PROPOSAL AND SPECIFICATIONS

FOR

HIGHWAY CONSTRUCTION

Do Not Separate
or Remove Sheets
From This Proposal

COUNTY LOCAL ROAD SYSTEM

<u>PROJECT NO. LH 4908</u>– 1.45 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, box culvert replacement, peat excavation, guardrail installation, and restoration on 144th Avenue, Kalamazoo Drive to Sunrise Trail in Leighton Township, Allegan County.

LEIGHTON TOWNSHIP

NOVEMBER 14, 2018

BOARD OF COUNTY ROAD COMMISSIONERS OF ALLEGAN COUNTY, MICHIGAN

1308 Lincoln Road, Allegan, MI 49010

ALLEGAN COUNTY ROAD COMMISSION

ADVERTISEMENT FOR BIDS

COUNTY LOCAL ROAD CONSTRUCTION

Sealed bids will be received by the Allegan County Road Commission at their office at 1308 Lincoln Road (M-89), Allegan, Michigan until 11:00 A.M., Local Time, November 14, 2018, and, at such time, be publicly opened and read aloud for the following:

<u>PROJECT NO. LH 4908</u>– 1.45 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, box culvert replacement, peat excavation, guardrail installation, and restoration on 144th Avenue, Kalamazoo Drive to Sunrise Trail in Leighton Township, Allegan County.

Complete specifications and bid forms are available at the Road Commission office and the Road Commission website www.alleganroads.org under the Projects link. When accessing plans from the website, please send an email to rcbeth@alleganroads.org to be added to the plan holders list.

All bids must be submitted on forms furnished by the Road Commission and sealed in envelopes with the name and address of the bidder, and the item bid upon clearly marked thereon.

A bid deposit of at least 5% of the bid amount will be required for this item. The bid deposit may be in the form of certified check, cashier's check or bid bond.

The Commission reserves the right to reject any or all bids, to waive minor technicalities, and to accept the bid that is deemed to be in the best interest of the County of Allegan.

BOARD OF COUNTY ROAD COMMISSIONERS OF ALLEGAN COUNTY, MICHIGAN

> John Kleinheksel, Vice-Chairman James Rybicki, Member Larry Brown, Member

<u>PROJECT NO. LH 4908</u>– 1.45 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, box culvert replacement, peat excavation, guardrail installation, and restoration on 144th Avenue, Kalamazoo Drive to Sunrise Trail in Leighton Township, Allegan County.

BID and AWARD	
Date	

Board of County Road Commissioners Of Allegan County 1308 Lincoln Road Allegan, MI 49010

Gentlemen:

The undersigned has examined the plans, specifications, and location of the work described herein and is fully informed as to the nature of the work and the conditions relating to its performance and understands that the quantities shown in the estimate are approximate only and are subject to either increase or decrease; and hereby proposed to furnish all necessary machinery, tools, apparatus and other means of doing the work, do all the work, furnish all the materials except as otherwise specified herein, and, for the unit prices named in the accompanying unit price schedule, to complete work in strict accordance with the plans and specifications therefore.

The undersigned further proposes to such extra work as may be ordered by you, prices for that are not included in the itemized bid, compensation therefore to be made on the basis agreed upon before such extra work is begun.

The undersigned agrees to complete all items of work on or before <u>August 17, 2018</u>. The schedule for liquidated damages is located in the general specifications.

The contractor shall submit a progress schedule subject to approval of the project engineer prior to the award of the contract.

The undersigned encloses a certified check, cashier's check, or Bid Bond, representing 5% of the bid, in the amount of \$______, payable to the Allegan County Road Commission as a guarantee of good faith. If the contract is awarded to the undersigned, and the undersigned fails to furnish satisfactory bonds to the Road Commission within fifteen (15) days after being given notice of award said check will be forfeited to the Allegan County Road Commission as liquidated damage.

THE CONTRACT

The Contract Documents consist of the bid documents, this Agreement, Conditions of the Contract (General Supplementary, Special and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negation, representations or agreements, either written or oral. If anything in the other Contract Documents is inconsistent with this Agreement, this Agreement will govern.

<u>PROJECT NO. LH 4908</u>– 1.45 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, box culvert replacement, peat excavation, guardrail installation, and restoration on 144th Avenue, Kalamazoo Drive to Sunrise Trail in Leighton Township, Allegan County.

ALLEGAN COUNTY ROAD COMMISSION ALLEGAN, MICHIGAN ITEMIZED UNIT PRICE BID SCHEDULE

ITEM OF WORK	QUANTITY	UNIT	UNIT PRICE	TOTAL
Clearing	1	LS		
Station Grading	1	LS		
Subbase, CIP	10,800	Cyd		
Topsoil Surface, Salv, LM	9,240	Cyd		
Geotextile, Stabilization	3,875	Syd		
High Performance Biaxial Geogrid	2,875	Syd		
Aggregate, 6A	50	Ton		
Subgrade Undercutting, Type II	1,000	Cyd		
Excavation, Peat	7,310	Cyd		
Backfill, Swamp	7,310	Cyd		
Culv, Cl F, 12 inch	520	Ft		
Culv, Cl F, 18 inch	80	Ft		
Culv, Cl F, 24 inch	80	Ft		
Culv, Cl E, Conc, 24 inch	280	Ft		
Culv End Sect, Conc, 24 inch	10	Ea		
Precast Concrete Box Culvert, 8' x 5'	64	Ft		
Underdrain, Subgrade, 6 inch	1,605	Ft		
Underdrain Outlet, 6 inch	70	Ft		
Underdrain, Outlet Ending, 6 inch	7	Ea		
Approach, Cl II	490	Ton		
Approach, HMA Millings	25	Ton		
Aggregate Base, 6 inch	26,000	Syd		
Aggregate Base, 10 inch	2,200	Syd		

A 24A A	4.000	T	
Aggregate, 21AA	1,600	Ton	
Restoration	1	LS	
Extended Restoration	1	LS	
Seeding, Mixture CR	590	Lb	
Sign, Type B, Temp, Modified	212	Sft	
Plastic Drum, High Intensity, Ltd, Modified	50	Ea	
Barricade, Type III, High Intensity, Dbl Sided, Ltd, Modified	8	Ea	
Riprap, Plain	75	Syd	
Riprap, Heavy	15	Syd	
Mulch Blanket, High Velocity	8,450	Syd	
Erosion Control, Silt Fence	3,900	Ft	
Erosion Control, Check Dam	220	Ft	
Project Cleanup	1	LS	
Guardrail, Type MGS-8	788	Ft	
Guardrail Approach Terminal, Type 2M	2	Ea	
Guardrail, Reflector	34	Ea	

	TOTAL	OF E	BID \$		
--	-------	------	--------	--	--

The undersigned bidder agrees the be utilized is awarded this contract the Board of County Road Commiss AND BRIEF DESCRIPTION OF W	and any change from t sioners of Allegan Count	his list will be permitted of	only with the cor	nsent of
I hereby state that all of the informal have the authority to submit this County Road Commissioners of A otherwise colluded with any other anything of value from an official County that would tend to destroy of	bid, which will become llegan County. I hereb bidder, nor have I mad or employee of the Boa	a binding contract if ac by state that I have not on the any agreement with reard of County Road Cor	cepted by the B communicated voor offered or a	oard of vith nor ccepted
In case the bidder is a co-partnersh	nip, each member must	sign this proposal.		
In case the bidder is a Corporation accordance with its articles of incorporation				
I hereby state that I have read, und	lerstand and agree to be	e bound by all the terms	of this bid docur	ment.
SIGNATURE:	NAME:	(Type or Print)		
TITLE:	DATE:	,		
FIRM NAME:				
ADDRESS:				
(Address) FOR COUNTY USE ONLY – DO N	(City)	(State)	(Zip)	
ACCEPTED BY: BOARD OF COU OF THE COUNTY OF ALLEGAN,	NTY ROAD COMMISSI	ONERS		
	Chairman			
	Vice-Chairman			
	Member			
Date				

STANDARD SPECIFICATIONS

The Standard Specifications for Construction of the Michigan Department of Transportation, 2012 Edition shall apply. Nothing herein will be construed to create any obligation or duty on the part of the Board of County Road Commissioners of Allegan County, including obligations or duties which may be expressed or implied in the Standard Specifications for Construction of the Michigan Department of Transportation, unless specifically set forth in the contract documents.

The quantity for all pay items will not exceed more than 5% of the plan quantity unless the Contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless the increase was directed by the Engineer or an error in calculations is proven.

<u>CLEARING</u>: The contractor will remove all trees and brush that are marked or are entirely or partially within the right-of-way or within the slope stake line as shown on the plans and all stumps within five (5) feet of the right-of-way or within the slope stake line unless instructed otherwise by the Engineer. Trees will remain the property of the adjacent landowner, if they want them. If not, the contractor will dispose of them. The contractor will dispose of all stumps. Where called for on the plans or when directed by the engineer in the field, the contractor shall grind stumps to avoid disturbing underground facilities. The tree and stump removal will be done in accordance with Section 201 & 202 of the 2012 Standard Specifications for Construction.

The Contractor will not receive any additional compensation due to delays caused by utility companies.

METHOD OF PAYMENT FOR CLEARING: The item of "Clearing" will be paid for as a lump sum. No tree count is provided. It is the contractor's responsibility to inspect the site and verify accuracy of trees, stumps, and brush shown on the plans. No change in payment will be made for variances. Clearing stakes have been set. Direct any questions to the Allegan County Road Commission. Limits are from Kalamazoo Drive to Sunrise Trail.

PAY ITEM PAY UNIT

Clearing Lump Sum

STATION GRADING: The item of "Station Grading" will include all culvert removal, fence removal, fence relocation regardless of fence type, obliterating roadway, rock excavation, concrete removal, earth excavation, embankment, and saw cuts required. The contractor will place ditches and slopes as shown on the project cross section sheets. The earth excavation quantity does include the existing topsoil and pavement that must be stripped. The embankment quantity does include material to replace stripped topsoil and pavement in fill sections. The embankment quantity does not reflect shrinkage. Some excavation and embankment will be required to make a smooth transition into driveways; this is included in the earthwork figures. Additional driveway changes in slopes or ditch depths will not result in extra payment on this item.

Some material excavated from ditches will not be suitable for embankment and will be disposed of at the contractor's expense.

All slopes in yard areas will be finished to Class A tolerance. Slopes not in yards will be trimmed to Class B tolerance.

The Controlled Density Method (Section 205.03 page 135) of the Standard Specifications for Construction will apply. The engineer will run density tests at his discretion.

Any salvaged gravel required to maintain local traffic will be included in the item of Station Grading.

STATION GRADING (CON'T):

The shaping and grading of the roadside shoulder from Kalamazoo Drive to Sunrise Trail is also considered included in the scope of the project.

The following is an approximate list of earthwork quantities (Note: <u>Quantities below are compacted in place units</u>, <u>Subbase not included</u>). Earthwork does not include quantities for grading the shoulder berm beyond the shoulder widening limits.

STATIONEARTH EX.EMBANKMENT144th Avenue11,600 CYD6,700 CYD

<u>METHOD OF PAYMENT FOR STATION GRADING:</u> The item of "Station Grading" will be paid for as a lump sum. The quantities listed above are approximate; any changes in quantity will not alter the lump sum pay quantity for Station Grading.

PAY ITEM PAY UNIT

Station Grading Lump Sum

<u>SUBBASE, CIP:</u> Section 301 of the Standard Specifications will apply. The contractor will furnish, place, compact and shape the material to obtain a minimum depth of 18 inch of Subbase over the box culvert area. Subbase will be Class II material.

The Subbase material will be compacted to not less than 95% of the maximum unit weight. Density tests will be done at the discretion of the Engineer.

METHOD OF PAYMENT FOR STRUCTURE, REM: The item of "Subbase, CIP" will be paid by the cubic yard, compacted-in-place.

PAY ITEM PAY UNIT

Subbase, CIP Cubic Yard

<u>TOPSOIL SURFACE, SALV, LM:</u> The existing topsoil will be stripped from the areas within the right-of-way or grading limits shown or as directed in the field, adjacent to roadway as detailed in the project description. The salvaged topsoil will be stockpiled for measurement. The item includes picking up, stockpiling, replacing and shaping the topsoil.

Prior to seeding, the Contractor will be required to drag all front and back slopes that are 1 on 3 or flatter. Slopes that are steeper than 1 on 3 must be left in a relatively smooth condition. Slope preparation will be included in the item of Topsoil Surface.

METHOD OF PAYMENT FOR TOPSOIL SURFACE, SALV, LM: The item of "Topsoil Surface, Salv, LM" will be paid for by the cubic yard as measured in the stockpile. The plan quantity is the maximum Cubic Yards that will be paid.

PAY ITEM PAY UNIT

Topsoil Surface Cubic Yard

<u>GEOTEXTILE, STABILIZATION:</u> The item of "Geotextile, Stabilization" will include all labor, material and equipment to place material as instructed by the Engineer. Material will be in accordance with section 308 of the Standard Specifications.

<u>METHOD OF PAYMENT FOR GEOTEXTILE, STABILIZATION:</u>

The item of "Geotextile,

Stabilization" will be paid by the square yard as measured in place.

PAY ITEM PAY UNIT

Geotextile, Stabilization Square Yard

<u>HIGH PERFORMANCE BIAXIAL GEOGRID:</u> The item of "High Performance Biaxial Geogrid" will include labor, material and equipment to place material as instructed by the Engineer. Placement and material will be in accordance with the following:

Ensure all areas immediately beneath the installation area for the geogrid are properly prepared as shown on the plans, as specified, or as directed by the Engineer. Ensure the geogrid is installed in accordance with the manufacturer's recommendations.

Ensure the geogrid is rolled out perpendicular to the road centerline and place in continuous strips from foreslope to foreslope. Place the geogrid taut prior to geotextile separator and backfill placement for the reinforced steepened slope. Anchor the geogrid in position after a layer of geogrid has been placed, until the subsequent backfill layer can be placed. Ensure adjacent rolls of geogrid are overlapped 6 inches minimum. Whenever possible the backfill placement must proceed from the slope line/wall face inward, to assist in tensioning the geogrids. Construction vehicles will not be permitted on the geogrid until at least 6 inches of backfill has been placed on the geogrid.

Use high performance biaxial geogrid that has a regular grid structure and has aperture geometry, and rib and junction cross-section sufficient to permit significant mechanical interlock with the material being reinforced. Ensure the geogrid has significant dimensional stability through all ribs and junctions of the grid structure. Ensure the geogrid maintains its reinforcement and interlock capabilities under repeated dynamic loads while in service. Ensure the geogrid is resistant to ultraviolet degradation, to damage under normal construction practices, and to all forms of biological or chemical degradation normally encountered in highway construction.

Ensure the geogrid is composed of polypropylene, high-density polyethylene, or polyester virgin resins. Ensure the protective coatings of polyester geogrids contains less than 5 percent filler content. Repair damaged coating prior to backfilling. Ensure the high performance biaxial geogrid meets the minimum requirements of Table 1:

HIGH PERFORMANCE BIAXIAL GEOGRID (CON'T):

Table 1: High Performance Biaxial Geogrid Physical Property Requirements

Property	Test Method	Minimum Value
Interlock Open Area	COE Method(a)	60 %
Ultimate Tensile Strength MD(c) CMD(c)	ASTM D6637(b)	1,800 lb/ft 2,050 lb/ft
Tensile Strength (2%) MD(c) CMD(c)	ASTM D6637(b)	580 lb/ft 690 lb/ft

- Percent open area measured without magnification by means of Corps of Engineers method as specified in CW 02215 Civil Works Construction Guide, November, 1977.
- b. Ultimate Strength and Tensile Modulus at 2 percent elongation measured by means of ASTM D 6637. No offset allowances or specimen pretensioning are made in calculating tensile modulus.

"MD" and "CMD" represent 'machine' and 'cross-machine' directions, referring to the principle directions of the manufacturing process.

METHOD OF PAYMENT FOR HIGH PERFORMANCE BIAXIAL GEOGRID: The item of "High Performance Biaxial Geogrid" will be paid by the square yard as measured in place.

PAY ITEM PAY UNIT

High Performance Biaxial Geogrid Square Yard

<u>AGGREGATE, 6A:</u> The item of "Aggregate, 6A" will include furnishing, hauling, placing, and shaping of the material. Material will meet MDOT 6A Specifications. This item is not shown on the plans, and will be used at the discretion of the Engineer. The item is intended to be used for pipe bedding over Geotextile Stabilization (separate item).

METHOD OF PAYMENT FOR AGGREGATE, 6A: The item of "Aggregate, 6A" will be paid for by the ton. Weight slips will be required.

PAY ITEM PAY UNIT

Aggregate, 6A Ton

SUBGRADE UNDERCUTTING, TYPE II: The item of "Subgrade Undercutting, Type II" will consist of cutting out undesirable material below the Subgrade and will include backfilling with Class II material (Section 205 Standard Specifications for Construction). Subgrade undercutting will be done only if requested by the engineer. Backfill of Subgrade Undercutting will be compacted to not less than 95% of the Maximum Unit Weight. Tests will be run at the discretion of the engineer. This item will also include all muck, morrow and peat excavation and backfill required up to 6 feet deep.

SUBGRADE UNDERCUTTING, TYPE II (CON'T):

METHOD OF PAYMENT FOR SUBGRADE UNDERCUTTING, TYPE II: The item of "Subgrade Undercutting, Type II" will be paid for by the cubic yard as measured from the area actually excavated from the roadway. Backfill for the undercutting is included in the price for Subgrade Undercutting, Type II. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission.

PAY ITEM PAY UNIT

Subgrade Undercutting, Type II Cubic Yard

EXCAVATION, PEAT: The item of "Excavation, Peat" will include all labor, material, and equipment necessary to remove peat, marl, soft clay, or other undesirable material as directed by the Engineer. All work will be performed in accordance with Section 205 of the Standard Specifications and in accordance with Standard Plan R-103 (current edition), Treatment of Peat Marshes, Method A-1, or as directed by the Engineer in the field.

<u>METHOD OF PAYMENT FOR EXCAVATION, PEAT:</u> The item of "Excavation, Peat" will be paid by the square yard as measured in place.

PAY ITEM PAY UNIT

Excavation, Peat Cubic Yard

<u>BACKFILL, SWAMP:</u> The item of "Backfill, Swamp" will include all labor, material, and equipment necessary to backfill areas, which are excavated as part of "Excavation, Peat." All work will be performed in accordance with Section 205 of the Standard Specifications and in accordance with Standard Plan R-103 (current edition), Treatment of Peat Marshes, Method A-1, or as directed by the Engineer in the field.

METHOD OF PAYMENT FOR BACKFILL, SWAMP: The item of "Backfill, Swamp" will be paid by the square yard as measured in place.

PAY ITEM PAY UNIT

Backfill, Swamp Cubic Yard

<u>CULVERT AND END SECTIONS:</u> The items of culvert and end section will include all labor and material for placing the new culverts, end sections, and/or salvaging existing end sections. Excavating and backfilling will be included in the item of Culverts. If any material more than 0.5 feet below the culvert is ordered to be removed by the Project Engineer, it will be paid for as "Subgrade Undercutting, Type II".

All culverts and end sections will be laid true to the lines and grades given, bells or grooves upgrade, ends fully and closely jointed, and each section will have a full, firm bearing throughout its length. All pipe sections/joint assemblies for use in culvert will be selected from the Qualified Products List for Watertight Sewer and Culvert Joint Systems. Pipe with diameters greater than 24 inch will have the pipe joints wrapped with a non-woven Geotextile fabric. The fabric will have a minimum width of 36 inch and will be centered on the joint.

It is the Contractor's responsibility to protect all new culverts and existing culverts to be left in place from damage by heavy equipment by ramping or other means necessary. All cross culverts and sewer will be placed prior to the machine grading.

CULVERT AND END SECTIONS (CON'T):

Cross Culverts will be placed at the following locations:

<u>STATION</u>	<u>TYPE</u>	END SECTIONS	<u>LENGTH</u>
10+53	Culv, CI E, Conc, 24 inch	2	48
29+52	Culv, CI E, Conc, 24 inch	2	56
44+83	Culv, Cl E, Conc, 24 inch	2	64
52+35	Culv, CI E, Conc, 24 inch	2	40
83+20	Culv, Cl E, Conc, 24 inch	2	48

METHOD OF PAYMENT FOR CULVERT AND END SECTION: The item of "Culvert" will be paid by the linear foot and the item of "End Section" will be paid for by the individual unit.

PAY ITEM	PAY UNIT
Culv, CI E, Conc, 24 inch	Foot
Culv, CI F, _ inch	Foot
Culv End Sect, Conc, 24 inch	Each

PRECAST CONCRETE BOX CULVERT: The item of "Precast Concrete Box Culvert, 8' x 6' will include all labor, material, and equipment necessary to provide and install the precast concrete box culvert as shown on the plans. The Contractor will furnish the culvert and precast footings. This work shall be done in accordance with the requirements of Sections 406, 701 and 909 of the 2012 Michigan Department of Transportation Standard Specifications for Construction and as specified herein. The work of "Precast Concrete Box Culvert" shall consist of the following:

- Providing and installing the precast concrete box culvert and footings as shown on the plans.
- Installing all grout, joint sealers, shims, gaskets, geotextile wrap, inserts and underdrain required.
- Dewatering the area to allow construction of the footings and culvert.
- Maintaining stream flow during construction.
- Performing the channel excavation as shown on the plans and as directed by the engineer including required stream relocation and backfill of abandoned stream channel.
- Performing any excavation or backfill that is required due to the type of culvert provided.
- Furnishing, excavating for, placing and grading 6A bedding stone up to 2' deep and 2' wider than the culvert as required.
- Furnishing, placing and compacting structure backfill. (est. 350 Cyd)

METHOD OF PAYMENT FOR PRECAST CONCRETE BOX CULVERT: The item of "Precast Concrete Box Culvert" will be paid for by the linear foot.

PAY ITEM	PAY UNIT

Precast Concrete Box Culvert, 8' x 6' Foot

<u>UNDERDRAIN</u>, <u>SUBGRADE</u>, <u>6 INCH</u>: The item of "Underdrain, Subgrade, 6 inch" will include all labor, material and equipment to place the item as instructed by the Engineer.

Section 404 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR UNDERDRAIN, SUBGRADE 6 INCH: The item of "Underdrain, Subgrade, 6 inch" will be paid for by the linear foot.

PAY ITEM PAY UNIT

Underdrain, Subgrade, 6 inch Foot

<u>UNDERDRAIN OUTLET, 6 INCH:</u> The item of "Underdrain Outlet, 6 inch" will include all labor, material and equipment required to place a piece of 6 inch PVC Schedule 40 or stronger from the end of the 6 inch Subgrade Underdrain to the Underdrain, Outlet Ending, 6 inch.

METHOD OF PAYMENT FOR UNDERDRAIN OUTLET, 6 INCH: The item of "Underdrain Outlet, 6 inch" will be paid for by the linear foot.

PAY ITEM PAY UNIT

Underdrain Outlet, 6 inch Foot

<u>UNDERDRAIN</u>, <u>OUTLET ENDING</u>, 6 INCH: The item of "Underdrain, Outlet Ending, 6 inch" will include all labor, material and equipment required to place a precast end section at the end of an Underdrain Outlet, 6 inch.

METHOD OF PAYMENT FOR UNDERDRAIN, OUTLET ENDING, 6 INCH: The item of "Underdrain, Outlet Ending, 6 inch" will be paid for by the individual unit.

PAY ITEM PAY UNIT

Underdrain, Outlet Ending, 6 inch Each

<u>APPROACH, CL II:</u> The item of "Approach, Cl II" will include all labor, material and equipment to place and compact the material specified on the plans. Section 307 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR APPROACH, CL II: The item of "Approach, Cl II" will be paid for by the ton. Weight slips will be required.

<u>PAY ITEM</u> <u>PAY UNIT</u>

Approach, CI II Ton

<u>APPROACH, HMA MILLINGS:</u> The item of "Approach, HMA Millings" will include all labor, material and equipment to place and compact the material specified on the plans. Section 307 of the Standard Specifications for Construction will apply. Material must approximate 22A gradation or be approved by Engineer.

APPROACH, HMA MILLINGS (CON'T):

METHOD OF PAYMENT FOR APPROACH, HMA Millings: The item of "Approach, HMA Millings" will be paid for by the ton. Weight slips will be required.

PAY ITEM PAY UNIT

Approach, HMA Millings Ton

AGGREGATE BASE, 6 INCH: The item of "Aggregate Base, 6 inch" will include all labor, material and equipment to place, and compact the base course.

The contractor may use 22A gravel, 22A slag, 22A limestone, 22A recycled concrete, or cold-milled bituminous material, which approximates the gradation for 22A material. When milled bituminous material is used as aggregate base, the density provisions of Standard Specifications are not waived. Milled bituminous material may be used full depth or on top of 22A gravel to obtain the specified thickness. 22A gravel shall not be placed on top of bituminous millings.

"Aggregate Base, 6 inch" must be placed directly on top of the sand subbase. Salvaged gravel or any material not meeting 22A specification is not allowed between the aggregate base and the sand subbase.

Section 302 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR AGGREGATE BASE, 6 INCH: The item of "Aggregate Base, 6 inch" will be paid for by the square yard, compacted in place.

PAY ITEM PAY UNIT

Aggregate Base, 6 inch Square Yard

AGGREGATE BASE, 10 INCH: The item of "Aggregate Base, 10 inch" will include all labor, material and equipment to place, and compact the base course.

The contractor may use 22A gravel, 22A slag, 22A limestone, 22A recycled concrete, or cold-milled bituminous material, which approximates the gradation for 22A material. When milled bituminous material is used as aggregate base, the density provisions of Standard Specifications are not waived. Milled bituminous material may be used full depth or on top of 22A gravel to obtain the specified thickness. 22A gravel shall not be placed on top of bituminous millings.

"Aggregate Base, 10 inch" must be placed directly on top of the sand subbase. Salvaged gravel or any material not meeting 22A specification is not allowed between the aggregate base and the sand subbase.

Section 302 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR AGGREGATE BASE, 10 INCH: The item of "Aggregate Base, 10 inch" will be paid for by the square yard, compacted in place.

PAY ITEM PAY UNIT

Aggregate Base, 10 inch Square Yard

<u>APPROACH, 21AA:</u> The item of "Approach, 21AA" will include all labor, material and equipment to place and compact the material specified on the plans. This material will meet the requirements for dense graded 21AA in accordance with Section 902 of the Standard Specifications for Construction. This item may be utilized for driveway approaches throughout the project at the discretion of the Engineer.

Section 307 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR APPROACH, 21AA: The item of "Approach, 21AA" will be paid for by the ton. Weight slips will be required. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered unless an error in calculations is proven.

PAY ITEM PAY UNIT

Approach, 21AA Ton

<u>RESTORATION:</u> The item of "Restoration" will include all labor, material and equipment required to do the restoration. Restoration will consist of placing Seeding, Mixture TUF (220#/acre); Fertilizer, Chemical Nutrient, CI A (228#/acre); Mulch (2 ton/acre); and Mulch Anchoring. Place Mulch and Mulch Anchoring within one calendar day after seeding.

Section 816 of the Standard Specifications for Construction will apply.

<u>METHOD OF PAYMENT FOR RESTORATION:</u> The item of "Restoration" will be paid for as a lump sum.

PAY ITEM PAY UNIT

Restoration Lump Sum

EXTENDED RESTORATION: The item of "Extended Restoration" will include all labor, material and equipment required to maintain the restoration of the construction site. The contractor will be responsible for the permanent establishment of turf and maintaining the temporary and permanent soil erosion control measures for a period of one year from the date of final approval or when the site is stabilized and approved by the Engineer. This may include reseeding, maintaining check dams and spillways, and fixing erosion on site.

<u>METHOD OF PAYMENT FOR EXTENDED RESTORATION:</u> The item of "Extended Resetoration" will be paid for as a lump sum.

PAY ITEM PAY UNIT

Extended Restoration Lump Sum

<u>SEEDING, MIXTURE CR:</u> The item "Seeding, Mixture CR" will include all labor, material and equipment to place the seed as instructed by the engineer. When directed by the Engineer, cereal rye seed will be placed at a rate of 70 pounds per acre.

METHOD OF PAYMENT FOR SEEDING, MIXTURE CR: The item of "Seeding, Mixture CR" will be paid for by the pound.

PAY ITEM PAY UNIT

Seeding, Mixture CR Pound

SIGN, TYPE B, TEMP, MODIFIED: The item of "Sign, Type B, Temp, Modified" will include supplying all materials, equipment and labor required to erect and maintain construction signs as designated by the project engineer. Materials and placement will conform to the MDOT Standard Specifications for Construction and the Michigan Manual of Uniform Traffic Control Devices. Signs will be placed as instructed by the project engineer. All "CONSTRUCTION AHEAD" and "ROAD CLOSED AHEAD" signs will be 48" x 48" mounted on two posts with one steady burn light. (Steady burn light and posts are included in the Sign, Type B, Temp, Modified item).

METHOD OF PAYMENT FOR SIGN, TYPE B, TEMP, MODIFIED: The item of "Sign, Type B, Temp, Modified" will be paid for by the square foot of Sign Face.

PAY ITEM PAY UNIT

Sign, Type B, Temp, Modified Square Foot

<u>PLASTIC DRUM, HIGH INTENSITY, LIGHTED, MODIFIED:</u> The item of "Plastic Drum, High Intensity, Lighted, Modified" will include all labor, equipment and material to furnish, set up, move and maintain the drums as required by the engineer. Drums will be equipped with one light.

Section 812 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR PLASTIC DRUM, HIGH INTENSITY, LIGHTED, MODIFIED: the item of "Plastic Drum, High Intensity, Lighted, Modified" will be paid for by the individual unit.

PAY ITEM PAY UNIT

Plastic Drum, High Intensity, Lighted, Modified Each

BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, MODIFIED: The item of "Barricade, Type III, High Intensity, Double Sided, Lighted, Modified" will include all labor, equipment and material to furnish, set up, move and maintain the barricades.

The Contractor will furnish and maintain Barricades, Type III with three lights and an R-11-4 Sign (ROAD CLOSED TO THRU TRAFFIC) mounted above the barricade when indicated on the plans. The R-11-4 sign will comply with and be paid as "Sign, Type B, Temp, Modified".

Section 812 of the Standard Specifications for Construction will apply.

METHOD OF PAYMENT FOR BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, MODIFIED: The item of "Barricade, Type III, Double Sided, Lighted" will be paid for as individual units.

BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, MODIFIED: (CON'T)

PAY ITEM PAY UNIT

Barricade, Type III, High Intensity, Double Sided, Lighted, Modified Each

<u>RIPRAP, PLAIN and RIPRAP, HEAVY:</u> The item of "Riprap, Plain" or "Riprap, Heavy" will include all labor, equipment and material to place the Riprap as instructed by the engineer.

Section 813 of the Standard Specifications for Construction will apply to this item.

The Riprap will be placed over Geotextile Fabric, included in this item.

METHOD OF PAYMENT FOR RIPRAP, PLAIN and RIPRAP, HEAVY: The item of "Riprap, Plain" or "Riprap, Heavy" will be paid for by the square yard. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission. Amounts in excess of the plan quantity will not be considered for payment unless an error in calculations is proven.

PAY ITEM PAY UNIT

Riprap, Plain Square Yard Riprap, Heavy Square Yard

MULCH BLANKET, HIGH VELOCITY: The item of "Mulch Blanket, High Velocity" will include all labor, material and equipment to place the mulch blanket as instructed by the engineer.

Section 816 of the Standard Specifications for Construction will apply to this item. The material for Mulch Blanket will meet the specifications set on page 853 (Section 917.15) of the 2012 MDOT Standard Specifications for Construction.

The contractor will also seed following placement of Mulch Blanket, High Velocity with Seeding, Mixture TUF at the rate of 400 pounds per acre (included in this item).

METHOD OF PAYMENT FOR MULCH BLANKET, HIGH VELOCITY: The item of "Mulch Blanket, High Velocity" will be paid for by the square yard.

PAY ITEM PAY UNIT

Mulch Blanket, High Velocity Square Yard

<u>EROSION CONTROL</u>, <u>SILT FENCE</u>: The item of "Erosion Control, Silt Fence" will include all labor, material and equipment to place silt fence as instructed by the engineer.

Section 208 of the Standard Specifications for Construction will apply to this item.

METHOD OF PAYMENT FOR EROSION CONTROL, SILT FENCE: The item of "Erosion Control, Silt Fence" will be paid for by the linear foot. The pay quantity for this item shall not exceed more than 5% of the plan quantity unless the contractor has received a written work order from the Allegan County Road Commission.

PAY ITEM PAY UNIT

Erosion Control, Silt Fence Foot

<u>EROSION CONTROL</u>, <u>CHECK DAM</u>: The item of "Erosion Control, Check Dam" will include all labor, material and equipment to place the check dam as instructed by the engineer.

Section 208 of the Standard Specifications for Construction will apply to this item. Stone or a permeable plastic berm, such as *Nilex, Inc. Geo-Ridge* or Equal will be allowed.

METHOD OF PAYMENT FOR EROSION CONTROL, CHECK DAM: The item of "Erosion Control, Check Dam" will be paid for by the linear foot.

PAY ITEM PAY UNIT

Erosion Control, Check Dam Foot

<u>PROJECT CLEANUP:</u> The item of "Project Cleanup" will include all labor, material and equipment to pick up stone, sticks, branches, roots and other debris from the project.

This item will also include moving all mailboxes to a temporary location to be approved by the mail carrier and to reset the boxes permanently on the project. If new boxes or posts are required, they will be supplied by the Road Commission. Project Cleanup also includes placing a 1" x 3" with the respective property address written on it in the front yard of each residence to assist with identification for emergency vehicles.

METHOD OF PAYMENT FOR PROJECT CLEANUP: The item of "Project Cleanup" will be paid for as a lump sum.

PAY ITEM PAY UNIT

Project Cleanup Lump Sum

<u>GUARDRAIL</u>: The items will include all labor, material and equipment required to provide and install new guardrail, posts, terminals, and reflectors. Posts shall be 8-foot long.

Section 807 of the Standard Specifications for Construction will apply.

<u>METHOD OF PAYMENT FOR GUARDRAIL:</u> The item of "Guardrail, Remove and Replace" will be paid by linear foot of guardrail installed including approach terminals.

PAY ITEM PAY UNIT

Guardrail, Type MGS-8 Ft Guardrail Approach Terminal, Type 2M Ea Guardrail, Reflector Ea

ALLEGAN COUNTY ROAD COMMISSION ALLEGAN, MICHIGAN

GENERAL SPECIFICATIONS

MICHIGAN DEPARTMENT OF TRANSPORTATION-STANDARD SPECIFICATIONS

The work covered by the plans and specifications will be done in accordance with the 2012 Michigan Department of Transportation Standard Specifications for Construction, except as qualified in supplemental specifications and special conditions of the Allegan County Road Commission or as agreed to in writing at the time of the award of the contract.

DEFINITION OF TERMS

See Section 101 of Michigan Department of Transportation Standard Specifications for Construction.

SPECIAL CONDITIONS

Special requirements, regulations or directions applying to a particular project may be made a part of these specifications.

THE WORK

The work consists of the completed services, construction and/or paving by the Contract Documents and includes all materials and labor incorporated or to be incorporated therein.

RESPONSIBILITIES OF CONTRACTOR

- A. <u>Responsibility for and Supervision of Construction.</u> Unless otherwise stated herein, Contractor will be solely responsible for all construction under this Contract, including the methods, techniques, sequences, procedures, and means, and for coordination of all work. Contractor will supervise and direct the work to the best of Contractor's ability, and give it all attention necessary for such proper supervision and direction.
- B. <u>Discipline and Employment.</u> Contractor will maintain at all times strict discipline among Contractor's employees, and contractor agrees not to employ for work on the project any person unfit for without sufficient skill to perform the job for which he or she was employed.
- C. <u>Furnishing of Labor, Materials, etc.</u> Unless otherwise stated herein, Contractor will provide and pay for all labor, materials, and equipment, including tools, construction equipment, and machinery, utilities, including water, transportation, and all other facilities and services necessary for the proper completion of work on the project in accordance with the Contract Documents.
- D. <u>Payment of Taxes; Procurement of Licenses and Permits.</u> Contractor will pay all taxes required by law in connection with work on the project in accordance with this agreement including sales, use, and similar taxes, and will secure all licenses and permits necessary for proper completion of the work, paying the fees for such licenses and permits.
- E. <u>Compliance with Laws and Regulations</u>. Contractor will comply with all laws and ordinances, and the rules, regulations or orders of all public authorities relating to the performance of the work under and pursuant to this Agreement including, but not limited to, the Occupational Safety and Health Act of 1970, the Michigan Occupational Safety and Health Act, and the rules and regulations of the Michigan Construction Safety Commission.

RESPONSIBILITIES OF CONTRACTOR (CON'T):

- F. Responsibility for Negligence of Employees and Subcontractors. Contractor assumes full responsibility for acts, negligence or omissions of all of Contractor's employees on the project, for those of Contractor's subcontractors and their employees, and for those of all other persons doing work under a contract with Contractor.
- G. Responsibility for Safety. Unless otherwise stated herein, at Contractor's expense, Contractor will take all necessary precautions (including, without limitation, the furnishing of traffic control, barricades, traffic control devices, flaggers, warning lights, signs, warning signs, safety channels, channelization devices, guards, fences, walks, flags, cables and lights) for the safety of, and the prevention of injury, loss and damage to, persons and property (including, without limitation, in the term persons, members of the public, employees, Contractor's subcontractors and their respective employees, other contractors, their subcontractors and respective employees) on, about or adjacent to the location where the work is being performed, and will comply with all applicable provisions of safety rules, ordinances, codes, regulations, and orders of duly-constituted public authorities including, but not limited to, the Michigan Manual of Uniform Traffic Control Devices.
- H. <u>Responsibility of Subcontractors</u>. The Contractor will require any subcontractor hired by the Contractor for the purpose of performing any of the work described by the Contract documents to be bound by all of the terms and conditions of the Contract documents and to perform the work in accordance with the Contract documents. Each and every condition of the Contract documents, including without limitation, the <u>RESPONSIBILITIES OF THE CONTRACTOR</u>, will be made a condition of each subcontract entered into by the Contractor in conjunction with the performance of the work.

INDEMNIFICATION

To the fullest extent permitted by law, the Contractor will indemnify, defend, and hold harmless The Board of County Road Commissioners of Allegan County, its officers, employees, representatives and agents from and against any and all claims, damages, demands, payments, suits, actions, recoveries, judgements, losses and expenses, including attorney fees, interest, and court costs, which are made, brought or recovered against the Board of County Road Commissioners of Allegan County, arising out of or resulting from performance of the Contractor's work under this Contract, provided that such claims, damages, losses, demands, payments, suits, actions, recoveries, judgements and/or expenses are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss of use resulting therefrom, but only if caused in whole or in part, by the act, omissions, fault, negligence or breach of the conditions of this Contract by negligent acts or omissions of the Contractor, the Contractor's sub-subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. The Contractor will not, however, be obligated to indemnify the Board of County Road Commissioners of Allegan County, for any damage or injuries caused by or resulting from the sole negligence of the Board of County Road Commissioners of Allegan County. Such obligation will not be construed to negate, abridge or otherwise reduce other rights or obligations of indemnity which would otherwise exist as a party or person described in this paragraph.

In claims against any person or entity indemnified under this Agreement by an employee of the Contractor, the Contractor's sub-subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph will not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or the Contractor's subcontractors under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

INSURANCE

A. <u>Contractor's Insurance.</u> Prior to start of the Contractor's work, the Contractor will procure for the Contractor's work and maintain in force until the completion of the work, workers' compensation insurance, employer's liability insurance, comprehensive general liability insurance and all insurance required of the contract under the contract documents.

The Board of County Road Commissioners of Allegan County will be named as an additional insured on each of these policies except for worker's compensation.

The insurance will include contractual liability insurance covering the Contractor's obligations under its agreement of indemnification as set forth herein.

- B. <u>Minimum Limits of Liability</u>. The Contractor's comprehensive general and automobile liability insurance as required herein, will be written with limits of liability not less than the following:
 - a. Comprehensive general liability including completed operations
 - (1) \$ 500,000 each occurrence
 - b. Property damage
 - (1) \$ 500,000 each occurrence
- C. <u>Number of Policies.</u> Comprehensive general liability insurance and other liability insurance may be arranged under a single policy for the full limit required or by combination of underlying policies with the balance provided by an excess or umbrella liability policy.
- D. <u>Cancellation, Renewal or Modification.</u> The Contractor will maintain in effect all insurance coverage required under this Agreement at the Contractor's sole expense and with insurance companies acceptable to the Board of County Road Commissioners of Allegan County.

All insurance policies will contain a provision that the coverage afforded thereunder will not be cancelled or not renewed nor restrictive modifications added at any time after a certificate of insurance required under agreement has been issued and before the work; as defined herein, has been completed, until at least thirty (30) days prior thereto written notice has been given to the Board of County Road Commissioners of Allegan County unless otherwise specifically required in the Contract Documents.

Certificates of insurance or certified copies of policies acceptable to the Board of County Road Commissioners of Allegan County will be filed with the Board of County Road Commissioners of Allegan County prior to the commencement of the Contractor's work.

In the event that the Contractor fails to obtain or maintain any insurance coverage required under this Agreement, the Board of County Road Commissioners of Allegan County may:

- 1. Purchase such coverage and charge the expense thereof to the Contractor, and
- Withhold from any payment due or to become due to the Contractor an amount sufficient to
 protect the Board of County Road Commissioners of Allegan County from such claims, damages,
 demands, payments, suits, actions, recoveries, judgements, losses and expenses, including
 attorney fees, interest and court costs, and
- 3. Terminate this agreement.

Nothing contained in this Agreement, nor the Board of County Road Commissioners of Allegan County's compliance therewith, will relieve the Contractor from its obligations under the Contract to purchase and maintain required insurance or to indemnify the Board of County Road Commissioners of Allegan County.

PROGRESS CLAUSE

The successful bidder will be required to submit a Progress Schedule, giving an outline of his proposed order of work and to indicate the dates for completion of the work. This outline, when approved by the Road Commission, will become a part of the contract.

PROSECUTION OF THE WORK

The Contractor will begin the work within five (5) days after being notified by the Road Commission of the award of the contract, unless this is inconsistent with the Progress Schedule, in which case the Progress Schedule will govern. He will prosecute the work in the order given in the Progress Schedule, with force and equipment adequate to complete the sections within the time limit therein fixed for completion. In case of failure to proceed with the work as rapidly as is provided in the Progress Schedule, or if it appears at any time that such work is not being prosecuted in such a manner as to insure its completion within time specified, the Road Commission will have the right to require the contractor to furnish and place in operation such additional force and equipment as the Road Commission will deem necessary to bring the work up to the Progress Schedule; and in case of the Contractor's neglect to do so, the Road Commission may place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plan and equipment as in its judgment is reasonable, and for such time as the plant and equipment are in service.

ESTIMATED QUANTITIES

The quantities listed in the proposal are the estimated quantities. Increases or decreases in quantities will not be considered as a basis for adjustment in unit prices and Articles 104.02 of M.D.O.T. Standard Specifications for Construction will not apply in this regard.

FINAL PAYMENT

Final payment will not be made until the contractor will have filed with the Board of County Road Commissioners the consent of the Surety of the payment of the final estimate and satisfactory evidence by affidavit or otherwise that all his indebtedness by reason of the contract has been fully paid or satisfactorily secured. In case such evidence is not furnished, the Road Commission may retain out of any amount due said contractor sums sufficient to cover all lienable claims unpaid.

AFFIRMATIVE ACTION POLICY (EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER)

The Allegan County Road Commission will require the Contractor to submit an Affirmative Action Policy stating that they are an equal employment opportunity employer and will recruit, hire and promote in all job classifications without regard to race, color, religion, sex or national origin, except where sex is a bona fide occupational qualification. The Affirmative Action Policy will be signed by the Contractor or one of the Company's Authorized Officers.

CONTRACT BONDS

The Successful Bidder will furnish satisfactory performance and lien bonds, each in the amount of not less than one hundred (100) percent of the total contract price. Such bonds will be on forms provided and will meet the regulations of the Allegan County Road Commission and the requirements specified in the laws of Michigan.

Bonds will not be required for contracts of less than \$5,000.00.

M.D.O.T. - PREQUALIFICATION

Contractors bidding on this work must be pre-qualified by the Michigan Department of Transportation to do similar work on State or Federal-aid Secondary projects.

LIQUIDATED DAMAGES

Failure to complete the project on or before the completion date specified will be assessed according to the following schedule:

Original	I Contract Am	ount		Liquid Damages Per Calendar Day
\$	0	to	49,999	75
	50,000	to	99,999	150
	100,000	to	499,999	450
	500,000	to	999,999	900
	1,000,000	to	1,999,999	1,300
	2,000,000	to	4,999,999	1,550
	5,000,000	to	9,999,999	2,650
	10,000	,000	and above	3,000

The liquidated damages may be delayed if the contractor meets the requirements set forth in Section 108.11 of the 2012 Standard Specifications for Construction. Approval of the project engineer is required.

BID TABULATION - Wednesday, November 14, 2018 - HIGHWAY CONSTRUCTION Allegan County Road Commission 1308 Lincoln Road Allegan, Michigan 49010-9762

PROJECT NO. LH 4908 - 1.45 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, box culvert replacement, peat excavation, guardrail installation, and restoration on 144th Avenue, Kalamazoo Drive to Sunrise Trail in Leighton Township, Allegan County.

									PRELI	MINARY
									ENGINEER	'S ESTIMATE
			UNIT		UNIT		UNIT		UNIT	
ITEM OF WORK	QUANTITY	UNIT	PRICE BID	AMOUNT	PRICE BID	AMOUNT	PRICE BID	AMOUNT	PRICE BID	AMOUNT
Clearing	1	LS		\$0.00		\$0.00		\$0.00	\$45,000.00	\$45,000.00
Station Grading	1	LS		0.00		0.00		0.00	110,000.00	110,000.00
Subbase, CIP	10,800	Cyd		0.00		0.00		0.00	6.00	64,800.00
Topsoil Surface, Salv, LM	9,240			0.00		0.00		0.00	3.00	27,720.00
Geotextile, Stabilization	3,875			0.00		0.00		0.00	5.00	19,375.00
High Performance Biaxial Geogrid	2,875	Syd		0.00		0.00		0.00	8.00	23,000.00
Aggregate, 6A	50			0.00		0.00		0.00	18.00	900.00
Subgrade Undercutting, Type II	1,000	Cyd		0.00		0.00		0.00	10.00	10,000.00
Excavation, Peat	7,310	Cyd		0.00		0.00		0.00	5.00	36,550.00
Backfill, Swamp	7,310	Cyd		0.00		0.00		0.00	10.00	73,100.00
Culv, Cl F, 12 inch	520	É t		0.00		0.00		0.00	20.00	10,400.00
Culv, Cl F, 18 inch	80	Ft		0.00		0.00		0.00	50.00	4,000.00
Culv, Cl F, 24 inch	80	Ft		0.00		0.00		0.00	60.00	4,800.00
Culv, Cl E, Conc, 24 inch	280	Ft		0.00		0.00		0.00	75.00	21,000.00
Culv End Sect, Conc, 24 inch	10	Ea		0.00		0.00		0.00	650.00	6,500.00
Precast Concrete Box Culvert, 8' x 5'	64	Ft		0.00		0.00		0.00	1,500.00	96,000.00
Underdrain, Subgrade, 6 inch	1,605	Ft		0.00		0.00		0.00	4.00	6,420.00
Underdrain Outlet, 6 inch	70	Ft		0.00		0.00		0.00	10.00	700.00
Underdrain, Outlet Ending, 6 inch	7	Ea		0.00		0.00		0.00	130.00	910.00
Approach, CI II	490	Ton		0.00		0.00		0.00	15.00	7,350.00
Approach, HMA Millings	25	Ton		0.00		0.00		0.00	20.00	500.00
Aggregate Base, 6 inch	26,000	Syd		0.00		0.00		0.00	4.25	110,500.00
Aggregate Base, 10 inch	2,200	Syd		0.00		0.00		0.00	6.00	13,200.00
Aggregate, 21AA	1,600	Ton		0.00		0.00		0.00	15.00	24,000.00
Restoration	1	LS		0.00		0.00		0.00	12,500.00	12,500.00
Extended Restoration	1	LS		0.00		0.00		0.00	2,500.00	2,500.00
Seeding, Mixture CR	590	Lb		0.00		0.00		0.00	3.25	1,917.50
Sign, Type B, Temp, Modified	212	Sft		0.00		0.00		0.00	4.25	901.00
Plastic Drum, High Intensity, Ltd, Modified	50	Ea		0.00		0.00		0.00	20.00	1,000.00
Barricade, Type III, High Intensity, Dbl Sided, Ltd, Modifie	8	Ea		0.00		0.00		0.00	125.00	1,000.00
Riprap, Plain	75	Syd		0.00		0.00		0.00	50.00	3,750.00
Riprap, Heavy	15	Syd		0.00		0.00		0.00	85.00	1,275.00
Mulch Blanket, High Velocity	8,450	Syd		0.00		0.00		0.00	3.00	25,350.00
Erosion Control, Silt Fence	3,900	Ft		0.00		0.00		0.00	2.50	9,750.00
Erosion Control, Check Dam	220	Ft		0.00		0.00		0.00	15.00	3,300.00
Project Cleanup	1	LS		0.00		0.00		0.00	4,000.00	4,000.00
Guardrail, Type MGS-8	788	Ft		0.00		0.00		0.00	20.00	15,760.00
Guardrail Approach Terminal, Type 2M	2	Ea		0.00		0.00		0.00	1,600.00	3,200.00
Guardrail, Reflector	34	Ea		0.00		0.00		0.00	40.00	1,360.00
			TOTAL BID	\$0.00	TOTAL BID	\$0.00	TOTAL BID	\$0.00	TOTAL BID	\$804,288.50