



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

November 5, 2010

CALL NO. 100
CONTRACT ID NO. 101338
ADDENDUM # 1

Subject: Pike County, APD 80-6 (27)
Letting November 19, 2010

- (1) Revised - Plan Sheet - R02E
- (2) Revised - Special Note for CPM Scheduling - Pages 18-25 of 160
- (3) Revised - Bid Items - Pages 155-159 of 160
- (4) Deleted - Page 160

Proposal revisions are available at <http://transportation.ky.gov/contract/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in blue ink that reads "Ryan Griffith".

Ryan Griffith
Director
Division of Construction Procurement

RG:ks

Enclosures



An Equal Opportunity Employer M/F/D

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GENERAL SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
PIKE	12-263.72	R02E

ITEM CODE	ITEM	UNIT	MAINLINE US 460	RAMP 1	KY 80	JOHN MOORE BRANCH			TOTAL PROJECT
78	CRUSHED AGGREGATE SIZE NO 2	TON	0	0	2	0			2
1982	DELINEATOR FOR GUARDRAIL-WHITE	EACH	0	0	11	0			11
2014	BARRICADE-TYPE III	EACH	0	0	14	0			14
2159	TEMP DITCH	LIN FT	-	-	-	-			18163
(5) 2200	ROADWAY EXCAVATION	CU YD	2849024	2395866	449683	1898			5696471
(6) 2242	WATER	M GAL	0	0	200	0			200
2262	FENCE-WOVEN WIRE TYPE 1	LIN FT	8124	1410	2318	0			11852
2351	GUARDRAIL-STEEL W BEAM-S FACE	LIN FT	0	0	3775	0			3775
2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	0	0	4	0			4
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	0	0	4	0			4
2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	23	4	15	0			42
2431	WITNESS R/W MONUMENT TYPE 2	EACH	2	0	1	0			3
2432	WITNESS POST	EACH	23	4	15	0			42
2488	CHANNEL LINING CLASS IV	CU YD	112	123	898	13400			14533
(2) 2545	CLEARING AND GRUBBING	LP SUM	-	-	-	-			1
(3) 2562	SIGNS	SQ FT	0	0	474	0			474
2568	MOBILIZATION	LP SUM	-	-	-	-			1
2569	DEMOBILIZATION	LP SUM	-	-	-	-			1
2585	EDGE KEY	LIN FT	0	0	44	0			44
(4) 2600	FABRIC GEOTEXTILE TY IV FOR PIPE	SQ YD	4666	518	781	814			6779
2650	MAINTAIN AND CONTROL TRAFFIC	LP SUM	-	-	-	-			1
2651	DIVERSIONS (BY-PASS DETOURS)	LP SUM	-	-	-	-			1
2653	LANE CLOSURE	EACH	0	0	2	0			2
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	0	0	3	0			3
2701	TEMP SILT FENCE	LIN FT	-	-	-	-			18163
2703	SILT TRAP TYPE A	EACH	-	-	-	-			291
2704	SILT TRAP TYPE B	EACH	-	-	-	-			291
2705	SILT TRAP TYPE C	EACH	-	-	-	-			291
2706	CLEAN SILT TRAP TYPE A	EACH	-	-	-	-			1746
2707	CLEAN SILT TRAP TYPE B	EACH	-	-	-	-			1746
2708	CLEAN SILT TRAP TYPE C	EACH	-	-	-	-			1746
2709	CLEAN TEMP SILT FENCE	LIN FT	-	-	-	-			18163
2726	STAKING	LP SUM	-	-	-	-			1
2775	ARROW PANEL	EACH	0	0	2	0			2
3171	CONCRETE BARRIER WALL TYPE 9T	LIN FT	60	0	1000	1560			2620
4772	HPS LUMINAIRE OFFSET	EACH	0	0	3	0			3
4933	TEMP SIGNAL 2 PHASE	EACH	0	0	3	0			3
5950	EROSION CONTROL BLANKET	SQ YD	-	-	-	-			262660
5952	TEMP MULCH	SQ YD	-	-	-	-			1409408
5953	TEMP SEEDING AND PROTECTION	SQ YD	-	-	-	-			1409408
5966	TOPDRESSING FERTILIZER	TON	-	-	-	-			72.94
5985	SEEDING AND PROTECTION	SQ YD	-	-	-	-			1318207
5989	SPECIAL SEEDING CROWN VETCH	SQ YD	-	-	-	-			343440
6510	PAVE STRIPING-TEMP PAINT-4 IN	LIN FT	0	0	32102	0			32102
6514	PAVE STRIPING-PERM PAINT-4 IN	LIN FT	0	0	14008	0			14008
6568	PAVE MARKING-THERMO STOP BAR-24IN	LIN FT	0	0	48	0			48
(8) 8100	CONCRETE-CLASS A	CU YD	-	-	-	-			12.55
(8) 8150	STEEL REINFORCEMENT	LB	-	-	-	-			700
10020NS	FUEL ADJUSTMENT	DOLL	-	-	-	-			834801
10030NS	ASPHALT ADJUSTMENT	DOLL	-	-	-	-			28213
(7) 20667ED	PNEUMATIC BACKSTOWING	TON	400	300	0	0			700
2570	PROJECT CPM SCHEDULE	LS							1
23131ER701	PIPELINE VIDEO INSPECTION	LIN FT	-	-	-	-			917

(A)

(A)

EMBANKMENT 5309409 CU YD

ROADWAY EXCAVATION 5696471 CU YD (A)

(A) ROADWAY EXCAVATION INCLUDES:

COMMON EXCAVATION 853893 CU YD (B)

ROCK EXCAVATION (S.R.)4840556 CU YD

EMBANKMENT BENCH 2022 CU YD

TRANSVERSE BENCH 0 CU YD

(B) COMMON EXCAVATION INCLUDES:

EXCAVATION..... 852921 CU YD

DITCH LEFT..... 886 CU YD

DITCH RIGHT..... 86 CU YD

① FOR CONTROLLING DUST CAUSED BY MAINTAINING TRAFFIC ONLY

② APPROXIMATELY 291 ACRES

③ TEMPORARY SIGNS FOR MAINTENANCE OF TRAFFIC

④ FOR WRAPPING PIPE TRENCH BACKFILL

⑤ CONTRACTOR IS HEREBY NOTIFIED OF THE HOMES AND ASSOCIATED STRUCTURES IN THE CLOSE PROXIMITY OF CONSTRUCTION AS DEPICTED ON PLAN SHEETS. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONARY METHODS TO INSURE THE SAFETY OF THE RESIDENTS AND THEIR PROPERTY IN THIS VICINITY DURING THE PROSECUTION OF ANY AND ALL WORK IN AND AROUND THIS AREA.

⑥ ALL EXCESS MATERIAL RESULTING FROM ROADWAY EXCAVATION SHALL BE PLACED IN THE JOHN MOORE BRANCH WASTE AREA. FOR ADDITIONAL INFORMATION REFER TO GEOTECHNICAL NOTES SHEET R49 IN THE CONTRACT PLANS

⑦ PIPE IS INCIDENTAL TO 20667ED.

⑧ QUANTITY CARRIED OVER FROM PIPE DRAINAGE SUMMARY.

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⚠️ REVISED 11-5-10

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GENERAL SUMMARY

Special Note for CPM Scheduling

A. General.

Contrary to Kentucky Standard Specifications 108.07.04, additional contract time will only be added when the Engineer deems the critical path of the project has been effected. Create the progress schedule required for this project using the critical path method (CPM). The Contractor shall designate a Schedule Representative who shall be responsible for coordinating with the Engineer during the preparation and maintenance of the schedule. The contractor shall submit an interim schedule followed by a baseline schedule, or only a baseline schedule, depending on when the contractor starts work as described below.

B. Interim Schedule.

If the Contractor starts work within 30 days of the Notice to Begin Work, they shall submit an interim schedule. The interim schedule will be in CPM schedule format. The interim schedule shall include detailed activities for the work to be accomplished during the first 45 days of the Contract, and summary activities for the balance of the work. The interim schedule, if required, shall be submitted at the Preconstruction Conference. No work shall begin without the submission of an interim schedule.

C. Baseline Schedule.

The Contractor shall submit a baseline schedule as outlined in the submission requirements section (C.2) within 30 days of the Notice to Begin Work. No pay estimates will be processed after 30 days without the submission of the baseline schedule. The baseline schedule will be in CPM schedule format and as described below. The Engineer will review the baseline schedule and will "accept", "accept as noted" or "reject" the schedule within 10 days of receipt. If the Engineer does not provide written notification regarding the disposition of the baseline schedule within 14 days, the submission will be considered "accepted."

For baseline schedules that are "accepted as noted", the Contractor shall make the necessary revisions and resubmit the revised schedule within 7 days. The Engineer will only "reject" baseline schedules that are not in compliance with contract requirements.

For baseline schedules that are "rejected", the Engineer shall indicate in writing portions of the schedule that are not in compliance with the contract requirements. The Project Engineer shall conduct a mandatory meeting with the Contractor and the Contractor's Schedule Representative within 10 days of the Engineer's written notice. The purpose of this meeting is to resolve disputes with the baseline schedule so that it may be resubmitted. The Contractor shall provide clarification and all additional information necessary for the Engineer within 7 days of this meeting. The Contractor shall submit the revised Baseline Schedule to the Engineer for review and acceptance within 7 days of this meeting.

No pay estimates will be generated until the baseline schedule is “accepted” or “accepted as noted.” In the event the baseline schedule is not “accepted” within 90 days of the Notice to Begin Work, all work shall cease on the project until the baseline schedule is “accepted”. The incurred delays from the “cease work order” will be the contractor’s responsibility and will not be considered for time extension. Any claims associated with time impacts for work performed or delay experienced prior to the baseline schedule being “accepted” or “accepted as noted” will be evaluated at the sole discretion of the Engineer. “Acceptance” by the Engineer will not relieve the Contractor of their responsibilities for compliance with specifications and contract requirements or for the accuracy or feasibility of the schedule.

“Acceptance” of the baseline schedule does not revise the Contract Documents. The baseline schedule must be “accepted” or “accepted as noted” by the Engineer prior to the Engineer evaluating any contractor claims associated with time impacts.

The Engineer’s review of the baseline schedule will be for compliance with the specifications and contract requirements. “Acceptance” by the Engineer will not relieve the Contractor of any of their responsibilities for the accuracy or feasibility of the schedule.

1. Schedule Requirements.

Generate and submit an electronic copy of the baseline schedule using Primavera Contractor 5.0 (or current edition) Deluxe by Primavera Systems Inc., Bala Cynwyd, PA, or equivalent electronically transferable software. One complete copy of the software will be purchased by the contractor and furnished to the Kentucky Transportation Cabinet. Any and all license fees for its use will be paid for by the contractor for the duration of this project. The Contractor’s costs associated with these provisions should be incorporated into the bid item for the progress schedule.

Provide a calendar day schedule that shows the various activities of work in sufficient detail to demonstrate a reasonable and workable plan to complete the Project by the Original Contract Completion Date. Show the order and interdependence of activities and the sequence for accomplishing the work. Describe all activities in sufficient detail so that the Engineer can readily identify the work and measure the progress of each activity. The baseline schedule must reflect the scope of work, required phasing, maintenance of traffic requirements, interim completion dates, the Completion Date, and other project milestones established in the Contract Documents. Include activities for submittals, working drawings, shop drawing preparation, submittal review time for the Department shop drawings, material procurement and fabrication, and the delivery of materials, plant, and equipment, and other similar activities.

The Contractor shall be responsible for assuring all work, including all subcontractor’s work, is included in the schedule. The Contractor shall be responsible for assuring that all work sequences are logical and that the schedule indicates a coordinated plan.

Failure by the Contractor to include any element of work required for performance of the Contract shall not excuse the Contractor from completing all work within the required time. Omissions and errors will be corrected as described in Section F or H in this note and will not affect contract time.

a) Administrative Identifier Information.

- | | |
|-------------------|-------------------------------------|
| 1. Project Number | 7. Date of Notice to Begin Work |
| 2. County | 8. Completion Date |
| 3. Route Number | 9. Contractor's Name |
| 4. Item Number | 10. Contractor's Dated Signature |
| 5. CID Number | 11. KYTC's Dated Accepted Signature |
| 6. Award Date | |

b) Project Activities.

- i. Activity Identification (ID): Assign each activity a unique identification number. Activity ID length shall not exceed 10 characters. Assign baseline Activity ID's in sequences of 10 (e.g.; A1000, A1010, A1020). This will allow modifications and additional items to be placed into the Identification scheme easily. Once accepted, the Activity ID shall be used for the duration of the project.
- ii. Activity Description: Each activity shall have a narrative description consisting of a verb or work function (e.g.; form, pour, excavate, pier #2) and an object (e.g.; slab, footing, underdrain).
- iii. Activity Original Duration: Assign planned duration in calendar days for each activity. Do not exceed a duration of 20 calendar days for any construction activity unless approved by the Engineer. Do not represent the maintenance of traffic, erosion control, and other similar items as single activities extending to the Completion Date. Break these Contract Items into component activities in order to meet the duration requirements of this paragraph.
- iv. Activity Relationships:
 - All activities, except the first activity, shall have a predecessor(s). All activities, except the final activity, shall have a successor(s).
 - Use only finish-to-start relationships with no leads or lags to link activities, or use start-to-start relationships with lags no greater than the predecessor duration to link activities.
 - Use of finish-to-finish relationship is permitted when both activities are already linked with a start-to-start relationship.

c) Project Milestones.

- i. Start Project: The Contractor shall include as the first milestone in the schedule, a milestone named "Start Project". The date used for this milestone is the date the contract is executed and signed by the Department.

- ii. End Project Milestone: The Contractor shall include as the last activity in the project schedule, a milestone named "End Project". The date used for this milestone is considered the project completion date.
- iii. Start Phase Milestone: The Contractor shall include as the first activity for a project phase, an activity named "Start Phase X", where "X" identifies the phase of work. The Contractor may include additional milestones but, as a minimum, must include all contractual milestones.
- iv. End Phase Milestone: The Contractor shall include as the last activity in a project phase, an activity named "End Phase X" where "X" identifies the phase of work. The Contractor may include additional milestones, but at a minimum contractual milestones.

d) Schedule Options.

The schedule may only be calculated using retained logic. Show open ends as non-critical. Schedule durations are to be contiguous. The project calendar will be based on the Contractor's plan for completing the project. However, the scheduling increment (hours or days) will be stipulated during the Preconstruction Conference. All days must remain active unless the Contractor is instructed not to work by contract documents. Total float shall be calculated as finish float.

2. Submission Requirements.

Submit all schedules within the time frames specified. Submit the schedule and information in electronic file format via email, and compact disc (CD) compatible with the Engineer's computer. Submit the following information along with the electronic baseline schedule:

- a) A baseline schedule in a bar chart format including the Administrative Identifier Information discussed in Section C.1.a on the first page of the schedule. For each activity on the chart, indicate the Activity ID, Activity Description, Original Duration, Remaining Duration, Total Float, Early Start Date, Early Finish Date, and Percent Complete. Use arrows to show the relationships among activities.
- b) A baseline schedule in a bar chart format, on paper. Identify the critical path of the project on the bar chart in red. The critical path is defined as; the longest path of activities in the project that determines the project completion date. The activities that make-up the critical path of activities are the "Critical Activities."

3. Submittal Cover Memo.

All submittals shall be accompanied with a brief cover memo containing:

- Identification of the submission as the Baseline Schedule
- Administrative Identifier Information (see section C.1.a)
- Any critical notes as determined by the Contractor

An example Cover Memo is provided in this note.

D. Float.

Use of float suppression techniques, such as; preferential sequencing (arranging critical path through activities more susceptible to Department caused delay), lag logic restraints, unrealistic activity durations, zero total or free float constraints, extending activity times, or imposing constraint dates other than as required by the contract, shall be cause for rejection of the project schedule or its updates. Schedules with negative float will also not be accepted.

1. Definitions of Float.

Total Float is the length of time along a given network path that the actual start and finish of activity(s) can be delayed without delaying the project completion date. Project Float is the length of time between the End Project Milestone and the Contract Completion Date.

2. Ownership of Float.

Float available in the schedule, at any time shall not be considered for the exclusive use of either the Department or the Contractor. During the course of contract execution, any float generated due to the efficiencies of either party is not for the sole use of the party generating the float; rather it is a shared commodity to be reasonably used by either party. Efficiencies gained as a result of favorable weather within a Monthly period, where the number of days of normally anticipated weather is less than expected, will also contribute to the Project Float. A schedule showing work completing in less time than the contract time, and accepted by the Department, will be considered to have Project Float. Project Float will be a resource available to both the Department and the Contractor. No time extensions will be granted nor delay damages paid unless a delay occurs which impacts the project's critical path, consumes all available float and extends the work beyond the Contract Completion Date.

3. Negative Float.

Negative float is not allowed. Schedules with negative float will not be accepted. Negative float will not be a basis for requesting time extensions. Any extension of time will be addressed in accordance with the Section F. Scheduled completion date(s) that extend beyond the contract (or phase) completion date(s) may be used in computations for assessment of liquidated damages. The use of this computation is not to be construed as an order by the Department to accelerate the project.

E. Monthly Update Schedule.

A Monthly update schedule is a schedule in which only progress is updated from the prior data date to the current data date. Work added and/or excusable delays encountered since the prior data date must be represented as a schedule revision as described in Section E.

1. Update Requirements.

Monthly on a date set at the Preconstruction Conference and until Formal Acceptance, submit an updated schedule and all required information with a data date of the last day of the preceding monthly submittal. The date for submission and data date may be adjusted to accommodate regularly scheduled progress meetings. Submit the Monthly updated bar chart on paper and a copy of the updated schedule in electronic format in Section C.2. The Engineer shall “accept” or “reject” the schedule update within 7 days of receipt of the updated CPM schedule. The Engineer may withhold estimates if the updated schedule is not submitted as required by this section. For each updated schedule, identify the actual start and finish dates for all completed activities and the actual start date and remaining duration for all activities in progress. Provide a written narrative that identifies any changes or shifts in the critical path and submit reasons for the changes or shifts in the critical path.

Submit the following with each updated schedule:

- a) CPM Schedule in Bar Chart Format
- b) Electronic files (formatted as described above)

2. Submittal Cover Memo.

All update submittals shall be accompanied with a brief cover memo containing all the information require in the Baseline Submittal Cover Memo per section C.3 with the addition of:

- Baseline Report
 - § Narrative of baseline expectations
 - § Project completion status per baseline expectations
- Logic Report
 - § Logic Modification Report per section F
 - § Narrative of all logic changes and reasoning
 - § Two separate CPM submissions; one reflecting the schedule without changes in logic, the other reflecting the proposed logic and the effects.
 - § Description of fragnet required per section F
- Progress Report
 - § Narrative of all schedule changes since last update
 - § Details of each change including impact of change on the schedule, float consumption or addition, and reason causing change when float is consumed

F. Revisions.

The Work may require and/or the Contractor may make revisions to the CPM schedule. Addition of new activities (fragnets required) or new calendars or changes to existing activities, calendars or logic constitute a revision. All revisions must be reported in a

Logic Modification Report. The Logic Modification Report is a separate CPM update which includes all the changes recommended by the contractor within the current Monthly update schedule. It shall include a Narrative explanation of the necessary changes accompanying the Monthly update schedule. Any revision which modifies the critical path or impacts an interim date or project completion date is considered a Logic Modification. A fragnet is defined as the sequence of new activities that are proposed to be added to the existing schedule. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities. If submitted as a fragnet, the Contractor shall compute two Finish Dates. The first Finish Date shall be computed without consideration of any impact by the fragnet. The second Finish Date shall be computed with consideration of any impact by the fragnet. The Contractor shall also submit a written narrative stating the reason for the proposed revisions. The Engineer shall "accept" or "reject" proposed revisions within ten days of receipt of appropriate schedules and narrative. All approved revisions will be incorporated into the Monthly Update Schedule which will become the Revised Monthly Update Schedule.

G. Time Extensions.

The Work may require and/or the Contractor may request an extension of the Completion Date. Perform the following analysis to compute the duration of the time extension. Submit two paper copies and two electronic copies of each analysis performed.

1. Determine project progress prior to circumstance(s) necessitating the time extension. Unless the Engineer requests an interim schedule updated to the date of the circumstance alleging to have caused delay, the previous accepted Monthly update shall be used to display the prior progress of the project. This schedule is referred to as the Un-impacted Schedule
2. Prepare a fragmentary network (fragnet) depicting the circumstance that is believed to have delayed the project.
3. Insert the fragnet into the Un-impacted Schedule, run the schedule calculations and determine the finish date. This schedule is referred to as the Impacted Schedule.
4. Compare the Impacted Schedule finish date with the Un-impacted Schedule finish date in order to determine the duration of any warranted time extension.

Submit the impacted schedule with the request for time extension. Include a narrative report describing the effects of new activities and relationships to interim and contract completion dates. All time extensions approved by the Engineer will be incorporated into the Monthly update with the fragnet used to determine impacts incorporated into the schedule.

H. Recovery Schedule.

If the Monthly Update Schedule or Revised Monthly Update Schedule projects a finish date for the Project more than 14 calendar days later than the Contract Completion Date, submit a recovery schedule showing a plan to finish by the current Completion Date. The acceptance of any schedule projecting a completion date for the Project beyond the Current Contract Completion Date does not constitute approval of a time extension or an order to accelerate. All changes to completion dates and orders to accelerate must be

made via Change Order. The Department will withhold Estimates until the Engineer “accepts” the recovery schedule. The Engineer will use the schedule to evaluate time extensions and associated costs requested by the Contractor. In the event the current Completion Date is in dispute, the recovery schedule will need to be submitted once the dispute has been resolved.

I. Basis of Payment.

The Department will make partial payments according to Section 109.05 of the standard specifications and as modified by the following schedule:

1. The Department will release 50 percent of the lump sum amount bid for Project CPM Schedule to the Contractor with the first regular estimate payable after the Engineer has “accepted” the CPM Baseline schedule submission and the Department has received the scheduling software.
2. The Department will release an additional 25 percent of the lump sum amount bid for Project CPM Schedule to the Contractor with the first regular estimate payable after 50 percent of the original contract amount is complete.
3. The Department will release the remaining 25 percent of the lump sum amount bid for Project CPM Schedule to the Contractor with the first regular estimate payable after project completion.

The Department will pay for the accepted quantities at the contract price as follows:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
-----	Project CPM Schedule	Lump Sum

The Department will consider payment as full compensation for all work required in this provision.

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
SECTION 0001 PAVING					
0010	00003	CRUSHED STONE BASE	9,665.000 TON		
0020	00100	ASPHALT SEAL AGGREGATE	51.000 TON		
0030	00208	CL4 ASPH BASE 1.50D PG64-22	6,006.000 TON		
0040	00214	CL3 ASPH BASE 1.00D PG64-22	917.000 TON		
0050	00217	CL4 ASPH BASE 1.00D PG64-22	3,039.000 TON		
0060	00221	CL2 ASPH BASE 0.75D PG64-22	219.000 TON		
0070	00291	EMULSIFIED ASPHALT RS-2	6.100 TON		
0080	00301	CL2 ASPH SURF 0.38D PG64-22	66.000 TON		
0090	00312	CL3 ASPH SURF 0.50D PG64-22	344.000 TON		
0100	00327	CL4 ASPH SURF 0.50B PG64-22	1,120.000 TON		
SECTION 0002 ROADWAY					
0110	00078	CRUSHED AGGREGATE SIZE NO 2	2.000 TON		
0130	01982	DELINEATOR FOR GUARDRAIL-WHITE	11.000 EACH		
0140	02014	BARRICADE-TYPE III	14.000 EACH		
0150	02159	TEMP DITCH	18,163.000 LF		
0160	02200	ROADWAY EXCAVATION	5,696,471.000 CUYD		
0170	02242	WATER	200.000 MGAL		
0180	02262	FENCE-WOVEN WIRE TYPE 1	11,852.000 LF		
0190	02351	GUARDRAIL-STEEL W BEAM-S FACE	3,775.000 LF		
0200	02360	GUARDRAIL TERMINAL SECTION NO 1	4.000 EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0210	02367	GUARDRAIL END TREATMENT TYPE 1	4.000 EACH		
0220	02429	RIGHT-OF-WAY MONUMENT TYPE 1	42.000 EACH		
0230	02431	WITNESS R/W MONUMENT TYPE 2	3.000 EACH		
0240	02432	WITNESS POST	42.000 EACH		
0250	02488	CHANNEL LINING CLASS IV	14,533.000 CUYD		
0260	02545	CLEARING AND GRUBBING (291 ACRES)	(1.00) LS		
0270	02562	SIGNS	474.000 SQFT		
0280	02570	PROJECT CPM SCHEDULE	(1.00) LS		
0290	02585	EDGE KEY	44.000 LF		
0300	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	6,779.000 SQYD	2.00	13,558.00
0310	02650	MAINTAIN & CONTROL TRAFFIC	(1.00) LS		
0320	02651	DIVERSIONS (BY-PASS DETOURS)	(1.00) LS		
0330	02653	LANE CLOSURE	2.000 EACH		
0340	02671	PORTABLE CHANGEABLE MESSAGE SIGN	3.000 EACH		
0350	02701	TEMP SILT FENCE	18,163.000 LF		
0360	02703	SILT TRAP TYPE A	291.000 EACH		
0370	02704	SILT TRAP TYPE B	291.000 EACH		
0380	02705	SILT TRAP TYPE C	291.000 EACH		
0390	02706	CLEAN SILT TRAP TYPE A	1,746.000 EACH		
0400	02707	CLEAN SILT TRAP TYPE B	1,746.000 EACH		
0410	02708	CLEAN SILT TRAP TYPE C	1,746.000 EACH		

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0420	02709	CLEAN TEMP SILT FENCE	18,163.000 LF		
0430	02726	STAKING	(1.00) LS		
0440	02775	ARROW PANEL	2.000 EACH		
0450	03171	CONCRETE BARRIER WALL TYPE 9T	2,620.000 LF		
0460	04772	HPS LUMINAIRE OFFSET	3.000 EACH		
0470	04933	TEMP SIGNAL 2 PHASE	3.000 EACH		
0480	05950	EROSION CONTROL BLANKET	262,660.000 SQYD		
0490	05952	TEMP MULCH	1,409,408.000 SQYD		
0500	05953	TEMP SEEDING AND PROTECTION	1,409,408.000 SQYD		
0510	05966	TOPDRESSING FERTILIZER	72.940 TON		
0520	05985	SEEDING AND PROTECTION	1,318,207.000 SQYD		
0530	05989	SPECIAL SEEDING CROWN VETCH	343,440.000 SQYD		
0540	06510	PAVE STRIPING-TEMP PAINT-4 IN	32,102.000 LF		
0550	06514	PAVE STRIPING-PERM PAINT-4 IN	14,008.000 LF		
0560	06568	PAVE MARKING-THERMO STOP BAR-24IN	48.000 LF		
0570	08100	CONCRETE-CLASS A	12.550 CUYD		
0580	08150	STEEL REINFORCEMENT	700.000 LB		
0590	10020NS	FUEL ADJUSTMENT	834,801.000 DOLL	1.00	834,801.00
0600	10030NS	ASPHALT ADJUSTMENT	28,213.000 DOLL	1.00	28,213.00
0610	20667ED	PNEUMATIC BACKSTOWING	700.000 TON		
0620	23131ER701	PIPELINE VIDEO INSPECTION	917.000 LF		

SECTION 0003 DRAINAGE

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0630	00440	ENTRANCE PIPE-15 IN	28.000 LF		
0640	00462	CULVERT PIPE-18 IN	176.000 LF		
0650	00464	CULVERT PIPE-24 IN	46.000 LF		
0660	00522	STORM SEWER PIPE-18 IN	845.000 LF		
0670	00524	STORM SEWER PIPE-24 IN	50.000 LF		
0680	00526	STORM SEWER PIPE-30 IN	171.000 LF		
0690	00528	STORM SEWER PIPE-36 IN	545.000 LF		
0700	01000	PERFORATED PIPE-4 IN	70.000 LF		
0710	01010	NON-PERFORATED PIPE-4 IN	20.000 LF		
0720	01020	PERF PIPE HEADWALL TY 1-4 IN	1.000 EACH		
0730	01028	PERF PIPE HEADWALL TY 3-4 IN	1.000 EACH		
0740	01450	S & F BOX INLET-OUTLET-18 IN	2.000 EACH		
0750	01451	S & F BOX INLET-OUTLET-24 IN	1.000 EACH		
0760	01452	S & F BOX INLET-OUTLET-30 IN	4.000 EACH		
0770	01453	S & F BOX INLET-OUTLET-36 IN	3.000 EACH		
0780	01493	DROP BOX INLET TYPE 2	4.000 EACH		
0790	01496	DROP BOX INLET TYPE 3	2.000 EACH		
0800	01499	DROP BOX INLET TYPE 4	5.000 EACH		
0810	01756	MANHOLE TYPE A	2.000 EACH		
0820	01767	MANHOLE TYPE C	1.000 EACH		
0830	20569ES710	DROP BOX INLET TY 13G(MOD) (MODIFIED)	4.000 EACH		

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LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0840	20570ES710	DROP BOX INLET TY 13S(MOD) (MODIFIED)	1.000 EACH		
SECTION 0004 BRIDGE					
0850	08002	STRUCTURE EXCAV-SOLID ROCK	413.400 CUYD		
0860	08003	FOUNDATION PREPARATION (25258)	(1.00) LS		
0870	08003	FOUNDATION PREPARATION (25259)	(1.00) LS		
0880	08003	FOUNDATION PREPARATION (25260)	(1.00) LS		
0890	08003	FOUNDATION PREPARATION (26555)	(1.00) LS		
0900	08100	CONCRETE-CLASS A	352.200 CUYD		
0910	08150	STEEL REINFORCEMENT	42,159.000 LB		
SECTION 0005 UTILITY					
0920	01065	STEEL ENCASEMENT PIPE-8 IN	100.000 LF		
0930	01073	STEEL ENCASEMENT PIPE-16 IN	100.000 LF		
0940	01095	DUCTILE IRON PIPE-8 IN	590.000 LF		
0950	03460	TIE-IN TO WATER LINE	6.000 EACH		
0960	03494	VALVE-4 IN	2.000 EACH		
0970	03528	GATE VALVE-8 IN	2.000 EACH		
0980	21353ND	TIE-IN TO FORCE MAIN	6.000 EACH		
0990	23013EN	SANITARY SEWER FORCE MAIN	280.000 LF		
SECTION 0006 DEMOBILIZATION / MOBILIZATION					
1000	02568	MOBILIZATION (NO MORE THAN 5%)	LUMP		
1010	02569	DEMOBILIZATION (AT LEAST 1.5%)	LUMP		
		TOTAL BID			