

9th St SW Bridge Replacement Project, GP 1298
Engineering Department

Addendum 2

City of Canton, Ohio
Purchasing Department
218 Cleveland Ave. SW, 4th floor
Canton, Ohio 44702

9th St. SW Bridge Replacement Project, GP 1298

Item/Project

Engineering Department

Responsible Department

Wednesday, June 5, 2019 at 4:00 PM local time

Bids Due On or Before

Bid Proposal Submitted By:

Company Name

Street Address

City

State

Zip

Contact Person

Phone No.

Email Address

9th St SW Bridge Replacement Project, GP 1298
Engineering Department

Request for Information 1:

Question:

Item B.4 on page 3 of the RFQ asks for our firm's current overhead rate. How is this rate accounted for in the selection criteria listed on page 4?

Answer:

The overhead rate is not accounted for in the selection criteria.

Request for Information 2:

Question:

Are any construction plans of the existing bridge available for review?

Answer:

Yes, the existing bridge plans are attached for review.

Request for Information 3:

Question:

Are there any hydraulic studies of this part of the West Branch of the Nimishillen Creek available for review?

Answer:

The City of Canton does not have hydraulic studies of this part of the West Branch of the Nimishillen Creek available for review.

DESIGN SPECIFICATION

REPLACED STRUCTURE CONFORMS TO THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1973, INCLUDING THE 1974 THROUGH 1981 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

IMPROVEMENT OF

9TH ST. S.W. BRIDGE

OVER WEST BRANCH OF NIMISHILLEN CREEK

MCKINLEY TOWNSHIP, CITY OF CANTON

STARK COUNTY, OHIO

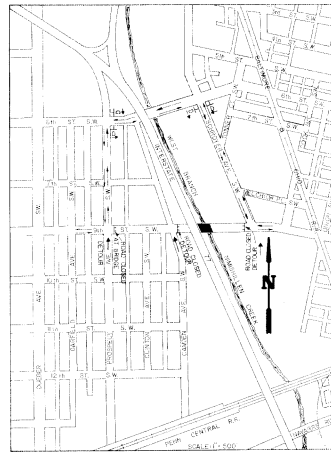
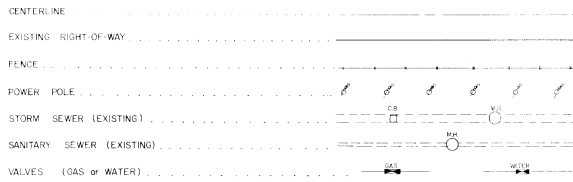
DESIGN DATA

EXISTING DESIGN LOADING — HS 20-44
 CLASS "C" CONCRETE — COMPRESSIVE STRENGTH = 4000 P.S.I.
 CLASS "S" CONCRETE — COMPRESSIVE STRENGTH = 4500 P.S.I.
 REINFORCING STEEL — A.S.T.M. A615, A616, OR A617 GRADE 60,
 MINIMUM YIELD STRENGTH = 60,000 P.S.I.
 STRUCTURAL STEEL — A.S.T.M. A36 — UNIT STRESS = 20,000 P.S.I.
 WELDED CONNECTION — E 70 XX ELECTRODE; UNIT STRESS = 18,000 P.S.I.

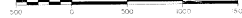
EXISTING STRUCTURE

TWO SPAN STEEL I-BEAM AND CONCRETE SLAB BRIDGE 40'-6" ON CENTER OF BEARING, FIFTY FOOT ROADWAY TWO 7'-0" SIDEWALKS; TWO 2'-6" x 9'-12" APPROACH SLABS, 3" BRICK WEARING COURSE WITH 3/4" OIL AND SAND BEDDING COURSE 20° SKEW TO RIGHT, OUTSIDE EDGE OF BRIDGE SET ON STRAIGHT GRADE.

LEGEND



VICINITY AND DETOUR MAP



GENERAL PROJECT NO. 873

CITY OF CANTON OFFICIALS

- STANLEY A. SMICH MAYOR
- RAYMOND DENCZAK PRESIDENT OF COUNCIL
- MARGARET A. BEEBE COUNCILMEN
- EDWARD L. SOLEMAN
- RICHARD A. MALLONN
- MELVIN J. GRAVELY
- ARTHUR G. GRELLI
- DAVID M. SULLS
- CAROL HADGLARD
- EDWARD S. MCDONNELL
- TONY L. BIASELLA
- LIS WALKER
- TOM ASCANI
- MARY M. BARBOCK COUNCILMEN-AT-LARGE
- JAMES MPARLANE
- ROBERT A. CARESTRAIN
- ROBERT FISHER SERVICE DIRECTOR
- PHILLIP L. NEFF CITY CIVIL ENGINEER
- FRANK L. BURNOSKY SAFETY DIRECTOR

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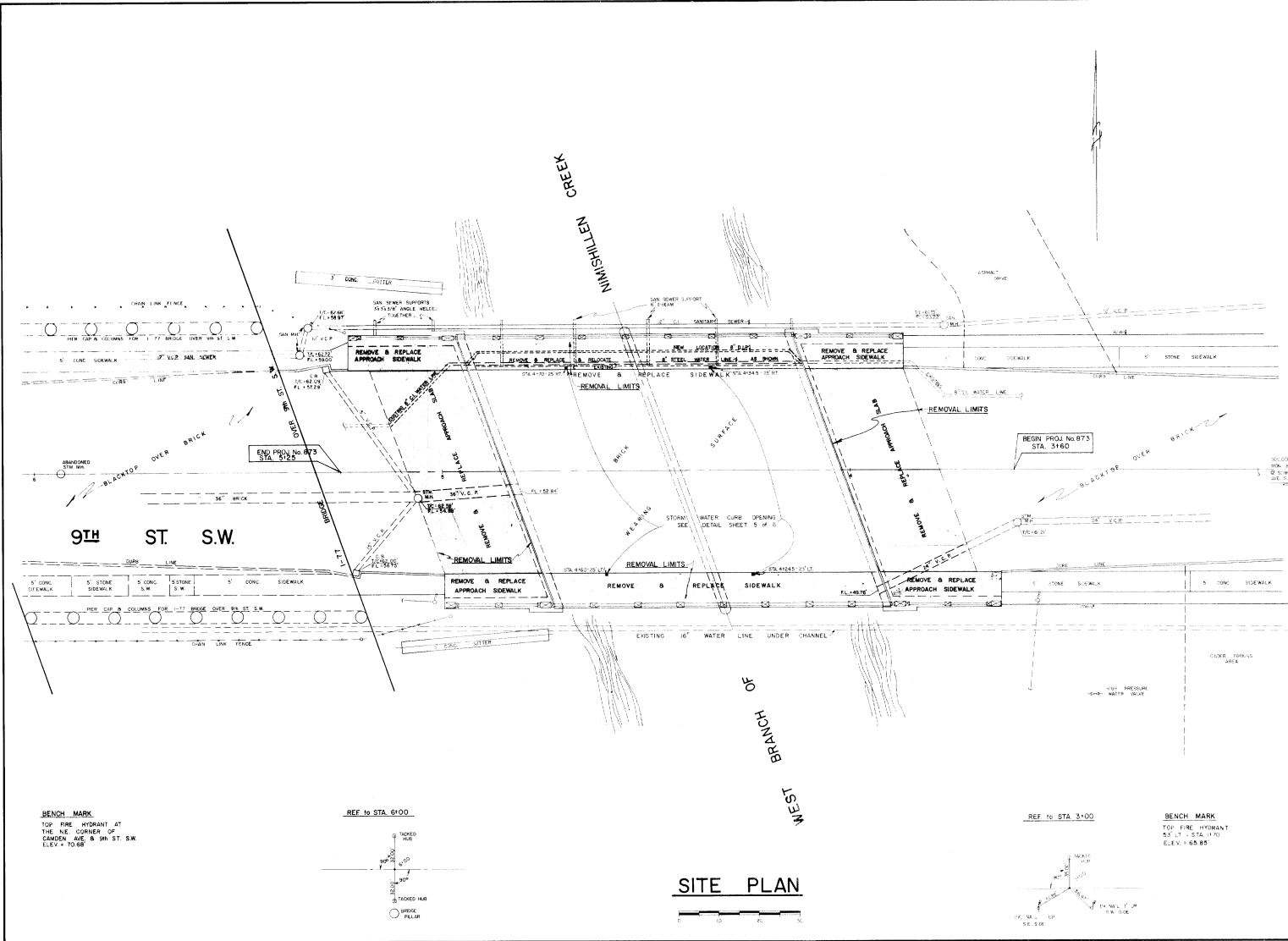
APPROVED BY THE CANTON CITY CIVIL ENGINEER THIS 8TH DAY OF December, 1987.

Shisler & Associates

SHISLER & ASSOCIATES

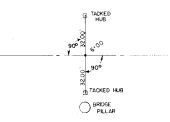
CONSULTING ENGINEERING and SURVEYING
 2011 FULTON RD. N.W. - CANTON, OHIO 44708
 PHONE: (216) 455-4942 or 455-3395

FILE No. 5773 27 1	DATE OF LETTING _____, 1987
	CONTRACT No. _____



BENCH MARK
 TOP FIRE HYDRANT AT
 THE N.E. CORNER OF
 CAMDEN AVE. & 9TH ST. S.W.
 ELEV. = 70.65

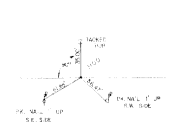
REF TO STA. 6100



SITE PLAN



REF TO STA. 3+00



BENCH MARK
 TOP FIRE HYDRANT
 S.W. CORNER OF
 STA. 170
 ELEV. = 68.85

REVISIONS NO. DATE BY	
SHISLER and ASSOCIATES CONSULTING ENGINEERING and SURVEYING 2017 FOLEY ROAD, SUITE 100, #4709 DALLAS, TEXAS 75244-1402, P.O. BOX 1005 DALLAS, TEXAS 75201	
IMPROVEMENT OF 9TH ST. S.W. BRIDGE MADISON TOWNSHIP, CITY OF GANTON STARK COUNTY, OHIO FEDERAL PROJECT #0873	
SCALE:	
HORIZ. 1" = 112'	
VERT. N/A	
DATE:	OCTOBER 1981
SHEET No:	2 of 6

DRAWN: _____

SHEET No: _____

GENERAL NOTES

ALL CONSTRUCTION SHALL CONFORM TO THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, "CONSTRUCTION AND MATERIALS SPECIFICATIONS," 1981 EDITION. ALL ITEMS REFERRED TO BY ITEM NUMBERS, SUCH AS ITEM 511, CONCRETE FOR STRUCTURES, ARE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND DRAWINGS REFERRED TO AS O.D.O.T. DWG. NO. ARE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS.

ALL ITEMS REFERRED TO AS CITY OF CANTON NUMBER, SUCH AS STORM MANHOLE NO. 16, WILL BE CITY OF CANTON STANDARD CONSTRUCTION DRAWINGS. THE CITY OF CANTON STANDARD DRAWINGS WILL TAKE PRECEDENCE OVER THE STATE OF OHIO STANDARDS. THE CITY OF CANTON STANDARDS WILL BE FOLLOWED FULLY, AND THE CASTING OR OTHER MATERIAL FURNISHED WILL MEET THESE DRAWINGS AND SPECIFICATIONS.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON CITY OF CANTON DATUM, AED 961.899 FT. TO CITY OF CANTON ELEVATIONS TO MEET USGS.

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 150 SQ. FT. OF FLOOR SPACE, AND IN ADDITION TO THE REQUIREMENTS OF ITEM 69, HE SHALL PROVIDE AND MAINTAIN SANITARY PROVISIONS AS PER F.H.W.A. 10706. ALL THE ABOVE IS INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 69, FIELD OFFICE.

MAINTENANCE OF TRAFFIC

DURING THE REMOVAL AND REPAIRS OF THE BRIDGE, A DETOUR SHALL BE PROVIDED AS SHOWN IN THESE PLANS, SHEET 1. THE CITY WILL PROVIDE, ERECT, MAINTAIN, AND REMOVE DETOUR SIGNING AS IS NECESSARY. TRAFFIC SHALL BE DETOURED UNTIL ALL CONSTRUCTION WITHIN THE WORK LIMITS HAS BEEN COMPLETED. THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC IN ACCORDANCE WITH THE PROVISIONS OF ITEM 64.

REVIEW OF EXISTING UTILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF EXISTING UTILITIES (SUCH AS SANITARY, STORM SEWER, WATER LINES, AND ETC.) WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE CITY.

ALL EXISTING UTILITIES INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE CITY OF CANTON DOES NOT GUARANTEE THEIR ACCURACY, OR COMPLETENESS.

EXISTING UTILITY PROTECTION AND NOTIFICATION

THE CONTRACTOR SHALL CONTACT RESPECTIVE UTILITIES WHEN WORKING IN VICINITY OF UTILITY INSTALLATIONS. ALL EXISTING UTILITIES WHICH MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION, OR ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROPERLY SHORED, BRACED, OR OTHERWISE PROTECTED BY THE CONTRACTOR. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO THAT THERE IS NO INTERRUPTION TO ANY UTILITY DURING CONSTRUCTION OF THIS PROJECT. PAYMENT FOR COSTS INVOLVED IN PERFORMING THIS WORK SHALL BE INCLUDED IN PRICE BID FOR THE PERTINANT ITEMS OF THE CONTRACT.

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

- THE CITY OF CANTON SEWER DEPARTMENT
28 CLEVELAND AVENUE SW
CANTON, OHIO 44702 PHONE: (216) 489-3450
- THE CANTON WATER DEPARTMENT
2664 HARRISBURG ROAD NE.
CANTON, OHIO 44705 PHONE: (216) 489-3310
- THE OHIO BELL TELEPHONE COMPANY
832 MCKNILEY AVENUE N.W. ROOM 01
CANTON, OHIO 44703 PHONE: (216) 489-9331
- THE OHIO POWER COMPANY
301 CLEVELAND AVENUE SW.
CANTON, OHIO 44702 PHONE: (216) 456-8173
- THE EAST OHIO GAS COMPANY
332 SECOND STREET N.W.
CANTON, OHIO 44702 PHONE: (216) 456-1328
- WARNER AMEX CABLE
2700 ATLANTIC BLVD. NE.
CANTON, OHIO 44705 PHONE: (216) 456-1866

WATER LINE

CONTRACTOR IS RESPONSIBLE FOR PROVIDING MATERIALS.

WATER LINE RELOCATION SPECIFICATIONS

ALL WATER LINE RELOCATION SHALL BE MADE IN ACCORDANCE WITH O.D.O.T. SPECIFICATIONS NO. 814, ENTITLED "WATER MAINS AND SERVICE BRANCHES." THIS SPECIFICATION IS MODIFIED BY THE FOLLOWING SPECIAL PROVISIONS WHICH CONSIST OF THESE NOTES IN ALL CASES OF CONFLICT WITH SUPPLEMENTAL SPECIFICATIONS 814, THESE NOTES SHALL GOVERN.

SEQUENCE OF OPERATIONS

THE WATER DEPARTMENT AND THE PROJECT ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF CUTTING EXISTING MAIN AND SERVICE SHALL BE INTERRUPTED FOR NO LONGER THAN TWO (2) HOUR INTERVALS. THE WATER DEPARTMENT WILL CONTROL THE TIME WHEN SERVICE MAY BE INTERRUPTED.

DEPARTMENT OF WATER APPROVAL

THE CITY OF CANTON WATER DEPARTMENT WILL OBSERVE THE WATER LINE RELOCATION WORK. CONSTRUCTION MATERIALS SHALL MEET THE APPROVAL OF THE WATER DEPARTMENT AND THE PROJECT ENGINEER. ALL INSTRUCTIONS WILL BE WORKED THROUGH THE PROJECT ENGINEER.

WORK TO BE DONE BY THE CITY

THE CITY WATER DEPARTMENT WILL DO ALL OPENING AND CLOSING OF VALVES NECESSARILY USED IN SHUTTING OFF WATER AT TIME OF MAKING CONNECTIONS WITH PRESENT LINE.

CUTTING PIPE

THE CUTTING OF PIPE FOR INSERTING VALVES, FITTINGS, OR CLOSURE MECHANISMS SHALL BE DONE IN A NEAT, AND WORKMAN-LIKE MANNER, WITHOUT DAMAGE TO THE PIPE OR GROUND LINGS, AND SO AS TO LEAVE A SMOOTH END AT RIGHT ANGLES TO THE AXIS OF THE PIPE. THE FLAME-CUTTING OF PIPE BY MEANS OF AN OXYACETYLENE TORCH SHALL BE PROHIBITED.

CONNECTIONS TO EXISTING PIPE

AT PLACES WHERE THE PLANS PROVIDE FOR PROPOSED PIPE TO BE CONNECTED TO EXISTING PIPE, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED LINE. THE COST OF THIS OPERATION SHALL BE INCLUDED IN THE PRICE PER LINEAL FOOT FOR ITEM 814.

WRAPPING EXPOSED PIPE

THE CONTRACTOR SHALL WRAP EXPOSED RELOCATED (D.I.B.) WATER LINE, WRAPPING AND MANUFACTURING INSTRUCTIONS WILL BE SUPPLIED BY THE CITY WATER DEPARTMENT. PAYMENT FOR WRAPPING SHALL BE INCLUDED IN THE PRICE PER LINEAL FOOT FOR ITEM 814.

DUCTILE IRON PIPE

DUCTILE IRON PIPE SHALL CONFORM TO THE LATEST SPECIFICATIONS AS ADOPTED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI) AND THE AMERICAN WATER WORKS ASSOCIATION (AWWA), SPECIFICALLY, DUCTILE IRON PIPE SHALL CONFORM TO ANSI SPECIFICATION A21.51 (AWWA C900).

THE CHEMICAL CONSTITUENTS SHALL MEET THE PHYSICAL PROPERTY RECOMMENDATIONS OF ASTM A539 TO ASSURE THAT THE IRON IS SUITABLE FOR SATISFACTORY DRILLING AND CUTTING.

UNLESS OTHERWISE SHOWN IN THE PLANS OR THE SPECIAL SPECIFICATIONS, THE THICKNESS OF THE BARREL OF THE PIPE SHALL NOT BE LESS THAN THE THICKNESS COMPUTED USING THE METHOD OF ANSI A21.50, AWWA MANUAL H-3, EXCEPT FOR THE FOLLOWING LOADING CONDITIONS: UNIT WEIGHT OF SOIL 130 POUNDS PER CU. FT.; TRUCK WHEEL LOADS OF 16,000 LBS., LAYING CONDITION B, DEPTH OF COVER 8' OR 2.5', WHICHEVER PRODUCES THE GREATEST LOAD IN CONJUNCTION WITH LIVE LOAD, WORKING PRESSURE 150 LBS. PER SQ. INCH, SURGE PRESSURE 100 LBS. PER SQ. INCH. THE MINIMUM THICKNESS OF DUCTILE IRON PIPE SHALL BE CLASS 53 FOR 4 THROUGH 24" DIA.

COATING AND LINING

THE PIPE SHALL BE COATED OUTSIDE WITH A BITUMINOUS COATING OF EITHER COAL TAR OR ASPHALT BASE IN ACCORDANCE WITH ANSI A21.6 (AWWA D106) AND LINED INSIDE WITH CEMENT MORTAR AND SEAL COATED IN ACCORDANCE WITH ANSI A21.4 (AWWA D104) UNLESS OTHERWISE NOTED.

JOINTS

MECHANICAL AND PUSH-ON JOINTS INCLUDING ACCESSORIES SHALL CONFORM TO ANSI A21.11 (AWWA C110)

ESTIMATED QUANTITIES

THE CONTRACTOR SHALL NOT ORDER THE ESTIMATED QUANTITIES UNTIL DIRECTED TO DO SO BY THE CITY OF CANTON.

WEEP HOLES

4" DIA. WEEP HOLES SHALL BE DRILLED THROUGH THE CONCRETE ABUTMENTS AS SHOWN ON PLANS. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	LN. FT.	4" DIA. WEEP HOLES

CURB OPENINGS

CURB OPENINGS SHALL BE PLACED AS DETAILED AT THE LOW POINTS OF THE BRIDGE.

DECK SHOWN ON THE SITE PLAN. METAL CURB OPENING CASTINGS SHALL BE NEENAH CATALOG NO. H-3262-6, OR EQUAL. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	CURB OPENINGS

18" STORM SEWER REPAIR

THE JOINTS OF THE EXISTING 18" STORM SEWER THROUGH THE WEST ABUTMENT ARE TO BE REPAIRED AS INDICATED BY PLANS. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	LUMP SUM	18" STORM JOINT REPAIR

EXPANDED JOINT

THE CONSTRUCTION OF THE JOINT BETWEEN THE APPROACH SLAB AND THE DECK SHALL INCLUDE THE COST OF CUTTING AND WELDING THE EXISTING ANGLE AS DETAILED, 4" DIA. 1/2" DIA. PREPARED TO STEEL AND CONCRETE, SURFACING AND PLACING THE POLY-ETHYLENE JOINT BACKFILLER, AND FORMING THE URETHANE JOINT MATERIAL. URETHANE SHALL BE MANUFACTURED TWO COMPONENT URETHANE. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	LN. FT.	URETHANE EXPANDED JOINT

BAR-GRIP COUPLERS

MECHANICAL REINFORCING CONNECTORS SHALL BE BAR-GRIP COUPLERS AS PER DAYTON BARGLACE, INC. SPECIFICATIONS. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	BAR-GRIP SYSTEM COUPLERS

EPOXY SINDER

EPOXY SINDER FOR DECK REPAIR SHALL BE Sika Chemical "SKASTIX 370 SKADOUR H-MOD" 100% EPOXY AND SHALL BE APPLIED AS PER MANUFACTURER'S SPECIFICATIONS. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	SQ. FT.	EPOXY SINDER

EPOXY GROUT

EPOXY GROUT FOR CRACK REPAIR SHALL BE Sika Chemical "SKASTIX 350 SKADOUR H-MOD" 100% EPOXY AND SHALL BE PRESSURE INJECTED AS PER MANUFACTURER'S SPECIFICATIONS. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	SQ. FT.	EPOXY GROUT

EMBED GROUT

GROUT FOR LEVELING ABUTMENT BEARING PLATES SHALL BE EMBECC PREMIXED, NON-SHRAK GROUT AS PER MANUFACTURER'S SPECIFICATIONS. PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	SQ. FT.	EMBED GROUT

ITEM 802 MISCELLANEOUS

PERCENT PORTIONS OF STRUCTURE REMOVED, MISCELLANEOUS INCLUDES MATERIALS SUCH AS BRICK AND CURB, SIDEWALK EXPANSION DAMS, AND 8" I-BEAM SEWER SUPPORTS THAT ARE TO BE REUSED. COST OF REPLACEMENT SHALL BE INCLUDED IN THIS ITEM.

REMOVED BRICK

ITEM 809, POROUS BACKFILL SHALL INCLUDE THE COST OF EXCAVATING AND REMOVING FROM THE SITE, THE EXISTING POROUS BACKFILL.

ITEM 801 CONCRETE

ALL CONCRETE SHALL BE TYPE II, 4000 PSI HIGH EARLY STRENGTH CONCRETE, AND SHALL CONTAIN 5% AIR ENTRAINMENT. ALL CONCRETE SHALL BE WATER CURED, USING COTTON WATS AND CONTINUOUS FINE SPRINKLING FOR 7 DAYS.

ITEM 803 PAINTING

ALL EXISTING STRUCTURAL STEEL, EXPOSED STEEL, AND NEW STEEL SHALL BE SAND BLASTED, COMPLETELY PRIME, DRYED, PAINTED, AND GIVEN TWO COATS OF FINISH PAINT AS PER SECTION PAINT, INCLUDING SECTION PA-01.

WELDING

WELDING TO BE GOVERNED BY THE CURRENT AWS "STRUCTURAL WELDING CODE" EXCEPT AS MODIFIED BY OHIO STATE SPECIFICATION 513.17.

REVISIONS

THE CONTRACTOR SHALL CHECK ALL DRAWINGS AND MAKE RECOMMENDATIONS AS TO ANY CHANGES AND/OR ADDITIONS. ALL CHANGES AND/OR ADDITIONS TO BE SUBMITTED TO AND APPROVED BY THE CITY OF CANTON ENGINEERING DEPARTMENT. THE CONTRACTOR SHALL GRADE AND FEATHER ROADWAY PAVEMENT WITH INSTALLED APPROACH SLABS TO INSURE A SMOOTH THROUGHWAY.

ASPHALT CONCRETE GOVERNED BY OHIO STATE DEPARTMENT OF TRANSPORTATION, A. APPROACH SLABS - 1/2" THICK ASPHALT CONCRETE - ITEM 404.

SCALE

HOR. N/A

VERT. N/A

DATE

OCTOBER 1981

SHEET NO.

3 of 6

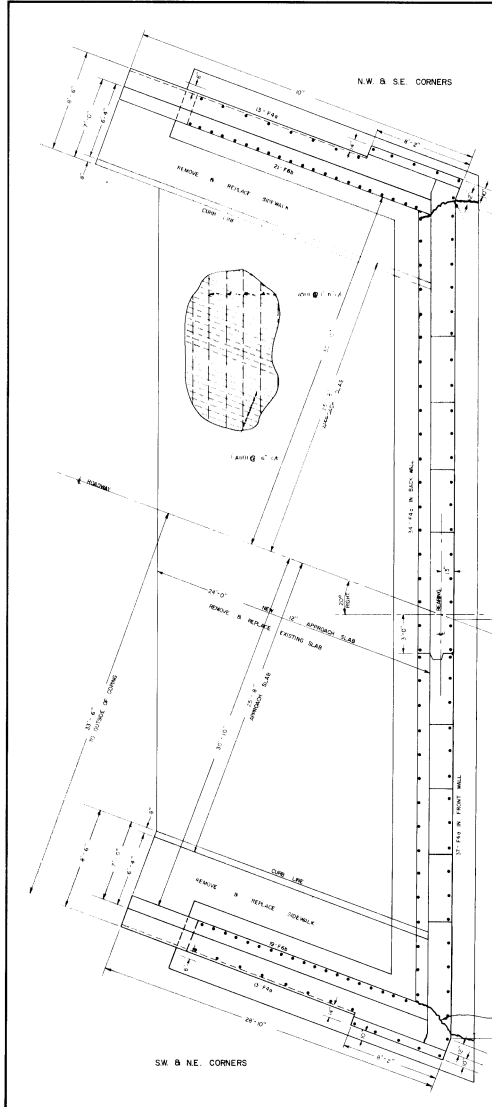
DRAWER

SHEET NO.

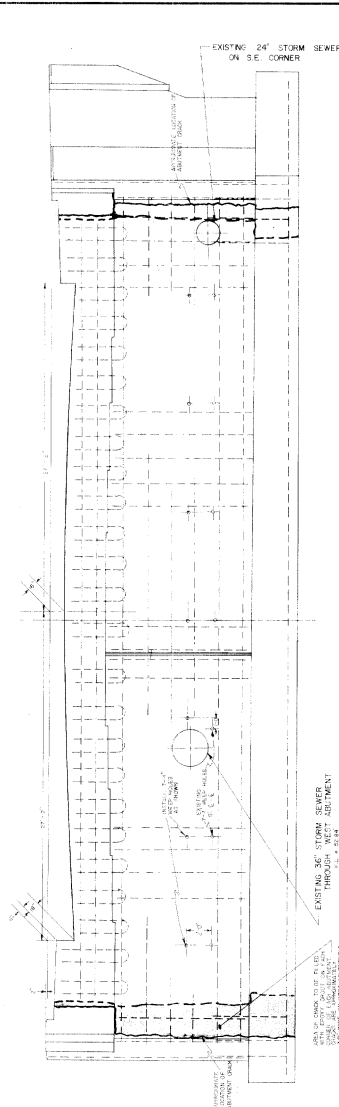
SHISLER and ASSOCIATES CONSULTING ENGINEERING and SURVEYING 1071 FULTON AVENUE, CANTON, OHIO 44705 PHONE: (216) 456-1866	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	DESCRIPTION												
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IMPROVEMENT OF
9th ST. S.W. BRIDGE
MUNICIPALITY OF CANTON
GENERAL PROJECT NO. 873

SHISLER & ASSOCIATES CONSULTING ENGINEERING and SURVEYING 1071 FULTON AVENUE, CANTON, OHIO 44705 PHONE: (216) 456-1866
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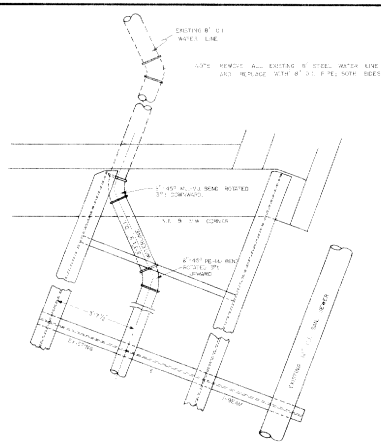


PLAN OF ABUTMENT
SCALE 1/8" = 1'-0"

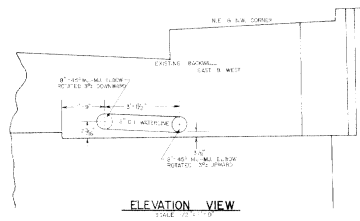


ELEVATION OF ABUTMENT
SCALE 1/8" = 1'-0"

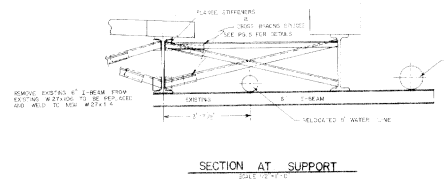
AREA OF CONCRETE FILL TO BE PLACED THROUGH WEST ABUTMENT TO BE CONCRETE. ALL EXISTING CONCRETE TO BE REMOVED & REPLACED WITH PORTLAND CEMENT CONCRETE TO PROVIDE POSITIVE DRAINAGE.



PLAN VIEW
SCALE 1/8" = 1'-0"



ELEVATION VIEW
SCALE 1/8" = 1'-0"



SECTION AT SUPPORT
SCALE 1/8" = 1'-0"

WATERLINE RELOCATION

NO.	DATE	BY	REVISIONS

SHISLER and ASSOCIATES
CONSULTING ENGINEERING AND SURVEYING
2091 FELLOW ROAD - CANTON, MASS 01929
PHONE: 408-244-4444 FAX: 408-252-8332
E-MAIL: SHISLER@AOL.COM

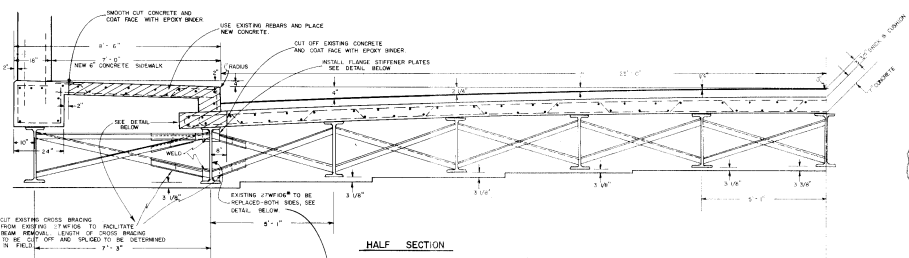
IMPROVEMENT OF
9th ST. S.W. BRIDGE
MIDDLEBURY TOWNSHIP, CITY OF CANTON
SPRING COUNTY, OHIO
GENERAL PROJECT NO. 1273



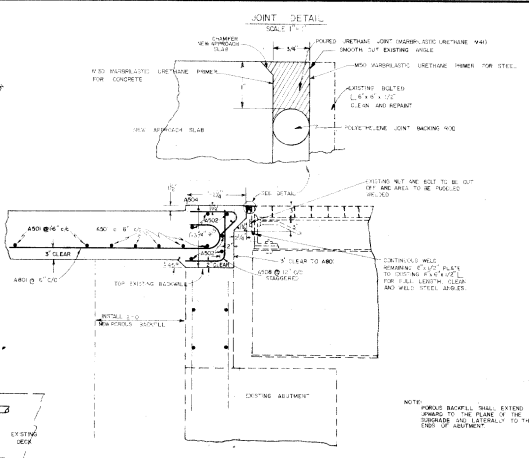
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VERT. No.
DATE:
OCTOBER, 1981
SHEET No.
4 OF 6

DRAWER

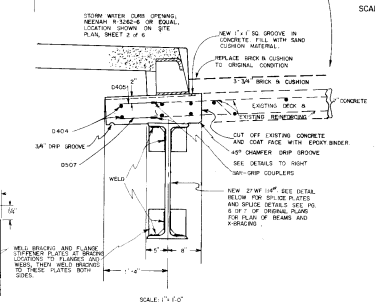
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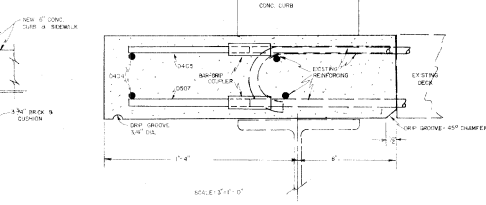
HALF SECTION
SCALE: 1/2" = 1'



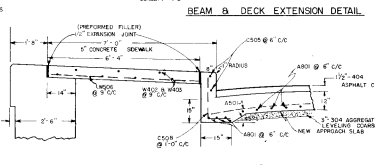
EAST & WEST EXPANSION & APPROACH SLAB DETAIL
SCALE: 1" = 1'



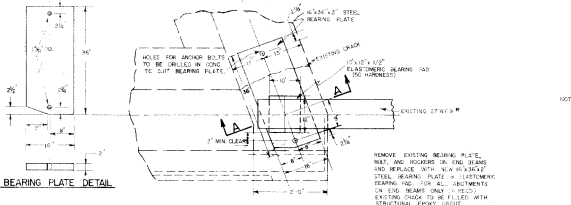
SCUPPER PLAN
SCALE: 3" = 1'-0"



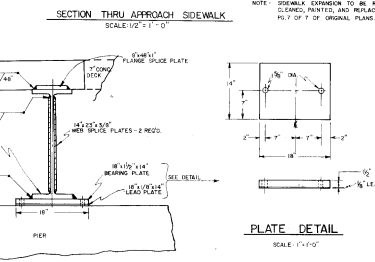
PLAN
SCALE: 3" = 1'-0"



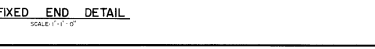
BEAM & DECK EXTENSION DETAIL
SCALE: 1" = 1'-0"



BEARING PLATE DETAIL
SCALE: 1" = 1'-0"



SECTION THRU APPROACH SIDEWALK
SCALE: 1/2" = 1'-0"



FIXED END DETAIL
SCALE: 1" = 1'-0"

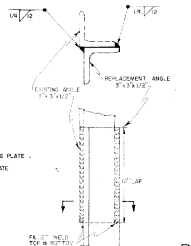
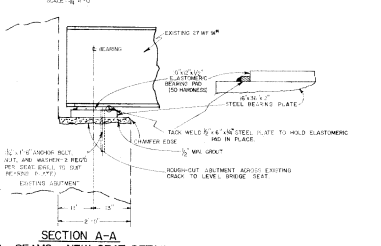
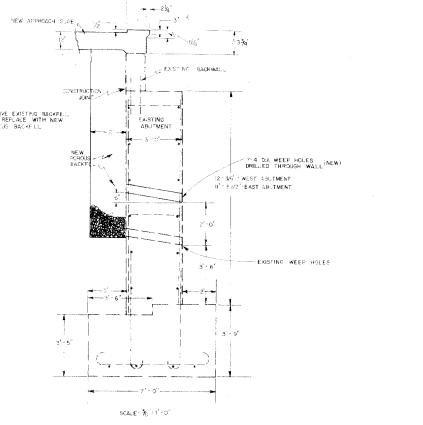


PLATE DETAIL
SCALE: 1" = 1'-0"



SECTION A-A
FASCIA BEAMS - NEW SEAT DETAIL
TYPICAL BOTH END BEAMS
SCALE: 3/8" = 1'-0"



SECTION THRU ABUTMENT
SCALE: 3/8" = 1'-0"

REVISIONS	DATE	BY
SHISLER and ASSOCIATES CONSULTING ENGINEERING and SURVEYING		
2001 FORTY-NINTH AVENUE, SUITE 100 DENVER, COLORADO 80202 PHONE: (303) 442-4444 FAX: (303) 442-4444 WWW.SHISLER.COM		
SHISLER & ASSOCIATES CONSULTING ENGINEERING and SURVEYING		
IMPROVEMENT OF 9th ST. S.W. BRIDGE MINNEAPOLIS, TAMMING, CITY OF CLINTON OSAGE COUNTY, MISSOURI GENERAL PROJECT NO. 02		
SCALE	NON AS LISTED	
VERT	N/A	
DATE	OCTOBER 1981	
SHEET NO.	5 OF 6	
DRAWER	SHEET NO.	

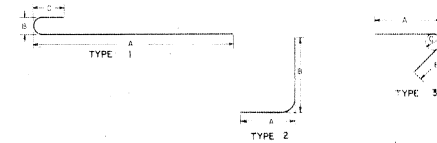
ESTIMATED QUANTITIES

ITEM #	UNIT	QUANTITY	DESCRIPTION	REMARKS
ROADWAY				
201	LUMP SUM		CLEARING & GRUBBING	
202	SQ. YD.	274	APPROACH SLAB REMOVAL	
202	SQ. FT.	776	SIDEWALK REMOVAL	
304	CU. YD.	22	3" AGGREGATE BASE	
404	CU. YD.	11	1/2" ASPHALTIC CONCRETE	
407	GAL.	27	TACK COAT	
509	LB.	19,308	REINFORCING STEEL, GRADE 60	FOR SIDEWALK & APPROACH SLAB
516	LN. FT.	222	1/2" PREFORMED EXPANSION JOINT FILLER	
608	SQ. FT.	693	CONCRETE SIDEWALK (EXCLUDING REINFORCING STEEL)	
611	SQ. YD.	274	CONCRETE APPROACH SLAB W/CURB (EXCLUDING REINFORCING STEEL)	
614	LUMP SUM		TRAFFIC MAINTENANCE	
619	LUMP SUM		FIELD OFFICE	
SPECIAL	LUMP SUM		3/8" CONDUIT JOINT REPAIR	
STRUCTURE				
202	CU. YD.	26	PORTION OF STRUCTURE REMOVED, CONCRETE	
202	LB.	19,100	PORTION OF STRUCTURE REMOVED, STRUCTURAL STEEL	
202	LN. FT.	114	8" STEEL WATER LINE REMOVAL	SEE NOTES
202	LUMP SUM		PORTION OF STRUCTURE REMOVED, MISCELLANEOUS	
SPECIAL	EACH	166	#4 BAR-GRIP SYSTEM COUPLERS	
SPECIAL	EACH	166	#5 BAR-GRIP SYSTEM COUPLERS	
509	LB.	469	REINFORCING STEEL, GRADE 60	
511	CU. YD.	29	CLASS "S" CONCRETE, SUPERSTRUCTURE	
513	LB.	20,000	STRUCTURAL STEEL	
514	LUMP SUM		FIELD PAINTING OF STRUCTURAL STEEL	COMPLETE FINISH COAT
514	LUMP SUM		FIELD PAINTING OF EXISTING STEEL (SURFACE PREPARATION, SPOT PRIME & PRIME COAT)	
SPECIAL	LN. FT.	107	URETHANE EXPANSION JOINT	SEE DETAIL
516	EACH	4	10"x12"x1/2" ELASTOMERIC BEARING PAD - 50 HARDNESS	
516	EACH	2	1/4"x18"x1/8" LEAD BEARING PAD	
518	CU. YD.	95	POROUS BACKFILL	
SPECIAL	EACH	4	CURB OPENINGS	SEE DETAIL
SPECIAL	LN. FT.	42	4" DIA. WEEP HOLES	
SPECIAL	SQ. FT.	32	EMBEDO GROUT TO LEVEL ABUTMENT BEARING PLATES	SEE NOTES
SPECIAL	SQ. FT.	96	EPOXY BINDER TO REPAIR DECK	SEE NOTES
SPECIAL	CU. FT.	5.3	EPOXY GROUT TO REPAIR ABUTMENT CRACKS	SEE NOTES
B14	LN. FT.	114	8" D.I. WATER LINE	
B14	EACH	4	8" D.I. 45° BENDS	SEE NOTES
B14	EACH	2	8" D.I. CONNECTING PIECE	

REBAR SCHEDULE

MARK	NO.	TYPE	LENGTH	WEIGHT (LBS)	A	B	C	REMARKS
DECK								
D404	12	ST.	29'-0"	233				LAP SPLICED
D405	166	ST.	0'-10"	92				SPECIAL CONNECTION
D507	166	ST.	0'-10"	144				SPECIAL CONNECTION
				469	Total weight of structure			
APPROACH SLAB								
A8C1	206	1	25'-4"	13,934	23'-6"	0'-6"	0'-6"	SEE DETAIL
A5C1	76	ST.	28'-3"	2,335				LAP SPLICED
A5C2	28	ST.	28'-3"	925				LAP SPLICED
A5C3	102	2	1'-8"	176	0'-10"	0'-11 1/2"		SEE DETAIL
A5C4	102	3	1'-6"	160	0'-11"	0'-6"	0'-2 1/2"	STIRRUP BEND
CURB								
C5C5	8	ST.	23'-6"	196				
C5C8	92	2	2'-6"	240	0'-11"	1'-6"		SEE DETAIL
SIDEWALK								
W4C2	36	ST.	5'-0"	36				LAP SPLICED
W4C3	36	ST.	13'-0"	313				TO FIT SIDEWALK
W5C8	140	ST.	5'-11"	864				
				19,308	Total weight of roadway			

DETAILS



<p style="text-align: center;">SHISLER and ASSOCIATES CONSULTING ENGINEERING and SURVEYING 2011 FELTON ROAD, W. CANTON, OHIO 44709 PHONE: (216) 455-4946 or 455-3995 FAX: (216) 455-4946</p>	<p style="text-align: center;">SHISLER & ASSOCIATES CONSULTING ENGINEERING and SURVEYING 2011 FELTON ROAD, W. CANTON, OHIO 44709 PHONE: (216) 455-4946 or 455-3995 FAX: (216) 455-4946</p>
<p>APPROVED BY: _____ DATE: _____</p> <p style="text-align: center;">9TH ST. S.W. BRIDGE</p> <p style="text-align: center;">MUNICIPALITY OF CANTON STARK COUNTY, OHIO GENERAL PROJECT NO. 973</p>	
<p>SHISLER & ASSOCIATES CONSULTING ENGINEERING and SURVEYING</p>	
<p>SCALE: HOR. N/A VERT. N/A DATE: OCTOBER 1991 SHEET No: 6 of 6</p>	

DRAWN: _____

CHECKED BY: _____