

CONSTRUCTION PLANS FOR
**WESTERLY SANITARY TRUNK
SEWER IMPROVEMENT**
CITY OF NORTH RIDGEVILLE, OHIO
2000

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KS ASSOCIATES

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KS ASSOCIATES

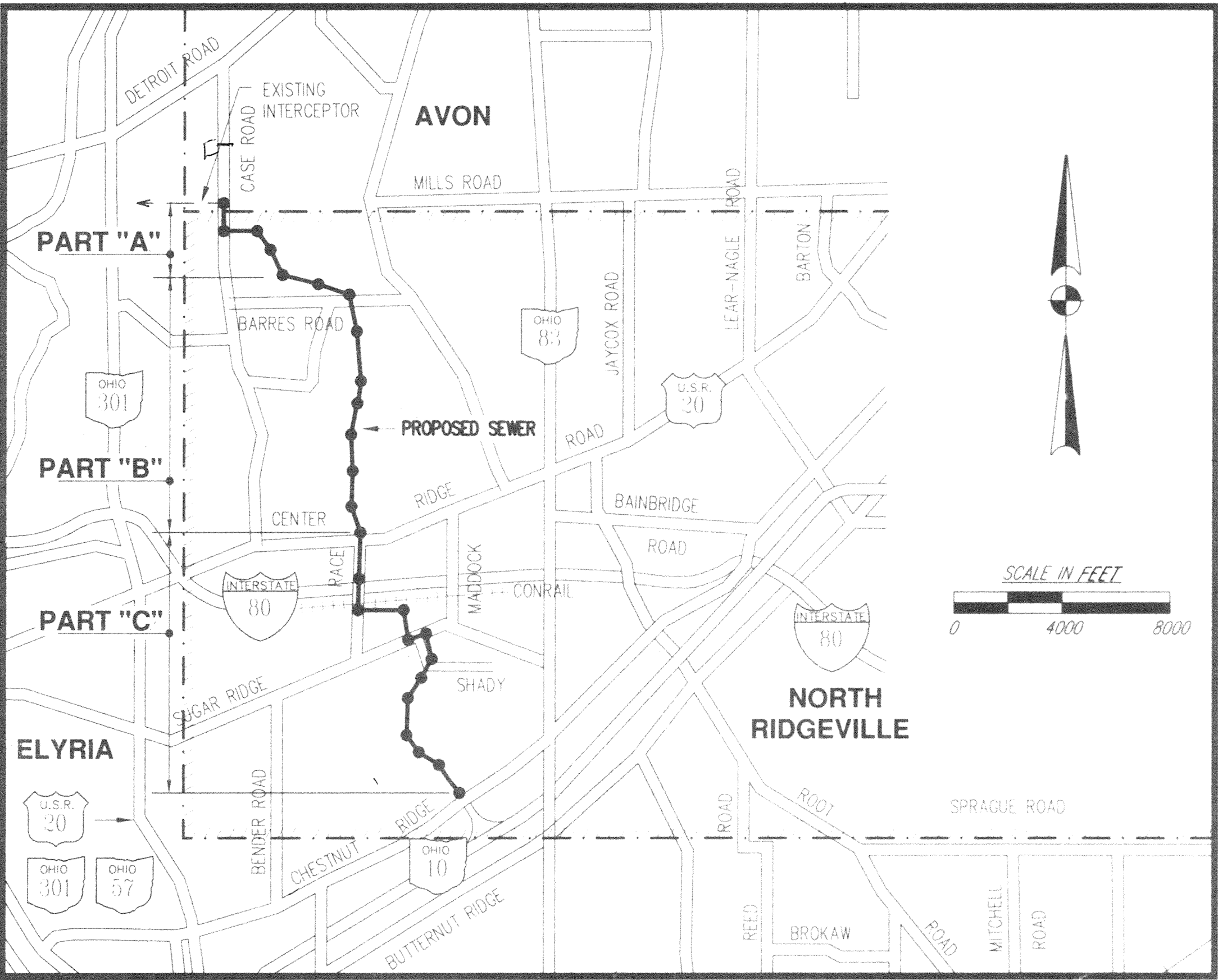
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K.E. McCARTNEY & ASSOC., INC.

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K.E. McCARTNEY & ASSOC., INC.~~

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SITE PLAN

NORTH RIDGEVILLE CITY OFFICIALS

CITY HALL, 7307 AVON-BELDEN ROAD, NORTH RIDGEVILLE, OHIO 44039

DEANNA L. HILL, MAYOR

JIM JOHNSON, SAFETY SERVICE DIRECTOR

JEAN K. BROWN, PRESIDENT OF COUNCIL

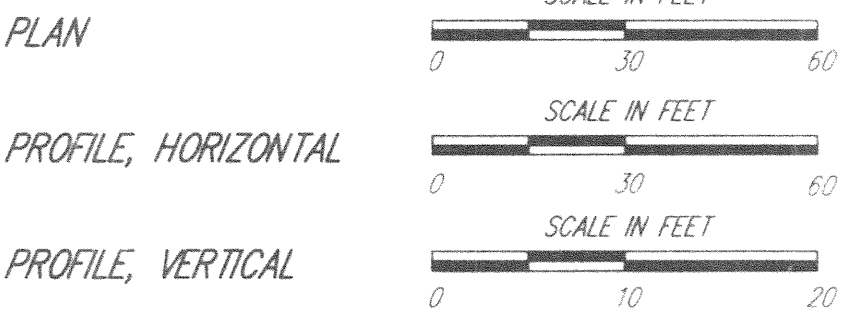
APPROVALS

APPROVED Stewart Lovece, City Engineer
DATE 1/26/01 STEWART P. LOVECE, P.E., P.S.
E-54368

LEGEND

EXISTING SANITARY SEWER	M.H.	SAN	GAS LINE	G	VALVE	G	G.V.
PROPOSED SANITARY SEWER	STUB	WYE	WATER LINE	W	VALVE	W	W.V.
EXISTING STORM SEWER	C.B.	M.H.	PROPERTY LINE	P	HYDRANT	Z	
PROPOSED FENCE	X	X	ROADWAY RIGHT-OF-WAY	R/W			
POWER, TELEPHONE, SERVICE, LIGHT & FLAG POLES	Φ	Φ	EXISTING FENCE	X			
BURIED TRAFFIC CABLE	U.C.	U.C.	TREE	EVERGREEN	HEDGE	STUMP	
BURIED ELECTRICAL CABLE	U.E.	U.E.	CLEAR AND GRUB	X	X		
FIBER OPTIC CABLE	F.O.	F.O.	SECTION LINE		CORPORATION LINE		
BURIED TELEPHONE CABLE	U.T.	U.T.	GUARDRAIL				
MAILBOX AND PAPERBOX	M.B.	P.B.	EASEMENT				
TRAFFIC SIGN	T						

SCALES



UNDERGROUND UTILITIES

TWO WORKING DAYS
BEFORE YOU DIG

CALL 1-800-362-2764 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

DRAFTED @ K.E. MCCARTNEY & ASSOCIATES, INC. DATE: 1/10/01 JOB TITLE: SW-166 SHEET NAME: SW166GN SCALE: 1" = 1' VIEW = PLOT

GENERAL NOTES

GENERAL ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILED PLANS AND AS OUTLINED IN THE TECHNICAL SPECIFICATIONS, AND SHALL MEET THE RULES AND REGULATIONS OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY, THE CITY OF NORTH RIDGEVILLE, AND ALL OTHER GOVERNING CODES AND AGENCIES UNLESS HERE-IN-AFTER AMENDED. IN CASE OF CONFLICT BETWEEN APPLICABLE RULES, REGULATIONS, STANDARDS OR REQUIREMENTS, THE MOST STRINGENT SHALL APPLY.

SPECIFICATIONS: THE CONSTRUCTION SPECIFICATIONS SHALL BE THE MOST CURRENT "STATE OF OHIO, DEPARTMENT OF TRANSPORTATION-CONSTRUCTION AND MATERIAL SPECIFICATIONS, INCLUDING SUPPLEMENTAL SPECIFICATIONS AND STANDARD DRAWINGS", AS MODIFIED HEREIN OR IN THE TECHNICAL SPECIFICATIONS AND BID DOCUMENTS. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, COPIES OF ALL STATE OF OHIO SPECIFICATIONS. WHERE REFERENCE IS MADE TO "ENGINEER", THIS SHALL MEAN THE "NORTH RIDGEVILLE CITY ENGINEER".

COOPERATION BETWEEN CONTRACTORS: SEPARATE CONTRACTS MAY BE LET UNDER THE PROJECT. THE CONTRACTOR SHALL CONDUCT HIS WORK SO AS NOT TO INTERFERE WITH OR HINDER THE PROGRESS OR COMPLETION OF THE WORK BEING PERFORMED BY OTHER CONTRACTORS. CONTRACTORS WORKING ON THE PROJECT SHALL COOPERATE WITH EACH OTHER AS DIRECTED. EACH CONTRACTOR INVOLVED SHALL ASSUME ALL LIABILITY, FINANCIAL OR OTHERWISE, IN CONNECTION WITH HIS CONTRACT AND SHALL PROTECT AND SAVE HARMLESS THE OWNER AND ENGINEER FROM ANY AND ALL DAMAGES OR CLAIMS THAT MAY ARISE BECAUSE OF THE PRESENCE AND OPERATIONS OF OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF THE PROJECT. THE CONTRACTOR SHALL ARRANGE HIS WORK AND SHALL PLACE AND DISPOSE OF THE MATERIALS BEING USED SO AS NOT TO INTERFERE WITH THE OPERATIONS OF THE OTHER CONTRACTORS WITHIN THE LIMITS OF THE PROJECT. HE SHALL JOIN HIS WORK WITH THAT OF THE OTHERS IN AN ACCEPTABLE MANNER AND SHALL PERFORM IT IN PROPER SEQUENCE TO THAT OF THE OTHERS.

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN: LOCAL TRAFFIC SHALL HAVE ACCESS TO THEIR RESPECTIVE RESIDENCES AT ALL TIMES, EXCEPT DURING RECONSTRUCTION OF DRIVEWAYS, PAVING OPERATIONS AND OTHER CONSTRUCTION OPERATIONS WHICH REQUIRES THE CLOSING OF DRIVEWAYS FOR SAFETY REASONS DURING THE ACTUAL HOURS OF CONSTRUCTION. THE CONTRACTOR SHALL GIVE SUFFICIENT PRIOR NOTICE TO PROPERTY OWNERS BEFORE CLOSING ANY PRIVATE DRIVEWAYS. NO PRIVATE DRIVEWAYS MAY BE CLOSED FOR MORE THAN SEVEN (7) CONSECUTIVE HOURS AND SHALL BE OPEN TO TRAFFIC AT THE END OF EACH WORKING DAY.

WHEN CONSTRUCTION OPERATIONS REQUIRE CLOSING OF ANY STREETS OR ALLEYS FOR TRAFFIC, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE OFFICE OF THE CITY ENGINEER FORTY-EIGHT (48) HOURS PRIOR TO ANY CHANGES IN TRAFFIC PATTERNS, AND IN ALL CASES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. TEMPORARY SURFACES WHERE EXCAVATIONS ARE LOCATED IN STREETS, DRIVEWAYS, AND PARKING AREAS SHALL BE FURNISHED AND PLACED BY THE CONTRACTOR AND SHALL BE FULLY MAINTAINED WITH MATERIALS OF COMPARABLE QUALITY (ASPHALT, COLD PATCH, ETC.) PERFORMED AND PAID FOR UNDER THIS ITEM.

IT IS THE INTENT OF THIS ITEM, UNDER THIS CONTRACT, THAT THROUGH TRAFFIC BE MAINTAINED AT ALL TIMES. WHENEVER IT IS NECESSARY FOR THE CONTRACTOR TO DIVERT THE FLOW OF TRAFFIC FROM ITS NORMAL CHANNEL ONTO ANOTHER CHANNEL OR TEMPORARY ROADWAY, THE TEMPORARY ROADWAY AND SURFACE SHALL BE PER ODOT ITEM 615, PERFORMED AND PAID FOR UNDER THIS ITEM.

ALL CONSTRUCTION SIGNS AND TEMPORARY TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE ERECTED AND MAINTAINED IN ACCORDANCE WITH "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS." THE COST FOR ALL THE ABOVE WORK SHALL BE INCLUDED WITHIN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN.

UNDERGROUND UTILITIES: THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 O.R.C. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT BUT THE ENGINEER AND OWNER DO NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE UTILITY AS TO LINE AND GRADE BEFORE STARTING ANY OPERATION THAT INTERFERES WITH THE UTILITY. AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN IN THE PLANS. THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION. THE FOLLOWING IS A PARTIAL LIST OF UTILITY OWNERS WHO MUST BE NOTIFIED. THE CONTRACTOR SHALL COMPLY WITH THE REGULATIONS SET FORTH BY THE RESPECTIVE PUBLIC SERVICE CORPORATIONS AS LISTED:

- | | |
|---------------------------------------|------------------------------|
| (1) OHIO UTILITIES PROTECTION SERVICE | 800-362-2769 |
| (2) COLUMBIA GAS OF OHIO | 440-322-7456 |
| (3) FIRST ENERGY | 330-384-5194 |
| (4) CITY OF NORTH RIDGEVILLE | 440-353-0859 |
| (5) QWEST L.C.I. INTERNATIONAL | 419-884-0400 |
| (6) A. T. & T. BROAD BAND | 614-278-1840 |
| (7) ALLTEL OHIO | 440-329-4193 |
| (8) A. T. & T. COMMUNICATION | 216-723-9191 |
| (9) MCI WORLD COM | 972-656-5983 |
| (10) AMERITECH | 216-476-6142 |
| (11) QWEST COMMUNICATIONS | 800-283-4237 |
| (12) AMERITECH NEW MEDIA | 440-582-6001 |
| (13) COLUMBIA GAS TRANSMISSION | 440-647-4322 |
| (14) ILLUMINATING COMPANY | 800-301-9191 |
| (15) RURAL LORAIN WATER AUTHORITY | 440-355-5121 |
| (16) OHIO EDISON | 330-384-4924 |
| (17) OHIO TURNPIKE COMMISSION | 440-234-2081 |
| (18) NORFOLK & SOUTHERN CORP. | 313-323-5100
313-323-5103 |

CONTACT MUST BE MADE A MINIMUM OF 72 HOURS PRIOR TO START OF CONSTRUCTION.

SEWER ALIGNMENT CONTROL: ALL PROPOSED MAINLINE SEWERS SHALL BE LAID TO THE SPECIFIED LINE AND GRADE USING A "LASER BEAM INSTRUMENT" PLACED INSIDE THE DOWNSTREAM MANHOLE PROJECTING THE LIGHT BEAM UPSTREAM, INSIDE THE PROPOSED SEWER BEING INSTALLED. THE CONTROL EQUIPMENT, INCLUDING LASER GUN, TARGETS, AND ACCESSORIES SHALL BE APPROVED FOR USE BY THE ENGINEER PRIOR TO CONSTRUCTION.

ROADWAY LIMITS: THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT STATE OF OHIO LEGAL ROAD LIMITS (AND ALL POSTED REDUCED ROAD LIMITS) FOR ALL VEHICLES USED ON THIS PROJECT.

DEWATERING: THE CONTRACTOR SHALL, AT ALL TIMES DURING CONSTRUCTION, PROVIDE PROPER AND SATISFACTORY MEANS AND DEVICES FOR THE REMOVAL OF ALL WATER ENTERING THE EXCAVATIONS AND SHALL REMOVE ALL SUCH WATER AS FAST AS IT MAY COLLECT IN SUCH A MANNER AS SHALL NOT INTERFERE WITH THE PROSECUTION OF THE WORK OR THE PROPER PLACING OF MASONRY OR OTHER WORK, AT NO COST TO THE OWNER.

ROCK EXCAVATION: THE CONTRACTOR SHALL PERFORM HIS OWN SUB-SURFACE INVESTIGATIONS TO DETERMINE SOIL PROFILES. ALL ROCK ENCOUNTERED SHALL BE REMOVED TO LINES AND GRADES AS SPECIFIED. UNDER THIS CONTRACT ALL ROCK EXCAVATION SHALL BE BY THE MECHANICAL METHOD ONLY. EXCAVATION BY BLASTING, USING EXPLOSIVES, IS NOT ACCEPTABLE. ALL ROCK EXCAVATION IS UNCLASSIFIED, AND THERE WILL BE NO PAYMENT FOR ROCK REMOVAL.

SALVAGEABLE MATERIALS: THE ENGINEER SHALL DESIGNATE A LOCATION WITHIN THE PROJECT LIMITS FOR THE STOCK PILING OF ALL SALVAGEABLE MATERIALS.

MAINTENANCE OF SEWER FLOWS: THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES SEWER FLOWS THROUGH EXISTING FACILITIES TO REMAIN IN PLACE.

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE REGISTERED WITH THE NORTH RIDGEVILLE BUILDING DEPARTMENT.

ELEVATION OF MANHOLE TOPS: THE ELEVATION OF THE PROPOSED MANHOLE COVERS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL CASTING ELEVATIONS SHALL BE FIELD DETERMINED DURING CONSTRUCTION, PER THE APPROVAL OF THE ENGINEER. IN GENERAL MANHOLE TOPS SHALL BE SET FLUSH WITH THE ROADWAY GRADE IN PAVED AREA, AND 18 INCHES ABOVE FINISH GRADE IN THE UNDEVELOPED AREA. MANHOLE TOPS IN LAWN AREAS SHALL BE SET 4 INCHES ABOVE ADJACENT GROUND. PROVIDE A GENTLE 12:1 GRADE AWAY FROM ALL CASTINGS.

ELEVATION DATUM: ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

ITEM 659 - SEEDING AND MULCHING, AS PER PLAN: ALL SOD AREAS DISTURBED ON THIS PROJECT SHALL BE RESTORED AND SEEDDED PER ITEM 659 USING THE URBAN SEED MIXTURE. THE COST OF SEEDING, MULCHING AND RESEEDING SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE RESPECTIVE ITEMS OF 603 CONDUIT. SEPARATE PAYMENT WILL NOT BE MADE.

SUBSURFACE CONDITIONS: IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS BID. A SOIL REPORT REGARDING THE SUBSURFACE SITE CONDITIONS IS INCLUDED IN THE CONTRACT DOCUMENTS. THE OWNER ASSUMES NO RESPONSIBILITY FOR ANY CONCLUSIONS OR INTERPRETATIONS MADE BY THE CONTRACTOR ON THE BASIS OF THIS SOIL REPORT.

ITEM 602 - CONCRETE MASONRY: ALL CULVERT HEADWALLS DISTURBED SHALL BE REPLACED IN-KIND WITH O.D.O.T. STANDARD TYPE HW-1 OR HW-4, OR AS APPROVED BY THE ENGINEER DURING CONSTRUCTION.

COOPERATION WITH UTILITIES: THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL PUBLIC OR PRIVATE UTILITY FACILITIES DURING CONSTRUCTION. SHOULD IT BECOME NECESSARY TO MOVE, ADJUST, OR TEMPORARILY RELOCATE ANY SUCH FACILITY, THE WORK SHALL BE DONE BY THE OWNER OF THE UTILITY FACILITY. ANY DAMAGE TO UTILITY FACILITIES BY THE CONTRACTOR OR HIS SUBCONTRACTORS SHALL BE RE-PAIRED BY THE OWNER OF SAID UTILITY, AND THE COST OF SAID RE-PAIRS WILL BE DEDUCTED FROM PAYMENT TO BE MADE TO CONTRACTOR UNDER THE CONTRACT.

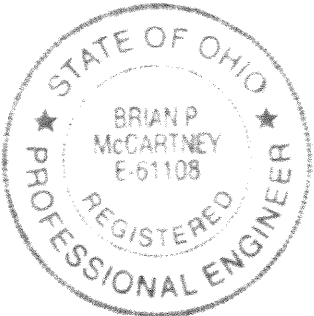
IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS CONSIDERED IN HIS BID ALL OF THE PERMANENT AND TEMPORARY UTILITY APPURTENANCES IN THEIR PRESENT OR RELOCATED POSITIONS AND THAT NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS, INCONVENIENCE, OR DAMAGE SUSTAINED BY HIM DUE TO ANY INTERFERENCE FROM THE SAID UTILITY APPURTENANCES OR THE OPERATION OF MOVING THEM.

RESTORING EXISTING PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS DISTURBED OR DESTROYED BY THE CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR PER O.D.O.T. ITEM 641 AND 642. PAYMENT SHALL BE INCLUDED UNDER ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN.

AGGREGATE BERMING: ALL ROADWAY SHOULDERS AND BERMS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED FOLLOWING CONSTRUCTION PER THE APPROVAL OF THE ENGINEER. REBERMING MATERIAL SHALL BE ITEM 411 LIMESTONE PLACED AND COMPACTED PER ITEM 617.05. THE COST OF THIS WORK SHALL BE INCLUDED UNDER ITEM 603 - SANITARY SEWERS. SEPARATE PAYMENT WILL NOT BE MADE.

SHEETING AND SHORING: ALL SHEETING AND SHORING REQUIRED TO SUPPORT ALL TRENCHES AND EXCAVATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION PUBLICATION 4121:1-2 AND SHALL BE PROVIDED BY THE CONTRACTOR AND PAID FOR UNDER THE VARIOUS ITEMS BID FOR SANITARY SEWERS. SEPARATE PAYMENT WILL NOT BE MADE.

DUST CONTROL: THE CONTRACTOR SHALL PROVIDE CALCIUM CHLORIDE AND WATER TO BE USED, AS DIRECTED BY THE ENGINEER, FOR DUST CONTROL. ALL SURFACES SHALL BE WATERED PRIOR TO MECHANICAL SWEEPING IN RESIDENTIAL AREAS. THE COST OF THIS WORK SHALL BE INCLUDED UNDER BID ITEM 603 - SANITARY SEWERS. SEPARATE PAYMENT WILL NOT BE MADE.



RECORD DRAWINGS

GENERAL NOTES

WESTERLY SANITARY TRUNK SEWER IMPROVEMENT
CITY OF NORTH RIDGEVILLE, OHIO

Richard County
Marion, Ohio 44602
KEM
K.E. McCartney & Associates, Inc.
Engineers • Planners • Surveyors
Lorain County
2301 N. High Street
Byrne, Ohio 44005
Phone: 440/285-9866
Fax: 440/285-9866

DRAFTED @ K.E. MCCARTNEY & ASSOCIATES, INC. DATE: 1/10/01 JOB TITLE: SW-66 SHEET NAME: SW166GN SCALE: 1" = 1' VIEW = PLOT2

3

GENERAL NOTES

STORM SEWERS, DRAINS AND TILES: AN ESTIMATED QUANTITY OF STORM SEWER PIPE IS INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO REPAIR AND REPLACE MISCELLANEOUS CONDUITS SHOWN OR NOT SHOWN ON THE PLANS. REPLACEMENT SHALL BE IN KIND OR BETTER.

RAILROAD BORES: ALL WORK ASSOCIATED WITH THE INSTALLATION OF THE RAILROAD BORE SHALL BE IN ACCORDANCE WITH THE MOST CURRENT SPECIFICATION FOR PIPE OCCUPANCY OF THE CHESSIE CSX RAIL CORPORATION PROPERTY. THE CONTRACTOR SHALL NOTIFY CSX'S AREA ENGINEER A MINIMUM OF 14 WORKING DAYS PRIOR TO DESIRED START OF CONSTRUCTION. ALL BORE AND JACK METHODS SHALL BE PER RAILROAD SPECIFICATIONS. ALL WORK SHALL MEET SAFETY REQUIREMENTS OF SAID SPECIFICATIONS. ALL WORK IS SUBJECT TO CSX INSPECTION. PERMIT AND FLAGMAN COST TO BE PAID BY CITY OF NORTH RIDGEVILLE.

MATERIALS: ALL MATERIALS INSTALLED ON THIS JOB SHALL MEET CITY OF NORTH RIDGEVILLE APPROVAL. SUBMIT FOUR (4) COPIES OF SHOP DRAWINGS OF ALL MATERIALS TO THE CITY ENGINEER, PRIOR TO ORDERING FOR ACCEPTANCE.

ITEM 107.17 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICE, AS PER PLAN: THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR THE REPAIR OF ANY DAMAGED WATER SERVICES AND WATER MAIN THAT ARE NOT SHOWN ON PLANS: ALL WATER SERVICE BRANCHES SHALL BE ASTM B88, TYPE K COPPER, PER ODOT ITEM 748.05.

638 - 3/4 INCH DIA. SERVICE BRANCH REPLACEMENT	100 LIN. FT.
638 - 1 INCH DIA. SERVICE BRANCH REPLACEMENT	100 LIN. FT.
638 - 1 1/4 INCH DIA. SERVICE BRANCH REPLACEMENT	50 LIN. FT.
638 - 1 1/2 INCH DIA. SERVICE BRANCH REPLACEMENT	50 LIN. FT.
638 - 2 INCH DIA. SERVICE BRANCH REPLACEMENT	50 LIN. FT.


IF THE CONTRACTOR DAMAGES ANY WATERLINE OR SERVICE THAT ARE SHOWN ON THE PLAN OR PROPERLY LOCATED BY THE UTILITY OWNER, HE SHALL REPAIR SAID WATERLINE OR SERVICE AT HIS OWN EXPENSE AT NO COST TO THE OWNER OR UTILITY. ALL REPAIR WORK SHALL BE COORDINATED WITH UTILITY OWNER.

REPAIR OF FAILED ROADWAY BASE: AN ESTIMATED QUANTITY OF "304 AGGREGATE FOR FAILED BASE REPAIR" AND "404 ASPHALT FOR FAILED BASE OVERLAY" HAS BEEN ADDED TO THE GENERAL SUMMARY TO BE USED "AS DIRECTED BY THE ENGINEER", TO REPAIR PAVEMENT AREAS WHERE SUBBASE HAS FAILED DUE TO NORMAL CONSTRUCTION OPERATIONS. INCLUDED INCLUDED IN THE ABOVE ITEMS SHALL BE THE COST TO REMOVE AND DISPOSE OF THE FAILED BASE AND PAVEMENT MATERIALS, PER O.D.O.T. ITEM 202.

COMPACTED GRANULAR BACKFILL: EXCAVATIONS AT ALL STREETS, DRIVES, BERMS, WALKS, PARKING AREAS AND OTHER ROADWAYS SHALL BE BACKFILLED AND COMPACTED WITH GRANULAR MATERIAL CONFORMING TO O.D.O.T. SPECIFICATION ITEM 703.11, TYPE 1 (304), AND SHALL BE LIMESTONE OR RECYCLED PORTLAND CEMENT CONCRETE MATERIALS ONLY. ADDITIONAL GRANULAR MATERIAL SHALL BE STOCKPILED AT SELECT LOCATIONS (APPROVED BY THE ENGINEER) FOR USE WHEN SETTLEMENT OCCURS. ALL GRANULAR MATERIAL SHALL BE MECHANICALLY COMPACTED IN EIGHT (8) INCH LAYERS, TO A DENSITY OF 96% (PROCTOR, AASHTO T99) PER ITEM 603.081. PAYMENT FOR GRANULAR BACKFILL SHALL BE INCLUDED IN THE BID PRICE OF TYPE B CONDUITS.

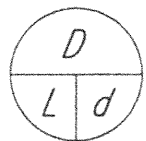
PROTECTION OF MONUMENTS, PROPERTY CORNER MARKERS, ETC.: MONUMENTS, PROPERTY CORNER MARKERS, ETC., SHALL NOT BE DISTURBED BY THE CONTRACTOR. IN THE EVENT IT IS NECESSARY TO REMOVE THESE ITEMS, THE CONTRACTOR SHALL AT HIS EXPENSE, PROPERLY REFERENCE THE POINTS AND SHALL RESET SAME AFTER CONSTRUCTION HAS BEEN COMPLETED IN THE AREA.

PAYMENT LIMITS: THE MAXIMUM ALLOWABLE TRENCH WIDTH FOR MEASUREMENT AND BASIS OF PAYMENT IS EQUAL TO THE OUTSIDE DIAMETER OF THE PIPE, OR STRUCTURE WIDTH, PLUS 24 INCHES.

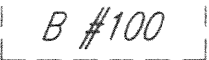
TUNNELING UNDER EXISTING CONDUITS: WHERE SO STATED ON THE PLANS THE CONTRACTOR SHALL TUNNEL UNDER EXISTING PIPES AND OTHER PHYSICAL FEATURES. THE COST OF THE OPERATION SHALL BE INCLUDED IN THE BID PRICE OF SANITARY SEWER, SEPARATE PAYMENT WILL NOT BE MADE. TUNNELING AREAS ARE INDICATED ON THE PLANS BY THE BOLD SYMBOL .

ESTIMATED QUANTITIES: THE ESTIMATED PLAN QUANTITIES ARE FOR COMPETITIVE BIDDING AND ARE NOT NECESSARILY THE FINAL PAY QUANTITIES. FINAL FIELD MEASUREMENTS AND CALCULATIONS SHALL DETERMINE FINAL PAY QUANTITY.

BUILDING LATERALS AND WYES: THE LOCATION AND DEPTH OF THE PROPOSED BUILDING LATERALS AND WYES SHOWN ON THE PLANS ARE APPROXIMATE. THE FINAL EXACT LOCATION OF THESE SEWERS SHALL BE FIELD DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION, PER THE APPROVAL OF THE ENGINEER. THE WYE BRANCH SHALL BE POSITIONED SUCH THAT THE PROPERTY OWNER HAS THE LEAST EXPENSIVE, SHORTEST POSSIBLE LENGTH OF CONNECTION. THE CONTRACTOR SHALL ENSURE THAT THE DEPTH AT THE END OF THE LATERAL IS SUFFICIENT TO SERVE THE LOWEST FLOOR OR BASEMENT. A MINIMUM COVER OF 8 FEET OVER ALL LATERALS SHALL BE MAINTAINED WITHIN ROADWAY RIGHT-OF-WAY. CODE FOR WYE AND BASEMENT FLOOR LOCATIONS SHOWN ON THE PLAN ARE:



- D = DISTANCE TO CENTER OF NEAREST DOWNSTREAM MANHOLE.
- d = DEPTH TO INVERT AT END OF LATERAL PIPE (TO BE DETERMINED BY CONTRACTOR)
- L = BUILDING LATERAL LENGTH AS SHOWN ON RISER DETAIL.

 B #100

APPROXIMATE BASEMENT FLOOR ELEV. OF RES. #100

STREAM CROSSING: A DEPARTMENT OF DEFENSE, CORPS OF ENGINEER RIVER CROSSING PERMIT IS ISSUED FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF SAID PERMIT. THE FOLLOWING MEASURES SHOULD BE USED TO MINIMIZE DAMAGE FROM THE CONSTRUCTION OF THE SEWER TO THE EXISTING STREAMS AND WATERWAYS. SEWER INSTALLATION ACROSS A STREAM IS BEST DONE DURING PERIODS OF LOW FLOW. STREAM FLOWS SHOULD BE DIVERTED AWAY FROM THE CONSTRUCTION AREA. THE CONSTRUCTION COULD BE STAGED SO THAT HALF THE STREAM IS BLOCKED OFF UNTIL THE WORK IS COMPLETE. THEN THE PROCESS WOULD BE USED ON THE SECOND HALF. SHEET PILING AND/OR SAND BAGS AND NOT EARTH EXCAVATED FROM THE STREAM BED SHALL BE USED TO TEMPORARILY DIVERT THE STREAM FLOW. AFTER THE CONSTRUCTION IS COMPLETE IN EACH STAGE THE AREA MUST BE COMPLETELY STABILIZED BEFORE THE WATER IS ALLOWED TO FLOW OVER THE DISTURBED AREA. MATERIAL EXCAVATED FROM THE TRENCH SHALL BE PLACED AT LEAST 20 FEET FROM THE TOP OF THE STREAM BANKS. PUMPED WATER CONTAINING SEDIMENT FROM THE THE TRENCH SHALL NOT DISCHARGE DIRECTLY INTO THE STREAM. THE WATER SHOULD BE DIRECTED THROUGH A SETTLING POND OR A FLAT, WELL VEGETATED AREA TO FILTER THE WATER BEFORE IT REACHES THE STREAM. FINAL BACKFILL FOR ALL TRENCH EXCAVATION SHALL BE CLEAN AGGREGATE (ROCK CHANNEL PROTECTION) OR REINFORCED CONCRETE COVER, AS CALLED FOR ON THE PLAN. PRECAUTIONS SHALL BE TAKEN TO MINIMIZE THE AMOUNT OF SEDIMENT POLLUTION DOWNSTREAM FROM THE UTILITY STREAM CROSSING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DO HIS WORK IN A MANNER THAT WILL NOT CAUSE AN EXCESS OF THIS TYPE POLLUTION. IN ADDITION TO THE GENERAL CONDITIONS ATTACHED TO THE NATIONWIDE PERMIT, YOUR ATTENTION IS DIRECTED TO THE FOLLOWING SPECIAL CONDITIONS WHICH ARE ALSO APPENDED AT THE END OF THE NATIONWIDE PERMIT GENERAL CONDITIONS.

1. THAT NO IN WATER WORK SHALL BE PERFORMED BETWEEN APRIL 15 AND JUNE 15 TO PRECLUDE ADVERSE IMPACTS ON THE SPAWNING, NURSERY, AND FEEDING ACTIVITIES OF INDIGENOUS FISH SPECIES.
2. THAT TREES WITH CAVITIES OR EXFOLIATED BARK SHALL NOT BE CUT BETWEEN APRIL 15 AND SEPTEMBER 15 WITHOUT FIRST CONDUCTING A MIST SURVEY (OR OTHER ACCEPTABLE SURVEY) FOR THE INDIANA BAT. TREES WITH CAVITIES OR EXFOLIATING BARK MAY PROVIDE POTENTIAL ROOSTING HABITAT FOR THIS FEDERALLY LISTED ENDANGERED SPECIES. ADDITIONAL INFORMATION MAY BE OBTAINED BY CONTACTING MR. BUDDY FAZIO OF THE U.S. FISH AND WILDLIFE SERVICE AT (614) 469-6923.
3. ALL UNSUITABLE/EXCESS DREDGED AND EXCAVATED MATERIAL NOT USED AS BACKFILL OVER THE SEWER LINE SHALL BE REMOVED FROM THE RIVER BOTTOM AND DEPOSITED AT A SEPARATELY APPROVED UPLAND DISPOSAL SITE.
4. THAT THE MECHANICAL EQUIPMENT USED TO EXECUTE THE WORK AUTHORIZED HEREIN SHALL BE OPERATED IN SUCH A WAY AS TO MINIMIZE TURBIDITY THAT COULD DEGRADE WATER QUALITY AND ADVERSELY AFFECT AQUATIC PLANT AND ANIMAL LIFE.
5. THAT EFFORTS SHALL BE MADE TO KEEP CONSTRUCTION DEBRIS FROM ENTERING THE WATERWAY OR WETLAND, AND SHALL BE REMOVED IMMEDIATELY SHOULD ANY DEBRIS BE PRESENT IN THE WATERWAY OR WETLAND.

YOUR INITIATION OF WORK AS AUTHORIZED BY THE NATIONWIDE PERMIT ACKNOWLEDGES YOUR ACCEPTANCE OF THE GENERAL AND SPECIAL CONDITIONS CONTAINED THEREIN.

WORK IN EASEMENTS: NO WORK SHALL BE PERFORMED ON ANY PORTIONS OF THE PROJECT ON PROPERTY REQUIRING EASEMENT OR WORK AGREEMENT WITHOUT THE WRITTEN AUTHORIZATION OF THE ENGINEER.

PROTECTION AND RESTORATION OF PROPERTY: THE CONTRACTOR SHALL USE CARE TO PROTECT PUBLIC AND PRIVATE PROPERTY AS PER ITEM 107.12 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. AFTER COMPLETION OF THE PROJECT OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL RESTORE THE DISTURBED AREAS TO AN ACCEPTABLE CONDITION INCLUDING GRADING, SEEDING, AND REPLACEMENT OF PAVEMENT, DRIVEWAYS, BERMS, SIDEWALK, CURBING, AND OTHER ITEMS AS DIRECTED BY THE ENGINEER.

OHIO E.P.A. REQUIREMENTS: THE OHIO ENVIRONMENTAL PROTECTION AGENCY REQUIRES A CONFORMANCE TO THE 1982 EDITION OF "RECOMMENDED STANDARDS." THIS STANDARD SHALL BE EQUALED OR EXCEEDED FOR WATERLINES. SPECIAL ATTENTION SHALL BE GIVEN TO THE FOLLOWING SECTIONS OF PART 8:

- 8.0.1. MATERIALS CONFORM TO AWWA STANDARDS
- 8.1.2. MINIMUM 6" DIAMETER FIRE PROTECTION, CL 52, CEMENT LIN. W/ POLYWRAP
- 8.5.3. MINIMUM 4' GROUND COVER
- 8.5.5. PRESSURE TESTING AWWA C-600*
- 8.5.6. DISINFECTION AWWA C-601*
- 8.6.2. 10' HORIZONTAL SEPARATION WATER MAIN/SEWER
- 8.6.3. 18" VERTICAL SEPARATION WATER MAIN/SEWER
- 8.6.6. NO ENTRY AND/OR CONTACT WITH SEWER MANHOLE

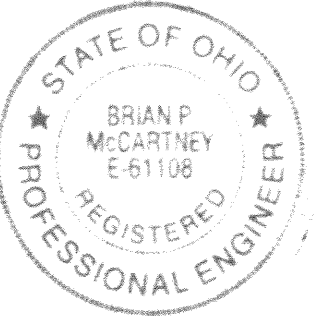
* NOTE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THIS TEST PROPERLY AND THE RESPONSIBILITY FOR AN ADEQUATE SUPERVISION AND APPROVAL RESTS WITH THE APPROPRIATE GOVERNMENTAL AGENCY. ANY DEVIATION FROM THE ABOVE WILL NOT BE PERMITTED UNLESS SPECIFICALLY INCLUDED IN THE GENERAL NOTES OR OTHERWISE SHOWN ON THESE PLANS.

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED

TYPE D GRANULAR PAVEMENT REPLACEMENT: THIS ITEM SHALL INCLUDE ALL WORK SHOWN ON THE PLAN DETAIL. PAYMENT SHALL BE INCLUDED UNDER THE VARIOUS BID OF ITEM 603 - SANITARY SEWERS. SEPARATE PAYMENT WILL NOT BE MADE.

AVON LAKE MUNICIPAL UTILITIES TRANSMISSION WATER MAIN: THE LOCATION OF THE 42" WATER MAIN SHOWN ON THE PLANS IS APPROXIMATE ONLY, SCALED FROM PLANS DATED 8-17-00. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION PRIOR TO CONSTRUCTION.

RECORD DRAWINGS



GENERAL NOTES

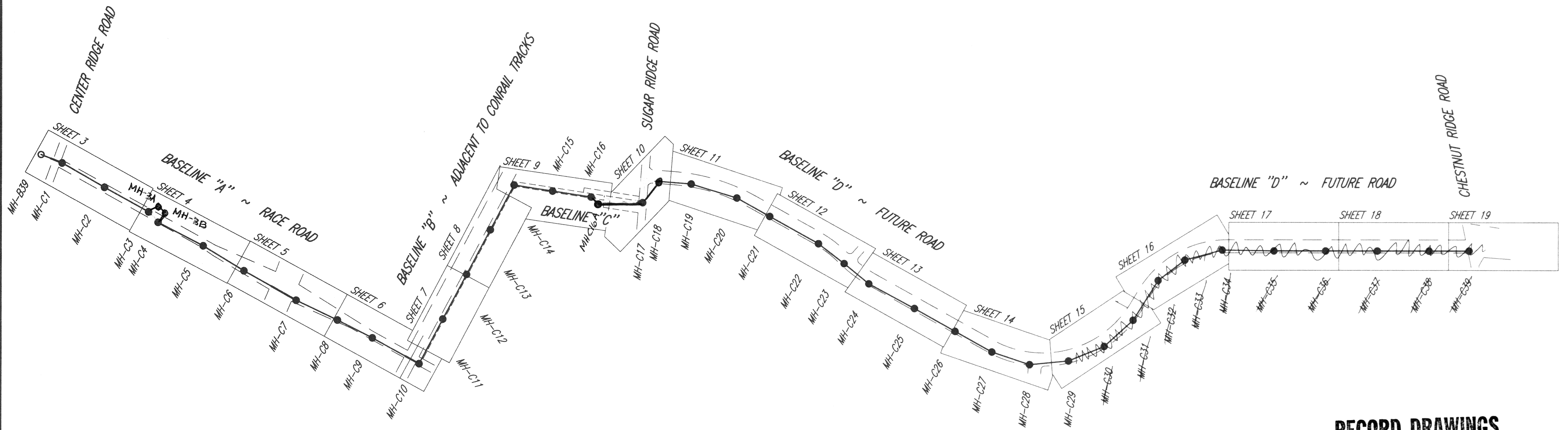
WESTERLY SANITARY TRUNK SEWER IMPROVEMENT
CITY OF NORTH RIDGEVILLE, OHIO

KEM
K.E. McCartney & Associates, Inc.
Engineers • Planners • Surveyors
230 Third Street
Bryan, Ohio 44806
Phone 419/469-8800
Fax 419/469-8844

3

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RECORD DRAWINGS

NOTE: FOR HORIZONTAL AND VERTICAL CONTROL SEE PLAN AND PROFILE SHEETS

STATE OF OHIO
BRIAN P. MCCARTNEY
E-61108
REGISTERED PROFESSIONAL ENGINEER

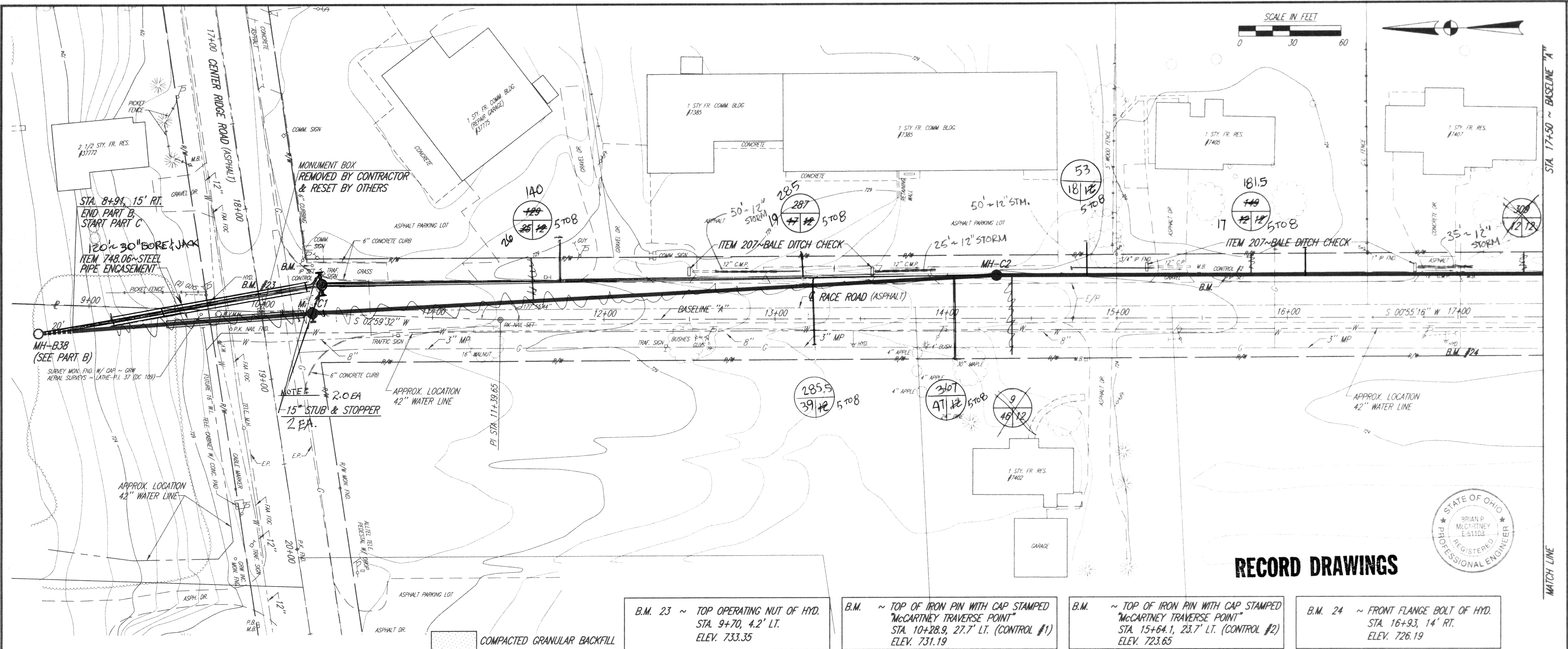
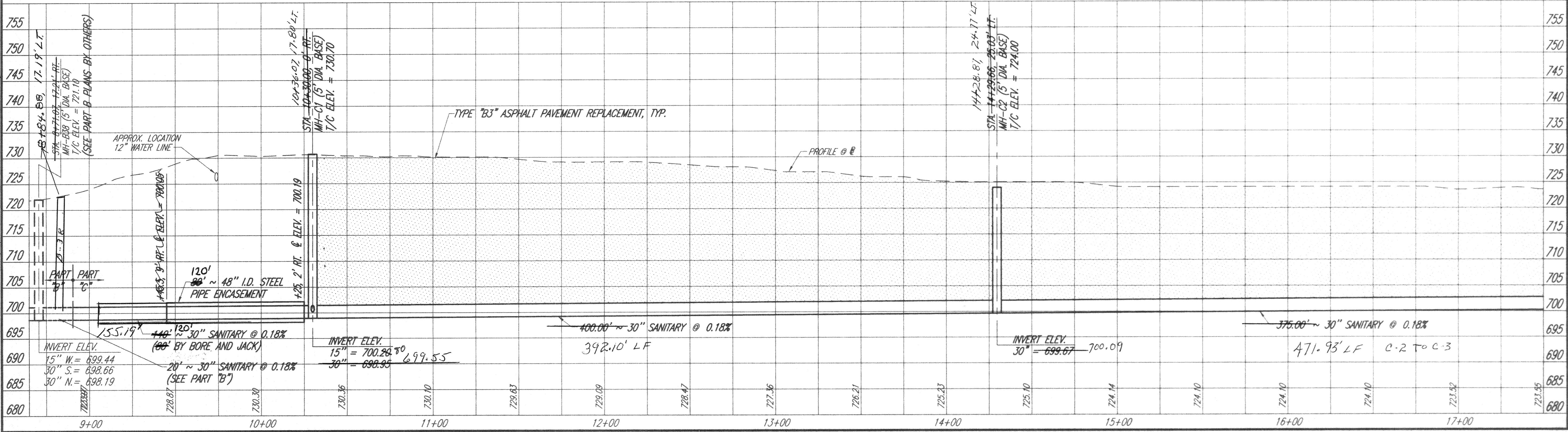
SCALE IN FEET
0 400 800

WESTERLY SANITARY TRUNK SEWER IMPROVEMENT
CITY OF NORTH RIDGEVILLE, OHIO

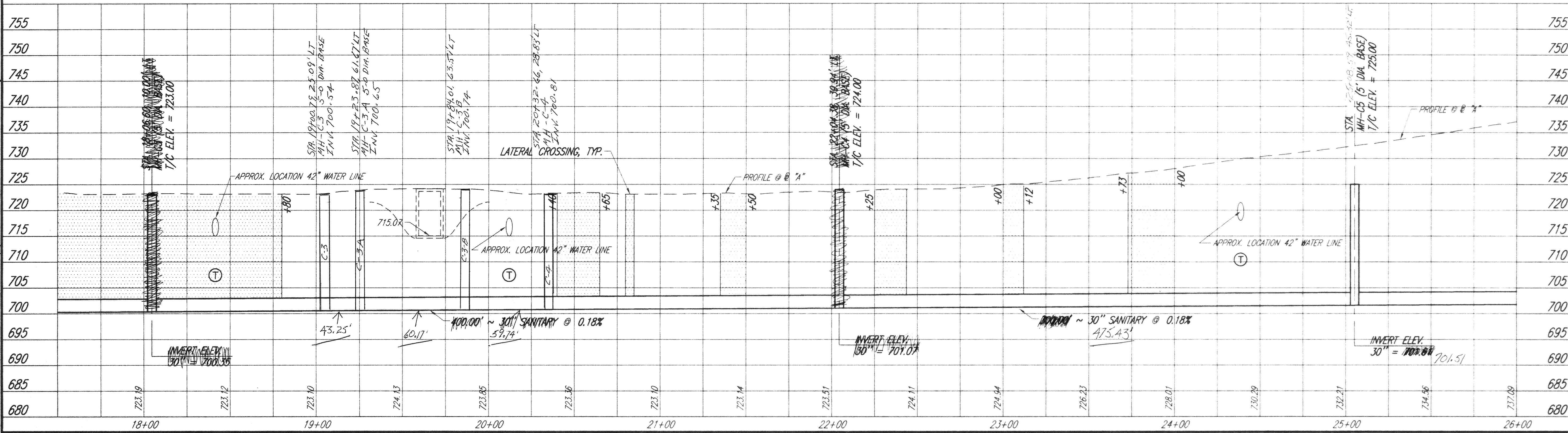
SCHEMATIC PLAN
PART C

KEM
K.E. McCarty & Associates, Inc.
Engineers • Planners • Surveyors
Richard County, Ohio
230 Green County
Elyria, Ohio 44025
Phone: 419/325-9855
Fax: 419/325-9854

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DRAWN BY K.E. MCCARTNEY & ASSOCIATES INC., DATE: 1/4/01 JOB TITLE: SW-166 SHEET NAME: RCP02007.dwg



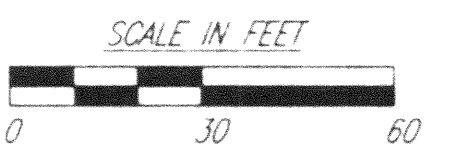
B.M. # 22 ~ FRONT FLANGE BOLT OF HYD.
STA. 20+50, 14.5' RT.
ELEV. 724.64

B.M. ~ TOP OF IRON PIN WITH CAP STAMPED
"MCCARTNEY TRAVERSE POINT"
STA. 19+96, 23.2' LT. (CONTROL #3)
ELEV. 724.69

B.M. ~ TOP OF IRON PIN WITH CAP STAMPED
"MCCARTNEY TRAVERSE POINT"
STA. 25+20.2, 8.7' RT. (CONTROL #4)
ELEV. 733.44

COMPACTED GRANULAR BACKFILL

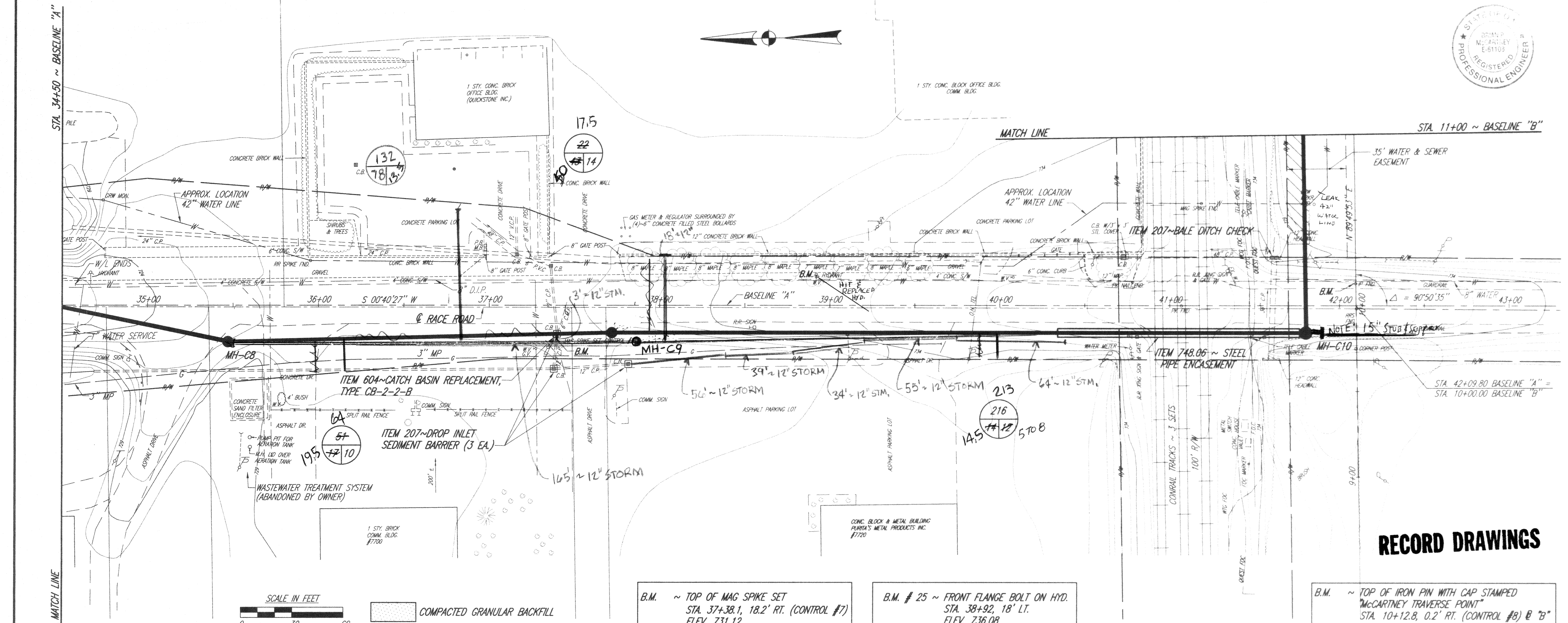
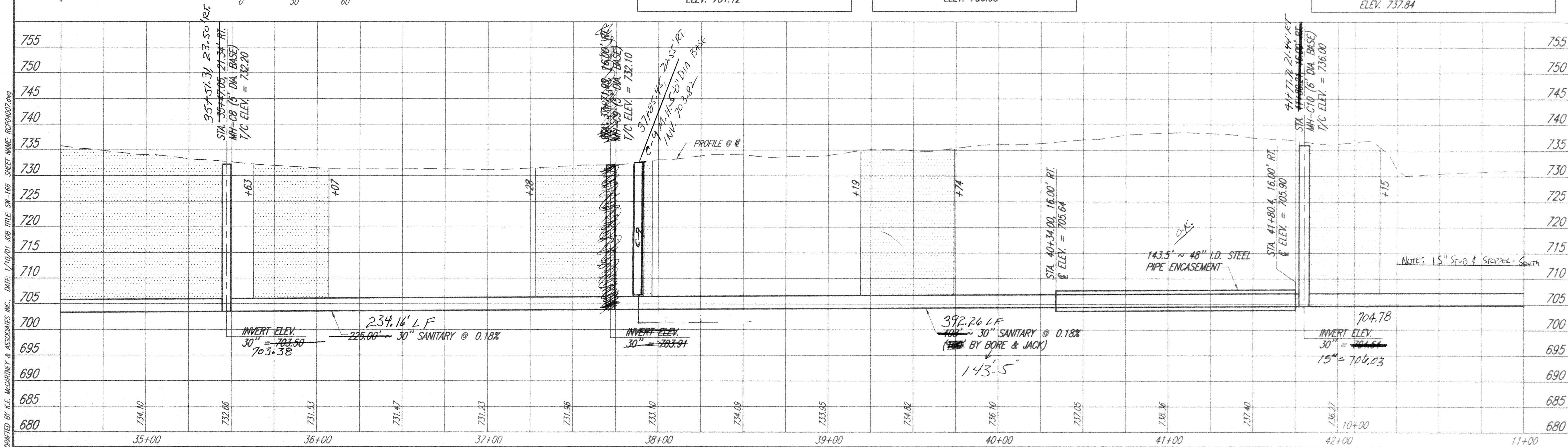
NOTE: EXIST. 60" C.P. TO BE REMOVED & RESET BY CONTRACTOR,
ALL COSTS INCLUDED UNDER ITEM 603 - SANITARY SEWER.



RECORD DRAWINGS

PLAN AND PROFILE
STA. 17+50 TO STA. 26+00 ~ @ "A"

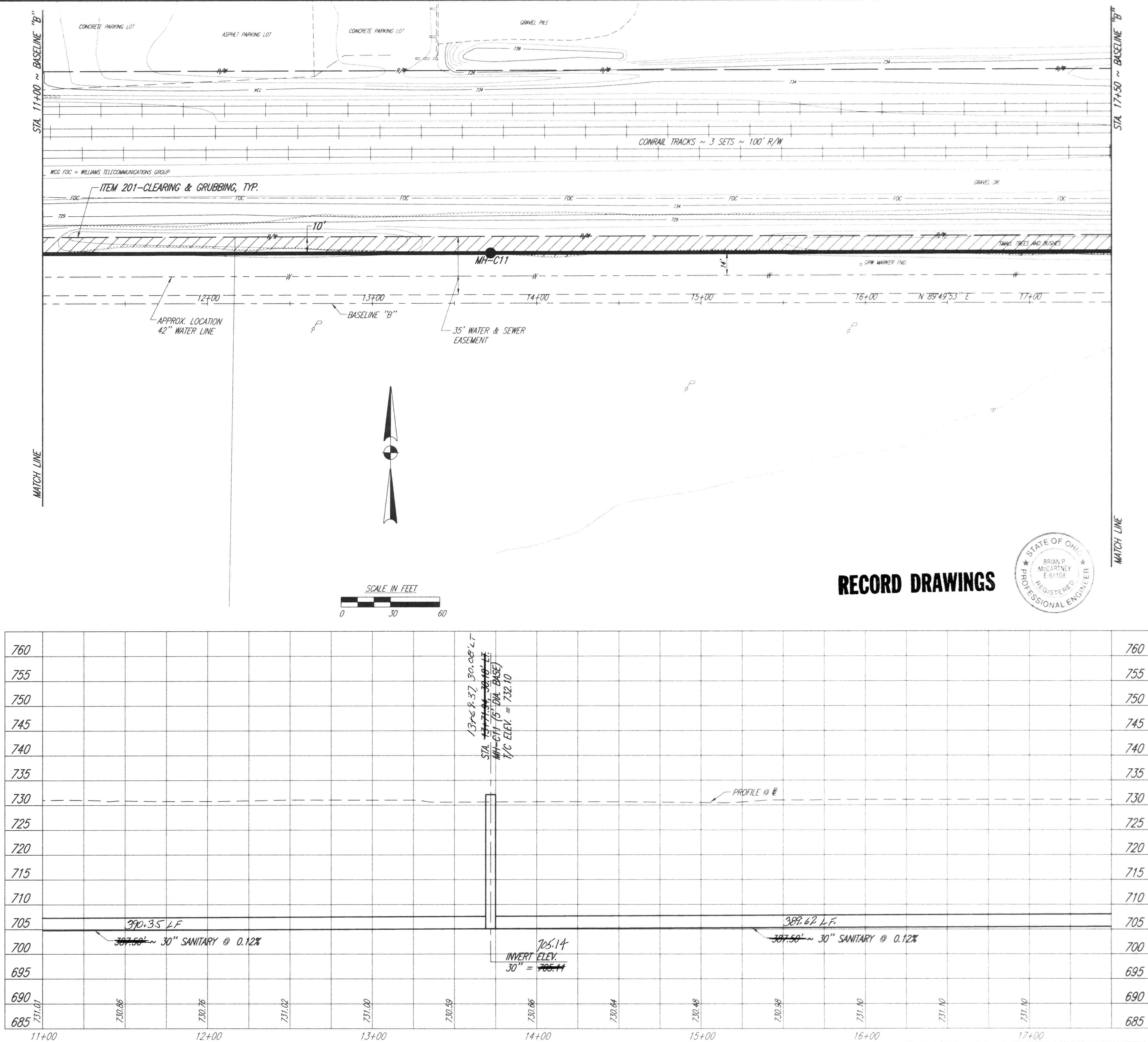
KEM
K.E. McCARTNEY & ASSOCIATES, INC.
Engineers • Planners • Surveyors
220 Third Street
Elyria, Ohio 44025
Phone 419/325-8888
Fax 419/325-3644



RECORD DRAWINGS

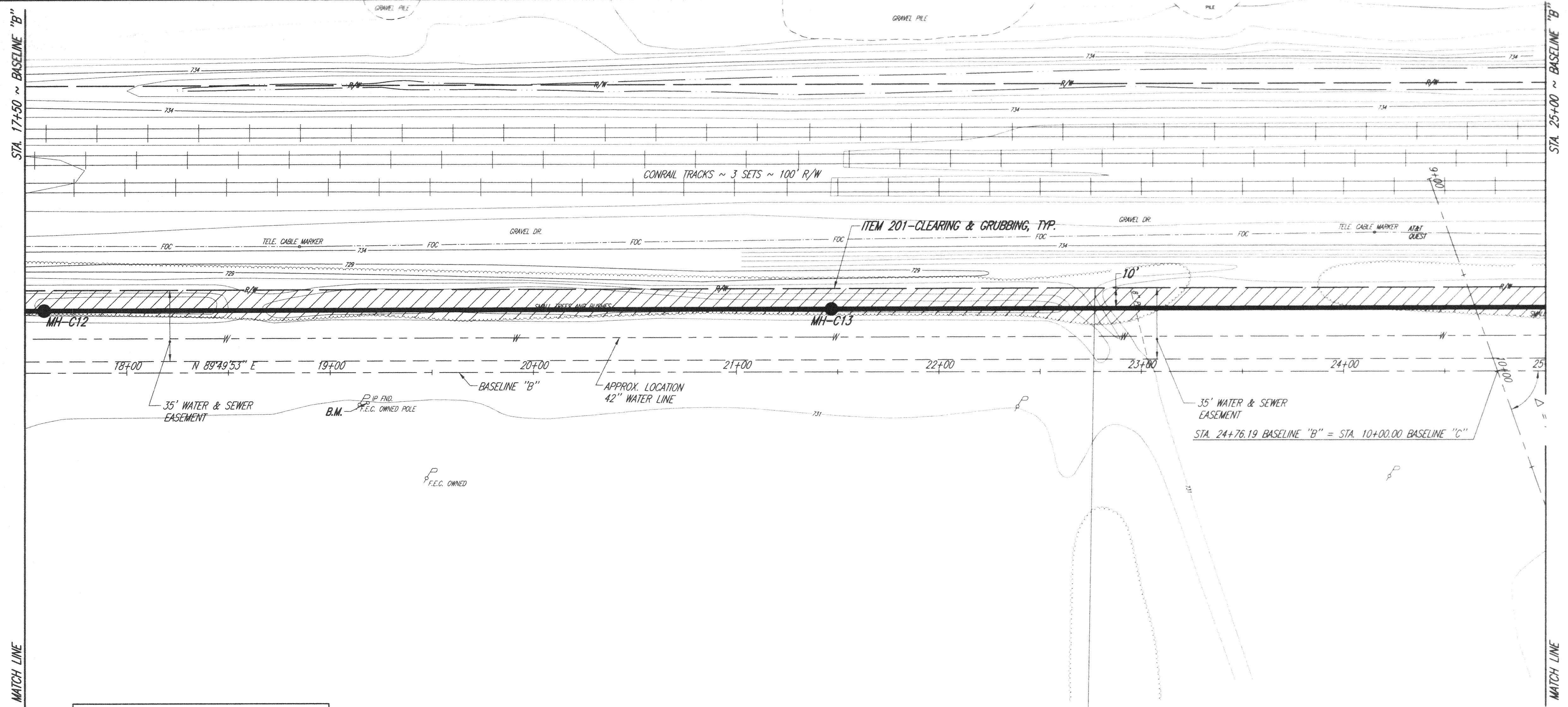
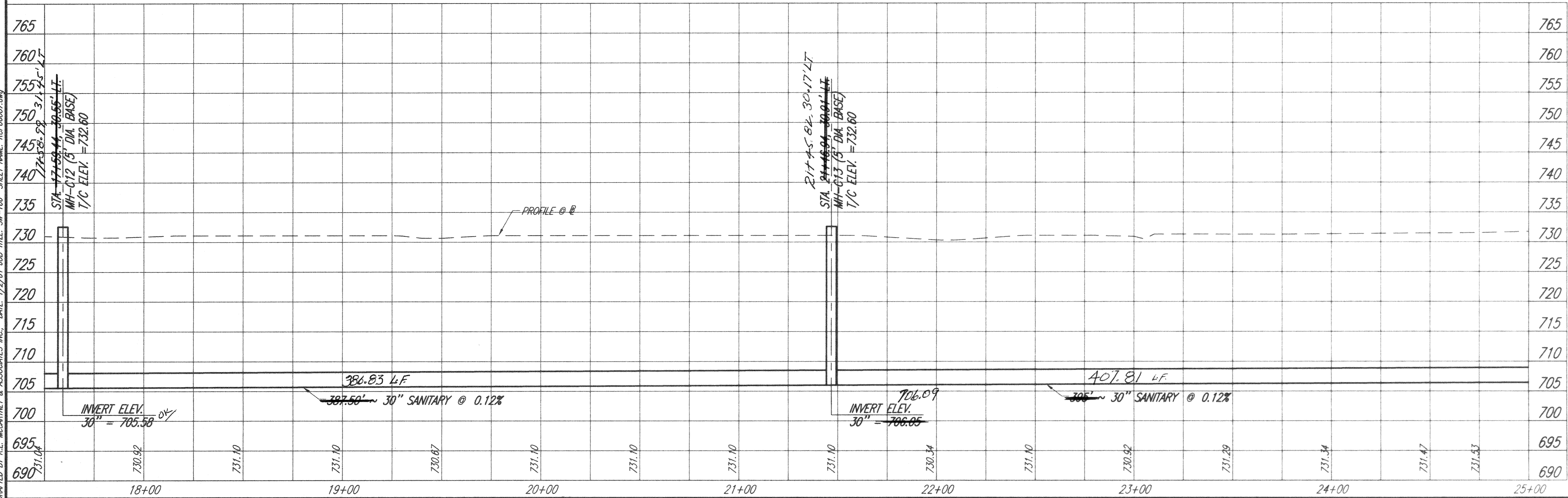
EH

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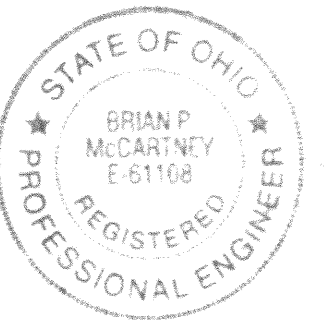


hls

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B.M. ~ TOP OF IRON PIN WITH CAP STAMPED
"MCCARTNEY TRAVERSE POINT"
STA. 19+18.4, 14.9' RT. (CONTROL #9)
ELEV. 731.05



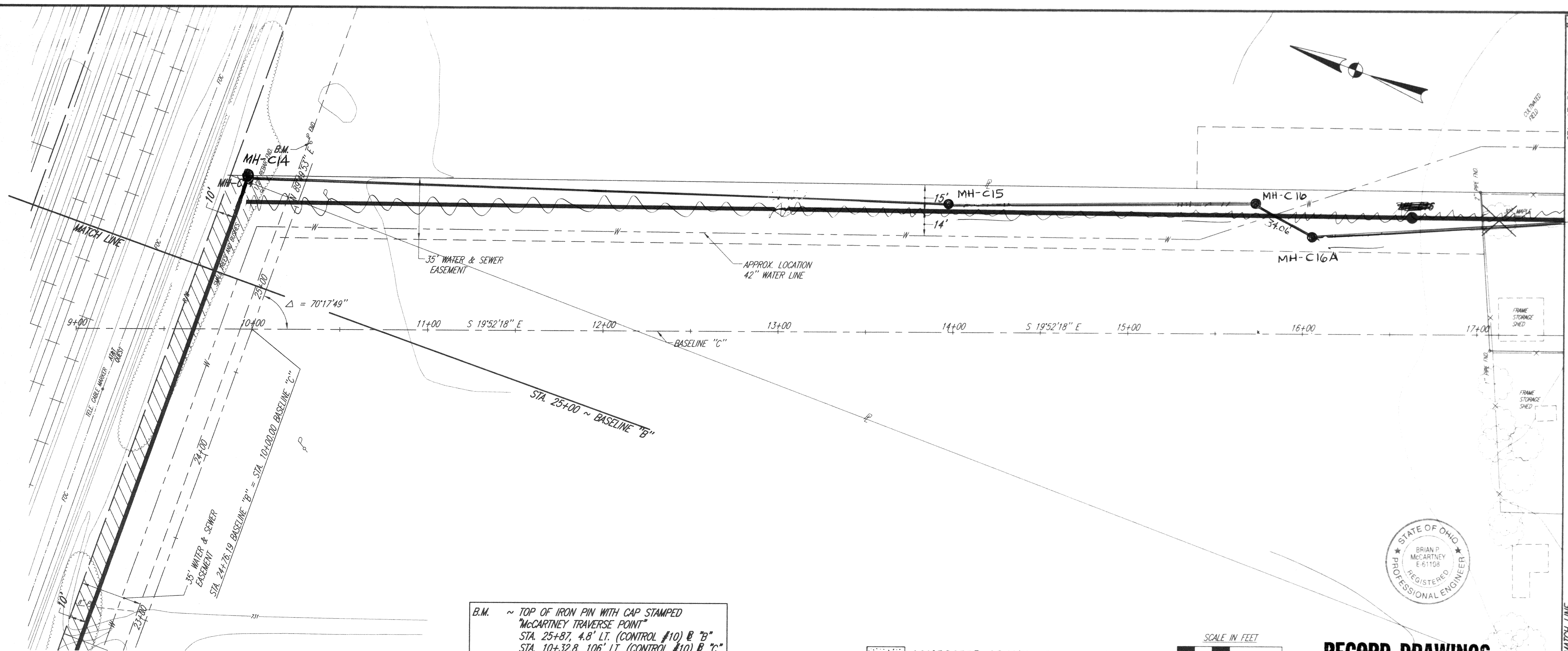
K&E
K&E McCartney & Associates, Inc.
Engineers • Planners • Surveyors

WESTERLY SANITARY TRUNK SEWER IMPROVEMENT
CITY OF NORTH RIDGEVILLE, OHIO

PLAN AND PROFILE
STA. 17+50 ~ B "B" TO STA. 11+50 ~ B "C"

54

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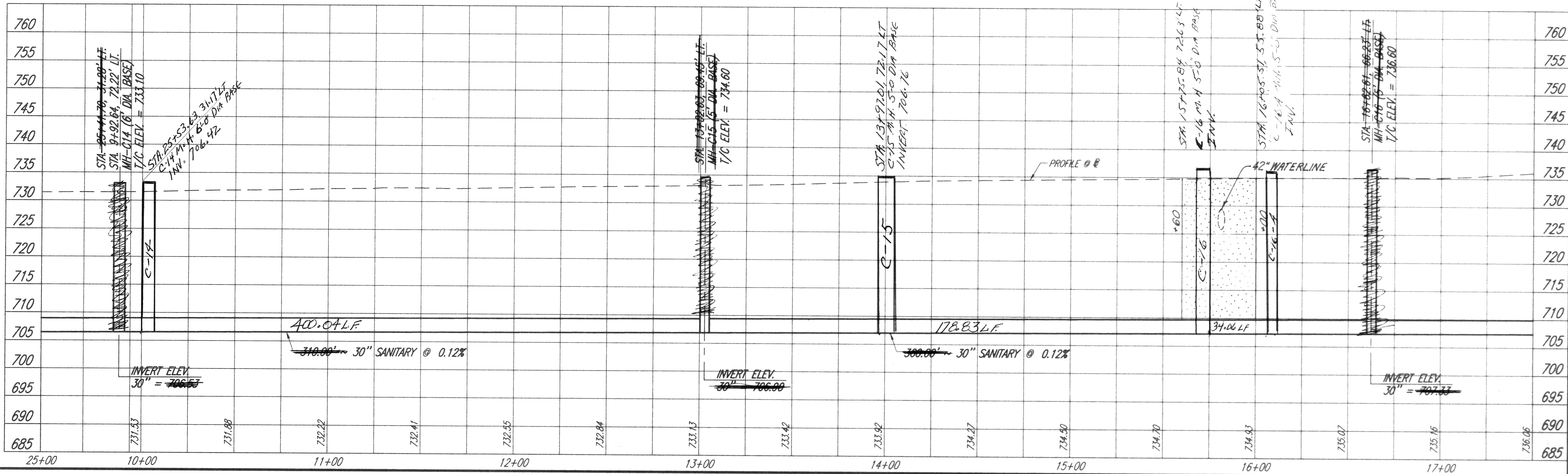


B.M. ~ TOP OF IRON PIN WITH CAP STAMPED
"MCCARTNEY TRAVERSE POINT"
STA. 25+87, 4.8' LT. (CONTROL #10) @ "B"
STA. 10+32.8, 106' LT. (CONTROL #10) @ "C"
ELEV. 732.16

COMPACTED GRANULAR BACKFILL



RECORD DRAWINGS



WESTERLY SANITARY TRUNK SEWER IMPROVEMENT
CITY OF NORTH RIDGEVILLE, OHIO

PLAN AND PROFILE
STA. 25+00 ~ @ "B" TO STA. 17+50 ~ @ "C"

