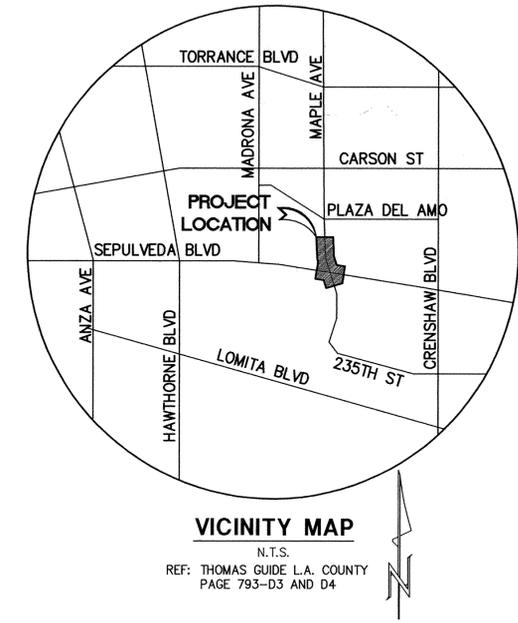


GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) 2009 EDITION AND SUPPLEMENTS THERETO, AS WRITTEN AND PROMULGATED BY THE PUBLIC WORKS STANDARDS, INC. (SEE GREENBOOK), THE CITY OF TORRANCE STANDARD PLANS, THE LATEST CALTRANS STANDARDS AND SPECIFICATIONS, AND TO THE SATISFACTION OF THE ENGINEER.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT ALL STRUCTURES, INCLUDING SUBSTRUCTURES, SHOWN AND NOT SHOWN ON THE PLAN. THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF REPAIRING OR REPLACING ANY OF SAID STRUCTURES DAMAGED BY HIM DURING PROSECUTION OF THE WORK. ALL LOCATIONS SHOWN ON THE PLAN FOR UTILITY LINES HAVE BEEN TAKEN FROM AVAILABLE RECORDS AND THEIR COMPLETENESS OR CORRECTNESS ARE IN NO WAY GUARANTEED.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600, ALL PUBLIC UTILITY COMPANIES AND OWNERS OF ALL PRIVATE FACILITIES WITHIN THE AREA OF CONSTRUCTION AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF PERFORMING ANY WORK WITHIN SAID AREA.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AS REQUIRED BY THE PUBLIC WORKS DEPARTMENT BEFORE COMMENCING WORK. TRAFFIC CONTROL WITHIN PUBLIC STREET RIGHTS OF WAY SHALL BE IN CONFORMANCE WITH THE STAGE CONSTRUCTION PLANS INCLUDED IN THESE PLANS AND IN CONFORMANCE WITH CALTRANS LATEST STANDARDS AND SPECIFICATIONS WHENEVER APPLICABLE.
- CAUTION: REVIEW APPROVED CONSTRUCTION PLAN. IF CONSTRUCTION REQUIRES WORKERS AND/OR EQUIPMENT TO BE WITHIN 6 FEET, OR CRANES OR HOISTING DEVICES TO BE WITHIN 10 FEET OF OVERHEAD ELECTRIC LINES, CALL SOUTHERN CALIFORNIA EDISON CO. AT (310) 608-5232.
- PRIOR TO START OF CONSTRUCTION, ALL SURVEY MONUMENTS IN THE PROJECT AREA SHALL BE LOCATED AND TIED OUT. THE CONTRACTOR SHALL NOT DESTROY ANY MONUMENTS OR TIES UNTIL HE HAS WRITTEN AUTHORIZATION FROM THE ENGINEER STATING THAT MONUMENTS HAVE BEEN TIED OUT. A LIST OF FOUND MONUMENTS AND TIE OUT DATA IS AVAILABLE WITHIN THE PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL MAKE AVAILABLE FOR THE INSPECTOR'S REVIEW, ON A DAILY BASIS, AS BUILT DRAWINGS FOR WORK PERFORMED UP TO AND INCLUDING THE PREVIOUS DAYS ACTIVITIES.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 3 WORKING DAYS PRIOR TO REMOVING OR RELOCATING ANY TREES WITHIN THE PUBLIC RIGHT OF WAY.
- ALL TRAFFIC SIGNS TO BE RELOCATED OR REMOVED SHALL BE DONE SO BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 2 WORKING DAYS IN ADVANCE. THE CONTRACTOR SHALL PROVIDE A 24-HOUR TELEPHONE NUMBER FOR EMERGENCIES.
- THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SITE CONDITIONS PRIOR TO COMMENCING WORK.
- SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK IN QUESTION.

CITY OF TORRANCE CONSTRUCTION PLANS FOR MEASURE R: N47 MAPLE AVENUE AT SEPULVEDA BOULEVARD, I-111 (ON MAPLE AVENUE 300 FEET NORTH OF SEPULVEDA BOULEVARD)



STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC)

(2009 EDITION & REVISIONS)

111-4	CURB RAMP
112-2	CURB AND SIDEWALK JOINTS
113-2	SIDEWALK AND DRIVEWAY REPLACEMENT
120-2	CURB AND GUTTER - BARRIER

CITY OF TORRANCE

T108	DRIVEWAY IN NARROW PARKWAY (1'-WIDE-PAVEMENT-SECTION)
T502	ROADSIDE SIGN PLACEMENT
T706	TYPICAL FIRE HYDRANT INSTALLATION FOR LOCAL STREETS & NON-HIGH PRESSURE ZONE

CALTRANS

(2010 EDITION & REVISIONS)

A20A	PAVEMENT MARKERS AND TRAFFIC LINES
A20D	PAVEMENT MARKERS AND TRAFFIC LINES
A24A	PAVEMENT MARKINGS ARROWS
A24E	PAVEMENT MARKINGS WORDS AND CROSSWALKS
ES-5B	ELECTRICAL SYSTEMS (DETECTORS)
A88A	CURB RAMP DETAILS

UTILITY CONTACTS:

UTILITY	CONTACT	PHONE NUMBER
AT&T DISTRIBUTION	MS. MEREDITH HOUSTON	(310) 515-4099
CHEVRON	MR. AL SUPER	(714) 228-1506
CRIMSON PIPELINE	MR. ALEX MORALES	(562) 595-9044
CALIFORNIA WATER SERVICE	MR. FRANK SCOTTY	(310) 257-1427
CITY OF TORRANCE - PUBLIC WORKS	MS. LUBNA ARIKAT	(310) 618-3066
EXXONMOBIL OIL CORPORATION	MS. RUTH CRONIN-FRUITT	(310) 212-1768
MCI VERIZON BUSINESS	MR. JOHN BACHELDER	(972) 729-6016
PLAINS ALL AMERICAN PIPELINE	MR. JAMES JACOBY	(562) 728-2020
SOCAL GAS	MR. MICHIGO ROBINSON	(310) 687-2023
SHELL OIL PIPELINE NORTH	MS. TERI WOHLGEMUTH	(310) 816-2063
SOCAL EDISON	MS. JODIE REYES	(310) 783-9302
TIME-WARNER CABLE	MR. DAVID BELL	(310) 647-5167
VERIZON	MS. BELINDA RAFF	(310) 264-5140
WEST BASIN MUNICIPAL WATER DISTRICT	MR. WYATT WON	(310) 660-6203

LIST OF ABBREVIATIONS

ABBREVIATION	DESCRIPTION
BC	BEGINNING OF CURVE
CMB	CRUSHED MISCELLANEOUS BASE
EC	END OF CURVE
EG	EXISTING GROUND
ELEC	ELECTRIC
E'LY	EASTERLY
EX	EXISTING
FH	FIRE HYDRANT
HYD	HYDRANT
IRR	IRRIGATION
PT	POINT OF TANGENCY
PVMT	PAVEMENT
TSPB	TRAFFIC SIGNAL PULLBOX
WLY	WESTERLY

*NOTE: ALL OTHER ABBREVIATIONS ARE DEFINED IN SECTION 1-3.2 OF THE "GREENBOOK" STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

CONSTRUCTION NOTES:

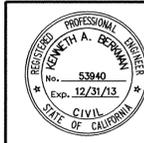
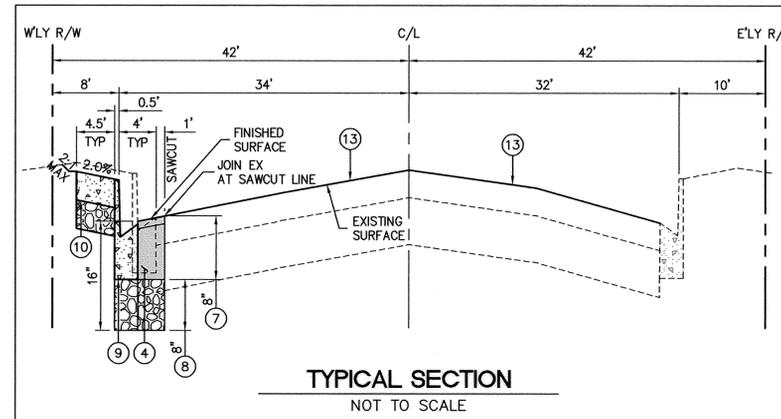
- PROTECT IN PLACE (ITEM AS NOTED)
- REMOVE EXISTING IMPROVEMENTS (ITEM AS NOTED)
- ADJUST EXISTING IMPROVEMENT TO GRADE (ITEM AS NOTED)
- SAWCUT AND REMOVE EXISTING STRUCTURAL SECTION AND UNCLASSIFIED MATERIALS TO A DEPTH OF 16" BELOW LIP OF FUTURE GUTTER
- RELOCATE TRAFFIC SIGNAL PULL BOX
- NOT USED
- CONSTRUCT 2" ASPHALT CONCRETE PAVEMENT (C2-PG70-10) OVER 6" THICK SECTION OF 1-SACK CEMENT AND SAND SLURRY MIX (100-E-100)
- CONSTRUCT 8" CRUSHED MISCELLANEOUS BASE (CMB)
- CONSTRUCT TYPE A2-8(200) CURB AND GUTTER ON 8" CRUSHED MISCELLANEOUS BASE (CMB) PER SPPWC STD PLAN 120-2
- CONSTRUCT 3.5" THICK PCC SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB)
- CONSTRUCT CASE A TYPE 1 PCC CURB RAMP PER SPPWC STD PLAN 111-4, AND 1'-WIDE-PAVEMENT SECTION PER NOTE ON CITY OF TORRANCE STD PLAN T108, MODIFIED TO PAVEMENT TYPE (B-PG70-10).
- RELOCATE FIRE HYDRANT ASSEMBLY PER CITY OF TORRANCE STD PLAN T706 (MOD.) AND EXTEND "SERVICE LINE" AND INSTALL NEW ITEMS 3, 4, 7, 8 AND 9. DETAIL A HEREON.
- INSTALL TYPE II SLURRY SEAL WITH 2.5% LATEX

BASIS OF BEARINGS AND DATUM STATEMENT

THE BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 5 NAD 83 (EPOCH 2007.0) AS DETERMINED LOCALLY ALONG THE CENTERLINE OF SEPULVEDA BOULEVARD SHOWN AS SOUTH 76°13'46" EAST.

BENCHMARKS

- COUNTY OF LOS ANGELES BENCHMARK NO. Y8430, TORRANCE QUAD DESCRIBED AS: BEING COUNTY ENGINEERING MONUMENT IN CATCH BASIN 1FT SOUTH OF CURB FACE, 45FT SOUTH OF THE CENTERLINE OF SEPULVEDA BOULEVARD AND 101FT EAST OF THE CENTERLINE OF MADRONA AVENUE (TO THE NORTH) MARKED (BM 22-12B 1970 RE 5869).
ELEV. 82.123 FEET ADJUSTMENT 2005 ADJUSTMENT
- COUNTY OF LOS ANGELES BENCHMARK NO. Y8431, TORRANCE QUAD DESCRIBED AS: BEING LEAD AND BRAD IN CATCH BASIN RETURN 1FT EAST OF BCR AT THE SOUTHWEST CORNER OF MAPLE AVENUE AND SEPULVEDA BOULEVARD.
ELEV. 85.576 FEET ADJUSTMENT 2005 ADJUSTMENT
- COUNTY OF LOS ANGELES BENCHMARK NO. Y12117, TORRANCE QUAD DESCRIBED AS: BEING LEAD AND BRAD IN CATCH BASIN RETURN 1FT EAST OF BCR AT SOUTH OF BCR AT THE SOUTHWEST CORNER OF SEPULVEDA BOULEVARD AND MAPLE AVENUE.
ELEV. 85.345 FEET ADJUSTMENT 2005 ADJUSTMENT



**MEASURE R: N47 MAPLE AVENUE
AT SEPULVEDA BOULEVARD, I-111
(ON MAPLE AVENUE 300 FEET NORTH OF SEPULVEDA BOULEVARD)**

TITLE SHEET

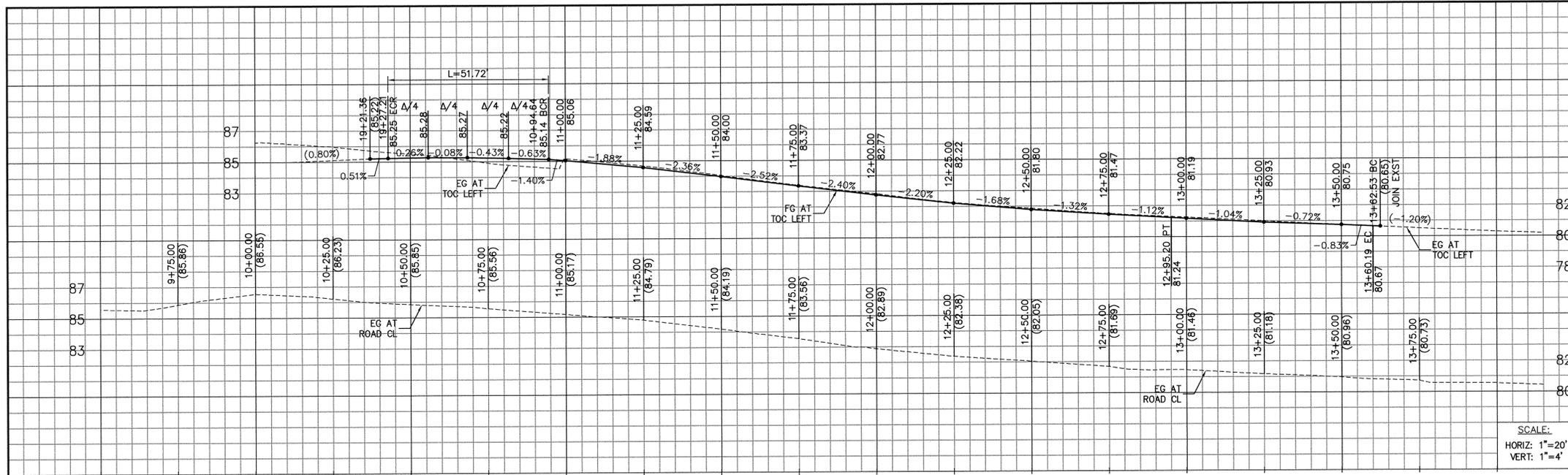
PLANS PREPARED BY:
PSOMAS

3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707
(714) 751-7373 Fax (714) 545-8883 KEN BERKMAN, RCE C53940, EXP 12/31/13 DATE May 17, 2012

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE PUBLIC WORKS DEPARTMENT	
DRAWN: G. ROBINSON	APPROVED:
DESIGNED: G. ROBINSON	TOURIC J. SEMAN ACTING CITY ENGINEER R.C.E. NO. 59226 EXP. 6-30-13
PROJECT ENGINEER: R. HU	DATE 1/15/12 SCALE: AS SHOWN SHEET 1 OF 5
	PLAN NO. ST-1047

Dwg Name: M:\P08030101\Public_Works_Sheets\TTL-01.dwg Plotted by: amanda.deng on May 17, 2012 - 8:16:29



FURNISH & INSTALL NEW

CONSTRUCTION NOTES:

- ① PROTECT IN PLACE (ITEM AS NOTED)
- ② REMOVE EXISTING IMPROVEMENTS (ITEM AS NOTED)
- ③ ADJUST EXISTING IMPROVEMENT TO GRADE (ITEM AS NOTED)
- ④ SAWCUT AND REMOVE EXISTING STRUCTURAL SECTION AND UNCLASSIFIED MATERIALS TO A DEPTH OF 16" BELOW LIP OF FUTURE GUTTER
- ⑤ RELOCATE TRAFFIC SIGNAL PULL BOX
- ⑥ NOT USED
- ⑦ CONSTRUCT 2" ASPHALT CONCRETE PAVEMENT (C2-PG70-10) OVER 6" THICK SECTION OF 1-SACK CEMENT AND SAND SLURRY MIX (100-E-100)
- ⑧ CONSTRUCT 8" CRUSHED MISCELLANEOUS BASE (CMB)
- ⑨ CONSTRUCT TYPE A2-B(200) CURB AND GUTTER ON 8" CRUSHED MISCELLANEOUS BASE (CMB) PER SPPWC STD PLAN 120-2
- ⑩ CONSTRUCT 3.5" THICK PCC SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB)
- ⑪ CONSTRUCT CASE A TYPE 1 PCC CURB RAMP PER SPPWC STD PLAN 111-4. AND 1" WIDE PAVEMENT SECTION PER NOTE ON CITY OF TORRANCE STD PLAN 110B, MODIFIED TO PAVEMENT TYPE (B-PG70-10).
- ⑫ RELOCATE FIRE HYDRANT ASSEMBLY PER CITY OF TORRANCE STD PLAN T706. EXTEND "SERVICE LINE" AND INSTALL NEW ITEMS 3, 4, 7, 8 AND 9 (MOD.) AND DETAIL A HEREON.
- ⑬ INSTALL TYPE II SLURRY SEAL WITH 2.5% LATEX

HATCH / LINE LEGEND

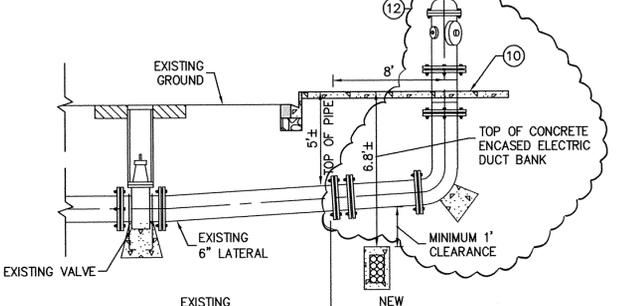
- NEW PAVEMENT
- NEW CONCRETE
- EXISTING ELECTRICAL
- EXISTING FIBER OPTIC
- EXISTING GAS
- EXISTING STORM DRAIN
- POTHOLE LOCATION
- SAWCUT LINE
- LIMIT OF IMPROVEMENTS
- EXISTING SANITARY SEWER
- EXISTING TELECOMMUNICATION
- EXISTING WATER

LINE / CURVE TABLE

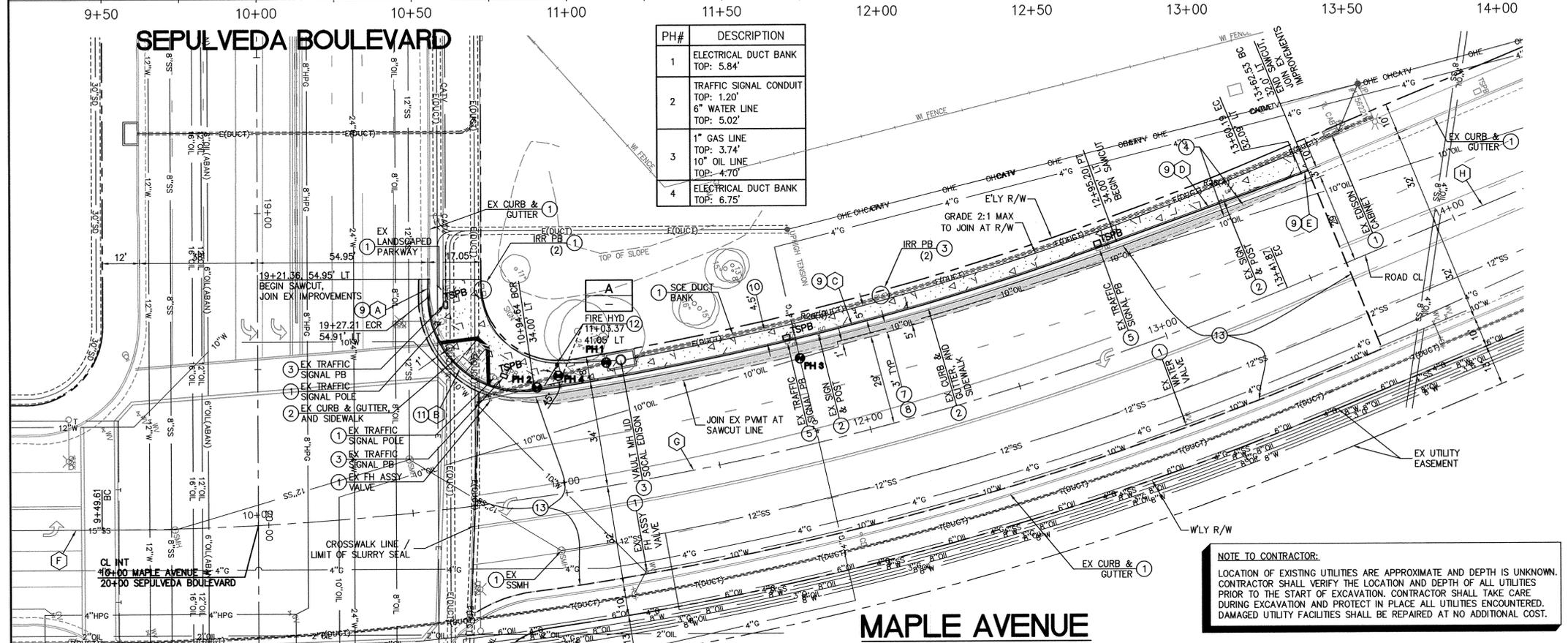
#	DELTA/BRG	RADIUS	LENGTH	TANGENT
A	N75°45'54"W	-	5.85'	-
B	98°46'12"	30.00'	51.72'	34.98'
C	11°12'30"	966.00'	193.75'	97.20'
D	N6°01'36"W	-	63.46'	-
E	2°40'26"	50.00'	2.33'	1.17'
F	N13°46'30"E	-	252.18'	-
G	22°28'33"	1000.00'	392.28'	198.69'
H	N8°42'2"W	-	99.56'	-

GENERAL NOTES:

1. ALL TREES BEHIND THE RIGHT OF WAY SHALL BE PROTECTED IN PLACE.
2. ALL UTILITIES SHALL BE PROTECTED IN PLACE, UNLESS OTHERWISE NOTED ON THIS SHEET.
3. FOR TRAFFIC DETECTOR LOOP LOCATIONS REFER TO SIGNING AND STRIPING PLAN.
4. FOR NEW SIGN TYPES AND PLACEMENT, REFER TO SIGNING AND STRIPING PLAN.



PROFILE - 6" FIRE HYDRANT LATERAL RELOCATION DETAIL
NOT TO SCALE



NOTE TO CONTRACTOR:
LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND DEPTH IS UNKNOWN. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF EXCAVATION. CONTRACTOR SHALL TAKE CARE DURING EXCAVATION AND PROTECT IN PLACE ALL UTILITIES ENCOUNTERED. DAMAGED UTILITY FACILITIES SHALL BE REPAIRED AT NO ADDITIONAL COST.

MEASURE R: N47 MAPLE AVENUE AT SEPULVEDA BOULEVARD, I-111
(ON MAPLE AVENUE 300 FEET NORTH OF SEPULVEDA BOULEVARD)

ROADWAY WIDENING PLAN

PLANS PREPARED BY:
PSOMAS
3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707
(714) 751-7373 Fax (714) 545-8883

PROFESSIONAL ENGINEER
KENETH A. BERKMAN
No. 53940
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

DATE: May 17, 2012

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

GRAPHIC SCALE
20' 10' 0' 20' 40'
Note: For reduced sized prints, original scale is in inches

REV.	DATE	DESCRIPTION	BY	CHECKED

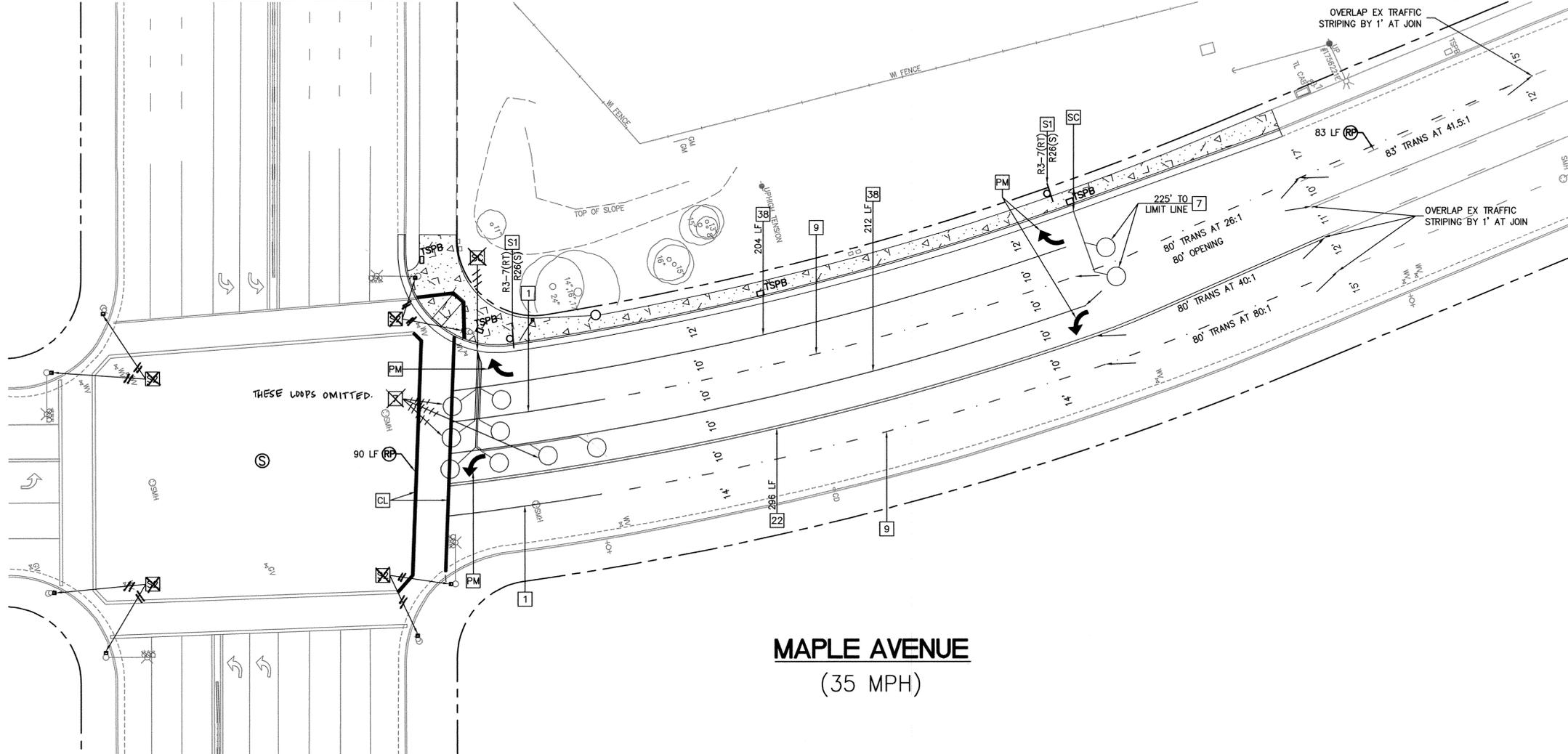
CITY OF TORRANCE PUBLIC WORKS DEPARTMENT

DRAWN: G. ROBISON
DESIGNED: G. ROBISON
PROJECT ENGINEER: R. HU

APPROVED: [Signature]
TOUFIC J. SEMAAN
ACTING CITY ENGINEER
R.C.E. NO. 59226
DATE: 11/15/11
EXP. 6-30-13

SCALE: AS SHOWN SHEET 2 OF 5
PLAN NO. **ST-1047**

SEPULVEDA BOULEVARD

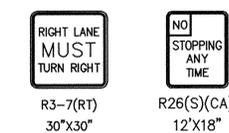


MAPLE AVENUE
(35 MPH)

SIGNING AND STRIPING NOTES:

- 1 INSTALL 50 LF. 4" WHITE SOLID LANE LINE WITH TYPE "G" RPMs AT 25' O.C., 2' OFFSET FROM LINE.
- 7 FURNISH AND INSTALL TYPE 'E' DETECTOR LOOPS AND SAWCUT TO EXISTING PULL BOX (AS INDICATED) PER CALTRANS STD PLAN ES-5B. SPLICE SC TO EXISTING LEAD-INS.
- 9 INSTALL 4" WHITE LANE LINE PER CALTRANS STD PLAN A20A, DET 9.
- 22 INSTALL DOUBLE YELLOW CENTERLINE PER CALTRANS STD PLAN A20A, DET 22.
- 38 INSTALL 8" WHITE CHANNELIZING LINE PER CALTRANS STD PLAN A20D, DET 38.
- CL INSTALL 12" WHITE CROSSWALK (10' CLEAR) PER CALTRANS STD PLAN A24E.
- PM INSTALL TYPE IV ARROW (LT OR RT) PER CALTRANS STD PLAN A24A.
- S1 FURNISH AND INSTALL SIGNS PER MUTCD AND SIGN POST PER CITY OF TORRANCE STD T502.
- REMOVE EXISTING AND FURNISH AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS AND MOUNTING, MODEL NO. LED-GE-GT-COUNTDOWN, MANUFACTURER-GE.

NEW SIGNS ON THIS SHEET:



LEGEND:

EXISTING	PROPOSED	
		TYPE IV (L or R) PAVEMENT ARROW
		TRAFFIC STRIPE OR MARKING
		AS NOTED PAVEMENT LEGEND
		SAWCUT AND INDUCTIVE LOOP
		TRAFFIC SIGN(S)
		SIGNALIZED INTERSECTION
		TRAFFIC SIGNAL PULL BOX
		SAWCUT AND INSTALL NEW LOOPS
		REMOVE ALL EXISTING CONFLICTING TRAFFIC STRIPING, MARKING OR ARROW AS NOTED, INCLUDING RAISED PAVEMENT MARKERS. CURB MARKINGS TO BE REMOVED SHALL BE DONE BY WET SANDBLASTING.
		LANE WIDTH FROM CENTER OF STRIP TO CENTER OF STRIPE OR TO FACE OF CURB
		PAINT (OR REPAINT) CURB FACE AND TOP OF CURB RED, YELLOW, WHITE OR GREY

SIGNING AND STRIPING GENERAL NOTES:

- INSTALLATION OF ALL STRIPING, SIGNS, PAVEMENT MARKERS, AND LEGENDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL STRIPING, SIGNS, PAVEMENT MARKERS, AND LEGENDS SHALL CONFORM TO THE MOST RECENT ADOPTED EDITION OF THE FOLLOWING MANUALS:
-CALIFORNIA MUTCD, DATED JANUARY 21, 2010
-CALTRANS STANDARD PLANS AND SPECIFICATIONS, DATED MAY 2010
- ALL STRIPING, SIGNS, PAVEMENT MARKERS, AND LEGENDS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER PRIOR TO INSTALLATION AND/OR REMOVAL.
- CONTRACTOR SHALL REMOVE ALL CONFLICTING STRIPING, PAVEMENT MARKINGS, PAVEMENT MARKERS AND LEGENDS BY WET SANDBLASTING AND/OR GRINDING. ANY DEBRIS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
- SIGN POSTS SHALL BE INSTALLED WITH SQUARE PREFORATED STEEL TUBING WITH BREAKAWAY BASE.
- ALL RAISED MEDIAN NOSES SHALL BE PAINTED YELLOW, WITH GLASS BEADS PER SPECIFICATIONS.
- ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO ANY CHANGES BEING MADE IN THE FIELD.

SIGNING AND STRIPING GENERAL NOTES (CONT):

- ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLANS SHALL BE NEW SIGNS PROVIDED AND INSTALLED BY THE CONTRACTOR, EXCEPT FOR EXISTING SIGNS SPECIFICALLY INDICATED TO BE RELOCATED OR TO REMAIN. ALL SIGNS SHALL BE MADE OF 3M DIAMOND GRADE CUBED, WITH 1160 PROTECTIVE ANTI-GRAFFITI OVERLAY FILM AND MATCHED COMPONENTS SYSTEM WARRANTY, (12 YEARS) ON 0.080 ALUMINUM.
- STRIPED CROSSWALKS SHALL HAVE AN INSIDE DIMENSION OF 10 FEET (CLEAR) UNLESS INDICATED OTHERWISE ON THE PLANS.
- ALL STRIPING, LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS (EXCEPT WITHIN BIKE LANES) SHALL BE THERMOPLASTIC. CURB MARKINGS SHALL BE PAINT (2 COATS).
- THE FINAL THERMOPLASTIC STRIPING AND PAVEMENT MARKINGS SHALL BE INSTALLED WHEN DIRECTED BY THE ENGINEER.
- ALL TYPE IV PAVEMENT MARKINGS AT THE CROSSWALK SHALL BE CENTERED BETWEEN THE FIRST AND SECOND LOOP DETECTORS.

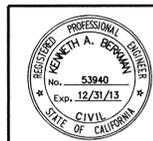
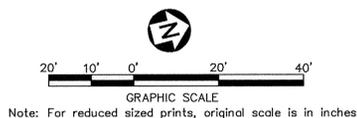
SIGNING AND STRIPING GENERAL NOTES (CONT):

- INSTALLATION OF PERMANENT SIGNING AND STRIPING SHALL BE DONE ONLY AFTER APPROVAL BY THE ENGINEER OF THE STRIPING CAT-TRACKS. CONTACT THE ENGINEER AT (310) 618-3054 TO SCHEDULE AN INSPECTION AT LEAST 24 HOURS BEFORE COMPLETING LAYOUTS. THE ENGINEER OR DESIGNEE MUST APPROVE ANY CHANGES DUE TO PLAN DISCREPANCIES OR REVISIONS.
- STRIPING SHALL BEGIN AND TERMINATE AT THE CENTER CORNER DELTA, AT THE LIMIT LINES, OR THE BACK OF THE CROSSWALK.
- ALL NEW INDUCTIVE LOOPS SHALL BE TYPE E, CENTERED IN THE LANE OF TRAVEL, AND SPACED OUT 16' O.C. (TYPICAL). FRONT LOOPS SHALL BE INSTALLED 1' INTO THE LIMIT LINE OF CROSSWALK.
- ALL NEW INDUCTIVE LOOPS SHALL BE CONNECTED TO PROVIDE A CALL TO THE PROPER PHASE PER THE EXISTING CONDITION. ALL LOOPS SHALL BE TESTED PRIOR TO ACCEPTANCE.
- CONTRACTOR SHALL INSTALL A TYPE D BLUE REFLECTIVE MARKER AT EACH FIRE HYDRANT LOCATION WITHIN THE PROJECT LIMITS. THE REFLECTOR SHALL BE 6" FROM THE CENTERLINE STRIPE, OR APPROXIMATE CENTER OF THE PAVEMENT WHERE THERE IS NO CENTERLINE STRIPE, ON THE SIDE NEAREST THE FIRE HYDRANT (PER MUTCD 2003, CA SUPPLEMENT FIG 3B-102). MARKER LOCATION SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.

NO WORK SHALL BE DONE ON THIS SITE UNTIL BELOW AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE.

Underground Service Alert
Call: TOLL FREE
1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG



MEASURE R: N47 MAPLE AVENUE
AT SEPULVEDA BOULEVARD, I-111
(ON MAPLE AVENUE 300 FEET NORTH OF SEPULVEDA BOULEVARD)

SIGNING AND STRIPING PLAN

PLANS PREPARED BY:
PSOMAS

3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707
(714) 751-7373 Fax (714) 545-8883

May 17, 2012

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: G. ROBISON
DESIGNED: G. ROBISON
PROJECT ENGINEER: R. HU

APPROVED: [Signature]
TOUFIC J. SEMAN
ACTING CITY ENGINEER
R.C.E. NO. 59226 EXP. 6-30-13

DATE 11/15/12

SCALE: AS SHOWN SHEET 3 OF 5

PLAN NO. **ST-1047**

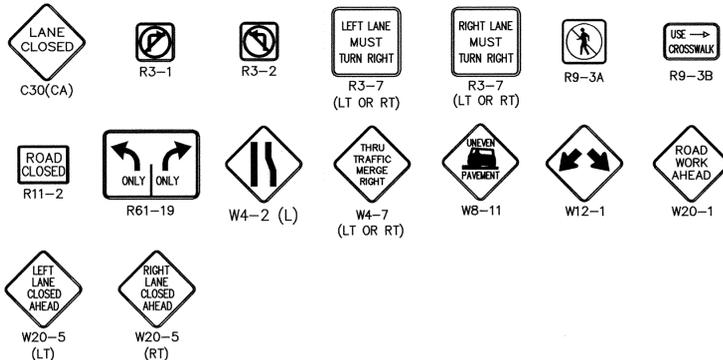
TRAFFIC CONTROL GENERAL NOTES

- ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO PART 6, "TEMPORARY TRAFFIC CONTROL" OF THE 2010 CALIFORNIA MUTCD, CALTRANS STANDARD PLANS AND SPECIFICATIONS DATED 2010. SIGNING AND STRIPING SHALL CONFORM TO LATEST MUTCD AND 2010 CALIFORNIA MUTCD, STANDARD PLANS AND STANDARD SPECIFICATIONS. SIGNS SHALL BE STANDARD UNLESS NOTED OTHERWISE.
- EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE AS DIRECTED BY ENGINEER BASED ON CONSTRUCTION CONDITIONS. ADDITIONAL WARNING OR CONSTRUCTION SIGNS MAY BE REQUIRED BY THE ENGINEER.
- ALL NIGHT TIME WORK SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.
- STREET CLOSURES SHALL BE APPROVED BY THE ENGINEER WHENEVER APPLICABLE. DETOUR PLANS SHALL BE SUBMITTED AND APPROVED BY THE CITY WHENEVER APPLICABLE. RESIDENTS/BUSINESSES SHALL BE NOTIFIED ONE WEEK PRIOR TO CONSTRUCTION.
- PRESSURE SENSITIVE DETOUR GRADE TRAFFIC MARKING TAPE AND/OR TEMPORARY FLEXIBLE RAISED PAVEMENT MARKERS MAY BE REQUIRED TO SUPPLEMENT THE CHANNELIZING DEVICES, DRUMS, REFLECTORIZED SIGNS, PAINT, AND BARRICADES AS DIRECTED BY THE ENGINEER.
- ALL CONFLICTING STRIPES, PAVEMENT MARKINGS, RAISED PAVEMENT MARKERS AND LEGENDS SHALL BE COMPLETELY REMOVED BY WET SANDBLASTING OR GRINDING PRIOR TO ANY CHANGE IN THE TRAFFIC PATTERN, IN COMPLIANCE WITH ALL APPLICABLE STORM WATER REGULATIONS. NO CONFLICTING STRIPES, PAVEMENT MARKINGS OR LEGENDS SHALL BE BLACKED OUT WITH PAINT.
- ALL ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES.
- ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE, UNLESS NOTED OTHERWISE. ALL W20-1, W20-5, AND W4-2 SIGNS SHALL BE MINIMUM 30" x 30".
- UNEVEN PAVEMENT SIGN(S) (W8-11) SHALL BE PLACED WHERE UNEVENNESS IN PAVEMENT DUE TO CONSTRUCTION OPERATIONS OCCUR.
- ALL DRUMS SHALL BE 36" MINIMUM HEIGHT, PORTABLE, WITH REFLECTORIZED 4"-6" WHITE AND ORANGE STRIPES, WITH WEIGHTED BASES OR BALLAST RINGS. DRUMS SHALL BE MADE OF A FLEXIBLE MATERIAL, 18"-36" IN DIAMETER AND SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY. DRUMS FOR NIGHTTIME USE SHALL BE PROVIDED WITH FLASHING WARNING LIGHTS.
- TYPE II BARRICADES MAY BE USED IN ADDITION TO THE DRUMS, AT THE DISCRETION OF THE CONTRACTOR, WHEN THEY ARE INTENDED TO PROVIDE ADDITIONAL EMPHASIS IN AREAS WHERE WORKERS ARE PRESENT.
- USE AND PLACEMENT OF FLASHING ARROW BOARD(S) AND CHANGEABLE MESSAGE SIGN(S) SHALL BE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN, ON A 24-HOUR BASIS, ALL SIGNS, DRUMS, BARRICADES, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC.
- THE CONTRACTOR SHALL UTILIZE FLAGGERS DURING WORK HOURS AS DEEMED NECESSARY BY THE ENGINEER.
- THE CONTRACTOR SHALL HAVE ALL SIGNS, DRUMS, BARRICADES, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND BEFORE ATTEMPTING TO SWITCH TO A SUBSEQUENT STAGE DURING WORK HOURS.
- THE CONTRACTOR SHALL PROVIDE PORTABLE CHANGEABLE MESSAGE SIGNS (P.C.M.S.) TO BE IN USE FOR THE ENTIRE DURATION OF WORK. USE, PLACEMENT AND FLASHING MESSAGE TEXT SHALL BE AS DIRECTED BY THE ENGINEER. PAYMENT IS INCLUDED IN THE UNIT PRICE FOR "PORTABLE CHANGEABLE MESSAGE SIGNS". REFER TO SPECIAL PROVISIONS FOR THE NUMBER OF PORTABLE CHANGEABLE MESSAGE SIGNS (P.C.M.S.).
- CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE AS POSSIBLE TO ADJUTING BUSINESSES AND PROPERTY OWNERS.
- CONSTRUCTION TRUCK TRAFFIC MERGING INTO TRAFFIC LANES SHALL BE DONE BY USE OF FLAGGER AND APPROPRIATE SIGNAGE AS DIRECTED BY ENGINEER.
- FLASHING ARROW SIGNS (F.A.S.) AND PORTABLE CHANGEABLE MESSAGE SIGNS (P.C.M.S.) SHALL CONFORM TO THE SPECIAL PROVISIONS AND BE EITHER SOLAR OR BATTERY OPERATED. GASOLINE AND DIESEL POWERED F.A.S. AND P.C.M.S. ARE PROHIBITED.
- NEW CONCRETE CURB AND GUTTER, SIDEWALKS, AND DRIVEWAYS SHALL BE COMPLETE AND IN PLACE PRIOR TO THE START OF ANY PAVEMENT RECONSTRUCTION.
- TRAFFIC SIGNALS (EXISTING, NEW OR TEMPORARY) SHALL BE IN OPERATION AT ALL TIMES AT SIGNALIZED INTERSECTIONS.
- ALL CONFLICTING SIGNAL HEADS SHALL BE COVERED DURING LONG TERM CLOSURE WHEN DIRECTED BY THE ENGINEER.
- TEMPORARY "NO PARKING - TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE FOR 24 HOUR ACCESS TO ALL ADJACENT PROPERTIES, THIS SHALL INCLUDE BUT NOT BE LIMITED TO DRIVEWAYS, SIDE STREETS, AND WALKWAYS, EXCEPT AS INDICATED ON THESE PLANS AND IN THE SPECIFICATIONS. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE POSSIBLE TO ADJUTING PROPERTY OWNERS/OPERATORS.
- ALL PROPERTIES THAT HAVE ACCESS ADJACENT TO THE WORK AREA SHALL BE NOTIFIED OF ACCESS RESTRICTIONS (IN WRITING 48 HOURS MINIMUM BEFORE START OF WORK). THE NOTIFICATION SHALL DESCRIBE THE ACCESS LIMITATIONS, DATES OF LIMITATION AND GIVE THE APPROXIMATE DATE AND TIME OF ACCESS RESTORATION. NO ACCESS SHALL BE LIMITED DURING NON-WORKING HOURS EXCEPT AS APPROVED BY THE ENGINEER. NO WORK IS PERMITTED ON SUNDAYS OR HOLIDAYS UNLESS APPROVED BY THE CITY.
- FLASHING YELLOW BEACONS, TYPE "B", SHALL BE USED ON ALL W20-1, W8-11 SIGNS, AND ALL TYPE III BARRICADES GUARDING THE WORK AREA OVERNIGHT.

TRAFFIC CONTROL GENERAL NOTES (CONTINUED):

- THE CONTRACTOR SHALL PROVIDE FOR SAFE PEDESTRIAN ACCESS AT ALL TIMES. TEMPORARY PEDESTRIAN ACCESS SHALL BE 5' MINIMUM WIDTH. ANY AND ALL PEDESTRIAN DETOUR ROUTES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE DETOUR ROUTE IS ESTABLISHED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF TRAFFIC SIGNAL LOOP-SENSORS AND SIGNAL AND INTERCONNECT CONDUITS. WHERE DAMAGE IS CAUSED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPLACE DAMAGED CITY FACILITY AT NO COST TO THE CITY.
- THE FOLLOWING AGENCIES SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ANY DETOUR AND/OR CONSTRUCTION ACTIVITIES.
 CITY OF TORRANCE (310) 781-6900
 POLICE (GIVE LOCATION AND DURATION) (310) 618-5557
 FIRE DEPARTMENT (310) 781-7042

TRAFFIC SIGN LEGEND



LEGEND

- TYPE II BARRICADE
- TYPE II BARRICADE WITH FLASHER
- TYPE III BARRICADE
- C30(CA), INSTALL SIGN (C30(CA), TYP) ON BARRICADE
- SIGN (PER MUTCD CODE)
- HIGH LEVEL WARNING DEVICE
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- REFLECTORIZED DRUM
- FLASHING ARROW SIGN
- WORK AREA
- DIRECTION OF TRAFFIC (NOT A PAVEMENT MARKING)
- SIGNALIZED INTERSECTION
- PRIVATE DRIVEWAY
- FLAGMAN

CONSTRUCTION NOTES

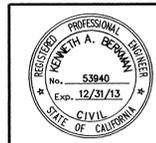
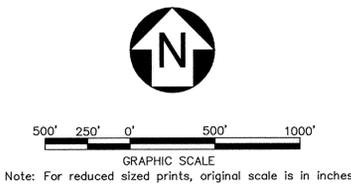
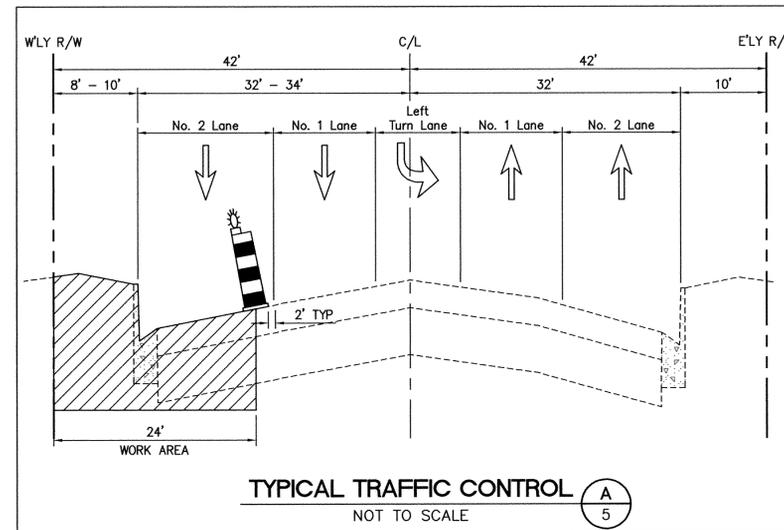
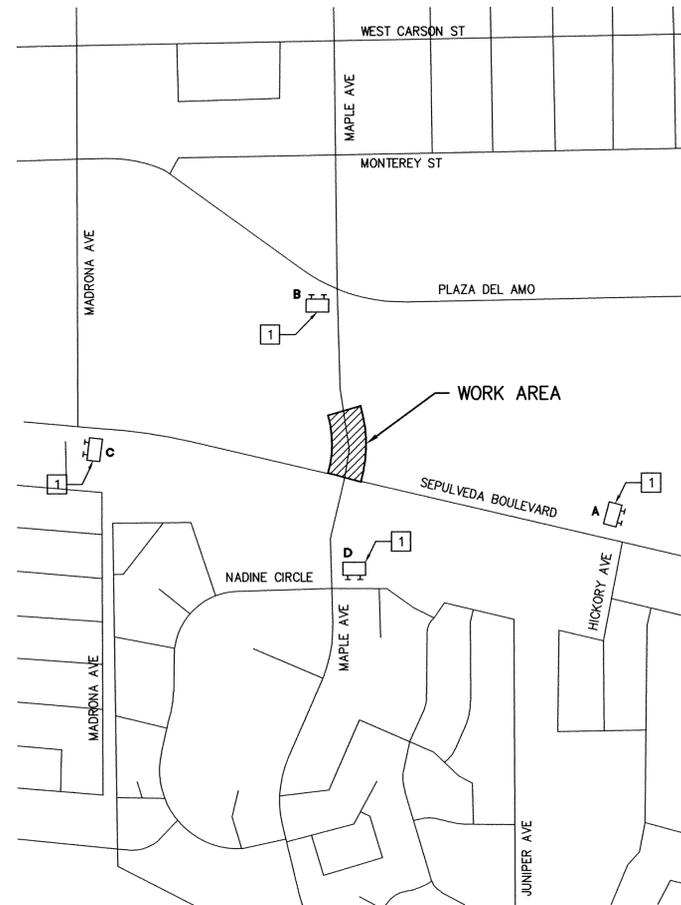
- INSTALL PORTABLE CHANGEABLE MESSAGE SIGN ONE WEEK PRIOR TO ANY CONSTRUCTION, COORDINATE EXACT LOCATION AND VERBAGE WITH CITY ENGINEER.

PORTABLE CHANGABLE MESSAGE SIGNS:

- CONTRACTOR SHALL PROGRAM EACH SCREEN OF ALL PORTABLE CHANGABLE MESSAGE SIGNS TO FLASH FOR TWO (2) SECONDS.

* ONE WEEK PRIOR TO CONSTRUCTION:

FOR PCMS 'A' AND 'C'	SCREEN 1 ROADWORK AT MAPLE AV	SCREEN 2 STARTING MONDAY NOV XX	SCREEN 1 ROADWORK AT MAPLE AV	SCREEN 2 EXPECT DELAYS
FOR PCMS 'B' AND 'D'	SCREEN 1 ROADWORK AT SEPUL BL	SCREEN 2 STARTING MONDAY NOV XX	SCREEN 1 ROADWORK AT SEPUL BL	SCREEN 2 EXPECT DELAYS



MEASURE R: N47 MAPLE AVENUE AT SEPULVEDA BOULEVARD, I-111
 (ON MAPLE AVENUE 300 FEET NORTH OF SEPULVEDA BOULEVARD)
TRAFFIC CONTROL PLAN
GENERAL NOTES AND PCMS PLAN

PLANS PREPARED BY:
PSOMAS
 3 Hutton Centre Drive, Suite 200
 Santa Ana, CA 92707
 (714) 751-7373 Fax (714) 545-8883 KEN BERKMAN, RCE C53940, EXP 12/31/13 DATE May 17, 2012

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE PUBLIC WORKS DEPARTMENT

DRAWN: G. ROBISON
 DESIGNED: G. ROBISON
 PROJECT ENGINEER: R. HU

APPROVED: [Signature]
 TOUFIQ J. SEMAAN
 ACTING CITY ENGINEER
 R.C.E. NO. 59226 EXP. 6-30-13
 DATE 11/15/11

SCALE: AS SHOWN SHEET 4 OF 5
 PLAN NO. **ST-1047**

