

H:\Engineering\2007-2008\080315\dwg\033 - Bike Ped Connector\000T SHEETS\105831GG001.dwg 14-Oct-20 3:05 PM

SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	9	12	13	14	15	26	33	36	01/S<2/O T	02/NFP/O T							
				5					5		611	99654	5	EACH	MANHOLE ADJUSTED TO GRADE		
2									2		611	99720	2	EACH	INSPECTION WELL		
				1					1		611	99900	1	EACH	DRAINAGE STRUCTURE, MISC.:CLEANOUT ADJUST TO GRADE	7	
PAVEMENT																	
			320						320		301	46000	320	CY	ASPHALT CONCRETE BASE, PG64-22		
			499						499		304	20000	499	CY	AGGREGATE BASE		
			269						269		407	20000	269	GAL	NON-TRACKING TACK COAT		
			102						102		441	50000	102	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22		
			141						141		441	50300	141	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)		
			258						258		452	11010	258	SY	7" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P		
				1,427					1,427		609	26000	1,427	FT	CURB, TYPE 6		
WATER WORK																	
								1		1	202	58000	1	EACH	MANHOLE REMOVED (CIN 1122)	36	
								2		2	202	75610	2	EACH	VALVE BOX REMOVED (CIN 1122)	36	
								300		300	509	25000	300	LB	REINFORCING STEEL	36	
								2		2	602	98200	2	CY	MASONRY, MISC.:CONCRETE, CLASS "C" (CIN 1110)	36	
								375		375	638	00700	375	FT	6" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 52, MECHANICAL JOINTS AND FITTINGS (CIN 1101)	36	
								319		319	638	01308	319	FT	8" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 55, MECHANICAL JOINTS AND FITTINGS (CIN1101)	36	
								4		4	638	07608	4	EACH	VALVE BOX (CIN 1116)	36	
								3	3	3	638	10200	3	EACH	6" FIRE HYDRANT (CIN 1112)	36	
								3		3	638	10300	3	EACH	FIRE HYDRANT EXTENDED AND ADJUSTED TO GRADE (CIN 1115)	36	
								2		2	638	10480	2	EACH	FIRE HYDRANT REMOVED (CIN 1114)	36	
								1		1	SPECIAL	63820742	1	EACH	1" AIR RELEASE VALVE WITH VALVE BOX (CIN 1116)	36	
								500		500	SPECIAL	63820766	500	FT	3/4" COPPER WATER SERVICE LINE WITH AQUA SHIELD (CIN 1126)	36	
								2		2	SPECIAL	63820798	2	FT	RAISE AND EXTEND 3/4" COPPER WATER SERVICE CONNECTION (CIN 1128)	36	
								23		23	638	98000	23	EACH	WATER WORK, MISC.:FURNISHING AND INSTALLING CURB AND ROADWAY BOX (RENEW) (CIN 1131)	36	
TRAFFIC CONTROL																	
							2		2		625	32000	2	EACH	GROUND ROD		
							161		161		630	03100	161	FT	GROUND MOUNTED SUPPORT, NO. 3 POST		
							6		6		630	08600	6	EACH	SIGN POST REFLECTOR		
							37		37		630	80100	37	SF	SIGN, FLAT SHEET		
							2		2		630	84900	2	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		
							5		5		630	85100	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION		
							4		4		630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
							5		5		630	87500	5	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL		
							2		2		630	97700	2	EACH	SIGNING, MISC.:SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY	31	
							2		2		632	64020	2	EACH	PEDESTAL FOUNDATION		
							2		2		632	90010	2	EACH	PEDESTAL, MISC.: 14', TRANSFORMER BASE	8	
							125		125		642	30000	125	FT	REMOVAL OF PAVEMENT MARKING	8	
							37		37		644	00500	37	FT	STOP LINE		
							69		69		644	00600	69	FT	CROSSWALK LINE		
							54		54		644	00601	54	FT	CROSSWALK LINE, AS PER PLAN	7	
							2		2		644	01000	2	EACH	RAILROAD SYMBOL MARKING		
							5		5		644	19000	5	EACH	SHARED LANE MARKING		
MAINTENANCE OF TRAFFIC																	
	9								9		616	10000	9	MGAL	WATER		
	20								20		617	10100	20	CY	COMPACTED AGGREGATE		
LIGHTING																	
									LS		625	98200	LS		LIGHTING, MISC.: DUKE ENERGY LIGHTING	6	
INCIDENTALS																	
									LS		614	11000	LS		MAINTAINING TRAFFIC		
									3		619	16000	3	MNTH	FIELD OFFICE, TYPE A		
									LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
									LS		624	10000	LS		MOBILIZATION		

CALCULATED
 SEC
 CHECKED
 TSC
GENERAL SUMMARY
HAM DEER PARK PED
 11
 40

GENERAL PROVISIONS

SUGGESTED BILL OF MATERIAL

The Contractor is advised that there are several changes to the most recent edition of the City of Cincinnati Supplement dated January 1, 2016. These General Provisions include these changes. The Supplement and a Summary of Changes can be purchased or downloaded from the City's website: <http://www.cincinnati-oh.gov/date/assets/File/2016%20CITY%20SUPPLEMENT-FINAL.pdf>

Water main items are to be constructed in accordance with the provisions of the State of Ohio, Department of Transportation, Construction and Material Specifications, dated January 1, 2016, and modified by the City of Cincinnati Supplement to said State of Ohio Specifications, effective January 1, 2016, and any supplements or changes thereto. Copies of the State specifications are on file at the Office of Contract Sales of the State of Ohio, Department of Transportation, 25 South Front Street, Columbus, Ohio, and at the offices of the City Engineer of Cincinnati, Ohio. Submittal of a bid for this project implies that the Contractor has taken all provisions of the Supplement into account.

The Greater Cincinnati Water Works (GCWW) understands that differing site conditions results in extra work/change orders to the project. Change orders on GCWW contracts will be done in strict accordance with Item 109.05 C of the State of Ohio Department of Transportation Construction and Material Specifications dated January 1, 2016 or most recent edition and as modified in this City of Cincinnati Supplement. GCWW limits the mark up on wages and fringe benefits as described in 109.05 C. 2. "Labor" to 30%. It is expressly understood that regardless of the nature of the claim, or change in scope of work, the Contractor is not entitled to compensation for loss of anticipated profit or production.

As defined in the City of Cincinnati Supplement, sections 107.07 and 107.071, the Contractor is required to submit, at the time of the pre-construction meeting, a Site Safety Plan. Furthermore, the Contractor shall have an authorized and competent safety representative assigned to the project site.

The Contractor is advised that he has certain responsibilities under Section 153.64 of The Ohio Revised Code. For all underground utilities, contact the Ohio Utilities Protection Service at 1-800-362-2764 (toll free) 48 hours in advance of work. The Contractor is advised that all utility information has been shown on the contract plans from information provided by the owner of each utility in compliance with Sec. 153.64 of the Ohio Revised Code. In cases where utility information is incorrect and it results in a change in the contract plans the Contractor shall first notify the owner of the utility to determine the necessary course of action. The Contractor shall submit any subsequent claims as a result of downtime or additional work to the owner of the conflicting utility. The GCWW will not accept claims for any utility other than those as a result of incorrect water main and related appearance information.

The Contractor must locate or "pot hole" all utilities within the alignment of the proposed main a minimum of 50 feet ahead of pipe laying. Test holes must be dug, or trench excavated, a minimum of 50 feet (15.2 m) in advance of pipe laying, to assure proper clearance between the water main and any utility crossing, or underground structure. All utilities and structures shall be suitably braced and supported. The Contractor shall understand that any obstructions encountered in the installation of the main, due to the failure of having 50 feet (15.2m) of trench excavated ahead of laying operations, may require removal and relaying of the pipe at the contractors expense. The GCWW will not accept a claim for different utility conditions encountered when test holes are not performed as required.

Item 1120, "Exploratory Excavation", shall not include excavations within the limits of the proposed trench as defined in 1101.04 and 1101.05. Test holes are required on all utilities within 50 feet of the last laid pipe. Test holes within the alignment of the proposed trench are included in the Contractor's unit bid for Item 1101. Locations to be explored will vary from areas within the roadway to areas outside of the roadway.

It is the nature of construction that unmarked utilities or utilities not shown on the plans may be encountered within the excavation for the proposed work. The Contractor is responsible to identify and remove any abandoned utilities encountered in the excavation. No extra payment will be made to the Contractor for the identification and removal of the abandoned utility. All costs shall be included in the contractor's unit price bid for the appropriate Item 1101-Furnishing & Laying Pipe and Fittings."

Street pavement or sidewalk should not be disturbed for a distance of more than 200 Feet (61.0 m) ahead of the last laid pipe. Backfill shall be completed within 50 feet (15.2 m) of the last laid pipe. Temporary or permanent surface restoration must be installed within a distance of 200 feet (61.0 m) of the laid pipe, including those areas where main installations occur within a closed lane or closed street condition. Roadway plates may be used as a temporary measure for a period not to exceed 24 hours without the approval of the GCWW.

Any undermined pavement of more than 6 inches horizontal must be removed prior to starting trench backfill. If undermining of pavement occurs more than 1 foot, then pavement must be shored to protect traffic, or arrangements made for additional lane closures must be made. If problems continue to occur regarding trenching integrity, sheeting and bracing can be required by the City Engineer or the City Engineer's representative, at the contractor's expense. If any tunneling is necessary, adequate information shown in both plan and profile and tunneling procedures must be submitted to the City Engineer's Office prior to commencement of work.

The GCWW has made every effort to depict the pipe sewers and lateral information on the plans. The Contractor is advised that sewer laterals are shown in plan view only. The Contractor shall determine the elevation of the sewer laterals in advance of laying the water main at these crossings. If the sewer laterals require changing in order to avoid conflict with the water main, or if the Contractor encounters a pipe sewer or lateral in the excavation that was not shown on the plans and requires a change of grade or alignment due to the installation of the water main, the Contractor shall furnish all necessary labor, material, tools, and equipment required to change the grade or alignment of pipe sewers and laterals of various sizes, allowing installation of water mains and appurtenances as shown on the plans, or as directed by the GCWW Inspector. This work shall include all necessary excavation, backfill, and restoration. The Contractor will be compensated under Item 1123, "Changing Pipe Sewers 8 inch and Under". When crossing sanitary and combination sewers, a vertical clearance of 18" must be maintained.

The Contractor is advised that due to the alignment of the proposed water main, it may be necessary to install a temporary valve box over an existing chambered valve that must remain in service during the water main installation as directed by the GCWW Inspector. The chamber shall be abandoned, a valve box (furnished by the contractor) placed over the valve, and upon project completion, the valve box must be removed. The contractor will not receive additional compensation for this work, but should include the cost of this work in his unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

It is the Contractor's responsibility to provide adequate water supply for domestic and fire fighting purposes. In order to accomplish the water main connections with a minimum amount of inconvenience to the consumers, it may be necessary to do the work at other than normal working hours or as may be scheduled by the GCWW.

The Contractor is advised that the operating pressure of the existing water main within the limits of the subject project is approximately 55-60 P.S.I.

In order to minimize the inconvenience of the consumers, the number of shutdowns required to do the proposed water main work shall be limited. Only one shutdown, limited to 8 hours, will be allowed during a 24 hour period.

All water service branches have a minimum cover of 3.0 feet.

The Contractor is advised that it shall be necessary to install temporary Plug/caps on the existing and proposed water mains in order to maintain service during testing and water main and branch connections. These temporary Plug shall be furnished by the contractor. He is responsible for their proper installation. The cost for this work shall be included in the Contractor's unit bid price for the appropriate Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor is required to excavate and expose the existing utilities and existing water mains along the line of the proposed water main and all proposed connection points to verify location, diameter, line and grade. Also, if the removal of the bulkhead or plug is required all excavation and temporary/permanent restoration shall be compensated under the Contractor's unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor is advised that all C.J. Plug are to be restrained with a Field Lok Gasket and all M.J. caps are to be restrained using a Megalug Assembly. This includes temporary Plug and caps for testing purposes. When a temporary plug is used, the contractor is permitted to remove the plug by cutting the section of pipe containing the plug and using a solid sleeve at that point to complete the tie-in. In the event that a cap is used, the contractor shall remove the Megalug Assembly and cap before completing the tie-in.

The Contractor is advised that on any fire hydrant required to be relocated with this project, all bolt assemblies shall be replaced. The cost for this work shall be included in the unit bid price for Item 1113 "Relocating Existing Fire Hydrants". No part of any fire hydrant setting shall be installed closer than five feet to any driveway, inlet, utility pole or guy wire anchor.

Item 1111, "Water Works Valve Chambers", shall also cover the furnishing and installing of Precast Reinforced Concrete Chambers in accordance with O.D.O.T. Specification 706.13. All pertinent provisions of this item and GCWW Standard Drawing No. 104-1A shall apply. Precast chambers shall be used in all locations where space permits and as directed by the GCWW.

Air cocks may be necessary for the proper operation of the water system. The Air Release Assembly, which may not be shown on the drawing, will be furnished and installed by the Contractor per the detail on these plans, if required by the GCWW.

It shall be the Contractor's responsibility to arrange for the removal and replacement of any poles and guys necessary for the installation of the proposed water mains, and any cost connected thereto shall be at his expense.

All pipe and specials shall be in accordance with City of Cincinnati Specification 40-110-12.

All procured water main and appurtenance materials, other than those furnished through the GCWW must be properly certified; certified for GCWW inspection; or already inspected by the GCWW. Pipe, fittings, valves and fire hydrants must be GCWW inspected and stamped materials.

The Contractor should be advised that all Fittings (Bends, Offset Bends, Tees, Crosses, Sleeves, Caps and Plug) supplied for this job may be either ANSI/AWWA C-110 Full-body Ductile Iron, Cement Lined Fittings or ANSI/AWWA C-153 Compact Ductile Iron, Fusion Bonded Epoxy Coated Fittings in accordance with City of Cincinnati, Department of Purchasing, Standard Specification No. 40-110-12 for Pipe and Fittings Water, Ductile Iron 3" to 60". All fittings are subject to inspection and approval by appropriate GCWW inspection personnel. Minor pinholes and abrasions to epoxy coated valves and fittings are to be repaired using 3M Hot Melt Patch Compounds (H.M.P.C.) in the stick form. Repair procedures shall be in accordance with the General Application Steps identified for the H.M.P.C. All repairs to epoxy coated fittings are subject to inspection and approval by appropriate GCWW inspection personnel.

All rejected material, including pipe and fittings, shall be removed from the project site immediately.

The Contractor must maintain access to sidewalks at all times. Storage of any materials within the public Right of Way, including sidewalks, is not permitted unless approved by GCWW, the Project Engineer, or as indicated on the approved plans.

All copper tubing shall be type "K" of a standard nominal size: 3/4", 1", 1-1/2" and 2". All fittings will have copper flare type connections and shall be in accordance with City of Cincinnati Specification No. 40-113-05.

The contractor shall furnish the necessary certifications for branch material.

All proposed water mains will be hydrostatically tested for leakage in accordance with 1101.054, Hydrostatic Test for Leakage, of the appropriate Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings".

The Contractor will be responsible for filling, flushing, and pressure testing new water mains, 20" or smaller. The contractor will provide all labor, material and equipment (including the necessary pumps to apply the pressure test). The Water Works will provide the necessary meter and gauge. All costs for this work shall be included in the contractor's unit bid price for Item 1101, "Furnishing & Laying Ductile Iron Pipe and Fittings". Once the filling and pressure testing are completed, the Contractor will be responsible for flushing the proposed water main and the GCWW will be responsible for bacteria sampling. The GCWW will be responsible for filling, pressure testing and flushing new water mains greater than 20".

The Contractor is responsible for all pipe sewers disturbed in the completion of this project. In the event it becomes necessary to repair or replace existing pipe sewers, the Contractor must notify Sewer Maintenance, (513)244-1369, before proceeding with the work.

The Contractor is advised that his unit bid prices for the appropriate Item 1101, "Furnish & Install Pipe and Fittings", includes final restoration of all disturbed surfaces. The GCWW will not make full compensation under Item 1101 until final restoration is complete.

Final restoration shall be done in accordance with the restoration detail drawing as shown on Sheet 2.

*All valve and air release box assemblies shall be domestically manufactured.

All box assemblies for 12-inch and smaller gate valves and 1-inch air releases shall be either Tyler Union Series 6850, EJ Series 8500, or Bingham & Taylor Series 4905, or GCWW approved equal. Box assemblies for these applications require a frost plug and "BOXLOK".

All box assemblies for 16-inch and above butterfly or gate valves and 2-inch air releases shall be EJ Series 460, or GCWW approved equal. Box assemblies for these applications require a frost plug.

All costs associated with adherence to these requirements shall be included in the Contractor's unit bid price for Item 1116 - Furnishing and Installing Valve Box Complete.

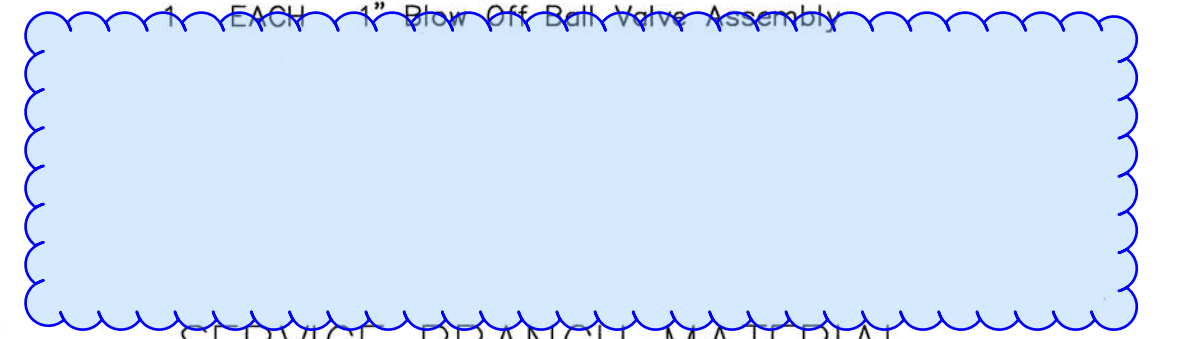
FURNISHED BY CONTRACTOR

- 19 EACH 6" Ductile Iron Pipe, C.I. Th. Cl. 55, 20' Lengths
- 16 EACH 8" Ductile Iron Pipe, C.I. Th. Cl. 55, 20' Lengths
- 21 EACH Polyethylene Flattened Tube, 4 Mil Thickness Cross-Laminate 16" Wide x 20' Long
- 18 EACH Polyethylene Flattened Tube, 4 Mil Thickness Cross-Laminate 20" Wide x 20' Long
- 4 EACH Rolls Polyethylene Tape w/Adhesive 1 1/2" Width, 100' Length
- 1 EACH 6" 90° Bend, 2MJ
- 6 EACH 6" 45° Bend, 2MJ
- 1 EACH 8" Cap, MJ (Temporary)
- 1 EACH 6" Solid Sleeve, DP
- 2 EACH 8" x 6" Tee, 2MJ x Fig.
- 1 EACH 8" x 6" Reducer, PE x MJ
- 1 EACH 8" x 6" Reducer, MJ x PE
- 2 EACH 6" Valve, Fig. x MJ
- 1 EACH 6" Valve, 2MJ
- 1 EACH 8" Valve, 2MJ
- 2 EACH 6" Flange Tyte Rubber Gasket
- 4 EACH Valve Box Complete
- 4 EACH Valve Box Frost Plug
- 4 EACH Valve Box Box Lok
- 3 EACH 6" Fire Hydrants
- 3 EACH 8" Fire Hydrant Extension (6" Long)
- 22 EACH 6" Mega Lug Assembly
- 8 EACH 8" Mega Lug Assembly
- 3 EACH 6" Field Lok Gasket
- 1 EACH 8" Field Lok Gasket

AIR RELEASE MATERIAL

(FURNISHED BY CONTRACTOR)

- 1 EACH Valve Box Complete
- 1 EACH Valve Box Frost Plug
- 1 EACH 1" Ferrule
- 4 LIN. FT. 1" Copper Service Pipe
- 1 EACH 1" Blow Off Ball Valve Assembly



SERVICE BRANCH MATERIAL

(FURNISHED BY CONTRACTOR)

- 500 LIN FT 3/4" Copper Service Pipe (w/Aquashield)
- 25 EACH 3/4" Ferrule
- 25 EACH 3/4" Insulating Coupling
- 23 EACH 3/4" Stop Cock
- 17 EACH Curb Box
- 6 EACH Roadway Box

***Note: Contractor shall verify the size and material of each service branch at the property line prior to installing branch. Cost for this work to be included in Item 1126-Furnishing and Installing Copper Service Pipe w/ Aqua Shield".

INDEX

General Provisions	1-2
Suggested Bill of Materials	1
Restoration Details	2
Plan	3-4

The materials listed are only suggested for use during the water main and branch relocation work as proposed on the drawings. The contractor shall furnish additional material where needed. No allowance will be made for unused material nor will any extra payment be made for additional specials required to complete the water main work. Before ordering material the contractor is responsible for making his own field measurements and for field verifying the O.D. of existing water mains where sleeves and pipe couplings are involved.

Note 1:
Valves furnished by the contractor shall be; American Resilient Wedge Gate Valve Series 2500, U.S. Pipe Metrosafe Gate Valve, Kennedy Valve Ken Seal II Resilient Gate Valve, Clow F-6100 Series Resilient Wedge Gate Valve, Mueller 2360 Resilient Wedge Gate Valve.

Note 2:
Low-Lead Brass Material Requirements:
All components in contact with water shall be fabricated from Sebiloy II or Federalloy I-836 alloys or a material approved by the Engineer. All components that do not come in contact with water shall comply with the requirements of ASTM B 62 Copper Alloy Number. Coated or washed metals are not acceptable if their lead levels exceed .25% by weight prior to the coating or washing process. All service fittings and materials shall be certified as suitable for contact with drinking water by an accredited certification organization in accordance with ANSI/NSF Standard 61, Drinking Water Systems Components - Health Effects. All service fittings shall either be stamped or embossed with the letter "NL", to indicate "No-Lead", or marked to indicate that the product is manufactured from the low-lead alloys.

Note 3:
Special Note on Service Pipe in Corrosive Soils:
Service tubing is to be soft K Copper manufactured to the requirements of ASTM B88. Service tubing coating shall have NOVA Polyethylene LDPE extrusion resin PP-0118-F coating to meet minimum of .026 mil thickness containing UV inhibitors. Service tubing shall have identification & traceability on both copper & plastic continuously line-marked with tube contents, ASTM specification, size, & descending footage. Unique lot number printed on both copper & plastic allowing product to be traced back to origin and time of manufacturing. Service tubing shall be Aqua Shield as manufactured by KAMCO Products Inc. or approved equal.

APPROVED:



Matthew S. Smith 06-15-20
Principal Engineer - System Facilities
Matthew S. Smith
6/19/20
Chief Engineer



GREATER CINCINNATI
WATER WORKS
ENGINEERING DIVISION
JUNE 2020



Ohio Environmental Protection Agency
"Self-Certification" letter required prior to the start of construction.

Matthew S. Smith
Supervising Engineer - Design
06-15-20

1-800-362-2764



OHIO Utilities Protection SERVICE
Call Before You Dig

Notice of Confidentiality - Public Infrastructure Record

This Document is a Public Infrastructure Record of the City of Cincinnati and its Greater Cincinnati Water Works, and is not subject to the public disclosure requirements of the public records laws of the State of Ohio and federal government. This Document is being provided on the basis of your reported need, and shall be considered confidential. By accepting this Document, you agree that it will not be shared or otherwise disclosed to anyone other than persons who have a direct need to know for the sole purpose of carrying out the project for which this Document was obtained. Anyone receiving this Document is bound by the same confidentiality requirements and must take precautions to protect against its dissemination.

The failure to observe the confidentiality of this Notice shall serve as the basis for the City of Cincinnati to immediately seek legal recourse, including the recovery of actual damages resulting from unauthorized access or disclosure of the Document.

4-3908
WW003508
MF-16496

01
04
37
40

GREATER CINCINNATI
WATER WORKS
ENGINEERING DIVISION / DESIGN SECTION
4747 Spring Grove Avenue, Cincinnati, Ohio 45224

SUGGESTED BILL OF MATERIAL
G.C.W.W. SPECIAL PROVISIONS

DEERPARK BIKE CONNECTOR - ST. JOHN TER