Project Number: 230321 PID #: 116322 Contract ID: FRA116322 EDGE Goal: 9.0% Franklin

SR 161-15.80 Cities of Columbus & New Albany

MAJOR WIDENING

Percentage of project Bidder must possess Work Types, and Perform Work: 50 Supplemental Specification 800-2019 - 1/20/2023

THE 2019 CONSTRUCTION AND MATERIAL SPECIFICATION BOOK IS PART OF THE BIDDING DOCUMENTS ON THIS PROJECT

# PROPOSAL

STATE OF OHIO

**DEPARTMENT OF TRANSPORTATION** 

Jack Marchbanks, Director

May 25, 2023

Submitted by \_

Bidder Id

#### TABLE OF CONTENTS

PN 019 - 01/20/2016 - PREPARATION OF PROPOSAL	3
PN 033 - 04/18/2008 - AS PER PLAN DESIGNATION - PROPOSAL NOTE	4
PN 038 - 10/15/2004 - UNRESOLVED FINDING FOR RECOVERY	4
PN 039 - 10/15/2004 - ASSIGNMENT OF ANTITRUST CLAIMS IN STATE CONTRACT LANGUAGE	5
PN 022 – 04/15/2013 - ENCOURAGING DIVERSITY, GROWTH AND EQUITY (EDGE) REQUIREMENTS	5
PN 016 - 10/15/2004 - STATE EEO CERTIFICATION CLAUSE	7
PN 090 - 01/15/2021 - WORK TYPE CODES AND DESCRIPTIONS	8
PN 060 – 04/20/2018 - PREVAILING WAGES ON STATE PROJECTS WITH NO FEDERAL AID	9
PN 045 - 10/15/2004 - NON - COLLUSION AFFIDAVIT	10
PN 031 – 08/16/2021 - PROMPT PAYMENT - ODOT-LET CONSTRUCTION PROJECTS	11
PN 040 – 3/30/2022 - PROHIBITION OF THE EXPENDITURE OF PUBLIC FUNDS FOR OFFSHORE PURPOSES	16
PN 034 – 10/21/2022 – SUPPLEMENTAL SPECIFICATION 832 COMPENSATION	24
PN 107 - 10/19/2018 - CRITICAL PATH METHOD PROGRESS SCHEDULE FOR MULTI-SEASON PROJECTS	24
PN 110 – 10/15/2011 - ESCROW BID DOCUMENTS	33
PN 111 – 10/21/2022 FACILITATED PARTNERING	39
PN 123 - 01/18/2019 - LUMP SUM MINUS INCENTIVE	41
PN 127 - 01/18/2019 - LANE VALUE CONTRACT:	42
PN 129 – 04/17/2020 – FLEXIBLE START WINDOW CONTRACT	42
PN 137 – 01/18/2019 – ALTERNATE BIDS	43
PN 140 – 10/15/2021 – SHORT-TERM HOURLY CLOSURE WINDOW CONTRACT	43
PN 420 – 1/20/2023 - SURFACE SMOOTHNESS REQUIREMENTS FOR PAVEMENTS	44
PN 520 07/15/2022 - FUEL PRICE ADJUSTMENT	50
PN 525 – 07/15/2022 - STEEL PRICE ADJUSTMENT	54

2	
Project No. 230321	
PN 534- 01/21/2022 - ASPHALT BINDER PRICE ADJUSTMENT	. 58
PN 555 - 01/15/2021 – SURFACE SMOOTHNESS FOR BRIDGES AND APPROACHES	. 60

#### PN 019 - 01/20/2016 - PREPARATION OF PROPOSAL

# ELECTRONIC BIDDING REQUIREMENTS

The Department uses the Bid Express website (<u>http://www.bidx.com</u>) as an official repository for electronic bid submittal. Bidders must prepare their bids electronically using Project Bids and submitted via Bid Express.

The Department will not accept handwritten bids or bids generated electronically from software other than that used and supplied by the Department. All handwritten bids and bids generated electronically from software other than that used and supplied by the Department shall be considered non-responsive and ineligible for award. The Department will only accept and consider bids that have been produced using Project Bids and submitted via Bid Express.

The Department's Office of Contracts will provide planholders with a proposal, plan set and any required addenda. Most addenda will not be provided by hard copy, but will be available on the Office of Contracts website at: <u>http://contracts.dot.state.oh.us</u>. Planholders will be notified of all addenda via email. All proposals, plans, Project Bids (EBSX) files and addenda are also available on the Office of Contracts web site.

Electronic bids must comply with all special provisions, the Construction and Material Specifications, Supplemental Specifications and the rules and regulations of the Ohio Department of Transportation regarding bid preparation and bid submittal.

Blank unit prices will be considered an invalid bid EXCEPT in the case of optional designs (projects where the bidder is required to bid on only one design). Unit prices of zero are not permitted at any time.

Addenda and/or amendments must be acknowledged in the Bid Acknowledgement section of the Project Bids (EBSX) file in order for your bid to be considered for award of this project. The section contains the certification of receipt of all hard copy proposals, addenda, amendments, plans, standard specifications and supplemental specifications. Supplemental Questionnaire information regarding the bidder's outstanding ODOT and non-ODOT work have also been included in this section. Bid Express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Project Bids (EBSX) submissions will result in the rejection of your bid.

Each bidder is required to file with his bid a <u>certified check</u> or <u>cashier's check</u> for an amount equal to five percent (5%) of its bid, but in no event more than <u>fifty thousand dollars</u>, or a <u>bid bond</u> for <u>ten percent</u> (10%) of its bid payable to the "Director of Transportation." Electronic bid bonds will be verified upon submission of bids through Bid Express. Bidders must obtain and verify a Bond ID number from the surety. This Bond ID must be entered in the "Bond ID Number" field in the Bid Bond Section of the Project Bids file.

If the contractor chooses to submit a certified check to guaranty its bid, the Department's Office of Contracts will accept a check up to 72 hours in advance of the letting. The Office of Contracts must receive the certified check by 10:00 a.m. on the day the project sells. All checks must be sent to ODOT, Office of Contracts, Attention: Letting Manager, First Floor, 1980 W. Broad St., Columbus, Ohio 43223.

The successful bidder must furnish a performance bond and a payment bond in an amount equal to one hundred percent (100%) of the awarded contract amount. (Ohio Revised Code Section 5525.16)

Any bid received after 10:00 a.m. on the scheduled day of opening will receive no further consideration for award. The Department will not be responsible for a late bid due to failure of the bidder to allow sufficient time for delivery of the bid.

The Department will ensure that this electronic bid depository is available for a two-hour period prior to the deadline for submission of bids. In the case of disruption of national communications or loss of services by <u>http://www.bidx.com</u> during this two-hour period, the Department will delay the deadline for bid submissions to ensure the ability of potential bidders to submit bids. If this occurs, instructions will be communicated to potential bidders.

# PN 033 - 04/18/2008 - AS PER PLAN DESIGNATION - PROPOSAL NOTE

For the last several years the "As Per Plan" designation has been added to some item descriptions in the proposal to assist the Contractors to easily identify standard items that have been altered by plan notes.

The "As Per Plan" designation has proven to be a very useful tool for the Contractors. However, its use was <u>never</u> intended to relieve the Contractors of their responsibility to read, bid and construct all items in accordance with all governing plan notes. Therefore, the absence of an "As Per Plan" designation on some item descriptions in the proposal for which there are clear and controlling plan notes does not relieve the Contractors of the responsibility to read, bid and construct those particular items in accordance with the governing plan notes.

Be advised that the item descriptions in the bidding proposal must be read or interpreted with the governing plan notes and the Ohio Department of Transportation Construction and Materials Specifications. A claim based upon an "order of precedence" basis will be denied. In the event that a conflict, either real or perceived, exists between the item description and the governing plan note, the Contractors are to request clarification through the pre-bid process.

# PN 038 - 10/15/2004 - UNRESOLVED FINDING FOR RECOVERY

The Contractor affirmatively represents to the Department that it is not subject to a finding for recovery under Ohio Revised Code §9.24, or that it has taken the appropriate remedial steps required under §9.24 or otherwise qualifies under that section. The Contractor agrees that if this representation is deemed to be false, the contract shall be void ab initio as between the parties to this contract, and any funds paid by the state hereunder shall be immediately repaid to the Department, or an action for recovery may be immediately commenced by the Department for recovery of said funds.

# PN 039 - 10/15/2004 - ASSIGNMENT OF ANTITRUST CLAIMS IN STATE CONTRACT LANGUAGE

It is the policy of the Ohio Department of Transportation that ODOT and the Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are usually borne by ODOT. As consideration for the Award of the Contract and intent to be legally bound, the Contractor acting herein by and through the person signing this contract on behalf of the Contractor as a duly authorized agent, hereby assigns, sells, conveys, and transfers to ODOT any and all right, title and interest to any and all claims and causes of action the Contractor now has or hereafter requires under state or federal antitrust laws provided that the claims or causes of action related to the goods or services that are the subject to the contract.

In addition, the Contractor warrants and represents that it will require any and all of its subcontractors and first tier suppliers to assign any and all federal and state antitrust claims and causes of action to ODOT. The provisions of this article shall become effective at the time ODOT executes this contract without further acknowledgment by any of the parties.

All contracting entities shall assign their rights and responsibilities to ODOT for all antitrust claims and causes of action regarding subcontractors.

# PN 022 - 04/15/2013 - ENCOURAGING DIVERSITY, GROWTH AND EQUITY (EDGE) REQUIREMENTS

Pursuant to Ohio Revised Code 123.152, the percentage indicated on the front cover of this bid is the percent of the awarded Contractor's bid. The percentage goal may be met if the Contractor is EDGE certified or by subcontracting to certified EDGE firms. EDGE certified firms are those who have been certified by the Ohio Department of Administrative Services. If not EDGE certified, the Contractor must use its best efforts to solicit quotes from and to utilize EDGE subcontractors/suppliers on this project.

# WAIVER PROCESS FOR EDGE GOAL

If not EDGE certified, the Contractor must document the progress and efforts made in securing the services of EDGE subcontractors/suppliers. In the event the Contractor is unable to meet the EDGE Goal placed on this project, a request for a waiver of all or part of the goal may be made to the DBE Services Section. The written request must include all signed and dated purchase orders and subcontract agreements for any goal attainment achieved and indicate a good faith effort was made to meet the goal and be sent to the DBE Services Section, Division of Construction Management, 1980 West Broad Street, Mail Stop 4110, Columbus, Ohio, 43223. There will be no extension of time for the project granted if the Contractor wishes to avail itself of this process. If an item of work subcontracted to an EDGE firm is non-performed by the Department or the subject of an approved VECP, the Contractor may request a waiver for the portion of work excluded.

The Department shall consider the following information and documentation when a request for an EDGE goal waiver is received:

1. Dollar value and % of EDGE goal. Dollar value and % of waiver request.

2. Signed copy of each subcontract or purchase order agreement between the prime and EDGE subcontractor/supplier utilized in meeting the contract goal.

3. Copy of dated written communication, fax confirmation, personal contact, follow up and negotiation with the EDGE firm.

4. Copy of dated written communication and/or fax confirmation that bidder solicited and provided EDGE with adequate information about the plans, specifications and requirements of the contract in a timely manner to assist them in responding to a solicitation.

5. Copy of dated written communication and/ or fax confirmation of each noncompetitive EDGE quote that includes the dollar value of each reference item and work type.

6. Copy of dated written communication and/ or dated fax confirmation of EDGE firms that were not interested in providing a quote for the project.

7. All solicitations made by the Contractor for subcontracting opportunities and EDGE quotes through SBN.

8. Documentation of all negotiating efforts and reason for rejecting quotes from EDGE firms.

9. Documentation of good faith efforts (GFE) to meet the EDGE subcontract goal, by looking beyond the items typically subcontract or consideration of subcontracting items normally performed by the prime as a way to meet the EDGE goal.

The Administrator will review the submitted documentation and issue a written decision within ten (10) business days. The Contractor may request administrative reconsideration within 14 days of being informed that it did not perform a GFE. The Contractor must make this request in writing to the following official:

Ohio Department of Transportation Attention: Deputy Director, Division of Construction Management 1980 West Broad Street, Mail Stop 4110 Columbus, Ohio 43223

The reconsideration official will not have played any role in the original determination that the Contractor did not document sufficient good faith effort.

As part of this reconsideration, the Contractor will have the opportunity to provide written documentation or an argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. ODOT will send the Contractor a written decision on reconsideration explaining the basis for finding that the Contractor did or did not meet the goal or make adequate good faith efforts. The result of the reconsideration process may be appealed to the Court of Claims.

# AFFIDAVIT OF SUBCONTRACTOR PAYMENT

The Ohio Revised Code 123.152, requires the Ohio Department of Transportation (ODOT) to monitor and verify that work subcontracted to Encouraging Diversity, Growth and Equity (EDGE) firms is actually performed by the EDGE firms. The affidavit seeks to verify actual payments made to EDGE firms on the project. Each EDGE firm must verify the actual payment amount.

The blank spaces in the affidavit must be filled in correctly, where indicated. The affidavit must be signed by the Contractor and subcontractor, or by the subcontractor and EDGE sub-contractor, if applicable. By signing the affidavit, the noted firm agrees that the payment amount recorded is true and accurate as of the payment time period.

Completed and signed affidavit shall be mailed to the Ohio Department of Transportation, DBE Services Section, 1980 West Broad Street, Mail Stop 4110, Columbus, Ohio 43223.

# SANCTIONS

The Ohio Department of Transportation will issue sanctions if the Contractor chooses not to request a waiver, the Contractor fails to comply with the contract requirements and/or fails to demonstrate the necessary good faith effort.

The Ohio Department of Transportation may impose any of the following sanctions:

- (1) letter of reprimand;
- (2) liquidated damages computed up to the amount of goal dollars not met;
- (3) cross-withhold from future projects;
- (4) contract termination and/or
- (5) other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions include, but are not limited to:

- (1) the magnitude and the type of offense;
- (2) the degree of the Contractor's culpability;
- (3) any steps taken to rectify the situation;
- (4) the Contractor's record of performance on other projects including, but not limited to:
- a. annual EDGE participation over EDGE goals;
- b. annual EDGE participation on projects without goals;
- c. number of complaints the Ohio Department of Transportation has received from EDGE firms regarding the Contractor; and
- d. the number of times the Contractor has been previously sanctioned by the Department of Transportation; and
- (5) whether the Contractor falsified, misrepresented, or withheld information.

# PN 016 - 10/15/2004 -STATE EEO CERTIFICATION CLAUSE

The hiring of employees for the performance of work under this contract shall be done in accordance with Sections 153.59 and .591, of the Ohio Revised Code, the Governor's Executive Order of January 27, 1972, including Appendices "A" and "B" and the Governor's amended Executive Order 84-9 of November 30, 1984. The successful contractor shall not discriminate against or intimidate any person hired for the performance of the work by reason of race, color, religion, national origin, ancestry, sex or handicap. For any violation the contractor shall suffer such penalties as provided for in Section 153.60, of the Ohio Revised Code, and the Governor's Executive Order of January 27, 1972. The bidder also agrees that upon the award of this contract he shall incorporate this certification in all subcontracts on this project regardless of tier.

# PN 090 - 01/15/2021 - WORK TYPE CODES AND DESCRIPTIONS

The Department will indicate the work type required for each pay item. If the line item does not have a corresponding work type, NR will be shown in the work type column. This proposal note will govern the assignment of work types to pay items.

However, the Contractor may perform incidental work items for which it does not hold the required work type provided the cost of the work does not exceed 5% of the total bid. The Contractor may also perform Work Type 26 (Structural steel painting) without holding the required work type provided the total area to be painted does not exceed 700 SF per structure. The Contractor may not perform any quantity of Work Type 55 or 56 unless they hold the required work type. The Contractor may perform Work Type 57 (Sealing of Concrete Surfaces with Epoxy or Non-Epoxy Sealers) without holding the required work type provided the total area to be sealed does not exceed 75 SY per project.

Listed below are the work types for this proposal. In accordance with Ohio law, a bidder must possess work types, and perform work equal to the percentage included on the front cover of this proposal. This is a percentage of the total amount of the submitted bid price. The Director may, by insertion of a contract provision, reduce the fifty percent amount.

Work Type	Work Type Description	Work Type	Work Type Description
Code		Code	
1	Clearing & Grubbing	29	Structure Repairs
2	Building Removal	30	Hydrodemolition
3	Gas, Oil, Water Well Abandonments	31	Structural Steel Repairs
4	Roadway Excavation & Embankment Construction	32	Heat Straightening
5	Major Roadway Excavations	33	Tieback Installation
6	Incidental Grading	34	Earth Retaining Structures
7	Soil Stabilization	35	Drainage (Culverts, Misc.)
8	Temporary Soil Erosion & Sediment Control	36	Guardrail / Attenuators
9	Aggregate Bases	37	Fence
10	Flexible Paving	38	Misc. Concrete
11	Apply Bituminous Treatments	39	Maintenance of Traffic
12	Rigid Paving	40	Waterproofing
13	Pavement Planning, Milling, Scarification	41	Raised Pavement Markers
14	Concrete Texturing	42	Signing
15	Sawing	43	Highway Lighting
16	Flexible Replacement	44	Traffic Signals - Standard
17	Rigid Pavement Replacement	45	Pavement Markings
18	Pavement Rubblizing, Breaking, Pulverizing	46	Landscaping
19	Structure Removal	47	Mowing
20	Level 1 Bridge	48	Trucking
21	Level 2 Bridge	49	Herbicidal Spraying
22	Level 3 Bridge	50	Railroad Track Construction
23	Reinforcing Steel	51	Micro Tunneling
24	Structural Steel Erection	52	Tunneling
25	Stud Welding	53	Piling
26	Structural Steel Painting	54	Post-Tensioning Bridge Members
27	Expansion & Contraction Joints, Joint	55	Fiber Optic Cable Installation, Splicing,
	sealers,		Termination
	Bearing Devices		and Testing – Traffic Signal System
28	Caissons / Drilled Shafts	56	Fiber Optic Cable Installation, Splicing,
			Termination
			and Testing – Intelligent Transportation System
		57	Sealing of Concrete Surfaces with Epoxy or Non-

8

	Epoxy Sealers

# PN 060 - 04/20/2018 - PREVAILING WAGES ON STATE PROJECTS WITH NO FEDERAL AID

The following is in addition to Section 108.10.

This contract is subject to Ohio Prevailing Wage Laws, Chapter 4115 of the Ohio Revised Code and the Prime Contractor and all subcontractors shall comply with all provisions contained therein or as otherwise provided by this note. The Prime Contractor guarantees that the prevailing wage scale to be paid to all laborers and mechanics employed on this contract shall be in accordance with the schedule of the prevailing hourly wage and fringe benefits as determined by the Ohio Department of Commerce for the county in which the work is being performed. The failure to pay prevailing wages to all laborers and mechanics employed on this project, shall be considered a breach of contract. Such a failure may result in the revocation of the contractor's and/or subcontractor's certificate of qualification and debarment. A schedule of the most current prevailing wage rates may be accessed by registering with the Ohio Department of Commerce, Labor and Worker Safety Division, Wage and Hour Bureau at the following web address:

# https://wagehour.com.ohio.gov/w3/webwh.nsf/wrlogin

The Contractor and all subcontractors shall compensate the employees on this contract at a pay rate not less than the hourly wage and fringe rate listed on the website noted above, for the applicable job classification or as may be modified by the Ohio Department of Commerce, Division of Labor and Worker Safety Wage and Hour Bureau, when new prevailing rates are established.

Overtime shall be paid at one and one-half times the basic hourly rate for any hours worked beyond forty hours during a pay week. The Prime Contractor and all subcontractors shall pay all compensation by company check or direct deposit to the worker and fringe benefit program.

The wage and fringe rates determined for this project or as may be later modified, shall be posted by the Prime Contractor in a prominent and accessible place on the project, field office, or equipment yard where they can be easily read by the workers or otherwise made available to the workers. On the first pay date of contract work the Prime Contractor and all subcontractors shall furnish each employee covered by prevailing wage a completed form whpw1512 in accordance with section 4115.05 of the Ohio Revised Code, showing the classification, hourly pay rate, fringes, and identifying the District Prevailing Wage Coordinator (DPWC) District Contractor Compliance Officer (CCO) if such employees are not covered by a collective bargaining agreement or understanding between employers and bona fide organizations of labor. These forms shall be signed by the Prime Contractor or subcontractor and the employee and kept in the Prime Contractor's payroll files.

The Prime Contractor shall submit to the designated Department representative, certified payrolls for the Prime Contractor and all subcontractors on form whpw1509 or equivalent, in accordance with sections 4115.07 and 4115.071 (C) of the Ohio Revised Code, three weeks after the start of work and every subsequent week until the completion of the contract. Additionally, a copy of the "Apprentice Certification" obtained from the Ohio State Apprenticeship Council, must accompany all certified payrolls submitted, for all apprentices working on this project. Upon completion of the contract and before the final payment, the Contractor shall submit to the DPWC CCO a final wage affidavit in accordance with section 4115.07 of the Ohio Revised Code stating that wages have been paid in conformance with the minimum rates set forth in the contract. Please be aware that it is ultimately the responsibility of the Prime Contractor to ensure that all laws relating to prevailing wages in Chapter 4115 of the Ohio Revised Code, are strictly adhered to by all subcontractors.

The Prime Contractor and all subcontractors shall make all of its payroll records available for inspection, copying or transcription by any authorized representative of the contracting agency. Additionally, the Prime Contractor and all subcontractors shall permit such representatives to interview any employees during working hours while the employee is on the job.

The Prime Contractor and all subcontractors shall submit via the Department's Civil Rights & Labor System (CRL), certified payrolls each week beginning three weeks after the start of work. The Department will not accept payrolls not uploaded via CRL (i.e. - no handwritten payrolls). These payrolls shall include, but not be limited to, the following:

- 1. Employee name, address, social security number, classification, and hours worked.
- 2. The basic hourly and overtime rate paid, total pay, and the manner in which fringe benefit payments have been irrevocably made.
- 3. The contract ID and pay week dates.
- 4. Signature of an authorized company representative will be done online through CRL.

CRL Requirements with interactive training guides can be found at transportation.ohio.gov/CRL.

Additionally, a copy of the "Apprentice Certification" obtained from the Ohio State Apprenticeship Council, must accompany all certified payrolls submitted for all apprentices working on this project. Instructions for attaching the apprenticeship certificate can also be found at <u>transportation.ohio.gov/CRL</u> under "Attaching the Apprenticeship Certificate."

If the Prime Contractor or any subcontractor fails to comply with any of the provisions contained in this proposal note, the Department may terminate the contract, debar the Prime Contractor or Subcontractor and/or withhold or suspend pay estimates after written notice and a reasonable opportunity to comply has been provided.

# PN 045 - 10/15/2004 - NON - COLLUSION AFFIDAVIT

In accordance with Title 23 United States Code, Section 112 and Ohio Revised Code, Chapter 1331 et. seq: and Sections 2921.11 and 2921.13, the bidder hereby states, under penalty of perjury and under other such penalties as the law provides, that he or his agents or employees have not entered either directly or indirectly into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal. Execution of this proposal on the signature portion thereof shall constitute also signature of this Non-Collusion Affidavit as permitted by title 28 United States Code, Section 1746.

# **REPORTING BID RIGGING**

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

# PN 031 - 08/16/2021 - PROMPT PAYMENT - ODOT-LET CONSTRUCTION PROJECTS

Prompt payment requirements apply to ODOT (the Department) and, by extension, its Prime Contractors and Subcontractors (including DBEs and non-DBEs and including traditional subcontractors as well as material suppliers and trucking firms, collectively referred to herein as Subcontractors). The State of Ohio's laws related to prompt payment are published in Ohio Revised Code (ORC) 4113.61. ORC 4113.61 applies to all contracts. The Prime Contractor must comply with this Proposal Note, ORC 4113.61, C&MS 107.21 and, for contracts with U.S. Department of Transportation financial assistance (i.e., federally-funded contracts), Title 49, Part 26, Section 29 of the Code of Federal Regulations (CFR) (i.e., 49 CFR 26.29).

The Department monitors the payments made by Prime Contractors and Subcontractors for compliance with this Proposal Note, ORC 4113.61, C&MS 107.21 and, for federally funded contracts, 49 CFR 26.29. To facilitate this monitoring, the Department requires Prime Contractors to report their remitted payments to specified Subcontractors, and Subcontractors to report their remitted payments to specified lower-tier Subcontractors, as follows.

- Prime Contractors must report remitted payments to subcontractors (DBE/EDGE and non-DBE/EDGE), suppliers (DBE/EDGE only, unless the supplier sublets to a lower-tier DBE/EDGE firm), and trucking firms (DBE/EDGE only, unless the trucking firm sublets to a lower-tier DBE/EDGE firm) (collectively, Subcontractors).
- Subcontractors must report remitted payments to lower-tier subcontractors (DBE/EDGE and non-DBE/EDGE), suppliers (DBE/EDGE only), and trucking firms (DBE/EDGE only) (collectively, "Lower-tier Subcontractors").

The Prime Contractor must report remitted payments to Subcontractors within 10 calendar days of each payment it receives from the Department. Each Subcontractor must report remitted payments to Lowertier Subcontractors within 10 calendar days of receipt of each payment received from the Prime Contractor. Payers must report return of retainage (and/or other amounts withheld) within 10 calendar days of release to the payee.

Unless the project type is excluded, all subcontractor payment reporting must take place within the Signet® application. Signet is a third-party software supported by the software vendor for usage by the Prime Contractor and subcontractors. Signet is only a reporting tool; it does not process financial transactions. ODOT does not provide direct technical support for Signet.

Projects of the following types (as indicated on the front page of the Proposal) are excluded from using Signet. In order to fulfill prompt payment reporting requirements, the Prime and Subcontractors MUST enter and verify remitted payments in AASHTOWare Project<sup>™</sup> - Civil Rights & Labor (CRL).

- Mowing
- Herbicidal Spraying
- Raised Pavement Markers
- Pavement Marking
- Tree Trimming

All other project types are required to use Signet. Anyone needing access to Signet must submit a request to <u>signet-support@infotechinc.com</u>. Licensing and usage fees for the Signet service are incidental to the Project. The Signet vendor will charge a set fixed fee of \$1,000 per each Contract requiring Signet regardless of Contract value, Contract duration, or number of subcontractors. Prime Contractors are responsible for obtaining a Project-specific Signet license regardless of the number of subcontractor payments made. The Prime Contractor shall be responsible for paying this fee to the Signet vendor. Helpful information on reporting Subcontractor payments in Signet may be found (as of the date of this Proposal Note) at <u>https://infotechinc.zendesk.com</u> (click Signet).

If any contractor or Subcontractor has not previously worked on an ODOT project and/or does not have a CRL account, that contractor or Subcontractor must request a CRL account by emailing <u>DOT.Helpdesk@dot.ohio.gov</u>. CRL feeds into Signet and vice versa, so contractors and Subcontractors MUST have accounts for both systems.

# Prime Contractors and Subcontractors shall not record or verify payments in CRL for Projects requiring Signet.

The payer (whether Prime Contractor or Subcontractor) must report the following information:

- 1.) The name of the payee;
- 2.) The dollar amount of the payment to the payee;
- 3.) The date the payee was paid;
- 4.) The retainage or other amount withheld (if any), and the reason for the withholding (if other than for retainage).

Payment reporting(s) must be both gross (i.e., the amount owed without factoring in retainage and/or other amounts being withheld) and net. The payer must report its return of retainage (and/or other amounts withheld) in separate, standalone payment entries (i.e., without being commingled with a payment for work performed or materials supplied).

Payees must verify, in Signet, each payment reported by a payer within 10 calendar days of the payment being reported by the payer. This verification includes whether the payment was received, and if so, whether it was as expected or not.

The Prime Contractor must include the above prompt payment and reporting requirements in all Subcontractor (DBE/EDGE and non-DBE/EDGE), supplier (DBE/EDGE only, unless the supplier sublets to a lower-tier DBE/EDGE firm), and trucking firm (DBE/EDGE only, unless the trucking firm sublets to a lower-tier DBE/EDGE firm) agreements that it enters into and further require that all such subcontractors include the same prompt payment and reporting obligation in their lower-tier Subcontractor (DBE/EDGE and non-DBE/EDGE only), and trucking firm (DBE/EDGE only) agreements. The project specific Signet license is applicable to all Project subcontracts and subcontractors.

Note: Payments made to non-DBE/EDGE suppliers and trucking firms need not be reported. However, as required in C&MS 107.21 and in accordance with ORC 4113.61, contractors are required to make payment to each subcontractor and supplier within 10 calendar days after receipt of payment from the Department for work performed or materials delivered or incorporated into the project—this requirement includes non-DBE/EDGE suppliers and trucking firms. If a contractor does not comply with this requirement, penalties in accordance with ORC 4113.61 may apply.

# SUGGESTED SUB AGREEMENT LANGUAGE – FEDERAL-AID CONTRACTS

Suggested language for the federal-aid Prime Contractor to include in its subcontractor agreements:

As a Subcontractor, supplier\* and/or trucking firm\*, you (the payee) must verify receipt of payments from the Prime Contractor. This verification must be performed within the Signet application. You must verify each payment within 10 calendar days of the payment being reported by the Prime Contractor. This verification includes whether the payment was received, and if so, whether it was as expected or not. Furthermore, you must report payments to your lower-tier Subcontractors (DBE and non-DBE), suppliers (DBE only), and trucking firms (DBE only). The payment data reported must include any retainage (and/or other amounts) withheld and any previously withheld amounts released. You must report payments within 10 calendar days of receipt of each payment received from the Prime Contractor. You must also report return of retainage (and/or other amounts withheld) within 10 calendar days of release to the payee. Your payees must then verify each payment reported by you (the payer) within 10 calendar days of the payment being reported. Your lower-tier Subcontractor (DBE and non-DBE), supplier (DBE only), and trucking firm (DBE only) sub agreements must include this prompt payment and reporting obligation.

If you have not previously worked on an ODOT project and/or do not have a CRL account, you must request a CRL account by emailing <u>DOT.Helpdesk@dot.ohio.gov</u>. CRL feeds into Signet and vice versa, so you MUST have accounts for both systems.

# Do not use CRL to record or verify payments for this Project.

Suggested language for the subcontractor to include in its lower-tier sub agreements:

As a lower-tier subcontractor (DBE or non-DBE), supplier (except non-DBE) and/or trucking firm (except non-DBE), you (the payee) must verify receipt of payments from the payer (i.e., the maker of this sub agreement with you). This verification must be performed within the Signet system. Payees must verify each payment reported by the payer within 10 days of the payment being reported. This verification includes whether the payment was received, and if so, whether it was as expected or not.

Anyone needing access to Signet may submit a request to signet-support@infotechinc.com.

If you have not previously worked on an ODOT project, and/or do not have a CRL account, you must request a CRL account by emailing <u>DOT.Helpdesk@dot.ohio.gov</u>. CRL feeds into Signet and vice versa, so you MUST have accounts for both systems.

Do not use CRL to verify payments for this Project.

# SUGGESTED SUB AGREEMENT LANGUAGE – NON-FEDERAL-AID CONTRACTS

Suggested language for the non-federal-aid Prime Contractor to include in its subcontractor agreements:

As a Subcontractor, supplier\* and/or trucking firm\*, you (the payee) must verify receipt of payments from the Prime Contractor. This verification must be performed within the Signet application. You must verify each payment within 10 calendar days of the payment being reported by the Prime Contractor. This verification includes whether the payment was received, and if so, whether it was as expected or not. Furthermore, you must report payments to your lower-tier Subcontractors (EDGE and non-EDGE), suppliers (EDGE only), and trucking firms (EDGE only). The payment data reported must include any retainage (and/or other amounts withheld) and any previously withheld amounts released. You must report payments within 10 calendar days of receipt of each payment received from the Prime Contractor. You must also report return of retainage (and/or other amounts withheld) within 10 calendar days of release to the payee. Your payees must then verify each payment reported by you (the payer) within 10 days of the payment being reported. Your lower-tier Subcontractor (EDGE and non-EDGE), supplier (EDGE only), and trucking firm (EDGE only) sub agreements must include this prompt payment and reporting obligation.

If you have not previously worked on an ODOT project and/or do not have a CRL account, you must request a CRL account by emailing <u>DOT.Helpdesk@dot.ohio.gov</u>. CRL feeds into Signet and vice versa, so you MUST have accounts for both systems.

# Do not use CRL to record or verify payments for this Project.

Suggested language for the subcontractor to include in its lower-tier sub agreements:

As a lower-tier subcontractor (EDGE or non-EDGE), supplier (except non-EDGE) and/or trucking firm (except non-EDGE), you (the payee) must verify receipt of payments from the payer (i.e., the maker of this sub agreement with you). This verification must be performed within the Signet application. Payees must verify each payment reported by the payer within 10 days of the payment being reported. This verification includes whether the payment was received, and if so, whether it was as expected or not.

If you have not previously worked on an ODOT project, and/or do not have a CRL account, you must request a CRL account by emailing <u>DOT.Helpdesk@dot.ohio.gov</u>. CRL feeds into Signet and vice versa, so you MUST have accounts for both systems.

# Do not use CRL to verify payments for this Project.

# SANCTIONS AND ADMINISTRATIVE REMEDIES

# **PROMPT PAYMENT**

Failure by the Prime Contractor to follow Prompt Payment requirements may result in the issuance of sanctions listed below. The Prime Contractor may also receive the below sanctions if any of their Subcontractors fail to follow Prompt Payment requirements.

- 1st Level Occurrence: The Department will issue a Letter of Reprimand to the Prime Contractor (applies if there is a failure to report payments in the Signet system (must use CRL if the project type is excluded as listed above) and/or failure to timely pay subcontractor(s));
- 2nd Level Occurrence: The Department may withhold an estimate in the amount due to the subcontractor(s) that was not reported or paid (applies if there is a failure to report payments in the Signet system (must use CRL if the project type is excluded as listed above) and/or failure to timely pay subcontractor(s));
  - If a Prime Contractor receives a 1<sup>st</sup> Level Occurrence reprimand for a project, all subsequent Prompt Payment violations on that project (same or different subcontractor) may result in withholding. In this situation, no 1<sup>st</sup> Level Occurrence reprimand letters will be sent.
- 3rd Level Occurrence: The Prime Contractor may be required to pay interest in the amount of 18% per annum of the payment due, beginning on the eleventh day following the receipt of payment from the owner and ending on the date of full payment of the payment due plus interest (applies if a pattern of not paying subcontractor(s) persists or the Contractor has falsified, misrepresented or withheld information, ODOT can pursue other remedies available by law including suspension, revocation and/or debarment).

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- the Contractor's past project practices;
- the magnitude and the type of offense;
- the degree of the Contractor's culpability;
- any steps taken to rectify;
- the Contractor's record of performance on other projects; and
- the number of times the Contractor has been previously sanctioned by ODOT.

#### **RETURN OF RETAINAGE**

Failure by the Prime Contractor to follow Return of Retainage requirements may result in the issuance of sanctions listed below. The Prime Contractor may also receive the below sanctions if any of their Subcontractors fail to follow Return of Retainage requirements.

 1st Level Occurrence: The Department will issue a Letter of Reprimand to the Prime Contractor (applies if there is a failure to report retainage being held in the Signet system (must use CRL if the project type is excluded as listed above) and/or failure to timely return retainage;

- 2nd Level Occurrence: The Department may withhold an estimate in the amount of retainage due to the subcontractor(s) (applies if there is a failure to report retainage being held in the Signet system (must use CRL if the project type is excluded as listed above) and/or failure to timely return retainage;
  - If a Prime Contractor receives a 1<sup>st</sup> Level Occurrence reprimand for a project, all subsequent Return of Retainage violations on that project (same or different subcontractor) may result in withholding. In this situation, no 1<sup>st</sup> Level Occurrence reprimand letters will be sent.
  - Repeat Occurrences: Continued non-compliance is a material breach of contract and will be treated as such. ODOT can pursue other remedies available by law including suspension, revocation and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- the Contractor's past project practices;
- the magnitude and the type of offense;
- the degree of the Contractor's culpability;
- any steps taken to rectify;
- the Contractor's record of performance on other projects; and
- the number of times the Contractor has been previously sanctioned by ODOT.

# PN 040 - 3/30/2022 - PROHIBITION OF THE EXPENDITURE OF PUBLIC FUNDS FOR OFFSHORE PURPOSES

Executive Order 2022-02D "State of Ohio's Response to Russia's Unjust War on the Country of Ukraine" prohibits purchases from or investment in a Russian institution or company. This Order shall be read in conjunction with Executive Order 2019-12D "Governing the Expenditure of Public Funds for Offshore Services" which already largely prohibits the contracting and purchasing of services from overseas sources, including subcontractors.

The Ohio Department of Transportation will not enter into any contract to purchase services provided outside of the United States or that allows State data to be sent, taken, accessed, tested, maintained, backed-up, stored, or made available remotely outside of the United States, unless a duly signed waiver from the Department of Administrative Services has been obtained. Notwithstanding any other terms of this Contract, the Department reserves the right to recover any funds paid for services the Contractor performs outside of the United States for which it did not receive a waiver. The Department does not waive any other rights and remedies provided to the Department in the Contract.

Further, the Department will not make any purchase from or investment in any Russian institution or company. Notwithstanding any other terms of this Contract, the Department reserves the right to recover any funds paid to the Contractor for purchases or investments in a Russian institution or company in violation of Executive Order 2022-02D. The provisions of this paragraph will expire when the applicable Executive Order is no longer effective.

**The Contractor must sign and complete** <u>both</u> of the attached Affirmation and Disclosure Forms ("ATTACHMENT A" and "ATTACHMENT B") and return the forms with the executed contract. By signing the Disclosure and Affirmation Forms, the Contractor is acknowledging that it understands and will meet the requirements of the above prohibitions. During the performance of this Contract, if the Contractor changes or adds to the location(s) disclosed on the Affirmation and Disclosure Forms, Contractor must complete and submit a revised Affirmation and Disclosure Form reflecting such changes.

#### ATTACHMENT A STATE OF OHIO DEPARTMENT OF TRANSPORTATION

# STANDARD AFFIRMATION AND DISCLOSURE FORM

# EXECUTIVE ORDER 2019-12D

# Governing the Expenditure of Public Funds on Offshore Services

By the signature affixed to this response, the CONTRACTOR/SUBCONTRACTOR affirms, understands and will abide by the requirements of Executive Order 2019-12D. If awarded a contract, the CONTRACTOR/SUBCONTRACTOR becomes the Contractor and affirms that both the Contractor and any of its subcontractors shall perform no services requested under this Contract outside of the United States. The Executive Order is available at the following website: (https://governor.ohio.gov/wps/portal/gov/governor/media/executive-orders).

The CONTRACTOR/SUBCONTRACTOR shall provide all the name(s) and location(s) where services under this Contract will be performed in the spaces provided below or by attachment. Failure to provide this information as part of the response will deem the CONTRACTOR/SUBCONTRACTOR not responsive the contract will not be executed. If the CONTRACTOR/SUBCONTRACTOR will not be using subcontractors, indicate "Not Applicable" in the appropriate spaces.

1. Principal location of business of Contractor:

(Address)

(City, State, Zip)

Name/Principal location of business of subcontractor(s):

(Name)

(Address, City, State, Zip)

(Name)

(Address, City, State, Zip)

2. Location where services will be performed by Contractor:

Name/Location where services will be performed by subcontractor(s): (Address, City, State, Zip) (Name) (Name) (Address, City, State, Zip) 3. Location where state data will be stored, accessed, tested, maintained or backed-up, by Contractor: (Address) (City, State, Zip) Name/Location(s) where state data will be stored, accessed, tested, maintained or backedup by subcontractor(s): (Name) (Address, City, State, Zip) (Address, City, State, Zip) (Name) 4. Location where services to be performed will be changed or shifted by Contractor: (Address) (City, State, Zip)

Name/Location(s) where services will be changed or shifted to be performed by subcontractor(s):

(Name)

(Address)

(Name)

(Address, City, State, Zip)

(Address, City, State, Zip)

(City, State, Zip)

On Behalf of the Contractor, I acknowledge that I am duly authorized to execute this Affirmation and Disclosure Form and have read and understand that this form is a part of any Contract that Contractor may enter into with the Department and is incorporated herein.

By: \_\_\_\_\_ Contractor

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Ohio Department of Administrative Services General Services Division

#### ATTACHMENT B

#### DEPARTMENT OF ADMINISTRATIVE SERVICES

#### STANDARD AFFIRMATION AND DISCLOSURE FORM

#### EXECUTIVE ORDER 2022-02D

State of Ohio's Response to Russia's Unjust War on the Country of Ukraine

March 2022

All of the following provisions must be included in all invitations to bid, requests for proposals, state term schedules, multiple award contracts, requests for quotations, informal quotations, and statements of work. This information is to be submitted as part of the response to any of the procurement methods listed.

#### AFFIRMATION AND DISCLOSURE FORM

Contractor affirms that Contractor has read and understands the applicable Executive Orders regarding the prohibitions of performance of offshore services, locating State data offshore in any way, or purchasing from Russian institutions or companies.

The Contractor shall provide all the name(s) and location(s) where services under this Contract will be performed and where data is located in the spaces provided below or by attachment. Failure to provide this information may result in no award. If the Contractor will not be using subcontractors, indicate "Not Applicable" in the appropriate spaces.

1. Principal location of business of Contractor:

(Address)

(City, State, Zip)

Name/Principal location of business of subcontractor(s):

(Name)

(Address, City, State, Zip)

(Name)

(Address, City, State, Zip)

2. Location where services will be performed by Contractor:

(Address)

(City, State, Zip)

Name/Location where services will be performed by subcontractor(s):

Ohio Department of Administrative Services General Services Division

3.

(Name)	(Address, City, State, Zip)
(Name)	(Address, City, State, Zip)
Location where state data will be located	d, by Contractor:
(Address)	(City, State, Zip)
Name/Location(s) where state data will b	be located by subcontractor(s):
(Name)	(Address, City, State, Zip)

Contractor also affirms, understands and agrees that Contractor and its subcontractors are under a duty to disclose to the State any change or shift in location of services performed by Contractor or its subcontractors before, during and after execution of any contract with the State. Contractor agrees it shall so notify the State immediately of any such change or shift in location of its services. The State has the right to immediately terminate the contract, unless a duly signed waiver from the State has been attained by the Contractor to perform the services outside the United States.

On behalf of the Contractor, I acknowledge that I am duly authorized to execute this Affirmation and Disclosure Form and have read and understand that this form is a part of any Contract that Contractor may enter into with the State and is incorporated therein.

By:

Contractor

Ohio Department of Administrative Services General Services Division

Print Name:

Title:

Date: \_\_\_\_\_

# PN 034 - 10/21/2022 - SUPPLEMENTAL SPECIFICATION 832 COMPENSATION

All BMP listed in SS832 Appendix F are compensated per SS832, Appendix F dated July 15, 2022.

# PN 107 - 10/19/2018 - CRITICAL PATH METHOD PROGRESS SCHEDULE FOR MULTI-SEASON PROJECTS

# **Section Table of Contents**

- A. General
- B. Interim Schedule
- C. Baseline Schedule
  - 1. Schedule Requirements
  - 2. Submission Requirements
- D. Float
  - 1. Definition of Float
  - 2. Ownership of Float
  - 3. Negative Float
- E. Monthly Update Schedule
  - 1. Update Requirements
  - 2. Early Completion Monthly Update Schedule
  - 3. Late Completion Monthly Update Schedule
- F. Revisions
- G. Time Extensions for Delays in Accordance with C&MS 108.06.B and 108.06.D
- H. Weather Days in Accordance with C&MS 108.06.C
- I. Recovery Schedule
- J. Basis of Payment

**A. General.** The progress schedule required for this project is the critical path method schedule (CPM schedule). The Contractor shall designate a Schedule Representative who shall be responsible for coordinating with the Engineer during the preparation and maintenance of the schedule. The requirements of this note replace the progress schedule requirements in 108.03 of the Construction & Material Specifications. The contractor shall submit an interim schedule followed by a baseline schedule, or only a baseline schedule, depending on when the contractor starts work as described below.

**B. Interim Schedule**. If the Contractor starts work within 60 days of execution of the contract, they shall submit an interim schedule. The interim schedule should be in CPM schedule format. The interim schedule shall include detailed activities for the work to be accomplished during the first 90 days of the Contract, and summary activities for the balance of the work. Include in the interim schedule columns for Activity ID, Activity Description, Original Duration, Remaining Duration, Total Float, Start Date, Finish Date, and Calendar ID.

**C. Baseline Schedule.** The Contractor shall submit a baseline schedule within 60 days of the execution of the Contract. The baseline schedule will be in CPM schedule format and as described below. The Engineer will review the baseline schedule and will either "approve", "approve as noted" or "reject" the schedule within 21 days of receipt. If the Engineer does not provide written notification regarding the disposition of the baseline schedule within 21 days, the submission will be considered approved.

For baseline schedules that are "approved as noted", the Contractor shall make the necessary revisions and resubmit the revised schedule within 14 days. The Engineer will only reject baseline schedules that are not in compliance with contract requirements.

For baseline schedules that are "rejected", the Engineer shall indicate in writing all portions of the schedule that are not in compliance with the contract requirements. The Project Engineer shall conduct a mandatory meeting with the Contractor and the Contractor's Schedule Representative within 14 days of the Engineer's written notice. The purpose of this meeting is to resolve all issues with the baseline schedule. At this meeting the Contractor shall provide clarification and all requested information necessary for the Engineer to "approve" the baseline schedule.

In the event the baseline schedule is not "approved" within 120 days of execution of the contract, all work shall cease on the project until the baseline schedule is "approved".

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

 Schedule Requirements. Submit an .xer or .xml file (to be determined by the Engineer) prepared in Primavera software manufactured by Oracle. The Department will "Import" or accept progress schedule files from the Contractor. All Calendars assigned to activities must be project level Calendars not Global or Resource Calendars; all Activity Codes shall be project level and not Global or EPS level Activity Codes; no Resources shall be assigned to activities, and no Project Codes shall be assigned.

Table 1 – Schedule Filename Convention			
Progress Schedule	1 <sup>st</sup> Submission	2 <sup>nd</sup> Submission	3 <sup>rd</sup> Submission
Interim Schedule	YYPPPP01IS	YYPPPP02IS	YYPPPP03IS
Baseline Schedule	YYPPPP01B	YYPPPP02B	YYPPPP03B
Schedule Update #1	YYPPPP01SU01	YYPPPP02SU01	YYPPPP03SU01
Schedule Update #2	YYPPPP01SU02	YYPPPP02SU02	YYPPPP03SU02
Delay Analysis	YYPPPP01TIA01	YYPPPP02TIA01	YYPPPP03TIA01
Weather Delay Analysis	YYPPPP01WD01	YYPPPP02WD01	YYPPPP03WD01
Recovery Schedule	YYPPPP01RS01	YYPPPP02RS01	YYPPPP03RS01

YY - Project Year PPPP - Project Number

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

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

Failure by the Contractor to include any element of work required for performance of the Contract shall not excuse the Contractor from completing all work within the required time. The Engineer's review of the baseline schedule will be for compliance with the specifications and contract requirements. Approval by the Engineer will not relieve the Contractor of any of their responsibilities for the accuracy or feasibility of the schedule. Omissions and errors will be corrected as described in Section F or I in this note and will not affect contract time.

- a) Administrative Identifier Information:
  - i. Project Number
  - ii. County
  - iii. Route Number
  - iv. FHWA Number
  - v. PID Number
  - vi. Contract Signed Date
  - vii. Completion Date
  - viii. Contractor's Name
  - ix. Contractor's Dated Signature
  - x. ODOT's Dated Approval Signature
- b) Project Activities:
  - i. Activity Identification (ID). Assign each activity a unique identification number. Activity ID length shall not exceed 10 characters. Once accepted, the Activity ID shall be used for the duration of the project.
  - ii. Activity Name. Each activity shall have a narrative description consisting of a verb or work function (e.g.; form, pour, excavate) and an object (e.g.; slab, footing, underdrain). Do not include commas in the narrative description.
  - iii. Activity Original Duration. Assign a planned duration in working days for each activity. Do not exceed a duration of 20 working days for any construction activity, unless approved by the Engineer. Activity durations will be in whole days, do not include decimals in the durations. Do not represent the maintenance of traffic, erosion control, and other similar items as single activities extending to the Completion Date. Break these Contract Items into component activities in order to meet the duration requirements of this paragraph.

- iv. Activity Relationships:
  - All activities, except the first activity, shall have a predecessor(s). All activities, except the final activity, shall have a successor(s).
  - Use only finish-to-start relationships with no leads or lags to link activities, or use start-to-start relationships with lags no greater than the predecessor duration to link activities.
  - Use of finish-to-finish relationship is required when both activities are already linked with a start-to-start relationship.
  - Negative lags are not allowed with any relationship
- c) Project Milestones:
  - i. Start Project: The Contractor shall include as the first milestone in the schedule, a milestone named "Start Project". The date used for this milestone is the date the contract is executed and signed by the Department.
  - ii. End Project Milestone: The Contractor shall include as the last activity in the project schedule, a milestone named "End Project". The date used for this milestone is considered the project completion date.
  - iii. Start Phase Milestone: The Contractor shall include as the first activity for a project phase, an activity named "Start Phase X", where "X" identifies the phase of work. The Contractor may include additional milestones but, as a minimum, must include all contractual milestones.
  - iv. End Phase Milestone: The Contractor shall include as the last activity in a project phase, an activity named "End Phase X" where "X" identifies the phase of work. The Contractor may include additional milestones, but at a minimum contractual milestones.
- d) Level of Effort Activities:

Use level of effort activities to show the duration of specified contract work periods, phases and road closures. The level of effort activity type is allowed to have a start-to-start relationship with the first activity in a series of activities and a finish-to-finish relationship with the last activity in a series of activities.

e) Constraints:

Use constraints sparingly in the schedule. If constraints are used, use only Early Constraints or Late Constraints.

f) Calendars:

Weather, seasonal (winter) and environmental shutdown periods shall be shown using non-work calendars. The activity can be assigned to a calendar indicating time periods of non-work. These custom calendars can be created to show days, weeks, or months of non-work. Weather and seasonal conditions, as shown in CMS 108.06-1, shall be evenly dispersed into the CPM schedule calendars as non-work days and be included in the planning and scheduling of all work.

All calendars developed by the Contractor shall be established as Project Calendars, with the calendar name including the project year, project number and describing the function (i.e. 160345 – 5 day workweek, 160345 – earthwork, 160345 – structures, 160345 – asphalt, 160345 – concrete cure, 160345 – environmental restriction, 160345 – 7 day week, etc.). Each calendar should indicate an 8 hour workday. No Global Calendars shall be incorporated into any progress schedule submission. Project Calendars cannot inherit holidays and exceptions from a Global Calendar.

g) Activity Codes:

The Contractor shall, at a minimum, include Project Activity Codes for Area, Phase, and Responsibility for each activity. Work Breakdown Structure is permitted, but is not be used in lieu of Activity Codes. No Global Activity Codes shall be incorporated into any progress schedule submission.

h) Schedule Options:

The schedule may only be calculated using retained logic. Show open ends as noncritical. Total float shall be calculated as finish float. Ignore relationships to and from other projects.

- Submission Requirements. Submit all schedules within the time frames specified. Submit the schedule and information in electronic file format via email or compact disc (CD) compatible with the Engineer's computer. Submit the following information along with the electronic baseline schedule:
  - a) A pdf of the baseline schedule in CPM format including the Administrative Identifier Information discussed in Section C.1.a on the first page of the schedule. For each activity on the chart, indicate the Activity ID, Activity Description, Original Duration, Remaining Duration, Total Float, Start Date, Finish Date, and Calendar ID. Use arrows to show the relationships among activities. Identify the critical path of the project on the bar chart in red. The critical path is defined as; the longest path of activities in the project that determines the project completion date. The activities that make-up the critical path of activities are the "Critical Activities."
  - b) A pdf of the Six Week Look Ahead Schedule in CPM format. This schedule will have all the requirements of the baseline schedule in bar chart format except that it shall be limited to those activities that have an early start or early finish within a six week period of the data date.
  - c) A complete Scheduling/Leveling Report (SCHEDLOG.TXT file generated by the Primavera scheduling software application) which includes Schedule Settings, Statistics, Errors, Warnings, Scheduling/Leveling Results, Exceptions, Activities with unsatisfied constraints, Activities with unsatisfied relationships, and Activities with external dates. The statistics shall include, number of Activities, number of Activities Not Started, number of Activities In Progress, number of Activities Completed, number of Activity Relationships, and number of Activities with Constraints. Total number of activities on the critical path, percent complete, activities without predecessors, activities without successors, and activities out of sequence.

**D. Float.** Use of float suppression techniques, such as; preferential sequencing (arranging critical path through activities more susceptible to Department caused delay), lag logic restraints, zero total or free float constraints, extending activity times, or imposing constraint dates other than as required by the contract, shall be cause for rejection of the project schedule or its updates.

- 1. Definitions of Float: Total Float is the length of time along a given network path that the actual start and finish of activity(s) can be delayed without delaying the project completion date. Project Float is the length of time between the End Project Milestone and the Contract Completion Date.
- 2. Ownership of Float: Float available in the schedule, at any time shall not be considered for the exclusive use of either the Department or the Contractor. During the course of contract execution, any float generated due to the efficiencies of either party is not for the sole use of the party generating the float; rather it is a shared commodity to be reasonably used by either party. Efficiencies gained as a result of favorable weather within a calendar month, where the number of days of normally anticipated weather is less than expected, will also contribute to the Project Float. A schedule showing work completing in less time than the contract time, and accepted by the Department, will be considered to have Project Float. Project Float will be a resource available to both the Department and the Contractor. No time extensions will be granted nor delay damages paid unless a delay occurs which impacts the project's critical path, consumes all available float and extends the work beyond the Contract Completion Date.
- 3. Negative Float: Negative float will not be a basis for requesting time extensions. Any extension of time will be addressed in accordance with the Section F. Scheduled completion date(s) that extend beyond the contract (or phase) completion date(s) may be used in computations for assessment of liquidated damages. The use of this computation is not to be construed as an order by the Department to accelerate the project.

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

1. Update Requirements. On the tenth day of the current month, during the life of the Project, submit an updated schedule and all required information with a data date of the first day of the current month. The date for submission and data date may be adjusted to accommodate regularly scheduled progress meetings. Submit the monthly updated bar chart and the updated schedule in electronic format in Section C.2. The Engineer shall "approve" or "reject" the schedule update within 7 days of receipt of the updated CPM schedule. The Engineer may withhold estimates if the updated schedule is not submitted as required by this section. For each updated schedule, identify the actual start and finish dates for all completed activities and the actual start date and remaining duration for all activities in progress. Correct out-of-sequence progress listings generated by the Scheduling Statistics Report on the critical path only. The project schedule shall be reviewed at each monthly progress meeting. Any corrections shall be made prior to the next monthly progress meeting.

Submit the following with each updated schedule:

- i. A pdf of the updated schedule in CPM format.
- ii. A pdf of the Six Week Look Ahead Schedule in CPM Format
- iii. Provide a written narrative that identifies any non-critical revisions or shifts in the critical path and submit reasons for the changes or shifts in the critical path.
- iv. A complete Scheduling/Leveling Report (SCHEDLOG.TXT) file generated by the Primavera scheduling software application.
- v. A pdf of the Claim Digger Report (generated by the Primavera Software application) providing a comparison between this updated schedule and the previous Monthly Updated Schedule.
- vi. Electronic files (formatted as described above)
- 2. Early Completion Monthly Update Schedule. An Early Completion Monthly Update Schedule is defined as a monthly update schedule submitted by the Contractor in which the Finish Date precedes the Contract Completion Date. If after incorporating necessary revisions in accordance with Section F, the Finish Date precedes the Contract Completion Date by at least the number of days shown Table A the Engineer will initiate a change order amending the Contract Completion Date to the Early Completion Date shown on the accepted Early Completion Monthly Update. The amended Completion Date will be effective upon execution of that change order and all contract provisions concerning the Completion Date such as incentives, disincentives, excusable delays, compensable delays, and liquidated damages will be measured against the amended Completion Date. The Contractor may elect not to execute the change order amending the Completion Date; however, in so doing, the Contractor waives its rights to delay damages in meeting the projected early Completion Date and the time between the Early Completion Date and the Contract Completion Date is used as Project Float.

# Table A

Original Project Duration	# days prior to Contract Completion Date
one year or less	30
one year to two years	60
two years or more	90

3. Late Completion Monthly Update Schedule. A Late Completion Monthly Update Schedule is defined as a monthly update schedule submitted by the Contractor in which the Finish Date exceeds the Contract Completion Date. In the event the Finish Date is more than 14 days beyond the current contract completion date and a schedule revision is not warranted, the contractor must proceed in accordance with Section H.

**F. Revisions.** The Work may require and/or the Contractor may make revisions to the CPM schedule. Addition of new activities or new calendars or changes to existing activities, calendars or logic constitute a revision.

- 1. Any revision which modifies the critical path or impacts an interim date or project completion date must be represented on a companion schedule submitted with the monthly update schedule. A fragnet shall be used to define the sequence of new activities that are proposed to be added to the existing schedule. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities. If submitted as a fragnet, the Contractor shall compute two Finish Dates. The first Finish Date shall be computed without consideration of any impact by the fragnet. The second Finish Date shall be computed with consideration of any impact by the fragnet. The Contractor shall also submit a written narrative stating the reason for the proposed revisions.
- 2. Any revision which does not modify the critical path or the interim date or project completion date can be submitted in a narrative form accompanying the monthly update schedule. The narrative shall include the reason for the revisions.

The Engineer shall "approve" or "reject" proposed revisions within ten days of receipt of appropriate schedules and narrative. All approved revisions will be incorporated into the Monthly Update Schedule which will become the Revised Monthly Update Schedule.

**G. Time Extensions for Delays in Accordance with C&MS 108.06.B and 108.06.D.** The Work may require and/or the Contractor may request an extension of the Completion Date. Perform the following analysis to compute the duration of the time extension. Submit a pdf copy and an electronic copy of each analysis performed.

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

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

**H. Weather Days in Accordance with C&MS 108.06.C.** The Contractor may request and/or the Engineer will determine an extension of the completion date due to weather days. Perform the following analysis to compute the duration of the time extension. Submit a pdf copy and an electronic copy of each analysis performed.

- 1. The previously accepted monthly update shall be used to display progress of the project and planned activities for the next 30 day period that incurred weather days. Make a copy of the schedule file to use for the analysis. This schedule is referred to as the Non-weather Schedule.
- 2. Prepare a list of actual weather days believed to have delayed the project and the activities that were impacted.
- Utilizing the calendar(s) of those impacted activities, remove any planned weather days. Insert the actual weather day(s) into the calendar(s) for the planned work as a non-work day. Run the schedule calculations and determine the finish date. This schedule is referred to as the Weather Schedule.
- 4. Compare the Weather Schedule finish date with the Non-weather Schedule finish date in order to determine the duration of any warranted time extension.

Submit the weather schedule with the request for time extension on a monthly basis. Include a narrative report describing the effects of weather days to interim and contract completion dates.

**I. Recovery Schedule.** If the Monthly Update Schedule or Revised Monthly Update Schedule projects a finish date for the Project more than 14 calendar days later than the current Completion Date, submit a recovery schedule showing a plan to finish by the current Completion Date if requested by the Engineer. The Department will withhold Estimates until the Engineer approves the recovery schedule. The Engineer will use the schedule to evaluate time extensions and associated costs requested by the Contractor. In the event the current Completion Date is in dispute, the recovery schedule will need to be submitted once the dispute has been resolved.

**J. Basis of Payment.** The Department will make partial payments according to C&MS 109.09 and as modified by the following schedule:

- 1. The Department will release 60 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after the Engineer has approved the CPM Baseline schedule submission.
- The Department will release an additional 30 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after 50 percent of the original contract amount is complete.
- 3. The Department will release the remaining 10 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after 90 percent of the original contract amount is complete.

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

Item	Unit	Description
108E10000	Lump Sum	CPM Progress Schedule

# PN 110 - 10/15/2011 - ESCROW BID DOCUMENTS

**1. Scope and Purpose.** The purpose of this note is to preserve the Contractor's and subcontractors' Bid Documents for use by the parties in the settlement of disputes and claims.

The Department will not use Escrow Documents to assess the Contractor's or subcontractors' qualifications for performing the Work. The Escrow Documents are, and will always remain, the property of the Contractor or subcontractors, subject to joint review by the Department and Contractor or subcontractors, as provided below.

Escrow Documents consist of one copy of all documents generated in preparation of the Proposal. This includes handwritten notes, records of phone conversations and phone quotes, letters, faxes, e-mails both printed and electronically archived, formal quotations, calculations, work sheets, conceptual progress schedules, marked up plan sheets, and any other paper or electronic record of how the Work was originally bid. These documents will be held in escrow for the duration of the Contract. These documents can be scanned in a format acceptable to the Department and submitted on a CD(s) or be submitted on paper, or a combination of the two types.

2. Submittal. The low bidder and the second low bidder shall submit their Bid Documents for purposes of escrow by 4:00 p.m. in the Office of Contracts at 1980 West Broad Street, Columbus, Ohio the next business day after the bid opening. The Escrow Documents shall be submitted in a sealed container containing only the Escrow Documents. Clearly mark the container with the Contractor's and subcontractors' name, date of submittal, project name and number, and the words "Escrow Documents."

Submittal shall be in accordance with this note. Failure of the low bidder or the second low bidder to submit their Bid Documents for purposes of escrow in a timely manner as defined above will result in a determination by the Department that the bid submitted by that particular bidder is non-responsive and ineligible for award.

3. Stipulations and Acknowledgements. The Department stipulates and expressly acknowledges that the Escrow Documents constitute proprietary information. This acknowledgement is based on the Department's expressed understanding that the information contained in the Escrow Documents is not known outside the Contractor's or subcontractors' business, is known only to a limited extent and by a limited number of the Contractor's or subcontractors' employees, and is safeguarded while in the Contractor's or subcontractors' possession. The Department further acknowledges that the Escrow Documents and the information they contain are provided for the joint use of the Contractor or the subcontractors and the Department.

The Contractor and subcontractors agree, as a requirement of the Contract, that the Escrow Documents constitute all the information used in the preparation of the Bid, and that no other Bid preparation information will be considered in the resolution of disputes and claims. The Contractor and subcontractors also agree that nothing in the Escrow Documentation shall change or modify the terms or conditions of the Contract Documents.

The Department further agrees to safeguard the Escrow Documents, and all information they contain, against disclosure to the fullest extent permitted by law.

4. Format and Contents. The Contractor and subcontractors may submit Escrow Documents in their usual cost estimating format. It is not the intention of this subsection to cause the Contractor to expend additional effort during Proposal preparation, but to ensure that the Escrow Documents are adequate to enable complete understanding and proper interpretation for their intended use.

Ensure that the Escrow Documents clearly itemize the estimated costs of performing the Work of each contract item in the Proposal. Separate contract items into such items necessary to present a complete and detailed estimate of all costs. Detail the plant, equipment, material, and indirect costs in the Contractor's usual format. Ensure that the allocation of contingencies, mark ups, and other items are identified for each contract item.

Identify all elements of pricing developed solely based on experience or market factors, and for which a detailed cost estimate does not exist.

Identify all costs. For contract items amounting to less than \$10,000, the Contractor may provide estimated costs without a detailed cost estimate.

Ensure that the Escrow Documents include all quantity take-offs, calculations of rates of production and progress, copies of quotes from subcontractors and suppliers, memoranda, narratives, add/deduct sheets, and all other information used by the Contractor to arrive at the prices contained in the Proposal.

**5.** Late Revisions. If the itemized cost breakdowns and allocations described elsewhere are not revised to reflect the final Bid prices, then submit information reconciling the Bid preparation documents and the Bid unit prices. Consider this reconciliation as a part of the Escrow Documents and include in the submittal.

**6. Storage.** The Department will acknowledge receipt of the Escrow Documents and place the Escrow Documents in an institution in Columbus, Ohio that is mutually agreed upon by both the Contractor and the Department for the life of the Contract. The Department will pay the cost of storage.

**7. Examination.** The Department, the Contractor, and when necessary, the applicable subcontractors will examine the Escrow Documents, at any time deemed necessary by either the Department or the Contractor, to assist in the negotiation of the settlement of disputes and claims; ensure that subcontractors are present if and when they are presenting a claim through the Contractor or when information is needed. The Contractor, applicable subcontractors, and the Department will be present to review the Escrowed Documents.

Examination of the Escrow Documents is subject to the following conditions:

a. The Escrow Documents are proprietary and confidential.

b. Access to the documents will take place only in the presence of authorized representatives from the Department, Contractor, and the applicable subcontractors.

c. The Contractor shall designate, in writing, the personnel from within the Contractor's organization who are authorized to examine the Escrow Documents. Submit this designation with the Escrow Documents. The Director or the designees may examine the Escrowed Documents.

**8. Final Disposition.** The Department will return the Escrow Documents to the Contractor and subcontractors after completion of the Contract and after all disputes and claims have been settled.

**9. Escrow Agreement for Contract Bid Documents.** The following Escrow Agreement shall be executed within ten (10) days after award of the Contract.

THIS AGREEMENT is made and entered into this \_\_\_th day of Month, \_\_\_\_, by and among the Ohio Department of Transportation, an agency of the State of Ohio, hereinafter called the "Department", \_\_\_\_\_\_ the "Contractor", and the \_\_\_\_\_\_, hereinafter called the

"Escrow Agent".

WHEREAS, the Department and Contractor entered into that certain construction contract dated \_\_\_\_\_\_, hereinafter called the "Contract", for the construction of Project Number \_\_\_\_\_\_, pursuant to which the Contractor shall cause the work therein to be constructed; and

WHEREAS, the Department and Contractor are desirous of entering into an Escrow Agreement, to provide for specific contingencies governing the escrow and control of contract bid documentation; hereinafter called "Bid Documents"; and

WHEREAS, the Department and Contractor desire the Escrow Agent to hold the Bid Documents of the Contractor;

NOW, THEREFORE, for and in consideration of the mutual covenants contained herein, it is agreed by and between the parties hereto that:

# **ARTICLE I - Contract Escrow Bid Documentation**

The parties hereto agree to the establishment of Escrow of the Bid Documents for the contract pursuant to the Department's specifications pertaining to construction under the contract. It is the understanding of the parties hereto that the Department shall pay the Escrow Agent, as determined by separate agreement, for the escrow of the Bid Documents submitted to the Escrow Agent under the terms of this Agreement.

# **ARTICLE II - Acknowledgment**

By its signature below, the Escrow Agent hereby acknowledges receipt from the Department and Contractor of a sealed container bearing the Contractor's name, address and Contract Project Number assigned by the Department and containing the Bid Documents.

# **ARTICLE III - Deposit of Bid Documents**

The Bid Documents shall remain on deposit with the Escrow Agent until those conditions of release, as specified in Article IV "Release from Escrow", are met. As long as the Bid Documents remain in escrow with the Escrow Agent, the Escrow Agent shall not allow any person access, to gain possession, or to in any way interfere with the sealed Bid Document container.

# **ARTICLE IV - Release from Escrow**

Upon being presented, by the Department, with documentation that the Final Estimate for the Contract has been paid to the Contractor, the Escrow Agent shall deliver to the Contractor the sealed container bearing the Contractor's name, address and Contract Project Number on it. The Escrow Agent is also authorized to release the Bid Document sealed container to the Department without the Contractor's signed consent subject to the following conditions:

- \* The Contractor has provided written notification to the Department of the Contractor's intention to file a claim related to the Contract; or
- \* The Contractor has initiated litigation against the Department relating to the Contract.

Prior to any release from escrow to the Department, the Escrow Agent shall verify that either condition of release to the Department, as stated above, has been met by providing written notice to the Contractor of the Escrow Agent's intention to release the Bid Documents to the Department. Such written notice from the Escrow Agent shall be sent by overnight mail no less than ten (10) calendar days prior to release to the Department. Further, the written notice shall recite a date and time certain when the escrow documents will be released to the Department. The Contractor may be present at the time of release and also while the Department reviews the documents. Upon any release from escrow of the Bid Document container, the Escrow Agent shall cause the execution of Exhibit A, "ESCROW RELEASE for Contract Bid Documents," as attached hereto and incorporate herein as if fully contained, by the party receiving the Bid Document container.

### **ARTICLE V - Indemnity**

The Contractor agrees to indemnify and hold the Escrow Agent harmless against any loss, claim, damage, liability or expenses incurred in connection with any action, suit, proceeding, claim or alleged liability arising from this Escrow Agreement, provided, however, that the Escrow Agent shall not be so indemnified or held harmless for its negligence or acts of bad faith by it or any of its agents or employees.

The Escrow Agent shall have no responsibility as to the genuineness of the signature or the validity of any document deposited in the escrow, nor as to the legal capacity or identity of the parties to this escrow, and the Escrow Agent shall be justified in every act, omission or forbearance in reliance upon the Escrow Agreement so long as and to the extent that it shall act or have acted in good faith.

All of the terms and conditions in connection with the Escrow Agent's duties and responsibilities, and the rights of the undersigned parties are contained in the Escrow Agreement. The Trust Company is not required to be familiar with the provisions of any other instrument or agreement and shall not be charged with any responsibility or liability in connection with the observance or non-observance, by any person, of the provisions of any other such instrument or agreement.

The Escrow Agent shall not be responsible for the determination of any facts or conditions on which the parties may give notice, but the Escrow Agent may rely solely on the notice received from the parties as to the existence of such facts or conditions.

The Escrow Agent may act or refrain from acting in respect of any matter referred to in the Escrow Agreement or additional instructions received in the performance of its duties in full reliance upon the advice of counsel which may be selected by it, and shall be fully protected in so acting or refraining from acting upon the advice of such counsel.

The Escrow Agent may obey and comply with any order or process of a court (whether or not such court shall have jurisdiction) commanding it to do or to refrain from some act in relation to the subject matter of this escrow. It may rely and continue to rely conclusively upon such orders or process, notwithstanding that it may found subsequently to be void or voidable, until one of the Trust Officers of the Escrow Agent, shall have actual knowledge that such order or process shall have been modified, annulled, set aside, vacated or quashed.

### **ARTICLE VI - Notices**

All notices and other communication shall be in writing and shall be deemed to have been duly given and delivered if mailed by certified mail, return receipt requested, postage prepaid to the addresses stated herein:

### Department:

The Ohio Department of Transportation Director 1980 West Broad Street Columbus, Ohio 43223

Contractor:

**Escrow Agent:** 

**ARTICLE VII - Duties of Escrow Agent** 

The duties and responsibilities of the Escrow Agent shall be limited to those expressly set forth herein and the Escrow Agent shall act only in accordance with this Escrow Agreement. Notwithstanding specific provisions hereunder, the Escrow Agent shall at all times act upon and in accordance with the joint written instructions of the Department and Contractor.

### **ARTICLE VIII - Laws**

This Escrow Agreement shall be deemed to have been executed in Franklin County, Ohio and the laws of the State of Ohio shall apply.

### **ARTICLE IX - Assignment**

This Escrow Agreement shall not be assigned without the written consent of all the parties hereto.

### **ARTICLE X - Survival of Contract**

Except as may be expressly modified, all terms and conditions of this Escrow Agreement remain in full force and effect. The establishment of this Escrow Agreement is limited solely by the contingency of release of the Bid Documents by the Contractor to the Department, as established by Article IV, Release from Escrow. Nothing contained herein shall alter the rights of the parties hereto.

The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

In witness whereof, the parties have hereunto set their hands and seals the day above first written.

The Co	ontractor:				
By:					
	(Title)				
	(Witness)				
	(Date)				
The O	hio Department	of Transpo	ortation:		
By:					
	(Title)				
	(Witness)				
	(Date)				
			(Escrow Ag	ent):	
By:					
	(Title)				
	(Witness)				
	(Date)				
EXHIB	IT A - ESCROW	RELEASE	for Contract Bio	Documents	
This is as:	to certify that on	this	day of	, 20	, the sealed container identified
Bid Do	ocumentation				
Contra	actor:				_
		(Address)			
Contra Projec	act et Number:				
Date o	of Submittal:				

(Evidence by Agreement dated \_\_\_\_\_),

was released from escrow and personally handed to the below name individual acknowledging receipt, representing the Contractor/Department, by the Escrow Agent upon the presentation of the required documentation pursuant to Article IV, Release from Escrow, of that agreement dated \_\_\_\_\_\_, 20\_\_\_\_\_, a copy of such documentation is attached hereto.

### Acknowledgment of Receipt:

Acknowledgment of Release:

(Escrow Agent)

### PN 111 - 10/21/2022 Facilitated Partnering

**A. Facilitated Partnering.** The type of Partnering required on this project is Facilitated Partnering. The requirements of this note replace the Self-facilitated Partnering requirements in 108.02.B and 108.02.E of the Construction & Material Specifications. Select, with input from the Engineer, a partnering facilitator from the ODOT prequalified list located on the Division of Construction Management's Partnering website:

### http://www.dot.state.oh.us/Divisions/ConstructionMgt/Pages/Partnering.aspx

**B. Initial Partnering Session.** Every attempt shall be made to hold an Initial Partnering Session prior to beginning the Work and separately from the Preconstruction Meeting. This session shall be no later than one month after the Preconstruction Meeting. Identify and invite all stakeholders necessary to make the project successful including utility companies, other transportation entities (i.e., railroads), community leaders, all project participants including subcontractors. Develop the Partnering agenda with the Engineer and facilitator before holding the Initial Partnering Session.

During the Initial Partnering Session:

- 1. Develop Partnering teams consisting of Department and Contractor senior personnel and Project personnel.
- 2. Identify and develop a consensus on project goals consistent with the contractual obligations, including specific goals concerning safety, quality, schedule, and budget.
- 3. Decide on how the teams will measure progress on project goals.
- 4. Identify any potential risks to the project's success, mitigation strategies and an implementation plan for appropriate strategies.
- 5. Define key issues, project concerns, joint expectations, roles of key partnership leaders, lines of decision making authority, and share relevant information to help determine the scope of the Partnering efforts.

- 6. Identify any opportunities for project enhancement, enhancement strategies, and a specific action plan for implementing strategies.
- 7. Develop a communication protocol to enhance communication on the project.
- 8. Develop an issue identification and resolution process that identifies and attempts to resolve issues at the level closest to the work. The issue identification and resolution process will develop all the necessary steps for issue elevation including Notice and Mitigation defined in 108.02.F and the Dispute Resolution and Administrative Claims Process defined in 108.02.G.

**C. Partnering Update Sessions.** Hold quarterly Partnering Update Sessions, unless the frequency is otherwise determined by the Engineer and Contractor, to maintain open communication and evaluate the Partnering relationship on the Project. Identify Partnering successes and possible areas of improvement. Identify and invite all stakeholders necessary to make the session successful including utility companies, other transportation entities (i.e., railroads), community leaders, all project participants including subcontractors.

**D. Partnering Monitoring.** Monitor the progress of the Partnering relationship based on the goals decided during the Initial Partnering Session. On-line surveys of project participants will be used to monitor goals progress and help identify issues as they arise. Complete the survey prior to every Partnering Update Session and determine with the Engineer and facilitator whether more frequent evaluations are necessary. The on-line surveys will be consistent with the Department's Partnering Project Rating Form which is located on the Division of Construction Management's Partnering website:

http://www.dot.state.oh.us/Divisions/ConstructionMgt/Pages/Partnering.aspx

### E. Compensation.

- 1. Submission for Compensation. The facilitator shall submit to the Contractor actual invoice costs.
- 2. Facilitator Compensation. After review and verification by the Contractor and Department of the facilitator's submission for compensation, the Contractor shall pay the facilitator the fees earned.
- 3. Contractor Reimbursement. The Department and the Contractor shall bear the costs and expenses of the facilitator and venue equally.

The facilitator chosen by the Department and the Contractor shall be compensated at a maximum rate of \$3,500 for the Initial Partnering Session. The facilitator shall be compensated at a maximum rate of \$1,500 for the Partnering Update Sessions.

The maximum session rates above shall be considered full compensation for venue cost, on-site time, travel expenses, transportation, lodging, and incidentals, or portion thereof that the facilitator is at an authorized meeting.

### F. Basis of Payment.

The Department will furnish the following item with an amount in the Proposal:

ItemUnitDescriptionSpecial EachDepartment's Share Facilitated Partnering Costs

The fixed amount shown in the Proposal is included in the Total Bid Amount. This fixed amount is fifty percent of the Department's estimate of the total cost of all Partnering Update Sessions and facilitator expenses

The payments due will be deducted from the item. If the Department's costs of the Facilitated Partnering item exceed the fixed amount, the Department will continue to pay its share of the actual invoice costs of the item by processing a change order.

The Department will not pay a percent mark-up on these costs. The Department will make partial payments according to C&MS 109.09. This item is exempt from the non-performance table found in C&MS 104.02.

#### PN 123 - 01/18/2019 - LUMP SUM MINUS INCENTIVE

The Contractor will be paid a Lump Sum Incentive as designated in the Lump Sum Minus Incentive Contract Table for completing the work before the completion date(s). The Lump Sum Minus Incentive Contract Table is located in the Plan General Notes. The Lump Sum Incentive will be decreased by the Disincentive amount shown in the Lump Sum Minus Incentive Contract Table for each day that the Contractor does not have the items of critical work completed until the Lump Sum Incentive reaches zero.

In the event the Contractor impedes the flow of traffic subsequent to the completion of any listed critical work, the Contractor shall be assessed liquidated damages as per C&MS 108.07 for each day or a portion of each day that traffic is restricted.

Critical work is shown in the Lump Sum Minus Incentive Contract Table.

Critical work is defined as having the designated section of work open to unrestricted traffic as shown in the table, or the entire project if not otherwise listed.

Unrestricted traffic is defined as all traffic lanes being available for use at their final design width with all markings, RPM's, and safety features installed, along with no restrictions within 2 feet of the edge line on the shoulders.

Extensions of time will be for calendar days and calculated in accordance with C&MS 108.06 except as noted below.

For the work items on the longest path of activities driving the Completion dates for the Critical work shown in the Lump Sum Minus Incentive Contract Table, Table 108.06-1 is revised to the following:

Month	Number of Workdays Lost Due to Weather
December	6
January	8
February	8
March	7
April	6

TABL	E 108	.06-1	(MODI	FIED)

#### PN 127 - 01/18/2019 - LANE VALUE CONTRACT:

The Contractor shall be assessed Disincentives as designated in the Lane Value Contract Table for each unit of time the described Critical Lane/Ramp is restricted from full use by the traveling public within the restricted time period. The Lane Value Contract Table is located in the Plan General Notes. The Disincentives will be assessed for all restrictions of the critical work.

Critical work is shown in the Lane Value Contract Table.

Critical work is defined as having the designated sections open to unrestricted traffic as shown in the table, or the entire project if not otherwise listed.

Unrestricted traffic is defined as all traffic lanes being available for use with specified striping and safety features in place.

### PN 129 - 04/17/2020 - FLEXIBLE START WINDOW CONTRACT

The Contractor has the number of calendar days designated in the Window Contract Table in which to complete all items of critical work. The Window Contract Table is located in the Plan General Notes. The Contractor may begin any time as identified in the Window Contract Table and must complete the critical work within the calendar days designated in the Window Contract Table or by the completion date listed in the proposal, whichever comes first.

Critical work is shown in the Window Contract Table.

Completion of critical work is defined as having the designated section of work open to unrestricted traffic as shown in the table, or the entire project if not otherwise listed.

Unrestricted traffic is defined as all traffic lanes being available for use at their final design width with all markings, RPM's, and safety features installed, along with no restrictions within 2 feet of the edge line on the shoulders.

The Contractor must schedule the latest start date of the critical work prior to the following calculated date:

Late Critical Work Start Date = [Work Window End Date] - [(Calendar Days to Complete) x 1.25]

If the critical work is not started by the Late Critical Work Start Date, the Contractor will be assessed a Disincentive as defined in the Window Contract Table for everyday the contractor does not start the Critical Work.

If the work is not completed within the calendar days designated in the Window Contract Table, the Contractor will be subject to disincentives as identified in the Contract Critical Work Table. If the Window Contract Critical Work Table does not designate a disincentive value, the Contractor will be subject to the liquidated damages in accordance with the schedule set forth in C&MS 108.07.

108.06 C shall be modified to the following and shall be applicable only to the Critical Work (as defined in the Window Contract Table):

#### 108.06 C Extension to the Completion Date for Weather or Seasonal Conditions.

A weather day for critical work is defined as a workday that weather reduced production by more than 50 percent on items of work on the critical path. Submit a request for an extension of time for a lost day due to weather with 2 days of occurrence. The Engineer will extend the Calendar Days to Complete by 1 calendar day for each lost day caused due to weather.

### PN 137 - 01/18/2019 - ALTERNATE BIDS

#### Description

Alternate Bid items for two or more competing designs, specifications, or materials are included within the Bid Documents. The Alternate Bid items are identified as such under the same heading within the General Summary.

Bid on all items within each competing Alternate Bid item set.

#### **Consideration of Proposals**

When Alternate Bids are specified, after proposals are opened and read, the Department will establish the apparent low bidder based on the overall Bid which includes only the lowest priced alternate within each competing Alternate Bid item set.

While the Department will use the lowest priced alternate within each competing Alternate Bid item set to determine the low bidder, the Department may select one of the other alternates within each competing Alternate Bid item set for the contract to be awarded.

### PN 140 - 10/15/2021 - SHORT-TERM HOURLY CLOSURE WINDOW CONTRACT

The Contractor has the number of hours designated in the Short-Term Hourly Closure Window Contract Table (Table) to complete all items of critical work as defined in the Table. The Table is located in the Plan General Notes.

Completion of the critical work is defined as having the designated work completed and the impacted roadway section open to unrestricted traffic; all traffic lanes being available for use at their required width with safety features installed.

Prior to initiating the critical work, the Contractor and Project Engineer must mutually review and agree to the appropriateness of the weather forecast. A copy of the weather forecast shall be kept in the project record. The critical work may need rescheduled.

The Contractor will be subject to hourly disincentives, as identified, if the critical work is not completed within the duration designated in the Table.

If the critical work is initiated, the Contractor shall remain reasonably onsite during a weather event and shall resume work immediately following the cessation of an impacting weather event.

Hourly time extensions for weather-sensitive critical work that has been impacted by weather will only be for the duration of the actual unanticipated weather event and the duration of any subsequent necessary weather-caused remediation work. The Contractor must immediately and actively pursue all remediation work.

Time extensions will be calculated in hours and on an hour-for-hour basis for portions thereof. Disincentives will be waived for the duration of any unanticipated weather impacts and for the duration necessary to perform remediation work caused by unanticipated weather.

Weather delay duration (i.e. "Down-time") is non-compensable for equipment and Supervisory labor. Non-supervisory craft hourly labor forces may be compensable, without markup on the wages and benefits, if labor forces cannot reasonably be dismissed from the Project Site during the weather impact.

The Contractor will be compensated for necessary remediation work caused by unanticipated weather.

### PN 420 - 1/20/2023 - SURFACE SMOOTHNESS REQUIREMENTS FOR PAVEMENTS

**DESCRIPTION:** The surface tolerance specification requirements are modified to use the International Roughness Index (IRI) as follows for all pavements of constant width with at least 1 centerline mile (1.6 km) of continuous paving. Short breaks in paving such as bridge decks, intersections, etc. are not considered breaks in continuous paving. Also included is pavement for ramps, including acceleration lanes and deceleration lanes, where the total length is greater than 0.5 miles (0.8 km); and all interstate-to-interstate ramps including acceleration lanes and deceleration lanes.

For roads with less than 1 centerline mile (1.6 km) of paving; ramps, acceleration lanes, and deceleration lanes not included above; and sections of undivided highways, as defined in this note, within corporation limits with posted speed limits less than 40 miles per hour, smoothness measurement and corrective action for all areas of localized roughness with an IRI in excess of 250 inches per mile (3.95 m/km) in 25 feet (7.6 m) is required. For these same areas, no corrective action for 0.1-mile (0.16 km) sections having an MRI (lot roughness) greater than 90 inches per mile (1.42 m/km) is required and no pay adjustments will be made.

Do not include pavement for turn lanes including center turn lanes, shoulders, crossovers, approach slabs, and bridge decks in IRI measurements, corrective actions, and pay adjustments.

Areas not part of this specification are subject to the requirements of the original item(s) specified.

If the pavement surface is Rubberized Open Graded Asphalt Friction Course (Supplemental Specification 803), this specification applies to the surface of the course immediately below and references to the number of courses placed do not include the SS803 course.

**MATERIALS AND EQUIPMENT:** Provide smoothness measuring equipment conforming to Supplement 1058. Furnish the Department's approval letter of the profiler and the operator to the Engineer. The Engineer will verify the smoothness measuring equipment conforms to Supplement 1058. The Engineer will complete the Smoothness Profiler Verification Report found in Supplement 1058, Appendix A, to document profiler calibration prior to measurement. The Engineer will verify the profile operator's certification against the operator list posted on the Office of Construction Administration webpage. Furnish equipment meeting the requirements of C&MS 257.02 for performing corrective diamond grinding.

**SMOOTHNESS MEASUREMENT:** Measure the pavement surface smoothness in both wheel paths. Wheel paths are located parallel to the centerline or baseline of the roadway or ramp and approximately 3.0 feet (1.0 m) from the centerline of the lane or ramp, measured transversely in both directions. Ensure the path of the profiler is parallel to the lane centerline at all times. Measure the entire length of pavement, event marking the profile runs such that profile data can later be identified when the profile sensor(s) is within 1.0 foot (0.3 m) of any existing pavement not constructed on the project, pressure relief joint, approach slab, or other non-pavement features (i.e., manholes, valve boxes, unusual geometry, catchbasins, etc.). It is the operator's responsibility to note such locations in the collected inertial profiles. Profiles provided without named event markings will not be reviewed and will be returned for correction. Non-pavement and pre-existing conditions will be considered on a project-by-project basis and approved by the Engineer for exclusion from IRI calculations.

Remove any objects such as dirt, debris, curing covers, etc., prior to performing the surface smoothness measurements. Replace any curing covers after the measurements are taken. Repair any membrane curing damaged during the measurements.

Do not perform any surface smoothness measurements until the pavement has cured sufficiently to allow measuring without damaging the pavement. When the pavement will not support the profiler on the next working day, notify the Engineer and inform the Engineer when the measurements will be taken. Provide the Engineer at least 24 hours' notice prior to performing any measurements. Do not take measurements until project site verification is demonstrated to the Engineer according to Supplement 1058.

**IRI and MRI CALCULATION:** Develop an IRI according to ASTM E 1926 for each 0.1-mile (0.16 km) section.

Non-pavement features and pre-existing conditions approved by the Engineer that influence the IRI measurements in a wheelpath should be sectioned out of profiles using the Leave-Out function in ProVAL for the corrective action and pay adjustment. Use 5-feet before and after length when using the Leave Out function. Do not perform corrective diamond grinding within 1.5 feet of a non-pavement feature installed directly in a wheel path.

Submit the summary report from ProVAL conforming to Supplement 1110 and electronic copies of all longitudinal pavement profiles in ProVAL compatible format to the Engineer. The Engineer will submit one copy of the summary report and one electronic copy of the profiles to the Office of Technical Services.

Provide necessary traffic control and survey stationing for all surface smoothness measurements.

**MANDATORY CORRECTIVE ACTION:** Perform corrective action for the applicable surface type as required. Provide a list of all mandatory corrective action locations, with station, lane, proposed corrections, proposed maximum grinding depths, and proposed final IRIs and MRIs for each location to the Engineer for approval as a Corrective Action Plan. The Corrective Action Plan is limited to grinding, pavement removal and replacement or a combination of the two. Submit the Corrective Action Plan at least 7 days prior to planning any corrective action. Corrective Action Plans that do not meet allowable IRI and MRI values at post-correction will not be approved. Do not perform any corrective actions without approval of the Engineer.

Corrective action required to meet the maximum allowable IRI and MRI values that are performed after the contract completion date will be a Punch List item in accordance with C&MS 109.12.B. Corrective action will not be assessed liquidated damages in C&MS 108.07 or contract disincentives. If corrective action on the Punch List is not completed within a reasonable time, as determined by the Final Inspector, it will be subject to an assessment of fifty percent of liquidated damages in accordance with C&MS 109.12.B.

Upon completion of the corrective action, re-measure surface smoothness according to this specification. Replace pavement markings and raised pavement markers according to the plans. All costs for corrective action will be the responsibility of the contractor.

Asphalt Concrete Surface: Classify asphalt pavement areas into one of the following types based on the work performed as part of the Project.

- Type A: Asphalt pavement specified as at least two uniform courses with the total thickness placed greater than or equal to 3 inches (75 mm).
- Type B: Asphalt pavement specified as either: a) at least one uniform course with the total thickness placed less than 3 inches (75 mm) and including Item 254 or SS897 planing prior to resurfacing, or b) at least two uniform courses with the total thickness less than 3 inches (75 mm) without including Item 254 or SS897 planing prior to resurfacing.
- Type C: Asphalt pavement specified as a single uniform course not meeting the criteria of Type B. The uniform course may be placed on a non-uniform leveling course.

TABLE 420-1 ASPHALT CONCRETE PAVEMENT CLASS CRITERIA					
	Divided Highways*		Undivided Highways*		
Pavement Class	Corrective Action	Pay Adjustment Schedule (Table 420-3)	Corrective Action	Pay Adjustment Schedule (Table 420-3)	
Type A [≥ 3in. + 2-course]	[1],[5]	А	[2],[5]	A	
Type B [< 3in. + Milling] or [< 3in. + 2-course]	[1],[5]	А	[3],[5]	А	
Type C [< 3in. + 1-course]	[2],[5]	А	[4]	В	

\* Divided highways have physical separation such as a grass median, raised concrete median, guardrail, or barrier between the two directions of travel. Highways with continuous two way left turn lanes are considered undivided. Undivided highways with short sections, less than 1000 feet (300 m), of physical separation are considered undivided for the entire length.

### **Corrective Action:**

- [1] Correct all areas of localized roughness having deviations, high or low points, with an IRI in excess of 160 inches per mile (2.53 m/km) in 25 feet (7.6 m).
- [2] Correct all areas of localized roughness having deviations, high or low points, with an IRI in excess of 200 inches per mile (3.16 m/km) in 25 feet (7.6 m).
- [3] Correct all areas of localized roughness having deviations, high or low points, with an IRI in excess of 225 inches per mile (3.55 m/km) in 25 feet (7.6 m).

- [4] Correct all areas of localized roughness having deviations, high or low points, with an IRI in excess of 250 inches per mile (3.95 m/km) in 25 feet (7.6 m).
- [5] Correct any 0.1-mile (0.16 km) sections having an MRI greater than 90 inches per mile (1.42 m/km).

Perform corrective action as required in Table 420-1. Do not propose diamond grinding corrections in excess of one-third the contract Item surface course thickness. When removal is required for corrective action, remove the entire asphalt course(s) affected, for the full lane width, for a minimum length of 30 feet, and replace per the original contract item(s). Apply Item 407 Tack Coat prior to placing any asphalt concrete. Do not diamond grind more than 5 percent by longitudinal length of the lane-miles (lane-km) eligible for a pay adjustment. Feather ground areas to provide a smooth surface.

Re-measure each 0.1-mile (0.16 km) section where corrective action was performed to ensure compliance with Table 420-1.

If the final surface course is Item 803, seal any diamond ground areas with material meeting the requirements of 702.04 prior to placing the Item 803.

**Portland Cement Concrete Surface:** Classify pavement areas into one of the following types based on the work performed as part of the Project.

Type A: Concrete pavement with the total specified thickness greater than or equal to 8 inches (200 mm).

- Type B: Concrete pavement with the total specified thickness greater than 6 inches (150 mm) and less than 8 inches (200 mm).
- Type C: Concrete pavement with the total specified thickness less than or equal to 6 inches (150 mm).

TABLE 420-2 PORTLAND CEMENT CONCRETE PAVEMENT CLASS CRITERIA					
	Divided Highways* Undivided High			d Highways*	
Pavement Class	Corrective Action	Pay Adjustment Schedule (Table 420-3)	Corrective Action	Pay Adjustment Schedule (Table 420-3)	
Type A [≥ 8in.]	[1],[5]	А	[1],[5]	А	
Type B [> 6 in. & < 8in.]	[1],[5]	А	[2],[5]	А	
Type C [< = 6 in.]	[2],[5]	А	[3]	В	

\* Divided highways have physical separation such as a grass median, raised concrete median, guardrail, or barrier between the two directions of travel. Highways with continuous two way left turn lanes are considered undivided. Undivided highways with short sections, less than 1000 feet (300 m), of physical separation are considered undivided for the entire length.

### **Corrective action:**

- [1] Correct all areas of localized roughness having deviations, high or low points, with an IRI in excess of 160 inches per mile (2.53 m/km) in 25 feet (7.6 m).
- [2] Correct all areas of localized roughness having deviations, high or low points, with an IRI in excess of 200 inches per mile (3.16 m/km) in 25 feet (7.6 m).

- [3] Correct all areas of localized roughness having deviations, high or low points, with an IRI in excess of 225 inches per mile (3.55 m/km) in 25 feet (7.6 m).
- [5] Correct any 0.1-mile (0.16 km) sections having an MRI greater than 90 inches per mile (1.42 m/km).

Perform corrective action as required in Table 420-2 by diamond grinding or removing and replacement per the original contract items. Feather ground areas to provide a smooth surface.

Re-measure each 0.1-mile (0.16 km) section where corrective action was performed to ensure compliance with Table 420-2.

Complete all corrective action prior to determination of pavement thickness. If corrective action is required, the surface texture after diamond grinding is acceptable and no additional texturing is required.

**Asphalt and Portland Cement Concrete Surfaces:** If corrective action is required, develop a Corrective Action Plan as specified in the Mandatory Corrective Action section of this Specification. Upon completion of the corrective action, re-measure surface smoothness according to this specification. In the event the Contractor was not able to correct the surface smoothness to meet the Specification, deductions will be made according to *Post-Correction Pay Adjustment* procedures below.

**METHOD OF MEASUREMENT:** Determine the IRI for each lane, for each wheel path, for each 0.1-mile (0.16 km) section of paving. The MRI for a 0.1-mile (0.16 km) section is the average of the IRI of the two wheel paths.

**PAY ADJUSTMENTS:** A lump sum pay adjustment will be made according to the following schedule and calculations for each lane for each 0.1-mile (0.16 km) section. Payment will be based on a 12 foot (3.7 m) lane width, regardless of lane width. Pay adjustments are based on the weighted average bid unit cost per square yard for the section multiplied by the pay factor as determined in Table 420-3. Pavement thickness is the total thickness of asphalt concrete, Portland cement concrete, or both placed as part of the contract and does not include any SS803 course, free draining base, aggregate base, stabilized subgrade, etc.

TABLE 420-3 PAY SCHEDULE					
SCHEDUL	EA	SCHEDULE B			
MRI PAY ADJUSTMENT		MRI	PAY ADJUSTMENT		
Inches per mile per 0.1 mile section (m/km per 0.16 km section)	Percentage of Unit Cost (PUC) (%)	Inches per mile per 0.1 mile section (m/km per 0.16 km section)	Percentage of Unit Cost (PUC) (%)		
35 (0.55) or less	35 (0.55) or less 4		4		
Over 35 to 50 (0.55 to 0.79)	(50 - IRI ) * (15 )	Over 45 to 60 (0.71 to 0.95)	(60 - IRI) * (15)		
Over 50 to 70 (0.79 to 1.10) 0		Over 60 (0.95)	0		
Over 70 to 90 (1.10 to 1.42)	- ( IRI - 70 ) *( $\frac{6}{20}$ )				

49 Project No. 230321

Over 90 (1.42)	(1)		
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#### (1) Corrective action required

Asphalt Pavements:

 $(t_1 \times u_1) + (t_2 \times u_2) + (t_3 \times u_3) \dots$ 

Concrete Pavements:

WUC = bid unit cost (\$/SY)

Pay Adjustment (PA):

 $PA = WUC \times 704 \times PUC$ 

Where: WUC = weighted unit cost (\$/SY). PUC = percentage of unit cost from Table 420-3, expressed as a decimal.

Pay adjustments will be based on the measured IRI of each wheelpath and averaged as MRI, after any mandatory corrective action, however no incentive will be paid for any 0.1-mile (0.16 km) section where mandatory corrective action was performed regardless of the resulting IRI/MRI. No pay adjustments will be made for sections less than 0.1 miles (0.16 km) long, however corrections for localized roughness are required.

At the Contractor's option, corrective action may be performed on any section with an MRI greater than 70 inches per mile (1.10 m/km) to reduce or eliminate the negative pay adjustment, however no incentive will be paid regardless of the resulting MRI. As an option the Department may allow corrective action, in the form of diamond grinding, Item 254, or SS897 pavement planing, to improve the profile on any course prior to the surface course. If the final course is Item 803 do not perform corrective action on the Item 803. Only diamond grinding may be performed on the course immediately below Item 803.

### **POST-CORRECTION PAY ADJUSTMENT**

**Lot Roughness:** Any uncorrected 0.1 mile (0.16 km) section at post-correction, subject to Schedule A, with an MRI of 90.1 or greater will require a negative pay adjustment according to the following table. Remove and replace any uncorrected 0.1 mile (0.16 km) section with an MRI greater than 95.

MRI at post-correction	% Pay Adjustment
90.1	20
91	35
92	51
93	67
94	84

50	
Project No.	230321

95	91
>95	Remove and replace

**Localized Roughness:** Any section of uncorrected localized roughness up to 10% over the specified IRI threshold and subject to Schedule A or B, will require a negative pay adjustment based on the localized roughness analysis using the weighted average bid unit cost per square yard for the section being assessed. The following formula will be used to determine the negative pay adjustment per violation.

Negative Pay Adjustment, per wheel path = Length of Violation x IRI above Threshold x WUC

The minimum negative pay adjustment will be \$500.00 per wheel path per violation. Negative pay adjustments for uncorrected localized violations are cumulative for each wheel path.

Remove and replace locations with uncorrected localized roughness greater than 10% of the specified IRI. Replace the entire lane width per violation.

**BASIS OF PAYMENT:** Include the cost of all labor, equipment, and materials necessary to meet this specification in the contract unit or lump sum price for the applicable pavement items.

### PN 520 07/15/2022 - FUEL PRICE ADJUSTMENT

**General:** This Fuel Price Adjustment (Fpa) provision is intended to minimize risk to the Contractor or Design Build Team, (DBT) due to fuel price fluctuations that may occur during the Contract. This provision is not designed to estimate actual quantities of fuel used in construction operations, but to provide a reasonable basis for calculating a fuel price adjustment based on average conditions.

The Department determines adjustments under the provisions of this Proposal Note, and presumes that the Contractor/(DBT) has relied on these provisions when determining unit bid prices. The monthly application range for percent change (Mbp/Cbp) will not exceed 100% for a Fuel Price Adjustment increase or 75% for a Fuel Price Adjustment decrease as outlined in Section B, Calculation of Fuel Price Adjustment.

**A. Price Adjustment Criteria:** These requirements provide for a price adjustment, positive or negative, to payments due the Contractor/(DBT) for fluctuations in the cost of fuel consumed in the performance of certain items of work. The total price adjustment must be more than \$400. These price adjustment provisions apply only to those items in the contract as grouped by category and identified in Table A-1. All adjustments will be made based on fuel consumption indicated by Table A-1, and no changes will be made for actual consumption rates.

Category descriptions and the fuel usage factors which are applicable to each are as follows:

	Fuel Adjustment Categories, Table A-1				
Category	Basis of Calculation and Threshold Quantity	Eligible Items	Units	Fuel Usage Factor	
Earthwork	Apply only to the greater of the sum of all Excavation quantities or the sum of all Borrow and Embankment quantities. Threshold Quantity* = 10,000 c.y. (7,645.66 c.m.)	203, 204	Gallons per cubic yard ( <b>Gallons</b> per cubic meter)	0.50 (0.65)	
Aggregate Bases	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 2,500 c.y. (1,912 c.m.)	304, 307	Gallons per cubic yard ( <b>Gallons</b> per cubic meter)	0.75 (0.98)	
Select Granular Backfill	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 2,000 c.y. (1,529 c.m.)	840	Gallons per cubic yard ( <b>Gallons</b> per cubic meter)	0.75 (0.98)	
Pavement Planing	Apply to quantity based upon Method of Measurement and Basis of Payment. Threshold Quantity* = 1,200 s.y. (103.35 s.m.)	254	Gallons per cubic yard (Gallons per cubic meter )	0.90 0.69	
Flexible Bases and Pavements	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 1,200 c.y. (917 c.m.)	301, 302, 424, 441, 442, 443, 446, 448, 614, 615, 803, 806, 826, 851, 857, 860, 880	Gallons per cubic yard (Gallons per cubic meter)	1.70 (2.22)	
Rigid Bases and Pavements	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 1,200 c.y. (917 c.m.)	305, 306, 451, 452, 526, 884,	Gallons per cubic yard ( <b>Gallons</b> per cubic meter)	1.00 (1.31)	
Structural Concrete	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 350 c.y. (268 c.m.)	511, 524, 842, 892	Gallons per cubic yard ( <b>Gallons</b> per cubic meter)	4.00 (5.23)	

\* A Fuel Price Adjustment will only apply when the sum of all **original** contract quantities or for Design Build Projects all completed in-place accepted final quantities for the category meet or exceed the specified Threshold Quantity. When a Fuel Price Adjustment applies, calculate the Fuel Price Adjustment for the sum of all quantities for the category per this proposal note.

**B. Calculation of Fuel Price Adjustment:** Fuel Price Adjustments may be either positive or negative. A positive Fuel Price Adjustment will result in a payment to the Contractor/(DBT) while a negative Fuel Price Adjustment will result in a deduction.

The Department will calculate a Monthly Base Price (Mbp) for fuel for each month of each calendar year beginning with January 2001. The method for calculating the Monthly Base Price (Mbp) will be on file in the Division of Construction Management. The Monthly Base Price (Mbp) will be used to calculate all Fuel Price Adjustments. The Contract Base Price (Cbp) will be the Monthly Base Price (Mbp) for the month the contract was bid. All Monthly Base Price (Mbp) values will be posted on the Division of Construction Management, Office of Construction Administration website at: http://www.dot.state.oh.us/Divisions/ConstructionMgt/Admin/Pages/PriceIndexes.aspx

During each month of the contract the Engineer will select the applicable Monthly Base Price (Mbp) and calculate the ratio of the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp). The formulas below allow for a variation in fuel prices without recognizing cost increases/ decreases within the range of 90% to 110% of the Contract Base Price (Cbp).

When, and only when, the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp) is less than 0.90 or greater than 1.10 will the Engineer calculate a Fuel Price Adjustment (Fpa).

Cost increases in excess of 200% of the Contract Base Price (Cbp) will not be recognized. When, the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp) is greater than 2.00, the Fpa shall be calculated using a Cbp/Mbp ratio of 2.00.

Cost decreases in excess of 75% of the Contract Base Price (CBP) will not be recognized. When, the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp) is less than 0.75, the Fpa shall be calculated using a Cbp/Mbp ratio of 0.75.

#### For a Price Increase:

 $Fpa = [(Mbp/Cbp) - 1.10] \times Cbp \times Q$ 

#### For a Price Decrease:

 $Fpa = [(Mbp/Cbp) - 0.90] \times Cbp \times Q$ 

Where:

**Fpa** = Fuel Price Adjustment **Mbp** = Monthly Base Price **Cbp** = Contract Base Price

 $\mathbf{Q}$  = The number of gallons of fuel used in the placement of items identified in Table A-1 during that month at the specified Fuel Usage Factor. Q will be determined by the Engineer for each category by multiplying the applicable Fuel Usage Factor by the sum of quantities of completed and accepted work for the specified items.

The total Monthly Fuel Price Adjustment will be the algebraic sum of the Fuel Price Adjustments for materials placed during the month for each applicable category identified in Table A-1. The Total Fuel Price Adjustment for the project will be the algebraic sum of all Monthly Fuel Price Adjustments. The

Department will calculate the Monthly and Total Fuel Price Adjustment on a monthly basis and make contract modifications as provided in Section C, Payment/Deduction.

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**C. Payment/Deduction:** The Fuel Price Adjustment will be paid, or deducted, upon approval of a change order prepared after completion of all work. Contractor/(DBT) markups are not permitted. Partial payments or deductions will be processed prior to total completion when the unpaid accrued Total Fuel Price Adjustment exceeds \$10,000 or once every 12 months.

**D. Expiration of Contract Time:** When eligible items of work grouped by category and identified in Table A-1 are performed after expiration of contract time and liquidated damages are chargeable, the value of Monthly Base Price (Mbp) used to compute the price adjustment will be either the Monthly Base Price (Mbp) at the time of actual performance or the Monthly Base Price (Mbp) at the time contract time expired, whichever is less.

**E. Extra Work:** When eligible items of work grouped by category and identified in Table A-1 are added to the contract as Extra Work and for which a unit price is negotiated the Contractor/(DBT) must use the appropriate price for fuel when preparing required backup data for the negotiated price. No Fuel Price Adjustment will be made for fuel consumed in the performance of eligible work added to the contract as Extra Work at a negotiated price when the work commences within 90 days of the approval of the change order authorizing said extra work. If the eligible work at a negotiated price Adjustment will be made if said extra work quantities exceed the applicable threshold quantity in Table A-1. The Fuel Price Adjustment will be calculated using the Monthly Base Price (Mbp) value for the month the change order authorizing said extra work was approved as the value for its Contract Base Price (Cbp).

When Extra Work is added to the contract as a Force Account operating costs for equipment used in the performance of this work will be paid in accordance with C&MS 109.05.C.4 with no further adjustment.

**F. Final Quantities:** Upon completion of the work and determination of final pay quantities a change order will be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for the Monthly Base Price (Mbp) used in the price adjustment formula will be the average of all Monthly Base Price (Mbp) values previously used for computing price adjustments.

### PN 525 - 07/15/2022 - STEEL PRICE ADJUSTMENT

**A. General**: This proposal note acknowledges fluctuations in the cost of manufactured steel used in the materials defined below and placed as part of the applicable construction work in the form of a pay adjustment. This proposal note will be used in bidding documents, including design-build projects only for as long as the price of the steel products set out below are subject to volatile spikes as determined solely by the Department.

These price adjustment provisions apply to items in the contract including any modified standard or nonstandard item where the work to be performed involves the placement or installation of one or more of the steel products specified herein. The total price adjustment must be more than \$400.

The Department will post monthly adjustment indices for steel using data obtained in Table B-1.

#### For Category 1, Table B-1:

The Department will post monthly adjustment indices (BI and MI) for wide flange steel beams plus a scrap surcharge using data obtained from the steel producers listed.

#### www.stld-cci.com

#### www.nucoryamato.com

#### For Category 2, Table B-1:

The Department will post monthly adjustment indices (BI and MI) for steel using data obtained on the last Wednesday of the month from the American Metal Market (**AMM**), based on the price for Steel Plate, Cut-to-length as reported for National Mills.

**B. Price Adjustment Criteria and Conditions**: The BI monthly values apply to projects sold during the same month in which the data is posted. The MI monthly values apply to projects for which qualifying items are shipped from the mill during the same month in which the data is posted. Adjustments will be made to the contract for fluctuations in the cost of steel used in the manufacture of the primary components of only the steel products listed in Table B-1:

Product Relationship Table B-1			
Steel Product (Title)	BI, MI		
<b>Category 1:</b> Structural Steel Members, Levels UF, 1, 2, and 3 Steel H-Piling	Average of lowest and highest 27" to 36" tall, 10" 12" wide flange beams, up to 256 lbs./ft., prices plus scrap surcharge from Nucor-Yamato and SDI		
<b>Category 2:</b> Structural Steel Members, Levels 4, 5, and 6 Stay in-place steel casing (Piling & Caissons)	AMM Product Designation: Steel Plate, Cut-to-length (National Mills)		

Nuts, bolts, rebar chairs, connecting bands and other miscellaneous hardware items shall not be included in the price adjustment. No other steel products shall be considered for a price adjustment.

Adjustments will only be made for fluctuations in the cost of the steel used in the above products as shipped from the producing mill. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

Adjustments may be positive, negative, or non-existent depending on the circumstances. Adjustments for the steel price will be calculated by the Engineer and processed by change order on the Contractor's progress estimate.

No steel price adjustments will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

Furnish the following documentation for all Table B-1 steel products to be incorporated into the work. Submit all documentation to the Engineer prior to incorporation of the steel into the work. The Department will withhold progress payments if the documentation is not provided and at the discretion of the Engineer the work is allowed to proceed. Progress payments will be made upon receipt of the delinquent documentation. Submit separate documentation packages for each steel product in Table B-1 and for each quantity represented by items 2) c and d below. Label each documentation package with a unique number.

- 1) An affidavit signed by the Contractor, or Design-Build Team, (DBT) stating that the documentation provided is true and accurate.
- 2) Identification of the steel product subject to adjustment.
  - a. Documentation package number: PN525 (Insert the steel product "title" from Table B-1)
     (Insert sequential package number beginning with "1"). Example: PN525 Steel H
    Piling 1, PN 525 Structural Steel 2, etc...
  - b. The steel product quantity in pounds (kg).
  - c. Steel Certification and Mill Test Reports for the steel product.
  - d. The date the steel product, subject to adjustment, was shipped from the producing mill.

Upon the incorporation of the steel product into the work provide the Engineer the following:

- 1) An affidavit signed by the Contractor, or DBT stating that the documentation provided is true and accurate.
- 2) Identification of the steel product subject to adjustment.
  - a. Documentation package number that was initially established for the steel product for which the price adjustment will be calculated.
  - b. The actual steel product quantity in pounds (kg) that was incorporated into the work.

### **Price Adjustment Calculations**

The below formulas allow for a variation in steel prices without recognizing cost increases/decreases within the range of - 90 % to 110% of the Bidding Index (BI). The total steel price adjustment (SPA) will not be computed unless the percent **% Change** is - 10% or more, increase or decrease:

% Change =  $[(MI/BI) - 1] \times 100$ 

### For a Price Increase:

 $SPA = [(MI/BI) - 1.10] \times BI \times (Q/100)$ 

MI and BI are in terms of dollars (\$) per hundredweight (CWT). Therefore, Quantity (Q) of structural steel is divided by 100.

55

**Example:** If the Project was bid on 3/8/2008, the BI for a category 1 pay item in March 2008 is \$46.48. If wide flange beams have a documented weight of 34500 pounds and the mill date of 9/8/2009, the MI for September 2008 is \$60.23

Check threshold:

% Change = [(\$60.23/CWT / \$46.48/CWT) - 1] x 100 = 29.58,

Is ABS (29.58) > 10? Yes

Calculate SPA = [(\$60.23/CWT / \$46.48/CWT)-1.10] x \$46.48/CWT x 34,500 lbs/100

= \$3,140.19 (positive adjustment)

#### For a Price Decrease:

 $SPA = [(MI/BI) - 0.90] \times BI \times (Q/100)$ 

MI and BI are in terms of dollars (\$) per hundredweight (CWT). Therefore, Quantity (Q) of structural steel is divided by 100.

**Example:** If the Project was bid on 1/8/2009, the BI for a category 1 pay item in January 2009 is \$47.83. If wide flange beams have a documented weight of 34500 pounds and the mill date of 4/8/2009, the MI for April 2009 is \$37.38.

Check threshold:

% Change = [(\$37.38/CWT/\$47.83/CWT) - 1] x 100 = -21.85,

Is ABS (-21.85) > 10? Yes

Calculate SPA = [(\$37.38/CWT/\$47.83/CWT)-0.90] x \$47.83/CWT x 34,500 lbs/100

= -\$1,955.12-(negative adjustment)

Where:

SPA = Steel Price Adjustment

MI = Mill Shipping Index. – in Dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month the steel was shipped from the producing mill and properly documented. The adjustment indices will be posted on ODOT's website.

BI = Bidding Index. - in Dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month in which the project is bid. The adjustment indices will be posted on ODOT's website.

Q = Quantity of the steel product, pounds actually incorporated into the work as documented by the Contractor, or DBT and verified by the Engineer.

**C. Price Adjustment Limitations:** The price adjustments are limited to a % Change of 100%, increase or 75% decrease.

**Example 1:** When the Project was bid, the BI for a category 1 pay item with a quantity of 50,000 pounds, was \$39.00, and the MI for the month in which the steel was shipped was \$89.88.

Check threshold:

% Change = [(\$89.88/CWT/\$39.00/CWT)-1] x 100 = 130.46%

The limit is +100%, thus the SPA is calculated as follows:

SPA = [2.0 - 1.10] x BI x (Q/100) SPA = [2.0-1.10] x \$39.00/CWT x 50,000 lbs/100 = \$17,550.00

**Example 2:** When the Project was bid, the BI for a category 1 pay item with a quantity of 50,000 pounds, was \$66.08, and the MI for the month in which the steel was shipped was \$29.00

Check threshold:

% Change = [(\$29.00/CWT/\$66.08/CWT)-1] x 100 = -56.11%

The limit is -100 %, thus the SPA is calculated as follows:

SPA = [0.56-0.90] x BI x Q SPA = [0.56-0.90] x \$66.08/CWT x 50,000 lbs/100 = -\$11,197.26

**D.** Payment/Deductions: The price adjustment will be paid, or deducted from the Contractor's, or DBT's progress estimate, upon approval of a change order.

If the price adjustment is based on estimated material quantities for that time, and a revision to the total material quantity is made in a subsequent or final estimate, an appropriate adjustment will be made to the price adjustment previously calculated. The adjustment will be based on the same indices used to calculate the price adjustment which is being revised. If the shipping date(s) of the revised material quantity cannot be determined, the adjustment for the quantity in question, will be based on the indices utilized to calculate the steel price adjustment for the last initial documentation package submission, for the steel product subject to adjustment, that was incorporated into the particular item of work, for which quantities are being finalized.

**Example:** Structural steel for a particular bridge was provided for in three different shipments with each having a different mill shipping date. The quantity of structural steel actually used for the bridge was calculated and a steel price adjustment was made in a progress payment. At the conclusion of the work an error was found in the calculation of the final quantity of structural steel used for the bridge. The quantity to be adjusted can not be directly related to any one of the three mill shipping dates.

The steel price adjustment for the quantity in question would be calculated using the indices that were utilized to calculate the steel price adjustment for the quantity of structural steel represented by the last initial structural steel documentation package submission. The package used would be the one with the greatest sequential number.

**E. Mill Index after the Approved Completion Date**: When steel products are shipped from the mill after the approved contract completion date, steel price adjustments will be based on the MI for the month of the approved contract completion date or the MI for the actual month the steel was shipped, using whichever MI is less.

**F. Documentation Review:** The Department reserves the right to inspect the records of the Contractor or DBT, its subcontractors, material fabricators and suppliers to verify the accuracy of the documentation submitted to the Department.

**G. Extra Work/Force Account:** When steel product, as specified herein, are added to the contract as Extra Work, in accordance with the provisions of C&MS Section 109, no steel price adjustments will be made for any products manufactured from steel having a mill shipping date 5 business days after the Department's request. Price adjustments will be made as provided herein however the BI shall be based on the month of the Department's request. The MI will be based on the month the steel was shipped from the producing mill and after the Extra Work request. For extra work performed on force account basis, reimbursement of actual material costs, along with the specified overhead and profit markup, will be made.

### PN 534 - 01/21/2022 - ASPHALT BINDER PRICE ADJUSTMENT

### A. Eligibility

If the Department's asphalt binder index has increased or decreased in excess of 10 percent, asphalt concrete may be eligible for a price adjustment. The total price adjustment must be more than \$400.

### B. Price Adjustment Criteria and Conditions:

The Department will establish and publish the asphalt binder Bidding Index (BI) and Placing Index (PI) for each month of each calendar year. The asphalt binder indexes will be posted on the Department's website.

The Department will establish the asphalt binder indexes based on the data provided in the Poten & Partners, Inc., Asphalt Weekly Monitor<sup>®</sup> (AWM) (<u>http://www.poten.com/copyright.asp</u>).

The Department will use the selling price for PG64-22 paving grade asphalt from the Midwest/Midcontinent Markets of Illinois/Michigan/Ohio/Indiana/Kentucky for the Ohio cities/areas listed. The Department will average the Ohio cities/areas low and high selling prices as published in the last weekly publishing period of each month that includes the last Friday of the month to calculate the BI and PI. The calculated asphalt binder BI will be posted by the Department as the index for the following month. The calculated asphalt binder PI will be posted by the Department as the index for the current month.

The Director will determine the asphalt binder indexes in the event data from the AWM is unavailable for any reason.

#### C. Price Adjustment Calculations

If the ratio of the PI to the BI is greater than 1.10 or less than 0.90, the Department will adjust the compensation the contractor receives for eligible quantities of asphalt concrete. The adjustment is based on the bid month and the month of asphalt concrete placement. The adjustment will apply to the price for asphalt binder used in eligible asphalt concrete quantities according to the following formula:

For a price increase:

$$PA = \left(\frac{PI}{BI} - 1.10\right) \times C \times Q$$

For a price decrease:

$$PA = \left(\frac{PI}{BI} - 0.90\right) \times C \times Q$$

Where:

- PA = Price Adjustment
- BI = Bidding Index, the asphalt binder index for the month the project is bid
- PI = Placing Index, the asphalt binder index for the month the asphalt concrete is placed
- C = BI x percent virgin asphalt binder / 100
- Q = Eligible quantity of asphalt concrete in tons (metric tons)

The percent of virgin asphalt binder used to calculate C is determined from the approved Job Mix Formula (JMF).

The eligible quantity of asphalt concrete, Q, is the complete, in-place, and accepted quantity in tons (metric tons) placed in the month being considered for price adjustment. If the quantity is paid in cubic yards (cubic meters), the Department will convert the volume into tons (metric tons) using the conversion factor established by OMM or, if an OMM conversion factor is not established, according to the Department's Construction and Material Specifications Item 440.07.

If eligible asphalt concrete is placed beyond an approved Contract Completion Date, the Department will base price adjustments on either the PI for the last month of the approved Contract Completion Date, or the PI for the actual month of placing, using whichever PI is less.

At a minimum, the Department will calculate and apply price adjustments at the end of each construction season and as soon as practical after the completion of the project.

### D. Extra Work/Force Account:

When new asphalt concrete pay items are added to the contract as Extra Work, in accordance with the provisions of C&MS Section 109.05, no price adjustments will be made.

### PN 555 - 01/15/2021 - SURFACE SMOOTHNESS FOR BRIDGES AND APPROACHES

#### DESCRIPTION

For projects with new full depth cast-in-place concrete decks and slab superstructures, the surface smoothness requirements of C&MS 451.13 are modified as follows for bridge encounters defined as 25 feet of entry pavement, entry approach slab, bridge deck, exit approach slab and 25 feet of exit pavement including all joints.

#### MATERIALS AND EQUIPMENT

Provide smoothness measuring equipment conforming to Supplement 1058. Furnish the Department's approval letter of the profiler and the operator to the Engineer prior to commencing work. The Engineer will verify the smoothness measuring equipment conforms to Supplement 1058. The Engineer will verify the profile operator's certification against the operator list posted on the Office of Construction Administration webpage. Furnish equipment meeting the requirements of C&MS 257.02 for performing corrective diamond grinding. The Engineer will complete the Smoothness Profiler Verification Report in Supplement 1058.

#### SMOOTHNESS MEASUREMENT

Collect surface smoothness measurements for both wheel paths in each proposed travel lane during one continuous pass. The wheel paths are located parallel to the centerline or baseline of the roadway or ramp and approximately 3.0 feet from the centerline of the lane, measured transversely in both directions. Start the profile measurement approximately 250 feet before the approach slab/pavement interface at the entry end and continue to approximately 250 feet after the approach slab/pavement interface at the exit end.

Notify the engineer a minimum of 24 hours prior to surface smoothness measurements. Do not perform final measurements until all final wearing courses are in place within the bridge encounter lanes being measured and all concrete surfaces have reached specified curing and loading requirements. Place expansion joint material including polymer modified joint material, unarmored strip seals, unarmored expansion seals or similar material after completing corrective action. Place temporary material in lieu of the joint material for profile measurement until all corrective action is complete. Remove all dirt and debris from the surface of the travel lanes prior to performing the surface smoothness measurements. Provide permanent or temporary pavement markings for all travel lanes that are of sufficient size to be visible during surface smoothness measurements. Ensure the path of the profiler is parallel to the lane centerline at all times during data collection.

Develop an International Roughness Index (IRI) according to ASTM E 1926 for the bridge encounter using a continuous 25 feet base length analysis for each wheel path. Submit two copies of the summary report from ProVAL conforming to Supplement 1112 and two electronic copies of all bridge encounter profiles in ProVAL compatible format to the Engineer.

Provide necessary traffic control and survey stationing for all surface smoothness measurements.

### MANDATORY CORRECTIVE ACTION

The Department will require corrective action where the Localized Roughness IRI (Refer to Supplement 1112 Appendix D for Definition) in any 25 feet segment of the bridge encounter exceeds 250 inches per mile, except on structures that include a steel armored expansion joint system where corrective action is required when the IRI exceeds 300 inches per mile. Perform corrective action to reduce the IRI for each corrected lane to 250 inches per mile or less for any 25 feet segment for a structure without a steel armore expansion joint system.

For a structure that includes a steel armored expansion joint system, perform corrective action to reduce the IRI at the steel armor for each corrected lane to 300 inches per mile or less. Do not perform corrective diamond grinding within 1.5 feet of a steel armored expansion joint system installed prior to the corrective action. Do not exceed 0.5 inches of material removed by corrective diamond grinding without approval of the Engineer. If proposing diamond grinding exceeding 0.5 inches, use a pachometer or equivalent, capable of locating the nearest reinforcement, (i.e. size and location), accurate to within  $\pm$  0.1 inches. Provide cover readings within 6 inches of grinding locations exceeding 0.5 inches of removal depth. Anytime PN 420 is used in conjunction with PN 555, the localized roughness criteria for the pavement beyond one foot of the approach slab will be governed by the criteria in PN 420.

If corrective action is required, develop a corrective action plan in accordance with Supplement 1112. Submit the corrective action plan to the Engineer at least 7 days before beginning corrective action. Do not begin corrective action until receiving the Engineer's acceptance of the corrective action plan. The corrective action plan may include but is not limited to grinding, pavement removal and replacement or a combination of the two. Corrective action required to meet the maximum allowable IRI values that are performed after the contract completion date, will be a Punch List item in accordance with C&MS 109.12.B. Corrective action on the Punch List is not completed within a reasonable time, it will be subject to an assessment of fifty percent of liquidated damages in accordance with C&MS 109.12.B. Upon completion of the corrective action, re-measure surface smoothness according to this specification. Feather areas adjacent to ground areas to provide a smooth surface. Re-groove diamond ground surfaces according to 511.17 if the existing grooves are less than 0.08 inches deep at no additional cost to the Department. Replace pavement markings and raised pavement markers according to the plans. All costs for corrective action will be the responsibility of the contractor.

### PAY ADJUSTMENTS

A lump sum pay adjustment will be made according to Table 1(without steel armored expansion joint system) or Table 2 (with steel armored expansion joint system) below based on the localized roughness histogram analysis within PROVAL per Supplement 1112. Positive Pay adjustments will only be made on histogram bins (refer to Supplement 1112 for definition.) on pre-corrected profile data that is below 200 IRI. The positive pay adjustment will only be made if the final structure does not have any locations exceeding a localized roughness of 250 IRI post correction without steel armored expansion joint systems or a localized roughness of 300 IRI with steel armored expansion joint systems, even for histogram bins on pre-corrected profile data below 200. The negative pay adjustments will be based on post corrective data.

The Department will not accept the Work for any part of the bridge with an IRI above 600 and consider the same as not in reasonably close conformance with the contract documents per C&MS 105.03. For surface smoothness above 600 IRI localized roughness, the Contactor must submit a corrective work plan per C&MS 501.05.C.

Table 1 - Pay Adjustment – No Steel Armor Expansion Joint Systems			
IRI	Approx. Area Under the Curve (AAUC)	FactoredBidCost (FBC)	Pay Adjustment (PA)
IRI > 600	Contractor submits corrective action plan.		
550 < IRI ≤ 600	AAUC = -325 * L550-600	FBC = BC/1000	
$500 < IRI \le 550$	AAUC = -275 * L500-550		
$450 < IRI \le 500$	AAUC = -225 * L450-500		
$400 < IRI \le 450$	AAUC = -175 * L400-450	PA = AAUC*FBC FBC = BC/2000	
$350 < IRI \le 400$	AAUC = -125 * L350-400		
$300 < IRI \le 350$	AAUC = -75* L300-350		
$250 < IRI \leq 300$	$AAUC = -25 * L_{250-300}$		
$200 < IRI \le 250$	No Pay Adjustment		
$150 < IRI \le 200$	$AAUC = 25 * L_{150-200}$		
$100 < IRI \le 150$	AAUC = 75 * L100-150	FBC = BC/4000 PA = AAUC*I	
$50 < IRI \le 100$	AAUC = 125 * L50-100		PA = AAUC*FBC
$0 < IRI \le 50$	AAUC = 175 * L <sub>0-50</sub>		
Notes:			
$L_{i-j} = Total \ length$	(ft) of encounter with $i < IRI \le j$ (e.	g. L <sub>200-250</sub> for 200 < I	$RI \leq 250$ )
BC bridge decks =	BC bridge decks = Unit Bid Cost ( $\frac{y}{y}d^3$ ) of superstructure concrete deck		
Table 2 – Pay Ad	justment – with Steel Expansion	<u>Joint Systems</u>	
IRI	Approx. Area Under the Curve (AAUC)	FactoredBidCost (FBC)	Pay Adjustment (PA)
IRI > 600	Contractor submits corrective action plan.		
$550 < IRI \le 600$	AAUC = -325 * L550-600	FBC = BC/1000 PA = AAUC*FBC	
$500 < IRI \le 550$	AAUC = -275 * L500-550		
$450 < IRI \leq 500$	AAUC = -225 * L450-500		
$400 < IRI \leq 450$	AAUC = -175 * L400-450	FBC = BC/2000	
$350 < IRI \le 400$	AAUC = -125 * L350-400		
$300 < IRI \leq 350$	AAUC = -75* L <sub>300-350</sub>		
$250 < IRI \leq 300$	No Pay Adjustment		

62 Project No. 230321

63 Project No. 230321

$200 < IRI \le 250$			
$150 < IRI \le 200$	$AAUC = 25 * L_{150-200}$		
$100 < IRI \le 150$	$AAUC = 75 * L_{100-150}$		
$50 < IRI \le 100$	AAUC = 125 * L50-100	$\mathbf{FBC} = \mathbf{BC}/4000$	$\mathbf{PA} = \mathbf{AAUC} * \mathbf{FBC}$
$0 < IRI \le 50$	AAUC = 175 * L <sub>0-50</sub>		
Notes:			
$L_{i-j}$ = Total length (ft) of encounter with i < IRI $\leq j$ (e.g. $L_{200-250}$ for 200 < IRI $\leq 250$ )			
BC bridge decks = Unit Bid Cost ( $\frac{y}{d^3}$ ) of superstructure concrete deck			

# UTILITY NOTE FRA - SR 161-15.80, PID 116322

February 10, 2023

"Bidders are advised that the utility facilities within the construction limits not in conflict will not be cleared from the construction area. All utility facilities in conflict within the construction limits of the project will be relocated as identified below."

All station locations listed below are approximate unless otherwise stated.

# **Utilities Not Impacted by the Project:**

There are multiple utilities within the construction limits of the project area that will remain in place. There is no conflict with the construction of the proposed project. Please review below for a complete listing of all utilities that exist within the construction limits of the project.

AEP-Transmission	AEP-Telecom
8600 Smiths Mill Rd.	1-Riverside Plaza
New Albany, OH 43054	Columbus, OH 43215
Attn: Michael Carr	Attn: Una Blanusa
380-205-5072	614-716-2531
<u>Tl_publicprojects@aep.com</u>	ohfiberrelocate@aep.com
Columbus Fibernet	Charter Communications (Spectrum)
1600 Walcutt Road	3760 Interchange Dr.
Columbus, OH 43228	Columbus, OH 43204
614-921-8524	614-255-6349
Attn: Matt Blackstone	dl-moh-construction-frelo-team@charter.com
mablackstone@columbusfiber.net	Ŭ
Lumen (Century Link)	Crown Castle Fiber
6185 Huntley Rd.	2 Easton Oval
Suite E	Suite 425
Columbus, OH 43229	Columbus, OH 43219
Attn: Steve Kauffman	Jon Tarnowski
614-255-2112	585-445-5813
Steve.kauffman@lumen.com	Jon.tarnowski@crowncastle.com
Verizon (MCI)	Middle Mile Infrastructure
757 Commerce Ct.	3760 Interchange Dr.
Lewis Center, OH 43035	Columbus, OH 43204
Attn: Robert Dillow	Attn: Sean Chaney
614-816-0361	614-351-6286
Robert.dillow@verizon.com	scchaney@teamfishel.com
	<u>sociality (a) califisher.com</u>
1	1

Columbia Gas of Ohio - Transmission	Columbia Gas of Ohio - Distribution
1600 Eastgate Pkwy	3550 Johnny Appleseed Court
Gahanna, OH 43230	Columbus, OH 43231
Attn: Robert Reed	Attn: Rob Caldwell
740-279-0870	614-818-2104
<u>robert1_reed@tcenergy.com</u>	<u>rcaldwell@nisource.com</u>
Aqua Ohio – Water & Sewer	City of Columbus-Division of Water
5481 Buenos Aires Blvd.	910 Dublin Rd.
Westerville, OH 43081	Columbus, OH 43215-9053
Attn: Jake Logan	Attn: Mark Gerhart
614-882-6586 x50559	614-645-6729
JELogan@aquaamerica.com	DPU_GIS_MAPPING@COLUMBUS.GOV
City of Columbus DPU-Division of Sewerage 1250 Fairwood Ave. Columbus, OH 43206 Attn: Mark Gerhart 614-645-6729 DPU_GIS_MAPPING@COLUMBUS.GOV	ODOT – District 6 Traffic 400 E. William Street Delaware, OH 43015 Attn: Troy Bryant 740-833-8110 <u>Troy.bryant@dot.ohio.gov</u>

# **AEP Transmission – Electric**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are Transmission facilities in the project area. AEP Transmission has aerial facilities at the following locations:

123+82.98 CDW	138 KV
2123+56.53 SR 161	138 KV
2184+72.10 SR 161	345 KV
2198+03.65 SR 161	138 KV

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **AEP-Telecom**

- Utility location: N/A
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are no AEP-Telecom facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **Columbus Fibernet**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are Columbus Fibernet facilities in the project area. Columbus Fibernet has an underground facility crossing IR 270 at station 653+38.70.

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **Charter Communications (Spectrum)**

- Utility location: N/A
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are no Charter Communications (Spectrum) facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# Lumen (Century Link)

- Utility location: N/A
- Expected Relocation Start / Completion Dates: N/A

- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are Lumen (Century Link) facilities in the project area. Lumen (Century Link) has an underground facility on the north side of CDW ramp between stations 129+50 to 135+00.

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **Crown Castle Fiber**

- Utility location: N/A
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are no Crown Castle Fiber facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# Verizon (MCI)

- Utility location: N/A
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are no Verizon (MCI) facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# Middle Mile Infrastructure

- Utility location: N/A
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are no Middle Mile Infrastructure facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **Columbia Gas of Ohio - Transmission**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are Columbia Gas of Ohio -Transmission facilities in the project area. Columbia Gas of Ohio -Transmission has underground facilities at the following locations:

2198+03.65 SR 161 2244+90.97 SR 161 2245+68.04 SR 161

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **Columbia Gas of Ohio - Distribution**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are Columbia Gas of Ohio -Distribution facilities in the project area. Columbia Gas of Ohio -Distribution has underground facilities at the following locations:

651+60.97 IR 270NB 2216+41.36 SR 161

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# Aqua Ohio – Water and Sewerage

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are Aqua Ohio – Water and Sewerage facilities in the project area. Aqua Ohio – Water and Sewerage has underground facilities at the following locations:

Wat	er	Sani	tary
657+26.29	IR 270NB	660+83.70	IR 270NB
661+65.38	IR 270NB	679+66.10	IR 270NB
680+29.71	IR 270NB		
680+80.93	IR 270NB		

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **City of Columbus – Division of Water**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are City of Columbus – Division of Water facilities in the project area. City of Columbus – Division of Water has underground facilities at the following locations:

140+94.06 CDW 241+08.26 CDE 2083+74.53 SR 161 2086+23.89 SR 161 2124+37.64 SR 161 2218+31.80 SR 161 2256+59.33 SR 161 2287+81.18 SR 161

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **City of Columbus – Division of Sewerage**

- Utility location: Ex LA R/W

- Expected Relocation Start / Completion Dates: N/A

- Joint Users: N/A

- Joint Users Expected Relocation Start /Completion Dates: N/A

There are City of Columbus – Division of Sewerage facilities in the project area. City of Columbus – Division of Sewerage has underground facilities at the following locations:

2166+31.16 SR 161 2238+91.27 SR 161

There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **ODOT District 6 - Traffic**

- Utility location: N/A
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are no ODOT District 6 - Traffic Surveillance facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **Utilities that will require relocation/coordination during the Project:**

"Bidders are advised that the following utility facilities within the construction limits in conflict will be relocated as part of the project per plan if public. Not all of the utility facilities within the construction limits will require relocation and shall remain in place within the construction limits of the project if not in conflict- public or private. There are project coordination requirements for the ODOT contractor with private utilities identified below. Their owners and contact information are identified below."

AEP – Ohio 700 Morrison Rd. Gahanna, OH 43230 Attn: Paul Paxton 740-348-5322 ptpaxton@aep.com	City of Columbus Division of Power 3568 Indianola Ave. Columbus, OH 43214 614-645-8276 Attn: Scott Wolfe <u>SAWolfe@columbus.gov</u>
AT&T - Ohio 111 North 4 <sup>th</sup> Street Room 802 Columbus, OH 43215 Attn: Donald G. Marshall, Jr. 614-216-2396 dm619w@att.com	City of Columbus Traffic 1881 E. 25 <sup>th</sup> Street Columbus, OH 43215 Attn: Scott Wolfe 614-645-0423 <u>SAWolfe@columbus.gov</u>
ODOT Central Office ITS 1980 West Broad Street Columbus, OH 43223 Attn: Bryan Comer 614-387-1253 bryan.comer@dot.ohio.gov	City of Columbus DPU-Division of Drainage 1250 Fairwood Ave. Columbus, OH 43206 Attn: Mark Gerhart 614-645-6729 DPU_GIS_MAPPING@COLUMBUS.GOV
City of New Albany Public Service 7800 Bevelhymer Rd. New Albany, OH 43054 614-855-0076 publicservice@newalbanyohio.org	

# AEP – Ohio

- Utility location: Ex LA R/W

- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

The contractor will need to coordinate with AEP on a proposed power source for the traffic lighting, City of Columbus CTSS and ODOT ITS systems on the project.

The contractor will need to coordinate with AEP on the relocation of the power source to the tunnel lighting under Ramp A and Ramp H of IR 270 at stations 700+50 and 116+80 respectively. AEP is intending to lower this line 5 feet below its current depth in the same location.

There are multiple locations of AEP Ohio – Distribution facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **City of Columbus – Division of Power**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: Relocations included in Plans
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are existing underground City of Columbus owned electric lighting circuits and light poles along the median of SR 161 from Little Turtle Rd. east to corporation limits, interchange lighting at SR 161 and Hamilton Rd., and interchange lighting at SR 161 and New Albany Rd. that will be removed/relocated as part of the Project and are included in proposed lighting plans. The remaining electric lighting lines and poles will remain in the final condition.

# AT&T Ohio

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: N/A
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

The contractor will need to coordinate with AT&T Ohio on the relocation of a communication line to the tunnel fire suppression system under Ramp A of IR 270 at station 696+58.

There are multiple locations of AT&T Ohio facilities in the project area. There is no conflict with the proposed project; however, contractor should take care to ensure their work is not

detrimental to the utility functionality in the final condition. Damage due to negligence is the fault of the contractor and will not be compensated.

# **City of Columbus – Traffic**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: Relocations included in Plans
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are existing underground City of Columbus owned CTSS facilities being relocated as part of this project and are included in the ITS/CTSS plans. Facilities to be relocated are along IR 270 NB from station 601+89.83 to station 690+59.74 and along SR 161 from station 914+04.08 to station 985+28.88.

# **ODOT Central Office - ITS**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: Relocations included in Plans
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are existing underground ODOT Central Office owned ITS facilities being relocated as part of this project and are included in the ITS/CTSS plans. Facilities to be relocated are along SR 161 from station 2011+50 to station 2364+53.

# **City of Columbus – Division of Drainage**

- Utility location: Ex LA R/W
- Expected Relocation Start / Completion Dates: Relocations included in Plans
- Joint Users: N/A
- Joint Users Expected Relocation Start /Completion Dates: N/A

There are existing underground City of Columbus owned drainage facilities that are being reconstructed or relocated as part of the Project along IR 270, CDE, CDW, and SR 161. Details of this work is included in the drainage plans.

# **City of New Albany**

- Utility location: Ex LA R/W

- Expected Relocation Start / Completion Dates: Relocations included in Plans

- Joint Users: N/A

- Joint Users Expected Relocation Start /Completion Dates: N/A

There are existing underground City of New Albany owned electric lighting circuits and light poles along the median of SR 161 from City of New Albany corporation limit east to station 2371+00 and interchange lighting at SR 161 and US 62 that will be removed/relocated as part of the Project and are included in proposed lighting plans. The remaining electric lighting lines and poles will remain in the final condition.

Utility Note Prepared By: Ken Fertal, PE, PS HDR Engineering Inc. 216-912-4251 ken.fertal@hdrinc.com

To the Director of the Ohio Department of Transportation: The undersigned, having full knowledge of the site, plans and specifications for the following improvement and the conditions of this proposal, hereby agrees to furnish all services, labor, materials, and equipment necessary to complete the entire project, according to the plans, specifications and completion dates, and to accept the unit prices specified below for each item as full compensation for the work in this proposal.

Date Set for Completion:

8/1/2025

**Unit Price Contract** 

Section 0	001 ROAI	DWAY			
Line Alt	Item Code	Item Description	wт	Unit	Quantity
0001	201E11000	CLEARING AND GRUBBING (WT: 01)	01	LS	1.000
0002	202E20010	HEADWALL REMOVED (WT: NR)	NR	EACH	3.000
0003	202E23000	PAVEMENT REMOVED (WT: NR)	NR	SY	58,217.000
0004	202E30600	CONCRETE MEDIAN REMOVED (WT: NR)	NR	SY	43.000
0005	202E30700	CONCRETE BARRIER REMOVED (WT: NR)	NR	FT	2,984.000
0006	202E32000	CURB REMOVED (WT: NR)	NR	FT	352.000
0007	202E35100	PIPE REMOVED, 24" AND UNDER (WT: NR)	NR	FT	2,997.000
0008	202E35200	PIPE REMOVED, OVER 24" (WT: NR)	NR	FT	1,042.000
0009	202E38000	GUARDRAIL REMOVED (WT: NR)	NR	FT	10,185.000
0010	202E38300	GUARDRAIL REMOVED, BARRIER DESIGN (WT: NR)	NR	FT	2,010.000
0011	202E42206	ANCHOR ASSEMBLY REMOVED (WT: NR)	NR	EACH	42.000
0012	202E42210	ANCHOR ASSEMBLY REMOVED, BARRIER DESIGN (WT: NR)	NR	EACH	13.000
0013	202E47000	BRIDGE TERMINAL ASSEMBLY REMOVED (WT: NR)	NR	EACH	16.000
0014	202E47800	IMPACT ATTENUATOR REMOVED (WT: NR)	NR	EACH	2.000
0015	202E48001	CABLE BARRIER REMOVED, AS PER PLAN (WT: NR)	NR	FT	18,857.000
0016	202E58000	MANHOLE REMOVED (WT: NR)	NR	EACH	8.000
0017	202E58100	CATCH BASIN REMOVED (WT: NR)	NR	EACH	46.000
0018	202E58200	INLET REMOVED (WT: NR)	NR	EACH	3.000
0019	202E70110	SPECIAL - PIPE CLEANOUT, 24" AND UNDER (WT: NR)	NR	FT	500.000
0020	202E70120	SPECIAL - PIPE CLEANOUT, 27" TO 48" (WT: NR)	NR	FT	100.000
0021	202E70130	SPECIAL - PIPE CLEANOUT OVER 48" (WT: NR)	NR	FT	100.000
0022	202E75000	FENCE REMOVED (WT: NR)	NR	FT	963.000
0023	202E75711	SPECIAL - EXISTING CONDUIT CLEANED, AS PER PLAN (WT: NR)	NR	FT	1,118.000
0024	202E98100	REMOVAL MISC.: EX. TRAFFIC EQUIPMENT (WT: NR)	NR	EACH	1.000
0025	202E98100	REMOVAL MISC.: INSPECTION WELL (WT: NR)	NR	EACH	1.000
0026	202E98200	REMOVAL MISC.: CONDUIT (WT: NR)	NR	FT	50.000
0027	202E98200	REMOVAL MISC.: FIBER OPTIC CABLE (WT: NR)	NR	FT	14,301.000
0028	202E98200	REMOVAL MISC.: SLOTTED DRAIN (WT: NR)	NR	FT	64.000
0029	203E10000	EXCAVATION (WT: 04)	04	CY	123,211.000
0030	203E20000	EMBANKMENT (WT: 04)	04	CY	18,223.000
0031	203E20001	EMBANKMENT, AS PER PLAN (WT: 06)	06	CY	5.000
0032	204E10000	SUBGRADE COMPACTION (WT: 06)	06	SY	121.000

Work Types - Page 2

0033	204E45000	PROOF ROLLING (WT: NR)	NR	HOUR	2.000
0034	209E15000	RESHAPING UNDER GUARDRAIL (WT: 06)	06	STA	28.000
0035	209E60200	LINEAR GRADING (WT: 06)	06	STA	87.000
0036	411E10000	STABILIZED CRUSHED AGGREGATE (WT: NR)	NR	CY	1,605.000
0037	606E15050	GUARDRAIL, TYPE MGS (WT: 36)	36	FT	17,766.500
0038	606E15150	GUARDRAIL, TYPE MGS HALF POST SPACING (WT: 36)	36	FT	175.000
0039	606E15550	GUARDRAIL, BARRIER DESIGN, TYPE MGS (WT: 36)	36	FT	536.000
0040	606E26050	ANCHOR ASSEMBLY, MGS TYPE B (WT: 36)	36	EACH	1.000
0041	606E26150	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016 (WT: 36)	36	EACH	40.000
0042	606E26550	ANCHOR ASSEMBLY, MGS TYPE T (WT: 36)	36	EACH	28.000
0043	606E35002	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 (WT: 36)	36	EACH	20.000
0044	606E35006	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1, BARRIER DESIGN (WT: 36)	36	EACH	2.000
0045	606E35102	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 (WT: 36)	36	EACH	8.000
0046	606E60012	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL) (WT: 36)	36	EACH	1.000
0047	606E60022	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) 60 MPH, 36" WIDE (WT: 36)	36	EACH	1.000
0048	606E60022	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) 70 MPH, 24" WIDE (WT: 36)	36	EACH	1.000
0049	606E60028	IMPACT ATTENUATOR, TYPE 2 (BIDIRECTIONAL) 70 MPH, 24" WIDE (WT: 36)	36	EACH	1.000
0050	607E23000	FENCE, TYPE CLT (WT: 37)	37	FT	1,000.000
0051	607E35000	FENCE REMOVED AND REBUILT (WT: 37)	37	FT	150.000
0052	607E70000	FENCELINE SEEDING AND MULCHING (WT: 46)	46	FT	966.000
0053	622E10060	CONCRETE BARRIER, SINGLE SLOPE, TYPE B (WT: 38)	38	FT	3,416.000
0054	622E10061	CONCRETE BARRIER, SINGLE SLOPE, TYPE B, AS PER PLAN (WT: 38)	38	FT	44.000
0055	622E10120	CONCRETE BARRIER, SINGLE SLOPE, TYPE C (WT: 38)	38	FT	5,644.000
0056	622E10121	CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN (WT: 38)	38	FT	458.000
0057	622E10121	CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN 1 (WT: 38)	38	FT	60.000
0058	622E10121	CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN 2 (WT: 38)	38	FT	13,310.000
0059	622E10140	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 (WT: 38)	38	FT	120.000
0060	622E10160	CONCRETE BARRIER, SINGLE SLOPE, TYPE D (WT: 38)	38	FT	988.000
0061	622E10161	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN (WT: 38)	38	FT	25.000
0062	622E10161	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN 2 (WT: 38)	38	FT	966.000
0063	622E10200	BARRIER TRANSITION (WT: 38)	38	EACH	3.000
0064	622E24840	CONCRETE BARRIER END SECTION, TYPE B (WT: 38)	38	EACH	3.000
0065	622E24861	CONCRETE BARRIER END SECTION, TYPE C1, AS PER PLAN (WT: 38)	38	EACH	2.000
0066	622E25000	CONCRETE BARRIER END SECTION, TYPE D (WT: 38)	38	EACH	14.000
0067	622E25004	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B (WT: 38)	38	EACH	13.000

Work Types - Page 3

0068	622E25008	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C (WT: 38)	38	EACH	28.000
0069	622E25009	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C, AS PER PLAN (WT: 38)	38	EACH	36.000
0070	622E25014	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1 (WT: 38)	38	EACH	6.000
0071	622E25050	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D (WT: 38)	38	EACH	24.000
0072	878E25000	INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS (WT: NR)	NR	LS	1.000

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0073	AA1	204E10000	SUBGRADE COMPACTION (ALTERNATE 1) (WT: 06)	06	SY	69,675.000
0074	AA1	204E13000	EXCAVATION OF SUBGRADE (ALTERNATE 1) (WT: 04)	04	CY	18,038.000
0075	AA1	204E20000	EMBANKMENT (ALTERNATE 1) (WT: 04)	04	CY	18,038.000
0076	AA1	204E45000	PROOF ROLLING (ALTERNATE 1) (WT: NR)	NR	HOUR	103.000
0077	AA1	206E10500	CEMENT (ALTERNATE 1) (WT: NR)	NR	TON	4,130.000
0078	AA1	206E11000	CURING COAT (ALTERNATE 1) (WT: 07)	07	SY	134,732.000
0079	AA1	206E15010	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP (ALTERNATE 1) (WT: 07)	07	SY	134,732.000
0080	AA2	203E35120	GRANULAR MATERIAL, TYPE C (ALTERNATE 2) (WT: 04)	04	CY	6,544.000
0081	AA2	204E10000	SUBGRADE COMPACTION (ALTERNATE 2) (WT: 06)	06	SY	193,102.000
0082	AA2	204E13000	EXCAVATION OF SUBGRADE (ALTERNATE 2) (WT: 04)	04	CY	25,680.000
0083	AA2	204E20000	EMBANKMENT (ALTERNATE 2) (WT: 04)	04	CY	17,640.000
0084	AA2	204E45000	PROOF ROLLING (ALTERNATE 2) (WT: NR)	NR	HOUR	98.000
0085	AA2	204E50000	GEOTEXTILE FABRIC (ALTERNATE 2) (WT: 06)	06	SY	15,080.000

### Section 0003 EROSION CONTROL

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0086		601E21000	CONCRETE SLOPE PROTECTION (WT: 35)	35	SY	111.000
0087		601E21050	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT (WT: 35)	35	SY	33.000
0088		601E21060	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT (WT: 35)	35	SY	192.000
0089		601E32200	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER (WT: 35)	35	CY	1.000
0090		659E00100	SOIL ANALYSIS TEST (WT: NR)	NR	EACH	2.000
0091		659E00300	TOPSOIL (WT: 46)	46	CY	16,061.000
0092		659E10000	SEEDING AND MULCHING (WT: 46)	46	SY	138,222.000
0093		659E14000	REPAIR SEEDING AND MULCHING (WT: 46)	46	SY	6,911.000
0094		659E15000	INTER-SEEDING (WT: 46)	46	SY	6,911.000
0095		659E20000	COMMERCIAL FERTILIZER (WT: 46)	46	TON	19.280

Work Types - Page 4

0096	659E31000	LIME (WT: 46)	46	ACRE	28.560
0097	659E35000	WATER (WT: 46)	46	MGAL	1,138.000
0098	659E40000	MOWING (WT: 46)	46	MSF	933.000
0099	670E00500	SLOPE EROSION PROTECTION (WT: 46)	46	SY	6,315.000
0100	670E00700	DITCH EROSION PROTECTION (WT: 46)	46	SY	2,731.000
0101	670E00720	DITCH EROSION PROTECTION MAT, TYPE B (WT: 46)	46	SY	5,377.000
0102	832E15000	STORM WATER POLLUTION PREVENTION PLAN (WT: NR)	NR	LS	1.000
0103	832E15002	STORM WATER POLLUTION PREVENTION INSPECTIONS (WT: NR)	NR	LS	1.000
0104	832E15010	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE (WT: NR)	NR	LS	1.000
0105	832E30000	EROSION CONTROL (WT: 08)	08	EACH	1,409,669.000
0106	836E10000	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1 (WT: 46)	46	SY	536.000

Line	Alt	Item Code	Item Description	wт	Unit	Quantity
0107		602E20000	CONCRETE MASONRY (WT: 35)	35	CY	21.200
0108		605E11110	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC (WT: 35)	35	FT	69,439.000
0109		605E13300	6" UNCLASSIFIED PIPE UNDERDRAINS (WT: 35)	35	FT	50.000
0110		605E13410	6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC (WT: 35)	35	FT	6,380.000
0111		605E14020	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC (WT: 35)	35	FT	62,639.000
0112		605E31100	AGGREGATE DRAINS (WT: 35)	35	FT	265.000
0113		611E00510	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS (WT: 35)	35	FT	2,377.000
0114		611E00900	6" CONDUIT, TYPE B (WT: 35)	35	FT	5.000
0115		611E01500	6" CONDUIT, TYPE F (WT: 35)	35	FT	20.000
0116		611E05900	15" CONDUIT, TYPE B (WT: 35)	35	FT	2,787.000
0117		611E05900	15" CONDUIT, TYPE B, 706.02 (WT: 35)	35	FT	162.000
0118		611E05900	15" CONDUIT, TYPE B, 707.33 (WT: 35)	35	FT	193.000
0119		611E06100	15" CONDUIT, TYPE C (WT: 35)	35	FT	722.000
0120		611E06100	15" CONDUIT, TYPE C, 707.33 (WT: 35)	35	FT	49.000
0121		611E06700	15" CONDUIT, TYPE F (WT: 35)	35	FT	171.000
0122		611E06700	15" CONDUIT, TYPE F, 707.33 (WT: 35)	35	FT	63.000
0123		611E07400	18" CONDUIT, TYPE B (WT: 35)	35	FT	590.000
0124		611E07400	18" CONDUIT, TYPE B, 706.02 (WT: 35)	35	FT	185.000
0125		611E07400	18" CONDUIT, TYPE B, 707.33 (WT: 35)	35	FT	58.000
0126		611E07600	18" CONDUIT, TYPE C (WT: 35)	35	FT	659.000

Work Types - Page 5

0127	611E07600	18" CONDUIT, TYPE C, 706.02 (WT: 35)	35	FT	23.000
0128	611E07600	18" CONDUIT, TYPE C, 707.33 (WT: 35)	35	FT	19.000
0129	611E08900	21" CONDUIT, TYPE B (WT: 35)	35	FT	40.000
0130	611E10400	24" CONDUIT, TYPE B (WT: 35)	35	FT	10.000
0131	611E10400	24" CONDUIT, TYPE B, 707.33 (WT: 35)	35	FT	10.000
0132	611E10600	24" CONDUIT, TYPE C (WT: 35)	35	FT	609.000
0133	611E10600	24" CONDUIT, TYPE C, 707.33 (WT: 35)	35	FT	5.000
0134	611E13600	30" CONDUIT, TYPE C (WT: 35)	35	FT	601.000
0135	611E13600	30" CONDUIT, TYPE C, 706.02 (WT: 35)	35	FT	55.000
0136	611E16400	36" CONDUIT, TYPE B, 706.02 (WT: 35)	35	FT	86.000
0137	611E16600	36" CONDUIT, TYPE C, 706.02 (WT: 35)	35	FT	53.000
0138	611E20900	48" CONDUIT, TYPE B (WT: 35)	35	FT	15.000
0139	611E20900	48" CONDUIT, TYPE B, 706.02 (WT: 35)	35	FT	9.000
0140	611E21100	48" CONDUIT, TYPE C (WT: 35)	35	FT	236.000
0141	611E21100	48" CONDUIT, TYPE C, 706.02 (WT: 35)	35	FT	20.000
0142	611E23800	60" CONDUIT, TYPE B, 706.02 (WT: 35)	35	FT	381.000
0143	611E97400	CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE (WT: 35)	35	FT	50.000
0144	611E97400	CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE (WT: 35)	35	FT	50.000
0145	611E97400	CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE (WT: 35)	35	FT	25.000
0146	611E97400	CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE (WT: 35)	35	FT	25.000
0147	611E98180	CATCH BASIN, NO. 3A (WT: 35)	35	EACH	4.000
0148	611E98230	CATCH BASIN, NO. 4 (WT: 35)	35	EACH	3.000
0149	611E98300	CATCH BASIN, NO. 5 (WT: 35)	35	EACH	29.000
0150	611E98341	CATCH BASIN, NO. 5A (WT: 35)	35	EACH	6.000
0151	611E98370	CATCH BASIN, NO. 6 (WT: 35)	35	EACH	6.000
0152	611E98410	CATCH BASIN, NO. 8 (WT: 35)	35	EACH	3.000
0153	611E98470	CATCH BASIN, NO. 2-2B (WT: 35)	35	EACH	1.000
0154	611E98630	CATCH BASIN ADJUSTED TO GRADE (WT: 35)	35	EACH	2.000
0155	611E98800	INLET, NO. 3B (WT: 35)	35	EACH	9.000
0156	611E98801	INLET, NO. 3B, AS PER PLAN (WT: 35)	35	EACH	5.000
0157	611E98810	INLET, NO. 3C (WT: 35)	35	EACH	2.000
0158	611E98811	INLET, NO. 3C, AS PER PLAN (WT: 35)	35	EACH	21.000
0159	611E98820	INLET, NO. 3D (WT: 35)	35	EACH	2.000
0160	611E99104	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C (WT: 35)	35	EACH	2.000
0161	611E99110	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1 (WT: 35)	35	EACH	2.000

Work Types - Page 6

0162	611E99114	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D (WT: 35)	35	EACH	2.000
0163	611E99150	INLET ADJUSTED TO GRADE (WT: 35)	35	EACH	7.000
0164	611E99574	MANHOLE, NO. 3 (WT: 35)	35	EACH	14.000
0165	611E99651	MANHOLE FRAME AND COVER, AS PER PLAN - BOLT DOWN LID (WT: 35)	35	EACH	1.000
0166	611E99660	MANHOLE RECONSTRUCTED TO GRADE (WT: 35)	35	EACH	22.000
0167	611E99710	PRECAST REINFORCED CONCRETE OUTLET (WT: 35)	35	EACH	17.000
0168	611E99720	INSPECTION WELL (WT: 35)	35	EACH	1.000
0169	611E99820	SPECIAL - MISCELLANEOUS METAL (WT: 35)	35	LB	2,750.000
0170	839E29000	TRENCH DRAIN, TYPE A WITH STANDARD GRATE (WT: 35)	35	FT	263.000

Section 0005 PAVEMENT

WΤ Line Alt Item Code Item Description Unit Quantity 0171 251E01000 PARTIAL DEPTH PAVEMENT REPAIR (441) (WT: 16) 16 SY 610.000 0172 253E90100 SY 1,000.000 PAVEMENT REPAIR, MISC.: HAMILTON RD, REPAIR (WT: 16) 16 0173 253E90100 PAVEMENT REPAIR, MISC.: US 62 REPAIR (WT: 16) 16 SY 1,000.000 SY 0174 254E01000 PAVEMENT PLANING, ASPHALT CONCRETE, 1.5" (WT: 13) 13 389,386.000 PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH, 1.5" AVERAGE 0175 254E01000 13 SY 24.730.000 (WT: 13) 0176 254E01011 PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN, SY 13 106.000 VARIABLE DEPTH, 1.5" AVERAGE (WT: 13) 0177 302E56000 ASPHALT CONCRETE BASE, PG64-22, (449) (WT: 10) 10 CY 38,016.000 0178 304E20000 AGGREGATE BASE (WT: 09) CY 54.513.000 09 305E13010 9" CONCRETE BASE, CLASS QC 1P (WT: 12) SY 0179 12 24.000 407E20000 GAL 58.174.000 0180 NON-TRACKING TACK COAT (WT: 10) 10 0181 441E10100 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG70-22M (WT: 10) 10 CY 220.000 CY 0182 441E50000 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (WT: 10) 10 2.000 0183 441E50200 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448) (WT: 10) 10 CY 3.000 0184 442E00100 ANTI-SEGREGATION EQUIPMENT (WT: 10) 10 CY 17,130.000 0185 442E10001 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN 10 CY 24,503.000 PG70-22M (WT: 10) 0186 442E10001 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN 10 CY 813.000 PG76-22M (WT: 10) 0187 442E10080 ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) (WT: 10) 10 CY 10,381.000 0188 452E13011 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN 12 SY 841.000 (WT: 12) 0189 609E24510 CURB, TYPE 4-C (WT: 38) 38 FT 364.000

0190	609E26000	CURB, TYPE 6 (WT: 38)	38	FT	403.000
0191	609E71000	CONCRETE MEDIAN, 6" (WT: 38)	38	SF	385.000
0192	690E98700	SPECIAL - QC 1 CONCRETE PER C&MS 499 (WT: 38)	38	CY	42.000
0193	872E10000	VOID REDUCING ASPHALT MEMBRANE (VRAM) (WT: 10)	10	FT	276,807.000
0194	889E10000	LONGITUDINAL DIAMOND GROOVING. (WT: 13)	13	SY	2,848.000

Section 0006 WATER WORK

Line	Alt	Item Code	Item Description	WТ	Unit	Quantity
0195		638E01205	8" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 53, PUSH-ON JOINTS AND FITTINGS, AS PER PLAN (WT: 35)	35	FT	230.000
0196		638E07303	18" STEEL PIPE ENCASEMENT, BORED OR JACKED, AS PER PLAN (WT: 51)	51	FT	112.000

Section 0007

LIGHTING

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0197		625E00480	CONNECTION, UNFUSED PERMANENT (WT: 43)	43	EACH	11.000
0198		625E10494	LIGHT POLE, LOW MAST: ALMB50 (WT: 43)	43	EACH	112.000
0199		625E14307	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN A (WT: 43)	43	EACH	109.000
0200		625E14307	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN B (WT: 43)	43	EACH	2.000
0201		625E14307	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN C (WT: 43)	43	EACH	1.000
0202		625E15100	LIGHT TOWER FOUNDATION, 36" X 20' DEEP (WT: 43)	43	EACH	2.000
0203		625E15200	LIGHT TOWER FOUNDATION, 36" X 25' DEEP (WT: 43)	43	EACH	2.000
0204		625E23300	NO. 2 AWG 2400 VOLT DISTRIBUTION CABLE (WT: 43)	43	FT	1,630.000
0205		625E24320	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES (WT: 43)	43	FT	1,421.000
0206		625E26273	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN 480V (WT: 43)	43	EACH	112.000
0207		625E29002	TRENCH, 24" DEEP (WT: 43)	43	FT	1,361.000
0208		625E29900	JUNCTION BOX (WT: 43)	43	EACH	5.000
0209		625E29910	TRANSITION JUNCTION BOX (WT: 43)	43	EACH	6.000
0210		625E30700	PULL BOX, 725.08, 18" (WT: 43)	43	EACH	1.000
0211		625E32000	GROUND ROD (WT: 43)	43	EACH	8.000
0212		625E33000	STRUCTURE GROUNDING SYSTEM (WT: 43)	43	EACH	3.000
0213		625E35021	RE-ERECT EXISTING LIGHT TOWER, AS PER PLAN (WT: 43)	43	EACH	4.000
0214		625E37101	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN (WT: 43)	43	EACH	2.000
0215		625E39520	PULL BOX CLEANED (WT: 43)	43	EACH	2.000
0216		625E40000	SPECIAL - MAINTAIN EXISTING LIGHTING (WT: 43)	43	LS	1.000
0217		625E75540	LIGHT TOWER FOUNDATION REMOVED (WT: NR)	NR	EACH	4.000

0218	625E75800	DISCONNECT CIRCUIT (WT: NR)	NR	EACH	3.000
0219	625E98000	LIGHTING, MISC.: AEP POWER SERVICE, CITY OF COLUMBUS (WT: 43)	43	EACH	3.000
0220	625E98000	LIGHTING, MISC.: AEP POWER SERVICE, CITY OF NEW ALBANY (WT: 43)	43	EACH	2.000
0221	625E98000	LIGHTING, MISC.:CITY, 3 WIRE, 480V, PAD MOUNT (MIS-603) (WT: 43)	43	EACH	5.000
0222	625E98000	LIGHTING, MISC.:CITY, FOUNDATION REMOVAL (MIS-900) (WT: 43)	43	EACH	45.000
0223	625E98000	LIGHTING, MISC.:CITY, FOUNDATION, 6' (MIS 201) (WT: 43)	43	EACH	26.000
0224	625E98000	LIGHTING, MISC.:CITY, FOUNDATION, 8' (MIS 201) (WT: 43)	43	EACH	65.000
0225	625E98000	LIGHTING, MISC.:CITY, LUMINAIRE, LED, COBRA HEAD, (30' MH) (MIS-800) (WT: 43)	43	EACH	9.000
0226	625E98000	LIGHTING, MISC.:CITY, LUMINAIRE, LED, COBRA HEAD, (40' MH) (MIS-800) (WT: 43)	43	EACH	65.000
0227	625E98000	LIGHTING, MISC.:CITY, LUMINAIRE, LED, TEAR DROP (MIS-801) (WT: 43)	43	EACH	17.000
0228	625E98000	LIGHTING, MISC.:CITY, LUMINAIRE, LED, UNDERPASS (MIS-804) (WT: 43)	43	EACH	4.000
0229	625E98000	LIGHTING, MISC.:CITY, POLE TO BE WIRED, 2-WIRE (MIS-500) (WT: 43)	43	EACH	40.000
0230	625E98000	LIGHTING, MISC.:CITY, POLE TO BE WIRED, 3-WIRE (MIS-501) (WT: 43)	43	EACH	168.000
0231	625E98000	LIGHTING, MISC.:CITY, POLE, 15' BRACKET, T-BASE, 30' MH (MIS-300) (WT: 43)	43	EACH	4.000
0232	625E98000	LIGHTING, MISC.:CITY, POLE, 15' BRACKET, T-BASE, 40' MH (MIS-302) (WT: 43)	43	EACH	65.000
0233	625E98000	LIGHTING, MISC.:CITY, POLE, 8' BRACKET, T-BASE, 30' MH (MIS-300) (WT: 43)	43	EACH	5.000
0234	625E98000	LIGHTING, MISC.:CITY, POLE, BLACK/GREEN TEAR DROP (MIS-305) (WT: 43)	43	EACH	17.000
0235	625E98000	LIGHTING, MISC.:CITY, PULL BOX, MIS 54 (WT: 43)	43	EACH	20.000
0236	625E98000	LIGHTING, MISC.:CITY, PULL BOX, SPECIAL, 17"X30"X24" (WT: 43)	43	EACH	16.000
0237	625E98000	LIGHTING, MISC.:CT METER CABINET, 480V, AEP POWERED STREET LIGHT CIRCUITS (MIS-59) (WT: 43)	43	EACH	5.000
0238	625E98100	LIGHTING, MISC.:'CITY, 2" CONDUIT, CONCRETE ENCASED (MIS-700) (WT: 43)	43	FT	14,968.000
0239	625E98100	LIGHTING, MISC.:'CITY, 3" CONDUIT-JACKING OR DRILLLING (MIS-701) (WT: 43)	43	FT	1,090.000
0240	625E98100	LIGHTING, MISC.:CITY, CONDUIT REPAIR (MIS-706) (WT: 43)	43	FT	5.000
0241	625E98100	LIGHTING, MISC.:CITY, UNDERGROUND CIRCUIT, 2-WIRE (MIS-403) (WT: 43)	43	FT	6,482.000
0242	625E98100	LIGHTING, MISC.:CITY, UNDERGROUND CIRCUIT, 3-WIRE (MIS-404) (WT: 43)	43	FT	39,178.000
0243	625E98200	LIGHTING, MISC.:CITY, UNDERGROUND SYSTEM REMOVAL (MIS-902) (WT: 43)	43	LS	1.000
0244	625E98200	LIGHTING, MISC.:MAINTAIN EXISTING LIGHTING, CITY OF COLUMBUS (WT: 43)	43	LS	1.000
0245	625E98200	LIGHTING, MISC.:MAINTAIN EXISTING LIGHTING, CITY OF NEW ALBANY (WT: 43)	43	LS	1.000
0246	625E98200	LIGHTING, MISC.: POLE IDENTIFICATION TAG INSTALLATION (WT: 43)	43	LS	1.000

Line Alt	Item Code	Item Description	WT	Unit	Quantity
0247	620E00500	DELINEATOR, POST GROUND MOUNTED (WT: NR)	NR	EACH	103.000

Work Types - Page 9

0248	621E00100	RPM (WT: 41)	41	EACH	2,212.000
0249	621E54000	RAISED PAVEMENT MARKER REMOVED (WT: NR)	NR	EACH	2,069.000
0250	625E32000	GROUND ROD (WT: 43)	43	EACH	42.000
0251	626E00102	BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL) (WT: NR)	NR	EACH	491.000
0252	626E00102	BARRIER REFLECTOR, TYPE 1 (ONE WAY) (WT: NR)	NR	EACH	739.000
0253	626E00110	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL) (WT: NR)	NR	EACH	36.000
0254	626E00110	BARRIER REFLECTOR, TYPE 2 (ONE WAY) (WT: NR)	NR	EACH	164.000
0255	626E00116	BARRIER REFLECTOR, TYPE 5 (BI-DIRECTIONAL) (WT: NR)	NR	EACH	7.000
0256	626E00116	BARRIER REFLECTOR, TYPE 5 (ONE WAY) (WT: NR)	NR	EACH	204.000
0257	630E03100	GROUND MOUNTED SUPPORT, NO. 3 POST (WT: 42)	42	FT	1,424.500
0258	630E04100	GROUND MOUNTED SUPPORT, NO. 4 POST (WT: 42)	42	FT	64.000
0259	630E06400	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7 (WT: 42)	42	FT	38.800
0260	630E07000	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8X18 (WT: 42)	42	FT	21.000
0261	630E07600	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12 (WT: 42)	42	FT	44.800
0262	630E08000	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W12X30 (WT: 42)	42	FT	51.800
0263	630E08200	GROUND MOUNTED SUPPORT, PIPE (WT: 42)	42	EACH	8.000
0264	630E08600	SIGN POST REFLECTOR (WT: 42)	42	EACH	14.000
0265	630E09000	BREAKAWAY STRUCTURAL BEAM CONNECTION (WT: 42)	42	EACH	4.000
0266	630E72320	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 6 (WT: 42)	42	EACH	11.000
0267	630E72330	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 10 (WT: 42)	42	EACH	4.000
0268	630E72340	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 12 (WT: 42)	42	EACH	9.000
0269	630E72410	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 1 (WT: 42)	42	EACH	1.000
0270	630E72420	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 2 (WT: 42)	42	EACH	8.000
0271	630E79611	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED, AS PER PLAN (WT: 42)	42	EACH	35.000
0272	630E80100	SIGN, FLAT SHEET (WT: 42)	42	SF	1,290.800
0273	630E80200	SIGN, GROUND MOUNTED EXTRUSHEET (WT: 42)	42	SF	596.000
0274	630E80224	SIGN, OVERHEAD EXTRUSHEET (WT: 42)	42	SF	8,629.000
0275	630E84010	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50 (WT: 42)	42	EACH	14.000
0276	630E84500	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION (WT: 42)	42	EACH	10.000
0277	630E84510	RIGID OVERHEAD SIGN SUPPORT FOUNDATION (WT: 42)	42	EACH	26.000
0278	630E84511	RIGID OVERHEAD SIGN SUPPORT FOUNDATION, AS PER PLAN (WT: 42)	42	EACH	2.000
0279	630E84900	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (WT: NR)	NR	EACH	110.000
0280	630E85100	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION (WT: 42)	42	EACH	2.000
0281	630E85400	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL (WT: NR)	NR	EACH	33.000

0282	630E86002	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (WT: NR)	NR	EACH	111.000
0283	630E86102	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL (WT: NR)	NR	EACH	42.000
0284	630E86272	REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND DISPOSAL (WT: NR)	NR	EACH	9.000
0285	630E87400	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL (WT: NR)	NR	EACH	50.000
0286	630E89100	REMOVAL OF OVERHEAD SIGN SUPPORT AND REERECTION, TYPE TC-12.30 (WT: 42)	42	EACH	1.000
0287	630E89706	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30 (WT: NR)	NR	EACH	15.000
0288	630E89804	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115 (WT: NR)	NR	EACH	11.000
0289	630E97700	SIGNING, MISC.: SAFE SIGN BREAKAWAY SYSTEM (WT: 42)	42	EACH	1.000
0290	631E94490	REMOVAL, MISC.: DYNAMIC MESSAGE SIGN (WT: NR)	NR	EACH	3.000
0291	644E00720	CHEVRON MARKING (WT: 45)	45	FT	271.000
0292	644E01350	LANE REDUCTION ARROW (WT: 45)	45	EACH	13.000
0293	644E01410	WORD ON PAVEMENT, 96" (WT: 45)	45	EACH	2.000
0294	644E50100	PAVEMENT MARKING, MISC.: LANE ARROW, 72" (WT: 45)	45	EACH	8.000
0295	644E50300	PAVEMENT MARKING, MISC.: CHANNELIZING LINE, 10", WHITE (WT: 45)	45	FT	1,219.000
0296	644E50300	PAVEMENT MARKING, MISC.: EDGE LINE, 5", WHITE (WT: 45)	45	FT	1,343.000
0297	644E50300	PAVEMENT MARKING, MISC.: EDGE LINE, 5", YELLOW (WT: 45)	45	FT	1,343.000
0298	644E50300	PAVEMENT MARKING, MISC.: LANE LINE, 5" (WT: 45)	45	FT	1,343.000
0299	644E50300	PAVEMENT MARKING, MISC.: STOP LINE, 20", WHITE (WT: 45)	45	FT	72.000
0300	647E21012	SPEED MEASUREMENT MARKING, TYPE B125 (WT: 45)	45	EACH	8.000
0301	807E12010	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" (WT: 45)	45	MILE	1.000
0302	807E12110	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" (WT: 45)	45	MILE	1.000
0303	807E13010	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6" (WT: 45)	45	MILE	33.900
0304	807E13110	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6" (WT: 45)	45	MILE	39.800
0305	807E13310	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12" (WT: 45)	45	FT	12,993.000
0306	807E13410	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6" (WT: 45)	45	FT	14,600.000
0307	807E13430	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 12" (WT: 45)	45	FT	5,419.000
0308	850E10010	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) (WT: 45)	45	MILE	74.000
0309	850E10110	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) (WT: 45)	45	FT	14,600.000

0310	850E10130	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) (WT: 45)	45	FT	18,405.000
0311	850E20110	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) (WT: 45)	45	FT	10,177.000

#### Section 0009 TRAFFIC SURVEILLANCE

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0312		625E25402	CONDUIT, 2", 725.05 (WT: 43)	43	FT	36.000
0313		625E25502	CONDUIT, 3", 725.05 (WT: 43)	43	FT	22,360.000
0314		625E25900	CONDUIT, JACKED OR DRILLED, 3" (WT: 43)	43	FT	1,566.000
0315		625E25920	CONDUIT, MISC.: 2-3" CONDUIT BANK, CONCRETE ENCASED, AS PER PLAN (WT: 35)	35	FT	724.000
0316		625E25920	CONDUIT, MISC.: 3" FIBERGLASS CONDUIT ATTACHED TO STRUCTURE, AS PER PLAN (WT: 35)	35	FT	408.000
0317		625E29100	TRENCH, 36" DEEP (WT: 43)	43	FT	8,509.000
0318		625E30710	PULL BOX, 725.08, 32" (WT: 43)	43	EACH	27.000
0319		625E31500	MEDIAN PULL BOX (WT: 43)	43	EACH	9.000
0320		625E31510	PULL BOX REMOVED (WT: 43)	43	EACH	17.000
0321		632E29900	MESSENGER WIRE, 7 STRAND, 1/4" DIAMETER WITH ACCESSORIES (WT: 44)	44	FT	6,479.000
0322		632E62810	INTERCONNECT CABLE, MISC.: AERIAL FIBER OPTIC INSTALLATION (WT: 44)	44	FT	6,479.000
0323		632E62810	INTERCONNECT CABLE, MISC.: UNDERGROUND FIBER OPTIC INSTALLATION (WT: 44)	44	FT	18,866.000
0324		632E70400	CONDUIT RISER, 2" DIAMETER (WT: 44)	44	EACH	2.000
0325		632E89300	WOOD POLE, CLASS 7, 35' (WT: 44)	44	EACH	29.000
0326		804E15050	FIBER OPTIC CABLE, 288 FIBER AS PER PLAN (WT: 55)	55	FT	22,879.000
0327		804E35001	FUSION SPLICE, AS PER PLAN (WT: 55)	55	EACH	1,728.000
0328		804E37001	SPLICE ENCLOSURE, AS PER PLAN (WT: 55)	55	EACH	5.000
0329		804E98000	FIBER OPTIC CABLE, MISC.: REROUTED (WT: 55)	55	FT	1,250.000

Section 0010 S

10 TRAFFIC SIGNALS
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Line Alt	Item Code	Item Description	WТ	Unit	Quantity
0330	625E00450	CONNECTION, FUSED PULL APART (WT: 43)	43	EACH	2.000
0331	625E00460	CONNECTION, UNFUSED PULL APART (WT: 43)	43	EACH	2.000
0332	625E00480	CONNECTION, UNFUSED PERMANENT (WT: 43)	43	EACH	2.000
0333	625E22990	NO. 6 AWG 600 VOLT DISTRIBUTION CABLE (WT: 43)	43	FT	12,321.000
0334	625E23000	NO. 4 AWG 600 VOLT DISTRIBUTION CABLE (WT: 43)	43	FT	1,512.000
0335	625E23100	NO. 2 AWG 600 VOLT DISTRIBUTION CABLE (WT: 43)	43	FT	1,641.000
0336	625E23308	DISTRIBUTION CABLE, MISC.: 1 CONDUCTOR, NO. 1 AWG (WT: 43)	43	FT	4,479.000
1	1	Work Types - Page 12	I	I	

Work Types - Page 12

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0337	625E23308	DISTRIBUTION CABLE, MISC.: 1 CONDUCTOR, NO. 1/0 AWG (WT: 43)	43	FT	783.000
0338	625E23308	DISTRIBUTION CABLE, MISC.: 1 CONDUCTOR, NO. 12 AWG (WT: 43)	43	FT	435.000
0339	625E23308	DISTRIBUTION CABLE, MISC.: 1 CONDUCTOR, NO. 3 AWG (WT: 43)	43	FT	1,092.000
0340	625E25400	CONDUIT, 2", 725.04 (WT: 43)	43	FT	109.000
0341	625E25408	CONDUIT, 2", 725.051 (WT: 43)	43	FT	2,326.000
0342	625E25908	CONDUIT, JACKED OR DRILLED, 725.052, 2" (WT: 43)	43	FT	175.000
0343	625E25909	CONDUIT, JACKED OR DRILLED, 725.052, AS PER PLAN, 2" (WT: 43)	43	FT	162.000
0344	625E29010	TRENCH, 30" DEEP (WT: 43)	43	FT	4,103.000
0345	625E29931	MEDIAN JUNCTION BOX, AS PER PLAN (WT: 43)	43	EACH	28.000
0346	625E29940	BARRIER JUNCTION BOX (WT: 43)	43	EACH	7.000
0347	625E30700	PULL BOX, 725.08, 18" (WT: 43)	43	EACH	20.000
0348	625E30706	PULL BOX, 725.08, 24" (WT: 43)	43	EACH	1.000
0349	625E30710	PULL BOX, 725.08, 32" (WT: 43)	43	EACH	22.000
0350	625E30730	PULL BOX, 725.08, 48", TYPE 1 (WT: 43)	43	EACH	7.000
0351	625E31511	PULL BOX REMOVED, AS PER PLAN (WT: 43)	43	EACH	1.000
0352	625E32001	GROUND ROD, AS PER PLAN (WT: 43)	43	EACH	41.000
0353	625E34000	POWER SERVICE (WT: 43)	43	EACH	3.000
0354	625E34001	POWER SERVICE, AS PER PLAN (WT: 43)	43	EACH	2.000
0355	625E75550	DISTRIBUTION CABLE REMOVED (WT: NR)	NR	FT	160.000
0356	625E98000	LIGHTING, MISC.: STEP-DOWN TRANSFORMER AND SUPPORT (WT: 43)	43	EACH	2.000
0357	630E70021	OVERHEAD SIGN SUPPORT, DMS TRUSS, 115', AS PER PLAN (WT: 42)	42	EACH	1.000
0358	630E70045	OVERHEAD SIGN SUPPORT, DMS PEDESTAL, AS PER PLAN (WT: 42)	42	EACH	1.000
0359	630E70051	CATWALK, DMS TRUSS, AS PER PLAN (WT: 42)	42	EACH	1.000
0360	630E70061	CATWALK, DMS PEDESTAL, AS PER PLAN (WT: 42)	42	EACH	1.000
0361	630E70080	OVERHEAD SIGN SUPPORT FOUNDATION, DMS TRUSS (WT: 42)	42	EACH	1.000
0362	630E70082	OVERHEAD SIGN SUPPORT FOUNDATION, DMS PEDESTAL (WT: 42)	42	EACH	1.000
0363	631E92001	SIGN FLASHER ASSEMBLY, AS PER PLAN (WT: 43)	43	EACH	1.000
0364	631E97700	SIGN LIGHTING MISC.: MODIFICATION TO FIRE ALARM SYSTEM (WT: 43)	43	EACH	1.000
0365	632E90030	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: AERIAL POWER FEED (WT: 44)	44	FT	130.000
0366	633E67201	CONTROLLER WORK PAD, AS PER PLAN (WT: 44)	44	EACH	8.000
0367	638E07001	10" STEEL PIPE ENCASEMENT, BORED OR JACKED, AS PER PLAN (WT: 51)	51	FT	62.000
0368	804E15031	FIBER OPTIC CABLE, 72 FIBER, AS PER PLAN (WT: 55)	55	FT	43,467.000
0369	804E37700	FIBER OPTIC CABLE TESTING (WT: 55)	55	LS	1.000
0370	809E21000	MICRO-DUCT PATHWAY, HYBRID, 3 ? 14/10 AND 3 ? 1.25 IN (WT: 55)	55	FT	13,752.000

0371	809E24000	CONDUIT, MULTICELL, JACKED OR DRILLED 2" (WT: 55)	55	FT	1,395.000
0372	809E25000	CONDUIT, MULTICELL, MISC.: 4" (WT: 55)	55	FT	453.000
0373	809E60040	CCTV IP-CAMERA SYSTEM, QUAD MULTI-VIEW FIXED WITH PTZ (WT: 44)	44	EACH	6.000
0374	809E61002	CCTV CONCRETE POLE, 70 FEET (WT: 44)	44	EACH	4.000
0375	809E61090	CCTV LOWERING UNIT (WT: 44)	44	EACH	5.000
0376	809E63000	DYNAMIC MESSAGE SIGN (DMS), FULL-SIZE WALK-IN (WT: 44)	44	EACH	2.000
0377	809E65000	ITS CABINET - GROUND MOUNTED (WT: 44)	44	EACH	5.000
0378	809E65020	ITS CABINET - POWER DISTRIBUTION CABINET (PDC) (WT: 44)	44	EACH	1.000
0379	809E65040	ITS CABINET - DMS (WT: 44)	44	EACH	2.000
0380	809E65990	ITS DEVICE, MISC.: CCTV POLE, 70' CONCRETE, REMOVE AND RE-ERECT (WT: 44)	44	EACH	1.000
0381	809E65990	ITS DEVICE, MISC.: REMOVAL OF ANTENNA (WT: 44)	44	EACH	4.000
0382	809E65990	ITS DEVICE, MISC.: REMOVAL OF CCTV CAMERA (WT: 44)	44	EACH	3.000
0383	809E65990	ITS DEVICE, MISC.: REMOVAL OF CCTV LOWERING UNIT (WT: 44)	44	EACH	1.000
0384	809E65990	ITS DEVICE, MISC.: REMOVAL OF CONDUIT RISER (WT: 44)	44	EACH	1.000
0385	809E65990	ITS DEVICE, MISC.: REMOVAL OF POLE MOUNTED CABINET (WT: 44)	44	EACH	2.000
0386	809E65990	ITS DEVICE, MISC.: REMOVAL OF POLE MOUNTED DISCONNECT SWITCH (WT: 44)	44	EACH	1.000
0387	809E65990	ITS DEVICE, MISC.: REMOVE AND RE-INSTALL ITS CABINET GROUND MOUNTED (WT: 44)	44	EACH	1.000
0388	809E70000	MAINTAINING ITS DURING CONSTRUCTION (WT: 44)	44	LS	1.000

### Section 0011 MAINTENANCE OF TRAFFIC

Line A	Alt	Item Code	Item Description	WТ	Unit	Quantity
0389		614E11110	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE (WT: 39)	39	HOUR	1,000.000
0390		614E11630	INCREASED BARRIER DELINEATION (WT: 39)	39	FT	22,500.000
0391		614E12380	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	39	EACH	100.000
			(WT: 39)			
0392		614E12420	DETOUR SIGNING (WT: 39)	39	LS	1.000
0393		614E12484	WORK ZONE INCREASED PENALTIES SIGN (WT: 39)	39	EACH	25.000
0394		614E12500	REPLACEMENT SIGN (WT: 39)	39	EACH	20.000
0395		614E12600	REPLACEMENT DRUM (WT: 39)	39	EACH	200.000
0396		614E12801	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (WT: 39)	39	EACH	4,353.000
0397		614E13310	BARRIER REFLECTOR, TYPE 1 (ONE WAY) (WT: NR)	NR	EACH	1,940.000
0398		614E13312	BARRIER REFLECTOR, TYPE 2 (ONE WAY) (WT: NR)	NR	EACH	45.000
0399		614E13350	OBJECT MARKER, ONE WAY (WT: NR)	NR	EACH	1,985.000

Work Types - Page 14

0400	614E18601	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (WT: 39)	39	SNMT	46.000
0401	614E20056	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT (WT: 39)	39	MILE	25.750
0402	614E20100	WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT (WT: 39)	39	MILE	0.260
0403	614E22056	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WT: 39)	39	MILE	22.170
0404	614E22100	WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WT: 39)	39	MILE	0.510
0405	614E23110	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT (WT: 39)	39	FT	60,396.000
0406	614E23200	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT (WT: 39)	39	FT	500.000
0407	614E24102	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT (WT: 39)	39	FT	12,114.000
0408	615E10000	ROADS FOR MAINTAINING TRAFFIC (WT: 06)	06	LS	1.000
0409	615E20000	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A (WT: 10)	10	SY	222.000
0410	615E20001	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN (WT: 10)	10	SY	1,757.000
0411	615E25001	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 2 (WT: 10)	10	SY	3,000.000
0412	615E25001	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, TYPE 3 (WT: 10)	10	SY	4,000.000
0413	616E10000	WATER (WT: NR)	NR	MGAL	460.000
0414	622E41050	PORTABLE BARRIER, "Y" CONNECTOR (WT: 39)	39	EACH	6.000
0415	622E41100	PORTABLE BARRIER, UNANCHORED (WT: 39)	39	FT	103,442.000
0416	642E01312	LANE REDUCTION ARROW, TYPE 1 (WT: 45)	45	EACH	4.000
0417	808E18700	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY (WT: 39)	39	SNMT	265.000
0418	829E00100	WORK ZONE EGRESS WARNING SYSTEM (WT: 39)	39	SNMT	77.000

### Section 0012 RETAINING WALLS

Line Alt	Item Code	Item Description	WТ	Unit	Quantity
0419	509E10000	EPOXY COATED REINFORCING STEEL (WT: 23)	23	LB	37,067.000
0420	509E20001	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN (WT: 23)	23	LB	100.000
0421	510E10000	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT (WT: 34)	34	EACH	2,495.000
0422	511E46012	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING (WT: 38)	38	CY	305.000
0423	512E10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (WT: 57)	57	SY	1,683.000
0424	516E13600	1" PREFORMED EXPANSION JOINT FILLER (WT: NR)	NR	SF	629.000
0425	516E14600	STRUCTURAL JOINT OR JOINT SEALER, MISC.: HOT APPLIED JOINT SEALER PER CMS 705.04, WALL 16 (WT: 34)	34	FT	1,158.000
0426	516E14600	STRUCTURAL JOINT OR JOINT SEALER, MISC.: HOT APPLIED JOINT SEALER PER CMS 705.04, WALL 8 (WT: 34)	34	FT	1,214.000

### Section 0013 STRUCTURE OVER 20 FOOT SPAN

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0427		202E11201	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN A (WT: 19)	19	LS	1.000
0428		202E11201	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN B (WT: 19)	19	LS	1.000
0429		512E33010	TYPE 3 WATERPROOFING (WT: 40)	40	SY	106.000

Section 0014 STRUCTURE OVER 20 FOOT SPAN (FRA-00161-16.620 A)

Line	Alt	Item Code	Item Description	WТ	Unit	Quantity
0430		202E11203	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (WT: 19)	19	LS	1.000
0431		509E10000	EPOXY COATED REINFORCING STEEL (WT: 23)	23	LB	49,372.000
0432		509E20001	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN (WT: 23)	23	LB	40.000
0433		509E30020	NO. 4 GFRP DEFORMED BARS (WT: 23)	23	FT	5,346.000
0434		510E10001	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN (WT: 21)	21	EACH	10.000
0435		511E34445	CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN (WT: 21)	21	CY	147.000
0436		511E34448	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET) (WT: 21)	21	CY	45.000
0437		511E44110	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING (WT: 21)	21	CY	2.000
0438		512E10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (WT: 57)	57	SY	379.000
0439		512E44450	TYPE E WATERPROOFING (WT: 40)	40	SY	11.000
0440		513E10200	STRUCTURAL STEEL MEMBERS, LEVEL UF (WT: 24)	24	LB	553.000
0441		514E00060	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT (WT: 26)	26	SF	65.000
0442		514E00067	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN (WT: 26)	26	SF	65.000
0443		514E21001	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (WT: 26)	26	LS	1.000
0444		514E27702	FIELD PAINTING, MISC.: EPOXY COATING REPAIR OF EXISTING EPOXY COATED REINFORCING STEEL (WT: 26)	26	EACH	1,014.000
0445		516E11211	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN (WT: 27)	27	FT	34.000
0446		516E13600	1" PREFORMED EXPANSION JOINT FILLER (WT: NR)	NR	SF	27.000
0447		516E14600	STRUCTURAL JOINT OR JOINT SEALER, MISC.: HOT APPLIED JOINT SEALER PER CMS 705.04 (WT: 34)	34	FT	74.000
0448		516E14600	STRUCTURAL JOINT OR JOINT SEALER, MISC.: STRIP SEAL (WT: 34)	34	FT	146.000

## Section 0015 STRUCTURE OVER 20 FOOT SPAN (FRA-00161-16.590 B)

Line	Alt	Item Code	Item Description	WТ	Unit	Quantity
0449		202E11203	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (WT: 19)	19	LS	1.000
0450		254E01010	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE (1 1/2" THICK) (WT: 13)	13	SY	14.000
0451		254E01010	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE (1/4" THICK) (WT: 13)	13	SY	22.000
0452		509E10000	EPOXY COATED REINFORCING STEEL (WT: 23)	23	LB	55,537.000
0453		509E20001	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN (WT: 23)	23	LB	40.000
0454		509E30020	NO. 4 GFRP DEFORMED BARS (WT: 23)	23	FT	5,521.000
0455		510E10001	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN (WT: 21)	21	EACH	10.000
0456		511E34445	CLASS QC2 CONCRETE, BRIDGE DECK, AS PER PLAN (WT: 21)	21	CY	146.000
0457		511E34448	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET) (WT: 21)	21	CY	45.000
0458		511E44110	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING (WT: 21)	21	CY	3.000
0459		512E10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (WT: 57)	57	SY	385.000
0460		512E44450	TYPE E WATERPROOFING (WT: 40)	40	SY	15.000
0461		513E10200	STRUCTURAL STEEL MEMBERS, LEVEL UF (WT: 24)	24	LB	554.000
0462		514E00060	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT (WT: 26)	26	SF	64.000
0463		514E00067	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN (WT: 26)	26	SF	64.000
0464		514E21001	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (WT: 26)	26	LS	1.000
0465		514E27702	FIELD PAINTING, MISC.: EPOXY COATING REPAIR OF EXISTING EPOXY COATED REINFORCING STEEL (WT: 26)	26	EACH	1,594.000
0466		516E10000	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL (WT: 27)	27	FT	16.000
0467		516E11211	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN (WT: 27)	27	FT	34.000
0468		516E13600	1" PREFORMED EXPANSION JOINT FILLER (WT: NR)	NR	SF	26.000
0469		516E14600	STRUCTURAL JOINT OR JOINT SEALER, MISC.: HOT APPLIED JOINT SEALER PER CMS 705.04 (WT: 34)	34	FT	59.000
0470		516E14600	STRUCTURAL JOINT OR JOINT SEALER, MISC.: STRIP SEAL (WT: 34)	34	FT	148.000
0471		847E10201	SUPERPLASTICIZED DENSE CONCRETE OVERLAY, AS PER PLAN (1 1/2" THICK) (WT: 29)	29	SY	35.000
0472		847E20201	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN (WT: 29)	29	CY	2.000
0473		847E30000	TEST SLAB (WT: 29)	29	LS	1.000
0474		847E50000	HAND CHIPPING (WT: 29)	29	SY	2.000

Work Types - Page 17

## Section 0016 STRUCTURE OVER 20 FOOT SPAN (FRA-00161-18.600 L&R)

Line	Alt	Item Code	Item Description	wт	Unit	Quantity
0475		201E11001	CLEARING AND GRUBBING, AS PER PLAN (WT: 01)	01	LS	1.000
0476		202E11203	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (WT: 19)	19	LS	1.000
0477		202E22901	APPROACH SLAB REMOVED, AS PER PLAN (WT: NR)	NR	SY	34.000
0478		503E11101	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (WT: 21)	21	LS	1.000
0479		503E21301	UNCLASSIFIED EXCAVATION, AS PER PLAN (WT: 21)	21	LS	1.000
0480		505E11100	PILE DRIVING EQUIPMENT MOBILIZATION (WT: NR)	NR	LS	1.000
0481		507E00500	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN (WT: 53)	53	FT	1,050.000
0482		507E00551	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN (WT: 53)	53	FT	1,190.000
0483		507E93301	STEEL POINTS OR SHOES, AS PER PLAN (WT: 53)	53	EACH	28.000
0484		509E10000	EPOXY COATED REINFORCING STEEL (WT: 23)	23	LB	67,294.000
0485		509E20001	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN (WT: 23)	23	LB	792.000
0486		509E25000	UNCOATED REINFORCING STEEL (WT: 23)	23	LB	560.000
0487		509E30020	NO. 4 GFRP DEFORMED BARS (WT: 23)	23	FT	3,713.000
0488		510E10001	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN (WT: 21)	21	EACH	114.000
0489		511E34446	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (WT: 21)	21	CY	133.000
0490		511E34450	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) (WT: 21)	21	CY	37.000
0491		511E41012	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS (WT: 21)	21	CY	12.000
0492		511E44112	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING (WT: 21)	21	CY	69.000
0493		511E46512	CLASS QC1 CONCRETE WITH QC/QA, FOOTING (WT: 21)	21	CY	67.000
0494		512E10050	SEALING OF CONCRETE SURFACES (NON-EPOXY) (WT: 57)	57	SY	246.000
0495		512E10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (WT: 57)	57	SY	128.000
0496		512E33000	TYPE 2 WATERPROOFING (WT: 40)	40	SY	26.000
0497		512E74000	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES (WT: NR)	NR	SY	5.000
0498		513E10281	STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN (WT: 24)	24	LB	42,400.000
0499		513E20000	WELDED STUD SHEAR CONNECTORS (WT: 25)	25	EACH	1,332.000
0500		514E00050	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL (WT: 26)	26	SF	203.000
0501		514E00056	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT (WT: 26)	26	SF	203.000
0502		514E00060	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT (WT: 26)	26	SF	5,133.000

Work Types - Page 18

#### 0503 514E00066 FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (WT: 26) SF 5.133.000 26 0504 514E00504 GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL (WT: 26) 26 MNHR 1.000 2.000 0505 514E10000 FINAL INSPECTION REPAIR (WT: 26) 26 EACH 0506 516E11901 HORIZONTAL EXTENSION OF STRUCTURAL EXPANSION JOINT, AS PER PLAN 27 FT 46.000 (WT: 27) 0507 516E13600 1" PREFORMED EXPANSION JOINT FILLER (WT: NR) NR SF 74.000 0508 ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE EACH 2.000 516E44201 21 (NEOPRENE), AS PER PLAN (16"x21"x3.273" WITH A 17"x29"xVARIES LOAD PLATE) (WT: 21) 0509 ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE EACH 516E44301 21 2.000 (NEOPRENE), AS PER PLAN (13.5"x14"x4.232" WITH A 14.5"x15"xVARIES LOAD PLATE) (WT: 21) 0510 516E44301 ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE 21 EACH 2.000 (NEOPRENE), AS PER PLAN (13.5"x15.5"x4.482" WITH A 14.5"x16.5"xVARIES LOAD PLATE) (WT: 21) CY 0511 518E21200 POROUS BACKFILL WITH GEOTEXTILE FABRIC (WT: 21) 21 66.000 0512 518E40000 6" PERFORATED CORRUGATED PLASTIC PIPE (WT: NR) NR FT 40.000 0513 518E40010 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS NR FT 17.000 (WT: NR) 0514 SF 519E11101 PATCHING CONCRETE STRUCTURE, AS PER PLAN (WT: 29) 29 32.000 0515 NR EACH 523E20000 DYNAMIC LOAD TESTING (WT: NR) 3.000 0516 SY 526E25010 REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15") (WT: 29) 29 132.000 0517 526E90010 29 FT 48.000 TYPE A INSTALLATION (WT: 29) 0518 601E20001 CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN (WT: 35) 35 SY 50.000

### Project Number: 230321

Section 0017 STRUCTURE OVER 20 FOOT SPAN (FRA-00161-19.090 L&R)

Line	Alt	Item Code	Item Description	wт	Unit	Quantity
0519		202E11203	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (WT: 19)	19	LS	1.000
0520		202E22901	APPROACH SLAB REMOVED, AS PER PLAN (WT: NR)	NR	SY	34.000
0521		503E11100	COFFERDAMS AND EXCAVATION BRACING (WT: 20)	20	LS	1.000
0522		503E21101	UNCLASSIFIED EXCAVATION, AS PER PLAN (WT: 20)	20	CY	105.000
0523		505E11100	PILE DRIVING EQUIPMENT MOBILIZATION (WT: NR)	NR	LS	1.000
0524		507E00600	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN (WT: 53)	53	FT	760.000
0525		507E00651	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN (WT: 53)	53	FT	830.000
0526		507E71200	SPECIAL - PILE ENCASEMENT (WT: 53)	53	FT	155.000

0527	509E10000	EPOXY COATED REINFORCING STEEL (WT: 23)	23	LB	57,065.000
0528	509E20001	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN (WT: 23)	23	LB	96.000
0529	509E25000	UNCOATED REINFORCING STEEL (WT: 23)	23	LB	286.000
0530	509E30020	509E30020 NO. 4 GFRP DEFORMED BARS (WT: 23) 23		FT	3,764.000
0531	510E10001 DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN (WT: 2)		21	EACH	66.000
0532	511E32212	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE (WT: 20)	20	CY	163.000
0533	511E34450	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) (WT: 21)	21	CY	44.000
0534	511E43212	CLASS QC1 CONCRETE WITH QC/QA, PIER (WT: 20)	20	CY	12.000
0535	511E43512	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING (WT: 20)	20	CY	25.000
0536	512E10050	SEALING OF CONCRETE SURFACES (NON-EPOXY) (WT: 57)	57	SY	378.000
0537	512E33000	TYPE 2 WATERPROOFING (WT: 40)	40	SY	10.000
0538	516E13600	1" PREFORMED EXPANSION JOINT FILLER (WT: NR)	NR	SF	61.000
0539	518E21200	POROUS BACKFILL WITH GEOTEXTILE FABRIC (WT: 21)	21	CY	9.000
0540	519E11101	PATCHING CONCRETE STRUCTURE, AS PER PLAN (WT: 29)	29	SF	17.000
0541	523E20000	DYNAMIC LOAD TESTING (WT: NR)	NR	EACH	3.000
0542	526E25010	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15") (WT: 29)	29	SY	180.000
0543	526E90010	TYPE A INSTALLATION (WT: 29)	29	FT	66.000
0544	601E32201	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER, AS PER PLAN (WT: 35)	35	CY	90.000
0545	846E00110	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM (WT: 27)	27	CF	25.000

Section 0018 STRUCTURE OVER 20 FOOT SPAN (FRA-00161-21.730 L&R)

Line Alt	Item Code	Item Description	WT	Unit	Quantity
0546	201E11001	CLEARING AND GRUBBING, AS PER PLAN (WT: 01)	01	LS	1.000
0547	202E11203	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (WT: 19)	19	LS	1.000
0548	202E22901	APPROACH SLAB REMOVED, AS PER PLAN (WT: NR)	NR	SY	68.000
0549	503E11101	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN (WT: 21)	21	LS	1.000
0550	503E21101	UNCLASSIFIED EXCAVATION, AS PER PLAN (WT: 20)	20	CY	416.000
0551	505E11100	PILE DRIVING EQUIPMENT MOBILIZATION (WT: NR)	NR	LS	1.000
0552	507E00500	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN (WT: 53)	53	FT	1,520.000
0553	507E00551	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN (WT: 53)	53	FT	1,710.000
0554	507E93301	STEEL POINTS OR SHOES, AS PER PLAN (WT: 53)	53	EACH	38.000
0555	509E10000	EPOXY COATED REINFORCING STEEL (WT: 23)	23	LB	124,294.000

Work Types - Page 20

0556	509E20001	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN (WT: 23)	23	LB	580.000
0557	509E25000	UNCOATED REINFORCING STEEL (WT: 23)	23	LB	1,308.000
0558	509E30020	NO. 4 GFRP DEFORMED BARS (WT: 23)	23	FT	6,277.000
0559	510E10001	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN (WT: 21)	21	EACH	264.000
0560	511E34446	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (WT: 21)	21	CY	221.000
0561	511E34450	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) (WT: 21)	21	CY	66.000
0562	511E41012	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS (WT: 21)	21	CY	19.000
0563	511E44113	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN (WT: 21)	21	CY	171.000
0564	511E46512	CLASS QC1 CONCRETE WITH QC/QA, FOOTING (WT: 21)	21	CY	112.000
0565	512E10050	SEALING OF CONCRETE SURFACES (NON-EPOXY) (WT: 57)	57	SY	335.000
0566	512E10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (WT: 57)	57	SY	348.000
0567	512E33000	TYPE 2 WATERPROOFING (WT: 40)	40	SY	40.000
0568	512E74000	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES (WT: NR)	NR	SY	20.000
0569	513E10261	STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN (WT: 24)	24	LB	144,000.000
0570	513E20000	WELDED STUD SHEAR CONNECTORS (WT: 25)	25	EACH	2,364.000
0571	514E00050	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL (WT: 26)	26	SF	460.000
0572	514E00056	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT (WT: 26)	26	SF	460.000
0573	514E00060	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT (WT: 26)	26	SF	9,040.000
0574	514E00066	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT (WT: 26)	26	SF	9,040.000
0575	514E00504	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL (WT: 26)	26	MNHR	2.000
0576	514E10000	FINAL INSPECTION REPAIR (WT: 26)	26	EACH	2.000
0577	516E11901	HORIZONTAL EXTENSION OF STRUCTURAL EXPANSION JOINT, AS PER PLAN (WT: 27)	27	FT	97.000
0578	516E13600	1" PREFORMED EXPANSION JOINT FILLER (WT: NR)	NR	SF	94.000
0579	516E13900	2" PREFORMED EXPANSION JOINT FILLER (WT: NR)	NR	SF	9.000
0580	516E44101	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11" x 13" x 2.17" WITH 12" x 14" x 1.5" LOAD PLATE) (WT: 21)	21	EACH	8.000
0581	516E44101	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (23" x 11.5" x 2.65" WITH 24" x 24.5" x 1.5" LOAD PLATE) (WT: 21)	21	EACH	4.000
0582	518E21200	POROUS BACKFILL WITH GEOTEXTILE FABRIC (WT: 21)	21	CY	124.000
0583	518E40000	6" PERFORATED CORRUGATED PLASTIC PIPE (WT: NR)	NR	FT	94.000

0584	518E40010	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS (WT: NR)	NR	FT	32.000
0585	519E11101	PATCHING CONCRETE STRUCTURE, AS PER PLAN (WT: 29)	29	SF	10.000
0586	523E20000	DYNAMIC LOAD TESTING (WT: NR)	NR	EACH	1.000
0587	524E94802	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK (WT: 28)	28	FT	94.000
0588	526E25010	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15") (WT: 29)	29	SY	264.000
0589	526E90010	TYPE A INSTALLATION (WT: 29)	29	FT	100.000
0590	530E00200	SPECIAL - STRUCTURES, MISC.: PRECONSTRUCTION CONDITION SURVEY (WT: NR)	NR	LS	1.000
0591	530E00200	SPECIAL - STRUCTURES, MISC.: VIBRATION MONITORING (WT: NR)	NR	LS	1.000
0592	601E20000	CRUSHED AGGREGATE SLOPE PROTECTION (WT: 35)	35	SY	80.000
0593	601E20001	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN (WT: 35)	35	SY	26.000
0594	848E10200	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (1.75" THICK) (WT: 29)	29	SY	609.000
0595	848E20000	SURFACE PREPARATION USING HYDRODEMOLITION (WT: 30)	30	SY	609.000
0596	848E30200	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY (WT: 29)	29	CY	11.000
0597	848E50000	HAND CHIPPING (WT: 29)	29	SY	20.000
0598	848E50100	TEST SLAB (WT: 29)	29	LS	1.000
0599	894E10000	THERMAL INTEGRITY PROFILING (TIP) TEST (WT: 28)	28	EACH	2.000

Section 0019 INCIDENTALS

Line A	lt Iten	n Code	Item Description	WT	Unit	Quantity
0600	100	E51100	DEPARTMENT'S SHARE OF THE DISPUTE RESOLUTION BOARD (WT: NR)	NR	EACH	82,000.000
0601	1031	E05000	PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND (WT: NR)	NR	LS	1.000
0602	108	E10000	CPM PROGRESS SCHEDULE (WT: NR)	NR	LS	1.000
0603	111	E10100	SPECIAL - DEPARTMENTS SHARE FACILITATED PARTNERING COSTS (WT: NR)	NR	EACH	7,750.000
0604	614	E11000	MAINTAINING TRAFFIC (WT: 39)	39	LS	1.000
0605	619	E16020	FIELD OFFICE, TYPE C (WT: NR)	NR	MNTH	24.000
0606	623	E10000	CONSTRUCTION LAYOUT STAKES AND SURVEYING (WT: NR)	NR	LS	1.000
0607	623	E11000	PROVIDING ELECTRONIC INSTRUMENTATION (WT: NR)	NR	LS	1.000
0608	624	E10000	MOBILIZATION (WT: NR)	NR	LS	1.000