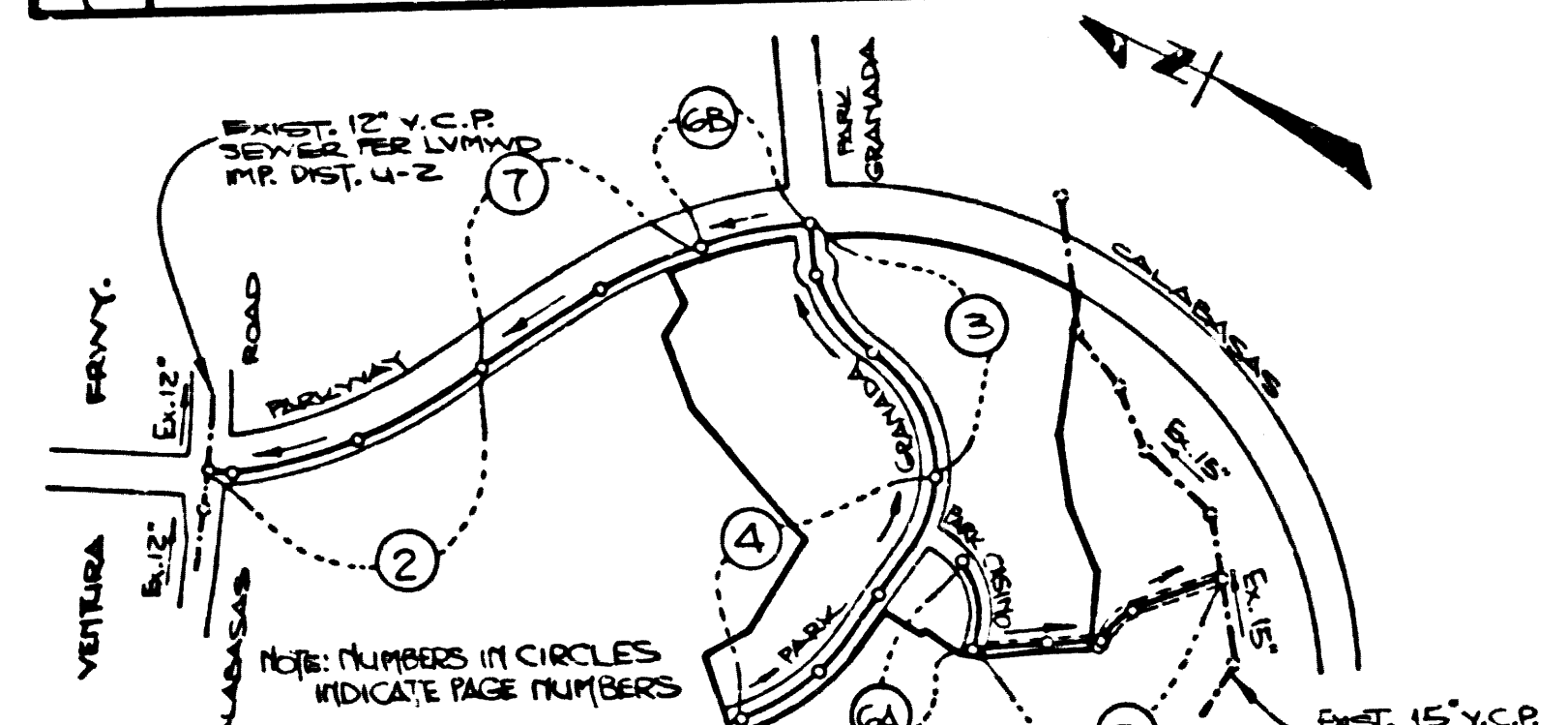


B.M. BY 10013 ELEV. 1027.800
 L.B. RR IN CONC. CB 47 FT S/O
 PARK GRANADA B 45 FT W/O PARKWAY
 CALABASAS
 MALIBU QUAD. 19 72

PAGE	REVISION	APPROVED BY:
3	REVISE STORM DRAIN CROSSINGS & ADD CONC. ENCASUREMENT AT STA. 1435.2	<i>Sandy G. Hald</i>
4	REVISE LATERAL GRADES & CROSSING & ADD CONC. ENCASUREMENT AT STA. 1445 TO 1450	<i>Sandy G. Hald</i>
5	REVISE STORM DRAIN GRADES STA. 124 TO 1445	<i>Sandy G. Hald</i>



INDEX MAP
 TRACT NO. 34015
 P.C. 10437
 SCALE: 1"=600'

PAGE	REVISION	APPROVED BY:
5	REDESIGN VERTICAL CURVES ON MAINLINE FROM 1400 TO 1405	<i>Sandy G. Hald</i>
2	ADJUST MANHOLE LOCATIONS AT STA. 1454.22 & 1400.10	<i>Sandy G. Hald</i>
4	REVISE VERTICAL ALIGNMENT OF MAINLINE SEWER & STORM DRAIN FROM STA. 1415.54 TO 1405.00	<i>Sandy G. Hald</i>

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

The existence and location of any underground utility pipes or structures shown on these plans are obtained by a search of the available records. To the best of our knowledge there are no existing utilities except as shown on these plans. The contractor is required to take due precautionary measures to protect the utility lines shown and any other lines not of record or not shown on these plans. The contractor shall be responsible for notifying "UNDERGROUND SERVICE ALERT" at 1-800-422-4133 two working days prior to any excavation or construction.

Sandy G. Hald
 Registered Engineer R.C.E. No. 19233

GENERAL NOTES CONT'D.

12. ALL REFERENCES ON THIS PLAN TO THE COUNTY ENGINEER, THE ROAD DEPARTMENT, OR THE FLOOD CONTROL DISTRICT SHALL APPLY TO THOSE APPROPRIATE SECTIONS OF THE DEPARTMENT OF PUBLIC WORKS.

CONSTRUCTION NOTES CONT'D.

- FULL COMPLIANCE WITH PART IV OF THE SPECIAL PROVISIONS IS REQUIRED FOR THE INSTALLATION OF A-B-S COMPOSITE PIPE.
- MANHOLE WATER STOP GASKETS AND CLAMPS ARE REQUIRED FOR THE CONNECTION OF A-B-S COMPOSITE PIPE TO MANHOLE STRUCTURES.
- A-B-S SOLID WALL PIPE MUST BE USED FOR WYE AND HOUSE LATERAL CONNECTIONS TO A-B-S COMPOSITE MAINLINE SEWER PIPE.
- A-B-S COMPOSITE PIPE SHALL BE BEDDED IN CONFORMANCE WITH THE TABLE IN SECTION B-3.1. OF PART IV OF THE SPECIAL PROVISIONS.
- THREE DEGREE DEFLECTION COUPLERS ARE REQUIRED FOR RADIUS OF CURVATURE LESS THAN 380 FEET WHEN USING "A-B-S" COMPOSITE PIPE.
- NO CONNECTIONS FOR DISPOSAL OF INDUSTRIAL WASTE IS ALLOWED IF A-B-S COMPOSITE PIPE IS USED.
- SEWER LINE CURVATURE SHALL NOT BE ACHIEVED BY PULLING OF JOINTS OR BEVELING PIPE ENDS WHEN USING PLASTIC PIPE INCLUDING A-B-S COMPOSITE PIPE.
- ALL WYE AND/OR HOUSE LATERALS ARE TO BE LOCATED AT LEAST FIVE FEET APART & WHEN POSSIBLE NOT CLOSER THAN FIVE FEET TO ANY MANHOLE.
- A-B-S SOLID WALL PIPE IS NOT ACCEPTABLE FOR USE AS MAINLINE SEWER.
- ONLY WYE BRANCHES ARE TO BE USED FOR CONNECTION TO A-B-S COMPOSITE MAINLINE SEWER PIPE.
- TESTING PER LAS VIRGENES MUNICIPAL WATER DISTRICT

A. INFILTRATION & LEAKAGE TESTS: METHOD USED FOR TESTING WILL BE THE SAME AS L.A. COUNTY EXCEPT THE FORMULA TO BE USED IS AS FOLLOWS:	0.033 GALLONS/MINUTE/INCH OF DIAMETER/1,000 FEET OF DIAMETER/MILE										
B. MANHOLE LEAKAGE TESTS: AT THE DISCRETION OF THE DISTRICT'S REPRESENTATIVE, ONE MANHOLE OUT OF EVERY TEN MANHOLES AND A MINIMUM OF TWO WILL BE FILLED WITH WATER & AFTER THREE HOURS WILL BE CHECKED FOR LEAKAGE WITH NO DROP IN LEVEL. FOR EVERY ONE MANHOLE NOT PASSING TESTS: FIVE MORE WILL BE TESTED AT THE DISCRETION OF THE DISTRICT'S REPRESENTATIVE.	250 GALLONS/DAY/INCH OF DIAMETER/MILE										
C. AIR TESTING: WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE INVERT OF THE UPPER STRUCTURE & THE INVERT OF THE LOWER STRUCTURE IS MORE THAN SIX (6) FEET, AN AIR TEST WILL BE MADE. THE TIME TAKEN TO LOSE ONE (1) POUND PER SQUARE INCH GAUGE PRESSURE FROM THREE (3) POUNDS PER SQUARE INCH GAUGE PRESSURE TO TWO (2) POUNDS PER SQUARE INCH GAUGE PRESSURE SHALL NOT BE LESS THAN TIMES SHOWN ON THE FOLLOWING TABLE:	<table border="1"> <tr> <th>MAIN PIPE DIAMETER</th> <th>MINIMUM TIME LOSS</th> </tr> <tr> <td>8" - 14"</td> <td>3 MINUTES</td> </tr> <tr> <td>15" - 20"</td> <td>3 MINUTES</td> </tr> <tr> <td>21" - 30"</td> <td>3 MINUTES</td> </tr> <tr> <td>31" - 36"</td> <td>4 MINUTES</td> </tr> </table>	MAIN PIPE DIAMETER	MINIMUM TIME LOSS	8" - 14"	3 MINUTES	15" - 20"	3 MINUTES	21" - 30"	3 MINUTES	31" - 36"	4 MINUTES
MAIN PIPE DIAMETER	MINIMUM TIME LOSS										
8" - 14"	3 MINUTES										
15" - 20"	3 MINUTES										
21" - 30"	3 MINUTES										
31" - 36"	4 MINUTES										

IF THE TIME IS LESS THAN LISTED IN THE TABLE ABOVE, THE CONTRACTOR SHALL MAKE SUCH REPAIRS AS ARE NECESSARY TO ELIMINATE THE EXCESSIVE LEAKAGE.

* NOTE NO. 26 APPLIES ONLY TO SEWERS OWNED, OPERATED AND MAINTAINED BY L.V.M.W.D.

GENERAL NOTES:

- ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
- NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE DEPT. OF PUBLIC WORKS.
- NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
- GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES AT ALL POINTS BY THREE CURVES CENTER LINE OF STREETS OR CENTER LINE OF ALLEYS ARE SHOWN BY CIRCLES ON PROFILES AT ALL POINTS BY THREE DESIGNATED POINTS THE GRADE SHALL BE ESTABLISHED SO AS TO CONFORM TO A STRAIGHT LINE DRAWN BETWEEN SAID DESIGNATED POINTS.
- THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "ON" TIE BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. ALL HOUSE LATERALS SHALL BE CONSTRUCTED AS A STRAIGHT ALIGNMENT AT RIGHT ANGLES FROM THE MAIN LINE SEWER EXCEPT AS SHOWN ON THE PLANS. HOUSE LATERALS FROM CHIMNEYS SHALL NOT HAVE AN ANGLE OF LESS THAN 45° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
- THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
- BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE L.A. COUNTY ROAD DEPT. DISTRICT OFFICE NO. 3 AND PAY A FEE TO THE COUNTY ENGINEER 550 S. VERMONT AVENUE, LOS ANGELES, CA 90005 TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
- IF WORK IS TO BE DONE IN A STATE HIGHWAY A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.
- APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
- REFER TO SECTION 7.10.41 OF THE STANDARD SPECIFICATIONS REGARDING SAFETY ORDERS.
- BEFORE THE ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT THE CONTRACTOR SHALL OBTAIN AND FILE WITH THE COUNTY ENGINEER COPIES OF A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE LOS ANGELES COUNTY ROAD DEPARTMENT. A PERMIT FOR EXCAVATIONS AND TRENCHES FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY AND CERTIFICATE OF WORKERS COMPENSATION INSURANCE WITH THE DEPARTMENT OF COUNTY ENGINEER, 550 SOUTH VERMONT, RM. 408, LOS ANGELES, CALIFORNIA 90005, NAMED AS THE CERTIFICATE HOLDER TO BE NOTIFIED 30 DAYS PRIOR TO CANCELLATION OF POLICY.

CONSTRUCTION NOTES:

- WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1985 EDITION) SEPT. 21, 1976 AND COUNTY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED SEPT. 21, 1976 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIV. PUBLIC WORKS DEPT. TEL. (213) 226-8261 AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
- HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE & FEET BELOW CURB GRADE EXCEPT AS NOTED.
- WYE OR TIE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
- WIRE BRANCHES ONLY MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS IF A.B.S.P. IS USED.
- ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S-1 OR PRECAST CONCRETE MANHOLES PER S-2 EXCEPT AS NOTED.
- PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
- MANHOLE TOPS IN UNIMPROVED RIGHTS OF WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
- WITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "D" OR "E" PER STANDARD SPECIFICATIONS SECTION 208-2.
- IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED PER S-23 CASE B TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
- IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23 CASE B UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER.
- ALL JOINTS BETWEEN CAST IRON PIPE AND WITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "C" OR "D".
- WITH RESPECT TO NECESSARY PER STANDARD SPECIFICATIONS SECTION 208-2 SHALL BE MADE WITH APPROVED FITTINGS.
- ALL JOINTS BETWEEN IRON PIPE AND WITRIFIED CLAY PIPE SHALL BE MADE WITH APPROVED FITTINGS.
- SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 208-2 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
- FULL COMPLIANCE WITH SECTION 208-3.5 OF THE SPECIAL PROVISIONS WILL BE REQUIRED FOR BACKFILL IN STREETS. CERTIFICATION OF BACKFILL COMPACTION AND SAND EQUIVALENTS BY A QUALIFIED, REGISTERED TESTING LABORATORY SHALL BE PROVIDED BY THE PERMITTEE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.
- SPECIAL BACKFILL IN EASEMENT CONSTRUCTION: (A) BACKFILL TRENCH AND REPLACE OTHER EARTH SO AS TO ACHIEVE THE NATURAL OR FINISHED GRADE AND SLOPES SHOWN ON THE GRADING PLAN APPROVED FOR THIS SERVICE BY THE BUILDING AND SAFETY DIVISION; (B) ALL BACKFILL AND EARTH REPLACEMENT SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY PER A.S.T.M. METHOD OF TEST D1557 AS MODIFIED ACCEPTABLE CERTIFICATION OF SUCH COMPACTION SHALL BE SUBMITTED TO THE CONSTRUCTION DIV. - PUBLIC WORKS DEPT.

SANITARY SEWERS

TO BE CONSTRUCTED IN

TRACT NO. 34015

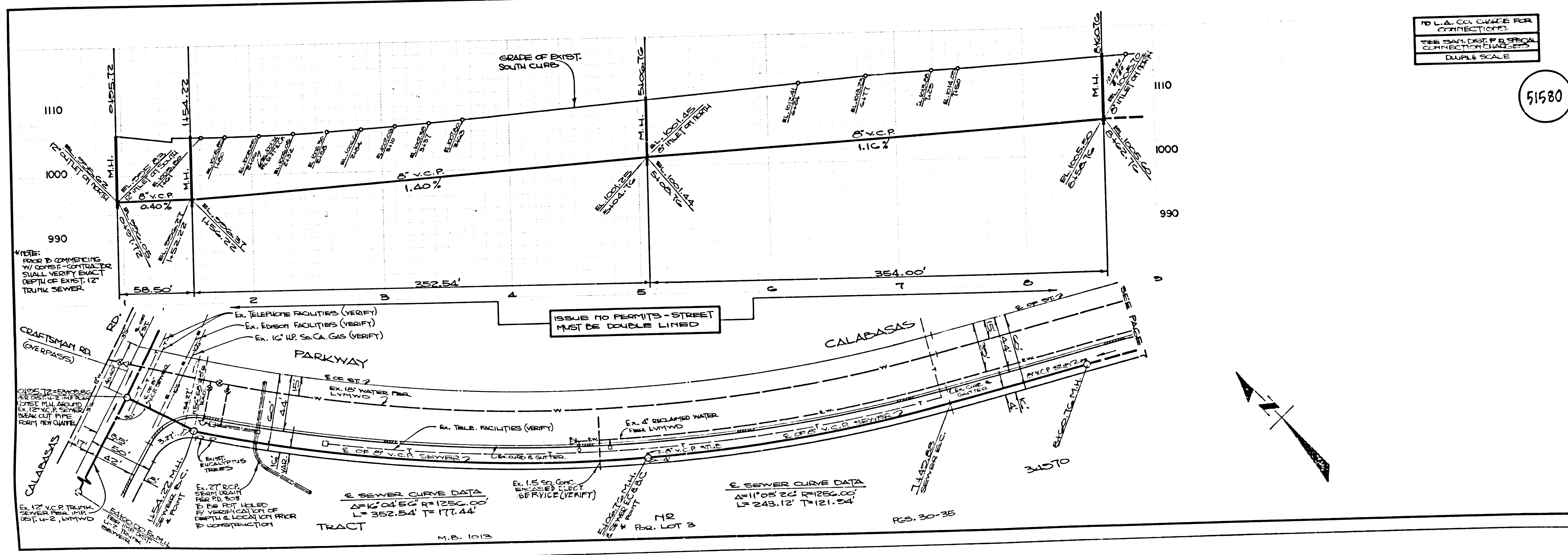
PRIVATE CONTRACT NO. 10437

C-233; A-B
 4 SHEETS, 7 PAGES
 SCALE: VERT. 1"=8'
 HORIZ. 1"=40'
 OCTOBER, 1985
 PREPARED IN THE OFFICES OF
LIND & HILLERUD, INC.
 2055 HUNTINGTON DRIVE
 SAN MATEO, CA 94068
 BY: *Sandy G. Hald*
 JOHN M. SARRACINO
 REG. C.E. NO. 19233

THE FOLLOWING LATEST REVISED STANDARD PLANS OR FILE IN THE OFFICE OF THE DEPARTMENT OF PUBLIC WORKS SHALL APPLY TO THE CONSTRUCTION OF THIS PROJECT:

LEGEND	5-1
MINIMUM PUBLIC SAFETY REQUIREMENTS	5-2
BRICK MANHOLE	5-3
STANDARD MANHOLE STOP	5-4
BEDDING FOR SEWER PIPE	5-5
CRACKING AND ENCASEMENT	5-6
WYE OR TIE BRANCH	5-7
ALLOWABLE TRENCH WIDTHS	5-8
LOCKING MANHOLE FRAME AND COVER	5-9
NON-REINFORCED PRECAST CONCRETE MANHOLE	5-10
APPROVED BACKFILL	5-11
MINIMUM PROTECTION FOR STREET SLOPES	5-12

COUNTY OF LOS ANGELES, CALIFORNIA
 LAS VIRGENES MUNICIPAL WATER DISTRICT
 THOMAS A. TIDEMANSON, DIRECTOR, DEPARTMENT OF PUBLIC WORKS
 APPROVED: *Sandy G. Hald* 10/14/85
 N.W. STOKES, CHIEF ENGINEER
 CALABASAS 9100, DIST. 91



SEWER CURVE DATA

ΔH 1105.25 FT (280.00')
L = 352.54' FT (177.44')

NO L.A. CO. CHECK FOR CONNECTIONS
 YES MANY DIST. P.B. SPECIAL CONNECTION CHECKS
 DOUBLE SCALE

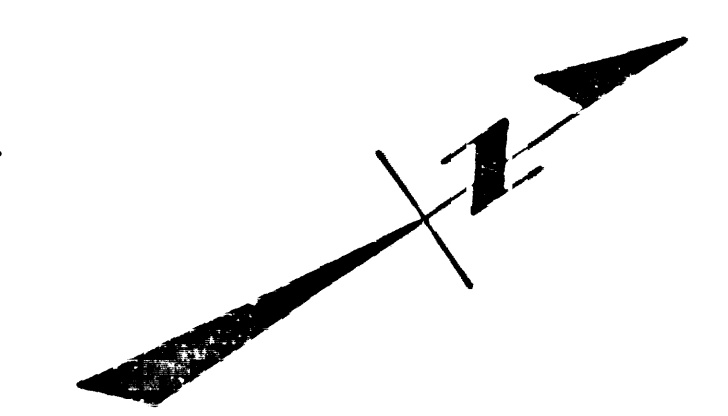
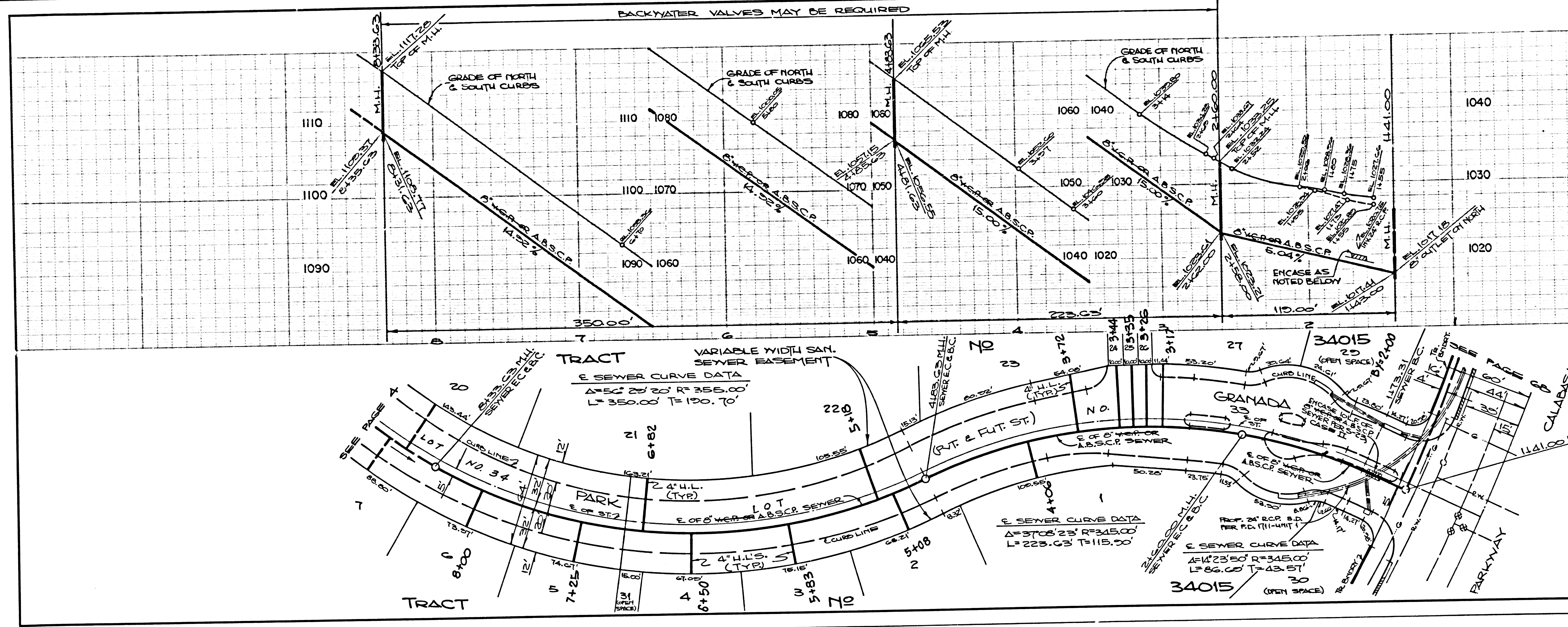
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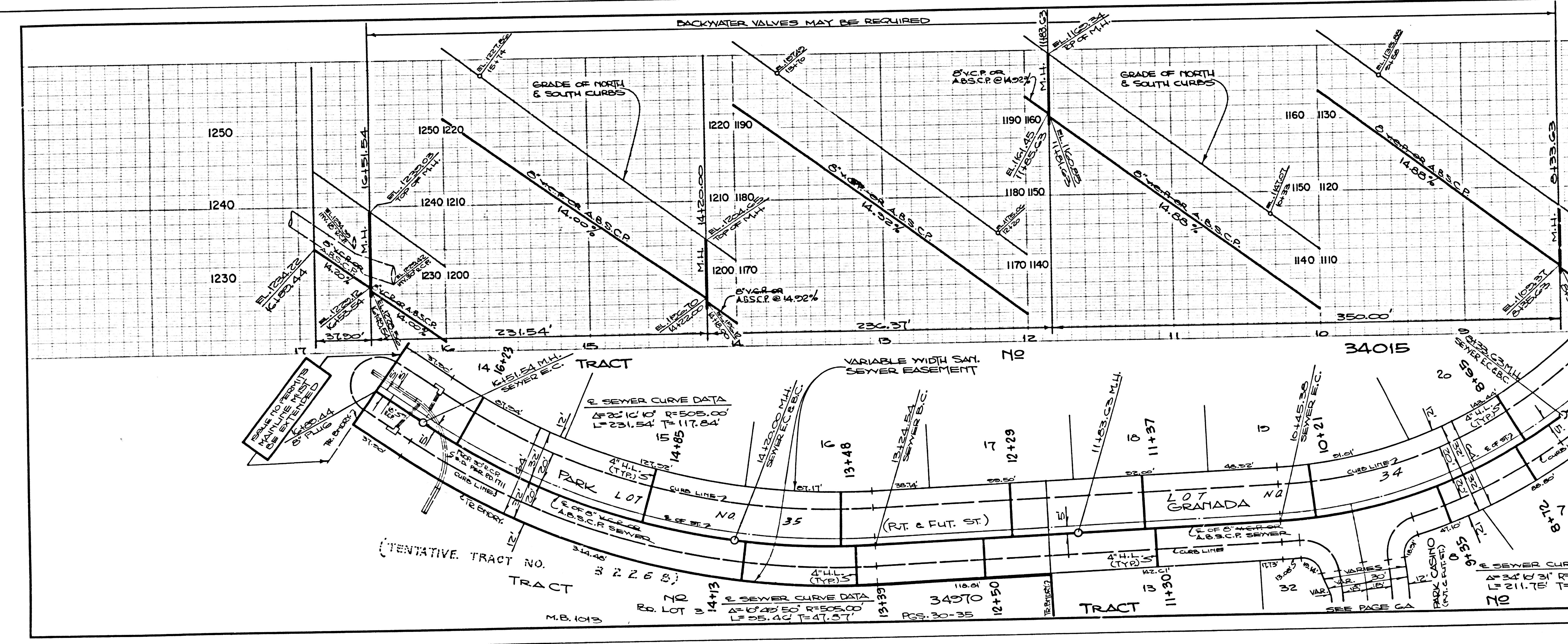
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DOUBLE SCALE

51581



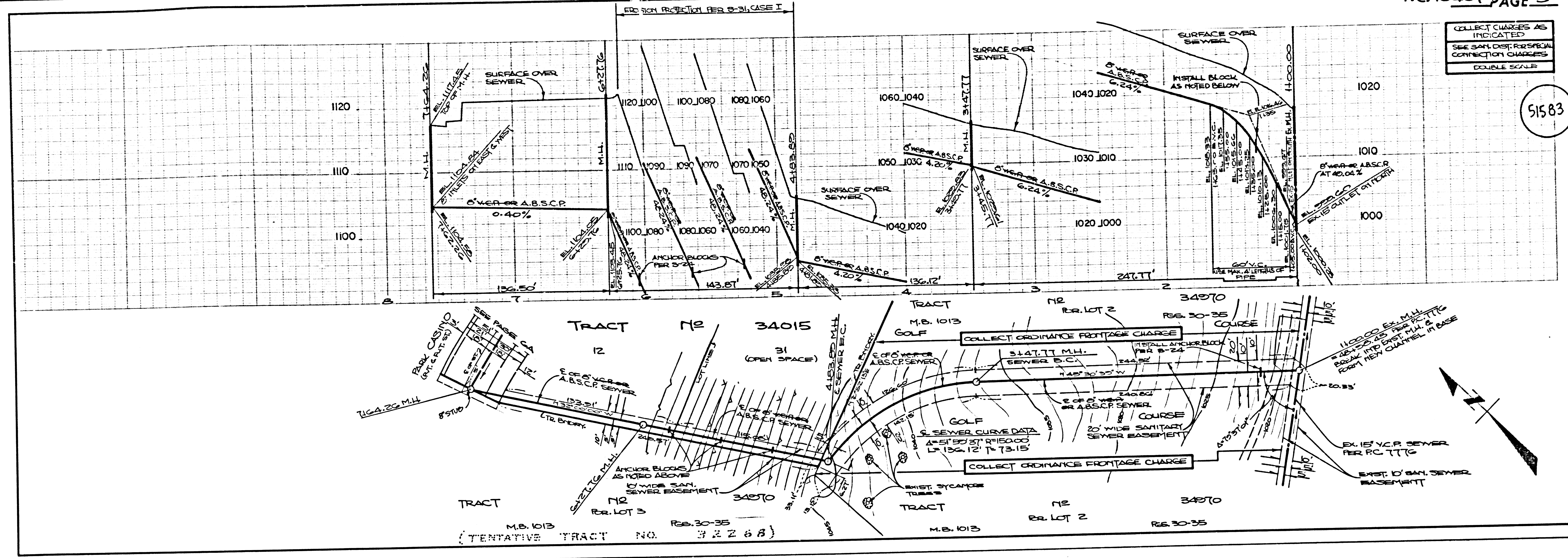
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DOUBLE SCALE

51582



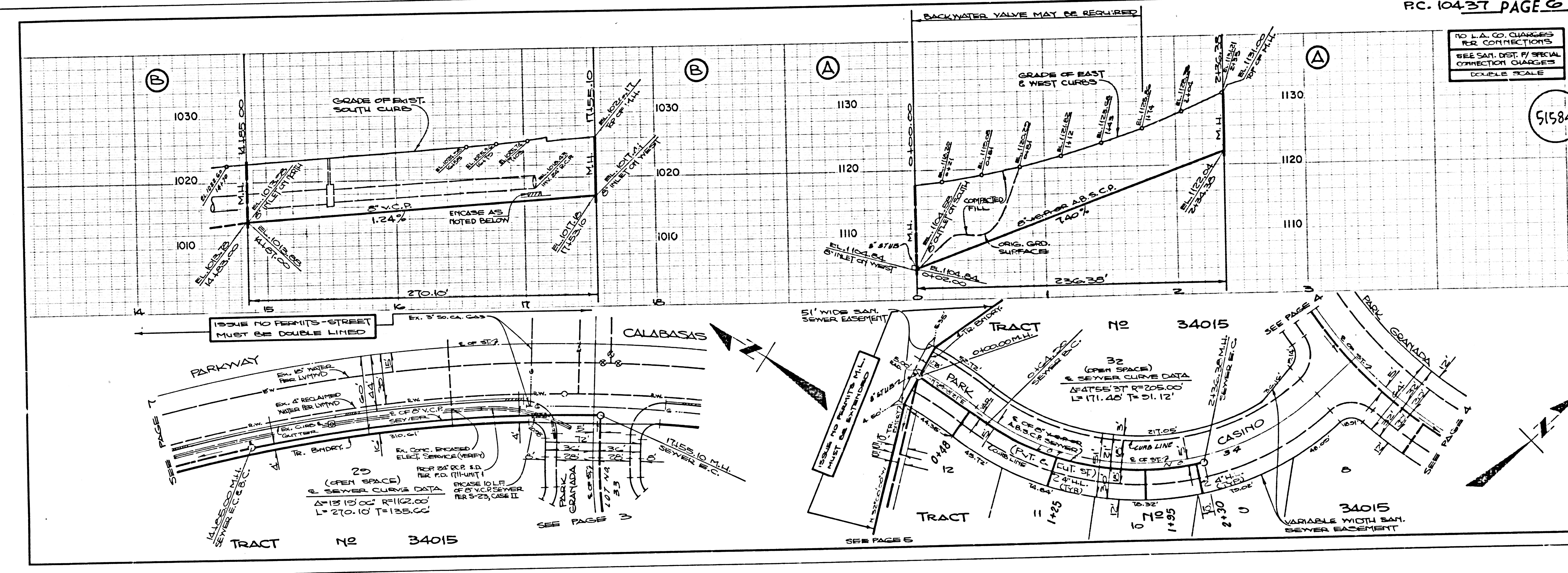
COLLECT CHARGES AS INDICATED
SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES
DOUBLE SCALE

51583



NO L.A. CO. CHARGES FOR CONNECTIONS
SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES
DOUBLE SCALE

51584



NO L.A. CO. CHARGES FOR CONNECTIONS SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES DOUBLE SCALE

51585

