SBMWD GENERAL NOTES: STANDARDS SPECIFICATIONS AND DRAWINGS ALL UTILITY LOCATIONS SHOWN ARE FROM RECORD INFORMATION ONLY AND ARE NOT A RESULT

- 1. THESE PLANS HAVE BEEN PREPARED FOR THE SAN BERNARDINO MUNICIPAL WATER DEPARTMENT (SBMWD). THESE PLANS ARE INTENDED TO SUPPLEMENT THE SBMWD'S WATER
- OF A FIELD SURVEY. CALL UNDERGROUND SERVICE ALERT AT 1-800-422-4133 48-HOURS ALL WATER LINE CONNECTION POINTS AND CRITICAL UTILITY CROSSING POINTS SHALL BE EXPOSED AND ACCURATELY LOCATED AT THE START OF CONSTRUCTION, AND THE SBMWD SHALL BE
- NOTIFIED OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF WORK. ALL ELEVATIONS SHOWN ON PLANS SHALL BE BASED ON A U.S.G.S. DATUM, AND SHALL SHOW ELEVATION FROM MEAN SEA LEVEL.
- ALL HORIZONTAL OR VERTICAL CHANGES IN PIPE ALIGNMENT DELINEATED ON THE PLANS AS "DEFLECTION BY JOINT" OR SHOWN WITHOUT BENDS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TOTAL ANGULAR DISPLACEMENT SHALL BE DISTRIBUTED THROUGH AS MANY JOINTS AS PRACTICABLE.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) - SBMWD WATER STANDARD SPECIFICATIONS, AND A.W.W.A. STANDARDS AND SPECIFICATIONS.
- APPROVAL OF THIS PLAN BY THE SBMWD DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR OF THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES WITHIN THE LIMITS OF THE
- DURING THE PERIOD OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN SUCH WARNINGS, SIGNS, STOP SIGNS, SIGNALS, BARRICADES AND OTHER SAFETY MEASURES AS DIRECTED BY THE CITY OF SAN BERNARDINO, DEVELOPMENT SERVICES DEPARTMENT WITH REFERENCE TO W.A.T.C.H. MANUAL.
- THE CONTRACTOR SHALL NOT OPEN MORE TRENCHES THAN CAN BE PROPERLY PROSECUTED IN A DAY'S OPERATION. ANY TRENCH UNAVOIDABLY LEFT OPEN DURING THE HOURS OF DARKNESS OR OVER A WEEKEND SHALL BE FENCED WITH 6-FOOT CHAIN LINK AND PROPERLY LIGHTED. OR BRIDGED BY A SBMWD APPROVED TRAFFIC PLATE WITH REFERENCE TO THE W.A.T.C.H.
- 10. THE CONTRACTOR SHALL REINSTALL PAVEMENT MARKINGS AND STRIPING DISTURBED BY HIS OPERATIONS.
- 11. A CAL/OSHA PERMIT REQUIRED FOR TRENCHES OVER 5' IN DEPTH.
- 12. THE CONTRACTOR SHALL PROVIDE SAFE AND CONTINUOUS PASSAGE FOR LOCAL PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES WITH REFERENCE TO THE W.A.T.C.H. MANUAL
- 13. TRAFFIC SIGNAL FUNCTIONS SHALL BE THE RESPONSIBILITY OF THE CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS; HOWEVER THE CONTRACTOR IS REQUIRED TO GIVE 48 HOUR NOTICE PRIOR TO CONSTRUCTION THAT WILL DAMAGE OR AFFECT ANY BURIED TRAFFIC
- 14. THE CONTRACTOR SHALL SO CONDUCT HIS OPERATIONS AS TO OFFER THE LEAST POSSIBLE OBSTRUCTION AND INCONVENIENCE TO THE PUBLIC AND HE SHALL HAVE UNDER CONSTRUCTION NO GREATER LENGTH OR AMOUNT OF WORK THAN HE CAN PROSECUTE PROPERLY WITH DUE REGARD TO THE RIGHTS OF THE PUBLIC. CONVENIENT ACCESS TO DRIVEWAYS, HOUSES AND BUILDINGS ALONG THE LINE OF WORK SHALL BE MAINTAINED. TEMPORARY CROSSINGS SHAL BE PROVIDED AND MAINTAINED IN GOOD CONDITION. NOT MORE THAN ONE CROSSING OR INTERSECTING STREET OR ROAD SHALL BE CLOSED AT ANY ONE TIME WITHOUT THE APPROVAL OF THE CITY OF SAN BERNDARINO DEVELOPMENT SERVICES DEPARTMENT. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUCH FENCES, BARRIERS, DIRECTIONAL SIGNS, LIGHTS, AND FLAG MEN AS ARE NECESSARY TO GIVE ADEQUATE WARNING TO THE PUBLIC AT ALL TIMES OF ANY DANGEROUS CONDITIONS TO BE ENCOUNTERED AS A RESULT OF THE CONSTRUCTION WORK AND TO GIVE
- STREET CUT PERMITS MUST BE OBTAINED FROM THE CITY OF SAN BERNARDINO DEVELOPMEN
- 16. ALL REMOVALS IN PAVED AREAS SHALL BE SAW CUT ON A NEAT STRAIGHT LINE PARALLEL TO THE PIPE LINE. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO PAVING OPERATIONS.
- 17. DUST SHALL BE CONTROLLED AT ALL TIMES BY APPROVED METHODS. 18. PUBLIC STREETS SHALL BE KEPT CLEAN AND FREE FROM DIRT AND/OR DEBRIS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED IN STREET CLEANING
- NECESSITATED BY HIS OPERATION. 19. ALL TRENCH BACK FILL SHALL BE TESTED AND CERTIFIED BY A SOILS ENGINEER PRIOR TO
- 20. 24 HOURS ADVANCE NOTICE IS REQUIRED FOR INSPECTION AND FIELD TIES. ARRANGEMENTS CAN
- BE MADE BY CALLING (909) 384-5391 BETWEEN 7:00 A.M. AND 4:30 P.M. WEEKDAYS. 21. NORMAL INSPECTION HOURS ARE 7:30 A.M. TO 4:00 P.M. MONDAY THROUGH FRIDAY EXCEPT LEGAL HOLIDAYS. REQUESTS FOR INSPECTION AT OTHER TIMES OR ON OTHER DAYS MUST BE SUBMITTED TO THE SBMWD ENGINEERING SECTION A MINIMUM OF 5 WORKING DAYS BEFORE THE INSPECTION IS REQUIRED. THE CONTRACTOR MUST BEAR THE COST OF SUCH OVERTIME INSPECTIONS AND WILL BE BILLED ACCORDINGLY NORMAL OVERTIME RATES ARE 1.5 TIMES THE BASE RATE PLUS OVERHEAD. OVERTIME INSPECTIONS WILL BE MADE SOLELY AT THE DISCRETION OF THE SBMWD AND BASED ON STAFF AVAILABILITY.
- THE CONTRACTORS WILL BE REQUIRED TO OBTAIN CITY BUSINESS LICENSES. INSURANCE A PROVIDE EVIDENCE OF SAME TO INSPECTION STAFF UPON REQUEST 23. THE CONTRACTOR SHALL NOT PLACE CONCRETE OR ASPHALT ON THE PROJECT PRIOR TO SBMWD
- REVIEW APPROVAL OF CONTRACTOR- SUPPLIED COMPACTION TESTS. 24. NO DEVIATIONS SHALL BE MADE FROM THIS PLAN WITHOUT THE REVIEW AND APPROVAL OF THE WATER DEPARTMENT ENGINEER.
- 25. THE CONTRACTOR SHALL NOT MAKE ANY CONNECTION TO THE EXISTING SBMWD DISTRIBUTION SYSTEM WITHOUT FIRST GAINING WRITTEN PERMISSION TO DO SO FROM THE WATER DEPARTMENT ENGINEER. IN THE EVENT THAT PERMISSION IS GRANTED, A SBMWD INSPECTOR MUST BE PRESENT ON SITE TO WITNESS SAID CONNECTION(S). TEST PLATES SHALL BE INSTALLED ON THE NEW CONSTRUCTED SIDE OF ALL MAIN CONNECTION POINTS. ALL FLUSHING, CHLORINATION, AND TESTING SHALL BE PERFORMED EITHER BY (A) WATER TRUCK, OR (B)
- HYDRANT-TO-HYDRANT CONNECTION THROUGH AN APPROVED BACK FLOW PREVENTION ASSEMBLY. 26. ALL WATER MAINS AND APPURTENANCES SHALL PRESSURE TESTED AND DISINFECTED PRIOR TO ACCEPTANCE BY THE SBMWD.
- 27. TESTING AND DISINFECTION OF WATER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE A.W.W.A. STANDARDS EXCEPT AS HEREIN MODIFIED. (SEE SBMWD WATER STANDARD SPECIFICATIONS).
- 28. ALL TESTING AND DISINFECTION SHALL BE MADE IN THE PRESENCE OF THE SBMWD INSPECTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN TWENTY-FOUR (24) HOURS IN ADVANCE OF THE ACTUAL TIME OF TESTING AND/OR DISINFECTION SO THAT THE ENGINEER OR DESIGNEE MAY OBSERVE THE PROCEDURE.
- 29. IF THE PRESSURE TEST, CHLORINATION OR BACTERIOLOGICAL TEST FAIL TO MEET THE REQUIREMENT OF THE SPECIFICATIONS, THE CONTRACTOR SHALL MAKE NECESSARY REPAIRS,
- REPLACEMENTS OR REPETITION OF PROCEDURES AT HIS OWN EXPENSE. 30. AT DEAD END LOCATIONS, WATER SERVICE SHALL BE TAPPED TO THE END OF WATER MAIN.

ENGINEER'S NOTICE TO CONTRACTOR:

- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING
- FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER. 2. ALL UNDERGROUND UTILITIES OR STRUCTURES, REPORTED OR FOUND ON PUBLIC RECORDS. ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT. THE OWNER, BY ACCEPTING THESE PLANS OR PROCEEDING WITH THE IMPROVEMENTS HEREON, AGREES TO ASSUME LIABILITY AND TO HOLD THE ENGINEER HARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED OR INDICATED ON PUBLIC RECORDS, OR THOSE CONSTRUCTED AT VARIANCE WITH REPORTED OR RECORDED LOCATIONS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHERS FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF
- ALL UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. 3. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
- 4. THE ENGINEER DOES NOT RECOMMEND OR ENDORSE THE USE OF ASBESTOS-CEMENT WATER PIPE OR ANY PRODUCTS CONTAINING ASBESTOS DUE TO THE HEALTH HAZARD CONNECTED WITH SUCH PRODUCTS. SPECIFICATION HEREON OF ANY SUCH PRODUCT IS AT THE DIRECTION THE JURISDICTIONAL AGENCY. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL CONSTRUCTION, CONNECTION AND REMOVAL OF ASBESTOS PRODUCTS AND SHALL FOLLOW ALL AND E.P.A. GUIDELINES TO MINIMIZE HEALTH HAZARDS.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN HEREON AT THE JOB SITE PRIOR TO ANY CONSTRUCTION. FUSCOE ENGINEERING, INC. SHALL BE NOTIFIED OF ANY DISCREPANCIES. REVISIONS TO THE PLAN SHALL BE APPROVED BY THE ENGINEER IN WRITING PRIOR TO IMPLEMENTATION.

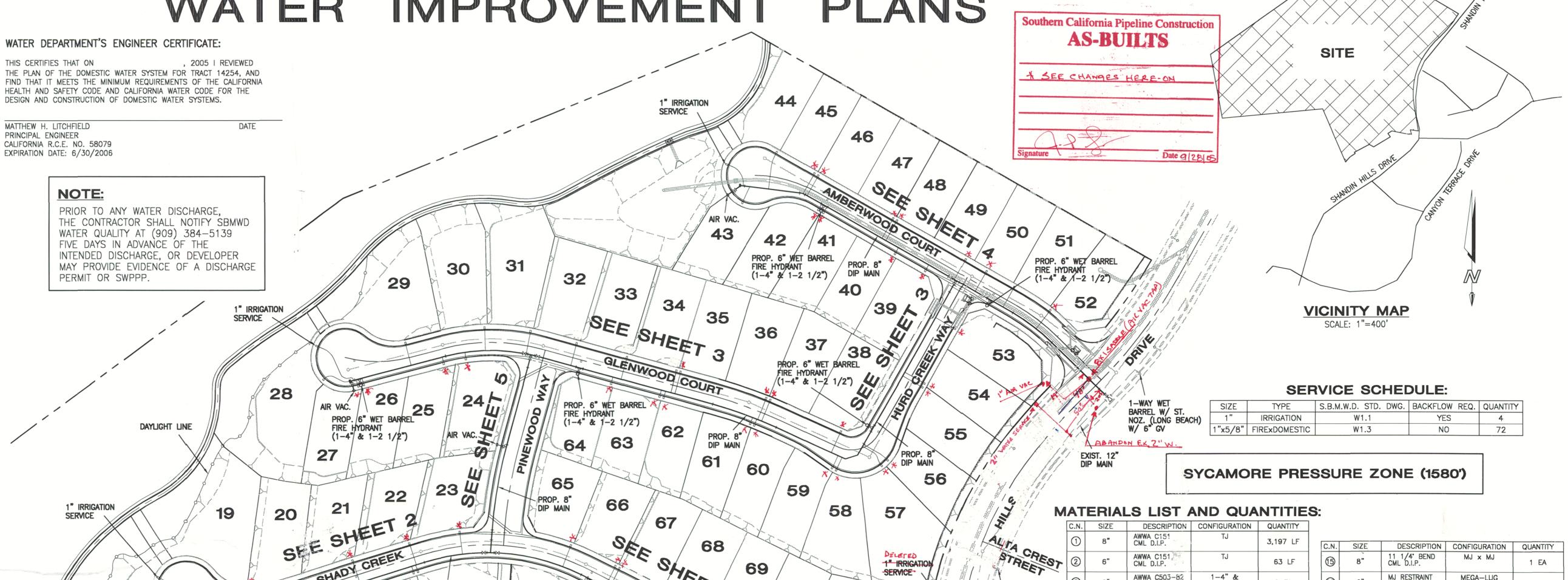
HE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES. CONDUITS OR STRUCTURES

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS, OR STRUCTURE SHOWN OR NOT SHOWN ON THESE DRAWINGS. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COUNTY THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

RIVATE ENGINEERS NOTE TO CONTRACTOR:

GLIGENCE OF THE OWNER OR THE ENGINEER.

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT TRACT NO. 14254 WATER IMPROVEMENT PLANS



PROP. 8"	S. S	EET	[/] 70 /	74		3	6"	AWWA C503-82 F.H. W/BURY	1-4" & 1-2-1/2"	9 EA .	16	6"	MJ RESTRAINT	MEGA-LUG	18 EA	
DIP MAIN 12	11	0x 2 /		71	XXXXX	6	1"	BACKFLOW ASSEMBLY	S.B.M.W.D. STD. W4.1	4 EA	16	8"	MJ RESTRAINT	MEGA-LUG	46 EA	
H 1	PROP. 6" WET BARREL FIRE HYDRANT (1-4"/& 1-2 1/2")	OY CREEK	PROP. 6" W	NET BARREL 72	1-WAY WET	7	1"	AIR VACUUM RELEASE VALVE	S.B.M.W.D. STD. W7.3	4 EA	16	8"	FIELD-LOK	7	65 EA	
	(1-4"/&/1-2 1/2")		FIRE HYDRA (1-4" & 1	-2 1/2")	BARREL W/ ST. NOZ. (LONG BEACH) W/ 6" GV	8	12"x12"x8"	TAPPING SLEEVE FOR 12" D.I.P.	EPOXY COATED STD. W3.5	2 EA	17	STD.	BLUE DOT PVMT. MARKER	S.B.M.W.D. STD. W6.3	13 EA	
	10 9	PROP. 8" DIP MAIN	1				8"x8"x8"	TEE CML D.I.P.	FL x FL x FL	4 EA	18	1"	AIR VACUUM RELEASE VALVE	S.B.M.W.D. STD. W7.1	1 EA	
		8				10	8"x8"x6"	TEE CML D.I.P.	MJ x MJ x FL	9 EA	19	8"	ADAPTER	FL x MJ	6 EA	
		7	ROP. 8"			11	8"	G.V. W/CAN AWWA C509	FL x MJ	8 EA	20	8"	D.I.P. CAP W/ 1" THRD. OUTLET	MJ	4 EA	7
		Dil	ROP. 8"		2 page 1	12	6"	G.V. W/CAN AWWA C509	FL x MJ	9 EA	2)	8"	HOT TAP CML D.I.P.	S.B.M.W.D. STD. W3.7	2 EA	
LEGEND:		6 AIR VAC.		1	Accordance of the second of th	13	8"	45° BEND CML D.I.P.	MJ × MJ	2 EA	22	8"	G.V. W/CAN AWWA C509	FL x FL	2 EA	
LLGLIID.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	AIR VAC.		1	ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA ANDINA AN	14	8'	22 1/2 BEND CML D.I.P.	MJ x MJ	2 EA	NO	TE:				
	FIRE HYDRANT EXISTING VALVE	_	360 X	7 2		LIAI	NTITY	NOTES:	•		QU	ANTITIES AF	RE APPROXIMATED.	ACTUAL QUANTITIES	; MAY VARY	

1-WAY WET

BARREL W/ ST.

NOZ. (LONG BEACH)

CONSTRUCTION NOTES:

(1) INSTALL 8" PRESSURE CLASS 350 CEMENT MORTAR LINED DUCTILE IRON PIPE PER S.B.M.W.D. STANDARD SPECIFICATIONS 2) INSTALL 6" PRESSURE CLASS 350 CEMENT MORTAR LINEDI DUCTILE IRON PIPE PER S.B.M.W.D. STANDARD SPECIFICATIONS) INSTALL 6" FIRE HYDRANT ASSEMBLY PER S.B.M.W.D. STD., DWG. NO. W2.2 (CONFIG. A)

PROP. 6" WET BARREL

(1-4" & 1-2 1/2") **16**

PROP. 6" WET BARREL

(1-4" & 1-2\1/2")

(4) INSTALL COMBINATION 5/8" DOMESTIC WATER SERVICE AND 1" FIRE SERVICE PER PER S.B.M.W.D. STD. DWG. NO. W1.3

(i) INSTALL 1" IRRIGATION WATER SERVICE PER S.B.M.W.D. STD. DWG. NO. W1.1) INSTALL 1" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER S.B.M.W.D. STD. DWG. NO. W4.1 7) INSTALL 1" AIR RELEASE VALVE PER S.B.M.W.D. STD. DWG: NO. W7.3

(8) INSTALL 12"x8" EPOXY COATED TAPPING SLEEVE FOR 8" IDIP PER S.B.M.W.D. STD. DWG. NO. 3.5) INSTALL 8" FL X 8" FL X 8" FL DUCTILE IRON TEE 10) INSTALL 8" MJ X 8" MJ X 6" FL DUCTILE IRON TEE 1) INSTALL 8" FL X MJ GATE VALVE PER S.B.M.W.D. STD. DWG. NO. W3.1

12) INSTALL 6" FL X MJ GATE VALVE PER S.B.M.W.D. STD. DWG. NO. W3.1 3) INSTALL 8" MJ X MJ DUCTILE IRON 45° BEND 4) INSTALL 8" MJ X MJ DUCTILE IRON 22 1/2" BEND

5) INSTALL 8" MJ X MJ DUCTILE IRON 11 1/4" BEND (16) INSTALL LINEAR JOINT RESTRAINT PER MANUFACTURER'S SPECIFICATIONS & S.B.M.W.D. STD. DWG. NO. W6.4 ON ALL JOINTS WITHIN MINIMUM LENGTH SPECIFIED ON PLAN. SEE JOINT RESTRAINT NOTE HEREON

17) INSTALL BLUE DOT PAVEMENT MARKER PER S.B.M.W.D. STID. DWG. NO. W6.3 18) INSTALL 1" AIR RELEASE VALVE PER S.B.M.W.D. STD. DWG. NO. W7.1

20) INSTALL 8" END CAP W/ 8" MEGALUG AND 1" THREADED OUTLET FOR SERVICE (21) HOT TAP 12" EXIST. MAIN PER S.B.M.W.D. STD. DWG. NO. W3.7 (22) INSTALL 8" FL X FL GATE VALVE PER S.B.M.W.D. STD. DWG. NO. W3.1

JOINT RESTRAINT NOTES:

INDEX MAP

SCALE: 1"=80'

2. USE FIELD-LOK GASKETS FOR JOINT RESTRAINT AT PIPE JOINTS.

WATER METER NOTE:

CONTRACTOR TO LOCATE SERVICE LATERALS AND WATER METERS.

USE MEGA-LUGS FOR JOINT RESTRAINT AT FITTINGS.

STEVEN L. ELLIS CALIFORNIA R.C.E. NO. 047255 EXPIRATION DATE: 12/31/05

FOR A PROJECT DESIGN.

QUANTITY NOTES:

QUANTITIES ARE FOR PLAN CHECK AND BONDING PURPOSES ONLY.

2. CONTRACTOR IS RESPONSIBLE FOR CALCULATING OWN QUANTITIES.

DECLARATION OF RESPONSIBLE CHARGE: ENGINEER OF WORK:

THAT I HAVE EXCERCISED RESPONSIBLE CHARGE OVER DESIGN OF THIS PROJECT

AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT IS CONFINED TO A REVIEW ONLY

AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITES

I HEARBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT.

HEALTH AND SAFETY CODE AND CALIFORNIA WATER CODE FOR THE

THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

DATE

ASSESSOR PARCEL NO. 266-211-30

SHADY CREEK _

SHEET INDEX:

VICINITY MAP

SCALE: 1"=400'

SERVICE SCHEDULE:

S.B.M.W.D. STD. DWG. BACKFLOW REQ. QUANTITY

YES

TYPE

IRRIGATION

TITLE SHEET _____ GLENWOOD COURT & HURD CREEK WAY ___ SHT. 3 AMBERWOOD & MULE CREEK COURTS _____ SHT. 4 ENGINE SEP 2 9 2005

CITY OF SA MUNICIPAL WATER DEPARTMENT

- MOUNTAIN DRIVE

DIG ALERT

DIAL TOLL FREE 1-800-227-2600 AT LEAST TWO DAYS BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

* DEMOTES W.S. CHANGED TO SINGLE DOM. SRU BENCH MARK:

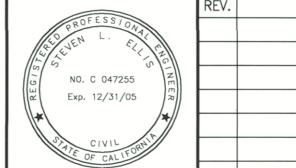
LEVATION = 1340.348

BRASS DISK, 50.0 FT SOUTH AND 30.6 FT EAST OF THE CENTERLINE P.I. OF 40TH AND NORTH "E" STREET; IN THE TOP OF THE 4" P.C.C. CURBING AT THE INTERSECTION OF THE BACK OF THE SIDEWALKS; ABOUT 0.4 FEET ABOVE THE WALK.

19) INSTALL 8" FL X MJ ADAPTER



www.fuscoe.com



PROPOSED GATE VALVE

PROPOSED WATER LINE

CHLORINATION AND FLUSHING PORT

MECHANICAL JOINT (MJ) BEND

PIPE CROSSING OVER EXISTING

PIPE CROSSING UNDER EXISTING

PROPOSED BUTTERFLY VALVE

JOINT RESTRAINT

AIR VACUUM AND/OR AIR RELEASE VALVE

HORIZONTAL DEFLECTION BY JOINT

EXISTING WATER LINE

RESTRAINT JOINT

——X—

DESCRIPTION	BY:	APP.	DRAWN BY:	NO EXCEPTIONS NOTED			
			CHECKED BY:	CITY FIRE DEPARTMENT	S.B.M.W.D.		
				DATE:	DATE:	W	
			g 2	BY:	BY:	~	
					1		

MUNICIPAL WATER DEPARTMENT ATER IMPROVEMENT PLANS

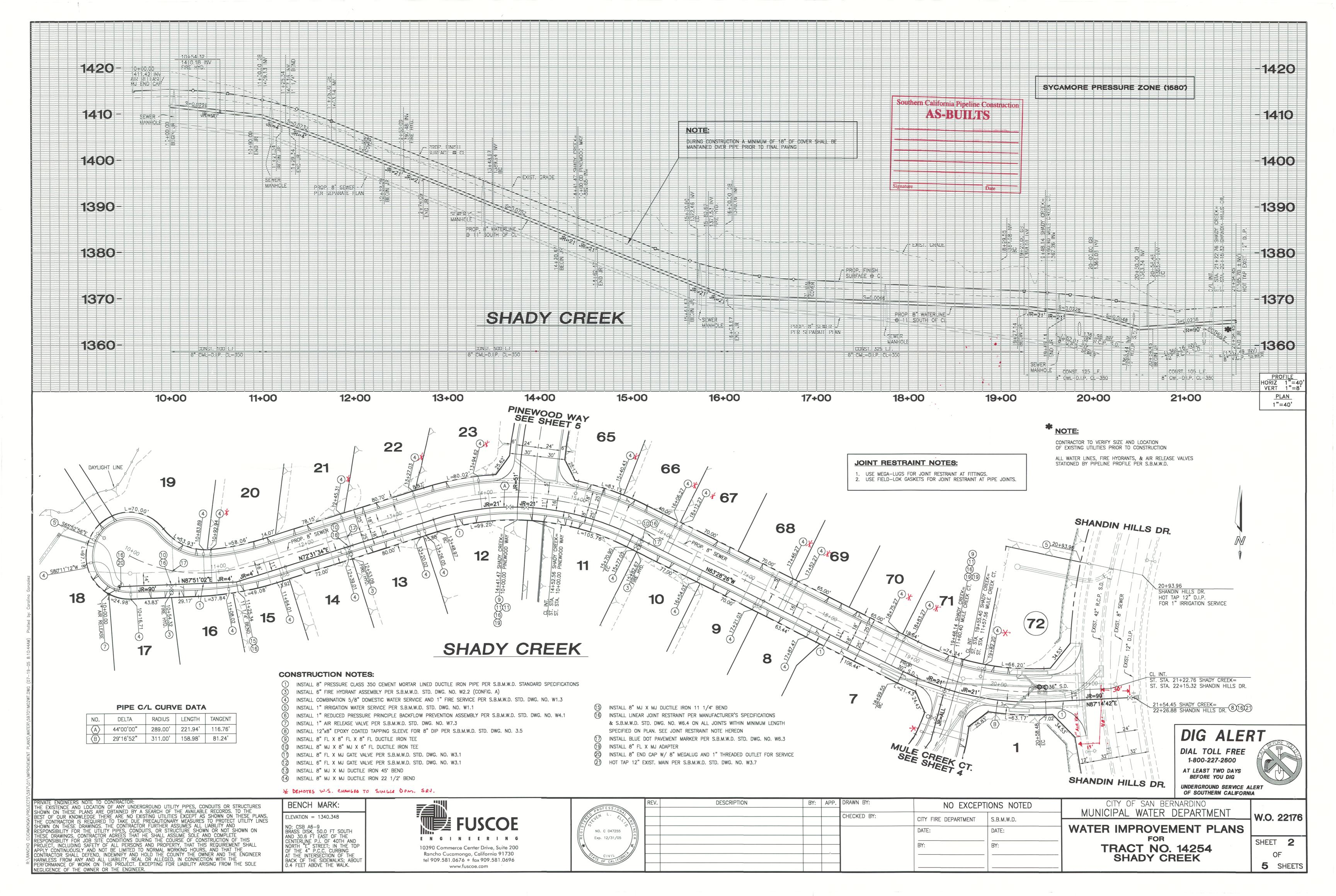
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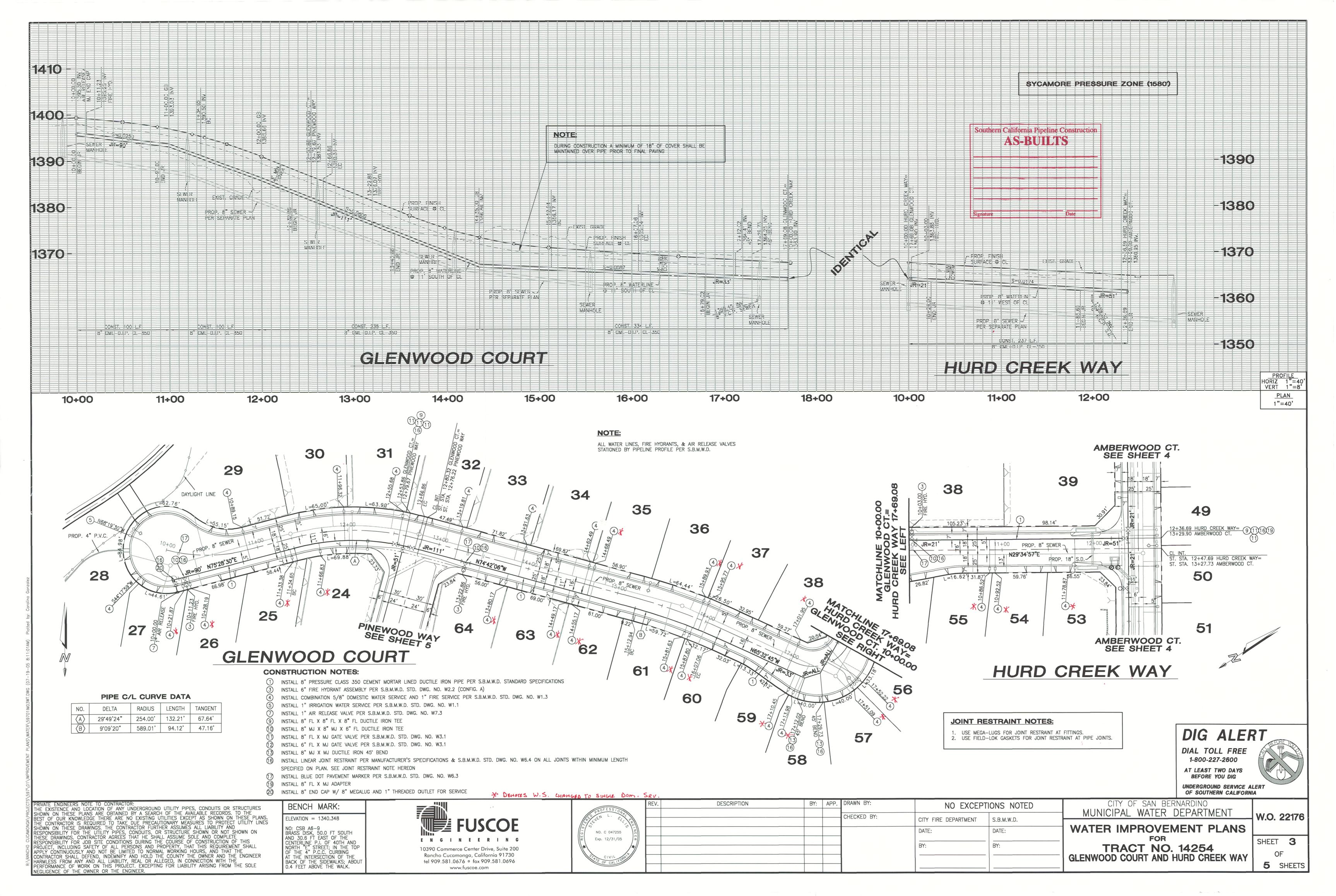
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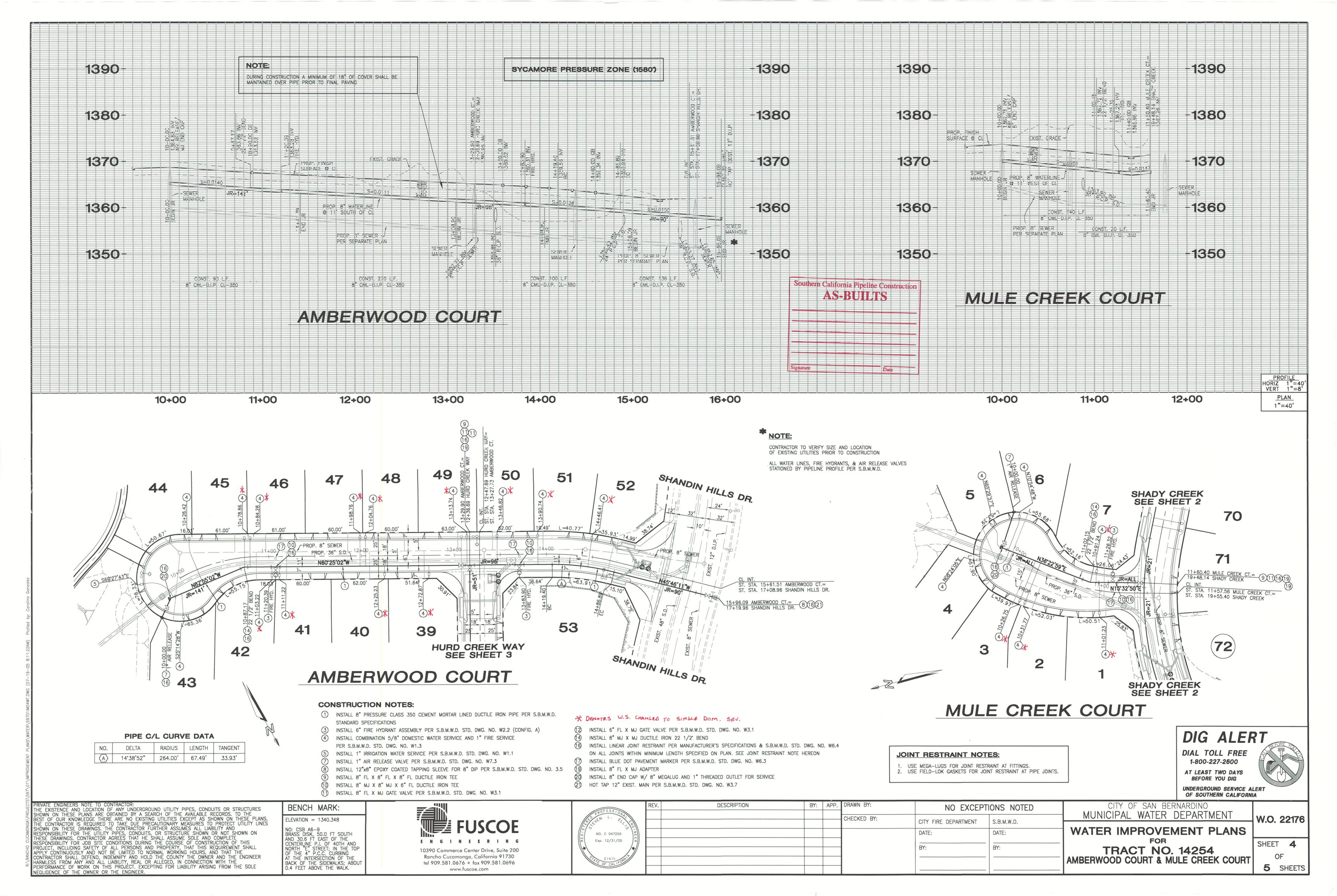
CITY OF SAN BERNARDINO

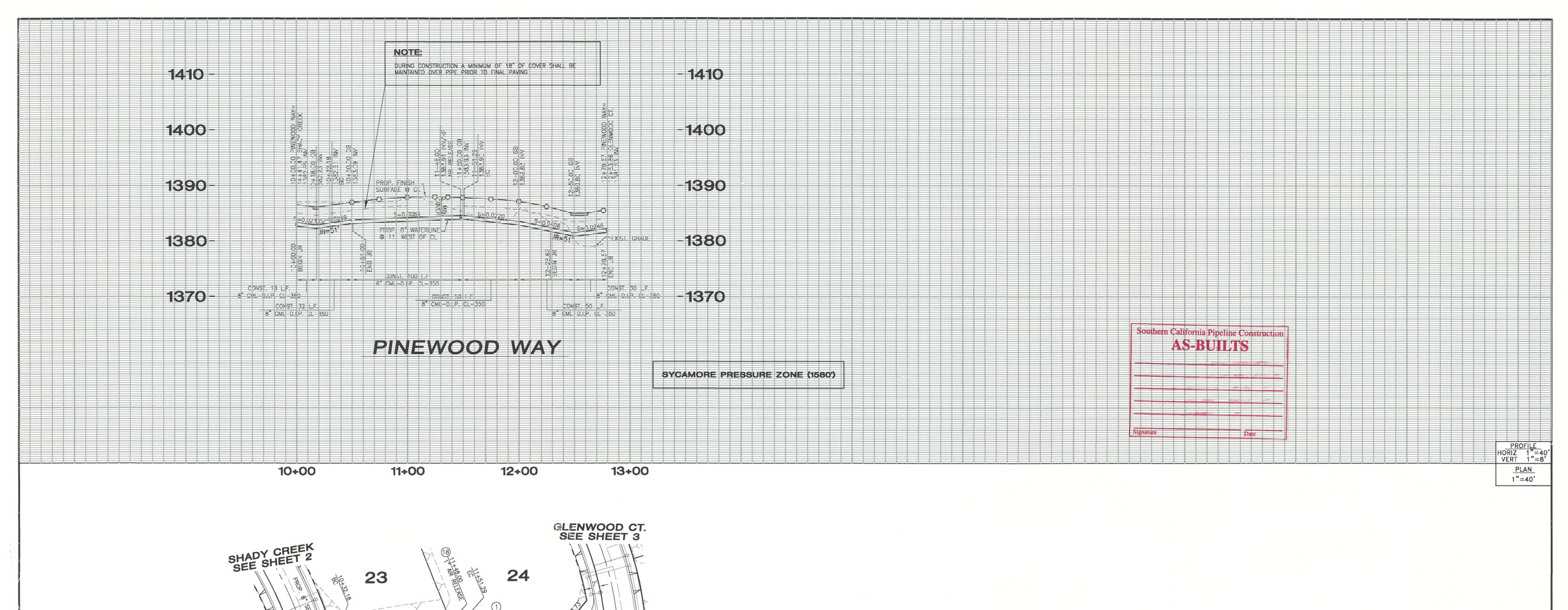
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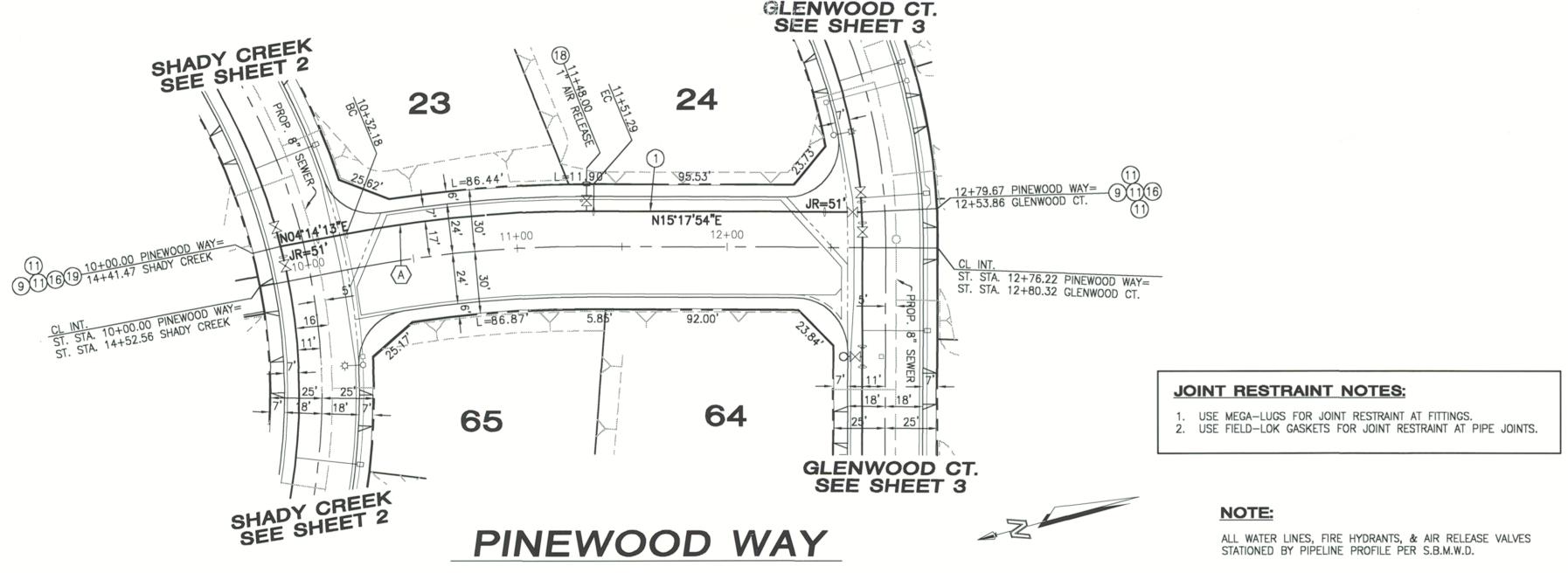
SHEET 1 **5** SHEETS











PIPE C/L CURVE DATA

RADIUS | LENGTH | TANGENT 11°03'41" 617.00' | 119.12' | 59.74'

CONSTRUCTION NOTES:

- INSTALL 8" PRESSURE CLASS 350 CEMENT MORTAR LINED DUCTILE IRON PIPE PER S.B.M.W.D. STANDARD SPECIFICATIONS
- INSTALL 8" FL X 8" FL X 8" FL DUCTILE IRON TEE
- INSTALL 8" FL X MJ GATE VALVE PER S.B.M.W.D. STD. DWG. NO. W3.1 INSTALL LINEAR JOINT RESTRAINT PER MANUFACTURER'S SPECIFICATIONS & S.B.M.W.D. ST
- ON ALL JOINTS WITHIN MINIMUM LENGTH SPECIFIED ON PLAN. SEE JOINT RESTRAINT NOT
- INSTALL 1" AIR RELEASE VALVE PER S.B.M.W.D. STD. DWG. NO. W7.1
- INSTALL 8" FL X MJ ADAPTER

S.B.M.W.D. STANDARD SPECIFICATIONS STD. DWG. NO. W6.4 NOTE HEREON						DIG ALER DIAL TOLL FREE 1-800-227-2600 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE AL OF SOUTHERN CALIFORNI	LERT	
REV. DE	DESCRIPTION	BY:	APP. DRAWN BY:	NO EXCEPTIONS NOTED	CITY OF SAN BER	NARDINO		
			CHECKED BA	NO EXOLITIONS NOTED		DEPARTMENT	WO 00176	

PRIVATE ENGINEERS NOTE TO CONTRACTOR:
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES
SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE
BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS.
THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT UTILITY LINES
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PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE
NEGLIGENCE OF THE OWNER OR THE ENGINEER.

BENCH MARK: ELEVATION = 1340.348NO: CSB A6-9
BRASS DISK, 50.0 FT SOUTH
AND 30.6 FT EAST OF THE
CENTERLINE P.I. OF 40TH AND
NORTH "E" STREET; IN THE TOP
OF THE 4" P.C.C. CURBING
AT THE INTERSECTION OF THE
BACK OF THE SIDEWALKS; ABOUT
0.4 FEET ABOVE THE WALK.



OFESSI	REV.	DESCRIPTION	BY:	APP.	DRAWN BT:	NO EXCEPTIONS NOTED			
EVEN L. EZZIONE					CHECKED BY:	CITY FIRE DEPARTMENT	S.B.M.W.D.	_	
NO. C 047255						DATE:	DATE:		
Exp. 12/31/05						BY:	BY:		
CIVIL OF CALIFORNIE									
		,							

-| W.O. 22176 | WATER IMPROVEMENT PLANS

SHEET 5 TRACT NO. 14254 PINEWOOD WAY

5 SHEETS