## **RULE NO.: R161-16.02**

#### NOTICE OF PROPOSED RULE POSTING DATE: April 5, 2016

The Director of the Department of Austin Water Utility proposes to adopt the following rule after May 7, 2016.

Comments on the proposed rule are requested from the public. Comments should be submitted to Mr. Britt Jones; Austin Water Utility, 625 E. 10<sup>th</sup> Street, 3rd Floor Suite 300, Austin, Texas 78701, 512-972-0235, or via email at <u>britt.jones@austintexas.gov</u>. To be considered, comments must be submitted before May 7, 2016, the 32nd day after the date this notice is posted. A summary of the written comments received will be included in the notice of rule adoption that must be posted for the rule to become effective.

An affordability impact statement regarding the proposed rule has been obtained and is available for inspection or copying at the address noted in the preceding paragraph.

#### **EFFECTIVE DATE OF PROPOSED RULE**

A rule proposed in this notice may not become effective before the effective date established by a separate notice of rule adoption. A notice of rule adoption may not be posted before May 7, 2016 (the 32nd day after the date of this notice) or not after July 4, 2016 (the 90th day after the date of this notice).

If a proposed rule is not adopted on or before July 4, 2016, it is automatically withdrawn and cannot be adopted without first posting a new notice of a proposed rule.

#### **TEXT OF PROPOSED RULE**

A copy of the complete text of the proposed rule is available for public inspection and copying at the following locations. Copies may be purchased at the following locations at a  $\sim$  cost of ten cents per page:

Austin Water Utility, located at 625 E. 10th Street, 3rd Floor Suite 300, Austin, Texas. See Mr. Britt Jones and:

Office of the City Clerk, City Hall, located at 301 West 2nd Street, Austin, Texas.

AUSTIN CITY CLERK RECEIVED

## **BRIEF EXPLANATION OF PROPOSED RULE**

#### R161-16.02: Proposed revision to the Standards Manual Section

- 520S-1 Water and Wastewater Service Connection 1.5 m × 1.5 m (5' × 5 ') Esmt
   Delete
- **520S-1A** Modified Water Service & Wastewater Service Connection Detail-Delete
- **520S-1B** Wastewater Service Connection to PVC C900 Rated Gravity Wastewater Main- Delete
- **520S-3** Double Water/Wastewater Service Connection Detail- Delete
- 520S-3A Single Wastewater Service Connection Detail- Delete
- **520S-3B** 6" Wastewater Connection to Existing PVC or Lined Main- Delete
- 520S-4 Wastewater Cleanout Adjustment to Grade in Driveways- Delete
- 520S-4A Wastewater Cleanout Casting (Unpaved Location) Delete
- **520S-6** Wastewater Deep Service Connection Detail- Delete
- 520S-9 Installation Detail For Two 16 mm (5/8"), 19 mm (34") & 25 mm (1') Meters- Delete
- 520S-9A Double Water Service For Duplex- Delete
- 520S-9B Potable HDPE Double Service Installation & Two 16 mm, 19 mm, OR 25 mm (5/8", 34", or 1") Meters- Delete
- 520S-9R Reclaimed Water Connection Installation For Two 16 mm (5/8"), 19 mm (3/4") & 25 mm (1") Reclaimed Water Meters- Delete
- **520S-11** Installation for a 16 mm, 19 mm OR 25 MM (5/8", 34", or 1") Potable Meter- Delete
- 520S-11A Double Water Service For Duplex With Irrigation Meter- Delete
- **520S-11B** Potable HDPE Service & 16 mm, 19 mm, and 25 mm (5/8", 3/4", or 1") Meter Installation- Delete
- **520S-11R** Reclaimed Water Connection Installation For a 16 mm, 19 mm or 25 mm (5/8", 34", or 1") Reclaimed Water Meter- Delete
- 520S-13 35 mm & 50 mm (1½" & 2") Meter Installation Showing Optional Bypass- Delete
- **520S-13B** Potable HDPE Service Installation for 35 mm (1<sup>1</sup>/<sub>2</sub>") Meter- Delete
- **520S-13R** Reclaimed Water Connection Installation For a 38 mm, 50 mm (1<sup>1</sup>/<sub>2</sub>" OR 2") Reclaimed Water Meter Showing Optional Bypass- Delete

- **520-AW-01** Water Service and Wastewater Service Connection Detail New Detail and New Number
  - o Combines 520S-01, 520S-1B, 520S-3, 520S-3A, 520S-3B, 520S-6
- **520-AW-02** Water Service and Meter Installation 1" & Smaller Meters– New Detail and New Number
  - Combines 520S-9, 520S-9A, 520S-9B, 520S9R, 520S-11, 520S-11A, 520-11B, 520-11R.
- **520-AW-03** Wastewater Clean-out Frame and Lid New Detail and New Number

o Combines 520S-4, 520S-4A

• **520-AW-04** 1-1/2" and 2" Meter Installation Showing Optional Bypass– New Detail and New Number

o Combines 520S-13, 520-13B, 520-13R

# AUTHORITY FOR ADOPTION OF PROPOSED RULE

The authority and procedure for adoption of a rule to assist in the implementation, administration, or enforcement of a provision of the City Code is provided in Chapter 1-2 of the City Code. The authority to regulate construction requirements is established in Section 552.001 and Title 15 of the City Code.

## CERTIFICATION BY CITY ATTORNEY

By signing this Notice of Proposed Rule R161-16.02, the City Attorney certifies the City Attorney has reviewed the rule and finds that adoption of the rule is a valid exercise of the Director's administrative authority.

### **REVIEWED AND APPROVED**

Date:

Director Gre Austin Water Utility

Date: 3/24/16

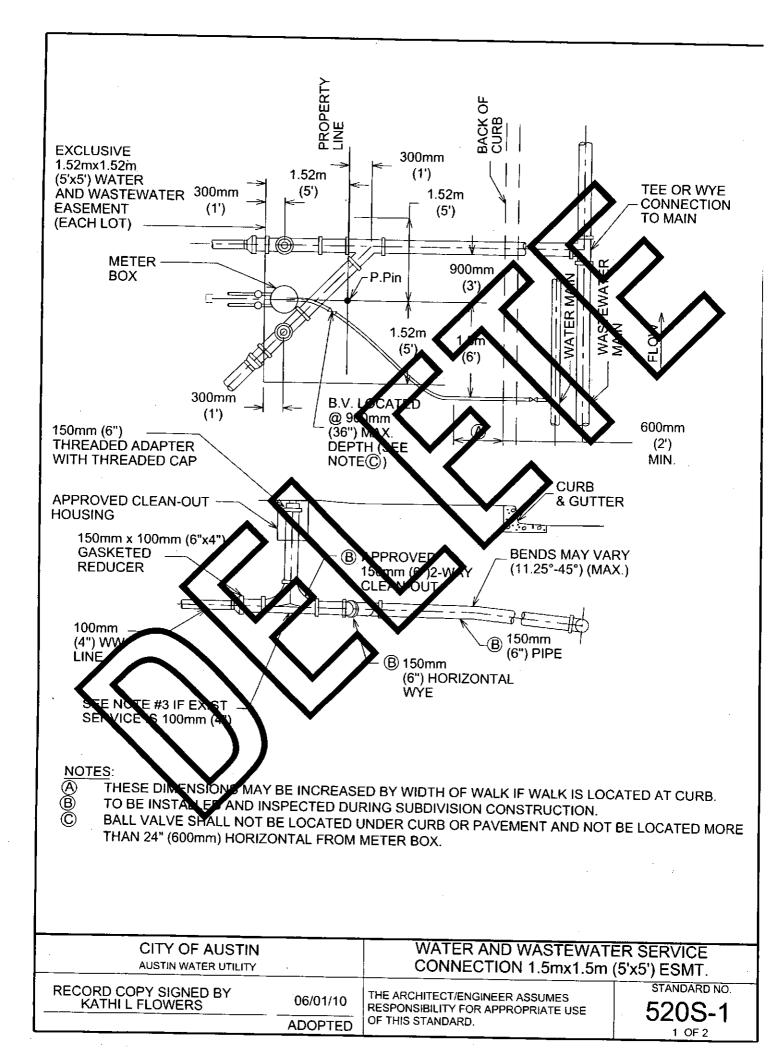
Anne L. Morgan City Attorney

# Summary of 520 Series Detail Drawings

- **520S-1** Water and Wastewater Service Connection 1.5 m  $\times$  1.5 m (5'  $\times$  5 ') Esmt Delete
- 520S-1A Modified Water Service & Wastewater Service Connection Detail- Delete
- 520S-1B Wastewater Service Connection to PVC C900 Rated Gravity Wastewater Main-Delete
- 520S-3 Double Water/Wastewater Service Connection Detail- Delete
- 520S-3A Single Wastewater Service Connection Detail- Delete
- 520S-3B 6" Wastewater Connection to Existing PVC or Lined Main- Delete
- 520S-4 Wastewater Cleanout Adjustment to Grade in Driveways- Delete
- 520S-4A Wastewater Cleanout Casting (Unpaved Location) Delete
- 520S-6 Wastewater Deep Service Connection Detail- Delete
- 520S-9 Installation Detail For Two 16 mm (5/8"), 19 mm (¾") & 25 mm (1') Meters-Delete
- **520S-9A** Double Water Service For Duplex- Delete
- 520S-9B Potable HDPE Double Service Installation & Two 16 mm, 19 mm, OR 25 mm (5/8", 34", or 1") Meters- Delete
- 520S-9R Reclaimed Water Connection Installation For Two 16 mm (5/8"). 19 mm (¾") & 25 mm (1") Reclaimed Water Meters- Delete
- 520S-11 Installation for a 16 mm, 19 mm OR 25 MM (5/8", 34", or 1") Potable Meter-Delete
- 520S-11A Double Water Service For Duplex With Irrigation Meter- Delete
- **520S-11B** Potable HDPE Service & 16 mm, 19 mm, and 25 mm (5/8", 34", or 1") Meter Installation- Delete
- 520S-11R Reclaimed Water Connection Installation For a 16 mm. 19 mm or 25 mm (5/8", ¾", or 1") Reclaimed Water Meter- Delete
- 520S-13 35 mm & 50 mm (1½" & 2") Meter Installation Showing Optional Bypass-Delete
- 520S-13B Potable HDPE Service Installation for 35 mm (11/2") Meter- Delete
- 520S-13R Reclaimed Water Connection Installation For a 38 mm, 50 mm (1½" OR 2") Reclaimed Water Meter Showing Optional Bypass- Delete
- 520-AW-01 Water Service and Wastewater Service Connection Detail New Detail and New Number
  - o Combines 520S-01, 520S-1B, 520S-3, 520S-3A, 520S-3B, 520S-6

- **520-AW-02** Water Service and Meter Installation ~ 1" & Smaller Meters- New Detail . and New Number
  - Combines 520S-9, 520S-9A, 520S-9B, 520S9R, 520S-11, 520S-11A, 520-11B, 520-11R.
- 520-AW-03 Wastewater Clean-out Frame and Lid New Detail and New Number
   Combines 520S-4, 520S-4A
- **520-AW-04** 1-1/2" and 2" Meter Installation Showing Optional Bypass New Detail and New Number

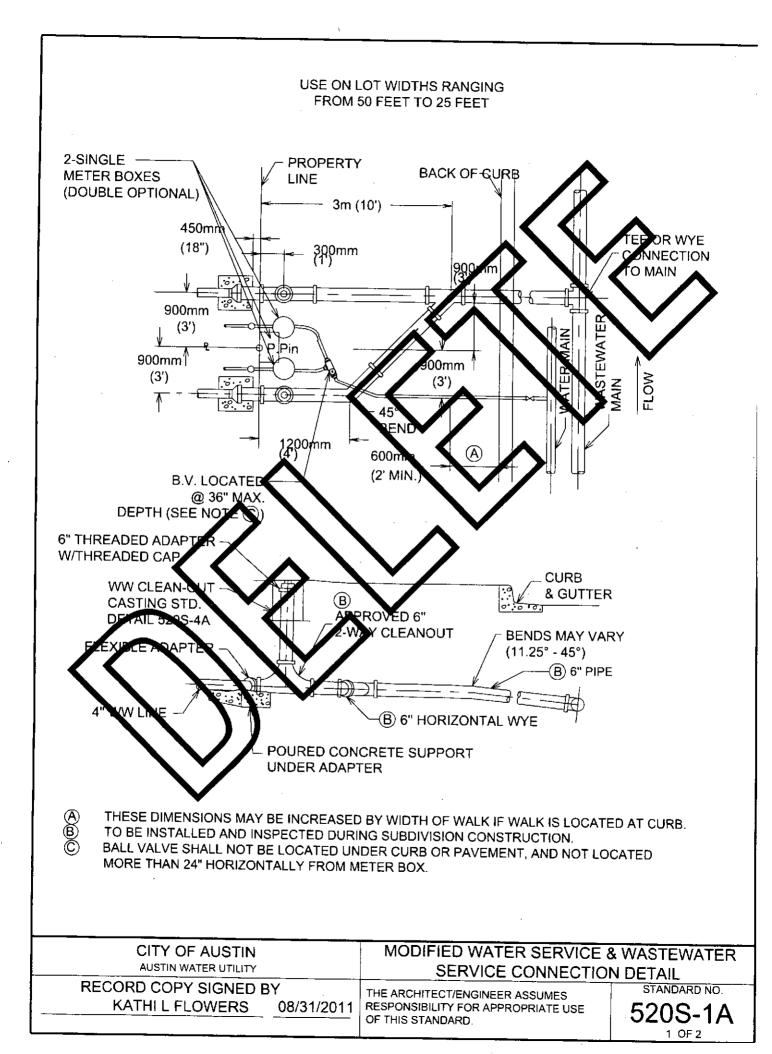
o Combines 520S-13, 520-13B, 520-13R



## NOTES:

- DURING SUBDIVISION CONSTRUCTION UTILITY CONTRACTOR INSTALLS WASTEWATER 1 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% MINIMUM TO 45° MAXIMUM. DEPTH OF SERVICE STUB AT PROPERTY LINE WINDE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 1.22m (4'), OTHERWISE THE INSTAL EDI EPTH WILL TYPICALLY BE 1.22m (4') TO 1.8m (6'). IF WASTEWATER SERVICE LINE TO AIN REQUIRES DEFLECTION EXCEEDING 45°, REFER TO DETAIL 520-6. UTILITY CONTRACTOR ALSO INSTALLS WATER CONNECTION TO MAIN WATER PIPE, FITTINGS AND VALVES INSLUDING STOL VALVE-F VE-REFER TO DETAIL 520S-9, 9A, 11 AND 11A FOR LOCATION OF STOP VALVES ALC TIONS SHALL BE NSTA MADE IN ACCORDANCE WITH INFORMATION SHOWN ON APPLICABLE STANDARD DRAWINGS AND WILL BE INSPECTED BY CITY OF AUSTIN CONSTRUCTION INS PECZION PERSO NNEN
- 2. CUSTOMER REMOVES PLUG FROM 2-WAY CLEAN-OUT AT ROPERTY LINE, INS ALLS 50m 100mm (6"x4") ELASTOMERIC GASKETED BELL REDUCED (SPI AW-22 ALLOWED. AS AN ALTERNATE, CUSTOMER MAY INSTALL MAIMUN 45 B). A BUSHING WIN NOT BΕ AIMUN 450mm (18") LENG H OF 1 Omm (6") PIPE, INSTALL 100mm (4") WASTEWATER LINES END 100mm ÆX ') PIRE 150mm (6") **MUM** INTO 150mm (6") PIPE AND JOINT BLOCK UNDER THE EXEXIBLE ADAPT FR (SF WW-354) AND CAST IN PLACE CONCRETE SUPPORT BLOCK UNDER THE FLEXIBLE ADAPTER. WAS EWATER WILL NOT SATISFACTORILY FLOW BY GRAVITY TO SEVER KAIN ADJACENT TO PROPERTY, SUMP EQUIPMENT MUST BE PROVIDED BY THE CUSTOMER AS ART OF THE OMER'S WAS EVATER SYSTEM. CUS CUSTOMER ALSO INSTALLS WATER LINES INCLUDING ATTURGS 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 FITT IGS.
- 3. IF EXISTING WASTEWATER SERVICE IS 100mm (4"), CUSTOMER SHALL INSTALL A 100mm (4") 2-WAY CLEAN-OUT. SEE SPL WW-2275
- 4. IF EXISTING SERVICE IS NOT PVOLTHE SUSTOMER SHALL INSTALL A FLEXIBLE ADAPTER (SPL WW-354) AND CAST IN FLACE CONCRETE SUPPORT BLOCK UNDER THE ADAPTER TO TRANSITION TO PVC. THE SUPPOPT BLOCK SHALL HAVE MINIMUM PIMENSIONS OF 150mm (6") THICK AND 450mm (18") WIDE AND EXTEND & MINIMUM OF 150mm (5") BEYOND EITHER END OF THE ADAPTER.
- 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 PENICO OF ONE (1) YEAR FROM DATE OF ACCEPTANCE, THAT ALL VALVES AND STOCK. METER BOX AND 2-WAY-CLEANOUTS REMAIN CLEAR OF SIDEWALKS AND OTHER OBSTRUCTIONS.
- 6. CITY OF AUSTIMACTIVITY IS EMITTED O INDITALLATION 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. PIPINE AND TUBING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR M TERIALS 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 FELOW FINAL STREET GRADE OF 1.07m (42") ANY EXCEPTION MUST BE SPECIFICALLY APPROVED BY THE ENGINEER.
- 8. NO METER BOX OR CEAN-OUT SHALL BE SET IN SIDEWALK OR DRIVEWAY AREA WITHOUT WRITTEN APPROVAL FROM AUSTIN WATER UTILITY.
- 9. ALL WW JOINTS THAT ARE NOT PVC OR A COMBINATION OF NON-PVC WITH PVC SHALL BE ENCASED IN CONCRETE OR CLSM.

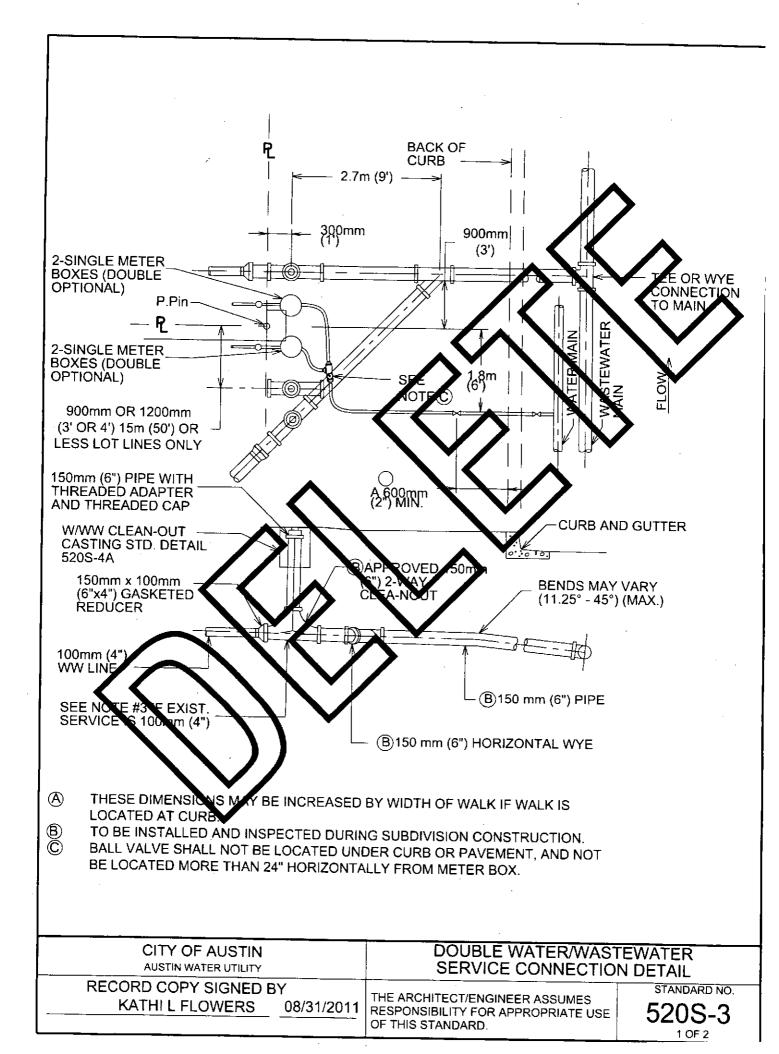
CITY OF AUSTIN		WATER AND WASTEWATER SERVICE	
AUSTIN WATER UTILITY		CONNECTION 1.5mx1.5m (5'x5') ESMT.	
RECORD COPY SIGNED BY	06/01/10	THE ARCHITECT/ENGINEER ASSUMES	STANDARD NO.
KATHI L FLOWERS		RESPONSIBILITY FOR APPROPRIATE USE	520S-1
	ADOPTED	OF THIS STANDARD.	2 OF 2



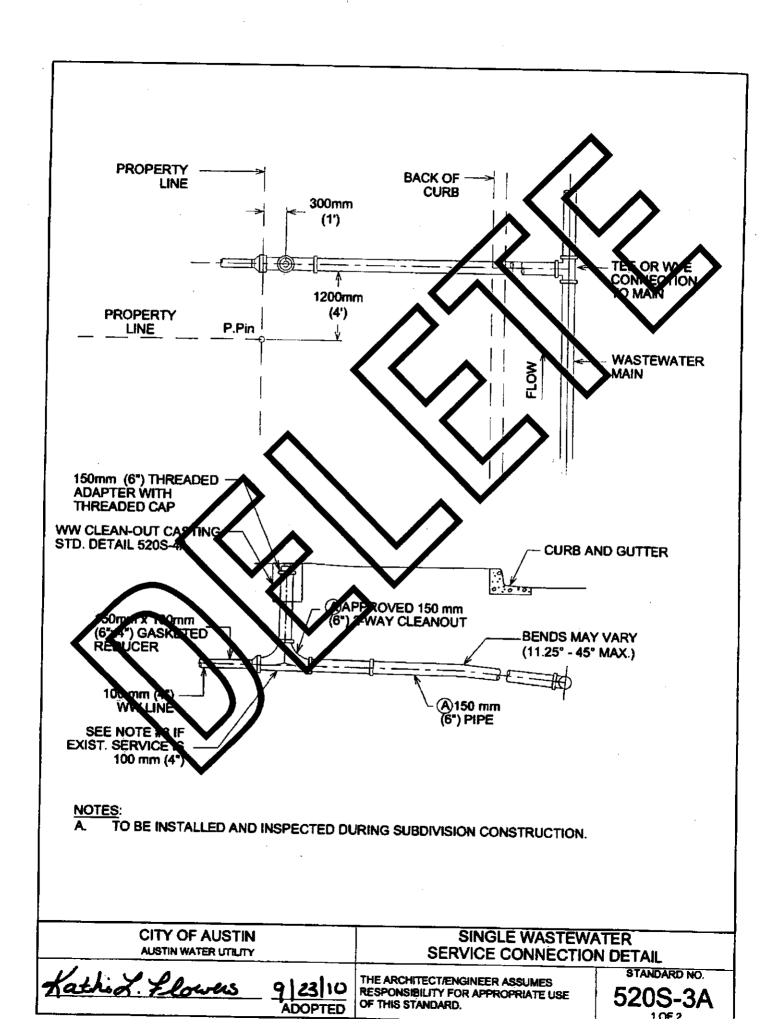
<u> NO</u>	IES:		
1.			
1.	DURING SUBDIVISION CONSTRUCTION UT	ILITY CONTRACTOR INSTALLS WASTE	WATER
	CONNECTION TO MAIN, 150mm (6") STUB		
		WITH HORIZONTAL WYE FOR DOUBLE :	SERVICES,
	130mm (0) SERVICE BRANCH WITH 2-WAY	-CLEANOUT(S) AND RISER FOR OLEAN	
	(CAPPED) AND PLUC(S) FOR 2 MAX OLDA	NOUT(0) AT DRODTRENUME THE	1001(3)
	(CAPPED), AND PLUG(S) FOR 2-WAY-CLEA	NOUT(S) AT PROPERTY LINE END, ALL	L WASTEWATER
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	MINIMUM TO 45° MAXIMUM. DEPTH OF SEI	RVICE STUB AT PROPERTY LINE WILL E	3E SHOWN ON
	FLANS DT ENGINEER IF GREATER THAN 1	.22m (4'). OTHERWISE THE INSTALLED	
	TYPICALLY BE 1.22m (4') TO 1.8m (6') IE 14		
	TYPICALLY BE 1.22m (4') TO 1.8m (6'). IF W	ASTEWATER SERVICE LINE TO MAIN RI	EQUIRES
	DEFLECTION EXCEEDING 45°, REFER TO [	DETAIL 520-6. UTILITY CONTRACTORY	SOINSTALLS
	WATER CONNECTION TO MAIN WATER DR		OO INGTALLS
	WATER CONNECTION TO MAIN WATER PIL	E, FITTINGS AND VALVES INCLUDING	STOP VALVE-REFER
	- 10 DETAIL 3203-9, 9A, 11 AND 11A FOR LC	CATION OF STOP VALVES ALVING AL	LATIONS OF ALL DR
	MADE IN ACCORDANCE WITH INFORMATIC	ON CHOMME ON A DDUG ADD TO THE INC. AL	LATIONS STALL DE
	MADE IN ACCORDANCE WITH INFORMATIC	ON SHOWN ON APPLICABLE STANDAR	D DEAWINGS AND
	WILL DE INSPECTED BY CITY OF AUSTIN (	CONSTRUCTION INSPECTION PERSONN	
2.	CUSTOMER REMOVES PLUG FROM 2-WAY	CLEAN OUT AT DROD TO UNIT US	
		CLEAN-OUT AT PROPERTY LINE, IN T	ALLS 150mm x
	TOOMIT (6 X4") ELASTOMERIC GASKETED B	ELL REDUCER (SPL_MM_27_R) RUS	
	ALLOWED AS AN ALTERNATE CUSTOMER	D MAY INCTALL METALLING ACO	IN O WILL NO DE
	ALLOWED. AS AN ALTERNATE, CUSTOMER	KIMAY INSTALL MINIMUM 450mm (10) L	ENGTH OF 100mm
	(0) FIFE, INSTALL TOOMM (4") WASTEWATE	R LINES, EXTERD 100mm (4") PIPE (194	mm N") MURINI Ka
	INTO 150mm (6") PIPE AND IONT BLOCK I		
1	INTO 150mm (6") PIPE AND JOINT BLOCK U	NDER THE ELEXING ADAM ER (SPL W	V 354) AND CAST IN
1	FLACE CONCRETE SUPPORT BLOCK UND	ER THE FAEXE F AD PTERME WAS TE	
	SATISFACTORILY FLOW BY GRAVITY TO S		WHEL NUT
	SATISFACTORILY FLOW BY GRAVITY TO S	EWER HAIR ADJACENT TO PROPERTY	, PUMILZQUIPMENT
1		S DAPT OF THE CUSTOME NO MODEL	
	CUSTOMER ALSO INSTALLS WATER LINES		VATER STOLEN.
	CUSTOMER ALSO INSTALLS WATER LINES	Inclosing FITHINGS AND VALVES ON	I BOTH SIDES OF
	METER BUXES AN	COVERS. A VEHICLD SPACER MAY BU	
	PROPER SPACING AND ALIGNMENT OF M		JUSED TO ASSURE
3.		ERR FITUINUS,	
J. J.	IF EXISTING WASTEWATER SERVICE IS 100	0mm 4"), COSTOMER SHALL INSTALL A	100mm (4") 2-WAV
	CLEAN-OUT, SEE SPL WW-227B.		- 100min (+ ) 2-WAT-
4.			
4.	IF EXISTING SERVICE IS NOT PYC, THE CL	JSTOMER SHALLINSTALLA DEXIBLE A	ADAPTER (SPI
	WW-354) AND CAST IN PLACE CONCRETE		
1		SUFFORT DOCK TODER HE ADAPTE	R TO TRANSITION
	TO PVC. THE SUPPORT BLOCK SHALL HAV	E MINIMUM DIMENSION OF 150mm (6)	") THICK AND 450mm
	(18") WIDE AND EXTEND AMINIM M OP 15	mm (6") REVON FITHER FUR OF THE	THER AND 450mm
5.		UNIT (0) BEY UNDER END OF THE	ADAPTER.
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	WASTEWATER IS CONNECTED ANY MISSI		
	WASTEWATER IS CONNECTED. ANY MISSI	WE OR DAMAGED PARTS SHALL BE RE	INSTALLED BY
	CUSTOWER WHU SHAVE GUARANTEE, FOR	R A BERLED OF ONE (1) YEAR FROM DA	
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1	ACCEPTANCE, MAT ALL VALVES AND STO	S, WEIEF BUX AND 2-WAY-CLEANOL	JTS REMAIN CLEAR
	OF SIDEWALKS AND OTHER OBSTRUCTION	VS A CONTRACT OF A CONTRACT	
6.	CITY OF AUSTIN ACT, YITY IS LUNITED TO IN	ISTANTION OF THE MATER METER A	
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	CONNUS HONS OTHER MAY SPESSIONS &		
	AND AT THE CUSTOMER'S WAS NEWATER	CONNECTION TO THE 2 MANY OF FAMILY	
7.		DINNECTION TO THE 2-WAY CLEAN-O	UT.
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	TRANSLAR WATE HALS AS RECUBED AV (		
	MATERIAL CHALLE ACCREDITED		(14);
[	M. TERNIS SHALL BE AS SPECIFIED IN 510	).2 (2)(A) AND (3)(B); BACKFILL ABOVE 1	THE GRANULAR
	BEDLING SHALL BE AS REQUIRED BY SEC	TION 510 3 (25) SERVICE LINES IN THE	
	HAVE AMINUN IM COVER RE OW EINIAL OF		SE AREAS SHALL
	HAVE A MININUM COVER BELOW FINAL ST	REET GRADE OF 1.07m (42"). ANY EXCI	EPTION MUST BE
	SPECIFICALLY PPROVED BY THE ENGINE	ER	
8.	NO METER LOX OR CLEANOUT SHALL BE		
	ADDDOVAL FROM A DEVICE ADOUT SHALL BE	SET IN SIDEWALK OR DRIVEWAY AREA	A WITHOUT WRITTEN
1	AFFROVAL FROM AUS IN WATER UTILITY.		
9.	ALL WW JOINTS CHATARE NOT PVC OR A	COMBINIATION OF NON DVC WITH DVC	
	IN CONCRETE OR OLSM.	COMBINATION OF NON-PVC WITH PVC	SHALL BE ENCASED
	IN CONCRETE OR DESM.		
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L			
1	CITY OF AUSTIN	MODIFIED WATER SERVICE &	& WASTEWATER
	AUSTIN WATER UTILITY		
		SERVICE CONNECTION	
	RECORD COPY SIGNED BY		STANDARD NO.
		THE ARCHITECT/ENGINEER ASSUMES	
	KATHIL FLOWERS 08/31/2011	RESPONSIBILITY FOR APPROPRIATE USE	520S-1A
	· · · · · · · · · · · · · · · · · · ·	OF THIS STANDARD.	JZUJ-IA
L			2 OF 2

PVC C900 WASTEWATER	D 3004 EVC WASTEWATER SERWCE, SPL WW 227
MAIN	
	200mm x 150 mm (8"X6") TEE C900 W/D3034 OUTLET, SPL WW-227D
1. THIS DETAIL APPLIES ONLY TO WITH TCEQ RULE 217.53 (d) (A)	INSTALLATIONS THAT MUST COMPLY (i).
CITY OF AUSTIN AUSTIN WATER UTILITY RECORD COPY SIGNED BY KATHI L FLOWERS 06/01/10 ADOPTED	WASTEWATER SERVICE CONNECTION TO PVC C900 RATED GRAVITY WASTEWATER MAIN THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. STANDARD.

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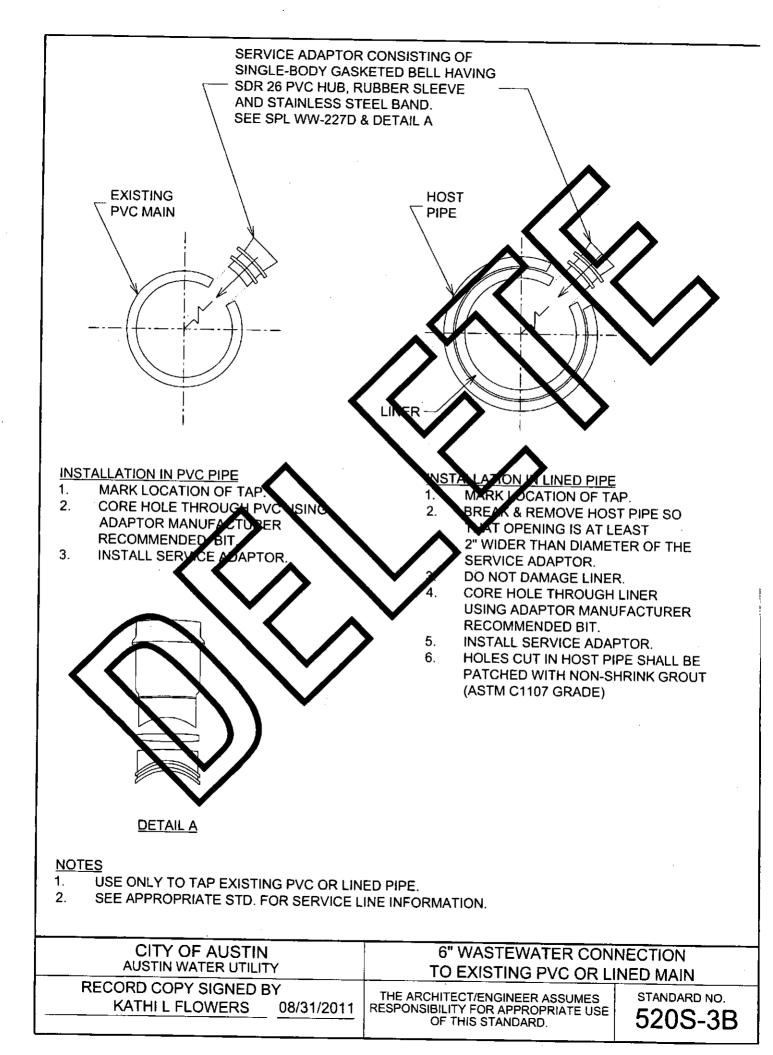


NO	TES:		
1.	DURING SUBDIVISION CONSTRUCTION UT		
	CONNECTION TO MAIN 150mm (6") STUD	AUTION RACTOR INSTALLS WASTE	WATER
	CONNECTION TO MAIN, 150mm (6") STUB	WITH HORIZONTAL WYE FOR DOUBLE S	SERVICES,
	150mm (6") SERVICE BRANCH WITH 2-WAY	-CLEANOUT(S) AND RISER FOR CLEAN	OUT(S)
	(CAPPED), AND PLUG(S) FOR 2-WAY-CLEA	NOUT(S) AT PROPERTY LINE END. ALL	WASTEWATER
	PIPING SHALL HAVE ELASTOMERIC GASK	ET TYPE JOINTS AND SLOPE DOWNWA	RD TO MAIN 1%
	MINIMUM TO 45° MAXIMUM. DEPTH OF SE	RVICE STUB AT PROPERTY LINE WILL	BE SHOWN ON
	FLANS BY ENGINEER IF GREATER THAN 1	.22m (4'). OTHERWISE THE INSTALL	
	11 FICALLT BE 1.22M (4') TO 1.8M (6'). IF W	ASTEWATER SERVICE LINE TO MAN D	DUIDER
	DEFLECTION EXCEEDING 45°, REFER TO [	DETAIL 520-6. UTILITY CONTRACTOR AL	SO INSTALLS
	WATER CONNECTION TO MAIN WATER PI	PE, FITTINGS AND VALVES INCLURING	
	- 10 DETAIL 5205-9, 9A, 11 AND 11A FOR LC	CATION OF STOP VALVES AN INSTAL	
	WADE IN ACCORDANCE WITH INFORMATIC	ON SHOWN ON APPLICABLE STANDAR	ORAVINGS AND
	WILL BE INSPECTED BY CITY OF AUSTIN (	CONSTRUCTION INSPECTION PERSONN	
2.	CUSTOMER REMOVES PLUG FROM 2-WAY	CLEAN-OUT AT PROPERTY LINE IN T	411 150mm
	100mm (6"x4") ELAS FOMERIC GASKETED B	ELL REDUCER (SPI WW-27-R) & RUSE	
	ALLOWED, AS AN ALTERNATE, CUSTOMER	R MAY INSTAILS MIMMAM 458 mm (18") L	ENATH OF 15 mm
	(0) PIPE, INSTALL 100mm (4") WASTEWATE	ER LINES, EXTEND 100m (4") HPE 150	mm (PA MINEALIKA
	- IN TO TOUTIM (6.) PIPE AND JOIN   BLOCK []	NDER THE FLOXIBLE ADADLED ADI MA	M 254 DOADT IN
	FLACE CONCRETE SUPPORT BLOCK UND	ER THE FLOXIBLE ADAPTER F WANTE	
	SATISFACTORILY FLOW BY GRAVITY TO S	EWER MAIN ADJACENT TO PROBERT	
	WUST DE PROVIDED BY THE CUSTOMER A	SPART OF THE ALISTOMER'S WALTEN	TED OVOTEM
	- COSTOMER ALSO INSTALLS WATER LINES	INCLUDING FRITINGS AND VALVES M	BOTH SIDES OF
1	METER, AND INSTALLS METER BOXES AND	O COVERS, A VENTED SPACER MAY BE	
	PROPER SPACING AND ALIGNMENT OF M	ETER FILLINGS	USED TO ASSURE
3.	IF EXISTING WASTEWATER SERVICE IS 10	0mm (4") CUSTONER SHALL USTALL A	100mm (4")
1	2-WAY CLEAN-OUT, SEE SPL WW-22 B		· · ·
4.	IF EXISTING SERVICE IS NOT PVS THE CL	ISTOMER SHALL INSTALLA ELEVIDLE A	
	WW-354) AND CAST IN PLACE CONCRETE	SUPPORT BLOCK NIDER THE ADADTE	DAPTER (SPL
	TO PVC. THE SUPPORT BLOCK SHALL HAV	MINIMUM DISENSIONS OF 450mm (0)	R TO TRANSITION
1	(18") WIDE AND EXTEND A MINIMUM OF 5		THICK AND 450mm
5.	CUSTOMER IS RESPONSIBLE FOR METER	NAME OF DEPONDENTIES END OF THE	ADAPTER.
	WASTEWATER IS CONNECTED ANY MISSI	NOR DAMAGED DADTO CHALL DE DE	R IS INSTALLED AND
	CUSTOMER WHO SHALL GOMANTEE, FOR		INSTALLED BY
1	ACCEPTANCE THAT AL VALVES AND STO		
i i	OF SIDE VALKS AND OTHER OB TRUCTIO	, MEIER BUX AND 2-WAY-CLEANOL	JIS REMAIN CLEAR
6.			
	CONNECTIONS TO THE CITY'S RESPONSIB	NSTALLATION OF THE WATER METER A	ND INSPECTION OF
F	AND AT THE CUSTOMER'S WASTEWATER		ER CUT-OFF VALVE
7.	PIPING AND TUBING IN STREET RIG P-OF-	CONNECTION TO THE 2-WAY CLEAN-OR	UT.
	GRAND AR MATERIALS IS REQUIRED BY (	CITY OF AUSTIN STANDARD OPEOUSION	SE BEDDED IN
-	MATERIA S SHALL BE AS SPECIFIED IN 610		TION 510.3 (14);
	MATERIALS SHALL BE AS SPECIFIED IN 510 BEDDING SHALL BE AS BEOLIRED BY SEC	TION 510.2 (25), SEDVICE UNED IN THE	HE GRANULAR
	BEDDING SHALL BE AS BEQUIRED BY SEC HAVE A MINIMUM COVER BELOW FINAL ST	TION 510.5 (25), SERVICE LINES IN THE	SE AREAS SHALL
[	SPECIFICALLY ASPROVED BY THE ENGINE	REET GRADE OF 1.07m (42 <u>°)</u> . ANY EXCE	=PTION MUST BE
8.	NO METER BOX OF CLAN-OUT SHALL BE		
	NO METER BOX OR CLEAN-OUT SHALL BE APPROVAL FROM AUSTIN WATER UTILITY.	SET IN SIDEWALK OR DRIVEWAY AREA	WITHOUT WRITTEN
9.	ALL WW JOINTS THAT ARE NOT PVC OR A	COMPINIATION OF NON DVO WITH DUO	
	IN CONCRETE OR CLSM.	COMBINATION OF NUN-PVC WITH PVC	SHALL BE ENCASED
_			
	CITY OF AUSTIN	DOUBLE WATER/WAST	EWATER
	AUSTIN WATER UTILITY	SERVICE CONNECTIO	
	RECORD COPY SIGNED BY		STANDARD NO.
		THE ARCHITECT/ENGINEER ASSUMES	
	KATHIL FLOWERS 08/31/2011	RESPONSIBILITY FOR APPROPRIATE USE	520S-3
		OF THIS STANDARD.	2 OF 2



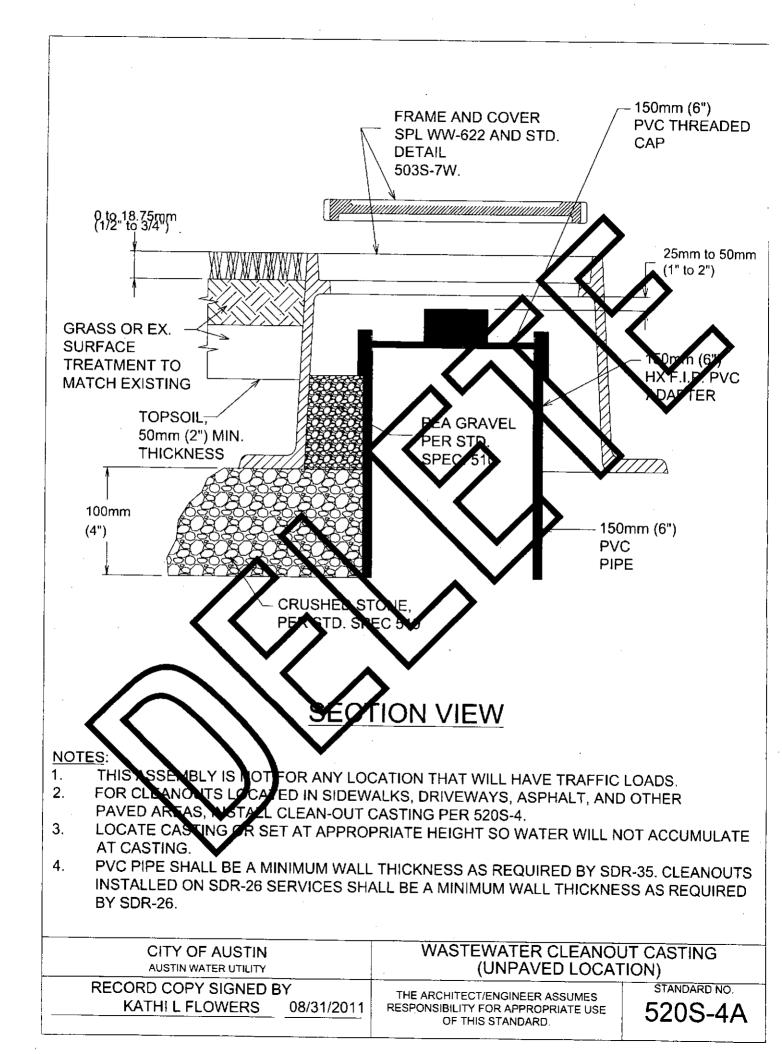
	OTES:		
1.		UTILITY CONTRACTOR INSTALLS WAST	FWATER
	CONNECTION TO MAIN, 150mm (6") STU		
	Some (C) SERVICE BRANCH WITH 2-W	AY-CLEANOUT/S) AND RISED FOD OUEA	NOUT/ON
	(CAFFED), AND FLUG(3) FUR Z-WAY-CL	EANOUT(S) AT PROPERTY LINE END AN	
1	THE ING SHALL HAVE ELASTOMERIC GAS	SKET TYPE JOINTS AND STOPE DOWNER	A TO MANNI 407
		5° MAXIMUM DEPTH OF SERVICE	TDDODCOT
	LINE WILL DE SHOWN UN PLANS BY EN	GINEER IF GREATER THAN 1 22-1/41	
	INSTALLED DEFTH WILL TYPICALLY BE	1.22m (4') TO 1.8m (6') JE MASZEMA ED :	
}	MAIN REQUIRES DEFLECTION EXCEED	NG 45° REFER TO DETAIL 520 AUTILIAN	
	ALSO INSTALLS WATER CONNECTION T	O MAIN WATER PIPE FIZEINES AND VAL	
	STOP VALVE-REFER TO DETAIL 520S-9,	9A. 11 AND 11A FOR LACATION OF STOR	
	INSTALLATIONS STALL BE MADE IN ALL	ORDANCE WITH INFORMATION CHOID	
	STANDARD DRAWINGS AND WILL BE IN	SPECTED BY CITY OF ALIS IN CONSTRU	
1			
2.	CUSTOMER REMOVES PLUG FROM 2-W	AY CLEAN-OUT A PROPARTY MUE INS	TALLS
	TOOMIN (U AT / ELAS   OMERIC GASKE   EL		
1			
1	(0) FIFE, INSTALL TUUMM (4") WAS LEWA	TER INES EXTEND 100mm (4") NOE 1	
1			
	SANGRACIORILI FLUW BI GRAVIJY 10	SEWINE MANYAR, MARKENT TO PROPERTY	
	MUST BE PROVIDED BT THE CUSTOMEN	LAS PARS OF THE CLISTOMER'S WASTE	WATED OVOTTLA
	CUSTOMER ALSO INSTALLS WATER LINE	ES INCLUDING ENTINGS AND ADDRES OF	
	METER, AND INSTALLS METER BOXES A	ND COVERS IN VENIED SPACER MAY RE	E LISED TO ASSURE
3.	IF EXISTING WASTEWATER SERVICE TO	100mm (4"), CUSTOMER SHALL INSTALL	A 100mm (4") 2.WAY_
4.	IF EXISTING SERVICE IS NOT PVC, THE O	COSTOMER SHALL INSTALL A FLEXIBLE	ADAPTER (SPI
1		E SINUCIU VELOVE LINDED THE ADADT	
		REALING THE DEVENSIONS OF 150	TURNIZ AND ACO
			A D A D T C D
5.	CUSTOMER IS RESPONSIBLE FOR METE	R BODAND DIDING SYSTEM HARTH METH	"D'IO INIGTALLED AND
	TTASTET LEN IS COUNCULER, ANY MIS	SING DEDAMAGED DADTE CUALL BE DI	
1	CUS MIER WHY SHAL GUALANTEE F	R PERIOD OF ONE (1) VEAD EDOM D	
	ACCEPTANCE, THAT ALL VALVES AND S	TOPS, METER BOX AND 2-WAY-CLEANO	UTS REMAIN CLEAR
6.	T SINETTALINE ANUAU HER DESITION (1)		
<b>U</b> .	CITY OF AUSTIMACTIVITY IS UNITED TO	INSTALLATION OF THE WATER METER	AND INSPECTION OF
7.			
1	PIPING AND TUBING IN STREET RIGHT-O GRANIDAR MATERIAL SAS FEOLURED R	F-WAY AND IN EASEMENT AREA SHALL	BE BEDDED IN
	MATERIALS SHALL BEAS SPECIFIED IN 5 BEDDING SHALL BUSS FEOLURED BY SE	CTICAL SAD 2 (25) OF THREE HILL ABOVE	THE GRANULAR
1	BEDDING SPILL BLAS REQUIRED BY SE HAVE A MINIMUM COVER BELOW FINAL S SPECIFICALLY APPROVED BLOW FINAL S	TREET ODADE OF 4 97-4400-4400 FILE	SE AREAS SHALL
1	SPECIFICALLY APPROVED BY THE ENGIN	REET GRADE OF 1.0/m (42"). ANY EXC	EPTION MUST BE
8.	NO METER BOX OR CLEAN-OUT SHALL B	E SET IN SIDEINALK OD DDN/DMAN ADD	
	APPROVAL FROM AUSTIN WATER UTILIT	Y	A WITHOUT WRITTEN
1			
İ			
			<u> </u>
	CITY OF AUSTIN	SINGLE WASTEWA	
	AUSTIN WATER UTILITY	SERVICE CONNECTION	N DETAIL
1		THE ARCHITECT/ENGINEER ASSUMES	STANDARD NO.
120	this flowers 9/23/10	RESPONSIBILITY FOR APPROPRIATE USE	520S-3A
	ADOPTED		

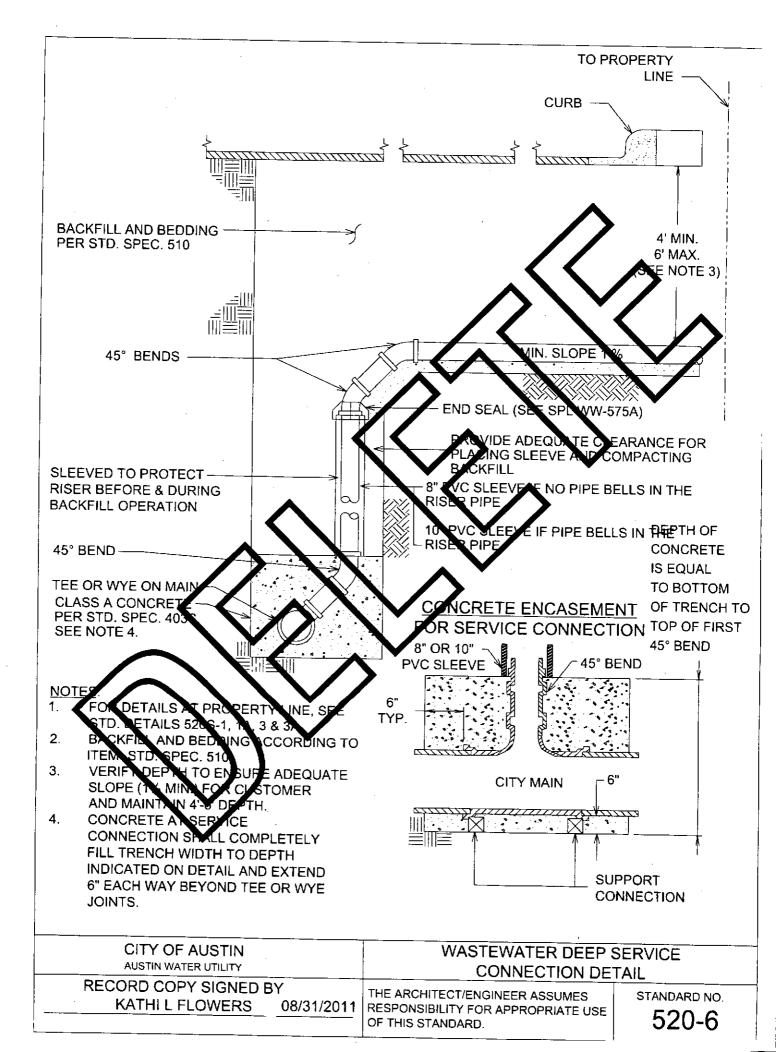
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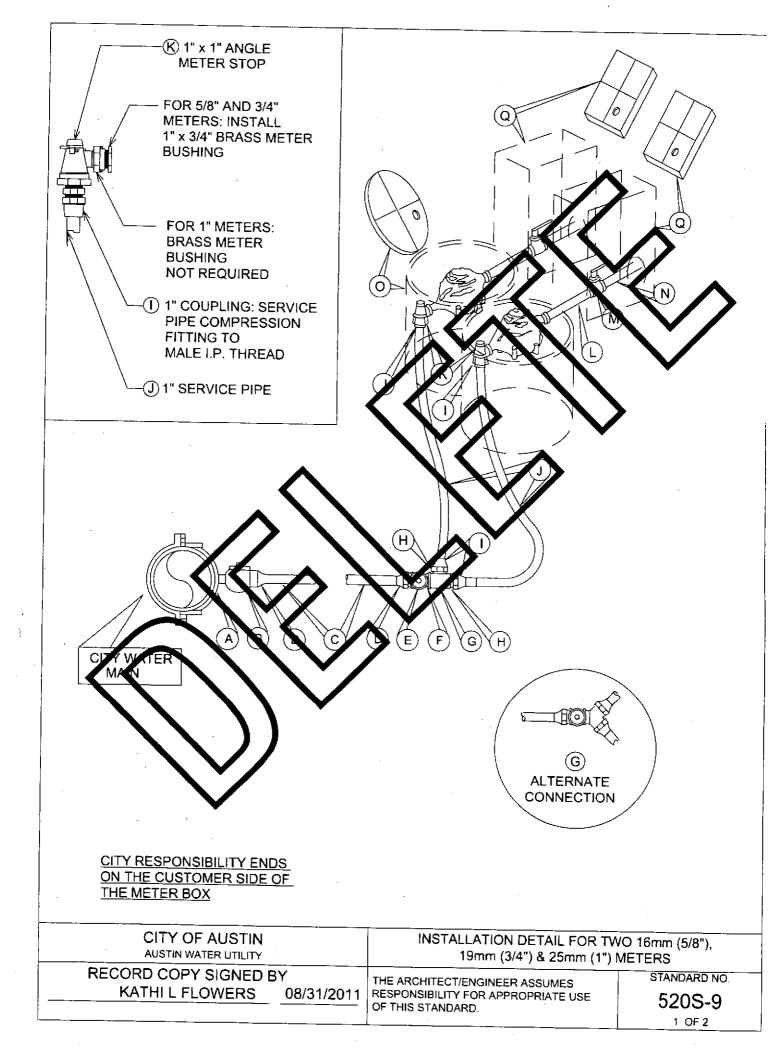


	15M (#5) BARS AT MID-DEPTH TYP		50mm (2") - 100mm (4")		
	13mm x 125mm (0.5"x5") REDWOOD CONTROL JOINT TYP.		AND	ANOUT FRAME COVER, WW-622	
	125mm (5") CONCRETE PAVEMENT		450mm (18") TYP.	$\langle \langle \rangle$	ク
	75mm (3") <u>MIN</u> SUBGRADE			SUBGRA	225mp DE (94
	· · ·				
	19mm x 450mm (3/4"x1.5') SMOOTH DOWEL		$\bigvee$	150mm (6") PV( THRE DED A 150mm (6") H X RVC ADAPTER	F.I.P.
	2 ON EACH SIDE, EQUALIA SPACED, GREASE ONE ONE ALL DOWELS TO BE INSTA STRAIGHT AND LEVEL		50m	1 (6") PVC PIPE	
		>			
1			AIV		
<u>N(</u> 1. 2.	SERVICES SHALL BE LESIG THIS STANDARD DETAIL IS	NED TO AVO	ID CLEAN-OUT LOC	CATION WITHIN D	RIVEWAYS.
.3. 4. 5.	EXISTING DRIVEWAYS SUB-GRADE PHAIL BE COM REINFORDING STEEL SHALL PC CONCRETE SHALL MEET	PACTED AS	PER STD. SPEC. 20 406S. REINFORCIN	1S. SUB-GRADE	
6. 7. 8. 9.	TRAFFIC BEARING FRAME A PLACE CASTING IN CONCRE LOCATE CASTING SO WATE	ND COVER ( TE, FINISH ( R WILL NOT	ONLY, HEAVY DUTY CONCRETE SMOOT ACCUMULATE AT C	H. ASTING.	
	PVC PIPE SHALL BE A MININ INSTALLED ON SDR-26 SER BY SDR-26.	/ICES SHALL	. BE A MINIMUM WA	LL THICKNESS A	S REQUIRED
	CITY OF AUSTIN AUSTIN WATER UTILITY		TO GR	CLEAN-OUT AD	DJUSTMENT AYS
F	RECORD COPY SIGNED BY KATHI L FLOWERS	06/01/10 ADOPTED	THE ARCHITECT/ENGIN RESPONSIBILITY FOR API OF THIS STANE	EER ASSUMES PROPRIATE USE	standard no. 520S-4
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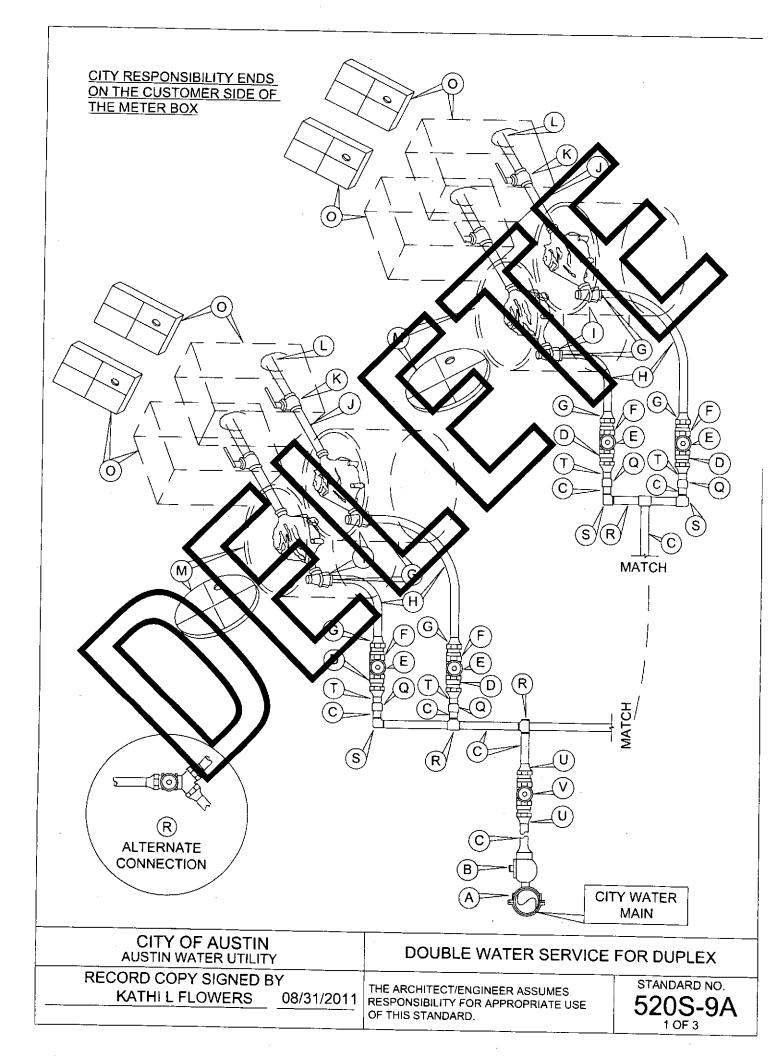


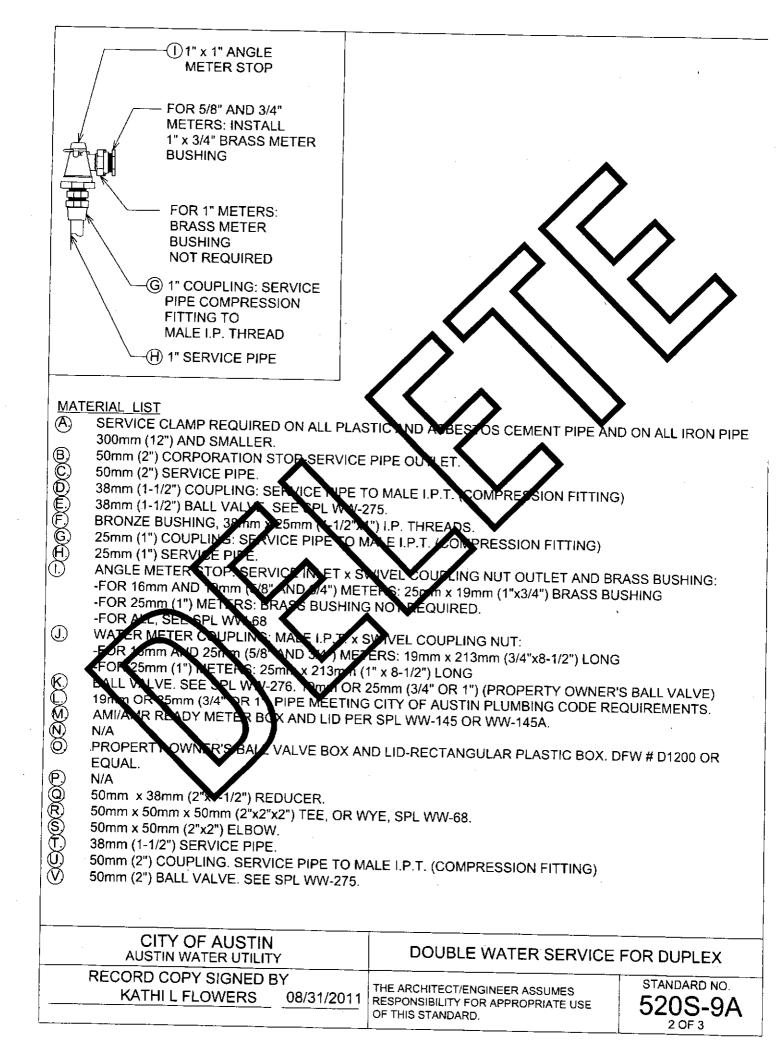




MAT	ERIAL LIST		· · · · · · · · · · · · · · · · · · ·
A	SERVICE CLAMP REQUIRED ON ALL PLAS	STIC AND ASBESTOS CEMENT PIPE AND	
	SUBALLER.		
୬୦୦୫୭୭୭୭୭	38mm (1-1/2") CORPORATION STOP-SERV	ICE PIPE OUTLET. SPL WW-68	
	Somm (1-1/2°) SERVICE PIPE		
ľ	38mm (1-1/2") COUPLING: SERVICE PIPE T 38mm (1-1/2") BALL VALVE SEE SPL MAK	O MALE I.P.T. (COMPRESSION FITTING	)
Ē	38mm (1-1/2") BALL VALVE. SEE SPL WW - 38mm (1-1/2") CLOSE NIPPLE. BRONZE I.P	Z/5; SEE NOTE 8	
Ğ	38mm (1-1/2") BRONZE TEE. SPL WW-68 O		<b>0</b> 0
Đ	BRONZE BUSHING, 38mm x 25mm (1-1/2"x1	") IP THREADS	68
Q	25mm (1") COUPLING: SERVICE PIPE TO M	ALE LP. THREAD COMPRESSION FOR	NG
Q			•
K	25mm (1") ANGLE METER STOP; SERVICE	PIPE INLET X SWIVEL COUPING INT C	UT ET NO BRASS
	DUSTING.		
1	-FOR 16mm AND 19mm (5/8" AND 3/4") MET	ERS 25mm x19mm (1"x3/4") 3RASS MET	
[	-FOR Zomm (1) METERS BRASS METER B	USHING NOT REQUIRED	
$\square$	-FOR ALL, SEE SPL WW-68		
	WATER METER COUPLING: MALE I.P.T. x S	SWIVEL COUPLING WIT:	$\setminus \vee /$
	-FOR 16mm (5/8") AND 19mm (3/4") METERS -FOR 25mm (1") METERS: 25mm x 213mm (1	6: 19mm x 213h or (3/4"x - 1/2") ONG	
$\mathbf{M}$	25mm (1") BALL VALVE. SEE SPL WW-276	1 XO-1/27 LUNG	V
	25mm (1") PIPE MEETING CITY OF AUSTIN		
Õ	AMR/AMI READY METER BOX AND LID PER	STANDARD PRONUCTS LIST SHI MAN	
W /			
Q	PROPERTY OWNERS BALL VALVE BOX AN	D LID REC ANGLI AR PLASTIC BOX D	
	<u>DTES:</u>	$\land \land \land$	
1.	SERVICE PIPE SHALL BE COPPER THE	E STE. IT SHALL BE ANNEALED SEAML	ESS TYPE "K"
	COPPER TURING MEETING THE CURRI SOLDERED JOINTS	NT ASTM B82 STANDARD WITH NO SW	EAT OR
2.	SERVICE SADDLE SHALL BE WRAPPED		
_,	FILM.	CORPLETELY WITH 0.2 mm (8 MIL) PO	LYETHYLENE
3.	BRANCH CONNECTION AND BOTH AND	GLEMETER STOPS MUST BE INSTALLE	
	FIRST MESER INSTALLATION EVEN THE	OGH SECOND PROPERTY MAY NOT B	
		SCH SEGOND THOPENTI MAT NOT B	
4.	TOP OF BOXES SHOULD BE 25mm (1").	ABOVE GROUND OR FLUSH WITH PAVE	MENT
-			
5.	PINNG AND TUBING IN STREET RIGHT	OF-WAY SHALL BE BEDDED IN GRANU	LAR
	IVIA I DISIALSIAS REQUIRED BY SECTION	510.3 (14) OF THE CITY OF ALISTIN ST	
6.	SI LOI NA HONS, EXCNALL ABOVE GE	ANULAR REDDING AS REALIDED BY S	
0.	BOX MUST BE BENIND CURB, NEXT TO AND VEHICO AR TRAFFIC AREA.	PROPERTY LINE OR EASEMENT, AND	OUT OF SIDEWALK
7.	BALL VALVE(E) HALL NOT BE LOCATED		
	24" (610mm) HORIZONTALLY FROM ME	TER BALL VALVE®MAY NOT DELOW MET	
	SIDEWALK, OR DRIVEWAY,		UNDER PAVING,
8.	A METER BOX IS REQUIRED FOR EACH	25mm (1") METER.	
		• •	
		· · · · · · · · · · · · · · · · · · ·	
	CITY OF AUSTIN	INSTALLATION DETAIL FOR TW	/O 16mm (5/8"),
		19mm (3/4") & 25mm (1") I	
I	RECORD COPY SIGNED BY	THE ARCHITECT/ENGINEER ASSUMES	STANDARD NO.
	KATHI L FLOWERS 08/31/2011	RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	520S-9

2 OF 2

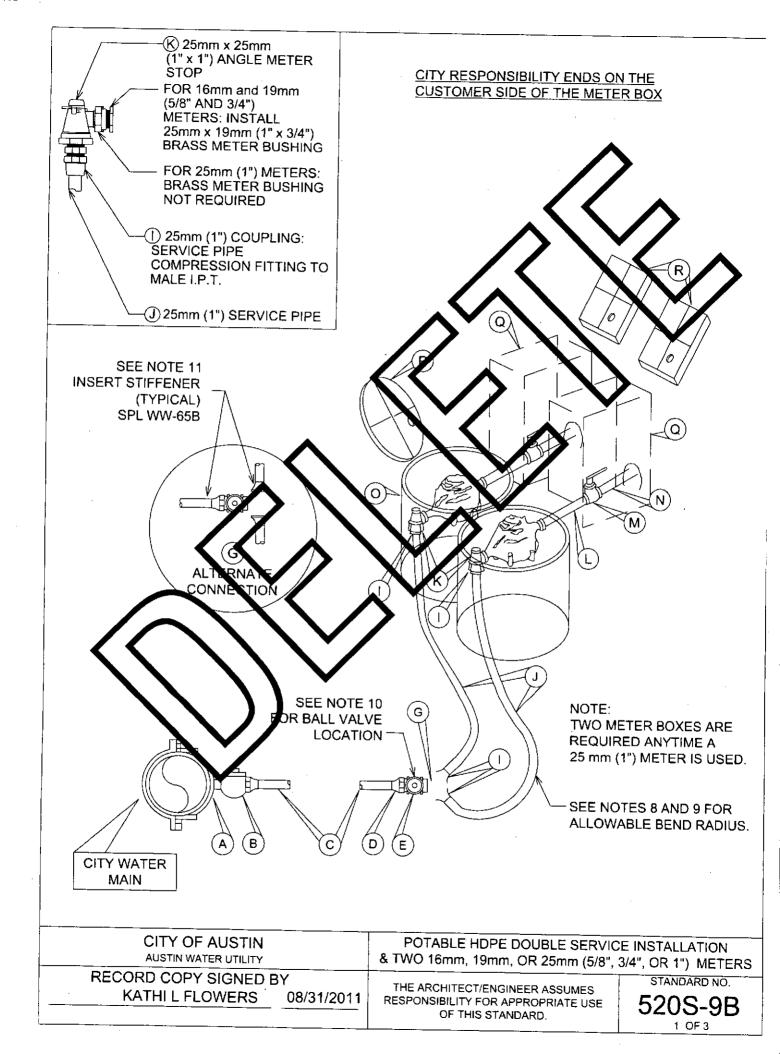




## NOTES:

- 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. OTHER THAN FITTINGS INCLUDED ON PAGE 2 OF 3.
- 2. SERVICE SADDLE SHALL BE WRAPPED COMPLETELY WITH 0.2 mm (8 MIL) POLYETHYLENE FILM.
- 3. BRANCH CONNECTION AND BOTH ANGLE METER STOPS MUST BE INSTALLED PRIOR TO FIRST METER INSTALLATION EVEN THOUGH SECOND PROPERTY MAY NOT BE READY FOR SERVICE.
- 4. TOP OF BOXES SHOULD BE 25 mm (1") ABOVE GROUND OR FLUSH WITH PAYMENT SURFACE.
- 5. 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)
- 6. BOX SHALL BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF SIDEWALK AND VEHICULAR TRAFFIC AREA.
- BALL VALVES EAND SHALL NOT BE LOCATED UNDER CUEB OF PAVERENT, AND NOT LOCATED MORE THAN 600mm (24") HORIZONTALLY FROM METER BOX AND 900mm (30") BEDQW FINAL GRADE.
- 8. A METER BOX IS REQUIRED FOR EACH 25mm (1") METE

CITY OF AUSTIN AUSTIN WATER UTILITY	DOUBLE WATER SERVICE	FOR DUPLEX
NATHIL FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 5205-9A 3 OF 3

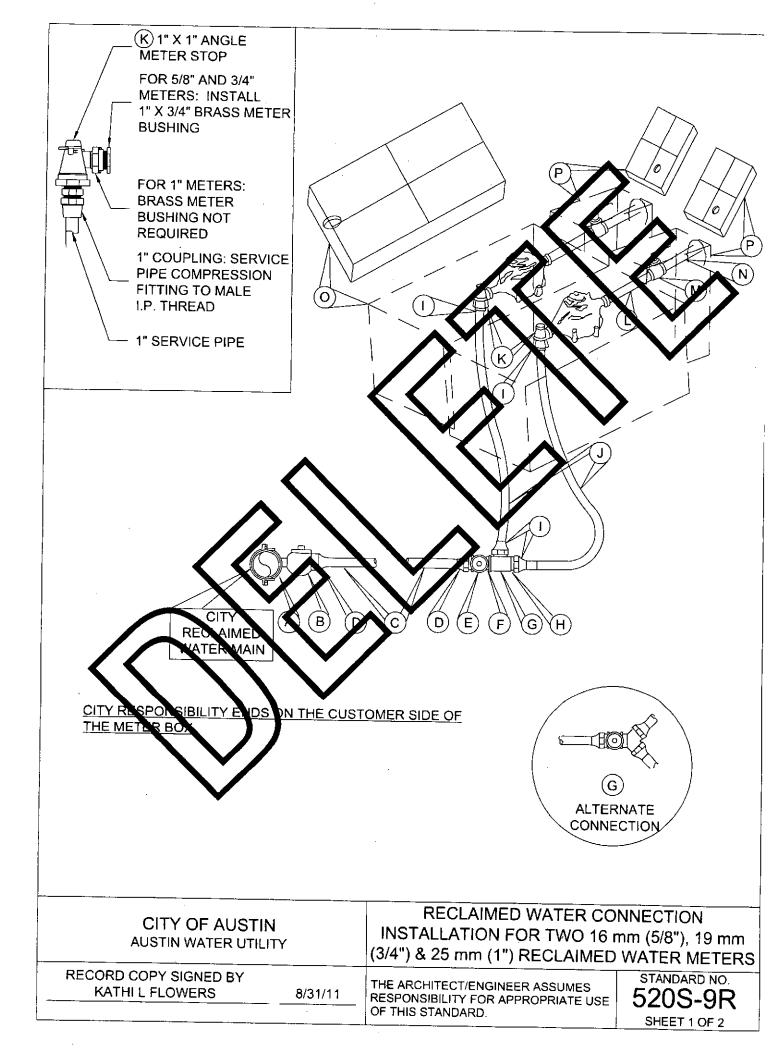


(A) (B)	TERIAL LIST		
8			
8		ASTIC AND ASBESTOS CEMENT PIPE AN	
	50mm (2") CORPORATION STOP-MALE T	HREAD INLET BY COMPRESSION OUTLE	
© D			T, SPL WW-68
D	COUPLING: 50mm (2") COMPRESSION TO	O 38mm (1-1/2") MAL⊏ L D T	
Ê F	38mm (1-1/2") BALL VALVE; SEE SPL WW	-275 AND NOTE 10	
Ð	N/A		
G	38mm (1-1/2") x 25mm (1") BRONZE WYE.	SPL WW-68 OR TEE (ALTERNATE COM	
Ð			CHON)
$\mathbb{D}$	25mm (1") COUPLING: SERVICE TUBING	TO MALE LET (COMPRESSION TTUC	
	WOTH LNER PER SPL WW-65B	TO MALE IN THE COMPRESSION FITTING	)
Ĵ	25mm (1") SERVICE TUBING		$\mathbf{\Lambda}$
ĸ	25mm (1") ANGLE METER STOP: SERVIC	E TUBING INLET Y SWIVE SOLUTING W	
	- COTLET, AND 25mm X 19mm (1" x 3/4") BE	RASS BUSHING A 25- 6 VILLAN	
_		DAT THE ANGLE STOP TARE INSTALLED	
D	- 1 COMBER FOR ALL (6mm (5/8") AND 19m	m (3/4") METERS SPL WALSS	
	WATER METER COUPLING: MALE I.P.T. X	SWIVEL COLUMN AND UT	$\setminus \vee /$
	-FOR 16mm AND 19mm (5/8" AND 3/4") ME	TERS: 19mm v 1 mm (4"v9 /2") LONO	
	-FOR 25mm (1°) METERS: 25mm x 213mm	(1" x 8-1/") DN/G	
0	CUSTOMER BALL VALVE 25mm (1") SEE :	SPL WM-270	V
)	25mm (1") TUBING MEETING CITY OF AU	STIP PLUMBING CODE REQUIREMENTS	
	METER BOX PER SPL WW-145 OR WW-14		
)	AMR/AMI READY LID-FOR METER BOX FI	IRUSHEN WITH ARRIGUED BOY	
)	RECTANGULAR BOX FOR CUSTOMER'S	CUT-OSE VAN/E MID DDV /WHEN DEVID	<b>\</b>
	300mm x 425mm x 300mm (12"x17"x12") O	R EQUAL SIZE MAY VARY WITH DRV AND	.) D
)	STOULD BE SIZED FOR OPERALION OF		
	RECTANGULAR PLASTIC BOX LID, 300mn	n x 425mm x 3.0mm 421x 47% 43% op r	0.1.41
	SEE SPL WW-145A.	In a regimment of the region o	QUAL.
	<b>~ \ \</b>		
		$\land \land \checkmark$	
		$\mathbf{N}$	
		$\sim$	
		$\sim$	
		$\sim$	
	CITY OF AUSTIN AUSTIN WATER LITH TY	POTABLE HDPE DOUBLE SERVICE & TWO 16mm 19mm OR 25mm (5/8" a	INSTALLATION
	AUSTIN WATER UTILITY	POTABLE HDPE DOUBLE SERVICE & TWO 16mm, 19mm, OR 25mm (5/8", 3	/4", OR 1") METERS
	AUSTIN WATER UTILITY RECORD COPY SIGNED BY	THE ARCHITECT/ENGINEER ASSUMES	EINSTALLATION /4", OR 1") METERS STANDARD NO.
	AUSTIN WATER UTILITY	POTABLE HDPE DOUBLE SERVICE & TWO 16mm, 19mm, OR 25mm (5/8", 3) THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD	/4", OR 1") METERS

1

FILM.	TALL BE WRAPPED COMP	PLETELY WITH 0.2 mm (8 M	IIL) POLYETHYLENE
BRANCH CONNECTION	ON AND BOTH ANGLE ME	TER STOPS MUST BE INS SECOND PROPERTY MAY	
TOP OF BOXES SHO		GROUND OR FLUSH WITH	
SURFACE.		Y SHALL BE BEDDED IN G	
MATERIALS AS REQU	JIRED BY SECTION 510.3 (	(14) OF THE CITY OF AUS R BEDDING AS REQUIRE	
	D CURB NEXT TO PROPE	RTY LINE AND/OR SIDE V	ALK AND OLD OF
INSTALL METALLIC W TO METER.	ARNING TAPE MIN. 1' AB	OVE P.E. TUBING FROM T	
TUBING SHALL BE PL TRENCH.	ACED SO THAT IT IS REL	AXED AND ISNAKET" LOC	SELY IN THE
	, SHALL HAVE A RADIUS	NO SMALLER THAN THE	ALUE SHOWN
IF A FITTING WILL BE	INSTALLED WITHIN A BEI	NY SECTION OF TUBING	THE TUBING SHALL
B.V. (E) SHALL NOT B	E LOCATED UNDER CORE	B CR PAVEMENT, AND NO	THE LOBATED MODE TH
		X R 900 m (2") BELOW	
	FOR RE TURING BED		FINE BRADE.
	FOR P.E. TUBING PER S	L WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WW COB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	UWW OOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	FOR P.E. TUBING PER S	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
INSERT STIFFENERS	NGS.	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
TALLE 1 (SE Nominal Subing	NGS.	TABLE 2 (S	ED INSIDE TUBING AT AL
TALE 1 (SE	ENOTE 8)	WWWOOB TO BE INSTALL	ED INSIDE TUBING AT AL
TALLE 1 (SE	ENOTE 8) Berd Radius of at	TABLE 2 (S Nominal Tubing	ED INSIDE TUBING AT AL SEE NOTE 9) Bend Radius of at
TALLE 1 (SE Nominal Tubing Dia.	ENOTE 8) Berd Radius of at Least	TABLE 2 (S Nominal Tubing Dia.	ED INSIDE TUBING AT AL BEE NOTE 9) Bend Radius of at Least

	POTABLE HDPE DOUBLE SERVIC & TWO 16mm, 19mm, OR 25mm (5/8",	E INSTALLATION 3/4", OR 1") METERS
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-9B



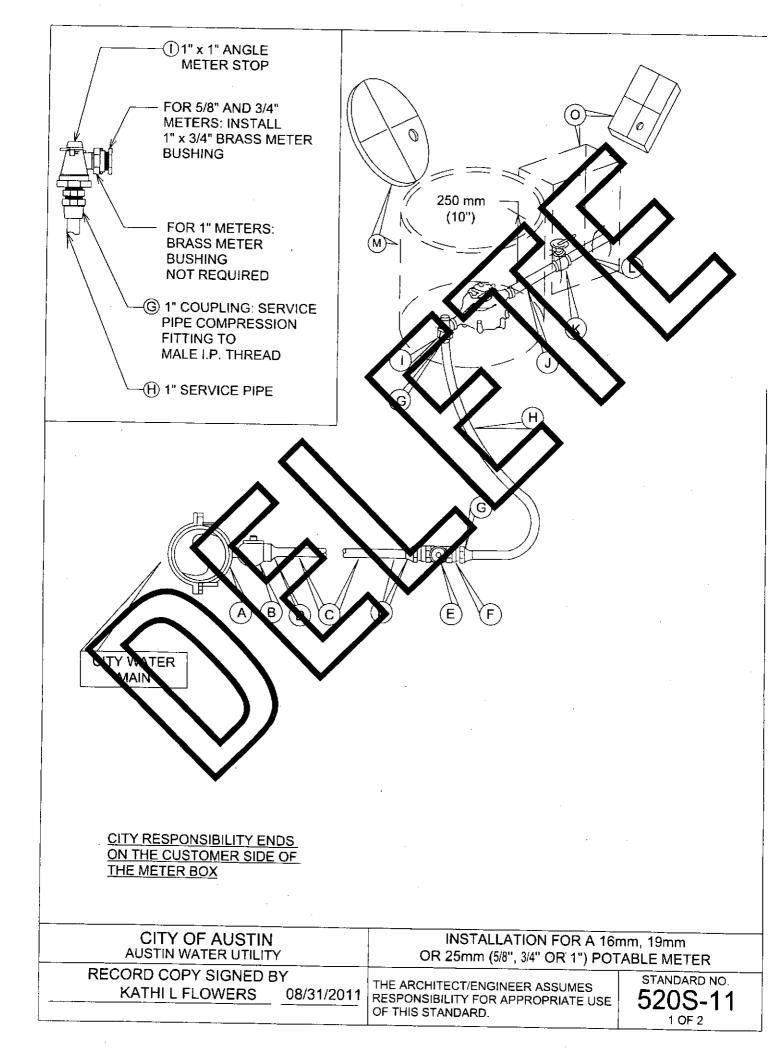
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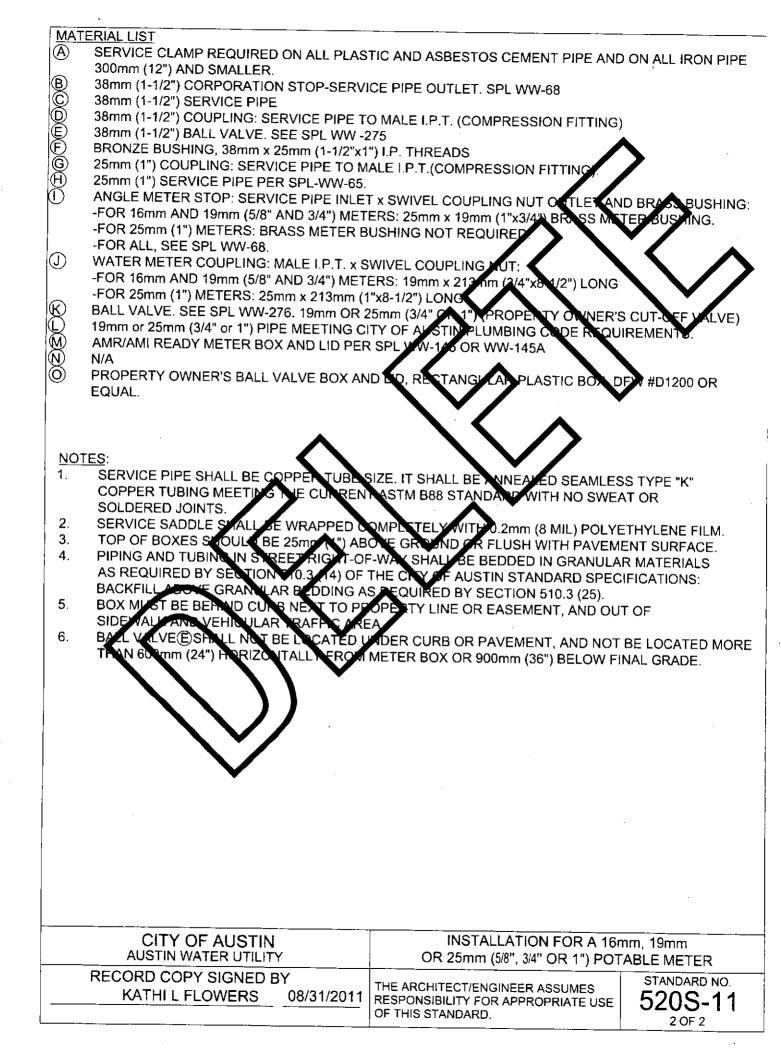
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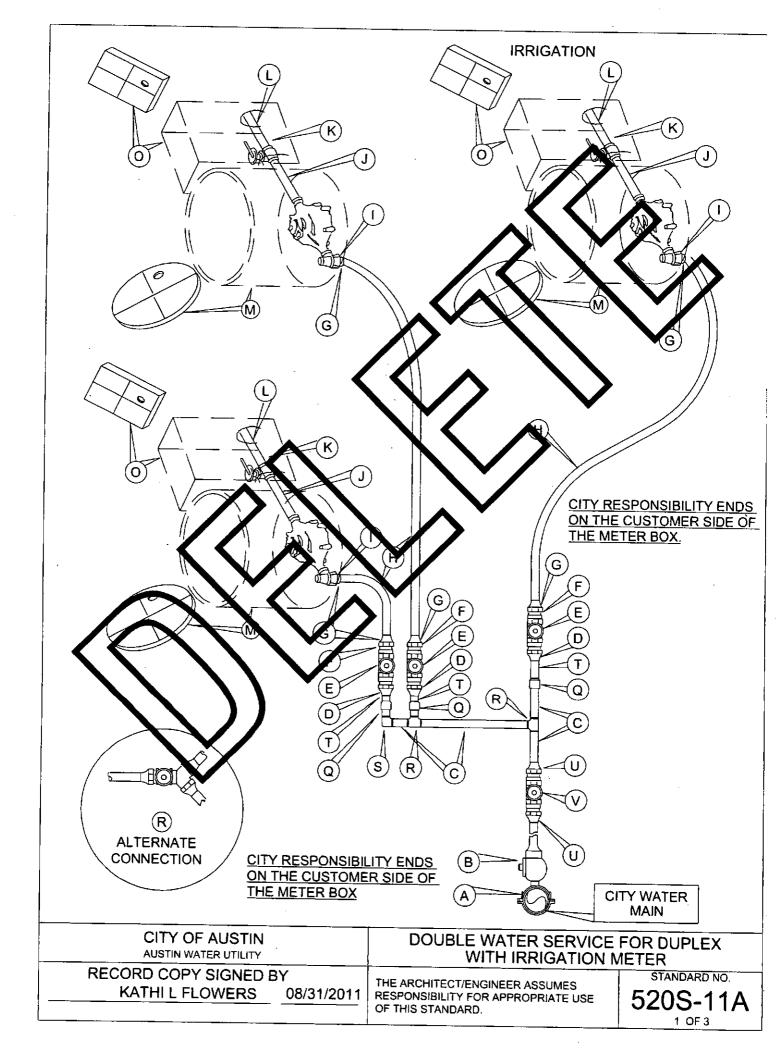
	38 mm (1-1/2") CORPORATION 38 mm (1-1/2") CORPORATION 38 mm (1-1/2") SERVICE PIPE 38 mm (1-1/2") COUPLING: SE 38 mm (1-1/2") BALL VALVE. S 38 mm (1-1/2") BRONZE NIPPLE 38 mm (1-1/2") BRONZE TEE, S BRONZE BUSHING, 38 mm X 2 25 mm (1") COUPLING: SERVI 25 mm (1") COUPLING: SERVI 25 mm (1") SERVICE PIPE 25 mm (1") SERVICE PIPE 25 mm (1") ANGLE METER STO BUSHING: -FOR 16 mm AND 19 mm (5/8", -FOR 25 mm (1") METERS: BR -FOR ALL, SEE SPL WW-68 WATER METER COUPLING; M	N STOP-SERV ERVICE PIPE SEE SPL WW- BRONZE I.P SPL WW-68 C 25 mm (1-1/2" ICE PIPE TO I OP: SERVICE AND 3/4") ME ASS METER	2. THREAD OR 38 mm (1-1/2") BRONZE WYE SPLWW X 1") I.P. THREADS MALE I.P. THREAD, COMPRESSION PT PIPE INLET X SWIVEL COUPLING INIT ( TERS: 25 mm X 19 pm (1" X 3/4") BRASS BUSHING NOT REQUIRED	G) TING OUTLET AND BRASS
	-FOR 16 mm AND 19 mm (5/8" ,	AND 3/4") ME	TERS: 19 mm X 213 mm (3/4" X 8-1/2 LC	DNG V
M	-FOR 25 mm (1°) METERS: 25 r	nm X 213 mm	(1" X 8 1/2") ZONG	
<b>\$</b> 20	25 mm (1") BALL VALVE. SEE	SPL WW-276		
8	RECTANGULAR METER BOX		PLONBING CODE RECUIREMENTS	
	CUSTOMERS. (MUST BE AMR	ND COVER,	SEE SPL WWW SA, FOR RECLAIMED W	ATER RESIDENTIAL
P	PROPERTY OWNERS BALL VA		D COVER, RECTANGULAR PLASTIC BO	
$\sim$	OR EQUAL, (MANUFACTURED		D COVER, RECTARGULAR FLASTIC BO D PURPLE WITH "RECLAMED MATER"	X, DFW #D1200.5
NOTI	FS.		OF ORFLE WITH RELAWED WATER"	CAST INTO COVER)
1.	SERVICE PIPE SHALL BE CON	PER TUBE S	RE. IT SHALL BE AN IEACED SEAMLES	S
	THE K COPPER TUBING MI		CURRENT ASTM 988 SYANDARD WITH	NO
2.	SWEAT OR SOLDERED JOINT	S		
۷.	BOLVETHVI ENE EVA DE	WRAPPED CO	DNPLETELY WITH 0.2 mm (8 MIL)	
3.	POLYETHYLENE FILM PER SP BRANCH CONNECTION AND	2 W V-2 D F	OR RECLAIMER WATER.	
0.	TO FIRST METER INSTAN AT		METER STOPS MUST BE INSTALLED P	RIOR
	READY FOR SERVICE.		OUGH SECOND PROPERTY MAY NOT E	SE
4.	TOP OF BOXES SHOLD BE		OVE SROUND OR FLUSH WITH PAVEM	
	JUN AGE			
5.	PIFING AND TUBING N STREE		WAY SHALL BE BEDDED IN GRANULAR	
	MATE IALS AS REQUIRED B	SECTION 51	D 3 (14) OF THE CITY OF ALLETIN STAND	
	SPECIFICATIONS: BACKPLLA	OVE GRAN	ULAR BEDDING AS REQUIRED BY SEC	
	510.5 (25).			1
6.	METER BOX MUST BE BEHIND	URB NEXT	TO PROPERTY LINE OR EASEMENT A	
_		RAFFIC ARE	Α	
7.	BALL VALVE (E) SNALL NOT B	E LOCATED N	MORE THAN 914 mm (36") BELOW DELO	w
	TINAL GRADE OR MICRE HAN	1 610 mm (24)	) HORIZONTALLY FROM METER BOX	
<u>.</u>	DALL VALVE (E) SHALLINO I BI		JNDER PAVING SIDEWALK OR DRIVEV	VAY.
8.	A METER BUX IS REQUIRED F	OR EACH 25	mm (1") METER	
9.			OVER SHALL BE MANUFACTURED PUR	PLE WITH
10.	"RECLAIMED WATER" CAST IN	ITO IT.		
τŲ.			IRTENANCES TO BE MANUFACTURED	PURPLE,
	WRAPPED IN PURPLE PULYE	HYLENE PE	R SPL WW-27D, OR PAINTED PURPLE F	ER SPL WW-3C.
			RECLAIMED WATER CO	
	CITY OF AUSTIN			
	AUSTIN WATER UTILITY	/	INSTALLATION FOR TWO 16 n	nm (5/8"), 19 mm
			(3/4") & 25 mm (1") RECLAIMED	WATER METERS
RE	CORD COPY SIGNED BY		THE ARCHITECT/ENGINEER ASSUMES	STANDARD NO.
<u> </u>	KATHI L FLOWERS	8/31/11	RESPONSIBILITY FOR APPROPRIATE USE. OF THIS STANDARD.	520S-9R

SHEET 2 OF 2

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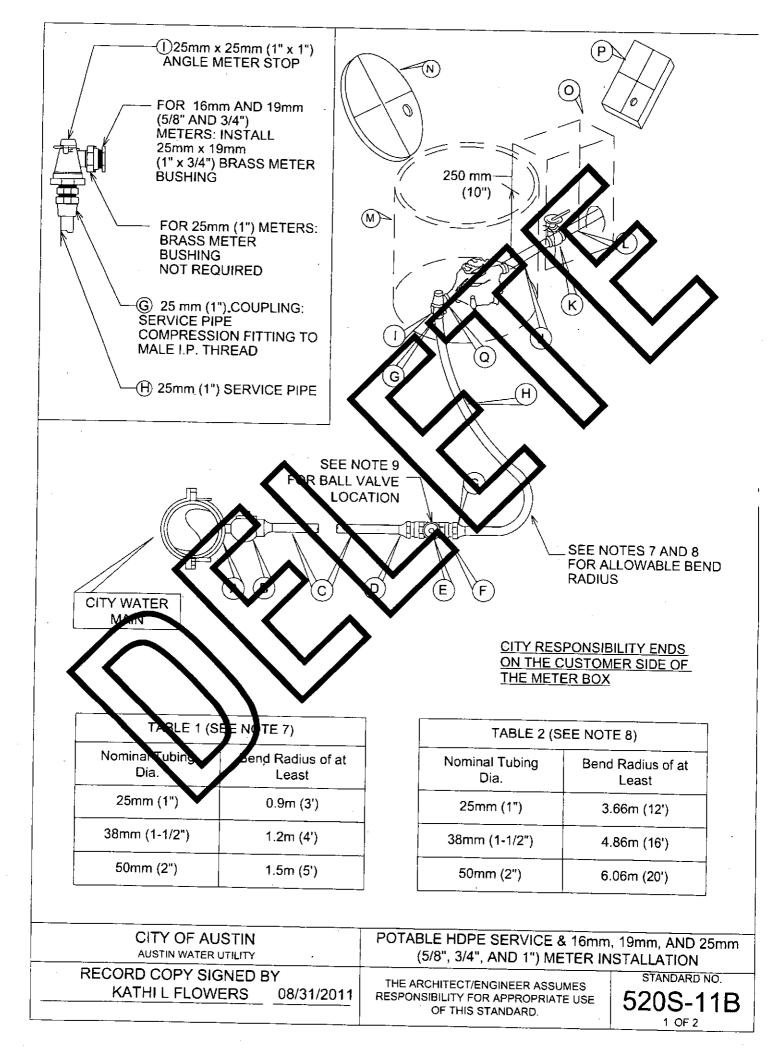


11" x 1" ANGLE			
METER STOP FOR 5/8" AND 3/4" METERS: INSTALL 1" x 3/4" BRASS METER BUSHING FOR 1" METERS: BRASS METER BUSHING NOT REQUIRED © 1" COUPLING: SERVICE PIPE COMPRESSION FITTING TO			
MALE I.P. THREAD	// 、 \\\	•	
	$\bigvee$ $\lor$	• .	
<ul> <li>MATERIAL LIST</li> <li>A SERVICE CLAMP REQUIRED ON ALL PLASTIC AND ASDESTOS COMENT PIPE AND ON ALL IRON PIPE 300mm (12") AND SMALLER</li> <li>50mm (2") CORPORATION TOPSERVICE PIPE OUTET.</li> <li>50mm (2") SERVICE PIPE.</li> <li>38mm (1-1/2") COUPLINE SERVICE PIPE TO MALE LP.T. (COMPRESSION FITTING)</li> <li>38mm (1-1/2") BALL ALV. SEE PL WX/275.</li> <li>BRONZE BUSHING: 38hm x 25 mmR1/2 (1") LP. HR:ADS</li> <li>25mm (1") COUPLINE SERVICE PIPE TO MALE LOUPLING NUT OUTLET AND BRASS BUSHING: -FOR 16mm AND 30mm 18" sci4") METERS: 55 mm x 19mm (1"x3/4") BRASS METER BUSHING: -FOR 16mm AND 30mm 18" sci4") METERS: 55 mm x 19mm (1"x3/4") BRASS METER BUSHING: -FOR 16mm AND 18mm (18" sci4") METERS: 55 mm x 19mm (1"x3/4") BRASS METER BUSHING: -FOR 16mm AND 18mm (18" sci4") METERS: 10 mm x 213mm (34" x 8-12") LONG -FOR 26mm (1") METERS: BLASS BUSHING NOT REQUIRED.</li> <li>4. WATER TER COUPLING: MAE LPT. 16WIVEL COUPLING NUT: -FOR 16mm AND 18mm (18" sci40 MD 4") MPTERS: 19mm x 213mm (34" x 8-12") LONG -FOR 25mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25mm (1") METERS: 25 mx 2210mm (1" x 8-12") LONG -FOR 25mm (1") METERS: 25 mx 2210mm (1" x 8-12") LONG -FOR 25mm (1") METERS: 25 mx 2210mm (1" x 8-12") LONG -FOR 25mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm (1") METERS: 25 mx 211mm (1" x 8-12") LONG -FOR 25 mm x 30mm (1" x 8-12") TEP DE S5 mm (2") BRONZE WYE, SEE SPL WW-68.</li> <li>SOMT x 50mm (2" x 2") ELBOW.</li> <li>Somm x 30mm (1" x 2") ELBOW.</li> <li>Somm (2") B</li></ul>			
CITY OF AUSTIN AUSTIN WATER UTILITY	DOUBLE WATER SERVICE WITH IRRIGATION N		
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 5205-11A 2 OF 3	

#### NOTES:

- 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) VETHYLENE FILM
- TOP OF BOXES SHOULD BE 25mm (1") ABOVE GROUND OR FLUSH WITH AVEMENT SURFACE.
   PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN SRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARP SPECIFICATIONS: BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 5104 (27)
- BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.5(25).
  BOX SHALL BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT, AND OUT OF SIDEWALK AND VEHICULAR TRAFFIC AREA.
- BALL VALVES EAND SHALL NOT BE LOCATED UNDER CLRB OX PAVEMENT, AND NOT LOCATED MORE THAN 600mm (24") HORIZONTALLY FROM METER POX AND 900mm (35") BE OW FINAL GRADE.
- 7. A METER BOX IS REQUIRED FOR EACH 25mm (1") METER

CITY OF AUSTIN	DOUBLE WATER SERVICE FOR DUPLEX	
AUSTIN WATER UTILITY	WITH IRRIGATION METER	
NATHLEFLOWERS00/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 5205-11A 3 OF 3



## MATERIAL LIST

- SERVICE CLAMP REQUIRED ON ALL PLASTIC AND ASBESTOS CEMENT PIPE AND ON ALL IRON PIPE 300mm (A) (12") AND SMALLER.
- 50mm (2") CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET, SPL WW-68. 0 õ
- 50mm (2") SERVICE TUBING.
- COUPLING: 50mm (2") COMPRESSION TO 38mm (1-1/2") MALE I.P.T.
- 38mm (1-1/2") BALL VALVE; SEE SPL WW-275 AND NOTE 9.
- DOOCA BRONZE BUSHING, 38mm x 25mm (1-1/2" x 1") I.P.T.
- 25mm (1") COUPLING: COMPRESSION TO MALE I.P.T.
- 25mm (1") SERVICE TUBING PER SPL WW-65.

ANGLE METER STOP: SERVICE TUBING INLET & SWIVEL COUPLING NUT OUTSET AND BRASS  $\bigcirc$ JNG: -FOR 16mm AND 19mm (5/8" AND 3/4") METERS: 25mm x 19mm (1" x 3/4") BE ISHII -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:  $(\mathbb{J})$ -FOR 16mm AND 19mm (5/8" AND 3/4") METERS: 19mm x 213mm ( 4" x\_8-1/2 ONG. -FOR 25 mm (1") METERS: 25mm x 213mm (1" x 8-1/2") LONG.
- B BALL VALVE 19mm OR 25mm (3/4" OR 1") (PROPERTY OWNER -OF /AI 🗸 SEE SPL WW
- 76). 19mm OR 25mm (3/4" OR 1") TUBING MEETING CITY OF A I PLUMBING ODE REQUIREMENT
- METER BOX PER SPL WW-145 OR WW-145A.
- AMR/AMI READY LID-FOR METER BOX, LID FURNIS FOW H APPROVED BOX
- PROPERTY OWNER'S CUT-OFF VALVE BOX-RETAIGU R PLASTIC BOX.
- RECTANGULAR PLASTIC BOX LID. 300mm x 425m x 30 12") OR EQU Ô
- ANGLE METER STOP: SERVICE TUBING INLET'X SW VEL UT OUTLET: -FOR 16mm and 19mm (5/8" and 3/4") METERS: 25mm Թՠՠ -FOR 25mm (1") METERS: 25mm x 25mm (1" x 1")

- SADDLE SH 1. SERVI RAPPED COM LETTEY WITH 0.2mm (8 MIL) POLYETHYLENE FILM. LBEV
- 2. TOP VE GROUND OR FLUSH WITH PAVEMENT SURFACE. OULD BE 25m (1")
- EET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS 3. ND TUBING IN ST RED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS: ALOVE GRAND AR BEDDING AS REQUIRED BY SECTION 510.3 (25). REO EILL A
- REHIND CURB NEYT TO PROPERTY LINE AND/OR SIDEWALK AND OUT OF VEHICULAR TRAFFIC 4. BOX M ст ве AREA.
- WARNING TAPE (MAGNETIC TRACER TAPE) MIN. 300mm (1') ABOVE P.E. TUBING FROM INSTALL ME 5. ALLIČ TAP CONNECT ON TO ER
- TUBING SHALL BE PLACED THAT IT IS RELAXED AND "SNAKES" LOOSELY IN THE TRENCH. 6.
- 7.
- TUBING, WHEN BENT SHALL HAVE A RADIUS NO SMALLER THAN THE VALUE SHOWN IN TABLE 1. IF A FITTING WILL BE INSTALLED WITHIN A BENT SECTION OF TUBING, THE TUBING SHALL HAVE A RADIUS NO 8. SMALLER THAN THE VALUE SHOWN IN TABLE 2.
- B.V. (E) SHALL NOT BE LOCATED UNDER CURB OR PAVEMENT, AND NOT BE LOCATED MORE THAN 600mm (24") 9. HORIZONTALLY FROM METER BOX OR 900mm (36") BELOW FINAL GRADE.
- INSERT STIFFENERS FOR P.E. TUBING PER SPL WW-65B TO BE INSTALLED INSIDE TUBING AT ALL COMPRESSION 10. FITTINGS.

CITY OF AUSTIN	POTABLE HDPE SERVICE & 16mm, 19mm, A	ND 25mm
AUSTIN WATER UTILITY	(5/8", 3/4", AND 1") METER INSTALLATI	ION
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	<b>S-11B</b>

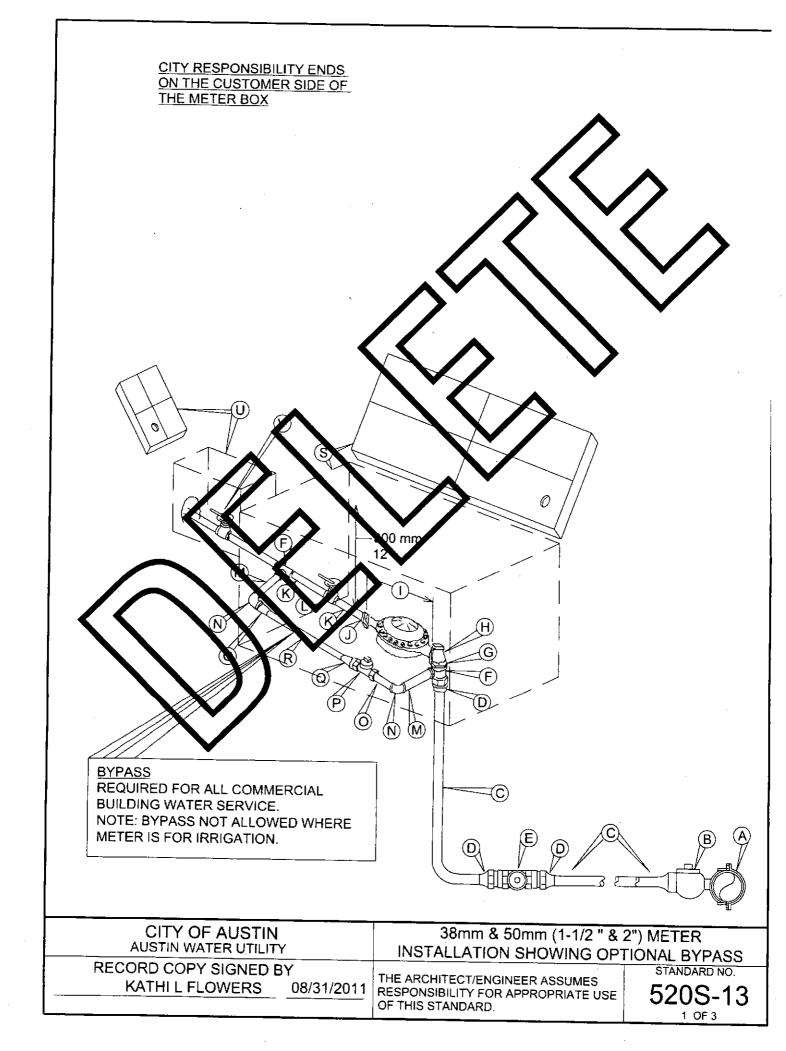
K 1" X 1" ANGLE METER STOP FOR 5/8" AND 3/4" METERS: INSTALL 1" X 3/4" BRASS METER BUSHING FOR 1" METERS: BRASS METER BUSHING NOT REQUIRED 1" COUPLING: SERVICE PIPE COMPRESSION FITTING TO MALE I.P. THREAD 1" SERVICE PIPE	
CITY RECENIMEN WATERMAIN	
CITY RESPONSIBILITY FINDS ON THE THE METER BOX	E CUSTOMER SIDE OF G ALTERNATE CONNECTION
CITY OF AUSTIN AUSTIN WATER UTILITY	RECLAIMED WATER CONNECTION INSTALLATION FOR A 16 mm, 19 mm OR 25 mm (5/8", 3/4", OR 1") RECLAIMED WATER METER
RECORD COPY SIGNED BY KATHI L FLOWERS 8/31	1/11       THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.       STANDARD NO.         520S-11R       5400 SHEET 1 OF 2

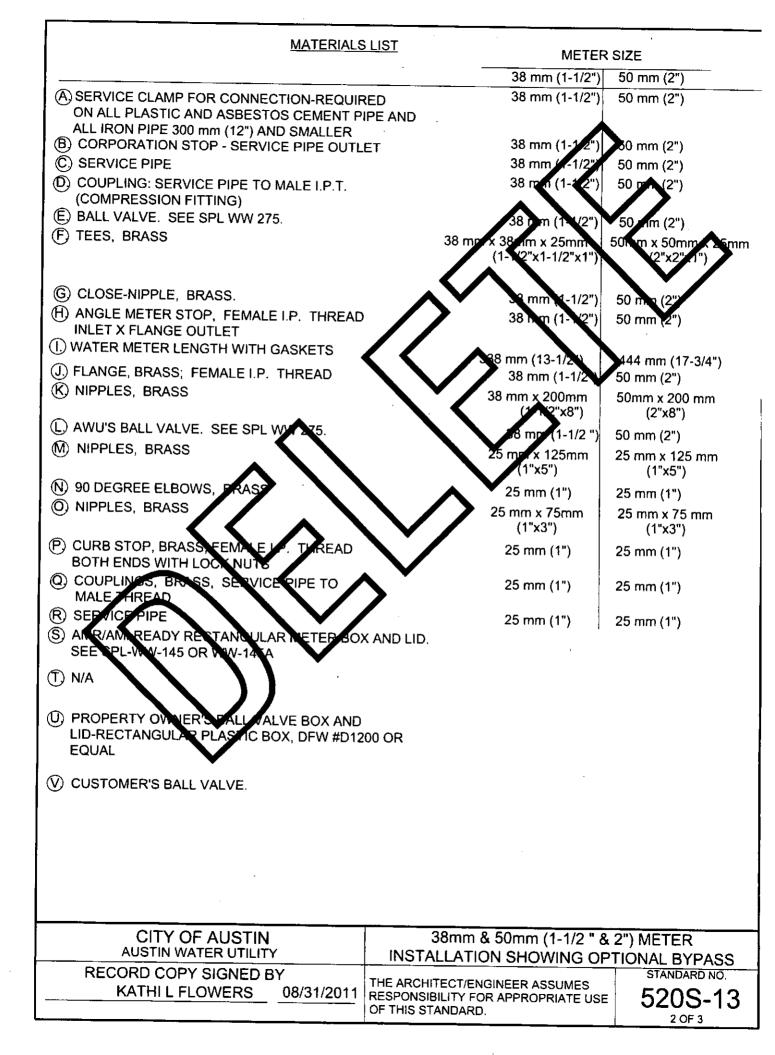
## MATERIAL LIST

SERVICE CLAMP REQUIRED ON ALL PLASTIC AND ASBESTOS CEMENT PIPE AND ON ALL IRON PIPE (A) 300mm (12") AND SMALLER 38 mm (1-1/2") CORPORATION STOP-SERVICE PIPE OUTLET. SPL WW-68 (B) Õ 38 mm (1-1/2") SERVICE PIPE 38 mm (1-1/2") COUPLING: SERVICE PIPE TO MALE I.P.T. (COMPRESSION 5 38 mm (1-1/2") BALL VALVE. SEE SPL WW-275 BRONZE BUSHING, 38 mm X 25 mm (1-1/2" X 1") I.P. THREADS 25 mm (1") COUPLING: SERVICE PIPE TO MALE I.P.T. (COMPRESSION FITTING WITH TIFFENER) 25 mm (1") SERVICE PIPE PER SPL WW-65B Ã ANGLE METER STOP: SERVICE PIPE INLET X SWIVEL COUPLI ITI F ŔASS BUSHING: -FOR 16 mm AND 19 mm (5/8" AND 3/4") METERS: 25 mm X 19 mr (1" X 3/4") Bi TER B -FOR 25 mm (1") METERS: BRASS METER BUSHING NOT REQUIR -FOR ALL, SEE SPL WW-68 WATER METER COUPLING: MALE I.P.T. X SWIVEL  $(\mathbb{J})$ OUT ZING NI -FOR 16 mm AND 19 mm (5/8" AND 3/4") METERS 19 🖻 m X 213 mm 1/2") LONG -FOR 25 mm (1") METERS: 25 mm X 213 mm (11 X 8-12") LONG BALL VALVE. SEE SPL WW-276. 19 mm OP 5 mm (3/4" OR 1 ") (PROPER R LY OWNER'S CUT-OFF VALVE) 19 mm OR 25 mm (3/4" OR 1") PIPE MEETING CITY UST PLUMBING COLE REQUIREMENTS RECTANGULAR METER BOX AND COVER, SEE SPL WW-M 45A, FOR RECLAIMED WATER RESIDENTIAL CUSTOMERS. (MUST BE AMR/AMI COMPATIBLE N) PROPERTY OWNERS BALL VALLE BOX AND COVER REC ANGLAR LASTIC BOX, DFW #D1200.5 OR EQUAL. (MANUFACTURED OR COLORED PURPLE ECLAMED WATER" CAST INTO COVER) WITH NOTES: 1. SERVICE PIPE S E COPPER TORE SIZE IT S **IALL** BE ANNEALED SEAMLESS TYPE "K" COPPER TOBING MERTING TH RENT ABTM B88 STANDARD WITH NO E CUR SWEAT OR SOL DERE NIOL A 2. SERVICE SADDL APPED COMPLETELY WITH 0.2 mm (8 MIL) GHA JE W POLYETHYLENE FIL L WW-27D FOR RECLAIMED WATER. LPER S 3. TOP OF BOXE 6 mm (1" ABOVE GROUND OR FLUSH WITH PAVEMENT SHOULD BE IN STREET RIGHT OF-WAY SHALL BE BEDDED IN GRANULAR 4. G AND BING RIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD CATIONS: MACKAUL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION RECI (25 BOXMUST BEBEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT, AND OUT OF 5. METE K AN VEHIOUL R TRAFFIC AREA. SIDEWA LLL OT BE LOCATED MORE THAN 914 mm (36") BELOW METER OR 6. BALL VAL (E); 0 mm (4") HORIZONTALLY FROM METER. BALL VALVE (E) SHALL NOT MORE THAN BE LOCATED UNDER PAVING, SIDEWALK, OR DRIVEWAY. METER BOX TO BE RECTANGULAR AND COVER SHALL BE MANUFACTURED PURPLE WITH 8. "RECLAIMED WATER" CAST INTO IT. ALL RECLAIMED WATER PIPING AND APPURTENANCES TO BE MANUFACTURED PURPLE. 9. WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D, OR PAINTED PURPLE PER SPL WW-3C. **RECLAIMED WATER CONNECTION CITY OF AUSTIN** INSTALLATION FOR A 16 mm, 19 mm OR 25 mm AUSTIN WATER UTILITY (5/8", 3/4", OR 1") RECLAIMED WATER METER RECORD COPY SIGNED BY STANDARD NO. THE ARCHITECT/ENGINEER ASSUMES KATHI L FLOWERS 8/31/11 520S-11R RESPONSIBILITY FOR APPROPRIATE USE

OF THIS STANDARD.

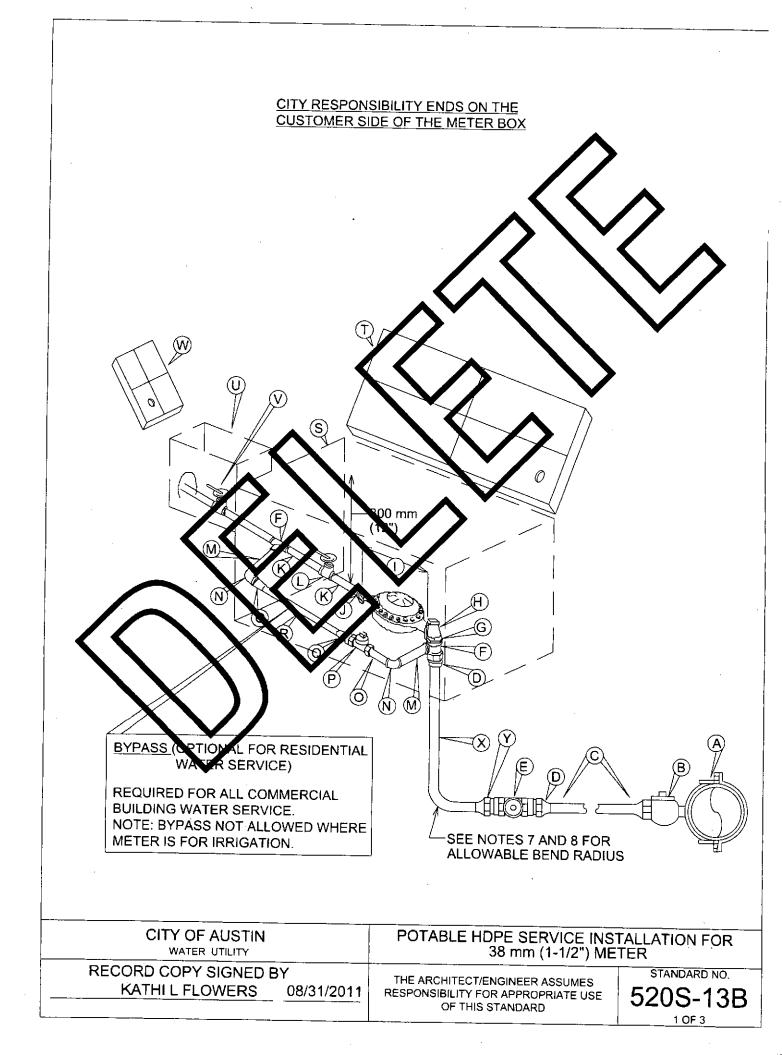
SHEET 2 OF 2





- 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.
- SERVICE SADDLE SHALL BE WRAPPED COMPLETELY WITH 0.2mm (8 MIL) POLYETHYLENE FILM.
   TOP OF BOXES SHOLL D BE 25mm (1") ABOVE CROLIND OD FLUCLUM/FLUDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FULDM/FU
- 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 GRANMAR 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 OUT OF VEHICULAR TRAFFIC AREA.
- BALL VALVES ESHALL NOT BE LOCATED UNDER CURB OR PAVEMENT, AND NOT LOCATED MORE THAN 600mm (24") HORIZONTALLY FROM METER BOX OR 90mm (36") BELOW FINAL GRADE.

CITY OF AUSTIN	38mm & 50mm (1-1/2 " & 2	2") METER
AUSTIN WATER UTILITY	INSTALLATION SHOWING OPT	
RECORD COPY SIGNED BY		STANDARD NO.
KATHLEFLOWERS08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	520S-13



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	MATERIALS	LIST	
(A) BCOW	50mm (2") SERVICE CLAMP FOR CONNECT ASBESTOS CEMENT PIPE AND IRON PIPE 50mm (2") CORPORATION STOP - MALE TH 50mm (2") SERVICE TUBING PER SPL WW- COUPLING: 500mm (2") COMPRESSION TO 38mm (1-1/2") BALL VALVE. SEE SPL WW-2	300mm (12") AND SMALLER. IREAD INLET BY COMPRESSION OUTLI 65 938mm (1-1/2") MALE LP T	ET
Ð	38mm (1-1/2") x 38mm (1-1/2") x 25mm (1") T	EES, BRASS	$\wedge$
360IO	38mm (1-1/2") CLOSE-NIPPLE, BRASS 38mm (1-1/2") ANGLE METER STOP, FEMAL 38mm (1-1/2") WATER METER LENGTH WIT 38mm (1-1/2") METER FLANGE, BRASS FEM 38mm (1-1/2") x 200mm (8") NIPPLE, BRASS	H GASKETS	
$\mathbb{Q}$	38mm (1-1/2") BALL VALVE. SEE SPL WW-2 25mm (1") x 125mm (5") NIPPLES, BRASS, M	175 MIP	V
8 0	25mm (1") 90° ELBOWS, BRASS, FIPT 25mm (1") x 75mm (3") NIPPLES, BRASS, Mil	$\sum_{i=1}^{n}$	
38\$< 90000	25mm (1") CURB STOP, BRASS, EEMALE I.P. 25mm (1") COUPLINGS, BRASS, SERVICE P. 25mm (1") SERVICE PIPE RECTANGULAR METER BOX. SED SPL VW- AMI/AMR READY LID FOR MITER BOX. SED OR APPROVED EQUAL; OF LID FURNEHED RECTANGULAR BOX FOR CUSTOMER'S NU SPL-WW-145A 300mm3, 425mm - 300mm (12 38mm (1-1/2") CUSTOMER'S PALL VALVE. S RECTANGULAR PLASTIC BOX LID, SPL-WW 38mm (1-1/2") SERVICE TUBING PER SPL M COUPLING: 38mm (1-1/2") COMPRESSION T	TIPE TO MIPT -145 OR WW-1451 E SPL WW-622 DWITH APPROVED METER BOX. SPL W IT-OFF VILVE (AND PRV WHEN REQ'D. "x17" Xr2") EL SPL WW-276 -1451 W 65	/W-145A )
		POTABLE HDPE SERVICE INS 38 mm (1-1/2") ME	TER
	RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD	STANDARD NO. 5205-138 2 OF 3

- SERVICE SADDLE SHALL BE WRAPPED COMPLETELY WITH 0.2mm (8 MIL) POLYETHYLENE FILM. 1.
- TOP OF BOXES SHALL BE 25mm (1") ABOVE GROUND. 2.

PIPING AND TUBING IN RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED 3. BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS: BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).

- BOX SHALL BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT, AND NOT 4. LOCATED IN SIDEWALK OR VEHICULAR TRAFFIC AREA.
- INSTALL METALLIC WARNING TAPE (MAGNETIC TRACER TAPE) MIN. 3 5. ABOVE P.E. TUBING FROM TAP CONNECTION TO METER.
- 6. TUBING SHALL BE PLACED SO THAT IT IS RELAXED AND "SNAKES .00 RENCH. 7.
- TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER TH T IN TABLE 1. IF A FITTING WILL BE INSTALLED WITHIN A BENT SECTION O 8. F TIRI G SHALL HAVE A RADIUS NO SMALLER THAN THE VALUE SHOWN IN TABLE
- B.V. (E) SHALL NOT BE LOCATED UNDER CURB OR PAVEMENT 9. AND NOT B .OC 600mm (24") HORIZONTALLY FROM METER BOX OR 200m (36" ELOW FINA
- INSERT STIFFENER FOR P.E. TUBING TO BE INSTAL 10. NG AT ALL Ò MPRE **ON** FITTINGS. SEE SPL WW-65B.

( )	$\mathbf{V}$
TABLE (S	SEE NOTE 7)
Nominal Aubing Dia.	Bend Radius of at Least
25mm ( 🖤	0.9m (3')
38mm (1-1/2")	1.2m (4')
50mm (2")	1.5m (5')

TABLE 2 (SEE NOTE 8)	
Nominal Tubing Dia.	Bend Radius of at Least
25mm (1")	3.66m (12')
38mm (1-1/2")	4.86m (16')
50mm (2")	6.06m (20')

CITY OF AUSTIN	POTABLE HDPE SERVICE INS	TALLATION FOR
WATER UTILITY	38 mm (1-1/2") ME	TER
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD	STANDARD NO. 520S-13B 3 OF 3

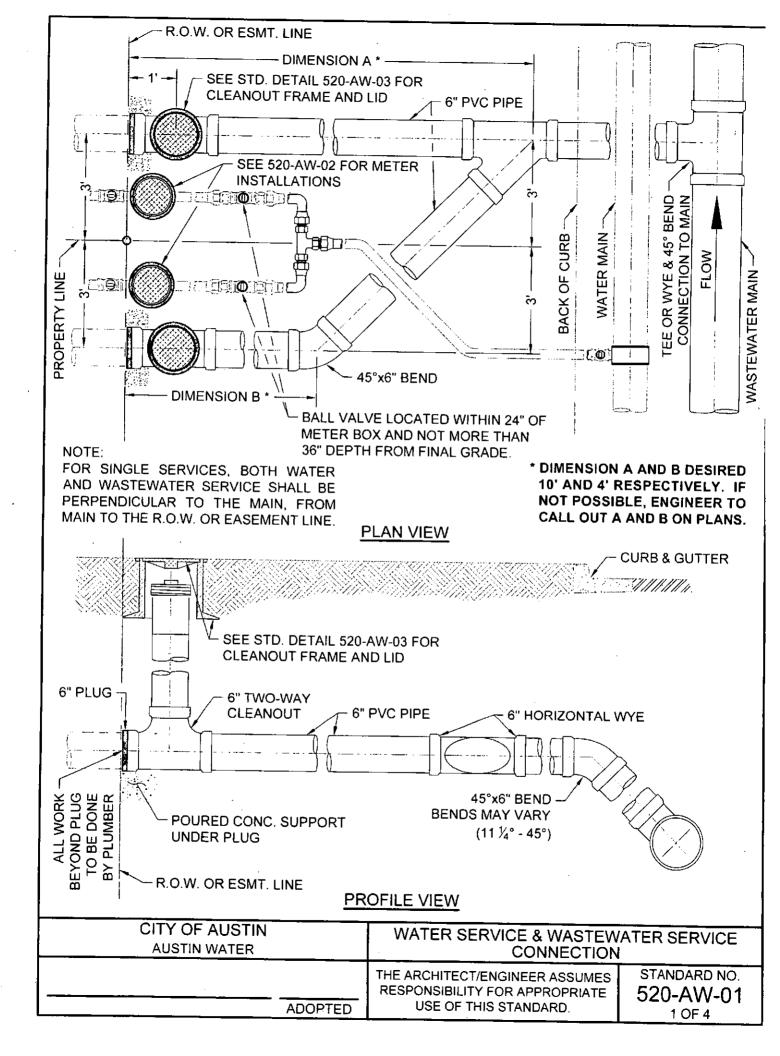
The second secon		
BYPASS NEQUIRED FOR ALL COMMERCIAL BUILDING WATER SERVICE. NOTE: BYPASS NOT ILLOWED WIERE METER IS FOR IRRIGATION.	ER SIDE OF THE METER BOX	BA
CITY OF AUSTIN AUSTIN WATER UTILITY	RECLAIMED WATER CONI INSTALLATION FOR A 38 mi (1-1/2" OR 2") RECLAIMED WA SHOWING OPTIONAL B	n & 50 mm TER METER
RECORD COPY SIGNED BY KATHI L FLOWERS 8/31/11		STANDARD NO. 20S-13R SHEET 1 OF 3

<ul> <li>SERVICE CLAMP CONNECTION REQUIRED ON ALL PLASTIC AND ASBESTOS CEMENT PIPE AND ON ALL IRON PIPE 300 mm (127) AND SMALLER CORPORATION STOP - SERVICE PIPE OUTLET</li> <li>SERVICE PIPE</li> <li>COUPLING: SERVICE PIPE TO MALE I.P.T. (COMPRESSION FITTING)</li> <li>BALL VALVE. SEE SPL WW-275</li> <li>BALL VALVE. SEE SPL WW-275</li> <li>CLOSE-NIPPLE, BRASS</li> <li>ANGLE METER STOP, FEMALE I.P. THREAD INLET X FLANGE OUTLET</li> <li>ANGLE METER STOP, FEMALE I.P. THREAD INLET X FLANGE OUTLET</li> <li>ANGLE METER STOP, FEMALE I.P. THREAD INLET X FLANGE OUTLET</li> <li>ANGLE BASS, FEMALE I.P. THREAD INLET X FLANGE OUTLET</li> <li>ANGLE BRASS, FEMALE I.P. THREAD INLET X FLANGE OUTLET</li> <li>AWU'S BALL VALVE. SEE SPL WW-275</li> <li>MIPPLES, BRASS</li> <li>AWU'S BALL VALVE. SEE SPL WW-275</li> <li>MIPPLES, BRASS</li> <li>AWU'S BALL VALVE. SEE SPL WW-275</li> <li>MIPPLES, BRASS</li> <li>SCURB STOP, BBASS FEMALE I.P. THREADDOTH EXOS WITH LOCK UTS</li> <li>COUPLINGS, BRASS FEMALE I.P. THREADDOTH EXOS WITH LOCK UTS</li> <li>COUPLINGS, BRASS FEMALE I.P. THREADDOTH EXOS WITH LOCK UTS</li> <li>COUPLINGS, BRASS SEERVICE BYE TO MALE</li> <li>SERVICE SPE SOF 1453, FOR RECIAL CLIPT TO MALE</li> <li>SERVICE BYE</li> <li>DECTAMONLAR METER DOX AND POVER. SEE SPL 145A, FOR RECIAINED WATER COMMERCIAL CUSTOMERS (MODT BE AMRIMI COMPATILE)</li> <li>RECLAIMED WATER COMMERCIAL CUSTOMERS (MODT BE AMRIMI COMPATILE)</li> <li>RECLAIMED WATER COLORED PURPLE WITH "RECLAIMED WATER CAS INTO COVER.</li> <li>CUSTOMER'S BALL VALVE BOX AND COVER- RECTAINCIDAR PLATICIDOS, DFW #01200.5 OR EQUAL, (MOUPACTIRE] OR COLORED PURPLE WITH "RECLAIMED WATER CAS INTO COVER.</li> <li>CUSTOMER'S BALL VALVE BOX AND COVER- RECTAINCIDAR PLATICIDOS, DFW #01200.5 OR EQUAL, (MOUPACTIRE] OR COLORED PURPLE WITH "RECLAIMED WATER CAS INTO COVER.</li> <li>CUSTOMER'S BALL VALVE</li> </ul>	R SIZE
ALL PLASTIC AND ASBESTOS CEMENT PIPE AND ON ALL IRON PIPE 300 mm (12") AND SMALLER CORPORATION STOP - SERVICE PIPE OUTLET SERVICE PIPE COUPLING: SERVICE PIPE TO MALE I.P.T. (COMPRESSION FITTING) BALL VALVE. SEE SPL WW-275 TEES, BRASS CLOSE-NIPPLE, BRASS ANGLE METER STOP, FEMALE I.P. THREAD NILET X FLANGE OUTLET WATER METER LENGTH WITH GASKETS FLANGE, BRASS; FEMALE I.P. THREAD NIPPLES, BRASS; FEMALE I.P. THREAD AWU'S BALL VALVE. SEE SPL WW-275 MIPLES, BRASS CURB STOP, BRASS LEMALE I.P. THREAD MIPLES, BRASS CURB STOP, BRASS LEMALE I.P. THREAD MIPLES, BRASS COUPLINGS, BRASS CURB STOP, BRASS LEMALE I.P. THREAD MIPLES, BRASS COUPLINGS, BRASS COUPLINGS, BRASS COUPLINGS, BRASS CURB STOP, BRASS LEMALE I.P. THREADROTH ENDS WITH LOCK AUTS COUPLINGS, BRASS COUPLINGS, BRASS C	?") 50 mm (2")
(COMPRESSION FITTING)       38 mm(1.1/1)         (E)       BALL VALVE. SEE SPL WW-275       38 mm(1.1/1)         (E)       BALL VALVE. SEE SPL WW-275       38 mm(1.1/1)         (E)       CLOSE-NIPPLE, BRASS       38 mm(1.1/1)         (E)       CLOSE-NIPPLE, BRASS       38 mm(1.1/1)         (E)       CLOSE-NIPPLE, BRASS       38 mm(1.1/1)         (E)       ANGLE METTER STOP, FEMALE I.P. THREAD       38 mm(1.1/1)         (E)       WATER METER LENGTH WITH GASKETS       38 mm(1.2/1)         (E)       NIPPLES, BRASS       38 mm(1.2/1)         (E)       MUPLES, BRASS       38 mm(1.2/1)         (E)       SUTH JCK (MTS       25 mm (1')         (E)       NIPPLES, BRASS       25 mm (1')         (F)       CURB STOP, BEASS, EMALE I.P. THREADROTH       25 mm (1')         (F) <t< td=""><td>!") 50 mm (2")</td></t<>	!") 50 mm (2")
COMPARESSION FITTING)       38 mm1.1/1         BALL VALVE: SEE SPL WW-275       38 mm1.1/1         TEES, BRASS       38 mm1.1/1         CLOSE-NIPPLE, BRASS       38 mm1.1/1         MANGLE METER STOP, FEMALE I.P. THREAD       38 mm1.1/1         INLET X FLANGE OUTLET       38 mm1.1/1         WATER METER LENGTH WITH GASKETS       38 mm1.1/1         MIPPLES, BRASS       38 mm1.1/1         MIPPLES, BRASS       38 mm1.1/1         MIPPLES, BRASS       38 mm2.1/1         MIPPLES, BRASS       38 mm2.1/1         MIPPLES, BRASS       38 mm2.1/1         MIPPLES, BRASS       38 mm2.1/1         MIPPLES, BRASS       1/1/2 X87         MIPPLES, BRASS       25 mm (1-1/2         MIPPLES, BRASS       25 mm (1'1.2/2 M)         SERVICE SUPE       25 mm (1'1.2/2 M)         SERVICE SUPE       25 mm (1'')         SERVICE SUPE       25 mm (1'')         SERVICE SUPE       25 mm (1'')         SERVICE SUPE <td< td=""><td></td></td<>	
CITY OF AUSTIN AUSTIN WATER UTILITY CITY OF AUSTIN AUSTIN WATER UTILITY CITY OF AUSTIN AUSTIN WATER UTILITY CLOSE-NIPPLE, BRASS CLOSE-NIPPLE, BRASS CLOSE-NIPPLE, BRASS CLOSE-NIPPLE, BRASS CLOSE-NIPPLE, BRASS CLOSE-NIPPLE, BRASS CLOSE MARKETS CLOSE-NIPPLE, BRASS CLOSE MARKETS CLOSE BRASS CLOSE MARKETS CLOSE BRASS CLOSE MARKETS CLOSE BRASS CLOSE BRASS CL	
<ul> <li>CLOSE-NIPPLE, BRASS</li> <li>ANGLE METER STOP, FEMALE I.P. THREAD</li> <li>ANGLE METER STOP, FEMALE I.P. THREAD</li> <li>WATER METER LENGTH WITH GASKETS</li> <li>FLANGE, BRASS; FEMALE I.P. THREAD</li> <li>NIPPLES, BRASS</li> <li>AWU'S BALL VALVE. SEE SPL WW-275</li> <li>MIPPLES, BRASS</li> <li>O DEGREE ELBOWS, BRASS</li> <li>90 DEGREE ELBOWS, BRASS</li> <li>91 DEGREE ELBOWS, BRASS</li> <li>92 fmm (1-1/2" (N")</li> <li>92 DEGREE ELBOWS, BRASS</li> <li>93 DEGREE ELBOWS, BRASS</li> <li>94 DEGREE ELBOWS, BRASS</li> <li>95 DEGREE ELBOWS, BRASS</li> <li>95 THASA, FOR BEASS, EMALE I.P. THREADROTH</li> <li>95 THASA, FOR REALAIMED WATER COMMERCIAL CUSTOMERS</li> <li>COUPLINGS, BRASS, SERVICE FIPE TO IMLE</li> <li>95 SERVICE SPE</li> <li>95 SERVICE SPE</li> <li>95 THASA, FOR REALAIMED WATER COMMERCIAL CUSTOMERS</li> <li>(MONT BE AMRIMI COMPATIBLE)</li> <li>96 SERVICE SPE SPLIASA, DEV WATER COMMERCIAL CUSTOMERS</li> <li>(MONT BE AMRIMI COMPATIBLE)</li> <li>97 REOTAINDLAR PLASTICE OR COLORED PURPLE WITH "RECLAIMED WATER CASS INTO ZOVER, RECTAINDLAR PLASTICE OR COLORED PURPLE WITH "RECLAIMED WATER CASS INTO ZOVER)</li> <li>98 CLIY OF AUSTIN AUSTIN WATER UTILITY</li> </ul>	m   50 mmX50mmX2 (2"X2"X1")
Image of Lange of Left       338 mm (13-4)         WATER METER LENGTH WITH GASKETS       338 mm (13-4)         Image of Lange Brass       38 mm (1-1/2)         Image of Lange Brass       38 mm (1-1/2)         Image Distribution	") 50 mm (2")
AWU'S BALL VALVE. SEE SPL WW-275     MIPPLES, BRASS     90 DEGREE ELBOWS, BRASS     125 mm (1")     25 mm (1")     3     FCTANGULAR METER DOX AND COVEP, SEE     SPE445A, FOR RED AIMED WATER COMMERCIAL CUSTOMERS     (MOST BE AMRIMI COMPATIBLE)     ROPARTY OWNER'S BLL VALVE BOX AND COVER-     REDTANGULAR PLATICIBOX, DFW #D1200.5 OR     EQUAL, (MANUFACTUREI OR COLORED PURPLE WITH "RECLAIMED     WATER CAS INTO COVER;     CUSTOMER'S BALL VALVE     CUSTOMER'S BALL VALVE     CUSTOMER'S BALL VALVE     RECLAIMED WATER COLORED PURPLE WITH "RECLAIMED     WATER CAS INTO COVER;     CUSTOMER'S BALL VALVE     CUSTOMER'S BALL VALVE     CUSTOMER'S BALL VALVE     RECLAIMED WATER COLORED PURPLE WITH "RECLAIMED     WATER CAS INTO COVER;     CUSTOMER'S BALL VALVE     CUSTOMER'S COLORED PURPLE VALVE     CUSTOMER'S CALLATION FOR A 3     (1-1/2" OR 2") RECLAIMED	") 444 mm (2")
Image: Second State Sta	m 50 mmX200mm (2"X8")
Image: Second Stress       25 mm (1")	") 50 mm (2") n 25 mm X 125 mm
CURB STOP, BEASS / EMALE I.P. THREADROTH       25 mm (1")         ENDS WITH LOCK JUTS       25 mm (1")         COUPLINGS, BRASS SERVICE PPE TO MALE       25 mm (1")         THREAD       25 mm (1")         R SERVICE PIPE       25 mm (1")         S FOR THE COMMERCIAL CUSTOMERS       25 mm (1")         PECTIMENTIAL RETER TOX AND COVER, SEE       SPE145A, FOR RED AIMED WATER COMMERCIAL CUSTOMERS         (MOST BE AMRAMI COMPATIBLE)       ROPARTY OWNER'S BILL VALVE BOX AND COVER- RESTANCULAR PLASTICEOR, DFW #D1200.5 OR EQUAL (MANUFACTURET OR COLORED PURPLE WITH "RECLAIMED WATER CASINTO COVER)         U CUSTOMER'S BALL VALVE       RECLAIMED WATER COMMERCIAL CUSTOMERS (INTO COVER)         U CUSTOMER'S BALL VALVE       RECLAIMED WATER CAIMED WATER CAIMED WATER CASINTO COVER)         U CUSTOMER'S BALL VALVE       RECLAIMED WATER COMMERCIAL CUSTOMER'S BALL VALVE	(1" X 5") 25 mm (1")
ENDS WITH LOCK HUTS       25 mm (1")         COUPLINGS, BRASS, SERVICE PPE TO MALE       25 mm (1")         R SERVICE PIPE       25 mm (1")         S ECUMENTE       25 mm (1")         S ECUMENT OF AUSTIN       25 mm (1")         U CITY OF AUSTIN       RECLAIMED WATER OF AUSTIN         AUSTIN WATER UTILITY       RECLAIMED WATER OF AUSTIN	m 25 mm X 75 mm (1" X 3")
THREAD       25 mm (1*)         Image: Service copy	25 mm (1")
S PECTANOLILAR INETERIOX AND COVER, SEE SPIE145A, FOR RECLAIMED WATER COMMERCIAL CUSTOMERS (MOST BE AMRAMI COMPATIBLE) ROPERTY OWNED'S BILL VALVE BOX AND COVER- RECTANSULAR PLASTICBOX, DFW #D1200.5 OR EQUIN. (MANUFACTURED OR COLORED PURPLE WITH "RECLAIMED WATER CAST INTO COVER) (U CUSTOMER'S BALE VALVE CUSTOMER'S BALE VALVE CITY OF AUSTIN AUSTIN WATER UTILITY RECLAIMED WATER COMPARING COLORED PURPLE (1-1/2" OR 2") RECLAIMED	25 mm (1")
(MUNT BE AMRAMI COMPATIALE)         T       ROPARTY OWNED'S BULL VALVE BOX AND COVER- RECTANDULAR PLACTICBOX, DFW #D1200.5 OR EQUAL (MANUFACTURED OR COLORED PURPLE WITH "RECLAIMED WATER CASHINTO COVER)         (U)       CUSTOMER'S BAYL VALVE         (U)       CUSTOMER'S BAYL VALVE         RECLAIMED WATER COMPARISON       RECLAIMED WATER COMPARISON         (U)       CITY OF AUSTIN AUSTIN WATER UTILITY         RECLAIMED WATER COMPARISON       INSTALLATION FOR A 3 (1-1/2" OR 2") RECLAIMED	25 mm (1")
CITY OF AUSTIN AUSTIN WATER UTILITY RECLAIMED UTILITY RECLAIMED WATER CASING COLORED PURPLE WITH "RECLAIMED WATER CASINTO COVER) CUSTOMER'S BAY VALVE RECLAIMED WATER C INSTALLATION FOR A 3 (1-1/2" OR 2") RECLAIMED	
CITY OF AUSTIN AUSTIN WATER UTILITY CITY OR 2") RECLAIMED WATER OF AUSTIN	
CITY OF AUSTIN AUSTIN WATER UTILITY RECLAIMED WATER OF A 3 (1-1/2" OR 2") RECLAIMED	
CITY OF AUSTININSTALLATION FOR A 3AUSTIN WATER UTILITY(1-1/2" OR 2") RECLAIMED	
CITY OF AUSTININSTALLATION FOR A 3AUSTIN WATER UTILITY(1-1/2" OR 2") RECLAIMED	
CITY OF AUSTININSTALLATION FOR A 3AUSTIN WATER UTILITY(1-1/2" OR 2") RECLAIMED	
CITY OF AUSTIN INSTALLATION FOR A 3 AUSTIN WATER UTILITY (1-1/2" OR 2") RECLAIMED	
CITY OF AUSTIN INSTALLATION FOR A 3 AUSTIN WATER UTILITY (1-1/2" OR 2") RECLAIMED	
AUSTIN WATER UTILITY (1-1/2" OR 2") RECLAIMED	
SHOWING OPTIONA	WATER METER
RECORD COPY SIGNED BY KATHI L FLOWERS 8/31/11 RESPONSIBILITY FOR APPRO2214 TE 1925	standard no. 520S-13F

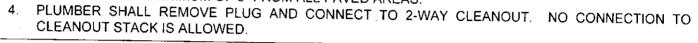
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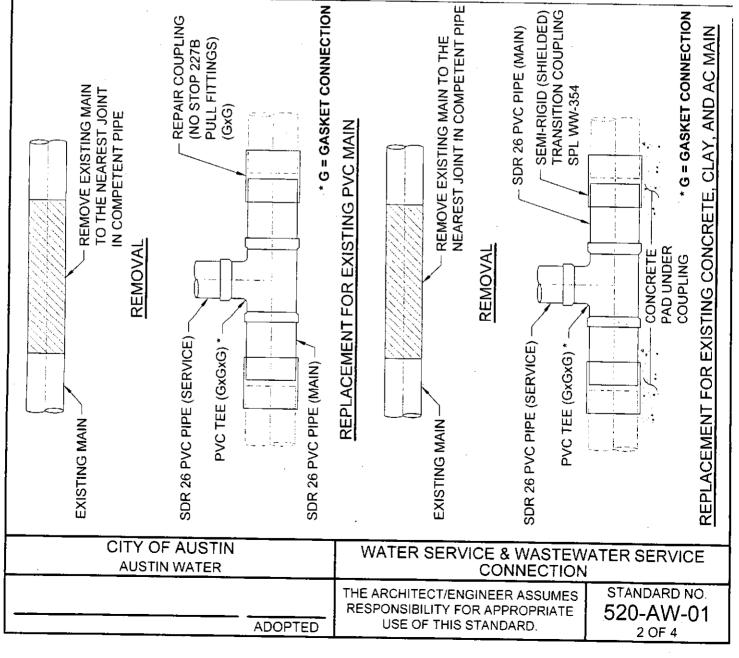
- 1. SERVICE PIPE SHALL BE COPPER TUBE SIZE. IT SHALL BE ANNEALED SEAMLESS TYPE "K" COPPER TUBING MEETING THE CURRENT ASTM B88 STANDARD WITH NO SWEAT OR SOLDERED JOINTS.
- 2. SERVICE SADDLE SHALL BE WRAPPED COMPLETELY WITH 0.2 mm (8 MIL). POLYETHYLENE FILM PER SPL WW-27D FOR RECLAIMED WATER.
- 3. TOP OF BOXES SHOULD BE 25 mm (1") ABOVE GROUND OR FLUSH WITH PAVEMENT SURFACE.
- 4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDFD IN GRANULAF 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. METER BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT, AND OUT OF SIDEWALK AND VEHICULAR TRAFFIC AREA.
- 6. BALL VALVE (E) SHALL NOT BE LOCATED MOKE THAN 914 mm (36'), BELOW FINAL GRADE OR MORE THAN 610 mm (24") HORIZONTALLY FROM METER BOX. BALL VALVE (E) SHALL NOT BE LOCATED UNDER PAVING, SIDEWALL, OR ORIVEWAY.
- 8. METER BOX TO BE RECTANGULAR AND DOVER SHALL BE MANUFACTURED URPLE WITH "RECLAIMED WATER" CAST INTO IT.
- ALL RECLAIMED WATER PIPING AND APPURTENANCES TO BE MANUFACTURED PURPLE, WRAPPED IN PURPLE POLYETHYLENE PER SPL 100-220, OR PAINTED PURPLE PER SPL WW-3C.

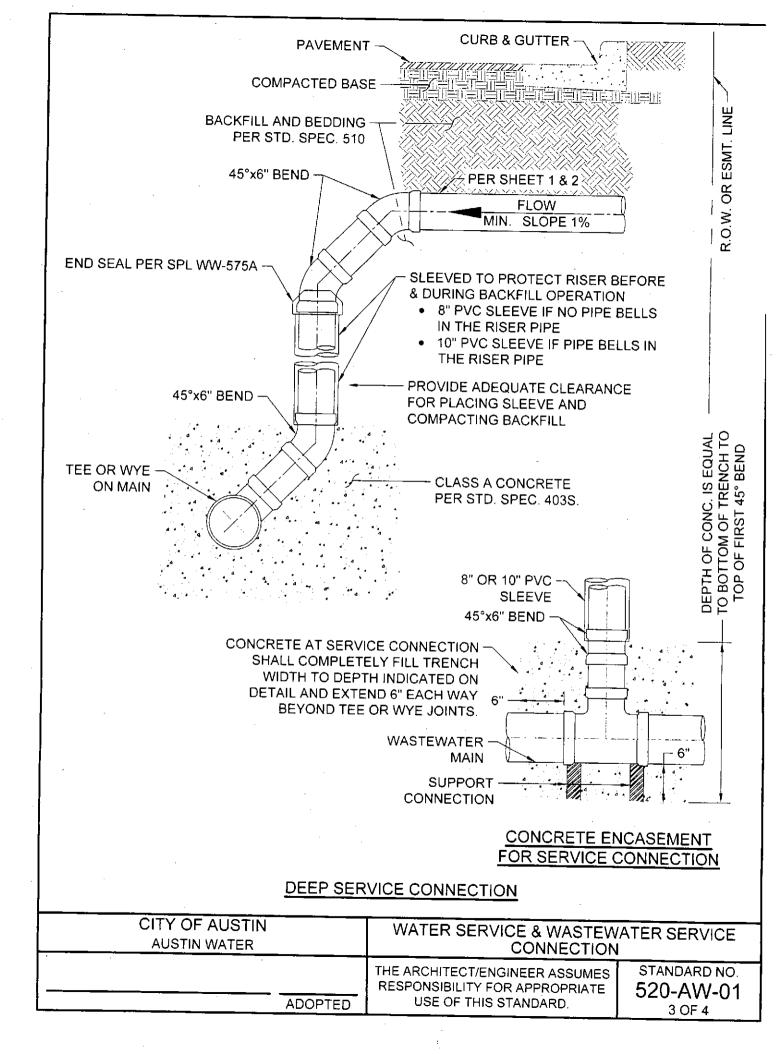
CITY OF AUSTIN AUSTIN WATER UTILITY	RECLAIMED WATER CO INSTALLATION FOR A 38 (1-1/2" OR 2") RECLAIMED SHOWING OPTIONA	3 mm & 50 mm WATER METER
RECORD COPY SIGNED BY KATHI L FLOWERS 8/31/11	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-13R SHEET 3 OF 3

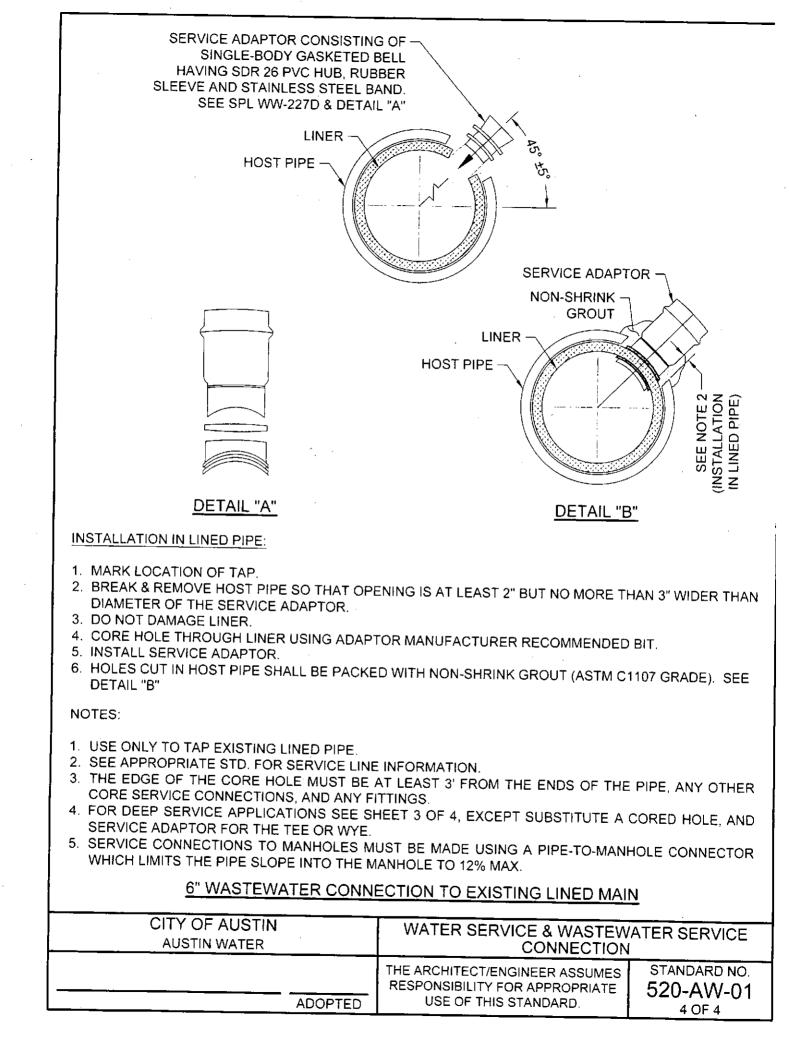


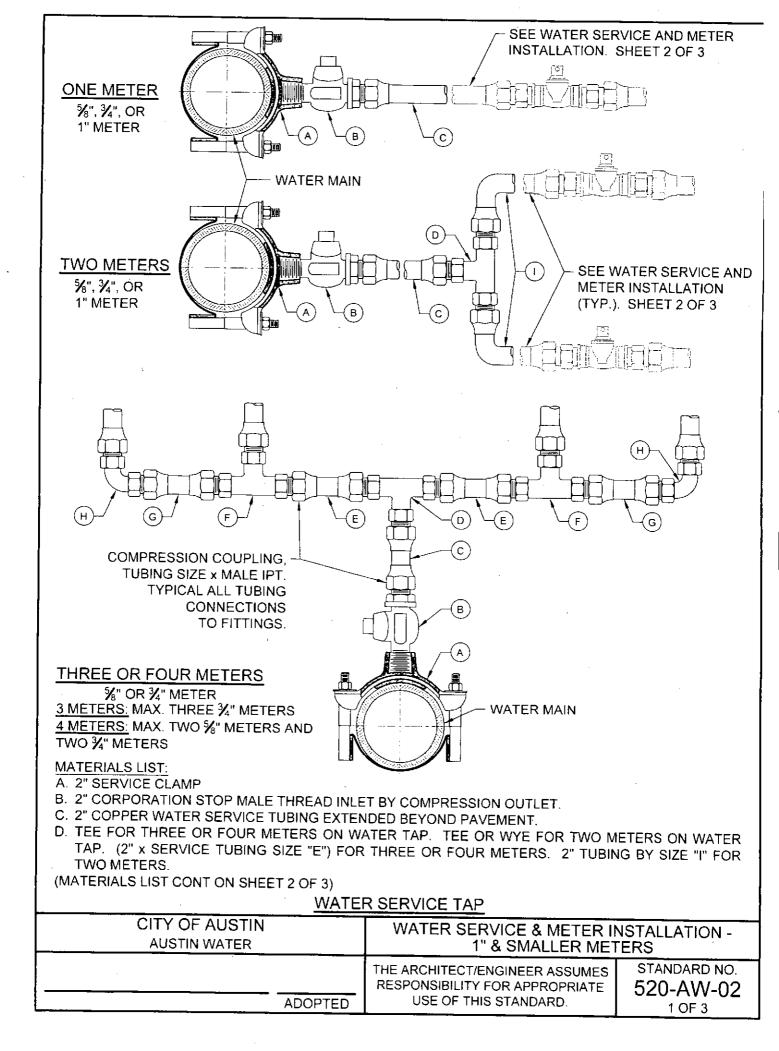
- DURING 1. SUBDIVISION CONSTRUCTION UTILITY CONTRACTOR INSTALLS WASTEWATER CONNECTION TO MAIN, 6" STUB, HORIZONTAL WYE FOR DOUBLE SERVICES, 6" SERVICE BRANCH 2-WAY-CLEANOUT(S) AND RISER, FRAME, AND WITH COVER CLEANOUT(S) PLUGGED AT PROPERTY LINE OR EASEMENT LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% MIN. TO 45° MAX. DEPTH OF SERVICE AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4', OTHERWISE THE INSTALLED DEPTH WILL BE 4' MIN. AND 6' MAX. AT PROPERTY LINE. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, SEE SHEET 3 OF 4. UTILITY CONTRACTOR ALSO INSTALLS WATER CONNECTION TO MAIN WATER PIPE, FITTINGS AND VALVES INCLUDING STOP VALVE. REFER TO DETAIL 520-AW-02.
- 2. 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 MIN. COVER BELOW FINAL STREET GRADE OF 42".
- 3. NO METER BOX, BALL VALVE OR CLEAN-OUT SHALL BE SET IN SIDEWALK OR DRIVEWAY AREA AND SHALL BE A MINIMUM OF 6" FROM ALL PAVED AREAS.

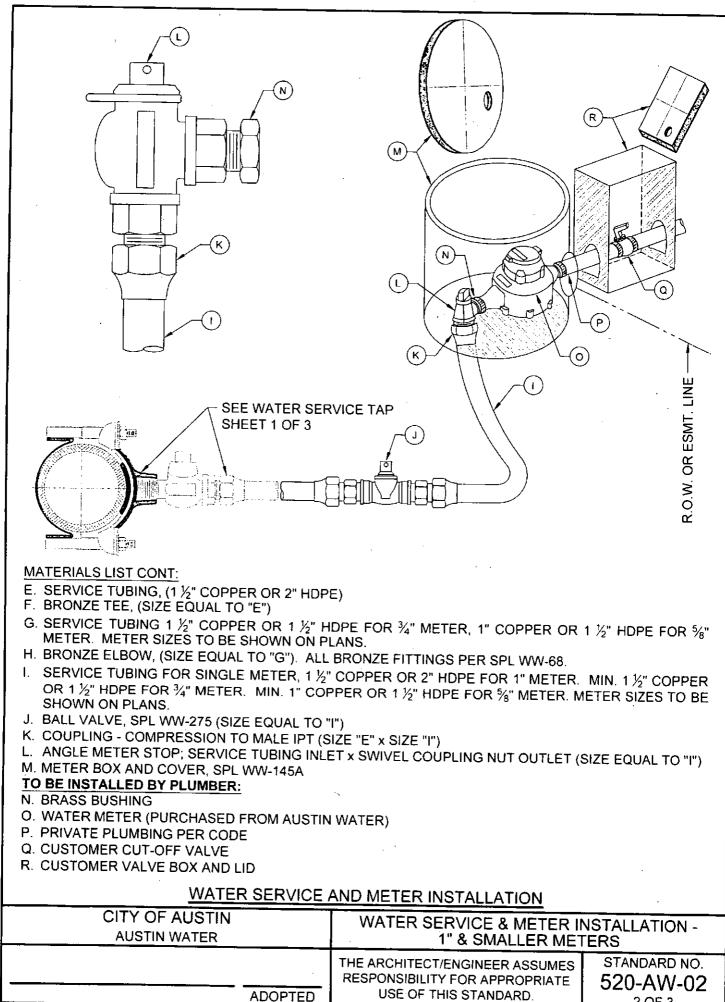












ADOPTED

2 OF 3

- 1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
- 2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
- 3. TOP OF BOXES SHOULD BE 1" ABOVE GROUND.
- 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 VEHICULAR TRAFFIC AREA AND SIDEWALK.
- 6. BALL VALVE "J" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 24" HORIZONTALLY FROM METER BOX OR 36" BELOW FINAL GRADE.

COPPER:

C1. COPPER SERVICE SHALL BE COPPER TUBING SIZE ANNEALED SEAMLESS TYPE "K" MEETING ASTM B88 WITH NO SWEAT OR SOLDERED JOINTS.

HDPE:

- H1. INSTALL METALLIC WARNING TAPE MIN. 1' ABOVE HDPE TUBING FROM TAP CONNECTION TO METER.
- H2. TUBING SHALL BE PLACED SO THAT IT IS RELAXED AND "SNAKES" LOOSELY IN THE TRENCH.

H3. TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN THE VALUE SHOWN IN TABLE 1.

- H4. IF A FITTING WILL BE INSTALLED WITHIN A BENT SECTION OF TUBING, THE TUBING SHALL HAVE A RADIUS NO SMALLER THAN THE VALUE SHOWN IN TABLE 2.
- H5. INSERT STIFFENERS FOR HDPE TUBING PER SPL WW-65B TO BE INSTALLED INSIDE TUBING AT ALL COMPRESSION FITTINGS.

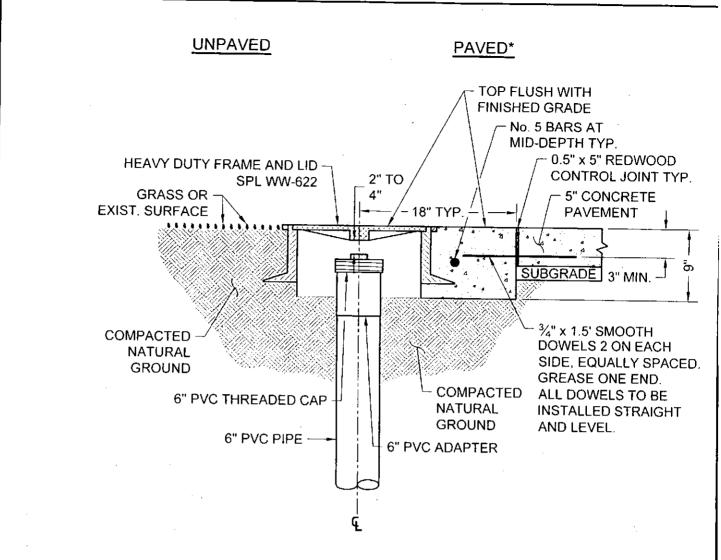
TABLE 1 (SEE NOTE H3)	
NOMINAL TUBING DIA.	BEND RADIUS OF AT LEAST
1"	3'
1 ½"	4'
2"	5'

TABLE 2 (SEE NOTE H4)	
NOMINAL TUBING DIA.	BEND RADIUS OF AT LEAST
1"	12'
1 ½"	16'
2"	20'

### **RECLAIMED WATER:**

R1. FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED PURPLE TUBING. HDPE TUBING SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER TUBING AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL TUBING AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE "RECLAIMED WATER" CAST INTO THEM.

CITY OF AUSTIN	WATER SERVICE & METER INSTALLATION -	
AUSTIN WATER	1" & SMALLER METERS	
ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-02 3 OF 3



\* CLEAN-OUTS MAY NOT BE PLACED IN PAVED AREAS - I.E. SIDEWALKS, DRIVEWAYS, OR PARKING LOTS, AND MUST BE LOCATED A MINIMUM OF 6" FROM ALL PAVED AREAS.

NOTES:

1. SUB-GRADE SHALL BE COMPACTED AS PER STD. SPEC. 201S, SUB-GRADE PREPARATION.

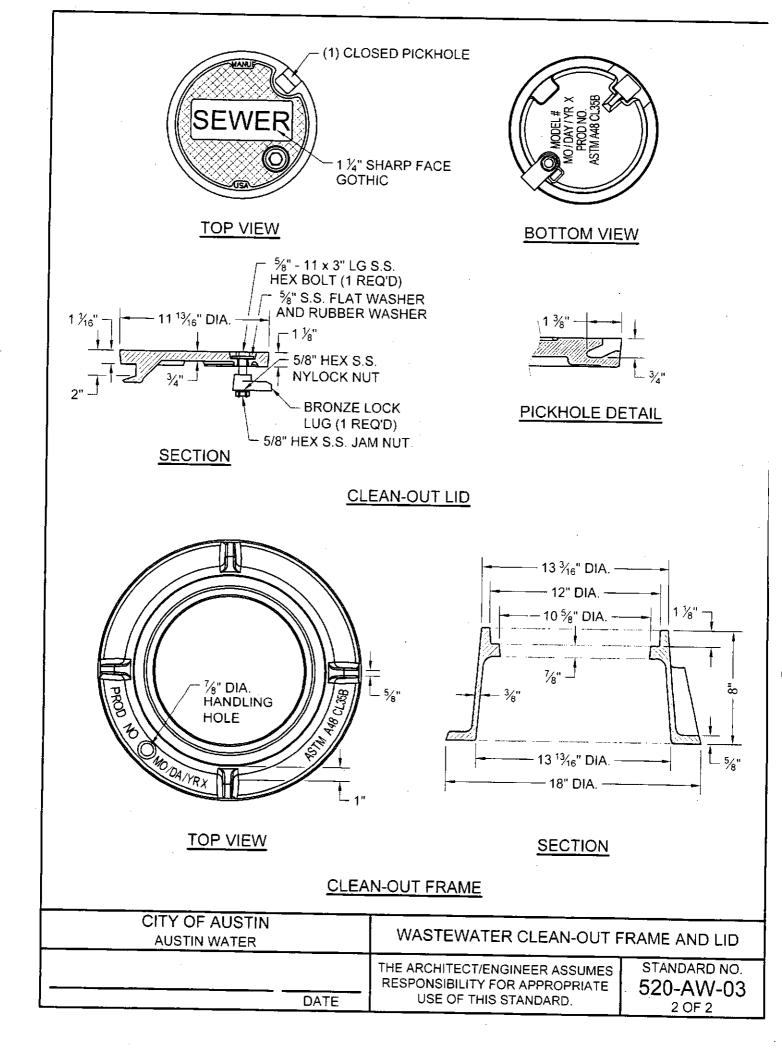
2. REINFORCING STEEL SHALL MEET ITEM 406S, REINFORCING STEEL.

3. CONCRETE SHALL MEET ITEM 403S CLASS "A".

4. ALL PVC SHALL BE SDR 26.

# CLEAN-OUT FRAME AND LID

CITY OF AUSTIN AUSTIN WATER	WASTEWATER CLEAN-OUT FRAME AND LID	
DATE	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-03 1 OF 2



	C C C C C C C C C C C C C C C C C C C
CITY OF AUSTIN 1½" - 2" METER INSTALLATION AUSTIN WATER SHOWING OPTIONAL BYPASS	ALLOWED WHERE METER IS FOR IRRIGATION.

# MATERIALS LIST:

- A. 2" SERVICE CLAMP
- B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET
- C. 2" COPPER WATER SERVICE TUBING EXTENDED BEYOND PAVEMENT
- D1. 2" BALL VALVE, SPL WW-275
- D2. 2" BALL VALVE, SPL WW-275
- E. 2" COPPER SERVICE TUBING
- F. 2" BRASS COUPLING COMPRESSION TO MALE IPT
- G. 2" BRASS TEE
- H. 2" BRASS CLOSE-NIPPLE
- I. 2" ANGLE METER STOP; SERVICE TUBING INLET x FLANGED OUTLET
- J. 2" BRASS NIPPLE
- K. 2" BRASS ELBOW
- L. 2" LOCKABLE CURB STOP FEMALE IPT INLET BY COMPRESSION OUTLET
- M. 2" BRASS COUPLING SERVICE TUBING TO MALE IPT
- N. RECTANGULAR METER BOX AND COVER, SPL WW-145A

# TO BE INSTALLED BY PLUMBER:

- O. WATER METER, LENGTH 13", (PURCHASED FROM AUSTIN WATER)
- P. 2" COPPER SERVICE TUBING (PRIVATE PLUMBING PER CODE)
- Q. CUSTOMER CUT-OFF VALVE
- R. CUSTOMER VALVE BOX AND LID

### NOTES:

- 1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
- 2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
- 3. TOP OF BOXES SHOULD BE 1" ABOVE GROUND.
- 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 VEHICULAR TRAFFIC AREA AND SIDEWALK.
- 6. BALL VALVE "D1" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 24" HORIZONTALLY FROM METER BOX OR 36" BELOW FINAL GRADE.
- COPPER SERVICE SHALL BE COPPER TUBING SIZE ANNEALED SEAMLESS TYPE "K" MEETING ASTM B88 WITH NO SWEAT OR SOLDERED JOINTS.

### **RECLAIMED WATER:**

FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED PURPLE TUBING. ALL OTHER TUBING AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL TUBING AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE "RECLAIMED WATER" CAST INTO THEM.

CITY OF AUSTIN	1 ½" - 2" METER INSTALLATION	
AUSTIN WATER	SHOWING OPTIONAL BYPASS	
ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-04 2 OF 2