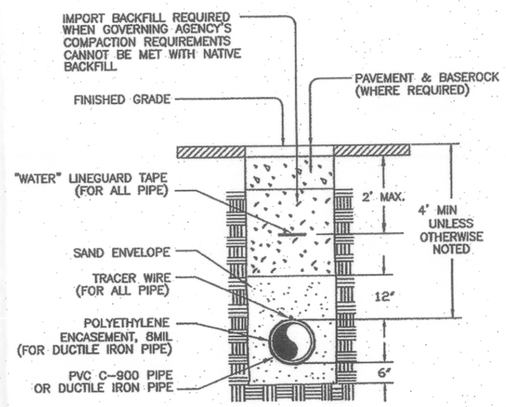
EP.08-1107-2

PIPELINE CROSSING INFORMATION

AT WATER MAIN CROSSINGS IN CONFLICT WITH OTHER FACILITIES: When the water main is in conflict with existing facilities or proposed facilities that require more than a 2 foot adjustment from the nominal 4 feet of cover, a fabricated steel cement mortar lined and cement mortar coated offset will be installed at the crossing per CWS Co. standards.

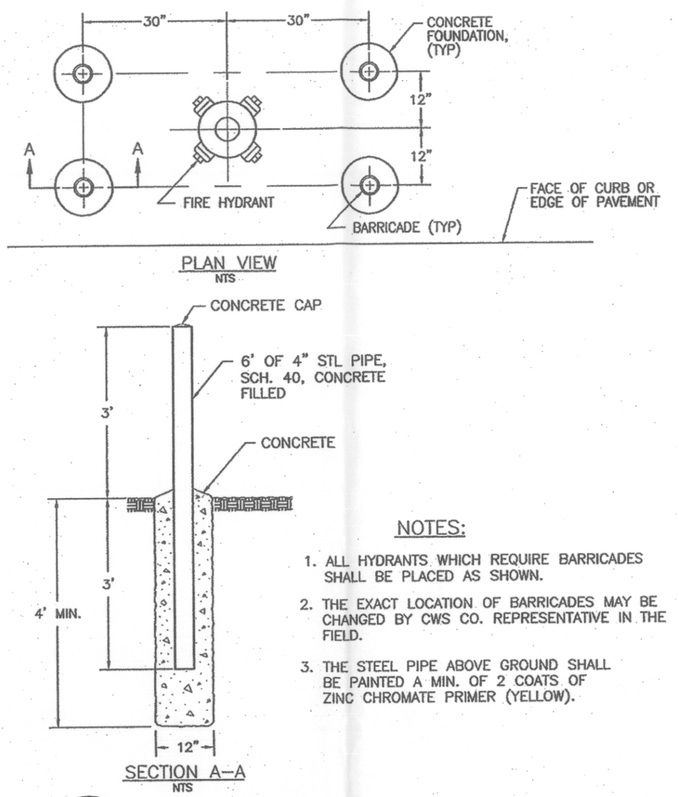
(1) FINISHED GRADE ELEV. = 17.9 (SS RIM ELEV)
EXISTING 12" SANITARY SEWER INVERT ELEV. = 4.1 @ MH
INSTALL 4" DI SERVICE RUN OVER EX. 12" SS w/4' COVER.

(2) FINISHED GRADE ELEV. = 17.9 9 (SS RIM)
EXISTING STORM DRAIN INVERT ELEV. = VERIFY
FIELD VERIFY INVERT ELEV OF EX. SD PRIOR TO EXCAVATION.



NOTE:
1. ALL EXCESS SPOIL IN TRACT IS TO REMAIN TRENCHSIDE AND ALL EXCESS SPOIL OFF TRACT IS TO BE REMOVED.
2. ALL VALVE CASINGS AND COVERS SHALL BE RAISED TO FINISHED GRADE AFTER PERMANENT PAVEMENT HAS BEEN PLACED.

TRENCH CROSS SECTION
NTS



NOTES:
1. ALL HYDRANTS WHICH REQUIRE BARRICADES SHALL BE PLACED AS SHOWN.
2. THE EXACT LOCATION OF BARRICADES MAY BE CHANGED BY CWS CO. REPRESENTATIVE IN THE FIELD.
3. THE STEEL PIPE ABOVE GROUND SHALL BE PAINTED A MIN. OF 2 COATS OF ZINC CHROMATE PRIMER (YELLOW).

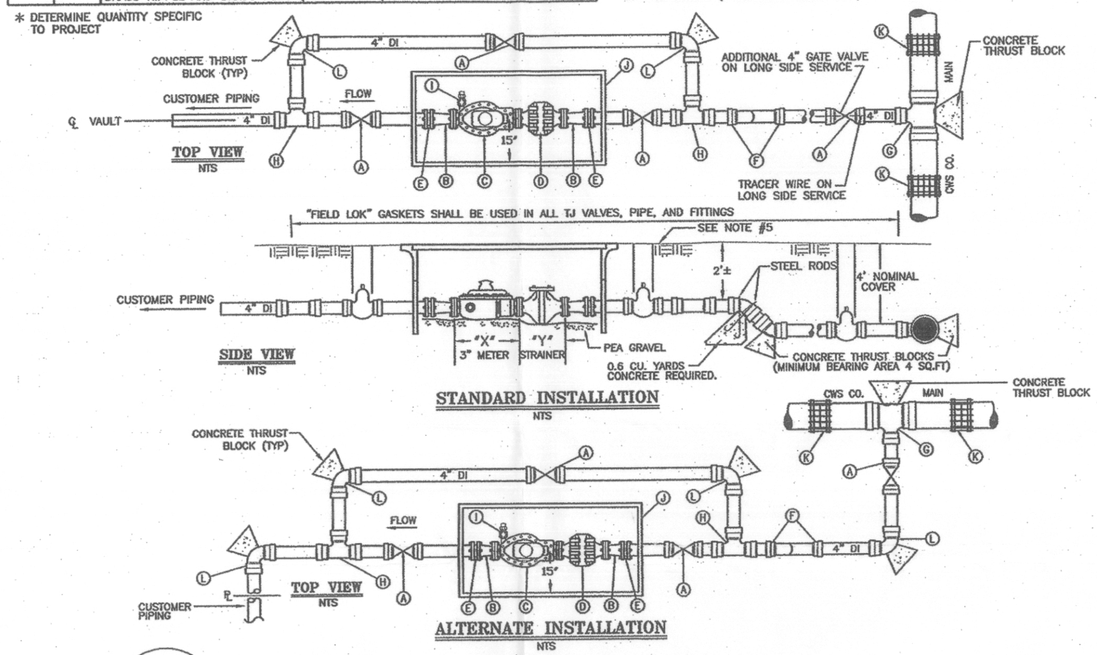
CW 822 FIRE HYDRANT BARRICADE DETAILS

MATERIALS:			
KEY	QTY.	ITEM	
A	3 (※)	4" GATE VALVE PO, W/ FIELD LOK GASKETS. (ADDITIONAL GATE VALVE FOR LONG SIDE SERVICE)	
B	2	4" x 3" REDUCER, CI CL. FLG (USE WITH "MEGAFLANGE")	
C	1	3" METER, PROVIDED BY C.W.S. CO.	
D	1	3" STRAINER, PROVIDED BY C.W.S. CO.	
E	2	4" MEGAFLANGE RESTRAINED FLANGE ADAPTOR	
F	2	4" ELL 45° PO CL DI, W/ FIELD LOK GASKETS	
G	1	8" x 4" TEE PO CL DI, W/ FIELD LOK GASKETS	
H	2	4" TEE PO CL DI, W/ FIELD-LOK GASKETS	
I	1	2" BALL VALVE F.I.P. THREAD, 360 DEGREE ROTATION, MUELLER 300 B-20283-3 FORD B11-777W, A.Y. McDONALD 6101, JONES J-1900W OR MILWAUKEE BA100 W/ 2" x 12" BRASS NIPPLE AND BRASS PLUG (SEE NOTE 11).	
J	1	OUTSIDE FULL TRAFFIC AREAS, 30" x 48"x 18" DEEP POLYMER CONCRETE METER BOX WITH ONE 18" EXTENSION AND SPLIT COVER ARMORCAST (A6001430APCX18, BOX) (A6001470, SPLIT COVER, SOLID) AND (A6001470DZ, SPLIT COVER, WITH READING LID).	
		IN FULL TRAFFIC AREAS 30"x 48" CONCRETE BOX, BROOKS NO. 68, OR CHRISTY B48 WITH TWO EXTENSIONS AND SPLIT COVER WITH READING LID. IF METER BOX IS LOCATED IN CONCRETE OR PAVED AREA, THEN A STEEL 2 PIECE COVER WITH READING LID IS REQUIRED.	
--	※	4" "FIELD LOK" GASKET (PLUS GASKETS FOR ADDTIONAL, PIPE FITTINGS, OR VALVES)	
--	※	4" DUCTILE IRON PIPE, CLASS 350 PO	
K	2	COUPLING OR SLEEVE FOR TIE-IN, IF EXISTING MAIN	
L	2 (※)	4" ELL 90° PO CL DI, W/ FIELD-LOK GASKETS (ADD 2 FOR ALTERNATE INSTALLATION)	
M	1	4.80" x 2" CC SADDLE, DOUBLE STRAP (MATERIAL PER NOTE 8)	
N	1	2" BALL CORPORATION VALVE, 2" CC x 2" M.I.P. MUELLER B-2996, FORD FB400-7, A.Y. McDONALD 314BB OR JONES J-1944, W/ 2 BRASS COUPLINGS, 2" x 12" BRASS NIPPLE AND BRASS PLUG (SEE NOTE 11)	

METER AND STRAINER LENGTHS			
MAKE	3" METER LENGTH X		3" STRAINER LENGTH Y
	COMPOUND	TURBO	
SCHLUMBERGER	17"	12"	6"
INVENSYS	17"	12"	7"
BADGER	17"	12"	7"

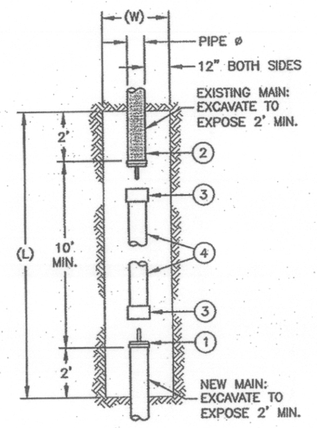
NOTES:
1. ALL FLANGES TO BE 125 LB. STANDARD DRILLING.
2. ITEMS © & (D) PROVIDED BY C.W.S. CO. WITH ONE SET OF BOLTS, NUTS, & GASKET.
3. BACKFLOW PREVENTION ASSEMBLIES SHALL BE DOWNSTREAM OF SERVICE INSTALLATION.
4. CENTER METER BOX OVER METER AND STRAINER, SEE PLAN VIEW.
5. ALL VALVES OUTSIDE THE CONCRETE BOX REQUIRE VALVE CASING & COVER PER DWG. CW14 AND CW439.
6. ALL UNDERGROUND MJ, BOLTS, NUTS, AND BARE STEEL SHALL BE PROTECTED BY METALGUARD GREASE AND BIT WRAP PER THE C.W.S CO. PROTECTION COATING STANDARD.
7. SEE DRAWING CW435 FOR TYPICAL THRUST BLOCK INSTALLATION.
8. SADDLE MATERIAL SHALL BE BRONZE WITH P.V.C. PIPE AND IRON WITH D.I. PIPE. MANUFACTURERS AND MODELS SHALL BE PER STD. 2" SERVICE CONN. DWG. CW-436.
9. SEE DRAWING CW-850 FOR TRACER WIRE INSTALLATION.
10. A MINIMUM OF 5 PIPE DIAMETERS OF STRAIGHT RUN PIPE OR FULL OPEN FLOW COMPONENTS (STRAINER, FULL OPEN GATE VALVES, BYPASS TEES OR CONCENTRIC REDUCERS) IS RECOMMENDED UPSTREAM OF THE METER.
11. INSTALL 2" x 12" BRASS NIPPLE WITH BRASS BALL VALVE AND BRASS PLUG (I) INTO METER TEST PORT. IF METER DOES NOT HAVE A TEST PORT, INSTALL 2" x 12" BRASS NIPPLE, COUPLINGS, NIPPLE AND BRASS PLUG (N) INTO A 2" SADDLE (M) DOWNSTREAM OF THE METER. (INSIDE THE METER BOX)

※ DETERMINE QUANTITY SPECIFIC TO PROJECT



CW 785R10 STANDARD 4" SERVICE CONNECTION FOR 3" METER WITH STRAINER

NOTE: IF UNFORESEEN CIRCUMSTANCES OR FIELD CONDITIONS ARISE THAT REQUIRE ALTERNATE OR ADDITIONAL MATERIALS FOR THE TIE-IN TO THE EXISTING SYSTEM, THE DEVELOPER'S CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THIS MATERIAL TO THE COMPANY TO COMPLETE THE TIE-IN.



TIE-IN DETAIL "A"
N.T.S.

1. DEVELOPER'S CONTRACTOR SHALL INSTALL NEW MAIN AND ADJUST FROM NOMINAL LINE AND GRADE TO MATCH EXISTING FACILITIES AT THIS LOCATION. THE DEVELOPER'S CONTRACTOR SHALL INSTALL A TEMPORARY CAP AND BLOWOFF AT THIS LOCATION.

CALIFORNIA WATER SERVICE CO. WILL TIE THE NEW MAIN FROM THIS LOCATION.

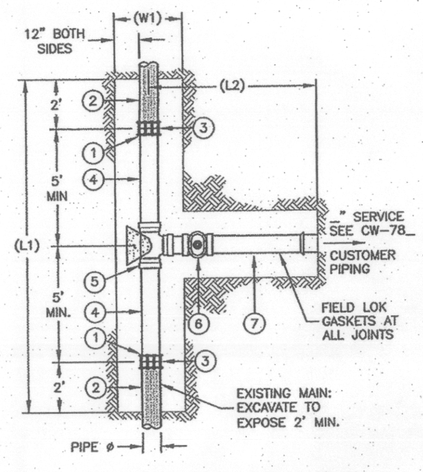
2. EXISTING MAIN, 8" PVC C-900 PIPE

THE DEVELOPER'S CONTRACTOR SHALL PROVIDE CALIFORNIA WATER SERVICE COMPANY WITH THE FOLLOWING MATERIALS FOR THE TIE-IN IT WILL MAKE AT SOUTH "D" STREET.

3. 1 – 8" "CERTAINTEED" PVC CLOSURE COUPLING (2 TOTAL)
4. 10' – 8" PVC C-900 PIPE

NOTE: IN ADDITION, THE DEVELOPER'S CONTRACTOR SHALL PROVIDE: MISC. MATERIAL REQUIRED TO COMPLETE THE TIE-IN SUCH AS, BUT NOT LIMITED TO: PROTECTION COATING MATERIAL FOR PIPE & FITTINGS, LINEGUARD TAPE, CONCRETE FOR THRUST BLOCKS, EMBEDMENT BACKFILL AROUND AND OVER THE PIPE, FINAL BACKFILL TO MEET COMPACTION REQUIREMENTS, AND PAVEMENT REPLACEMENT.

NOTE: IF UNFORESEEN CIRCUMSTANCES OR FIELD CONDITIONS ARISE THAT REQUIRE ALTERNATE OR ADDITIONAL MATERIALS FOR THE TIE-IN TO THE EXISTING SYSTEM, THE DEVELOPER SHALL BE RESPONSIBLE TO PROVIDE THIS MATERIAL TO THE COMPANY TO COMPLETE THE TIE-IN.



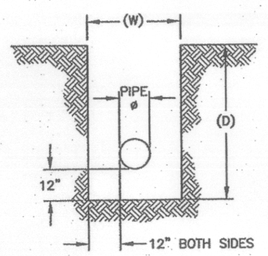
WORK BY CWS – DETAIL "B"
DOMESTIC SERVICE OFF EXISTING MAIN
N.T.S.

1. CWS COMPANY'S CONTRACTOR WILL TIE THE NEW DOMESTIC SERVICE INTO EXISTING MAIN AT THIS LOCATION.
2. EXISTING MAIN, 6" AC PIPE

CWS COMPANY'S CONTRACTOR SHALL PROVIDE THE FOLLOWING MATERIALS FOR THE TIE-IN IT WILL MAKE AT SOUTH "B" STREET.

3. 1 – 6" ACRB X DI FLEX COUPLING, 10" SLEEVE (2 TOTAL)
4. 5' – 6" PVC C-900 PIPE (10' TOTAL)
5. 1 – 6" X 4" TEE PO w/ 2-6" RINGS & 1-4" FIELD LOK GASKET
6. 1 – 4" GATE VALVE PO w/ FIELD LOK GASKETS
7. 20'± – 4" DUCTILE IRON PIPE (90° ELBOW MAY BE REQUIRED DEPENDING ON LOCATIONS)

NOTE: IN ADDITION, CWS CO'S CONTRACTOR SHALL PROVIDE: MISC. MATERIAL REQUIRED TO COMPLETE THE TIE-IN SUCH AS, BUT NOT LIMITED TO: PROTECTION COATING MATERIAL FOR PIPE & FITTINGS, LINEGUARD TAPE, CONCRETE FOR THRUST BLOCKS, EMBEDMENT BACKFILL AROUND AND OVER THE PIPE, FINAL BACKFILL TO MEET COMPACTION REQUIREMENTS, AND PAVEMENT REPLACEMENT.



TRENCH NOTES FOR TIE IN:

TRENCH WIDTH (W) SHALL BE ONE PIPE DIAMETER PLUS 12" ON EACH SIDE OF THE PIPE. (E.G. A 6" OR 8" MAIN REQUIRES A 30" TRENCH).

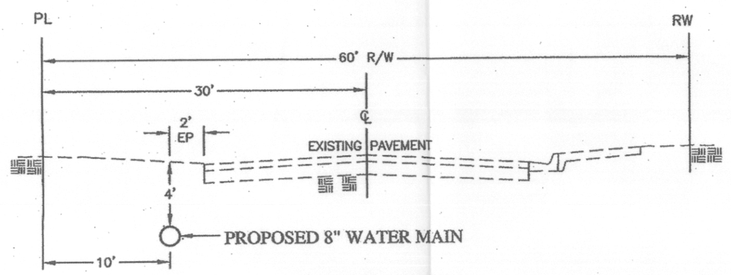
TRENCH LENGTH (L) SHALL BE 14' (MIN). (10' FOR TIE-IN PLUS 2' EXPOSURE OF EXISTING AND NEW MAINS).

TRENCH DEPTH (D) SHALL BE 12" (MIN) BELOW BOTTOM OF MAIN.

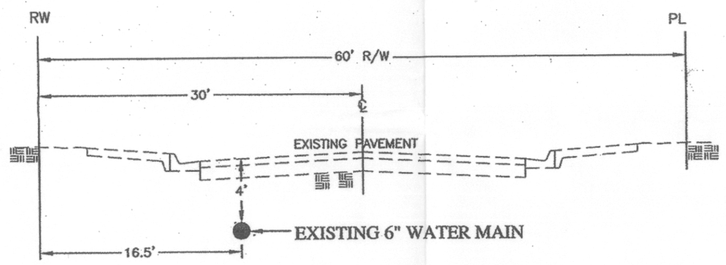
DEVELOPER'S CONTRACTOR SHALL PROVIDE TRENCH SHORING PER OSHA STANDARDS.

DEVELOPER'S CONTRACTOR SHALL BE RESPONSIBLE FOR EMBEDMENT BACKFILL, TRENCH BACKFILL, COMPACTION TO REQUIREMENTS, AND FINAL PAVEMENT RESTORATION.

TYPICAL STREET CROSS SECTIONS
N.T.S.



60' R/W STREET
SOUTH "D" STREET



60' R/W STREET
SOUTH "B" STREET

ENGINEERING

CALIFORNIA WATER SERVICE CO.

DEPARTMENT

REVISIONS:

	DATE:	INIT.
DISTRIBUTION MAP	[X]	
PLAT SHEET	[X]	
SYSTEM SCHEMATIC	[ ]	
STATION SCHEMATIC	[ ]	
ZONE MAP	[ ]	
VALVE REMOVED	[ ]	

PLAT SHEET NO.:
37-32

SCALE:
AS NOTED

DRAWN BY:
Peralta

DESIGNED BY:
Prasanna

CHECKED BY: DP DATE: 8/28/07

APPROVED BY: TH DATE: 11/29/2007

REGISTERED PROFESSIONAL ENGINEER
TING MEI HE
No. C60340
EXP. 06-30-08
CIVIL
STATE OF CALIFORNIA

TITLE:
PROGRESSIVE MISSIONARY BAPTIST CHURCH

DISTRICT:
STOCKTON

DATE:
11/12/07

PROJECT ID.:
18855

DRAWING NO.:
STK-8538

SHT 2 OF 2