03-10-2023 LETTING ITEM 040

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	1
	ILLINOIS	CONTRACT NO. 66M64		

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
515001-04	NAME PLATE FOR BRIDGES
604036-03	GRATE, TYPE 8
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701901-08	TRAFFIC CONTROL DEVICES
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS.
B.L.R. 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS.

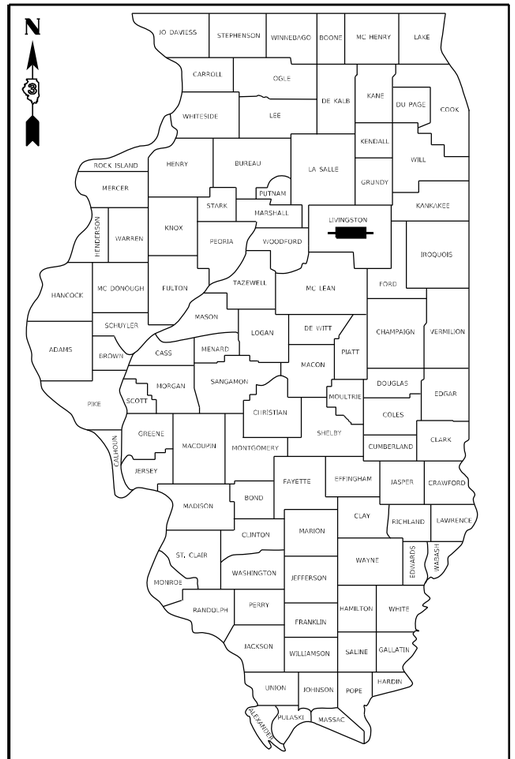
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 673 (IL 116)
SECTION (112X)CLV
CMP ENTRANCE CULVERT REM/REPL WITH PRECAST CONCRETE BOX CULVERTS
LIVINGSTON COUNTY

C-93-087-22

D-93-066-22



LOCATION OF SECTION INDICATED THUS: -

IMPROVEMENT BEGINS

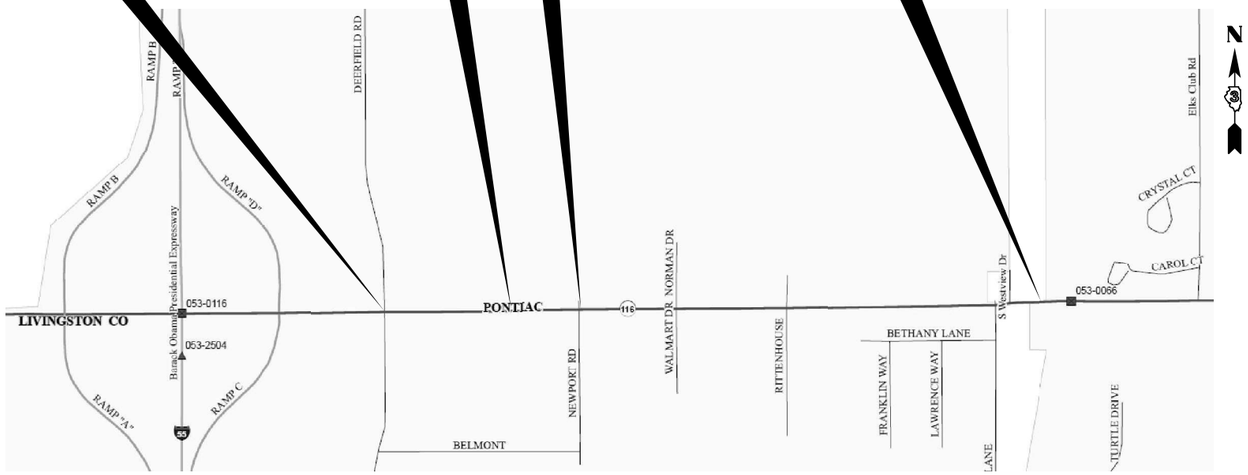
1300 FEET EAST OF I-55
INTERSECTION OF
IL 116 & DEERFIELD RD.
STA. 63+60 RT.

STRUCTURE NO. 053-2593
SECTION (112X)C-3
STA. 69+69 RT.
(DRISCOLL LUBE ENTRANCE)

STRUCTURE NO. 053-2594
SECTION (112X)C-4
STA. 116+32.10 RT.
(NEWPORT RD.)

IMPROVEMENT ENDS

192 FEET WEST OF S. N. 053-0066
AT PE (1304 E. 1700 N. RD.)
STA. 145+50 RT.



100' 200' 300'— 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

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
1–800–892–0123
OR 811

PROJECT ENGINEER: YOGESH PATEL
UNIT CHIEF: RON WOODSHANK
DISTRICT 3 NO. (815) 434-6131

CONTRACT NO. 66M64

FUNCTIONAL CLASSIFICATION

URBAN OTHER PRINCIPAL ARTERIAL
F.A.P. ROUTE 673 (IL 116)
2019 ADT = 11,900
P.V. 89.1 % S.U. 4.4 % M.U. 6.5 %

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 20, 20 22
REGIONAL ENGINEER
February 3, 2023
ENGINEER OF DESIGN AND ENVIRONMENT
February 3, 2023
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

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

BEFORE ORDERING PRECAST BOX CULVERTS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

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

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

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN

COMMITMENTS

THE ENGINEER SHALL NOTIFY ADJACENT BUSINESSES, EMERGENCY SERVICES, COUNTY ENGINEER A MINIMUM OF 72 HOURS IN ADVANCE OF CLOSING A SIDE ROAD OR COMMERCIAL ENTRANCES THE ENGINEER SHALL ALSO SUPPLY AN APPROXIMENT LENGTH OF CLOSURE.

HMA MIXTURE REQUIREMENT TABLE

LOCATIONS:	ENTIRE PROJECT	ENTIRE PROJECT
MIXTURE USE(S):	HMA FULL DEPTH BOTTOM LIFT(S)	HMA FULL DEPTH TOP LIFT
BINDER GRADE (PG):	PG64-22	PG64-22
DESIGN AIR VOIDS:	4.0% @N70	4.0% @ N70
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 19.0	IL 9.5
FRICTION AGGREGATE:		MIXTURE D
MIXTURE WEIGHT:	112.0 LB/SY/IN	112.0 LB/SY/IN
QUALITY MANAGEMENT PROGRAM:	QCQA	QCQA
SUBLOT SIZE:	NA	NA
DENSITY TEST METHOD:	CORES/NUCLEAR	CORES/NUCLEAR
MATERIAL TRANSFER DEVICE (REQUIRED):	NO	NO

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

SUPERVISING CONSTRUCTION FIELD ENGINEER

RESIDENT ENGINEER / TECHNICIAN

START & END DATES OF CONSTRUCTION:

INSPECTORS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY:
DISTRICT STUDIES & PLANS ENGINEER

DATE:

EXAMINED BY:
DISTRICT CONSTRUCTION ENGINEER

DISTRICT MATERIALS ENGINEER

DISTRICT OPERATIONS ENGINEER

FILE NAME = pw:\\illdot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRWN Default	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / In.	DRAWN - RW	REVISED -					673	(112X)CLV	LIVINGSTON	18	2
	PLOT DATE = 12/19/2022	CHECKED - YP	REVISED -							CONTRACT NO. 66M64		
		DATE - 6/4/2022	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS	STA. TO STA.		ILLINOIS	FED. AID PROJECT		

CONSTRUCTION CODE
CONTRACT MAINTENANCE 100% STATE
BOX CULVERT
0004
URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
20400800	FURNISHED EXCAVATION	CU YD	56	56
20700220	POROUS GRANULAR EMBANKMENT	CU YD	250	250
21400100	GRADING AND SHAPING DITCHES	FOOT	1771	1771
25000210	SEEDING, CLASS 2A	ACRE	2.7	2.7
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	242	242
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	242	242
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	242	242
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	9324	9324
31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	115	115
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	24	24
40701861	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9"	SQ YD	106	106
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	135	135
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	106	106
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	135	135

FILE NAME = pw:\\illdot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAWN

Default

USER NAME = ronald.woodshank

PLOT SCALE = 100.0000 ' / In.

PLOT DATE = 12/19/2022

DESIGNED -	RW	REVISED -
DRAWN -	RW	REVISED -
CHECKED -	YP	REVISED -
DATE -	6/4/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	3
		CONTRACT NO. 66M64		
	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE CONTRACT MAINTENANCE 100% STATE BOX CULVERT 0004 URBAN
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	121	121
	50104650	SLOPE WALL REMOVAL	SQ YD	136	136
	50105220	PIPE CULVERT REMOVAL	FOOT	354	354
	51500100	NAME PLATES	EACH	2	2
	54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2
	54001002	BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2	2
	54010804	PRECAST CONCRETE BOX CULVERTS 8' X 4'	FOOT	120	120
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	121	121
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	392	392
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1
*	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	4	4
	67100100	MOBILIZATION	L SUM	1	1

*= SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE CONTRACT MAINTENANCE 100% STATE BOX CULVERT 0004 URBAN
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	40	40
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1
X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	164	164

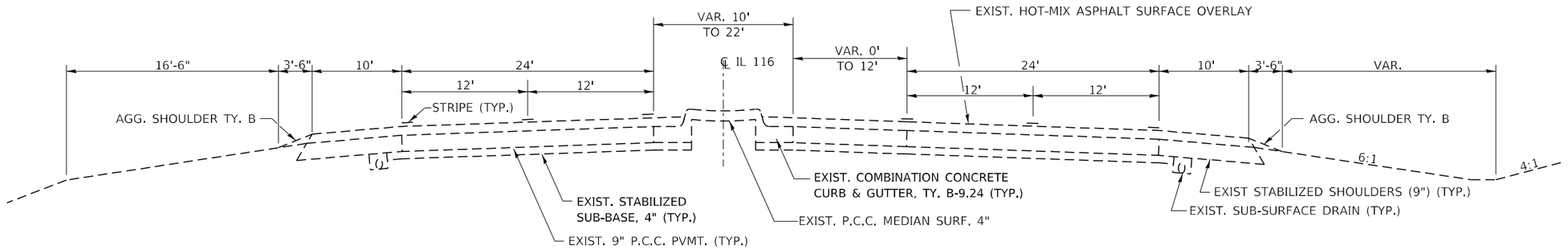
FILE NAME =	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
pw:\\dot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAWN		- RW	REVISED -	
Default	PLOT SCALE = 100.0000 ' / in.	CHECKED - YP	REVISED -	
	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -	

SUMMARY OF QUANTITIES

SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

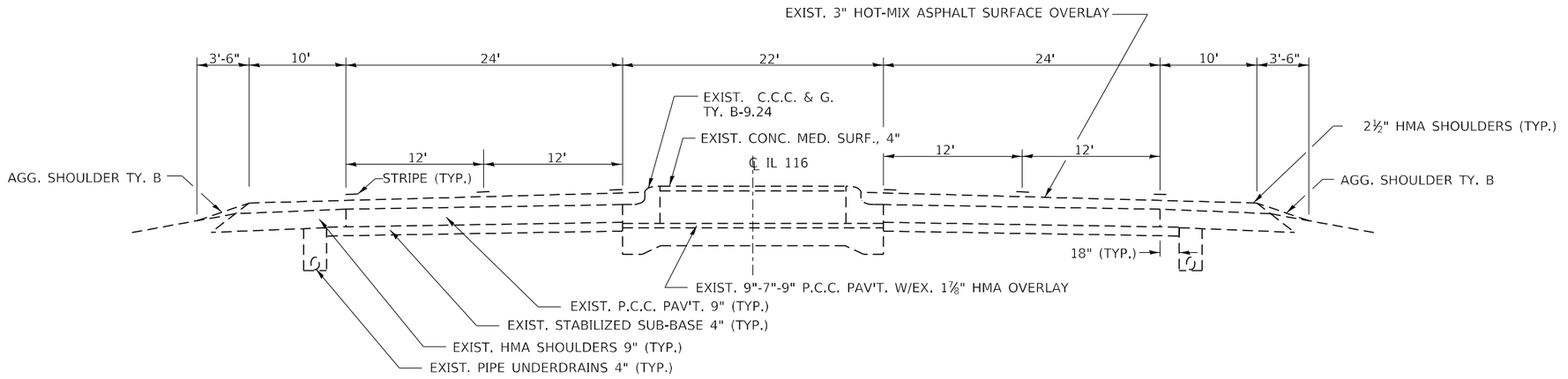
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	5
		CONTRACT NO. 66M64		
	ILLINOIS	FED. AID PROJECT		

REV. 1/3/23



TYPICAL SECTION 1

STA. 60+00 - STA. 72+00



TYPICAL SECTION 2

STA. 72+00 = STA. 112+33.48
STA. 112+33.48 TO 133+50

FILE NAME = pw:\\dot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAWN.dgn Default	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / in.	CHECKED - YP	REVISED -			673	(112X)CLV	LIVINGSTON	18	6
	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 66M64		
							ILLINOIS	FED. AID PROJECT		

SCHEDULES - PAVEMENT

LOCATION	COMBINATION CURB AND GUTTER REMOVAL	HOT-MIX ASPHALT SURFACE REMOVAL 3"	DRIVEWAY PAVEMENT REMOVAL	SUBBASE GRANULAR MATERIAL TYPE B	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 6 INCH	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH) 9"
	FOOT	SQ YD	SQ YD	CU YD	FOOT	SQ YD	SQ YD
C.E. STA. 69+69 RT.	72		135	33.6	72	135	
S.R. STA. 116+32 RT.	49	106		81.4	49		106
TOTALS	121	106	135	115	121	135	106

SCHEDULES - LANDSCAPING

LOCATION			GRADING AND SHAPING DITCHES	SEEDING CLASS 2A	NITROGEN FERTILIZER NUITRIENT	PHOSPHORUS FERTILIZER NUITRIENT	POTASSSIUM FERTILIZER NUITRIENT	HEAVY DUTY EROSION CONTROL BLANKET
STATION	TO	STATION	FOOT	ACRE	POUND	POUND	POUND	SQ YD
60+90	TO	62+90	200	0.3	27	27	27	1022
64+30	TO	65+30	100	0.2	14	14	14	511
67+75	TO	69+25	150	0.2	20	20	20	767
*69+37				0.01	1	1	1	68
*70+01				0.01	1	1	1	68
114+70	TO	115+70	100	0.2	14	14	14	511
*115+82				0.01	1	1	1	68
*116+72				0.01	1	1	1	68
119+30	TO	121+85	255	0.4	34	34	34	1303
127+05	TO	129+05	200	0.3	27	27	27	1022
129+95	TO	131+45	150	0.2	20	20	20	767
133+50	TO	134+50	100	0.2	14	14	14	511
140+25	TO	142+74	249	0.4	33	33	33	1273
143+03	TO	144+00	97	0.1	13	13	13	496
144+20	TO	145+40	120	0.2	16	16	16	613
145+70	TO	146+20	50	0.1	6	6	6	256
TOTAL			1771	2.7	242	242	242	9324

*BOX CULVERT END SECTION

FILE NAME = pw:\\dot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAWN

Default

USER NAME = ronald.woodshank

PLOT SCALE = 100.0000 ' / In.

PLOT DATE = 12/19/2022

DESIGNED - RW

DRAWN - RW

CHECKED - YP

DATE - 6/4/2022

REVISED -

REVISED -

REVISED -

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES

SCALE:

SHEET 1 OF 1 SHEETS STA. TO STA.

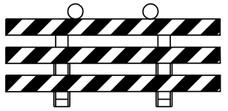
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	7
		CONTRACT NO. 66M64		
		ILLINOIS	FED. AID PROJECT	

LEGEND

TYPE III BARRICADE WITH STEADY BURNING LIGHTS

A

B

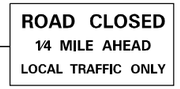


TRAFFIC CONTROL AND PROTECTION
STANDARD B.L.R. 21 OR B.L.R. 22

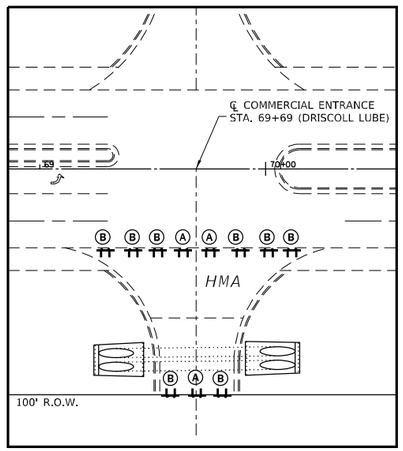
NOTES:

1. COMMERCIAL ENTRANCE AT STA. 69+69 (DRISCOLL LUBE) AND THE S.R. AT STA. 116+32 (NEWPORT RD.) SHALL NOT BE CLOSED AT THE SAME TIME. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ONE OF THE ENTRANCES AT ALL TIMES.
2. 2 CHANGEABLE MESSAGE SIGNS SHALL BE USED WHENEVER A SIDE ROAD OR ENTRANCE IS CLOSED FOR CONSTRUCTION WORK. LOCATIONS SHALL BE AS DIRECTED BY THE ENGINEER.
3. ALL LANES OF IL ROUTE 116 SHALL BE OPEN TO TRAFFIC AT THE END OF EACH WORK DAY WHENEVER TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 IS BEING UTILIZED.
4. COST OF STANDARDS B.L.R. 21, B.L.R. 22, ADDITIONAL SIGNAGE, ALL TRAFFIC CONTROL DEVICES AS SHOWN ON THIS DETAIL SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDE WITH THE COST OF "TRAFFIC CONTROL FOR ROAD CLOSURE".

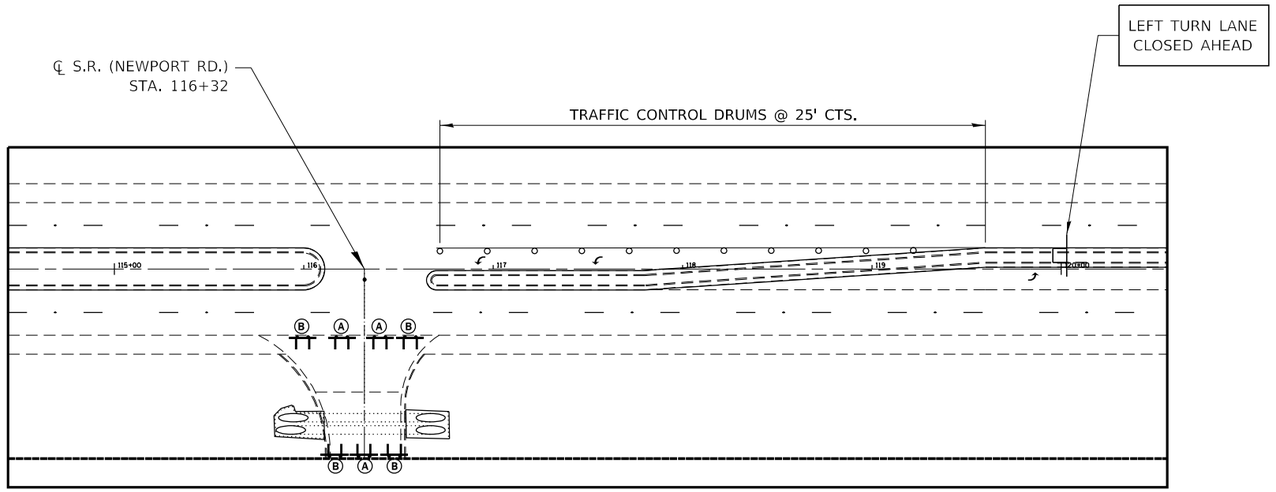
M4-I0L 48"X18"



R11-3A 60"X30"

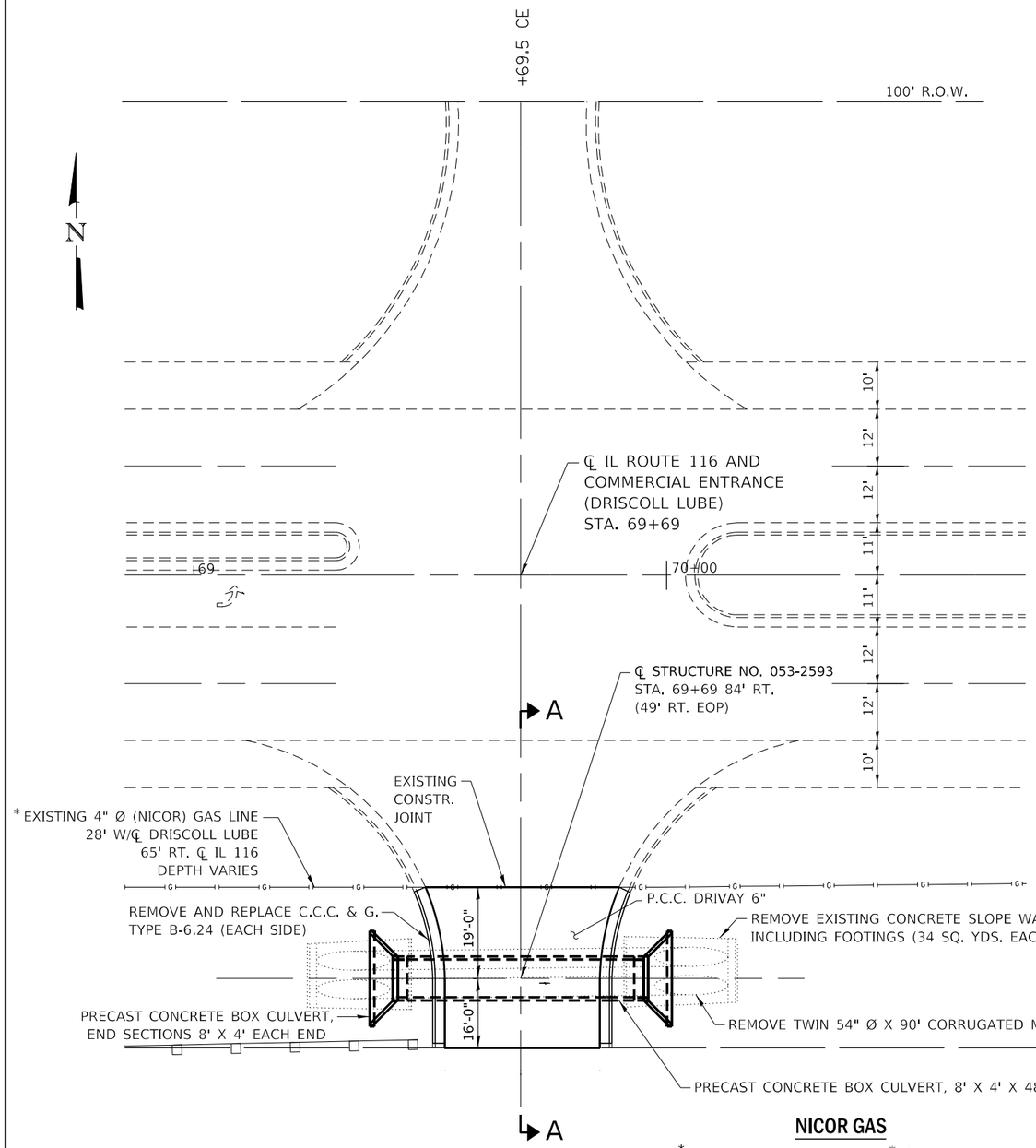


PLAN DETAIL "A"
COMMERCIAL ENTRANCE
STA. 69+69 RT.
(DRISCOLL LUBE)



PLAN DETAIL "B"
NEWPORT RD.

FILE NAME = pw:\\dot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLAN.dgn	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**TRAFFIC CONTROL AND PROTECTION FOR ROAD CLOSURE**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RW	REVISED -			673	(112X)CLV	LIVINGSTON	18	8
	PLOT SCALE = 100.0000 ' / In.	CHECKED - YP	REVISED -						CONTRACT NO. 66M64	
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	



PLAN

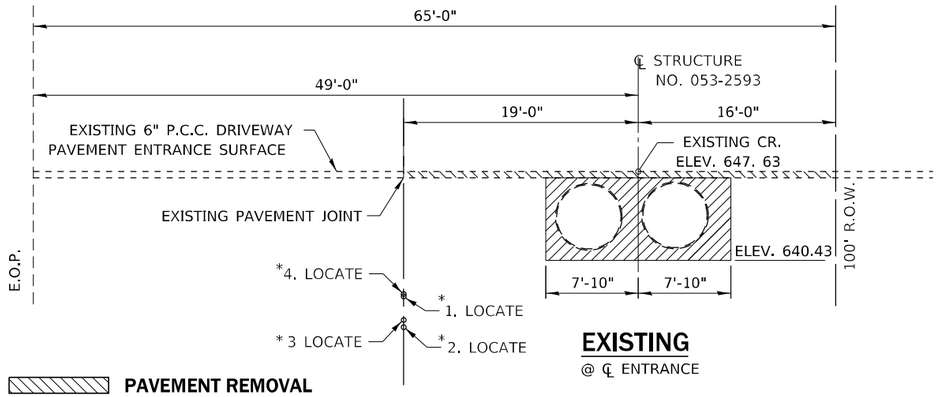
NICOR GAS

* L1
4" Ø GAS LINE
150' W/℄ DRISCOLL LUBE,
64" RT. ℄ IL 116
4'-8" DEPTH

* L2
4" Ø GAS LINE
28' W/℄ DRISCOLL LUBE,
65' RT. ℄ IL 116
6'-10" DEPTH

* L3
4" Ø GAS LINE
29' E/℄ DRISCOLL LUBE
65' RT. ℄ IL 116
6'-4" DEPTH

* L4
4" Ø GAS LINE
133' E/℄ DRISCOLL LUBE
64' RT. ℄ IL 116
4'-6" DEPTH

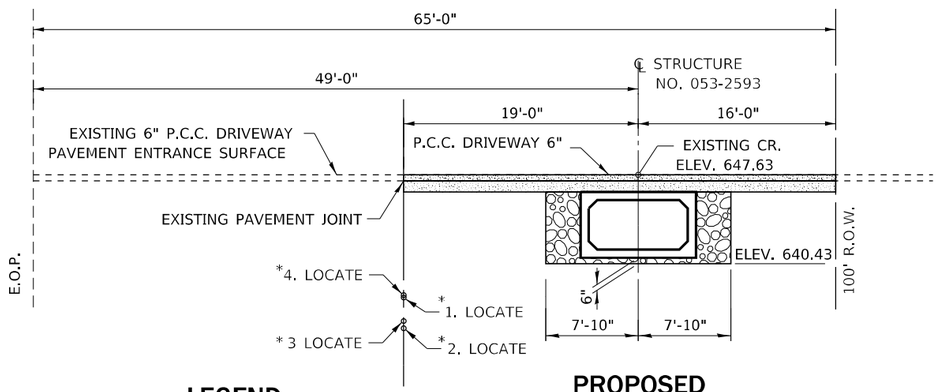


EXISTING
@ ℄ ENTRANCE

PAVEMENT REMOVAL

EARTH EXCAVATION

NOTE: EXCAVATION REQUIRED FOR THE REMOVAL OF THE EXISTING CORRUGATED METAL PIPE CULVERTS (CMP'S) SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PIPE REMOVAL PER ARTICLE 501.06 OF THE STANDARD SPECIFICATIONS.



LEGEND

PROPOSED
@ ℄ ENTTRANCE

PORTLAND CEMENT CONCRETE DRIVEWAY 6"

SUBBASE GRANULAR MATERIAL, TYPE B

POROUS GRANULAR EMBANKMENT

SECTION A-A
PRECAST CONCRETE BOX CULVERT 8' X 4'

FILE NAME = pw:\\dot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDET.dgn	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -
		DRAWN - RW	REVISED -
	PLOT SCALE = 100.0000 ' / In.	CHECKED - YP	REVISED -
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

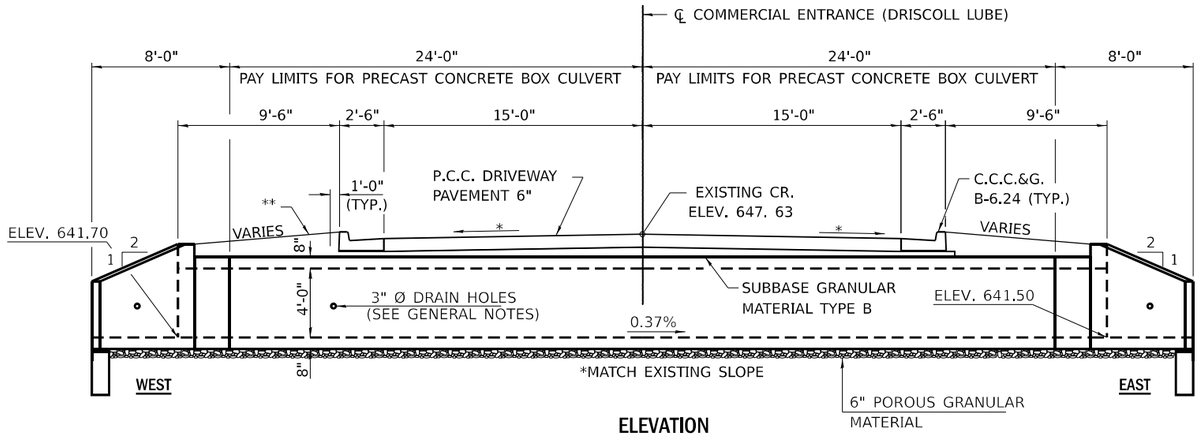
PLAN DETAILS FOR COMMERCIAL ENTRANCE
STA. 69+69 RT. (DRISCOLL LUBE)

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

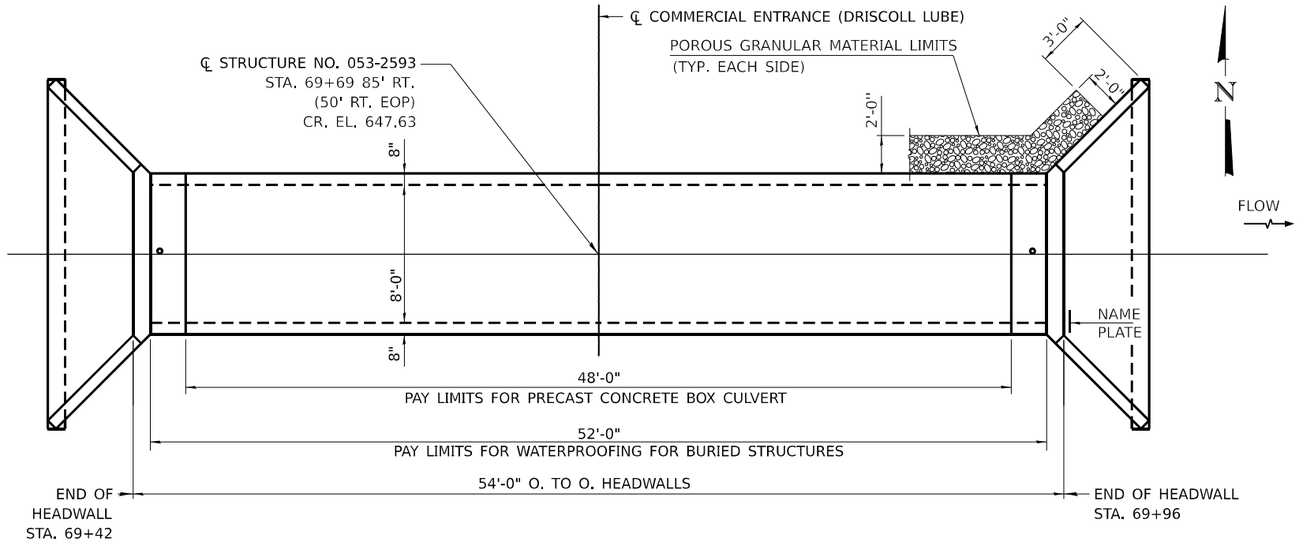
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	9
		CONTRACT NO. 66M64		
	ILLINOIS FED. AID PROJECT			

BENCHMARK NO. 1: CHISLED "X" ON CURB, SE CORNER OF IL 116 AND DRISCOLL LUBE ENTRANCE. ELEVATION 648.73

EXISTING STRUCTURE: TWIN 54" X 87' Ø CORRUGATED METAL PIPE CULVERTS WITH CONCRETE SLOPE WALLS



ELEVATION



PLAN
STRUCTURE NO. 053-2593

WATERWAY INFORMATION

DRAINAGE AREA = 0.6 SQ. MI. LOW GRADE ELEV. = 647.15 @ STA. 69+69									
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.		NAT. H.W.E.	HEAD - FT.		HEADWATER EL.	
			EXIST.	PROP.		EXIST.	PROP.	EXIST.	PROP.
TEN-YEAR	10	81	10	18	644.0	1.3	0.2	645.4	644.2
DESIGN	50	129	14	22	644.5	1.7	0.6	646.3	645.1
BASE	100	150	16	24	644.7	1.9	0.7	646.6	645.4
OVERTOP EXISTING	133	160	16	-	644.8	2.0	-	646.8	-
SCOUR CHECK	200	172	17	25	644.9	2.0	0.9	646.9	645.8
MAX. CALC.	500	201	19	27	645.1	2.1	1.2	647.2	646.2

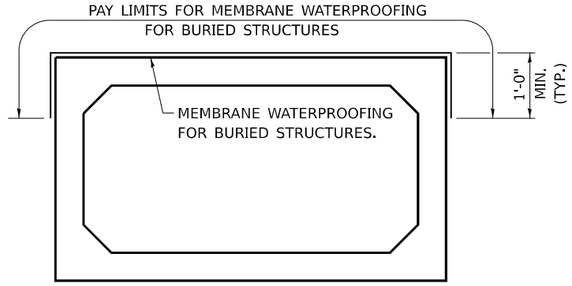
GENERAL NOTES

THE DESIGN FILL HEIGHT FOR THIS BOX IS 1.4 FT. THE PRECAST BOX CULVERT SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 1577.

DRAIN HOLES SHALL BE PROVIDED ON EXTERIOR CULVERT WALLS FOR EACH PRECAST BOX SEGMENT WITH A CLEAR RISE GREATER THAN 3 FT. THE DRAIN HOLE SHALL BE LOCATED WITHIN 1/3 OF THE CLEAR RISE OF THE BOX CULVERT, SHALL NOT INTERCEPT THE HAUNCH, AND SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 503.11 OF THE STANDARD SPECIFICATION.

NONWOVEN GEOTEXTILE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ART. 1080.01 OF THE STANDARD SPECIFICATIONS. THE MINIMUM WEIGHT OF THE FABRIC SHALL BE 6 OUNCES PER SQUARE YARD.

PRECAST CONCRETE BOX CULVERTS AND BOX CULVERT END SECTIONS SHALL BE BACKFILLED WITH POROUS GRANULAR EMBANKMENT IN THE REQUIRED EXCAVATION AREAS ON THE SIDES OF THE BOX CULVERT FROM THE TOP OF THE BOX CULVERT TO THE BOTTOM OF THE BOX CULVERT. THIS AREA OF PGE IS INCLUDED IN THE POROUS GRANULAR EMBANKMENT PAY ITEM. THE 6-INCH THICK LAYER OF POROUS GRANULAR MATERIAL REQUIRED UNDER THE PRECAST CONCRETE BOX CULVERT, ACCORDING TO SECTION 540.06 OF THE STANDARD SPECIFICATIONS, SHALL ALSO APPLY TO THE END SECTIONS. COST OF THIS POROUS GRANULAR MATERIAL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE OF THE WORK FOR WHICH IT IS REQUIRED.



MEMBRANE WATERPROOFING FOR BURIED STRUCTUREE

N

FLOW

** SUITABLE EXCAVATED MATERIALS SHALL BE USED TO RECONSTRUCT EMBANKMENT SLOPES (TYP.).

IN THE EVENT THAT ADDITIONAL MATERIAL IS REQUIRED TO RECONSTRUCT THE EMBANKMENT ADJACENT TO THE NEW BOX CULVERT STRUCTURES, THE CONTRACTOR SHALL FURNISH AND PLACE MATERIAL ACCORDING TO SECTION 204 OF THE STANDARD SPECIFICATIONS AND AS APPROVED BY THE ENGINEER. COST OF FURNISHING, PLACING AND COMPACTING THE MATERIAL SHALL BE ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

STATION 69+69
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 673 SEC. (112X)C-3
LOADING HL-93
STRUCTURE NO. 053-2593

NAME PLATE
SEE STD. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
PIPE CULVERT REMOVAL	FOOT	180
SLOPE WALL REMOVAL	SQ. YD.	68
NAME PLATES	EACH	1
BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2
PRECAST CONCRETE BOX CULVERTS, 8' X 4"	FOOT	48
POROUS GRANULAR EMBANKMENT	CU. YD.	91
MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SQ. YD.	66

DESIGN SPECIFICATIONS

2020 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
CUSTOMARY U.S. UNITS, 9TH EDITION

LOADING HL-93

DESIGN STRESSES

PRECAST UNITS

f'c = 5,000 psi
fy = 65,000 PSI (WELDED WIRE REINFORCEMENT)

GENERAL PLAN AND ELEVATION
IL RTE. 17 OVER A DRAINAGE DITCH
F.A.P. RTE. 673 SEC. (112X)C-3
LIVINGSTON COUNTY
STATION 69+69
S.N. 053-2593

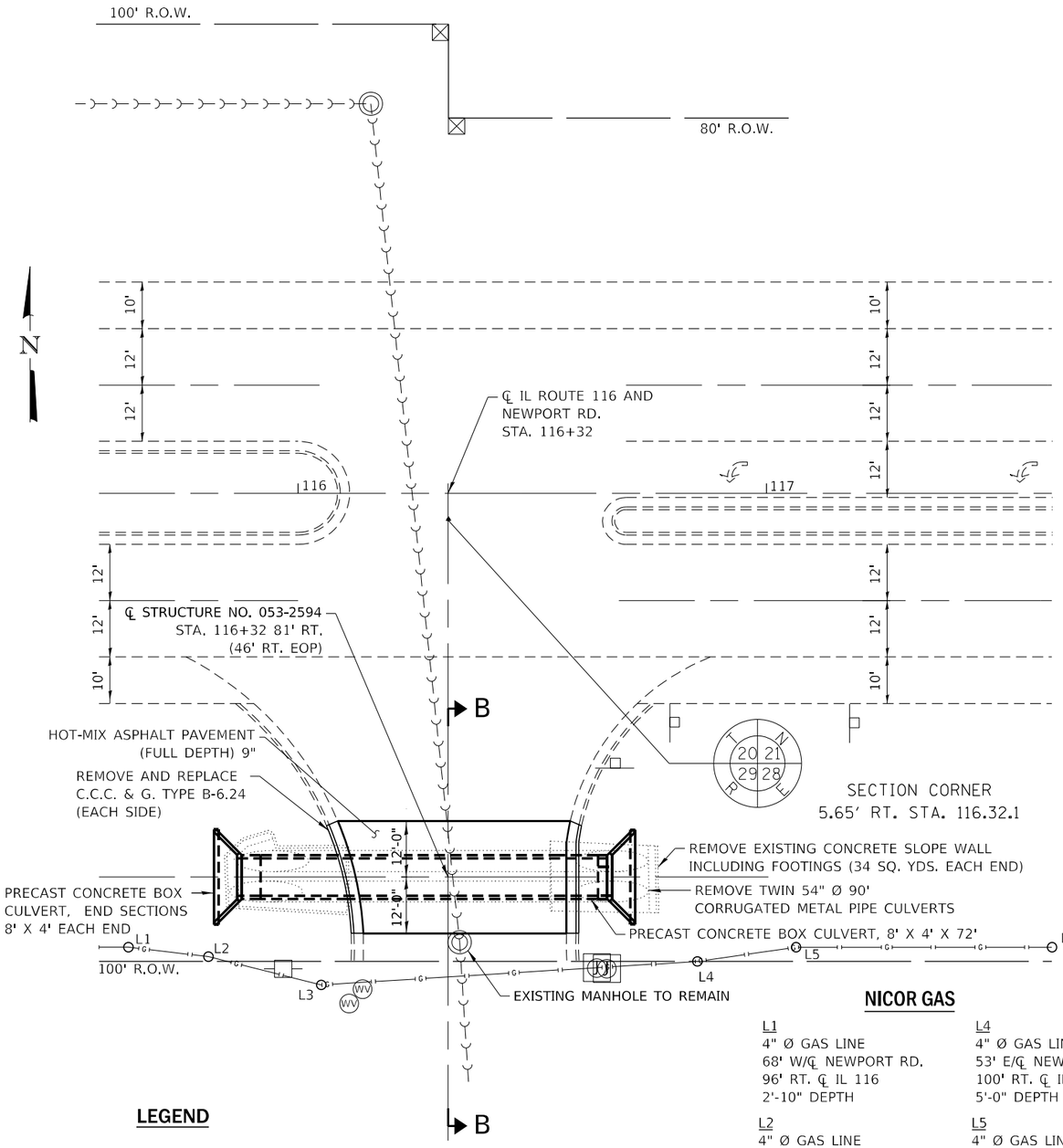
FILE NAME = pw://dot-pw.bentley.com:PWIDOT/Documents/IDOT Offices/District 3/ORD Projects/D366M76/CADData/CADsheets/66M76 GPAVN.dgn	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -
Default		DRAWN - RW	REVISED -
	PLOT SCALE = 50.000 ' / in.	CHECKED - YP	REVISED -
	PLOT DATE = 1/27/2023	DATE - 6/4/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION FOR STRUCTURE NO. 053-2593
COMERCIAL ENTRANCE (DRISCOLL LUBE)

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	10
		CONTRACT NO. 66M64		
	ILLINOIS FED. AID PROJECT			



PLAN

NICOR GAS

L1
4" Ø GAS LINE
68' W/℄ NEWPORT RD.
96' RT. ℄ IL 116
2'-10" DEPTH

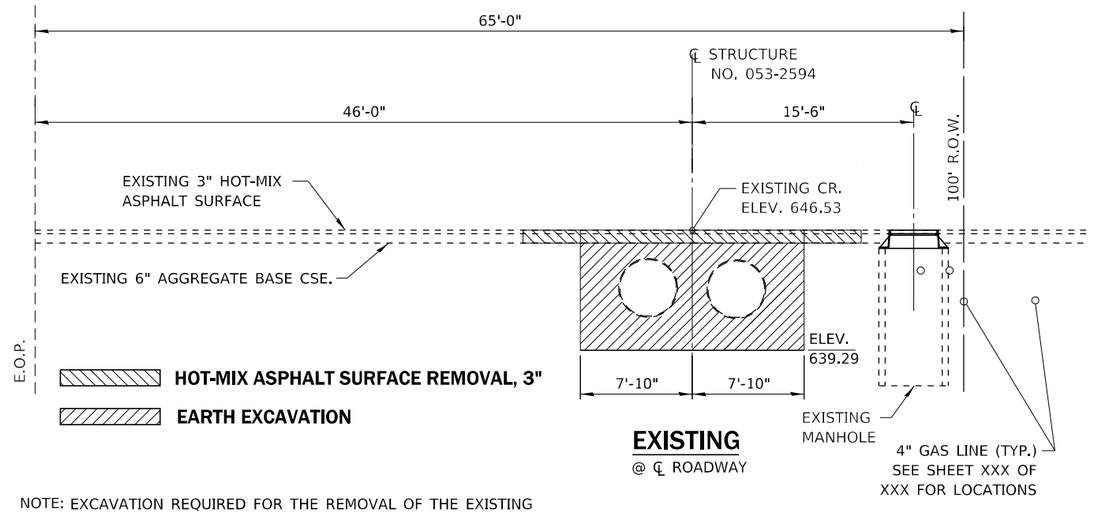
L2
4" Ø GAS LINE
51' W/℄ NEWPORT RD.
98' RT. ℄ IL 116
2'-10" DEPTH

L3
4" Ø GAS LINE
27' W/℄ NEWPORT RD.
105' RT. ℄ IL 116
4'-11" DEPTH

L4
4" Ø GAS LINE
53' E/℄ NEWPORT RD.
100' RT. ℄ IL 116
5'-0" DEPTH

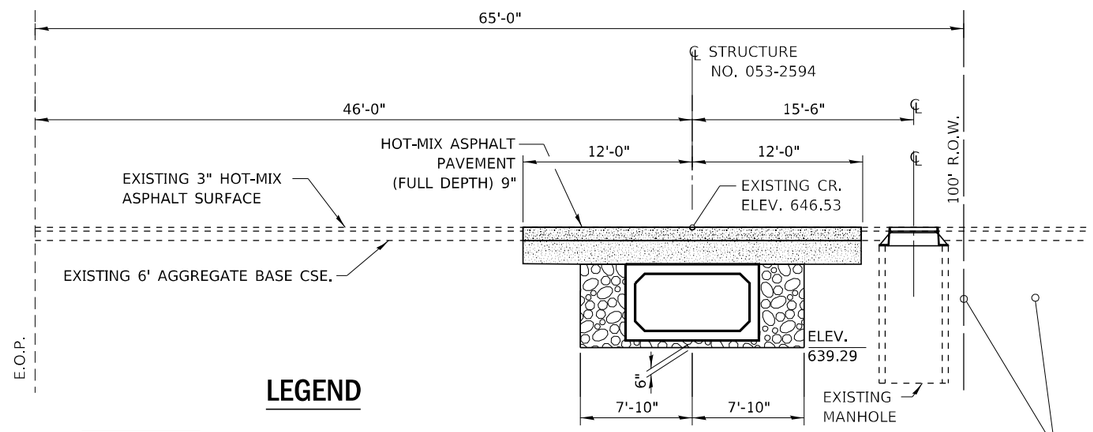
L5
4" Ø GAS LINE
74' E/℄ NEWPORT RD.
97' RT. ℄ IL 116
3'-2" DEPTH

L6
4" Ø GAS LINE
184' E/℄ NEWPORT RD.
97' RT. ℄ IL 116
2-6" DEPTH



EXISTING
@ ℄ ROADWAY

NOTE: EXCAVATION REQUIRED FOR THE REMOVAL OF THE EXISTING CORRUGATED METAL PIPE CULVERTS (CMP'S) SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PIPE REMOVAL PER ARTICLE 501.06 OF THE STANDARD SPECIFICATIONS.



LEGEND

HOT-MIX ASPHALT PAVEMENT, 9"
SUBBASE GRANULAR MATERIAL, TYPE B
POROUS GRANULAR EMBANKMENT

PROPOSED
@ ℄ ROADWAY

SECTION B-B
PRECAST CONCRETE BOX CULVERT 8' X 4'

FILE NAME = pw:\\ildot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAW	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED
		DRAWN - RW	REVISED -
	PLOT SCALE = 100.0000 ' / In.	CHECKED - YP	REVISED -
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

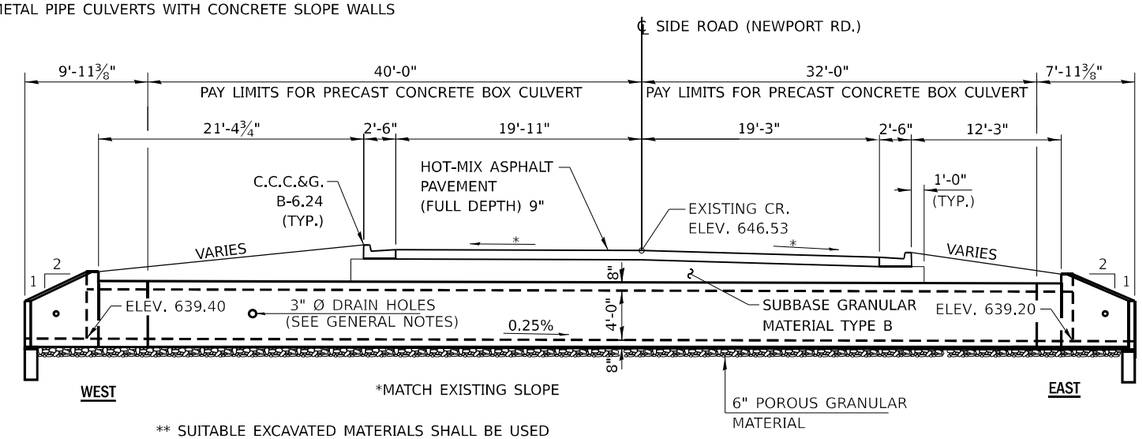
PLAN DETAILS FOR SIDE ROAD
STA. 116+32 RT. (NEWPORT RD.)

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	11
		CONTRACT NO. 66M64		
	ILLINOIS FED. AID PROJECT			

BENCHMARK NO. 2: CHISLED "X" ON CURB, SE CORNER OF HAND HOLE, IL 116 AND NEWPORT RD. ELEVATION 645.49

EXISTING STRUCTURE: TWIN 54" Ø X 90' CORRUGATED METAL PIPE CULVERTS WITH CONCRETE SLOPE WALLS



** SUITABLE EXCAVATED MATERIALS SHALL BE USED TO RECONSTRUCT EMBANKMENT SLOPES (TYP.)

ELEVATION

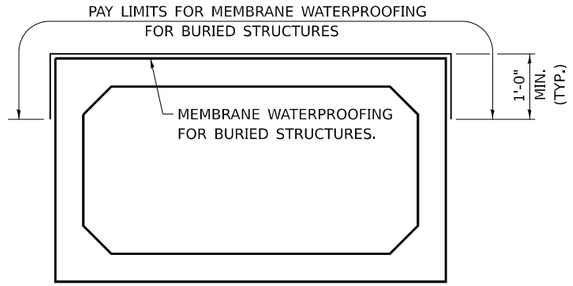
GENERAL NOTES

THE DESIGN FILL HEIGHT FOR THIS BOX IS 2.6 FT. THE PRECAST BOX CULVERT SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 1577.

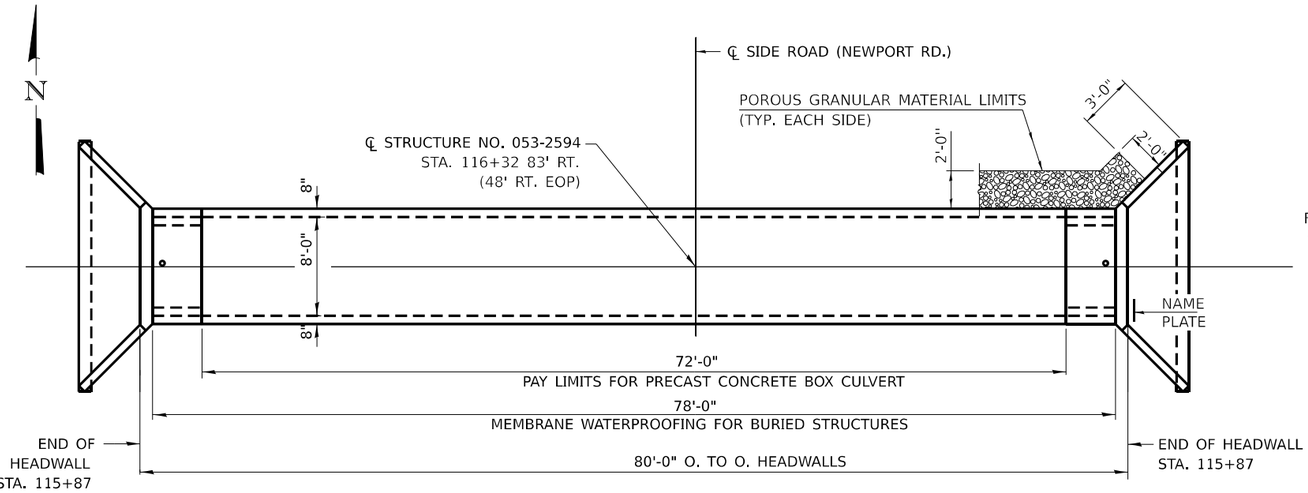
DRAIN HOLES SHALL BE PROVIDED ON EXTERIOR CULVERT WALLS FOR EACH PRECAST BOX SEGMENT WITH A CLEAR RISE GREATER THAN 3 FT. THE DRAIN HOLE SHALL BE LOCATED WITHIN 1/3 OF THE CLEAR RISE OF THE BOX CULVERT, SHALL NOT INTERCEPT THE HAUNCH, AND SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 503.11 OF THE STANDARD SPECIFICATION.

NONWOVEN GEOTEXTILE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ART. 1080.01 OF THE STANDARD SPECIFICATIONS. THE MINIMUM WEIGHT OF THE FABRIC SHALL BE 6 OUNCES PER SQUARE YARD.

PRECAST CONCRETE BOX CULVERTS AND BOX CULVERT END SECTIONS SHALL BE BACKFILLED WITH POROUS GRANULAR EMBANKMENT IN THE REQUIRED EXCAVATION AREAS ON THE SIDES OF THE BOX CULVERT FROM THE TOP OF THE BOX CULVERT TO THE BOTTOM OF THE BOX CULVERT. THIS AREA OF PGE IS INCLUDED IN THE POROUS GRANULAR EMBANKMENT PAY ITEM. THE 6-INCH THICK LAYER OF POROUS GRANULAR MATERIAL REQUIRED UNDER THE PRECAST CONCRETE BOX CULVERT, ACCORDING TO SECTION 540.06 OF THE STANDARD SPECIFICATIONS, SHALL ALSO APPLY TO THE END SECTIONS. COST OF THIS POROUS GRANULAR MATERIAL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE OF THE WORK FOR WHICH IT IS REQUIRED.



MEMBRANE WATERPROOFING FOR BURIED STRUCTUREE



PLAN
STRUCTURE NO. 053-2594

** SUITABLE EXCAVATED MATERIALS SHALL BE USED TO RECONSTRUCT EMBANKMENT SLOPES (TYP.).

IN THE EVENT THAT ADDITIONAL MATERIAL IS REQUIRED TO RECONSTRUCT THE EMBANKMENT ADJACENT TO THE NEW BOX CULVERT STRUCTURES, THE CONTRACTOR SHALL FURNISH AND PLACE MATERIAL ACCORDING TO SECTION 204 OF THE STANDARD SPECIFICATIONS AND AS APPROVED BY THE ENGINEER. COST OF FURNISHING, PLACING AND COMPACTING THE MATERIAL SHALL BE ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

STATION 116+32.10
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 673 SEC. (112X)C-4
LOADING HL-93
STRUCTURE NO. 053-2594

NAME PLATE
SEE STD. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
PIPE CULVERT REMOVAL	FOOT	180
SLOPE WALL REMOVAL	SQ. YD.	68
NAME PLATES	EACH	1
BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2
PRECAST CONCRETE BOX CULVERTS, 8' X 4"	FOOT	72
POROUS GRANULAR EMBANKMENT	CU. YD.	150
MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SQ. YD.	98

WATERWAY INFORMATION

DRAINAGE AREA = 0.6 SQ. MI. LOW GRADE ELEV. = 646.63 @ STA. 116+323

FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT. EXIST.	OPENING SQ. FT. PROP.	NAT. H.W.E.	HEAD - FT. EXIST.	HEAD - FT. PROP.	HEADWATER EL. EXIST.	HEADWATER EL. PROP.
TEN-YEAR	10	81	19	25	642.6	0.5	0.1	643.1	642.7
DESIGN	50	129	24	39	643.2	0.8	0.3	644.0	643.5
BASE	100	150	26	31	643.4	1.0	0.4	644.4	643.8
SCOUR CHECK	200	172	28	31	643.6	1.3	0.6	644.8	644.2
MAX. CALC.	500	201	29	31	643.8	1.7	0.9	645.6	644.7

DESIGN SPECIFICATIONS

2020 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
CUSTOMARY U.S. UNITS, 9TH EDITION

LOADING HL-93

DESIGN STRESSES

PRECAST UNITS

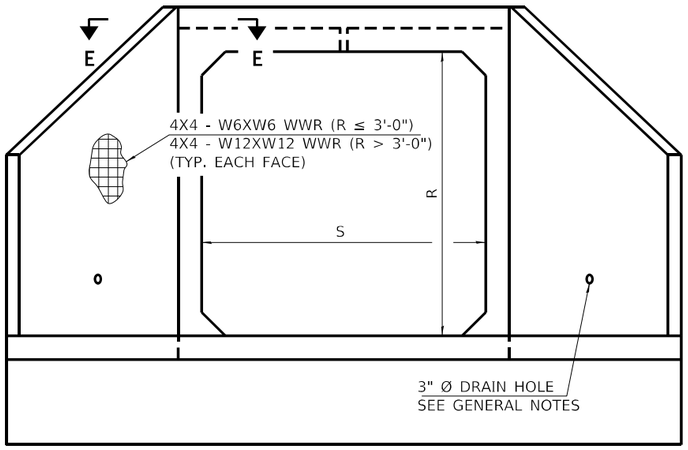
f'c = 5,000 psi
fy = 65,000 PSI (WELDED WIRE REINFORCEMENT)

GENERAL PLAN AND ELEVATION
IL RTE. 116 OVER A DRAINAGE DITCH
F.A.P. RTE. 673 SEC. (112X)C-4
LIVINGSTON COUNTY
STATION 116+32.10
S.N. 053-2594

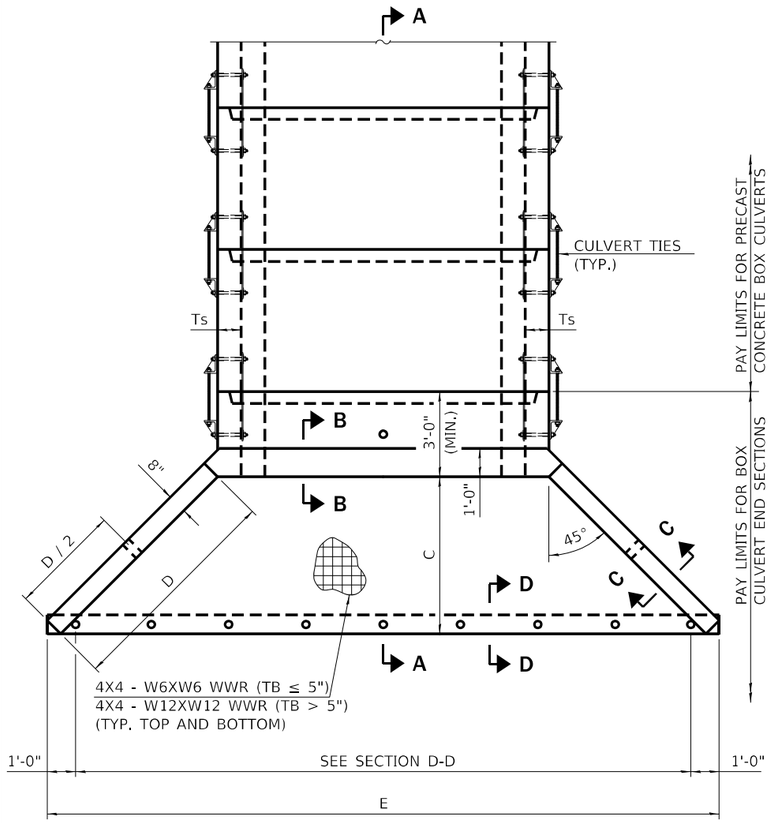
FILE NAME = pw://ildot-pw.bentley.com:PWIDOT/Documents/IDOT Offices/District 3/ORD Projects/D366M76/CADData/CADsheets/66M64 GPE.dgn	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
Default		DRAWN - RW	REVISED -	
	PLOT SCALE = 50.000 ' / in.	CHECKED - YP	REVISED -	
	PLOT DATE = 1/27/2023	DATE - 6/4/2022	REVISED -	

GENERAL PLAN AND ELEVATION FOR STRUCTURE NO. 053-2594
NEWPORT RD.
SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

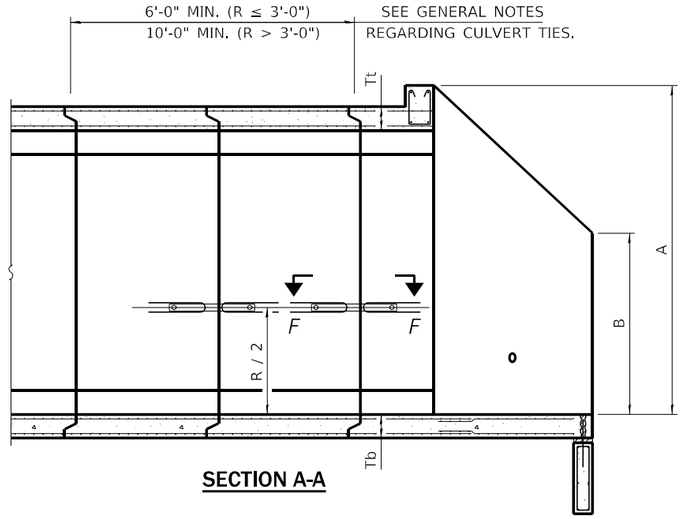
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	12
		CONTRACT NO. 66M64		
	ILLINOIS	FED. AID PROJECT		



END VIEW



PLAN



SECTION A-A

GENERAL NOTES

BOX CULVERT END SECTIONS SHALL BE CONSTRUCTED ACCORDING TO THE REQUIREMENTS OF SECTION 540 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED HEREIN. END SECTIONS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR BOX CULVERT END SECTIONS.

THE CONTRACTOR MAY FURNISH THE END SECTION AS A SINGLE PRECAST CONCRETE PIECE OR CONSTRUCT THE END SECTION IN THE FIELD USING CAST-IN-PLACE (CIP) CONSTRUCTION. FOR CIP CONSTRUCTION, THE BOTTOM SLAB THICKNESS SHALL BE NCREASED BY 2" AND THE CLEAR COVER TO THE BOTTOM MAT OF REINFORCEMENT SHALL BE INCREASED TO 3".

BOX SECTION DIMENSIONS, MATERIALS, AND REINFORCEMENT DETAILS FOR BOX CULVERT END SECTIONS SHALL BE ACCORDING TO THE REQUIREMENTS FOR ASTM C 1577 AS REQUIRED FOR THE DESIGN OF THE PORTION OF THE CULVERT WITHIN THE LIMITS OF PRECAST CONCRETE BOX CULVERTS EXCEPT AS MODIFIED HEREIN.

THE NUMBER OF CULVERT TIES SHALL BE SUFFICIENT TO ENGAGE THE MINIMUM LENGTH OF CULVERT BARREL SHOWN WITHIN THE PAY LIMITS FOR PRECAST CONCRETE BOX CULVERTS AND WILL BE DEPENDENT UPON THE LENGTH OF BOX CULVERT SEGMENTS FURNISHED BY THE CONTRACTOR. CULVERT TIES ARE NOT REQUIRED FOR BOX CULVERTS HAVING A RISE (R) LESS THAN OR EQUAL TO 3 FT AND A SPAN (S) GREATER THAN OR EQUAL TO 10 FT.

ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING OR CONSTRUCTING THE TOEWALL AND CULVERT TIES WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR BOX CULVERT END SECTIONS OF THE CULVERT NUMBER SPECIFIED.

SHOP DRAWINGS THAT DETAIL SLAB THICKNESS AND REINFORCEMENT LAYOUT FOR THE BOX CULVERT END SECTIONS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL. REINFORCEMENT BARS NOT DETAILED HEREIN SHALL BE DETAILED WITH A CLEAR DISTANCE AT THE END OF THE REINFORCEMENT NOT LESS THAN ½" NOR MORE THAN 2". FOR THE PRECAST OPTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR DETERMINING A METHOD OF HANDLING AND A CONSTRUCTION PROCEDURE SHALL BE INCLUDED ON THE SHOP DRAWINGS. THE CONTRACTOR SHALL DETERMINE AND DETAIL IN THE SHOP DRAWINGS ANY NECESSARY STRENGTHENING OR STIFFENING PROVISIONS NECESSARY TO HANDLE THE PRECAST SEGMENT. ANY REQUIRED MODIFICATIONS SHALL BE AT NO EXTRA CHARGE.

THE CONTRACTOR MAY USE REINFORCEMENT BARS IN LIEU OF WELDED WIRE REINFORCEMENT (WWR). REINFORCEMENT BARS SHALL BE LIMITED TO THE SIZES OF #3 THROUGH #5 BARS, A MAXIMUM SPACING OF THE LESSER OF 8" OR THE MEMBER THICKNESS, AND SHALL RESULT IN AN AREA OF REINFORCEMENT EQUAL TO OR GREATER THAN THAT PROVIDED BY THE WWR. MINIMUM LAP LENGTHS DETAILED HEREIN ARE APPLICABLE TO WWR AND REINFORCEMENT BARS.

REINFORCEMENT (CIRCUMFERENTIAL AND LONGITUDINAL) IN THE CULVERT BARREL PORTION OF THE END SECTION BEING LAPPED WITH REINFORCEMENT FROM THE WINGWALLS OR BOTTOM SLAB OF THE END SECTION SHALL NOT BE LESS THAN THAT REQUIRED BY ASTM C 1577 FOR THE DESIGN FILL HEIGHT OR THE REINFORCEMENT DETAILED FOR THE END SECTION, WHICHEVER IS GREATER.

ONE DRAIN HOLE SHALL BE PROVIDED IN EACH WINGWALL FOR END SECTIONS OF BOX CULVERTS HAVING AN OPENING WITH A CLEAR RISE GREATER THAN 3 FT. THE DRAIN HOLE SHALL BE LOCATED WITHIN THE LOWER 1/3 OF THE CLEAR RISE OF THE BOX CULVERT AND SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 503.11 OF THE STANDARD SPECIFICATIONS.

APRON END SECTION DIMENSIONS

SPAN (S)	RISE (R)	Tt	Tb	Ts	A	B	C	D	E	CONCRETE CU. YD.	CULVERT TIES REQUIRED
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10⅝"	4'-1"	10'-4⅝"	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7⅞"	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10⅝"	5'-6"	12-4⅝"	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7⅞"	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7.5"	6"	5"	3'-4½"	2'-2½"	2'-11⅜"	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8½"	3'-10"	11'-2⅜"	2.8	Yes
4'-0"	3'-0"	7.5"	6"	5"	4'-4½"	2'-8½"	3'-11⅜"	5'-7"	13'-8⅛"	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8½"	5'-3"	13'-2⅜"	3.7	Yes
4'-0"	4'-0"	7.5"	6"	5"	5'-4½"	3'-2½"	4'-11⅜"	7'-0"	15'-8⅛"	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8⅜"	6'-8"	15'-2½"	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11⅜"	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7¼"	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11⅜	5'-7"	14'-10⅛"	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7¼"	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11⅜"	7'-0"	16'-10⅛"	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9¼"	6'-9"	16'-5⅞"	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11⅜"	8'-5"	18'-10⅛"	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9¼"	8'-2"	18'-5⅞"	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11⅜"	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10⅝"	4'-1"	13'-10⅝"	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11⅜"	5'-7"	16'-0⅛"	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10⅝"	5'-6"	15'-10⅝"	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11⅜"	7'-0"	18'-0⅛"	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10¾"	6'-11"	17'-10¾"	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11⅜"	8'-5"	20'-0⅛"	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10¾"	8'-4"	19'-10¾"	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11½"	9'-10"	22'-0¼"	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10¾"	9'-9"	21'-10¾"	9.3	Yes
7'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11⅜"	4'-2"	15'-2"	4.9	Yes
7'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11⅜"	5'-7"	17'-2⅛"	6.1	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11⅜"	7'-0"	19'-2⅛"	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11⅜"	8'-5"	21'-2⅛"	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11½"	9'-10"	23'-2¼"	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11⅜"	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11⅜"	5'-7"	18'-2⅛"	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11⅜"	7'-0"	20'-2⅛"	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11⅜"	8'-5"	22'-2⅛"	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11½"	9'-10"	24'-2¼"	11.0	Yes
9'-0"	2'-0"	9"	9"	9"	3'-6"	2'-3"	3'-0¾"	4'-4"	17'-6⅞"	6.2	Yes
9'-0"	3'-0"	9"	9"	9"	4'-6"	2'-9"	4'-0¾"	5'-9"	19'-6⅞"	7.5	Yes
9'-0"	4'-0"	9'	9"	9"	5'-6"	3'-3"	5'-0¾"	7'-2"	21'-6⅞"	9.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0⅞"	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0⅛"	9'-11"	25'-5⅝"	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1½"	4'-5"	18'-10¼"	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1½"	5'-10"	20'-10¼"	8.6	No
10'-0"	4'-0"	10"	10"	10"	5'-7"	3'-4"	5'-1½"	7'-3"	22'-10⅜"	10.2	Yes
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1½"	8'-8"	24'-10⅜"	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1½"	10'-1"	26'-10⅜"	13.9	Yes
11'-0"	2'-0"	11"	11"	11"	3'-8"	2'-4"	3'-2⅞"	4'-7"	20'-3⅛"	8.2	No
11'-0"	3'-0"	11"	11"	11"	4'-8"	2'-10"	4'-2⅞"	6'-0"	22'-3⅛"	9.8	No
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2¼"	7'-4"	24'-1¾"	11.5	Yes
11'-0"	5'-0"	11"	11"	11"	6'-8"	3'-10"	6'-2¼"	8'-9"	26'-1¾"	13.3	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2¼"	10'-2"	28'-1⅞"	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3⅝"	4'-8"	21'-6½"	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3⅝"	6'-1"	23'-6½"	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3⅝"	7'-6"	25'-6⅝"	13.0	Yes
12'-0"	5'-0"	12"	12"	12"	6'-9"	3'-11"	6'-3⅝"	8'-11"	27'-6⅝"	14.1	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3⅝"	10'-4"	29'-6⅝"	17.4	Yes

NOTE:
TWO SETS OF APRON END SECTION DIMENSIONS ARE SHOWN ABOVE FOR SOME BOX CULVERT SIZES DUE TO THE TOP AND BOTTOM SLABS HAVING DIFFERENT THICKNESSES PER ASTM C 1577 FOR DESIGN FILL HEIGHTS LESS THAN 2 FT.

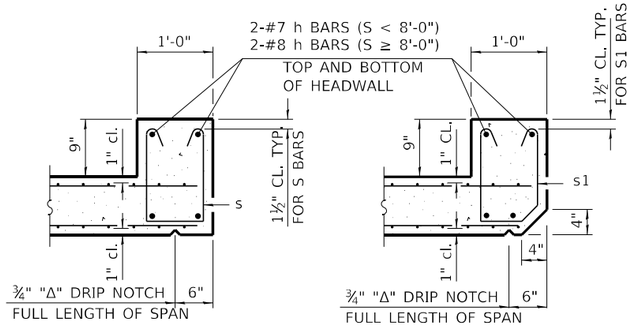
SCB-AES 2-17-2017

FILE NAME = pw:\\dot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAWN.dgn	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - RW	REVISED -	
	PLOT SCALE = 100.0000 ' / In.	CHECKED - YP	REVISED -	
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -	

PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS FOR STRUCTURE NO. 053–2593, 053–2594 AND 053–2595

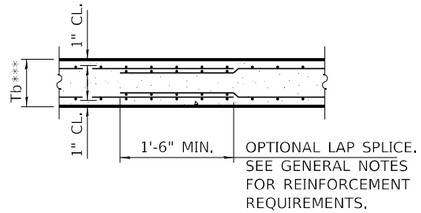
SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	13
		CONTRACT NO. 66M64		
		ILLINOIS	FED. AID PROJECT	



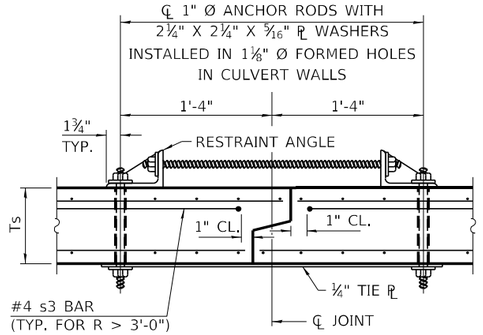
SECTION B-B
(TOP SLAB AT DOWNSTREAM END)

SECTION B-B
(TOP SLAB AT UPSTREAM END)

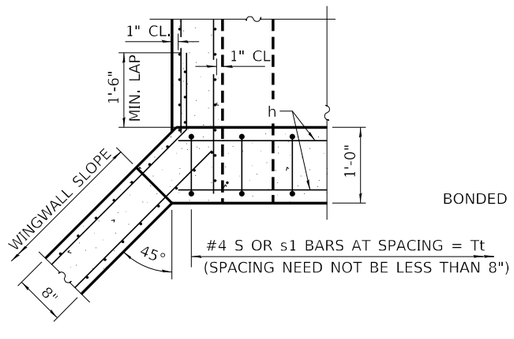


SECTION B-B
(BOTTOM SLAB)

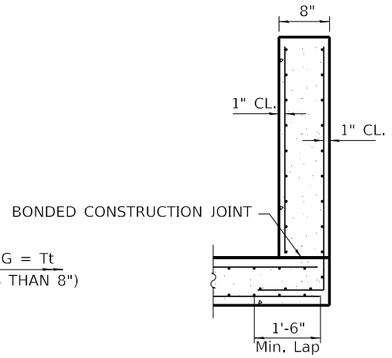
*** THIS DIMENSION SHALL BE INCREASED BY 2" FOR CIP CONSTRUCTION.



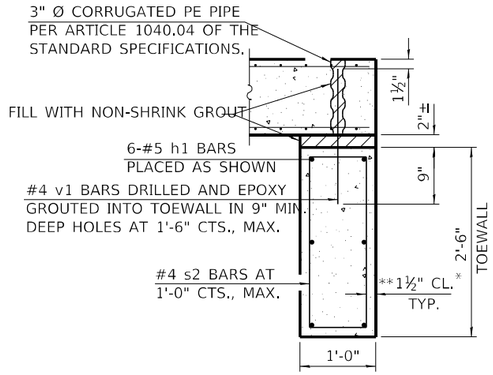
SECTION F-F
(SHOWING CULVERT TIE DETAILS)



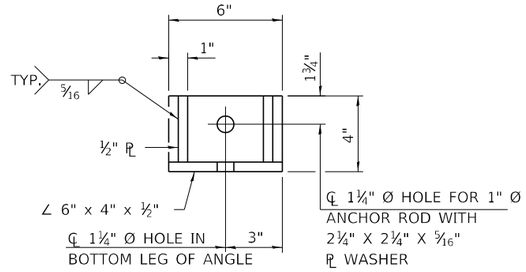
SECTION E-E



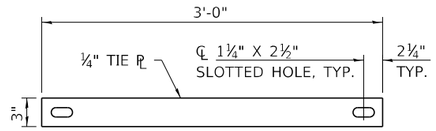
SECTION C-C



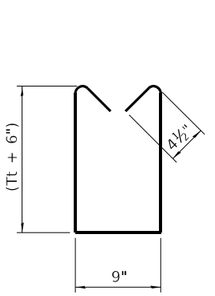
SECTION D-D



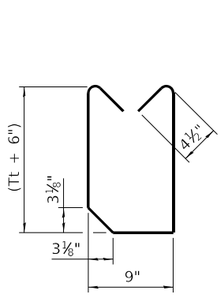
RESTRAINT ANGLE DETAIL



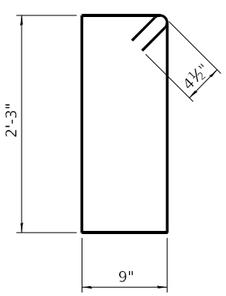
TIE PLATE DETAIL



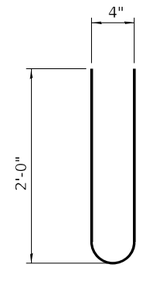
BAR s



BAR s1



BAR s2



BAR s3

TOEWALL CONSTRUCTION SEQUENCE

1. PERFORM EXCAVATION AND CONSTRUCT TOEWALL.
2. BACKFILL ACCORDINGLY AND PLACE BEDDING FOR PRECAST BOX CULVERT END SECTIONS.
3. SET PRECAST BOX CULVERT END SECTION.
4. DRILL AND EPOXY GROUT REINFORCEMENT IN TOEWALL IN ACCORDANCE WITH SECTION 584 OF THE STANDARD SPECIFICATIONS.
5. PRESSURE GROUT VOIDS USING NON-SHRINK GROUT CONFORMING TO SECTION 1024 OF THE STANDARD SPECIFICATIONS.

* THE CONTRACTOR MAY FURNISH A PRECAST OR CAST-IN-PLACE TOEWALL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRECAST TOEWALL DURING HANDLING. ADDITIONAL LIFTING POINTS MAY BE REQUIRED DEPENDING UPON THE LENGTH OF THE TOEWALL OR THE CONTRACTOR MAY NEED TO MODIFY THE DESIGN OF THE TOEWALL FOR THE PROPOSED HANDLING METHOD.

** IF SOIL CONDITIONS PERMIT, THE SIDES OF THE TOEWALL MAY BE POURED DIRECTLY AGAINST THE SOIL. THE CLEAR COVER ON THE SIDES OF THE TOEWALL SHALL BE INCREASED TO 3" BY INCREASING THE THICKNESS OF THE TOEWALL.

NOTES:

1" Ø ANCHOR RODS FOR THE CULVERT TIES SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1554, GRADE 105. STRUCTURAL STEEL FOR THE TIE PLATE AND RESTRAINT ANGLE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.04 OF THE STANDARD SPECIFICATIONS. ALL COMPONENTS OF THE CULVERT TIE DETAIL SHALL BE GALVANIZED ACCORDING TO THE REQUIREMENTS OF AASHTO M 111 OR M 232 AS APPLICABLE. 2¼"X2¼"X5/16" PLATE WASHERS SHALL BE PROVIDED UNDER EACH NUT REQUIRED FOR THE ANCHOR RODS. ANCHOR RODS CONNECTING PRECAST SECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION FOLLOWED BY AN ADDITIONAL TURN ON ONE OF THE NUTS FOR ANCHOR RODS INSTALLED IN THE WALLS. MATCH MARKS SHALL BE PROVIDED ON THE BOLT AND NUT TO VERIFY RELATIVE ROTATION BETWEEN THE BOLT AND THE NUT. HOLES IN THE WALLS FOR THE CULVERT TIE ASSEMBLY MAY BE DRILLED USING CORE BITS IN LIEU OF USING FORMED HOLES.

SCB-AES

2-17-2017

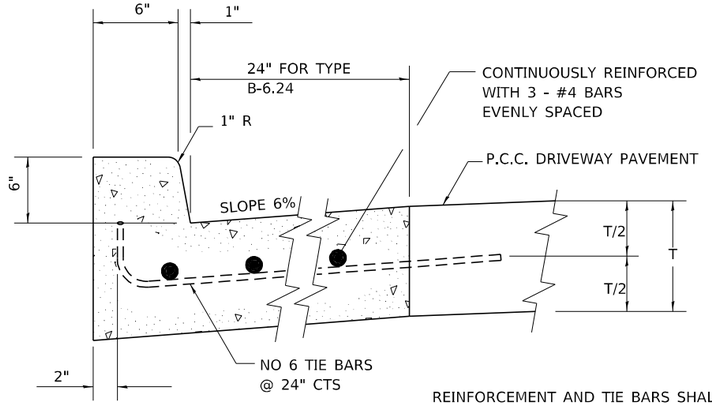
FILE NAME = pw:\\idot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRWG	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -
Default		DRAWN - RW	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - YP	REVISED -
	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS FOR STRUCTURE NO. 053-2593, 053-2594 AND 053-2595

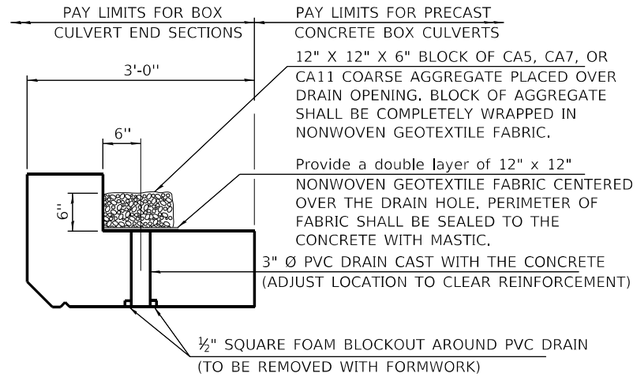
SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(112X)CLV	LIVINGSTON	18	14
		CONTRACT NO. 66M64		
	ILLINOIS	FED. AID PROJECT		



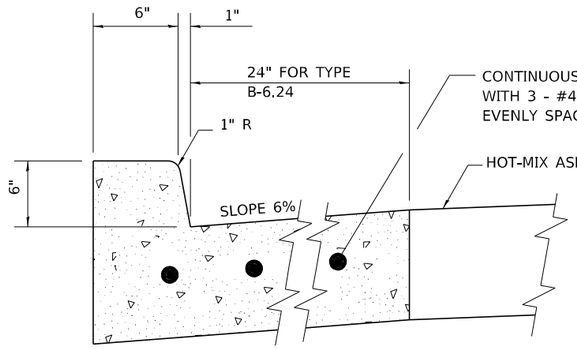
REINFORCEMENT AND TIE BARS SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24

REINFORCEMENT AND TIE BARS FOR COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 ADJACENT TO P.C.C. PAVEMENT



DRAIN DETAIL

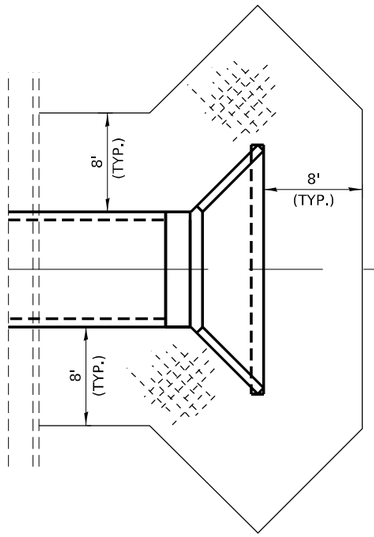
(ALL COSTS ASSOCIATED WITH FURNISHING AND CONSTRUCTING THE ABOVE DRAIN DETAIL WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE ASSOCIATED WORK.)



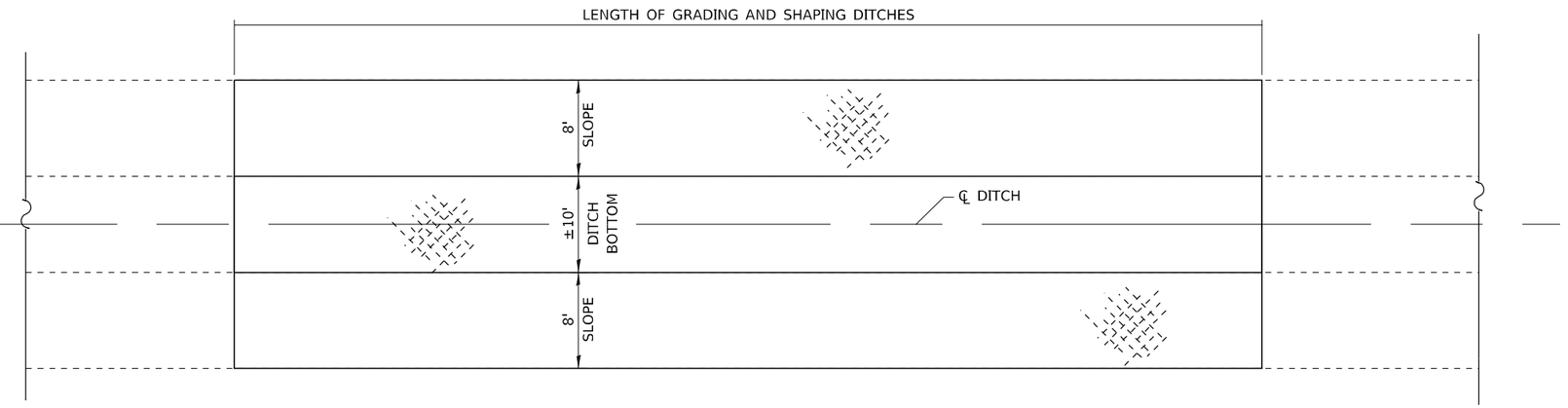
REINFORCEMENT SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24

REINFORCEMENT FOR COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 ADJACENT TO FLEXIBLE PAVEMENT

FILE NAME = pw:\\dot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAIN	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MISCELLANEOUS DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RW	REVISED -				673	(112X)CLV	LIVINGSTON	18	15
	PLOT SCALE = 100.0000 ' / in.	CHECKED - YP	REVISED -						CONTRACT NO. 66M64		
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -		SCALE:	SHEET 6 OF 9 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		



AT END SECTION

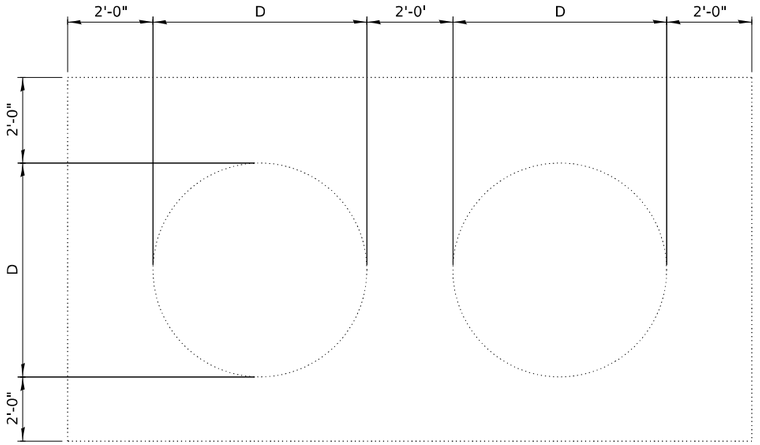


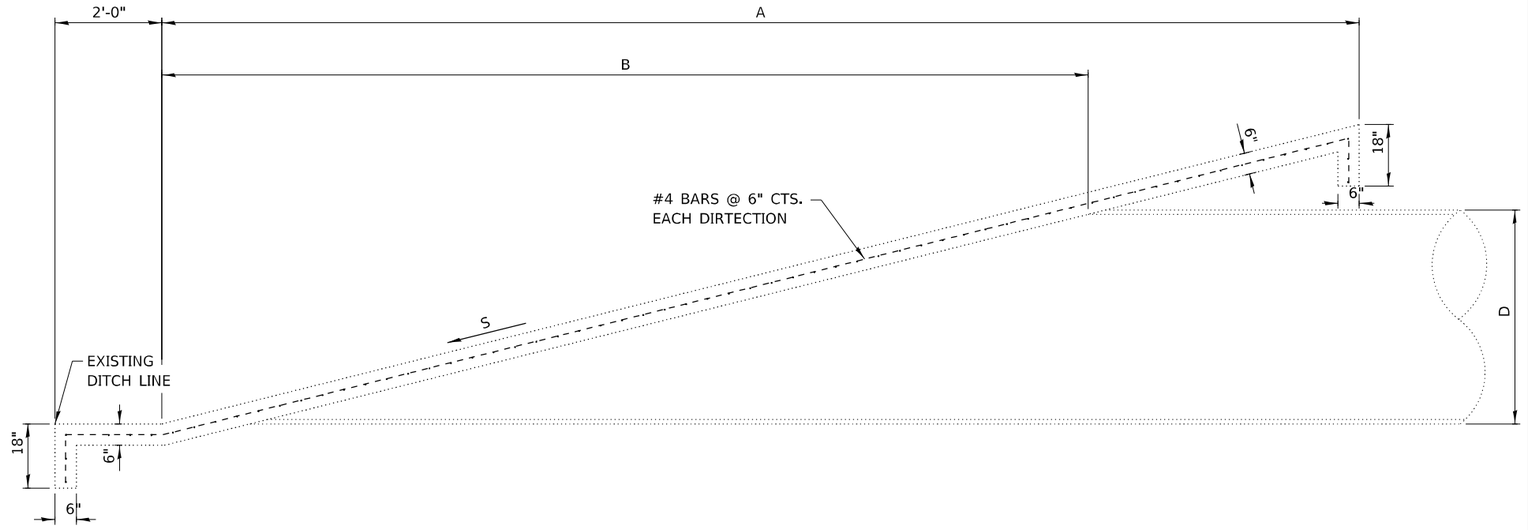
AT GRADING AND SHAPING DITCH LOCATIONS

HEAVY DUTY EROSION CONTROL BLANKET

EROSION CONTROL BLANKET AT PRECAST CONCRETE BOX CULVERTS END SECTIONS AND DITCH CLEANING AREAS

FILE NAME = pw:\\Ildot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRWG	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL BLANKET DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RW	REVISED -			673	(112X)CLV	LIVINGSTON	18	16
	PLOT SCALE = 100.0000 ' / In.	CHECKED - YP	REVISED -					CONTRACT NO. 66M64		
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		





EXISTING CONCRETE SLOPE WALL DETAILS

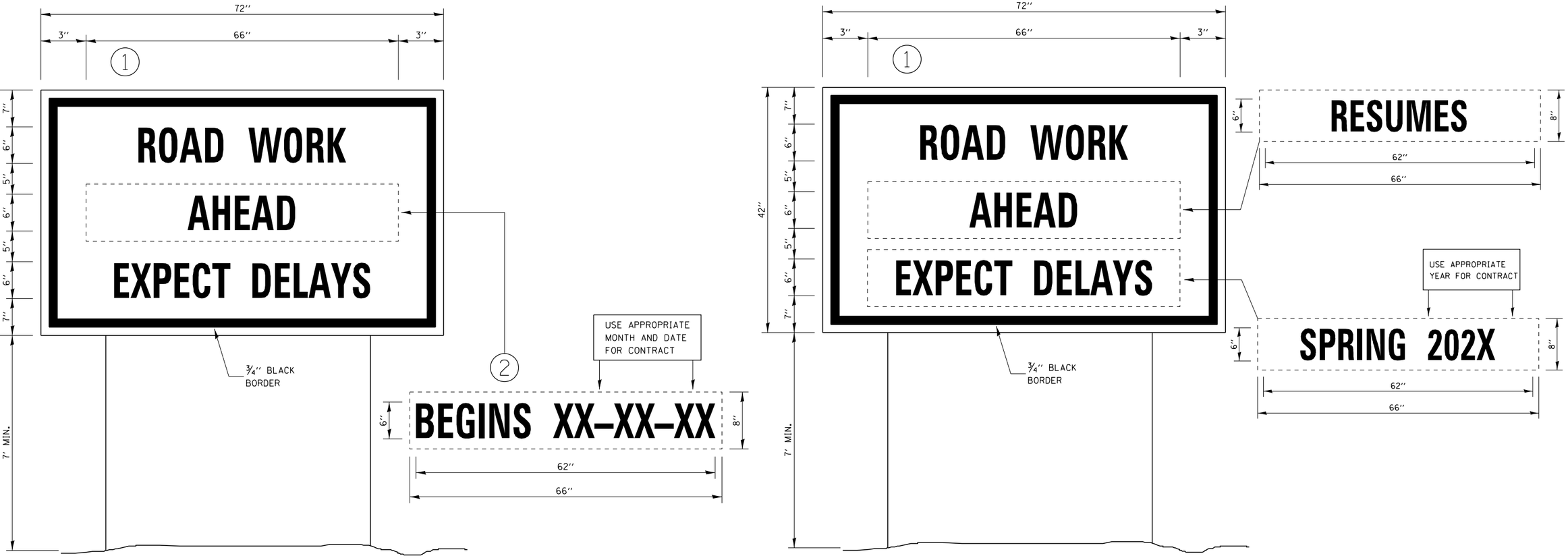
DIMENSION TABLE

LOCATION (STATION)	ENTRANCE TYPE	D	S	A	B	W	L
69+69 RT.	C.E.	54"	4:1	26'-0"	18'-0"	15'-0'	27'-0'
		54"	4:1	26'-0"	18'-0"	15'-0'	27'-0'
116+32 RT.	S.R.	54"	4:1	26'-0"	18'-0"	15'-0'	27'-0'
		54"	4:1	26'-0"	18'-0"	15'-0'	27'-0'

FOR INFORMATION ONLY

FILE NAME = pw:\\illdot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAWN	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING CONCRETE SLOPE WALL DETAILS FOR INFORMATION ONLY	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RW	REVISED -			673	(112X)CLV	LIVINGSTON	18	17
	PLOT SCALE = 100.0000 ' / in.	CHECKED - YP	REVISED -					CONTRACT NO. 66M64		
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS	FED. AID PROJECT		

TEMPORARY INFORMATION SIGNING



WINTER SHUT DOWN SIGNING

NOTES:

1. USE 6'' D BLACK LETTERING ON FLOURESENT ORANGE BACKGROUND.
2. ERECT SIGNS AT LOCATIONS IN ADVANCE OF THE ''ROAD CONSTRUCTION AHEAD'' SIGNS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) A MINIMUM OF ONE WEEK PRIOR TO THE START OF THE LANE CLOSURE.
4. REMOVE PANEL (2) ON THAT DATE.
5. SEE SPECIAL PROVISION ''TEMPORARY INFORMATION SIGNING'' FOR ADDITIONAL INFORMATION.
6. WILL BE PAID FOR PER SQ FT AS ''TEMPORARY INFORMATION SIGNING''. EACH SIGN = 21 SQ FT AND THE DATE PANEL (2) WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

FILE NAME = pw:\\lldot-pw.bentley.com:PWIDOT\Documents\IDOT Offices\District 3\Projects\D366M64\CADData\CADsheets\D366M64-PLDRAWN	USER NAME = ronald.woodshank	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY INFORMATION SIGNING			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RW	REVISED -					673	(112X)CLV	LIVINGSTON	18	18
	PLOT SCALE = 100.0000 ' / In.	CHECKED - YP	REVISED -							CONTRACT NO. 66M64		
Default	PLOT DATE = 12/19/2022	DATE - 6/4/2022	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		