

DRAWING NUMBER  
KELLOGG IMP.  
W/B RT 90 RAMP

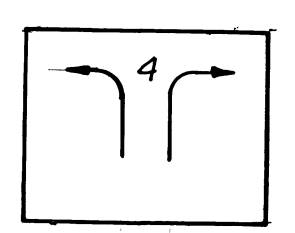
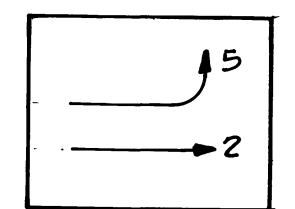
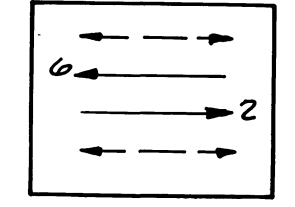
DRAWING NUMBER  
K20.2

DRAWING NUMBER

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GENERAL NOTES:

- ALL SIGNAL HEADS SHALL HAVE THREE 12-INCH LENSES WITH PLASTIC HOUSINGS UNLESS SHOWN OTHERWISE.
- ALL NEW CONDUIT SHALL BE 2-INCH MINIMUM UNLESS OTHERWISE NOTED.
- TRAFFIC SIGNAL AND HIGHWAY LIGHTING CONSTRUCTION SHALL CONFORM TO STATE OF CALIFORNIA STANDARD SPECIFICATIONS SECTION 86 (DATED JAN. 1981) AND STANDARD PLANS (DATED JAN. 1981) AND THE SPECIAL PROVISIONS.
- CONDUCTOR AND POLE SCHEDULES ARE FURNISHED AS INSTALLATION GUIDELINES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT EQUIPMENT REQUIRED FOR EXTENDED OPERATION.
- INDUCTOR LOOPS SHALL BE 6'x6' WITH 10' SPACING 2'-IN-FRONT-OF-STOP LINE IN THE DIRECTION OF TRAVEL UNLESS OTHERWISE SHOWN.
- ALL PULLBOXES SHALL BE #5 UNLESS SHOWN OTHERWISE. PULL BOXES SHALL BE OUTSIDE OF WHEELCHAIR RAMPS. (2)
- PEDESTRIAN SIGNALS SHALL BE TYPE 'C'.
- SIGNING AND STRIPING SHALL BE DONE BY THE CONTRACTOR AT NO COST TO THE STATE. (1)
- STRIPING SHALL BE PERFORMED PRIOR TO LOCATING DETECTORS.
- LUMINAIRES SHALL HAVE INTEGRAL BALLASTS & TYPE II PHOTO-ELECTRIC CONTROL RECEPTACLE. (2)
- PRIOR TO FINAL ACCEPTANCE OF STREET IMPROVEMENTS, ALL STREET STRIPING AND STENCILING WITHIN THE PERIMETER OF THE CONSTRUCTION PROJECT WILL BE RESTORED TO A 'LIKE NEW CONDITION' IN A MANNER MEETING THE APPROVAL OF THE ASSISTANT DIRECTOR, EMA/DEVELOPMENT.
- INSTALLATION OF SIGNAL CONDUIT ACROSS RAMPS AND KELLOGG DRIVE SHALL BE DONE BY JACKING AND BORING.



PHASE DIAGRAM

NOTES THIS SHEET:

- INSTALL STATE FURNISHED TYPE ITO CONTROLLER.
- PROVIDE INTERCONNECT BETWEEN GRANDVIEW AVE./KELLOGG DR. & ROUTE 90 NORTH BOUND ON-OFF RAMPS/KELLOGG DR.
- STRIPING REVISIONS PER STRIPING PLAN. (SEE SHEET 14 OF 24).
- NO LIGHTING CIRCUIT SHALL BE ALLOWED IN THE CONTROLLER CABINET.

| CONDUCTOR SCHEDULE   |               | RUN |    |        |        |
|----------------------|---------------|-----|----|--------|--------|
| AWG                  | CIRCUIT       | 1   | 2  | 3      | 4      |
| #14                  | φ2            | -   | -  | 3      | 3      |
|                      | φ6            | 3   | 3  | -      | 3      |
|                      | φ4            | 3   | 3  | -      | 3      |
|                      | φ5            | -   | 3  | -      | 3      |
|                      | φ2P           | -   | -  | 2      | 2      |
|                      | φ6P           | 2   | 2  | -      | 2      |
|                      | φ2 PPB        | -   | -  | 1      | 1      |
|                      | φ6 PPB        | 1   | 1  | -      | 1      |
|                      | PPB COMMON    | 1   | 1  | 1      | 1      |
|                      | SPARES        | 3   | 3  | 3      | 6      |
|                      | TOTAL         | 13  | 16 | 10     | 26     |
| #10                  | LUMINAIRE     | 2   | 2  | -      | 2      |
|                      | SIGNAL COMMON | 1   | 1  | 1      | 2      |
|                      | TOTAL         | 3   | 3  | 1      | 4      |
| 2 #14 CABLE (Type C) | φ4P DETECTOR  | -   | -  | -      | 1      |
|                      | φ5P DETECTOR  | -   | -  | 1      | 1      |
|                      | φ2C DETECTOR  | -   | -  | 2      | 2      |
|                      | φ6C DETECTOR  | -   | 2  | -      | 2      |
|                      | TOTAL         | -   | 2  | 3      | 6      |
| CONDUIT SIZE         |               | 2"  | 2" | 2 1/2" | 2 1/2" |

| LOOP DETECTOR SCHEDULE |         |          |        |
|------------------------|---------|----------|--------|
| SENSOR                 | CHANNEL | DETECTOR | OPTION |
| 1                      | 1       | 2-C1     |        |
|                        | 2       | 2-C2     |        |
|                        | 3       | 6-P1     |        |
|                        | 4       | 6-C2     |        |
| 2                      | 1       | 4-P1     |        |
|                        | 2       | 4-P2     |        |
|                        | 3       | 5-P1     |        |

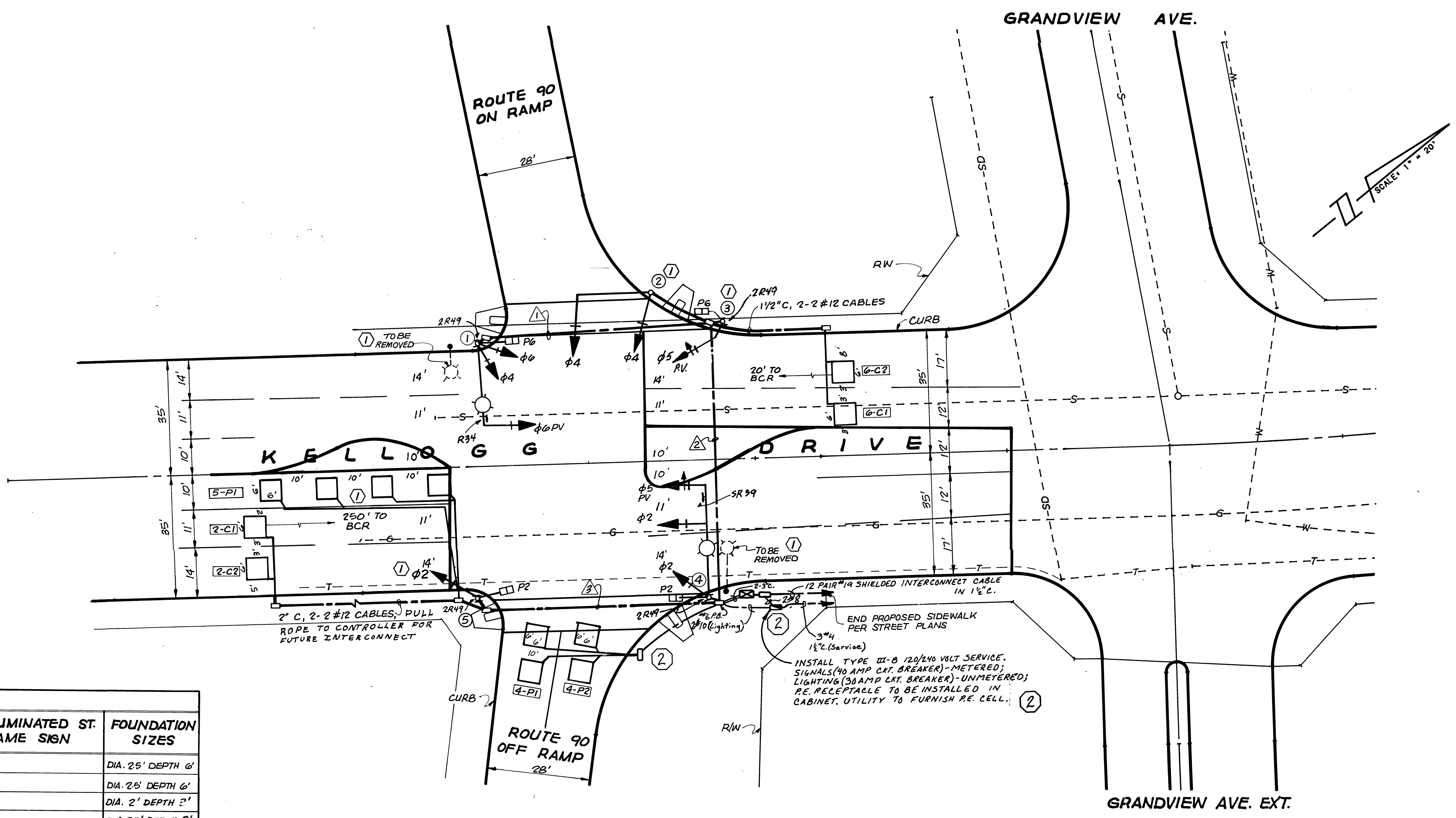
| NEW POLE SCHEDULE |              |     |             |           |                 |          |         |        |               |     |                           |
|-------------------|--------------|-----|-------------|-----------|-----------------|----------|---------|--------|---------------|-----|---------------------------|
| STANDARD          |              |     | LUMINAIRE * |           | SIGNAL MOUNTING |          | P.R.B.  |        | POLE LOCATION |     | ILLUMINATED ST. NAME SIGN |
| NO.               | DESCRIPTION  | HT. | SIG. M.A.   | LUM. M.A. | VEHICLE POLE    | MAST ARM | PED.    | PHASE  | BCR           | CF  |                           |
| (1)               | TYPE 17-2-70 | 30' | 20'         | 12'       | 200 W HPS       | SV-2-T   | MAS     | SP-1-T | 6             | 2'  | -                         |
| (2)               | TYPE 16-2-70 | 30' | 20'         | -         | -               | SV-2-T   | MAS     | -      | 6             | 27' | -                         |
| (3)               | TYPE 1-A     | 10' | -           | -         | -               | SV-1-T   | -       | TV-1-T | -             | 12' | 2.5'                      |
| (4)               | TYPE 19-3-70 | 30' | 30'         | 12'       | 200 W HPS       | SV-1-T   | MAS/MAT | TV-1-T | 2             | 16' | -                         |
| (5)               | TYPE 1-A     | 10' | -           | -         | -               | SV-1-T   | -       | TV-1-T | 2             | 3'  | 2.5'                      |

\* WITH INTEGRAL BALLAST  
LUMINAIRE SHALL BE CUTOFF TYPE (2)

**WARNING**  
BEFORE STARTING WORK ON EXISTING SERIES LIGHTING CIRCUITS, CONTRACTOR MUST OBTAIN DAILY SAFETY CIRCUIT CLEARANCE FROM SERVING COMPANY. DISCONNECT CIRCUITS AND PLACE "MEN AT WORK" SIGNS NEAR OPEN SWITCHES BEFORE DOING ANY WORK ON CIRCUITS.

| CALTRANS     |             |                         |      |
|--------------|-------------|-------------------------|------|
| SUBMITTED BY | REVIEWED BY | APPROVAL RECOMMENDED BY | DATE |
| Arnie Peters | A. Lindgren | B.H. Clark              | 2/82 |

PERMIT NO. T81-75N-0937



- (2) REVISED 2/18/82
- (1) REVISED DATE 2/4/82

*Donald R. Gordon* DATE 2/17/82  
G.N. FITZGERALD RCE 26973  
OPERATION ENGINEER

*Donald R. Gordon* DATE 2/17/82  
R.W. VOYLES RCE 12169 RTE 669  
MANAGER, TRAFFIC ENGINEERING

**W** VAN DELL AND ASSOCIATES, INC.  
SURVEYORS CIVIL ENGINEERS LAND PLANNERS  
17801 CARTWRIGHT ROAD  
IRVINE, CA 92714  
ROUTE 14 971-862-1100

*Donald R. Gordon* 2/17/82  
DONALD R. GORDON RCE 24725 DATE

ORA-90 11.02

**IMPROVEMENT PLAN  
FOR TRACT NO. 11331  
SIGNAL PLAN  
KELLOGG DRIVE &  
N/B ROUTE 90 ON-OFF RAMP**

SHEET 13 OF 24

DRAWING NUMBER  
KELLOGG IMP.

DRAWING NUMBER  
K20.3

DRAWING NUMBER

DRAWING NUMBER

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA  
REORDER BY NUMBER 0204R  
POSITION EDGE OF PRINT ON THIS LINE

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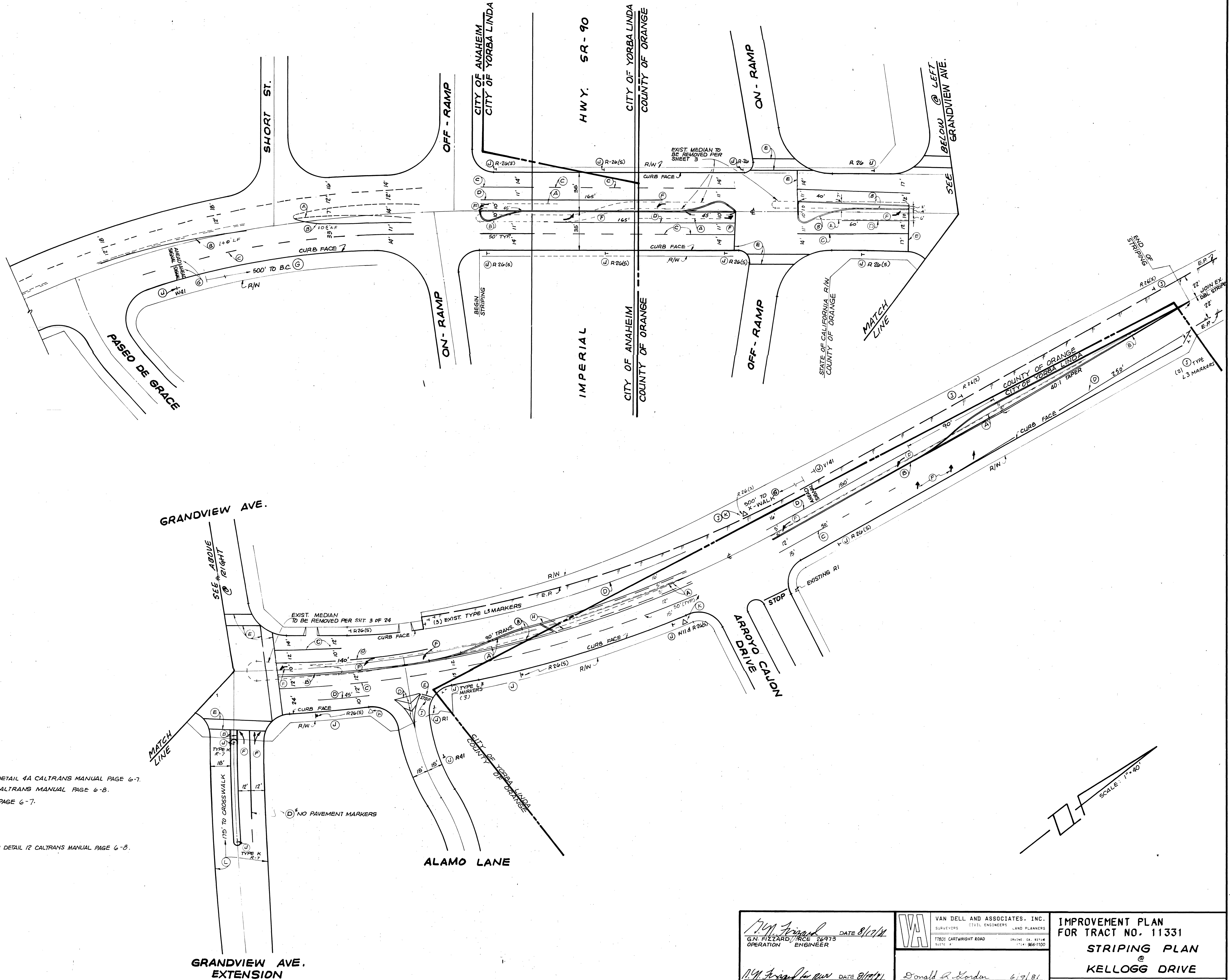
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QUANTITY  
ESTIMATE

STRIPING NOTES:

- 1370 L.F. (A) SANDBLAST STRIPE.  
1350 L.F. (B) PAINT 4" DOUBLE YELLOW AND PAVEMENT MARKER PER DETAIL 4A CALTRANS MANUAL PAGE 6-7.  
1310 L.F. (C) PAINT 4" WHITE AND PAVEMENT MARKER PER DETAIL 7A, CALTRANS MANUAL PAGE 6-8.  
1027 L.F. (D) PAINT 8" WHITE 8 RPM PER DETAIL 5 CALTRANS MANUAL PAGE 6-7.  
720 L.F. (E) PAINT 12" WHITE  
15 EA. (F) PAINT ARROW  
3 EA. (G) PAINT "SIGNAL AHEAD"  
270 L.F. (H) PAINT 4" STRIPE DOUBLE YELLOW 2-WAY LEFT TURN 4 RPM PER DETAIL 12 CALTRANS MANUAL PAGE 6-8.  
1 EA. (I) PAINT "STOP"  
33 EA. (J) INSTALL SIGN  
3 EA. (K) INSTALL STREET SIGN PER STD. PLAN 407.  
350 L.F. (L) PAINT RED CURB.



*W. J. F. J. J.* DATE 8/1/81  
GAI FIELD/ RCE 24725  
OPERATION ENGINEER  
  
*W. J. F. J. J.* DATE 8/1/81  
R.W. VOIGT/ RCE 12169 RTE 609  
MANAGER, TRAFFIC ENGINEERING

**W** VAN DELL AND ASSOCIATES, INC.  
SURVEYORS CIVIL ENGINEERS LAND PLANNERS  
17801 CARTWRIGHT ROAD IRVINE, CA 92714  
DONALD R. GORDON RCE 24725 DATE 6/9/81

IMPROVEMENT PLAN  
FOR TRACT NO. 11331  
STRIPING PLAN  
KELLOGG DRIVE

SHEET 14 OF 24