

A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: January 20, 2016
Date of Addendum: January 8, 2016

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
305	85-0354-173	GRADING	STORY	IM-NHS-035-4(173)109--03-85 IM-NHS-035-4(203)109--03-85	20JAN305.A02

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Delete Proposal Line No. 0230; 2504-0112266 SANITARY SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 66 IN. 590.000 LF

Delete Proposal Line No. 0430; 2599-9999009 ('LINEAR FEET' ITEM) CASING PIPE, 90-INCH DIP 45.000 LF

Add Proposal Line No. 0681; 2504-0132466 SANITARY SEWER GRAVITY MAIN WITH CASING PIPE, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 3000D (CLASS IV), 66 IN., 45.000 LF

Estimate Reference Note: See M Sheets for locations and details. Bedding shall be Class R-1. Casing pipe will be 90-INCH DIP. Welding of new casing to existing casing is incidental to this bid item.

Add Proposal Line No. 0682; 2504-0112466 SANITARY SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 3000D (CLASS IV), 66 IN., 545.000 LF

Estimate Reference Note: See M Sheets for locations and details. Bedding shall be Class R-1.

If the above changes are not made, they will be made as shown here.

Replace plan sheets C.2, C.3, C.4, & C.5 with the attached.

**ESTIMATED PROJECT QUANTITIES
(UP TO A 5 DIVISION PROJECT)**

Item No.	Item Code	Item	Unit	Quantities				
				City of Ames	Division 3	Division 4	Division 5	Total
1	2101-0859001	CLEARING AND GRUBBING	ACRE	9.2				9.2
2	2102-2624980	CONTRACTOR FURNISHED SELECT TREATMENT	CY	51,010.2				51,010.2
3	2102-2625001	EMBANKMENT-IN-PLACE, CONTRACTOR FURNISHED	CY	156,173.0				156,173.0
4	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS	CY	67,950.0				67,950.0
5	2102-4569000	LOCATING TILE LINES	STA	129.00				129.00
6	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	26,561.0	433.3			26,994.3
7	2105-8425020	TOPSOIL, STRIP AND STOCKPILE	CY	1,343.0				1,343.0
8	2107-0025020	COMPACTING BACKFILL ADJACENT TO BRIDGES, CULVERTS OR STRUCTURES	CY	288,410.0				288,410.0
9	2107-0025100	COMPACTION WITH MOISTURE CONTROL	CY	288,410.0				288,410.0
10	2107-0025200	EXCAVATION, CLASS 26, FOR ROADWAY PIPE CULVERT	CY	382.9				382.9
11	2402-2720100	EXCAVATION, CLASS 26, FOR ROADWAY PIPE CULVERT	CY	382.9				382.9
12	2416-0100024	APRONS, CONCRETE, 24 IN. DIA.	EACH	1				1
13	2416-0100072	APRONS, CONCRETE, 72 IN. DIA.	EACH	2				2
14	2416-1100024	CULVERT, CONCRETE ROADWAY PIPE, 24 IN. DIA.	LF	100				100
15	2416-1100072	CULVERT, CONCRETE ROADWAY PIPE, 72 IN. DIA.	LF	74				74
16	2416-1250072	CULVERT, CONCRETE PIPE 20000, TRENCHLESS, 72 IN. DIA.	LF	222				222
17	2417-1060024	CULVERT, CORRUGATED METAL ROADWAY PIPE, 24 IN. DIA.	LF	732				732
18	2417-1060072	CULVERT, CORRUGATED METAL ROADWAY PIPE, 72 IN. DIA.	LF	732				732
19	2435-0130148	MANHOLE, SANITARY SEMI, SM-301, 48 IN. CONE SECTION ONLY	EACH	1				1
20	2435-0256210	INTAKE, SW-562 MODIFIED	EACH	7				7
21	2502-8212204	SUBRAILIN, PERFORATED PLASTIC PIPE, 4 IN. DIA.	LF	190				190
22	2502-8212204	SANITARY SEMI GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 30000 (CLASS IV), 66 IN.	LF	545.0				545.0
23	2504-0112466	REINFORCED CONCRETE PIPE (RCP), 30000 (CLASS IV), 66 IN.	LF	45.0				45.0
24	2504-0132466	REINFORCED CONCRETE PIPE (RCP), 30000 (CLASS IV), 66 IN.	LF	240				240
25	2504-0240237	SANITARY SEMI ABANDONMENT, FILL AND PILE, GREATER THAN 36 IN. DIA.	LF	204.6				204.6
26	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	CY	251.1				251.1
27	2506-4984000	FLAMEABLE MORTAR	SY	217.8				217.8
28	2507-3250005	ENGINEERING FABRIC	TON	120.0				120.0
29	2507-6008061	REVISION, CLASS E	EACH	411.0				411.0
30	2507-6008061	REVISION, CLASS E	EACH	411.0				411.0
31	2518-6010000	SAFETY CLOSURE	EACH	2				2
32	2519-3200000	FENCE, FIELD	LF	12,538.1				12,538.1
33	2519-3300400	FIELD FENCE BRACE PANELS	EACH	121				121
34	2526-8285000	CONSTRUCTION SURVEY	LS	1.00				1.00
35	2528-8400048	TEMPORARY BARRIER RAIL, CONCRETE	LF	12,475.0				12,475.0
36	2528-8405110	TRAFFIC CONTROL	LS	1.00				1.00
37	2531-0000110	TEMP CRASH CUSHION	EACH	1.00				1.00
38	2531-0000110	TEMP CRASH CUSHION	EACH	1.00				1.00
39	2599-9999001	(ACRES' ITEM) TEMPORARY SUBGRADE STABILIZATION	ACRE	12.4				12.4
40	2599-9999005	(EACH' ITEM) 3-DEGREE BEND, RCP, 66-INCH	EACH	1				1
41	2599-9999005	(EACH' ITEM) 60-DEGREE BEND, RCP, 66-INCH	EACH	2				2
42	2599-9999005	(EACH' ITEM) REMOVAL OF TEE MANHOLE	EACH	1				1
43	2599-9999005	(EACH' ITEM) TEE, RCP, 66-INCH X 48-INCH	EACH	1				1
44	2599-9999005	(EACH' ITEM) TEE, RCP, 66-INCH X 48-INCH	EACH	1				1
45	2601-2634100	MULCHING (SUP' ITEM) BYPASS SANITARY SEMI PIPE	ACRE	21.7				21.7
46	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	6.8				6.8
47	2601-2640350	SPECIAL DITCH CONTROL, WOOD EXCELSION MAT	SQ	132.0				132.0
48	2601-2642100	STABILIZING GROP - SEEDING AND FERTILIZING	ACRE	21.7				21.7
49	2601-2643110	WATERING FOR SOD, SPECIAL DITCH CONTROL, OR SLOPE PROTECTION	MGAL	26.40				26.40
50	2601-2643300	MOBILIZATION FOR WATERING	EACH	3				3
51	2602-0000040	SILT DIKES	LF	7,980.0				7,980.0
52	2602-0000040	SILT FENCE FOR DITCH CHECKS	LF	942.0				942.0
53	2602-0000040	SILT DIKES	LF	5,295.0				5,295.0
54	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	4,371.0				4,371.0
55	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	874.2				874.2
56	2602-0000130	TEMPORARY SEDIMENT CONTROL BASIN	EACH	2				2
57	2602-0000140	MAINTENANCE OF TEMPORARY SEDIMENT CONTROL BASIN	EACH	8				8
58	2602-0000170	MAINTENANCE OF ROCK CHECK DAM	EACH	16				16
59	2602-0000170	MAINTENANCE OF ROCK CHECK DAM	EACH	16				16
60	2602-0000180	REMOVAL OF ROCK CHECK DAM	EACH	4				4
61	2602-0000212	FLOATING SILT CURTAIN (HANGING)	LF	600.0				600.0
62	2602-0000240	MAINTENANCE OF FLOATING SILT CURTAIN	LF	300.0				300.0
63	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	340.0				340.0
64	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	500.0				500.0
65	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	846.0				846.0
66	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	1				1
67	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1				1
68	2612-0000520	ROADSIDE SPRAY FOR WEED CONTROL	ACRE	4.0				4.0

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
1	2101-0850001	CLEARING AND GRUBBING Refer to sheets U.6-10.
2	2102-2624980	CONTRACTOR FURNISHED SELECT TREATMENT See Tab 103-3 in C Sheets and cross sections for details. Overhaul shall be incidental to the bid item. Contractor may elect to substitute special backfill with a thickness of 1.5' according to Specification 2102.3F3A(2).
3	2102-2625001	EMBANKMENT-IN-PLACE, CONTRACTOR FURNISHED Refer to T Sheets.
4	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW See T Sheets. Overhaul will not be measured or paid for, but shall be considered incidental to roadway excavation on this project.
5	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS Refer to Tab. 103-7 on CS sheets. Overhaul will not be measured or paid for, but shall be considered incidental to roadway excavation on this project.
6	2102-4560000	LOCATING TILE LINES
7	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD Refer to T Sheets. Topsoil cut depth at 6 inches. Topsoil replacement depth at 8 inches.
8	2105-8425020	TOPSOIL, STRIP AND STOCKPILE Refer to T Sheets. Topsoil cut depth at 6 inches. Topsoil replacement depth at 8 inches. The Contractor shall strip all required topsoil, stockpile topsoil, and follow applicable provisions, for stripping and stockpiling of the topsoil, in Section 2105 of the current specifications.
9	2107-0425020	COMPACTING BACKFILL ADJACENT TO BRIDGES, CULVERTS OR STRUCTURES See Tab 104-4 for locations and details.
10	2107-0875100	COMPACTION WITH MOISTURE CONTROL Refer to Tab 103-6 for details.
11	2401-6745650	REMOVAL OF EXISTING STRUCTURES Refer to Tab 103-2 on C Sheets.
12	2402-2720100	EXCAVATION, CLASS 20, FOR ROADWAY PIPE CULVERT See Tab 104-3 on Sheets CD.1 and C Sheets for details.
13	2416-0100024	APRONS, CONCRETE, 24 IN. DIA. See Tab 104-3 on sheet C.14 and sheet CD.1 for locations and details.
14	2416-0100072	APRONS, CONCRETE, 72 IN. DIA. See Tab 104-3 on CD sheets for locations and details.
15	2416-1100024	CULVERT, CONCRETE ROADWAY PIPE, 24 IN. DIA. See Tab 104-3 on sheet C.14 and sheet CD.1 for locations and details.
16	2416-1100072	CULVERT, CONCRETE ROADWAY PIPE, 72 IN. DIA. See Tab 104-3 on CD sheets for locations and details.
17	2416-1262072	CULVERT, CONCRETE PIPE, 20000, TRENCHLESS, 72 IN. DIA.
18	2417-0220024	APRONS, REINFORCED CONCRETE, 24 IN. DIA.
19	2417-0600024	APRONS, REINFORCED CONCRETE, ROADWAY PIPE, 24 IN. DIA. See Tab 104-3 on sheet C.14 and sheet CD.1 for locations and details.
20	2417-1060024	CULVERT, CORRUGATED METAL ROADWAY PIPE, 24 IN. DIA. 24" CMP Pipe will be inter-lin and will be removed or plugged and abandoned with next stage of project by others.
21	2435-0120148	MANHOLE, SANITARY SEWER, SW-301, 48 IN. CONE SECTION ONLY See T Sheets for locations and details.
22	2435-0246210	MANHOLE, SANITARY SEWER, SW-301, 48 IN. CONE SECTION ONLY See T Sheets for locations and details.
23	2435-0246210	MANHOLE, SANITARY SEWER, SW-301, 48 IN. CONE SECTION ONLY See T Sheets for locations and details.
24	2502-8212204	SUBDRAIN, PERFORATED PLASTIC PIPE, 4 IN. DIA. Refer to Tab. 104-4.

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ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
23	2504-0112466	SANITARY SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 30000 (CLASS IV), 66 IN.
24	2504-0132466	SANITARY SEWER GRAVITY MAIN WITH CASING PIPE, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 30000 (CLASS IV), 66 IN.
25	2504-0240237	SANITARY SEWER ABANDONMENT, FILL AND PLUG, GREATER THAN 36 IN. DIA. See M sheets for locations and details.
26	2504-0112466	SANITARY SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 66 IN. Bedding shall be Class R-1. Slopes shall be Class R-1. Casing pipe will be 90-INCH DIP. Welding of new casing to existing casing is incidental to this bid item.
27	2506-4984000	REMOVAL OF STEEL BEAM GUARDRAIL See Tab 110-7A for location. FLOWABLE MORTAR See Tab 110-9 for details and location.
28	2507-3250005	ENGINEERING FABRIC See Tab. 100-23 for locations and details.
29	2507-6000061	REVEITEMT, CLASS E See Tab. 100-23 for locations and details.
30	2510-6745850	REMOVAL OF PAVEMENT Refer to Tab 110-01 for details. Includes 95.4 LF of sawcut.
31	2518-6910000	SAFETY CLOSURE Refer to Tab. 108-13A on C Sheets. At the conclusion of this project all safety closures will remain in place and become property of the IDOT.
32	2519-3200000	FENCE, FIELD
33	2519-3300400	FENCE, PORTABLE BRIDGE PANELS See Tab 100-7 for locations and details. See U.1-5 for locations.
34	2526-8285000	CONSTRUCTION SURVEY
35	2528-8400048	TEMPORARY BARRIER RAIL, CONCRETE See Tab. 108-33 for locations and details. At the conclusion of this project all temporary barrier rail will remain in place and become property of the IDOT.
36	2528-8445110	TRAFFIC CONTROL Sand Barrels left in place over the winter must be winterized according to the manufacturer's recommendations. At the conclusion of this project all temporary crash cushions will remain in place and become property of the IDOT.
37	2533-4980005	MOBILIZATION
38	2551-0000110	TEMP CRASH CUSHION See Tab. 108-30 for locations and details.
39	2559-9990001	('ACRES' ITEM) TEMPORARY SURGRADE STABILIZATION Apply and distribute evenly and uniformly 1.5 tons per acre of dry cereal straw or native grass straw. See certified mixtures. See Free Nitch certified by the Iowa Crop Improvement Association or other state's Crop Improvement Associations. The general absence of straw longer than 6 inches after distribution will be considered excessive pulverization and will not be accepted. After the application of the dry cereal straw or native grass straw, apply a tackifier that will easily mix with water and shall be noncorrosive to hydraulic application equipment. The tackifier will be nonirrigating and contain mixture enhancers to prevent foaming and mixing problems during agitation in the application equipment. Application equipment will have both mechanical agitation and a slurry bypass. Application rate will be as indicated by the manufacturer product label for the site conditions and time of year. Tackifiers will be considered safe to the applicator, adjacent workers, and the environment when properly applied according to Environmental Protection Agency (EPA) and other regulatory agencies. Material Safety Data Sheets (MSDS) will be required to be submitted to the Engineer prior to application. The tackifier will be nontoxic to plants, fish and other wildlife and 100% biodegradable.

FILE NO. ENGLISH DESIGN TEAM HOIST/BELL/Ryan/Bennett

Story COUNTY

PROJECT NUMBER IM-NHS-035-4(173)109--03-85 SHEET NUMBER C.3

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Changed By Addenda

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
47	2601-2640950	SPECIAL DITCH CONTROL - WOOD EXCELSTOR VNT Refer to Tab. 100-22 for Locations. Refer to Standard Road Plan EC-101. ----- Prepare seedbed according to Article 2601.03, B 4 and install according to Article 2601.03, H, 2 and seed according to the following: 109 lbs/acre Alkali grass 66 lbs/acre Perennial ryegrass 66 lbs/acre Crested wheatgrass 44 lbs/acre Hard fine fescue 44 lbs/acre Sheep fine fescue The mix may contain a 10% increase of any of the combinations of grasses listed above. - 2601-2642100 STABILIZING CROP - SEEDING AND FERTILIZING Included for disturbed areas as directed by the Engineer. Prepare seedbed according to 2601.03, B, 4, a. Seed mixture shall be: Oats 50 lbs. per acre Grain rye 50 lbs. per acre *Canada wildrye (Elymus canadensis) 5 lbs. PLS per acre *Big bluestem (Andropogon gerardii) 3 lbs. PLS per acre *Little bluestem (Schizachyrium scoparium) 3 lbs. PLS per acre Indiangrass (Sorghastrum nutans) 3 lbs. PLS per acre Sudangrass (Sorghum sudanense) 1 lbs. PLS per acre Sudagrass (Panicum virgatum) 1 lbs. PLS per acre Butterfly pea (Chamaecrista fasciculata) 2 lbs. PLS per acre Swamp Milkweed (Asclepias tuberosa) 3 oz. PLS per acre Swamp Milkweed (Asclepias incarnata) 3 oz. PLS per acre *Note: Canada wildrye, Big bluestem, Little bluestem and Indiangrass shall be debarbed or equal to facilitate the application of seed. For stabilizing crop only, seed will not be required to be certified as Source Identified Class (Yellow Tag) Source G0-Iowa. Seed may be applied by broadcasting or with a Native Grass Drill. Broadcast seed will require one complete rolling of the area seeded with a cultipacker within 24 hours after seeding and prior to mulching or hydromulching. Native Grass Drilled seed must meet Article 2601.03, A, 11 and be completed per Article 2601.03, C, 5. All seed shall be mixed off-site by a seed conditioner approved by the Iowa Crop Improvement Association or Crop Improvement Association. Bags shall arrive onsite from seed conditioner in sealed/unopened bags. All disturbed areas shall be fertilized per Article 2601.03, C, 1. - 2601-2643110 WATERING FOR SOD, SPECIAL DITCH CONTROL, OR SLOPE PROTECTION Estimate based on four waterings of the Special Ditch Control at a rate of 50 gallons per square. The contractor shall water the required areas no later than the day following placement of the mat. If the Contractor fails to water by the second day following placement, a price adjustment will be assessed at a rate of \$200.00 per calendar day until the watering has been completed. Additional waterings will be required at intervals of 5 to 8 calendar days. Perform all waterings unless otherwise noted. The contractor shall begin watering on the 8th calendar day following placement of the mat. If the Contractor fails to complete the watering before the 8th calendar day has elapsed, a price adjustment will be assessed at a rate of \$200.00 per calendar day, beginning on the 9th day, until the watering is completed. - 2601-2643300 MOBILIZATION FOR WATERING ----- - 2601-0000020 SILT FENCE Refer to Tab. 100-17. The tabulation includes estimated locations for placement of "Silt Fence" to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement. Bid item includes 25% additional quantity for field adjustments and replacements. - 2601-0000030 SILT FENCE FOR DITCH CHECKS Refer to Tab. 100-18. The tabulation includes estimated locations for placement of "Silt Fence for Ditch Checks" to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement. Bid item includes 50% additional quantity for field adjustments and replacements.

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
40	2599-9999005	The tackifier will be water soluble natural proteins, vegetable gums, guar gums, starch, psyllium, pitch, or rosin type blended with gelling and hardening agents, or a water-soluble blend of hydrophilic polymers, viscosifiers, sticking aids and other gums.
41	2599-9999005	Guar gum based tackifiers will consist of a minimum of 95% guar gum, by weight. The remaining 5% will consist of dispersing and cross-linking additives. Starch will be a non-ionic, cold-water-soluble (pre-gelatinized) starch. Guar gum will be a non-ionic, cold-water-soluble guar gum. Pitch and rosin will be a non-ionic pitch and rosin emulsion that in a wet slurry to the surface of the soil. Pitch and rosin will be a minimum of 26 percent of the total solids content. The tackifier will be a non-corrosive, water-dilutable emulsion that cures to water-insoluble binding and cementing agent upon application.
42	2599-9999005	Approved products include: Turf Solutions, LLC HF5000 Tack by Rantec Corporation Second Nature Tactpac GTX by Central Fiber Corp. Startak 100 P by Chemstar
43	2599-9999005	Method of Measurement will be in acres to the nearest 0.1 acre of subgrade stabilized.
44	2599-9999010	Basis of Payment for Subgrade Stabilization will be the contract unit price per acre to the nearest 0.1 acre for Subgrade Stabilization. Payment is full compensation for preparing the area and all materials, labor, and equipment required to stabilize the subgrade.
45	2599-9999005	(EACH ITEM) 3-DEGREE BEND, RCP, 66-INCH (EACH ITEM) 60-DEGREE BEND, RCP, 66-INCH (EACH ITEM) 90-DEGREE BEND, RCP, 66-INCH (EACH ITEM) TEE, RCP, 66-INCH X 48-INCH (EACH ITEM) TEE, RCP, 66-INCH X 48-INCH (LUMP SUM ITEM) BYPASS SANITARY SEWER PIPE See M sheets for locations and details.
46	2599-9999005	(EACH ITEM) 3-DEGREE BEND, RCP, 66-INCH Method measurement and basis of payment shall be each bend installed.
47	2599-9999005	(EACH ITEM) 60-DEGREE BEND, RCP, 66-INCH Method measurement and basis of payment shall be each bend installed.
48	2599-9999005	(EACH ITEM) REMOVAL OF TEE MANHOLE Method measurement and basis of payment shall be each tee removed.
49	2599-9999005	(EACH ITEM) TEE, RCP, 66-INCH X 48-INCH Method measurement and basis of payment shall be each tee installed.
50	2599-9999010	(LUMP SUM ITEM) BYPASS SANITARY SEWER PIPE Method measurement and basis of payment shall be per lump sum. Contractor shall contact City of Ames Water Pollution Control Facility Superintendent, Jim McElvogue (515-232-7423), a minimum of 48 hours in advance of commencing the bypass operation.
51	2601-2634100	MULCHING Mulching per Article 2601.03, E, 2. Anchor mulch into the soil using mulch anchoring equipment with a minimum of two passes. Included for areas requiring reshaping and seedbed preparation. Mulch shall be Certified Noxious Weed Seed Free Mulch as certified by the Iowa Crop Improvement Association or adjacent states Crop Improvement Associations. Mulch Rate: 1.1/2 tons of dry cereal straw or native grass straw per acre.
52	2601-2636043	SEEDING AND FERTILIZING (RURAL) All areas 8 feet adjacent to the shoulder mainline, side roads, trails and median shall be fertilized per Article 2601.03, C, 3 and seeded per the following: 109 lbs/acre Alkali grass 109 lbs/acre Turf-type Tall Fescue (at least two cultivars) 66 lbs/acre Perennial ryegrass 66 lbs/acre Crested wheatgrass 44 lbs/acre Hard fine fescue 44 lbs/acre Sheep fine fescue The mix may contain a 10% increase of any of the combinations of grasses listed above. All seed and fertilizer for shall be applied with ground driven equipment. No broadcast seeding will be allowed.

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
53	2602-0000040	SILT DIKES Refer to Tab 100-15.
54	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS This item is included for silt fence and silt fence for ditch check removal required for staging reasons, removal to allow for replacement (replacement to be paid separately), or for areas that have achieved 70% permanent growth.
55	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK This item is included for clean-out and repair of the silt fence and silt fence for ditch checks during the grading project.
56	2602-0000130	TEMPORARY SEDIMENT CONTROL BASIN Refer to Sheet U.14 for details.
57	2602-0000140	MAINTENANCE OF TEMPORARY SEDIMENT CONTROL BASIN Refer to Sheet U.14 for details.
58	2602-0000160	ROCK CHECK DAM See Sheet U.13 for details. Place at locations as directed by the Engineer. Quantity based on estimated four Rock Check Dams plus 10% for repair. Use Class D Revetment to construct Rock Check Dams. Method of Measurement for installation and repair of the Rock Check Dam will be in linear feet to the nearest 0.1 feet. Measurement for installation and repair shall be made at the base of the Rock Check Dam parallel to where the excavation trench was cut or repair is needed. Basis of Payment for Rock Check Dam will be the contract unit price per linear foot. Payment is full compensation for all materials, labor, and equipment required to construct the Rock Check Dam as shown. Class 30 excavation required to cut trench and engineering fabric installed prior to placing revetment are incidental and will not be paid for separately
59	2602-0000170	MAINTENANCE OF ROCK CHECK DAM Quantity based on four cleanouts of each Rock Check Dam. Method of Measurement for Maintenance of Rock Check Dam will be by count. Basis of Payment for Maintenance of Rock Check Dam will be at the contract unit price for each occurrence. Payment is full compensation for clean out and disposal of material when capacity reaches 50% that is needed during the project
60	2602-0000180	REMOVAL OF ROCK CHECK DAM Method of Measurement for removal of Rock Check Dam will be by count. Basis of payment for the removal of the Rock Check Dam will be at the contract unit price. Payment is full compensation for all labor and equipment required to remove all rock and material above designed ditch grade. Rock, silt and engineering fabric that is flush and/or below designed ditch grade will remain in the excavation trench.
61	2602-0000212	FLOATING SILT CURTAIN (HANGING)
62	2602-0000240	PERIMETER AND SLOPE SEDIMENT CONTROL CURTAIN Refer to Tab. 100-19 for details and locations.
63	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA. Refer to Tab. 100-19 for locations. Refer to Standard Road Plan EC-204. Item is included for temporary perimeter sediment control, inlet protection, and water velocity reduction on slopes or ditches at locations to be determined during construction. Verify specific locations with the Engineer prior to beginning placement.
64	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA. Refer to Standard Road Plan EC-204. Item is included for temporary perimeter sediment control, inlet protection, and water velocity reduction on slopes or ditches at locations to be determined during construction. Verify specific locations with the Engineer prior to beginning placement. Perimeter and Slope Sediment Control Devices will be required to be constructed out of wood excelsior.

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
65	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE Included for removal of perimeter and sediment control devices. All material shall become the property of the contractor and removed from the project within 24 hours.
66	2602-0010010	MOBILIZATIONS, EROSION CONTROL
67	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL
68	2612-0000520	ROADSIDE SPRAY FOR WEED CONTROL Furnish and apply aminopyralid herbicide as spot weed control throughout the project area. Use hand equipment to target herbicide to thistle species, and if directed by the Engineer, to other weed species. The Engineer will issue a Notice to Proceed to begin each spraying. The Contractor will be charged working days, beginning with the 3rd working day after notification to start spraying until the spraying is complete. LOCATION: The Engineer will designate spray locations. In order to not exceed the herbicide's maximum annual use rate, combined applications may not exceed 100% of the seeded area per 360 days. APPLICATION: Apply as needed in areas to control thistles and other invasive species as directed by the Engineer. Use aminopyralid herbicide at a rate of 2.8 oz. per acre active ingredient (for example, for a 40.6% active ingredient product, apply at 7 oz. per acre). Use a surfactant according to label directions. Coordinate the herbicide applications with the Mowing bid item so there is at least 8 inches of re-growth on Canada thistle following mowing, and at least 14 calendar days prior to the next mowing. See Herbicide Application Tab 231-2 The Engineer will verify evidence of the specified herbicide effects to the treated areas 10 to 14 calendar days after application. Method of Measurement: The quantity of Roadside Spray for Weed Control for which payment is made will be the acres displaying a complete visual herbicide control response to the target weed. Basis of Payment: For the number of acres of Roadside Spray for Weed Control designated by the Engineer, the Contractor will be paid contract unit price based on the measured area displaying a complete visual herbicide control response.