

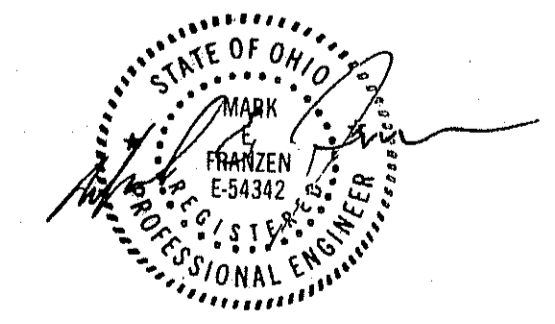
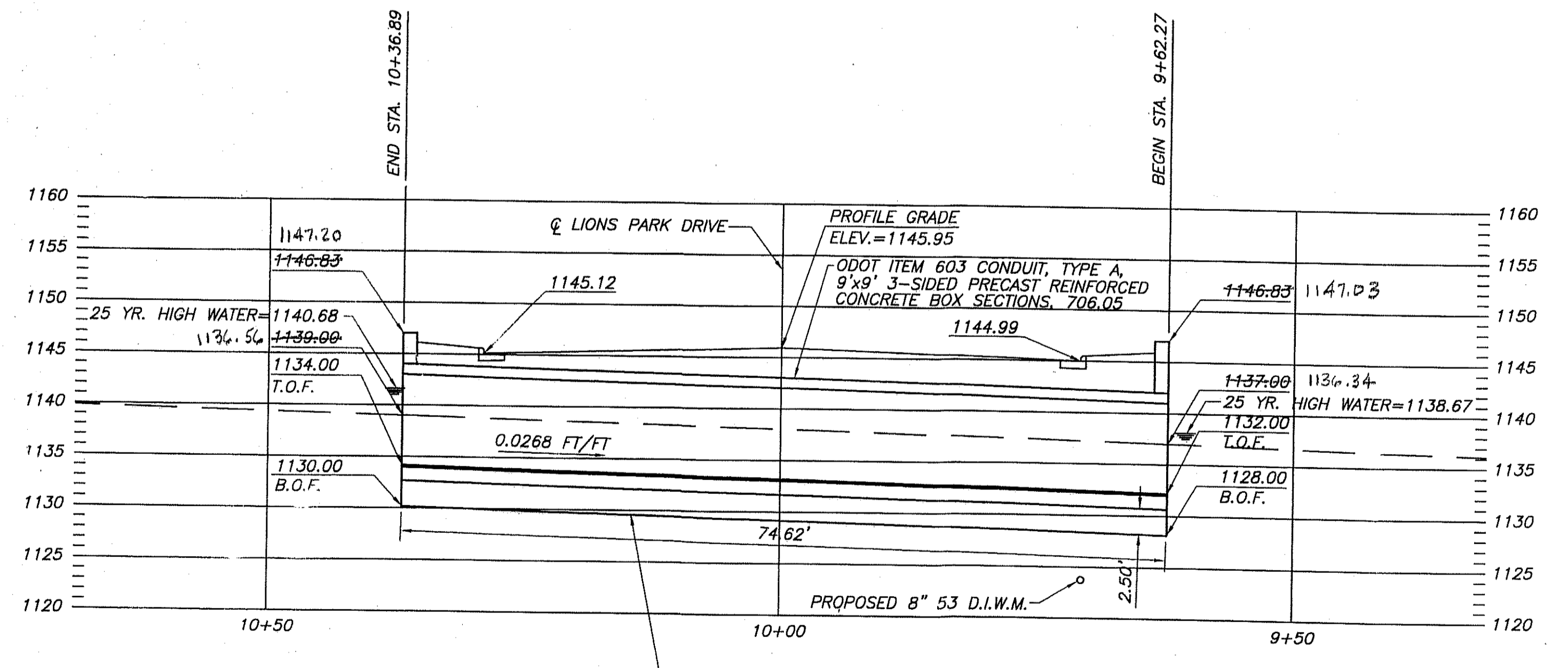
BENCH MARK 1
 SURVEY SPIKE NAIL SET IN THE NORTH SIDE OF A POWER POLE LOCATED ON THE EAST SIDE OF MARION AVENUE ACROSS FROM ADDRESS: 332 MARION AVE. ELEVATION = 1145.86'

BENCH MARK 2
 "R" IN COREY ON A HYDRANT LOCATED ON THE NORTHEAST CORNER OF HERBERT STREET AND DONOVAN AVENUE IN FRONT OF ADDRESS: 151 DONOVAN AVENUE ELEVATION = 1164.65'

HYDRAULIC DATA	
DRAINAGE AREA =	58.32 ACRES
DISCHARGE =	111 CFS
VELOCITY =	14.36 FPS
HIGH WATER	
UPSTREAM =	1140.68 FT
DOWNSTREAM =	1138.67 FT

GENERAL NOTES

- DESIGN SPECIFICATIONS**
 THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996, INCLUDING THE INTERIM SPECIFICATIONS, THE ODOT BRIDGE DESIGN MANUAL AND THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS 2002.
- DESIGN LOADING**
 DESIGN LOADING - HS25
- DESIGN DATA**
 CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)
 REINFORCING STEEL - ASTM A615, A616, A617, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI.
- DECK PROTECTION METHOD** - EPOXY COATED REINFORCING STEEL, CAST-IN-PLACE NC...
 - SEALING OF CONCRETE SURFACES
 - CORROSION INHIBITOR, PRECAST CONCRETE
- 1) GENERAL BACKFILLING SHALL BE DONE IN ACCORDANCE WITH ODOT CMS ITEM 503
 - 2) THE CONTRACTOR SHALL PROVIDE GROUNDWATER CONTROL MEASURES DURING FOOTING EXCAVATION AND CONSTRUCTION IN ACCORDANCE WITH ODOT CMS ITEM 503.03
 - 3) CULVERT AND HEAD/TAIWALL STRIP FOOTINGS SHALL BE UNDERCUT 2.5' AND BACKFILLED WITH COMPACTED ODOT NO. 24 LIMESTONE AGGREGATE (2.5' AND NO. 57 LIMESTONE AGGREGATE FOR THE REMAINING 6" IN ACCORDANCE WITH ODOT CMS ITEM 503.07. UNDERCUT SHALL BE BELOW ELEVATION OF FILL MATERIAL.
 - 4) THE CONTRACTOR SHALL CONTACT SUMMIT TESTING AND INSPECTION PRIOR TO CONSTRUCTION OF THE CULVERT FOOTINGS. SUMMIT TESTING AND INSPECTION SHALL INSPECT THE EXCAVATION BY A QUALIFIED GEOTECHNICAL ENGINEER TO CONFIRM THAT THE EXPOSED CONDITIONS ARE SIMILAR TO THOSE ENCOUNTERED IN THE TEST BORINGS.
 - 5) TYPE 2 WATERPROOFING SHALL BE PLACED ON THE CULVERT SURFACES IN ACCORDANCE WITH ODOT CMS ITEM 512.09
 - 6) STRUCTURE POROUS BACKFILL SHALL BE IN ACCORDANCE WITH ODOT ITEM 503.07
 - 7) SEALING OF CONCRETE SURFACES SHALL BE IN ACCORDANCE WITH ODOT DESIGN MANUAL SECTION 302.1.1.3.C.
 - 8) EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPE SHALL BE TO PLAN CROSS SECTIONS.
 - 9) THE CULVERT MAY NEED REDESIGNED IF UNSUITABLE SOILS ARE ENCOUNTERED DURING EXCAVATION.



Let. 4-11-16 AS-BUILTS

DESIGN AGENCY: HAMMONTREE & ASSOCIATES, LTD.
 ENGINEERS, PLANNERS, SURVEYORS
 CANTON, PITTSBURGH, AKRON
 DATE: 7-25-05
 STRUCTURE FILE NUMBER:
 DRAWN BY: MEF
 CHECKED BY: KJO
 DESIGNED BY: MEF
 REVISIONS:
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