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**LIST OF STANDARDS**

- 280001-06 TEMPORARY EROSION CONTROL SYSTEMS
- 482011-03 HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
- 630001-10 STEEL PLATE BEAM GUARDRAIL
- 630106 LONG-SPAN GUARDRAIL OVER CULVERT
- 630301-05 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
- 701006-03 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24" (600 MM) FROM PAVEMENT EDGE
- 701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701901-02 TRAFFIC CONTROL DEVICES
- 701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH

**GENERAL NOTES**

1. ALL AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AT THE CONTRACTOR'S EXPENSE.
2. THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING AND TOPO SHOWN IN THE PLANS WAS CREATED USING FIELD MEASUREMENTS MADE BY DESIGN PERSONNEL. BOTH SHALL BE ASSUMED TO BE APPROXIMATE.
3. THE CONTRACTOR SHALL VERIFY ALL DEMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
4. THE CONTRACTOR SHALL EXERCISE CARE IN PERFORMING REMOVALS SO AS NOT TO DISRUPT ADJOINING FEATURES THAT ARE TO REMAIN IN PLACE. ANY DAMAGE CAUSED TO ADJOINING FEATURES AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.
5. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUB-CONTRACTED WORK, REGARDLESS OF FUNDING SOURCE. THE SPECIAL PROVISIONS, SPECIFICATIONS, AND STANDARD SPECIFICATIONS SHALL GOVERN CONTRACTUAL REQUIREMENTS FOR SAID ARRANGEMENTS.
6. ALL SAW CUTTING REQUIRED FOR REMOVALS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER UNIT OF REMOVAL QUANTITIES.
7. THE CONTRACTOR SHALL EXERCISE CARE IN EXCAVATING AROUND EXISTING UTILITIES TO REMAIN IN PLACE, SUCH AS WATER AND SEWER MAINS, AND SHALL BE RESPONSIBLE FOR REPAIR OF THESE AND MAINTENANCE OF SERVICE, IF DAMAGED BY THE CONTRACTOR'S ACTIVITIES, AS DEEMED SUCH BY THE ENGINEER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING POSITIVE DRAINAGE IN THE DISTURBED AREAS, TO THE SATISFACTION OF THE ENGINEER.
9. IN ADDITION TO WARNING SIGNS SHOWN ON THE STANDARDS FOR TRAFFIC CONTROL, ROAD CONSTRUCTION AHEAD SIGNS SHALL BE PLACED ON INTERSECTING SIDE ROADS THROUGHOUT THE WORK ZONE.
10. ALL ADVANCED WARNING SIGNS SHALL BE 48" FLUORESCENT ORANGE.
11. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF UTILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

- AMEREN ILLINOIS (GAS AND ELECTRIC)
- AT&T ILLINOIS
- BUCKEYE PARTNERS L.P. WOOD RIVER PIPELINE
- CHARTER COMMUNICATIONS, INC.
- CONSOLIDATED COMMUNICATIONS, INC.
- CITY OF EDWARDSVILLE
- CITY OF EDWARDSVILLE PUBLIC WORKS
- VILLAGE OF HAMEL
- KEYSTONE PIPELINE
- MADISON TELEPHONE COMPANY
- MARATHON PIPELINE LLC
- NORTHEAST CENTRAL COUNTY PUBLIC WATER DISTRICT
- PAE TEC
- PLAINS MARKETING, L.P.
- SOUTHWESTERN ELECTRIC COOPERATIVE, INC.

MEMBERS OF J.U.L.I.E. (800) 892-0123 ARE INDICATED BY \*. NON-MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

12. IT IS THE INTENT OF THIS PROJECT TO COMPLETE THE MAJORITY OF GRADING WITHIN THE FRONT SLOPES UTILIZING 1V:2.5H (TYPICAL) TO 1V:2H (MAX) SLOPES. HOWEVER, THERE ARE SOME LOCATIONS WHERE GRADING WILL EXTEND BEYOND THE TOE OF THE SLOPE. SAID LOCATIONS ARE ESTIMATED WITHIN THE QUANTITIES AND WILL REQUIRE RE-GRADING OF THE DITCH AND BACK SLOPE. THE CONTRACTOR SHOULD BE AWARE THAT THE ACTUAL EXTENTS OF WORK MAY VARY FROM THAT SHOWN. FINAL EXTENT OF GRADING WILL BE AT THE DISCRETION OF THE ENGINEER. RE-GRADING SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION.
13. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES.

**APPLICATION RATES**

AGGREGATE MATERIALS	2.05 TONS/CU YD
GRANULAR MATERIALS	2.05 TONS/CU YD

**FOR SEEDED AREAS:**

NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE

14. THE FOLLOWING HMA MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

**HMA MIXTURE REQUIREMENTS**

ROUTE	FAS/FAU 8890 (IL 157)
SECTION	(65,66)-J
COUNTY	MADISON
CONTRACT	76F18

DESCRIPTION	HISP GUARDRAIL ON IL ROUTE 157 FROM IL ROUTE 143 IN EDWARDSVILLE TO IL ROUTE 140 IN HAMEL
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ADT (Construction Yr.)	8000
MU%	1
SU%	2.5
20 YR. ESAL'S	0.73

MIXTURE USE	SHOULDERS ≥ 2.25"	SHOULDERS < 2.25"		
AC/PG	PG 64-22	PG 64-22		
RAP % (MAX)	See Contract RAP	See Contract RAP		
DESIGN AIR VOIDS	Special Provisions	Special Provisions		
MIX COMPOSITION	**2.0% @ Ndes=30	**2.0% @ Ndes=30		
(GRADATION MIXTURE)	NMAS 3/4"	NMAS 1/2"		
FRICION AGG				

\*\* Top Lift Shoulders - Design this mix at 2.0% voids and add asphalt to reduce voids to 1.5%.

Plan quantities for Bituminous Concrete Surface Course Items are calculated using a unit weight of 112lb/sq yd/in (59.8 kg/sq m/25 mm thickness).

16. THE HAZARD STATIONS INDICATED IN THE PLANS ARE APPROXIMATE AND ASSUMED TO BE THE CENTERLINE OF THE DRAINAGE STRUCTURE AT THE EDGE OF PAVEMENT OR THE CENTER OF THE EXISTING GUARDRAIL IF NO DRAINAGE STRUCTURE IS PRESENT.
17. AT LOCATION 6, THE REQUIRED GRADING AROUND THE END TERMINALS AT STA. 199+16 AND STA. 201+16, SHALL BE ACCOMPLISHED USING AGGREGATE SHOULDERS, TYPE A.
18. A TAPER RATE OF 20:1 WAS ASSUMED AT LOCATIONS WHERE THE DISTANCE FROM THE EDGE OF PAVEMENT TO THE FACE OF GUARDRAIL VARIES.
19. AT LOCATION 2RT, THE QUANTITY FOR GUARDRAIL REMOVAL IS TO REMOVE THE DAMAGED TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT.