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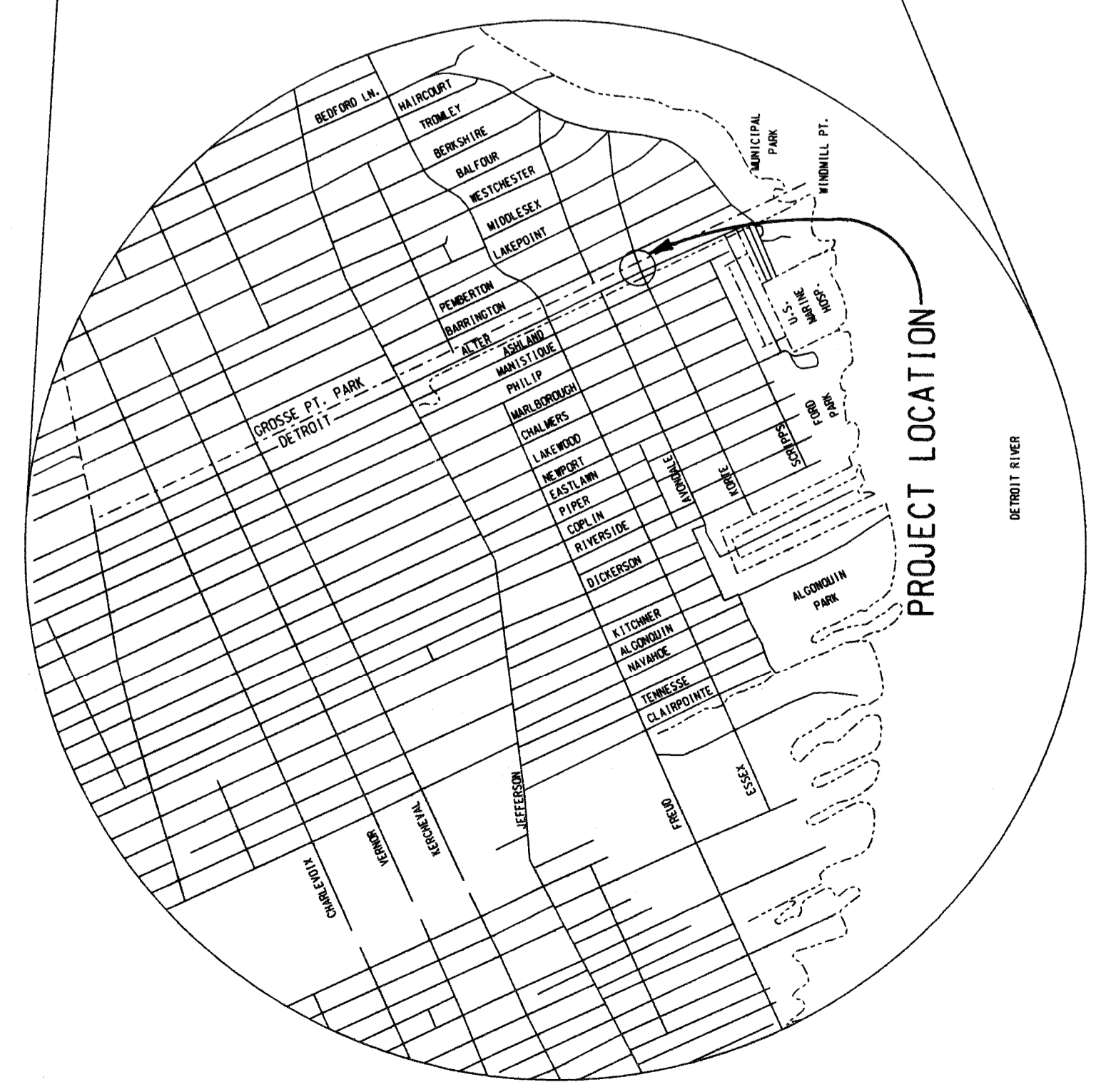
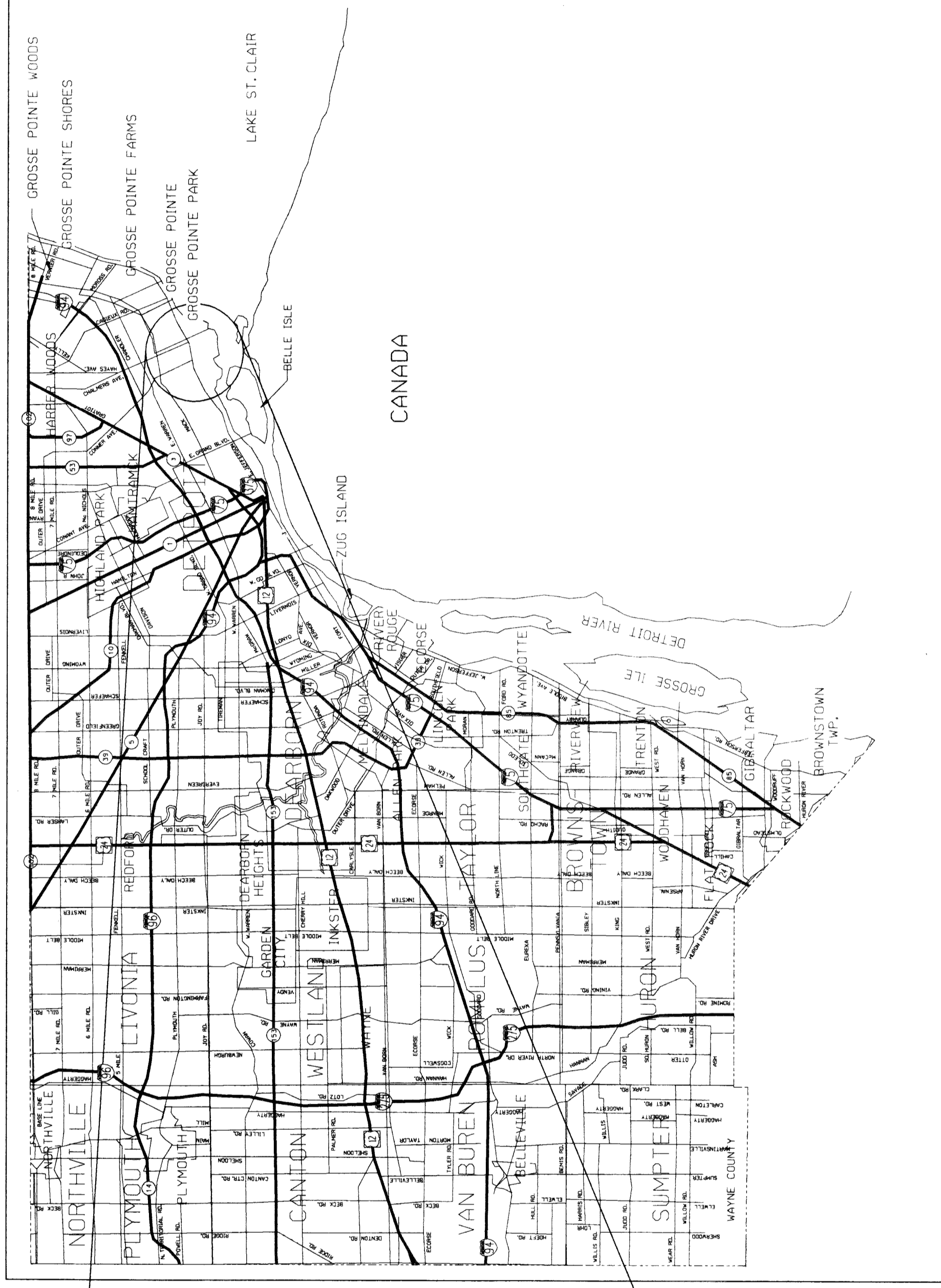
CITY OF DETROIT MICHIGAN

DEPARTMENT OF PUBLIC SERVICE

PLAN AND PROFILE OF PROPOSED BRIDGE REPLACEMENT PROJECT

NO. --- - ---
JOB NO.

REPLACEMENT OF THE KORTE AVENUE
BRIDGE OVER FOX CREEK



THE DESIGN OF THIS STRUCTURE IS BASED ON CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES MS18 LOADING, LIVE LOAD PLUS IMPACT DEFLECTION DOES NOT EXCEED 1/1000 OF THE SPAN LENGTH.

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS, THE PROPOSAL, AND SUPPLEMENTAL SPECIFICATIONS CONTAINED HEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 1996 EDITION.

THE STATIONING AS SHOWN ON THESE PLANS FOR THE INTERSECTION OF THE CENTERLINE OF BRIDGE AND ROADWAY CENTERLINE IS BELIEVED TO BE CORRECT. IT SHALL, HOWEVER, BE CHECKED AT THE TIME OF STARTING CONSTRUCTION, AND IF THE STATIONING SHOWN ON THE PLANS IS INCORRECT IT SHALL BE REPORTED TO THE DESIGN OFFICE IN DETROIT, AND THE STRUCTURE SHALL BE STAKED OUT USING THE ACTUAL INTERSECTION OF THE CENTERLINE OF THE BRIDGE AND ROADWAY CENTERLINE AS THE CONTROL POINT.

ALL EXPOSED CONCRETE CORNERS SHOWN SQUARE ON THE PLANS SHALL BE BEVELED WITH 13 mm TRIANGULAR MOLDINGS EXCEPT AS OTHERWISE NOTED.

THE DESIGN OF THE STRUCTURAL MEMBERS IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES:

CONCRETE: GRADE S2
 CONCRETE: GRADE D
 STEEL REINFORCEMENT:
 f'c = 21 MPa
 f'c = 28 MPa
 fy = 400 MPa

ALL DIMENSIONS ON THESE PLANS ARE IN MILLIMETERS EXCEPT AS NOTED.

METRIC

DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN. ELEVATIONS, COORDINATES, CURVE AND ALIGNMENT DATA ARE IN METERS. STATIONS ARE IN KILOMETERS + METERS.

REVISIONS	DESIGN BY	F.I.	7-97	CITY OF DETROIT	TITLE SHEET	SCALE	NOT TO SCALE
	DR'N BY	J.E.	7-97	 DETROIT Making it better for you	KORTE AVE. OVER THE FOX CREEK	PROJECT NO. 9641-5160-02	SHEET NO. 1 OF 9
	CK'D BY	COP	7-97	 FTA FEMI TALABI & ASSOCIATES INC. 615 GERRARD ST. E. 6TH FLOOR, DETROIT, MICHIGAN 48226			
	APP'D BY			 SNELL ENVIRONMENTAL GROUP, INC. A D.L.Z. Company 151 W. CONGRESS, SUITE 328 DETROIT, MICHIGAN 48226 TELEPHONE (313) 961-4040			

UTILITIES	TELEPHONE
AMERITECH 4000 WALLEN RD. ROSEN PARK, MICHIGAN 48101 ATTN: DAVE BUCIENSKI PHONE NO.: (313) 389-9819	
WATER & SEWAGE	
CITY OF DETROIT WATER & SEWERAGE DEPT 735 RANDOLPH ST., W. 48226 DETROIT, MICHIGAN 48206 PHONE NO.: (313) 224-4800	
ELECTRIC	
DETROIT EDISON 2000 SECOND AVE. ROOM 607 G.O. DETROIT, MICHIGAN 48226 ATTN: JOHN SQUIRES PHONE NO.: (313) 235-6597	
GAS	
MICHIGAN CONSOLIDATED GAS CO. DRAWING CLERK MAINT. REPLACEMENT TEAM NOBLE SECOND FLOOR 3200 HOBSON, MICHIGAN 48201 DETROIT, MICHIGAN 48201 PHONE NO.: (313) 577-7236	

DRIVEWAYS TO BE PAVED TO PROVIDE A SMOOTH TRANSITION BETWEEN PROPOSED PAVEMENT AND EXISTING DRIVEWAY AS DIRECTED BY ENGINEER.

EXISTING STRUCTURE
ONE SPAN REINFORCED CONCRETE ARCH STRUCTURE MEASURING 10.67 m AND RISE 1.52 m BUILT IN 1924.
7925mm CLEAR ROADWAY.

STA. 9+977.500 TO STA. 9+992.500
REMOVE 15 m CURB & REMOVE 30 m² SIDEWALK
STA. 9+977.500 TO STA. 9+994.158
PLACE 18 m MISC. CURB, CONCRETE, DETAIL CD & 36 m² SIDEWALK, CONC., 100 mm

REMOVE, SALVAGE & REPLACE 10 m FENCE

EXIST. POWER POLE TO BE REMOVED AND RELOCATED BY OTHERS

HAZARDOUS OR FLAMMABLE MATERIAL

PLAN OF SITE
SCALE: 1:500
CONTOUR 0.5m

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STA. 9+977.500 TO STA. 9+994.158
PLACE 18 m MISC. CURB, CONCRETE, DETAIL CD & 36 m² SIDEWALK, CONC., 100 mm

WPT STA = 9+982.500
WPI EL = 176.743
CURVE LEN = 15.000
K = 0.021
E = +16.280%
G1 = +17.423%
G2 = +17.423%

BENCHMARK
B.M. #62-254A
CITY OF DETROIT, N.E. QUAD PHILIP RD. AND AVONDALE RD. INTERSECTION OF SIDEWALKS
ELEV. 174.852

B.M. #61-255
CITY OF DETROIT, N.E. QUAD CHALMERS RD. AND SCRIPPS RD. INTERSECTION OF SIDEWALKS
ELEV. 174.605

PROPOSED REPLACEMENT KORTE AVE. BRIDGE
MOOT - B01 OF 1086
CITY - BW-249

EXISTING STRUCTURE TO BE REMOVED

REMOVE, SALVAGE & REPLACE 5 m FENCE

STA. 10+007.500 TO STA. 10+012.500
REMOVE 10 m CURB & REMOVE 10 m² SIDEWALK
STA. 10+005.842 TO STA. 10+012.500
PLACE 10 m MISC. CURB, CONCRETE, DETAIL CD & 10 m² SIDEWALK, CONC., 100 mm

REMOVE, SALVAGE & REPLACE 5 m FENCE

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STA. 10+005.842 TO STA. 10+012.500
PLACE 10 m MISC. CURB, CONCRETE, DETAIL CD & 10 m² SIDEWALK, CONC., 100 mm

WITNESSES

WITNESS TO CONTROL POINT 102: STA. 9+900 (MAG. NAIL)
N 80° W 18.92 m
S 50° W 15.99 m
S 60° E 10.15 m
SE CORNER HOUSE
POWER POLE

WITNESS TO CONTROL POINT 103: STA. 10+040 (MAG. NAIL)
N 85° W 13.36 m
S 10° E 6.25 m
N 30° W 12.10 m
762 mm ELM
POWER POLE
SW CORNER HOUSE

8400 CLEAR ROADWAY
1800
MISC. CURB, CONCRETE, DETAIL CD
WINGWALL (TYP.)
R.O.W.

BACKFILL STRUCTURE, CIP

TYPICAL APPROACH SECTION
* TRANSITION FROM 0% AT BRIDGE TO MATCH EXISTING CROSS SLOPE AT APPROACHES

8400 CLEAR ROADWAY
VARIES
MISC. CURB, CONCRETE, DETAIL CD
KORTE AVE.
R.O.W.

EXIST. GROUND
EMANKMENT, CIP
EXISTING PAVEMENT
BITUMINOUS BASE CRUSHING & SHAPING
R.O.W.

TYPICAL APPROACH SECTION
STA. 9+975 TO STA. 9+989.158 & STA. 10+005.842 TO STA. 10+007
* TRANSITION FROM 0% AT BRIDGE TO MATCH EXISTING CROSS SLOPE AT APPROACHES

80 kg/m² (40 mm) BIT. MIXTURE - 4C(T)
85 kg/m² (40 mm) BIT. MIXTURE - 3C(L)
140 mm 22A AGGREGATE BASE

NOTES:
THE WORK COVERED BY THESE PLANS INCLUDES MAINTAINING TRAFFIC, REMOVAL OF EXISTING BRIDGE. THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
KORTE AVE. TRAFFIC IS TO BE DETOURED OVER THE EXISTING ROADS.
DATUM REFERS TO N.A.V.D. DATUM.
WATER LEVEL IS SUBJECT TO CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF WATER LEVELS THAT WILL EXIST DURING CONSTRUCTION.
MEASURES SHALL BE TAKEN TO PREVENT DEBRIS FROM FALLING FROM THE STRUCTURE. IF DEBRIS FALLS INTO THE WATERWAY, IT SHALL BE REMOVED WITHIN 24 HOURS, SINCE DISTURBANCE OF THE WATERWAY BOTTOM MAY BE AS HARMFUL AS THE DEBRIS ITSELF. THE PREVENTIVE MEASURES MUST BE MADE AS EFFECTIVE AS POSSIBLE.
TEMPORARILY STORED EXCAVATED MATERIAL SHALL NOT BE ALLOWED TO ERODE INTO THE WATERCOURSE.
ALL DISTURBED EXISTING GROUND AND ANY NEW FILL SLOPES SHALL BE SEDED, FERTILIZED, AND MULCHED AS DIRECTED BY THE ENGINEER. TO BE INCLUDED IN THE PAY ITEMS "SEEDING, MIXTURE TURF," "FERTILIZER, CHEMICAL NUTRIENT, CLASS A," AND "MULCH BLANKET."

WPT STA = 10+000.00
WPI EL = 176.042
CURVE LEN = 12.000
K = 0.723
E = -0.249
G1 = +17.423%
G2 = -19.170%

WPT STA = 10+010.000
WPI EL = 177.125
CURVE LEN = 8.000
K = 0.832
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G1 = -19.170%
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TELEPHONE

WATER & SEWAGE

ELECTRIC

GAS

DRIVEWAYS TO BE PAVED TO PROVIDE A SMOOTH TRANSITION BETWEEN PROPOSED PAVEMENT AND EXISTING DRIVEWAY AS DIRECTED BY ENGINEER.

EXIST. POWER POLE TO BE REMOVED AND RELOCATED BY OTHERS

HAZARDOUS OR FLAMMABLE MATERIAL

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CONTOUR 0.5m

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TEST HOLE SB-1

LOCATION STATION 9+990.834 1150 LT
KORTE AVE. OVER FOX CREEK

ELEV. GROUND SURFACE ELEVATION 177.270

177.270	176.734	102 mm ASPHALT PAVEMENT
176.508	175.972	FILL-Brown to variegated silty to sandy CLAY, trace small gravel, moist, very stiff
176.051	175.820	POSSIBLE FILL-Black sandy to clayey PEAT, with organics, trace small gravel, very moist, firm to stiff
175.746	175.210	POSSIBLE FILL-Gray to variegated, silty to sandy CLAY, some organics, trace small gravel, very moist, soft
174.984	174.448	Brown fine to medium sandy SILT, trace small gravel, moist, very stiff to hard
174.832	174.296	ESTIMATED TOTAL SCOUR LIMIT ABUT. A (E.L. 171.479)
174.222	173.686	Gray silty to sandy CLAY, little small gravel, moist, stiff
173.308	173.381	Gray silty to sandy CLAY, little small gravel, moist, firm to very stiff
172.698	172.162	Gray silty to sandy CLAY, moist, very soft
171.784	171.400	Gray silty to sandy CLAY, moist, very soft
171.174	170.638	Gray silty to sandy CLAY, moist, very soft
169.802	170.028	Gray silty to sandy CLAY, moist, very soft
169.345	169.266	Gray silty to sandy CLAY, moist, very soft
168.278	167.895	Gray silty to sandy CLAY, moist, very soft
166.754	167.742	Gray silty to sandy CLAY, moist, very soft
165.688	166.676	Gray silty to sandy CLAY, moist, very soft
165.230	166.218	Gray silty to sandy CLAY, moist, very soft
164.468	165.152	Gray silty to sandy CLAY, moist, very soft
163.706	164.694	Gray silty to sandy CLAY, moist, very soft
163.402	163.932	Gray silty to sandy CLAY, moist, very soft
162.182	163.780	Gray silty to sandy CLAY, moist, very soft
162.030	163.170	Gray silty to sandy CLAY, moist, very soft
160.658	163.018	Gray silty to sandy CLAY, moist, very soft
159.134	161.792	Gray silty to sandy CLAY, moist, very soft
157.610	161.646	Gray silty to sandy CLAY, moist, very soft
157.153	160.122	Gray silty to sandy CLAY, moist, very soft
156.086	158.598	Gray silty to sandy CLAY, moist, very soft
155.934	157.532	Gray silty to sandy CLAY, moist, very soft
154.562	157.074	Gray silty to sandy CLAY, moist, very soft
153.038	155.703	Gray silty to sandy CLAY, moist, very soft
151.514	155.550	Gray silty to sandy CLAY, moist, very soft
149.990	154.941	Gray silty to sandy CLAY, moist, very soft
149.838	154.026	Gray silty to sandy CLAY, moist, very soft
148.466	152.502	Gray silty to sandy CLAY, moist, very soft
146.942	150.978	Gray silty to sandy CLAY, moist, very soft
145.418	149.912	Gray silty to sandy CLAY, moist, very soft
144.809	149.454	Gray silty to sandy CLAY, moist, very soft
143.894	148.083	Gray silty to sandy CLAY, moist, very soft
143.530	147.930	Gray silty to sandy CLAY, moist, very soft
	146.406	Gray silty to sandy CLAY, moist, very soft
	144.882	Gray silty to sandy CLAY, moist, very soft
	144.425	Gray silty to sandy CLAY, moist, very soft
	143.358	Gray silty to sandy CLAY, moist, very soft
	141.834	Gray silty to sandy CLAY, moist, very soft
	141.682	Gray silty to sandy CLAY, moist, very soft

NOTE: WATER LEVEL AT COMPLETION: 25.6 m

BORING DATE 10/12/94

REVISIONS	DESIGN BY	F.T.	7-97
	DR'N BY	J.E.	7-97
	CK'D BY	COP	7-97
	APP'D BY		

SNELL ENVIRONMENTAL GROUP, INC.
151 W. CONGRESS, SUITE 328
DETROIT, MICHIGAN 48226
TELEPHONE 1-313-391-0400

F.T.A. FEMI TALABI & ASSOCIATES INC.
665 GERRARD STREET EAST, SUITE 400
TORONTO, ONTARIO M4M 1B7
CANADA
TEL: (416) 461-1111
FAX: (416) 461-1112

CITY OF DETROIT MICHIGAN

KORTE AVE. OVER THE FOX CREEK

LOG OF BORINGS

SCALE NOT TO SCALE
PROJECT NO. 9641-5160-02
SHEET NO. 3 OF 9

TEST HOLE SB-2

LOCATION STATION 10+023.384 158 RT
KORTE AVE. OVER FOX CREEK

ELEV. GROUND SURFACE ELEVATION 176.734

176.734	176.734	102 mm ASPHALT PAVEMENT
175.972	175.972	FILL-Crushed LIMESTONE and SAND, slightly moist, dense
175.820	175.210	POSSIBLE FILL-Black silty to sandy PEAT, with organics, moist to very moist, stiff to soft
174.448	174.296	POSSIBLE FILL-Dark green to black SAND and GRAVEL, very moist to wet, dense
173.686	173.381	Gray silty CLAY, trace organics, moist, very stiff
172.162	172.162	ESTIMATED TOTAL SCOUR LIMIT ABUT. B (E.L. 172.700 +/-)
171.400	170.638	Gray silty CLAY, trace small GRAVEL, moist, very stiff
170.028	169.266	Gray silty CLAY, trace small GRAVEL, moist, soft to firm
167.895	167.742	Wood encountered (piece of wood pile?)
166.676	166.218	Gray silty SAND, slightly cemented, moist, very dense
166.066	165.152	Gray silty to sandy CLAY, moist, very moist, firm to stiff
165.152	164.694	Gray silty to sandy CLAY, moist, very soft
163.932	163.780	Gray silty to sandy CLAY, moist, firm to stiff
163.170	163.018	Gray silty to sandy CLAY, moist, very soft
161.792	161.646	Shelby Tube sample taken from 13 411 to 14 326 LL=26 PI=13
161.646	160.122	Shelby Tube sample taken from 14 935 to 15 850 LL=25 PI=12
158.598	157.532	Gray silty to sandy CLAY, moist, stiff
157.074	155.703	Shelby tube sample taken from 21 031 to 21 946 LL=27 PI=13
155.550	154.941	Gray silty to sandy CLAY, moist, very soft
154.026	152.502	Gray silty to sandy CLAY, moist, very soft
150.978	149.912	Gray silty to sandy CLAY, moist, very soft
149.454	148.083	Gray silty to sandy CLAY, moist, very soft
148.083	147.930	Gray silty CLAY with sand seams, very moist to saturated, firm to stiff
146.406	144.882	Gray silty CLAY, very moist to moist, stiff to very stiff
144.882	144.425	Gray silty CLAY, very moist to moist, stiff to very stiff
143.358	141.834	Gray silty CLAY, very moist to moist, stiff to very stiff
141.834	141.682	Gray silty CLAY, very moist to moist, stiff to very stiff

NOTE: WATER LEVEL AT COMPLETION: 11.3 m

BORING DATE 10/19/94

REVISIONS	DESIGN BY	F.T.	7-97
	DR'N BY	J.E.	7-97
	CK'D BY	COP	7-97
	APP'D BY		

SNELL ENVIRONMENTAL GROUP, INC.
151 W. CONGRESS, SUITE 328
DETROIT, MICHIGAN 48226
TELEPHONE 1-313-391-0400

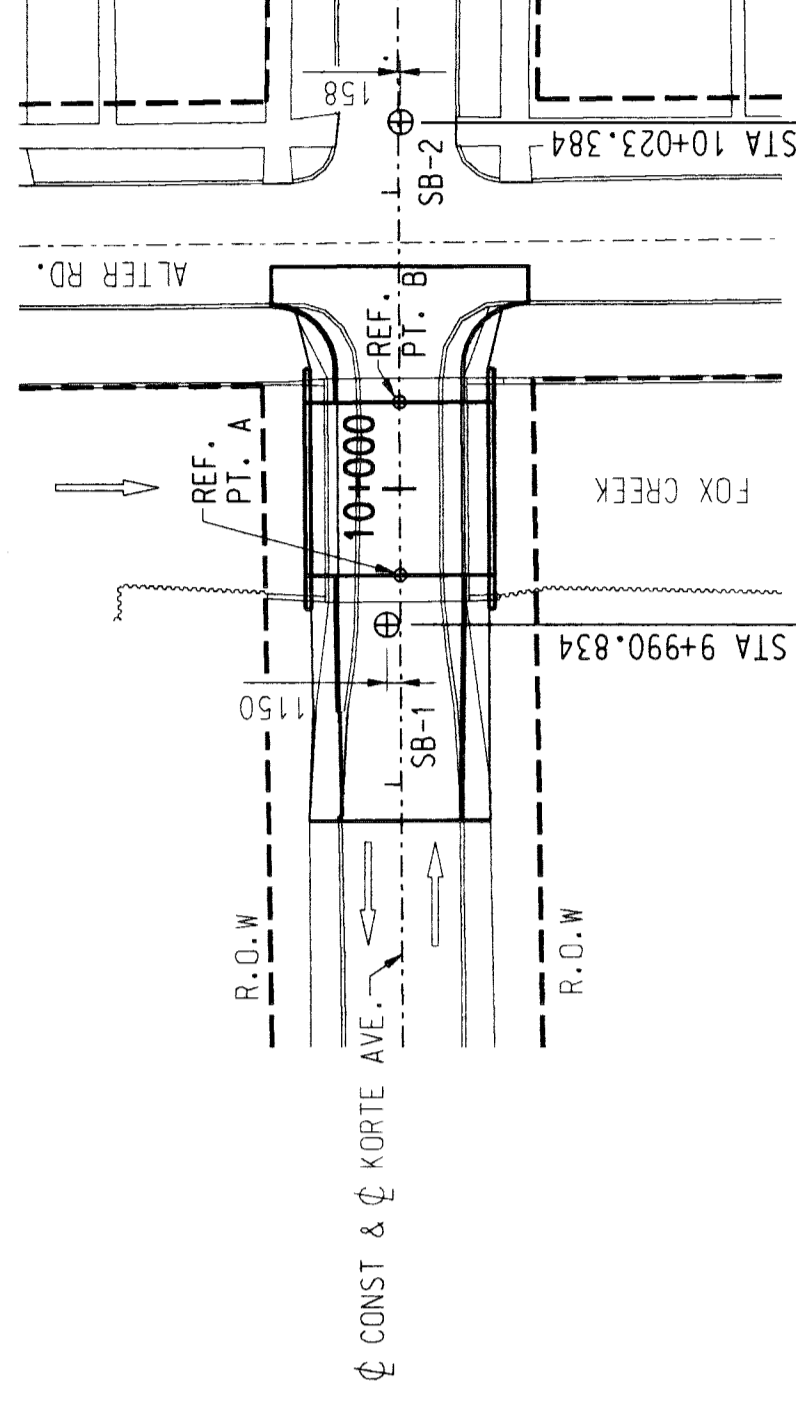
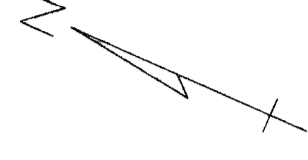
F.T.A. FEMI TALABI & ASSOCIATES INC.
665 GERRARD STREET EAST, SUITE 400
TORONTO, ONTARIO M4M 1B7
CANADA
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FAX: (416) 461-1112

CITY OF DETROIT MICHIGAN

KORTE AVE. OVER THE FOX CREEK

LOG OF BORINGS

SCALE NOT TO SCALE
PROJECT NO. 9641-5160-02
SHEET NO. 3 OF 9



LOCATION PLAN
SCALE: N15

NOTES:

NUMBERS IN CIRCLES DENOTE NUMBER OF BLOWS REQUIRED TO DRIVE A 50.8 mm SPLIT SPOON SAMPLER 3 SUCCESSIVE 0.15 m INCREMENTS USING A 63.5 kg HAMMER FALLING 0.76 m. WHERE THE SAMPLER IS DRIVEN DISTANCES OTHER THAN THE 0.15 m INCREMENT, THE DISTANCE IS SHOWN IN PARENTHESES TO THE RIGHT OF THE NUMBER OF BLOWS.

- (X) NUMBER OF BLOWS PER 0.15 m
- (X X) NUMBER OF BLOWS PER 0.15 m
- (X X X) NUMBER OF BLOWS PER 0.15 m
- (X X X X) NUMBER OF BLOWS PER 0.15 m
- (XX) NUMBER OF BLOWS PER DISTANCE (mm)
- (XX XX) NUMBER OF BLOWS PER DISTANCE (mm)

CONSISTENCY WAS DETERMINED BY INSPECTION OF SAMPLES AND SUBSTITUTED BY SOILS RESISTANCE TO DRILLING TOOLS.

WATER LEVELS MAY BE INFLUENCED BY RESIDUAL BORING WATER.

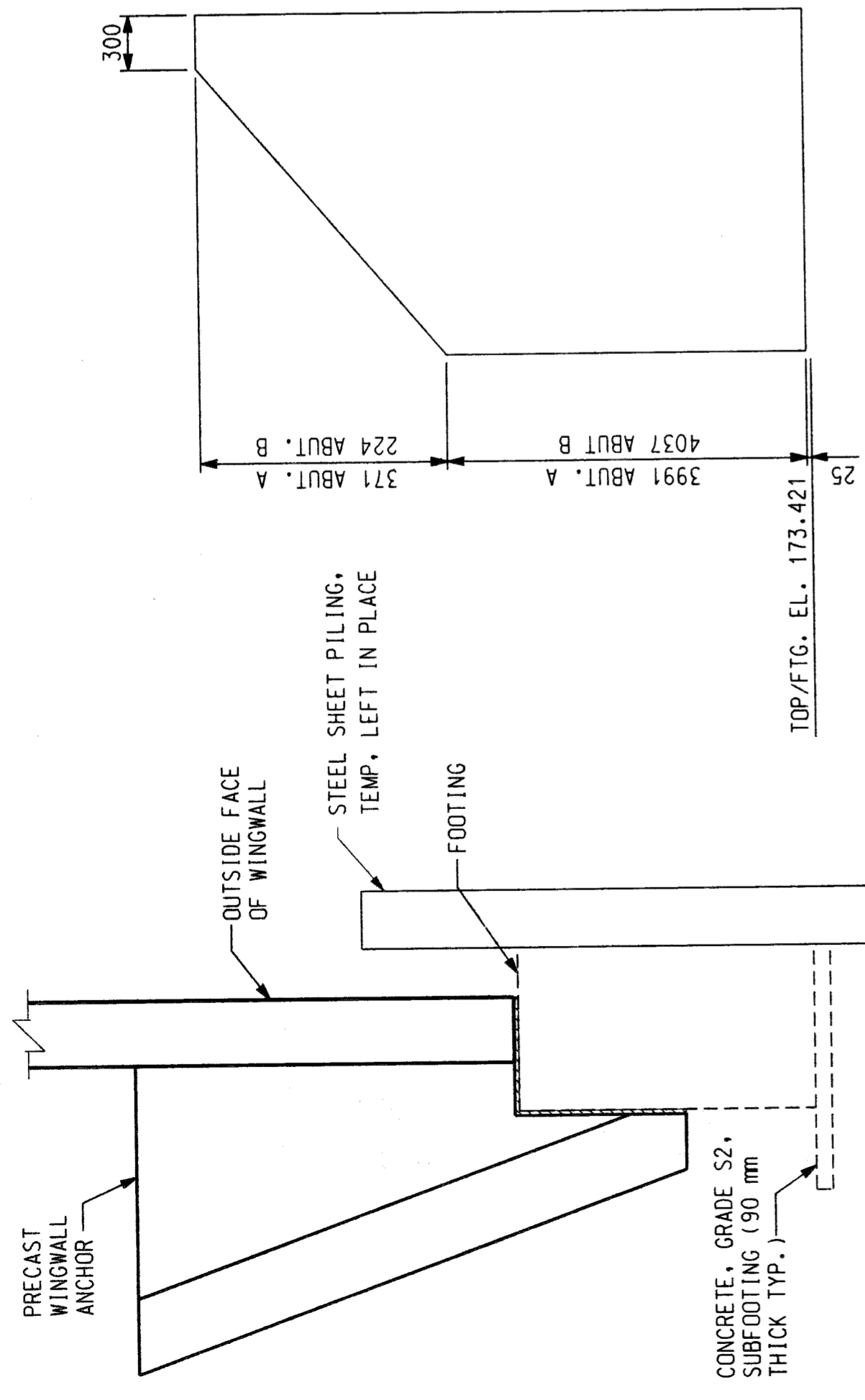
THE SOIL BORING LOGS REPRESENT POINT INFORMATION. PRESENTATION OF THIS INFORMATION IN NO WAY IMPLIES THAT SUBSURFACE CONDITIONS ARE THE SAME AT LOCATIONS OTHER THAN THE EXACT LOCATION OF THE BORING.

SOIL BORINGS WERE PERFORMED ON DATES SHOWN BELOW BORING.

BY: PROFESSIONAL SERVICES INDUSTRIES, INC.
24355 Capital Ave.
Detroit, Mich. 48239
Phone: (313) 255-4200

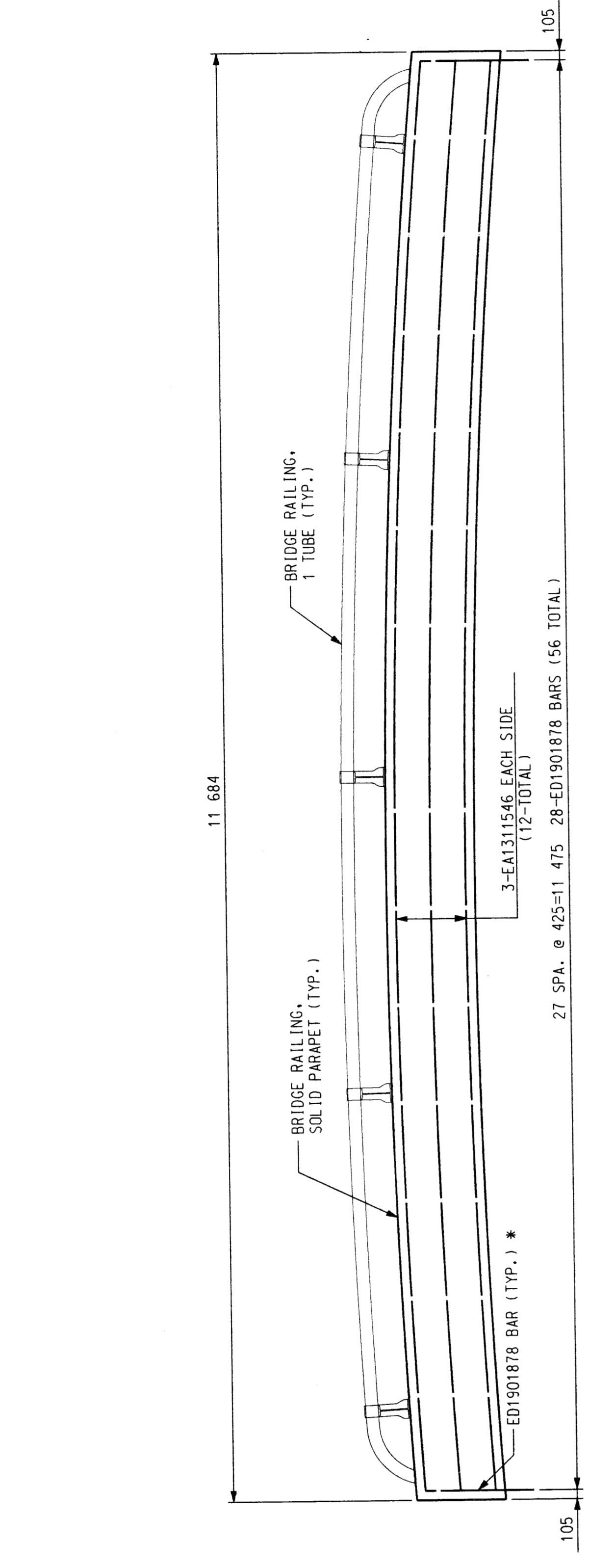
METRIC

DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN. ELEVATIONS, COORDINATES, CURVE AND ALIGNMENT DATA ARE IN METERS. STATIONS ARE IN KILOMETERS + METERS.



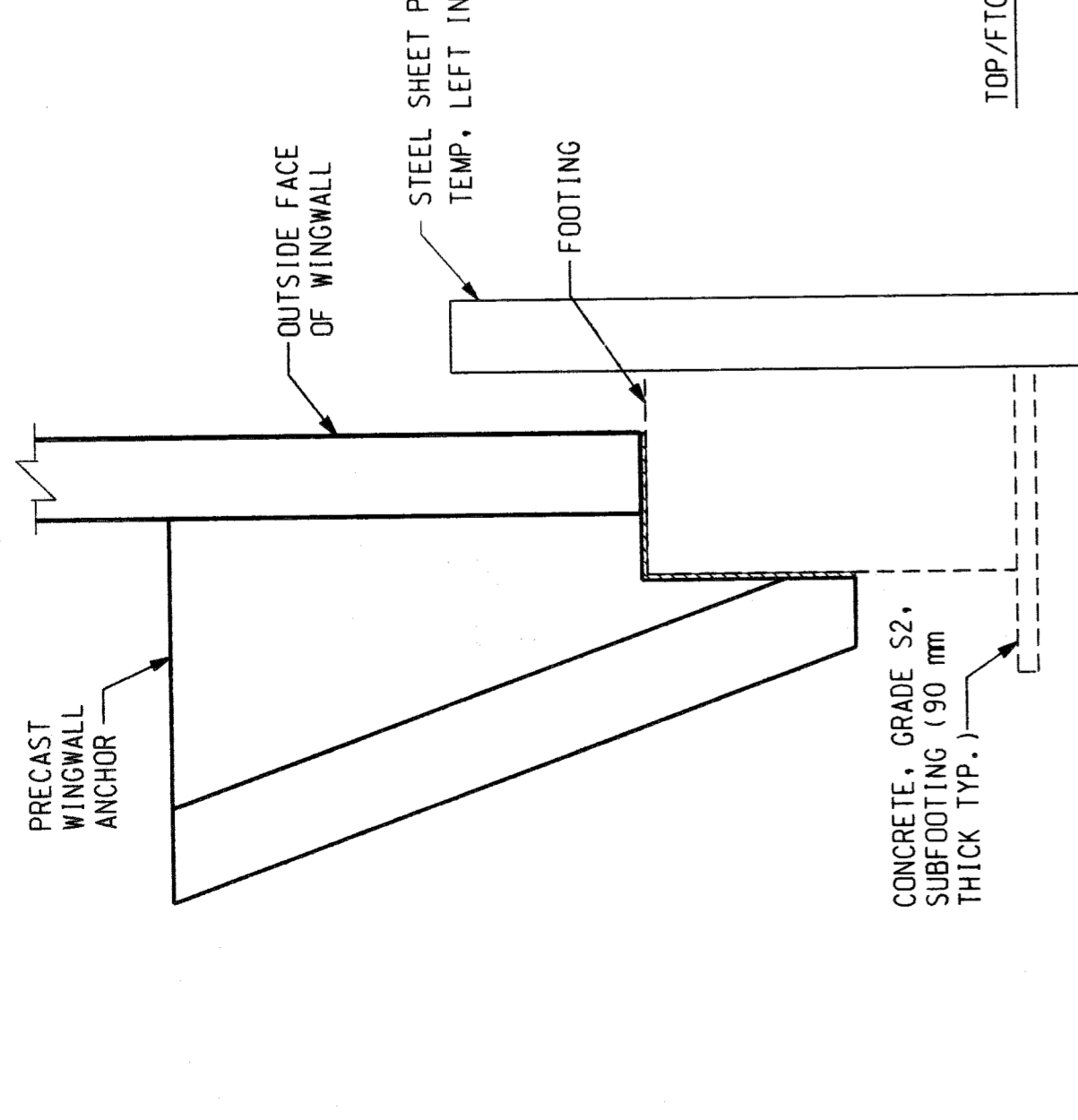
WINGWALL ELEVATION
(SHOWN PARALLEL TO WALL)

LENGTH OF WINGWALL SHALL BE DERIVED FROM PLAN OF FOOTING SHEET 5)

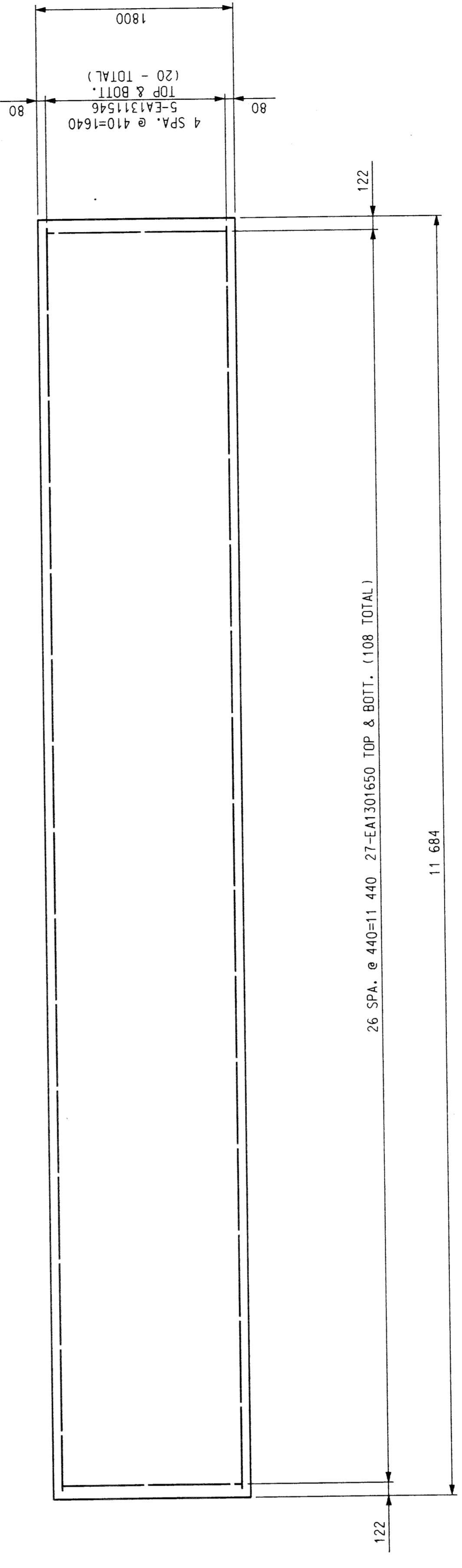


BRIDGE RAILING ELEVATION

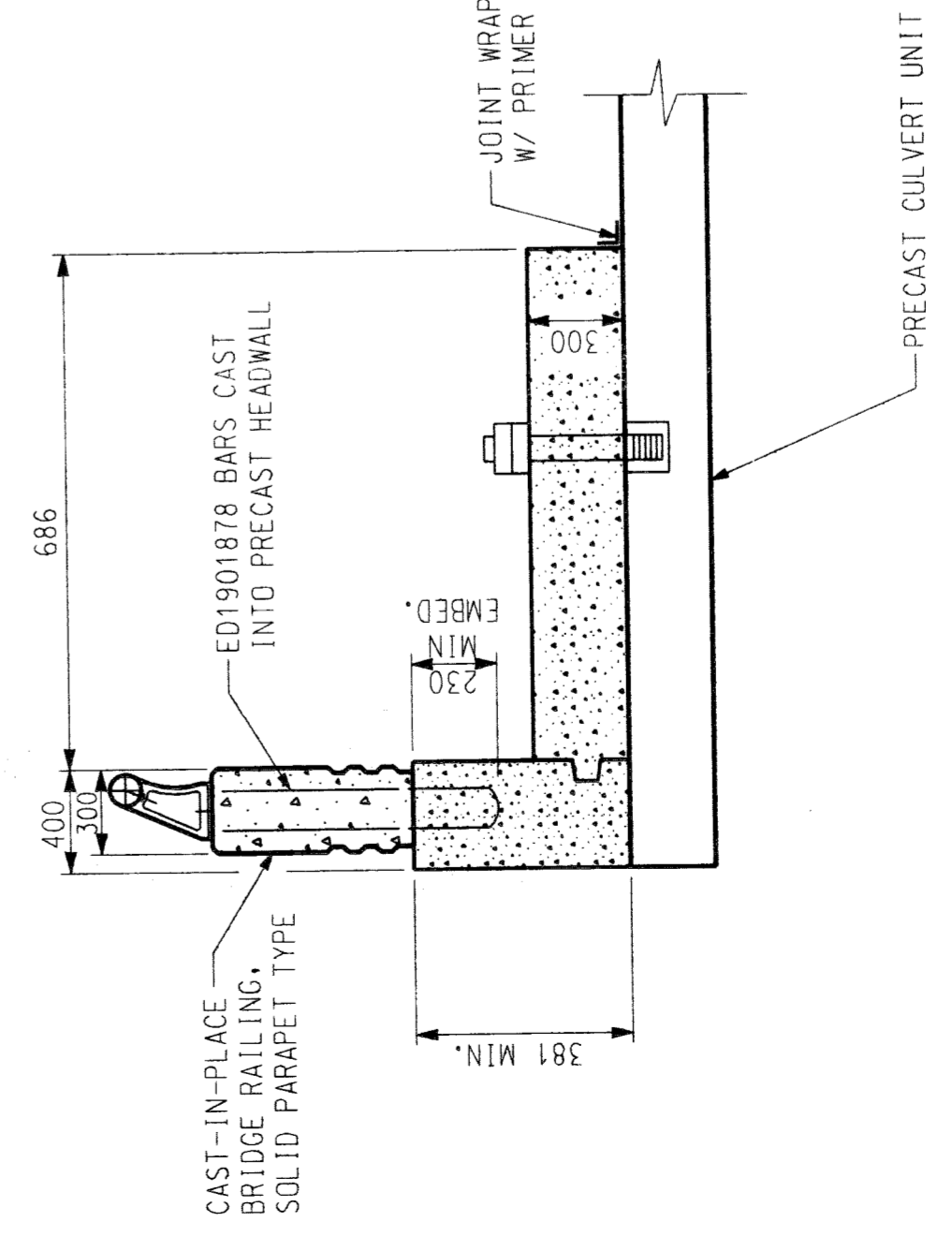
* SHALL BE CAST INTO PRECAST HEADWALL



TYPICAL SECTION THRU PRECAST WINGWALL



TYPICAL PLAN OF SIDEWALK



DETAIL A

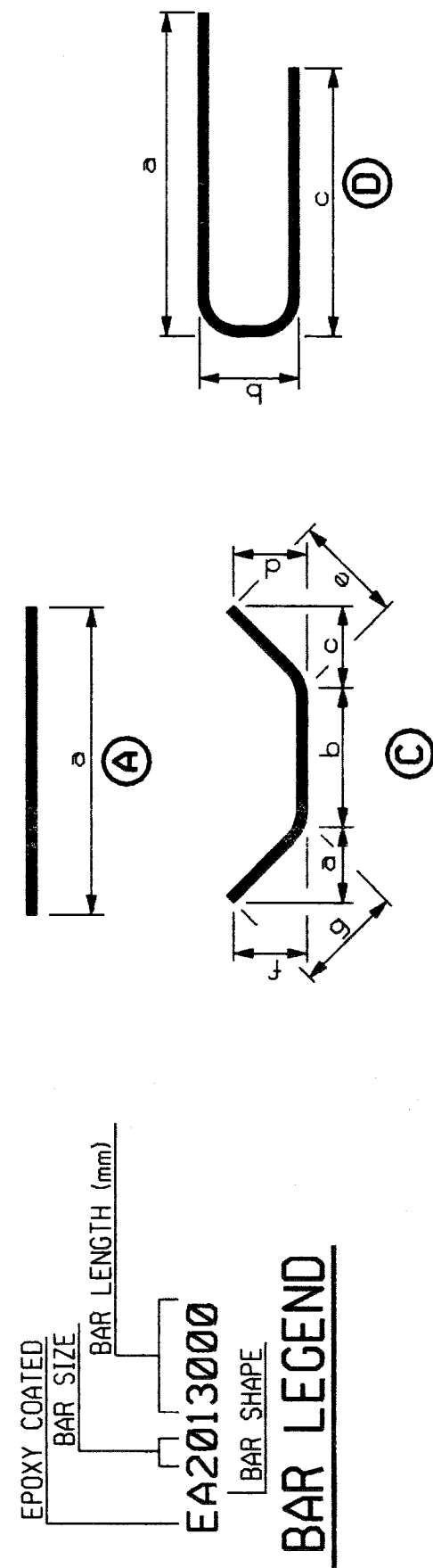
METRIC

DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN. ELEVATIONS, COORDINATES, CURVE AND ALIGNMENT DATA ARE IN METERS. STATIONS ARE IN KILOMETERS + METERS.

REVISIONS		DESIGN BY H.J.	6-97	 CITY OF DETROIT MICHIGAN	KORTE AVE. OVER THE FOX CREEK	MISCELLANEOUS DETAILS	SCALE NOT TO SCALE
		DR'N BY J.E.	6-97				PROJECT NO. 9641-5160-02
		CK'D BY C.D.P.	7-97				SHEET NO. 6 OF 9
		APP'D BY		 FEMA TALABI & ASSOCIATES INC. 465 GREENWOOD SUITE 1000 DETROIT MICHIGAN 48226 TELEPHONE (313) 961-4640	 SNELL ENVIRONMENTAL GROUP, INC. A DLZ Company 151 W. CONGRESS, SUITE 226 ANN ARBOR MI 48106 TELEPHONE (313) 961-4640		

BAR	DIMENSIONS											NO. RECD	TOTAL MASS
	a	b	c	d	e	f	g	h	j	k	m		
A1905533	5533											28	346
A1913000	13000											10	291
A1913358	13358											14	418
C1903302	866	2302	0	0	500	1000						10	75
C1903557	906	2557	0	0	423	1000						10	79
D1302968	1059	850	1059									84	248
D1304334	1742	850	1742									112	482
													SUBTOTAL = 1939 kg
EA1301650	1650											108	177
EA1311546	11546											32	367
ED1901878	870	138	870									56	235
													EPOXY SUBTOTAL = 779 kg

* SHALL BE CAST INTO PRECAST HEADWALL.



SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1500000	MOBILIZATION, MAX.	Lsum	1
2040005	CURB, REMOVE	m	50
2040013	SIDEWALK, REMOVE	m ²	80
2040020	STRUCTURES, REMOVE	Lsum	1
2047102	FENCE, REMOVAL, SALVAGE AND REPLACE	m	20
2050010	EMBANKMENT, CIP	m ³	100
2060002	BACKFILL, STRUCTURE, CIP	m ³	1200
2060011	EXCAVATION, FOUNDATION	m ³	500
2080025	EROSION CONTROL, SILT FENCE	m	40
3020014	AGGREGATE BASE, 140 mm	m ²	92
3027000	AGGREGATE, 6A (LM)	m ³	42
3050001	BITUMINOUS BASE CRUSHING AND SHAPING	m ²	157
4017102	10.973 X 3962 PRECAST CONC THREE-SIDED BOX CULVERT	m	12.8
5020057	BIT MIXTURE 3C	t	30
5020059	BIT MIXTURE 2C	t	28
7040003	STEEL SHEET PILING, TEMP, LEFT IN PLACE	m ²	514
7060007	CONCRETE, GRADE D	m ³	13
7060010	CONCRETE, GRADE S2, SUBFOOTING	m ³	4
7060020	SUBSTRUCTURE, CONCRETE	m ³	89
7060030	REINFORCEMENT, STEEL	Kg	1939
7060031	REINFORCEMENT, STEEL, EPOXY COATED	Kg	779
7060250	STRUCTURE NAME PLATE	m ²	2
7100001	JOINT WATERPROOFING	m ²	7
7110004	BRIDGE RAILING, SOLID PARAPET TYPE	m	24
7110007	BRIDGE RAILING, ONE TUBE	m	24
8027102	MISC. CURB, CONCRETE, DETAIL CD	m	56
8030002	SIDEWALK, CONCRETE, 100 mm	m ²	92
8110241	PAVT MRKG, REGULAR DRY, 100 mm, WHITE	m	80
8110242	PAVT MRKG, REGULAR DRY, 100 mm, YELLOW	m	80
8120026	PLASTIC DRUM, LIGHTED, FURN	ea	20
8120027	PLASTIC DRUM, LIGHTED, OPER	ea	20
8120036	BARRICADE, TYPE III, LIGHTED, FURN	ea	8
8120037	BARRICADE, TYPE III, LIGHTED, OPER	ea	8
8120060	SIGN, TYPE B TEMPORARY, PRISMATIC RETRIFLEC SHEETING	m ²	32
8160007	SEEDING, MIXTURE TUF	Kg	2
8160020	FERTILIZER, CHEMICAL NUTRIENT, CLASS A	Kg	2
8160077	MULCH BLANKET	m ²	70

REINFORCEMENT SHALL BE BUNDLED AND TAGGED AS TO THE LOCATION AS SHOWN ON THIS SHEET.
 ALL BENDS IN REINFORCING STEEL TO BE MADE ABOUT A PIN OF THE MINIMUM DIAMETER ALLOWED BY THE STANDARD SPECIFICATIONS.
 TOLERANCES IN CUTTING AND BENDING BARS ARE AS ESTABLISHED IN THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE AND DETAILING MANUAL OF THE AMERICAN CONCRETE INSTITUTE.
 WHERE FIELD CUTTING OF EPOXY BARS IS REQUIRED, THE CONTRACTOR SHALL REPAIR THE EPOXY COATING AT THE CUT END AS PROVIDED FOR IN STANDARD SPECIFICATION 706.03.E.8.

METRIC

DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN. ELEVATIONS, COORDINATES, CURVE AND ALIGNMENT DATA ARE IN METERS. STATIONS ARE IN KILOMETERS + METERS.

STEEL REINFORCEMENT AND QUANTITIES
 SCALE NOT TO SCALE
 PROJECT NO. 9641-5160-02
 SHEET NO. 8 OF 9

CITY OF DETROIT MICHIGAN
 KORTE AVE. OVER THE FOX CREEK

DETROIT
For You

FTA
FEMI TALABI & ASSOCIATES INC.
855 GREENWOOD SUITE 1000, DETROIT, MICHIGAN, 48226

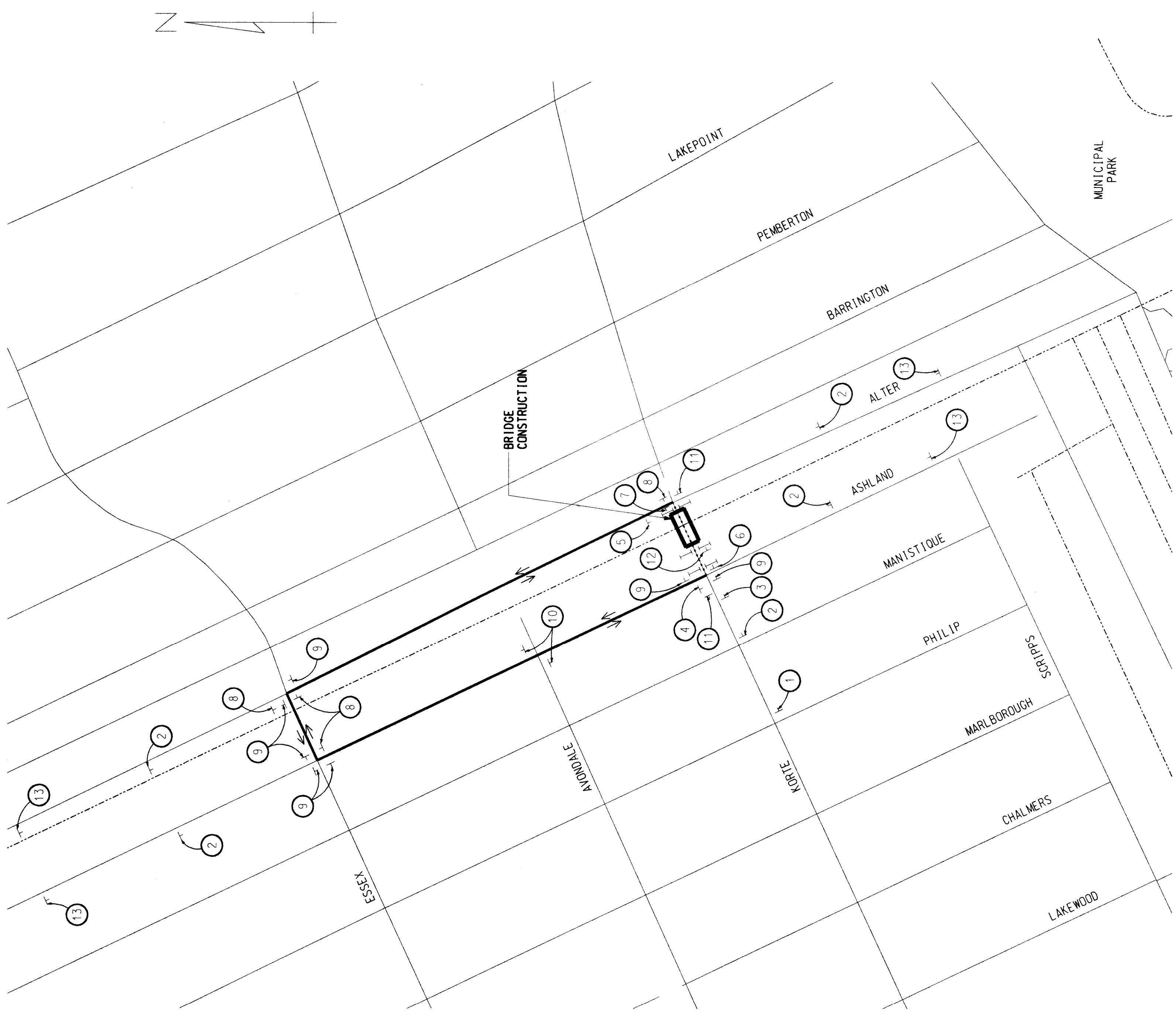
SSEG

DESIGN BY	F.T.	7-97
DR'N BY	J.E.	7-97
CK'D BY	C.D.P.	7-97
APP'D BY		

SNELL ENVIRONMENTAL GROUP, INC. A DLT Company
 511 W. CONGRESS, SUITE 328
 DETROIT, MICHIGAN 48226
 TELEPHONE (313) 961-4940

MISCELLANEOUS QUANTITIES		
ITEM	UNIT	AMOUNT
BARRICADE, TYPE III, LIGHTED, OPER	ea	8
BARRICADE, TYPE III, LIGHTED, FURN	ea	8
PLASTIC DRUM, LIGHTED, OPER	ea	20
PLASTIC DRUM, LIGHTED, FURN	ea	20
SIGN, TYPE B, TEMPORARY, PRISMATIC RETROREFLECTIVE SHEETING	m ²	32

SIGN TYPE LEGEND	
+	SIGN, TYPE B
—	TYPE III BARRICADE



SIGN CHART				
I.D. NUMBER	SIGN	SIGN DESTINATION	SIZE	NUMBER REQUIRED
1		W20-3	1200X1200	1
2		W20-2	1200X1200	5
3		W20-3	1200X1200	1
4		D3-1 M6-1b	900X300 525X375	1
5		D3-1 M6-1b	900X300 525X375	1
6		R11-4 M4-10	1500X750 1200X450	1
7		R11-2 M4-10	1200X750 1200X450	1
8		D3-1 M4-9	900X300 750X600	4
9		D3-1 M4-9	900X300 750X600	7
10		D3-1 M4-9	900X300 750X600	2
11		M4-8a	600X450	2
12		R11-2	1200X750	1
13		W20-3 D3-1	1200X1200 900X300	4

NOTES:
 THE CONTRACTOR WILL FURNISH AND ERECT THE SIGNS LISTED ON THE SIGN CHART AT THE LOCATIONS SHOWN.
 AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ANY ADDITIONAL SIGNS, BARRICADES AND LIGHTS WITHIN THE PROJECT TO PROTECT THE TRAFFIC AND WORK AREA.
 THE CONTRACTOR SHALL PLACE SANDBAGS ON BARRICADES TO PREVENT MOVEMENT OF THE BARRICADES. THE CONTRACTOR SHALL ATTACH AND MAINTAIN THREE (3) STEADY BURN AMBER LIGHTS (TYPE "C") ON EACH OF THE BARRICADES.
 THE CONTRACTOR SHALL ATTACH AND MAINTAIN ONE (1) BATTERY OPERATED AMBER FLASHER LIGHTS (TYPE "A") AND ONE (1) ORANGE FLUORESCENT DAY-GLO FLAG ON EACH ADVANCE CONSTRUCTION SIGN (SIGNS ①, ② & ③).
 TRAFFIC CONTROL SIGNS WHICH ARE REMOVED FROM THE VICINITY OF THE PROJECT DUE TO INTERFERENCE SHALL BE TURNED OVER TO THE CITY. UPON COMPLETION OF THE PROJECT, TRAFFIC CONTROL SIGNS AND STREET NAME SIGNS WILL BE RESET IN THEIR PROPER POSITION BY THE CONTRACTOR.
 THE CONTRACTOR SHALL NOT BEGIN ANY OPERATIONS ON THE PROJECT UNTIL ALL OF THE SIGNS HAVE BEEN POSITIONED AND FLASHER LIGHTS AND FLAGS ARE ATTACHED TO ALL REQUIRED SIGNS AND BARRICADES.
 ANY OTHER SIGNS WHICH THE CONTRACTOR MAY BE REQUIRED TO FURNISH SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 ALL CONSTRUCTION SIGNS SHALL CONFORM TO MDT 1996 STANDARD SPECIFICATIONS FOR CONSTRUCTION 812.02.B-1.

METRIC

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SCALE	NOT TO SCALE
PROJECT NO.	9641-5160-02
SHEET NO.	9 OF 9

DETOUR ROUTE DETAILS

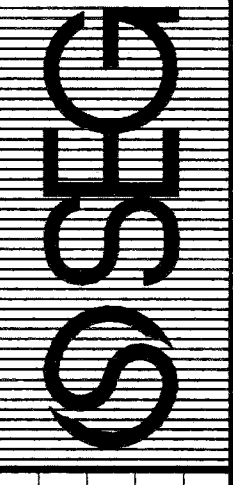
KORTE AVE. OVER

CITY OF DETROIT MICHIGAN



F T A
 FERMI TALABI & ASSOCIATES INC.
 685 GREENWOOD SQUARE, DETROIT, MICHIGAN 48226

SNELL ENVIRONMENTAL GROUP, INC.
 CONSULTING ENGINEERS
 DETROIT, MICHIGAN 48226
 TELEPHONE (313) 961-4040



DESIGN BY	F.T.	7-97
DR'N BY	J.E.	7-97
CK'D BY	C.D.P.	7-97
APP'D BY		

REVISIONS	

DETOUR PLAN KORTE AVE.