

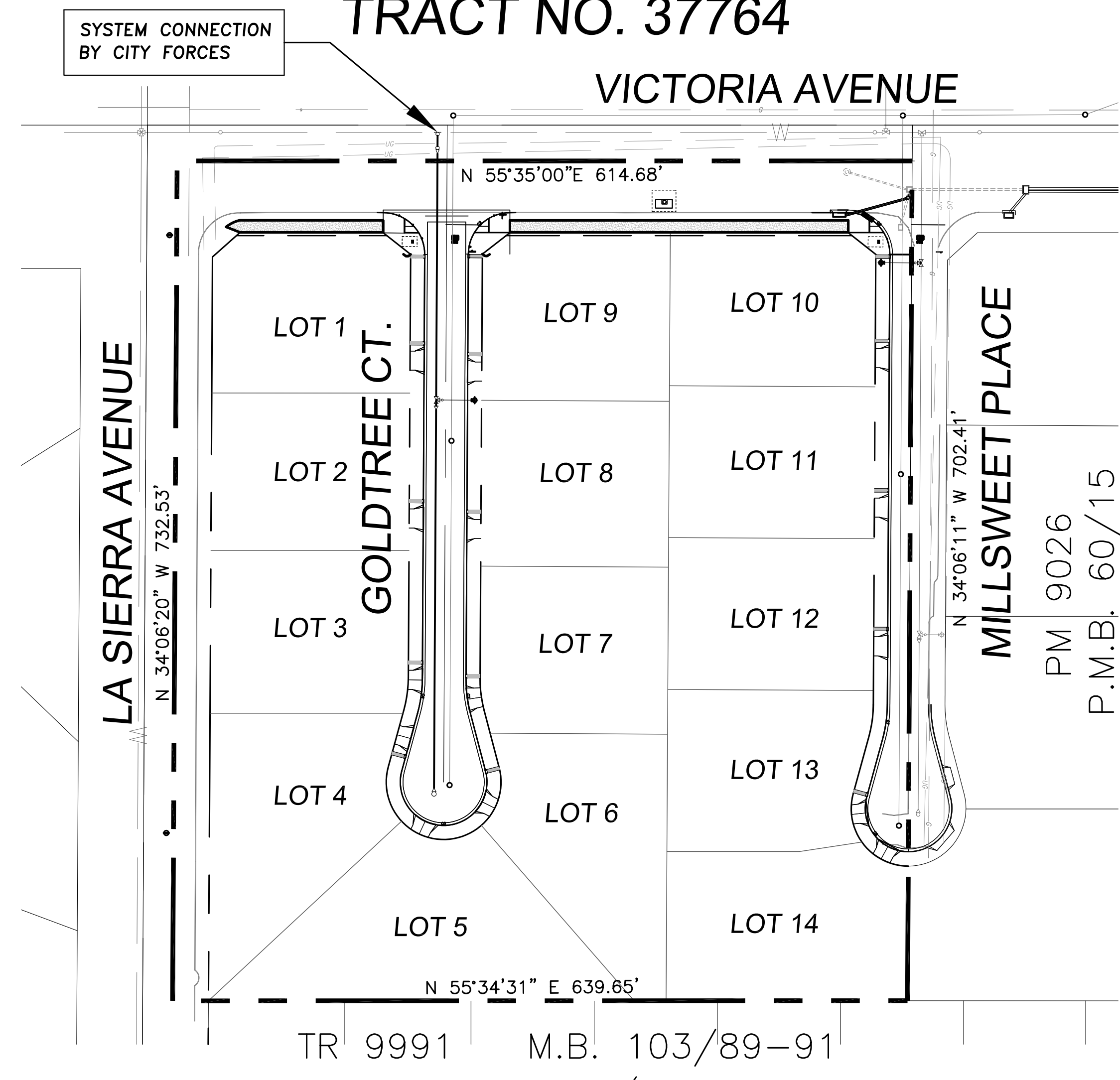
**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND IN CONFORMANCE WITH THE CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT, WATER DIVISION, STANDARD SPECIFICATION NO. 205 FOR WATER DISTRIBUTION SYSTEMS, LATEST REVISION; ALL APPLICABLE A. W. W. A. STANDARDS AND SPECIFICATIONS, EXCEPT AS NOTED; AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), LATEST ADOPTED EDITION AND AMENDMENTS.
- ALL WATER MAINS 12 INCH AND UNDER SHALL BE CLASS 350 D.I.P. PER A.W.W.A. C-151. ALL PIPE JOINTS SHALL BE RESTRAINED WITH ROMAC INDUSTRIES, INC. "GRIP RING" GASKETS, U.S. PIPE AND FOUNDRY COMPANY "FIELD-LOK" GASKETS OR WATER DIVISION APPROVED EQUAL. ALL FITTINGS SHALL BE RESTRAINED MECHANICAL JOINT TYPE.
- APPROVAL OF THIS PLAN BY THE WATER DIVISION DOES NOT RELIEVE THE PRIVATE ENGINEER OF THE DESIGN RESPONSIBILITY THEREOF. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF THE CONSTRUCTION SHOWN HEREON.
- WATER MAINS SHALL BE LAID TO THE LINE AND GRADE SHOWN ON THE PLAN AND PER CWD-040.
  - THE DEVELOPER'S ENGINEER SHALL PROVIDE A CONSTRUCTION OFF-SET LINE AND STATION ALL FITTINGS AND APPURTENANCES. CUT SHEETS SHALL BE PROVIDED FOR PIPELINES ON ALL STREETS.
  - MINIMUM DEPTH OF COVER OVER WATER MAINS UNDER 12-INCHES IN DIAMETER SHALL BE 3.0 FEET, UNLESS OTHERWISE NOTED. ALL 12-INCH AND LARGER DIAMETER, WATER MAINS SHALL HAVE 4.0 FEET OF COVER.
- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS, CABLES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF 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 THE UTILITY LINES SHOWN, OR ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- PROPOSED ELECTRICAL UNDERGROUND AND STREET LIGHT FACILITIES ARE NOT SHOWN ON THE PLAN. THE CONTRACTOR SHALL COORDINATE INSTALLATION WITH THE DEVELOPER AND PUBLIC UTILITIES DEPARTMENT, ELECTRICAL DIVISION, 951-826-5489, FOR LOCATIONS OF THE PROPOSED ELECTRICAL AND STREET LIGHT FACILITIES.
- PIPE SHALL BE HANDLED SO AS TO PROTECT PIPE AT ALL TIMES AND SHALL BE CAREFULLY BEDDED TO PROVIDE CONTINUOUS BEARING AND TO PREVENT UNEVEN SETTLEMENT. PIPE SHALL BE PROTECTED AGAINST FLOTATION AT ALL TIMES. OPEN ENDS SHALL BE SEALED AT ALL TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
- UNLESS OTHERWISE APPROVED, WATER MAINS AND SEWER MAINS SHALL NOT CROSS WITH LESS THAN 1.0 FOOT OF VERTICAL CLEARANCE. WATER SERVICE LINES AND SEWER LATERALS SHALL NOT BE IN THE SAME TRENCH, A MINIMUM, HORIZONTAL CLEARANCE OF 10 FEET IS REQUIRED. WATER MAINS SHALL CLEAR ALL HOUSE SEWER LATERALS BY A MINIMUM OF 1.0 FOOT VERTICAL CLEARANCE (PER CWD-015 AND CWD-023).
- WATER METER BOXES AND FIRE HYDRANTS SHALL BE PLACED AT CURB SITE LOCATIONS. THE CONTRACTOR SHALL ADJUST THE METER BOXES TO SIDEWALK GRADE AFTER THE SIDEWALKS HAVE BEEN POURED. WATER METER BOXES SHALL NOT BE LOCATED IN DRIVEWAYS.
- A MATERIAL LIST, PER WATER DIVISION SPECIFICATION NO. 205, APPENDIX I - APPROVED MATERIAL LIST AND MATERIAL CERTIFICATIONS MUST BE SUBMITTED FOR WATER DIVISION APPROVAL PRIOR TO INSTALLATION.
- THE CONTRACTOR MAY BEGIN CONSTRUCTION ONLY AFTER A PRECONSTRUCTION MEETING IS HELD WITH THE WATER DIVISION ENGINEERING STAFF. CONTACT WATER CONTRACT ADMINISTRATION AT 951-826-5482, AT LEAST ONE WEEK PRIOR TO THE PLANNED START OF CONSTRUCTION OF THE WATERLINES TO ARRANGE THIS MEETING.
- THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), DIAL 811, TWO WORKING DAYS BEFORE DIGGING. NO STREET OPENING PERMIT WILL BE ISSUED BY THE PUBLIC WORKS DEPARTMENT INVOLVING EXCAVATION FOR UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS BEEN PROVIDED AN INQUIRY IDENTIFICATION NUMBER BY USA. ALL NECESSARY PERMITS SHALL BE TAKEN OUT BY THE CONSTRUCTION CONTRACTOR. A STREET OPENING PERMIT, ISSUED BY THE PUBLIC WORKS DEPARTMENT, OR A RIVERSIDE COUNTY ENCROACHMENT PERMIT, DEPENDING UPON JURISDICTION, IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL POTHOLE EXISTING UTILITIES. PRIOR TO CONSTRUCTION, TO DETERMINE THE DEPTH OF COVER. THE WATER MAIN SHALL BE INSTALLED WITH THE REQUIRED VERTICAL CLEARANCE. IF INSUFFICIENT COVER EXISTS, THE CONTRACTOR SHALL CONTACT THE PRIVATE ENGINEER WHO SIGNED THE PLAN TO DETERMINE AN ACCEPTABLE SOLUTION.
- THE CONTRACTOR SHALL REQUEST WATER DIVISION INSPECTION TWO WORKING DAYS PRIOR TO TRENCHING. PLANS AND SPECIFICATIONS SHALL BE ON-SITE AT ALL TIMES.
- WATER MAINS SHALL BE SAND BEDDED IN ACCORDANCE WITH CWD-040 AND PER PART 3, SECTION 306-1.2.1 OF THE SPECIFICATION 205.
- THE CONTRACTOR SHALL NOT BACKFILL ANY TRENCHES UNTIL CONTRACTOR HAS OBTAINED ASBUILT STATIONING ON ALL FITTINGS AND APPURTENANCES. PRESSURE TESTING WILL NOT BE ALLOWED UNTIL "AS-BUILTS," SUBMITTED BY THE CONTRACTOR, HAVE BEEN APPROVED BY THE WATER DIVISION.
- THE CONTRACTOR SHALL BULKHEAD MAINS, PLACE AND COMPACT BACKFILL, TEST, STERILIZE AND PASS BACTERIOLOGICAL TESTING BEFORE ANY TIE-INS ARE MADE TO THE CITY SYSTEM. CITY FORCES WILL MAKE THE FINAL SYSTEM CONNECTIONS FROM THE EXISTING MAIN. NO CONNECTIONS WILL BE MADE UNTIL ALL TESTING IS COMPLETE AND WRITTEN PASSING BACTERIOLOGICAL TEST RESULTS HAVE BEEN SUBMITTED TO THE WATER DIVISION.

- PRESSURE TESTING SHALL BE CONDUCTED AFTER THE TRENCH BACKFILL HAS PASSED THE REQUIRED COMPACTION TESTS. HYDRO TEST PRESSURE SHALL BE 200 PSI FOR TWO HOURS. THE LEAKAGE LIMIT IS 15 GALLONS PER INCH DIAMETER PER MILE, PER 24 HOURS FOR DIP PIPE. NO LEAKAGE IS ALLOWED FOR WELDED STEEL PIPE.
  - CHLORINATION SHALL BE PERFORMED PER PART 7, SECTION 700-5 OF SPECIFICATION 205. GAS CHLORINATION WILL NOT BE ALLOWED. AFTER THE MINIMUM CHLORINATION CONTACT TIME, THE CONTRACTOR SHALL DECHLORINATE THE TEST WATER IN ACCORDANCE WITH THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SANTA ANA REGION ORDER NO. 98-67 AND NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) NO. CA098001.
  - A MINIMUM OF TWO BACTERIOLOGICAL TESTS ARE REQUIRED, PER DAY. APPROXIMATELY ONE SAMPLE SHALL BE TAKEN PER 500 FEET OF MAIN FOR TWO CONSECUTIVE DAYS.
- REFER TO CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT DRAWINGS (LIST THE R-, S-, AND D- NUMBERS) FOR PROJECT COORDINATION.
  - BLUE HYDRANT REFLECTORS ARE REQUIRED FOR EACH HYDRANT.
  - ALL CURBS, GUTTERS, SEWER LINES AND STORM DRAIN LINES MUST BE INSTALLED PRIOR TO BEGINNING ANY WATER LINE INSTALLATION.
  - ALL PAVING, INCLUDING CITY FORCES WORK, SHALL BE PER THE LATEST EDITION OF THE CITY OF RIVERSIDE PUBLIC WORKS STANDARD 453 AND SHALL BE COMPLETED BY THE DEVELOPER.
  - THE CONTRACTOR SHALL VERIFY THE DEPTH AND ALIGNMENT OF THE EXISTING WATERLINES AT ALL SYSTEM BY POTHOLING (MINIMUM 2) PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL ADJUST THE DEPTH AT THE START OF CONSTRUCTION OF NEW WATER MAIN TO MATCH EXISTING AS DIRECTED BY THE INSPECTOR.

# CITY OF RIVERSIDE WATER IMPROVEMENT PLANS

FOR  
TRACT NO. 37764



**LEGEND**

ITEM	EXISTING	PROPOSED
AIR VALVE		
CHECK VALVE		
CROSS		
END CAP W/BO		
FIRE HYDRANT		
TAP SLEEVE		
TRACT BOUNDARY		
WATER LINE		
WATER SERVICE		
WATER SERVICE (BY CITY FORCES)		
WATER VALVE		

**SITE MAP**  
1"=80'

ITEM	SYMBOL
CABLE TV	--- CIV ---
ELECTRIC	--- E ---
GAS	--- 6" G ---
SEWER	--- 8" S ---
STORM DRAIN	--- 18" SD ---
TELEPHONE	--- T ---

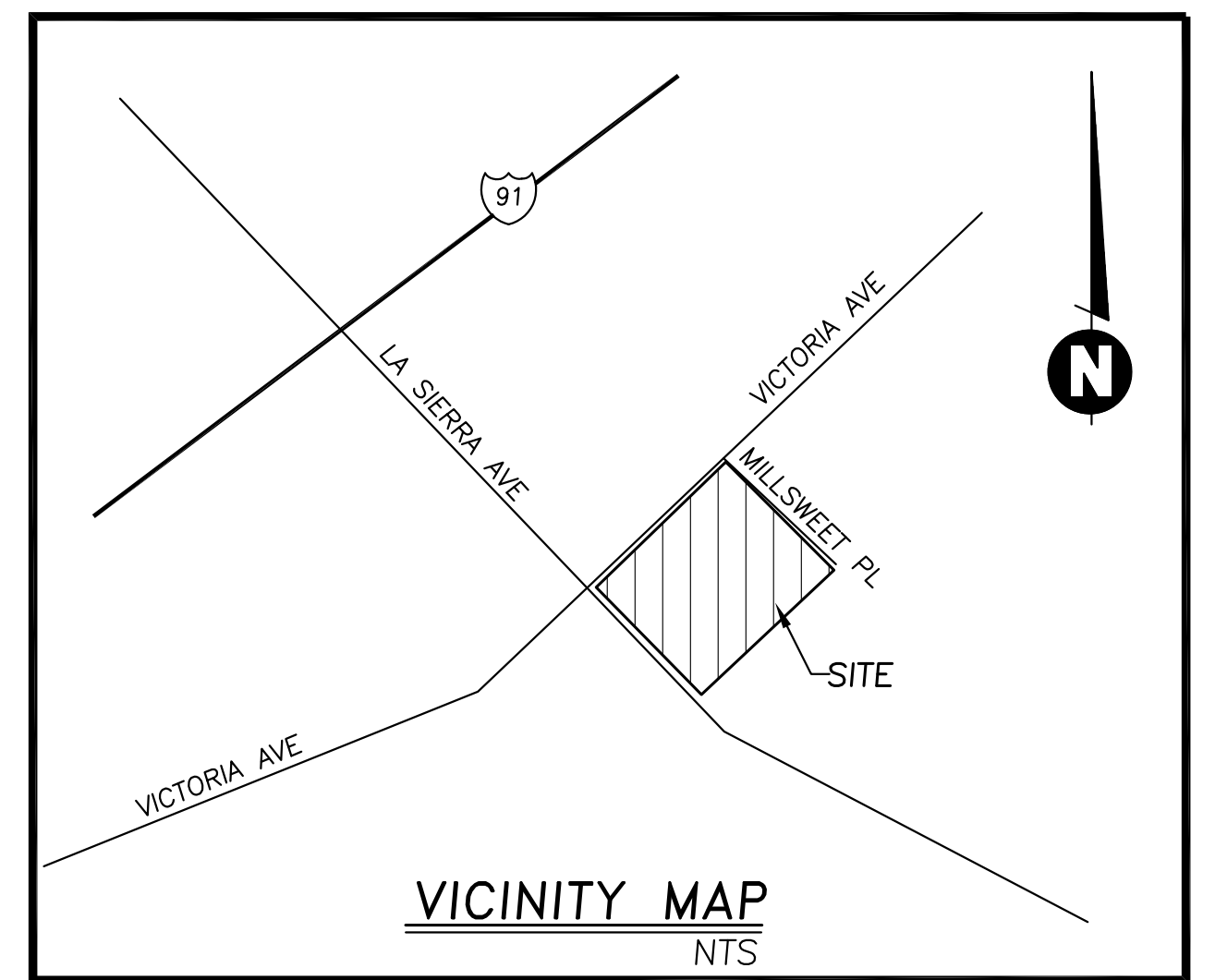
**BILL OF MATERIALS**

#	ITEM	STD. DWG. REF.	QUANTITIES
1	INSTALL 8" D.I.P. CL 350 WATER LINE	CWD-040-1,	228 L.F.
2	INSTALL 1" WATER SERVICE	CWD-600	9 EA.
3	INSTALL REGULAR FIRE HYDRANT ASSEMBLY	CWD-700	1 EA.
4	INSTALL TEMPORARY CONSTRUCTION END CAP	CWD-412	1 EA.
5	INSTALL 2" END OF MAIN BLOWOFF	CWD-411-A	1 EA.
6	INSTALL 8" x 4" REDUCER	CWD-700	1 EA.
7	INSTALL 4" DIP CL 350 WATERLINE	CWD-040-1	320 L.F.

**CITY FORCES INSTALLATION**

#	ITEM	QUANTITIES
20	INSTALL 12" x 8" TAPPING SLEEVE SYSTEM CONNECTION	1 EA.
21	INSTALL 8" TAP VALVE	1 EA.
22	INSTALL 1" METER	9 EA.
23	INSTALL 1" WATER SERVICE WITH 1" METER	5 EA.
24	INSTALL REGULAR FIRE HYDRANT ASSEMBLY	1 EA.

THOMAS BROTHERS MAP PAGE/GRID:  
PAGE 744, GRID G-3, 2004 EDITION



**OWNER AND DEVELOPER:**

LA SIERRA VICTORIA DEVELOPMENT LLC  
HITESH PATEL  
19215 WILD MUSTANG CT.  
APPLE VALLEY, CA 92307  
(760) 963-3475 PH.

**ENGINEERS:**

SAKE ENGINEERS, INC.  
400 S. RAMONA AVE., STE 202  
CORONA, CA 92879  
(951) 279-4041 PH.

**ASSESSOR'S PARCEL NUMBER:**

136-220-016

**UTILITIES:**

ELECTRIC	CITY OF RIVERSIDE
GAS	SO. CAL. GAS CO.
WATER	CITY OF RIVERSIDE
SEWER	CITY OF RIVERSIDE
TELEPHONE	PACIFIC TELEPHONE

**LEGAL DESCRIPTION:**

OF LOT 1 IN BLOCK 12 OF THE RESUBDIVISION OF LANDSW OF J.F.MOULTON AND H.B. PRAGED, AS SHOWN BY MAP ON FILE IN BOOK 1 PAGES 49 AND 50 OF MAPS, RECORDS OF RIVERSIDE COUNTY.

**BENCHMARK:**

CITY OF RIVERSIDE BM# E2P2; CHISEL SQUARE IN TOP CORN AT THE SE CORNER OF INDIANA AVE. & FILLMORE ST. ELEV = 738.41'

**BASIS OF BEARING**

THE CENTERLINE OF VICTORIA AVENUE BEING NORTH 55°35'00" EAST AS SHOWN ON M.B. 153/15-17.

**ENGINEER'S NOTICE TO CONTRACTORS:**

- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE.
- CARE SHOULD BE TAKEN TO PREVENT GRADED DITCHES AND SWALES FROM UNDERMINING STREET IMPROVEMENTS. ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS, OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT UPON INSPECTION OF THE SITES, THE CITY ENGINEER MAY REQUIRE TEMPORARY GUNITE SWALES, ENTERING OR
- ALL AREAS SHALL SLOPE A MINIMUM OF 1.0% TO STREETS, DRIVE OR SWALE UNLESS OTHERWISE NOTED.
- QUANTITIES SHOWN HERE ARE FOR PLAN CHECKING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE TO PERFORM HIS OWN QUANTITIES TAKEOFF.
- 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 FROM THE SOLE NEGLIGENCE OF THE CITY OF RIVERSIDE OR THE ENGINEER, THE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY OF RIVERSIDE 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

**NOTICE TO CONTRACTORS:**

CONTRACTOR SHALL POTHOLE AT THE TIE-IN STATIONS AND AT ANY OTHER POINTS OF POTENTIAL CONFLICTS WITH UNDERGROUND FACILITIES BEFORE STARTING CONSTRUCTION. EXISTING SUBSURFACE UTILITY DATA ON DRAWINGS WERE COMPILED FROM INFORMATION FURNISHED BY VARIOUS SOURCES. NEITHER THE ACCURACY NOR THE COMPLETENESS OF THE INFORMATION SHOWN IS GUARANTEED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER MAINS, GAS MAINS, SANITARY SEWERS, STORM DRAINS, ELECTRIC CONDUITS, TELEPHONE LINES AND ANY OTHER UTILITIES WHICH MAY CONFLICT WITH THE DESIGN AND CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. RIM ELEVATIONS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE RING AND COVER SHALL BE ADJUSTED IN THE FIELD TO MATCH THE FINISHED SURFACE OF THE PAVEMENT TO FORM A SMOOTH DRIVING SURFACE. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COSTS FOR THE REPAIR OF ANY AND ALL DAMAGE TO THE CONTRACT WORK OR TO ANY UTILITY (WHETHER PREVIOUSLY KNOWN OR DISCLOSED DURING THE WORK) AS MAY BE CAUSED BY HIS OPERATIONS. UTILITIES NOT SHOWN ON THE DRAWING TO BE RELOCATED OR ALTERED BY OTHERS SHALL BE MAINTAINED BY THE CONTRACTOR. AT THE COMPLETION OF THE CONTRACT WORK, THE CONTRACTOR SHALL LEAVE ALL UTILITIES AND APPURTENANCES IN A CONDITION SATISFACTORY TO THE OWNERS AND THE CITY.

NOTE: THIS SYSTEM SERVED BY VICTORIA 1100 ZONE

**DIG ALERT**  
TOLL FREE  
1-800-227-2600  
48 HOURS BEFORE YOU DIG

CITY OF RIVERSIDE  
PUBLIC UTILITIES DEPARTMENT  
OVERHEAD & UNDERGROUND

APPROVED BY:  
FIRE HYDRANT LOCATION ONLY

CITY OF RIVERSIDE BUSINESS TAX ACCOUNT #74172 EXP. 7/31/18

**SAKE ENGINEERS, INC.**  
www.sakeengineers.com  
ENGINEERING • SURVEYING • LAND DEVELOPMENT  
400 S. RAMONA AVE., STE. 202  
CORONA, CALIFORNIA 92879  
(951) 279-4041 FAX: (951) 279-2830

REGISTERED PROFESSIONAL ENGINEER  
SAN BARRIBAR  
C053038  
CIVIL  
STATE OF CALIFORNIA

CITY OF RIVERSIDE  
PUBLIC UTILITIES DEPARTMENT  
WATER DIVISION

APPROVED BY: \_\_\_\_\_ DATE \_\_\_\_\_

DESIGNED BY: RL DRAWN BY: RL CHECKED BY: SA

CITY OF RIVERSIDE  
PUBLIC UTILITIES DEPARTMENT  
WATER DIVISION

TRACT 37764  
WATER IMPROVEMENT PLANS

PW17-0184  
DRAWING NO.  
D5-1813008  
SHEET 1 OF 2  
CADME PG.: 95-1