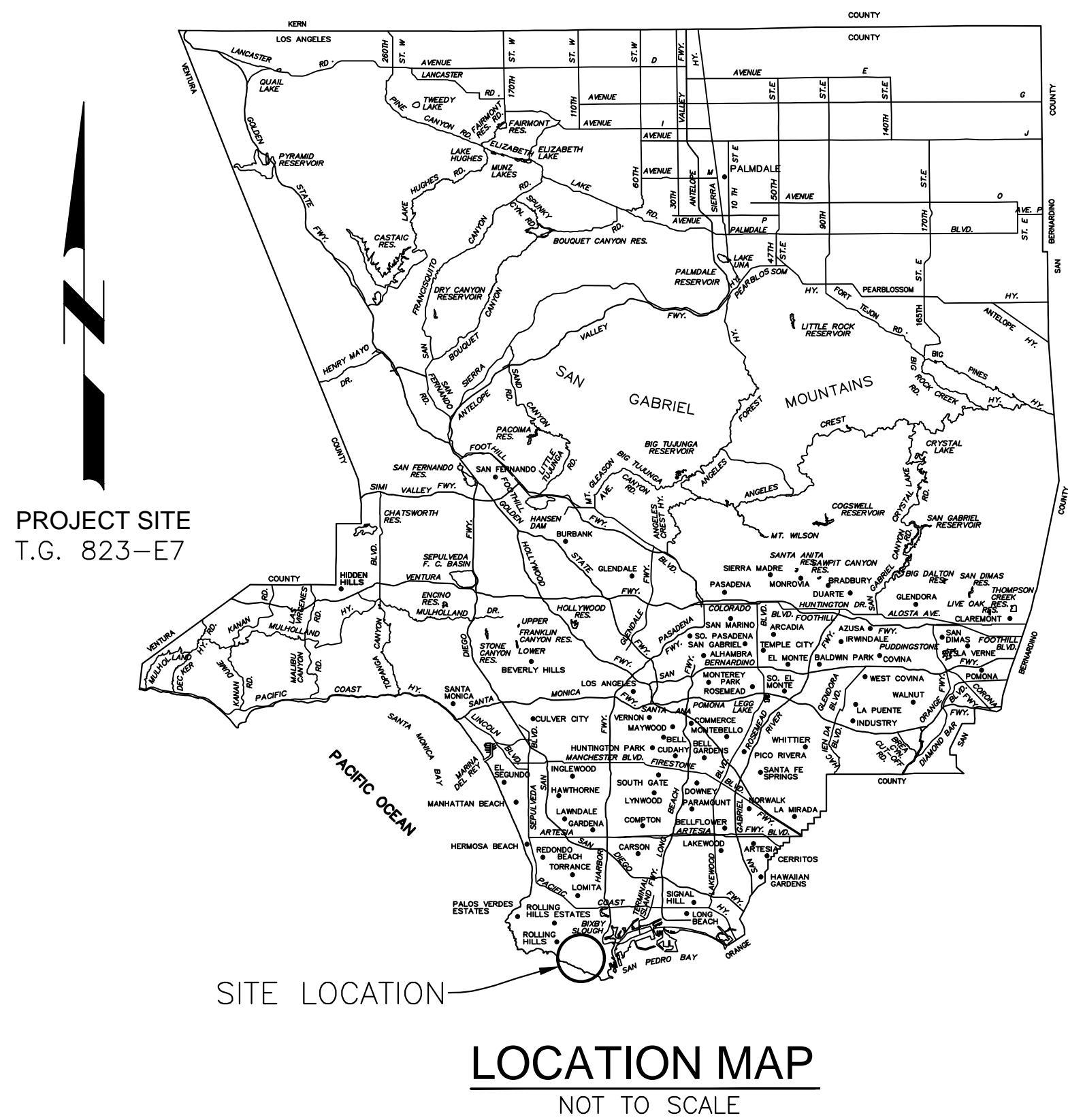


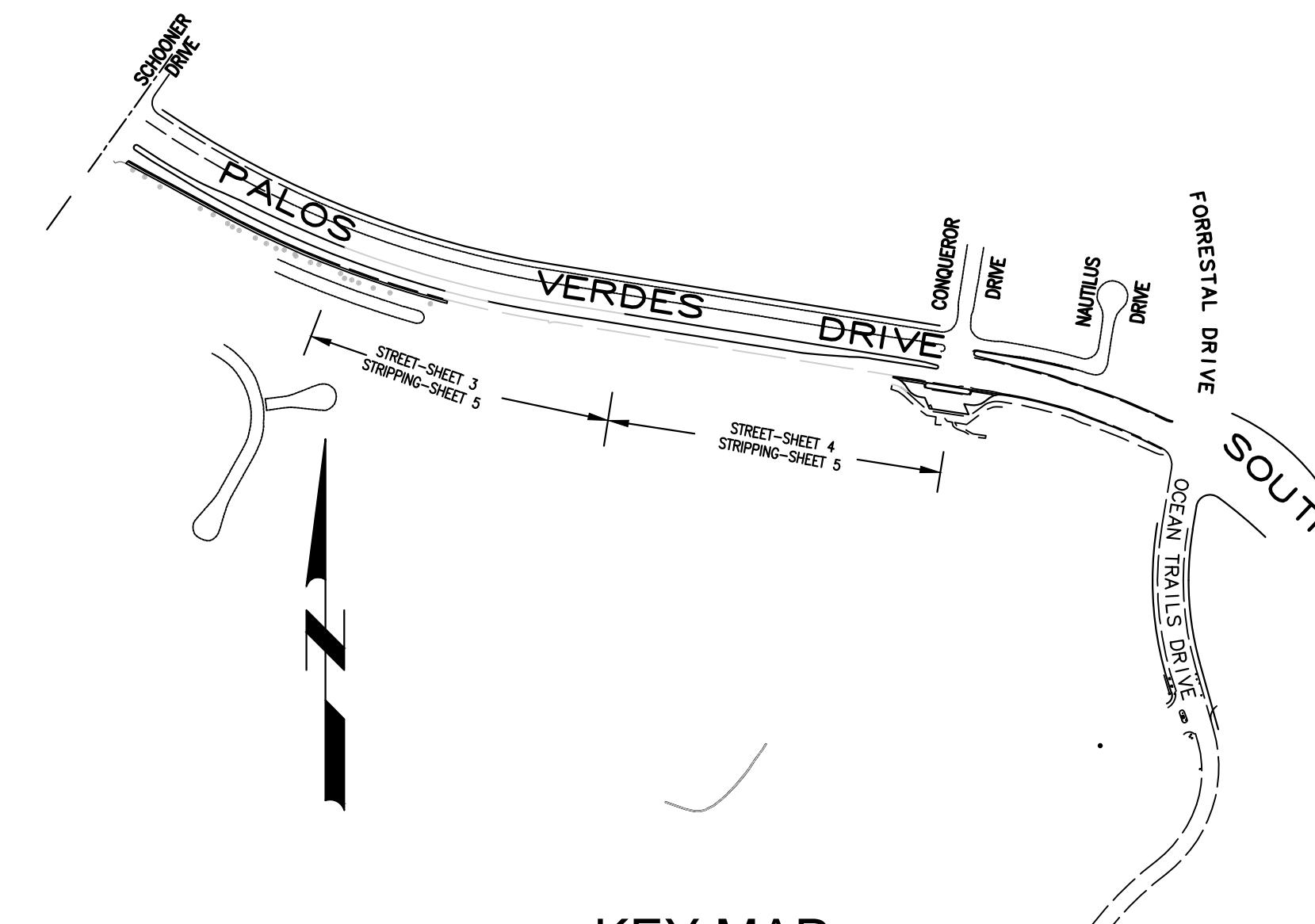
SCALE: HOR. 1' = 40'
VERT. 1' = 4'



STREET IMPROVEMENTS PLAN for PALOS VERDES DRIVE SOUTH

BENCH MARK
B.M. CY9368
RDBM TAG N CB E END CB 10 Ft. E/O
BCR NE COR PALOS VERDES DR. S and
CONQUEROR DR. 43 Ft. N & 45 Ft. E/O C/L INT.
PALOS VERDES QUADRANT 1980

Elev. 291.039'



INDEX TO PROJECT DRAWINGS

SHT. NO.	DESCRIPTION
1	TITLE SHEET
2	CONSTRUCTION NOTES AND TYPICAL SECTIONS
3	PALOS VERDES DR. SOUTH - PLAN & PROFILE - STA. 267+11.85 TO STA. 276+35.77
4	PALOS VERDES DR. SOUTH - PLAN & PROFILE - STA. 276+35.77 TO STA. 283+30.57
5	STRIPPING PLAN

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

The existence and location of any underground utility pipes or structures shown on these plans were obtained by a search of available records. To the best of our knowledge there are no existing utilities except those shown on this map. The contractor is required to take precautionary measures to protect the utility lines shown, and any other lines not of record or shown on these plans. The contractor further assumes all liability and responsibility for the utility pipes, conduits or structures shown or not shown on these plans. The contractor shall pothole all existing utilities to verify their locations, and any discrepancy between found locations and the plans shall immediately be brought to the attention of the design engineer. Prior to excavation the contractor shall call toll free 800-422-4133 to verify the underground location of gas and telephone lines. The contractor shall also call Mr. Ray Cummings of the General Telephone Company at 805-948-4871 so they can mark the location of underground telephone lines. The contractor agrees that he shall assume sole and complete responsibility for the job site condition during the course of construction of this project, including the safety of all persons and property, and that this requirement shall apply continuously and not be limited only to normal working hours. The contractor also agrees to defend, indemnify and hold the owner and engineer harmless from any and all liability, real or alleged in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the owner or engineer.

J.K. Newville R.C.E. 13095 Date

GENERAL NOTES

1. A permit shall be obtained and fees paid for construction inspection to the Department of Public Works 30940 Hawthorne Boulevard, Rancho Palos Verdes, at least 72 hours prior to starting work under this contract.
2. The Contractor shall contact the City of Rancho Palos Verdes to arrange for an acceptable construction start date.
3. A permit must be obtained from the Los Angeles County Department of Public Works, at (626) 458-3129 for all storm drain connections.
4. All work shall conform to "Standard Plans and Specifications for Public Works Construction" (two books) as supplemented with the Los Angeles County Department of Public Works Standard Plans 1995 edition.
5. Work, as implemented, shall be prosecuted to completion without delay so as to provide minimum inconvenience to adjacent property owners and to the traveling public.
6. The contractor shall take all necessary and proper precautions to protect adjacent properties from all damage that may occur from storm water runoff and/or deposition of debris resulting from any and all work in connection with subdivision construction.
7. There shall be no above-ground obstruction in any portion of the sidewalk except where the width, exclusive of top of curb, is 50 inches or greater.
8. Construct walk returns and transitions per L.A. County Dept. of Public Works Standard Plan 1130-0.
9. Where sidewalks are adjacent to curb, construct residential driveways per APWA Standard Plan 110-1, unless otherwise shown. Prior to forming curb and gutter, the contractor shall confer with the City to determine appropriate curb locations.
10. Construct street name signs as shown on plan. Contact the City for standard plans and specifications. Street name signs shall be posted prior to occupancy of buildings.
11. Thickness of base materials will be determined by the soil test. Subdivider's engineer shall request tests by the Department of Public Works after the streets have been rough graded. Plans must be revised to show actual base to be placed.
12. Processed Miscellaneous Base may be used under curb and gutter in lieu of Crushed Aggregate Base.
13. Processed Miscellaneous Base or Select Material with expansion of 3% or less by the Department of Public Works CBR soil test may be used in lieu of Crushed Aggregate Base under walks.
14. Driveways shall not encroach into the four (4) feet gutter portion of local depressions (to be used whenever plans include four (4) feet gutter local depressions).
15. All utility lines shall be underground per Section 21.24.400 of Title 21 of the Los Angeles County Code.
16. No driveways should be located within 25 feet upstream of catch basin when grade is greater than 5%.
17. All construction joints for P.C.C. curbs, gutters, driveways and sidewalks shall be in accordance with APWA Standard Plan No. 112-1.
18. The latest revised standard plan or drawing shall be used unless otherwise specifically noted.

TRAFFIC CONTROL REQUIREMENTS

1. Traffic control shall be in accordance with the provisions of the latest edition of the "Work Area Traffic Control Handbook" (WATCH) and at the direction of the Director of Public Works.
2. Two lanes of traffic (one each direction) shall be open/restored between the hours of 5:00 p.m. to 8:00 a.m. Monday thru Friday and all day Saturday, Sunday and Holidays.
3. One lane of traffic for two directional flow will be allowed between the hours of 8:00 a.m. to 5:00 p.m. Monday thru Friday, with two flaggers, one for each direction of traffic.

STORMWATER POLLUTION CONTROL REQUIREMENTS FOR ROAD CONSTRUCTION

A. NOTES:

1. Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or wind.
2. Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
3. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
4. Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.
5. Trash and construction related solid wastes may be deposited into a covered receptacle to prevent contamination of rainfall runoff and disposal by wind.
6. Sediments and other materials must not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
7. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.

8. The following BMP's as outlined in, but not limited to, the Best Management Practice Handbook, California Stormwater Quality Task Force, Sacramento, California 1993, or the latest revised edition, may apply during construction (additional measures may be required if deemed appropriate by inspector):

CA001 - DEWATERING OPERATIONS	ESC02 - PRESERVATION OF EXISTING VEGETATION
CA010 - PAVING OPERATIONS	ESC10 - SEEDING AND PLANTING
CA010 - MATERIAL DELIVERY AND STORAGE	ESC11 - MULCHING
CA011 - MATERIAL USE	ESC20 - GEOTEXTILES AND MATS
CA012 - SPILL PREVENTION AND CONTROL	ESC21 - DUST CONTROLS
CA020 - SOLID WASTE MANAGEMENT	ESC22 - TEMPORARY STREAM CROSSING
CA021 - HAZARDOUS WASTE MANAGEMENT	ESC23 - CONSTRUCTION ROAD STABILIZATION
CA022 - CONTAMINATED SOIL MANAGEMENT	ESC24 - STABILIZED CONSTRUCTION ENTRANCE
CA023 - CONCRETE WASTE MANAGEMENT	ESC30 - SLOPE ROUGHENING/TERRACING
CA030 - VEHICLE AND EQUIPMENT CLEANING	ESC50 - SILT FENCE
CA031 - VEHICLE AND EQUIPMENT FUELING	ESC51 - STRAW BALE BARRIERS
CA032 - VEHICLE AND EQUIPMENT MAINTENANCE	ESC52 - SAND BAG BARRIER
CA040 - EMPLOYEE/SUBCONTRACTOR TRAINING	ESC53 - BRUSH OR ROCK FILTER
ESC01 - SCHEDULING	ESC54 - STORM DRAIN INLET PROTECTION

PREPARED BY:
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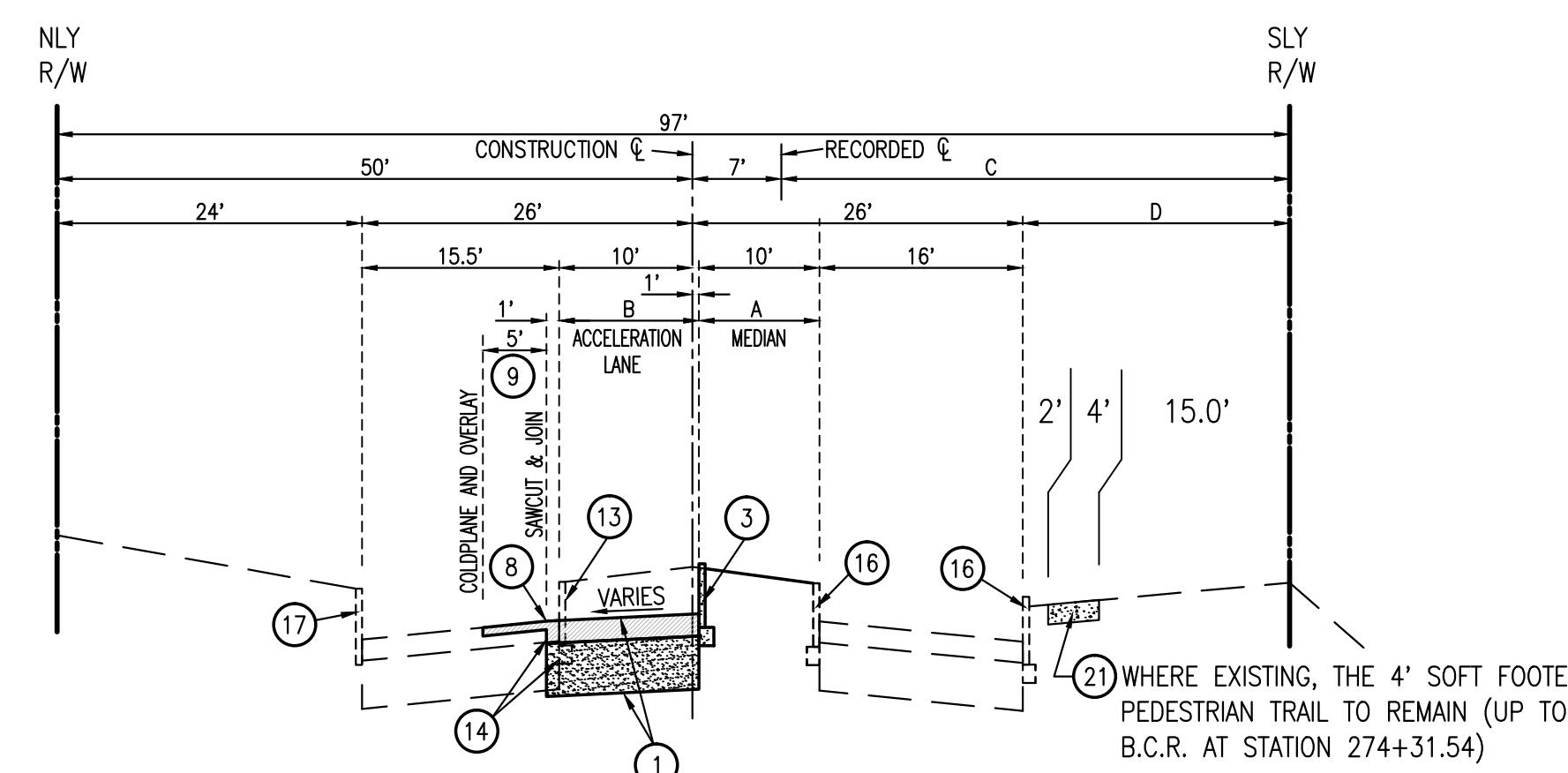
CHECKED
DESIGNED
DRAFTED



APPROVED
CITY OF RANCHO PALOS VERDES
Michael Throne, R.C.E. 46469 Exp. 6-30-19
DIRECTOR OF PUBLIC WORKS

NO.	REVISION	REVISED BY	APPROVED BY	DATE

CITY of RANCHO PALOS VERDES	
STREET IMPROVEMENTS PLAN	
LOCATION and KEY MAPS, BENCH MARK INDEX TO PROJECT DRAWINGS	
PRIVATE ENGINEERS NOTICE TO CONTRACTORS STORMWATER POLLUTION CONTROL REQUIREMENTS GENERAL NOTES and TRAFFIC CONTROL REQUIREMENTS	
TRACT No. 50666	SHEET 1 OF 5



FROM STATION 272+18.78 TO 273+00.00 NORTHERLY MEDIAN CURB LINE VARIES FROM 10.5' LEFT TO 0.5' RIGHT OF CL
A = VARIES FROM 20.5' TO 9.5', B = VARIES FROM 0.0' TO 11.0'
C = 47.0', D=21.0'

FROM STATION 273+00.00 TO 273+78.07 NORTHERLY MEDIAN CURB LINE IS UNIFORM AT 0.5' RIGHT OF CL
A = 9.5', B=11.0', C=47.0', D=21.0'

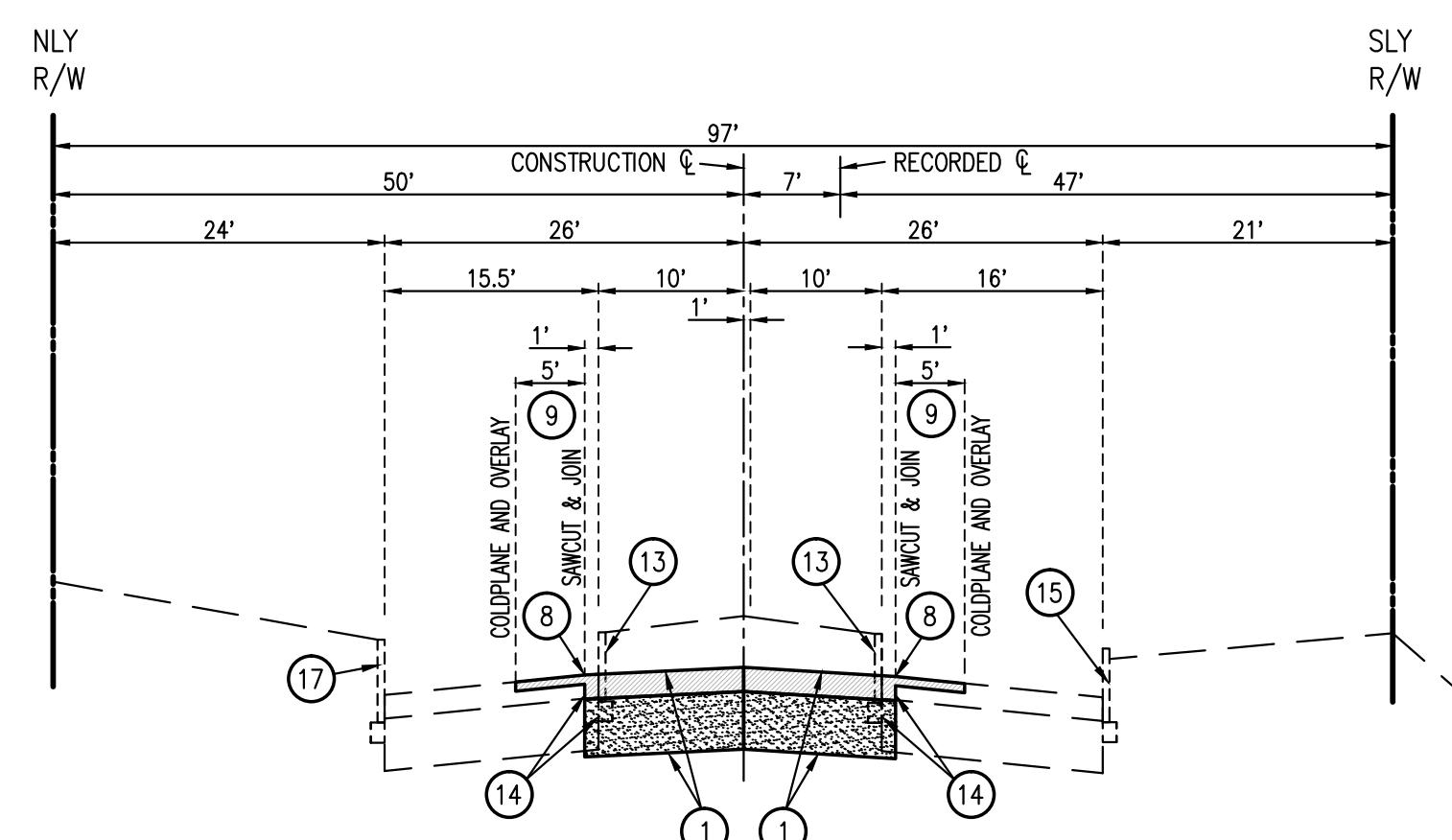
FROM STATION 273+78.07 TO 274+31.58 NORTHERLY MEDIAN CURB LINE VARIES FROM 0.5' RIGHT TO 6.6' RIGHT OF CL
A = VARIES FROM 9.5' TO 4.0', B = VARIES FROM 11.0' TO 17.0'
C = 47.0', D=21.0'

FROM STATION 275+18.87 TO 275+58.38 NORTHERLY MEDIAN CURB LINE VARIES FROM 6.4' RIGHT TO 0.5' RIGHT OF CL
A = VARIES FROM 4.0' TO 9.6', B = VARIES FROM 16.8' TO 11.0'
C = 57.0', D=31.0'

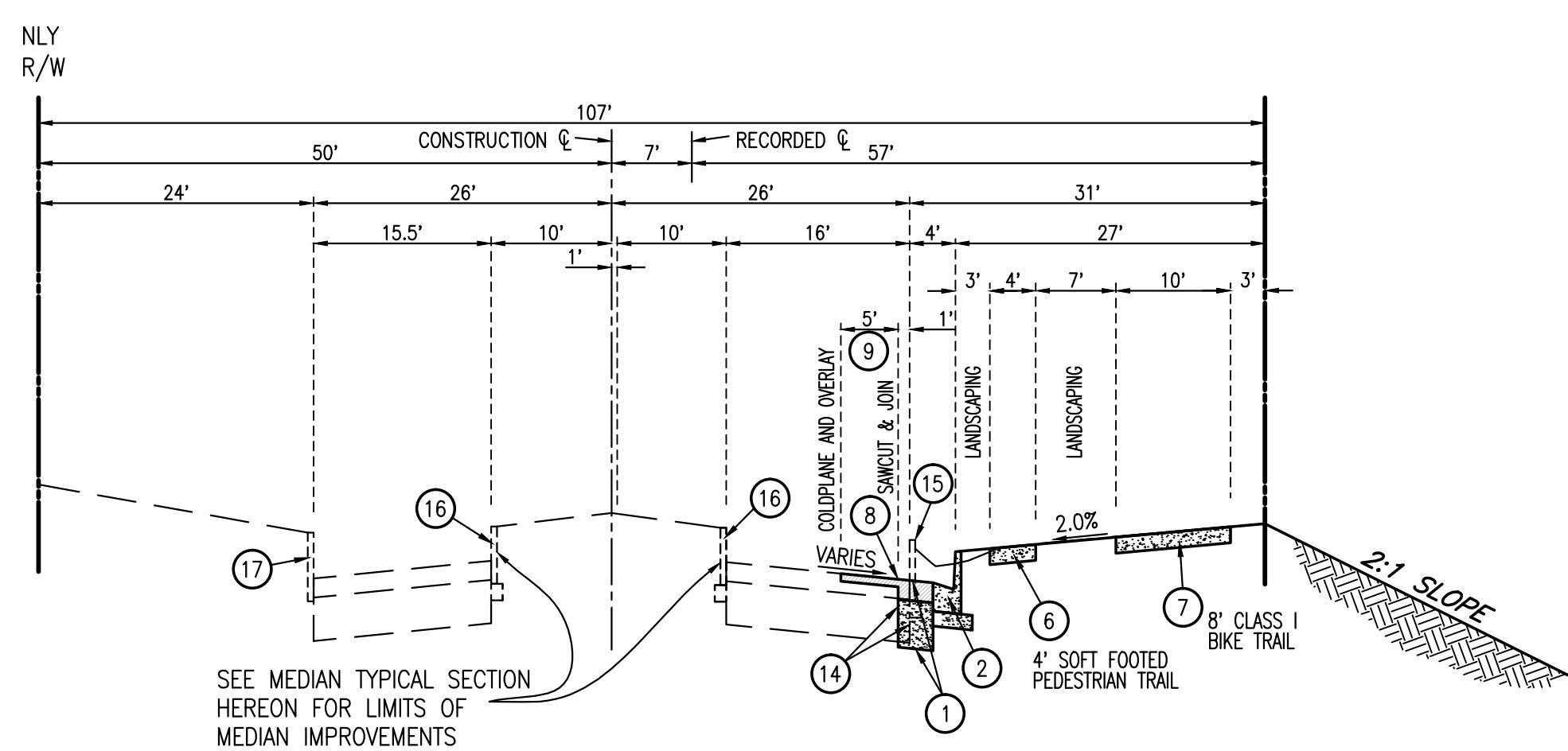
FROM STATION 275+58.38 TO 276+68.87 NORTHERLY MEDIAN CURB LINE IS UNIFORM AT 0.5' RIGHT OF CL
A = 9.5', B=11.0', C=47.0', D=21.0'

FROM STATION 276+68.87 TO 277+90.00 NORTHERLY MEDIAN CURB LINE VARIES FROM 0.5' RIGHT TO 10.5' LEFT OF CL
A = VARIES FROM 9.5' TO 20.5', B = VARIES FROM 11.0' TO 0.0'
C = 57.0', D=31.0'

MEDIAN TYPICAL SECTION
PALOS VERDES DRIVE SOUTH
N.T.S.
FROM STA. 272+148.78 TO STA. 277+90.00



TYPICAL SECTION AT INTERSECTION
PALOS VERDES DRIVE SOUTH
N.T.S.
FROM STA. 274+31.58 TO STA. 275+18.87



SOUTHERLY CURB TYPICAL SECTION
PALOS VERDES DRIVE SOUTH
N.T.S.
FROM STA. 275+31.92 TO STA. 274+31.54

CONSTRUCTION NOTES

- (1) CONST. 1.5" A.R.H.M. ON 3" A.C. ON 11" CRUSHED MISCELLANEOUS BASE
- (2) CONST. 6" CURB AND 24" GUTTER BARRIER PER CITY STANDARDS
- (3) CONST. CONCRETE CURB PER S.P.P.W.C. STD. PLAN 120-2, A1-150(6)
- (4) CONST. 6" THICK P.C.C. WALK (SEE GENERAL NOTES 8 & 9 ON SHEET 1).
- (5) CONST. CURB RAMP PER S.P.P.W.C. STD. PLAN 111-3, TYPE PER PLAN.
- (6) CONST. 4' WIDE DECOMPOSED GRANITE WALK, 4" THICK WITH 2'X4" REDWOOD HEADER ON BOTH SIDES
- (7) CONST. 3" A.C. PAVEMENT FOR BIKE TRAIL
- (8) SAW CUT EXISTING A.C. PAVEMENT FOR SQUARE JOIN.
- (9) COLD PLANE 1.5" MIN, 5' WIDE STRIP MIN. AND OVERLAY WITH 1.5" MIN. A.R.H.M.
- (10) CONST. 6" A.C. CURB PER S.P.P.W.C. STD. PLAN 121-2 TYPE D2-6 (150).
- (11) CONST. LOCAL DEPRESSION PER A.P.W.A. STD. PLAN 313-1, CASE A, H=2", H1=2-1/2".
- (12) PROPOSED CURB OPENING CATCH BASIN PER S.P.P.W.C. STD. PLAN 300-3, W=10', V=5'-0", VU=3'-10", B=3'-8"
- (13) REMOVE EXISTING CURB OR CURB AND CUTTER.
- (14) REMOVE EXISTING A.C. PAVEMENT AND BASE AND PULVERIZE TO 2" OR LESS THEN INCORPORATE IT INTO THE SUBGRADE.
- (15) REMOVE EXISTING A.C. BERM
- (16) EXISTING CURB AND/OR CURB AND GUTTER TO REMAIN
- (17) EXISTING A.C. BERM TO REMAIN
- (18) EXISTING CATCH BASIN TO REMAIN
- (19) EXISTING 30" R.C.P. TO REMAIN
- (20) EXISTING HEAD WALL TO BE REMOVED PER MTD 1472-5
- (21) EXISTING 4' SOFT-FOOTED TRAIL TO REMAIN

PREPARED BY:
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CIVIL ENGINEERING / LAND PLANNING / SURVEYING

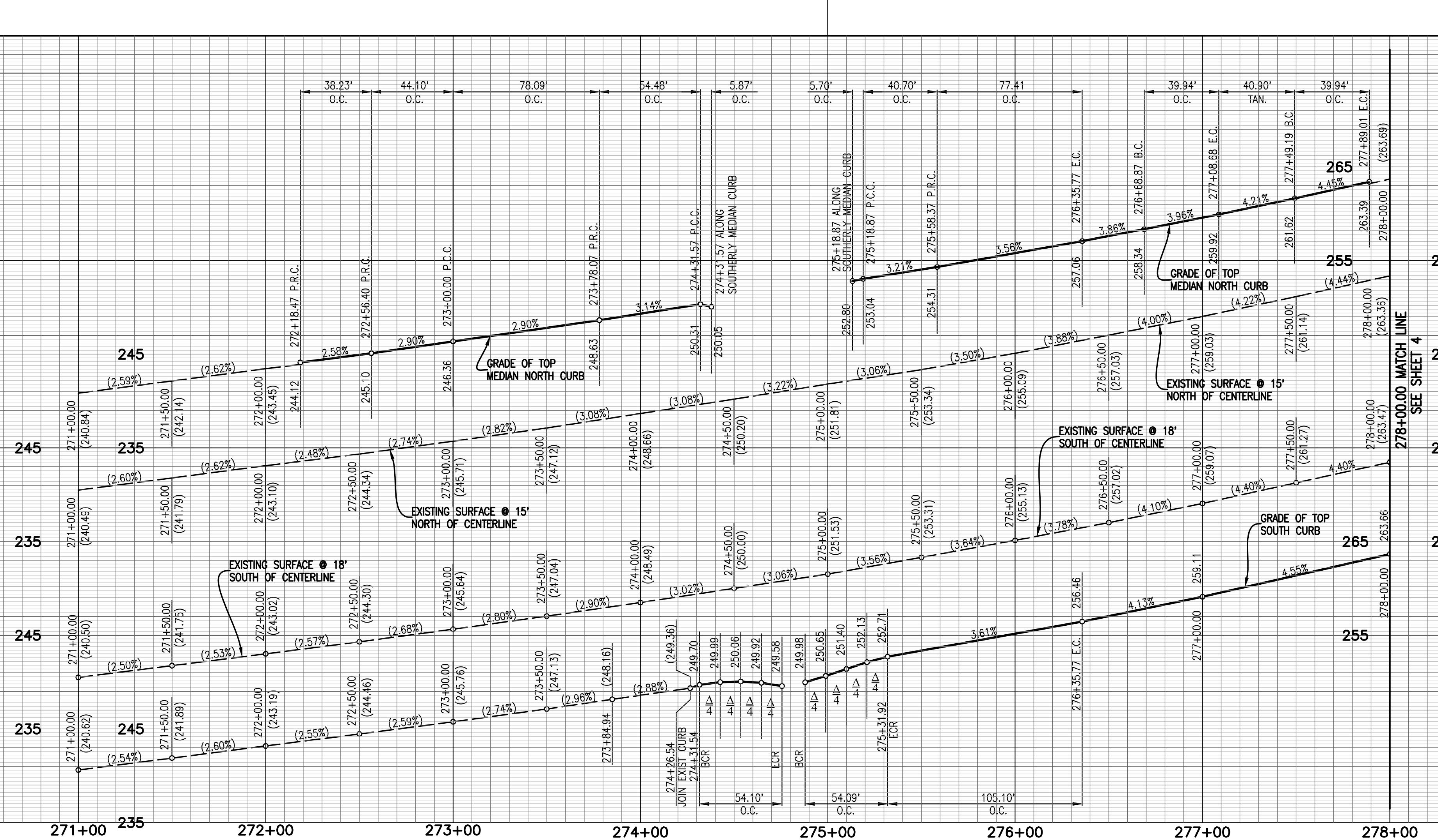
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APPROVED
CITY OF RANCHO PALOS VERDES
Michael Throne, R.C.E. 46469 Exp. 6-30-19
DIRECTOR OF PUBLIC WORKS

NO.	REVISION	REVISED BY	APPROVED BY	DATE
CITY of RANCHO PALOS VERDES				
STREET IMPROVEMENTS PLAN				
CONSTRUCTION NOTES				
TYPICAL SECTION				
TRACT No. 50666		SHEET 2 OF 5		

SCALE: HOR. 1'-40'
VERT. 1'-4"



265

265

255

255

255

255

255

255

255

255

255

255

255

255

255

255

255

CURVE TABLE			
○	DELTA	RADIUS	LENGTH
1	265°4'07"	1993.00'	935.77'
2	275°8'09"	2000.00'	976.31'
3	14°36'07"	150.00'	38.23'
4	16°50'48"	150.00'	44.10'
5	2°14'40"	1993.50'	78.09'
6	11°21'03"	275.00'	54.48'
7	168°05'23"	2.00'	5.87'
8	163°20'21"	2.00'	5.70'
9	153°25'54"	150.00'	40.71'
10	2°13'29"	1993.50'	77.41'
11	75°2'23"	290.65'	39.94'
12	75°2'23"	290.63'	39.94'
13	87°48'47"	35.00'	53.64'
14	88°3'07"	35.00'	54.09'
15	2°59'07"	2023.00'	105.40'

SCALE: 1"-40'

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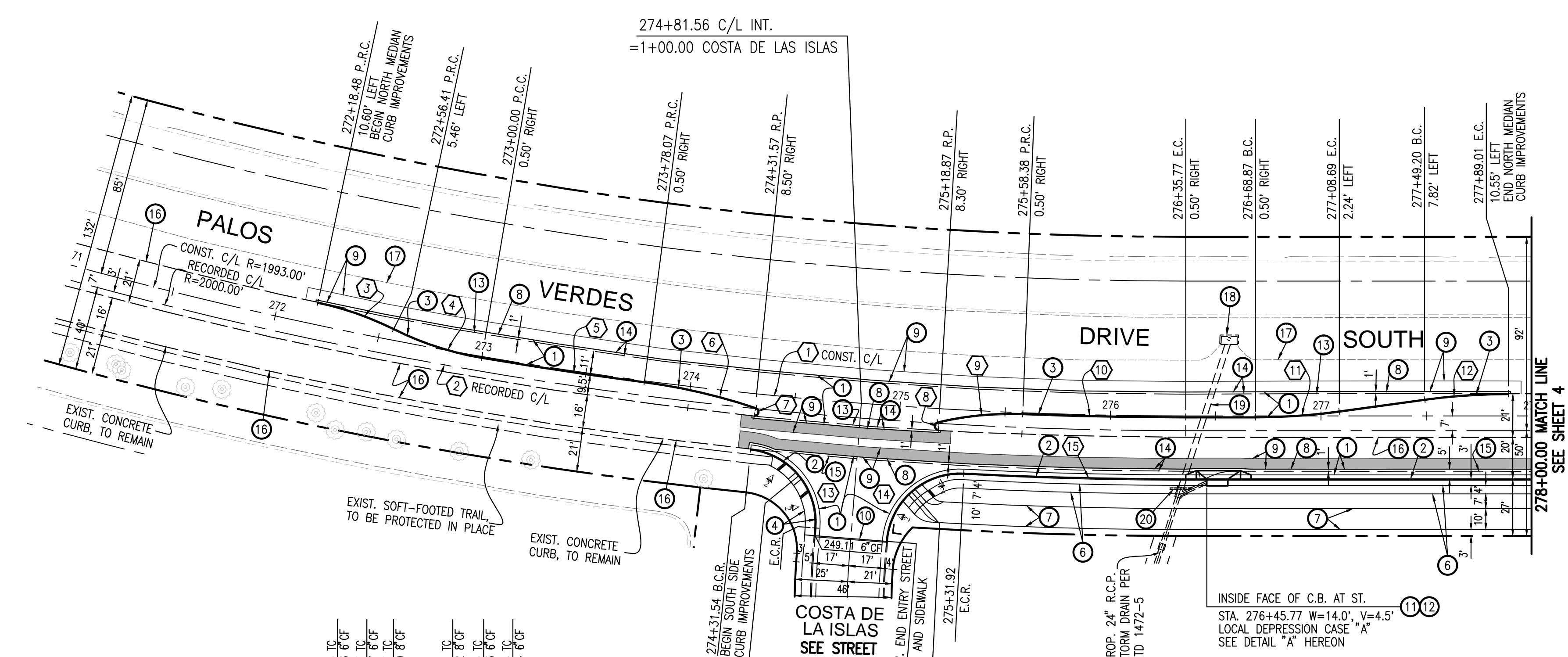
CATCH BASIN DETAIL "A"
SCALE: 1"-20'

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DATE

CASE A, TYPE 6
X=7'-4", Y=5'
MODIFIED FOR ONE
SIDE APPROACH
FROM P.V.D.S.

NO.	REVISION	REVISED BY	APPROVED BY	DATE

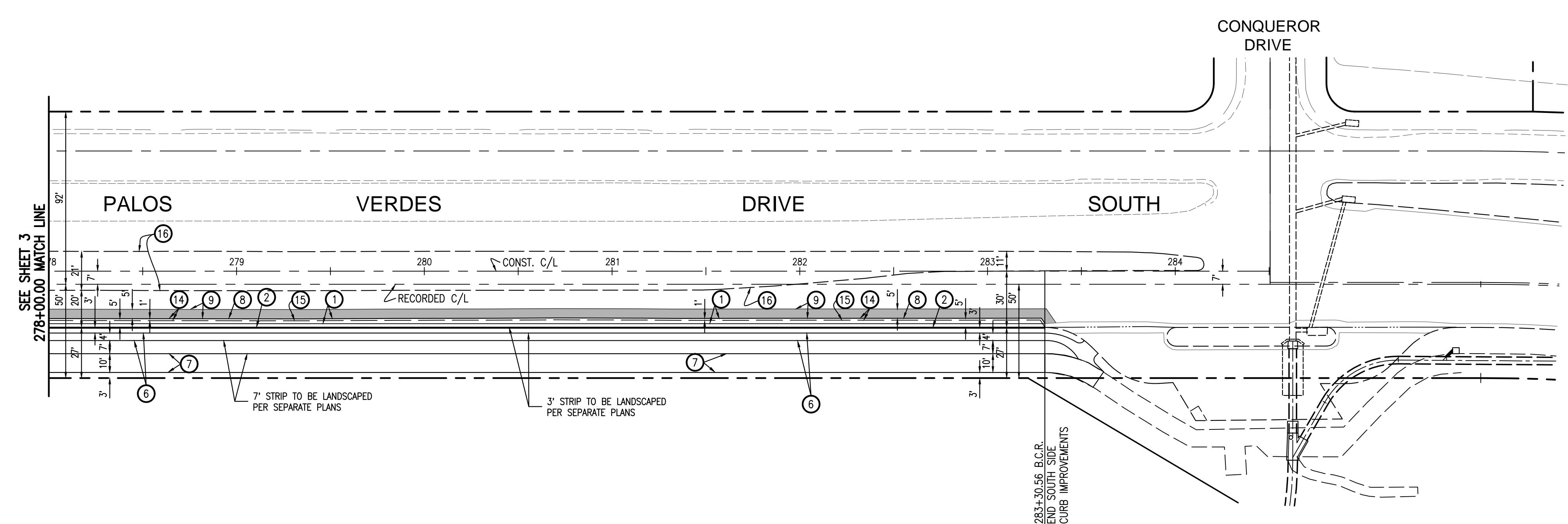
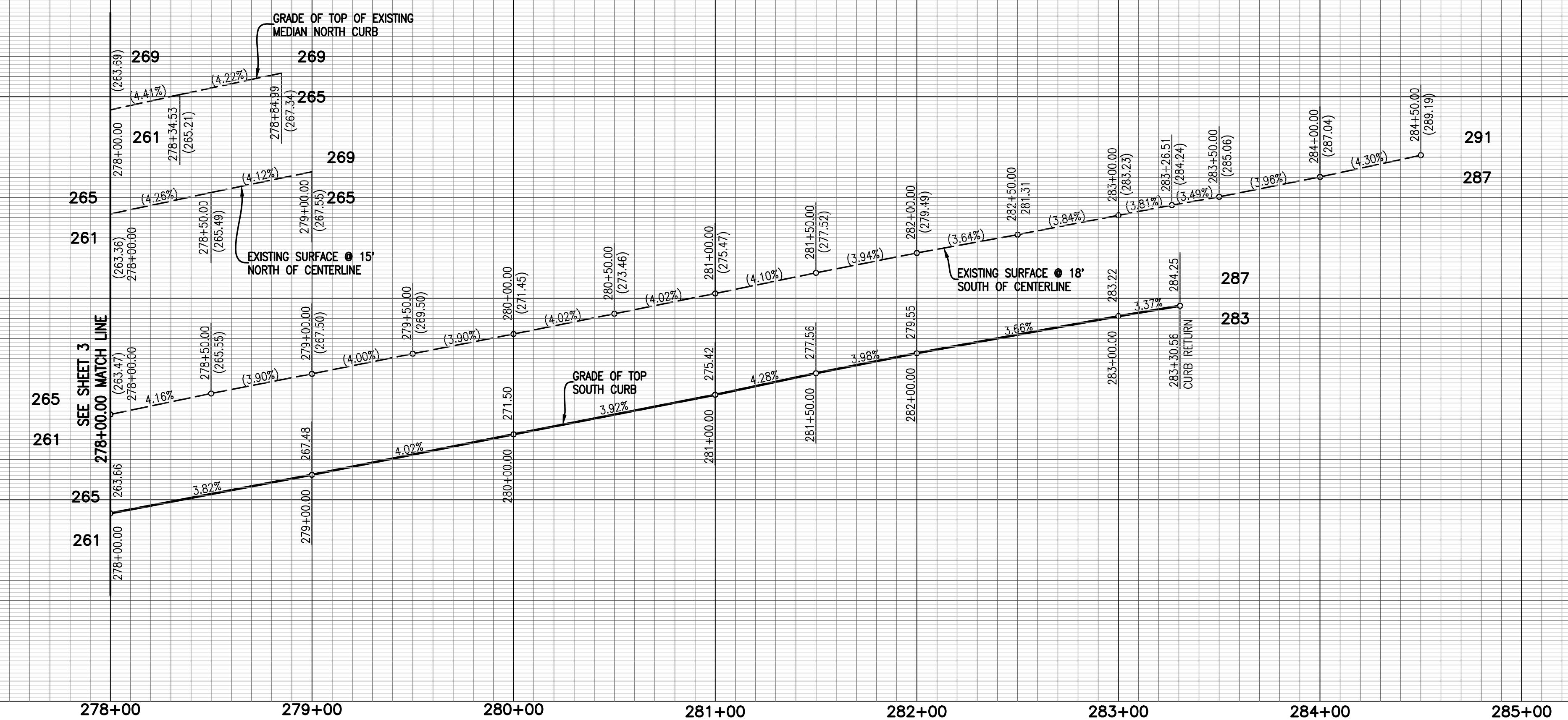
CITY OF RANCHO PALOS VERDES
STREET IMPROVEMENTS PLAN
PLAN AND PROFILE
PALOS VERDES DRIVE SOUTH
FROM STA. 272+18.48 TO STA. 278+00.00
TRACT No. 50666 SHEET 3 OF 5



CONSTRUCTION NOTES

- CONST. 1.5' A.R.H.M. ON 3' A.C. ON 11" CRUSHED MISCELLANEOUS BASE
- CONST. 6" CURB AND 24" GUTTER BARRIER PER CITY STANDARDS
- CONST. CONCRETE CURB PER S.P.P.W.C. STD. PLAN 120-2, A1-150(6)
- CONST. 6" CURB RAMP PER S.P.P.W.C. STD. PLAN 111-3, TYPE PER PLAN.
- CONST. 4' WIDE DECOMPOSED GRANITE WALK, 4" THICK WITH 2"x4" REDWOOD HEADER ON BOTH SIDES
- CONST. 3' A.C. PAVEMENT FOR BIKE TRAIL
- SAW CUT EXISTING A.C. PAVEMENT FOR SQUARE JOIN.
- COLD PLANE 2" MIN, 5" WIDE STRIP MIN. AND OVERLAY WITH 2" MIN. A.C.
- CONST. 6" A.C. CURB PER S.P.P.W.C. STD. PLAN 121-2 TYPE D2-6 (150).
- CONST. LOCAL DEPRESSION PER A.P.W.A. STD. PLAN 313-1, CASE A, H=2", H1=2-1/2"
- PROPOSED CURB OPENING CATCH BASIN PER S.P.P.W.C. STD. PLAN 300-3, W=14', V=4'-6", VU=3'-10", B=3'-8"
- REMOVE EXISTING CURB OR CURB AND GUTTER.
- REMOVE EXISTING A.C. PAVEMENT AND BASE AND PULVERIZE TO 2" OR LESS THEN INCORPORATE IT INTO THE SUBGRADE.
- REMOVE EXISTING A.C. BERM.
- EXISTING CURB AND/OR CURB AND GUTTER TO REMAIN
- EXISTING A.C. BERM TO REMAIN
- EXISTING CATCH BASIN TO REMAIN
- EXISTING 30' R.C.P. TO REMAIN
- EXISTING HEAD WALL TO BE REMOVED PER MTD 1472-5
- EXISTING 4' SOFT-FOOTED TRAIL TO REMAIN

SCALE: HOR. 1'-40'
VERT. 1'-4"



SCALE: 1"-40'

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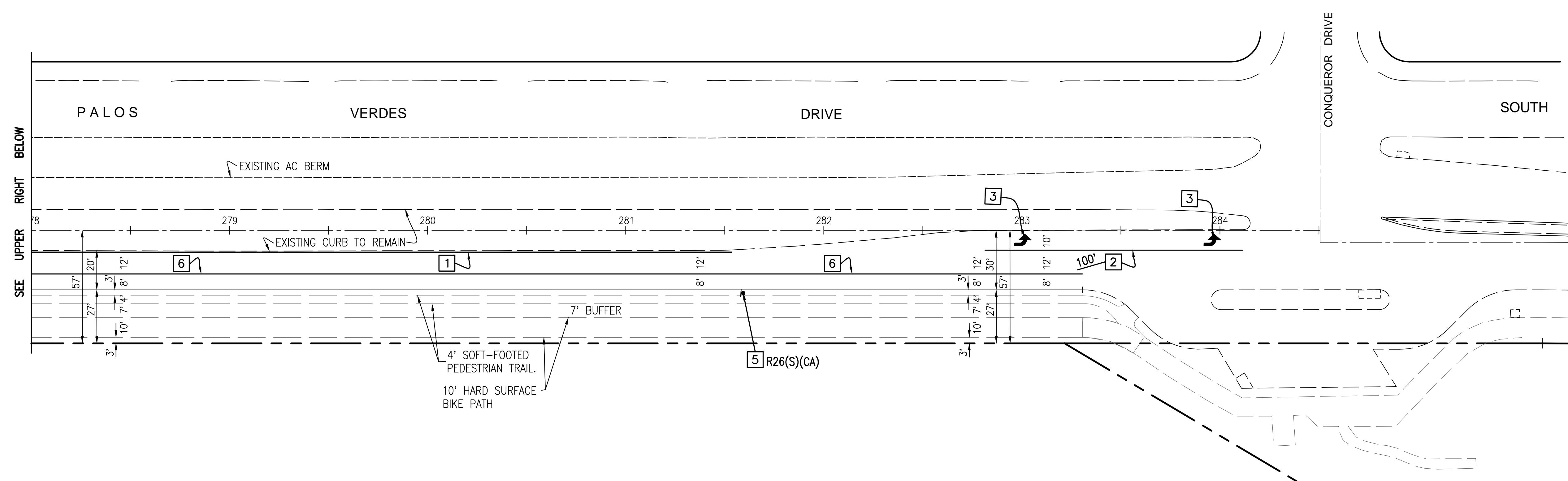
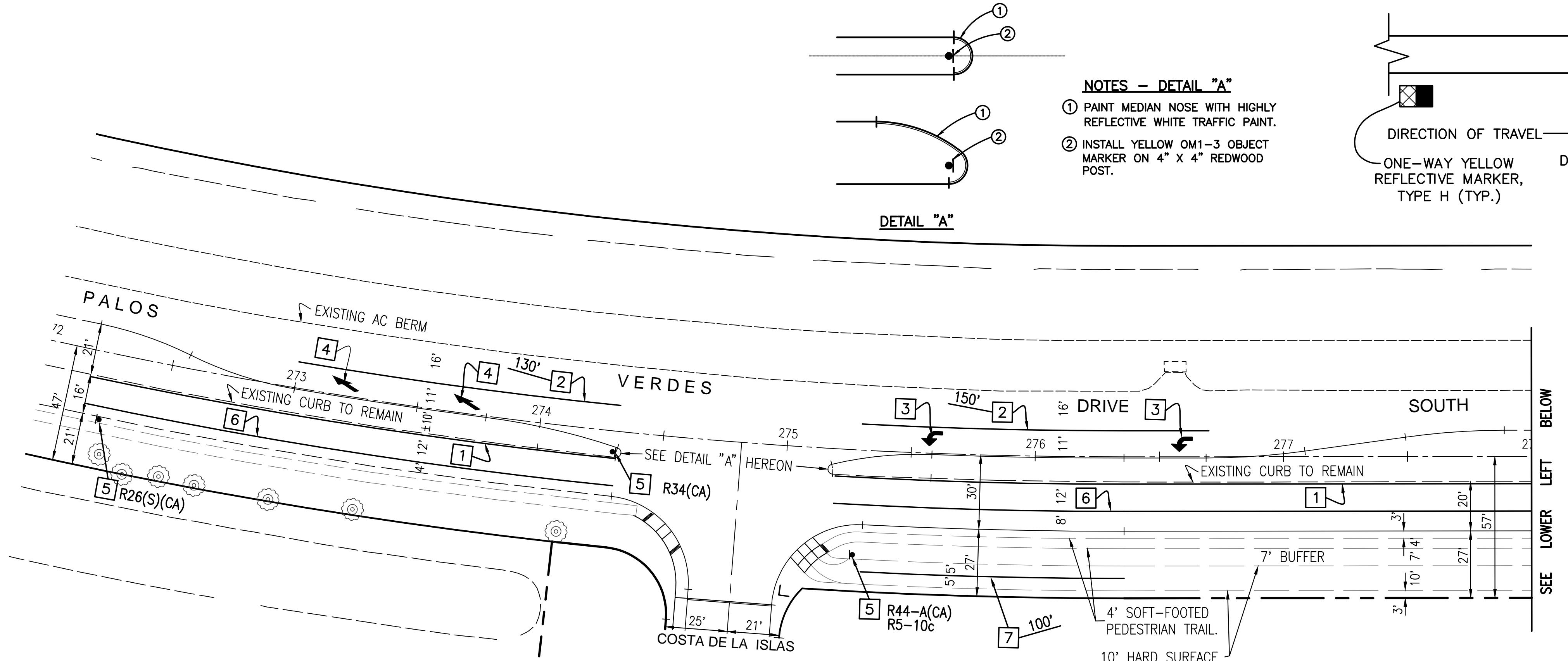
NO.	REVISION	REVISED BY	APPROVED BY	DATE
CITY of RANCHO PALOS VERDES				
STREET IMPROVEMENTS PLAN				
PLAN AND PROFILE				
PALOS VERDES DRIVE SOUTH				
FROM STA. 278+00.00 TO STA. 283+30.56				
TRACT No. 50666		SHEET 4 OF 5		

STRIPING GENERAL NOTES

- TRAFFIC SIGNING AND STRIPING, CONDUIT AND PULL-BOXES SHALL CONFORM TO CALTRANS STANDARD PLANS AND SPECIFICATIONS DATED JULY 1992, CALTRANS MUTCD 2003 CALIFORNIA SUPPLEMENT, AND THESE PLANS.
- INSTALL TWO-WAY BLUE REFLECTIVE MARKERS AT EVERY FIRE HYDRANT.
- REMOVAL OF CONFLICTING STRIPING, LEGENDS AND RAISED PAVEMENT MARKERS SHALL BE BY WET SANDBLASTING.
- ALL NEW SIGN POSTS SHALL BE 4"X4" REDWOOD.
- NEW CROSSWALKS, LIMIT LINES, STOP LEGENDS, AND ANY OTHER PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, EXCEPT THAT THE BIKE LANE LEGENDS AND ARROW SHALL BE PAINT. ALL OTHER STRIPING SHALL BE PAINT.
- ALL NEW STREET NAME SIGNS SHALL BE WESTERN HIGHWAY PRODUCTS TYPE A9, SPECIALLY ADAPTED FOR THE CITY OF RANCHOS PALOS VERDES USE (WITH CITY LOGO APPEARING ON THE SIGN).
- ALL NEW ADVANCED STREET NAME SIGNS SHALL BE WESTERN HIGHWAY PRODUCTS TYPE G7, SPECIALLY ADAPTED FOR THE CITY OF RANCHO PALOS VERDES USE (WITH CITY LOGO APPEARING ON SIGN).
- COORDINATE SIGN LOCATIONS WITH LANDSCAPING PLAN.
- RAISED PAVEMENT MARKERS OR OTHER RAISED BARRIERS SHALL NOT BE USED TO DELINEATE BIKE LANES.

NOTES

- INSTALL DETAIL 26 (MOD) PER DETAIL "B"
- INSTALL 8" PAINTED WHITE / DETAIL 38
- INSTALL THERMOPLASTIC TYPE IV ARROW LEFT
- INSTALL THERMOPLASTIC TYPE VI (R)
- INSTALL SIGN AND POST AS SHOWN (USE STREET LIGHT POLE WHERE AVAILABLE)
- INSTALL 6" PAINTED WHITE / DETAIL 39
- INSTALL 4" PAINTED YELLOW SOLID AS SHOWN



PREPARED BY:  SAWAYA ENGINEERING CONSULTANTS, INC. 642 S. PATHFINDER TRAIL, ANAHEIM, CA 92807 (714) 974-7474 FAX (714) 974-6526 FAX CIVIL ENGINEERING / LAND PLANNING / SURVEYING	CHECKED DESIGNED DRAFTED
--	--------------------------------



SCALE: 1"=30'
30' 15' 0' 30' 60'
GRAPHIC SCALE

APPROVED
CITY OF RANCHO PALOS VERDES
Michael Throne, R.C.E. 46469 Exp. 6-30-19
DIRECTOR OF PUBLIC WORKS
DATE

NO.	REVISION	REVISED BY	APPROVED BY	DATE	CITY of RANCHO PALOS VERDES STREET IMPROVEMENTS PLAN	
SIGNING AND STRIPING PALOS VERDES DRIVE SOUTH						
TRACT No.	50666	SHEET	5	OF	5	