BASIS OF BEARING

CCS83 ZONE 5, NAD83(2011), EPOCH 2010.0

BENCHMARK

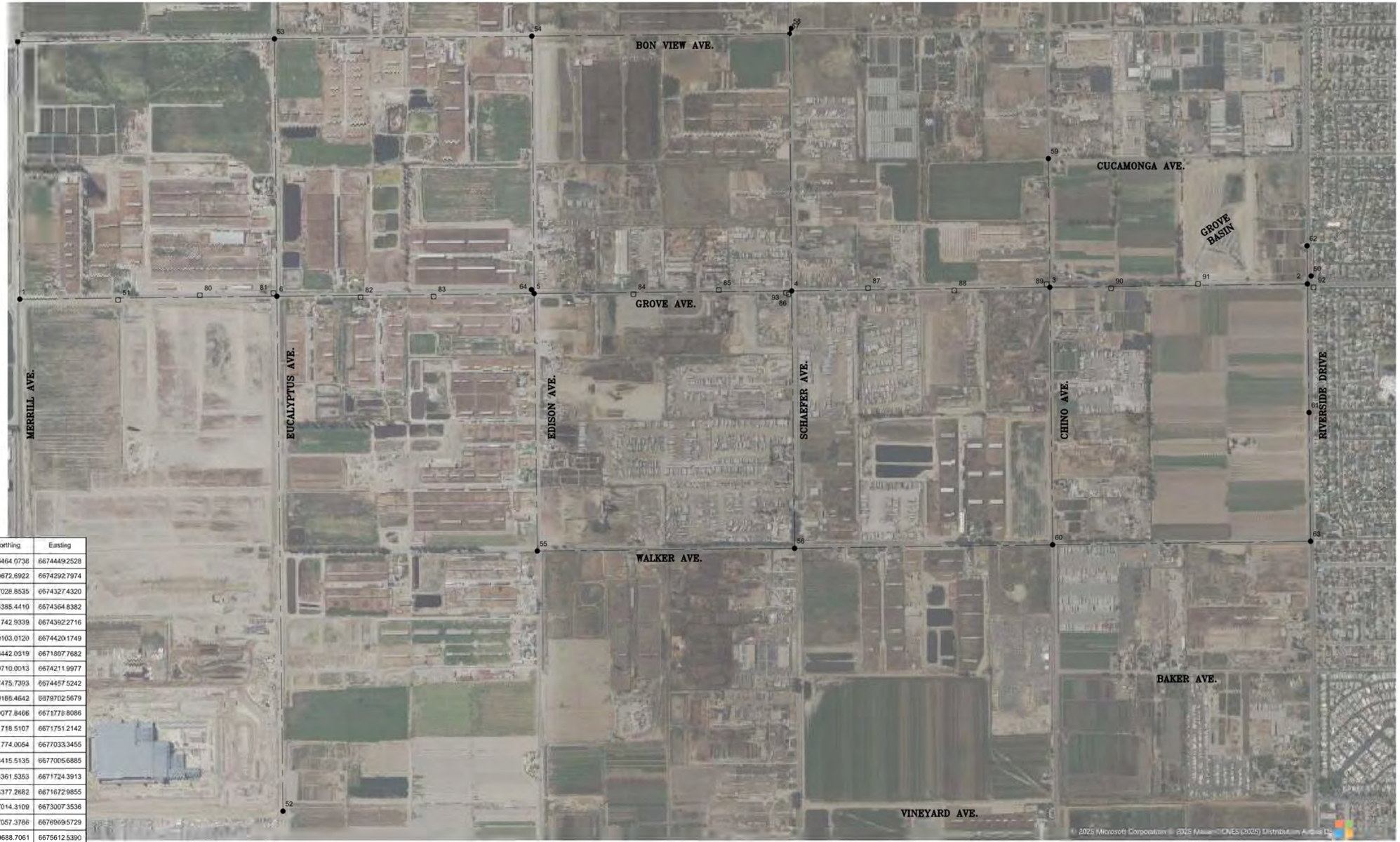
FD 2.5" BRASS ON TC STAMPED 'CITY OF ONTARIO BM V22-1' AT NW CORNER OF RIVERSIDE AVE AND GROVE AVENUE PER CSFB 4006/1622.
NAVD-88 ELEV = 776.846'

GROUND TO GRID

DISTANCES AND COORDINATES ARE GROUND.
COMBINATION FACTOR = 0.99998511
1/CF = 1.00001489022

NOTE - THIS DRAWING CONTAINS GRID BEARINGS AND GRID COORDINATES, BUT GROUND DISTANCES.

TO CONVERT TO GRID:
SCALE PROJECT @ Pt #1 (0.99998511)



Point #	Raw Description	Elevation	Northing	Easting
1	FD S/W LS8686 FLUSH	657.296	1816464.0738	6674492528
2	FD S/W CITY ONTARIO FLUSH	776.925	1829672.6922	6674292.7974
3	FD 2" BRASS LS8231 DN 0.90' IN WELL (PT.19)	746.724	1827028.8535	6674327.4320
4	FD 2" BRASS LS8231 DN 0.65' IN WELL	718.758	1824385.4410	6674364.8382
5	FD L/T LS776_ IN CONC	695.333	1821742.9339	6674392.2716
6	FD L/T LS 776_ IN CONC	671.995	1819103.0120	6674420.1749
7	FD 3" BRASS w/PUNCHMARK DN 0.65' IN WELL	651.088	1816442.0319	6671807.7682
50	BM-FD 2.5" BRASS CITY ONT. BM V22-1	776.846	1829710.0013	6674211.9977
51	TRAVPT-SET MAGNAIL FLUSH ON AC	660.907	1817475.7393	6674457.5242
52	FD 1"IP w/PLUG ILLEG DN 0.70'	685.175	1819185.4642	6679702.5679
53	FD S/W LS8133 CITY ONTARIO FLUSH	670.220	1819077.8466	6671778.8086
54	FD L/T LS 776_ IN CONC	690.192	1821718.5107	6671751.2142
55	FD L/T LS 776_ IN CONC	696.873	1821774.0054	6677033.3455
56	FD L/T LS 776_ IN CONC	724.331	1824415.5135	6677005.6885
57	FD L/T LS 776_ IN CONC	714.583	1824361.5353	6671724.3913
58	BM-FD 2.5" BRASS ON TC 'B-89 04-09'	716.160	1824377.2682	6671672.9855
59	FD 1"IP w/TAG ILLEG DN 0.80'	748.346	1827014.3109	6673007.3536
60	FD 2" BRASS LS8231 DN 0.65' IN WELL (PT.18)	746.617	1827057.3786	6676969.5729
61	FD 1"IP w/NAIL NO TAG DN 0.15'	782.381	1829688.7061	6675612.5390
62	FD S/W RCE29616 FLUSH	777.770	1829668.2755	6673902.3580
63	FD 2" BRASS LS8231 DN 0.65' IN WELL	781.497	1829704.7322	6676933.2730
64	FD S/W SBCO FLUSH IN AC DIKE	696.677	1821714.9935	6674351.7191
80	TRAVPT-SET MAGNAIL FLUSH	666.770	1818312.9280	6674410.3743
81	TRAVPT-SET MAGNAIL FLUSH	673.397	1819066.8270	6674387.1829
82	TRAVPT-SET MAGNAIL FLUSH	678.715	1819960.0976	6674430.4458
83	TRAVPT-SET MAGNAIL FLUSH	684.457	1820712.8500	6674422.3280
84	TRAVPT-SET MAGNAIL FLUSH	704.051	1822759.4290	6674398.7395
85	TRAVPT-SET MAGNAIL FLUSH	712.134	1823633.5911	6674355.3933
86	TRAVPT-SET MAGNAIL FLUSH	720.296	1824351.7336	6674401.4404
87	TRAVPT-FD PK NAIL FLUSH	725.650	1825167.0144	6674337.0977
88	TRAVPT-SET MAGNAIL FLUSH	736.157	1826050.7716	6674360.7338
89	TRAVPT-SET MAGNAIL FLUSH	748.086	1826996.2114	6674294.8808
90	TRAVPT-SET MAGNAIL FLUSH	757.020	1827656.1992	6674337.6413
91	TRAVPT-SET MAGNAIL FLUSH	766.141	1828551.1007	6674292.7196
92	TRAVPT-SET MAGNAIL FLUSH	776.388	1829734.1853	6674328.1876
93	TRAVPT-SET PK NAIL FLUSH	718.475	1824322.3660	6674383.3890

GRAPHIC SCALE 1" = 500'
500' 0 500' 1000' 1500'

65% SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER — LAWRENCE GLEN WHITE — 73724 — CIVIL — STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT — 1939 — CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MEHYAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

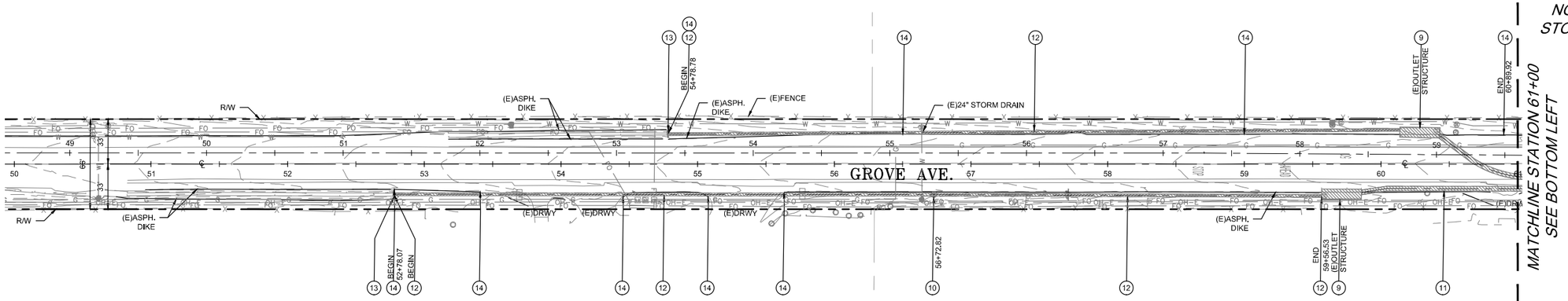
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

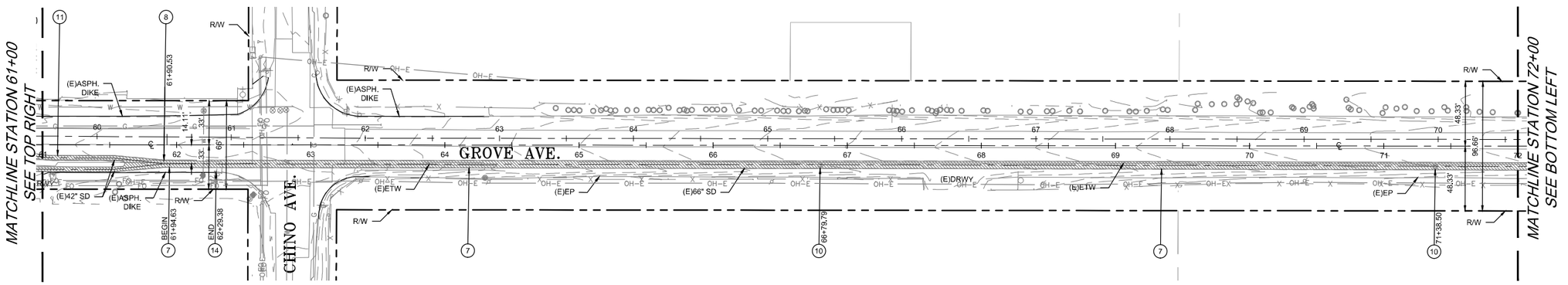
ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

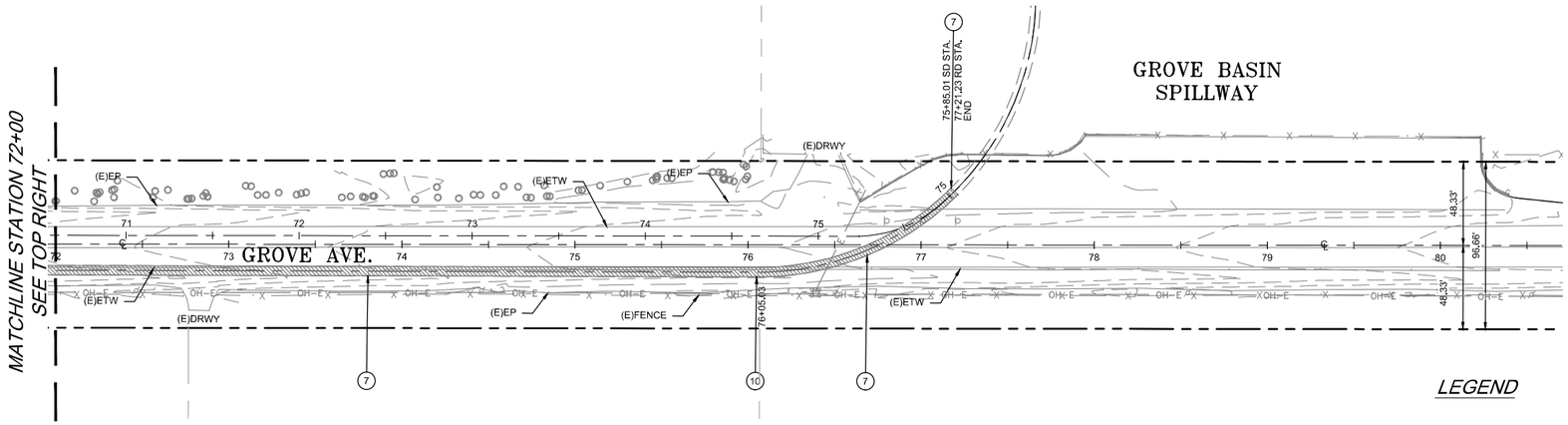
SURVEY CONTROL MAP

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	G-4
SHEET NO.	4 OF 19

NOTE: SEE "P" SHEETS FOR PURPOSED STORMDRAIN AND "R"SHEETS FOR STORM DRAIN TRENCH REPAIR







LEGEND

DEMOLITION AREA

#	DISPOSITION NOTES
7	REMOVE EXISTING 66" R.C.P.
8	REMOVE EXISTING JUNCTION STRUCTURE AND MANHOLE SHAFT
9	REMOVE EXISTING CATCH BASIN AND OUTLET STRUCTURE
10	REMOVE EXISTING MANHOLE
11	REMOVE EXISTING 42" R.C.P.
12	REMOVE EXISTING 24" R.C.P.
13	REMOVE EXISTING HEADWALL
14	REMOVE EXISTING DIKE

GRAPHIC SCALE 1" = 40'

40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER LAWRENCE GLENN WHITE 73724 CIVIL STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT 1939 CALIFORNIA

REVISIONS

MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE

RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE

APPROVED BY: MERVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

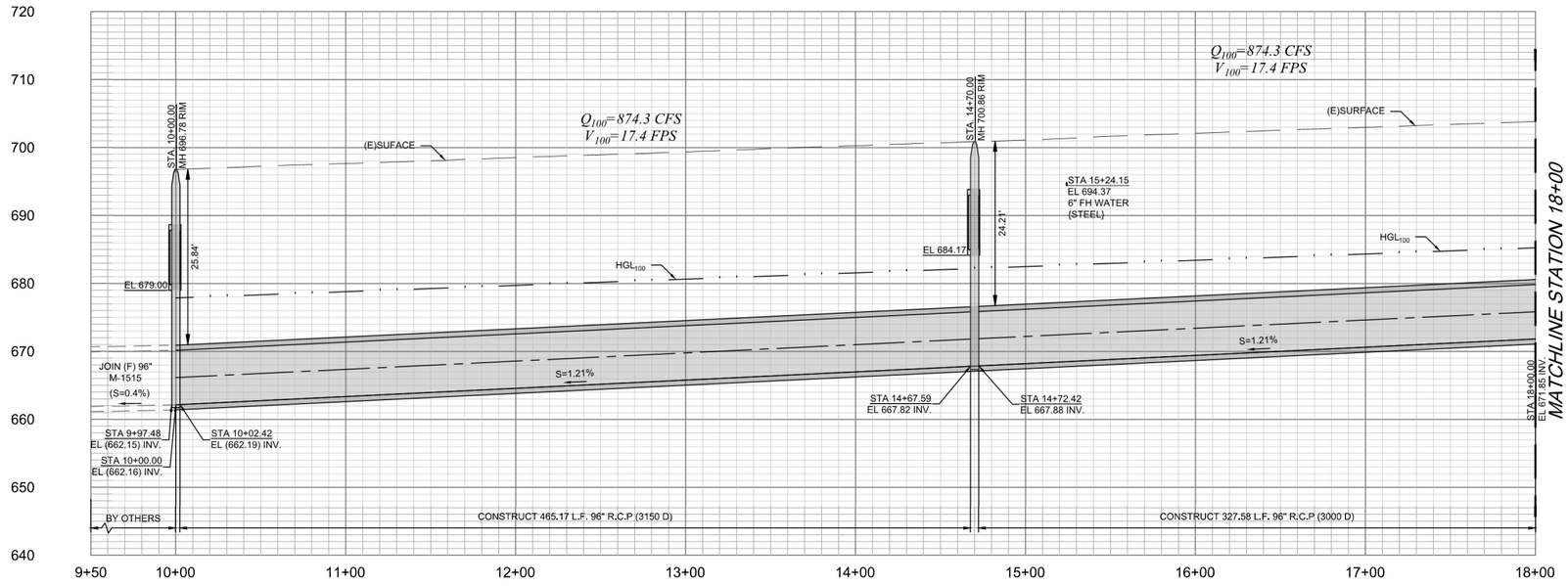
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

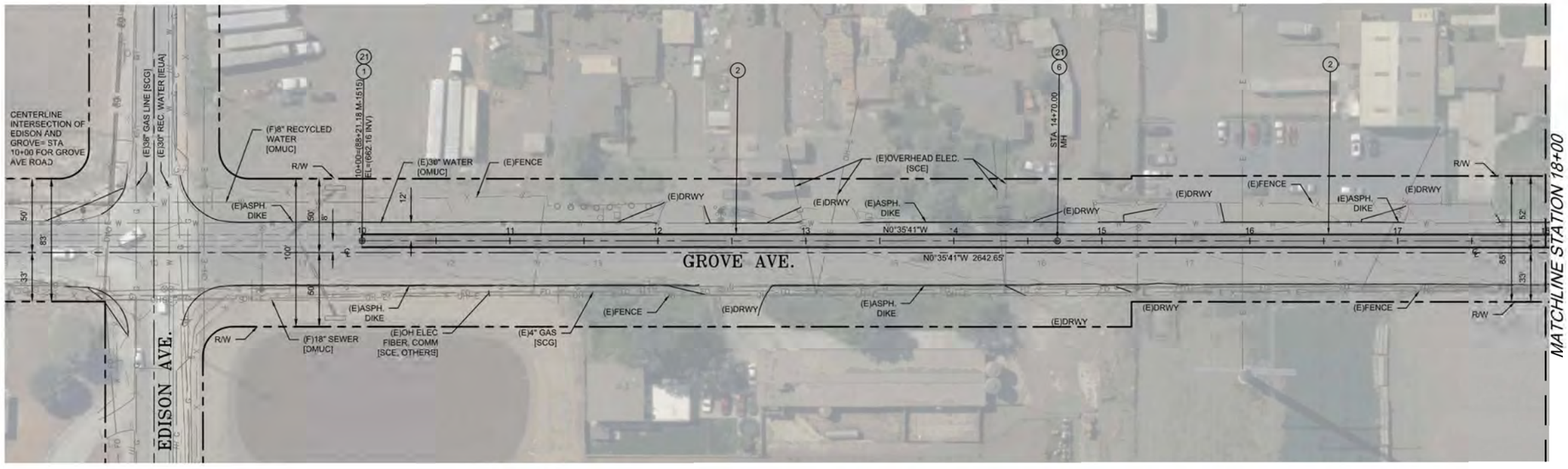
ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

STORM DRAIN
DEMOLITION PLAN

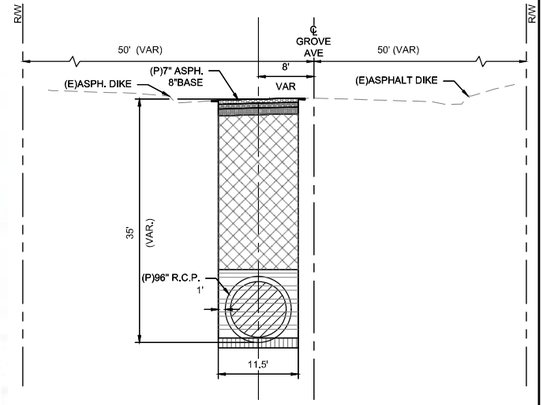
DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	D-1
SHEET NO.	5 OF 19

65% SUBMITTAL





BEGIN TO 18+00
HORZ: 1"=40'
VERT: 1"=10'



TYPICAL SECTION

SCALE 1"=10'

LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

#	CONSTRUCTION NOTES
1	REMOVE EXISTING BULKHEAD, INSTALL MANHOLE AND CONNECT TO EXISTING 96" R.C.P.
2	INSTALL 96" DIA R.C.P. PER PLAN AND PROFILE
6	CONSTRUCT MANHOLE PER CITY OF ONTARIO STD. DWG. NO. 3008 & 3009
21	CONSTRUCT MANHOLE SAFTEY LEDGE PER SPPWC STD. DWG. 330-2

GRAPHIC SCALE 1" = 40'

40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER — LAWRENCE GLEEN WHITE — 73724 — CIVIL — STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT — 1939 — CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE

RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE

APPROVED BY: MEHVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

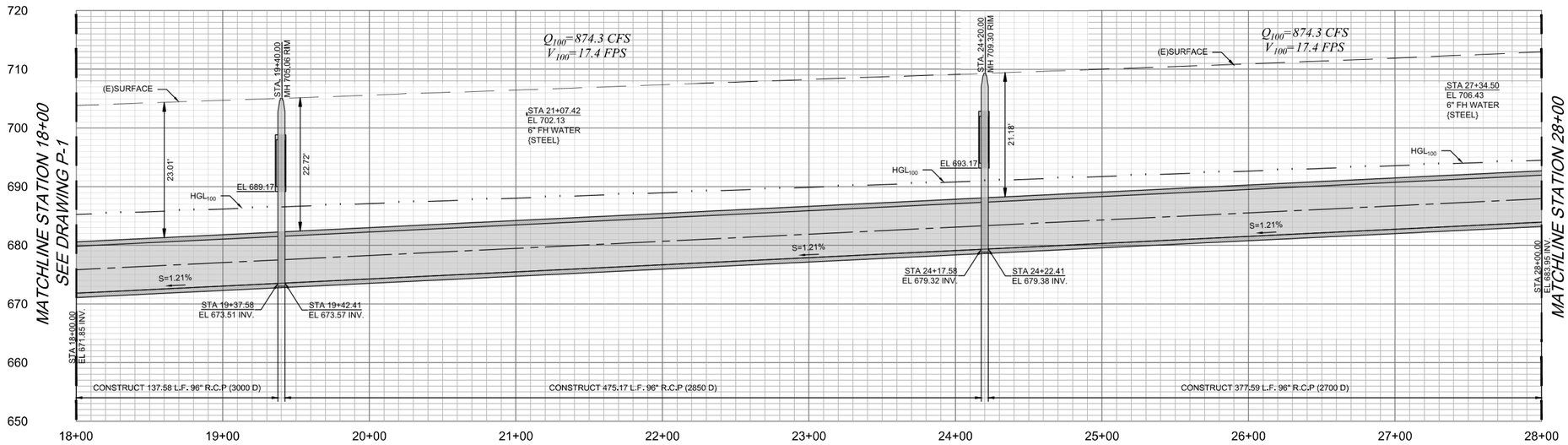
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET STORM DRAIN

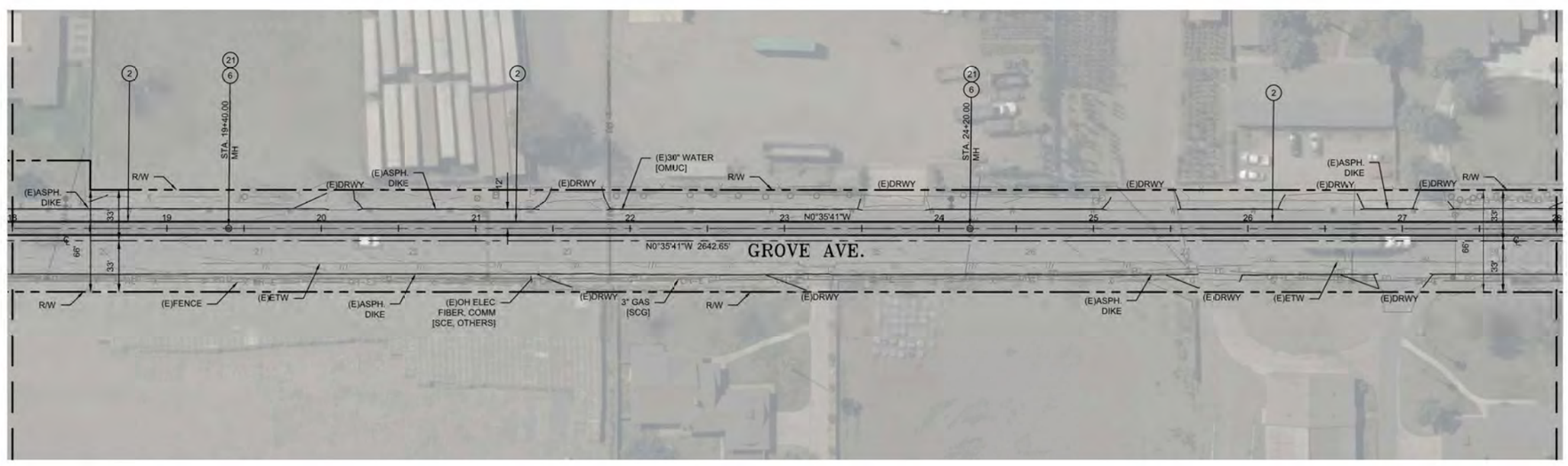
PLAN & PROFILE
STA 10+00 TO 18+00

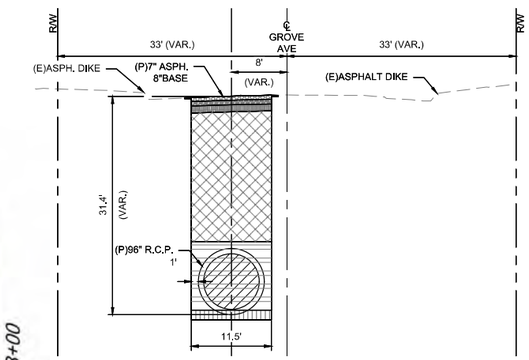
DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	P-1
SHEET NO.	6 OF 19

65% SUBMITTAL



18+00 TO 28+00
HORZ: 1"=40'
VERT: 1"=10'





TYPICAL SECTION
SCALE 1"=10'

LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

#	CONSTRUCTION NOTES
2	INSTALL 96" DIA R.C.P. PER PLAN AND PROFILE
6	CONSTRUCT MANHOLE PER CITY OF ONTARIO STD. DWG. NO. 3008 & 3009
21	CONSTRUCT MANHOLE SAFTEY LEDGE PER SPPWC STD. DWG. 330-2

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE GLEEN WITTE
73724
CIVIL
STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
1939
CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MEHVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

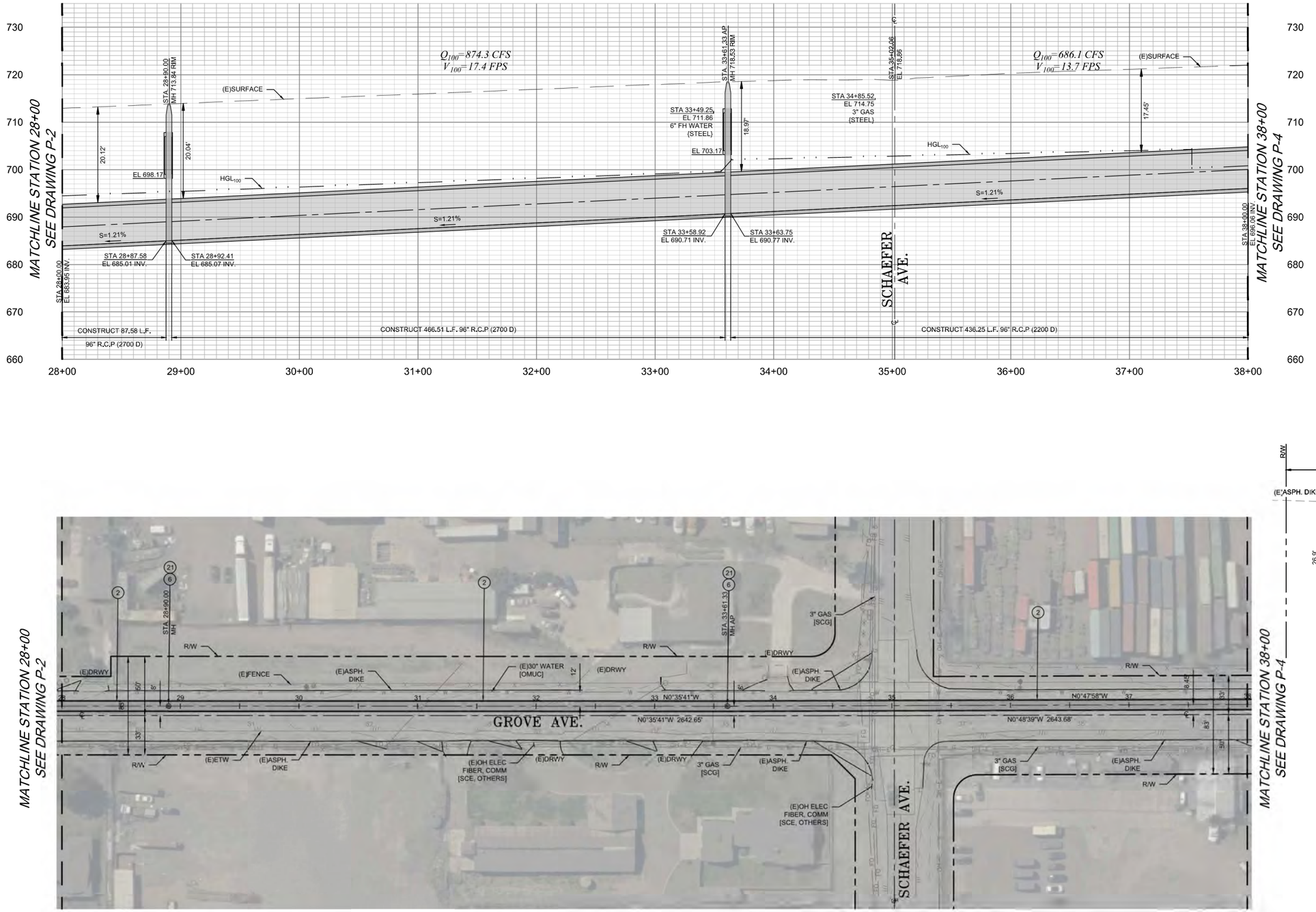
65% SUBMITTAL

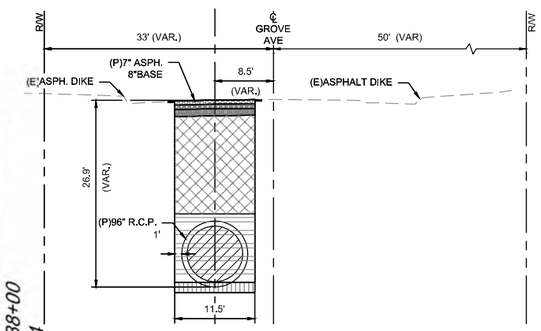
SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

PLAN & PROFILE
STA 18+00 TO 28+00

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	P-2
SHEET NO.	2 OF 19





TYPICAL SECTION
SCALE 1"=10'

LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

(#)	CONSTRUCTION NOTES
2	INSTALL 96" DIA R.C.P. PER PLAN AND PROFILE
6	CONSTRUCT MANHOLE PER CITY OF ONTARIO STD. DWG. NO. 3008 & 3009
21	CONSTRUCT MANHOLE SAFTEY LEDGE PER SPPWC STD. DWG. 330-2

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER LAWRENCE GLENN WHITE 73724 CIVIL STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT 1939 CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MEHRVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

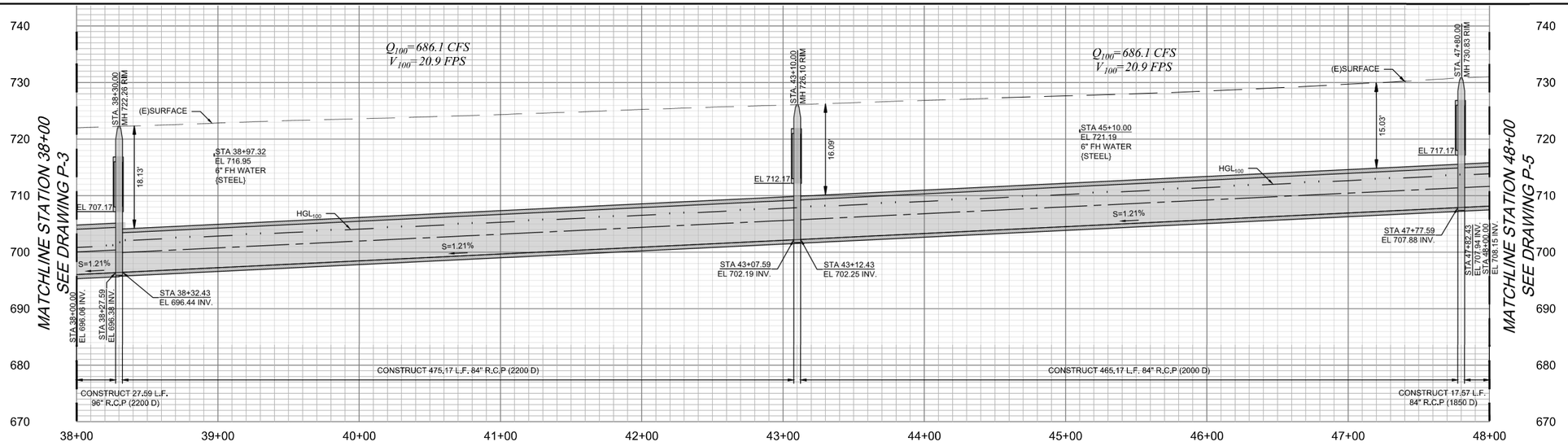
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET STORM DRAIN

PLAN & PROFILE
STA 28+00 TO 38+00

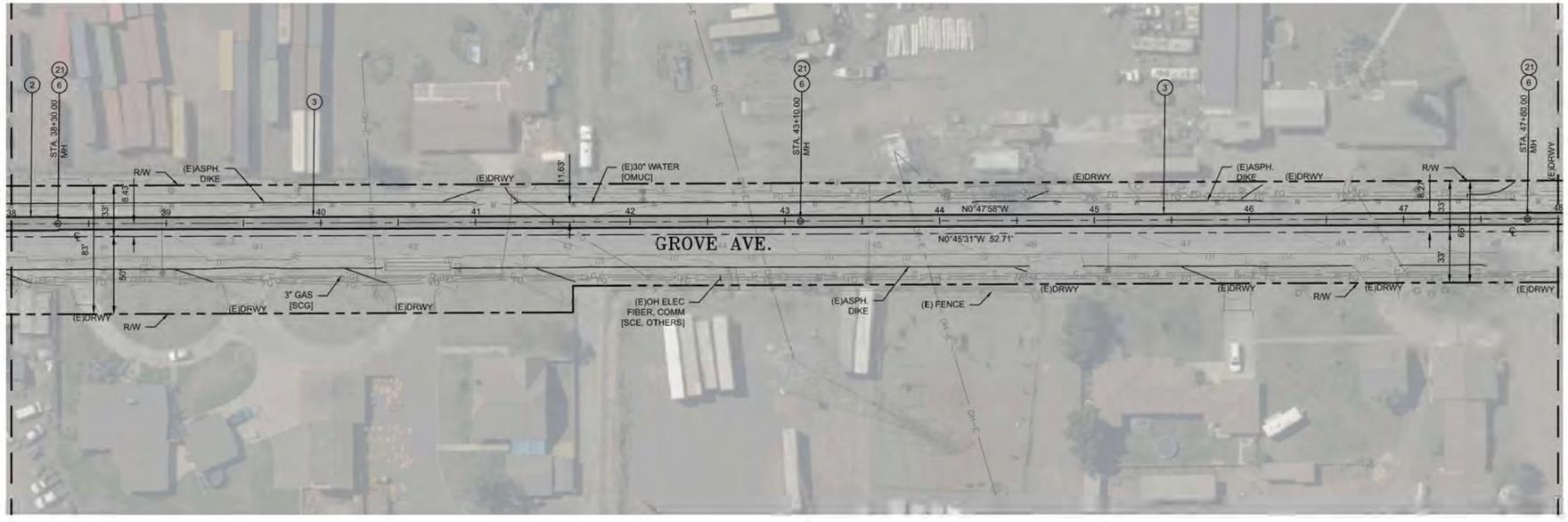
DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	P-3
SHEET NO.	8 OF 19

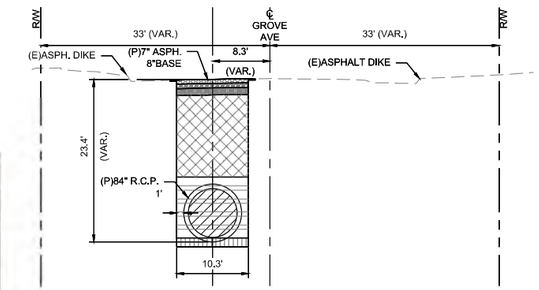
65% SUBMITTAL



MATCHLINE STATION 38+00
SEE DRAWING P-3

MATCHLINE STATION 48+00
SEE DRAWING P-5





TYPICAL SECTION
SCALE 1"=10'

LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

(#)	CONSTRUCTION NOTES
2	INSTALL 96" DIA R.C.P. PER PLAN AND PROFILE
3	INSTALL 84" DIA. R.C.P. PER PLAN AND PROFILE
6	CONSTRUCT MANHOLE PER CITY OF ONTARIO STD. DWG. NO. 3008 & 3009
21	CONSTRUCT MANHOLE SAFTEY LEDGE PER SPPWC STD. DWG. 330-2

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER LAWRENCE GLEN WHITE 73724 CIVIL STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT 1939 CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MEHRVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

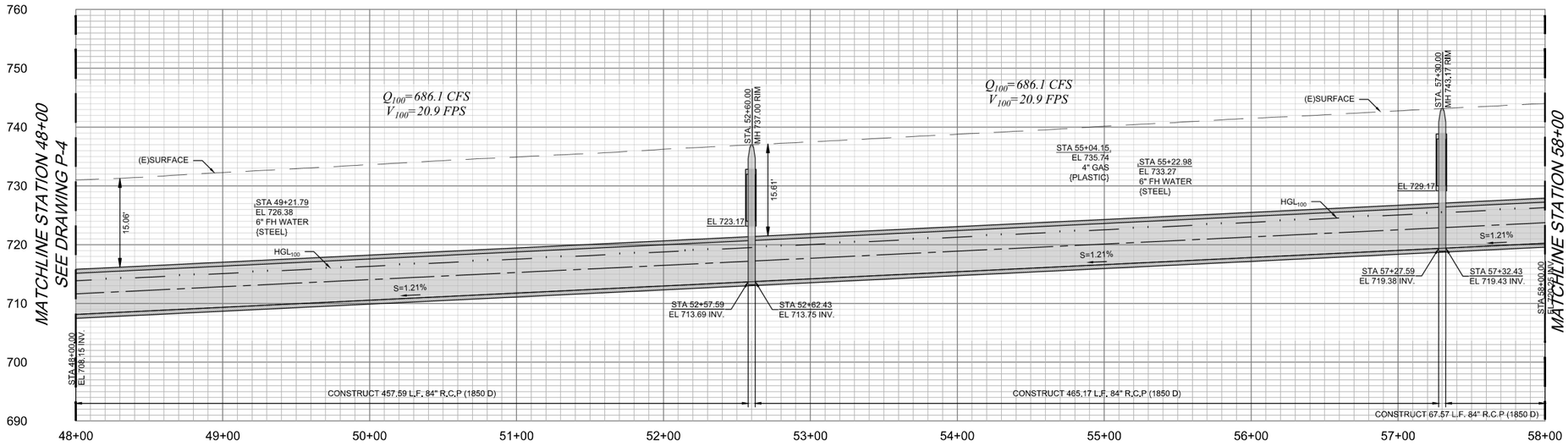
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET STORM DRAIN

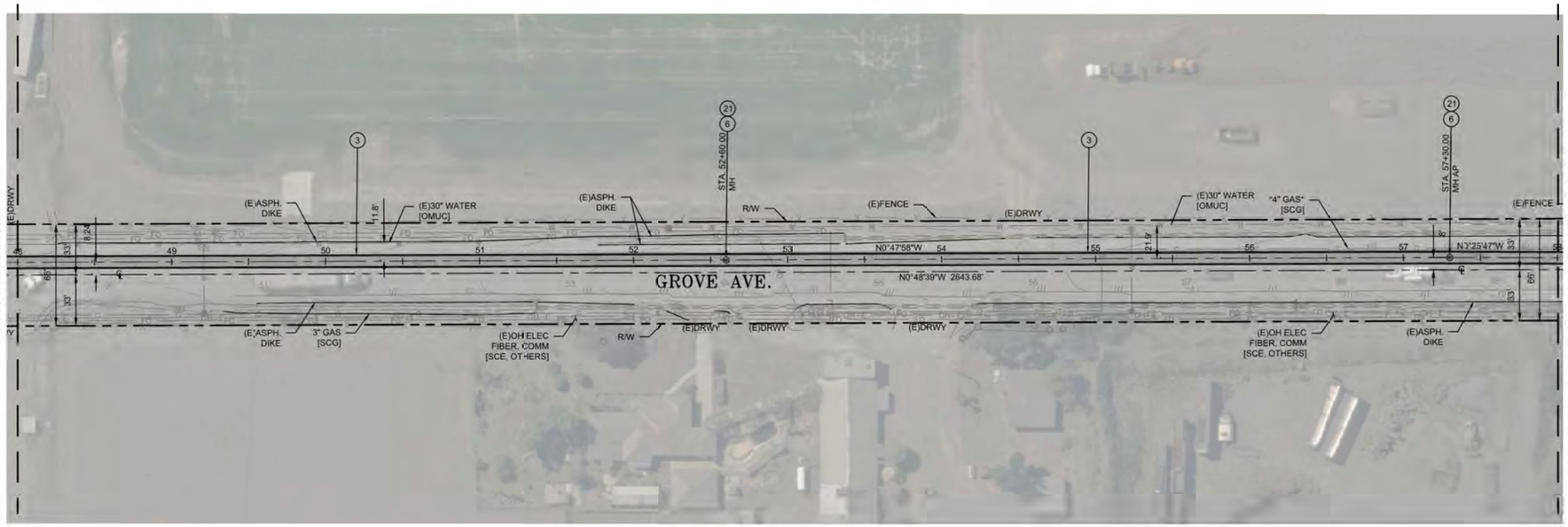
PLAN & PROFILE
STA 38+00 TO 48+00

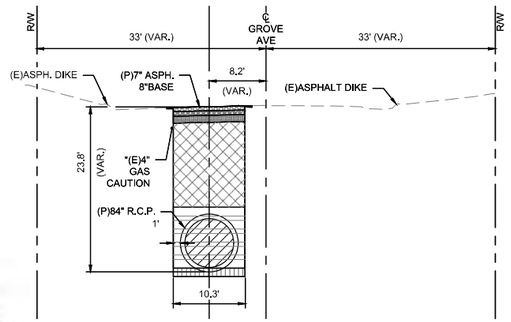
DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	P-4
SHEET NO.	9 OF 19

65% SUBMITTAL



48+00 TO 58+00
HORZ: 1"=40'
VERT: 1"=10'





TYPICAL SECTION
SCALE 1"=10'

LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

#	CONSTRUCTION NOTES
3	INSTALL 84" DIA. R.C.P. PER PLAN AND PROFILE
6	CONSTRUCT MANHOLE PER CITY OF ONTARIO STD. DWG. NO. 3008 & 3009
21	CONSTRUCT MANHOLE SAFTEY LEDGE PER SPPWC STD. DWG. 330-2

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE GLEEN WHITE
73724
CIVIL
STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
1939
CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY:
RUDY VELASQUEZ, P.E. DATE

RECOMMENDED BY:
LAWRENCE G. WHITE, P.E. DATE

APPROVED BY:
MEHRVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

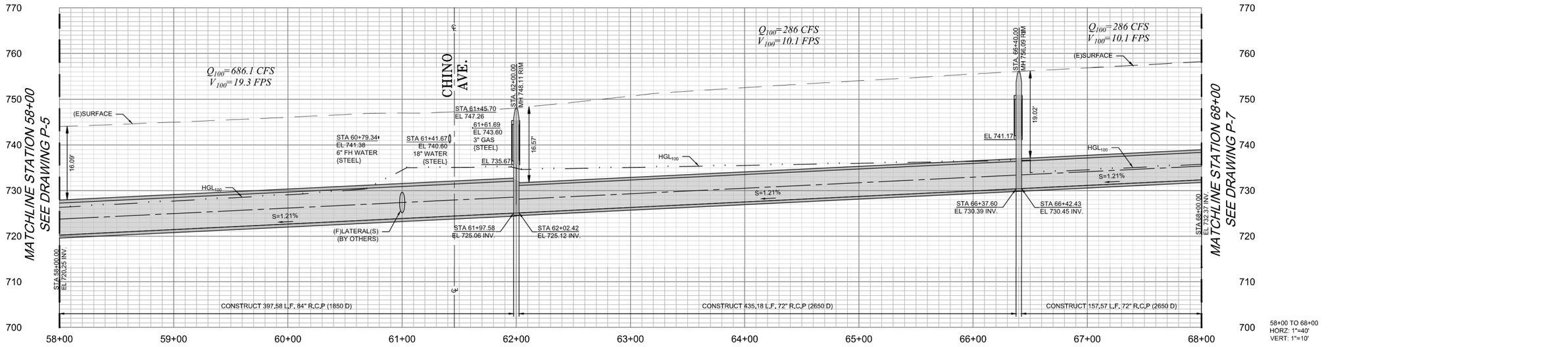
SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

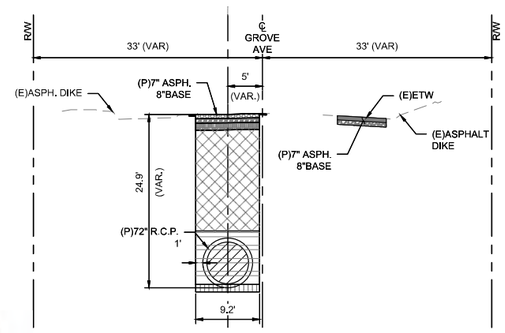
PLAN & PROFILE
STA 48+00 TO 58+00

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	P-5
SHEET NO.	10 OF 19

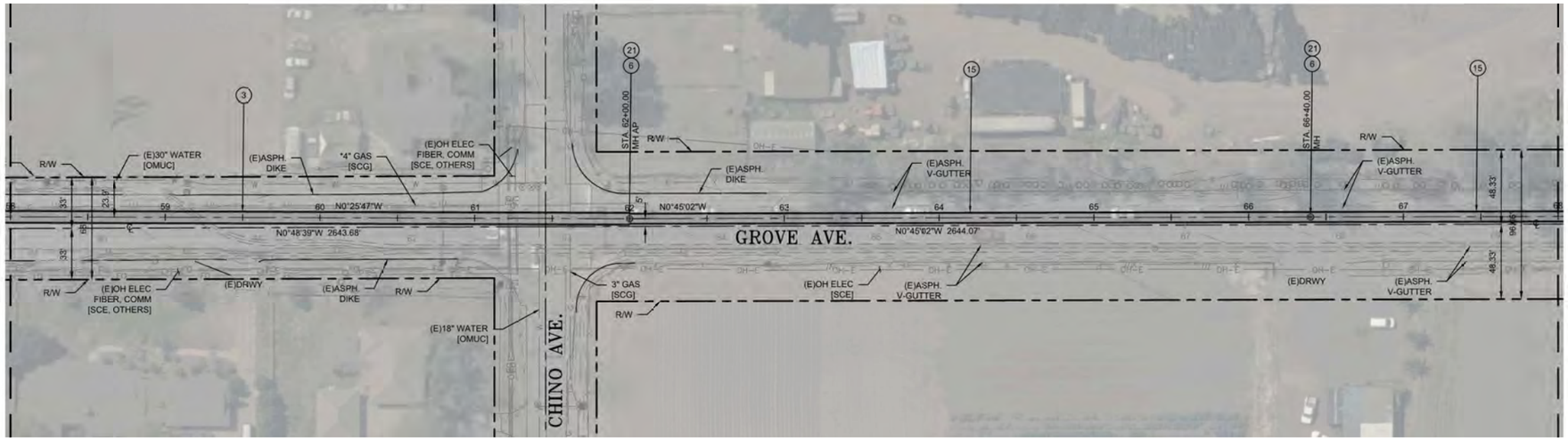
65% SUBMITTAL



58+00 TO 68+00
HORZ: 1"=40'
VERT: 1"=10'



TYPICAL SECTION
SCALE 1"=10'



LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

(#)	CONSTRUCTION NOTES
3	INSTALL 84" DIA. R.C.P. PER PLAN AND PROFILE
6	CONSTRUCT MANHOLE PER CITY OF ONTARIO STD. DWG. NO. 3008 & 3009
15	INSTALL 72" DIA. R.C.P. PER PLAN AND PROFILE
21	CONSTRUCT MANHOLE SAFTEY LEDGE PER SPPWC STD. DWG. 330-2

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE GLEEN WHITE
73724
CIVIL
STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
1939
CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MIHRVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

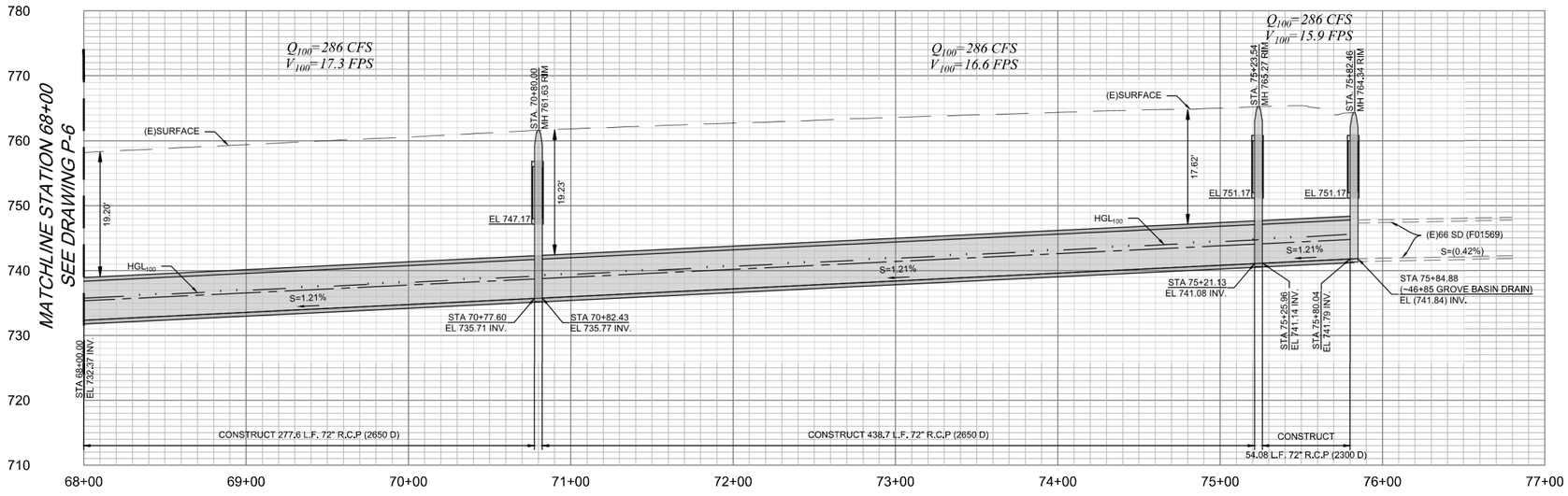
SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

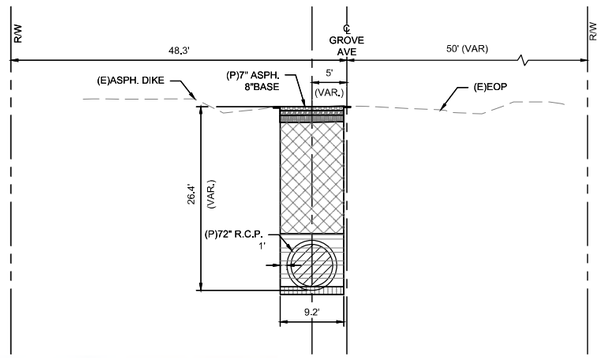
ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

PLAN & PROFILE
STA 58+00 TO 68+00

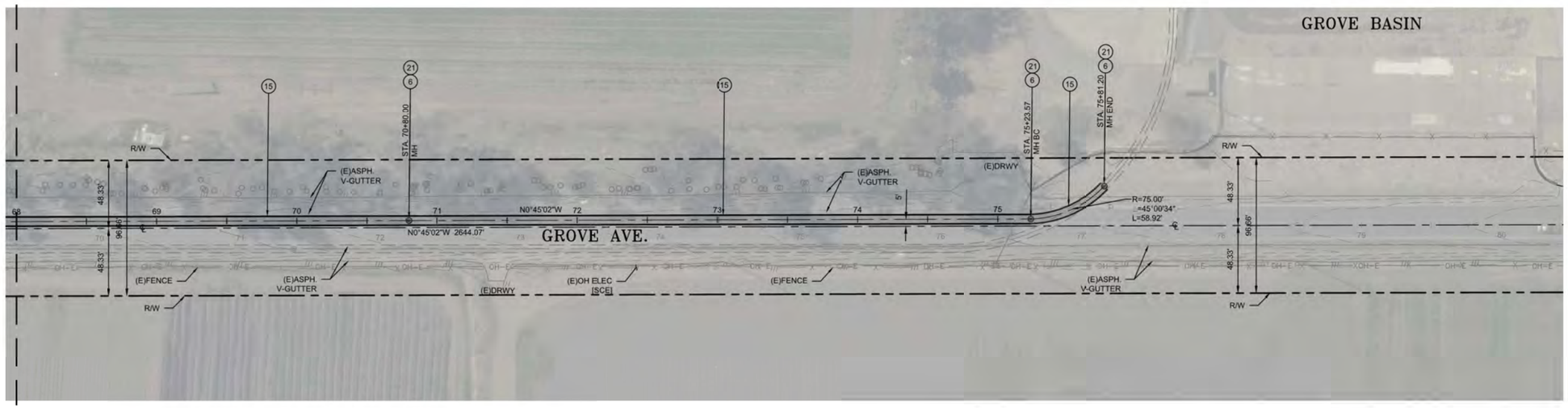
DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	P-6
SHEET NO.	11 OF 19

65% SUBMITTAL





TYPICAL SECTION
SCALE 1"=10'



LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

(#)	CONSTRUCTION NOTES
6	CONSTRUCT MANHOLE PER CITY OF ONTARIO STD. DWG. NO. 3008 & 3009
15	INSTALL 72" DIA. R.C.P. PER PLAN AND PROFILE
21	CONSTRUCT MANHOLE SAFTEY LEDGE PER SPPWC STD. DWG. 330-2

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE GLEEN WHITE
73724
CIVIL
STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
1939
CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY:
RUDY VELASQUEZ, P.E. DATE

RECOMMENDED BY:
LAWRENCE G. WHITE, P.E. DATE

APPROVED BY:
MEHRVAT MIKHAIL, P.E. DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

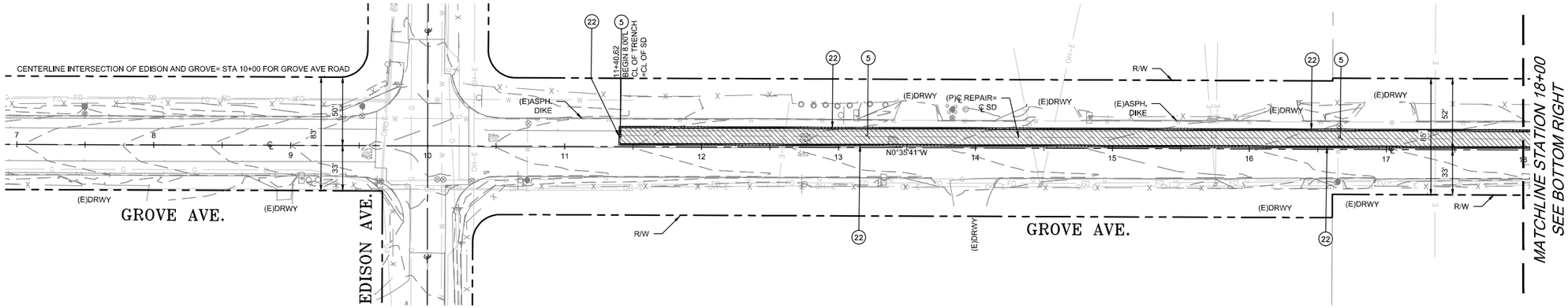
SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

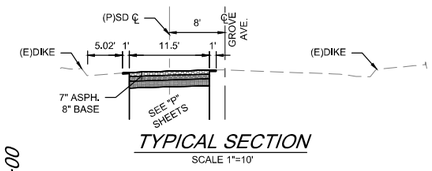
ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

PLAN & PROFILE
STA 68+00 TO 77+00

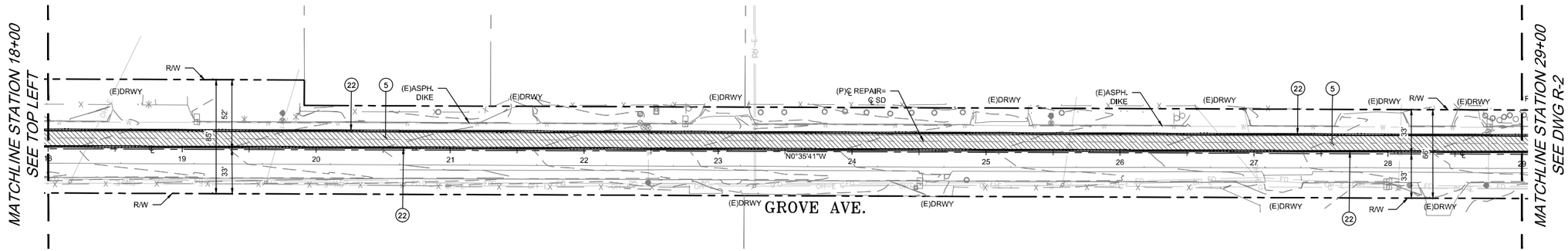
DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	P-7
SHEET NO.	12 OF 19

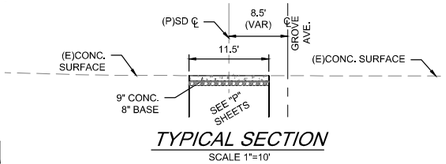
65% SUBMITTAL



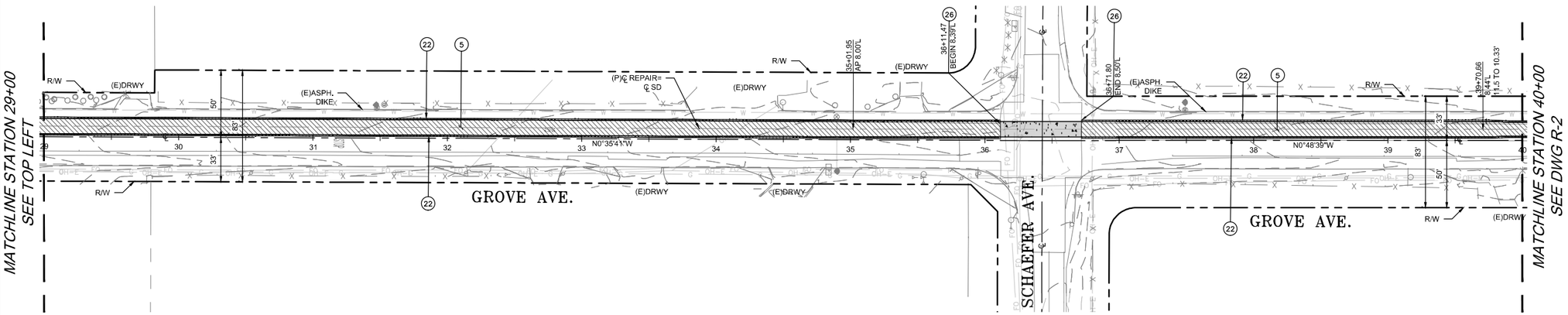


TYPICAL SECTION
SCALE 1"=10'





TYPICAL SECTION
SCALE 1"=10'



65% SUBMITTAL

#	CONSTRUCTION NOTES
4	CONSTRUCT AC DIKE PER CITY OF ONTARIO STANDARD 1214 MODIFIED TO MATCH EXISTING (1' HEIGHT +/-)
5	CONSTRUCT 7" AC (TYPE A) OVER 8" AB (CLASS 2), OVER 1.0' 95% COMPACTED NATIVE
22	2" GRIND AND OVERLAY PER CITY OF ONTARIO STANDARD DWG 1306
26	CONSTRUCT 9" PCC OVER 8" AB (CLASS 2) OVER 1.0' 95% COMPACTIVE NATIVE

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

REGISTERED PROFESSIONAL ENGINEER LAWRENCE GLENN WITTE 73724 CIVIL STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT 1939 CALIFORNIA

REVISIONS

MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MERVAT MIKHAIL, P.E. DATE

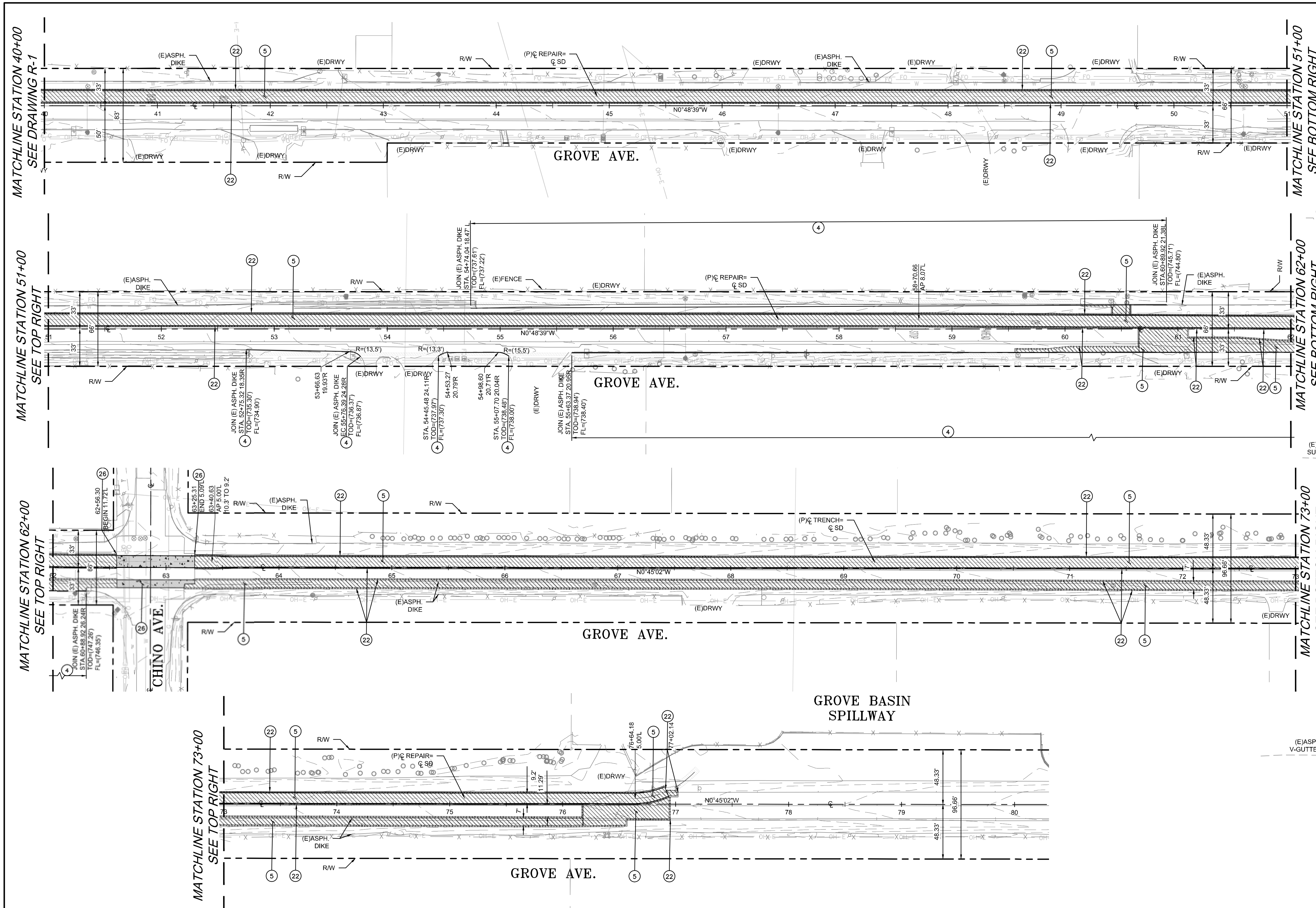
PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

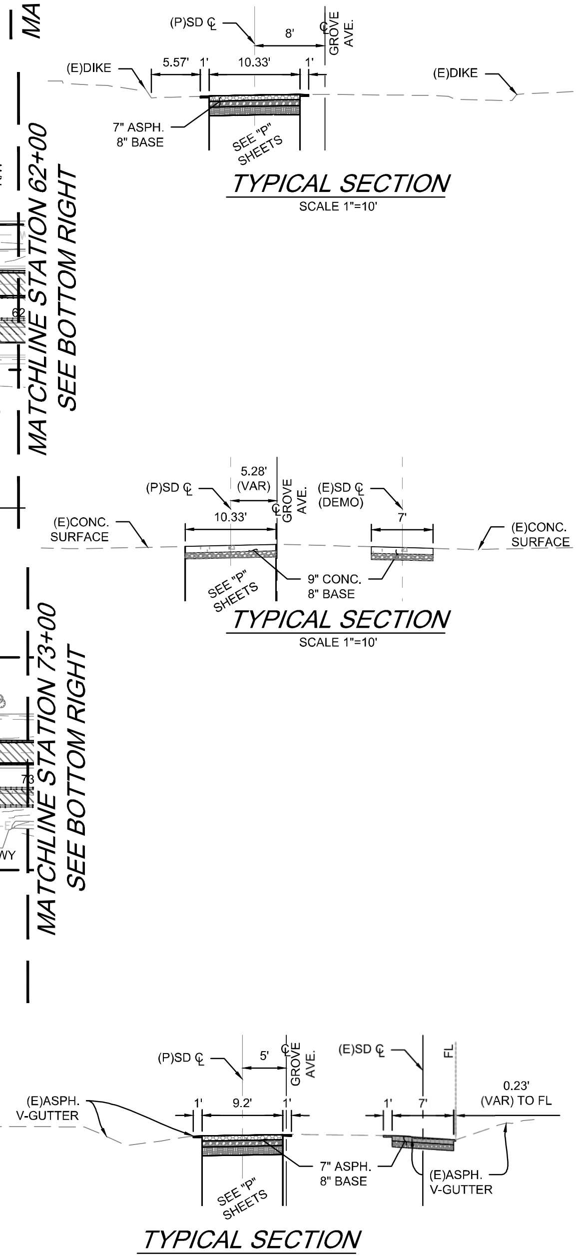
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

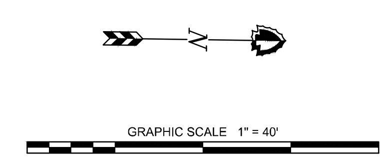
ONTARIO DRAINAGE
GROVE BASIN OUTLET STORM DRAIN

TRENCH REPAIR PLAN
STA. 10+00 TO 40+00

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	R-1
SHEET NO.	13 OF 19







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4	CONSTRUCT AC DIKE PER CITY OF ONTARIO STANDARD 1214 MODIFIED TO MATCH EXISTING (1' HEIGHT +/-)
5	CONSTRUCT 7" AC (TYPE A) OVER 8" AB (CLASS 2), OVER 1.0' 95% COMPACTED NATIVE
22	2" GRIND AND OVERLAY PER CITY OF ONTARIO STANDARD DWG 1306
26	CONSTRUCT 9" PCC OVER 8" AB (CLASS 2) OVER 1.0' 95% COMPACTIVE NATIVE

65% SUBMITTAL

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MERVAT MIKHAIL, P.E. DATE

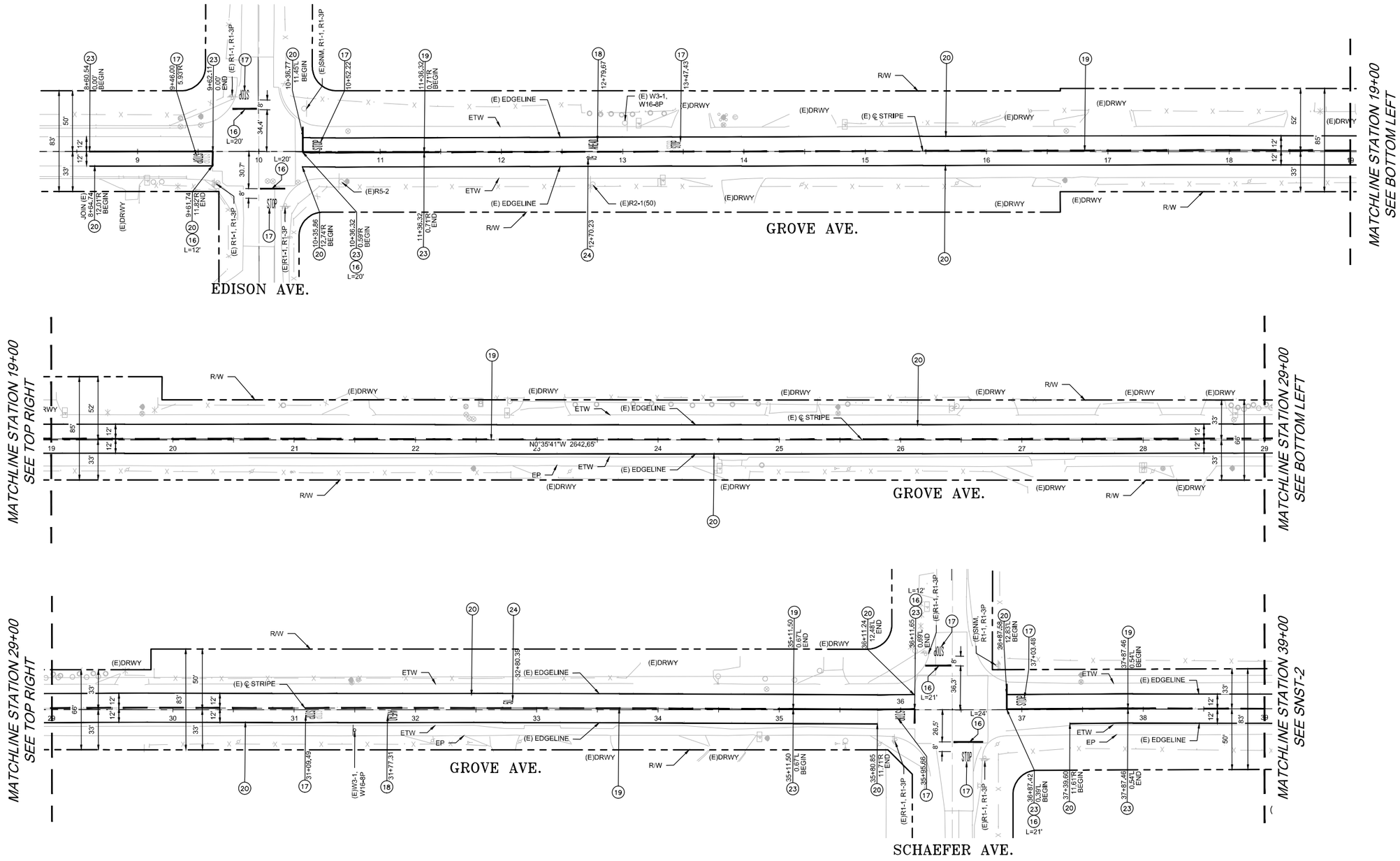
PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE GROVE BASIN OUTLET STORM DRAIN

TRENCH REPAIR PLAN STA 40+00 TO END

DATE: APRIL 25
SCALE: AS SHOWN
FILE NO.: 1-910-6A
DRAWING NO.: R-2
SHEET NO.: 14 OF 19



#	CONSTRUCTION NOTES
16	PAINT THERMOPLASTIC LIMIT LINE PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24G
17	PAINT THERMOPLASTIC "STOP" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
18	PAINT THERMOPLASTIC "AHEAD" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
19	PAINT THERMOPLASTIC DASHED YELLOW (SPRAYABLE) TRAFFIC STRIPE DETAIL 1 PER CALTRANS STANDARD PLAN A20A
20	PAINT THERMOPLASTIC "EDGE LINE" (SPRAYABLE) TRAFFIC STRIPE DETAIL 27B PER CALTRANS STANDARD PLAN A20B
23	PAINT SOLID DOUBLE YELLOW CENTERLINE PER CALTRANS DETAIL 21 PER STANDARD DRAWING A20A
24	PAINT THERMOPLASTIC "50" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24C

GRAPHIC SCALE 1" = 40'
40' 0 40' 80' 120'

65% SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE GLEEN WHITE
73724
CIVIL
STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
1939
CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE
RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE
APPROVED BY: MERVAT MIKHAIL, P.E. DATE

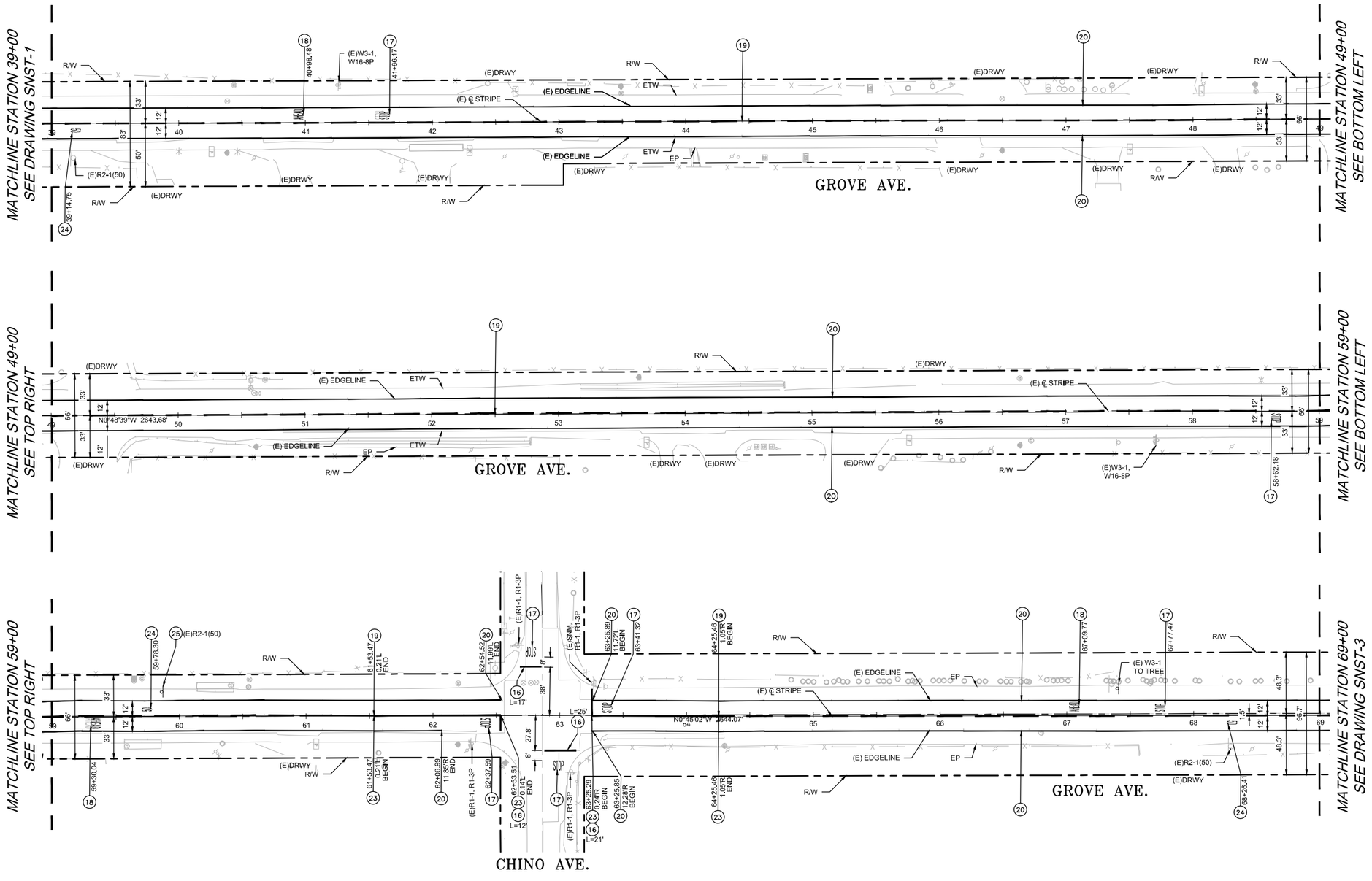
PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	RC

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

SIGNING AND STRIPING PLAN
STA 8+50 TO 39+00

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	SNST-1
SHEET NO.	15 OF 19



#	CONSTRUCTION NOTES
16	PAINT THERMOPLASTIC LIMIT LINE PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24G
17	PAINT THERMOPLASTIC "STOP" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
18	PAINT THERMOPLASTIC "AHEAD" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
19	PAINT THERMOPLASTIC DASHED YELLOW (SPRAYABLE) TRAFFIC STRIPE DETAIL 1 PER CALTRANS STANDARD PLAN A20A
20	PAINT THERMOPLASTIC "EDGE LINE" (SPRAYABLE) TRAFFIC STRIPE DETAIL 27B PER CALTRANS STANDARD PLAN A20B
23	PAINT SOLID DOUBLE YELLOW CENTERLINE PER CALTRANS DETAIL 21 PER STANDARD DRAWING A20A
24	PAINT THERMOPLASTIC "50" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24C
25	INSTALL ROADISDE SIGN

65% SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE GLEEN WHITE
73724
CIVIL
STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
1939
CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY:
RUDY VELASQUEZ, P.E. DATE

RECOMMENDED BY:
LAWRENCE G. WHITE, P.E. DATE

APPROVED BY:
MERVAT MIKHAIL, P.E. DATE

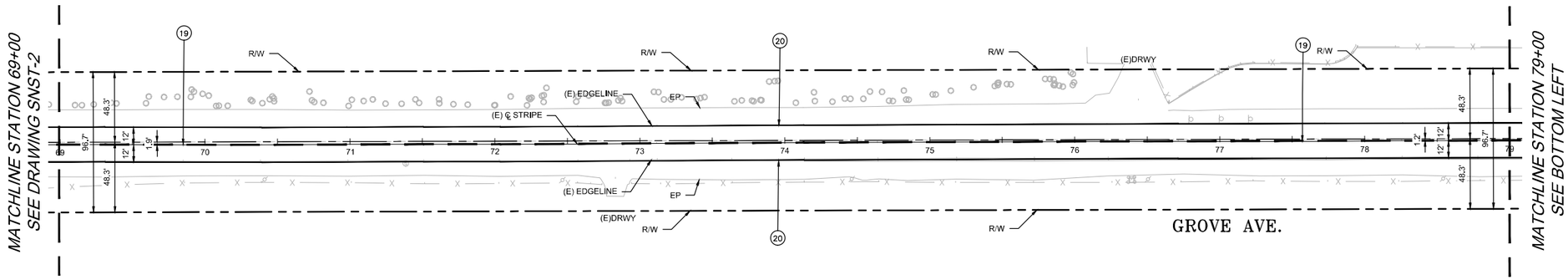
PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	RC

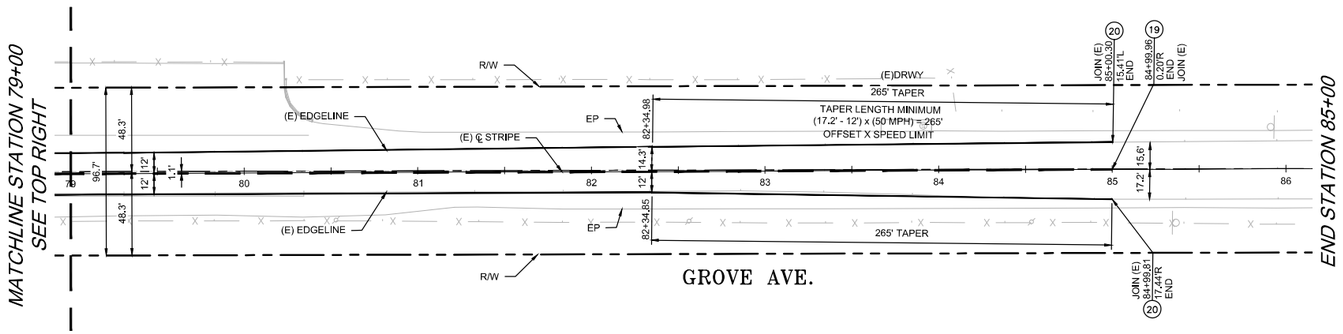
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

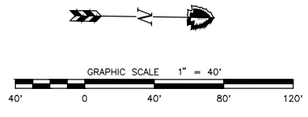
SIGNING AND STRIPING PLAN
STA. 39+00 TO 69+00

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	SNST-2
SHEET NO.	16 OF 19





#	CONSTRUCTION NOTES
16	PAINT THERMOPLASTIC LIMIT LINE PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24G
17	PAINT THERMOPLASTIC "STOP" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
18	PAINT THERMOPLASTIC "AHEAD" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
19	PAINT THERMOPLASTIC DASHED YELLOW (SPRAYABLE) TRAFFIC STRIPE DETAIL 1 PER CALTRANS STANDARD PLAN A20A
20	PAINT THERMOPLASTIC "EDGE LINE" (SPRAYABLE) TRAFFIC STRIPE DETAIL 27B PER CALTRANS STANDARD PLAN A20B
23	PAINT SOLID DOUBLE YELLOW CENTERLINE PER CALTRANS DETAIL 21 PER STANDARD DRAWING A20A
24	PAINT THERMOPLASTIC "50" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24C



65% SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE GLEEN WHITE
73724
CIVIL
STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
1939
CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE

RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE

APPROVED BY: MERVAT MIKHAIL, P.E. DATE

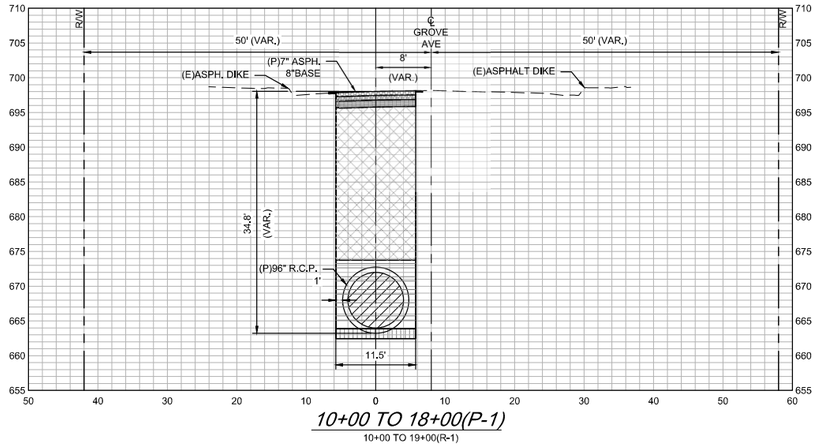
PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	RC

SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

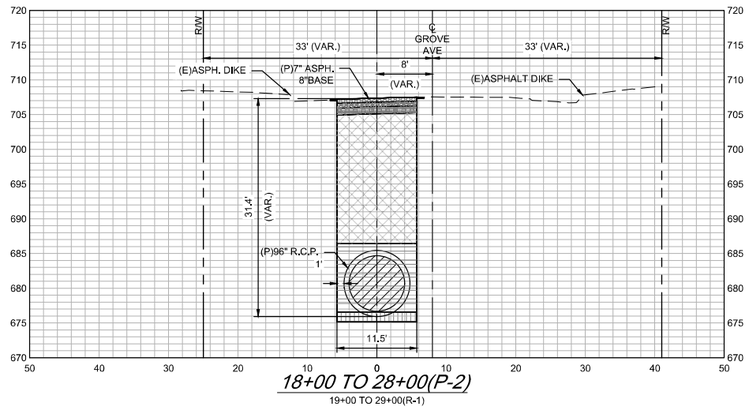
SIGNING AND STRIPING PLAN
STA. 69+00 TO 85+00

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	SNST-3
SHEET NO.	17 OF 19



10+00 TO 18+00(P-1)

10+00 TO 19+00(R-1)



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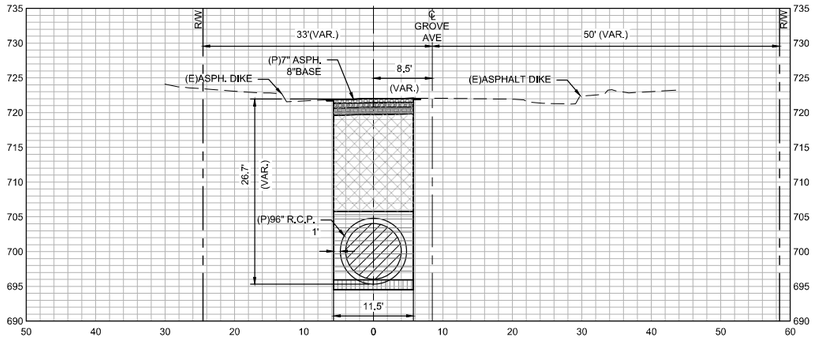
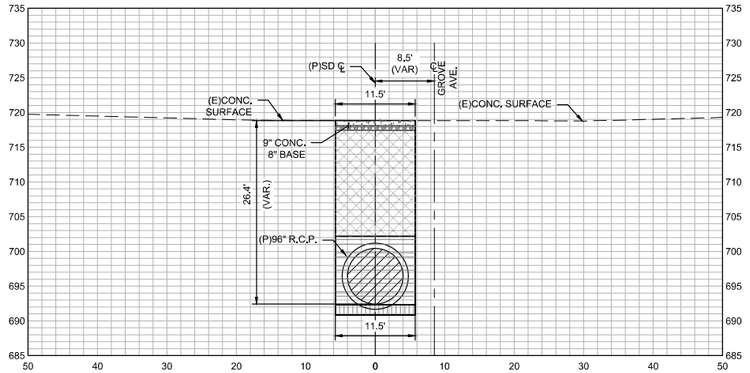
19+00 TO 29+00(R-1)



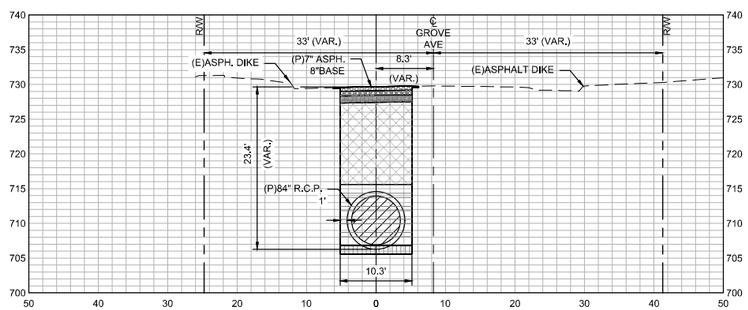
28+00 TO 38+00(P-3)

29+00 TO 39+00(R-1)



28+00 TO 38+00(P-3)

29+00 TO 39+00(R-1)



38+00 TO 48+00(P-4)

39+00 TO 49+00(R-1)

GRAPHIC SCALE 1" = 10'

10' 0 10' 20' 30'

LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

65% SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER — LAWRENCE GLEEN WHITE — 73724 — CIVIL — STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT — 1939 — CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. DATE

RECOMMENDED BY: LAWRENCE G. WHITE, P.E. DATE

APPROVED BY: MERVAT MIKHAIL, P.E. DATE

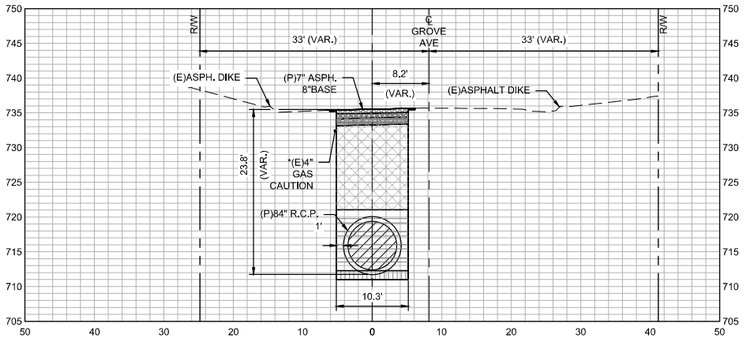
PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET STORM DRAIN

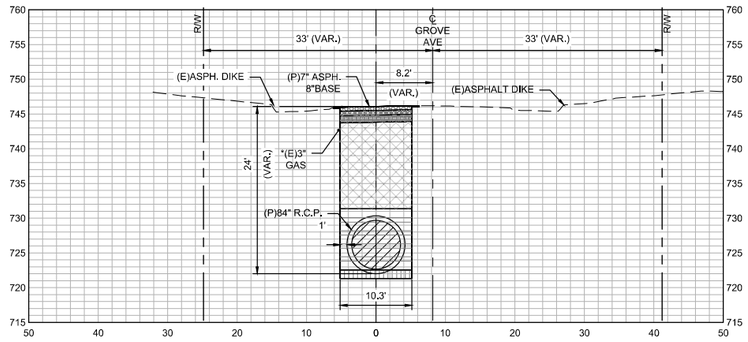
TYPICAL CROSS-SECTIONS I

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	XS-1
SHEET NO.	18 OF 19



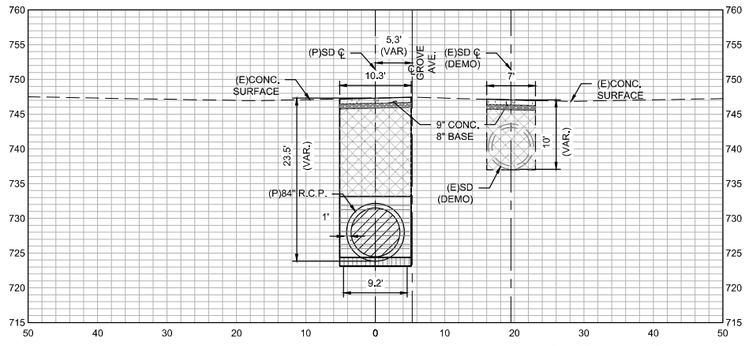
48+00 TO 58+00(P-5)

49+00 TO 59+00(R-1)



58+00 TO 61+00(P-6)

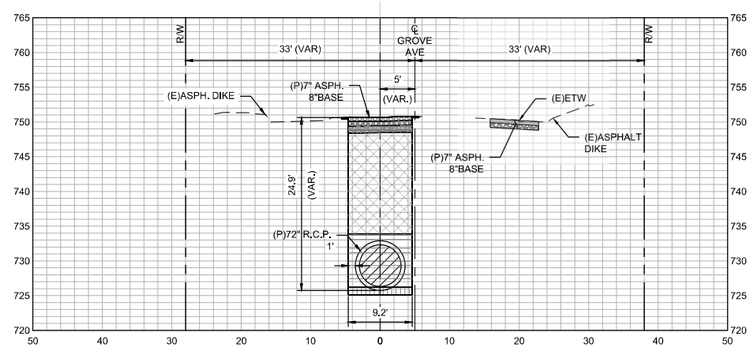
61+00 TO 62+56(R-2)



61+00 TO 62+00(P-6)

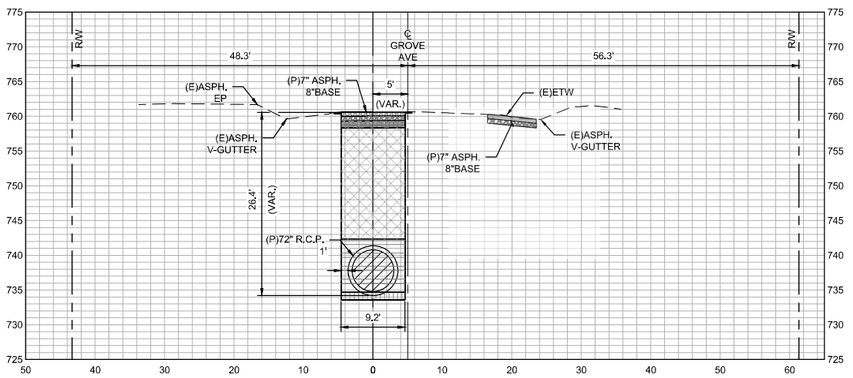
62+56 TO 63+25(R-2)

(E)SD DEMOLITION NOT SHOWN IN ALL CROSS-SECTIONS



62+00 TO 68+00(P-6)

59+00 TO 69+00(R-2)



68+00 TO 78+00(P-7)

69+00 TO 79+00(R-2)

GRAPHIC SCALE 1" = 10'

LEGEND

- ASPHALT (PAVING/DIKE)
- BASE
- COMPACTED SOIL
- BACKFILL
- BEDDING B
- BEDDING A

65% SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER — LAWRENCE GLEEN WHITE — 73724 — CIVIL — STATE OF CALIFORNIA

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT — 1939 — CALIFORNIA

REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY: RUDY VELASQUEZ, P.E. — DATE

RECOMMENDED BY: LAWRENCE G. WHITE, P.E. — DATE

APPROVED BY: MERVAT MIKHAIL, P.E. — DATE

PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
FP	FP	RV	FP

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

ONTARIO DRAINAGE
GROVE BASIN OUTLET
STORM DRAIN

TYPICAL CROSS-SECTIONS II

DATE	APRIL 25
SCALE	AS SHOWN
FILE NO.	1-910-6A
DRAWING NO.	XS-2
SHEET NO.	19 OF 19

SECTION 4 – ENVIRONMENTAL CHECKLIST FORM

1.	**Project Title:**	Grove Basin Outlet Storm Drain Improvement Project
2.	**Lead Agency Name:**	San Bernardino County Flood Control District
	Address:	825 East Third Street Rm. 123 San Bernardino, California 92415-0835
3.	**Contact Person:**	Ayida Smith M.P.A, Planner II – Environmental Management Division, Capital Improvement Section Ayida.Smith@dpw.sbcounty.gov 909-387-1864
4.	**Project Location:**	Grove Avenue between East Riverside Drive to Edison Avenue, City of Ontario, California 91761
	Topographic Quad (USGS 7.5"):	Ontario Quad
	Topographic Quad Coordinates:	T2S R7W, SBB&M
	Latitude/Longitude	34.006727N 117.628206W approximately the center of the Project location
	Site Access:	Grove Avenue between East Riverside Drive to Edison Avenue
5.	**Project Sponsor:**	San Bernardino County Flood Control District
	Name and Address:	825 East Third Street, Room 123 San Bernardino, CA 92415
6.	**General Plan/Zoning Designation:**	The 2050 Ontario Plan designates the Project location's land use as Medium Density Residential (MDR), with Mixed-Use (MU) designated areas adjacent to the Project. The Project area is currently zoned as Agricultural (AG).

7. Project Description Summary:

Details of the Project are further discussed in Section 3.

8. Environmental/Existing Site Conditions:

The Grove Basin Outlet Storm Drain Improvement Project addresses flooding along a 6,583 ft. section of Grove Avenue, a north-south asphalt road with dirt shoulders and intermittent curb. The project involves modifying existing facilities to improve stormwater flow management. Currently, stormwater from Grove Basin is discharged into reinforced concrete

pipes on both sides of Grove Avenue, spanning from approximately Edison Avenue to Chino Avenue.

9. Surrounding land uses and setting:

The region surrounding Grove Avenue has experienced significant urban development in recent years, transitioning from predominantly agricultural and low-density residential land uses to medium and high-density residential developments.

10. Other public agencies whose approval is required:

The following agencies are responsible for review and approval of the Proposed Project:

City/County Agencies:

- City of Ontario

11. Have California Native American tribes traditionally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation?

On November 1, 2024, the County sent project notification letters to the following California Native American tribes, which had previously submitted general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code:

- San Manuel Band of Mission Indians (now known as The Yuhaaviatam of San Manuel Nation)
- Soboba Band of Luiseno Indians

Each recipient was provided a brief description of the Proposed Project, a map of its location, the lead agency representative's contact information, and a notification that the tribe has 30 days to request consultation. The 30-day response period concluded on December 1, 2024.

As a result of the initial notification letters, the San Bernardino County received the following responses:

- The San Manuel Band of Mission Indians (now known as The Yuhaaviatam of San Manuel Nation) declined to consult.
- No response or request to consult was received from the Soboba Band of Luiseno Indians.

12. Lead Agency Discretionary Actions:

- District Board of Supervisors approval of the CEQA document (expected to be a Mitigated Negative Declaration) is required prior to Project implementation.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

☐	Aesthetics	☐	Agricultural / Forest Resources	☐	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
☐	Geology / Soils	☐	Greenhouse Gas Emissions	☐	Hazards / Hazardous Materials
☐	Hydrology / Water Quality	☐	Land Use / Planning	☐	Mineral Resources
☐	Noise	☐	Population / Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities / Service Systems	☐	Wildfire	■	Mandatory Findings of Significance

LEAD AGENCY DETERMINATION

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Ayida Smith 06/03/2025

Signature: Ayida Smith, MPA, Planner II Date

1. AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

(Check ☐ if project is located within a view-shed of any Scenic Route listed in the General Plan):

Environmental Setting

The Project is situated within a San Bernardino County Flood Control District easement, currently in a rural part of the City of Ontario. The Project area has scenic views of the Chino Hills State Park and Angeles Mountains.

Impact Analysis

a) Have a substantial adverse effect on a scenic vista?

No Impact. The proposed project consists of ground-level or below-ground improvements to existing drainage facilities and roads. These improvements will result in the obstruction of any scenic vista or open view to the public beyond that which will take place temporarily during the time of construction. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Project involves underground utilities and pavement repair along Grove Avenue. This work will not impact scenic resources and will improve the long-term scenic qualities of the area. The Project will not impact any protected trees, rock outcroppings, historic buildings, or state scenic highways (City 2025a). Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The Project Site, situated in an urban area as defined by PRC 21071, involves underground utilities and pavement repair along Grove Avenue (OPR 2025). This road repair will enhance the long-term scenic quality of the area without negatively impacting the visual character experienced by the public. The pavement of Grove Avenue from East Riverside Drive to Edison Avenue will be maintained to meet standards established by the City of Ontario and will not alter the visual character of the area beyond the temporary construction anticipated; however, these changes will be temporary and resolved through the implementation of the Project. The Proposed Project will not substantially degrade the existing visual character of the site and its surroundings, as all improvements will be underground or at-grade and within the existing roadway. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The Project would not result in new light sources. Construction will be conducted during daylight hours, and operational activities will not require additional lighting. Therefore, there would be no impact from light sources and no mitigation is required.

Aesthetics Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required regarding impacts to aesthetics.

2. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

(Check ☐ if project is located in the Important Farmlands Overlay):

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site and surrounding area are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. As the proposed area of disturbance would occur within the public right of way and not on land suitable for utilization as farmland, no impacts are anticipated, and no mitigation measures are required.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. The Proposed Project will not occur on lands zoned for agricultural use under Williamson Act contract (DOC 2022), or on lands that would impact agricultural resources. The disturbance will be confined to the existing public right-of-way. As such, there are no anticipated impacts to agricultural resources and no mitigation is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project would not result in rezoning of, or conflict with existing zoning for, forest land or timberland zoned for Timberland Production. The proposed improvements would occur within the public right of way and would not include forest land or timberland. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site does not contain forest land, and implementing the project will not result in forest land loss or conversion to non-forest use. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The Project will not result in the loss of agricultural or forest land uses because the improvements would occur on previously disturbed land that does not support those uses currently or in the foreseeable future. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Agriculture and Forestry Services Impact Conclusions:

No impacts are identified or anticipated, and no mitigation measures are required.

3. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				X
c) Expose sensitive receptors to substantial pollutant concentrations?				X
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

(Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

Environmental Setting

Overview of the Existing Air Quality Environment

The project site is in the western portion of San Bernardino County, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the SCAQMD.

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions transported by prevailing winds from the second-largest urban area in the United States gives the Basin some of the worst air pollution problems in the nation. The Project area is at the northeastern edge of the Basin at an elevation of 716 feet above sea level. Due to the elevation and location at the northeastern edge of the Basin, the project area is prone to the highest ozone concentrations within the Basin.

Surrounding Land Uses in the Project Vicinity

The surrounding setting consists of various agricultural, industrial, and residential land uses including truck storage yards, asphalt processing and storage, landscape materials handling, composting facilities, interspersed with single-family residential.

REGULATORY SETTING

Federal Regulations

Pursuant to the Federal Clean Air Act (CAA) of 1970, the Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS). The NAAQS was established for six major pollutants, termed “criteria” pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards (AAQS), or criteria, for outdoor concentrations to protect public health.

California Regulations

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish the California Air Resources Board (CARB). Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to the State’s air pollution problems.

California adopted the CCAA in 1988. CARB administers the CAAQS for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the six criteria pollutants designated by the CAA as well as four others: visibility-reducing particulates, H_2S, sulfates, and vinyl chloride.

Regional Air Quality Planning Framework

The 1976 Lewis Air Quality Management Act established SCAQMD and other air districts throughout the State. The CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

CARB is responsible for incorporating Air Quality Management Plans (AQMPs) for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary-source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan

SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every three years, updating the previous plan and 20-year horizon.

The latest plan is the 2022 AQMP (SCAQMD 2022), which incorporates the latest scientific and technological information and planning assumptions, including the 2020 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories which also benefits reduction of GHG emissions. Key elements of the 2022 AQMP pertaining to GHG emissions include:

- Specifically addresses decarbonization and climate policy development and its role in achieving the 2015 Ozone standard.
- Calculation and credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation)
- A strategy with fair-share emission reductions at the federal, State, and local levels

- Investment in strategies and technologies meeting multiple air quality and climate objectives
- Identification of new partnerships and significant funding for incentives to accelerate deployment of zero and near-zero technologies
- Attainment of the 1-hour Ozone standard by 2022 with no reliance on “black box” future technology (CAA Section 182(e)(5) measures). While not directly correlated to GHG emissions, the measures rely heavily on zero emission technologies that will also significantly reduce GHG emissions.

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operations impacting reduction of GHG emissions.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate new development projects within the Basin, such as projects. Instead, SCAQMD published the *CEQA Air Quality Handbook* (SCAQMD 1993) to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential GHG and air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures that can be used in conducting GHG analyses in environmental impact reports and were used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook.*

While the replacement *Air Quality Analysis Guidance Handbook* is being updated, supplemental guidance/information on the SCAQMD website includes: (1) Emission FACtors (EMFAC) on-road vehicle air pollutant and GHG emission factors, (2) GHG analysis guidance, (3) mitigation measures and control efficiencies, (5) off-road mobile source air pollutant and GHG emission factors, and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

County of San Bernardino GHG Reduction Plan

The County completed a GHG Emissions Reduction Plan Update in June 2021 (County of San Bernardino 2021), which sets forth emissions reduction targets, emissions reduction measures, and action steps to assist the County to demonstrate consistency with California’s Global Warming Solutions Act (Senate Bill 32). Together with the GHG Emissions Reduction Plan, the County adopted the GHG DRP (County of San Bernardino 2021) in 2021. The DRP procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the DRP and comply with State requirements.

THRESHOLDS OF SIGNIFICANCE

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health within an adequate margin of safety (SCAQMD 2017), these emissions thresholds are regarded as conservative and would overstate an individual project’s contribution to health risks.

Regional Emissions Thresholds

Table 1 lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

Table 3-1: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOC	NOx	CO	PM_{10}	$PM_{2.5}$	SOx
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: SCAQMD. Air Quality Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed May 2025).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact. Note that because the proposed project consists of improvements to an existing storm drainage system, operational activities providing maintenance to the storm drainage system are exactly the same as current maintenance activities. Therefore, the proposed project will not generate any new operational air quality or GHG emissions impacts. For this reason, the analysis focuses on construction period impacts to air quality and GHG emissions.

Localized Significance Thresholds

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008 (SCAQMD 2008), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or the CAAQS for CO, NO_2, PM_{10} and $PM_{2.5}$, as shown in previously referenced Table A. LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA is the East San Bernardino Valley area (SRA 35).

The LST Methodology uses look-up tables based on site acreage to determine the significance of emissions for CEQA purposes. Based on the SCAQMD recommended methodology and the construction equipment planned, no more than 1 acre would be disturbed on any one day; thus, the 1-acre LSTs have been used for construction emissions. On-site operational emissions would occur from stationary and mobile sources. Because the project operation area would be less than 1 acre, the 1-acre thresholds would apply during project operations.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. As described above, the closest residences are within 20 feet (6 meters) from the southern boundary of construction. SCAQMD LST Methodology specifies, “Projects with boundaries located closer than 25 meters to

the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, the following emissions thresholds apply during project construction and operation:

- Construction LST (1 acre, 25 meters, East San Bernardino Valley):
  - 118 pounds per day (lbs/day) of NOx.
  - 775 lbs/day of CO.
  - 4 lbs/day of PM_{10}.
  - 4 lbs/day of $PM_{2.5}$.
- Operation LST (1 acre, 25 meters, East San Bernardino Valley):
  - 118 lbs/day of NOx.
  - 775 lbs/day of CO.
  - 1 lb/day of PM_{10}.
  - 1 lb/day of $PM_{2.5}$.

Impact Analysis

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The AQMP is based on regional growth projections developed by SCAG. The proposed project is approximately 1.5 miles of storm drain improvements. Thus, the proposed project would not be defined as a regionally significant project under CEQA; therefore, it does not meet SCAG's Intergovernmental Review criteria. The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Impacts would be less than significant (Hendrix 2025).

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

No Impact. Short-Term Construction Impacts: Construction activities produce combustion emissions from various sources (utility engines, tenant improvements, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions.

The most recent version of CalEEMod (Version 2022.1.1.29) was used to develop the construction equipment inventory and calculate the construction emissions. The emissions shown in Table 2 are the combination of the on-site and off-site emissions from the CalEEMod output tables. No exceedances of any criteria pollutants are expected. The CalEEMod output is included in Appendix A.

Table 3-2: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**		**$PM_{2.5}$**	
Site Preparation	0.09	8.81	9.54	0.04	0.29		0.27	
Excavation/Trenching	1.65	10.25	12.41	0.04	0.38		0.35	
Installation/Construction	1.88	12.52	14.35	0.05	0.48		0.44	
Paving	1.82	12.37	15.80	0.05	0.47		0.44	
Architectural Coating	0.01	0.00	0.00	0.00	0.00		0.00	
Peak Daily	**1.88**	**12.52**	**15.80**	**0.05**	**0.48**		**0.44**	
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**		**55**	
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Compiled by MHC (May 2025).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

Localized Impacts Analysis: Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Table 3 shows that the construction emission rates would not exceed the LSTs for the existing residences near the project site. Table 3 also shows that the emissions of the pollutants on the peak day of construction would result in concentrations of pollutants at the nearest residences that are all below SCAQMD thresholds of significance. Note that the LST was set at 5-acres since the 15-acre project is divided into 3 phases and land clearing and grading, the phases of construction with the highest emissions, would not disturb more than 5-acres per day.

Table 3-3: Construction Localized Impacts Analysis

Emissions Sources	NOx	CO	PM_{10}	$PM_{2.5}$
Construction Emissions	1.88	15.80	0.48	0.44
LST	118.00	863.00	**5.00**	**4.00**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by MHC (May 2025).

Note: Source Receptor Area 33 – Southwest San Bernardino Vally, 1 acre, 25 meters.

CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Construction Emissions Conclusions: Previously referenced Tables 2 and 3 show that daily regional construction emissions and localized emissions would not exceed the daily thresholds or localized significance thresholds established by SCAQMD; thus, during construction, there would be no regional or localized impacts.

Long-Term Operational Impacts: The current maintenance activities associated with the existing storm drainage system would continue after completion of the proposed project. Since no new operational activities occur as a result of the proposed project, no new long-term operational impacts occur.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. Localized Impacts Analysis: Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Table 3 shows that the construction emission rates would not exceed the LSTs for the existing residences near the project site. Table 3 also shows that the emissions of the pollutants on the peak day of construction would result in concentrations of pollutants at the nearest residences that are all below SCAQMD thresholds of significance. Note that the LST was set at 5-acres since the 15-acre project is divided into 3 phases and land clearing and grading, the phases of construction with the highest emissions, would not disturb more than 5-acres per day.

Table 3-3: Construction Localized Impacts Analysis

Emissions Sources	NOx	CO	PM_{10}	$PM_{2.5}$
Construction Emissions	1.88	15.80	0.48	0.44
LST	118.00	863.00	**5.00**	**4.00**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by MHC (May 2025).

Note: Source Receptor Area 33 – Southwest San Bernardino Valley, 1 acre, 25 meters.

CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. Odors from Construction Activities: Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. However, the construction activity would cease to occur after construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required.

SCAQMD Rule 402 regarding nuisances states: “A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.” The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors posing a health risk to potential on-site and existing off-site uses would not occur as a result of the proposed project.

Air Quality Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

4. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

☐ Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario. Most of the project area consists of developed land, and all Project activities will occur within the existing roadway.

Impact Analysis

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. Five special-status plant species and eleven special-status wildlife species have the potential to occur based on a CNDDB search within 3 miles of the project area. No special-status plant species were observed along the edge of the roadway, next to the project alignment, during the May 2025 site visit. Therefore, no Project impacts to special status plant species would occur. However, two special-status wildlife species have been identified as likely to occur within the Project alignment. According to the field observations, the general area contains open fields with low growing vegetation, which offer suitable nesting and foraging habitat for *Athene cunicularia* or the burrowing owl (BUOW). The extent of potentially suitable habitat actually inside the study area or Project alignment for BUOW is limited; however, one potential BUOW burrow was observed within the study area, along the edge of a suitable field. The qualified biologist determined this burrow is inactive. The second wildlife species that is likely to occur within the Project alignment is *Setophaga petechia* or the yellow warbler (YEWA). An area of dense eucalyptus and other tall trees along the road side contains suitable nesting and foraging habitat for YEWA, and one individual was detected during the May 2025 site visit. The Project's immediate surrounding area including trees, power poles, and shrubs also contains suitable habitat for other nesting birds . Implementation of Mitigation Measure BIO-1 would ensure potential impacts to nesting birds remain less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact. A literature search revealed that roadside drainage ditches are present adjacent to the Project alignment. SummitWest conducted a site check of the roadside drainage ditches to determine if they are jurisdictional features. Several locations were evaluated using the Rapid Ordinary High Water Mark (OHWM) Field Identification Data Sheet (Appendix 2). Per Holland and Hart, "Key Takeaways from the EPA and the Corps' New Waters of the U.S. (WOTUS) Guidance Memo" By Craig Galli, Ashley Peck, and Melissa Reynolds, the new EPA and Army Corps of Engineers has new guidance further reiterates the two-part test from Sackett for adjacent wetlands as follows:

- *First, the adjacent body of water must be a "water of the United States," which generally means traditional navigable waters, or a relatively permanent body of water connected to a traditional navigable water...*
- *Second, the wetland, assuming it satisfies the agencies' longstanding regulatory definition of "wetlands" at 33 C.F.R. 328.3 and 40 C.F.R. 120.2, must have a continuous surface connection to a requisite covered water, making it difficult to determine where the water ends and wetland begins.* (Holland and Hart 2025).

Per the new guidelines, the adjacent body of water must be a "water of the United States," although roadside ditches convey water to traditional navigable waters, roadside ditches are not navigable waters. Furthermore, the water that has ponded and flowing within the roadside ditch can be seen flowing from adjacent fields or properties into the Project location, as seen in the photographs (Appendix 4). With photographic confirmation water is entering the Project location from non-traditional waters, the water within the roadside ditches are not

jurisdictional. Moreover, the Project will stay within the paved roadway, therefore, no jurisdictional features are within the Project boundaries.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact. A literature search revealed that there are potential drainage ditches adjacent to the Project alignment. SummitWest conducted field observations of the roadside drainage ditches to determine if they are jurisdictional wetlands. As described in section b above, the roadside drainage ditches do not fall under the regulatory authority of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife, therefore, these ditches are not considered potentially jurisdictional wetland features. Additionally, the Proposed Project is anticipated to avoid impacts to all features outside of the roadway. As such, a less than significant impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The Project area is not within any known wildlife corridors and would not impact movement of migratory fish or wildlife.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. Most of the trees determined to be present within the Project area by the arborist report (Appendix 3) are non-native Eucalyptus trees, which are not regulated under San Bernardino County Development Code, Chapter 88.01. Elderberry bushes (*Sambucus* sp.) were also observed on site, but these native plants also do not hold any special protections. Therefore, removal of either species will not conflict with any local policies, and no impact is anticipated.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project Site is not within or adjacent to a habitat conservation plan, and is not located within any USFWS designated critical habitat. No impacts are anticipated and no mitigation measures are required.

Mitigation Measures

BIO-1 To avoid potential impacts to nesting birds (common and special status) during the nesting season (February 1- September 15), a qualified Avian Biologist shall conduct pre-construction Nesting Bird Surveys prior to commencement of any project activities. If no active nests are found, no further action will be required. If an active nest is found, the qualified biologist will identify and flag a no-disturbance buffer around the nest which will be based upon the species, level of disturbance, and expected fledge date. The nests and no-disturbance buffers shall be checked weekly by a qualified biological monitor until project activities end or until young have fledged the nest or the nest is deemed inactive.

Biological Resources Impact Conclusions:

Implementation of Mitigation Measures BIO-1 would minimize potential impacts to Biological resources as much as possible.

5. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

(Check if project is located in the Cultural ☐ overlays or cite results of cultural resource review)

Environmental Setting

To identify previous investigations and known cultural resources within and near the project area, an in-house records search was conducted by SummitWest at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on April 29, 2025. The SCCIC is part of the California Historical Resources Information System (CHRIS) and serves as the official repository for all cultural resources records and reports for San Bernardino County. The records search was completed by Evelyn Chandler, a qualified archaeologist who meets the U.S. Secretary of Interior's standards for Archaeology. The records search examined records and reports within a 0.5-mile radius around the project area.

SummitWest also conducted a review of the on-line Built Environment Resources Directory (BERD) and historic aerial photographs on May 1, 2025 to identify any resources that have been listed or determined eligible for listing on the National Register of Historic Places (NRHP) and/or the California Register of HIstorical Resources (CRHR) situated within or near the project area.

Previous Surveys.The results of the records search at SCCIC indicate that 10 cultural resources investigations have been conducted within 0.5 mile of the project area, 7 of which overlap the project area (**Table 5-1**). The seven studies that overlap the project area were conducted between 1995 and 2011 and primarily consist of linear surveys in support of utility projects.

Table 5-1. Previous Cultural Resources Investigations Within 0.5 Mile of Project Area

Report Number	Year	Report Title	Author(s)	Organization	Overlaps Project Area?
SB-00324	1976	Archaeological - Historical Resources Assessment of Area Bounded By Philadelphia Street on the North, Baker Avenue on the East, Riverside Drive on the South, and Sultana Avenue on the West	Harris, Ruth D.	San Bernardino County Museum Association	No
SB-01499	1985	Cultural Resources Overview: California Portion, Proposed Pacific Texas Pipeline Project	Foster, John M. And Roberta S. Greenwood	Greenwood And Associates	No
SB-03012	**1995**	**Cultural Resources Survey and Impact Assessment for the Cajon/Eptc Pipeline Project Located In Portions of Los Angeles, San Bernardino, and Orange Counties, CA**	**Owen, Shelley Marie**	**EIP Associates**	**Yes**
SB-05729	**2004**	**CA8118/SCE Grove, 13524 South Grove Ave, Ontario, San Bernardino County, California 91761**	**Gordon, Beth**	**Rescom Environmental Corp**	**Yes**
SB-06095	**2009**	**Confidential Cultural Resources Specialist Report for the Tehachapi Renewal Transmission Project**	**Applied Earthworks**	**Applied Earthworks**	**Yes**
SB-06928	**2010**	**A Record Search and Field Reconnaissance Phase for the Proposed AT&T Wireless Telecommunications Site ES0342 (Anker Property) Located at 13524 Grove Avenue, Ontario, California 91761**	**Wlodarski, Robert J.**	**CARE**	**Yes**
SB-07956	**2007**	**Archaeological Survey Report for Southern California Edison's G.O. 131-D Assessment of the Chino A-Bank System and System Split Project, San Bernardino County, California**	**Doolittle, Christopher J.**	**Earth Tech, Inc.**	**Yes**
SB-07968	**2011**	**Supplemental Archaeological Survey Report: Tehachapi Renewable Transmission Project Segment 8 East (Phases 2 and 3) and West (Phase 4), Los Angeles and San Bernardino Counties, California**	**Holm, Lisa and John Holson**	**Pacific Legacy, Inc.**	**Yes**
SB-07977	**2010**	**Supplemental Archaeological Survey Report: Tehachapi Renewable Transmission Project Segment 8 East (Phases 2 and 3), San Bernardino County California**	**Panich, Lee, Tsim D. Schneider, and John Holson**	**Pacific Legacy, Inc.**	**Yes**

SB-08257	2016	Due-Diligence Historical/Archaeological Resources Study Inland Empire Utilities Agency Recharge Basin Maintenance Plan Chino Basin Area, San Bernardino and Riverside Counties, California CRM TECH Contract No. 2989	Tang, Bai	CRM TECH	No

**Bold indicates the study overlaps the project area*

Known Cultural Resources. The results of the records search at SCCIC indicate that two cultural resources (P-36-025440 and P-36-026051) have been recorded within 0.5 mile of the project area, both of which overlap the project area (**Table 5-2**). Both resources consist of historic-age (i.e., 50 years old or older) power transmission lines that bisect the project alignment.

No precontact resources have been recorded within 0.5 mile of the project area.

Table 5-2. Known Cultural Resources Within 0.5 Mile of Project Area

Resource Number	Resource Name	Resource Type	Resource Age	Proximity to Project Area
P-36-025440	**Chino-Mira Loma No. 1 Transmission Line**	**Structure**	**Historic**	**Overlaps**
P-36-026051	**Hayfield-Chino 220kV Transmission Line**	**Structure**	**Historic**	**Overlaps**

**Bold indicates the resource overlaps the project area*

P-36-025440. This resource consists of the Chino-Mira Loma No. 1 Transmission Line, which is owned and operated by Southern California Edison (SCE). The 220kV circuit was originally constructed in 1937 with two parallel lines of single circuit towers to connect SCE's Chino and Mira Loma substations. In 1979, the transmission line was converted to a single line of steel lattice, double circuit towers. The transmission line was evaluated for eligibility to the NRHP and CRHR in 2010 and recommended as not eligible for inclusion in either register (Tinsley Becker 2010). Because the transmission line is not eligible for the CRHR, it does not qualify as a historical resource under CEQA.

P-36-026051. This resource consists of SCE's Hayfield-Chino 220kV Transmission Line. The line was originally constructed between 1945 and 1946 between the Hayfield Pumping Plant, located east of Coachella, and the Chino substation as a single circuit line of steel lattice towers. Between the 1950s and 1980s, the line was segmented as SCE constructed new substations along the line, and portions of the line were renamed based on the connection to the new substations. During these alterations, some segments of the original transmission line were left intact, some segments were replaced with 66kV circuits, and other segments were removed entirely. The transmission line was evaluated for eligibility to the NRHP and CRHR in 2014 and recommended as not eligible for inclusion in either register (Tinsley Becker 2014). Because the transmission line is not eligible for the CRHR, it does not qualify as a historical resource under CEQA.

Built Environment Resources Directory (BERD) Review. The review of the BERD and historic aerial photographs indicates that there are no resources that have been listed in or determined eligible for listing in the NRHP or CRHR within the project area. One historic-age house, 8087 Schaeffer Avenue, was constructed

in 1950, but has not been formally evaluated for the NRHP or CRHR. The house is situated at the corner of Schaeffer Avenue and Grove Avenue, but lies outside the project area.

Impact Analysis

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. No resources that have been listed in or determined eligible for listing in the CRHR are located within the project area. The two historic-age transmission lines (P-36-025440 and P-36-026051) that bisect the project alignment have been previously evaluated and determined not eligible for inclusion in the CRHR. Therefore, they do not qualify as historical resources under CEQA. The historic-age house at 8087 Schaeffer Avenue is situated outside the project area and will not be subject to impacts from the proposed flood control improvements. Because there are no historical resources within the project area, there will be no impacts to historical resources from the proposed project.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. No archaeological resources have been identified within the project area. Therefore, there will be no impact to known archaeological resources from the proposed project. However, there is a potential for unknown, buried archaeological resources to exist below depths of previous disturbance. The project will involve excavation to a depth of up to 27 feet below ground surface (bgs). The project area is entirely paved and has likely sustained disturbances to a depth of at least 3 to 5 feet bgs from past construction of the roadway and installation of existing utility lines. Below the depths of previous disturbance, however, there is the potential for intact, subsurface archaeological materials to exist. Based on the lack of archaeological sites recorded within 0.5 mile of the project area, the potential for subsurface archaeological materials is considered low.

Although unlikely, if buried archaeological deposits are extant, they could be subject to impacts from construction activities. Implementation of **Mitigation Measure CR-1** would mitigate any potential inadvertent impacts to subsurface archaeological sites.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated. No cemeteries are located within or adjacent to the project area and no precontact archaeological sites have been recorded within 0.5 mile of the project area. The project area is entirely paved and has likely sustained disturbances to a depth of at least 3 to 5 feet bgs from past construction of the roadway and installation of existing utility lines. Below the depths of previous disturbance, however, there is the potential for buried human remains to exist. Based on the lack of archaeological sites and cemeteries in the area, the potential for subsurface human remains is considered low.

Although unlikely, if buried human remains are extant, they could be subject to impacts from construction activities. Implementation of **Mitigation Measure CR-2** would mitigate any potential inadvertent impacts to subsurface archaeological sites.

Mitigation Measures:

CR-1 Inadvertent Discovery Protocol

Prior to the start of construction, a qualified archaeologist will be retained to provide Worker Environmental Awareness Program (WEAP) training to all contractors conducting Project-related ground disturbing activities. The WEAP training will include information about the types of archaeological resources that could be encountered, the laws and regulations regarding archaeological resources, and the protocols to follow in the event of an inadvertent discovery.

Should archaeological material be encountered during Project-related ground disturbance all work in the vicinity of the discovery must be halted. A 50-foot buffer around the discovery will be demarcated and work may resume elsewhere in the Project area outside of that buffer. The District will be notified immediately and a qualified archaeologist will be contacted to assess the discovery and evaluate whether it constitutes a historical resource or a unique archaeological resource as defined by CEQA. The qualified archaeologist will provide guidance on the treatment of the discovery and how work may proceed. Should the discovery be precontact in age, consultation with the San Manuel Band of Mission Indians and the Soboba Band of Luiseño Indians shall occur.

CR-2 Inadvertent discoveries of human remains:

Should human remains and associated funerary objects be encountered during Project-related ground disturbance all work within 50-feet of the discovery should be halted and redirected elsewhere in the Project area outside of discovery. The San Bernardino County Coroner shall be contacted immediately to determine the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. A qualified archaeologist shall also be contacted to assess the discovery and coordinate consultation with the appropriate agencies. If the remains are determined to be precontact, the coroner shall contact the NAHC within 24 hours of the determination in accordance with section 5097.98 of the California Public Resources Code, and section 7050.5 of the California Health and Safety Code, as applicable. The NAHC will identify a Most Likely Descendent (MLD) who will inspect the discovery and provide recommendations for the proper treatment of the remains and any associated funerary objects.

Cultural Resources Impact Conclusions:

No impacts to historical resources, archaeological resources, or human remains are anticipated. Implementation of **Mitigation Measures CR-1 and CR-2** would mitigate any potential inadvertent impacts to unknown, subsurface archaeological sites and/or human remains.

6. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Environmental Setting

The Project is located within a San Bernardino County Flood Control District easement and will consist of underground and at-grade improvements. The project site is entirely situated within the existing roadway in a rural area of the City of Ontario, CA within city limits.

Impact Analysis

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Less Than Significant. Construction equipment that runs on carbon-based fuel would be used during the Project. The construction-phase of the project will be temporary (2026) and all equipment and equipment operation shall include implementation of industry-standard best management practices (BMPs) in compliance with SCAQMD regulations. All equipment will be maintained to best optimize performance and reduce fuel consumption. A Less Than Significant Impact to the consumption of energy would occur. No mitigations are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The Project would not conflict with any state or local plan for renewable energy or energy efficiency. No impact would occur, and no mitigation is required.

Energy Impact Conclusions:

The identified impacts on energy resource consumption are less than significant, and there would be no impact on state or local energy plans.

7. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving?				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii. Strong seismic ground shaking?			X	
iii. Seismic-related ground failure, including liquefaction?			X	
iv. Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

(Check if project is located in the Geologic Hazards ☐ or Paleontologic Resources ☐Overlay District):

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The Project Site and alignment are not located within a state-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. Additionally, there are no known Holocene-active or pre-Holocene faults with the potential for surface fault rupture passing directly beneath the Project Site (City 2025b). Therefore, the potential for surface rupture due to faulting beneath the alignment during the design life of the proposed public works project is considered low, and no mitigation measures are required.

ii. Strong seismic ground shaking?

Less than Significant Impact. The Project Site could experience moderate to severe ground shaking due to its location seismically in the Southern California region, which is considered seismically active due to the presence of many active faults. The closest seismic fault is a westerly surface trace of a regional fault within the City of Chino (City 2025b), located approximately 3.5 miles from the Project site. In the case that moderate-to-severe ground shaking was to take place as a result of an earthquake originating from one of these faults, it is unlikely that this project would experience significant impacts as the effects of ground shaking can be minimized through the–project's engineered design and construction. Therefore, the impacts are less than significant.

iii. Seismic related ground failure, including liquefaction?

Less than Significant Impact. The northern section of the Project site is located within an area susceptible to liquefaction due to the pumping of ground water which can cause loss of bearing capacity, the liquefiable layer must be close to the ground surface and within the zone of influence of the proposed improvements (City 2025c). Impacts are expected to be less than significant with no mitigation measures required, as the effects of liquefaction can be minimized if the proposed infrastructures are designed and constructed in conformance with current engineering practices.

iv. Landslides?

No Impact. The Project site has low potential for slope stability hazards because it is not located in an area with potential for seismic slope instability, and the Project is located near any known landslides nor is it in the path of any known or potential landslides. Therefore, the proposed improvements are not expected to be adversely affected by slope stability hazards. No impacts are identified or anticipated. and no mitigation measures are required.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact. Although construction activities may result in soil erosion, the Project is at or below grade and any potential soil erosion impacts would be minimized through the preparation and implementation of a Storm Water Pollution and Prevention Plan (SWPPP), which would prescribe Best Management Practices (BMPs) to control wind and water erosion during and shortly after construction. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. The northern part of the Project site has a low potential for slope stability hazards because it is not located in an area with potential for seismic slope instability, and there are no known landslides nearby nor is the Project located within the path of any known or potential landslides. Although this area is susceptible to liquefaction due to the pumping of ground water often resulting in the loss of bearing capacity, the liquefiable layer must be close to the ground surface and within the zone of influence of the proposed improvements (City 2025c). Impacts are expected to be less than significant with no mitigation measures required, as the effects of liquefaction can be minimized if the proposed infrastructures are designed and constructed in conformance with current engineering practices.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. The Proposed Project is associated with improving existing facilities within Grove Avenue. No facilities for temporary or permanent occupation are required therefore there are no associated risks of expansive soil. No impact would occur, and no mitigation measures are required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Proposed Project does not include the use of septic tanks. No impacts are identified or anticipated, and no mitigation measures are required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. The Project will improve existing facilities within Grove Avenue and will remain within the previously disturbed Project location footprint. The Project has mitigation measures in place for unique resources under CR-1. Therefore, the impacts are less than significant.

Geology and Soils Impact Conclusions:

Less than significant impacts are anticipated, and no mitigation measures are required.

8. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Environmental Setting

Overview of the Existing Air Quality Environment

The project site is in the western portion of San Bernardino County, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the SCAQMD.

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions transported by prevailing winds from the second-largest urban area in the United States gives the Basin some of the worst air pollution problems in the nation. The Project area is at the northeastern edge of the Basin at an elevation of 5,200 feet above sea level, which is at the upper mixing height of the Basin. Due to the elevation and location at the northeastern edge of the Basin, the project area is prone to the highest ozone concentrations within the Basin.

Surrounding Land Uses in the Project Vicinity

The surrounding setting consists of various agricultural, industrial, and residential land uses including truck storage yards, asphalt processing and storage, landscape materials handling, composting facilities, interspersed with single-family residential.

REGULATORY SETTING

Federal Regulations

Pursuant to the Federal Clean Air Act (CAA) of 1970, the Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS). The NAAQS was established for six major pollutants, termed “criteria” pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards (AAQS), or criteria, for outdoor concentrations to protect public health.

California Regulations

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish the California Air Resources Board (CARB). Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems.

California adopted the CCAA in 1988. CARB administers the CAAQS for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the six criteria pollutants designated by the CAA as well as four others: visibility-reducing particulates, H_2S, sulfates, and vinyl chloride.

Regional Air Quality Planning Framework

The 1976 Lewis Air Quality Management Act established SCAQMD and other air districts throughout the State. The CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

CARB is responsible for incorporating Air Quality Management Plans (AQMPs) for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary-source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan

SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every three years, updating the previous plan and 20-year horizon.

The latest plan is the 2022 AQMP (SCAQMD 2022), which incorporates the latest scientific and technological information and planning assumptions, including the 2020 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories which also benefits reduction of GHG emissions. Key elements of the 2022 AQMP pertaining to GHG emissions include:

- Specifically addresses decarbonization and climate policy development and its role in achieving the 2015 Ozone standard.
- Calculation and credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation)
- A strategy with fair-share emission reductions at the federal, State, and local levels
- Investment in strategies and technologies meeting multiple air quality and climate objectives
- Identification of new partnerships and significant funding for incentives to accelerate deployment of zero and near-zero technologies
- Attainment of the 1-hour Ozone standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures). While not directly correlated to GHG emissions, the measures rely heavily on zero emission technologies that will also significantly reduce GHG emissions.

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operations impacting reduction of GHG emissions.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate new development projects within the Basin, such as project. Instead, SCAQMD published the *CEQA Air Quality Handbook* (SCAQMD 1993) to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential GHG and air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures that can be used in conducting GHG analyses in environmental impact reports and were used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook.*

While the replacement *Air Quality Analysis Guidance Handbook* is being updated, supplemental guidance/information on the SCAQMD website includes: (1) Emission FACtors (EMFAC) on-road vehicle air pollutant and GHG emission factors, (2) GHG analysis guidance, (3) mitigation measures and control efficiencies, (5) off-road mobile source air pollutant and GHG emission factors, and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

County of San Bernardino GHG Reduction Plan

The County completed a GHG Emissions Reduction Plan Update in June 2021 (County of San Bernardino 2021), which sets forth emissions reduction targets, emissions reduction measures, and action steps to assist the County to demonstrate consistency with California's Global Warming Solutions Act (Senate Bill 32). Together with the GHG Emissions Reduction Plan, the County adopted the GHG DRP (County of San Bernardino 2021) in 2021. The DRP procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the DRP and comply with State requirements.

THRESHOLDS OF SIGNIFICANCE

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health within an adequate margin of safety (SCAQMD 2017), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Regional Emissions Thresholds

Table 1 lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

Table 8-1: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOC	NOx	CO	PM_{10}	$PM_{2.5}$	SOx
Construction	75	100	550	150	55	150

Table 8-1: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOC	NOx	CO	PM_{10}	$PM_{2.5}$	SOx
Operations	55	55	550	150	55	150

Source: SCAQMD. Air Quality Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed May 2025).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact. Note that because the proposed project consists of improvements to an existing storm drainage system, operational activities providing maintenance to the storm drainage system are exactly the same as current maintenance activities. Therefore, the proposed project will not generate any new operational air quality or GHG emissions impacts. For this reason, the analysis focuses on construction period impacts to air quality and GHG emissions.

Localized Significance Thresholds

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008 (SCAQMD 2008), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or the CAAQS for CO, NO_2, PM_{10} and $PM_{2.5}$, as shown in previously referenced Table A. LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA is the East San Bernardino Valley area (SRA 35).

The LST Methodology uses look-up tables based on site acreage to determine the significance of emissions for CEQA purposes. Based on the SCAQMD recommended methodology and the construction equipment planned, no more than 1 acre would be disturbed on any one day; thus, the 1-acre LSTs have been used for construction emissions. On-site operational emissions would occur from stationary and mobile sources. Because the project operation area would be less than 1 acre, the 1-acre thresholds would apply during project operations.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. As described above, the closest residences are within 20 feet (6 meters) from the southern boundary of

construction. SCAQMD LST Methodology specifies, “Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.” Therefore, the following emissions thresholds apply during project construction and operation:

- Construction LST (1 acre, 25 meters, East San Bernardino Valley):
  - 118 pounds per day (lbs/day) of NOx.
  - 775 lbs/day of CO.
  - 4 lbs/day of PM_{10}.
  - 4 lbs/day of $PM_{2.5}$.
- Operation LST (1 acre, 25 meters, East San Bernardino Valley):
  - 118 lbs/day of NOx.
  - 775 lbs/day of CO.
  - 1 lb/day of PM_{10}.
  - 1 lb/day of $PM_{2.5}$.

GHG Emissions Thresholds

State CEQA Guidelines Section 15064(b) provides that the “determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data,” and further, states that an “ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

Appendix G of the *CEQA Guidelines* includes significance thresholds for GHG emissions. A project would normally have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Currently, there is no statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in the State.

The lead agency for the project is San Bernardino County, which has adopted its GHG Emissions Reduction Plan Update and GHG DRP (County of San Bernardino 2021) in 2021. The DRP procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the DRP and comply with State requirements. For projects exceeding the review standard of 3,000 MT CO_2e per year, the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions is required. If the GHG emissions from the project are less than 3,000 MT CO_2e per year and the project would apply GHG performance standards and State requirements, project-level and cumulative GHG emissions would be less than significant.

Impact Analysis

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant. In evaluating the Project's GHG emissions impact, this analysis tiers from the San Bernardino County GHG Reduction Plan Update.

The County's GHG Emissions Reduction Plan Update includes the Performance Standard that will reduce 7,891 Metric Tons of Carbon Dioxide Equivalents (MT CO2e) per year from new development by 2030. The County's Development Review Process (DRP) procedures for evaluating GHG impacts and determining significance for CEQA purposes is streamlined by utilizing (1) applying a uniform set of performance standards to all development projects, and (2) utilizing the GHG Reduction Plan Screening Tables to mitigate project GHG emissions. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 MTCO2e per year will be considered consistent with the GHG Reduction Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. A review standard of 3,000 MT CO2e per year is used to identify projects that require the use of the Screening Tables.

Project analysis generated a total of GHG emissions calculated at 5,221 MT CO2e during construction. Following the SCAQMD methodology, GHG emissions associated with construction activities are divided by 25 years which is the anticipated economic life of the Project. Using this methodology, the Proposed Project will generate 208.84 MT CO2e per year which is below the 3,000 MT CO2e review standard. Therefore, the Project is consistent with the County's GHG Reduction Plan Update and GHG emissions are considered less than significant (Hendrix 2025).

Greenhouse Gas Emissions Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

9. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk loss, injury or death involving wildland fires?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. The Proposed Project's construction would include the use, storage, transport, and disposal of common hazardous materials in limited quantities. These materials would consist of gasoline, diesel fuel, oils, solvents, and other similar substances. All materials used during construction will be managed in accordance with State and local regulations and Best Management Practices. As such, impacts are expected to be less than significant, and no mitigation measures are required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. The Proposed Project would include the use, storage, transport, and disposal of common hazardous materials in limited quantities. Implementation of industry-standard BMPs regarding storage and handling of these materials will prevent release of these materials into the environment therefore, the use of these materials is not expected to result in any significant impacts, and no mitigation measures are required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The closest school to the Project is Levi H Dickey Elementary School, located approximately half a mile northeast at 2840 S. Parco Ave (City 2025d). Because the proposed project would not emit hazardous emissions or handle hazardous materials within a quarter mile of a school, no impacts are anticipated, and no mitigation measures are required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Project does not occur on any hazardous materials sites listed pursuant to Government Code Section 65962.5 (City 2025e). As a result, no impacts were identified or anticipated, and no mitigation measures are required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project site is situated approximately 1 ¼ miles north of Chino Airport, however the Project is located outside the Airport Safety Review Area (City 2025f). The proposed project encompasses road repair and stormwater facility improvements, which would be constructed at or below grade. Therefore, it would not pose a safety hazard for residents or workers within the project area. As a result, no impacts are anticipated, and no mitigation measures are required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The Project site does not contain any critical facilities, however, Grove Avenue, which would be partially subject to construction detours, is an emergency evacuation route (City 2025g). Any road closures would be temporary and short-term for the construction phase of the Project. Detours can be established using crossroads at the Project location. As a result, impacts are anticipated to be less than significant, and no mitigation measures are required.

g) Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The project is not located in lands classified as very high, high, or moderate fire hazard severity zones (City 2025h). The proposed project consists of road repair and stormwater facility improvements constructed at or below grade. It does not include any features that would increase the risk of wildfire. Therefore, the project would have less than significant impacts and no mitigation measures are required.

Hazards and Hazardous Materials Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

10. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?				X
I. Result in substantial erosion or siltation on – or off-site;				X
II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on – or off-site;				X
III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a rural area of the city of Ontario.

Impact Analysis

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact. The Grove Basin Outlet replacement will not require utilization of any groundwater resources for construction. However, construction may lead to downstream sediment transport, particularly during storms. To mitigate this impact on surface water quality, a Stormwater Pollution Prevention Plan (SWPPP) will be drafted and approved before the project begins. The Regional Water Quality Control Board has issued a County-wide NPDES Storm Water Permit, which mandates project-specific measures to ensure compliance. The SWPPP will outline Best Management Practices (BMPs) aimed at reducing construction-related impacts on surface water quality. The result will be a less than significant impact. Therefore, no mitigation is needed.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. Groundwater resources would not be required to implement the Proposed Project. The project activities would not affect groundwater recharge to a significant level, due to the nature of the Project.. No impacts would occur, and no mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?

I. Result in substantial erosion or siltation on – or off-site;

II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;

III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or

No Impact. The intent of this Project is to improve the current drainage system to properly manage a 100-year flood event, thereby reducing associated risks. This will be achieved by replacing the existing RCP below ground level and repairing the existing roadway after construction. The project will not alter the existing drainage pattern but will enhance storm flow management for up to a 100-year flood event. No impacts would occur, and no mitigation is required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The Project Site is not located within a tsunami hazard area or a FEMA 100-year floodplain. The proposed project includes road repair and drainage improvements to mitigate existing flooding issues. The project's Stormwater Pollution Prevention Plan (SWPPP) would incorporate Best Management Practices (BMPs) to prevent project-related pollutants from impacting surface waters. As a result, no impacts are identified or anticipated, and no mitigation measures are required.

Hydrology and Water Quality Impact Conclusions:

No mitigation measures are required, as no significant adverse impacts were identified or are anticipated.

11. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Physically divide an established community?

No Impact. The proposed project consists of ground-level or below-ground improvements to existing drainage facilities and roads. These improvements will not require land use updates to the City of Ontario General Plan (City 2025i). Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. This Initial Study shows that the Proposed Project would not have any significant environmental impacts with regard to any land use plans, policies, or regulations. No impacts were identified or are anticipated, and no mitigation measures are needed.

Land Use and Planning Impact Conclusions:

No impacts are identified or anticipated, and no mitigation measures are required.

12. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The Proposed Project is located in an area designated as other use within the City of Ontario and per ER-5.5 Mining Operations (City 2025j). The City of Ontario prohibits future mining operations where the resource extraction activities are incompatible with existing or proposed adjacent land uses (Plan 2022). Due to the surrounding land uses and linear nature of the Proposed Project, mineral resource extraction would not be compatible with the proposed areas of disturbance. Therefore, no impacts are identified or anticipated and no mitigation measures are required.

Mineral Resources Impact Conclusions:

No impacts are identified or anticipated, and no mitigation measures are required.

13. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration of groundborne noise levels?				X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. The Proposed Project is located currently in a rural part of the City of Ontario, north of Chino Airport. Construction is scheduled to last approximately 160 working days, with anticipated start of Fall 2025. Construction noise is regulated within Sec. 5-29.09 of the City of Ontario Municipal Code. Accordingly, “No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m (City 2025k).” The Proposed Project construction will not occur outside of the hours outlined; therefore, the Proposed Project would not exceed City-established standards relating to construction noise. Furthermore, because of its location along an avenue with active agriculture and light industrial land uses, which are major sources of noise in the area, the Proposed Project is

not anticipated to significantly increase ambient noise. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Generation of excessive groundborne vibration of groundborne noise levels?

No Impact. Construction noise is regulated within Sec. 5-29.09 of the City of Ontario Municipal Code, "No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.[4]" Construction of the Proposed Project will not occur outside of the hours outlined in City of Ontario Municipal Code (City 2025k). Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The Proposed Project is located within the Chino Airport Influence Area (City 2025f). The Project Site is located north of the Chino Airport, but outside of the airport's established noise contours (City 2025l). The airport is a public airport and operates 24 hours a day, seven days a week. The Proposed Project does impact any residential uses of adjacent or nearby properties and would not generate noise levels during construction in excess of City Standards. Impacts would be less than significant, and no mitigation measures are required.

Noise Impact Conclusions:

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

14. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The Project includes repair and replacement of underground utilities and pavement repair along Grove Avenue. These improvements aim to serve the existing population and will not increase service capacity or create new jobs. Therefore, the project is not expected to induce population growth, and no impacts are anticipated or identified. As a result, no mitigation measures are required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Proposed Project would improve existing public works infrastructure to serve the community. It would not displace existing people or housing. As a result, no impacts are identified or anticipated, and no mitigation measures are required.

Population and Housing Impact Conclusions:

No impacts are identified or anticipated, and no mitigation measures are required.

15. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?				X
ii. Police protection?				X
iii. Schools?				X
iv. Recreation/Parks?				X
v. Other public facilities?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Recreation/Parks, Other public facilities?*

No Impact. The Proposed Project includes improvements to existing San Bernardino County Flood Control District infrastructure. Construction activities are proposed to be temporary and short-term, and the Project would not increase the residential or employee population. Therefore, the Project would not result in the need for additional public facilities, such as schools, recreation/parks, fire protection, police protection, and other public facilities. However, the Project will have traffic control during construction that will require notification to the City of Ontario. No impacts are identified or anticipated; therefore, no mitigation measures are required.

Public Services Impact Conclusions:

No impacts are identified or anticipated, and no mitigation measures are required.

16. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario. There are no nearby parks near the Project site.

Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The Project is proposed to improve existing public works infrastructure. It would not result in population growth that would increase the use of existing parks or other recreational facilities. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Project does not include recreational facilities and would not require the construction or expansion of recreational facilities. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

Recreation Impact Conclusions:

No impacts are identified or anticipated, and no mitigation measures are required.

17. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?				X
d) Result in inadequate emergency access?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. The Proposed Project would not require any permanent changes to the local circulation system. There would be increased traffic associated with bringing construction equipment to the site and for construction workers to travel daily to and from the Project area. This increased traffic would be minimal and temporary and is not anticipated to add more than 50-peak hour trips to adjacent roadways. Once construction is complete, trips would be limited to normal traffic circulation. Due to the project's location along the existing roadway (Grove Ave.), temporary road closures and detours may be required during the construction phase of this project, however these changes in circulation would be temporary. Therefore, less than significant impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. The Proposed Project's vehicle miles travelled (VMT) impact has been assessed in accordance with the City of Ontario for this CEQA document. The Ontario Plan identifies M -1.6 "We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and

public capital improvement projects (City 2025m)" Projects generating less than 110 daily vehicle trips should not be required to complete a VMT assessment.

The construction activities associated with the Proposed Project would be temporary. Construction of the Proposed Project is estimated to be approximately 160 working days and is anticipated to occur Fall 2025.

Construction traffic would be limited to delivery of equipment and material, and associated employee trips during this period.

Once construction is complete, trips would be limited to normal traffic circulation. The Proposed Project is exempt from preparation of a VMT Assessment and would have a less than significant impact on VMT. Therefore, less than significant impacts are identified or anticipated, and no mitigation measures are required.

c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*

No Impact. The Project does not require construction of new roads or modification of existing roadways. No impact would occur, and no mitigation is required.

d) *Result in inadequate emergency access?*

No Impact. A small amount of traffic associated with construction workers would be generated at the beginning and end of each workday. However, the work would be conducted on the Project site and would not block existing roads or emergency access routes in the area. Notification of the period of any road closure or required detours would be provided to emergency service providers and the existing surrounding road network is sufficient to provide adequate emergency access. No impact would occur, and no mitigation is required.

Transportation Impact Conclusions:

No mitigation measures are required because no significant adverse impacts were identified or anticipated.

18. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, lace, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Environmental Setting

A search of the Sacred Lands File (SLF) was requested from the Native American Heritage Commission (NAHC) on April 16, 2025. The NAHC responded the same day and indicated that the results of the SLF search were negative.

Native American consultation under Assembly Bill (AB) 52 for the project is being conducted by the San Bernardino County Flood Control District with two Tribes who have submitted general request letters for consultation on projects within the area of the project: the San Manuel Band of Mission Indians and the Soboba Band of Luiseño Indians. Project notification letters were sent to each Tribe on November 1, 2024 and included a project description, project location map, photographs of the project area, and an invitation to consult on the project under AB 52. The San Manuel Band responded and declined to consult on the project. No response has been received from the Soboba Band.

Impact Analysis

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

No Impact. No resources that have been listed in or determined eligible for listing in the CRHR are located within the project area. Furthermore, the search of the SLF by the NAHC was negative. Tribal consultation under AB 52 has not identified any Tribal Cultural Resources within or near the project area. Therefore, there would be no impact to such resources from the proposed project.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Less Than Significant with Mitigation Incorporation. No resources that have been determined by a lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 are located within the project area. The search of the SLF by the NAHC was negative. Tribal consultation under AB 52 has not identified any Tribal Cultural Resources within or near the project area. Therefore, there would be no impact to known Tribal Cultural Resources from the proposed project. However, there is a potential for unknown, buried resources to exist below depths of previous disturbance. The project will involve excavation to a depth of up to 27 feet bgs. The project area is entirely paved and has likely sustained disturbances to a depth of at least 3 to 5 feet bgs from past construction of the roadway and installation of existing utility lines. While considered unlikely, there is a potential for subsurface cultural materials to exist below the depths of previous disturbance.

If buried cultural materials are extant, they could be subject to impacts from construction activities. Implementation of **Mitigation Measures CR-1 and CR-2** would mitigate any potential inadvertent impacts to Tribal Cultural Resources.

Mitigation Measures:

CR-1 (see Section 5)

CR-2 (see Section 5)

Tribal Cultural Resources Conclusions:

No impacts to Tribal Cultural Resources are anticipated. Implementation of **Mitigation Measures CR-1** and **CR-2** would mitigate any potential inadvertent impacts to unknown, subsurface resources.

19. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. The carrying capacity of the existing concrete pipes is currently undersized for the levels of flow release being experienced.This situation currently leads to flooding downstream during storm events, impacting low-density residential and agricultural areas. The Proposed Project will address the outflow from the Grove Basin Outlet. The Proposed Project would not require wastewater treatment, water supplies, electric power, natural gas, or telecommunication services. As demonstrated in this Initial Study, the

construction of the proposed stormwater improvements or roadway pavement repair would not have significant environmental effects. Less than significant impacts are identified or anticipated, and no mitigation measures are required**.**

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. The Proposed Project may require water during construction for dust control. This water demand would be temporary and negligible. The Proposed Project would not require water post-construction. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The Proposed Project would not generate wastewater or require service by a wastewater treatment provider. No impacts are identified or anticipated, and no mitigation measures are required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The Proposed Project will enhance stormwater capacity from the Grove Basin Outlet by replacing the existing reinforced concrete pipe (RCP) with larger RCP. This construction will generate solid waste, including concrete and asphalt. However, the RCP and asphalt will be transported to recycling facilities, resulting in less than significant impacts.

Utilities and Service Systems Impact Conclusions

No mitigation measures are required because no significant adverse impacts were identified or anticipated.

20. WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project?				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Environmental Setting

The project, located within a San Bernardino County Flood Control District easement, will consist of underground and at-grade improvements situated within the existing roadway in a currently rural area of Ontario.

Impact Analysis

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The Proposed Project is Grove Avenue, which has been identified as an evacuation route (City 2025g). This portion of Grove Avenue, between Edison Avenue and East Riverside Drive, would be partially blocked during construction with easily accessible detours provided. Final material staging areas would be determined by the contractor. Detours would be provided for any road closures that would be short-term and temporary. Less than significant impacts are identified or anticipated, and no mitigation measures are required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The Project is not situated in lands classified as very high, high, or moderate fire hazard severity zones (City 2025h). The proposed improvements, which include underground infrastructure replacement and pavement repair along Grove Avenue, do not include features that would exacerbate wildfire risks. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

No Impact. The Project is not situated in lands classified as very high, high, or moderate fire hazard severity zones. The proposed improvements, which include underground infrastructure replacement and pavement repair along Grove Avenue, do not include features that would exacerbate wildfire risks. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

No Impact. The Project entails underground infrastructure replacement and pavement repair along Grove Avenue. It is situated outside of a FEMA 500-year floodplain and not located in lands classified as very high, high, or moderate fire hazard severity zones (City 2025h) Additionally, the Project Site is not within an area identified as having a potential for seismic slope instability, near any known landslides, or in the path of any known or potential landslides. The proposed drainage improvements aim to reduce the intensity of flooding in the area. As the Project doesn't include structures and would not expose people to flooding or landslides, no impacts are identified or anticipated, and no mitigation measures are required.

Wildfire Impact Conclusions:

No mitigation measures are required as no impacts were identified or are anticipated.

21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. As concluded in the Biological Resource section, no state and/or federally listed threatened or endangered species are documented/or expected to occur within the Project Site. Furthermore, no plant species with the California Rare Plant Rank (CRPR) of 1 or 2 were observed along the Project alignment. No other sensitive species were observed within the Project alignment or buffer area. Since there is some habitat within the immediate surrounding area that is suitable for nesting birds in general, Mitigation Measure BIO-1 shall be implemented.

The archaeological records search at SCCIC indicate that 10 cultural resources investigations have been conducted within 0.5 mile of the Project area, 7 of which overlap the Project area. Furthermore,the records search at SCCIC indicate that two cultural resources (P-36-025440 and P-36-026051) have been recorded within 0.5 mile of the Project area, both of which overlap the Project area. Both resources consist of historic-age (i.e., 50 years old or older) power transmission lines that bisect the Project alignment. Because the transmission lines are not eligible for the CRHR, they do not qualify as a historical resource under CEQA. The review of the BERD and historic aerial photographs indicates that there are no resources that have been listed in or determined eligible for listing in the NRHP or CRHR within the project area. One historic-age house, 8087

Schaeffer Avenue, was constructed in 1950, but has not been formally evaluated for the NRHP or CRHR. The house is situated at the corner of Schaeffer Avenue and Grove Avenue, but lies outside the Project area.

There remains a potential that buried archaeological resources may inadvertently be discovered within the Project boundaries. As such, implementation of the Proposed Project could potentially uncover cultural resources. Therefore, to ensure less than significant impacts, the Proposed Project shall implement Mitigation Measures CR-1and CR-2.

On November 1, 2024, the San Bernardino County mailed notification pursuant to AB 52 to YSMN and Soboba Band of Luiseno Indians. The YSMN declined to consult and Soboba Band of Luiseno Indians provided no response. However, if buried cultural materials are extant, they could be subject to impacts from construction activities. Implementation of Mitigation Measures CR-1 and CR-2 would mitigate any potential inadvertent impacts to Tribal Cultural Resources.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant. The Proposed Project has the potential to have cumulative impacts to air quality and greenhouse gases. However, as discussed in Section 3 (Air Quality) and Section 8 (Greenhouse Gas Emissions), these impacts would be temporary during construction and would not be significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant. The Proposed Project may have indirect minor short-term effects on human beings during construction. However, in the long term, the Project would have a beneficial impact because the improved flood control channel would reduce the potential for flooding in the surrounding area. No substantial adverse effects on human beings would occur.

SECTION 5 – SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce impacts to less than significant:

BIOLOGICAL RESOURCES:

BIO-1 To avoid potential impacts to nesting birds (common and special status) during the nesting season (February 1- September 15), a qualified Avian Biologist shall conduct pre-construction Nesting Bird Surveys prior to commencement of any project activities. If no active nests are found, no further action will be required. If an active nest is found, the qualified biologist will identify and flag a no-disturbance buffer around the nest which will be based upon the species, level of disturbance, and expected fledge date. The nests and no-disturbance buffers shall be checked weekly by a qualified biological monitor until project activities end or until young have fledged the nest or the nest is deemed inactive.

CULTURAL RESOURCES:

CR-1 Inadvertent Discovery Protocol

Prior to the start of construction, a qualified archaeologist will be retained to provide Worker Environmental Awareness Program (WEAP) training to all contractors conducting Project-related ground disturbing activities. The WEAP training will include information about the types of archaeological resources that could be encountered, the laws and regulations regarding archaeological resources, and the protocols to follow in the event of an inadvertent discovery.

Should archaeological material be encountered during Project-related ground disturbance all work in the vicinity of the discovery must be halted. A 50-foot buffer around the discovery will be demarcated and work may resume elsewhere in the Project area outside of that buffer. The District will be notified immediately and a qualified archaeologist will be contacted to assess the discovery and evaluate whether it constitutes a historical resource or a unique archaeological resource as defined by CEQA. The qualified archaeologist will provide guidance on the treatment of the discovery and how work may proceed. Should the discovery be precontact in age, consultation with the San Manuel Band of Mission Indians and the Soboba Band of Luiseño Indians shall occur.

CR-2 Inadvertent discoveries of human remains:

Should human remains and associated funerary objects be encountered during Project-related ground disturbance all work within 50-feet of the discovery should be halted and redirected elsewhere in the Project area outside of discovery. The San Bernardino County Coroner shall be contacted immediately to determine the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. A qualified archaeologist shall also be contacted to assess the discovery and coordinate consultation with the appropriate agencies. If the remains are determined to be precontact, the coroner shall contact the NAHC within 24 hours of the determination in accordance with section 5097.98 of the California Public Resources Code, and section 7050.5 of the California Health and Safety Code, as applicable. The NAHC will identify a

Most Likely Descendent (MLD) who will inspect the discovery and provide recommendations for the proper treatment of the remains and any associated funerary objects.

TRIBAL CULTURAL RESOURCES:

CR-1 Inadvertent Discovery Protocol

Prior to the start of construction, a qualified archaeologist will be retained to provide Worker Environmental Awareness Program (WEAP) training to all contractors conducting Project-related ground disturbing activities. The WEAP training will include information about the types of archaeological resources that could be encountered, the laws and regulations regarding archaeological resources, and the protocols to follow in the event of an inadvertent discovery.

Should archaeological material be encountered during Project-related ground disturbance all work in the vicinity of the discovery must be halted. A 50-foot buffer around the discovery will be demarcated and work may resume elsewhere in the Project area outside of that buffer. The District will be notified immediately and a qualified archaeologist will be contacted to assess the discovery and evaluate whether it constitutes a historical resource or a unique archaeological resource as defined by CEQA. The qualified archaeologist will provide guidance on the treatment of the discovery and how work may proceed. Should the discovery be precontact in age, consultation with the San Manuel Band of Mission Indians and the Soboba Band of Luiseño Indians shall occur.

CR-2 Inadvertent discoveries of human remains:

Should human remains and associated funerary objects be encountered during Project-related ground disturbance all work within 50-feet of the discovery should be halted and redirected elsewhere in the Project area outside of discovery. The San Bernardino County Coroner shall be contacted immediately to determine the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. A qualified archaeologist shall also be contacted to assess the discovery and coordinate consultation with the appropriate agencies. If the remains are determined to be precontact, the coroner shall contact the NAHC within 24 hours of the determination in accordance with section 5097.98 of the California Public Resources Code, and section 7050.5 of the California Health and Safety Code, as applicable. The NAHC will identify a Most Likely Descendent (MLD) who will inspect the discovery and provide recommendations for the proper treatment of the remains and any associated funerary objects.

SECTION 6 - REFERENCES

City of Ontario (City). 2025a. City of Ontario Traffic & Transportation. https://experience.arcgis.com/experience/67764dd03c4e4b5e848f89d319540c14. Accessed April 9, 2025

——-. 2025b. The Ontario Plan: Policy Plan Regional Faults & Fault Zones. https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20S-01%20Regional%20Faults%207%20Fault%20Zones.pdf. Accessed April 21, 2025.

——-. 2025c. The Ontario Plan: Policy Plan Subsidance Zones. https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20S-02%20Subsidence%20Zones%20%281%29.pdf. Accessed April 21, 2025.

——-. 2025d. The Ontario Plan: Policy Plan Critical Facilities. https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20S-08%20Critical%20Facilities.pdf. Accessed April 21, 2025.

——-. 2025e. The Ontario Plan: Policy Plan Hazardous Material Cleanup Sites. https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20S-07%20Hazardous%20Material%20Cleanup%20Sites.pdf. Accessed April 21, 2025.

——-. 2025f. The Ontario Plan: Policy Plan Airport Safety Zones & Influence Areas https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20LU-06%20Airport%20Safety%20Zones%20%26%20Influence%20Areas.pdf. Accessed April 21, 2025.

——-. 2025g. The Ontario Plan: Policy Plan Evacuation Routes. https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20S-10%20Evacuation%20Sites.pdf. Accessed April 15, 2025 .

——-. 2025h. The Ontario Plan: Policy Plan Fire Hazard Severity Zone. https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20S-05%20Fire%20Hazard%20Severity%20Zones%20%281%29.pdf. Accessed April 15, 2025.

——-. 2025i.The Ontario Plan: Land Use Element. https://experience.arcgis.com/experience/99e7a1effa0242218701ac06ca387f9b. Accessed April 11, 2025.

——-. 2025j. The Ontario Plan: Policy Plan - Environmental Resources. https://www.ontarioca.gov/government/community-development/planning/ontario-plan/ontario-plan-policy-plan/environmental. Accessed April 10, 2025.

——-. 2025k. City of Ontario Municipal Code 2024 Chapter 29: Noise. https://codelibrary.amlegal.com/codes/ontarioca/latest/ontario_ca/0-0-0-41895#JD_5-29.04. Accessed April 11, 2025.

——-. 2025l. The Ontario Plan: Policy Plan Airport Noise Cortours. https://content.ontarioca.gov/sites/default/files/2024-12/Figure%20S-06c%20Airport%20Noise%20Contours.pdf.Accessed April 11, 2025.

——-. 2025m.The Ontario Plan: Policy Plan - Mobility https://www.ontarioca.gov/government/community-development/planning/ontario-plan/ontario-plan-policy-plan/mobility. Accessed April 9, 2025.

Department Of Conservation. 2022. Farmland Mapping and Monitoring Program – Important Farmland Finder.https://maps.conservation.ca.gov/DLRP/CIFF. Accessed April 10, 2025.

Department of Parks and Recreation. 2010. 523 Record for P-36-025440: Southern California Edison Company Chino-Mira Loma No. 1 Transmission Line. Record prepared by Urbana Preservation & Planning, LLC, San Diego, California. Record on file at South Central Coastal Information Center, California State University, Fullerton.

Department of Parks and Recreation. 2014. 523 Record for P-33-015035/P-36-026051: Southern California Edison Company Hayfield-Chino 220kV Transmission Line. Record prepared by Urbana Preservation & Planning, LLC, San Diego, California. Record on file at South Central Coastal Information Center, California State University, Fullerton.

Holland and Hart. 2025. Key Takeaways from the EPA and the Corps' New WOTUS Guidance Memo. https://www.hollandhart.com/key-takeaways-from-the-epa-and-the-corps-new-wotus-guidance-memo. Accessed May 15, 2025.

Michael Hendrix. 2025. Air Quality and Greenhouse Gas Emissions Analysis for the Grove Basin Outlet Storm Drain Improvement Project. May 9, 2025

Office of Planning and Research. 2025. Site Check https://sitecheck.opr.ca.gov. Accessed April 10, 2025.

SECTION 7 - APPENDICES

Appendix - 1: Air Quality and Greenhouse Gas Emissions Analysis for the Grove Basin Outlet Storm Drain Improvement Project

Appendix - 2: Biological Resources

Appendix - 3: Grove St Storm Drain Tree Work

Appendix - 4: Photographs Field Survey Grove Avenue May 8, 2025

SECTION 8 - PROOF OF NOTIFICATION AND PUBLICATION

SECTION 9 - RESPONSE TO COMMENTS

This section presents responses to the comments received during the public review periods for the Draft Initial Study (IS) for the CGrove Basin Outlet Storm Drain Improvement Project (Project). The original public review period was from June 10, 2025 through July 11, 2025. The District received one email and several returned envelopes during this comment period.

The tables below identify the organization or individual that submitted comments on the Draft IS. Each comment within each letter/email is given a unique number corresponding to responses which are provided immediately following each comment letter.

Comments Received on the Draft Initial Study During Original Comment Period

Commenter	Date of Comments	Letter or Email Number
Eddie Voortman - Voortman Egg Ranch (Email)	June 15, 2025	1

From: bevoortman1@verizon.net <bevoortman1@verizon.net>
Sent: Sunday, June 15, 2025 3:32 PM

To: Smith, Ayida <Ayida.Smith@dpw.sbcounty.gov>
Subject: notice of intent

Hello Ayida,

I am writing you this email in response to the Flood control district notice of intent. We own and operate a business on Grove Ave. between Shaefer and Edison. We have a lot of concerns with this project. We need to access to our property at all time for feed trucks and delivery trucks not to mention our retail store. We need access for employees as well. How are you going to guarantee us access to these things? Without them our livestock and business will die. We live onsite as well and are concerned about having access to our driveway as well. When is this project's purposed start date? I see the width of the operation is not to exceed 14ft in width. I would like to know the center line for that also. If you can let me know how you will accommodate us that would be great.

Thank you,

Eddie Voortman

Voortman Egg Ranch

Response to Comments 1 (email) – Eddie Voortman

1-1 The Email identifies concerns related to the generation of loose dirt, rocks, and gravel from the flood control right-of-way that affects multiple properties on Daisy Drive that are owned by the commenter.

Please see below the responses provided by our engineers regarding the property owner comments received for the Grove Basin Outlet Storm Drain Project:

Tentative Construction Start Date:
Construction is anticipated to begin in Spring 2026.

Access During Construction:
The Contractor will be required to coordinate with local residents and businesses to ensure ingress and egress is maintained for adjacent properties. This includes access for personal and business-related activities, as well as services such as mail, deliveries, and trash collection.

Public Notification and Engagement:
The Contractor will prepare and distribute a “Notice to Residents” in both English and Spanish to all properties adjacent to or directly impacted by the project. Notices will be placed at least seven (7) days prior to the start of construction work.

MEMORANDUM

DATE: May 12, 2025

TO: Mark Hopkins, Project Manager, SummitWest Environmental

FROM: Michael Hendrix

SUBJECT: Air Quality and Greenhouse Gas Emissions Analysis for the Grove Basin Outlet Storm Drain Improvement Project

Michael Hendrix Consulting (MHC) is pleased to provide you with this air quality and greenhouse gas (GHG) emissions analysis for the Grove Basin Outlet Storm Drain Improvement Project, Ontario California. The following sections summarize the analysis.

INTRODUCTION

This air quality and GHG emissions analysis has been prepared to evaluate the potential air quality and GHG emissions impacts and identify mitigation measures associated with the proposed Grove Basin Outlet Storm Drain Improvement Project which would construct storm drain improvements within the paved right-of-way of Grove Avenue between Edison Avenue to the south to Chino Avenue at the north terminus of the proposed storm drain improvements. This report is intended to satisfy County of San Bernardino (County) requirements for a project-specific air quality and GHG emissions impact analysis by examining the short-term impacts on regional air quality, localized air pollutant impacts on sensitive uses adjacent to the project site and evaluate conformity with the County's GHG Reduction Plan. Note that because the proposed project is an improvement to an existing storm drain system, operational activities are the same as the existing maintenance activities for the current storm drain system and do not generate new operational impacts to air quality or GHG emissions.

The project is located within the City of Ontario but is part of the San Bernardino County Flood Control system. Therefore, the San Bernardino County Flood Control District is the lead agency under the California Environmental Quality Act (CEQA).

The project is located within the South Coast Air Basin within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As such this analysis will also evaluate project consistency with the SCAQMD's 2022 Air Quality Management Plan (AQMP).

PROJECT LOCATION AND DESCRIPTION

The Project is within the existing paved right-of-way of Grove Avenue, between Edison Avenue to the south to Chino Avenue at the north terminus of the proposed storm drain improvements in the western portion of San Bernardino County within the City of Ontario.

The Project includes the installation of a new 84" reinforced concrete pipe (RCP) and 96" RCP from Edison Avenue to Chino Avenue. Additionally, the existing 66" RCP will be replaced with a 72" RCP

from Chino Avenue to just south of the Grove Basin. Furthermore, the project would replace manholes, junction structures, involve reconstruction of the roadway and associated driveways, and remove outlet structures. The pipeline disturbance area has a width of 14 feet and a total pipeline length of 6,583 feet from Edison Avenue to East Riverside Drive. The project also involves an excavation depth of up to 27 feet, junction structures, and the reconstruction of roadways and driveways as necessary. Existing outlet structures will be removed to enhance water flow management.

The project connects to an existing storm drain at the intersection of Edison and Grove, ultimately discharging into the Prado Basin and subsequently the lower Santa Ana River. Night work is not proposed for this project. The estimated construction duration is 160 working days. Construction activities will take place primarily along Grove Avenue, with site access facilitated from this main roadway. Lane closures along Grove Avenue may be necessary, including potential traffic detours at intersections to maintain safety and minimize disruptions during construction operations.

EXISTING SETTING

Overview of the Existing Air Quality Environment

The project site is in the western portion of San Bernardino County, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the SCAQMD.

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions transported by prevailing winds from the second-largest urban area in the United States gives the Basin some of the worst air pollution problems in the nation. The Project area is at the northeastern edge of the Basin at an elevation of 5,200 feet above sea level, which is at the upper mixing height of the Basin. Due to the elevation and location at the northeastern edge of the Basin, the project area is prone to the highest ozone concentrations within the Basin.

Surrounding Land Uses in the Project Vicinity

The surrounding setting consists of various agricultural, industrial, and residential land uses including truck storage yards, asphalt processing and storage, landscape materials handling, composting facilities, interspersed with single-family residential.

REGULATORY SETTING

Federal Regulations

Pursuant to the Federal Clean Air Act (CAA) of 1970, the Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS). The NAAQS was established for six major pollutants, termed “criteria” pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards (AAQS), or criteria, for outdoor concentrations to protect public health.

California Regulations

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish the California Air Resources Board (CARB). Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems.

California adopted the CCAA in 1988. CARB administers the CAAQS for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the six criteria pollutants designated by the CAA as well as four others: visibility-reducing particulates, H_2S, sulfates, and vinyl chloride.

Regional Air Quality Planning Framework

The 1976 Lewis Air Quality Management Act established SCAQMD and other air districts throughout the State. The CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

CARB is responsible for incorporating Air Quality Management Plans (AQMPs) for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary-source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan

SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every three years, updating the previous plan and 20-year horizon.

The latest plan is the 2022 AQMP (SCAQMD 2022), which incorporates the latest scientific and technological information and planning assumptions, including the 2020 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories which also benefits reduction of GHG emissions. Key elements of the 2022 AQMP pertaining to GHG emissions include:

- Specifically addresses decarbonization and climate policy development and its role in achieving the 2015 Ozone standard.
- Calculation and credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation)
- A strategy with fair-share emission reductions at the federal, State, and local levels
- Investment in strategies and technologies meeting multiple air quality and climate objectives
- Identification of new partnerships and significant funding for incentives to accelerate deployment of zero and near-zero technologies