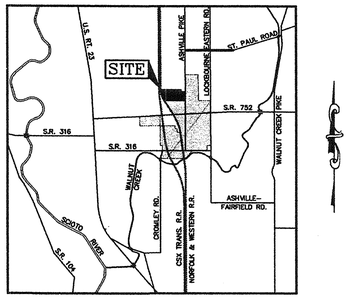
STREET, STORM SEWER, WATER LINE, AND SANITARY IMPROVEMENT PLAN
FOR
ASHTON CROSSING
SECTION 1, PART 1 & PART 2
LONG STREET
ASHVILLE, OHIO



LOCATION MAP
- NOT TO SCALE -

GENERAL NOTES

REFERENCE SPECIFICATIONS AND REQUIREMENTS: THE CURRENT CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, INCLUDING ALL SUPPLEMENTS THERETO, INFORCE ON THE 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 GENERAL NOTES AND/OR SPECIFICATIONS OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN. THE CONTRACTOR SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE VILLAGE OF ASHVILLE GENERAL PROVISIONS AND THE STANDARD CITY OF COLUMBUS DETAIL CONSTRUCTION DRAWINGS.

WORK LIMITS: THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT OR THE EXISTING RIGHT-OF-WAYS, CONSTRUCTION AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PRIVATE PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER.

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 BID FOR THE VARIOUS RELATED ITEMS

FIELD TILE: ALL FIELD TILE BROKEN DURING EXCAVATION SHALL BE REPLACED TO ORIGINAL CONDITION OR AS DIRECTED BY THE ENGINEER.

SURPLUS EXCAVATION: THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION OFF-SITE OR MOUND FOR FUTURE SECTIONS MOUNDED MATERIAL SHALL BE DRESSED-UP, STABILIZED AND SEEDED ACCORDING TO SPECIFICATIONS. MOUNDS SHALL NOT EXCEED TO THE HEIGHT AND SHALL NOT INTERFERE WITH SITE DRAINAGE.

EXISTING UTILITIES: THE INFORMATION SHOWN CONCERNING EXISTING UTILITIES IS NOT REPRESENTED, WARRANTED, OR GUARANTEED TO BE COMPLETE OR ACCURATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY, IN THE FIELD, ALL UTILITY LOCATIONS AND ELEVATIONS, WHETHER SHOWN ON THE PLAN OR NOT, PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL SUPPORT, PROTECT, AND RESTORE ALL EXISTING UTILITIES AND THEIR ASSOCIATED ITEMS.

THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS, IN ACCORDANCE WITH SECTION 153.64, OHIO REVISED CODE, AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE BEGINNING OF ANY WORK, COORDINATE HIS WORK WITH THEM, AND KEEP THE UTILITY OWNERS APPRAISED OF HIS SCHEDULE AND REQUIREMENTS UNTIL ALL WORK IS COMPLETED. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH EVIDENCE OF HAVING NOTIFIED THE UTILITIES AND PROVIDING THEM WITH HIS WORK SCHEDULE PRIOR TO BEGINNING ANY WORK.

NOTICE SHALL BE GIVEN TO THE OHIO UTILITIES PROTECTION SERVICE (TELEPHONE: 800-362-2764), FOR THE MEMBER UTILITIES THE FOLLOWING UTILITIES ARE KNOWN NOT TO BE MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE.

VILLAGE OF ASHVILLE OFFICES:
VILLAGE OF ASHVILLE (740) 983-6367
ADMINISTRATION BUILDING
200 STATION STREET
ASHVILLE, OH 43103

ASHVILLE SERVICE DEPARTMENT (740) 983-4053
400 CHERRY STREET
ASHVILLE, OH 43103

TEMPORARY PAVEMENT REPLACEMENT: TEMPORARY PAVEMENT REPLACEMENT SHALL BE PROVIDED ON PERMANENT PAVEMENTS DAMAGED OR REMOVED BY THE CONTRACTOR IN THE PERFORMANCE OF THE WORK TO LIMITS SHOWN ON THE PLANS OR ORDERED BY THE ENGINEER. AS SOON AS THE TRENCH HAS BEEN BACKFILLED, TEMPORARY PAVEMENT SHALL BE INSTALLED. THE ENGINEER MAY REQUIRE THAT ALL MATERIALS AND EQUIPMENT INCIDENTAL TO PROVIDING THE TEMPORARY PAVEMENT BE PRESENT ON THE JOB SITE PRIOR TO REMOVING THE EXISTING PAVEMENT. THE TEMPORARY PAVEMENT SHALL CONSIST OF 2 INCHES OF COMPACTED BITUMINOUS MATERIAL ITEM 405 OMSC PLACED UPON 6 INCHES OF COMPACTED ITEM 304, O.D.T.S. AGGREGATE BASE. TEMPORARY PAVEMENT SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IS INSTALLED.

PERMANENT PAVEMENT REPLACEMENT: THE PAVEMENT SHALL BE REPLACED BY FIRST REMOVING THE TEMPORARY PAVEMENT DOWN TO THE CLEAN GRANULAR MATERIAL AND REMOVING THE EXISTING PAVEMENT FOR AT LEAST 12 INCHES BEYOND THE TRENCH LIMITS ON EACH SIDE. THE PAVEMENT TO BE REMOVED SHALL BE NEATLY SAWED, NOT MORE THAN 72 HOURS PRIOR TO THE PLACING OF PERMANENT PAVEMENT MATERIALS. THE PERMANENT PAVEMENT MATERIALS AND WORKMANSHIP SHALL BE AT EAST EQUIVALENT TO THE EXISTING PERMANENT PAVEMENT REPLACED, AS DETERMINED BY THE ENGINEER. AFTER REMOVAL OF THE TEMPORARY PAVEMENT AND SAWING OF THE EXISTING PAVEMENT EDGES, ITEM 407 TACK COAT SHALL BE APPLIED TO THE EXPOSED EXISTING PAVEMENT EDGES, AND TO THE BASE MATERIAL, PRIOR TO THE PLACING OF THE PERMANENT PAVEMENT.

SAFETY OF CONSTRUCTION: COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 IS REQUIRED OF ALL CONTRACTORS ON THIS PROJECT.

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 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.

MANHOLE TOPS: WHERE MANHOLES ARE LOCATED WITHIN STREET GRADING LIMITS, THE TOPS SHALL BE BUILT TO ELEVATIONS SHOWN OR ORDERED. ELSEWHERE MANHOLES SHALL BE BUILT OR SUBSEQUENT ADJUSTED TO MEET SURFACE GRADES ESTABLISHED FOR THE DEVELOPMENT. THE COST OF THE ADJUSTMENT IS TO BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.

FINAL CLEAN-UP: THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM HIS OPERATION AND RESTORE ALL OTHER SURFACES, STRUCTURES, DITCHES, ON PUBLIC AND ADJACENT PROPERTY TO THERE ORIGINAL CONDITIONS TO THE SATISFACTION OF THE ENGINEER AND THE DEVELOPER'S PROPERTY TO THEIR SATISFACTION. ALL COSTS FOR THIS WORK SHALL BE INCLUDED WITH THE PRICE BID FOR THE VARIOUS ITEMS.

PERMITS: THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.

STORM STRUCTURES: THE CONTRACTOR SHALL TACK WELD THE GRATES AND COVERS OF ALL STORM SEWER STRUCTURES TO THE FRAMES PRIOR TO ACCEPTANCE OF THE SUBDIVISION. TACK WELDING SHALL BE CONSIST OF THREE WELDS ON CIRCULAR COVERS AND FOUR WELDS ON SQUARE OR RECTANGULAR GRATES (WELDS SHALL BE AT LEAST 3/4" IN LENGTH AND SHALL BE DONE IN CONFORMANCE WITH THE MANUFACTURE'S RECOMMENDED PROCEDURES).

STREET NOTES

UNDERCUTTING: IN THE EVENT EXCAVATION FOR THE STREET IS FROM 0" TO 6" BELOW THAT CALLED FOR ON THE PLANS, THE CONTRACTOR WILL BE REQUIRED TO REPLACE THIS EXCESS EXCAVATED MATERIAL WITH COMPACTED GRANULAR MATERIAL, ITEM 310 OR 304 AS DIRECTED AND AT NO EXTRA COST TO THE OWNER.

PRIOR TO CONSTRUCTION OF THE STREETS, SOIL TESTS SHALL BE MADE ON ALL SANITARY SEWER AND DESIGNATED STORM SEWER TRENCHES WHICH CROSS THE PROPOSED PAVEMENTS OR WHICH LIE SUCH THAT THE PROPOSED PAVEMENTS ARE LOCATED WITHIN ANY PART OF THE INFLUENCE LINE OF SAID TRENCH. WHERE SAID RESULTS INDICATE THAT THE TRENCH BACKFILL DOES NOT MEET THE COMPACTION REQUIREMENTS OF 912.03 (MINIMUM OF 100% OF MAXIMUM LABORATORY DENSITY) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, ALL BACKFILL MATERIAL SHALL BE REMOVED, REPLACED, AND RE-TESTED UNTIL COMPACTION MEETS SAID REQUIREMENTS OF 912.03.

WATER LINE NOTES

ALL WATER PIPE AND FITTINGS, AND METHODS OF CONSTRUCTION AND WORKMANSHIP FOR WATER LINES AND APPURTENANCES SHOWN ON THESE PLANS SHALL CONFORM TO THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, DIVISION 800 AND APPLICABLE REFERENCES THEREIN, CURRENT ON THE DATE OF CONTRACT, UNLESS THE REQUIREMENTS OF SUCH RULES AND REGULATIONS ARE UPGRADED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.

WORK REQUIRING THE SHUTDOWN OF EXISTING WATER MAINS IS TO BE COORDINATED WITH THE VILLAGE OF ASHVILLE WATER DEPARTMENT FORTY EIGHT (48) HOURS PRIOR TO THE SCHEDULED WORK BEING PERFORMED. ALL EFFECTED CUSTOMERS SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST TWENTY FOUR (24) HOURS PRIOR TO THE SHUT DOWN.

(A) WATER MAINS SHALL BE DUCTILE IRON PIPE DESIGNED IN ACCORDANCE WITH THE LATEST REVISION OF A.N.S.I./A.W.W.A. C150/A21.50 FOR A MINIMUM 150 PSI (OR PROJECT REQUIREMENTS, WHICHEVER IS GREATER) RATED WORKING PRESSURE PLUS A 100 PSI MINIMUM SURGE ALLOWANCE; A 2 TO 1 FACTOR OF SAFETY ON THE SUM OF WORKING PRESSURE PLUS SURGE PRESSURE.

DUCTILE IRON PIPE SHALL BE MANUFACTURED IN THE U.S.A. IN ACCORDANCE WITH THE LATEST REVISION OF A.N.S.I./A.W.W.A. C151/A21.51. EACH PIPE SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST OF AT LEAST 500 PSI AT THE POINT OF MANUFACTURE.

PIPE SHALL HAVE STANDARD ASPHALTIC COATING ON THE EXTERIOR. PIPE SHALL ALSO HAVE A CEMENT MORTAR ON THE INTERIOR IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C104/A21.4 OF THE LATEST REVISION.

THE CLASS OR NOMINAL THICKNESS, NET WEIGHT WITHOUT LINING, AND CASTING PERIOD SHALL BE CLEARLY MARKED ON EACH LENGTH OF PIPE. ADDITIONALLY, THE MANUFACTURE'S MARK, COUNTRY WHERE CAST, YEAR IN WHICH THE PIPE WAS PRODUCED, AND LETTERS "DI" OR "DUCTILE" SHALL BE CAST OR STAMPED ON THE PIPE.

(B) PVC PLASTIC PIPE, A.W.W.A. C900 DR 18 FOR SIZES 4" TO 12" AND A.W.W.A. C905 DR 18 FOR SIZES 14" AND ABOVE.

WATER LINE NOTES (CONTINUED)

ALL PIPING TWO (2") INCHES OR LESS IN DIAMETER BETWEEN THE WATER MAIN AND THE CONTROL VALVE OR METER PIT SHALL BE TYPE K, SOFT TEMPERED COPPER TUBING CONFORMING IN ALL RESPECTS TO A.S.T.M. B88. FITTINGS SHALL BE HIGH QUALITY COPPER BRASS WITH A.W.W.A. APPROVED COMPRESSION TYPE JOINTS. IN GENERAL, THERE WILL BE NO FITTINGS PERMITTED BETWEEN THE WATER MAIN CONNECTION AND THE CONTROL VALVE.

DEAD END WATER LINES: SHALL TERMINATE WITH A FIRE HYDRANT AND A WATCH VALVE OR TWO 3/4" WATER SERVICES FOLLOWED BY SUFFICIENT LENGTH OF WATER LINE TO RESTRAIN THE VALVE AND SHALL BE PLUGGED AND BLOCKED.

WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF FOUR (4) FEET OF COVER MEASURED FOR THE FINISHED GRADE TO THE TOP OF THE WATER MAIN.

ALL MAIN LINE VALVES, HYDRANT WATCH VALVES, CURB BOXES AND DEAD END LINES ARE TO BE MARKED WITH A 4" X 4" 8'-0" PRESSURE TREATED WOOD POST WITH 4'-0" PROJECTING ABOVE THE FINISH GRADE AND THE TOP 1'-0" PAINTED BLUE ON ALL FOUR (4) SIDES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HORIZONTAL AND VERTICAL DEFLECTIONS OR BENDS OF THE WATER LINES IN ACCORDANCE WITH THE MANUFACTURE'S SPECIFICATIONS. DEFLECT WATER LINES TO PROVIDE 1'-6" VERTICAL AND 10'-0" HORIZONTAL CLEARANCE FROM SANITARY AND STORM SEWERS.

IF THERE ARE ANY CONFLICTS IN GRADE BETWEEN WATER LINES AND GRAVITY SEWERS, THE WATER LINES SHALL BE LOWERED DURING CONSTRUCTION. CLEARANCES STARTED, MUST BE MAINTAINED.

A PERMIT FOR EACH WATER SERVICE MUST BE OBTAINED FROM THE VILLAGE OF ASHVILLE, PRIOR TO MAKING A CONNECTION TO THE WATER SERVICE INSTALLED AS PART OF THIS PROJECT AND PRIOR TO MAKING ANY ADDITIONAL TAPS INTO THESE WATER LINES.

THE WATER SERVICE TAPS SHALL CONSIST OF ALL PIPE, VALVES, FITTINGS AND APPURTENANCES REQUIRED FROM AND INCLUDING THE WATER MAIN CONNECTION TO AND INCLUDING THE CONTROL VALVE AND BOX OR METER PIT.

THE CAPS AND INSIDE OF ALL MAINLINE WATER VALVE BOXES SHALL BE PAINTED BLUE, AND THE CAPS AND INSIDE OF ALL FIRE HYDRANT GATE VALVE BOXES SHALL BE PAINTED RED WITH TWO COATS OF RUST INHIBITIVE PAINT. PUBLIC FIRE HYDRANTS ARE TO BE PAINTED FEDERAL SAFETY RED.

ALL MECHANICAL FASTENERS, BOLTS, ALL THREAD ROD, ETC., ARE TO RECEIVE ONE COAT OF RUST INHIBITIVE PAINT OR COATING.

IF THE TOP OF THE OPERATING NUT IS MORE THAN THIRTY SIX (36) INCHES BELOW FINISHED GRADE, AN EXTENSION STEM SHALL BE FURNISHED TO BRING THE TOP OF THE OPERATING NUT TO WITHIN TWENTY FOUR (24) INCHES OF FINISHED GRADE ELEVATION. ALL VALVE STEM EXTENSIONS ARE TO BE INSTALLED WITH THE EXTENSION SECURED DIRECTLY TO THE VALVE OPERATING NUT WITH GALVANIZED RESTRAINT CLIPS.

THE COST OF ANY DEWATERING OPERATIONS REQUIRED FOR THE CONSTRUCTION OF THE WATER LINE SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS.

ALL FITTINGS SHALL BE ADEQUATELY RESTRAINED WITH CONCRETE BLOCKING PER THE VILLAGE OF ASHVILLE STANDARD DRAWINGS. ALL FITTINGS TO BE BLOCKED MUST BE THOROUGHLY WRAPPED IN PLASTIC SHEETING PRIOR TO PLACING CONCRETE.

FIRE HYDRANTS ARE TO BE AMERICAN DARLING MARK 73-1 IN ACCORDANCE WITH VILLAGE OF ASHVILLE STANDARD DRAWINGS W-20 STANDARD FIRE HYDRANT DETAIL WITH THE FOLLOWING EXCEPTIONS: GRANULAR BACKFILL SHALL BE ITEM 310, 4'-0" MINIMUM BURY, HARDWOOD BLOCKING SHALL BE REPLACED WITH CONCRETE REACTION BLOCKING AND HYDRANT INSTALLATION SETTING DETAILS SHALL CONFORM TO FIRE: HYDRANT INSTALLATIONS ASHVILLE STD. DRWG. W-24. HYDRANT LOCATION DETAILS (CITY OF COLUMBUS DETAILS): L-6637, TYPICAL HYDRANT SETTING TYPE "A"; L-7601, TYPICAL HYDRANT SETTING TYPE "A" MODIFIED (TO ELIMINATE EXCESSIVE BURY); L-6409, TYPICAL HYDRANT SETTING TYPE "B" AND "B" MODIFIED OR AS SPECIFIED BY THE VILLAGE WATCH VALVE & HYDRANT SHALL BE ANCHOR TYPE FITTINGS.

TAPPING SLEEVES ARE TO BE FORD FAST TAPPING SLEEVES.

ALL GATE VALVES SHALL BE DUCTILE IRON RESILIENT WEDGE TWO HUNDRED AND FIFTY (250) POUNDS PER SQUARE INCH (PSI) AS MANUFACTURED BY AMERICAN FLOW CONTROL OR APPROVED EQUIVALENT WHICH MEETS OR EXCEEDS THE REQUIREMENTS OF A.N.S.I./A.W.W.A. C509.

VALVE BOXES ARE TO BE TYLER 6500 SCREW TYPE FOR MAIN AND WATCH VALVES AND FORD F-1000 CORPORATION STOPS. CONTROL VALVES SHALL BE FORD Z44-333 VALVES.

WATER SERVICE BOXES ARE TO BE LOCATED IN PAIRS ALONG PROPERTY LINE, 6'-0" APART AND 0'-6" INSIDE OF THE RIGHT-OF-WAY LINE.

WATER MAIN CLEANING AND FLUSHING SHALL CONFORM TO ITEM 801.11 CMSC.

HYDROSTATIC TESTS (AS REQUIRED IN SECTION 5 OF AWWA C600) SHALL CONFORM TO ITEM 801.12 CMSC.

CHLORINATION OF COMPLETED PIPE LINE SHALL CONFORM TO ITEM 801.13 CMSC.

WHEN REQUIRED, THE METER PIT INCLUDING ALL PIPING, FITTINGS, EQUIPMENT AND APPURTENANCES ARE SUBJECT TO APPROVAL BY THE VILLAGE OF ASHVILLE PRIOR TO INSTALLATION.

SANITARY SEWER NOTES

ALL SEWERS, APPURTENANCES AND METHODS OF CONSTRUCTION AND WORKMANSHIP FOR SEWERS AND APPURTENANCES SHOWN ON THESE PLANS SHALL CONFORM TO THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION DIVISION 900 AND APPLICABLE REFERENCES THEREIN, CURRENT ON THE DATE OF THE CONTRACT, UNLESS THE REQUIREMENTS OF SUCH RULES AND REGULATIONS ARE UPGRADED OR MODIFIED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.

SANITARY SEWER LEAKAGE TESTING: LEAKAGE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 901.20 AND SHALL INCLUDE MAIN SEWER, MANHOLES AND SERVICE CONNECTIONS DURING THE CONSTRUCTION OF THE SEWERS AND MANHOLES GROUND WATER LEVELS SHALL BE OBSERVED AND REPORTED IN A SUITABLE LOG. GROUND WATER OBSERVATION PIPES SHALL BE INSTALLED IN MANHOLES AS FOLLOWS FOR THE PURPOSE OF MONITORING GROUND WATER LEVELS PREVAILING OVER THE PROJECT AT THE TIME OF LEAKAGE TESTING. THESE MANHOLES ARE MHS 2, 5, 7, 10, 13, 14, 17 AND 19.

SANITARY SEWER NOTES (CONTINUED)

CLEAN WATER CONNECTIONS INCLUDING ROOF DRAINS, FOUNDATION DRAINS, SUMPS, ETC., ARE PROHIBITED FROM BEING CONNECTED TO THE SANITARY SEWER.

MATERIAL: UNLESS OTHERWISE INDICATED ON THE PLANS, SEWERS AND SERVICES ARE TO BE SUPPLIED WITH MATERIAL CONFORMING TO ITEM 901 CMSC.

(1) POLYVINYL CHLORIDE (PVC) PLASTIC PIPE: ITEM 720.08 PIPE SHALL CONFORM TO ASTM D-3034 SDR 35 FOR SIZES 6", 8", 10", 12" AND 15". FITTINGS SHALL ALSO CONFORM TO ASTM F-1336.

(2) POLYVINYL CHLORIDE (PVC) LARGE DIAMETER PLASTIC PIPE: ITEM 720.08. THE PIPES AND FITTINGS SHALL CONFORM TO ASTM F-679 FOR SIZES 18" THROUGH 36".

PIPES FOR ALL 6" SERVICES SHALL BE PVC SEWER PIPE CONFORMING TO THE REQUIREMENTS OF ASTM D-3034, SDR 35. THESE SERVICES ARE ALSO SUBJECT TO LEAKAGE TESTING. SERVICES EXTENSIONS SHALL BE INSTALLED AT A MINIMUM GRADE OF 1/4" PER FOOT AND SHALL BE CONSTRUCTED AT THE TIME OF CONSTRUCTING THE MAIN SEWER, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ALL PVC PIPE SHALL BE DEFLECTION TESTED 30 DAYS OR MORE AFTER THE TRENCH HAS BEEN BACKFILLED TO THE FINISH GRADE. THE TESTING SHALL BE DONE IN ACCORDANCE WITH ITEM 901.21 OMSC. A RIGID MANDREL PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER SHALL BE USED FOR TESTING. NO MECHANICAL PULLING DEVICES SHALL BE USED. PIPE DEFLECTION SHALL NOT EXCEED FIVE (5) PERCENT. AN ACCURATE LOG OF SEWER INSTALLATION SEGMENTS AND DATES SHALL BE KEPT BY THE CONTRACTOR.

6'-0" LONG CLAY DAMS ARE TO BE INSTALLED ALONG MAIN LINE SEWERS IN ACCORDANCE WITH ITEM 901.11 CMCS. BUT NO CLOSER THAN TEN (10) FEET FROM A LATERAL SERVICE. COST TO BE INCLUDED WITH THE VARIOUS SEWER ITEMS.

6'-0" LONG CLAY DAMS ARE TO BE INSTALLED ON ALL SANITARY LATERAL SEWERS BUT NO CLOSER THAN FIVE (5) FEET FROM THE END OF THE SERVICE. DAMS ARE TO BE INSTALLED BY THE SITE UTILITY CONTRACTOR WITH THE COST TO BE INCLUDED WITH THE VARIOUS SEWER ITEMS.

ALL SANITARY MANHOLES AND LATERAL SERVICES ARE TO BE MARKED WITH A 4" X 4" X 10'-0" PRESSURE TREATED WOOD POST WITH 4'-0" PROJECTING ABOVE THE FINISHED GRADE AND WITH THE TOP 1'-0" PAINTED GREEN ON ALL FOUR SIDES. ADDITIONALLY, A 2" X 2" HARDWOOD WYE POLE IS TO BE WIRED TO THE BASE OF EACH 4" X 4" POLE AND EXTENDED DOWN TO THE END OF EACH LATERAL SERVICE. COST TO BE INCLUDED IN VARIOUS ITEMS.

WHERE THE COVER TO FINISHED GRADE OVER A SANITARY WYE IS IN EXCESS OF TWELVE (12) FEET, A LENGTH OF RISER PIPE AND A FORTY FIVE (45) DEGREE BEND SHALL BE INSTALLED ALONG WITH A MINIMUM OF ONE WHOLE LENGTH OF SIX (6) INCH PIPE SUCH THAT THE END OF THE SERVICE WILL BE TEN (10) FEET BELOW GRADE. ALL SANITARY LINES AND SERVICES ARE TO BE DESIGNED AND INSTALLED SO AS TO PROVIDE BASEMENT SERVICE.

WHERE THE SANITARY SEWER CROSSES UNDER A PROPOSED STORM SEWER OR WATERLINE THE TRENCH SHALL BE BACKFILLED TO THE BOTTOM OF THE PROPOSED STORM SEWER OR WATERLINE WITH COMPACTED GRANULAR MATERIAL AS PER ITEM 912, FOR A LENGTH OF TWENTY (20) LINEAR FEET CENTERED ON THE STORM SEWER OR WATER LINE. THE COST OF THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR VARIOUS SEWER ITEMS.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY MANHOLE CONSTRUCTION AND TOP-OF-CASTING ELEVATION WITH THE FINAL GRADES SHOWN ON THE GRADING PLAN. MANHOLES SHALL BE BUILT OR ADJUSTED SO THE TOPS CONFORM TO THE ELEVATIONS SHOWN ON THESE PLANS. ALL MANHOLE CASTING ADJUSTMENTS SHALL BE ACCOMPLISHED WITH PRECAST CONCRETE ADJUSTMENT RINGS.

SANITARY TRENCH DETAILS SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBUS STANDARD DRAWING AA-S149. ALL PIPES SHALL BE INSTALLED WITH STONE OR GRAVEL TYPE I BEDDING.

TEMPORARY WATERTIGHT BULKHEADS SHALL BE PLACED, WHERE INDICATED ON THE PLANS, AND SHALL REMAIN IN PLACE UNTIL REMOVAL IS DIRECTED BY THE VILLAGE ENGINEER. BULKHEADS SHALL BE INSTALLED IN MANHOLE #2 ON 12"(E) AND ON MANHOLE #5 ON 8"(N) AND 12"(E).

SANITARY LATERALS INSTALLED IN A COMMON TRENCH ARE TO BE INSTALLED WITH A MINIMUM 2'-0" CENTER SEPARATION OF PIPES IN A 4'-0" MINIMUM WIDTH TRENCH WITH 1'-0" MINIMUM BEDDING AROUND PIPES. PIPE ENDS ARE TO BE FLARED TO A MINIMUM 10'-0" CENTER TO CENTER SEPARATION OF PIPES AT 5'-0" OUTSIDE THE RIGHT -OF-WAY.

A PERMANENT FLEXIBLE WATERTIGHT JOINT SEALANT BETWEEN THE TOPS OF SANITARY MANHOLES AND MANHOLE CASTINGS SHALL BE INSTALLED. SEALANT TO BE "CONSEAL" AS MANUFACTURED BY CONCRETE SEALANTS, INC. NEW CARLISLE, OHIO OR APPROVED EQUAL.

EACH MANHOLE SHALL BE PROVIDED WITH A "CHIMNEY SEAL " CONSISTING OF A TRIPLE PLEATED RUBBER SLEEVE HAVING A MINIMUM THICKNESS OF 3/16 INCH, A MINIMUM UNEXPANDED VERTICAL HEIGHT OF EIGHT (8) INCHES, CAPABLE OF EXPANDING NOT LESS THAN TWO (2) INCHES VERTICALLY WHEN INSTALLED, EQUIPPED WITH 18 GAUGE BY 1-3/4" WIDE A.S.T.M. STAINLESS STEEL TYPE 304 EXPANSION BANDS, THE ENTIRE UNIT AS MANUFACTURED BY CRETEX SPECIALTY PRODUCTS OR APPROVED EQUAL.

NO FLOW MAY BE DIVERTED INTO THE NEW OR EXISTING SEWER UNTIL THEY HAVE BEEN INSPECTED, TESTED, AND APPROVED FOR USE. WRITTEN APPROVAL FOR SUCH USE SHALL BE OBTAINED FROM THE VILLAGE OF ASHVILLE.

BENCHMARKS:

SOURCE BENCHMARK
CHISELED SQUARE IN THE SOUTHWEST CORNER OF WESTERLY PUMP ISLAND AT SERVICE STATION AT THE NORTHEAST CORNER OF SR 752 AND LONG STREET.

(NGVD 29) ELEVATION = 716.76
(NAVD 88) ELEVATION = 716.23

BENCHMARK #1
EAST BOLT OF FIRE HYDRANT. FIRST FIRE HYDRANT SOUTH OF ASHTON DRIVE ON THE WEST SIDE OF LONG STREET.

(NGVD 29) ELEVATION = 717.03
(NAVD 88) ELEVATION = 716.50

BENCHMARK #2
CHISELED SQUARE IN NORTHWEST CORNER OF HEADWALL ON THE WEST SIDE OF LONG STREET IN FRONT OF ASHTON VILLAGE SUBDIVISION.

(NGVD 29) ELEVATION = 712.58
(NAVD 88) ELEVATION = 712.05

BENCHMARK #3
RAILROAD SPIKE SET IN WEST SIDE OF POWER POLE ON EAST SIDE OF LONG STREET. FIRST POWER POLE NORTH OF THOMPSON AVENUE (ASHTON VILLAGE SUBDIVISION).

(NGVD 29) ELEVATION = 714.84
(NAVD 88) ELEVATION = 714.31

*AB - AS BUILT SURVEY NOV. 21, 2006

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APPROVALS

SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLAN.

SERVICE DEPARTMENT, SUPERVISOR — DATE 11/7/05

VILLAGE ENGINEER, VILLAGE OF ASHVILLE — DATE 11/3/05

MAYOR, VILLAGE OF ASHVILLE — DATE 11/04/05

VILLAGE ADMINISTRATOR, VILLAGE OF ASHVILLE — DATE 11/4/05

SUB775_001A

PROFESSIONAL ENGINEER — NO. 68106 — DATE 2 Nov 2005

STATE OF OHIO · CHRISTOPHER MICHAEL TERBEE · E-68106 · REGISTERED PROFESSIONAL ENGINEER

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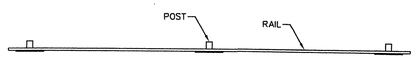
TITLE SHEET
ASHTON CROSSING
SECTION 1, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

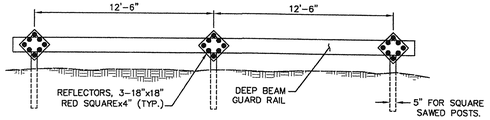
REVISIONS
1 REVISED SHEETS 2 & 10 PER OH10 EPA REQUEST 12-30-2005

JOB NO.	1860
DRAWN BY	MJM
DESIGN BY	JSG
CHECKED BY	CMT

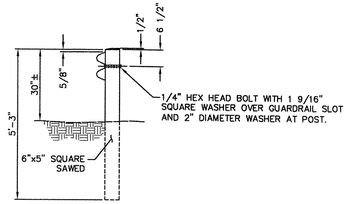
SHEET 1 OF 30



PLAN VIEW



ELEVATION



WOOD POSTS

TEMPORARY BARRICADE DETAIL
– NOT TO SCALE –

STANDARD DRAWINGS

DRAWING #	DESCRIPTION	REVISION DATE
	CITY OF COLUMBUS	
AA–S100	TYPE "A" MANHOLES – 8" THRU 27" PIPE (STORM SEWER)	12–15–93
AA–S101	TYPE "B" MANHOLES – 30" THRU 60" PIPE (STORM SEWER)	12–15–93
AA–S102	TYPE "C" MANHOLE – 8" THRU 42" PIPE––– 2 SHEETS	5–16–97
AA–S106	TYPICAL ASSEMBLY COMBINATIONS FOR PRECAST MANHOLES	12–15–93
AA–S107	MISC. ITEMS PRECAST MANHOLES	12–15–93
AA–S110	INSIDE DROP AND OUTSIDE DROP PIPE FOR MANHOLES	12–15–93
AA–S111	STANDARD DIMENSIONS FOR MANHOLE FRAME & COVER CASTING (SANITARY SEWERS)	5–16–97
AA–S112	STANDARD DIMENSIONS FOR MANHOLE FRAME & COVER CASTING (STORM SEWERS)	5–16–97
AA–S117	PRECAST MANHOLE BASE CHANNELIZATION DETAIL	12–15–93
AA–S119	MANHOLE STEPS DETAIL	12–15–93
AA–S125	CURB AND GUTTER INLET	12–15–93
AA–S128	CAST IRON FRAME & GRATE FOR CURB & GUTTER INLET (STANDARD CURB)	5–16–97
AA–S133	STANDARD CATCH BASIN	12–15–93
AA–S134	STANDARD CATCH BASIN – 24" SIDE INLETS	12–15–93
AA–S139	GRATE & ANGLE FRAME FOR STANDARD CATCH BASIN	5–16–97
AA–S145	OUTLET CONTROL ORIFICE PLATE	12–15–93
AA–S149	TYPE I BEDDING FOR FLEXIBLE SEWER PIPES 6" TO 48" DIAMETER	12–15–93
AA–S151	TYPE I BEDDING FOR RIGID SEWER PIPE – 6" TO 108" DIAMETER ITEM 901	10–3–97
AA–S155	TYPICAL TRENCH DETAIL FOR STORM SEWERS OUTSIDE R/W W/COVER 30" OR LESS	12–15–93
AA–S160	TYPICAL SANITARY HOUSE CONNECTION SERVICE ---- 2 SHEETS	12–15–93
AA–S161	TYPICAL WYE RISER (FOR SEWERS 27" AND UNDER) & TYPICAL CLEANOUT	12–15–93
AA–S168	PRECAST PIPE CULVERT HEADWALLS – 8" TO 36" DIAMETER	12–15–93
AA–S169	PRECAST PIPE ENDWALLS – 8" TO 60" DIAMETER	12–15–93
L–6306	CONCRETE VALVE SUPPORTS	4–1–01
L–6309	TYPICAL TRENCH	4–1–01
L–6310	BACKING FOR VERTICAL BENDS	4–1–01
L–6311	BACKING FOR BENDS	4–1–01
L–6312	BACKING FOR TEES	4–1–01
L–6316	COLUMBUS STANDARD HEAVY DUTY VALVE BOX	4–1–01
L–6409	TYPICAL HYDRANT SETTING, TYPE "B"	12–10–01
L–6473	TYPICAL AIR RELEASE 3/4" THRU 2"	4–1–01
L–6640	ALLOWABLE LEAKAGE TABLE	4–1–01
L–7001	THRUST BLOCK DETAIL, END OF PIPE	4–1–01
L–7002	DRAIN TILE REPLACEMENT	4–1–01
L–7601	TYPICAL HYDRANT SETTING, TO ELIMINATE EXCESSIVE BURY	4–1–01
L–9901	CURB BOX INSTALLATION, 3/4" THRU 2"	1–21–05
CB–1.2	ODOT CATCH BASINS NO'S 2–3 & 2–4	7–15–05
	VILLAGE OF ASHVILLE	
W–20	STANDARD FIRE HYDRANT DETAIL	4–2–93
W–30	STANDARD WATER SERVICE	6–9–91

THE STANDARD DRAWINGS LISTED ON THIS PLAN SHALL BE CONSIDERED A PART THEREOF.

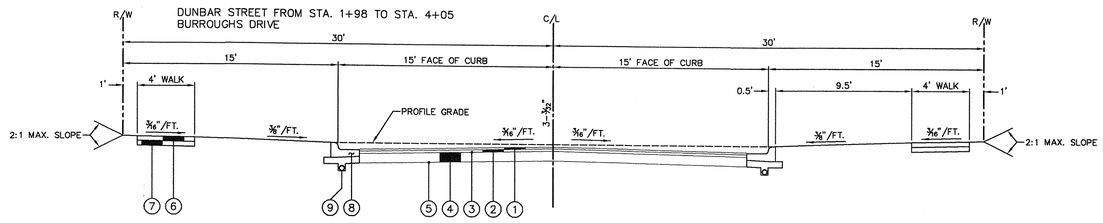
ESTIMATE OF QUANTITIES

ITEM	PART 1	PART 2	TOTAL	UNIT	DESCRIPTION
					STREETS
201	LUMP	LUMP	LUMP	LS	CLEARING AND GRUBBING
202	22	–	22	SY	PAVEMENT REMOVED
203	15022	5200	20222	CY	EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION (TOP SOIL STRIPPING)
203	100000	10000	110000	CY	EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION
203	115022	15200	132000	CY	EMBANKMENT CONSTRUCTION
204	10110	5940	16050	SY	SUBGRADE COMPACTION
304	2808	1652	4460	CY	AGGREGATE BASE
402	562	330	892	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2
404	351	206	557	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1
413	240	–	240	LF	CRACK SEALING
605	5148	3466	8615	LF	4" PIPE UNDERDRAIN
608	10150	–	10150	SF	CONCRETE SIDEWALK
608	24	8	32	EA	CURB RAMP, AS PER PLAN
609	5148	3466	8615	LF	COMBINATION CURB AND GUTTER, AS PER PLAN
SPEC	14	10	24	EA	STREET LIGHT, COMPLETE
252	8	–	8	CY	PERMANENT PAVEMENT REPLACEMENT
SPEC	LUMP	–	LUMP	LS	TEMPORARY PUMP STATION ACCESS DRIVE
					STORM SEWER
901	1071	472	1543	LF	12" REINFORCED CONCRETE PIPE, 706.02 CL V W/TYPE 1 BEDDING *
901	–	29	29	LF	12" REINFORCED CONCRETE PIPE, 706.02 CL V W/TYPE 1 BEDDING & CONC. ENCASE.*
901	815	380	1195	LF	15" REINFORCED CONCRETE PIPE, 706.02 CL V W/TYPE 1 BEDDING *
901	1182	211	1393	LF	18" REINFORCED CONCRETE PIPE, 706.02 CL III W/TYPE 1 BEDDING *
901	1974	506	2480	LF	24" REINFORCED CONCRETE PIPE, 706.02 CL III W/TYPE 1 BEDDING
901	–	29	29	LF	24" REINFORCED CONCRETE PIPE, 706.02 CL V W/TYPE 1 BEDDING & CONC. ENCASE.*
901	791	220	1011	LF	30" REINFORCED CONCRETE PIPE, 706.02 CL III W/TYPE 1 BEDDING *
901	30	–	30	LF	30" REINFORCED CONCRETE PIPE, 706.02 CL V W/TYPE 1 BEDDING & CONC. ENCASE.*
901	424	–	424	LF	36" REINFORCED CONCRETE PIPE, 706.02 CL III W/TYPE 1 BEDDING
601	54	–	54	CY	ROCK CHANNEL PROTECTION TYPE "C" WITHOUT FILTER
604	17	8	25	EA	CURB & GUTTER INLET, AS PER AA–S125
604	8	3	11	EA	CATCH BASIN, AS PER AA–S133
604	8	2	10	EA	CATCH BASIN, AS PER ODOT CB2–3
604	2	–	2	EA	CATCH BASIN, AS PER ODOT CB2–4
604	13	2	15	EA	MANHOLE, TYPE "A"
604	6	1	7	EA	MANHOLE, TYPE "B"
604	–	1	1	EA	MANHOLE, TYPE "A" WITH CURB & GUTTER INLET FRAME & GRATE
604	6	1	7	EA	ENDWALL, AS PER AA–S169
SPEC	8	1	9	EA	ANTI–SEEP COLLAR, AS PER PLAN
					SANITARY SEWER
604	10	9	19	EA	MANHOLE TYPE "C"
604	4	–	4	EA	MANHOLE TYPE "C" W/OUTSIDE DROP
901	1305	1775	3080	LF	8" SANITARY SEWER PIPE
901	2061	–	2061	LF	12" SANITARY SEWER PIPE
901	50	–	50	LF	18" SANITARY SEWER PIPE
914	308	122	430	LF	6" DIAMETER PIPE RISERS
915	44	–	44	EA	12"X6" WYE FITTINGS
915	21	40	61	EA	8"X6" WYE FITTINGS
918	2514	1543	4057	LF	6" DIAMETER PIPE, SANITARY HOUSE CONNECTION SERVICE
SPEC	LUMP	–	LUMP	LS	REMOVE AND DISPOSE OF EXISTING PUMP STATION
SPEC	LUMP	–	LUMP	LS	SANITARY PUMP STATION COMPLETE, AS PER PLAN
901	289	–	289	LF	6" C–900 SANITARY FORCE MAIN
802	2	–	2	EA	6" VALVE AND APPURTENANCES
SPEC	2	–	2	EA	SLUICE GATE, COMPLETE, AS PER PLAN
					WATER
801	3923	1530	5453	LF	8" C–900 WATER PIPE & FITTINGS
802	9	5	14	EA	6" WATER VALVE AND APPURTENANCES (INCLUDING HYDRANTS)
802	10	6	16	EA	8" WATER VALVE AND APPURTENANCES
803	2	–	2	EA	12" x 8" TAPPING SLEEVE AND VALVE AND APPURTENANCES
805	35	17	52	EA	3/4" WATER SERVICE TAP COMPLETE, SHORT
805	33	18	51	EA	3/4" WATER SERVICE TAP COMPLETE, LONG
809	8	5	13	EA	FIRE HYDRANT TYPE "B", COMPLETE
809	1	–	1	EA	FIRE HYDRANT TYPE "A", COMPLETE
					EROSION CONTROL
207	2	2	4	EA	STABILIZED CONSTRUCTION ENTRANCE
207	17	9	26	EA	CURB AND GUTTER INLET PROTECTION
207	19	7	26	EA	CATCH BASIN SEDIMENT FILTER
207	5	–	5	EA	CHECK DAM IN DRAINAGE WAY
207	6000	3000	9000	LF	SEDIMENT FENCE
207	1500	–	1500	LF	TREE PROTECTION FENCE, AS PER PLAN
207	40000	10000	50000	SY	TEMPORARY SEEDING AND MULCHING
207	LUMP	LUMP	LUMP	LS	TEMPORARY SEDIMENT BASIN , COMPLETE(AS PER PLAN, INCLUDING TEMPORARY PIPES)
624	LUMP	LUMP	LUMP	LS	MOBILIZATION

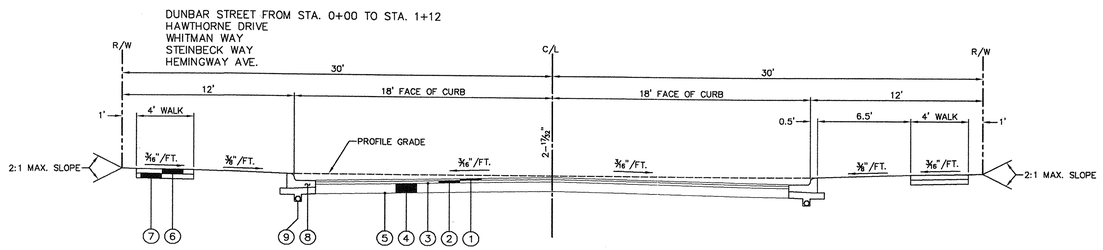
QUANTITIES SHOWN ARE LISTED FOR INFORMATION AND ARE ESTIMATES ONLY. THE CONTRACTOR SHALL CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND SHALL NOT RELY ON QUANTITIES LISTED OR NOT LISTED HEREON.

* OR POLYETHLENE STORM PIPE AS PER 706.16 W/TYPE I BEDDING. IF POLYETHYLENE PIPE IS USED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ALL CONCRETE ENCASMENT FROM STRUCTURE TO STRUCTURE FOR ALL SEGMENTS OF PIPE FOR WHICH CONCRETE ENCASEMENT IS SPECIFIED ON THESE PLANS.

IF POLYETHELENE STORM PIPE IS USED THEN A DEFLECTION TEST MUST BE COMPLETED NO SOONER THAN 30 DAYS AFTR COMPLETION OF BACKFILL OPERATIONS ON ALL PIPE UP TO AND INCLUDING 36" DIAMETER.



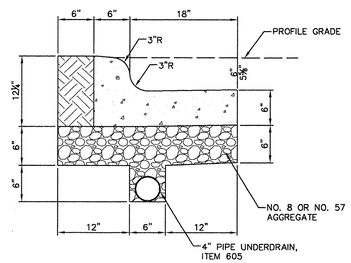
TYPICAL 30' SECTION (60' R/W)
SCALE: 1" = 5'



TYPICAL 36' SECTION (60' R/W)
SCALE: 1" = 5'

ITEM LEGEND

1. ITEM 404 – 1 1/4" ASPHALT CONCRETE
2. ITEM 402 – 2" ASPHALT CONCRETE
3. ITEM 408 – BITUMINOUS PRIME COAT APPLIED AT THE RATE OF 0.35 GAL. PER SQ. YD.
4. ITEM 304 – 10" AGGREGATE BASE
5. ITEM 203 – SUBGRADE COMPACTION
6. ITEM 608 – 4" CONCRETE WALK
7. ITEM 310 – 4" SUBBASE
8. ITEM 609 – CURB & GUTTER
9. ITEM 605 – 4" PIPE UNDERDRAIN



CURB & GUTTER DETAIL
– NOT TO SCALE –

SUB775_002A

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ESTIMATE OF QUANTITIES AND DETAILS
ASHTON CROSSING
SECTION I, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

REVISIONS
1 REVISED SANITARY QUANTITIES PER OHIO EPA REQUEST 12–30–2005

JOB NO.	1860
DRAWN BY	MJM
DESIGN BY	JSG
CHECKED BY	CMT

SHEET
2
OF 30

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STORM & SANITARY INDEX
ASHTON CROSSING
SECTION I, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

HEMINGWAY AVENUE
TWAIN PLACE
THOREAU DRIVE
BURROUGHS DRIVE
HAWTHORNE DRIVE
COOPER PLACE
DUNBAR STREET
COLLINS DR.
BRENTON CT.
BRENTON DR.
ASHTON DR.
WINSTON AVENUE
THOMPSON AVENUE
LONG STREET (ASHVILLE PIKE)
THURBER ROAD
NORFOLK SOUTHERN RAILROAD
RESERVE "A"
RESERVE "B"
RESERVE "C"
RESERVE "D"
RESERVE "E"
RESERVE "F"
POND A
POND B
POND C
POND D
EX. POND
SECTION 3 PB 9, P.14
SECTION 2 PB 8, P.153
SECTION 1 PB 8, P.137
ASHTON VILLAGE PHASE I

S86°33'34"E 2295.41'
S86°33'02"E 323.28'
S03°50'40"W 134.95'
N03°31'11"E 121.88'
N89°20'40"W
N 85°54'20" W
S 03°56'43" W 1252.52'
2161.85'
Δ=32°51'51"
R=1860.08
L=1066.92
CH=1052.35'
N12°54'44"W

24"(RCP)=705.01
24"(VCP)=703.74
24"(CMP)=703.23 (PLUGGED) (OUTLET UNKNOWN)
12"(DIP)=702.78 (OUTLET UNKNOWN)
24"(VCP)=704.42
24"(RCP)=704.93

EX. STM 18"(N)=703.31

(1) EX. CATCH BASIN
T/C=706.85±
12"(NE)=703.72
18"(S)=703.59

(2) EX. CATCH BASIN
T/C=709.65±
12"(NE)=706.46
12"(SW)=706.26

(3) EX. CATCH BASIN
T/C=710.7±
12"(W)=707.81
24"(N)=707.59 (PLUGGED)
24"(S)=707.65 (PLUGGED)
36"(E)=707.53

(4) EX. CATCH BASIN
T/C=708.71
12"(S)=706.99

(5) EX. CATCH BASIN
T/C=710.28
12"(E)=708.56

(6) EX. CATCH BASIN
T/C=710.47
12"(E)=707.72
12"(W)=707.78
12"(S)=707.65

(7) EX. CATCH BASIN
T/C=711.47
12"(W)=708.75

(#) = PROPOSED STORM STRUCTURE
(#) = PROPOSED SANITARY STRUCTURE

1"=100'
100 50 0 100 200

SUB775_003A

REVISIONS

JOB NO.	1860
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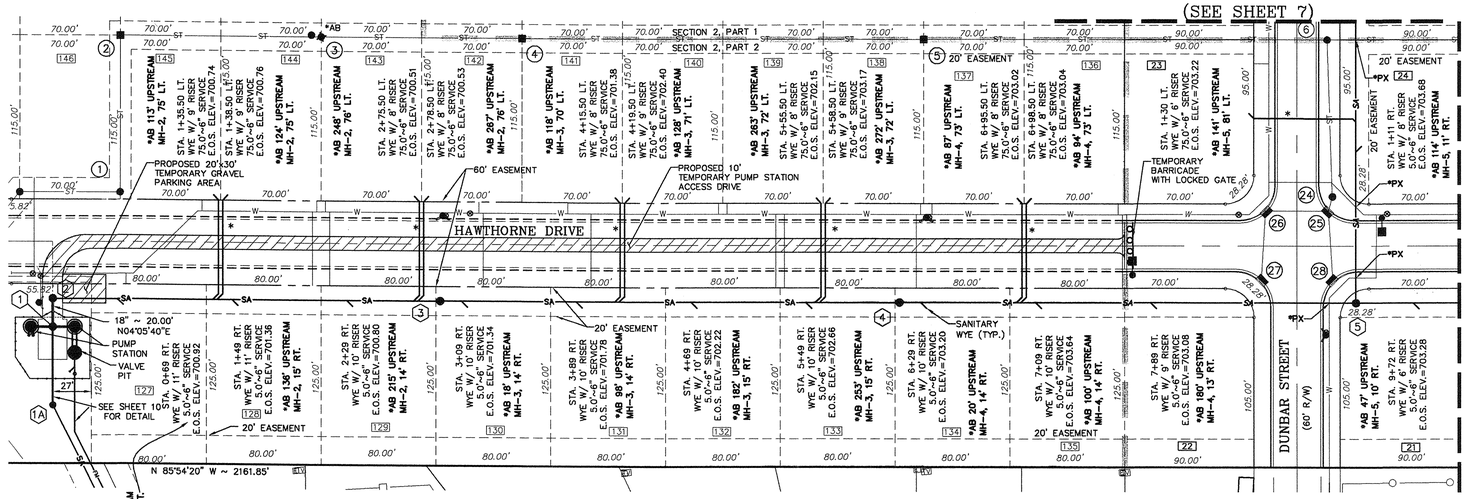
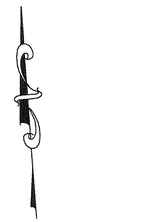
DESIGN BY	JSG
CHECKED BY	CMT

SHEET
3
OF 30





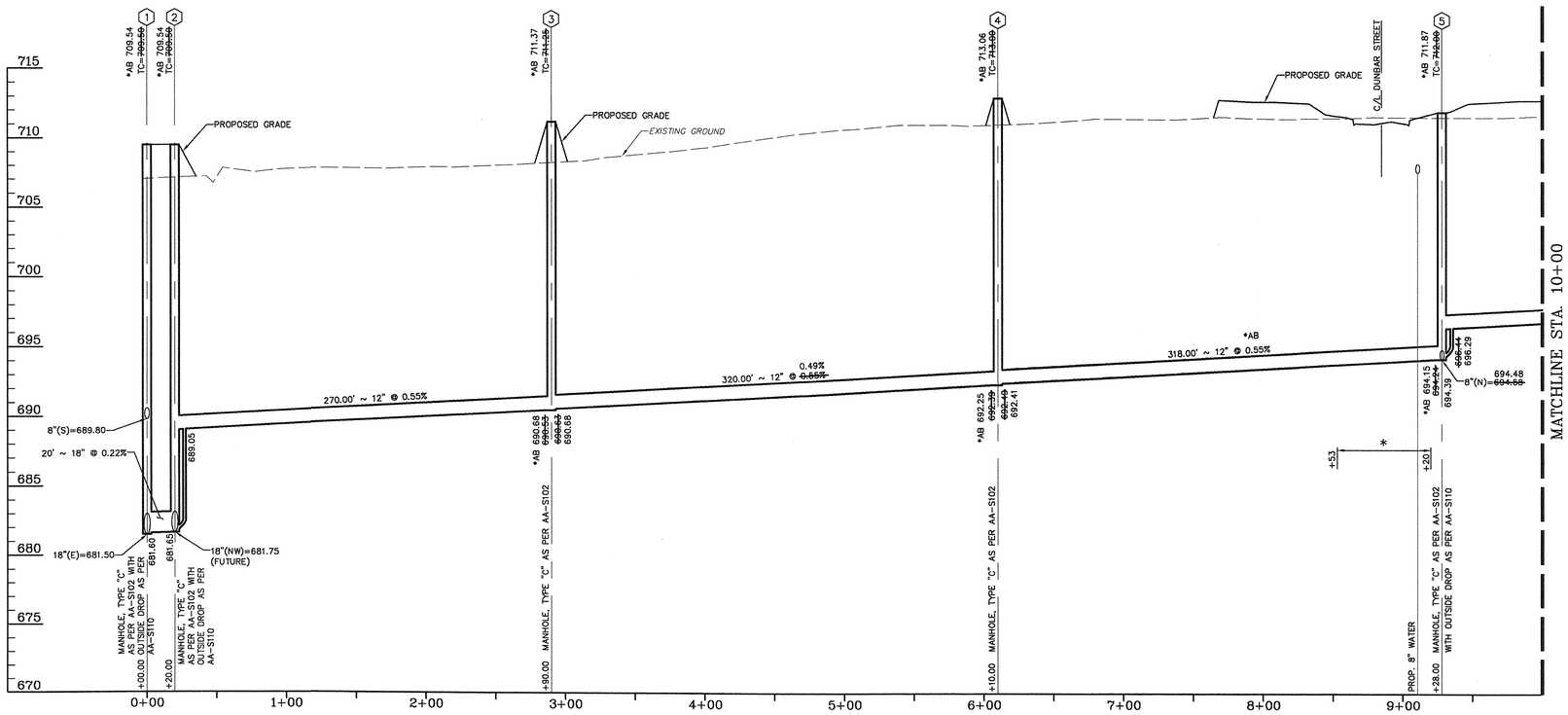
SCALE: 1" = 50'
50 25 0 50 100

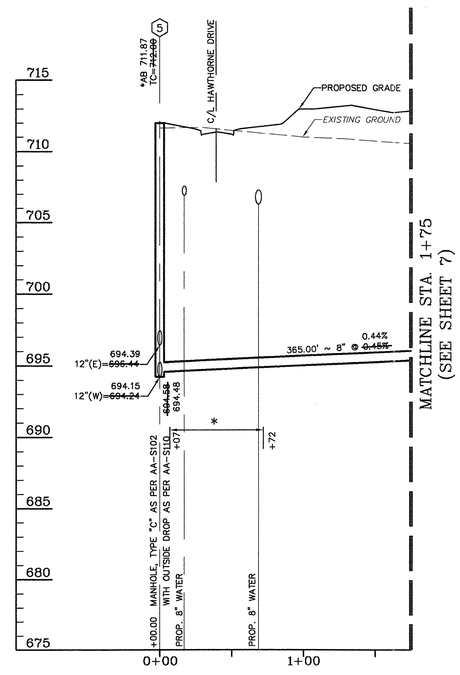
* = COMPACTED GRANULAR BACKFILL AS PER ITEM 912 WITH 100% MAX. DENSITY AS A MINIMUM.

EASEMENT NOTE:
FOR EASEMENT USE, SIZE AND LOCATION REFER TO THE FINAL PLAT.

* PX = CONTRACTOR SHALL PROVIDE ITEM 912. COMPACTED GRANULAR BACKFILL 10' EACH DIRECTION OF WATER LINE OR STORM SEWER CROSSING.

SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'





SUB775_004A

*AB= AS BUILT SURVEY ~ 11-06

SANITARY SEWER PLAN & PROFILES
ASHTON CROSSING
SECTION I, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

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REVISIONS

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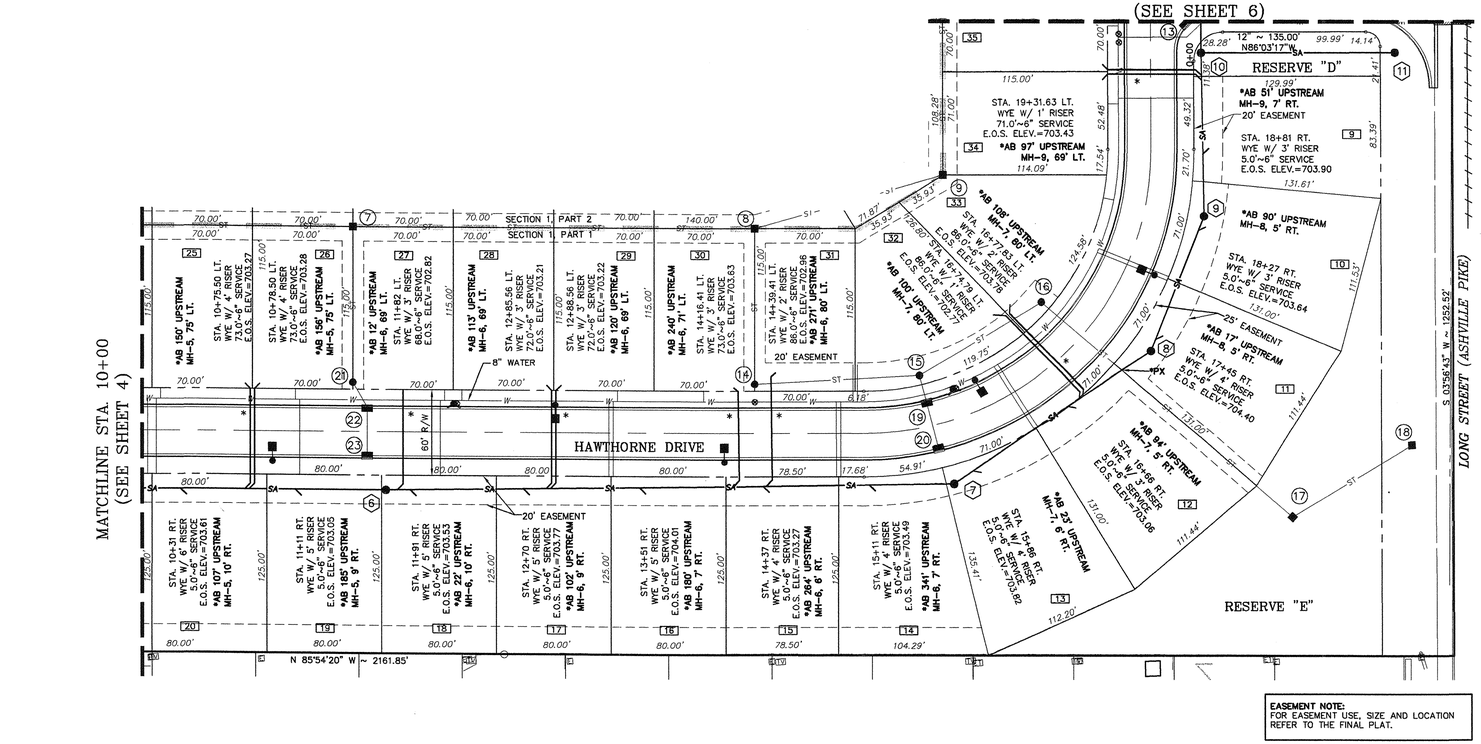
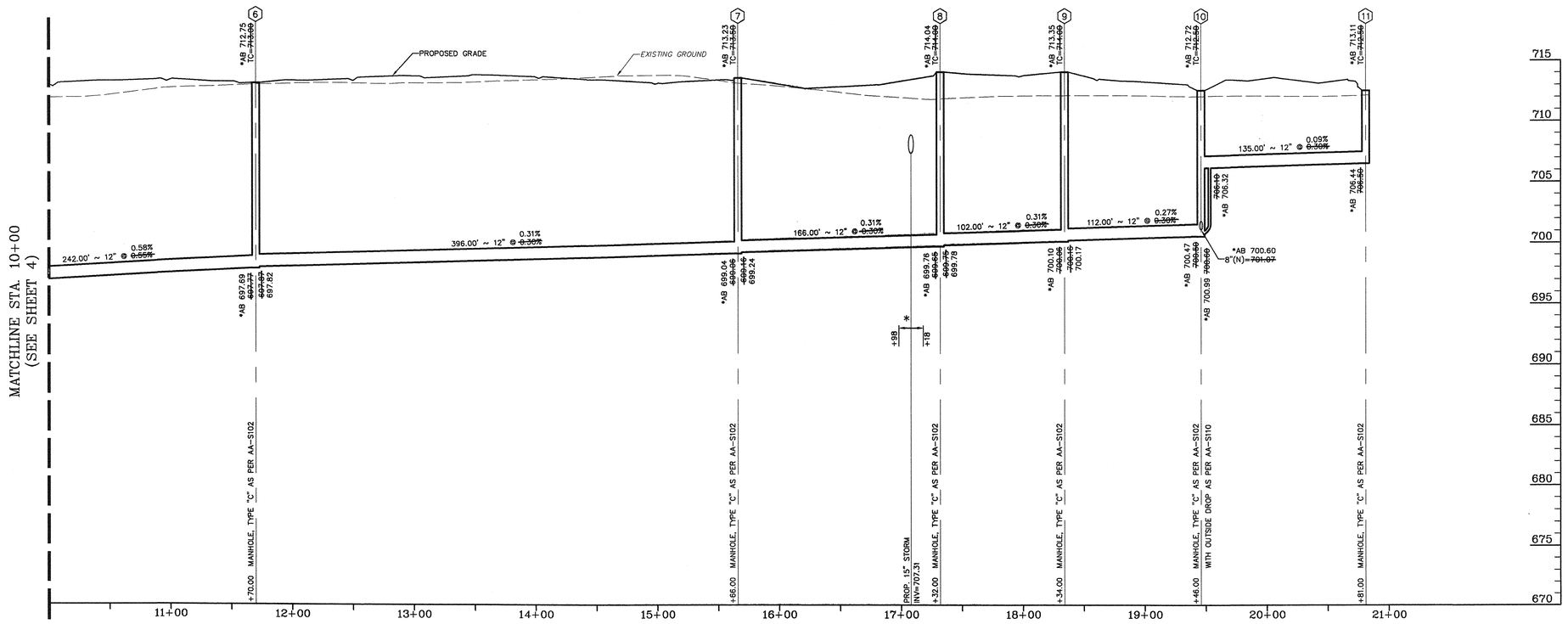
CHECKED BY	BJS

SHEET
4
OF 30





SCALE: 1" = 50'

50 25 0 50 100

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SCALE: HORIZ: 1" = 50'
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* PX = CONTRACTOR SHALL PROVIDE ITEM 912, COMPACTED GRANULAR BACKFILL 10' EACH DIRECTION OF WATER LINE OR STORM SEWER CROSSING.

SUB775_005A

*AB= AS BUILT SURVEY ~ 11-06

SANITARY SEWER PLAN & PROFILES
ASHTON CROSSING
SECTION I, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

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REVISIONS

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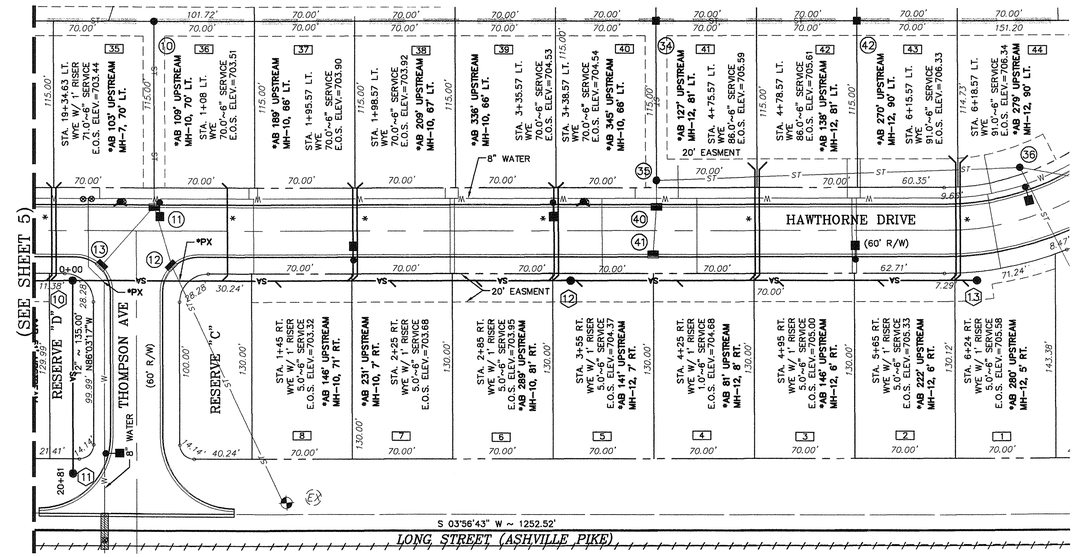
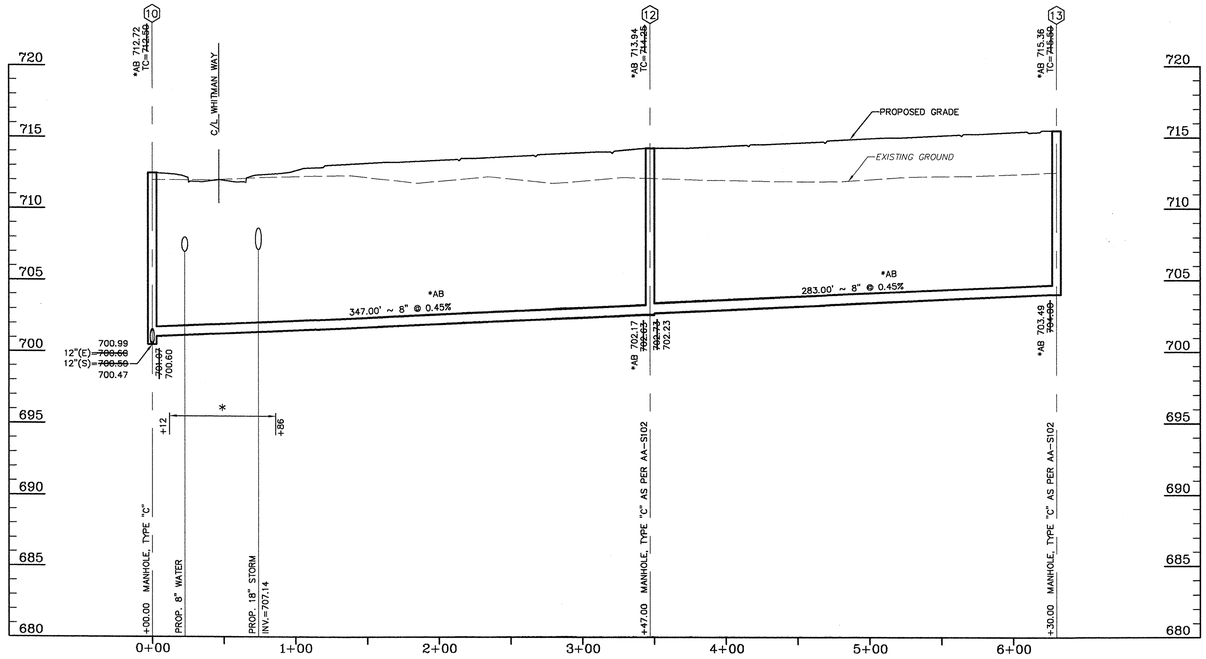
SHEET 5 OF 30



EASEMENT NOTE:
FOR EASEMENT USE, SIZE AND LOCATION REFER TO THE FINAL PLAT.

* PX = CONTRACTOR SHALL PROVIDE ITEM 912, COMPACTED GRANULAR BACKFILL 10' EACH DIRECTION OF WATER LINE OR STORM SEWER CROSSING.



* = COMPACTED GRANULAR BACKFILL AS PER ITEM 912 WITH 100% MAX. DENSITY AS A MINIMUM.

SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'

SUB775_006A

*AB= AS BUILT SURVEY ~ 11-06

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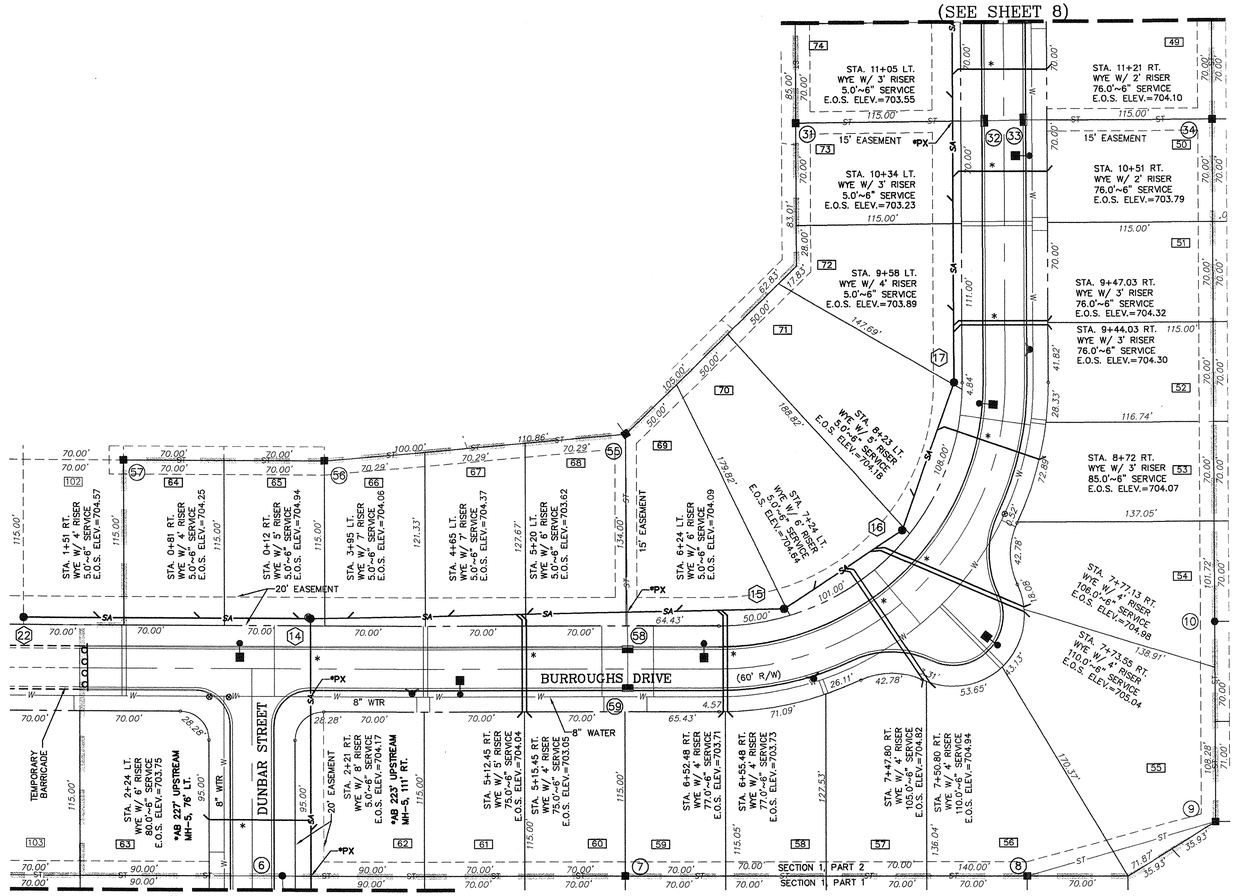
SANITARY SEWER PLAN & PROFILES
ASHTON CROSSING
SECTION I, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

REVISIONS

JOB NO.	1860
DRAWN BY	MJM
DESIGN BY	JSG
CHECKED BY	BJS

SHEET
6
OF 30



SCALE: 1" = 50'

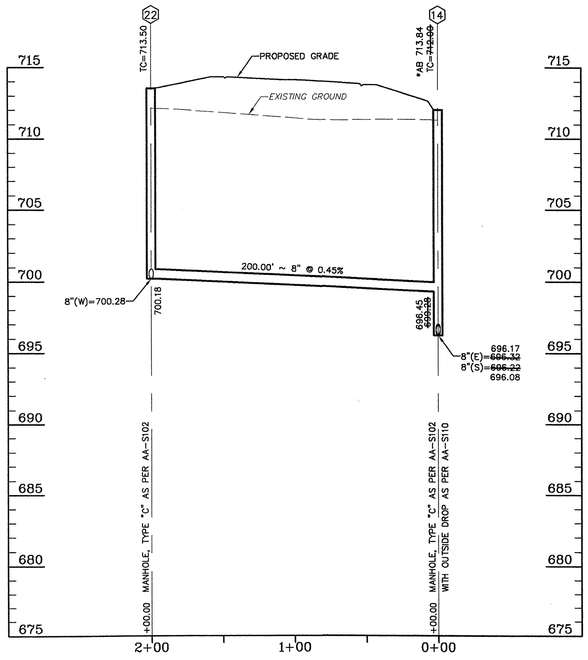
50 25 0 50 100

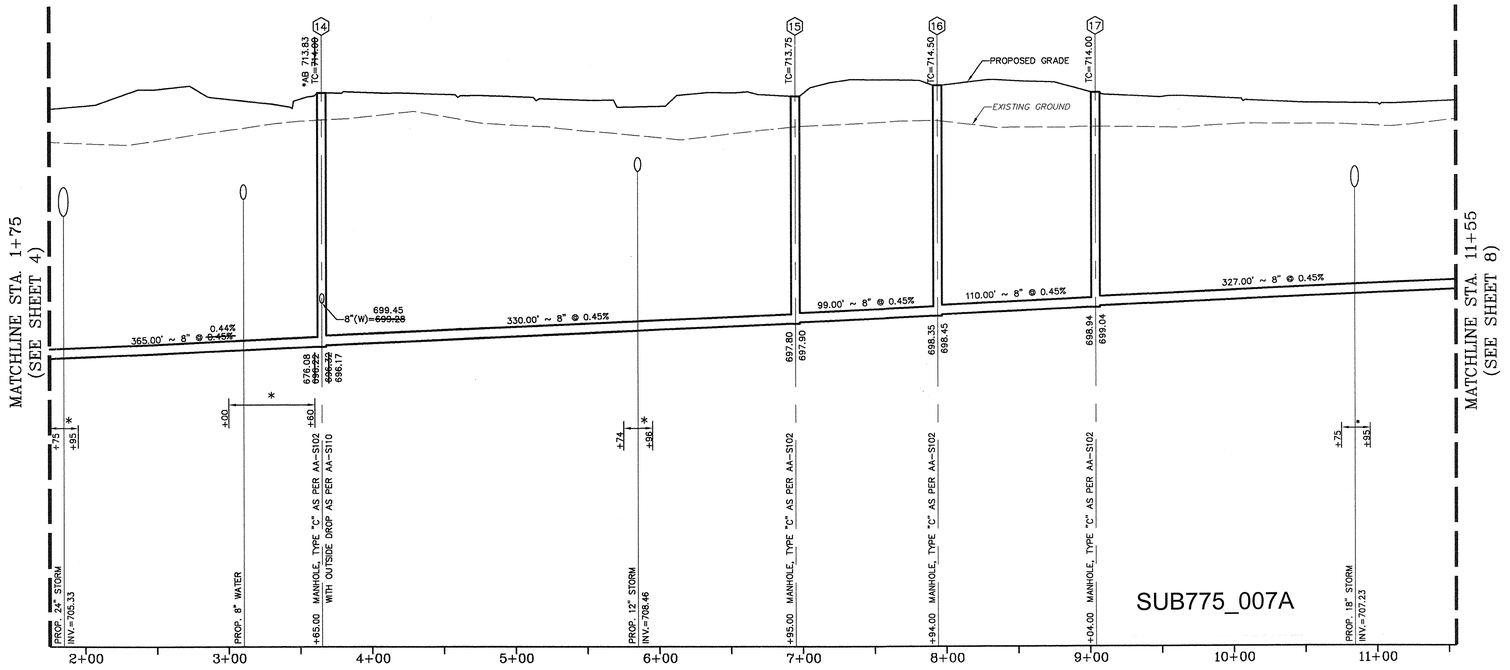
EASEMENT NOTE:
FOR EASEMENT USE, SIZE AND LOCATION REFER TO THE FINAL PLAT.

* PX = CONTRACTOR SHALL PROVIDE ITEM 912, COMPACTED GRANULAR BACKFILL 10' EACH DIRECTION OF WATER LINE OR STORM SEWER CROSSING.

* = COMPACTED GRANULAR BACKFILL AS PER ITEM 912 WITH 100% MAX. DENSITY AS A MINIMUM.

SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'





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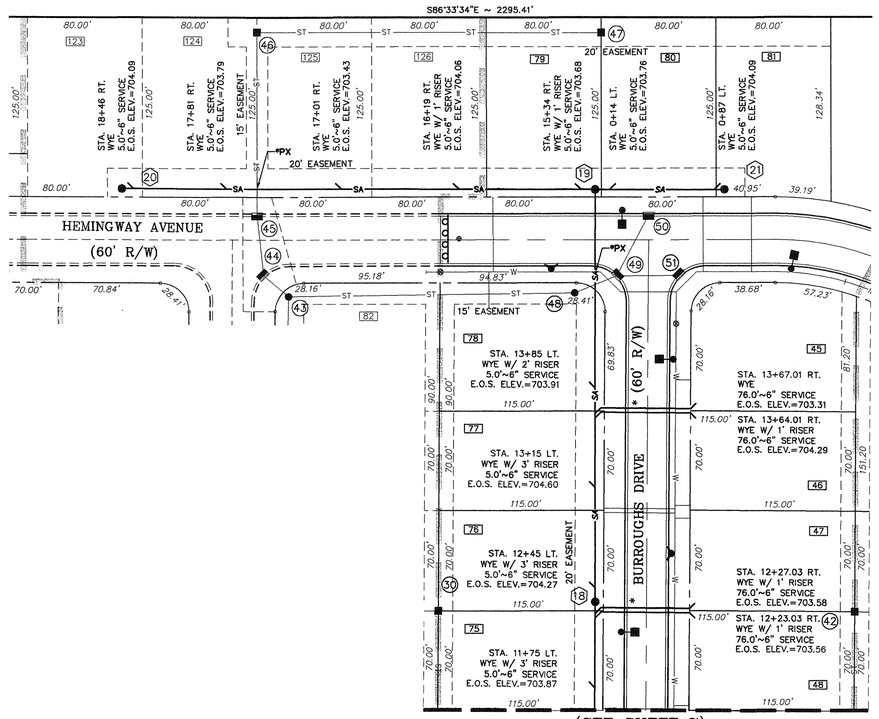
SANITARY SEWER PLAN & PROFILES
ASHTON CROSSING
SECTION 1, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

REVISIONS

JOB NO.	1860
DRAWN BY	MJM
DESIGN BY	JSG
CHECKED BY	BJS

SHEET
7
OF 30

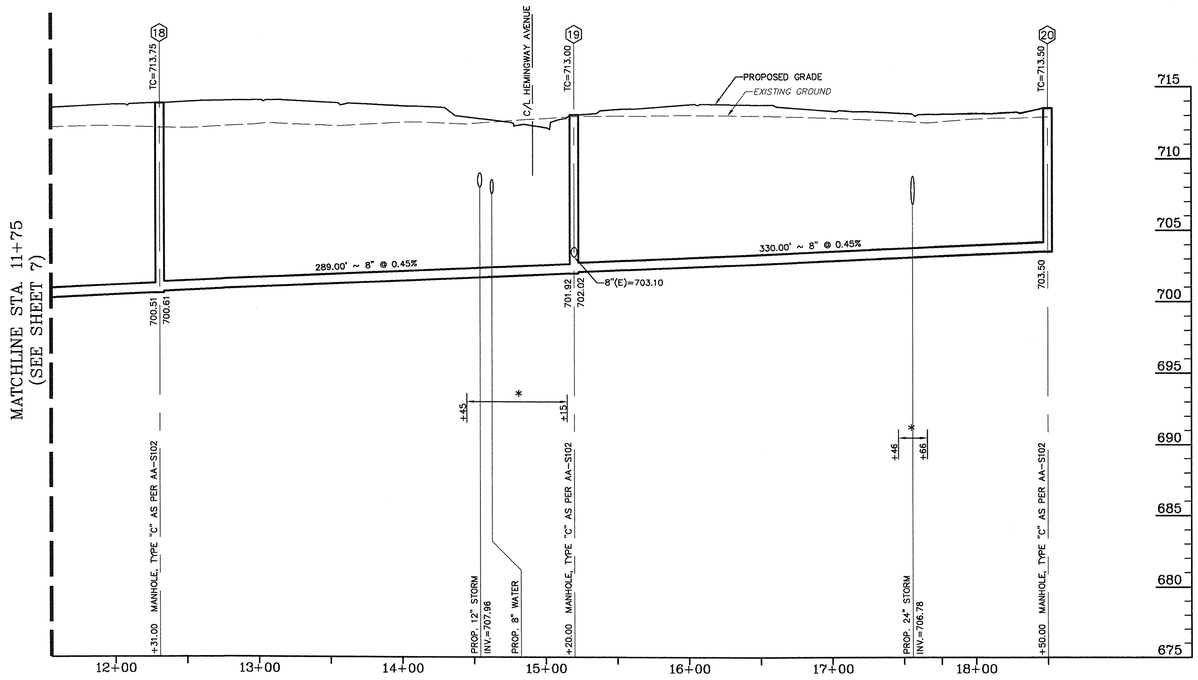


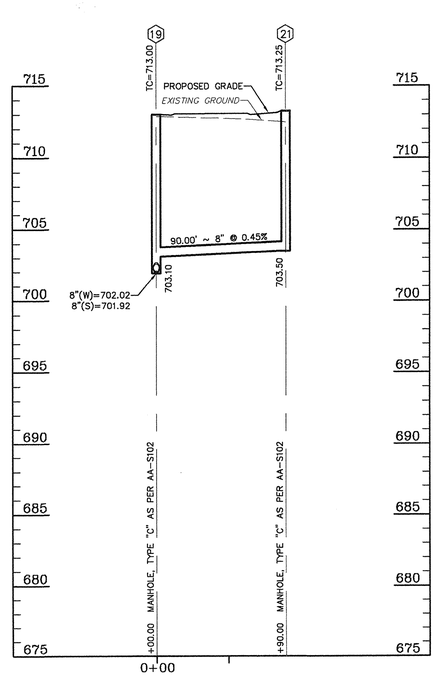
EASEMENT NOTE:
FOR EASEMENT USE, SIZE AND LOCATION REFER TO THE FINAL PLAT.

* PX = CONTRACTOR SHALL PROVIDE ITEM 912, COMPACTED GRANULAR BACKFILL 10' EACH DIRECTION OF WATER LINE OR STORM SEWER CROSSING.

* = COMPACTED GRANULAR BACKFILL AS PER ITEM 912 WITH 100% MAX. DENSITY AS A MINIMUM.

SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'





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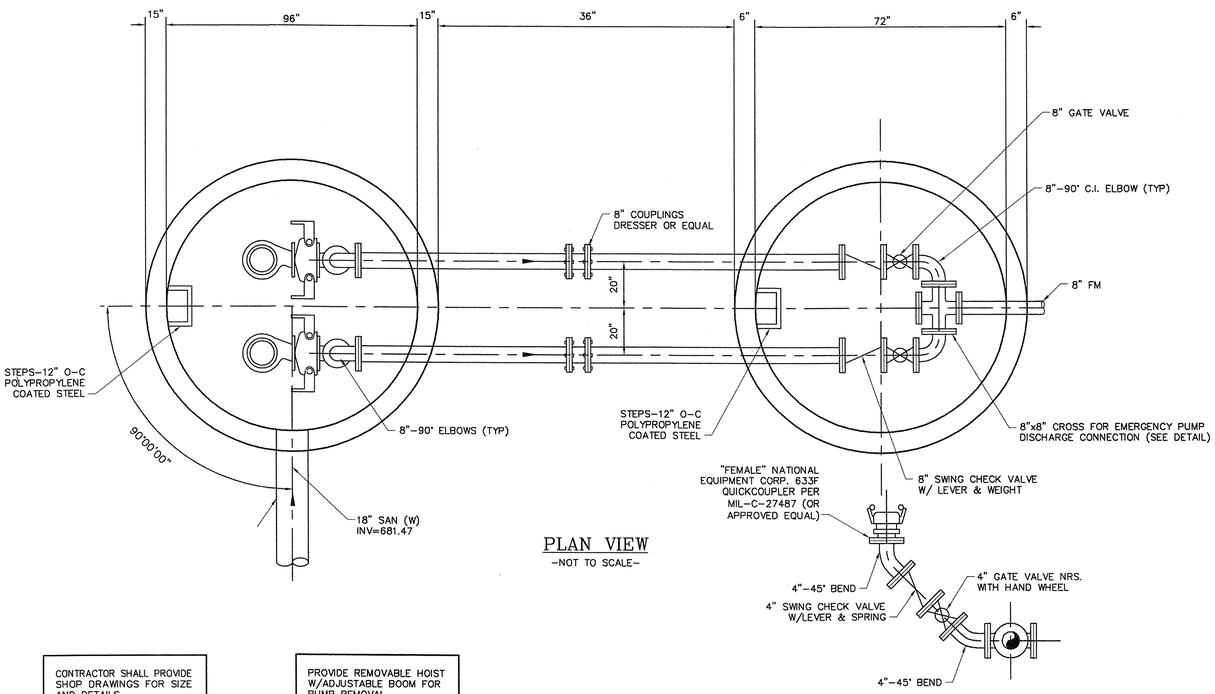


PLAN VIEW

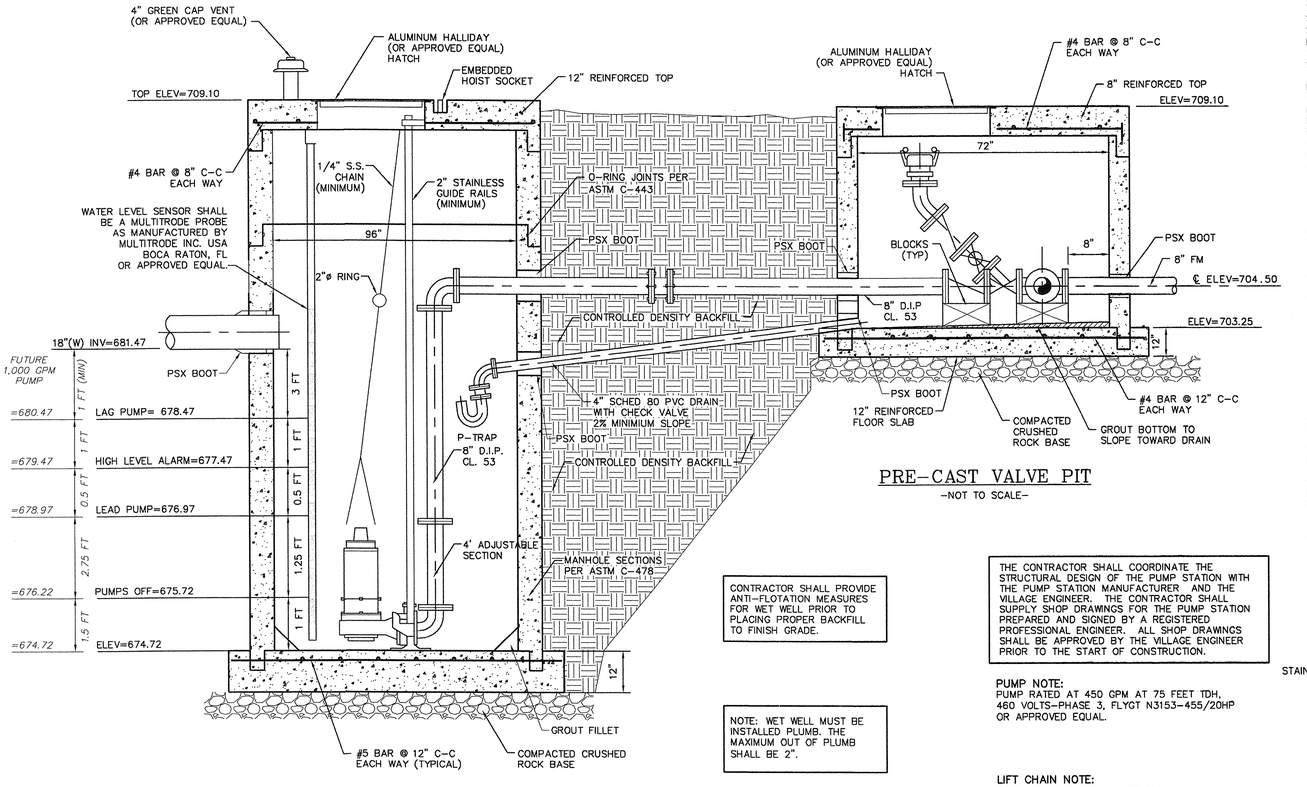
-NOT TO SCALE-

EMERGENCY PUMP DISCHARGE CONNECTION DETAIL

-NOT TO SCALE-

CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR SIZE AND DETAILS.

PROVIDE REMOVABLE HOIST W/ADJUSTABLE BOOM FOR PUMP REMOVAL.



PRE-CAST LIFT STATION

-NOT TO SCALE-

PRE-CAST VALVE PIT

-NOT TO SCALE-

CONTRACTOR SHALL PROVIDE ANTI-FLOTATION MEASURES FOR WET WELL PRIOR TO PLACING PROPER BACKFILL TO FINISH GRADE.

NOTE: WET WELL MUST BE INSTALLED PLUMB. THE MAXIMUM OUT OF PLUMB SHALL BE 2".

THE CONTRACTOR SHALL COORDINATE THE STRUCTURAL DESIGN OF THE PUMP STATION WITH THE PUMP STATION MANUFACTURER AND THE VILLAGE ENGINEER. THE CONTRACTOR SHALL SUPPLY SHOP DRAWINGS FOR THE PUMP STATION PREPARED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER. ALL SHOP DRAWINGS SHALL BE APPROVED BY THE VILLAGE ENGINEER PRIOR TO THE START OF CONSTRUCTION.

PUMP NOTE:
PUMP RATED AT 450 GPM AT 75 FEET TDH, 460 VOLTS-PHASE 3, FLYGT N3153-455/20HP OR APPROVED EQUAL.

LIFT CHAIN NOTE:
2" DIAMETER RINGS WILL BE PLACED EVERY 10 FEET TO AID IN THE EVENT THAT THE PUMPS MUST BE HOISTED OUT OF THE WET WELL.

GENERAL
SCOPE OF WORK: THE CONTRACTOR SHALL, UNLESS OTHERWISE NOTIFIED, FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO INSTALL, TEST, COMPLETE AND MAKE READY FOR OPERATION A SUBMERSIBLE SEWAGE PUMP STATION. THIS INCLUDES THE FURNISHING AND INSTALLATION OF ALL NECESSARY AND DESIRABLE ACCESSORY EQUIPMENT AND AUXILIARIES, WHETHER SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR NOT, AS REQUIRED FOR A SUCCESSFUL INSTALLATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION AND REMOVAL OF OBSTRUCTIONS AND RESTORATION OF ALL PROPERTIES INVOLVED DIRECTLY WITH THE CONSTRUCTION AND/ OR INSTALLATION OF THE PUMP STATION.
THE CONTRACTOR SHALL PAY ALL SERVICE FEES REQUIRED FOR THE INSTALLATION OF THE ELECTRICAL SERVICE. PICKAWAY COUNTY ELECTRICAL INSPECTION SHALL BE COMPLETED PRIOR TO START-UP AND ACCEPTANCE.

CODES: ALL WORK FOR THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRIC CODE (NEC), STATE OF OHIO BASIC BUILDING CODE, AND THE VILLAGE OF ASHVILLE CONSTRUCTION MATERIALS AND SPECIFICATIONS AND STANDARD DRAWINGS. SAID CODES SHALL BE CONSIDERED THE MINIMUM STANDARD FRO MATERIALS AND METHODS NOT OTHERWISE COVERED IN THIS SPECIFICATION.
EXISTING CONDITIONS: THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS WHICH MAY AFFECT HIS WORK AND HE MUST CONSIDER SAME AS PART OF HIS BID. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CONTRACTOR'S FAILURE TO BECOME AWARE OF EXISTING CONDITIONS.

TEMPORARY SERVICES AND WIRING: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY TEMPORARY POWER OR TELEPHONE SERVICES NECESSARY FOR THE EXECUTION OF HIS WORK. PAYMENT OF INSTALLATION AND USAGE FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SAID TEMPORARY SERVICES SHALL BE REMOVED FROM THE SITE AT THE COMPLETION OF THE PROJECT.

MOUNTING HARDWARE: ALL MOUNTING HARDWARE SHALL BE 316 STAINLESS STEEL. ALL BRACKETS, SUPPORTS, HANGERS, AND BRACES INSIDE THE WET WELL SHALL BE STAINLESS STEEL.

SUBMERSIBLE PUMP REQUIREMENTS: A 316 STAINLESS STEEL NAMEPLATE SHALL BE ATTACHED TO THE TOP OF EACH PUMP. THE MANUFACTURER NAME, RATED CAPACITY, TOTAL HEAD, MODEL NUMBER, SERIAL NUMBER, AND ALL OTHER PERTINENT DATA SHALL BE STATED. A 316 STAINLESS STEEL LIFTING CHAIN WITH A MINIMUM OF THREE (3) INTERSPERSED LIFTING RINGS SHALL BE PROVIDED THE CHAIN SHALL BE OF SUFFICIENT STRENGTH TO RAISE AND LOWER THE PUMP WITH A SAFETY FACTOR OF TWO (2) AND A MINIMUM OF 1/4 INCH THICK CHAIN LINKS.

THE PUMP SHALL BE SUPPLIED WITH A MATING CAST IRON DISCHARGE CONNECTION ELBOW. THE ELBOW SHALL BE PERMANENTLY CONNECTED TO THE WET WELL ALONG WITH THE DISCHARGE PIPING AND THE PUMP SLIDE RAILS. THE SLIDE RAILS SHALL BE STAINLESS STEEL AND HAVE A MINIMUM DIAMETER OF TWO (2) INCHES AND BE SIZED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. THE PUMP SHALL BE EASILY REMOVABLE AND REPLACEABLE VIA THE SLIDE RAILS AND QUICK DISCONNECT SYSTEM. NO ENTRY INTO THE WET WELL SHALL BE REQUIRED TO REMOVE THE PUMPS.

INTEGRAL MOTOR THERMAL PROTECTION AND PUMP SEAL FAILURE DETECTORS MAY BE PROVIDED AS A PART OF THE PUMP PACKAGE. WHEN THESE ARE PROVIDED, THEY SHALL BE WIRED IN ACCORDANCE WITH THE PUMP MANUFACTURER'S RECOMMENDATIONS.

PIPE AND FITTINGS: THE INTERIOR PIPING SHALL BE DUCTILE IRON PIPE, CLASS 52 WITH FLANGED JOINTS CONFORMING TO AWWA C 115 AND FITTINGS CONFORMING TO AWWA C 110 UNLESS INTERNAL PRESSURES REQUIRE A HIGHER RATED MATERIAL. PIPE AND FITTING COATING AND LINING SHALL BE AN ASPHALTIC COATING WITH A MINIMUM 1 MIL THICKNESS. AN ALTERNATE FOR PIPING OUTSIDE OF STRUCTURES IS AWWA C-900.

STRUCTURES: THE WET WELL AND VALVE VAULT 10 FEET DIAMETER AND SMALLER SHALL BE CONSTRUCTED OF MANHOLE SECTIONS IN ACCORDANCE ASTM C 478 WITH WATERTIGHT RUBBER GASKETED JOINTS PER ASTM C 443. THE BASE SECTION SHALL CONSIST OF A RISER SECTION WITH A 12-INCH THICK INTEGRAL FLOOR AND SIX (6) INCH ANTI FLOTATION "LIP" AROUND THE EXTERIOR. THE TOP SHALL BE FLAT AND BE PRECAST CONCRETE WITH A MINIMUM TWELVE (12) INCH THICKNESS. THE REQUIREMENTS FOR WET WELLS LARGER THAN TEN (10) FEET IN DIAMETER SHALL BE COORDINATED WITH THE VILLAGE OF ASHVILLE.

EACH STRUCTURE (WET WELL AND VALVE VAULT) SHALL HAVE AN ACCESS COVER. ACCESS COVERS SHALL BE ALUMINUM WITH 316 STAINLESS STEEL HARDWARE AND FLUSH MOUNTED. THE COVERS SHALL BE RATED FOR THREE HUNDRED (300) POUNDS PER SQUARE FOOT LOADING. THE FINISH SHALL BE CHECKERED, DIAMOND PLATE OR OTHER APPROVED NON-SLIP SURFACE. THE VALVE VAULT SHALL HAVE A MINIMUM DIMENSION OF 36" X 48". THE WET WELL SHALL HAVE A RECTANGULAR HATCH OPENING WHICH PROVIDES THE MAXIMUM SIZE OPENING. AT A MINIMUM, THE WET WELL HATCH SHALL PROVIDE A TWELVE (12) INCH CLEARANCE FROM THE BACK OF THE PUMP VOLUTE (AWAY FROM THE SLIDE RAILS) TO THE EDGE OF THE OPENING TO FACILITATE EASY REMOVAL. THE WET WELL AND VALVE VAULT HATCHES SHALL BE HALLIDAY, BILCO OR APPROVED EQUAL.

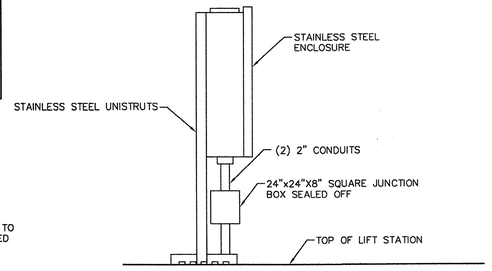
THE INTERIOR OF BOTH THE WET WELL AND VALVE VAULT SHALL BE COATED WITH WITH A COATING APPROVED BY THE VILLAGE ENGINEER PRIOR TO THE CONSTRUCTION OF THE WETWELL TO ALLOW FOR THE COATING TO BE FACTORY APPLIED.

PUMP STATION AND VALVE VAULT SHALL BE PROVIDED WITH MANHOLE STEPS IN ACCORDANCE WITH VILLAGE OF ASHVILLE STANDARD DRAWINGS.

A GROUT FILLET SHALL BE PROPERLY DESIGNED AND CONSTRUCTED AROUND THE FULL CIRCUMFERENCE OF THE STATION OF THE WET WELL'S BOTTOM TO DIRECT GRIT AND OTHER SOLIDS TO THE PUMPS. THE GROUT SHALL BE APPROVED BY THE VILLAGE.

EACH VALVE VAULT SHALL BE FITTED WITH A DRAIN LINE BACK TO THE WET WELL. THE DRAIN LINE SHALL HAVE A MINIMUM DIAMETER OF TWO (2) INCHES, BE OF SCHEDULE 80 PVC, BE PLACED AT A 2% SLOPE OR BETTER, AND HAVE A TRAP AND CHECK VALVE. THE CHECK VALVE SHALL BE EXPOSED IN THE WET WELL AND BE ATTACHED WITH A NPT THREADED JOINT TO PERMIT CHANGING THE VALVE. THE PIPE SHALL EXTEND A MINIMUM OF TWELVE (12) INCHES INTO THE WET WELL BUT SHALL NOT INTERFERE WITH THE OPERATIONS OF THE STATION OR REMOVAL OF THE PUMPS.

VALVE VAULT: THE VALVE VAULT SHALL HOUSE THE VALVES, CHECK VALVES, AND BYPASS PUMPING CONNECTION FOR THE PUMP STATION. EACH PUMP SHALL HAVE A SWING CHECK VALVE AND GATE VALVE. THE EMERGENCY PUMP DISCHARGE LINE SHALL BE FOUR (4) INCHES IN DIAMETER AND HAVE A "FEMALE" NATIONAL EQUIPMENT CORP. 633F QUICKCOUPLER MEETING MIL-C-27487 OR APPROVED EQUAL. THE EMERGENCY PUMP DISCHARGE LINE SHALL ALSO HAVE A CHECK VALVE AND GATE VALVE. THE MAXIMUM DEPTH OF THE VALVE VAULT IS SEVEN (7) FEET. A PRESSURE GAUGE SHALL BE LOCATED ON THE UPSTREAM SIDE OF EACH SWING CHECK VALVE. THE PRESSURE GAUGE SHALL BE ASHCRAFT OR AMTEK, WITH AN ACCEPTABLE PRESSURE RANGE.



CONTROL PANEL DETAIL

-NOT TO SCALE-

CONNECTIONS: ALL PIPE WALL CONNECTIONS SHALL UTILIZE PSX MANHOLE BOOTS OR APPROVED EQUAL. ONCE THE WET WELL AND VALVE VAULT ARE TESTED AND APPROVED, ANGULAR SPACE SHALL BE FILLED WITH NON-SHRINK GROUT.

VENT: THE WET WELL SHALL BE PROVIDED WITH A FOUR (4) INCH GREEN CAP VENT OR APPROVED EQUAL. THE PIPE SHALL BE MADE OF EPOXY-COATED DUCTILE IRON, STAINLESS STEEL OR OTHER CORROSION RESISTANT MATERIAL. PVC AND BLACK IRON ARE NOT ACCEPTABLE.

TESTING: THE WET WELL AND VALVE VAULT SHALL BE TESTED PRIOR TO BACKFILLING AS FOLLOWS. THE VAULTS SHALL BE FILLED WITH WATER FOR TWENTY-FOUR (24) HOURS AND ANY VISIBLE LEAKS REPAIRED IMMEDIATELY. IF THE WATER LEVEL DROPS MORE THAN TWELVE (12) INCHES WITHIN TWENTY-FOUR (24) HOURS, THE STRUCTURE FAILS THE TEST AND THE CONTRACTOR SHALL MAKE THE NECESSARY REPAIRS TO PASS THE TEST.

BEDDING AND BACKFILL: THE WET WELL AND VALVE VAULTS SHALL BE BEDDED AND BACKFILLED IN ACCORDANCE WITH CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATIONS (CMS) REGARDING MANHOLES AND SPECIAL STRUCTURES.

GATE VALVES: GATE VALVES SHALL BE IN ACCORDANCE WITH VILLAGE OF ASHVILLE CONSTRUCTION MATERIALS AND SPECIFICATIONS.

SWING CHECK VALVES: CHECK VALVES SHALL HAVE EXTERIOR WEIGHTED ARMS AND CONFORM THE AWWA C 508. VALVES SHALL BE CAST IRON BODY WITH BRONZE MOUNTING, SINGLE-DISC, 175-PSI WORKING PRESSURE, CUSHIONED CLOSING TYPE. VALVE SHALL BE COATED IN ACCORDANCE WITH AWWA C-550. CHECK VALVES SHALL BE AIR CUSHIONED, HORIZONTAL SWING BOLTED BONNET, REMOVABLE SEAT AND DISC FLANGED FROM G.A. INDUSTRIES OR APPROVED EQUAL.

SUBMITTALS: BEFORE ANY CONSTRUCTION COMMENCES THE CONTRACTOR SHALL SUBMIT TO THE OWNER OR HIS REPRESENTATIVE FOR REVIEW, SHOP DRAWINGS FOR THE SERVICE ENTRACE EQUIPMENT, DISTRIBUTION PANELS, TRANSFORMERS, MOTOR STARTERS, CONTROL PANELS, TELEPHONE DIALERS, LIIGHTING FIXTURES, AND OTHER MAJOR EQUIPMENT ITEMS SPECIFIED HEREIN. SUBMITTAL SHALL CLEARLY IDENTIFY THE EQUIPMENT BEING FURNISHED. IN THE CASE OF STANDARD DRAWINGS, EXTRANEOUS DATA SHALL BE CROSSED OUT. THE CONTRACTOR SHALL ALSO INCLUDE WITH HIS SUBMITTALS DETAILED INFORMATION SHOWING THE PROPOSED CONSTRUCTION AND INCLUDE ENGINEERING DATA GERMAINE TO SAID INSTALLATION, INCLUDING BUT NOT LIMITED TO INCLUDE A COMPLETE SET OF DIMENSION DRAWINGS INCLUDING LOCATION OF PUMPS, PIPING, HATCHES, VALVES, AND OTHER ACCESSORIES.

PERMIT AND INSPECTION: THE CONTRACTOR IS REQUIRED TO OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS NECESSARY IN THE PROSECUTION OF THE CONTRACT. THE CONTRACTOR IS ALSO REQUIRED TO HOLD SUCH QUALIFICATION CERTIFICATES AND/OR LICENSES ISSUED BY THE STATE OF OHIO, DEPARTMENT OF INDUSTRIAL RELATIONS, OHIO CONSTRUCTION INDUSTRY EXAMINING BOARD, THE VILLAGE OF ASHVILLE, AND PICKAWAY COUNTY.

GUARANTEE: A TWENTY-FOUR (24) MONTH WARRANTY SHALL BE PROVIDED FOR THE PUMP STATION. THIS WARRANTY SHALL BEGIN ON THE DATE THE PUMP STATION IS ACCEPTED BY THE DISTRICT FOR OPERATION. THE WARRANTY SHALL COVER THE FOLLOWING:
1. ALL EQUIPMENT, PARTS, AND LABOR.
2. SITE MATERIALS, ROADWAYS, AND FENCES.
3. GROUND SUBSIDENCE AND SETTLEMENT OF VALVE VAULT AND WET WELL.

TOOLS AND SPARE PARTS: ALL SPECIAL TOOLS AND RECOMMENDED SPARE PARTS REQUIRED FOR NORMAL OPERATION AND MAINTENANCE SHALL BE SUPPLIED FOR EACH PIECE OF EQUIPMENT FURNISHED.

THE FOLLOWING SPARE PARTS SHALL BE FURNISHED AS A MINIMUM:
1. ONE (1) SET OF 1 UPPER AND 1 LOWER MECHANICAL SEALS AND A SEAL TOOL.
2. ONE (1) SET OF GASKETS, O-RINGS, GROMMETS, AND OTHER SEALING DEVICES.
3. ONE (1) ROTATING WEAR RING (IF SO EQUIPPED) OR A SPARE IMPELLER, AND ONE (1) STATIONARY WEAR RING (IF SO EQUIPPED) OR SPARE VOLUTE.
4. ONE (1) COMPLETE SET OF SPARE FUSES FOR ALL ELECTRICAL DEVICES.
5. FIVE (5) SPARE BULBS FOR EACH LAMP TYPE.
6. ONE (1) CONTROL RELAY OF EACH TYPE USED.
ALL SPARE PARTS SHALL BE DELIVERED TO THE OWNER PRIOR TO FINAL COMPLETION AND START OF THE WARRANTY PERIOD.

OPERATION AND MAINTENANCE MANUALS: FOUR (4) COMPLETE SETS OF INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS SHALL BE PROVIDED FOR ALL EQUIPMENT AND ELECTRICAL COMPONENTS. THE MANUALS SHALL BE PREPARED SPECIFICALLY FOR THE INSTALLATION TO WHICH THEY PERTAIN AND SHALL INCLUDE ALL AVAILABLE INSTALLATION MANUALS, OPERATION MANUALS, MAINTENANCE MANUALS, CATALOG CUTS, DRAWINGS, WIRING DIAGRAMS, EQUIPMENT AND PARTS LIST, LIST OF SPARE PARTS PROVIDED, WARRANTIES, PRODUCT DESCRIPTIONS, ETC. ALL FOUR (4) SETS OF MANUALS FOR MAJOR EQUIPMENT SHALL BE ORIGINAL MANUFACTURER'S MANUALS--COPIES WILL NOT BE ACCEPTABLE. ONLY ONE (1) SET OF ORIGINAL MANUFACTURER'S LITERATURE IS REQUIRED FOR MISCELLANEOUS COMPONENTS; COPIES OF THIS LITERATURE IS REQUIRED FOR MISCELLANEOUS COMPONENTS; COPIES OF THIS LITERATURE WILL BE ACCEPTABLE FOR THE OTHER THREE (3) O & M MANUALS. COPIES MUST ALSO BE PROVIDED ON A DISK IN PDF FORMAT.

RECORD DRAWINGS: THE RECORD DRAWINGS SHALL CONSIST OF THE CONTRACT DRAWINGS REVISED PER-AS-BUILT CONDITIONS AND THE APPROVED SHOP DRAWINGS. AS-BUILT REVISIONS TO THE CONTRACT DRAWINGS SHALL BE PROFESSIONALLY DRAFTED. THE RECORD DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT AND ON DISK (OR CD ROM) IN AUTOCADD FORMAT UPON COMPLETION OF THE CONSTRUCTION. THE RECORD DRAWINGS MUST CONSIST OF SIX (6) BOND COPIES; THREE (3) BEING OF 24" X 36" SIZE AND THREE (3) BEING OF 12" X 18" SIZE.

CONTRACT DRAWINGS SHALL BE LEGIBLY MARKED IN THE FIELD TO RECORD THE ACTUAL CONSTRUCTION PROCEDURES AND INSTALLATION METHODOLOGY INCLUDING;

1. ALL DEVIATIONS IN LOCATION OR ELEVATION OF ANY UNDERGROUND INSTALLATION FROM THAT SHOWN ON THE CONTRACT DRAWINGS.
2. ANY SIGNIFICANT CHANGES IN ABOVEGROUND INSTALLATION FROM THE APPROVED SHOP DRAWINGS OR CONTRACT DRAWINGS.
INDICATION OF DISTRICT'S APPROVAL OF ANY SUCH DEVIATIONS OR CHANGES FROM THE CONTRACT DRAWINGS OR APPROVED SHOP DRAWINGS.

CLEAN UP: AFTER CONSTUCTION HAS BEEN COMPLETED, THE CONTRACTOR SHALL CAUSE THE AREA AND ALL EQUIPMENT TO BE CLEANED. ALL PAINTED/COATED SURFACES, WHICH HAVE BEEN DAMAGED DURING THE COURSE OF CONSTRUCTION, SHALL BE TOUCHED UP AS DIRECTED BY THE SOUTHWEST LICKING COMMUNITY WATER AND SEWER DISTRICT. FINAL PAYMENT WILL NOT BE MADE UNTIL CLEAN UP HAS BEEN COMPLETED.

ELECTRICAL SPECIFICATIONS
COORDINATION WITH AMERICAN ELECTRIC POWER: 460 VOLT THREE PHASE SERVICE IS NOT CURRENETLY AVAILABLE ON SITE. HOWEVER, AT THE TIME THE PUMP STATION IS TO BE PLACED IN SERVICE, INFRASTRUCTURE IMPROVEMENTS BY AMERICAN ELECTRIC POWER WILL BE COMPLETE AND NECESSARY SERVICE WILL BE PROVIDED. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRIC SERVICE TO THE PUMP STATION AND THE TRANSFORMER PAD WITH MR. ROBIN HAND AT AMERICAN ELECTRIC POWER (PHONE NUMBER: 614 883-6839). COSTS ASSOCIATED WITH THE INSTALLATION OF THE ELECTRIC SERVICE AND TRANSFORMER PAD TO BE COORDINATED WITH THE DEVEPOR PRIOR TO THE START OF CONSTRUCTION RELATED TO THE INSTALLATION OF THE ELECTRIC SERVICE.

IF AN ABOVE GROUND SERVICE IS USED, THE NEW SERVICE POLE, AS A MINIMUM, SHALL BE A 30 FOOT LONG CLASS 5 OR LARGER AND PRESSURE TREATED WITH PENTACHLOROPHENOL. SAID POLE SHALL BE SET IN THE GROUND A MINIMUM OF FIVE FEET AND, IF NECESSARY, A POLE GUY ANCHOR SHALL BE PROVIDED TO OFFSET THE LATERAL FORCES GENERATED BY THE OVERHEAD SERVICE DOP. MINIMUM CLEARANCE BELOW THE OVERHEAD SERVICE DROP SHALL BE 18 FEET, AND IF NECESSARY TO MAINTAIN THIS MINIMUM CLEARANCE, A LARGER POLE SHALL BE PROVIDEDAT NO ADDITIONAL COST TO THE DEVELOPER.

THE SERVICE ENTRANCE EQUIPMENT, CONDUCTORS, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL ELECTRIC UTILITY COMPANY REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS NOT FURNISHED BY SAID UTILITY COMPANY.

ALL ELECTRICAL COMPONENTS SHALL MEET NEMA STANDARDS, AND SHALL COMPLY WITH NEC AND UL AS APPLICABLE TO CONSTRUCTION AND INSTALLATION OF WIRING AND COMPONENTS. THE ELECTRICAL SYSTEM INSIDE THE WET WELL SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE FOR HAZARDOUS LOCATIONS, CLASS I, DIVISION 1, GROUP D.

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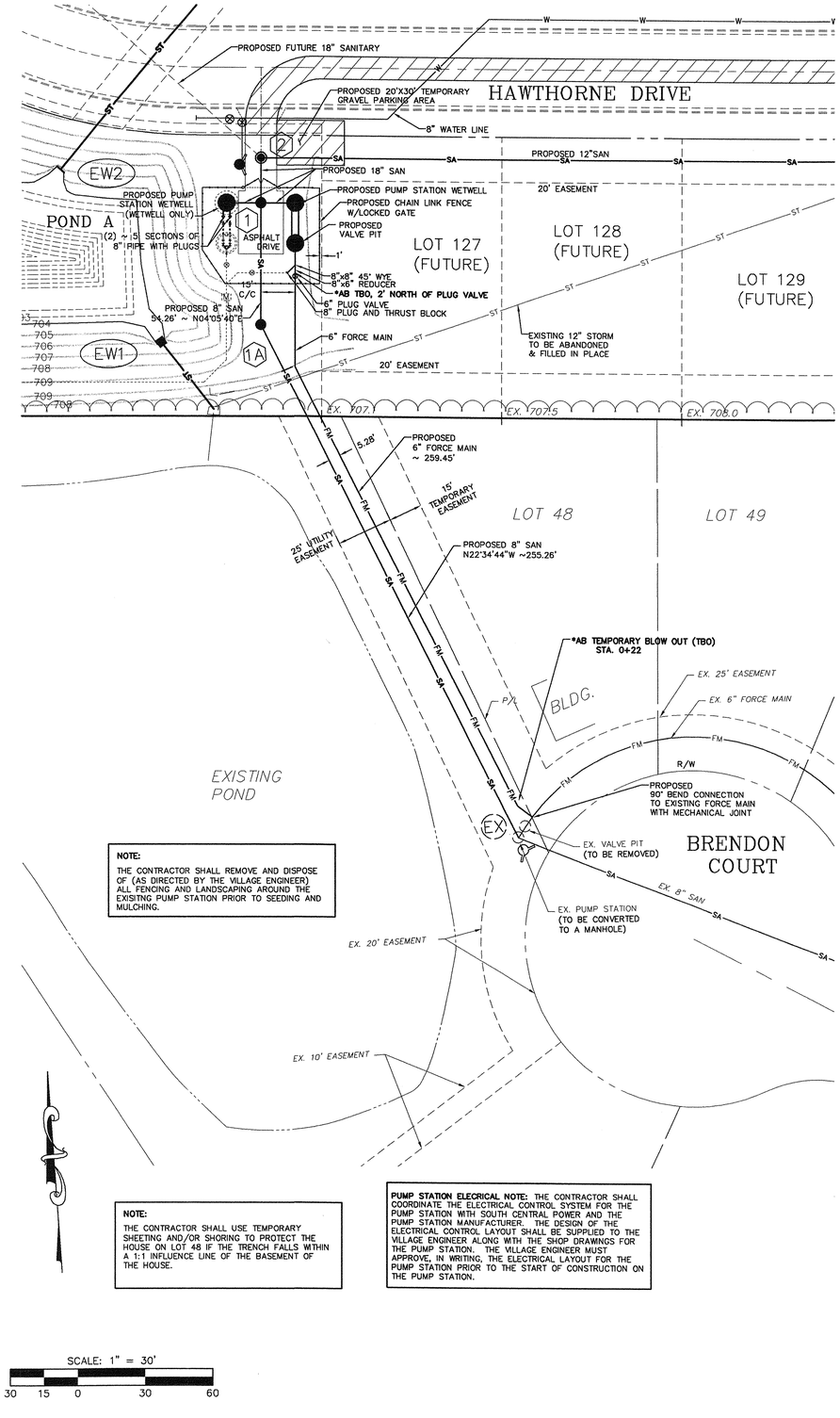
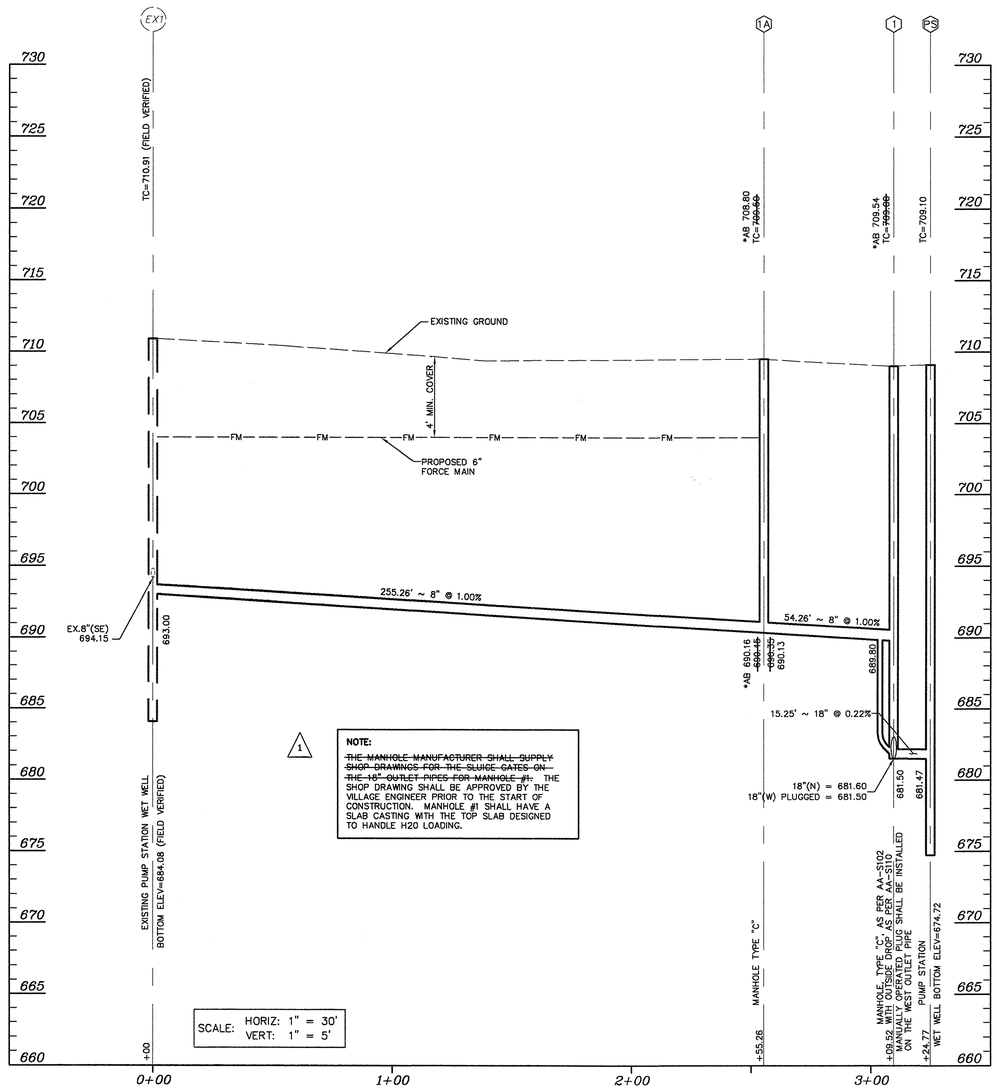


NOTE:
THE CONTRACTOR SHALL REMOVE AND DISPOSE OF (AS DIRECTED BY THE VILLAGE ENGINEER) ALL FENCING AND LANDSCAPING AROUND THE EXISTING PUMP STATION PRIOR TO SEEDING AND MULCHING.

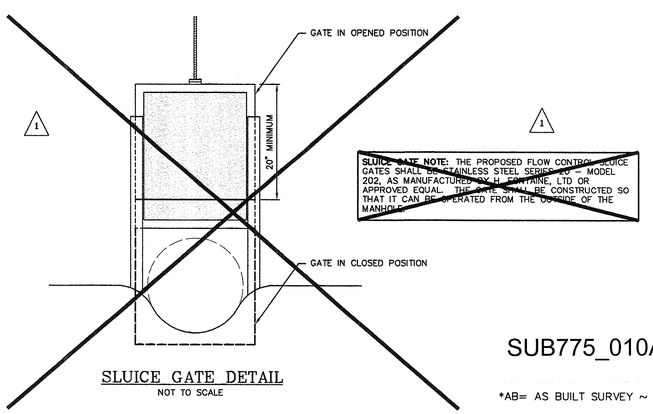
NOTE:
THE CONTRACTOR SHALL USE TEMPORARY SHEETING AND/OR SHORING TO PROTECT THE HOUSE ON LOT 48 IF THE TRENCH FALLS WITHIN A 1:1 INFLUENCE LINE OF THE BASEMENT OF THE HOUSE.

PUMP STATION ELECRICAL NOTE: THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL CONTROL SYSTEM FOR THE PUMP STATION WITH SOUTH CENTRAL POWER AND THE PUMP STATION MANUFACTURER. THE DESIGN OF THE ELECTRICAL CONTROL LAYOUT SHALL BE SUPPLIED TO THE VILLAGE ENGINEER ALONG WITH THE SHOP DRAWINGS FOR THE PUMP STATION. THE VILLAGE ENGINEER MUST APPROVE, IN WRITING, THE ELECTRICAL LAYOUT FOR THE PUMP STATION PRIOR TO THE START OF CONSTRUCTION ON THE PUMP STATION.



NOTE:
~~THE MANHOLE MANUFACTURER SHALL SUPPLY SHOP DRAWINGS FOR THE SLUICE GATES ON THE 18" OUTLET PIPES FOR MANHOLE #1.~~ THE SHOP DRAWING SHALL BE APPROVED BY THE VILLAGE ENGINEER PRIOR TO THE START OF CONSTRUCTION. MANHOLE #1 SHALL HAVE A SLAB CASTING WITH THE TOP SLAB DESIGNED TO HANDLE H20 LOADING.

NOTE:
THE 18" SANITARY SEWER PIPE BETWEEN MANHOLE #1 AND THE FUTURE WETWELL SHALL BE BULKHEADED ON BOTH ENDS AND FILLED WITH SAND AFTER DEFLECTION TESTING IS COMPLETED. THIS SEGMENT OF PIPE SHALL NOT BE OPENED OR MADE ACTIVE AT ANY TIME. THE USE OF THIS PIPE WILL REQUIRE OBTAINING A PERMIT-TO-INSTALL (PTI) FROM THE OHIO EPA BEFORE THE FUTURE WETWELL CAN BE HYDRAULICALLY CONNECTED TO THE SANITARY SEWER SYSTEM.



SLUICE GATE DETAIL
NOT TO SCALE

~~**SLUICE GATE NOTE:** THE PROPOSED FLOW CONTROL SLUICE GATES SHALL BE STAINLESS STEEL SERIES 40 - MODEL 202, AS MANUFACTURED BY A.Y. McDONALD, LTD OR APPROVED EQUAL. THE GATE SHALL BE CONSTRUCTED SO THAT IT CAN BE OPERATED FROM THE OUTSIDE OF THE MANHOLE.~~

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CONSTRUCTION SEQUENCE:

1. CORE EXISTING WET WELL AND INSTALL KOR-N-SEAL BOOT OR EQUAL.
2. CONSTRUCT MANHOLE #1 & #1A AND NEW WET WELLS.
3. CONSTRUCT 8" SANITARY FROM OLD WET WELL TO MANHOLE #1.
4. CONSTRUCT 18" SANITARY FROM MANHOLE #1 TO NEW WET WELL.
5. CONSTRUCT 6" FORCE MAIN FROM NEW PUMP STATION TO EXISTING FORCE MAIN.
6. PRIOR TO CONNECTING THE NEW FORCE MAIN TO THE EXISTING FORCE MAIN THE CONTRACTOR SHALL RECEIVE WRITTEN APPROVAL FROM THE VILLAGE OF ASHVILLE.
7. CONTRACTOR TO BYPASS PUMP FLOW INTO EXISTING PUMP STATION.
8. CONNECT THE NEW FORCE MAIN INTO THE EXISTING FORCE MAIN.
9. REMOVE ALL PUMPS AND APPURTENANCES FROM THE EXISTING PUMP STATION WET WELL.
10. WET WELL TO BE CLEANED AND BOTTOM TO BE FILLED WITH CONCRETE TO PROVIDE CHANNEL AND BENDS FOR 8" SANITARY SEWER. EXISTING WET WELL TOP SHALL BE REMOVED AND A CONCRETE SLAB WITH CONE SECTION AND WATERTIGHT BOLTED MANHOLE LID SHALL BE INSTALLED. TOP OF SLAB SHALL BE AT LEAST 18" UNDERGROUND AND MANHOLE CONE BROUGHT TO GRADE.
11. END BYPASS PUMPING.
12. CONTRACTOR SHALL REMOVE AND DISPOSE ALL PIPING AND VALVES IN VALVE PIT.
13. EXISTING VALVE PIT TOP AND SIDES TO BE REMOVED AND DISPOSED OF BY CONTRACTOR TO A POINT 3 FEET BELOW GRADE.
14. EXISTING VALVE PIT BOTTOM TO BE BROKEN, DRAIN TO WET WELL REMOVED, AND BACKFILLED WITH GRANULAR BACKFILL.
15. PUMP AND ELECTRICAL PANEL TO BE REMOVED AND DELIVERED TO VILLAGE OF ASHVILLE.
16. AREA AROUND EXISTING PUMP STATION SHALL BE GRADED TO DRAIN AND SEEDED AND MULCHED.

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SANITARY PUMP STATION PLAN & PROFILE
ASHTON CROSSING
SECTION I, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

REVISIONS
1 REVISED FUTURE WETWELL CONNECTION PER OHIO EPA REQUEST 12-30-2005

JOB NO.	1860
DRAWN BY	MJM
DESIGN BY	JSG
CHECKED BY	CMT

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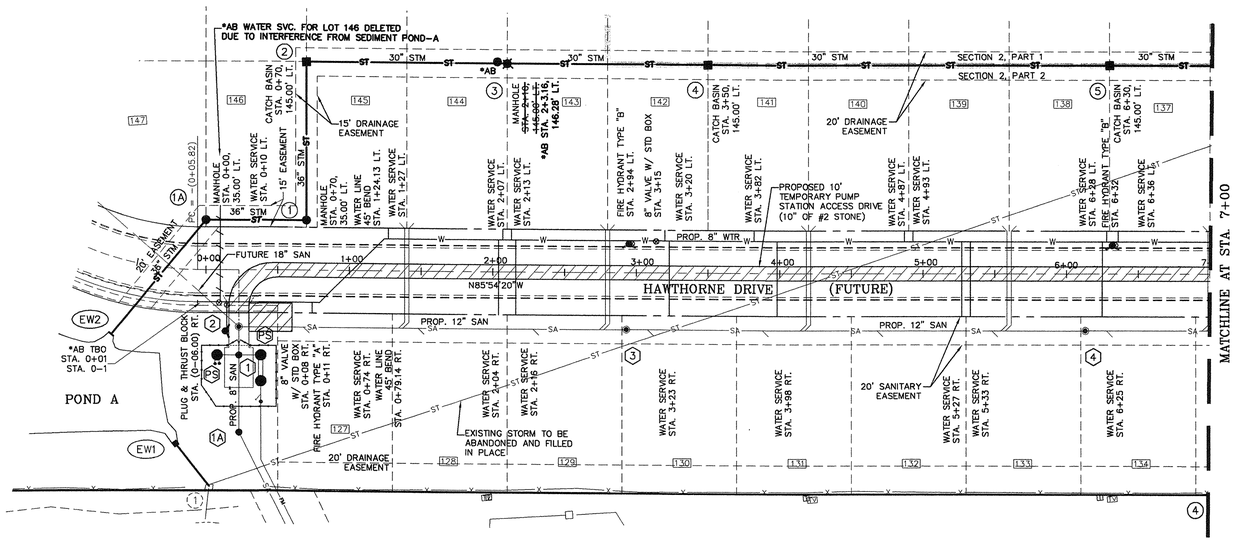
OF 30

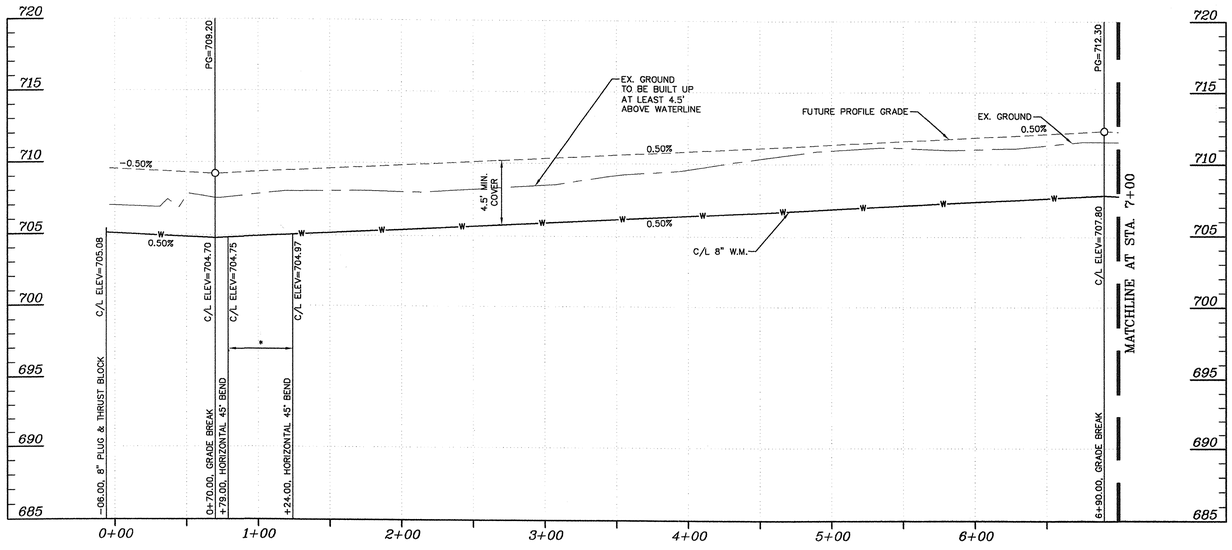


EASEMENT NOTE:
FOR EASEMENT USE, SIZE AND LOCATION REFER TO THE FINAL PLAT.

SIDEWALK NOTE:
ALL SIDEWALKS ALONG LONG STREET, STREET EXTENSIONS AND RESERVES ARE TO BE BUILT BY THE DEVELOPER AS SHOWN ON THE PLAN AND PROFILE SHEETS. ALL OTHER SIDEWALKS SHALL BE CONSTRUCTED ON A LOT-BY-LOT SCHEDULE BY THE HOMEBUILDER(S) AS EACH HOUSE IS BUILT.

* = COMPACTED GRANULAR BACKFILL AS PER ITEM 912 WITH 100% MAX. DENSITY AS A MINIMUM.

SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'



STORM STRUCTURE DATA TABLE		
STRUCTURE NUMBER	NORTHING	EASTING
EX1	N 629654.00	E 1839314.92
EW1	N 629685.31	E 1839293.74
EW2	N 629765.13	E 1839254.53
1	N 629835.54	E 1839395.97
1A	N 629840.53	E 1839326.15
2	N 629945.26	E 1839403.83
3	N 629935.26	E 1839543.47
4	N 629925.26	E 1839683.11
5	N 629905.27	E 1839962.40
6	N 629885.21	E 1840242.66
7	N 629868.14	E 1840481.07
8	N 629848.18	E 1840760.35
9	N 629876.31	E 1840893.94
10	N 630015.98	E 1840903.57
11	N 630007.20	E 1841030.76
12	N 630016.62	E 1841073.99
13	N 629966.80	E 1841070.55
14	N 629738.43	E 1840752.50
15	N 629736.21	E 1840867.48
16	N 629782.45	E 1840955.86
17	N 629619.38	E 1841119.55
18	N 629663.12	E 1841206.11
19	N 629683.25	E 1840877.33
20	N 629717.69	E 1840871.07
21	N 629758.42	E 1840473.22
22	N 629740.25	E 1840481.94
23	N 629705.34	E 1840479.45
24	N 629775.23	E 1840238.49
25	N 629765.41	E 1840235.08
26	N 629768.55	E 1840191.25
27	N 629718.95	E 1840184.69
28	N 629715.39	E 1840234.50
29	N 630529.65	E 1840538.03
30	N 630523.05	E 1840647.85
31	N 630383.37	E 1840638.22
32	N 630375.56	E 1840768.48
33	N 630374.12	E 1840797.46
34	N 630365.15	E 1840927.65
35	N 630357.59	E 1841037.39
36	N 630610.68	E 1841046.17
37	N 630685.56	E 1841225.39
38	N 630720.48	E 1841227.79
39	N 630743.24	E 1841080.78
40	N 630356.39	E 1841054.85
41	N 630351.43	E 1841089.59
42	N 630504.82	E 1840937.27
43	N 630749.40	E 1840557.54
44	N 630764.89	E 1840541.12
45	N 630807.58	E 1840539.12
46	N 630934.84	E 1840546.97
47	N 630920.08	E 1840786.51
48	N 630739.86	E 1840756.77
49	N 630749.84	E 1840786.75
50	N 630791.21	E 1840811.56
51	N 630747.65	E 1840830.64
52	N 630377.57	E 1840423.31
53	N 630355.67	E 1840442.32
54	N 630314.88	E 1840420.51
55	N 630176.28	E 1840504.13
56	N 630172.33	E 1840293.31
57	N 630182.32	E 1840153.67
58	N 630027.10	E 1840494.41
59	N 629998.17	E 1840492.34
60	N 630852.87	E 1838914.80
61	N 630843.86	E 1839060.86
62	N 630834.78	E 1839208.24
63	N 630822.29	E 1839419.60
64	N 630514.11	E 1839649.74
65	N 630489.16	E 1839998.85
EW3	N 630826.75	E 1838700.29
EW4	N 630826.75	E 1838730.29
EW5	N 630851.74	E 1838839.76
EW6	N 630703.96	E 1839412.55
EW7	N 630560.24	E 1839561.02
EW8	N 630553.14	E 1840117.73
EW9	N 630477.75	E 1840392.14
EW10	N 630537.88	E 1840418.31

SUB775_011A

*AB = AS BUILT SURVEY ~ 11-06

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PLAN AND PROFILE
ASHTON CROSSING
SECTION I, PART 1 & PART 2
VILLAGE OF ASHVILLE, OHIO

REVISIONS

JOB NO.	1860
DRAWN BY	MJM
DESIGN BY	JSG
CHECKED BY	CMT

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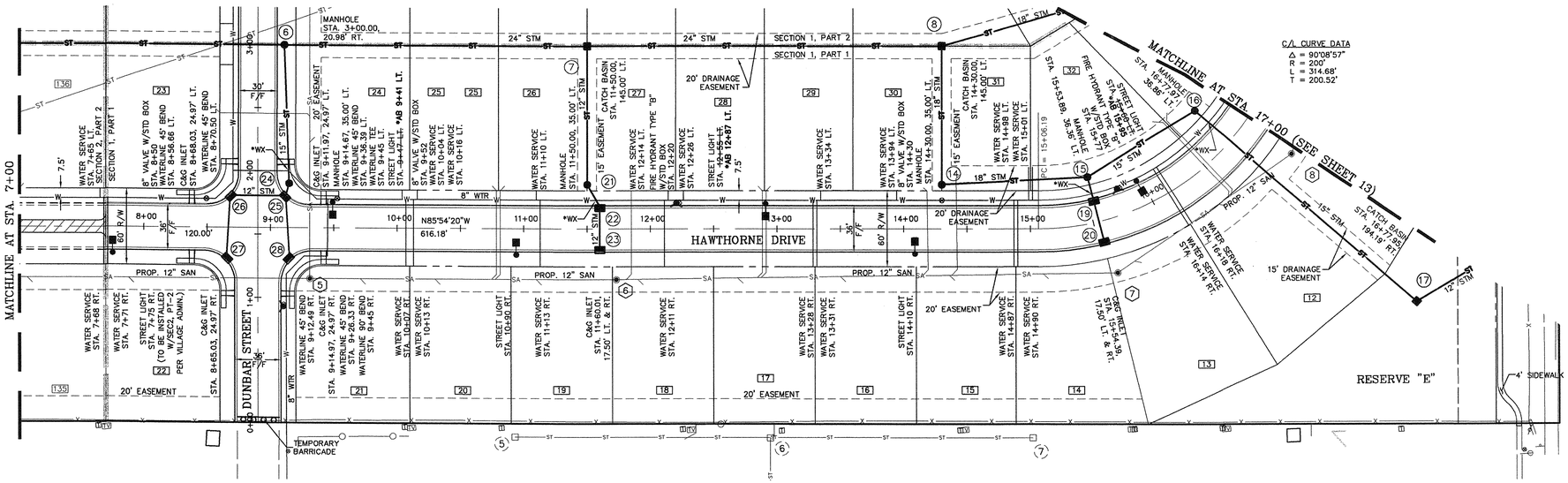

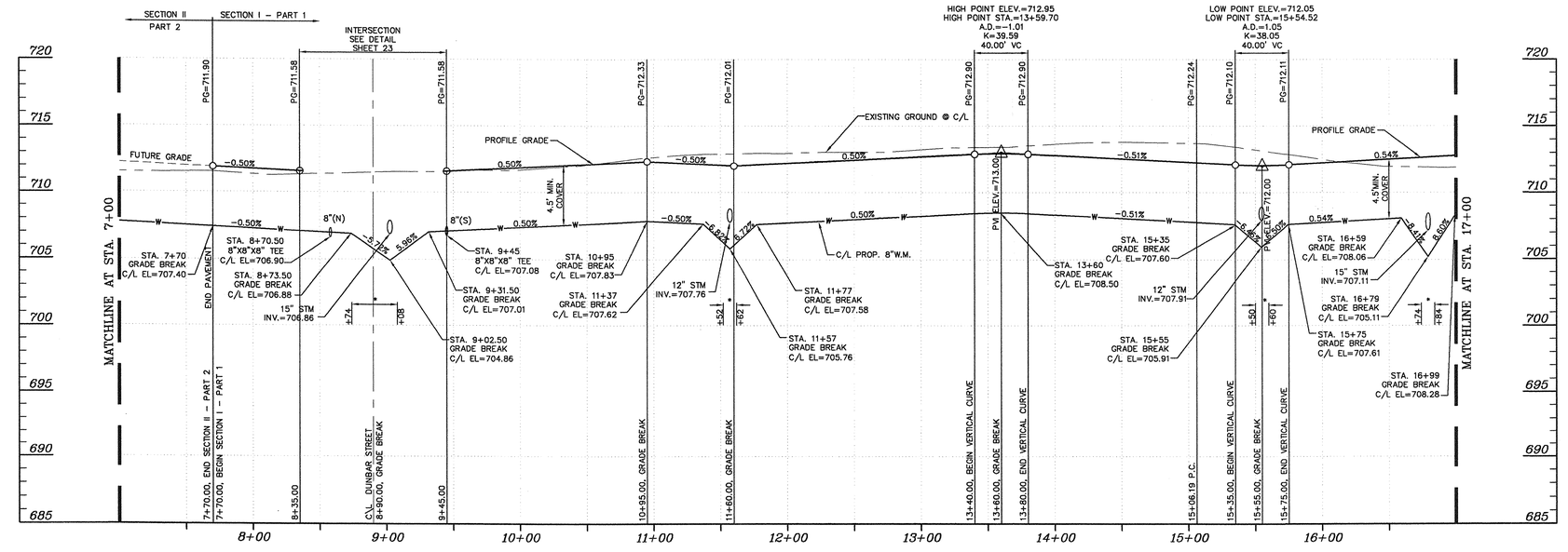

HAWTHORNE DRIVE

SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'

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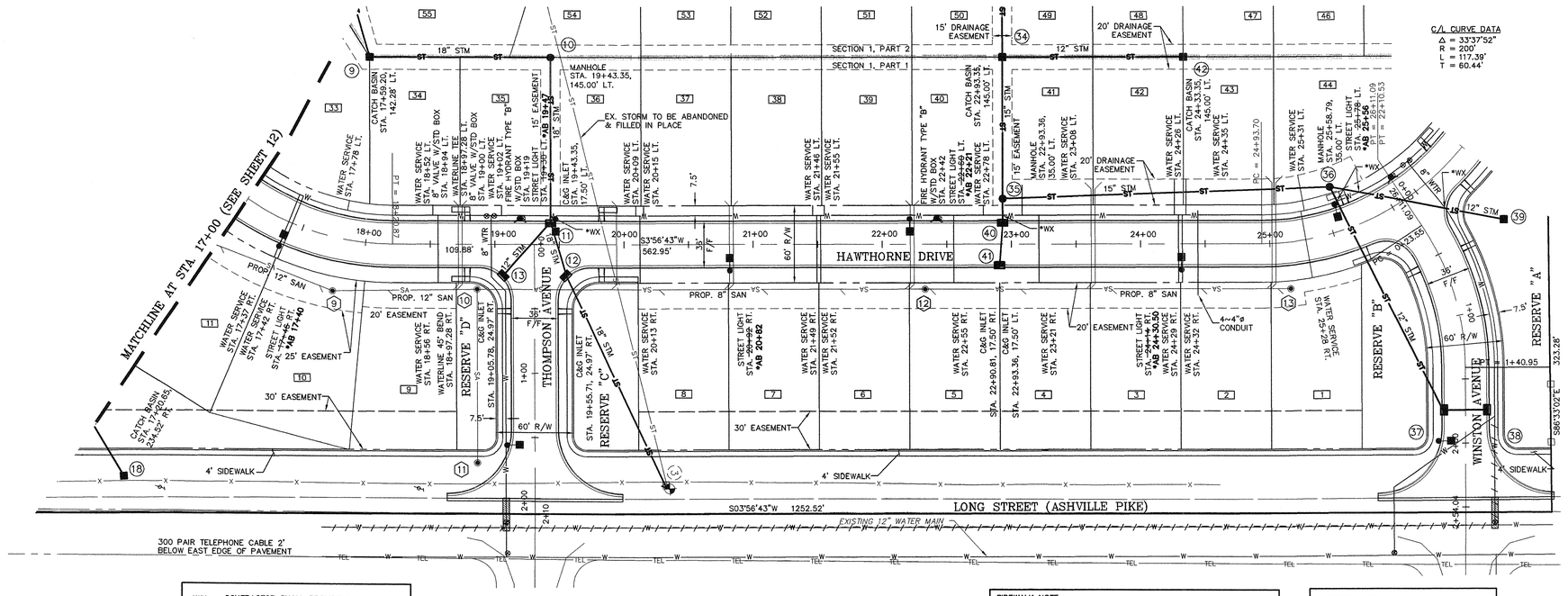

*WX = CONTRACTOR SHALL PROVIDE ITEM 912 COMPACTED GRANULAR BACKFILL AS SHOWN ON THE PLAN FOR WATER LINE CROSSING.

SIDEWALK NOTE:
ALL SIDEWALKS ALONG LONG STREET, STREET EXTENSIONS AND RESERVES ARE TO BE BUILT BY THE DEVELOPER AS SHOWN ON THE PLAN AND PROFILE SHEETS. ALL OTHER SIDEWALKS SHALL BE CONSTRUCTED ON A LOT-BY-LOT SCHEDULE BY THE HOMEBUILDER(S) AS EACH HOUSE IS BUILT.

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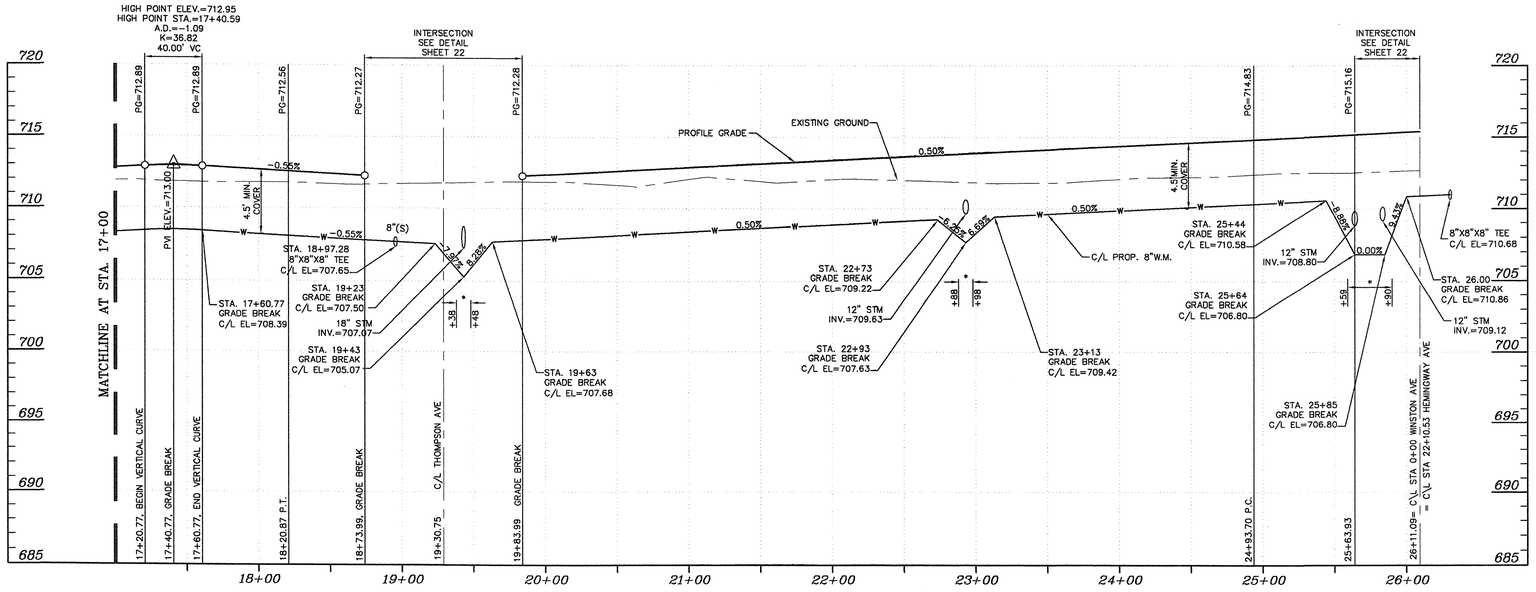

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SUB775_013A

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HAWTHORNE DRIVE

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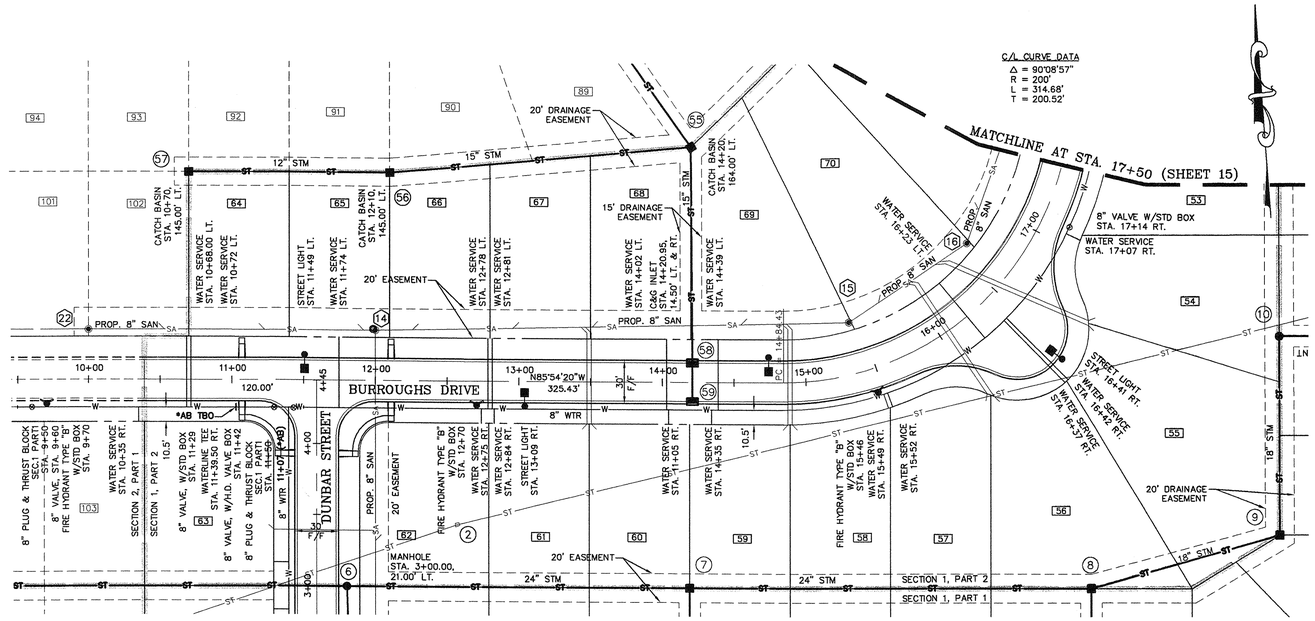

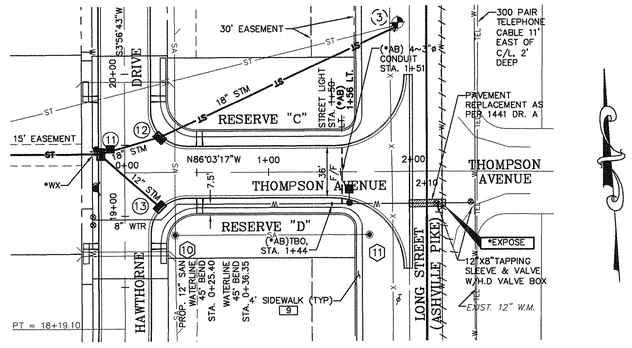

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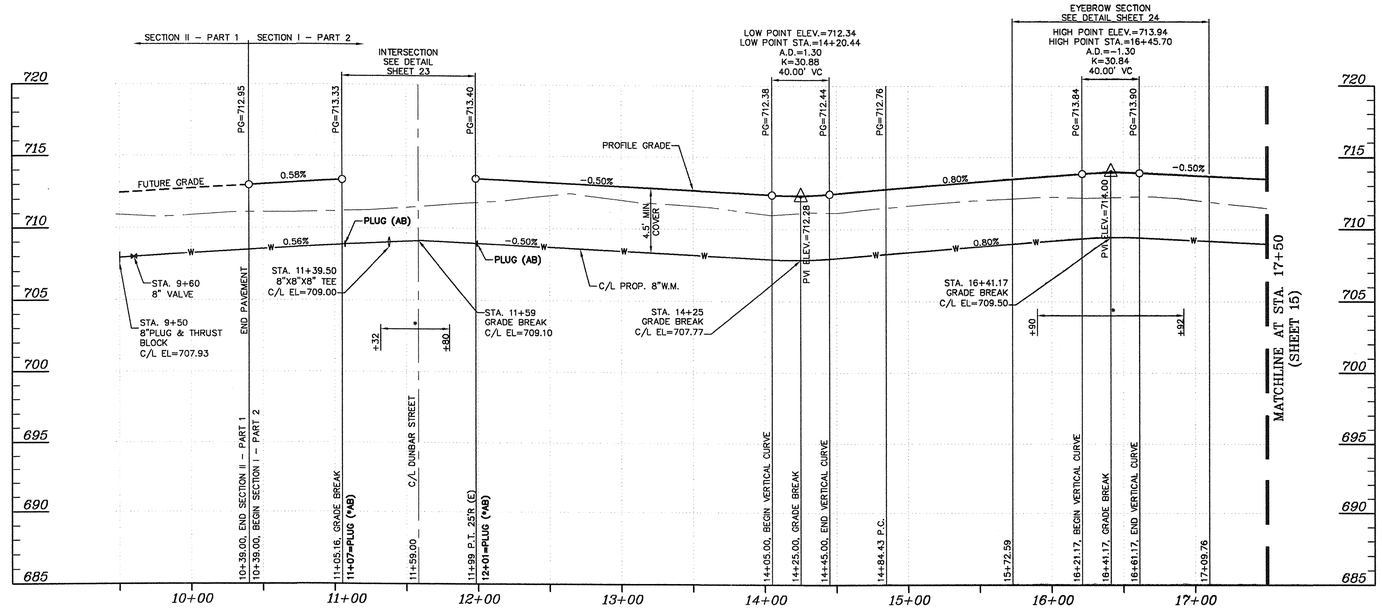
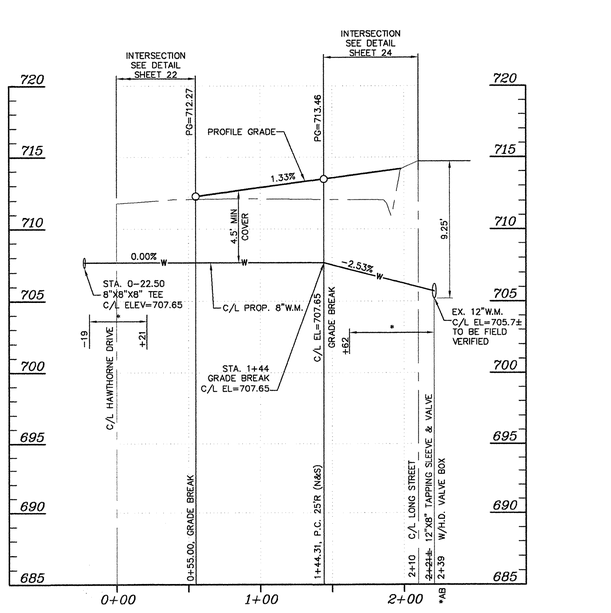
*EXPOSE = CONTRACTOR SHALL EXPOSE AND VERIFY ELEVATION WELL IN ADVANCE OF PIPE LAYING OPERATIONS TO PERMIT GRADE ADJUSTMENT AS NEEDED.

*WX = CONTRACTOR SHALL PROVIDE ITEM 912 COMPACTED GRANULAR BACKFILL AS SHOWN ON THE PLAN FOR WATER LINE CROSSING.



BURROUGHS DRIVE



THOMPSON AVENUE

SCALE: HORIZ: 1" = 50'
VERT: 1" = 5'

*AB = AS BUILT SURVEY ~ 11-06

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