

# NIPOMO COMMUNITY SERVICES DISTRICT WILLOW ROAD WATERLINE EXTENSION PHASE II COUNTY OF SAN LUIS OBISPO, CALIFORNIA

## WATER LINE NOTES

- ALL NEW WATER FACILITIES IDENTIFIED ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCSD STANDARD SPECIFICATIONS, LATEST EDITION.
- THE DISTRICT SHALL BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO START OF CONSTRUCTION. TELEPHONE (805) 929-1133. CONSTRUCTION WILL NOT TAKE PLACE ON WEEKENDS, OR HOLIDAYS, UNLESS SPECIFICALLY APPROVED BY DISTRICT.
- ALL PIPE, FITTINGS, MATERIALS, AND INSTALLATION SHALL CONFORM TO THE LATEST EDITIONS OF THE AWWA SPECIFICATIONS.
- CONTRACTORS WILL COORDINATE ALL TIE-INS OF NEW WATER MAINS TO EXISTING WATER MAINS WITH THE DISTRICT TO MINIMIZE SERVICE INTERRUPTIONS. PROVIDE AT LEAST TWO (2) WORKING DAYS NOTICE PRIOR TO CONSTRUCTION.
- THE WATER SYSTEM, INCLUDING LATERALS, SHALL PASS HYDROSTATIC TESTING PRIOR TO PLACING STREET PAVEMENT.
- ALL VALVES SHALL BE FLANGE CONNECTED TO FITTINGS WHEN LOCATED ADJACENT TO FITTINGS.
- ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 48-INCHES UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL DUCTILE IRON FITTINGS SHALL BE FLANGED OR MECHANICAL JOINTS UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROPRIATE ENCROACHMENT PERMITS FOR THIS PROJECT.
- THE CONTRACTOR SHALL DISINFECT PIPELINES PER DISTRICT STANDARDS.

## GENERAL PIPELINE CONDITIONS

- ALL STATIONING IS BASED ON THE CONSTRUCTION CENTERLINE OF ROAD AS DEFINED IN THE "WILLOW ROAD EXTENSION PROJECT" FOR THE COUNTY OF SAN LUIS OBISPO, COUNTY PROJECT NO. 300129.
- THE CONTRACTOR SHALL MAINTAIN A CURRENT, COMPLETE, AND ACCURATE RECORD OF ALL CHANGES WHICH DEVIATE FROM THE CONSTRUCTION AS PROPOSED IN THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE AS-BUILT INFORMATION AS TO THE EXACT LOCATION BY CENTERLINE STATION AND MAIN DEPTH OF ALL WATER FACILITY APPURTENANCES: PIPE, VALVES, TEES, MARKERS, AND OTHER FEATURES FOR THE PURPOSE OF PROVIDING THE ENGINEER WITH A BASIS FOR RECORD DRAWINGS. NO CHANGES SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE DISTRICT ENGINEER.
- ALL UTILITY RELOCATIONS AND/OR ALTERATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AT HIS EXPENSE UNLESS OTHERWISE INDICATED IN THE PROJECT DOCUMENTS.
- IN THE EVENT THAT THE CONTRACTOR NOTICES IRREGULARITIES IN THE LINE OR GRADE HE SHALL BRING IT TO THE IMMEDIATE ATTENTION OF THE DISTRICT AND DESIGN ENGINEER. IF HE FAILS TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ERROR IN THE LINE AND GRADE AND NECESSARY RECONSTRUCTION TO CORRECT SUCH ERROR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS, FEES, BONDS, OR CHARGES IN CONNECTION WITH THE WORK SPECIFIED.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO MARK LOCATIONS AND SHALL POTHOLE ALL UTILITY CROSSINGS, PRIOR TO STAKING AND PRIOR TO ANY PIPELINE EXCAVATIONS TO ALLOW GRADE REVISIONS IF NECESSITATED BY ACTUAL LOCATIONS.
- DISTRICT ENGINEER OR REPRESENTATIVE SHALL REVIEW ALL CUT SHEETS TO CHECK GRADES PRIOR TO TRENCHING.
- THE CONTRACTOR SHALL, AT A MINIMUM, CONTACT THE FOLLOWING UTILITY COMPANIES, AND ANY ADDITIONAL UTILITIES IDENTIFIED BY UNDERGROUND SERVICE ALERT (USA), AT LEAST 48 HOURS BEFORE BEGINNING EXCAVATION AND SHALL VERIFY WHETHER OR NOT A REPRESENTATIVE OF EACH COMPANY WILL BE PRESENT DURING EXCAVATION.  
 UNDERGROUND SERVICE ALERT (USA) 800-642-2444  
 AT&T - MEMBER USA OR 805-546-7447  
 THE GAS COMPANY - MEMBER USA OR 805-928-1541  
 PACIFIC GAS & ELEC. CO. - MEMBER USA OR 805-346-2250  
 CHARTER CABLE TELEVISION 805-468-4423  
 NIPOMO COMMUNITY SERVICES DISTRICT 805-929-1133
- INTERFERING PORTIONS OF ABANDONED UTILITIES SHALL BE REMOVED AND DISPOSED OF AS UNSUITABLE MATERIAL BY THE CONTRACTOR. THE CUT ENDS SHALL BE PLUGGED WITH BRICK AND MORTAR OR CONCRETE.
- ALL DUCTILE IRON PIPE SHALL BE PRESSURE CLASS 350, UNLESS OTHERWISE SPECIFIED. JOINTS SHALL BE FULLY RESTRAINED (TR-FLEX OR APPROVED EQUAL) WHERE SPECIFIED.

## SPECIAL AREA REQUIREMENTS

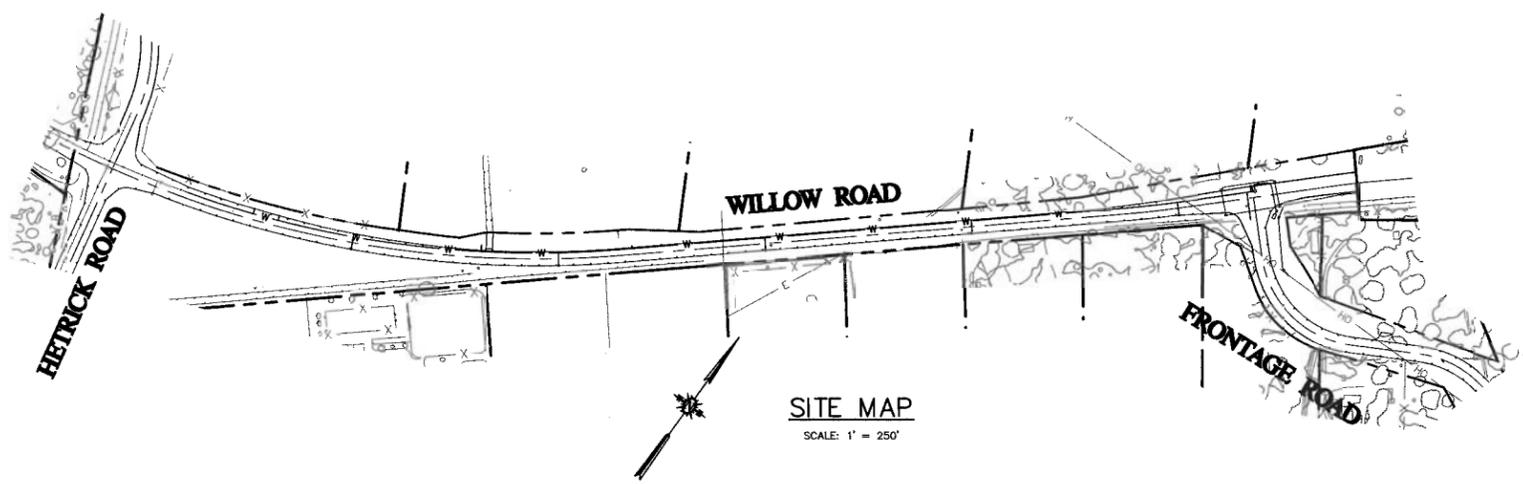
OTHER PROJECTS MAY BE ONGOING WITHIN OR NEAR THE PROJECT LIMITS DURING THE CONTRACT PERIOD. THE CONTRACTOR SHALL COORDINATE THE WORK WITH THE OTHER CONTRACTORS, UTILITIES, ETC., SUCH THAT ALL PROJECTS CAN BE DILIGENTLY PURSUED TO THEIR COMPLETION. THE CONTRACTOR SHALL INCLUDE IN THE BID ALL COSTS FOR COORDINATING, SCHEDULING, MEETINGS, AND DELAYS THAT RESULT FROM INTERFACING WITH CONCURRENT WORK. THE FOLLOWING IS A LIST OF THE VARIOUS PROJECTS (NOT INCLUSIVE):

- STATE HIGHWAY 101, WILLOW ROAD, FRONTAGE ROAD, AND THOMPSON AVE IMPROVEMENTS PER PROJECT PLANS, OR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY, COUNTY OF SAN LUIS OBISPO, CALIFORNIA. COUNTY PROJECT NO. 05-474503.
- UTILITY RELOCATION WORK ASSOCIATED WITH STATE HIGHWAY 101, WILLOW ROAD, FRONTAGE ROAD, AND THOMPSON AVE IMPROVEMENTS PER PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY PROJECT, COUNTY OF SAN LUIS OBISPO, CALIFORNIA. COUNTY PROJECT NO. 05-474503.

## SECTION AND DETAIL NUMBERING SYSTEM

- DETAIL ON DRAWING SHEET X. DETAIL TITLE: SWALE DETAIL. DETAIL NUMBER: 1. SCALE: 1"=1'-0". DRAWING(S) FROM WHICH DETAIL IS TAKEN: SHEET X.
- ON SHEET X, THIS DETAIL IS IDENTIFIED AS
- SECTIONS ARE CROSS-REFERENCED IN A SIMILAR MANNER, EXCEPT THAT SECTIONS ARE IDENTIFIED BY LETTER RATHER THAN NUMBER.

APPROVED BY: <i>Peter U. Lewis</i>	7/23/2010 DATE
PETER SEVCIK NCSD REPRESENTATIVE	
PRINT NAME: CAL FIRE REPRESENTATIVE	DATE
<i>Dave Flynn</i>	9/24/10
DAVE FLYNN, DEPUTY DIRECTOR OF PUBLIC WORKS, COUNTY OF SAN LUIS OBISPO, CALIFORNIA R.C.E. 43933 (EXP. JUNE 30, 2011)	DATE

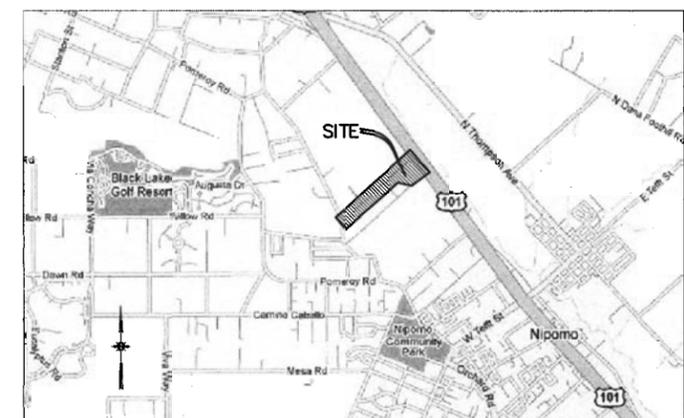


## LEGEND

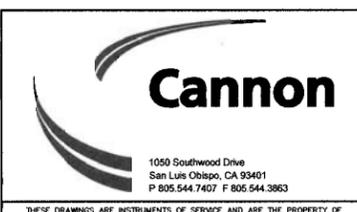
	EXISTING	PROPOSED
PROPERTY LINE	---	---
CENTER LINE	---	---
RIGHT-OF-WAY	---	---
EASEMENT	---	---
AC DIKE	---	---
CUT DAYLIGHT LINE	---	---
FILL DAYLIGHT LINE	---	---
EDGE OF PAVING	---	---
TRAFFIC STRIPING	---	---
FENCE	---	---
CONTOURS	---	---
SANITARY SEWER LINE	SS	SD
STORM DRAIN	SD	SD
GAS LINE	G	G
JOINT UTILITY TRENCH	JT	JT
OVERHEAD WIRES	OH	OH
UNDERGROUND ELECTRIC	E	E
UNDERGROUND CABLE	TV	TV
UNDERGROUND TELEPHONE	UT	UT
WATER MAIN	W	W
POWER POLE	⊙	⊙
STREET LIGHT	⊙	⊙
WATER VALVE	⊙	⊙
FIRE HYDRANT	⊙	⊙
WATER METER	⊙	⊙
MONUMENT	⊙	⊙
TWO-WAY SIGN	⊙	⊙
AIR RELEASE VALVE	⊙	⊙
BLOW OFF	⊙	⊙
ASBESTOS CEMENT PIPE		ACP
CENTERLINE		CL
DUCTILE IRON PIPE		DIP
ELEVATION		ELEV.
FLANGED JOINT		FLG
INNER DIAMETER		I.D.
INVERT		INV.
MECHANICAL JOINT		MJ
NIPOMO COMMUNITY SERVICES DISTRICT		NCSD
OUTER DIAMETER		O.D.
POINT OF CONNECTION		POC
POLYVINYL CHLORIDE		PVC

## SHEET INDEX

SHEET	TITLE	STA	TO
SHEET 1	TITLE SHEET		
SHEET 2	SHEET LAYOUT		
SHEET 3	WILLOW ROAD PLAN & PROFILE	325+73.95	336+50
SHEET 4	WILLOW ROAD PLAN & PROFILE	336+50	348+50
SHEET 5	WILLOW ROAD PLAN & PROFILE	348+50	358+00
SHEET 6	DETAIL SHEET (1)		
SHEET 7	DETAIL SHEET (2)		



VICINITY MAP  
N.T.S.



<b>NCSD WILLOW ROAD WATERLINE EXTENSION - PHASE II TITLE SHEET</b> COUNTY OF SAN LUIS OBISPO, CALIFORNIA		
DRAWN BY AJS	DATE 09/20/2010	CA JOB NO. 090235
CHECKED BY <i>[Signature]</i>	SCALE AS SHOWN	SHEET 1 OF 7

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF CANNON. ALL DESIGN AND INFORMATION ON THESE DRAWINGS ARE FOR USE OF THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE, OR REPRODUCED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF CANNON.

**PROJECT COORDINATE SYSTEM**

HORIZONTAL CONTROL FOR THIS PROJECT IS BASED UPON THE NORTH AMERICAN DATUM OF 1983, CALIFORNIA STATE PLANE COORDINATES ZONE V BETWEEN FOUND GOVERNMENT CONTROL STATIONS "TEFFT" (PID: FV1436) AND "MESSER" (PID: FV1519), BEARING BEING N34°52'18"W.

**CONSTRUCTION CENTERLINE**

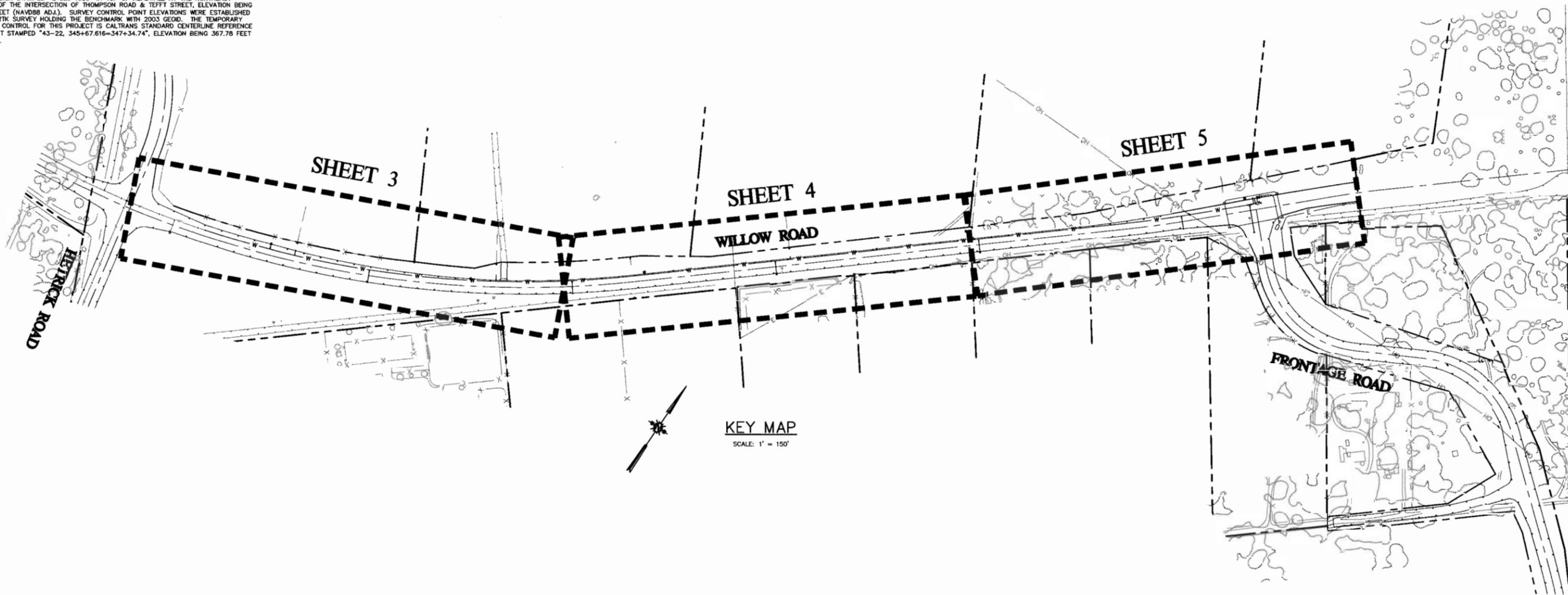
THE CONSTRUCTION CENTERLINES AND STATIONING SHOWN IN THESE DRAWINGS ARE INTENDED TO BE IDENTICAL TO THE CONSTRUCTION CENTERLINES AND STATIONING DEFINED IN THE COUNTY OF SAN LUIS OBISPO'S, PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY PROJECT, CONTRACT NO. 05-474503. THE INTENT OF THE CONSTRUCTION CENTERLINES AND STATIONING IS TO HORIZONTALLY DEFINE THE LOCATION OF THE WATERLINE AND APPURTENANCES AND TO RELATE THE PLAN VIEW TO THE PROFILE VIEW BY STATION.

**BOUNDARY DISCLAIMER**

THIS SURVEY WAS COMPILED FOR COUNTY OF SAN LUIS OBISPO, CALIFORNIA, PUBLIC WORKS & TRANSPORTATION DEPARTMENT'S, PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY PROJECT, COUNTY CONTRACT NO. 05-474503, AND IS TO BE USED FOR TOPOGRAPHIC PURPOSES ONLY. THE BOUNDARY INFORMATION SHOWN HEREON IS INTENDED FOR ORIENTATION ONLY AND SUCH IS NOT INFERRED OR IMPLIED TO BE A BOUNDARY SURVEY. FOR FURTHER INFORMATION, SEE COUNTY OF SAN LUIS OBISPO'S, PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY PROJECT, SHEETS CS-1 & CS-2.

**PROJECT ELEVATIONS**

VERTICAL CONTROL FOR THIS PROJECT IS BASED ON BENCHMARK Q-529 (PID FV0764) BEING A DISK STAMPED "Q 529 1956" IN TOP OF HEADWALL AT THE NORTHEAST CORNER OF THE INTERSECTION OF THOMPSON ROAD & TEFFT STREET, ELEVATION BEING 332.32 FEET (NAVD88 ADA). SURVEY CONTROL POINT ELEVATIONS WERE ESTABLISHED BY GPS RTK SURVEY HOLDING THE BENCHMARK WITH 2003 GEOD. THE TEMPORARY VERTICAL CONTROL FOR THIS PROJECT IS CALTRANS STANDARD CENTERLINE REFERENCE MONUMENT STAMPED "43-22, 345+67.616=347+34.74", ELEVATION BEING 367.78 FEET (NAVD88).



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REV. NO	DATE	REVISED	DESTROY ALL PRINTS BEARING EARLIER DATE	REV. BY	CHK. BY	APPR. BY

**Cannon**  
 1050 Southwood Drive  
 San Luis Obispo, CA 93401  
 P 805.544.7407 F 805.544.3863

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF CANNON. ALL DESIGNS AND INFORMATION ON THESE DRAWINGS ARE FOR USE OF THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE OR REPRODUCED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF CANNON.

**NCSO WILLOW ROAD  
 WATERLINE EXTENSION - PHASE II  
 SHEET LAYOUT  
 COUNTY OF SAN LUIS OBISPO, CALIFORNIA**

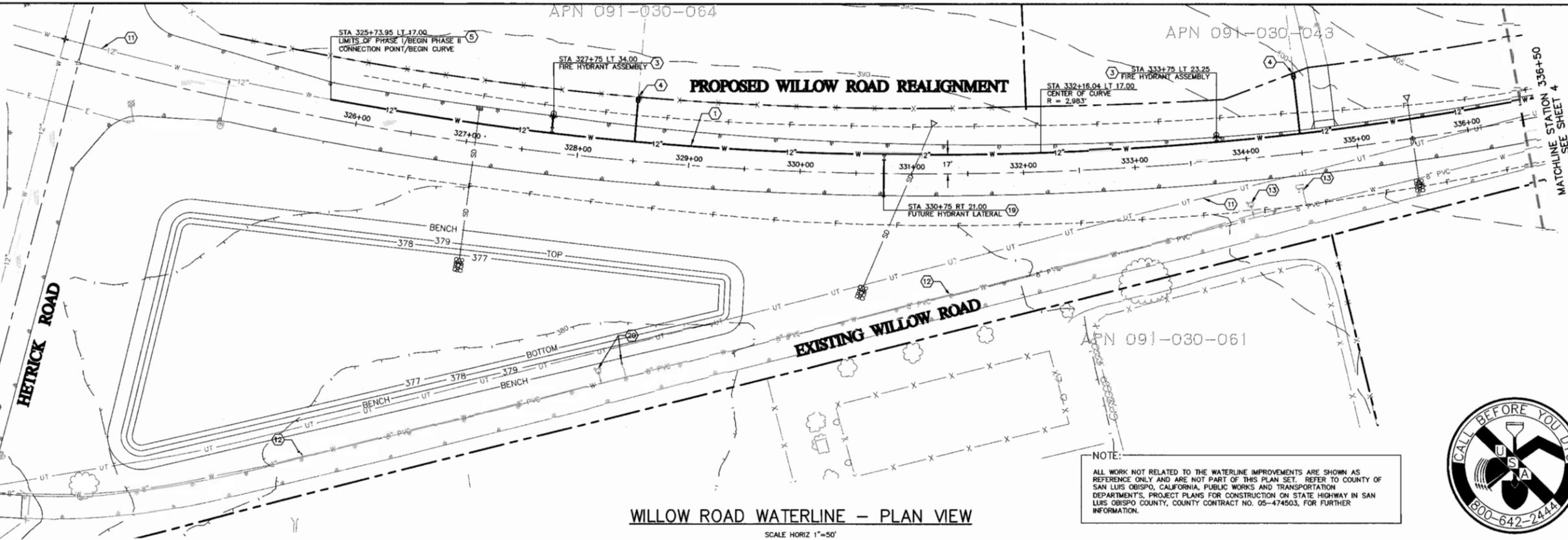
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CHECKED BY <i>[Signature]</i>	SCALE AS SHOWN	SHEET 2 OF 7

**GENERAL NOTES**

1. LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE INFORMATION PROVIDED BY UTILITY COMPANIES. IN INSTANCES WHERE NO VERTICAL UTILITY INFORMATION COULD BE FOUND, THE DEPTH OF THESE UTILITIES ARE SHOWN THREE FEET BELOW GROUND SURFACE.
2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL POthOLE AND VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL USE POSITIVE LOCATION METHODS PER CALTRANS PUBLICATION - "POLICY ON HIGH AND LOW RISK UNDERGROUND FACILITIES WITHIN HIGHWAY RIGHTS OF WAY".
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8. ALL ROAD AND STORM DRAIN IMPROVEMENTS, LOT LINES, PROPERTY LINES, RIGHT OF WAY LINES, AND PUBLIC UTILITY EASEMENT LINES ARE APPROXIMATED AND SHOWN FOR REFERENCE ONLY USING INFORMATION PROVIDED BY COUNTY OF SAN LUIS OBISPO, CALIFORNIA, PUBLIC WORKS AND TRANSPORTATION DEPARTMENTS, PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY, COUNTY CONTRACT NO. 05-474503.

APN 091-030-064

APN 091-030-043



**WILLOW ROAD WATERLINE - PLAN VIEW**

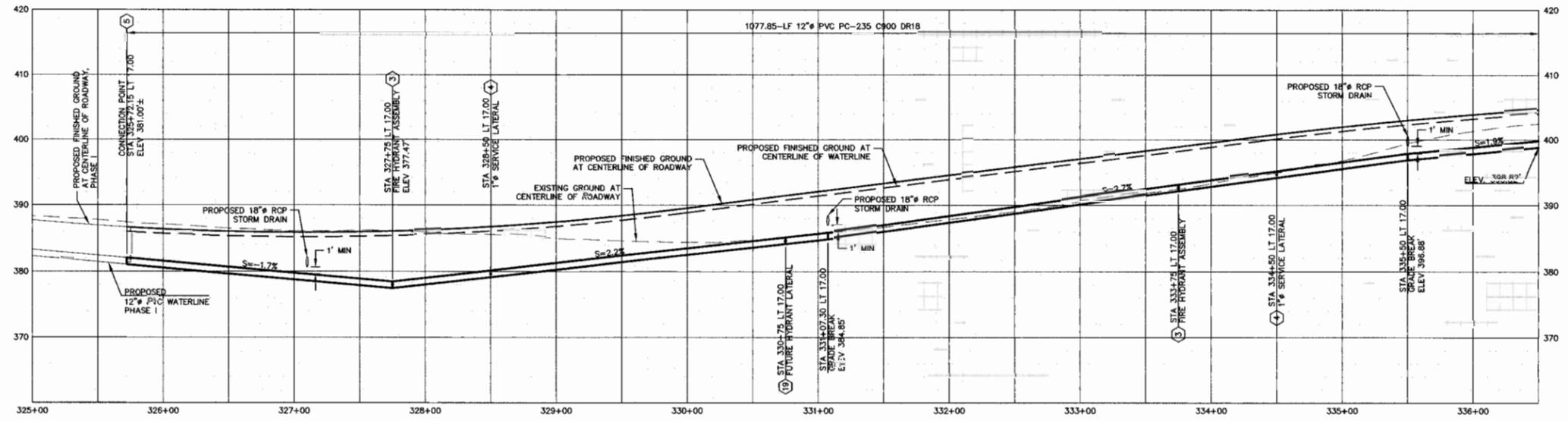
SCALE HORIZ 1"=50'

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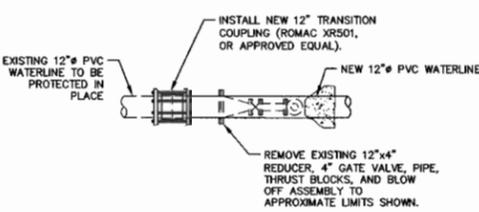
**CONSTRUCTION NOTES**

1. INSTALL NEW 12" PVC PC-235 C900 DR18 WATER MAIN IN OPEN TRENCH PER NCSD REQUIREMENTS AND BACKFILL PER COUNTY OF SAN LUIS OBISPO STANDARD DETAIL U-4, SHEET 6.
3. INSTALL NEW FIRE HYDRANT PER NIPOMO COMMUNITY SERVICES DISTRICT STANDARD DRAWING W-6, SHEET 7.
4. INSTALL NEW 1" WATER SERVICE LATERAL AND METER PER NCSD STANDARD DRAWING W-8, SHEET 7, AND CONNECT TO EXISTING RESIDENCE. EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION.
5. CONNECT TO EXISTING (PHASE I) 12" WATERLINE PER CONNECTION DETAIL 1, THIS SHEET.
11. EXISTING UTILITY TO BE PROTECTED IN PLACE.
12. EXISTING WATERLINE TO BE ABANDONED IN PLACE.
13. RELOCATE EXISTING UTILITY AS NECESSARY TO MAINTAIN WATER SERVICE DURING CONSTRUCTION. RECONNECT CUSTOMER SIDE WATER SERVICES LATERALS TO THE NEW WATER METERS AFTER THE NEW 12" WATERLINE HAS PASSED ALL TESTS AND IS ACCEPTED BY THE DISTRICT. ALL ABANDONED FACILITIES SHALL HAVE THEIR SURFACE IMPROVEMENT REMOVED.
14. CAP EXISTING 8" PVC WATERLINE PER DETAIL 2, THIS SHEET.
19. INSTALL FUTURE FIRE HYDRANT LATERAL PER NCSD DETAIL W-6, SHEET 7, TO LIMITS SHOWN ON DETAIL 9, THIS SHEET. INSTALL END CAP WITH RESTRAINTS AS SHOWN IN DETAIL 4, THIS SHEET.
20. EXISTING ABOVE GROUND PORTION OF UTILITY TO BE REMOVED AT END OF CONSTRUCTION. CONTRACTOR TO COORDINATE WITH NCSD.

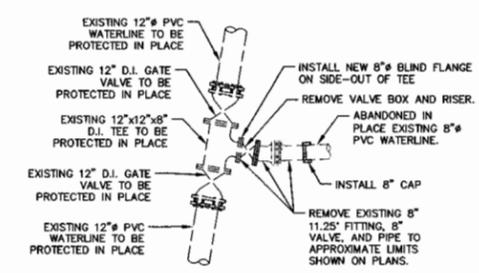


**WILLOW ROAD WATERLINE - PROFILE VIEW**

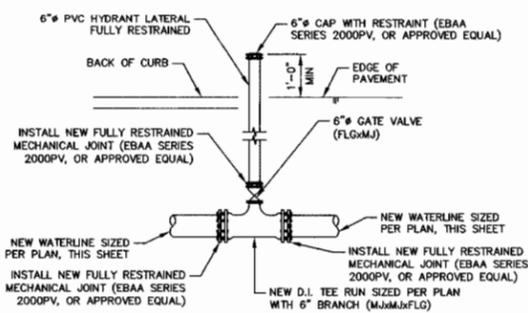
SCALE HORIZ 1"=50'; VERT. 1"=10'



**CONNECTION DETAIL - STA 325+73.95**  
SHEET 3 N.T.S. 1



**8" WATERLINE CAP DETAIL**  
SHEET 3 N.T.S. 2



**FUTURE HYDRANT CONNECTION DETAIL**  
ALL SHEETS N.T.S. 4



REV. NO	DATE	REVISED	DESTROY ALL PRINTS BEARING EARLIER DATE	REV. BY	CKD. BY	APPR. BY

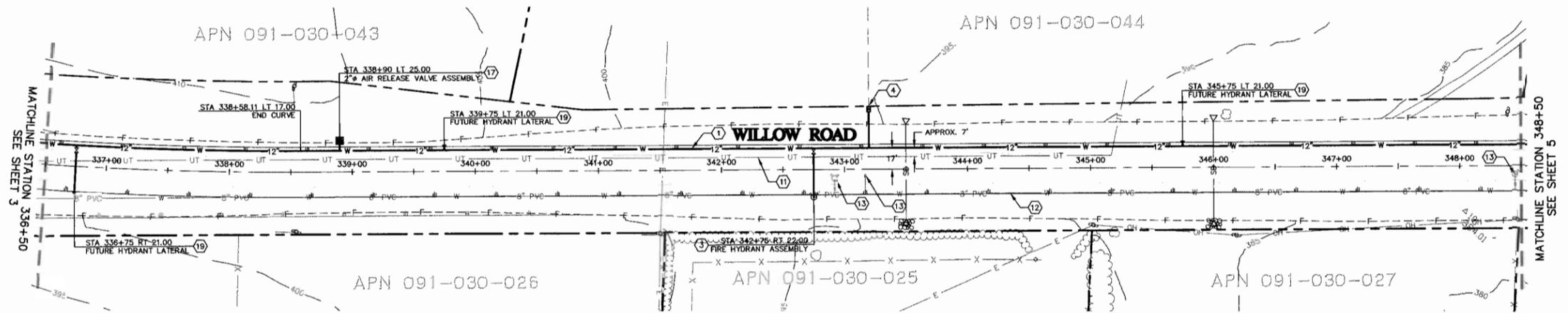
**NCSD WILLOW ROAD WATERLINE EXTENSION - PHASE II**  
**WILLOW ROAD PLAN & PROFILE**  
**STA 325+73.95 TO STA 336+50**  
COUNTY OF SAN LUIS OBISPO, CALIFORNIA

DRAWN BY AJS	DATE 09/20/2010	CA JOB NO. 090235
CHECKED BY JK	SCALE 1" = 50'	SHEET 3 OF 7

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**CONSTRUCTION NOTES**

- 1. INSTALL NEW 12" PVC PC-235 C900 DR18 WATER MAIN IN OPEN TRENCH PER NCSD REQUIREMENTS AND BACKFILL PER COUNTY OF SAN LUIS OBISPO STANDARD DETAIL U-4, SHEET 6.
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- 11. EXISTING UTILITY TO BE PROTECTED IN PLACE.
- 12. EXISTING WATERLINE TO BE ABANDONED IN PLACE.
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- 17. INSTALL 2" COMBINATION AIR RELEASE VALVE ASSEMBLY PER NCSD STANDARD DETAIL W-15, SHEET 7.
- 19. INSTALL FUTURE FIRE HYDRANT LATERAL PER NCSD DETAIL W-6, SHEET 7, TO LIMITS SHOWN ON DETAIL 9, THIS SHEET. INSTALL END CAP WITH RESTRAINTS AS SHOWN IN DETAIL 4, THIS SHEET.



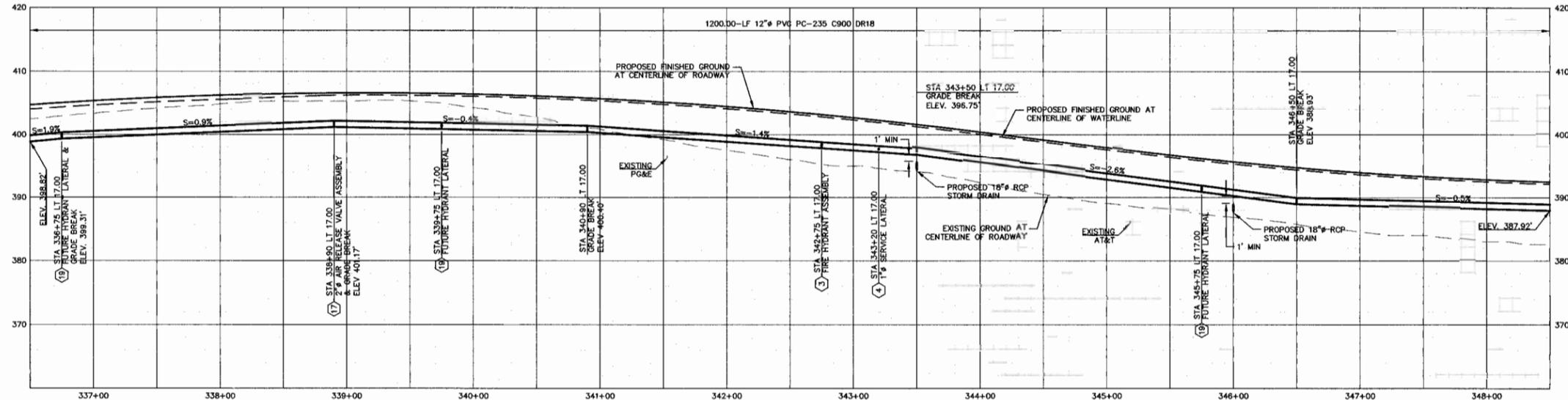
**WILLOW ROAD WATERLINE - PLAN VIEW**

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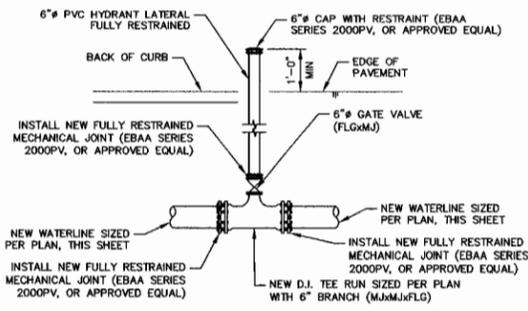
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**WILLOW ROAD WATERLINE - PROFILE VIEW**

SCALE HORIZ 1"=50'; VERT. 1"=10'



**FUTURE HYDRANT CONNECTION DETAIL**  
ALL SHEETS N.T.S.

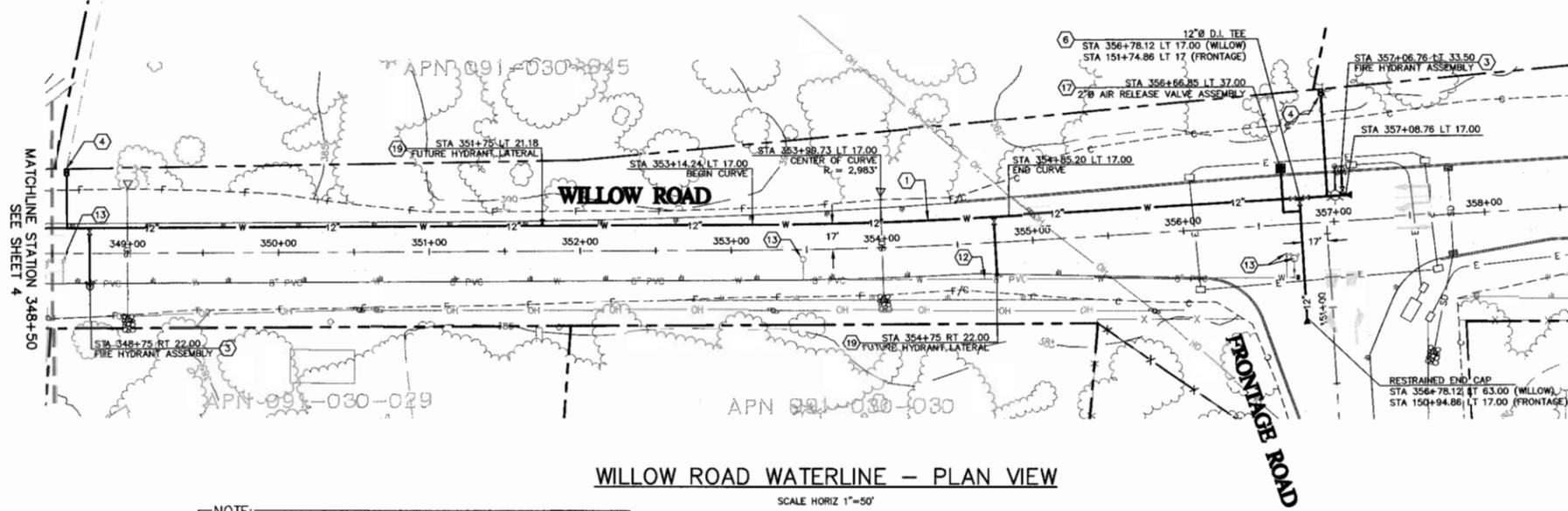


REV. NO.	DATE	REVISED	DESTROY ALL PRINTS BEARING EARLIER DATE	REV. BY	CKD. BY	APRD BY

<b>NCSD WILLOW ROAD WATERLINE EXTENSION - PHASE II</b> <b>WILLOW ROAD PLAN &amp; PROFILE</b> <b>STA 336+50 TO STA 348+50</b> COUNTY OF SAN LUIS OBISPO, CALIFORNIA		
DRAWN BY AJS	DATE 09/20/2010	CA JOB NO. 090235
CHECKED BY [Signature]	SCALE 1" = 50'	SHEET 4 OF 7

**GENERAL NOTES**

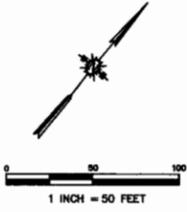
1. LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE INFORMATION PROVIDED BY UTILITY COMPANIES. IN INSTANCES WHERE NO VERTICAL UTILITY INFORMATION COULD BE FOUND, THE DEPTH OF THESE UTILITIES ARE SHOWN THREE FEET BELOW GROUND SURFACE.
2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL POthOLE AND VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL USE POSITIVE LOCATION METHODS PER CALTRANS PUBLICATION - "POLICY ON HIGH AND LOW RISK UNDERGROUND FACILITIES WITHIN HIGHWAY RIGHTS OF WAY".
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF THE DISCOVERY OF ANY UTILITY THAT WAS OMITTED FROM THE PLANS, INCORRECTLY SHOWN OR NOT PROPERLY MARKED. IF THE UTILITY DOES NOT PROVIDE LOCATION INFORMATION OR MARKING SERVICES IN THE FIELD, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
4. OVERHEAD UTILITIES ARE NOT SHOWN IN ALL INSTANCES. CONTRACTOR SHALL USE DUE CARE WHEN WORKING NEAR OR UNDER SAID UTILITIES AND SHALL PROTECT THEM IN PLACE.
5. THE CONTRACTOR SHALL NOT INTERRUPT THE UTILITY SERVICE FUNCTION, DISTURB THE SUPPORT BASE, OR MODIFY ANY FACILITY WITHOUT AUTHORITY FROM THE UTILITY OWNER.
6. EXISTING PIPELINES/UTILITIES THAT CROSS NEW SYSTEM PIPING OR SIMILAR EXCAVATIONS REQUIRED TO CONSTRUCT THE PIPING, SHALL BE PROTECTED IN PLACE, UNLESS OTHERWISE NOTED. ALL EXISTING PIPELINES/UTILITIES SHALL BE SUPPORTED ACROSS THE EXCAVATION DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER IF ANY UTILITY IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BEAR THE COSTS OF REPAIR OR REPLACEMENT OF ANY MARKED UTILITY WHERE DAMAGE WAS CAUSED BY THE CONTRACTOR'S ACTIVITIES.
8. ALL ROAD AND STORM DRAIN IMPROVEMENTS, LOT LINES, PROPERTY LINES, RIGHT OF WAY LINES, AND PUBLIC UTILITY EASEMENT LINES ARE APPROXIMATED AND SHOWN FOR REFERENCE ONLY USING INFORMATION PROVIDED BY COUNTY OF SAN LUIS OBISPO, CALIFORNIA, PUBLIC WORKS AND TRANSPORTATION DEPARTMENTS. PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY, COUNTY CONTRACT NO. 05-474503.



**WILLOW ROAD WATERLINE - PLAN VIEW**

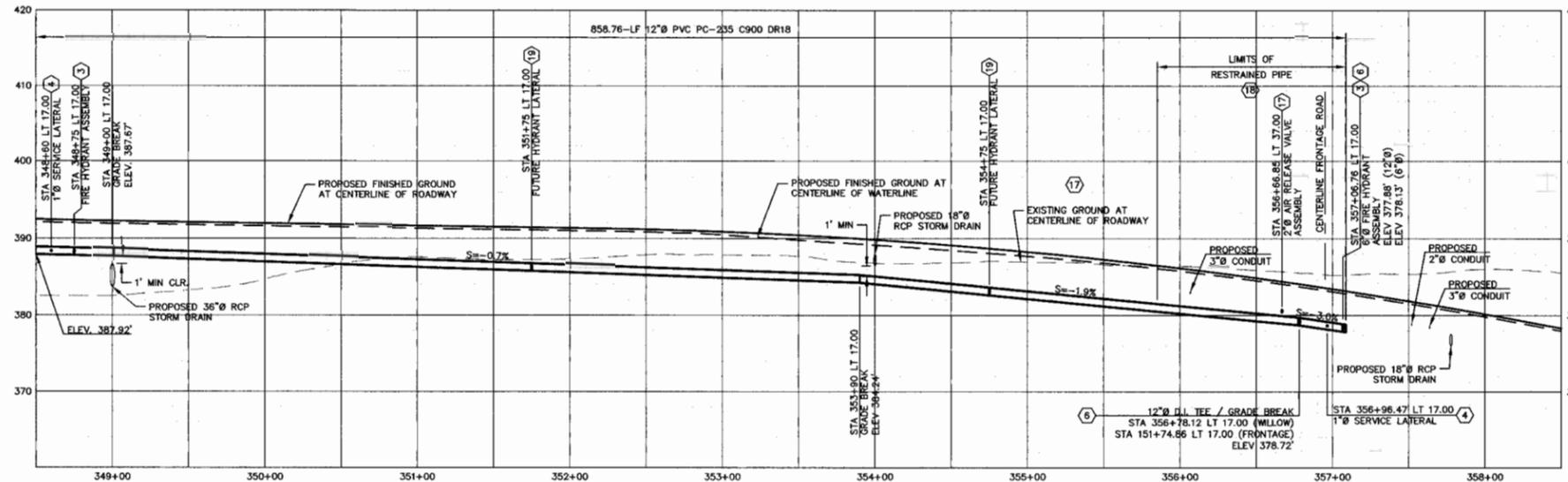
SCALE HORIZ 1"=50'

**NOTE:**  
ALL WORK NOT RELATED TO THE WATERLINE IMPROVEMENTS ARE SHOWN AS REFERENCE ONLY AND ARE NOT PART OF THIS PLAN SET. REFER TO COUNTY OF SAN LUIS OBISPO, CALIFORNIA, PUBLIC WORKS AND TRANSPORTATION DEPARTMENT'S, PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN LUIS OBISPO COUNTY, COUNTY CONTRACT NO. 05-474503, FOR FURTHER INFORMATION.



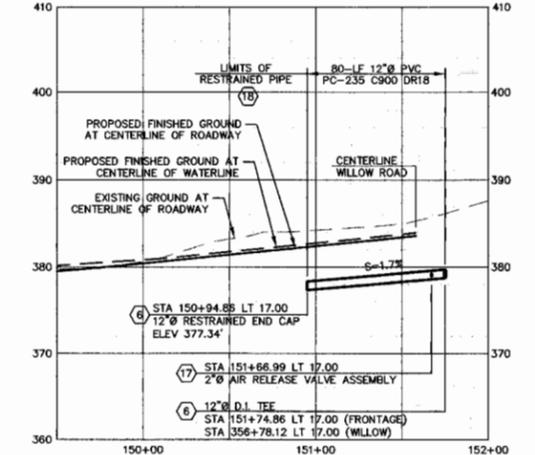
**CONSTRUCTION NOTES**

1. INSTALL NEW 12" PVC PC-235 C900 DR18 WATER MAIN IN OPEN TRENCH PER NCSD REQUIREMENTS AND BACKFILL PER COUNTY OF SAN LUIS OBISPO STANDARD DETAIL U-4, SHEET 6.
3. INSTALL NEW FIRE HYDRANT PER NIPOMO COMMUNITY SERVICES DISTRICT STANDARD DRAWING W-6, SHEET 7.
4. INSTALL NEW 1" WATER SERVICE LATERAL AND METER PER NCSD STANDARD DRAWING W-8, SHEET 7, AND CONNECT TO EXISTING RESIDENCE. EXACT LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION.
6. INSTALL WATERLINE CONNECTION PER CONNECTION DETAIL 3, THIS SHEET.
12. EXISTING WATERLINE TO BE ABANDONED IN PLACE.
13. RELOCATE EXISTING UTILITY AS NECESSARY TO MAINTAIN WATER SERVICE DURING CONSTRUCTION. RECONNECT CUSTOMER SIDE WATER SERVICES LATERALS TO THE NEW WATER METERS AFTER THE NEW 12" WATERLINE HAS PASSED ALL TESTS AND IS ACCEPTED BY THE DISTRICT. ALL ABANDONED FACILITIES SHALL HAVE THEIR SURFACE IMPROVEMENT REMOVED.
18. FULLY RESTRAIN PVC PIPE TO LIMITS SHOWN USING 12" BELL RESTRAINT HARNESS (EBAA IRON SERIES 1600, OR APPROVED EQUAL).
17. INSTALL 2" COMBINATION AIR RELEASE VALVE ASSEMBLY PER NCSD STANDARD DETAIL W-15, SHEET 7.
19. INSTALL FUTURE FIRE HYDRANT LATERAL PER NCSD DETAIL W-6, SHEET 7, TO LIMITS SHOWN ON DETAIL 5, THIS SHEET. INSTALL END CAP WITH RESTRAINTS AS SHOWN IN DETAIL 4, THIS SHEET.



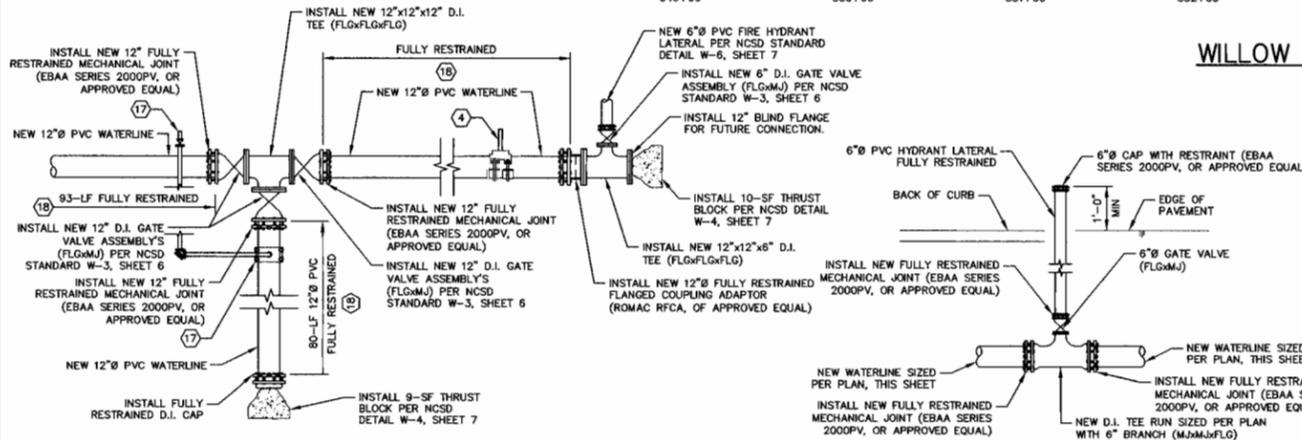
**WILLOW ROAD WATERLINE - PROFILE VIEW**

SCALE HORIZ 1"=50'; VERT. 1"=10'



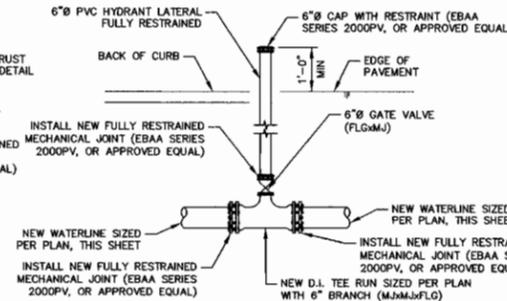
**FRONTAGE ROAD - PROFILE VIEW**

SCALE HORIZ 1"=50'; VERT. 1"=10'



**CONNECTION DETAIL - STA 356+78.12**  
SHEET 5 N.T.S.

3



**FUTURE HYDRANT CONNECTION DETAIL**  
ALL SHEETS N.T.S.

4

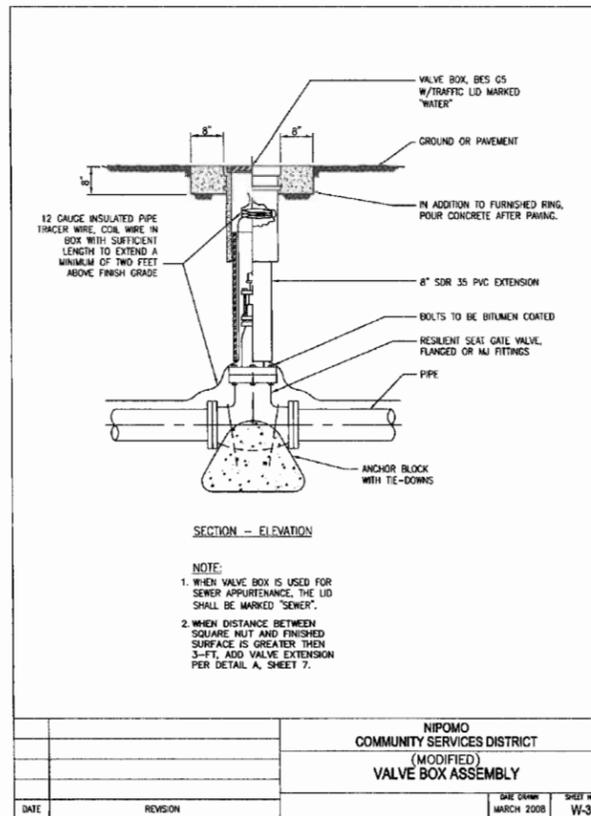
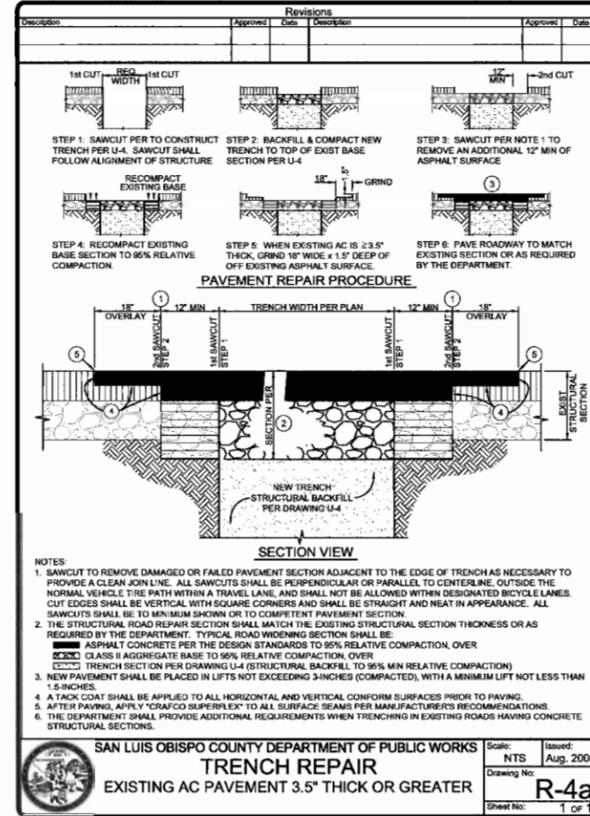
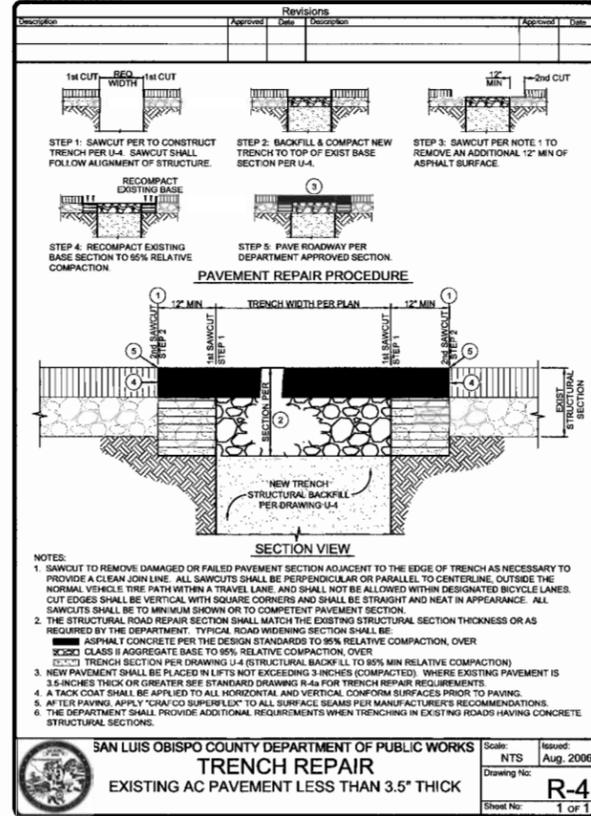
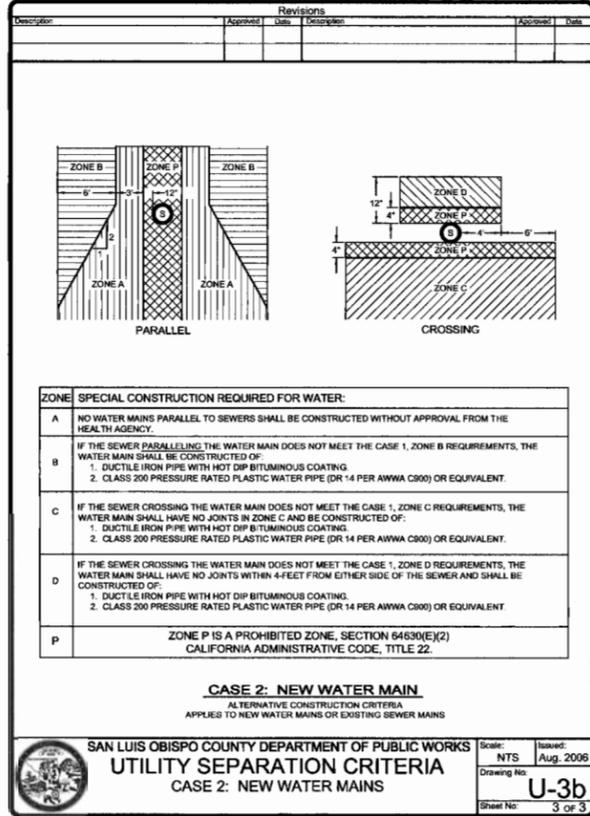
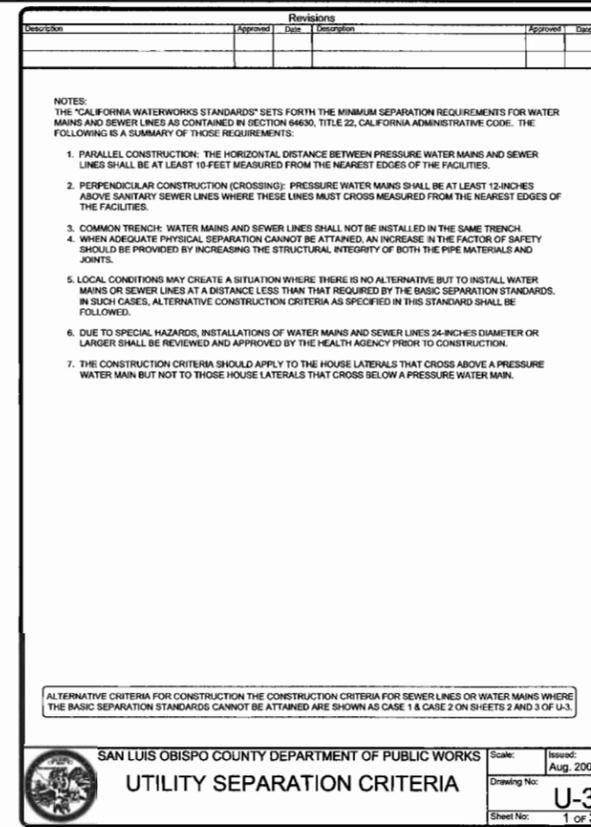
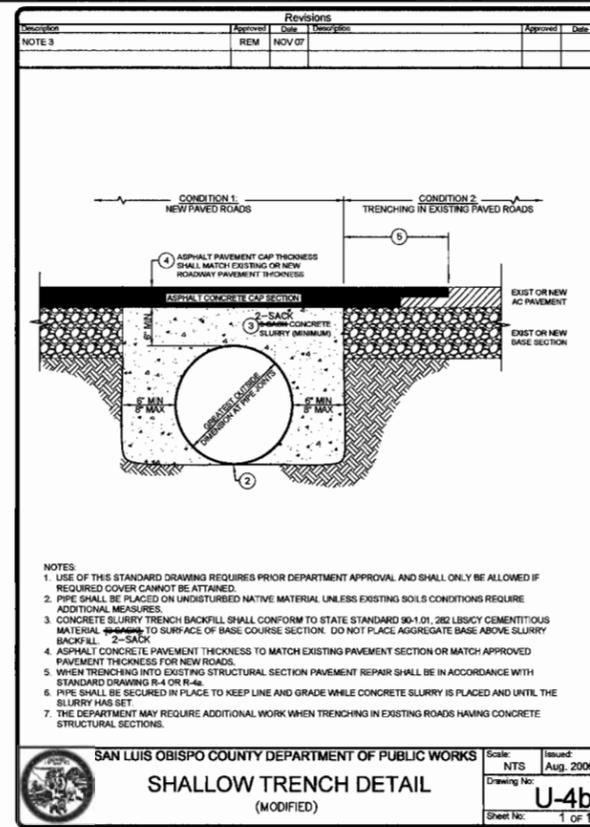
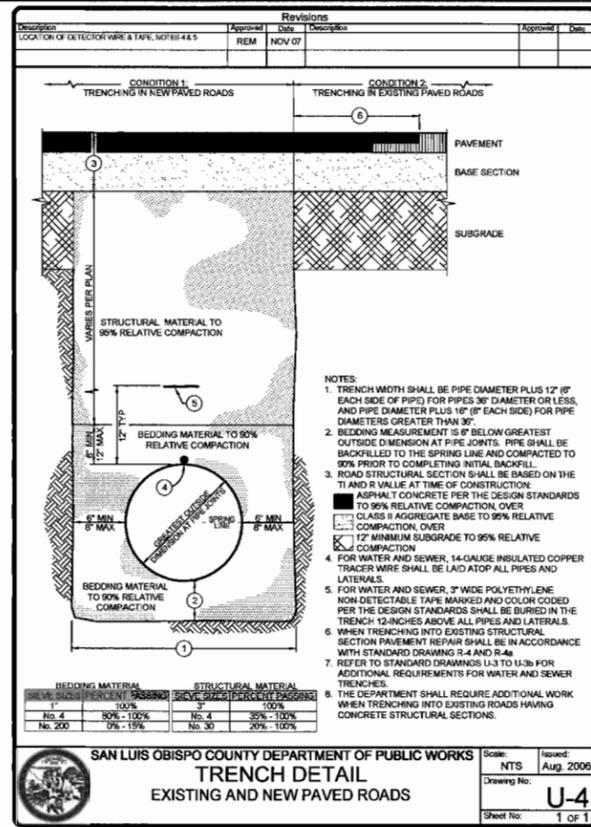
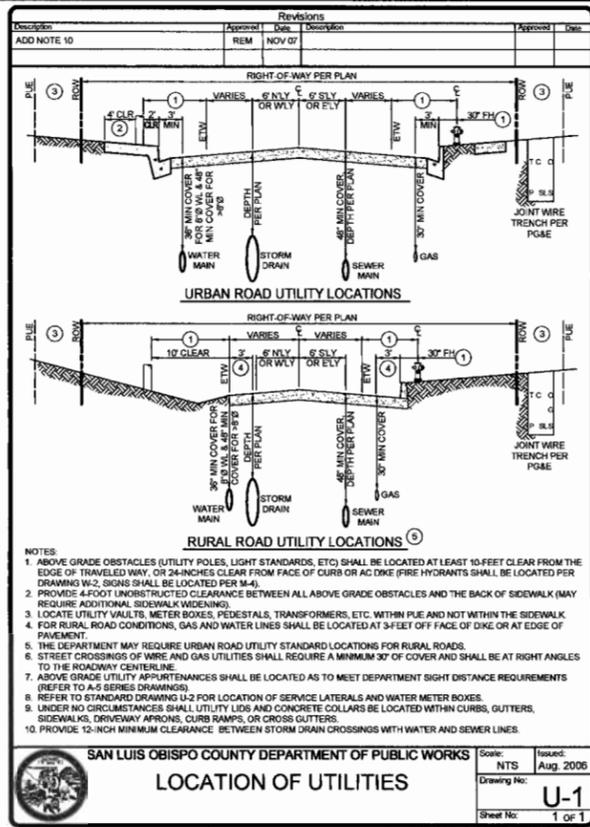
REV. NO.	DATE	REVISED	DESTROY ALL PRINTS BEARING EARLIER DATE	REV. BY	CKD. BY	APRD. BY



**NCSD WILLOW ROAD WATERLINE EXTENSION - PHASE II**  
**WILLOW ROAD PLAN & PROFILE**  
**STA 348+50 TO STA 358+00**  
**COUNTY OF SAN LUIS OBISPO, CALIFORNIA**

DRAWN BY AJS	DATE 09/20/2010	CA JOB NO. 090235
CHECKED BY HK	SCALE 1" = 50'	SHEET 5 OF 7

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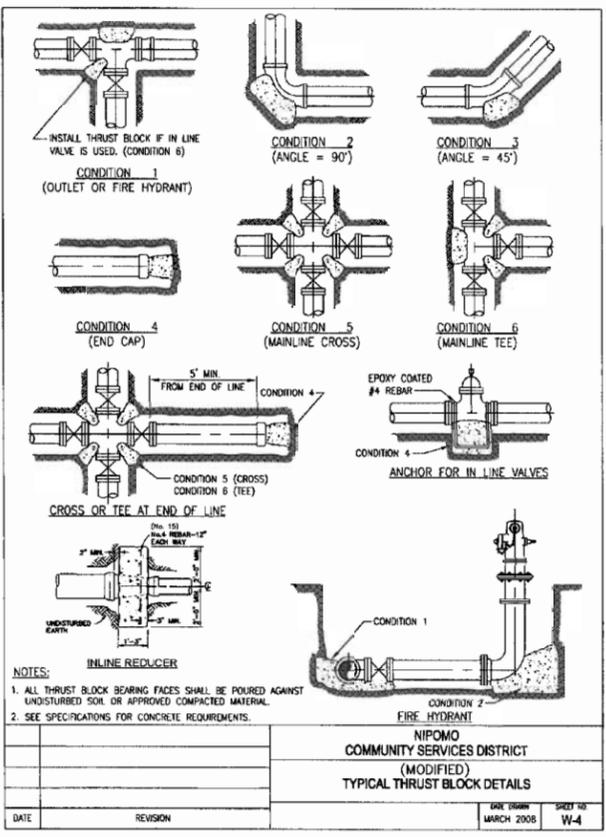


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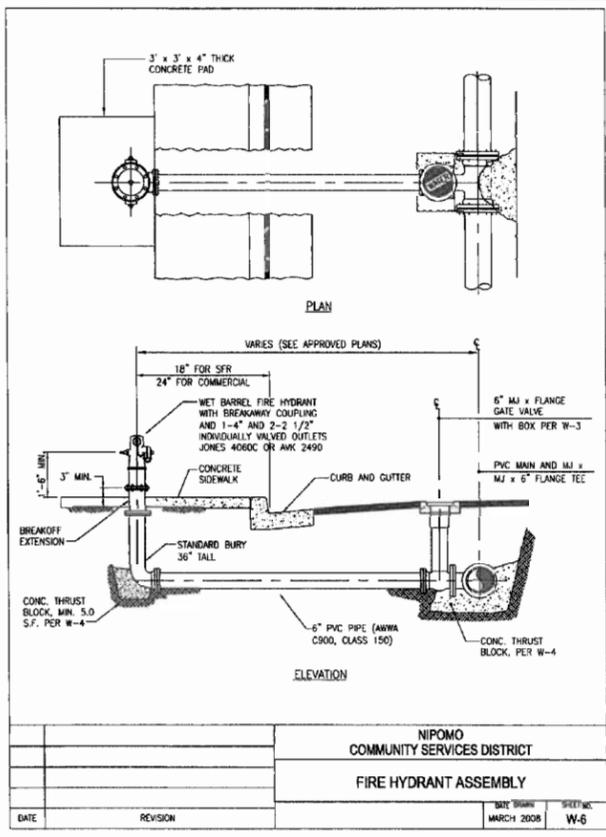
**CANNON**

1050 Southwood Drive  
San Luis Obispo, CA 93401  
P 805.544.7407 F 805.544.3963

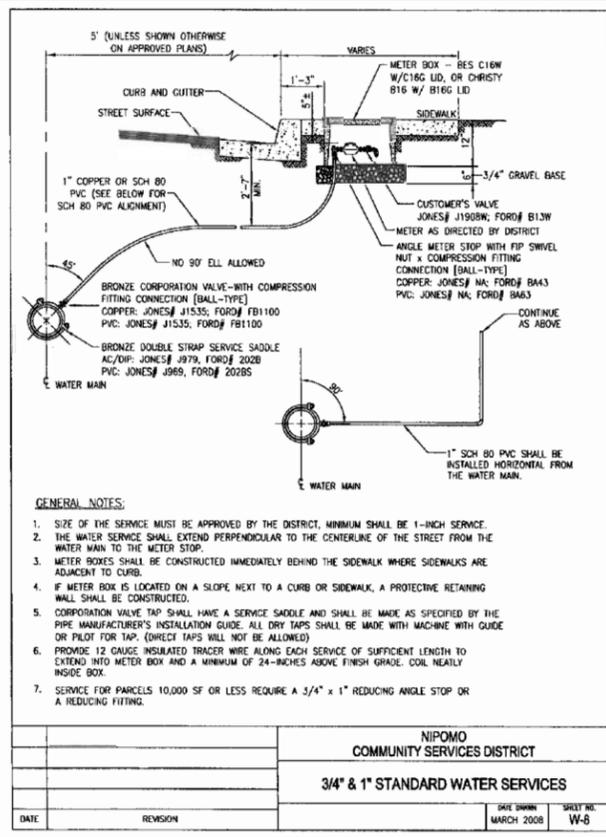
NCSO WILLOW ROAD WATERLINE EXTENSION - PHASE II DETAIL SHEET (1) COUNTY OF SAN LUIS OBISPO, CALIFORNIA	
DRAWN BY AJS	DATE 09/20/2010
CHECKED BY [Signature]	SCALE 1" = 50'
CA JOB NO. 090235	SHEET 6 OF 7



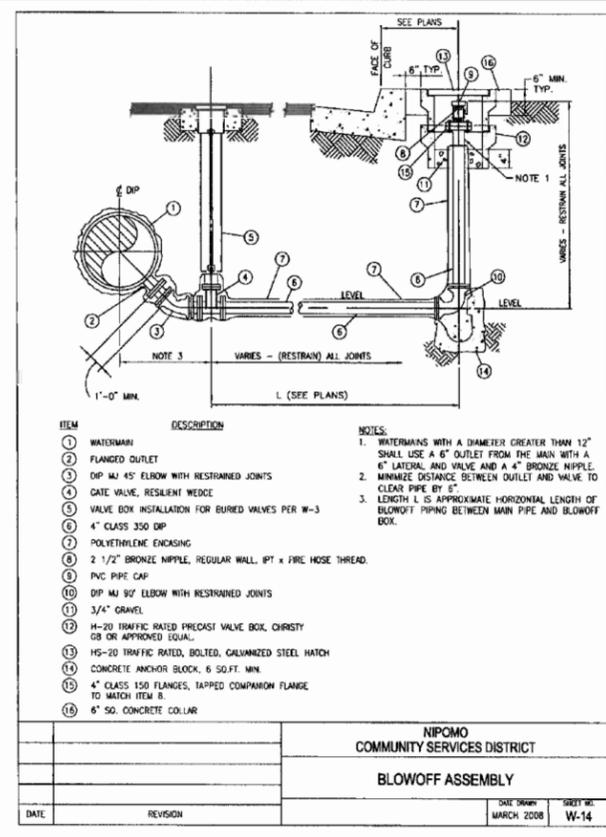
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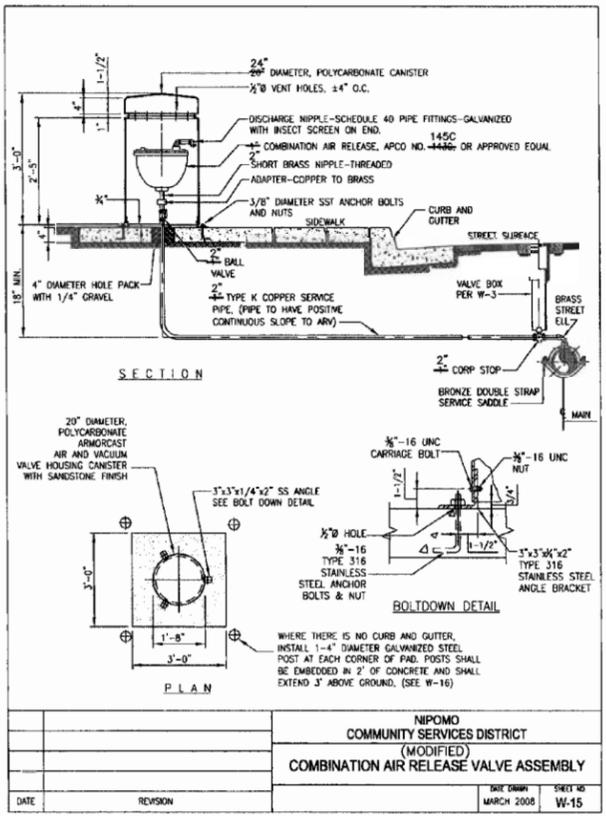
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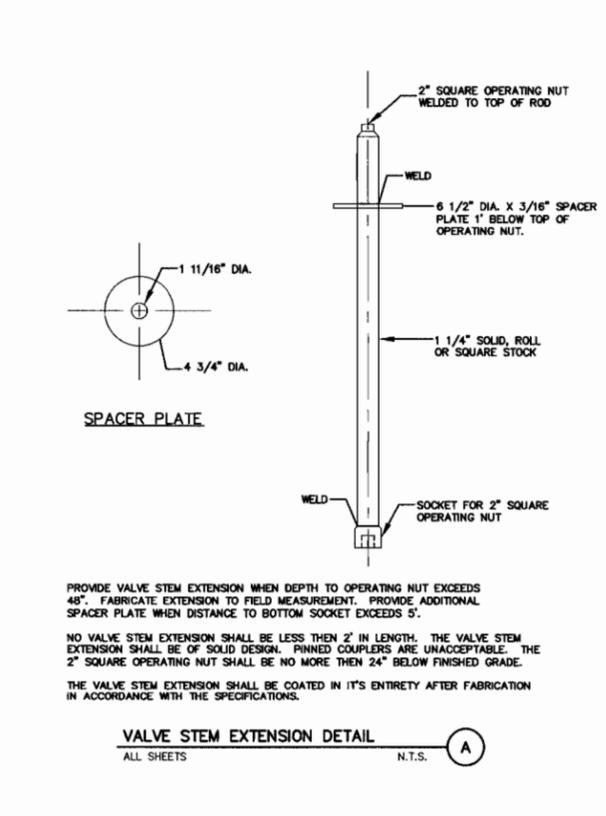
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		MARCH 2008			



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		MARCH 2008			



DATE	REVISION	DATE	BY	DATE	BY
		MARCH 2008			



DATE	REVISION	DATE	BY	DATE	BY
		MARCH 2008			

REV. NO.	DATE	REVISED	DESTROY ALL PRINTS BEARING EARLIER DATE	REV. BY	CKD. BY	APRD. BY



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**NCSO WILLOW ROAD WATERLINE EXTENSION - PHASE II**

**DETAIL SHEET (2)**

**COUNTY OF SAN LUIS OBISPO, CALIFORNIA**

DRAWN BY	DATE	CA JOB NO.
AJS	09/20/2010	090235
CHECKED BY	SCALE	SHEET
	1" = 50'	7 OF 7

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