

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 63164		

**INDEX OF SHEETS**

- 1 COVER SHEET, INDEX OF SHEETS, LIST OF STATE STANDARDS
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**STANDARDS**

- 424001-05 CURB RAMPS FOR SIDEWALKS
- 442201-03 CLASS C AND D PATCHES
- 606201-02 TYPE B GUTTER ( INLET, OUTLET & ENTRANCES)
- 701311-03 LANE CLOSURE 2L, 2W, MOVING OPERATIONS-DAY ONLY
- 701501-05 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701901-01 TRAFFIC CONTROL DEVICES
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 701801-04 LANE CLOSURE MULTI LANE 1W OR 2W CROSS WALK OR SIDEWALK CLOSURE

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**

**FAU 94039 (MILLER ROAD)  
HALIGUS ROAD TO LAKEWOOD ROAD  
&  
FAU 93867 (FRANK ROAD)  
ALGONQUIN ROAD TO MILLER ROAD  
&  
FAU 94040 (OAK STREET)  
BURR STREET TO PYOTT ROAD  
RESURFACING**

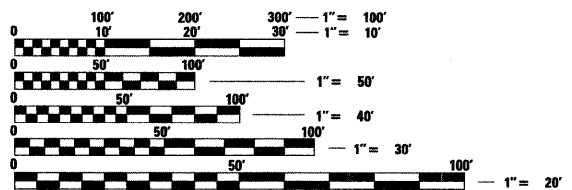
**SECTION NO.: 08-00032-00-RS  
PROJECT NO.: M-9003(214)  
VILLAGE OF LAKE IN THE HILLS  
MCHENRY COUNTY  
C-91-267-09**



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

**TRAFFIC DATA**

ADT:			
MILLER ROAD	5,701 VPD (2008)	9,127 VPD (2020)	
FRANK ROAD	5,739 VPD (2008)	9,188 VPD (2020)	
OAK STREET	2,960 VPD (2008)	4,739 VPD (2020)	
	<b>POSTED SPEED</b>	<b>ROAD CLASSIFICATION</b>	
MILLER ROAD	35 MPH (EXISTING)	LOCAL COLLECTOR	
FRANK ROAD	35 MPH (EXISTING)	LOCAL COLLECTOR	
OAK STREET	35 MPH (EXISTING)	LOCAL COLLECTOR	



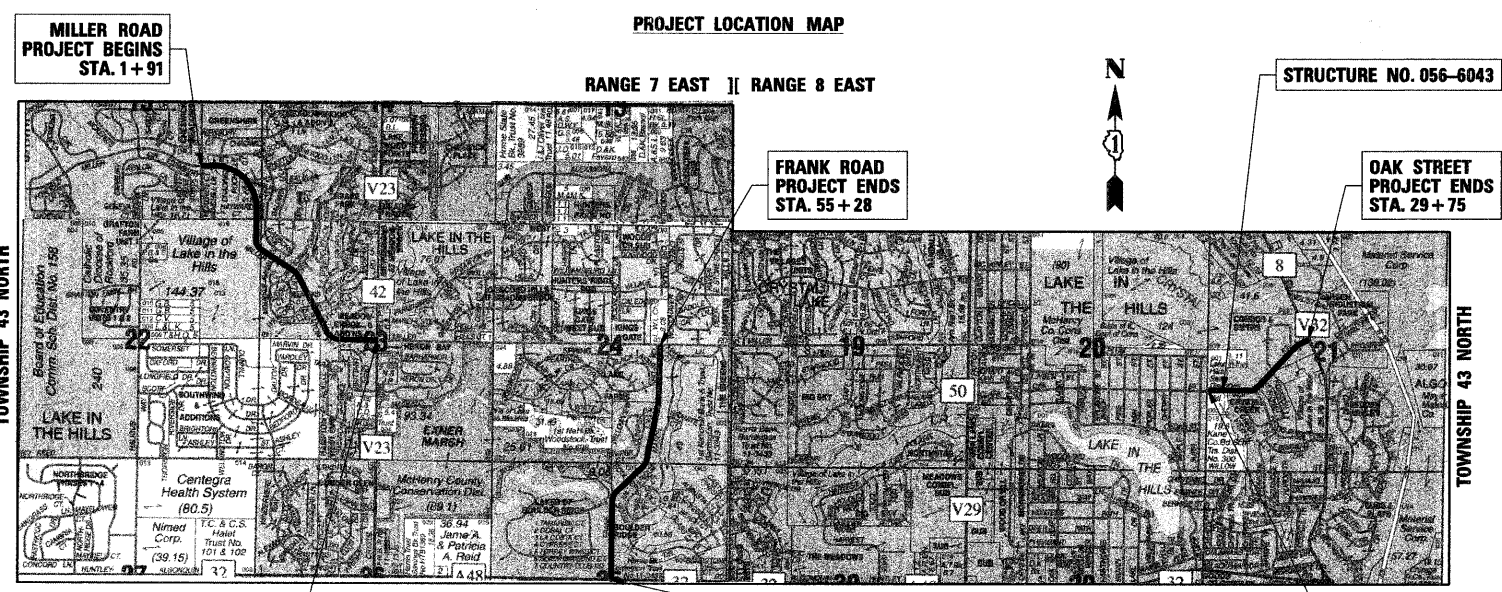
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

**J.U.L.I.E.**  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
CALL 811

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PROJECT LOCATION MAP  
N.T.S.

**PROJECT LENGTH**

NET LENGTH OF PROJECT (MILLER ROAD)	= 6,092 FT (1.154 MI)
NET LENGTH OF PROJECT (FRANK ROAD)	= 5,428 FT (1.028 MI)
NET LENGTH OF PROJECT (OAK STREET)	= 2,865 FT (0.543 MI)
<b>GROSS LENGTH OF PROJECT</b>	<b>= 14,385 FT (2.724 MI)</b>

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED 3/27 20 09  
*[Signature]*  
VILLAGE OF LAKE IN THE HILLS - DIRECTOR OF PUBLIC WORKS

PASSED APRIL 8 2009  
*[Signature]*  
DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID  
BASED ON LIMITED REVIEW APRIL 8 20 09  
*[Signature]*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

PROFESSIONAL ENGINEER'S SIGN & SEAL

*[Signature]*

DAVID M. VAN CAMP  
EXPIRES: 11-30-09

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FEDERAL AID DESIGN ENGINEER: KEVIN STALLWORTH (847) 705-4169  
 COMPANY NAME: Smith  
 PROJECT CONTACT: DVC  
 PROJECT NO.: 08-00032-00-RS  
 DATE PLOTTED: 3/25/2009 9:10:00 AM  
 FILE NAME: 080507-evr.dgn  
 PLOT DRIVER: pdf.plt  
 PEN TABLE: standard-trans.tbl

**PROJECT MANAGER: DAVID M. VAN CAMP**  
**CLIENT MANAGER: DAVID M. VAN CAMP**

**CONTRACT NO. 63164**

GENERAL NOTES

- 1 THE CONTRACTOR WILL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH BARRICADE USED. (TYPE I OR TYPE II (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.) ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR (4) SANDBAGS PER BARRICADE.
- 2 FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.
- 3 THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF LAKE IN THE HILLS.
- 4 THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE VILLAGE.
- 5 PROPOSED PAVEMENT SHALL MATCH EXISTING PAVEMENT ACCORDING TO THE TRANSITION DETAILS SHOWN IN THE CONSTRUCTION DETAILS.
- 6 THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HOT MIX ASPHALT LIFTS.
- 7 THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.08 GAL/SQ-YD BEFORE BINDER AND SURFACE COURSE PLACEMENT.
- 8 PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES, IF APPLICABLE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

9 SAW CUTTING WILL BE REQUIRED FOR ALL REMOVAL ITEMS LISTED IN SECTION 440 OF THE STANDARD SPECIFICATIONS, SHOWN IN THE PLANS, AND AS DIRECTED BY THE ENGINEER. THE COST OF SAW CUTTING WILL BE INCLUDED IN THE COST OF ITEMS BEING REMOVED.

10 QUANTITIES FOR PATCHING SHALL NOT EXCEED THOSE PROVIDED IN THE SUMMARY OF QUANTITIES UNLESS APPROVED BY THE ENGINEER. THE ENGINEER WILL IDENTIFY FINAL PATCH LOCATIONS IN THE FIELD.

11 PAVEMENT PATCHING SHALL BE COMPLETED AFTER HOT-MIX ASPHALT SURFACE REMOVAL. ALL PATCHING SHALL BE FULL DEPTH AND CONSTRUCTED UP TO THE ELEVATION OF THE SURFACE AFTER REMOVAL.

12 THE CONTRACTOR SHALL MAKE EFFORT TO MINIMIZE DISTURBANCES TO THE EXISTING PARKWAY. ANY DISTURBANCE CAUSED SHALL BE REPAIRED IN KIND AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED

BOXED ITEMS INDICATE WORK THAT IS INCIDENTAL TO THE CONTRACT

SUMMARY OF QUANTITIES

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	ROADWAY	ROADWAY	ROADWAY
				80% FEDERAL	80% FEDERAL	80% FEDERAL
				20% STATE	20% STATE	20% STATE
				MILLER RD.	FRANK RD.	OAK ST.
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4,095	2,040	1,335	720
40600300	AGGREGATE (PRIME COAT)	TON	103	51	34	18
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	1,779	730	655	394
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1,147	385	417	345
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	5,320	2,910	1,885	1,025
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	2,349	1,588	573	188
42400800	DETECTABLE WARNINGS	SQ FT	578	382	154	42
44000159	HOT-MIX ASPHALT SURFACE REMOVAL 2 1/2"	SQ YD	8,974	0	0	8,974
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	9,716	8,326	1,390	0
44000600	SIDEWALK REMOVAL	SQ FT	3,035	2,035	705	295
44000915	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	366	0	0	366
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1,352	0	114	1,238
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	2,555	1,273	832	450
48101200	AGGREGATE SHOULDERS, TYPE B	TON	300	0	300	0
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	1,095	0	0	1,095
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	3	0	3	0
60602800	CONCRETE GUTTER, TYPE B	FOOT	120	0	120	0
67100100	MOBILIZATION	L SUM	1	0	0	0
70101700	TRAFFIC CONTROL AND PROTECTION, SPECIAL	L SUM	1	0	0	0
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,445	610	545	290
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	475	292	110	73
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	32,440	11,169	16,487	4,784
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,156	1,738	304	114
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	633	396	237	0
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	63	36	0	27
* 78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	402	178	147	77
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	300	100	100	100
X0301424	SILICONE JOINT SEALER	FOOT	118	0	0	118
X0320887	POLYMER CONCRETE	CU FT	21.8	0.0	0.0	21.8
X0325806	WATERPROOFING MEMBRANE SYSTEM	SQ FT	3,294	0	0	3,294
XX005369	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	0	0	1
Δ Z0076600	TRAINEES	HOUR	500	170	165	165

\* DENOTES SPECIALTY ITEM

Δ Y080



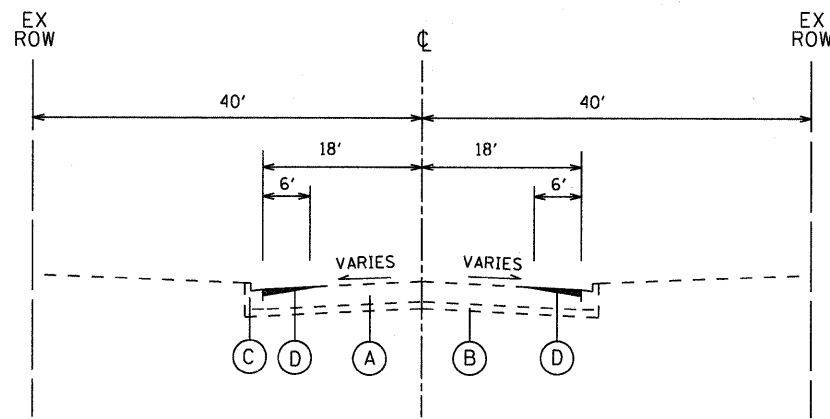
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**VILLAGE OF LAKE IN THE HILLS 2009 LAPP RESURFACING PROGRAM**

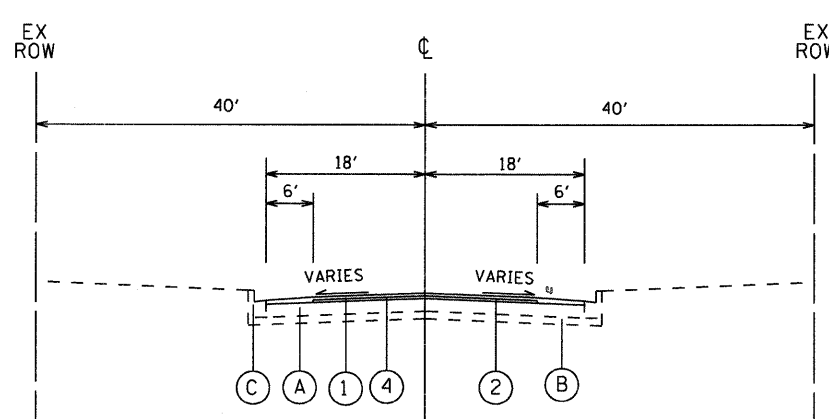
**GENERAL NOTES AND SUMMARY OF QUANTITIES**

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	2
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 63164	



EXISTING TYPICAL SECTION  
MILLER ROAD  
STA. 1+91 TO STA. 62+83

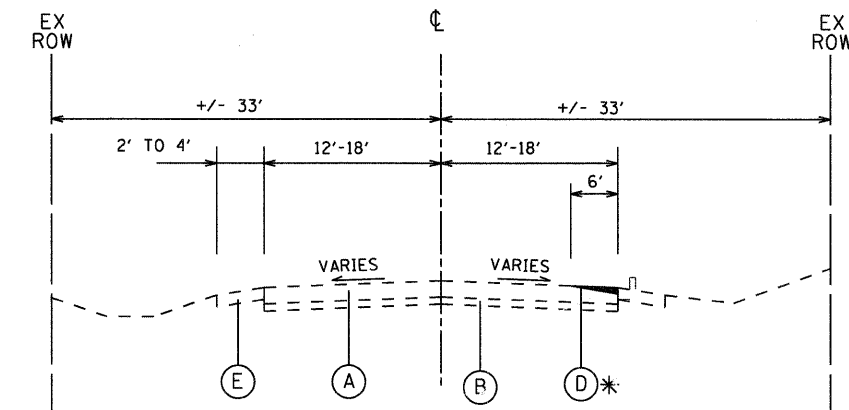


PROPOSED TYPICAL SECTION  
MILLER ROAD  
STA. 1+91 TO STA. 62+83

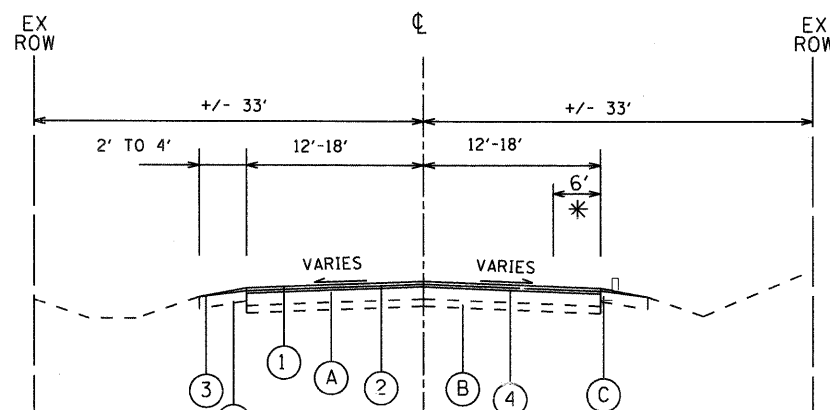
- MILLER ROAD STREET NOTES**
- SEE CONSTRUCTION DETAILS FOR INFORMATION ON HMA TRANSITION AT CURB
  - RESURFACING LIMITS ARE AT EXISTING CURB LINE
  - FULL WIDTH 2 1/2" SURFACE REMOVAL FROM STA. 51+00 TO 51+55 (PAID AS HMA SURF REM VAR DP)

- EXISTING LEGEND**
- (A) EXISTING BITUMINOUS PAVEMENT
  - (B) EXISTING AGGREGATE BASE
  - (C) EXISTING CONCRETE CURB OR CURB AND GUTTER
  - (D) HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH
  - (E) EXISTING AGGREGATE SHOULDER
  - (F) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"

- PROPOSED LEGEND**
- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2" (TON)
  - (2) LEVELING BINDER (MACHINE METHOD), N50, 3/4" (TON)
  - (3) AGGREGATE SHOULDERS, TYPE B (TONS)
  - (4) BITUMINOUS MATERIALS (PRIME COAT) (GALLON) AND AGGREGATE (PRIME COAT) (TON)

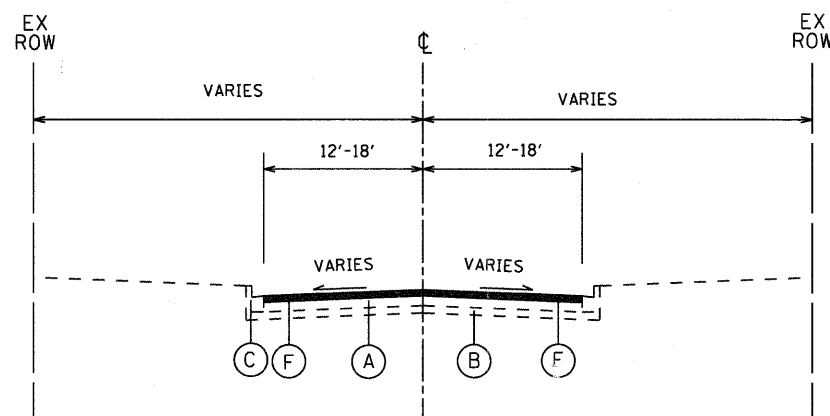


EXISTING TYPICAL SECTION  
FRANK ROAD  
STA. 1+00 TO STA. 55+28

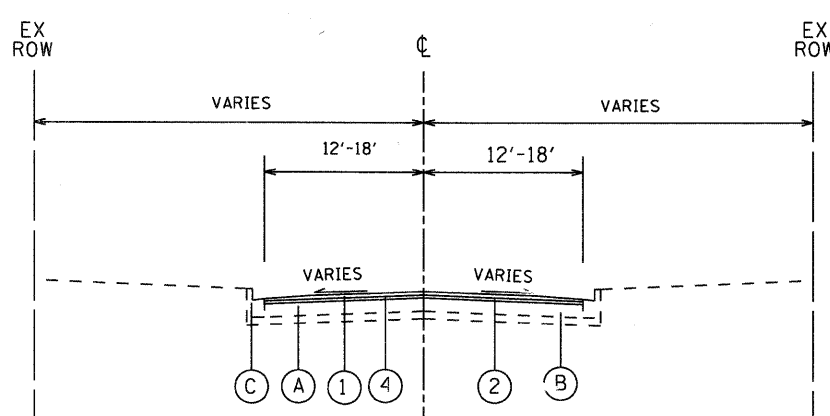


PROPOSED TYPICAL SECTION  
FRANK ROAD  
STA. 1+00 TO STA. 55+28

- FRANK ROAD NOTES**
- SEE CONSTRUCTION DETAILS FOR INFORMATION ON HMA TRANSITION AT CURB
  - SEE CONSTRUCTION DETAILS FOR DRIVEWAY TREATMENT
  - RESURFACING LIMITS ARE AT EXISTING CURB LINE OR SHOULDER
  - SEE PLAN SHEET FOR LIMITS OF SHOULDER AND CURB SECTIONS
  - FULL WIDTH 2 3/4" SURFACE REMOVAL FROM STA 21+13 TO 29+00 (PAID AS HMA SURF REM VAR DP)
- \* EDGE MILLING ALONG GUTTER FLAG



EXISTING TYPICAL SECTION  
OAK STREET  
STA. 1+10 TO STA. 29+75



PROPOSED TYPICAL SECTION  
OAK STREET  
STA. 1+10 TO STA. 29+75

- OAK STREET NOTES**
- RESURFACING LIMITS ARE AT EXISTING CURB LINE OR SHOULDER
  - SEE PLAN SHEET FOR LIMITS OF SHOULDER AND CURB SECTIONS

**HOT-MIX ASPHALT MIXTURE REQUIREMENT**

ITEM DESCRIPTION	AC TYPE	VOIDS
HOT MIX ASPHALT SURFACE COURSE, MIX D, N50 (IL 9.5 mm)	PG 64-22	4.0% @ 50 Gyr.
LEVELING BINDER (MACHINE METHOD), N50 (IL 9.5 mm)	PG 64-22	4.0% @ 50 Gyr.
CLASS D PATCHES, HOT-MIX ASPHALT BINDER COURSE, IL-19.0	PG 64-22*	4.0% @ 70 Gyr.

THE UNIT WEIGHT TO CALCULATE ALL THE HMA SURFACE MIXTURE QUANTITIES 112 LBS/50 YD/ IN  
 \*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

GENERAL NOTE:  
 PROPOSED CROSS SLOPES TO VARY FROM 1.5% TO 2%.



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 PLOT SCALE = N/A  
 PLOT DATE = 4/9/2009

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 DRAWN - DVC  
 CHECKED - DVC  
 DATE - TBD

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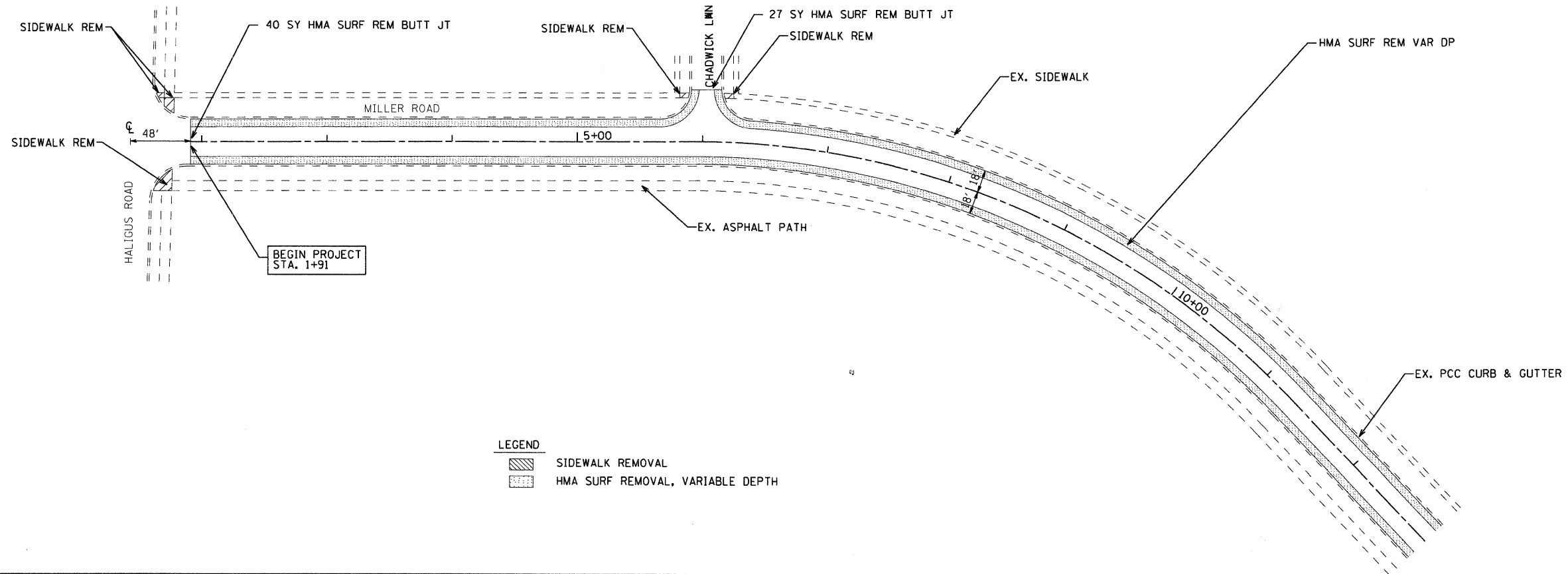
**VILLAGE OF LAKE IN THE HILLS 2009 LAPP RESURFACING PROGRAM**

**TYPICAL SECTIONS**

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 63164				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

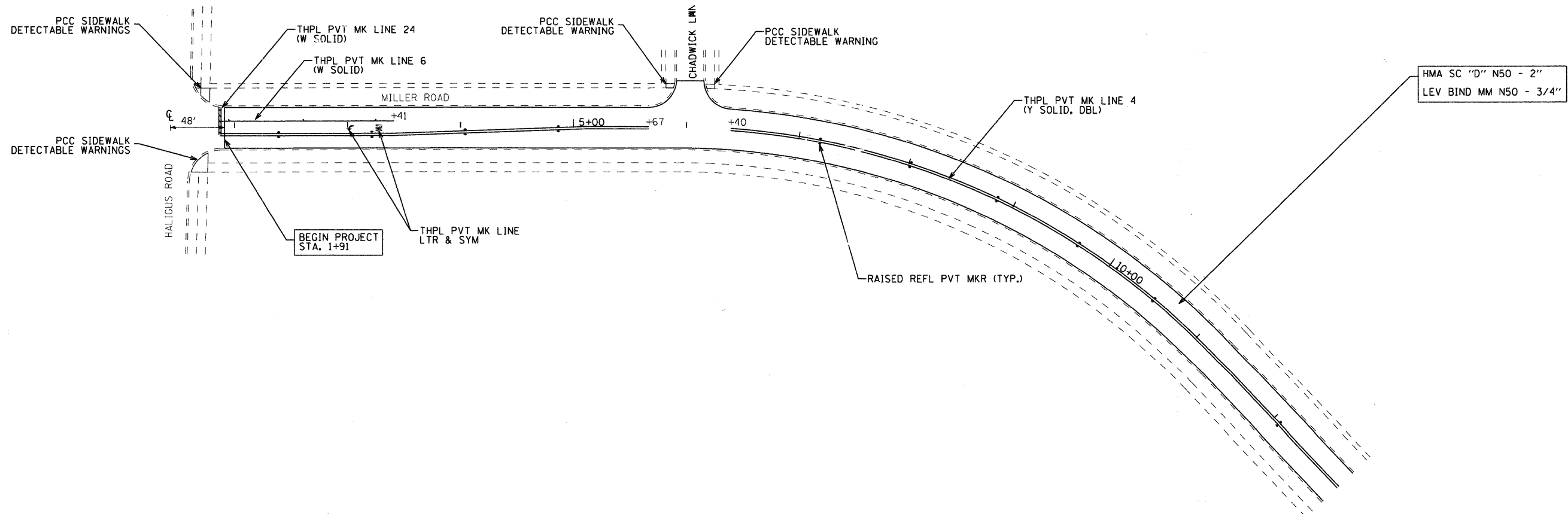
**EXISTING CONDITIONS AND REMOVALS**



**LEGEND**

	SIDEWALK REMOVAL
	HMA SURF REMOVAL, VARIABLE DEPTH

**PROPOSED PLAN**



USER NAME = jguerriero	DESIGNED -	REVISED -
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PLOT DATE = 4/9/2009	CHECKED -	REVISED -
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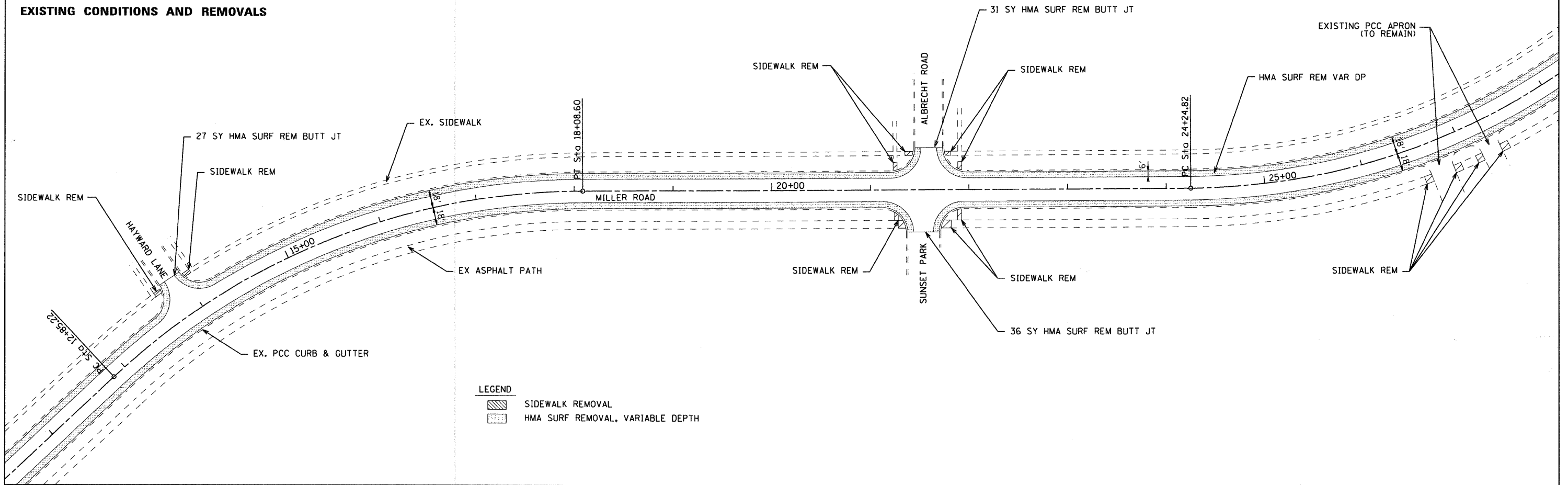
**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
RESURFACING PROGRAM**

**ROADWAY PLAN  
MILLER ROAD**

SCALE: 1"=50' SHEET NO. 1 OF 5 SHEETS STA. TO STA.

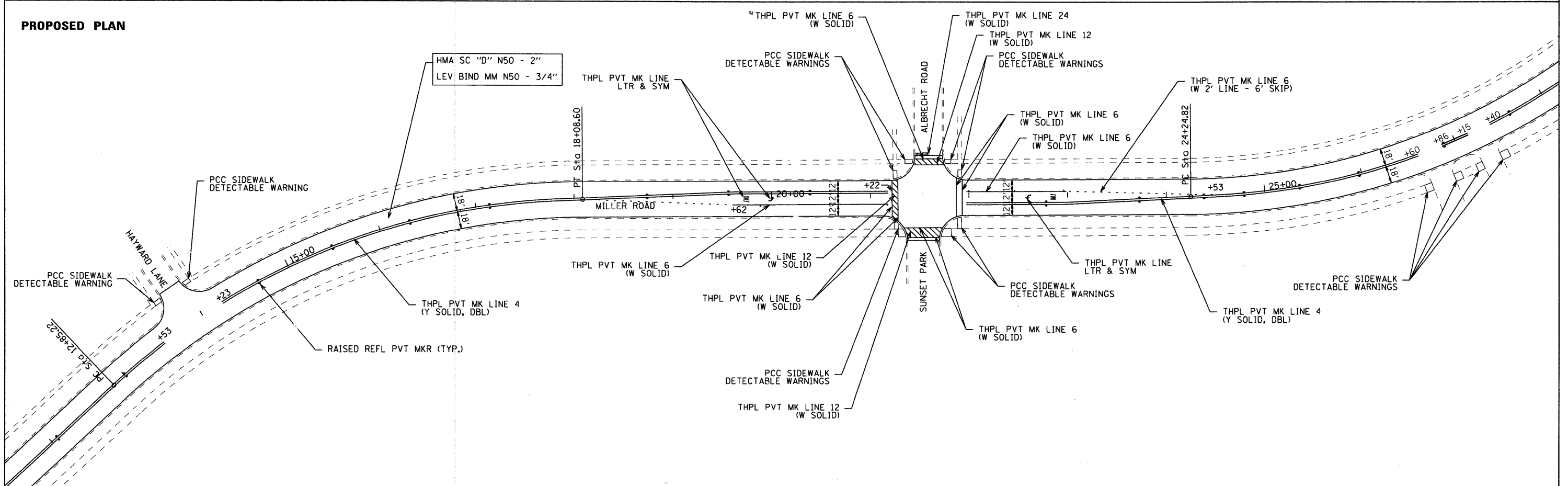
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	08-00032-00-RS	MCHENRY	21	4
CONTRACT NO. 63164				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**EXISTING CONDITIONS AND REMOVALS**



- LEGEND**
- SIDEWALK REMOVAL
  - HMA SURF REMOVAL, VARIABLE DEPTH

**PROPOSED PLAN**



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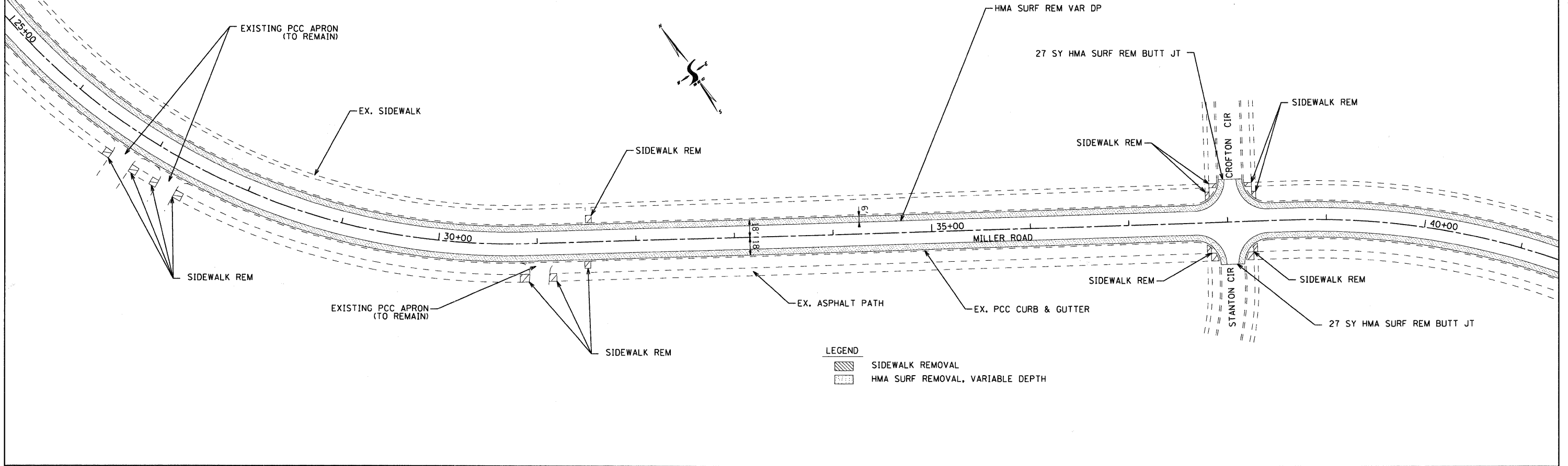
**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
 RESURFACING PROGRAM**

**ROADWAY PLAN  
 MILLER ROAD**

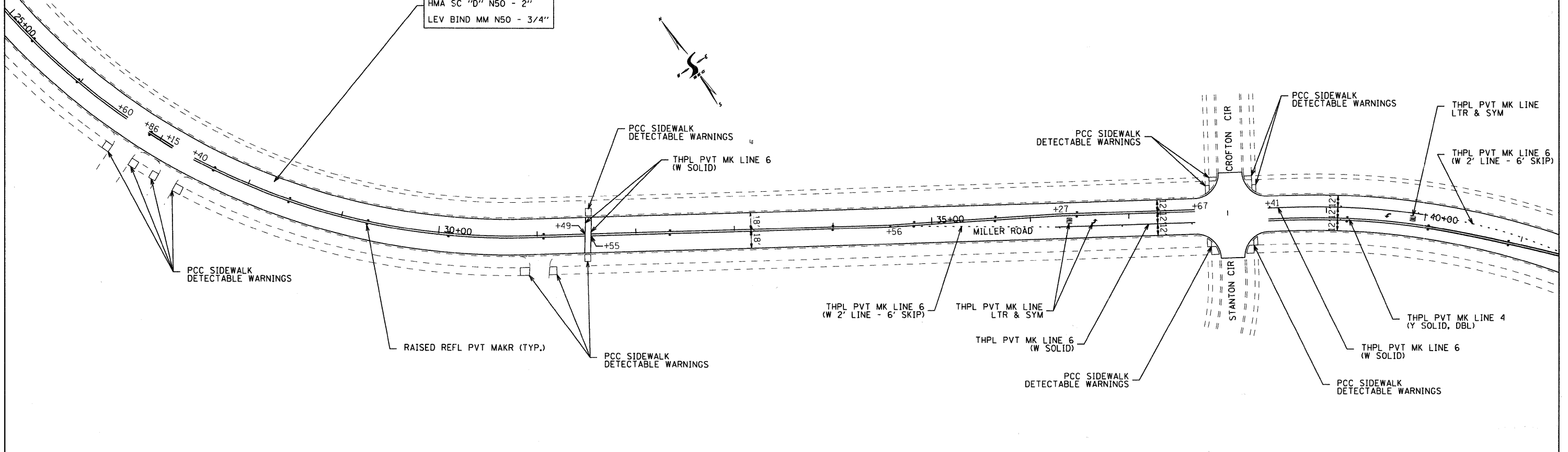
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	5
CONTRACT NO. 63164				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**EXISTING CONDITIONS AND REMOVALS**



**PROPOSED PLAN**



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	DATE - TBD	REVISED -

**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
 RESURFACING PROGRAM**

**ROADWAY PLAN  
 MILLER ROAD**  
 SCALE: 1"=50' SHEET NO. 3 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	6
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 63164

LAKE IN THE HILLS 2009 LAPP  
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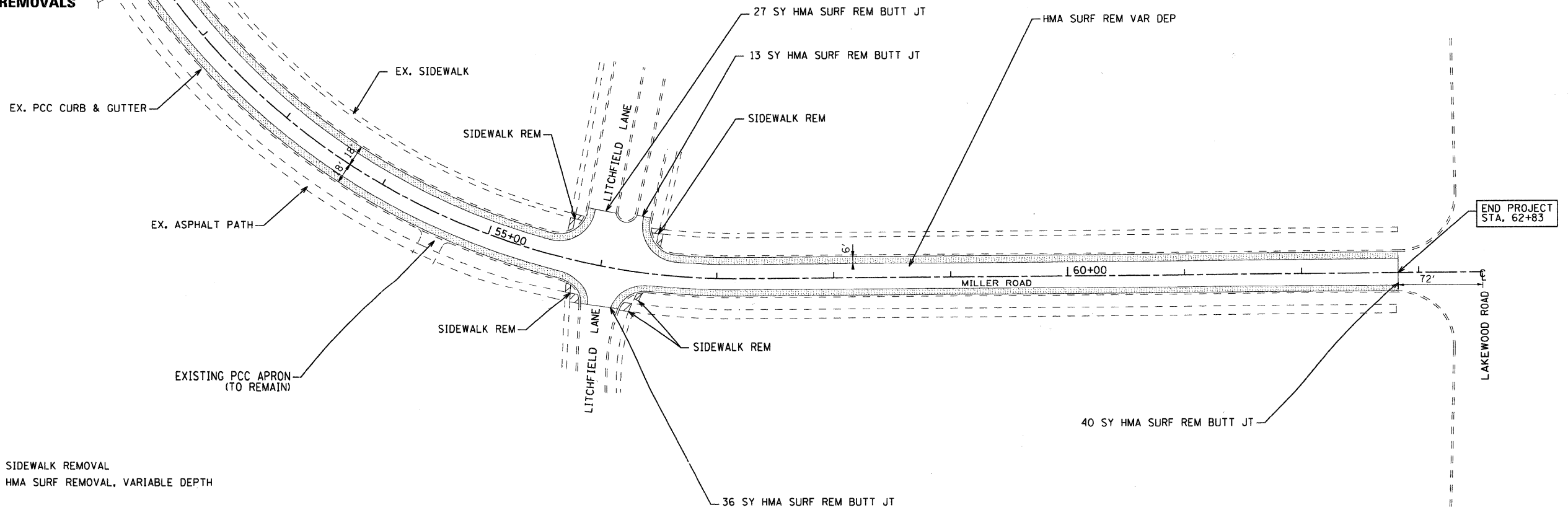


**EXISTING CONDITIONS AND REMOVALS**

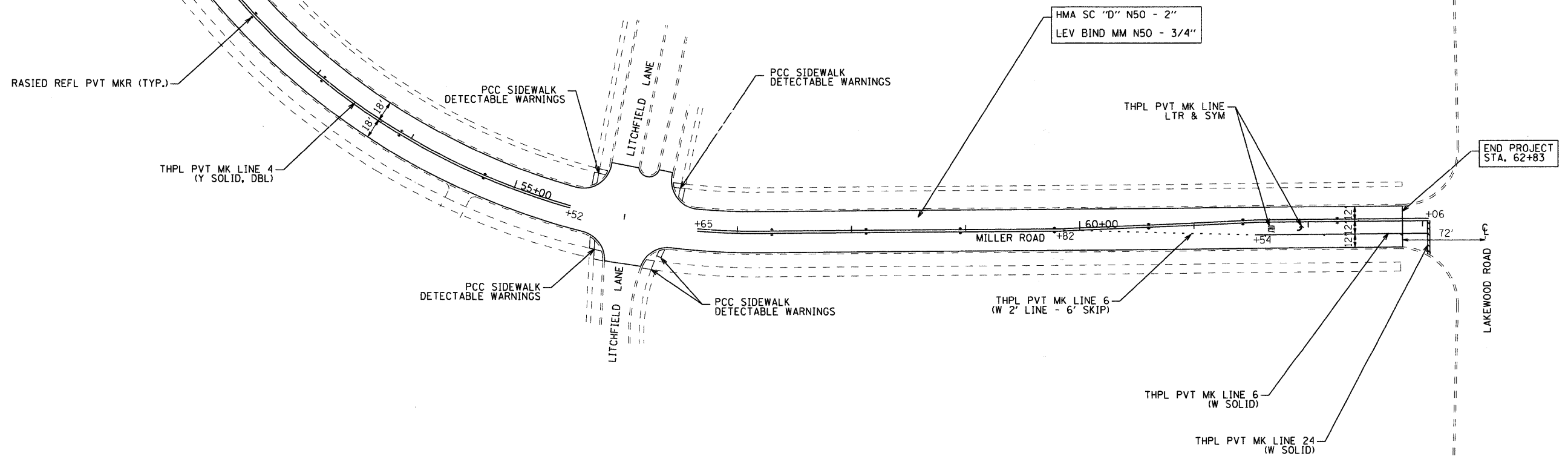


**LEGEND**

- SIDEWALK REMOVAL
- HMA SURF REMOVAL, VARIABLE DEPTH



**PROPOSED PLAN**



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PLOT DATE = 4/9/2009	CHECKED -	REVISED -
	DATE - TBD	REVISED -

**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
 RESURFACING PROGRAM**

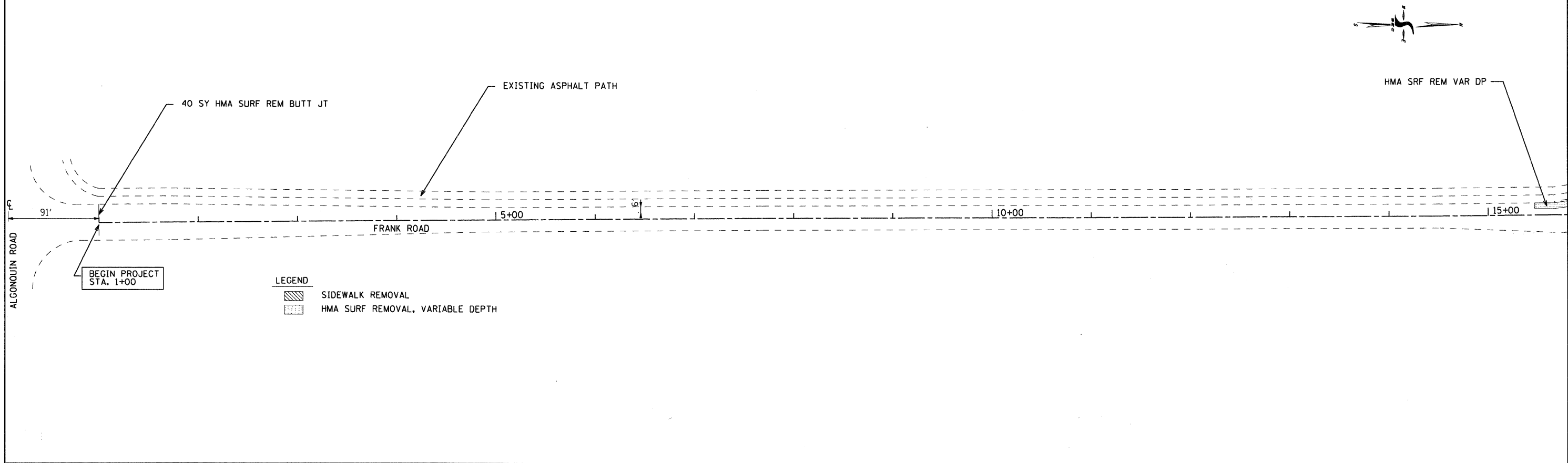
**ROADWAY PLAN  
 MILLER ROAD**

SCALE: 1"=50' SHEET NO. 5 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	8
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63164	



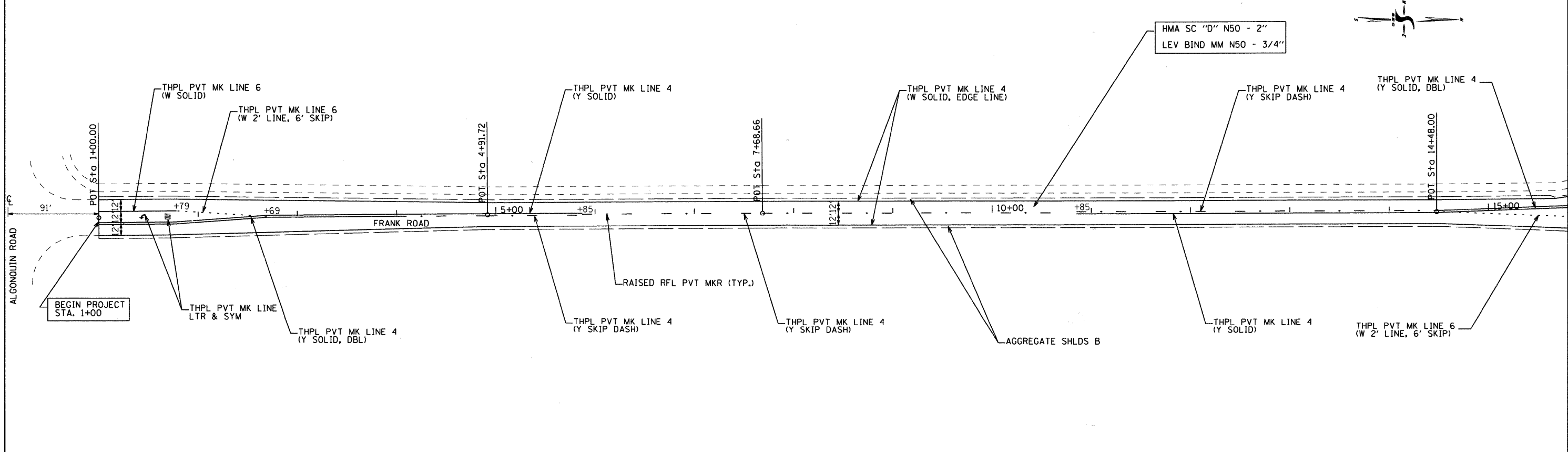
**EXISTING CONDITIONS AND REMOVALS**



**LEGEND**

	SIDEWALK REMOVAL
	HMA SURF REMOVAL, VARIABLE DEPTH

**PROPOSED PLAN**



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PLOT SCALE = 1"=50'	DRAWN -	REVISD -
PLOT DATE = 4/9/2009	CHECKED -	REVISD -
	DATE - TBD	REVISD -

**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
 RESURFACING PROGRAM**

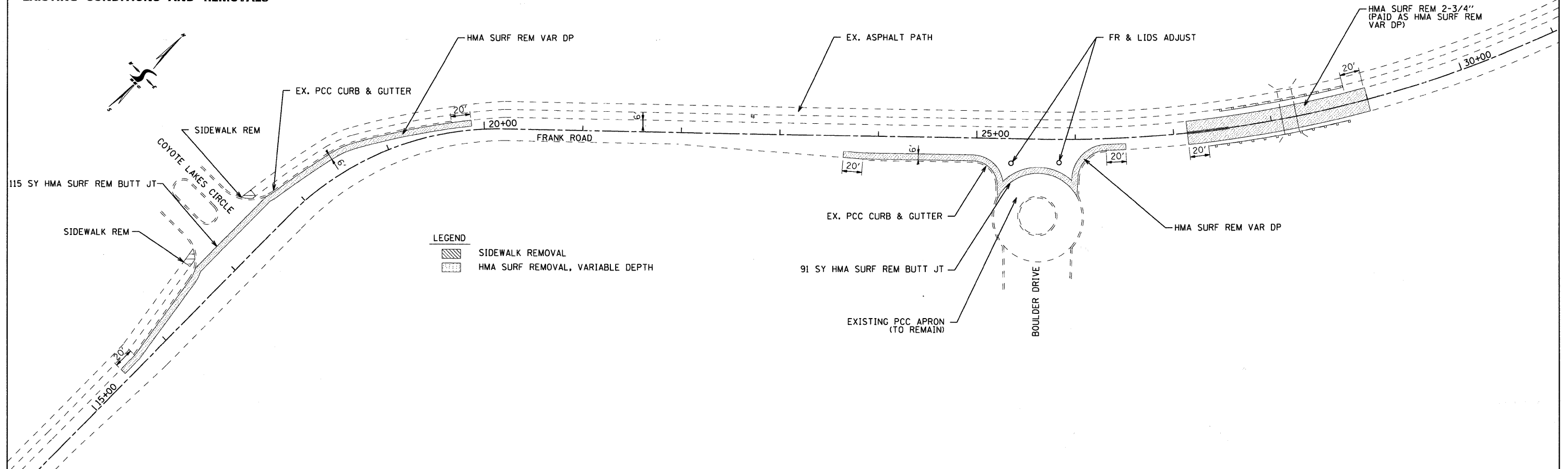
**ROADWAY PLAN  
 FRANK ROAD**

SCALE: 1"=50' SHEET NO. 1 OF 4 SHEETS STA. TO STA.

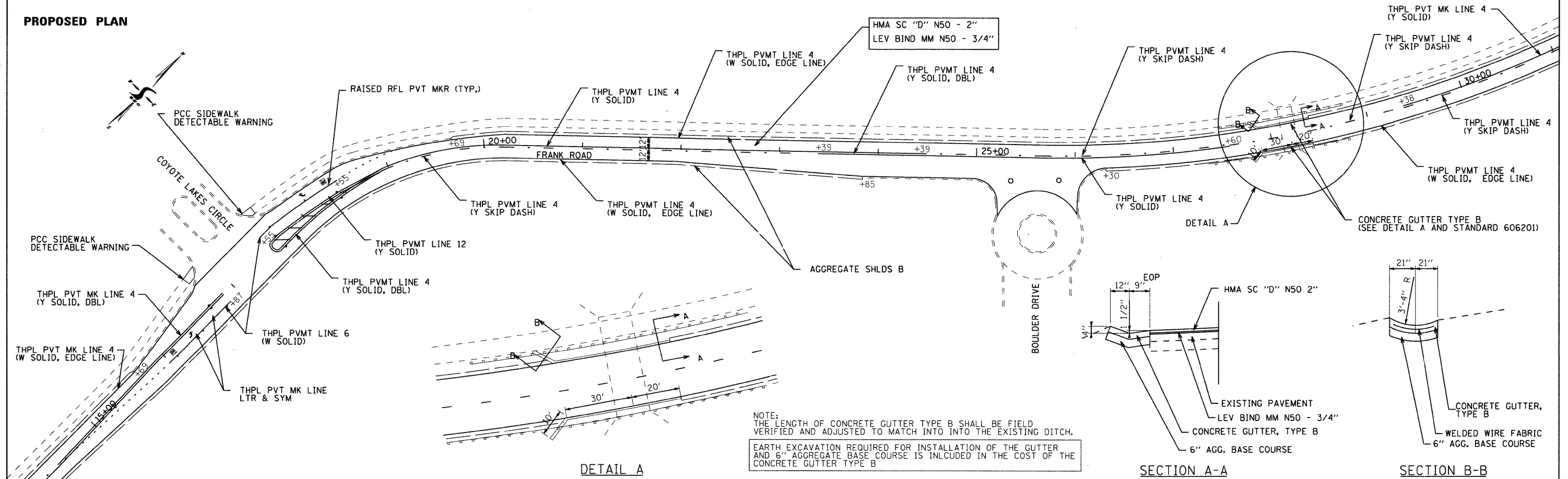
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	08-00032-00-RS	MCHENRY	21	9
FED. ROAD DIST. NO.			CONTRACT NO. 63164	
ILLINOIS FED. AID PROJECT				

LAKE IN THE HILLS 2009 LAPP  
 LTH-080551  
 080551.rps06.dgn

**EXISTING CONDITIONS AND REMOVALS**



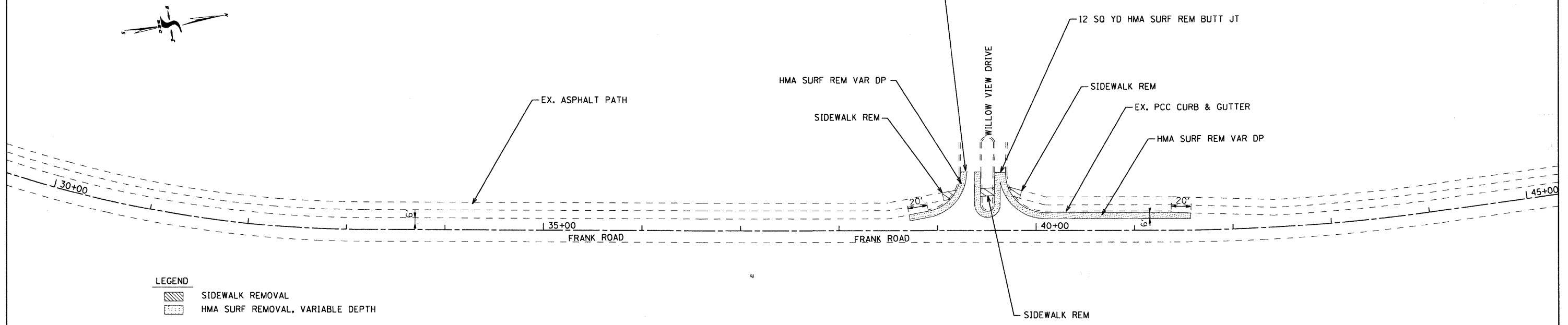
**PROPOSED PLAN**



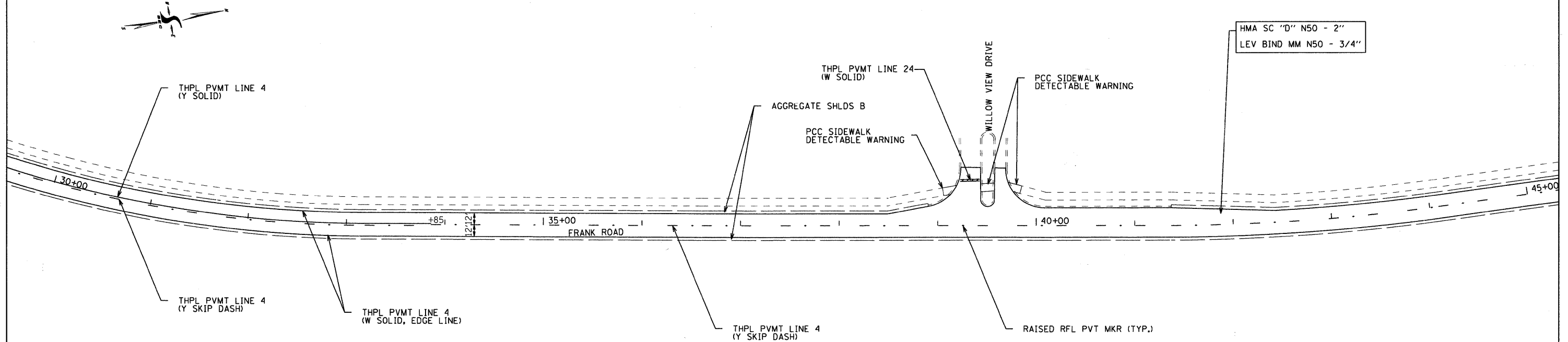
NOTE:  
THE LENGTH OF CONCRETE GUTTER TYPE B SHALL BE FIELD VERIFIED AND ADJUSTED TO MATCH INTO THE EXISTING DITCH.  
EARTH EXCAVATION REQUIRED FOR INSTALLATION OF THE GUTTER AND 6" AGGREGATE BASE COURSE IS INCLUDED IN THE COST OF THE CONCRETE GUTTER TYPE B

<p>SEC Group, Inc. Engineering Surveying Planning Landscape Architecture McHenry • Yorkville • New Lenox • Chicago www.secgroupinc.com</p>	USER NAME = jguerrero	DESIGNED -	REVISED -	<b>VILLAGE OF LAKE IN THE HILLS 2009 LAPP RESURFACING PROGRAM</b>	<b>ROADWAY PLAN FRANK ROAD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 1"=50'	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO. 2 OF 4 SHEETS	STA. TO STA.	08-00032-00-RS	MCHENRY	21	10		
	PLOT DATE = 4/9/2009	CHECKED -	REVISED -										
		DATE - TBD	REVISED -										
								CONTRACT NO. 63164					
								FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

**EXISTING CONDITIONS AND REMOVALS**



**PROPOSED PLAN**



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 Illinois Professional Design Firm # 154-000708  
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PLOT SCALE = 1"=50'	DRAWN -	REVISED -
PLOT DATE = 4/9/2009	CHECKED -	REVISED -
	DATE - TBD	REVISED -

**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
 RESURFACING PROGRAM**

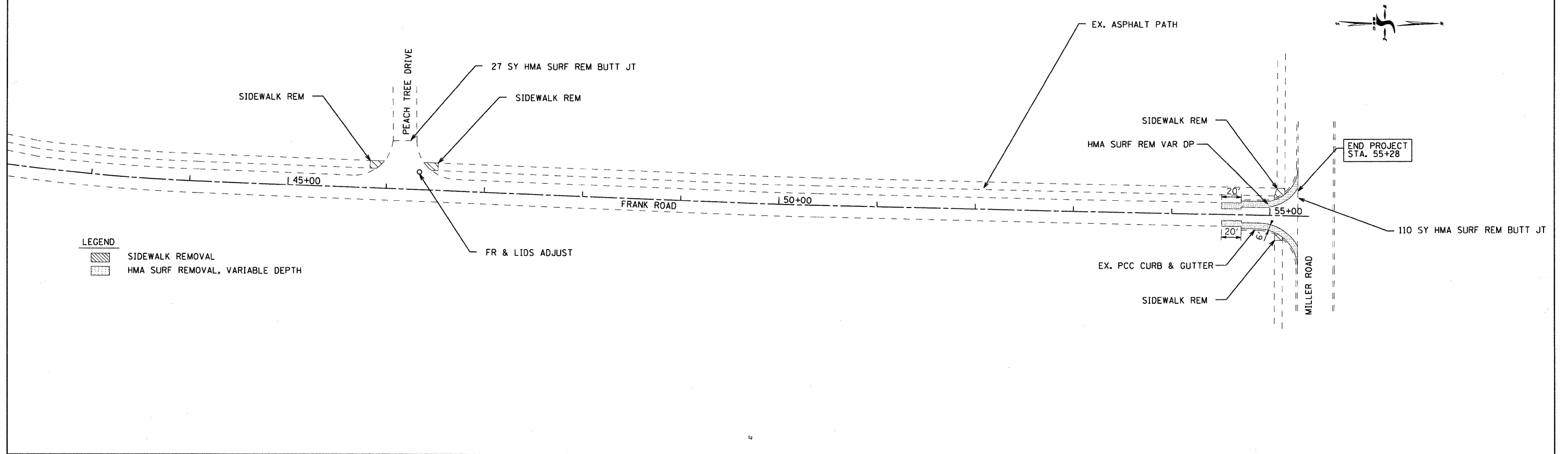
**ROADWAY PLAN  
 FRANK ROAD**

SCALE: 1"=50' SHEET NO. 3 OF 4 SHEETS STA. TO STA.

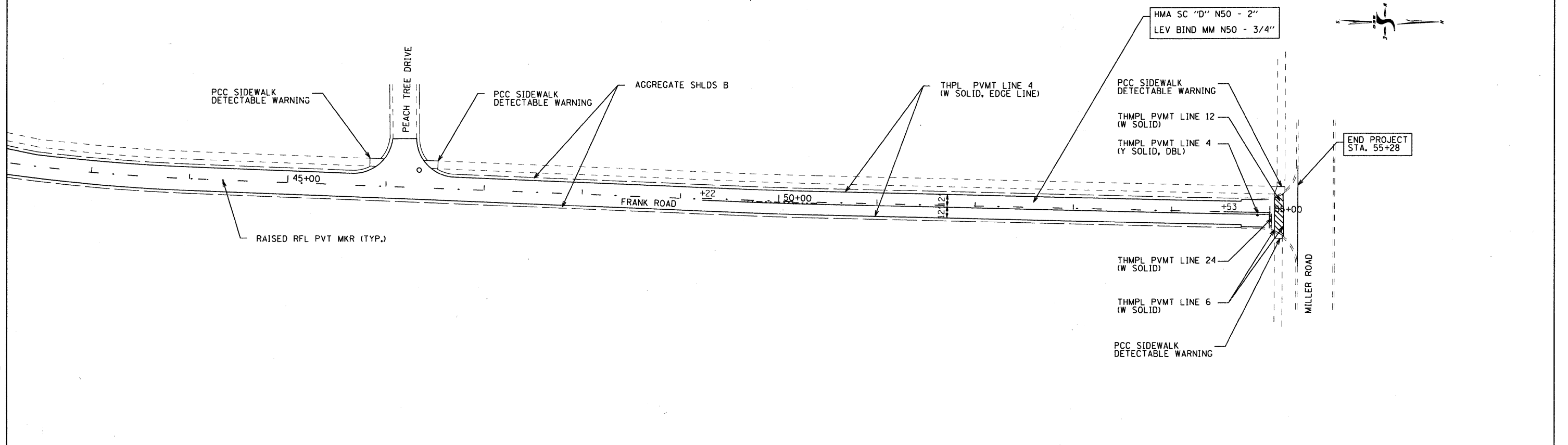
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	08-00032-00-RS	MCHENRY	21	11
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63164	

LAKE IN THE HILLS 2009 LAPP  
 11105-080951  
 080951-prp08.dgn

**EXISTING CONDITIONS AND REMOVALS**

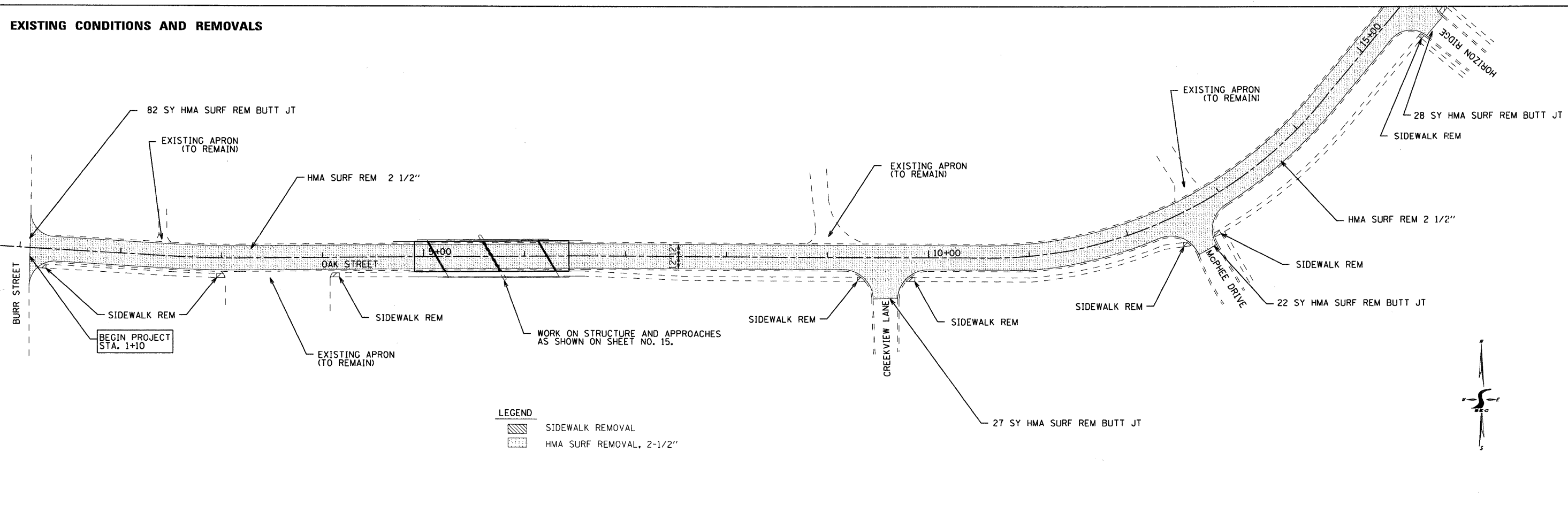


**PROPOSED PLAN**



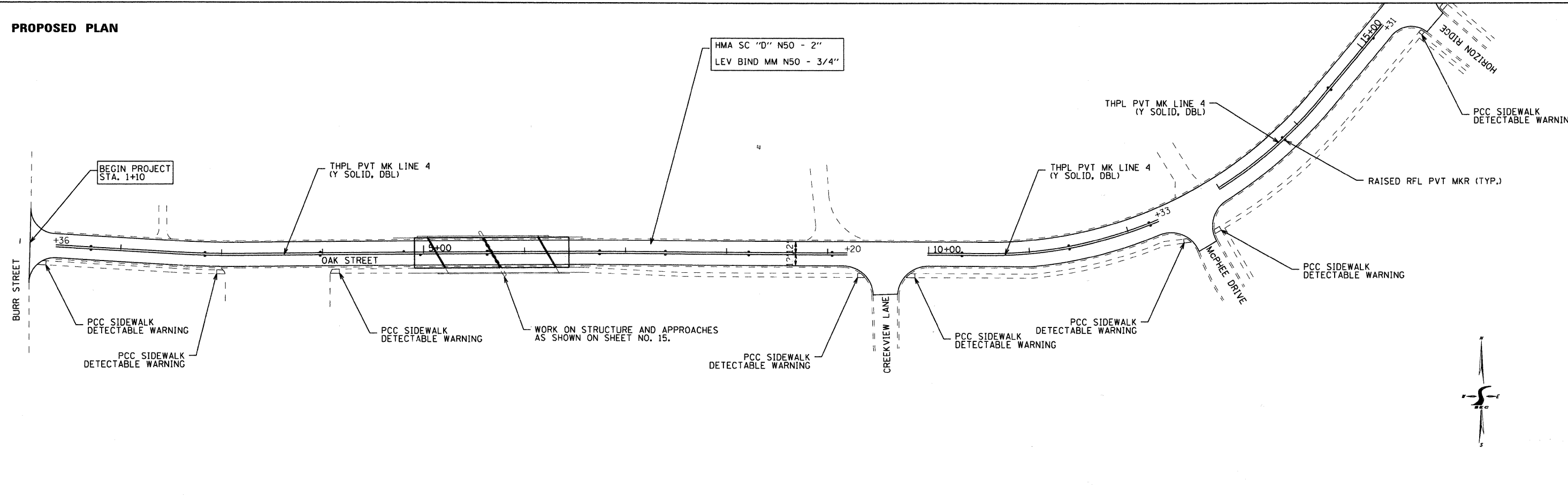
<p>Professional Design Firm # 144-000108 Engineering Surveying Planning Landscape Architecture McHenry • Yorkville • New Leno • Chicago www.secgroupinc.com</p>	USER NAME = jguerrero	DESIGNED -	REVISED -	<b>VILLAGE OF LAKE IN THE HILLS 2009 LAPP RESURFACING PROGRAM</b>	<b>ROADWAY PLAN FRANK ROAD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1"=50'	CHECKED -	REVISED -		SCALE: 1"=50'	SHEET NO. 4 OF 4 SHEETS	STA. TO STA.	08-00032-00-RS	MCHENRY	21	12	
	PLOT DATE = 4/9/2009	DATE - TBD	REVISED -					CONTRACT NO. 63164				
								FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**EXISTING CONDITIONS AND REMOVALS**



**LEGEND**  
 SIDEWALK REMOVAL  
 HMA SURF REMOVAL, 2-1/2"

**PROPOSED PLAN**



USER NAME = jguerrero	DESIGNED -	REVISED -
PLOT SCALE = 1"=50'	DRAWN -	REVISED -
PLOT DATE = 4/9/2009	CHECKED -	REVISED -
	DATE - TBD	REVISED -

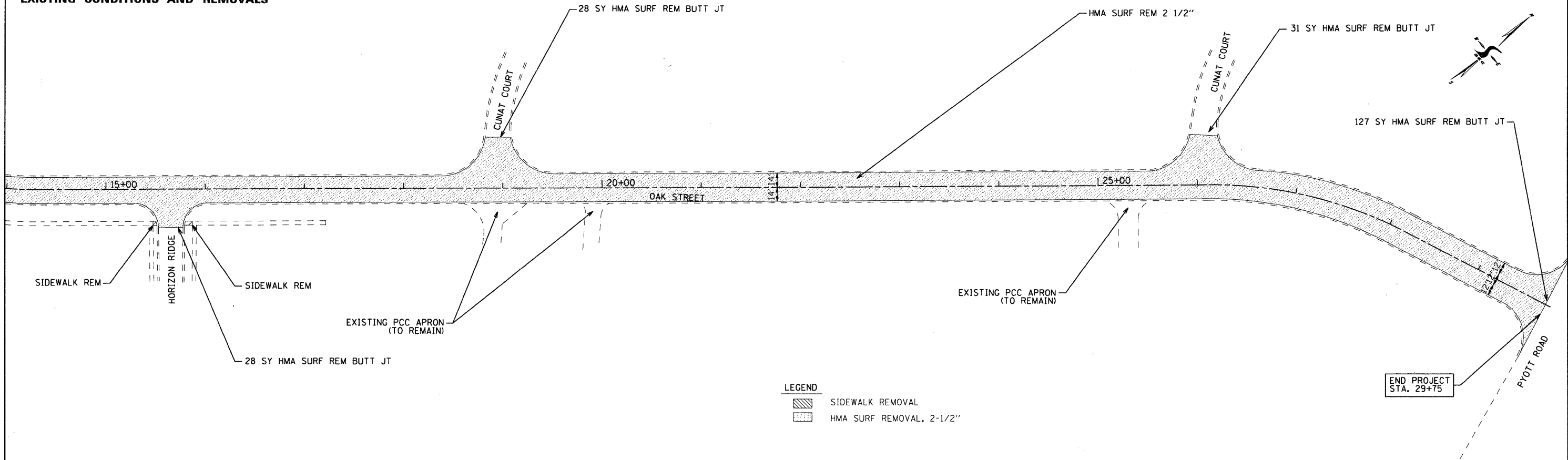
**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
RESURFACING PROGRAM**

<b>ROADWAY PLAN OAK STREET</b>	
SCALE: 1"=50'	SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	13
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	CONTRACT NO. 63164			

LAKE IN THE HILLS 2009 LAPP  
 L110-00032-00-RS  
 080957-0010.dgn

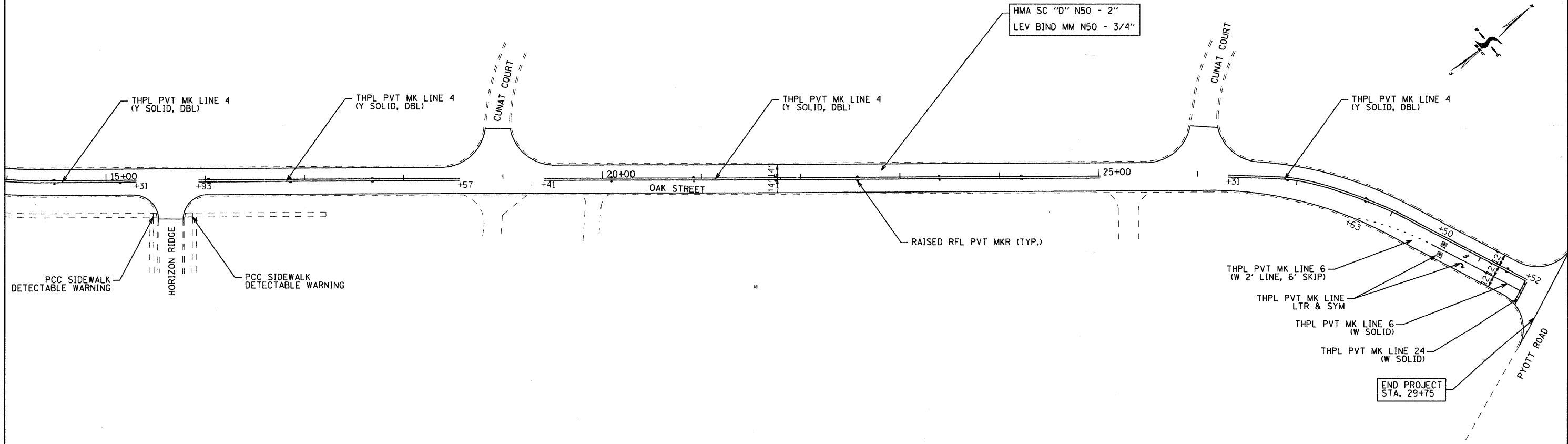
**EXISTING CONDITIONS AND REMOVALS**



**LEGEND**

	SIDEWALK REMOVAL
	HMA SURF REMOVAL, 2-1/2"

**PROPOSED PLAN**



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PLOT SCALE = 1"=50'	DRAWN -	REVISED -
PLOT DATE = 4/9/2009	CHECKED -	REVISED -
	DATE - TBD	REVISED -

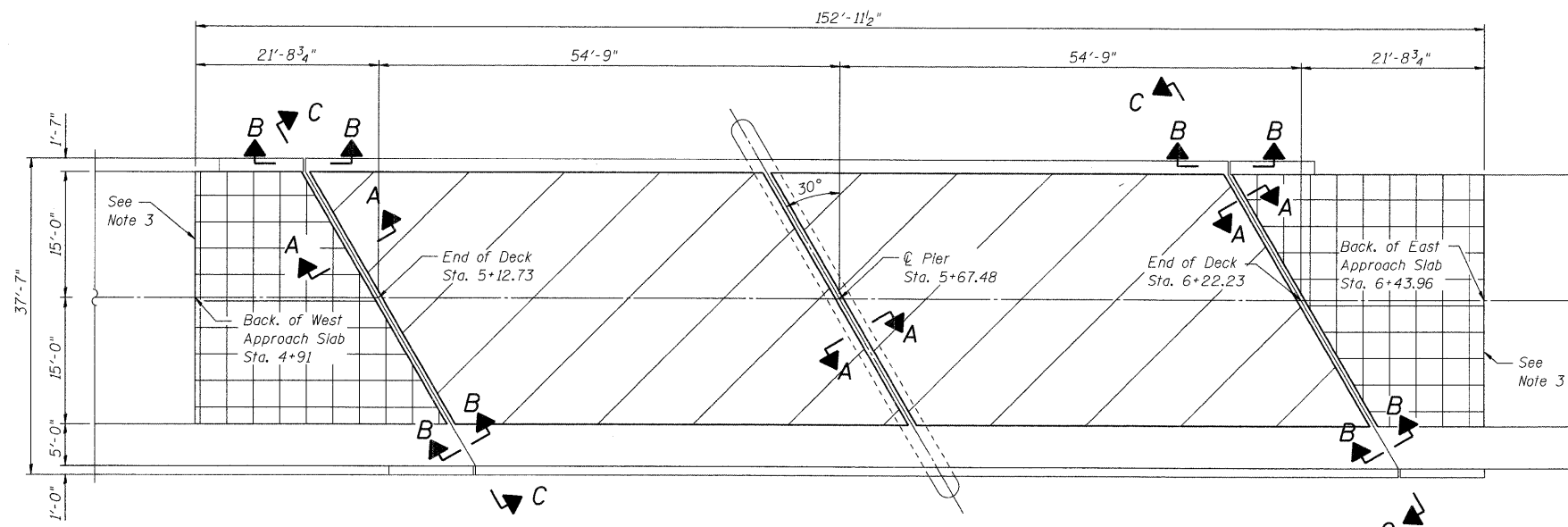
**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
 RESURFACING PROGRAM**

**ROADWAY PLAN  
 OAK STREET**

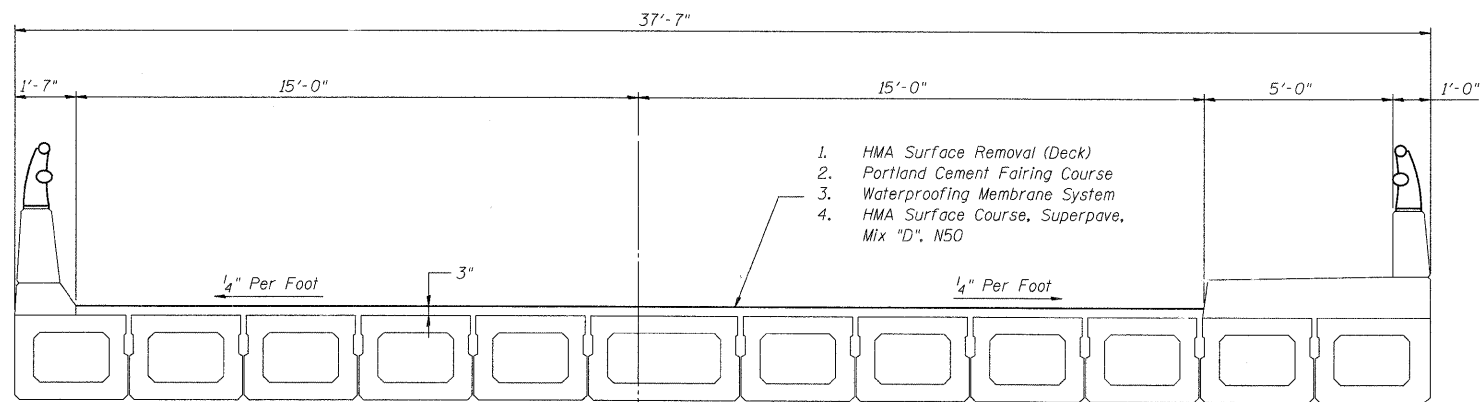
SCALE: 1"=50' SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	14
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
		CONTRACT NO.	63164	

LAKE IN THE HILLS 2009 LAPP  
 11/08/09  
 080557-0001.dgn



PLAN VIEW

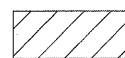


CROSS SECTION

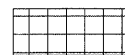
BILL OF MATERIAL

Item	Unit	Quantity
Hot-Mix Asphalt Surface Course, Superpave, Mix "D", N50	Tons	88
Hot-Mix Asphalt Surface Removal, 2-1/2"	Sq. Yds.	145
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yds.	366
Waterproofing Membrane System	Sq. Ft.	3294
Portland Cement Mortar Fairing Course	Foot	1095
Silicone Joint Sealer	Foot	118
Polymer Concrete	Cu. Ft.	21.8

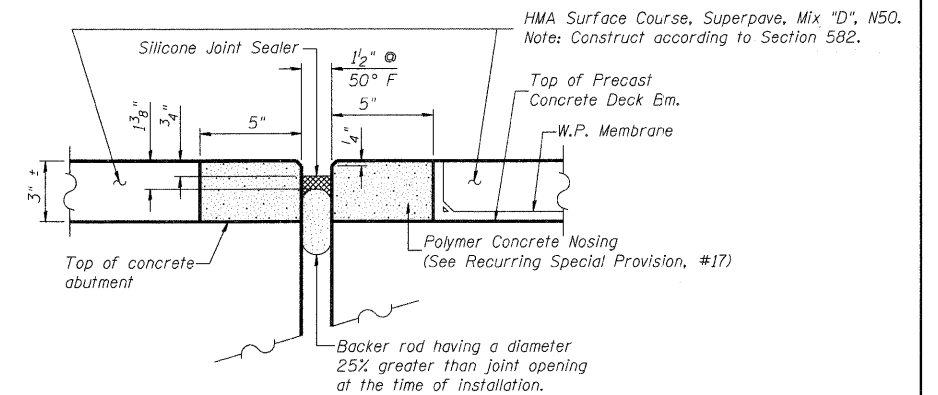
LEGEND:



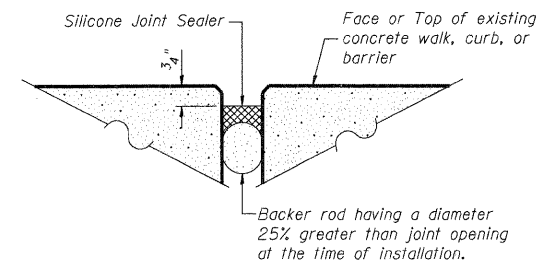
Limits of Hot Mix Asphalt Surface Removal (Deck), Waterproof Membrane System, and Portland Cement Mortar Fairing Course assumed for 10 joints 109.5' long (each).



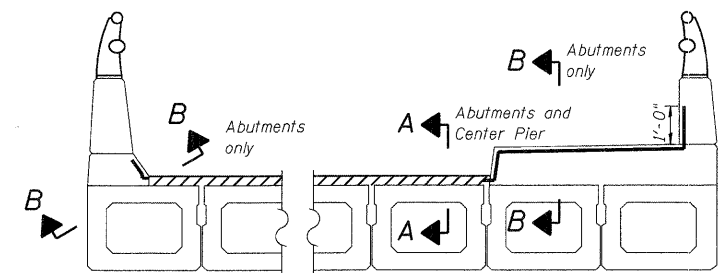
Limits of Hot Mix Asphalt Surface Removal, 2-1/2\"/>



SECTION A-A



SECTION B-B



SECTION C-C

Each end of bridge

NOTES:

- HMA Surface Course shall be constructed according to Section 582, except for no calibration strip on the bridge deck.
- The cost of removing the existing Neoprene Expansion Joint shall be included in the cost of Silicone Joint Sealer.
- The existing Approach Slabs were constructed of reinforced concrete with an asphalt surface course.



USER NAME = jguerrero	DESIGNED - MGH	REVISED -
PLOT SCALE = N/A	DRAWN - WJH	REVISED -
PLOT DATE = 4/9/2009	CHECKED - DVC	REVISED -
	DATE - TBD	REVISED -

VILLAGE OF LAKE IN THE HILLS 2009 LAPP RESURFACING PROGRAM

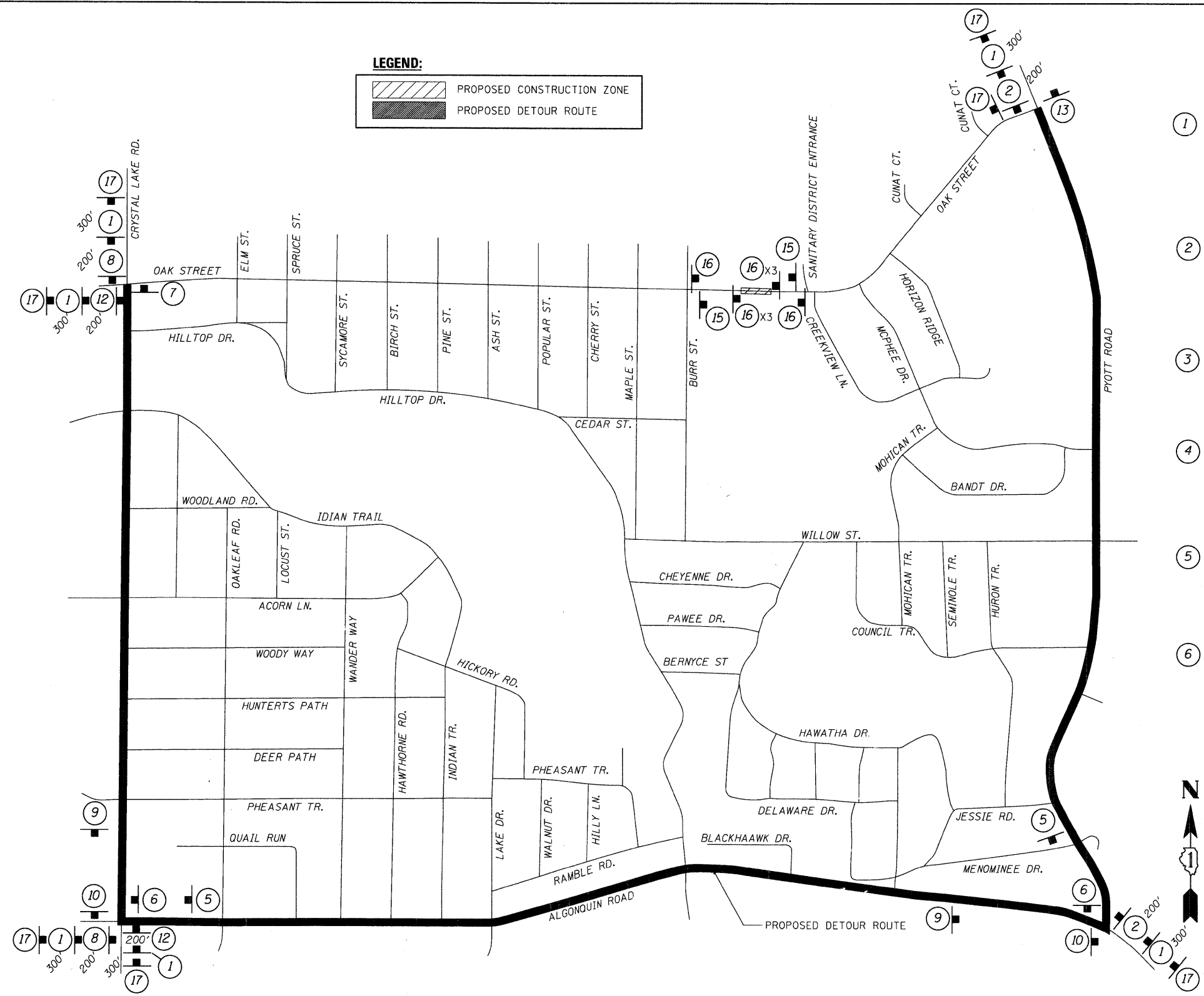
OAK STREET OVER CRYSTAL CREEK SN 056-6403

SCALE: N/A SHEET NO. OF SHEETS STA. 4+91 TO STA. 6+43.96

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	15
CONTRACT NO.			63164	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**LEGEND:**

	PROPOSED CONSTRUCTION ZONE
	PROPOSED DETOUR ROUTE



1		7		13	
2		8		14	
3		9		15	
4		10		16	
5		11		17	
6		12		18	

**DETOUR GENERAL NOTES**

1. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING HAS BEEN ERECTED IN ACCORDANCE WITH THE DETOUR PLAN.
2. THE ENGINEER AND EMERGENCY SERVICES SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
3. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND AND BRIDGE CONSTRUCTIONS" ADOPTED JANUARY 1, 2007. THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AND AS DIRECTED BY THE ENGINEER.

4. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL.
5. ADDITIONAL SIGNING AND/OR BARRICADES DEEMED NECESSARY BY THE ENGINEER SHALL BE PROVIDED AND INSTALLED AT NO ADDITIONAL COST.
6. PRIOR TO THE START OF WORK AT THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE NAMES AND PHONE NUMBERS OF HIS REPRESENTATIVES THAT SHALL BE RESPONSIBLE FOR THE DETOUR SIGNING ON THE CONSTRUCTION SITE (INCLUDING A 24-HR EMERGENCY NUMBER).
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD LOCATION OF ALL DETOUR AND CONSTRUCTION SIGNING. THE CONTRACTOR SHALL REQUEST THE ENGINEER TO FIELD VERIFY THE POSITIONS OF ANY SIGNS.

8. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WITH THE DETOUR SHALL BE COMPLETELY COVERED OR REMOVED BY THE CONTRACTOR IN A MANNER MEETING THE APPROVAL OF THE ENGINEER. IF SIGNAGE IS REMOVED THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REINSTALLATION OF THE REMOVED SIGNS.
9. ALL DETOUR SIGNING SHALL BE POST MOUNTED.
10. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1084.02 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR IN LIKE-NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.

**DETOUR GENERAL NOTES (CONT.)**

11. THE ROAD NAME SIGN SHALL BE A BLACK LEGEND ON ORANGE REFLECTIVE SHEETING. THE SIGN BLANK SHALL BE VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6".
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY, INCLUDING SUNDAYS AND HOLIDAYS.
13. THE "ROAD CLOSED" (R11-2) AND (R11-4) SIGNS SHALL BE MOUNTED ABOVE THE TOPS OF THE TYPE III BARRICADES. ALL TYPE III BARRICADES SHALL HAVE TWO AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINES OF THE SUPPORTS.
14. THE DETOUR SIGNAGE SHALL BE FIELD VERIFIED AND INSTALLED IN MANNER THAT DOES NOT OBSTRUCT THE VISIBILITY OF EXISTING SIGNAGE.
15. THE TYPE III BARRICADES USED AT POINTS OF CLOSURE TO THRU TRAFFIC ONLY SHALL NOT EXCEED 8 FEET IN WIDTH EACH FOR A SINGLE APPROACH LANE. ALL BARRICADES AT THESE LOCATIONS SHALL HAVE REFLECTORIZED STRIPING ON THE BACK SIDES OF THE BARRICADES.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNS, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.
17. THE ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE THE ROAD IS TO BE REOPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
18. ALL WORK REQUIRED FOR DETOUR SIGNING SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR LUMP SUM AS "TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR."
19. THE DETOUR ROUTE SHALL NOT BE IN PLACE FOR NO MORE THAN ONE, TWO WEEK PERIOD.

COMPANY NAME: Smith  
 PROJECT CONTACT: DVE IN THE HILLS  
 DATE PLOTTED: 4/9/2009 9:03:54 AM  
 FILE NAME: 080557-detour.dgn  
 PLOT DRIVER: plot.dif  
 PEN TABLE: standard-trans.tbl

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USER NAME = jguerrero	DESIGNED -	REVISED -
FILE NAME = 080557-detour.dgn	DRAWN -	REVISED -
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PLOT DATE = 4/9/2009	DATE - TBD	REVISED -

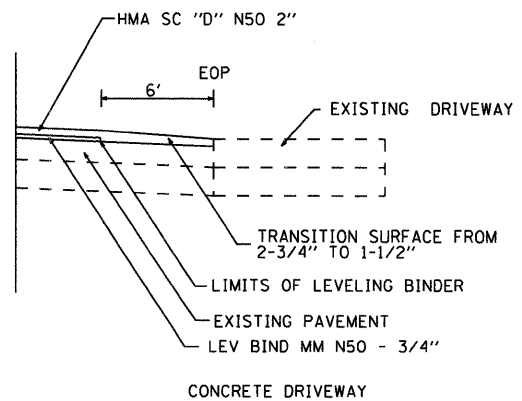
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DETOUR PLAN  
 OAK STREET**

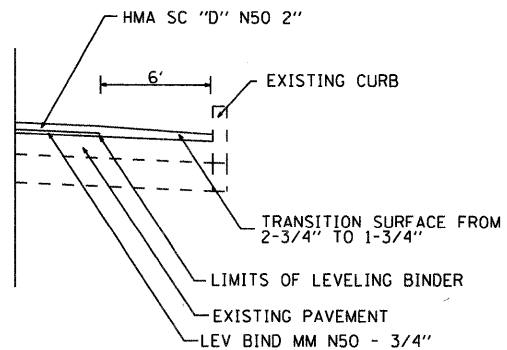
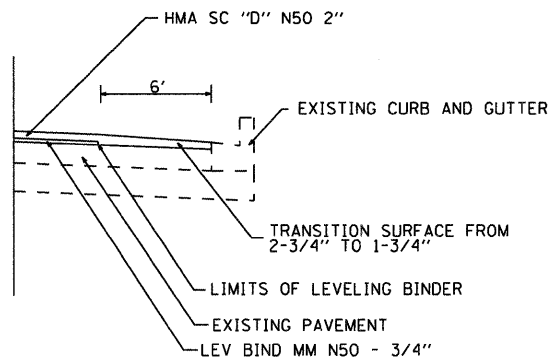
SCALE: 1"=400' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 63164			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

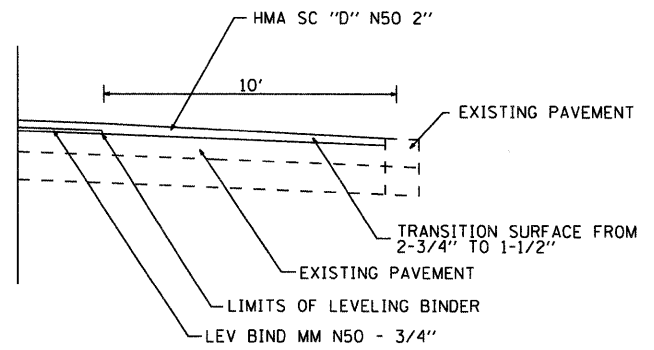




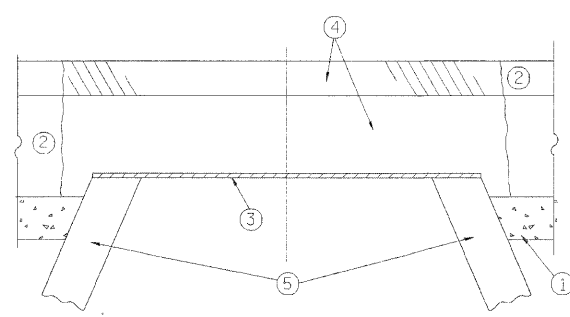
DRIVEWAY TREATMENT DETAIL



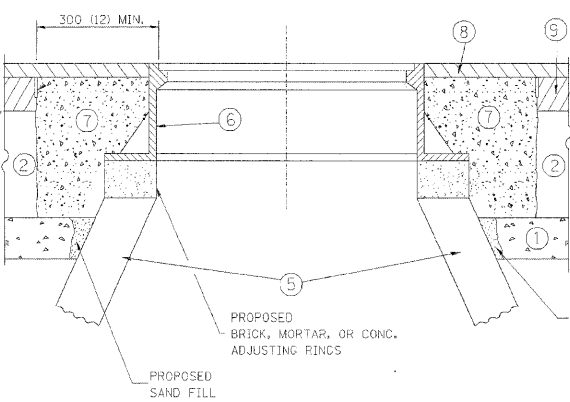
HMA TRANSITION AT CURB DETAIL



HMA TRANSITION TO EXISTING PAVEMENT



- CONSTRUCTION PROCEDURES**
- STAGE 1 (BEFORE PAVEMENT MILLING)**
- A) REMOVE A MINIMUM OF 300 (12") OF THE PAVEMENT FROM AROUND THE STRUCTURE.
  - B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
  - C) COVER THE STRUCTURE OPENING WITH A 900 (36) DIAMETER METAL PLATE.
  - D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 40 (1 1/2) THICK BITUMINOUS MATERIAL APPROVED BY THE ENGINEER.



- STAGE 2 (AFTER PAVEMENT MILLING)**
- A) REMOVE THE BITUMINOUS MATERIAL AND CRUSHED STONE.
  - B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
  - C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS S1 CONCRETE, OR BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

- LEGEND**
- 1 SUB-BASE GRANULAR MATERIAL
  - 2 EXISTING PAVEMENT
  - 3 900 (36) DIAMETER METAL PLATE
  - 4 PROPOSED CRUSHED STONE AND BITUMINOUS MATERIAL
  - 5 EXISTING STRUCTURE
  - 6 FRAME AND LID (SEE NOTES)
  - 7 CLASS S1 CONCRETE, BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL
  - 8 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE
  - 9 PROPOSED BITUMINOUS CONCRETE BINDER COURSE

**NOTES:**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE RECONSTRUCTION PAY ITEM.

**LOCATION OF STRUCTURES:**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT:** FRAMES AND LIDS TO BE ADJUSTED, SPECIAL EACH

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE

DATE: 10/18/2002

DRAWN BY

CHECKED BY

BD600-03 (BD-8)

REVISION DATE: 03/27/98

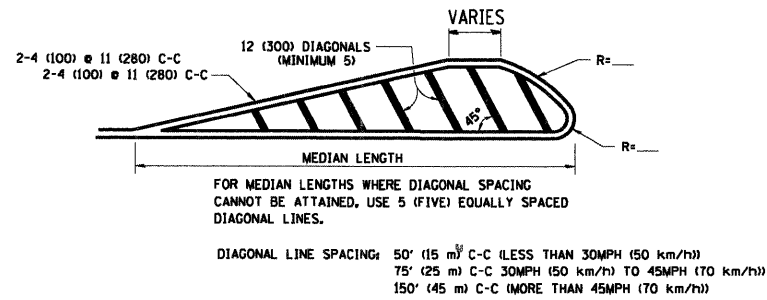
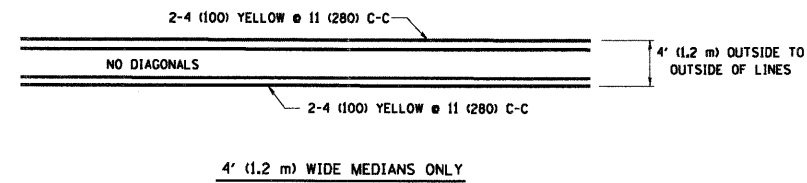
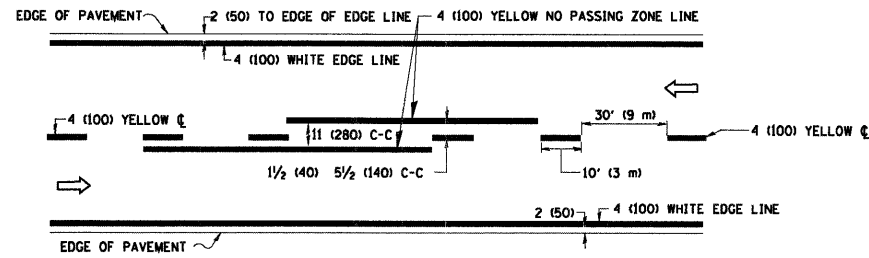


USER NAME = jguerrero	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 4/9/2009	CHECKED -	REVISED -
	DATE - TBD	REVISED -

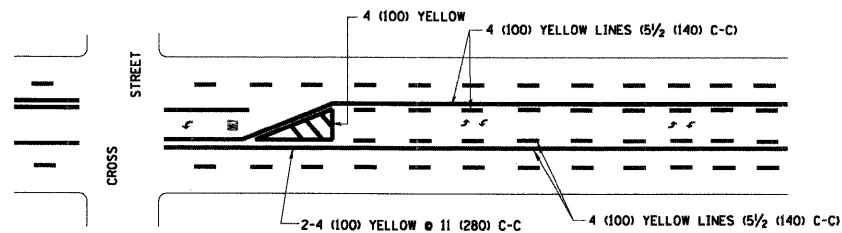
**VILLAGE OF LAKE IN THE HILLS 2009 LAPP RESURFACING PROGRAM**

SCALE:	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.
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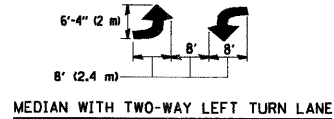
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	17
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 63164	



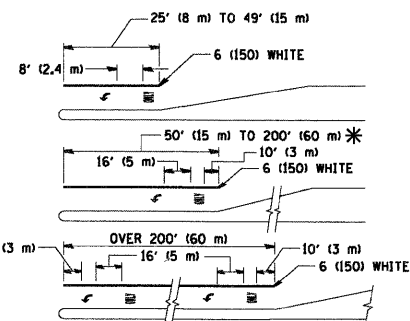
MEDIANS OVER 4' (1.2 m) WIDE



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



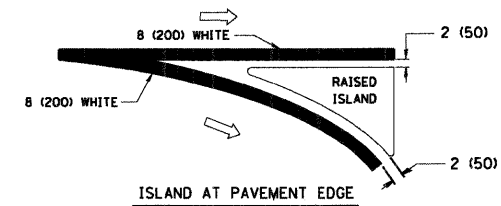
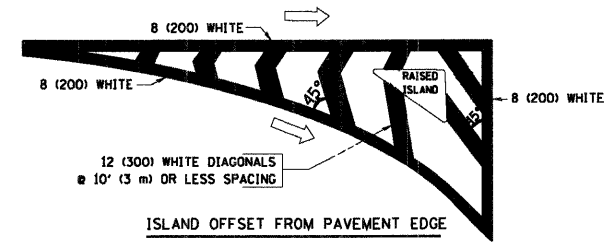
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

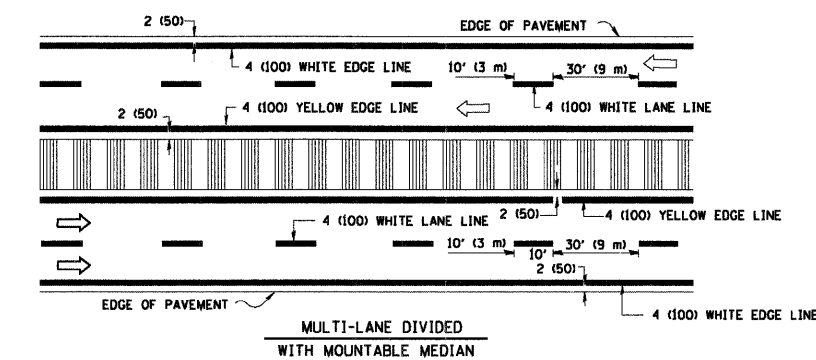
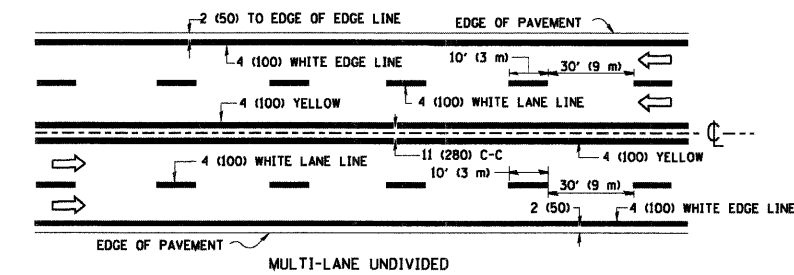


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW. EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15' (4.5 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

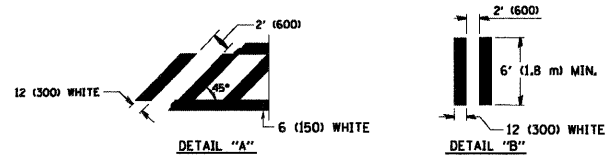
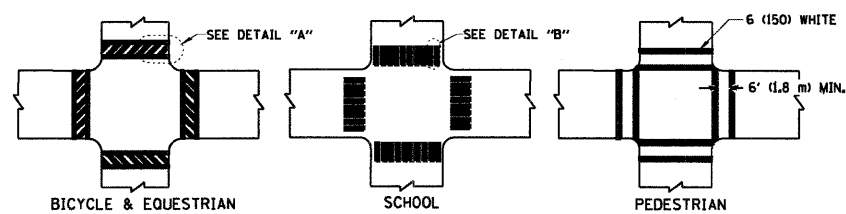
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

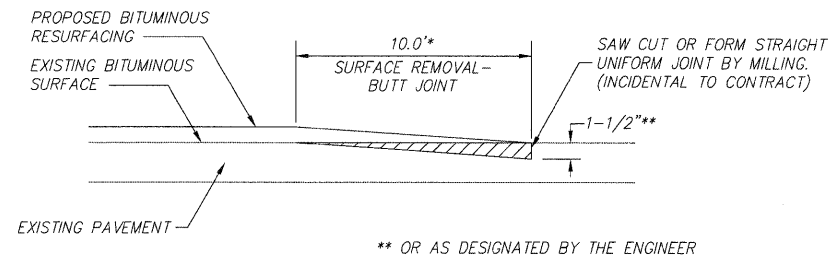


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



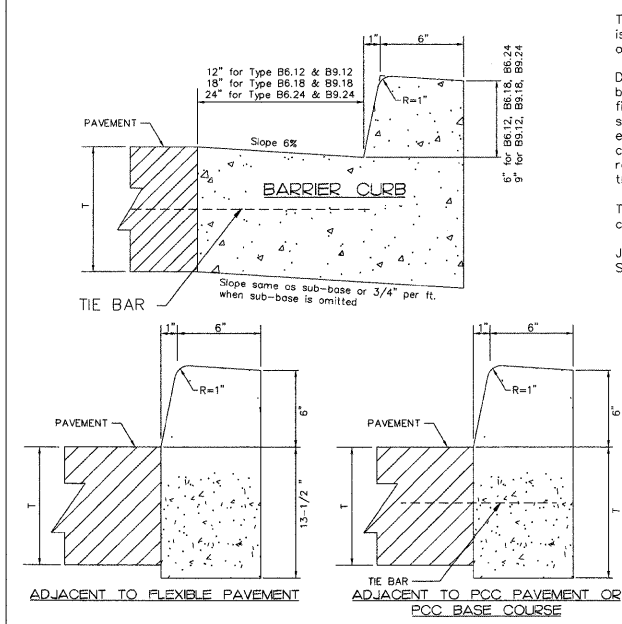
TYPICAL CROSSWALK MARKING



\*\* OR AS DESIGNATED BY THE ENGINEER

NO.	REVISIONS	
	BY	DATE

DATE APPROVED: 02-13-03



**THICKNESS - T** - Thickness of pavement. When curb & gutter is constructed adjacent to flexible pavement, the vertical thickness of the gutter flag shall be 9". Also, tie bars shall be omitted.

**DRAINAGE OPENINGS** - At all locations where metal casings are to be incorporated in the curb and gutter, a 1" thick preformed joint filler, conforming to the cross sections of the curb and gutter, shall be installed in the curb and gutter a distance of 10 ft. from each side of the metal casing. When the width of the metal casing is less than the width of the curb and gutter, 2 - No. 4 rebar (L = 12" + casing length + 12") shall be incorporated in the continuous portion of concrete gutter in front of the casing.

**TRANSITIONS** - The transition from full height curb to depressed curb shall be made at the rate of 3" per foot of length or flatter.

**JOINTS** - In addition to the requirements of Article 606 of the Standard Specifications, joints shall be constructed as follows.

When curb & gutter is constructed adjacent to P.C.C. pavement, contraction joints, spaced at 10' intervals shall be sawcut within 24 hours. Expansion joints shall be installed in the curb and gutter in prolongation with joints in adjacent P.C.C. pavement or base course.

When curb and gutter is constructed adjacent to flexible pavement, a 1" thick preformed expansion joint filler, conforming to the cross section of the curb and gutter shall be installed every 90' max., at points of curvature for short radius curves and at construction joints. Contraction joints shall be sawcut within 24 hours between expansion joints at distances not to exceed 15 feet.

All expansion joints shall be placed 5 feet on either side of every drainage structure located within the curb and gutter. All expansion joints shall be provided with a 1 1/4" dia. x 18" coated smooth dowel bar conforming to Article 1006.11(b) of the Standard Specifications. The dowel bar shall be fitted with a cap having a pinched stop that will provide 1" of expansion.

Curb & gutter located over utility crossings and at depressions for sidewalks shall be reinforced with 2-no. 4 bars on 12" centers at a length of 20' as approved by the Engineer.

All construction joints shall be provided with 1/2" dia. deformed steel tie bars 30' long conforming to AASHTO M-31 of M-53. Tie bars shall be placed on 9"± centers (minimum 2 per joint).

NO.	REVISIONS	
	BY	DATE

DATE APPROVED: 02-13-03

**VILLAGE OF LAKE IN THE HILLS 2009 LAPP RESURFACING PROGRAM**

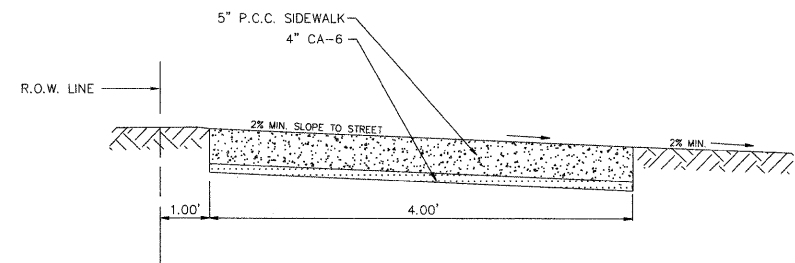
**DETAILS**

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	19
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63164	

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LAKE IN THE HILLS 2009 LAPP  
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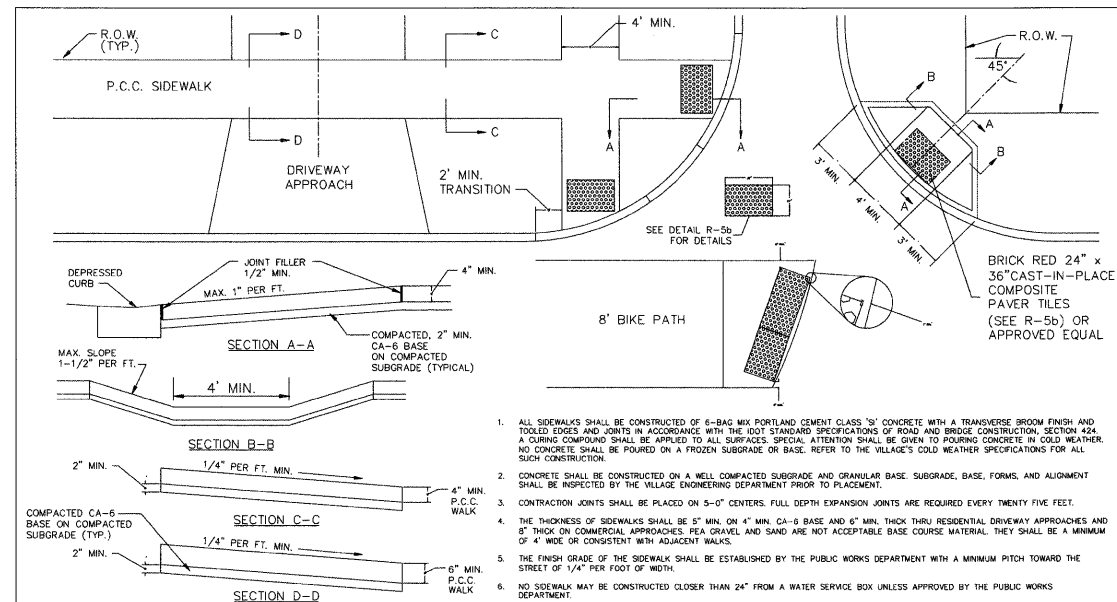


NOTES:  
 SIDEWALK THROUGH DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WITH THE VILLAGE OF LAKE IN THE HILLS DETAIL R-1 OR R-2 AS APPROPRIATE. ALL SIDEWALKS SHALL HAVE CONTRACTION JOINTS AT 5' INTERVALS AND EXPANSION JOINTS AT 25' INTERVALS.

VILLAGE OF LAKE IN THE HILLS PUBLIC WORKS DEPARTMENT DATE APPROVED: 02-26-09	REVISIONS		
	NO.	BY	DATE

SIDEWALK DETAIL

R-4



- ALL SIDEWALKS SHALL BE CONSTRUCTED OF 6-BAG MIX PORTLAND CEMENT CLASS 'S' CONCRETE WITH A TRANSVERSE BROOM FINISH AND TOOLED EDGES AND JOINTS IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION, SECTION 424. A CURING COMPOUND SHALL BE APPLIED TO ALL SURFACES. SPECIAL ATTENTION SHALL BE GIVEN TO POURING CONCRETE IN COLD WEATHER. NO CONCRETE SHALL BE POURED ON A FROZEN SUBGRADE OR BASE. REFER TO THE VILLAGE'S COLD WEATHER SPECIFICATIONS FOR ALL SUCH CONSTRUCTION.
- CONCRETE SHALL BE CONSTRUCTED ON A WELL COMPACTED SUBGRADE AND GRANULAR BASE. SUBGRADE, BASE, FORMS AND ALIGNMENT SHALL BE INSPECTED BY THE VILLAGE ENGINEERING DEPARTMENT PRIOR TO PLACEMENT.
- CONTRACTION JOINTS SHALL BE PLACED ON 5'-0" CENTERS. FULL DEPTH EXPANSION JOINTS ARE REQUIRED EVERY TWENTY FIVE FEET.
- THE THICKNESS OF SIDEWALKS SHALL BE 5" MIN. ON 4" MIN. CA-6 BASE AND 6" MIN. THICK THRU RESIDENTIAL DRIVEWAY APPROACHES AND 8" THICK ON COMMERCIAL APPROACHES. FEA GRAVEL AND SAND ARE NOT ACCEPTABLE BASE COURSE MATERIAL. THEY SHALL BE A MINIMUM OF 4" WIDE OR CONSISTENT WITH ADJACENT WALKS.
- THE FINISH GRADE OF THE SIDEWALK SHALL BE ESTABLISHED BY THE PUBLIC WORKS DEPARTMENT WITH A MINIMUM PITCH TOWARD THE STREET OF 1/4" PER FOOT OF WIDTH.
- NO SIDEWALK MAY BE CONSTRUCTED CLOSER THAN 24" FROM A WATER SERVICE BOX UNLESS APPROVED BY THE PUBLIC WORKS DEPARTMENT.
- RAMPS SHALL BE LOCATED AS SHOWN ON PLANS WITH CONSIDERATION GIVEN TO ALIGNMENT WITH NORMAL SIDEWALK OR CROSSWALK AND MAINTENANCE OF SUFFICIENT CURB LENGTH AT CORNER RADII TO PREVENT VEHICULAR ENCRoACHMENT.
- RAMPS SHALL NOT HAVE A SLOPE GREATER THAN 1" PER FOOT EXCEPT WHERE BUILDING OR OTHER RESTRICTIONS WILL NOT PERMIT.
- THICKNESS OF RAMPS WILL BE THE SAME AS THE ADJACENT SIDEWALK WITH A MINIMUM 4".

VILLAGE OF LAKE IN THE HILLS PUBLIC WORKS DEPARTMENT DATE APPROVED: 02-26-09	REVISIONS		
	NO.	BY	DATE

PUBLIC SIDEWALK AND HANDICAP RAMP DETAIL

R-5a

**PRODUCT SPECIFICATIONS**  
**CAST-IN-PLACE COMPOSITE PAVER TILES**  
 Inline Dome Pattern: Tactile Warning Surface

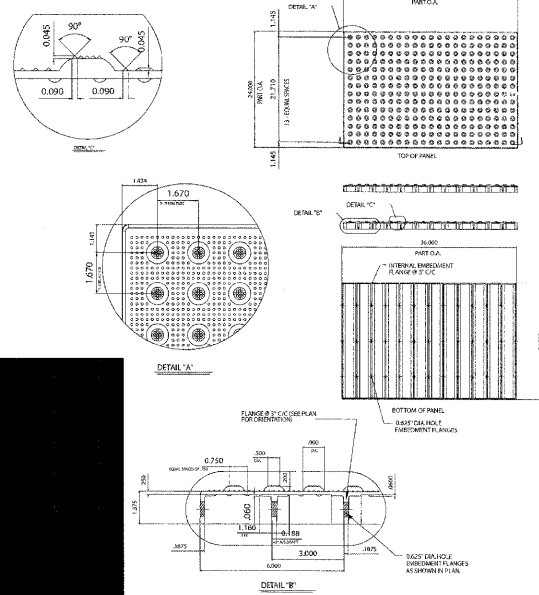
**DOMES GEOMETRY** In accordance with ADA Regulations for Detectable Warning on Curbs: raised truncated domes with a diameter of nominal 0.9", a height of nominal 0.2", and a center-to-center spacing of 1.67" minimum, and 2.35" maximum.

**PANEL DIMENSIONS**

**MATERIAL** A homogeneous glass and carbon reinforced composite which is colorfast and UV stable. Truncated Domes are fiberglass reinforced for enhanced durability. The TWS panel color is uniform throughout and does not rely on any type of paint coating to achieve color stability. Standard colors include: Federal Yellow, Brick Red, Clay Red, Dark Gray, Black, and Blue.

**INSTALLATION** TWS Units are to be used on new curb ramp locations. The TWS Units can be pre-filled with concrete and set in place or pressed into place in the freshly poured concrete.

PHYSICAL CHARACTERISTICS:		
Compressive Strength	28,900 psi	ASTM D 695
Flexural Strength	29,300 psi	ASTM D 790
Water Absorption	0.7%	ASTM D 570
Slip Resistance	1.18 Dry/1.05 Wet	ASTM C 1028
Flame Spread Index	20	ASTM E 84
Salt Spray	No Change (200 hours)	ASTM B 117
Chemical Stain Testing	No Deterioration	ASTM 1308
Abrasion Resistance	549	ASTM C 501
Accelerated Weathering	Delta E < 3.0 (2,000 hours)	ASTM G 155
Tensile Strength	11,600 psi	ASTM D 638
Adhesion to Concrete (20° -180°)	No Delamination or Degradation	ASTM C 903
Freeze/Thaw/Heat	No Disintegration	ASTM C 1026



VILLAGE OF LAKE IN THE HILLS PUBLIC WORKS DEPARTMENT DATE APPROVED: 02-26-09	REVISIONS		
	NO.	BY	DATE

CAST-IN-PLACE COMPOSITE PAVER TILES  
 BRICK RED, 24" X 36"

R-5b



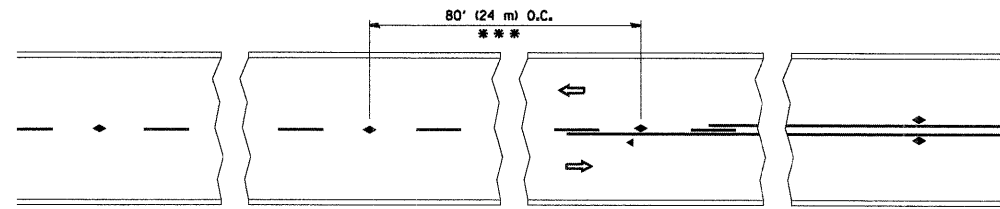
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PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 4/9/2009	CHECKED -	REVISED -
	DATE - TBD	REVISED -

**VILLAGE OF LAKE IN THE HILLS 2009 LAPP  
 RESURFACING PROGRAM**

**DETAILS**

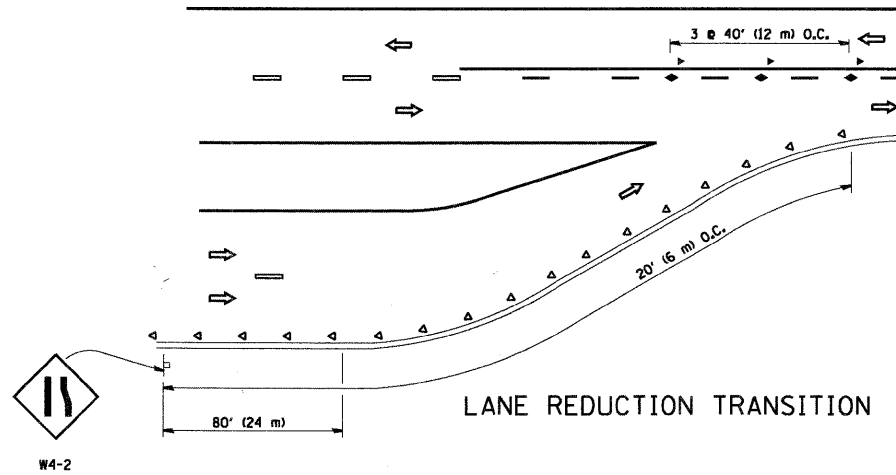
SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00032-00-RS	MCHENRY	21	20
CONTRACT NO. 63164				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

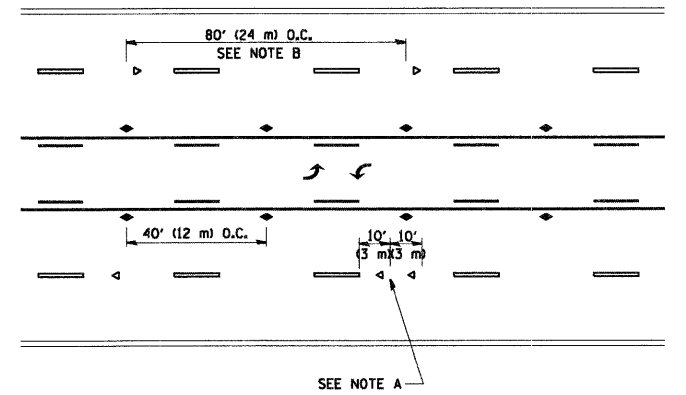


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

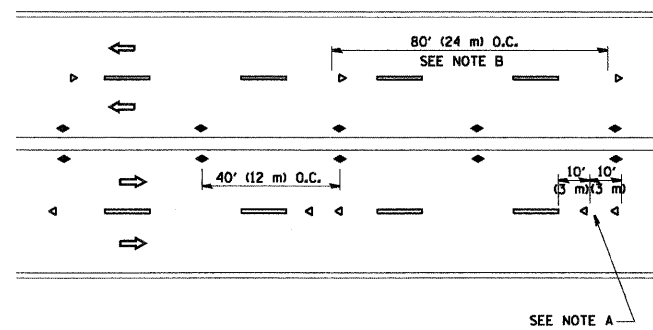
TWO-LANE/TWO-WAY



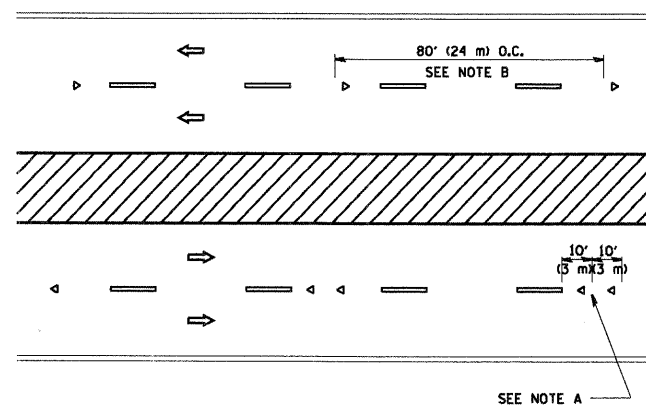
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

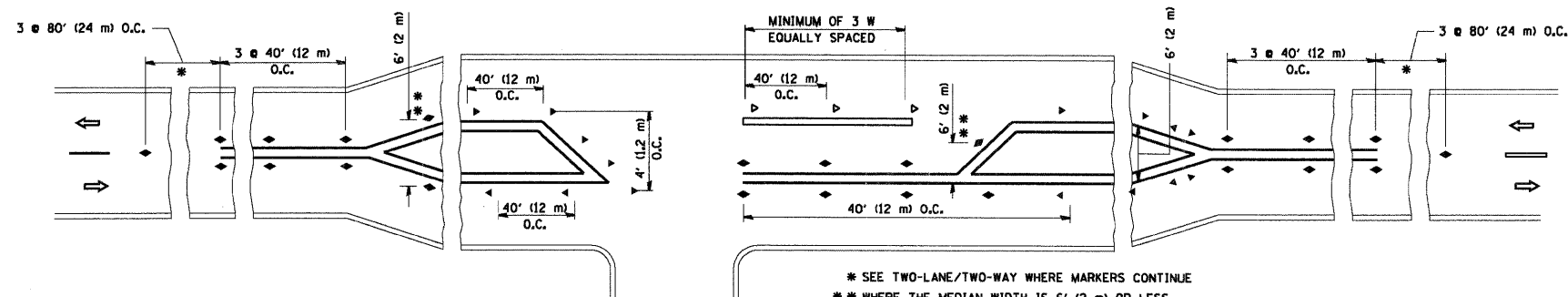
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\distato\22x34\to11.dgn	USER NAME = gegianobt	DESIGNED - DRAWN -	REVISD - T. RAMMACHER 09-19-94 REVISD - T. RAMMACHER 03-12-99	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISD - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	08-00032-00-RS	MCHENRY	21	21	
	PLOT DATE = 1/4/2008	DATE -							TC-11				
									CONTRACT NO. 63164				