

**FINAL IDOT PUMP STATION #25
HYDRAULIC REPORT (HR) APPENDICES
(VOLUME TWO OF TWO)**

Route/Roadway: IDOT Pump Station #25
IL-43 Harlem Avenue and 95th Street

Limits: From 79th Street to Stony Creek

Municipality/County: Bridgeview/Cook County

PTB Number: 154/020 Work Order No.12

Job No: MCI #2099

R E C E I V E D
DEC 21 2012

Prepared For:
DIST. ONE - DESIGN



**DISTRICT ONE
HYDRAULICS SECTION
BUREAU OF PROGRAMMING
IDOT- DIVISION OF HIGHWAYS**

Prepared By:



Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

**Dated: August 15, 2012
Revised: November 21, 2012**

APPENDIX TABLE OF CONTENTS

APPENDIX

VOLUME ONE

Appendix A — Field Survey Notes

Topographic survey of Detention and Miscellaneous Areas, prepared by Robert E. Hamilton Consulting Engineers, Inc., dated April 14, 2012.

Electronic Copy Via CD-ROM

Appendix B — Copy of Selected Reference Materials

A - Village of Bridgeview, Southfield Neighborhood Storm Sewer Atlases. Received May 31, 2012;

B - Village of Oak Lawn, Storm Sewer Atlases. Received May 31, 2012;

C - Copy of report titled "Stormwater Management Plan, Village of Bridgeview, for the Area Between 87th Street and 95th Street and Harlem Ave. and Tri State Tollway." Latest revision date April 1988, prepared by Robinson Engineering;

D - Copy of report titled "Village of Bridgeview, IL Tri-State Industrial Park Storm Sewer, Southfield Subdivision Outlet and Central Detention Pond Drainage Study." Latest revision date May 2003, prepared by Robinson Engineering;

VOLUME TWO

Appendix B Continued — Copy of Selected Reference Materials

E - Illinois State Toll Highway Authority, Contract GRE-84-317R, plan sheets 2, 11, 47, 48, 49, 50 and 55a of 155, prepared by Jack E. Leisch & Associates, latest revision date 7/30/89;

F - Village of Bridgeview, General Drainage Plan — South of 95th Street & West of Harlem Avenue, record drawing, dated 1-20-97, prepared by Hoefflerle-Butler Engineering, Inc. 1 plan sheet;

G - Village of Bridgeview, Construction Plan & Profile — Octavia Avenue, as-built plans prepared by Hoefflerle-Butler Engineering, Inc., dated 2-17-92, sheet 3 of 7;

Village of Bridgeview, Construction Plan & Profile — Odell Avenue, as-built plans prepared by Hoefflerle-Butler Engineering, Inc., dated 2-17-92, sheet 4 of 7;

Village of Bridgeview, Construction Plan & Profile — 93rd Street, as-built plans prepared by Hoefflerle-Butler Engineering, Inc., dated 2-17-92, sheets 3 and 4 of 6;

H - Illinois Department of Transportation PTB 146 / 10-Work Order No. 20. IL 43 (Harlem Avenue) from 95th Street to 105th Street (near Stony Creek). Storm Sewer Televising Memorandum, prepared by Hey and Associates, latest revision date August 9, 2011.

Electronic Copy Via CD-ROM

APPENDIX B CONTINUED
COPY OF SELECTED REFERENCE MATERIALS

W/ DISK

Hey and Associates, Inc.

Water Resources, Wetlands and Ecology

26575 W. COMMERCE DRIVE, SUITE 601
VOLO, ILLINOIS 60073
PHONE (847) 740-0888
FAX (847) 740-2888

MEMORANDUM

BUREAU OF PROGRAMMING
RECEIVED

AUG 11 2011

DISTRICT #1

BUREAU OF PROGRAMMING
RECEIVED
AUG 11 2011
DISTRICT #1

TO: Mr. Santos Batista

FROM: Michael Farrell
Tom Polzin P.E. CFM

DATE: August 9, 2011

RE: IDOT PTB 146/10-Work Order No.20
IL 43 (Harlem Avenue) from 95th Street to 105th Street (Near Stoney Creek)

PROJECT NO. 08009S

Wednesday June 29, 2011 and Friday July 1, 2011

American Underground (AU) and Michael Farrell of Hey and Associates, Inc. met at the northeast corner of Harlem Ave. and East Frontage Drive (approximately 98th Street) to televise and lightly clean IDOT's storm sewer in Harlem Ave., from pumping station 25, located on the southwesterly ramp connecting Harlem Ave. with 95th St., to the outfall on the easterly side of Harlem Ave. at Stoney Creek (approximately 105th Street). Mr. Farrell of Hey and Associates was onsite to provide documentation, digital photographs and to verify the depths of the recovered manholes.

The attached Exhibit A is a time line of all activities, and Exhibit B shows the sewer location and manhole numbering system and Exhibit C lists the depth of the recovered manholes.

Our first operation was to identify the IDOT sewer manholes. A search did not locate manholes #4 and #10.

All manholes and pipes were found to be clean and unobstructed except between manholes #1 and #2. The televising of this length of the sewer pipe was first attempted moving north from manhole #2 and was halted at a distance of 375 feet by what AU described as roots, a subsequent attempt moving south from manhole #1 was also stopped in the same manner, at a distance of 113 feet from manhole #1. These roots do not fill the entire pipe but only prevented the camera from passing through. At this time, in this reach, there is some portion of the pipe which is not televised. The distance, protracted from plans, between manholes #1 and #2 is approximately 830 feet and the total length televised in this pipe was 488 feet.

The televising of the balance of the sewer system proceeded without problems or interruption and no cleaning was required.

Client's Name: IDOT PTB 146/10-Work Order No.20

Date: August 9, 2011

Page 2

Tuesday, August 2, 2011

American Underground (AU) and Michael Farrell of Hey and Associates, Inc. met at the intersection of 96th Street and W. Avon Ave. in the Village of Oak Lawn. The purpose was to complete the storm sewer televising between manholes #1 and #2.

During the first attempt to televise between MH#1 and MH#2 the camera was halted by roots blocking the bottom of the pipe. In this operation, on August 2, 2011, the camera was inserted into the sewer pipe at MH#1 accompanied by a worker from AU. This worker, using hand tools, cut away the roots as the camera proceeded along the storm sewer pipe. The four or five root masses encountered were large enough to impede the camera, but did not block the pipe in any significant way. Once the path had been cleared, the camera was returned to MH#1 and the televising of the pipe to MH#2 was recorded.

AU produced a report and provided a digital copy of the televised recordings, both of which are attached to this memorandum. In addition, a CD with all digital photos taken is also attached.

Exhibit A

Televising of Storm Sewer in Harlem Ave. South of 95th St.

June 29-2011

- 8:00 Meet with American Underground at the northeast corner of Harlem Ave and East Frontage Dr.
- 8:05 Walk north with the American Underground to locate manholes, at this time we can not find MH #2, #1 or #10 and find #11 within the enclosure around Pumping Station #25
- 8:40 Back at the Corner of Harlem Ave and East Frontage Dr.
- 8:45 American Underground set up to televise from MH#3, which is found clean and free of debris
- 9:15 The camera begins to travel north through the 72" pipe.
- 9:50 The camera reaches MH#2 at 610ft north of MH#3
- 10:10 The camera continues north from MH#2 and reaches a root ball and is stopped
- 10:25 Wheel of 610ft from MH#3 and locate MH#2 on the surface
- 10:45 American Underground recovers the camera and turns it south to televise the section between MH#3 and MH#4
- 11:08 At 745ft south the camera reaches MH#4
- 11:10 Wheel off 745ft south from MH#3 and do not find MH#4 on the surface
- 11:40 American Underground recovers the camera
- 12:10 Locate MH#5 on the surface and set up to televise.
- 12:18 Begin televising north to MH#4, reach MH#4 at 550ft, make one last check and do not find MH#4 on the surface
- 12:45 recover camera and begin televising to south to MH#6
- 1:11 Reach MH#6 at 814ft, walk to MH#6 and find that the camera as rigged will not fit through the offset rim. American Underground unplugs the camera from the cable and recovers the cable leaving the camera at MH#6
- 1:50 American Underground moves the equipment van to MH#6 reconnects the cable and begins television south to MH#7
- 2:29 Reach the maximum cable length at 1295ft, stationing indicates the distance to MH#7 is 1385ft, start retrieval of the camera.
- 2:57 finish recovery of the camera, and pack up for the day
- 3:05 Leave site

July 1-2011

- 8:00 Meet American Underground at pumping station 25 on the southwest ramp connecting Harlem Ave. with 95th St.
- 8:15 Call IDOT and find that due to a miscommunication IDOT is not here to open the gate, we move to MH#1
- 8:30 Locate MH#1 and set up to begin televising
- 8:45 Camera is rigged and lowered into MH#1
- 8:55 Begin televising south to MH#2
- 9:03 Camera reaches a root ball and retrieval begins
- 9:09 Begin televising west to MH#10
- 9:29 Reach MH#10 and continue west
- 9:50 Reach MH#11 at pumping station 25 and begin retrieval of the camera

Exhibit A

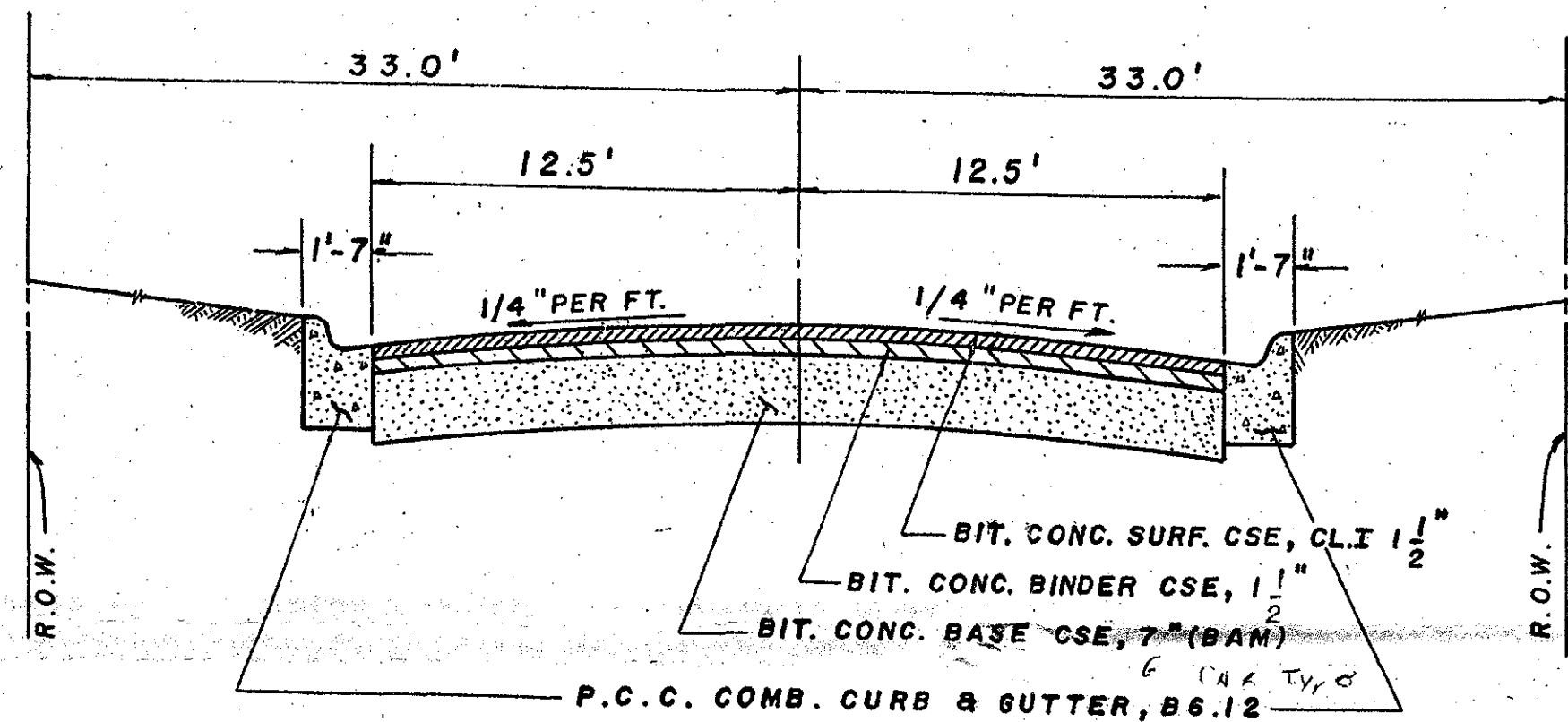
- 10:25 Meet with IDOT personal at pumping station 25 and measure depth of MH#11
- 11:00 Locate MH#8 and set up to begin televising south to the outfall at Stoney Creek
- 11:30 The camera is recovered and turned north to televise to MH#7
- 12:15 Reach MH#7 and continue 100 ft north to close out the run between MH#6 and MH#7
- 12:35 The camera is recovered and American Underground packs it up
- 12:50 leave site

8/2/2011

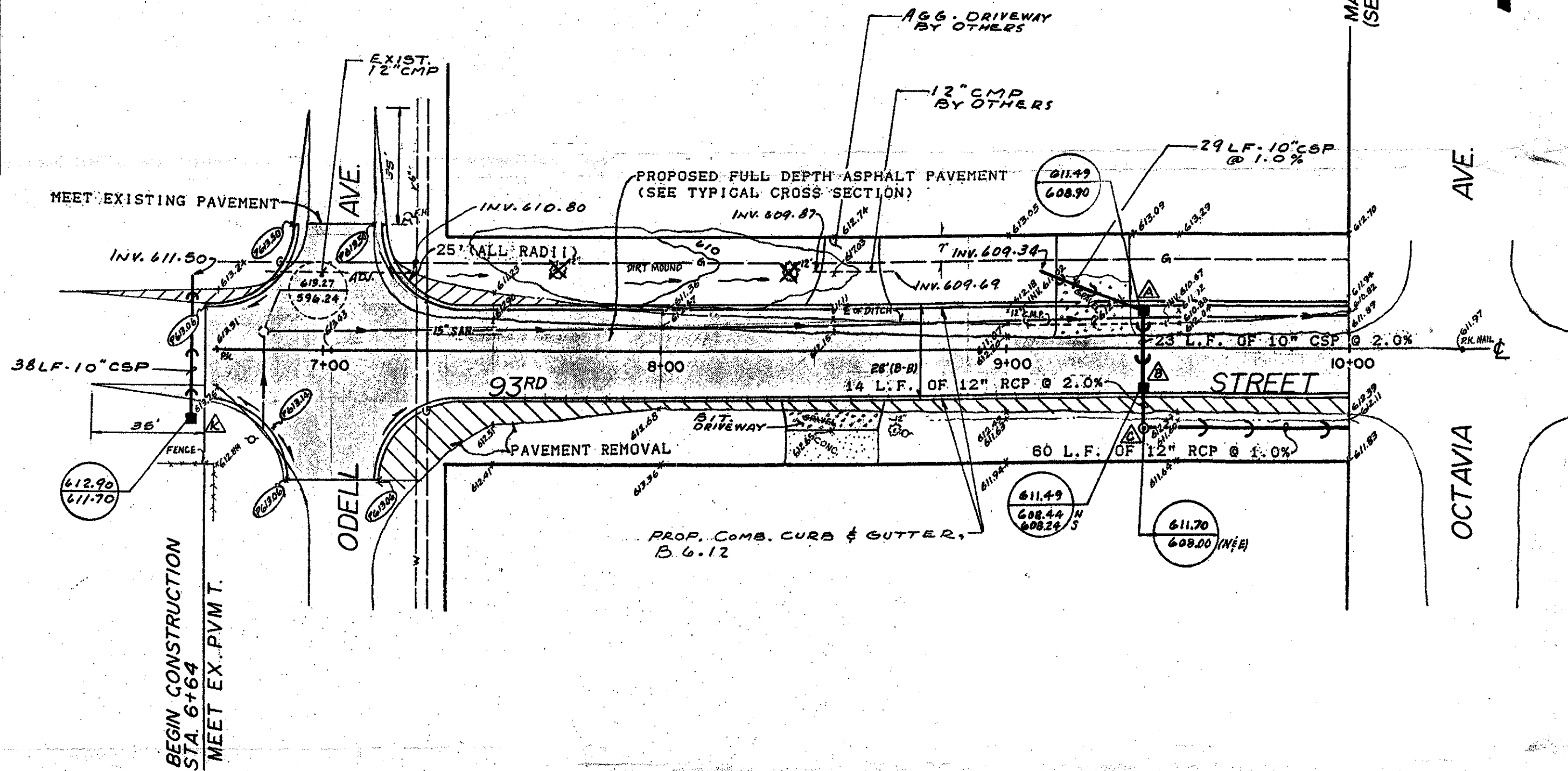
- 7:05 Speak with IDOT representative, who verified the shutdown of pumping station No. 25.
- 7:55 Meet American Underground on site, at the intersection of 96th St. and W. Avon Ave. in Oak Lawn.
- 8:00 American Underground prepares the camera for televising.
- 8:25 The camera is inserted into the sewer at MH#1 and it travels north through a 72" pipe.
- 8:40 The camera encounters a root mass and a member of the American Underground crew enters the pipe to clear the way.
- 9:00 The crewman exits the sewer to get more cleaning tools.
- 9:20 Crewman re-enters pipe and continues cleaning.
- 9:40 Some debris is removed from pipe.
- 10:50 Finish clearing roots.
- 10:58 Pull camera back to MH#1 .
- 11:00 Begin televising run from MH#1 to MH#2.
- 11:30 Reach MH#2.
- 11:45 Remove camera from pipe at MH#1.
- 12:00 American Underground packs up and leaves site.
- 12:05 Contact IDOT representative to reactivate pumping station No. 25.
- 12:10 Leave site.

Exhibit C

<u>Manhole Number</u>	<u>Depth (Ft and Decimals)</u>
1	11.70
2	15.40
3	16.33
4	Not Found on the surface
5	12.25
6	12.00
7	10.82
8	9.95
9	Outfall at creek
10	Not Found on the surface
11	12.25



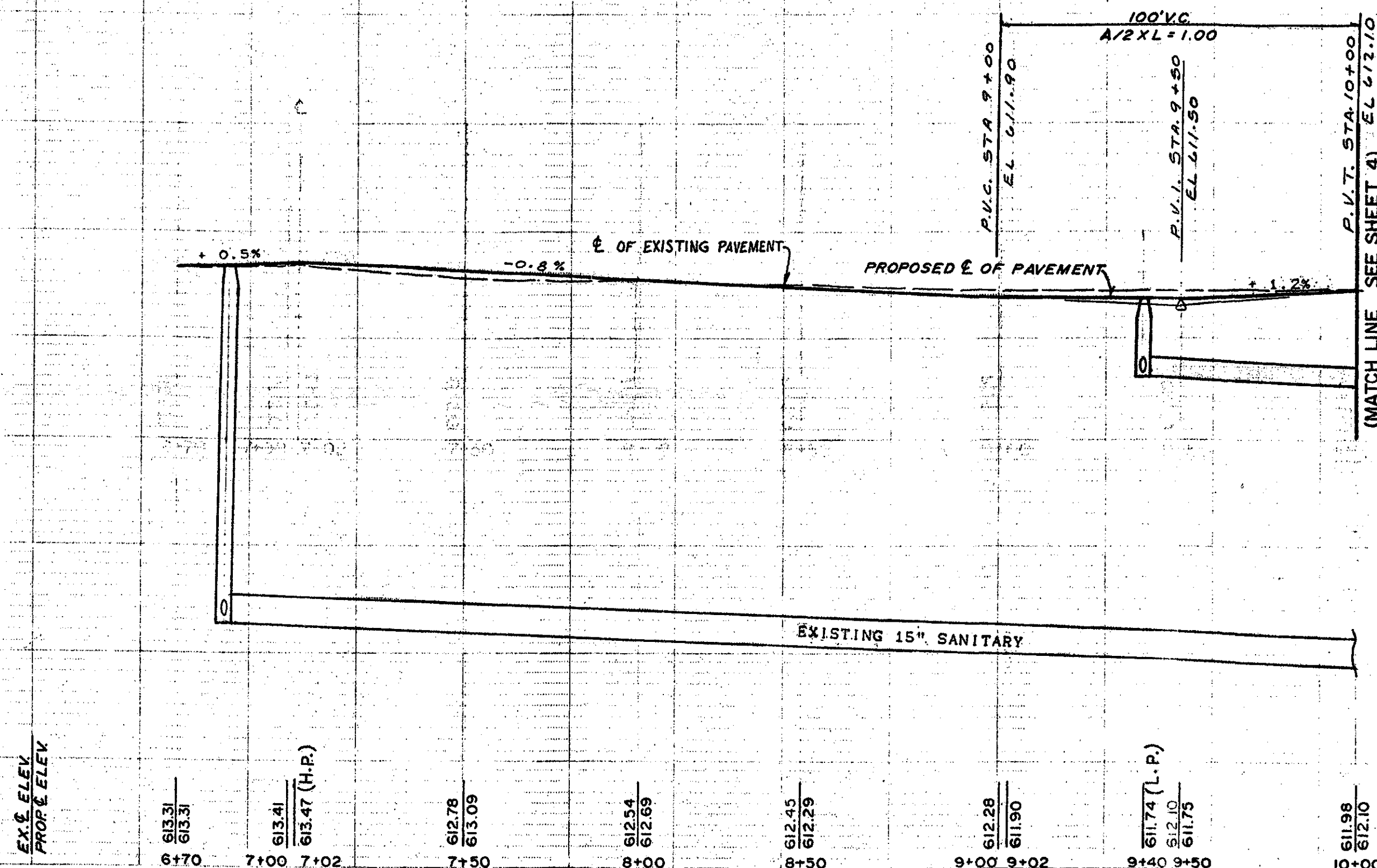
TYPICAL CROSS SECTION
(93rd Street)



SCHEDULE OF STRUCTURES		
SYMBOL	LOCATION	TYPE
△	9+40, 11.5' LEFT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
△	9+40, 11.5' RIGHT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
△	9+40, 23' RIGHT	MANHOLE, TYPE C, TYPE 1, FRAME & CLOSED LID
△	6+61, 20' RIGHT	INLET TYPE A, TYPE 8 GRATE

615
610
605

615
610
605



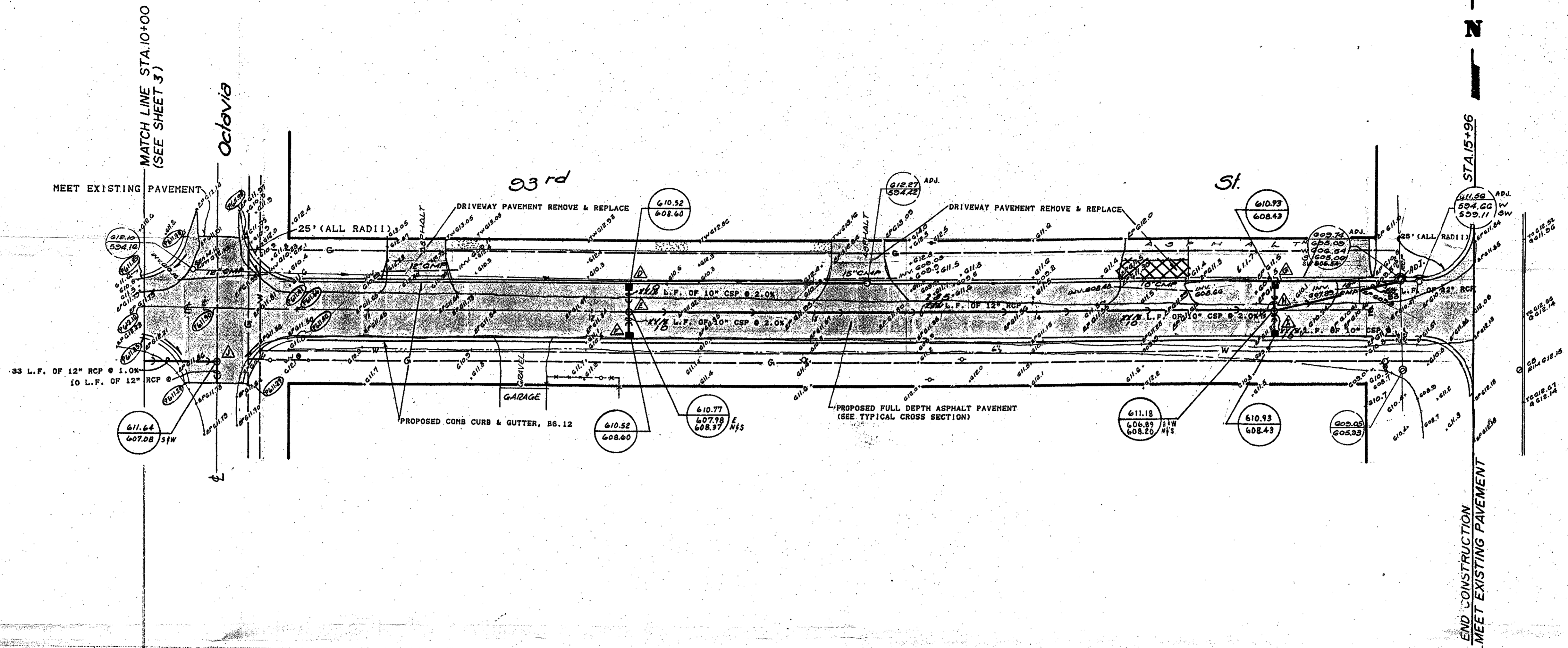
AS-BUILTS
2-17-92

CONSTRUCTION PLAN & PROFILE - 93RD STREET VILLAGE OF BRIDGEVIEW 7500 S. OKETO AVE. BRIDGEVIEW, IL 60445		HOEFFERLE-BUTLER ENGINEERING, INC. 8714 SOUTH ROBERTS ROAD WICKORY HILLS, IL 60457	DATE 5-23-90 DRAWN BY T.M.F. CHECKED BY SAL	SCALE H.1"=30', V.1"=5' JOB NO. 89-918 SHEET 3 of 6
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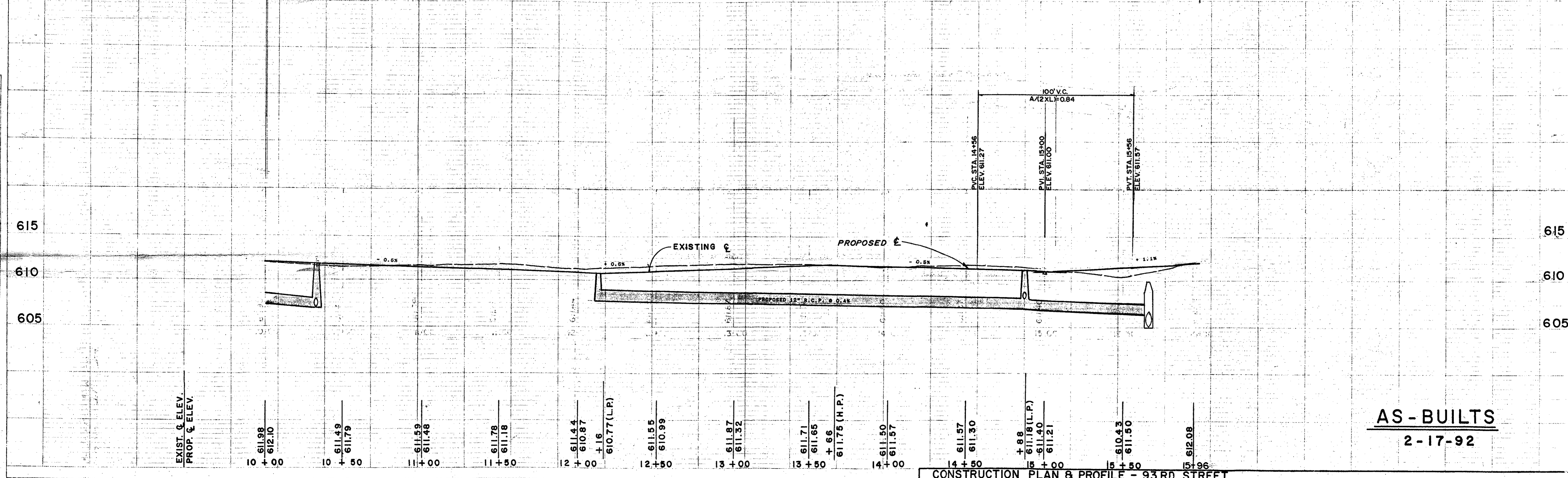
PLATE 1-SINGLE PLAN AND PROFILE LINE & DOT
PRINTED IN U.S.A.

PLAN
 DATE
 BY
 CHECKED
 APPROVED
 TITLE

PROFILE
 DATE
 BY
 CHECKED
 APPROVED
 TITLE



SCHEDULE OF STRUCTURES		
SYMBOL	LOCATION	TYPE
△	12+16, 11.5' LEFT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
△	12+16, CENTER LINE	MANHOLE, TYPE C, TYPE 1, FRAME & CLOSED LID
△	12+16, 11.5' RIGHT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
△	15+06, 11.5' LEFT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
△	15+06, CENTER LINE	MANHOLE, TYPE A, TYPE 1, FRAME & CLOSED LID
△	15+06, 11.5' RIGHT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
△	10+32, 24' RIGHT	MANHOLE, TYPE A, TYPE 1, FRAME & CLOSED LID

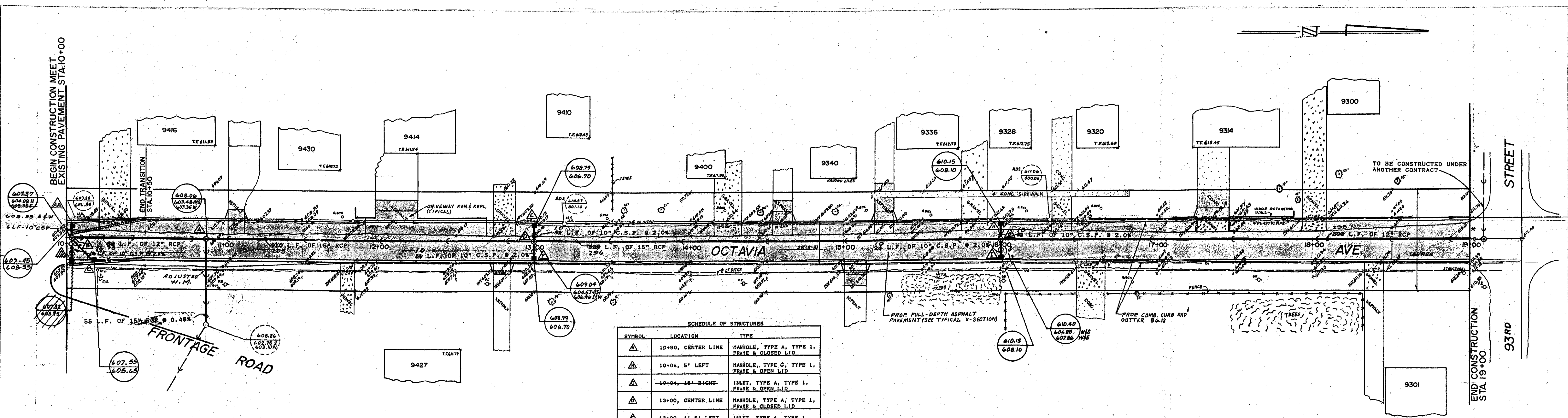


AS-BUILTS
 2-17-92

CONSTRUCTION PLAN & PROFILE - 93RD STREET

VILLAGE OF BRIDGEVIEW 7500 S. OKETO AVE. BRIDGEVIEW, IL 60445	HOEFFERLE-BUTLER ENGINEERING, INC. 8714 SOUTH ROBERTS ROAD HICKORY HILLS, IL 60457 17081599-8980	DATE 5-23-90 DRAWN BY T.M.F. CHECKED BY SAL	SCALE HORZ. 1"=30' VERT. 1"=5' JOB NO. 89-918 SHEET 4 OF 6
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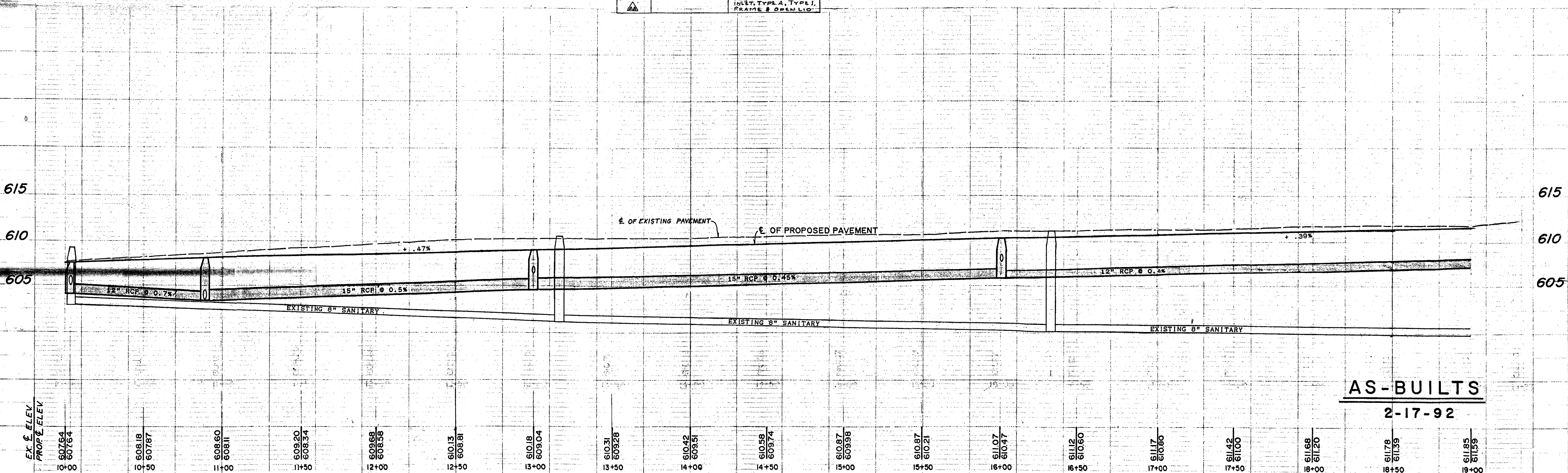
PLATE 1: SINGLE PLAN AND PROFILE LINE & PLOT
 PRINTED IN U.S.A.



SCHEDULE OF STRUCTURES

SYMBOL	LOCATION	TYPE
▲	10+90, CENTER LINE	MANHOLE, TYPE A, TYPE 1, FRAME & CLOSED LID
▲	10+04, 5' LEFT	MANHOLE, TYPE C, TYPE 1, FRAME & OPEN LID
▲	10+04, 15' RIGHT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
▲	13+00, CENTER LINE	MANHOLE, TYPE A, TYPE 1, FRAME & CLOSED LID
▲	13+00, 11.5' LEFT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
▲	13+00, 11.5' RIGHT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
▲	16+00, CENTER LINE	MANHOLE, TYPE A, TYPE 1, FRAME & CLOSED LID
▲	16+00, 11.5' LEFT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
▲	16+00, 11.5' RIGHT	INLET, TYPE A, TYPE 1, FRAME & OPEN LID
▲		INLET, TYPE A, TYPE 1, FRAME & OPEN LID

* - CONNECT TO PROPOSED STORM SEWER TO BE CONSTRUCTED AS PART OF 93RD STREET IMPROVEMENTS.



AS-BUILTS
2-17-92

EX. ELEV.	PROP. ELEV.	STATION	EX. ELEV.	PROP. ELEV.	STATION	EX. ELEV.	PROP. ELEV.	STATION	EX. ELEV.	PROP. ELEV.	STATION	EX. ELEV.	PROP. ELEV.	STATION	EX. ELEV.	PROP. ELEV.	STATION	EX. ELEV.	PROP. ELEV.	STATION																																				
607.64	607.64	10+00	608.18	607.87	10+50	608.60	608.11	11+00	609.20	608.34	11+50	609.69	608.58	12+00	610.13	608.81	12+50	610.18	609.04	13+00	610.31	609.28	13+50	610.42	609.51	14+00	610.59	609.74	14+50	610.87	609.98	15+00	610.87	610.21	15+50	611.07	610.47	16+00	611.12	610.60	16+50	611.17	610.90	17+00	611.42	611.00	17+50	611.68	611.20	18+00	611.78	611.39	18+50	611.85	611.59	19+00

CONSTRUCTION PLAN & PROFILE - OCTAVIA AVENUE

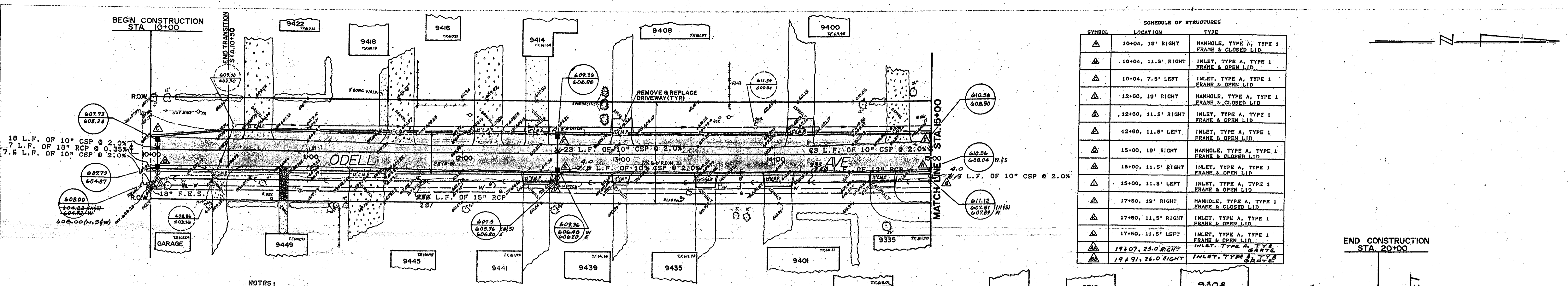
VILLAGE OF BRIDGEVIEW
7500 S. OKETO AVE.
BRIDGEVIEW, IL 60445

HOEFFERLE-BUTLER ENGINEERING, INC.
8714 SOUTH ROBERT ROAD
HICKORY HILLS, IL 60457
1708 599-8980

DATE 5-23-90
DRAWN BY T.M.F.
CHECKED BY SAL

SCALE H"=30', V"=1"=10'
JOB NO. 89-913
SHEET 3 OF 7

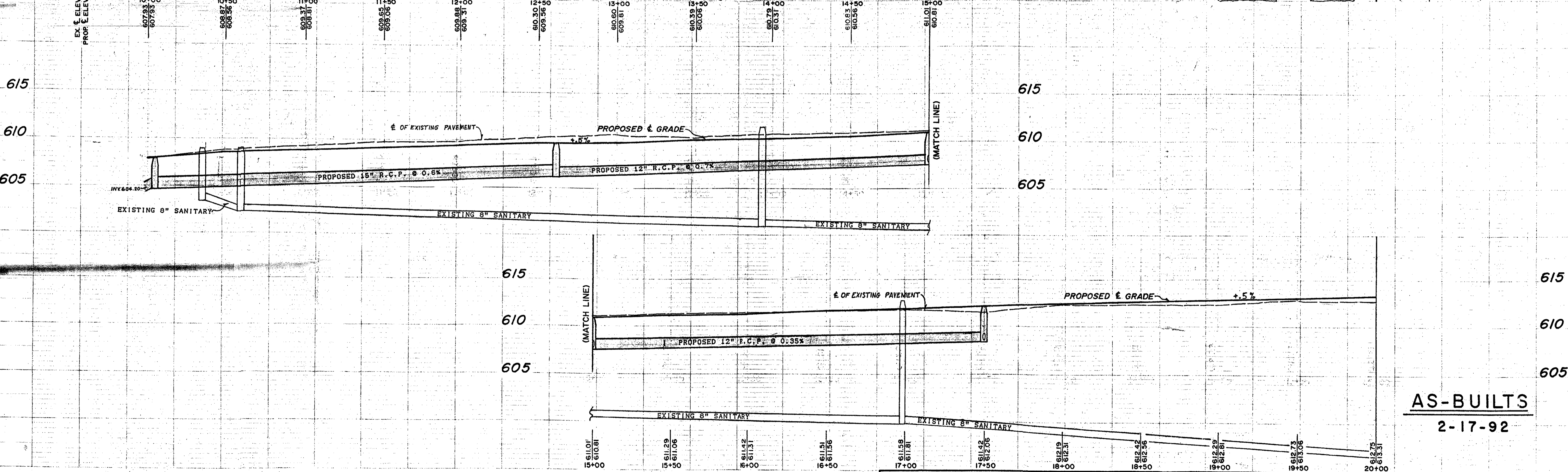
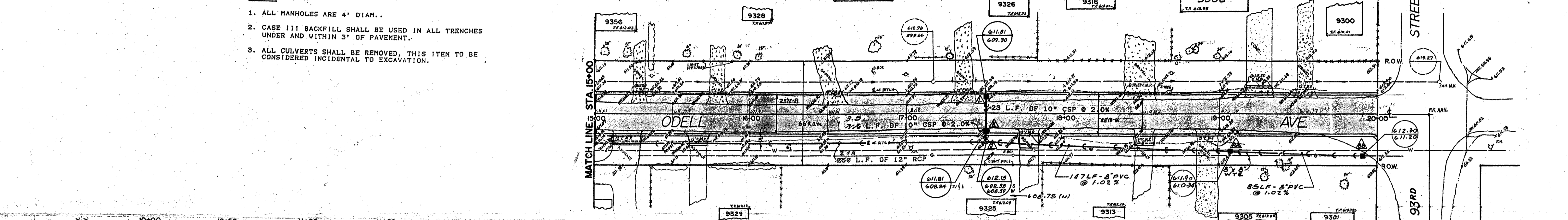
HIGHWAY FEDERAL AID SHEET
PLATE I-SINGLE PLAN AND PROFILE LINE A-D
"W" ELEV
PRINTED IN U.S.A.



SCHEDULE OF STRUCTURES

SYMBOL	LOCATION	TYPE
△	10+04, 19' RIGHT	MANHOLE, TYPE A, TYPE 1 FRAME & CLOSED LID
△	10+04, 11.5' RIGHT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	10+04, 7.5' LEFT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	12+60, 19' RIGHT	MANHOLE, TYPE A, TYPE 1 FRAME & CLOSED LID
△	12+60, 11.5' RIGHT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	12+60, 11.5' LEFT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	15+00, 19' RIGHT	MANHOLE, TYPE A, TYPE 1 FRAME & CLOSED LID
△	15+00, 11.5' RIGHT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	15+00, 11.5' LEFT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	17+50, 19' RIGHT	MANHOLE, TYPE A, TYPE 1 FRAME & CLOSED LID
△	17+50, 11.5' RIGHT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	17+50, 11.5' LEFT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	19+07, 25.0' RIGHT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID
△	19+91, 26.0' RIGHT	INLET, TYPE A, TYPE 1 FRAME & OPEN LID

- NOTES:
1. ALL MANHOLES ARE 4' DIAM.
 2. CASE III BACKFILL SHALL BE USED IN ALL TRENCHES UNDER AND WITHIN 3' OF PAVEMENT.
 3. ALL CULVERTS SHALL BE REMOVED, THIS ITEM TO BE CONSIDERED INCIDENTAL TO EXCAVATION.

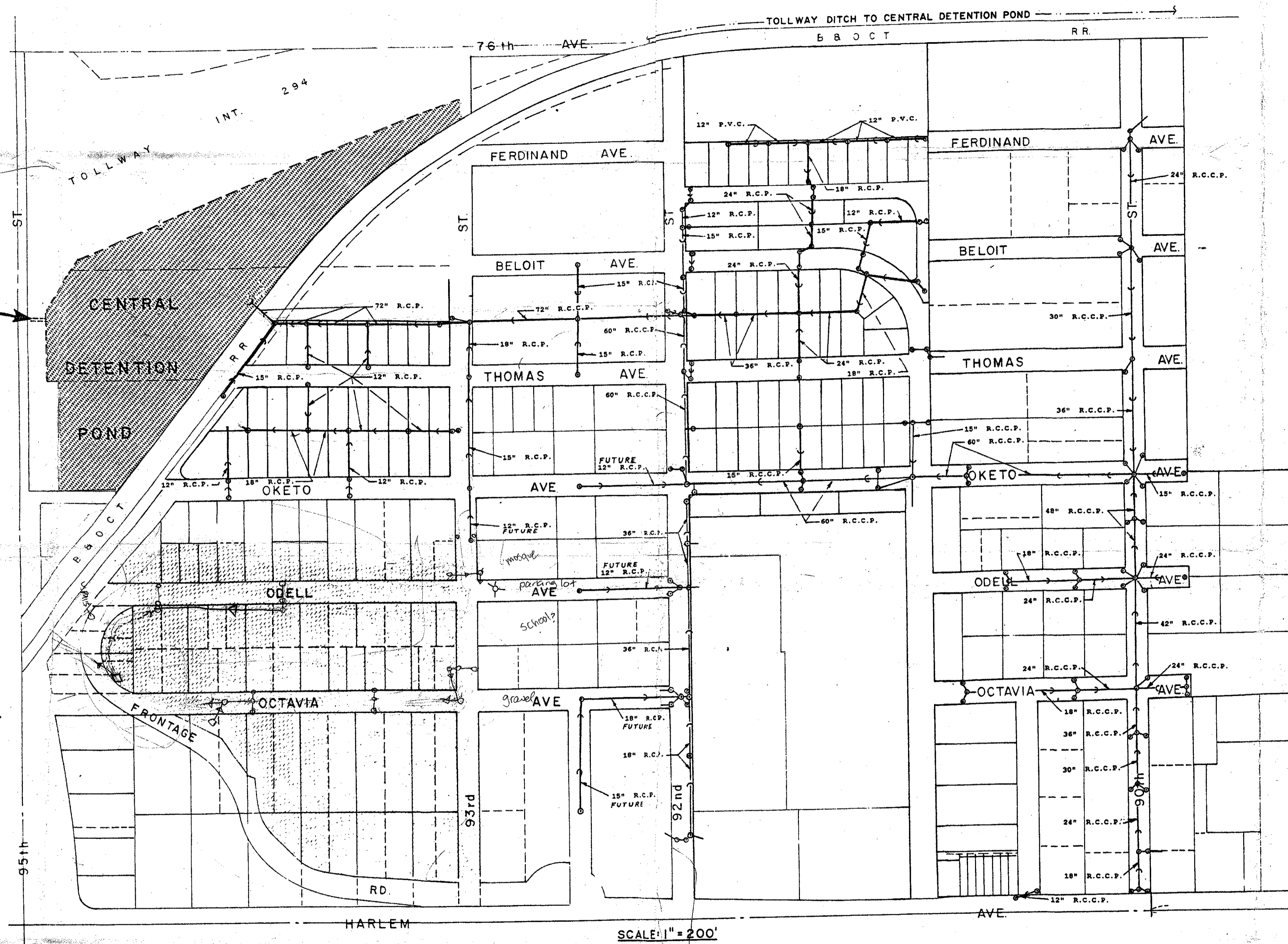


AS-BUILTS
2-17-92

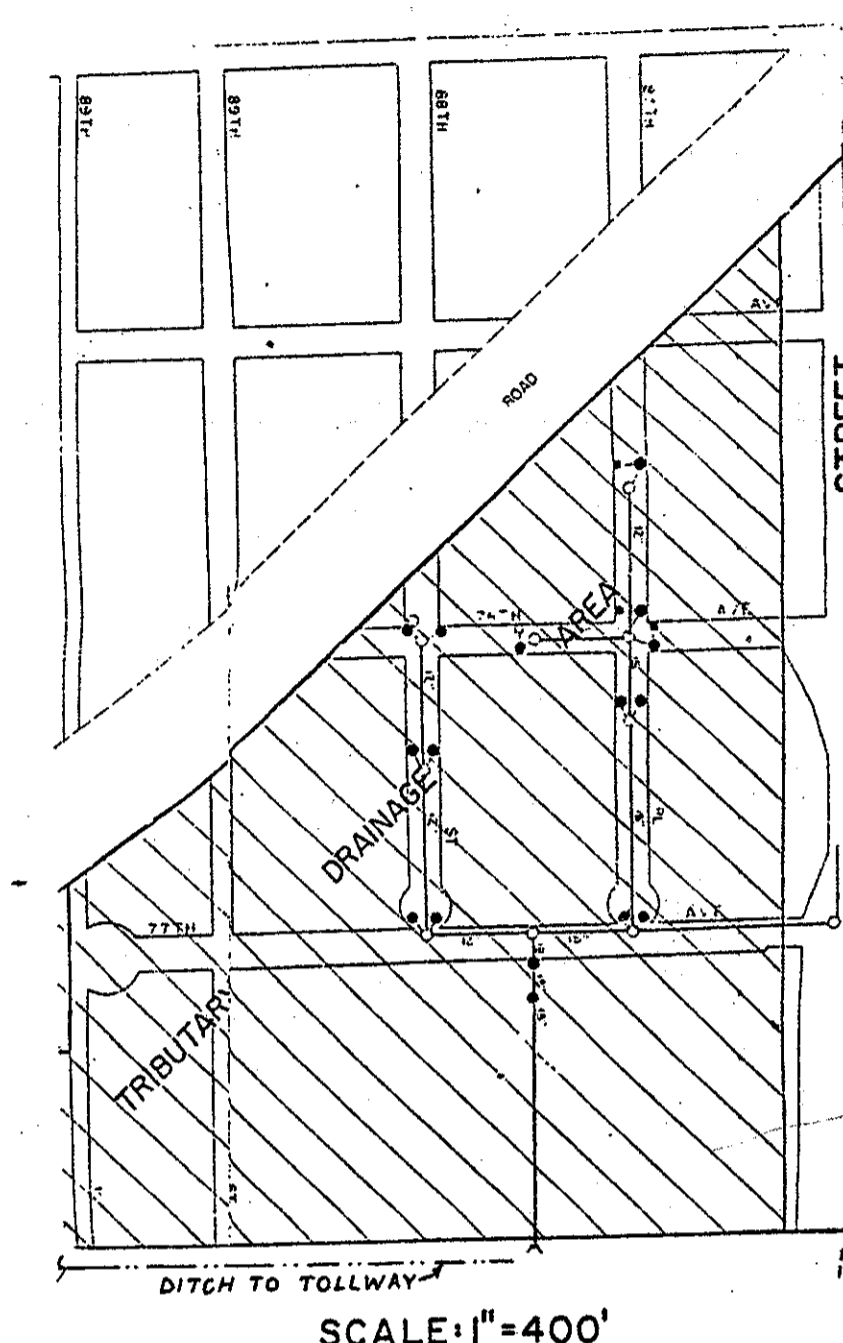
CONSTRUCTION PLAN & PROFILE - ODELL AVENUE

VILLAGE OF BRIDGEVIEW 7500 S. OKETO AVE. BRIDGEVIEW, IL 60445	HOEFFERLE-BUTLER ENGINEERING, INC. 8714 SOUTH ROBERTS ROAD HICKORY HILLS, IL 60457 (708) 599-8980	DATE 5-23-90 DRAWN BY TMF CHECKED BY SAA	SCALE H. 1"=30', V. 1"=5' JOB NO. 89-913 SHEET 4 OF 7
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OUTLET TO BE COORDINATED WITH ILLINOIS TOLL HIGHWAY AUTHORITY.



SCALE: 1" = 200'



ALL INFORMATION RECEIVED JUL 05 2001 DISTRICT #1

True copy of plans on file with Metropolitan Water Reclamation District of Greater Chicago Sewerage Permit **94-016**

AREA NOT INCLUDED
 TRIBUTARY TO EXISTING STORM SEWER SYSTEM

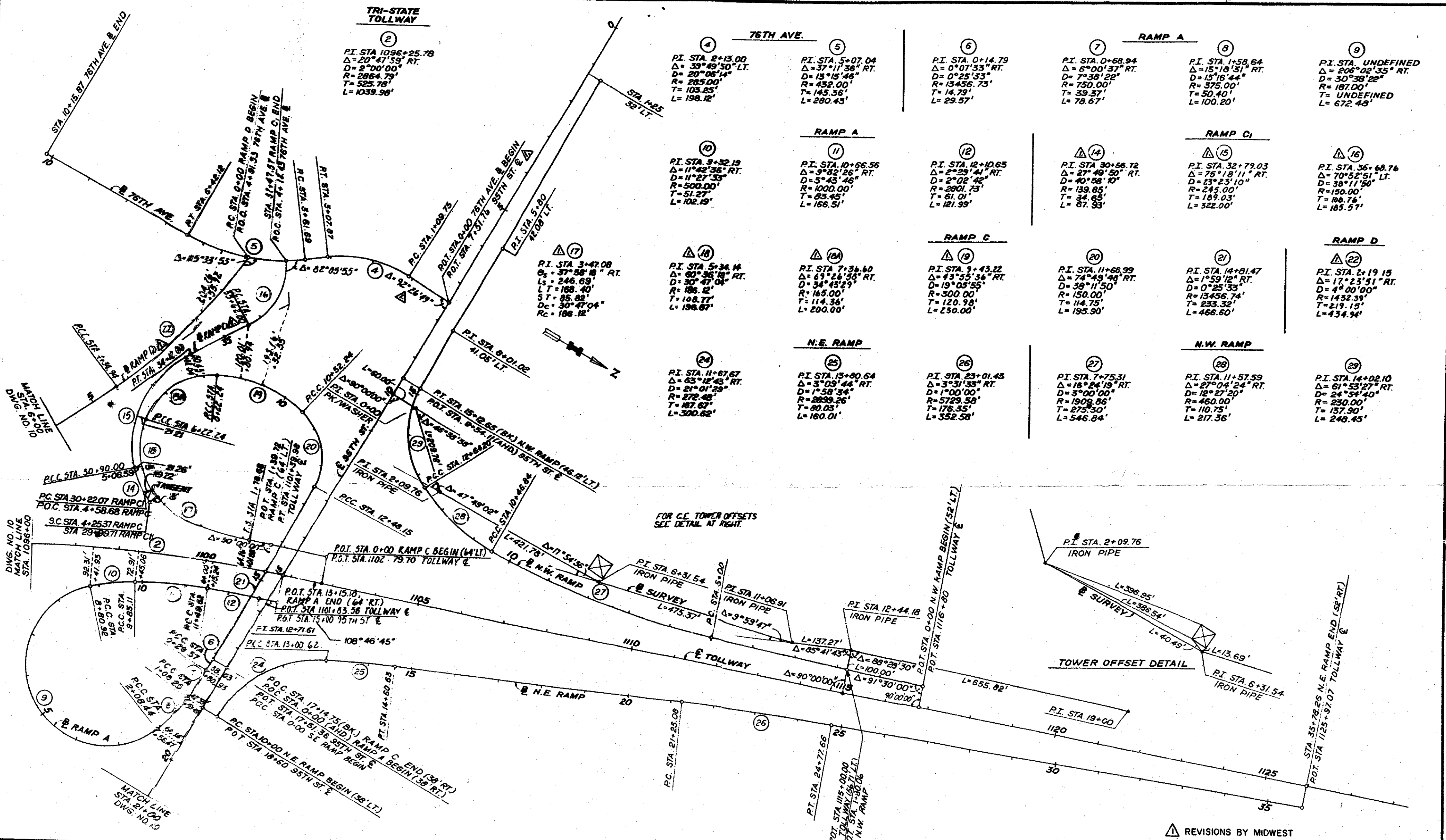
DETECTION POND AREA

AS-BUILT
 DATE RECEIVED 1/22/97
 LOG NO. E597-006

J. BUTLER
 33353
 REGISTERED PROFESSIONAL ENGINEER
 ILL.

John J. Butler
 1-20-97
 Exp. No. 11-21-57

GENERAL DRAINAGE PLAN-SOUTH OF 95th ST. & WEST OF HARLEM AVE.		Date: 1-20-97
VILLAGE OF BRIDGEVIEW 7500 S. OKETO AVE. BRIDGEVIEW, ILLINOIS 60445		Drn: TMF Ckd. JUB
HOEFFERLE-BUTLER ENGINEERING, INC. 8714 SOUTH ROBERTS ROAD HICKORY HILLS, ILLINOIS 60457 (708) 599-8980		Scale: 1" = 97-900
		Sheet 1 of 1



DRAWN G.T.
 CHECKED J.A.R.
 DATE 7.30.195
 SCALE 1"=100'

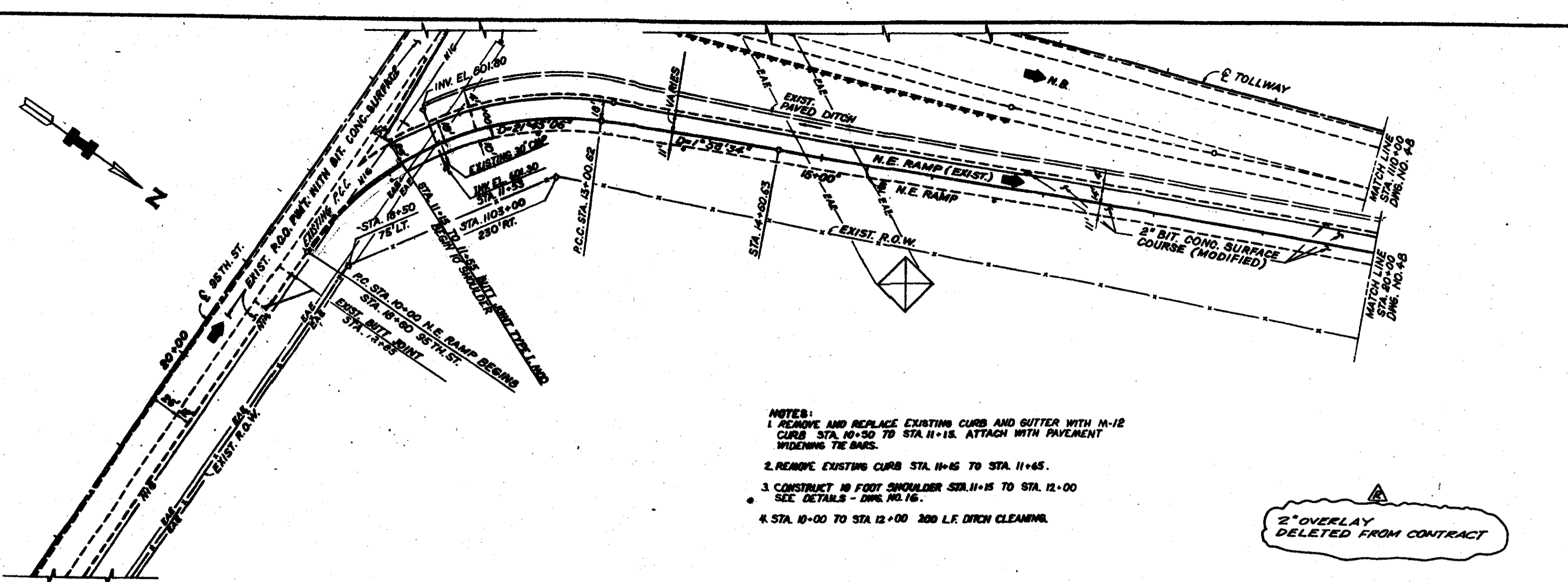
JACK E. LEISCH & ASSOCIATES
 TRANSPORTATION ENGINEERING
 EVANSTON, ILLINOIS

I THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
 EAST-WEST TOLLWAY AND MIDWEST ROAD
 OAK BROOK, ILLINOIS 60521

REVISIONS	
NO.	DESCRIPTION
1	10/24/84 RAMP C, C.I., & D ALIGNMENT

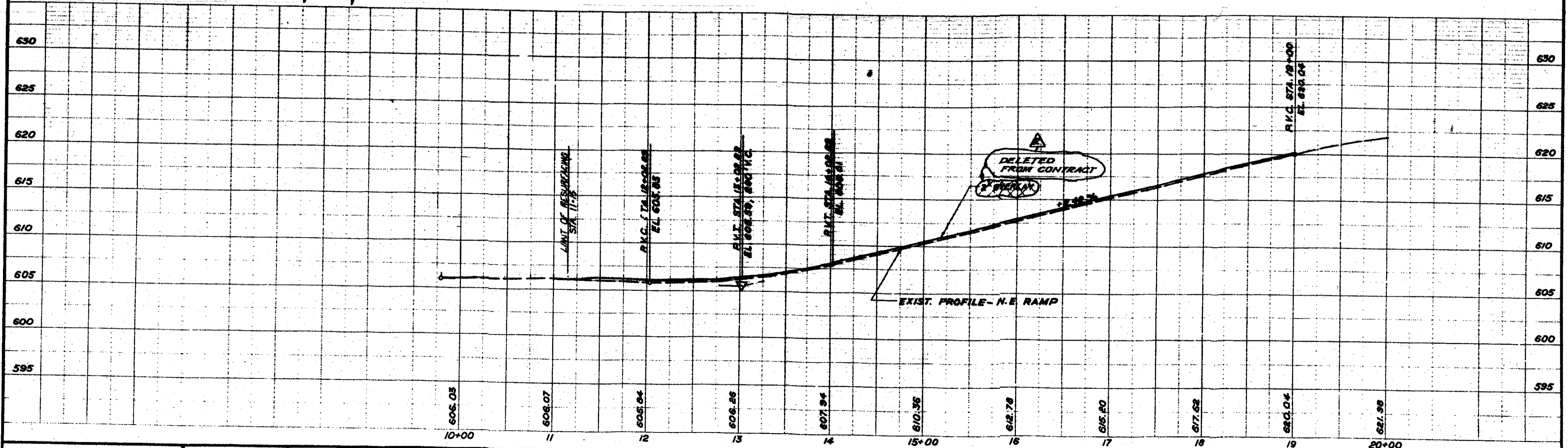
REVISIONS BY MIDWEST CONSULTING ENGINEERS, INC.
 CONTRACT GRE-84-317 R
 SCHEMATIC ALIGNMENT PLAN

DRAWING NO. 11 OF 155



- NOTES:
1. REMOVE AND REPLACE EXISTING CURB AND GUTTER WITH M-12 CURB STA. 10+30 TO STA. 11+15. ATTACH WITH PAVEMENT WIDENING THE BARS.
 2. REMOVE EXISTING CURB STA. 11+15 TO STA. 11+65.
 3. CONSTRUCT 10 FOOT SHOULDER STA. 11+15 TO STA. 12+00 SEE DETAILS - DWG. NO. 16.
 4. STA. 10+00 TO STA. 12+00 200 L.F. DITCH CLEANING.

2" OVERLAY DELETED FROM CONTRACT



DRAWN A.M.
CHECKED G.L.

DATE 7/30/85
SCALE 1" = 50'

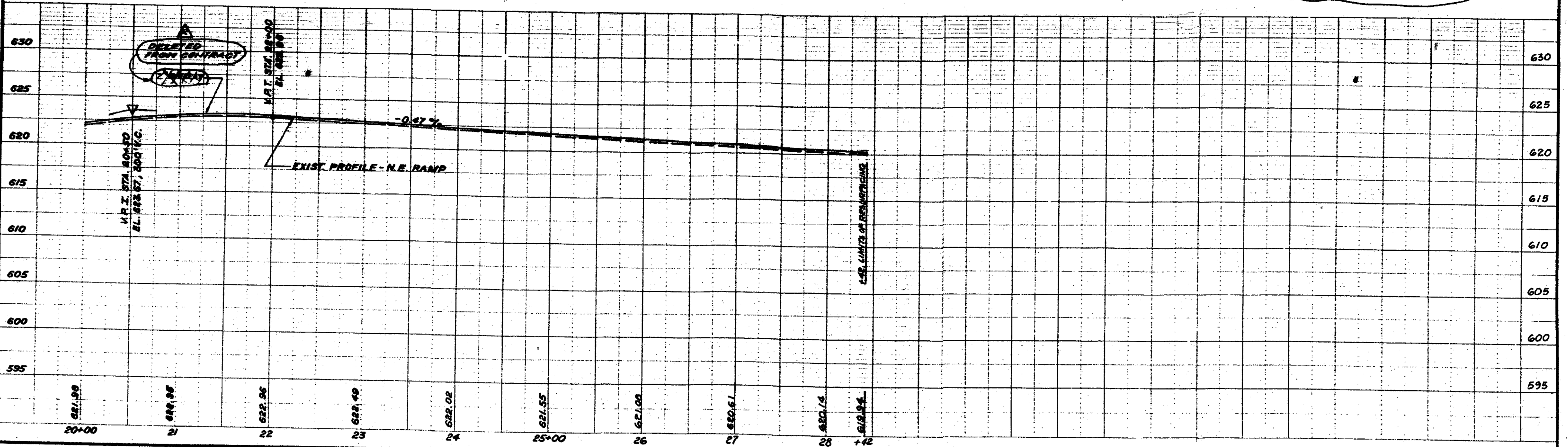
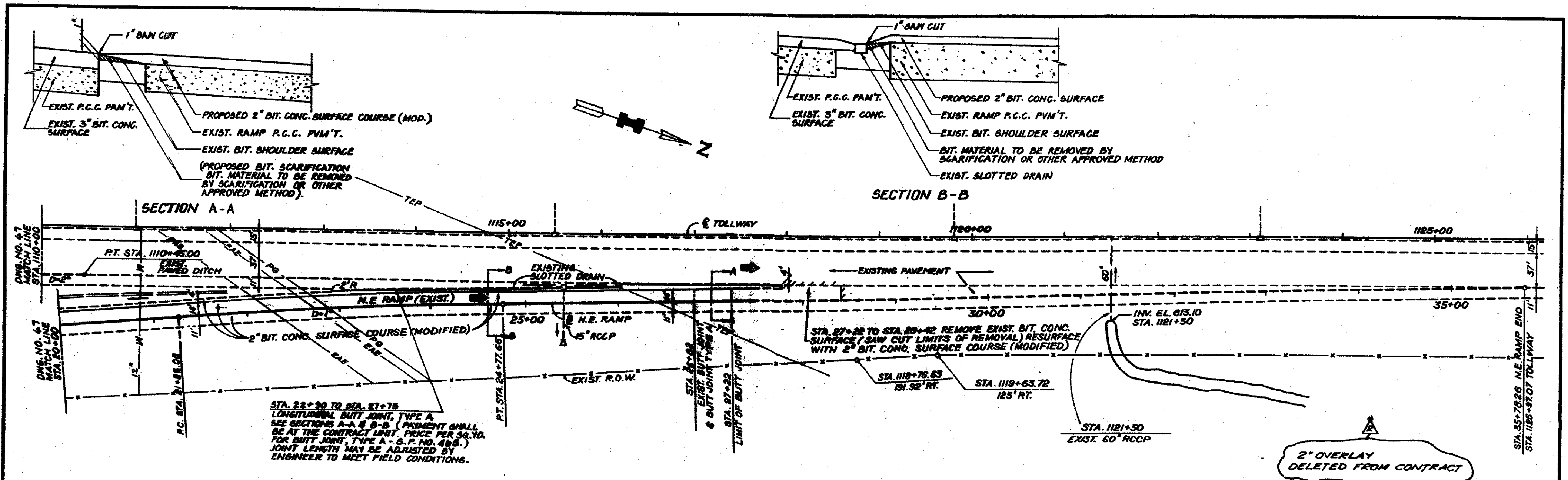
JACK E. LEISCH & ASSOCIATES
TRANSPORTATION ENGINEERING
EVANSTON, ILLINOIS

I THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION
1	7-30-89	CONSTRUCTION CHANGES

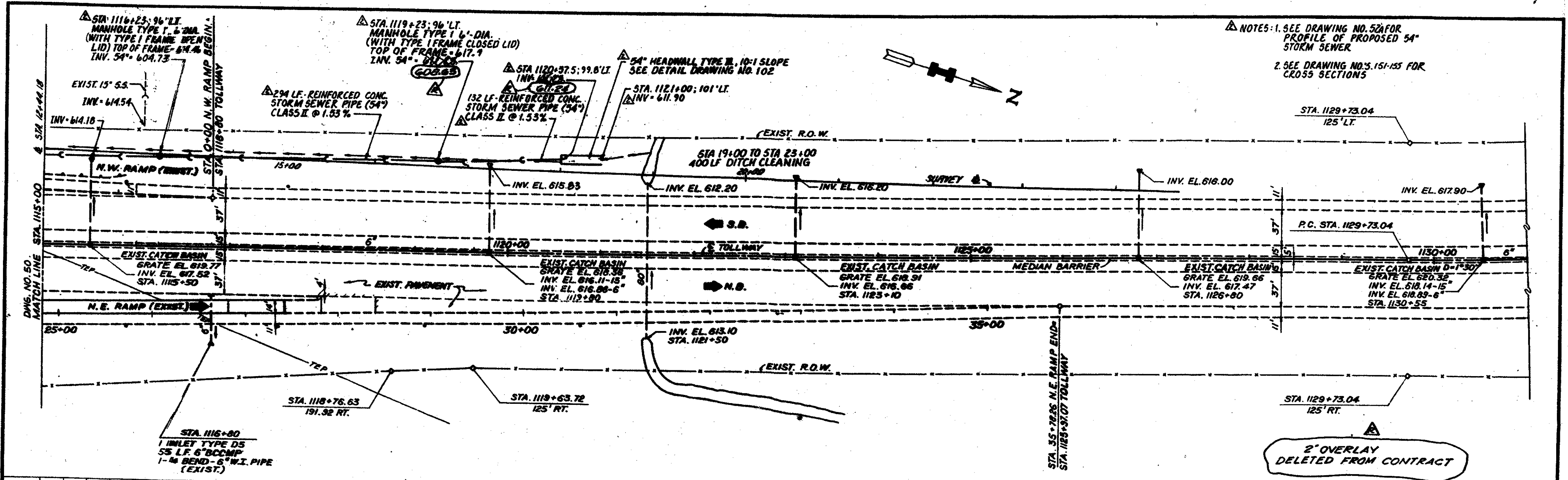
CONTRACT GRE-84-317R
PLAN AND PROFILE
N.E. RAMP

DRAWING NO.
47 of 155

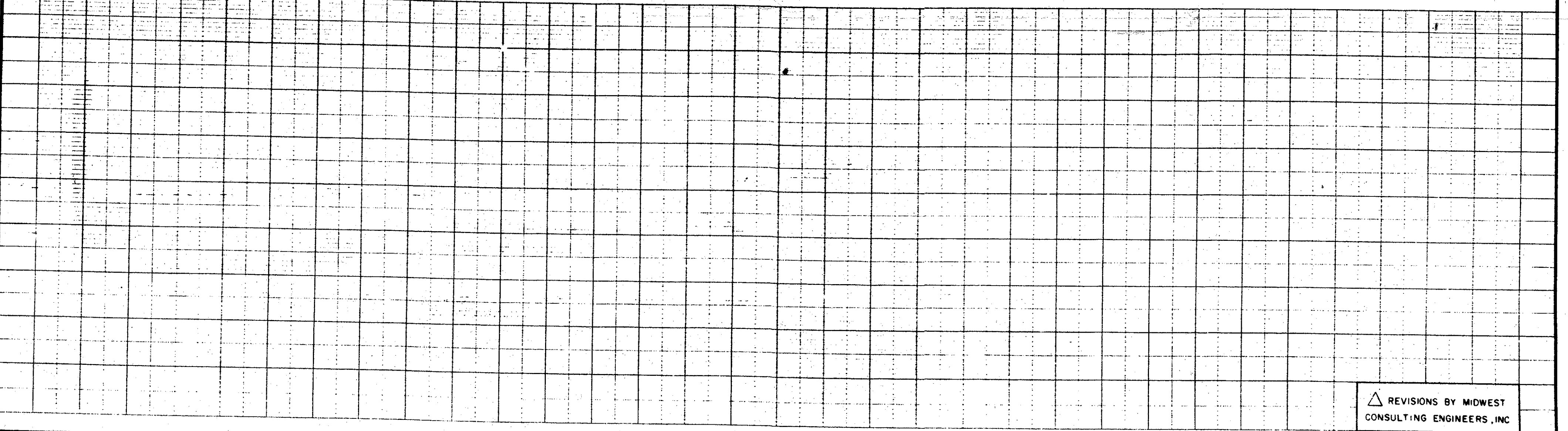


DRAWN G.T.	DATE 7/30/85	JACK E. LEISCH & ASSOCIATES TRANSPORTATION ENGINEERING EVANSTON, ILLINOIS	THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY EAST-WEST TOLLWAY AND MIDWEST ROAD OAK BROOK, ILLINOIS 60521	REVISIONS		CONTRACT GRE-84-317R	DRAWING NO. 48 of 155
				NO.	DATE		
CHECKED G.L.	SCALE 1" = 50'			7-30-89	CONSTRUCTION CHANGES	PLAN AND PROFILE N.E. RAMP	

no cover east from w. of the hwy



NOTES: 1. SEE DRAWING NO. 52 FOR PROFILE OF PROPOSED 54" STORM SEWER
2. SEE DRAWING NO'S 151-155 FOR CROSS SECTIONS



REVISIONS BY MIDWEST CONSULTING ENGINEERS, INC

DRAWN: A.M.
CHECKED: G.L.

DATE: 7/30/85
SCALE: 1"=50'

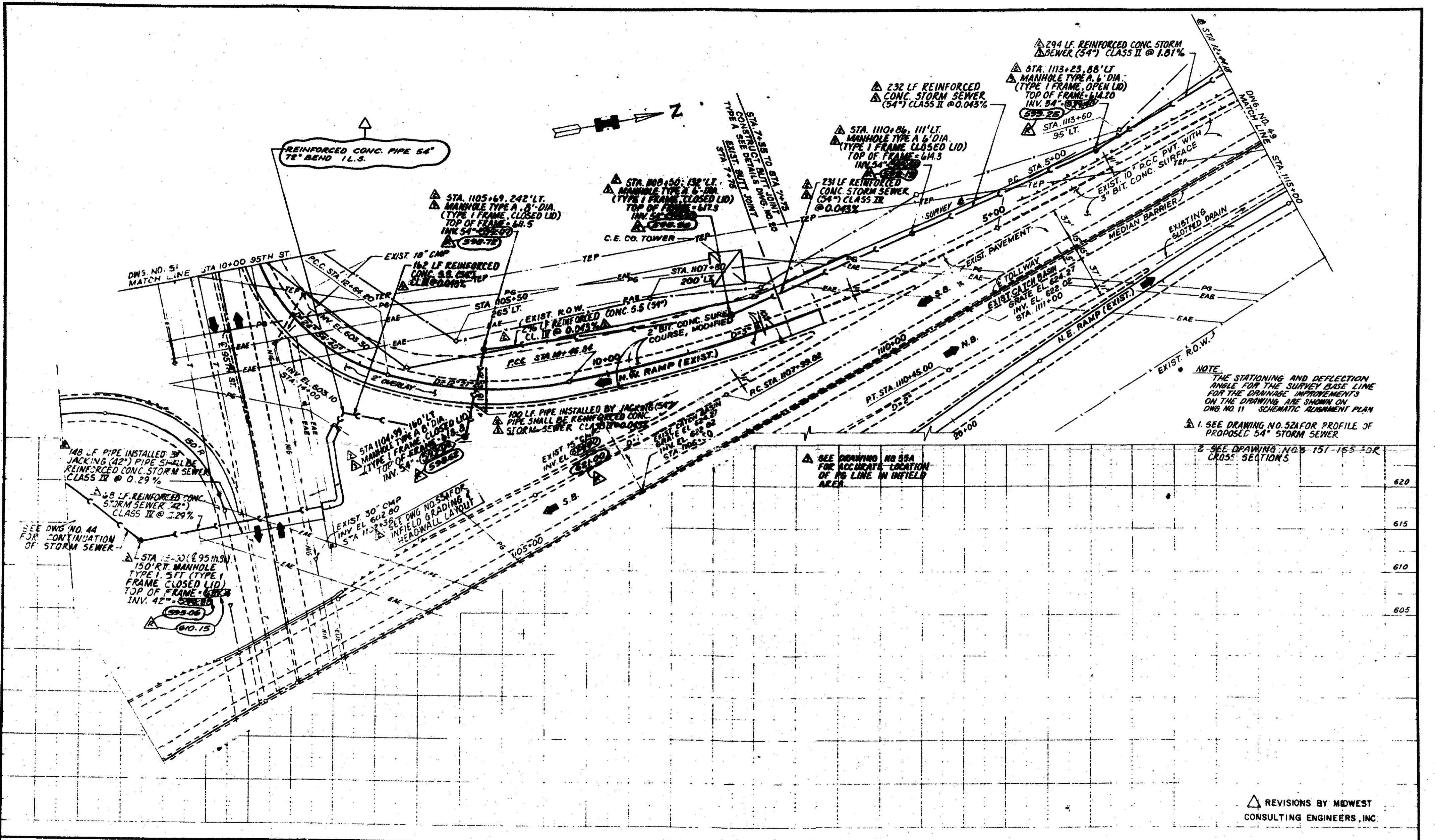
JACK E. LEISCH & ASSOCIATES
TRANSPORTATION ENGINEERING
EVANSTON, ILLINOIS

I THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION
1	10-24-86	ELIMINATED 42" STORM SEWER
2	3-31-88	MAIN DRAIN ADDED
3	7-30-89	CONSTRUCTION CHANGES

CONTRACT GRE-84-317R
PLAN AND PROFILE
N.W. RAMP

DRAWING NO.
49 OF 155



NOTE
 THE STATIONING AND DEFLECTION ANGLE FOR THE SURVEY BASE LINE FOR THE DRAINAGE IMPROVEMENTS ON THE DRAWING ARE SHOWN ON DWG. NO. 11 SCHEMATIC ALIGNMENT PLAN
 1. SEE DRAWING NO. 52A FOR PROFILE OF PROPOSED 54" STORM SEWER
 2. SEE DRAWING NO. 5-151-155 FOR CROSS SECTIONS

SEE DRAWING NO. 95A FOR ACCURATE LOCATION OF PG LINE IN INFIELD AREA

REVISIONS BY MIDWEST CONSULTING ENGINEERS, INC.

DRAWN: A.M.
 CHECKED: G.L.

DATE: 7/30/85
 SCALE: 1" = 50'

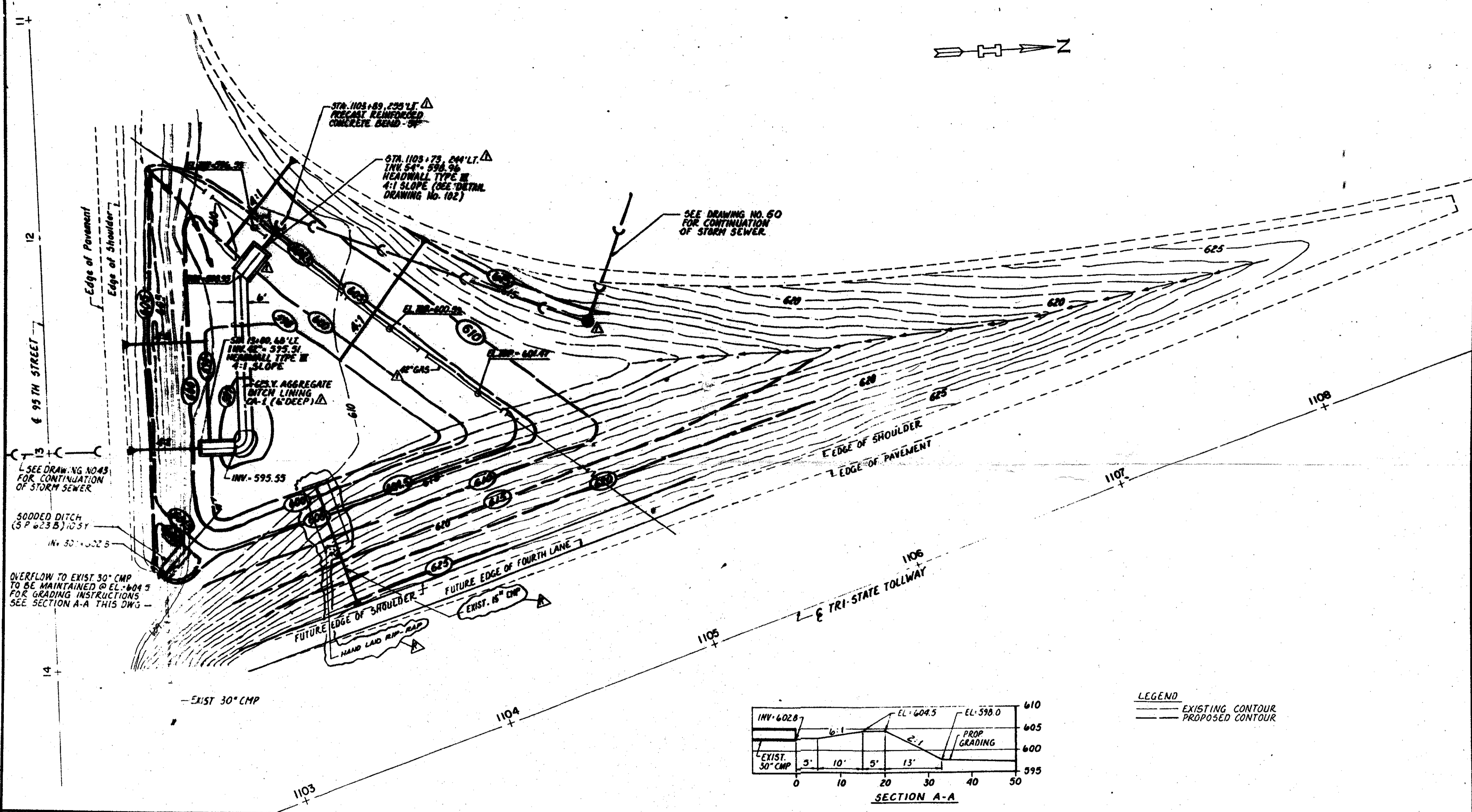
JACK E. LEISCH & ASSOCIATES
 TRANSPORTATION ENGINEERING
 EVANSTON, ILLINOIS

I THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
 EAST-WEST TOLLWAY AND MIDWEST ROAD
 OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION
1	10-24-86	ELIMINATE 42" STORM SEWER
2	3-31-88	MAIN DRAIN ADDED
3	9-28-88	REVISED ALIGN. 54" 5.5.
4	7-30-89	CONSTRUCTION CHANGES

CONTRACT GRE-84-317R
 PLAN AND PROFILE
 N.W. RAMP

DRAWING NO.
 50 OF 155



SEE DRAWING NO. 43 FOR CONTINUATION OF STORM SEWER

SODDED DITCH (S.P. 23 B) 10.5' IN. 30" x 32.5'

OVERFLOW TO EXIST. 30" CMP TO BE MAINTAINED @ EL. 604.5 FOR GRADING INSTRUCTIONS SEE SECTION A-A THIS DWG.

STA. 1103+89, 235' LT. PRECAST REINFORCED CONCRETE BEND - 90°

STA. 1103+73, 244' LT. INV. 54" - 598.96 HEADWALL TYPE III 4:1 SLOPE (SEE DETAIL DRAWING No. 102)

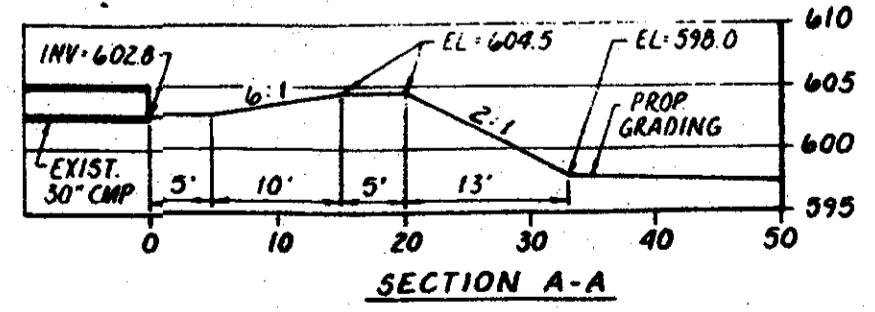
SEE DRAWING NO. 50 FOR CONTINUATION OF STORM SEWER

SM 12" x 12" x 48' LT. INV. 54" - 595.91 HEADWALL TYPE III 4:1 SLOPE

CONCRETE AGGREGATE BITCH LINING GA-1 (6" DEEP)

INV. 595.55

EXIST. 30" CMP



LEGEND
 --- EXISTING CONTOUR
 --- PROPOSED CONTOUR

DRAWN: J.P.L.
 CHECKED: M.L.H.

DATE: 3/31/88
 SCALE: 1" = 20'

MIDWEST CONSULTING ENGINEERS, INC.
 5151 NORTH HARLEM AVENUE
 CHICAGO, ILLINOIS 60656

I THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
 EAST-WEST TOLLWAY AND MIDWEST ROAD
 OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION
1	9/28/88	Revised Align. 54" Storm Sewer
2	10/31/88	Revised Infield Grading
3	7/30/89	CONSTRUCTION CHANGES

CONTRACT GRE - 84 - 317R
 GRADING PLAN
 NORTHWEST QUADRANT

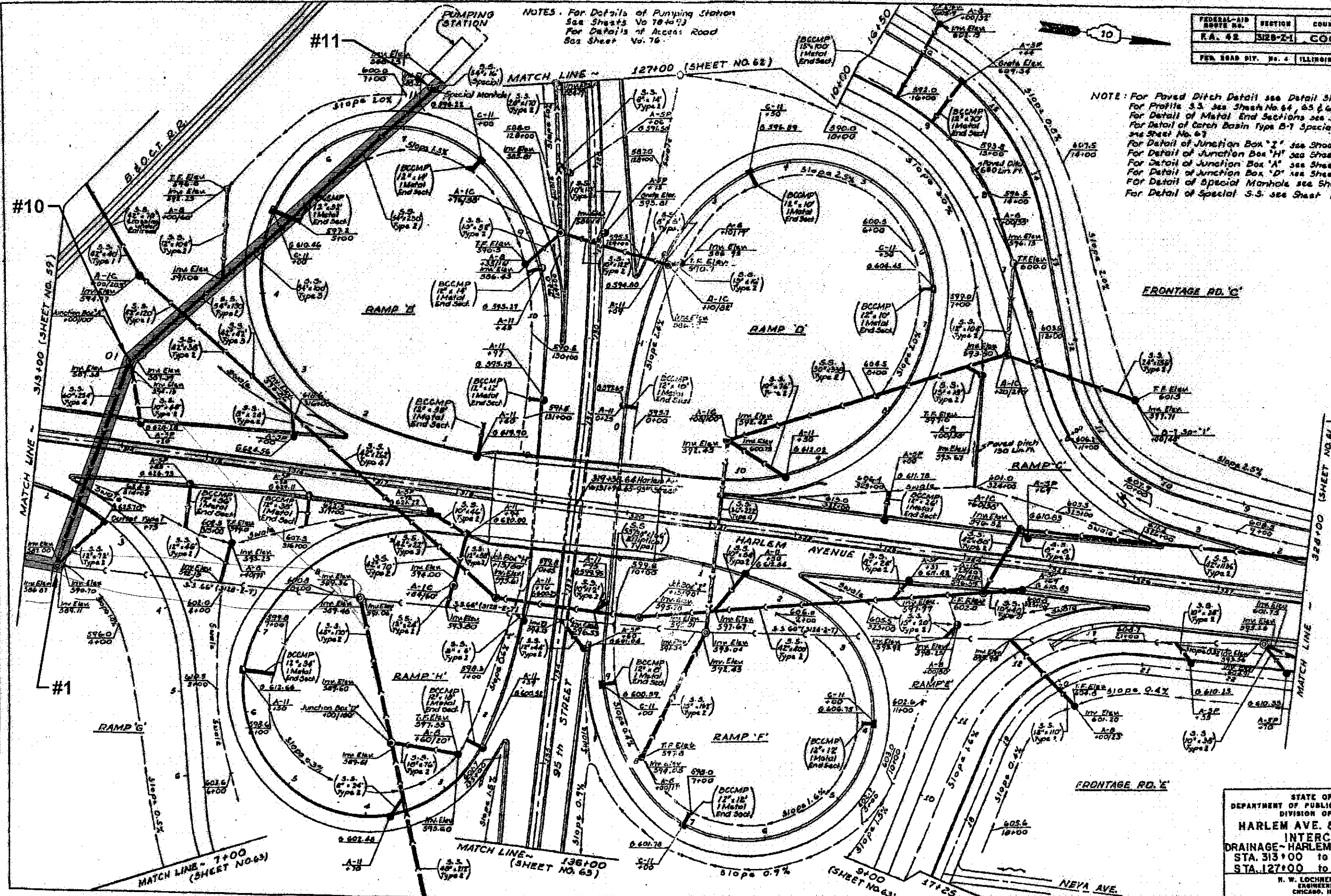
DRAWING NO.
55A OF **155**

I:\09000\09000 Phase 1 Various - IDOT - P\B146 No 101090096 IL 43 (Harlem Avenue) from 95th Street to 105th Street (Near Stony Creek)\Working\Engineering\09000\ST\released Route Exhibit.dwg, 8/9/2011 10:28:57 AM, RICOH C5000_Color.pc3

FEDERAL-AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
E.A. 42	SUB-2-1	COOK	162	60
FEB. ROAD DIV. No. 4 ILLINOIS PROJECT U-4(198)				

NOTES: For Details of Pumping Station See Sheets Vc 76 to 73
For Details of Access Road See Sheet Vc 76

NOTE: For Paved Ditch Detail see Detail Sheet No. 97
For Profiles S.S. see Sheets No. 64, 65 & 66
For Detail of Metal End Sections see Sheet No. 70
For Detail of Catch Basin Type B-7 Special "1" see Sheet No. 67
For Detail of Junction Box "I" see Sheet No. 74
For Detail of Junction Box "H" see Sheet No. 76
For Detail of Junction Box "A" see Sheet No. 70
For Detail of Junction Box "D" see Sheet No. 71
For Detail of Special Manhole see Sheet No. 69
For Detail of Special S.S. see Sheet No. 69



NO.	DESCRIPTION	DATE
1	ORIGINAL	
2	REVISION	
3	REVISION	
4	REVISION	
5	REVISION	

NO.	DESCRIPTION	DATE
1	ORIGINAL	
2	REVISION	
3	REVISION	
4	REVISION	
5	REVISION	

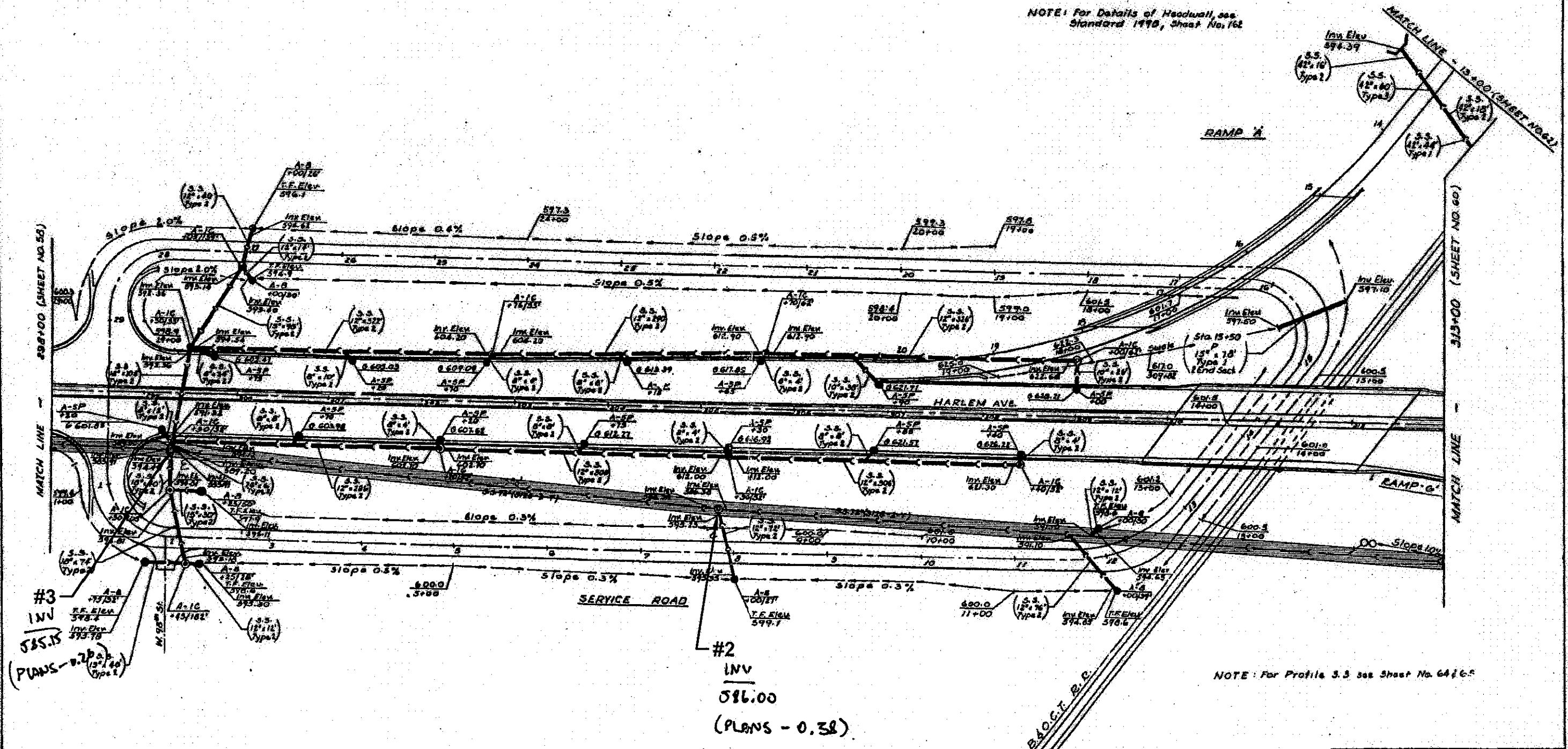
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
HARLEM AVE. & 95TH STREET INTERCHANGE
DRAINAGE - HARLEM AVE. & 95TH ST.
STA. 313+00 to STA. 328+00
STA. 127+00 to STA. 136+00
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILL.

Exhibit B

FEDERAL-AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PA. 42	522-2-1	COOK	162	59
PER. ROAD DIV. NO. 4 ILLINOIS PROJECT W-4(158)				



NOTE: For Details of Headwall, see Standard 1998, Sheet No. 162

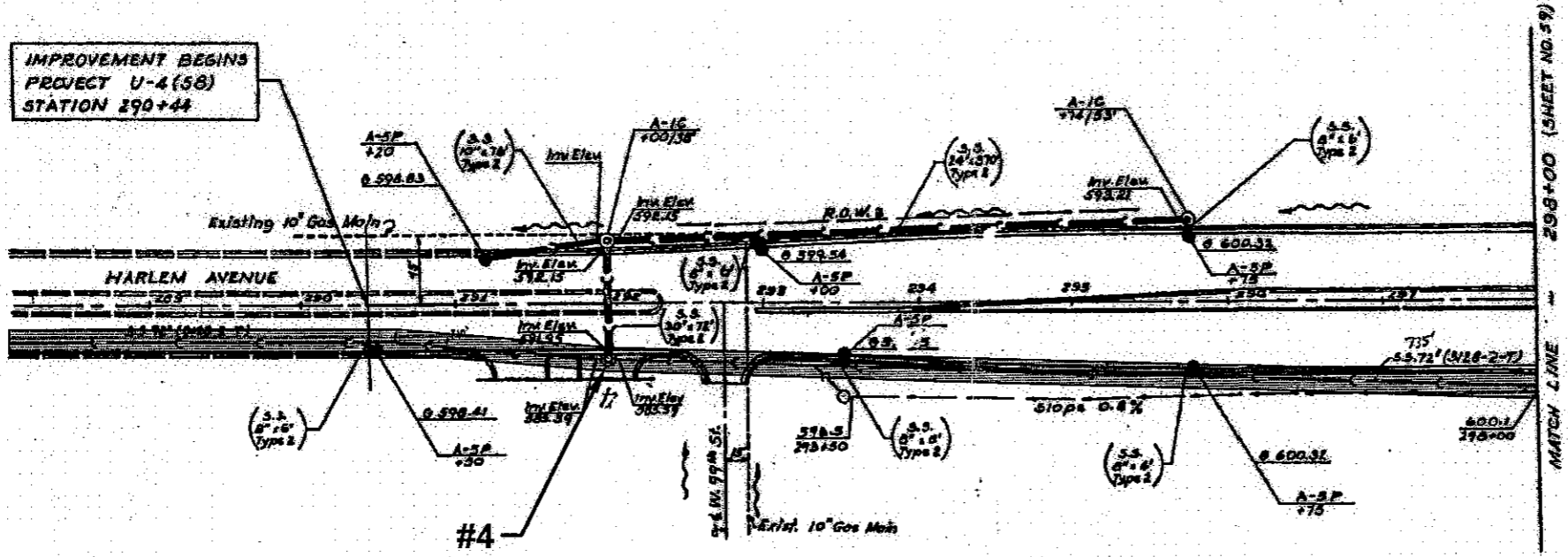


STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS
HARLEM AVE. & 95TH STREET INTERCHANGE DRAINAGE
HARLEM AVE
STA. 298+00 to STA. 313+00
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILL.

Exhibit B

I:\00000-00000 Phase I Various - IDOT - P1B146 No. 10060085 IL 43 (Harlem Avenue) from 96th Street to 103rd Street (Near Stony Creek)\Working\Engineering\00000095\Revised Route Exhibit.dwg, 06/20/11 10:36:47 AM, RICCH C5000_Color.pct

FEDERAL-AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 42	D12B-2-1	COOK	162	58
PER. ROAD DIV. NO. 4 ILLINOIS PROJECT U-4(58)				



IMPROVEMENT BEGINS
PROJECT U-4(58)
STATION 290+44

NOTE: For Profile 5.5 see Sheet No. 64

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
HARLEM AVE. & 95TH STREET
INTERCHANGE
DRAINAGE
HARLEM AVE
STA. 290+44 to STA. 298+00
H. W. LOCHNER, INC.
ENGINEERS
CHICAGO, ILL.

Exhibit B

I:\08000-10\08009 Phase I\Various - IDOT - PTB146 No. 10\08009S IL 43 (Harlem Avenue) from 95th Street to 105th Street (Near Stony Creek)\Working\Engineering\08009S\Revised Route Exhibit.dwg, 8/9/2011 10:37:52 AM, RICOH C5500_Color.pcl

NO.	REVISION	DATE	BY	CHKD.

NO.	REVISION	DATE	BY	CHKD.

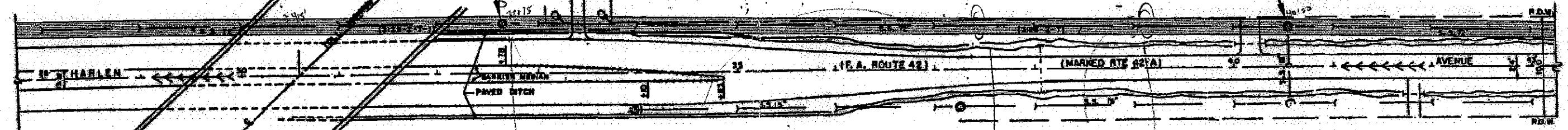
SECTION	COUNTY	TOWNSHIP	RANGE
F.A. 42	COOK	25	6
STA. 28+00		TO STA. 43+00	



WORTH

TOWNSHIP

#6



NOTE: ILLINOIS TOLLWAY BRIDGE OVER HARLEM AVE.
 VERTICAL CLEARANCE: 14'-5" PLUS
 ROADWAY: 2 @ 24'
 SIDEWALKS: 5' EAST SIDE

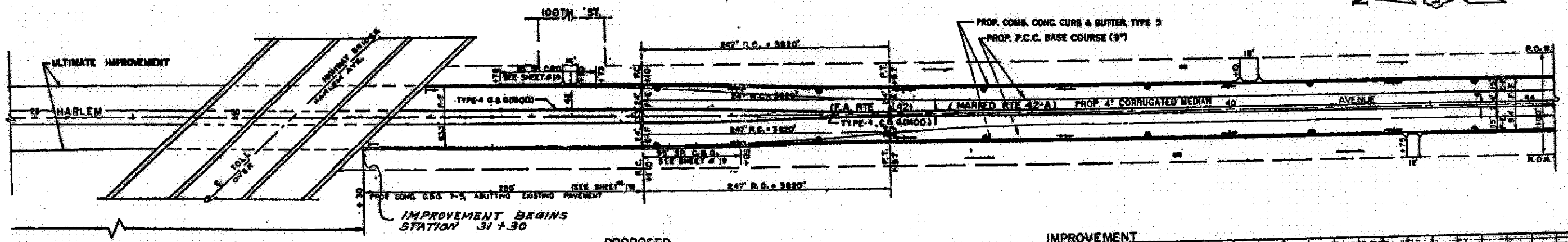
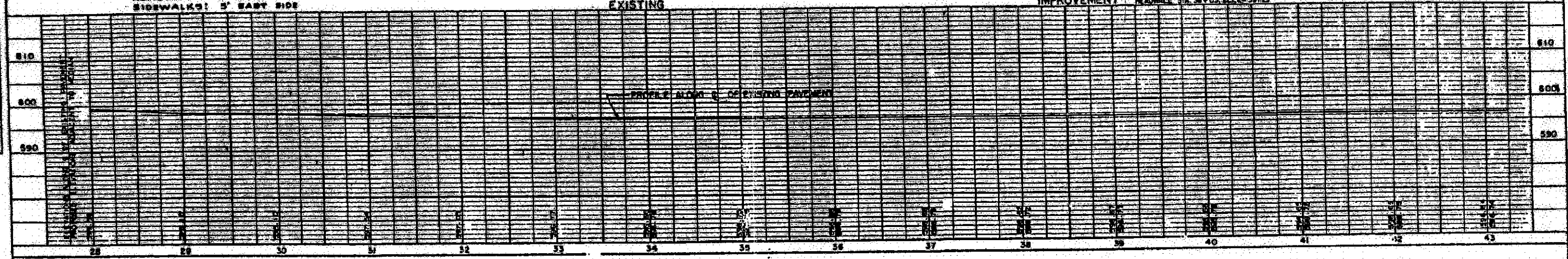
PALOS

TOWNSHIP

EXISTING

IMPROVEMENT

B.M. 25+00 IN S.E. CORNER OF
 HEADWALL STA. 30+05 ELEV. 597.23



PROPOSED

IMPROVEMENT

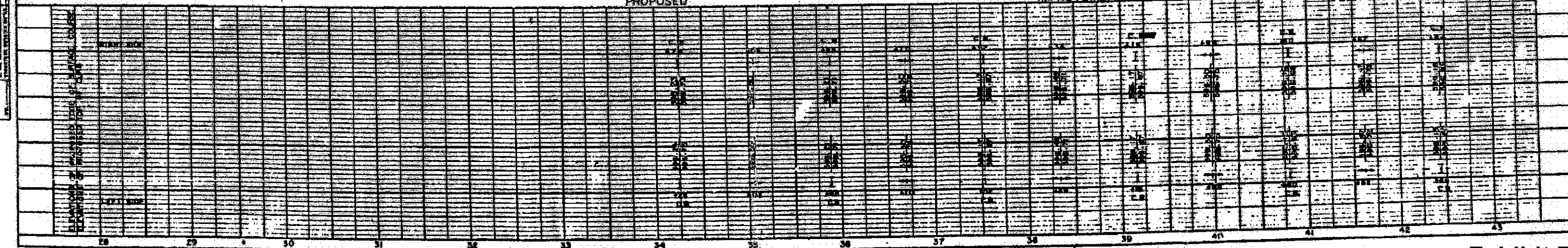
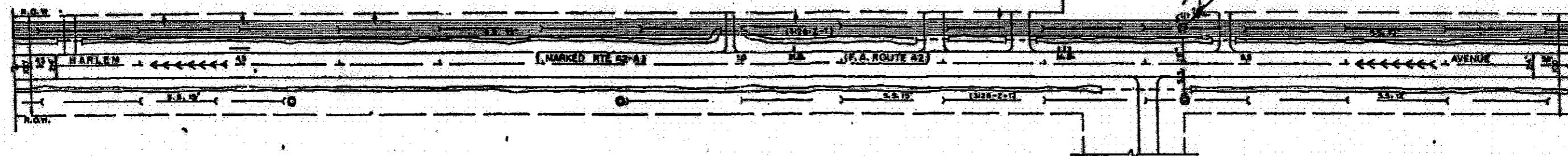


PLATE B-PLAN-PROFILE S.P.A.S.S. STANDARD
 1994 AND PAPER MADE AND PRINTED IN U.S.A.
 DRAWING NUMBER 44



WORTH TOWNSHIP

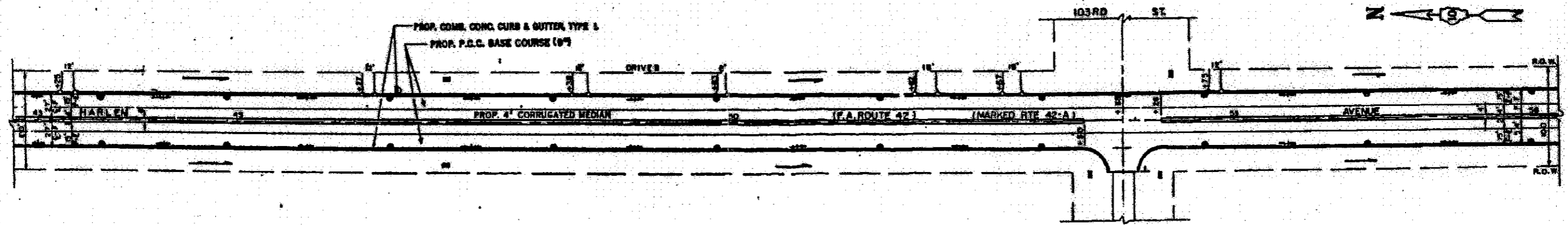
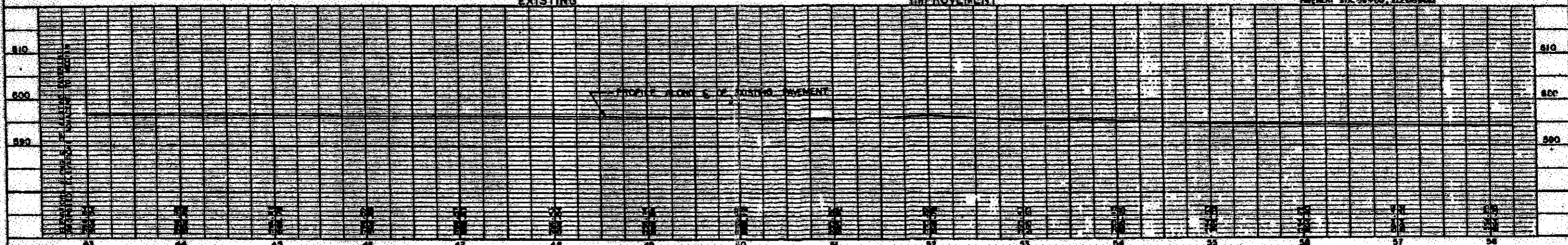
SECTION	528-2-Y	SUBDIV	COOK
E.A. 42			
STA. 43+00		TO STA. 58+00	



PALOS TOWNSHIP

EXISTING IMPROVEMENT

B.M. SPOT 12 IN EAST EDGE OF PAVEMENT STA. 28+00 - 21.00



PROPOSED IMPROVEMENT

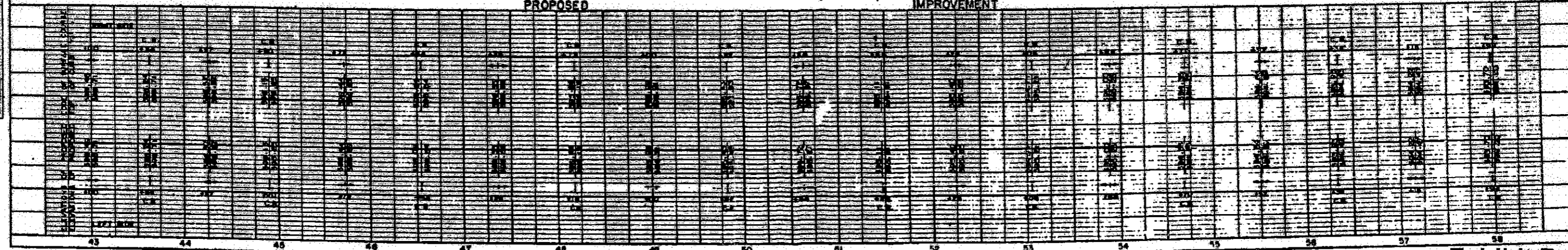


PLATE B - PLAN-PROFILE STANDARD
1921 AND REVISIONS AND ADDED IN U. S. A.
REVISED EDITION 1921

Exhibit B



ROUTE NO.	SECTION	COUNTY	TOTAL LENGTH	SHEET NO.
FA 42	288-2-Y	COOK	2.5	1
STA. 58+00		TO STA. 73+00		
S.A. 2008 PUB. ROAD, INC. & [unreadable] [unreadable]				

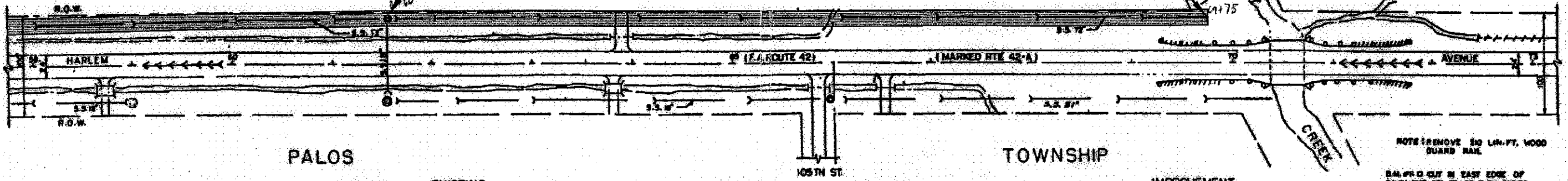
WORTH

TOWNSHIP

COMPLETELY BENCHED

#9

#8



PALOS

TOWNSHIP

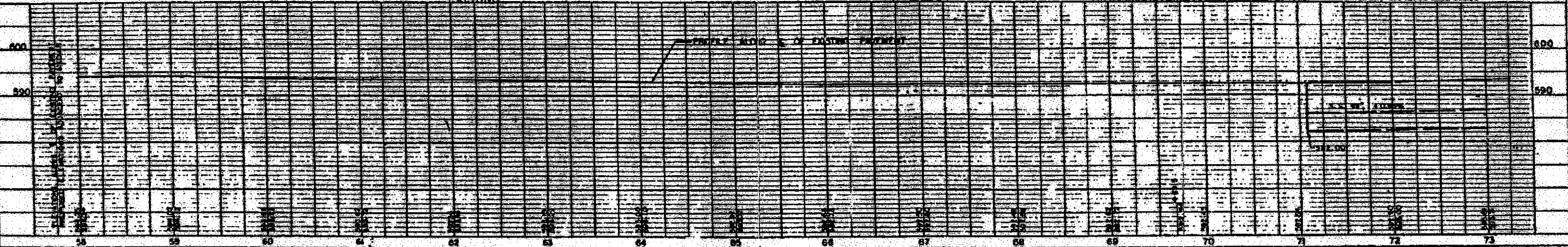
NOTE: REMOVE 50 LIN. FT. WOOD GUARD RAIL

5/4" P.C. CURB IN EAST EDGE OF PAVEMENT STA. 71+00 ELEV. 588.88

EXISTING

IMPROVEMENT

PLAN	SCALE
1" = 40'	

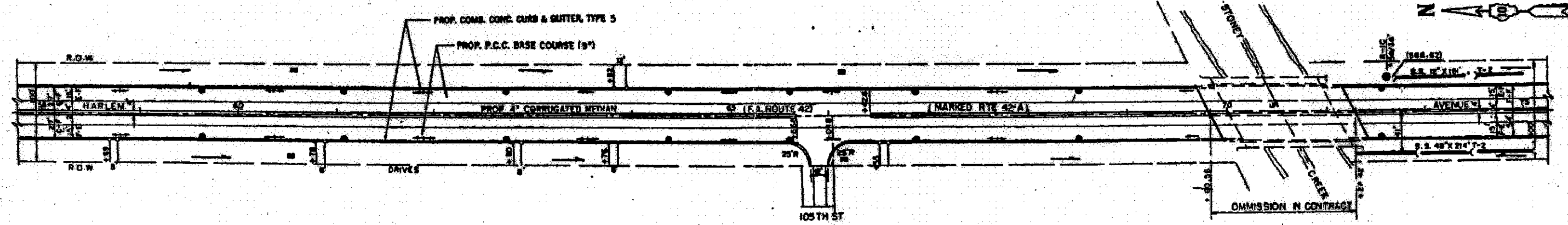


PROP. CORR. CONC. CURB & GUTTER, TYPE 5

PROP. P.C.C. BASE COURSE (9")

PROP. 2" CORRUGATED METAL

OMISSION IN CONTRACT



PROPOSED

IMPROVEMENT

PROFILE	SCALE
1" = 10'	

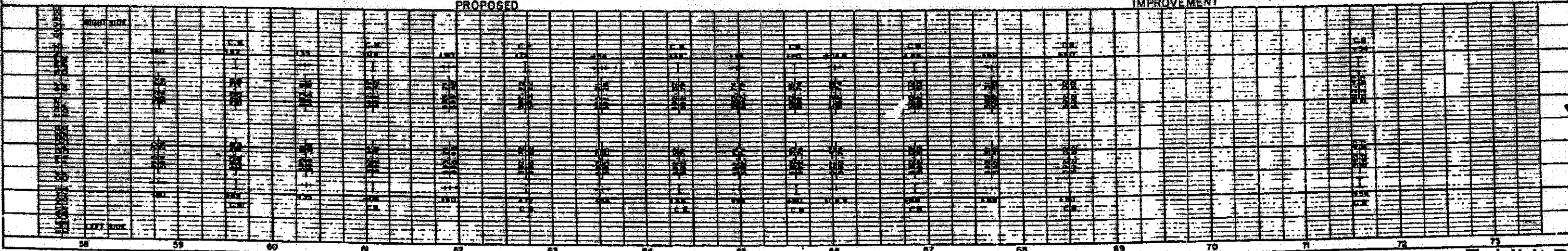


PLATE 2-PLAN-PROFILE S.P.D.S.E. STANDARD 1988 THE ALLEN BRIDGE AND JOHNSON CO. S.A. WHERE SHOWN ON

Exhibit B