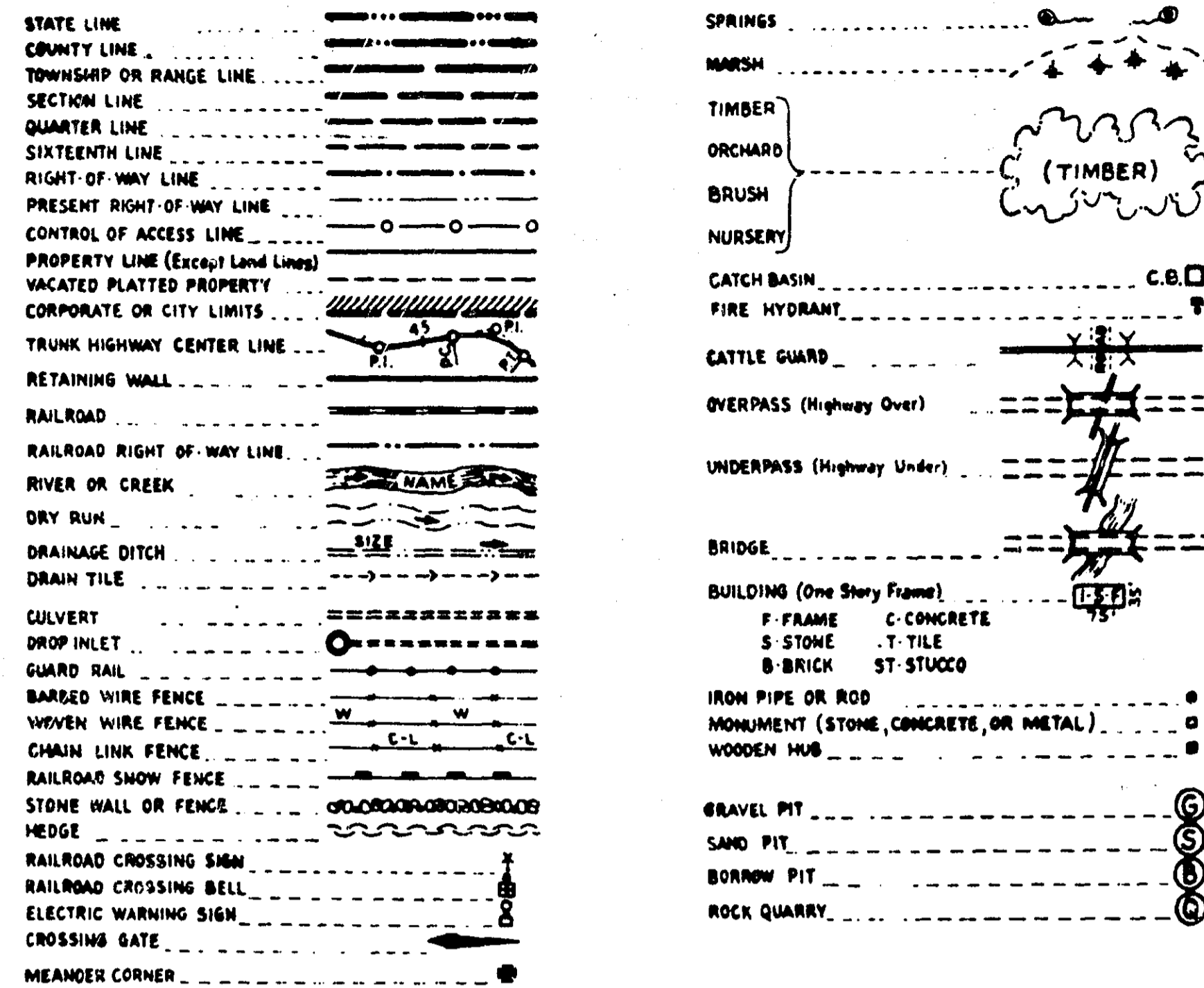
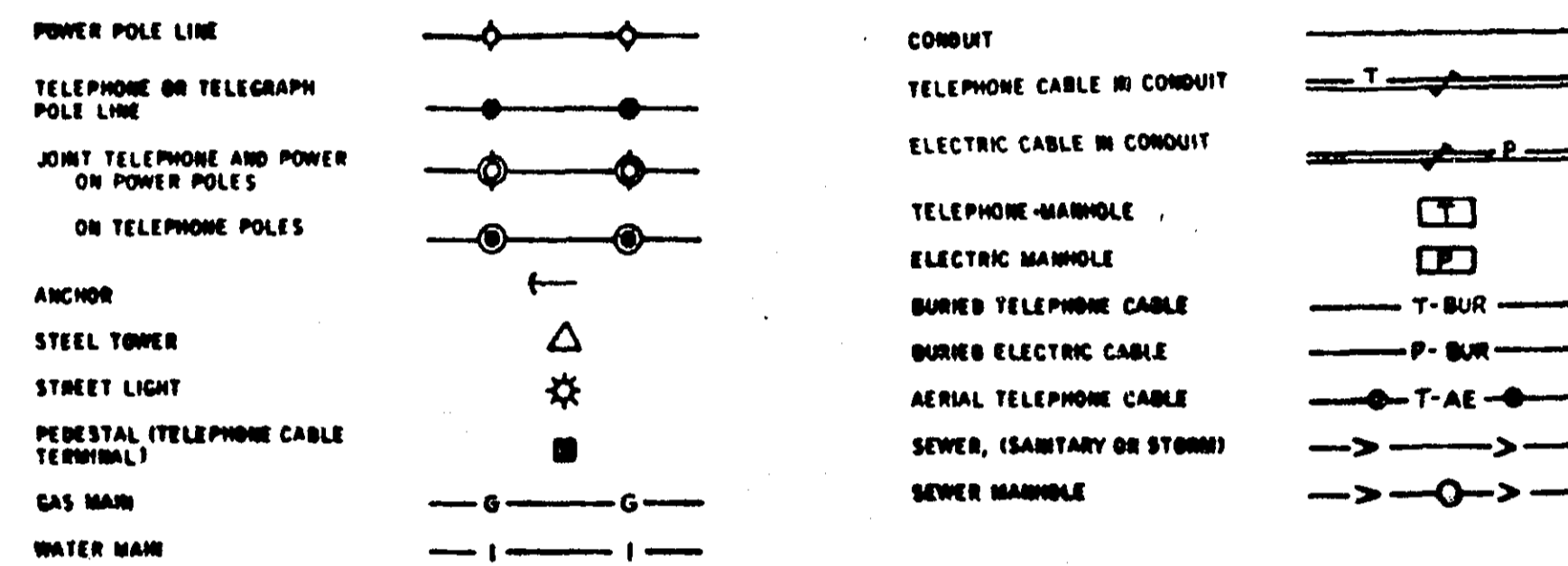


PLANS SYMBOLS



UTILITIES SYMBOLS



PIT DATA

PIT NO. _____ Located in _____
Dead Haul _____

PIT NO. _____ Located in _____
Dead Haul _____

SPECIFICATIONS
THE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION"
DATED JANUARY 1, 1968 SHALL GOVERN.

*Sheet 2 and 3 to
Be Made at shop on
5-3-73*

**OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY
CONSTRUCTION PLAN FOR GRADING AND BITUMINOUS SURFACING
COUNTY ROAD C - S.A.P. 62-623-08**

BETWEEN: SNELLING AVENUE AND OXFORD STREET
FROM: A POINT 43 FEET EAST OF THE NORTHWEST CORNER OF SECTION 10, T.29N., R.23W. TO: A POINT 704 FEET EAST AND 104 FEET SOUTH OF THE NORTHWEST CORNER OF SECTION 11, T.29N., R. 23W.

GROSS LENGTH 5912 FEET 1.12 MILES
BRIDGES-LENGTH 0 FEET 0 MILES
EXCEPTIONS-LENGTH 0 FEET 0 MILES
NET LENGTH 5912 FEET 1.12 MILES

SCALES: PLAN, 1 Inch = 50 Feet
PROFILE, Horiz. 1 Inch = 50 Feet Vert. 1 Inch = 5 Feet
CROSS-SECTIONS, 1 Inch = 10 Feet
LAYOUT, 1 Inch = 5280 Feet

DESIGN DESIGNATION
A.D.T. 1969 = NO EXISTING ROAD
A.D.T. 196 =
D.H.V. =
D(DIRECTIONAL DISTRIBUTION) = 50-50
T(HEAVY COMMERCIAL) 1969 = 300
DESIGN SPEED = 50 M.P.H. TO LEXINGTON - 45 M.P.H. LEXINGTON TO OXFORD
DESIGN LOAD = 9 TON
SOIL FACTOR = 100 %

INDEX

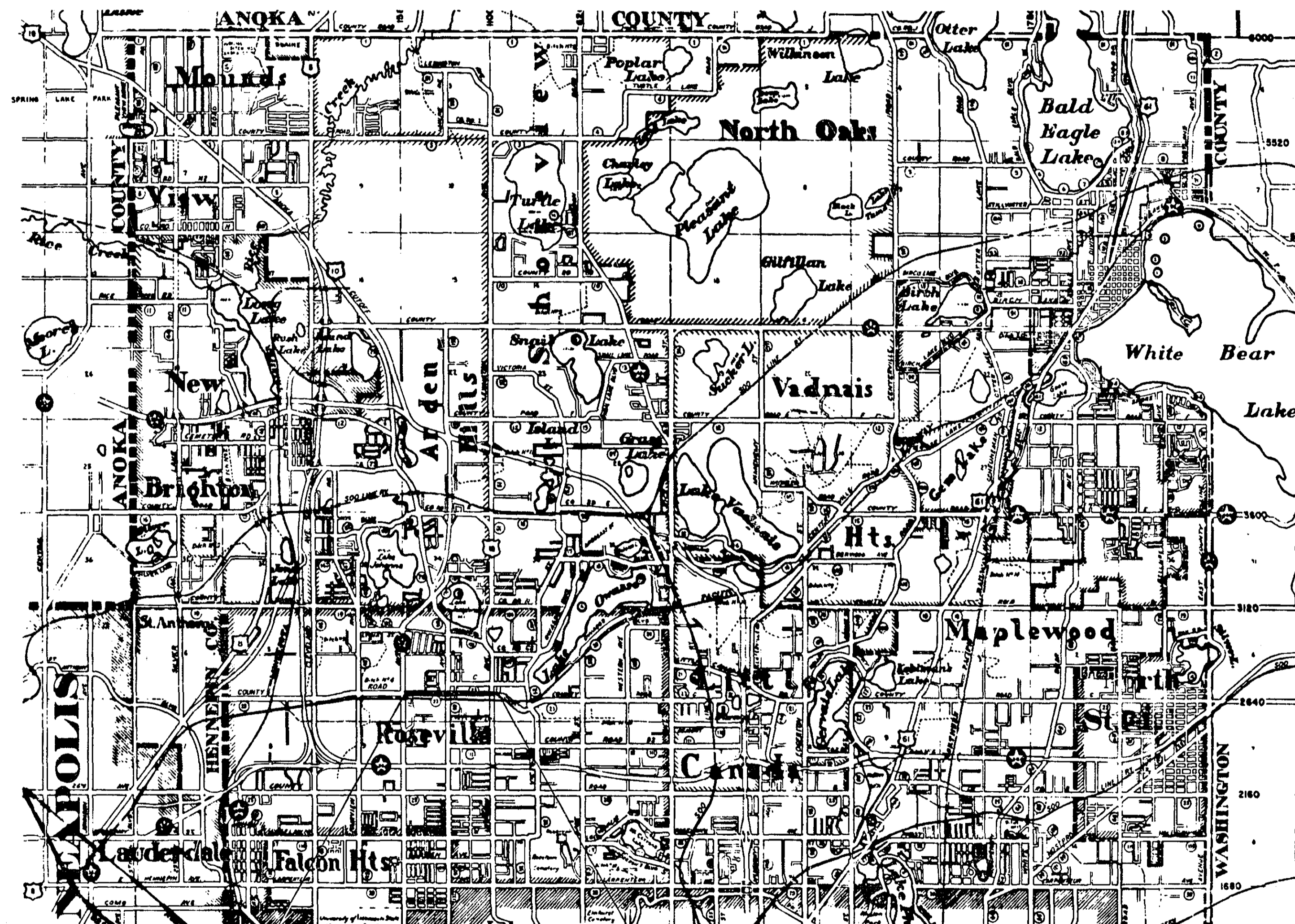
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION & ESTIMATED QUANTITIES
3	DRAINAGE CHART & DETAILS
4-8	PLAN PROFILES
9-10	CONSTRUCTION PLANS
11-20	CROSS SECTIONS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Thomas Aaker REG. NO. 2042 DATE 5-25-69
ENGINEER

RECOMMENDED FOR APPROVAL: *W. J. Smith* DATE 6-4-69
RECOMMENDED FOR APPROVAL: *M. J. Smith* DATE 6-4-69
RECOMMENDED FOR APPROVAL: *A. W. Wilke* DATE 4-4-69
RECOMMENDED FOR APPROVAL: _____ DATE _____
RECOMMENDED FOR APPROVAL: _____ DATE _____
APPROVED: _____ DATE _____
COUNTY ENGINEER

RECOMMENDED FOR APPROVAL: *Dean R. Amble* DATE 5-26-69
COUNTY ENGINEER
APPROVED: *Thomas Aaker* DATE 5-26-69
CHAIRMAN OF THE RAMSEY COUNTY BOARD
APPROVED: _____ DATE _____
MAYOR, VILLAGE OF ROSEVILLE

MINNESOTA STATE HIGHWAY DEPARTMENT
RECOMMENDED FOR APPROVAL: *C. E. Weichselbaum* DATE 6-3-69
RECOMMENDED FOR APPROVAL: *W. J. Smith* DATE 5-27-69
DISTRICT STATE AID ENGINEER
APPROVAL: *Thomas Aaker* DATE 6-4-69
STATE AID ENGINEER



BEGIN PROJ. S.A.P. NO. 62-623-08 STA. 0+43
END PROJ. STA. 59+55

STATEMENT OF ESTIMATED QUANTITIES

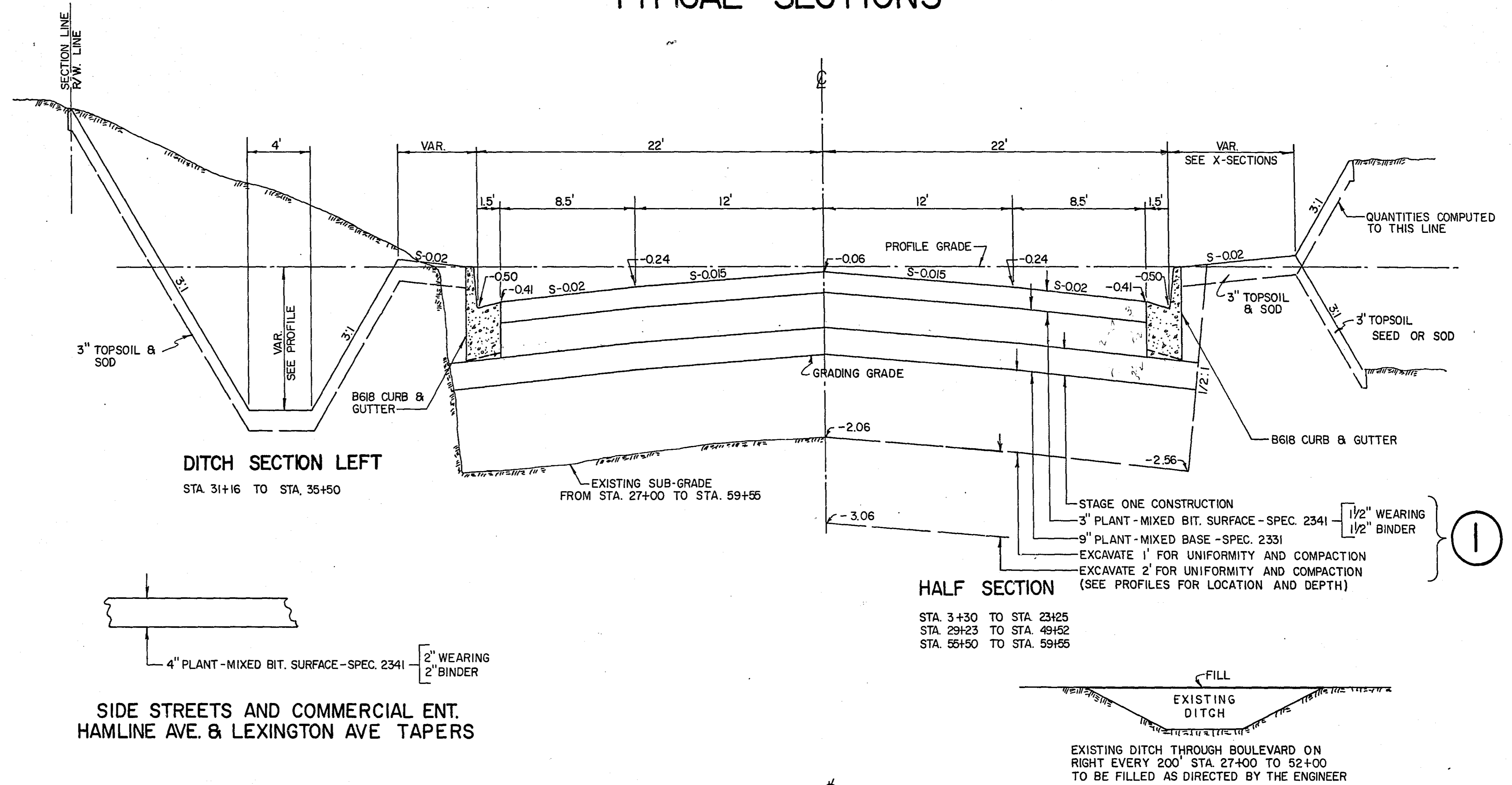
ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2104.501	REMOVE PORTABLE CULVERTS	L.F.	201
2104.502	REMOVE PAVEMENT	S.Y.	500
2104.509	REMOVE GUARD RAIL	L.F.	25
2104.512	REMOVE DROP INLETS	STRUCTURE	2
2104.515	REMOVE PIPE SEWER	L.F.	10
2104.520	REMOVE HANDHOLE	STRUCTURE	2
2105.501	COMMON EXCAVATION	C.Y.	30471
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	550
2331.514	BASE COURSE MIXTURE	TON	15674
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	271
2341.508	WEARING COURSE MIXTURE	TON	2698
2341.510	BINDER COURSE MIXTURE	TON	2698
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	5645
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GALLON	10300
2451.503	GRANULAR BACKFILL	C.Y.	732
2501.511	18" METAL PIPE CULVERT	L.F.	168
2501.532	18" METAL APRON	APRON	1
2501.536	15" CONCRETE APRON	APRON	1
2501.536	18" CONCRETE APRON	APRON	1
2503.502	12" REINFORCED CONCRETE SEWER, CLASS IV	L.F.	286
2503.502	15" REINFORCED CONCRETE SEWER, CLASS II	L.F.	1680
2503.502	18" REINFORCED CONCRETE SEWER, CLASS II	L.F.	88
2503.521	INSTALL CONCRETE SEWER	L.F.	72
2503.523	INSTALL METAL SEWER	L.F.	46
2506.506	CONSTRUCT MANHOLE, DESIGN A OR F	L.F.	21.8
2506.509	CONSTRUCT CATCH BASIN, DESIGN R.C.2	STRUCTURE	16
2506.509	CONSTRUCT CATCH BASIN, DESIGN L.P.4-H	STRUCTURE	3
2506.511	RECONSTRUCT MANHOLES	L.F.	6.7
2506.516	CASTING ASSEMBLIES	ASSEMBLY	3
2506.521	INSTALL CASTINGS	ASSEMBLY	2
2506.522	ADJUST FRAME RING AND CASTING	ASSEMBLY	9
2531.501	CONCRETE CURB AND GUTTER, DESIGN B618	L.F.	12385
2554.501	TRAFFIC BARRIER, DESIGN A	L.F.	12.5
2554.511	INSTALL TRAFFIC BARRIER, DESIGN A	L.F.	25
2575.501	ROADSIDE SEEDING	ACRE	0.2
2575.502	SEED, MIXTURE 6	POUND	15
2575.505	SODDING	S.Y.	18412
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	1.4
2575.551	TOPSOIL	C.Y.	2140
0503.602	10" CAST IRON PIPE SEWER	L.F.	60
0565.632	CONCRETE HANDHOLES	HANDHOLE	10
0565.635	RIGID METALLIC CONDUIT 3"	L.F.	444
0565.643	INSTALL MAGNETIC DETECTOR ENCASMENT	EACH	1

① USE HIGH EARLY STRENGTH CONCRETE

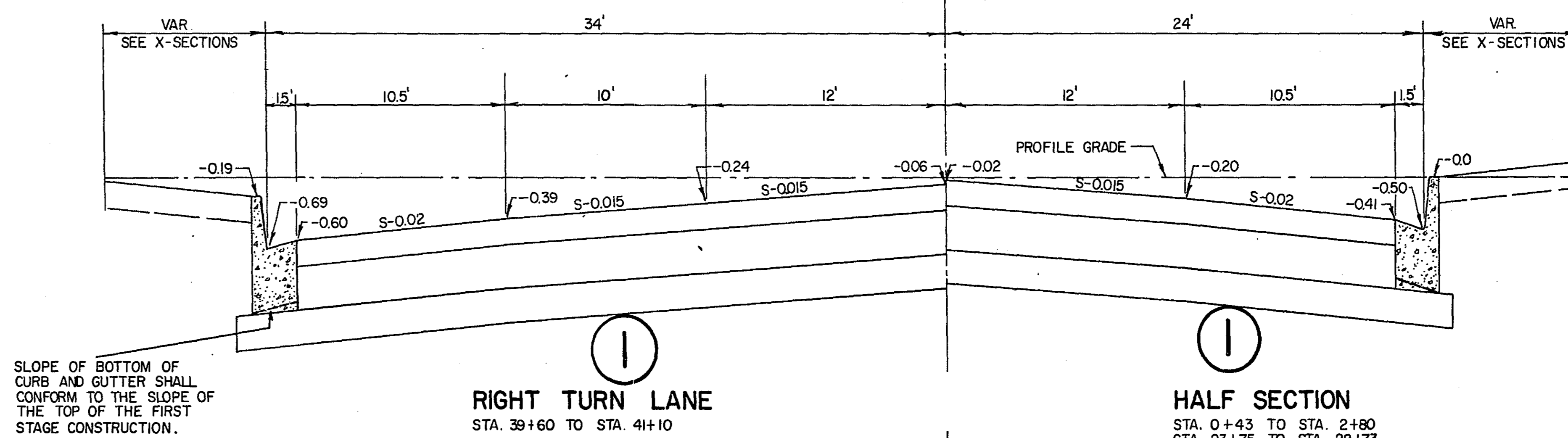
STANDARD DETAIL PLATES

PLATE NO.	DESCRIPTION
0001 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 F	REINFORCED CONCRETE PIPE
3040 C	CORRUGATED METAL PIPE
3100 E	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
4000 G	MANHOLE OR CATCH BASIN
4005 H	MANHOLE OR CATCH BASIN
4016 C	CURB OPENING CATCH BASIN
4101 B	RING CASTING FOR MANHOLE OR CATCH BASIN
4110 D	COVER CASTING FOR MANHOLE
4180 F	MANHOLE STEP CASTING
7100 D	CONCRETE CURB AND GUTTER
7111 D	INSTALLATION OF CATCH BASIN CASTINGS
8000 C	STANDARD BARRICADES
8008 C	CONTRACTORS' SIGN
8113 A	MAGNETIC VEHICLE DETECTOR INSTALLATION
8117 A	PRECAST CONCRETE HANDHOLE
8307 I	STRUCTURAL PLATE BEAM GUARD RAIL

TYPICAL SECTIONS

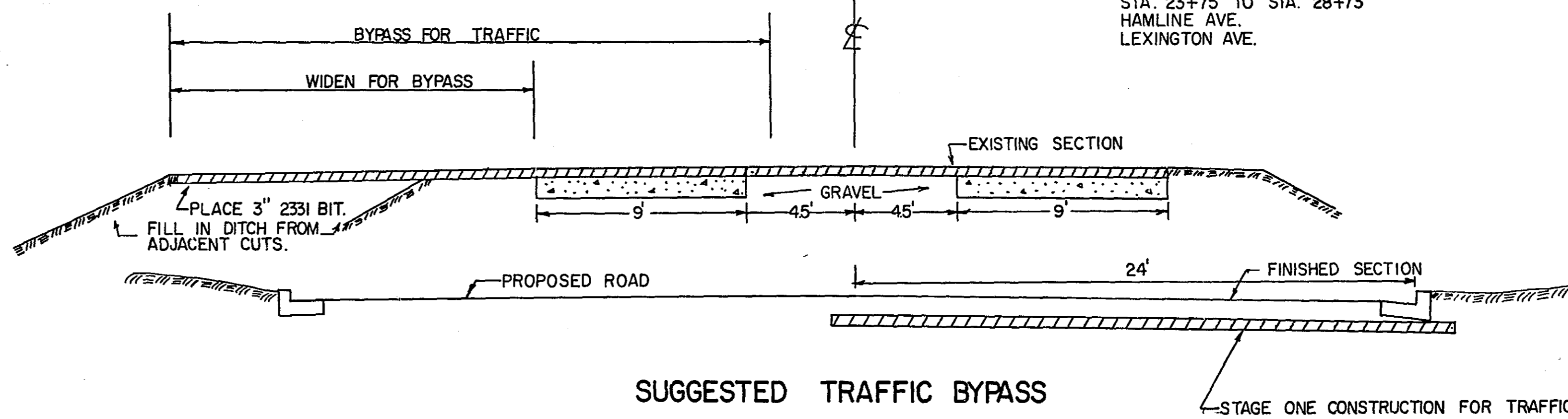


SIDE STREETS AND COMMERCIAL ENT. HAMLINE AVE. & LEXINGTON AVE TAPERS



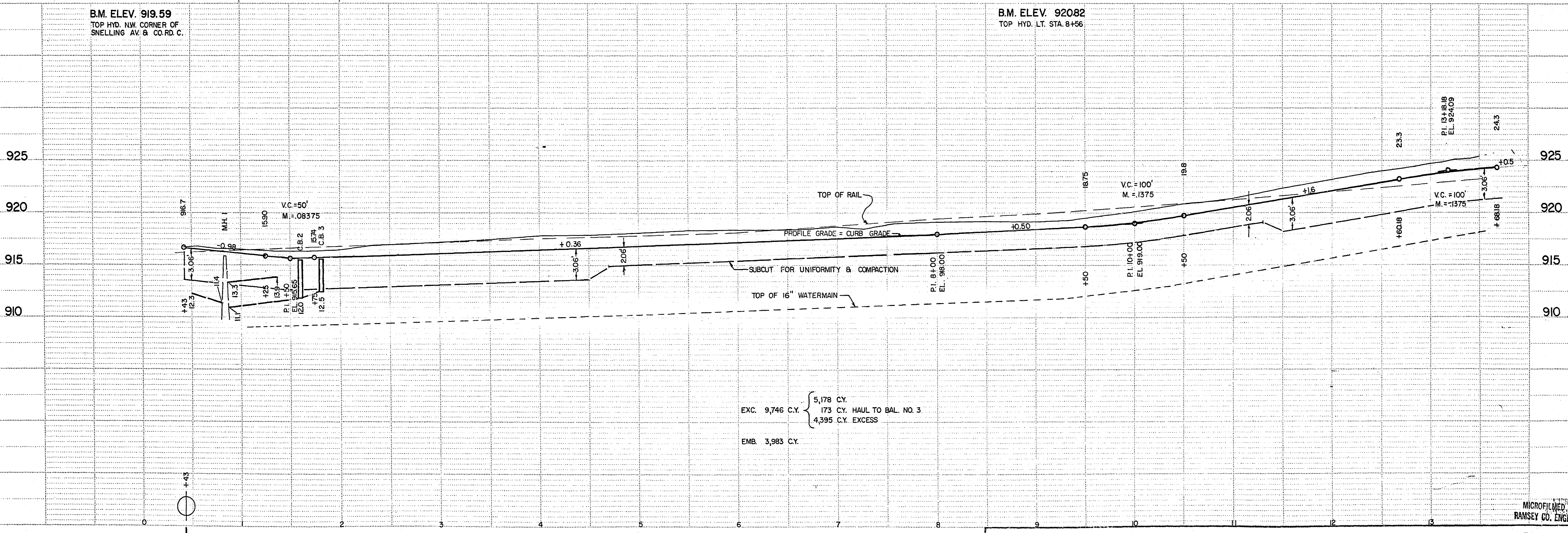
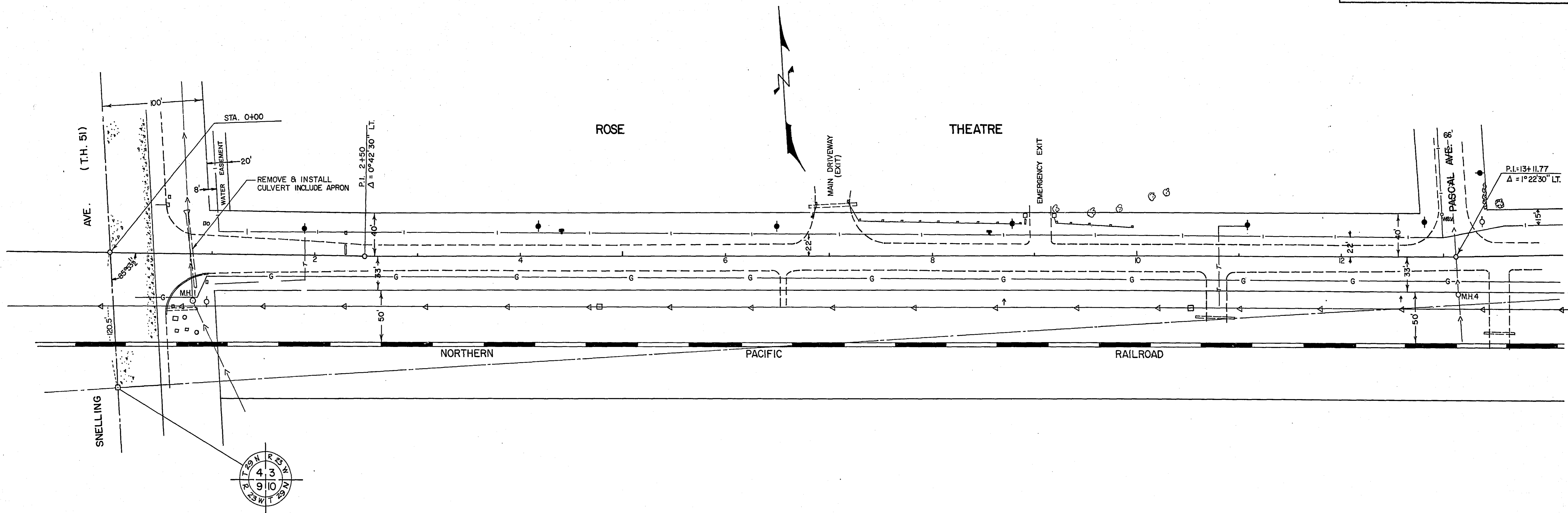
SLOPE OF BOTTOM OF CURB AND GUTTER SHALL CONFORM TO THE SLOPE OF THE TOP OF THE FIRST STAGE CONSTRUCTION.

THICKNESS OF CURB AND GUTTER SHALL BE NO LESS THAN STANDARD DESIGN.



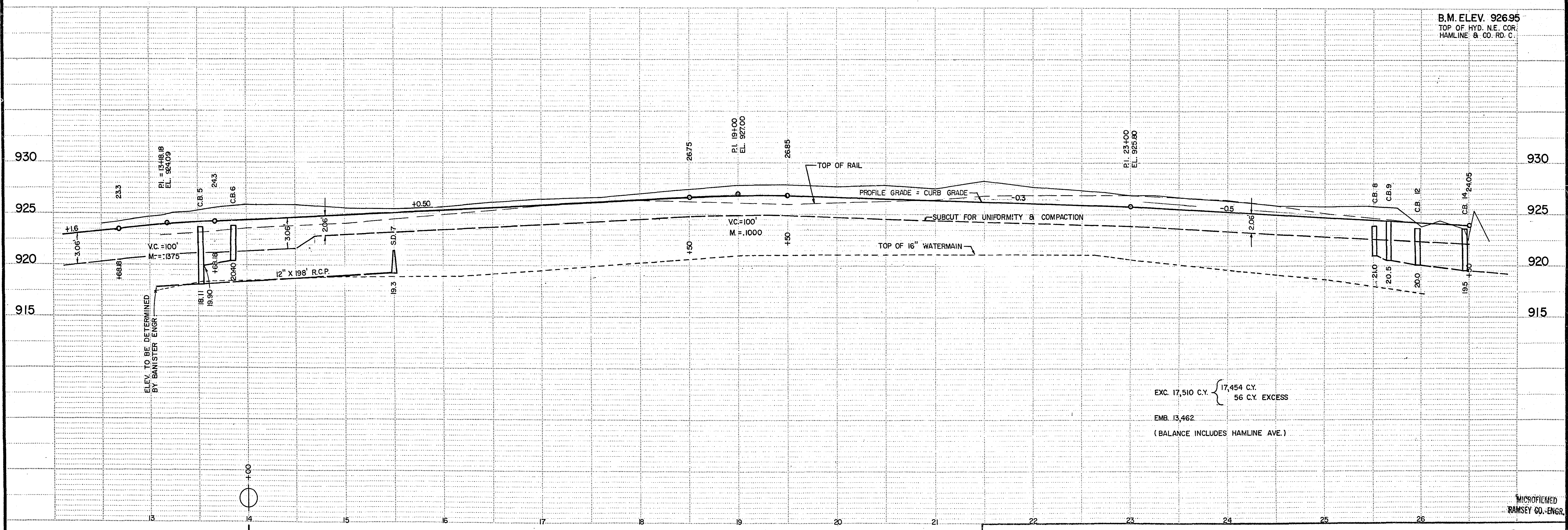
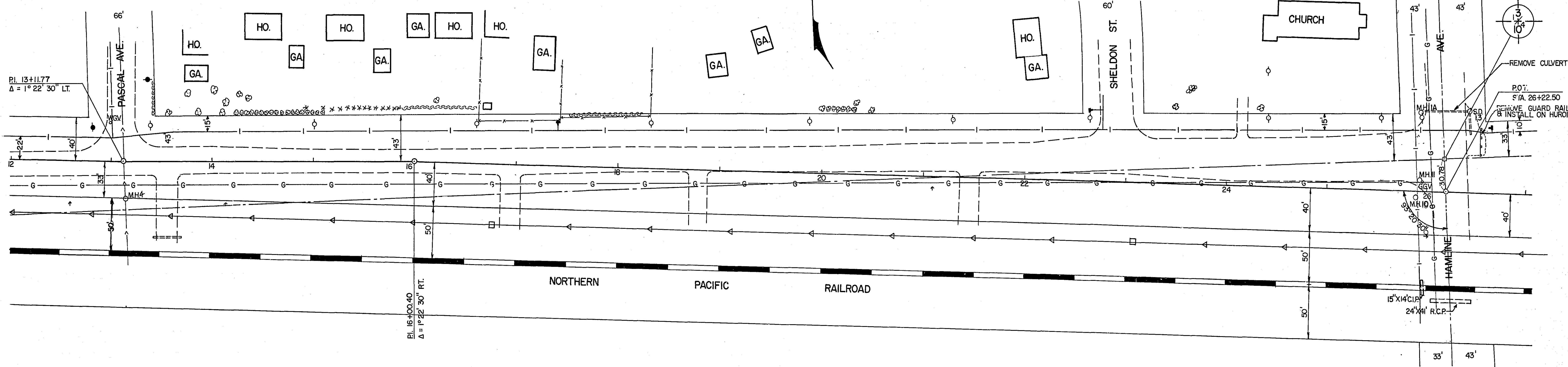
NOTE: ALL AREAS TO BE SODDED EXCEPT BETWEEN (RT. 22+00 TO 25+75 - SOD ONLY 10.5' BOULEVARD.)

SOD RT. BOULEVARD BERM BETWEEN HAMLINE & OXFORD AS DIRECTED BY ENGINEER



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MICROFILMED BY RAMSEY CO. ENGR.



BAL. NO. 2

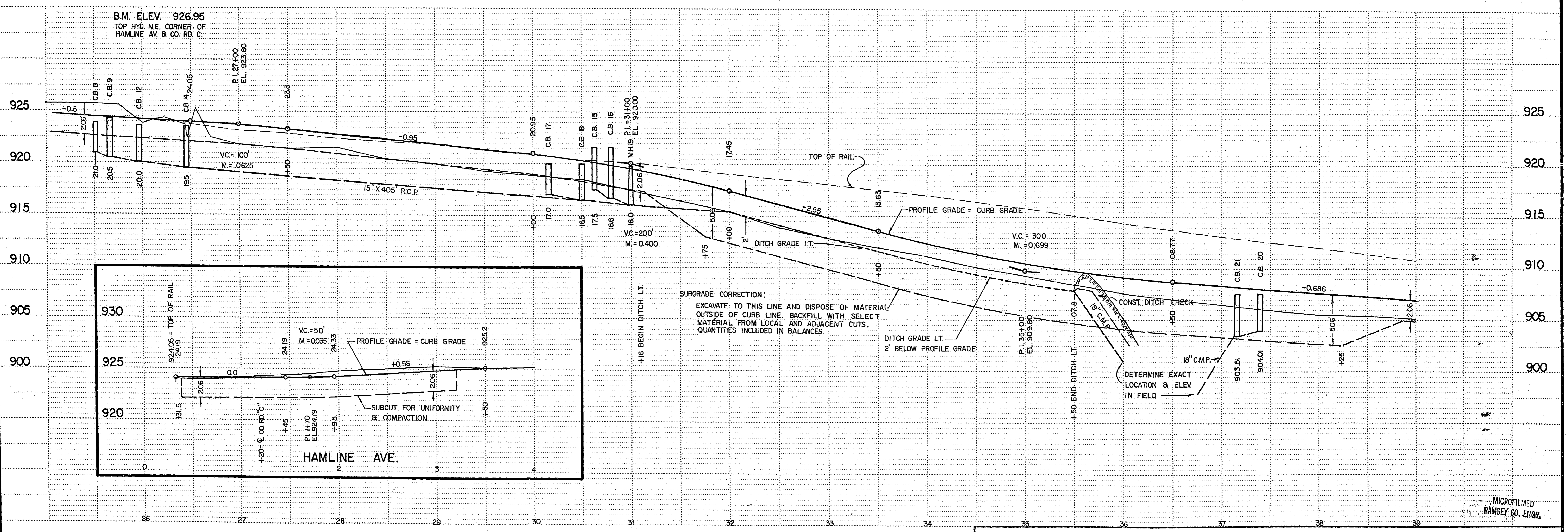
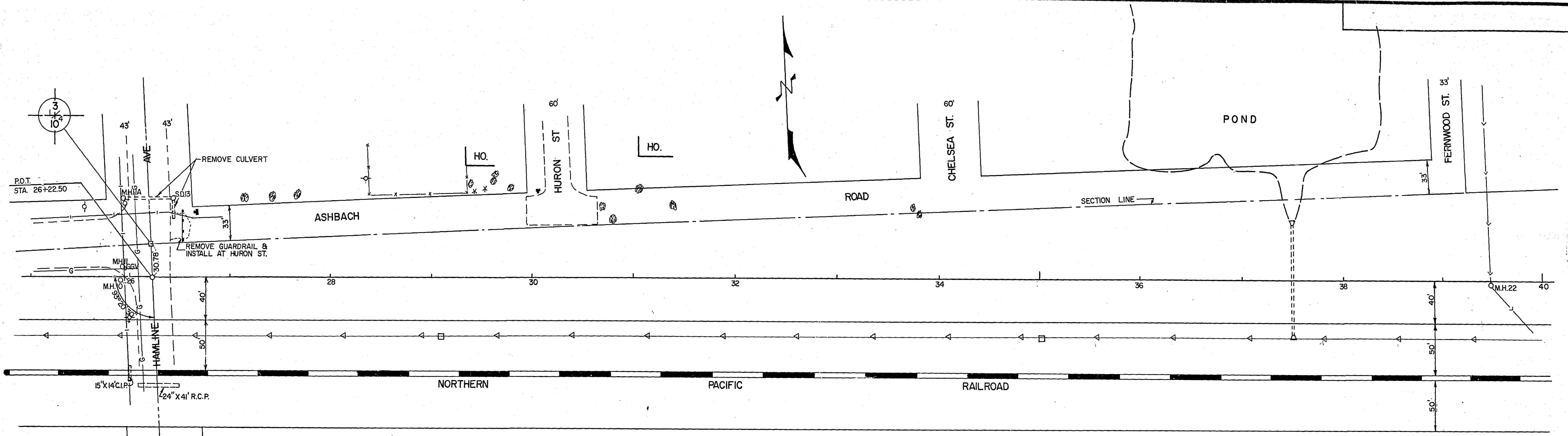
S.A.P. NO. 62-623-08

Sheet No. 5 of 20 Sheets

6888

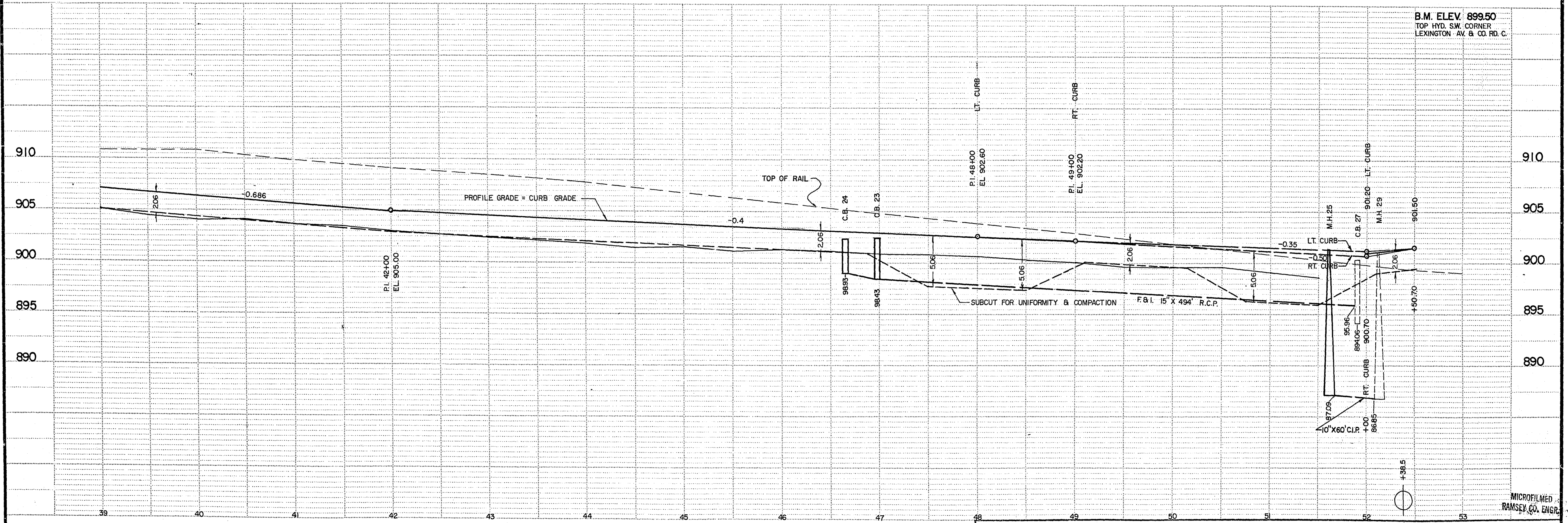
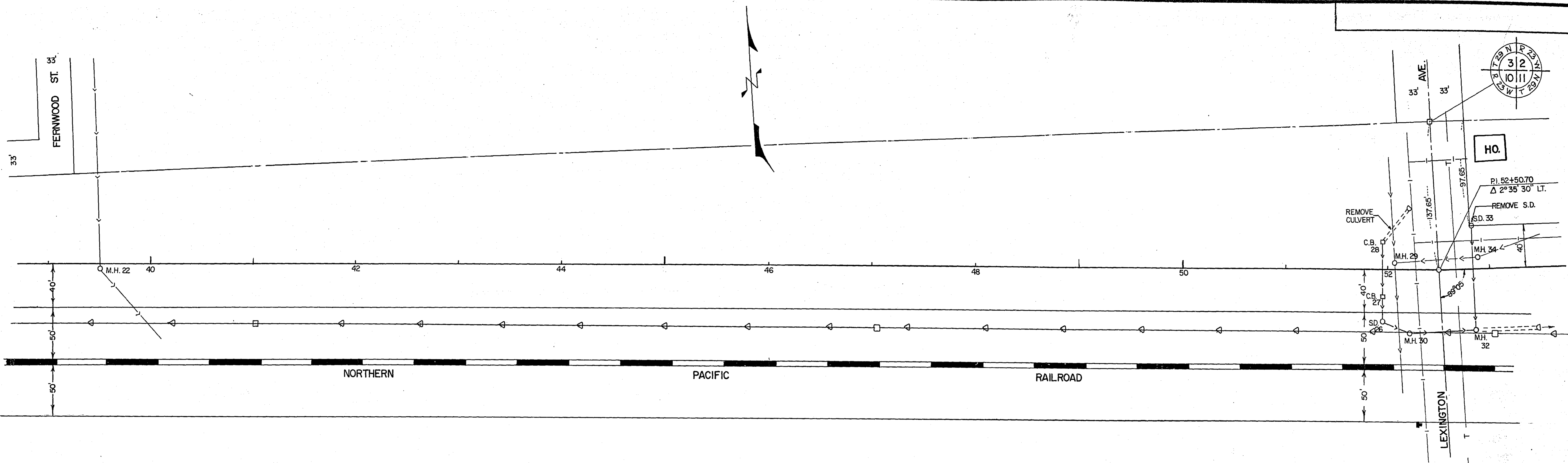
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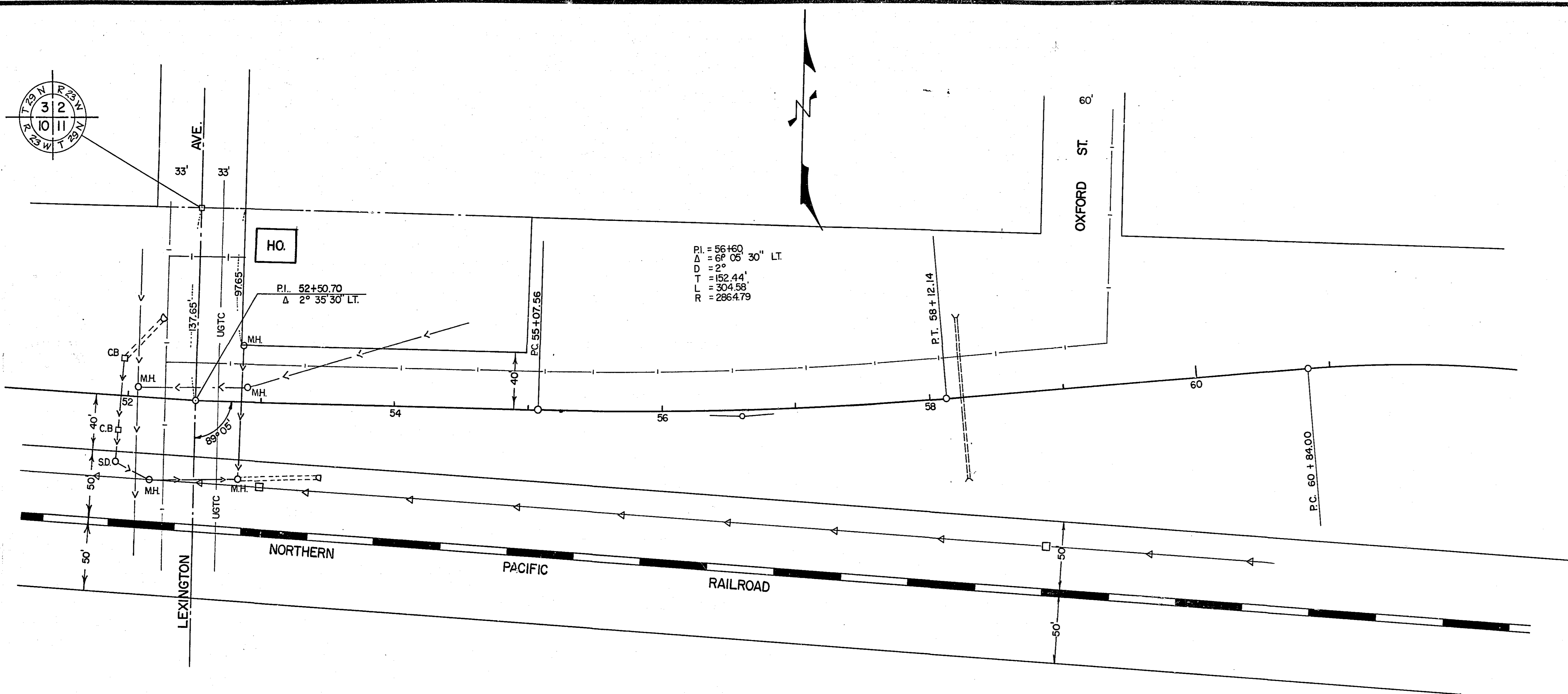
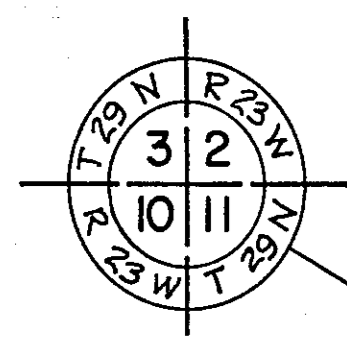
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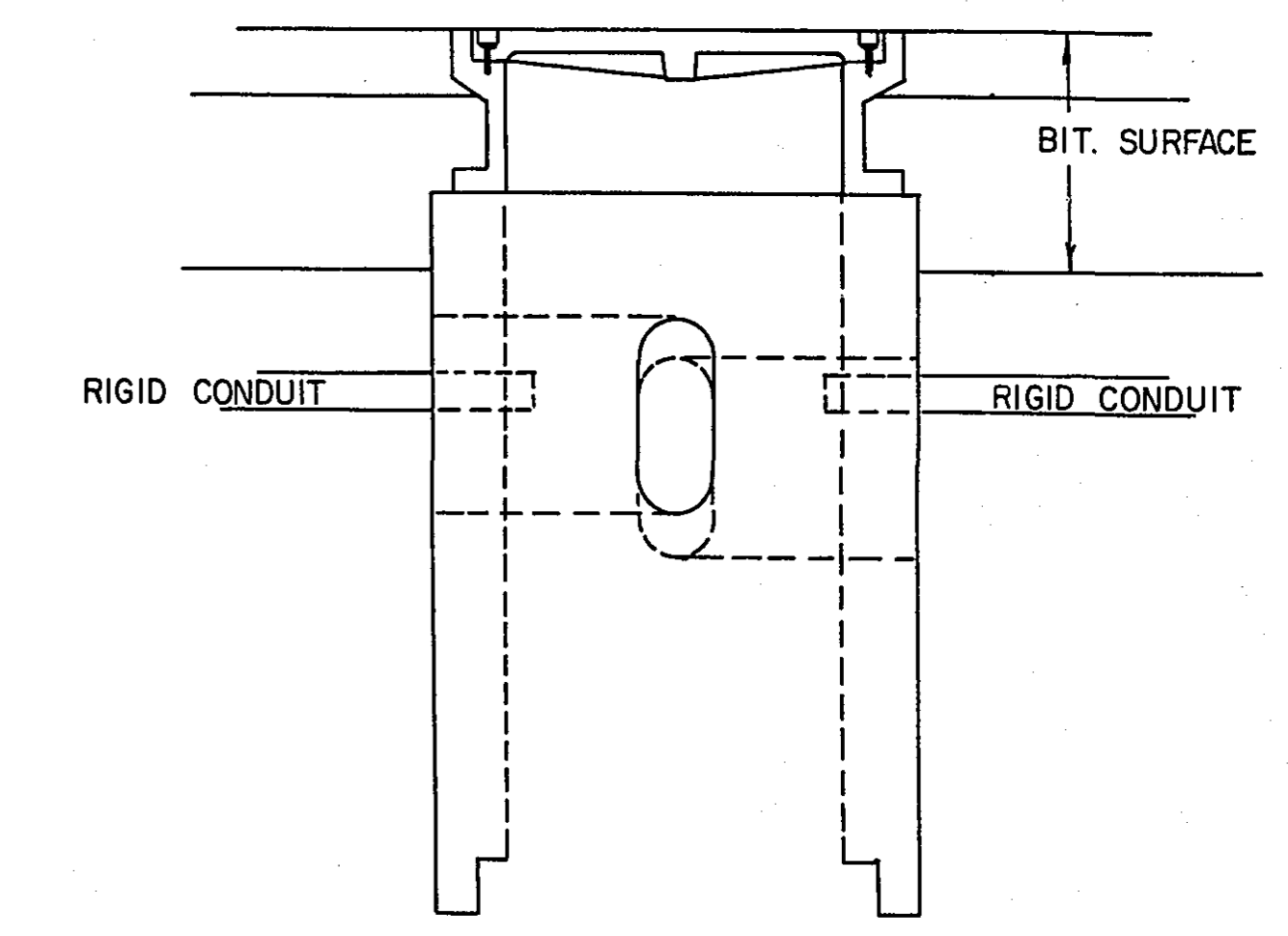


B.M. ELEV. 899.50
 TOP HYD. SW. CORNER
 LEXINGTON AV. & CO. RD. C.

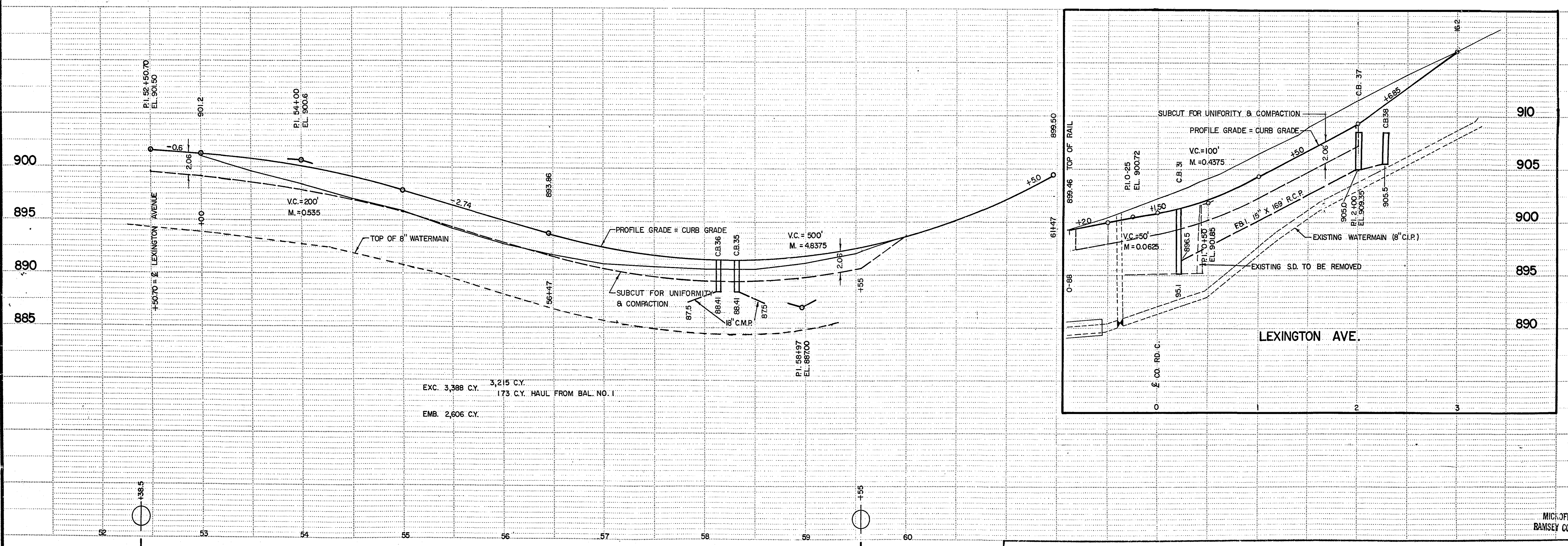
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 RAMSEY CO. ENGR.



**MANHOLE COVER AND CASTING
DETAIL FOR HANDHOLE**
SEE SHEET NO. 9



NOTE
HANDHOLE IS BUILT ACCORDING TO STANDARD DETAIL
PLATE NO. 8117 AND SET UP SIDE DOWN. PRECAST
CONCRETE COVER NOT NEEDED, USE NEENAH FOUNDRY
CO. CASTING NO. R 6668-L3 OR EQUAL.
INCLUDED FOR PAYMENT AS ITEM NO. 2506.516



EXC. 3,388 C.Y. 3,215 C.Y.
173 C.Y. HAUL FROM BAL. NO. 1
EMB. 2,606 C.Y.

0+76 INSTALL 18" X 72" INCLUDES EXISTING APRON
F. & I. 18" X 24" R.C.P.

7+05 ENT. LT.
18" X 48" C.M.P. OK LEAVE

ROSE

THEATRE

EMERGENCY EXIT

PROPOSED M.H. BY ROSEVILLE

PASCAL-AVE. 8'

PI = 13+11.77
Δ = 1° 22' 30" LT.

STA. 0+100

AVE. (T.H. 51)

SNELLING

BEGIN PROJ.
STA. 0+43

EXIST. HANDHOLE
O.K. LEAVE

REMOVE & REINSTALL
EXIST. 1 1/4" X 137" R.M.C.

REMOVE EXIST. HANDHOLE
AND DISPOSE

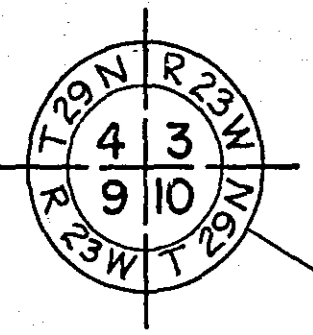
F. & I. HANDHOLE STA. 2+29 LT. 28'

REMOVE EXIST. 3" NON-METALLIC CONDUIT & DISPOSE. (INCIDENTAL)
F. & I. 3" X 28" N.M.C. ENCASED IN CONCRETE
M.H.D. STD. PLATE NO. 8113A

(REMOVE EXISTING M.K. DETECTOR AND
REINSTALL IN NEW N.M.C. AS DIRECTED
BY ENGINEER)

EXIST. 3" R.M.C.
NOT TO BE DISTURBED OR DISRUPTED
OF SERVICE AT ANY TIME

REMOVE EXIST. HANDHOLE AND DISPOSE
F. & I. HANDHOLE WITH NEENAH FOUNDRY
CO. CASTING
(SEE DETAIL - SHEET NO. 8)



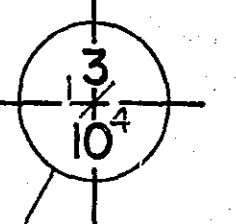
PI = 13+11.77
Δ = 1° 22' 30" LT.

PROPOSED M.H. BY ROSEVILLE

PASCAL-AVE. 8'

CONCRETE GUTTER
SEE DETAIL - SHEET NO. 3

SHELDON ST. 8'



POT
STA. 26+22.50

PI. 16+00.52
Δ = 1° 22' 30" RT.

HURON ST. 8'

CHELSEA ST. 8'

POND

FERWOOD ST. 8'

NO.	STATION	LOCATION	F. & I. HANDHOLE
1	25+75	RT. 27'	I
2	25+93	LT. 45'	I
3	26+52	RT. 46'	I
4	26+70	LT. 27'	I

375' OF GUARD RAIL TO BE INSTALLED AS DIRECTED BY ENGINEER.
25' FROM HAMLINE AVE. & F. & I. 12.5'

CONSTRUCT 4' WIDE DITCH CHECK
AS DIRECTED BY ENGINEER.

DETERMINE EXACT LOCATION
IN FIELD AS DIRECTED BY
THE ENGINEER.

37+50 X-CULVERT
O.K. LEAVE

CONSTRUCT 4' DITCH (SEE PROFILE & X-SECTIONS)

POT
STA. 26+22.50

AVE.

HAMLINE

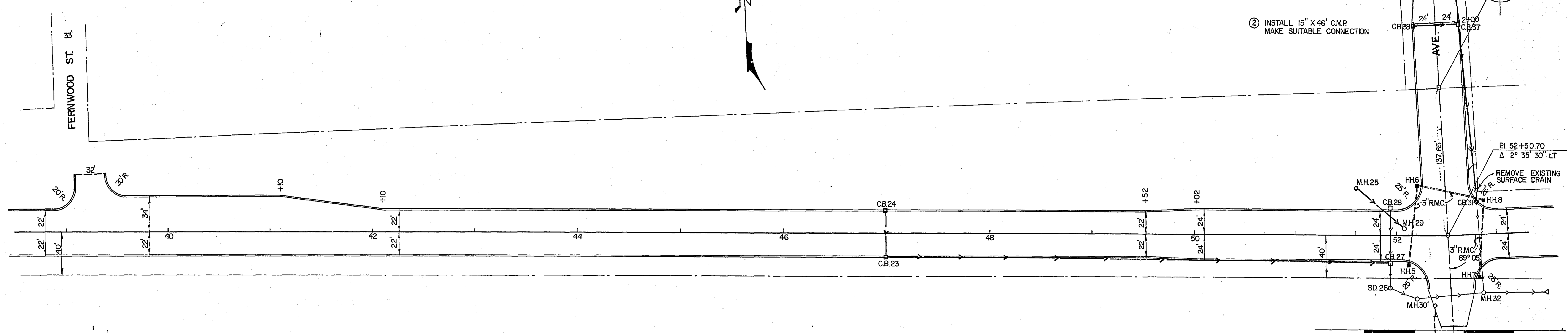
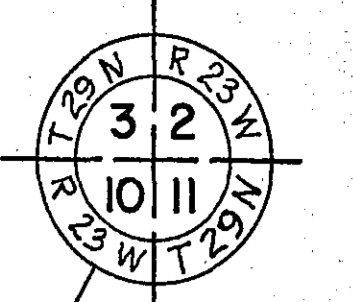
CONSTRUCTION PLAN

MICROFILMED
RAMSEY CO. ENGR.

S.A.P. NO. 62-623-08

SHEET NO. 9 OF 20 SHEETS

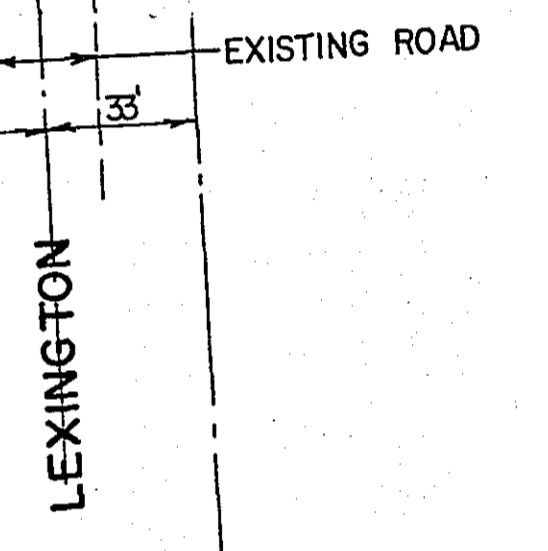
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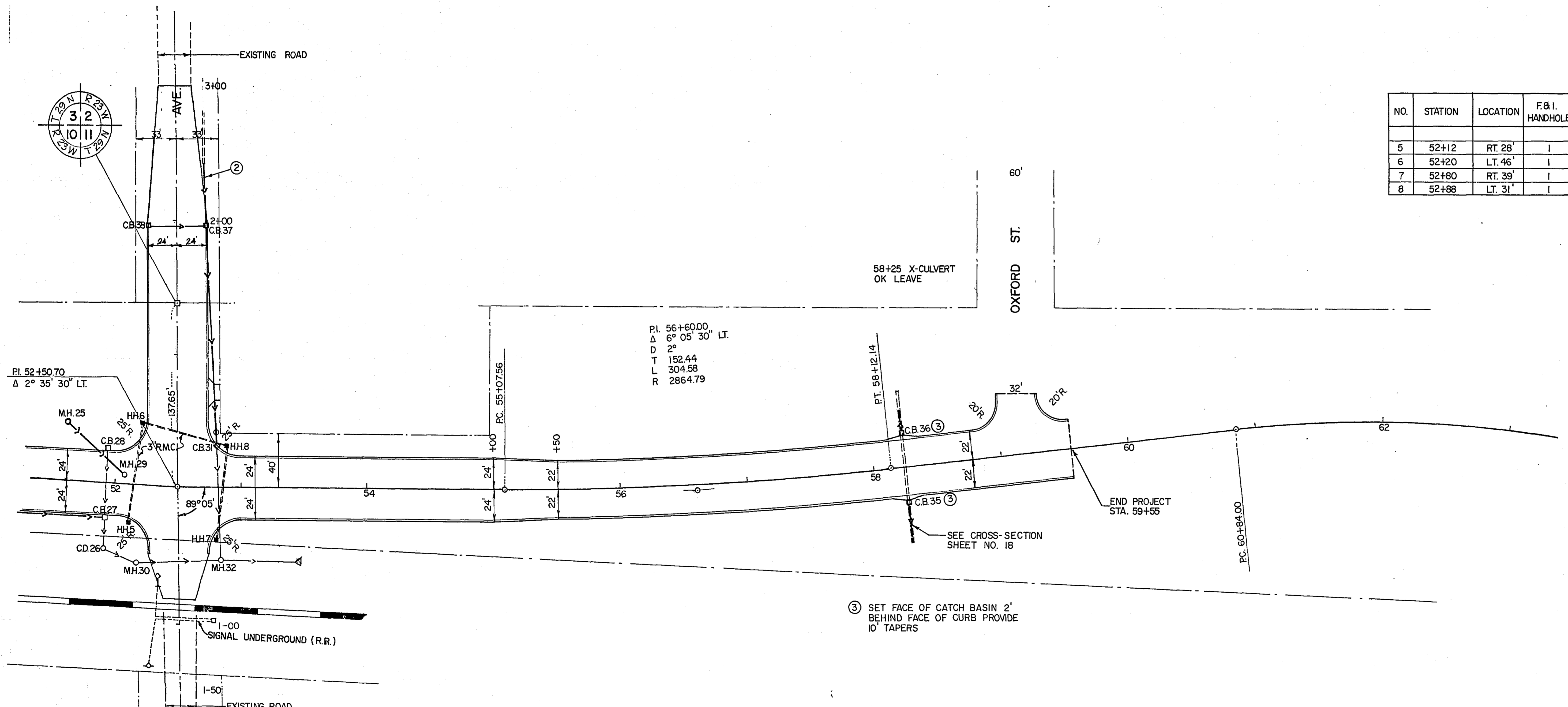
② INSTALL 15" X 46' C.M.P.
MAKE SUITABLE CONNECTION

PI 52+50.70
Δ 2° 35' 30" LT
REMOVE EXISTING
SURFACE DRAIN

1-00 SIGNAL UNDERGROUND (R.R.)



NO.	STATION	LOCATION	F.B.I. HANDHOLE
5	52+12	RT. 28'	I
6	52+20	LT. 46'	I
7	52+80	RT. 39'	I
8	52+88	LT. 31'	I



PI. 56+60.00
Δ 6° 05' 30" LT.
D 152.44
T 304.58
R 2864.79

③ SET FACE OF CATCH BASIN 2'
BEHIND FACE OF CURB PROVIDE
10" TAPERS

CONSTRUCTION PLAN

MICROFILM
RAMSEY CO. ENGR.

S.A.P. NO. 62-623-08

SHEET NO 10 OF 20 SHEETS

6888