CITY OF TORRANCE

CONSTRUCTION PLANS FOR MADISON STREET AND SKYPARK DRIVE REHABILITATION, I-122

GENERAL NOTES

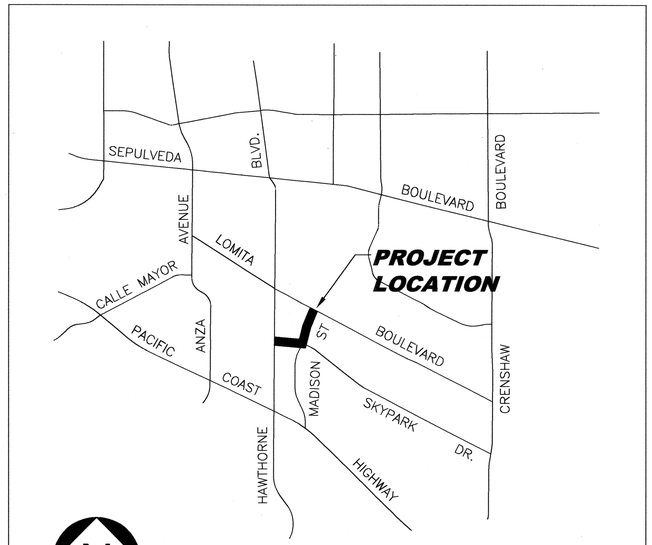
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) 2006 EDITION AND SUPPLEMENTS THERETO, AS WRITTEN AND PROMULGATED BY THE PUBLIC WORKS STANDARDS, INC. (SEE GREENBOOK), THE CITY OF TORRANCE STANDARD PLANS, THE LATEST CALTRANS STANDARDS AND SPECIFICATIONS, AND TO THE SATISFACTION OF THE ENGINEER.
2. 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 DURING COMPLETION 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.
3. 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.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY AND FROM CALTRANS BEFORE COMMENCING WORK. TRAFFIC CONTROL WITHIN PUBLIC STREET RIGHT OF WAY SHALL BE IN CONFORMANCE WITH THE TRAFFIC CONTROL PLANS AND SPECIAL PROVISIONS PROVIDED IN THIS CONTRACT. TRAFFIC CONTROL NOT SHOWN ON THE PLAN SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE CA MUTCD. THE CONTRACTOR SHALL PROVIDE A 24 HOUR TELEPHONE NUMBER FOR EMERGENCY REPAIRS TO TRAFFIC CONTROL AND PAVEMENT MARKERS.
5. 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 12 FEET OF OVERHEAD ELECTRIC LINES, CALL SOUTHERN CALIFORNIA EDISON CO. AT (310) 783-9336.
6. PRIOR TO START OF CONSTRUCTION, ALL SURVEY MONUMENTS IN THE PROJECT AREA SHALL BE LOCATED AND TIED OUT. ALL CENTERLINE MONUMENTS OR TIES LOST OR DESTROYED BY THIS WORK SHALL BE REPLACED EITHER BY A LICENSED SURVEYOR OR A CIVIL ENGINEER REGISTERED PRIOR TO JANUARY 1, 1982 AND NEW TIES SHEETS PROVIDED. METHOD OF ESTABLISHMENT SHALL BE STATED ON THE TIE SHEET.
7. 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. WORK SHALL NOT BE CONSIDERED AS COMPLETE UNTIL AS-BUILT DRAWINGS ARE SUBMITTED TO AND ACCEPTED BY THE COMMUNITY DEVELOPMENT OR PUBLIC WORKS DIRECTOR.
8. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AY (310) 781-6900 AT LEAST 3 WORKING DAYS PRIOR TO ROOT PRUNING, TRIMMING, REMOVING OR RELOCATING ANY TREES WITHIN THE PUBLIC RIGHT OF WAY.
9. DURING NON-CONSTRUCTION HOURS, ALL EXCAVATION MUST BE STEEL PLATED OR BACKFILLED AND SECURED IN PLACE TO THE SATISFACTION OF THE ENGINEER. PLATES SHALL BE TACK WELDED, PINNED AND/OR SECURED IN PLACE BY ANOTHER METHOD APPROVED BY THE INSPECTOR.
10. UNLESS OTHERWISE SHOWN, 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.
11. IF STREET TREES ARE REQUIRED IN THE PARKWAY, NEWLY INSTALLED TREES SHALL BE INSTALLED PER CITY OF TORRANCE STANDARD T401 AND TO THE SATISFACTION OF THE STREETSCAPE MANAGER. CONTACT THE PUBLIC WORKS DEPARTMENT AT 310-781-6900 FOR TYPE(S), SIZE(S) AND LOCATION(S) OF TREES.
12. PLANTED AND IRRIGATED PARKWAY(S) (IF REQUIRED) SHALL HAVE MATERIALS AND PLANTS APPROVED BY THE STREETSCAPE MANAGER PRIOR TO INSTALLATION.
13. THE CONTRACTOR SHALL BE FAMILIAR WITH THE PLANS AND SITE CONDITIONS PRIOR TO COMMENCING WORK.
14. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK IN QUESTION.

LEGEND

00+00	CENTERLINE WITH STATIONING	EPB	EXISTING ELECTRIC PULL BOX
	EXISTING TRAFFIC SIGNAL CONDUIT		EXISTING IRRIGATION BOX
— —AT&T— —	EXISTING AT&T CONDUIT	TB	EXISTING TRAFFIC PULL BOX
— — E — —	EXISTING SCE CONDUIT	TC	EXISTING TRASH CAN
— — G — —	EXISTING GAS PIPE	TLPH	EXISTING TELEPHONE BOX
— — SD — —	EXISTING STORM DRAIN PIPE	TV	EXISTING TV BOX
— — SS — —	EXISTING SEWER PIPE	UB	EXISTING UTILITY BOX
— — TW — —	EXISTING TIME WARNER CONDUIT	VAULT	EXISTING UTILITY VAULT
— — V — —	EXISTING VERIZON CONDUIT	WM	EXISTING WATER METER
— — W — —	EXISTING WATER PIPE	GV	EXISTING GAS VALVE
ETS	EXISTING GAS CATHODIC VALVE	CD	EXISTING CURB DRAIN
GBO	EXISTING GAS BLOW OFF		EXISTING TREE
IRGT V	EXISTING IRRIGATION VALVE		
PPB	EXISTING PEDESTRIAN PUSH BUTTON POLE	(XX.XX) FS	EXISTING ELEVATION (FEET)
TS	EXISTING TRAFFIC SIGNAL POLE	XX.XX FS	PROPOSED ELEVATION (FEET)
WV	EXISTING WATER VALVE	XX.XX RW	RIGHT OF WAY ELEVATION (FEET)
	EXISTING STORM DRAIN MANHOLE	XX.XX BW	BACK OF WALK ELEVATION (FEET)
S	EXISTING SEWER MANHOLE	XX.XX SW	SIDE WALK ELEVATION (FEET)
T	EXISTING TELEPHONE MANHOLE	XX.XX TC	TOP OF CURB ELEVATION (FEET)
U	EXISTING UNKNOWN UTILITY MANHOLE	XX.XX FL	FLOW LINE ELEVATION (FEET)
V	EXISTING VERIZON MANHOLE	XX.XX EG	EDGE OF GUTTER ELEVATION (FEET)
			EXISTING SIGN
			EXISTING STREET LIGHT
			EXISTING FIRE HYDRANT
		E	EXISTING SCE MANHOLE AND VAULT
		D	EXISTING CATCH BASIN AND MANHOLE
			EXISTING TRAFFIC LOOP DETECTOR

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



VICINITY MAP

NOT TO SCALE.

SHEET INDEX

SHEET NO.	DESCRIPTIONS
1	TITLE SHEET
2	CONSTRUCTION DETAILS
3	CONSTRUCTION PLAN – SKYPARK DR.
4	CONSTRUCTION PLAN – SKYPARK DR. INCLUDING SKYPARK DR/MADISON ST INTERSECTION
5	CONSTRUCTION PLAN – MADISON ST
6	CONSTRUCTION PLAN – MADISON ST
7	CONSTRUCTION PLAN – INTERSECTION DETAILS
8	TRAFFIC SIGNAL PLAN – SKYPARK DR/MADISON ST INTERSECTION
9	TRAFFIC SIGNAL PLAN – HAWTHORNE BLVD/SKYPARK DR INTERSECTION
10	SIGNING AND STRIPING PLAN
11	TRAFFIC CONTROL PLAN – TITLE SHEET
12	TRAFFIC CONTROL PLAN – PHASE 1
13	TRAFFIC CONTROL PLAN – PHASE 2
14	TRAFFIC CONTROL PLAN – PHASE 3
15	TRAFFIC CONTROL PLAN – PHASE 4
16	TRAFFIC CONTROL PLAN – DETOUR ROUTE

STANDARD PLANS

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC)

(LATEST EDITION)

111-5	CURB RAMP
112-2	CURB AND SIDEWALK JOINTS
113-2	SIDEWALK & DRIVEWAY REPLACEMENT
120-2	CURB AND GUTTER – BARRIER
150-3	CURB DRAIN

CITY OF TORRANCE

(LATEST EDITION)

T105	RADIUS DRIVEWAY WITH DEPRESSED SIDEWALK
T115	DOWELS AT EXPANSION JOINTS
T401	TREE PLANTING
T1004	ARTERIAL & COLLECTOR RIGHT LANE CLOSURE
T1005	ARTERIAL AND COLLECTOR LEFT LANE CLOSURE
T1011	RIGHT LANE CLOSURE FOR WORK BEYOND INTERSECTION
T1013	ARTERIAL & COLLECTOR STREET RIGHT TURN LANE CLOSURE

CALTRANS

(LATEST EDITION)

A20A	PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS
A20B	PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS
A20D	PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS
A24A	PAVEMENT MARKINGS ARROWS
A24D	PAVEMENT MARKINGS WORKS AND CROSSWALKS
A24E	PAVEMENT MARKINGS WORDS, LIMIT AND YIELD LINES
ES-4B	ELECTRICAL SYSTEMS (PEDESTRIAN SIGNAL AND RAMP METERING SIGN)
ES-5A	ELECTRICAL SYSTEMS (DETECTORS)
ES-5B	ELECTRICAL SYSTEMS (DETECTORS)

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. THOMAS HANLEY	(562) 285-4128
CALIFORNIA WATER SERVICE	MR. CARDINAL FERNANDEZEES	(310) 257-1446
EXXONMOBIL OIL CORPORATION	MS. ADRIANE SIMON	(310) 212-4374
VERIZON TELECOMMUNICATIONS	MR. DAN HAYES	(310) 793-4159
PLAINS ALL AMERICAN PIPELINE	MR. JAMES JACOBY	(562) 728-2020
SOCAL GAS	MS. GALE ETHERLY	(310) 687-2020
SHELL OIL PIPELINE NORTH	MS. TERI WOHLGEMUTH	(310) 816-2063
SOCAL EDISON	MS. KIM GURULE	(714) 796-9932
TIME-WARNER CABLE	MR. CARY HANSON	(414) 212-6961
MCI VERIZON BUSINESS	MR. JOHN BACHELDER	(972) 729-6322
WEST BASIN MUNICIPAL WATER DISTRICT	MR. WYATT WON	(310) 679-2575
LA COUNTY SANITATION DISTRICT	MR. JOHN GANZ	(562) 908-4288 EXT. 1205
WATER	MR. ALAN BERNDT	(310) 781-6219
SEWER AND STORMDRAINS	MR. TOM COOK	(310) 781-6905

BENCHMARK:

THE ELEVATION SHOWN HEREON ARE BASED UPON THE COUNTY OF LOS ANGELES BENCHMARK No. Y 12116, (2005) L&N IN E CB 300 MM (1FT) S/O BCR @ SE COR HAWTHORNE BL & 234TH ST @ BLDG #23332.

ELEVATION: 79.133'

BASIS OF COORDINATES:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM OF NAD83 (EPOCH 2007.014), ZONE V, AS DETERMINED LOCALLY BY A LINE BETWEEN CONTINUOUSLY OPERATING REFERENCE STATIONS (C.O.R.S.) HNPS AND IMPS, BEING N84° 19' 14" W, PER CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.).

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

TITLE SHEET

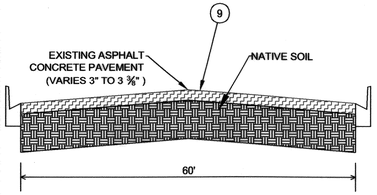
CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM
DESIGNED: JASON THIEM
APPROVED: 5/13/2014
PROJECT ENGINEER: JASON THIEM
CRAIG BILEZERIAN CITY ENGINEER R.C.E. NO. 55339 DATE: EXP. 12/31/2014
ENGINEERING MANAGER: TED SEMAAN
SCALE: AS SHOWN
SHEET 1 OF 16
PLAN NO. ST-1059

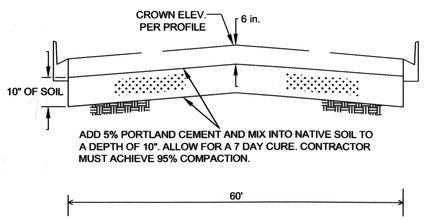
SKYPARK DRIVE

5.5"A.C./10.5"C.T.S.

STEP 1



STEP 2 (9)



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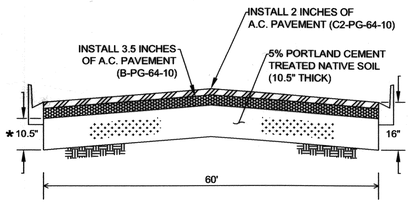
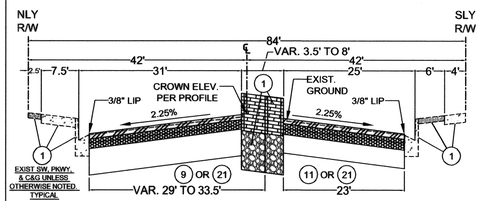


* 0.5" EXPANSION IS EXPECTED AFTER ADDING 5% PORTLAND CEMENT

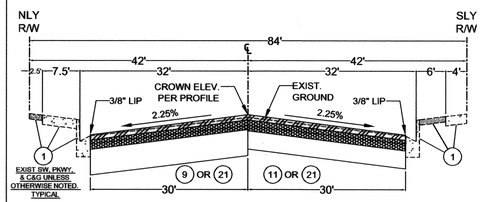
TYPICAL SECTIONS



TYPICAL SECTION : SKYPARK DRIVE

STA 11+50.00 TO STA 12+22.70

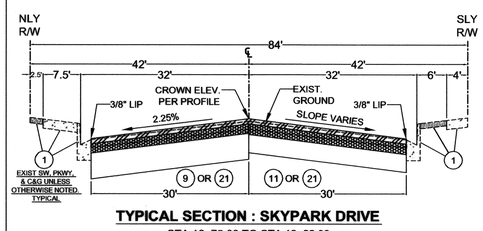
N.T.S.



TYPICAL SECTION : SKYPARK DRIVE

STA 12+22.70 TO STA 16+75.00

N.T.S.



TYPICAL SECTION : SKYPARK DRIVE

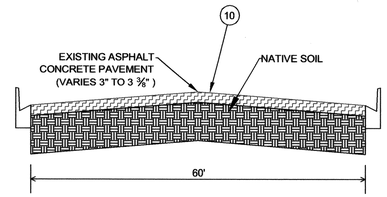
STA 16+75.00 TO STA 18+22.00

N.T.S.

MADISON STREET

5"A.C./10.5"C.T.S.

STEP 1



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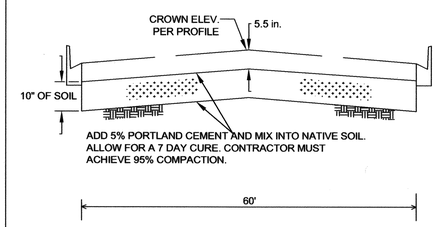

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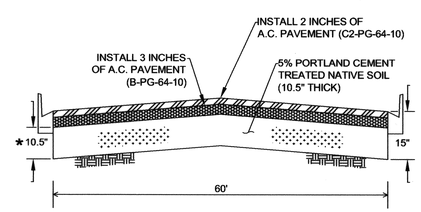
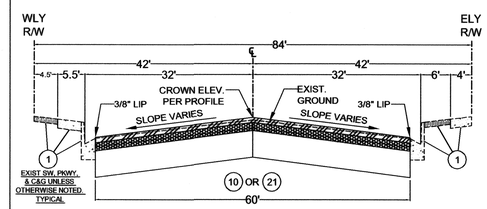


* 0.5" EXPANSION IS EXPECTED AFTER ADDING 5% PORTLAND CEMENT

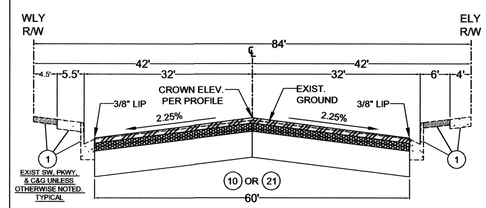
TYPICAL SECTIONS



TYPICAL SECTION : MADISON STREET

STA 10+81.25 TO STA 12+00.00

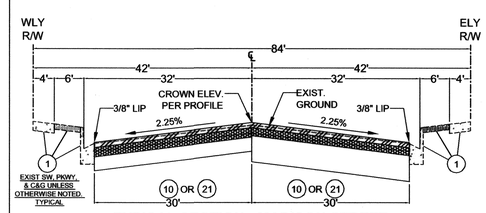
N.T.S.



TYPICAL SECTION : MADISON STREET

STA 12+00.00 TO STA 19+08.75

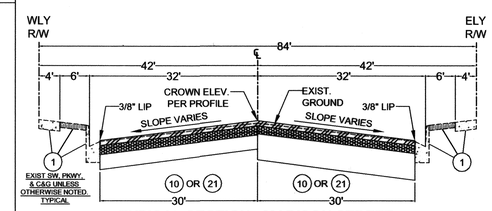
N.T.S.



TYPICAL SECTION : MADISON STREET

STA 19+08.75 TO STA 20+46.61

N.T.S.



TYPICAL SECTION : MADISON STREET

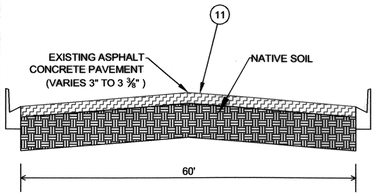
STA 20+46.61 TO STA 21+23.75

N.T.S.

CONSTRUCTION NOTES

1. PROTECT IN PLACE.
2. REMOVE EXISTING P.C.C. SIDEWALK AND CONSTRUCT 3.5" THICK P.C.C. SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB).
3. REMOVE EXISTING P.C.C. CURB AND GUTTER AND CONSTRUCT TYPE A2-8 P.C.C. CURB AND GUTTER PER SPPWC STD PLAN 120-2 ON 8" CMB (W=2').
4. REMOVE EXISTING P.C.C. DRIVEWAY APPROACH AND CONSTRUCT 6" THICK P.C.C. DRIVEWAY PER C.O.T. STD PLAN T105 ON 8" CMB.
5. REMOVE EXISTING P.C.C. CURB RAMP AND CONSTRUCT 3.5" P.C.C. CURB RAMP PER STD PLAN SPECIFIED ON PLAN ON 4" CMB. DELTAS (Δ) ARE FROM BCR TO ECR OF FLOW LINE.
6. ADJUST MANHOLE AND COVER TO FINISHED GRADE.
7. ADJUST MANHOLE AND VAULT FRAME TO FINISH GRADE. (WORK TO BE DONE BY SCE). CONTRACTOR TO COORDINATE WITH SCE.
8. ADJUST VALVE FRAME AND COVER TO FINISH GRADE.
9. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 6". CONSTRUCT A 5.5"A.C./ 10.5"C.T.S. SECTION PER "SKYPARK DRIVE" DETAILS ON SHEET 2 AND SPECIFICATIONS.
10. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 5.5". CONSTRUCT A 5"A.C./10.5"C.T.S. SECTION PER "MADISON STREET" DETAILS ON SHEET 2 AND SPECIFICATIONS.
11. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 6". CONSTRUCT A 6"A.C./ 7"C.M.B. SECTION PER "SKYPARK DRIVE" DETAILS ON SHEET 2 AND SPECIFICATIONS.
12. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 5.5". CONSTRUCT A 5.5"A.C./ 5.5"C.M.B. SECTION PER "MADISON STREET" DETAILS ON SHEET 2 AND SPECIFICATIONS.
13. RE-ADJUST EXISTING PIPE CURB DRAIN TO ENSURE A MINIMUM OF 2% POSITIVE FLOW PER SPPWC STD PLAN 150-3.
14. REMOVE EXISTING TREE AND ROOTS PER CERTIFIED ARBORIST RECOMMENDATIONS. REFER TO SPECIFICATIONS.
15. INSTALL 24" BOX - BRISBANE BOX PER C.O.T. STD PLAN T401.
16. SAWCUT.
17. SAWCUT AND REMOVE THE EXISTING CONCRETE IN FRONT OF THE BRICKS AND REPLACE IN KIND SLOPED TO JOIN THE PROPOSED BACK OF DEPRESSED SIDEWALK.
18. REMOVE EXISTING LANDSCAPING AND REGRADE TO PROPOSED SIDEWALK AND TOP OF CURB SLOPE. INSTALL SOD.
19. REMOVE EXISTING LANDSCAPING AND ADJUST IRRIGATION PIPES. ENSURE IRRIGATION SYSTEM IS OPERATIONAL AND THEN CONSTRUCT 3.5" THICK PCC SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB).
20. REMOVE EXISTING SIDEWALK AND INSTALL SOD.
21. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 9 INCHES, GRADE AND COMPACT TO CONSTRUCT A 3"A.C/ 6"R.C.C. SECTION. SECTION NOT SHOWN.

STEP 1 6"A.C./7"C.M.B.



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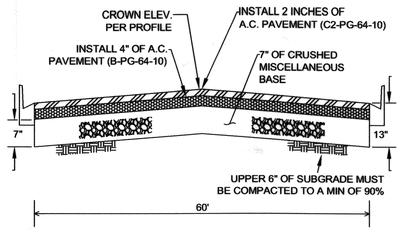
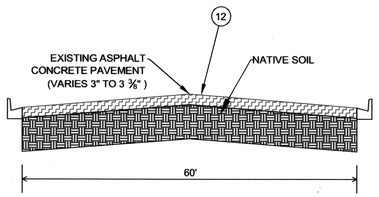


STEP 1 5.5"A.C./5.5"C.M.B.



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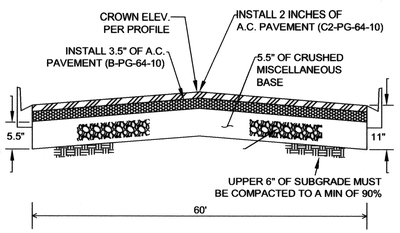

HATCH LEGEND

- EXISTING ISLAND
- EXISTING PARKWAY
- EXISTING CONCRETE (C&G, SW, DWY)
- EXISTING ASPHALT CONCRETE
- EXISTING NATIVE SOIL
- ASPHALT SURFACE COURSE (C2-PG-64-10)
- ASPHALT BASE COURSE (B-PG-64-10)
- CRUSHED MISCELLANEOUS BASE
- CEMENT TREATED SOIL

ABBREVIATIONS

RW	RIGHT OF WAY
BW	BACK OF WALK
TC	TOP OF CURB
FL	FLOW LINE
EG	EDGE OF GUTTER
FS	FINISH SURFACE
CL	CENTER LINE
DW	DRIVEWAY
SW	SIDEWALK
A.C.	ASPHALT CONCRETE
C.T.S.	CEMENT TREATED SOIL
C.M.B.	CRUSHED MISCELLANEOUS BASE

CONSTRUCTION DETAILS

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM

DESIGNED: JASON THIEM

PROJECT ENGINEER: JASON THIEM

ENGINEERING MANAGER: TED SEMAAN

APPROVED: 5/13/2014

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

DATE:
EXP. 12/31/2014

SCALE: AS SHOWN

SHEET 2 OF 16

PLAN NO. ST-1059

LEGEND

00+00	CENTERLINE WITH STATIONING
	EXISTING TRAFFIC SIGNAL CONDUIT
—AT&T—	EXISTING AT&T CONDUIT
— E —	EXISTING SCE CONDUIT
— G —	EXISTING GAS PIPE
— SD —	EXISTING STORM DRAIN PIPE
— SS —	EXISTING SEWER PIPE
— TW —	EXISTING TIME WARNER CONDUIT
— V —	EXISTING VERIZON CONDUIT
— W —	EXISTING WATER PIPE
ETS	EXISTING ETS STATION
GBO	EXISTING GAS BLOW OFF
IRGT V	EXISTING IRRIGATION VALVE
PPB	EXISTING PEDESTRIAN PUSH BUTTON POLE
TS	EXISTING TRAFFIC SIGNAL POLE
WV	EXISTING WATER VALVE
	EXISTING STORM DRAIN MANHOLE
S	EXISTING SEWER MANHOLE
T	EXISTING TELEPHONE MANHOLE
U	EXISTING UNKNOWN UTILITY MANHOLE
V	EXISTING VERIZON MANHOLE
E	EXISTING SCE MANHOLE AND VAULT
D	EXISTING CATCH BASIN AND MANHOLE
	EXISTING TRAFFIC LOOP DETECTOR
EPB	EXISTING ELECTRIC PULL BOX
	EXISTING IRRIGATION BOX
TB	EXISTING TRAFFIC PULL BOX
TC	EXISTING TRASH CAN
TLPH	EXISTING TELEPHONE BOX
TV	EXISTING TV BOX
UB	EXISTING UTILITY BOX
VAULT	EXISTING UTILITY VAULT
WM	EXISTING WATER METER
GV	EXISTING GAS VALVE
CD	EXISTING CURB DRAIN
	EXISTING TREE
(XX.XX) FS	EXISTING ELEVATION (FEET)
XX.XX FS	PROPOSED ELEVATION (FEET)
XX.XX RW	RIGHT OF WAY ELEVATION (FEET)
XX.XX BW	BACK OF WALK ELEVATION (FEET)
XX.XX SW	SIDE WALK ELEVATION (FEET)
XX.XX TC	TOP OF CURB ELEVATION (FEET)
XX.XX FL	FLOW LINE ELEVATION (FEET)
XX.XX EG	EDGE OF GUTTER ELEVATION (FEET)
	EXISTING SIGN
	EXISTING STREET LIGHT
	EXISTING FIRE HYDRANT

HATCH LEGEND

	PROPOSED 5.5"A.C./10.5"C.T.S. SECTION
	PROPOSED 5"A.C./10.5"C.T.S. SECTION
	PROPOSED 6"A.C./7"C.M.B. SECTION
	PROPOSED 5.5"A.C./5.5"C.M.B. SECTION
	PROPOSED CONCRETE DRIVEWAY
	PROPOSED CONCRETE CURB & GUTTER
	PROPOSED CONCRETE SIDEWALK
	PROPOSED LANDSCAPE REMOVAL, REGRADE AND INSTALL SOD. PROTECT EXISTING TREES UNLESS OTHERWISE NOTED.

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

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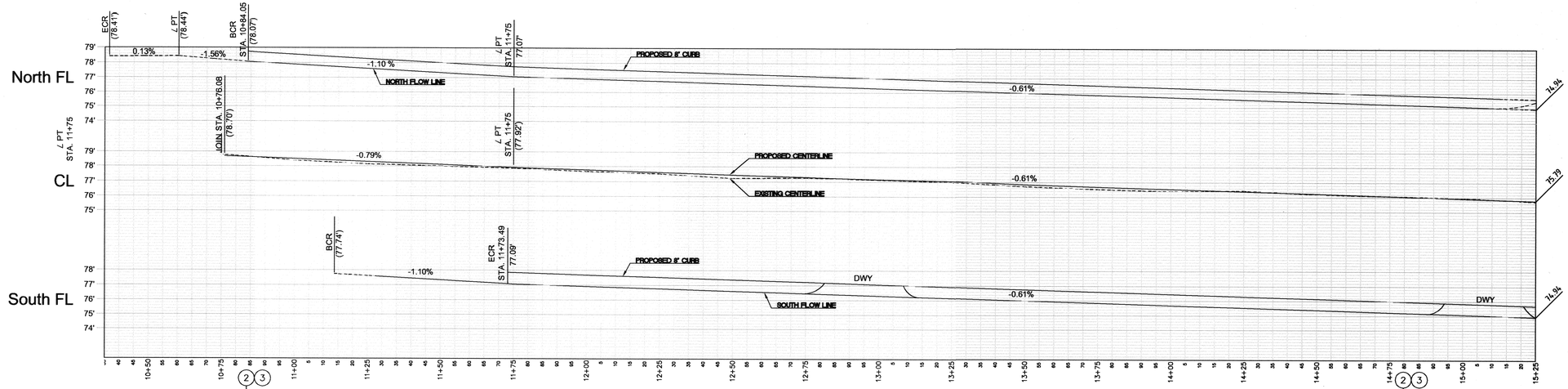
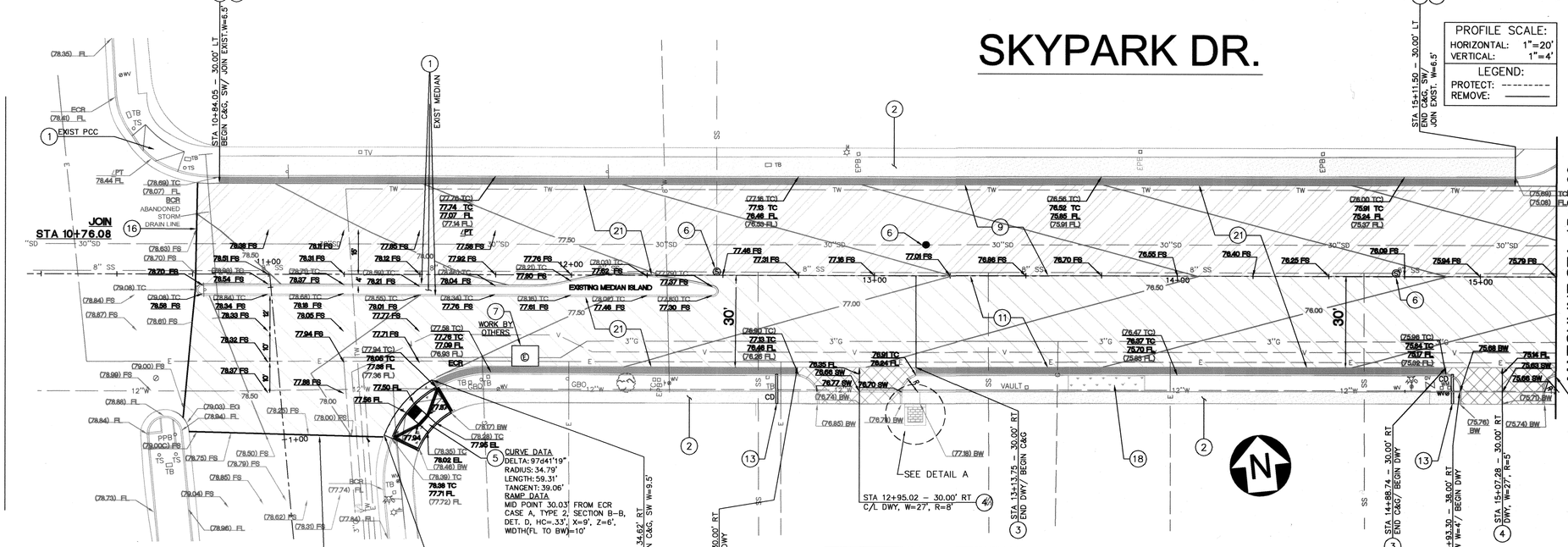
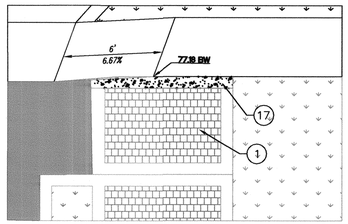




SCALE: 1" = 20'

20' 0' 20' 40'



DETAIL A
NOT TO SCALE

CONSTRUCTION NOTES

1. PROTECT IN PLACE.
2. REMOVE EXISTING P.C.C. SIDEWALK AND CONSTRUCT 3.5" THICK P.C.C. SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB).
3. REMOVE EXISTING P.C.C. CURB AND GUTTER AND CONSTRUCT TYPE A2-8 P.C.C. CURB AND GUTTER PER SPPWC STD PLAN 120-2 ON 8" CMB (W=2').
4. REMOVE EXISTING P.C.C. DRIVEWAY APPROACH AND CONSTRUCT 6" THICK P.C.C. DRIVEWAY PER C.O.T. STD PLAN T105 ON 8" CMB.
5. REMOVE EXISTING P.C.C. CURB RAMP AND CONSTRUCT 3.5" P.C.C. CURB RAMP PER STD PLAN SPECIFIED ON PLAN ON 4" CMB. DELTAS (Δ) ARE FROM BCR TO ECR OF FLOW LINE.
6. ADJUST MANHOLE AND COVER TO FINISHED GRADE.
7. ADJUST MANHOLE AND VAULT FRAME TO FINISH GRADE. (WORK TO BE DONE BY SCE). CONTRACTOR TO COORDINATE WITH SCE.
9. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 6". CONSTRUCT A 5.5"A.C./ 10.5"C.T.S. SECTION PER "SKYPARK DRIVE" DETAILS ON SHEET 2 AND SPECIFICATIONS.
11. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 6". CONSTRUCT A 6"A.C./ 7"C.M.B. SECTION PER "SKYPARK DRIVE" DETAILS ON SHEET 2 AND SPECIFICATIONS.
13. RE-ADJUST EXISTING PIPE CURB DRAIN TO ENSURE A MINIMUM OF 2% POSITIVE FLOW PER SPPWC STD PLAN 150-3.
16. SAWCUT.
17. SAWCUT AND REMOVE THE EXISTING CONCRETE IN FRONT OF THE BRICKS AND REPLACE IN KIND SLOPED TO JOIN THE PROPOSED BACK OF DEPRESSED SIDEWALK.
18. REMOVE EXISTING LANDSCAPING, PRUNE ROOTS PER CERTIFIED ARBORIST RECOMMENDATION, REGRADE TO PROPOSED SIDEWALK AND TOP OF CURB AND INSTALL SOD.
21. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 9 INCHES, GRADE AND COMPACT TO CONSTRUCT A 3"A.C/ 6"R.C.C. SECTION. SECTION NOT SHOWN.

NOTE: IF UNDERLYING CLAY SOIL IS ENCOUNTERED, CONTRACTOR SHALL SATURATE THE CLAY TO OPTIMUM MOISTURE CONTENT PRIOR TO INSTALLING C.M.B. AND MAINTAIN OPTIMUM MOISTURE UNTIL NEW P.C.C. IS INSTALLED.

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CONSTRUCTION PLAN - SKYPARK DR.

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM
DESIGNED: JASON THIEM
APPROVED: 5/13/2014
PROJECT ENGINEER: JASON THIEM
CRAIG BILEZERIAN, CITY ENGINEER, R.C.E. NO. 55339 — DATE: EXP. 12/31/2014
ENGINEERING MANAGER: TED SEMAAN
SCALE: AS SHOWN — SHEET 3 OF 16
PLAN NO. ST-1059

LEGEND

00+00	CENTERLINE WITH STATIONING
	EXISTING TRAFFIC SIGNAL CONDUIT
—AT&T—	EXISTING AT&T CONDUIT
— E —	EXISTING SCE CONDUIT
— G —	EXISTING GAS PIPE
— SD —	EXISTING STORM DRAIN PIPE
— SS —	EXISTING SEWER PIPE
— TW —	EXISTING TIME WARNER CONDUIT
— V —	EXISTING VERIZON CONDUIT
— W —	EXISTING WATER PIPE
ETS	EXISTING ETS STATION
GBO	EXISTING GAS BLOW OFF
IRGT V	EXISTING IRRIGATION VALVE
PPB	EXISTING PEDESTRIAN PUSH BUTTON POLE
TS	EXISTING TRAFFIC SIGNAL POLE
WV	EXISTING WATER VALVE
	EXISTING STORM DRAIN MANHOLE
S	EXISTING SEWER MANHOLE
T	EXISTING TELEPHONE MANHOLE
U	EXISTING UNKNOWN UTILITY MANHOLE
V	EXISTING VERIZON MANHOLE
E	EXISTING SCE MANHOLE AND VAULT
D	EXISTING CATCH BASIN AND MANHOLE
	EXISTING TRAFFIC LOOP DETECTOR
EPB	EXISTING ELECTRIC PULL BOX
	EXISTING IRRIGATION BOX
TB	EXISTING TRAFFIC PULL BOX
TC	EXISTING TRASH CAN
TLPH	EXISTING TELEPHONE BOX
TV	EXISTING TV BOX
UB	EXISTING UTILITY BOX
VAULT	EXISTING UTILITY VAULT
WM	EXISTING WATER METER
GV	EXISTING GAS VALVE
CD	EXISTING CURB DRAIN
	EXISTING TREE
(XX.XX) FS	EXISTING ELEVATION (FEET)
XX.XX FS	PROPOSED ELEVATION (FEET)
XX.XX RW	RIGHT OF WAY ELEVATION (FEET)
XX.XX BW	BACK OF WALK ELEVATION (FEET)
XX.XX SW	SIDE WALK ELEVATION (FEET)
XX.XX TC	TOP OF CURB ELEVATION (FEET)
XX.XX FL	FLOW LINE ELEVATION (FEET)
XX.XX EG	EDGE OF GUTTER ELEVATION (FEET)
	EXISTING SIGN
	EXISTING STREET LIGHT
	EXISTING FIRE HYDRANT

HATCH LEGEND

- PROPOSED 5.5"A.C./10.5"C.T.S. SECTION
- PROPOSED 5"A.C./10.5"C.T.S. SECTION
- PROPOSED 6"A.C./7"C.M.B. SECTION
- PROPOSED 5.5"A.C./5.5"C.M.B. SECTION
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED CONCRETE CURB & GUTTER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED LANDSCAPE REMOVAL, REGRADE AND INSTALL SOD. PROTECT EXISTING TREES UNLESS OTHERWISE NOTED.

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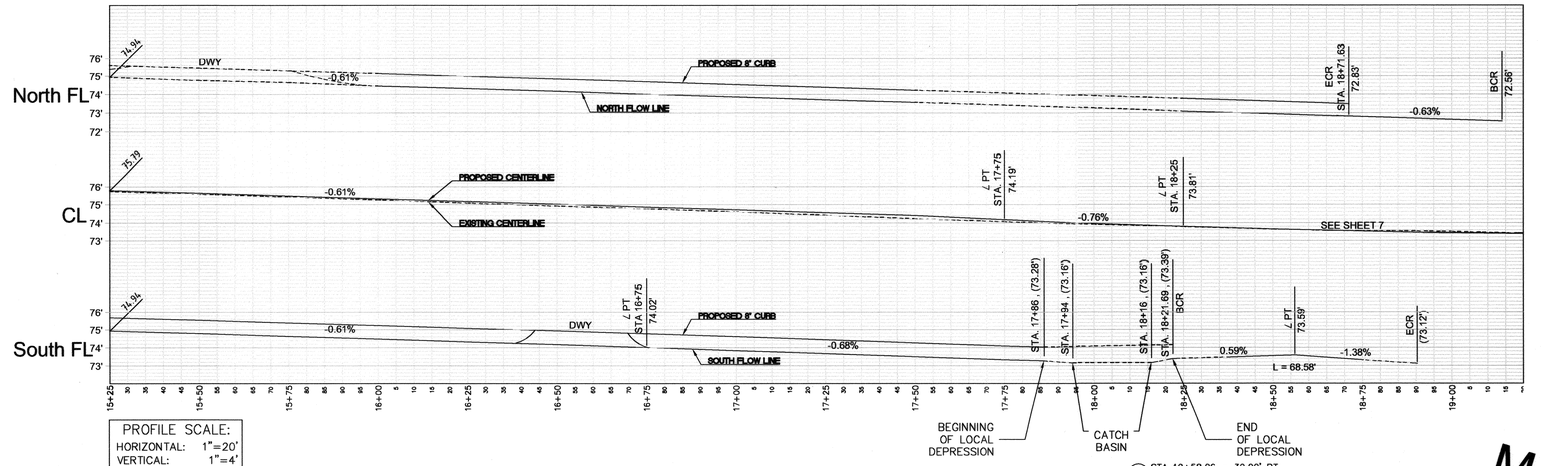
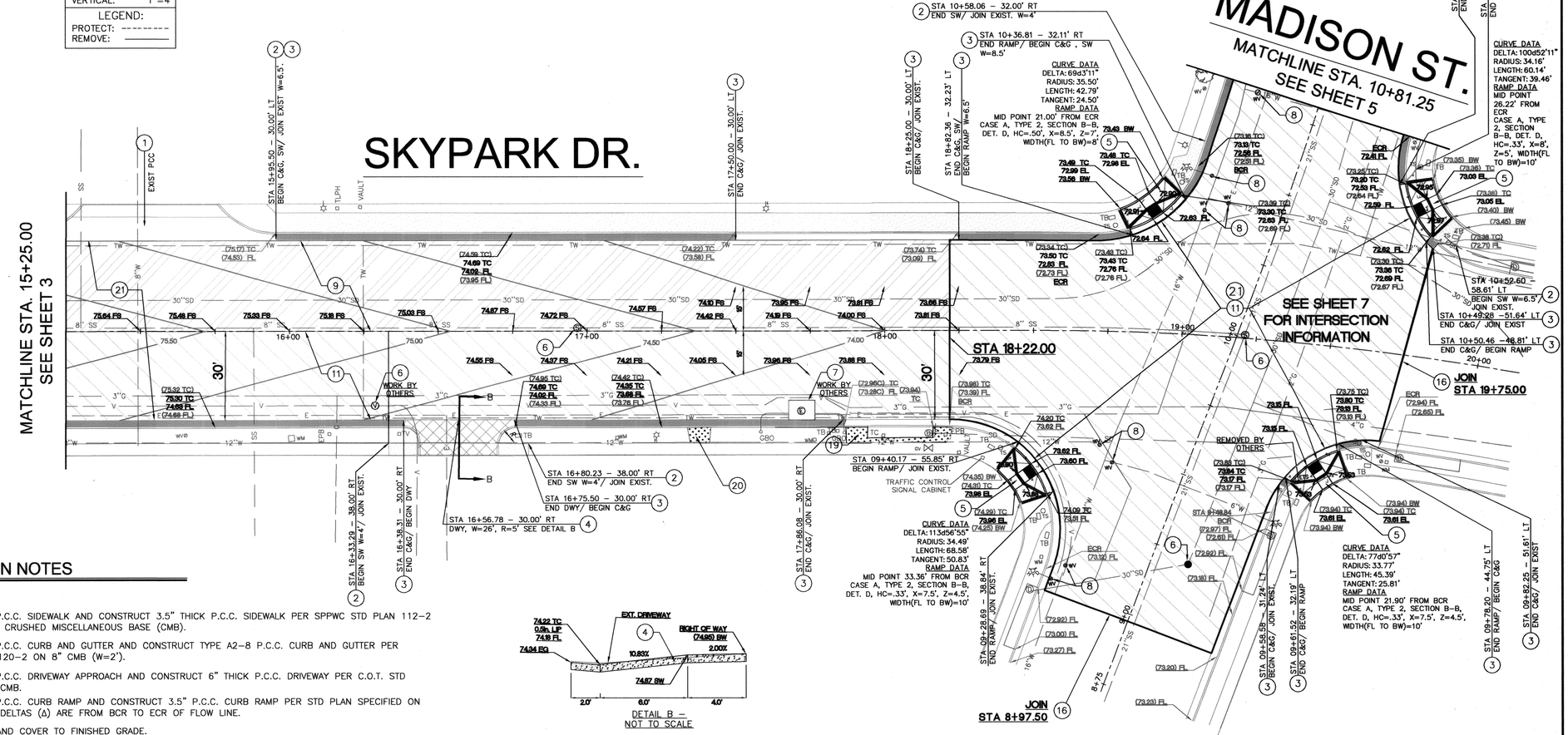
CONSTRUCTION NOTES

1. PROTECT IN PLACE.
2. REMOVE EXISTING P.C.C. SIDEWALK AND CONSTRUCT 3.5" THICK P.C.C. SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB).
3. REMOVE EXISTING P.C.C. CURB AND GUTTER AND CONSTRUCT TYPE A2-8 P.C.C. CURB AND GUTTER PER SPPWC STD PLAN 120-2 ON 8" CMB (W=2').
4. REMOVE EXISTING P.C.C. DRIVEWAY APPROACH AND CONSTRUCT 6" THICK P.C.C. DRIVEWAY PER C.O.T. STD PLAN T105 ON 8" CMB.
5. REMOVE EXISTING P.C.C. CURB RAMP AND CONSTRUCT 3.5" P.C.C. CURB RAMP PER STD PLAN SPECIFIED ON PLAN ON 4" CMB. DELTAS (Δ) ARE FROM BCR TO ECR OF FLOW LINE.
6. ADJUST MANHOLE AND COVER TO FINISHED GRADE.
7. ADJUST MANHOLE AND VAULT FRAME TO FINISH GRADE. (WORK TO BE DONE BY SCE). CONTRACTOR TO COORDINATE WITH SCE.
8. ADJUST VALVE FRAME AND COVER TO FINISH GRADE.
9. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 6". CONSTRUCT A 5.5"A.C./10.5"C.T.S. SECTION PER "SKYPARK DRIVE" DETAILS ON SHEET 2 AND SPECIFICATIONS.
11. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 6". CONSTRUCT A 6"A.C./7"C.M.B. SECTION PER "SKYPARK DRIVE" DETAILS ON SHEET 2 AND SPECIFICATIONS.
16. SAWCUT.
19. REMOVE EXISTING LANDSCAPING AND ADJUST IRRIGATION PIPES. ENSURE IRRIGATION SYSTEM IS OPERATIONAL AND THEN CONSTRUCT 3.5" THICK PCC SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB).
20. REMOVE EXISTING P.C.C. SIDEWALK AND INSTALL SOD.
21. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 9 INCHES, GRADE AND COMPACT TO CONSTRUCT A 3"A.C/ 6"R.C.C. SECTION. SECTION NOT SHOWN.





DETAIL B – NOT TO SCALE

NOTE: IF UNDERLYING CLAY SOIL IS ENCOUNTERED, CONTRACTOR SHALL SATURATE THE CLAY TO OPTIMUM MOISTURE CONTENT PRIOR TO INSTALLING C.M.B. AND MAINTAIN OPTIMUM MOISTURE UNTIL NEW P.C.C. IS INSTALLED.

SCALE: 1" = 20'

20' 0' 20' 40'

CONSTRUCTION PLAN - SKYPARK DR. INCLUDING SKYPARK DR/MADISON ST INTERSECTION

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

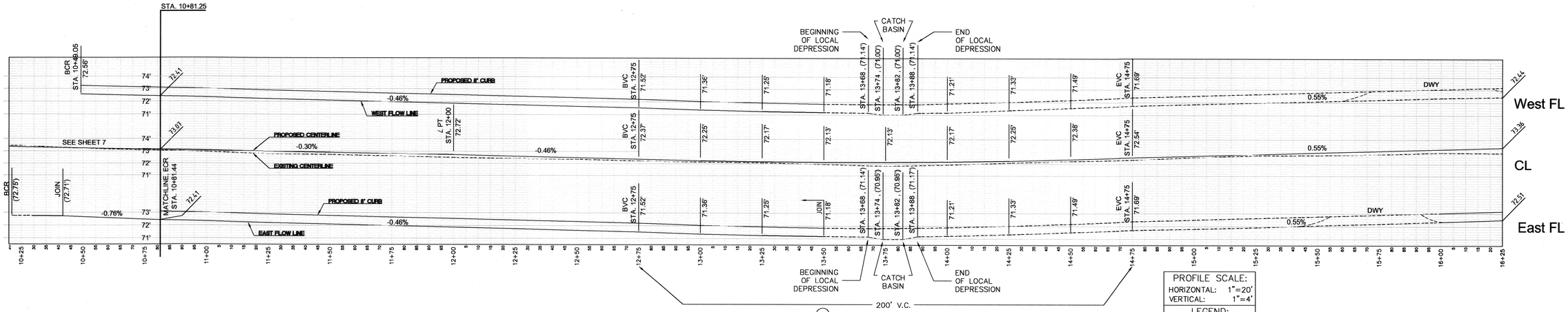
CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM
DESIGNED: JASON THIEM
PROJECT ENGINEER: JASON THIEM
ENGINEERING MANAGER: TED SEMAAN

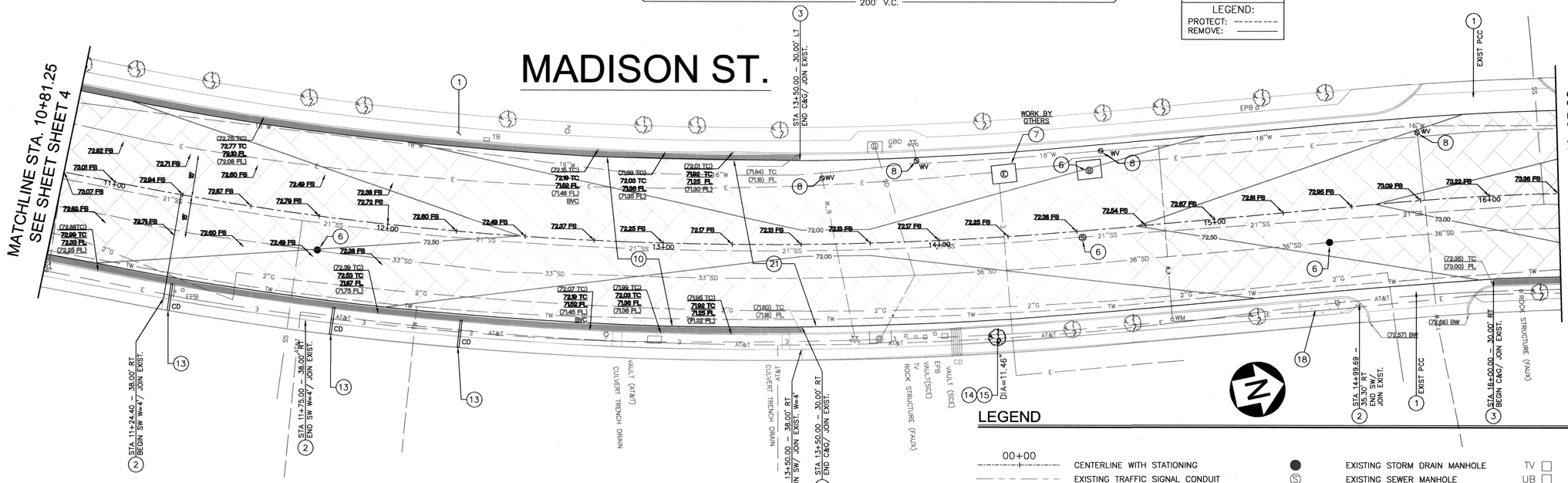
APPROVED: 5/13/2014
CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339
DATE:
EXP. 12/31/2014

SCALE: AS SHOWN | SHEET 4 OF 16

PLAN NO. **ST-1059**



MADISON ST.



HATCH LEGEND

- PROPOSED 5.5"A.C./10.5"C.T.S. SECTION
- PROPOSED 5"A.C./10.5"C.T.S. SECTION
- PROPOSED 6"A.C./7"C.M.B. SECTION
- PROPOSED 5.5"A.C./5.5"C.M.B. SECTION
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED CONCRETE CURB & GUTTER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED LANDSCAPE REMOVAL, REGRADE AND INSTALL SOD. PROTECT EXISTING TREES UNLESS OTHERWISE NOTED.

CONSTRUCTION NOTES

1. PROTECT IN PLACE.
2. REMOVE EXISTING P.C.C. SIDEWALK AND CONSTRUCT 3.5" THICK P.C.C. SIDEWALK PER SPPWC STD PLAN 112-2 AND 113-2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB).
3. REMOVE EXISTING P.C.C. CURB AND GUTTER AND CONSTRUCT TYPE A2-8 P.C.C. CURB AND GUTTER PER SPPWC STD PLAN 120-2 ON 8" CMB (W=2').
6. ADJUST MANHOLE AND COVER TO FINISHED GRADE.
7. ADJUST MANHOLE AND VAULT FRAME TO FINISH GRADE. (WORK TO BE DONE BY SCE). CONTRACTOR TO COORDINATE WITH SCE.
8. ADJUST VALVE FRAME AND COVER TO FINISH GRADE.
10. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 5.5". CONSTRUCT A 5"A.C./10.5"C.T.S. SECTION PER "MADISON STREET" DETAILS ON SHEET 2 AND SPECIFICATIONS.
13. RE-ADJUST EXISTING PIPE CURB DRAIN TO ENSURE A MINIMUM OF 2% POSITIVE FLOW PER SPPWC STD PLAN 150-3.
14. REMOVE EXISTING TREE AND ROOTS PER CERTIFIED ARBORIST RECOMMENDATIONS. REFER TO SPECIFICATIONS.
15. INSTALL 24" BOX – BRISBANE BOX PER C.O.T. STD PLAN T401.
18. REMOVE EXISTING LANDSCAPING, PRUNE ROOTS PER CERTIFIED ARBORIST RECOMMENDATION, REGRADE TO PROPOSED SIDEWALK AND TOP OF CURB AND INSTALL SOD.
21. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 9 INCHES, GRADE AND COMPACT TO CONSTRUCT A 3"A.C/ 6"R.C.C. SECTION. SECTION NOT SHOWN.

SCALE: 1" = 20'

20' 0' 20' 40'

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LEGEND

00+00	CENTERLINE WITH STATIONING	●	EXISTING STORM DRAIN MANHOLE	TV □	EXISTING TV BOX
— — — —	EXISTING TRAFFIC SIGNAL CONDUIT	Ⓢ	EXISTING SEWER MANHOLE	UB □	EXISTING UTILITY BOX
— —AT&T— —	EXISTING AT&T CONDUIT	Ⓣ	EXISTING TELEPHONE MANHOLE	VAULT □	EXISTING UTILITY VAULT
— — E — —	EXISTING SCE CONDUIT	Ⓤ	EXISTING UNKNOWN UTILITY MANHOLE	WM □	EXISTING WATER METER
— — G — —	EXISTING GAS PIPE	Ⓥ	EXISTING VERIZON MANHOLE	GV ⋈	EXISTING GAS VALVE
— — SD — —	EXISTING STORM DRAIN PIPE	Ⓔ	EXISTING SCE MANHOLE AND VAULT	CD ▭	EXISTING CURB DRAIN
— — SS — —	EXISTING SEWER PIPE				EXISTING TREE
— — TW — —	EXISTING TIME WARNER CONDUIT	Ⓓ	EXISTING CATCH BASIN AND MANHOLE	(XX.XX) FS	EXISTING ELEVATION (FEET)
— — V — —	EXISTING VERIZON CONDUIT		EXISTING TRAFFIC LOOP DETECTOR	XX.XX FS	PROPOSED ELEVATION (FEET)
— — W — —	EXISTING WATER PIPE				
ETS ○	EXISTING GAS CATHODIC VALVE	EPB □	EXISTING ELECTRIC PULL BOX	XX.XX RW	RIGHT OF WAY ELEVATION (FEET)
GBO ○	EXISTING GAS BLOW OFF	□	EXISTING IRRIGATION BOX	XX.XX BW	BACK OF WALK ELEVATION (FEET)
IRGT V ○	EXISTING IRRIGATION VALVE	TB □	EXISTING TRAFFIC PULL BOX	XX.XX SW	SIDE WALK ELEVATION (FEET)
PPB ○	EXISTING PEDESTRIAN PUSH BUTTON POLE	TC □	EXISTING TRASH CAN	XX.XX TC	TOP OF CURB ELEVATION (FEET)
TS ○	EXISTING TRAFFIC SIGNAL POLE	TLPH □	EXISTING TELEPHONE BOX	XX.XX FL	FLOW LINE ELEVATION (FEET)
WV ⊘	EXISTING WATER VALVE		EXISTING FIRE HYDRANT	XX.XX EG	EDGE OF GUTTER ELEVATION (FEET)
—☼	EXISTING STREET LIGHT				EXISTING SIGN

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REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CONSTRUCTION PLAN - MADISON ST.

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM
DESIGNED: JASON THIEM
PROJECT ENGINEER: JASON THIEM
ENGINEERING MANAGER: TED SEMAAN

APPROVED: 5/13/2014
CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339
DATE: EXP. 12/31/2014

SCALE: AS SHOWN | SHEET 5 OF 16
PLAN NO. ST-1059

LEGEND

00+00	CENTERLINE WITH STATIONING
	EXISTING TRAFFIC SIGNAL CONDUIT
—AT&T—	EXISTING AT&T CONDUIT
— E —	EXISTING SCE CONDUIT
— G —	EXISTING GAS PIPE
— SD —	EXISTING STORM DRAIN PIPE
— SS —	EXISTING SEWER PIPE
— TW —	EXISTING TIME WARNER CONDUIT
— V —	EXISTING VERIZON CONDUIT
— W —	EXISTING WATER PIPE
ETS	EXISTING ETS STATION
GBO	EXISTING GAS BLOW OFF
IRGT V	EXISTING IRRIGATION VALVE
PPB	EXISTING PEDESTRIAN PUSH BUTTON POLE
TS	EXISTING TRAFFIC SIGNAL POLE
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EPB	EXISTING ELECTRIC PULL BOX
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TC	EXISTING TRASH CAN
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WM	EXISTING WATER METER
GV	EXISTING GAS VALVE
CD	EXISTING CURB DRAIN
	EXISTING TREE
(XX.XX) FS	EXISTING ELEVATION (FEET)
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XX.XX BW	BACK OF WALK ELEVATION (FEET)
XX.XX SW	SIDE WALK ELEVATION (FEET)
XX.XX TC	TOP OF CURB ELEVATION (FEET)
XX.XX FL	FLOW LINE ELEVATION (FEET)
XX.XX EG	EDGE OF GUTTER ELEVATION (FEET)
	EXISTING SIGN
	EXISTING STREET LIGHT
	EXISTING FIRE HYDRANT

HATCH LEGEND

- PROPOSED 5.5"A.C./10.5"C.T.S. SECTION
- PROPOSED 5"A.C./10.5"C.T.S. SECTION
- PROPOSED 6"A.C./7"C.M.B. SECTION
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- PROPOSED CONCRETE CURB & GUTTER
- PROPOSED CONCRETE SIDEWALK
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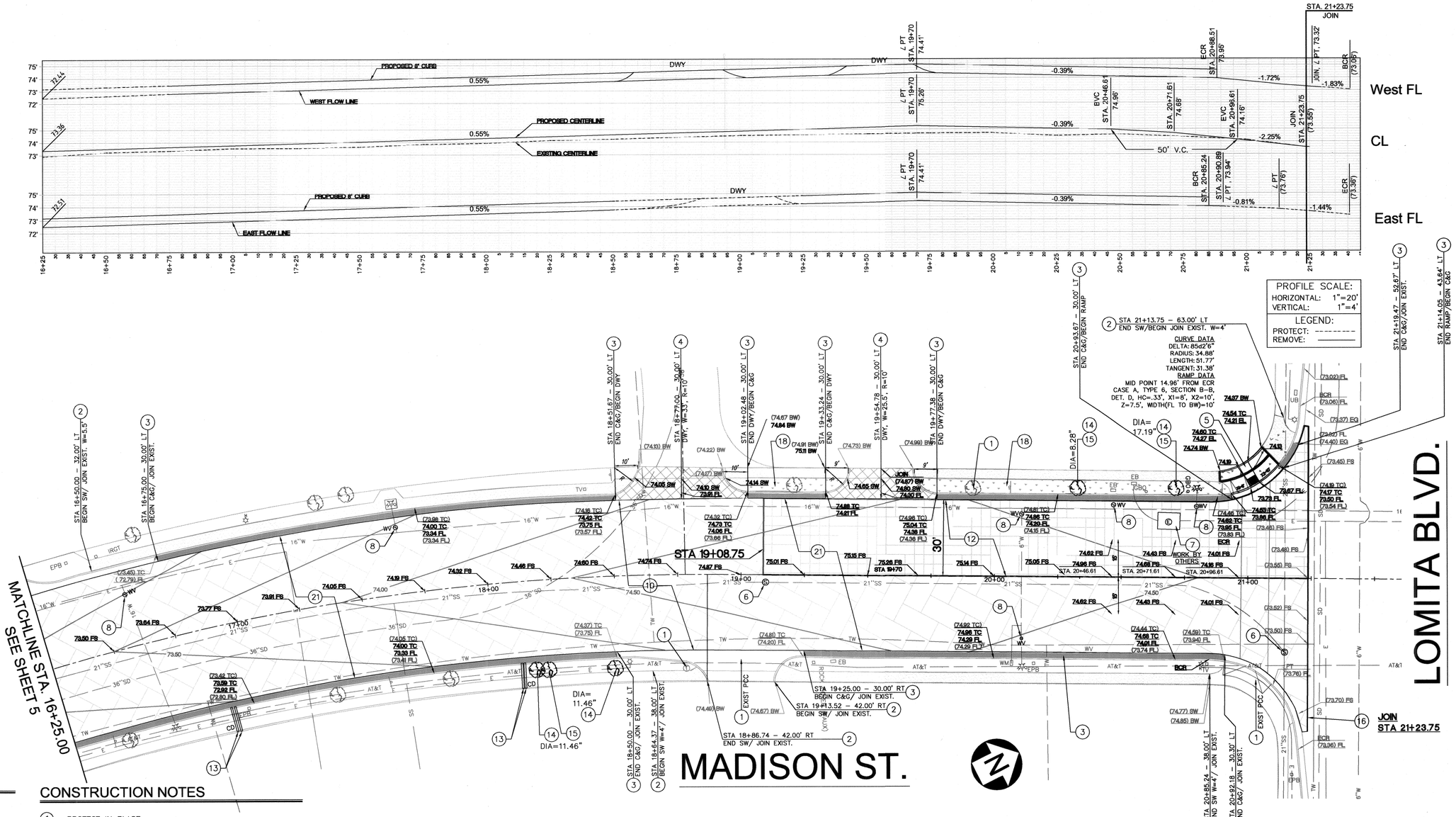

CONSTRUCTION NOTES

1. PROTECT IN PLACE.
2. REMOVE EXISTING P.C.C. SIDEWALK AND CONSTRUCT 3.5" THICK P.C.C. SIDEWALK PER SPPWC STD PLAN 112–2 AND 113–2 ON 4" CRUSHED MISCELLANEOUS BASE (CMB).
3. REMOVE EXISTING P.C.C. CURB AND GUTTER AND CONSTRUCT TYPE A2–8 P.C.C. CURB AND GUTTER PER SPPWC STD PLAN 120–2 ON 8" CMB (W=2').
4. REMOVE EXISTING P.C.C. DRIVEWAY APPROACH AND CONSTRUCT 6" THICK P.C.C. DRIVEWAY PER C.O.T. STD PLAN T105 ON 8" CMB.
5. REMOVE EXISTING P.C.C. CURB RAMP AND CONSTRUCT 3.5" P.C.C. CURB RAMP PER STD PLAN SPECIFIED ON PLAN ON 4" CMB. DELTAS (Δ) ARE FROM BCR TO ECR OF FLOW LINE.
6. ADJUST MANHOLE AND COVER TO FINISHED GRADE.
7. ADJUST MANHOLE AND VAULT FRAME TO FINISH GRADE. (WORK TO BE DONE BY SCE). CONTRACTOR TO COORDINATE WITH SCE.
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12. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 5.5". CONSTRUCT A 5.5"A.C./ 5.5"C.M.B. SECTION PER "MADISON STREET" DETAILS ON SHEET 2 AND SPECIFICATIONS.
13. RE–ADJUST EXISTING PIPE CURB DRAIN TO ENSURE A MINIMUM OF 2% POSITIVE FLOW PER SPPWC STD PLAN 150–3.
14. REMOVE EXISTING TREE AND ROOTS PER CERTIFIED ARBORIST RECOMMENDATIONS. REFER TO SPECIFICATIONS.
15. INSTALL 24" BOX – BRISBANE BOX PER C.O.T. STD PLAN T401.
16. SAWCUT.
18. REMOVE EXISTING LANDSCAPING, PRUNE ROOTS PER CERTIFIED ARBORIST RECOMMENDATION, REGRADE TO PROPOSED SIDEWALK AND TOP OF CURB AND INSTALL SOD.
21. REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIAL TO A DEPTH OF 9 INCHES, GRADE AND COMPACT TO CONSTRUCT A 3"A.C/ 6"R.C.C. SECTION. SECTION NOT SHOWN.

SCALE: 1" = 20'

20' 0' 20' 40'

NOTE: IF UNDERLYING CLAY SOIL IS ENCOUNTERED, CONTRACTOR SHALL SATURATE THE CLAY TO OPTIMUM MOISTURE CONTENT PRIOR TO INSTALLING C.M.B. AND MAINTAIN OPTIMUM MOISTURE UNTIL NEW P.C.C. IS INSTALLED.

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CONSTRUCTION PLAN - MADISON ST.

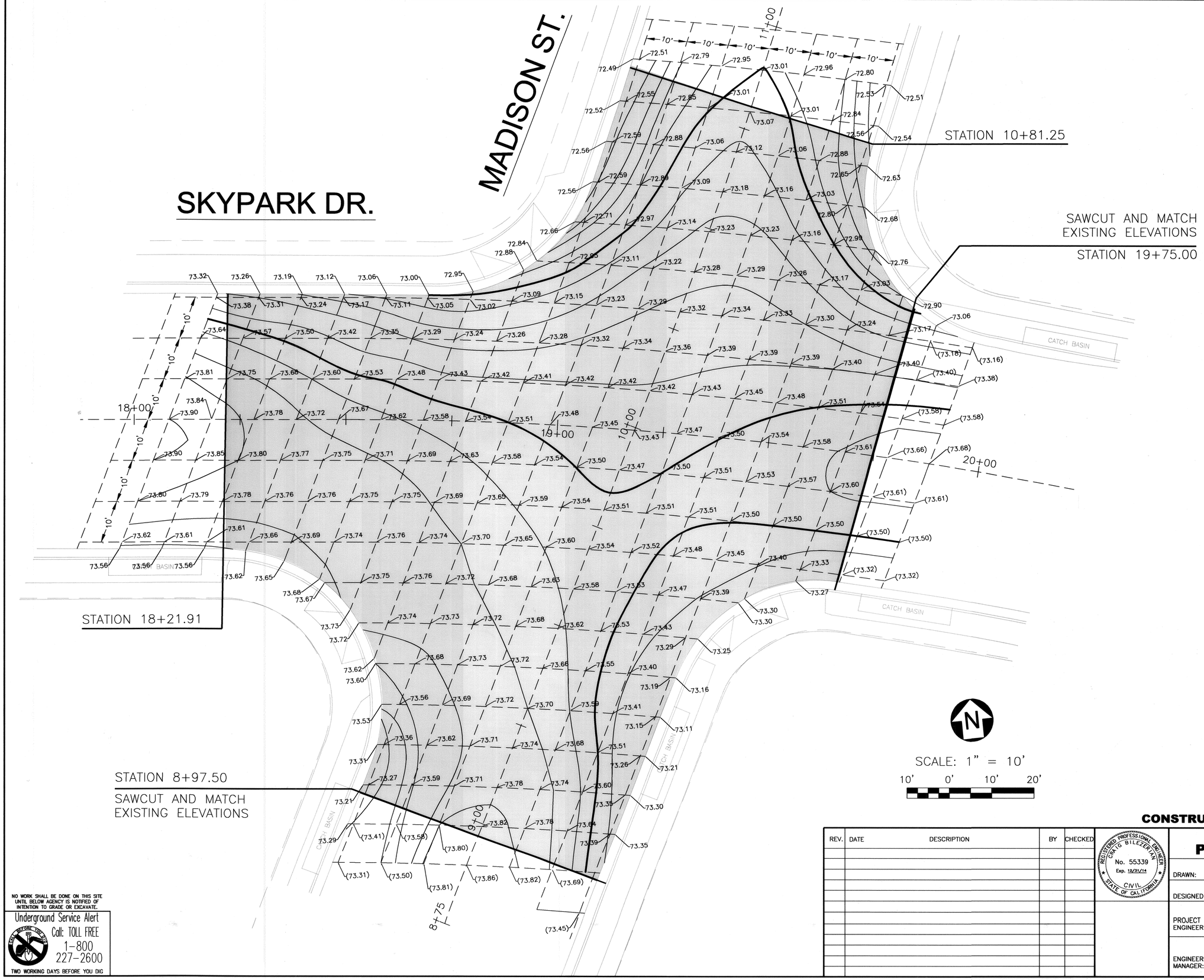
CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM
DESIGNED: JASON THIEM
PROJECT ENGINEER: JASON THIEM
ENGINEERING MANAGER: TED SEMAAN

APPROVED: 5/13/2014
CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339
DATE: EXP. 12/31/2014

SCALE: AS SHOWN | SHEET 6 OF 16

PLAN NO. **ST-1059**



LEGEND

	NEW A.C. PAVEMENT OVER CRUSHED MISCELLANEOUS BASE –OR– NEW A.C. PAVEMENT OVER ROLLER COMPACTED CONCRETE
XX.XX	FINISH SURFACE ELEVATION
(XX.XX)	EXISTING SURFACE ELEVATION

SCALE: 1" = 10'

10' 0' 10' 20'

CONSTRUCTION PLAN - INTERSECTION DETAILS

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM

DESIGNED: JASON THIEM

PROJECT ENGINEER: JASON THIEM

ENGINEERING MANAGER: TED SEMAAN

APPROVED: 5/12/2014

CRAIG BILEZERIAN DATE:
CITY ENGINEER
R.C.E. NO. 55339 EXP. 12/31/2014

SCALE: AS SHOWN SHEET 7 OF 16

PLAN NO. **ST-1059**

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

CONDUCTOR TABLE

AWG	CIRCUIT	RUNS 1	2	3	4	5	6	7	8
	28 CONDUCTOR	–	2	–	2	–	2	–	2
	5 CONDUCTOR	3	–	3	–	3	–	3	–
	3 CONDUCTOR	1	–	1	–	1	–	1	–
TYPE B DLC	ø2 DETECTOR	–	–	–	–	–	–	–	1
	ø4 DETECTOR	–	–	–	1	–	–	–	1
	ø6 DETECTOR	–	1	–	1	–	–	–	1
	ø8 DETECTOR	–	–	–	–	–	–	–	1
	TOTAL	–	1	–	2	–	–	–	4
#10	LUMINAIRE	2	2	2	2	2	2	2	–
#12	IISNS	2	2	2	2	2	2	2	–
*	EVPE	2	2	2	4	–	–	–	6
#6	SIGNAL SERVICE	–	–	–	–	–	–	–	3
VIDEO DETECTION CABLE		1	1	1	2	1	1	1	4
CONDUIT SIZE		2"	3"	2"	3"	2"	3"	2"	2–3" 1–2"
CONDUIT MATERIAL		METAL	METAL	METAL	METAL	METAL	METAL	METAL	METAL METAL

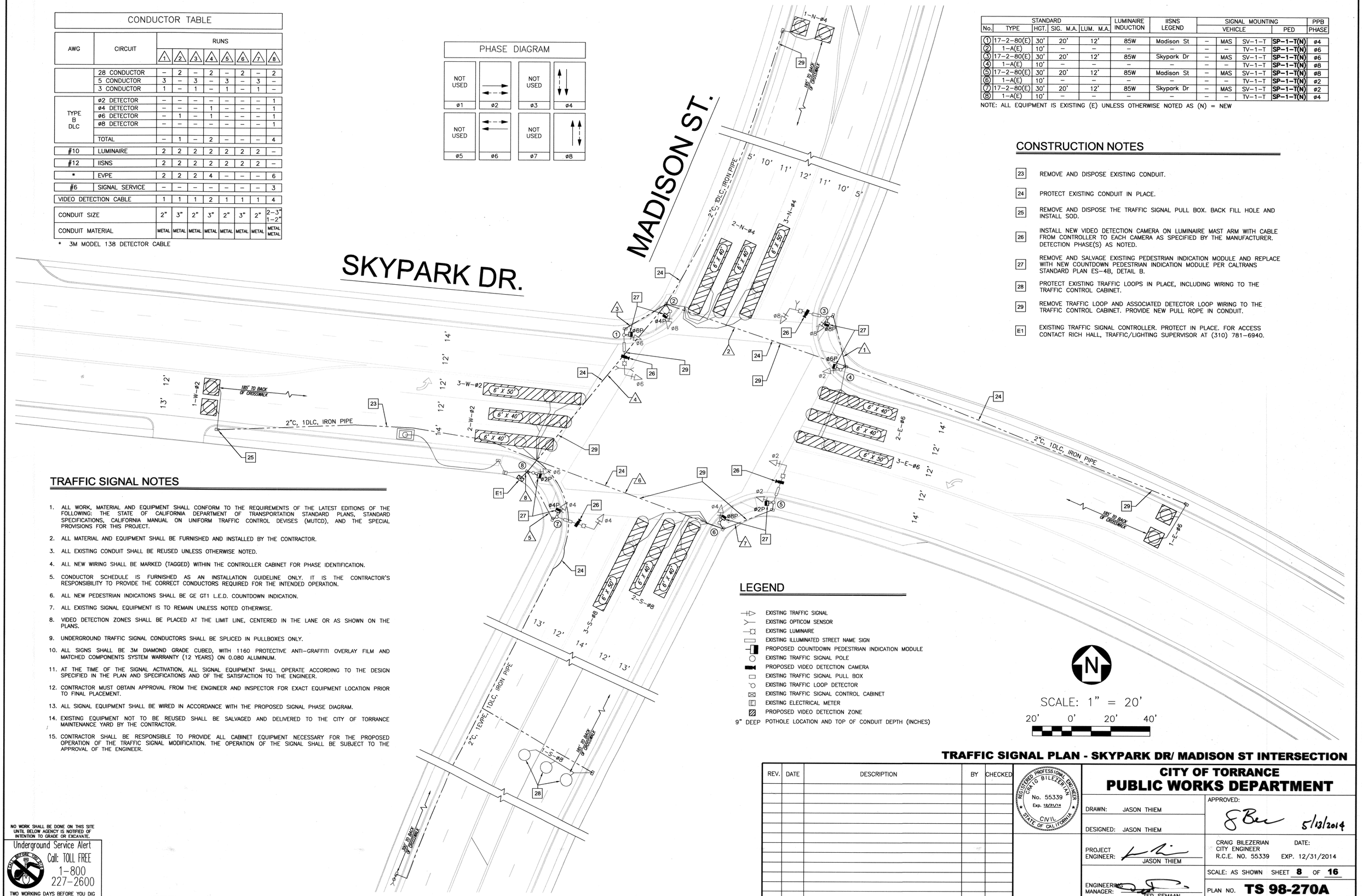
* 3M MODEL 138 DETECTOR CABLE

PHASE DIAGRAM

NOT USED		NOT USED	
ø1	ø2	ø3	ø4
NOT USED		NOT USED	
ø5	ø6	ø7	ø8

No.	STANDARD TYPE	HGT.	SIG. M.A.	LUM. M.A.	LUMINAIRE INDUCTION	IISNS LEGEND	SIGNAL MOUNTING VEHICLE			SIGNAL MOUNTING PED	PPB PHASE
1	17–2–80(E)	30'	20'	12'	85W	Madison St	–	MAS	SV–1–T	SP–1–T(N)	ø4
2	1–A(E)	10'	–	–	–	–	–	–	TV–1–T	SP–1–T(N)	ø6
3	17–2–80(E)	30'	20'	12'	85W	Skypark Dr	–	MAS	SV–1–T	SP–1–T(N)	ø6
4	1–A(E)	10'	–	–	–	–	–	–	TV–1–T	SP–1–T(N)	ø8
5	17–2–80(E)	30'	20'	12'	85W	Madison St	–	MAS	SV–1–T	SP–1–T(N)	ø8
6	1–A(E)	10'	–	–	–	–	–	–	TV–1–T	SP–1–T(N)	ø2
7	17–2–80(E)	30'	20'	12'	85W	Skypark Dr	–	MAS	SV–1–T	SP–1–T(N)	ø2
8	1–A(E)	10'	–	–	–	–	–	–	TV–1–T	SP–1–T(N)	ø4

NOTE: ALL EQUIPMENT IS EXISTING (E) UNLESS OTHERWISE NOTED AS (N) = NEW



CONSTRUCTION NOTES

23 REMOVE AND DISPOSE EXISTING CONDUIT.

24 PROTECT EXISTING CONDUIT IN PLACE.

25 REMOVE AND DISPOSE THE TRAFFIC SIGNAL PULL BOX. BACK FILL HOLE AND INSTALL SOD.

26 INSTALL NEW VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM WITH CABLE FROM CONTROLLER TO EACH CAMERA AS SPECIFIED BY THE MANUFACTURER. DETECTION PHASE(S) AS NOTED.

27 REMOVE AND SALVAGE EXISTING PEDESTRIAN INDICATION MODULE AND REPLACE WITH NEW COUNTDOWN PEDESTRIAN INDICATION MODULE PER CALTRANS STANDARD PLAN ES–4B, DETAIL B.

28 PROTECT EXISTING TRAFFIC LOOPS IN PLACE, INCLUDING WIRING TO THE TRAFFIC CONTROL CABINET.

29 REMOVE TRAFFIC LOOP AND ASSOCIATED DETECTOR LOOP WIRING TO THE TRAFFIC CONTROL CABINET. PROVIDE NEW PULL ROPE IN CONDUIT.

E1 EXISTING TRAFFIC SIGNAL CONTROLLER. PROTECT IN PLACE. FOR ACCESS CONTACT RICH HALL, TRAFFIC/LIGHTING SUPERVISOR AT (310) 781–6940.

TRAFFIC SIGNAL NOTES

1. ALL WORK, MATERIAL AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FOLLOWING: THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, STANDARD SPECIFICATIONS, CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVISES (MUTCD), AND THE SPECIAL PROVISIONS FOR THIS PROJECT.
2. ALL MATERIAL AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
3. ALL EXISTING CONDUIT SHALL BE REUSED UNLESS OTHERWISE NOTED.
4. ALL NEW WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION.
5. CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
6. ALL NEW PEDESTRIAN INDICATIONS SHALL BE GE GT1 L.E.D. COUNTDOWN INDICATION.
7. ALL EXISTING SIGNAL EQUIPMENT IS TO REMAIN UNLESS NOTED OTHERWISE.
8. VIDEO DETECTION ZONES SHALL BE PLACED AT THE LIMIT LINE, CENTERED IN THE LANE OR AS SHOWN ON THE PLANS.
9. UNDERGROUND TRAFFIC SIGNAL CONDUCTORS SHALL BE SPLICED IN PULLBOXES ONLY.
10. ALL SIGNS SHALL BE 3M DIAMOND GRADE CUBED, WITH 1160 PROTECTIVE ANTI–GRAFFITI OVERLAY FILM AND MATCHED COMPONENTS SYSTEM WARRANTY (12 YEARS) ON 0.080 ALUMINUM.
11. AT THE TIME OF THE SIGNAL ACTIVATION, ALL SIGNAL EQUIPMENT SHALL OPERATE ACCORDING TO THE DESIGN SPECIFIED IN THE PLAN AND SPECIFICATIONS AND OF THE SATISFACTION TO THE ENGINEER.
12. CONTRACTOR MUST OBTAIN APPROVAL FROM THE ENGINEER AND INSPECTOR FOR EXACT EQUIPMENT LOCATION PRIOR TO FINAL PLACEMENT.
13. ALL SIGNAL EQUIPMENT SHALL BE WIRED IN ACCORDANCE WITH THE PROPOSED SIGNAL PHASE DIAGRAM.
14. EXISTING EQUIPMENT NOT TO BE REUSED SHALL BE SALVAGED AND DELIVERED TO THE CITY OF TORRANCE MAINTENANCE YARD BY THE CONTRACTOR.
15. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL CABINET EQUIPMENT NECESSARY FOR THE PROPOSED OPERATION OF THE TRAFFIC SIGNAL MODIFICATION. THE OPERATION OF THE SIGNAL SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

LEGEND

- EXISTING TRAFFIC SIGNAL
- EXISTING OPTICOM SENSOR
- EXISTING LUMINAIRE
- EXISTING ILLUMINATED STREET NAME SIGN
- PROPOSED COUNTDOWN PEDESTRIAN INDICATION MODULE
- EXISTING TRAFFIC SIGNAL POLE
- PROPOSED VIDEO DETECTION CAMERA
- EXISTING TRAFFIC SIGNAL PULL BOX
- EXISTING TRAFFIC LOOP DETECTOR
- EXISTING TRAFFIC SIGNAL CONTROL CABINET
- EXISTING ELECTRICAL METER
- PROPOSED VIDEO DETECTION ZONE

9" DEEP POTHOLE LOCATION AND TOP OF CONDUIT DEPTH (INCHES)

N

SCALE: 1" = 20'

20' 0' 20' 40'

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

Underground Service Alert
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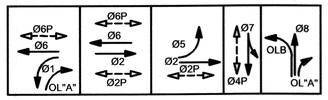
TRAFFIC SIGNAL PLAN - SKYPARK DR/ MADISON ST INTERSECTION

REV.	DATE	DESCRIPTION	BY	CHECKED

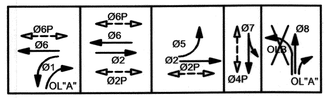
REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

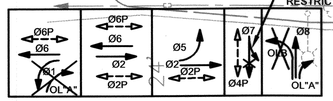
DRAWN: JASON THIEM
DESIGNED: JASON THIEM
APPROVED: 5/13/2014
PROJECT ENGINEER: JASON THIEM
CRAIG BILEZERIAN CITY ENGINEER R.C.E. NO. 55339 DATE: EXP. 12/31/2014
ENGINEERING MANAGER: TED SEMAAN
SCALE: AS SHOWN SHEET 8 OF 16
PLAN NO. **TS 98-270A**



EXISTING PHASE DIAGRAM



TEMPORARY SIGNAL PHASE DIAGRAM FOR PHASE 1 AND 2



TEMPORARY SIGNAL PHASE DIAGRAM FOR PHASE 3

GENERAL NOTES

1. Traffic signal and highway safety systems shall conform to Caltrans Standard Plans and Standard Specifications, dated May 2006, as shown hereon and in Special Provisions.
2. All materials and equipment shall be furnished and installed by the CONTRACTOR.
3. At the time the signal turn-on, all signal equipment shall operate according to the design specified in the plan and specification and to the satisfaction of the Engineer in the field.
4. Locate all substructures prior to construction. Dig foundations until clear of obstructions. Coordinate pole installations with overhead and underground utility owners. Contact Underground Service Alert at (800) 422-4133, 48 hours prior to construction.
5. Obtain approval from City Engineer and Caltrans inspector for exact equipment location prior to final placement.
6. Conduit shall be 3-inch rigid metal unless shown otherwise.
7. Pullboxes shall be no. 6 and reinforced concrete, unless shown otherwise. Pullbox covers shall be marked "TRAFFIC SIGNAL".
8. All wiring shall be marked (tagged) within the controller cabinet and in the pullboxes for phase identification. The color code of the wires shall follow Caltrans Standards.
9. Vehicle signal heads shall have 12" lenses, visors and backplates. All signal and pedestrian indications shall be provided with LED units.
10. CONTRACTOR shall be responsible for the relocation of equipment and the modification of such equipment including but not limited to frame work, its appurtenant labor and materials in order to reinstall as indicated on plan.
11. CONTRACTOR shall provide temporary support during installation of concrete bases on any existing nearby poles or standards.
12. CONTRACTOR shall be responsible for any temporary traffic signal installation of poles or standards with all the necessary traffic signal equipment during construction.

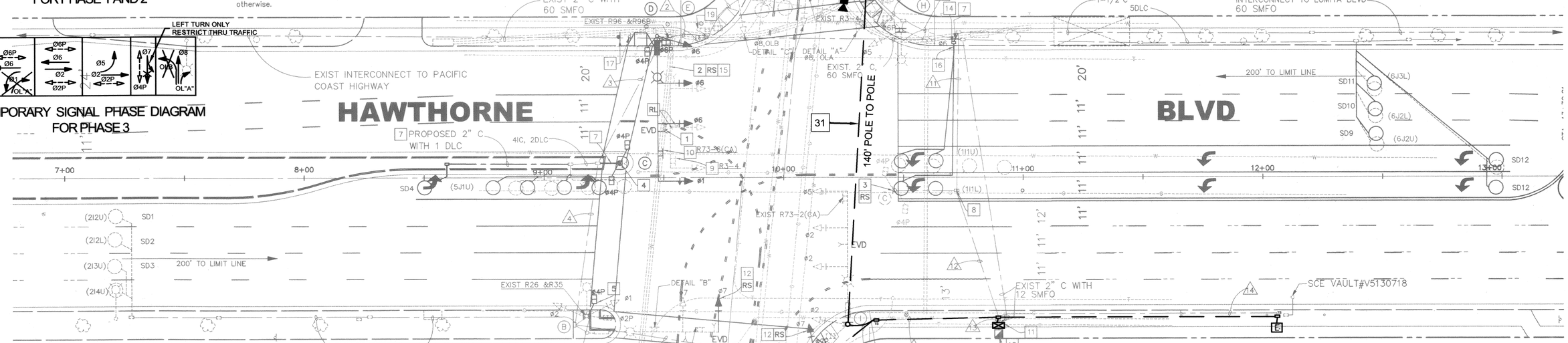
GENERAL NOTES (CONT'D)

13. (XXXX) indicates loop assignment in the controller cabinet. Each assignment shall have a separate lead in cable to the controller.
14. All signal standards, mast arms and luminaires shall conform to the State of California Department of Transportation Standards.
15. All signal equipment shall be wired in accordance with the proposed signal phase diagram.
16. Round loops, 6' diameter shall be used.
17. Loops shall be centered in the lane unless otherwise noted.
18. Front detection loops shall be placed 2' into the back of the crosswalk.
19. Existing equipment not to be reused shall be salvaged and delivered to City of Carson maintenance yard by the CONTRACTOR except foundations.
20. Installation of conduits to be accomplished by boring method.
21. All existing conduits shall be reused unless otherwise noted and new 3/12 conductor cables shall be used throughout the extent of this modification unless otherwise approved by the Engineer.
22. CONTRACTOR shall be responsible to provide all cabinet equipment necessary for the proposed operation of the traffic signal modification. The operation of the signal shall be subject to the approval of the Engineer.

SCALE: 1"=20'

LEGEND

- EXISTING SIGNAL EQUIPMENT TO BE RELOCATED
- EXISTING SIGNAL EQUIPMENT TO REMAIN
- NEW SIGNAL



1. INSTALL NEW 61-5-100 STANDARD ON NEW FOUNDATION COMPLETE WITH VEHICLE HEADS, PEDESTRIAN PUSH BUTTON, PEDESTRIAN HEAD, OPTICOM, LUMINAIRE,AND ILLUMINATED STREET NAME SIGN.
2. REMOVE EXISTING 29A-5-113 STANDARD COMPLETE WITH VEHICLE HEADS, AND LUMINAIRE AND DELIVER TO CITY YARD. REMOVE FOUNDATION TO A DEPTH OF 12" BELOW EXISTING SURFACE.RELOCATE THE EXISTING EMERGENCY VEHICLE DETECTOR (EVD) TO NEW SIGNAL POLE (POLE "D")
3. REMOVE EXISTING 1A STANDARD COMPLETE WITH PED HEADS & PED PUSH BUTTON. REMOVE FOUNDATION TO A DEPTH OF 18" BELOW EXISTING SURFACE.
4. INSTALL NEW 1A STANDARD ON NEW FOUNDATION COMPLETE WITH TWO PED HEADS AND PED PUSH BUTTON.
5. INSTALL NEW PED HEAD ON EXISTING POLE
6. REMOVE PED HEAD FROM EXISTING POLE
7. INSTALL 2" CONDUIT.
8. REMOVE PULL BOX AND JOIN CONDUITS, PULL ALL CONDUCTOR CABLES, INSTALL 3" CONDUIT SWEEP, & INSTALL NEW CONDUCTORS TO CONTROLLER CABINET.
9. REMOVE EXIST SIGN FROM MAST ARM
10. INSTALL SIGN ON MAST ARM
11. EXISTING MODEL 2070 CONTROLLER ASSEMBLY INSTALL AUXILIARY OUTPUT FILE FOR OVERLAP OPERATION.
12. REMOVE AND SALVAGE EXIST. SIGNAL HEADS INSTALL NEW SIGNAL HEAD PER DETAIL "D".
13. INSTALL 2" CONDUIT AND 2 DLC's TO CONTROLLER CABINET.
14. INSTALL #5 PULLBOX.
15. CONTRACTOR TO PROVIDE TEMPORARY POLES AS REQUIRED BY CALTRANS INSPECTOR AT NO ADDITIONAL COST TO CITY.
16. INSTALL 1.5" CONDUIT.
17. RELOCATE SIGN AS SHOWN.
18. MOVE EXISTING BATTERY BACK UP SYSTEM TO NEW CALTRANS PROVIDED CABINET AS SHOWN INCLUDING ALL INCIDENTALS.
19. REMOVE TYPE 1A POLE, PED HEAD AND FOUNDATION. GRADE & REPAIR LANDSCAPING & IRRIGATION.

CONTRACTOR TO PROVIDE TEMPORARY POLES AS REQUIRED BY CALTRANS INSPECTOR AT NO ADDITIONAL COST TO CITY.

CONSTRUCTION NOTES

30. INSTALL TEMPORARY VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM.
31. INSTALL OVERHEAD CABLES, INCLUDING BELDEN 8281 COAX (VIDEO) AND 3#16 CABLE (POWER) TO POLE (1) ON NE CORNER. ROUTE CABLES DOWN THROUGH POLE, INTO CONDUIT SYSTEM, AND TO RESPECTIVE CABINET.
32. REMOVE AND INSTALL TRAFFIC LOOPS INCLUDING WIRING TO TRAFFIC SIGNAL PULL BOX AND SPLICING

LEGEND

- DETECTION ZONE
- CAMERA
- TS TRAFFIC SIGNAL PULL BOX
- E ELECTRICAL SERVICE CABINET
- TRAFFIC SIGNAL CONTROL CABINET

POLE AND EQUIPMENT SCHEDULE

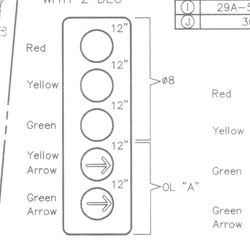
No.	STANDARD TYPE	STANDARD SIG. M.A.	STANDARD LUM. M.A.	VEHICLE SIGNAL MOUNTING MAST ARM	VEHICLE SIGNAL MOUNTING POLE	PED SIGNAL MTG.	PPB ø	PPB ARROW	HPSV LUMINAIRE TYPE IV PEC	SPECIAL REQUIREMENTS I.I.S.N.S.	POLE LOCATION (SEE DETAIL "E") E	B	C	REMARKS
(A)	29A-5-113	55'	15'	2-MAS			2	←	310W	HAWTHORNE BL(N)	*	*	*	
(B)	30				SV-2-TA	SP-2-T(N)	4(N)	→	310W		*	*	*	
(C)	1-A(7') (N)*					TP-2-T(N)	4(N)	←→			*	*	*	* 7' PEDESTRIAN SIGNAL POLE
(D)	61A-5-100(N)	60'(N)	15'(N)	2-MAS(N)/1-MAT(N)	SV-1-T(N)	SP-2-T(N)	4(N)	→	310W(N)	SKYPARK DR(N)	-10'	*	3.5'	
(E)	1-A					TP-1-T					*	*	*	REMOVE POLE & FOUNDATION
(F)	30		8'		SV-2-TA		6	→	310W		*	*	*	
(G)	19A-2-113	30'	8'	MAS	SV-1-T		6	←	250W	HAWTHORNE BL(N)	*	*	*	
(H)	30		15'		SV-2-TA				310W		*	*	*	REMOVE PPB
(I)	29A-5-113	55'	15'	3-MAS	SV-1-T				310W	SKYPARK DR(N)	*	*	*	REMOVE PPB
(J)	30		15'		SV-2-TA(N)	SP-1-T	2	→	310W		*	*	*	

NOTES:
1. ALL SIGNAL EQUIPMENT IS EXISTING UNLESS NOTES OTHERWISE
2. INSTALL SIGN PANEL AS SHOWN ON DETAIL "J" STD. PLAN ES-6T.
3. ROADSIDE SIGNS ON SIGNAL POSTS ARE SHOWN FOR REFERENCE ONLY. SEE SIGNING AND STRIPING PLAN
4. (N) NEW EQUIPMENT OR POLE.REPLACE ALL MAST ARM STREET NAME SIGNS WITH NEW SIGNS

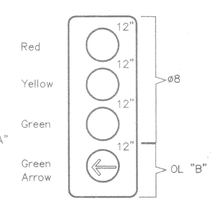
CONDUCTOR AND CONDUIT SCHEDULE

AWG OR CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
28 CONDUCTORS SIGNAL CABLE		2	2	2	2	2	2	2	2	2	2	2(N)	2(N)	2/2N	
DLC	ø1 DETECTOR											2(N)	2(N)	4(N)	
	ø2 DETECTOR					4	4	4						4	
	ø5 DETECTOR				2	2	2	2						2	
	ø6 DETECTOR											3(N)	3(N)	3(N)	
	ø7 DETECTOR								2(N)	2(N)	2(N)	2(N)	2(N)	2(N)	
	ø8 DETECTOR						4	4						4	
#6	SIGNAL SERVICE													2	2
#8	LUMINAIRE	2	2			2	2	2	2	2	2	2(N)	2(N)		3
EV CABLE	EV DETECTOR			1	1	2	2	3						3	
#10	IISNS	2	2					2	2	2	2	2(N)	2(N)		2
CONDUIT SIZE		3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	2-3"	2"

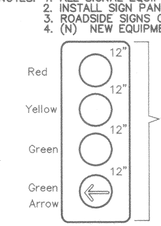
(N) = NEW



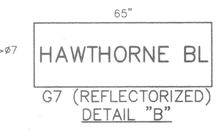
DETAIL "A"
(No Scale)



DETAIL "C"
(No Scale)



DETAIL "D"



G7 (REFLECTORIZED)
DETAIL "B"

DETAIL "E"

CALTRANS PERMIT PLANS
MARCH 21, 2014
PERMIT No. 714-NRT-0581

TRAFFIC SIGNAL PLAN - HAWTHORNE BLVD/ SKYPARK DR INTERSECTION

TRAFFIC SIGNAL NOTES

1. CAMERA HEIGHT AND EXACT LOCATION SHALL BE ADEQUATE TO MEET THE REQUIREMENTS OF THE REQUIRED FIELD OF VIDEO DETECTION. CONTRACTOR IS RESPONSIBLE FOR ANY POSTS, MASTS, ARMS, STRAPS, SUPPORTS, GUYS, ETC. REQUIRED FOR THE PROPER MOUNTING & LOCATION OF EACH VIDEO DETECTION UNIT, WIRES, AND OTHER APPURTENANCES.
2. DRILLING OR ALTERING OF CALTRANS' FACILITIES SHALL NOT BE ALLOWED.
3. TRAFFIC SIGNAL CABINETS SHALL BE SECURE AT ALL TIMES.
4. POWER CONDUCTORS TO ENTER THROUGH TOP OF POLE IN A LOCATION NEAREST TO THE CONTROLLER CABINET. LOCATION OF POWER AND COMMUNICATION CONDUCTORS SHALL BE APPROVED BY CALTRANS. CONTRACTOR TO ADD A NEW DEDICATED CIRCUIT BREAKER FOR CAMERAS WITHIN CALTRANS' CABINET. CIRCUIT BREAKER AND ALL OTHER ITEMS INCLUDING CONDUIT, CONDUCTORS, BRACKETS, BRACES, AND SHALL BE COMPLETELY REMOVED UPON COMPLETION OF CONSTRUCTION AND ALL TRAFFIC LANES ARE RESTORED TO NORMAL USAGE.
5. OBTAIN APPROVAL FROM CITY OF TORRANCE ENGINEER AND CALTRANS INSPECTOR FOR THE EXACT LOOP LOCATION PRIOR TO FINAL PLACEMENT.
6. ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET AND IN THE PULLBOXES FOR PHASE IDENTIFICATION. THE COLOR CODE OF THE WIRES SHALL FOLLOW CALTRANS STANDARDS.
7. (XXXX) INDICATES LOOP ASSIGNMENT IN THE CONTROLLER CABINET. EACH ASSIGNMENT SHALL HAVE A SEPARATE LEAD IN THE CABLE TO THE CONTROLLER.
8. ROUND LOOPS, 6' DIAMETER SHALL BE USED.
9. LOOPS SHALL BE CENTERED IN THE LANE UNLESS OTHERWISE NOTED.
10. ALL NEW INDUCTIVE LOOPS SHALL BE TYPE E, CENTERED IN THE LANE OF TRAVEL, AND SPACED OUT 16' O.C. (TYPICAL). FRONT DETECTION LOOPS SHALL BE PLACED 2' INTO THE BACK OF THE CROSSWALK.

REGISTERED PROFESSIONAL ENGINEER ELIE FARAH EXP. 03-31-2012 NO. C42080 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
ELIE FARAH, INC
1593 LIBERTY DRIVE CORONA, CA 92881
PHONE (951) 898-0772 FAX (951) 278-4110
CIVIL & TRAFFIC ENGINEERING
LAND SURVEYING AND
CONSTRUCTION MANAGEMENT

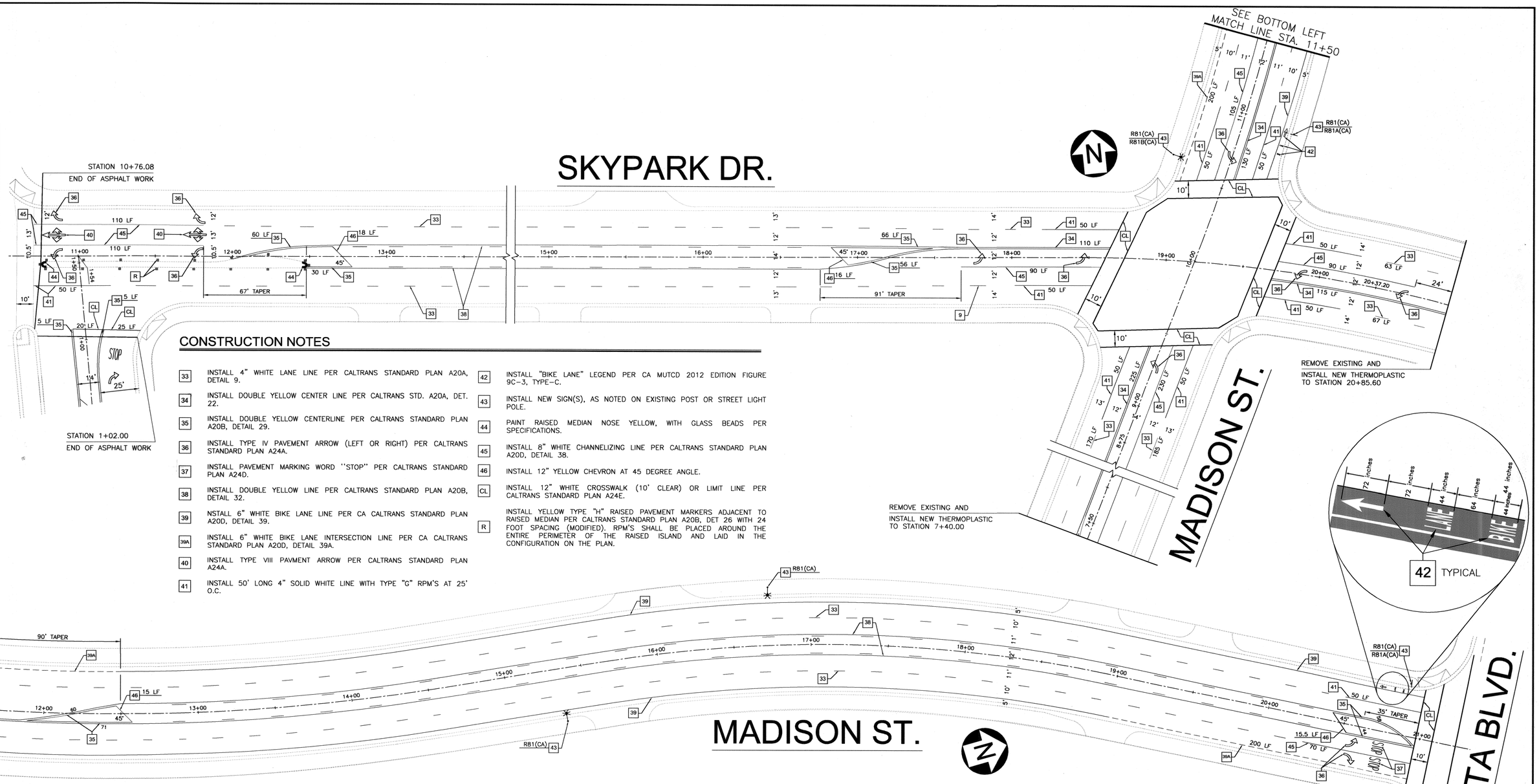
DESIGNED BY: EF DATE: 2/2011
DRAWN BY: JF DATE: 2/2011
CHECKED BY: EF DATE: 2/2011
UNDER THE SUPERVISION OF:
ELIE G. FARAH-RCE 42080 6-20-11 DATE

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JF
DESIGNED: EF
PROJECT ENGINEER:
INTERSECTION IMPROVEMENT PROJECT PLAN 2011-001 SHEET 3 OF 6

APPROVED: John C. Dettle
JOHN C. DETTLE DATE
ACTING CITY ENGINEER
R.C.E. NO. C51438 EXP. 6/30/12

SCALE: AS SHOWN SHEET 9 OF 16
PLAN NO. TL117A



CONSTRUCTION NOTES

33	INSTALL 4" WHITE LANE LINE PER CALTRANS STANDARD PLAN A20A, DETAIL 9.
34	INSTALL DOUBLE YELLOW CENTER LINE PER CALTRANS STD. A20A, DET. 22.
35	INSTALL DOUBLE YELLOW CENTERLINE PER CALTRANS STANDARD PLAN A20B, DETAIL 29.
36	INSTALL TYPE IV PAVEMENT ARROW (LEFT OR RIGHT) PER CALTRANS STANDARD PLAN A24A.
37	INSTALL PAVEMENT MARKING WORD "STOP" PER CALTRANS STANDARD PLAN A24D.
38	INSTALL DOUBLE YELLOW LINE PER CALTRANS STANDARD PLAN A20B, DETAIL 32.
39	NSTALL 6" WHITE BIKE LANE LINE PER CA CALTRANS STANDARD PLAN A20D, DETAIL 39.
39A	INSTALL 6" WHITE BIKE LANE INTERSECTION LINE PER CA CALTRANS STANDARD PLAN A20D, DETAIL 39A.
40	INSTALL TYPE VIII PAVMENT ARROW PER CALTRANS STANDARD PLAN A24A.
41	INSTALL 50' LONG 4" SOLID WHITE LINE WITH TYPE "G" RPM'S AT 25' O.C.
42	INSTALL "BIKE LANE" LEGEND PER CA MUTCD 2012 EDITION FIGURE 9C-3, TYPE-C.
43	INSTALL NEW SIGN(S), AS NOTED ON EXISTING POST OR STREET LIGHT POLE.
44	PAINT RAISED MEDIAN NOSE YELLOW, WITH GLASS BEADS PER SPECIFICATIONS.
45	INSTALL 8" WHITE CHANNELIZING LINE PER CALTRANS STANDARD PLAN A20D, DETAIL 38.
46	INSTALL 12" YELLOW CHEVRON AT 45 DEGREE ANGLE.
CL	INSTALL 12" WHITE CROSSWALK (10' CLEAR) OR LIMIT LINE PER CALTRANS STANDARD PLAN A24E.
R	INSTALL YELLOW TYPE "H" RAISED PAVEMENT MARKERS ADJACENT TO RAISED MEDIAN PER CALTRANS STANDARD PLAN A20B, DET 26 WITH 24 FOOT SPACING (MODIFIED). RPM'S SHALL BE PLACED AROUND THE ENTIRE PERIMETER OF THE RAISED ISLAND AND LAID IN THE CONFIGURATION ON THE PLAN.

SIGNING AND STRIPING GENERAL NOTES

1. 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) 618-3049 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 FOR THE ENTIRE PROJECT.
2. ALL SIGNING AND STRIPING MUST BE INSTALLED PER THE LATEST CALTRANS STANDARD SPECIFICATIONS, PLANS, AND CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST VERSION). ALL RAISED PAVEMENT MARKERS MUST BE NEW.
3. ALL STRIPING MUST BE INSTALLED USING THERMO PLASTIC PER THE LATEST CALTRANS STANDARD SPECIFICATIONS. ALL PAVEMENT MARKINGS (LEGENDS) ARROWS AND CROSSWALK MUST BE THERMO PLASTIC. THE STRIPING MUST BE INSTALLED USING A ROAD LINER TYPE STRIPING TRUCK USING AIRLESS EQUIPMENT. ALL SIGNING AND STRIPING MUST BE COMPLETED AND DRY BEFORE THE ROADWAY IS OPEN TO TRAFFIC.
4. ALL STENCILS USED FOR INSTALLING PAVEMENT MARKINGS MUST CONFORM TO THE LATEST CALTRANS STANDARD PLAN A24A THROUGH A24E.
5. ANY EXISTING STRIPING OR PAVEMENT MARKINGS WHICH CONFLICT WITH THIS APPROVED SIGNING AND STRIPING PLAN MUST BE REMOVED BY WET SANDBLASTING. NO BLACKOUT STRIPING WILL BE ALLOWED. PAVEMENT MARKINGS TO BE REMOVED SHALL BE "BLOCKED" SO THE OLD MESSAGE CANNOT BE IDENTIFIED. ANY DEBRIS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
6. LANE WIDTHS SHALL BE MEASURED BETWEEN THE CENTERLINES OF EACH ADJACENT SINGLE OR DOUBLE STRIPE OR FLOWLINE AS APPROPRIATE.
7. INSTALLATION OF ALL STRIPING, SIGNS, PAVEMENT MARKERS, AND LEGENDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY CHANGES BEING MADE IN THE FIELD.
9. 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.
10. STRIPED CROSSWALKS SHALL HAVE AN INSIDE DIMENSION OF 10 FEET (CLEAR) UNLESS INDICATED OTHERWISE ON THE PLANS.
11. STRIPING SHALL BEGIN AND TERMINATE AT THE CENTER CORNER DELTA, AT THE LIMIT LINES, OR THE BACK OF THE CROSSWALK.
12. 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 LATEST EDITION OF THE CA MUTCD). MARKER LOCATION SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.

SIGN LEGEND

SCALE: 1" = 30'

30' 0' 30' 60'

SIGNING AND STRIPING PLAN

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: D. BALAGUER / J. THIEM

DESIGNED: JASON THIEM

PROJECT ENGINEER: JASON THIEM

ENGINEERING MANAGER: TED SEMAAN

APPROVED: 5/13/2014

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

DATE: EXP. 12/31/2014

SCALE: AS SHOWN

SHEET 10 OF 16

PLAN NO. C 2013-002

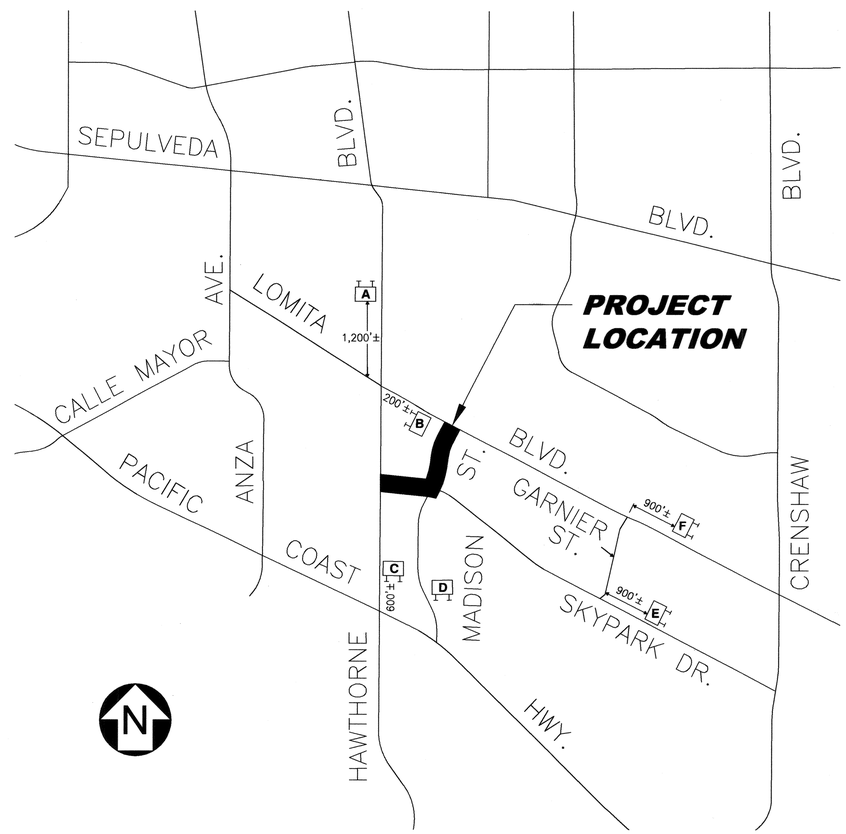
CITY OF TORRANCE

TRAFFIC CONTROL PLANS FOR MADISON STREET AND SKYPARK DRIVE REHABILITATION

TRAFFIC CONTROL GENERAL NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE WORK ON A PUBLIC STREET TO INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES, AS WELL AS ANY SUCH ADDITIONAL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED TO ENSURE THE SAFE MOVEMENT OF TRAFFIC AND PEDESTRIANS THROUGH AND AROUND THE WORK AREA AND PROVIDE MAXIMUM PROTECTION AND SAFETY TO CONSTRUCTION WORKERS. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO THE CA MUTCD (LATEST EDITION) AND THESE PLANS, UNLESS NOTED OTHERWISE.
2. ALL DRUMS SHALL BE EQUIPPED WITH REFLECTIVE BAND IF USED FOR NIGHT TIME WORK.
3. THE CONTRACTOR SHALL NOTIFY CALTRANS TRAFFIC ENGINEER OR HIS/HER REPRESENTATIVE AT LEAST FIVE WORKING DAYS IN ADVANCE OF IMPLEMENTING ANY CONSTRUCTION DETOUR. (ON HAWTHORNE BLVD.)
4. ALL SIGNS, DELINEATORS, BARRICADES, ETC. AND THEIR INSTALLATION SHALL CONFORM TO THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS LATEST EDITION AND THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, 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.
5. THE CALTRANS TRANSPORTATION ENGINEERING DIVISION RESERVES THE RIGHT TO OBSERVE THESE TRAFFIC CONTROL PLANS IN USE AND MAKE ANY NECESSARY CHANGES AS FIELD CONDITIONS WARRANT. ANY CHANGES SHALL SUPERSEDE THESE PLANS AND BE DONE SOLELY AT THE CONTRACTOR'S EXPENSE. EXACT LOCATION OF ALL EQUIPMENT AND TRAFFIC CONTROL DEVISES ON HAWTHORNE BLVD. SHALL BE DETERMINED BY THE CALTRANS INSPECTOR.
6. CONTRACTOR SHALL NOTIFY TORRANCE TRANSIT AT (310) 618-6866 OR ANY OTHER AFFECTED TRANSIT SERVICES AT LEAST FIVE WORKING DAYS PRIOR TO CONSTRUCTION.
7. FOR DELINEATION TO INDICATE THE NEW REQUIRED VEHICLE PATH, USE PRESSURE SENSITIVE TRAFFIC MARKING TAPE AND/OR TYPICAL STRIPING PAINT AND/OR RAISED PAVEMENT MARKERS TO SUPPLEMENT THE CHANNELIZING DEVICES, DELINEATORS, REFLECTORIZED SIGNS , AND BARRICADES. TAPE MARKINGS SHALL CLEARLY REPRESENT LANE MARKINGS.
8. ALL CONFLICTING STRIPES, PAVEMENT MARKINGS, RAISED PAVEMENT MARKERS AND LEGENDS SHALL BE COMPLETELY REMOVED BY WET SANDBLASTING OR OTHER METHOD APPROVED BY THE ENGINEER PRIOR TO ANY CHANGE IN THE TRAFFIC PATTERN, IN COMPLIANCE WITH ALL APPLICABLE STORM WATER REGULATIONS.
9. CONTRACTOR SHALL NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES FIVE WORKING DAYS PRIOR TO CONSTRUCTION.
10. ALL ADVANCE WARNING SIGNS SHALL BE EQUIPPED WITH FLAGS DURING DAY TIME WORKING HOURS AND WITH WARNING LIGHTS AT NIGHT.
11. TRAFFIC SIGNALS SHALL REMAIN IN OPERATION AT ALL TIMES. SIGNAL OPERATION DURING EACH CONSTRUCTION PHASE SHALL BE COORDINATED WITH AND APPROVED BY THE CALTRANS INSPECTOR (HAWTHORNE/SKYPARK INTERSECTION ONLY) AND THE CITY OF TORRANCE (MADISON/SKYPARK).
12. CONTRACTOR SHALL NOTIFY THE CALTRANS SIGNAL CONTACT, RALPH GRIFFO AT (909) 628 – 6249 FIVE WORKING DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION 20 FEET OF EXISTING TRAFFIC SIGNAL DETECTOR LOOPS, CONDUIT, AND INTERCONNECTS.
13. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED FOLLOWING COMPLETION OF EACH CONSTRUCTION PHASE AND THE PERMANENT TRAFFIC CONTROL DEVICES SHALL BE RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT.
14. THE TRAFFIC SIGNAL CONTROLLER, SIGNAL STANDARDS, AND ALL OTHER ASSOCIATED SIGNAL EQUIPMENT, INCLUDING TRAFFIC SIGNAL PULL BOXES, MUST BE ACCESSIBLE AT ALL TIMES TO CALTRANS TRAFFIC SIGNAL REPAIR PERSONNEL.
15. CONTRACTOR SHALL REPLACE/REPAIR ALL DAMAGED STRIPING WITH TEMPORARY STRIPING OR RAISED PAVEMENT MARKERS AT THE END OF EACH WORKING DAY.
16. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN DISABILITY ACT (ADA) ACCESSIBILITY GUIDELINES AND WITH THE CALIFORNIA ACCESSIBILITY GUIDELINES AS RELATED TO PEDESTRIAN ACCESS AND SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES PER ADA REQUIREMENTS. SIDEWALK CLOSURE/DETOUR SHALL COMPLY WITH THE CA MUTCD STANDARDS.
17. CONTRACTOR SHALL INSTALL "STEEL PLATES AHEAD" SIGNS IN ADVANCE OF STEEL PLATE BRIDGING.
18. CONTRACTOR SHALL TRIM TREES TO MAINTAIN A MIN OF 17 FOOT VERTICAL CLEARANCE PRIOR TO DETOUR.
19. 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.
20. ALL NIGHT TIME WORK SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.
21. 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.
22. ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE, UNLESS NOTED OTHERWISE. ALL W20-1, W20-5, AND W4-2 SIGNS SHALL BE MINIMUM 36" X 36".
23. 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 NIGHT TIME USE SHALL BE PROVIDED WITH FLASHING WARNING LIGHTS.
24. 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.
25. USE AND PLACEMENT OF FLASHING ARROW BOARD(S) AND CHANGEABLE MESSAGE SIGN(S) SHALL BE AS DIRECTED BY THE ENGINEER AND THE LOCATION CHECKED IN THE FIELD.
26. THE CONTRACTOR SHALL MAINTAIN, ON A 24-HOUR BASIS, ALL SIGNS, DRUMS, BARRICADES, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC.
27. THE CONTRACTOR SHALL UTILIZE FLAGGERS DURING WORK HOURS AS DEEMED NECESSARY BY THE ENGINEER.
28. THE CONTRACTOR SHALL HAVE ALL SIGNS, DRUMS, BARRICADES, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND BEFORE ATTEMPTING TO SWITCH TO A SUBSEQUENT PHASE DURING WORK HOURS.
29. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE AS POSSIBLE TO ABUTTING -USINESSES AND PROPERTY OWNERS.
30. CONSTRUCTION TRUCK TRAFFIC MERGING INTO TRAFFIC LANES SHALL BE DONE BY USE OF FLAGGER AND APPROPRIATE SIGNAGE AS DIRECTED BY ENGINEER.
31. 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.
32. NEW CONCRETE CURB AND GUTTER, SIDEWALKS, DRIVEWAYS, AND ACCESS RAMPS SHALL BE COMPLETE AND IN PLACE PRIOR TO THE START OF ANY PAVEMENT RECONSTRUCTION.
33. ALL CONFLICTING SIGNAL HEADS SHALL BE COVERED DURING LONG TERM CLOSURE WHEN DIRECTED BY THE ENGINEER.
34. TEMPORARY "NO PARKING – TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
35. THE CONTRACTOR SHALL PROVIDE FOR 24 HOUR ACCESS TO ALL ADJACENT PROPERTIES, THIS SHALL INCLUDE BUT NOT BE LIMITED TO DRIVEWAYS 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 ABUTTING PROPERTY OWNERS/OPERATORS.
36. 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.
37. FLASHING YELLOW BEACONS, TYPE "B", SHALL BE USED ON ALL W20-1, C27 SIGNS, AND ALL TYPE III BARRICADES GUARDING THE WORK AREA OVERNIGHT.
38. "UNEVEN LANES" SIGN(S) (W8-11) SHALL BE PLACED WHERE UNEVENNESS IN PAVEMENT DUE TO CONSTRUCTION OPERATIONS OCCUR.
39. 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.
40. THE FOLLOWING CITY DEPARTMENTS SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ANY DETOUR AND/OR CONSTRUCTION ACTIVITIES.

TORRANCE PUBLIC WORKS	(310) 781-6900
TORRANCE POLICE (GIVE LOCATION AND DURATION)	(310) 618-5557
TORRANCE FIRE DEPARTMENT	(310) 781-7042



VICINITY MAP

N.T.S.

NOTE: AT THE DISCRETION OF CALTRANS, ADDITIONAL TRAFFIC CONTROL PLANS MAY BE REQUESTED FROM CONTRACTOR. IF REQUESTED, TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO CALTRANS FOR APPROVAL.

TRAFFIC CONTROL SHEET INDEX

SHEET NO.	DESCRIPTIONS
1	TITLE SHEET
2	TRAFFIC CONTROL – PHASE 1
3	TRAFFIC CONTROL – PHASE 2
4	TRAFFIC CONTROL – PHASE 3
5	TRAFFIC CONTROL – PHASE 4
6	TRAFFIC CONTROL – DETOUR ROUTE

CONSTRUCTION NOTES

1. ALL SIX PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE INSTALLED ONE WEEK PRIOR TO ANY CONSTRUCTION. COORDINATE EXACT LOCATION AND MESSAGES WITH PROJECT ENGINEER.
2. CONTRACTOR SHALL CONTACT THE ENGINEER TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMING FOR THE MADISON/SKYPARK TRAFFIC SIGNAL.

NOTE: CONTRACTOR SHALL CONTACT THE TORRANCE TRAFFIC AND LIGHTING SUPERVISOR, RICHARD HALL, AT (310) 781 -6900 (OFFICE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMING.

PORTABLE CHANGEABLE MESSAGE SIGNS

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

A — ON MEDIAN NORTH OF 230TH

ONE WEEK PRIOR TO PHASE 1, 2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	STARTING
ON	FRIDAY
SKYPARK	MONTHDAY

DURING PHASE 1,2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	EXPECT
ON	DELAYS
SKYPARK	

ONE WEEK PRIOR TO PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO LEFT	STARTING
TURN ON	FRIDAY
SKYPARK	MONTHDAY

DURING PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO LEFT	USE
TURN ON	LOMITA
SKYPARK	BLVD

B — IN BIKE LANE/ SHOULDER

ONE WEEK PRIOR TO PHASE 1, 2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	STARTING
ON	FRIDAY
MADISON	MONTHDAY

DURING PHASE 1,2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	EXPECT
ON	DELAYS
MADISON	

ONE WEEK PRIOR TO PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO RIGHT	STARTING
TURN ON	FRIDAY
MADISON	MONTHDAY

DURING PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO RIGHT	MAKE
TURN ON	RIGHT ON
MADISON	GARNIER

C — ON THE BEND OF 240TH ST. AT HAWTHORNE BLVD.

ONE WEEK PRIOR TO PHASE 1, 2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	STARTING
ON	FRIDAY
SKYPARK	MONTHDAY

DURING PHASE 1,2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	EXPECT
ON	DELAYS
SKYPARK	

ONE WEEK PRIOR TO PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO RIGHT	STARTING
TURN ON	FRIDAY
SKYPARK	MONTHDAY

DURING PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO RIGHT	USE
TURN ON	LOMITA
SKYPARK	BLVD

D — STRIPED CENTER MEDIAN NORTH OF AIRPORT DR.

ONE WEEK PRIOR TO PHASE 1, 2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	STARTING
AHEAD	FRIDAY
	MONTHDAY

DURING PHASE 1,2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	EXPECT
AHEAD	DELAYS

ONE WEEK PRIOR TO PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
ROAD	STARTING
CLOSED	FRIDAY
AHEAD	MONTHDAY

DURING PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
ROAD	LOCAL
CLOSED	ACCESS
AHEAD	ONLY

E — IN THE PAINTED MEDIAN

ONE WEEK PRIOR TO PHASE 1, 2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	STARTING
AHEAD	FRIDAY
	MONTHDAY

DURING PHASE 1,2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	EXPECT
AHEAD	DELAYS

ONE WEEK PRIOR TO PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
ROAD	STARTING
CLOSED	FRIDAY
AHEAD	MONTHDAY

DURING PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
ROAD	MAKE
CLOSED	RIGHT ON
AHEAD	GARNIER

F — IN THE SHOULDER/ BIKE LANE

ONE WEEK PRIOR TO PHASE 1, 2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	STARTING
ON	FRIDAY
MADISON	MONTHDAY

DURING PHASE 1,2 OR 4 CONSTRUCTION

SCREEN 1	SCREEN 2
ROADWORK	EXPECT
ON	DELAYS
MADISON	

ONE WEEK PRIOR TO PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO LEFT	STARTING
TURN ON	FRIDAY
MADISON	MONTHDAY

DURING PHASE 3 CONSTRUCTION

SCREEN 1	SCREEN 2
NO LEFT	USE
TURN ON	HAWTHORN
MADISON	BLVD

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

TRAFFIC CONTROL PLAN - TITLE SHEET

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: J. THIEM/ D. BALAGUER

DESIGNED: JASON THIEM

APPROVED: 5/13/2014

PROJECT ENGINEER: JASON THIEM

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

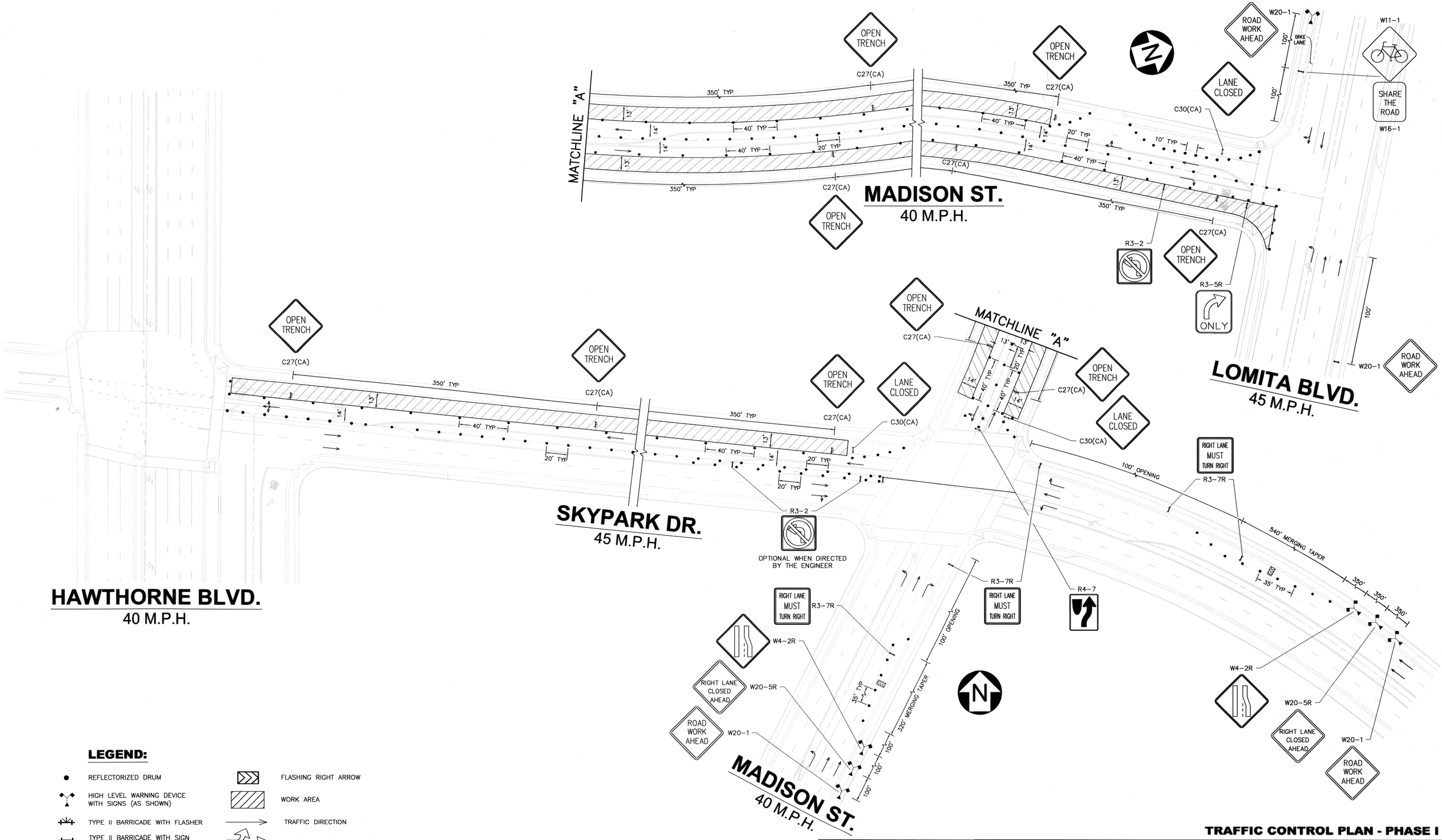
DATE: EXP. 12/31/2014

ENGINEERING MANAGER: TED SEMAAN

SCALE: AS SHOWN

SHEET 11 OF 16

PLAN NO. **ST-1059-TC**



LEGEND:

- REFLECTORIZED DRUM
- HIGH LEVEL WARNING DEVICE WITH SIGNS (AS SHOWN)
- TYPE II BARRICADE WITH FLASHER
- TYPE II BARRICADE WITH SIGN (PER CA MUTCD MANUAL)
- FLASHING RIGHT ARROW
- WORK AREA
- TRAFFIC DIRECTION
- EXISTING TRAFFIC MARKERS

NOTE: CONTRACTOR MUST REMOVE CONFLICTING EXISTING STRIPING PER TRAFFIC CONTROL GENERAL NOTES AND SPECIFICATIONS.

SCALE: 1" = 40'

40' 0' 40' 80'

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

TRAFFIC CONTROL PLAN - PHASE I

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: J. THIEM/ D. BALAGUER

DESIGNED: JASON THIEM

PROJECT ENGINEER: JASON THIEM

ENGINEERING MANAGER: TED SEMAAN

APPROVED: 5/13/2014

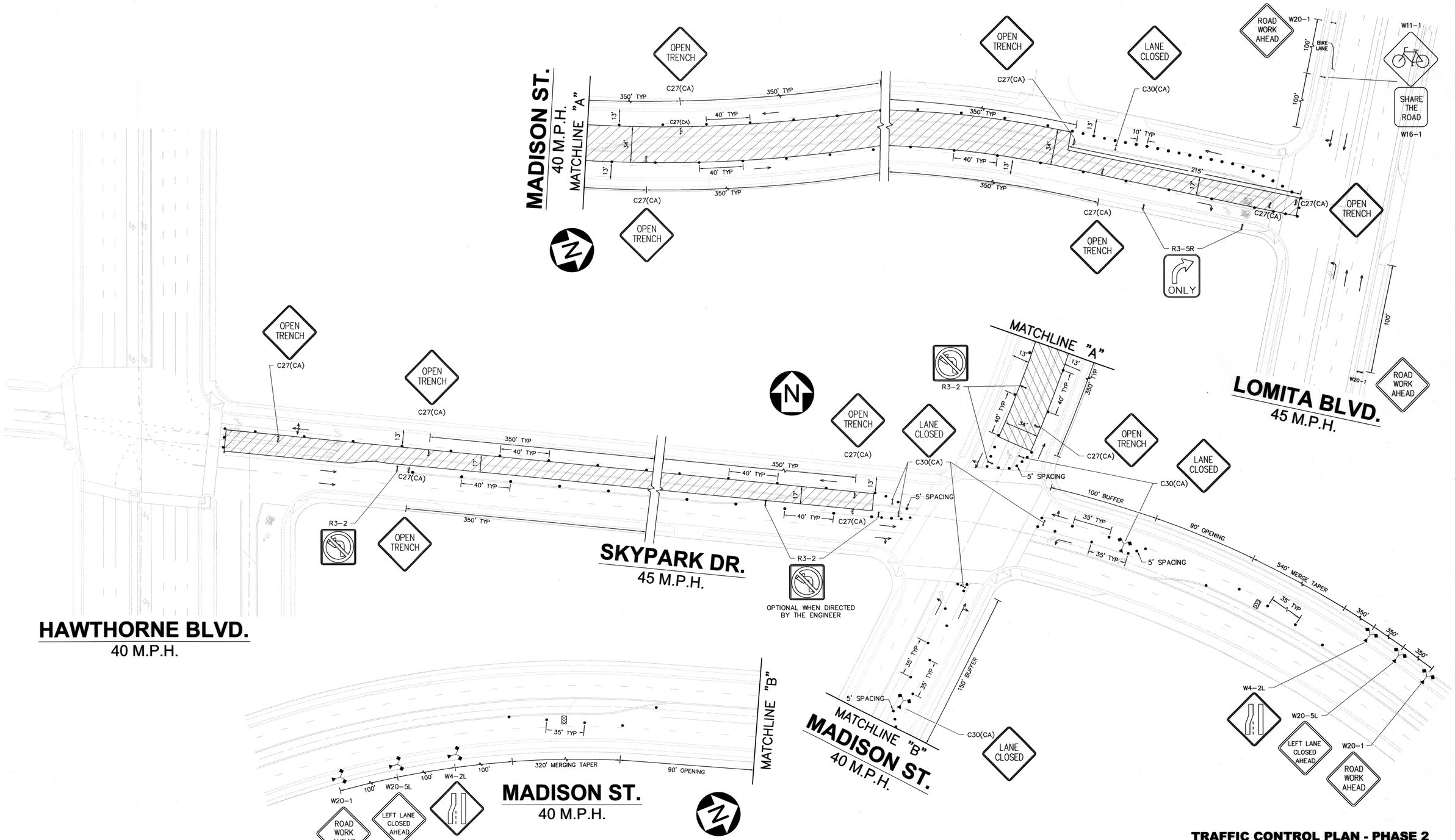
CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

DATE: EXP. 12/31/2014

SCALE: AS SHOWN

SHEET 12 OF 16

PLAN NO. ST-1059-TC



LEGEND:

- REFLECTORIZED DRUM
- TYPE II BARRICADE WITH SIGN (PER CA MUTCD MANUAL)
- TYPE II BARRICADE WITH FLASHER
- HIGH LEVEL WARNING DEVICE WITH SIGNS (AS SHOWN)
- FLASHING RIGHT ARROW
- WORK AREA
- TRAFFIC DIRECTION
- EXISTING TRAFFIC MARKERS

SCALE: 1" = 40'

40' 0' 40' 80'

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

TRAFFIC CONTROL PLAN - PHASE 2

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: J. THIEM/ D. BALAGUER

DESIGNED: JASON THIEM

APPROVED: 8/13/2014

PROJECT ENGINEER: JASON THIEM

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

DATE: EXP. 12/31/2014

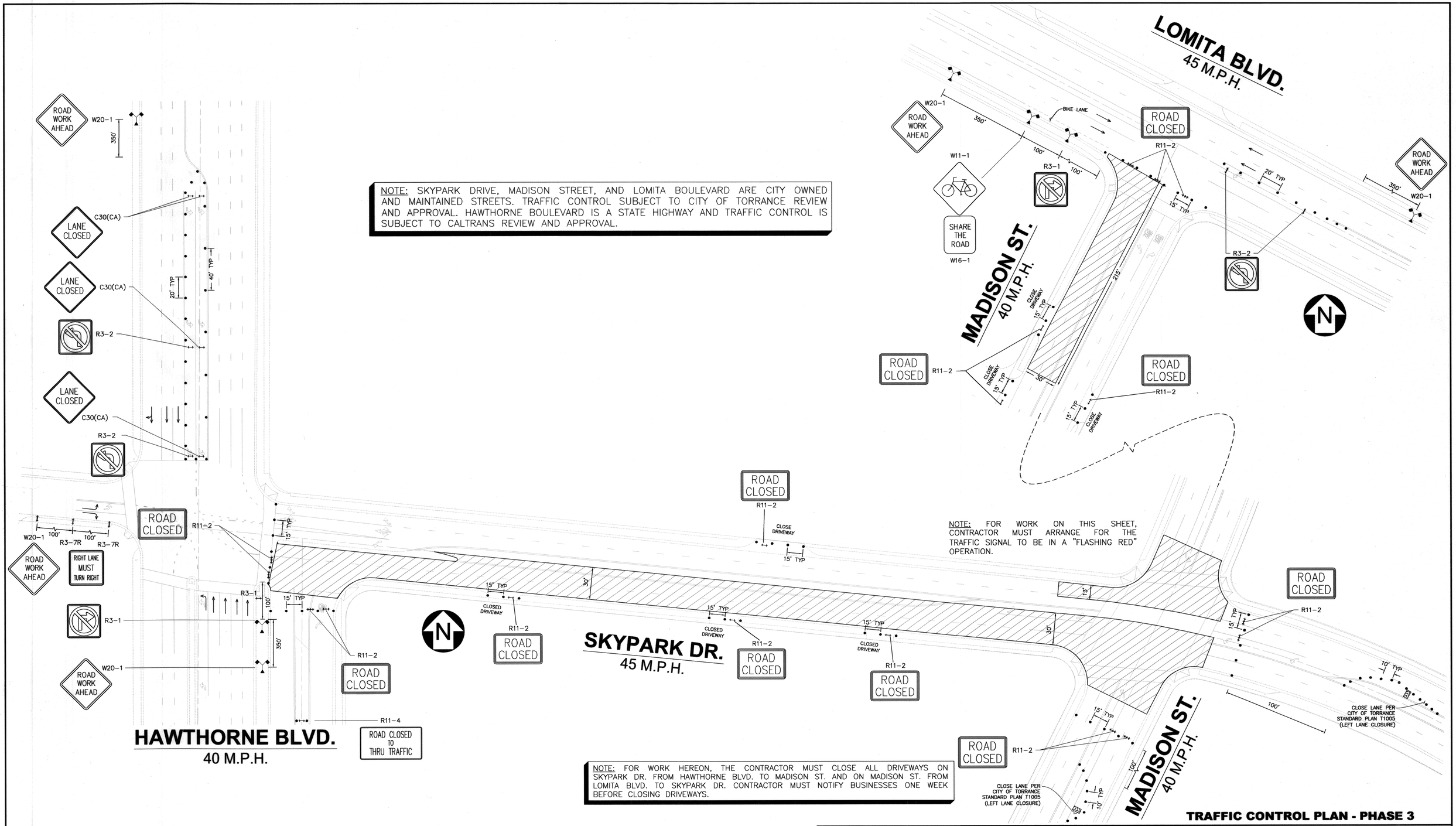
ENGINEERING MANAGER: TED SEMAAN

SCALE: AS SHOWN

SHEET 13 OF 16

PLAN NO. **ST-1059-TC**

NOTE: SKYPARK DRIVE, MADISON STREET, AND LOMITA BOULEVARD ARE CITY OWNED AND MAINTAINED STREETS. TRAFFIC CONTROL SUBJECT TO CITY OF TORRANCE REVIEW AND APPROVAL. HAWTHORNE BOULEVARD IS A STATE HIGHWAY AND TRAFFIC CONTROL IS SUBJECT TO CALTRANS REVIEW AND APPROVAL.



NOTE: FOR WORK ON THIS SHEET, CONTRACTOR MUST ARRANGE FOR THE TRAFFIC SIGNAL TO BE IN A "FLASHING RED" OPERATION.

NOTE: FOR WORK HEREON, THE CONTRACTOR MUST CLOSE ALL DRIVEWAYS ON SKYPARK DR. FROM HAWTHORNE BLVD. TO MADISON ST. AND ON MADISON ST. FROM LOMITA BLVD. TO SKYPARK DR. CONTRACTOR MUST NOTIFY BUSINESSES ONE WEEK BEFORE CLOSING DRIVEWAYS.

LEGEND:

- REFLECTORIZED DRUM
- HIGH LEVEL WARNING DEVICE WITH SIGNS (AS SHOWN)
- TYPE II BARRICADE WITH SIGN (PER CA MUTCD MANUAL)
- TYPE III BARRICADE WITH FLASHER
- FLASHING RIGHT ARROW
- WORK AREA
- TRAFFIC DIRECTION
- EXISTING TRAFFIC MARKERS

SCALE: 1" = 40'

40' 0' 40' 80'

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

TRAFFIC CONTROL PLAN - PHASE 3

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: J. THIEM/ D. BALAGUER

DESIGNED: JASON THIEM

APPROVED: 5/18/2014

PROJECT ENGINEER: JASON THIEM

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

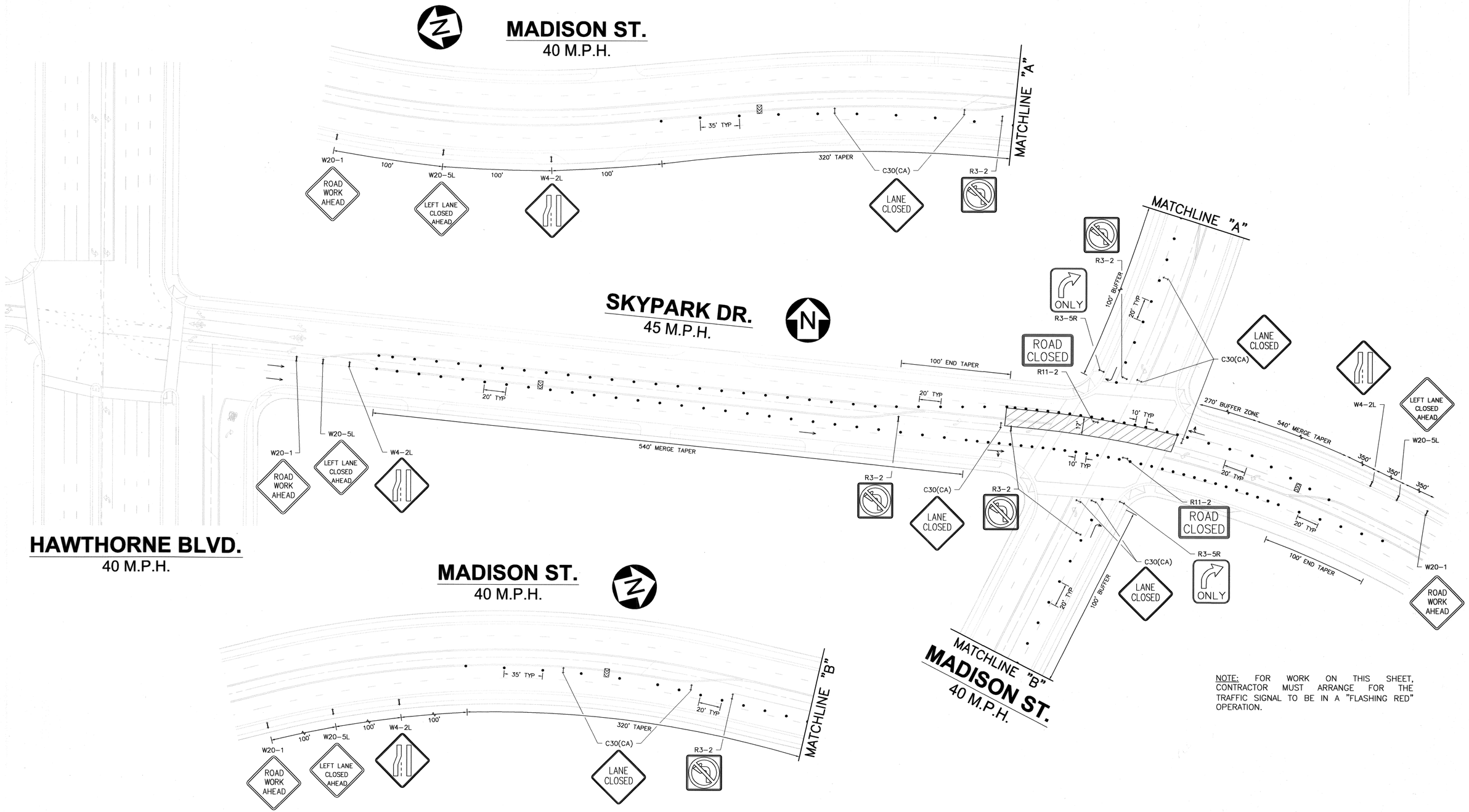
DATE: EXP. 12/31/2014

ENGINEERING MANAGER: TED SEMAAN

SCALE: AS SHOWN

SHEET 14 OF 16

PLAN NO. **ST-1059-TC**



NOTE: FOR WORK ON THIS SHEET, CONTRACTOR MUST ARRANGE FOR THE TRAFFIC SIGNAL TO BE IN A "FLASHING RED" OPERATION.

LEGEND:

- REFLECTORIZED DRUM
- TYPE II BARRICADE WITH SIGN (PER CA MUTCD MANUAL)
- TYPE II BARRICADE WITH FLASHER
- FLASHING RIGHT ARROW
- WORK AREA
- TRAFFIC DIRECTION
- EXISTING TRAFFIC MARKERS

SCALE: 1" = 40'

40' 0' 40' 80'

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

TRAFFIC CONTROL PLAN - PHASE 4

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: J. THIEM/ D. BALAGUER

DESIGNED: JASON THIEM

APPROVED: 5/18/2014

PROJECT ENGINEER: JASON THIEM

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

DATE: EXP. 12/31/2014

ENGINEERING MANAGER: TED SEMAAN

SCALE: AS SHOWN

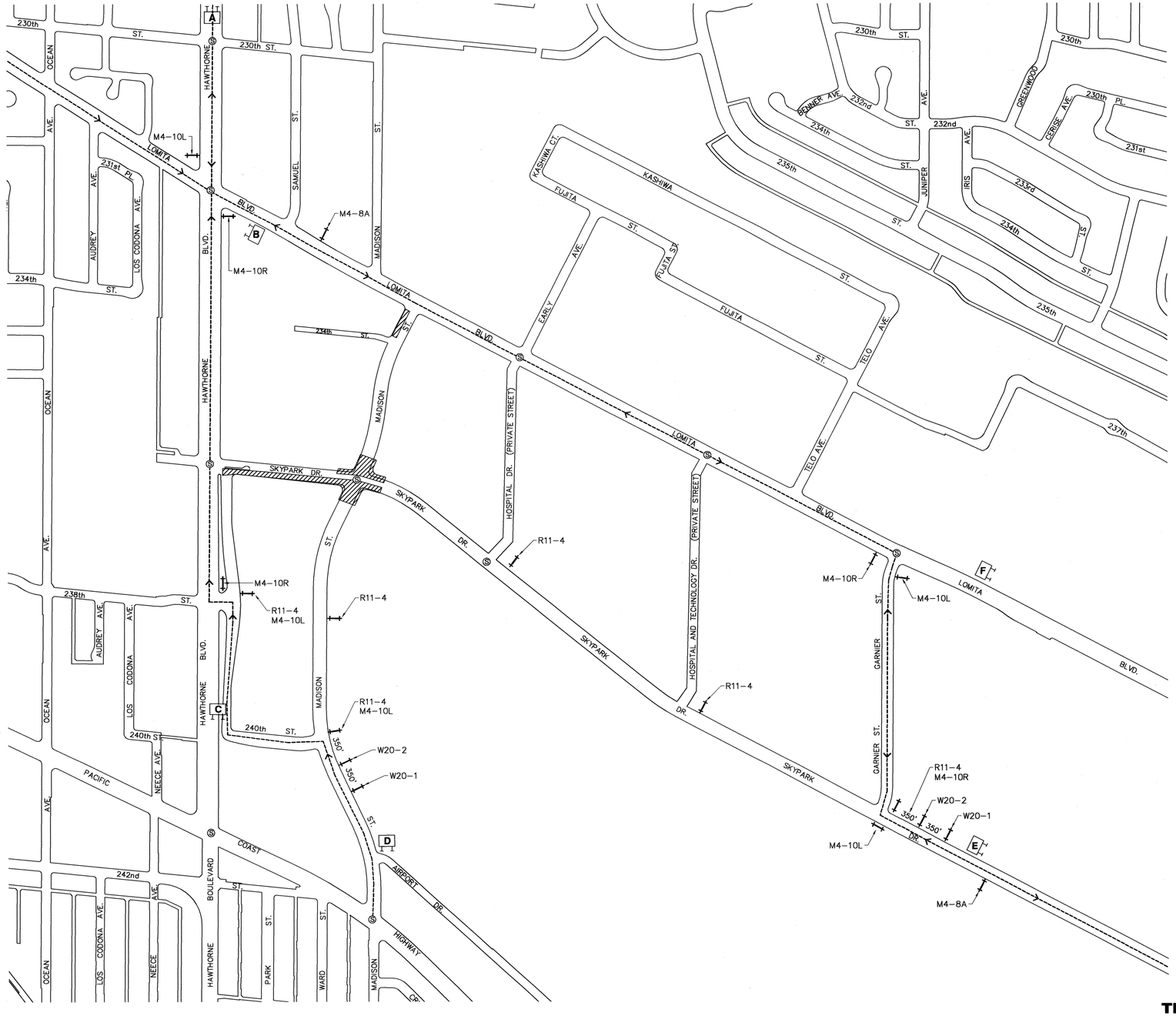
SHEET 15 OF 16

PLAN NO. **ST-1059-TC**

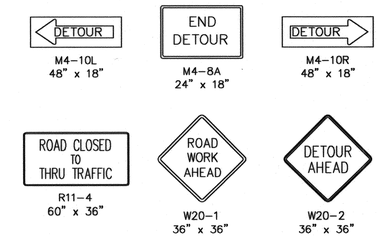
DETOUR ROUTE

DETOUR ROUTE GENERAL NOTES

1. CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SIGNS OR TRAFFIC MARKINGS THAT CONFLICT WITH THE DETOUR PLAN. CONTRACTOR SHALL BE RESPONSIBLE TO IMMEDIATELY RESTORE ANY SUCH SIGNS OR MARKING UPON REMOVAL OF THE DETOUR.
2. ALL DETOUR SIGNS SHALL BE PLACED ON LIGHT POSTS OR SIGNAL POSTS OR ON 4"X4" POST.
3. THE DETOUR ROUTE AT THE TIME OF CONSTRUCTION SHALL BE REMOVED IMMEDIATELY UPON RE-OPENING OF THE ROADWAY.
4. THIS DETOUR PLAN IS FOR PHASE 3 CONSTRUCTION ONLY



SIGNS



LEGEND

- TYPE II BARRICADE WITH SIGN (PER CA MUTCD MANUAL)
- DETOUR ROUTE
- DIRECTION OF TRAFFIC
- WORK AREA
- SIGNALIZED INTERSECTION
- PORTABLE CHANGEABLE MESSAGE SIGN

NOT TO SCALE

NOTE: SIGN SPACING SHALL BE PER THE MOST CURRENT VERSION OF THE CALIFORNIA MUTCD MANUAL.

TRAFFIC CONTROL PLAN - DETOUR ROUTE

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: J. THIEM/ D. BALAGUER
DESIGNED: JASON THIEM
APPROVED: 5/13/2014
PROJECT ENGINEER: JASON THIEM
CRAIG BILEZERIAN, CITY ENGINEER, R.C.E. NO. 55339 — DATE: EXP. 12/31/2014
ENGINEERING MANAGER: TED SEMAAN
SCALE: AS SHOWN — SHEET 16 OF 16
PLAN NO. ST-1059-TC

BID SCHEDULE B

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) LATEST 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.
2. 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 DURING COMPLETION 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.
3. 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.
4. THE CONTRACTOR SHALL BE FAMILIAR 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.
5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL DEVICES AT ALL TIMES IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, LATEST EDITION OF THE CA MUTCD AND DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL REMOVE ALL GRASS AND WEEDS IN CRACKS OR BETWEEN GUTTER AND PAVEMENT AND SPRAY WITH WEED KILLER.
7. CONSTRUCT A.C. TO PROVIDE A MAX. 3/8 INCH LIP ALONG EDGE OF GUTTER.

LEGEND

INSTALL TACK COAT AND 1.5 INCH OVERLAY OF TYPE III-C3-PG-64-10

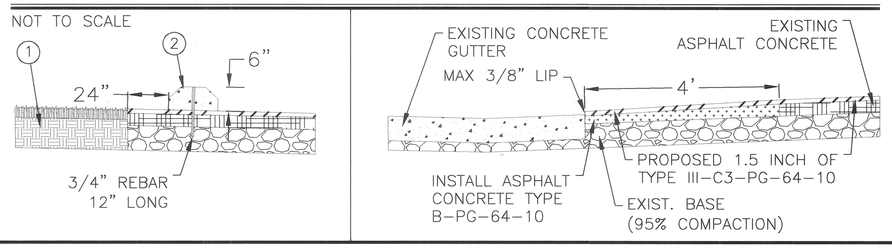
REMOVE EXISTING ASPHALT CONCRETE AND UNCLASSIFIED MATERIALS TO A DEPTH OF 3 INCHES (WIDTH 4 FEET TYP.) COMPACT EXISTING SUBBASE TO 95% COMPACTION. INSTALL TYPE B-PG-64-10 TO ACCOMMODATE A 1.5 INCH OVERLAY PER CONSTRUCTION DETAIL ON PLAN.

CONSTRUCTION NOTES

1. PROTECT IN PLACE
2. CONTRACTOR TO REMOVE ALL EXISTING WHEEL STOPS AND ANCHOR PINS. PROJECT ENGINEER WILL DECIDE IF THE WHEEL STOPS ARE SALVAGEABLE. CONTRACTOR TO DELIVER SALVAGED WHEEL STOPS TO THE CITY YARD AND DISPOSE ALL OTHER WHEEL STOPS. CONTRACTOR SHALL INSTALL NEW CURB STOPS AND REBAR PINS PER STRIPING PLAN.
3. ADJUST MANHOLE AND COVER TO FINISH GRADE

TYPICAL SECTION

NOT TO SCALE



SCALE: 1" = 30'

30' 0' 30' 60'

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

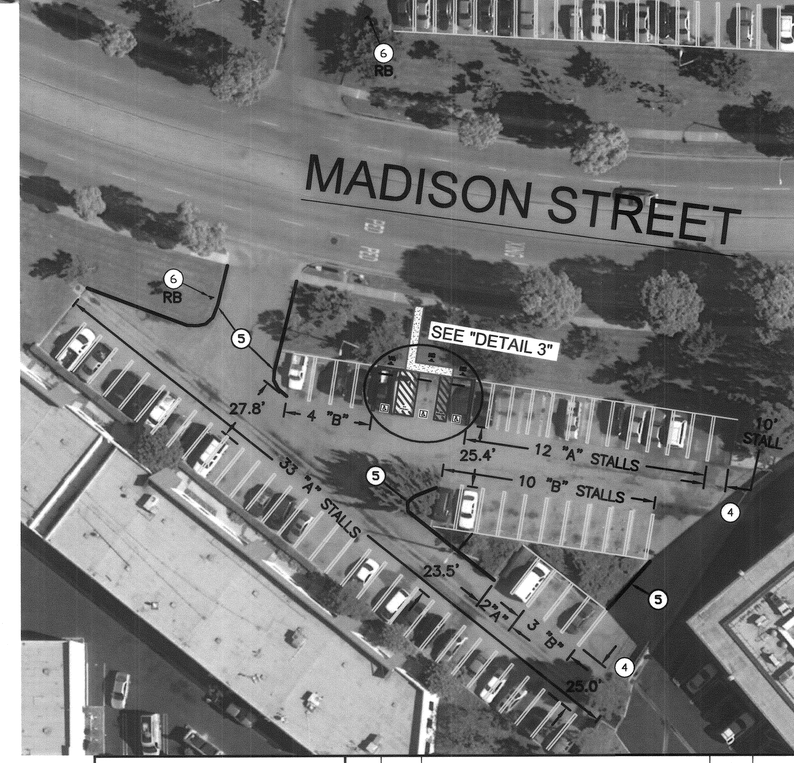
MEADOW PARK PARKING LOT REHABILITATION, I-118

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM
DESIGNED: JASON THIEM
APPROVED: 5/13/2014
PROJECT ENGINEER: JASON THIEM
CRAIG BILEZERIAN, CITY ENGINEER, R.C.E. NO. 55339 — DATE: EXP. 12/31/2014
ENGINEERING MANAGER: TED SEMAAN
SCALE: AS SHOWN — SHEET 1 OF 4
PLAN NO. **CP-415**

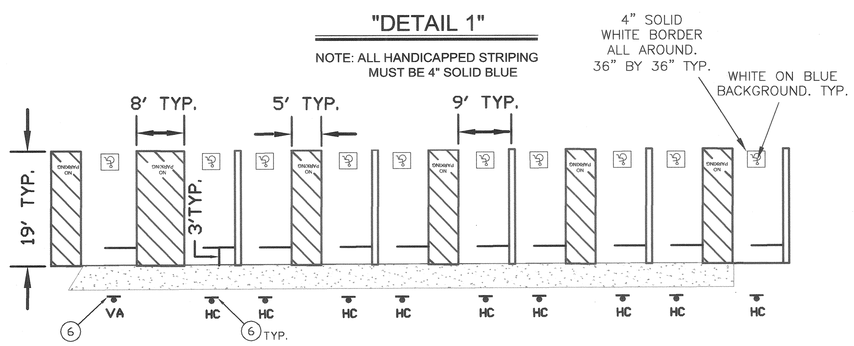
NO WORK SHALL BE DONE ON THIS SITE UNTIL BELOW AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE.

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



"DETAIL 1"

NOTE: ALL HANDICAPPED STRIPING MUST BE 4" SOLID BLUE



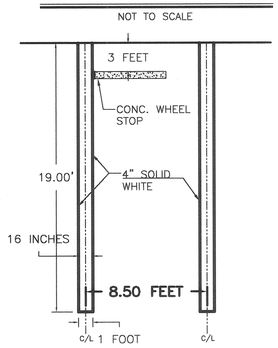
	WEST LOT	EAST LOT
"A" STALLS	47	362
"B" STALLS	17	82
"C" STALLS	0	50
HANDICAP ST.	3	12
10' STALL	1	0
SUBTOTAL	68	506
GRAND TOTAL	575	

CONSTRUCTION NOTES

4. FURNISH AND INSTALL NEW SIGN TO MATCH EXISTING WORDING.
5. PAINT CURB RED.
6. INSTALL SIGN POST AND SIGN PER PLAN.

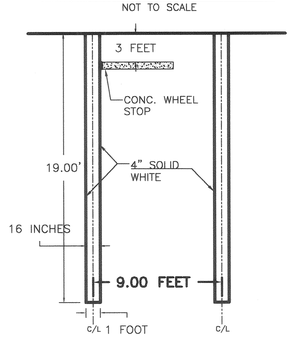
"A" PARKING STALL

NOT TO SCALE



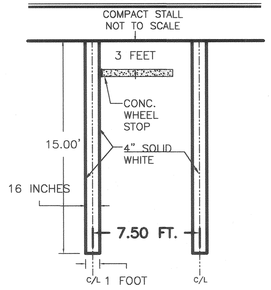
"B" PARKING STALL

NOT TO SCALE

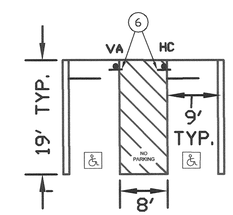


"C" PARKING STALL

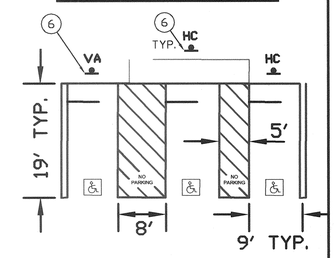
COMPACT STALL
NOT TO SCALE



"DETAIL 2"



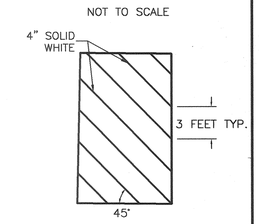
"DETAIL 3"



SIGN CHART

DIAGONAL STRIPING

NOT TO SCALE



SCALE: 1" = 30'

30' 0' 30' 60'

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

MEADOW PARK STRIPING PLAN, I-118

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM

DESIGNED: JASON THIEM

APPROVED: 5/13/2014

PROJECT ENGINEER: JASON THIEM

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

DATE:
EXP. 12/31/2014

ENGINEERING MANAGER: TED SEMAAN

SCALE: AS SHOWN

SHEET 2 OF 4

PLAN NO. **CP-415**

BID SCHEDULE B-1

LEGEND

REMOVE EXISTING ASPHALT CONCRETE (VARIES 1.5 TO 3 INCHES) AND UNCLASSIFIED MATERIALS TO A DEPTH OF 3 INCHES. REGRADE AND COMPACT EXISTING SUBGRADE TO 95% COMPACTION. CONSTRUCT A 3 INCH ASPHALT CONCRETE (TYPE III-C3-PG-64-10) SURFACE.

CONSTRUCTION NOTES

1. PROTECT IN PLACE
2. CONTRACTOR TO REMOVE ALL EXISTING WHEEL STOPS AND ANCHOR PINS. PROJECT ENGINEER WILL DECIDE IF THE WHEEL STOPS ARE SALVAGEABLE. CONTRACTOR TO DELIVER SALVAGED WHEEL STOPS TO THE CITY YARD AND DISPOSE ALL OTHER WHEEL STOPS. CONTRACTOR SHALL INSTALL NEW CURB STOPS AND REBAR PINS PER STRIPING PLAN.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) LATEST 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.
2. 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 DURING COMPLETION 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.
3. 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.
4. THE CONTRACTOR SHALL BE FAMILIAR 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.
5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL DEVICES AT ALL TIMES IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, LATEST EDITION OF THE CA MUTCD AND DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL REMOVE ALL GRASS AND WEEDS IN CRACKS OR BETWEEN GUTTER AND PAVEMENT AND SPRAY WITH WEED KILLER.
7. CONSTRUCT A.C. TO PROVIDE A MAX. 3/8 INCH LIP ALONG EDGE OF GUTTER.

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

ESTIMATED LOT AREA

NOTE: AREAS INCLUDE THE RIBBON GUTTERS AND EXCLUDES THE CONCRETE ISLANDS.

WEST LOT = 26,200 SF

EAST LOT = 167,330 SF

SCALE: 1" = 30'

30' 0' 30' 60'

REV.	DATE	DESCRIPTION	BY	CHECKED

REGISTERED PROFESSIONAL ENGINEER CRAIG BILEZERIAN No. 55339 Exp. 12/31/14 CIVIL STATE OF CALIFORNIA

MEADOW PARK PARKING LOT REHABILITATION, I-118

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: JASON THIEM

DESIGNED: JASON THIEM

APPROVED: 5/13/2014

PROJECT ENGINEER: JASON THIEM

CRAIG BILEZERIAN
CITY ENGINEER
R.C.E. NO. 55339

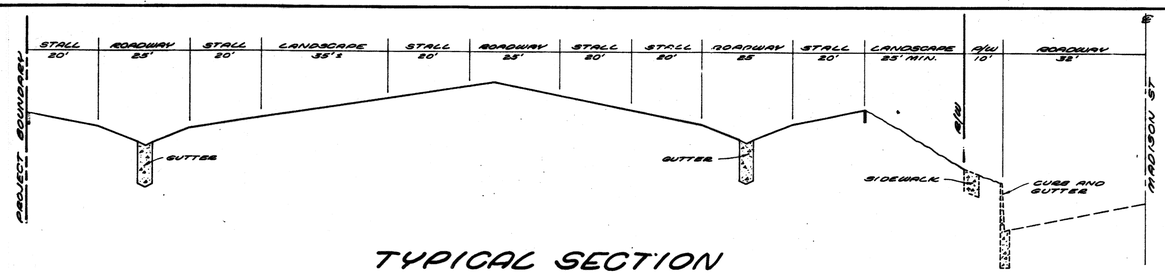
DATE:
EXP. 12/31/2014

ENGINEERING MANAGER: TED SEMAAN

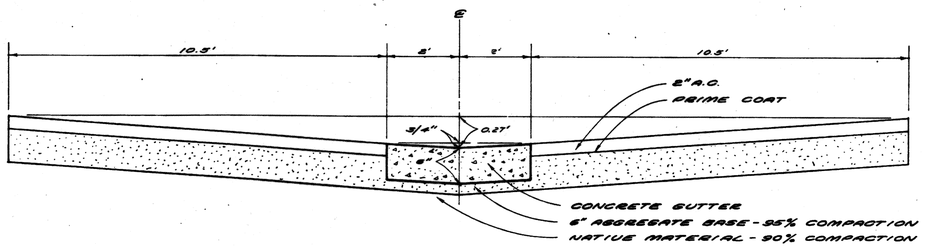
SCALE: AS SHOWN

SHEET 3 OF 4

PLAN NO. **CP-415**



TYPICAL SECTION
PARKING LOT



TYPICAL SECTION
ROADWAY AND GUTTER

NOTE:
PLACE SINGLE #4 BARS 24" LONG AT ALL EXPANSION AND CONTRACTION JOINTS, SPACING PER TOLERANCE PLAN NO. S-4.

TYPICAL 6" CURB

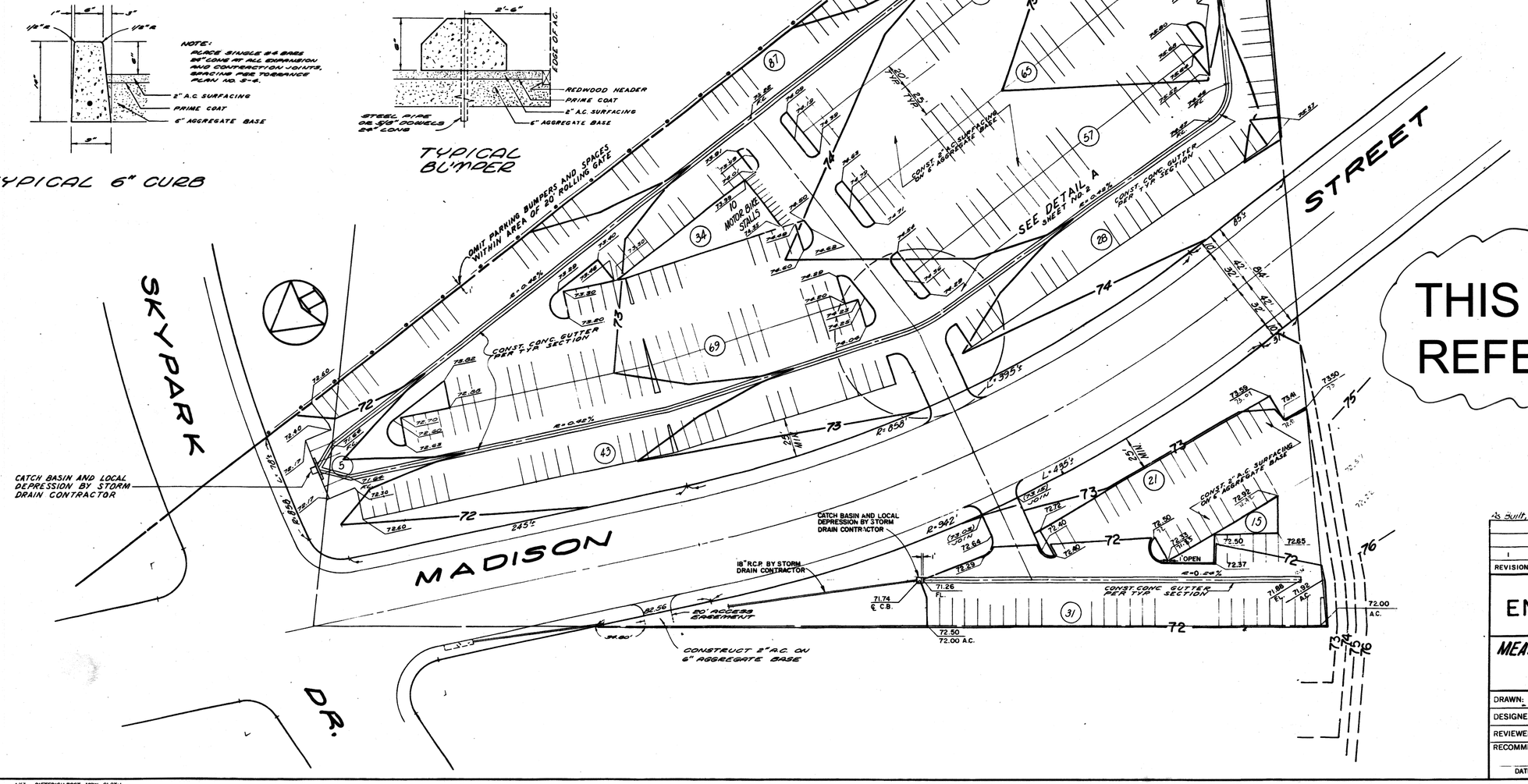
TYPICAL BUMPER

ABBREVIATIONS

A.C.	ASPHALTIC CONCRETE
B.C.	BEGINNING OF CURVE
℄	CENTER LINE
E.C.	END OF CURVE
F.L.	FLOW LINE
L	LENGTH
MIN.	MINIMUM
P/W	PARKWAY
R	RADIUS OR % OF SLOPE
R/W	RIGHT OF WAY
TAN.	TANGENT
TYP.	TYPICAL

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE CITY.
2. STANDARD SPECIFICATIONS SHALL BE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1970 EDITION".
3. NO WORK SHALL BE DONE WITHOUT NOTIFYING THE INSPECTOR AT LEAST ONE WORKING DAY PRIOR TO BEGINNING. SUBSEQUENT INSPECTIONS SHALL BE REQUESTED IN ACCORDANCE WITH THE INSPECTOR'S INSTRUCTIONS AT THE FIRST INSPECTION.
4. ELEVATIONS SHOWN ARE TOP OF CURB UNLESS OTHERWISE INDICATED.
5. CONTOURS SHOWN ARE TOP OF FINISHED GRADE
6. REDWOOD HEADERS SHALL BE INSTALLED ALONG ALL NON-CURBED EDGES OF THE A.C. PAVING.
7. CONCRETE CURBS SHALL CONFORM TO SECTION 303-5 OF THE STANDARD SPECIFICATIONS. EXTRUDED CONCRETE CURBS ARE AN ACCEPTABLE ALTERNATE, SUBJECT TO APPROVAL OF THE CITY ENGINEER.
8. ALL CURBS SHALL HAVE A 6" CURB FACE EXCEPT AS SHOWN BY ELEVATIONS ON THE PLANS.
9. THE ASPHALTIC CONCRETE SHALL BE TYPE I, CLASS C PER SECTION 203-6 OF THE STANDARD SPECIFICATIONS.
10. BUMPERS SHALL BE REQUIRED FOR PARKING SPACES EXCEPT AS NOTED ON SHEET NO. 2.
11. BUMPERS MAY BE PRECAST CONCRETE OR EXTRUDED CONCRETE SUBJECT TO APPROVAL OF THE CITY ENGINEER, AND SHALL BE SECURELY FASTENED IN PLACE WITH DOWELS OR APPROVED BONDING MATERIAL.



THIS SHEET IS FOR REFERENCE ONLY.

PAVING PLAN

As built, 9-15-72. Nelson & Fielding Co., Permit No. 12026

REVISION	DATE	DESCRIPTION	BY	CHECKED
1	6-71	REVISED GRADES & ADDED R.C.P. AT W. PARKING LOT	C.N.	

CITY OF TORRANCE
ENGINEERING DEPARTMENT

MEADOW PARK REDEVELOPMENT PROJECT
CLEAR ZONE
PARKING LOT

DRAWN: K.A.S.
DESIGNED: P. A. COSTA
REVIEWED:
RECOMMENDED:
DATE ASSISTANT CITY ENGINEER

APPROVED:
DATE CITY ENGINEER R.C.E. NO. 14016
SCALE: 1" = 40'
SHEET 4 OF 4
PLAN NO. ~~MRP-8~~

CP-206

4/67 DIETERICH-POST 122W CLOTH