# **ADDENDUM NO. 2**

# 2025-2 Paving Program

August 25, 2025

# BOARD OF COUNTY COMMISIONERS ELKHART COUNTY, INDIANA

**TO:** All bidders and others to whom Bid Documents for the above referenced Project have been issued.

The items included in this Addendum are to become a part of the original Bid Documents as if included therein. Only these items are to be altered. The remainder of the original bid documents maintains validity in their entirety.

1. Item EC 13 has been revised. The bid form, field directives, and project plans have been revised as follows:

Group	Item	Road	Shape Length	Approx. Miles	Road Width	Sq Yards	Unit	Unit Quantities	Price per Unit	Extension
		County Road 22 (Goshen City Limits - County Road 28) - Full Depth Patching	215	0.04	6.00	143				
		Prep Cost	Prep Cost					1		\$0.00
		Joint Adhesive					LFT	311		\$0.00
		Common Excavation					CYS	80		
FC	12	Asphalt Milling (2 inches)					SYS	287		\$0.00
EC	13	220 lb/yd² HMA, 12.5 mm, Surface, Type B, 58S-28					TON	32		\$0.00
		880 lb/yd² HMA For Full Depth Patching, 19 mm, Base,	Type B, 588	S-28*			TON	64		\$0.00
		Compacted Aggregate, No. 2					TON	64		\$0.00
		Compacted Aggregate, No. 53					TON	32		\$0.00
								TOTA	L FOR ITEM	\$0.00

EC 13 COUNTY ROAD 22 (GOSHEN CITY LIMITS – COUNTY ROAD 28) FULL DEPTH PATCHING ENGINEER TO MARK UP AREAS IN FIELD. GENERAL LOCATIONS IDENTIFIED IN APPENDIX C – PROJECT PLANS.

EXCAVATE ASPHALT IN MARKED UP AREAS TO 8 IN DEPTH, FROM EDGE OF PAVEMENT TO CENTER OF THE TRAVEL LANE (6 FOOT WIDTH). COMPACT SUBGRADE TO STABILIZE. HAVE ENGINEER INSPECT SUBGRADE FOR STABILITY AND SUITABILITY. INSTALL 8 IN OF HMA BASE IN EXCAVATED AREAS. IF SUBGRADE IS NOT STABILIZED PROPERLY, EXCAVATE AN ADDITIONAL 12 IN, ADD 8 IN OF NO. 2 COMPACTED AGGREGATE, 4 IN OF NO. 53 COMPACTED AGGREGATE, AND 8 IN OF HMA. MILL ENTIRE TRAVEL LANE 2 IN WITHIN LIMITS OF PATCH (12 FOOT WIDTH) AND PAVE 2 IN HMA SURACE.

TRAFFIC CONTROL, MOBILIZATION/DEMOBILIZATION, AND ANY INCENDENTIALS NOT SPECIFIED AS LINE ITEMS, SHALL BE INCLUDED IN PREP COST. (0.04 MILES)

Elkhart County Highway 2025-2 County Road 22 & Lamplighter paving repairs Item EC-13



2. Item EC 14 has been revised. The bid form, field directives, and project plans have been revised as follows:

Group	Item	Road	Shape Length	Approx. Miles	Road Width	Sq Yards	Unit	Unit Quantities	Price per Unit	Extension
		Lamplighter (Country Acres Dr - Ridgeway Ln) - Full Depth Patching	40	0.01	4.00	18				
	14	Prep Cost					LS	1		\$0.00
		Joint Adhesive					LFT	72		\$0.00
EC		Common Excavation						9		\$0.00
EC		660 lb/yd <sup>2</sup> HMA For Full Depth Patching, 12.5 mm, Surface, Type B, 58S-28*					TON	6		\$0.00
		Compacted Aggregate, No. 2				TON	8		\$0.00	
		Compacted Aggregate, No. 53					TON	4		\$0.00
								TOTAL	FOR ITEM	\$0.00

# EC 14 (LAMPLIGHTER (COUNTRY ACRES DR – RIDGEWAY LN) FULL DEPTH PATCHING

ENGINEER TO MARK UP AREAS IN FIELD. GENERAL LOCATIONS IDENTIFIED IN APPENDIX C – PROJECT PLANS.

EXCAVATE ASPHALT IN MARKED UP AREAS TO 6 IN. COMPACT SUBGRADE TO STABILIZE. HAVE ENGINEER INSPECT SUBGRADE FOR STABILITY AND SUITABILITY. INSTALL 6 IN OF ASPHALT IN EXCAVATED AREAS. IF SUBGRADE IS NOT STABILIZED PROPERLY, EXCAVATE AN ADDITIONAL 12 IN, ADD 8 IN OF NO. 2 COMPACTED AGGREGATE, 4 IN OF NO. 53 COMPACTED AGGREGATE, AND 6 IN OF HMA.

TRAFFIC CONTROL, MOBILIZATION/DEMOBILIZATION, AND ANY INCENDENTIALS NOT SPECIFIED AS LINE ITEMS, SHALL BE INCLUDED IN PREP COST. (0.01 MILES)

Elkhart County Highway 2025-2 County Road 22 & Lamplighter paving repairs Item EC-14



All areas are along the south curb line. Area's will be painted for construction.

4 areas of patching

Size approximately 4x10

# 2025-2 Paving Program

# 3. Item EC 18 has been added. The bid form has been revised as follows.

Grou	Item	Road	Shape Length	Approx. Miles	Road Width	Sq Yards	Unit	Unit Quantities	Price per Unit	Extension
EC		Subgrade Treatement for Full Depth Reclaimed Roads (Undistributed)	2,000	0.38	12	2,667				
		No. 2 Compacted Aggregate for Subgrade Treatment					TON	1,779		\$0.00
	18	No. 53 Compacted Aggregate for Subgrade Treatment					TON	888		\$0.00
	10	Geogrid for Subgrade Treatment					SYS	2,667		\$0.00
		Excavation for Subgrade Treatment					CYS	1,333		\$0.00
								TOTAL	L FOR ITEM	\$0.00

4. The technical specifications have been revised and reissued, as follows:

# **Division 3:**

# Project Technical Specifications

For

2025-2 Paving Program

OWNERS: ELKHART COUNTY, INDIANA, ACTING THROUGH

IT'S BOARD OF COUNTY COMMISSIONERS

ELKHART COUNTY HIGHWAY DEPARTMENT

**ENGINEERING SECTION** 

610 STEURY AVENUE

GOSHEN, IN 46528



Elkhart County Highway Department 610 Steury Avenue, Goshen, Indiana 46528

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# TP1 - GENERAL INFORMATION

# **GENERAL**

The following Technical Provisions are in addition to the Indiana Department of Transportation 2024 "STANDARD SPECIFICATIONS", which Standard Specifications shall apply to this contract. Where the words "Standard Specifications" and also where reference consisting of a number or numbers are used, they shall be construed as referring to the Indiana Department of Transportation 2020 Standard Specifications and current supplemental specifications and standard detail drawings.

The term "State" as used in the Standard Specifications shall be deleted and replaced with the term "County".

The term "Engineer" as used in the Standard Specifications shall be the person, firm, or corporation named as such in the written Agreement between the OWNER and CONTRACTOR.

# **TP2 - TIME OF COMPLETION**

# **GENERAL**

Work on this Contract shall not begin prior to notice to proceed. The Contractor shall begin on or after **September 15**<sup>th</sup> **2025**, and shall complete all work no later than **June 5**<sup>th</sup> **2026**.

This completion date is a 'fixed calendar date' as defined by INDOT Standard Specifications section 108

Determination and Extension of Contract Time for Completion and Failure to Complete on Time shall be in accordance with the Agreement and all applicable requirements of 108.08 and 108.09 respectively, and modified as follows.

If an intermediate date is specified for one or more of the items or phases of the contract, liquidated damages will apply for that particular item or phase as if the intermediate date specified for said item or phase is the conclusion of said portion of project or contract.

No extension of Contract Time shall be allowed for weather or changes in quantities placed.

Changes in Contract Time will only be considered if requested in writing by the Contractor in accordance with Article 10 of the General Conditions.

The Contractor shall notify the Owner at least two (2) weeks in advance of his intention to perform any Work on the project. The contractor shall give the owner/inspector updated schedules of work on a weekly basis or as the schedule changes. The Contractor shall also notify the appropriate agencies of his intention to close any County Road in connection with the project. See ROAD CLOSING REQUIREMENTS.

Note that "Road Construction Ahead" signage shall be installed prior to any other work, and shall be removed only upon final acceptance of the project or initial acceptance of the segment for paving packages. These signs shall be checked on a daily basis and promptly reset as needed.

Substantial completion of a road segment is defined as the full planned width of the final course of asphalt has been placed and is ready for traffic, shoulders have been applied, driveway approaches are completed, any required grading is complete, and final striping has been placed.

Final Inspection may be done on a per segment basis. When a particular segment is completed, a final inspection may be requested and final acceptance granted for that particular segment.

Final Acceptance of a road segment is defined as the full planned width of the final course of asphalt has been placed and is ready for traffic, shoulders have been applied, driveway approaches are completed, any required grading is complete, final striping has been placed, construction signs and construction debris removed, pre-final inspection punch list items have been completed and final inspection has been granted.

Project Completion will be assessed by the following criteria, the full planned width of the final course of asphalt has been placed and is ready for traffic, shoulders have been applied, driveway approaches are completed, any required grading is complete, final striping has been placed, construction signs and construction debris removed, pre-final inspection punch list items have been completed, final inspection has been granted and all contract line items are

completed. Time extension may be granted on any work items added through change order or outside of contract.

# **TP3 - UTILITIES**

#### **GENERAL**

The Contractor shall determine the location of all underground and overhead utility lines within the project limits. If proper clearances cannot be obtained, affected planned structures shall be placed as otherwise directed and approved by the adjacent utility representatives (and as accepted by the Engineer).

# **COORDINATION WITH UTILITIES**

The Contractor shall be responsible for utility property and services in accordance with 107.20 of INDOT's Standard Specifications. All of the permanent and temporary utility appurtenances in their present or relocated positions shall have been considered in the bid. No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility appurtenances or the operations of moving them.

The plan drawings include a list of names for the known companies that may have utilities located within the limits of construction in this contract. If any of these utilities are affected, it shall be the Contractor's responsibility to identify and coordinate with that utility.

The prime contractor shall be ultimately responsible for the completeness and promptness of utility location(s) for subcontractors. Multiple locations of the same facilities may be required throughout the project time.

# TP4 - BUY AMERICAN REQUIREMENT

#### **GENERAL**

Buy American Requirements shall be in accordance with 106.01(c) of INDOT's Standard Specifications.

# TP5 - STORAGE OF CONTRACTOR'S EQUIPMENT, MATERIALS AND TEMPORARY OFFICES

#### **GENERAL**

The Contractor will be permitted to store non-operating construction equipment, workmen's vehicles, materials and temporary offices within the limits of the Right-of-Way with approval from Owner.

In the event that the Right-of-Way is not available for storage, the Contractor shall procure an adequately secure operations site as an incidental item to the contract.

All areas within the limits of the Right-of-Way that are used by the Contractor for temporary storage of materials, non-operating construction equipment, workmen's vehicles and temporary offices, when no longer required for such purpose, shall be restored to their original condition by the Contractor at his own expense.

The Contractor shall not use property adjacent to the project Right-of-Way for storage, parking or any other use without prior approval from the property owner.

# PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

The Contractor shall be responsible for preservation of all public and private property. All areas on the Right-of-Way that are used for storage of any kind shall be restored to their original condition when no longer required for that purpose. Generally, this shall comply with the requirements of Sections 107.14 and 107.19 of Standard Specifications.

# TP6 - HAZARD COMMUNICATIONS PROGRAM

# **GENERAL**

Pursuant to the latest requirement of OSHA the bidder is obligated to inform his employees concerning the health and safety hazards of chemical substance that may be required in the performance of this contract.

### TP7 - ENVIRONMENTAL RESTRICTIONS

#### GENERAL

- (a) All trees or shrubs outside the construction limits shall not be disturbed.
- (b) Construction limit shall be defined as the Right-of-Way line unless otherwise shown on the plans.

#### **PERMITS**

Regulatory permits for this project to be obtained by the OWNER currently are as follows:

None

The CONTRACTOR is responsible for securing all other permits that may be required for this project in accordance with the Standard Specifications.

# TP8 - RIGHT-OF-WAY CLEARING

# **GENERAL**

Clearing right-of-way shall include the removal and/or trimming of all trees and brush within the right-of-way unless specifically identified on the contract plans to remain. Stumps shall be entirely removed and filled with sand.

Incidental to the work shall be the removal of any miscellaneous obstructions within the right-of-way.

The work shall include the removal of portions of existing pavement as indicated by plan details and/or within the construction limits or to the r/w line, whichever is greater.

It is the Contractor's responsibility to adequately inspect the site and clarify the intent of the project prior to submitting a bid.

### TP9 – MAINTENANCE OF TRAFFIC

# **GENERAL**

All signs and traffic control devices shall be in accordance with the Indiana Department of Transportation Standard Specifications and the Indiana MUTCD so as to provide continuous, safe, 2-way traffic at all times.

The Contractor shall be totally responsible for the maintenance of traffic. Maintaining of traffic shall be the non-delegable duty of the Contractor to fulfill each and every responsibility and to accept full liability. All applicable provisions of 107.12 shall apply to work being done under traffic.

Access to residential and business driveways within the project limits shall be maintained at all times. Temporary closure of driveway access may be allowed upon approval of the Engineer and adequate notification of the property owner. All driveways shall be accessible at the end of each work day. Stone, gravel or other temporary materials needed to make driveways accessible will not be paid for directly but will be included in the Maintenance of Traffic pay item.

Construction signs and barricades shall be as per INDOT standard sheets and shall be in sufficient condition for good functioning (i.e. visible, readable, reflective, etc.). The Contractor will be responsible for maintenance of traffic including all construction signs necessary or as directed by the Engineer for the duration of construction.

When necessary or as directed by the Engineer, the Contractor shall provide standard reflective barrels with approved weighting systems, flagmen, caution tape, temporary pavement markings, etc. Reflective barrels shall be placed to warn motorists of hazards. Maximum spacing of barrels shall be 30 ft.

The timing of any lane restrictions shall be subject to approval by the Engineer.

The Contractor shall keep lane restrictions to an absolute minimum, as reasonable in order to complete the work. When lane restrictions are necessary, the Contractor shall perform continuous work operations so as to lift the lane restrictions as soon as possible. Lane restrictions shall not remain in place while the Contractor is not actively working.

All other costs of maintaining traffic, as specified for in this contract, shall be paid for at the lump sum price bid for "Prep Cost", and such price shall include and be full compensation for all costs incurred by the Contractor for maintaining traffic, and as set forth in Sections 104.04 and 108.04 of the Standard Specifications.

The Contractor shall be responsible for safe driving of haul trucks, heavy equipment, etc. related to the project work, including subcontractors.

Temporary pavement markings shall be required before two-way traffic is allowed on a newly paved road; if more than one lane is present in the same direction, turn lanes or if previous pavement markings existed and removed before permanent markings are applied.

The Contractor shall give a 24 hr./day emergency phone number to the owner and to local law enforcement authorities, for the prompt response to project-related concerns during non-work hours.

Lane restrictions shall be during daylight hours only unless otherwise approved by the Engineer.

The Contractor shall coordinate the specific timing of the activation of any new signalization system, reopening, etc. When practical, the Contractor shall provide access through the site for emergency vehicle traffic.

Note that "Road Construction Ahead" signage shall be installed prior to any other work, and shall be removed only upon final acceptance of the project or initial acceptance of the segment for paving packages. These signs shall be checked on a daily basis and promptly reset as needed.

On roads that have an ADT of 5000 cars per day or greater, advance warning of road construction and / or closure shall be placed 1 week in advance of construction and detour route established. These roads will be noted on bid sheet.

# TP10 - CONSTRUCTION STAKING

# **GENERAL**

The Contractor shall provide construction layout/surveying under the direction of a licensed land surveyor for the improvements as shown in the project plans and specifications. The cost of this item shall be included in the cost of other items and shall include, but may not be limited to the following:

Locate existing bench marks and verify level circuit to check elevations. Set new bench marks (if needed) every 500 feet. Bench mark data sheets shall be provided to the project Engineer.

Stake right-of-way as needed.

Stake all easement lines.

Preserve and perpetuate existing property corners, which are at risk from construction operations. (This item must be performed under the direct supervision of a licensed surveyor.)

Field notes shall be kept in standard field notebooks supplied by the Contractor in a clear, orderly and neat manner consistent with standard engineering practices and procedures. The field books shall be available for inspection by the Engineer at all times and shall become the property of the Owner on completion of the work.

The supervision of the Contractor's construction staking personnel shall be the responsibility of the Contractor and any errors resulting from the operations of such personnel shall be corrected at the expense of the Contractor and at no additional cost to the Owner.

The Engineer may check the accuracy of the staking as necessary, but will assume no responsibility for the accuracy of the layout or the final result of construction accuracy.

When "laying out" the project, an Elkhart County representative will be available to go over transition areas and "start / stop" locations.

Surveying pertaining to existing right-of-ways and monument perpetuation shall be performed under the direction of a Land Surveyor licensed in the State of Indiana.

# TP11 - CONTRACTOR'S RESPONSIBILITY FOR MATCHING OLD WORK

# **GENERAL**

Where new pavement is to be fitted to existing pavement, the Contractor shall check all leading dimensions, elevations and conditions in the field and report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of new parts to old. If such parts do not fit properly, the Contractor shall make and pay for such alterations or new parts as may be necessary to assure proper fits and connections meeting the approval of the Engineer. Transition from new pavement to existing, shall be less than 1/2 inch.

All adjoining asphalt surfaces, including but not limited to, cross roads, passing blisters, driveways, shall be cut full depth or milled 1½ inch minimum to provide a smooth transition. Transition joints shall be constructed in accordance with Elkhart County's TRANSVERSEJOINT TRANSITION DETAIL. Any damage to edge will be removed prior to paving. Payment shall be included in prep cost line item.

TP12 - DUST AND AIR POLLUTION CONTROL

# **GENERAL**

Provision shall be made for prompt removal from traveled roadways of all dirt and other materials that have been deposited thereon by operations associated with the project, whenever the accumulation is sufficient to cause the formation of dust or mud, interfere with drainage, damage pavements, or create a traffic hazard. Construction methods and means shall be employed to keep flying dust and air pollution to a minimum. Provisions shall be made for the control of dust on the project and on the roads, streets and other areas affected by the project wherever traffic or buildings or construction materials are affected by such dust. The materials and methods used for dust control shall be subject to approval by the Engineer. Pulverized roads within the Paving Program shall have grade watered to minimize dust. The cost of controlling dust and air pollution shall be included in the costs of other pay items and no additional payment will be made.

# TP13 - CONTAMINATION PRECAUTION

# **GENERAL**

Contractor shall take all precautions to avoid the spillage of construction-related liquids and fuels during the project. All portable stationary fuel tanks shall have secondary containment.

# TP14 - EARTHWORK

# **GENERAL**

- (a) This work shall consist of all earthwork required for the completion of the project as detailed on the plans and in the specifications. This item includes excavation, embankment construction, hauling, disposal and/or compaction of all material not being removed under some other item which is encountered within the limits of the work and also from intersecting entrance approaches beyond the Right-of-Way limits necessary for the construction of the roadway in accordance with the Specifications and in reasonably close conformance with the lines, grades, thickness and typical cross section shown on the plans or as directed.
- (b) Excavation for culverts, ditches, sewers, tunnels, and other approach structures will not be paid for directly, but the cost thereof shall be included in the cost of other pay items. Removal and disposal of piles of broken concrete and similar debris located on the Right-of-Way shall be included in the cost of earthwork. Where surplus material is suitable for use in the roadway or bridge approach embankment, it may be used as allowed by the Engineer.
- (c) Borrow shall consist of approved material required for construction of embankments. No direct payment will be made for borrow required for embankment construction in accordance with lines, grades and typical cross sections specified.

(d) The work shall include salvaging topsoil and replacement of topsoil for top dressing areas to receive sod or mulch seeding.

#### CONCRETE PAVEMENT REMOVAL

Removal of pavement shall consist of the removal and satisfactory disposal of portland cement concrete pavement; portland cement concrete surface with its base; or the total of any combination of base, binder, and surface course of any pavement on a portland cement concrete base, including the base. Each complete pavement section removed, regardless of thickness and composition will be considered as a separate item and paid for as such when removed. Pavement removal shall include only the removal and disposal of existing public road, driveway or street and alley pavement as required for the planned construction. Curb removal shall include curb that is separate from the pavement or removed separately. Integral curb that is removed with the adjacent pavement shall be paid for as pavement removal. Prior to performing the work of pavement removal at locations indicated on the plans or where directed, concrete pavement to be removed shall be cut with a power driven concrete saw along designated lines. Sawing shall be such that any portion of the pavement to remain in place will not be damaged. Any portion that is damaged or removed outside the designated lines shall be replaced with no additional payment. Sawing of pavement to be removed will not be paid for directly, but shall be included in the cost of pavement removal.

If no Pay Item has been established in the Proposal for Concrete Pavement Removal, and such work is necessary to perform the above, such work shall not be paid for directly, but shall be included in the costs of other pay items.

#### CONSTRUCTION

Excavation and embankment methods and testing shall conform to the INDOT standard specifications.

# **TP15 - DRAINAGE STRUCTURES**

# 1. GENERAL

- (a) All new structures shall comply with plans and shall be installed to the elevations shown on the plans or as otherwise determined by the Engineer.
- (b) Construction of all new inlets involving existing structures shall be accomplished such that the existing pipe structure is not damaged.

- (c) Where a new casting is to be fitted to an existing catch basin or an existing casting is to be fitted to a new inlet, the Contractor shall check all dimensions and conditions in the field and shall assume responsibility for their correctness and fit.
- (d) The cost of removal or modification of existing drainage structures as shown on the plans shall be included in the contract unit prices for the new structure items except as otherwise noted.
- (e) All existing structures damaged during construction shall be replaced with no additional payment.
- (f) At the connection of a pipe to a concrete structure, gasket connections shall be employed.
- (g) Pipes shall extend through walls, a sufficient distance, to allow for placement of the gasket connection.
- (h) Field constructed connections to structures, new or existing, shall be core drilled.
- (i) Mortar collars shall be placed on inside and outside of pipe installed in all structures.
- (j) Flow lines shall be poured in all structures when required.

# 2. CLEAN-UP

- (a) Clean-up shall be in accordance with sub-section 104.08 of the State Specifications.
- (b) No payment will be made for clean-up.

# SEWER PIPE AND APPURTENANCES

(a) DESCRIPTION – this work shall consist of the construction or reconstruction of sanitary sewer, storm sewer and appurtenances in accordance with specifications section 715 and in reasonably close conformance with the lines and grades shown on the plans or established by the Engineer

- (b) MATERIALS Materials shall be in accordance with State Specifications Section 715 and details shown on the drawings.
- (c) GENERAL REQUIREMENTS Manholes, inlets and catch basins shall comply with Section 720 of the State Specifications. Risers shall not exceed two risers per structure. Manholes, inlets and catch basins shall be done in accordance with the details shown on the drawings.

# 4. BASIS OF PAYMENT

(a) The accepted quantities for each class and diameter of sewer pipe specified will be paid for at the contract price per lineal foot complete in place. The accepted quantities of manholes, clean-outs, pipe end sections, inlets, catch basin and drywells will be paid for at the contract unit price each in place. The payment shall be full compensation for furnishing and installing all materials, labor, excavation, backfilling, pavement removal, testing, dewatering, compaction and all appurtenances.

# **TP16 - DEWATERING**

#### GENERAL

No pay item will be provided for dewatering. Any expenditure for equipment, labor, etc. to provide dewatering of an excavation should be included in the price of the other line items.

The Contractor shall arrange for dewatering discharge outfalls. Outfalls shall be acceptable to the Owner, the Elkhart County Drainage Board and the Indiana Department of Natural Resources.

#### TP17 - PROOFROLLING

# **GENERAL**

(a) Proof rolling of the natural ground surface shall be in accordance with 203.26 within all areas where new fill will be placed. Any soft soils encountered during the proof rolling operations, which will not readily compact, shall be removed and replaced with Structure Backfill to an elevation two (2) feet above the ground water level, if ground water is encountered. Otherwise backfilling shall

be accomplished in accordance with 203.09. The Contractor shall schedule a proof roll with the Owner's representative 24 hours in advance of all proof rolls. A weight ticket will be required for the truck performing the proof roll, showing a minimum gross weight of 68,000 lbs. for a tri-axle or tandem axle truck. No quad axle trucks will be allowed unless the fourth axle is able to be lifted from the surface for the test, and is.

# 1. PAYMENT

a) No direct payment will be made for proof rolling. The cost of this work shall be included in bid price of other items.

# TP18 - COMPACTED AGGREGATE

#### **GENERAL**

- (a) All compacted aggregate shall be paid under this item regardless whether used as base course for the mainline, as base course for the shoulders, as base course for approaches or as temporary surface.
- (b) All compacted aggregate shall be Compacted Aggregate, No. 53, in accordance with Section 300 Aggregate Bases.
- (c) Aggregate to maintain temporary access to driveways may be salvaged from existing onsite gravel roads, drives and shoulders.
- (d) It shall be the Contractor's responsibility to verify that subgrade elevations are in agreement with the plan/profile.

# 1. CONSTRUCTION

The compacted aggregate shall be constructed in accordance with INDOT Section 300 – Aggregate Bases.

Existing Subgrade (or Previously Constructed Subbase) – Prior to constructing the compacted aggregate, the subgrade shall be cleaned of all foreign substances and shall contain no frozen material. The Subgrade shall receive 6" subgrade treatment in accordance with the Standard Specifications and as directed by the Engineer. The first 6" below the pavement structure subgrade shall be compacted to at least 100% of dry density, as per AASHTO T 99. Compaction shall not be less than 100% of Standard Proctor as per ASTM D 698. It shall be inspected by the Engineer or his representative for adequate compaction and surface tolerances. Ruts or soft, yielding spots having inadequate compaction shall be corrected to the satisfaction of the designated representative.

The compacted aggregate material shall be placed in layers of uniform thickness with an approved spreader.

Layer thickness generally shall not exceed 5 inches after compaction. When vibrating or other approved types of special compacting equipment are to be used, approval may be given for increasing the permissible thickness of layers, provided the ability of such equipment to achieve acceptable compaction to the full layer depth is demonstrated. When the course is constructed in more than one layer, the previously constructed layers shall be cleaned of loose and foreign matter. The water content of the material shall be maintained during placement at the optimum percentage  $(1 - \frac{1}{2}\%)$  as determined by ASTM D 1557.

Compaction – While at optimum moisture  $(1 - \frac{1}{2}\%)$  the compacted aggregate shall be compacted with equipment capable of obtaining the desired density to the full depth. The rolling shall continue until the base is compacted to not less than 100% of the maximum dry density as determined in accordance with AASHTO T99.

Finishing – The surface of the compacted aggregate shall be finished by blading or with automated equipment especially designed for this purpose and rolled with a steel-wheeled roller. In no case will thin layers of fine materials be added to the top layer of the base course in order to meet the grade.

Surface Finish Tolerances – The surface of the completed crushed stone base shall not show any deviation in excess of  $\frac{1}{2}$  inch when tested with a 12 foot straight edge. The completed thickness of the base shall be within  $\frac{1}{2}$  inch plus or minus of the thickness indicated, and the average thickness shall not be less than the design thickness.

Maintenance – The base shall be maintained in a condition that will meet all specification requirements until the work is accepted.

# 2. PAYMENT

Payment will be made at the unit price as indicated below:

Pay Item Pay Unit

Compacted Aggregate, No 53. Ton

# TP19 - DISPOSAL OF UNSUITABLE MATERIAL

#### **GENERAL**

- (a) No temporary Right-of-Way has been provided on this contract for disposal of unsuitable material. The disposal of any peat and/or any other unsuitable soil that might be encountered throughout the length of the project shall be in accordance with all applicable requirements of 203.12.
- (b) Excess peat or any unsuitable material left over after placement as set out in 203.12 shall be disposed of outside the Right-of-Way with no additional payment.
- (c) Excess material may be utilized as "topsoil" where appropriate.

# TP20 - RECORD DRAWINGS

# **GENERAL**

Record Drawings shall be required for all major projects.

Record Drawings shall be required for minor projects if they include, but not limited to, the following elements: change in road elevations, profile, alignment, small structure improvement, intersection improvement, drainage pipe and structures.

The Contractor shall provide the Owner with two (2) neatly prepared and reproducible sets of record drawings and two (2) complete sets in PDF format on a CD or DVD.

# MINIMUM RECORD DRAWING REQUIREMENTS

Record drawings shall include the following, but not be limited to:

- 1) Installed structure locations (including GPS coordinates) and elevations
- 2) Elevations of installed improvements at regular intervals not to exceed 50 feet, i.e., curb and gutter, pavement centerline, swales and ditches, etc.
- 3) Detention/Retention basin elevations with constructed capacity
- 4) Any other newly constructed or reconstructed features pertinent to the project

Record drawing preparation shall be incidental to the contract.

# TP21 - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

# GENERAL

Wherever in the Contract Documents reference is made to the Manual on Uniform Traffic Control Devices, MUTCD, it shall be interpreted to mean the 2011 Indiana Manual on Uniform Traffic Control Devices with revisions 1, 2 & 3.

# **TP22 - COORDINATION CLAUSE**

# **GENERAL**

Contractor shall coordinate the work on this project with any other public works projects that may be taking place within the vicinity of the project site, or that are seen to, or are expected to, have an effect on this project or that this project has on another. This includes coordination with projects funded by Elkhart County, neighboring counties, municipalities, utilities or INDOT.

#### TP23 - EXISTING TRAFFIC CONTROL DEVICES

# **GENERAL**

- (a) This work shall consist of the removal and delivery to the County of all roadway signs and delineators that are to be removed and not reused in this contract. These items are to be delivered to the location specified by the Engineer. This work will not be paid for separately, but shall be included in the cost of other items.
- (b) Signs not required to be removed, or are planned for reuse, that are damaged by the Contractor shall be replaced by the Contractor.
- (c) All existing regulatory signs shall be maintained at all times during construction. For questions that should arise, the Engineer will be notified.
- (d) For all other signs that are to be disturbed, the County will be notified as to the reinstallation of these signs.
- (e) All existing traffic signals, masts, poles and other hardware if removed must be salvaged and maintained in good condition by the Contractor. The County has salvage rights for all removed items if not reused in the course of constructing this project.

# **TP24 – SUBGRADE TREATMENT**

# **GENERAL**

Areas with inadequate soils may require subgrade treatment. These areas will be identified by the Engineer during the course of the project through proof rolls or other means. The

Engineer will direct the Contractor in an appropriate treatment that may consist of excavation and replacement of the inferior soils with No. 2 Compacted Aggregate, No. 53 Compacted Aggregate, Geogrid, or combinations of some or all of the above.

### **MATERIALS**

The materials used shall conform to the Geogrid specification as listed in this document. Aggregate shall conform to the INDOT specifications in effect at the time of bidding for the aggregate classes identified.

# CONSTRUCTION

Remove the soil in areas designated by the Engineer, to the depth specified. Place aggregate and/or geogrid as directed.

#### **BASIS OF PAYMENT**

Compaction and/or placement of the materials used for subgrade treatment shall be included in the unit price of those items.

Pay Item	Pay Unit
No. 2 Compacted Aggregate for Subgrade Treatment	TON
No. 53 Compacted Aggregate for Subgrade Treatment	TON
Geogrid for Subgrade Treatment	SYS
Excavation for Subgrade Treatment	CYS

# TP25 - HMA PAVEMENTS

#### 1. GENERAL

Mainline and shoulder pavements shall conform to INDOT Standard Specifications section 402. PG Binder grades used in each mixture type shall conform to section 402.04. Pavements shall be supplied by a certified HMA plant in accordance with ITM 583.

#### 2. QUALITY CONTROL

The HMA shall be transported and placed according to the Quality Control Plan QCP submitted by the contractor according to ITM 803. Quality Control Plan shall be submitted to the Engineer 15 days prior to the placement of HMA.

During the pavement operation, the owner, the contractor, or the supplier of the HMA reserves the right to stop paving when a problem is identified. This includes test results from the Transtech PQI 380 indicating insufficient density readings as performed by Engineer.

#### 3. ACCEPTANCE OF MIXTURES

Design mix formula shall be submitted to the engineer for approval one week prior to use. Mixes shall be accepted by a Type D certification in accordance with section 916. Type D certification to include air voids and binder content.

The Engineer will select random locations for verification sampling. A verification sample will be at the auger of the paving device or, if determined by the engineer, a truck sample in accordance with AASHTO R 97. Samples will be tested by owners representative to verify Air voids, binder content, and mix gradation.

# 4. CONSTRUCTION REQUIREMENTS

Equipment for the HMA operations shall be in accordance with section 409 and shall be listed in the QCP. The contractor is responsible for the paving layout and roller pattern to achieve the specified density requirements.

# 5. DENSITY

For mainline paving, the density shall be determined using cores from two random locations selected by the engineer for a quantity not to exceed 600 ton of surface or 1000 ton of base or intermediate placed. Cores shall be drilled at each location where mix is placed every day work is performed. The cores shall be taken in accordance with ITM 580. The contractor is to drill the cores and immediately submit them to the Engineer for testing. Acceptance is based on maximum specific gravity and shall be within 92-96% Maximum Specific Gravity. Acceptance is based on three successive core tests calculated as an average. Average will be of current, previous and proceeding cores if available. Any density less than 90% will be considered deficient, and additional cores may be necessary to determine areas for removal.

Cores shall produce a uniform sample  $6.00 \pm 0.25$  in. Cores shall be cleaned, dried, and refilled with either HMA of similar or smaller size. Core hole shall be filled the same day as it is cut.

TP26 - INSPECTION AND TESTING

**GENERAL** 

#### 1. LABORATORY INSPECTION AND TESTING

- (a) All collection, laboratory inspection and testing of materials shall be performed as required under Article 106.02 of the Standard Specifications except as modified herein. It is the responsibility of the Contractor to see that all work is performed as required herein. The collection, laboratory inspection and testing of materials shall be performed by an independent testing laboratory.
- (b) The minimum number of samples and/or tests will be in accordance with INDOT's "Manual for Frequency of Sampling and Testing and Basis for Use of Material" unless superseded by the Technical Provisions and Supplementary Specifications for this project. This manual is available for review at INDOT's Office of the Division of Materials and Tests.
- (c) The cost of this work shall be included in the bid price of other items.
- (d) The Engineer, or the Engineer's Authorized Representative, may require that collection, laboratory inspection and testing of materials be performed in addition to the minimum number of tests required as described above. A written order will be provided to the Contractor requesting the additional work. Payment for the additional collection, laboratory inspection and testing of materials will be made either by change order or under the item allowance for Inspection and Testing if included in the contract. All test results shall be given to the owner/inspector in a timely manner.
  - (e) For paving packages only, Contractor will be required to take one sample per Mix Design of asphalt from behind paver for EACH road in excess of 800 total tons total.

#### **TP27 – MONUMENTS**

#### **GENERAL**

Monuments are the responsibility of the contractor on all segments awarded within the Paving Contract. Maintaining location and preservation, visibility, and adjusting to new grade shall be the responsibility of the contractor. If a monument will need to be replaced due to change in profile, where a riser will not suffice, or, at the direction of Owner, a line item will be supplied in the bid tab to accommodate the replacement item.

Existing monuments shall not be disturbed unless directed by Engineer. Any monument disturbed through the construction process, shall be replaced at the Contractors expense including cost of monument.

- (a) On roads that will be milled and repaved, all monuments will remain in place and the contractor will work around them.
- (b) On road sections that will be completely removed, the contractor will be required to leave the monuments in place unless the profile of the road will be changed. The owner/inspector will make the decision if the monument will need to be replaced or adjusted.
  - If the monument is to be replaced, the contractor will be required to replace the monument at the cost of the bid item. The replacement will include the removal and disposal of the old monument and all associated materials. The monument must be replaced by a licensed surveyor or by technicians working under the direct supervision of a licensed surveyor.
- (c) Monuments to be used must be approved by the Elkhart County Surveyor.
- (d) Monuments will be marked before work begins on each section of road by Elkhart County Surveyor.
- (e) Extensions may be used if needed to adjust existing monument to new grade. Elkhart County will supply risers for adjusting of monuments.
- (f) Final elevation of the monument shall not exceed finished elevation of asphalt and shall be recessed no greater than 1/2 inch.

**TP28 – MILLING OPERATIONS** 

**GENERAL** 

This item shall include the milling and removal of milled materials, to the depth indicated on the plans.

HMA Millings are the property of the County unless noted otherwise. The Contractor shall transport millings to a location designated by the County, if Elkhart County chooses to retain or use millings. The cost of transporting the millings shall be included in the cost of Milling Operations if millings are to retained or used and will be noted prior to bidding.

The existing pavement shall be removed to varying depths in a manner that shall restore the pavement surface to a uniform longitudinal profile and cross-section while preserving curb and/or gutter if present. Removal shall be to the depth and cross slope as specified in the contract or as directed by the Engineer. If an independent grade reference is required, it shall be designated in the contract and shall be established by the Engineer. All new pavements shall have 2% slopes.

Longitudinal pavement edge drop-offs of two (2) inches or greater shall not be left at the end of the workday without proper traffic control devices in place or otherwise addressing the condition such that there is no hazard to motorists. Traffic control devices shall be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) latest edition. There shall be no additional compensation for providing traffic control devices or otherwise addressing the pavement edge drop-off condition such that there is no hazard to motorists.

- 1. Tack shall be placed on clean surface prior to paving for surface layer application.
- 2. All work shall be performed during daylight hours.
- 3. All work shall take place Monday through Friday excluding holidays.
- 4. Asphalt placement shall begin within 48 hours of the commencement of the milling operation and continue each work day until completed. For multiple segments greater than 1 mile, a time extension may be granted prior to paving, so prep may be completed. Extension time must be approved by Engineer and paving must continue until segment is completed to avoid damages.

- 5 Paving / Milling may occur on Saturdays with notification to Elkhart County Highway Inspector.
- 6. A Six thousand dollar (\$6,000) per sub-group penalty will be assessed to the contractor for locations where asphalt placement is not commenced within 48 hours after milling. Unless authorized by ENGINEER (SEE ITEM 4).
- 7. Contractor to provide Model and Type of Milling Machine to be used on this project or specialized subcontractors name to be utilized.
- 8. Driveways shall be transitioned to meet at present elevation, as outlined in TP35

9.

- # 53 gravel shoulders shall be applied ASAP to avoid unsafe conditions if specified. Payment is to be made per line item. Gravel shoulders shall be two feet wide, and shall not exceed two feet. Shoulders may consist of minimal millings.
- 11. All adjoining asphalt surfaces, including but not limited to, cross roads, passing blisters, driveways, shall be cut full depth and material removed or milled 1½ inch depth and 36 inches width minimum across the entire width of the pavement to provide a smooth transition. Any damage to edge will be removed prior to paving. Payment shall be included in prep cost line item.
- 12. All gravel roads encountered shall have a 100 foot asphalt approach installed.
- 13. Pavement markings (including striping, stop bars, RR Crossings, pedestrian walkways, etc.) shall be replaced by contractor. Payment shall be included in prep cost line item.
- 14. Monuments are to be preserved and adjusted as outlined in TP27.
- 15. Bid shall include all costs for milling including passing blisters, driveway transitions, intersection radius, etc.

Pay Item Pay Unit

Prep Cost LSUM

# TP30 – RESTORATION OF PAVEMENT MARKINGS

#### **GENERAL**

ALL PAVEMENT MARKINGS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AT PRECONSTRUCTION LOCATIONS, WHICH INCLUDES BUT NOT LIMITED TO STRIPING, STOP BARS, RR CROSSINGS, AND PEDESTRIAN WALKWAYS.

# 1.0 Description

This specification covers thermoplastic, latex based traffic line paint and glass beads suitable for use as retro reflective pavement markings on bituminous or PCC pavement.

1.1 If road does not have edge markings and has an ADT of 5000 or more, edge lines must be installed as well. Road to have edge lines will be determined by Engineer and noted prior to bidding.

# 2.0 Materials

# A. Paint

Use white or yellow paint that is specifically manufactured for use on traffic markings. The paint must comply with volatile organic compound (VOC) requirements, be lead and other toxic heavy metal free, and exhibit the following qualities:

- 1. The non-volatile portion of the vehicle shall be composed of a 100% acrylic-polymer as determined by infrared spectral analysis.
- 2. Yellow and white paint shall have a minimum of 60% solids by volume.
- 3. The paint shall have a minimum of 60% and a maximum of 62% pigment by weight.
- 4. Dry-Opacity: A contrast ratio of not less than 0.96 when the paint is applied with a 0.015 in. film applicator. Dry Opacity will be determined according to Method 4121, Federal Test Method Standard No. 141a. Apply the paint to the chart specified in Section 1.1 of Method 4121.
- 5. Daylight Directional Reflectance of the white paint shall not be less than 85% as determined in accordance with ASTM E 1347 using the 45/0 illumination.
- 6. Color Match: Yellow paint shall match Federal Standard 595 color number 33538 tested in accordance with ASTM D 1729 with the daylight illumination represented by CIE Illuminant D75 or D65. White paint shall not exceed a yellowness index of 12 when tested in accordance with ASTM D 1925.

7. Titanium Dioxide Content: Yellow paint shall contain a maximum of 0.2 lb/gal rutile titanium dioxide. White paint shall contain a minimum of 1 lb/gal rutile titanium dioxide. Determine the titanium dioxide content using the aluminum reduction method of ASTM D 1394.Drying Time: The paint shall dry to a no tracking condition in no more than 90 seconds. The no tracking condition shall be determined by actual application on the pavement at a wet film thickness of 0.015 in. with white or yellow paint covered with glass beads at a rate of 6 lb/gal. Pavement temperatures shall be between 60 and 100° F and under all humidity conditions providing that the pavement is dry. The no tracking time shall be determined by passing over the paint line 90 seconds after paint application, in a simulated passing maneuver at a constant speed of 30 to 40 mph with a passenger car. A line showing no visual deposition of the paint to the pavement surface when viewed from a distance of 50 feet from the point where the test vehicle has crossed the line shall be considered as showing no tracking.

# B. Glass Beads

Reflective glass beads for use in the composition and for drop-on shall conform to the following requirements:

- 1. The glass beads shall be colorless, clean, and transparent, free from milkiness or excessive air bubbles, and essentially free from surface scaring or scratching. They shall be spherical in shape and at least 70% of the glass beads shall be true spheres when tested in accordance with ASTM D 1155.
- 2. The refractive index of the beads shall be a minimum of 1.50 as determined by the liquid immersion method at 25 degrees Celsius true.
- 3. The silica content of the glass beads shall not be less than 60%.
- 4. The glass beads shall be coated with a moisture resistant coating and an adhesion promoting coating which is compatible with the paint being used, shall remain free from clusters, and shall flow freely from dispensing equipment.
- 5. The glass beads shall have the following grading when tested in accordance with AASHTO M-247 FOR TYPE 1

US Standard Sieve	Mass % Passing
No. 20	100
No. 30	75-95
No. 50	15-35
No. 100	0-5

# C. Thermoplastic Pavement Markings

All linear pavement markings, stop bars, symbols, or words displayed on pavement that need replacement, must be replaced with thermoplastic and must follow the current INDOT Specification.

Application shall be per INDOT Specification Methods.

# ALL PERMANENT PAVEMENT MARKINGS SHALL BE RESTORED WITHIN 14 DAYS AFTER COMPLETED PAVING OF THE ROAD SEGMENT.

Pay Item	<u>Pay Unit</u>
Linear Pavement Markings, Paint, 4"	LFT
Linear Pavement Markings, Thermoplastic, 4"	LFT
Linear Pavement Markings, Thermoplastic, Gore, 8"	LFT
Pavement Markings, Thermoplastic, White, Stop Bar, 24"	LFT
Pavement Markings, Thermoplastic, White, Arrow, Turn	EA

# TP31 – TRAFFIC SIGNAL EQUIPMENT

Contractor shall replace detector housings and detection loops per INDOT Standard Specifications, the Elkhart County Street Standards, Appendix D, and the attached plans. All necessary signal wire, signal conduit, couplings, and labor necessary to connect old loop detection equipment to new detector housings and loops, and necessary work to provide a full functioning actuated traffic signal shall not be paid separately but will be included in the cost of other items.

Pay Item	Pay Unit
Sawcut for Loop Detector and Sealant	LFT

Signal Detector Housing

EΑ

# TP32 – GRINDING OPERATIONS GRIND & PAVE

#### **GENERAL**

This item shall include the grinding and profiling of full depth reclaimed materials.

The existing pavement shall be reclaimed to a consistent depth in a manner that shall restore the pavement surface to a uniform longitudinal profile and cross-section. If an independent grade reference is required, it shall be designated in the contract and shall be established by the Engineer. All new pavements shall have 2% slopes.

Longitudinal pavement edge drop-offs of two (2) inches or greater shall not be left at the end of the workday without proper traffic control devices in place or otherwise addressing the condition such that there is no hazard to motorists. Traffic control devices shall be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) latest edition. There shall be no additional compensation for providing traffic control devices or otherwise addressing the pavement edge drop-off condition such that there is no hazard to motorists.

Gradation of reclaimed asphalt shall have a particle size of which 97% will pass through a 2" sieve.

Work shall include, but not be limited to, the following:

1.

a. Contractor to reclaim/grind asphalt in place 22 - 24 feet wide and to a depth sufficient to cut through all asphalt and gravel base. The grinding operation should penetrate 1-2 inches into the sub-surface layer (below the aggregate subbase or road bed layer). Elkhart County Highway, at their discretion, may spread gravel or other material over the asphalt before

- grinding commences. The schedule for grinding must be approved by the Engineer prior to commencement of the operation.
- b. All roads which are to be reclaimed shall be reclaimed 1 foot wider than proposed road width for each lane and an additional prep of 1 foot for shoulders for each lane.
- c. A pad foot roller shall be used immediately behind the grinder on entire area .Pad foot roller shall make 6 cycles on all reclaimed areas prior to grading operations.
- d. Contractor shall grade material behind the pad foot roller to a 2% cross slope. Cross slope shall not be adjusted for driveway or approach tie ins without written approval from Engineer.
- e. Following the pad roller and grader, a vibratory roller shall be used over entire area until suitably compacted for paving.
- 3. All work shall be performed during daylight hours.
- 4. All work shall take place Monday through Friday excluding holidays.
- 5. Asphalt placement shall begin within 48 hours of the commencement of the grinding operation and continue each work day until completed. For multiple segments greater than 1 mile, a time extension may be granted prior to paving, so prep may be completed. Extension time must be approved by Engineer and paving must continue until segment is completed to avoid damages.
- 6. Proofroll for Grinding Operations In addition to the requirements in TP17, the following shall apply:
  - a. No payment will be made for asphalt placed prior to acceptable proofrolling observed by Engineer.
  - b. Yielding areas shall receive Subgrade Treatment as directed by Engineer. Undistributed items for Subgrade Treatment are provided in this contract for this purpose, and shall adhere to TP24.
  - c. Hot Mix Asphalt that is delivered to the site shall meet specifications at the time of placement. No payment will be made for delays in paving operations, rejection of Hot Mix Asphalt material, or any other costs associated with failed proofroll.
  - d. The occurrence of precipitation following an acceptable proofroll and prior to paving operations nullifies the prior proofroll.
- 7. Elkhart County will provide the material for any necessary profile improvements. The time constraints will be adjusted for these circumstances on a case by case basis.
- 8. Paving / Grinding <u>may</u> occur on Saturdays with notification to Elkhart County Highway Inspector.

- 9. If rain is imminent, and forecasted, grinding of roads will be at the discretion of Engineer.
- 10. A Six thousand dollar (\$6,000) per sub-group penalty will be assessed to the contractor for locations where asphalt placement does not commence within 48 hours after grinding. Unless authorized by ENGINEER (SEE ITEM 5).
- 11. Contractor shall provide Model and Type of Grinding Machine to be used on this project or specialized subcontractors name to be utilized to Engineer prior to commencement of grinding.
- 12. Driveways shall be transitioned to meet at present elevation, as outlined in TP35
- 13. # 53 gravel shoulders shall be applied ASAP to avoid unsafe condition. Payment is to be made per line item. Gravel shoulders shall be two feet wide, and shall not exceed two feet. Shoulders may consist of minimal millings.
- 14. All adjoining asphalt surfaces, including but not limited to, cross roads, passing blisters, driveways, shall be cut full depth or milled 1½ inch minimum to provide a smooth transition. Transition joints shall be constructed in accordance with Elkhart County's TRANSVERSEJOINT TRANSITION DETAIL. Any damage to edge will be removed prior to paving. Payment shall be included in prep cost line item.
- 15. All gravel roads encountered shall have a 100 foot asphalt approach installed.
- 16. Monuments are to be preserved and adjusted as outlined in TP27.
- 17. The cost of removing and replacing soft and yielding areas shall be included in the cost of other pay items in this section
- 18. Bid shall include all costs for grinding passing blisters, driveway transitions, intersection radius, pavement marking restoration, etc.

Pay Item	<u>Pay Unit</u>
Prep Cost	LSUM

TP34 – BRIDGE DECK RESURFACING

**GENERAL** 

The work includes resurfacing the following bridges:

### NONE

The work shall consist of providing all equipment, labor and materials to perform the following work:

- 1. Removing the existing asphalt wearing surface on the bridge deck without damaging the bridge beams. Milling of the asphalt will not be allowed.
- 2. Notifying the Engineer after the asphalt has been removed so that an inspection of the bridge deck can be performed.
- 3. Patching all holes or spalls in concrete bridge decks as directed by the Engineer.
- **4.** Placing a waterproofing membrane on the bridge deck. Timber Bridges MAY OR MAY NOT require membrane, and will be noted prior to bidding.

# 5. MEMBRANE SHALL NOT BE APPLIED TO BRIDGE DECKS 24 HOURS PRIOR TO PAVING

- **6.** Resurfacing the bridge deck to facia including approach tapers as directed with the HMA surface material specified.
- **7.** A leveling course of asphalt may be applied to bridge deck prior to final paving, but shall not exceed 1.5"
- **8.** Saw cutting a 1/8" thick transverse joint the width of the deck at each abutment and pier and filling the saw cut with self-leveling caulk. Saw cut must be dry and clean of debris before caulk is applied.

### **MATERIALS**

Waterproofing Membrane –

- a. Royston 10AN Easy Pave, Chase Corporation, distributed by Con-Quip Tristate Construction Supply, 1612 Distribution Drive, Burlington, KY 41005 or
- **b.** Polyguard 665, Polyguard Products, Ennis, TX 75120

Waterproofing Membrane Adhesive – match with selected membrane supplier.

- **a.** Royston Roybond 713A, Chase Corporation, distributed by Con-Quip Tristate Construction Supply, 1612 Distribution Drive, Burlington, KY 41005 or
- **b.** Polyguard Liquid Adhesive, Polyguard Products, Ennis, TX 75120

Concrete Patch Material – 1260 MG-Krete Flex Fine, IMCO Technologies, distributed by Kuert Concrete, 18370 U.S. 20, Goshen, IN 46528

Tack – in accordance with the Standard Specifications.

HMA Surface – use the HMA material being used on the road section where the bridge is located.

Self-Leveling Caulk – Dow Corning 890-SL.

### **INSTALLATION**

- **1.** Bridge Deck Surface Removal remove all existing asphalt off of the bridge deck. Care shall be taken to not damage the bridge beams. Milling will not be allowed.
- 2. Bridge Deck Inspection Notify the Engineer after the asphalt surface has been removed from the bridge deck so that an inspection can be performed to document its condition and determine the extent of surface preparation required prior to placing the waterproofing membrane and resurfacing.
- 3. Concrete Deck Patching Patch all spalls in the concrete bridge deck as directed by the owner's representative using the specified material. All work to be done in accordance with the patching material manufacturer's recommendations.
- **4.** Waterproofing Membrane Adhesive Place the specified waterproofing membrane adhesive on the bridge deck. All work to be done in accordance with the adhesive manufacturer's recommendations. The waterproofing membrane adhesive is not required on timber bridges.
- **5.** Waterproofing Membrane Place the specified waterproofing membrane on the bridge deck. The minimum overlap between roll segments shall be 6". All work to be done in accordance with the membrane manufacturer's recommendations. Tack the membrane uniformly at the application rate of 0.08 gal./sq. yd.
- **6.** Resurface the bridge deck using the HMA surface mix specified. The thickness shall be 2" (220#/Syd) at the edges and 3.5" (385#/Syd) at the center.
- 7. Saw cut a 1/8" thick transverse joint the width of the deck at each abutment and pier and fill with self-leveling caulk. The saw cut shall be the full-depth of the HMA. The joint shall be on the approach side of the abutment and the center of piers.

Pay Item
Bridge Deck Resurfacing

Pay Unit Lump Sum Each

**TP35 – DRIVEWAY TRANSITIONS** 

### MILLED ROADS

All Driveways shall be transitioned at their present / existing elevations and grades or less. All Concrete Driveways within the proposed reconstruction areas shall be cut and material removed. All gravel driveways must have a sufficient taper with #53 Limestone.

### **GROUND ROADS**

All Driveways shall be transitioned at no greater than 10% slope (unless noted otherwise). The actual distance required into a driveway will be determined from field verification of the actual finished profile. If the distance goes beyond the existing right-of-way then contractor shall obtain property owner permission prior to proceeding. Generally all transitions will be accomplished by the placement of asphalt. Under certain circumstance where a significant grade change has occurred similar material as the existing drive maybe used i.e. limestone or as stated below for concrete drives.

All concrete driveways shall be cut and material removed. The distance to cut each driveway may vary as described in paragraph below. Concrete shall be replaced if cut portion extends more than 24" from the newly created edge of pavement or as directed by Engineer. Replaced concrete shall be a minimum of 6" thick.

No new or existing concrete driveway shall extend into new pavement.

All gravel driveways shall have a two-foot HMA surface approach (measured from edge line of road) before completing transition to existing with, graded and compacted #53 crushed limestone.

#53 crushed limestone may be placed for temporary access if drive will not be finished during normal paving time frames.

Limestone driveway transitions shall be placed within 48 hrs. of asphalt pavement placement.

METHOD OF MEASUREMENT

Driveway transitions will be paid per ton as shoulder gravel compacted in place.

Pay ItemPay UnitDrive TransitionsPer Ton

TP36 - MAILBOX RESET

### **GENERAL**

The work specified in this section includes removing existing mailboxes as shown in the contract or as designated by the Engineer, and resetting them at the locations and at the elevations designated.

The term mailbox shall include the mailbox and support on which it is mounted.

### **MATERIALS**

Existing mailboxes shall be used unless damaged by Contractor.

### CONSTRUCTION REQUIREMENTS

- a) Access to existing mailboxes shall be maintained for mail delivery service during construction.
- b) As soon as the state of the work permits and the Engineer so directs, all mailboxes shall be reset by the Contractor in permanent locations in compliance with postal regulations. The Domestic Mail Manual states that mailboxes "must be placed so that they may be safely and conveniently served by carriers without leaving their conveyances..." The Postal Service recommends that mailboxes be placed with the bottom of the box at a vertical height of between three and one-half (3½) feet to four (4) feet from the road surface.
- c) The Contractor shall replace, without additional compensation, any mailboxes, supports, or any related parts that have been damaged as a result of the construction work.

### METHOD OF MEASUREMENT

The actual number of mailboxes reset shall be the number of each reset, complete in place as directed or designated.

The accepted number of mailboxes reset, measured as noted above, shall be paid for at the unit price for each which shall be payment in full for furnishing all material, labor, equipment, tools and incidentals necessary to complete the work.

Pay ItemPay UnitMailbox ResetEach

TP37 - SHOULDERS

### **GENERAL**

Shoulders are to be approximately 24" wide and not exceed 24", with a slope of 2% from road edge. Shoulder material shall be placed by machine creating a uniform and smooth transition from finished asphalt surface. Shoulders shall be 53 gravel compacted in place. Shoulders may consist of millings but shall be capped with #53 gravel. Any oversized asphalt rubble, shall be removed prior to shoulder placement. Windrows adjoining gravel shoulders, left by construction, shall be leveled or disposed of prior to shoulder placement. If windrow is of minimal size and quantity, material may be incorporated with shoulder material.

### METHOD OF MEASUREMENT

Shoulders will be paid for per ton compacted in place.

Pay Item Pay Unit

#53 Gravel Shoulders Per Ton

# TP38 - HOT POURED JOINT ADHESIVE INDOT STANDARD SPECIFICATION 401.15 JOINTS

### **GENERAL**

Hot poured joint adhesive in accordance with 906 shall be applied to longitudinal joints constructed between two adjacent HMA courses as outlined in Segment Specifications. This includes joints within the traveled way as well as between any of the following if specified: traveled way and an auxiliary lane; traveled way and a paved shoulder; and auxiliary lane and a paved shoulder.

The material shall be heated in a jacketed, double boiler melting kettle. The kettle shall have an attached pressure feed wand system with applicator shoe.

The joint adhesive shall be applied to the face of the previously constructed edge at the joint using a wand applicator. Prior to application of the joint adhesive, the joint face shall be dry and free of loose material and foreign objects. The adhesive shall be applied on the joint face 1/8 in. thick at the temperature recommended by the manufacturer. Excess joint adhesive shall not be allowed to pool on the top of the previously constructed pavement course or the pavement to be overlaid. The application of the adhesive shall be made within the same day, but at least 30 minutes prior to construction of the longitudinal joint.

All longitudinal joints that have the joint adhesive applied shall be sealed using SS-1h or AE-NT asphalt.

The liquid asphalt sealant shall be a minimum width of 24 in., centered on the joint line. The sealant shall be applied at an application rate of 0.03 ± 0.01 gal./sq. yd. onto a dry surface, free of any foreign or loose material, using a distributor. Areas receiving joint adhesive/sealant shall be lightly broomed to have surface debris removed. The sealant temperature at the time of application shall be at least 135°F and shall not exceed 180°F. The ambient air and pavement temperatures at the time of application shall be greater than 32°F. Temporary pavement markings be offset a sufficient distance from the longitudinal joint so as not to obstruct the installation of liquid asphalt sealant. The sealant shall be cured a minimum of five days prior to applying the permanent

Elkhart County 2025-2	Paving Progran	ก
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pavement traffic markings.

**MATERIALS** 

CRAFCO 34524 - Pavement Joint Adhesive or Approved Equal

### METHOD OF MEASUREMENT

Joint sealant/adhesive and asphalt sealant will be paid for combined per LFT

<u>Pay Item</u> <u>Pay Unit</u>

Joint Adhesive/Sealant, Asphalt Sealant Per LFT

### TP39 - MANHOLES, INLETS, AND WATER VALVE

### **GENERAL**

All work shall comply with the City of Elkhart Prevailing Standard Specifications, Divisions B:5.10 and B:5.11. Manhole, inlet, and valve box castings must be adjusted prior to the placement of pavement. Cutting of the pavement after placement to allow for adjustment of castings shall not be permitted.

METHOD OF MEASUREMENT

Manholes will be paid for combined per EACH

Pay Item Pay Unit

Casting, Manhole, Adjust to Grade EACH

Casting, Inlet, Adjust to Grade	EACH
Casting, Water Valve, Adjust to Grade	EACH

5. Minutes from the Pre Bid meeting are attached.



## 2025-2 Paving Program

### **Pre-Bid Meeting**

Elkhart County Highway Department August 21<sup>st</sup>, 2025, 9:00 AM

### Minutes

### 1. Introduction

- a. Elkhart County Staff
- b. Contact Person:

Primary Contact: Mario Soto Luna, Elkhart County <a href="msotoluna@elkcohwy.org">msotoluna@elkcohwy.org</a> (email). (574)312-8001 (cell)

Elkhart County will need to be contacted before you show up on site and will need to be notified in advance of all paving. (Schedule of 2025-1 CCMG Paving Program must be provided by Contractor no later than The Pre-Construction Meeting).

- 2. Overview of Project 2025-2 Paving Program
  - a. Contract time: September 15<sup>th</sup> to June 5<sup>th</sup>, 2026. Earlier start may be permitted if award and contract documents are in place.
  - b. Bid opening at Commissioners Meeting September 2<sup>nd</sup>, 2025 at 9:00 a.m.
  - c. Project Description Just Over 12 miles of paving, combination of full depth reclamation and mill and overlay.
- 3. Maintenance of Traffic follow MUTCD.
  - a. Contractor is responsible for all Maintenance of Traffic (See TP 9 in Specifications), i.e., flaggers, barricades, etc.
  - b. Barricades are to be checked daily at the beginning and end of each day, removed or reset if needed and promptly replaced if moved during the daily construction process
  - c. Unnecessary traffic must be kept to a minimum, work zone safety is paramount
  - d. Contractor is responsible for haul trucks and other subcontractors

### 4. Time of Completion

- a. Completion date of June 5<sup>th</sup>, 2026.
- b. No extra days for weather, supply delays, utility conflicts, shop drawing review, etc. Liquidated damages: \$1000 per day

### 5. Measurement of Quantities

a. Measurements, as called out in the Bid Documents



### 6. Paving

- a. New Asphalt material specification.
  - i. The County gave an overview of TP 25 HMA Pavements, specifically the requirement for a Quality Control Plan, material samples, and core samples.
- 7. Demonstration of Prior Experience
  - All bidders must submit a list of similar projects completed within last two years describing project scope, work completed by bidder's forces, contract amount, and owner contacts
- 8. Use of Sub Contractors
  - a. Any sub-contractors to be used on the project must be listed in the bid submittal.
- 9. Addendums will be promptly posted on web site. It is the Contractor's responsibility to check website for updates.
  - a. Must acknowledge all addendums on bid sheet
  - b. Addendums have been known to be posted less than 24-hrs before bid due. Check the website often.
  - c. Addendum 1 issued on 8/19 there will likely be one more following this meeting
    - i. Added curb ramp at Six Span Kayak Launch and CR 142 spot paving

### 10. Pay estimates

- a. 10 % retainage
- b. Monthly estimates allowed. Submit At least 15 days before each regularly scheduled County Commissioners Meeting.
- 11. Bids due on Monday, September 2<sup>nd</sup>, 2025 for the 2025-2 Paving Program, at County Commissioner's office (not 610 Steury). Will be opened and read at the meeting at 9:00 AM.
- 12. Elkhart County reserves the right to award individual segments within the bid package at its discretion.
- 13. Millings will be delivered to the Elkhart County Landfill on County Road 7. Roads near New Paris shall be delivered to the Highway garage on CR 50 in New Paris.
- 14. Bidder Questions / Comments
- Q: The contractor requested specific locations for deep patching on EC 13 and EC 14.
- A: The County will issue locations on an aerial via addendum.

# 2025-2 Paving Program Program

# PRE-BID MEETING SIGN-IN SHEET

August 21, 2025

Name	Company	EMAIL	Phone Number
Charlie McKenzie	Elk Co Highway	cmckenzie@elkcohwy.org	(574) 210-5164
BRIGH HENDSBEE	Elk Co Highway	shend-bee Celkcohyy.org	574-349-4248
Argelo Wasselli	Rieth-Files	Amaracelia Riet - Rily. com	524-572-0073
The Speken	Elk G Hay	tackson a elkcohonun orac	8550-855-765
Kyle WALNER	EUK Co 14my	KWAGNER @ ELKCOHWY, ORG	1726-678-655
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