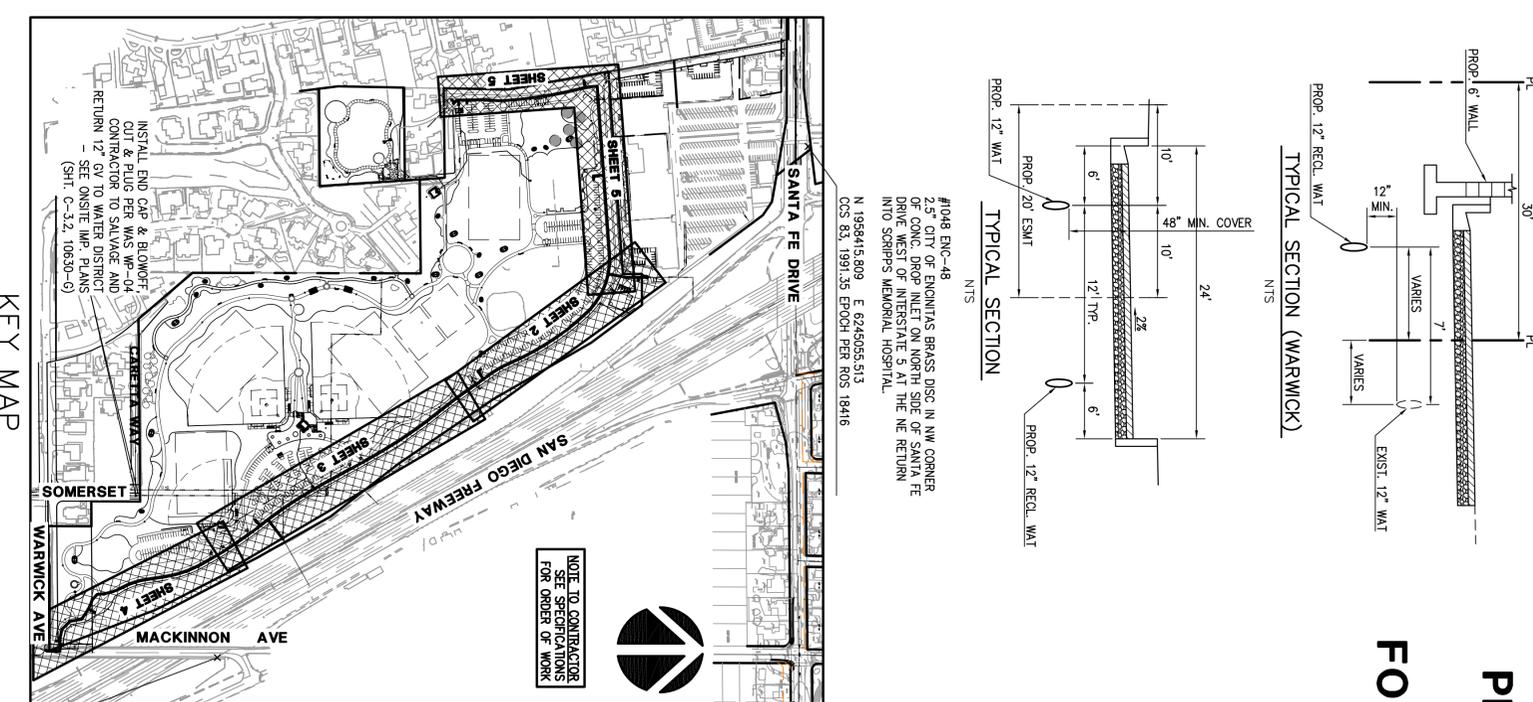


WATER NOTES

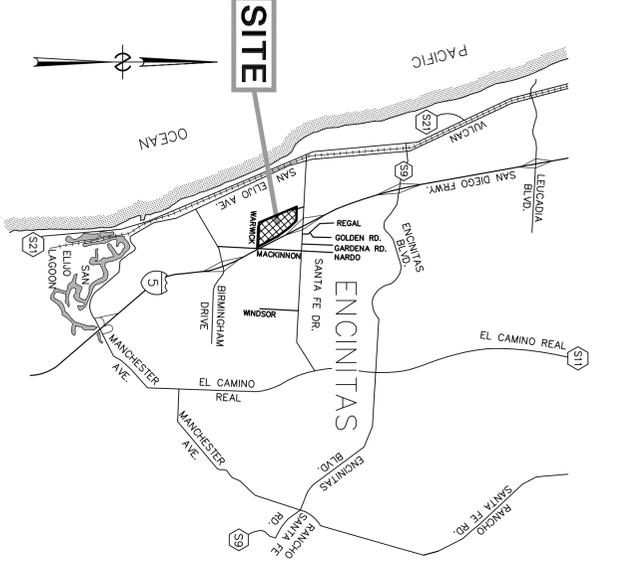
- (1) WATER MAINS, LATERALS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS OF THE CURRENT WATER AGENCIES' STANDARDS COMMITTEE (WASCO). THE CONTRACTOR SHALL AND HEREBY DOES GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF ACCEPTANCE.
- (2) UNLESS OTHERWISE NOTED, ALL CONNECTIONS TO EXISTING MAINS WILL BE MADE BY THE CONTRACTOR, UNDER THE SUPERVISION OF SAN DIEGUITO WATER DISTRICT, AFTER PAYMENT OF THE ESTIMATED COST BY THE DEVELOPER.
- (3) WHERE ELEVATIONS AND GRADES ARE NOT SHOWN ON THE WATER MAIN PROFILE, TOP OF PIPE PROFILE IS 48 INCHES BELOW CENTERLINE FINISH GRADE OF STREET.
- (4) ALL SERVICES TO BE CONSTRUCTED CLEAR OF DRIVEWAYS.
- (5) CONTRACTOR TO FURNISH ONE INCH COPPER WATER SERVICE AND METER BOX FOR EACH RESIDENTIAL LOT.
- (6) CONTRACTORS SHALL ACQUIRE A TRENCHING PERMIT FROM THE CALIFORNIA DIVISION OF SAFETY FOR ALL TRENCH WORK.
- (7) INSTALL FIRE HYDRANTS 2.5 FEET FROM FACE OF CURB, IF NO SIDEWALK EXISTS, OR 7 FEET FROM FACE OF CURB WHERE SIDEWALK EXISTS OR WILL BE CONSTRUCTED.
- (8) PROVIDE AIR RELEASE ASSEMBLIES AT ALL HIGH POINTS IN WATER MAIN.
- (9) CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE CITY OF ENCINITAS FOR ANY EXCAVATION WITHIN EXISTING CITY RIGHTS-OF-WAY.
- (10) THE DISTRICT REQUIRES THAT COMPACTON TESTS BE TAKEN WHERE WATER LINES ARE INSTALLED WITHIN EXISTING COUNTY RIGHTS-OF-WAY, CITY OF ENCINITAS RIGHTS-OF-WAY, OR PRIVATE EASEMENTS, AND THE RESULTS APPROVED BY THE CITY OF ENCINITAS, BEFORE THE WATER LINES ARE ACCEPTED AND A COPY SENT TO THE SAN DIEGUITO WATER DISTRICT OFFICE.
- (11) PRIOR TO AMENDING WATER LINE CONTRACT, CONTRACTORS TO OBTAIN AND REVIEW CURRENT WATER AGENCIES' STANDARDS COMMITTEE (WASCO) SPECIFICATIONS.
- (12) THE CONTRACTOR SHALL NOTIFY THE DISTRICT'S INSPECTION DEPARTMENT 48 HOURS IN ADVANCE OF BEGINNING WORK TO ARRANGE FOR INSPECTION OF PROJECT.
- (13) FILL AREAS MUST BE COMPACTED TO 90% PRIOR TO PIPE INSTALLATION.
- (14) APPROVAL OF THIS PLAN BY SAN DIEGUITO WATER DISTRICT DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF, OR THE EXISTENCE OR NON-EXISTENCE OF, ANY UNDERGROUND UTILITY, PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT.
- (15) ALL EXISTING FACILITIES WHICH MAY AFFECT FINAL DESIGN, I.E. LINE CROSSINGS, LINE PARALLELS OR PROPOSED CONNECTIONS SHALL BE FIELD VERIFIED. ALL EXISTING OR PROPOSED UTILITY CROSSINGS WITHIN 10 FEET OF PROPOSED WATER MAINS SHALL BE SHOWN ON IMPROVEMENT PLANS. ELECTRICAL AND SEMER TO CROSS UNDER WATER MAINS UNLESS GIVEN WRITTEN PERMISSION BY SAN DIEGUITO WATER DISTRICT.
- (16) WATER CONNECTIONS TO COMMERCIAL DEVELOPMENTS SHALL HAVE AN APPROVED BACKFLOW DEVICE INSTALLED TO THE DISTRICT'S SATISFACTION AND CURRENT WATER AGENCIES' STANDARDS COMMITTEE (WASCO) STANDARDS. BACKFLOW DEVICES ARE TO BE INSTALLED DIRECTLY OUTSIDE CITY OR COUNTY RIGHT-OF-WAY OR OUTSIDE WATER DISTRICT EASEMENT, REPAIR, MAINTENANCE AND ANNUAL TESTING OF BACKFLOW DEVICE ARE RESPONSIBILITY OF OWNER.
- (17) MINIMUM HORIZONTAL SEPARATION OF 10 FEET REQUIRED BETWEEN FIRE HYDRANTS AND SAN DIEGO GAS AND ELECTRIC VAULTS.
- (18) UTILITIES TO MAINTAIN MINIMUM 5-FOOT SEPARATION WHEN PARALLELING WATER SERVICES.
- (19) CONTRACTOR IS RESPONSIBLE TO RELOCATE ANY EXISTING WATER FACILITY (FIRE HYDRANT, METERS, VALVES, VALVE BOXES, ETC.) THAT ARE EFFECTED BY THEIR PROJECT.
- (20) CONTRACTOR TO SUPPLY DOCUMENTATION SHOWING THAT ANY ASBESTOS WATER PIPES REMOVED FROM THE GROUND WERE DISPOSED OF IN A MANNER ACCEPTABLE TO THE SAN DIEGO COUNTY WASTE DIVISION.
- (21) USE THE FOLLOWING VARIOUS COMBINATIONS OF MAIN END PIPE LENGTHS WITH HIGH PRESSURE POLYETHYLENE (HDPE) PIPE TO AVOID BENDS OR JOINTS IN THE MAIN LINE. USE HORIZONTAL BELL END OF STANDARD PIPE AND BELL END FOR USE WITH DEFLECTION COUPLINGS. USE 9.5-FOOT PLAIN END PIPE LENGTHS WITH DEFLECTION COUPLINGS FOR ALL MAINS BETWEEN 140 FEET TO 270 FEET. USE 19-FOOT PIPE LENGTHS WITH DEFLECTION COUPLINGS FOR ALL MAINS BETWEEN 270 FEET TO 560 FEET. USE AND INTERNAL BELL END PIPE LENGTH JOINED TOGETHER WITH A 19-FOOT PLAIN END PIPE LENGTH TO FORM A CHORD. USE DEFLECTION COUPLINGS ON EACH END OF THE CHORD AND CONTINUE THIS COMBINATION THROUGH THE CHORD ALIGNMENT FOR ALL MAINS BETWEEN 560 FEET TO 1,150 FEET. PIPE LENGTHS SHORTER THAN 9 FEET WILL NOT BE USED UNLESS SPECIFICALLY AUTHORIZED BY THE DISTRICT'S REPRESENTATIVE.
- (22) CALIFORNIA STATE LAW ASSEMBLY BILL 49-1953 IS REQUIRING THAT NO-LEAD BRASS BE USED IN THE CONSTRUCTION OR REPAIR OF ALL POTABLE WATER SYSTEM EFFECT JANUARY 1, 2010. IN COMPLIANCE WITH THIS LAW, THE DISTRICT SHALL REQUIRE ALL MATERIALS TO BE NO-LEAD BRASS PARTS.
- (23) ALL COPPER TUBING USED FOR AIR RELEASES, BLOW OFFS, AND SERVICES SHALL BE PROVIDED WITH CATHODIC PROTECTION IN ACCORDANCE WITH WC-17 OR WC-18.



PLANS FOR THE CONSTRUCTION OF POTABLE WATER IMPROVEMENTS FOR THE ENCINITAS COMMUNITY PARK IN THE CITY OF ENCINITAS

CONSTRUCTION NOTES AND ESTIMATED QUANTITIES

| NO. | DESCRIPTION | QUANTITY |
|-----|---|----------|
| 01 | GENERAL CONSTRUCTION NOTES | |
| 01 | CONSTRUCT 8" PVC, C900, CL 305 WATER LINE, BEDDING PER WAS WF-02 * | 1,250 LF |
| 02 | CONSTRUCT 12" PVC, C900, CL 305 WATER LINE, BEDDING PER WAS WF-02 * | 2,735 LF |
| 03 | INSTALL 12" x 8" TE & THRUST BLOCK PER WAS WF-01 | 1 EA |
| 04 | INSTALL 8" TE & THRUST BLOCK PER WAS WF-01 | 1 EA |
| 05 | CONSTRUCT 12" FW GATE VALVE PER WAS WF-02 | 14 EA |
| 06 | INSTALL 12" TE & THRUST BLOCK PER WAS WF-01 | 3 EA |
| 07 | INSTALL 8" 90° D.I. ELBOW & THRUST BLOCK PER WAS WF-01 | 1 EA |
| 08 | INSTALL 8" 45° D.I. ELBOW & THRUST BLOCK PER WAS WF-01 | 1 EA |
| 09 | CONSTRUCT FIRE HYDRANT ASSEMBLY PER WAS WF-01 | 4 EA |
| 10 | CUT-IN 12" TE W/ THRUST BLOCK PER WAS WF-01 | 1 EA |
| 11 | INSTALL 12" x 8" REDUCER | 1 EA |
| 12 | REMOVE EXIST. WATER LINE & APPURTENANCE | 1 EA |
| 13 | INSTALL 12" 45° D.I. ELBOW & THRUST BLOCK PER WAS WF-01 | 3 EA |
| 14 | INSTALL 12" 90° D.I. ELBOW & THRUST BLOCK PER WAS WF-01 | 1 EA |
| 15 | INSTALL 12" 11.25" & 22.5" D.I. ELBOW & THRUST BLOCK PER WAS WF-01 | 2 EA |
| 16 | CONSTRUCT 1" SERVICE W/ RP PER WAS WS-01, WC-17 | 3 EA |
| 17 | INSTALL 12" 22.5" D.I. ELBOW & THRUST BLOCK PER WAS WF-01 | 1 EA |
| 18 | INSTALL 12" 11.25" D.I. ELBOW & THRUST BLOCK PER WAS WF-01 | 1 EA |
| 19 | PLUG & INSTALL TEMP. BLOWOFF & THRUST BLOCK PER WAS WF-01, WB-05 | 3 EA |
| 20 | REMOVE EXIST. PLUG & CONNECT AS REQUIRED | 1 EA |
| 21 | CONSTRUCT AIR VAC. RELEASE VALVE PER WAS WA-02, WC-17 | 2 EA |
| 22 | CONSTRUCT MANUAL AIR VAC. RELEASE VALVE PER WAS WA-01, WC-17 | 9 EA |
| 23 | POT HOLE EXIST. WATER MAIN FOR LOCATION & DEPTH | 3 EA |
| 24 | CONNECT TO EXIST. WATER W/ FLEX TRANS. COUPLING W/ 316 STAINLESS STEEL RESTRAINING HARNES | 2 EA |
| 25 | CONSTRUCT BLOW-OFF PER WAS WB-01, WC-17 | 7 EA |
| 26 | CONSTRUCT 2" SERVICE W/ RP PER WAS WS-02, WR-01, WC-17 | 1 EA |
| 27 | CONSTRUCT 8" RW GATE VALVE PER WAS WA-02 | 1 EA |
| 28 | CONSTRUCT TRENCH RESURFACING PER SPSD NO. G-24/G-25 | 70 LF |



WORK TO BE DONE

- THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THE SPECIAL PROVISIONS AND THE FOLLOWING SPECIFICATIONS OF THESE PLANS AND STANDARD DRAWINGS:
- STANDARD SPECIFICATIONS**
1. GREENBOOK STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (2009 EDITION).
 2. CALIFORNIA DEPARTMENT OF TRANSPORTATION, MANUAL OF PRACTICE CONTROLS FOR THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS-MAY 2006.
 3. SAN DIEGUITO WATER DISTRICT STANDARD SPECIFICATIONS.
 4. WATER AND SEWER FACILITIES - SEBRUNN 1, 2008.
- STANDARD DRAWINGS**
1. COUNTY OF SAN DIEGO REGIONAL STANDARD DRAWINGS, AUGUST 2009.
 2. SAN DIEGUITO WATER DISTRICT STANDARD DRAWINGS.
 3. SAN DIEGUITO WATER DISTRICT STANDARD PLANS.
 4. WATER AGENCIES STANDARDS.
- DESCRIPTION**
- SYMBOL**
- EXIST GABLE TELEVISION LINE
 - EXIST STAIR LINE
 - EXIST SIGN LINE
 - EXIST ELECTRICAL
 - EXIST TELEPHONE
 - EXIST GAS MAIN
 - EXIST STORM DRAIN
 - EXIST CONDUITS
 - EXIST RIGHT-OF-WAY LINE
 - PROPOSED ROW/STANDARD PLANNING ZONING
 - PROPOSED CONDUITS
 - GRADED SLOPES
- PROPOSED SPOT ELEVATIONS**
- PROPOSED WATER LINE**
- WF-02
 - WF-01
 - WA-02
 - WA-01, -02
 - AR VAC RELEASE VALVE
 - WS-01, WC-17
 - WB-01
 - THRUST BLOCK
 - BLOW-OFF
 - REDUCER
 - CUT & PLUG EXIST. WATER
 - WF-03

ABBREVIATIONS

| | | | |
|------|--------------------------|-----|----------------|
| AC | ASPHALT CONCRETE | FL | FLOW LINE |
| ARMH | ARMED RUBBERIZED HOT MIX | FR | FRONT OF WAY |
| BC | BESON CURB RETURN | GR | GRAND DRAINAGE |
| BR | BESON CURB RETURN | HT | HIGHWAY |
| CA | CORRUGATED METAL PIPE | INT | INTERSECTION |
| CC | CONCRETE | IS | INTERSECTION |
| CD | CONCRETE | IS | INTERSECTION |
| CE | END CURVE | IS | INTERSECTION |
| CF | END CURVE | IS | INTERSECTION |
| CG | END CURVE | IS | INTERSECTION |
| CH | END CURVE | IS | INTERSECTION |
| CI | END CURVE | IS | INTERSECTION |
| CJ | END CURVE | IS | INTERSECTION |
| CK | END CURVE | IS | INTERSECTION |
| CL | END CURVE | IS | INTERSECTION |
| CM | END CURVE | IS | INTERSECTION |
| CN | END CURVE | IS | INTERSECTION |
| CO | END CURVE | IS | INTERSECTION |
| CP | END CURVE | IS | INTERSECTION |
| CQ | END CURVE | IS | INTERSECTION |
| CR | END CURVE | IS | INTERSECTION |
| CS | END CURVE | IS | INTERSECTION |
| CT | END CURVE | IS | INTERSECTION |
| CU | END CURVE | IS | INTERSECTION |
| CV | END CURVE | IS | INTERSECTION |
| CW | END CURVE | IS | INTERSECTION |
| CX | END CURVE | IS | INTERSECTION |
| CY | END CURVE | IS | INTERSECTION |
| CZ | END CURVE | IS | INTERSECTION |

NOTICE TO THE CONTRACTOR

THE ESTIMATES OF IMPROVEMENT QUANTITIES AS SHOWN HEREON ARE PROVIDED FOR SATISFYING PLANNING CHECK INFORMATION REQUIREMENTS ONLY. THE CONTRACTOR SHALL PERFORM AN INDEPENDENT ESTIMATE OF ALL IMPROVEMENT QUANTITIES AND NOTIFY THE CITY IMMEDIATELY OF ANY PERCEIVED DISCREPANCIES.

The area shall be carefully compacted to 90 percent of maximum density of optimum moisture content. Compaction shall be obtained by mechanical means, or if approved by the Engineer, by using excess water and passing a vibrator between the pipes and side of trench.

THRUST BLOCK SIZES (SQ. FT.)

| SIZE | AREA | REDUCER |
|--------|------|---------|
| 11.25' | 22.5 | 45' |
| 8" | 1.9 | 3.8 |
| 4.0 | 8.0 | 11.9 |
| | | 15.7 |
| | | 29.0 |
| | | 20.5 |
| | | 10.9 |

ANCHOR BLOCK SIZES (CUBIC FT.)

| SIZE | AREA | REDUCER |
|--------|------|---------|
| 11.25' | 22.5 | 45' |
| 8" | 2.7 | 5.4 |
| | | 8.0 |
| | | 10.6 |
| | | 19.5 |
| | | 13.8 |
| | | 13.8 |



REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |

BENCHMARK
DESCRIPTION: OC 0019
LOCATION: SEE SHEET C-01
ELEVATION: 215.640
DATE: NGD 28

SCALE
HORIZONTAL: AS SHOWN
VERTICAL: AS SHOWN

BASIS OF BEARING
THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF SANTA FE DRIVE BEING NORTH 89°59'47" EAST AS SHOWN ON RECORD OF SURVEY 15762.

PLANS PREPARED UNDER SUPERVISION OF
MCE CONSULTANTS
1000 LA JOLLA VILLAGE, CA 92037
PHONE: 949.542.7220
FAX: 949.542.7230
RICHARD A. MOORE

DATE: 04/09/12
BY: [Signature]
ENGINEER NAME: [Name]
DATE: 12/21/2013
EXP. DATE: 12/21/2013

APN & ADDRESS
APNs: 260-650-01-00, 260-181-37-00, 260-181-56-00, 260-181-59-00, 260-181-91-71 THRU 96, 260-181-63 THRU 64, 260-181-71 THRU 74

CITY OF ENCINITAS SAN DIEGUITO WATER DISTRICT APPROVALS

CITY OF ENCINITAS SAN DIEGUITO WATER DISTRICT

SDWD W10-150

TITLE SHEET
ENCINITAS COMMUNITY PARK
POTABLE WATER IMPROVEMENTS
04-197 MUP/DR/CDP/EIA

DW-1
SHEET 1 OF 5