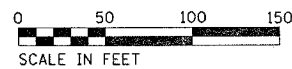


**INDEX OF SHEETS**

- 1 COVER SHEET
- 2 GENERAL NOTES, STANDARDS & SUMMARY OF QUANTITIES
- 3 PROPOSED PLAN VIEW
- 4 STORM SEWER PROFILE VIEW
- 5 CATCH BASIN DETAILS
- 6 COLLAR DETAIL
- 7 CROSS SECTION VIEW

**HIGHWAY STANDARDS**

SEE PAGE 2



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

MICROFILMED \_\_\_\_\_  
 REEL NUMBER \_\_\_\_\_  
 AWARDED \_\_\_\_\_  
 RESIDENT ENGINEER \_\_\_\_\_  
 AS BUILT CHANGES WERE MADE  
 ON THE FOLLOWING SHEETS \_\_\_\_\_

JULIE 1-800-892-0123

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: DAVE BROVIAK  
 UNIT CHIEF: SCOTT FERGUSON  
 TOWNSHIP:

CONTRACT NO. 66527

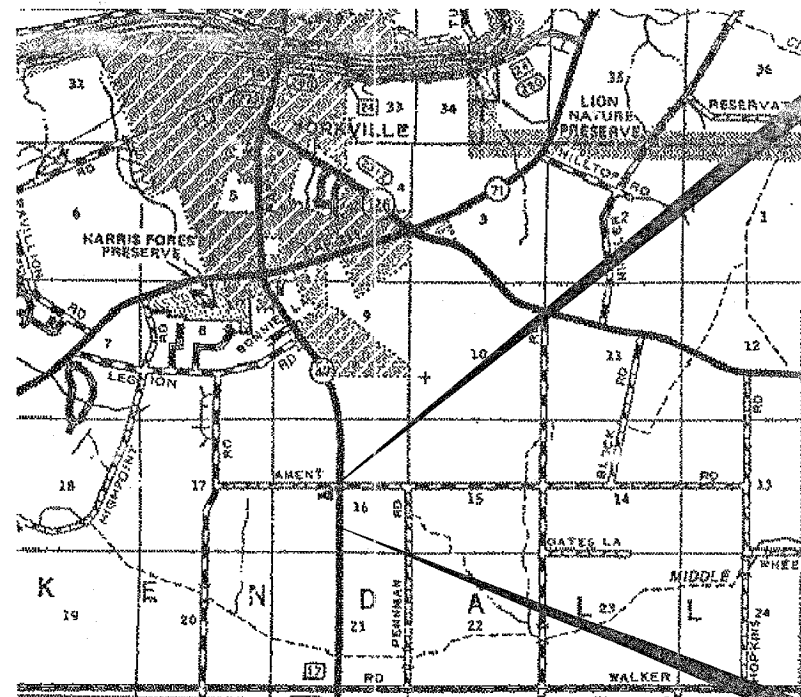
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
 FEDERAL AID HIGHWAY**

FAP 326 (IL ROUTE 47)

SECTION 109 T-1

KENDALL COUNTY

C - 93 - 001 - 05  
 DRAINAGE IMPROVEMENTS



LOCATION MAP  
 NOT TO SCALE

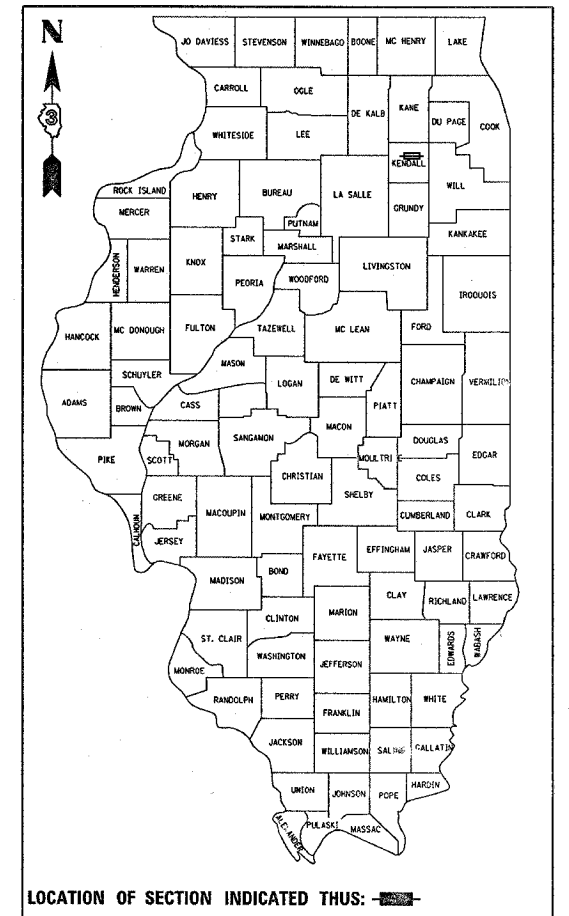
GROSS LENGTH = 130 FT. = .024 MI.  
 NET LENGTH = 130 FT. = .024 MI.

PROJECT BEGINS  
 STA. 186 + 00

PROJECT ENDS  
 STA 187 + 30

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326 (IL 47)	109 T-1	KENDALL	7	1

ILLINOIS PROJECT  
 0-93-009-05



LOCATION OF SECTION INDICATED THUS: [thick black line]

FUNCTION CLASSIFICATION  
 FUNCTION CLASSIFICATION

2004 ADT = 8700  
 P.V. = 77.6% S.U. = 12.1% M.U. = 10.3%

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED FEB 15 2005  
*Gregory L. Mounts*  
 REGISTERED PROFESSIONAL ENGINEER  
 MARCH 25 2005  
*Mike Hine*  
 ENGINEER OF DESIGN AND ENVIRONMENT  
 MARCH 25 2005  
*Victor Maden*  
 DIRECTOR, DIVISION OF HIGHWAYS

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 OF THE STATE OF ILLINOIS

12/22/2004  
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F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	109 T-1	KENDALL	7	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

**CONTRACT NO. 66527**

## GENERAL NOTES

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDING WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDING OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE COST OF MAKING ANY SEWER CONNECTIONS TO AN EXISTING DRAINAGE STRUCTURE OR PIPE SHALL BE INCLUDED IN THE COST OF THE NEW SEWER.

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

Com Ed - Distribution  
City of Yorkville  
Yorkville Bristol Sanitary Dist  
Comcast Cable  
SBC

ComEd - Transmission  
Nicor Gas C4245

NON-MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

## SUMMARY OF QUANTITIES

CODE NO.	ITEM	CONSTRUCTION CODE TYPE:	
		UNIT	Y007 TOTAL QUANTITY
20400800	FURNISHED EXCAVATION	CU YD	4
50800105	REINFORCEMENT BARS	POUND	40
54002020	EXPANSION BOLTS 3/4 INCH	EACH	28
54010403	PRECAST CONCRETE BOX CULVERT 4' X 3'	FOOT	3
54248510	CONCRETE COLLAR	CU YD	0.4
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	18
55100500	STORM SEWER REMOVAL 12"	FOOT	10
55100700	STORM SEWER REMOVAL 15"	FOOT	6
60206805	CATCH BASINS, TYPE B, SPECIAL	EACH	2
60224446	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2
60402110	GRATES, TYPE 7	EACH	4
67100100	MOBILIZATION	L SUM	1
XXC03822	STORM SEWER REMOVAL, SPECIAL	FOOT	4

## STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001	AREAS OF REINFORCEMENT BARS
602406-01	MANHOLE, TYPE A, 1800 mm (72") DIAMETER
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701	CAST IRON STEPS
604001-02	FRAME AND LIDS, TYPE 1
604031-01	GRATE, TYPE 7
701001-01	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5 m (15') AWAY
701006-02	OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
702001-05	TRAFFIC CONTROL DEVICES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

PREPARED BY: Thomas R. Samuels, P.E.  
DISTRICT STUDIES & PLANS ENGINEER

DATE: February 9, 2005

EXAMINED BY: Alvin K. [Signature]  
DISTRICT CONSTRUCTION ENGINEER

Harold R. [Signature]  
DISTRICT MATERIALS ENGINEER

Barbara A. [Signature]  
DISTRICT OPERATIONS ENGINEER

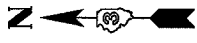
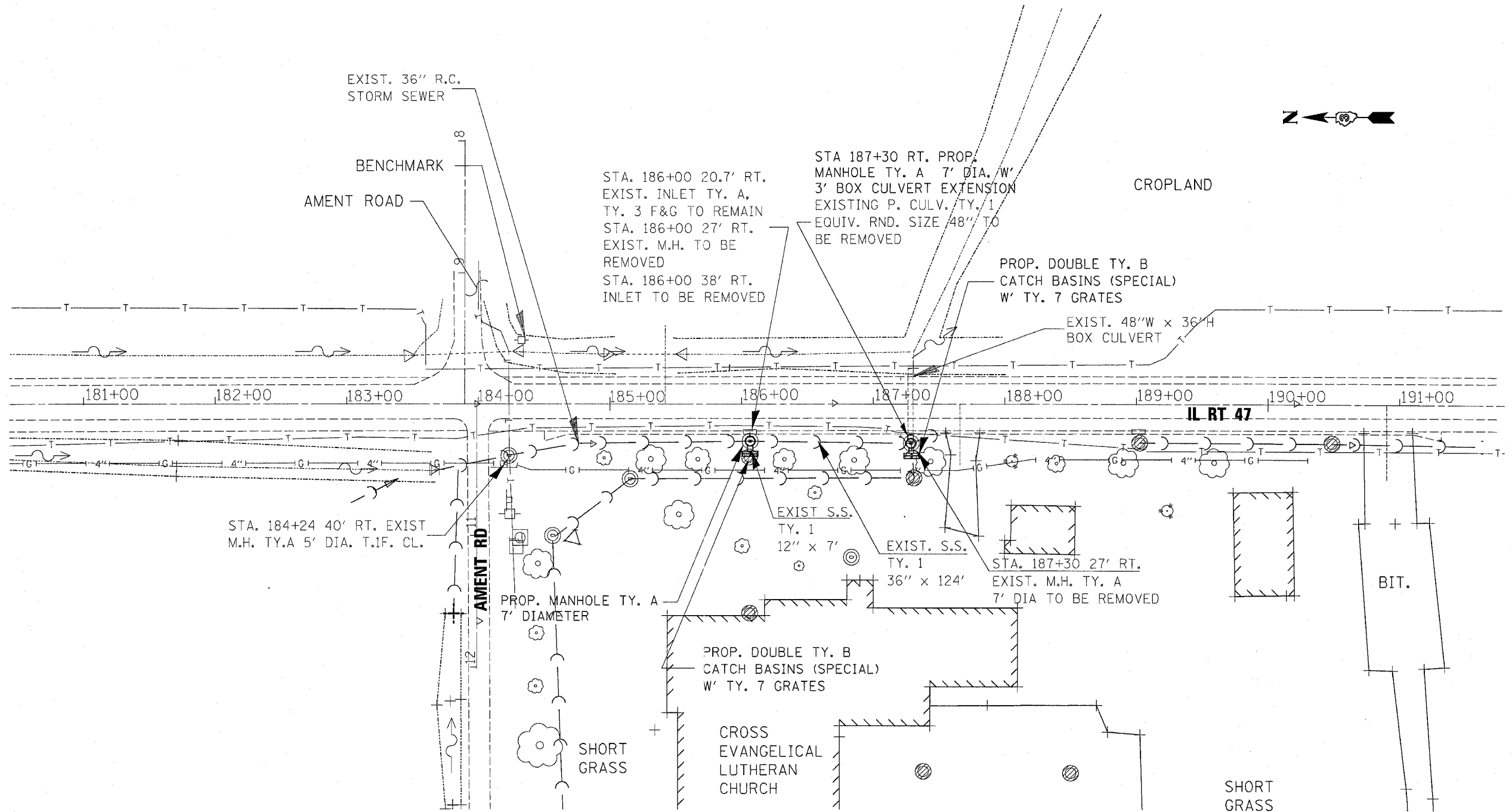
ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIONS	
NAME	DATE

**GENERAL NOTES, STANDARDS,  
& SUMMARY OF QUANTITIES**

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	109 T-1	KENDALL	7	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



IL RT 47

BIT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

## PROPOSED PLAN

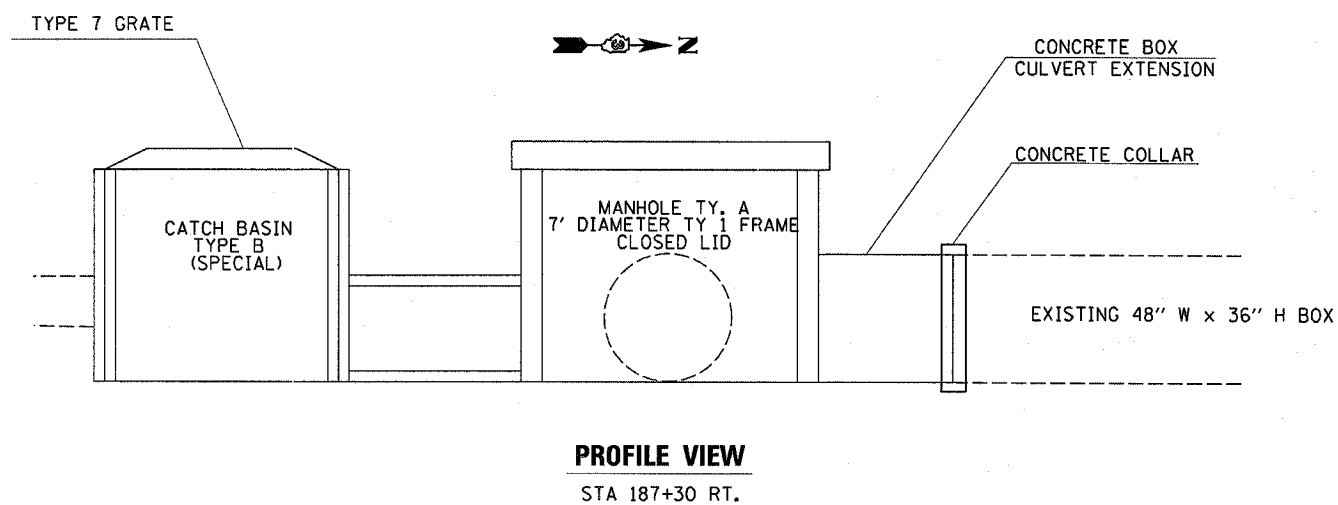
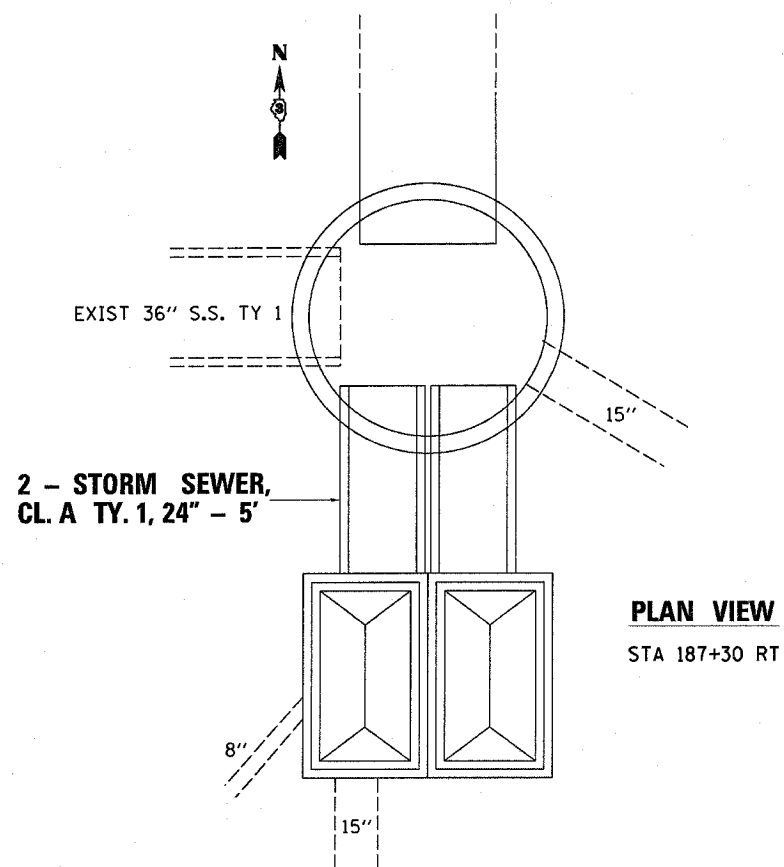
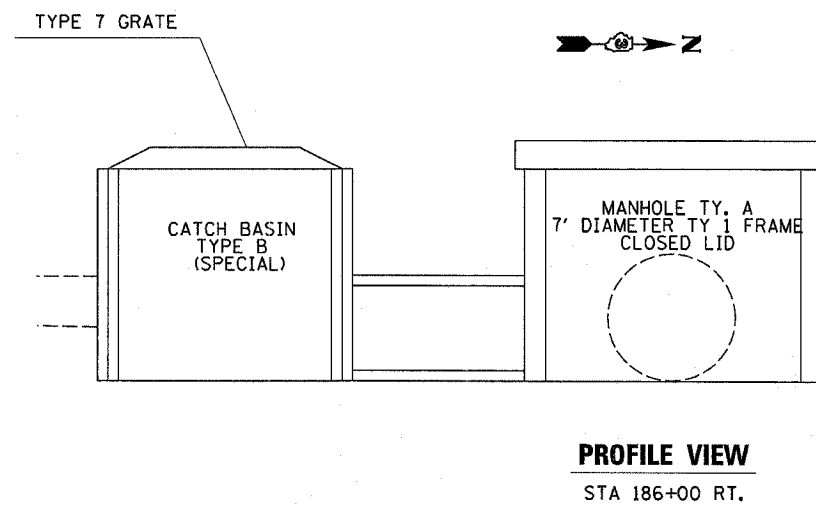
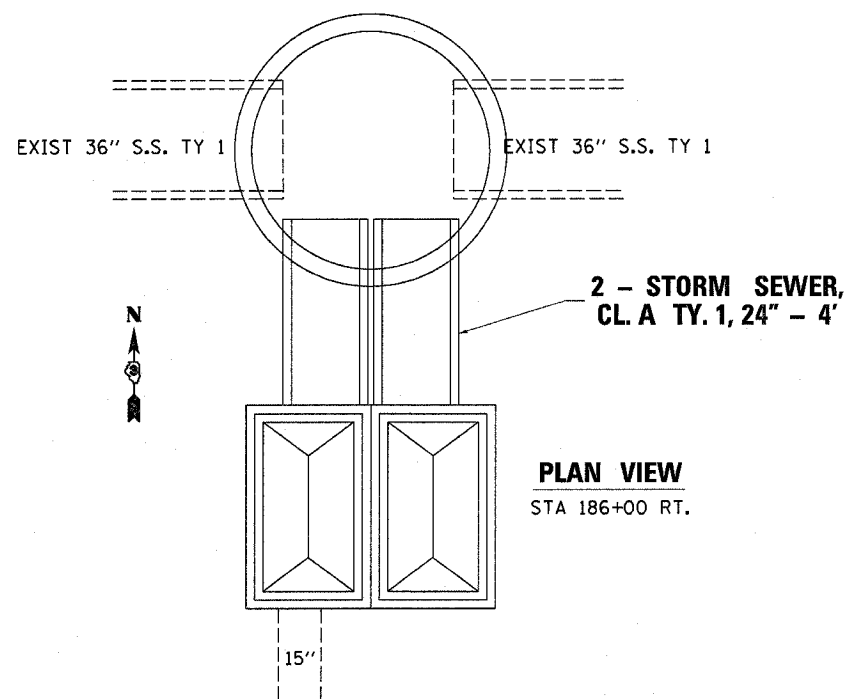
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DATE \_\_\_\_\_

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 CHECKED BY \_\_\_\_\_

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F.A.B. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



REVISIONS	
NAME	DATE

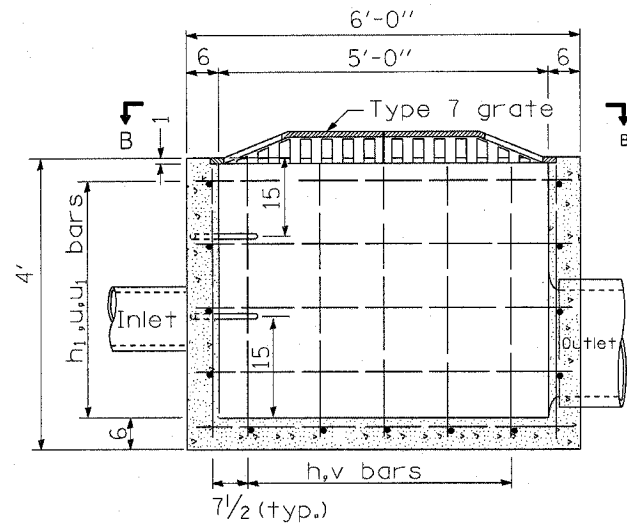
ILLINOIS DEPARTMENT OF TRANSPORTATION

**SEWER PROFILE DETAILS**

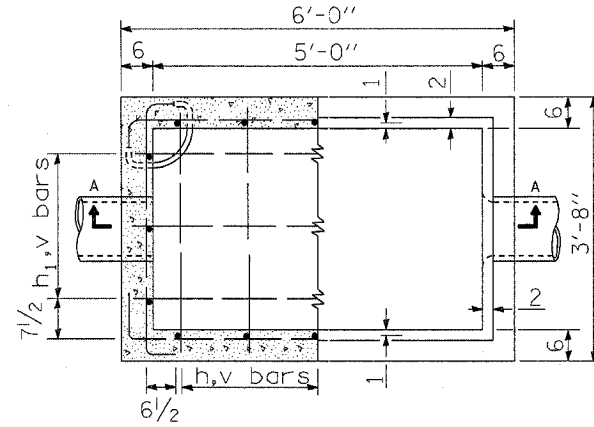
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HORIZ. \_\_\_\_\_

DATE \_\_\_\_\_ DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	109 T-1	KENDALL	7	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**SECTION A-A**



**SECTION B-B**

**CATCH BASIN  
TYPE B (SPECIAL)**

STATION 187+30 RT

MATERIALS REQUIRED FOR ONE (1)  
TYPE B CATCH BASIN (SPECIAL)

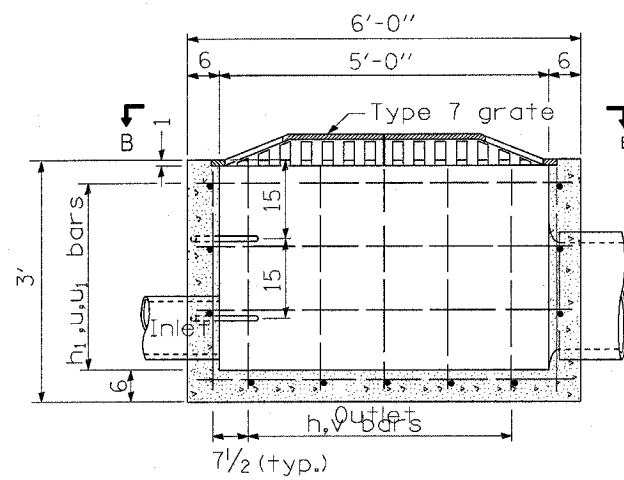
Bar	Qty.	Size	Shape	Length
h	5	(No. 4)	—	(3'-5")
h <sub>1</sub>	3	(No. 4)	—	(5'-9")
u	10	(No. 4)	U	(7'-0")
u <sub>1</sub>	10	(No. 4)	U	(4'-6")
v	16	(No. 4)	—	(3'-9")
Concrete			(cu. yd.)	(1.9)
Reinforcement bars			(lbs.)	(140)

All bars shall be at (12) centers unless otherwise shown. Reinforcement bar clearance shall be (1/2).

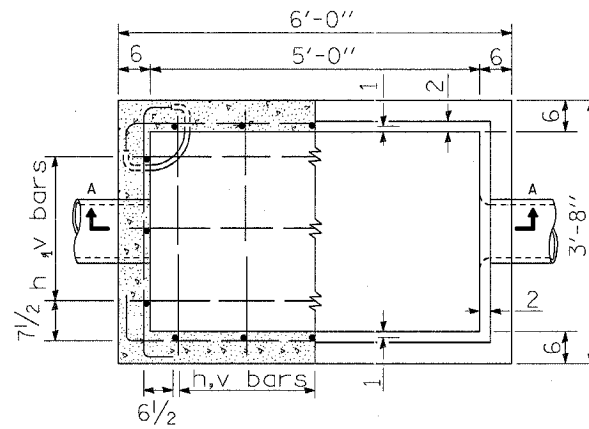
**GENERAL NOTES**

See Standard 602701 for details of steps.

All dimensions are in (inches) unless otherwise shown.



**SECTION A-A**



**SECTION B-B**

**CATCH BASIN  
TYPE B (SPECIAL)**

STATION 186+00 RT

MATERIALS REQUIRED FOR ONE (1)  
TYPE B CATCH BASIN (SPECIAL)

Bar	Qty.	Size	Shape	Length
h	5	(No. 4)	—	(3'-5")
h <sub>1</sub>	3	(No. 4)	—	(5'-9")
u	8	(No. 4)	U	(7'-0")
u <sub>1</sub>	8	(No. 4)	U	(4'-6")
v	16	(No. 4)	—	(2'-9")
Concrete			(cu. yd.)	(1.4)
Reinforcement bars			(lbs.)	(114)

All bars shall be at (12) centers unless otherwise shown. Reinforcement bar clearance shall be (1/2).

**GENERAL NOTES**

See Standard 602701 for details of steps.

All dimensions are in (inches) unless otherwise shown.

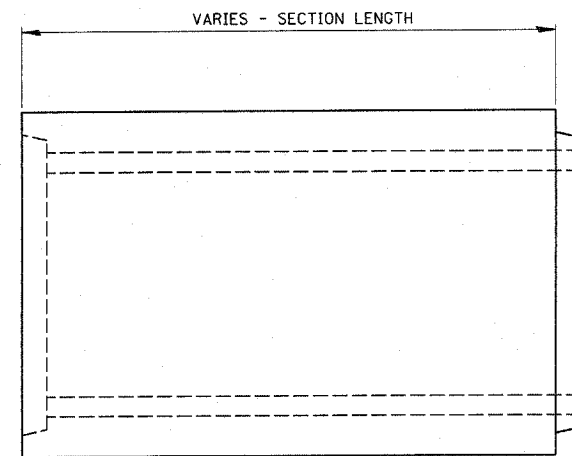
ILLINOIS DEPARTMENT OF TRANSPORTATION

**CATCH BASIN DETAILS**

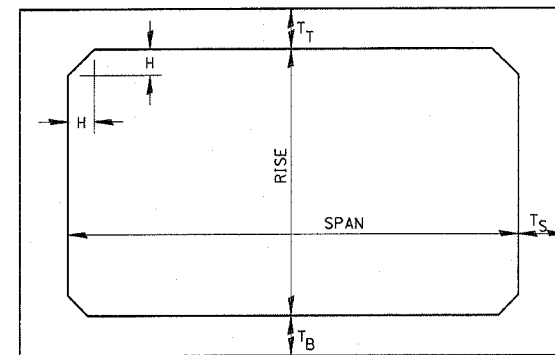
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DATE

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	109 T-1	KENDALL	7	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**ELEVATION**



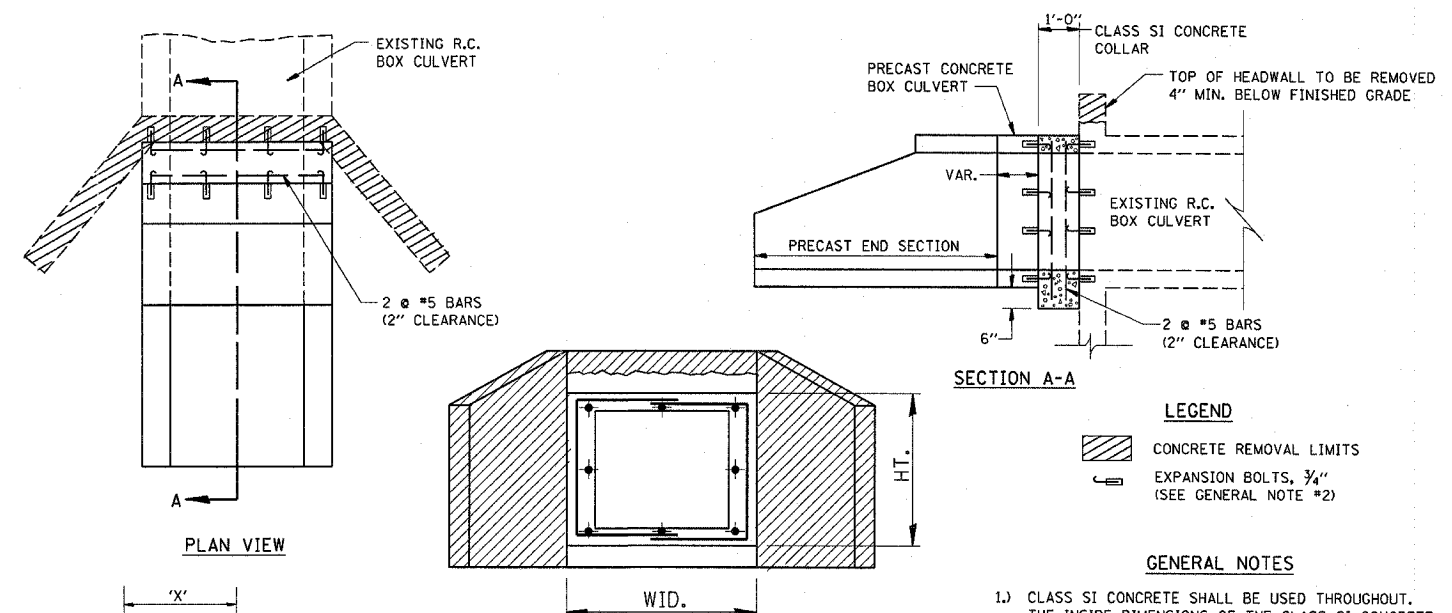
NOTE: THE HAUNCH DIMENSION H, IS EQUAL TO THE WALL THICKNESS T<sub>S</sub>.

**TYPICAL BOX SECTION**

SPAN, FEET	T <sub>T</sub> , INCHES		T <sub>B</sub> , INCHES		T <sub>S</sub> , INCHES	
	M 259	M 273	M 259	M 273	M 259	M 273
3	4	7	4	6	4	4
4	5	7 1/2	5	6	5	5
5	6	8	6	7	6	6
6	7	8	7	7	7	7
7	8	8	8	8	8	8
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12

**TYPICAL THICKNESSES**

GENERAL NOTES:  
MINIMUM COVER FOR BOX  
CULVERTS SHALL BE 6".



- LEGEND**
- CONCRETE REMOVAL LIMITS
  - EXPANSION BOLTS, 3/4" (SEE GENERAL NOTE #2)

**GENERAL NOTES**

- CLASS SI CONCRETE SHALL BE USED THROUGHOUT. THE INSIDE DIMENSIONS OF THE CLASS SI CONCRETE COLLAR SHALL BE THE SAME AS THE NEW PRECAST CONCRETE BOX CULVERT.
- EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE PLACED IN EACH CORNER AND AT 18" MAXIMUM CENTERS. MINIMUM CERTIFIED PROOF LOADING = 4,080 LBS.

LOCATION	EXISTING CULVERT SIZE	PRECAST CULV. EXTENSION	U-BAR		CONC. COLLAR	REINFORCEMENT BARS	3/4" DIA. EXPANSION BOLTS
			X'	Y'			
STATION	FT. x FT.	FT. x FT.	IN.	IN.	CU. YD.	POUND	EACH
187+30	4' x 3'	4' x 3'	31	43	.4	40	28

**COLLAR DETAIL (PRECAST BOX CULVERT EXTENSION OF BOX CULVERT)**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**PRECAST CONCRETE BOX SECTION AND COLLAR DETAIL**

SCALE: VERT. DATE  
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CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	109 T-1	KENDALL	7	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

NO.	DATE	BY	FINAL SURVEY	SURVEYED	PLOTTED	AREA CHECKED

NO.	DATE	BY	ORIGINAL SURVEY	SURVEYED	PLOTTED	AREA CHECKED

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