## Guided Horizontal Drilling System (HDD) (Continued)

The Contractor when installing HDPE conduit is to limit the amount of conduit being ovaled by the installation process. The Conduit being pulled out from an installation at the exit pit shall be controlled so as not to oval the conduit. The conduit is required to be round to allow the installation of couplings, steel pipe, bends or schedule 40 PVC conduit. Force fitting of round conduit on to oval conduit is not acceptable. To provide a round connection for the HDPE, the HDPE has to be cut back to where the conduit is round .In the process of cutting the HDPE back a large amount of scrape can be generated. The Contractor is advised the Conduit supplied by the city is furnished 3% over the required amount to allow for some ovaling. In the event the amount of conduit scraped exceeds 3% the Contractor shall furnish and install all remaining HDPE conduit at the Contractors cost to finish the Project. The use of straight 40-foot lengths of HDPE is not acceptable

Since some of the construction along the route shall be done in close proximity to existing energized conductors as well as lower voltage distribution circuits now in operation, due caution shall be taken to Prevent accidental contact with or damage to any part of these lines, or any other overhead conductors or underground utilities encountered along the right-of-way. It shall be the Contractor's responsibility to locate all facilities by hand digging and /or machine aided digging as deemed necessary. The Contractor shall consider all electric lines overhead or underground Energized at all times.

The Contractor shall comply with the Occupational Safety and Health Act of 1970 (OSHA). The Contractor may obtain copies from the Regional Administrator of the Department of Labor, Dirksen Federal Office Building Chicago, Illinois 60690

Construction Drawings, showing the route of the HDPE conduit installation are attached and are part of this specification and no deviation from these shall be made without written approval from the Engineer

The Contractor shall be responsible for all damages occurring on or off the right-of-way, including, fence. grass, flowers, vegetables, drain tile, drainage or lack of drainage, shrubs, sheds, buildings, tree, sidewalk, driveway and, crop damage, when such damage was necessary or not a necessary incident to the execution of the work or was occasioned by carelessness or neglect on the part of the Contractor. The Contractor shall obtain signed releases and wavier of liens from all property Owner's along the route of the conduit runs. The Contractor shall provide a completed and signed release form to the City of Naperville's for file. The form shall be used for this project. The Contractor shall submit a waiver of lien from every entity who could lawfully and/or possibly file a lien in excess of \$75 arising out of the Contract and related work. The City of Naperville reserves the right to designate which entities involved in the work must submit waivers

Where soil and sod has been removed, it shall be replaced as soon as possible after the backfilling is competed. All areas disturbed by work shall be restored to its original or better condition. The restoration shall include any necessary top soiling, fertilizing, liming, seeding, or mulching, as shown on the plans as removed/damaged. All such work shall be performed in accordance with the specifications as directed by the Engineer. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance. Restoration shall be considered incidental to the pay item of which it is a component part.

The Contractor will settle damages and obtain releases, releasing Company as well as Contractor, for damages as outlined above.

The approximate locations of existing roads in the vicinity of the work are shown on the drawings furnished by the Company. Any improvement, maintenance, repair or construction required on roads or easements by the Contractor in performing the work covered by the specification, or in traveling to and from the site of the work, shall be at the expense of the Contractor. Access to the work is from existing roads and easements. All other means of egress and ingress shall be provided by and at the expense of the Contractor.

## Guided Horizontal Drilling System (HDD) (Continued)

High density polyethylene pipe is subject to conformance testing of fusion welds performed in the field. The Contractor shall ensure the field set-up and operation of the fusion equipment, and the fusion procedure used by the Contractor's fusion operator while on site. Upon request by the Engineer, the Contractor shall verify field fusion quality by making and testing a trial fusion weld. The trial fusion weld shall be allowed to cool completely; then test straps shall be cut out and bent strap tested in accordance with ASTM D2657. If the bent strap test of the trial fusion fails at the joint, the field fusions represented by the trail fusion shall be rejected. The Contractor shall make all necessary corrections to equipment, set-up, operation and fusion procedure, and shall re-make the rejected fusions at Contractor's expense.

The quantities shown on the "Unit Pricing Sheet" is approximations/estimates for comparing bids, and no claim shall be made against the Company for excess or deficiency therein, actual or relative. The Company shall be the final judge on completion and acceptance of the work. Within the first fifteen (15) days of each calendar month, the Company shall make partial payments to the Contractor for construction accomplished during the preceding calendar month or period on the basis of completed assembly units furnished and certified to by the Contractor, recommended by the Engineer and approved by the Company solely for the purposes of payment However, that such approval by the Company shall not be deemed approval of the workmanship or materials. Ninety percent (90%) of each estimate approved for payment shall be paid by the Company to the Contractor of the work. However, that any time after work, which in the sole determination of the engineer, amounts to fifty percent (50%) of the maximum contract price has been completed, the Company may elect, in lieu of paying ninety percent (90%) of each subsequent estimate, to pay each subsequent estimate in full. The Invoice as submitted shall contain the following information:

- Field record of work accomplished, horizontal drilling log sheet with item types, quantities, sketches, signed, dated, and attached to the invoice with WF#
- 2 Purchase order # and date
- Vendor #
- Project#
- Project description.
- Account #
- Period of time invoice covers
- Partial Payment number
- Contractors name, address, telephone #, pager#, fax#, name of person submitting invoice, invoice number, invoice date, number of pages
- Update resources paid and resources remaining on each invoice (a running total) 10
- 11 Update number of items installed and the number of items remaining. On each invoice (a running total)
- 12 Indicate quantities of each item, price per item, and price extension of each item
- 13 Include total payment in bottom portion of invoice. (A running total is also required.)
- 14 Include WF #
- 15 The invoice shall be supplied in triplicate to the Department of Public Utilities-Electric
- 16 The invoice shall be submitted on Contractors letterhead stationary.
- 17 Completed Signed Waivers of Lien shall accompany all invoices. Include material tickets.
- 18 A copy of the certified payroll for the period covered on the invoice shall be provided
- 19 The Invoice shall have attached an authorization letter, signed and dated of any work required but Not covered in the estimated units
- 20 The Invoice shall include an address box showing payment to: Bill To:

Accounts Payable P.O. Box 3020 Naperville ILL 60566-7020 Phone (630) 420-6111

NAPERVILLE PUBLIC	SPECIFICATION FOR THE INSTALLATION	DATE: 02-19-08		NAPERVILLE PUBLIC	SPECIFICATION FOR THE INSTALLATION	DATE: 02-19-08	ſ	NAPERVILLE PUBLIC
UTILITIES DEPARTMENT	OF HDPE CONDUIT BY THE HORIZONTAL	PAGE: 19 OF 25		UTILITIES DEPARTMENT	OF HDPE CONDUIT BY THE HORIZONTAL	PAGE: 20 OF 25		UTILITIES DEPARTMENT
ELECTRIC STANDARDS	DRILLING SYSTEM (HDD)	C30-1950		ELECTRIC STANDARDS	DRILLING SYSTEM (HDD)	C30-1950	ļ	ELECTRIC STANDARDS



Contractor, if deemed showing the total numb character of assembly u Company, together with

	F.A.P. RTE.	SECTION		OUNTY	TOTAL SHEETS	SHEET NO.						
	338/IL 59	<del>-2011-035-I</del>		UPAGE								
					ACT 60F							
	FED.ROAD.DIS	I.NO.	ILLINOIS	FED. A	AID PRO	JECT						
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Guided Horizontal Drilling System	. , .		with the acc	istance of th	e							
Upon completion by the Contractor of the construction of the work, the Engineer with the assistance of the Contractor, if deemed necessary by the Engineer, shall prepare a final inventory of the work completed showing the total number, description, type of electrical equipment installed, lengths in feet, location and character of assembly units and, after checking such inventory with the Contractor, shall certify it to the Company, together with the total cost of the construction work performed. All invoices shall clearly state full assembly units installed, quantities, types, sizes, percentage of work completed and date completed.												
Upon approval of such invoices by the Company, the Company shall make payment to the Contractor of all amounts to which the Contractor shall be entitled there under which shall not have been paid previously. Final payment shall be made not later than ninety (90) days after the completion of construction of the work, as specified, unless with held because of the fault of the Contractor.												
The Contractor shall be paid on the basis of the number of units actually installed at the direction of the Company shown by the inventory on the material fickets, specifications, and lists provided. However, the total cost shall not exceed the maximum contract price for the construction of the work as set forth in the bid award, unless such excess shall have been approved in writing by the Engineer and approved by the Company. The Company shall pay for no work under a verbal agreement or understanding that is not documented in writing and approved. No exceptions. This documentation shall accompany all payment requests for additional, less work or modifications to the work and performed and completed by the Contractor. Failure to document your claim of work with a signed city authorized employee's signature affixed to the invoice or document or approval letter will result in rejecting your invoice.												
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PROJECT TITLE												
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Naperville		ent of Public			work f	equest # 168						
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