

128

November 8, 2024 Letting

Notice to Bidders, Specifications and Proposal



**Illinois Department
of Transportation**

**Contract No. 91599
MCLEAN County
Section 16-00360-00-PV (Bloomington)
Route FAU 6371 (Hamilton Road)
District 5 Construction Funds**

Prepared by

S

Checked by

(Printed by authority of the State of Illinois)



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. November 8, 2024 prevailing time at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 91599
MCLEAN County
Section 16-00360-00-PV (Bloomington)
Route FAU 6371 (Hamilton Road)
District 5 Construction Funds**

HMA Resurfacing, Traffic Signal Improvements, Curb & Gutter, Storm Sewer, Sidewalks, Multi-Use Path, ADA Ramps, and Watermains on Hamilton Road from Commerce Parkway to US 150 in Bloomington.

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Omer Osman,
Secretary

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2024

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-22) (Revised 1-1-24)

SUPPLEMENTAL SPECIFICATIONS

<u>Std. Spec. Sec.</u>		<u>Page No.</u>
202	Earth and Rock Excavation	1
204	Borrow and Furnished Excavation	2
207	Porous Granular Embankment	3
211	Topsoil and Compost	4
407	Hot-Mix Asphalt Pavement (Full-Depth)	5
420	Portland Cement Concrete Pavement	6
502	Excavation for Structures	7
509	Metal Railings	8
540	Box Culverts	9
542	Pipe Culverts	29
586	Granular Backfill for Structures	34
630	Steel Plate Beam Guardrail	35
644	High Tension Cable Median Barrier	36
665	Woven Wire Fence	37
782	Reflectors	38
801	Electrical Requirements	40
821	Roadway Luminaires	43
1003	Fine Aggregates	44
1004	Coarse Aggregates	45
1010	Finely Divided Minerals	46
1020	Portland Cement Concrete	47
1030	Hot-Mix Asphalt	48
1061	Waterproofing Membrane System	49
1067	Luminaire	50
1097	Reflectors	57

RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

<u>CHECK SHEET #</u>		<u>PAGE NO.</u>
1	<input type="checkbox"/> Additional State Requirements for Federal-Aid Construction Contracts	59
2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts)	62
3	<input checked="" type="checkbox"/> EEO	63
4	<input checked="" type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts	73
5	<input checked="" type="checkbox"/> Required Provisions - State Contracts	78
6	<input type="checkbox"/> Asbestos Bearing Pad Removal	84
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	85
8	<input type="checkbox"/> Temporary Stream Crossings and In-Stream Work Pads	86
9	<input checked="" type="checkbox"/> Construction Layout Stakes	87
10	<input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing	90
11	<input type="checkbox"/> Subsealing of Concrete Pavements	92
12	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction	96
13	<input type="checkbox"/> Pavement and Shoulder Resurfacing	98
14	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal	99
15	<input type="checkbox"/> Polymer Concrete	101
16	Reserved	103
17	<input type="checkbox"/> Bicycle Racks	104
18	<input type="checkbox"/> Temporary Portable Bridge Traffic Signals	106
19	<input type="checkbox"/> Nighttime Inspection of Roadway Lighting	108
20	<input type="checkbox"/> English Substitution of Metric Bolts	109
21	<input checked="" type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete	110
22	<input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant	111
23	<input checked="" type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures	119
24	Reserved	135
25	Reserved	136
26	<input type="checkbox"/> Temporary Raised Pavement Markers	137
27	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam	138
28	<input type="checkbox"/> Portland Cement Concrete Inlay or Overlay	141
29	<input type="checkbox"/> Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	145
30	<input type="checkbox"/> Longitudinal Joint and Crack Patching	148
31	<input checked="" type="checkbox"/> Concrete Mix Design – Department Provided	150
32	<input type="checkbox"/> Station Numbers in Pavements or Overlays	151

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

Table of Contents

<u>CHECK SHEET #</u>		<u>PAGE NO.</u>
LRS 1	Reserved	153
LRS 2	<input type="checkbox"/> Furnished Excavation	154
LRS 3	<input checked="" type="checkbox"/> Work Zone Traffic Control Surveillance	155
LRS 4	<input checked="" type="checkbox"/> Flaggers in Work Zones	156
LRS 5	<input type="checkbox"/> Contract Claims	157
LRS 6	<input type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals	158
LRS 7	<input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals	164
LRS 8	Reserved	170
LRS 9	<input type="checkbox"/> Bituminous Surface Treatments	171
LRS 10	Reserved	175
LRS 11	<input type="checkbox"/> Employment Practices	176
LRS 12	<input type="checkbox"/> Wages of Employees on Public Works	178
LRS 13	<input type="checkbox"/> Selection of Labor	180
LRS 14	<input type="checkbox"/> Paving Brick and Concrete Paver Pavements and Sidewalks	181
LRS 15	<input type="checkbox"/> Partial Payments	184
LRS 16	<input type="checkbox"/> Protests on Local Lettings	185
LRS 17	<input type="checkbox"/> Substance Abuse Prevention Program	186
LRS 18	<input type="checkbox"/> Multigrade Cold Mix Asphalt	187
LRS 19	<input type="checkbox"/> Reflective Crack Control Treatment	188

TABLE OF CONTENTS

<u>ITEM</u>	<u>PAGE NO.</u>
LOCATION OF PROJECT	1
DESCRIPTION OF PROJECT.....	1
DATE OF COMPLETION (PLUS WORKING DAYS).....	1
WORKING RESTRICTIONS.....	1
COOPERATION AND COORDINATION WITH OTHER CONTRACTORS.....	2
X7010216 TRAFFIC CONTROL AND PROTECTION (SPECIAL).....	2
40201000 AGGREGATE FOR TEMPORARY ACCESS.....	2
Z0007430 TEMPORARY SIDEWALK.....	2
STATUS OF UTILITIES/UTILITIES TO BE ADJUSTED.....	9
COOPERATION WITH UTILITY COMPANIES	10
NOTIFICATION OF UTILITIES PRIOR TO CONSTRUCTION	10
UTILITY COORDINATION	11
SALVAGEABLE MATERIALS	11
CONCRETE CURB, COMBINATION CONCRETE CURB AND GUTTER, AND CONCRETE MEDIANS.....	11
21000300 GRANULAR EMBANKMENT, SPECIAL.....	12
35300210 PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2"	12
44000100 PAVEMENT REMOVAL	12
44201341 CLASS C PATCHES, TYPE II, 9 INCH	12
44201349 CLASS C PATCHES, TYPE I, 10 INCH	13
44201353 CLASS C PATCHES, TYPE II, 10 INCH	13
44201357 CLASS C PATCHES, TYPE III, 10 INCH	13
44201359 CLASS C PATCHES, TYPE IV, 10 INCH.....	13
55100300 STORM SEWER REMOVAL 8"	13
55100500 STORM SEWER REMOVAL 12"	13
55100700 STORM SEWER REMOVAL 15"	13
55101200 STORM SEWER REMOVAL 24"	13
55101400 STORM SEWER REMOVAL 30"	13
55101600 STORM SEWER REMOVAL 36"	13

66400405	CHAIN LINK FENCE, 7'	14
X0324056	REMOVAL OF EXISTING WOOD BOLLARDS.....	15
X2011000	TEMPORARY FENCE (SPECIAL)	15
X6026050	SANITARY MANHOLES TO BE ADJUSTED	16
X6050205	FILLING EXISTING STORM SEWERS.....	16
X6061815	COMBINATION CONCRETE CURB AND GUTTER, TYPE M (SPECIAL)	17
X6061900	CONCRETE MEDIAN, TYPE SB-6.12 (SPECIAL).....	17
X6350108	FLEXIBLE DELINEATORS.....	17
X6640104	FENCE REMOVAL	18
X7010016	BARRICADES, TYPE III.....	18
X8140115	HANDHOLE TO BE ADJUSTED	18
XX005569	MAILBOX REMOVAL AND REINSTALLATION	19
X4406812	PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1 1/2"	19
X4240118	PORTLAND CEMENT CONCRETE SIDEWALK CURB.....	20
	DRAINAGE SPECIFICATIONS.....	21
	UTILITY TRENCHES AND EXCAVATIONS.....	21
	CONNECTING INTO EXISTING MANHOLES	21
	EXISTING SEWERS AND STRUCTURES TO BE PLUGGED.....	21
	HEAVY EQUIPMENT OPERATION DURING CONSTRUCTION.....	21
	MANHOLE STEPS.....	21
20800150	TRENCH BACKFILL	22
59300100	CONTROLLED LOW-STRENGTH MATERIAL.....	22
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	22
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	22
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	22
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	22
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	22
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	22
550A0400	STORM SEWERS, CLASS A, TYPE 2 21"	22
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	22
550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	22
550A4000	STORM SEWERS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 18".....	22

60218300	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	23
60221000	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	23
60224445	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, OPEN LID	23
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE.....	23
61140000	STORM SEWERS (SPECIAL) 8"	23
X6020076	INLETS, SPECIAL, WITH SPECIAL FRAME AND GRATE.....	23
X6022230	MANHOLES, TYPE A, 4'-DIA, WITH SPECIAL FRAME AND GRATE.....	24
X6022930	MANHOLES, TYPE A, 5'-DIA, WITH SPECIAL FRAME AND GRATE.....	24
Z0056648	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	24
Z0056650	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 15"	24
XX008979	CONCRETE COLLAR.....	25
TRAFFIC SIGNAL SPECIFICATIONS.....		26
SIGNAL HEAD, LED.....		26
88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED.....	26
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA	26
ELECTRIC CABLE IN CONDUIT SIGNAL		26
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1/C 27	
87600100	PEDESTRIAN PUSH-BUTTON POST, TYPE 1.....	27
87900200	DRILL EXISTING HANDHOLE	27
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	28
89502200	MODIFY EXISTING CONTROLLER	28
X8891202	WIDE AREA VIDEO VEHICLE DETECTION SYSTEM COMPLETE.....	28
X8870300	EMERGENCY VEHICLE PRIORITY SYSTEM	31
WATER MAIN SPECIFICATIONS.....		33
GENERAL REQUIREMENTS.....		33
56105200	WATER VALVES 12"	33
56109210	WATER VALVES TO BE ADJUSTED	35
56400500	FIRE HYDRANTS TO BE REMOVED.....	36
56400820	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX.....	37
X5610024	DUCTILE IRON WATER MAIN 6" RESTRAINED JOINT TYPE.....	39
X1200078	DUCTILE IRON WATER MAIN 12" RESTRAINED JOINT TYPE.....	39
X5610752	WATER MAIN LINE STOP 12".....	51
X5630712	CONNECTION TO EXISTING WATER MAIN 12"	51

XX005106	PVC CASING PIPE 18"	52
XX008839	WATER MAIN TO BE ABANDONED.....	54
XX008959	DUCTILE IRON WATER MAIN (SPECIAL).....	54
IDOT DISTRICT 5 SPECIAL PROVISIONS.....		56
ADJUSTING OF FRAMES AND GRATES OF DRAINAGE AND UTILITY STRUCTURES		56
EMBANKMENT		56
HAND GRADING		57
PAVEMENT MARKING		57
PNEUMATIC-TIRED ROLLER FOR HOT-MIX ASPHALT		57
SEEDING AND ESTABLISHMENT OF VEGETATION		57
STRINGLINE.....		58
TEMPORARY DRAINAGE INTO PROPOSED DRAINAGE STRUCTURES.....		58
TRAFFIC CONTROL REMOVAL ON MULTI-LANE RESURFACING SECTIONS.....		58
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES		59
ENVIRONMENTAL PERMITTING		60
NPDES PERMIT		60
SWPPP.....		61
INSURANCE (LR 107-4)		69
CONSTRUCTION AND MAINTENANCE SIGNS (LR 702).....		70
LOCAL QUALITY ASSURANCE/QUALITY MANAGEMENT QC/QA (LR 1030-2).....		71
IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING		73

BDE SPECIAL PROVISIONS

The following special provisions indicated by an "X" are applicable to this contract. An * indicates a new or revised special provision for the letting.

<u>File Name</u>	<u>Pg.</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099	75	<input checked="" type="checkbox"/> Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
80274	77	<input checked="" type="checkbox"/> Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
80192	80	<input checked="" type="checkbox"/> Automated Flagger Assistance Device	Jan. 1, 2008	April 1, 2023
80173	81	<input checked="" type="checkbox"/> Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80426		<input type="checkbox"/> Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
80241		<input type="checkbox"/> Bridge Demolition Debris	July 1, 2009	
50531		<input type="checkbox"/> Building Removal	Sept. 1, 1990	Aug. 1, 2022
50261		<input type="checkbox"/> Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
80449	83	<input checked="" type="checkbox"/> Cement, Type II	Aug. 1, 2023	
80384	84	<input checked="" type="checkbox"/> Compensable Delay Costs	June 2, 2017	April 1, 2019
80198		<input type="checkbox"/> Completion Date (via calendar days)	April 1, 2008	
80199		<input type="checkbox"/> Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80453		<input type="checkbox"/> Concrete Sealer	Nov. 1, 2023	
80261		<input type="checkbox"/> Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80434		<input type="checkbox"/> Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
80029	88	<input checked="" type="checkbox"/> Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
80229		<input type="checkbox"/> Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
80452		<input type="checkbox"/> Full Lane Sealant Waterproofing System	Nov. 1, 2023	
80447		<input type="checkbox"/> Grading and Shaping Ditches	Jan 1, 2023	
80433		<input type="checkbox"/> Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
80443		<input type="checkbox"/> High Tension Cable Median Barrier Removal	April 1, 2022	
80456	98	<input checked="" type="checkbox"/> Hot-Mix Asphalt	Jan. 1, 2024	
80446	99	<input checked="" type="checkbox"/> Hot-Mix Asphalt – Longitudinal Joint Sealant	Nov. 1, 2022	Aug. 1, 2023
80438	101	<input checked="" type="checkbox"/> Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	April 2, 2024
80045		<input type="checkbox"/> Material Transfer Device	June 15, 1999	Jan. 1, 2022
80450		<input type="checkbox"/> Mechanically Stabilized Earth Retaining Walls	Aug. 1, 2023	
80441	102	<input checked="" type="checkbox"/> Performance Graded Asphalt Binder	Jan 1, 2023	
80451	107	<input checked="" type="checkbox"/> Portland Cement Concrete	Aug. 1, 2023	
80459		<input type="checkbox"/> Preformed Plastic Pavement Marking	June 2, 2024	
34261		<input type="checkbox"/> Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
80455	108	<input checked="" type="checkbox"/> Removal and Disposal of Regulated Substances	Jan. 1, 2024	April 1, 2024
80445	110	<input checked="" type="checkbox"/> Seeding	Nov. 1, 2022	
80457	116	<input checked="" type="checkbox"/> Short Term and Temporary Pavement Markings	April 1, 2024	April 2, 2024
80448		<input type="checkbox"/> Source of Supply and Quality Requirements	Jan. 2, 2023	
80340		<input type="checkbox"/> Speed Display Trailer	April 2, 2014	Jan. 1, 2022
80127	120	<input checked="" type="checkbox"/> Steel Cost Adjustment	April 2, 2014	Jan. 1, 2022
80397	123	<input checked="" type="checkbox"/> Subcontractor and DBE Payment Reporting	April 2, 2018	
80391	124	<input checked="" type="checkbox"/> Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
80437	125	<input checked="" type="checkbox"/> Submission of Payroll Records	April 1, 2021	Nov. 2, 2023
80435	127	<input checked="" type="checkbox"/> Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2023
80410		<input type="checkbox"/> Traffic Spotters	Jan. 1, 2019	
20338	133	<input checked="" type="checkbox"/> Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
80429		<input type="checkbox"/> Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
80439	136	<input checked="" type="checkbox"/> Vehicle and Equipment Warning Lights	Nov. 1, 2021	Nov. 1, 2022
80458		<input type="checkbox"/> Waterproofing Membrane System	Aug. 1, 2024	
80302	137	<input checked="" type="checkbox"/> Weekly DBE Trucking Reports	June 2, 2012	Nov. 1, 2021
80454		<input type="checkbox"/> Wood Sign Support	Nov. 1, 2023	
80427	138	<input checked="" type="checkbox"/> Work Zone Traffic Control Devices	Mar. 2, 2020	
80071		<input type="checkbox"/> Working Days	Jan. 1, 2002	

SPECIAL PROVISIONS

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction”, Adopted January 1, 2022, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, and the “Manual of Test Procedures of Materials” in effect on the date of invitation of bids, and the “Supplemental Specifications and Recurring Special Provisions” indicated on the Check Sheet included herein which apply to and govern the construction of Hamilton Road, Project XAYB(639), Section 16-00360-00-PV, in McLean County and in case of conflict with any parts, or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

This project is located on Hamilton Road, Commerce Parkway, and US Route 150 (Morrissey Drive) in McLean County:

From approximately the intersection of Commerce Parkway and Hamilton Road to approximately 630 feet east of the intersection of Hamilton Road and US Route 150 (Morrissey Drive).

DESCRIPTION OF PROJECT

The work on this project consists of improvements along Hamilton Road, Commerce Parkway, and US Route 150 (Morrissey Drive) in Bloomington. The work in this contract consists of HMA pavement, curb and gutter, storm sewer system, sidewalk, multi-use path, watermain, fencing and all incidental items shown in the plans and as described in these Special Provisions.

DATE OF COMPLETION (PLUS WORKING DAYS)

The assessment of liquidated damages in accordance with Article 108.09 of the Standard Specifications shall be defined with respect to the following completion dates for the project.

The Contractor shall schedule his operations so as to complete all remaining work, except as specified below, and open all the roadway to traffic on or before **September 27, 2025**. The Contractor will be allowed **5** working days, after the **September 27, 2025** completion date, to complete punchlist and the following items: **cleanup**.

WORKING RESTRICTIONS

Stage 1 work adjacent to the railroad crossing shall remain outside the railroad ROW and maintain the required minimum clearance away from the railroad as to not require any railroad flaggers. The Contractor shall be responsible for any costs incurred due to Stage 1 operations that violate the required clearances and require railroad flaggers.

Any lane closures shall be coordinated at least two weeks in advance with the City.

Resurfacing work on Hamilton Road shall not start until all utility work, adjacent curb and gutter and pavement widening work is complete within each section of the resurfacing area and completed in the applicable stage unless alternative is approved by the Engineer.

Except as otherwise provided herein, the Contractor shall provide at least one entrance/exit point to all properties at all times.

Property owners and businesses within the construction limits shall be given two weeks' notice for any changes in traffic patterns or entrance work.

COOPERATION AND COORDINATION WITH OTHER CONTRACTORS

The City of Bloomington has plans to continue Hamilton Road to the west across the railroad tracks. The schedule for this project is not known at this time but is anticipated to occur during the construction of this project and will require all contractors and the City to coordinate activities to ensure the project is completed in an efficient and cost effective manner.

The Contractor shall be required to attend coordination meetings with the City and the contractors responsible for the project described above and coordinate all work and schedules that potentially impact each project.

X7010216 TRAFFIC CONTROL AND PROTECTION (SPECIAL)

40201000 AGGREGATE FOR TEMPORARY ACCESS

Z0007430 TEMPORARY SIDEWALK

Description

This work shall consist of providing the necessary traffic control personnel and devices and the installation, maintenance, relocation and removal of these devices during construction of the improvement. The City of Bloomington will be responsible for notifying the public, the United States Postal Service, and the emergency service agencies for road closures and changes in the traffic control and maintenance of traffic plans.

TRAFFIC CONTROL PLAN

Traffic control shall be in accordance with the applicable sections of the "Standard Specifications for Road and Bridge Construction," the applicable guidelines contained in the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," these Special Provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to Articles 107.09 and 107.14 and Sections 701 through 705 of the SSRBC and the traffic control related Highway Standards shown in the plans; Supplemental

Specifications and Recurring Special Provisions; BDE Special Provisions; and Other Special Provisions relating to Traffic Control.

Highway Standards:

701101, 701601, 701602, 701611, 701701, 701801, 701901

Special Provisions

LRS 3	Work Zone Traffic Control Surveillance
LRS 4	Flaggers in Work Zones

Traffic/Access: The contractor is required to:

1. Provide aggregate for temporary access at vehicle entrances.

Maintenance of Traffic

Road closures and the conveyance of thru and local traffic within and around the construction zone shall be provided for in accordance with the Plan Details noted above and the use of the above referenced Highway Standards as directed by the Engineer.

With the approval of the Engineer, the Contractor may modify the suggested construction sequence and associated traffic control procedures as shown. The Contractor shall submit his proposed sequence of operations and any necessary revisions to attendant traffic control to the Engineer for approval before actual construction operations begin.

Driveways

The Contractor shall keep driveways open to traffic by keeping at least half of the width of said driveway open or by providing access at a temporary location, as approved by the Engineer. The Contractor shall provide and maintain access to commercial and private properties abutting the roadway being improved in accordance with Article 107.09 of the Standard Specifications. Access to commercial property shall, at no time, be shut off completely except as expressly authorized in the plans. An estimated quantity of AGGREGATE FOR TEMPORARY ACCESS has been included in the plans for use in the conveyance of local traffic and the provision of temporary access. The Contractor shall coordinate with the Engineer and homeowner/business representatives prior to beginning work on each stage to determine a plan to maintain access and not disrupt any business operations.

Construction of driveway entrances shall be completed as soon as possible after the construction of mainline pavement in front of the driveway. This is necessary in order to accommodate vehicle turning movements in and out of the driveways after completion of construction on, and in front of, their properties thus eliminating the need for closure of these facilities twice; i.e., once for mainline pavement construction and again for the entrance or side road construction.

Removing and Resetting Traffic Signs

This work shall consist of the removal, relocation, and resetting of traffic signs which interfere with construction operations. This work shall also include the removal, relocation, and resetting of existing wood signs, delineators and other miscellaneous signs which interfere with construction operations. This work shall be performed in accordance with the applicable portions of Article 107.25 of the Standard Specifications and as directed by the Engineer. The contractor shall remove, temporarily relocate and/or permanently reset existing signs which interfere with the construction operations. This work will not be paid for separately but shall be included in the contract lump sum price of TRAFFIC CONTROL AND PROTECTION, (SPECIAL). The Engineer will determine which signs will be removed, temporarily relocated and permanently reset.

Traffic Control Surveillance

Traffic control surveillance will be required, but will not be paid for separately on this project. The special provision check sheet LRS 3 "Work Zone Traffic Control Surveillance" will apply for the inspection of traffic control devices on this project along with the following additional requirements. The minimum frequency of worksite inspections by the Contractor shall be defined as daily unless directed otherwise by the Engineer. The person responsible for surveillance shall complete an inspection form, furnished by the Engineer, on a daily basis. The completed form shall be given to the Engineer on the first working day after the inspection.

Quality of Traffic Control Devices

Traffic Control Devices include signs and their supports, signals, pavement markings, barricades with sand bags, channelizing devices, warning lights, arrow boards, flaggers, or any device used for the purpose of regulating, detouring, warning or guiding traffic through or around the construction zone.

Only signs, barricades, vertical panels, drums, and cones that meet the requirements of the Department's "Quality Standard for Work Zone Traffic Control Devices 2010" shall be used on this project. Copies of this publication are available from the IDOT website under "Resources". At the time of the initial setup or at the time of major stage changes, one-hundred percent (100%) of each type of device (cones, drums, barricades, vertical panels or signs) shall be acceptable as defined by the referenced publication. Throughout the duration of the project, the percentage of acceptable devices may decrease to seventy-five percent (75 %) only as a result of damage and/or deterioration during the course of the work. Work shall not begin until a determination has been made that the traffic control devices meet the quality required in this standard. The Contractor is required to conduct routine inspections of the work site at a frequency that will allow for the prompt replacement of any traffic control device that has become displaced or damaged to the extent that it no longer conforms to the shape, dimensions, color and operational requirements of the MUTCD and the Traffic Control Standards, or that it no longer presents a neat appearance to motorists. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement.

Placement of Traffic Control Signs and Devices

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times. The Contractor shall immediately remove, cover, or turn from the view of the motorists all traffic control devices which are inconsistent with detour or lane alignment patterns and conflicting conditions during the transition from one construction stage to another. When the Contractor elects to cover conflicting or inappropriate signing materials used, he/she shall totally block out reflectivity of the sign and shall cover the entire sign. The method used for covering the signing shall meet the approval of the Engineer.

When directed by the Engineer, the Contractor shall remove all traffic control devices which were furnished and installed and maintained by him/her under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

The Contractor shall ensure that all traffic control devices installed by him/her are operational, functional, and effective 24 hours a day, including Sundays and holidays.

Solar Powered Arrow Boards

Arrow boards shall be used as required by the Standards and as directed by the Engineer. All arrow boards to be used on this project shall be solar powered. Any additional cost in meeting this requirement shall be considered as included in the cost of TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Construction Signs

All signing for traffic control shall meet current IDOT policy for retro-reflectivity requirements.

Construction signs referring to daytime lane closures during working hours shall be removed, covered or turned away from the view of motorists during non-working hours.

Flashing lights shall be used on each approach in advance of the work area, and in accordance with the details shown on the Plans and Standard Drawings.

All provisions of Article 107.25 of the Standard Specifications shall apply except the third paragraph shall be revised to read: "The Contractor shall maintain, furnish, and replace at his/her own expense, any traffic sign or post which has been damaged or lost by the Contractor or a third party."

Wayfinding or Directional Signage

The Contractor shall be responsible for the proper location, installation, and arrangement of any wayfinding or directional signage as directed by the Engineer. The wayfinding or direction signage may consist of post mounted sheet signs or changeable message boards. The cost of providing, installing and maintaining wayfinding or directional signs will not be paid for separately but shall be included in the contract lump sum price of TRAFFIC CONTROL AND PROTECTION (SPECIAL). No additional compensation will be allowed.

Placement and Removal of Signs and Barricades

Placement of all signs and barricades shall proceed in the direction of flow of traffic. Removal of all signs and barricades shall start at the end of the construction areas and proceed toward oncoming traffic unless otherwise directed by the Engineer.

Temporary Sidewalks

The Contractor may restrict pedestrian access to the project site during working hours by utilizing Highway Standard 701801. During non-working hours the Contractor shall allow for pedestrian access through the project site by constructing temporary sidewalks at locations directed by the Engineer. This work shall consist of furnishing, placing, maintaining, and removing temporary sidewalks in accordance with Section 406 of the Standard Specifications and the plan notes. The temporary sidewalk shall consist of Hot-Mix Asphalt (2 inches minimum thickness) at locations shown on the plans and as directed by the Engineer. This work, including furnishing and placing the materials, as well as compaction, removal, and subsequent disposal of the material in accordance with Article 202.03 of the Standard Specifications, will not be paid for separately, but shall be considered included in the contract unit price per square foot for TEMPORARY SIDEWALK.

Public Safety and Convenience

The Contractor shall provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis to receive notification of any deficiencies regarding traffic control and protection. The Contractor shall dispatch personnel, materials and equipment to correct any such deficiencies. The Contractor shall respond to any call from the Engineer or government agencies concerning any request for improving or correcting traffic control devices and begin making the requested repair within **two (2) hours** from the time of notification.

When traveling in lanes open to public traffic, the Contractor's vehicles shall always move with and not against or across the flow of traffic. These vehicles shall enter or leave work areas in a manner which will not be hazardous to, or interfere with, traffic and shall not park or stop except within areas designated by the Engineer.

Personal vehicles will not be allowed to park within the right-of-way. The Contractor shall provide for off-site parking of his/her personal vehicles.

The Contractor shall maintain entrances and side roads along the proposed improvement. Interference with traffic movements and inconvenience to owners of abutting property and the public shall be kept to a minimum. Any delays or inconveniences caused to the Contractor by complying with these requirements shall be considered included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Construction Staging Requirements

Lane Closures and the conveyance of local traffic within and around the construction zone shall be provided for in accordance with the above referenced Highway Standards and as directed by the Engineer. With the approval of the Engineer, the Contractor may make modifications to the proposed traffic control plans. The Contractor shall submit his/her proposed sequence of operations, and any necessary revisions to the attendant traffic control plan, to the Engineer for approval before actual construction operations begin.

All traffic control devices and barricades throughout the project shall remain in place until the entire project is substantially complete, or as otherwise directed by the Engineer.

Brooming of Roadway

All traffic lanes which are closed to through traffic during construction shall be broomed or swept free of all loose gravel or construction debris before the traffic lane is reopened to traffic. All roadway surface conditions shall be approved by the Engineer before they are opened to traffic. This work will not be paid for separately, but shall be considered included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Brooming of Pedestrian Routes

All pedestrian routes which are closed during construction operations shall be broomed or swept free of all loose gravel or construction debris before the pedestrian routes are reopened. All pedestrian route surface conditions shall be approved by the Engineer before they are opened. This work will not be paid for separately but shall be considered included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Construction Access

The Contractor shall present a plan that will be used to provide access by the Contractor or Subcontractor to the Engineer at the time of the Pre-Construction Meeting. The Engineer and Contractor shall both examine the plan noting any areas of concern before construction begins.

Upon completion of the project the Engineer shall examine the streets prior to approving final payment to the Contractor. Any areas that have been damaged, due to construction activity, shall be repaired by the Contractor to the satisfaction of the Engineer. When work is complete, the Contractor shall arrange, within a reasonable time period, to clean up and restore areas where equipment or material has been stored on the right-of-way or easement. This work shall be included in the cost of the contract.

The Engineer may restrict the movement of construction vehicles on the completed surface in order to prevent damage to these surfaces.

CONTRACTOR ACCESS

Eff. 09-11-1990 Rev. 01-01-2014

At road closure locations, where Type III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be relocated, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. ' Road Closed ' signs (R11-2), supplemented by 'Except Authorized Vehicles' signs (R3-1101), shall be mounted on both the near-right and the far-left barricade(s). At the end of each work day the barricades shall be returned to their in-line positions. This work will be considered to be included in the cost of the various traffic control items and no extra compensation will be allowed.

UNEVEN LANES

Eff.: 12/11/2009 Rev.: 4/25/2015

Where construction operations result in a temporary drop-off between two traffic lanes open to traffic, excluding patching, "UNEVEN LANES" (W8-11(0)48) signs shall be used. The Contractor shall place the signs at the beginning of the drop-off area, major intersections, and at as such other locations within the drop-off area as the Engineer may direct, including as shown below.

- 2 Mile spacing on Interstates
- 1 Mile spacing on rural 2-lane highways
- Spacing per the Traffic Control Plan in Urban sections

The signs shall be placed just prior to the work that will result in the drop-off and shall remain in place until the drop-off is eliminated. This work shall be considered as included in the contract unit prices for the construction items involved and no additional compensation will be allowed.

Basis of Payment: All work prescribed and referenced herein shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL). This price shall be considered payment in full for all labor, materials, transportation, handling and incidental work necessary to furnish, install, relocate, maintain and remove all traffic control devices as required by the traffic control plan and as directed and approved by the Engineer, for the duration of the contract. No separate payment will be made for complying with the provisions of Standard 701101, 701601, 701602, 701611, 701701, 701801, and 701901. Article 701.20 of the Standard Specifications is revised in that no additional payment will be made for furnishing, installing, maintaining, and removing additional traffic control devices or signs from those shown on the plans or as directed by the Engineer.

The cost of furnishing, placing, compacting, maintaining, removing, and disposing of coarse aggregate for temporary driveways will be measured and paid for at the contract unit price per ton of material furnished for AGGREGATE FOR TEMPORARY ACCESS.

The cost of furnishing, placing, compacting, maintaining, removing, and disposing of hot-mix asphalt for temporary sidewalks will be measured and paid for at the contract unit price per square foot for TEMPORARY SIDEWALK.

All detour signing will be paid for at the contract lump sum price for DETOUR SIGNING, which work shall include furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices provided to detour traffic on the local streets during the road closure. See plans for detour plan.

STATUS OF UTILITIES/UTILITIES TO BE ADJUSTED

The following utilities are located within the project limits. For relocations, the utility companies have provided the estimated dates.

<u>Name, Contact, Address And Phone Number of Utility</u>	<u>Type</u>	<u>Location</u>	<u>Relocation Needed</u>	<u>Estimated Date Relocation Completed</u>
Bloomington Metro Fiber System Todd Bowlin 309-735-2194 todd.bowlin.hrm0@statefarm.com	Underground Fiber	West side of Bunn St. / South side of Rhodes Ln. / East side of Morrissey Dr.	None Anticipated	During Construction
CIRBN, LLC Dennis Leggett 200 W Front Street Bloomington, IL 61701 309-845-0605 dennisl@cirbn.org	Underground Fiber	West side of Morrissey Dr.	None Anticipated	During Construction
Corn Belt Energy Jill Dirr 1 Energy Way Bloomington, IL 61705 309-664-9240 dirr@cornbeltenergy.com	Aerial / Underground Electric	Hamilton Rd. (East of Tracks) / Commerce Pkw.	Yes	During Construction
Comcast James vonBrethorst 3517 N. Dries Lane Peoria, IL 61604 309-208-6650 James_vonBrethorst@comcast.com	Underground Cable/Fiber	North side Hamilton Rd. (East of Tracks)	Yes	During Construction
Frontier Communications Adam Gangloff 109 E. Market Street Bloomington, IL 61701 309-557-1378 adam.r.gangloff@ftr.com	Aerial / Underground	East side Bunn St. / South Side Hamilton Rd. and Rhodes Ln. / North side Hamilton Rd. (East of Tracks) / East side Morrissey Dr.	Yes	During Construction
MCI/Verizon Joe Chaney Jr. 312-617-2131 Joe.Chaney@verizon.com	Underground Fiber	Along NS RR	None Anticipated	During Construction
Metro Fibernet, LLC Korie Nellis Korie.Nellis@metronetinc.com	Aerial / Underground Fiber	Bunn St. / Hamilton Rd. / West side of Morrissey Drive	None Anticipated	During Construction

<p>Nicor Gas Chip Parrott 1844 Ferry Rd. Naperville, IL 60563 630-388-2761 cparrot@southernco.com</p>	<p>Gas</p>	<p>Bunn St. / South side Hamilton Rd. and Rhodes Ln. / North side Hamilton Rd. (East of Morrissey) / East side Morrissey Dr.</p>	<p>Yes</p>	<p>During Construction</p>
<p>Sprint Jason Jarvis 7459 W. 79th Street Bridgeview, IL 60455 219-433-4091 Jason.M.Jarvis@sprint.com</p>	<p>Underground Fiber</p>	<p>Along NS RR</p>	<p>None Anticipated</p>	<p>During Construction</p>
<p>Stratus Networks Tony Jordan 4700 N. Prospect Rd. Peoria Heights, IL 61616 309-253-4374 tjordan@stratusnet.com</p>	<p>Underground Fiber</p>	<p>East side of Morrisey Dr. / Hamilton Rd. / Rhodes Ln.</p>	<p>None Anticipated</p>	<p>During Construction</p>
<p>Uniti Fiber LLC Brian Art 1522 8th Avenue Belvidere, IL 60018 847-650-1348 brian.art@bluebirdnetwork.com</p>	<p>Underground Fiber</p>	<p>West side of Morrisey Dr. / Hamilton Rd. (East of Morrissey Dr.)</p>	<p>None Anticipated</p>	<p>During Construction</p>

COOPERATION WITH UTILITY COMPANIES

It is understood and agreed that the Contractor has considered, in their bid, all the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for any delays, inconvenience or damage sustained by the contractor due to any interference from the said utility appurtenances or the operations of moving them.

All telephone, cable, fiber, gas, water, and wire lines, within the limits of the proposed construction owned by various utility companies, are to be moved by the owners of the particular utility involved at the owner's expense.

NOTIFICATION OF UTILITIES PRIOR TO CONSTRUCTION

In addition to notifying J.U.L.I.E., all utility companies must be notified by the Contractor, in writing, at least one (1) week in advance prior to starting construction so that they will have adequate time to locate and mark their utility locations in the field and twenty-four (24) hours

prior to commencing actual construction work. All utility companies must be notified so that they may have personnel on the job site to assist in locating their utility lines and avoid damage to their utilities, including but not limited to Ameren, Comcast, Nicor Gas, Corn Belt Energy Corporation, Sprint, Frontier, CIRBN LLC, Metro Fibernet, LCC, Stratus Networks, MCI, and Bloomington-Normal Water Reclamation District. A copy of the letter notifying the utility companies of the Contractor's intention to start work must be received by the City of Bloomington Public Works before the Contractor will be permitted to start construction.

UTILITY COORDINATION

The Contractor shall coordinate and host onsite bi-weekly utility coordination meetings beginning at the start of construction and continue until the Engineer is satisfied with the status of the utility adjustments/relocations. The Contractor shall include all utilities impacted by the project, the Engineer, and the City in the coordination meetings.

SALVAGEABLE MATERIALS

All materials deemed salvageable by the Engineer, such as traffic signal components, mast arms, and, castings, shall remain the property of the City of Bloomington and shall be stored on the job site as directed by the Engineer until such time the City collects the materials. The Contractor shall dispose of any materials off site that the Engineer determines should not be salvaged. This work will not be paid for separately but shall be considered as included in the cost of the various removal items.

CONCRETE CURB, COMBINATION CONCRETE CURB AND GUTTER, AND CONCRETE MEDIANS

Concrete curb and gutter shall be sawed or scored at intervals coinciding with the joint intervals of the adjoining pavement. The minimum joint depth for the gutter shall be 2 inches, and 1 inch for the curb. The curb and gutter may be jointed instead of sawed provided the stated joint depths are obtained. If the curb and gutter is adjacent to bituminous pavement it shall be jointed at 15 foot intervals.

The sawing of the curb and gutter shall commence within four (4) hours of the start of the pour unless otherwise directed by the Engineer. Sawing shall continue until all joints are completed.

Asphaltic type expansion joints 1 inch thick shall be placed at all P.C.'s, P.T.'s and R.P.C.'s and at maximum 500' intervals.

This special provision shall apply to all types of concrete curb, combination concrete curb and gutter, and concrete medians constructed on this project.

This work shall not be paid for separately but shall be included in the cost of the applicable pay items.

21000300 GRANULAR EMBANKMENT, SPECIAL

This work shall be in accordance with Section 210 of the Standard Specifications, IDOT's Subgrade Stability Manual, and the plan details, except as modified herein.

The Granular Embankment, Special shall utilize an oversized aggregate approved by the Engineer and in accordance with the IDOT Subgrade Stability Manual.

35300210 PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2"

This work shall be done in accordance with Section 353 of the Standard Specifications and plan details except as modified below.

The cost of any reinforcement, tie bars or dowel bars, will not be paid for separately but shall be included in the cost of PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2".

This work will be measured for payment at the contract unit price per square yard for PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2", which price shall include all labor, equipment, and material necessary to complete the work as specified.

44000100 PAVEMENT REMOVAL

The existing pavement structure within the project limits vary both in type and thickness throughout. The best available information, based on original construction plans, is shown in the existing typical sections. No additional compensation will be allowed for sections of pavement that may deviate from the type and depth information provided on the existing typical sections.

44201341 CLASS C PATCHES, TYPE II, 9 INCH

This work shall consist of the removal of the existing pavement, the necessary excavation and the pavement replacement at locations identified in the field by the Engineer. Quantity for this pay item has been estimated to establish a contract unit bid price. No change in contract unit price will be allowed because of an adjustment of these quantities, size of the patch area, or depth of the patch due to actual conditions encountered in the field. This work shall be done in accordance with Section 442 of the Standard Specifications and plan details except as modified below.

The patch depth may vary based upon the existing pavement thickness.

The cost of any reinforcement, tie bars or dowel bars, will not be paid for separately but shall be included in the cost of CLASS C PATCHES, TYPE II, 9 INCH.

The cost of saw cutting will not be paid for separately but shall be included in the cost of CLASS C PATCHES, TYPE II, 9 INCH.

This work will be measured for payment at the contract unit price per square yard for CLASS C PATCHES, TYPE II, 9 INCH, which price shall include all labor, equipment, and material necessary to complete the work as specified. No change in contract unit price or the pay item will be allowed due to the actual required patch size determined in the field by the Engineer.

44201349 CLASS C PATCHES, TYPE I, 10 INCH
44201353 CLASS C PATCHES, TYPE II, 10 INCH
44201357 CLASS C PATCHES, TYPE III, 10 INCH
44201359 CLASS C PATCHES, TYPE IV, 10 INCH

This work shall consist of the removal of the existing pavement, the necessary excavation and the pavement replacement at locations identified in the field by the Engineer. This work shall be done in accordance with Section 442 of the Standard Specifications and plan details except as modified below.

The patch depth may vary based upon the existing pavement thickness.

The cost of any reinforcement, tie bars or dowel bars, will not be paid for separately but shall be included in the cost of CLASS C PATCHES, of the type and thickness specified.

The cost of saw cutting will not be paid for separately but shall be included in the cost of CLASS C PATCHES, of the type and thickness specified.

This work will be measured for payment at the contract unit price per square yard for CLASS C PATCHES, of the type and thickness specified, which price shall include all labor, equipment, and material necessary to complete the work as specified. No change in contract unit price or the pay item will be allowed due to the actual required patch size determined in the field by the Engineer.

55100300 STORM SEWER REMOVAL 8"
55100500 STORM SEWER REMOVAL 12"
55100700 STORM SEWER REMOVAL 15"
55101200 STORM SEWER REMOVAL 24"
55101400 STORM SEWER REMOVAL 30"
55101600 STORM SEWER REMOVAL 36"

This work shall consist of the removal and disposal of existing storm sewers at the locations shown on the plans in accordance with Section 551 of the Standard Specifications and as directed by the Engineer. Storm sewer materials determined not to be salvageable by the

Engineer shall be disposed of by the Contractor in accordance with Article 202.03 of the Standard Specifications. Excavations resulting from the removal of storm sewers that result in holes beneath or within two feet horizontally of proposed pavement and curb shall be backfilled with Controlled Low Strength Material (CLSM). CLSM shall not be paid for separately but shall be included in the contract unit price per foot for STORM SEWER REMOVAL, of various sizes. Where existing storm sewers that connect to an existing drainage structure to remain in place are removed any holes left by removing the pipe shall be plugged as directed by the engineer. Removal of any end sections or headwalls attached to the storm sewer designated for removal shall not be paid for separately, but shall be included in the contract unit price per foot for STORM SEWER REMOVAL, of various sizes.

Basis of Payment: This work will be measured for payment and paid for at the contract unit price per foot for STORM SEWER REMOVAL, of various sizes, which price shall be considered payment in full for all labor, equipment, and materials required for the satisfactory removal and disposal of the existing pipe culverts and storm sewers.

66400405 CHAIN LINK FENCE, 7'

This work shall be in accordance with Section 664 of the Standard Specifications and the plan details, except as modified herein.

Submittals:

1. General: Submit the following according to the conditions of the contract.
2. Product Data: In the form of manufacturer's technical data, specifications, and installations for fence, posts, gate uprights, post caps, gates, gate hardware and accessories.
3. Shop Drawings showing fence design.

Quality Assurance:

1. Installer Qualifications: Engage an experienced installer who has at least three years' experience and has completed at least five fence projects with same material and of similar scope to that indicated for this project with a successful construction record of in-service performance.
2. Single-Source Responsibility: Obtain fence, including accessories, fittings, and fastenings, from a single source.

Project Conditions:

1. Field Measurements: Verify layout information for fences shown on the drawings in relation to the property survey and existing structures. Verify dimensions by field measurements.

Fence Materials:

1. Fabric shall be 84" 9 gauge aluminized (2" mesh) KT chain-link fabric.
2. Top rail shall be 1 5/8" O.D. LG-40 pipe, 1.83 lbs per foot. Top rail shall be 21' in length and joined with 1 5/8" 6" long sleeve.
3. Line posts shall be 2 1/2" O.D. LG-40 pipe post, 3.12 lbs per foot. Line posts shall be set 10' on center maximum spacing in 10" diameter, 36" deep concrete footings.
4. Terminal post shall be 3" O.D. LG-40 pipe post, 4.64 lbs per foot. Terminal posts shall be set in 12" diameter, 36" deep concrete footings.
5. Terminal posts shall be braced and trussed to the nearest line post with 1 5/8" O.D. LG-40 pipe and 3/8" threaded truss rod and pressed steel industrial truss rod tightener.
6. Barbed wire shall be 3 strand 12 1/2" gauge 4 pt. aluminized 5" gap barb wire on 3 wire 45 degree barb arm.
7. Fittings shall be regular brace band and carriage bolt, combo pressed steel rail end, 3 wire 45 degree barb arm, pressed steel dome cap, 3/16" x 3/4" steel tension bar, regular tension band and carriage bolt.
8. Tie wire shall be 8 1/4" aluminum 9 gauge tie wire and 6 1/2" steel W3 tie wire spaced 15" on center for line posts and 24" on center for rails.
9. Post footings shall be truck poured.

This work will be measured for payment in feet, along the top of the fence from center to center of end posts.

This work will be paid for at the contract unit price per foot for CHAIN LINK FENCE, 7'. The price will include all materials, equipment, and labor necessary to complete the work.

X0324056 REMOVAL OF EXISTING WOOD BOLLARDS

This work shall include the removal of existing bollards at locations noted on the plans.

The bollards shall be completely removed and the grade backfilled using Trench Backfill to match the elevation of the proposed subgrade. Trench Backfill shall not be paid for separately but shall be included in the contract unit price.

The removal of the bollards shall be paid for at the contract unit price per each for REMOVAL OF EXISTING WOOD BOLLARDS, which price shall include all labor, materials, and equipment specified herein.

X2011000 TEMPORARY FENCE (SPECIAL)

The Contractor shall erect a temporary chain link fence as directed by the Engineer. This work shall follow the requirements set forth in Section 664 of the Standard Specifications. The fence shall be a minimum of 6 feet in height and may be free standing so long as fence is in a stable condition. The Engineer shall approve all methods of attachment. Locations shall be as shown on the plans and as directed by the Engineer.

TEMPORARY FENCE (SPECIAL) that is determined by the Engineer to be damaged rendering it ineffective for its intended use will be immediately replaced by the Contractor. No additional compensation will be provided for replacing damaged fence.

TEMPORARY FENCE (SPECIAL) is required to secure the fenced area of Parcel 119 at locations where the existing fence will be removed. Where gaps may exist between existing fence to remain and the temporary chain link fence, additional temporary fence may need to be erected to ensure closure of all gaps throughout construction.

The Engineer may adjust TEMPORARY FENCE (SPECIAL) locations as needed.

Method of Measurement: TEMPORARY FENCE (SPECIAL) will be measured for payment in feet, along the top of the fence from center to center of end posts.

Basis of Payment: This fence at all locations will be paid at the contract unit price per foot for TEMPORARY FENCE (SPECIAL), which includes all material, labor and equipment required to construct, mount/attach, relocate and remove the fence, and associated hardware.

X6026050 SANITARY MANHOLES TO BE ADJUSTED

This work shall consist of adjusting sanitary manholes in accordance with Section 602 of the Standard Specifications.

This work will be paid for at the contract unit price per each for SANITARY MANHOLES TO BE ADJUSTED which price shall include all labor, materials and equipment necessary to perform the work as specified herein.

X6050205 FILLING EXISTING STORM SEWERS

This work shall consist of filling existing storm sewer pipes that will be abandoned in place with controlled low-strength material as directed by the Engineer. The controlled low-strength material shall be in accordance with Section 593 of the Standard Specifications. The pipes shall be filled with the use of concrete pumping machines or by methods approved by the Engineer.

Excavations shall be made to expose the ends of pipes to be filled. If necessary, vent holes shall be made in the pipes to allow air to release while filling. The pipes shall be completely filled with controlled low-strength material to prevent collapsing and the ends capped to contain the controlled low-strength material. Excavations within paved areas shall be backfilled with controlled low-strength material.

This work will be paid for at the contract unit price per cubic yard for FILL EXISTING STORM SEWERS, which price shall include all labor, equipment, excavation, controlled low-strength material for filling the pipe, pipe caps, earth backfill, and controlled low-strength material backfill.

X6061815 COMBINATION CONCRETE CURB AND GUTTER, TYPE M (SPECIAL)

This work shall consist of constructing concrete curb and gutter in accordance with Section 606 of the Standard Specifications, details in the plans, and the following additional requirements:

The combination concrete curb and gutter shall be constructed at locations noted in the plans and according to the plan details.

This work will be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE M (SPECIAL), which price shall include all labor, materials, and equipment necessary to perform the work as specified herein.

X6061900 CONCRETE MEDIAN, TYPE SB-6.12 (SPECIAL)

This work shall consist of constructing concrete median in accordance with Section 606 of the Standard Specifications, details in the plans, and the following additional requirements:

The concrete median shall be constructed at locations noted in the plans and according to the plan details.

This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN, TYPE SB-6.12 (SPECIAL) which price shall include all labor, materials, and equipment necessary to perform the work as specified herein.

X6350108 FLEXIBLE DELINEATORS

This work shall consist of furnishing and installing Flexible Delineators in accordance with the plans and Section 1106 of the Standard Specifications, except as modified herein.

Flexible Delineators shall measure at least 28" from the mounting surface to top of the device and the delineator itself shall be a minimum of 3" in width. Flexible Delineators shall have two (2) retroreflective bands 4" tall made of reflective sheeting complying with Article 1091.03 of the

Standard Specification and ASTM D4956. The color of the delineator and retroreflective bands shall match the color of the adjacent striping at these locations. Mounting of the base and installation of the Flexible Delineators shall be per manufacturer's recommendations. Any delineator damaged or compromised by the Contractor during subsequent operations shall be replaced at no additional cost to the Department.

This work will be measured and paid for at the contract unit price each for FLEXIBLE DELINEATORS, which price shall include all labor, equipment, and material necessary to complete the work as specified.

X6640104 FENCE REMOVAL

This work shall consist of removing chain link and woven wire fence at locations noted on the plans.

The fence shall be removed to a point where it can be appropriately terminated as determined in the field by the engineer. This may require ending the removal at a post or reinstalling sections to appropriately terminate the fence at the desired location to restore the fence to proper working order. Therefore this may require the fence to be removed in such a manner that some pieces will be available for reuse. Any fence or post that is reused shall be installed and stabilized to a condition equal to or greater than the existing condition.

This work will be measured for payment in feet, along the top of the fence from center to center of end posts.

The removal of the existing fence shall be paid for at the contract unit price per foot for FENCE REMOVAL. The price will include all materials, equipment and labor necessary to complete the work.

X7010016 BARRICADES, TYPE III

This work shall include furnishing and installing Type III Barricades at locations shown on the plans.

Only barricades that meet the requirements of the Department's "Quality Standard for Work Zone Traffic Control Devices 2010" shall be used on this project. Barricades shall be installed in accordance with applicable standards and approved by the Engineer.

This work will be measured and paid for at the contract unit price each for BARRICADES, TYPE III, which price shall include all labor, equipment, and material necessary to complete the work as specified.

X8140115 HANDHOLE TO BE ADJUSTED

This work shall include all labor, equipment, tools, and materials needed to adjust existing handholes.

The Contractor shall remove the existing handhole frame and lid and dispose of them in accordance with Article 202.03 of the Standard Specifications. The top of the existing handhole shall be saw cut to the appropriate elevation and slope to fit within the proposed sidewalk where applicable. The Contractor shall provide a new frame and lid for the adjusted handhole. Where applicable, the new handhole frame shall be cast into the proposed sidewalk. Joints in the proposed sidewalk shall be tooled around the handhole frame as directed by the Engineer. The joint between the top of the existing handhole and the bottom of the proposed sidewalk shall be sealed as directed by the Engineer.

This work will be measured and paid for at the contract unit price each for HANDHOLE TO BE ADJUSTED, which price shall include all labor, equipment, and material necessary to complete the work as specified.

XX005569 MAILBOX REMOVAL AND REINSTALLATION

This work shall consist of removing and temporarily relocating existing mailboxes and posts along with furnishing and installing existing mailboxes on new posts at the locations specified in the plans, or as directed by the engineer. This work shall be done in accordance with Article 107.20 of the Standard Specifications.

Prior to removing any mailbox, the Contractor shall coordinate temporary and permanent locations with the mailbox owner and local Post Master.

The post shall consist of 4" x 4" treated wood, have nominal height of 76" and be USPS (United States Postal Services) approved.

The mailbox shall consist of galvanized steel, be of standard size, and be USPS approved. Standard size mailboxes shall have the following nominal dimensions: 20" long x 9" height x 7" wide.

The mailbox shall be installed at a nominal height of 45". The post shall be installed with a minimum of 18" below ground and shall be installed at a maximum of 24" from the face of curb.

Basis of Payment: The cost of all materials, equipment and labor will be paid for at the contract unit price per EACH for MAILBOX REMOVAL AND RELOCATION. This pay item shall include relocating all mailboxes to temporary locations as well as relocating them from temporary locations to their final locations as directed by the Engineer.

X4406812 PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1 1/2"

This work shall consist of the removal and satisfactorily disposal of existing portland cement concrete pavement surface. This work shall be done in accordance with the plans and applicable portions of Section 440 of the standard specifications at the location shown in the plans and as directed by the Engineer. The grindings resulting from the surface removal shall be removed from the site and the surface cleaned of any loose material and debris.

This work shall be paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1 1/2", which shall include the removal and disposal of the removed material, all necessary machinery and equipment to complete the specified work.

X4240118 PORTLAND CEMENT CONCRETE SIDEWALK CURB

This work shall consist of construction of Portland Cement Concrete Sidewalk Curb in accordance with Section 606 of the Standard Specification at locations noted on the plans.

The concrete sidewalk curb shall be constructed in accordance with the details noted on the plans. All reinforcement shall be epoxy coated and shall be included in the cost of the Portland Cement Concrete Sidewalk Curb.

This work will be paid for at the contract unit price per foot for PORTLAND CEMENT CONCRETE SIDEWALK CURB. The price will include all materials, equipment and labor necessary to complete the work as specified herein.

DRAINAGE SPECIFICATIONS

UTILITY TRENCHES AND EXCAVATIONS

The Contractor shall use care in excavating utility trenches or other excavations and follow all safety requirements. It will be necessary to shore trenches and excavations or use double trench boxes to protect workers and adjacent existing sewers or utilities. Geotechnical information is available for the existing soils and can be obtained from the Engineer upon request. No additional compensation will be allowed for special trench or excavation shoring methods, materials or methods.

CONNECTING INTO EXISTING MANHOLES

At locations indicated in the plans, proposed storm sewers are to be connected into existing manholes. These connections shall be made by core drilling holes in the structures and constructing concrete, brick and masonry around the connections to prevent leakage. This work will not be paid for separately, but shall be considered as included in the contract unit prices for storm sewers of the size and type specified, and no additional compensation will be allowed.

EXISTING SEWERS AND STRUCTURES TO BE PLUGGED

Where existing sewers are to be abandoned or removed as shown in the plans, or as directed by the Engineer, the abandoned sewers and structure openings which remain shall be plugged with concrete, brick masonry, or mechanical plugs in a workmanlike manner and to the satisfaction of the Engineer. This work will not be paid for separately but will be considered as included in the contract unit prices for the various storm or sanitary sewer pay items and no additional compensation will be allowed.

HEAVY EQUIPMENT OPERATION DURING CONSTRUCTION

The Contractor shall use caution whenever operating vibratory machines within the project limits. It is the City of Bloomington's intent to limit the use of vibratory machines so that unnecessary damage to adjacent properties and underground utilities can be avoided. All vibratory machines shall meet the approval of the Engineer before use. The cost of compliance with these requirements will not be paid for separately but shall be considered as included in the contract unit prices for the various pay items of the proposed construction involved, and no additional compensation will be allowed.

MANHOLE STEPS

The manhole steps required for drainage structures and sanitary manholes shall be the plastic type as depicted on Highway Standard Drawing 602701. The cost of complying with this requirement will not be paid for separately but shall be considered as included in the contract unit prices for various drainage structures and sanitary manholes and no additional compensation will be allowed.

20800150 TRENCH BACKFILL
59300100 CONTROLLED LOW-STRENGTH MATERIAL

Description: This work shall consist of furnishing and placing trench backfill and controlled low-strength material (CLSM) for backfilling trenches and excavations as detailed in the plans and as directed by the Engineer. This work shall be in accordance with the applicable articles of Section 208 and 593 of the Standard Specifications.

Construction Requirements: A quantity for CONTROLLED LOW-STRENGTH MATERIAL and TRENCH BACKFILL has been established per the locations shown in the plans. It is hereby understood that the City of Bloomington reserves the right to modify locations as shown in the plans which may result in an addition or reduction of the respective pay item quantities from the contract. Should the City of Bloomington delete any or all of a pay item quantity from the contract, the Contractor will receive no remuneration for the deleted item.

Measurement and Payment: This work will be measured for payment at the contract unit price per cubic yard for CONTROLLED LOW-STRENGTH MATERIAL and TRENCH BACKFILL, which price shall be considered payment in full for all labor, equipment, and materials required for the satisfactory backfilling of trenches and excavations.

- 550A0050 STORM SEWERS, CLASS A, TYPE 1 12"**
- 550A0070 STORM SEWERS, CLASS A, TYPE 1 15"**
- 550A0120 STORM SEWERS, CLASS A, TYPE 1 24"**
- 550A0340 STORM SEWERS, CLASS A, TYPE 2 12"**
- 550A0360 STORM SEWERS, CLASS A, TYPE 2 15"**
- 550A0380 STORM SEWERS, CLASS A, TYPE 2 18"**
- 550A0400 STORM SEWERS, CLASS A, TYPE 2 21"**
- 550A0410 STORM SEWERS, CLASS A, TYPE 2 24"**
- 550A0430 STORM SEWERS, CLASS A, TYPE 2 30"**
- 550A4000 STORM SEWERS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 18"**

Description

This work shall consist of constructing storm sewers of the class, type, and diameter specified in accordance with Section 550 of the Standard Specifications.

Measurement and Payment

This work will be measured and paid for at the contract unit price per foot for STORM SEWERS, CLASS A, of the type and diameter specified, which price shall include all labor, equipment, and material necessary to complete the work as specified. The pipe types shown on the plans refer to the fill heights over the pipe as indicated in Article 550.03 of the Standard Specifications.

- 60218300 MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID**
- 60221000 MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID**
- 60224445 MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, OPEN LID**
- 60236800 INLETS, TYPE A, TYPE 11 FRAME AND GRATE**

Description: This work shall consist of the construction of manholes and inlets in accordance with Section 602 of the Standard Specifications, Highway Standard Drawings 602301, 602401, 602402, 602411, and 602601, and the plans, except that these structures shall be constructed with precast concrete flat slab tops as detailed on the Standard Drawings. Any necessary lengths of 24-inch diameter adjustment rings or risers required to achieve the top-of-frame elevations as shown in the plans shall also be included. All manholes shall be Type A.

All manholes and inlets shall be backfilled with controlled low-strength materials in accordance with Section 593 and article 602.12 of the IDOT standard specifications. The controlled low-strength material will not be paid for separately but shall be included in the cost of the manhole and inlet Pay Items and no additional compensation will be allowed.

Measurement and Payment: This work will be measured for payment at the contract unit price each for MANHOLES or INLETS, of the specified type and diameter, with frame and grate or lid. The price shall include the cost of all excavation and backfill, controlled low-strength materials, furnishing and installing the manholes, inlets, flat slab tops, and any required adjustment rings or risers, and furnishing and installing the specified frame and grate or lid.

61140000 STORM SEWERS (SPECIAL) 8”

Description: This work shall consist of the construction of low flow storm sewers along the perimeter of the retention basin and miscellaneous storm sewer connections as shown in the plans. This work shall be in accordance with applicable portions of Section 550 and 611 of the Standard Specifications and as directed by the Engineer. Storm sewers as described herein shall be PVC pipe, SDR 26. All storm sewer connections shall be watertight and shall be done in a good and workmanlike manner in accordance with the latest edition of the Standard Specification for Water and Sewer Construction in Illinois.

Measurement and Payment: This work will be measured and paid for at the contract unit price per foot for STORM SEWERS, (SPECIAL), 8”, which price shall include all labor, equipment, fittings, and materials required, except for the concrete collars. The concrete collars will be paid for as specified herein.

X6020076 INLETS, SPECIAL, WITH SPECIAL FRAME AND GRATE

Description: This work shall consist of constructing special drainage inlets at locations shown on the plans. The inlets shall be constructed in accordance with the applicable Articles of Section 602 of the Standard Specifications and the detail in the plans. Neenah Foundry No. R-3067 or EJ 7030 and Neenah R-1879-B7L or EJ V-6665 frames and grates shall be furnished and installed with the inlets. The special frames shall be provided with open face curb boxes.

Measurement and Payment: This work will be measured and paid for at the contract unit price each for INLETS, SPECIAL, WITH SPECIAL FRAME AND GRATE, which price shall include furnishing and installing the inlets, frames and grates and concrete fillets.

X6022230 MANHOLES, TYPE A, 4'-DIA, WITH SPECIAL FRAME AND GRATE

X6022930 MANHOLES, TYPE A, 5'-DIA, WITH SPECIAL FRAME AND GRATE

Description: This work shall consist of the construction of manholes with special frame and grates in accordance with Section 602 of the Standard Specifications, Highway Standard Drawings 602401, 602402, and 602601, and the plans except that these structures shall be constructed with precast concrete flat slab tops as detailed on the Standard Drawings. Any necessary lengths of 24-inch diameter adjustment rings or risers required to achieve the top-of-frame elevations as shown in the plans shall also be included. All manholes shall be Type A. Special frames and grates shall be provided as shown in the storm sewer structure schedules unless directed otherwise by the Engineer.

Measurement and Payment: This work will be measured for payment at the contract unit price each for MANHOLES, of the specified type and diameter, with special frame and grate or lid. The price shall include the cost of all excavation and backfill, furnishing and installing the manholes, inlets, flat slab tops, and any required adjustment rings or risers, and furnishing and installing the specified frame and grate or lid.

Z0056648 STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"

Z0056650 STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 15"

Description: This item is intended to satisfy the EPA requirements for horizontal and vertical separation of sewer and water mains outlined in Section 41 of the Standard Specifications for Water and Sewer Construction in Illinois. This work shall consist of constructing storm sewers of the required inside diameter with the necessary fittings or joints in accordance with Section 550 of the Standard Specifications and the following additions or exceptions.

Materials: The materials allowed for the water main quality storm sewer pipe shall be PVC pipe SDR 21, reinforced concrete pressure pipe, or ductile iron pipe Class 52, and of the size and type indicated on the plans. The materials shall be in accordance with Articles 40-2.01A, 40-2.01B, 40-2.01C, 40-2.02, 40-2.05A, and 40-2.05B of the Standard Specifications for Water and Sewer Construction in Illinois. Joints between different pipe material types shall be water tight and made with concrete collars as detailed on the plans and as approved by the Engineer. The water main quality pipe joints shall be of the type approved by the Illinois Environmental Protection Agency for storm sewer lines crossing above water mains.

Measurement and Payment: This work will be measured and paid for at the contract unit price per foot for STORM SEWERS, WATER MAIN QUALITY PIPE of the type and size indicated, which price shall include all labor, equipment, and materials required, except for the concrete collars. The concrete collars will be paid for as specified herein. The pipe types shown on the plans refer to the fill heights over the pipe as indicated in Article 550.03 of the Standard Specifications.

XX008979 CONCRETE COLLAR

Description: This work shall consist of constructing concrete collars around joints of pipes where the pipes being joined are of different diameters or types of materials. The collars shall be as shown on the detail in the plans and shall be constructed with class SI concrete in accordance with Section 1020 of the Standard Specifications. The excavation and backfilling shall be as specified for the associated pipe installation.

Measurement and Payment: This work will be measured and paid for at the contract unit price each for CONCRETE COLLAR, which price shall include all labor, equipment, non-shear coupling, and material necessary to complete the work as specified, including the welded wire fabric.

TRAFFIC SIGNAL SPECIFICATIONS

SIGNAL HEAD, LED

This work shall be in accordance with Sections 880 and 1078 of the Standard Specifications except as modified herein.

The traffic signal heads shall consist of 12" polycarbonate sections and shall be equipped with LED assemblies for all red bulb, yellow bulb, green bulb, red arrow, yellow arrow, and green arrow indications.

The LED signal faces shall be equipped with spade connectors and connected to the traffic signal head terminal block.

The LED signal heads shall come with a 15-year manufacturer's warrantee. The Contractor shall complete and submit to the manufacturer any necessary paperwork to activate said warrantee. Copies of all paperwork shall be provided to the City.

Basis of Payment: This work will be paid for at the contract unit prices each for SIGNAL HEAD, LED of the type specified and shall be payment in full for all labor, materials, and equipment required to provide and install the traffic signal heads described above, complete.

88200110 TRAFFIC SIGNAL BACKPLATE, LOUVERED

This work shall consist of furnishing and stalling a traffic signal backplate in accordance with Sections 882 and 1078.03 of the Standard Specifications for Road and Bridge Construction and the following exceptions.

The traffic signal backplate shall be of the same material as the traffic signal heads as specified on the plans.

Basis of Payment: This item will be paid for at the contract unit price each for TRAFFIC SIGNAL BACKPLATE for supplying and installing the traffic signal backplate to the satisfaction of the Engineer.

81028350 UNDERGROUND CONDUIT, PVC, 2" DIA

This work shall be in accordance with applicable portions of Sections 810, 811, 812, and 1088.01 of the Standard Specifications for Road and Bridge Construction with no exception.

Basis of Payment: This item will be paid for at the contract unit price per foot for UNDERGROUND CONDUIT, PVC 2" DIA for supplying and installing the underground conduit to the satisfaction of the Engineer.

ELECTRIC CABLE IN CONDUIT SIGNAL

This work shall be in accordance with the applicable Articles of Sections 801, 817, 873, 1076, and 1088 of the Standard Specifications with no exceptions.

Method of Measurement. This work will be measured for payment in feet according to Article 817.04.

Basis of Payment: This work will be paid for at the contract unit price per foot for ELECTRIC CABLE IN CONDUIT, SIGNAL of the type, size and number of conductors specified.

87301900 ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1/C

This work shall be in accordance with the applicable Articles of Sections 801, 806, 873, 1076, and 1088 of the Standard Specifications with the following modifications:

This work shall consist of furnishing and installing a grounding wire to bond all traffic signal handholes (lids and rings), mast arm assemblies, posts, light poles, cabinets and exposed conduits as designated in the proposed highway plans.

The proposed ground wire shall be an insulated #6 XLP copper conductor with green insulation.

Method of Measurement. This work will be measured for payment in feet according to Article 873.05.

Basis of Payment: This work will be paid for at the contract unit price per foot for ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1/C which price shall be payment in full for all labor, materials, and equipment required to provide the grounding system described above.

87600100 PEDESTRIAN PUSH-BUTTON POST, TYPE 1

Description: This work shall be in accordance with Section 876 and 1077.02 of the Standard Specifications with no exception.

Method of Measurement: This work will be measured for payment as each per pedestrian push-button post.

Basis of Payment: This work will be paid for at the contract unit prices for PEDESTRIAN PUSH-BUTTON POST, TYPE 1 and will be payment in full for all labor, equipment, and materials required to provide and install the pedestrian push-button posts.

87900200 DRILL EXISTING HANDHOLE

This work shall maintain accordance with Section 814 and 1088 of the Standard Specifications and be in accordance with Section 879 with no exception.

Basis of payment: This work will be paid for at the contract unit prices for DRILL EXISTING HANDHOLE and will be payment in full for all labor, equipment, materials required to complete the drilling and installation of conduit. The unit price shall also include all necessary excavation and backfilling outside of the handhole required.

85000200 MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

Description The Contractor shall maintain the existing traffic signal located at Morrissey and Hamilton during construction.

Basis of Payment: The above work will be paid for at the contract unit price each (per intersection) for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

89502200 MODIFY EXISTING CONTROLLER

Description. This work shall consist of modifying the existing controller at the existing traffic signal located at Morrissey and Hamilton to accept additional traffic signal equipment, including but not limited to detection cameras, pedestrian facilities, additional signal heads, and altered phasing. All materials necessary for this work are included in this pay item. This may include the connection of new cables and the reprogramming of the controller to new timing.

Basis of Payment: This work will be paid for at the contract unit price per each for MODIFY EXISTING CONTROLLER.

X8891202 WIDE AREA VIDEO VEHICLE DETECTION SYSTEM COMPLETE

General. This specification sets forth the minimum requirements for a system that detects vehicles on a roadway using only video images of vehicle traffic.

The system shall include software that detects vehicles in multiple lanes using only the video image. Detection zones shall be defined using only an on board video menu and a pointing device to place the zones on a video image. Up to 144 detection zones shall be available. A separate computer shall not be required to program the detection zones.

Functional Capabilities. The video detection system shall be compatible with the controller and cabinet identified in these specifications. The VDP shall process video from up to six video sources simultaneously. The sources can be video cameras or S-VHS video tape players. The video shall be input to the VDP in RS170 format and shall be digitized and analyzed in real time. A separate microprocessor for each video input shall be used.

Vehicle Detection.

Detection zones shall be capable of being Or'ed or ANDed together to indicate vehicle presence on a single detector output channel.

Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the VDP and displayed on a video monitor, to draw the detection zones on the video image from each video camera. No separate computer shall be required to program the detection zones.

Up to 3 detection zone patterns shall be saved for each camera within the VDP memory and this memory shall prevent loss during power outages.

The selection of detection zone pattern for current use shall be done through a menu. It shall be possible to activate a detection zone pattern from VDP memory and have that detection zone pattern available within 1 second of activation.

When a vehicle is detected crossing a detection zone, the corners of the detection zone will flash on the video overlay display to confirm the detection of the vehicle.

Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality. See Camera section for recommended camera placement.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.

Detection zone setup shall not require temporal information such as date and time.

The VDP shall output a constant call for each enabled detector output channel if a loss of video signal occurs. The VDP shall output a constant call during the background of the learning period.

VDP Hardware.

The VDP shall be powered by 120 VAC 60 Hz single-phase power. Surge settings shall be set forth in NEMA specifications. Power consumptions shall not exceed 135 watts.

The VDP shall include ports for communications with a remote computer.

The VDP shall include ports for transmitting TS1 and TS2 detections to the specified traffic controller.

The front of the VDP shall include one video output. Any one of the video inputs shall be switch selectable for output on this connection via the pointing device at the VDP, or through software and a personal computer connected.

A portable monitor shall be provided with the VDP.

Camera. The video cameras used for traffic detection shall be Iteris Vantage Next or Autoscope Vision and be compatible with specified controller.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sun shield. The sunshield shall include a provision for water diversion to prevent water from flowing in the cameras field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.

When mounted outdoors in the enclosure, the camera shall operate satisfactory in a temperature range from -34° C to +60° C and a humidity range from 0% RH to 100%RH.

Recommended camera placement shall be over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

The camera enclosure shall be equipped with separate, weather-tight connections for power and video cables at the rear of the enclosure. These connections may also allow diagnostic

testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module (LAM) supplied by the VDP supplier. Video and power shall not be connected within the same connector.

The video signal shall be fully isolated from the camera enclosure and power cabling.

Installation. The coax cable shall be a continuous unbroken run from the camera to the VDP. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. The coaxial cable, BNC connector, and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

The cameras shall be mounted at least 6' above the mast arm.

The power cabling shall be 16 AWG three conductor cable. The cabling shall comply with the National Electric code, as well as local electric codes.

The video detection system shall be installed by supplier factory certified installers and as recommended by the supplier and documented in installation materials provided by the supplier.

Video cable and AWG cable shall not be paid for separately but shall be included in the cost of WIDE AREA VIDEO VEHICLE DETECTION SYSTEM COMPLETE.

Warranty. The supplier shall provide a limited warranty on the video detection system. See suppliers standard warranty included in the Terms and Conditions of Sale documentation.

During the warranty period, technical support shall be available from the supplier via telephone within 4 hours of the time the call is made by a user, and this support shall be available from factory-certified installers.

During the warranty period, updates to VDP software shall be available from the supplier without charge.

Before the end of the warranty period, an inspection shall be conducted to insure proper function.

Maintenance and Support. The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. These parts shall be available for delivery within thirty days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone, or via personnel sent to the installation site upon placement-of an acceptable order at the supplier's then current pricing and terms of sale for onsite technical support services.

Installation or training support shall be provided by a factory authorized representative.

All product documentation shall be written in the English language.

Basis of Payment: This work will be paid for at the contract unit price per each for WIDE AREA VIDEO VEHICLE DETECTION SYSTEM COMPLETE for each intersection which price shall include installation in the controller cabinet complete with necessary connections for proper operation.

X8870300 EMERGENCY VEHICLE PRIORITY SYSTEM

This work shall consist of furnishing and installing an emergency vehicle priority system with redundant cellular and radio communication in accordance with the details in the plans and as specified herein.

Construction Requirements: The emergency vehicle priority system shall be the Glance System with matched components, manufactured by Applied Information. The system shall include a Model AI-500-085-02 cabinet unit with all required antennas, installation cables, and other associated equipment. The external components shall be mounted in accordance with the manufacturer's installation requirements, or as otherwise directed by the Engineer.

All installations shall be equipped with Confirmation Beacons for all directions. The Confirmation Beacons shall consist of a 6-watt PAR 38 LED flood lamp with a 30-degree light spread, or a 7-watt PAR 30 LED flood lamp with a 15-degree or greater light spread, maximum 7-watt energy consumption at 120V, and a 2,000-hour warranty for each direction of preemption. The lamp shall have an adjustable mount with a weatherproof enclosure for cable splicing. All hardware shall be cast aluminum or stainless steel. Holes drilled into signal poles, mast arms, or posts shall require rubber grommets. In order to maintain uniformity between communities, the confirmation beacons shall indicate when the control equipment receives the preemption signal. The pre-emption movement shall be signalized by a flashing indication. The stopped preempted movements shall be signalized by a continuous indication.

All cables shall be continuous unbroken runs. Splices in the cable are not allowed.

This item shall include any required modifications to an existing traffic signal controller as a result of the addition of the EMERGENCY VEHICLE PRIORITY SYSTEM.

The System shall come with a 10-year Connectivity and Support Plan agreement with the City of Bloomington, Illinois, and shall include at a minimum:

1. Glance Platform Subscription and Configuration
2. Guaranteed cellular connectivity with no cellular overage charges
3. Upgrade of cellular modem should current communication means no longer be supported
4. Telephone and email support during standard business hours.
5. Extended warranty on the hardware for the period of the Connectivity and Support Agreement
6. Over-the-air software and security updates
7. The Connectivity and Support plan shall be extendable prior to the end of the 10-year period at the option of the City. The cost of any extensions shall be born by the City separate from this work.

The contractor shall contact the City of Bloomington Traffic Engineer – Philip Allyn, P.E., P.T.O.E.; 309-434-2225, to coordinate the activation of the Connectivity and Support Plan agreement and the Glance Subscription and Configuration.

The System hardware shall be under warranty for as long as the device has an active connectivity and support license and is connected to the browser-based monitoring platform. Warranty shall be a “no-questions-asked” warranty, where hardware shall be replaced in the event that the device is irreparable.

Basis of Payment: This work will be paid for at the contract unit price each for EMERGENCY VEHICLE PRIORITY SYSTEM which price shall include all labor, equipment, material and testing necessary to complete the work as specified and ensure proper operation.

All cable required for the installation of the System and confirmation beacons shall be considered included in the cost of EMERGENCY VEHICLE PRIORITY SYSTEM and will not be paid for separately.

LED Confirmation Beacons will be considered as included in the cost of the EMERGENCY VEHICLE PRIORITY SYSTEM and will not be paid for separately.

The providing and activating the 10-year Connectivity and Support Plan agreement with the City of Bloomington shall be considered included in the cost of EMERGENCY VEHICLE PRIORITY SYSTEM and will not be paid for separately.

WATER MAIN SPECIFICATIONS

GENERAL REQUIREMENTS

- A. For approved manufacturers not listed for this project, inquire of the City of Bloomington Water Department Director, (309) 434-2426.
- B. Exercise care in transporting and handling pipe and fittings in order to avoid damage to materials or coatings. Lifting shall be by hoist or on skids when hand lifting is not feasible. Dropping shall not be permitted. Store and stack pipe as recommended by the manufacturer. Damaged pipe and fittings shall be replaced.
- C. Corporation stops, curb stops, service fittings and couplings, valves, gauges, and all materials that come in contact with potable water, shall comply with Section 611.126 of the Illinois Administrative Code Title 35. Lead concentrations cannot exceed 0.25% weighted average limit for all wetted surfaces.
- D. Water main replacements and connections to existing water main on Hamilton Road between Commerce Parkway and Morrissey Drive:
 - Connection shall be coordinated 48 hours in advance with both the City and with customers on Hamilton Rd. Work may only take place during the hours of 12:00 PM Saturday – 11:00 PM Sunday. Service shall be restored as soon as possible. If the existing water supply service is interrupted prior to the service being replaced, Contractor shall immediately contact the City and the customers on Hamilton Rd.
- E. A quantity for controlled low strength material and trench backfill has been established per locations shown in the plans. Refer to technical specifications included herein for additional information.
- F. All pipe materials furnished under this section shall have been manufactured in the United States of America and comply with all applicable provisions of referenced AWWA standards.

56105200 WATER VALVES 12”

Description

This work shall consist of furnishing and installing water valves of various sizes at locations shown on the plans and as directed by the Owner and as specified herein.

Submittal Requirements

- A. Submit shop drawings and product data for all valves, valve boxes, and valve operators showing general dimensions, linings and coatings, construction details and full descriptive literature, which includes materials of construction, material specification and grade for all valve parts. Shop drawings shall indicate valve operator locations.
- B. Valve manufacturer shall furnish certification that each valve has been subjected to a hydrostatic water pressure twice the pressure class and that each valve is free of defects. Valves shall be tested in both the open and closed positions.
- C. Furnish one set of all special tools necessary for installation, operation, normal maintenance, and adjustment.

Construction Requirements

General Valve

- A. All valves shall be of standard manufacture and of highest quality materials and workmanship.
- B. All valves of a particular type shall be the product of one manufacturer regularly engaged in the continuous production of that size and type of valve.
- C. Valves shall be suitable for working pressure as required and as specified for the pipeline in which it is installed. Manufacturer's name, service, and pressure class shall be cast into the body.
- D. Unless otherwise indicated or specified, valves shall be ductile iron body and disc.
- E. All valves shall be constructed for services up to 250 psi.
- F. Where required for satisfactory operation of valves, provide valve operators, cast iron valve boxes, tee handle wrench, and other valve appurtenances
- G. Buried valves shall be epoxy coated. All bolts shall be stainless steel.
- H. Buried valves 6-inch diameter or larger shall be set on foundation of solid concrete or stone not less than 8 inches thick nor less than one cubic foot in volume. Foundations shall be set on firmly compacted ground.
- I. The height of the valve and its supporting foundation shall conform to the height of the connecting pipe. Valves shall be set in a vertical position unless otherwise indicated on the Drawings
- J. All valves shall be restrained with retainer glands or a manufactured pipe restraint system approved by the Owner.
- K. All valves shall be inspected upon delivery in the field to insure proper working order before installation. They shall be set and jointed to the pipe in the manner as set forth in the AWWA Standards for the type of connection ends furnished. Open and close each valve observing full operation prior to installing successive lengths of pipe.
- L. All valves shall be provided with a standard valve chamber so arranged that no shock will be transmitted to the valve and the box opening shall be centered over the operation nut, and the cast iron cover shall be set flush with the road surface or finished surface.
- M. After installation, all valves shall be subject to the field test for piping as outlined in these specifications. Should any defects in materials or workmanship appear during these tests, the Contractor shall correct such defects with the least possible delay and to the satisfaction of the Owner.

General Gate Valve

- A. Gate valves shall be resilient wedge with cast iron body and non-rising stem with upper and lower thrust collars. Waterways shall be smooth. Gate valves shall be furnished with O-ring stem seals. Number, size and design shall conform to the AWWA Standard for R/W Valve O-Ring Stem Seals. All valves shall open by turning counterclockwise. Valves shall meet or exceed AWWA C-509.
- B. Wrench nuts shall be made of cast iron and shall be one and fifteen-sixteenths (1-15/16) inches square at the top, two (2) inches square at the base and one and three-fourths (1-3/4) inches high.

- C. Each gate valve shall be subjected to hydrostatic pressure test per AWWA C509-15.
- D. Acceptable gate valve manufacturers are Clow F6100, Mueller or equal.

General Valve Box

- A. Valve boxes shall be a screw type approximately 5-1/4 inches in diameter with a minimum thickness of 3/16 inch and shall be set to position during backfilling operations so they will be in a vertical alignment to and centered over the valve operating stem. The lower casting of the unit shall be installed first in such manner as to be cushioned and to not rest directly upon the body of the valve or upon the water main. The upper casting of the unit shall then be placed in proper alignment into such an elevation that its top will be at final grade. Extension sections shall be furnished, if necessary, to increase the length of the screw type valve box to ensure the top of the box will be at final grade. Where valve boxes require more than one additional section of box, the top section of the box shall be removed and a section of 6-inch diameter AWWA C900 PVC pipe cut to length, shall be inserted into the bottom section of the box and the upper section installed on top of the PVC pipe extension. CA-6 granular material shall be utilized to backfill around the operating nut and valve box. Valve box shall be two piece, screw type, and covers shall be no-tilt drop cover marked "WATER".

Measurement and Payment

This work will be measured for payment at the contract unit price each for each for WATER VALVES of the size specified. This work shall include all labor, equipment and material including excavation, except rock excavation; locating existing water main; furnishing and installing valves and valve boxes; blind flange; all necessary fittings for a complete installation as shown on the Drawings; concrete block support; bedding and earth backfill; testing; disinfection; protection, replacement, or repair of utilities, drainage systems, structures, homeowner's property, and miscellaneous property; removal of surplus excavated material; and clean-up.

TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

56109210 WATER VALVES TO BE ADJUSTED

Description

This work shall consist of adjusting existing water valve boxes to finished grade at the locations shown on the plans and as directed by the Owner. The work shall include excavating around the valve boxes, adjusting the boxes to match the finished grade and backfilling the excavation with select earth material. Excavations that are beneath or within two feet horizontally of proposed pavement and curbs shall be backfilled with Controlled Low-Strength Material. Any broken or damaged valve box materials will be replaced by the Contractor.

Measurement and Payment

This work will be paid for at the contract unit price each for WATER VALVES TO BE ADJUSTED, which price shall include all work as specified herein.

TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

56400500 FIRE HYDRANTS TO BE REMOVED

Description

This work shall consist of complete removal and disposal of the existing fire hydrants at the locations shown on the plans and as directed by the Owner.

Construction Requirements

The Contractor will be responsible for exploring and determining the type, size, and depth of the fire hydrants. After the new water mains have been satisfactorily installed, disinfected and approval given by the Owner, the existing hydrants shall be removed as noted on the plans and described herein. The limits of the water lines to be abandoned are shown on the plans. All fire hydrants and valve boxes within the limits shown shall be removed to a minimum one foot below grade. The fire hydrants that are salvageable as determined by the Owner shall become the property of the City of Bloomington and be delivered by the Contractor to the Water Department at 603 West Division Street, Bloomington, IL. Fire hydrants determined not to be salvageable by the Owner shall be disposed of by the Contractor in accordance with Article 202.03 of the Standard Specifications.

The remaining water mains shall be abandoned in accordance with the special provision for "Abandon Existing Water Main". The excavated areas that are beneath or within two feet horizontally of proposed pavement and curb shall be backfilled with Controlled Low-Strength Material. All other excavated areas shall be backfilled with Trench Backfill.

Measurement and Payment

This work will be measured for payment at the contract unit price each for FIRE HYDRANTS TO BE REMOVED. This work shall include all labor, equipment and material including excavation, locating existing water main, valves and hydrants; dewatering the abandoned line; cutting and removing sections of pipe, installing restrained plugs and caps, isolation valves and thrust blocks; salvaging and delivering fire hydrants or removing and disposing of valve boxes and fire hydrants to a minimum of 1 foot below grade; protection, replacement or repair of utilities, drainage systems, structures, homeowner's property and miscellaneous property; removal of surplus excavated material; and clean-up.

The abandonment of existing water mains and TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

56400820 FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX

Description

This work shall be performed in accordance with the latest edition of the Standard Specification for Water and Sewer Construction in Illinois, the City of Bloomington Design and Construction Standards for Water Distribution and Supply System, and Section 561 of the Standard Specifications, except as modified herein. The work of this item shall consist of furnishing and installing fire hydrants with and without auxiliary valve and valve box as shown in the plans.

Submittal Requirements

- A. Submit shop drawings and product data showing general dimensions, linings and coatings, construction details and full descriptive literature, which includes materials of construction, material specification and grade for fire hydrants, hydrant parts, hydrant auxiliary valves and valve boxes.

Construction Requirements

General Fire Hydrants

- A. These specifications are to be used in conjunction with the AWWA Standard C502 for fire hydrants for ordinary water works service.
- B. All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502.
- C. The hydrants shall be Waterous Pacer, Mueller Modern Centurion, Clow F2500, or Kennedy Guardian, of a pattern approved by the Owner and each supplied with all optional features. The name or mark of the manufacturer and size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed. The specific type of hydrant must be approved by the Owner prior to installation. 2-Way hydrants shall be equivalent to the listed hydrants.
- D. As a minimum requirement, all hydrants shall be designed for a working pressure of 200 pounds per square inch. Workmanship, design and material, shall conform to the AWWA Standard C502. The hydrant bodies shall be cast iron, fully mounted with approved non-corrodible metals. All wearing surfaces shall be either a copper alloy or some other approved non-corrodible material and there shall be no moving bearing or contact surfaces of iron in contact with iron or steel. All contact surfaces shall be finished or machined in the best workmanlike manner and all wearing surfaces shall be easily renewable. All bolts below ground shall be stainless steel.
- E. The design of the hydrant shall be such that all working parts may be removed through the top of the hydrant and shall have the required AWWA specified number of turns of the stem to open the R/W and are equal to the area of the valve opening. Any change in area of the water passage through the valve must have an easy curve, and all outlets must have round corners of good radius. Hydrant barrel shall be of such design

that there is easy installation to top extensions and full rotation (360°) of the upper barrel without shutting off water to the hydrant.

- F. Hydrants shall be provided with a sidewalk flange. Breaking devices shall be at the sidewalk flange which will allow the hydrant barrel to separate at this point with a minimum breakage of hydrant parts in case of damage. There shall also be provided at this point, a safety stem coupling on the operating stem that will shear at the time of impact. All hydrants shall be equipped with O-Ring stem seals. The breakaway flange is to be 2.5" to 8.5" above the proposed ground level per manufacturer specifications.
- G. Hydrants shall utilize standard nozzle caps. The hydrant nozzle and nozzle caps shall be Harrington Integral Hydrant Storz including Storz Blind Cap with Suction Seal and Aircraft Cable or equal. The nozzle shall have a brass metal face seal and hard anodized aluminum ramps and lugs. The aluminum finish shall be hardcoat anodized to Mil-A-8625f, Type 3, dark gray. The adapter shall be made of forged or extruded 6061-T6 aluminum. The blind cap shall have hard anodized aluminum ramps and lugs and be made of forged or extruded 6061-T6 aluminum. The center cap shall be equipped with a suction seal and be connected to the adapter or hydrant with a 0.125" vinyl coated aircraft cable.
- H. Hydrants shall have one – 4" pumper nozzle with Bloomington Standard Threads and two - 2-1/2" hose nozzle NST. 2-Way hydrants shall have two - 2-1/2" hose nozzle NST.
- I. The 5-1/4" internal hydrant valve shall be equipped with a 1-1/2" pentagon operating nut and a main operating rod travel stop capable of withstanding 200 foot pounds in the fully open or closed position.
- J. Before the hydrant is painted at the factory, it shall be subjected to an internal hydrostatic test of 300 pound per square inch with the hydrant valve in a closed position and again with the hydrant valve in an open position.
- K. All iron parts of the hydrant, both inside and outside shall be thoroughly cleaned and thereafter painted with one coat of paint of a durable composition. The hydrants shall be painted with one additional coat of Tnemec-Gloss Safety Yellow per national fire code specifications and as approved by the Water Department Director.
- L. Fire hydrants shall have a 6-inch restrained joint opening. Fire hydrants shall open counterclockwise and close with pressure.
- M. All fittings and valves in connection with the fire hydrant shall be the anchoring type. No hydrant shall be placed closer than 2 1/2 feet from back of curb or edge of pavement to the centerline of hydrant.
- N. See General Gate Valve and General Valve Box for auxiliary valve and valve box requirements.

Installation

- A. The Contractor will be responsible for verifying the depth of the water mains and the finished grade elevation and providing any necessary fittings to bring the hydrant supply pipe, valve box and hydrant to the depth shown on the detail. The intent is for the hydrant to be installed as shown with a one piece barrel section. The cost of any

additional fittings and complying with these requirements shall be included in the cost of the hydrant assembly and no additional compensation will be allowed.

- B. Hydrants shall not be located closer than 10 feet from any light standard, tree, sign post, or other permanent structure that would impeded access to the hydrant or reduce its visibility. No hydrant shall be placed closer than 2-1/2 feet from back of curb or edge of pavement to the centerline of hydrant.
- C. Hydrants shall be plumb and shall be set so that the center of the hydrant port is eighteen (18) inches +/- above the surrounding finished grade ensuring the breakaway flange is at proper ground height. Hydrants shall be set in accordance with the City of Bloomington's minimum cover requirement of 4 feet. All hydrants shall be inspected in the field upon delivery to the job to insure proper operation before installation. A minimum of 2/3 cubic yard of washed coarse stone and polyethylene covering shall be placed at and around the base of the hydrant to insure proper drainage of the hydrant after use. The blocking of the hydrant shall consist of masonry blocks extending from the hydrant to undisturbed soil and shall be so placed to form a barrier adjacent to the hydrant base top to counteract the pressure of water exerted thereon. Poured-in-place concrete shall not be used. Care shall be taken to insure that weep holes are not covered. The hydrant shall be set on a concrete block to insure a firm bearing for the hydrant base. The hydrant auxiliary valve shall not be located directly adjacent to the hydrant. A minimum spool piece length of 2 feet (2') is required. Placing the auxiliary valve in the pavement is preferred and the valve shall not be located in the curb without express written directive from the Water Department Director.
- D. All fire hydrants shall be installed prior to the hydrostatic testing of the water main so that all items (water main, fire hydrants, valves, etc) are tested as one complete system. This shall occur prior to abandonment of the existing water main.

Measurement and Payment

This work will be measured for payment at the contract unit price each for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX. This work shall include all labor, equipment and material including excavation, except rock excavation, bedding and earth backfill; furnishing and installing the fire hydrant rated at 200 psi working pressure, all necessary fittings for a complete installation as shown on the Drawings, auxiliary gate valve, valve box, thrust blocks, hydrant extension, drainage system, and appurtenances; testing; disinfection; protection, replacement, or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material; and clean-up.

TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

X5610024 DUCTILE IRON WATER MAIN 6" RESTRAINED JOINT TYPE
X1200078 DUCTILE IRON WATER MAIN 12" RESTRAINED JOINT TYPE

Description

This work shall consist of furnishing and installing ductile iron water main or ductile iron water main, restrained joint type as shown in the plans. All work shall be performed in accordance with the latest edition of the Standard Specification for Water and Sewer Construction in Illinois, the

City of Bloomington Design and Construction Standards for Water Distribution and Supply System, and Sections 561 of the Standard Specifications, except as modified herein.

Submittal Requirements

Submit the following:

- A. Product data for gaskets.
- B. Product data and details showing general dimensions, construction details and full descriptive literature, which includes materials of construction, material specification and grade for pipe, fittings and joints.
- C. Piping specialties, installation details, and jointing details including restrained joints.
- D. Manufacturer's information on installation procedures.

Construction Requirements

General Water Main:

- A. Ductile Iron Pipe shall be centrifugally cast in metal or sand-lined molds and shall conform to AWWA C151.
- B. The minimum wall thickness for pipe having push-on or mechanical joints, restrained joints, plain ends, or cast flange ends shall be Special Class 52 with single gasket joints.
- C. Joints: Mechanical and push-on joints for pipe and fittings shall conform to AWWA C111. All fittings shall be restrained. Restrained joints shall be American Ductile Iron Pipe "Lok-Ring Joint", U.S. Pipe "TR-FLEX", McWane (Clow) "Field Lok (Tyton)", Griffin Pipe "Snap-Lok" or "Bolt-Lok Joint". Restrained retainer glands shall be EBAA Iron Sales Meg-a-Lug for 14" or larger pipe. Restrained retainer glands for 12" and smaller pipes shall be standard retainer glands from approved manufacturers. Restrained joints are required when connecting to fittings. Restrained joints using a boltless design shall be used for full length joints where called out on the drawings for restrained joints.
- D. Gaskets: Flanged joint gaskets shall be full-face, 1/8-inch thick, cloth inserted, synthetic rubber and conform to AWWA C111, ANSI B16.21, and be certified to ANSI/NSF 61.
- E. Fittings: All fittings shall be either flanged or restrained joints as described above. Fittings, including compact fittings, for ductile iron pipe shall be ductile iron of the type shown and shall conform to AWWA/ANSI C153/A21.5310 and AWWA/ANSI C111/A21.11, 1725 Kpa (250 psi) rated pressure. Joints shall be as specified above.
- F. Grooved pipe type couplings shall be manufactured by Victaulic Company of America. Coupling shall be flexible system conforming to ASTM A536.
- G. Interior Lining: Interior lining for cast iron and ductile iron pipe and fittings shall be as follows:
 - 1. Cement mortar lining and bituminous seal coat shall conform to AWWA C104. Bituminous lining shall be 1 mil thick.

- H. Exterior Coating: Exterior coating for ductile iron pipe and fittings shall be as follows.
 - 1. Buried pipe and fittings shall have a minimum 1 mil thick asphaltic coating per AWWA C151 and ANSI A21.6 or A21.8.
- I. Corrosion Protection
 - 1. Ductile iron pipe, fittings and valves shall be encased in polyethylene encasement sleeves which consist of linear low density polyethylene, 8 mil thickness, Class C (black) conformity to the requirements of AWWA C105/ANSI A21.5-99. Polyethylene wrap shall be secured with a polyethylene compatible adhesive tape. The use of duct tape will not be allowed. When lifting polyethylene wrapped pipe with a backhoe, a fabric sling or padded cable shall be used to protect the wrap from damage.
 - 2. Ductile iron pipe and fittings installed by horizontal directional drilling shall be encased by dual wrap polyethylene encasement sleeves, Class C (black) conforming to the requirements of AWWA C105/ANSI A21.5-99. The inner wrap shall be linear low density, polyethylene, 8 mil thickness, and the exterior wrap shall be high density cross laminated, polyethylene, 4 mil thickness.
- J. All bolts shall be stainless steel.
- K. Tracer wire shall be #12 THWN single strand electrical cable suitable for direct burial. Tracer wire shall be installed with all pipes on this project. The wire shall be taped or attached to the pipe in an approved manner during installation and prior to backfilling. Two feet of slack shall be provided in all valve boxes and fire hydrants. The slack shall be wrapped around the valve box or fire hydrant at ground level.

Installation:

- A. Pipe, including pipe with mechanical joints, shall be installed in accordance with the manufacturer's specifications and recommendations. Sockets and gaskets shall be clean, and gaskets shall be properly centered before joint is made.
- B. All lengths of pipe shall be dimensioned accurately to measurements established at the site and shall be worked into place without springing or forcing.
- C. The Contractor shall cut all pipe and drill all holes that may be necessary. Cut sections of pipe shall be reamed or filed to remove all burrs. The pipe interior and joints shall be thoroughly cleaned before being installed and kept clean during construction.
- D. All changes in direction shall be made with fittings or approved joint deflection. Bending of pipe is prohibited. The maximum deflection at any joint shall not exceed 3 degrees per joint or 80% of the pipe manufacturers recommended maximum deflection, whichever is less. Contractor shall supply documentation from pipe manufacturer to verify the recommended deflection for any type pipe proposed for use.
- E. Any transition from one pipe size to another shall be made with a reducing fitting. Reducing bushings are prohibited except where specifically indicated on the Drawings.

- F. Make adequate provision for expansion and contraction of piping.
- G. Pipe embedment and backfilling shall closely follow the installation and jointing of pipe in the trench, to prevent floating of the pipe by water which may enter the trench, and to prevent longitudinal movement caused by thermal expansion or contraction of the pipe. Not more than 25 feet of pipe shall be exposed at any time ahead of the backfilling in any section of trench.
- H. Plugs
1. Installed piping systems shall be temporarily plugged at the end of each day's work, or other interruption to progress on a given line. Plugging shall be adequate to prevent entry of small animals or persons into the pipe or the entrance or insertion of deleterious materials.
 2. Standard plugs shall be inserted into all dead-end pipes, tees, or crosses; spigot ends shall be capped; flanged and mechanical joint ends shall have blind flanges of metal.
 3. Plugs installed for pressure testing shall be blind flanges fully secured and blocked to withstand the test pressure.
 4. Where plugging is required because of contract division or phasing for later connection, the ends of such lines shall be equipped with a permanent type plug or blind flange. Installation or removal of such plugging shall be considered incidental to the work.
- I. Separation of Non-Potable and Potable Water Lines
1. Water main separation requirements shall follow the rules listed in the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers "Recommended Standards for Water Works", 2022 Edition.
 2. If water main separation is not possible, both the water main and drain or sewer shall be constructed of slip-on or mechanical joint ductile iron pipe, meeting the requirements of 35 Illinois Administrative Code (IAC) 653.111. Construction shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least ten feet. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling
- J. Joining Gasket Joint Pipe
1. The inside of the bell shall be thoroughly cleaned to remove all foreign matter from the joint. The gasket shall be inserted in the gasket seat provided.
 2. A thin film of gasket lubricant shall be applied to inside surface of the gasket. Gasket lubricant shall be a solution of vegetable soap or other solution supplied by the pipe manufacturer and approved by the Owner.

3. The spigot end of the pipe shall be cleaned and entered into the rubber gasket in the bell, using care to keep the joint from contacting the ground. The joint shall then be completed by forcing the plain end to the seat of the bell.
4. Care must be taken not to damage exterior coating or interior lining when joining the pipe.
5. Field cut pipe lengths shall be beveled to avoid damage to the gasket and facilitate making the joint.
6. All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joint.

K. Pipeline Trenching

1. Provide suitable temporary drainage channels for any water that may flow along or across the work.
2. Provide barriers, warning lights and other protective devices at all excavations in accordance with Stage Construction and Maintenance of Traffic Plans.
3. Roads and pavements shall not be blocked or obstructed by excavated materials, except as authorized by the Owner, in which case adequate temporary provisions must be made for satisfactory temporary passage of Owner's operating personnel, pedestrians, and vehicles.
4. If underground utilities and/or structures not shown on the Drawings are encountered, notify the Owner and do not proceed until instructions are obtained. Notify the Owner if springs or running water are encountered.
5. Excavation in close proximity to existing utilities shall be performed in a manner to prevent damage. Contact the Owner and representatives of site utilities for assistance in locating buried lines.
6. All excavations shall be made by open cut unless otherwise indicated. Sides of trenches shall be kept as nearly vertical as possible from the trench bottom to a level of one foot above the top of the pipe. Trench bottoms shall be excavated true to line and shall be 18 inches wider than the outside diameter of the pipe for trench depths of less than 5 feet, or 36 inches wider than the outside diameter of the pipe for trench depths of 5 feet or larger. Minimum trench width for small diameter pipe shall be 24 inches. Grade of the trench bottom shall be consistent with the method of bedding specified.

L. Shoring and Bracing

1. Engage and assign supervision of shoring and bracing work to a qualified foundation consultant.
2. Comply with local codes and ordinances of governing authorities having jurisdiction.
3. Before starting work, check and verify governing dimensions and elevations. Survey condition of adjoining properties, take photographs, recording existing settlement or cracking of structures, pavements, and other improvements. Prepare list of such damages, verified by dated photographs, and signed by Contractor and others conducting investigation.

4. Protect existing active utility services and structures from damage during shoring and bracing work. Repair or replace damages to satisfaction of utility owner.
5. Provide suitable shoring and bracing materials which will support loads imposed.

M. Shoring

1. Protect site from caving and unacceptable soil movement. Where shoring is required, locate system to clear permanent construction and to permit forming and finishing of concrete surfaces. Provide shoring system adequately anchored and braced to resist earth and hydrostatic pressures.
2. Shoring systems retaining earth on which support or stability of existing structures is dependent must be left in place at completion of work. If wood is part of shoring system near existing structures, use pressure preservative treated materials or remove before placement of backfill.

N. Bracing

1. Locate bracing to clear permanent work. If necessary to move a brace, install new bracing prior to removal of original brace.
2. Install internal bracing, if required, to prevent spreading or distortion to braced frames.
3. Maintain bracing until structural elements are re-braced by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.
4. Remove sheeting, shoring, and bracing in stages to avoid disturbance to underlying soils and damage to structures, pavements, facilities, and utilities.
5. Repair or replace adjacent work damaged or displaced through installation or removal of shoring and bracing work.

O. The trenches shall be bedded, haunched, and backfilled as shown on the detail in the plans. The excavated areas that are beneath or within two feet horizontally of proposed pavement and curb shall be backfilled with Controlled Low-Strength Material.

P. Provide for testing and cleanup as soon as practicable, so these operations do not lag far behind pipe installation. Perform preliminary cleanup and grading operations immediately after backfilling. All surplus excavated material shall be disposed of off-site by the Contractor.

Identification Tape:

A. Identification tape shall be manufactured of polyethylene with a minimum thickness of 4-mils. The tape shall be highly resistant to alkalis, acid and other destructive agents found in soil. Tape width shall be a minimum of 3 inches and a maximum of 6 inches and shall have a blue background color, imprinted with black letters. Imprint shall be "CAUTION CAUTION – WATER LINE BURIED BELOW" and shall repeat itself a minimum of once every 2 feet for entire length of the tape.

- B. Install identification tape above all proposed water mains in accordance with the manufacturer's installation instructions. Install identification tape one foot above the top of the pipe.
- C. Acceptable Manufacturers of the identification tape are Reef Industries, Inc – Terra Tape and Proline Safety Products.

System Testing

Piping System Testing:

Provide all necessary equipment and instrumentation required for proper completion of testing. Water for the initial testing is available from the Owner at no cost. The Owner reserves the right to meter and charge for additional water used by the Contractor for additional testing, etc.

Test procedures and method of disposal of water shall be approved by the Owner. All tests shall be made in the presence of the Owner. Preliminary tests made by the Contractor without being observed by the Owner will not be accepted. Notify the Owner at least eight hours before any work is to be inspected or tested.

All defects in piping systems shall be repaired and/or replaced and retested until acceptable. Repairs shall be made to the standard of quality specified for the entire system.

Sections of the system may be tested separately, but any defect which may develop in a section previously tested and accepted shall be promptly corrected and retested. Pressure tests shall be made between valves to demonstrate ability of valves to sustain pressure.

All piping shall be tested in accordance with the following test methods, in addition to any test required by local and state codes or building authorities.

Prior to testing, flush all piping system with water at a minimum velocity of 3 fps to remove construction debris.

Pressure Piping Testing:

All water piping shall pass a hydrostatic pressure test and a leakage test before any pipe joints are backfilled, and a final test after backfill operations are complete.

The pressure and leakage test shall be made after all jointing operations are completed and any concrete reaction blocks and restraints have cured at least 7 days. Lines tested before backfill is in place shall be retested after compacted backfill is placed.

Sections of piping between valves and other short sections of line may be isolated for testing. If shorter sections are tested, test plugs or bulkheads required at the ends of the test section shall be furnished and installed by the Contractor, together with all anchors, braces, and other devices required to withstand the hydrostatic pressure without imposing any thrust on the pipe line. The Contractor shall be solely responsible for any damage, which may result from the failure of test plugs or supports.

Air shall be expelled from the pipe before applying pressure tests.

Hydrostatic Pressure Test:

Hydrostatic pressure test shall be made in accordance with the latest edition of ANSI/AWWA C600.

Piping shall be slowly filled with water and all air expelled. Care shall be taken that all air valves are installed and open in the section being filled and that the rate of filling does not exceed the venting capacity of the air valves.

After the section of line to be tested has been filled with water, the specified test pressure shall be applied and maintained for a minimum period of 2 hours and for such additional period necessary for the Owner to complete the inspection of the line under test. Do not exceed pipe manufacturer's suggested time duration at the test pressure. If defects are noted, repairs shall be made and the test repeated until all parts of the line withstand the test pressure.

Hydrostatic test pressure shall be 50 percent more than the operating pressure at the lowest elevation of the pipe section or 150 psi, whichever is greater, for at least one two-hour duration and not vary more than 5 psi.

Leakage Test:

After the specified hydrostatic test has been completed, the line shall be subjected to a leakage test under a hydrostatic pressure of 150 psi or 150% of the normal operating pressure, whichever is greater. The pressure shall be maintained within a maximum variation of 5 psi during the entire leakage test. The duration of the leakage test shall be 2 hour minimum, and for such additional time necessary for the Owner to complete inspection of the section of line under test. Leakage measurements shall not be started until a constant test pressure has been established. The line leakage shall be measured by means of a water meter installed on the supply side of the pressure pump.

No leakage is allowed in exposed piping, buried piping with flanged, threaded, or welded joints or buried non-potable piping in conflict with potable water lines.

Tested sections of buried piping with slip-type or mechanical joints will not be accepted if it has a leakage rate in excess of the rate determined by the formula:

$L = (1/133,200) * SDp$, in which;

L = Maximum permissible leakage rate, in gallons per hour, throughout the entire length of line being tested.

S = Length of pipe in feet.

D = Nominal internal diameter (in inches) of the pipe.

p = The square root of the average pressure in psig in the tested portion of the line.

Where the leakage rate exceeds the permissible maximum, the Contractor shall locate and repair leaking joints to the extent required to reduce the total leakage to within the prescribed amount.

All apparent leaks discovered within one year from the date of final acceptance of the work by the Owner shall be located and repaired by the Contractor, regardless of the total line leakage rate.

System Startup – Disinfection

Applicable Codes:

All disinfection work shall be acceptable to the State Health Authority. If any requirements of this Section are in conflict with requirements of the Authority for disinfection, those of the Authority shall govern methods of disinfection and shall conform to AWWA C650, Standard Procedure for Disinfecting Water Mains, Article 41-2.15 of the Standard Specifications for Water and Sewer Construction in Illinois, and the City of Bloomington's Manual of Practice for Design of Public Improvements.

Qualifications:

All work performed for and in connection with disinfection shall be under the direction of an experienced supervisor.

All equipment used in disinfection work shall be in proper working condition and shall be adequate for the specified work.

Submittals:

Prior to starting any disinfection work, furnish for the Owner's review, a detailed outline of the proposed sequence of operation, manner of filling and flushing units, source and quality of water to be used, and disposal of wasted water. Admission of contaminated water into previously disinfected units must be prevented.

Chlorine Source:

Chlorine shall be applied either as liquid chlorine or as chlorine-bearing compounds in water.

Disinfection of Potable Water Piping Systems:

Chlorination shall be performed by the Contractor. The Contractor shall have a representative present during the disinfecting to render assistance and record any defects found during disinfection operations. The Contractor shall notify the Owner 24 hours prior to disinfection operations.

Water for the initial flushing and chlorination of the water main shall be supplied by the City. Should additional flushing(s) or rechlorination(s) be required to obtain satisfactory bacterial test results, the City reserves the right to meter and charge for the additional water used by the Contractor.

Water used for testing, flushing and chlorination shall be discharged to the sanitary sewer. The Contractor shall provide and install any hose necessary to direct the water being flushed away from any area it might damage. The Contractor shall take whatever precautions necessary during flushing to prevent ecological damage to any receiving stream, lake, or other body of water.

At the extreme ends of the proposed new water main, every 1200 feet, and at additional locations directed by the Owner, sampling and chlorinating taps shall be installed by the Contractor in accordance with the details as shown on the Drawings. After the chlorinating, sampling and testing is approved by the Owner, the corporation stop shall be shut off and the piping removed from the corporation stop.

All water used must be potable and contain a chlorine residual of not less than 0.2 parts per million of free chlorine or 0.5 parts per million of combined chlorine.

Cleaning and Swabbing:

The interior of the pipe shall be cleaned during installation by swabbing or after installation by inserting a foam pig, prior to testing. A 1% hypochlorite disinfecting solution shall be used during swabbing or use of the foam pig.

All taps required by the Contractor for chlorination or flushing purposes or for temporary or permanent release of air shall be provided by Contractor as part of the construction of water mains. When completed, the copper tubing shall be removed and the corporation stop placed at the "off" position.

Form of Applied Chlorine:

Disinfection must be accomplished by either the continuous feed method or slug method. The tablet method is not acceptable and is not to be used except with the expressed written permission of the Owner. A chlorine residual of at least 50 parts per million must be attained initially and 25 parts per million residual present after 24 hours when the preferred continuous feed method is used. If the slug method is used, 300 parts per million must be retained for a minimum of 3 hours, or 500 parts per million retained for 30 minutes. Attainment of initial and final chlorine residuals must be verified by the Owner. Disinfecting chlorine doses shall not remain in the pipe for more than 24 hours.

In order to provide proper conditions for disinfection following construction, installation option "A" or "B" must be followed.

- A. A minimum of three low density foam swabs shall be introduced into the first unit of pipe being installed and shall remain until the job is completed whereupon the swabs

shall be propelled a minimum of three times, or until water is clear, in the direction of the extreme ends of the construction project during the initial filling and flushing process. When a dead-end main is involved the Contractor may return the swabs to the point of origin by using another water source with sufficient volume and pressure to propel the swabs, or he may retrieve the swabs at the exit point and reintroduce the swabs at the origin repeating the process until exit water is clear. The process must be performed on every run of pipe from each branch of newly constructed water main. In cases where foam swabs are too large to be retrieved from a fire hydrant, an exit tee or wye and a means of directing the water away from the trench must be provided. All swabs that are used must be accounted for when cleaning is completed.

- B. Each unit of pipe, fitting and valve shall be hand swabbed or otherwise mechanically cleaned with a prior approved method before installation, and a cap or plug inserted in the pipe and retained until just prior to joining with the next unit of pipe. Two caps or plugs must be utilized, one inserted in the last unit of pipe laid and one to be used in the unit of pipe being prepared for installation. The plug or cap in the last unit of pipe installed shall not be removed until the next pipe unit is lowered into the trench and is ready to be inserted. At the end of each working day a watertight plug or cap shall reside in the last unit of pipe or fitting installed, until construction resumes. During installation workman's hands, gloves, rags, tools, or any other foreign object must not be introduced into the open ends of any previously cleaned pipe. If dirt or mud is kicked into or falls into the open ends of the pipe during handling or joining, re-cleaning of the pipe or fitting affected must be performed. Cleaning water must be clear water containing a minimum of 10 ppm chlorine and shall be changed whenever appropriate. Muddy or overly discolored cleaning solutions shall not be used at any time.

In the event a project is constructed where a flushing velocity of 2.5 feet per second cannot be attained the hand cleaning method must be employed. Where the hand cleaning method is employed, chlorine in the form of high test hypochlorite (HTH) may be introduced into each unit of pipe during construction to satisfy the disinfection requirements, providing a minimum of fifty parts per million (50 ppm) of chlorine is present in both ends of the new main following initial filling.

Point and Rate of Application:

Point of Application - The preferred point of application of the chlorinating agent is at the beginning of the pipeline extension or any valved section of it, and through a corporation stop inserted in the pipe. The water injector for delivering the chlorine-bearing water into the pipe should be supplied from a tap made on the pressure side of the gate valve controlling the flow into the pipeline extension. Alternate points of application may be used when approved or directed by the Owner.

Rate of Application - Water from the existing distribution system, or other approved source of supply shall be controlled to flow very slowly into the newly laid pipeline during the application of the chlorine. The rate of chlorine mixture flow shall be in such proportion to the rate of water entering the newly laid pipe such that the dosage applied to the water will be at least fifty (50) parts per million.

Retention Period - Treated water shall be retained in the pipe at least twenty-four (24) hours. After this period, the chlorine residual at pipe extremities and at other representative points shall be at least twenty-five (25) parts per million.

Chlorinating Valves and Hydrants - In the process of chlorinating newly laid pipe, all valves or other appurtenances shall be operated while the pipeline is filled with the chlorinating agent and under normal operating pressure.

Preventing Reverse Flow - Valves shall be manipulated so that the strong chlorine solution in the line being treated will not flow back into the line supplying the water. Check valves may be used on chlorine equipment piping if desired.

Final Flushing and Testing:

Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipe at its extremity until the replacement water throughout its length shows a residual not in excess of that carried in the system. Before any flushing of water mains, the Contractor shall notify the Owner of the flushing date and time. Notify the Owner twenty-four (24) hours prior to filling the main.

After flushing, water samples the Contractor shall collect from the treated piping system and arrange for analysis. Bacteriological analysis must be performed by a laboratory approved by the Director of Illinois Department of Public Health and the Owner. The samples shall show satisfactory bacteriological results on two (2) successive days.

Water mains that fail the initial bacterial test shall be flushed again before additional sampling is commenced. If the second sample also fails the bacterial test, then disinfection shall be repeated and flushing prior to additional sampling shall be required. If the third sample fails the bacterial test, then the next step shall be determined by the Owner.

Swabbing:

Disinfection for pipe, fittings, or valves that must be placed in service immediately shall be accomplished by thoroughly flushing and swabbing with a strong (5 percent) solution of calcium hypochlorite immediately prior to assembly. Approval must be secured from the Owner before this method of disinfection will be accepted.

Measurement and Payment

This work will be measured for payment at the contract unit price per foot for DUCTILE IRON WATER MAIN 12" RESTRAINED JOINT TYPE or DUCTILE IRON WATER MAIN 6" RESTRAINED JOINT TYPE. Water mains will be measured in lineal feet along the centerline of the pipe. This work shall include all labor, equipment and material necessary to construct the water mains including all excavation, except rock excavation; clearing and grubbing; locating existing water main; furnishing and installing transition fittings for dissimilar pipe materials; furnishing and installing pipe, restrained joint pipe, fittings, reducers, and elbows; polyethylene wrap; watertight plugs; No. 12 THWN single strand tracer wire, bedding and backfill (except

Trench Backfill and Controlled Low-Strength Material, which will be paid for as specified herein); thrust blocks; testing; chlorination taps; disinfection; protection, replacement, or repair of utilities, drainage systems, structures, homeowner's property, and miscellaneous property; removal of surplus excavated material; and clean-up.

TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

X5610752 WATER MAIN LINE STOP 12"

Description

This work shall consist of furnishing and installing temporary inflatable plugs in pressurized water mains to stop water flow and allow for the installation of new water mains and valves at locations shown on the plans or as directed by the Owner. Other means of plugging the water mains must be approved by the Owner prior to beginning the work.

Construction Requirements

The Contractor shall be responsible for excavating and locating the existing water mains at locations shown on the plans or as directed by the Owner. The Contractor shall install the inflatable plugs and leave them in place until such time that the new water main connections are made and tested and then the plugs can be removed. The excavated areas that are beneath or within two feet horizontally of proposed pavement and curb shall be backfilled with Controlled Low-Strength Material. All other excavated areas shall be backfilled with Trench Backfill.

Measurement and Payment

This work will be measured for payment at the contract unit price each for WATER MAIN LINE STOP of the size shown on the plans. This work shall include all labor, equipment, and material including excavation, except rock excavation; installation and removals; protection, replacement, or repair of utilities and drainage systems; removal of surplus excavated material; backfill with earth, controlled low-strength material or trench material; surface restoration to match existing; and clean-up.

X5630712 CONNECTION TO EXISTING WATER MAIN 12"

Description

This work shall consist of removing fittings and/or sections of pipe and furnishing and installing all pipe, tees, fittings and pipe restraints required to connect to existing water main as shown in the plans. All work shall be performed in accordance with the latest edition of the Standard Specification for Water and Sewer Construction in Illinois, the City of Bloomington Design and Construction Standards for Water Distribution and Supply System, and the Standard Specifications, except as modified herein.

Construction Requirements

General

- A. When connecting to an existing water main, work must be coordinated with the Owner at least 2 business days in advance. If the connection to an existing water main requires a shutdown of the existing main, the Contractor shall re-chlorinate that portion of the existing main which is shut down before it is put back into service. Shutting down the existing water main shall be limited to 48 hours for installation of all connections to the existing water main, with additional time allotted for disinfection of the line. The Contractor shall provide the necessary restraining of the existing main and transitional fittings when making the new connection.
- B. The Contractor shall be responsible for excavating and locating the existing water mains at locations shown on the plans or as directed by the Owner.
- C. Reference the Ductile Iron Water Main Section for joint, gasket, and fitting requirements.
- D. Contractor shall not operate existing water valves. All existing valves shall be operated by City of Bloomington staff.
- E. Thrust blocking and other associated work for the connections to existing mains shall be in accordance with Section 41 of the Standard Specification for Water and Sewer Construction in Illinois.

Measurement and Payment

This work will be measured for payment at the contract unit price each for CONNECTION TO EXISTING WATER MAIN of the size shown on the plans. This work shall include all labor, equipment, and material including excavation, except rock excavation; locating existing water main; removing fittings and sections of pipe; furnishing and installing transition fittings for dissimilar pipe materials and changes in elevation; furnishing and installing gaskets, tees, reducers, elbows and other fittings and hardware as necessary from the outlet at the new main to the connection with the existing main; watertight plugs; thrust blocks; testing; disinfection; protection; earth backfill; replacement or repair of utilities, drainage systems, structures, homeowner's property and miscellaneous property; and removal of surplus excavated material.

TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

XX005106 PVC CASING PIPE 18"

Description

This work shall consist of constructing PVC casing pipes for the water mains at locations shown on the plans and as directed by the Owner.

Materials

PVC Casing:

PVC Casing pipes shall be water main quality pipe in accordance with Article 40-2.01 C of the Standard Specifications for Water and Sewer Main Construction in Illinois and the following requirements.

Standard C900: Polyvinyl Chloride (PVC) Pressure Pipe Schedule 80 with fabricated fittings, 4 inch through 12-inch diameter, for Water Distribution.

Standard C905: Polyvinyl Chloride (PVC) Pressure Pipe Schedule 80 with fabricated Fittings, 14 inch through 48-inch diameter, for Water Transmission and Distribution.

Joints in the PVC pipe shall be pressure slip jointed with elastomeric gaskets in accordance with ASTM Standard F477 or solvent cement welded in accordance with ASTM Standard D2564.

Casing spacer end seals shall be a pull-over type construction and made from Neoprene rubber with a thickness between 3/32 and 1/8 inch, dependent on size and flexibility needed for proper fitment and functionality. End Seals shall utilize T304 stainless steel bands for securing each end to the casing pipe and carrier pipe. Casing spacer end seals shall be supplied and installed per the City's Manual of Practice

Construction Requirements

Unless otherwise shown on the drawings, the casing pipe shall be installed using open cut construction. Alternative proposed methods of installation shall be approved by the Owner prior to starting the work.

The water main pipe may be pushed or pulled (depending upon piping material, joint type, and method of pipe spacers and support) into the casing as assembled. The proposed method of installation shall be approved by the Owner prior to starting the work.

Measurement and Payment

This work will be measured and paid for at the contract unit price per foot for PVC CASING PIPE of the diameter specified. The casing pipes will be measured in lineal feet along the centerline of the pipe. This work shall include all labor, equipment and materials necessary to construct the water mains and casing including all excavation, except rock excavation; clearing and grubbing; casing pipe; spacers; locating existing water main and utilities; furnishing and installing transition fittings for dissimilar pipe materials; furnishing and installing pipe, restrained joint pipe, fittings, reducers and elbows; polyethylene wrap; watertight plugs; No. 12 THWN single strand tracer wire, bedding and backfill (except Trench Backfill and Controlled Low-Strength Material, which will be paid as specified herein); thrust blocks; testing; chlorination taps; disinfection; protection, replacement or repair of utilities, drainage systems, structures, homeowner's property and miscellaneous property; removal of surplus excavated material; and clean-up.

The water main carrier pipe, TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

XX008839 WATER MAIN TO BE ABANDONED

Description

This work shall consist of removing, plugging, capping, and properly abandoning of the existing water mains and service lines as shown on the plans and as directed by the Owner. Abandoning of the water mains and service lines shall consist of draining and leaving the existing pipes in place except where they conflict with the new construction in which case the water mains and service lines shall be removed and disposed of.

Construction Requirements

The Contractor will be responsible for exploring and determining the type, size, and depth of the water mains and service lines. All abandoned piping remaining in place shall be drained have the ends capped or plugged with concrete as directed by the Owner. Existing valves that are being abandoned and do not conflict with the proposed work shall remain in place, but the top of the valve boxes shall be removed to a minimum of one foot below grade. The remainder of the valve box and void around the box shall be filled with concrete. The removal of fire hydrants shall be in accordance with the special provision for "Fire Hydrants to be Removed". The material that is salvageable as determined by the Owner shall become the property of the City of Bloomington and be delivered by the Contractor to the Water Department at 603 West Division Street, Bloomington, IL. Materials determined by the Owner not to be salvaged shall be disposed of by the Contractor in accordance with Article 202.03 of the Standard Specifications.

The excavated areas that are beneath or within two feet horizontally of proposed pavement and curb shall be backfilled with Controlled Low-Strength Material. All other excavated areas shall be backfilled with Trench Backfill.

Measurement and Payment

This work will be measured for payment at the contract lump sum price for WATER MAIN TO BE ABANDONED. This work shall include all labor, equipment and material necessary to complete the work, including excavation, locating existing water main, valves, hydrants and service connections; dewatering the abandoned line; cutting and removing sections of pipe, installing restrained plugs and caps, concrete plugs, isolation valves and thrust blocks; removing and disposing of pipes, valve boxes and curb boxes to a minimum of 1 foot below grade; and protection, replacement or repair of utilities, drainage systems, structures, homeowner's property and miscellaneous property.

The removal of fire hydrants and TRENCH BACKFILL and CONTROLLED LOW-STRENGTH MATERIAL will be paid for separately as specified herein.

XX008959 DUCTILE IRON WATER MAIN (SPECIAL)

Description

This work shall consist of furnishing and installing ductile iron water main, restrained joint type as shown in the plans. All work shall be performed in accordance with the latest edition of the

Standard Specification for Water and Sewer Construction in Illinois, the City of Bloomington Design and Construction Standards for Water Distribution and Supply System, and Sections 561 of the Standard Specifications, except as modified herein.

Submittal Requirements

Submit the following:

- A. Reference the Ductile Iron Water Main Section for submittal requirements.

Construction Requirements

General Water Main:

- A. Reference the Ductile Iron Water Main Section for pipe, joint, gasket, fitting, lining, coating, corrosion protection and other related requirements.

Installation:

- A. Reference the Ductile Iron Water Main Section for installation and testing requirements.

Measurement and Payment

This work will be measured for payment at the contract unit price per foot for DUCTILE IRON WATER MAIN (SPECIAL). Water mains will be measured in lineal feet along the centerline of the pipe. This work shall include all labor, equipment and material necessary to construct the water mains including all excavation, except rock excavation; clearing and grubbing; locating existing water main; furnishing and installing transition fittings for dissimilar pipe materials; furnishing and installing pipe, restrained joint pipe, fittings, reducers, and elbows; polyethylene wrap; watertight plugs; No. 12 THWN single strand tracer wire, bedding and backfill with controlled low-strength material or trench material; and clean-up; thrust blocks; testing; chlorination taps; disinfection; protection, replacement, or repair of utilities, drainage systems, structures, homeowner's property, and miscellaneous property; removal of surplus excavated material; and clean-up.

IDOT DISTRICT 5 SPECIAL PROVISIONS

ADJUSTING OF FRAMES AND GRATES OF DRAINAGE AND UTILITY STRUCTURES

Eff. 03-09-2001 Rev. 03-28-2007

At the contractor's option the adjustment of the casting may be performed after the surface course has been placed.

If this option is chosen, the existing pavement adjacent to and for a distance not exceeding 12 inches (300 mm) outside the base of the casting to be adjusted shall be broken sufficiently to permit its removal.

After the casting has been adjusted, the pavement and hot-mix asphalt mixture removed shall be replaced with Class SI concrete not less than 9 inches (225 mm) thick. The surface course shall be saw cut to create smooth edges prior to removing the pavement and placing the Class SI concrete. ~~The concrete surface to a depth of 1 inch (25 mm) shall be darkened with a mortar additive to match the adjacent hot mix asphalt mixture.~~

Payment will be in accordance with Articles 602.16 or 603.09.

EMBANKMENT

Eff. 04-18-2002 Rev. 01-01-2014

The embankment shall be constructed according to Section 205 of the Standard Specifications, except that the embankment shall not be compacted at a moisture content in excess of 110 percent of the optimum moisture content determined according to AASHTO T 99.

All material that is proposed for use in embankment construction must be approved by the Engineer. The proposed material shall have a Standard Dry Density of not less than 90 lb./ft³ (1442 kg/m³) when tested according to AASHTO T 99 and shall not have an organic content greater than 10 percent when tested according to AASHTO T 194. Soils that demonstrate any of the following properties shall be restricted to the interior of the embankment:

- a) A grain size distribution with less than 35 percent passing the #200 sieve.
- b) A plasticity index (PI) of less than 12.
- c) A liquid limit (LL) in excess of 50.

Such soils shall be covered on top of the embankment by a minimum of 2 ft. (600 mm) of soil not characterized by any of the items above. Other materials that may be considered by the Engineer as having the potential for erosion or excess volume change shall not be used in the 2 ft. (600 mm) cover on the sides or the top of the embankment.

The top 4 inches (100 mm) of any embankment that will be seeded shall be capable of sustaining vegetation when fertilized as outlined in the plans.

The District Geotechnical Engineer shall be contacted a minimum of two weeks prior any embankment construction. The contractor will be required to dig at least one test hole at each

proposed borrow location as directed by the Engineer. Soil samples will be taken by the Engineer at each location to assure that the above specifications will be met. The contractor must obtain Environmental Clearance as outlined in Section 107.22 of the Standard Specifications prior to digging any test holes.

This work will not be paid for separately, but shall be considered as included in the cost of the various earthwork items.

HAND GRADING

Eff. 04-01-2020

Grading shall be done by hand around light poles, utility poles, signposts, shrubs, trees, or other natural or man-made objects where shallow fills or cuts are adjacent to the items. The intent is to preserve original state of the construction limits and temporary easements as much as possible. Items to remain in place will be determined by the Engineer

This work shall not be paid for separately but shall be included in the contract unit price per cubic yard for EARTH EXCAVATION.

PAVEMENT MARKING

Eff. 09-11-1990 Rev. 01-01-2014

It is the intention of the Department that the Contractor place lane markings as shown on the plans on the completed pavement prior to opening the road to traffic, in accordance with the applicable portions of the Manual on Uniform Traffic Control Devices for Streets and Highways.

PNEUMATIC-TIRED ROLLER FOR HOT-MIX ASPHALT

Eff. 10-01-1998

Rev. 03-09-2021

For all Hot-Mix Asphalt Mixtures placed at a rate exceeding 85 tons per hour (75 metric tons per hour), a pneumatic-tired roller will be required as the intermediate roller. This roller shall meet the requirements of Table 1 of Article 406.07 of the Standard Specifications.

This work will not be measured for payment or paid for separately, but shall be considered as included in the price per ton (metric ton) or square yard (square meter) of the various items of HOT-MIX ASPHALT, of the mixture and Ndesign (if applicable) specified.

SEEDING AND ESTABLISHMENT OF VEGETATION

Eff.: 08-12-2014

The contractor shall be required to have multiple mobilizations to establish vegetation. This work will not be allowed to be postponed until the end of the project, but shall be completed as work progresses throughout the project limits. Temporary seed and temporary mulch or

permanent seed and mulch/erosion control blanket are to be continuously established as the work progresses and at the direction of the Engineer.

When the contract does not include a pay item for supplemental watering, any watering required by the Engineer will be paid for according to Article 109.04.

STRINGLINE

Eff. 11-27-1991

Rev. 08-01-2012

Some or all of the cold-milling, leveling binder, or hot-mix asphalt binder course on this section is intended as the first step toward establishing the proposed profile grade. The cold milling and leveling binder or hot-mix asphalt binder course will be controlled by stringline(s) erected, maintained, and removed and disposed of by the Contractor.

The cost of providing, erecting, maintaining, removing, disposing of and employing the stringline as the grade control will not be paid for separately but shall be considered as included in the COLD-MILLING, LEVELING BINDER (MACHINE METHOD) or HOT-MIX ASPHALT BINDER COURSE pay item involved.

TEMPORARY DRAINAGE INTO PROPOSED DRAINAGE STRUCTURES

Eff. 09-11-1990 Rev. 01-01-2014

This work shall consist of providing temporary drainage into any proposed drainage structure that is to be constructed in a sag location. These sag locations shall also be interpreted to include side streets. This work shall consist of a 4 inch (100-mm) PVC or polyethylene pipe installed from the surface of the proposed widening material into the proposed drainage structure near the 'resurfacing lip' on the combination concrete curb and gutter. The 4-inch (100-mm) pipe shall be cut flush with the proposed widening material as directed by the Engineer. Prior to the final resurfacing operations, the 4-inch (100-mm) pipe shall be filled with concrete or bituminous material.

This work will not be paid for separately but shall be considered as included in the contract unit price for the various pay items involved and no additional compensation will be allowed.

TRAFFIC CONTROL REMOVAL ON MULTI-LANE RESURFACING SECTIONS

Effective: 10/13/2011

Per the requirements of Article 701 of the Standard Specifications:

All lanes shall be open to traffic and all lane closure traffic control shall be removed during non-work hours, unless required by the Contractor's operation or authorized by the Engineer. Failure to open all lanes to traffic during non-work hours will result in a traffic control deficiency, per Article 105.03 of the Standard Specifications.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

Description. This work shall consist of the removal and disposal of regulated substances according to Section 669 of the Standard Specifications as revised below.

Contract Specific Work Areas. For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

The following contract specific work areas shall be monitored by the Environmental Firm for soil contamination and workers protection.

ISGS Site #3311-7 - Commercial Buildings, 1808 Morrissey Drive, Bloomington, McLean County

- Station 499+67, 0' to 60' RT to Station 501+17, 0' to 55' RT (Commercial Buildings, PESA site 3311-7, 1808 Morrissey Drive, Bloomington; 3311-7 borings: 1, 2) - The material meets the criteria of Article 669.09(b)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters include: lead, manganese, and pH.
- Station 501+82, 0' to 55' RT to Station 502+39, 0' to 55' RT (Commercial Buildings, PESA site 3311-7, 1808 Morrissey Drive, Bloomington; 3311-7 boring 4) - The material meets the criteria of Article 669.09(b)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters include: manganese and pH.
- Station 502+99, 0' to 60' RT to Station 503+82, 0' to 60' RT (Commercial Buildings, PESA site 3311-7, 1808 Morrissey Drive, Bloomington; 3311-7 boring 6) - The material meets the criteria of Article 669.09(b)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters include: lead, manganese, and pH.
- Station 504+50, 0' to 60' RT to Station 505+88, 0' to 63' RT (Commercial Buildings, PESA site 3311-7, 1808 Morrissey Drive, Bloomington; 3311-7 borings: 8 and 9) - The material meets the criteria of Article 669.09(b)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters include: lead, manganese, and pH.

Work Zones

Three distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply for the following ISGS PESA Sites:

None

Additional information on the contract specific work areas listed above collected during the regulated substances due-diligence process is available through the District's Environmental Studies Unit (DESU).

ENVIRONMENTAL PERMITTING

NPDES PERMIT

The Engineer will apply for and obtain a National Pollutant Discharge Elimination System Construction General Permit (NPDES CGP) prior to beginning construction.

The CGP has four main elements:

- Notice of Intent (NOI)
- Storm Water Pollution Prevention Plan (SWPPP)
- Incident of Non-Compliance (ION)
- Notice of Termination (NOT)

The Notice of Intent (NOI) serves as the application for the CGP. A Notice of Intent must be post-marked at least thirty days prior to the commencement of any construction activity on site. The Erosion Control Plan sheets will convey the information required for a Storm Water Pollution Prevention Plan (i.e. drainage patterns, area of soil disturbance, location of storm water discharges, etc.). The Contractor shall be responsible for having these plan sheets available for viewing during business hours at the project site. An Incident of Non-Compliance must be completed and submitted to the IEPA if, at any time, an erosion or sediment control device fails.



Route FAU 6371	Marked Route Hamilton Road	Section Number 16-00360-00-PV
Project Number XAYB(639)	County McLean	Contract Number 91599

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature 	Date 7-30-24
--	-----------------

Print Name Kevin Kothe	Title City Engineer	Agency City of Bloomington
---------------------------	------------------------	-------------------------------

Note: Guidance on preparing each section of BDE 2342 can be found in Chapter 41 of the IDOT Bureau of Design and Environment (BDE) Manual. Chapter 41 and this form also reference the IDOT Drainage Manual which should be readily available.

I. Site Description:

A. Provide a description of the project location; include latitude and longitude, section, town, and range:

The project limits are Hamilton Road from just west of Commerce Parkway to just east of Morrissey Drive, including the existing sections and a proposed alignment, small sections of Commerce Parkway and Morrissey Dr beyond where they cross Hamilton Rd; all of these street are on the southern edge of the city of Bloomington. The project is located in Section 15 in Township 23 North, Range 2 East of the 3rd Principal Meridian. The approximate midpoint of the project is at the latitude and longitude of: 40°27'16.5"N 88°58'15.8"W

B. Provide a description of the construction activity which is the subject of this plan. Include the number of construction stages, drainage improvements, in-stream work, installation, maintenance, removal of erosion measures, and permanent stabilization:

The work is to start work to join the east and west segments of Hamilton and provide widening along Hamilton and Morrissey. The areas of disturbed soil along the project will be seeded or sodded at the end of the project. New storm sewer will be installed, and the existing system will be adapted to the widened section where appropriate. No in-stream work is proposed as part of this project.

C. Provide the estimated duration of this project:

The project is estimated to start March 2025 and be completed in November 2025 for a total construction time of ~9 months.

D. The total area of the construction site is estimated to be 2.5 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 2.15 acres.

E. The following are weighted averages of the runoff coefficient for this project before and after construction activities are completed; see Section 4-102 of the IDOT Drainage Manual:

The runoff number for the existing conditions is 0.750
The runoff number for the proposed conditions is 0.80

F. List all soils found within project boundaries; include map unit name, slope information, and erosivity:

43A—Ipava silt loam, 0 to 2 percent slopes
60C2—La Rose silt loam, 5 to 10 percent slopes, eroded
68A—Sable silty clay loam, 0 to 2 percent slopes
171B—Catlin silt loam, 2 to 5 percent slopes
171B2—Catlin silt loam, 2 to 5 percent slopes, eroded
802B—Orthents, loamy, undulating
893B—Catlin-Saybrook silt loams, 2 to 5 percent slopes

G. If wetlands were delineated for this project, provide an extent of wetland acreage at the site; see Phase I report:

H. Provide a description of potentially erosive areas associated with this project:

The project area is relatively flat, but involves the cutting of open ground to create new roadway sections and to widen existing ones. These areas are prone to tracking or eroding sediment into storm drains and streams until proper cover is established.

I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g., steepness of slopes, length of slopes, etc.):

This project will be staged to construct the project on one side at a time over the project limits. This project will have low to moderate soil disturbance as the project consists mainly of roadway widening on already built up sections of road and minimal reconstruction area.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) , and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

City of Bloomington

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located:

City of Bloomington

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. In addition, include receiving waters that are listed as Biologically Significant Streams by the Illinois Department of Natural Resources (IDNR). The location of the receiving waters can be found on the erosion and sediment control plans:

Little Kickapoo Creek to Kickapoo Creek to Salt Creek to Sangamon River to the Illinois River

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes (i.e., 1:3 or steeper), highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc. Include any commitments or requirements to protect adjacent wetlands.

For any storm water discharges from construction activities within 50-feet of Waters of the U.S. (except for activities for water-dependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the U.S. or b) How additional erosion and sediment controls will be provided within that area.

O. Per the Phase I document, the following sensitive environmental resources are associated with this project and may have the potential to be impacted by the proposed development. Further guidance on these resources is available in Section 41-4 of the BDE Manual.

N/A

303(d) Listed receiving waters for suspended solids, turbidity, or siltation.
The name(s) of the listed water body, and identification of all pollutants causing impairment:

Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

Applicable Federal, Tribal, State, or Local Programs

Floodplain

Historic Preservation

Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
TMDL (fill out this section if checked above)

The name(s) of the listed water body:

Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

Threatened and Endangered Species/Illinois Natural Areas (INAI)/Nature Preserves

Other

Wetland

P. The following pollutants of concern will be associated with this construction project:

Antifreeze / Coolants

Solid Waste Debris

- Concrete
- Concrete Curing Compounds
- Concrete Truck Waste
- Fertilizers / Pesticides
- Paints
- Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
- Soil Sediment

- Solvents
- Waste water from cleaning construction equipments
- Other (Specify) _____
- Other (Specify) _____
- Other (Specify) _____
- Other (Specify) _____
- Other (Specify) _____

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in Section I.C above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:

1. Minimize the amount of soil exposed during construction activity;
2. Minimize the disturbance of steep slopes;
3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
4. Minimize soil compaction and, unless infeasible, preserve topsoil.

B. Stabilization Practices: Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II.B.1 and II.B.2, stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching | <input type="checkbox"/> Temporary Turf (Seeding, Class 7) |
| <input type="checkbox"/> Geotextiles | <input type="checkbox"/> Temporary Mulching |
| <input checked="" type="checkbox"/> Permanent Seeding | <input checked="" type="checkbox"/> Vegetated Buffer Strips |
| <input checked="" type="checkbox"/> Preservation of Mature Seeding | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Protection of Trees | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Sodding | <input type="checkbox"/> Other (Specify) _____ |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (Specify) _____ |

Describe how the stabilization practices listed above will be utilized during construction:

Any areas of disturbed soil will be temporarily seeded if work stops for winter or other similar protracted shutdown. Wherever possible soil will be left with existing vegetation to prevent erosion. Newly seeded areas will be protected with mulching until the new grass can stabilize the soil.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

At the end of soil disturbing activating, disturbed soils will be covered with seeding as designated on the final improvement plans to permanently stabilize the soil as soon as practical.

C. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

- | | |
|--|--|
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Stabilized Construction Exits |
| <input type="checkbox"/> Concrete Revetment Mats | <input type="checkbox"/> Stabilized Trench Flow |
| <input type="checkbox"/> Dust Suppression | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Dewatering Filtering | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Gabions | <input type="checkbox"/> Temporary Ditch Check |
| <input type="checkbox"/> In-Stream or Wetland Work | <input type="checkbox"/> Temporary Pipe Slope Drain |
| <input type="checkbox"/> Level Spreaders | <input type="checkbox"/> Temporary Sediment Basin |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Temporary Stream Crossing |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Turf Reinforcement Mats |
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Retaining Walls | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Riprap | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Rock Outlet Protection | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Other (Specify) _____ |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Other (Specify) _____ |

Describe how the structural practices listed above will be utilized during construction:

Perimeter erosion barrier shall be placed where shown on the final improvement plans or in areas where sediment may run off-site. Storm drain protections shall be installed as shown on the final improvement plans or in all structures or pipes that could possibly accumulate sediment. These temporary measures must be installed prior to and be maintained during soil disturbing activities and be in place until the soil is permanently stabilized.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

D. Treatment Chemicals

Will polymer flocculants or treatment chemicals be utilized on this project: Yes No

If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

E. Permanent (i.e., Post-Construction) Storm Water Management Controls: Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined based on the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT BDE Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to

the initiation of construction activities).

Description of permanent storm water management controls:

F. Approved State or Local Laws: The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the IEPA's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

City of Bloomington Manual of Practice

G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342A.

1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:

- Approximate duration of the project, including each stage of the project
- Rainy season, dry season, and winter shutdown dates
- Temporary stabilization measures to be employed by contract phases
- Mobilization time-frame
- Mass clearing and grubbing/roadside clearing dates
- Deployment of Erosion Control Practices
- Deployment of Sediment Control Practices (including stabilized cons

- Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
- Paving, saw-cutting, and any other pavement related operations
- Major planned stockpiling operation
- Time frame for other significant long-term operations or activities that may plan non-storm water discharges as dewatering, grinding, etc
- Permanent stabilization activities for each area of the project

2. During the pre-construction meeting, the Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Temporary Ditch Checks - Identify what type and the source of Temporary Ditch Checks that will be installed as part of the project. The installation details will then be included with the SWPPP.
- Vehicle Entrances and Exits - Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material Delivery, Storage and Use - Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management - Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal - Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control - Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
- Concrete Residuals and Washout Wastes - Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management - Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Fueling - Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance - Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities - Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals - Identify the use and dosage of treatment chemicals and provide the

Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.

Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides (e.g., IDOT Erosion and Sediment Control Field Guide) to the Contractor for the practices associated with this project. Describe how all items will be checked for structural integrity, sediment accumulation and functionality. Any damage or undermining shall be repaired immediately. Provide specifics on how repairs will be made. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site including Borrow, Waste, and Use Areas, which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report, BC 2259. Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.



Contractor Certification Statement



Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.G of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route FAU 6371	Marked Route Hamilton Road	Section Number 16-00360-00-PV
Project Number XAYB(639)	County McLean	Contract Number 91599

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Additionally, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

- Contractor
- Sub-Contractor

Signature		Date	
Print Name		Title	
Name of Firm		Phone	
Street Address	City	State	Zip Code

Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
INSURANCE

Effective: February 1, 2007
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets
SPECIAL PROVISION
FOR
CONSTRUCTION AND MAINTENANCE SIGNS

Effective: January 1, 2004
Revised: June 1, 2007

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

State of Illinois
 DEPARTMENT OF TRANSPORTATION
 Bureau of Local Roads & Streets
 SPECIAL PROVISION
 FOR
 LOCAL QUALITY ASSURANCE/ QUALITY MANAGEMENT QC/QA
 Effective: January 1, 2022

Replace the first five paragraphs of Article 1030.06 of the Standard Specifications with the following:

“1030.06 Quality Management Program. The Quality Management Program (QMP) will be Quality Control / Quality Assurance (QC/QA) according to the following.”

Delete Article 1030.06(d)(1) of the Standard Specifications.

Revise Article 1030.09(g)(3) of the Standard Specifications to read:

“(3) If core testing is the density verification method, the Contractor shall provide personnel and equipment to collect density verification cores for the Engineer. Core locations will be determined by the Engineer following the document “Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations” at density verification intervals defined in Article 1030.09(b). After the Engineer identifies a density verification location and prior to opening to traffic, the Contractor shall cut a 4 in. (100 mm) diameter core. With the approval of the Engineer, the cores may be cut at a later time.”

Revise Article 1030.09(h)(2) of the Standard Specifications to read:

“(2) After final rolling and prior to paving subsequent lifts, the Engineer will identify the random density verification test locations. Cores or nuclear density gauge testing will be used for density verification. The method used for density verification will be as selected below.

Density Verification Method	
<input type="checkbox"/>	Cores
<input checked="" type="checkbox"/>	Nuclear Density Gauge (Correlated when paving ≥ 3,000 tons per mixture)

Density verification test locations will be determined according to the document “Hot-Mix Asphalt QC/QA Procedure for Determining Random Density Locations”. The density testing interval for paving wider than or equal to 3 ft (1 m) will be 0.5 miles (800 m) for lift thicknesses of 3 in. (75 mm) or less and 0.2 miles (320 m) for lift thicknesses greater than 3 in. (75 mm). The density testing interval for paving less than 3 ft (1 m) wide will be 1 mile (1,600 m). If a day’s paving will be less than the prescribed density testing interval, the length of the day’s paving will be the interval for that day. The density testing interval for mixtures used for patching will be 50 patches with a minimum of one test per mixture per project.

If core testing is the density verification method, the Engineer will witness the Contractor coring, and secure and take possession of all density samples at the

density verification locations. The Engineer will test the cores collected by the Contractor for density according to Illinois Modified AASHTO T 166 or AASHTO T 275.

If nuclear density gauge testing is the density verification method, the Engineer will conduct nuclear density gauge tests. The Engineer will follow the density testing procedure detailed in the document "Illinois Modified ASTM D 2950, Standard Test Method for Density of Bituminous Concrete In-Place by Nuclear Method".

A density verification test will be the result of a single core or the average of the nuclear density tests at one location. The results of each density test must be within acceptable limits. The Engineer will promptly notify the Contractor of observed deficiencies."

Revise the seventh paragraph and all subsequent paragraphs in Section D. of the document "Hot-Mix Asphalt QC/QA Initial Daily Plant and Random Samples" to read:

"Mixtures shall be sampled from the truck at the plant by the Contractor following the same procedure used to collect QC mixture samples (Section A). This process will be witnessed by the Engineer who will take custody of the verification sample. Each sample bag with a verification mixture sample will be secured by the Engineer using a locking ID tag. Sample boxes containing the verification mixture sample will be sealed/taped by the Engineer using a security ID label."

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION

Effective: August 1, 2012 Revised: February 2, 2017

In addition to the Contractor's equal employment opportunity (EEO) affirmative action efforts undertaken as required by this Contract, the Contractor is encouraged to participate in the incentive program described below to provide additional on-the-job training to certified graduates of the IDOT pre-apprenticeship training program, as outlined in this Special Provision.

IDOT funds, and various Illinois community colleges operate, pre-apprenticeship training programs throughout the State to provide training and skill-improvement opportunities to promote the increased employment of minority groups, disadvantaged persons and women in all aspects of the highway construction industry. The intent of this IDOT Pre-Apprenticeship Training Program Graduate (TPG) special provision (Special Provision) is to place these certified program graduates on the project site for this Contract in order to provide the graduates with meaningful on-the-job training. Pursuant to this Special Provision, the Contractor must make every reasonable effort to recruit and employ certified TPG trainees to the extent such individuals are available within a practicable distance of the project site.

Specifically, participation of the Contractor or its subcontractor in the Program entitles the participant to reimbursement for graduates' hourly wages at \$15.00 per hour per utilized TPG trainee, subject to the terms of this Special Provision. Reimbursement payment will be made even though the Contractor or subcontractor may also receive additional training program funds from other non-IDOT sources for other non-TPG trainees on the Contract, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving reimbursement from another entity through another program, such as IDOT through the TPG program. With regard to any IDOT funded construction training program other than TPG, however, additional reimbursement for other IDOT programs will not be made beyond the TPG Program described in this Special Provision when the TPG Program is utilized.

No payment will be made to the Contractor if the Contractor or subcontractor fails to provide the required on-site training to TPG trainees, as solely determined by IDOT. A TPG trainee must begin training on the project as soon as the start of work that utilizes the relevant trade skill and the TPG trainee must remain on the project site through completion of the Contract, so long as training opportunities continue to exist in the relevant work classification. Should a TPG trainee's employment end in advance of the completion of the Contract, the Contractor must promptly notify the IDOT District EEO Officer for the Contract that the TPG's involvement in the Contract has ended. The Contractor must supply a written report for the reason the TPG trainee involvement terminated, the hours completed by the TPG trainee on the Contract, and the number of hours for which the incentive payment provided under this Special Provision will be, or has been claimed for the separated TPG trainee.

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract, and furnish periodic written reports to the IDOT District EEO Officer that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is 2.

The Department has contracted with several educational institutions to provide screening, tutoring and pre-training to individuals interested in working as a TPG trainee in various areas of common construction trade work. Only individuals who have successfully completed a Pre-Apprenticeship Training Program at these IDOT approved institutions are eligible to be TPG trainees. To obtain a list of institutions that can connect the Contractor with eligible TPG trainees, the Contractor may contact: HCCTP TPG Program Coordinator, Office of Business and Workforce Diversity (IDOT OBWD), Room 319, Illinois Department of Transportation, 2300 S. Dirksen Parkway, Springfield, Illinois 62764. Prior to commencing construction with the utilization of a TPG trainee, the Contractor must submit documentation to the IDOT District EEO Officer for the Contract that provides the names and contact information of the TPG trainee(s) to be trained in each selected work classification, proof that that the TPG trainee(s) has successfully completed a Pre-Apprenticeship Training Program, proof that the TPG is in an Apprenticeship Training Program approved by the U.S. Department of Labor Bureau of Apprenticeship Training, and the start date for training in each of the applicable work classifications.

To receive payment, the Contractor must provide training opportunities aimed at developing a full journeyworker in the type of trade or job classification involved. During the course of performance of the Contract, the Contractor may seek approval from the IDOT District EEO Officer to employ additional eligible TPG trainees. In the event the Contractor subcontracts a portion of the contracted work, it must determine how many, if any, of the TPGs will be trained by the subcontractor. Though a subcontractor may conduct training, the Contractor retains the responsibility for meeting all requirements imposed by this Special Provision. The Contractor must also include this Special Provision in any subcontract where payment for contracted work performed by a TPG trainee will be passed on to a subcontractor.

Training through the Program is intended to move TPGs toward journeyman status, which is the primary objective of this Special Provision. Accordingly, the Contractor must make every effort to enroll TPG trainees by recruitment through the Program participant educational institutions to the extent eligible TPGs are available within a reasonable geographic area of the project. The Contractor is responsible for demonstrating, through documentation, the recruitment efforts it has undertaken prior to the determination by IDOT whether the Contractor is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of \$15.00 per hour.

Notwithstanding the on-the-job training requirement of this TPG Special Provision, some minimal off-site training is permissible as long as the offsite training is an integral part of the work of the contract, and does not compromise or conflict with the required on-site training that is central to the purpose of the Program. No individual may be employed as a TPG trainee in any work classification in which he/she has previously successfully completed a training program leading to journeyman status in any trade, or in which he/she has worked at a journeyman level or higher.

ACCESSIBLE PEDESTRIAN SIGNALS (APS) (BDE)

Effective: April 1, 2003

Revised: January 1, 2022

Description. This work shall consist of furnishing and installing accessible pedestrian signals (APS). Each APS shall consist of an interactive vibrotactile pedestrian pushbutton with speaker, an informational sign, a light emitting diode (LED) indicator light, a solid-state electronic control board, a power supply, wiring, and mounting hardware. The APS shall meet the requirements of the MUTCD and Sections 801 and 888 of the Standard Specifications, except as modified herein.

Electrical Requirements. The APS shall operate with systems providing 95 to 130 VAC, 60 Hz and throughout an ambient air temperature range of -29 to +160 °F (-34 to +70 °C).

The APS shall contain a power protection circuit consisting of both fuse and transient protection.

Audible Indications. A pushbutton locator tone shall sound at each pushbutton and shall be deactivated during the associated walk indication and when associated traffic signals are in flashing mode. Pushbutton locator tones shall have a duration of 0.15 seconds or less and shall repeat at 1-second intervals. Each actuation of the pushbutton shall be accompanied by the speech message "Wait".

If two accessible pedestrian pushbuttons are placed less than 10 ft (3 m) apart or placed on the same pole, the audible walk indication shall be a speech walk message. This message shall sound throughout the WALK interval only. The verbal message shall be modeled after: "Street Name, Walk Sign is on to cross Street Name." For signalized intersections utilizing exclusive pedestrian phasing, the verbal message shall be "Walk sign is on for all crossings". In addition, a speech pushbutton information message shall be provided by actuating the APS pushbutton when the WALK interval is not timing. This verbal message shall be modeled after: "Wait. Wait to cross Street Name at Street Name".

Where two accessible pedestrian pushbuttons are separated by at least 10 ft (3 m), the walk indication shall be an audible percussive tone. It shall repeat at 8 to 10 ticks per second with a dominant frequency of 880 Hz.

Automatic volume adjustments in response to ambient traffic sound level shall be provided up to a maximum volume of 100 dBA. Locator tone and verbal messages shall be no more than 5 dB louder than ambient sound.

At locations with railroad interconnection, an additional speech message stating "Walk time shortened when train approaches" shall be used after the speech walk message. At locations with emergency vehicle preemption, an additional speech message "Walk time shortened when emergency vehicle approaches" shall be used after the speech walk message.

Pedestrian Pushbutton. Pedestrian pushbuttons shall be at least 2 in. (50 mm) in diameter or width. The force required to activate the pushbutton shall be no greater than 3.5 lb (15.5 N).

A red LED shall be located on or near the pushbutton which, when activated, acknowledges the pedestrians request to cross the street.

Signage. A sign shall be located immediately above the pedestrian pushbutton and parallel to the crosswalk controlled by the pushbutton. The sign shall conform to one of the following standard MUTCD designs: R10-3, R10-3a, R10-3e, R10-3i, R10-4, and R10-4a.

Tactile Arrow. A tactile arrow, pointing in the direction of travel controlled by a pushbutton, shall be provided on the pushbutton.

Vibrotactile Feature. The pushbutton shall pulse when depressed and shall vibrate continuously throughout the WALK interval.

Method of Measurement. This work will be measured for payment as each, per pushbutton.

Basis of Payment. This work will be paid for at the contract unit price per each for ACCESSIBLE PEDESTRIAN SIGNALS.

80099

AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012

Revised: April 1, 2022

Add the following Section to the Standard Specifications:

“SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement (ASI).

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP)	1031.09

303.03 Equipment. The vibratory roller shall be according to Article 1101.01, or as approved by the Engineer. Vibratory machines, such as tampers, shall be used in areas where rollers do not fit.

303.04 Soil Preparation. The minimum immediate bearing value (IBV) of the soil below the improved subgrade shall be according to the Department’s “Subgrade Stability Manual” for the aggregate thickness specified.

303.05 Placing and Compacting. The maximum nominal lift thickness of aggregate gradations CA 2, CA 6, and CA 10 when compacted shall be 9 in. (225 mm). The maximum nominal lift thickness of aggregate gradations CS 1, CS 2, and RR 1 when compacted shall be 24 in. (600 mm).

The top surface of the aggregate subgrade improvement shall consist of a layer of capping aggregate gradations CA 6 or CA 10 that is 3 in. (75 mm) thick after compaction. Capping aggregate will not be required when aggregate subgrade improvement is used as a cubic yard pay item for undercut applications.

Each lift of aggregate shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

303.06 Finishing and Maintenance. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

303.07 Method of Measurement. This work will be measured for payment according to Article 311.08.

303.08 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) or ton (metric ton) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.”

Add the following to Section 1004 of the Standard Specifications:

“1004.07 Coarse Aggregate for Aggregate Subgrade Improvement (ASI). The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. In applications where greater than 24 in. (600 mm) of ASI material is required, gravel may be used below the top 12 in (300 mm) of ASI.

(b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.

(c) Gradation.

(1) The coarse aggregate gradation for total ASI thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 1.

The coarse aggregate gradation for total ASI thickness greater than 12 in. (300 mm) shall be CS 1 or CS 2 as shown below or RR 1 according to Article 1005.01(c).

COARSE AGGREGATE SUBGRADE GRADATIONS					
Grad No.	Sieve Size and Percent Passing				
	8”	6”	4”	2”	#4
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)					
Grad No.	Sieve Size and Percent Passing				
	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 1	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 2		100	80 ± 10	25 ± 15	

(2) Capping aggregate shall be gradation CA 6 or CA 10.”

Add the following to Article 1031.09 of the Standard Specifications:

“(b) RAP in Aggregate Subgrade Improvement (ASI). RAP in ASI shall be according to Articles 1031.01(a), 1031.02(a), 1031.06(a)(1), and 1031.06(a)(2), and the following.

- (1) The testing requirements of Article 1031.03 shall not apply.
- (2) Crushed RAP used for the lower lift may be mechanically blended with aggregate gradations CS 1, CS 2, and RR 1 but it shall be no greater than 40 percent of the total product volume. RAP agglomerations shall be no greater than 4 in. (100 mm).
- (3) For capping aggregate, well graded RAP having 100 percent passing the 1 1/2 in. (38 mm) sieve may be used when aggregate gradations CS 1, CS 2, CA 2, or RR 1 are used in the lower lift. FRAP will not be permitted as capping material.

Blending shall be through calibrated interlocked feeders or a calibrated blending plant such that the prescribed blending percentage is maintained throughout the blending process. The calibration shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered.”

80274

AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)

Effective: January 1, 2008

Revised: April 1, 2023

Description. This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement in segments where no sideroads or entrances require deployment of additional flaggers. Use of these devices shall be at the option of the Contractor.

Equipment. AFADs shall be the STOP/SLOW or Red/Yellow Lens type mounted on a trailer or moveable cart meeting the requirements of the MUTCD and NCHRP 350 or MASH 2016, Category 4.

General. AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The AFAD shall be setup within five degrees of vertical.

Flagger symbol signs as shown on the plans shall be replaced with "BE PREPARED TO STOP" signs when the AFAD is in operation.

Personal communication devices shall not be used to operate the AFAD.

Flagging Requirements. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

Each AFAD shall be operated by a flagger trained to operate the specific AFAD to be deployed. A minimum of two flaggers shall be on site at all times during operation. Each flagger shall be positioned outside the lane of traffic and near each AFAD's location.

Flagging equipment required for traditional flagging shall be available near each AFAD location in the event of AFAD equipment malfunction/failure.

For nighttime flagging, the AFAD and flagger shall be illuminated according to Article 701.13 of the Standard Specifications.

When not in use, AFADs will be considered non-operating equipment and shall be stored according to Article 701.11 of the Standard Specifications.

Basis of Payment. This work will not be paid for separately but shall be considered as included in the cost of the various traffic control items included in the contract.

80192

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE)

Effective: November 2, 2006

Revised: August 1, 2017

Description. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract.

The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments that are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, joint filling/sealing, or extra work paid for at a lump sum price or by force account.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

$$CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$$

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).

%AC_V = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: $Q, \text{ tons} = A \times D \times (G_{mb} \times 46.8) / 2000$. For HMA mixtures measured in square meters: $Q, \text{ metric tons} = A \times D \times (G_{mb} \times 1) / 1000$. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_V.

For bituminous materials measured in gallons: $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$

For bituminous materials measured in liters: $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).
SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

80173

CEMENT, TYPE IL (BDE)

Effective: August 1, 2023

Add the following to Article 302.02 of the Standard Specifications:

“(k) Type IL Portland-Limestone Cement1001”

Revise Note 2 of Article 352.02 of the Standard Specifications to read:

“Note 2. Either Type I or Type IA portland cement or Type IL portland-limestone cement shall be used.”

Revise Note 1 of Article 404.02 of the Standard Specifications to read:

“Note 1. The cement shall be Type I portland cement or Type IL portland-limestone cement.”

Revise Article 1019.02(a) of the Standard Specifications to read:

“(a) Cement, Type I or IL1001”

80449

COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

Revised: April 1, 2019

Revise Article 107.40(b) of the Standard Specifications to read:

“(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.

- (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
- (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
- (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days.”

Revise Article 107.40(c) of the Standard Specifications to read:

“(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

- (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

- (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

- (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13.”

Revise Article 108.04(b) of the Standard Specifications to read:

“(b) No working day will be charged under the following conditions.

- (1) When adverse weather prevents work on the controlling item.
- (2) When job conditions due to recent weather prevent work on the controlling item.
- (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item.”

Revise Article 109.09(f) of the Standard Specifications to read:

“(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited.”

Add the following to Section 109 of the Standard Specifications.

“109.13 Payment for Contract Delay. Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
 - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, One Engineer, and

	One Clerk
Over \$50,000,000	One Project Manager, Two Project Superintendents, One Engineer, and One Clerk

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

When an extended traffic control adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

80384

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: March 2, 2019

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract the Contractor signs with a subcontractor.

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a

good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 6% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at:

<http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate and adequately document enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. This means the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts the bidder has made. Mere *pro forma* efforts, in other words efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
 - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
 - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the

bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

- (c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at DOT.DBE.UP@illinois.gov.
- (b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) SUBCONTRACT. The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
- (1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.

- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be

made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

- (h) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

80029

HOT-MIX ASPHALT (BDE)

Effective: January 1, 2024

Revise the second paragraph of Articles 1030.07(a)(11) and 1030.08(a)(9) of the Standard Specifications to read:

“When establishing the target density, the HMA maximum theoretical specific gravity (G_{mm}) will be based on the running average of four available Department test results for that project. If less than four G_{mm} test results are available, an average of all available Department test results for that project will be used. The initial G_{mm} will be the last available Department test result from a QMP project. If there is no available Department test result from a QMP project, the Department mix design verification test result will be used as the initial G_{mm} .”

In the Supplemental Specifications, replace the revision for the end of the third paragraph of Article 1030.09(h)(2) with the following:

“When establishing the target density, the HMA maximum theoretical specific gravity (G_{mm}) will be the Department mix design verification test result.”

Revise the tenth paragraph of Article 1030.10 of the Standard Specifications to read:

“Production is not required to stop after a test strip has been constructed.”

80456

HOT-MIX ASPHALT – LONGITUDINAL JOINT SEALANT (BDE)

Effective: November 1, 2022

Revised: August 1, 2023

Add the following after the second sentence in the eighth paragraph of Article 406.06(h)(2) of the Standard Specifications:

“If rain is forecasted and traffic is to be on the LJS or if pickup/tracking of the LJS material is likely, the LJS shall be covered immediately following its application with FA 20 fine aggregate mechanically spread uniformly at a rate of 1.5 ± 0.5 lb/sq yd (0.75 ± 0.25 kg/sq m). Fine aggregate landing outside of the LJS shall be removed prior to application of tack coat.”

Add the following after the first sentence in the ninth paragraph of Article 406.06(h)(2) of the Standard Specifications:

“LJS half-width shall be applied at a width of 9 ± 1 in. (225 ± 25 mm) in the immediate lane to be placed with the outside edge flush with the joint of the next HMA lift. The vertical face of any longitudinal joint remaining in place shall also be coated.”

Add the following after the eleventh paragraph of Article 406.06(h)(2) of the Standard Specifications:

“LJS Half-Width Application Rate, lb/ft (kg/m) ^{1/}			
Lift Thickness, in. (mm)	Coarse Graded Mixture (IL-19.0, IL-19.0L, IL-9.5, IL-9.5L, IL-4.75)	Fine Graded Mixture (IL-9.5FG)	SMA Mixture (SMA-9.5, SMA-12.5)
¾ (19)	0.44 (0.66)		
1 (25)	0.58 (0.86)		
1 ¼ (32)	0.66 (0.98)	0.44 (0.66)	
1 ½ (38)	0.74 (1.10)	0.48 (0.71)	0.63 (0.94)
1 ¾ (44)	0.82 (1.22)	0.52 (0.77)	0.69 (1.03)
2 (50)	0.90 (1.34)	0.56 (0.83)	0.76 (1.13)
≥ 2 ¼ (60)	0.98 (1.46)		

1/ The application rate includes a surface demand for liquid. The thickness of the LJS may taper from the center of the application to a lesser thickness on the edge of the application, provided the correct width and application rate are maintained.”

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

“Aggregate for covering tack, LJS, or FLS will not be measured for payment.”

Add the following to the end of the second paragraph of Article 406.14 of the Standard Specifications:

“Longitudinal joint sealant (LJS) half-width will be paid for at the contract unit price per foot (meter) for LONGITUDINAL JOINT SEALANT, HALF-WIDTH.”

80446

ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE)

Effective: June 2, 2021

Revised: April 2, 2024

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. Of this goal, at least 50% of the labor hours of each prevailing wage classification performed by apprentices shall be performed by graduates of the Illinois Works Pre-Apprenticeship Program, the Illinois Climate Works Pre-Apprenticeship Program, or the Highway Construction Careers Training Program.

The Contractor may seek from the Department of Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

80438

PERFORMANCE GRADED ASPHALT BINDER (BDE)

Effective: January 1, 2023

Revise Article 1032.05 of the Standard Specifications to read:

“1032.05 Performance Graded Asphalt Binder. These materials will be accepted according to the Bureau of Materials Policy Memorandum, “Performance Graded Asphalt Binder Qualification Procedure.” The Department will maintain a qualified producer list. These materials shall be free from water and shall not foam when heated to any temperature below the actual flash point. Air blown asphalt, recycle engine oil bottoms (ReOB), and polyphosphoric acid (PPA) modification shall not be used.

When requested, producers shall provide the Engineer with viscosity/temperature relationships for the performance graded asphalt binders delivered and incorporated in the work.

- (a) Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 “Standard Specification for Performance Graded Asphalt Binder” for the grade shown on the plans and the following.

Test	Parameter
Small Strain Parameter (AASHTO PP 113) BBR, ΔT_c , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5 °C min.

- (b) Modified Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 “Standard Specification for Performance Graded Asphalt Binder” for the grade shown on the plans.

Asphalt binder modification shall be performed at the source, as defined in the Bureau of Materials Policy Memorandum, “Performance Graded Asphalt Binder Qualification Procedure.”

Modified asphalt binder shall be safe to handle at asphalt binder production and storage temperatures or HMA construction temperatures. Safety Data Sheets (SDS) shall be provided for all asphalt modifiers.

- (1) Polymer Modification (SB/SBS or SBR). Elastomers shall be added to the base asphalt binder to achieve the specified performance grade and shall be either a styrene-butadiene diblock, triblock copolymer without oil extension, or a styrene-butadiene rubber. The polymer modified asphalt binder shall be smooth, homogeneous, and be according to the requirements shown in Table 1 or 2 for the grade shown on the plans.

Table 1 - Requirements for Styrene-Butadiene Copolymer (SB/SBS) Modified Asphalt Binders		
Test	Asphalt Grade SB/SBS PG 64-28 SB/SBS PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SB/SBS PG 76-22 SB/SBS PG 76-28
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.

Table 2 - Requirements for Styrene-Butadiene Rubber (SBR) Modified Asphalt Binders		
Test	Asphalt Grade SBR PG 64-28 SBR PG 70-22	Asphalt Grade SB/SBS PG 64-34 SB/SBS PG 70-28 SBR PG 76-22 SBR PG 76-28
Separation of Polymer ITP, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions	4 (2) max.	4 (2) max.
Toughness ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (N-m)	110 (12.5) min.	110 (12.5) min.
Tenacity ASTM D 5801, 77 °F (25 °C), 20 in./min. (500 mm/min.), in.-lbs (N-m)	75 (8.5) min.	75 (8.5) min.
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	40 min.	50 min.

- (2) Ground Tire Rubber (GTR) Modification. GTR modification is the addition of recycled ground tire rubber to liquid asphalt binder to achieve the specified performance grade. GTR shall be produced from processing automobile and/or truck tires by the ambient

grinding method or micronizing through a cryogenic process. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall not contain free metal particles, moisture that would cause foaming of the asphalt, or other foreign materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois Modified AASHTO T 27 “Standard Method of Test for Sieve Analysis of Fine and Coarse Aggregates” or AASHTO PP 74 “Standard Practice for Determination of Size and Shape of Glass Beads Used in Traffic Markings by Means of Computerized Optical Method”, a 50 g sample of the GTR shall conform to the following gradation requirements.

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 µm)	95 ± 5
No. 50 (300 µm)	> 20

GTR modified asphalt binder shall be tested for rotational viscosity according to AASHTO T 316 using spindle S27. GTR modified asphalt binder shall be tested for original dynamic shear and RTFO dynamic shear according to AASHTO T 315 using a gap of 2 mm.

The GTR modified asphalt binder shall meet the requirements of Table 3.

Table 3 - Requirements for Ground Tire Rubber (GTR) Modified Asphalt Binders		
Test	Asphalt Grade GTR PG 64-28 GTR PG 70-22	Asphalt Grade GTR PG 76-22 GTR PG 76-28 GTR PG 70-28
TESTS ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)		
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.

- (3) Softener Modification (SM). Softener modification is the addition of organic compounds, such as engineered flux, bio-oil blends, modified vegetable oils, glycol amines, and fatty acid derivatives, to the base asphalt binder to achieve the specified performance grade. Softeners shall be dissolved, dispersed, or reacted in the asphalt binder to enhance its performance and shall remain compatible with the asphalt binder with no separation. Softeners shall not be added to modified PG asphalt binder as defined in Articles 1032.05(b)(1) or 1032.05(b)(2).

An Attenuated Total Reflectance-Fourier Transform Infrared spectrum (ATR-FTIR) shall be collected for both the softening compound as well as the softener modified

asphalt binder at the dose intended for qualification. The ATR-FTIR spectra shall be collected on unaged softener modified binder, 20-hour Pressurized Aging Vessel (PAV) aged softener modified binder, and 40-hour PAV aged softener modified binder. The ATR-FTIR shall be collected in accordance with Illinois Test Procedure 601. The electronic files spectral files (in one of the following extensions or equivalent: *.SPA, *.SPG, *.IRD, *.IFG, *.CSV, *.SP, *.IRS, *.GAML, *. [0-9], *.IGM, *.ABS, *.DRT, *.SBM, *.RAS) shall be submitted to the Central Bureau of Materials.

Softener modified asphalt binders shall meet the requirements in Table 4.

Test	Asphalt Grade	
	SM PG 46-28	SM PG 46-34
	SM PG 52-28	SM PG 52-34
	SM PG 58-22	SM PG 58-28
	SM PG 64-22	
Small Strain Parameter (AASHTO PP 113) BBR, ΔT_c , 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	-5°C min.	
Large Strain Parameter (Illinois Modified AASHTO T 391) DSR/LAS Fatigue Property, $\Delta G^* _{peak}$, 40 hrs PAV (40 hrs continuous or 2 PAV at 20 hrs)	≥ 54 %	

The following grades may be specified as tack coats.

Asphalt Grade	Use
PG 58-22, PG 58-28, PG 64-22	Tack Coat

Revise Article 1031.06(c)(1) and 1031.06(c)(2) of the Standard Specifications to read:

“(1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin ABR shall not exceed the amounts listed in the following table.

Ndesign	Binder	Surface	Polymer Modified Binder or Surface ^{3/}
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
 - 3/ The maximum ABR percentages for ground tire rubber (GTR) modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the following table.

HMA Mixtures - FRAP/RAS Maximum ABR % ^{1/2/}			
Ndesign	Binder	Surface	Polymer Modified Binder or Surface ^{3/}
30	55	45	15
50	45	40	15
70	45	35	15
90	45	35	15
SMA	--	--	25
IL-4.75	--	--	35

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ The maximum ABR percentages for GTR modified mixes shall be equivalent to the percentages specified for SBS/SBR polymer modified mixes.”

Add the following to the end of Note 2 of Article 1030.03 of the Standard Specifications.

“A dedicated storage tank for the ground tire rubber (GTR) modified asphalt binder shall be provided. This tank shall be capable of providing continuous mechanical mixing throughout and/or recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ±0.40 percent.”

PORTLAND CEMENT CONCRETE (BDE)

Effective: August 1, 2023

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

“The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures.”

80451

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2024

Revised: April 1, 2024

Revise the first paragraph of Article 669.04 of the Standard Specifications to read:

“669.04 Regulated Substances Monitoring. Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities. The excavated soil and groundwater within the work areas shall be managed as either uncontaminated soil, hazardous waste, special waste, or non-special waste.

As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 “Regulated Substances Monitoring Daily Record (RSM DR)”.

Revise the first two sentences of the nineteenth paragraph of Article 669.05 of the Standard Specifications to read:

“The Contractor shall coordinate waste disposal approvals with the disposal facility and provide the specific analytical testing requirements of that facility. The Contractor shall make all arrangements for collection, transportation, and analysis of landfill acceptance testing.”

Revise the last paragraph of Article 669.05 of the Standard Specifications to read:

“The Contractor shall select a permitted landfill facility or CCDD/USFO facility meeting the requirements of 35 Ill. Admin. Code Parts 810-814 or Part 1100, respectively. The Department will review and approve or reject the facility proposed by the Contractor based upon information provided in BDE 2730. The Contractor shall verify whether the selected facility is compliant with those applicable standards as mandated by their permit and whether the facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected facility shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.”

Revise the first paragraph of Article 669.07 of the Standard Specifications to read:

“669.07 Temporary Staging. Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. All other soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Topsoil for re-use as final cover which has been field screened and found not to exhibit PID readings over daily background readings as documented on the BDE 2732, visual staining or

odors, and is classified according to Articles 669.05(a)(2), (a)(3), (a)(4), (b)(1), or (c) may be temporarily staged at the Contractor's option."

Add the following paragraph after the sixth paragraph of Article 669.11 of the Standard Specifications.

"The sampling and testing of effluent water derived from dewatering discharges for priority pollutants volatile organic compounds (VOCs), priority pollutants semi-volatile organic compounds (SVOCs), or priority pollutants metals, will be paid for at the contract unit price per each for VOCS GROUNDWATER ANALYSIS using EPA Method 8260B, SVOCs GROUNDWATER ANALYSIS using EPA Method 8270C, or RCRA METALS GROUNDWATER ANALYSIS using EPA Methods 6010B and 7471A. This price shall include transporting the sample from the job site to the laboratory."

Revise the first sentence of the eight paragraph of Article 669.11 of the Standard Specifications to read:

"Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) to be managed and disposed of, if required and approved by the Engineer, will be paid according to Article 109.04."

80455

SEEDING (BDE)

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

“250.07 Seeding Mixtures. The classes of seeding mixtures and combinations of mixtures will be designated in the plans.

When an area is to be seeded with two or more seeding classes, those mixtures shall be applied separately on the designated area within a seven day period. Seeding shall occur prior to placement of mulch cover. A Class 7 mixture can be applied at any time prior to applying any seeding class or added to them and applied at the same time.

TABLE 1 - SEEDING MIXTURES		
Class - Type	Seeds	lb/acre (kg/hectare)
1 Lawn Mixture 1/	Kentucky Bluegrass	100 (110)
	Perennial Ryegrass	60 (70)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	40 (50)
1A Salt Tolerant Lawn Mixture 1/	Kentucky Bluegrass	60 (70)
	Perennial Ryegrass	20 (20)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	20 (20)
	<i>Festuca brevipilla</i> (Hard Fescue)	20 (20)
	<i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	60 (70)
1B Low Maintenance Lawn Mixture 1/	Turf-Type Fine Fescue 3/	150 (170)
	Perennial Ryegrass	20 (20)
	Red Top	10 (10)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	20 (20)
2 Roadside Mixture 1/	<i>Lolium arundinaceum</i> (Tall Fescue)	100 (110)
	Perennial Ryegrass	50 (55)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	40 (50)
	Red Top	10 (10)
2A Salt Tolerant Roadside Mixture 1/	<i>Lolium arundinaceum</i> (Tall Fescue)	60 (70)
	Perennial Ryegrass	20 (20)
	<i>Festuca rubra</i> ssp. <i>rubra</i> (Creeping Red Fescue)	30 (20)
	<i>Festuca brevipila</i> (Hard Fescue)	30 (20)
	<i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	60 (70)
3 Northern Illinois Slope Mixture 1/	<i>Elymus canadensis</i> (Canada Wild Rye) 5/	5 (5)
	Perennial Ryegrass	20 (20)
	Alsike Clover 4/	5 (5)
	<i>Desmanthus illinoensis</i> (Illinois Bundleflower) 4/ 5/	2 (2)
	<i>Schizachyrium scoparium</i> (Little Bluestem) 5/	12 (12)
	<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/	10 (10)
	<i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	30 (35)
	Oats, Spring	50 (55)
	Slender Wheat Grass 5/	15 (15)
	Buffalo Grass 5/ 7/	5 (5)
	3A Southern Illinois Slope Mixture 1/	Perennial Ryegrass
<i>Elymus canadensis</i> (Canada Wild Rye) 5/		20 (20)
<i>Panicum virgatum</i> (Switchgrass) 5/		10 (10)
<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/		12 (12)
<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/		10 (10)
<i>Dalea candida</i> (White Prairie Clover) 4/ 5/		5 (5)
<i>Rudbeckia hirta</i> (Black-Eyed Susan) 5/		5 (5)
Oats, Spring		50 (55)

Class – Type	Seeds	lb/acre (kg/hectare)
4 Native Grass 2/ 6/	<i>Andropogon gerardi</i> (Big Blue Stem) 5/	4 (4)
	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/	5 (5)
	<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/	5 (5)
	<i>Elymus canadensis</i> (Canada Wild Rye) 5/	1 (1)
	<i>Panicum virgatum</i> (Switch Grass) 5/	1 (1)
	<i>Sorghastrum nutans</i> (Indian Grass) 5/	2 (2)
	Annual Ryegrass	25 (25)
	Oats, Spring	25 (25)
	Perennial Ryegrass	15 (15)
	4A Low Profile Native Grass 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/
<i>Bouteloua curtipendula</i> (Side-Oats Grama) 5/		5 (5)
<i>Elymus canadensis</i> (Canada Wild Rye) 5/		1 (1)
<i>Sporobolus heterolepis</i> (Prairie Dropseed) 5/		0.5 (0.5)
Annual Ryegrass		25 (25)
Oats, Spring		25 (25)
Perennial Ryegrass		15 (15)
4B Wetland Grass and Sedge Mixture 2/ 6/	Annual Ryegrass	25 (25)
	Oats, Spring	25 (25)
	Wetland Grasses (species below) 5/	6 (6)
<u>Species:</u>		<u>% By Weight</u>
<i>Calamagrostis canadensis</i> (Blue Joint Grass)		12
<i>Carex lacustris</i> (Lake-Bank Sedge)		6
<i>Carex slipata</i> (Awl-Fruited Sedge)		6
<i>Carex stricta</i> (Tussock Sedge)		6
<i>Carex vulpinoidea</i> (Fox Sedge)		6
<i>Eleocharis acicularis</i> (Needle Spike Rush)		3
<i>Eleocharis obtusa</i> (Blunt Spike Rush)		3
<i>Glyceria striata</i> (Fowl Manna Grass)		14
<i>Juncus effusus</i> (Common Rush)		6
<i>Juncus tenuis</i> (Slender Rush)		6
<i>Juncus torreyi</i> (Torrey's Rush)		6
<i>Leersia oryzoides</i> (Rice Cut Grass)		10
<i>Scirpus acutus</i> (Hard-Stemmed Bulrush)		3
<i>Scirpus atrovirens</i> (Dark Green Rush)		3
<i>Bolboschoenus fluviatilis</i> (River Bulrush)		3
<i>Schoenoplectus tabernaemontani</i> (Softstem Bulrush)		3
<i>Spartina pectinata</i> (Cord Grass)		4

Class – Type	Seeds	lb/acre (kg/hectare)
5	Forb with Annuals Mixture 2/ 5/ 6/	Annuals Mixture (Below) Forb Mixture (Below)
		1 (1) 10 (10)
	Annuals Mixture - Mixture not exceeding 25 % by weight of any one species, of the following:	
	<i>Coreopsis lanceolata</i> (Sand Coreopsis) <i>Leucanthemum maximum</i> (Shasta Daisy) <i>Gaillardia pulchella</i> (Blanket Flower) <i>Ratibida columnifera</i> (Prairie Coneflower) <i>Rudbeckia hirta</i> (Black-Eyed Susan)	
	Forb Mixture - Mixture not exceeding 5 % by weight PLS of any one species, of the following:	
	<i>Amorpha canescens</i> (Lead Plant) 4/ <i>Anemone cylindrica</i> (Thimble Weed) <i>Asclepias tuberosa</i> (Butterfly Weed) <i>Aster azureus</i> (Sky Blue Aster) <i>Symphotrichum leave</i> (Smooth Aster) <i>Aster novae-angliae</i> (New England Aster) <i>Baptisia leucantha</i> (White Wild Indigo) 4/ <i>Coreopsis palmata</i> (Prairie Coreopsis) <i>Echinacea pallida</i> (Pale Purple Coneflower) <i>Eryngium yuccifolium</i> (Rattlesnake Master) <i>Helianthus mollis</i> (Downy Sunflower) <i>Heliopsis helianthoides</i> (Ox-Eye) <i>Liatris aspera</i> (Rough Blazing Star) <i>Liatris pycnostachya</i> (Prairie Blazing Star) <i>Monarda fistulosa</i> (Prairie Bergamot) <i>Parthenium integrifolium</i> (Wild Quinine) <i>Dalea candida</i> (White Prairie Clover) 4/ <i>Dalea purpurea</i> (Purple Prairie Clover) 4/ <i>Physostegia virginiana</i> (False Dragonhead) <i>Potentilla arguta</i> (Prairie Cinquefoil) <i>Ratibida pinnata</i> (Yellow Coneflower) <i>Rudbeckia subtomentosa</i> (Fragrant Coneflower) <i>Silphium laciniatum</i> (Compass Plant) <i>Silphium terebinthinaceum</i> (Prairie Dock) <i>Oligoneuron rigidum</i> (Rigid Goldenrod) <i>Tradescantia ohiensis</i> (Spiderwort) <i>Veronicastrum virginicum</i> (Culver's Root)	

Class – Type	Seeds	lb/acre (kg/hectare)
5A Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
	<u>Species:</u>	<u>% By Weight</u>
	<i>Aster novae-angliae</i> (New England Aster)	5
	<i>Echinacea pallida</i> (Pale Purple Coneflower)	10
	<i>Helianthus mollis</i> (Downy Sunflower)	10
	<i>Heliopsis helianthoides</i> (Ox-Eye)	10
	<i>Liatris pycnostachya</i> (Prairie Blazing Star)	10
	<i>Ratibida pinnata</i> (Yellow Coneflower)	5
	<i>Rudbeckia hirta</i> (Black-Eyed Susan)	10
	<i>Silphium laciniatum</i> (Compass Plant)	10
	<i>Silphium terebinthinaceum</i> (Prairie Dock)	20
	<i>Oligoneuron rigidum</i> (Rigid Goldenrod)	10
5B Wetland Forb 2/ 5/ 6/	Forb Mixture (see below)	2 (2)
	<u>Species:</u>	<u>% By Weight</u>
	<i>Acorus calamus</i> (Sweet Flag)	3
	<i>Angelica atropurpurea</i> (Angelica)	6
	<i>Asclepias incarnata</i> (Swamp Milkweed)	2
	<i>Aster puniceus</i> (Purple Stemmed Aster)	10
	<i>Bidens cernua</i> (Beggarticks)	7
	<i>Eutrochium maculatum</i> (Spotted Joe Pye Weed)	7
	<i>Eupatorium perfoliatum</i> (Boneset)	7
	<i>Helenium autumnale</i> (Autumn Sneezeweed)	2
	<i>Iris virginica shrevei</i> (Blue Flag Iris)	2
	<i>Lobelia cardinalis</i> (Cardinal Flower)	5
	<i>Lobelia siphilitica</i> (Great Blue Lobelia)	5
	<i>Lythrum alatum</i> (Winged Loosestrife)	2
	<i>Physostegia virginiana</i> (False Dragonhead)	5
	<i>Persicaria pensylvanica</i> (Pennsylvania Smartweed)	10
	<i>Persicaria lapathifolia</i> (Curlytop Knotweed)	10
	<i>Pycnanthemum virginianum</i> (Mountain Mint)	5
	<i>Rudbeckia laciniata</i> (Cut-leaf Coneflower)	5
	<i>Oligoneuron riddellii</i> (Riddell Goldenrod)	2
	<i>Sparganium eurycarpum</i> (Giant Burreed)	5
6 Conservation Mixture 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/ <i>Elymus canadensis</i> (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring	5 (5) 2 (2) 5 (5) 15 (15) 48 (55)
6A Salt Tolerant Conservation Mixture 2/ 6/	<i>Schizachyrium scoparium</i> (Little Blue Stem) 5/ <i>Elymus canadensis</i> (Canada Wild Rye) 5/ Buffalo Grass 5/ 7/ Vernal Alfalfa 4/ Oats, Spring <i>Puccinellia distans</i> (Fults Saltgrass or Salty Alkaligrass)	5 (5) 2 (2) 5 (5) 15 (15) 48 (55) 20 (20)
7 Temporary Turf Cover Mixture	Perennial Ryegrass Oats, Spring	50 (55) 64 (70)

Notes:

- 1/ Seeding shall be performed when the ambient temperature has been between 45 °F (7 °C) and 80 °F (27 °C) for a minimum of seven (7) consecutive days and is forecasted to be the same for the next five (5) days according to the National Weather Service.
- 2/ Seeding shall be performed in late fall through spring beginning when the ambient temperature has been below 45 °F (7 °C) for a minimum of seven (7) consecutive days and ending when the ambient temperature exceeds 80 °F (27 °C) according to the National Weather Service.
- 3/ Specific variety as shown in the plans or approved by the Engineer.
- 4/ Inoculation required.
- 5/ Pure Live Seed (PLS) shall be used.
- 6/ Fertilizer shall not be used.
- 7/ Seed shall be primed with KNO_3 to break dormancy and dyed to indicate such.

Seeding will be inspected after a period of establishment. The period of establishment shall be six (6) months minimum, but not to exceed nine (9) months. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department.”

80445

SHORT TERM AND TEMPORARY PAVEMENT MARKINGS (BDE)

Effective: April 1, 2024

Revised: April 2, 2024

Revise Article 701.02(d) of the Standard Specifications to read:

“(d) Pavement Marking Tapes (Note 3) 1095.06”

Add the following Note to the end of Article 701.02 of the Standard Specifications:

“Note 3. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape.”

Revise Article 703.02(c) of the Standard Specifications to read:

“(c) Pavement Marking Tapes (Note 1) 1095.06”

Add the following Note to the end of Article 703.02 of the Standard Specifications:

“Note 1. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape.”

Revise Article 1095.06 of the Standard Specifications to read:

“1095.06 Pavement Marking Tapes. Type I white or yellow marking tape shall consist of glass spheres embedded into a binder on a foil backing that is precoated with a pressure sensitive adhesive. The spheres shall be of uniform gradation and distributed evenly over the surface of the tape.

Type IV tape shall consist of white or yellow tape with wet reflective media incorporated to provide immediate and continuing retroreflection in wet and dry conditions. The wet retroreflective media shall be bonded to a durable polyurethane surface. The patterned surface shall have approximately 40 ± 10 percent of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed reflective elements or particles.

Blackout tape shall consist of a matte black, non-reflective, patterned surface that is precoated with a pressure sensitive adhesive.

- (a) Color. The white and yellow markings shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degrees circumferential/zero degree geometry, illuminant D65, and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

Color	Daylight Reflectance %Y
White	65 min.
Yellow *	36 - 59

*Shall match Aerospace Material Specification Standard 595 33538 (Orange Yellow) and the chromaticity limits as follows.

x	0.490	0.475	0.485	0.530
y	0.470	0.438	0.425	0.456

- (b) Retroreflectivity. The white and yellow markings shall be retroreflective. Reflective values measured in accordance with the photometric testing procedure of ASTM D 4061 shall not be less than those listed in the table below. The coefficient of retroreflected luminance, R_L , shall be expressed as average millicandelas/footcandle/sq ft (millicandelas/lux/sq m), measured on a 3.0 x 0.5 ft (900 mm x 150 mm) panel at 86 degree entrance angle.

Coefficient of Retroreflected Luminance, R_L , Dry					
Type I			Type IV		
Observation Angle	White	Yellow	Observation Angle	White	Yellow
0.2°	2700	2400	0.2°	1300	1200
0.5°	2250	2000	0.5°	1100	1000

Wet retroreflectance shall be measured for Type IV under wet conditions according to ASTM E 2177 and meet the following.

Wet Retroreflectance, Initial R_L	
Color	R_L 1.05/88.76
White	300
Yellow	200

- (c) Skid Resistance. The surface of Type IV and blackout markings shall provide a minimum skid resistance of 45 BPN when tested according to ASTM E 303.
- (d) Application. The pavement marking tape shall have a precoated pressure sensitive adhesive and shall require no activation procedures. Test pieces of the tape shall be applied according to the manufacturer's instructions and tested according to ASTM D 1000, Method A, except that a stiff, short bristle roller brush and heavy hand pressure will be substituted for the weighted rubber roller in applying the test pieces to the metal test panel. Material tested as directed above shall show a minimum adhesion value of 750 g/in. (30 g/mm) width at the temperatures specified in ASTM D 1000. The adhesive shall be resistant to oils, acids, solvents, and water, and shall not leave objectionable stains or residue after removal. The material shall be flexible and conformable to the texture of the pavement.

(e) Durability. Type IV and blackout tape shall be capable of performing for the duration of a normal construction season and shall then be capable of being removed intact or in large sections at pavement temperatures above 40 °F (4 °C) either manually or with a roll-up device without the use of sandblasting, solvents, or grinding. The Contractor shall provide a manufacturer's certification that the material meets the requirements for being removed after the following minimum traffic exposure based on transverse test decks with rolling traffic.

- (1) Time in place - 400 days
- (2) ADT per lane - 9,000 (28 percent trucks)
- (3) Axle hits - 10,000,000 minimum

Samples of the material applied to standard specimen plates will be measured for thickness and tested for durability in accordance with ASTM D 4060, using a CS-17 wheel and 1000-gram load, and shall meet the following criteria showing no significant change in color after being tested for the number of cycles indicated.

Test	Type I	Type IV	Blackout
Minimum Initial Thickness, mils (mm)	20 (0.51)	65 (1.65) ^{1/} 20 (0.51) ^{2/}	65 (1.65) ^{1/} 20 (0.51) ^{2/}
Durability (cycles)	5,000	1,500	1,500

1/ Measured at the thickest point of the patterned surface.

2/ Measured at the thinnest point of the patterned surface.

The pavement marking tape, when applied according to the manufacturer's recommended procedures, shall be weather resistant and shall show no appreciable fading, lifting, or shrinkage during the useful life of the marking. The tape, as applied, shall be of good appearance, free of cracks, and edges shall be true, straight, and unbroken.

(f) Sampling and Inspection.

(1) Sample. Prior to approval and use of Type IV pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The independent laboratory test report shall state the lot tested, the manufacturer's name, and the date of manufacture.

After initial approval by the Department, samples and certification by the manufacturer shall be submitted for each subsequent batch of Type IV tape used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, the manufacturer's name, and the date of manufacture.

- (2) Inspection. The Contractor shall provide a manufacturer's certification to the Engineer stating the material meets all requirements of this specification. All material samples for acceptance tests shall be taken or witnessed by a representative of the Bureau of Materials and shall be submitted to the Engineer of Materials, 126 East Ash Street, Springfield, Illinois 62704-4766 at least 30 days in advance of the pavement marking operations."

80457

STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004

Revised: January 1, 2022

Description. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

- Metal Piling (excluding temporary sheet piling)
- Structural Steel
- Reinforcing Steel

Other steel materials such as dowel bars, tie bars, welded reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars
Q = quantity of steel incorporated into the work, in lb (kg)
D = price factor, in dollars per lb (kg)

$$D = MPI_M - MPI_L$$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

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

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

Basis of Payment. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPI_L and MPI_M in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(MPI_L - MPI_M) \div MPI_L\} \times 100$$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling) Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness) Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness) Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness) Other piling	23 lb/ft (34 kg/m) 32 lb/ft (48 kg/m) 37 lb/ft (55 kg/m) See plans
Structural Steel	See plans for weights (masses)
Reinforcing Steel	See plans for weights (masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Welded Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail Steel Plate Beam Guardrail, Type A w/steel posts Steel Plate Beam Guardrail, Type B w/steel posts Steel Plate Beam Guardrail, Types A and B w/wood posts Steel Plate Beam Guardrail, Type 2 Steel Plate Beam Guardrail, Type 6 Traffic Barrier Terminal, Type 1 Special (Tangent) Traffic Barrier Terminal, Type 1 Special (Flared)	20 lb/ft (30 kg/m) 30 lb/ft (45 kg/m) 8 lb/ft (12 kg/m) 305 lb (140 kg) each 1260 lb (570 kg) each 730 lb (330 kg) each 410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms Traffic Signal Post Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m) Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m) Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m) Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m) Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m) Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m) Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)	11 lb/ft (16 kg/m) 14 lb/ft (21 kg/m) 21 lb/ft (31 kg/m) 13 lb/ft (19 kg/m) 19 lb/ft (28 kg/m) 31 lb/ft (46 kg/m) 65 lb/ft (97 kg/m) 80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence) Steel Railing, Type SM Steel Railing, Type S-1 Steel Railing, Type T-1 Steel Bridge Rail	64 lb/ft (95 kg/m) 39 lb/ft (58 kg/m) 53 lb/ft (79 kg/m) 52 lb/ft (77 kg/m)
Frames and Grates Frame Lids and Grates	250 lb (115 kg) 150 lb (70 kg)

80127

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

“109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting.
The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor’s submitted DBE utilization plan.

The report shall be made through the Department’s on-line subcontractor payment reporting system within 21 days of making the payment.”

80397

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: November 2, 2017

Revised: April 1, 2019

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

“This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor’s work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%”

80391

SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021

Revised: November 2, 2023

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

“STATEMENTS AND PAYROLLS

The payroll records shall include the worker’s name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit certified payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers, last known addresses, telephone numbers, and email addresses shall not be included on weekly submittals. Instead, the payrolls need only include an identification number for each employee (e.g., the last four digits of the employee’s social security number). The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option (“No Work”, “Suspended”, or “Complete”) selected.”

STATE CONTRACTS. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

- “3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee’s social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>.

When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option (“No Work”, “Suspended”, or “Complete”) selected.”

80437

SURFACE TESTING OF PAVEMENTS – IRI (BDE)

Effective: January 1, 2021

Revised: January 1, 2023

Description. This work shall consist of testing the ride quality of the finished surface of pavement sections with new concrete pavement, PCC overlays, full-depth HMA, and HMA overlays with at least 2.25 in. (57 mm) total thickness of new HMA combined with either HMA binder or HMA surface removal, according to Illinois Test Procedure 701, "Ride Quality Testing Using the International Roughness Index (IRI)". Work shall be according to Sections 406, 407, or 420 of the Standard Specifications, except as modified herein.

Hot-Mix Asphalt (HMA) Overlays

Add the following to Article 406.03 of the Standard Specifications:

"(n) Pavement Surface Grinding Equipment..... 1101.04"

Revise Article 406.11 of the Standard Specifications to read:

"406.11 Surface Tests. Prior to HMA overlay pavement improvements, the Engineer will measure the smoothness of the existing high-speed mainline pavement. The Contractor shall measure the smoothness of the finished high-speed mainline, low-speed mainline, and miscellaneous pavements after the pavement improvement is complete but within the same construction season. Testing shall be performed in the presence of the Engineer and according to Illinois Test Procedure 701. The pavement will be identified as high-speed mainline, low-speed mainline, or miscellaneous as follows.

(a) Test Sections.

- (1) High-Speed Mainline Pavement. High-speed mainline pavement consists of pavements, ramps, and loops with a posted speed limit greater than 45 mph. These sections shall be tested with an inertial profiling system (IPS).
- (2) Low-Speed Mainline Pavement. Low-speed mainline pavement consists of pavements, ramps, and loops with a posted speed limit of 45 mph or less. These sections shall be tested using a 16 ft (5 m) straightedge or with an IPS analyzed using the rolling 16 ft (5 m) straightedge simulation in ProVAL.
- (3) Miscellaneous Pavement. Miscellaneous pavement are segments that either cannot readily be tested by an IPS or conditions beyond the control of the Contractor preclude the achievement of smoothness levels typically achievable with mainline pavement construction. This may include the following examples or as determined by the Engineer.

- a. Pavement on horizontal curves with a centerline radius of curvature of less than or equal to 1,000 ft (300 m) and the pavement within the superelevation transition of such curves;
- b. Pavement on vertical curves having a length less than or equal to 200 ft (60 m) in combination with an algebraic change in tangent grade greater than or equal to 3 percent as may occur on urban ramps or other constricted-space facilities;
- c. The first and last 50 ft (15 m) of a pavement section where the Contractor is not responsible for the adjoining surface;
- d. Intersections and the 25 ft (7.6 m) before and after an intersection or end of radius return;
- e. Variable width pavements;
- f. Side street returns, to the end of radius return;
- g. Crossovers;
- h. Pavement connector for bridge approach slab;
- i. Bridge approach slab;
- j. Pavement that must be constructed in segments of 600 ft (180 m) or less;
- k. Pavement within 25 ft (7.6 m) of manholes, utility structures, at-grade railroad crossings, or other appurtenances;
- l. Turn lanes; and
- m. Pavement within 5 ft (1.5 m) of jobsite sampling locations for HMA volumetric testing that fall within the wheel path.

Miscellaneous pavement shall be tested using a 16 ft (5 m) straightedge.

- (4) International Roughness Index (IRI). An index computed from a longitudinal profile measurement using a quarter-car simulation at a simulation speed of 50 mph (80 km/h).
- (5) Mean Roughness Index (MRI). The average of the IRI values for the right and left wheel tracks.
 - a. MRI_0 . The MRI of the existing pavement prior to construction.
 - b. MRI_i . The MRI value that warrants an incentive payment.

- c. MRI_F. The MRI value that warrants full payment.
 - d. MRI_D. The MRI value that warrants a financial disincentive.
- (6) Areas of Localized Roughness (ALR). Isolated areas of roughness, which can cause significant increase in the calculated MRI for a given subplot.
- (7) Subplot. A continuous strip of pavement 0.1 mile (160 m) long and one lane wide. A partial subplot greater than or equal to 264 ft (80 m) will be subject to the same evaluation as a whole subplot. Partial subplots less than 264 ft (80 m) shall be included with the previous subplot for evaluation purposes.
- (b) Corrective Work. Corrective work shall be completed according to the following.
- (1) High-Speed Mainline Pavement. For high-speed mainline pavement, any 25 ft (7.6 m) interval with an ALR in excess of 200 in./mile (3,200 mm/km) will be identified by the Engineer and shall be corrected by the Contractor. Any subplot having a MRI greater than MRI_D, including ALR, shall be corrected to reduce the MRI to the MRI_F, or replaced at the Contractor's option.
 - (2) Low-Speed Mainline Pavement. Surface variations in low-speed mainline pavement which exceed the 5/16 in. (8 mm) tolerance will be identified by the Engineer and shall be corrected by the Contractor.
 - (3) Miscellaneous Pavements. Surface variations in miscellaneous pavement which exceed the 5/16 in. (8 mm) tolerance will be identified by the Engineer and shall be corrected by the Contractor.

Corrective work shall be completed with pavement surface grinding equipment or by removing and replacing the pavement. Corrective work shall be applied to the full lane width. When completed, the corrected area shall have uniform texture and appearance, with the beginning and ending of the corrected area perpendicular to the centerline of the paved surface.

Upon completion of the corrective work, the surface of the subplot(s) shall be retested. The Contractor shall furnish the data and reports to the Engineer within 2 working days after corrections are made. If the MRI and/or ALR still do not meet the requirements, additional corrective work shall be performed.

Corrective work shall be at no additional cost to the Department.

- (c) Smoothness Assessments. Assessments will be paid to or deducted from the Contractor for each subplot of high-speed mainline pavement per the Smoothness Assessment Schedule. Assessments will be based on the MRI of each subplot prior to performing any corrective work unless the Contractor has chosen to remove and replace the pavement.

For pavement that is replaced, assessments will be based on the MRI determined after replacement.

The upper MRI thresholds for high-speed mainline pavement are dependent on the MRI of the existing pavement before construction (MRI_0) and shall be determined as follows.

Upper MRI Thresholds ^{1/}	MRI Thresholds (High-Speed, HMA Overlay)	
	$MRI_0 \leq 125.0$ in./mile ($\leq 1,975$ mm/km)	$MRI_0 > 125.0$ in./mile ^{1/} ($> 1,975$ mm/km)
Incentive (MRI_I)	45.0 in./mile (710 mm/km)	$0.2 \times MRI_0 + 20$
Full Pay (MRI_F)	75.0 in./mile (1,190 mm/km)	$0.2 \times MRI_0 + 50$
Disincentive (MRI_D)	100.0 in./mile (1,975 mm/km)	$0.2 \times MRI_0 + 75$

1/ MRI_0 , MRI_I , MRI_F , and MRI_D shall be in in./mile for calculation.

Smoothness assessments for high-speed mainline pavement shall be determined as follows.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, HMA Overlay)	
Mainline Pavement MRI Range	Assessment Per Sublot ^{1/}
$MRI \leq MRI_I$	$+ (MRI_I - MRI) \times \$20.00$ ^{2/}
$MRI_I < MRI \leq MRI_F$	$+ \$0.00$
$MRI_F < MRI \leq MRI_D$	$- (MRI - MRI_F) \times \$8.00$
$MRI > MRI_D$	$- \$200.00$

1/ MRI , MRI_I , MRI_F , and MRI_D shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$300.00.

Smoothness assessments will not be paid or deducted until all other contract requirements for the pavement are satisfied. Pavement that is corrected or replaced for reasons other than smoothness, shall be retested as stated herein.”

Hot-Mix Asphalt (HMA) Pavement (Full-Depth)

Revise the first paragraph of Article 407.03 of the Standard Specifications to read:

“407.03 Equipment. Equipment shall be according to Article 406.03.”

Revise Article 407.09 of the Standard Specifications to read:

“407.09 Surface Tests. The finished surface of the pavement shall be tested for smoothness

according to Article 406.11, except as follows:

The testing of the existing pavement prior to improvements shall not apply and the smoothness assessment for high-speed mainline pavement shall be determined according to the following table.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, Full-Depth HMA)	
Mainline Pavement MRI, in./mile (mm/km)	Assessment Per Sublot ^{1/}
≤ 45.0 (710)	+ (45 – MRI) × \$45.00 ^{2/}
> 45.0 (710) to 75.0 (1,190)	+ \$0.00
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$20.00
> 100.0 (1,580)	– \$500.00

1/ MRI shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$800.00.”

Portland Cement Concrete Pavement

Delete Article 420.03(i) of the Standard Specifications.

Revise Article 420.10 of the Standard Specifications to read:

“420.10 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows.

The testing of the existing pavement prior to improvements shall not apply. The Contractor shall measure the smoothness of the finished surface of the pavement after the pavement has attained a flexural strength of 250 psi (3,800 kPa) or a compressive strength of 1,600 psi (20,700 kPa).

Membrane curing damaged during testing shall be repaired as directed by the Engineer at no additional cost to the Department.

- (a) Corrective Work. No further texturing for skid resistance will be required for areas corrected by grinding. Protective coat shall be reapplied to areas ground according to Article 420.18 at no additional cost to the Department.

Jointed portland cement concrete pavement corrected by removal and replacement, shall be corrected in full panel sizes.

- (b) Smoothness Assessments. Smoothness assessment for high-speed mainline pavement shall be determined as follows.

SMOOTHNESS ASSESSMENT SCHEDULE (High-Speed, PCC)	
Mainline Pavement MRI, in./mile (mm/km) ^{3/}	Assessment Per Sublot ^{1/}
≤ 45.0 (710)	+ (45 – MRI) × \$60.00 ^{2/}
> 45.0 (710) to 75.0 (1,190)	+ \$0.00
> 75.0 (1,190) to 100.0 (1,580)	– (MRI – 75) × \$37.50
> 100.0 (1,580)	– \$750.00

1/ MRI shall be in in./mile for calculation.

2/ The maximum incentive amount shall not exceed \$1200.00.

3/ If pavement is constructed with traffic in the lane next to it, then an additional 10 in./mile will be added to the upper thresholds.”

Removal of Existing Pavement and Appurtenances

Revise the first paragraph of Article 440.04 of the Standard Specifications to read:

“**440.04 HMA Surface Removal for Subsequent Resurfacing.** The existing HMA surface shall be removed to the depth specified on the plans with a self-propelled milling machine. The removal depth may be varied slightly at the discretion of the Engineer to satisfy the smoothness requirements of the finished pavement. The temperature at which the work is performed, the nature and condition of the equipment, and the manner of performing the work shall be such that the milled surface is not torn, gouged, shoved or otherwise damaged by the milling operation. Sufficient cutting passes shall be made so that all irregularities or high spots are eliminated to the satisfaction of the Engineer. When tested with a 16 ft (5 m) straightedge, the milled surface shall have no surface variations in excess of 3/16 in. (5 mm).”

General Equipment

Revise Article 1101.04 of the Standard Specifications to read:

“**1101.04 Pavement Surface Grinding Equipment.** The pavement surface grinding device shall have a minimum effective head width of 3 ft (0.9 m).

- (a) Diamond Saw Blade Machine. The machine shall be self-propelled with multiple diamond saw blades.
- (b) Profile Milling Machine. The profile milling machine shall be a drum device with carbide or diamond teeth with spacing of 0.315 in. (8 mm) or less and maintain proper forward speed for surface texture according to the manufacturer’s specifications.”

80435

TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975
Revised: September 2, 2021

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 2. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee it employs on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor Employment Training Administration shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting its performance under this Training Special Provision.

For contracts with an awarded contract value of \$500,000 or more, the Contractor is required to comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules to the extent permitted by Section 20-20(g). For federally funded projects, the number of trainees to be trained under this contract, as stated in the Training Special Provisions, will be the established goal for the Illinois Works Apprenticeship Initiative 30 ILCS 559/20-20(g). The Contractor shall make a good faith effort to meet this goal. For federally funded projects, the Illinois Works Apprenticeship Initiative will be implemented using the FHWA approved OJT procedures. The Contractor must comply with the recordkeeping and reporting obligations of the Illinois Works Apprenticeship Initiative for the life of the project, including the certification as to whether the trainee/apprentice labor hour goals were met.

Method of Measurement. The unit of measurement is in hours.

Basis of Payment. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

20338

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)

Effective: November 1, 2021

Revised: November 1, 2022

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

“The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. In accordance with 625 ILCS 5/12-215, the lights may only be in operation while the vehicle or equipment is engaged in construction operations.”

80439

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: November 1, 2021

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

80302

WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

“(q) Temporary Sign Supports 1106.02”

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

“For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer’s specifications.”

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

“**701.15 Traffic Control Devices.** For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer’s self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device.”

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

“**1106.02 Devices.** Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact

attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH-16 compliant is available, an NCHRP 350 or MASH-2009 compliant device may be used, even if manufactured after December 31, 2019.”

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

“(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.

(k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.

(l) Movable Traffic Barrier. The movable traffic barrier shall be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis.”

80427

REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <http://www.state.il.us/agency/idol/> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.