

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	COLORADO	S 0075 (2)	1	

COLORADO DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED STATE PROJECT NO. S0075(2) STATE HIGHWAY NO. 95 DENVER & JEFFERSON COUNTIES

CONVENTIONAL SIGNS

CENTER LINE	PLAN SHEET	TITLE SHEET
RIGHT OF WAY LINE	R.O.W. MARKER	
COUNTY LINE		
TOWNSHIP OR RANGE LINE	SECTION LINE	1/4 SECTION LINE
LAND LINES	1/8 SECTION LINE	1/16 SECTION LINE
RAILROAD	TITLE SHEET	PLAN SHEET
BARBED WIRE FENCE		
COMBINATION WIRE FENCE		
SNOW FENCE		
TELEPHONE & TELEGRAPH LINES		
POWER LINE		
PRESENT ROAD (Plan Sheets)		

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	SKETCH MAP, TITLE PAGE AND TABULATION OF LENGTH AND DESIGN
2	TYPICAL SECTION
3	SURFACING AND SUB-BASE MATERIAL PLAN AND SUMMARY OF APPROXIMATE QUANTITIES
4	LIST OF STRUCTURES
5	STANDARD SIDE APPROACH ROADS, FLARING, CUT SLOPE TREATMENT & WIDENING AT BRIDGES & AT CREST OF GRADES
6	STANDARD MARKER POSTS AND BENCH MARKS
7 & 8	STANDARD ROADWAY CONSTRUCTION TRAFFIC SIGNS (2 SHEETS)
9 - 14	ALIGNMENT PLAN AND PROFILE SHEETS
15	SUMMARY OF EARTHWORK QUANTITIES
16 - 44	CROSS SECTIONS

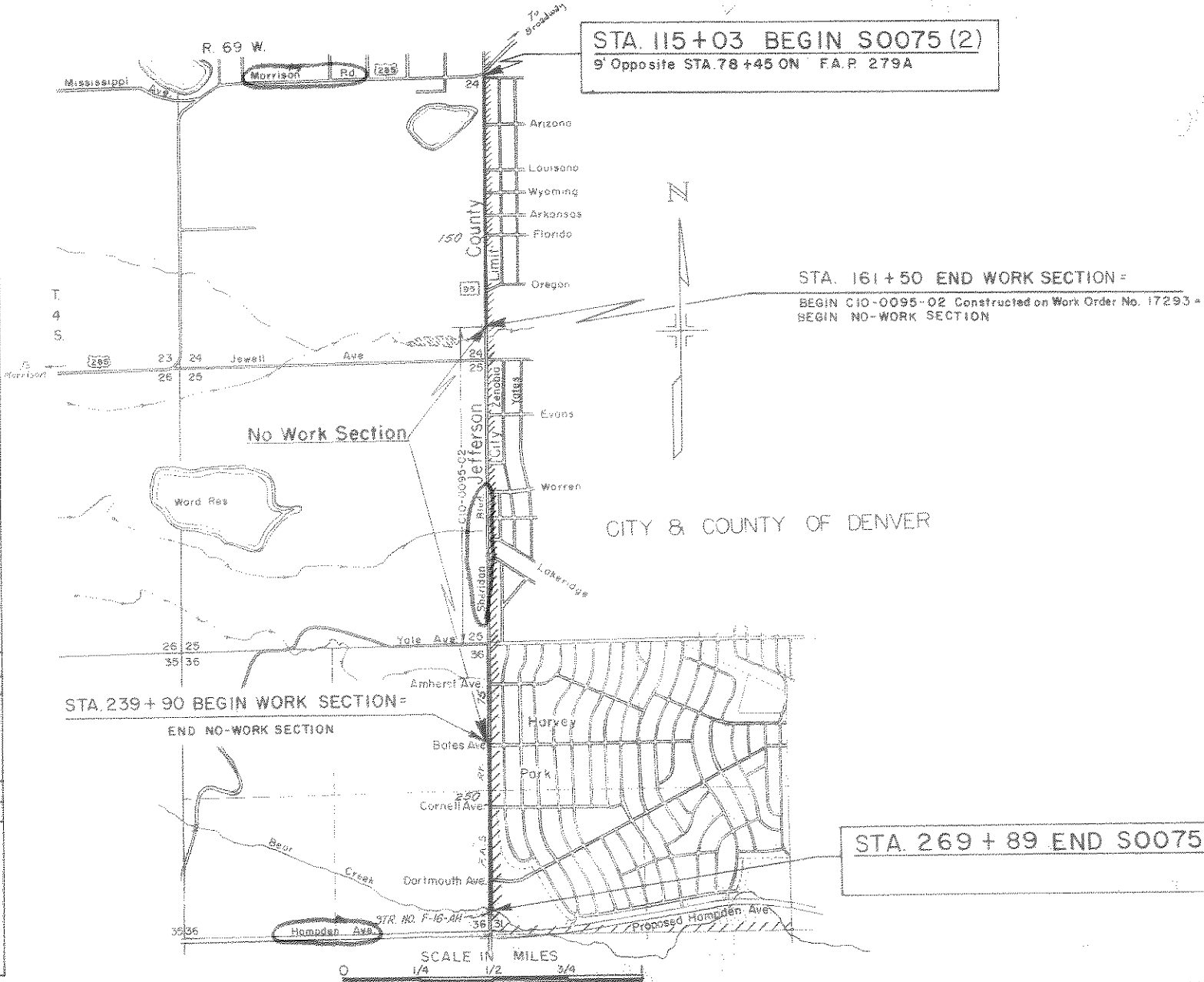
M-2-EM
M-7-C
M-29-B

SCALES OF ORIGINAL DRAWINGS

ON PLAN	1 IN. = 50 FT.
ON PROFILE	1 IN. = 50 FT. HORIZONTAL 1 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD	
GROSS LENGTH OF PROJECT	15,508.0 FT. = 2.937 MI.
NET LENGTH OF PROJECT	7,668.0 FT. = 1.452 MI.

TABULATION OF LENGTH AND DESIGN DATA

STATION	NO-WORK SECTION	24'-FT. ROADWAY	34'-FT. ROADWAY	44'-FT. ROADWAY	
	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	
115+03 BEGIN S 0075(2) 9' OPPOSITE STA 78+45 ON F.A.P. 279 A		660.0			
121+63			692.0		
126+55				289.0	
131+44		1,034.0			
141+75			1,082.0		
160+50 C.B.M. = 150+00 160+36 C.B.M.			112.0		
161+50 END WORK SECTION = STA 161+50 BEGIN C 10-0095-02 CONSTRUCTED ON WORK ORDER NO. 17293 = BEGIN NO-WORK SECTION	5,938.3				
220+66.3 = STA 220+66.3 END C 10-0095-02	1,901.7				
239+90 BEGIN WORK SECTION = END NO-WORK SECTION					
250+50		1,939.0			
269+89 END S 0075(2)					
TOTALS	7,646.0	3,633.0	3,746.0	289.0	
SUMMARY					
TOTAL S 0075(2) 24' ROADWAY					3,633.0 C 688
TOTAL S 0075(2) 34' ROADWAY					3,746.0 C 709
TOTAL S 0075(2) 44' ROADWAY					289.0 C 055
TOTAL NO-WORK SECTION					7,646.0 C 1485
NET LENGTH S 0075(2)					7,668.0 C 1.452
GROSS LENGTH S 0075(2)					15,508.0 C 2.937
DESIGN DATA					
MAXIMUM GRADE					-0.80%
MAXIMUM DEGREE OF CURVE					NONE
MINIMUM N.P.S.D. - HORIZONTAL					>1300'
MINIMUM N.P.S.D. - VERTICAL					425'
MAXIMUM DESIGN SPEED					35 MPH



NOTED BY BIDDERS
IT IS RECOMMENDED THAT BIDDERS ON THIS PROJECT GO
OVER THE PLAN DETAILS WITH ONE OF THE FOLLOWING FIELD
REPRESENTATIVES OF THE DEPARTMENT
Mr. F. D. Stearns - Constr. Engr. - Denver, Colo.
Mr. R. W. Pottor - Project Engr. - Denver, Colo.
Home Phone SU 1-0791

COLORADO
DEPARTMENT OF HIGHWAYS
10-11-56
DATE

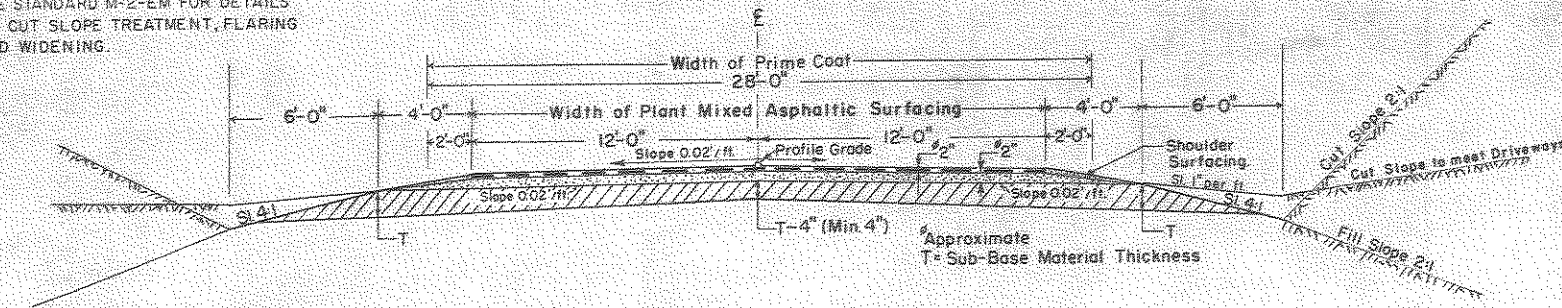
TYPICAL CROSS SECTION OF IMPROVEMENT

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S0075 (2)	2	

TYPICAL SECTION - 24' ROADWAY

STA. 115+03 TO STA. 121+63
STA. 131+44 TO STA. 141+78
STA. 250+50 TO STA. 269+89

NOTE:
SEE STANDARD M-2-EM FOR DETAILS
OF CUT SLOPE TREATMENT, FLARING
AND WIDENING.



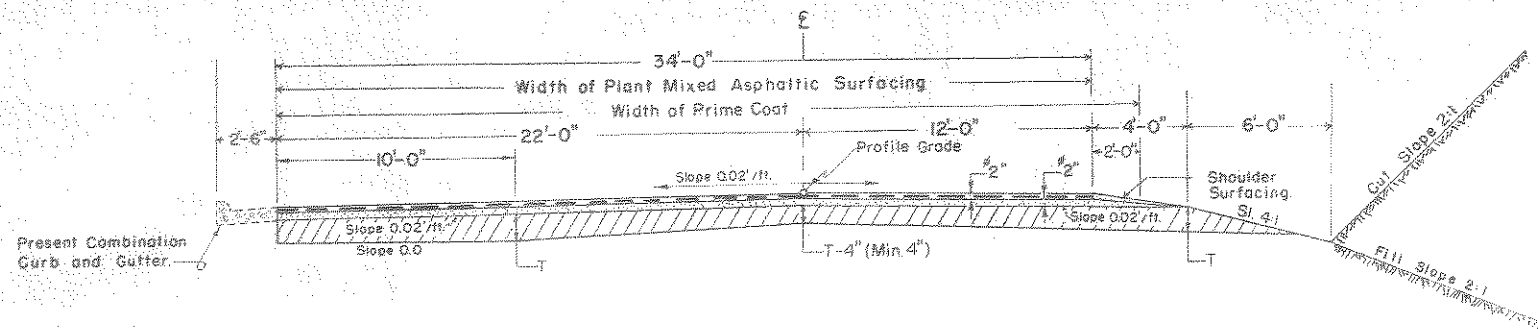
EXCAVATION OR BORROW BELOW 4:1 SLOPE AND/OR 10:1 SLOPE
WILL NOT BE PERMITTED.

THE DEPTH AND WIDTH OF THE SIDE DITCH
SHALL BE VARIED WHERE NECESSARY IN
ORDER TO PROVIDE PROPER DRAINAGE AND/OR
ENTRANCE TO DRAINAGE STRUCTURES.

NOTE:
SHOULDER SLOPE 1" PER FT. TO
BE USED STA. 115+ TO 121+

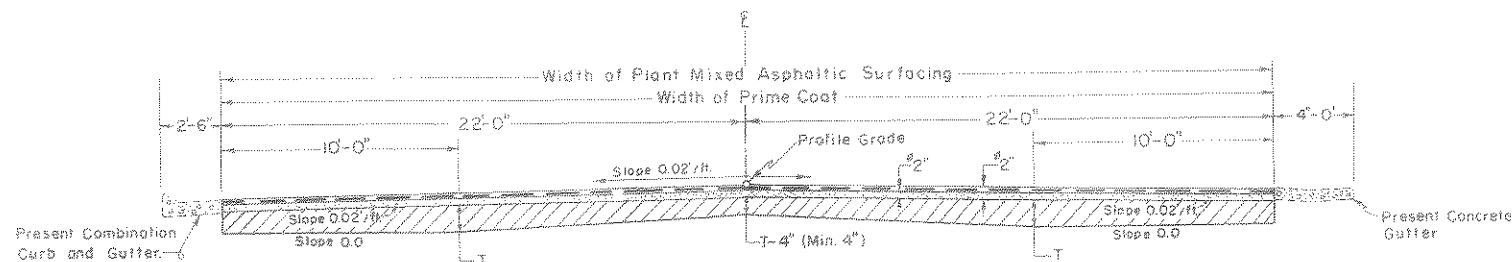
TYPICAL SECTION - 34' ROADWAY

STA. 121+63 TO STA. 128+55
STA. 141+78 TO STA. 161+50
STA. 239+90 TO STA. 250+50



TYPICAL SECTION - 44' ROADWAY

STA. 128+55 TO STA. 131+44



MATERIAL ABOVE THE SUBGRADE IS TO BE CONSTRUCTED OF SUB-BASE
MATERIAL AT LOCATIONS DESIGNATED IN SUB-BASE MATERIAL TABULATION.
ESTIMATED QUANTITIES INVOLVED IN THIS OPERATION AND THICKNESS OF
MATERIAL REQUIRED ARE TABULATED IN THE SUB-BASE MATERIAL PLAN.

APPROXIMATE 4" COMPACTED THICKNESS OF GRAVEL OR CRUSHED ROCK
SURFACING SHALL BE PLACED IN SEPARATE COURSES AT THE FOLLOWING RATES PER
100 LIN. FT. OF ROADWAY:

	24' ROADWAY	34' ROADWAY	44' ROADWAY
PLANT MIX (INCLUDES ASPHALT)	28	40	52
BOTTOM COURSE	32	40	49
SURFACING FOR SHOULDER AREAS	5	3	

GENERAL NOTES

THIS PROJECT IS TO BE CONSTRUCTED IN CONFORMITY WITH THE STANDARD SPECIFICATIONS OF THE COLORADO
DEPARTMENT OF HIGHWAYS, ADOPTED JUNE 1, 1982.

ALL QUANTITIES ON PRELIMINARY PLANS ARE TO BE CONSIDERED APPROXIMATE ONLY.

ALL POLES, WATER LINES, SEWER LINES, GAS MAINS, FIRE HYDRANTS, VALVES, MANHOLES, ETC., ENCRDACHING
ON CONSTRUCTION SHALL BE RELOCATED OR ADJUSTED BY THE OWNERS, EXCEPT AS OTHERWISE NOTED ON PLANS

FOR PRELIMINARY PLAN QUANTITIES OF ASPHALTIC MATERIALS, THE FOLLOWING RATES OF APPLICATION WERE
USED:

PRIME COAT	@	0.40	GALS PER SQ. YD.
PAVING ASPHALT	@	5.0%	BY WEIGHT

RATE OF APPLICATION AND GRADE OF ASPHALTIC MATERIAL SHALL BE AS DETERMINED BY THE ENGINEER AT TIME
OF APPLICATION.

ALL SIDE APPROACH ROADS TO THE PROJECT DESIGNATED BY THE ENGINEER SHALL BE PRIMED AND ASPHALTIC
PAVED TO THE RIGHT OF WAY LINE.

NOTE:

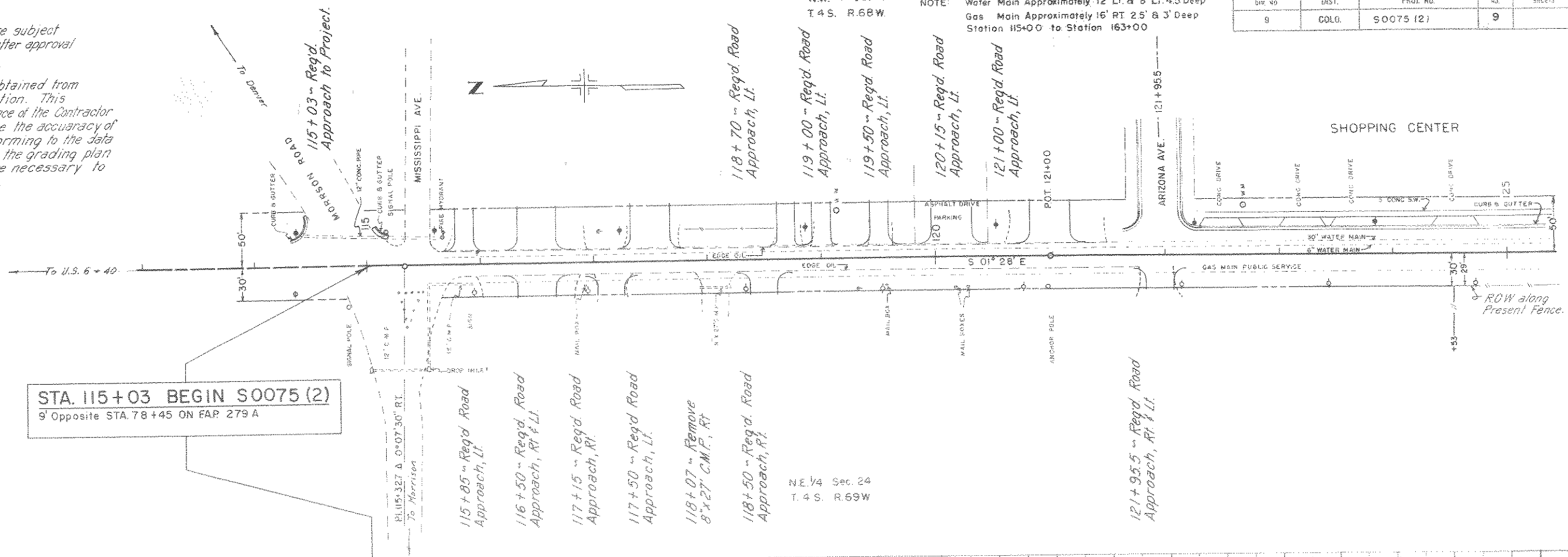
Alignment and Grades as shown are subject to modification during construction after approval by the Denver Office.

Soil data shown on the plans is obtained from the best available laboratory information. This information is shown for the convenience of the Contractor and the Department does not guarantee the accuracy of these tests. If materials not conforming to the data are encountered during construction the grading plan shown on plans will be modified where necessary to secure dense, stable embankments.

NW 1/4 Sec. 19
T. 4 S. R. 68 W.

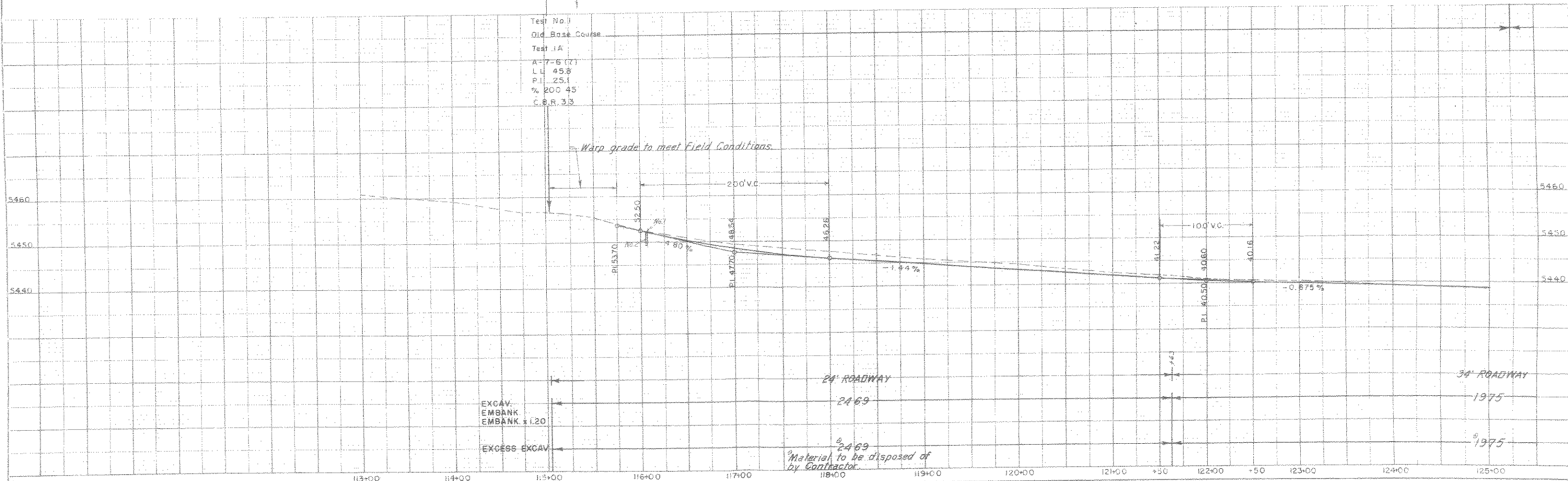
NOTE: Water Main Approximately 12' LT. & 8' LT. 4.5' Deep
Gas Main Approximately 16' RT. 2.5' & 3' Deep
Station 115+00 to Station 121+00

REG. ROAD DIV. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0075 (2)	9	



Test No. 1
Old Base Course
Test 1A
A-7-B (2)
LL 49.8
PI 25.1
% 200 45
C.B.R. 33

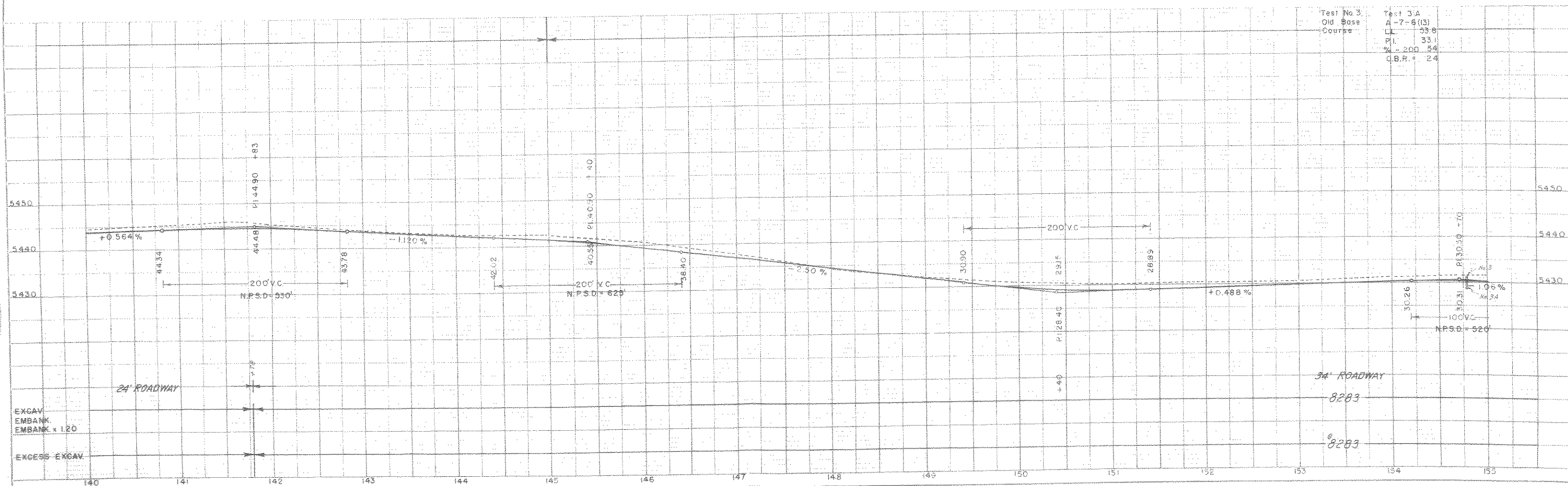
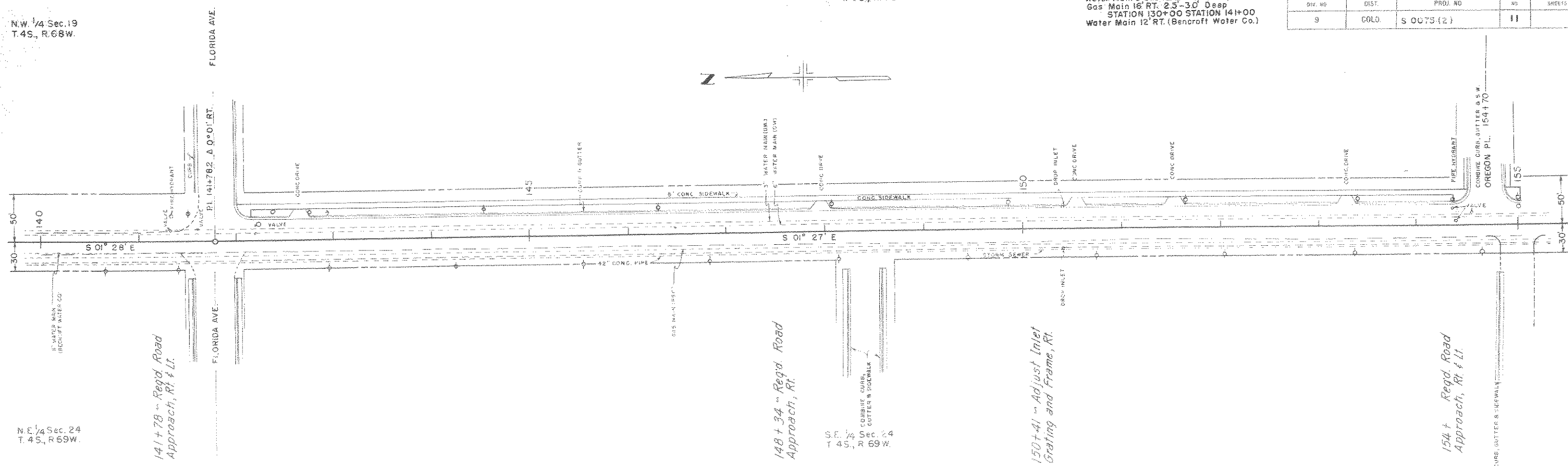
Warp grade to meet Field Conditions.



N.E. 1/4 Sec. 24
T. 4 S., R. 69 W.

NOTE: STATION 115+00 STATION 170+00
Water Main 8' and 12' LT. 4.5' Deep
Gas Main 16' RT. 2.5'-3.0' Deep
STATION 130+00 STATION 141+00
Water Main 12' RT. (Bencroft Water Co.)

FED. ROAD DIV. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLOR.	5 0075 (2)	11	



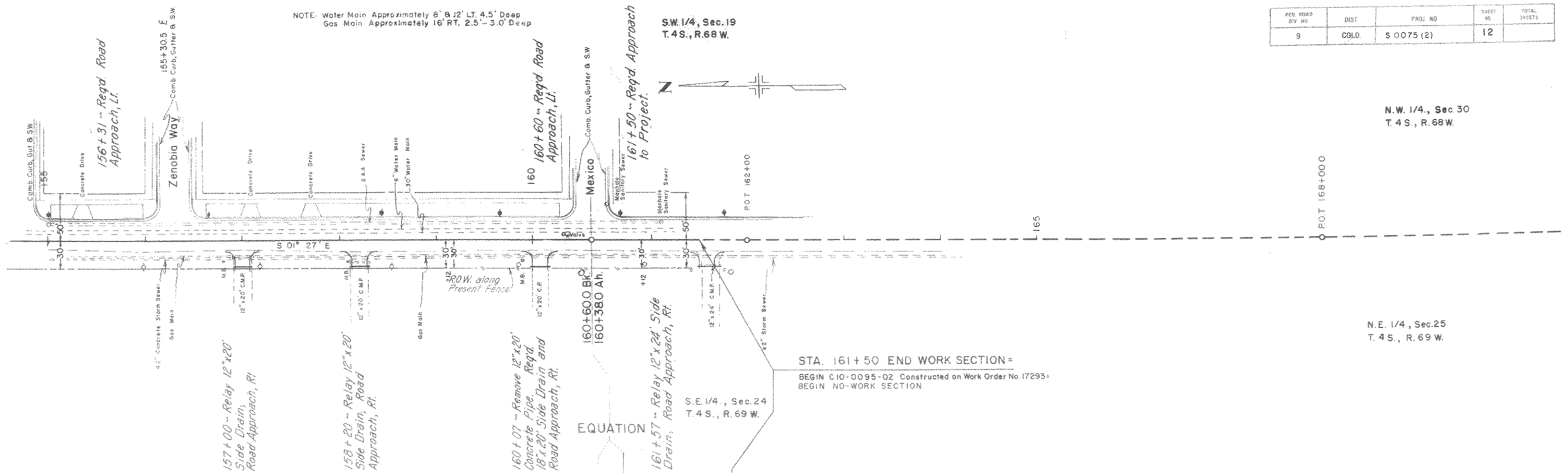
REP. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLA	S 0075 (2)	12	

N.W. 1/4., Sec. 30
T. 4 S., R. 68 W.

N.E. 1/4., Sec.25
T.4S., R.69W.

NOTE: Water Main Approximately 6' & 12' LT, 4.5' Deep
Gas Main Approximately 16' RT, 2.5' - 3.0' Deep

S.W. 1/4, Sec. 19
T. 4 S., R. 68 W.



STA. 161+50 END WORK SECTION=

BEGIN C10-0095-02 Constructed on Work Order No. 17293-
BEGIN NO-WORK SECTION

S.E. 1/4., Sec. 24
T. 4 S., R. 69 W.

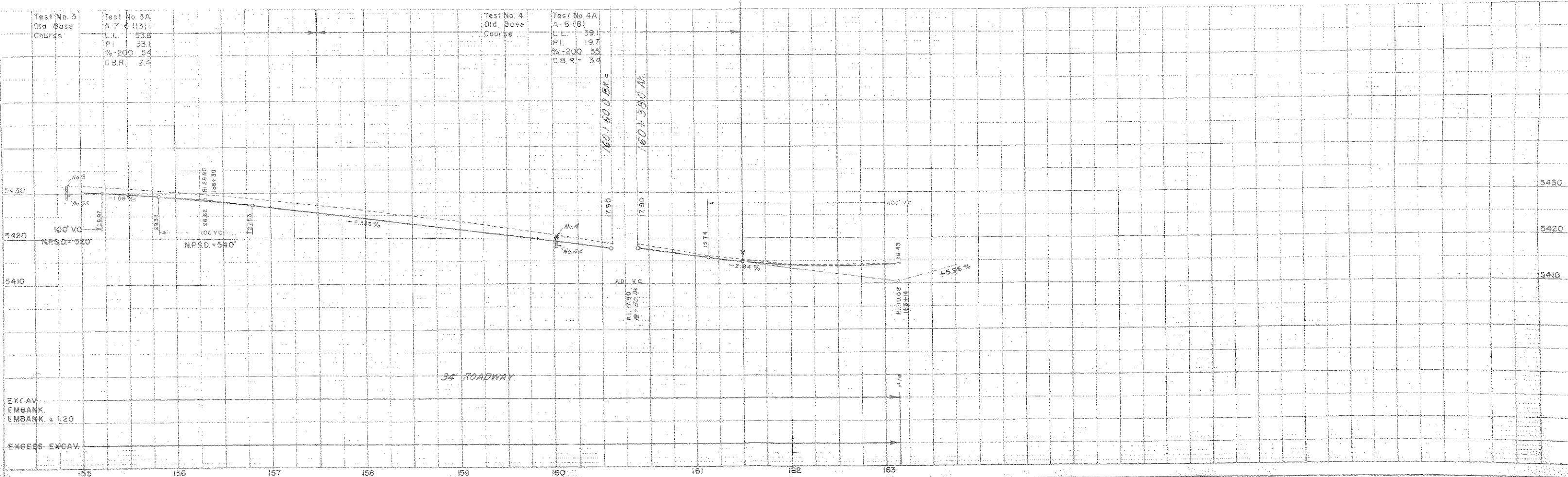
EQUATION

Test No. 3
Old Base
Course

Test No. 3A	
A-7-8 (13)	
LL	53.8
PI	33.1
%-200	54
C.B.R.	2.4

Test No. 4
Old Busse
Course

Test No. 4A	
A-6 (B)	
C.L.	39.1
P.L.	19.7
%-200	55
C.B.R.	3.4



REG ROAD DHW NO	DIST	PROJ NO	DATE NO	TIME SHEET
9	COLD	S 0075 (2)	13	

S.W. 1/4 Sec. 31
T. 4 S., R. 68 W.

N.W. 1/4 Sec. 31
T 4 S., R 68 W.

240+77 ~ Relay 15"x20'
Side Drain, Road
Approach, Rt.

239+90 ~ Req'd. Approach
to Project. Road Approach,
Lt.

CORNELL AVE

250+58 ~ Req'd. Road Approach, Lt.

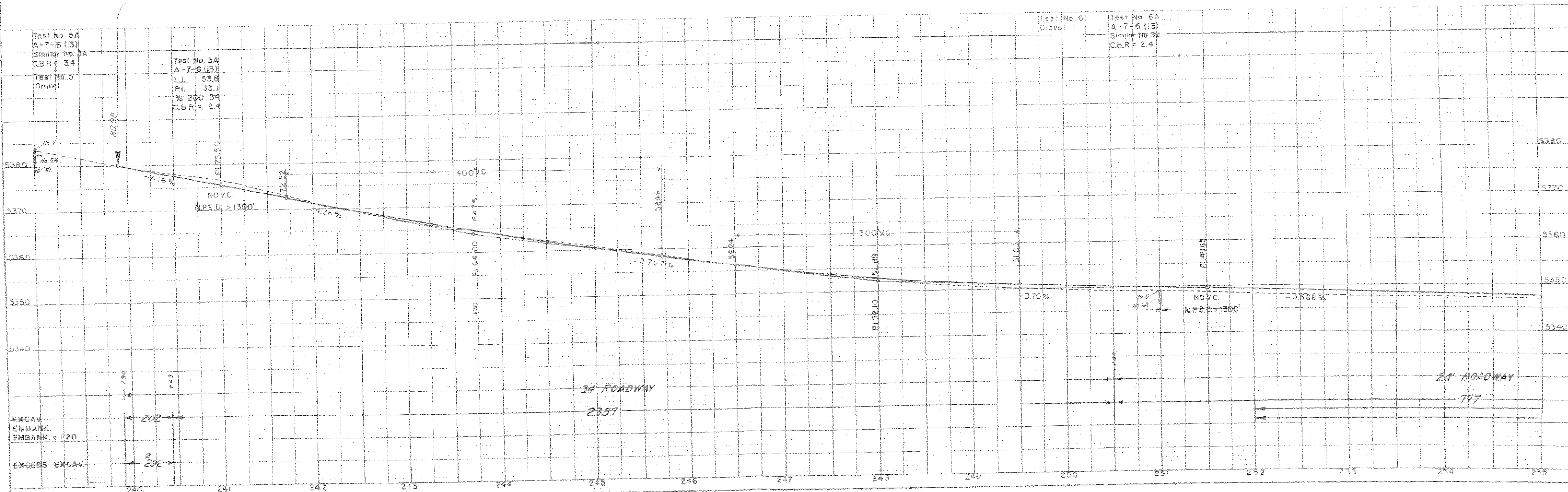
SO. SHERIDAN BLVD.

246+00 ~ Relay 24"x16"
Side Drain, Road
Approach, Rt.

S.E. 1/4 Sec. 36
T. 4S, R. 69W

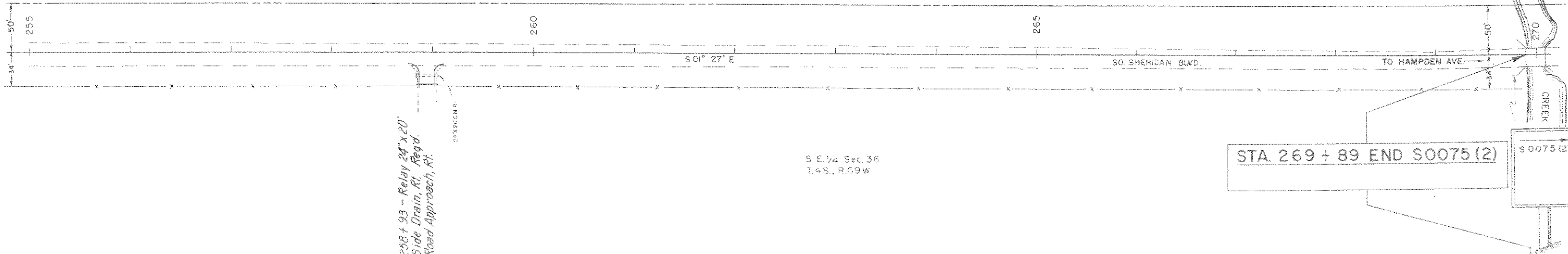
STA.239+90 BEGIN WORK SECTION=

END NO-WORK SECTION



S.W. 1/4 Sec. 31
T.4S., R.68W.

FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S-0075 (2)	14	



258+93 - Relay 24"x20'
Side Drain, Rt. Reg'd.
Road Approach, Rt.

269+89 - Reg'd.
Project Marker, Rt.
(State Forces)

STRUCTURE NO. F-16-AH.

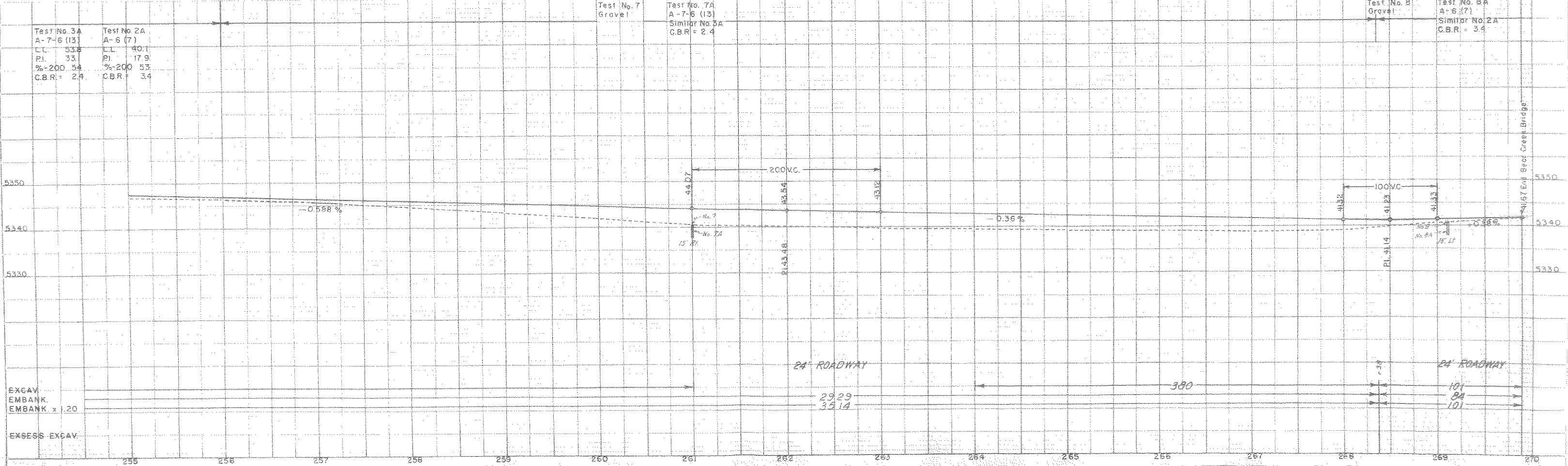
Test No. 3A A-7-6 (13)	Test No. 2A A-6 (7)
CL 33.8	LL 40.1
PI 33	PI 17.9
%+200 54	%-200 53
CBR = 2.4	CBR = 3.4

Test No. 7
Gravel

Test No. 7A
A-7-6 (13)
Similar No. 5A
CBR = 2.4

Test No. 8
Gravel

Test No. 8A
A-6 (7)
Similar No. 2A
CBR = 3.4



24' ROADWAY

24' ROADWAY

SUMMARY OF EARTH WORK QUANTITIES

EXCAVATION	24' ROADWAY	34' ROADWAY	44' ROADWAY	PROJECT TOTALS
FROM CROSS SECTIONS	8235 CU.YD.	12817 CU.YD.	588 CU.YD.	21640 CU.YD.
ESTIMATED FOR CUT SLOPE TREATMENT	90 " "	100 " "	10 " "	200 " "
LIST OF STRUCTURES (EXCAVATION)	65 " "	340 " "	30 " "	435 " "
	8390 " "	13257 " "	628 " "	TOTAL 22,275 " "
EMBANKMENT				
FROM CROSS SECTIONS	3013 CU.YD.	—	—	3013 CU.YD.
EMBANKMENT X FACTOR*	3615 CU.YD.	—	—	3615 CU.YD.
EXCESS EXCAVATION	6977 CU.YD.	10460 CU.YD.	588 CU.YD.	18025 CU.YD.
COMPACTION				
FROM EMBANKMENT X FACTOR*	3615 CU.YD.	—	—	3615 CU.YD.
FROM BASE OF CUTS & FILLS	6356 " "	6130 CU.YD.	469 CU.YD.	12955 " "
	9971 " "	6130 " "	469 " "	TOTAL 16570 " "