

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF LAKEWOOD,
GRAFTON TOWNSHIP, & CITY OF CRYSTAL LAKE

TRAFFIC DATA

BALLARD ROAD
POSTED SPEED LIMIT: 45 MPH
DESIGN SPEED LIMIT: 50 MPH
2017 ADT = 1,500

FUNCTIONAL CLASSIFICATION

MINOR COLLECTOR

02-27-2026 LETTING ITEM 078



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.

JULIE DESIGN STAGE REQUEST
DIG, No. A252180353 & A252180362



CONTACT JULIE AT 811 OR 800-892-0123
WITH THE FOLLOWING:
COUNTY = MCHENRY
CITY-TOWNSHIP = VILLAGE OF LAKEWOOD - TOWNSHIP 43 N
SEC. & 1/4 SEC. NO. = SECTIONS 1, 2, 3 AND 4
48 HOURS (2 working days) BEFORE YOU DIG

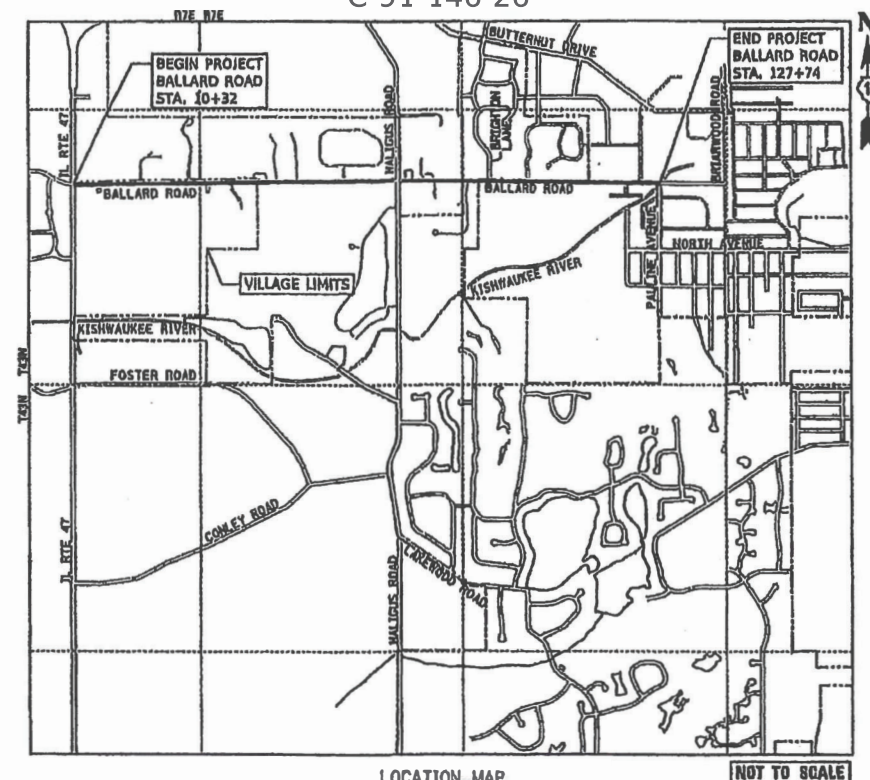
CONTRACT NO. 61M23

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

TR 0203 (BALLARD ROAD) IL
ROUTE 47 TO PAULINE AVENUE
RESURFACING

SECTION: 22-00016-00-RS
PROJECT: N86V(322)
VILLAGE OF LAKEWOOD & GRAFTON TOWNSHIP
MCHENRY COUNTY
C-91-146-26



LOCATION MAP
GROSS LENGTH = 11,174 FT. = 2.116 MILE
NET LENGTH = 11,174 FT. = 2.116 MILE

BAXTER & WOODMAN
Consulting Engineers



F.A.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-RS	MCHENRY	21	1
N06V(322)		CONTRACT NO. 61M23		



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED	<i>Jean Hechman</i> JEAN HECHMAN VILLAGE MANAGER VILLAGE OF LAKEWOOD REPRESENTATIVE
APPROVED	<i>Abigail Wilkerson</i> Abigail Wilkerson City Engineer CITY OF CRYSTAL LAKE REPRESENTATIVE
APPROVED	<i>Frank J. Kearns</i> Frank J. Kearns Road Commissioner GRAFTON TOWNSHIP REPRESENTATIVE
PASSED	DEC 17, 2025 District Engineer of Local Roads and Streets
RELEASING FOR BID BASED ON LIMITED REVIEW	Dec 17, 2025 Regional Engineer

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
JWillemsen 12/11/2025 1:44:12 PM
MODEL Default
FILE NAME: P:\KWDV\0220239-Ballard_Rd STP Improv\CAD\Sheets\220239-SHT-SOQ_01.dgn

...\\Plt\drv\pdf\BW_Default.plt
...\\CAD\Plots\220239_Fen.tol
P:\KWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-SOQ_01.dgn

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GRAFTON TOWNSHIP	VILLAGE OF LAKEWOOD
			80% FED 20% VILL	80% FED 20% VILL	80% FED 20% VILL
			ROADWAY	ROADWAY	ROADWAY
			0005 RURAL	0005 RURAL	0005 RURAL
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	228	13	215
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1,360	75	1,285
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	5,173	1,193	3,980
25000210	SEEDING, CLASS 2A	ACRE	1.25	0.30	0.95
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	113	27	86
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	113	27	86
25100645	WILDLIFE FRIENDLY EROSION CONTROL BLANKET	SQ YD	5,173	1,193	3,980
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	125	30	95
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	228	13	215
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	19,784	4,528	15,256
40600370	LONGITUDINAL JOINT SEALANT	FOOT	11,638	2,684	8,954
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	9	2	7
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	80	34	46
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	1,210	277	933
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	2,873	658	2,215

* INDICATES SPECIALTY ITEM
\$ INDICATES CONSTRUCTION CODE 0042 TRAINEES

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GRAFTON TOWNSHIP	VILLAGE OF LAKEWOOD
			80% FED 20% VILL	80% FED 20% VILL	80% FED 20% VILL
			ROADWAY	ROADWAY	ROADWAY
			0005 RURAL	0005 RURAL	0005 RURAL
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	29,308	6,707	22,601
44201690	CLASS D PATCHES, TYPE I, 4 INCH	SQ YD	137	8	129
44201692	CLASS D PATCHES, TYPE II, 4 INCH	SQ YD	204	11	193
44201694	CLASS D PATCHES, TYPE III, 4 INCH	SQ YD	340	19	321
44201696	CLASS D PATCHES, TYPE IV, 4 INCH	SQ YD	679	37	642
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	585	99	486
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	363		363
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1		1
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	2	1
* 63200310	GUARDRAIL REMOVAL	FOOT	317		317
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	228	13	215
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	4		4
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1		1
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1		1
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	10		10

* INDICATES SPECIALTY ITEM
\$ INDICATES CONSTRUCTION CODE 0042 TRAINEES



USER NAME = jwillemsen	DESIGNED - ZEW	REVISED -
	DRAWN - KAR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/11/2025	DATE - 12/11/2025	FILE - 220239-SHT-SOQ_01.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NTS SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	3
		CONTRACT NO. 61M23		
		ILLINOIS FED. AID PROJECT N86V(322)		

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
JWillemsen
12/11/2025 1:44:19 PM
MODEL Default
FILE NAME: P:\KWDV\0220239-Ballard_Rd_STP_Impro\CAD\Sheets\220239-SHT-SOQ_01.dgn

...\\pltdrv\pdf\BW_Default.plt
...\\CAD\Plots\220239_Pen.tol
P:\KWDV\0220239-Ballard Rd STP_Impro\CAD\Sheets\220239-SHT-SOQ_01.dgn

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GRAFTON TOWNSHIP	VILLAGE OF LAKEWOOD
			80% FED 20% VILL	80% FED 20% VILL	80% FED 20% VILL
			ROADWAY	ROADWAY	ROADWAY
			0005	0005	0005
			RURAL	RURAL	RURAL
67100100	MOBILIZATION	L SUM	1	0.2	0.8
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.2	0.8
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.2	0.8
70300100	SHORT TERM PAVEMENT MARKING	FOOT	186,712	43,316	143,396
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	62,838	14,819	48,019
* 72000100	SIGN PANEL - TYPE 1	SQ FT	107	44	63
72400735	REMOVE AND RELOCATE SIGN PANEL - TYPE 1	EACH	4	4	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	2	1
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	285	105	180
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	46,552	10,736	35,816
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	60	60	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	66	33	33
* 78011025	GROOVING FOR RECESSED PAVEMENT MARKING, 5"	SQ FT	19,398	4,474	14,924
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	146	34	112
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	4		4

* INDICATES SPECIALTY ITEM
\$ INDICATES CONSTRUCTION CODE 0042 TRAINEES

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GRAFTON TOWNSHIP	VILLAGE OF LAKEWOOD
			80% FED 20% VILL	80% FED 20% VILL	80% FED 20% VILL
			ROADWAY	ROADWAY	ROADWAY
			0005	0005	0005
			RURAL	RURAL	RURAL
K1004595	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	L SUM	1	0.2	0.8
XX006947	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	989	645	344
X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	52	26	26

* INDICATES SPECIALTY ITEM
\$ INDICATES CONSTRUCTION CODE 0042 TRAINEES



USER NAME = jwillemsen	DESIGNED - ZEW	REVISED -
	DRAWN - KAR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/11/2025	DATE - 12/11/2025	FILE - 220239-SHT-SOQ_01.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

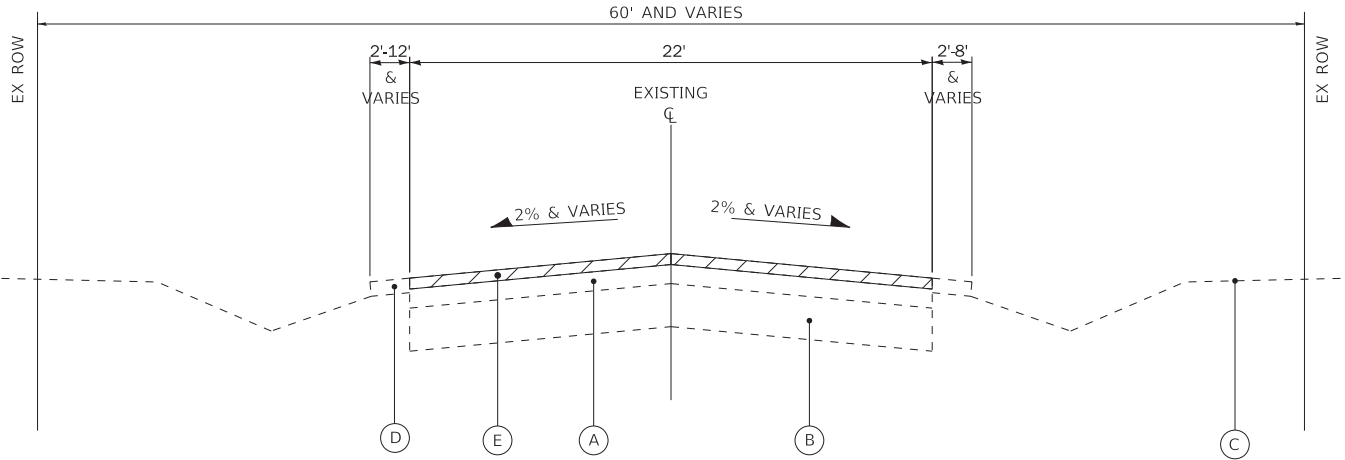
SUMMARY OF QUANTITIES					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					0203	22-00016-00-R5	MCHENRY	21	4
					CONTRACT NO. 61M23				
SCALE:		SHEET 2	OF 2	SHEETS	STA.		TO STA.		
					ILLINOIS FED. AID PROJECT N86V(322)				

NOTE:

GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

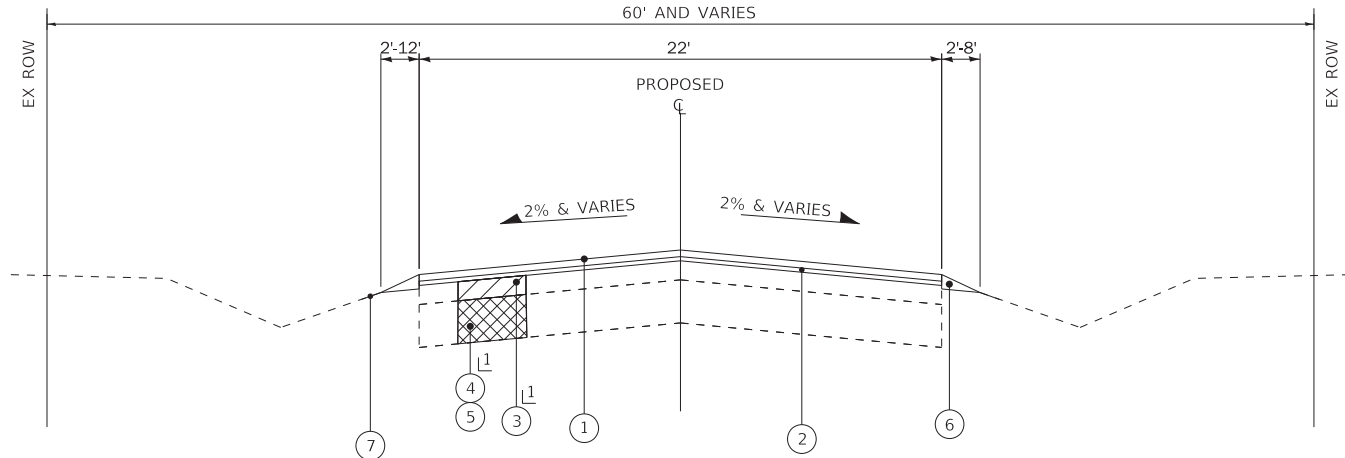
ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECT BY THE ENGINEER AT CONTRACTOR EXPENSE.

THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED ON THE P HMA BC IL-4.75 N50.



EXISTING TYPICAL SECTION

BALLARD ROAD
STA 10+32 TO STA 127+74



PROPOSED TYPICAL SECTION

BALLARD ROAD
STA 10+32 TO STA 127+74

1 LOCATIONS DETERMINED
BY ENGINEER

EXISTING PAVEMENT THICKNESS DATA

STREET	CORE	HOT-MIX ASPHALT	AGG BASE
BALLARD ROAD	1	6"	7"
BALLARD ROAD	2	6 3/4"	15 1/4"
BALLARD ROAD	3	8"	10"
BALLARD ROAD	4	6 1/2"	16 1/2"
BALLARD ROAD	5	8 3/4"	9 1/4"
BALLARD ROAD	6	3 3/4"	17 1/4"
BALLARD ROAD	7	5"	17"
BALLARD ROAD	8	4"	19"
BALLARD ROAD	9	3 3/4"	18 1/4"
BALLARD ROAD	10	4 1/4"	17 3/4"

PROPOSED LEGEND

- HOT - MIX ASPHALT SURFACE COURSE, IL - 9.5, MIX "D", N50 - 1.75"
- POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL - 4.75, N50 - 0.75"
- CLASS D PATCHES 4"
- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
- AGGREGATE SUBGRADE IMPROVEMENT
- AGGREGATE WEDGE SHOULDERS, TYPE B
- SEEDING, CLASS 2A

EXISTING LEGEND

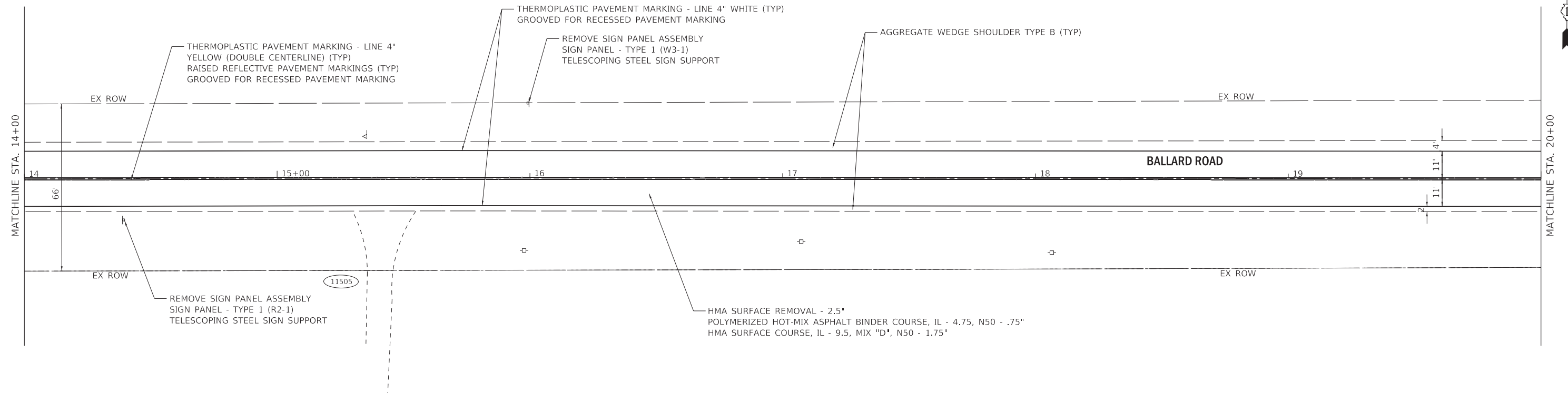
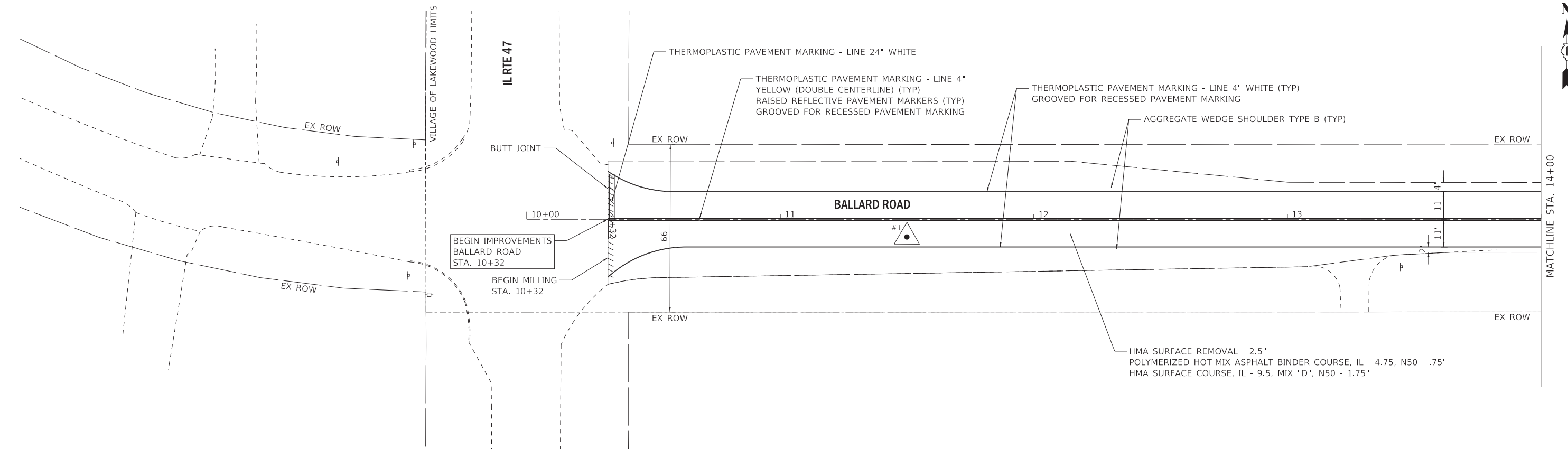
- A EXISTING HMA BINDER AND SURFACE COURSE, 3.75" - 8.75"
- B EXISTING AGGREGATE BASE COURSE, 7.0" - 19.0"
- C GROUND SURFACE
- D EXISTING AGGREGATE SHOULDER
- E HOT-MIX ASPHALT SURFACE REMOVAL, 2.5"
- REMOVAL ITEM

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes	QMP
PAVEMENT RESURFACING		
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL - 4.75, N50 - 3/4"	3.5% @ 50 Gyr.	LR1030-2
HOT-MIX ASPHALT SURFACE COURSE, IL - 9.5, MIX "D", N50 - 1 3/4"	4% @ 50 Gyr.	LR1030-2
HMA DRIVEWAY SURFACE REMOVAL & REPLACEMENT		
HOT-MIX ASPHALT SURFACE COURSE, IL - 9.5, MIX "D", N50 - 2"	4% @ 50 Gyr.	LR1030-2
CLASS D PATCHES		
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 4"	4% @ 50 Gyr.	LR1030-2
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) PER LR 1030-2		

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.



STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark
12/10/2025 2:45:50 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd SHT-Plan_02.dgn

...\\pltdrv\pdf-BW_Default.plt
...\\CAD\Plots\220239_Pent.ttl
P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_02.dgn



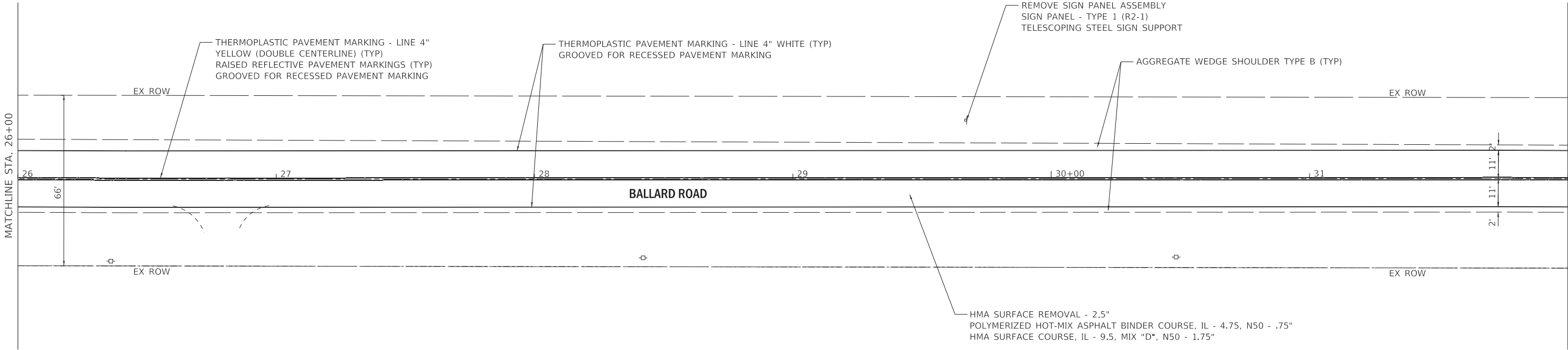
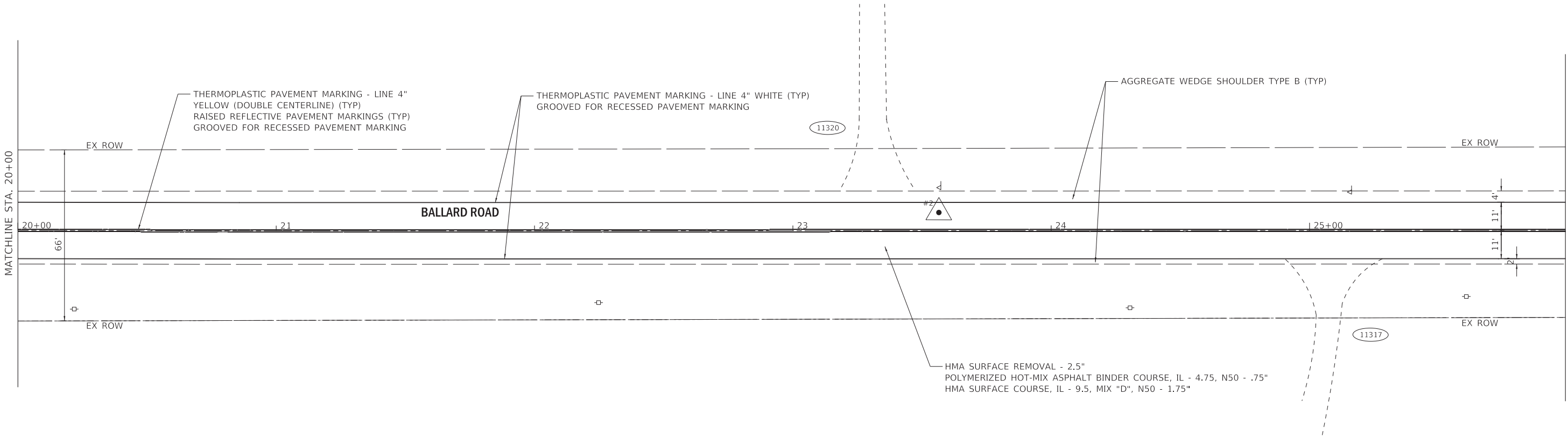
USER NAME = mclark	DESIGNED - ZEW	REVISED -
	DRAWN - KAR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_02.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

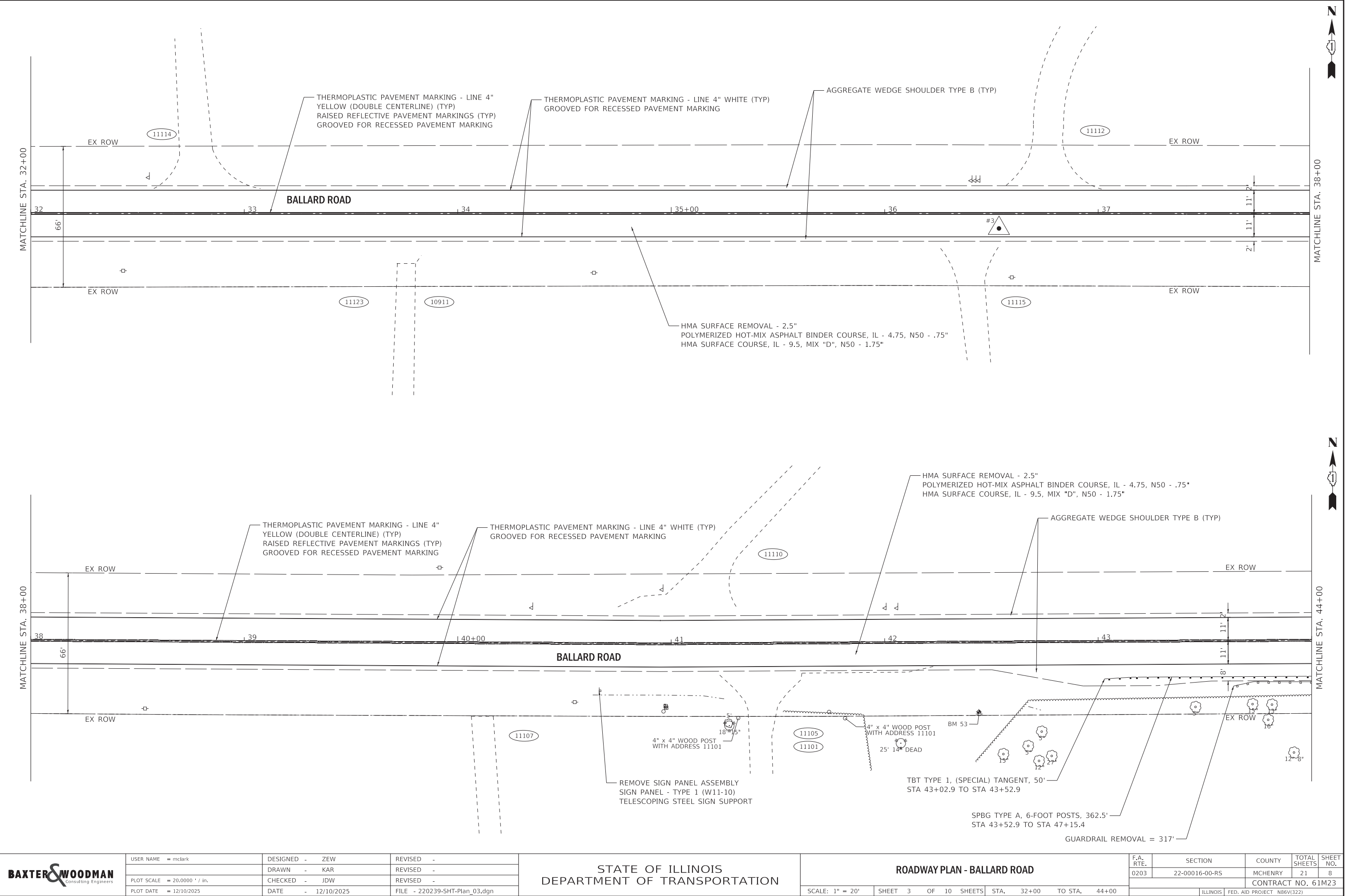
ROADWAY PLAN - BALLARD ROAD

SCALE: 1" = 20' SHEET 2 OF 10 SHEETS STA. 20+00 TO STA. 32+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	7
				CONTRACT NO. 61M23
ILLINOIS FED. AID PROJECT N86V(322)				



STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark 12/10/2025 2:45:51 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_03.dgn



USER NAME = mclark	DESIGNED - ZEW	REVISED -
DRAWN - KAR	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_03.dgn

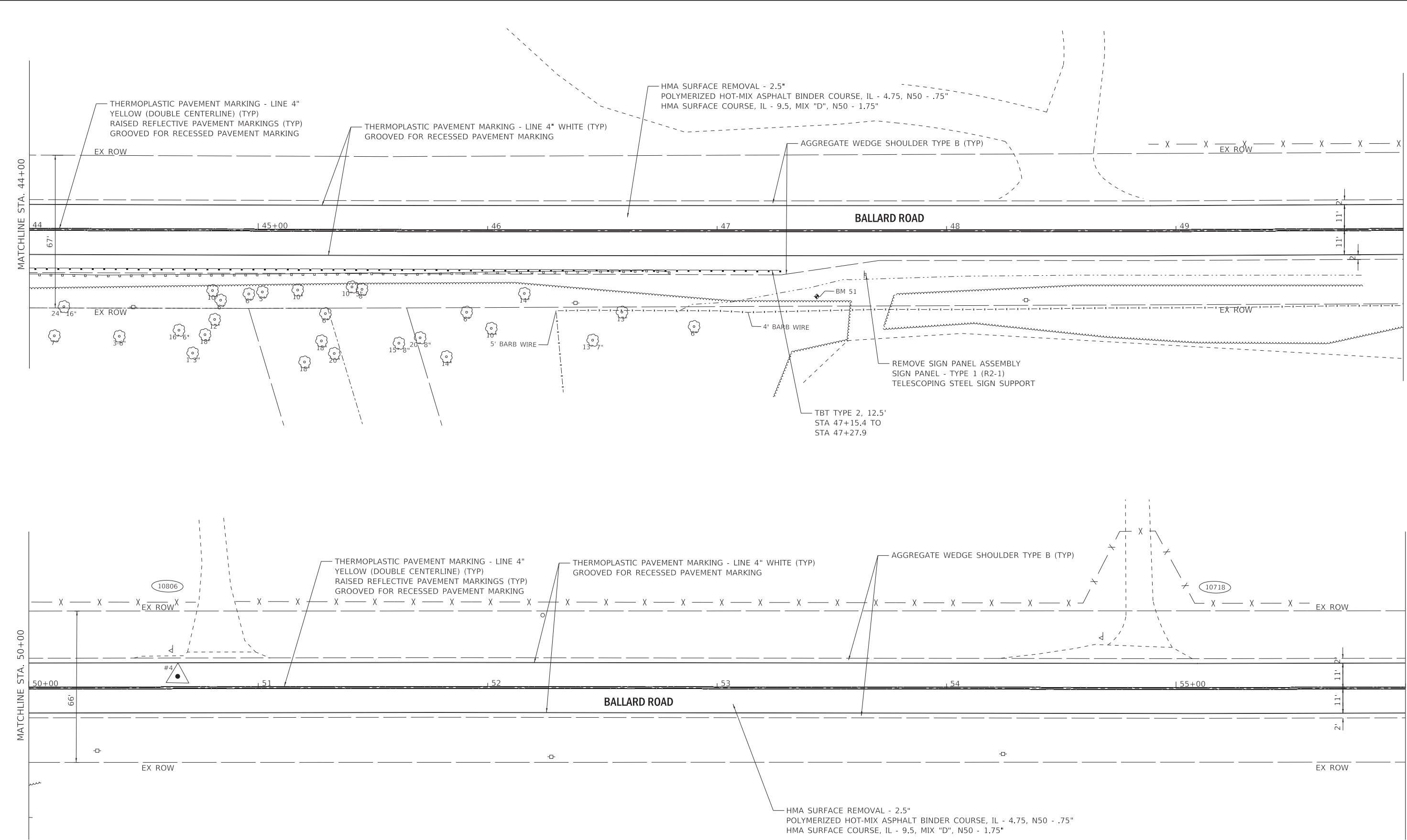
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN - BALLARD ROAD

SCALE: 1" = 20' SHEET 3 OF 10 SHEETS STA. 32+00 TO STA. 44+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	8
CONTRACT NO. 61M23				
ILLINOIS FED. AID PROJECT N86V(322)				

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark
12/10/2025 2:45:52 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_04.dgn



USER NAME = mclark	DESIGNED - ZEW	REVISED -
	DRAWN - KAR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_04.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN - BALLARD ROAD

SCALE: 1" = 20' SHEET 4 OF 10 SHEETS STA. 44+00 TO STA. 56+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	9
CONTRACT NO. 61M23				
ILLINOIS FED. AID PROJECT N86V(322)				

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark 12/10/2025 2:45:34 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_05.dgn

...P\ctd\rv\pdf-BW_Default.plt

...CAD\Plots\220239_Pen.ttl

P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_05.dgn



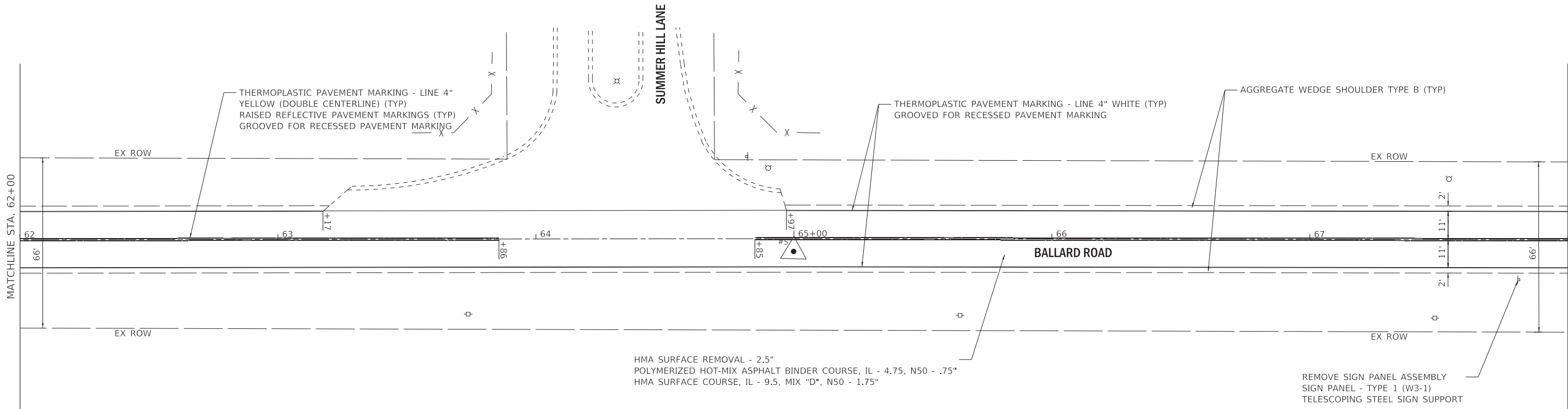
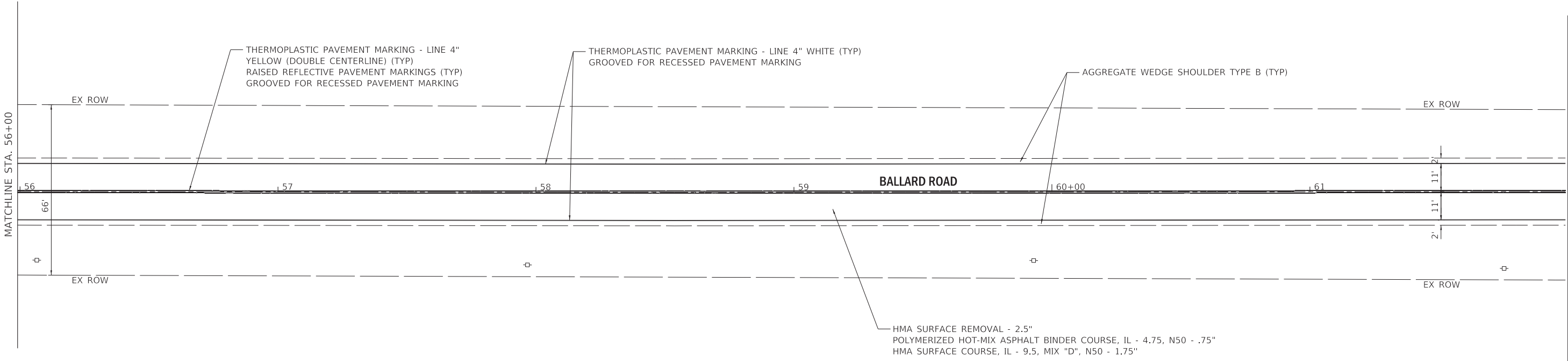
USER NAME = mclark	DESIGNED - ZEW	REVISED -
	DRAWN - KAR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_05.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN - BALLARD ROAD

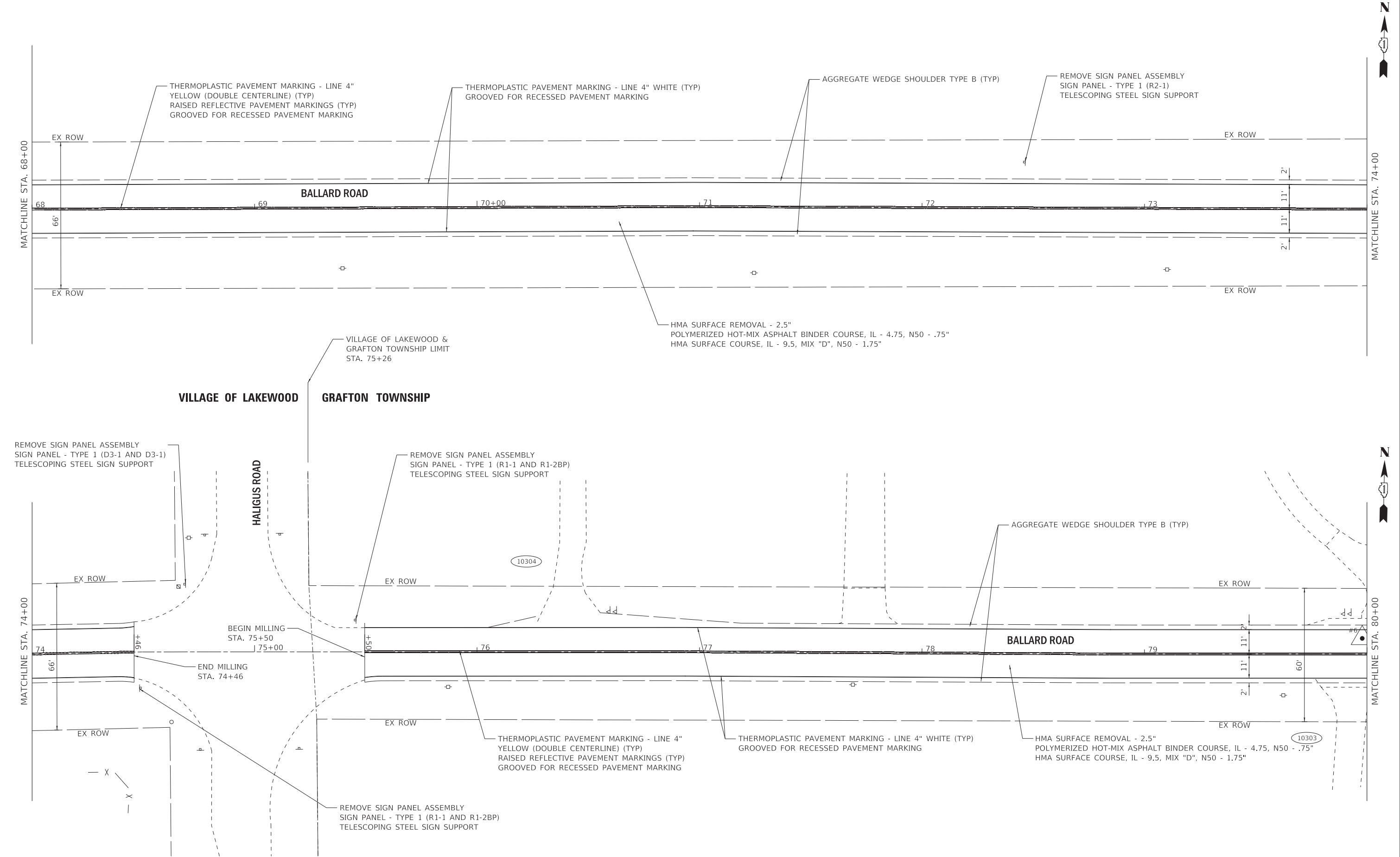
SCALE: 1" = 20' SHEET 5 OF 10 SHEETS STA. 56+00 TO STA. 68+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	10
CONTRACT NO. 61M23				
ILLINOIS FED. AID PROJECT N86V(322)				



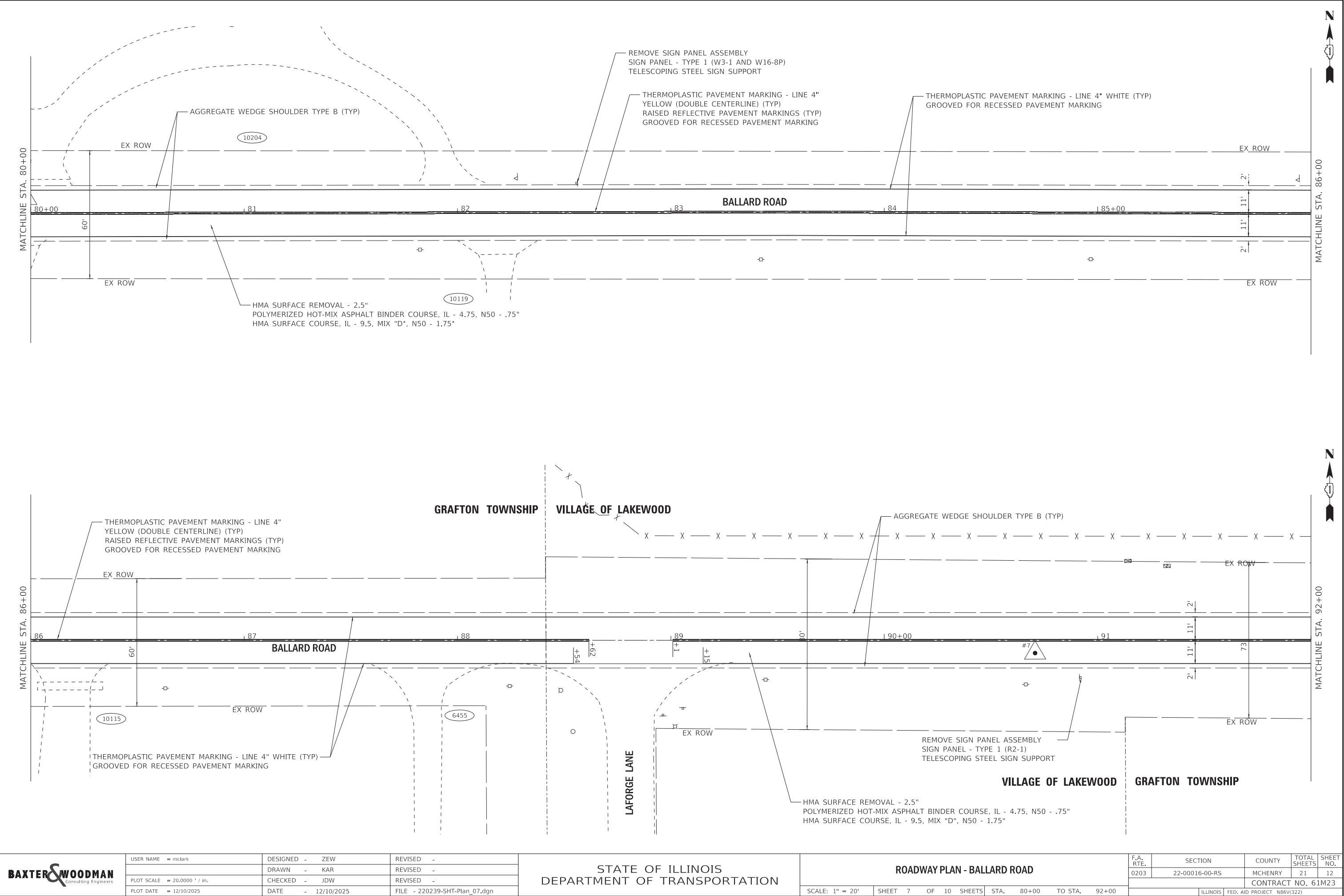
STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark 12/10/2025 2:45:55 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd SHT-Plan_06.dgn
...P\ltdrv\pdf-BW_Default.plt
...CAD\Plots\220239_Pen.tbl
P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_06.dgn

<div><div>BAXTER & WOODMAN</div><div>Consulting Engineers</div></div>	USER NAME = mclark	DESIGNED - ZEW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN - BALLARD ROAD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - KAR	REVIS	REVISED -			0203	22-00016-00-R5	MCHENRY	21	11
	PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -			CONTRACT NO. 61M23				
	PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_06.dgn			ILLINOIS FED. AID PROJECT N86V(322)				
SCALE: 1" = 20' SHEET 6 OF 10 SHEETS STA. 68+00 TO STA. 80+00										



STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark 12/10/2025 2:43:56 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_07.dgn

...P\ctd\rv\pdf-BW_Default.plt
...CAD\Plots\220239_Pen.tbl
P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_07.dgn



<div><div>BAXTERWOODMAN</div><div>Consulting Engineers</div></div>	USER NAME = mclark		DESIGNED - ZEW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN - BALLARD ROAD				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - KAR		CHECKED - JDW	REVISED -						0203	22-00016-00-R5	MCHENRY	21	12
	PLOT SCALE = 20.0000 ' / in.		DATE - 12/10/2025	FILE - 220239-SHT-Plan_07.dgn		SCALE: 1" = 20' SHEET 7 OF 10 SHEETS STA. 80+00 TO STA. 92+00				CONTRACT NO. 61M23				
	PLOT DATE = 12/10/2025									ILLINOIS FED. AID PROJECT N86V(322)				

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark 12/10/2025 2:45:58 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_08.dgn

...\\pltdrv\pdf-BW_Default.plt
...\\CAD\Plots\220239_Pen.tbl
P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_08.dgn



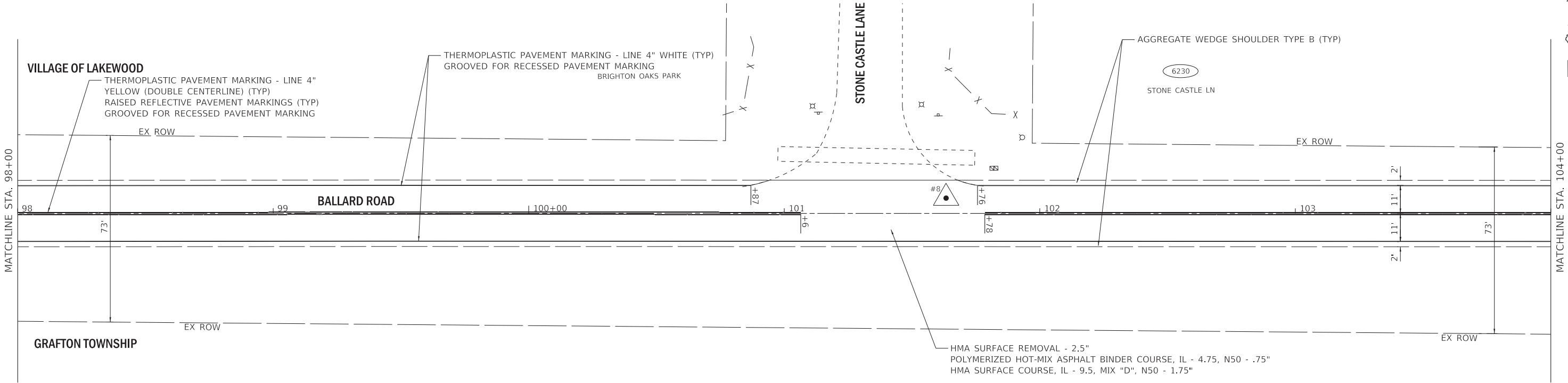
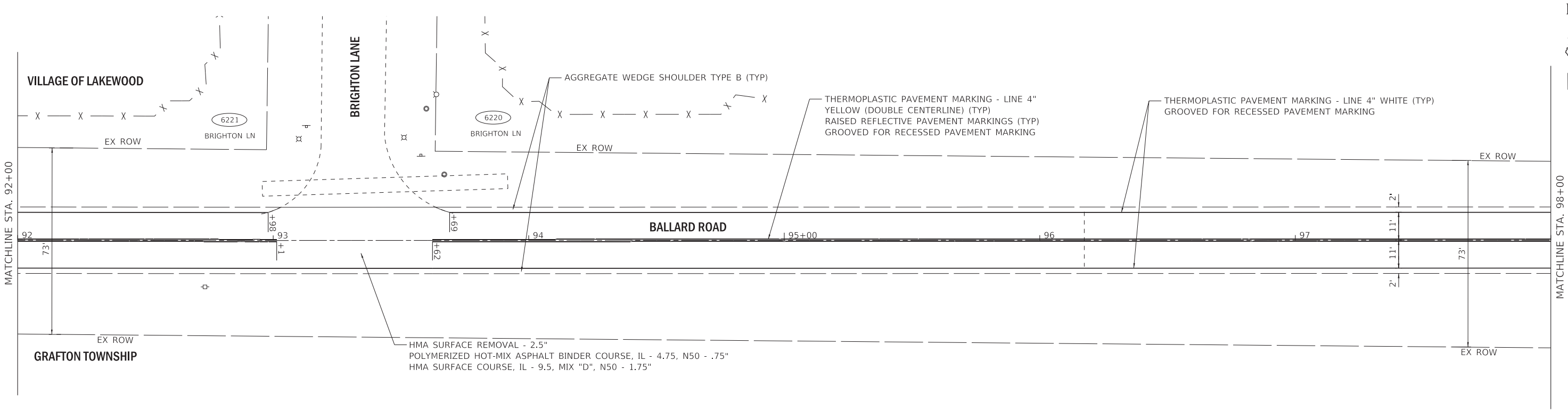
USER NAME = mclark	DESIGNED - ZEW	REVISED -
DRAWN - KAR	REVISED -	
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_08.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN - BALLARD ROAD

SCALE: 1" = 20' SHEET 8 OF 10 SHEETS STA. 92+00 TO STA. 104+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	13
CONTRACT NO. 61M23				
ILLINOIS FED. AID PROJECT N86V(322)				



STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark
12/10/2025 2:45:59 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_09.dgn



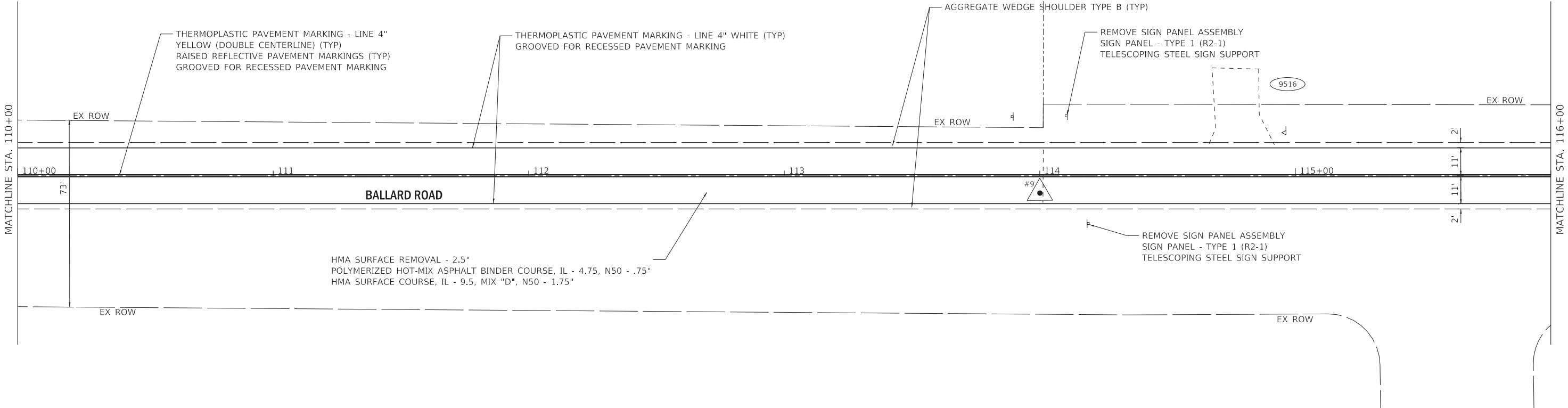
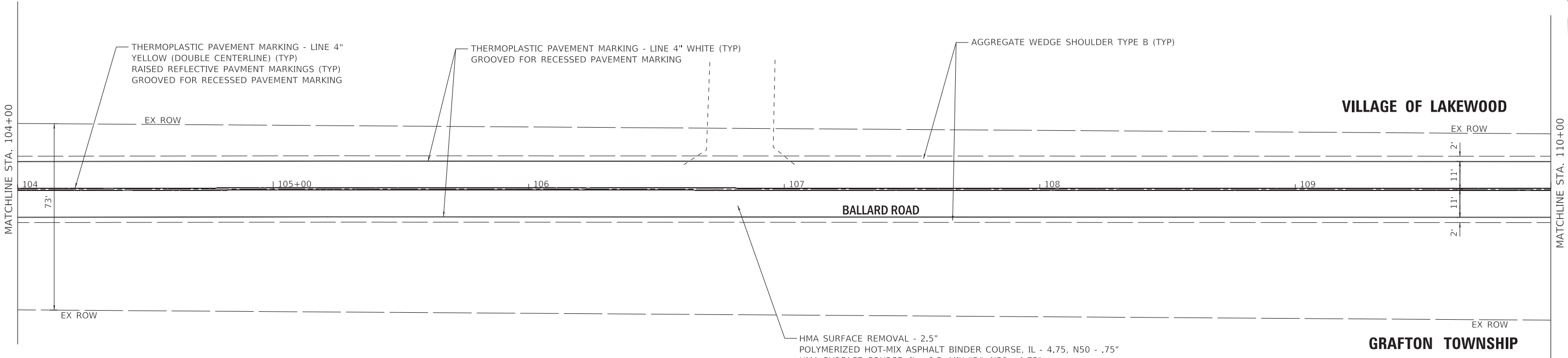
USER NAME = mclark	DESIGNED - ZEW	REVISED -
	DRAWN - KAR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_09.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN - BALLARD ROAD

SCALE: 1" = 20' SHEET 9 OF 10 SHEETS STA. 104+00 TO STA. 116+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	14
CONTRACT NO. 61M23				
ILLINOIS FED. AID PROJECT N86V(322)				



STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2027
mclark 12/10/2025 2:46:00 PM
FILE NAME: P:\LKWDV\0220239-Ballard Rd STP Improv\CAD\Sheets\220239-SHT-Plan_10.dgn



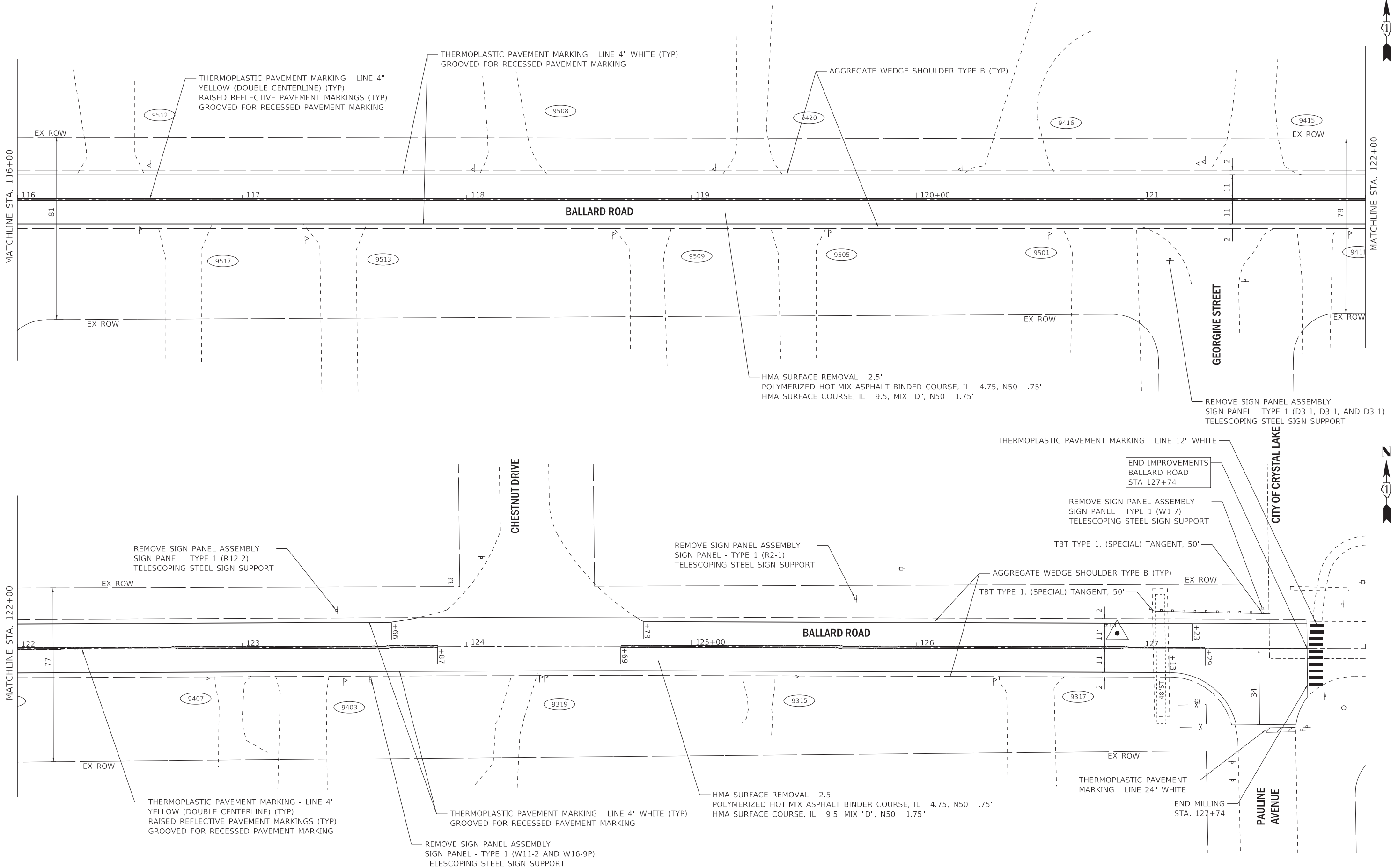
USER NAME = mclark	DESIGNED - ZEW	REVISED -
	DRAWN - KAR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JDW	REVISED -
PLOT DATE = 12/10/2025	DATE - 12/10/2025	FILE - 220239-SHT-Plan_10.dgn

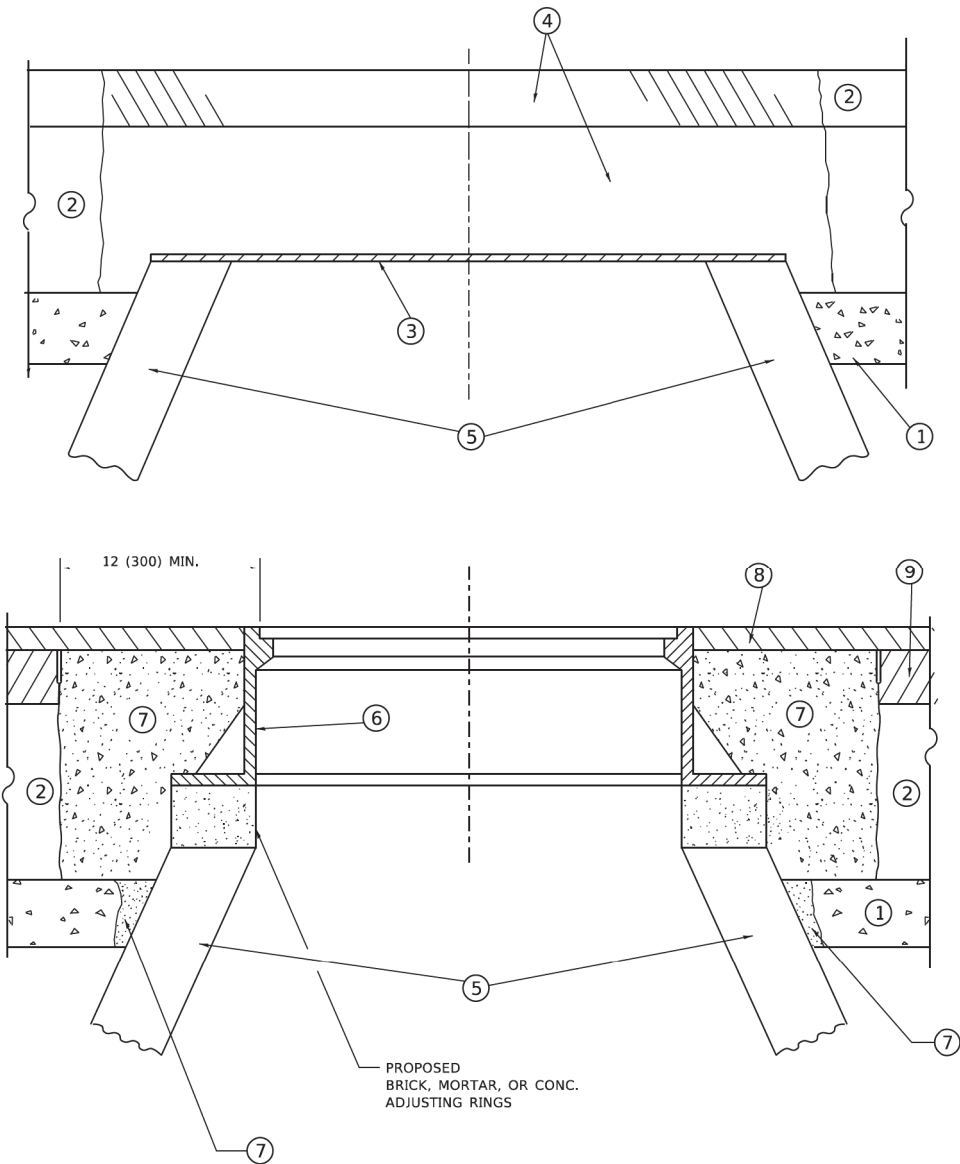
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN - BALLARD ROAD

SCALE: 1" = 20' SHEET 10 OF 10 SHEETS STA. 116+00 TO STA. 128+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-R5	MCHENRY	21	15
CONTRACT NO. 61M23				
ILLINOIS FED. AID PROJECT N86V(322)				





DETAILS FOR FRAMES AND LIDS ADJUSTMENT
WITH MILLING

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.
- THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

STAGE 2 (AFTER PAVEMENT MILLING)

- REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

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

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

- REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
- THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
- NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- WHEN STRUCTURES ARE TO BE ADJUSTED OR 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 CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

MODEL Default
FILE Name: W:\Jct54\0223\34\bd08.dgn

USER NAME = Lawrence,DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 03-09-11
	DRAWN -	REVISED - R. BORO 12-06-11
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - K. SMITH 11-18-22
PLOT DATE = 9/15/2023	DATE - 10-25-94	REVISED - K. SMITH 09-15-23

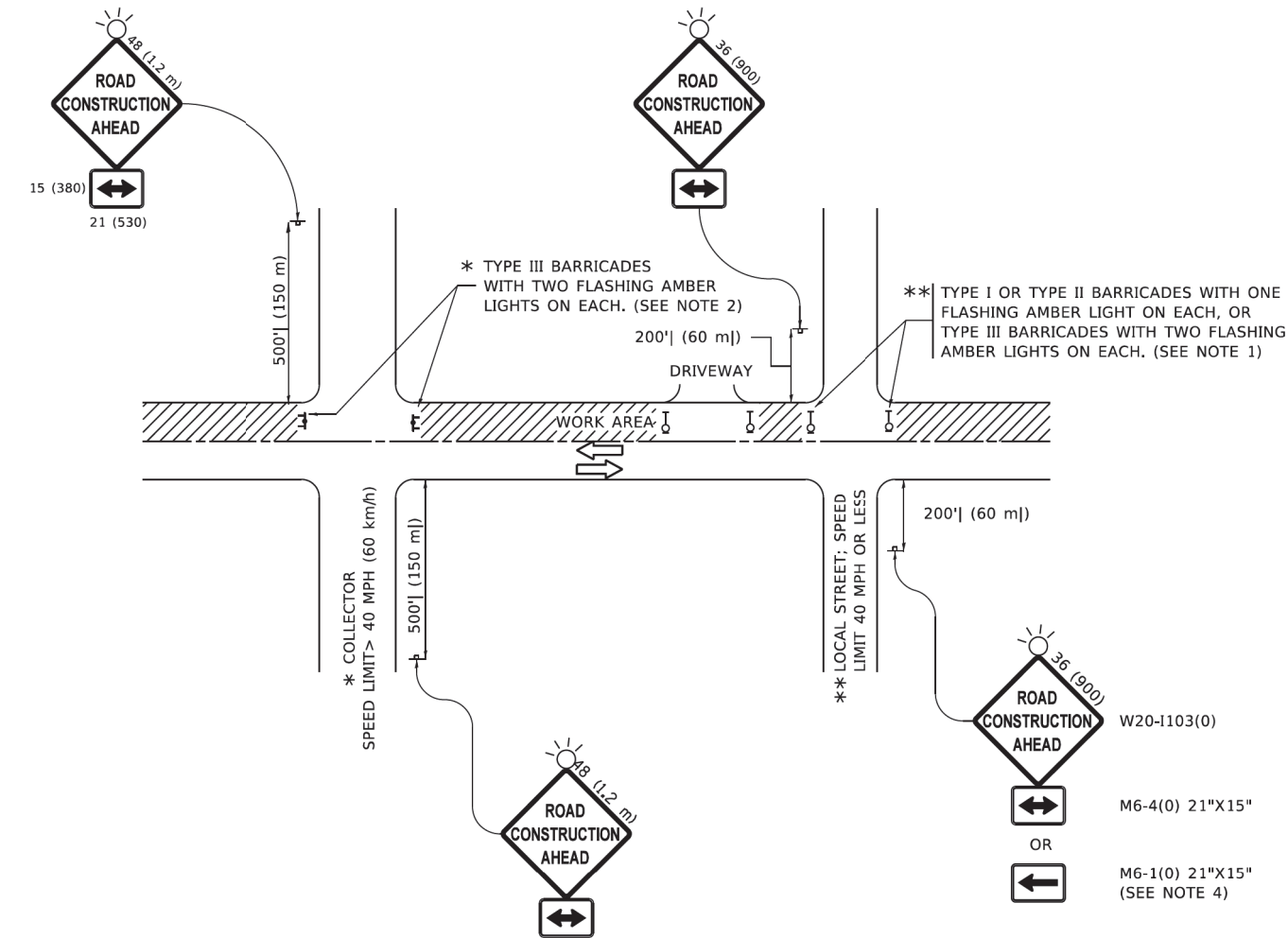
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-RS	MCHENRY	21	16
BD600-03 (BD-08)		CONTRACT NO. 61M23		
		ILLINOIS FED. AID PROJECT N86V(322)		

MODEL Default
FILE Name: C:\pwworkspace\dwg\benley.com\pwworkspace\Documents\DOT Offices\District 1\Projects\District 1\Projects\District 1\CAD\Drawings\TC10.dgn



NOTES:

- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
- SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

USER NAME = Lawrence,DeManche	DESIGNED - L.H.A.	REVISED - T. RAMMACHER 01-06-00
	DRAWN -	REVISED - A. SCHUETZE 07-01-13
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 5/3/2024	DATE - 06-89	REVISED - D. SENDERAK 05-03-24

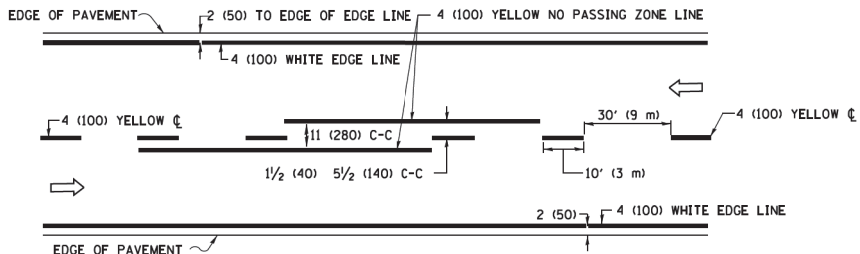
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

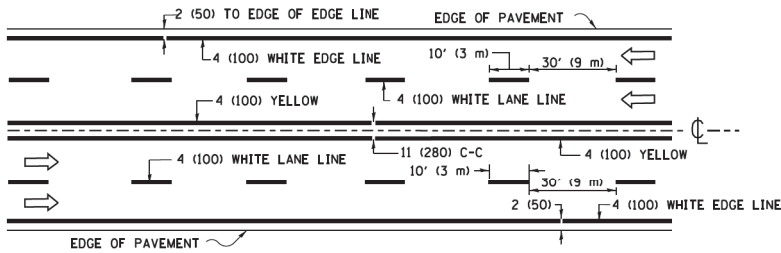
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-RS	MCHENRY	21	18
TC-10		CONTRACT NO. 61M23		
		ILLINOIS	FED. AID PROJECT	N86V(322)

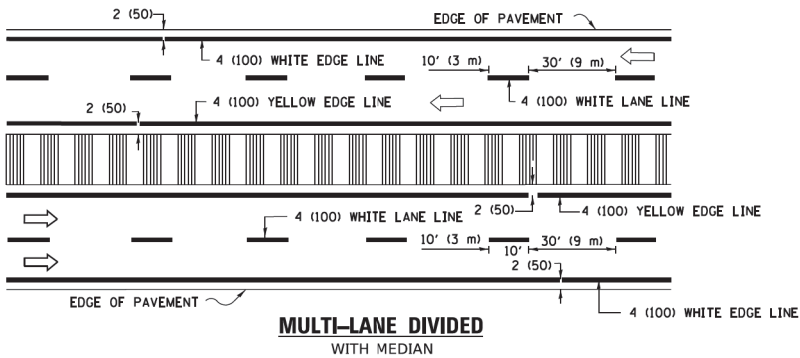
MODEL: Default
FILE NAME: P:\1108481\BID\NTEC\Illinois.gov-P\1108481\Documents\DOT Offices\District 1\Projects\DUHS422\23\ACAD\DATA\CAD\Sheet\TC13.dgn
11/13/2019 10:34:37 AM User:footen



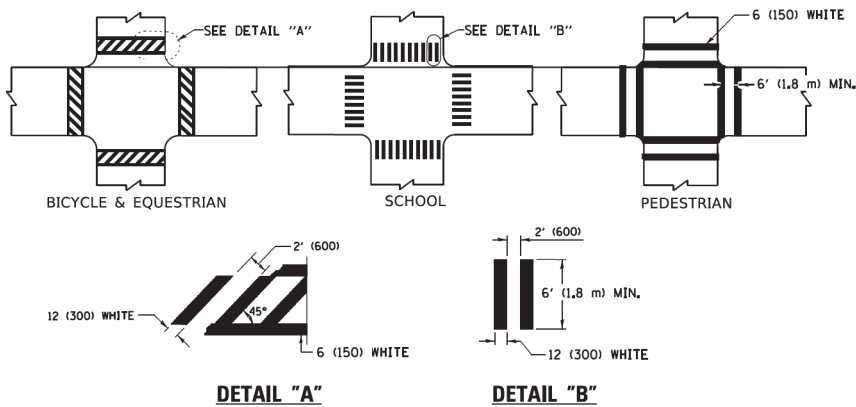
2-LANE ROADWAY



MULTI-LANE UNDIVIDED

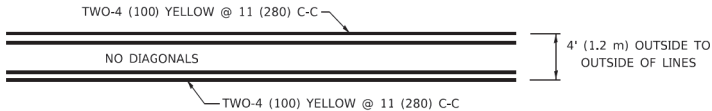


TYPICAL LANE AND EDGE LINE MARKING

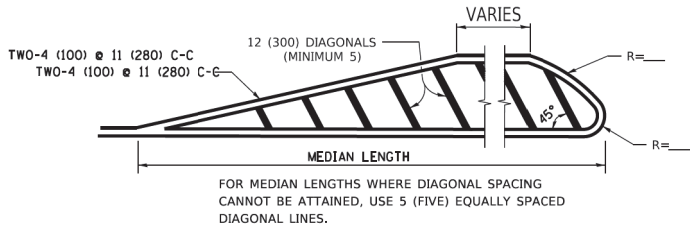


TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

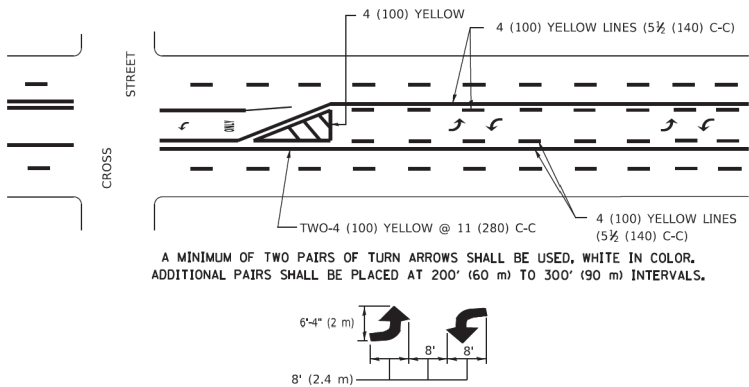


4' (1.2 m) WIDE MEDIANS ONLY



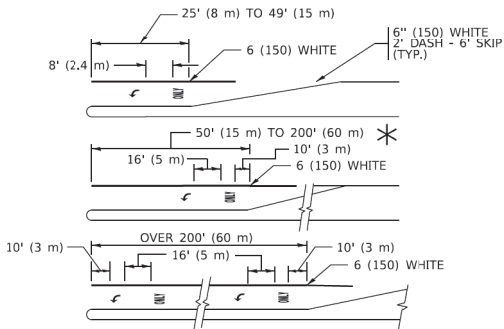
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

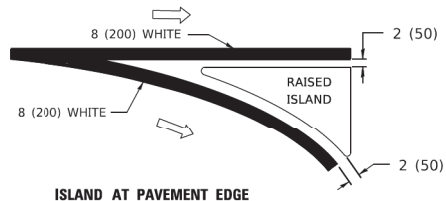
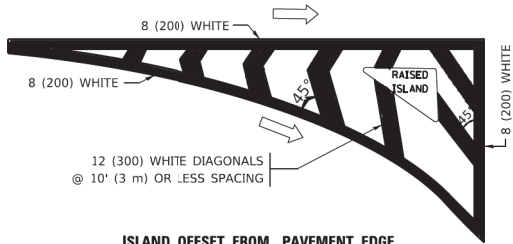


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

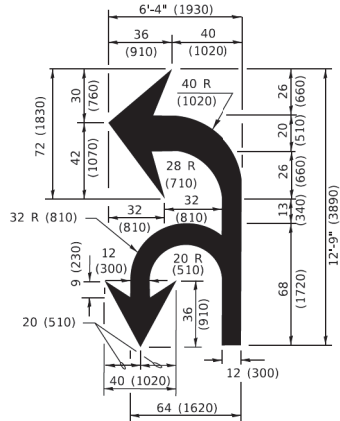
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

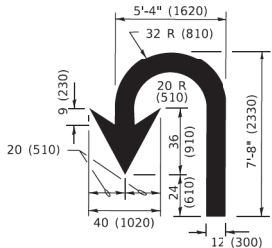
TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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 1/2 (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 MEDIANS IN YELLOW
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 1/2 (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 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: *R*=3.6 SQ. FT. (0.33 m ²) EACH *X*=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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.

USER NAME = footenj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
	DRAWN -	REVISED - C. JUCIUS 07-01-13
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0203	22-00016-00-RS	MCHENRY	21	20
TC-13		CONTRACT NO. 61M23		
ILLINOIS		FED. AID PROJECT N86V(322)		

