ASHTON CROSSING

SECTION 2, PARTS 1 & 2

STREET, STORM SEWER AND WATER IMPROVEMENT PLAN

VILLAGE OF ASHVILLE, PICKAWAY COUNTY, OHIO

2017

NORTH

SCALE IN FEET

0 100 200

ENGINEER/SURVEY

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
250 OLD WILSON BRIDGE ROAD, SUITE 250
WORTHINGTON, OH 43085
CONTACT: CHAD J. BUCKLEY, P.E.
PHONE: (614) 540-6633

DEVELOPER/OWNER

MARONDA HOMES INC. OF OHIO
3966 BROWN PARK DRIVE, SUITE E
HILLIARD, OH 43026
CONTACT: MARK SCHEEL
PHONE: (614) 274-5775 X14
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PROJECT DESCRIPTION

PLAN DETAILS THE CONSTRUCTION OF AN 83 LOT SUBDIVISION ALONG WITH STORM SEWER, WATERLINE, AND ROADWAY IMPROVEMENTS.

BENCHMARKS

SOURCE BM:

BENCHMARK #1 FROM ASHTON CROSSING SECTION 1, PART 1 & 2 STREET, STORM SEWER, WATER LINE AND SANITARY IMPROVEMENT PLANS. EAST BOLT OF FIRE HYDRANT SOUTH OF ASHTON DRIVE ON THE WEST SIDE OF LONG STREET.

ELEV = 716.50' (NAVD 88)
ELEV = 715.96' (NGVD 29)

BM 1:
CHISELED "X" ON NORTH BOLT OF HYDRANT AT SW CORNER OF HEMINGWAY AVENUE AND BURROUGHS DRIVE INTERSECTION.

ELEV = 714.71' (NAVD 88)
ELEV = 715.25' (NGVD 29)

BM 2:
CHISELED "X" ON SW CORNER OF CONC RIM OF CATCH BASIN AT THE NE CORNER OF LOT 68 OF ASHTON CROSSING SUBDIVISION SECTION 1, PART 2.

ELEV = 709.80' (NAVD 88)
ELEV = 710.34' (NGVD 29)

BM 3:
CHISELED "X" ON THE NORTH RIM OF FIRST SANITARY MANHOLE OF DUNBAR STREET, NORTH SIDE OF BURROUGHS DRIVE.

ELEV = 713.66' (NAVD 88)
ELEV = 714.20' (NGVD 29)

BM 4:
CHISELED "X" ON THE NORTH BOLT OF A HYDRANT LOCATED WEST OF DUNBAR STREET, SOUTH SIDE OF HAWTHORNE DRIVE, AND BEING NORTH OF GATED AREA AND EAST OF POND "A" AS SHOWN IN SAID ASHTON CROSSING SECTION 1, PART 1 & 2 STREET, STORM SEWER, WATER LINE AND SANITARY IMPROVEMENT PLANS.

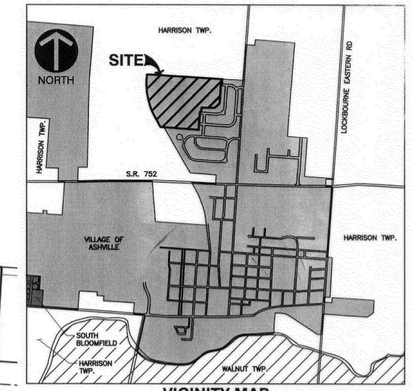
ELEV = 711.56' (NAVD 88)
ELEV = 712.10' (NGVD 29)

REFERENCES

EXISTING TOPOGRAPHIC INFORMATION IS BASED ON SURVEY PREFORMED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC IN JANUARY 2017.

INDEX MAP

SCALE: 1"=100'



VICINITY MAP

NOT TO SCALE

SHEET LIST INDEX

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23	C902	EROSION & SEDIMENT CONTROL DETAILS
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25	C607	SIGNING PLAN
26	C903	STORM SEWER TRIBUTARY MAP

STANDARD CONSTRUCTION DRAWINGS

CITY OF COLUMBUS

STORM				WATER			ROADWAY	SUPPLEMENTAL SPECS.
AA-S102	AA-S119	AA-S133A	AA-S151	L1001	L6311	L7002	2300	SS1100 02/01/17
AA-S106	AA-S120	AA-S139	AA-S168	L6306	L6312	L7401		SS1551 03/01/04
AA-S107	AA-S121	AA-S142		L6309A	L6409A	L9901		SS1630 11/13/09
AA-S112	AA-S125A	AA-S149		L6309B	L6640			
AA-S117	AA-S128	AA-S150		L6310	L7001			

THE STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS LISTED ABOVE SHALL BE CONSIDERED A PART OF THESE DRAWINGS.

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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: 20 Sept. 2017

VILLAGE ENGINEER, VILLAGE OF ASHVILLE — E-48206 — DATE: 19 Sept 2017

MAYOR, VILLAGE OF ASHVILLE — DATE: 05 OCT 17

VILLAGE ADMINISTRATOR, VILLAGE OF ASHVILLE — DATE: 10/1/2017

PLAN PREPARED BY:

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43085
Ph: 614.540.6633 - 888.598.6808 - Fax: 614.540.6638
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REGISTERED ENGINEER — NUMBER: 74383 — DATE: 9/15/17

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE
1	REVISED ESTIMATE OF QUANTITIES, ADDED CBU DETAIL, ADDED HANDICAP RAMPS, ADJUSTED UTILITY LOCATIONS SHEETS: 1, 4, 7, 8, 13, 21, & 24	CMT	27Apr18
2	REVISED GRADING ON THOREAU DRIVE AND PARKING DETAIL SHEETS: 1, 7, 13, 14, & 24	CMT	30May18

RECORD DRAWING: SECTION 1 PART 1 ONLY
- OCTOBER 2018

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

TITLE SHEET

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C000

SHEET 1 OF 26

P:\2016\164-591 - OAOO\Dwg\C01 Street Plan\164591-C000_Titlesheet.dwg[TITLE SHEET] LS:(9/14/2017 - mgsmith) - LP: 9/14/2017 5:34 PM

GENERAL NOTES

GEN 1 THE VILLAGE OF ASHVILLE REQUIREMENTS, TOGETHER WITH THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION AND THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION, SHALL GOVERN ALL CONSTRUCTION ITEMS, MATERIAL, WORKSMANSHIP, ECT THAT ARE A PART OF THIS PLAN, INFORCE ON THE DATE OF CONTRACT, UNLESS OTHERWISE NOTED. 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 REQUIREMENTS OF THE VILLAGE OF ASHVILLE GENERAL PROVISIONS AND THE STANDARD CITY OF COLUMBUS DETAIL CONSTRUCTION DRAWINGS. IF THERE ARE ANY DISCREPANCIES, THE VILLAGE OF ASHVILLE REQUIREMENTS SHALL GOVERN.

GEN 2 ANY MODIFICATION TO THE SPECIFICATIONS OR CHANGES TO WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE VILLAGE ENGINEER.

GEN 3 THE CONTRACTOR OR 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 OR SUBCONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR OR SUBCONTRACTOR SHALL ALSO ABIDE BY ALL ORDINANCES OF THE VILLAGE OF ASHVILLE, OHIO.

GEN 4 PRIOR TO BIDDING THE CONTRACTOR SHALL, BY PERSONAL EXAMINATION, SATISFY THEMSELVES AS TO THE LOCATION OF THE PROPOSED WORK AND TO ACQUAINT THEMSELVES THOROUGHLY WITH THE EXISTING CONDITIONS AND THE DIFFICULTIES THAT ARE LIKELY TO BE ENCOUNTERED IN THE PERFORMANCE OF THE PROPOSED WORK. THIS IS ESPECIALLY TRUE WITH REGARD TO ANY REMOVAL ITEMS.

GEN 5 ALL WORK SHALL BE COMPLETELY ACCEPTABLE TO THE VILLAGE OF ASHVILLE OFFICIALS. NO WORK SHALL BE COMMENCED UNTIL ARRANGEMENTS HAVE BEEN MADE WITH THE VILLAGE OF ASHVILLE ENGINEER FOR INSPECTION. NECESSARY LINE AND GRADE STAKING WILL BE PROVIDED BY THE DEVELOPER. CUT SHEETS SHALL BE SUBMITTED AND APPROVED BY THE VILLAGE PRIOR TO THE BEGINNING OF CONSTRUCTION.

GEN 6 PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS NECESSARY TO COORDINATE AND PROVIDE FULL-TIME INSPECTION SERVICE BY THE VILLAGE FOR THE PROPOSED WORK. COST OF INSPECTION SHALL BE PAID FOR BY THE DEVELOPER.

GEN 7 THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE VILLAGE OF ASHVILLE ENGINEERING DEPARTMENT AT LEAST SEVEN (7) DAYS PRIOR TO ANY CONSTRUCTION.

GEN 8 THE CONTRACTOR OR DEVELOPER SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND GOVERNMENT FEES, LICENSES, AND INSPECTIONS FOR THE PROPER EXECUTION AND COMPLETION OF THE IMPROVEMENTS SHOWN ON THE PLANS PRIOR TO CONSTRUCTION. ALL PERTINENT STANDARD CONSTRUCTION DRAWINGS ARE AVAILABLE UPON REQUEST OF THE OFFICE OF THE VILLAGE ENGINEER.

GEN 9 THE CONTRACTOR SHALL NOTIFY ALL OF THE AFFECTED PROPERTY OWNERS AT LEAST TWO (2) WEEKS PRIOR TO THE SCHEDULED COMMENCEMENT OF WORK ON THE JOB SITE. THIS LETTER SHALL STATE THE DATE CONSTRUCTION IS TO BEGIN AND THAT RESIDENT SHOULD REMOVE ANY ITEMS, EXAMPLE: SHRUBS, SPOT LIGHTS, FENCES, STONES OR BRICKS, ETC., WHICH MAY FALL WITHIN THE WORK LIMITS. THE LETTER SHOULD ALSO CONTAIN THE NAME AND A TWENTY-FOUR (24) HOUR PHONE NUMBER OF A CONTACT, FROM THE CONTRACTOR'S FIRM, WHO COULD BE CONTACTED IN CASE OF EMERGENCY. THIS LETTER, FOR CONVENIENCE PURPOSES, SHALL CONTAIN A PHONE NUMBER FOR ALL LOCAL LAW ENFORCEMENT AGENCIES AND FIRE SAFETY FORCES.

GEN 10 EXISTING UTILITIES SHOWN ARE FROM BEST AVAILABLE RECORDS AND FIELD INVESTIGATION, AND ARE NOT NECESSARILY COMPLETE OR EXACT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT OF THE PROPOSED CONSTRUCTION, AND SHALL MAKE ADJUSTMENTS IN ELEVATIONS AS DIRECTED BY THE VILLAGE ENGINEER TO PROVIDE SUFFICIENT CLEARANCE BETWEEN THE PROPOSED AND EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 THREE (3) WORKING DAYS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES AND ACCORDING TO 153.64, OHIO REVISED CODE (ORC) SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.

GEN 11 THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT AND DO SUBSCRIBE TO A REGISTERED UNDERGROUND UTILITY SERVICES:

VERIZON 500 LANCASTER PIKE CIRCLEVILLE, OH 43113 (740) 474-5033	TIME WARNER COMMUNICATIONS 1315 GRANVILLE PIKE LANCASTER, OHIO 43130 (740) 635-9685	* VILLAGE OF ASHVILLE SERVICE DEPARTMENT 160 CHERRY STREET, ASHVILLE, OHIO 43103 (740) 983-4053
COLUMBIA GAS TRANSMISSION 1440 MCNAUGHTON ROAD COLUMBUS, OH 43232	SBC 140 WEST WHEELING STREET LANCASTER, OHIO 43130 (740) 687-6696	(WATERLINE SANITARY SEWER & STORM SEWER ONLY) 200 EAST STATION STREET, ASHVILLE OHIO 43103 (740) 983-6367
SOUTH CENTRAL POWER COMPANY 2780 COONPATH ROAD, NE LANCASTER, OHIO 43130 (740) 653-4422	COLUMBIA GAS OF OHIO 843 PLATT AVENUE CHILLICOTHE, OHIO 45601 (740) 772-9224	
AMERICAN ELECTRIC POWER 1320 SUGAR GROVE ROAD LANCASTER, OHIO 43130 (740) 689-4700		

*THE VILLAGE OF ASHVILLE DOES NOT SUBSCRIBE TO A REGISTERED UNDERGROUND UTILITY SERVICE.

GEN 12 THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIES ON AS BEING EXACT OR COMPLETE. THE VILLAGE OF ASHVILLE AND/OR ENGINEER ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR DEPTHS OF THE UNDERGROUND FACILITIES AS SHOWN ON THE PLANS. THE CONTRACTOR MUST CALL APPROPRIATE UTILITY COMPANY AT LEAST SEVEN (7) DAYS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY FOR THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

GEN 13 THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.

GEN 14 WHERE POTENTIAL GRADE CONFLICTS MIGHT OCCUR WITH EXISTING UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO UNCOVER SUCH UTILITIES SUFFICIENTLY IN ADVANCE OF LAYING PIPE OR DUCT IN ORDER THAT THE ENGINEER MAY DETERMINE THE EXACT ELEVATION AND MAKE ANY NECESSARY ADJUSTMENTS. COST OF THE ABOVE SHALL BE INCLUDED IN THE PRICE BID FOR THE ITEMS IN THE CONTRACT.

GEN 15 ALL MATERIALS INCLUDING PIPING, APPURTENANCES, MANHOLES, GRAVEL, ETC. TO BE UTILIZED FOR DEDICATED PUBLIC UTILITIES OR ROADWAYS MUST BE APPROVED BY THE VILLAGE OF ASHVILLE ENGINEER.

GEN 16 ALL FIELD TILES BROKEN DURING EXCAVATION SHALL BE REPLACED BY THE CONTRACTOR TO ORIGINAL CONDITION OR CONNECTED TO THE CURB SUB DRAIN OR TO THE STORM SEWER SYSTEMS AS DIRECTED BY THE ENGINEER.

GEN 17 TWENTY-FOUR (24) HOUR ADVANCE NOTIFICATION IS REQUIRED FOR ALL WORK REQUIRING INSPECTION, TESTING, OR APPROVAL BY THE VILLAGE ENGINEER OR BUILDING DEPARTMENTS.

GEN 18 THE CONTRACTOR SHALL REPAIR OR REPLACE ANY AND ALL EXISTING WORK DAMAGED DURING OR DUE TO THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION PRIOR TO THE DAMAGE, AT THEIR OWN EXPENSE. ALL SAID WORK TO BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE DEVELOPER'S ENGINEER AND VILLAGE OF ASHVILLE ENGINEER. ANY DAMAGE TO OTHER UTILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE APPROPRIATE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.

GEN 19 CARE SHALL BE EXERCISED WHEN WORKING THE AREA AROUND EXISTING TREES AND SHRUBS. ANY TREES OR SHRUBS NOT MARKED FOR REMOVAL THAT ARE DAMAGED BY THE CONTRACTOR WILL HAVE TO BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.

GEN 20 ANY PROPERTY CORNER PINS OR PERMANENT SURVEY MARKERS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A REGISTERED SURVEYOR AT THE CONTRACTOR'S EXPENSE.

GEN 21 EXISTING STRUCTURES TO BE REMOVED OR DEMOLISHED REQUIRE A "DEMOLITION PERMIT" ISSUED BY THE VILLAGE OF ASHVILLE ENGINEER.

GEN 22 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING MAIL SERVICE IN THE CONSTRUCTION AREA.

GEN 23 THE CONTRACTOR SHALL NOT ORDER MATERIAL OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

GEN 24 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 IT SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS RELATED ITEMS.

GEN 25 ALL EXCAVATION ON THIS PROJECT IS UNCLASSIFIED. THE CONTRACTOR SHALL MAKE ALL EXCAVATION OF WHATEVER NATURE NECESSARY FOR CONSTRUCTION OF WATER LINES AND SEWERS AND THEIR APPURTENANT STRUCTURES INCLUDED IN THIS PROJECT.

GEN 26 APPROVALS OF CONSTRUCTION PLANS IS CONTINGENT ON ALL EASEMENTS REQUIRED FOR THE CONSTRUCTION OF THE WORK BEING SECURED AND SHOWN ON THE FINAL PLAT FOR RECORDING. NO WORK THAT REQUIRES AN EASEMENT WILL BE ALLOWED TO PROCEED UNTIL THIS HAS BEEN DONE.

GEN 27 TWENTY-FOUR (24) HOUR ADVANCE NOTIFICATION IS REQUIRED FOR ALL WORK REQUIRING INSPECTION, TESTING, OR APPROVAL BY THE VILLAGE ENGINEER OR BUILDING DEPARTMENTS.

GEN 28 THE CONTRACTOR IS RESPONSIBLE TO NOTIFY THE VILLAGE ENGINEER AND REQUEST A FINAL PUNCH-OUT INSPECTION OF THE SITE ONCE ALL OF THE ITEMS ON THE APPROVED DEVELOPMENT PLANS HAS BEEN COMPLETED.

GEN 29 THE CONTRACTOR SHALL SUFFICIENTLY EXPOSE EACH UTILITY OR STRUCTURE INDICATED ON THE PLANS IN ADVANCE OF EXCAVATING TO DETERMINE IF A GRADE CONFLICT OCCURS. LOCATIONS SHOWN ARE APPROXIMATE ONLY. OTHER UTILITIES NOT MARKED MAY ALSO REQUIRE EXPOSING.

GEN 30 THE DEVELOPER IS RESPONSIBLE FOR HAVING "AS-BUILT" CONSTRUCTION DRAWINGS SENT TO THE VILLAGE ENGINEER AFTER THE PROJECT HAS BEEN COMPLETED. THE PLANS MUST INCLUDE TOP-OF-CASTING AND FLOW-LINE ELEVATIONS FOR ALL SANITARY AND STORM STRUCTURES AND IDENTIFY ALL FIELD MODIFICATIONS TO THE APPROVED PLAN SET. THE "AS BUILT" DRAWINGS MUST ALSO INCLUDE STATE PLANE COORDINATES FOR ALL NEWLY CONSTRUCTED PUBLIC UTILITY STRUCTURES.

GEN 31 ACCESS TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

GEN 32 ALL SITE CLEARING SHALL BE PERFORMED BY THE OWNER AT HIS EXPENSE PRIOR TO CONSTRUCTION OF THIS PROJECT SUBJECT TO COMPLIANCE WITH THE VILLAGE OF ASHVILLE ZONING CODE.

GEN 33 ALL TREES, EITHER STANDING OR FALLEN, AND STUMPS WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING UNLESS DIRECTED OTHERWISE.

GEN 34 AT ALL UTILITY CROSSINGS, THE BACKFILL SHALL CONSIST OF COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH C.M.S.C. ITEM 912 BETWEEN THE DEEPER AND SHALLOWER PIPE. WHERE PROPOSED UTILITIES OR SERVICES CROSS PROPOSED OR EXISTING PAVEMENT AREAS, BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH C.M.S.C. ITEM 912 EXTENDING AT LEAST THREE (3) FEET BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT. THE COST IS TO BE INCLUDED IN THE PRICE BID FOR RELATED PIPE, C.M.S.C. ITEM 912 MAY BE SUBSTITUTED.

GEN 35 IN THE EVENT THAT IT BECOMES NECESSARY, THE VILLAGE OF ASHVILLE SHALL PERFORM WORK OF AN IMMEDIATE NATURE REQUIRED OF THE CONTRACTOR BY THIS CONTRACT BECAUSE OF THE FAILURE OR REFUSAL OF THE CONTRACTOR TO PERFORM-SUCH WORK, THE CONTRACTOR SHALL REIMBURSE THE VILLAGE OF ASHVILLE AT THE RATE OF 2.5 TIMES THE ACTUAL COST OF LABOR, MATERIALS AND EQUIPMENT NECESSARY TO PERFORM SUCH WORK. THE VILLAGE OF ASHVILLE SHALL BE REQUIRED TO NOTIFY OR ATTEMPT TO NOTIFY THE DESIGNATED REPRESENTATIVE OF THE CONTRACTOR OF THE NECESSITY TO PERFORM SUCH WORK. IN THE EVENT OF AN EMERGENCY, NO NOTIFICATION IS REQUIRED. IF THE CONTRACTOR REFUSES OR FAILS WITHIN A REASONABLE TIME TO PERFORM OR CAUSE THE PERFORMANCE OF SUCH WORK, THE VILLAGE OF ASHVILLE SHALL BE REIMBURSED BY THE CONTRACTOR IN THE AMOUNT PROVIDED HEREIN. REASONABLE TIME FOR ALL STREETS INVOLVED ON THIS CONTRACT IS ONE (1) HOUR FROM THE TIME OF NOTIFICATION BY THE VILLAGE OF ASHVILLE.

GEN 36 PRIOR TO THE 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 INDICATED THAT THE TRENCH BACKFILL DOES NOT MEET THE COMPACTION REQUIREMENTS OF 912.03 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, ALL BACKFILL MATERIAL SHALL BE REMOVED, REPLACED AND RE-TESTED UNTIL COMPACTION MEETS REQUIREMENTS OF 912.03.

GEN 37 ALL SIDEWALKS, CURB ROMPS, AND CURBS AND GUTTERS SHALL MEET FEDERAL A.D.A. (AMERICANS WITH DISABILITIES ACT) REQUIREMENTS, LATEST EDITION.

GEN 38 ANY EXISTING PAVEMENT REMOVED FOR SANITARY SEWER, STORM SEWER OR WATERLINE PLACEMENT SHALL BE BACKFILLED AND COMPACTED TO A MAXIMUM DENSITY OF 100X OR WITH. CONTROLLED DENSITY FILL (CDF), REFERENCE CITY OF COLUMBUS ITEM 912 OR 636. IF CDF IS USED ALL DUCTILE OR COST IRON PIPE IN CONTACT WITH CDF SHALL BE POLY-WRAPPED IN ACCORDANCE WITH C-7484 OR AWWA C-105.

GEN 39 ANY TUNNELING OR BORING OF ANY PIPELINES SHALL BE IN ACCORDANCE WITH PLANS APPROVED BY THE VILLAGE ENGINEER.

GEN 40 DURING THE CONSTRUCTION OF THE IMPROVEMENTS SHOWN ON THESE PLANS, SEDIMENTATION AND EROSION CONTROL SHALL BE CONTROLLED IN ACCORDANCE WITH APPLICABLE STATE AND FEDERAL REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH EPA STANDARDS WHERE NEEDED FOR THE DURATION OF THE PROJECT. ALL COSTS ASSOCIATED WITH SEDIMENTATION AND EROSION CONTROL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PIPE.

GEN 41 THE CONTRACTOR SHALL, PRIOR TO BIDDING, CAREFULLY STUDY THE GEOTECHNICAL REPORT, AS PROVIDED AS A PART OF THE BID DOCUMENTS, AND MAKE SITE VISITS TO SATISFY HIMSELF OF THE SITE CONDITIONS. THE CONTRACTOR SHALL, AS A PART OF HIS BID, SUBMIT A DETAILED DEWATERING PLAN THAT SHALL INCLUDE THE NUMBER AND SPACING OF WELL POINTS, THE SIZE OF PUMPS TO BE USED, THE POINTS OF DISCHARGE OF SAID DEWATERING PAVEMENTS AND ANY OTHER INFORMATION PERTINENT TO THE DEWATERING OF THE PROJECT. NO EXTRA PAYMENT SHALL BE MADE FOR DEWATERING. ALL COSTS FOR DEWATERING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ASSOCIATED ITEMS. BY SUBMITTING A BID THE CONTRACTOR IS STATING THAT HE CLEARLY UNDERSTANDS THE SCOPE OF THE DEWATERING FOR THE PROJECT AND HAS INCLUDED THIS WORK IN HIS UNIT PRICE BID FOR ASSOCIATED ITEMS.

GEN 42 THE CITY OF COLUMBUS STANDARD DRAWINGS SHALL GOVERN ALL PROJECTS UNLESS OTHERWISE NOTED.

GEN 43 THE CONTRACTOR SHALL CLEAN UP- ALL DEBRIS AND MATERIALS RESULTING FROM HIS OPERATIONS AND RESTORE ALL SURFACES, STRUCTURES, DITCHES, AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER.

GEN 44 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.

GEN 45 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.

GEN 46 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.

GEN 47 COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 IS REQUIRED OF ALL CONTRACTORS ON THIS PROJECT.

GEN 48 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.

GEN 49 THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIAL 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.

ROADWAY NOTES

RDW 1 ALL PAVEMENT SUB-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 203 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE SOILS REPORT AND AS DIRECTED BY THE GEOTECHNICAL SOILS ENGINEER PRESENT ON THE SITE. SECTION 203.12 SHALL BE MODIFIED SUCH THAT ALL COMPACTION SHALL BE TO ONE HUNDRED (100) PERCENT OF THE MAXIMUM DRY UNIT WEIGHT OBTAINED IN THE LABORATORY BY THE "STANDARD PROCTOR" COMPACTION TEST (ASTM D698). MOISTURE CONTENT OF THE NEW FILL SHALL BE IN RANGE OF + TWO (2) PERCENT OF THE OPTIMUM MOISTURE CONTENT DETERMINED BY AST D698.

RDW 2 PRIOR TO CONSTRUCTION OF THE STREETS, SOIL TESTS SHALL BE MADE ON ALL SANITARY SEWER AND DESIGNATED STORM SEWER TRENCHES WHICH CROSS 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.

RDW 2 ALL PAVEMENT JOINTS, PARTICULARLY WHERE A PROPOSED PAVEMENT ABUTS AN EXISTING PAVEMENT, AND ALL PAVEMENT JOINTS ABUTTING UTILITY STRUCTURES SUCH AS MANHOLES, CATCH BASINS, VALVE BOXES, ETC. SHALL BE SEALED IN ACCORDANCE WITH ITEM 413 TYPE (1) OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.

RDW 3 THE CONTRACTOR SHALL CONTACT THE COLUMBIA GAS OF OHIO, INC. OPERATIONS SUPERVISOR AT 614-818-2109 ONE (1) WEEK PRIOR TO ROADWAY CONSTRUCTION FOR THE DELIVERY OF PVC GAS SLEEVES OR COLUMBUS SOUTHERN POWER COMPANY ENGINEERING LIAISON COORDINATOR AT 614-464-7379 FOR ELECTRIC CONDUIT SLEEVES.

RDW 4 AT THE OPTION OF THE DEVELOPER OR THE VILLAGE, THE PLACEMENT OF THE FINAL WEARING COURSE OF ITEM 404 ASPHALT CONCRETE MAY BE DELAYED UNTIL SUCH TIME THAT THE MAJORITY OF THE RESIDENTIAL HOUSING CONSTRUCTION IN THE AREA IS COMPLETE OR WEATHER PERMITS.

RDW 5 WEARING COURSE OF ASPHALT CONCRETE IS TO MEET CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION ITEM 404 AND ADDITIONAL MIX DESIGN REQUIREMENTS OF THE VILLAGE OF ASHVILLE.

RDW 6 PAVEMENT CUTS FOR UTILITY LINE INSTALLATIONS ARE SUBJECT TO THE BACKFILL REQUIREMENTS OF ITEM 912 IN LIEU OF COMPACTED GRANULAR MATERIAL, FLOWABLE CONTROLLED DENSITY FILL, ITEM 636 TYPE-11 MAY BE USED. PAVEMENT SHALL BE CONSTRUCTED TO MATCH THE EXISTING SECTION OR NINE INCHES OF ITEM 404 ASPHALT CONCRETE, WHICHEVER IS GREATER. AS AN OPTION, THE CONCRETE BASE EXTENDING ONE (1) FOOT BEYOND EITHER EDGE OF THE EXCAVATION, WITH TWO (2) INCHES OF ITEM 404 ASPHALT WEARING COURSE PLACED ON TOP.

RDW 7 STEEL PLATES SHALL BE POSITIONED AND SECURED IN PLACE WITH STEEL SPIKES AND COLD PATCH ASPHALT MIX OVER ALL TRENCHES THAT ARE LEFT OPEN ON A TEMPORARY BASIS AND SUBJECT TO TRAFFIC.

RDW 8 VILLAGE STREETS ARE TO BE KEPT CLEAN AND FREE FROM MUD, STONE, DIRT, ETC. A TEMPORARY CONSTRUCTION ENTRANCE COMPRISED OF A 20'X 50' MAT OF NUMBER 2 STONE IS TO BE MAINTAINED AT ALL SITE ENTRANCES.

RDW 9 CONCRETE CURBS ARE TO BE BRANDED DURING PLACEMENT UTILIZING THE STANDARD BRAND SET PROVIDED BUY THE VILLAGE OF ASHVILLE ENGINEER. BRAND CURBS ARE AS FOLLOWS:

"S" – ON TOP OF CURB FOR SANITARY LATERAL LOCATIONS

"W" – ON FACE OF CURB FOR WATER SERVICE BOX LOCATIONS.

"WV" – ON FACE OF CURB FOR HYDRANT WATCH VALVE LOCATIONS.

"WM" – ON FACE OF CURB FOR WATER MAIN VALVE LOCATIONS.

BRANDS THAT ARE MISSED MUST BE MECHANICALLY GROUNDED INTO CURB AFTER THE CONCRETE IS SET.

RDW 10 THE COMBINATION CURB AND GUTTER SHALL BE PLACED CONTINUOUSLY. DRIVEWAY KNOCK DOWNS SHALL BE SAW-CUT AT THE TIME EACH INDIVIDUAL RESIDENT IS CONSTRUCTED.

RDW 11 MONUMENT BOXES SHALL BE INSTALLED AT INTERSECTIONS DESIGNATED ON THE PLAN. BOXES SHALL BE NEENAH R-1968, TYPE 36-8 OR EAST JORDAN IRON WORKS NUMBER 8371. MONUMENTS ARE TO BE SET IN A CONCRETE FILLED TWENTY-FOUR (24) INCH DIAMETER CORED HOLE, FLUSH WITH THE TOP OF THE PAVEMENT PER VILLAGE STANDARD.

RDW 12 ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE "OHIO MANUAL OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS" COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC, 25 SOUTH FRONT STREET, COLUMBUS, OHIO 43215.

RDW 13 LANE RESTRICTIONS OR CLOSURES REQUIRED DURING CONSTRUCTION MUST BE APPROVED BY THE VILLAGE OF ASHVILLE ENGINEER AND SERVICE DEPARTMENTS A MINIMUM OF TWO (2) WEEKS PRIOR TO ANY WORK BEING PERFORMED. OTHERWISE, TRAFFIC LANES SHALL BE FULLY OPEN TO TRAFFIC AT ALL TIMES AND INGRESS AND EGRESS SHALL BE MAINTAINED TO PUBLIC AND PRIVATE PROPERTY.

RDW 14 THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR THE PROVISION AND SCHEDULING OF PERSONNEL FOR CONCRETE, ASPHALT, AND SOILS TESTING PROCEDURES AS REQUIRED BY THE VILLAGE ENGINEER. TESTING IS TO BE PERFORMED BY REGISTERED TESTING PROCEDURES AS REQUIRED BY THE VILLAGE ENGINEER. TESTING IS TO BE PERFORMED BY A REGISTERED TESTING AGENCY THAT IS APPROVED BY THE VILLAGE ENGINEER.

RDW 15 THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR THE PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE PROVIDED WHETHER INSIDE OR OUTSIDE OF THE WORK LIMITS BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF TRAFFIC CONTROL SERVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS (CURRENT EDITION). COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, OFFICE OF TRAFFIC ENGINEERING.

RDW 16 THE TRACKING OF SPILLAGE OF MUD, DIRT OR DEBRIS UPON VILLAGE STREETS IS PROHIBITED AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR.

RDW 17 NO NON-RUBBER TIRE VEHICLE SHALL BE MOVED ON VILLAGE STREETS. EXCEPTIONS MAY BE GRANTED BY AN AUTHORIZED VILLAGE OFFICIAL WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE VILLAGE.

RDW 18 STEADY BURNING TYPE "C" LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS AND SIMILAR TRAFFIC DEVICES IN USE AT NIGHT. CONES ARE NOT PERMITTED TO BE USED FOR NIGHT WORK.

RDW 19 ALL TRAFFIC LANES SHALL BE FULLY OPEN TO TRAFFIC FROM 7:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 6:00 P.M., UNLESS OTHERWISE APPROVED BY THE VILLAGE. ONE LANE MAY BE CLOSED TO TRAFFIC DURING WORKING HOURS, DURING SANITARY SEWER BORING OPERATION.

GEN 38 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 ON THE JOB SITE PRIOR TO REMOVING THE EXISTING PAVEMENT. THE TEMPORARY PAVEMENT SHALL CONSIST OF 2 INCHES OF COMPACTED BITUMINOUS MATERIAL ITEM 301 CMSC PLACED UPON 6 INCHES OF COMPACTED ITEM 304, CMSC AGGREGATE BASE. TEMPORARY PAVEMENT SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT PAVEMENT IS INSTALLED.

RDW 20 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 24 HOURS PRIOR TO THE PLACING OF PERMANENT PAVEMENT MATERIALS. THE PERMANENT PAVEMENT MATERIALS AND WORKMANSHIP SHALL BE AT LEAST 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.

RDW 21 ALL TRENCHES IN THE ROADWAY SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.

RDW 22 IN THE EVENT EXCAVATION FOR THE STREET IS FROM ZERO (0) INCHES TO TWELVE (12) INCHES BELOW WHAT IS CALLED FOR ON THE PLANS THE CONTRACTOR SHALL REPLACE THIS EXCESS EXCAVATED MATERIAL AS DIRECTED BY THE GEOTECHNICAL ENGINEER. ITEM 310 OR 304 AS DIRECTED AND AT NO EXTRA COST TO THE OWNER.

RDW 23 WHERE NECESSARY TO DISTURB EXISTING PAVEMENT OR DRIVES, THE PAVEMENT SHALL BE SAW CUT IN NEAT, STRAIGHT LINES. THE DEPTH OF SAW CUT SHALL BE AT LEAST TWO (2) INCHES.

STORMWATER NOTES

STM 1 THE MINIMUM REQUIREMENTS FOR STORM SEWER PIPE WITH THE VILLAGE RIGHT-OF-WAY OR EASEMENTS SHALL BE REINFORCED CONCRETE PIPE ASTM C655 OR ASTM C76 AND NON-REINFORCED CONCRETE PIPE ASTM C14 OR CORRUGATED POLYETHYLENE SMOOTH LINES M-294, TYPES S, AS PER OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 707.

STM 2 FLEXIBLE STORM SEWERS ARE SUBJECT TO MANDREL TESTING AND/OR VIDEO INSPECTION AS DIRECTED BY THE VILLAGE ENGINEER. TESTING SHALL BE PERFORMED NO SOONER THAN THIRTY (30) DAYS AFTER THE PIPE TRENCH HAS BEEN BACKFILLED AND ALL ROADWAY AND SITE FILLS OVER THE STORM LINES HAVE BEEN CONSTRUCTED. MAXIMUM DEFLECTION SHALL NOT EXCEED 7.5% OF THE BASE INSIDE DIAMETER. COST OF TESTING SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

STM 3 ALL STORM MANHOLES SHALL BE MARKED WITH A 4"X4" X 10'-0" PRESSURE TREATED WOODEN POST PROJECTING 4'-0" ABOVE THE FINISHED GRADE AND WITH THE TOP 1'-0" PAINTED GREEN ON FOUR SIDES.

STM 4 THE COST OF ANY DEWATERING OPERATIONS REQUIRED FOR THE CONSTRUCTION OF THE STORM SEWER SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SEWER ITEMS.

STM 5 THE COST OF ANY ROCK EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR THE STORM SEWER. THE BIDDER SHALL DETERMINE IF ANY ROCK EXCAVATION WILL BE REQUIRED AND ADJUST THEIR BIDS ACCORDINGLY.

STM 6 THE FLOW IN ALL SEWERS, DRAINS, AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.

STM 7 ALL MAJOR FLOOD ROUTES AND DETENTION BASINS ARE TO BE SURVEYED BY A REGISTERED SURVEYOR TO VERIFY CONFORMANCE TO THE APPROVED GRADING PLAN. COST OF THIS WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

STM 8 EROSION CONTROL MEASURES ARE TO BE INSTALLED BY THE CONTRACTOR DURING CONSTRUCTION TO PROTECT CATCH BASINS AND CURB INLETS FROM SILT, MUD, AND DEBRIS.

STM 9 ALL DRAINAGE FLOOD ROUTES, SWALES, AND DITCHES ARE TO BE DESIGNED AND GRADED WITH A MINIMUM FLOW LINE GRADE OF TWO (2) PERCENT, AND A MAXIMUM SIDE SLOPE OF 4:1.

STM 10 ALL CATCH BASINS, MANHOLES, AND CURB INLETS SHALL HAVE CONCRETE CHANNELS POURED IN PLACE TO ASSURE POSITIVE DRAINAGE THROUGH THESE STRUCTURES.

STM 11 PUBLIC STORM SEWER MANHOLE LIDS ARE TO BE EAST JORDAN IRON WORKS NUMBER 1660 -A2 OR EQUIVALENT AND EMBOSSED "VILLAGE OF ASHVILLE STORM SEWER".

STM 12 STORM SEWER CURB INLETS ARE TO BE ADJUSTED WITHIN ¼" OF PLAN ELEVATION USING STEEL SHIMS.

STM 13 PRE-CAST RINGS ARE TO BE USED FOR ALL FINAL ADJUSTMENTS OF MANHOLE CASTINGS. STORM MANHOLE TOP OF CASTINGS SHOULD BE SET AT 1 - ½" ABOVE FINISHED GRADE.

STM 14 OPENINGS SHALL BE PROVIDED IN DRAINAGE STRUCTURES TO ACCOMMODATE UNDER DRAIN OUTLETS. UNDER DRAINS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH DETAILS GIVEN IN THE PLANS.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

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

GENERAL NOTES

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:	164-591	APPROVED BY:	CLL

DRAWING NO.: C001

SANITARY AND STORMWATER SEWER NOTES

STM/SAS 1 ROOF DRAINS. FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED ON THIS PROJECT.

STM/SAS 2 ALL SANITARY SEWERS CONSTRUCTED UNDER THIS PLAN SHALL MEET THE REQUIREMENTS OF THE VILLAGE OF ASHVILLE, UNLESS OTHERWISE NOTED.

STM/SAS 3 THE CONSTRUCTION OF NEW SANITARY SEWERS OR WATERLINES SHALL NOT BEGIN UNTIL THE VILLAGE RECEIVES AN APPROVED AND CURRENT OHIO ENVIRONMENTAL PROTECTION AGENCY PERMIT TO INSTALL (PTI), OR A LETTER OF ACCEPTANCE.

STM/SAS 4. THERE SHALL BE NO SANITARY SEWER INSTALLED IN REAR OR SIDE LOT EASEMENTS WITHOUT PRIOR WRITTEN APPROVAL FROM THE VILLAGE OF ASHVILLE WASTEWATER SUPERINTENDENT.

STM/SAS 5 THE MINIMUM REQUIREMENTS FOR SANITARY SEWER PIPE SHALL BE PVC SEWER PIPE ASTM D-3034, SDR 35 AND ASTM F-679.

STM/SAS 6 THE MINIMUM REQUIREMENT FOR STORM SEWER PIPE SHALL BE: 8" THROUGH 36" HIGH DENSITY POLYETHYLENE N-12 OR EQUAL HIGH DENSITY POLYETHYLENE PIPE WITH SMOOTH INTERIOR WAIL. STORM DRAINS LARGER THAN 36" SHALL MEET THE REQUIREMENTS OF AASHTO M-294-S. REINFORCED CONCRETE RCP MAY BE SPECIFIED BY THE ENGINEER WHEN THEY DEEM NECESSARY.

STM/SAS 7 ALL TRENCH BACKFILL SHALL BE COMPACTED BACKFILL AS PER CMSC ITEM 911. THE COST OF OIL COMPACTED BACKFILL SHALL BE INCLUDED IN THE PRICE BID FOR FURNISHING AND INSTALLING PIPE. THE CONTRACTOR IS HEREBY NOTIFIED THAT THE CMSC FOR ASHVILLE REQUIRES THE USE OF NUMBER 57 CRUSHED LIMESTONE ROUND GRAVEL FOR BEDDING OF SANITARY PIPE.

STM/SAS 8 IN ADDITION TO THE REQUIREMENTS OF CMSC ITEM 901.08 AS IT REFERS TO COMPACTED BACKFILL, THERE MAY BE AREAS ON THE PLANS WITH THE LIMITS INDICATED ON THE PROFILE VIEW OF THE SEWER AS "COMPACTED GRANULAR BACKFILL". THESE AREAS WILL BE COMPACTED TO MEET THE REQUIREMENTS OF CMSC ITEM 912.03. PAYMENT FOR THE COMPACTION OF BACKFILL WITHIN THESE AREAS SHALL BE INCLUDED IN THE PRICE BID FOR FURNISHING AND INSTALLING PIPE.

STM/SAS 9 ALL BEDDING OF SANITARY SEWER PIPE SHALL CONFORM TO THE TYPICAL TRENCH DETAIL.

STM/SAS 10 THE CONTRACTOR'S SPECIFIC ATTENTION IS DIRECTED TO THE REQUIREMENTS OF THE LEAKAGE TEST. ALL SANITARY SEWERS SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH 901.20 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS IS AN EXFILTRATION WATER TEST. AN AIR TEST IS PERMITTED AS DIRECTED BY THE VILLAGE OF ASHVILLE. AN INFILTRATION TEST MAY BE REQUIRED IN AREAS OF HIGH GROUNDWATER.

STM/SAS 11 PIPE FOR ALL SIX (6) INCH HOUSE SERVICES SHALL BE PVC SEWER PIPE, ASTM D-3034, SDR 35. ALL SERVICE EXTENSIONS SHALL BE LAID AT A MINIMUM GRADE OF TWO (2) PERCENT AND SHALL BE CONSTRUCTED AT THE TIME OF CONSTRUCTION OF THE MAIN SEWER, UNLESS OTHERWISE DIRECTED BY THE VILLAGE ENGINEER.

STM/SAS 12 CONNECTIONS BETWEEN EXISTING AND PROPOSED SERVICE LINES SHALL BE COMPLETED USING A FOUR (4) INCH OR SIX (6) INCH FERNCO, INC. DONUT OR BOOT.

STM/SAS 13 A WYE POLE MADE OF 4" BY 4" LUMBER SHALL BE FURNISHED AND PLACED AT ALL WYE BRANCHES AND AT THE END OF EXTENDED SERVICE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE SEWER ITEMS.

STM/SAS 14 ALL SANITARY SEWER LINES INSTALLED USING PVC PIPE WILL BE. SUBJECT TO DEFLECTION TESTING BY PULLING AN APPROVED MANDREL EQUAL IN DIAMETER TO 95% OF THE PIPE DIAMETER THROUGH THE PIPE NO LESS THAN (30) DAYS AFTER THE PIPE IS BACKFILLED.

STM/SAS 15 THE WYE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL BE FIELD LOCATED DURING CONSTRUCTION TO SERVE THE INDIVIDUAL STRUCTURES.

STM/SAS 16 MANHOLE COVERS FOR SANITARY SEWERS SHALL CONFORM TO VILLAGE OF ASHVILLE STANDARD DRAWINGS.

STM/SAS 17 MANHOLE TOPS SHALL BE BUILT OR SUBSEQUENTLY ADJUSTED TO MEET SURFACE GRADES ESTABLISHED FOR THE DEVELOPMENT. COST OF THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SEWER ITEMS.

STM/SAS 18 ALL SANITARY SEWER LINES SHALL END WITH MANHOLES.

STM/SAS 19 ALL NEW SANITARY SEWER AND STORM DRAIN MANHOLES INSTALLED IN THE VILLAGE OF ASHVILLE SANITARY SEWER AND STORM DRAIN SYSTEMS SHALL BE AS FOLLOWS:

A. PRE-CAST CONCRETE

B. FOUR (4) FOOT DIAMETER, MINIMUM

C. INSTALLED WITH FORMED CHANNELS

STM/SAS 20 ALL NEW SANITARY SEWER MANHOLES AND EXISTING SANITARY MANHOLES ADJUSTED TO GRADE SHALL BE CONSTRUCTED WITH CHIMNEY SEALS AND DISH IN ACCORDANCE WITH VILLAGE OF ASHVILLE SPECIFICATIONS.

STM/SAS 21 ALL NEW MANHOLES AND EXISTING MANHOLES ADJUSTED TO GRADE SHALL HAVE CONCRETE COLLARS.

STM/SAS 22 SANITARY SEWER MANHOLE CONNECTIONS: THE SANITARY SEWER PIPE TO MANHOLE CONNECTIONS SHALL BE OF A FLEXIBLE WATERTIGHT JOINT OF APPROVED MANUFACTURE. THE JOINT MAY BE OF THE FOLLOWING DESIGN (A) RUBBER SLEEVE WITH STAINLESS STEEL BANDING, (B) RUBBER GASKET COMPRESSION, OR (C) RUBBER GASKET EXPANSION.

STM/SAS 23 MANHOLE LOCATIONS: THE STATION AND OFFSET OF THE MANHOLES SHOWN ON THE PLANS ARE TO THE CENTER OF THE MANHOLE BASE.

STM/SAS 24 THE MAXIMUM TRENCH WIDTH SHALL NOT BE GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE PLUS TWO (2) FEET.

STM/SAS 25 THE CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES – DURING CONSTRUCTION METHODS FOR MAINTAINING

STM/SAS 26 ALL SANITARY SEWERS SHALL BE RECORDED IN DVD FORMAT AFTER CONSTRUCTION PRIOR TO ACCEPTANCE OF THE SEWERS BY THE VILLAGE OF ASHVILLE. THE DVD SHALL REMAIN THE PROPERTY OF THE VILLAGE OF ASHVILLE. THE DVD SHALL CLEARLY IDENTIFY THE LOCATION OF THE CAMERA WITHIN THE SEWER, DATE AND TIME OF THE DVD AND BE OF SUFFICIENT QUALITY TO DETERMINE THE CONDITIONS OF THE SANITARY SEWERS. AN ADDITIONAL DVD SHALL BE PERFORMED JUST PRIOR TO THE EXPIRATION OF THE ONE (1) YEAR WARRANTY PERIOD.

STM/SAS 27 THE MAXIMUM VELOCITY IN ANY NEW SANITARY SEWER SHALL NOT EXCEED TEN FEET PER SECOND (10 FPS).

STM/SAS 28 TESTING OF LATERAL CONNECTIONS SHALL BE ADHERED TO.

STM/SAS 29 THE CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN FLOWS IN THE EXISTING SEWER AT ALL TIMES – DURING CONSTRUCTION METHODS FOR MAINTAINING FLOWS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. AT NO TIME WILL SANITARY SEWAGE BE ALLOWED TO DISCHARGE TO ANY RIVER OR STREAM NOR SPILL OUT ON THE GROUND. APPROVAL OF PLANS BY THE ENGINEER TO MAINTAIN FLOWS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY TO ADEQUATELY PROVIDE FOR ALL FLOWS. THE CONTRACTOR SHALL BE AWARE THAT THE EXISTING SEWERS MAY BE OPERATING UNDER PRESSURE (HEAD) DURING TIMES OF RAINFALL: THEREFORE THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING ON THESE SEWERS. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE ITEM BID FOR FURNISHING AND INSTALLING PIPE.

STM/SAS 30 THE CONTRACTOR SHALL SUBMIT TO THE DESIGN ENGINEER AND THE VILLAGE ENGINEER FOR HIS OR HER REVIEW, FIVE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE SAID MATERIALS, STRUCTURES OR EQUIPMENT IS ORDERED. THE OWNER NOR VILLAGE BARE ANY RESPONSIBILITY TO ACCEPT ANY OF THE ABOVE MENTIONED ITEMS WITHOUT A COMPLETED REVIEW OF SAID SHOP DRAWINGS. SHOP DRAWINGS SHALL BE APPROVED BY THE DESIGN ENGINEER PRIOR TO SUBMITTAL TO THE VILLAGE ENGINEER. THESE DOCUMENTS SHALL BE BOUND AND INDEXED WITH NUMBERED SHEETS FOR EACH ITEM OR PAGES NUMBERED THROUGHOUT.

STM/SAS 31 THE MINIMUM CLEARANCE BETWEEN SANITARY AND WATER MAINS SHALL BE TEN (10) FEET HORIZONTAL OR ONE (1) FOOT SIX (6) INCHES VERTICAL OUTSIDE OF PIPE TO OUTSIDE OF PIPE.

WATER MAIN/LINE NOTES

WML 1 ALL WATERLINE SERVICE SADDLES SHALL BE DOUBLE BOLT STAINLESS STEEL STYLE 306 AS MANUFACTURED BY ROMAC, OR EQUAL.

WML 2 LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL WATER LINES, SERVICES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT HIS DETAILS AND METHODS OF SUPPORTING THE WATER LINES ACROSS THE SEWER TRENCH TO THE ENGINEER FOR APPROVAL BY THE WATER DEPARTMENT. SUPPORT METHOD AND DETAIL APPROVAL SHALL BE SECURED PRIOR TO THE COMMENCEMENT OF EXCAVATION OPERATIONS.

WML 3 WATER MAINS SHALL, WHERE POSSIBLE, BE DEFLECTED AROUND STRUCTURES WITHOUT THE USE OF SPECIAL FITTINGS AND WITHOUT EXCEEDING THE MANUFACTURER'S ALLOWABLE DEFLECTION.

WML 4 THE CONTRACTOR SHALL HAND SWAB ALL PIPE AND FITTINGS THAT ARE NOT OTHERWISE DISINFECTED. THE AMOUNT OF CHLORINE TO BE USED DURING HAND SWABBING OPERATIONS SHALL BE DETERMINED BY THE VILLAGE OF ASHVILLE, WATER DEPARTMENT.

WML 5 ANY TESTING PERFORMED AGAINST EXISTING VALVES SHALL BE DONE AT THE CONTRACTOR'S RISK AND IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE ENGINEER. IF SATISFACTORY TEST RESULTS CANNOT BE OBTAINED AGAINST AN EXISTING VALVE, THE NEW LINE SHALL BE DISCONNECTED FROM THE EXISTING LINE, PLUGGED AND RE-TESTED. DAMAGE CAUSED TO EXISTING LINES AND VALVES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

WML 6 ALL COST TO PLUG AND BLOCK THE ENDS OF WATER MAINS AT LOCATION SHOWN IN THE PLANS SHALL BE INCLUDED IN THE PRICE BID FOR PIPE.

WML 7 WATER SERVICE BOXES SHALL BE LOCATED 6" TO 12" FROM THE ROADWAY RIGHT-OF-WAY LINE, UNLESS OTHERWISE AUTHORIZED BY THE VILLAGE ENGINEER.

WML 8 A DETECTABLE UNDERGROUND UTILITY MARKING TAPE SHALL BE INSTALLED APPROXIMATELY 18" BELOW GRADE. THIS TAPE SHALL CONSIST OF A MINIMUM 5 MIL. OVERALL THICKNESS, WITH A SOLID ALUMINUM FOIL CORE, WITH, A 2 MIL. CLEAR FILM REVERSE PRINT LAMINATED TO AN ALUMINUM FOIL TO 2 MIL. CLEAR FILM, MAKING THE FILM PERMANENTLY PRINTED. COLOR CODE SHALL BE BLUE INDICATING WATER AND ASSOCIATED LINES. THE TAPE SHALL BE MANUFACTURED TO WITHSTAND ALKALINE, ACIDIC AND NEUTRAL SOIL CONDITIONS. ANY DIRECTIONAL BORED PIPE SHALL HAVE A NO. 6 BRAIDED WIRE, INSTALLED WITH THE PIPE. COST SHALL BE INCLUDED WITH THE PRICE OF PIPE. NO SEPARATE PAYMENT WILL BE MADE.

WML 9 THE CONTRACTOR SHALL SUBMIT TO THE VILLAGE ENGINEER FOR REVIEW, FIVE COPIES OF SHOP DRAWINGS FOR ALL MATERIALS, STRUCTURES, GRADATION CERTIFICATIONS AND EQUIPMENT BEFORE ANY OF THE SAID MATERIALS, STRUCTURES AND EQUIPMENT IS ORDERED. THE OWNER NOR THE VILLAGE OF ASHVILLE BEAR ANY RESPONSIBILITY TO ACCEPT ANY OF THE ABOVE-MENTIONED ITEMS WITHOUT A COMPLETE REVIEW OF SAID SHOP DRAWINGS. THE SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO SUBMISSION TO THE VILLAGE, THESE DOCUMENTS SHALL BE BOUND INTO A FOLDER WITH EITHER AN INDEX WITH # OF SHEETS FOR EACH ITEM OR PAGES IDENTIFIED THROUGHOUT.

WML 10 ALL WATER PIPES AND FITTINGS, AND METHODS OF CONSTRUCTION AND WORKMANSHIP FOR WATER LINES AND APPURTENANCES SHOWN IN THESE PLANS SHOULD 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.

WML 11 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.

WML 12 WATER MAINS SHALL BE DUCTILE IRON PIPE DESIGNED IN ACCORDANCE WITH THE LATEST REVISIONS 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 OR SAFETY ON THE SUM OF WORKING PRESSURE PLUS SURGE PRESSURE.

WML 13 WATER MAINS SHALL BE DUCTILE IRON PIPE, CLASS 52 (AWWA C151) WITH CEMENT MORTAR LINING AND SEAL COATING (AWWAC104) IN ACCORDANCE WITH VILLAGE SPECIFICATIONS. JOINTS SHALL BE RUBBER GASKET PUSH-ON MECHANICAL (AWWA C111). WATER MAIN FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND SEAL COATING WITH MECHANICAL JOINTS AND SHALL CONFORM TO AWWA C153.

WML 14 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 MANUFACTURED.

WML 15 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.

WML 16 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.

WML 17 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 MAY BE USED ONLY WHEN APPROVED BY THE VILLAGE OF ASHVILLE.

WML 18 ALL PIPING TWO (2") INCHES OR LESS IN DIAMETER BETWEEN THE WATER MAIN AND THE CONTROL VALVE OR THE 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 AAWA APPROVED COMPRESSION TYPE JOINTS. IN GENERAL, THERE WILL BE NO FITTINGS PERMITTED BETWEEN THE WATER MAIN CONNECTION AND THE CONTROL VALVE.

WML 19 DEAD END WATER LINES SHALL TERMINATE WITH A FIRE HYDRANT AND A WATCH VALVE OR TWO ¾ INCH WATER SERVICE FOLLOWED BY SUFFICIENT LENGTH OF WATER LINE TO RESTRAIN THE VALVE AND SHALL BE FOLLOWED BY A MAIN LINE VALVE AND AN ADDITIONAL SECTION OF WATER LINED PLUGGED AND BLOCKED PER THE "STANDARD DRAWINGS".

WML 20 WATERLINES SHALL BE INSTALLED WITH A MINIMUM OF FOUR (4) FEET OF COVER MEASURED FOR THE FINISHED GRADE TO THE TOP OF THE WATER MAIN.

WML 21 ALL MAIN LINE VALVES, HYDRANT WATCH VALVES, CURB BOXES AND DEAD END LINES ARE TO BE MARKED WITH A 4"X4" 8'-0" OR 10'-0" PRESSURE TREATED WOOD POST WITH 4'-0" PROJECTING ABOVE THE FINISH GRADE AND THE TOP 1'-0" POINTED BLUE ON ALL FOUR (4) SIDES.

WML 22 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HORIZONTAL AND VERTICAL DEFLECTIONS OR BENDS OF THE WATER LINES IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. DEFLECT WATER LINES TO PROVIDE 1'-6" VERTICAL AND 10'-0" HORIZONTAL CLEARANCE FROM SANITARY AND STORM SEWERS.

WML 23 IF THERE ARE ANY CONFLICTS IN GRADE BETWEEN WATER LINES AND GRAVITY SEWERS, THE WATER LINES SHALL BE LOWERED DURING CONSTRUCTION. CLEARANCES STATED MUST BE MAINTAINED.

WML 24 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.

WML 25 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.

WML 26 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 POINTED RED WITH TWO COATS OF RUST INHIBITIVE PAINT. PUBLIC FIRE HYDRANTS ARE TO BE PAINTED WITH TWO COATS OF FEDERAL SAFETY RED, SHERWIN WILLIAMS B54Y37 PER VILLAGE OF ASHVILLE 1507.08(A)(1). PRIVATE FIRE HYDRANTS ARE TO BE PAINTED FEDERAL SAFETY RED AND WHITE CAPS AND BONNETS PER VILLAGE OF ASHVILLE 1507.14(B)(4). HYDRANTS PLACES IN A FACTORY LOOPED SYSTEM SHALL BE PAINTED ALL FEDERAL SAFETY RED.

WML 27 TAPPING SLEEVES ARE TO BE FORD METER BOX STYLE FTSS ALL STAINLESS STEEL OR JCM 432 ALL STAINLESS STEEL.

WML 28 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 ANSI / AWWA C509.

WML 29 VALVE BOXES ARE TO BE TYLER 6500 SCREW TYPE FOR MAIN AND WATCH VALVES WITH FORD F-1000 CORPORATION STOPS, AND TYLER 94E CURB BOXES. VALVE BOXES ARE TO BE HEAVY DUTY IF LOCATED IN PAVED AREAS. CONTROL VALVES SHALL BE FORD Z44-333 VALVES.

WML 30 WATER MAIN CLEANING AND FLUSHING SHALL CONFORM TO ITEM 801.11 CMSC.

WML 31 HYDROSTATIC TESTS (AS REQUIRED IN SECTION 5 OF A.W.W.A C600) SHALL CONFORM TO ITEM 801.12 CMSC. 33. CHLORINATING OF COMPLETED PIPE LINE SHALL CONFORM TO ITEM 801.13 CMSC.

WML 32 FOR WATER SERVICE TAPS, WATER MAIN CONNECTION SHALL BE MADE USING FORD F-1000 CORPORATION STOPS. CONTROL VALVES SHALL BE FORD Z44-333 VALVES.

WML 33 WATER SERVICE BOXES ARE TO BE LOCATED IN PAIRS ALONG PROPERTY LINES. 8"-0"APART AND 2'-0" OUTSIDE OF THE RIGHT-OF-WAY LINE, WHENEVER PRACTICAL.

WML 34 ALL WATER LINES SHALL BE TESTED (AWWA 600) AND STERILIZED (AWWA C651) BY THE CONTRACTOR IN ACCORDANCE WITH THE VILLAGE OF ASHVILLE AND AWWA SPECIFICATIONS. TESTING SHALL BE DONE UNDER THE SUPERVISION OF THE VILLAGE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.

WML 35 IT IS THE POLICY OF THE VILLAGE OF ASHVILLE THAT THE DESIGN OF THE WATER DISTRIBUTION SYSTEM IMPROVEMENTS BE SUCH THAT THE WORKING PRESSURE SHOULD NOT BE LESS THAN THIRTY-FIVE (35) POUNDS PER SQUARE INCH (PSI) DURING PEAK FLOW CONDITIONS, OR MINIMUM OF TWENTY (20) PSI DURING PEAK FLOW PLUS FIRE FLOW CONDITIONS. INDIVIDUAL BOOSTER PUMPS FOR THE PURPOSE OF RAISING SUPPLY LINE PRESSURE SHALL NOT BE PERMITTED FOR NON-SINGLE FAMILY RESIDENTIAL APPLICATION.

WML 36 THE METER PIT FOR SINGLE-FAMILY RESIDENTIAL APPLICATION, INCLUDING ALL PIPING, FITTINGS, EQUIPMENT, AND APPURTENANCES ARE SUBJECT TO APPROVAL BY THE VILLAGE OF ASHVILLE PRIOR TO INSTALLATION. METER PITS UNABLE TO BE PROVIDED WITH A GRAVITY FLOOR DRAIN MUST BE INSTALLED IN A DEDICATED METER ROOM. GRAVITY DRAWS SHALL HAVE A BACKFLOW PREVENTION INSTALLED.

WML 37 THE PRESSURE REQUIRED TO PERFORM HYDROSTATIC TESTING ON WATER LINES MUST BE 150 PSI FOR DOMESTIC LINES AND 200 PSI FOR FIRE SUPPRESSION LINES (PER NFPA 13). HYDROSTATIC TESTS (AS REQUIRED IN SECTION 5 OF AWWA C 600) SHALL CONFORM TO ITEM 801.12 CMSC.

WML 38 CHLORINATION OF COMPLETED PIPELINE SHALL CONFORM TO ITEM 801.13 CMSC.GE OF ASHVILLE WATER DEPARTMENT FORTY-EIGHT.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

CEC
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614-540-6633 · 888-598-6808
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ASHTON CROSSING
SECTION 2, PART 1 & 2
VILLAGE OF ASHVILLE, OHIO

GENERAL NOTES

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C002

SHEET 3 OF 26

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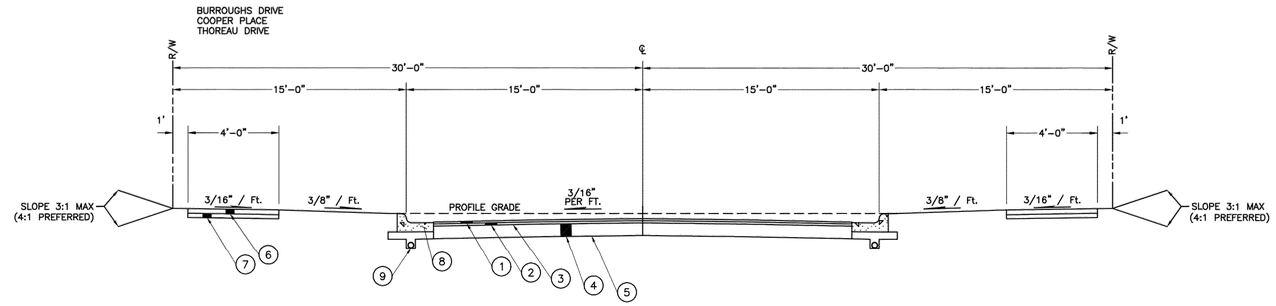
ESTIMATE OF QUANTITIES

ITEM	PART 1	PART 2	TOTAL	UNIT	DESCRIPTION
					STREET
201	LS	LS	LS	LS	CLEARING AND GRUBBING
203	5,300	1,600	6,900	CY	EXCAVATION (R/W)
203	1,500	3,500	5,000	CY	EMBANKMENT (R/W)
204	8,080	7,040	15,120	SY	SUBGRADE COMPACTION
304	40	21	61	CY	4" AGGREGATE BASE (CONCRETE WALK)
304	1,974	1,736	3,710	CY	10" AGGREGATE BASE
408	2,489	2,188	4,677	GAL	PRIME COAT (0.35 GAL/SY)
448	247	217	464	CY	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1
448	395	347	742	CY	2" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2
605	4,380	3,530	7,910	LF	4" PIPE UNDERDRAIN
608	3,200	1,700	4,900	SF	4' CONCRETE WALK (AS PER STD DWG 2300) (BY DEVELOPER)
608	18	6	24	EA	CURB RAMPS WITH DETECTABLE WARNING
609	4,380	3,530	7,910	LF	COMBINED CONCRETE CURB AND GUTTER
630	12	36	48	LF	GROUND MOUNTED SUPPORT, NO. 2
630	14	42	56	EA	STREET NAME SIGN SUPPORT, 4" NPS GALV. PIP
630	14	42	56	LF	U-CHANNEL, 2#/FT POST
630	11	33	44	SF	SIGN, FLAT SHEET
630	14	42	56	LF	STOP LINE, 20"
630	60	180	240	LF	CROSSWALK LINE, 10"
					STORM
202	–	114	114	LF	36" PIPE REMOVED
202	–	2	2	EA	HEADWALL REMOVED
604	3	1	4	EA	MANHOLE TYPE "C" (AA-S102)
604	13	6	19	EA	CURB & GUTTER INLET (AA-S125A)
604	–	1	1	EA	CURB INLET MANHOLE (AA-S121)
604	2	4	6	EA	STANDARD CATCH BASIN (AA-S133A)
604	–	1	1	EA	STANDARD CATCH BASIN (AA-S133B)
604	–	1	1	EA	HEADWALL (AA-S168) (18")
604	1	–	1	EA	HEADWALL (AA-S168) (24")
604	2	–	2	EA	CURB & GUTTER INLET, RECONSTRUCTED TO GRADE
901	21	–	21	LF	12" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL
901	296	35	331	LF	12" STORM PIPE, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL
901	130	97	227	LF	12" STORM PIPE W/ SANITARY GRADE WATER TIGHT JOINTS AND TRENCH DAMS, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL
901	126	–	126	LF	12" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL, W/ O-RING RUBBER GASKET JOINTS
901	5	–	5	LF	12" STORM PIPE, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL, W/ O-RING RUBBER GASKET JOINTS
901	36	26	62	LF	15" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL
901	6	23	29	LF	15" STORM PIPE, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL
901	29	–	29	LF	15" STORM PIPE W/ SANITARY GRADE WATER TIGHT JOINTS AND TRENCH DAMS, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL
901	160	320	480	LF	18" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL
901	–	354	354	LF	18" STORM PIPE W/ SANITARY GRADE WATER TIGHT JOINTS AND TRENCH DAMS, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL
901	–	7	7	LF	18" STORM PIPE W/ SANITARY GRADE WATER TIGHT JOINTS AND TRENCH DAMS, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL
901	–	121	121	LF	18" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL, W/ O-RING RUBBER GASKET JOINTS
901	309	210	519	LF	24" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL
901	8	40	48	LF	24" STORM PIPE, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL
901	126	–	126	LF	24" STORM PIPE W/ SANITARY GRADE WATER TIGHT JOINTS AND TRENCH DAMS, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL, W/ O-RING RUBBER GASKET JOINTS
901	–	120	120	LF	24" STORM PIPE W/ SANITARY GRADE WATER TIGHT JOINTS AND TRENCH DAMS, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL
901	29	7	36	LF	24" STORM PIPE W/ SANITARY GRADE WATER TIGHT JOINTS AND TRENCH DAMS, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL
901	122	–	122	LF	24" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL, W/ O-RING RUBBER GASKET JOINTS
901	9	–	9	LF	24" STORM PIPE, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL, W/ O-RING RUBBER GASKET JOINTS
901	15	–	15	LF	30" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL
901	107	–	107	LF	30" STORM PIPE, TYPE I BEDDING, W/ ITEM 911 COMPACTED BACKFILL, W/ O-RING RUBBER GASKET JOINTS
901	9	–	9	LF	30" STORM PIPE, TYPE I BEDDING, W/ ITEM 912 COMPACTED GRANULAR BACKFILL, W/ O-RING RUBBER GASKET JOINTS
					SEDIMENT & EROSION CONTROL
207	25	18	43	EA	INLET PROTECTION
207	980	740	1,720	LF	FILTER FABRIC FENCE
207	1	1	2	EA	CONCRETE WASHOUT
207	1	1	2	EA	STABILIZED CONSTRUCTION ENTRANCE
207	–	1	1	EA	CONSTRUCTION DITCH PROTECTION (ROCK CHECK)
					WATER
801	36	18	54	LF	6" WATER PIPE AND FITTINGS (FIRE HYDRANT LEADS)
802	2,222	1,072	3,294	LF	8" WATER PIPE AND FITTINGS
802	6	3	9	EA	6" VALVE AND APPURTENANCES (FIRE HYDRANT VALVES)
802	6	2	8	EA	8" VALVE AND APPURTENANCES
805	23	9	32	EA	¾" WATER SERVICE TAP, COMPLETE (SHORT)
805	20	9	29	EA	¾" WATER SERVICE TAP, COMPLETE (LONG)
809	6	3	9	EA	FIRE HYDRANT (TYPE B)
					MAINTENANCE OF TRAFFIC
202	2	2	4	EA	TEMPORARY BARRICADE, REMOVED
202	3	1	4	EA	TEMPORARY BARRICADE

QUANTITIES SHOWN MAY NOT BE COMPLETE, ITEMS LISTED ARE 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.

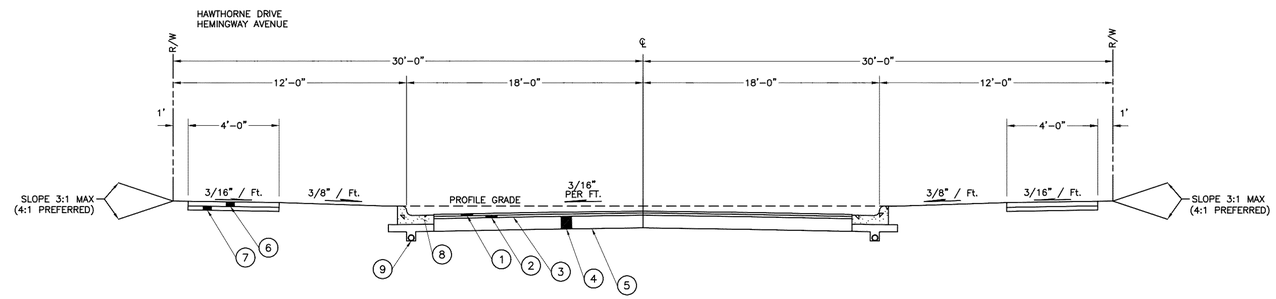
⚠ ESTIMATE OF QUANTITIES

ITEM	PART 1	PART 2	TOTAL	UNIT	DESCRIPTION
					STREET
204	176	–	176	SY	SUBGRADE COMPACTION (PARKING)
304	49	–	49	CY	10" AGGREGATE BASE (PARKING)
408	21	–	21	GAL	PRIME COAT (0.35 GAL/SY) (PARKING)
448	6	–	6	CY	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 (PARKING)
448	10	–	10	CY	2" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2 (PARKING)
608	200	–	200	SF	4' CONCRETE WALK (AS PER STD DWG 2300) (BY DEVELOPER) (PARKING)
608	40	40	80	SF	CONCRETE PAD (CBU)
609	120	–	120	LF	18" STRAIGHT CURB (AS PER STD DWG 2000)



① ITEM 448 – 1 1/4" ASPHALT CONCRETE
② ITEM 448 – 2" ASPHALT CONCRETE
③ ITEM 408 – BITUMINOUS PRIME COAT (0.35 GAL. PER SY)
④ ITEM 304 – 10" AGGREGATE BASE
⑤ ITEM 204 – SUBGRADE COMPACTION
⑥ ITEM 608 – 4" CONCRETE WALK AS PER STD DWG 2300
⑦ ITEM 304 – 4" AGGREGATE BASE
⑧ ITEM 609 – CURB & GUTTER
⑨ ITEM 605 – 4" PIPE UNDERDRAIN

TYPICAL 30' SECTION (60' R/W)
NOT TO SCALE



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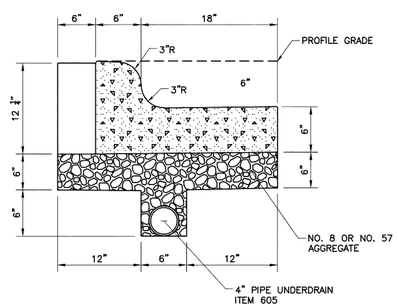
⑦ ITEM 304 – 4" AGGREGATE BASE
⑧ ITEM 609 – CURB & GUTTER
⑨ ITEM 605 – 4" PIPE UNDERDRAIN

TYPICAL 36' SECTION (60' R/W)
NOT TO SCALE



CURB & GUTTER DETAIL
NOT TO SCALE

REVISION RECORD

NO.	DESCRIPTION	APPROVAL	DATE
1	REVISED ESTIMATE OF QUANTITIES	CMT	27Apr18

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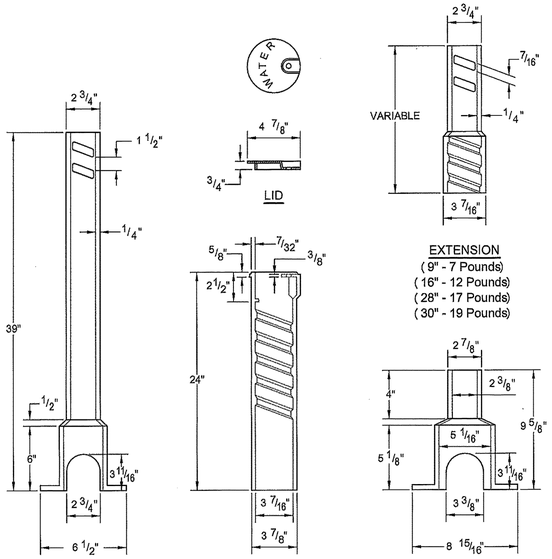
ASHTON CROSSING
SECTION 2, PART 1 & 2
VILLAGE OF ASHVILLE, OHIO

TYPICAL SECTIONS

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:			164-591
APPROVED BY:			CLL

DRAWING NO.: **C003**
SHEET 4 OF 26

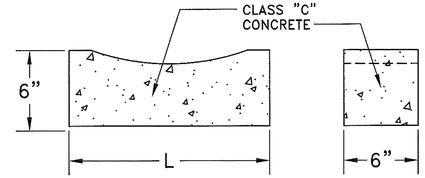
P:\2016\164-591\-CADD\Dwg\C101 Street Plan\164591-C000_TitleSheet.dwg(TYPICAL SECTIONS) LS:(9/14/2017 - mgsmith) - LP: 9/14/2017 5:34 PM



CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-14-13
ADMINISTRATOR DATE

STANDARD DETAIL
TYPICAL CURB BOX

L-1001



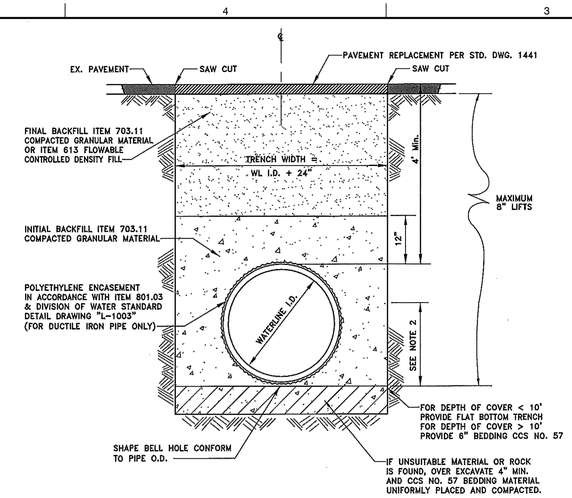
	SIZE OF VALVE	L	VOLUME CU-FT
GATE VALVES	3"	15"	0.31
	4"	16"	0.33
	6"	17"	0.36
	8"	20"	0.42
	12"	24"	0.50
	16"	30"	0.63
	20"	36"	0.75
BUTTERFLY VALVES	24"	42"	0.88
	30"	48"	1.00
	36"	54"	1.13
	42"	60"	1.25
	48"	66"	1.38

NOTE:
FOR VALVES LARGER THAN 48" THE SUPPORT SHALL BE DESIGNED BY A STRUCTURAL ENGINEER.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-14-13
ADMINISTRATOR DATE

STANDARD DETAIL
CONCRETE VALVE SUPPORTS

L-6306

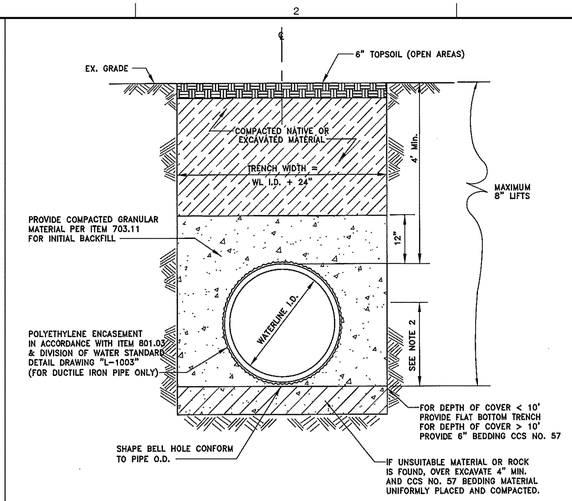


NOTES:
1. REFER TO OSHA REQUIREMENTS FOR MAXIMUM ALLOWABLE TRENCH SLOPES.
2. THIS PORTION OF PIPE EMBEDMENT ZONE MUST BE RECOMPACTED TO PROPER DENSITIES AFTER MOVING SUPPORT SYSTEM FORWARD.
3. PROVIDE FILTER FABRIC WHEN VERY FINE OR UNSTABLE MATERIAL IS ENCOUNTERED.
4. BACKFILL SHALL BE COMPACTED PER THE REQUIREMENTS OF ITEM 801.12.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-14-13
ADMINISTRATOR DATE

STANDARD DETAIL
TYPICAL TRENCH
EXCAVATION & BACKFILL UNDER
INFLUENCE OF PAVEMENT
(FOR 16" DIAMETER WATER MAIN AND SMALLER)

L-6309A



NOTES:
1. REFER TO OSHA REQUIREMENTS FOR MAXIMUM ALLOWABLE TRENCH SLOPES.
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3. PROVIDE FILTER FABRIC WHEN VERY FINE OR UNSTABLE MATERIAL IS ENCOUNTERED.
4. BACKFILL SHALL BE COMPACTED PER THE REQUIREMENTS OF ITEM 801.12.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-14-13
ADMINISTRATOR DATE

STANDARD DETAIL
TYPICAL TRENCH
EXCAVATION & BACKFILL OUTSIDE
INFLUENCE OF PAVEMENT
(FOR 16" DIAMETER WATER MAIN AND SMALLER)

L-6309B

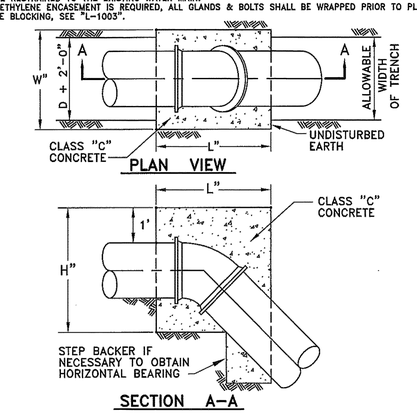
REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

PIPE SIZE	11.25° L"	W"	H"	Vol.	22.5° L"	W"	H"	Vol.	45° L"	W"	H"	Vol.
3"	12	18	12	1.5	13	25	16	3.0	18	30	19	5.9
4"	12	24	16	2.6	16	30	18	5.0	22	36	24	11.0
6"	12	48	18	6.0	15	43	36	13.4	30	55	24	22.9
8"	12	63	24	10.5	18	57	34	20.2	36	57	33	39.2
12"	20	54	36	22.6	37	62	37	49.0	48	62	51	87.9
16"	31	65	38	44.3	60	65	39	88.1	65	65	65	159.2

NOTES:
1. VOLUMES GIVEN IN CUBIC FEET.
2. BACKER TO BE CENTERED HORIZONTALLY ON BEND.
3. STEEL WILL BE USED AS REQUIRED BY THE ENGINEER.
4. ALL NEW PIPE 20" & LARGER SHALL BE RESTRAINED JOINT PER CCMS ITEM 801 UNLESS OTHERWISE PER PLAN OR AS DIRECTED BY THE ENGINEER.
5. EXISTING WATER LINES 20" AND GREATER MUST HAVE PRIOR APPROVAL FROM DOW TO LOWER UNDER A PROPOSED UTILITY. APPROVAL WILL ONLY BE GIVEN UNDER SPECIAL CIRCUMSTANCES AND CONTINGENT UPON THE CONTRACTOR SUBMITTING A DESIGNED DRAWING, STAMPED BY A PROFESSIONAL ENGINEER, DETAILING HOW THE LOWERED WATER MAIN WILL BE RESTRAINED TO THE EXISTING WATER MAIN.
6. WHERE POLYETHYLENE ENCASEMENT IS REQUIRED, ALL GLANDS & BOLTS SHALL BE WRAPPED PRIOR TO PLACEMENT OF CONCRETE BLOCKING, SEE "L-1003".



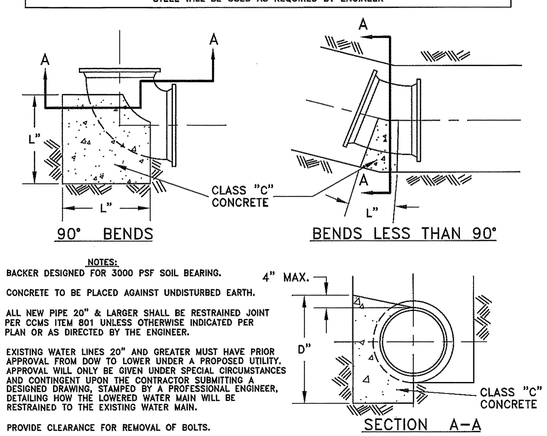
CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-14-13
ADMINISTRATOR DATE

STANDARD DETAIL
BACKING FOR VERTICAL BENDS
(OVER BENDS ONLY)

L-6310

SIZE OF PIPE	DEGREE OF BEND 11.25° L"	D"	Vc.f.	22.50° L"	D"	Vc.f.	45° L"	D"	Vc.f.	90° (HORZ. ONLY) L"	D"	Vc.f.
3"	4	3	0.1	6	4	0.2	10	4	0.3	10	4	0.3
4"	5	4	0.2	9	5	0.4	14	5	0.6	14	5	0.6
6"	8	6	0.5	12	7	0.7	20	8	1.4	18	9	1.7
8"	9	8	0.7	16	9	1.4	24	12	2.7	25	11	4.0
12"	14	12	1.8	24	14	3.6	36	18	6.8	32	18	10.7
16"	18	16	3.4	32	18	6.7	36	32	13.4	41	26	25.6

STEEL WILL BE USED AS REQUIRED BY ENGINEER



NOTES:
1. BACKER DESIGNED FOR 3000 PSF SOIL BEARING.
2. CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH.
3. ALL NEW PIPE 20" & LARGER SHALL BE RESTRAINED JOINT PER CCMS ITEM 801 UNLESS OTHERWISE INDICATED PER PLAN OR AS DIRECTED BY THE ENGINEER.
4. EXISTING WATER LINES 20" AND GREATER MUST HAVE PRIOR APPROVAL FROM DOW TO LOWER UNDER A PROPOSED UTILITY. APPROVAL WILL ONLY BE GIVEN UNDER SPECIAL CIRCUMSTANCES AND CONTINGENT UPON THE CONTRACTOR SUBMITTING A DESIGNED DRAWING, STAMPED BY A PROFESSIONAL ENGINEER, DETAILING HOW THE LOWERED WATER MAIN WILL BE RESTRAINED TO THE EXISTING WATER MAIN.
5. PROVIDE CLEARANCE FOR REMOVAL OF BOLTS.

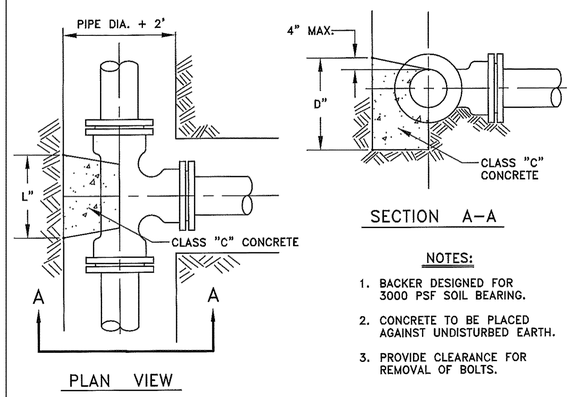
CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-14-13
ADMINISTRATOR DATE

STANDARD DETAIL
BACKING FOR BENDS
HORIZONTAL AND VERTICAL SAG

L-6311

RUN	BRANCH 3" L"	D"	Vc.f.	4" L"	D"	Vc.f.	6" L"	D"	Vc.f.	8" L"	D"	Vc.f.	12" L"	D"	Vc.f.	16" L"	D"	Vc.f.	20" L"	D"	Vc.f.	24" L"	D"	Vc.f.
3"	12	5	0.5																					
4"	10	6	0.5	11	8	0.8																		
6"	9	7	0.5	11	8	0.8	18	12	1.9															
8"	8	8	0.5	10	9	0.7	18	12	1.9	23	16	3.5												
12"	6	12	0.6	8	12	0.8	18	12	1.9	23	16	3.5	38	22	8.7									
16"							14	16	2.0	20	18	3.3	36	23	8.7	49	30	13.6						
20"							11	20	1.9	18	20	3.3	35	24	8.7	46	32	13.6	60	38	26.5			
24"							9	24	1.9	15	24	3.3	30	28	8.7	42	36	14.0	54	42	26.3	68	48	45.4

STEEL WILL BE USED AS REQUIRED BY THE ENGINEER

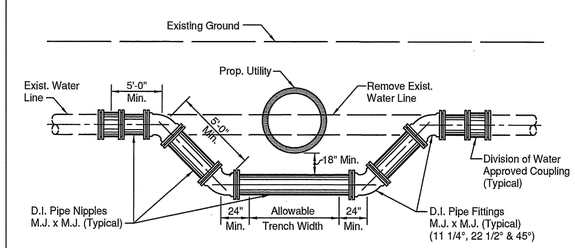


NOTES:
1. BACKER DESIGNED FOR 3000 PSF SOIL BEARING.
2. CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH.
3. PROVIDE CLEARANCE FOR REMOVAL OF BOLTS.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-14-13
ADMINISTRATOR DATE

STANDARD DETAIL
BACKING FOR TEES

L-6312



1. The scheduling of any water shut downs shall be as per Item 801 of the current CCMS. Time and duration of all shut downs shall be determined by Division of Water. The Contractor shall notify all water customers effected by the proposed work at least 24 hours in advance of the scheduled shut down.
2. All bends shall be secured by retaining glands, rodding or other methods as approved by the Engineer to restore the water main to service as soon as possible. For water lines 16" and under concrete backing shall then be provided in accordance with Standard Detail L-6310 for over bends and L-6311 for sag bends.
3. Existing Water Lines 20" and greater must have prior approval of DOW to lower under a proposed utility. Approval will only be given under special circumstances and contingent upon the Contractor submitting a designed drawing, stamped by a Professional Engineer, detailing how the lowered water line will be restrained to the existing water main.
4. The relocated lines shall be laid to the new line and grade, tested and disinfected prior to shut down of existing main and connection of the relocated lines to the existing main.
5. All water lines shall be disinfected by swabbing with a 5 per cent Hypochlorite solution in accordance with the applicable sections of A.W.W.A. C-651.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 11-5-15
ADMINISTRATOR DATE

STANDARD DETAIL
TYPICAL WATER LINE
LOWERING

L-7401

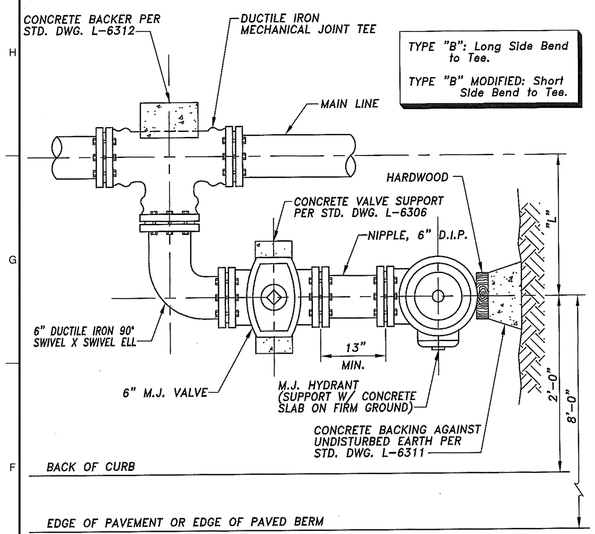
ASHTON CROSSING
SECTION 2, PART 1 & 2
VILLAGE OF ASHVILLE, OHIO

STANDARD DRAWINGS

DATE: APRIL 2017	DRAWN BY: MGS		
DWG SCALE: AS NOTED	CHECKED BY: CJB		
PROJECT NO: 164-591			
APPROVED BY: CLL			

DRAWING NO.: C800
SHEET 5 OF 26

P:\2016\164-591\-CADD\Dwg\CV01 Street Plan\164591-C000_Titlesheet.dwg[STANDARD DRAWINGS] LS:(8/14/2017 - mgsmith) - LP: 8/14/2017 5:34 PM



MAIN LINE	DIMENSION "L" TYPE "B"	DIMENSION "L" TYPE "B" MOD.
6"	24"	19"
8"	25"	20"
12"	28"	23"
16"	31"	26"
20"	33"	28"
24"	36"	31"
30"	39"	34"

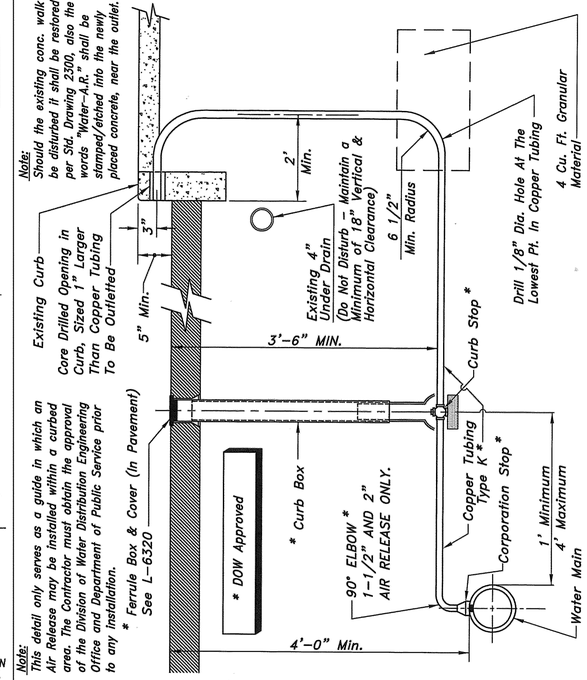
NOTES:

1. FIRE HYDRANT SHALL HAVE A MAXIMUM BURY OF 7'-0". MODIFICATION OF THE HYDRANT LEAD TO MEET THIS REQUIREMENT SHALL BE IN THAT SECTION FROM THE VALVE TO THE HYDRANT AS PER STANDARD DETAIL L-7601.
2. FIRE HYDRANTS SHALL BE SET A MINIMUM OF 6' FROM ALL DRIVEWAY OPENINGS.
3. TEE USED TO CONNECT HYDRANT LEAD TO WATER MAIN IS INCLUDED IN COST OF ITEM 809, FIRE HYDRANT.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-15-13
ADMINISTRATOR DATE

STANDARD DETAIL
TYPICAL HYDRANT SETTING
TYPE "B" AND "B" MODIFIED
FOR
MECHANICAL JOINT TEES

L-6409A



CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 11-5-15
ADMINISTRATOR DATE

STANDARD DETAIL
TYPICAL AIR RELEASE
3/4" THRU 2"
(CURB & GUTTER AREAS)

L-6473B

LENGTH OF PIPE	GALLONS PER HOUR 6" Pipe	8" Pipe	12" Pipe	16" Pipe	20" Pipe	24" Pipe	30" Pipe	36" Pipe	42" Pipe	48" Pipe	54" Pipe	60" Pipe	66" Pipe
50	0.02	0.03	0.05	0.07	0.08	0.10	0.12	0.15	0.17	0.20	0.22	0.25	0.27
100	0.05	0.07	0.10	0.13	0.17	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55
200	0.10	0.13	0.20	0.26	0.33	0.40	0.50	0.60	0.70	0.79	0.89	0.99	1.09
300	0.15	0.20	0.30	.040	0.50	0.60	0.74	0.89	1.04	1.19	1.34	1.49	1.64
400	0.20	0.26	0.40	0.53	0.66	0.79	0.99	1.19	1.39	1.59	1.79	1.99	2.18
500	0.25	0.33	0.50	0.66	0.83	0.99	1.24	1.49	1.74	1.99	2.23	2.48	2.73
600	0.30	0.40	0.60	0.79	0.99	1.19	1.49	1.79	2.09	2.38	2.68	2.98	3.28
700	0.35	0.46	0.70	0.93	1.16	1.39	1.74	2.09	2.43	2.78	3.13	3.48	3.82
800	0.40	0.53	0.79	1.06	1.32	1.59	1.99	2.38	2.78	3.18	3.57	3.97	4.37
900	0.45	0.60	0.89	1.19	1.49	1.79	2.23	2.68	3.13	3.57	4.02	4.47	4.92
1000	0.50	0.66	0.99	1.32	1.66	1.99	2.48	2.98	3.48	3.97	4.47	4.97	5.46
2500	1.24	1.66	2.48	3.31	4.14	4.97	6.21	7.45	8.69	9.93	11.17	12.41	13.65
5000	2.48	3.31	4.97	6.62	8.28	9.93	12.41	14.90	17.38	19.86	22.34	24.83	27.31
7500	3.72	4.97	7.45	9.93	12.41	14.90	18.62	22.34	26.07	29.79	33.51	37.24	40.96
10000	4.97	6.62	9.93	13.24	16.55	19.86	24.83	29.79	34.76	39.72	44.69	49.65	54.62

FORMULA: $L = \frac{SD\sqrt{P}}{148{,}000}$

Where:
L = Allowable Leakage (gal./hr.)
S = Length of pipe tested in feet.
D = Nominal pipe diameter in inches.
P = Test pressure (150 psi)

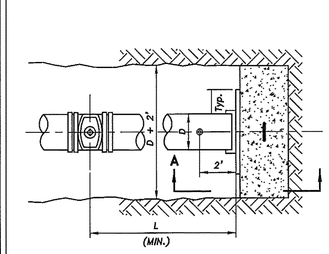
When testing against closed metal-seated valves, an additional leakage per closed valve of 0.0078 gal./hr./in. of nominal valve size will be allowed.

These calculations are based on "AWWA C-600-10" Specifications, Section 4, Hydrostatic Testing, Dated December 1, 2005.

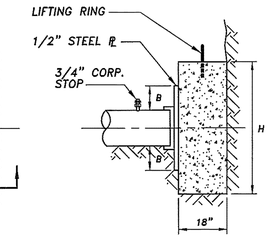
CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-16-13
ADMINISTRATOR DATE

STANDARD DETAIL
ALLOWABLE LEAKAGE TABLE

L-6640

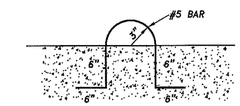


PLAN VIEW



SECTION A-A

PIPE DIAMETER (D)	H	B	L	VOLUME CU-FT
3"	5"	1"	10'	1.43
4"	6"	1"	10'	1.76
6"	8"	1"	10'	2.52
8"	12"	1"	10'	4.00
12"	23"	3"	18'	8.64
16"	37"	3"	18'	15.39



LIFT RING DETAIL

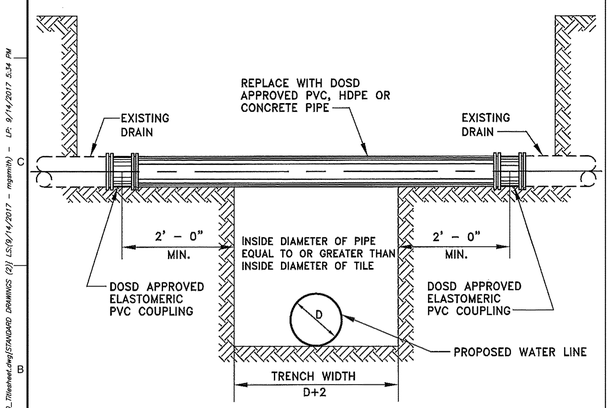
NOTES:

1. BACKER DESIGNED FOR 3000 PSF SOIL BEARING.
2. END OF PIPE CAPPED OR PLUGGED.
3. GREASE STEEL PLATE WHERE IN CONTACT WITH CONCRETE BACKER.
4. PLACE CONCRETE AGAINST UNDISTURBED SOIL.
5. THOROUGHLY COMPACT BACKFILL BETWEEN VALVE AND END OF PIPE.
6. FOR WATER LINES 20" AND GREATER, A THRUST RESTRAINT SYSTEM FOR DEAD END PIPE MUST BE DESIGNED BASED UPON EXISTING SITE CONDITIONS AND PROJECT REQUIREMENTS. DESIGN DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER AND BE SUBMITTED TO DOW FOR REVIEW.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-16-13
ADMINISTRATOR DATE

STANDARD DETAIL
THRUST BLOCK DETAIL
END OF PIPE

L-7001

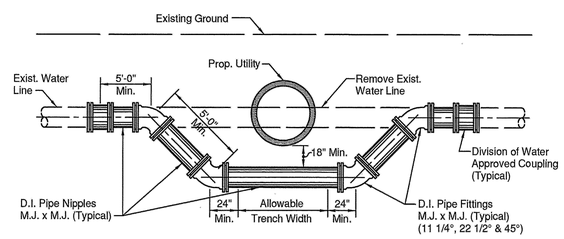


DOSD = DIVISION OF SEWERAGE AND DRAINAGE.

CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 5-16-13
ADMINISTRATOR DATE

STANDARD DETAIL
DRAIN TILE REPLACMENT

L-7002



1. The scheduling of any water shut downs shall be as per Item 801 of the current CCMS. Time and duration of all shut downs shall be determined by Division of Water. The Contractor shall notify all water customers effected by the proposed work at least 24 hours in advance of the scheduled shut down.
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CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 11-5-15
ADMINISTRATOR DATE

STANDARD DETAIL
TYPICAL WATER LINE
LOWERING

L-7401

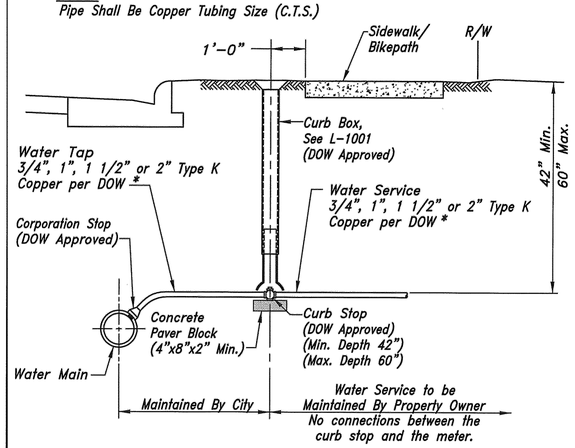
NOTES:

The Curb Box shall be placed 1'-0" from the streetedge of the proposed or existing sidewalk/bikepath, or 2 feet inside the right-of-way or easement line when no sidewalk/bikepath is present or proposed.

When a curb box is installed within a traveled area, the contractor shall install a C.I. Ferrule Box per "L-6320".

The Curb Stop Shall Be Installed with Valve Opening Facing the Structure to be served. The Curb Stop Shall Turn "1/4 Turn" Clockwise From On to Off Position. (Typical)

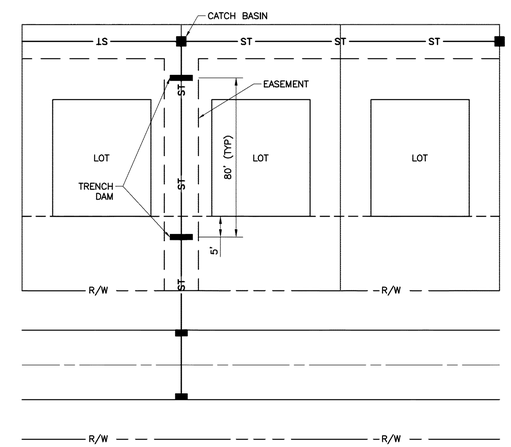
* NOTE:
Pipe Shall Be Copper Tubing Size (C.T.S.)



CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER
APPROVED: R.C. Masterfield 11-5-15
ADMINISTRATOR DATE

STANDARD DETAIL
CURB BOX INSTALLATION
3/4" THRU 2"

L-9901



NOTE: FOR ALL STORM SEWER PIPE ALONG THE SIDE YARD, REINFORCED CONCRETE PIPE WITH O-RING RUBBER GASKET SHALL BE USED. NO AGGREGATE BEDDING OR BACKFILL SHALL BE USED.

TYPICAL SIDE YARD STORM SEWER DETAIL

NOT TO SCALE

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

STANDARD DRAWINGS

DATE:	APRIL 2017	DRAWN BY: MGS
DWG SCALE:	AS NOTED	CHECKED BY: CJB
PROJECT NO:	164-591	APPROVED BY: CLL

DRAWING NO.: C801

SHEET 6 OF 26

P:\2016\164-591\-CADD\Dwg\C101 Street Plan\164591-C000_Titlesheet.dwg[STANDARD DRAWINGS (2)] 5/9/14/2017 - mgsmith) - LP: 9/14/2017 5:34 PM

NORTH

SCALE IN FEET

0 50 100

SECTION H–H'
MAX SPREAD=15.87'
MAX DEPTH=0.23'
CREST ELEV=710.21
100YR ELEV=710.44

SECTION I–I'
MAX SPREAD=3.76'
MAX DEPTH=0.25'
CREST ELEV=712.07
100YR ELEV=712.32

SECTION J–J'
MAX SPREAD=4.30'
MAX DEPTH=0.29'
CREST ELEV=711.95
100YR ELEV=712.24

SECTION K–K'
MAX SPREAD=13.01'
MAX DEPTH=0.13'
CREST ELEV=711.74
100YR ELEV=711.87

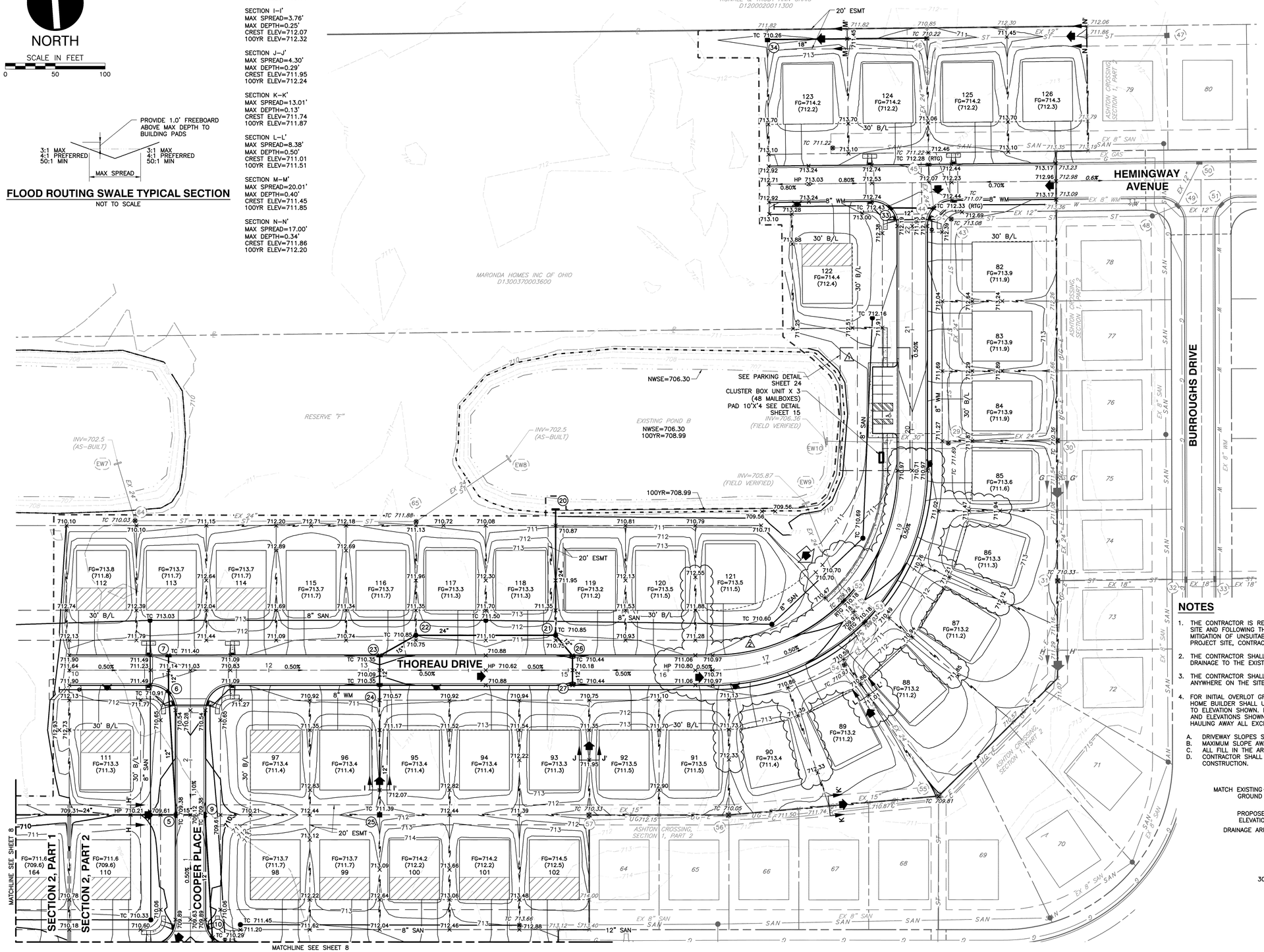
SECTION L–L'
MAX SPREAD=8.38'
MAX DEPTH=0.50'
CREST ELEV=711.01
100YR ELEV=711.51

SECTION M–M'
MAX SPREAD=20.01'
MAX DEPTH=0.40'
CREST ELEV=711.45
100YR ELEV=711.85

SECTION N–N'
MAX SPREAD=17.00'
MAX DEPTH=0.34'
CREST ELEV=711.86
100YR ELEV=712.20

FLOOD ROUTING SWALE TYPICAL SECTION

NOT TO SCALE



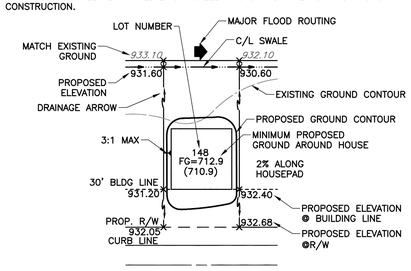
LEGEND

- EXISTING RIGHT–OF–WAY
- EXISTING UNPAVED DRIVEWAY
- EXISTING ROADWAY
- EXISTING CENTERLINE
- EXISTING CORPORATION LINE
- ST — EXISTING STORM SEWER
- SAN — EXISTING SANITARY
- W — EXISTING WATER
- E — EXISTING UNDERGROUND ELECTRIC
- EXISTING STREET LIGHT
- EXISTING SANITARY MANHOLE
- EXISTING STORM STRUCTURES
- EXISTING FIRE HYDRANT
- SAN — PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED SANITARY MANHOLE
- W — PROPOSED WATER
- PROPOSED WATER SERVICE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHTPOLE
- PROPOSED PULLBOX
- E — PROPOSED UNDERGROUND ELECTRIC
- PROPOSED PROJECT BOUNDARY
- PROPOSED CENTERLINE
- PROPOSED RIGHT–OF–WAY
- PROPOSED EDGE OF PAVEMENT
- ST — PROPOSED STORM SEWER
- PROPOSED CURB INLET
- PROPOSED CATCH BASIN
- PROPOSED STORM MANHOLE
- × TC 906.10 — PROPOSED TOP OF CURB/CASTING
- × HP 907.1 — PROPOSED HIGH POINT
- × 906.2 — PROPOSED SPOT ELEVATION
- × 908.2 — EXISTING SPOT ELEVATION
- MASTER FLOOD ROUTING ARROW
- FLOW ARROW
- ENGINEERED FILL ON LOT
- PROPOSED SWALE
- LIMITS OF DISTURBANCE
- (TBR) — TO BE REMOVED
- (RTG) — RECONSTRUCTED TO GRADE

NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING GEOTECHNICAL REPORT SPECIFIC TO THE PROJECT SITE AND FOLLOWING THE SITE PREPARATION RECOMMENDATIONS, INCLUDING THE REMOVAL AND MITIGATION OF UNSUITABLE MATERIAL. IF A GEOTECHNICAL REPORT WAS NOT PREPARED FOR THE PROJECT SITE, CONTRACTOR SHALL TAKE ALL RISKS ASSOCIATED WITH SUBSURFACE FINDINGS.
2. THE CONTRACTOR SHALL ENSURE THAT ALL FUTURE SECTIONS OF THE PROJECT HAVE POSITIVE DRAINAGE TO THE EXISTING BASINS AFTER THE CONSTRUCTION OF SECTION 2.
3. THE CONTRACTOR SHALL ALSO ENSURE THAT NO WATER IS ALLOWED TO COLLECT AND POND ANYWHERE ON THE SITE.
4. FOR INITIAL OVERLOT GRADING PURPOSES, PAD GRADES SHALL BE 2.0' LOWER THAN THAT SHOWN. HOME BUILDER SHALL USE BASEMENT EXCAVATION TO BRING GROUND AROUND HOUSE FOUNDATION TO ELEVATION SHOWN. HOME BUILDER SHALL BE RESPONSIBLE FOR CONFORMING TO THE GRADES AND ELEVATIONS SHOWN TO PROVIDE POSITIVE DRAINAGE. HOME BUILDER SHALL BE RESPONSIBLE FOR HAULING AWAY ALL EXCESS EXCAVATION AS DIRECTED BY THE DEVELOPER.

A. DRIVEWAY SLOPES SHALL MAINTAIN A SLOPE OF NOT LESS THAN 2% AND NO GREATER THAN 8%.
B. MAXIMUM SLOPE AWAY FROM HOUSE IS 3:1. EXPOSE BLOCK AS NECESSARY.
C. ALL FILL IN THE AREA OF RIGHT–OF–WAY SHALL BE MADE IN ACCORDANCE WITH ITEM 203.
D. CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.



TYPICAL LOT LEGEND

NOT TO SCALE

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE
1	ADDED CBU LOCATION, ADDED PARKING SPOTS	CMT	27Apr18
2	REVISED GRADING.	CMT	30May18

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

GRADING PLAN

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:			164-591
APPROVED BY:			CLL

DRAWING NO.: **C300**

SHEET 7 OF 26

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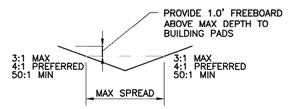
NORTH

SCALE IN FEET

0 50 100

FLOOD ROUTING SWALE TYPICAL SECTION

NOT TO SCALE



SECTION A–A'
MAX SPREAD=8.22'
MAX DEPTH=0.53'
CREST ELEV=709.81
100YR ELEV=710.34

SECTION B–B'
MAX SPREAD=6.89'
MAX DEPTH=0.25'
CREST ELEV=709.02
100YR ELEV=709.27

SECTION C–C'
MAX SPREAD=7.36'
MAX DEPTH=0.19'
CREST ELEV=709.02
100YR ELEV=709.21

SECTION D–D'
MAX SPREAD=6.60'
MAX DEPTH=0.13'
CREST ELEV=709.02
100YR ELEV=709.15

SECTION E–E'
MAX SPREAD=11.94'
MAX DEPTH=0.29'
CREST ELEV=710.79
100YR ELEV=711.08

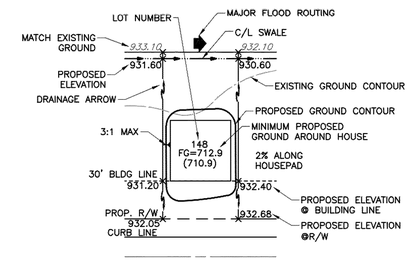
SECTION F–F'
MAX SPREAD=7.20'
MAX DEPTH=0.25'
CREST ELEV=711.81
100YR ELEV=712.06

SECTION G–G'
MAX SPREAD=9.18'
MAX DEPTH=0.21'
CREST ELEV=709.81
100YR ELEV=710.02

NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING GEOTECHNICAL REPORT SPECIFIC TO THE PROJECT SITE AND FOLLOWING THE SITE PREPARATION RECOMMENDATIONS, INCLUDING THE REMOVAL AND MITIGATION OF UNSUITABLE MATERIAL. IF A GEOTECHNICAL REPORT WAS NOT PREPARED FOR THE PROJECT SITE, CONTRACTOR SHALL TAKE ALL RISKS ASSOCIATED WITH SUBSURFACE FINDINGS.
2. THE CONTRACTOR SHALL ENSURE THAT ALL FUTURE SECTIONS OF THE PROJECT HAVE POSITIVE DRAINAGE TO THE EXISTING BASINS AFTER THE CONSTRUCTION OF SECTION 2.
3. THE CONTRACTOR SHALL ALSO ENSURE THAT NO WATER IS ALLOWED TO COLLECT AND POND ANYWHERE ON THE SITE.
4. FOR INITIAL OVERLOT GRADING PURPOSES, PAD GRADES SHALL BE 2.0' LOWER THAN THAT SHOWN. HOME BUILDER SHALL USE BASEMENT EXCAVATION TO BRING GROUND AROUND HOUSE FOUNDATION TO ELEVATION SHOWN. HOME BUILDER SHALL BE RESPONSIBLE FOR CONFORMING TO THE GRADES AND ELEVATIONS SHOWN TO PROVIDE POSITIVE DRAINAGE. HOME BUILDER SHALL BE RESPONSIBLE FOR HAULING AWAY ALL EXCESS EXCAVATION AS DIRECTED BY THE DEVELOPER.

A. DRIVEWAY SLOPES SHALL MAINTAIN A SLOPE OF NOT LESS THAN 2% AND NO GREATER THAN 8%.
B. MAXIMUM SLOPE AWAY FROM HOUSE IS 3:1. EXPOSE BLOCK AS NECESSARY.
C. ALL FILL IN THE AREA OF RIGHT-OF-WAY SHALL BE MADE IN ACCORDANCE WITH ITEM 203.
D. CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.

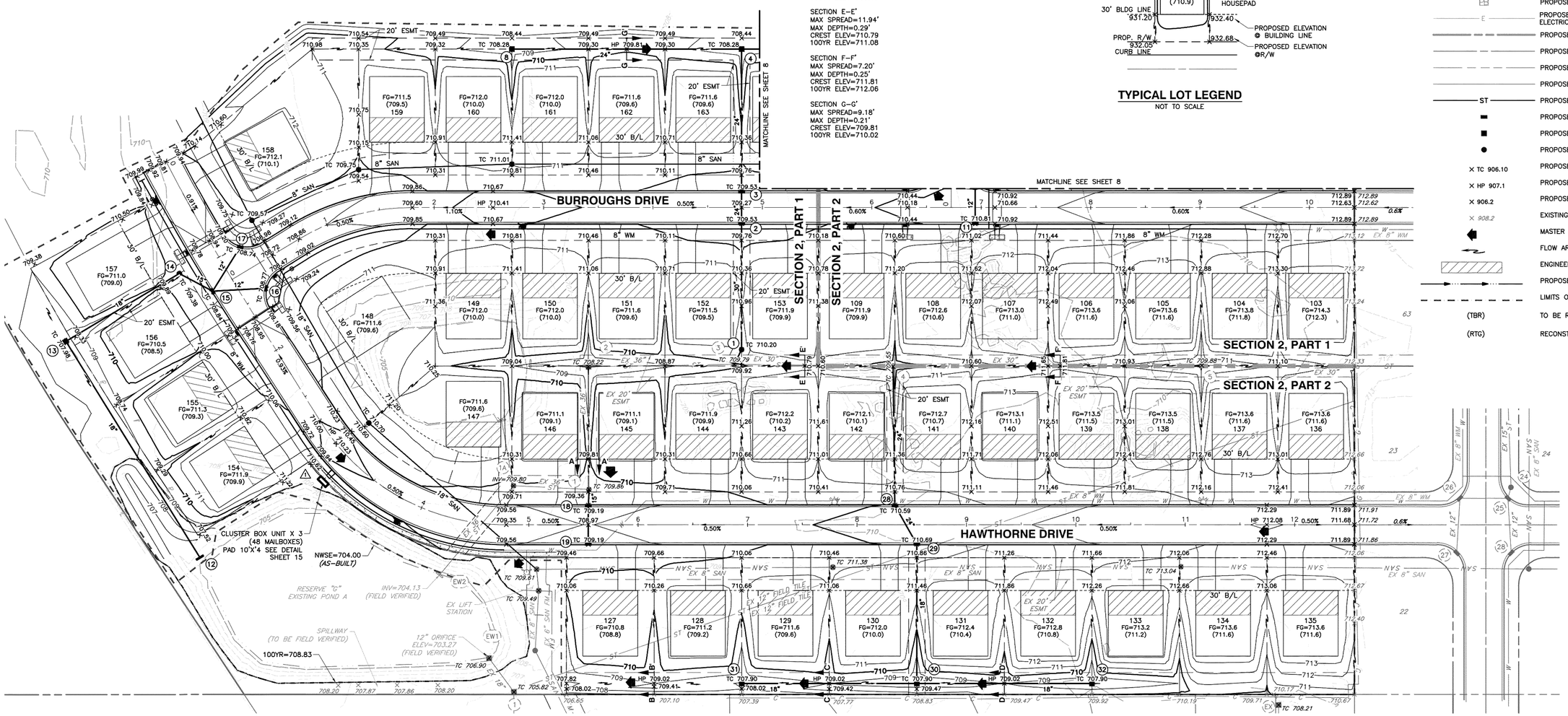


TYPICAL LOT LEGEND

NOT TO SCALE

LEGEND

- EXISTING RIGHT-OF-WAY
- EXISTING UNPAVED DRIVEWAY
- EXISTING ROADWAY
- EXISTING CENTERLINE
- EXISTING CORPORATION LINE
- ST — EXISTING STORM SEWER
- SAN — EXISTING SANITARY
- W — EXISTING WATER
- E — EXISTING UNDERGROUND ELECTRIC
- EXISTING STREET LIGHT
- EXISTING SANITARY MANHOLE
- EXISTING STORM STRUCTURES
- EXISTING FIRE HYDRANT
- SAN — PROPOSED SANITARY SEWER
- PROPOSED SANITARY SERVICE
- PROPOSED SANITARY MANHOLE
- W — PROPOSED WATER
- PROPOSED WATER SERVICE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHTPOLE
- PROPOSED PULLBOX
- E — PROPOSED UNDERGROUND ELECTRIC
- PROPOSED PROJECT BOUNDARY
- PROPOSED CENTERLINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EDGE OF PAVEMENT
- ST — PROPOSED STORM SEWER
- PROPOSED CURB INLET
- PROPOSED CATCH BASIN
- PROPOSED STORM MANHOLE
- × TC 906.10 — PROPOSED TOP OF CURB/CASTING
- × HP 907.1 — PROPOSED HIGH POINT
- × 906.2 — PROPOSED SPOT ELEVATION
- × 908.2 — EXISTING SPOT ELEVATION
- MASTER FLOOD ROUTING ARROW
- FLOW ARROW
- ENGINEERED FILL ON LOT
- PROPOSED SWALE
- LIMITS OF DISTURBANCE
- (TBR) — TO BE REMOVED
- (RTG) — RECONSTRUCTED TO GRADE



NO	DESCRIPTION	APPROVAL	DATE
1	ADDED CBU LOCATION	CMT	27/04/18

REVISION RECORD

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

GRADING PLAN

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:		164-591	
APPROVED BY:			CLL

DRAWING NO.: C301

SHEET 8 OF 26

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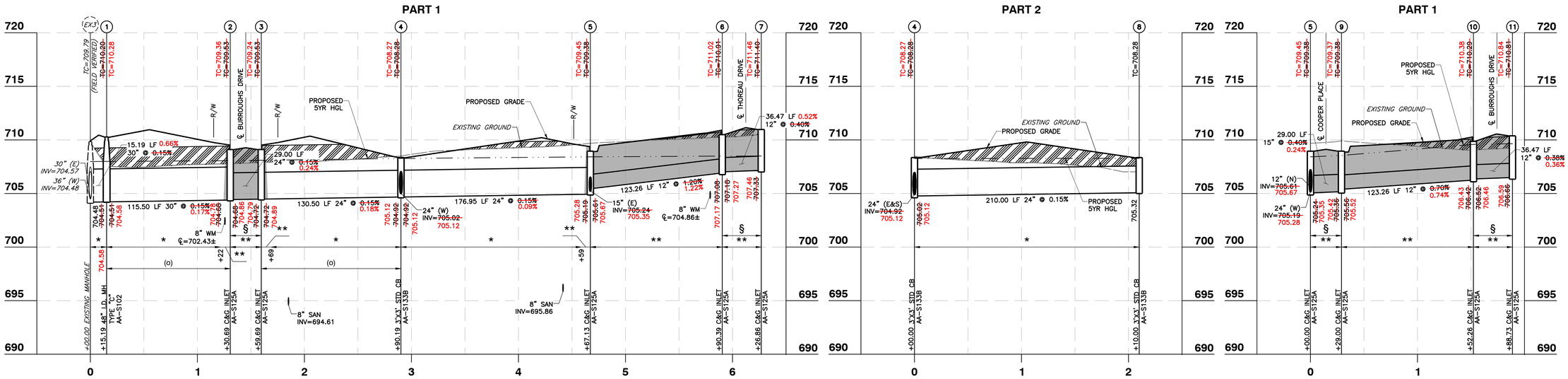


EX3-7 PROFILE

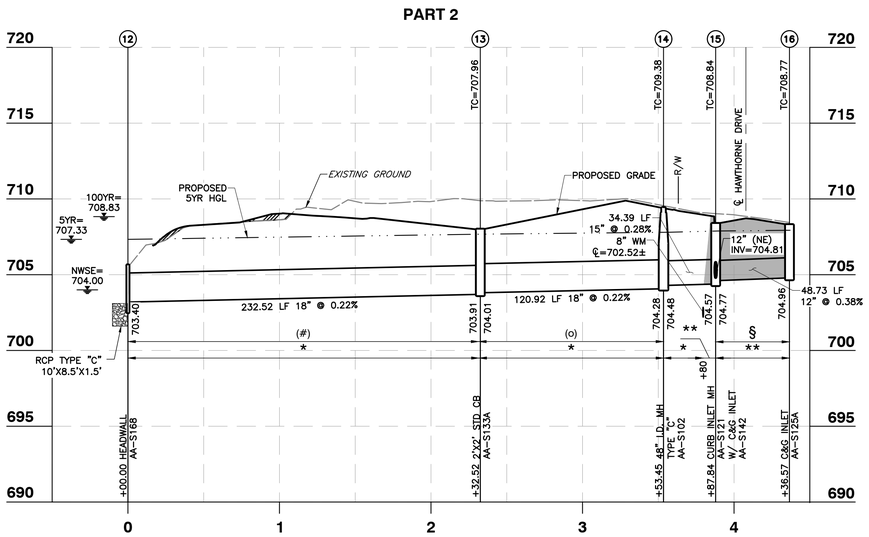
HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'

4-8 PROFILE

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

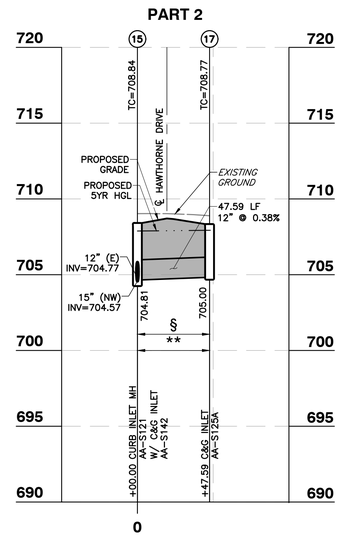
5-11 PROFILE

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



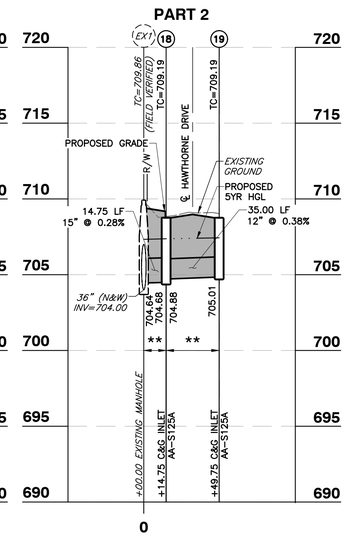
12-16 PROFILE

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



15-17 PROFILE

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



EX1-19 PROFILE

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

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.
2. ALL ELEVATIONS SHOWN ON THIS PLAN ARE NAVD 88.
3. ALL EXISTING INFORMATION IS PER PLAN, UNLESS OTHERWISE NOTED.
4. 18" MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN ALL STORM, SANITARY AND WATER LINES.

* COMPACTED BACKFILL PER ITEM 911.

** COMPACTED GRANULAR MATERIAL PER ITEM 912.

§ CLASS A CONCRETE ENCASED PIPE PER ITEM 901.12. CONTRACTOR SHALL INSTALL STORM SEWER (SANITARY GRADE PIPE) WITH WATERTIGHT JOINTS AND TRENCH DAMS WITHIN LIMITS SHOWN. INCLUDE COSTS IN PRICE BID FOR STORM SEWER (SANITARY GRADE PIPE WITH WATERTIGHT JOINTS, ITEM 901).

ALL FILLS ARE TO BE PLACED A MINIMUM OF 2.5' PER ITEM 203 ABOVE THE PROPOSED STORM SEWER PRIOR TO THE START OF SEWER CONSTRUCTION.

TC = TOP OF CASTING

(#) CONTRACTOR SHALL INSTALL STORM SEWER (SANITARY GRADE PIPE) WITH WATERTIGHT JOINTS AND TRENCH DAMS WITHIN LIMITS SHOWN. INCLUDE COST IN BID PRICE FOR STORM SEWER.

(o) O-RING RUBBER GASKET JOINTS, (ASTM-C136) WITH NO AGGREGATE BACKFILL

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE
	RECORD DRAWING: SECTION 1 PART 1 ONLY		
	OCTOBER 2018		

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614-540-6633 · 888-598-6808
www.cecinc.com

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

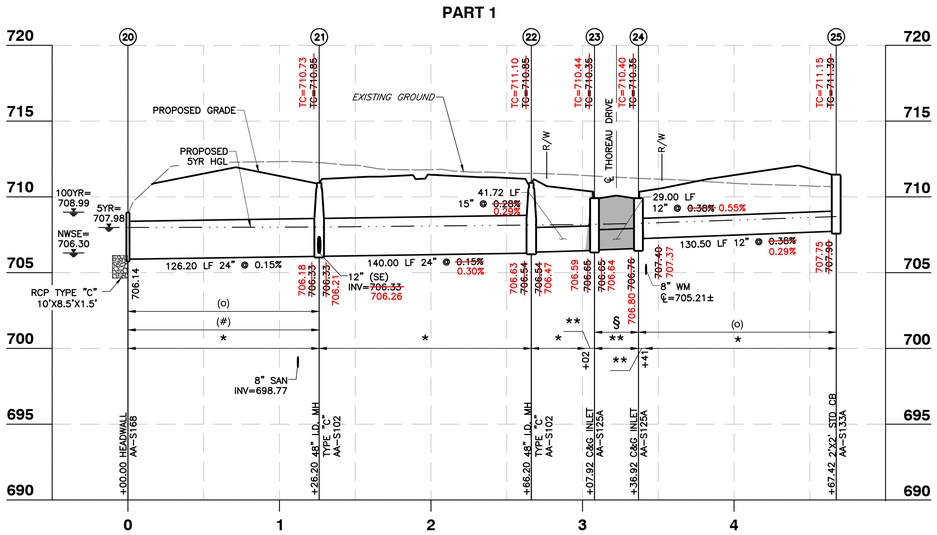
STORM PROFILES

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C400

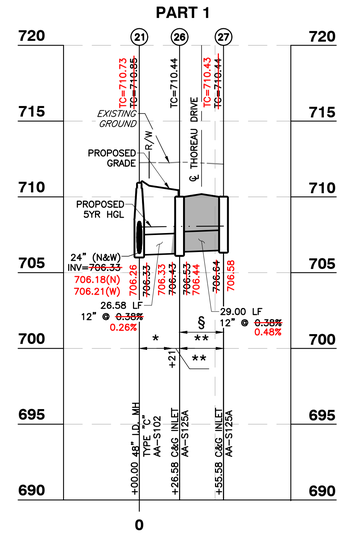
SHEET 9 OF 26

P:\2016\164-591\-Survey\Dwg\AsBuilt\164591-C400_Storm Profiles&SB.dwg\AYOUTI LS:(10/23/2018 - dcox) - LP: 11/2/2018 10:40 AM



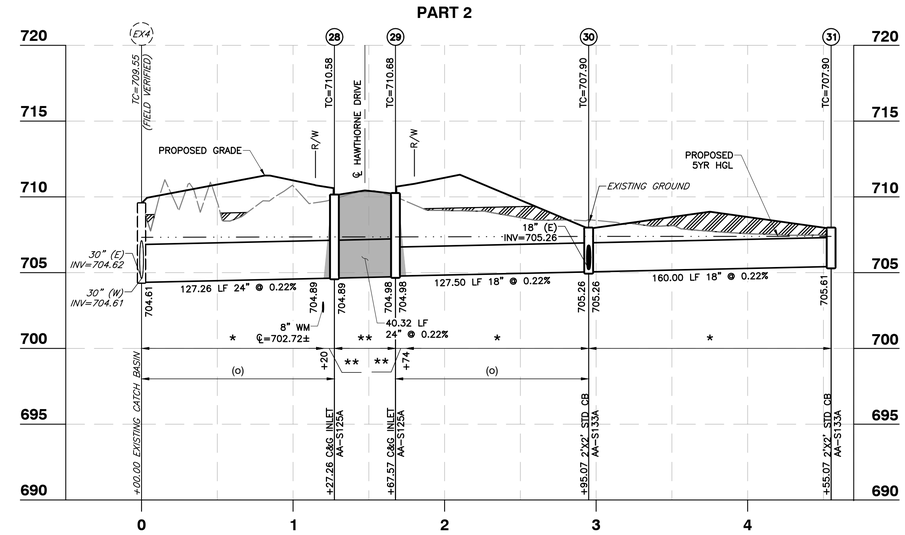
20-25 PROFILE

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



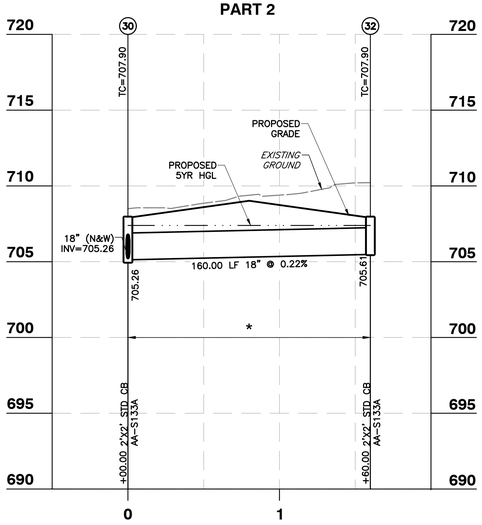
21-27 PROFILE

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



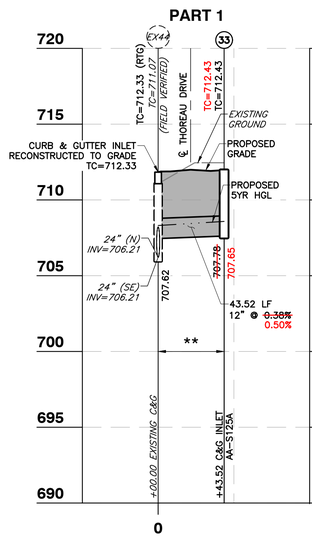
EX4-31 PROFILE

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



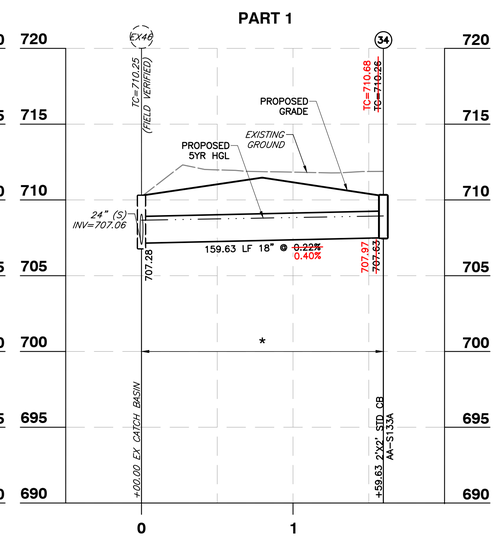
30-32 PROFILE

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



EX44-33 PROFILE

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



EX46-34 PROFILE

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

STORM STRUCTURE SEWER COORDINATE CHART
STATE PLANE COORDINATES - OHIO SOUTH ZONE*

STRUCTURE NO.	NORTHING	EASTING	NORTHING (AS-BUILT)	EASTING (AS-BUILT)
EX4	629925.70	1839683.25	–	–
EX3	629937.72	1839538.52	–	–
EX1	629833.27	1839398.12	–	–
EX46	630935.42	1840548.10	630935.41	1840548.21
EX44	630764.92	1840542.91	630764.58	1840543.35
1	629950.77	1839546.28	629950.20	1839548.17
2	630065.98	1839554.51	630064.98	1839555.58
3	630094.91	1839556.58	630095.76	1839556.66
4	630225.07	1839565.88	630224.30	1839566.24
5	630212.47	1839742.37	630212.79	1839741.59
6	630335.72	1839743.69	630334.68	1839743.30
7	630372.09	1839746.29	630372.93	1839746.56
8	630240.04	1839356.41	–	–
9	630210.40	1839771.30	630210.22	1839772.08
10	630087.15	1839769.98	630087.66	1839770.63
11	630050.77	1839767.38	630050.13	1839766.87
12	629796.56	1839038.96	–	–
13	630002.42	1838930.84	–	–
14	630056.89	1839038.80	–	–
15	630038.60	1839067.92	–	–
16	630037.79	1839116.64	–	–
17	630077.05	1839095.95	–	–
18	629818.61	1839396.48	–	–
19	629783.70	1839393.96	–	–
20	630490.78	1840143.59	630491.78	1840144.04
21	630364.90	1840134.60	630365.22	1840134.88
22	630374.88	1839994.96	630375.49	1839994.83
23	630357.02	1839957.25	630357.83	1839957.86
24	630328.10	1839955.19	630327.23	1839955.16
25	630197.93	1839945.89	630200.24	1839946.38
26	630343.25	1840150.02	630343.97	1840149.94
27	630314.32	1840147.95	630313.35	1840148.11
28	629798.66	1839675.77	–	–
29	629762.32	1839693.24	–	–
30	629635.15	1839684.15	–	–
31	629646.55	1839524.56	–	–
32	629623.75	1839843.74	–	–
33	630768.20	1840499.51	630767.21	1840498.84
34	630945.28	1840388.78	630944.72	1840389.87

*HORIZONTAL REFERENCE DATUM = NAD 83 (1986 ADJ.) (OHIO SOUTH)

STORM ALIGNMENT TABLE

START STRUCTURE	END STRUCTURE	LENGTH	BEARING
EX3	1	15.19'	S 30°44'12" W
EX1	18	14.75'	N 06°23'17" E
EX44	33	43.52'	S 85°40'11" E
EX4	28	127.26'	N 03°22'14" E
1	2	115.50'	S 04°05'10" W
2	3	29.00'	S 04°05'10" W
3	4	130.50'	S 04°05'10" W
4	8	210.00'	S 85°54'50" E
4	5	176.95'	N 85°54'50" W
5	6	123.26'	S 00°36'44" W
5	9	29.00'	N 85°54'50" W
6	7	36.47'	S 04°05'10" W
9	10	123.26'	N 00°36'44" E
10	11	36.47'	N 04°05'10" E
12	13	232.52'	S 27°42'30" E
13	14	120.92'	S 63°13'35" W
14	15	34.39'	N 57°51'36" W
15	16	48.73'	N 89°03'30" W
15	17	47.59'	S 36°05'25" W
18	19	35.00'	N 04°07'36" E
20	21	126.20'	N 04°05'10" E
21	26	26.58'	N 35°27'32" W
21	22	140.00'	S 85°54'50" E
22	23	41.72'	N 64°39'16" E
23	24	29.00'	N 04°04'58" E
24	25	130.50'	N 04°05'10" E
26	27	29.00'	N 04°05'42" E
28	29	40.32'	N 25°40'11" W
29	30	127.50'	N 04°05'09" E
30	31	160.00'	S 85°54'50" E

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.
2. ALL ELEVATIONS SHOWN ON THIS PLAN ARE NAVD 88.
3. ALL EXISTING INFORMATION IS PER PLAN, UNLESS OTHERWISE NOTED.
4. 18" MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN ALL STORM, SANITARY AND WATER LINES.

* COMPACTED BACKFILL PER ITEM 911.

** COMPACTED GRANULAR MATERIAL PER ITEM 912.

§ CLASS A CONCRETE ENCASED PIPE PER ITEM 901.12. CONTRACTOR SHALL INSTALL STORM SEWER (SANITARY GRADE PIPE) WITH WATERTIGHT JOINTS AND TRENCH DAMS WITHIN LIMITS SHOWN. INCLUDE COSTS IN PRICE BID FOR STORM SEWER (SANITARY GRADE PIPE WITH WATERTIGHT JOINTS, ITEM 901).

ALL FILLS ARE TO BE PLACED A MINIMUM OF 2.5' PER ITEM 203 ABOVE THE PROPOSED STORM SEWER PRIOR TO THE START OF SEWER CONSTRUCTION.

TC = TOP OF CASTING

(#) CONTRACTOR SHALL INSTALL STORM SEWER (SANITARY GRADE PIPE) WITH WATERTIGHT JOINTS AND TRENCH DAMS WITHIN LIMITS SHOWN. INCLUDE COST IN BID PRICE FOR STORM SEWER.

(o) O-RING RUBBER GASKET JOINTS, (ASTM-C136) WITH NO AGGREGATE BACKFILL

REVISION RECORD			
NO	DESCRIPTION	APPROVAL	DATE
	RECORD DRAWING: SECTION 1 PART 1 ONLY OCTOBER 2018		

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

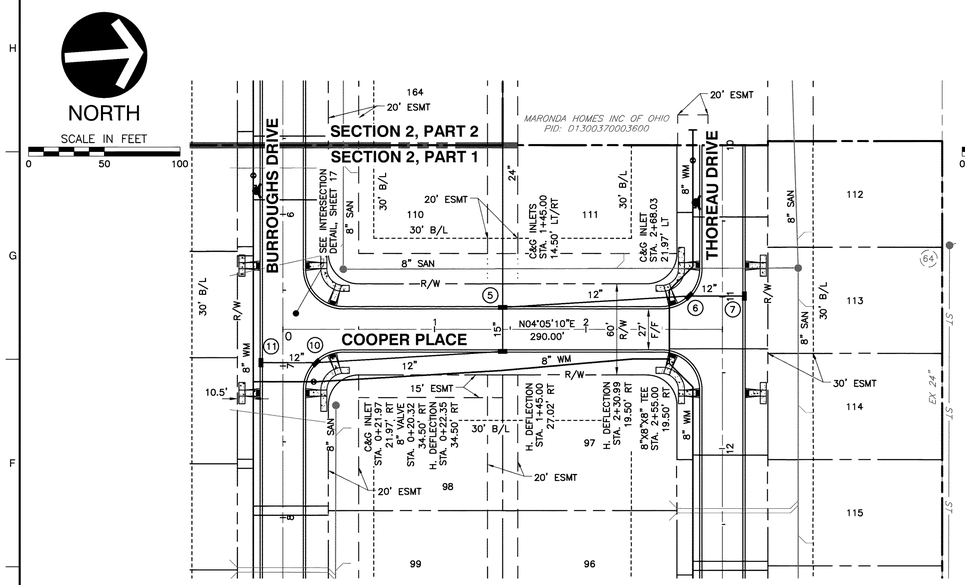
STORM PROFILES

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:			164-591
APPROVED BY:			CLL

DRAWING NO.: C401

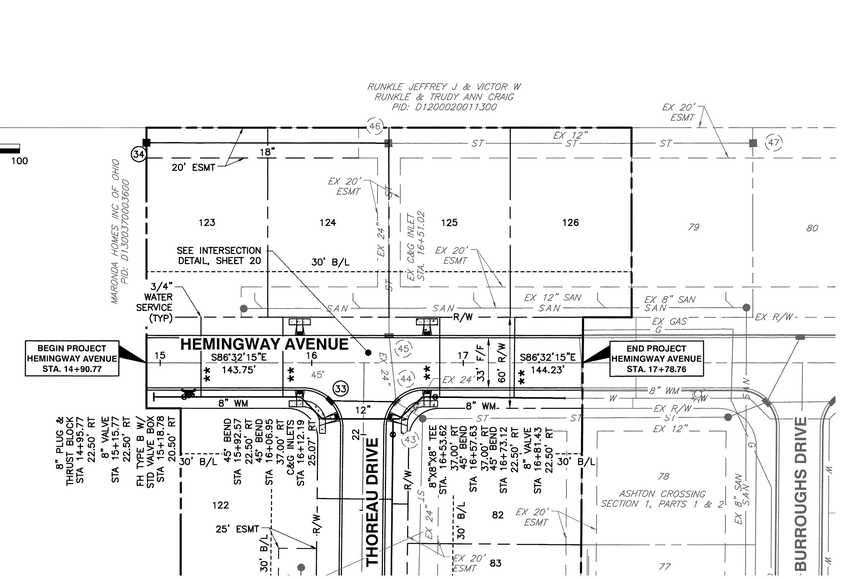
SHEET 23 OF 26

P:\2016\164-591_Survey\Dwg\AsBuilt\164591-C400_Storm Profiles438.dwg[AROUTE] LS:(10/23/2018 - dcox) - LP: 11/2/2018 10:37 AM



COOPER PLACE

SCALE: 1"=50'

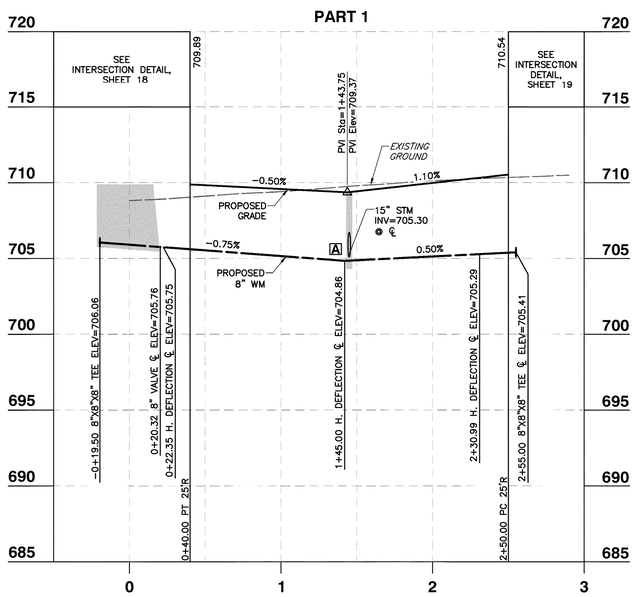


HEMINGWAY AVENUE

SCALE: 1"=50'

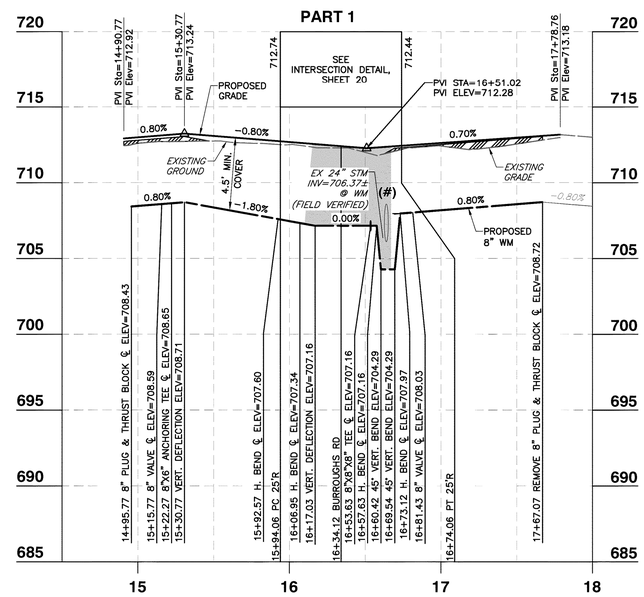
LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE OF ROAD
- EXISTING FACE OF CURB
- ST — EXISTING STORM SEWER
- W — EXISTING WATER MAIN
- EXISTING STORM CATCH BASIN
- OH-E — EXISTING OVERHEAD UTILITIES
- G — EXISTING GAS LINE
- C — EXISTING TELECOMMUNICATION
- PROPOSED PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED ESMT
- PROPOSED CENTERLINE OF ROAD
- PROPOSED FACE OF CURB
- PROPOSED CONCRETE WALK
- SAN — PROPOSED SANITARY SEWER
- ST — PROPOSED STORM SEWER
- W — PROPOSED WATER MAIN
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM CURB INLET
- PROPOSED STORM CATCH BASIN
- PROPOSED STORM MANHOLE
- PROPOSED STORM HEADWALL
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE



COOPER PLACE PROFILE

SCALE H: 1"=50'; V: 1"=5'



HEMINGWAY PROFILE

SCALE H: 1"=50'; V: 1"=5'

BASIS OF STATIONING

HEMINGWAY AVENUE – BEGIN PROJECT STATIONING SET AS 14+90.77 STATION PER ASHTON CROSSING SECTION 1 PLANS.

COOPER PLACE – INTERSECTION OF BURROUGHS DRIVE AND COOPER PLACE SET TO STA 0+00.00.

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.
2. ALL ELEVATIONS SHOWN ON THIS PLAN ARE NAVD 88.
3. ALL EXISTING INFORMATION IS PER PLAN UNLESS OTHERWISE NOTED.
4. ALL FITTINGS SHALL BE LEAD FREE.

(#) 18" MINIMUM VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN ALL STORM, SANITARY AND WATER LINES. DIMENSIONS ON THE PROFILE REPRESENT THE CLEARANCE BETWEEN THE OUTSIDE DIAMETERS OF WATER PIPE AND UTILITY BEING CROSSED.

A — STORM SEWER DOES NOT CROSS WATERLINE AT THIS LOCATION.

** — COMPACTED GRANULAR MATERIAL PER ITEM 912.

ALL FILLS ARE TO BE PLACED 4.0' PER ITEM 203 ABOVE THE PROPOSED WATERLINE PRIOR TO PRESSURE TESTING.

REVISION RECORD			
NO	DESCRIPTION	APPROVAL	DATE

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

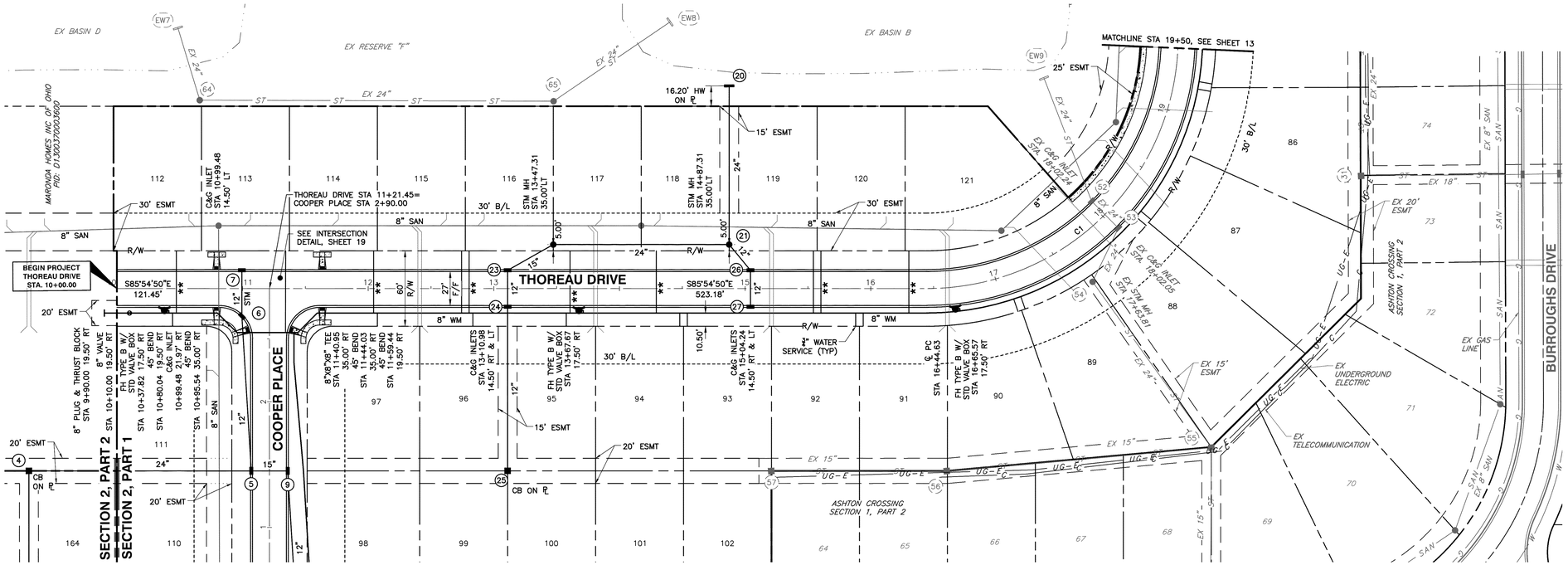
PLAN & PROFILE - COOPER PLACE & HEMINGWAY AVENUE

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:			164-591
APPROVED BY:			CLL

DRAWING NO.: C600

SHEET 11 OF 26

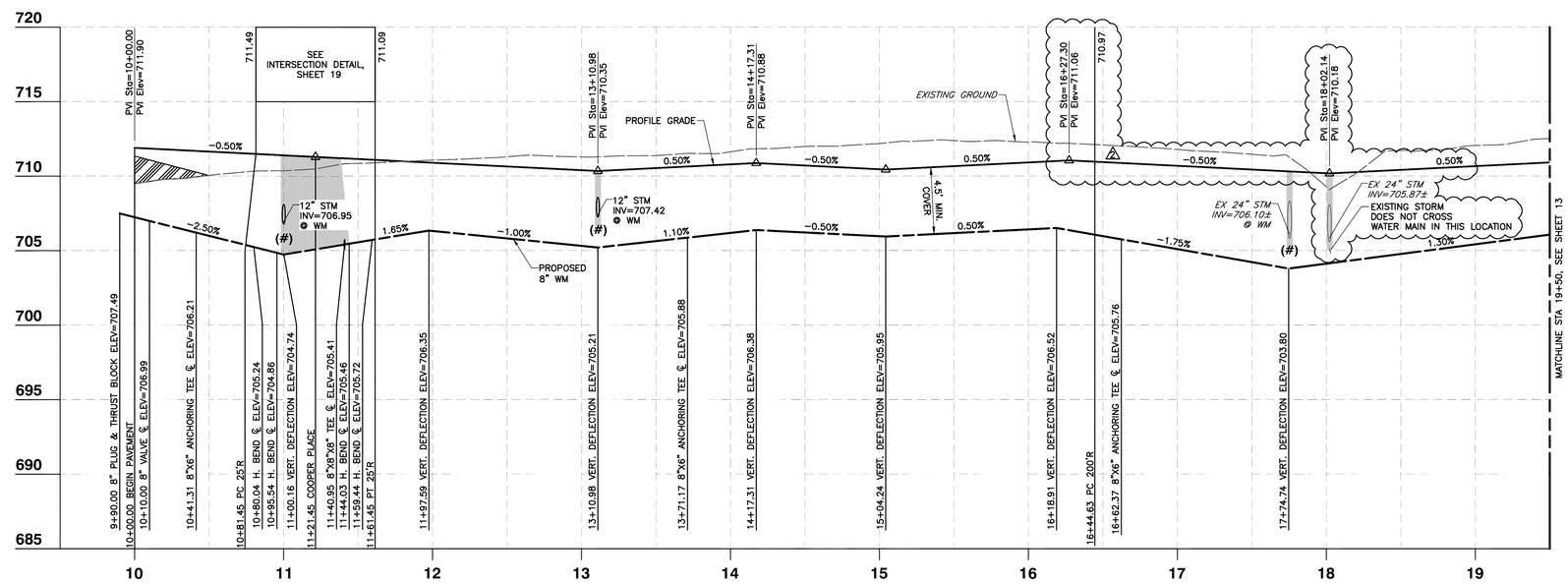
P:\2018\164-591\-CADD\Dwg\CV01 Street Plan\164591-C600_Plan & Profile-Hemingway.dwg\AVOUTT1 LS:(4/4/2018 - cathu) - LP: 4/14/2018 10:15 PM



THOREAU DRIVE

SCALE: 1"=50'

PART 1



THOREAU DRIVE PROFILE

SCALE H: 1"=50'; V: 1"=5'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE OF ROAD
- EXISTING FACE OF CURB
- ST — EXISTING STORM SEWER
- W — EXISTING WATER MAIN
- EXISTING STORM CATCH BASIN
- OH-E — EXISTING OVERHEAD UTILITIES
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- PROPOSED SANITARY MANHOLE
- PROPOSED STORM CURB INLET
- PROPOSED STORM CATCH BASIN
- PROPOSED STORM MANHOLE
- PROPOSED STORM HEADWALL
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE

ROAD CENTERLINE CURVE TABLE

CURVE #	CHORD BEARING	DELTA	CHORD	RADIUS	TAN	LENGTH
C1	N49° 05' 10.10"E	90°00'00"	282.84'	200'	200.00'	314.159'

BASIS OF STATIONING

THOREAU DRIVE – STATION AT INTERSECTION OF THOREAU DRIVE AND COOPER PLACE SET AT 11+21.45.

NOTES

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.

ALL ELEVATIONS SHOWN ON THIS PLAN ARE NAVD 88.

ALL EXISTING INFORMATION IS PER PLAN UNLESS OTHERWISE NOTED.

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ALL FITTINGS SHALL BE LEAD FREE.

** COMPACTED GRANULAR MATERIAL PER ITEM 912.

ALL FILLS ARE TO BE PLACED 4.0' PER ITEM 203 ABOVE THE PROPOSED WATERLINE PRIOR TO PRESSURE TESTING.

REVISION RECORD

NO.	DESCRIPTION	APPROVAL	DATE
1	REVISED PROFILE AT EXISTING STORM CROSSING. ADDED EXISTING STORM CROSSING	CMT	30May18

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614-540-6633 · 888-598-6808
www.cecinc.com

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

PLAN & PROFILE - THOREAU DRIVE

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C601

SHEET 12 OF 26

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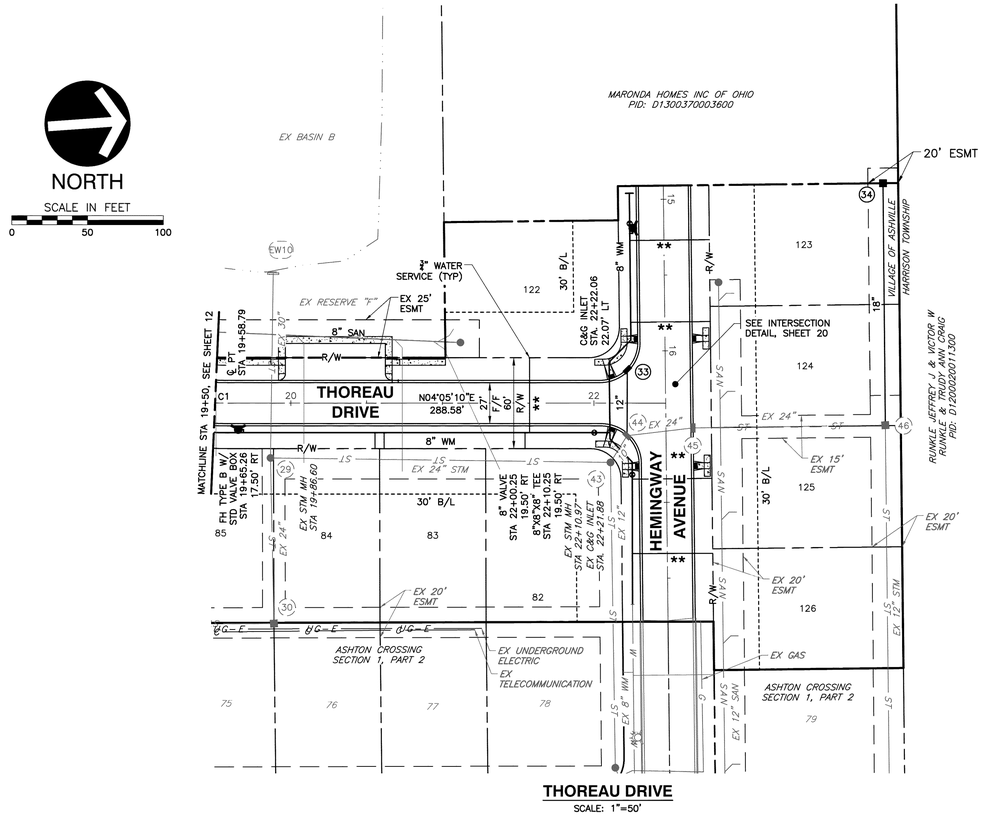
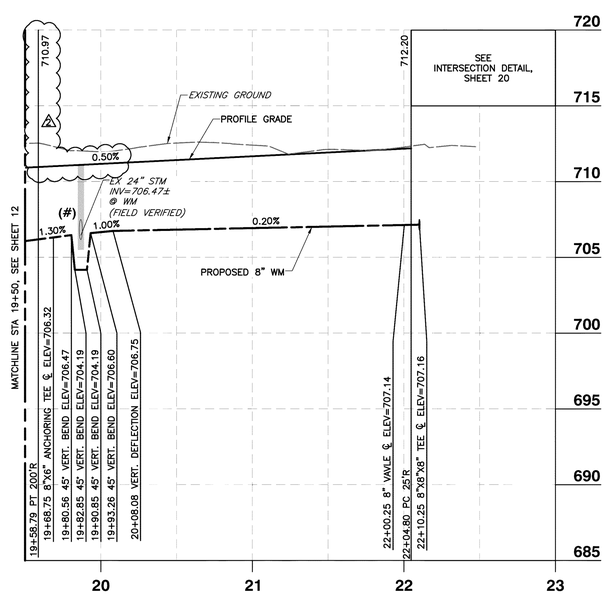


THOREAU DRIVE

SCALE: 1"=50'



THOREAU DRIVE PROFILE

SCALE H: 1"=50'; V: 1"=5'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE OF ROAD
- EXISTING FACE OF CURB
- ST — EXISTING STORM SEWER
- W — EXISTING WATER MAIN
- EXISTING STORM CATCH BASIN
- OH-E — EXISTING OVERHEAD UTILITIES
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- PROPOSED STORM CURB INLET
- PROPOSED STORM CATCH BASIN
- PROPOSED STORM MANHOLE
- PROPOSED STORM HEADWALL
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE

ROAD CENTERLINE CURVE TABLE

CURVE #	CHORD BEARING	DELTA	CHORD	RADIUS	TAN	LENGTH
C1	N49° 05' 10.10"E	90°00'00"	282.84'	200'	200.00'	314.159'

BASIS OF STATIONING

THOREAU DRIVE – STATION AT INTERSECTION OF THOREAU DRIVE AND COOPER PLACE SET AT 11+21.45.

NOTES

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** COMPACTED GRANULAR MATERIAL PER ITEM 912.

ALL FILLS ARE TO BE PLACED 4.0' PER ITEM 203 ABOVE THE PROPOSED WATERLINE PRIOR TO PRESSURE TESTING.

REVISION RECORD

NO.	DESCRIPTION	APPROVAL	DATE
1	REVISED PROFILE.	CMT	30May18

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www.cecinc.com

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

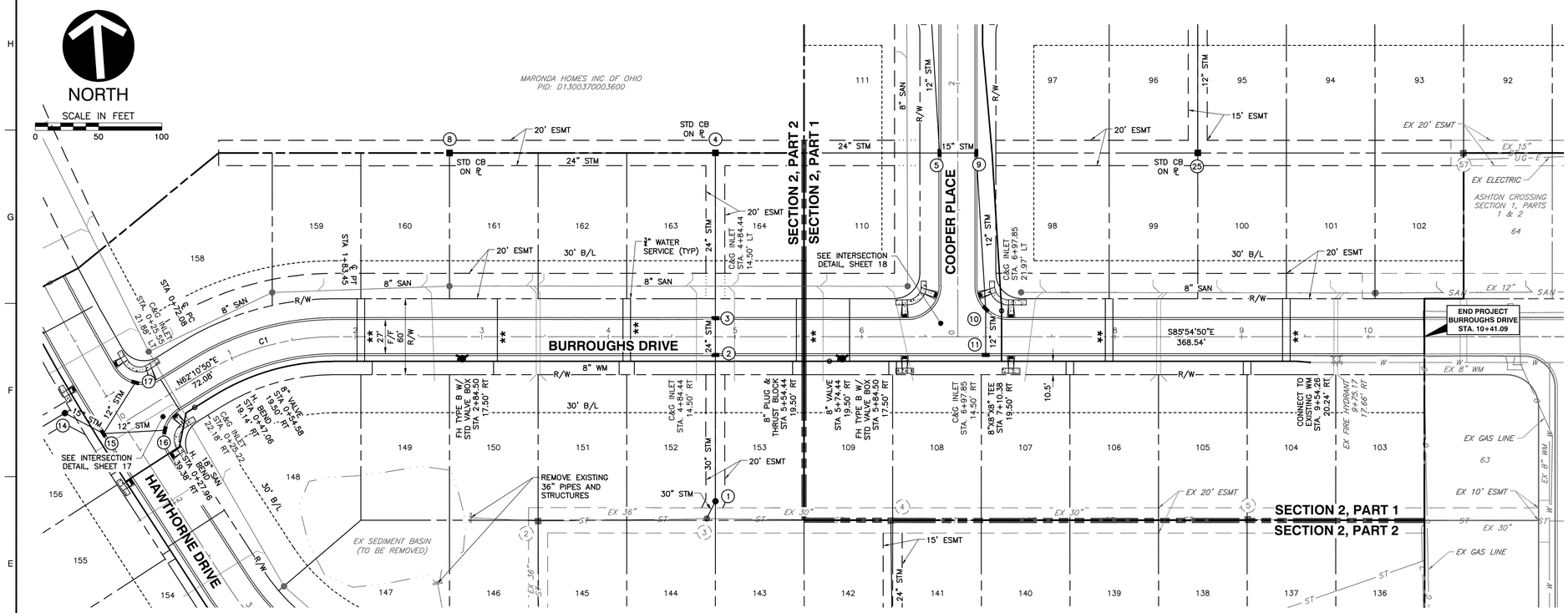
PLAN & PROFILE - THOREAU DRIVE

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO.:	164-591
APPROVED BY:	CLL

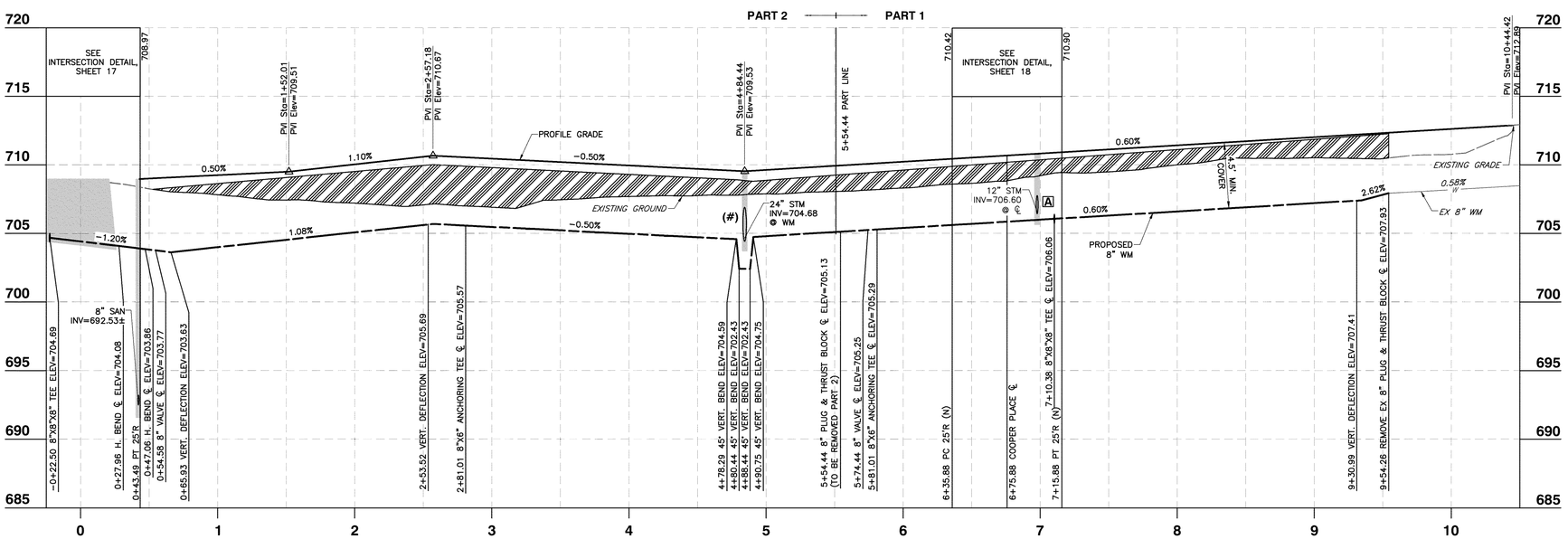
DRAWING NO.: C602

SHEET 13 OF 26

P:\2016\164-591\-CADD\Dwg\C601 Street Plan\164591-C602_Plan & Profile-Thoreau.dwg\LAYOUT2\ LS:(5/29/2018 - cartur) - LP: 5/29/2018 10:57 PM



BURROUGHS DRIVE
SCALE: 1"=50'



BURROUGHS DRIVE PROFILE
SCALE H: 1"=50'; V: 1"=5'

ROAD CENTERLINE CURVE TABLE

CURVE #	CHORD BEARING	DELTA	CHORD	RADIUS	TAN	LENGTH
C1	N78° 07' 59.86"E	31°54'20"	109.94'	200'	57.17'	111.372'

BASIS OF STATIONING

BURROUGHS DRIVE – INTERSECTION OF HAWTHORNE DRIVE AND BURROUGHS DRIVE SET TO STA 0+00.00.

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.
2. ALL ELEVATIONS SHOWN ON THIS PLAN ARE NAVD 88.
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4. ALL FITTINGS SHALL BE LEAD FREE.

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[A] STORM SEWER DOES NOT CROSS WATERLINE AT THIS LOCATION.

** COMPACTED GRANULAR MATERIAL PER ITEM 912.

ALL FILLS ARE TO BE PLACED 4.0' PER ITEM 203 ABOVE THE PROPOSED WATERLINE PRIOR TO PRESSURE TESTING.

LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE OF ROAD
- EXISTING FACE OF CURB
- ST — EXISTING STORM SEWER
- W — EXISTING WATER MAIN
- EXISTING STORM CATCH BASIN
- OH-E — EXISTING OVERHEAD UTILITIES
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- PROPOSED SANITARY MANHOLE
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- PROPOSED STORM CATCH BASIN
- PROPOSED STORM MANHOLE
- PROPOSED STORM HEADWALL
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

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614-540-6633 · 888-598-6808
www.cecinc.com

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

PLAN & PROFILE - BURROUGHS DRIVE

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: **C603**

SHEET 14 OF 26

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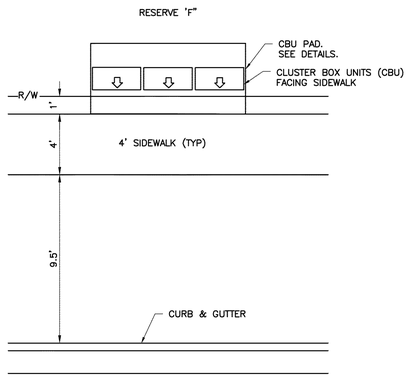
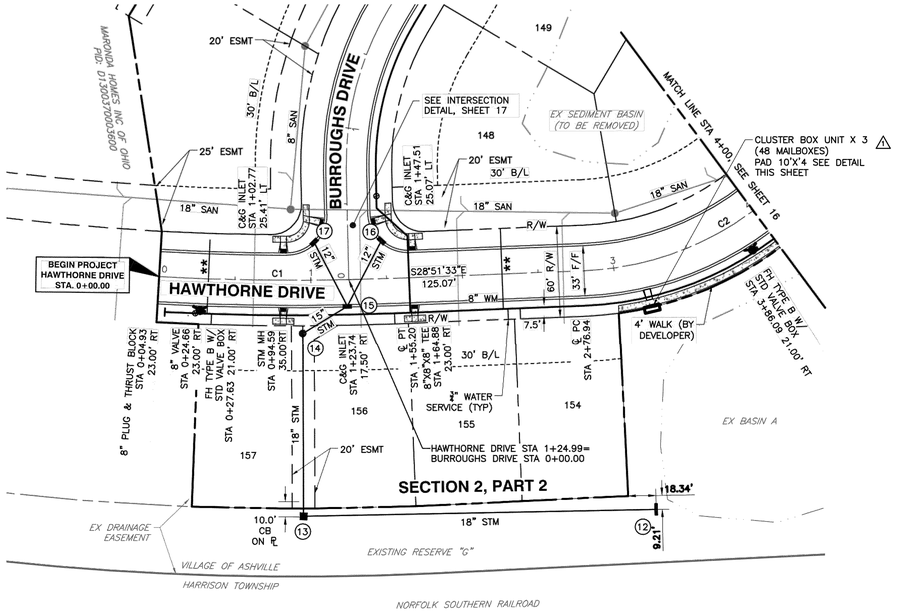


ASHTON CROSSING CLUSTER BOX UNIT ORIENTATION DETAIL

NOT TO SCALE



HAWTHORNE DRIVE

SCALE: 1"=50'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE OF ROAD
- EXISTING FACE OF CURB
- ST — EXISTING STORM SEWER
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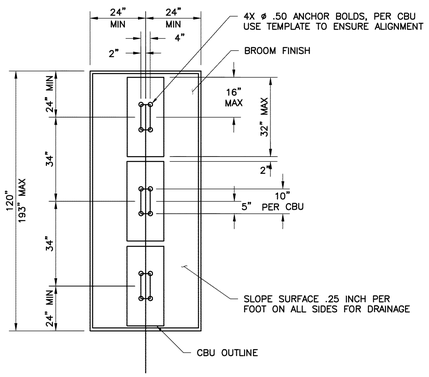
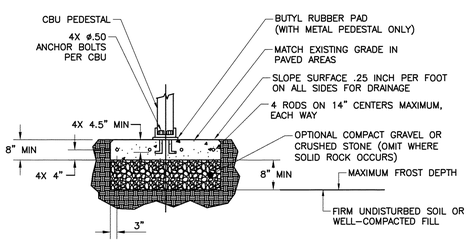


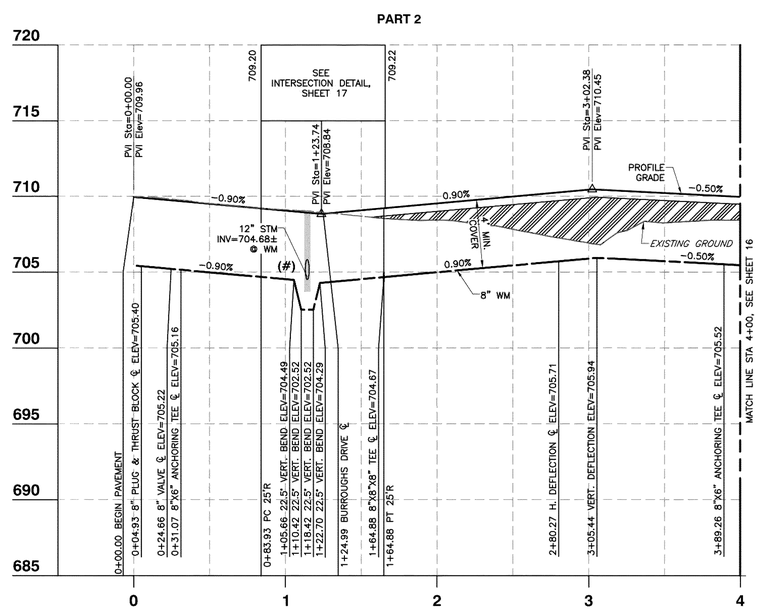


NOTES:

1. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN-6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50-4.50 SLUMP IN ACCORDANCE WITH ACI 301.
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
3. ANCHOR BOLTS SHALL CONFORM TO ASTM A193, GRADE B8M, TYPE 315 STAINLESS STEEL.

MULTIPLE UNIT PAD DETAIL

NOT TO SCALE



HAWTHORNE DRIVE PROFILE

SCALE H: 1"=50'; V: 1"=5'

ROAD CENTERLINE CURVE TABLE

CURVE #	CHORD BEARING	DELTA	CHORD	RADIUS	TAN	LENGTH
C1	S26° 11' 20.04"E	5°20'26"	155.15'	1665'	77.66'	155.203'
C2	S57° 23' 11.43"E	57°03'17"	191.03'	200'	108.71'	199.158'

BASIS OF STATIONING

HAWTHORNE DRIVE – STATION AT INTERSECTION OF HAWTHORNE DRIVE AND BURROUGHS DRIVE SET AT 1+23.74.

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS AND INVERTS PRIOR TO START OF CONSTRUCTION.
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A STORM SEWER DOES NOT CROSS WATERLINE AT THIS LOCATION.

** COMPACTED GRANULAR MATERIAL PER ITEM 912.

ALL FILLS ARE TO BE PLACED 4.0' PER ITEM 203 ABOVE THE PROPOSED WATERLINE PRIOR TO PRESSURE TESTING.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE
1	ADDED CBU LOCATION, ADDED CBU DETAIL	CMT	27Apr16

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614-540-6633 · 888-598-6808
www.cecinc.com

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

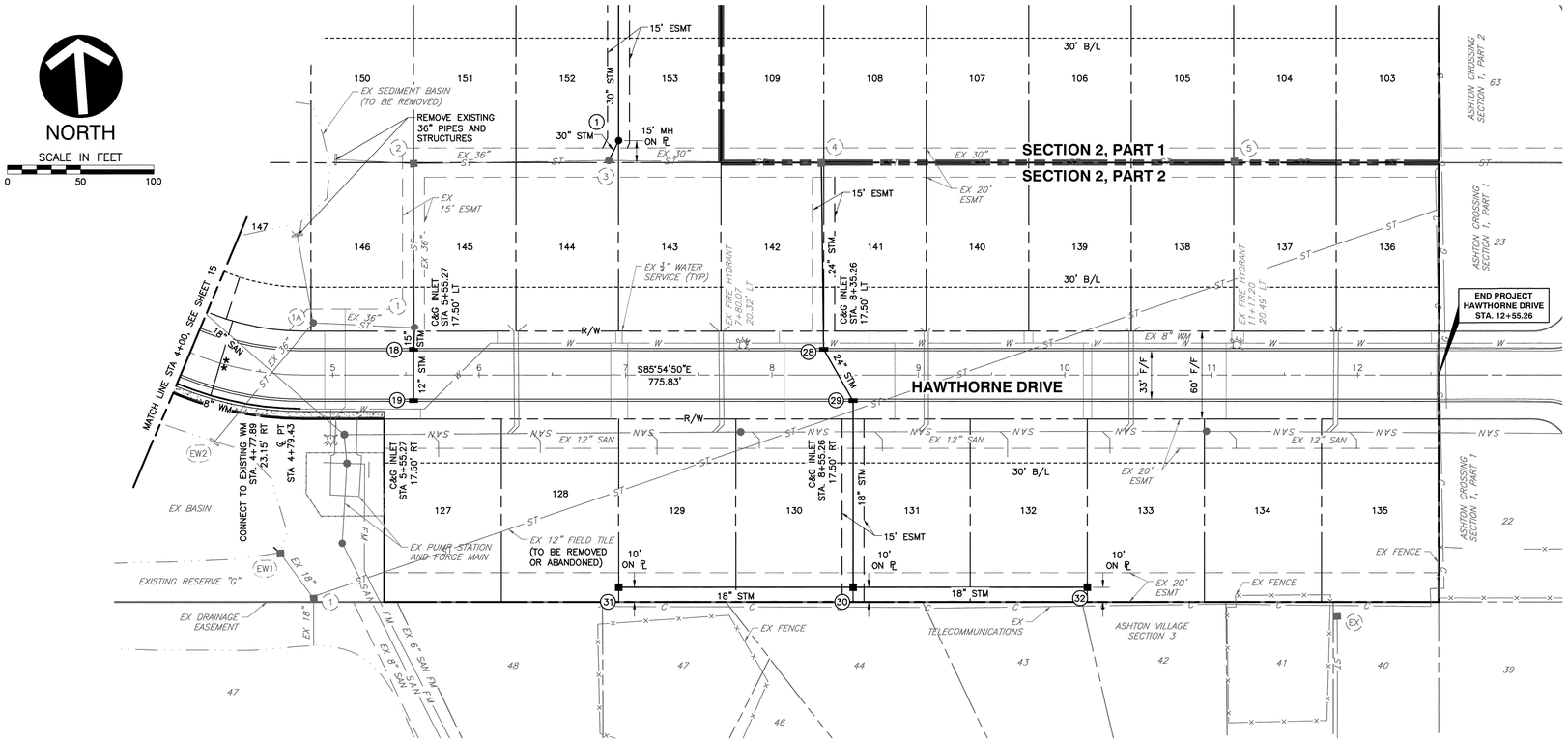
PLAN & PROFILE - HAWTHORNE DRIVE

DATE:	APRIL 2017	DRAWN BY: MGS
DWG SCALE:	AS NOTED	CHECKED BY: CJB
PROJECT NO:	164-591	
APPROVED BY:	CLL	

DRAWING NO.: **C604**

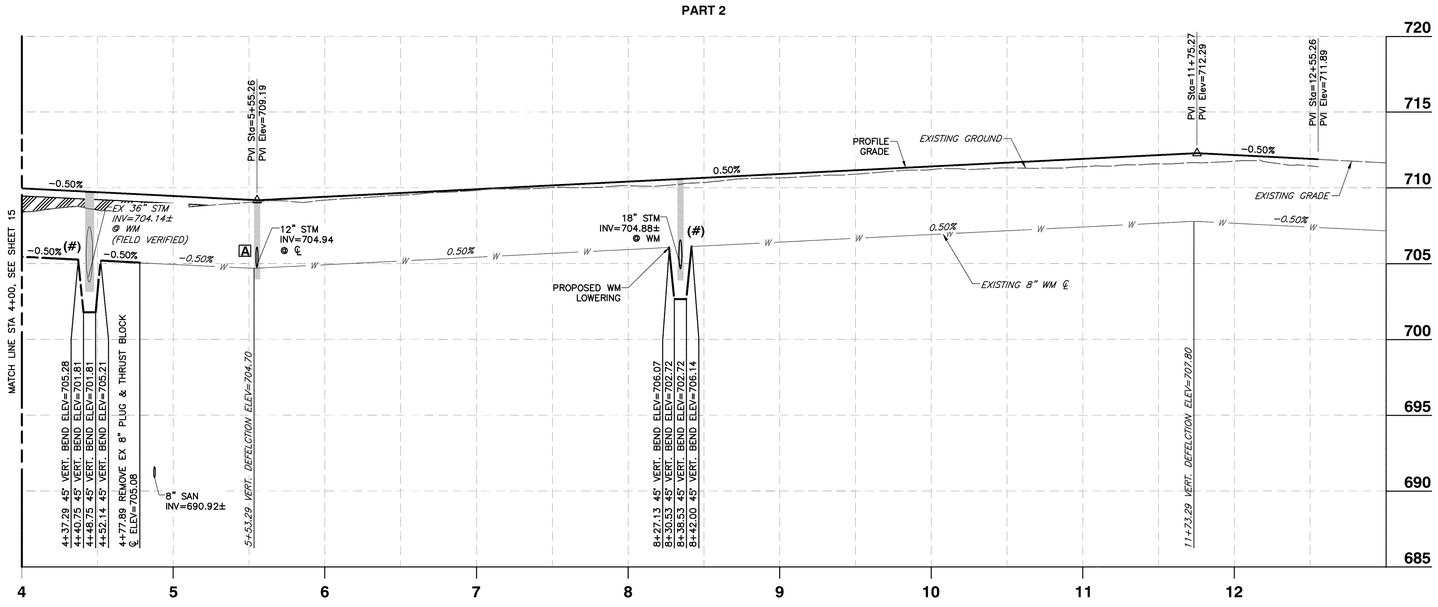
SHEET 15 OF 26

P:\2016\164-591\-CADD\Dwg\C601 Street Plan\164591-C600_Plan & Profile-Hawthorne.dwg[4x10UT] LS:(9/14/2017 - centur) - LP: 9/14/2017 5:37 PM



HAWTHORNE DRIVE

SCALE: 1"=50'



HAWTHORNE DRIVE PROFILE

SCALE H: 1"=50'; V: 1"=5'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE OF ROAD
- EXISTING FACE OF CURB
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- EXISTING WATER MAIN
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ROAD CENTERLINE CURVE TABLE

CURVE #	CHORD BEARING	DELTA	CHORD	RADIUS	TAN	LENGTH
C1	S26° 11' 20.04"E	5°20'26"	155.15'	1665'	77.66'	155.203'
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BASIS OF STATIONING

HAWTHORNE DRIVE – STATION AT INTERSECTION OF HAWTHORNE DRIVE AND BURROUGHS DRIVE SET AT 1+23.74.

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ALL FILLS ARE TO BE PLACED 4.0' PER ITEM 203 ABOVE THE PROPOSED WATERLINE PRIOR TO PRESSURE TESTING.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

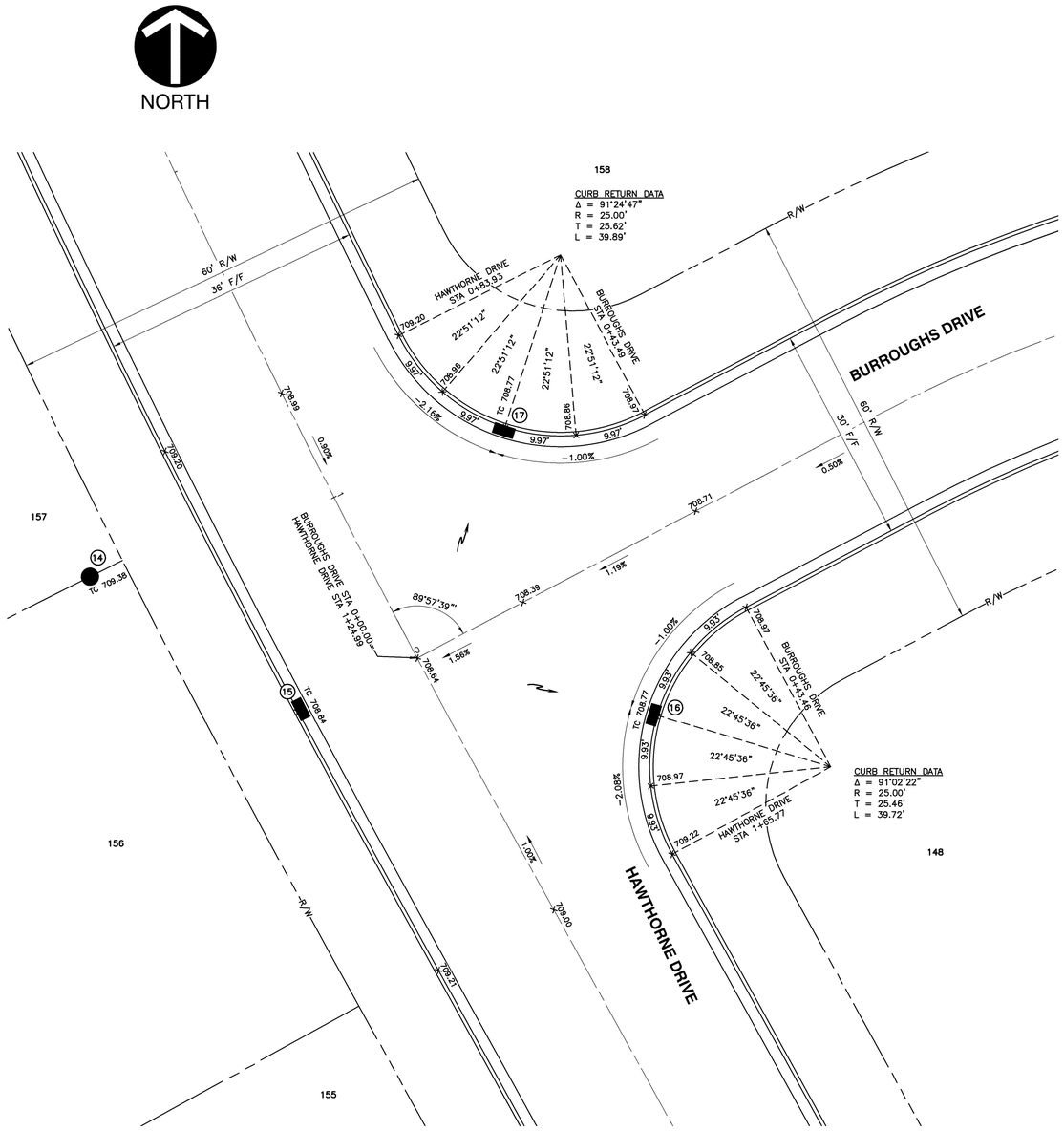
PLAN & PROFILE - HAWTHORNE DRIVE

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C605

SHEET 16 OF 26

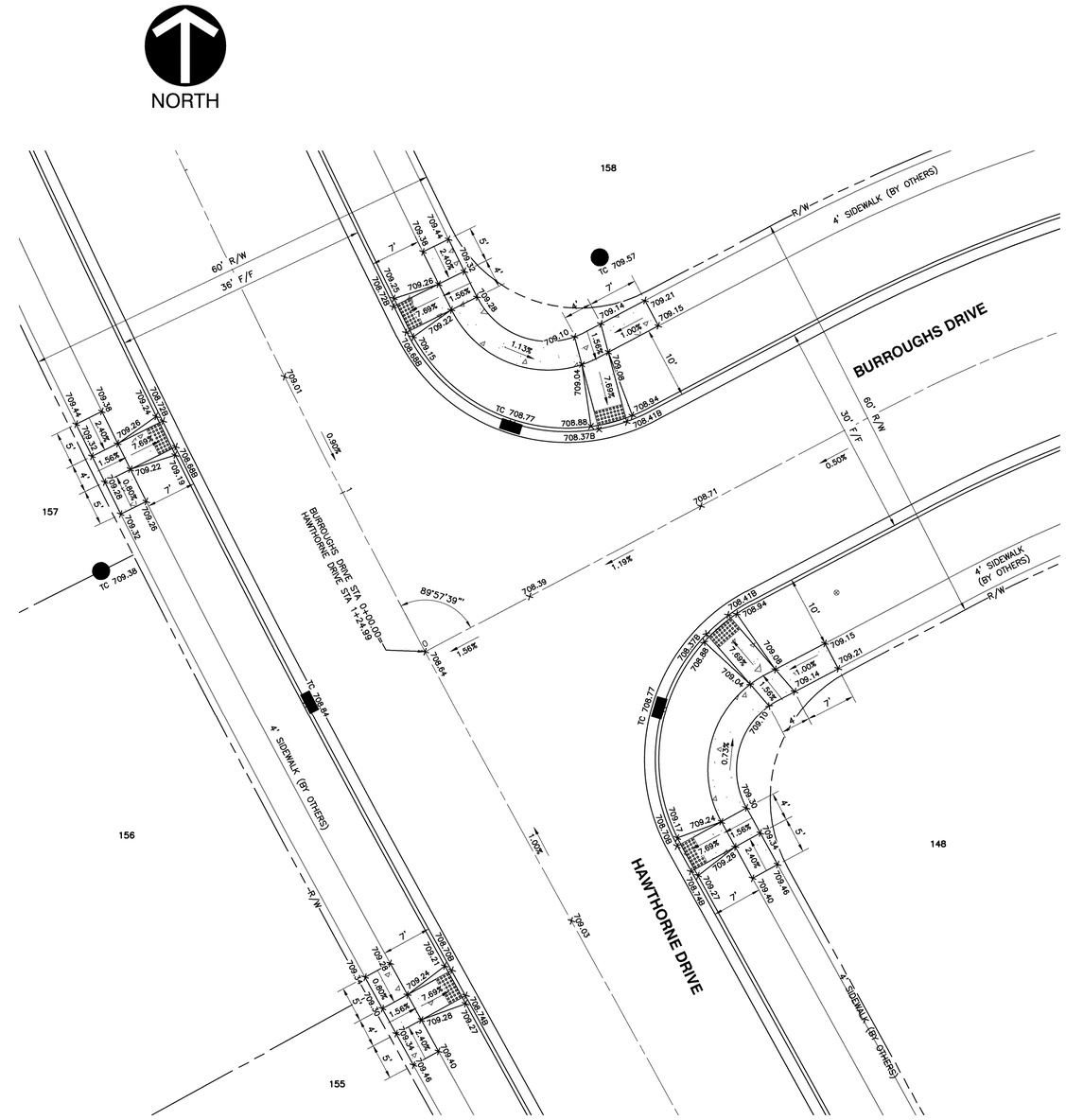
P:\2016\164-591\-CADD\Dwg\C101 Street Plan\164591-C605_Plan & Profile-Hawthorne.dwg[LAYOUT2] LS:(9/14/2017 - cathul) - LP: 9/14/2017 5:37 PM



INTERSECTION DETAIL 1

SECTION 2, PART 2
SCALE: 1"=10'

SCALE IN FEET
0 10 20



CURB RAMP DETAIL 1

SECTION 2, PART 2
SCALE: 1"=10'

SCALE IN FEET
0 10 20

LEGEND

× *TC 905.42*	EXISTING TOP OF CASTING
× TC 905.42	PROP TOP OF CASTING
× TC 905.42 (RTG)	PROP TOP OF CASTING RECONSTRUCTED TO GRADE
× 905.66B	PROP BOTTOM OF CURB
× 905.66	PROP SPOT ELEVATION

NOTES

1. RAMPS TO BE BUILT BY CONTRACTOR DURING ROADWAY CONSTRUCTION. SIDEWALK TO BE BUILT BY HOMEBUILDER AS NOTED.
2. DETECTABLE WARNING SURFACES SHALL CONFORM TO ADAAG SECTION 4.29. SEE COLUMBUS STANDARD DRAWING 2319 FOR SPECIFIC INSTALLATION REQUIREMENTS.
3. CURB DATA INFORMATION INCLUDED IN THE INTERSECTION DETAILS REFLECTS DATA AT THE FRONT OF CURB.
4. ALL ELEVATIONS AT CURB ARE TOP OF CURB UNLESS OTHERWISE NOTED.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

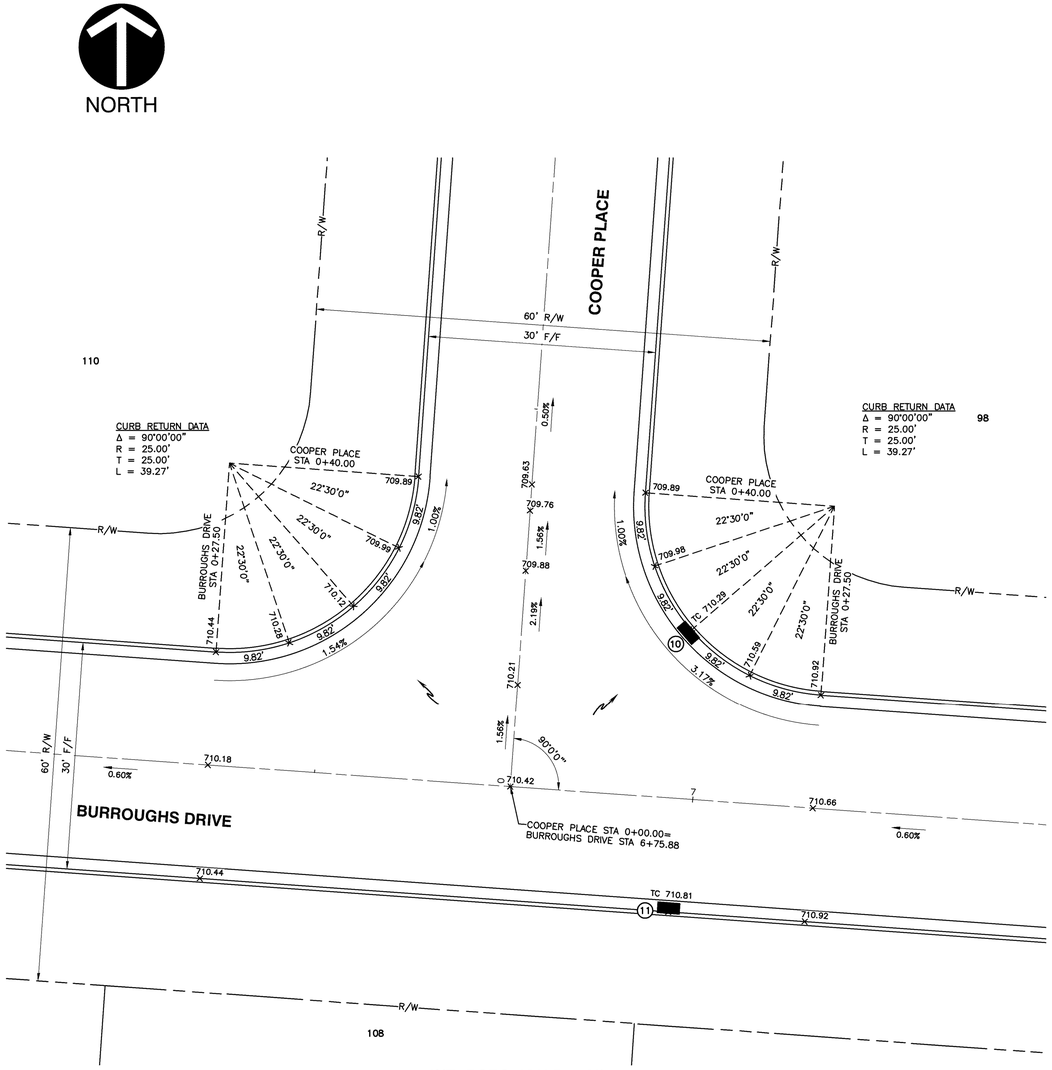
INTERSECTION DETAILS

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C302

SHEET 17 OF 26

P:\2016\164-591\-CADD\Dwg\CVD1 Street Plan\164591-C302_Intersection Details.dwg\BURROUGHS-HAWTHORNE\ LS:(9/14/2017 - mgsmith) - LP: 9/14/2017 5:37 PM



INTERSECTION DETAIL 2

SECTION 2, PART 1
SCALE: 1"=10'

SCALE IN FEET
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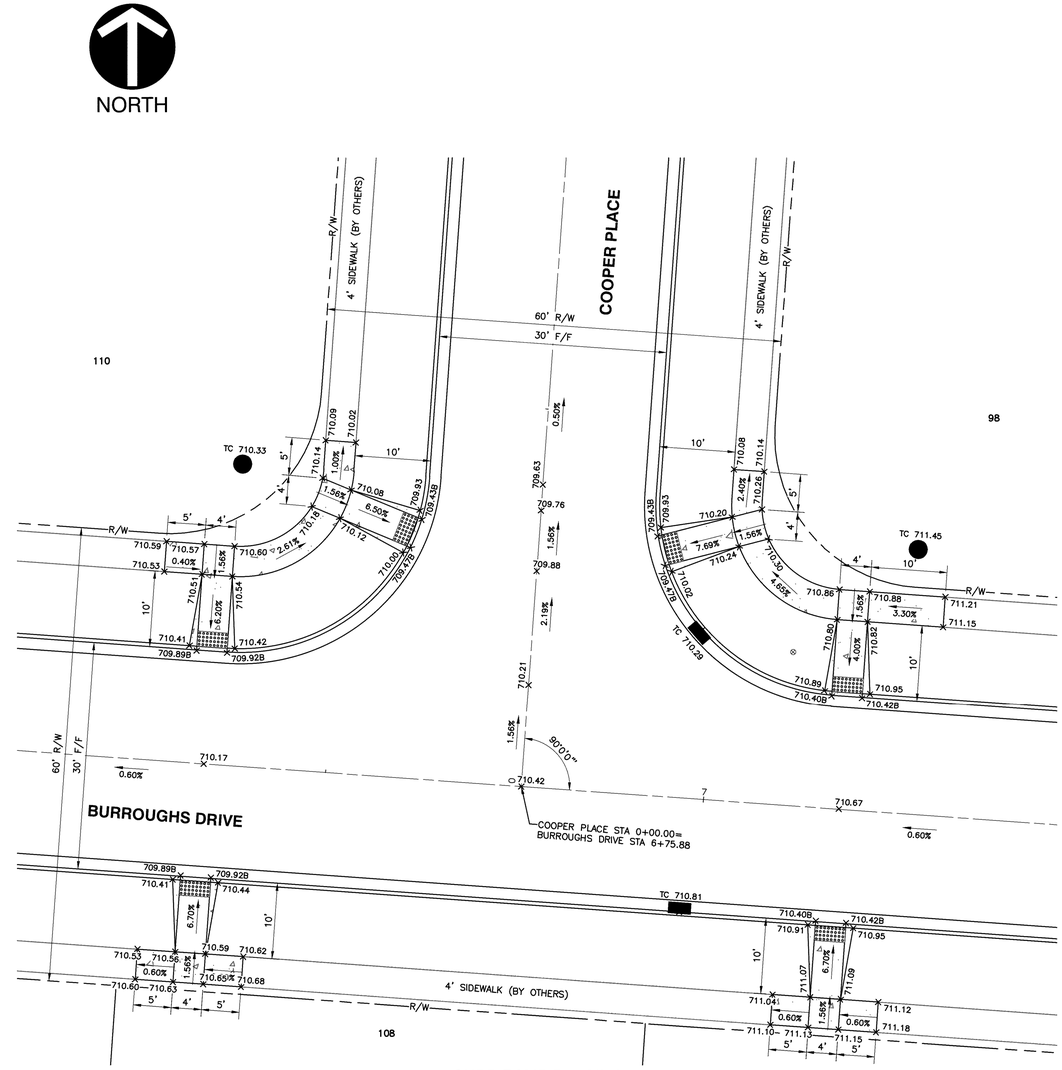

CURB RAMP DETAIL 2

SECTION 2, PART 1
SCALE: 1"=10'

SCALE IN FEET
0 10 20

LEGEND

× *TC 905.42*	EXISTING TOP OF CASTING
× TC 905.42	PROP TOP OF CASTING
× TC 905.42 (RTG)	PROP TOP OF CASTING RECONSTRUCTED TO GRADE
× 905.66B	PROP BOTTOM OF CURB
× 905.66	PROP SPOT ELEVATION

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REVISION RECORD

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

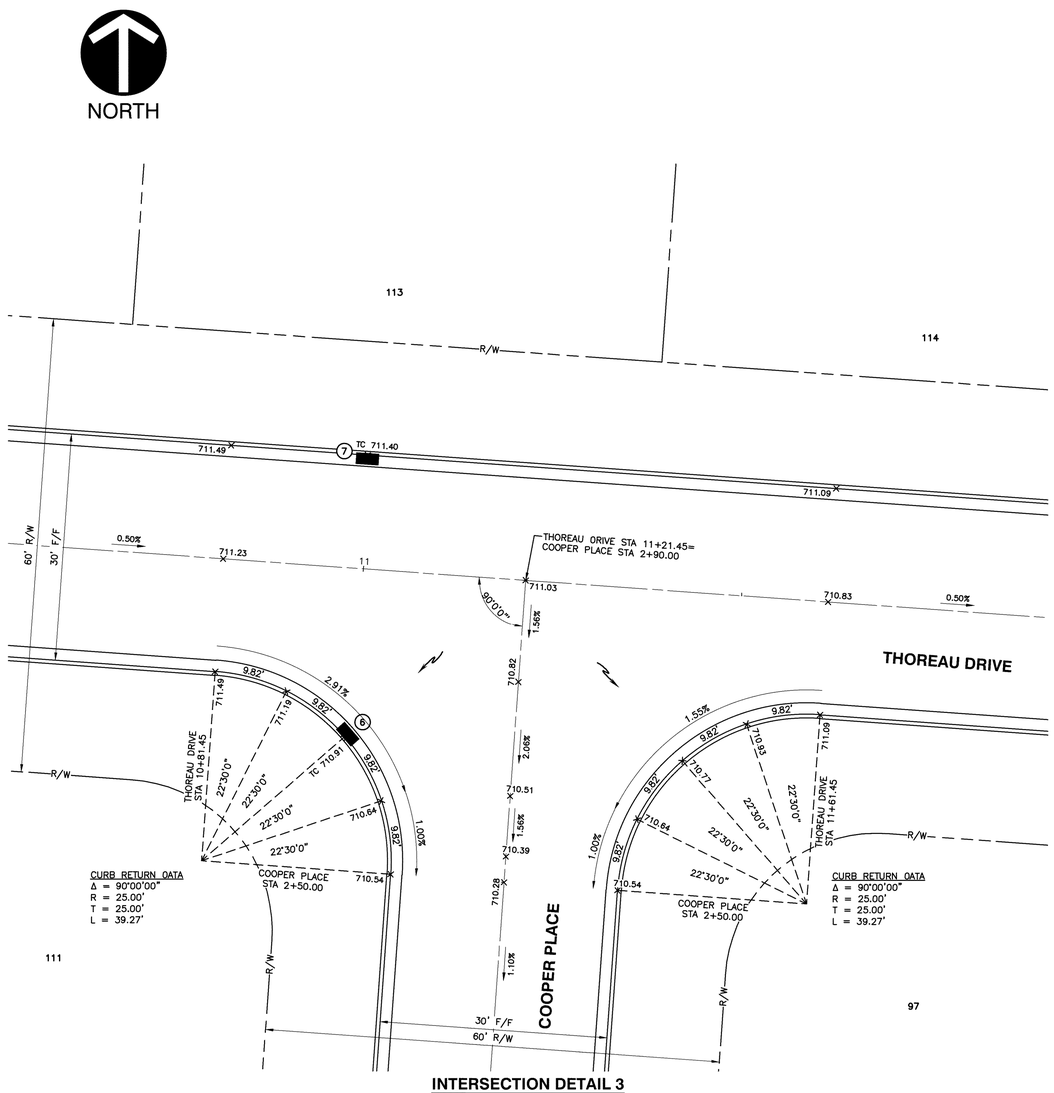
INTERSECTION DETAILS

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: **C303**

SHEET 18 OF 26

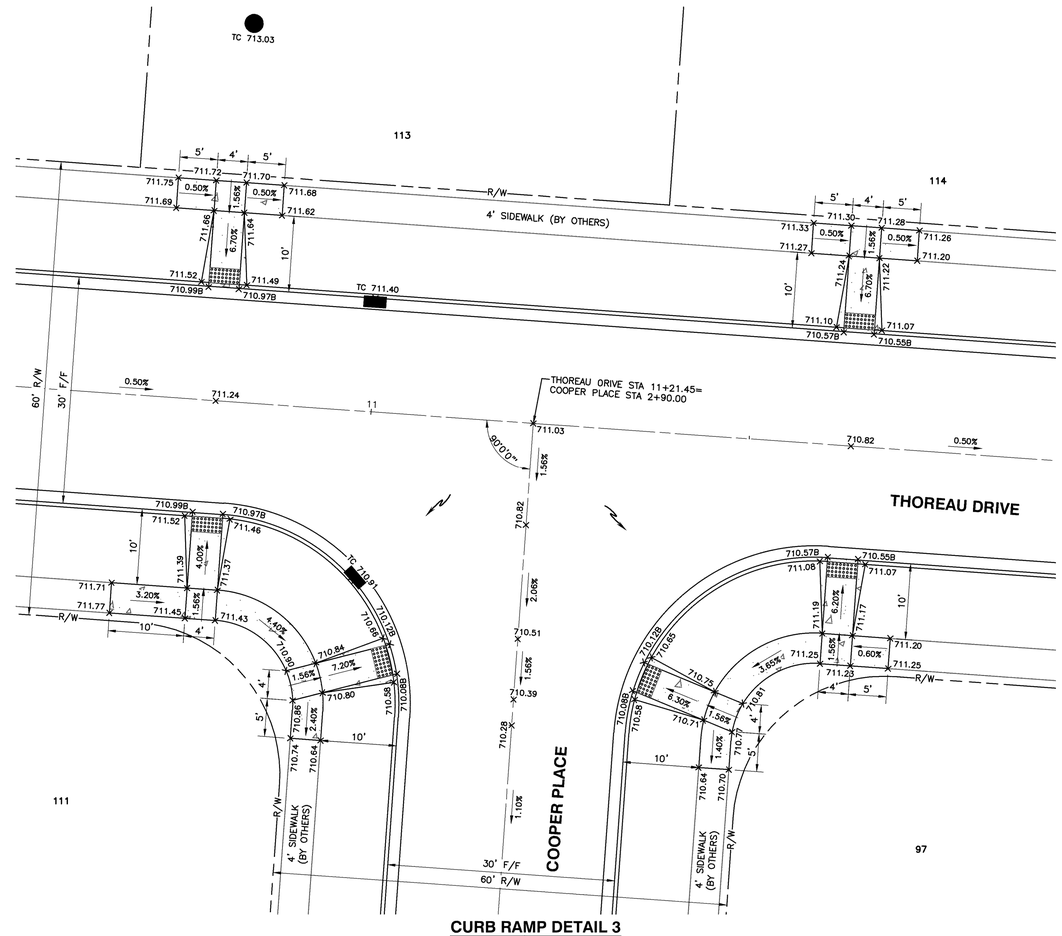
P:\2016\164-591\-CADD\Dwg\C101 Street Plan\164591-C300_Intersection Details.dwg[COOPER-BURROUGHS] LS:(9/14/2017 - mgsmith) - LD: 9/14/2017 5:37 PM



INTERSECTION DETAIL 3

SECTION 2, PART 1
SCALE: 1"=10'

SCALE IN FEET
0 10 20



CURB RAMP DETAIL 3

SECTION 2, PART 1
SCALE: 1"=10'

SCALE IN FEET
0 10 20

LEGEND

× *TC 905.42*	EXISTING TOP OF CASTING
× TC 905.42	PROP TOP OF CASTING
× TC 905.42 (RTG)	PROP TOP OF CASTING RECONSTRUCTED TO GRADE
× 905.66B	PROP BOTTOM OF CURB
× 905.66	PROP SPOT ELEVATION

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REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

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250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

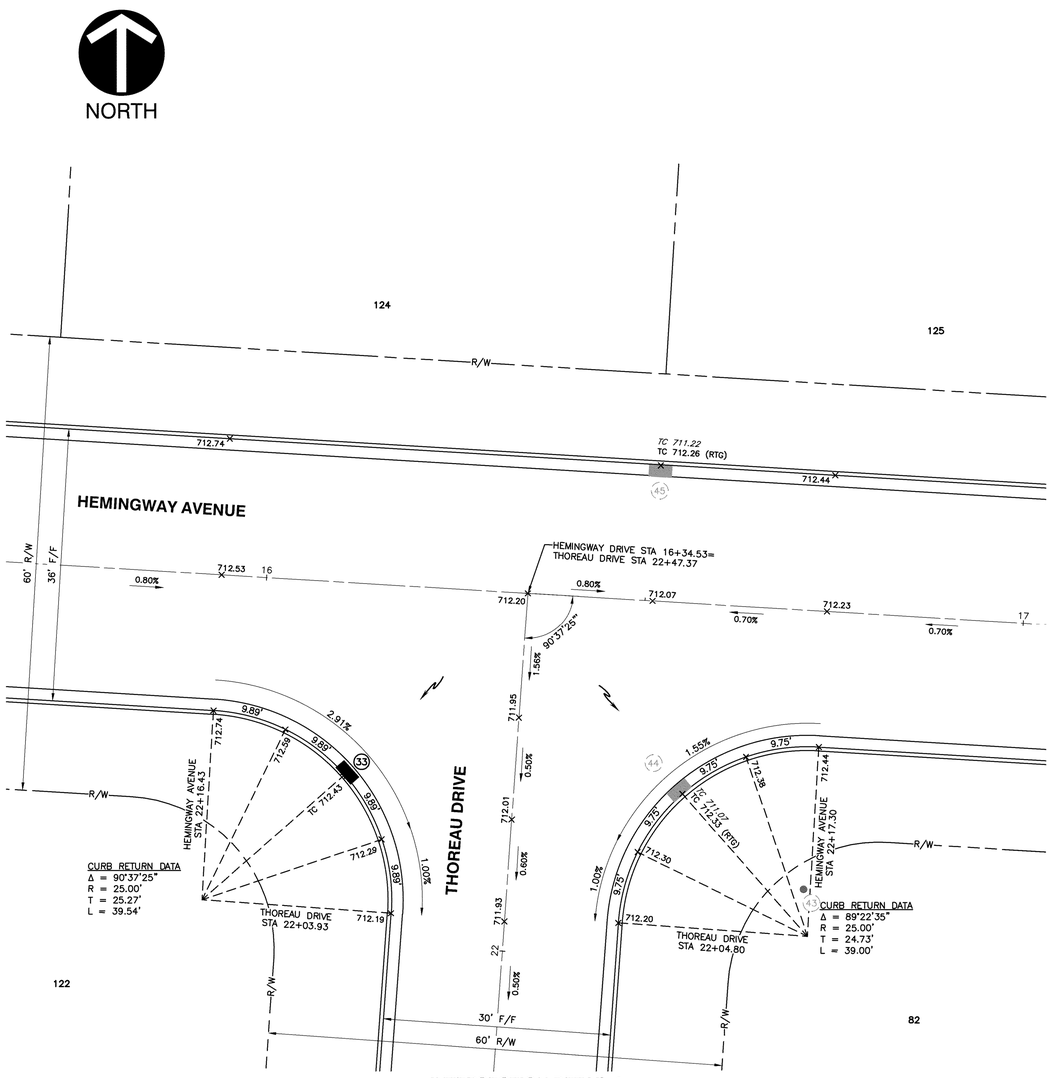
ASHTON CROSSING
SECTION 2, PART 1 & 2
VILLAGE OF ASHVILLE, OHIO

INTERSECTION DETAILS

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:	164-591		
APPROVED BY:	CLL		

DRAWING NO.:
C304
SHEET 19 OF 26

P:\2016\164-591\-CADD\Dwg\CV01 Street Plan\164591-C300_Intersection Details.dwg(THOREAU-COOPER) LS:(9/14/2017 - mgsmith) - LP: 9/14/2017 5:38 PM



INTERSECTION DETAIL 4

SECTION 2, PART 1
SCALE: 1"=10'

SCALE IN FEET
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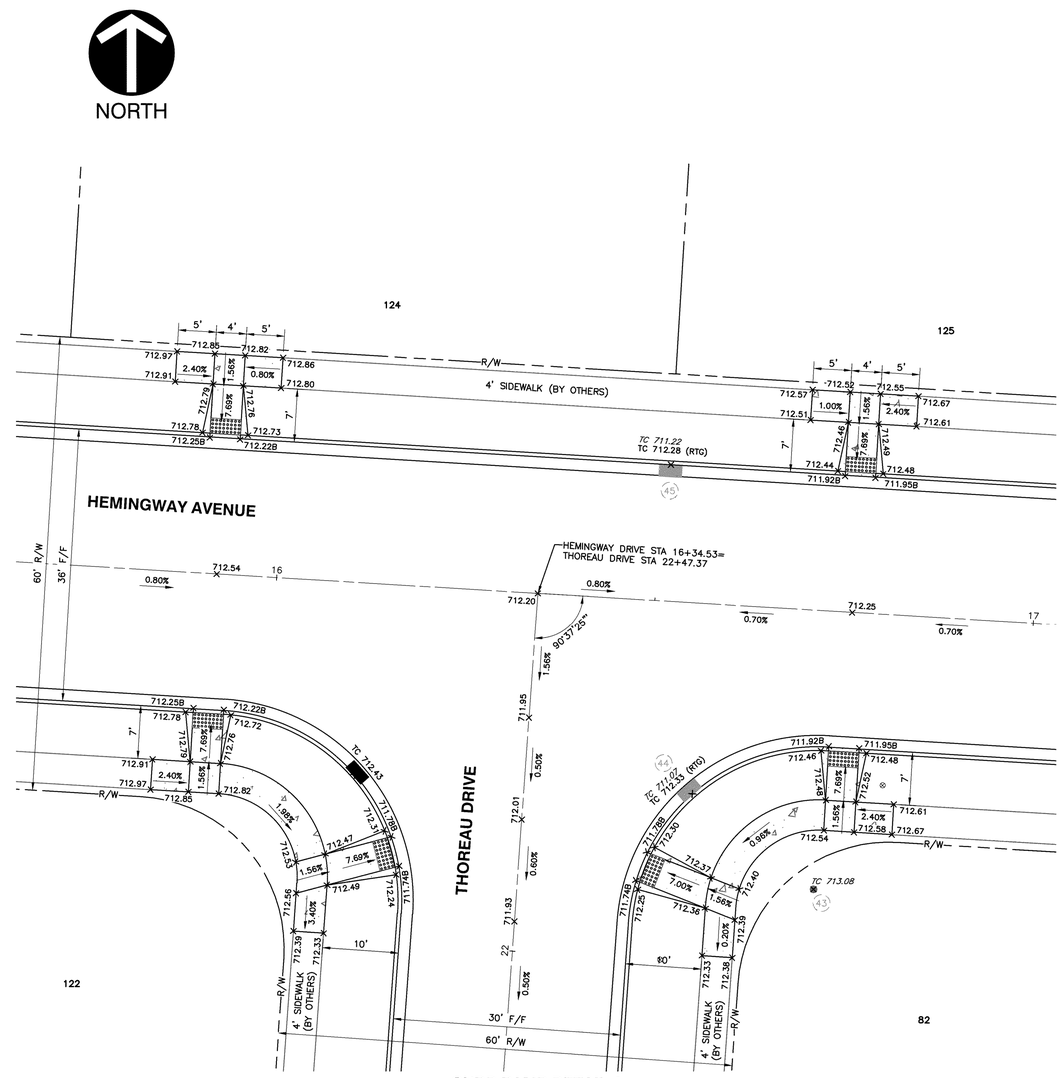

CURB RAMP DETAIL 4

SECTION 2, PART 1
SCALE: 1"=10'

SCALE IN FEET
0 10 20

LEGEND

× *TC 905.42*	EXISTING TOP OF CASTING
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REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

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614-540-6633 · 888-598-6808
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ASHTON CROSSING
SECTION 2, PART 1 & 2
VILLAGE OF ASHVILLE, OHIO

INTERSECTION DETAILS

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.:
C305
SHEET 20 OF 26

P:\2016\164-591\-CADD\Dwg\CVD\ Street Plan\164591-C300_Intersection Details.dwg\HEMINGWAY-THOREAU\ LS:(9/14/2017 - mgsmith) - LP: 9/14/2017 5:39 PM

NORTH

SCALE IN FEET

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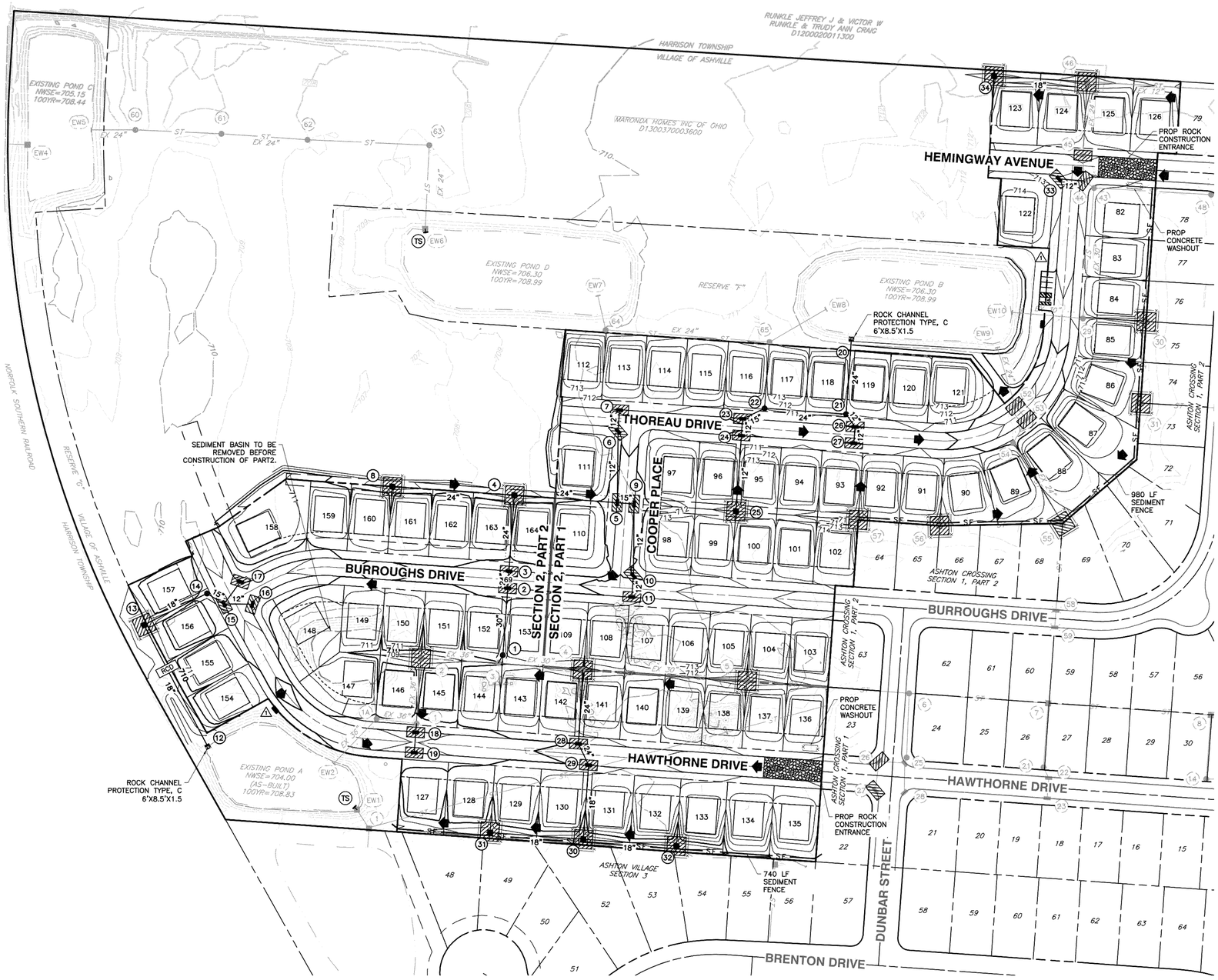

LEGEND

- MASTER FLOOD ROUTING ARROW
- FLOW ARROW
- LIMITS OF GRADING/DISTURBANCE
- SF — PROPOSED SEDIMENT FENCE
- PROPOSED FILTER FABRIC INLET PROTECTION
- RCD — PROPOSED ROCK CHECK DAM
- PROPOSED INLET PROTECTION
- PROPOSED CONCRETE WASHOUT
- PROPOSED ROCK CONSTRUCTION ENTRANCE

NOTES

1. TEMPORARY SEDIMENT BASIN FOR SECTION 1, PARTS 1 & 2 TO REMAIN DURING THE CONSTRUCTION OF SECTION 2, PART 1. SKIMMER TO TO BE INSTALLED ON WET DETENTION BASIN D OUTLET STRUCTURE BEFORE CONSTRUCTION OF SECTION, 2 PART 1.
2. SKIMMER TO TO BE INSTALLED ON WET DETENTION BASIN A OUTLET STRUCTURE BEFORE CONSTRUCTION OF SECTION, 2 PART 2.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE
1	ADDED CBU LOCATION, ADDED PARKING SPOTS	CMT	27Apr18

Civil & Environmental Consultants, Inc.
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614-540-6633 · 888-598-6808
www.cecinc.com

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

EROSION & SEDIMENT CONTROL PLAN

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO.:		164-591	
APPROVED BY:			CLL

DRAWING NO.: C900

SHEET 21 OF 26

P:\2016\164-591\-CADD\Dwg\C901 Street Plan\164591-C900_E&S.dwg\AFUTT1 LS:9/14/2017 - cathur) - LP: 9/14/2017 5:38 PM

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

PLAN DESIGNER:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
8740 ORION PLACE, SUITE 100
COLUMBUS, OHIO 43240
PHONE: (614) 540-6633
FAX: (614) 540-6638
CONTACT: CHAD BUCKLEY, P.E.

OWNER/DEVELOPER:

MARONDA HOMES INC. OF OHIO
3966 BROWN PARK DRIVE, SUITE E
HILLIARD, OHIO 43026
CONTACT: MARK SCHEEL
PHONE: (614) 247-5775 x14
EMAIL: SCHEELMA@MARONDA.COM

ON-SITE CONTACT:

CONTACT: MARK SCHEEL
PHONE: (614) 247-5775 X14

PROJECT DESCRIPTION:

PROJECT INCLUDES THE CONSTRUCTION OF A 83 LOT SUBDIVISION ALONG WITH STORM SEWER, SANITARY SEWER, AND WATERLINE IMPROVEMENTS.

CONSTRUCTION SEQUENCE:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. ESTABLISH CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCE
3. CHECK TEMPORARY SEDIMENT RISER AND SKIMMER ON EXISTING BASIN. INSTALL EROSION CONTROL DEVICES
4. FULL SITE GRADING
5. PILE TOPSOIL WITHIN SILT FENCE PERIMETER
6. STABILIZE DENUDED AREAS AND STOCKPILES WITHIN 14 DAYS OF LAST CONSTRUCTION ACTIVITY IN THAT AREA
7. INSTALL UTILITIES
8. BUILDING CONSTRUCTION
9. FINAL GRADING AND INSTALL PERMANENT SEEDING
10. RESEED ANY DISTURBED AREAS AND LANDSCAPE SITE
11. REMOVE EROSION CONTROL DEVICES ONCE SITE HAS BEEN PERMANENTLY STABILIZED

SCHEDULE:

THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE OWNER. SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE PLACED IN ACCORDANCE WITH THIS SCHEDULE.

SITE DATA:

SECTION 2, PARTS 1 & 2 – APPROX. 26.4 ACRES

DISTURBED AREA:

SECTION 2, PARTS 1 & 2 – APPROX. 23.1 ACRES

RUNOFF C VALUES:

PRE~ 0.40
POST~ 0.40

PROPOSED IMPERVIOUS AREA:

PART 1 – 5.71 AC.
PART 2 – 5.10 AC.

ULTIMATELY RELEASING INTO:

DRAIN INTO EXISTING BASINS ON-SITE. ALL STORM WATER DRAINS ULTIMATELY TO WALNUT CREEK.

STORM WATER MANAGEMENT:

ALL DETENTION IS PROVIDED BY THE EXISTING BASINS. PERIMETER SILT FENCE AND STORM SEWER INLET PROTECTION WILL ADDITIONALLY BE USED IN THE MANAGEMENT OF CONSTRUCTION SITE STORM WATER RUNOFF.

EXISTING SITE CONDITIONS:

EXISTING – MEADOW AND BRUSH, WOODED

SOIL TYPE:
CrA – CROSBY SILT LOAM, SOUTHERN OHIO TILL PLAIN (0 TO 2 PERCENT SLOPES)
Ko – KOKOMO SILT CLAY LOAM (0 TO 2 PERCENT SLOPES)
MKA – MIAMIAN-KENDALLVILLE SILT LOAM (0 TO 2 PERCENT SLOPES)
MkB – MIAMIAN-KANDALLVILLE SILT LOAM (2 TO 6 PERCENT SLOPES)

GENERAL PERMIT:

4GCXXXXX*AG

NOTES

1. STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER, CLEANING AND (IF NECESSARY MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS).
2. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF THE CITY OF COLUMBUS AND/OR THE OHIO EPA.
3. THE CITY OF COLUMBUS WILL ALLOW THE USE OF STRAW WATTLES IN PLACE OF SILT FENCE.
4. THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED OEPA GENERAL CONSTRUCTION PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.

SEDIMENT FENCE

THIS SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED. MATERIAL PROPERTIES ARE LISTED IN THE PROVIDED TABLE.

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6 INCHES OVERLAP PRIOR TO DRIVING INTO THE GROUND. (SEE DETAILS)
10. MAINTENANCE – SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.
SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS:

1. FENCE POSTS – THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD POSTS WILL BE 2-BY-2 INCH NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SEDIMENT FENCE FABRIC SHALL BE ODOT, TYPE C GEOTEXTILE FABRIC OR THE EQUIVALENT TO THE PROPERTIES IN THE TABLE BELOW.

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LBS. (535 N)	ASTM D 4632
MAXIMUM ELONGATION AT 60 LBS	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS (220 N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS (180 N)	ASTM D 4533
APPARENT OPENING SIZE	< OR = 0.84 MM	ASTM D4751
MINIMUM PERMITTIVITY	1X10-2 SEC. -1	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70%	ASTM G 4355

TEMPORARY AND PERMANENT SEEDING

THE LIMITS OF SEEDING AND MULCHING ARE AS SHOWN WITHIN THE PLAN. SEEDING HAS BEEN ASSUMED TO BE 5'-0" OUTSIDE THE WORK LIMITS OR THE RIGHT-OF-WAY WHICHEVER IS GREATER. ALL AREAS NOT DESIGNATED TO BE SEEDED SHALL REMAIN UNDER NATURAL GROUND COVER. THOSE AREAS DISTURBED OUTSIDE THE SEEDING LIMITS SHALL BE SEEDED AND MULCHED AT THE CONTRACTOR'S EXPENSE.

TEMPORARY SEEDING: ANY AREA WHICH WILL BE LEFT DORMANT (UNDISTURBED) FOR MORE THAN 21 DAYS SHALL BE SEEDED WITHIN 7 DAYS OF TERMINATED WORK. DISTURBED AREAS WITHIN 50 FEET OF A STREAM, FIRST ORDER OR LARGER, SHALL BE STABILIZED WITHIN 2 DAYS OF INACTIVITY. TEMPORARY SEEDING CONSISTS OF SEEDBED PREPARATION AND APPLICATION OF SEED, FERTILIZER, AND WATER. SOIL TEST IS RECOMMENDED TO DETERMINE PROPER APPLICATION RATE OF FERTILIZER AND IF LIME IS NECESSARY

FERTILIZER 12-12-12 = 12 LB/1000 SQ. FT.
STRAW MULCH = 2 TONS/ACRE
WATER = 300 G/1000 SQ. FT.

PERMANENT SEEDING: ANY AREA THAT IS AT FINAL GRADE SHALL BE SEEDED WITHIN 7 DAYS OF TERMINATED WORK. PERMANENT SEEDING CONSISTS OF SEEDBED PREPARATION AND APPLICATION OF SEED, FERTILIZER, AND WATER. SOIL TEST IS RECOMMENDED TO DETERMINE PROPER APPLICATION RATE OF FERTILIZER AND IF LIME IS NECESSARY. IDEAL CONDITIONS FOR PERMANENT SEEDING IS MARCH 1-MAY 31 AND AUGUST 1-SEPTEMBER 30.

PROHIBITED CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL NOT USE CONSTRUCTION PROCEEDINGS, ACTIVITIES OR OPERATIONS THAT MAY UNNECESSARILY IMPACT THE NATURAL ENVIRONMENT OR THE PUBLIC HEALTH AND SAFETY, PROHIBITED CONSTRUCTION PROCEEDINGS, ACTIVITIES, OR OPERATIONS INCLUDE BUT NOT LIMITED TO:

1. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER
2. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS.
3. PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS OR STORM DRAINS.
4. DISCHARGING POLLUTANTS SUCH AS CHEMICAL, FUEL, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWERAGE, AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS IMPOUNDMENTS OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.
5. PERMANENT OR UNSPECIFIED ALTERATIONS OF THE CONSTRUCTED AREA.
6. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.
7. DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS ANY WETLANDS, ANY SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS
8. OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.
9. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED BY THE CITY ENGINEER FOR SAID PURPOSE.

TEMPORARY SEEDING SPECIES SELECTION

SEEDING DATES	SPECIES	LB./1,000 FT^2	LB. PER AC.
MARCH 1 TO AUGUST 15	OATS TALL FESCUE ANNUAL RYEGRASS	3 1 1	128 LB.(4 BUSHEL) 40 LB. 40 LB.
	PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 LB. 40 LB. 40 LB.
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	55 LB. 142 LB. 17 LB. 17 LB.
	OATS TALL FESCUE ANNUAL RYEGRASS	3 1 1	128 LB.(3 BUSHEL) 40 LB. 40 LB.
AUGUST 16 TO NOVEMBER 1	RYE TALL FESCUE ANNUAL RYEGRASS	3 1 1	112 LB.(2 BUSHEL) 40 LB. 40 LB.
	WHEAT TALL FESCUE ANNUAL RYEGRASS	3 1 1	120 LB.(2 BUSHEL) 40 LB. 40 LB.
	PERENNIAL RYE TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 LB. 40 LB. 40 LB.
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	40 LB. 40 LB. 40 LB.
NOV. 1 TO SPRING SEEDING	USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING.		
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

PERMANENT SEEDING SPECIES SELECTION

	SEEDING RATE		NOTES
		LB/1000 SQ. FT.	
GENERAL USE			
CREEPING RED FESCUE	20-40	1/2-1	
DOMESTIC RYEGRASS	10-20	1/4-1/2	
KENTUCKY BLUEGRASS	10-20	1/4-1/2	
TALL FESCUE	40	1	
DWARF FESCUE	40	1	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE	40	1	
CROWN VETCH	10	1/4	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	20	1/4	
FLAT PEA	20	1/2	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	20	1/2	
ROAD DITCHES AND SWALES			
TALL FESCUE	40	1	
DWARF FESCUE	90	2 1/4	
KENTUCKY BLUEGRASS	5		
LAWNS			
KENTUCKY BLUEGRASS	60	1 1/2	
PERENNIAL RYEGRASS	60	1 1/2	
KENTUCKY BLUEGRASS	60	1 1/2	FOR SHADED AREAS
CREEPING RED FESCUE	60	1 1/2	
NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.			

TEMPORARY SEDIMENT BASIN A SCHEDULE

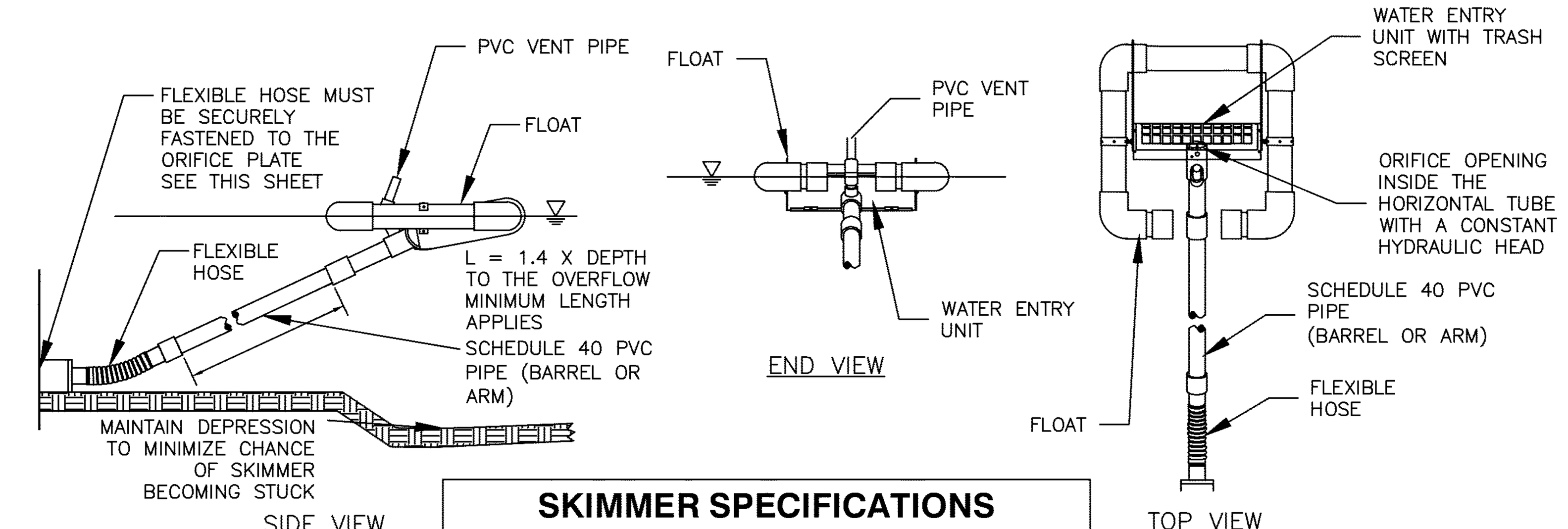
CONTROL STRUCTURE

LOCATION	TRIBUTARY ACREAGE	DISTURBED ACREAGE	REQUIRED BASIN DEWATERING VOLUME (67 CY/ACRE)	PROVIDED BASIN DEWATERING VOLUME	REQUIRED SEDIMENT STORAGE VOLUME (37 CY/ DISTURBED AC)	PROVIDED SEDIMENT STORAGE VOLUME	DEWATERING VOLUME DRAWDOWN (HR)	SKIMMER HOLE
EXISTING WET DETENTION BASIN A	30.48 AC	15.00 AC	2042 CY	~3200 CY	555 CY	< 1000 CY	> 2 DAYS	5.5" @ 704.00
EXISTING WET DETENTION BASIN D	35.6 AC	12.00 AC	2385 CY	~10000 CY	444 CY	< 1000 CY	> 7 DAYS	4.0" @ 706.10

NOTES

1. TEMPORARY SEDIMENT BASIN FOR SECTION 1, PARTS 1 & 2 TO REMAIN DURING THE CONSTRUCTION OF SECTION 2, PART 1. SKIMMER TO TO BE INSTALLED ON WET DETENTION BASIN D OUTLET STRUCTURE BEFORE CONSTRUCTION OF SECTION, 2 PART 1.

2. SKIMMER TO TO BE INSTALLED ON WET DETENTION BASIN A OUTLET STRUCTURE BEFORE CONSTRUCTION OF SECTION, 2 PART 2.

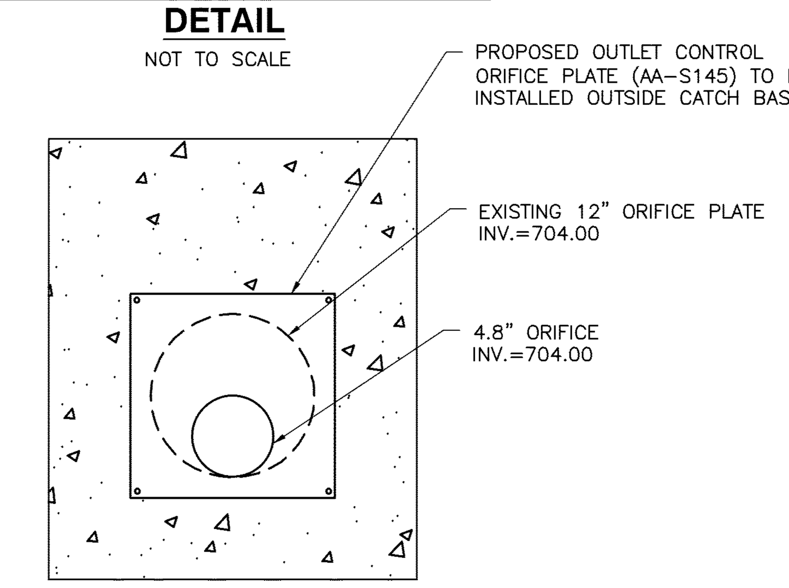


SKIMMER SPECIFICATIONS

	SKIMMER DIAMETER (IN.)	SKIMMER ORIFICE DIAMETER (IN.)	SKIMMER PIPE LENGTH (FT.)
EXISTING WET DETENTION BASIN A	6.0	5.5	6.0
EXISTING WET DETENTION BASIN D	6.0	4.0	6.0

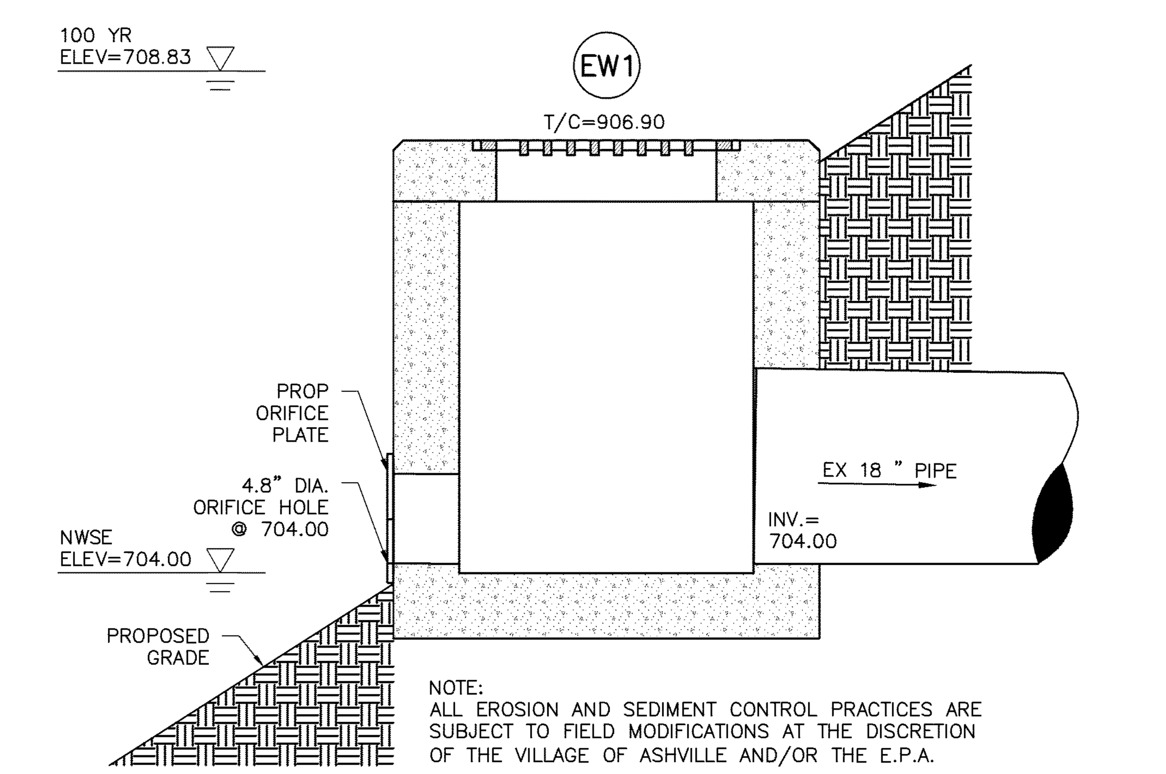
SKIMMER DISCHARGE SYSTEM DETAIL

NOT TO SCALE



4.8" ORIFICE PLATE DETAIL

NOT TO SCALE



EX CATCH BASIN (EW1) MODIFIED AS OUTLET STRUCTURE FOR BASIN A

WATER QUALITY/QUANTITY STRUCTURE DETAIL

NOT TO SCALE

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

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250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

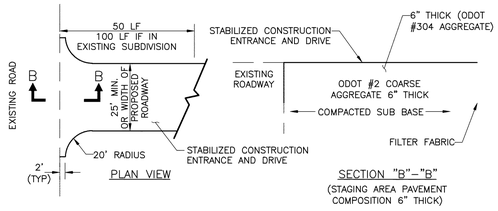
ASHTON CROSSING
SECTION 2, PART 1 & 2
VILLAGE OF ASHVILLE, OHIO

EROSION & SEDIMENT CONTROL NOTES

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:	164-591		
APPROVED BY:	CLL		

DRAWING NO.: C901

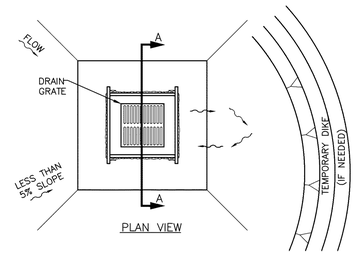
P:\2016\164-591\-CADD\Dwg\C\01 Street Plan\164591-C900_E&S.dwg[LAYOUT2] LS:(9/14/2017 - carthur) - LP: 9/14/2017 5:38 PM

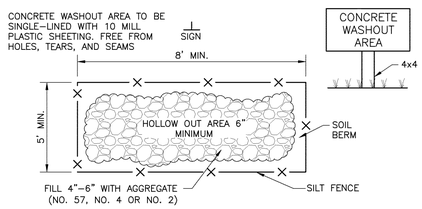


THE EARTHWORK CONTRACTOR SHALL INSTALL AND MAINTAIN THE CONSTRUCTION ENTRANCE AND STAGING AREA. THE EARTHWORK CONTRACTOR SHALL PERIODICALLY ADD CLEAN STONE AND MAINTAIN THE GRAVEL EDGES FOR THE DURATION OF THE PROJECT. WHEN THE CONSTRUCTION ENTRANCE AND DRIVE ARE NO LONGER NEEDED, THE EARTHWORK CONTRACTOR SHALL REMOVE THE GRAVEL AND RESTORE THE GROUND TO ITS ORIGINAL CONDITION.

STABILIZED CONSTRUCTION ENTRANCE

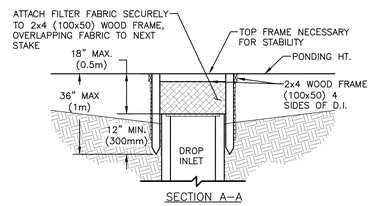
NOT TO SCALE





PORTABLE CONCRETE TRUCK WASHOUT AREA

NOT TO SCALE

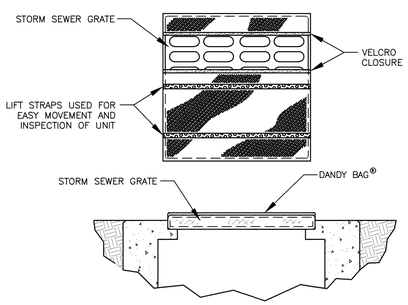


NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
2. USE 2"x4" (100x50mm) WOOD OR EQUIVALENT METAL STAKES, 3" (1m) MINIMUM LENGTH.
3. INSTALL 2"x4" (100x50mm) WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

SILT FENCE DROP INLET SEDIMENT BARRIER

NOT TO SCALE

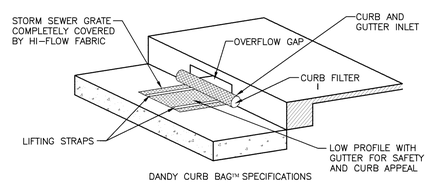
TO BE USED ON STRUCTURE
EXISTING STRUCTURES: 2, 4–5, 30–31, 46, 55–57
PROPOSED STRUCTURES: 4, 8, 13, 25, 30, 31



DANDY BAG INLET PROTECTION

NOT TO SCALE

TO BE USED ON STRUCTURES
EXISTING STRUCTURES: 2, 4–5, 30–31, 46, 55–57
PROPOSED STRUCTURES: 4, 8, 13, 25, 30, 31



DANDY CURB BAG™ SPECIFICATIONS

NOTE: THE DANDY CURB BAG WILL BE MANUFACTURED IN THE U.S.A FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

DANDY CURB BAG™ (SAFETY ORANGE)

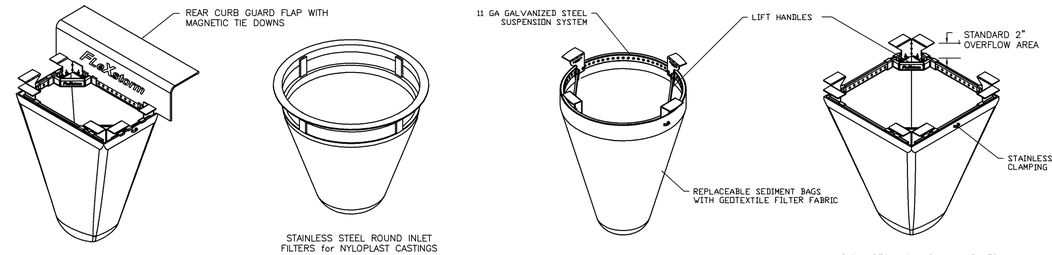
MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	KN (LBS)	1.62 (365) X 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 X 10
PUNCTURE STRENGTH	ASTM D 4833	KN (LBS)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	KPA (PSI)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	KN (LBS)	0.51 (115) X 0.33 (75)
UV RESISTANCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	MM (US STD SIEVE)	0.425 (40)
FLOW RATE	ASTM D 4491	$1/MIN/M^2$ $(GAL/MIN/FT^2)$	5907 (145)
PERMITTIVITY	ASTM D 4491	SEC^{-1}	2.1

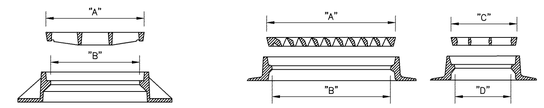
*NOTE: ALL DANDY CURB BAGS™ CAN BE ORDERED WITH OPTIONAL OIL ABSORBENTS.

DANDY CURB INLET BAG DETAIL

NOT TO SCALE

TO BE USED ON STRUCTURES
EXISTING STRUCTURES: 44–45, 52–53
PROPOSED STRUCTURES: 2–3, 5–7, 9–11, 15–19, 23–24, 26–29, 32



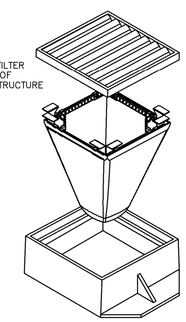


1. IDENTIFY YOUR FRAME STYLE AND SIZE		
STYLE	FRAME STYLE AND SIZE	FRAME P/N
ROUND	SMALL ROUND (UP TO 20.0" DIA GRATES (A) DIM)	62SRD
	MED ROUND (26.1"–26.0" DIA GRATES (A) UP TO 25" DIA OPENINGS (B))	62MRD
	LARGE ROUND (26.1"–32.0" DIA GRATES (A) UP TO 30" OPENINGS (B))	62LRD
	XL ROUND (32.1"–39.0" DIA GRATES (A) UP TO 37" OPENINGS (B))	62XLRD
RECT/ SQUARE	SMALL RECT/SQUARE (UP TO 16" (B) X 16" (D) OPENINGS OR 64" PERIMETER	62SSQ
	MED RECT/SQUARE (UP TO 24" (B) X 24" (D) OPENINGS OR 96" PERIMETER	62MSQ
	LARGE RECT/SQUARE (UP TO 36" (B) X 36" (D) OPENINGS OR 96" PERIMETER	62LSQ
	XL RECT/SQUARE (SIDE BY SIDE 2 PC SET TO FIT UP TO 48" (B) X 36" (D) OPENINGS)	62XLSQ
COMBO INLETS	SMALL RECT/SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62SCB
	MED RECT/SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62MCB
	LARGE RECT/SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62LCB
	XL RECT/SQUARE (REF RECT SIZING; SHIPPED WITH MAGNETIC CURB FLAPS)	62XLCB
NYLOPLAST	12" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6212NY
	15" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6215NY
	18" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6218NY
	24" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6224NY
	30" DIAMETER NYLOPLAST CASTINGS (STAINLESS STEEL FRAMING STANDARD)	6230NY

2. SELECT YOUR BAG NUMBER				
FLEXSTORM FILTER BAG	(22" DEPTH) STD BAG P/N	(12" DEPTH) SHORT BAG P/N	CLEAN WATER FLOW RATE (GPM/SQFT)	MIN A.O.S. (US SIEVE)
FX: STANDARD WOVEN BAG	FX	FX–S	200	40
IL: IDOT NON–WOVEN BAG	IL	IL–S	145	70

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE			
NOMINAL BAG SIZE	SOLIDS STORAGE (CUFT)	FILTERED FLOW RATE AT 50% MAX (CFS)	
		FX (WOVEN)	IL (NONWOVEN)
SMALL	1.0	1.2	0.9
MEDIUM	2.1	1.7	1.3
LARGE	3.8	2.7	1.9
XL	4.2	3.6	2.6

INSTALLATION:
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

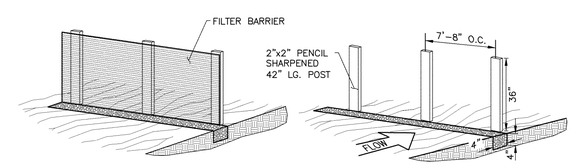


NOTES:
1. ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7 YEAR MINIMUM SERVICE LIFE.
2. UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
3. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

FLEXSTORM INLET PROTECTION

NOT TO SCALE

BID ALTERNATIVE
TO BE USED ON STRUCTURES
EXISTING STRUCTURES: 2, 4–5, 30–31, 44–46, 52, 53, 55–57
PROPOSED STRUCTURES: 2–11, 13, 15–19, 23–32



NOTE: THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE IN LINEAR INSTALLATIONS. ADDITIONALLY, THE USE OF COMPOST FILTER SOCKS AND COMPOST BLANKETS ARE GAINING WIDER ACCEPTANCE NATIONWIDE. THEY ARE NOW APPROVED FOR USE ON ALL COLUMBUS SWP3 PLANS AND CONSTRUCTION SITES.

SEDIMENT FENCE DETAIL

NOT TO SCALE

REVISION RECORD			
NO	DESCRIPTION	APPROVAL	DATE

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250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

EROSION & SEDIMENT CONTROL DETAILS

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:			164-591
APPROVED BY:			CLL

DRAWING NO.: C902

SHEET 23 OF 26

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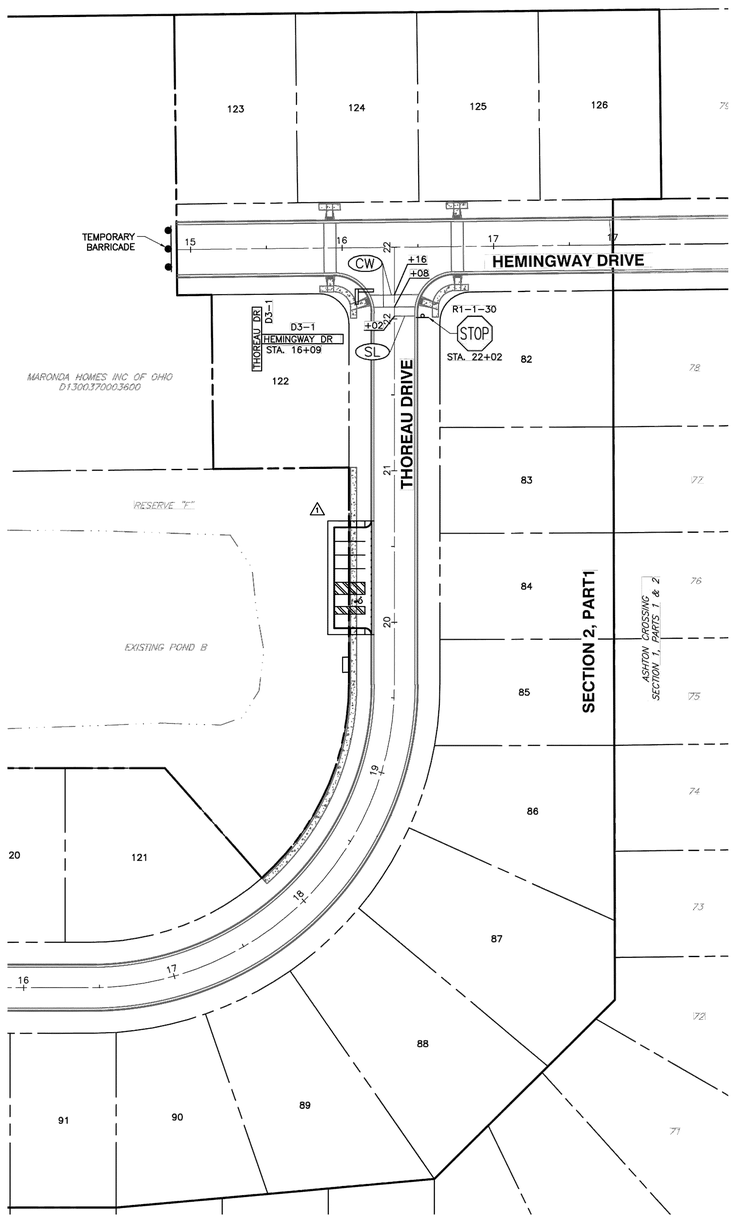
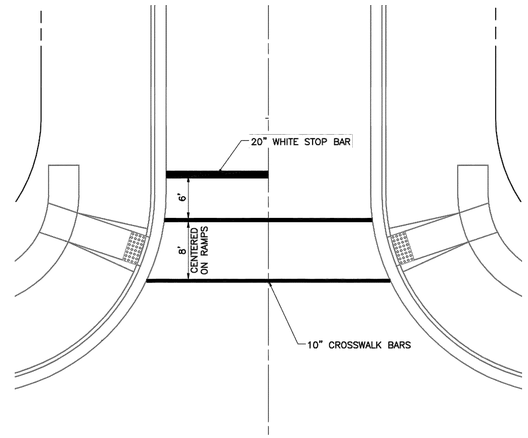


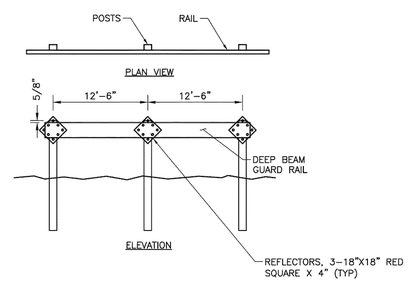
PLAN VIEW

SCALE: 1"=50'



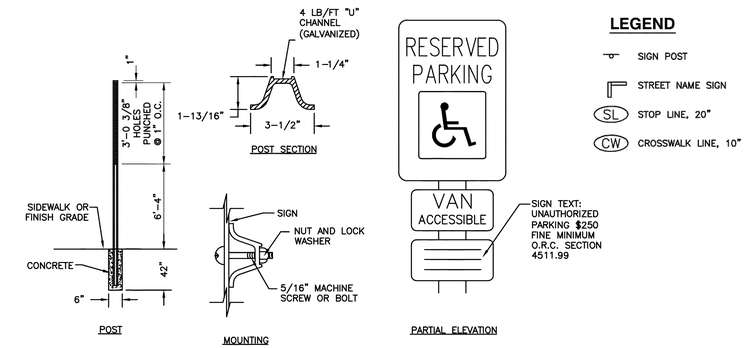
TYPICAL STRIPING

SCALE: 1"=10'



TEMPORARY BARRICADE DETAIL

NOT TO SCALE

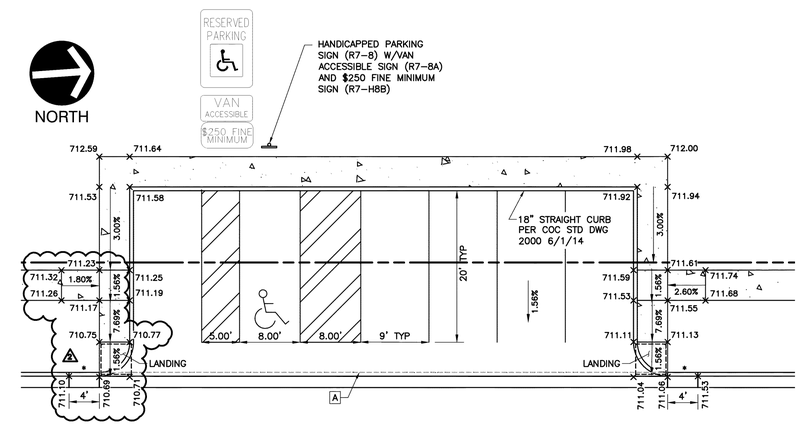


ACCESSIBLE PARKING SIGNS

NOT TO SCALE

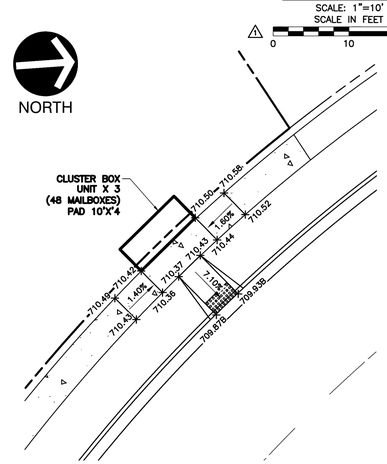
LEGEND

- SIGN POST
- STREET NAME SIGN
- (SL) STOP LINE, 20"
- (CW) CROSSWALK LINE, 10"



PARKING DETAIL

SCALE: 1"=10'
SCALE IN FEET
0 10 20



CLUSTER BOX EXHIBIT SECTION 2, PART 2

SCALE: 1"=10"
SCALE IN FEET
0 10 20

LEGEND

× 905.66 PROP SPOT ELEVATION

NOTES

1. RAMPS TO BE BUILT BY CONTRACTOR DURING ROADWAY CONSTRUCTION. SIDEWALK TO BE BUILT BY HOMEBUILDER AS NOTED.
2. DETECTABLE WARNING SURFACES SHALL CONFORM TO ADAAG SECTION 4.29. SEE COLUMBUS STANDARD DRAWING 2319 FOR SPECIFIC INSTALLATION REQUIREMENTS.
3. CURB DATA INFORMATION INCLUDED IN THE INTERSECTION DETAILS REFLECTS DATA AT THE FRONT OF CURB.
4. ALL ELEVATIONS AT CURB ARE TOP OF CURB UNLESS OTHERWISE NOTED.

* TAPER CURB FROM 6" TO 1" OVER 4'

[A] CURB TO BE LOWER TO 1". MAINTAIN GUTTER AND 4" PIPE UNDERDRAIN.

NOTE

1. TEMPORARY BARRICADE TO BE INSTALLED PER CITY OF COLUMBUS STANDARD DRAWINGS 2190.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE
1	ADDED CBU LOCATION, ADDED PARKING SPOTS, ADDED PARKING DETAIL	CMT	27Apr18
2	REVISED PARKING DETAIL	CMT	30May18

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

SIGNING PLAN

DATE:	APRIL 2017	DRAWN BY:	MGS
DWG SCALE:	AS NOTED	CHECKED BY:	CJB
PROJECT NO:			164-591
APPROVED BY:			CLL

DRAWING NO.: C606

SHEET 24 OF 26

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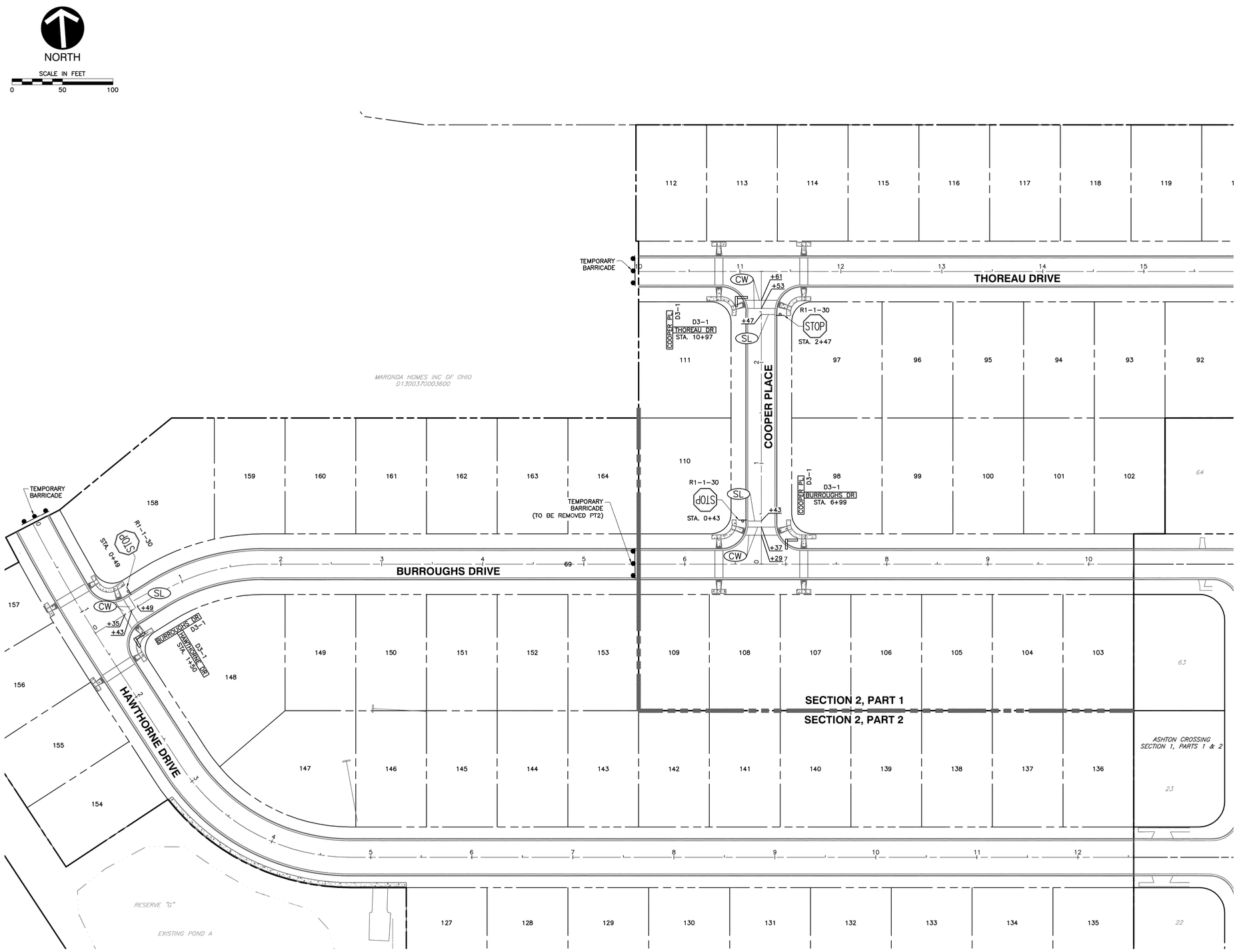

PLAN VIEW

SCALE: 1"=50'

LEGEND

- SIGN POST
- STREET NAME SIGN
- (SL) STOP LINE, 20"
- (CW) CROSSWALK LINE, 10"

NOTE

1. TEMPORARY BARRICADE TO BE INSTALLED PER CITY OF COLUMBUS STANDARD DRAWINGS 2190.

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
www.cecinc.com

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

SIGNING PLAN

DATE:	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C607

SHEET 25 OF 26

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NORTH

SCALE IN FEET
0 100 200

TRIB TO OFFSITE 0.32 AC.

OFFSITE TRIB TO FUTURE AREA 0.80 AC.

OFFSITE TRIB TO 34 0.81 AC.

OFFSITE TRIB TO EX 46 1.25 AC.

OFFSITE TRIB TO EX 47 2.70 AC.

TOTAL TRIB TO JOINED BASIN B & D 35.6 AC.

FUTURE AREA 0.60 AC.

TRIB TO 34 0.31 AC.

TRIB TO EX46 0.47 AC.

TRIB TO EX47 0.55 AC.

OFFSITE TRIB TO EX 37 1.56 AC.

TRIB TO EX45 0.42 AC.

HEMINGWAY AVENUE

TRIB TO 33 0.12 AC.

EXISTING POND C
NWSE=705.15
(AS-BUILT)
100YR=708.44

TRIB TO BASIN C 16.89 AC.

TRIB TO EX44 0.17 AC.

TRIB TO EX30 0.74 AC.

RESERVE "F"

EXISTING POND D
NWSE=706.30
100YR=708.99

DIRECT TRIB TO JOINED BASINS B & D 9.23 AC.

EXISTING POND B
NWSE=706.30
100YR=708.99

TRIB TO EX52 0.55 AC.

TOTAL TRIB TO BASIN C 52.5 AC.

TRIB TO EX53 1.13 AC.

TRIB TO EX31 0.69 AC.

TRIB TO 7 0.34 AC.

TRIB TO 23 0.50 AC.

TRIB TO 26 0.32 AC.

TRIB TO 6 0.36 AC.

TRIB TO 24 0.43 AC.

THOREAU DRIVE

TRIB TO 27 0.35 AC.

BURROUGHS DRIVE

TRIB TO BASIN B&D 8.65 AC.

HAWTHORNE DRIVE

TRIB TO 8 0.82 AC.

TRIB TO 5 0.31 AC.

COOPER PLACE

TRIB TO 25 0.47 AC.

TRIB TO EX55 1.53 AC.

TRIB TO 9 0.52 AC.

TRIB TO 4 0.80 AC.

TRIB TO EX57 0.68 AC.

TRIB TO EX56 0.57 AC.

ASHTON VILLAGE
SECTION 2, PHASE 2 & 3 DISCHARGE
1-YR = 0 CFS
2-YR = 0 CFS
5-YR = 0 CFS
10-YR = 2.0 CFS
25-YR = 2.1 CFS
50-YR = 2.8 CFS
100-YR = 3.2 CFS

ASHTON CROSSING POND
100YR WSEL=713.0
ASHVILLE PIKE
(LONG STREET)
OVERTOP FLOOD ROUTES
714.5±

TRIB TO 17 0.49 AC.

TRIB TO 3 0.63 AC.

TRIB TO 10 0.75 AC.

TRIB TO 16 0.53 AC.

TRIB TO 2 0.74 AC.

TRIB TO 11 0.72 AC.

TRIB TO 13 0.40 AC.

TRIB TO EX2 1.32 AC.

TRIB TO EX4 0.93 AC.

TRIB TO EX5 0.90 AC.

TRIB TO 15 0.48 AC.

TRIB TO BASIN A 13.99 AC.

TRIB TO 18 0.85 AC.

TRIB TO 28 0.57 AC.

TRIB TO 19 0.68 AC.

TRIB TO 29 0.51 AC.

DIRECT TRIB TO BASIN A 1.76 AC.

EXISTING POND A
NWSE=704.00
(AS-BUILT)
100YR=708.83

TOTAL TRIB TO BASIN A 30.4 AC.

TRIB TO 31 0.28 AC.

TRIB TO 30 0.31 AC.

TRIB TO 32 0.31 AC.

TRIB TO EX 0.35 AC.

TRIB TO OFFSITE 1.25 AC.

TRIB TO OFFSITE 0.06 AC.

RESERVE "G"

LEGEND

- PROP PROPERTY LINE
- PROP WATERSHED LINE
- PROP RIGHT-OF-WAY
- PROP EDGE OF PAVEMENT
- PROP PARCEL BOUNDARY
- 900 EXISTING INDEX CONTOUR
- 901 EXISTING INTERMEDIATE CONTOUR

REVISION RECORD

NO	DESCRIPTION	APPROVAL	DATE

Civil & Environmental Consultants, Inc.
250 Old Wilson Bridge Road · Suite 250 · Worthington, OH 43085
614-540-6633 · 888-598-6808
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ASHTON CROSSING SECTION 2, PART 1 & 2 VILLAGE OF ASHVILLE, OHIO

STORM SEWER TRIBUTARY MAP

DATE	APRIL 2017
DRAWN BY:	MGS
DWG SCALE:	AS NOTED
CHECKED BY:	CJB
PROJECT NO:	164-591
APPROVED BY:	CLL

DRAWING NO.: C903

SHEET 26 OF 26

P:\2016\164-591\-DWG\Dwg\CV03 SWM\164-591 Post-Developed Local Trib Map.dwg[LAYOUT1] LS:(9/14/2017 - mgsmith) - LP: 9/14/2017 5:39 PM