

STATE OF ILLINOIS  
**WINNEBAGO COUNTY HIGHWAY DEPARTMENT**  
 PLANS FOR HIGHWAY SAFETY IMPROVEMENT PROGRAM  
**ROUTE: VARIOUS COUNTY HIGHWAYS**  
**SECTION: 10-00473-00-SP**  
**PROJECT NO.: HSIP-0201(029)**



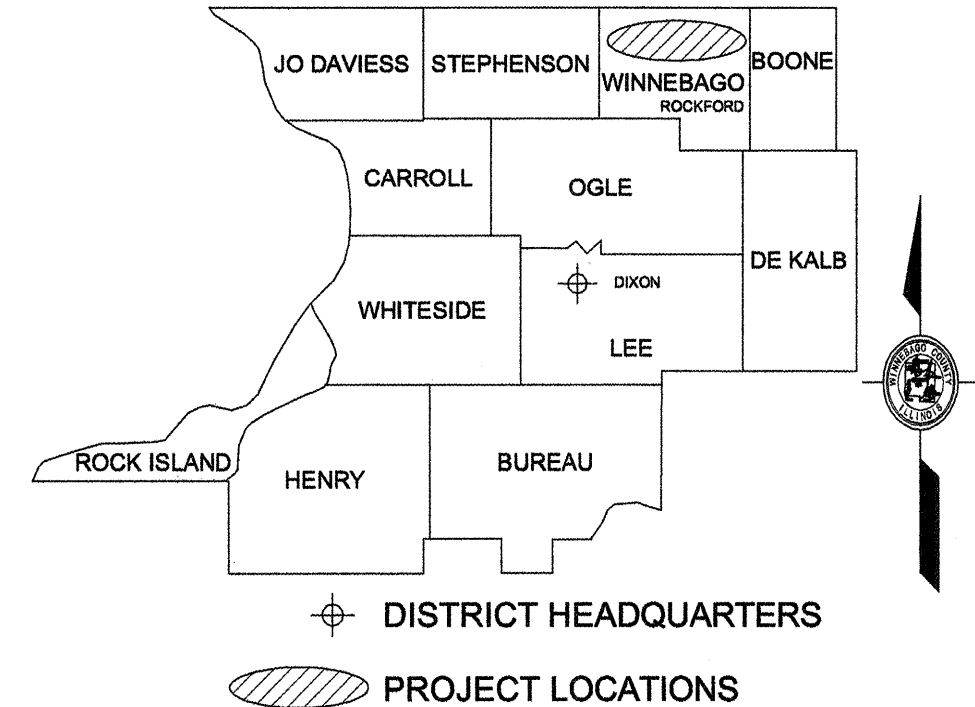
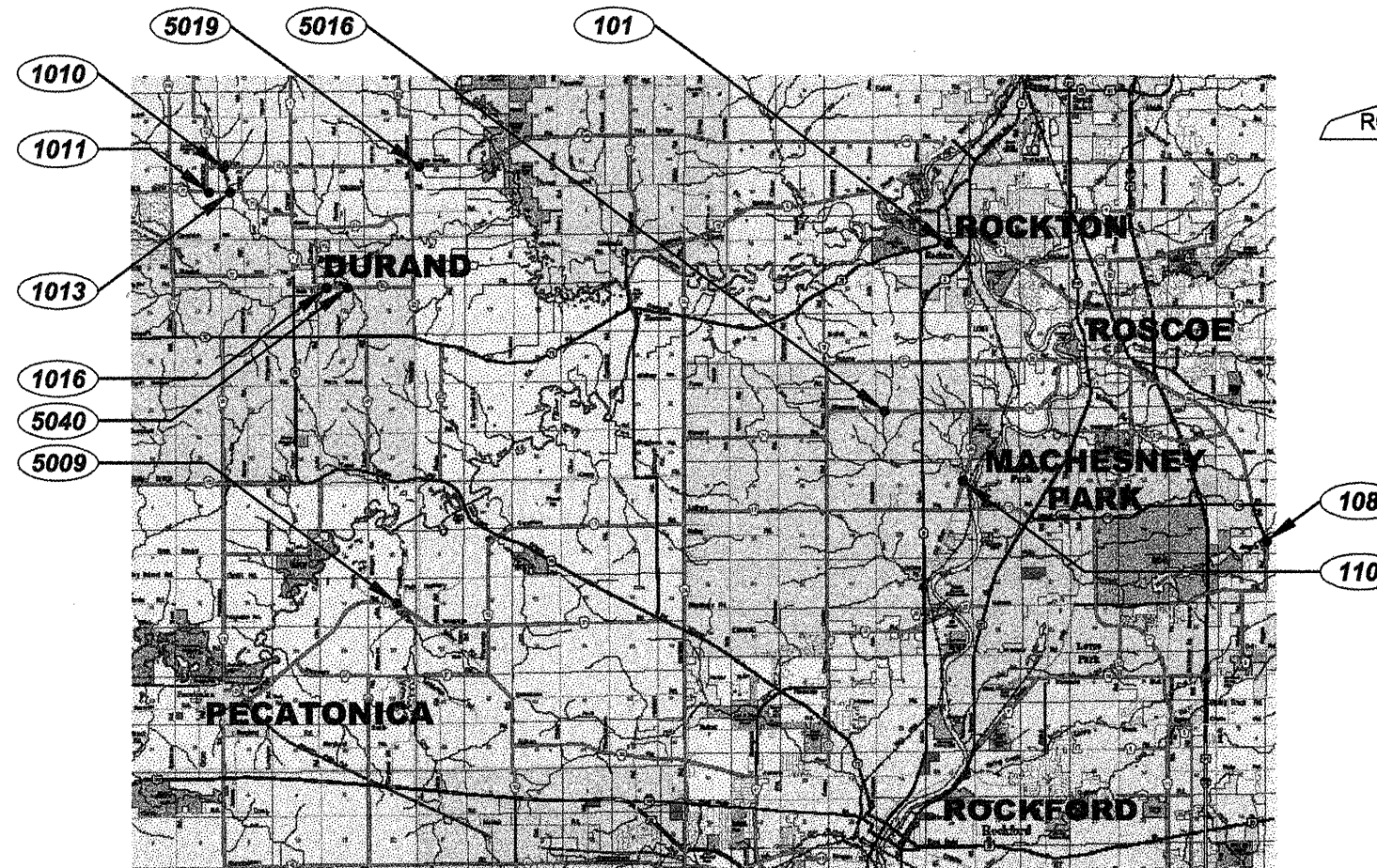
**INDEX OF SHEETS**

SHEET NO.	SHEET NAME
1	COVER SHEET
2	SUMMARY OF QUANTITIES & GENERAL NOTES
3	GUARDRAIL LAYOUTS - 1
4	GUARDRAIL LAYOUTS - 2

**STANDARDS**

STD. NO.	STD. TITLE
B.L.R. 23-3	TRAFFIC BARRIER TERMINAL TYPE 1
B.L.R. 27-1	TRAFFIC BARRIER TERMINAL TYPE 5A
630001-09	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-01	TRAFFIC CONTROL DEVICES
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

GUARDRAIL 2011 - COUNTY-WIDE  
 JOB NO.: C-92-035-11  
 CONTRACT NO.: 85533



**SITE LOCATIONS**

NO.	CO. HWY.	TWP	P.M.	T	R	SEC.
101	64 - OLD RIVER ROAD	ROCKTON	3	46N	1E	24
108	25 - ARGYLE ROAD	HARLEM	3	45N	2E	24
110	64 - OLD RIVER ROAD	OWEN	3	45N	1E	13
1010	48 - YALE BRIDGE ROAD	LAONA	4	29N	10E	33
1011	77 - ROCK GROVE ROAD	LAONA	4	29N	10E	5/32
1013	77 - ROCK GROVE ROAD	LAONA	4	29N	10E	4/33
1016	62 - FRITZ ROAD	DURAND	4	28N	10E	11/14
5009	21 - TELEGRAPH ROAD	PECATONICA	4	27N	10E	13
5016	71 - GLEASMAN ROAD	OWEN	3	45N	1E	2/11
5019	48 - YALE BRIDGE ROAD	LAONA	4	29N	11E	31
5040	62 - FRITZ ROAD	DURAND	4	28N	10E	11/14

**CALL J.U.L.I.E.**  
 BEFORE YOU DIG  
 1-800-892-0123  
 SEE  
 "SITE LOCATIONS"

DONALD L. KRIZAN  
 062-046605  
 LICENSED PROFESSIONAL ENGINEER  
 State of Illinois  
 Expires 11/30/11

**THESE PLANS PREPARED BY:**  
 WINNEBAGO COUNTY HIGHWAY DEPARTMENT

APPROVED 2-16 20 11  
*[Signature]*  
 WINNEBAGO COUNTY ENGINEER

PASSED FEB 24 20 11  
*[Signature]*  
 DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
 BASED ON LIMITED REVIEW FEB 24 20 11  
*[Signature]*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER



### SUMMARY OF QUANTITIES:

CONSTRUCTION TYPE CODE: 0021

Item	Pay Item Number	Pay Item Description	Unit of Measure	Quantity
1	63000001	STEEL PLATE BEAM GUARDRAIL, TY A, 6 FT POSTS	FOOT	4137.5
2	63000025	STEEL PLATE BEAM GUARDRAIL, ATTACH TO STR	FOOT	475
3	LR631020	TRAFFIC BARRIER TERMINAL, TY 1	EACH	7
4	63100167	TRAFFIC BARRIER TERMINAL, TY 1 (SP) TANGENT	EACH	33
5	63100075	TRAFFIC BARRIER TERMINAL, TY 5A	EACH	8
6*	63200310	GUARDRAIL REMOVAL	FOOT	1340
7	63500105	DELINEATORS	EACH	40
8	67100100	MOBILIZATION	LSUM	1
9*	X7010216	TRAFFIC CONTROL AND PROTECTION SPECIAL	LSUM	1
10	78200410	GUARDRAIL MARKER, TY A	EACH	108
11	78201000	TERMINAL MARKER, DIRECT APPLIED	EACH	40

\* SEE SPECIAL PROVISIONS

### GENERAL NOTES:

1. GUARDRAIL REMOVAL SHALL INCLUDE DISMANTLING, LOADING, HAULING, DISPOSAL, AND RESTORATION OF THE SITE IN PREPARATION FOR INSTALLATION OF NEW GUARDRAIL.
2. PRIOR TO THE COMMENCEMENT OF WORK BY THE CONTRACTOR AT EACH SITE, ALL REQUIRED GRADING OF SHOULDERS, FRONT SLOPES, AND GUARDRAIL TERMINATION POINTS WILL HAVE BEEN COMPLETED BY WINNEBAGO COUNTY. THE FURNISHING OF MATERIALS AND PERFORMANCE OF GRADING IS NOT INCLUDED WITH THE WORK ON THIS CONTRACT.
3. THE COST OF REMOVING AND REPLACING EARTH AND SHOULDER MATERIAL NECESSARY FOR INSTALLATION OF STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURE, WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THIS ITEM. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL FIELD CONDITIONS WHICH RELATE TO THIS ITEM AS WELL AS TO ALL ITEMS ASSOCIATED WITH THIS CONTRACT.
4. ANY COST ASSOCIATED WITH FURNISHING AND INSTALLING SHORT RADIUS GUARDRAIL AT SITE 108, AS INDICATED IN THE GUARDRAIL LAYOUTS, WILL NOT BE PAID FOR SEPARATELY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS. THE GUARDRAIL ELEMENT PLATES SHALL BE FACTORY-FABRICATED TO THE INDICATED RADIUS OF CURVATURE OR TO THE RADIUS NECESSARY TO MATCH THE GUARDRAIL CONFIGURATION SPECIFIED BY THE ENGINEER.
5. ONCE WORK IS BEGUN ON A CONTINUOUS RUN OF GUARDRAIL, ALL OF THE GUARDRAIL THAT IS REMOVED IN THAT RUN MUST BE REPLACED WITH NEW GUARDRAIL IN THE SAME DAY AND THE NEW GUARDRAIL SHALL BE TEMPORARILY CONNECTED TO ANY REMAINING OLD GUARDRAIL IN A MANNER APPROVED BY THE ENGINEER.
6. WORK AREAS SHALL BE LEFT IN SAFE AND ORDERLY CONDITION. NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROAD OR SHOULDERS DURING NON-WORKING HOURS.
7. ALL GUARDRAIL AND TERMINAL MARKERS SHALL BE INSTALLED IN THE SAME DAY THAT THE GUARDRAIL AND TERMINAL SECTIONS TO WHICH THEY ARE TO BE ATTACHED ARE INSTALLED. GUARDRAIL MARKERS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.
8. WHERE GUARDRAIL IS TO BE REMOVED ON BOTH SIDES OF THE ROAD, REPLACEMENT ON ONE SIDE SHALL BE COMPLETE BEFORE REMOVAL ON THE SECOND SIDE SHALL BEGIN.
9. AT BRIDGE LOCATIONS, FLAGGERS WILL NOT BE ALLOWED TO STAND ON THE BRIDGE TO PERFORM FLAGGING OPERATIONS. FLAGGERS WILL BE REQUIRED TO OPERATE AT OR NEAR THE BRIDGE APPROACHES IN ORDER TO PROVIDE AN ACCEPTABLE ESCAPE ROUTE.

### SCHEDULE OF WORK:

	SITE 101	SITE 108	SITE 110	SITE 1010	SITE 1011	SITE 1013	SITE 1016	SITE 5009	SITE 5016	SITE 5019	SITE 5040	TOTALS
1. Install SPBGR	112.5	37.5	475	450	150	387.5	250	700	687.5	425	462.5	4137.5
2. Install SPBGR (ATS)	--	--	--	--	25	--	200	100	50	50	50	475
3. Install TBT-TY1	1	2	--	--	1	--	--	--	--	1	2	7
4. Install TBT-TY1(SP)TAN	1	--	4	4	3	4	4	4	4	3	2	33
5. Install TBT-TY5A	--	--	--	4	--	4	--	--	--	--	--	8
6. Remove GR	180	70	410	210	30	180	260	--	--	--	--	1340
7. Install Delineator	2	2	4	4	4	4	4	4	4	4	4	40
10. Install GR MRKR, TY A	3	--	12	12	5	10	10	16	17	11	12	108
11. Install Terminal MRKR, DA	2	2	4	4	4	4	4	4	4	4	4	40

ATS - Attached to Structure  
 DA - Direct Applied  
 GR - Guardrail  
 MRKR - Marker  
 SPBGR - Steel Plate Beam Guardrail  
 TBT - Traffic Barrier Terminal



# GUARDRAIL LAYOUTS

## LEGEND:

- ATS - Attached to Structure
- GR - Guardrail
- GRMB - Guardrail Marker-Bidirectional (◆)
- GRMM - Guardrail Marker-Monodirectional (▶)
- Install Guardrail (all components)
- Remove Guardrail (all components)
- SN - Structure Number
- SPBGR - Steel Plate Beam Guardrail
- SR - Short Radius
- TBT - Traffic Barrier Terminal

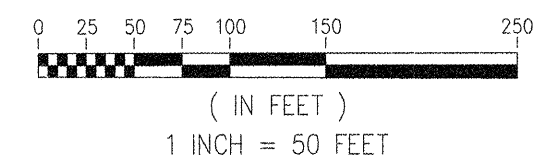
## GUARDRAIL OFFSETS:

SITE	DISTANCE (EDGE OF PAVEMENT TO GR FACE)
101	10'
108	4'
110	7'
1010	3'
1011	7'N; 3'S
1013	3'
1016	5'
5009	5'N; 4'S
5016	3'N; 2'S
5019	3'
5040	5'

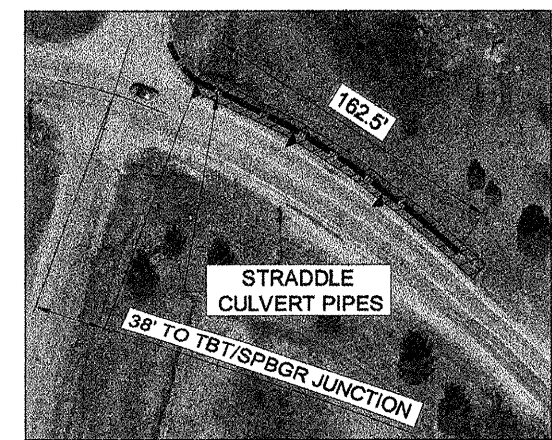
## NOTE:

Indicated dimensions are approximate. Layout points are to be determined by the Engineer at the site locations.

## GRAPHIC SCALE:

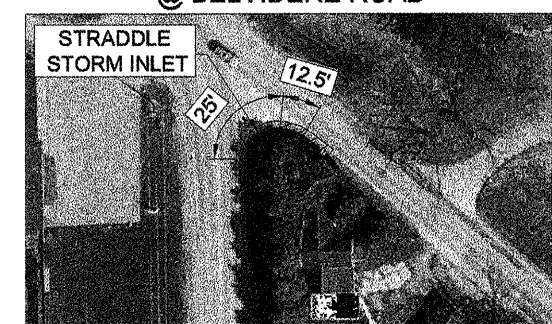


SITE 101 - OLD RIVER ROAD (CH 64)  
0.25 MI E OF S BLACKHAWK BLVD



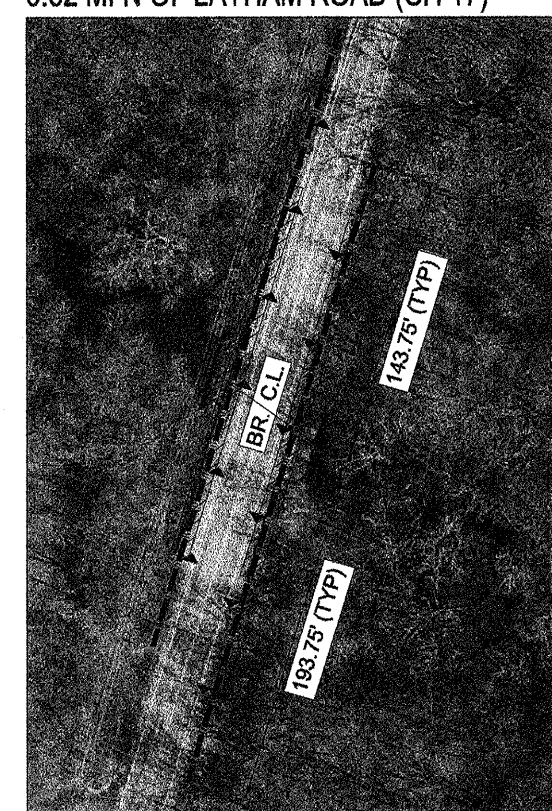
112.5' SPBGR  
1 - TBT-TY1  
1 - TBT-TY1(SP)TAN  
3 - GRMM  
SCALE: 1"=50'

SITE 108 - ARGYLE ROAD (CH 25)  
@ BELVIDERE ROAD



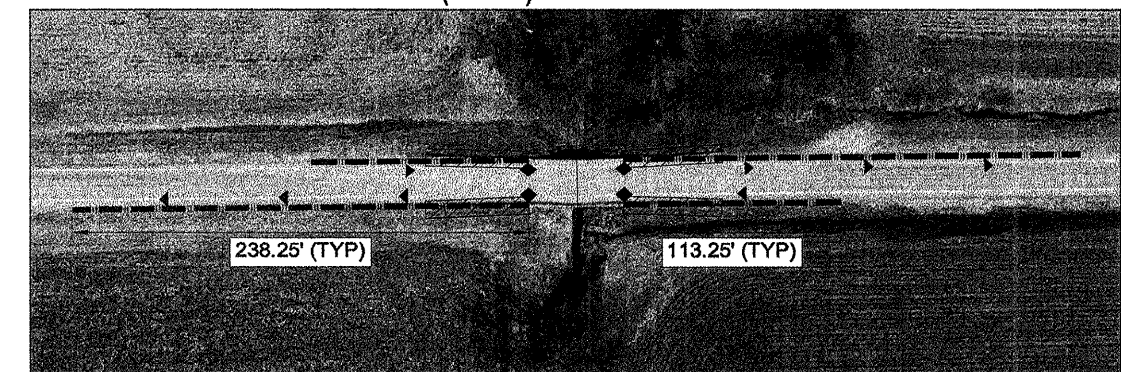
25' SPBGR (15' SR)  
12.5' SPBGR (30' SR)  
2 - TBT-TY1  
SCALE: 1"=50'

SITE 110 - OLD RIVER ROAD (CH 64)  
0.62 MI N OF LATHAM ROAD (CH 17)



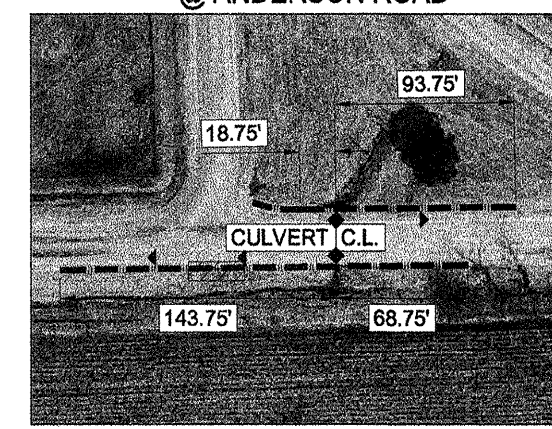
475' SPBGR  
4 - TBT-TY1(SP)TAN  
12 - GRMM  
SN 101-5042  
SCALE: 1"=50'

SITE 1010 - YALE BRIDGE ROAD (CH 48)  
0.30 MI E OF ANDERSON ROAD (CH 19)



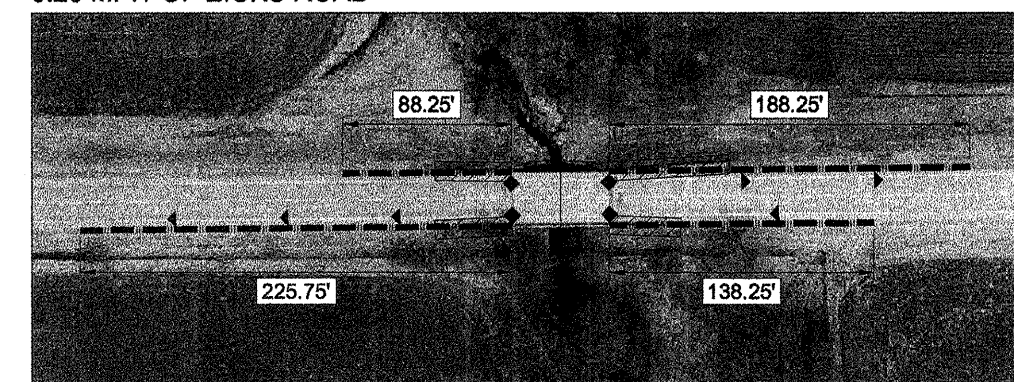
450' SPBGR  
4 - TBT-TY1(SP)TAN  
4 - TBT-TY5A  
4 - GRMB  
8 - GRMM  
SN 101-3076  
SCALE: 1"=50'

SITE 1011 - ROCK GROVE ROAD (CH 77)  
@ ANDERSON ROAD



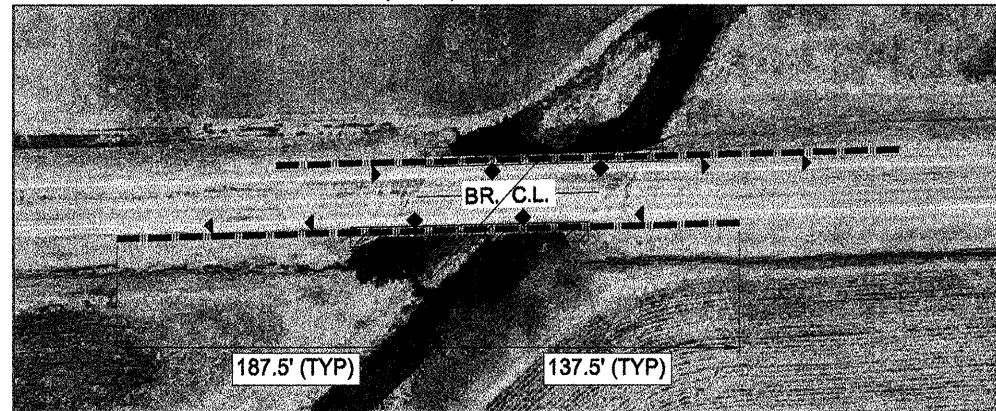
150' SPBGR  
25' SPBGR-ATS (CASE I)  
1 - TBT-TY1  
3 - TBT-TY1(SP)TAN  
2 - GRMB  
3 - GRMM  
SCALE: 1"=50'

SITE 1013 - ROCK GROVE ROAD (CH 77)  
0.20 MI W OF EICKS ROAD



387.5' SPBGR  
4 - TBT-TY1(SP)TAN  
4 - TBT-TY5A  
4 - GRMB  
6 - GRMM  
SN 101-3073  
SCALE: 1"=50'

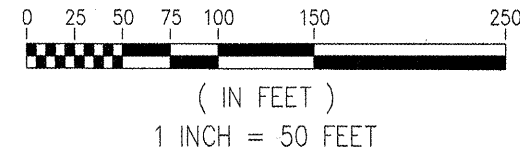
SITE 1016 - FRITZ ROAD (CH 62)  
0.70 MI E OF CENTER ROAD (IL 70)



250' SPBGR  
200' SPBGR-ATS (CASE IV)  
4 - TBT-TY1(SP)TAN  
4 - GRMB  
6 - GRMM

SN 101-5039  
SCALE: 1"=50'

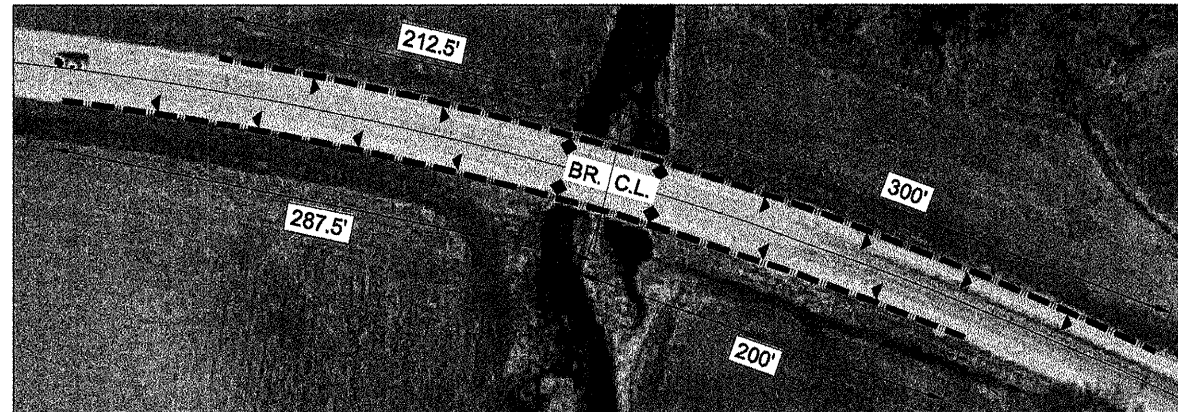
GRAPHIC SCALE:



ROUTE VARIOUS	SECTION 10-00473-00-SP	SHEET 4 OF 4
------------------	---------------------------	-----------------

GUARDRAIL 2011 - COUNTY-WIDE

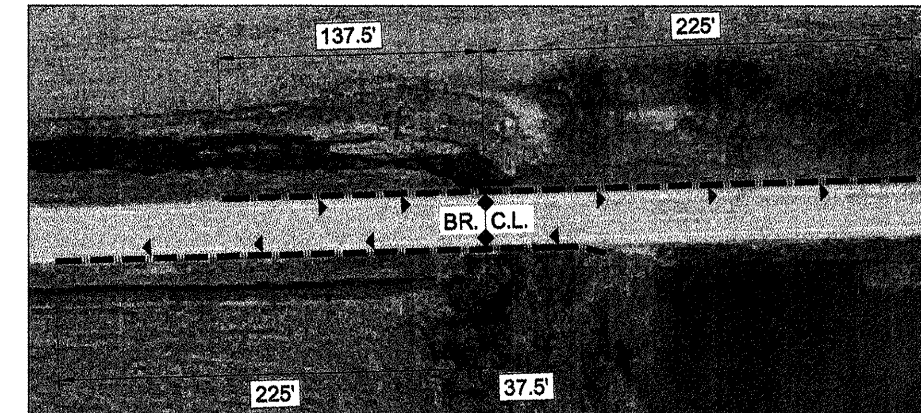
SITE 5009 - TELEGRAPH ROAD (CH 21)  
0.32 MI E OF AHERENS ROAD



700' SPBGR  
100' SPBGR-ATS (CASE IV)  
4 - TBT-TY1(SP)TAN  
4 - GRMB  
12 - GRMM

SN 101-5009  
SCALE: 1"=50'

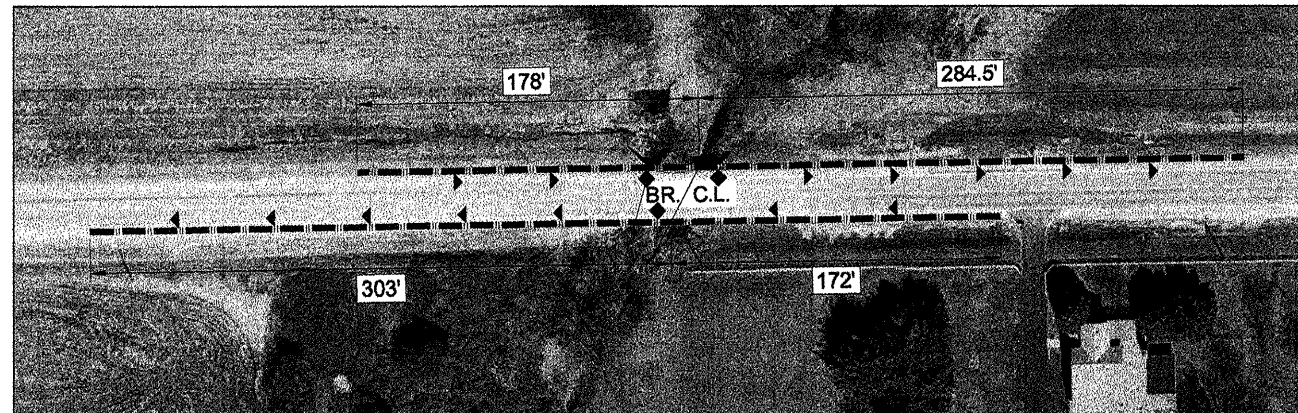
SITE 5019 - YALE BRIDGE ROAD (CH 48)  
0.20 MI E OF WHEELER ROAD



425' SPBGR  
50' SPBGR-ATS (CASE IV)  
1 - TBT-TY1  
3 - TBT-TY1(SP)TAN  
2 - GRMB  
9 - GRMM

SN 101-5019  
SCALE: 1"=50'

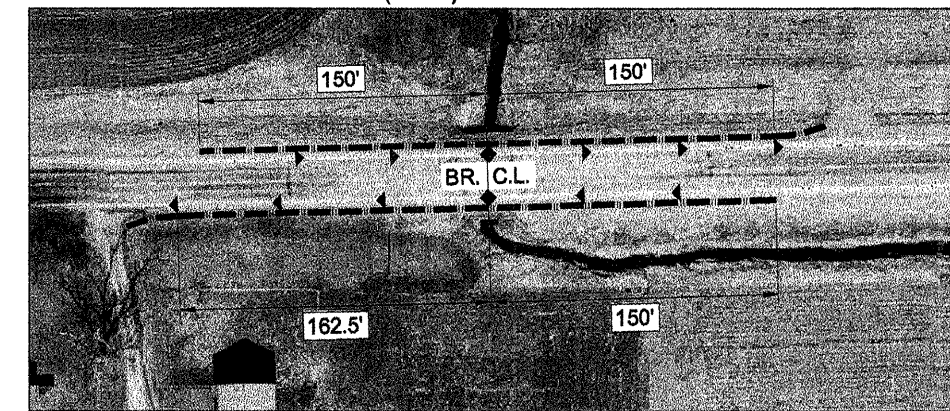
SITE 5016 - GLEASMAN ROAD (CH 71)  
0.20 MI E OF ROCKTON AVENUE



687.5' SPBGR  
50' SPBGR-ATS (CASE IV)  
4 - TBT-TY1(SP)TAN  
3 - GRMB  
14 - GRMM

SN 101-5016  
SCALE: 1"=50'

SITE 5040 - FRITZ ROAD (CH 62)  
1.0 MI E OF CENTER ROAD (IL 70)



462.5' SPBGR  
50' SPBGR-ATS (CASE IV)  
2 - TBT-TY1  
2 - TBT-TY1(SP)TAN  
2 - GRMB  
10 - GRMM

SN 101-5040  
SCALE: 1"=50'