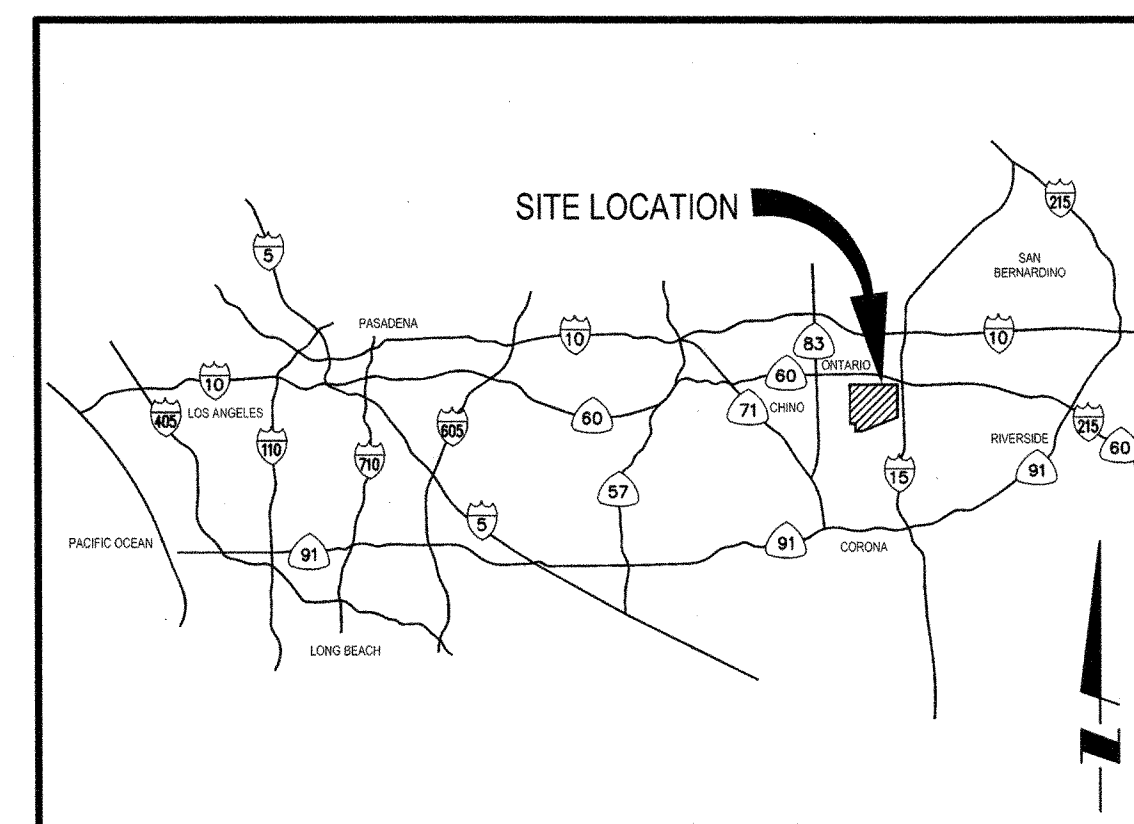


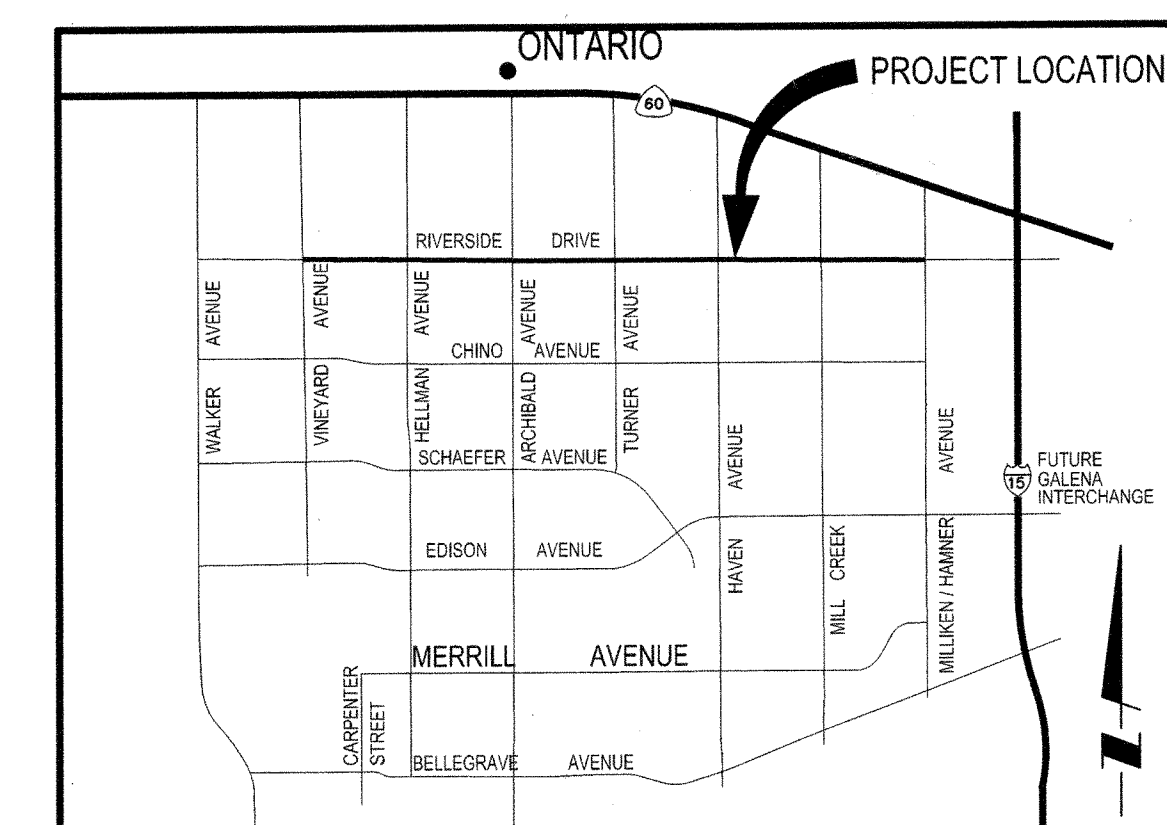


IMPROVEMENT PLANS FOR RIVERSIDE DRIVE FROM VINEYARD AVENUE TO MILLIKEN AVENUE IN THE CITY OF ONTARIO DOMESTIC WATER ZONE 1010

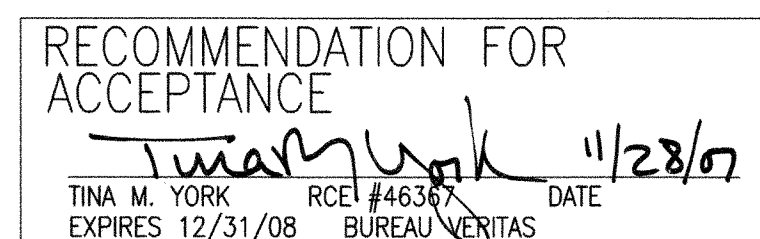
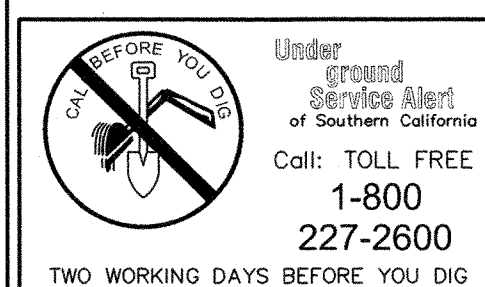


LOCATION MAP
NOT TO SCALE

OCTOBER 2007



VICINITY MAP
NOT TO SCALE



REVISIONS			
MARK	DATE	BY	APPROVED/ RCE NO.

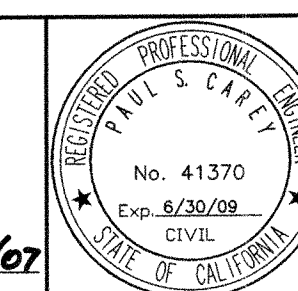
DESIGNED BY: PC
DATE: AUGUST 21, 2007
DRAWN BY: PC
DATE: AUGUST 21, 2007
CHECKED BY: [Signature]
DATE: 11/28/07

CITY OF ONTARIO

RECOMMENDED BY: [Signature]
JOHN P. SULLIVAN / CITY ENGINEER
44485 EXP. 3/31/08 DATE 12-14-07
C.E. NO. 24079 EXP. 12/31/07 DATE 12-20-07
C.E. NO.

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880
PAUL S. CAREY
41370 6/30/09 EXP. 11/1/07
C.E. NO. DATE



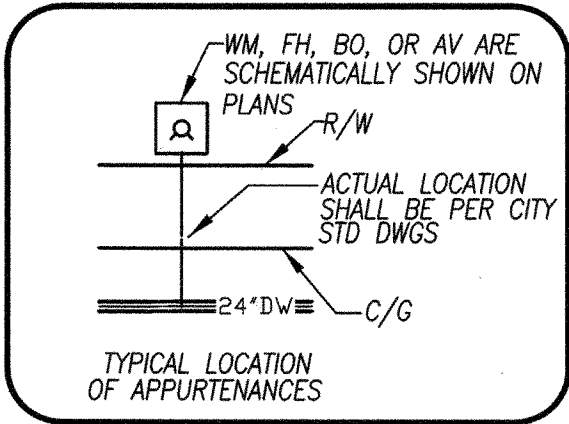
NEW MODEL COLONY (EAST)
RIVERSIDE DRIVE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS
TITLE SHEET

M-442

SHEET 1 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3247
W13416

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RIVERSIDE DRIVE - DW



A.C.P. ASBESTOS CEMENT PIPE
A.G.T.B. ABOVE GROUND TERMINAL BOX
A.R. COMBINATION AIR AND VACUUM RELEASE VALVES
AWWA AMERICAN WATER WORKS ASSOCIATION
A.C. ASPHALT CONCRETE
B.F.V. BUTTERFLY VALVE
B.O.P. BOTTOM OF PIPE
B.O. BLOWOFF ASSEMBLY
C.B. CATCH BASIN
C.F. CURB FACE
CL CENTER LINE
CML&C CEMENT MORTAR LINED AND COATED
CLR. CLEAR DISTANCE
COMP. COMPRESSION
CPLG. COUPLING
CL CLASS
CP CATHODIC PROTECTION
CSP CORRUGATED STEEL PIPE
CONC. CONCRETE
CTS CORROSION TEST STATION
DEFL. DEFLECTION
DIA. DIAMETER
DI (DIP) DUCTILE IRON (DUCTILE IRON PIPE)

ABBREVIATIONS

D.W. DOMESTIC WATER	LAT. LATERAL
ELEV. ELEVATION	L.F. LINEAL FEET
E.P. EDGE OF PAVEMENT	LT. LEFT
EXIST./EX. EXISTING	MH. MANHOLE
F.E. FLANGE END	MIN. MINIMUM
F.H. FIRE HYDRANT	MAX. MAXIMUM
F.G. FINISHED GRADE	MW. MANWAY
F.L. FLOW LINE	MJ. MECHANICAL JOINT
FLEX. FLEXIBLE	N. NORTH
FLG. FLANGE	NO. NUMBER
F.S. FINISHED SURFACE	N.T.S. NOT TO SCALE
G.B. GRADE BREAK	OAE OR APPROVED EQUAL
GALV. GALVANIZED	PC POINT OF CURVATURE
G.E. GROOVED END	PO PUSH ON
G.V. GATE VALVE	PCC POINT OF COMPOUND CURVATURE
HORIZ. HORIZONTAL	P.E. PLAIN END
INT. INTERSECTION	PRC POINT OF REVERSE CURVATURE
INV. INVERT	PROP. PROPOSED
VZN VERIZON	P.R.V. PRESSURE REDUCING VALVE
JF. JET FUEL	PT. POINT OF TANGENT
L. LENGTH	PVC POLYVINYL CHLORIDE

R. RADIUS
RED. REDUCING
REQ. REQUIRED
REV. REVISED
RCP. REINFORCED CONCRETE PIPE
RT. RIGHT
R.W. RECYCLED WATER
R/W. RIGHT OF WAY
R.W.G.V. RESILIENT WEDGE GATE VALVE
S. SLOPE
SS. SANITARY SEWER
SCCP. STEEL CONCRETE CYLINDER PIPE
S.D. STORM DRAIN
SHT. SHEET
ST. STREET
STA. STATION
STD. STANDARDS
STL. STEEL
T.C. TOP OF CURB
T.O.P. TOP OF PIPE
TYP. TYPICAL
VERT. VERTICAL
VCP. VITRIFIED CLAY PIPE
W. WEST

SYMBOL/LEGEND

- | | |
|--|----------------------------------|
| --- ROADWAY CENTERLINE | ○ SEWER OR STORM SEWER MANHOLE |
| --- PROPERTY - R/W LINE | ⊗ ISOLATION VALVE |
| --- PROPOSED PIPELINE | △ AIR & VACUUM RELEASE VALVE |
| 5
+ PIPELINE CENTERLINE STATION | ⊕ END OF LINE BLOWOFF ASSEMBLY |
| --- DW --- DOMESTIC WATER LINE | ⊕ LINE DRAIN BLOWOFF ASSEMBLY |
| --- SS --- SANITARY SEWER LINE | ⊕ CORROSION TEST STATION |
| --- RW --- RECYCLED WATER LINE | ▽ WATER QUALITY SAMPLING STATION |
| --- SD --- STORM DRAIN LINE | ⊕ FIRE HYDRANT |
| ⊕ TELEMETRY PULL BOX/ TERMINAL CABINET | |

UTILITIES

NOTIFICATION:

CONTRACTOR SHALL CONTACT THE FOLLOWING AGENCIES AND UTILITY COMPANIES AT LEAST TWO WORKING DAYS PRIOR TO STARTING CONSTRUCTION:

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	(800) 227-2600
SOUTHERN CALIFORNIA GAS	(951) 335-3928
ADELPHIA	(951) 975-3342
INLAND EMPIRE UTILITIES AGENCY	(909) 993-1522
CITY OF ONTARIO	(909) 395-2150
PACIFIC PIPELINE SYSTEM INC.	(526) 728-2351
VERIZON-ENGINEERING DEPARTMENT	(951) 469-6369
SOUTHERN CALIFORNIA EDISON	
ONTARIO DISTRICT EDISON OPERATOR	(951) 930-8591

NOTICE TO CONTRACTOR

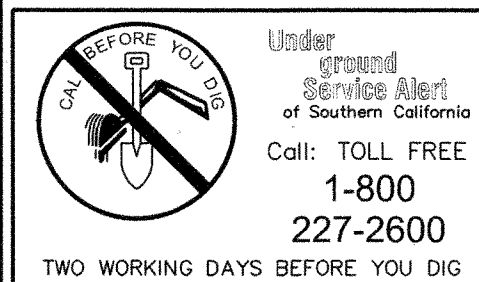
PURSUANT TO ASSEMBLY BILL 3019, NO EXCAVATION PERMIT IS VALID UNLESS THE FOLLOWING IS PERFORMED :

1. UNDERGROUND SERVICE ALERT HAS BEEN CONTACTED AND HAS PROVIDED INQUIRY I.D. # _____
2. THE UNDERSIGNED AGREES TO CONTACT AND OBTAIN AN INQUIRY I.D.# FROM UNDERGROUND SERVICE ALERT (1-800-227-2600) AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF EXCAVATION.

SIGNED _____ DATE _____

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR

ALL UNDERGROUND UTILITIES AND STRUCTURES, PRIVATE AND PUBLIC, SHOWN HEREON REFLECT A SEARCH OF ALL KNOWN RECORD DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND DAMAGE TO ALL STRUCTURES AND UTILITIES, SHOWN OR NOT, HEREIN.



REVISIONS			
MARK	DATE	BY	APPROVED/ RCE NO.

DESIGNED BY: PC	DATE: AUGUST 21, 2007
DRAWN BY: PG	DATE: AUGUST 21, 2007
CHECKED BY: 11/28/07	DATE: 11/28/07

CITY OF ONTARIO

RECOMMENDED BY: *John P. Sullivan* 44485 EXP. 3/31/08 12-14-07
JOHN P. SULLIVAN / CITY ENGINEER 24079 EXP. 12/31/07 12-20-07
C.E. NO. DATE

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572

LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.

NGVD29 / 1990 ADJ.

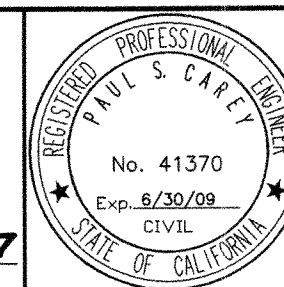


STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880

stantec.com

Paul S. Carey
PAUL S. CAREY

41370 6/30/09 11/7/07
C.E. NO. EXP. DATE



NEW MODEL COLONY (EAST)
IMPROVEMENT PLANS FOR
RIVERSIDE DRIVE DOMESTIC WATER
SHEET INDEX, LOCATION MAP, AND LEGEND

M-442

SHEET 2 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3248
W13417

G2

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GENERAL CITY NOTES

- 1- ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH THE CURRENT CITY OF ONTARIO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 2- ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS/HER OPERATIONS, WHETHER OR NOT THE FACILITY IS SHOWN ON THESE PLANS.
- 3- ALL OBSTRUCTIONS WITHIN THE AREA TO BE IMPROVED SHALL BE REMOVED AND/OR RELOCATED AT THE DIRECTION OF THE CITY ENGINEER. UTILITIES ARE TO BE RELOCATED BY THEIR RESPECTIVE OWNERS UNLESS NOTED OTHERWISE. THE CONTRACTOR IS REFERRED TO SECTION 5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- 4- UTILITY LINE LOCATIONS WERE TAKEN FROM AVAILABLE RECORD DATA AND WERE NOT LOCATED IN THE FIELD, UNLESS OTHERWISE NOTED ON THE PLAN. THE CONTRACTOR IS REFERRED TO SECTION 5 OF THE STANDARD SPECIFICATIONS.
- 5- IN CASE OF ANY ACCIDENTS INVOLVING SAFETY MATTERS COVERED BY SECTION 6409(b) OF THE CALIFORNIA LABOR CODE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STATE DIVISION OF INDUSTRIAL SAFETY.
- 6- STATE LAW (SB 3019) REQUIRES THE CONTRACTOR TO CONTACT UNDERGROUND SERVICE ALERT AND OBTAIN AN IDENTIFICATION NUMBER PRIOR TO THE ISSUANCE OF CITY'S ENCROACHMENT PERMIT. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AT 1-800-227-2600 A MINIMUM OF 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES.
- 7- PRIOR TO THE START OF ANY WORK THE CONTRACTOR SHALL OBTAIN A BUSINESS LICENSE FROM THE CITY OF ONTARIO. THE CONTRACTOR SHALL ALSO OBTAIN AN ENCROACHMENT PERMIT FROM THE ENGINEERING DEPARTMENT NO LESS THAN 48 HOURS PRIOR TO START OF ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY.
- 8- THE CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT 48 HOURS PRIOR TO TIME OF CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR IS REFERRED TO SECTION 7-10.3 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION.
- 9- THE CONTRACTOR SHALL RENEW OR REPLACE ANY EXISTING TRAFFIC STRIPING AND/OR PAVEMENT MARKINGS, WHICH DURING HIS OPERATIONS HAVE BEEN EITHER REMOVED OR THE EFFECTIVENESS OF WHICH HAS BEEN REDUCED. RENEWAL OF TRAFFIC STRIPING AND MARKINGS SHALL BE DONE USING REFLECTIVE THERMO-PLASTIC MARKINGS IN CONFORMANCE WITH SECTION 84 & 85 OF THE CALTRANS STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. ALL REGULATORY, WARNING, AND GUIDE SIGNS SHALL HAVE 3M DIAMOND, VIP GRADE SHEETING WITH SERIES 1160 PROTECTIVE OVERLAY FILM.
- 10- THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 732.5, 1492-5, 1810-5 OF THE STREETS AND HIGHWAY CODE REQUIRE THAT SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED. "IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR OTHERS PERFORMING THE CONSTRUCTION WORK TO RETAIN A QUALIFIED REGISTERED CIVIL ENGINEER AND/OR LICENSED LAND SURVEYOR PRIOR TO THE START OF CONSTRUCTION TO LOCATE, REFERENCE AND FILE THE NECESSARY CORNER RECORDS WITH THE COUNTY SURVEYOR'S OFFICE FOR SURVEY CONTROL POINTS/MONUMENTS THAT EXIST AS SHOWN ON RECORDED TRACT MAPS, PARCEL MAPS, RECORDS OF SURVEYS AND HIGHWAY MAPS, AND MAY BE DISTURBED OR DAMAGED BY THE PROPOSED CONSTRUCTION." AFTER THE COMPLETION OF THE PROPOSED CONSTRUCTION, SAID MONUMENTS AND/OR CONTROL SURVEY POINTS SHALL BE RESET TO THE NEW SURFACE IN ACCORDANCE WITH CURRENT PROFESSIONAL LAND SURVEYING PRACTICES. CORNER RECORDS SHALL BE FILED WITH THE COUNTY SURVEYOR FOR ALL THE NEW MONUMENTS SET.
- 11- THE DEVELOPER SHALL PROVIDE THE CITY WITH A COMPLETED SET OF "AS BUILT", MYLAR DRAWINGS PRIOR TO THE FINAL INSPECTION.
- 12- A CITY ACCEPTED/APPROVED SET OF PLANS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
- 13- A PRE-CONSTRUCTION MEETING SHALL OCCUR PRIOR TO CONSTRUCTION. ATTENDEES SHALL INCLUDE A CITY REPRESENTATIVE AND THE CONTRACTOR WHO WILL PERFORM THE WORK. "CUT-SHEETS" SHALL BE PROVIDED TO THE CITY AT THIS MEETING FOR ITS REVIEW.
- 14- CITY ACCEPTANCE OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST OF THE CITY INSPECTOR, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR REVIEW.
- 15- WATER MAINS WITHIN NEW MODEL COLONIES SHALL BE C900 CLASS 200 PVC UP TO 12-INCHES IN SIZE. CML/CMC IS REQUIRED FOR DOMESTIC WATER MAINS IN EXCESS OF 12-INCHES.
- 16- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF THE EXISTING WATER MAIN(S) AND NOTIFY THE DESIGN ENGINEER OF ANY VARIATION FROM DESIGN.
- 17- ALL VALVE OPERATIONS SHALL BE BY CITY FORCES. THE CONTRACTOR SHALL CONTACT THE CITY A MINIMUM OF 24 HOURS PRIOR TO TIME OF THE REQUIRED VALVE OPERATIONS (909) 395-2025.
- 18- MINIMUM COVER OF WATER MAINS SHALL BE 42 INCHES FROM THE FINISHED SURFACE FOR PIPES UNDER 12" DIAMETER AND 48 INCHES FOR PIPES 12" DIAMETER AND LARGER, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 19- WATER MAIN LINE STATIONING IS PER PIPE CENTERLINE.
- 20- STREET CENTERLINE STATIONING IS PER THE STREET IMPROVEMENT PLANS AND PROVIDED FOR REFERENCE.
- 21- THE CONTRACTOR SHALL INSTALL SUITABLE THRUST BLOCKS AT EVERY VERTICAL AND/OR HORIZONTAL CHANGE OF DIRECTION IN ACCORDANCE WITH CITY OF ONTARIO STANDARD DRAWING NO. 4004, WHETHER OR NOT SPECIFICALLY CALLED FOR OR SHOWN ON THE PLAN. UPON APPROVAL BY CITY, CONTRACTOR MAY UTILIZE FULLY WELDED JOINTS (IN LIEU OF THRUST BLOCKS) PER CITY OF ONTARIO STANDARD DRAWING NO. 4003. THRUST RESTRAINT FOR PVC PIPE SHALL BE ACCOMPLISHED WITH THE USE OF RESTRAINED JOINTS PER STANDARD DRAWING NO. 4010 (RESTRAINED JOINTS ARE REQUIRED WITHIN THE NMC).
- 22- ALL WELDED STEEL PIPE USED SHALL BE CEMENT MORTAR LINED AND COATED, 10 GAUGE (MINIMUM), UNLESS NOTED OTHERWISE.
- 23- ALL STEEL BENDS AND FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED AND SHALL BE SHOP FABRICATED PER AWWA C-208. CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS FOR ALL AWWA SHOP FABRICATED FITTINGS TO THE CITY

ADDITIONAL GENERAL CITY NOTES AND REQUIREMENTS

- 1- SEPARATION REQUIREMENTS BETWEEN WATER AND SEWER LINES SHALL CONFORM TO THE COUNTY OF SAN BERNARDINO HEALTH DEPARTMENT AND THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES REQUIREMENTS. THE AGENCY'S SPECIFICATIONS THAT ARE MORE RESTRICTIVE SHALL GOVERN IN ALL CASES.
- 2- CONTRACTOR SHALL SHORE ALL TRENCHES AND CONDUCT ALL CONSTRUCTION AND OPERATIONS IN ACCORDANCE WITH CAL-OSHA REQUIREMENTS AND HAVE ALL ENCROACHMENT AND EXCAVATION PERMITS PRIOR TO THE START OF WORK.
- 3- PIPE JOINTS SHALL NOT BE PULLED AT ANY ANGLE GREATER THAN THE MAXIMUM ANGLE RECOMMENDED BY THE PIPE MANUFACTURER.
- 4- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AND HAVE ALL UNDERGROUND UTILITIES MARKED PRIOR TO CONSTRUCTION.
- 5- ALL CONSTRUCTION SHALL CONFORM TO CURRENT CAL OSHA SAFETY REQUIREMENTS.
- 6- CONTRACTOR SHALL DESIGNATE A QUALIFIED SUPERINTENDENT WITH FULL AUTHORITY TO ACT ON BEHALF OF THE CONTRACTOR. SAID SUPERINTENDENT SHALL BE ON THE JOB SITE AT ALL TIMES.
- 7- THE CONSTRUCTION OF THE SEWER MAIN, MANHOLES, AND LATERALS, AND SUCCESSFUL FIRST AIR TEST SHALL BE COMPLETED PRIOR TO THE COMMENCEMENT OF THE WATERLINE INSTALLATION.
- 8- UPON COMPLETION OF CONSTRUCTION OF ALL CML & CMC RECYCLED WATERLINES AND PRIOR TO PAVING, THE DEVELOPER SHALL HIRE A CITY APPROVED VIDEO COMPANY TO VIDEO TAPE THE PIPELINES. CITY SHALL REVIEW SAID VIDEOTAPE FOR POTENTIAL CONSTRUCTION DEFECTS PRIOR TO ACCEPTANCE OF THE PROJECT. PAYMENT FOR ALL SUCH SERVICES SHALL BE BORNE BY THE DEVELOPER.

ADDITIONAL GENERAL CITY NOTES AND REQUIREMENTS (WATER)

- 1- THE CONTRACTOR SHALL INSTALL SUITABLE THRUST BLOCKS AT EVERY VERTICAL AND/OR HORIZONTAL CHANGE OF DIRECTION IN ACCORDANCE WITH THE CITY STANDARD DRAWING NO. 4004, WHETHER OR NOT SPECIFICALLY CALLED FOR OR SHOWN ON THE PLAN. UPON APPROVAL BY THE CITY, CONTRACTOR MAY UTILIZE FULLY WELDED JOINTS (IN LIEU OF THRUST BLOCKS). THRUST RESTRAINT FOR PVC PIPE SHALL BE ACCOMPLISHED WITH THE USE OF RESTRAINED JOINTS PER CITY STANDARD DRAWING NO. 4010.
- 2- ALL APPURTENANCES (I.E. AV, BO, FH, SERVICES, ETC.) THAT REQUIRE RELOCATION SHALL BE RECONSTRUCTED IN ACCORDANCE WITH CURRENT CITY STANDARDS. EACH APPURTENANCE TO BE RELOCATED SHALL BE EVALUATED IN THE FIELD ON A CASE BY CASE BASIS AND RECONSTRUCTED AS DIRECTED BY THE CITY, HOWEVER, UNLESS OTHERWISE APPROVED BY THE CITY, RELOCATED APPURTENANCES SHALL BE RECONSTRUCTED FROM THE MAIN TO THE PROPOSED LOCATION.

SPECIAL NOTE -1: SOUTHERN CALIFORNIA GAS COMPANY.

-NOTIFY GAS COMPANY PRIOR TO ANY WORK WITHIN THE GAS COMPANY EASEMENT. ARRANGEMENTS FOR A REPRESENTATIVE OF THE GAS COMPANY CAN BE MADE BY CALLING (951) 845-0712 TWO WORKING DAYS PRIOR TO START OF CONSTRUCTION.
-CALL UNDERGROUND SERVICE ALERT (USA) AT (800) 422-4133 TWO (2) WORKING DAYS PRIOR TO START OF CONSTRUCTION. THE GAS COMPANY WILL LOCATE AND MARK THEIR ACTIVE UNDERGROUND FACILITIES FOR THE CONTRACTOR AT NO COST.

SPECIAL NOTE -2: FUTURE WATER CONNECTION

WHEN JOINING MAINS, CONTINUE RESTRAINING ALL PVC JOINTS ON WATER MAINS AND LATERALS AS REQUIRED ON THE PLANS. RESTRAINING LENGTH AS SHOWN ON THE PLANS AND PER CITY STD DWG NO. 4010

GAS COMPANY NOTES

- 1- CONSIDERATION SHALL BE GIVEN TO THE SAFETY OF OUR PIPELINES DURING THE DESIGN AND CONSTRUCTION STAGES.
- 2- NO MECHANICAL EQUIPMENT WILL BE PERMITTED TO OPERATE WITHIN SEVEN AND A HALF (7.5) HORIZONTAL FEET OF THE PIPELINE, AND ANY CLOSER WORK MUST BE PERFORMED BY HAND.
- 3- A REPRESENTATIVE OF THE GAS COMPANY MUST OBSERVE THE EXCAVATION AROUND OR NEAR OUR FACILITIES TO INSURE PROTECTION AND TO RECORD PERTINENT DATA NECESSARY FOR OUR OPERATIONS.
- 4- A MINIMUM OF TWO-FOOT SEPARATION MUST BE MAINTAINED BETWEEN GAS FACILITIES AND PROPOSED LATERALS AND MUST CROSS PERPENDICULAR TO GAS FACILITIES.
- 5- ALL EQUIPMENT CROSSING GAS EASEMENT MUST BE APPROVED BY THE GAS COMPANY REPRESENTATIVE AND ALL CROSSINGS REQUIRE A MINIMUM OF SEVEN (7) FEET OF COVER OVER GAS FACILITIES.
- 6- ONLY RUBBER TIRE, LIGHT LOADING EQUIPMENT WILL BE ALLOWED TO WORK WITHIN THE GAS COMPANY EASEMENT AND NO MECHANICAL EQUIPMENT WILL BE PERMITTED TO OPERATE WITHIN TWO (2) VERTICAL FEET OF THE PIPELINE. ANY CLOSER WORK MUST BE PERFORMED BY HAND.
- 7- A GAS COMPANY REPRESENTATIVE SHALL BE NOTIFIED TWO WORKING DAYS PRIOR TO ANY WORK WITHIN THE GAS COMPANY EASEMENT. CALL (951) 845-0712
- 8- NO CHANGE OF GRADE WITHIN GAS COMPANY EASEMENT WITHOUT GAS COMPANY'S APPROVAL. NO PERMANENT STRUCTURES WITHIN EASEMENT WITHOUT GAS COMPANY APPROVAL.

ADDITIONAL WATER NOTES

- A. ALL WATER SYSTEM WORK SHALL CONFORM TO THE CITY OF ONTARIO'S "PROCEDURAL GUIDELINE AND GENERAL DESIGN REQUIREMENTS" AND "CONSTRUCTION MANUAL," AS LAST REVISED.
- B. THE CITY'S ENGINEERING OFFICE SHALL BE CALLED FOR INSPECTION FOUR (4) WORKING DAYS BEFORE START OF WORK.
- C. A PRECONSTRUCTION CONFERENCE OF REPRESENTATIVES FROM AFFECTED AGENCIES AND THE CONTRACTOR SHALL BE HELD ON THE JOB SITE 48 HOURS PRIOR TO START OF WORK.
- D. THE WATER SYSTEM SHALL BE STAKED BY THE DEVELOPER'S ENGINEER AT A MINIMUM 50-FOOT STATIONING INTERVAL IF THERE ARE NO EXISTING CURBS.
- E. ANY WATER SERVICE FOUND TO BE WITHIN A DRIVEWAY OR SIDEWALK SHALL BE REMOVED COMPLETELY AND REINSTALLED AT THE PROPER LOCATION AT NO COST TO THE CITY.
- F. ALL MAIN LINE VALVES SHALL BE MAINTAINED SO AS TO BE ACCESSIBLE DURING TRACT DEVELOPMENT, AND ALL VALVE STEM TOPS HAVING OVER 60 INCHES OF COVER WILL REQUIRE AN EXTENSION AS PER DRAWING 4110.
- G. THE TOP OF THE PIPE, 8-INCHES AND SMALLER, SHALL BE A MINIMUM OF 42-INCHES BELOW THE FINISHED STREET SURFACE, 12-INCHES OR GREATER, SHALL BE A MINIMUM OF 48-INCHES BELOW FINISHED STREET SURFACE, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- H. ALL FIRE HYDRANTS SHALL BE SET WITH THE BOTTOM FLANGE 4-INCHES ABOVE THE CONCRETE PAD OR SIDEWALK AND SHALL BE LOCATED A MINIMUM OF 3 FEET FROM THE ECR OR BCR AT INTERSECTIONS.
- I. ALL WATER MAINS 8-INCHES THROUGH 12-INCHES SHALL BE CLASS 200, AWWA C-900 PVC UNLESS NOTED OTHERWISE.
- J. NO TAPS OR OTHER CONNECTIONS SHALL BE MADE TO EXISTING CITY WATER MAINS PRIOR TO CONDUCTING AN APPROVED PRESSURE TEST ON THE NEW WATER DISTRIBUTION SYSTEMS. TAPPING SLEEVES SHALL BE PRESSURE TESTED IN AN APPROVED MANNER IN THE FIELD IN THE PRESENCE OF THE CITY INSPECTOR, PRIOR TO TAPPING THE MAIN LINE. TAPPING OF THE MAIN LINE SHALL NOT PROCEED UNLESS A CITY INSPECTOR IS PRESENT.
- K. WHERE METERS AND METER BOXES ARE LOCATED WITHIN SLOPES, THE ANGLE METER STOPS SHALL BE LOCATED SO THAT THE METERS AND BOXES WILL BE PARALLEL AND FLUSH, RESPECTIVELY, WITH THE FINISHED SURFACE.
- L. CURBS SHALL BE INSCRIBED WITH A "W" INDICATING LOCATIONS OF ALL DOMESTIC WATER SERVICES BY USE OF A 4" GRINDER.
- M. INDIVIDUAL PRESSURE REGULATORS ARE REQUIRED BY THE UNIFORM PLUMBING CODE IF THE AVERAGE STATIC PRESSURE IN THE MAIN IS EQUAL TO OR GREATER THAN 80 PSI.
- N. CURBS SHALL BE INSCRIBED WITH TIE DOWN OF ALL VALVE LOCATIONS BY USE OF A 4" GRINDER.
- O. THE CONTRACTOR SHALL EXPOSE JOIN POINTS TO THE EXISTING WATER SYSTEM FOR VERIFICATION OF LOCATION AND ELEVATION BEFORE CONSTRUCTION.
- P. FINAL INSPECTION FOR WATERLINES MUST INCLUDE WATER SAMPLES THAT WILL BE TESTED FOR CONDUCTIVITY, TURBIDITY, ODOR AND BACTERIA. THE TURBIDITY MUST BE LESS THAN 2.5 NTU AND THE ODOR MUST BE LESS THAN 1.0 TON, NOT TO INCLUDE CHLORINE ODOR, TO BE ACCEPTABLE. BACTERIOLOGICAL TESTS REQUIRED BY THE HEALTH DEPARTMENT SHALL BE TAKEN AND CONDUCTED BY A LABORATORY SELECTED BY THE CITY. ALL COSTS FOR TESTING SHALL BE PAID BY THE CONTRACTOR. ALL RETESTING SHALL CONFORM TO CITY REQUIREMENTS. MINIMUM REQUIREMENTS FOR DISINFECTION AND BACTERIOLOGICAL TESTING OF NEW PIPELINES SHALL BE IN ACCORDANCE WITH ANSI/AWWA C651 AND THE LOCATION AND NUMBER OF ALL TESTS SHALL BE DETERMINED BY THE CITY, WITH APPROVAL BY THE STATE HEALTH DEPARTMENT.
- Q. THE CONTRACTOR WORKING ON THE CITY WATERLINES MUST HAVE A VALID C-34 LICENSE OR A CLASS A GENERAL CONTRACTORS LICENSE.
- R. CONTRACTOR SHALL OBTAIN AND SHOW PROOF OF A DEWATERING PERMIT FROM THE STATE OF CALIFORNIA, REGIONAL WATER QUALITY CONTROL BOARD PRIOR TO THE START OF EXCAVATION.

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR

ALL UNDERGROUND UTILITIES AND STRUCTURES, PRIVATE AND PUBLIC, SHOWN HEREON REFLECT A SEARCH OF ALL KNOWN RECORD DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND DAMAGE TO ALL STRUCTURES AND UTILITIES, SHOWN OR NOT, HEREIN. DAMAGED TRAFFIC LOOPS SHALL BE REPLACED PER CITY OF ONTARIO ORDINANCE.

NOTE:

SURVEYOR SHALL STAKE ALL APPURTENANCES SHOWN ON PLANS IN ACCORDANCE WITH LOCATION SETBACKS PROVIDED ON CITY STANDARD PLAN SHEETS.

NOTE:

ALL BUTTERFLY VALVES, 16" AND LARGER, MUST BE TESTED WITH THE OPERATOR INSTALLED AND WITNESSED BY THE CITY INSPECTORS PRIOR TO DELIVERY TO THE JOB SITE. FOR THIS PROJECT ONLY, TEST EACH SIDE OF THE VALVE AT 200 PSI.

NOTE:

ALL SHUT DOWN OF EXISTING WATER MAIN TO BE DONE BY AND COORDINATED WITH THE CITY UTILITY DIVISION. CONTRACTOR SHALL NOTIFY ALL AFFECTED WATER USERS 72 HOURS IN ADVANCE OF SHUT DOWN.

NOTE:

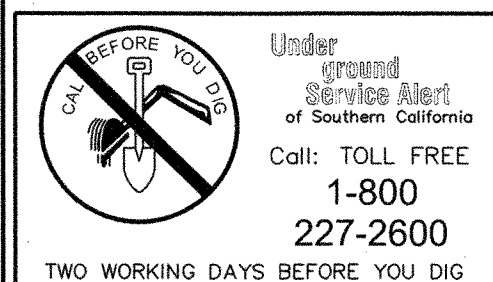
PIPELINE STATIONING IS PER PIPELINE CENTERLINE AND IS INDEPENDENT OF STREET CENTERLINE STATIONING.

NOTE:

ALL EXISTING UNDERGROUND FACILITIES ARE TO BE PROTECTED IN PLACE UNLESS NOTED OTHERWISE ON THE PLANS

NOTE:

PRIOR TO CONSTRUCTION CONTRACTOR TO CONFIRM LOCATIONS OF UTILITY CROSSINGS AND COORDINATE WITH GAS COMPANY TO ABANDON IN PLACE 3" AND SMALLER GAS LINES AT THE INTERFERING CROSSINGS WITH PROPOSED UNDERGROUND FACILITIES



REVISIONS				
MARK	DATE	BY	APPROVED/ RCE NO.	

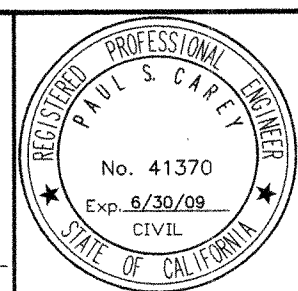
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DATE: AUGUST 21, 2007
CHECKED BY: [Signature]
DATE: 11/28/07

CITY OF ONTARIO

RECOMMENDED BY: [Signature] 44485 EXP. 3/31/08 12-14-07
DATE: 12-20-07
JOHN P. SULLIVAN / CITY ENGINEER 24079 EXP. 12/31/07

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8860
[Signature] PAUL S. CAREY
41370 6/30/09 11/7/07
C.E. NO. EXP. DATE



NEW MODEL COLONY (EAST)
IMPROVEMENT PLANS FOR
RIVERSIDE DRIVE DOMESTIC WATER
GENERAL NOTES

M-442

SHEET 3 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3249
W13418

G3

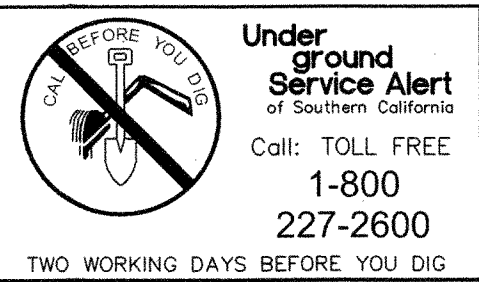
DOMESTIC WATER CONSTRUCTION NOTES

QUANTITY

101	CONSTRUCT 8" DIA PVC CL 200, AWWA C-900 WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.	63 L.F.
102	CONSTRUCT 12" DIA PVC CL 200, AWWA C-900 WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.	192 L.F.
104	CONSTRUCT 18" DIA CML&C (WALL THICKNESS: 0.164", WELDED JOINTS) STEEL WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.	5,184 L.F.
105	CONSTRUCT 10" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, OAE, PER CITY OF ONTARIO STD. DWG. NO. 4005.	3 EA.
107	CONSTRUCT 30" DIA CML&C (WALL THICKNESS: 0.25", WELDED JOINTS) STEEL WATER LINE. TRENCHING & BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.	84 L.F.
110	CONSTRUCT 8" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.	2 EA.
111	CONSTRUCT 12" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.	3 EA.
112	CONSTRUCT 16" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006.	1 EA.
113	CONSTRUCT 18" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006 AND DETAIL ON SHEET CP-2.	17 EA.
120	CONSTRUCT 18"x18"x18" CML&C STEEL TEE.	3 EA.
123	CONSTRUCT 12"x12"x12" COMPACT DI TEE AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.	1 EA.
128	CONSTRUCT 18"x18"x8" CML&C STEEL TEE.	2 EA.
134	CONSTRUCT 18"x16" CML&C STEEL CROSS.	1 EA.
141	CONSTRUCT 18"x12" CML&C STEEL REDUCER.	3 EA.
142	CONSTRUCT 12"x10" COMPACT D.I REDUCER (F.L x P.O) AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.	2 EA.
146	CONSTRUCT 24"x12" CML&C STEEL REDUCER.	1 EA.
147	CONSTRUCT 18"x10" CML&C STEEL REDUCER.	1 EA.
151	CONSTRUCT 12"-45" COMPACT DI ELBOW AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.	4 EA.
153	CONSTRUCT 18"-90" CML&C STEEL ELBOW.	1 EA.
154	CONSTRUCT 18"-45" CML&C STEEL ELBOW.	8 EA.
160	CONSTRUCT FIRE HYDRANT WITH BREAK-OFF CHECK VALVE PER CITY OF ONTARIO STD DWG NO. 4101 (STEEL MAIN) OR STD DWG NO 4111 (PVC MAIN).	11 EA.
161	CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102	12 EA.
165	CONSTRUCT 6" BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4109	5 EA.
170	CONSTRUCT END OF LINE CAP (M.J. WITH RETAINER GLAND) AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.	4 EA.
171	CONSTRUCT 8" BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD. DWG. NO. 4109	1 EA.
172	CONSTRUCT 4" TEMPORARY END OF MAIN BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD. DWG. NO. 4113	2 EA.
173	CONSTRUCT CML&C STEEL BULKHEAD (SIZE PER PLAN) & APPURTENANCES PER DETAIL 6 ON SHEET M1.	1 EA.
175	CONSTRUCT CML&C STEEL PIPE BUTTSTRAP JOINT (SIZE PER PLANS) AND APPURTENANCE PER DETAIL 3 ON SHEET M1.	1 EA.
176	CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1	9 EA.
178	REMOVE BULKHEAD, BLIND FLANGE OR END OF LINE CAP AND JOIN EX. WATER LINE, SIZE PER PLAN.	3 EA.
179	CONSTRUCT PVC END CAP, SIZE PER PLAN	1 EA.
183	CONSTRUCT 12"-11 1/4" COMPACT DI ELBOW AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.	1 EA.
186	CONSTRUCT 12" DIA. CML&C (WALL THICKNESS = 0.164", WELDED JOINTS) DOMESTIC WATERLINE TRENCHING AND BEDDING PER CITY OF ONTARIO STD DWG, 1306. CONNECT TO PROPOSED PVC PIPE WITH STEEL/PVC TRANSITION COUPLING PER DETAIL 1 ON SHEET M2.	24 L.F.
192	CONSTRUCT 18"x12" CML&C STEEL CROSS.	1 EA.
194	REMOVE EXISTING CONNECTION AND RECONNECT EXIST WATER LINE (SIZE PER PLAN) TO PROPOSED 18" CML&C STEEL PIPE WATER LINE.	4 EA.
195	CONSTRUCT 18"x18"x6" CML&C STEEL TEE.	1 EA.
196	CONSTRUCT 6" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.	1 EA.
197	CONSTRUCT 18"x18"x10" CML&C STEEL TEE.	2 EA.

CORROSION NOTE

REFER TO CP-1 THROUGH CP-4 FOR CORROSION PROTECTION ON APPURTENANCES AND METALLIC COMPONENTS OF WATER LINES.



REVISIONS				
MARK	DATE	BY	APPROVED/ RCE NO.	

DESIGNED BY: PC
DATE: AUGUST 21, 2007
DRAWN BY: PC
DATE: AUGUST 21, 2007
CHECKED BY: <i>[Signature]</i>
DATE: 11/28/07

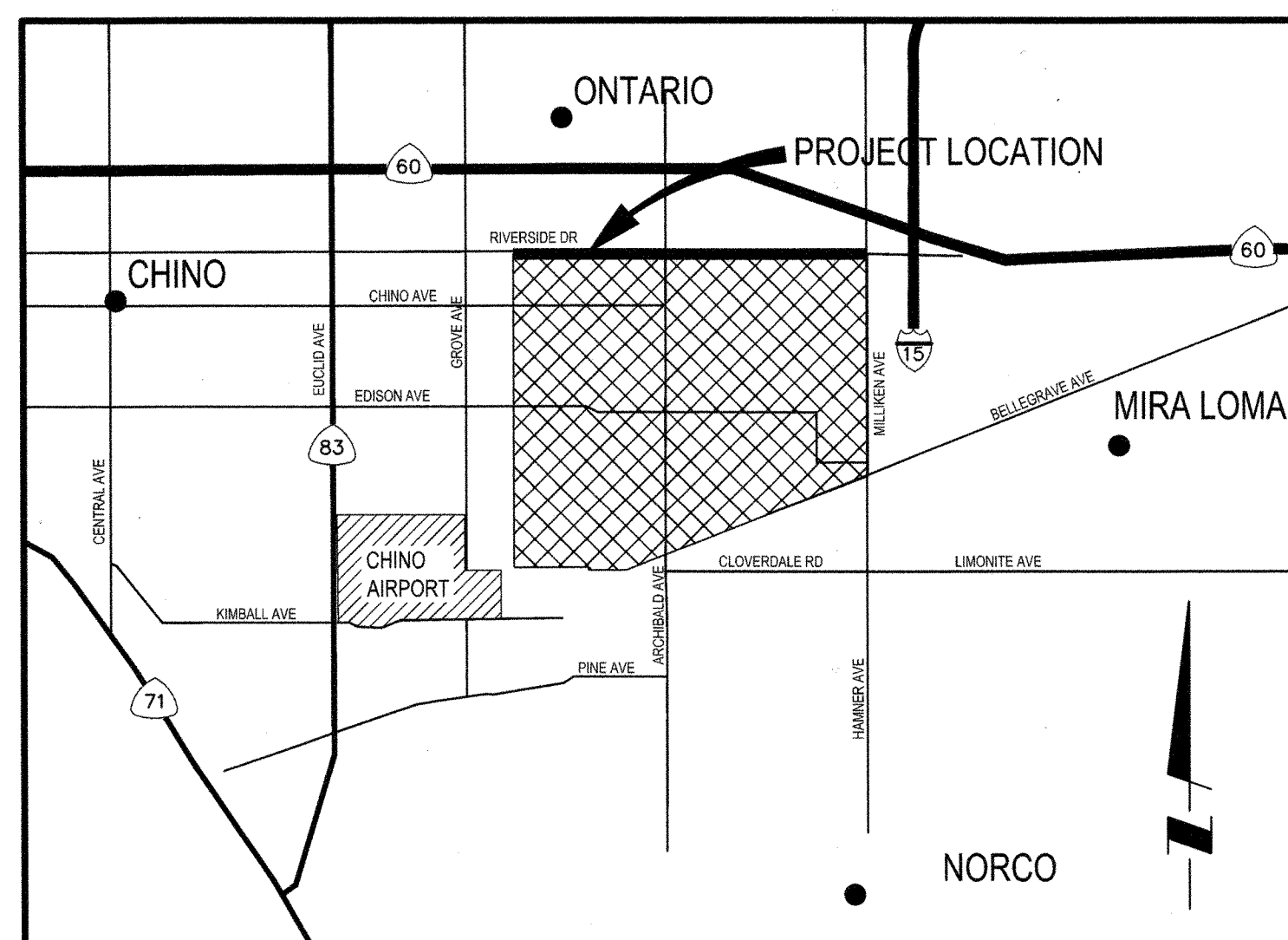
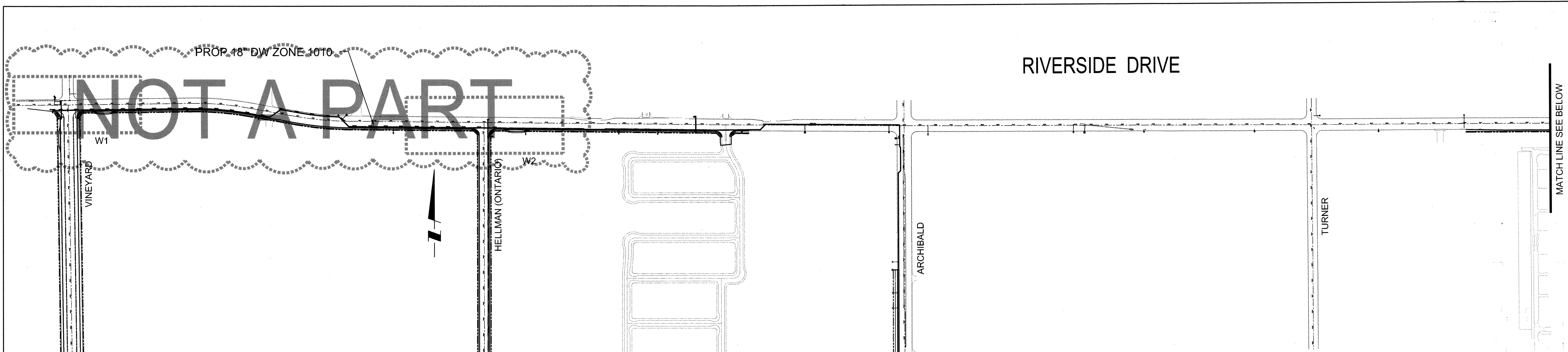
CITY OF ONTARIO			
RECOMMENDED BY: <i>[Signature]</i>	44485 EXP. 3/31/08	12-14-07	
JOHN P. SULLIVAN / CITY ENGINEER	24079 EXP. 12/31/07	12-20-07	
	C.E. NO.	DATE	

BENCH MARK No. S.P.S.N 00789	ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.	
NGVD29 / 1990 ADJ.	

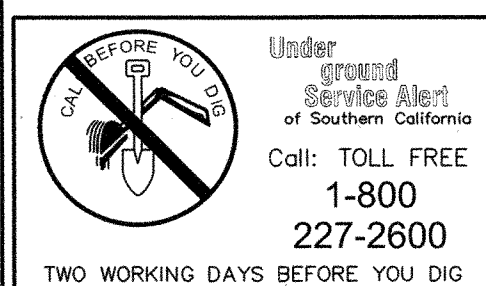
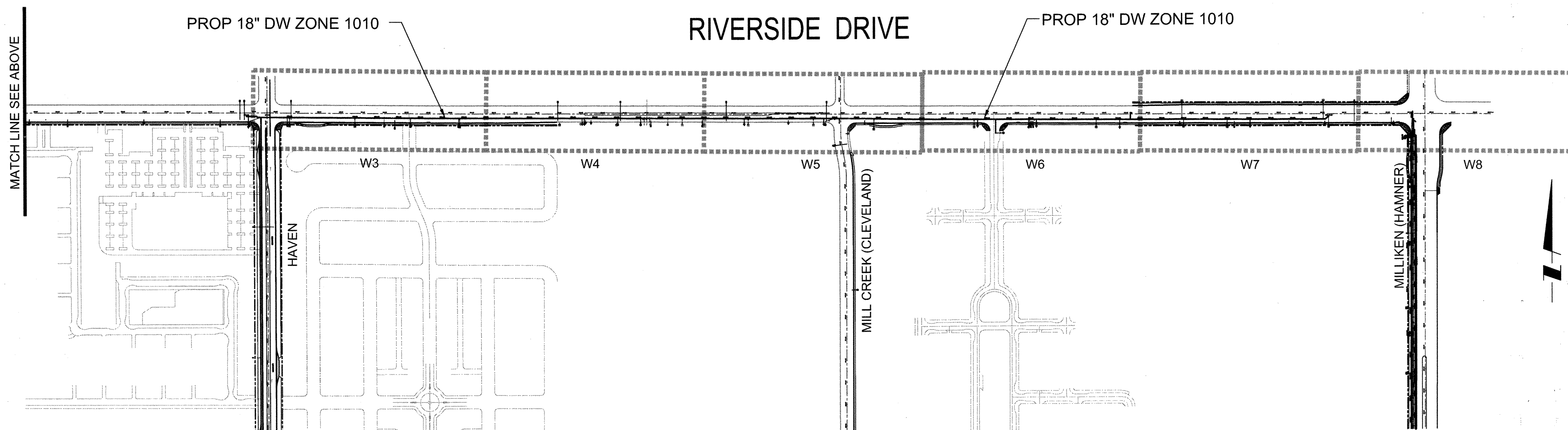
	STANTEC CONSULTING INC. 3105 EAST GUASTI ROAD SUITE 100 ONTARIO, CA 91761 909.390.8880 stantec.com
	41370 6/30/09 11/1/09 C.E. NO. EXP. DATE

NEW MODEL COLONY (EAST) IMPROVEMENT PLANS FOR RIVERSIDE DRIVE DOMESTIC WATER CONSTRUCTION NOTES
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M-442	SHEET 4 OF 19
CONTRACT	
ACCOUNT	
DWG. NO.	W3250



VICINITY MAP
NOT TO SCALE



MARK	DATE	BY	APPROVED/ RCE NO.

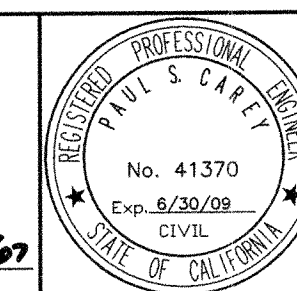
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DATE: AUGUST 21, 2007
CHECKED BY: [Signature]
DATE: 11/28/07

CITY OF ONTARIO

RECOMMENDED BY: [Signature]
LOUIS P. SULLIVAN / CITY ENGINEER
44485 EXP. 3/31/08 DATE 12-14-07
24079 EXP. 12/31/07 DATE 12-20-07
C.E. NO. DATE

BENCH MARK No. S.P.S.N. 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W. 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

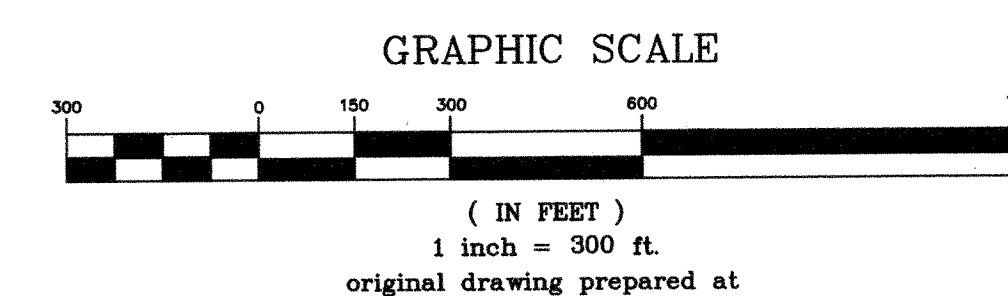
Stantec
STANTEC CONSULTING INC.
3102 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880

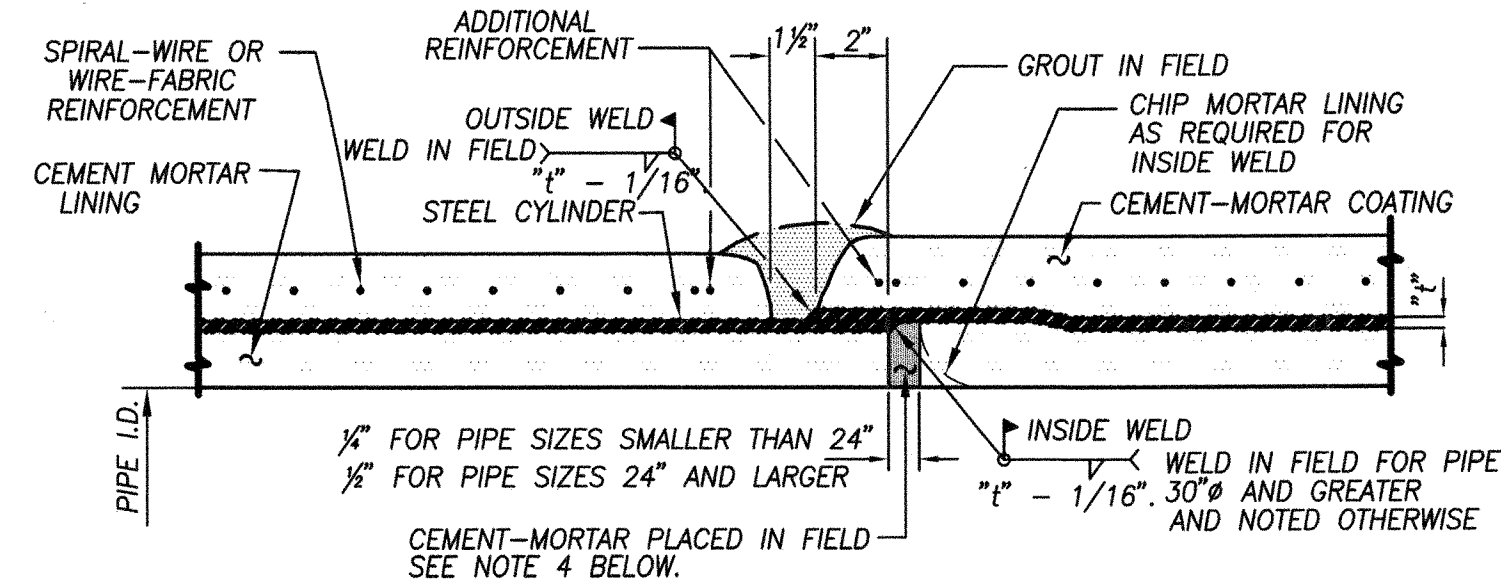


**NEW MODEL COLONY (EAST)
IMPROVEMENT PLANS FOR
RIVERSIDE DRIVE DOMESTIC WATER
INDEX MAP**

M-442

SHEET 5 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3251
G5

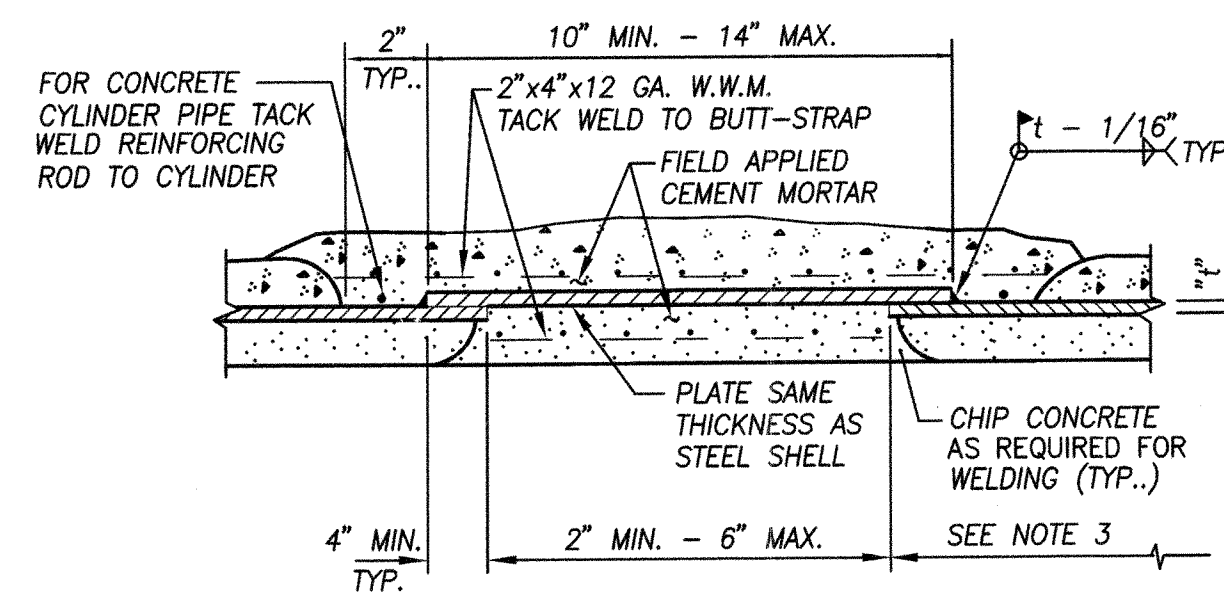




- NOTES:**
1. ALL WELDED JOINTS SHALL BE SINGLE-WELDED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR AS NOTED BELOW. FOR SINGLE-WELDED JOINTS, THE PIPE CAN BE WELDED OUTSIDE OR INSIDE (IF FEASIBLE) AT THE CONTRACTOR'S OPTION.
 2. CONTRACTOR SHALL DOUBLE-WELD THE JOINTS FOR ALL PIPELINES 30" AND LARGER IN DIAMETER IN THE FIRST ONE-HALF OF THE WELDED LENGTH CALLED FOR ON THE PLANS. WELDED JOINTS REQUIRED DUE TO VERTICAL SLOPES SHALL BE DOUBLE-WELDED FOR THE ENTIRE LENGTH CALLED FOR ON THE PLANS.
 3. WHEN WELDED JOINTS ARE CALLED FOR ON THE PLANS, THE CONTRACTOR MAY EITHER USE THE WELDED CARNEGIE JOINT OR THE LAP-WELDED SLIP JOINT.
 4. CEMENT MORTAR SHALL BE APPLIED AT THE INTERNAL JOINTS AND SHALL BE FINISHED SMOOTH BY RUBBING MANUALLY OR PULLING THROUGH A RUBBER BALL.

STEEL PIPE LAP-WELDED SLIP JOINT

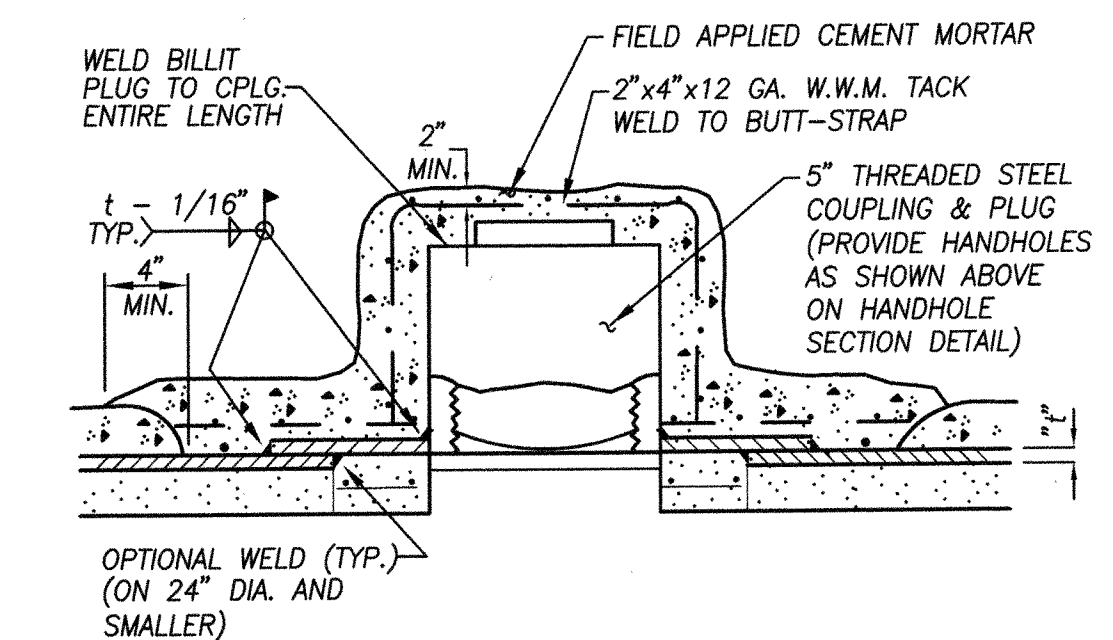
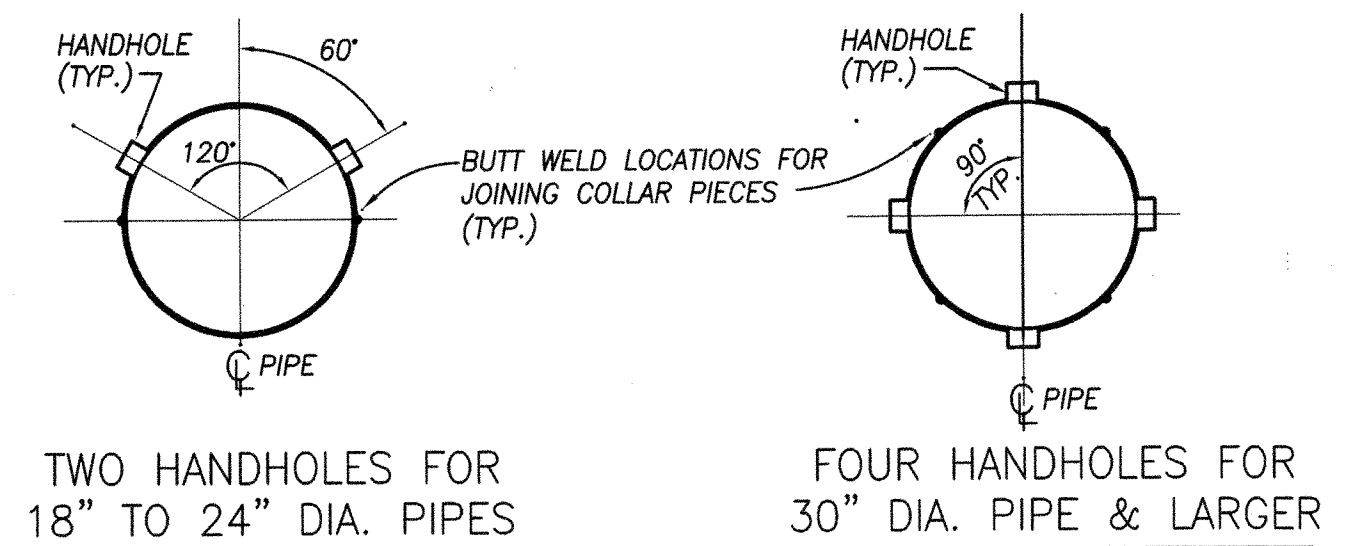
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- NOTES:**
1. COATING SHOWN IS FOR CML&C STEEL PIPE. COATING SHALL MATCH TRANSMISSION MAIN COATING.
 2. HAND HOLES REQUIRED AT BUTT-STRAP JOINT PER DETAIL 4.
 3. WHEN TYING-IN TO AN EXISTING PIPE, EXTRA LENGTH OF NEW PIPE SHALL BE PROVIDED FOR FIELD CUT TO SUIT.

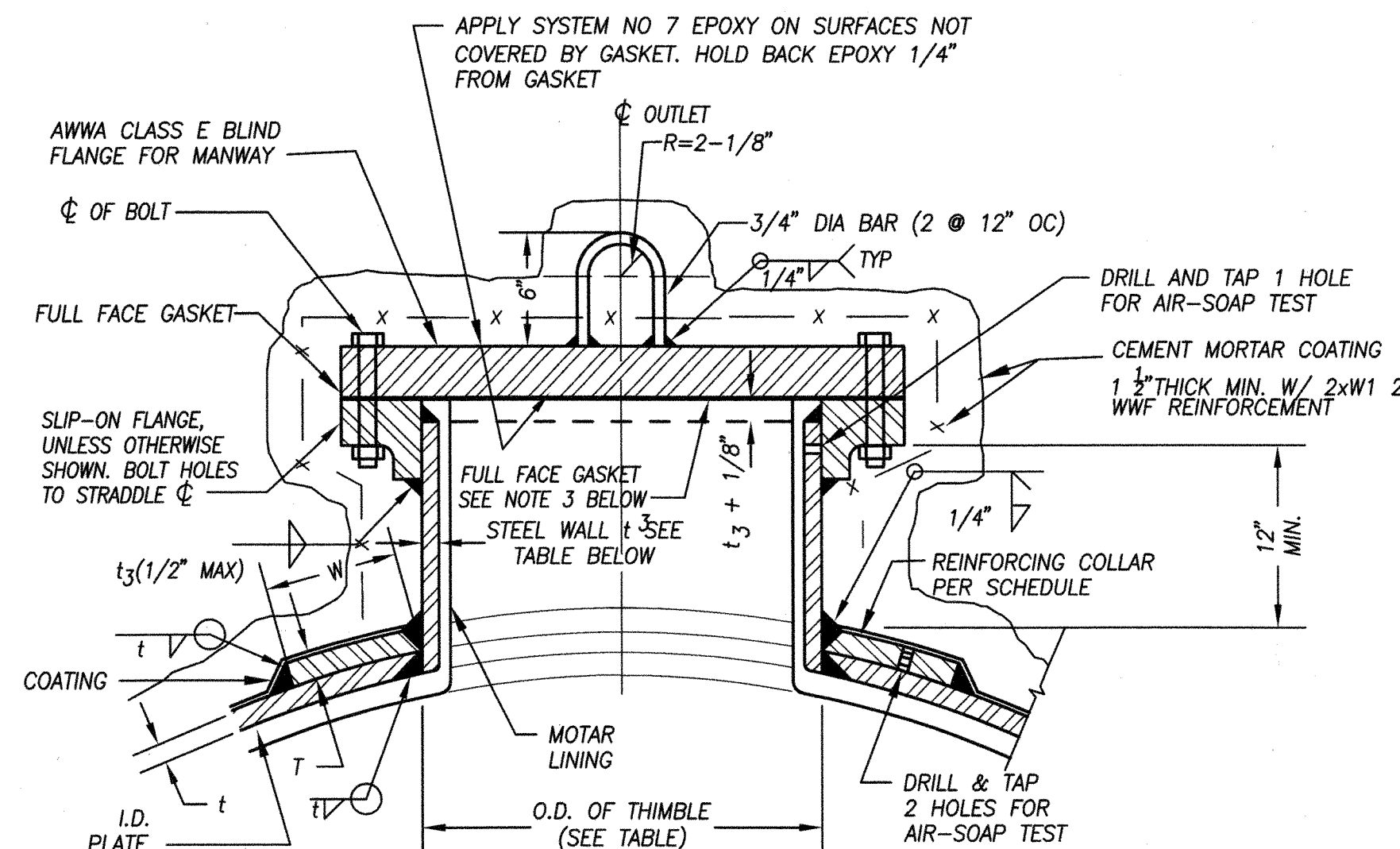
STEEL PIPE BUTT-STRAP JOINT TYPICAL SECTION

NOT TO SCALE



STEEL PIPE TYPICAL HANDHOLE DETAIL

NOT TO SCALE

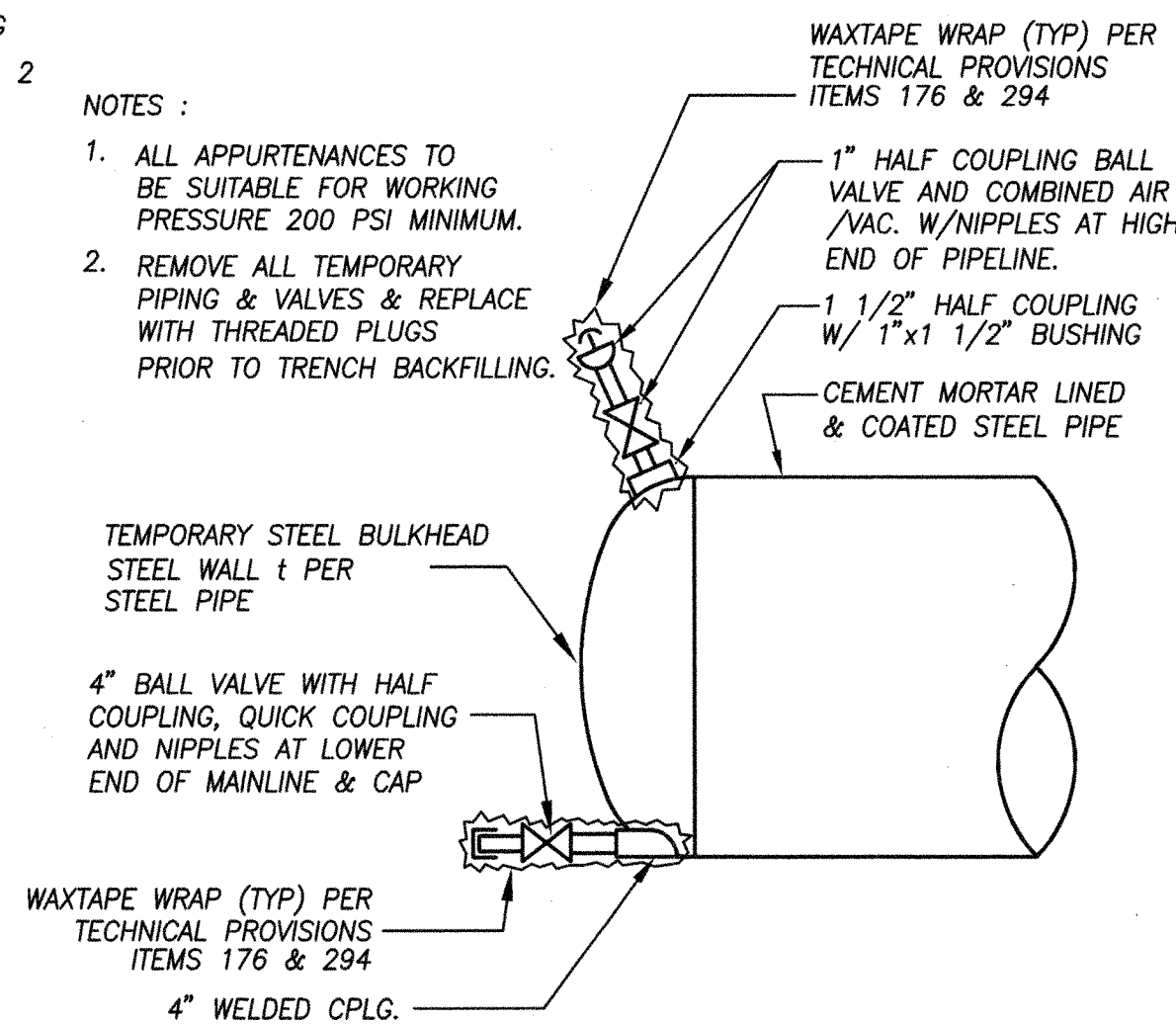


OUTLET NOM. SIZE	SCHEDULE PIPE	t ₃ WALL THICKNESS	O.D. THIMBLE	MORTAR LINING	COLLAR DIMENSIONS	LENGTH "L"
36"	STD.	0.375"	36"	1/2"	14"	1.33t
30"	STD.	0.375"	30"	1/2"	11 1/4"	1.33t
24"	STD.	0.375"	24"	3/8"	9"	1.33t
18"	STD.	0.375"	18"	3/8"	6"	1.33t
12"	STD.	0.375"	12 3/4"	1/4"	5"	1.33t
8"	STD.	0.322"	8 5/8"	1/4"	3 1/2"	1.33t
6"	STD.	0.280"	6 5/8"	1/4"	3"	1.33t
4"	STD.	0.237"	4 1/2"	1/4"	2"	1.33t

- NOTES:**
1. LENGTH "L" IS THE MINIMUM DISTANCE FROM CENTER LINE OF OUTLET TO ADJACENT JOINT OR END OF PIPE. t₃ DENOTES THE MAIN PIPE STEEL WALL THICKNESS.
 2. REINFORCING COLLAR OR WRAPPING PLATE ON MAIN LINE SHALL BE DESIGNED AND FABRICATED PER AWWA M-11 DESIGN MANUAL.
 3. THE UNDERSIDE OF THE BLIND FLANGE COVER SHALL BE COATED WITH 12 MILS EPOXY PER THE SPECS AND COMPLETELY SEALED WITH FULL FACE GASKET.
 4. ALL BOLTS, NUTS AND WASHERS SHALL BE TYPE 316 STAINLESS STEEL.

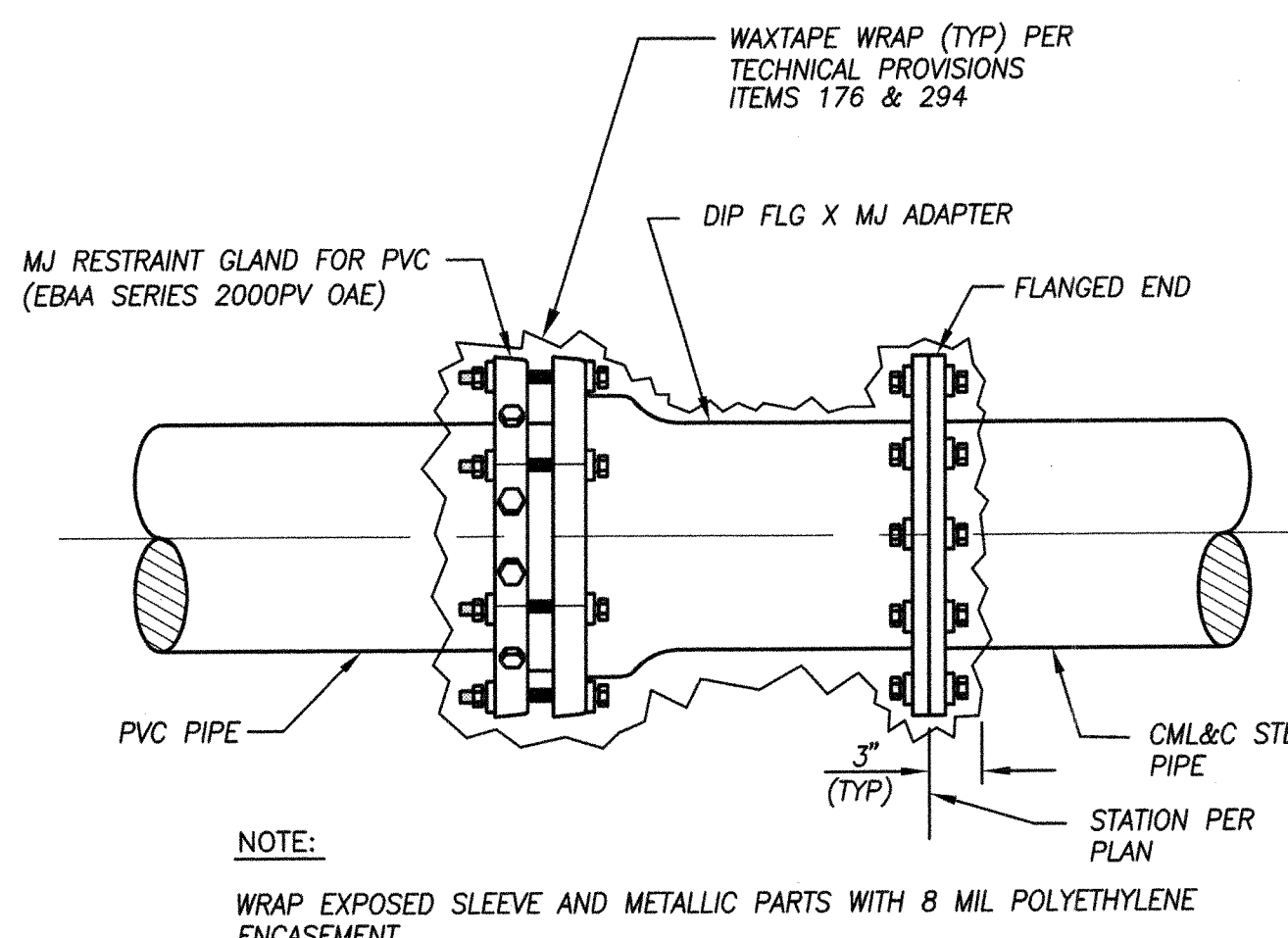
STEEL PIPE OUTLET/MANWAY DETAIL

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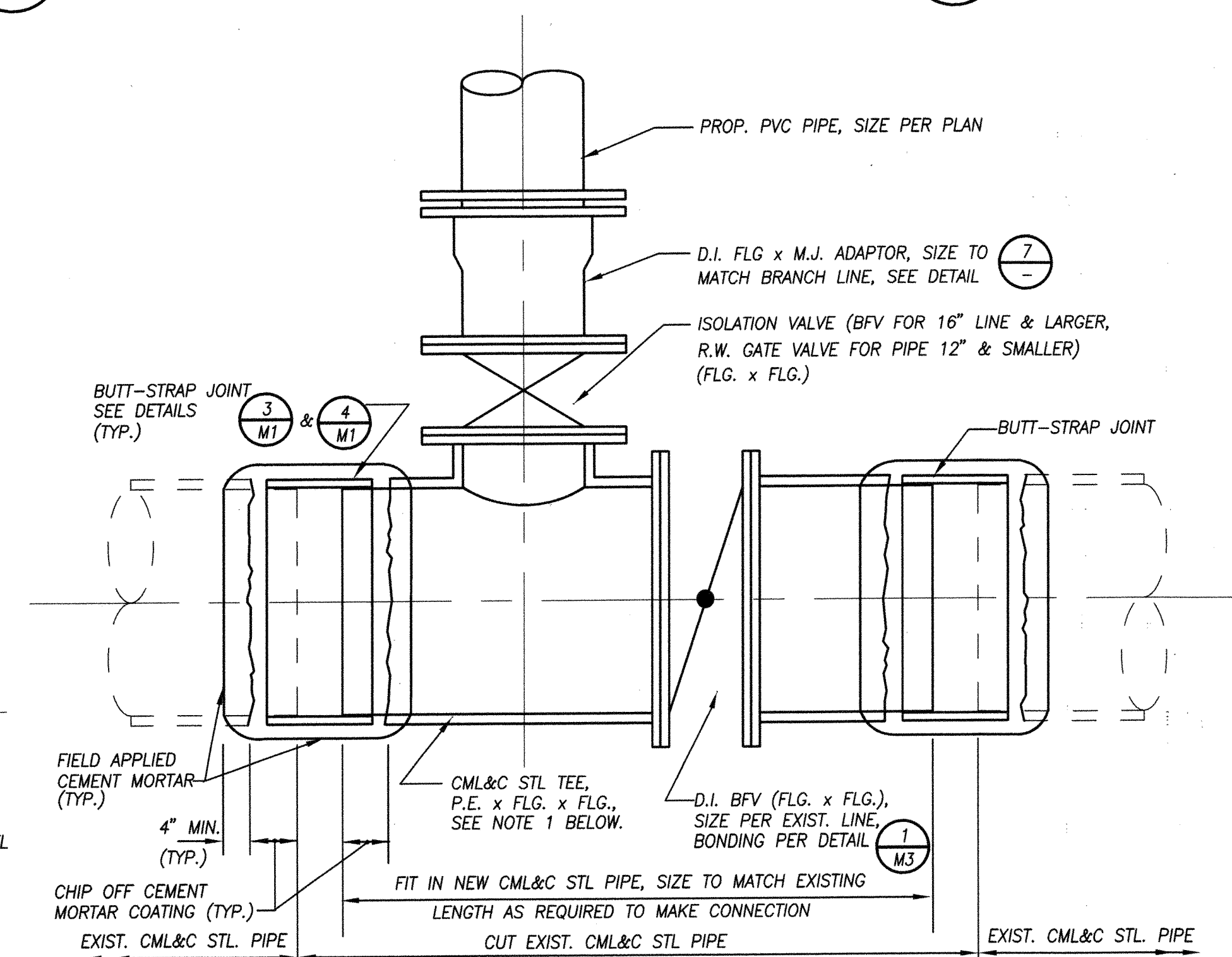
STEEL PIPE BULKHEAD AND APPURTENANCES

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PVC TO STEEL TRANSITION

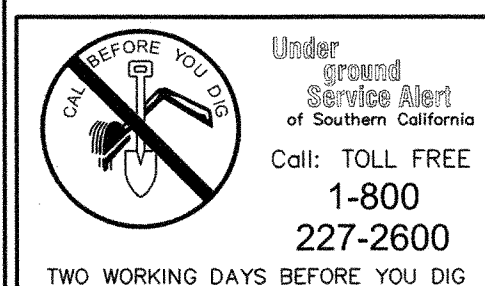
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- NOTES:**
1. ALL STEEL PIPE FITTINGS SHALL BE FABRICATED IN ACCORDANCE WITH AWWA C-208 STANDARD.
 2. USE BV'S FOR 16" LINE AND LARGER AND R.W. GATE VALVES FOR 12" LINE AND SMALLER.
 3. RESTAIN ALL JOINTS.
 4. ALL BOLTS, NUTS AND WASHERS SHALL BE TYPE 316 STAINLESS STEEL.

EXIST. STEEL PIPE CUT-IN TEE

NTS



STEEL PIPE OUTLET/MANWAY DETAIL

NOT TO SCALE

MARK	DATE	BY	APPROVED / RCE NO.

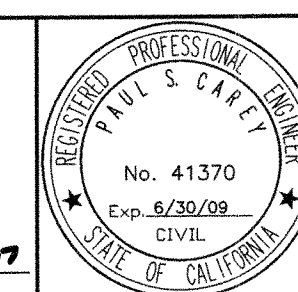
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DATE: 12-20-07
DRAWN BY: T.O./J.R.F.
DATE: 12-20-07
CHECKED BY: J.P. Sullivan
DATE: 12-20-07

CITY OF ONTARIO

RECOMMENDED BY: JOHN P. SULLIVAN, CITY ENGINEER
44485 EXP. 3/31/08
24079 EXP. 12/31/07
DATE: 12-20-07

BENCH MARK No. S.P.S.N. 00789 ELEV. 785.572
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NGVD29 / 1990 ADJ.

STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
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ONTARIO, CA 91761
909.390.8880
PAUL S. CAREY

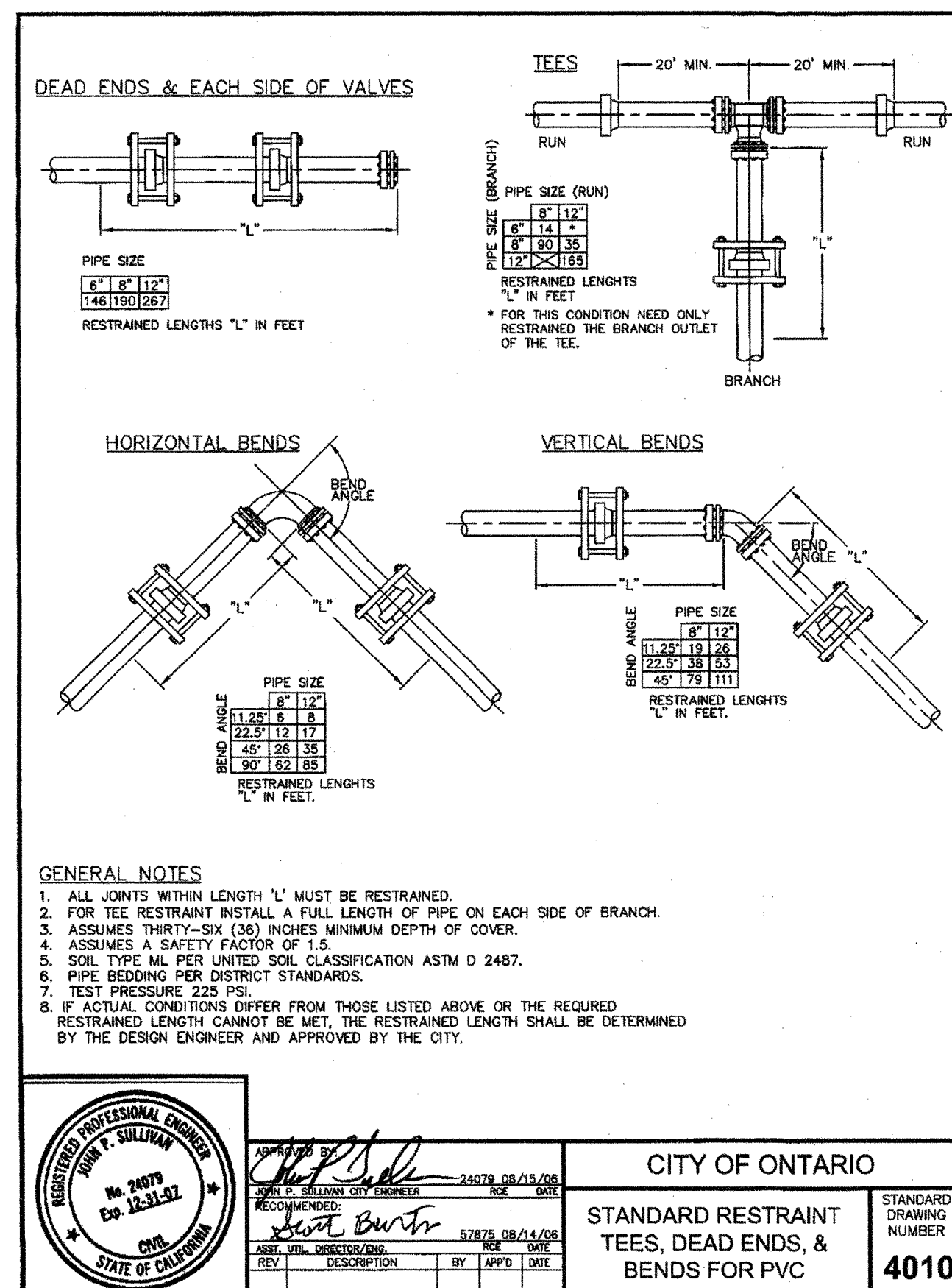


NEW MODEL COLONY (EAST) IMPROVEMENT PLANS FOR RIVERSIDE DOMESTIC WATER MECHANICAL DETAILS

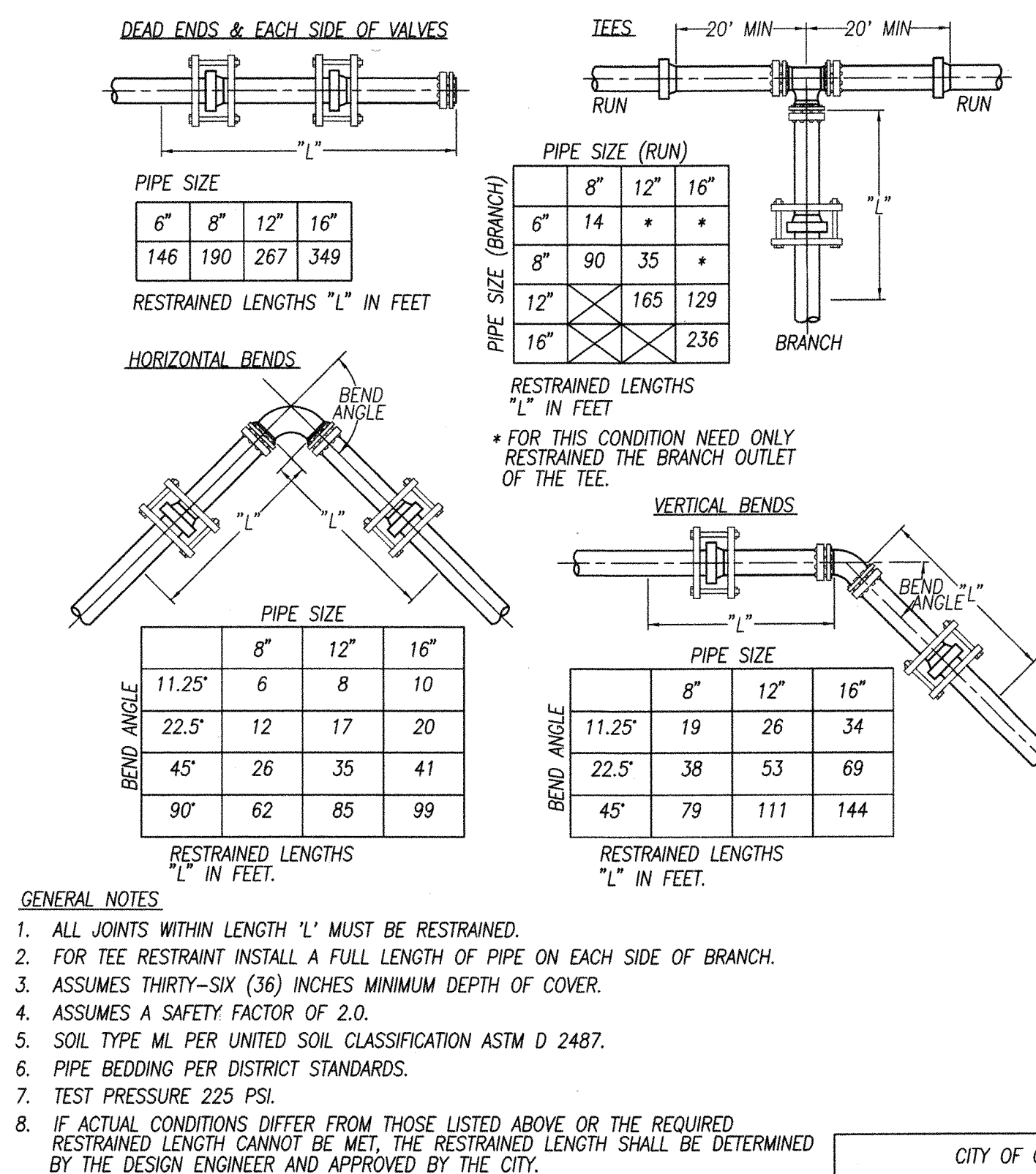
M-442

SHEET 6 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3252
W13421

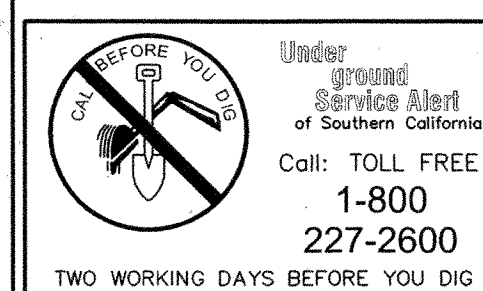
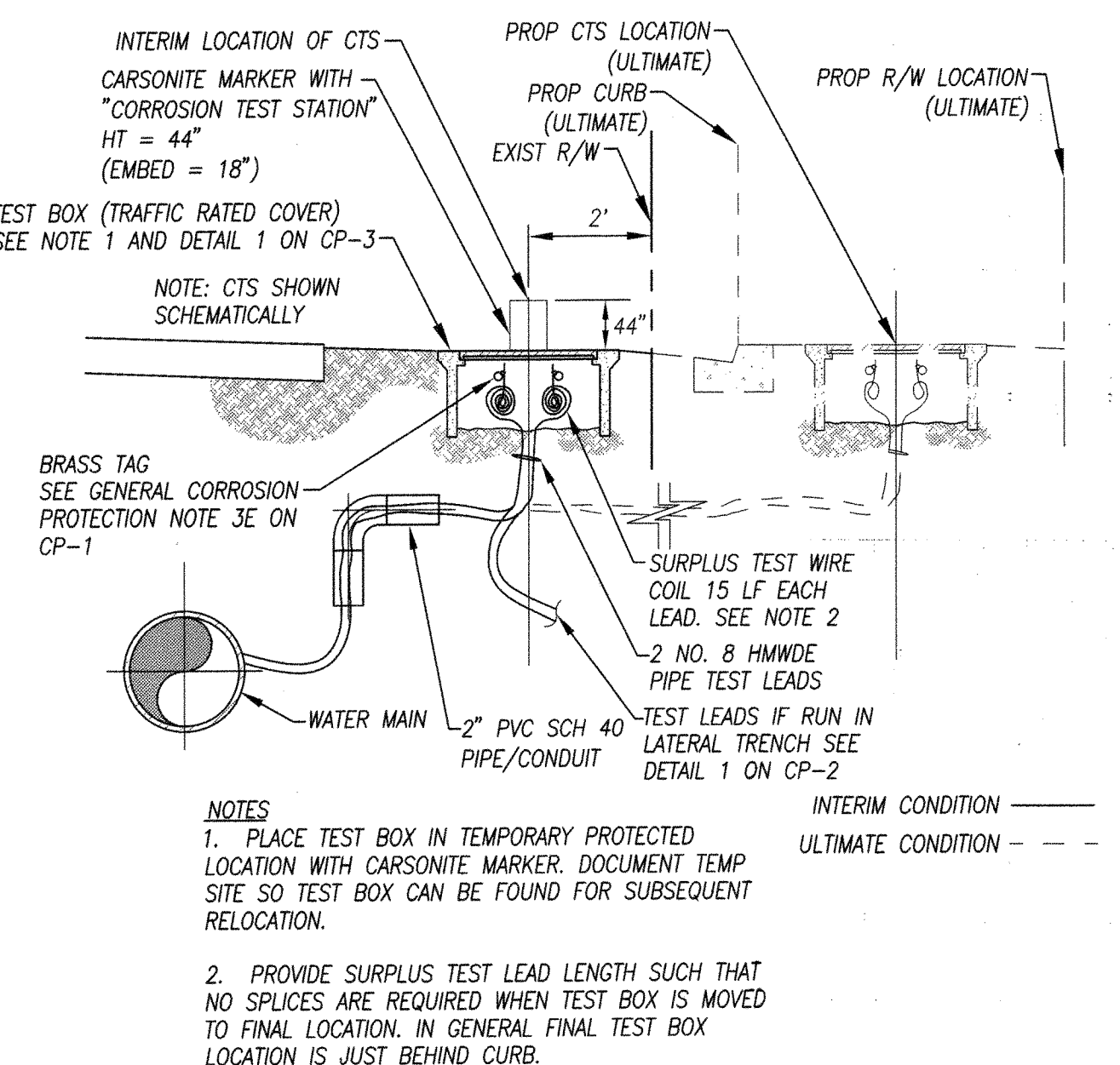
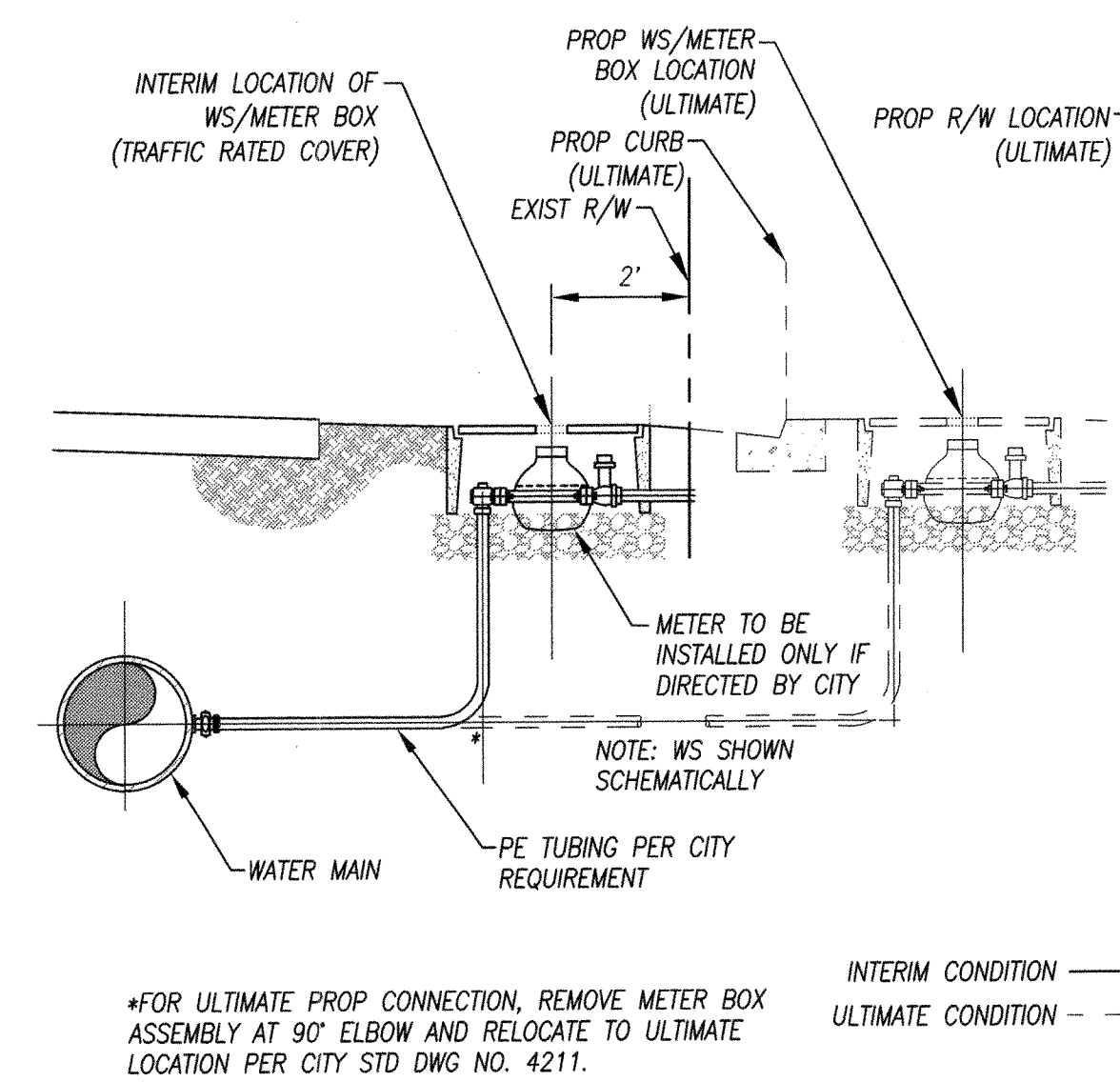
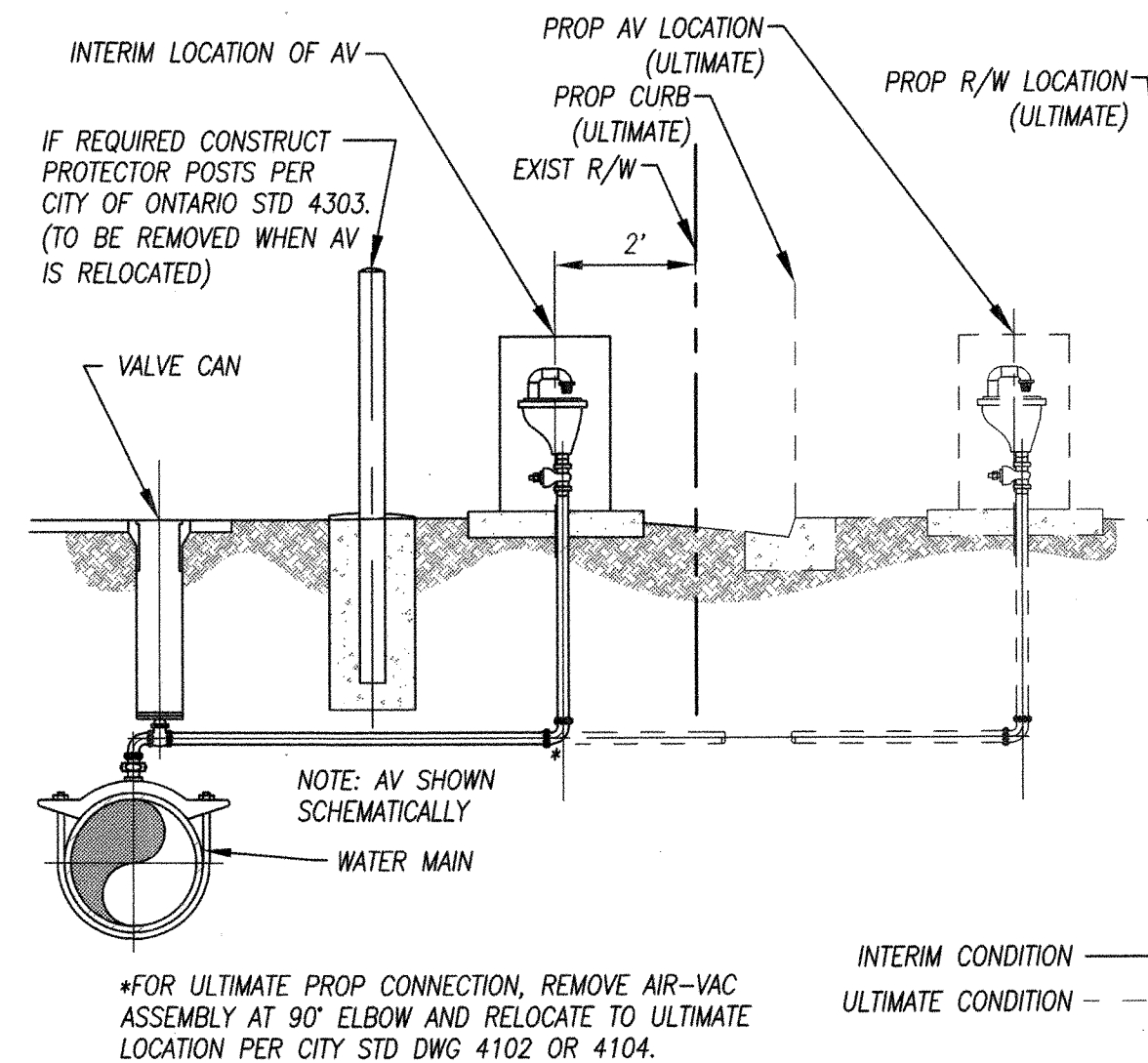
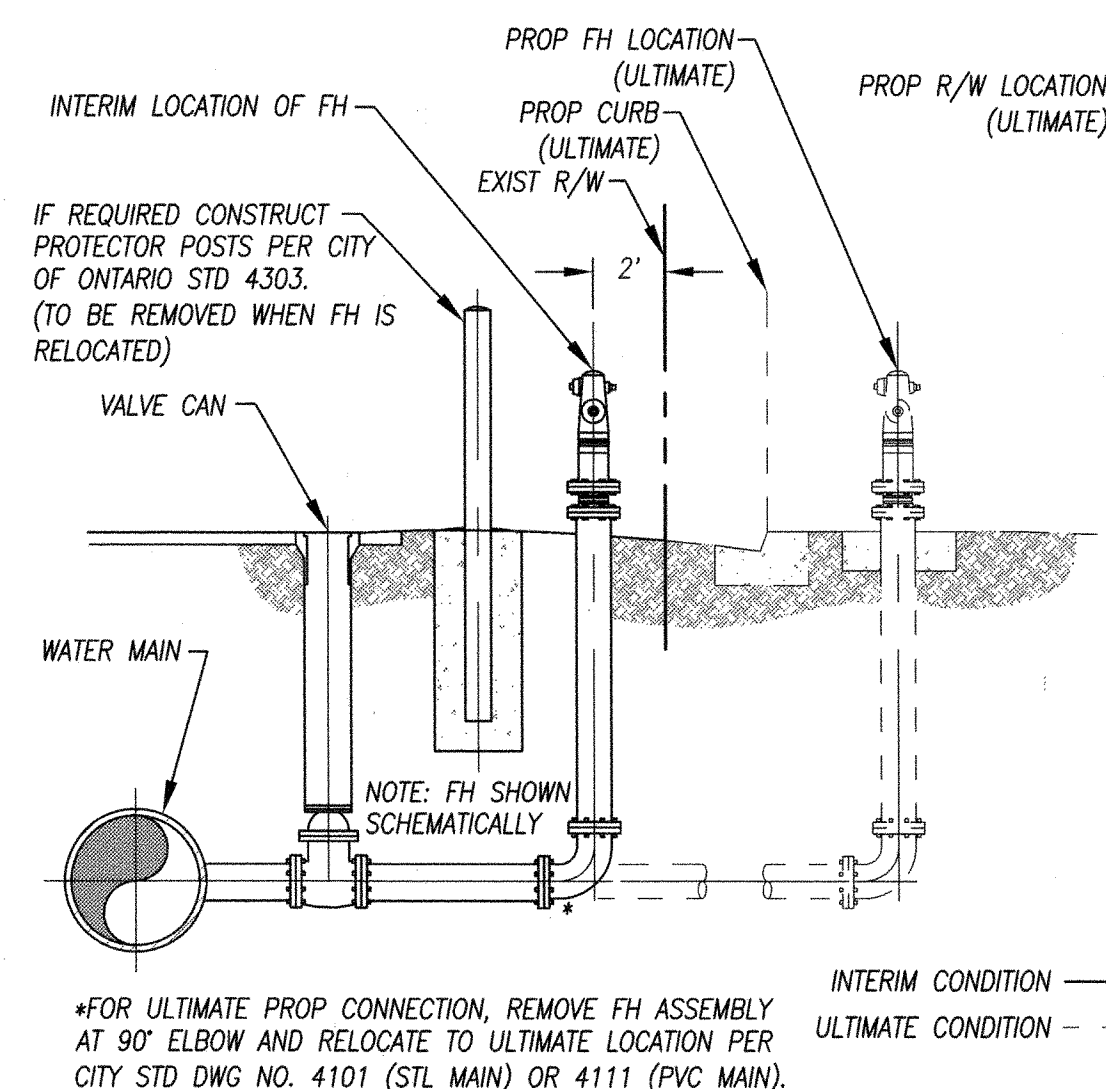
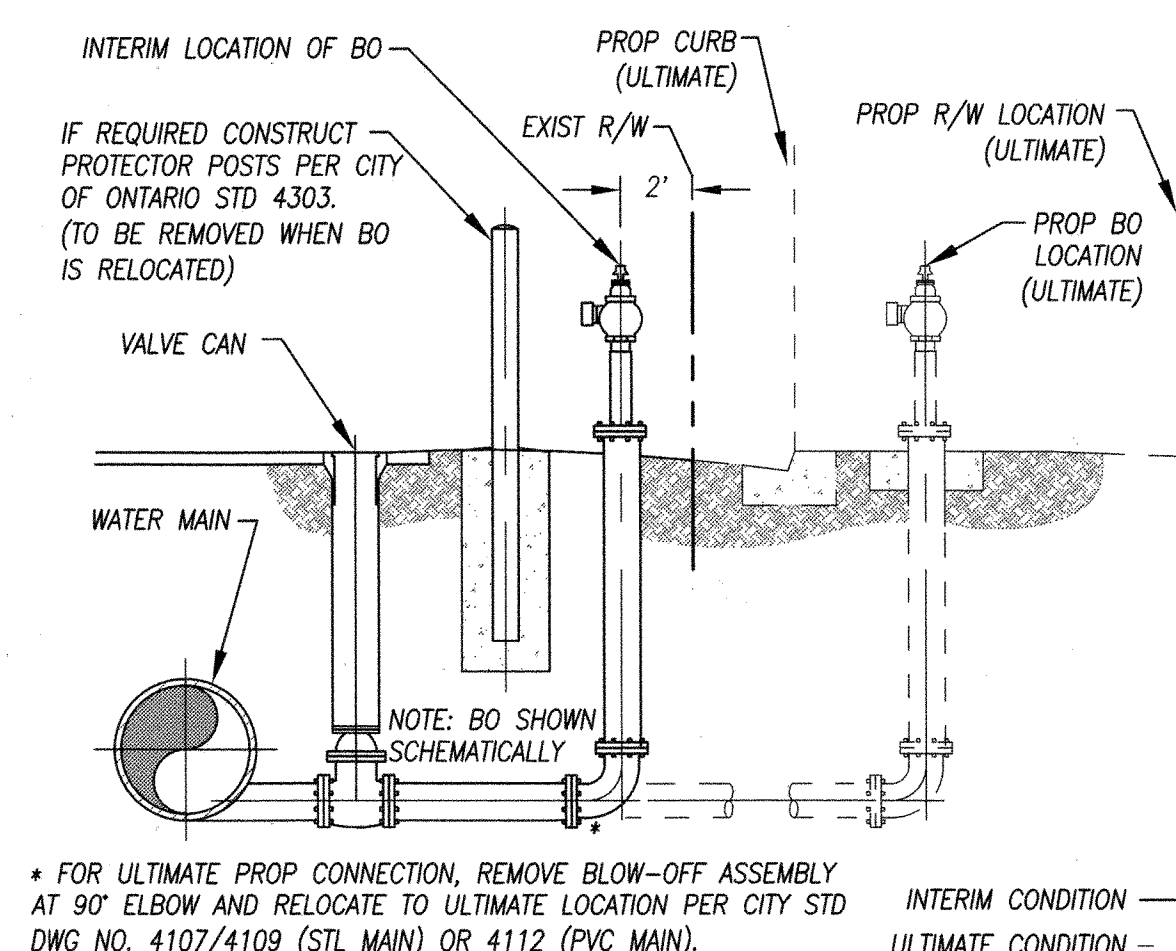
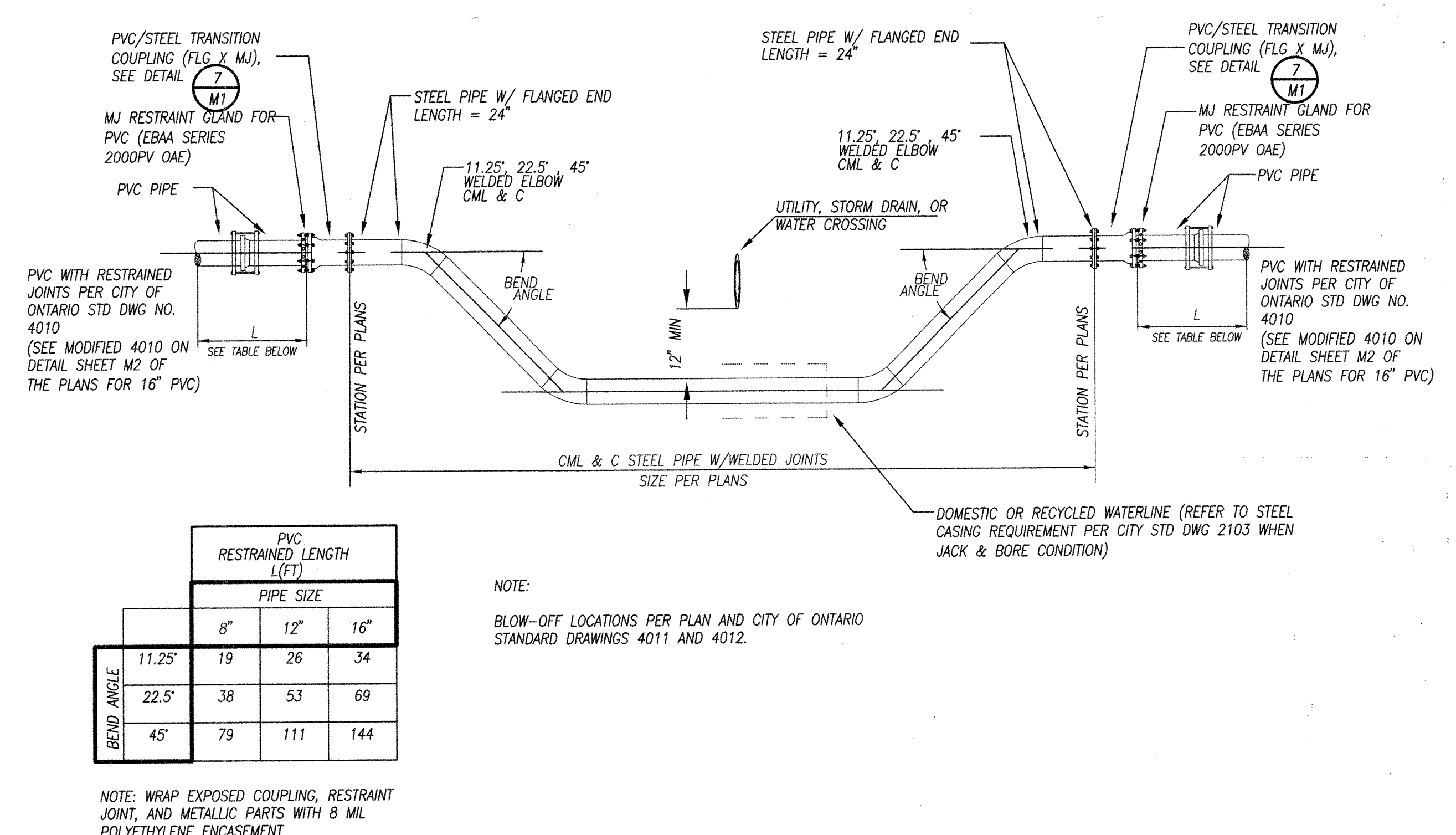
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NOTE: FOR 16" PVC SEE MODIFIED 4010.



CITY OF ONTARIO	
STANDARD RESTRAINT TEES, DEAD ENDS, & BENDS FOR PVC	STANDARD DRAWING NUMBER MODIFIED 4010

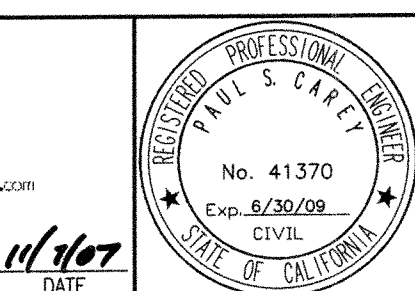


MARK	DATE	BY	APPROVED / RCE NO.

DESIGNED BY: T.O./J.R.F.	DATE: 12-14-07
DRAWN BY: T.O./J.R.F.	DATE: 12-20-07
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NGVD29 / 1990 ADJ.	

STANTEC CONSULTING INC.	3105 EAST GUASTI ROAD
SUITE 100	ONTARIO, CA 91761
909.390.8880	
STANTEC.COM	
PAUL S. CARNEY	41370 6/30/09
C.E. NO.	EXP. DATE

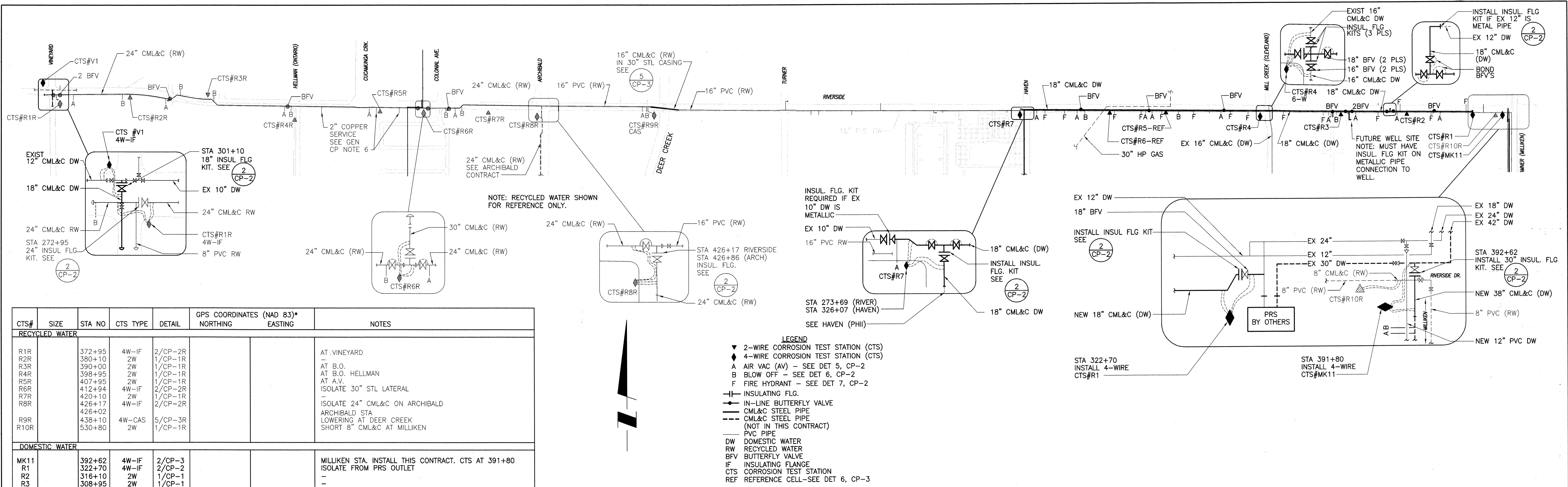


NEW MODEL COLONY (EAST) IMPROVEMENT PLANS FOR RIVERSIDE DOMESTIC WATER DETAILS
M-442

SHEET 7 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3253
W13422

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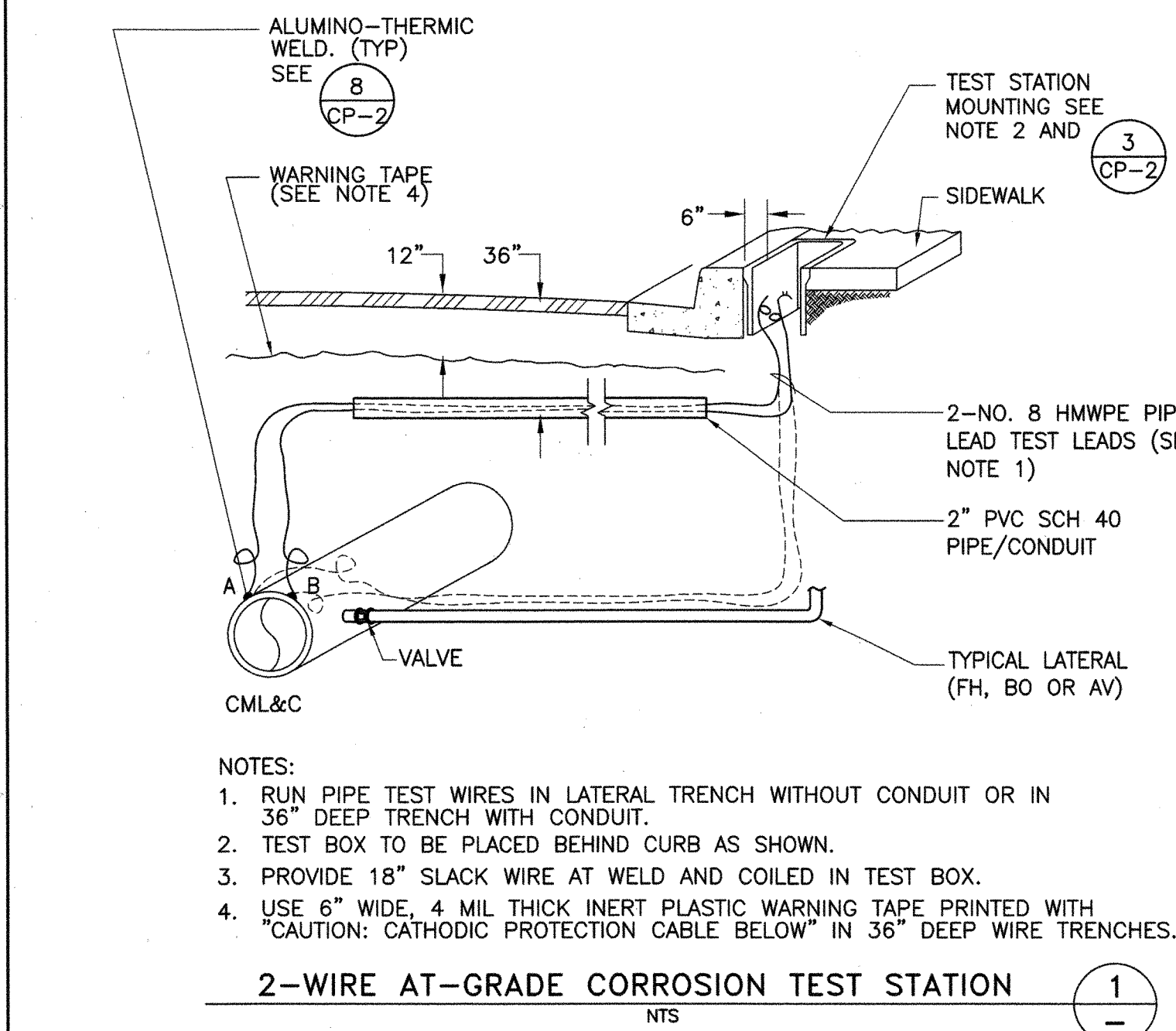
M2



CTS#	SIZE	STA NO	CTS TYPE	DETAIL	GPS COORDINATES (NAD 83)*	NOTES
RECYCLED WATER						
R1R		372+95	4W-IF	2/CP-2R		AT VINEYARD
R2R		380+10	2W	1/CP-1R		
R3R		390+00	2W	1/CP-1R		AT B.O. HELLMAN
R4R		398+95	2W	1/CP-1R		AT A.V. ISOLATE 30" STL LATERAL
R5R		407+95	2W	1/CP-1R		
R6R		412+94	4W-IF	2/CP-2R		
R7R		420+10	2W	1/CP-1R		
R8R		426+17	4W-IF	2/CP-2R		ISOLATE 24" CML&C ON ARCHIBALD
R9R		426+02				ARCHIBALD STA
R10R		438+10	4W-CAS	5/CP-3R		LOWERING AT DEER CREEK
		530+80	2W	1/CP-1R		SHORT 8" CML&C AT MILLIKEN
DOMESTIC WATER						
MK11		392+62	4W-IF	2/CP-3		MILLIKEN STA. INSTALL THIS CONTRACT. CTS AT 391+80
R1		322+70	4W-IF	2/CP-2		ISOLATE FROM PRS OUTLET
R2		316+10	2W	1/CP-1		
R3		308+95	2W	1/CP-1		
R4		300+00	6W-IF	3/CP-2		IN-LINE IF AND ISOLATE TWO EX 16" WL'S
R5		290+05	2W-REF	1/CP-1		INSTALL PERM REF CELL-DET 6 ON CP-3
R6		282+75	2W-REF	1/CP-1		AT F.H. INSTALL PERM REF CELL-DET 6 ON CP-3
R7		373+69	4W-IF	2/CP-2		ISOLATE FROM 18" HAVEN DW
		326+07				HAVEN STATION
V1		301+10	4W-IF	2/CP-2		I.F. ONLY IF EX 10" IS MET. OTHERWISE 2W CTS

* TO BE ADDED TO RECORD DRAWINGS

RIVERSIDE AVE CORROSION PROTECTION SITE PLAN (DOMESTIC WATER)



CONSTRUCTION NOTES (DW)

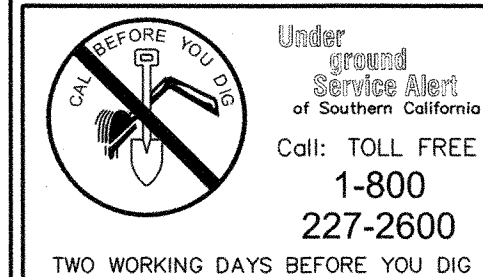
- INSTALL THE FOLLOWING DW CORROSION PROTECTION AND MONITORING FACILITIES PER THESE DRAWINGS, TECHNICAL PROVISION ITEM 176/294 (REVISE) AND CITY STANDARDS.
- CORROSION TEST STATIONS (DW)
 - 4-WIRE-INSULATING FLG 4 EA
 - 4-WIRE-CASING 0 EA
 - 2-WIRE 2 EA
 - 2-WIER W/REF CELL 2 EA
 - 6-WIRE-INSULATING FLG 1 EA
 - INSULATING FLANGE KITS
 - 30-INCH 1 EA
 - 24-INCH 0 EA
 - 18-INCH 4 EA
 - 16-INCH 2 EA
 - 10-INCH 1 EA
 - MECHANICAL BONDS ON STEEL PIPE*
 - IN-LINE BFV OR GV (TO BE BONDED) 13 EA
 - AIR-VAC 10 EA
 - BLOW-OFFS 5 EA
 - FIRE HYDRANTS 14 EA
 - TRANSITION COUPLINGS 0 EA
 - WAX TAPE
 - REFER TO CONSTRUCTION NOTES ON SHEET G4 FOR QUANTITIES OF GATE AND BUTTERFLY VALVES, DI TEES, CROSSES AND FITTINGS AND FIRE HYDRANT, AIR RELEASE AND BLOW-OFF ASSEMBLIES.
 - PIPE JOINT BONDS-ALL NON-WELDED JOINTS. REFER TO SHEET G4 FOR PIPE LENGTHS AND MFGS LAY DRAWINGS.
- * THE NUMBER OF MECHANICAL BONDS REQUIRED IS THE CORROSION ENGINEER'S ESTIMATE. CONTRACTOR TO VERIFY BASED ON CIVIL PLAN & PROFILE DRAWINGS. SEE GEN CP NOTES 4 & 5.

GENERAL CORROSION PROTECTION NOTES

- THE CORROSION PROTECTION REQUIREMENTS FOR BURIED, CML&C STEEL DW AND RW PIPE INCLUDE THE FOLLOWING:
 - A. CEMENT MORTAR COATING THICKNESS: 1-INCH
 - B. FULL METALLIC CONTINUITY ALONG ALL BURIED, PRESSURIZED PIPE REACHES.
 - C. DIELECTRIC ISOLATION FROM METALLIC LATERALS AND PIPE CONNECTIONS, AS INDICATED, AND FROM ALL ELECTRICALLY GROUNDED STRUCTURES.
 - D. IN-LINE INSULATING FLANGE KITS AND CORROSION TEST STATIONS AS SHOWN.
 - E. WAX TAPE WRAP OVER ALL BURIED, NON-MORTAR COATED SURFACES ON STEEL MAINS.
 - F. PROTECTION OF COATING AND LINING DURING HANDLING AND BACKFILLING.
 - G. FULL INSPECTION OF GROUDED EXTERIOR JOINTS AND VIDEO INSPECTION OF INTERIOR GROUDED JOINTS WITH PROVISIONS FOR REPAIRS AS NEEDED.
 - H. INSPECTION/TESTING OF ALL CORROSION PROTECTION FACILITIES INCLUDING PIPE CONTINUITY TESTING AND INITIAL POTENTIAL SURVEY.
- NOTE: THERE ARE NO CATHODIC PROTECTION ANODES (EXCEPT ON COPPER LATERALS) OR RECTIFIERS IN THIS PROJECT.
- MATERIALS AND INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, SUPPLEMENTAL (REVISED) TECHNICAL PROVISIONS ITEM 176/294 AND CITY OF ONTARIO STANDARDS AS INDICATED.
- AT-GRADE CORROSION TEST STATIONS:
 - A. TEST BOXES SHALL BE LOCATED BEHIND CURB AS SHOWN. IF NO CURB, PLACE TEST BOX OUT OF ROAD AND WITHIN THE CITY RIGHT-OF-WAY. TEST BOX SITES MAY BE OFFSET FROM PIPE STATIONS SHOWN TO AVOID DRIVEWAYS OR OTHER INTERFERENCE. SITES SELECTED BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER.
 - B. USE BROOKS MODEL 36-HFL OR SIMILAR AT-GRADE, CONCRETE YARD BOX.
 - C. PROVIDE 18" SLACK WIRE AT WELD TO PIPE AND COILED IN TEST BOX.
 - D. BOTTOM OF TEST BOX SHALL BE NATIVE SOIL, NO ROCK OR SAND.
 - E. IDENTIFY TEST LEADS WITH BRASS TAGS AS SHOWN. ATTACH TAGS WITH No. 14 BARE COPPER WIRE.
- CONTRACTOR TO MAINTAIN IDENTIFICATION OF ALL TEST WIRES.
- ALL BURIED PIPE JOINTS ON THE MAIN LINE ARE WELDED OR BONDED. SEE DETAIL 3 ON CP-3. BOND ALL NON WELDED, NON INSULATING MECHANICAL JOINTS ON CML&C MAINS, I.E., VALVES, FLANGES AND COUPLINGS PER DETAIL 4 ON CP-2.
- ALL CML&C AIR-VAC, BLOW-OFF AND FIRE HYDRANT LATERALS SHALL BE FULLY BONDED AND CONTINUOUS WITH THE MAIN. SEE DETAIL 5, 6 AND 7 ON CP-2.
- BURIED BLIND FLANGES SHALL BE FULLY ENCASED IN MORTAR OR SHOP COATED WITH 10 TO 15 MILS OF EPOXY BEFORE INSTALLATION IN THE DITCH. ALL FLANGE BOLTS, STUDS, NUTS AND WASHERS THAT ARE NOT ENCASED IN CONCRETE SHALL BE INDIVIDUALLY COATED/Wrapped WITH WAX TAPE.
- ALL BURIED, STEEL OR IRON, NON-MORTAR COATED PIPE, FITTING OR APPURTENANCE SURFACES, I.E. FLANGES, VALVES, COUPLINGS, ETC., SHALL BE WRAPPED WITH PETROLATUM WAX TAPE PER AWWA C217 AND TECHNICAL PROVISIONS ITEM 176/294 REVISED.
- NO WIRE OR CABLE SPLICES ARE PERMITTED.
- WIRE-TO-PIPE WELDS SHALL BE MADE BY THE ALUMINO-THERMIC WELD PROCESS. ATTACH 1 WIRE PER WELD. SEPARATE WELDS BY 3" MINIMUM.
- CONTRACTOR SHALL DOCUMENT ALL CHANGES FROM THESE DRAWINGS INCLUDING ACTUAL STATION NUMBERS AND GPS COORDINATES (NAD 83) FOR ALL TEST STATIONS AND SUBMIT RECORD DRAWINGS TO THE ENGINEER PRIOR TO COMPLETION OF WORK.
- UNLESS OTHERWISE NOTED DRAWINGS ARE NOT SHOWN TO SCALE.

CORROSION TEST AND INSPECTION NOTES

- THE CITY SHALL INSPECT AND TEST ALL CORROSION PROTECTION INSTALLATIONS AT THE COMPLETION OF CONSTRUCTION AND AT INTERIM TESTING OR INSPECTIONS AT THEIR DISCRETION. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED CORROSION ENGINEER (SEE TECHNICAL PROVISIONS) WHO SHALL CONDUCT OR SUPERVISE ALL TEST TASKS AS DESCRIBED BELOW. THE PROJECT MANAGER (PM), OR HIS/HER REPRESENTATIVE, SHALL INSPECT CRITICAL INSTALLATIONS AS INDICATED BELOW. THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER 5 DAYS IN ADVANCE OF ALL TESTING.
- FACILITIES/INSTALLATIONS TO BE TESTED OR INSPECTED ARE:
 - A. GROUING OF ALL INTERIOR AND EXTERIOR PIPE JOINTS
 - B. TEST OR BOND WIRE WELDS
 - C. ALL INSULATING FLANGE KITS AND DIELECTRIC INSULATORS
 - D. WIRE TRENCH DEPTH
 - E. METALLIC CONTINUITY OF ALL BURIED STEEL PIPE
 - F. WAX TAPE APPLICATIONS
 - G. TEST STATION INSTALLATIONS AND WIRE IDENTIFICATIONS
 - H. INITIAL PIPE-TO-SOIL POTENTIAL READINGS
- JOINT GROUT MIX SHALL COMPLY WITH TECHNICAL PROVISIONS AND BE VERIFIED BY THE PM. ALL EXTERIOR GROUT DIAPERS SHALL BE VISUALLY INSPECTED BY THE PM. ALL INTERIOR GROUDED JOINTS SHALL BE VIDEO INSPECTED BY THE CONTRACTOR PER THE TECHNICAL PROVISIONS AND VERIFIED BY THE PM.
- ALL WIRE-TO-PIPE WELDS SHALL PASS THE HAMMER TEST PER REVISED ITEM 176/294 OF THE TECHNICAL PROVISIONS. THE CONTRACTOR SHALL PERFORM THESE TESTS. WIRE WELD INTEGRITY WILL BE VERIFIED BY THE CORROSION ENGINEER PRIOR TO THE CITY'S FINAL CORROSION PROTECTION SYSTEM INSPECTION.
- ALL WIRE TRENCH DEPTHS (36 INCHES) SHALL BE VISUALLY INSPECTED AND ACCEPTED BY THE PM PRIOR TO BACKFILLING.
- ALL INSULATING FLANGES SHALL BE TESTED BY THE CORROSION ENGINEER AS INDICATED IN THE REVISED TECHNICAL PROVISIONS ITEM 176/294. NOTE THAT ALL INSULATING FLANGE KITS 18-INCHES OR LARGER MUST BE ASSEMBLED IN THE SPOOL AND PASS INSULATOR TEST BEFORE BEING INSTALLED IN THE TRENCH. ALL INSULATING FLANGE KITS MUST BE TESTED OR RE-TESTED IN THE TRENCH.
- ALL BURIED MECHANICAL JOINT CONTINUITY BONDS SHALL BE INSPECTED BY THE PM IN THE TRENCH PRIOR TO BACKFILLING.
- ALL PIPE REACHES THAT CONTAIN ONE OR MORE BONDED PIPE JOINT OR MECHANICAL JOINT SHALL BE TESTED FOR CONTINUITY BY THE CORROSION ENGINEER. CONTINUITY TESTING SHALL BE DONE USING THE LINEAR RESISTANCE METHOD AS DESCRIBED IN THE REVISED TECHNICAL PROVISIONS ITEM 176/294. ALL DISCONTINUITIES SHALL BE REPORTED TO THE PM WITHIN 24 HOURS.
- COMPLETED TEST STATION INSTALLATIONS SHALL BE TESTED BY A QUALIFIED CORROSION ENGINEER. TESTING SHALL INCLUDE A VISUAL INSPECTION AND POTENTIAL MEASUREMENTS AS INDICATED IN THE REVISED TECHNICAL PROVISIONS ITEM 176/294.
- A FINAL CORROSION PROTECTION TEST REPORT SHALL BE PREPARED BY THE CORROSION ENGINEER AND SUBMITTED TO THE PM. THE FINAL REPORT SHALL INCLUDE ALL TEST RESULTS, CONCLUSIONS AND INFORMATION AS DESCRIBED IN THE REVISED TECH PROVISIONS ITEM 176/294.



Underground Service Alert
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TWO WORKING DAYS BEFORE YOU DIG

MARK	DATE	BY	APPROVED / RCE NO.

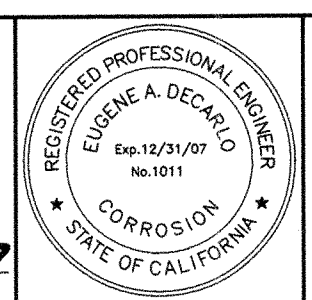
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DATE: 4/19/07
DRAWN BY: GPM
DATE: 4/19/07
CHECKED BY: 1/22/07
DATE: 1/22/07

RECOMMENDED BY: [Signature]
DATE: 4/19/07
ACCEPTED BY: [Signature]
DATE: 4/19/07

CITY OF ONTARIO

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, 511" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

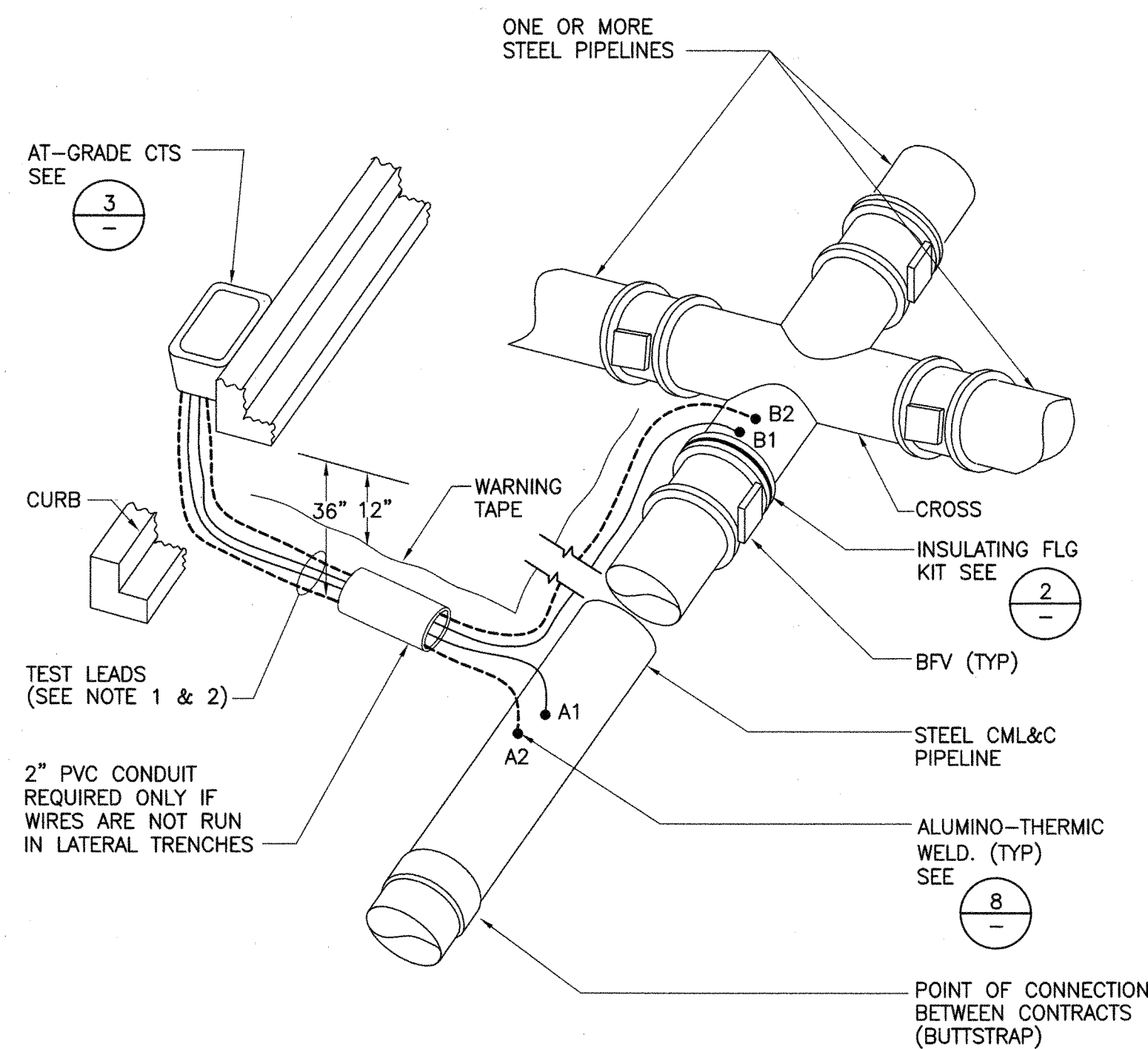
DeC CONSULTANTS
a V&A Company
2901 Aero Place, Suite 110
San Diego, CA 92123
Tel: (619) 594-1100 Fax: (619) 576-0004
[Signature]
1011 12/31/07
C.R. 1011 EXP.



NEW MODEL COLONY (EAST)
RIVERSIDE AVENUE ZONE 925
DOMESTIC WATER IMPROVEMENT PLANS
CORROSION PROTECTION PLAN & DETAILS

M-442
SHEET 8 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3254
W13423

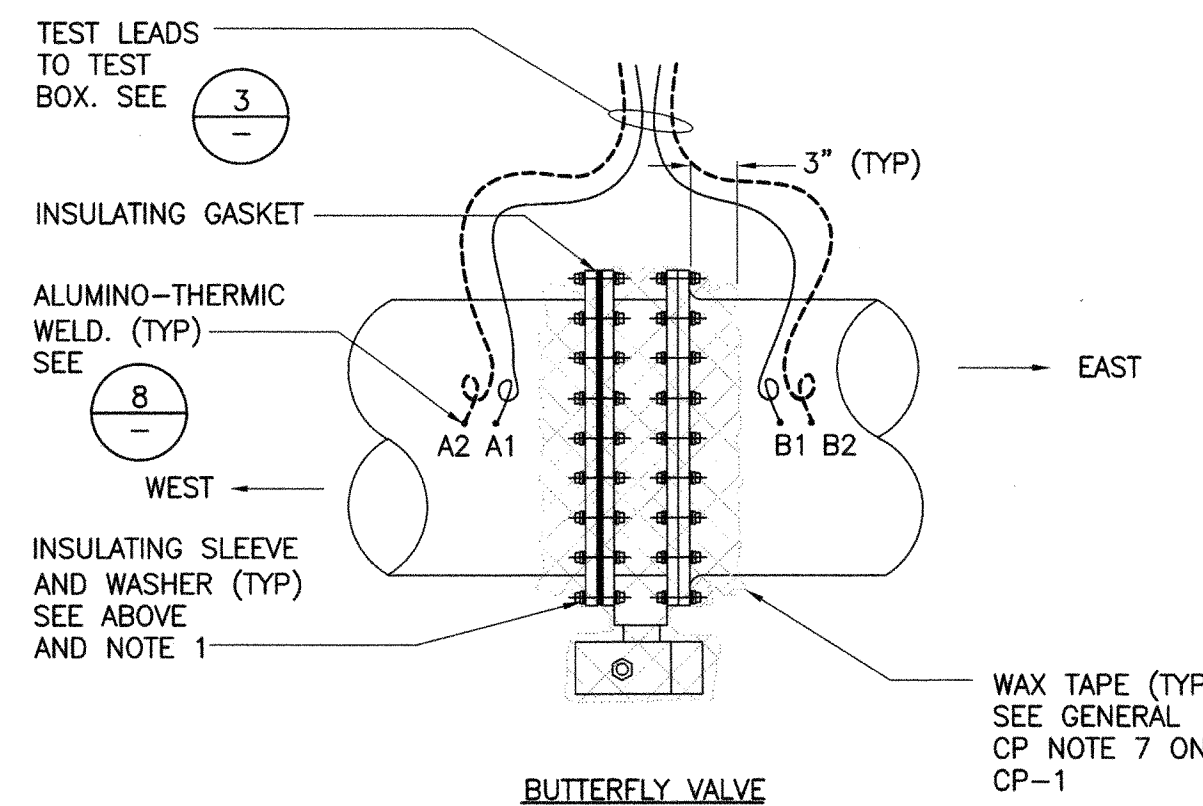
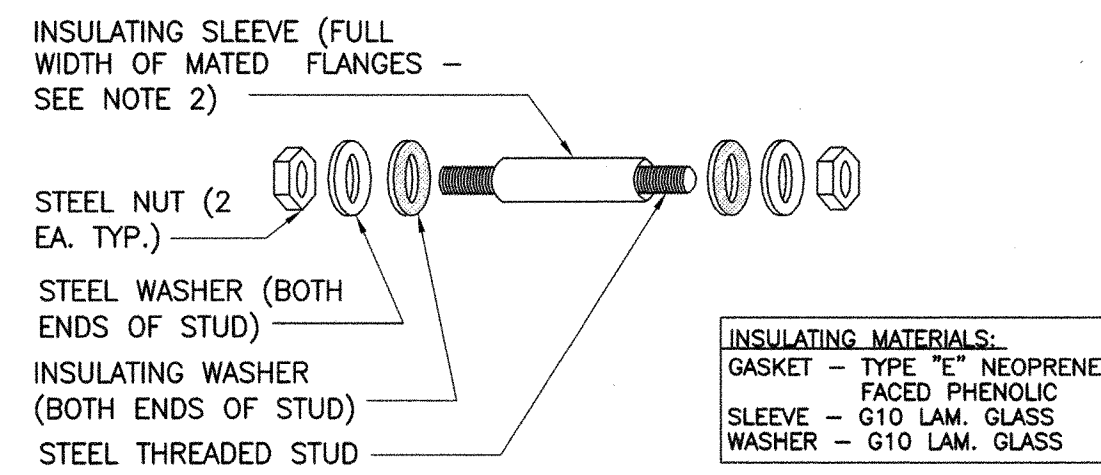
CP-1



- NOTES:
1. TEST LEADS A1 AND B1 SHALL BE #8 HMWPE
 2. TEST LEADS A2 AND B2 SHALL BE #4 HMWPE
 3. SIMILAR FOR SINGLE IN-LINE BV.

4-WIRE INSULATOR CTS
NTS

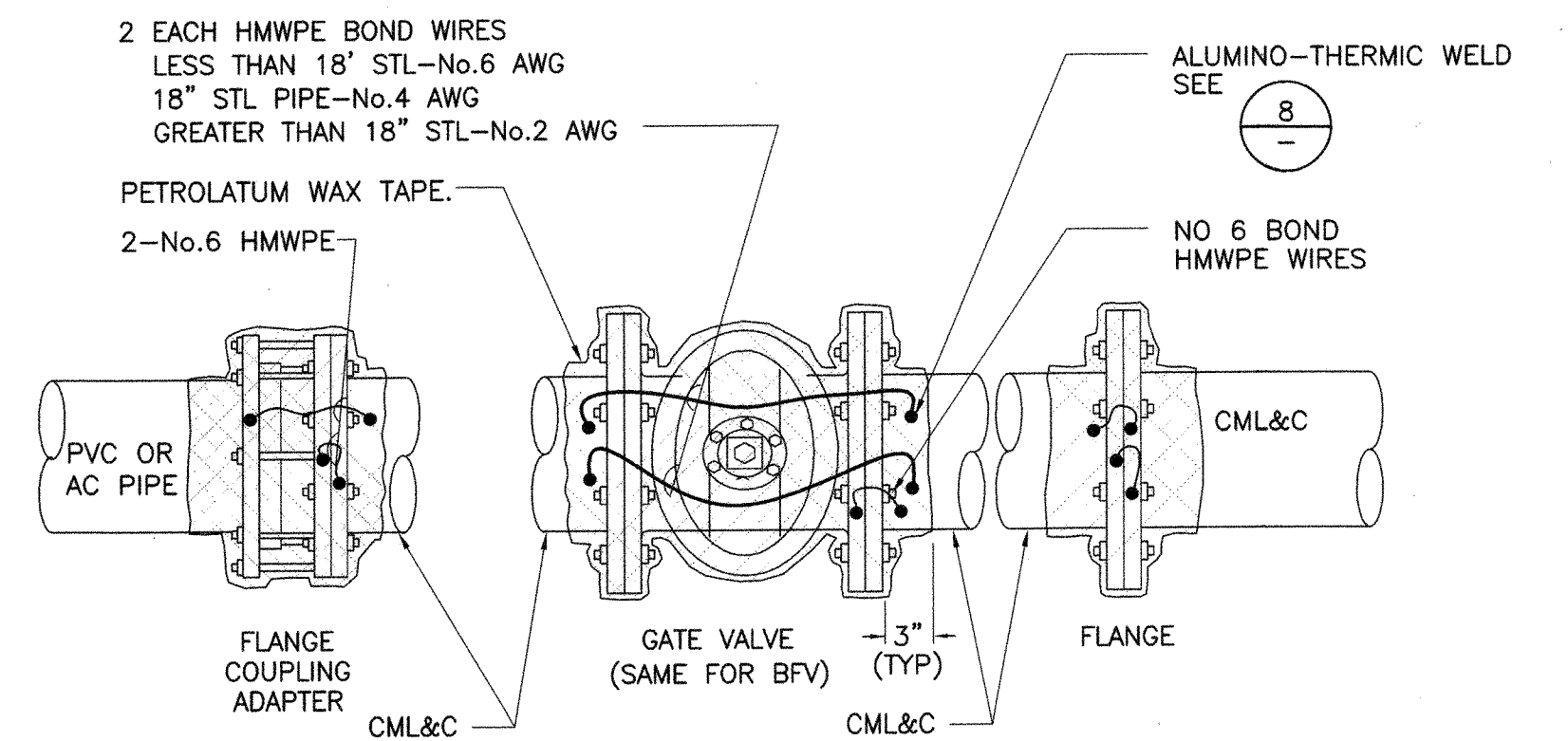
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- NOTES:
1. SEE GENERAL CP NOTE No. 3.
 2. FOR CTS ML#1 AND ML#2 AT CUCAMUNGA CREEK USE No.8 HMWPE WIRES FOR DW LINE AND No.10 HMWPE ON RW.
 3. COMPASS DIRECTION (N, S, E, W) OF CONNECTION WITH RESPECT TO INSULATOR.

2 AND 4-WIRE CORROSION TEST STATION
NTS

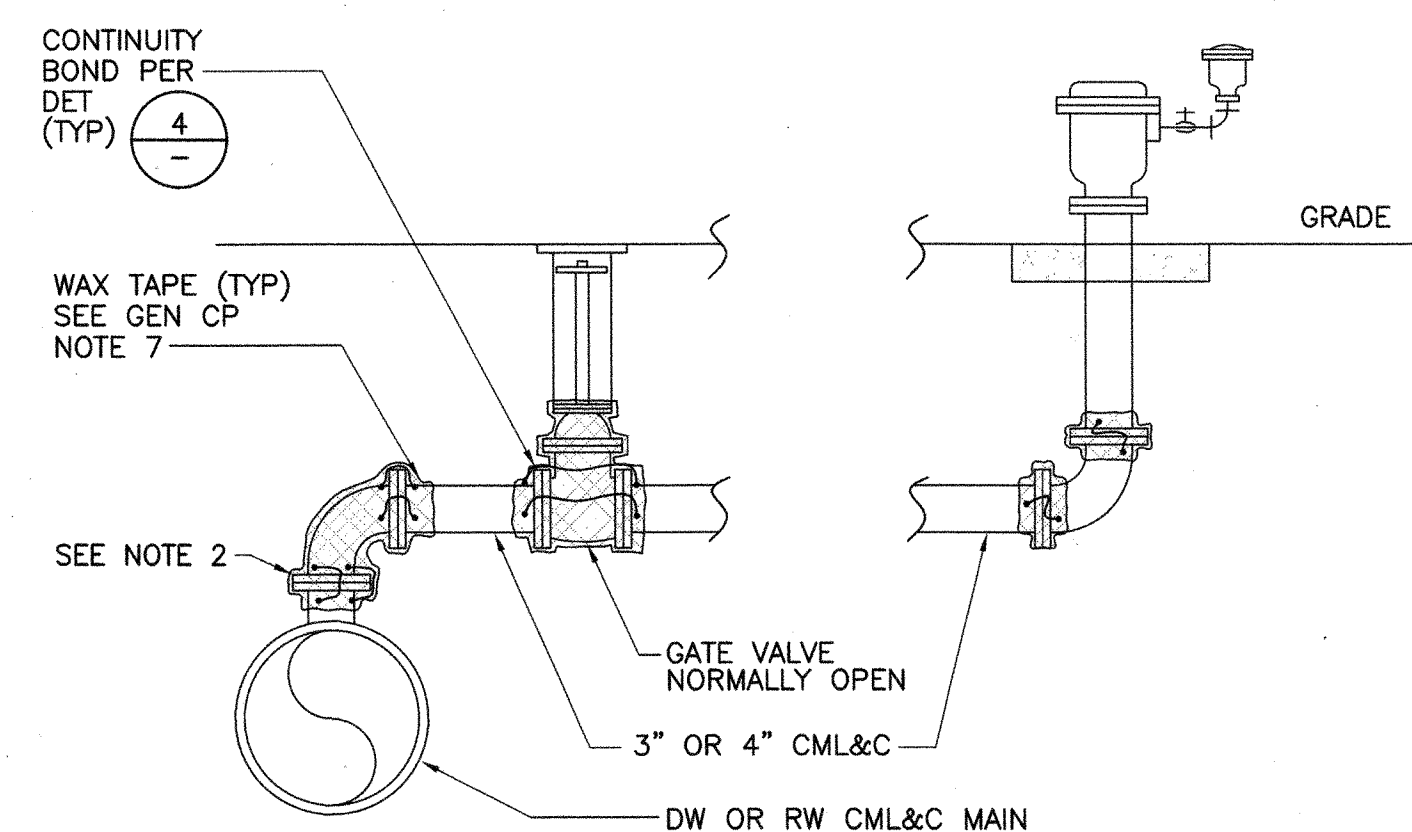
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- NOTES:
1. TWO (2) BONDING WIRES REQUIRED ACROSS ALL BURIED, NON-INSULATING MECHANICAL JOINTS ON STEEL PIPE. ONE (1) No. 6 WIRE REQUIRED FROM PIPE TO VALVE BODY OR COUPLING FOLLOWER.
 2. WELDS CAN BE MADE TO PIPE OR FLANGE.
 3. BONDING WIRES SHALL BE AS SHORT AS POSSIBLE.
 4. ALUMINO-THERMIC WELDS SHALL BE 3\"/>

JOINT BONDING
NTS

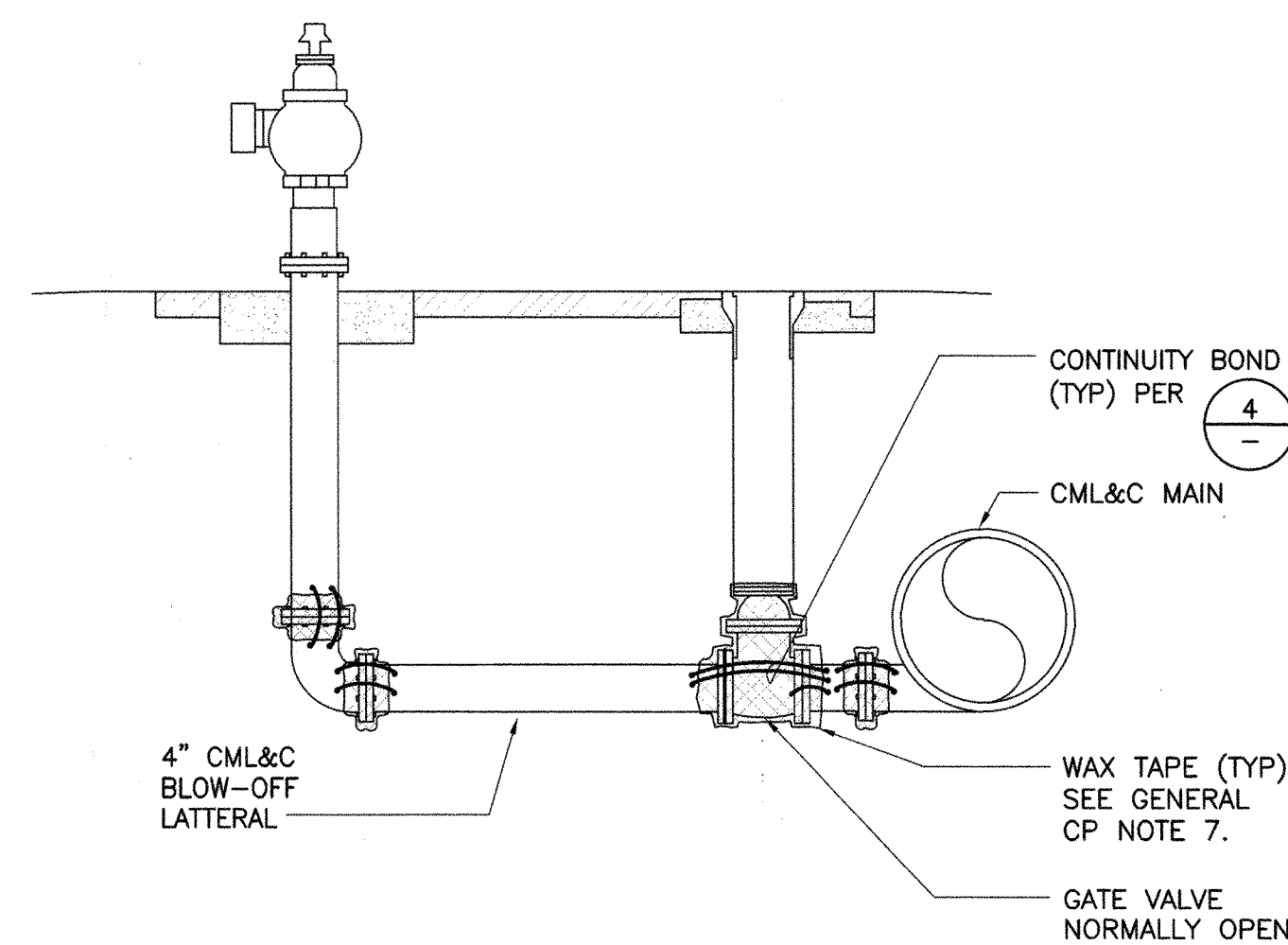
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- NOTES:
1. INSTALL BLOW-OFF PER CITY OF ONTARIO STD DRAWING NO. 4104 EXCEPT AS SHOWN.
 2. ALL COPPER AIR-VAC TUBING MUST BE INSULATED FROM STL MAIN WITH DIELECTRIC BUSHING OR UNION.

AIR-VAC BONDING
NTS

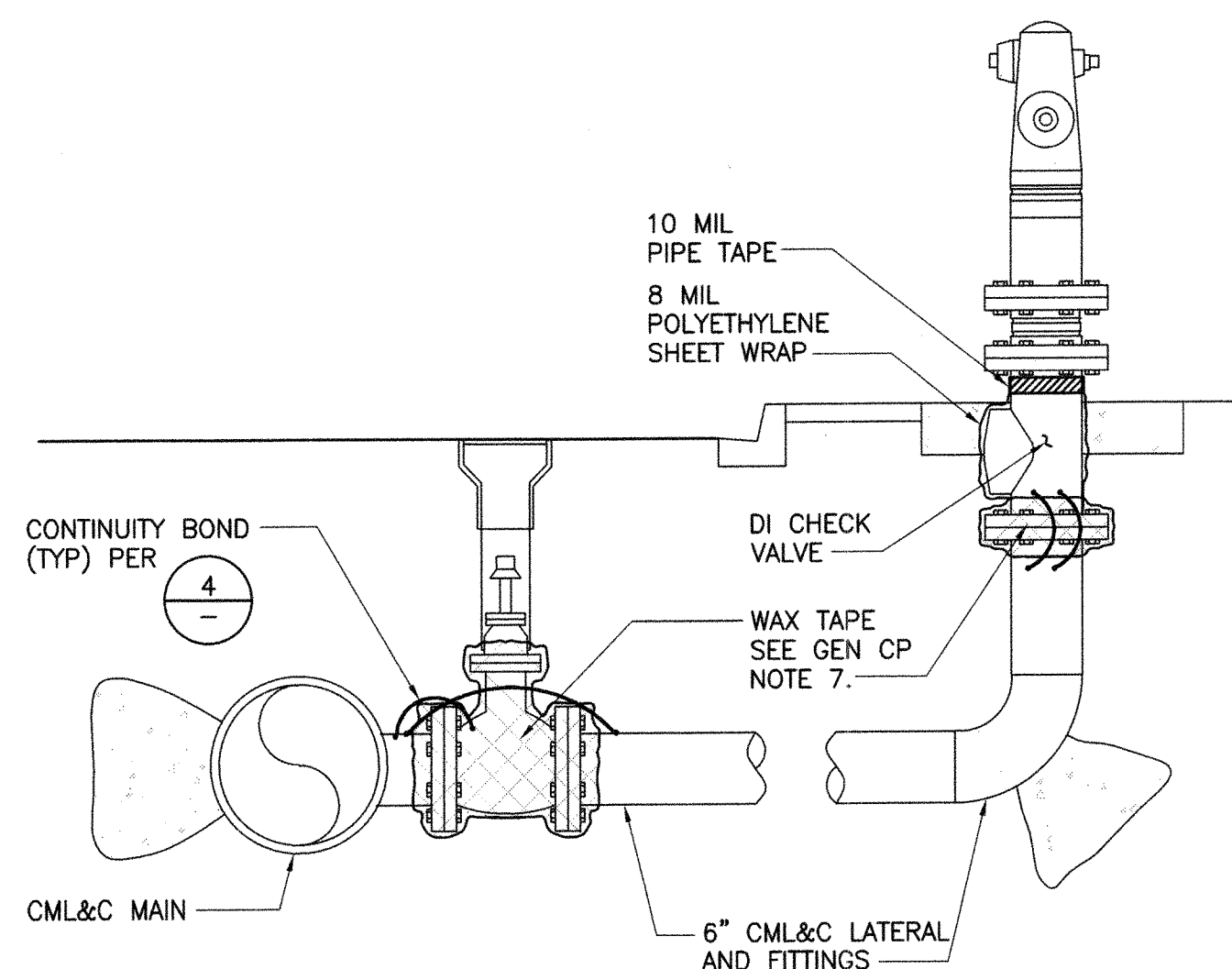
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- NOTES:
1. INSTALL BLOW-OFF PER CITY OF ONTARIO STD DRAWING NO. 4107 EXCEPT AS SHOWN.
 2. 4\"/>

BLOW OFF BONDING
NTS

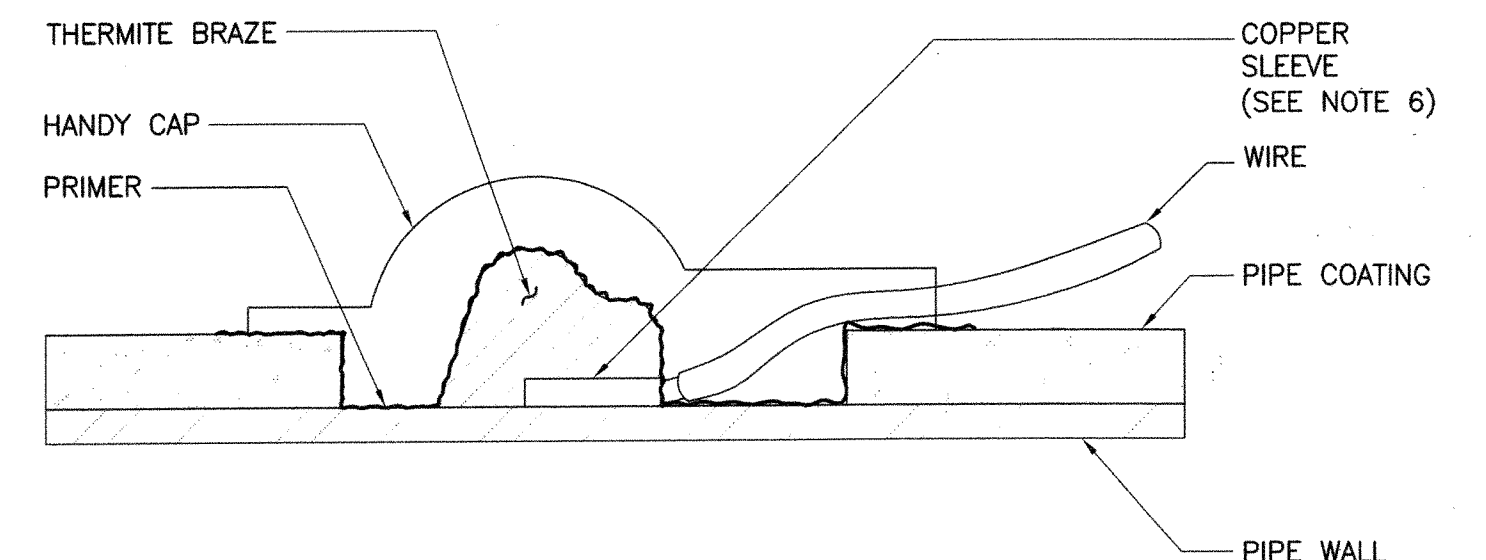
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- NOTE:
1. INSTALL FIRE HYDRANT LATERAL PER CITY OF ONTARIO STD DRAWING NO. 4101 EXCEPT AS SHOWN.

FIRE HYDRANT BONDING
NTS

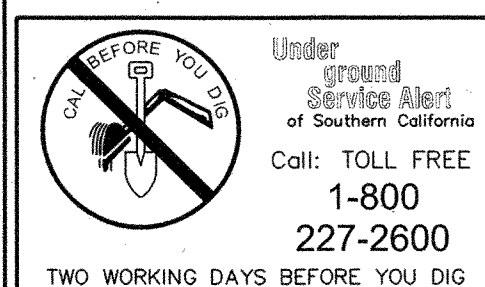
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- NOTES:
1. CLEAN PIPE TO BRIGHT METAL.
 2. THERMITE BRAZE TO BE CADWELL BY ERICO PRODUCTS OR EQUAL.
 3. USE PROPER BRAZE ALLOY FOR STEEL AND FOR DIP.
 4. TEST BRAZE BY PULLING ON WIRE & STRIKING BRAZE PER REVISED TECHNICAL PROVISIONS ITEM 176/294.
 5. COAT BRAZE WITH ROYSTON PRIMER AND "HANDY CAP."
 6. USE COPPER REINFORCING SLEEVE FOR #10 OR SMALLER WIRE.

ALUMINO-THERMIC WELD
NTS

8



MARK	DATE	BY	APPROVED / RCE NO.
DESIGNED BY:	4/19/07	EAD	
DRAWN BY:	4/19/07	GPM	
CHECKED BY:	11/28/07	J.P. Sullivan	
DATE:	11/28/07		

CITY OF ONTARIO

RECOMMENDED BY: *John P. Sullivan* 44455 EXP. 3/31/08 12-14-07
C.E. NO. 12-20-07
ACCEPTED BY: *John P. Sullivan* 24079 EXP. 12/31/07 12-20-07
C.E. NO. 12-20-07

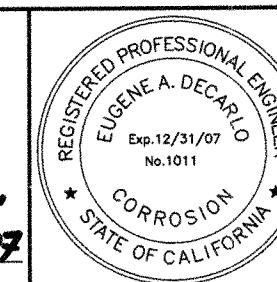
BENCH MARK No. S.P.S.N 00789 ELEV. 785.572

LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2\"/>

NGVD29 / 1990 ADJ.

DeC CONSULTANTS

a V&A Company Proj: 07-0003
8291 Aero Place, Suite 110
San Diego, CA 92123
Tel: (619) 594-3838 Fax: (619) 576-0004
Salvador
SIGNATURE
1011 12/31/07 11/16/07
C.R. 1011 EXP. DATE



NEW MODEL COLONY (EAST)
RIVERSIDE AVENUE ZONE 925
DOMESTIC WATER IMPROVEMENT PLANS
CORROSION PROTECTION DETAILS

M-442

SHEET 9 OF 19

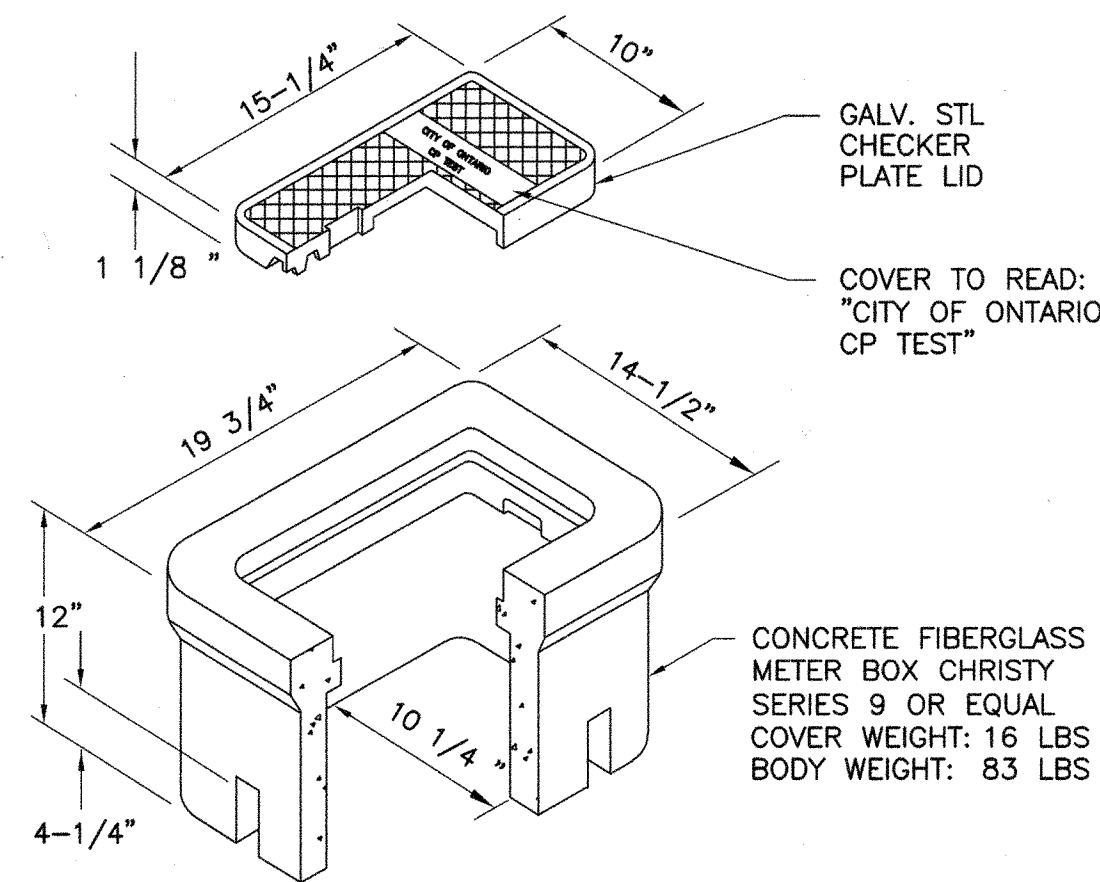
CONTRACT

ACCOUNT

DWG. NO. W3255

W13424

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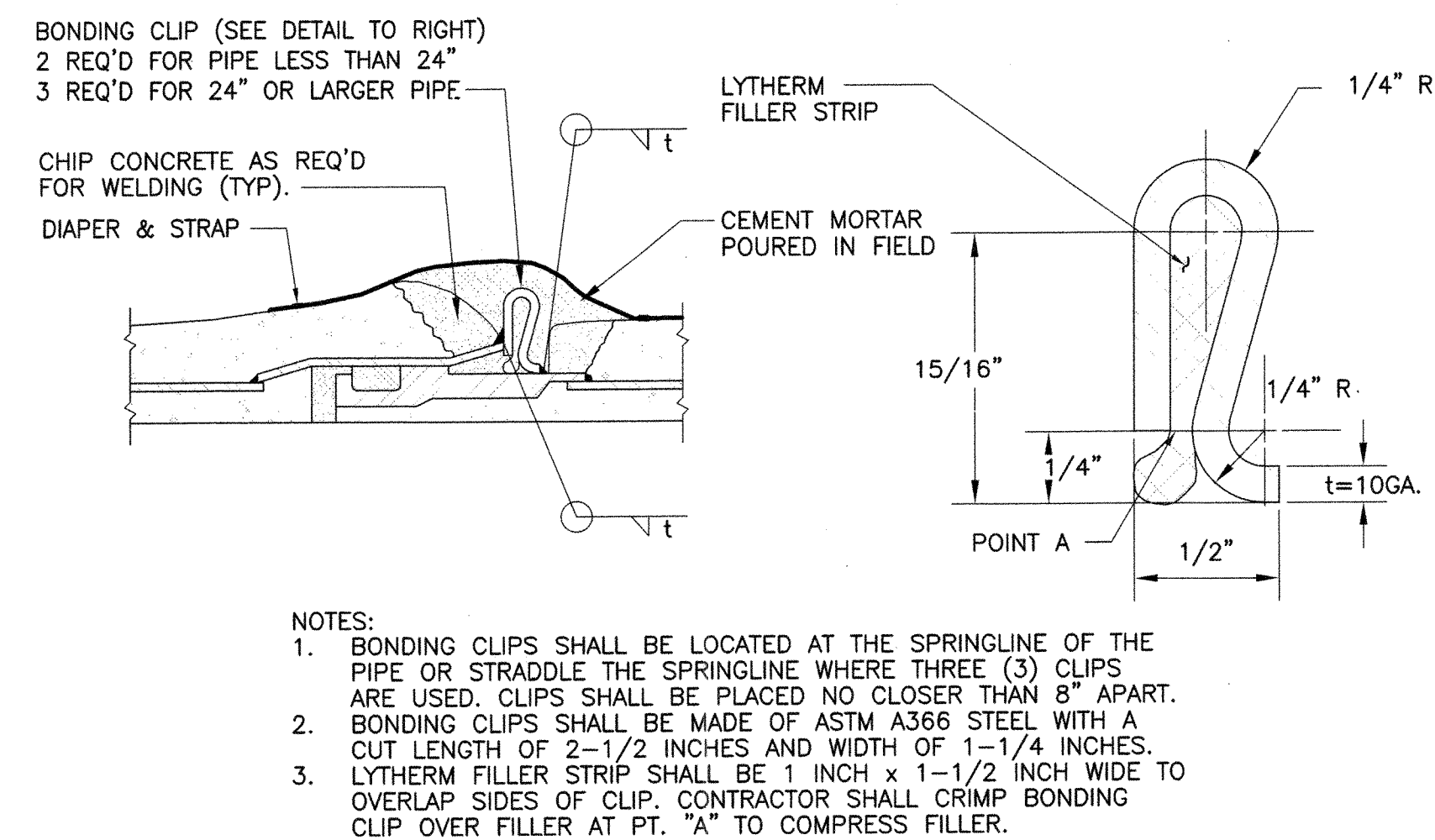
NOTES:
1. USE FOR ALL 4-WIRE INSULATOR CTS.
2. DO NOT PLACE IN TRAFFIC AREAS.

CONCRETE YARD BOX
NTS

1
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DETAIL
NOT
USED

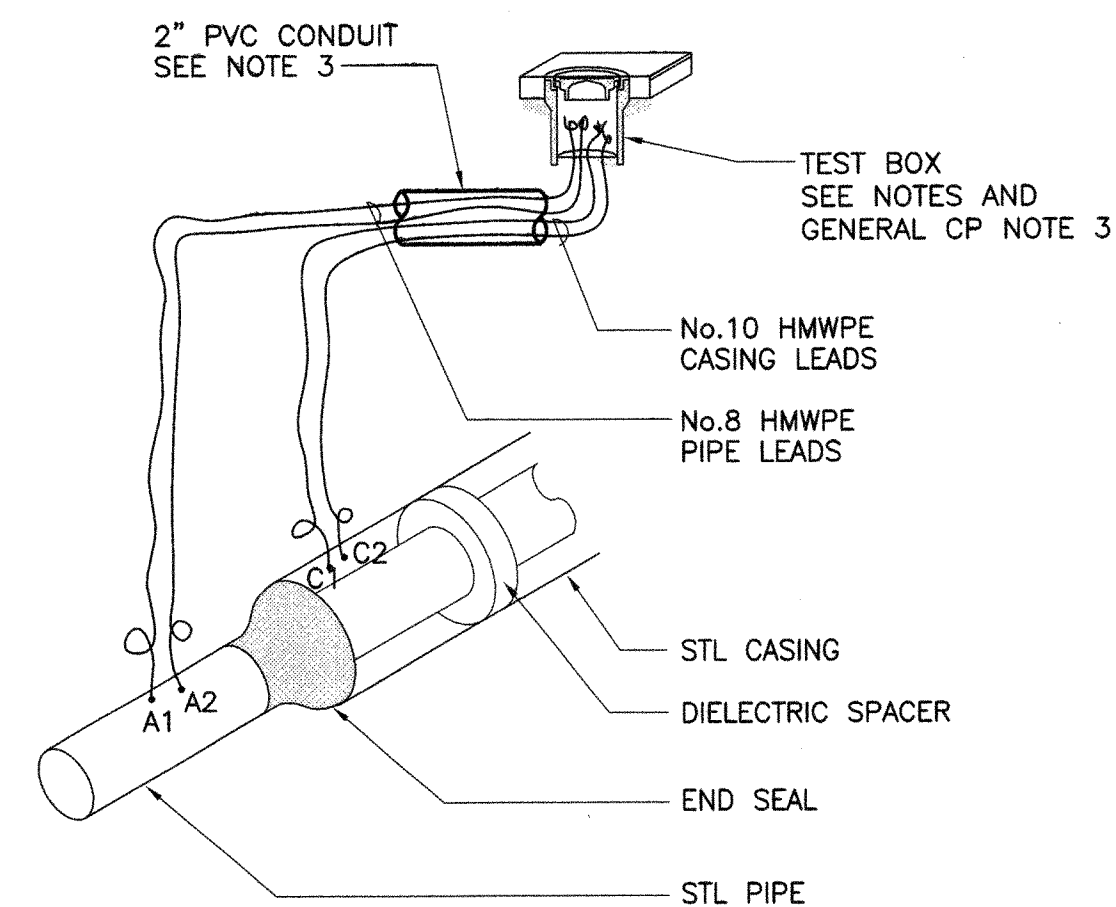
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BONDING CLIP DETAIL (STL PIPE)
NTS

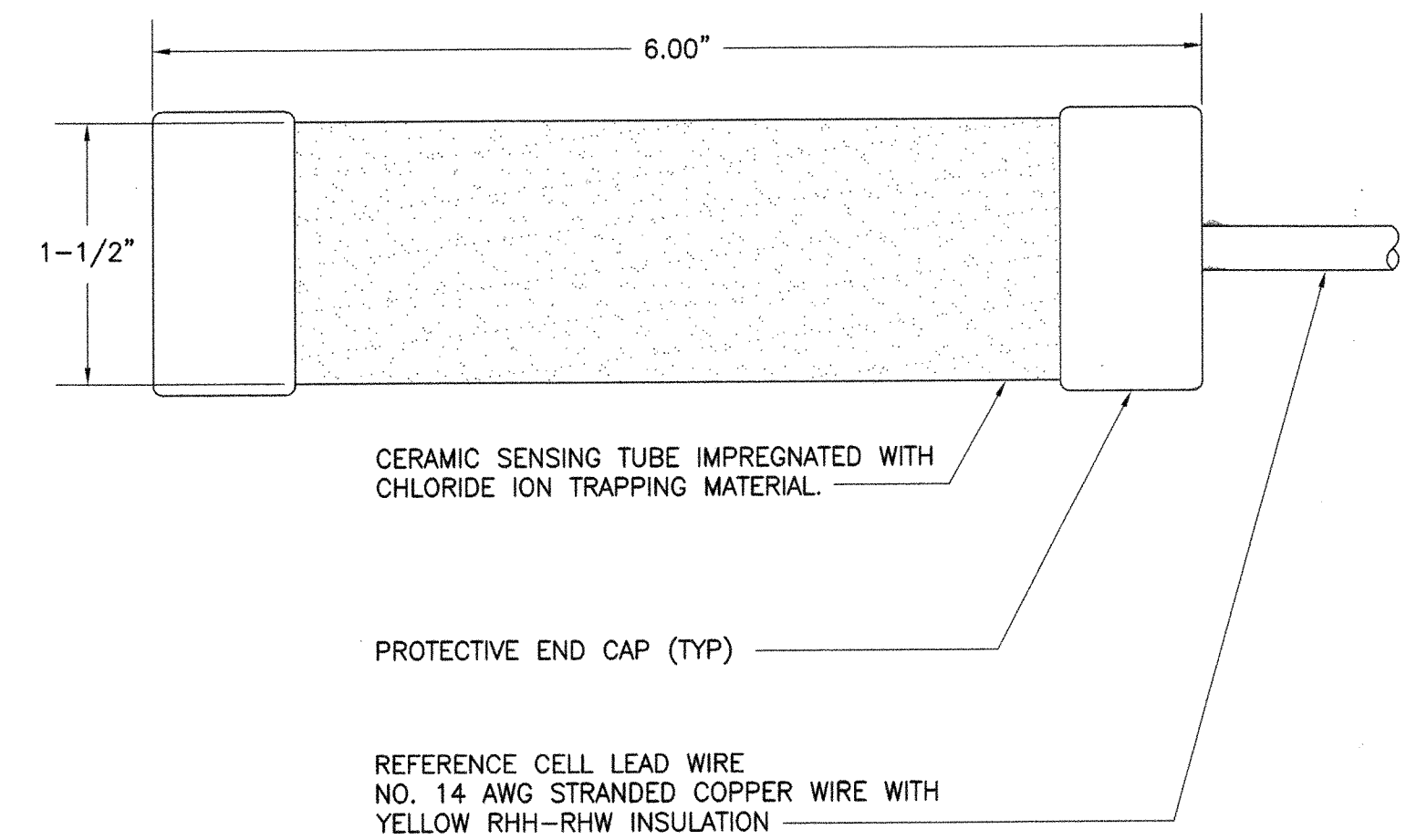
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DETAIL
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USED



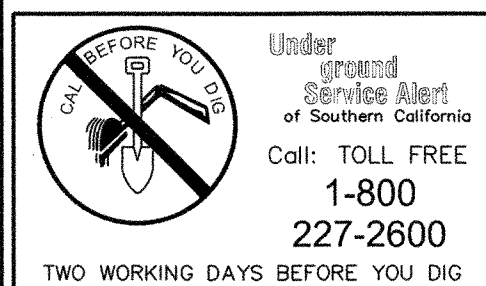
4-WIRE CASING TEST STATION
NTS

5
—



COPPER SULFATE REFERENCE ELECTRODE
NTS

6
—



MARK	DATE	BY	APPROVED/ RCE NO.

DESIGNED BY: EAD
DATE: 4/19/07
DRAWN BY: GPM
DATE: 4/19/07
CHECKED BY: J. Sullivan
DATE: 11/2/07

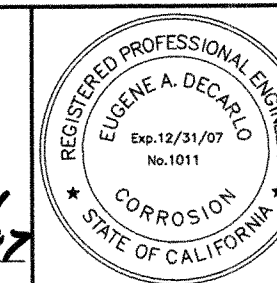
CITY OF ONTARIO

RECOMMENDED BY: Louis J. Young, Assistant City Engineer
ACCEPTED BY: John P. Sullivan, City Engineer

44485 EXP. 3/31/08 DATE 12-14-07
24079 EXP. 12/31/07 DATE 12-20-07

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

DeC CONSULTANTS
a V&A Company
8291 Aero Place, Suite 110
San Diego, CA 92123
Tel: (619) 590-4111 Fax: (619) 576-0000
1011 12/31/07 11/16/07
C.E. NO. EXP. DATE



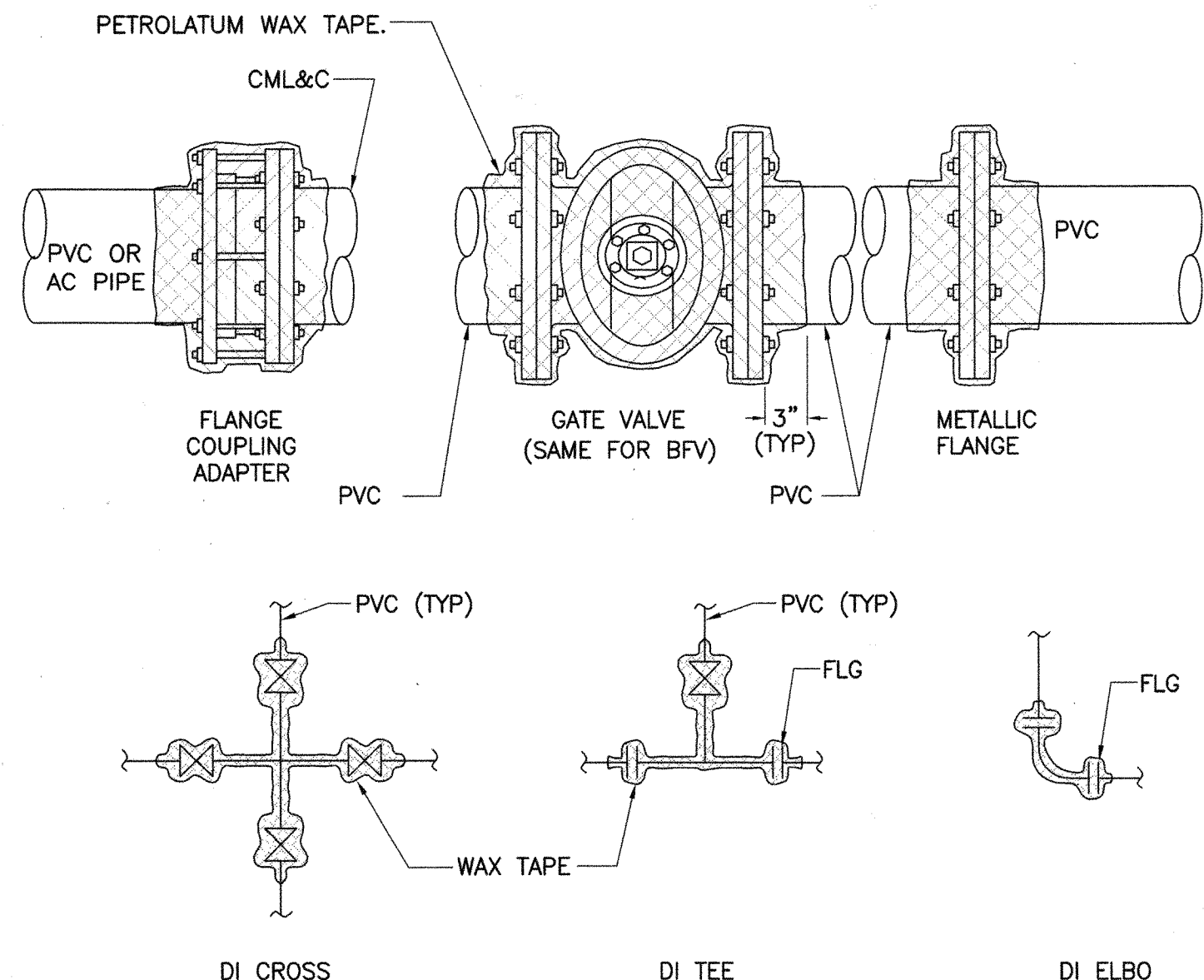
NEW MODEL COLONY (EAST)
RIVERSIDE AVENUE ZONE 925
DOMESTIC WATER IMPROVEMENT PLANS
CORROSION PROTECTION DETAILS

M-442

SHEET 10 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3256
W13425

CP-3

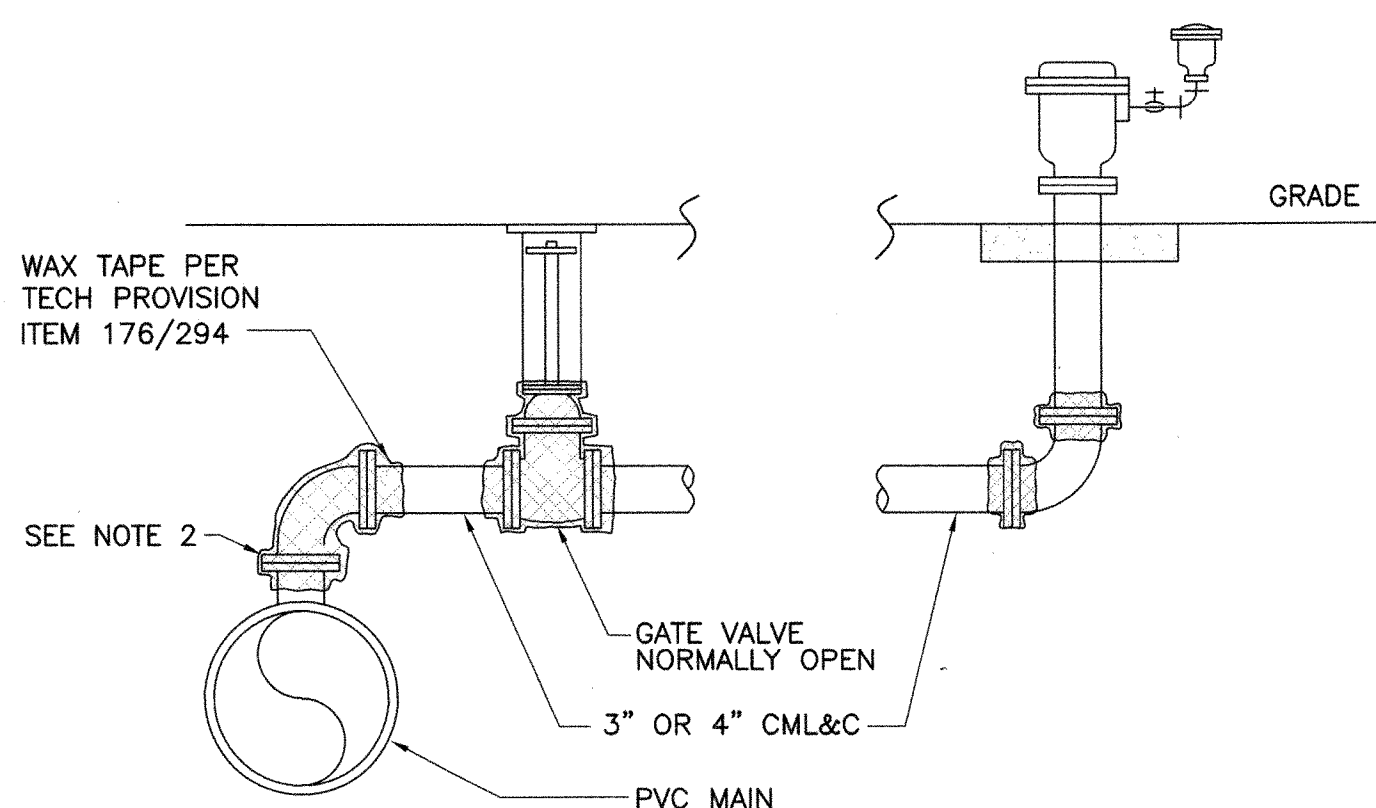
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NOTE:
1. ALL METALLIC COMPONENTS ON PVC PIPE I.E. VALVES, FLANGES, COUPLINGS, CROSSES, ELBOWS & TEES SHALL BE WAX TAPE WRAPPED PER TECH PROVISIONS ITEM 176/294.

WAX TAPE WRAP
NTS

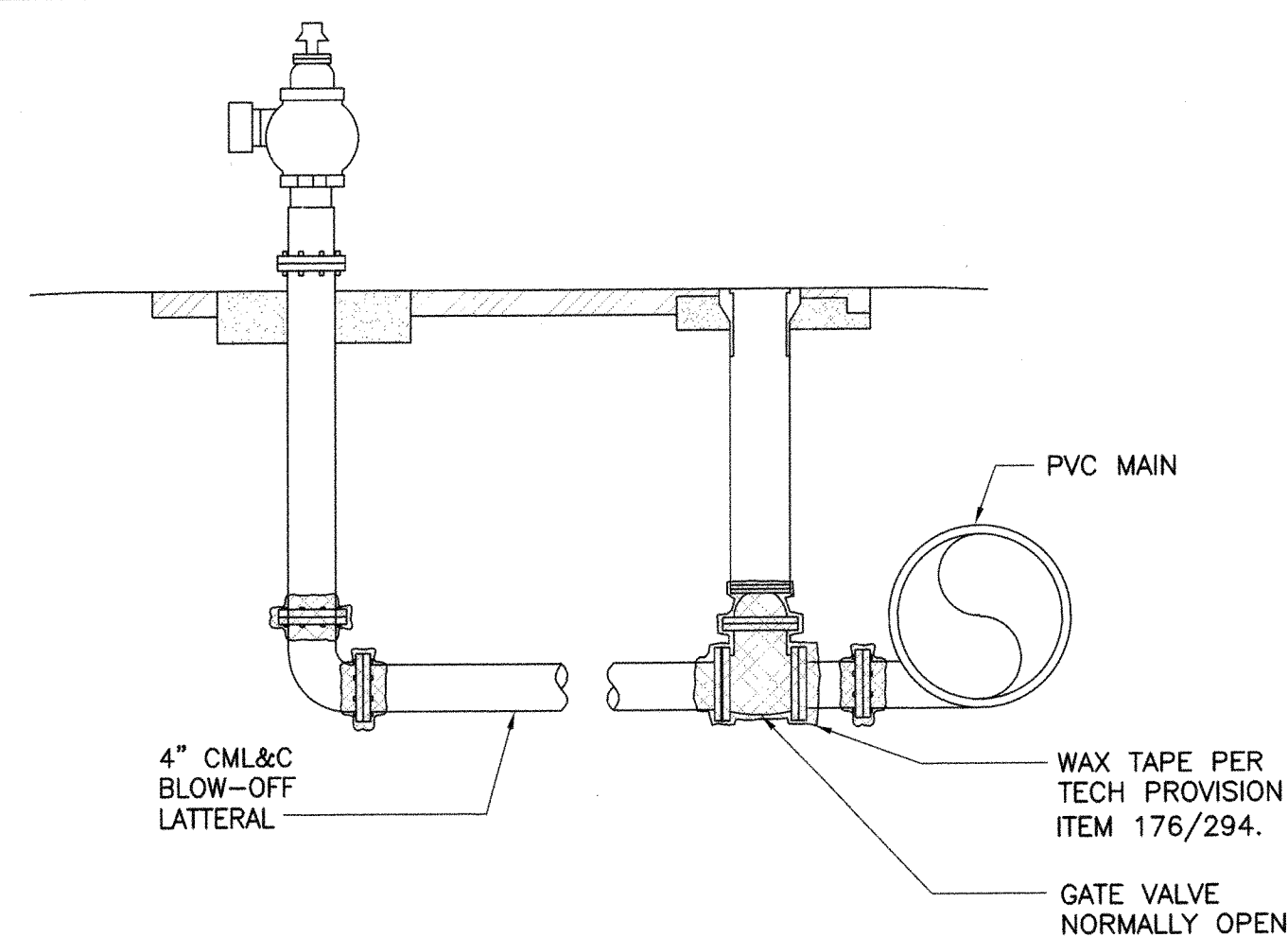
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NOTES:
1. INSTALL BLOW-OFF PER CITY OF ONTARIO STD DRAWING NO. 4104 EXCEPT FOR WAX TAPE AS SHOWN.
2. ALL COPPER AIR-VAC TUBING MUST BE INSULATED FROM STL MAIN WITH DIELECTRIC BUSHING OR UNION.
3. CONTINUITY BONDING NOT REQUIRED ON AIR VACUUM RELEASE LATERALS THAT CONNECT TO PVC MAINS.

AIR-VAC WAX TAPE WRAP
NTS

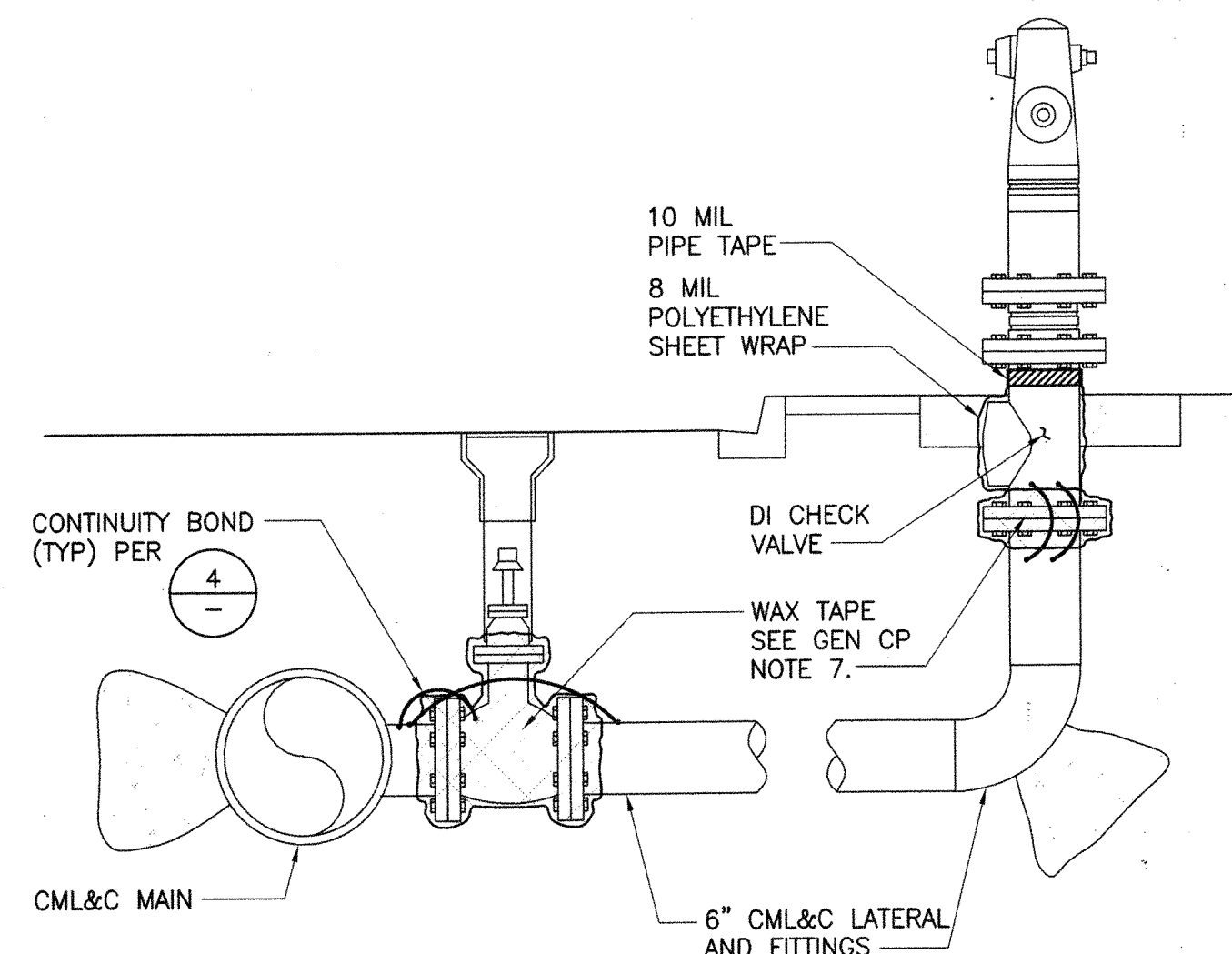
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NOTES:
1. INSTALL BLOW-OFF PER CITY OF ONTARIO STD DRAWING NO. 4107 EXCEPT AS SHOWN.
2. 4\"/>

BLOW OFF BONDING
NTS

3
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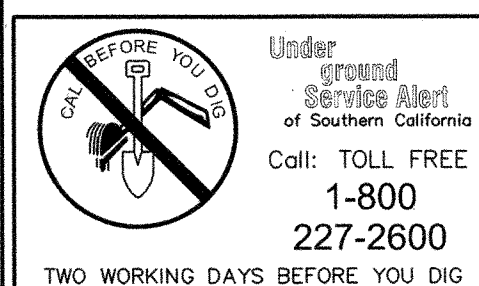
NOTE:
1. INSTALL FIRE HYDRANT LATERAL PER CITY OF ONTARIO STD DRAWING NO. 4101 EXCEPT AS SHOWN.
2. CONTINUITY BONDING NOT REQUIRED ON FIRE HYDRANT LATERALS THAT CONNECT TO PVC MAINS.

FIRE HYDRANT BONDING
NTS

4
—

CORROSION PROTECTION NOTES FOR PVC PIPING

- CORROSION PROTECTION IS REQUIRED FOR BURIED METALLIC COMPONENTS ON PVC PIPE AS INDICATED ON THIS DRAWING AND ITEM 176/294 IN THE TECHNICAL PROVISIONS.
- ALL BURIED METALLIC COMPONENTS, I.E., VALVES, FLANGES, TRANSITION COUPLINGS AND DUCTILE IRON CROSSES, TEES, ELBOWS AND COUPLINGS SHALL BE WRAPPED WITH PETROLATUM WAX TAPE PER AWWA C-217 AND ITEM 176/294.
- COPPER TUBING SERVICE LATERALS SHALL BE BACKFILLED IN A 3-INCH (MIN) ENVELOPE OF CLEAN SAND AS DEFINED IN ITEM 176/294.
- BRASS 2-INCH AIR-VACUUM RELEASE LATERALS SHALL BE ENCASED IN A 6 MIL (.006 INCH) PLASTIC SLEEVE AS INDICATED IN THE CITY OF ONTARIO STANDARD DRAWING No. 4102. WRAP ALL FERROUS COMPONENTS, I.E., 2-INCH GATE VALVE, WITH PETROLATUM WAX TAPE.
- STEEL LATERALS CONNECTED TO PVC PIPE MAINS, I.E., AIR-VACS, BLOW-OFFS AND FIRE HYDRANTS, DO NOT REQUIRE BONDING. BONDS ARE REQUIRED AT ALL MECHANICAL JOINTS ON STEEL LATERALS CONNECTED TO STEEL PIPE.
- ALL WAX TAPE APPLICATIONS AND SAND TRENCH PADDING AND SHADING SHALL BE INSPECTED BY THE PROJECT MANAGER OR INSPECTOR PRIOR TO BURIAL.



REVISIONS				DESIGNED BY: EAD
MARK	DATE	BY	APPROVED/ RCE NO.	DATE: 4/19/07
				DRAWN BY: GPM
				DATE: 4/19/07
				CHECKED BY: J.P. Sullivan
				DATE: 1/28/07

CITY OF ONTARIO

RECOMMENDED BY: *John P. Sullivan*
CITY ENGINEER
ACCEPTED BY: *John P. Sullivan*
CITY ENGINEER

44485 EXP. 3/31/08 12-14-07
C.E. NO. DATE
24079 EXP. 12/31/07 12-20-07
C.E. NO. DATE

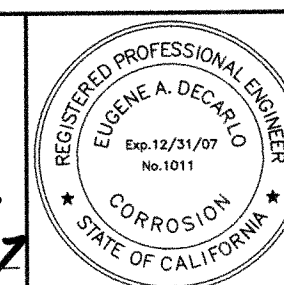
BENCH MARK No. S.P.S.N. 00789 ELEV. 785.572

LOCATION:
SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2\"/>

NGVD29 / 1990 ADJ.

DeC CONSULTANTS

a V&A Company Proj: 07-0003
8291 Aero Place, Suite 110
San Diego, CA 92123
Tel: (619) 480-4138 Fax: (619) 576-0004
John P. Sullivan
SIGNATURE DATE: 12/31/07
C.R. 1011 EXP.



NEW MODEL COLONY (EAST)
RIVERSIDE AVENUE ZONE 925
DOMESTIC WATER IMPROVEMENT PLANS
CORROSION PROTECTION FOR PVC PIPE

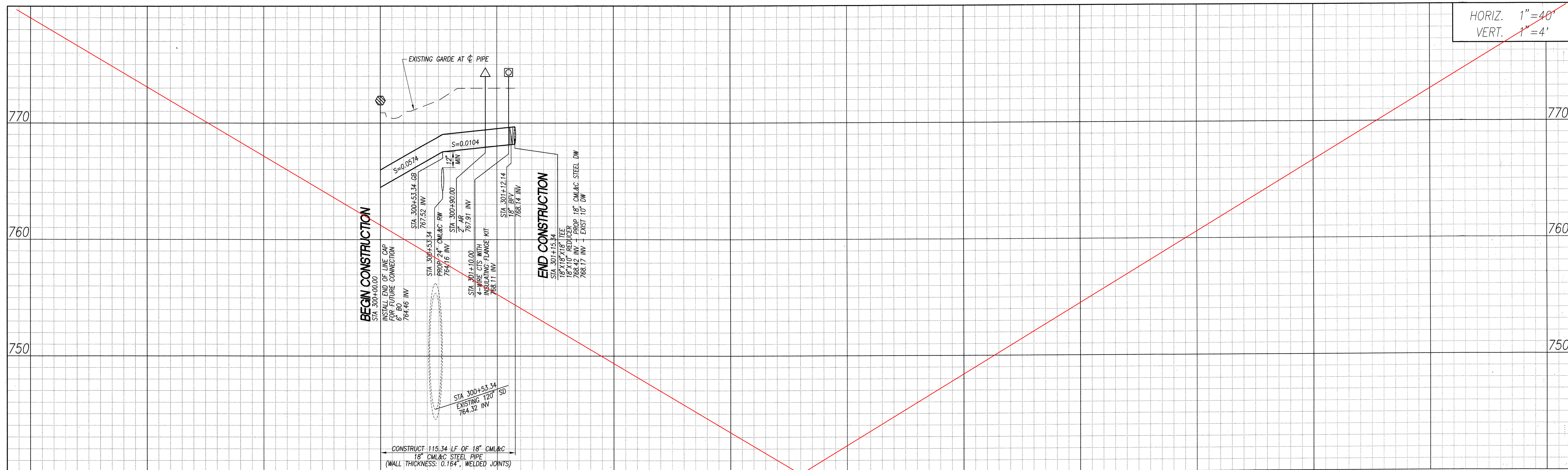
M-442

SHEET 11 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3257

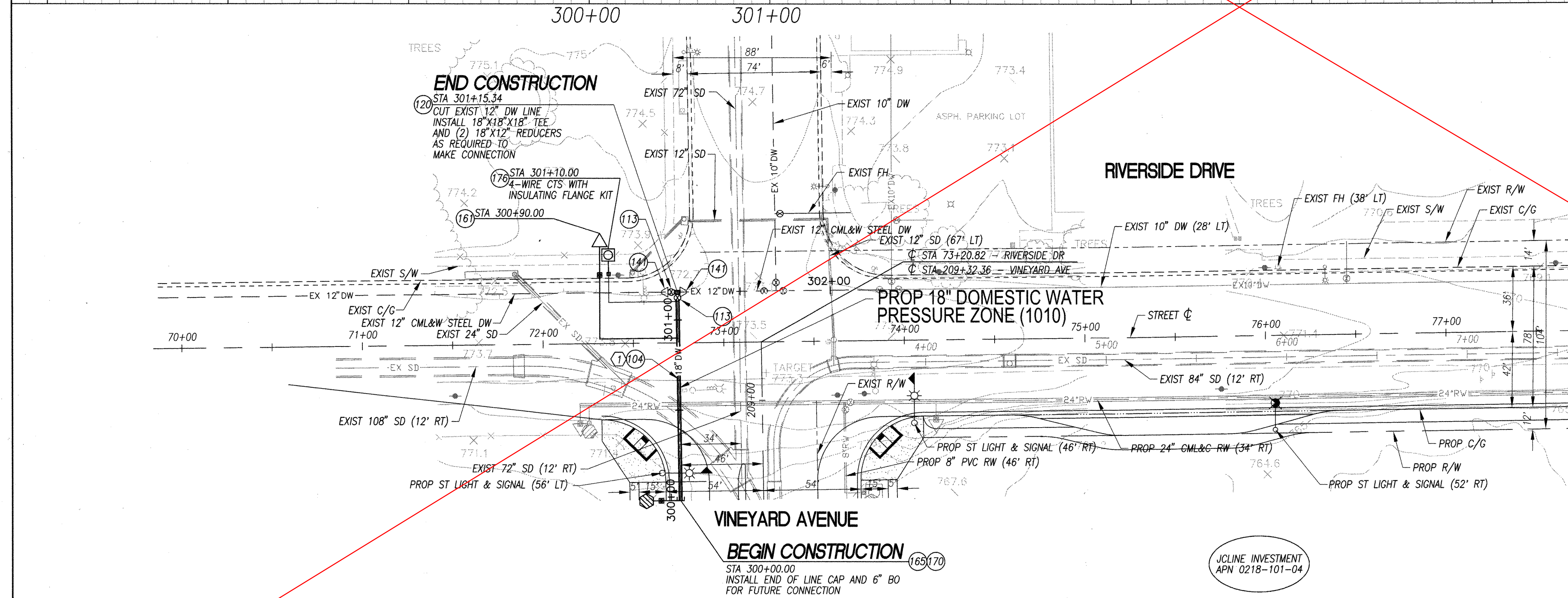
W13426

CP-4

DRAWING: \Projects\28000.00\dwg\PRSW1126.dwg (print) 126.dwg PLOTTED: 11/6/2007 4:17 PM BY: Lee, Stacy



HORIZ. 1"=40'
VERT. 1"=4'



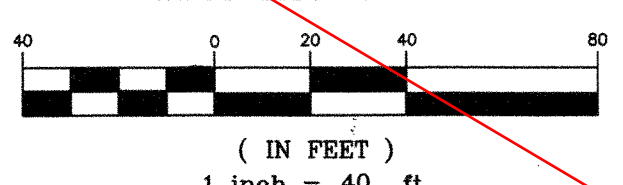
DOMESTIC WATER CONSTRUCTION NOTES

- (104) CONSTRUCT 18" DIA CML&C (WALL THICKNESS: 0.164", WELDED JOINTS) STEEL WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
- (113) CONSTRUCT 18" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006 AND DETAIL ON SHEET CP-2.
- (120) CONSTRUCT 18"x18"x18" CML&C STEEL TEE.
- (141) CONSTRUCT 18"x12" CML&C STEEL REDUCER.
- (161) CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102
- (165) CONSTRUCT 6" BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4109
- (170) CONSTRUCT END OF LINE CAP (M.J. WITH RETAINER GLAND) AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.
- (176) CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1

18" DOMESTIC WATER LINE DATA

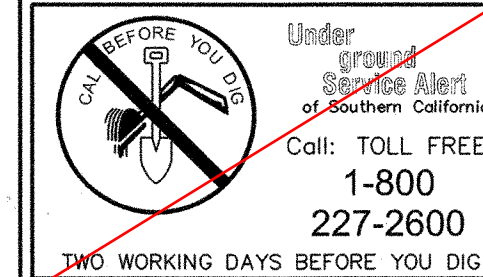
NO.	BEARING	DISTANCE
(1)	N00°49'36"W	115.34'

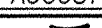
GRAPHIC SCALE



NOTE:
SEE STREET IMPROVEMENT PLANS FOR
DISPOSITION OF EXISTING SURFACE FEATURES

FUTURE IMPROVEMENT - NIC



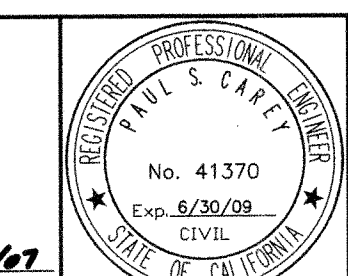
REVISIONS				DESIGNED BY: PC
MARK	DATE	BY	APPROVED/ RCE NO.	DATE: AUGUST 21, 2007
				DRAWN BY: PG
				DATE: AUGUST 21, 2007
				CHECKED BY: 
				DATE: 11/28/09

CITY OF ONTARIO

RECOMMENDED BY: *John P. Sullivan*
JOHN P. SULLIVAN / CITY ENGINEER
44485 EXP. 3/31/08 DATE 12-14-07
24079 EXP. 12/31/07 DATE 12-20-07

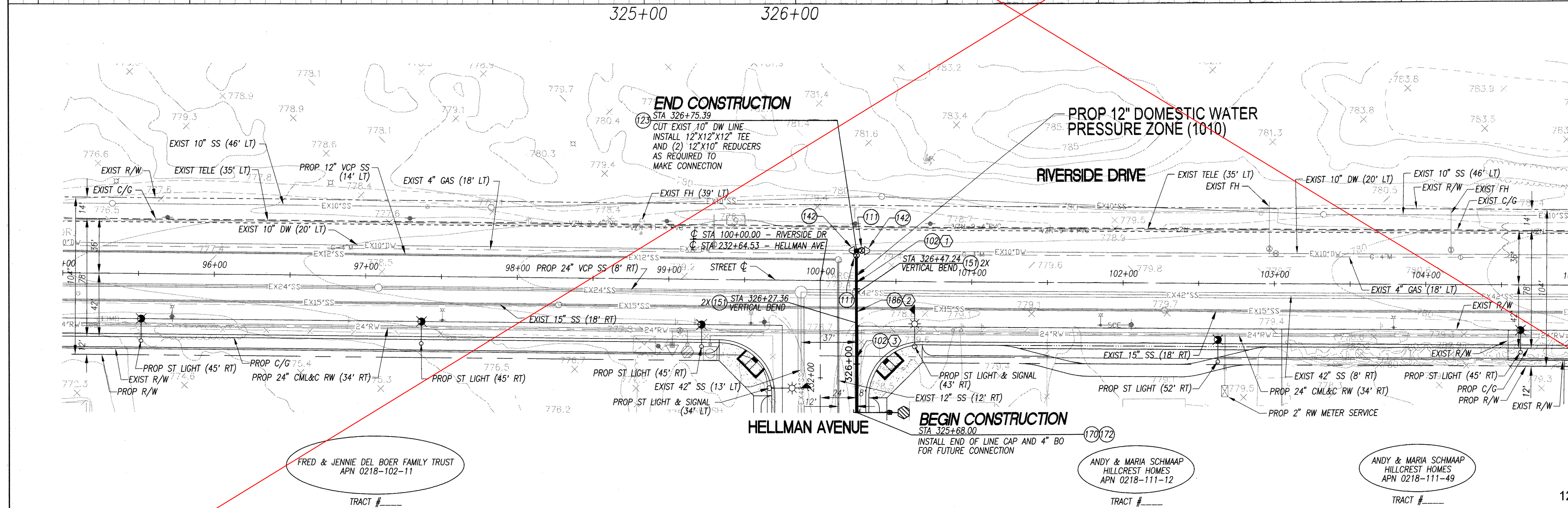
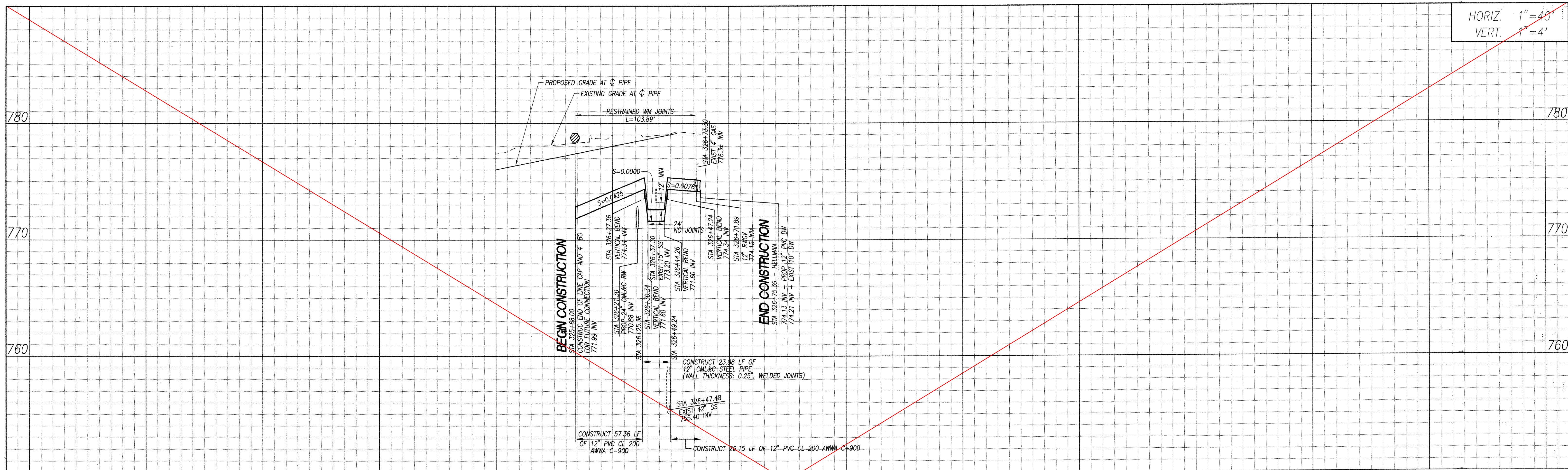
BENCH MARK No. S.P.S.N 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, 511" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880
PAUL S. CAREY
41370 6/30/09 11/1/09
C.E. NO. EXP. DATE



NEW MODEL COLONY (EAST)
RIVERSIDE DRIVE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS
ST STA 70+00.00 TO ST STA 77+70.37

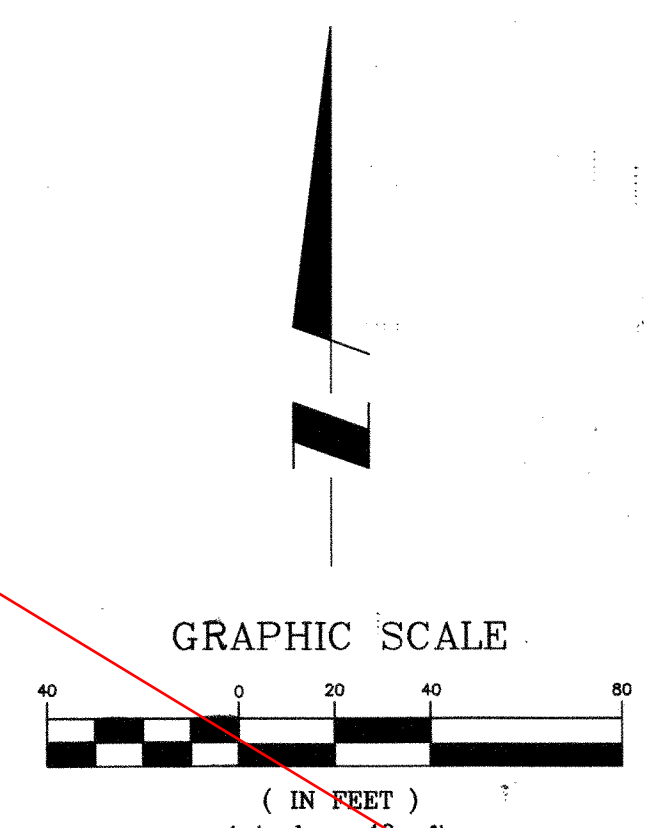
M-442
SHEET 12 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3258
W13427



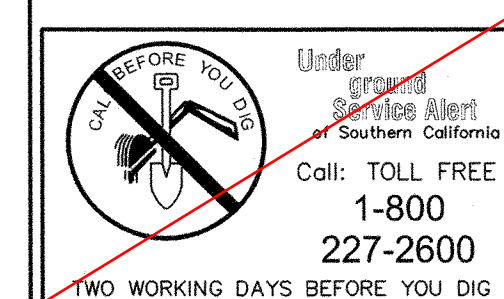
- DOMESTIC WATER CONSTRUCTION NOTES**
- (102) — CONSTRUCT 12" DIA PVC CL 200, AWWA C-900 WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
 - (111) — CONSTRUCT 12" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.
 - (123) — CONSTRUCT 12"x12"x12" COMPACT DI TEE AND RESTRAINT JOINTS PER CITY OF ONTARIO STD. DWG. NO. 4010.
 - (142) — CONSTRUCT 12"x10" COMPACT DI REDUCER (F.L. x P.O.) AND RESTRAINT JOINTS PER CITY OF ONTARIO STD. DWG. NO. 4010.
 - (151) — CONSTRUCT 12"-45" COMPACT DI ELBOW AND RESTRAINT JOINTS PER CITY OF ONTARIO STD. DWG. NO. 4010.
 - (170) — CONSTRUCT END OF LINE CAP (M.J. WITH RETAINER GLAND) AND RESTRAINT JOINTS PER CITY OF ONTARIO STD. DWG. NO. 4010.
 - (172) — CONSTRUCT 4" TEMPORARY END OF MAIN BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD. DWG. NO. 4113.
 - (186) — CONSTRUCT 12" DIA CML&C (WALL THICKNESS = 0.164", WELDED JOINTS) DOMESTIC WATERLINE TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. 1306. CONNECT TO PROPOSED PVC PIPE WITH STEEL/PVC TRANSITION COUPLING PER DETAIL 1 ON SHEET M2.

12" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(1)	N00°02'42"E	26.15'
(2)	N00°02'42"E	23.88'
(3)	N00°02'42"E	57.36'



NOTE:
SEE STREET IMPROVEMENT PLANS FOR
DISPOSITION OF EXISTING SURFACE FEATURES



REVISIONS			
MARK	DATE	BY	APPROVED/ RCE NO.

DESIGNED BY: PC	DATE: AUGUST 21, 2007
DRAWN BY: PG	DATE: AUGUST 21, 2007
CHECKED BY: 11/28/07	DATE: 11/28/07

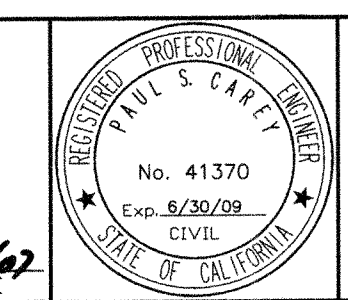
CITY OF ONTARIO

RECOMMENDED BY: *[Signature]* 44485 EXP. 3/31/08 12-14-07
LOUIS DE TOMMASO, ASSISTANT CITY ENGINEER
C.E. NO. 24079 EXP. 12/31/07 12-20-07
JOHN P. SULLIVAN, CITY ENGINEER
C.E. NO.

BENCH MARK No. S.P.S.N. 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880
stantec.com

[Signature] 41370 6/30/09 11/10/07
PAUL S. CAREY
C.E. NO. EXP. DATE

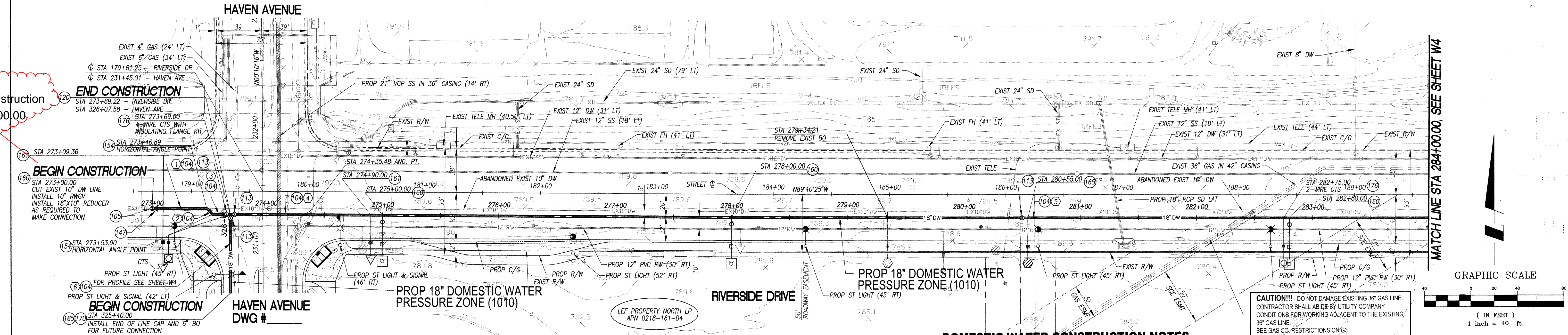
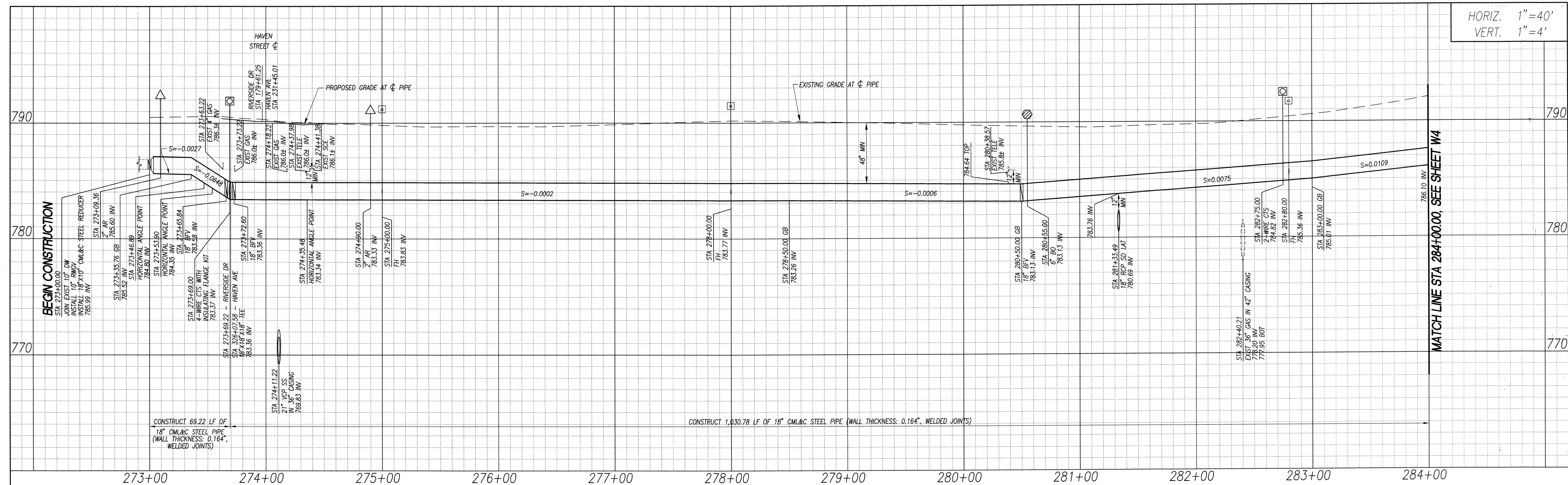


**NEW MODEL COLONY (EAST)
RIVERSIDE DRIVE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS**
ST STA 95+00.00 TO ST STA 104+00.00

SHEET 13 OF 19
CONTRACT ACCOUNT
DWG. NO. W3259
W13428

W2

HORIZ. 1"=40'
VERT. 1"=4'



18" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(1)	N89°58'31"W	46.89'
(2)	N44°58'31"W	7.01'
(3)	N89°48'02"W	15.32'
(4)	N89°48'02"W	66.26'
(5)	N89°40'25"W	964.52'
(6)	N00°10'16"W	67.58'

DOMESTIC WATER CONSTRUCTION NOTES

(104) - CONSTRUCT 18" DIA CML&C (WALL THICKNESS: 0.164", WELDED JOINTS) STEEL WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.

(105) - CONSTRUCT 10" DI RESILIENT WEDGE GATE VALVE, ANWA C-509, OAE, PER CITY OF ONTARIO STD. DWG. NO. 4005.

(113) - CONSTRUCT 18" BUTTERFLY VALVE CL 150-B, ANWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006 AND DETAIL ON SHEET CP-2.

(120) - CONSTRUCT 18"x18"x18" CML&C STEEL TEE.

(147) - CONSTRUCT 18"x10" CML&C STEEL REDUCER.

(154) - CONSTRUCT 18"-45" CML&C STEEL ELBOW.

(160) - CONSTRUCT FIRE HYDRANT WITH BREAK-OFF CHECK VALVE PER CITY OF ONTARIO STD DWG NO. 4101 (STEEL MAIN) OR STD DWG NO. 4111 (PVC MAIN).

(161) - CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102.

(165) - CONSTRUCT 6" BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4109.

(170) - CONSTRUCT END OF LINE CAP (M.J. WITH RETAINER GLAND) AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.

(176) - CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1.

NOTE:
SEE STREET IMPROVEMENT PLANS FOR DISPOSITION OF EXISTING SURFACE FEATURES

CAUTION!!! - DO NOT DAMAGE EXISTING 36" GAS LINE. CONTRACTOR SHALL ABIDE BY UTILITY COMPANY CONDITIONS FOR WORKING ADJACENT TO THE EXISTING 36" GAS LINE. SEE GAS CO. RESTRICTIONS ON G3.

REVISIONS

MARK	DATE	BY	APPROVED / RCE NO.

CITY OF ONTARIO

DESIGNED BY: PC
DATE: AUGUST 21, 2007
DRAWN BY: PC
DATE: AUGUST 21, 2007
CHECKED BY: [Signature]
DATE: 11/28/07

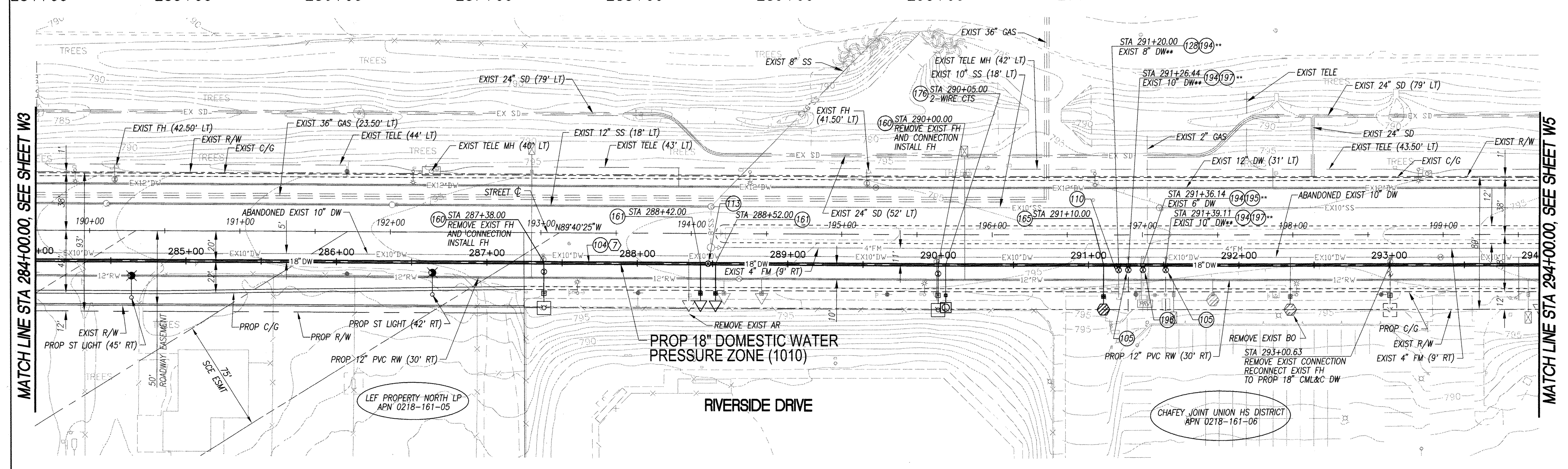
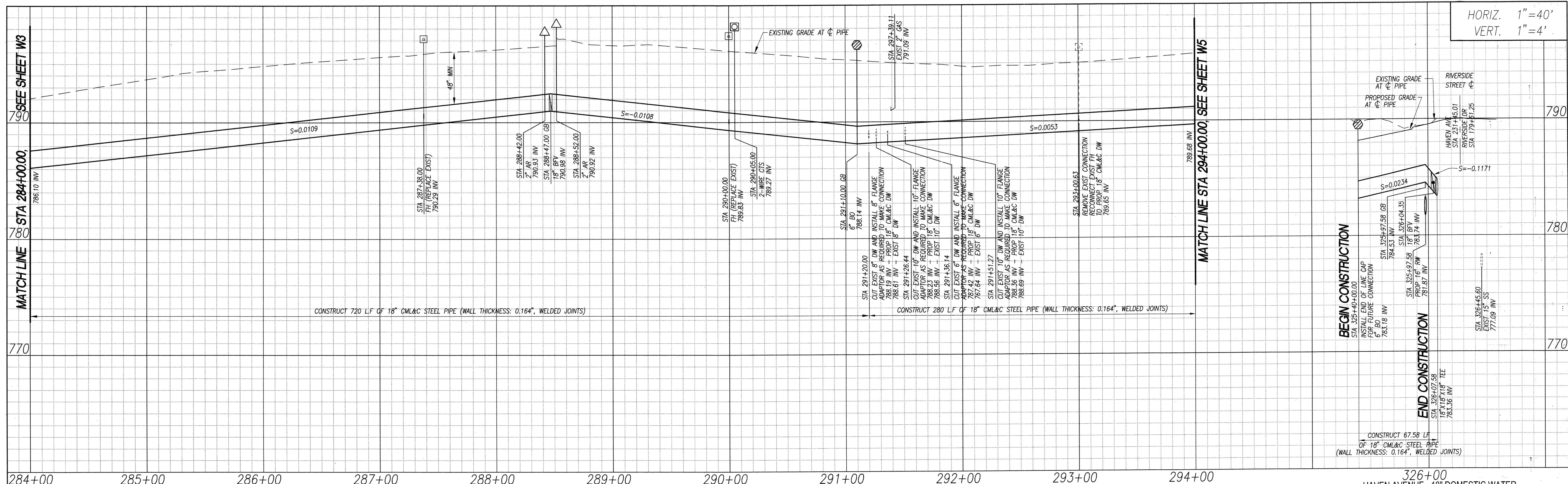
STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880

PAUL S. CAREY
No. 41370
Exp. 6/30/09
CIVIL
STATE OF CALIFORNIA

**NEW MODEL COLONY (EAST)
RIVERSIDE DRIVE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS
STA 273+69.22 TO STA 284+00.00**

W3

SHEET 14 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3260
W13429



- ### DOMESTIC WATER CONSTRUCTION NOTES
- (104) CONSTRUCT 18" DIA CML&C (WALL THICKNESS: 0.164", WELDED JOINTS) STEEL WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
 - (105) CONSTRUCT 10" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, OAE, PER CITY OF ONTARIO STD. DWG. NO. 4005.
 - (110) CONSTRUCT 8" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.
 - (113) CONSTRUCT 18" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006 AND DETAIL ON SHEET CP-2.
 - (128) CONSTRUCT 18"x18"x8" CML&C STEEL TEE.
 - (160) CONSTRUCT FIRE HYDRANT WITH BREAK-OFF CHECK VALVE PER CITY OF ONTARIO STD DWG NO. 4101 (STEEL MAIN) OR STD DWG NO 4111 (PVC MAIN).
 - (161) CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102
 - (165) CONSTRUCT 6" BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4109
 - (176) CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1
 - (194) REMOVE EXISTING CONNECTION AND RECONNECT EXIST WATER LINE (SIZE PER PLAN) TO PROPOSED 18" CML&C STEEL PIPE WATER LINE.
 - (195) CONSTRUCT 18"x18"x8" CML&C STEEL TEE.
 - (196) CONSTRUCT 6" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.
 - (197) CONSTRUCT 18"x18"x10" CML&C STEEL TEE.

CITY OF ONTARIO

DESIGNED BY: PC
DATE: AUGUST 21, 2007

DRAWN BY: PG
DATE: AUGUST 21, 2007

CHECKED BY: *12367*
DATE: 11/23/07

RECOMMENDED BY: *John P. Sullivan*
DATE: 11/23/07

44485 EXP. 3/31/08
24079 EXP. 12/31/07

C.E. NO. 12-20-07

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572

LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.

NGVD29 / 1990 ADJ.

STANTEC CONSULTING INC.

3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880

Paul S. Carey
PAUL S. CAREY

41370 6/30/09
C.E. NO. EXP. 11/23/07

**NEW MODEL COLONY (EAST)
RIVERSIDE DRIVE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS**

STA 284+00.00 TO STA 294+00.00

M-442

SHEET 15 OF 19

CONTRACT ACCOUNT
DWG. NO. W3261

W13430

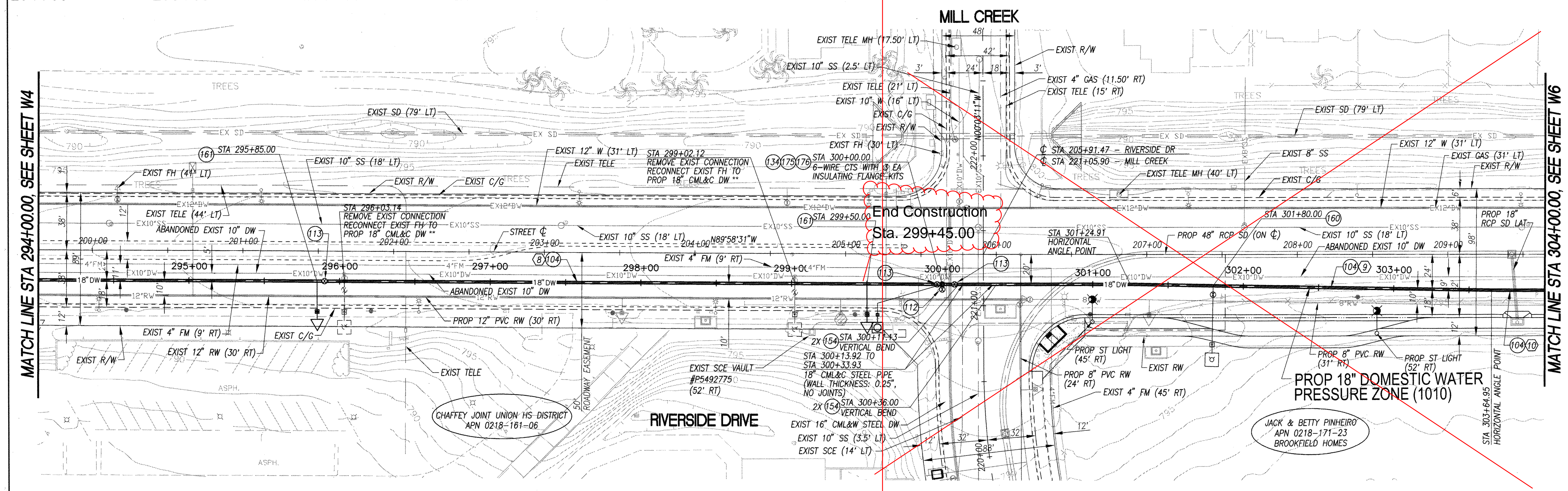
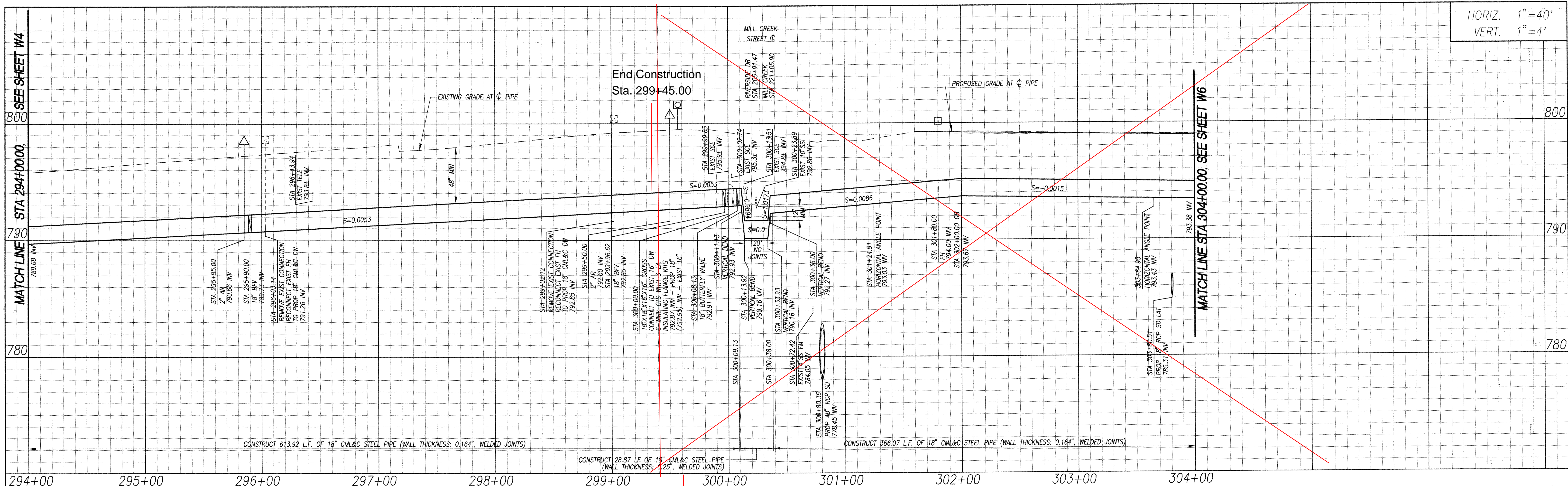
NOTE: SEE STREET IMPROVEMENT PLANS FOR DISPOSITION OF EXISTING SURFACE FEATURES

18" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(7)	N89°40'25"W	1,000.00'

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

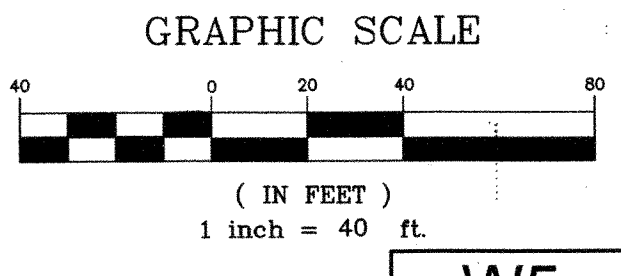


DOMESTIC WATER CONSTRUCTION NOTES

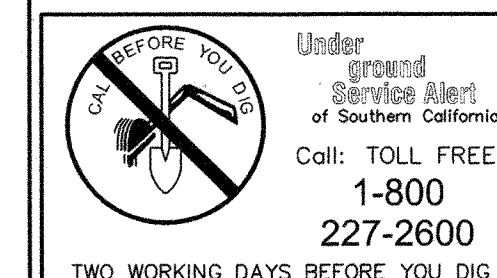
- (104) CONSTRUCT 18" DIA CML&C (WALL THICKNESS: 0.164", WELDED JOINTS) STEEL WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
- (112) CONSTRUCT 16" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006.
- (113) CONSTRUCT 18" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006 AND DETAIL ON SHEET CP-2.
- (134) CONSTRUCT 18"x16" CML&C STEEL CROSS.
- (154) CONSTRUCT 18"-45" CML&C STEEL ELBOW.
- (160) CONSTRUCT FIRE HYDRANT WITH BREAK-OFF CHECK VALVE PER CITY OF ONTARIO STD DWG NO. 4101 (STEEL MAIN) OR STD DWG NO 4111 (PVC MAIN).
- (161) CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102
- (175) CONSTRUCT CML&C STEEL PIPE BUTTSPRINT JOINT (SIZE PER PLANS) AND APPURTENANCE PER DETAIL 3 ON SHEET M1.
- (176) CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1

18" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(8)	N89°40'25"W	724.91'
(9)	N88°43'08"W	240.04'
(10)	N89°40'25"W	35.05'

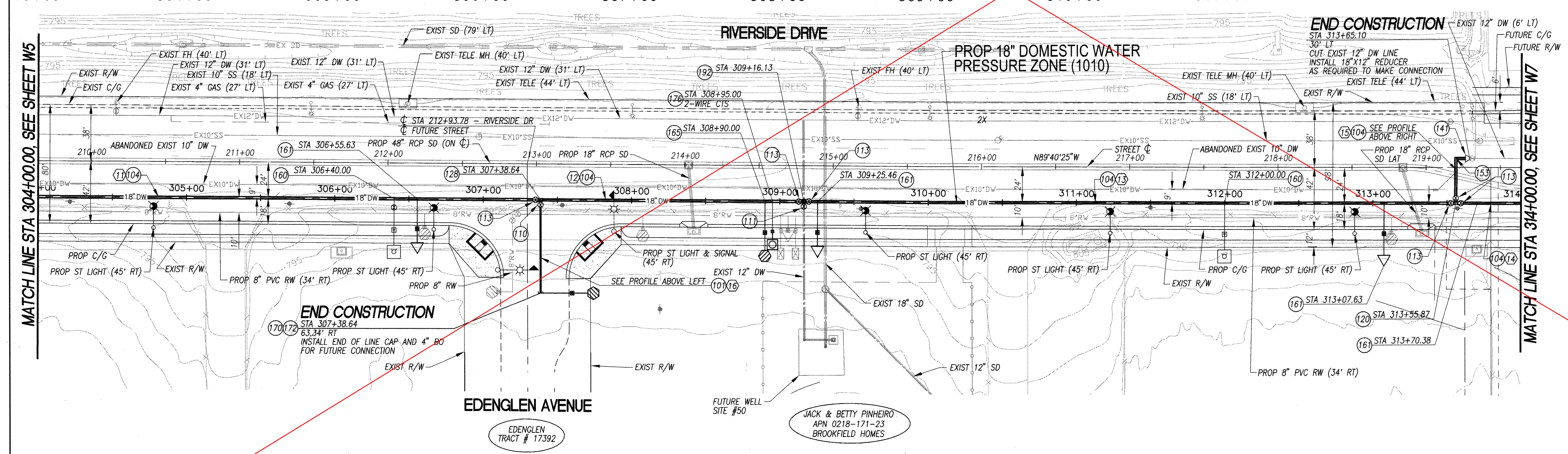
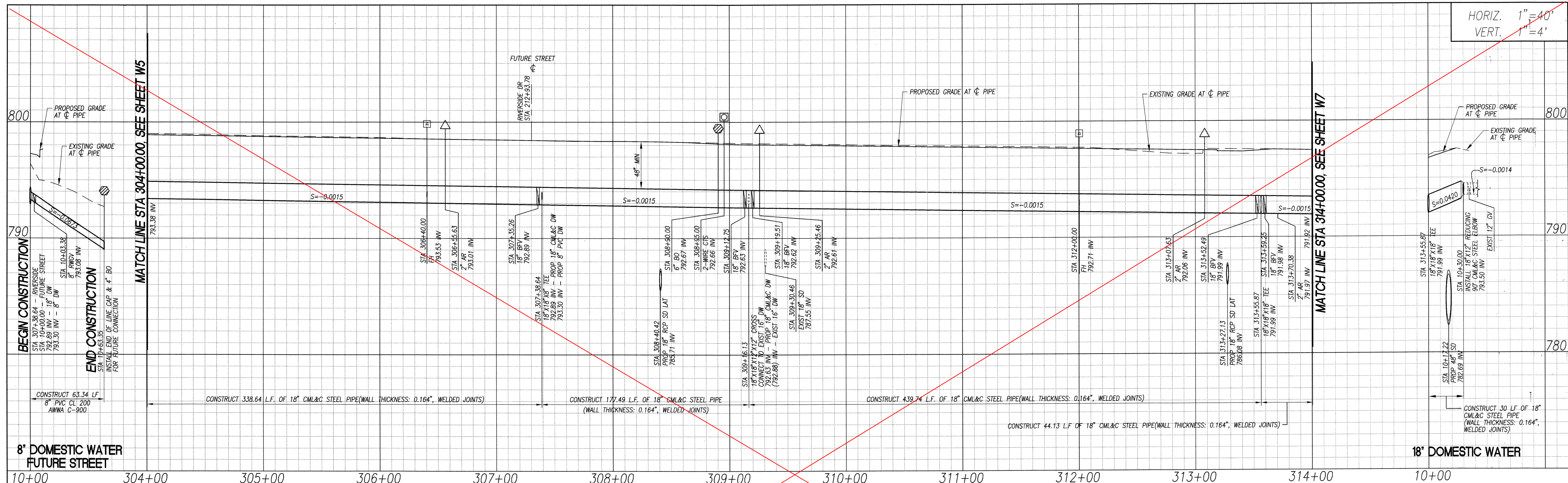


NOTE:
SEE STREET IMPROVEMENT PLANS FOR
DISPOSITION OF EXISTING SURFACE FEATURES



*** VERIFY LOCATION PRIOR TO RECONNECTING THE SERVICE

REVISIONS MARK DATE BY APPROVED/ RCE NO. 1 AUGUST 21, 2007 PG 2 AUGUST 21, 2007 PG 3 11/28/07		DESIGNED BY: PC DATE: AUGUST 21, 2007 DRAWN BY: PG DATE: AUGUST 21, 2007 CHECKED BY: 11/28/07 DATE:		CITY OF ONTARIO RECOMMENDED BY: <i>[Signature]</i> 44485 EXP. 3/31/08 12-16-07 24079 EXP. 12/31/07 12-20-07 JOHN P. SULLIVAN / CITY ENGINEER		BENCH MARK No. S.P.S.N 00789 ELEV. 785.572 LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C. NGVD29 / 1990 ADJ.		STANTEC CONSULTING INC. 3103 EAST GUASTI ROAD SUITE 100 ONTARIO, CA 91761 909.390.8880 <i>[Signature]</i> 41370 6/30/09 11/10 C.E. NO. EXP. DATE		NEW MODEL COLONY (EAST) RIVERSIDE DRIVE ZONE 1010 DOMESTIC WATER IMPROVEMENT PLANS STA 294+00.00 TO STA 304+00.00		SHEET 16 OF 19 CONTRACT ACCOUNT DWG. NO. W3262 W13431	
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- ### DOMESTIC WATER CONSTRUCTION NOTES
- (10) - CONSTRUCT 8" DIA PVC CL 200, AWWA C-900 WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
 - (104) - CONSTRUCT 18" DIA CML&C (WALL THICKNESS: 0.164", WELDED JOINTS) STEEL WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
 - (110) - CONSTRUCT 8" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.
 - (111) - CONSTRUCT 12" DI RESILIENT WEDGE GATE VALVE, AWWA C-509, PER CITY OF ONTARIO STD. DWG. NO. 4005.
 - (113) - CONSTRUCT 18" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006 AND DETAIL ON SHEET CP-2.
 - (120) - CONSTRUCT 18"x18"x18" CML&C STEEL TEE.
 - (128) - CONSTRUCT 18"x18"x8" CML&C STEEL TEE.
 - (141) - CONSTRUCT 18"x12" CML&C STEEL REDUCER.
 - (153) - CONSTRUCT 18"-90° CML&C STEEL ELBOW.
 - (160) - CONSTRUCT FIRE HYDRANT WITH BREAK-OFF CHECK VALVE PER CITY OF ONTARIO STD DWG NO. 4101 (STEEL MAIN) OR STD DWG NO 4111 (PVC MAIN).
 - (161) - CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102.
 - (165) - CONSTRUCT 6" BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4109.
 - (170) - CONSTRUCT END OF LINE CAP (M.J. WITH RETAINER GLAND) AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.
 - (172) - CONSTRUCT 4" TEMPORARY END OF MAIN BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD. DWG. NO. 4113.
 - (176) - CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1.
 - (192) - CONSTRUCT 18"x12" CML&C STEEL CROSS.

18" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(11)	N89°40'25"W	338.64'
(12)	N89°40'25"W	177.50'
(13)	N89°40'25"W	439.74'
(14)	N89°40'25"E	44.13'
(15)	N00°19'35"E	30.00'

8" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(16)	N00°00'00"E	63.34'

REVISIONS

MARK	DATE	BY	APPROVED / RCE NO.

DESIGNED BY: PC
DATE: AUGUST 21, 2007
DRAWN BY: PC
DATE: AUGUST 21, 2007
CHECKED BY: 11/28/07
DATE: 11/28/07

CITY OF ONTARIO

RECOMMENDED BY: Louis A. ...
DATE: 12-14-07
DATE: 12-20-07

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572
LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.
NGVD29 / 1990 ADJ.

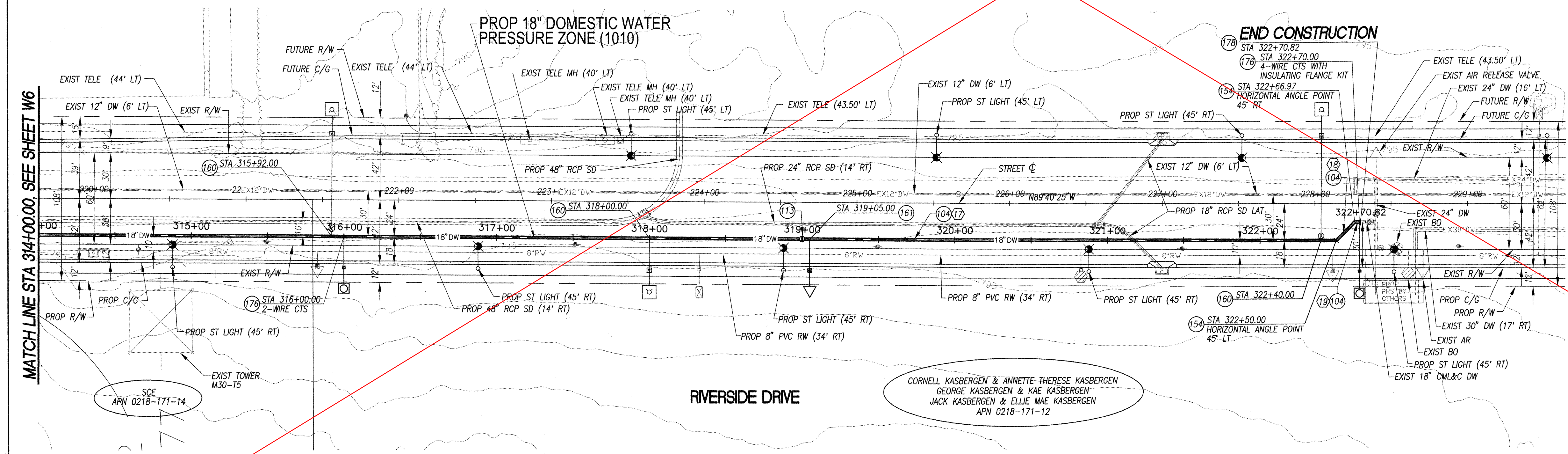
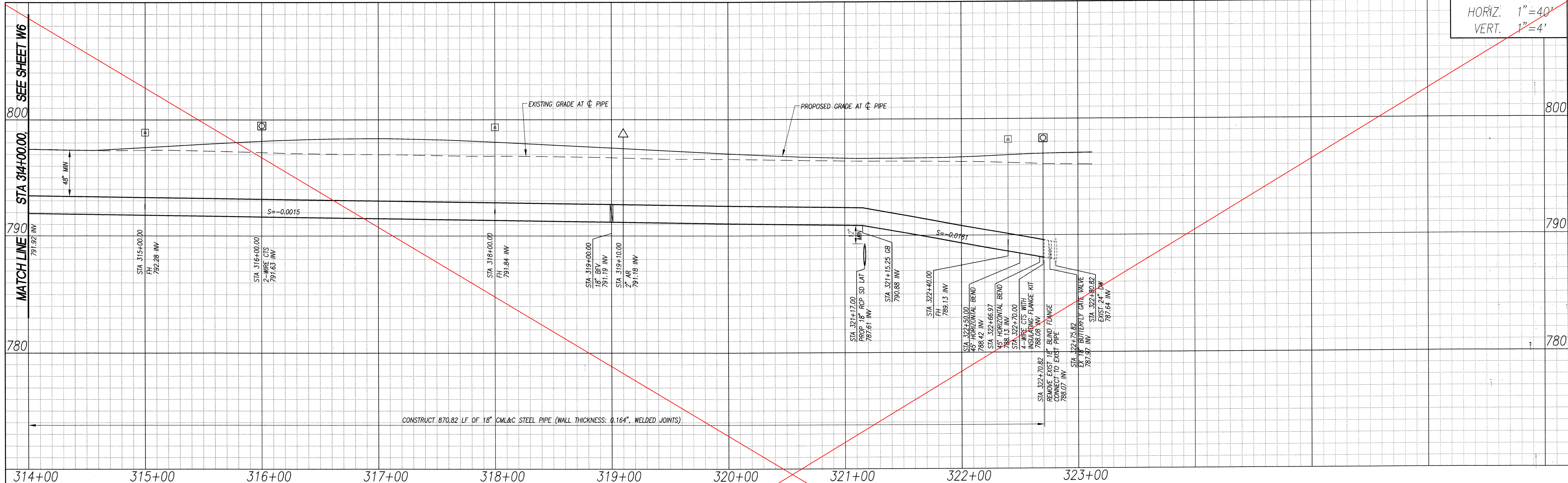
STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880

PAUL & CARLY
No. 41370
Exp. 6/30/09
CIVIL

NEW MODEL COLONY (EAST)
RIVERSIDE DRIVE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS
STA 304+00.00 TO STA 314+00.00

M-442

SHEET 17 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3263
W13432



- DOMESTIC WATER CONSTRUCTION NOTES**
- (104) CONSTRUCT 18" DIA CML&C (WALL THICKNESS: 0.164", WELDED JOINTS) STEEL WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
 - (113) CONSTRUCT 18" BUTTERFLY VALVE CL 150-B, AWWA C-504, PER CITY OF ONTARIO STD. DWG. NO. 4006 AND DETAIL ON SHEET CP-2.
 - (154) CONSTRUCT 18"-45" CML&C STEEL ELBOW.
 - (160) CONSTRUCT FIRE HYDRANT WITH BREAK-OFF CHECK VALVE PER CITY OF ONTARIO STD DWG NO. 4101 (STEEL MAIN) OR STD DWG NO 4111 (PVC MAIN).
 - (161) CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102
 - (176) CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1
 - (178) REMOVE BULKHEAD, BLIND FLANGE OR END OF LINE CAP AND JOIN EX. WATER LINE, SIZE PER PLAN.

18" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(17)	N89°40'25"W	850.00'
(18)	N45°19'35"E	16.97'
(19)	N89°40'25"W	3.85'

Under Ground Service Alert
Call: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

MARK	DATE	BY	APPROVED / RCE NO.

DESIGNED BY: PC	DATE: AUGUST 21, 2007
DRAWN BY: PG	DATE: AUGUST 21, 2007
CHECKED BY: [Signature]	DATE: 11/28/07

CITY OF ONTARIO

RECOMMENDED BY: [Signature]
JOHN P. SULLIVAN / CITY ENGINEER

44485 EXP. 3/31/08
C.E. NO. 12-11-07

24079 EXP. 12/31/07
C.E. NO. 12-20-07

BENCH MARK No. S.P.S.N 00789 ELEV. 785.572

LOCATION: SAN BERNARDINO COUNTY BENCHMARK LOCATED AT THE INTERSECTION OF TURNER & RIVERSIDE AVENUES, 1/4 COR. SEC. 2/11, T2S, R7W, 2" BRASS DISK STAMPED "T2S, R7W, 1/4, S2, S11" "LS 3258" SET FLUSH IN A.C.

NGVD29 / 1990 ADJ.

STANTEC CONSULTING INC.
3105 EAST GUASTI ROAD
SUITE 100
ONTARIO, CA 91761
909.390.8880

PAUL S. GORE
No. 41370
Exp. 6/30/09
CIVIL
STATE OF CALIFORNIA

**NEW MODEL COLONY (EAST)
RIVERSIDE DRIVE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS
STA 314+00.00 TO STA 322+78.33**

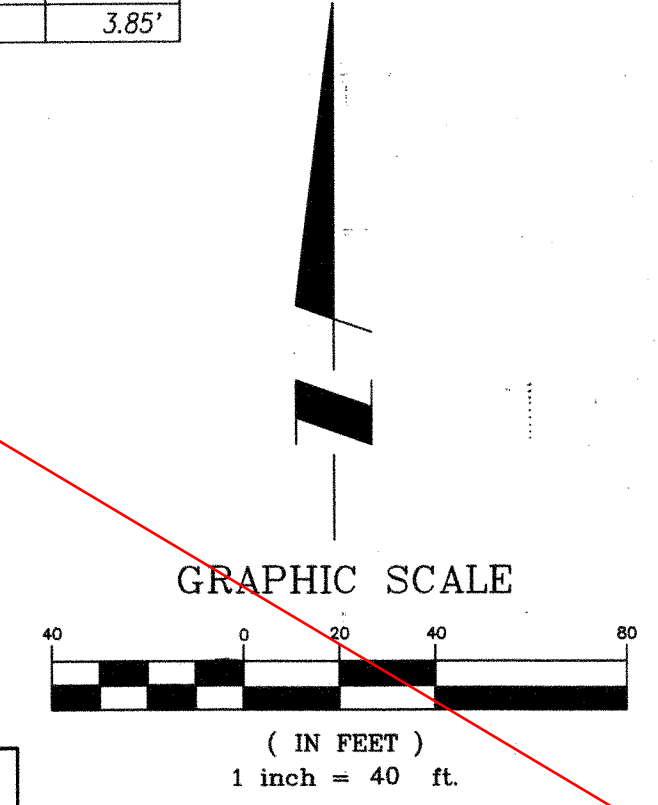
M-442

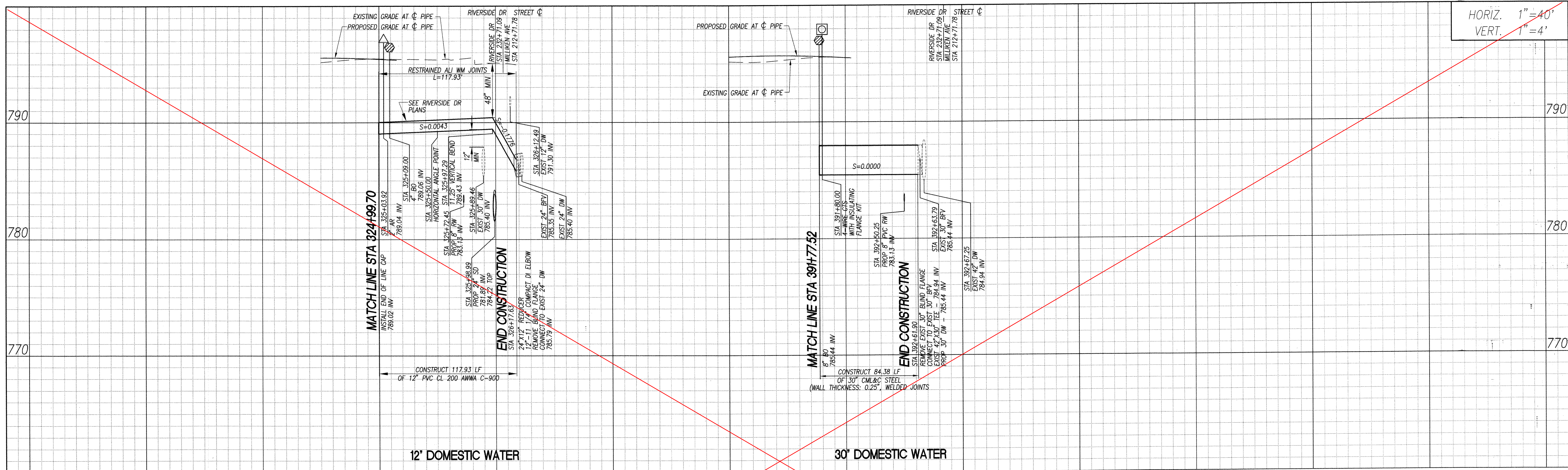
SHEET 18 OF 19

CONTRACT ACCOUNT
DWG. NO. W3264

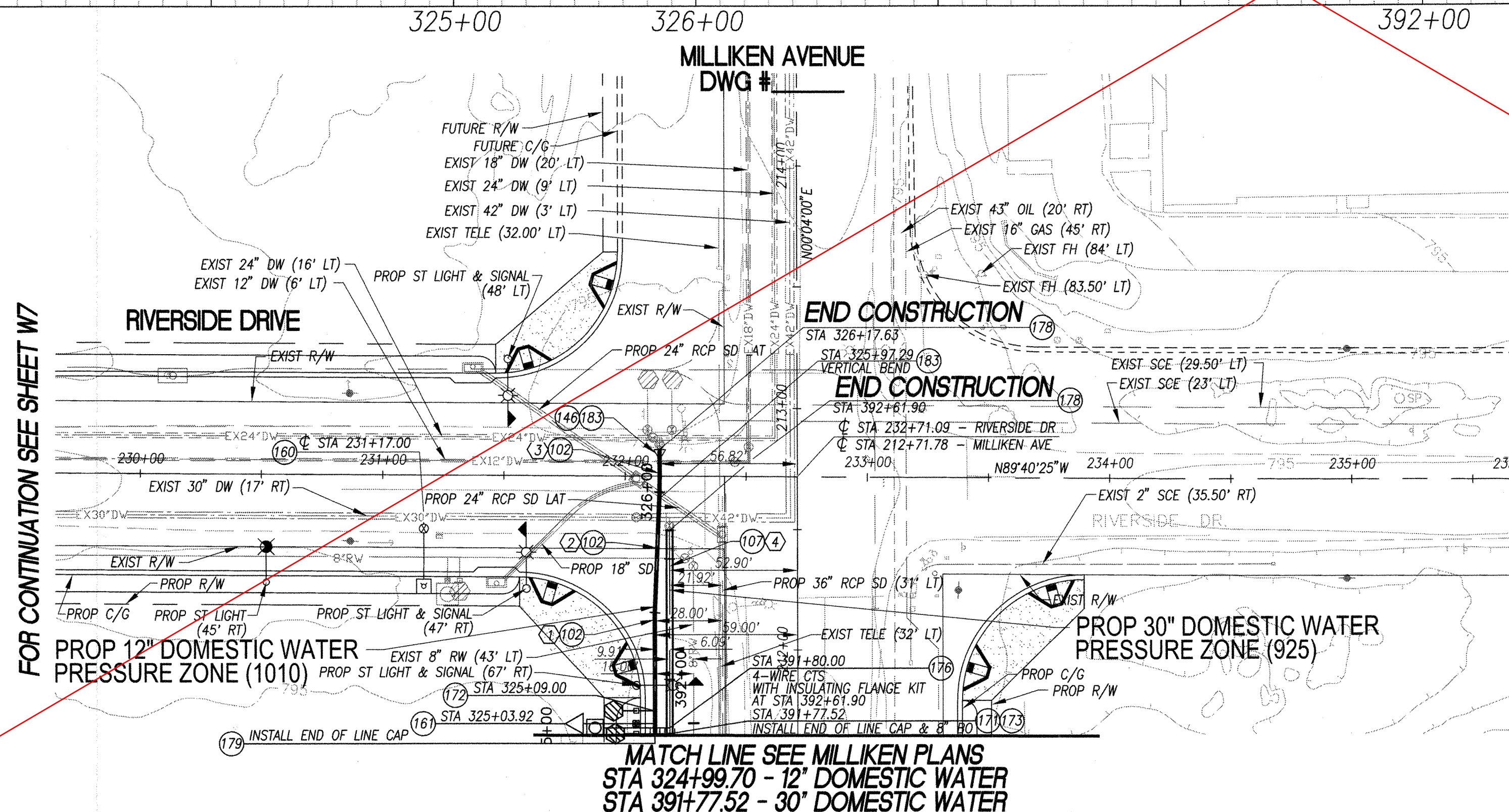
W13433

NOTE:
SEE STREET IMPROVEMENT PLANS FOR
DISPOSITION OF EXISTING SURFACE FEATURES





HORIZ. 1"=40'
VERT. 1"=4'



DOMESTIC WATER CONSTRUCTION NOTES

- (102) CONSTRUCT 12" DIA PVC CL 200, AWWA C-900 WATERLINE. TRENCHING AND BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
- (107) CONSTRUCT 30" DIA CML&C (WALL THICKNESS: 0.25", WELDED JOINTS) STEEL WATER LINE. TRENCHING & BEDDING PER CITY OF ONTARIO STD. DWG. NO. 1306.
- (146) CONSTRUCT 24"x12" CML&C STEEL REDUCER.
- (161) CONSTRUCT 2" AIR RELEASE AND VACUUM RELIEF VALVE ASSEMBLY PER CITY OF ONTARIO STD DWG NO. 4102
- (171) CONSTRUCT 8" BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD. DWG. NO. 4109
- (172) CONSTRUCT 4" TEMPORARY END OF MAIN BLOW-OFF ASSEMBLY PER CITY OF ONTARIO STD. DWG. NO. 4113
- (173) CONSTRUCT CML&C STEEL BULKHEAD (SIZE PER PLAN) & APPURTENANCES PER DETAIL 6 ON SHEET M1.
- (176) CONSTRUCT CORROSION PROTECTION TEST STATION PER SHEET CP-1
- (178) REMOVE BULKHEAD, BLIND FLANGE OR END OF LINE CAP AND JOIN EX. WATER LINE, SIZE PER PLAN.
- (179) CONSTRUCT PVC END CAP, SIZE PER PLAN
- (183) CONSTRUCT 12"-11 1/4" COMPACT DI ELBOW AND RESTRAINT JOINTS PER CITY OF ONTARIO STD DWG NO. 4010.

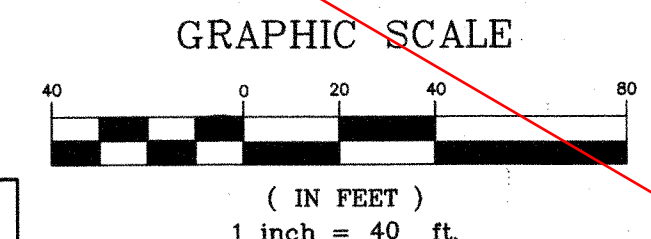
12" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(1)	N00°04'00"E	41.00'
(2)	N02°31'14"E	50.00'
(3)	N00°19'35"E	17.63'

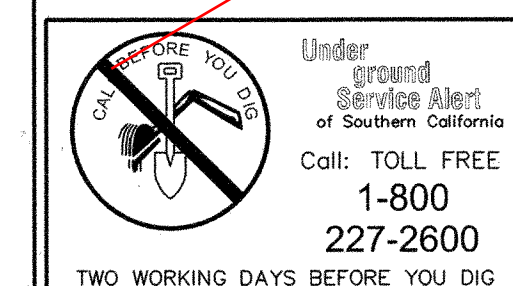
30" DOMESTIC WATER LINE DATA

NO.	BEARING	DISTANCE
(4)	N00°09'00"E	84.38'

NOTE:
SEE STREET IMPROVEMENT PLANS FOR
DISPOSITION OF EXISTING SURFACE FEATURES



W8



CORNELL KASBERGEN & ANNETTE THERESA KASBERGEN
GEORGE KASBERGEN & KARA KASBERGEN
JACK KASBERGEN & ELLIE MAE KASBERGEN
APN 0218-171-12

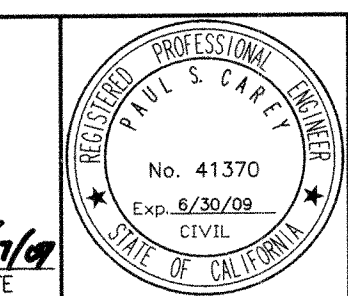
REVISIONS			
MARK	DATE	BY	APPROVED / RCE NO.

CITY OF ONTARIO

RECOMMENDED BY: [Signature]
44485 EXP. 3/31/08 12-11-07
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BENCH MARK No. S.P.S.N 00789 ELEV. 785.572
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No. 41370
Exp. 6/30/09
CIVIL
PAUL S. CARP
C.E. NO. EXP. DATE



NEW-MODEL COLONY (EAST)
MILLIKEN AVENUE ZONE 1010
DOMESTIC WATER IMPROVEMENT PLANS
12" AND 30" DOMESTIC WATER

M-442

SHEET 19 OF 19
CONTRACT
ACCOUNT
DWG. NO. W3265
W13434