

NAME OF CONTRACTOR _____

PROPOSAL AND SPECIFICATIONS

FOR

HIGHWAY CONSTRUCTION

COUNTY LOCAL ROAD SYSTEM

**Do Not Separate
or Remove Sheets
From This Proposal**

PROJECT NO. 3548 – 2.10 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, and restoration on 103rd Avenue, 52nd Street, and 104th Avenue from 54th Street to 1,000' west of 50th Street in Lee Township, Allegan County.

LEE TOWNSHIP

JULY 15, 2020

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 A.M., Local Time, July 15, 2020, and at such time, be opened, tabulated, and publicly posted on our website for the following:

PROJECT NO. 3548 – 2.10 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, and restoration on 103rd Avenue, 52nd Street, and 104th Avenue from 54th Street to 1,000' west of 50th Street in Lee Township, Allegan County.

Complete specifications, plans, 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 jscott@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, Chairman
James Rybicki, Vice-Chairman
Larry Brown, Member

PROJECT NO. 3548 – 2.10 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, and restoration on 103rd Avenue, 52nd Street, and 104th Avenue from 54th Street to 1,000' west of 50th Street in Lee 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 have slope restoration complete on or before October 23, 2020 and to have final completion of all items of work on or before November 27, 2020. The schedule for liquidated damages is located in the general specifications.

The contractor shall submit a progress schedule subject to approval of the 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 negotiation, representations or agreements, either written or oral. If anything in the other Contract Documents is inconsistent with this Agreement, this Agreement will govern.

PROJECT NO. 3548 – 2.10 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, and restoration on 103rd Avenue, 52nd Street, and 104th Avenue from 54th Street to 1,000' west of 50th Street in Lee 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		
HMA Base Crushing and Shaping	28,800	Syd		
Subbase, CIP	5,000	Cyd		
Topsoil Surface, Salv, LM	3,300	Cyd		
Trenching	68	Sta		
Subgrade Undercutting, Type II	1,000	Cyd		
Geotextile, Stabilization	5,000	Syd		
High Performance Biaxial Geogrid	10,000	Syd		
Aggregate, 6A	100	Ton		
Excavation, Peat	2,500	Cyd		
Backfill, Swamp	2,500	Cyd		
Culv, CI E, Conc, 18 inch	240	Ft		
Culv, CI E, Conc, 24 inch	50	Ft		
Culv, CI F, 12 inch	700	Ft		
Culv, CI F, 18 inch	120	Ft		
Culv End Sect, Conc, 18 inch	10	Ea		
Culv End Sect, Conc, 24 inch	2	Ea		
Aggregate Base, 6 inch	43,000	Syd		
Aggregate, 12 inch (21AA)	5,000	Syd		
Shoulder, CI II, 4 inch	5,000	Syd		
Approach, CI II	520	Ton		
HMA, 4E1	9,500	Ton		
Guardrail, Rem	350	Ft		

ITEMIZED UNIT PRICE BID SCHEDULE (CONT.):

ITEM OF WORK	QUANTITY	UNIT	UNIT PRICE	TOTAL
Guardrail, Type B	350	Ft		
Guardrail Approach Terminal, Type 2B	2	Ea		
Guardrail Departing Terminal, Type B	2	Ea		
Pavt Mrkg, Waterborne, 4 inch, White	23,000	Ft		
Pavt Mrkg, Waterborne, 4 inch, Yellow	16,900	Ft		
Riprap, Plain	250	Syd		
Slope Restoration, Type A	30,500	Syd		
Slope Restoration, Type C	9,000	Syd		
Extended Restoration	1	LS		
Sign, Type B, Temp, Modified	400	Sft		
Plastic Drum, High Intensity, Lighted, Modified	50	Ea		
Barricade Type III, High Intensity, Dbl Sided, Ltd, Modified	10	Ea		
Erosion Control, Silt Fence	6,500	Ft		
Erosion Control, Check Dam	100	Ft		
Monument Box Adjust	4	Ea		
Project Cleanup	1	LS		

TOTAL \$ _____

The undersigned bidder agrees that the following is a complete and accurate list of all sub-contractors to be utilized is awarded this contract and any change from this list will be permitted only with the consent of the Board of County Road Commissioners of Allegan County. **LIST NAME OF EACH SUB-CONTRACTOR AND BRIEF DESCRIPTION OF WORK TO BE DONE.**

I hereby state that all of the information I have provided is true, accurate and complete. I hereby state that I have the authority to submit this bid, which will become a binding contract if accepted by the Board of County Road Commissioners of Allegan County. I hereby state that I have not communicated with nor otherwise colluded with any other bidder, nor have I made any agreement with nor offered or accepted anything of value from an official or employee of the Board of County Road Commissioners of Allegan County that would tend to destroy or hinder free competition.

In case the bidder is a co-partnership, each member must sign this proposal.

In case the bidder is a Corporation, this proposal must be executed by its duly authorized officials in accordance with its articles of incorporation and a certified copy of such articles must be attached hereto.

I hereby state that I have read, understand and agree to be bound by all the terms of this bid document.

SIGNATURE: _____ NAME: _____
(Type or Print)

TITLE: _____ DATE: _____

FIRM NAME: _____ PHONE: _____

ADDRESS: _____
(Street Address) (City) (State) (Zip)

FOR COUNTY USE ONLY – DO NOT WRITE BELOW

ACCEPTED BY: BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF ALLEGAN, MICHIGAN

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.

CLEARING: 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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
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, HMA 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. Additional grading in yards at the request of property owners will be included in Station Grading.

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 (Section 205.03 page 138).

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 following is an approximate list of earthwork quantities (Note: Quantities below are compacted in place units, Complete removals for the addition of new subbase, gravel, and HMA are included in excavation quantities.)

<u>STATION</u> 103 rd Ave, 52 nd St, 104 th Ave	<u>EARTH EXCAVATION</u> 13,000 CYD	<u>EMBANKMENT</u> 6,000 CYD
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METHOD OF PAYMENT FOR STATION GRADING: 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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Station Grading	Lump Sum

HMA BASE CRUSHING AND SHAPING: This item will include all labor, material and equipment required to scarify, crush, grade, shape roll and compact the existing HMA surface to a minimum depth of 6 inches. The pay item does not differentiate between various depths of crushing required. Gravel will be added on top of the existing HMA prior to the crush and shape operation and will be paid for separately as Aggregate Surface Course. This item will include the final shaping compaction required prior to paving on the entire project.

METHOD OF PAYMENT FOR HMA BASE CRUSHING AND SHAPING: The item of “HMA Base Crushing and Shaping” will be paid for by the square yard. The existing HMA surface area will be measured for payment.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
HMA Base Crushing and Shaping	Square Yard

SUBBASE, CIP: Section 301 of the Standard Specifications will apply. The contractor will furnish, place, compact and shape the material to obtain a minimum depth of 12 inch of Subbase for the length of the project. All 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 SUBBASE, CIP: The item of “Subbase, CIP” will be paid by the cubic yard, compacted-in-place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Subbase, CIP	Cubic Yard

TOPSOIL SURFACE, SALV, LM: 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 at least 3 inches deep.

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, Salv, LM.

TOPSOIL SURFACE, SALV, LM (CON'T):

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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Topsoil Surface, Salv, LM	Cubic Yard

TRENCHING: Excavate, shape, and compact trenches to the width and depth required. For trenches under Hot Mix Asphalt (HMA) compact the bottom of the trench to at least 98 percent of the maximum unit weight at no greater than optimum moisture content. Compact the bottom of other trenches to 95 percent of the maximum unit weight. The engineer may allow 95 percent if 98 percent of the maximum unit weight cannot be achieved.

Take ownership of trenched material and dispose in accordance with subsection 205.03.P at no additional cost.

Place and maintain traffic control devices in accordance with section 812, in shoulder areas that cannot be backfilled and compacted the same day. Bring shoulder material flush with existing pavement the next calendar day.

METHOD OF PAYMENT FOR TRENCHING: The item of "Trenching" will be paid for by the station measured along each pavement edge. The unit price for Trenching includes the cost of trenched aggregate reused in shoulders or approaches that does not require loading and hauling.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Trenching	Station

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.

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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Subgrade Undercutting, Type II	Cubic Yard

GEOTEXTILE, STABILIZATION: 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.

METHOD OF PAYMENT FOR GEOTEXTILE, STABILIZATION: The item of “Geotextile, Stabilization” will be paid for by the square yard as measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Geotextile Stabilization	Square Yard

HIGH PERFORMANCE BIAXIAL GEOGRID: 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 placed in continuous full length strips with the highest tensile strength perpendicular to the slope line/wall face. 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. Create the wrapped face steepened slopes as shown on the plans.

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 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 Strength MD(d) CMD(d)	ASTM D6637(b)	1200 lb/ft 2000 lb/ft
Individual Junction Strength MD(d) CMD(d)	GRI GG2-87(c) (mod. 1988) (Revised 2000)	130 lb 170 lb
Tensile Modulus (2%) MD(d) CMD(d)	ASTM D6637(b)	18000 lb/ft 30000 lb/ft
<p>a. Percent open area measured without magnification by means of Corps of Engineers method as specified in <i>CW 02215 Civil Works Construction Guide, November, 1977.</i></p> <p>b. Ultimate Strength and Tensile Modulus at 2 percent elongation measured by means of <i>ASTM D 6637</i>. No offset allowances or specimen pretensioning are made in calculating tensile modulus.</p> <p>c. Individual junction strength measured by means of <i>Geosynthetic Research Institute Testing Method GG2 "Individual Geogrid Junction Strength."</i></p> <p>d. "MD" and "CMD" represent 'machine' and 'cross-machine' directions, referring to the principle directions of the manufacturing process.</p>		

METHOD OF PAYMENT FOR HIGHPERFORMANCE BIAXIAL GEOGRID: The item of "High Performance Biaxial Geogrid" will be paid for by the square yard as measured in place. No payment will be made for overlap or wasted material.

PAY ITEM

PAY UNIT

High Performanx Biaxial Geogrid

Square Yard

AGGREGATE, 6A: 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. Scaled tickets are required.

PAY ITEM

PAY UNIT

Aggregate, 6A

Ton

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-C, Treatment of Peat Marshes, Method A-1, or as directed by the Engineer in the field.

METHOD OF PAYMENT FOR EXCAVATION, PEAT: The item of "Excavation, Peat" will be paid for by the cubic yard as measured from the area actually excavated from the roadway.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Excavation, Peat	Cubic Yard

BACKFILL, SWAMP: 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-C, Treatment of Peat Marshes, Method A-1, or as directed by the Engineer in the field.

BACKFILL, SWAMP (CON'T):

METHOD OF PAYMENT FOR BACKFILL, SWAMP: The item of "Backfill, Swamp" will be paid for by the cubic yard as measured from the area actually backfilled as part of "Excavation, Peat" and in accordance with Standard Plan R-103-B.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Backfill, Swamp	Cubic Yard

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

Granular bedding and backfill will be included in the item of Sewer and Culverts.

All sewer, 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. Pipes 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 unless approved by the Engineer.

SEWER, CULVERT AND END SECTIONS (CON'T):

Concrete Cross Culverts will be placed at the following locations:

<u>STATION</u>	<u>TYPE</u>	<u>END SECTIONS</u>	<u>LENGTH</u>
36+68	Culv, CI E, Conc, 18 inch	2	43
58+05	Culv, CI E, Conc, 24 inch	2	48
92+60	Culv, CI E, Conc, 18 inch	2	50
94+69	Culv, CI E, Conc, 18 inch	2	45
119+66	Culv, CI E, Conc, 18 inch	2	45
132+38	Culv, CI E, Conc, 18 inch	2	55

METHOD OF PAYMENT FOR SEWER, 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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Culv, CI F, ___ inch	Foot
Culv, CI E, Conc, ___ inch	Foot
Culv End Sect, Conc, ___ inch	Each

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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Aggregate Base, 6 inch	Square Yard

AGGREGATE, 12 INCH (21AA): The item of "Aggregate, 21AA" will include furnishing, hauling, placing, and shaping of the material. Material will meet MDOT 21AA Specifications.

METHOD OF PAYMENT FOR AGGREGATE, 21AA: The item of "Aggregate, 21AA" will be paid for by the square yard, compacted in place

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Aggregate, 12 inch (21AA)	Square Yard

SHOULDER, CL II, 4 INCH: The item of “Shoulder, Cl II, 4 inch” 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, 4 INCH: The item of “Shoulder, Cl II, 4 inch” will be paid for by the square yard, compacted in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Shoulder, Cl II, 4 inch	Square Yard

APPROACH, CL II: 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, Cl II	Ton

HMA, 4E1: This item includes furnishing, hauling, and placing HMA, 4E1 and HMA Approach where indicated in the plans. This work will also include cleaning and sweeping as required. No additional payment will be made for HMA valley curb. HMA material used on driveways, side roads, and intersections will also be included in this item and paid for as the HMA, 4E1. Driveways shall be constructed with two courses of HMA pavement where paved driveways are called for in the plans. The work will also include furnishing and applying Bond Coat (included in HMA items), MDOT Standard Specifications SS-1h before placing the HMA. Bond Coat will be placed at the rate of 0.05 – 0.10 gallons per square yard prior to placing HMA.

Performance Grade Asphaltic Cement Bituminous Material will be PG 64-22.

1. The Contractor will submit a mix design with a range of 5.0 to 8.0 percent (effective bitumen) of bitumen content. Target air voids of 3.0% through regression.
2. The limits for the bitumen content of range 1 will be ± 0.30 from the optimum mix design.
3. The Contractor will submit a mix design and test results of the aggregates to be used at least two weeks before commencing paving. The mix design will be submitted to an approved testing laboratory for design compliance tests. The Road Commission will require a mix design in accordance with the MDOT “HMA Production Manual”.
4. All mix designs must be approved by the Engineer.

HMA, 4E1 (CON”T):

ROLLING OF THE HMA MIXTURE

Nuclear gauge testing requirements may be waived at the discretion of the Engineer; the rolling and compaction operation will be controlled by the “Number of Rollers Method” shown below.

Average Laydown Rate, Square Yards per Hour	Number of Rollers Required	
	Compaction Rollers	Finish Rollers
Less than 800	1	*1
800-1800	1	1
1800-4000	2	1
4000-7000	3	1

* The compaction roller may also be used as the finish roller.

PAY ITEM

HMA, 4E1

PAY UNIT

Ton

GUARDRAIL, REM: This item will include the cost of the removal and disposal of multiple beam elements, posts, anchorages, including concrete blocks and sleeves, hardware and other items according to Section 204 of the Standard Specifications.

METHOD OF PAYMENT FOR GUARDRAIL, REM: The item of “Guardrail, Rem” will be measured along the face of the existing guardrail installation and paid for by the foot

PAY ITEM

Guardrail, Rem

PAY UNIT

Foot

GUARDRAIL, TYPE B: This item will include the cost of providing and placing guardrail posts, blocks and miscellaneous hardware and other items in accordance with section 807 of the Standard Specifications.

METHOD OF PAYMENT FOR GUARDRAIL, TYPE B: The item of “Guardrail, Type B” will be measured along the face of the rail, excluding terminals, and end shoes and paid for by the foot

PAY ITEM

Guardrail, Type B

PAY UNIT

Foot

GUARDRAIL APPROACH TERMINAL, TYPE 2B: This item will include the cost of proprietary and standard elements, and hardware required for installation, including obstacle marker panel, and terminal end shoes and other items in accordance with section 807 of the Standard Specifications.

METHOD OF PAYMENT FOR GUARDRAIL APPROACH TERMINAL, TYPE 2B: The item of "Guardrail Approach Terminal, Type 2B" will be paid for as individual units.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Guardrail Approach Terminal, Type 2B	Each

GUARDRAIL DEPARTING TERMINAL, TYPE B: This item will include the cost of terminal end shoes and other items in accordance with section 807 of the Standard Specifications.

METHOD OF PAYMENT FOR GUARDRAIL DEPARTING TERMINAL, TYPE B

The item of "Guardrail Departing Terminal, Type B" will be paid for as individual units.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Guardrail Departing Terminal, Type B	Each

PAVT MRKG, WATERBORNE, 4-INCH, YELLOW: This item will include all equipment, labor, and material required to place the pavement marking according to Section 811 of the Standard Specifications.

The Allegan County Road Commission will mark no-passing zones after paving the surface course. Pavement markings must be placed within 14 calendar days of shoulder completion. After this time, liquidated damages will be assessed in accordance with section 108.10 of the 2012 Standard Specifications for Construction.

METHOD OF PAYMENT FOR PAVT MRKG, WATERBORNE, 4-INCH, YELLOW: The item of "Pavt Mrkg, Waterborne, 4-inch, Yellow" will be paid for by the linear foot.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Pavt Mrkg, Waterborne, 4-inch, Yellow	Foot

PAVT MRKG, WATERBORNE, 4-INCH, WHITE: This item will include all equipment, labor, and material required to place the pavement marking according to Section 811 of the Standard Specifications.

Pavement markings must be placed within 14 calendar days of shoulder completion. After this time, liquidated damages will be assessed in accordance with section 108.10 of the 2012 Standard Specifications for Construction.

METHOD OF PAYMENT FOR PAVT MRKG, WATERBORNE, 4-INCH, WHITE: The item of "Pavt Mrkg, Waterborne, 4-inch, White" will be paid for by the linear foot.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Pavt Mrkg, Waterborne, 4-inch, White	Foot

RIPRAP, PLAIN: The item of "Riprap, Plain" 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: The item of "Riprap, Plain" 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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Riprap, Plain	Square Yard

SLOPE RESTORATION, TYPE A: The item of "Slope Restoration, Type A" will include all labor, material and equipment required to do the restoration. Restoration will consist of placing Seeding, Mixture TUF (220#/acre); Seeding, Mixture CR (70#/acre), Fertilizer, Chemical Nutrient, CI A (176#/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. The following is an approximate list of restoration material quantities:

<u>MATERIAL</u>	<u>QUANTITY</u>
Seeding, Mixture TUF	1,400 Lb
Seeding, Mixture CR	450 Lb
Fertilizer, Chemical Nutrient, CI A	1,100 Lb (Nutrients)
Mulch	13 Ton
Mulch Anchoring	Per manufactures recommendation

METHOD OF PAYMENT FOR SLOPE RESTORATION, TYPE A: The item of "Slope Restoration, Type A" will be paid for by the square yard measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Slope Restoration, Type A	Square Yard

SLOPE RESTORATION, TYPE C: The item of “Slope Restoration, Type C” will include all labor, material and equipment required to do the restoration. Restoration will consist of placing Seeding, Mixture TUF (400#/acre); Seeding, Mixture CR (70#/acre), Fertilizer, Chemical Nutrient, CI A (228#/acre); and High Velocity Mulch Blanket. Place High Velocity Mulch Blanket and Anchoring within one calendar day after seeding.

Section 816 of the Standard Specifications for Construction will apply. 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 following is an approximate list of restoration material quantities:

<u>MATERIAL</u>	<u>QUANTITY</u>
Seeding, Mixture TUF	750 Lb
Seeding, Mixture CR	130 Lb
Fertilizer, Chemical Nutrient, CI A	450 Lb (Nutrients)
High Velocity Mulch Blanket	9,000 Syd
Mulch Blanket Anchoring	Per manufactures recommendation

METHOD OF PAYMENT FOR SLOPE RESTORATION, TYPE C: The item of “Slope Restoration, Type C” will be paid for by the square yard measured in place.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Slope Restoration, Type C	Square Yard

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 shall 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 reseeded, maintaining check dams and spillways, and fixing erosion on site.

METHOD OF PAYMENT FOR EXTENDED RESTORATION: The item of “Extended Restoration” will be paid for as a lump sum.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Extended Restoration	Lump Sum

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 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 Engineer. All “CONSTRUCTION AHEAD” and “ROAD CLOSED AHEAD” signs will be 48” x 48” mounted on two posts with one steady burn light. Place “CONSTRUCTION AHEAD” signs on all public roads approaching the project limits. Also, place “ROAD CLOSED AHEAD” signs at each end of the project limits if applicable. (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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Sign, Type B, Temp, Modified	Square Foot

PLASTIC DRUM, HIGH INTENSITY, LTD, MODIFIED: The item of "Plastic Drum, High Intensity, Ltd, 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, LTD, MODIFIED: The item of "Plastic Drum, High Intensity, Ltd, Modified" will be paid for by the individual unit.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Plastic Drum, High Intensity, Ltd, Modified	Each

BARRICADE ,TYPE III, HIGH INTENSITY, DOUBLE SIDED, LTD, MODIFIED: The item of "Barricade, Type III, High Intensity, Double Sided, Ltd, 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. 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, LTD, MODIFIED: The item of "Barricade, Type III, Double Sided, Ltd, Modified" will be paid for as individual units.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Barricade, Type III, High Intensity, Double Sided, Ltd, Modified	Each

EROSION CONTROL, SILT FENCE: 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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Erosion Control, Silt Fence	Foot

EROSION CONTROL, CHECK DAM: 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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Erosion Control, Check Dam	Foot

MONUMENT BOX, ADJ: This item includes all equipment, labor, and material required to remove existing monument boxes and reset them to match the final surface elevation of the HMA. The Allegan County Road Commission will furnish new boxes if the existing box is broken, damaged, or missing.

METHOD OF PAYMENT FOR MONUMENT BOX, ADJ

The item of "Monument Box, Adj" will be paid for by the individual unit.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Monument Box, Adj	Each

PROJECT CLEANUP: 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.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Project Cleanup	Lump Sum

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. Responsibility for and Supervision of Construction. 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. Contractor will notify the Road Commission of any anticipated pay item overruns or extras as soon as possible to allow for approval or design changes.

B. Discipline and Employment. 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. Furnishing of Labor, Materials, etc. 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. Payment of Taxes; Procurement of Licenses and Permits. 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. Compliance with Laws and Regulations. 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. Responsibility of Subcontractors. 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 RESPONSIBILITIES OF THE CONTRACTOR, 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. Contractor's Insurance. 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. Minimum Limits of Liability. 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. Number of Policies. 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. Cancellation, Renewal or Modification. 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
2. 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, judgments, 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 109.03 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 Contract Amount	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 waived if the contractor meets the requirements set forth in Section 108.07 of the 2012 Standard Specifications for Construction. Approval of the Engineer is required.

A Contractor's Guide to

STORM WATER POLLUTION PREVENTION



Our Watershed, Our Responsibility

- A watershed is an area of land that catches rain and snow melt and drains into a river, lake, stream, or wetland. There are several major watersheds in Allegan County including the Kalamazoo River Watershed and the Macatawa Watershed.
- As citizens and contractors living and working in Allegan County, it is your duty to ensure that the surface waters of the community are kept clean and healthy.

Where Do Storm Drains Go?

- Storm drains, catch basins, and ditches are directly connected to local waterways.
- This direct connection means that whatever enters the storm drain eventually enters a river, lake, stream or wetland.
- When fertilizer, yard waste, sediment, or other contaminants enter a storm drain, it has adverse effects on local waterways.



Eliminating Illicit Discharges

- An illicit discharge is the discharge of pollutants to storm sewer systems via overland flow or direct dumping into catch basins.

- Illicit discharges are illegal! Reporting them can help eliminate the problem and keep our rivers and streams clean.

Report an illicit discharge to the Pollution Emergency Alerting System (PEAS) at (800) 292-5706 or to the Allegan County Road Commission at (269) 673-2184.

Practicing Healthy Land Care

- Use a fertilizer that is organic slow-release with low or no phosphorus. Phosphorus is the main cause of algae growth in streams, which depletes the oxygen aquatic organisms need to survive.
- Get your soil tested through your county Michigan State University Extension office. This will tell you what fertilizer you should use, if any.
- Don't dump leaves or grass clippings down the drain or blow them into the street! Decaying leaves also deplete the oxygen in streams. They can be used as mulch, or they can be disposed of by curbside pick-up.

Maintaining Your Fleet

- Leaky vehicles and construction machinery can easily cause stream contamination by tracking fluids and other pollutants off site, eventually draining into a catch basin
- You can prevent vehicle fluids from entering local bodies of water by ensuring that your vehicles and equipment are properly maintained and in good working condition.
- Proper disposal of chemicals and other waste is critical to the health of streams and rivers. Solid and liquid waste materials are not meant to be dumped in catch basins. Remember that catch basins are made for storm water only!



- Manage riparian land wisely! Leaving a buffer zone of 20 feet between lawns and streams prevents stream bank erosion, stops pollutants from reaching the stream, and creates a habitat for local wildlife.

Managing Streets and Parking Lots

- Storm water runoff from streets and parking lots is a main cause of pollution because the storm water takes sediment and other solids with it into catch basins.
- The runoff from these impervious surfaces entering streams contains total suspended solids (TSS).
- Suspended solids make water in streams cloudy, which inhibits aquatic plant growth. This in turn affects the health of aquatic organisms that require oxygen from the aquatic plants.
- You can prevent this by keeping roads clean near the construction site and have a designated disposal area for cigarette butts and other small debris that can make its way into a catch basin.



Allegan County Road
Commission
1308 Lincoln Road
Allegan, MI 49010
(269) 673-2184 phone
(269) 673-5922 fax

BID TABULATION - Friday, July 15, 2020 - HIGHWAY CONSTRUCTION
 Allegan County Road Commission
 1308 Lincoln Road
 Allegan, Michigan 49010-9762

PROJECT NO. 3548 – 2.10 miles of roadway reconstruction including clearing, grade establishment, sand subbase, aggregate base, cross culvert replacement, and restoration on 103rd Avenue, 52nd Street, and 104th Avenue from 54th Street to 1,000' west of 50th Street in Lee Township, Allegan County.

ITEM OF WORK	QUANTITY	UNIT	UNIT		UNIT		UNIT		PRELIMINARY ENGINEER'S ESTIMATE	
			PRICE BID	AMOUNT	PRICE BID	AMOUNT	PRICE BID	AMOUNT	PRICE BID	AMOUNT
Clearing	1	LS		\$0.00		\$0.00		\$0.00	\$40,000.00	\$40,000.00
Station Grading	1	LS		0.00		0.00		0.00	65,000.00	65,000.00
HMA Base Crushing and Shaping	28,800	Syd		0.00		0.00		0.00	2.00	57,600.00
Subbase, CIP	5,000	Cyd		0.00		0.00		0.00	6.00	30,000.00
Topsoil Surface, Salv, LM	3,300	Cyd		0.00		0.00		0.00	5.00	16,500.00
Trenching	68	Sta		0.00		0.00		0.00	250.00	17,000.00
Subgrade Undercutting, Type II	1,000	Cyd		0.00		0.00		0.00	9.00	9,000.00
Geotextile, Stabilization	5,000	Syd		0.00		0.00		0.00	2.50	12,500.00
High Performance Biaxial Geogrid	10,000	Syd		0.00		0.00		0.00	3.00	30,000.00
Aggregate, 6A	100	Ton		0.00		0.00		0.00	30.00	3,000.00
Excavation, Peat	2,500	Cyd		0.00		0.00		0.00	8.00	20,000.00
Backfill, Swamp	2,500	Cyd		0.00		0.00		0.00	15.00	37,500.00
Culv, CI E, Conc, 18 inch	240	Ft		0.00		0.00		0.00	50.00	12,000.00
Culv, CI E, Conc, 24 inch	50	Ft		0.00		0.00		0.00	70.00	3,500.00
Culv, CI F, 12 inch	760	Ft		0.00		0.00		0.00	40.00	30,400.00
Culv End Sect, Conc, 18 inch	10	Ea		0.00		0.00		0.00	600.00	6,000.00
Culv End Sect, Conc, 24 inch	2	Ea		0.00		0.00		0.00	750.00	1,500.00
Aggregate Base, 6 inch	43,000	Syd		0.00		0.00		0.00	5.00	215,000.00
Aggregate, 12 inch (21AA)	5,000	Syd		0.00		0.00		0.00	10.00	50,000.00
Shoulder, CL II, 4 inch	5,000	Syd		0.00		0.00		0.00	4.00	20,000.00
Approach, CI II	520	Ton		0.00		0.00		0.00	20.00	10,400.00
HMA, 4E1	9,500	Ton		0.00		0.00		0.00	65.00	617,500.00
Guardrail, Rem	350	Ft		0.00		0.00		0.00	10.00	3,500.00
Guardrail, Type B	350	Ft		0.00		0.00		0.00	18.00	6,300.00
Guardrail Approach Terminal, Type 2B	2	Ea		0.00		0.00		0.00	2,000.00	4,000.00
Guardrail Departing Terminal, Type B	2	Ea		0.00		0.00		0.00	650.00	1,300.00
Pavt Mrkg, Waterborne, 4 inch, White	23,000	Ft		0.00		0.00		0.00	0.50	11,500.00
Pavt Mrkg, Waterborne, 4 inch, Yellow	16,900	Ft		0.00		0.00		0.00	0.50	8,450.00
Riprap, Plain	250	Syd		0.00		0.00		0.00	45.00	11,250.00
Slope Restoration, Type A	30,500	Syd		0.00		0.00		0.00	2.00	61,000.00
Slope Restoration, Type C	9,000	Syd		0.00		0.00		0.00	3.00	27,000.00
Extended Restoration	1	LS		0.00		0.00		0.00	1,000.00	1,000.00
Sign, Type B, Temp, Modified	400	Sft		0.00		0.00		0.00	8.50	3,400.00
Plastic Drum, High Intensity, Lighted, Modified	50	Ea		0.00		0.00		0.00	25.00	1,250.00
Barricade Type III, High Intensity, Dbl Sided, Ltd, Modified	10	Ea		0.00		0.00		0.00	200.00	2,000.00
Erosion Control, Silt Fence	6,500	Ft		0.00		0.00		0.00	2.00	13,000.00
Erosion Control, Check Dam	100	Ft		0.00		0.00		0.00	20.00	2,000.00
Monument Box Adjust	4	Ea		0.00		0.00		0.00	400.00	1,600.00
Project Cleanup	1	LS		0.00		0.00		0.00	2,000.00	2,000.00
			TOTAL BID	\$0.00	TOTAL BID	\$0.00	TOTAL BID	\$0.00	TOTAL BID	\$1,464,950.00