

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
2. THE LOCATIONS OF EXISTING GAS MAINS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
3. THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.
SEEDING, CLASS 2 (SPECIAL) = 2.25 ACRES
4. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

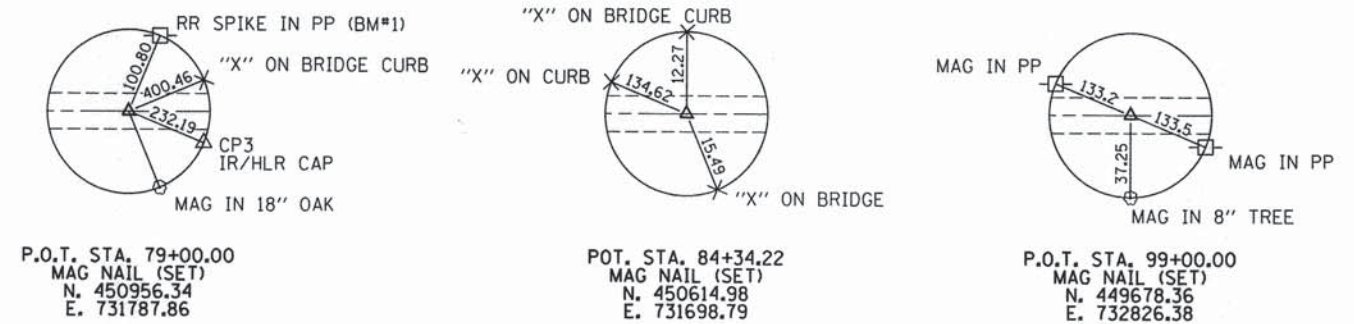
ALL HOT MIX ASPHALT	112 LBS/SQ. YD./INCH OF THICKNESS
ALL AGGREGATE	2.05 TONS/CU. YD.
BITUMINOUS MATERIALS:	
ON PAVEMENT	0.05 LB./SQ. FT.
INTERMEDIATE LIFTS (FOG COAT)	0.025 LB./SQ. FT.
ON AGGREGATE SURFACE	0.25 LB./SQ. FT.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING FIELD DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
6. AT ALL LOCATIONS WHERE THE PROPOSED HOT MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.
7. VERTICAL PANELS SHOWN ON STANDARD 701321 WILL NOT BE REQUIRED ON THE STAGE II NEW BRIDGE PARAPET. THE BARRIER WALL REFLECTORS SHALL BE INSTALLED PRIOR TO OPENING TO TRAFFIC.
8. ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC. THE TEMPORARY TRAFFIC SIGNALS SHALL BE TURNED OFF OR COVERED.
9. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE LEFT IN PLACE UNTIL REMOVAL IS REQUIRED TO CONSTRUCT FINAL GRADE LINES.
10. TREES WITHIN THE RIGHT-OF-WAY WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED ONLY AT THE DIRECTION OF THE ENGINEER. ANY TREES ALREADY FELLED SHALL BE MEASURED AND REMOVED AS PER THE SPECIAL PROVISIONS.
11. TREE REMOVAL IS PROHIBITED BETWEEN APRIL 1 AND SEPTEMBER 30.

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 420 401-11 BRIDGE APPROACH PAVEMENT CONNECTOR
- 515001-03 NAME PLATE FOR BRIDGES
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630301-06 SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
- 631032-08 TRAFFIC BARRIER TERMINAL, TYPE 6A
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 642006-02 SHOULDER RUMBLE STRIPS, 8 IN
- 701001-02 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5M (15') AWAY
- 701006-05 OFF-ROAD OPERATIONS 2L, 2W, 4.5M (15') TO 600 MM (24") FROM PAVEMENT EDGE
- 701011-04 OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
- 701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-03 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS - DAY ONLY FOR SPEEDS > 45 MPH
- 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS, DAY ONLY
- 701321-14 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS > 45 MPH
- 701901-04 TRAFFIC CONTROL DEVICES
- 704001-07 TEMPORARY CONCRETE BARRIER
- 780001-05 TYPICAL PAVEMENT MARKINGS

BENCHMARKS AND TIES



HMA MIXTURE REQUIREMENTS

LOCATION(S):	FAS 6891CH14/ROYALTON ROAD	FAS 6891CH14/ROYALTON ROAD	FAS 6891CH14/ROYALTON ROAD	FAS 6891CH14/ROYALTON ROAD
MIXTURE USE(S):	HMA BASE COURSE	HMA SURFACE COURSE	HMA BINDER COURSE	HMA SHOULDERS
PG:	PG 64-22	PG 64-22	PG 64-22	PG 58-22
DESIGN AIR VOIDS:	4% @ Ndes 70	4% @ Ndes 70	4% @ Ndes 70	2% @ Ndes 70
MIXTURE COMPOSITION: (MIXTURE GRADATION):	IL 19.0	IL 9.5	IL 19.0	HMA SHOULDERS
FRICTION AGGREGATE:	NONE	MIXTURE C	NONE	NONE
MIXTURE WEIGHTS:	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS

- BM#1 - RR SPIKE IN POWER POLE
40' LT., STA. 79+93
ELEV. 389.38
- BM#2 - CHISELED "□" ON N.W. CURB
13' LT., STA. 83+00
ELEV. 388.92
- BM#3 - RR SPIKE IN POWER POLE
60' RT., STA. 96+94
ELEV. 376.83

SUMMARY OF QUANTITIES				
ITEM NO.	CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011	
			UNIT	QUANTITY
1	20100500	TREE REMOVAL, ACRES	ACRE	0.5
2	20200100	EARTH EXCAVATION	CU YD	1586
3	20300100	CHANNEL EXCAVATION	CU YD	820
4	20400800	FURNISHED EXCAVATION	CU YD	2984
5	25100115	MULCH, METHOD 2	ACRE	4.5
6	25100630	EROSION CONTROL BLANKET	SQ YD	895
7	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	432
8	28000400	PERIMETER EROSION BARRIER	FOOT	3123
9	28100207	STONE RIPRAP, CLASS A4	TON	1486
10	28200200	FILTER FABRIC	SQ YD	1601
11	30201500	LIME	TON	144
12	35100100	AGGREGATE BASE COURSE, TYPE A	TON	464
13	35501312	HOT-MIX ASPHALT BASE COURSE, 7"	SQ YD	1108
A	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	3338
15	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	120
16	40600990	TEMPORARY RAMP	SQ YD	68
17	40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	37
18	40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	258
Δ	42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	40
	19	42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD 40
20	44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	183
21	48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	666
22	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	505
23	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
24	50104650	SLOPE WALL REMOVAL	SQ YD	686
25	50200100	STRUCTURE EXCAVATION	CU YD	188
26	50200300	COFFERDAM EXCAVATION	CU YD	328
A	50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1
A	50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1
29	50300225	CONCRETE STRUCTURES	CU YD	219.2
30	50300255	CONCRETE SUPERSTRUCTURE	CU YD	243.5

A SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES				
ITEM NO.	CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011	
			UNIT	QUANTITY
31	50300260	BRIDGE DECK GROOVING	SQ YD	1020
32	50300300	PROTECTIVE COAT	SQ YD	1259
33	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
34	50500505	STUD SHEAR CONNECTORS	EACH	4338
35	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	84490
36	50800515	BAR SPLICERS	EACH	1096
* 37	50901050	STEEL RAILING, TYPE SM	FOOT	596
38	51202100	FURNISHING STEEL PILES HP14X117	FOOT	1332
39	51202305	DRIVING PILES	FOOT	1332
40	51204100	TEST PILE STEEL HP14X117	EACH	4
41	51204650	PILE SHOES	EACH	24
42	51500100	NAME PLATES	EACH	1
43	52000110	PREFORMED JOINT STRIP SEAL	FOOT	62
44	52100510	ANCHOR BOLTS, 3/4"	EACH	24
45	52100520	ANCHOR BOLTS, 1"	EACH	24
46	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	58
* 47	63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	100
* 48	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
* 49	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
* 50	63200310	GUARDRAIL REMOVAL	FOOT	464
51	64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	1585
52	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9
53	67100100	MOBILIZATION	L SUM	1
A	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
A	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
A	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
A	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
58	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10
* 59	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
60	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2

A SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES					
ITEM NO.	CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0011		
			UNIT	QUANTITY	
61	70300100	SHORT TERM PAVEMENT MARKING	FOOT	72	
62	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4392	
63	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1479	
64	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1625	
A	65	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	588
66	70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	
67	70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	
* 68	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	4392	
* 69	78200410	GUARDRAIL MARKERS, TYPE A	EACH	14	
* A	70	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
71	78300100	PAVEMENT MARKING REMOVAL	SQ FT	791	
* 72	86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1	
A	73	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	2.25
A	74	X4404400	PAVEMENT REMOVAL (SPECIAL)	SQ YD	1382
A	75	X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	200
A	76	X5040100	PRECAST BRIDGE APPROACH SLAB	SQ FT	1749
A	77	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	128
A	78	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	124
A	79	Z0026407	TEMPORARY SHEET PILING	SQ FT	531
80	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	
	Z0016000	TRAINEES	hr	500	
A	81	31001900	PROCESSING LIME STABILIZED SOIL MIXTURE 36"	SQ YD	1778
	Z0016004	TRAINEES TRAINING PROGRAM GRADUATE	hr	500	

A SEE SPECIAL PROVISIONS
* SPECIALTY ITEMS

ROADWAY SCHEDULE															
LOCATION	PROCESSING LIME STABILIZED SOIL MIXTURE 36"	LIME	AGGREGATE BASE COURSE TYPE A	HOT-MIX ASPHALT BASE COURSE 7"	BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	TEMPORARY RAMP	HOT-MIX ASPHALT BINDER COURSE IL 19.0, N70	HOT-MIX ASPHALT SURFACE COURSE MIX "C", N50 (2.25")	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	STRIP REFLECTIVE CRACK CONTROL TREATMENT	AGGREGATE SHOULDERS TYPE B 8"	HOT-MIX ASPHALT SHOULDERS 8"	SHOULDER RUMBLE STRIPS 8 INCH	PAVEMENT REMOVAL (SPECIAL)
	TON	TON	TON	TON	POUND	SQ YD	SQ YD	TON	TON	SQ YD	FOOT	SQ YD	SQ YD	FOOT	SQ YD
FAS 689 \ CH14 \ ROYALTON RD															
STA 81+00 TO STA 82+99.14					180	68	34	17	51	20		131	131	294	
STA 85+69.31 TO STA 97+00	1778	144	464	1108	3158	52	34	20	207	20	183	535	374	1291	1382
TOTAL	1,778	144	464	1,108	3,338	120	68	37	258	40	183	666	505	1,585	1,382

EARTHWORK SUMMARY							
LOCATION	EARTH EXCAVATION	CHANNEL EXCAVATION	SHRINKAGE FACTOR	% USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT REQUIRED	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	20200100	20300100					
	CU YD	CU YD			CU YD	CU YD	CU YD
FAS 689 \ CH14 \ ROYALTON ROAD							
STA 81+05 TO STA 82+87.08	17		25.00%	100.00%	13	110	-97
STA 82+87.08 TO STA 85+56.92		820	25.00%	70.00%	574		574
STA 85+56.92 TO STA 97+00	1569		25.00%	100.00%	1177	4638	-3461
TOTAL	1586				1764	4748	-2984
					FURNISHED EXCAVATION	2984	CU.YD.

GUARDRAIL SCHEDULE						
LOCATION	STEEL PLATE BEAM GUARD RAIL TYPE A 9 FOOT POSTS	TRAFFIC BARRIER TERMINAL TYPE 6A	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT)	GUARD RAIL REMOVAL	TERMINAL MARKER DIRECT APPLIED	GUARDRAIL MARKERS TYPE A
	63000001	63100087	63100167	63200310	78201000	78200410
	FOOT	EACH	EACH	FOOT	EACH	EACH
FAS 689 \ CH14 \ ROYALTON RD						
RT. STA 81+26.21 TO RT. STA 82+99.60	50	1	1	165	1	
LT. STA 81+76.21 TO LT. STA 82+99.60		1	1	66	1	
RT. STA 85+68.42 TO RT. STA 86+67.80		1	1	66	1	
LT. STA 85+68.42 TO LT. STA 87+17.8	50	1	1	167	1	
RT. STA 81+26.21 TO RT. STA 86+67.80						7
LT. STA 81+76.21 TO LT. STA 87+17.80						7
PROJECT TOTAL	100	4	4	464	4	14

PAVEMENT MARKING SCHEDULE							
LOCATION	TEMPORARY PAVEMENT MARKING - LINE 4"		PAINT PAVEMENT MARKING - LINE 4"		SHORT TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL	PAVEMENT REMOVAL
	SINGLE WHITE EDGE LINE	SKIPPED DASHED YELLOW CENTERLINE	SINGLE WHITE EDGE LINE	SKIPPED DASHED YELLOW CENTERLINE			
	70300220	70300220	78001110	78001110			
	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	SQ FT
FAS 689 \ CH14 \ ROYALTON RD							
LT. STA 80+05.69 TO LT. STA 99+58	1,952		1,952			651	546
CL. STA 80+05.69 TO CL. STA 99+58		488		488		163	49
RT. STA 80+05.69 TO RT. STA 99+58	1,952		1,952			651	196
CL. STA 80+05 TO CL. STA 87+75					72	14	
SUBTOTAL	3904	488	3904	488	72	1479	791
TOTAL		4392		4392	72	1479	791

STAGING SCHEDULE					
LOCATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	TEMPORARY BRIDGE TRAFFIC SIGNALS	IMPACT ATTENUATORS TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	IMPACT ATTENUATORS RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3
	70400100	70400200	70106500	70600250	70600350
	FOOT	FOOT	EACH	EACH	EACH
FAS 689 \ CH14 \ ROYALTON RD					
STAGE I					
RT. STA 80+05.69 TO RT. STA 99+58	1625		1	2	
STAGE II					
LT. STA 80+05.69 TO LT. STA 88+50		588			2
TOTAL	1625	588	1	2	2