

F.A. RTE. 2552	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	00-0014-00-PV	DUPAGE	563	299
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT 63024				

Guided Horizontal Drilling System (HDD) (Continued)

The Contractor shall backfill and level area immediately, and remove fill later to make all connections. No claims for extra compensation will be considered for cost incurred because of delay due to changing the location of a staging area, a frac out incident, splice pit location determination, turning pit location determination, or obtaining approval for said work area or opening the equipment for inspection or installation. The Contractor shall minimize the inconvenience to the public when picking and staging the work. The Contractor shall provide CA-6 backfill materials, black dirt, sod, grading, landscaping, stone/rock removal, tunneling, hand digging, install new fencing, removal of fencing, sidewalk replacement, curb and gutter replacement, tree and brush protection, arborist services, and/or replacement and dispose of all removed materials off site. The removal of spoils off the site is a major concern and must be removed off site immediately or by the end of the work day or next day. The excavated materials as well as spilled drilling fluids shall be removed in the same day as the dig or the next day at the latest. The Contractor shall not block pedestrian traffic or create a line of site problem with their equipment or work methods to the general public and this equipment or method shall be moved or changed at the request of the City of Naperville at no cost. Hand digging is considered incidental to the work and no claim for additional funds shall be honored. Storing of excavated materials of any kind in the City Right of Way over night is not permitted unless a permit has been issued that approves such methods.

The Contractor shall explain in detail in the bid submittal the technique and construction method that shall be used on the project to minimize the amount scrap of 3 inch, 5 inch and 6-inch conduit. The Contractor shall provide an approximate estimate of scrap in linear feet of each size. A method that minimizes scrap is very desirable.

All 3 inch, 5 inch, and 6 inch HDPE SDR 13.5 is furnished to the Contractor by the City of Naperville and picked up by the Contractor. However, the couplings for 3 inch, 5 inch and 6 inch 13.5 SDR HDPE to schedule 40 PVC plastic or steel shall be furnished and installed by the Contractor and the cost is in the pricing.

Contractor shall furnish all labor, tools, transportation, communication, supervision, equipment, all materials not furnished by the City of Naperville, however, the following is required: registered professional land surveying services, soil boring services, licensed professional landscaping services, services of a registered professional arborist, and all consumables necessary for a complete job and is included in each unit of pricing of the work for a complete job.

The Contractor shall be responsible, at no additional cost, for timely repair or replacement of structures, equipment, pipelines, power lines, or any facilities and/or other on-going or completed construction item damage by the Contractor's and/or his subcontractor's operations and/or personnel.

The Contractor shall be required to inform the residents if drilling work is going to be done during, before and after a snow fall incident so they can move their cars to allow the Contractor to shovel and remove snow from the street that is being used to get to the job site and at the job site. The Contractor has the responsibility to remove and keep clear at all times the roads being used including snow removal and disposal of snow from street. The Contractor shall spread salt to improve drivability. The Contractor shall include in the installation cost of all 3 inch SDR HDPE, 5 inch SDR HDPE and 6 inch SDR HDPE conduit materials and accessories including couplings, shipping and ordering, transportation of materials and disposal of the reels in the pricing of the unit of foot. Landscaping and restoration including fences gates, trees, bushes, grass, and black dirt, humps, frac outs, cleaning up frac outs, remove and restore all plantings, trimming all trees and brush,, all temporary work, all patching, flowers, access to and from job site, pothole repairs, sodding and watering, street repair, curb and gutter repair, side walk repair, transplanting functions, street light cable repair/ move, all cable TV repair/ move, all telephone repairs/ move, and disposal of all excavated materials off site are included.

NAPERVILLE PUBLIC UTILITIES DEPARTMENT	SPECIFICATION FOR THE INSTALLATION OF HDPE CONDUIT BY THE HORIZONTAL DRILLING SYSTEM (HDD)	DATE: 02-19-08 PAGE: 7 OF 25 C30-1950
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Guided Horizontal Drilling System (HDD) (Continued)

The Contractor shall submit in writing that the installed HDPE 13.5 (SDR) conduit, pipe couplings, and fittings installed under this specification are in conformance with the material and mechanical requirements for the type of conduit installed and are compatible with the cable tensions required to install: namely 12kv 1000 MCM or 34 Kv 1000 MCM triplexed cable in the installed conduit. The Contractor shall be responsible, for all couplings, fittings, to provide a smooth and unobstructed path through the HDPE conduit and connection area plus provide sufficient strength of the connection to maintain a continuous conduit with out separation for the cable installation. All tooling and connection materials for steel conduit to HDPE conduit and HDPE conduit to PVC schedule 40 conduits are to be supplied by the Contractor. A failure of the cable to be installed in the conduit shall be reason enough to reject the entire installation and delay further payments until the problem is corrected to the satisfaction of the City of Naperville

The contractor shall install pits for example: receiving, sending, entry, exit, turning, connecting etc; the contractor shall layout the work to install the minimum number of pits. The number of pits shall be kept to a minimum to reduce the damage to the surrounding landscaping. All pits must be approved by the city of Naperville before any work is started. All access pits must be identified in the field by staking after the job is awarded by the contractor and documented with a sketch and provided to the City.

No claims for extra compensation will be considered for cost incurred because of delay due changing the route location or location of access pits due to lack of notification, or obtaining approval. Contractor to provide compacted CA6 backfill materials and black dirt. Dispose of all removed materials off site.

Hand digging is considered as part of the work. Pits are excavations and must be covered and fenced in and not left open and are to be made safe for the Public and meet OSHA regulations

The Contractor shall furnish all connection fittings, tools, equipment, labor and transportation for joining together the 3-inch, 5 inch, and 6- inch flexible poly coiled SDR13.5 HDPE poly conduit to steel conduit or schedule 40 PVC

The Contractor shall provide a butt fused or electro fused coupling to connect the 3, 5 or 6-inch to 3, 5 or 6- inch flexible coiled conduit.

The Contractor shall provide mechanical adapters to connect 3, 5, 6-inch steel or 3, 5, 6-inch schedule 40 PVC bends or straight pieces of PVC to the flexible poly coiled 3, 5, 6- inch HDPE (13.5 SDR) conduit.

The Contractor shall provide fast setting glue for schedule 40 PVC conduit connections at the Contractor's cost and furnish in sufficient quantities for a complete job, if the Contractor decides to substitute.

The cost to provide this material is included in the installation price for: 3 inch, 5 inch, and 6-inch directional bored 3, 5, and or 6-inch conduit 1-way, 2-way, 3 -way, 4way, and 6 way duct sections of HDPE (13.5 SDR) flexible poly coiled conduit.

The cost of all materials furnished by the Contractor shall be included in the installation of the conduit duct section per the unit pricing.

It is the contractor's responsibility to obtain and direct the surveying services required to establish the right of way limits of all the city of Naperville's recorded easements within the work area. The contractor is responsible for installing all duct sections and maintaining all construction activities inside the limits the city of Naperville's right of way. No ingress or egress will be provided other than shown on the recorded easements

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Guided Horizontal Drilling System (HDD) (Continued)

The Contractor shall establish reference points to horizontal and vertical control near and/or within the construction site at the beginning of construction from the County or City records. From these reference points, the Contractor shall provide all horizontal and vertical controls necessary to complete the work to grades, slopes and dimensions shown on the Drawings. The Contractor's surveying service shall be in compliance with the vertical and horizontal tolerances in the specifications, and shall be conducted under the direct supervision of Registered Land Surveyor. Marking and grade stakes shall be provided as needed by the Contractor to facilitate and expedite inspection of the finished grade for compliance with the dimensions on the Drawings and specified grade tolerances.

The lines, grades and dimensions shown on the Drawings have been selected to approximate the best route based on certain simplifying assumptions, and as such are approximate. Final grades, elevations and dimensions are subject to adjustment during construction at the sole discretion of the Engineer. Any such adjustment shall not constitute a changed condition and shall be undertaken at no additional cost.

It is the responsibility of the Contactor to verify all dimensions prior to fabrication, installation and/or construction of any item of work.

After installation, contractor shall mark the plan drawings or provide new drawings to accurately show the actual installation and alignment of the conduit installed. This information shall be provided to the owner.

The information provided by the Contractor's surveyor to the City shall be the measured conduit lengths from electrical structure to electrical structure, number, and size of conduit and depth of conduits. All above and below ground obstructions, road ways drives, entry and exit pits, turning pits and all equipment installed. All elevations and GPS coordinates of every conduit with dimensions and connections shall be identified and shown.

Materials indicated in these Specifications as supplied by the DPU--E shall be picked up by the Contractor at storage facilities as designated by the DPU--E and this picking up, sorting, hauling, loading, unloading, tracking, security, proper size equipment, labor, tools, storage off site, preparing damage claims, and replacing all materials found unacceptable to use after the contractor accepts the materials and keeping an inventory of all materials picked up until completion of the project shall be considered incidental to the contract.

It is the Contractors responsibility to determine from the work specification that materials furnished by the City of Naperville are sufficient to complete the job. The Contractor shall maintain a tally of all materials picked up by WF number and continuously update the tally to show what has been installed and what is needed to complete each WF# as each project progresses. The Contractor Shall notify the City of Naperville in writing, before the commencement of work, of any shortages of one or more types or quantities of materials required for a complete job. The Contractor shall be responsible to provide any shortages of materials in type or quantity furnished by the City of Naperville during the progress of the work. No claims for extra compensation will be considered for cost incurred because of lack of adequate materials.

The Contractor is responsible for inspecting materials delivered to the site for damage. All materials found during inspection or during the progress of work to have cracks, flaws, cracked linings, or other defects shall be rejected and removed from the job site without delay. Unload and store opposite or near the place where the work will proceed with minimum handling. Store material under cover out of direct sun light. Do not store directly on the ground. Keep all materials free of dirt and debris. Contractor is responsible for obtaining, transporting and sorting any fluids, including water, to the work site. Disposal of fluids is the responsibility of the Contractor. Disposal of fluids shall be done in a manner that is in compliance with all permits and applicable federal, state, or local environmental regulations. The bentonite drilling slurry may be recycled for reuse in the hole opening operation, or shall be hauled by the Contractor to an approved location or landfill for proper disposal. Contractor shall thoroughly clean entire area of any fluid residue upon completion of installation, and replace and all plants and sod damaged, discolored or stained by drilling fluids.

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WF# INFORMATION		CITY OF NAPERVILLE/DEPARTMENT OF PUBLIC UTILITIES -- ELECTRIC			
WF# 59481 WASHINGTON ST. 75TH TO OLYMPUS DR. EAST SIDE	JOB 1 EU-73	CALL J.U.I.L.F. 48 HRS. PRIOR TO CONSTRUCTION		MAP NO.:	CAD FILE: 2056270001058.DWG
WF# 59482 75TH WASHINGTON ST. TO OLYMPUS DR. NORTH SIDE	JOB 2 EU-73	75TH ST. AND WASHINGTON ST. ROAD IMPROVEMENTS		DRAWN BY: JK, PM	PROJECT NO.: EU 7-09-03 (173)
WF# 59484 75TH WASHINGTON ST. TO CLYDE DR. SOUTH SIDE	JOB 3 EU-73	PROJECT DESCRIPTION: TRENCH SECTION DETAILS		WORK REQUEST NO.:	COMPLETED BY:
WF# 59485 WASHINGTON ST. 75TH TO BAILEY RD. EAST SIDE	JOB 4 EU-73	DATE: 4-01-08	ISSUED:	56270	SCALE: NTS
		ENGINEER: RPS	APPR:		SHEET 58 OF 73
		REVISION: 1 2 3			