



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

2/28/2005

SUBJECT: FAP Route 305
Project ACNHF-0305(034)
Section 2004-088B
Cook County
Contract No. 62829
Item No. 27, 03/11/2005 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS: ;

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Revised pages iii & iv of the Table of Contents.
2. Revised pages 141 and 205 of the Special Provisions
3. Added pages 206 – 213 to the Special Provisions.
4. Revised pages 1,2,6,12 and 13 of the Schedule of Prices.
5. Revised sheets 2,4,6,10,45,46,49-53,76,85,111,113 and 119 of the Plans.
6. Added sheet 127A to the Plans.

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Michael L. Hine
Engineer of Design
and Environment

A handwritten signature in cursive script, reading "Ted B. Walschleger" followed by "P.E." in a smaller font.

By: Ted B. Walschleger, P. E.
Engineer of Project Management

cc: Diane O'Keefe; Roger Driskell; R. E. Anderson; Jim White; Design &
Environment File
TK/cah

TABLE OF CONTENTS

WHITEWASHING FOR CONCRETE PAVEMENT 135

TEMPORARY PAVEMENT..... 136

TYPE A FINAL FINISH OF PORTLAND CEMENT CONCRETE PAVEMENT WITH VARIABLY
 SPACED TILING..... 137

COMPOST FURNISH AND PLACE..... 138

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL 138

RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND BACKFILL 139

CLEANING EXISTING DRAINAGE STRUCTURES 139

FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)..... 139

BRACED EXCAVATION..... 140

APPROACH SLAB REMOVAL 141

BRIDGE APPROACH PAVEMENT (SPECIAL) 141

TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR REPLACEMENT AND/OR
 INSTALLATION ON ROADWAY GRINDING, RESURFACING, & PATCHING OPERATIONS142

GENERAL ELECTRICAL REQUIREMENTS 146

TRENCH AND BACKFILL FOR ELECTRICAL WORK 149

WIRE AND CABLE 150

EXPOSED RACEWAYS..... 152

UNDERGROUND RACEWAYS..... 155

STAINLESS STEEL JUNCTION BOX 155

UNDERPASS LUMINAIRE, HPS, STAINLESS STEEL HOUSING..... 156

LUMINAIRE 173

STEEL COST ADJUSTMENT (BDE)..... 180

FORMED CONCRETE REPAIR 184

DRAINAGE SYSTEM 186

JACK AND REMOVE EXISTING BEARINGS..... 187

CLEANING AND PAINTING CONTACT SURFACE AREAS OF EXISTING STEEL STRUCTURES 188

CLEANING AND PAINTING NEW METAL STRUCTURES 193

TEMPORARY SHEET PILING 199

SILICONE BRIDGE JOINT SEALER 200

UNDERWATER STRUCTURE EXCAVATION PROTECTION..... 204

FABRIC REINFORCED ELASTOMERIC MAT 204

REMOVAL OF EXISTING NON COMPOSITE BRIDGE DECKS 205

SLIPFORM PARAPET..... 205

Revised 2/28/2005

TABLE OF CONTENTS

MAINTENANCE OF LIGHTING SYSTEMS208
PROTECTION AND MAINTENANCE OF EXISTING UNDERPASS LUMINAIRES211
REMOVAL OF EXISTING UNDERPASS LUMINAIRE AND SALVAGE.....212
UNIT DUCT213

Revised 2/28/2005

APPROACH SLAB REMOVAL

Description. This work shall consist of the removal and satisfactory disposal of all existing bridge approach slabs, sleeper slabs, reinforcement bars, tie bars, expansion joints, base and subbase materials as well as any superimposed sidewalks, median or barriers, according to the applicable requirements of Section 440 of the Standard Specifications.

Method of Measurement. This work shall be measured in place and the area computed in square yards.

Basis of Payment. This work, as herein specified and shown on the plans, will be paid for at the contract unit price per square yard for BRIDGE APPROACH SLAB REMOVAL.

BRIDGE APPROACH PAVEMENT (SPECIAL)

Description. This work shall consist of a Bridge Approach Pavement (Special) constructed according to the applicable requirements of Section 420 of the Standard Specifications. This item shall also include all the concrete, reinforcement bars, tie bars and all other materials and items necessary to construct the barriers, sidewalks, medians and parapets which are superimposed on the Bridge Approach Pavement (Special). This item shall also include all other materials and items necessary to construct any Bridge Fence Railing (Sidewalk), Bicycle Railing and Parapet Railing which are superimposed on the Bridge Approach Pavement (Special).

Method of Measurement. This work shall be measured in square yards according to the requirements for Bridge Approach Pavement (Special) as specified in Section 420.22 of the Standard Specifications.

Basis of Payment. This work, as herein specified and shown on the plans, will be paid for at the contract unit price per square yard for BRIDGE APPROACH PAVEMENT (SPECIAL).

Revised 2/28/2005

Threaded studs, washers and nuts shall be according to ASHTO M 164. Flattening plates shall be according to AASHTO M 270M, Grade 250 (M 270, Grade 36).

Method of Measurement. The fabric reinforced elastomeric mat and all hardware necessary to install the mat will not be measured for payment but shall be included in the concrete pay item involved.

REMOVAL OF EXISTING NON COMPOSITE BRIDGE DECKS

Effective: June 21, 2004

Revise the fourth sentence of the third paragraph of Article 501.03 of the Standard Specifications to read:

“Saw cutting directly over the top of beam or girder flanges may be permitted only if shown on the plans. The maximum saw cut depth allowed directly over a flange shall be to the bottom of the top mat of reinforcing steel but shall not exceed half the deck thickness. The Contractor shall provide positive control for controlling the depth of cut into the slab. The Contractor shall provide sawing equipment adequate in size and horsepower to complete the sawing operation.”

SLIPFORM PARAPET

Effective February 25, 2005

The following shall replace Article 503.17(e)(1) of the Standard Specifications.

- (1) Slipforming. At the option of the Contractor, concrete parapets may be constructed by slipforming in lieu of the conventional forming methods. The slipform machine shall have automatic horizontal and vertical grade control and be approved by the Engineer.

The concrete mix design may combine two or more coarse aggregate sizes, consisting of CA-7, CA-11, CA-13, CA-14, and CA-16, provided a CA-7 or CA-11 is included in the blend in a proportion approved by the Engineer.

The slipform machine speed shall not exceed 1.2 m (4 feet) per minute. Any section of parapet placed with the slipform machine moving in excess of the maximum allowed speed will be rejected. The contractor shall schedule concrete delivery to maintain a uniform delivery rate of concrete into the slipform machine. If delivery of concrete into the slipforming machine is interrupted by more than 10 minutes, the portion of the wall within the limits of the slipform machine will be rejected.

If the Contractor elects to slipform, the parapet cross-sectional area and reinforcement bar clearances may be revised according to the detail for Concrete Parapet Slipforming Option.

For parapets adjacent to the watertable, the Contractor shall use the alternate reinforcement as shown in the detail for Concrete Parapet Slipforming Option at no additional cost to the Department. For parapets at other locations or for median barriers on bridge decks, the Contractor may propose alternate reinforcement and stiffening details subject to the approval of the Engineer.

Revised 2/28/2005

The use of cast-in-place anchorage devices for attaching appurtenances and/or railings to the parapets will not be allowed in conjunction with slipforming of parapets. Alternates means for making these attachments shall be as detailed on the plans or as approved by the Engineer.

All reinforcement bar intersections within the parapet cross section shall be 100 percent tied to maintain rigidity during concrete placement. At pre-planned sawcut joints in the parapet, Glass Fiber Reinforced Polymer (GFRP) reinforcement shall be used to maintain the rigidity of the reinforcement cage across the proposed joints (See Detail for Concrete Parapet Slipforming Option).

Glass Fiber Reinforced Polymer (GFRP) reinforcement shall be subject to approval by the Engineer. Other non-ferrous reinforcement may be proposed for use but shall be subject to approval by the Engineer.

For projects with plan details specifying parapet joints spaced greater than 6 meters (20 feet) apart, additional sawcut joints, spaced between 3 meters (10 feet) and 6 meters (20 feet), shall be placed as directed by the Engineer. The horizontal reinforcement extending through the proposed joints shall be precut to provide a minimum of 100 mm (4 inch) gap, centered over the joint, between rebar ends. The ends of the reinforcement shall be repaired according to Article 508.05.

After the slipform machine has been set to proper grade and prior to concrete placement, the clearance between the slipform machine inside faces and reinforcement bars shall be checked during a dry run by the Contractor in the presence of the Engineer. The dry run shall not begin until the entire reinforcing cage has been tied and the Engineer has verified and approved the placement and tying of the reinforcing bars. Any reinforcement bars found to be out of place by more than 13 mm ($\frac{1}{2}$ in.), or any dimensions between bars differing from the plans by more than 13 mm ($\frac{1}{2}$ in.) shall be re-tied to the plan dimensions.

During the dry run and in the presence of the Engineer, the Contractor shall check the clearance of the reinforcement bars from the inside faces of the slipform mold. In all locations, the Contractor shall ensure the reinforcement bars have the minimum cover distance shown on the plans. This dry run check shall be made for the full distance that is anticipated to be placed in the subsequent pour. Reinforcement bars found to have less than the minimum clearance shall be adjusted and the dry run will be performed again, at least in any locations that have been readjusted.

The aluminum cracker plates as detailed in the plans shall be securely tied in place and shall be coated or otherwise treated to minimize their potential reaction with wet concrete. In lieu of chamfer strips at horizontal and vertical edges, radii may be used. Prior to slipforming, the Contractor shall verify proper operation of the vibrators using a mechanical measuring device subject to approval by the Engineer.

Added 2/28/2005

The top portion of the joint shall be sawcut as shown in Detail for Concrete Parapet Slipforming Option. Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive raveling. All joints shall be sawed to the full thickness before uncontrolled shrinkage cracking takes place but no later than 8 hours after concrete placement. The sawcut shall be approximately 10 mm (3/8 in.) wide and shall be performed with a power circular concrete saw. The joints shall be sealed with an approved polysulfide sealant, conforming to Article 1050.03, to a minimum depth of 12 mm (1/2 in.), with surface preparation and installation according to the manufacturer's written instructions. Cork, hemp or other compressible material may be used as a backer. The sawcut will not require chamfered edges.

Ends of the parapet shall be formed and the forms securely braced. Parapets at light standards, shall be formed for a minimum distance of 1.2 m (4 ft) on each side of the exception.

For acceptance and rejection purposes a parapet section shall be defined as the length of parapet between adjacent vertical parapet joints.

The maximum variance of actual to proposed longitudinal alignment shall not exceed ± 20 mm (3/4 in.) with no more than 6 mm in 3 m (1/4 in. in 10 ft). Notwithstanding this tolerance, abrupt variance in actual alignment of 13 mm in 3 m (1/2 in. in 10 ft) will be cause for rejection of the parapet section.

In addition, all surfaces shall be checked with a 3 m (10 ft) straight edge furnished and used by the Contractor as the concrete is extruded from the slipform mold. Continued variations in the barrier surface exceeding 6 mm in 3 m (1/4 in. in 10 ft) will not be permitted and remedial action shall immediately be taken to correct the problem.

The use of equipment or methods which result in dimensions outside the tolerance limits shall be discontinued. Parapet sections having dimensions outside the tolerance limits will be rejected.

Any visible indication that less than specified cover of concrete over the reinforcing bars has been obtained, or any cracking or tearing of the plastic concrete, or any location showing diagonal or horizontal cracking will be cause for rejection of the parapet section in which they are found.

The vertical surfaces at the base of the barrier within 75 mm (3 inches) of the deck surface shall be trowelled true after passage of the slipform machine. Any deformations or bulges remaining after the initial set shall be removed by grinding after the concrete has hardened. Hand finishing of minor sporadic surface defects may be allowed at the discretion of the Engineer. Otherwise the parapets shall receive a normal finish as specified in Article 503.16(a) as directed by the Engineer.

Slipformed parapets shall be cured according to either Article 1020.13(a)(3) or Article 1020.13(a)(5). For either method, a soaker hose shall be placed on the top surface of the parapet, and the curing material kept wet with a continuous supply of water for the entire curing period. The cotton mats or burlap covering shall be held in place with brackets or other method approved by the Engineer.

Added 2/28/2005

A maximum of three random 100 mm (4 in.) diameter cores per 30 m (100 feet) of parapet shall be taken as directed by the Engineer, but no less than three random cores shall be taken for each parapet pour. Separate parapets poured on the same date shall be considered separate pours. Random cores will not be measured for payment.

The Engineer will mark additional locations for cores where, in the sole opinion of the Engineer, the quality of the slipformed parapet is suspect.

Any cores showing voids of any size adjacent to the reinforcement bars, or showing voids not adjacent to reinforcement bars of 160 square millimeters (1/4 square inch) in area or more, or showing signs of segregation, or showing signs of cracking shall be considered failures and the parapet section from which it was taken will be rejected.

Rejected parapet sections shall be removed and replaced for the full depth cross-section of the parapet. The minimum length of parapet removed and replaced shall be 1 m (3 feet). Additional cores may be required to determine the longitudinal extent of removal and replacement if it can not be determined and agreed upon by other means (i.e. visual, sounding, non-destructive testing, etc.).

Any parapet section with more than one half of its length rejected or with remaining segments less than 3m (10 feet) in length shall be removed and replaced in its entirety.

If reinforcement bars are damaged during the removal and replacement, additional removal and replacement shall be done, as necessary, to ensure minimum splice length of replacement bars. Any damage to epoxy coating of bars shall be repaired according to Article 508.05.

All core holes will be filled with a non-shrink grout meeting the requirements of Section 1024.

MAINTENANCE OF LIGHTING SYSTEMS

Effective: March 1, 2003

Replace Article 801.12 of the Standard Specifications with the following:

Effective the date the Contractor's activities (electrical or otherwise) at the job site begin, the Contractor shall be responsible for the proper operation and maintenance of all existing and proposed lighting systems which are part of, or which may be affected by the work until final acceptance or as otherwise determined by the Engineer.

Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall initiate a request for a maintenance transfer and preconstruction inspection, as specified elsewhere herein, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. The request for the maintenance preconstruction inspection shall be made no less than seven (7) calendar days prior to the desired inspection date.

Added 2/28/2005

Existing lighting systems, when depicted on the plans, are intended only to indicate the general equipment installation of the systems involved and shall not be construed as an exact representation of the field conditions. It remains the Contractor's responsibility to visit the site to confirm and ascertain the exact condition of the electrical equipment and systems to be maintained.

Maintenance of Existing Lighting Systems

Existing lighting systems. Existing lighting systems shall be defined as any lighting system or part of a lighting system in service prior to this contract. The contract drawings indicate the general extent of any existing lighting, but whether indicated or not, it remains the Contractor's responsibility to ascertain the extent of effort required for compliance with these specifications and failure to do so will not be justification for extra payment or reduced responsibilities.

Extent of Maintenance.

Partial Maintenance. Unless otherwise indicated, if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in a given controller and the controller is not part of the contract work, the Contractor needs only to maintain the affected circuits. The affected circuits shall be isolated by means of in-line waterproof fuse holders as specified elsewhere and as approved by the Engineer.

Full Maintenance. If the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given controller, or if the controller is modified in any way under the contract work, the Contractor shall maintain the entire controller and all associated circuits.

Maintenance of Proposed Lighting Systems

Proposed Lighting Systems. Proposed lighting systems shall be defined as any lighting system or part of a lighting system which is to be constructed under this contract. The Contractor shall be fully responsible for maintenance of all items installed under this contract. Maintenance shall include, but not be limited to, any equipment failures or malfunctions as well as equipment damage either by the motoring public, Contractor operations, or other means. The potential cost of replacing or repairing any malfunctioning or damaged equipment shall be included in the bid price of this item and will not be paid for separately.

Lighting System Maintenance Operations

The Contractor's responsibility shall include all applicable responsibilities of the Electrical Maintenance Contract, State of Illinois, Department of Transportation, Division of Highways, District One. These responsibilities shall include the maintenance of lighting units (including sign lighting), cable runs and lighting controls. In the case of a pole knockdown or sign light damage caused by normal vehicular traffic, the Contractor shall promptly clear the lighting unit and circuit discontinuity and restore the system to service.

Responsibilities shall also include weekly night-time patrol of the lighting system, with patrol reports filed immediately with the Engineer and with deficiencies corrected within 24 hours of the patrol. Patrol reports shall be presented on standard forms as designated by the Engineer. Uncorrected deficiencies may be designated by the Engineer as necessitating emergency repairs as described elsewhere herein.

Added 2/28/2005

The following chart lists the maximum response, service restoration, and permanent repair time the Contractor will be allowed to perform corrective action on specific lighting system equipment.

INCIDENT OR PROBLEM	SERVICE RESPONSE TIME	SERVICE RESTORATION TIME	PERMANENT REPAIR TIME
Control cabinet out	1 hour	4 hours	7 Calendar days
Hanging mast arm	1 hour to clear	na	7 Calendar days
Radio problem	1 hour	4 hours	7 Calendar days
Motorist caused damage or leaning light pole 10 degrees or more	1 hour to clear	4 hours	7 Calendar days
Circuit out – Needs to reset breaker	1 hour	4 hours	na
Circuit out – Cable trouble	1 hour	24 hours	21 Calendar days
Outage of 3 or more successive lights	1 hour	4 hours	na
Outage of 75% of lights on one tower	1 hour	4 hours	na
Outage of light nearest RR crossing approach, Islands and gores	1 hour	4 hours	na
Outage (single or multiple) found on night outage survey or reported to EMC	na	na	7 Calendar days
Navigation light outage	na	na	24 hours

- Service Response Time -- amount of time from the initial notification to the Contractor until a patrolman physically arrives at the location.
- Service Restoration Time – amount of time from the initial notification to the Contractor until the time the system is fully operational again (In cases of motorist caused damage the undamaged portions of the system are operational.)
- Permanent Repair Time – amount of time from initial notification to the Contractor until the time permanent repairs are made if the Contractor was required to make temporary repairs to meet the service restoration requirement.

Failure to provide this service will result in liquidated damages of \$500 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to the Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Electrical Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. Repeated failures and/or a gross failure of maintenance shall result in the State's Electrical Maintenance Contractor being directed to correct all deficiencies and the resulting costs deducted from any monies owed the contractor.

Damage caused by the Contractor's operations shall be repaired at no additional cost to the Contract.

Operation of Lighting

The lighting shall be operational every night, dusk to dawn. Duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously. Lighting systems shall not be kept in operation during long daytime periods. The contractor shall demonstrate to the satisfaction of the Engineer that the lighting system is fully operational prior to submitting a pay request. Failure to do so will be grounds for denying the pay request.

Added 2/28/2005

Basis of Payment. Maintenance of lighting systems shall be paid for at the contract unit price per calendar month or fraction thereof for MAINTENANCE OF LIGHTING SYSTEM, which shall include all work as described herein.

PROTECTION AND MAINTENANCE OF EXISTING UNDERPASS LUMINAIRES

Effective: November 11, 2002

Description: This item shall consist of providing protection, temporary support, removal and reattachment as required, of the existing underpass lighting system. The system consists of, but not limited to, luminaires, junction boxes, raceways, support equipment and conductors. Any wiring required to maintain the operation of the underpass or other circuits feed through the underpass lighting system shall be included in this item.

Materials. Materials shall be according to the following Articles of Section 1000 - Materials

Item	Article/Section
(a) Electric Raceway Material.....	1088
(b) Conductors.....	1066.02
(c) Insulation.....	1066.03(b)

CONSTRUCTION REQUIREMENTS

General. Before performing any work, an inventory of all missing hardware of the existing lighting system shall be taken jointly by the Contractor and the Engineer.

Protection During Deck Reconstruction: Luminaires and conduit hangers attached to the bridge deck shall be removed prior to the removal of the existing bridge deck. The luminaires and the conduits shall be temporarily supported during bridge deck reconstruction. The method of support shall be structurally equivalent to the existing system and shall be approved by the Engineer. Existing vertical clearances shall be maintained at all times.

The underpass luminaires and hardware shall be protected from overhead debris during the removal and reconstruction of the bridge deck. The underpass luminaire protection shall be coordinated with the protective shield as described elsewhere in these Special Provisions.

The underpass lighting system shall be protected from spills and over-spray during any painting operations. Spills and over-spray shall be removed by the Contractor at no additional expense to the State. If spills or over-spray occur on the luminaire lens, the luminaire lens shall be replaced with new lens from the luminaire manufacturer at no additional cost to the State.

Prior to bridge deck removal the Contractor shall measure and log the location of all existing conduit and luminaire hangers for reattachment purposes. Upon completion of the bridge deck reconstruction, the existing underpass lighting system shall be permanently reattached at these locations. New heavy duty expansion anchors, as approved by the Engineer, shall be used. New hangers may be installed at the option of the Contractor. The new hangers shall be equivalent to the existing hangers or as approved by the Engineer. The cost of the new expansion anchors and hangers shall be included in this pay item.

Damage to Underpass Lighting System: Should the lighting system be damaged through the Contractor's operations, repairs shall be made by the Contractor at no additional cost to the State.

Added 2/28/2005

All repairs shall be performed expeditiously and shall be approved by the Engineer. The Contractor shall conduct his work in a manner as not to keep out of service any of the lighting between 4:00 PM and 8:00 AM. All lights shall be tested daily and any necessary repairs shall be made immediately without delay.

Damaged cable shall be replaced in complete spans, no underground splices will be allowed. Temporary aerial quadruplex cable may be used to maintain luminaires operational provided it does not interfere with traffic or other operations as determined by the Engineer.

Grounding of Existing Lighting System: As indicated on the plans, the Contractor shall furnish and install a grounding conductor for the underpass lighting system in all existing conduits, junction boxes and luminaires. The ground conductor shall be a 1/C #10 AWG EPR (Type-RHW) green insulated conductor. The new ground conductor shall be connected to the existing ground conductor in the main junction box. The cost of this work shall be included in this pay item.

The continuity and continued operation of the adjacent lighting system shall be the responsibility of the Contractor. Any temporary wiring required to comply with this requirement shall be included in this item.

Basis of Payment: This work shall be paid for at the contract lump sum price for PROTECT AND MAINTAIN EXISTING UNDERPASS LUMINAIRE, which shall be payment for the work as described herein and as indicated in the plans.

REMOVAL OF EXISTING UNDERPASS LUMINAIRE AND SALVAGE

Description: This item consists of the removal of the existing underpass lighting system including, but not limited to, luminaires, conduit, wire, and junction boxes as indicated on the Plans or as directed by the Engineer.

General Requirements: When directed by the Engineer the existing underpass lighting system will be removed in phases. Removal of the associated conduit, wire and junction boxes is considered as incidental to the unit price for this item. Removal of the underpass lighting system must be well coordinated with construction phases in order to maintain a minimum underpass illumination level, acceptable to the Engineer.

All materials removed becomes property of the Contractor and must be disposed of off the job site. The salvage value of these items must be reflected in the unit bid price for this item.

Method of Measurement: Removal of the existing underpass lighting is measured by the unit price per each underpass luminaire removed.

Basis of Payment: This work is paid for at the Contract unit price each for REMOVAL OF EXISTING UNDERPASS LUMINAIRE AND SALVAGE which price is payment in full for the work described herein will not be paid for separately, but is included the contract unit price of this item.

Added 2/28/2005

UNIT DUCT

Effective: October 1 2002

Revise the second paragraph of Article 816.03(b) to read

“The unit duct shall be installed at a minimum depth of 760 mm (30-inches) unless otherwise directed by the Engineer.”

Revise Article 1066.01 to read:

“1066.01 Unit Duct. The unit duct shall be an assembly of insulated conductors which are factory pre-installed in a coilable nonmetallic conduit. The polyethylene duct shall be extruded directly over the cable at the factory in long continuous lengths. The unit duct shall be according to NEC Article 354 and be UL Listed.”

Revise Article 1088.01 (c) to read:

“(c) Coilable Nonmetallic Conduit.

Polyethylene Duct. The duct shall be a plastic duct which is intended for underground use and can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties of performance.

The duct shall be made of high density polyethylene which shall meet the requirements of ASTM D 2447, for schedule 40. The duct shall be composed of black high density polyethylene meeting the requirements of ASTM D 3350, Class C, Grade P33. The wa thickness shall be in accordance with Table 2 for ASTM D 2447.

Duct dimensions shall conform to the following table:

Nom. Duct Diameter		Nom. Outside Diameter		Min. Wall Thickness	
mm	in	mm	in	mm	in
27	1	33.4	1.315	3.4	0.133
35	1.25	42.2	1.660	3.6	0.140
41	1.5	48.3	1.900	3.7	0.145
53	2.0	60.3	2.375	3.9	0.154

Performance Tests. Polyethylene Duct testing procedures and test results shall meet the requirements of ASTM D 3485. Certified copies of the test report shall be submitted to the Engineer prior to the installation of the duct. Duct crush test results shall meet or exceed the following requirements:

Duct Diameter		Min. Force required to deform sample 50%	
mm	in	N	lbs
27	1	5337	1200
35	1.25	4937	1110
41	1.5	4559	1025
53	2.0	3780	850

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES

State Job # - C-91-347-04
PPS NBR - 1-73626-0050
County Name - COOK - -
Code - 31 - -
District - 1 - -
Section Number - 2004-088B

CONTRACT NUMBER - 62829

Project Number
ACNHF-0305/034/000

Route
FAP 305

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
XX002104	IELCBL C 14 2C TW SH	FOOT	100.000				
XX002898	PIPE DRNS PERF PVC 8	FOOT	35.000				
X0320870	BRACED EXCAVATION	CU YD	260.000				
X0323080	DRAINAGE SCUPPR DS-12	EACH	4.000				
X0323082	DRAINAGE SCUPPR DS-33	EACH	8.000				
X0323426	SED CONT DR ST INL CL	EACH	40.000				
* X0323574	MAINTAIN LIGHTING SYS	CAL MO	8.000				
X0324112	BARRIER BASE	FOOT	2,126.000				
X0324159	WHITEWASH CONC PAVT	SQ YD	4,191.000				
* DELETED							
* DELETED							
* DELETED							
X0712400	TEMP PAVEMENT	SQ YD	356.000				
X4066426	BC SC SUPER "D" N70	TON	461.000				
X4066548	P BCSC SUPER "F" N90	TON	419.000				
X4066616	BCBC SUP IL-19.0 N70	TON	2,968.000				

* REVISED : FEBRUARY 28, 2005

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES

CONTRACT NUMBER - 62829

State Job # - C-91-347-04
PPS NBR - 1-73626-0050
County Name - COOK - -
Code - 31 - -
District - 1 - -
Section Number - 2004-088B

Project Number
ACNHF-0305/034/000

Route
FAP 305

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X4067100	P LB MM SU IL4.75 N50	TON	180.000				
X5020501	UNWAT STR EX PROT L1	EACH	2.000				
X6063600	COMB CC&G TM4.24	FOOT	2,214.000				
X6370940	CONC BAR 2F 42HT	FOOT	2,096.000				
X7015000	CHANGEABLE MESSAGE SN	CAL MO	14.000				
* DELETED							
* X8110110	CON ATS 1 GALVS PVC	FOOT	690.000				
* DELETED							
* DELETED							
* DELETED							
* X8160300	UD3#4#6G XLP 1.25S40P	FOOT	413.000				
* DELETED							
* X8210302	PROT-MAIN UNPASS LUM	L SUM	1.000				
X8420102	REM EX UNPAS LUM SALV	EACH	12.000				
Z0001050	AGG SUBGRADE 12	SQ YD	5,997.000				
Z0002600	BAR SPLICERS	EACH	2,972.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0030040	IMP ATTEN FRD WID TL2	EACH	2.000				

* REVISED : FEBRUARY 28, 2005

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 62829

State Job # - C-91-347-04
 PPS NBR - 1-73626-0050
 County Name - COOK--
 Code - 31 - -
 District - 1 - -
 Section Number - 2004-088B

Project Number
 ACNHF-0305/034/000

Route
 FAP 305

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
48300505	PCC SHOULDERS 10 1/4	SQ YD	1,894.000				
48301000	PROTECTIVE COAT	SQ YD	1,894.000				
50100100	REM EXIST STRUCT	EACH	1.000				
50102400	CONC REM	CU YD	31.000				
50104720	REM EXIST CONC DECK	EACH	1.000				
* 50200100	STRUCTURE EXCAVATION	CU YD	605.000				
50200300	COFFERDAM EXCAVATION	CU YD	235.000				
50200700	COFFERDAM PIER 2	EACH	2.000				
50200800	COFFERDAM PIER 3	EACH	2.000				
50300150	NEOPRENE EXPAN JT 2	FOOT	190.000				
50300225	CONC STRUCT	CU YD	653.000				
50300255	CONC SUP-STR	CU YD	1,288.000				
50300260	BR DECK GROOVING	SQ YD	4,500.000				
* 50300265	SEAL COAT CONC	CU YD	80.000				
50300300	PROTECTIVE COAT	SQ YD	6,080.000				

* REVISED : FEBRUARY 28, 2005

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES

CONTRACT NUMBER - 62829

State Job # - C-91-347-04
 PPS NBR - 1-73626-0050
 County Name - COOK--
 Code - 31 - -
 District - 1 - -
 Section Number - 2004-088B

Project Number
 ACNHF-0305/034/000

Route
 FAP 305

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78000650	THPL PVT MK LINE 24	FOOT	84.000				
78008210	POLYUREA PM T1 LN 4	FOOT	11,655.000				
78008250	POLYUREA PM T1 LN 12	FOOT	324.000				
78100100	RAISED REFL PAVT MKR	EACH	162.000				
78100105	RAISED REF PVT MKR BR	EACH	29.000				
78200410	GUARDRAIL MKR TYPE A	EACH	32.000				
78200530	BAR WALL MKR TYPE C	EACH	66.000				
78201000	TERMINAL MARKER - DA	EACH	1.000				
78300100	PAVT MARKING REMOVAL	SQ FT	3,846.000				
* DELETED							
81018500	CON P 2 GALVS	FOOT	57.000				
* DELETED							
* DELETED							
81400200	HD HANDHOLE	EACH	1.000				
* 81700110	EC C EPR RHW 1C 10	FOOT	2,070.000				
* REVISED : FEBRUARY 28, 2005							

