

JOB SPECIAL PROVISIONS TABLE OF CONTENTS

(Job Special Provisions shall prevail over General Special Provisions whenever in conflict therewith).

- A. Project Contract for Contractor/Bidder Questions
- B. Delayed Notice to Proceed S-17, S-20, S-21 and S-23
- C. Parcel S-20
- D. Demolition Permits
- E. Delayed Notice to Proceed S-26
- F. Work Zone Traffic Management Plan
- G. Optional Pavements
- H. Supplemental Revisions
- I. Temporary Traffic Control
- J. Integral Sidewalk Retaining Wall
- K. Concrete Curb and Gutter
- L. Cast Iron Truncated Domes
- M. Traffic Signal Installation
- N. BNSF Railroad Requirements
- O. Reinforced Concrete Pipe
- P. Inlets
- Q. Flared End Sections
- R. Energy Dissipator
- S. Flared End Section and Energy Dissipator Riprap
- T. Storm Sewer and Inlet Abandonment and Removal
- U. Erosion Control
- V. Waterline
- W. Valves
- X. Fire Hydrant Assemblies
- Y. Steel Waterline Casing
- Z. Sanitary Sewer Piping Extension
- AA. New 4' Diameter Manholes
- BB. Extended Manholes
- CC. Manhole and Sewer Pipe Abandonment and Removal
- DD. Roadway Lighting
- EE. Permanent Traffic Signs
- FF. Relocated Traffic Signs
- GG. Guide Signs
- HH. Aggregate Base Courses and Rock Bases
- II. Liquidated Savings Specified


ADDITIONAL INFORMATION

BNSF Exhibit C – Contractor Requirements
BNSF Exhibit C-1 – Agreement Between BNSF Railway Company and the Contractor
Route 72 Foundation Investigation Report
Highway 72 Extension – Suspect ACBM Inspection Report


ENGINEER SEAL PAGE 1 OF 3

	<p>HNTB 715 Kirk Drive Kansas City, MO 64105-1310 Certificate of Authority: 001270 Consultant Phone: (816) 472-1201</p>
	<p>Route 72 Extension Rolla Project Number 359 DATE PREPARED:09/29/2017</p>
	<p>ADDENDUM DATE:</p>
<p>If a seal is present on this sheet JSP's have been electronically sealed and dated.</p>	
<p>Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: F – N & GG - II</p>	

ENGINEER SEAL PAGE 2 OF 3

	<p><i>Archer - Elgin</i> 310 East 6th Street Rolla, MO 65401 Certificate of Authority: 2003023612 Consultant Phone: (573) 364-6362</p>
	<p>Route 72 Extension Rolla Project Number 359 DATE PREPARED:09/29/2017</p>
<p>Jeffery A. Meadows, P.E. 29477</p>	<p>ADDENDUM DATE:</p>
<p>If a seal is present on this sheet JSP's have been electronically sealed and dated.</p>	
<p>Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: O - FF</p>	

ENGINEER SEAL PAGE 3 OF 3

	<p><i>City of Rolla, MO</i> <i>P.O. Box 979, 901 N. Elm St.</i> <i>Rolla, MO 65402</i> <i>Phone: 573-364-8659</i></p>
	<p>Route 72 Extension Rolla Project Number 359 DATE PREPARED: 09/28/2017</p>
	<p>9-28-17 ADDENDUM DATE:</p>
<p>If a seal is present on this sheet JSP's have been electronically sealed and dated.</p>	
<p>Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal: A-E</p>	

A. PROJECT CONTACT FOR CONTRACTOR/BIDDER QUESTIONS

1.0 Description. All Questions concerning the project shall be forwarded to the project contract listed below:

**Darin Pryor, P.E.
City of Rolla Public Works Department
P.O. Box 979, 901 N. Elm St.
Rolla, MO 65402
573-364-8659
dpryor@rollacity.org**

B. DELAYED NOTICE TO PROCEED S-17, S-20, S-21, and S-23

The City will not have possession of parcels S-17, S-20, S-21, and S-23 prior to bid opening date. The City anticipates having possession of the properties December 2017. A Notice to Proceed will be issued on the entire project except for the four parcels listed above and Parcel S-26. A separate Notice to Proceed will be issued on each of the four parcels when the City has possession.

There will be no direct payment for complying with this provision. A time extension will not be granted for complying with this provision.

C. PARCEL S-20**PART 1 - GENERAL**

1. In regard to excavated soils between Station 701+50 through Station 703+75 of the Hwy 72 Extension.
2. Any soils excavated from the subject area must be handled as a potential special waste. The excavated material shall be stockpiled adjacent to the construction site. Composite sampling will be conducted on the stockpiled material to determine if the material is a special waste or if can be used as clean fill.
3. Tarps shall be provided under and over the stockpiled material to make sure that surface waters do not transfer the material offsite.
4. If the composite soil samples meet the Tier 1 Risk-based Target Levels, for Non-Residential land use, the material can be used as clean fill under the pavement. If the composite soil samples meet the Tier 1 Risk-based Target Levels, for Residential land use or the Default Target Levels the material can be used as clean fill as determined by the City. If the soils do not meet the Tier 1 Target Levels, they will have to be disposed in a landfill as special waste.
5. All records for the subject soils including possible special waste landfill receipts, sampling results, and soil placement locations must be logged and submitted to the City.

6. Any free product encountered during earthwork on the subject site will be contained, collected in 55-gallon drums by the contractor and given to the City of Rolla Public Works Department for disposal at no direct payment.

PART 2 – Payment

The City will cover all costs of sampling and testing of the contaminated soil. The contractor will be responsible for excavating and storage of the contaminated soil until the testing is completed. There will be no direct payment for storage. If the contaminated soil must be disposed in a landfill as special waste the City will issue a change order to cover the costs of hauling and disposal.

D. DEMOLITION PERMITS

The successful bidder and all subcontractors will be required to obtain a City of Rolla Business License. A no cost demolition permit will be required for each parcel included in the demolition plans. There will be no direct payment for complying with this provision.

E. DELAYED NOTICE TO PROCEED S-26

The City is selling the structure on Parcel S-26. The purchaser will have until April 10th, 2018 to remove the structure. A Notice to Proceed for Parcel S-26 will be issued after the structure is removed. The contractor will be responsible for demolition on this parcel after the Notice to Proceed.

There will be no direct payment for complying with this provision. A time extension will not be granted for complying with this provision.

F. WORK ZONE TRAFFIC MANAGEMENT PLAN

1.0 Description. Work zone traffic management shall be in accordance with applicable portions of Division 100 and Division 600 of the Standard Specifications, and specifically as follows.

2.0 Traffic Management Schedule.

2.1 Traffic management schedules shall be submitted to the engineer for review prior to the start of work and prior to any revisions to the traffic management schedule. The traffic management schedule shall include the proposed traffic control measures, hours traffic control will be in place, and work hours.

2.2 The contractor shall notify the engineer one week prior to lane closures, shifting traffic, or reopening the roadway to traffic.

2.3 The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.

2.4 In order to ensure minimal traffic interference, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

3.0 Detours and Lane Closures.

3.1 The contractor shall provide changeable message signs notifying motorists of future traffic disruption and possible traffic delays one week before prior to the lane closures or new shifts in traffic. The changeable message signs shall be installed at a location as approved by the engineer.

4.0 Basis of Payment. No direct payment will be made to the contractor to recover the cost of equipment, labor, materials or time required to fulfill the above provisions, unless specified elsewhere in the contract document. All authorized changes in the traffic control plan shall be provided for as specified in Standard Specifications Section 616.

G. OPTIONAL PAVEMENTS

1.0 Description. This work shall consist of a pavement composed of either Portland cement concrete or asphaltic concrete constructed on a prepared subgrade. This work shall be performed in accordance with the standard specifications and as shown on the plans or established by the engineer.

2.0 The quantities shown reflect the total square yards of pavement surface designated for each pavement type as computed and shown on the plans.

2.1 No additional payment will be made for asphaltic concrete mix quantities to construct the required 1:1 slope along the edge of the pavement. No additional payment will be made for constructing a 30 degree safety edge along the edge of pavement.

2.2 No additional payment will be made for aggregate base quantities outside the limits of the final surface area as computed and shown on the plans.

2.3 No additional payment will be made for Prime Coat needed for asphaltic concrete option.

2.4 No additional payment will be made to bring the roadway subgrade to the proper elevation for the bridge tie-in's for either type of optional pavement.

2.5 The grading shown on the plans was designed for the **thicker** pavement option. For projects with grading in the contract, there will be no adjustment of the earthwork quantities due to adjusting the roadway subgrade for optional pavements.

2.6 The contractor shall comply with Sections 401 through 403 for the asphalt option and Sections 501 and 502 for the concrete option.

2.7 Pavement options composed of Portland cement concrete shall have contrast pavement marking for intermittent markings (skips), dotted lines, and solid intersection lane lines. The pavement markings shall be in accordance with Section 620. No additional payment will be made for the contrast pavement markings.

3.0 Method of Measurement. The quantities of concrete pavement will be measured in accordance with Section 502.14. The quantities of asphaltic concrete pavement will be measured in accordance with Section 403.22.

4.0 Basis of Payment. The accepted quantity of the chosen option will be paid for by the contract unit bid price for Item 401-99.05A, Optional Pavement 72A, per square yard, 401-99.05B, Optional Pavement 72B, per square yard, 401-99.05C, Optional Pavement 72C, per square yard and 401-99.05D, Optional Pavement Side Roads, per square yard.

H. SUPPLEMENTAL REVISIONS JSP-09-01U

Insert Sec 109.15, Sec 109.16 and Sec 109.17, subsequent section renumbered accordingly:

109.15 Seal Coat Price Index. Adjustments will be made to the payments due the contractor for Seal Coat placed in accordance with Sec 409 of the Standard Specifications. Adjustments will be calculated in accordance with Asphalt Cement Price Index of the General Provisions, except as defined herein.

109.15.1 Basis of Payment. To determine the adjustment for any material specified in this provision the following formula will be used.

$$A = B \times (0.68 \times 8.58/2000) \times (D - E)$$

Where:

- A = adjustment for Seal Coat placed during the index period
- B = gallons of seal coat placed during the index period
- D = average index price at the beginning of the period
- E = average index price at the time of bid
- 0.68 = factor to reduce volume of emulsion to AC only
(use average specific gravity of 1.03 for seal coat)

109.15.2 Optional. This provision is optional. If the bidder wishes to be bound by this provision, the bidder shall execute the acceptance form in the Bid for the Asphalt Cement Price Index. Acceptance of this provision will apply to both the Asphalt Cement Price Index and Seal Coat Price Index. Failure by the bidder to execute the acceptance form will be interpreted to mean election to not participate in the Asphalt Cement Price Index or Seal Coat Price Index.

109.16 Asphalt Underseal Price Index. Adjustments will be made to the payments due the contractor for Asphalt underseal placed in accordance with Sec 625 of the Standard Specifications. Adjustments will be calculated in accordance with Asphalt Cement Price Index of the General Provisions, except as defined herein.

109.16.1 Basis of Payment. To determine the adjustment for any material specified in this provision the following formula will be used.

$$A = B \times (8.66/2000) \times (D - E)$$

Where: A = adjustment for asphalt underseal placed during the index period
B = gallons of asphalt underseal placed during the index period
D = average index price at the beginning of the period
E = average index price at the time of bid
(use average specific gravity of 1.04 for underseal)

109.16.2 Optional. This provision is optional. If the bidder wishes to be bound by this provision, the bidder shall execute the acceptance form in the Bid for the Seal Coat Price Index. Failure by the bidder to execute the acceptance form will be interpreted to mean election to not participate in the Seal Coat Price Index.

109.17 Polymer Modified Emulsion Membrane Price Index. Adjustments will be made to the payments due the contractor for Polymer Modified Emulsion Membrane placed in accordance with Sec 413.30. Adjustment will be calculated in accordance with the Supplemental Asphalt Price Adjustment except as defined herein.

109.17.1 Basis of Payment. To determine the adjustment for any material specified in this provision the following formula will be used.

$$A=B \times (0.9/2000) \times (D - E)$$

Where: A = adjustment for membrane placed during the index period
B = square yards of membrane placed during the index period
D = average index price at the beginning of the period
E = average index price at time of bid

109.17.2 Optional. This provision is optional. If the bidder wishes to be bound by the provision, the bidder shall execute the acceptance form in the Bid for Polymer Modified Emulsion Membrane Price Index. Failure by the bidder to execute the acceptance form will be interpreted to mean election not to participate in the Polymer Modified Emulsion Membrane Price Index.

Delete Sec 403.2.5.2 and substitute the following:

403.2.5.2 Fibers. A fiber additive shall be used as a stabilizer in SMA Mixtures. Fibers shall be uniformly distributed by the end of the plant mixing process. The dosage rate for fibers shall be no less than 0.3 percent by weight of the total mixture for cellulose and no less than 0.4 percent by weight for mineral fibers.

Delete Sec 407 in its entirety and substitute the following:

407.1 Description. This work shall consist of preparing and treating an existing bituminous or concrete surface with bituminous material, in accordance with these specifications.

407.2 Material. All material shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section
Emulsified Asphalt or PG Liquid Asphalt	1015

407.3 Equipment. The contractor shall provide a system for heating and applying the bituminous material. The system shall be designed, equipped, maintained and operated such that emulsified asphalt or liquid asphalt, at even heat, may be applied uniformly on variable widths of surface up to 15 feet with uniform pressure and an allowable variation from any specified rate of ±0.01 gallon per square yard. The system shall include a calibrated tank and a thermometer for measuring temperature of tank contents. The system shall be equipped with instrumentation that continuously verifies application rates. The calibration of the system shall be approved by the engineer prior to use, and the contractor shall furnish all equipment, material and assistance if calibration is required.

407.4 Construction Requirements.

407.4.1 Preparation of Surface. The existing surface shall be free of all dust, loose material, grease or other foreign material at the time the tack is applied. Any excess bituminous surface mixture or bituminous joint material will be removed by MoDOT without cost to the contractor before the tack is applied.

407.4.2 Application. Asphalt emulsion or PG liquid asphalt shall be applied uniformly with a pressure distributor at the minimum rates indicated in the following table. No dilution of the emulsified asphalt material shall be allowed. The tack coat material shall be heated at the time of application to a temperature in accordance with Sec 1015. The tack coat shall be properly cured and the tacked surface shall be clean of all dirt before the next course is placed.

Tack Coat Application Rates	
Surface Type	Minimum Application Rate (Gal. per sq. yd.)
New Asphalt Pavement	0.05
Existing Asphalt or Concrete Pavement	0.08

407.4.3 Tack. The tack coat shall be applied in such a manner as to cause the least inconvenience to traffic and to permit one-way traffic without tracking of asphalt emulsion. All exposed tack coat shall be covered with bituminous mixture prior to opening to traffic.

407.5 Method of Measurement. Measurement of asphalt emulsion to the nearest 10 gallons will be made in accordance with Sec 1015.

407.6 Basis of Payment. The accepted quantity of tack coat will be paid for at the contract unit price.

Amend Sec 620.10.3.1.1.1, and 620.10.3.1.1.2 to include the following:

620.10.3.1.1.1 Type 1 Preformed Marking Tape in Lieu of Type 2. Type 1 Preformed Pavement Marking Tape will be allowed in lieu of Type 2 Preformed Marking Tape (Grooved) at no additional cost to the Commission. This work shall be in accordance with Sec 620 and accompanying provisions except as modified herein.

620.10.3.1.1.2 Construction Requirements. Grooving will not be required when Type 1 Preformed Marking Tape is used.

Delete Sec 606.30.4 & 606.30.5 and substitute the following:

606.30.4 Method of Measurement. Measurement for crashworthy end terminals will be made for each unit assembled, installed and complete in place. Grading for crashworthy end terminals will be measured in accordance with [Sec 203](#) when roadway and drainage excavation is included in the contract, otherwise grading will be measured in accordance with Shaping Slopes, Class III or as directed on plans.

606.30.5 Basis of Payment. The accepted quantities of Type A, B C, D and E crashworthy end terminals, complete in place, will be paid for at the contract unit price. Payment will be considered full compensation for complete installation including any backup assemblies or other items necessary for proper installation of the end terminal or crash cushion as required. Grading for end terminals will be paid for at the contract unit price for roadway and drainage excavation if included in the contract; otherwise it will be paid for as Shaping Slopes, Class III. If the contractor elects to use a flared Type A crashworthy end terminal, additional embankment as shown on the plans shall be provided at the contractor's expense.

Insert Sec 620.80 by to including the following:**SECTION 620.80 CONTRAST PAVEMENT MARKINGS**

620.80.1 Description. This work shall consist of furnishing and installing black contrasting pavement marking for intermittent markings (skips), dotted lines and solid intersection lane lines on new, and newly ground concrete surfaces. This work shall be in accordance with Sec 620 and accompanying provisions except as modified herein

620.80.2 Material. The black contrast marking shall be compatible with the white pavement marking material specified in the plans.

620.80.3 Construction Requirements.

620.80.3.1 The Contrast markings shall be accomplished by placing the black pavement marking according to manufacturer's recommendations.

620.80.3.2 The white marking shall be centered within the black marking such that there will be a 1.5 inch border of black on both sides of the white marking. Tolerances for the width and length of the black and white markings shall be in accordance with Sec 620.2.4.2.

620.80.4 Basis of Payment. There will be no direct payment for compliance with the requirements of this provision.

Delete Sec 1048.10.1.1 and substitute the following:

1048.10.1.1 Application. Application shall be in accordance with the manufacturer's recommendations.

I. TEMPORARY TRAFFIC CONTROL

1.0 Description. All work necessary to maintain safe and efficient traffic flow through the work areas shall be provided by the contractor. This will include furnishing, relocating, and removing temporary traffic control devices, and the removal and relocation or covering and uncovering of existing signs and other traffic control devices, placement of temporary pavement marking, removal of existing pavement marking and temporary pavement marking once stage is complete and in accordance with the contract documents or as directed by the engineer.

2.0 Work requirements. Work shall be in accordance with Sec 616, Sec 612, Sec 620 and the contract plans.

3.0 Method of Measurement. This work will not be measured for payment, but will be considered a lump sum unit.

4.0 Basis of Payment.

4.1 Partial payments will be made as follows:

- (a) The first partial payment will be made when five percent of the original contract amount is earned. This payment will be the lesser of 50 percent of the contract price for the item of temporary traffic control or 5 percent of the original contract price.
- (b) The second partial payment will be made when 50 percent of the original contract amount is earned. This payment will be the lesser of 25 percent of the original contract price for the item of temporary traffic control or 2.5 percent of the original contract price.
- (c) The third partial payment will be made when 75 percent of the original contract amount is earned. This payment will be the lesser of 20 percent of the original contract price for the item of temporary traffic control or 2 percent of the original contract price.
- (d) When the engineer has accepted the contract for maintenance in accordance with Sec 105, the remaining contract price for the item of temporary traffic control will be paid.
- (e) The above partial payment schedule may be adjusted by the engineer if proof of invoices submitted by the contractor demonstrate additional temporary traffic control costs were incurred earlier than the above proposed schedule. The total payment for temporary traffic control will not exceed the bid amount for Temporary Traffic Control, lump sum, unless covered by a cost change order as referenced in the following Section 4.3.

4.1.1 For the purposes of this provision, the term “original contract price” will be construed as the total dollar value of the construction items (excluding temporary traffic control) of the original contract.

4.2 Temporary traffic control will be paid for at the contract lump sum price for Item 616-99.01, Temporary Traffic Control. No direct payment will be made for the following:

- (a) Incidental items necessary to complete the work, unless specifically provided as a pay item in the contract.
- (b) Installing, operating, maintaining, cleaning, repairing, removing or replacing traffic control devices.
- (c) Covering and uncovering existing signs and other traffic control devices.
- (d) Relocating temporary traffic control devices, including permanent traffic control devices temporarily relocated, unless specifically included as a pay item in the contract.
- (e) Providing channelizers.

J. INTEGRAL SIDEWALK RETAINING WALL

1.0 Description. Integral sidewalk retaining walls of reinforced concrete shall be constructed at locations shown on the plans and in accordance with the details shown on the plans and the requirements of the Standard Specifications.

2.0 Work requirements. Work shall be in accordance with Standard Specifications, with the addition of all form ties used for construction of retaining walls shall be of an approved type so as to have a minimum breakback of ½ inch. All tie holes shall be grouted and all form marks shall be removed with a diamond grinder or approved equal.

3.0 Method of Measurement. This work will be measured by the quantity of cubic yards placed of concrete which includes both the wall and sidewalk.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the Integral Sidewalk Retaining Wall as shown in the contract documents. The accepted quantity will be paid for at the contract unit price for Item 703-99.07, Integral Sidewalk Retaining Wall, per cubic yard.

K. CONCRETE CURB AND GUTTER

1.0 Description. Concrete Curb and Gutter shall be constructed at locations shown on the plans.

2.0 Work requirements. Work shall be in accordance with City Standard Drawings 200 and 202 for the dimensions of the curb and gutter only, all other aspects of the construction shall comply with Sec 609 of the Standard Specifications.

3.0 Method of Measurement. This work will be measured by the quantity of linear feet placed of concrete curb and gutter, and include both rollover curb as well as the standard curb.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the Concrete Curb and Gutter as shown in the contract documents. The accepted quantity will be paid for at the contract unit price for Item 609-99.03, Concrete Curb and Gutter, per linear foot.

L. CAST IRON TRUCATED DOMES

1.0 Description. Cast Iron Truncated Domes shall be constructed at the locations shown on the plans.

2.0 Work requirements. Work shall be in accordance with Sec 608 of the Standard Specifications and Standard Plan 608.50. The truncated domes shall be made from Cast Iron and wet set integral with the concrete, surface applied products will not be allowed.

3.0 Method of Measurement. This work will be measured by the quantity of cast iron truncated domes placed to the nearest square foot.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the Cast Iron Truncated Domes as shown in the contract documents. The accepted quantity will be paid for at the contract unit price for Item 608-99.12, Truncated Domes, per square foot.

M. TRAFFIC SIGNAL INSTALLATION

1.0 Description. This work shall consist of furnishing all labor, materials and equipment to complete in place the traffic signal work at Route 72-Kingshighway-Bridge School Road and US 63 and Route 72 intersections as shown in the contract documents.

2.0 Work requirements. Work shall be in accordance with Sec 902 of the Standard Specifications and Standard Plans.

3.0 Method of Measurement. This work will be measured as indicated on the plans, complete-in place and accepted by the engineer, as unit lump sum quantity for all work necessary.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the Traffic Signal Installation as shown in the contract documents. The accepted quantity will be paid for at the contract unit price for Item 902-99.01A, Signalized Intersection @ Kingshighway-Route 72, per lump sum and Item 902-99.01B, Signalized Intersection @ Route 63-Route 72, per lump sum.

N. BNSF RAILROAD REQUIREMENTS

1.0 Description. These Railroad Requirements set forth terms and conditions under which the Railroad will allow the contractor to enter in and upon the Railroad's real property, right of way, tracks and other facilities to perform the contractors work relating to this project. The contractor shall comply with the attached BNSF Exhibit C – Contractor Requirements and execute Exhibit C-1 – Agreement Between BNSF Railway Company and the Contractor prior to proceeding with any work within the Railroad right-of-way. Exhibit C-1 shall be executed and sent to BNSF for final execution no later than 10 business days after City has provided a Notice to Proceed for the project. Agreement shall be sent to:

John Caufield, PE
Manager of Public Projects
BNSF Railway
4515 Kansas Ave
Kansas City, KS 66106
Cell 817-789-0879
Office 913-551-4965

2.0 Basis of Payment. No direct payment will be made for the compliance with this provision it is considered incidental to the contract unit price for items properly authorized in the contract.

O. Reinforced Concrete Pipe

4.0 Description. Reinforced Concrete Pipe shall be constructed at locations and elevations shown on the plans.

5.0 Work requirements. Work shall be in accordance with Project Plan and Details for all dimensions, pipe class, materials, and bedding types and sizes. All other aspects of the construction shall comply with Sec 726, Divisions 200, 800, and 1000 of the Standard Specifications.

6.0 Method of Measurement. This work will be measured by the quantity of linear feet placed of reinforced concrete pipe measured along the longitudinal axis of the pipe from flowline in to flowline out along each pipe alignment.

7.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the reinforced concrete pipe and shall include piping; testing; excavation of all material regardless of character; trenching; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; connections to new and existing pipes and structures; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation, trenching and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb.

The accepted quantity will be paid at the contract unit price for Item 726-99.03A for 15" Reinforced Concrete Pipe, per lineal foot; for Item 726-99.03B; 18" Reinforced Concrete Pipe, per lineal foot; for Item 726-99.03C, 24" Reinforced Concrete Pipe, per lineal foot; and for Item 726-99.03D, 14" x 23" Elliptical Reinforced Concrete Pipe, per lineal foot.

P. Inlets

1.0 Description. Precast Concrete Inlets shall be constructed at locations and elevations shown on the plans.

2.0 Work requirements. Work shall be in accordance with Project Plan and Details for all dimensions, inlet types, materials, grates and curb box types, and bedding. All other aspects of the construction shall comply with Sec 731, 614, Divisions 200, 800, and 1000 of the Standard Specifications.

3.0 Method of Measurement. This work will be measured by each unit assembled, installed and complete in place.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include precast concrete structure; metal grates and curb boxes; lids; aggregate; excavation of all material regardless of character; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; connections to new and existing pipes and structures; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb. The accepted quantity will be paid at the contract unit price for Item 731-99.02A, 2x3 Single Curb Inlets, per unit; for Item 731-99.02B, 2x6 Double Curb Inlets, per unit; ; for Item 731-99.02C, 3x6 Double Curb Inlets, per unit; for Item 731.99.02D, Area Inlets, per unit; for Item 731.99.02E, 2x4 Grated Inlets, per unit; and for Item 731.99.02F, 3x3 Grated Inlets, per unit.

Q. Flared End Sections

1.0 Description. Precast Concrete Flared End Sections shall be constructed at locations and elevations shown on the plans.

2.0 Work requirements. Work shall be in accordance with Project Plan and Details for all dimensions, materials, and types and sizes. All other aspects of the construction shall comply with Sec 732, Divisions 200 and 1000 of the Standard Specifications.

3.0 Method of Measurement. This work will be measured by each unit assembled, installed and complete in place.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include flared end section; toe wall; excavation of all material regardless of character, bedding, backfill; connections to new and

existing pipes and structures; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation, nor for finish grading or seeding. The accepted quantity will be paid at the contract unit price for Item 732-99.02A, 15" Precast Concrete Flared End Section, per unit; for Item 732-99.02B, 18" Precast Concrete Flared End Section, per unit; for Item 732-99.02C, 24" Precast Concrete Flared End Section, per unit; and for Item 732-99.02D, 14" x 23" Elliptical Precast Concrete Flared End Section, per unit.

R. Energy Dissipator

- 1.0 Description.** Reinforced Concrete Energy Dissipators shall be constructed at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, materials, and bedding types and sizes. All other aspects of the construction shall comply with Sec 604, Divisions 200, and 1000 of the Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by each unit assembled, installed and complete in place.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include reinforced concrete structure, aggregate; excavation of all material regardless of character, bedding, backfill; connections to new and existing pipes and structures; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation, and backfilling associated with the installation, nor for finish grading or seeding. The accepted quantity will be paid at the contract unit price for Item 604-99.02, Reinforced Concrete Energy Dissipators, per unit.

S. Flared End Section and Energy Dissipator Riprap

- 1.0 Description.** Riprap shall be constructed for flared end sections and energy dissipators at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, materials, types and sizes. All other aspects of the construction shall comply with Sec 609.70, Divisions 200, and 1000 of the Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by the quantity of cubic yards placed of rip rap.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the rip rap, geotextile filter fabric; and all incidental work required for a complete installation. No separate payment shall be made for excavation of any kind including rock excavation; excavation removal, any other work incidental to excavation, associated with the installation, nor for finish grading or seeding. The accepted quantity will be paid at the contract unit price for Item 609-99.07, Flared End Section and Energy Dissipator Riprap, per cubic yard.

T. Storm Sewer and Inlet Abandonment and Removal

- 1.0 Description.** Existing Storm Sewer Pipe and Inlets shall be capped, plugged, abandoned and/or removed as shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, materials, and sizes. All other aspects of the construction shall comply with Section 202, Division 200 and 800 of the Standard Specifications
- 3.0 Method of Measurement.** This work will not be measured for payment, but will be considered a lump sum unit.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to cap, plug abandon and/or remove and dispose of existing storm pipes and inlets and restore the surface to subgrade elevation if under proposed pavement, to existing pavement conditions if under existing pavement, or to final grade with seed and straw if outside pavement areas. The work shall include grout; caps; plugs; excavation of all material regardless of character; trenching; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement; ground restoration in areas outside of pavement; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation, trenching and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration. The accepted quantity will be paid at the contract lump sum price for Item 202-99.01, Storm Sewer and Inlet Abandonment and Removal.

U. Erosion Control

- 1.0 Description.** Pollution, Erosion and Sediment Control shall be provided as shown on the plan, as directed by the Engineer, or as needed based on site conditions.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details and as required depending upon the Contractor's method of operation, seasonal conditions and nature of the work being performed. All other aspects of the construction shall comply with Section 806 of the Standard Specifications
- 3.0 Method of Measurement.** This work will not be measured for payment, but will be considered a lump sum unit.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to install, maintain and remove temporary pollution, erosion and sediment control measures. Additional erosion control items, other than those indicated on the plans, may be required depending upon the Contractor's method of operation, seasonal conditions and nature of the work being performed. The accepted quantity will be paid at the contract lump sum price for Item 806-99.01, Erosion Control.

V. Waterline

- 1.0 Description.** Waterline Pipe shall be constructed at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, pipe class, materials, and bedding types and sizes. All other aspects of the construction shall comply with Rolla Municipal Utilities Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by the quantity of linear feet placed of waterline pipe measured on top of the ground along the centerline of the trench from point of connection to point of connection.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the waterline pipe and shall include all pipe; fittings; restraints; thrust blocks; hydrostatic pressure testing; flushing; disinfecting; separation and protection from other utilities; excavation of all material regardless of character; trenching; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation, trenching and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb. The accepted quantity will be paid at the contract unit price for Item 603-99.03A, 12" Waterline Pipe, per linear foot; and for Item 603-99.03B, 8" Waterline Pipe, per lineal foot.

W. Valves

- 1.0 Description.** Waterline Valves shall be constructed at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, pipe class, materials, and bedding types and sizes. All other aspects of the construction shall comply with Rolla Municipal Utilities Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by each unit assembled, installed and complete in place.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include valve assembly; valve box and lid; thrust blocks; restraints; hydrostatic pressure testing; flushing; disinfecting; separation and protection from other utilities; excavation of all material regardless of character; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb. The accepted

quantity will be paid at the contract unit price for Item 603-99.02A, 12" Waterline Valves, per unit; and for Item 603-99.02B, 8" Waterline Valves, per unit.

X. Fire Hydrant Assemblies

- 1.0 Description.** Fire Hydrants shall be constructed at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, pipe class, materials, and bedding types and sizes. All other aspects of the construction shall comply with Rolla Municipal Utilities Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by each unit assembled, installed and complete in place.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include hydrants; fittings; thrust blocks; lateral pipe and associated valve assembly, valve box and lid; restraints; hydrostatic pressure testing; flushing; disinfecting; separation and protection from other utilities; excavation of all material regardless of character; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb. The accepted quantity will be paid at the contract unit price for Item 603-99.02C, Fire Hydrant Assemblies, per unit.

Y. Steel Waterline Casing

- 1.0 Description.** Steel Waterline Casing Pipe shall be constructed at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, pipe class, materials, and bedding types and sizes. All other aspects of the construction shall comply with Rolla Municipal Utilities Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by the quantity of linear feet placed of steel waterline casing pipe measured on top of the ground along the centerline of the trench from end of casing to end of casing.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the casing pipe and shall include all casing; spacers; end seals; weld testing; excavation of all material regardless of character; trenching; bedding; backfill; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation, trenching and backfilling associated with the installation, nor for finish grading or seeding. The accepted quantity will be paid at the contract unit price for Item 603-99.03C, 20" Steel Waterline Casing Pipe, per linear foot.

Z. Sanitary Sewer Piping Extension

- 1.0 Description.** Sanitary Sewer Pipe shall be constructed at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, pipe class, materials, and bedding types and sizes. All other aspects of the construction shall comply with City of Rolla Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by the quantity of linear feet placed of sewer pipe measured on top of the ground along the centerline of the trench from point of connection to point of connection.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the sewer pipe and shall include all connections to new and existing manholes and existing pipes; testing; excavation of all material regardless of character; trenching; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation, trenching and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb. The accepted quantity will be paid at the contract unit price for Item 603-99.23, Sanitary Sewer Pipe Extension, per linear foot.

AA. New 4' Diameter Manholes

- 1.0 Description.** Precast Sanitary Sewer Manholes shall be constructed at locations and elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, materials, rings and lids, and bedding. All other aspects of the construction shall comply with the City of Rolla Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by each unit assembled, installed and complete in place.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include precast concrete structure; ring and lid; aggregate; excavation of all material regardless of character; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; connections to new and existing pipes and structures; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb. The accepted quantity will be paid at the contract unit price for Item 603-99.22A, New 4' Diameter Manholes, per unit.

BB. Extended Manholes

- 1.0 Description.** Existing sanitary sewer manholes shall be extended to elevations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, materials, rings and lids, and bedding. All other aspects of the construction shall comply with City of Rolla Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by each unit assembled, installed and complete in place.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include removal and replacement of existing cone section or addition of new cone section, addition of riser sections, removal and replacement of existing ring and lid; excavation of all material regardless of character; bedding; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement and curb; connections to new and existing pipes and structures; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration in areas of existing pavement and curb. The accepted quantity will be paid at the contract unit price for Item 603-99.22B, Extended Manholes, per unit. .

CC. Manhole and Sewer Pipe Abandonment and Removal

- 1.0 Description.** Existing Manholes and Sewer Pipe shall be capped, plugged, abandoned and/or removed as shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, materials, and sizes. All other aspects of the construction shall comply with the City of Rolla Standard Specifications
- 3.0 Method of Measurement.** This work will not be measured for payment, but will be considered a lump sum unit.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to cap, plug abandon and/or remove and dispose of existing sewer pipes and manholes and restore the surface to subgrade elevation if under proposed pavement, to existing pavement conditions if under existing pavement, or to final grade with seed and straw if outside pavement areas. The work shall include grout; caps; plugs; excavation of all material regardless of character; trenching; backfill; sawcutting existing pavement and curb; pavement, curb and ground restoration in areas of existing pavement; ground restoration in areas outside of pavement; and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation, trenching and backfilling associated

with the installation, nor for finish grading, seeding, etc associated with pavement, curb and site restoration. The accepted quantity will be paid at the contract lump sum price for Item 603.99-21, Manhole and Sewer Pipe Abandonment and Removal.

DD. Roadway Lighting

- 1.0 Description.** Roadway lightpole structures and all associated circuits, conduit, casing pipe, pullboxes and all appurtenances shall be installed at locations and in the manner shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details. All other aspects of the construction shall comply with Sec 901, Divisions 200, and 1000 of the Standard Specifications.
- 3.0 Method of Measurement.** This work will not be measured for payment, but will be considered a lump sum unit.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete roadway lighting system and shall include trenching, excavation of all material regardless of character, backfilling, conduit, wire, pullboxes, casing pipe, concrete, aggregate, pole, brackets and bracket arms, luminaries, pedestals, bolts, nuts, washers, miscellaneous hardware, and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation nor for finish grading or seeding. The accepted quantity will be paid at the contract lump sum price for Item 901-99.01, Roadway Lighting.

EE. Permanent Traffic Signs

- 1.0 Description.** Permanent traffic signs assemblies shall be installed in the locations shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, type, and style. All other aspects of the construction shall comply with Sec 903, Division 200 and 1000 of the Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by each unit assembled, installed and complete in place.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to construct the complete unit and shall include sign, PSST mounting post, base, all necessary mounting hardware, excavation of all material regardless of character, concrete, backfill, and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation nor for finish grading or seeding. The accepted quantity will be paid at the contract unit price for Item 903-99.02A, Stop R1-1, per unit; for Item 903-99.02B, Yield R1-2 per unit; for Item 903-99.02C, Speed Limit R2-1 per unit; for Item 903-99.02D, Right Lane Must Turn Right R3-7R, per unit; for Item 903-99.02E, Two Way Center Lane, R3-9B, per unit; for Item 903-

99.02F, Do Not Enter, R5-1, per unit; for Item 903-99.02G, Merge W4-1R, per unit; for Item 903-99.02H, Cross Traffic Does Not Stop W4-4P, per unit; for Item 903-99.02I, Right Lane Ends, W9-1, per unit; for Item 903-99.02J, Pedestrian W11-2, per unit; for Item 903-99.02K, Double Arrow W12-1 per unit; for Item 903-99.02L, Diagonal Arrow W16-7P, per unit; for Item 903-99.02M, Ahead, W16-9P, per unit; for Item 903-99.02N, Street Name (Two Lines) D3-1b, per unit; for Item 903-99.02O, Street Name (One Line) D3-1, per unit; for Item 903-99.02P, Hospital, D9-2, per unit; for Item 903-99.02Q, Blue Arrow M6-1, per unit; for Item 903-99.02R, RT/LT Arrow M6-1, per unit; for Item 903-99.02S, Slight Right M6-2, per unit; for Item 903-99.02T, Straight Arrow M6-3, per unit; for Item 903-99.02U, Blue Straight Ahead Arrow M6-3, per unit; for Item 903-99.02V, LT and RT Arrow M6-4, per unit; for Item 903-99.02W, Interstate Route Sign M1-1, per unit; for Item 903-99.02X, U.S. Route Marker M1-4, per unit; for Item 903-99.02Y, State Route M1-5, per unit; for Item 903-99.02Z, East M3-2, per unit; for Item 903-99.02AA, West M3-4, per unit.

FF. Relocated Traffic Signs

- 1.0 Description.** Relocated traffic signs assemblies shall be removed from their existing location and reinstalled in the final locations as shown on the plans.
- 2.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, type, and style. All other aspects of the construction shall comply with Sec 903, Division 200 and 1000 of the Standard Specifications.
- 3.0 Method of Measurement.** This work will be measured by each unit assembled, installed and complete in place.
- 4.0 Basis of Payment.** Payment for this work shall include all materials, labor, equipment and time necessary to relocate the complete unit and shall include relocated sign, relocated or new PSST mounting post as needed, new base, all necessary mounting hardware, excavation of all material regardless of character, concrete, backfill, and all incidental work required for a complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation nor for finish grading or seeding. The accepted quantity will be paid at the contract unit price for Item 903-99.02BB, Relocated Traffic Signs, per unit.

GG. Guide Signs

- 5.0 Description.** This item includes the removal of existing and construction proposed guide signs and modifications to route assemblies shown in the plans along I-44 from east of exit 186 to west of exit 184 including signing at interchanges 184 and 186 as shown in the Off Project Signing Plan and associated sign details.
- 6.0 Work requirements.** Work shall be in accordance with Project Plan and Details for all dimensions, type, and style. All other aspects of the construction shall comply with Sec 903, Division 200 and 1000 of the Standard Specifications. Contractor shall submit shop drawings per direction on the project plans for verification of proper mounting posts, footing depths, and mounting height.

7.0 Method of Measurement. This work will be measured by lump sum, for removal of existing, and installed signs and complete in place as shown on the plans.

8.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to remove existing signs, which may include the posts, fabricate and install new sign panels, mounting posts, hinge assemblies, mounting brackets and hardware necessary to complete the new installation. This item includes all incidental work required for complete installation. No separate payment shall be made for rock excavation and removal, shoring, dewatering or any other work incidental to excavation and backfilling associated with the installation nor for finish grading or seeding. The accepted quantity will be paid at the contract unit price for Item 903-99.01, Guide Signs, per Lump Sum.

HH. AGGREGATE BASE COURSES AND ROCK BASES

8.0 Description. The Aggregate Bases and Rock Bases shall be constructed at locations shown on the plans.

9.0 Work requirements. Work shall be in accordance with Sec 303, 304 and Division 1000 of the Standard Specifications.

3.0 Method of Measurement. This work will be measured by the quantity of square yards placed of either aggregate base course or rock base.

4.0 Basis of Payment. Payment for this work shall include all materials, labor, equipment and time necessary to construct the Aggregate Base Courses and Rock Bases as shown in the contract documents. The accepted quantity will be paid for at the contract unit price for Item 3049905A, 8" Type 5 Aggregate Base, per Square Yard; Item 3049905B, 6" Type 5 Aggregate Base, per Square Yard; Item 3039905A, Furnishing 15" (or 12") Rock Base, per Square Yard; Item 3039905B, Placing 15" (or 12") Rock Base, per Square Yard

II. LIQUIDATED SAVINGS SPECIFIED

1.0 Liquidated Savings Specified for Early Completion. The contractor may receive an incentive payment from the City of Rolla, in addition to all other sums earned under the contract, if the contractor achieves substantial completion of the Route 72 extension. Substantial completion of Route 72 Extension includes completion of the roadway that allows 4 lanes of traffic from Sta. 698+61 (connection to existing Kingshighway) to US 63/Bishop Ave, including full construction of intersection and signal at Route 72 and Kingshighway/Bridge School Road including both realignment of Kingshighway from Kinghighway Sta. 53+60 through new intersection to realigned Bridge School Road Sta. 44+00. Temporary lane reductions are still allowed to allow contractor to perform work outside of the curblines during the working day. Should weather not permit permanent pavement markings to be placed, temporary pavement markings will be accepted. must be completed and open to traffic. An incentive payment of \$3200 will be paid per DAY for each full DAY that the work described above is completed prior to December 1st, 2018. The maximum amount paid as liquidated savings will not exceed \$250,000.

1.1 In the event of an excusable delay, an extension of the contract completion time will not extend the date specified for determining any liquidated savings or incentive. Further, in the event

of an excusable delay, if the contractor completes the work providing for liquidated savings or incentive on or before the milestone or other date, that shall not constitute a basis to claim acceleration costs in addition to the liquidated savings or incentive that may be earned.

1.2 The incentive payment described above is made, not as a bonus or gift, but as stipulated compensation in full for reduced risks, delay and inconvenience experienced by the traveling public, and for other reduced costs to the Commission and public resulting from early completion.