

SUMMARY OF QUANTITIES				
IDOT Code #	Item	Unit of Measure	Total Quantity	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	193	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	312	
20200100	EARTH EXCAVATION	CU YD	7,859	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	19	
20800150	TRENCH BACKFILL	CU YD	1,293.2	
20900110	POROUS GRANULAR BACKFILL	CU YD	65	
25000100	SEEDING, CLASS 1	ACRE	4.8	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	432	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	432	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	432	
25100115	MULCH, METHOD 2	ACRE	4.8	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	960	
28000305	TEMPORARY DITCH CHECKS	FOOT	28	
28000400	PERIMETER EROSION BARRIER	FOOT	2,190	
28000500	INLET AND PIPE PROTECTION	EACH	101	
28100107	STONE RIPRAP, CLASS A4	SQ YD	294	
28100109	STONE RIPRAP, CLASS A5	SQ YD	268	
28200200	FILTER FABRIC	SQ YD	562	
30200650	PROCESSING/MODIFIED SOIL 12"	SQ YD	20,872	
30201500	LIME	TON	406	
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	22,962	
35101700	AGGREGATE BASE COURSE, TYPE B 5"	SQ YD	24	
35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	962	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	794	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	100	
40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	1,434	
40300500	COVER COAT AGGREGATE	TON	11	
40300800	SEAL COAT AGGREGATE	TON	26	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	500	
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	41	
42000301	PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED)	SQ YD	17,143	
42001200	PAVEMENT FABRIC	SQ YD	17,297	
42001300	PROTECTIVE COAT	SQ YD	20,258	
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	2,018	
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	22,911	
42400800	DETECTABLE WARNINGS	SQ FT	177	
44000100	PAVEMENT REMOVAL	SQ YD	381	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1,223	
44000300	CURB REMOVAL	FOOT	135	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	868	
44000600	SIDEWALK REMOVAL	SQ FT	1,183	
44004250	PAVED SHOULDER REMOVAL	SQ YD	27	
50105220	PIPE CULVERT REMOVAL	FOOT	2,846	
50200100	STRUCTURE EXCAVATION	CU YD	26	
50300225	CONCRETE STRUCTURES	CU YD	6	
50800105	REINFORCEMENT BARS	POUND	344	
54001061	GRADED BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	4	
54010503	PRECAST CONCRETE BOX CULVERTS 5' X 3'	FOOT	92	
542A0226	PIPE CULVERTS, CLASS A, TYPE 1 21"	FOOT	120	
542A5479	PIPE CULVERTS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 24"	FOOT	172	
542A5491	PIPE CULVERTS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 36"	FOOT	111	
542A8209	PIPE CULVERTS, CLASS A, TYPE 2 EQUIVALENT ROUND-SIZE 24"	FOOT	44	
542A8215	PIPE CULVERTS, CLASS A, TYPE 2 EQUIVALENT ROUND-SIZE 30"	FOOT	43	
542A8221	PIPE CULVERTS, CLASS A, TYPE 2 EQUIVALENT ROUND-SIZE 36"	FOOT	92	
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	3	
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1	
54213666	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 21"	EACH	3	
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	6	
54213693	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	EACH	3	
54214509	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, EQUIVALENT ROUND-SIZE 24"	EACH	2	
54214515	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, EQUIVALENT ROUND-SIZE 30"	EACH	1	
54214521	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, EQUIVALENT ROUND-SIZE 36"	EACH	2	
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	743	
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	909	
550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	882	
550A0110	STORM SEWERS, CLASS A, TYPE 1 21"	FOOT	501	
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	193	
550A0160	STORM SEWERS, CLASS A, TYPE 1 36"	FOOT	51	
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	470	
550A0380	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	619	
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	255	
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	75	
550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	223	

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SUMMARY OF QUANTITIES (CONTINUED)				
IDOT Code #	Item	Unit of Measure	Total Quantity	
550A0480	STORM SEWERS, CLASS A, TYPE 2 48"	FOOT	174	
550B0020	STORM SEWERS, CLASS B, TYPE 1 6"	FOOT	311	
550B0050	STORM SEWERS, CLASS B, TYPE 1 12"	FOOT	63	
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	3	
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	
60218500	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	8	
60219000	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	1	
60219540	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2	
60219570	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	17	
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	
60221200	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	4	
60221700	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 8 GRATE	EACH	2	
60222270	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	1	
60224120	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	2	
60224129	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	2	
60224446	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	
60224447	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	3	
60224459	MANHOLES, TYPE A, 8'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	
60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	9	
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	3	
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	1	
60240220	INLETS, TYPE B, TYPE 3 FRAME AND GRATE	EACH	3	
60240301	INLETS, TYPE B, TYPE 8 GRATE	EACH	2	
60240328	INLETS, TYPE B, TYPE 24 FRAME AND GRATE	EACH	1	
60255500	MANHOLES TO BE ADJUSTED	EACH	20	
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	10,443	
63200310	GUARDRAIL REMOVAL	FOOT	56	
66400305	CHAIN LINK FENCE, 6'	FOOT	107	
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	12	
67100100	MOBILIZATION	L SUM	1	
72000100	SIGN PANEL - TYPE 1	SQ FT	160	
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	99.8	
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	10	
72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	3	
72900100	METAL POST - TYPE A	FOOT	69	
72900200	METAL POST - TYPE B	FOOT	338	
78001100	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	122.4	
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,556	
78001140	PAINT PAVEMENT MARKING - LINE 8"	FOOT	634	
78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	111	
78001180	PAINT PAVEMENT MARKING - LINE 24"	FOOT	78	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	36	
Z0016700	DRAINAGE STRUCTURE TO BE REMOVED	EACH	5	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	
Z0056648	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	FOOT	106	
Z0056672	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 24"	FOOT	53	
Z0075498	CONCRETE RETAINING WALL REMOVAL	CU YD	6	
XX000610	RELOCATE EXISTING MAILBOX	EACH	24	
XX001484	ROOF DRAIN GUTTER OUTLET	EACH	6	
XX006500	SANITARY SEWER SERVICE REMOVAL AND REPLACEMENT	FOOT	98	
XX007300	PORTLAND CEMENT CONCRETE PAD (SPECIAL)	SQ YD	21	
XX007504	SANITARY SEWER SERVICE RISER, 6" PVC	FOOT	19	
XX007759	ADJUST SANITARY SEWER CLEANOUT	EACH	10	
XX008203	CONCRETE RETAINING WALL	SQ FT	80	
XX008310	AGGREGATE SURFACE COURSE, TYPE B 3" (SPECIAL)	SQ YD	14	
XZ193300	SURVEY MARKER, TYPE 1 (SPECIAL)	EACH	7	
X0322924	RETAINING WALL REMOVAL	SQ FT	143	
X0323260	SEDIMENT BASIN	EACH	1	
X0327356	INSTALL ROUND STEEL SIGN SUPPORT	FOOT	156	
X4201600	PORTLAND CEMENT CONCRETE PAVEMENT (VARIABLE DEPTH)	SQ YD	154	
X4230710	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH, SPECIAL	SQ YD	72	
X6020074	INLETS, TYPE A, TYPE 3V FRAME AND GRATE	EACH	18	
X6020075	INLETS, TYPE B, TYPE 3V FRAME AND GRATE	EACH	5	
X6061005	CONCRETE CURB, TYPE B (SPECIAL)	FOOT	108	
X6840298	CHAIN LINK FENCE (SPECIAL)	FOOT	57	
X6840300	CHAIN LINK FENCE REMOVAL	FOOT	182	
X6870105	PERMANENT SURVEY MARKERS (SPECIAL)	EACH	43	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	
X8780100	CONCRETE FOUNDATIONS (SPECIAL)	CU YD	4	
X8780100	MANHOLES, TYPE A, 8'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	3	

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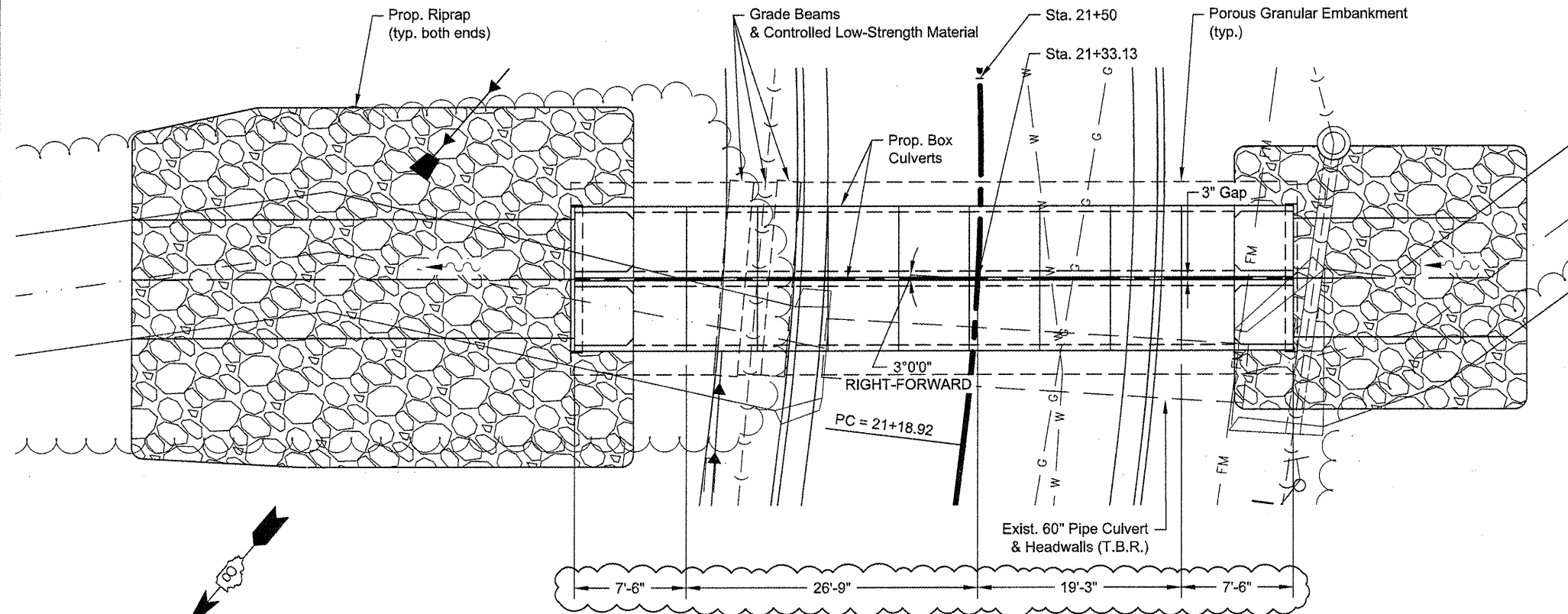
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FILE NAME =	USER NAME = Vogt, Jim	DESIGNED - BJB	REVISED - G-1-12
00140-321	PLOT SCALE = 1:2	CHECKED - DLK	REVISED -
	PLOT DATE = 5/9/2012	DATE - 4/27/12	REVISED -

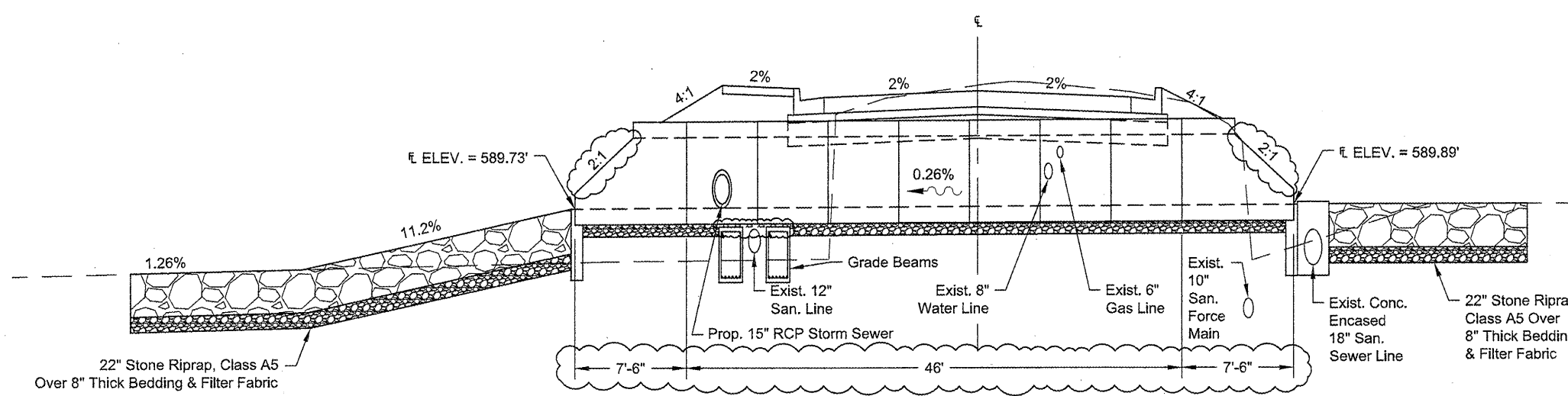
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE: NA	SHEET NO. 4 OF 117 SHEETS	STA. NA	TO STA. NA

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B801	05-00034-01-RP	JERSEY	117	4
CONTRACT NO. 97371			FED. ROAD DIST. NO. 8 ILLINOIS	



PLAN



ELEVATION

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURE EXCAVATION	CU YD	26
REINFORCEMENT BARS	POUND	344
CONCRETE STRUCTURES	CU YD	6
CONTROLLED LOW-STRENGTH MATERIAL	CU YD	3
POROUS GRANULAR EMBANKMENT	CU YD	19
PRECAST CONCRETE BOX CULVERTS 5x3	FOOT	92
BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	4
POROUS GRANULAR BACKFILL	CU YD	65
FILTER FABRIC	SQ YD	212
STONE RIPRAP, CLASS A5	SQ YD	212

GENERAL NOTES

- All dimensions and elevations are in feet except when otherwise noted.
- Exposed edges shall have a 3/4" chamfer unless otherwise noted.
- The toewalls will not be paid for separately, but shall be included in the cost for GRATED BOX CULVERT END SECTIONS, CULVERT NO. 1. Approximately 3.5 yd³ of concrete will be required to pour all 4 end section toewalls as shown on the end section elevation. Toe walls may be precast or cast-in-place.
- The grating for the four end sections will not be paid for separately, but shall be included in the cost for GRATED BOX CULVERT END SECTIONS, CULVERT NO. 1.
- All Class SI Concrete required to fill the space between multiple box culvert cells will not be paid for separately, but shall be included in the cost for PRECAST CONCRETE BOX CULVERTS 5x3 and GRATED BOX CULVERT END SECTIONS, CULVERT NO. 1 appropriately. Approximately 1.7 yd³ of Class SI Concrete will be required between the box culverts and approximately 0.6 yd³ will be required between the precast end sections as shown.
- The proposed box culverts have an approximate fill height of 11 inches. The precast concrete box culverts shall be designed in accordance with AASHTO M273 except that the aggregate shall conform to the requirements of Articles 1003 and 1004 of the IDOT standard specifications with the exception of gradation. All compaction shall conform with the requirements of Article 502 of the IDOT standard specifications.
- All excavation above the bottom-of-box elevation shall be included in the contractor's unit price for PRECAST CONCRETE BOX CULVERTS 5x3 and GRATED BOX CULVERT END SECTIONS, CULVERT NO. 1 appropriately. All excavation, backfilling, and compaction shall be executed according to Article 502 of the IDOT standard specifications.
- The contractor shall submit shop drawings for the precast concrete box culverts, the precast box culvert end sections, the precast toe walls, the grade beams, and the grating for the box culvert end sections. Shop drawings and calculations shall be sealed by a structural engineer registered in the State of Illinois for the grade beams and the grating for the box culvert end sections.
- Structure excavation and porous granular embankment quantities calculated for placement of the aggregate base material have been determined based on the indicated minimum depth. Should unstable soils be encountered upon execution of the pay item STRUCTURE EXCAVATION, the Engineer shall determine the necessary depth of excavation required to reach stable soils. Any additional structure excavation and porous granular embankment required to reach the designed bottom-of-box elevation will be addressed according to the Standard Specifications.
- Structure excavation and controlled low-strength material quantities calculated for construction of the grade beams have been determined according to the grade beam detail. Should unstable soils be encountered upon execution of the pay item STRUCTURE EXCAVATION, the Engineer shall determine the necessary depth of excavation required to reach stable soils. Any additional structure excavation and aggregate material required to reach the designed bottom-of-grade beam elevation will be addressed according to the Standard Specifications.
- The porous granular backfill quantity for these culverts has been determined according to Article 209 of the IDOT Standard Specifications for the total width of the trench as illustrated on the culvert sections.
- Structural design requirements are as follows:
 DESIGN SPECIFICATIONS
 2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES
 DESIGN STRESSES (PRECAST UNITS) DESIGN LOADING
 FC = 5 KSI HS20-44
 FY = 65 KSI (WELDED WIRE FABRIC)
 DESIGN STRESSES (GRADE BEAMS)
 FC = 4 KSI
 FY = 60 KSI
- Grade beams may be constructed as cast-in-place or precast units. If precast units are used, they shall be installed on a 3" sand cushion. All costs to be included under the pay items of REINFORCEMENT BARS and CONCRETE STRUCTURES regardless of the method chosen.

