

# CITY OF GAHANNA, OHIO

## PRIVATE STREET, STORM, WATER & STREET LIGHTING IMPROVEMENT NO. 831

### FOXWOOD SECTIONS 1, 2 & 3 2003

**GENERAL NOTES**  
SPECIFICATIONS: The requirements of the City of Gahanna, together with the Standard Specifications of the State of Ohio, Dept. of Transportation and the City of Columbus Construction and Material Specifications (CMS) 2002, including all supplements thereto in force on date of contract, shall govern all materials and workmanship involved in the improvements shown on these plans, except as such specifications are modified by the following specifications, or by the construction details set forth herein.

**STANDARD CONSTRUCTION DRAWINGS:** All pertinent Standard Construction Drawings are available upon request at the office of the City Engineer.

**PERMITS:** The Contractor shall obtain all necessary permits.

**SAFETY REQUIREMENTS:** The Contractor and Subcontractor shall be solely responsible for complying with all federal, state and local safety requirements, together with exercising precautions at all times for the protection of persons (including employees) and property. It is also the sole responsibility of the Contractor and Subcontractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work. Reference: OSHA - Ohio

**MISCELLANEOUS WORK:** All items of work called for on the plans for which no specific method of payment is provided shall be performed by the Contractor and the cost of same shall be included in the price for the various related items.

**FIELD TILE:** All field tile broken or natural springs discovered during excavation shall be replaced to original condition or connected to either the curb subdrain or to the storm sewer system as directed by the Engineer.

**SURPLUS EXCAVATION:** The Contractor shall dispose of all surplus street excavation on the project site where and as directed by the Owner.

**UNAUTHORIZED STREET EXCAVATION:** In the event excavation for the street is from 0" to 6" below that called for on the plans, the Contractor shall replace this excess excavated material with compacted No. 304 crushed aggregate as directed and at no extra cost to the Owner or Engineer.

**STORM SEWERS:** Unless otherwise noted on the plans all storm sewers shall be as hereafter specified: (1) All sizes of storm sewer located within or across proposed or existing pavement areas shall be Type B conduit, 706.02, with Class B bedding. (2) Storm sewer located outside pavement areas shall be Type E conduit, 706.01, Class B bedding, for 15" and smaller and shall be Type E conduit, 706.02, Class B bedding, for 18" and larger. The following modifications to Ohio Dept. of Transportation Specifications shall apply: (1) Type E conduits shall have sealed joints; (2) Granular backfill material shall be compacted granular material, Item 304, placed within limits shown on the plan including around all inlet structures. Granular backfill shall extend from the top of the pipe bedding to the subgrade under pavement. Backfill per City of Columbus (CMS) Item 901.17. Structures to be precast only; castings to be coated w/factory applied black asphalt paint.

**CURB INLETS:** All curb inlets shall be channeled as directed.

**ROOF DRAIN OPENINGS:** The Contractor shall provide two roof drain openings in the curb for each lot. The Contractor shall coordinate opening locations with Homebuilder.

**STREET LIGHTING:** Standard Electrical Specifications and Standard Construction Drawings, covering street lighting for the City of Gahanna, Ohio, shall apply.

**EXPANSION JOINTS:** It shall be the responsibility of the Contractor to adequately barricade the street in the vicinity of all expansion joints, until such time as the street is open to traffic.

**WATER MAINS:** All water mains shall be either Ductile Iron Class 53 (4" through 10"), Class 54 (12" and larger) or P.V.C. C-900, Class 150. All bends, joint deflection and fittings shall be backed with concrete where and as directed. Where water mains or services cross proposed or existing streets, backfill shall be compacted granular material, Item 304 within limits 5' outside edge of pavement or curb, extended from the bottom of the trench to the subgrade. The services may be jacked across the street in lieu of open cut and the use of granular backfill. All 2" water pipe shall be SDR-21, 200 p.s.i.  
All fire hydrants shall meet AWWA standards.  
CURB BOXES: Curb boxes shall be located 6" from the property line unless otherwise shown on the plans or ordered by the Engineer.

**TESTING OF WATER MAINS:** The Contractor shall pressure test all water lines and send results to the City of Gahanna per City of Columbus (CMS) Item 801.12. Pressure testing and disinfection must be in accordance with AWWA C-600, and AWWA C-651, respectively. All Water Lines must be AWWA approved. The Contractor shall submit two (2) copies of plans, pressure test results and a letter requesting chlorination to the City of Columbus. The cost of the pressure test and chlorination shall be included in the price bid for the various water main items.

Separation of Water Mains and Sanitary Sewers must conform to the Ten(10) State Standards. All watermains shall be located at least 10 feet horizontally and at least 18" vertically from sanitary and storm sewers. Normal working pressure for watermains shall not be less than 35 psi. Individual booster pumps shall not be allowed for an individual service. All water services shall be installed in accordance with City of Gahanna standard Drawings G-26 and G-41 and include PowerSeal all stainless steel service saddles, Model #3411, single bolt, or approved equal, for 4" through 8" diameter water mains.

**PROTECTION OF DRAINAGE COURSES:** No natural drainage courses shall be altered and no fill, buildings or structures shall be placed in it, unless provisions are made for the flow of water in a manner satisfactory to the City Engineer. An easement shall be provided on both sides of any existing important surface drainage course adequate for the purpose of protecting, widening, deepening, enclosing or otherwise improving such stream for drainage purposes.

The Developer is to schedule a Pre-Construction meeting one business week prior to construction. The meeting shall take place at least one business week prior to the following: Site Clearing, Material on Site, Equipment on site and Field Office on Site.

Orange construction fencing will be placed around the existing trees and will remain in place during the development construction. The location of the fencing and any clearing necessary will be determined at the pre-construction meeting.

See Sheet 1A for Section 3 General Notes and Section 3 Index Map.  
Section 3 Impervious Area Pre - 0 / Post - 1.7 Ac.

**EXISTING UTILITIES:** The identity and locations of the existing underground utility facilities known located in the construction area have been shown on the plans as accurately as provided by the Owner of the utility. The City of Gahanna and/or the Engineer assumes no responsibility as to the accuracy or the depths of the underground facilities whether shown on the plans.

Investigation, location, support, protection and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor. The cost of this work shall be included in the price bid for the various items.

The Contractor shall cause notice to be given to the Ohio Utilities Protection Service (phone-800/362-2764 - toll free) and to the Owners of the underground utility facilities shown on the plan who are not members of a registered underground protection service in accordance with Section 153.64 of the Revised Code. The above mentioned notice shall be give at least 48 hours prior to start of construction.

The Owner/Developer shall provide a Soils Engineer, registered in the State of Ohio, for the purpose of inspecting and certifying to the City of Gahanna, acceptable soil bearing conditions prior to placement of improvements within the right-of-way and easements in accordance with the appropriate City of Columbus specifications. Owner/Developer to provide a Soils Engineer in order to perform compaction (density) testing on utility trench backfill and roadway embankment as required by the Gahanna Project Engineer Representative.

All site clearing (tree removal) shall be performed by the Owner at his expense prior to construction of this project.

The Contractor shall secure a written permit from the Franklin Co. Engineers Office, 970 Dublin Rd., two working days prior to beginning work within the Franklin County right-of-way. The Contractor shall provide the Franklin Co. Engineer a 24-hour telephone to be used in case of an emergency.

**MAINTENANCE OF TRAFFIC:** At least two way, one lane traffic shall be maintained on Taylor Road during construction operations, in accordance with page C-18 of the Ohio Manual. A uniformed officer shall be substituted for each flag person shown on this page and such officers shall be present whenever two-way, one-lane traffic is in effect.

All traffic lanes shall be fully open to traffic on Taylor Road from 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m. One lane may be closed to traffic during working hours.

Steady burning, Type "C" lights shall be required on all barricades, drums and similar traffic control devices in use at night. All signs nine square feet (36"x36") and over shall have yellow type "A" low intensity flashing warning lights and three flags. Cones are NOT APPROVED for use at night.

All traffic control devices shall be furnished, erected, maintained, and removed by the Contractor in accordance with the "Ohio Manual of Uniform Traffic Control Devices for Construction and Maintenance Operations". All devices shall meet FP-85 Reflectance Standards and in full compliance with "Quality Standards for Work Zone Traffic Control Devices" published by ATSSA. All Traffic Control Devices must Meet NCHRP 350.

Manual control of traffic by anyone other than a police officer is not permitted.

Access to all adjoining properties shall be maintained at all times.

The roadway shall not be opened to traffic until permanent traffic controls are in place, or until temporary traffic controls, approved by the Engineer, are installed. The Contractor assumes all liability for the premature removal of temporary traffic controls.

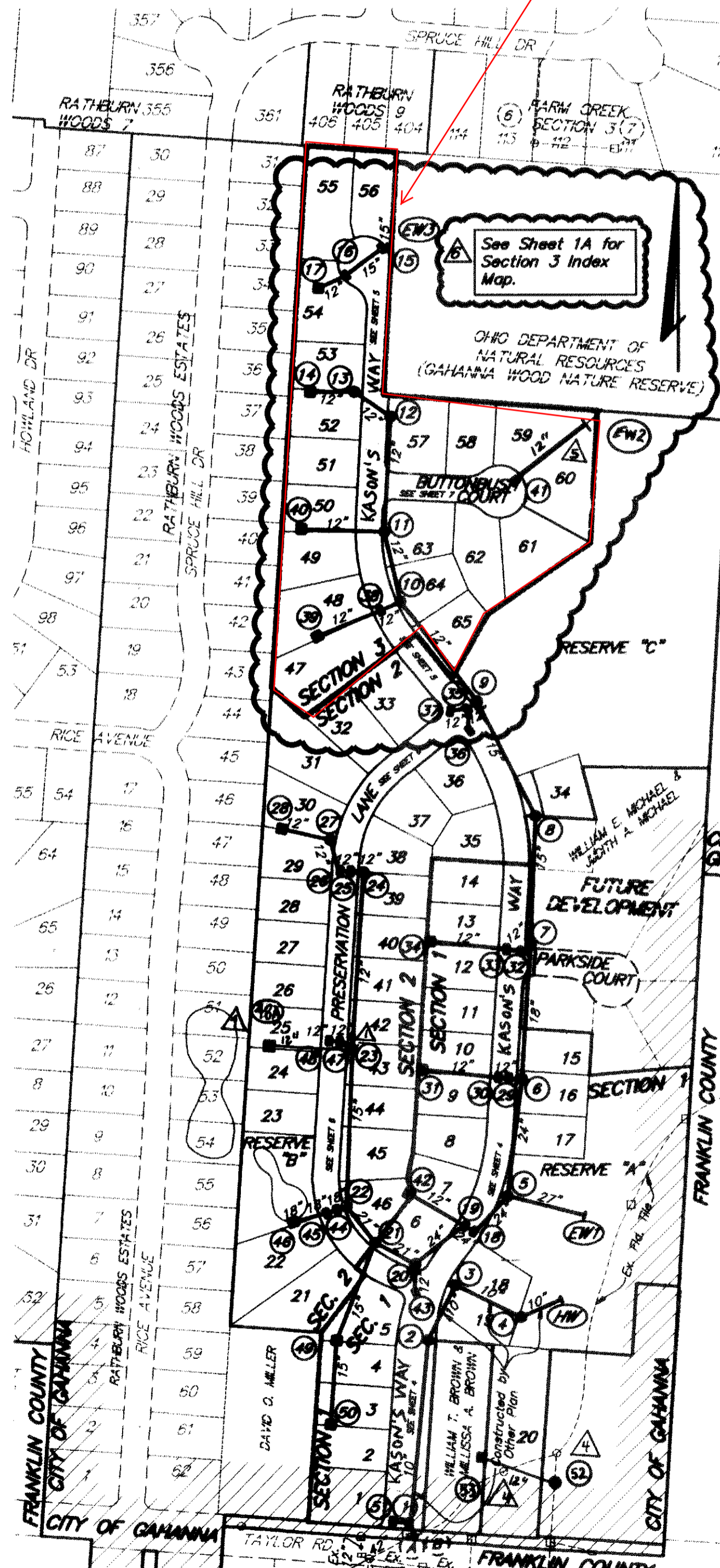
The Contractor shall be responsible for the reinstallation and/or replacement of all permanent traffic control devices damaged or removed during the construction. Permanent traffic control no longer in conflict with temporary traffic control shall be replaced immediately.

All permanent traffic controls not in conflict with the temporary traffic controls shall be maintained throughout the project by the Contractor. The Contractor shall assume all liability for missing, damaged, and improperly placed traffic control devices.

All trenches within the road right-of-way shall be backfilled or securely plated during non-working hours.

The Contractor shall secure a written permit from the Franklin Co. Engineer's Office, 970 Dublin Rd., two (2) working days prior to beginning work within the Franklin County right-of-way. The Contractor shall provide the Franklin Co. Engineer a 24-hour telephone number to be used in case of an emergency.

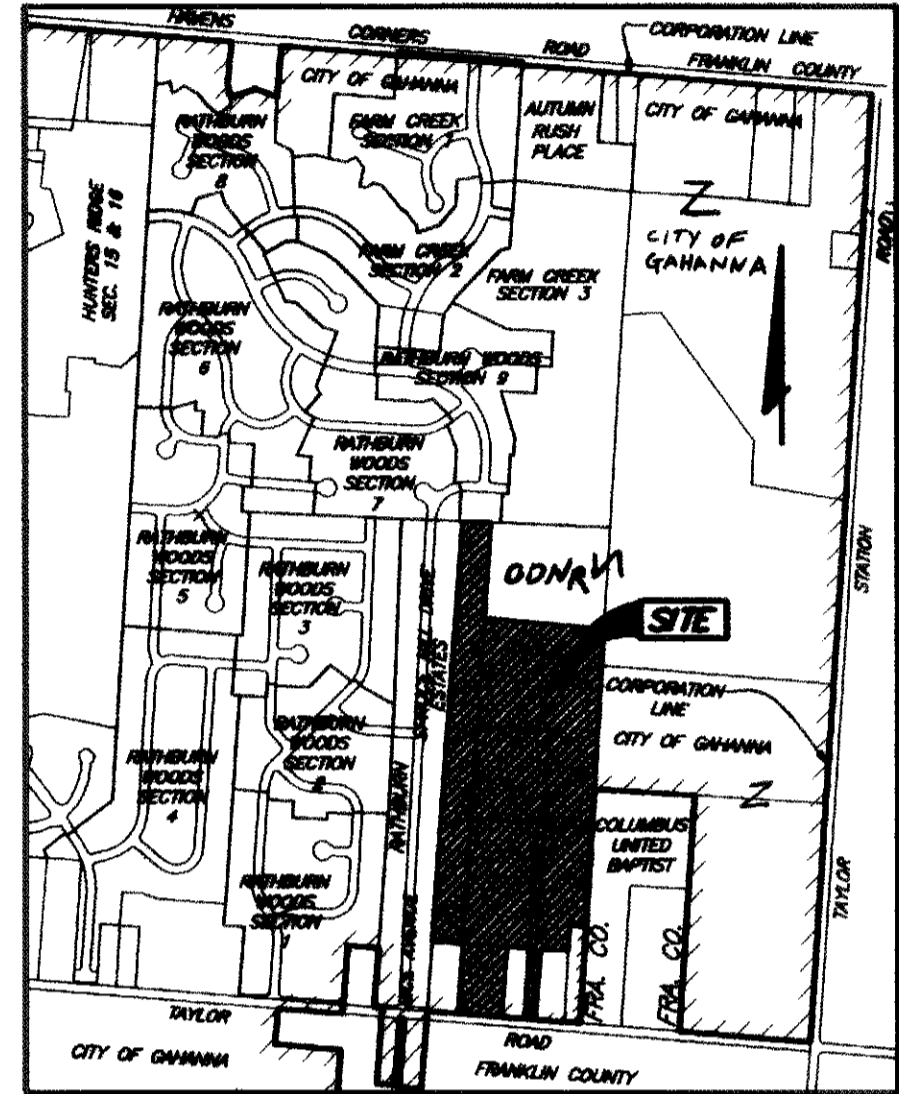
REV.	DATE	APPROVAL	DESCRIPTION
1	2/13/03	[Signature]	Prescription Lay Profile, Grading Plan, Storm Sewer Rev.'s
2	10/11/04	[Signature]	SECTION 2 - ST. LIGHTS BURNING (SEE ST. LIGHTS); SECTION 3 - ST. LIGHTS BURNING (SEE ST. LIGHTS)
3	4/23/15	[Signature]	Revised Section 3 Revised Sheets 1, 2, 5, 7, 9-11, 13, 14 Added Sheets 1A, 5A, 9A, 13A, 13B, & 14A.



STREET AND LIGHTING VALUE = \$138,921.00  
STORM SEWER VALUE = \$88,810.00  
WATER VALUE = \$42,125  
PER REVISION #6 APPROVED ON 4/23/15

See Sheet 14A for Section 3 Quantities

ESTIMATE OF QUANTITIES					
ITEM	SECTION	QUANTITY	UNIT	DESCRIPTION	
				1	2
STREET					
203	-	5,660	C.Y.	Embankment Construction	
203	-	4,059	C.Y.	Excavation, including Embankment Constr.	
305	1,30	4,100	S.Y.	7" Portland Cement Concrete Base	
402	290	290	Tons	Asphalt Concrete (1-1/4")	
404	310	370	Tons	Asphalt Concrete (1-1/4"), Includes Expansion Joint Material (7")	
407	4,130	4,100	Gal.	Tack Coat	
413	100	-	Lin. Ft.	Crack Sealing, Hot Applied	
605	3,580	3,195	2195	Lin. Ft.	4" Pipe Underdrain
608	8	4	Each	Curb Ramps	
609	2,880	3,195	2195	Lin. Ft.	Curb & Gutter - Standard
609	700	-	-	Lin. Ft.	18" Straight Curb
659	4,555	4,320	473	S.Y.	Seeding & Mulching (In R/W)
Spec	2	1	-	Each	Temporary Barricade
608	1465	1500	-	S.F.	4" Concrete Sidewalk (Access Drive Apron Section 1)
STORM					
202	45	-	-	L.F.	Remove & Dispose of Pipe
202	1	-	-	Each	Remove Reuse Catch Basin
901	180	1135	935	Lin. Ft.	12" Conduit, 706.02, Class IV, w/Type 1 Bedding
901	120	95	15	Lin. Ft.	12" Conduit, 706.02, Class IV, w/Type 1 Bedding, w/Conc. Enc.
901	605	535	19	Lin. Ft.	15" Conduit, 706.02, Class IV, w/Type 1 Bedding
901	355	-	96	Lin. Ft.	15" Conduit, 706.02, Class IV, w/Type 1 Bedding w/Conc. Enc.
901	355	-	-	Lin. Ft.	18" Conduit, 706.02, Class III, w/Type 1 Bedding
604	-	-	-	Each	12" Endwall (AA-S168) or (AA-S169)
901	175	-	-	Lin. Ft.	21" Conduit, 706.02, Class III, w/Type 1 Bedding
901	435	-	-	Lin. Ft.	24" Conduit, 706.02, Class III, w/Type 1 Bedding
901	25	-	-	Lin. Ft.	24" Conduit, 706.02, Class III, w/Type 1 Bedding, w/Con. Back.
901	150	-	-	Lin. Ft.	27" Conduit, 706.02, Class II, w/Type 1 Bedding
604	3	-	-	C.Y.	Rock Channel Protection, Type B w/Filter
604	7	-	-	Each	Manhole, Type A
604	2	-	-	Each	Manhole, Type A w/ E.I.W. #7360 Grate & Frame
604	8	-	-	Each	Curb & Gutter Inlets (Std.)
604	5	-	-	Each	Catch Basin (Std.)
604	1	-	-	Each	O.D.O.T. 2-2A Catch Basin
604	1	-	-	Each	27" Endwall (AA-S169)
604	1	-	-	Each	15" Endwall (AA-S169), (AA-S168)
604	1	-	-	Each	Manhole Adjusted To Grade
WATER					
252	4	-	-	C.Y.	Permanent Pavement Replacement (Type 1)
801	80	25	715	Lin. Ft.	6" Water Pipe
801	1,515	1,545	100	Lin. Ft.	8" Water Pipe
802	5	5	5	Each	6" Valve w/Box (Include Fire Hydrants)
802	4	3	-	Each	8" Valve w/Box
803	1	-	-	Each	12"x8" Tapping Sleeve & Valve w/ Heavy Duty Box
805	17	14	-	Each	3/4" Water Service (Long)
805	14	12	-	Each	3/4" Water Service (Short)
809	4	5	3	Each	Fire Hydrants
LIGHTING					
*	6	7	5	Each	Street Lighting System, Complete (18 Standards, 1 Control Site)
PROSITION CONTROL (SEE SHEET 14 FOR QUANTITIES)					
Calculated By: A.E.F. Date: 4-25-03 Checked By: Date: _____					



**INDEX OF DRAWINGS**  
Title Sheet, General Notes, Storm Sewer Index Map & Quantities 1, 1A  
Typical Sections & Construction Details 2  
Boulevard and Intersection Details 3  
Plan, Profile and Cul-De-Sac Details 4-6, 5A  
Curb Ramp Details 7-8  
Storm Sewer Profiles 9-11, 9A  
Grading & Erosion Control Plans 12-13A  
Bioretention Basin Plan & Details 13B  
Erosion Control Details, Quantities and Water and Light Index Map 14, 14A

- STANDARD DRAWINGS**  
The Standard Construction Drawings listed on these plans shall be considered a part thereof:
- | Q.D.O.T. | City of Columbus                |
|----------|---------------------------------|
| G-25     | SLD-1 2-2A C.B. AA-S100 AA-S151 |
| G-26     | SLD-2 2-4 C.B. AA-S112 AA-S155  |
| G-41     | SLD-3 AA-S119 AA-S166           |
| L-6306   | SLD-5 AA-S125 1441 Dr. A        |
| L-6309   | AA-S129 2000 Dr. A              |
| L-6312   | AA-S133 2156 Dr. A              |
|          | AA-S149 2190 Dr. A              |
|          | AA-S150 2300 Dr. A              |
|          | AA-S145 2319 Dr. A              |

- BENCH MARKS**  
N.A.V.D. 1988  
Source: 1929 FCBM #5521
- BM 1 R.R.S. W. Side P. Pole, 70'± N. C/L Taylor Rd., E. P/L United Baptist Church. Elev. = 890.35 (Elev. = 890.90 1929)
  - BM 2 S. Rim Strm. M.H. 75' E. of Curb End, N. Side Taylor Rd., By Residence # 5990. Elev. = 883.71 (Elev. = 884.26 1929)
  - BM 3 Aluminum cap in conc. monument, at the intersection of Taylor Rd. and Reynoldsburg-New Albany Rd., access through F.C. road monument box. Monument replaced a found 1" solid iron pin. Elev. = 955.89 (Elev. = 956.44 1929)
- REV. DATE APPROVAL DESCRIPTION  
1/2/03 [Signature] Storm Sewer, Sidewalk, Ramp, Pavement Replacement  
2/10/04 [Signature] Final Plan, Utility, Erosion, Miscellaneous  
3/10/04 [Signature] Final Water Service, Inlets, Change - Revised  
3/10/04 [Signature] Final Water Service, Inlets, Change - Revised  
3/10/04 [Signature] Final Water Service, Inlets, Change - Revised  
3/10/04 [Signature] Final Water Service, Inlets, Change - Revised

**PREPARED BY**  
EVANS, MECHWART, HAMBLETON & TILTON, INC.  
CONSULTING ENGINEERS & SURVEYORS  
GAHANNA, OHIO

4/25/03  
Date

4/28/03  
Date

5-15-03  
Date

5-15-03  
Date

5-15-03  
Date

5-15-03  
Date

5-15-03  
Date

5-22-03  
Date

5-21-03  
Date

Franklin County Engineer Signatures signify approval for work within Franklin County right-of-way only.

Franklin County Chief Deputy Engineer

1  
14

PROJECT: 2002-1548 DMC121548801.DWG - 1 XREFS: 21548985 - PLOTTED BY: ENVRON - April 24, 2003 - 4:16 PM

AS-BUILT:

SECTION 1 - WATER & STORM SEWER "AS-BUILTS" 1-28-04  
SECTION 2 - WATER & STORM SEWER "AS-BUILTS" 3-26-07  
SECTION 3 - WATER & STORM SEWER "AS-BUILTS"