



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

November 1, 2007

SUBJECT: FAP Route 338  
Project ACBRF-0338 (032)  
Section 114 BY-R-1  
Will County  
Contract No. 60C19  
Item No. 69, November 16, 2007 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 1, 2 & 3 of the Schedule of Prices.
2. Revised the Table of Contents to the Special Provisions, adding page iii.
3. Revised pages 4 – 7 of the Special Provisions.
4. Added pages 109 - 113 to the Special Provisions.
5. Revised sheets 1 – 4, 6, 10 – 13, 31, 36, 38 - 40, 119, 126, 127 & 135 of the Plans.
6. Added sheet 38A 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,

Eric E. Harm  
Interim Bureau Chief  
Bureau of Design and Environment

A handwritten signature in black ink, appearing to read 'Ted B. Walschleger' with a small 'P.E.' to the right.

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

cc: Diane O'Keefe, Region 1, District 1; Roger Driskell; R. E. Anderson;  
Estimates

TBW:MS:jc

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF PRICES  
 CONTRACT  
 NUMBER - 60C19

State Job # - C-91-160-07  
 PPS NBR - 1-70859-0500  
 County Name - WILL - -  
 Code - 197 - -  
 District - 1 - -  
 Section Number - 114BY-R-1

Project Number  
 ACBRF-0338/032/

Route  
 FAP 338

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
XX002134	CONC C&G OUTLET SPL	EACH	2.000				
XX005656	INLET FILTER CLEANING	EACH	42.000				
XX005733	POLYUREA PM LINE 12	FOOT	290.000				
XX006058	POLYUREA PM LINE 4	FOOT	1,468.000				
X0322256	TEMP INFO SIGNING	SQ FT	51.400				
X0323830	DRAINAGE SCUPPR DS-11	EACH	10.000				
X0323973	SED CONT SILT FENCE	FOOT	1,385.000				
X0323974	SED CONT SILT FN MAIN	FOOT	1,385.000				
X0323988	TEMP SOIL RETEN SYSTM	SQ FT	6,210.000				
* X0325833	WICK DRAINS	FOOT	30,736.000				
* X0325834	HOR STRIP DRAINS	FOOT	8,400.000				
* DELETED							
X0325858	ERECT PPC I-BM 48	FOOT	2,880.000				
X0712400	TEMP PAVEMENT	SQ YD	6,066.000				
X4021000	TEMP ACCESS- PRIV ENT	EACH	2.000				
X4023000	TEMP ACCESS- ROAD	EACH	1.000				
X4024000	TEMP ACCESS- FLD ENT	EACH	2.000				
* REVISED : OCTOBER 31, 2007							

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Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X5020501	UNWAT STR EX PROT L1	EACH	1.000				
X5020502	UNWAT STR EX PROT L2	EACH	1.000				
Z0001050	AGG SUBGRADE 12	SQ YD	2,779.000				
Z0001900	ASB BEARING PAD REMOV	EACH	66.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0030240	IMP ATTN TEMP NRD TL2	EACH	2.000				
Z0030255	IMP ATTN TEMP FRN TL2	EACH	3.000				
Z0030320	IMP ATTN REL FRD TL2	EACH	2.000				
Z0030340	IMP ATTN REL NRD TL2	EACH	4.000				
Z0065000	SET PILES IN ROCK	EACH	40.000				
Z0076600	TRAINEES	hour	1,500.000		0.800		1,200.000
20100110	TREE REMOV 6-15	UNIT	711.000				
* 20100210	TREE REMOV OVER 15	UNIT	823.000				
20101100	TREE TRUNK PROTECTION	EACH	37.000				
20101200	TREE ROOT PRUNING	EACH	21.000				
* REVISED : OCTOBER 31, 2007							

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 SCHEDULE OF PRICES  
 CONTRACT  
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60C19

State Job # - C-91-160-07  
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Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
20101300	TREE PRUN 1-10	EACH	27.000				
20101350	TREE PRUN OVER 10	EACH	10.000				
20200100	EARTH EXCAVATION	CU YD	5,907.000				
20201200	REM & DISP UNS MATL	CU YD	1,193.000				
* 20400800	FURNISHED EXCAV	CU YD	11,589.000				
20700400	POROUS GRAN EMB SPEC	CU YD	410.000				
* 20700420	POROUS GRAN EMB SUBGR	CU YD	910.000				
* 20800150	TRENCH BACKFILL	CU YD	744.000				
21101505	TOPSOIL EXC & PLAC	CU YD	3,047.000				
21101815	COMPOST F & P 4	SQ YD	2,807.000				
21301052	EXPLOR TRENCH 52	FOOT	200.000				
25000210	SEEDING CL 2A	ACRE	1.500				
25000312	SEEDING CL 4A	ACRE	0.300				
25000314	SEEDING CL 4B	ACRE	0.300				
25000400	NITROGEN FERT NUTR	POUND	220.000				
* REVISED : OCTOBER 31, 2007							

**TABLE OF CONTENTS**

LOCATION OF IMPROVEMENT ..... 1  
 DESCRIPTION OF IMPROVEMENT..... 1  
 MAINTENANCE OF ROADWAYS ..... 1  
 START OF WORK ..... 2  
 BRIDGE APPROACH PAVEMENT (SPECIAL)..... 2  
 APPROACH SLAB REMOVAL ..... 2  
 CLASS D PATCHES..... 2  
 REMOVAL OF EXISTING STRUCTURES ..... 3  
 PIPE UNDERDRAINS, FABRIC LINED TRENCH 4" ..... 3  
 PIPE CULVERT REMOVAL..... 4  
 MANHOLE, DROP TYPE..... 4  
 CONCRETE CURB AND GUTTER OUTLET SPECIAL..... 4  
 CONCRETE MEDIAN, TYPE SB..... 4  
 TEMPORARY PAVEMENT..... 7  
 ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 48 INCH ..... 8  
 UNDERWATER STRUCTURE EXCAVATION PROTECTION ..... 9  
 INLET FILTER CLEANING ..... 10  
 STATUS OF UTILITIES TO BE ADJUSTED ..... 10  
 COMPLETION DATE PLUS WORKING DAYS..... 11  
 POROUS GRANULAR EMBANKMENT, SUBGRADE..... 11  
 AGGREGATE SUBGRADE, 12" (300 MM) ..... 13  
 RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND BACKFILL..... 15  
 AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS ..... 15  
 BACKFILLING STORM SEWER UNDER ROADWAY ..... 16  
 TRAFFIC CONTROL PLAN..... 16  
 WORK ZONE TRAFFIC CONTROL (LUMP SUM PAYMENT) ..... 18  
 EPOXY COATING ON REINFORCEMENT (DISTRICT ONE) ..... 18  
 SEDIMENT CONTROL, SILT FENCE ..... 18  
 TEMPORARY INFORMATION SIGNING ..... 20  
 TRAFFIC CONTROL FOR WORK ZONE AREAS ..... 21  
 ANTI-STRIP ADDITIVE FOR HMA (DISTRICT ONE)..... 21  
 FINE AGGREGATE FOR HOT-MIX ASPHALT (HMA) (DISTRICT ONE) ..... 22  
 TEMPERATURE CONTROL FOR CONCRETE PLACEMENT (DISTRICT ONE) ..... 22  
 TEMPORARY SOIL RETENTION SYSTEM ..... 22

Revised 11/01/2007

PIPE UNDERDRAINS FOR STRUCTURES ..... 23  
 POROUS GRANULAR EMBANKMENT (SPECIAL) ..... 24  
 SETTING PILES IN ROCK ..... 24  
 ALKALI-SILICA REACTION FOR CAST-IN-PLACE CONCRETE (BDE) ..... 25  
 ASBESTOS BEARING PAD REMOVAL (BDE)..... 28  
 CEMENT (BDE) ..... 29  
 DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE) ..... 31  
 DOWEL BARS (BDE) ..... 38  
 ENGINEER’S FIELD OFFICE (LONG DISTANCE BILL) (BDE) ..... 39  
 ENGINEER’S FIELD OFFICE TYPE A (BDE) ..... 39  
 EQUIPMENT RENTAL RATES (BDE)..... 40  
 EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE) ..... 41  
 ERRATA FOR THE 2007 STANDARD SPECIFICATIONS (BDE)..... 41  
 HOT-MIX ASPHALT EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE) ..... 44  
 HOT-MIX ASPHALT – FIELD VOIDS IN THE MINERAL AGGREGATE (BDE) ..... 44  
 IMPACT ATTENUATORS TEMPORARY (BDE) ..... 45  
 MULTILANE PAVEMENT PATCHING (BDE)..... 47  
 NOTIFICATION OF REDUCED WIDTH (BDE) ..... 47  
 PAYMENTS TO SUBCONTRACTORS (BDE) ..... 48  
 PLASTIC BLOCKOUTS FOR GUARDRAIL (BDE) ..... 49  
 POLYUREA PAVEMENT MARKING (BDE) ..... 49  
 RECLAIMED ASPHALT PAVEMENT (RAP) (BDE) ..... 55  
 REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE) ..... 61  
 REINFORCEMENT BARS (BDE) ..... 62  
 RETROREFLECTIVE SHEETING, NONREFLECTIVE SHEETING, AND TRANSLUCENT OVERLAY  
 FILM FOR HIGHWAY SIGNS (BDE) ..... 63  
 SEEDING (BDE) ..... 69  
 SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)..... 71  
 SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)..... 75  
 STEEL PLATE BEAM GUARDRAIL (BDE) ..... 76  
 STONE GRADATION TESTING (BDE)..... 76  
 SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE) ..... 76  
 TEMPORARY EROSION CONTROL (BDE) ..... 77  
 THERMOPLASTIC PAVEMENT MARKINGS (BDE) ..... 78  
 TRAINING SPECIAL PROVISIONS ..... 79

Revised 11/01/2007

WATER BLASTING WITH VACUUM RECOVERY ..... 81  
BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)..... 81  
STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID) ..... 84  
STORM WATER POLLUTION PREVENTION PLAN..... 88  
404 PERMIT..... 97  
HORIZONTAL STRIP DRAINS..... 109  
WICK DRAINS ..... 110

Revised 11/01/2007

### **PIPE CULVERT REMOVAL**

This work shall include the removal and disposal of existing pipe culverts and end sections or headwalls as noted in the Removal Plans.

Basis of Payment: This work will be paid for at the contract unit price per Foot for PIPE CULVERT REMOVAL, irrespective of pipe size.

### **MANHOLE, DROP TYPE**

This work shall consist of the furnishing and installation of Drop Type Manhole structures with specified frame and lid and as shown on the Construction Details in the Plans.

All manhole structures having depths greater than 12' (rim to invert), shall be limited to Pre-Cast Reinforced Concrete Sections or cast-in-place concrete in accordance with Section 602 of the Standard Specifications.

This item of work is to include all castings, Frame and Lid, Type 1 (State Standard 604001), reduced size drop pipe, and concrete encasement.

Basis of Payment: This work will be paid for at the contract unit price per Each for MANHOLES, DROP TYPE, at the Diameter shown on the plans.

### **CONCRETE CURB AND GUTTER OUTLET SPECIAL**

This work shall consist of the construction of Concrete Gutter in accordance with State Standard 606006 and in accordance with Section 606 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per Each for CONCRETE CURB AND GUTTER OUTLET SPECIAL.

### **CONCRETE MEDIAN, TYPE SB**

This work shall consist of the construction of Concrete Median, Type SB in accordance with State Standard 606306 and in compliance with Section 606 of the Standard Specifications, with the following exception. The maximum pay width shall be 18-feet instead of 12-feet shown in Standard 606306.

Basis of Payment: This work will be paid for at the contract unit price per Square Foot for CONCRETE MEDIAN, TYPE SB of the size specified on the plans.

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**SETTLEMENT WAITING PERIOD**

Station 3207+50 to Station 3214+00 Northbound, Stages 3 & 4  
Station 3208+00 to Station 3215+00 Southbound, Stages 1 & 2

A waiting period of 45 days is required between the completion of embankment construction and the beginning of paving operations. The waiting period may be reduced if the contractor elects to install monuments or settlement platforms and provide data to the Engineer that indicates the settlement rate is less than 0.03 ft. over a period of one month. Monuments or settlement platforms shall be installed at approximately Stations 3208+60, 40 ft. Rt. and 3211+10, 40 ft. Lt. or as directed by the Engineer. Monuments or settlement platform data shall be obtained at no greater than weekly intervals. The cost of monuments or settlement platforms and monitoring is incidental to embankment construction and placement of Aggregate Subgrade, 12 in. if the contractor elects to monitor settlement.

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Revised 11/01/2007

## **TEMPORARY PAVEMENT**

This item shall include all materials, labor, and equipment necessary to construct, maintain, remove and dispose of Temporary Pavement at the locations shown on the Maintenance of Traffic Plans or as directed by the Engineer. The Temporary Pavement shall be constructed and removed in accordance with the applicable portions of Sections 406 and 440 of the Standard Specifications.

The Temporary Pavement shall be constructed of two inches (2") Hot-Mix Asphalt Surface Course, Mix "D", N50, IL 9.5 and ten inches (10") of Hot-Mix Asphalt Binder Course, IL-19, N50.

The temporary pavement shall be place on 4-inches of Sub-Base Granular Material, Type B which shall be paid for separately.

The cost of maintaining and the removal and disposal of the temporary pavement shall be included in the contract unit price for TEMPORARY PAVEMENT. The temporary pavement shall be disposed of outside the right of way.

This work will be paid for at the contract unit price per square yard for TEMPORARY PAVEMENT which price shall include payment for all materials, labor and equipment necessary to construct, maintain, remove and dispose of the Temporary Pavement.

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**HORIZONTAL STRIP DRAINS**

Description. This work shall consist of all labor, materials, equipment and services necessary to complete the horizontal strip drain installation for the wick drain system according to the details and dimensions shown on the plans, this specification, and as directed by the Engineer.

Submittals The submittal requirements shall meet the requirements for WICK DRAINS.

Quality Assurance: The quality assurance requirements shall meet the requirements for WICK DRAINS.

Materials: The materials used for the construction of horizontal strip drains shall satisfy the following requirements:

The horizontal strip drains consist of a plastic core encapsulated within a geotextile filter fabric wrap. The minimum discharge capacity shall be 3849 ft<sup>3</sup>/day.

The horizontal strip drain shall conform to the following specifications:

Property	Value	Test Method
Compressive Strength	10,000 psf	ASTM D 1621
Thickness	1.0 inches	ASTM D 1777
Material Type	HDPE, formed dimple core	

Property	Value	Test Method
Grab Tensile Strength	90 lbs	ASTM D 4632
Grab Elongation	50%	ASTM D 4632
Puncture Strength	55 lbs	ASTM D 4833
Mullen Burst Strength	185 psi	ASTM D 3786
Permittivity	150 gpm/sf	ASTM D 4491
AOS, U.S. Std. Sieve	70	ASTM D 4751
UV Resistance @500 hrs	85%	ASTM D 4355
Fungus Resistance	No Growth	ASTM D 1612

Property	Value	Test Method
In Plane Flow, Q&518 psf Hydraulic Gradient = 1	170 gpm/ft width	ASTM D-4716

Protection of Materials. The protection of materials requirements shall meet the requirements for WICK DRAINS.

Added 11/01/2007

Method of Measurement. Horizontal strip drains will be measured for payment in feet in place for the full length of horizontal strip drains complete and in place. Horizontal strip drains that are damaged in construction or that are improperly completed will not be measured for payment and no compensation will be allowed for any material furnished or for work performed on such horizontal strip drains.

Basis of Payment. This work will be paid for at the contract unit price per foot for HORIZONTAL STRIP DRAINS. The price shall be full compensation for the cost of furnishing the full length of horizontal strip drain material, installing the horizontal strip drains, altering of the equipment and methods of installation in order to produce the required end result and shall also include the cost of furnishing all tools, materials, labor, equipment, services and all other costs necessary to complete the required work. No direct payment will be made for unacceptable horizontal strip drains or for any delays or expenses incurred through change necessitated by improper or unacceptable material or equipment, but the costs of such shall be included in the Unit Prices bid for this work.

## **WICK DRAINS**

Description. This work shall consist of all labor, materials, equipment and services necessary to complete the wick drain installation according to the details and dimensions shown on the plans, this specification, and as directed by the Engineer.

### Submittals.

- (a) Within two weeks of the preconstruction meeting, the Contractor shall submit to the Engineer for review:
  - (1) Details of the equipment, sequence and method of installation
  - (2) Wick drain samples indicating the source of the proposed materials
  - (3) List of at least three projects of similar magnitude and installation where the same wick drain has been installed including details on prior performance on these projects.
  - (4) Manufacturer's literature documenting the physical and mechanical properties of the wick drain. Letter of certification from manufacturer documenting test results indicating that materials meet material specifications in accordance with this specification.
- (b) Four weeks prior to installation, the Contractor shall submit to the Engineer for review, wick drain detailed drawings. The detailed plan drawing shall indicate wick drain layout and spacing; each vertical wick drain location tied to roadway baseline and wick drain limits shown on the plans; each horizontal wick drain location and limits and location of outlet; and top and bottom elevation of each wick drain.
- (c) Two weeks prior to installation, the Contractor shall submit to the Engineer purchase certificate which documents the type and physical characteristics of the wick drain to be used and documents that the materials meet testing requirements specified.
- (d) At the end of each working day, the Contractor shall supply to the Engineer, a summary of the wick drains installed that day. The summary shall include drain type, locations and length (to nearest 4 inches) quantity of wick drain installed at each location.

Added 11/01/2007

Quality Assurance:

- (a) Prior to the installation of wick drains within the designated areas, the Contractor shall demonstrate that his equipment, method and materials produce a satisfactory installation in accordance with these specifications. For this purpose, the Contractor shall install six trial wick drains totaling approximately 200 linear feet at locations designated by the Engineer. Payment will be made at the bid price per linear foot for wick drains. Payment will not be made for installing unsatisfactory trial wicks.
- (b) Approval by the Engineer of the method and equipment to install the trial wicks shall not necessarily constitute, acceptance of the method for the remainder of the project. If, at anytime, the Engineer considers that the method of installation does not produce a satisfactory wick, the Contractor shall alter his method and/or equipment as necessary to comply with these specifications.
- (c) The Contractor shall provide the Engineer with suitable means of making a linear determination of the quantity of wick material used in each wick location. During installation of the wick, the Contractor shall provide suitable means of determining the depth of the wick drains at any given time.
- (d) Wick drain materials shall be labeled or tagged in such a manner that the information for sample identification and other quality control purposes can be read from the label. As a minimum, each roll shall be identified by the manufacturer as to lot or control numbers, individual roll number, date of manufacture, manufacturer and product identification of the jacket and core.

Materials: The materials used for the construction of wick drains shall satisfy the following requirements:

- (a) Wick drains shall be of newly-manufactured materials and shall consist of a core enclosed in or integrated with a jacket. The jacket shall allow free passage of pore water to the core without loss of soil material or piping. The core shall provide continuous vertical drainage.
- (b) The wick drains shall be a prefabricated band-shaped drain with an aspect ratio (width divided by thickness) not exceeding 50.
- (c) Jacket material:
  - (1) Shall be a synthetic non-woven geotextile capable of resisting all bending, punching and tensile forces imposed during installation and during the design life of the wick drain.
  - (2) Shall not be subject to localized damage (e.g., punching through the filter by sand/gravel particles).
  - (3) Shall be sufficiently rigid to withstand lateral earth pressures due to embedment and surcharge so that the vertical flow capacity through the core will not be adversely affected.
  - (4) Shall be sufficiently flexible to bend smoothly during installation and induced consolidation settlement without damage.
  - (5) Shall not undergo cracking and peeling during installation of the wick drain.
  - (6) Shall conform to the following specifications:

Added 11/01/2007

Test Property	Test Method	(Minimum Value)*
Grab Tensile Strength	ASTM D4632	80 lbs.
Trapezoidal Tear	ASTM D4533	25 lbs.
Puncture Strength	ASTM D4833	50 lbs.
Mullen Burst Strength	ASTM D3786	130 psi

\* The jacket material shall be tested in saturated and dry condition. These requirements apply to the lower of the two tested conditions.

These criteria must be demonstrated by manufacturer's test results and letter of certification.

- (d) The core shall be a continuous plastic material fabricated to promote drainage along the axis of the vertical wick drain.

Assembly:

- (a) The mechanical properties (strength and modulus) of the assembled wick drain shall equal or exceed those specified for the component jacket and core.
- (b) The assembled wick drain shall be resistant against wet rot, mildew, bacterial action, insects, salts in solution in the groundwater, acids, alkalis, solvents, and any other significant ingredients in the site groundwater.
- (c) One single type of assembled wick drain shall be used on the project unless otherwise directed by the Engineer.
- (d) The assembled wick drain shall have a minimum equivalent diameter of 2.1 inches using the following definition of equivalent diameter:  
 $dw = (a+b)/2$   
 dw = diameter of a circular drain equivalent to the band shaped drain  
 a = width of a band shaped drain  
 b = thickness of a band shaped drain

Protection of Materials. During shipment and storage, the wick drain shall be wrapped in heavy paper, burlap or similar heavy duty protective covering. The wick drain shall be protected from sunlight, mud, dirt, dust, debris and other detrimental substances during shipping and on-site storage.

Construction. Wick drains shall be installed with approved modern equipment, which will cause a minimum of disturbance of the subsoil during the installation operation. The wick installation rig shall utilize either vibratory methods or a static push. Installation shall be in accordance with the following procedure.

- (a) The drainage wick shall be installed using a mandrel or sleeve that is continuously vibrated or statically pushed into the soil. The sleeve shall protect the wick material from tears, cuts, and abrasion during installation, and shall be retracted after each drainage wick is installed. The sleeve shall be rhombic or rectangular in shape, and of cross sectional area not to exceed 10 square

Added 11/01/2007

inches. To minimize disturbance to the subsoil, the sleeve shall not be advanced into the subsoil using impact methods. In no case will alternate raising or lowering of the mandrel during advancement be permitted. Raising of the mandrel will only be permitted after completion of a wick drain installation.

- (b) Wick drains shall be staked out by the Contractor. The locations of the wick drains shall not vary by more than 6 inches from the locations indicated on the drawings, as specified, or as directed by the Engineer. The equipment must be carefully checked for plumbness prior to advancing each wick, and must not deviate more than one inch per five feet from the vertical. Wick drains that are out of their proper location by more than 6 inches or wick drains that are damaged in construction, or wick drains that are improperly completed will be abandoned in place and no compensation will be allowed for any material furnished or for work performed on such wicks.
- (c) Wick drains shall completely penetrate the compressible soft to stiff clay strata at the site.
- (d) The Engineer may vary the depths, spacing, or the number of wick drains to be installed, and may revise the plan limits for this work, as necessary.
- (e) Splices or connections of wick drain material shall be done by stapling in a workmanlike manner and so as to insure structural and hydraulic continuity of the wick drain. The jacket and core shall be overlapped a minimum of 6 inches at any splice. A maximum of one splice per drain installed will be permitted, unless otherwise directed by the Engineer.
- (f) The Contractor is permitted to use auguring or other methods to loosen stiff upper soils and/or granular fill prior to installation of the wick drains. If predrilling or other methods are used to open an installation hole, the annulus must be filled with sand after installation of the wick drains. No additional compensation will be made for auguring or loosening of soils.
- (g) Where obstructions are encountered below the working surface, which cannot easily be removed or penetrated using normal and accepted procedures, the Contractor, shall complete the wick drain from the elevation of the obstruction to the working surface and notify the Engineer in writing within four hours.
- (h) The vertical wick drain shall be wrapped around horizontal drain and stapled as specified above.

Method of Measurement. Wick drains will be measured for payment in feet in place for the full length of wick drain (vertical) complete and in place. Wick drains that are out of their proper location by more than 6 inches or wick drains that are damaged in construction, or wick drains that are improperly completed will not be measured for payment, and no compensation will be allowed for any material furnished or for work performed on such wick drains.

Basis of Payment. This work will be paid for at the contract unit price per foot for WICK DRAINS. The prices shall be full compensation for the cost of furnishing the full length of wick drain material, installing the wick drains, altering of the equipment and methods of installation in order to produce the required end result and shall also include the cost of furnishing all tools, materials, labor, equipment, services and all other costs necessary to complete the required work. No direct payment will be made for unacceptable wick drains or for any delays or expenses incurred through change necessitated by improper or unacceptable material or equipment, but the costs of such shall be included in the Unit Prices bid for this work. No additional compensation will be allowed for the cost of constructing any work platform to provide stability for the wick drain installation equipment and to allow movement of the wick drain installation equipment across the site.

Added 11/01/2007