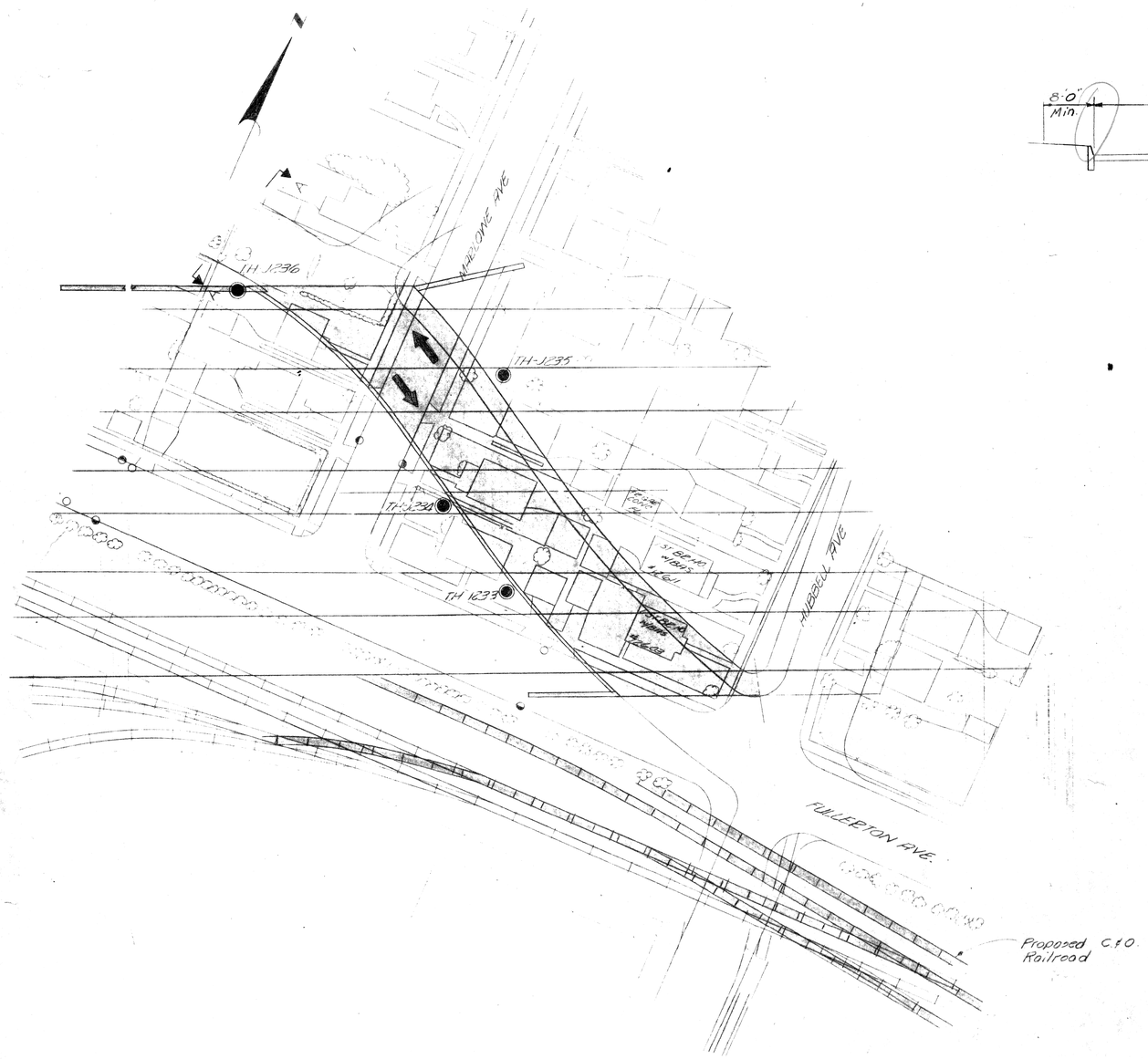
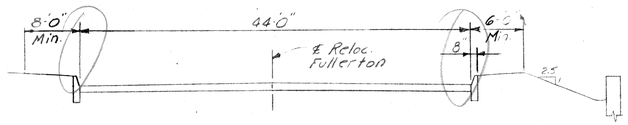


Note:
● TH Denotes Test Hole Location
See Sheets # 5 Reading of Soil Borings

SURVEY PLAN
Scale 1"-40'



SECTION A-A

LEGEND

- Tree
- Fence
- R.C.C. Manhole
- Sewer Manhole
- Water Gatewell & Valve
- D.E. Manhole
- P.L.C. Lightpole
- Sewer Inlet or Catch Basin

Add Traffic Count

GENERAL NOTES:

The work covered by these plans includes construction of the proposed bridge. All other work is included in the Road plans which are a part of this contract.

Removal of buildings and fences is not a part of this contract.

Datum refers to City of Detroit datum.

Fullerton traffic is to be maintained over the temporary road. (See Rd. Plans)

PRELIMINARY PLAN 'A' DATE 9-15-69

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

APPROVED _____ STRUCTURAL ENGINEER

JOB No. PW 990(18)

REVISIONS

NO.	DESCRIPTION	DATE	BY

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

FULLERTON AVE. CROSSING THE JEFFRIES FREEWAY IN DETROIT

GENERAL PLAN OF SITE

APPROVED R. T. Montgomery 10-8-69 SUPERVISOR - DESIGN

APPROVED L. J. Cook 10-15-69 ENGINEER - BUREAU - DESIGN

CITY OF DETROIT

SQUAD BOSS	Locher	9/69
DRAWN BY	Ind	8-69
TRACED BY		
CHECKED BY	AJG	8-69

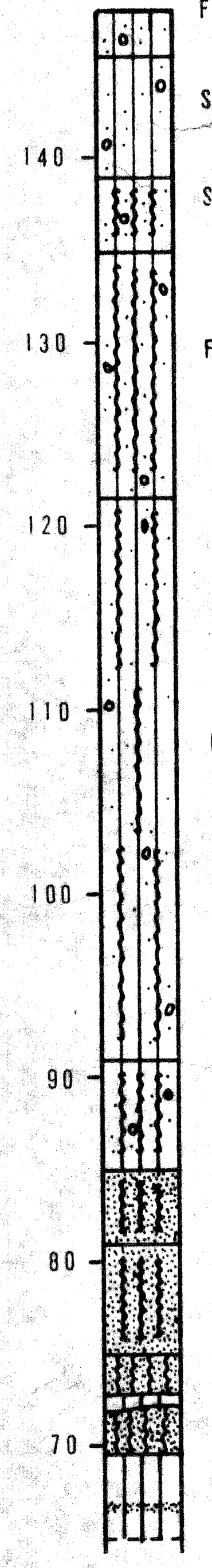
SHEET 1 OF 7

S13 of 82123D

TEST HOLE NO. J-233

LOG OF SOIL

BORING NO. J-233 HYDRAULIC WASH BORING
LOCATION 39'NORTH OF FULLERTON CENTERLINE, 106'EAST OF MARLOWE CENTERLINE
GROUND SURFACE ELEVATION (FT) 147.8 (CITY OF DETROIT)



FIRM GRAY AND BROWN MOTTLED CLAY, TRACE OF SAND, OCCASIONAL PEBBLE
STIFF GRAY AND BROWN MOTTLED CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
STIFF GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
FIRM GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
PLASTIC GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
SOFT GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
MODERATELY COMPACT GRAY SILTY MEDIUM SAND
COMPACT GRAY SILTY MEDIUM SAND
COMPACT SILT AND FINE SAND, LENSES OF CLAY
HARD GRAY CLAY (LAYER OF SAND 81' to 82')
END OF BORING

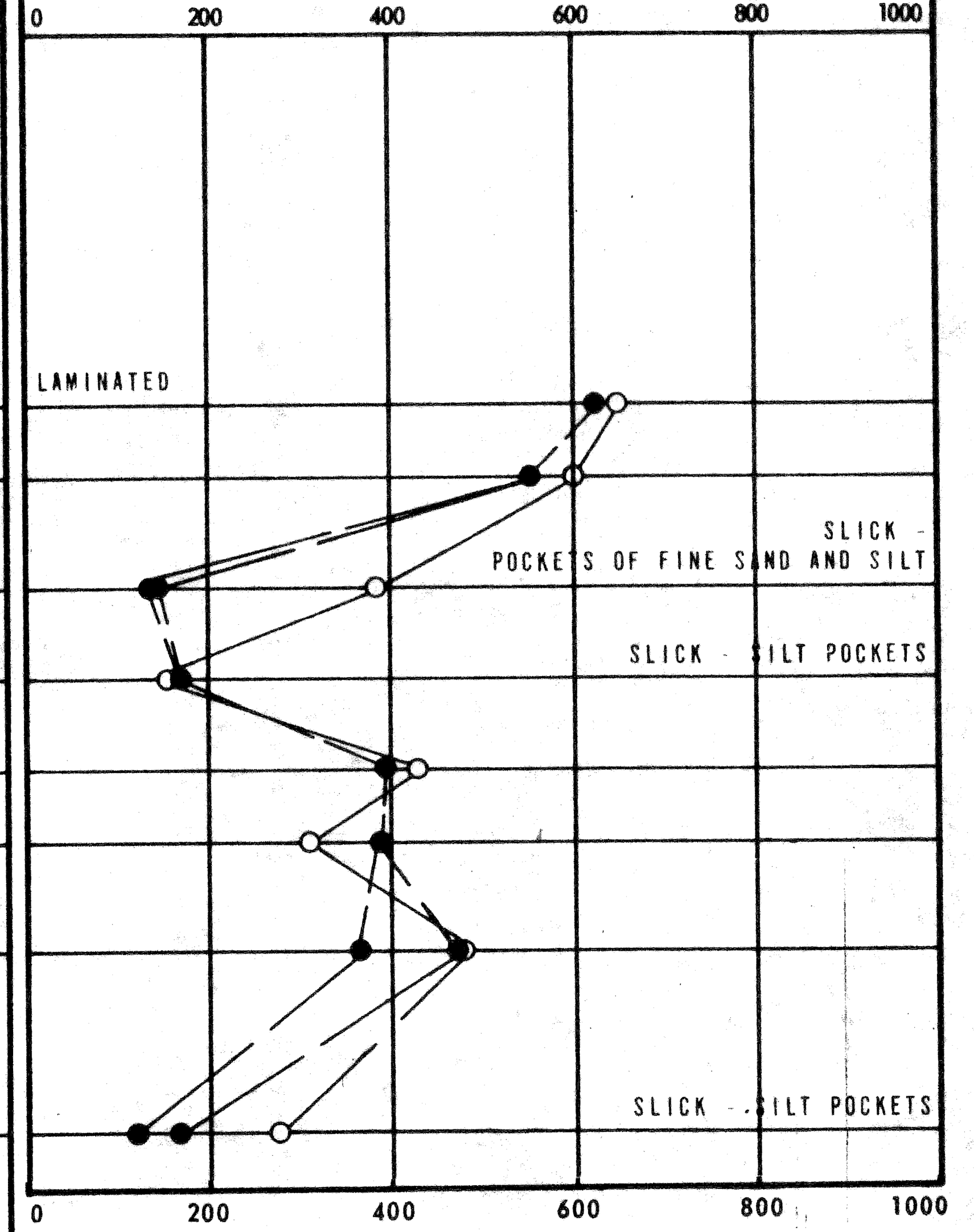
SOIL SAMPLE

SA. NO.	ELEV. IN FEET	PENETRATION NO. OF BLOWS	PENETRATION DRIVE IN INCHES	CONSISTENCY	CONSISTENCY	MOISTURE PER CENT DRY WT.	DRY WT. LB PER CU FT
1	142.8	7-10	6-6	--	NO	SAMPLE	
	137.8	7-9	6-6	--	NO	SAMPLE	
2	132.8	5-6	6-6	--	NO	SAMPLE	
3	127.3	LEVERED		FIRM	FIRM	19.4	108.6
4	123.3	LEVERED		FIRM	FIRM	17.5	113.6
5	117.3	LEVERED		PLASTIC	SOFT TO PLASTIC	29.0 31.0	94.8 89.9
6	112.3	LEVERED		PLASTIC	SOFT	24.0 30.0 29.4	103.0 92.4 92.4
7	107.3	LEVERED		PLASTIC	PLASTIC	23.6	101.7
8	103.3	LEVERED		PLASTIC	PLASTIC	23.8	102.3
9	97.3	LEVERED		PLASTIC	PLASTIC TO FIRM	22.9 22.3	102.3 103.0
	92.8	FAILED		--	NO	SAMPLE	
10	87.3	PUSHED AND LEVERED		SOFT	SOFT TO PLASTIC	37.2	83.0
	83.8	10-14	6-6	--	NO	SAMPLE	
	77.8	17	6	--	NO	SAMPLE	
11	72.8	14	6	--	NO	SAMPLE	

NOTE:
1.375" I.D. x 1.750" O.D. THIN WALL SAMPLER.
CASING LEFT IN HOLE TO ALLOW GAS TO DISSIPATE.
VERY SLIGHT GAS FLOW WAS NOTICED WHEN RETRIEVING CASING AT 63 ft. THERE WAS JUST ENOUGH FLOW TO CAUSE SLIGHT NOISE AS THE GAS BUBBLED THROUGH THE WATER IN CASING.

SHEARING RESISTANCE

●— —● ONE-HALF COMPRESSIVE STRENGTH IN LB PER SQ FT (BASED ON ORIGINAL CROSS-SECTION OF TEST SPECIMEN)
0 800 1600 2400 3200 4000
○——○ TRANSVERSE SHEARING RESISTANCE IN LB PER SQ FT
0 200 400 600 800 1000

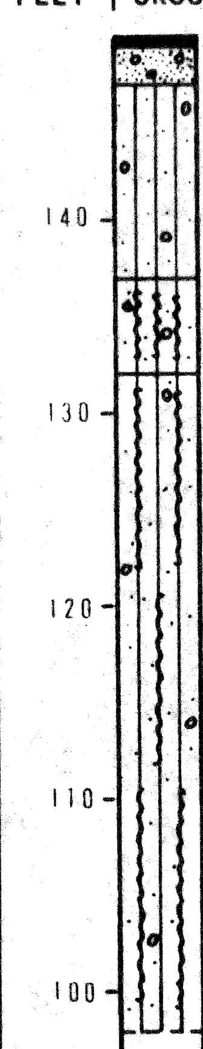


BORING DATA
NUMBER J-233 HYDRAULIC WASH BORING
DATE OF BORING APRIL, 1969
LOCATION 39'NORTH OF FULLERTON CENTERLINE, 106'EAST OF MARLOWE CENTERLINE
MADE BY PATRICK McGOVERN JR, BORING CHIEF

TEST HOLE NO. J-234

LOG OF SOIL PROFILE

BORING NO. J-234 HYDRAULIC WASH BORING
LOCATION 71'NORTH OF FULLERTON CENTERLINE 49'EAST OF MARLOWE CENTERLINE
GROUND SURFACE ELEVATION (FT) 149.4 (CITY OF DETROIT)



TOPSOIL
FILL (SAND AND GRAVEL)
STIFF GRAY-BROWN MOTTLED CLAY. HEAVY TRACE OF SAND, TRACE OF FINE GRAVEL, OCCASIONAL PEBBLE
FIRM GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
PLASTIC GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL OCCASIONAL PEBBLE (42' to 47' LOW PLASTIC)
END OF BORING

NOTE:
1.375" I.D. x 1.750" O.D. THIN WALL SAMPLER
WATER LEVEL BELOW GROUND AFTER COMPLETION (UNCASED): 1-HR. 4.5 ft; 24-HR. 4.5 ft.
MAY BE RESIDUAL WASH BORING WATER AND NOT TRUE WATER TABLE

SOIL SAMPLE

SA. NO.	ELEV. IN FEET	PENETRATION NO. OF BLOWS	PENETRATION DRIVE IN INCHES	FIELD CONSISTENCY	LAB CONSISTENCY	MOISTURE PER CENT DRY WT.	DRY WT. LB PER CU FT
	144.4	8-12	6-6				
	139.4	9-12	6-6				
	134.4	6-8	6-6				
	129.4	4-4	6-6				
	125.4	3-4	6-6	--			
	119.4	3-4	6-6	--			
	114.4	3-3	6-6	--			
	109.4	2-3	6-6	--			
	105.4	2-2	6-6	--			
	99.4	2-3	6-6	--			

SHEARING RESISTANCE

●— —● ONE-HALF COMPRESSIVE STRENGTH IN LB PER SQ FT (BASED ON ORIGINAL CROSS-SECTION OF TEST SPECIMEN)
0 800 1600 2400 3200 4000
○——○ TRANSVERSE SHEARING RESISTANCE IN LB PER SQ FT
0 200 400 600 800 1000

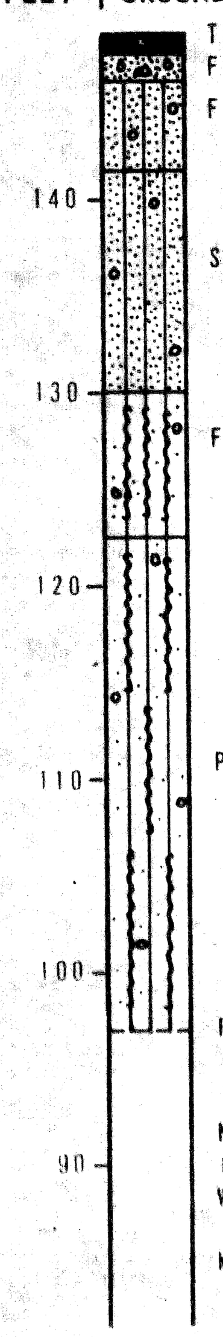
0 200 400 600 800 1000

BORING DATA
NUMBER J-234 HYDRAULIC WASH BORING
DATE OF BORING APRIL, 1969
LOCATION 71'NORTH OF FULLERTON CENTERLINE AND 49'EAST OF MARLOWE CENTERLINE
MADE BY PATRICK McGOVERN JR, BORING CHIEF

TEST HOLE NO. J-235

LOG OF SOIL PROFILE

BORING NO. J-235 HYDRAULIC WASH BORING
LOCATION 160'NORTH OF FULLERTON CENTERLINE 50'EAST OF MARLOWE CENTERLINE
GROUND SURFACE ELEVATION (FT) 148.5 (CITY OF DETROIT)



TOPSOIL
FILL (SAND, GRAVEL, BROKEN BRICK)
FIRM GRAY AND BROWN MOTTLED SANDY CLAY, TRACE OF FINE GRAVEL, OCCASIONAL PEBBLE
STIFF GRAY AND BROWN MOTTLED SANDY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
FIRM GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
PLASTIC GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE (38' to 42' LOW PLASTIC)
END OF BORING

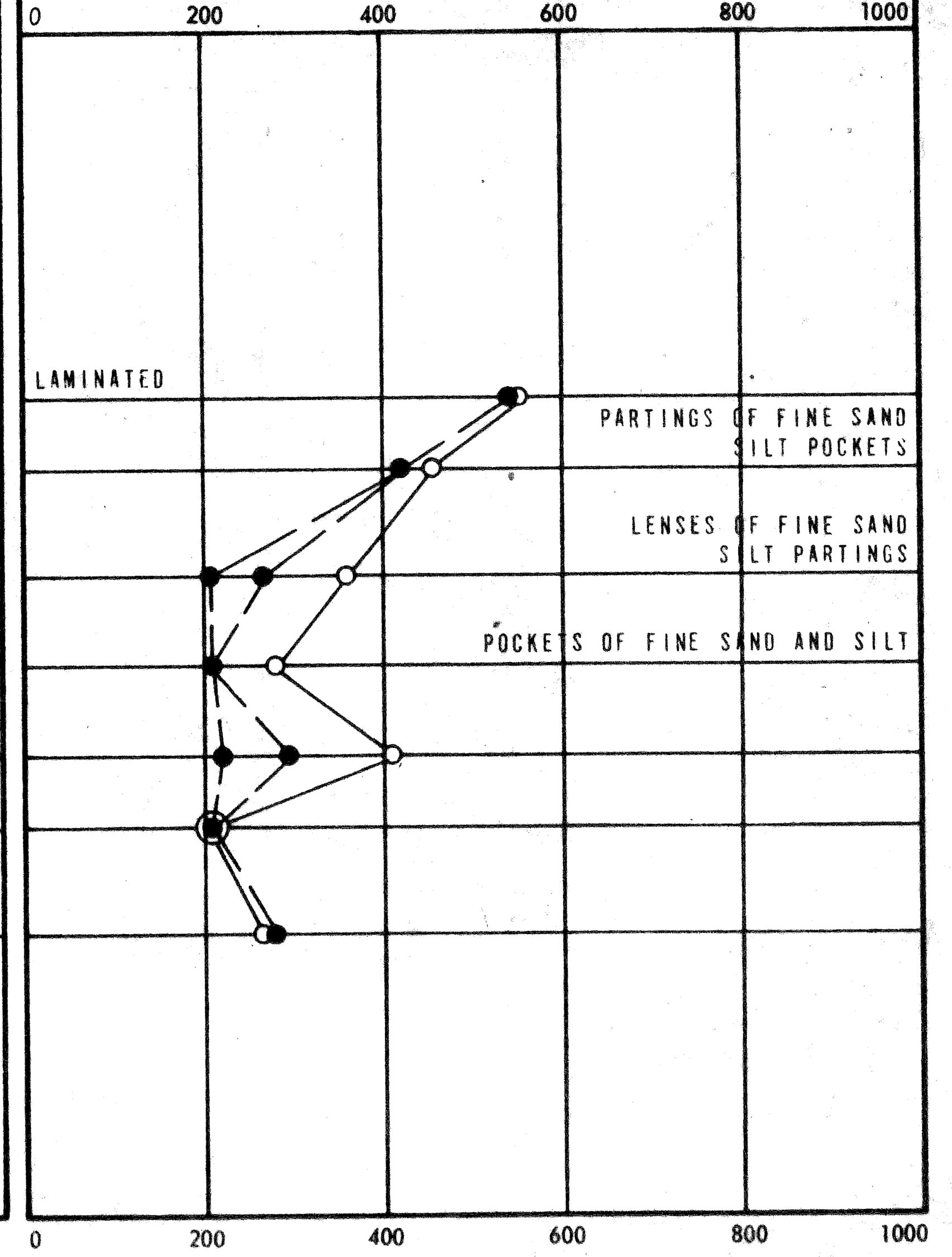
NOTE:
1.375" I.D. x 1.750" O.D. THIN WALL SAMPLER
WATER LEVEL BELOW GROUND AFTER COMPLETION (UNCASED): 1 HR. 2 ft; 24 HR. 3.5 ft.
MAY BE RESIDUAL WASH BORING WATER AND NOT TRUE WATER TABLE

SOIL SAMPLE

SA. NO.	ELEV. IN FEET	PENETRATION NO. OF BLOWS	PENETRATION DRIVE IN INCHES	FIELD CONSISTENCY	LAB CONSISTENCY	MOISTURE PER CENT DRY WT.	DRY WT. LB PER CU FT
	143.5	5-6	6-6	--	NO	SAMPLE	
	138.5	9-11	6-6	--	NO	SAMPLE	
	133.5	5-6	6-6	--	NO	SAMPLE	
1	128.0	LEVERED		FIRM	FIRM	19.2	109.8
2	124.0	LEVERED		FIRM	PLASTIC	20.3	106.7
3	118.0	LEVERED		PLASTIC	SOFT TO PLASTIC	26.4	96.7
4	113.0	LEVERED		PLASTIC	SOFT TO PLASTIC	19.0 17.8 21.2	108.6 111.7 106.7
5	108.0	LEVERED		PLASTIC	SOFT TO PLASTIC	17.3 23.2	- 103.6
6	104.0	LEVERED		PLASTIC	SOFT	21.3	106.1
7	98.0	LEVERED		PLASTIC	PLASTIC	24.0	99.8

SHEARING RESISTANCE

●— —● ONE-HALF COMPRESSIVE STRENGTH IN LB PER SQ FT (BASED ON ORIGINAL CROSS-SECTION OF TEST SPECIMEN)
0 800 1600 2400 3200 4000
○——○ TRANSVERSE SHEARING RESISTANCE IN LB PER SQ FT
0 200 400 600 800 1000



BORING DATA
NUMBER J-235 HYDRAULIC WASH BORING
DATE OF BORING APRIL, 1969
LOCATION 160'NORTH OF FULLERTON CENTERLINE 50'EAST OF MARLOWE CENTERLINE
MADE BY PATRICK McGOVERN JR, BORING CHIEF

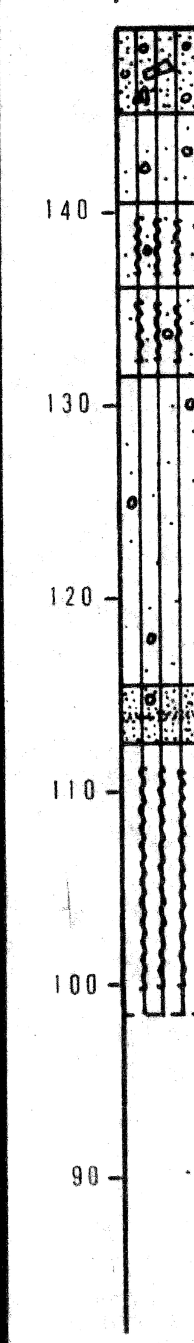
PENETRATION NOTE: NUMBER OF BLOWS REQUIRED TO DRIVE SAMPLER DISTANCE GIVEN USING 140 - LB WEIGHT FALLING 30 IN

GENERAL NOTE: FIELD CONSISTENCY DETERMINED BY INSPECTION OF SAMPLES AND SUBSTANTIATED BY RESISTANCE TO PIPE CASING AND JET ROD. BELOW DEPTH OF SAMPLING, CONSISTENCY DETERMINED BY SOIL RESISTANCE TO JET ROD

TEST HOLE NO. J-236

LOG OF SOIL PROFILE

BORING NO. J-236 HYDRAULIC WASH BORING
LOCATION 140'NORTH OF FULLERTON CENTERLINE 117'WEST OF MARLOWE CENTERLINE
GROUND SURFACE ELEVATION (FT) 149.6 (CITY OF DETROIT)



FILL (SAND, BROKEN BRICK, CLAY, GRAVEL)
FIRM GRAY AND BROWN MOTTLED CLAY, TRACE OF FINE GRAVEL, OCCASIONAL PEBBLE
STIFF GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
FIRM GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
PLASTIC GRAY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
FIRM GRAY VERY SANDY CLAY, TRACE OF FINE GRAVEL, OCCASIONAL PEBBLE, OCCASIONAL LENS OF SAND
PLASTIC GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE
END OF BORING

NOTE:
1.375" I.D. x 1.750" O.D. THIN WALL SAMPLER
WATER LEVEL BELOW GROUND AFTER COMPLETION (UNCASED): 3.5 ft.
MAY BE RESIDUAL WASH BORING WATER AND NOT TRUE WATER TABLE.

SOIL SAMPLE

SA. NO.	ELEV. IN FEET	PENETRATION NO. OF BLOWS	PENETRATION DRIVE IN INCHES	FIELD CONSISTENCY	LAB CONSISTENCY	MOISTURE PER CENT DRY WT.	DRY WT. LB PER CU FT
	144.6	4-6	6-6	--			
	139.6	10-12	6-6	--			
	134.6	4-6	6-6	--			
	129.6	3-5	6-6	--			
	125.6	3-3	6-6	--			
	119.6	2-2	6-6	--			
1	114.6	6-8	6-6	--			
	109.6	3-3	6-6	--			
	105.6	3-3	6-6	--			
	99.6	2-3	6-6				

SHEARING RESISTANCE

●— —● ONE-HALF COMPRESSIVE STRENGTH IN LB PER SQ FT (BASED ON ORIGINAL CROSS-SECTION OF TEST SPECIMEN)
0 800 1600 2400 3200 4000
○——○ TRANSVERSE SHEARING RESISTANCE IN LB PER SQ FT
0 200 400 600 800 1000

0

BORING DATA
NUMBER J-236 HYDRAULIC WASH BORING
DATE OF BORING APRIL, 1969
LOCATION 140'NORTH OF FULLERTON CENTERLINE AND 117'WEST OF MARLOWE CENTERLINE
MADE BY PATRICK McGOVERN JR, BORING CHIEF

PENETRATION NOTE: NUMBER OF BLOWS REQUIRED TO DRIVE SAMPLER DISTANCE GIVEN, USING 140 - LB WEIGHT FALLING 30 IN.

GENERAL NOTE: FIELD CONSISTENCY DETERMINED BY INSPECTION OF SAMPLES AND SUBSTANTIATED BY RESISTANCE TO PIPE CASING AND JET ROD. BELOW DEPTH OF SAMPLING, CONSISTENCY DETERMINED BY SOIL RESISTANCE TO JET ROD.

PRELIMINARY PLAN 'A' DATE 9-15-69

PREPARED BY
CITY OF DETROIT
BUREAU OF ... EXPRESSWAYS
JOB No.
STRUCTURAL ENGINEER

MICHIGAN DEPARTMENT OF STATE HIGHWAYS
TESTING AND RESEARCH DIVISION
TESTING LABORATORY SECTION
SOILS LABORATORY ANN ARBOR, MICHIGAN
SOIL MECHANICS ANALYSIS
PROJECT S 13 of 82123D
PROPOSED FULLERTON CROSSOVER CROSSING I 96 (JEFFRIES FREEWAY)
DETROIT MICHIGAN

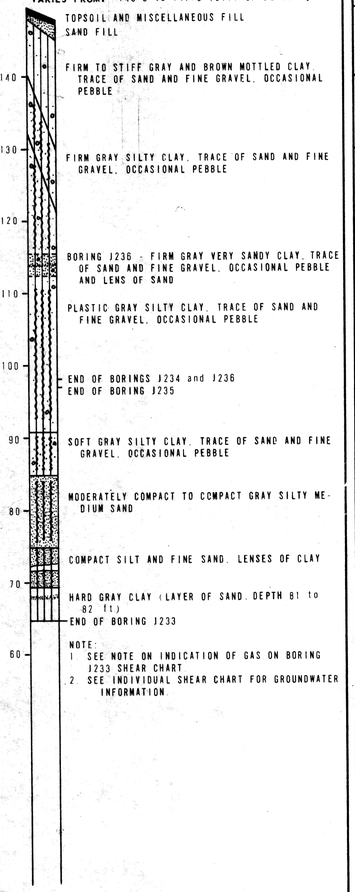
S 13 OF 82123D | STATE PROJECT | FEDERAL PROJECT | SHEET NO. 2 of 7

COMPOSITE SOIL PROFILE

ELEV. IN FEET

BORING NO. J233 THROUGH J236

GROUND SURFACE ELEV. (FT)
VARIES FROM: 149.6 to 147.8 (CITY OF DETROIT)



TOPSOIL AND MISCELLANEOUS FILL
SAND FILL

FIRM TO STIFF GRAY AND BROWN MOTTLED CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE

FIRM GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE

BORING J236 - FIRM GRAY VERY SANDY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE AND LENS OF SAND

PLASTIC GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE

END OF BORINGS J234 and J236
END OF BORING J235

SOFT GRAY SILTY CLAY, TRACE OF SAND AND FINE GRAVEL, OCCASIONAL PEBBLE

MODERATELY COMPACT TO COMPACT GRAY SILTY MEDIUM SAND

COMPACT SILT AND FINE SAND, LENSES OF CLAY

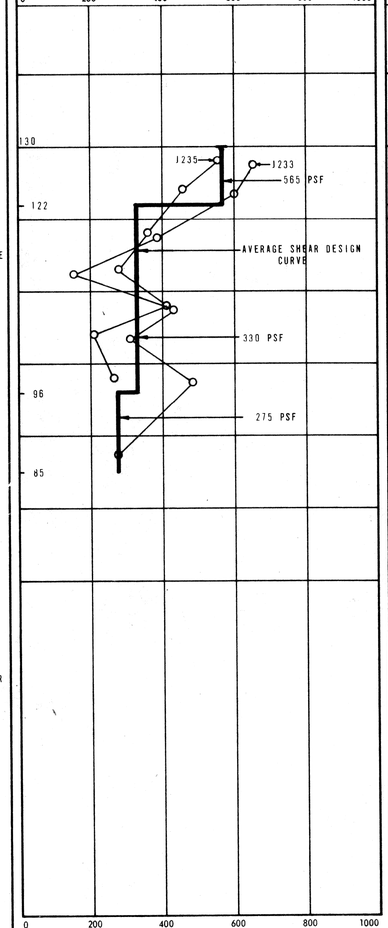
HARD GRAY CLAY (LAYER OF SAND, DEPTH 81 to 82 ft.)
END OF BORING J233

NOTE:
1. SEE NOTE ON INDICATION OF GAS ON BORING J233 SHEAR CHART
2. SEE INDIVIDUAL SHEAR CHART FOR GROUNDWATER INFORMATION

THE ABOVE COMPOSITE SOIL PROFILE IS INTENDED ONLY TO PRESENT AVERAGE CONDITIONS THROUGHOUT THE GROUP OF BORINGS REPRESENTED. SEE INDIVIDUAL BORING CHARTS FOR DETAILS.

TRANSVERSE SHEARING RESISTANCE

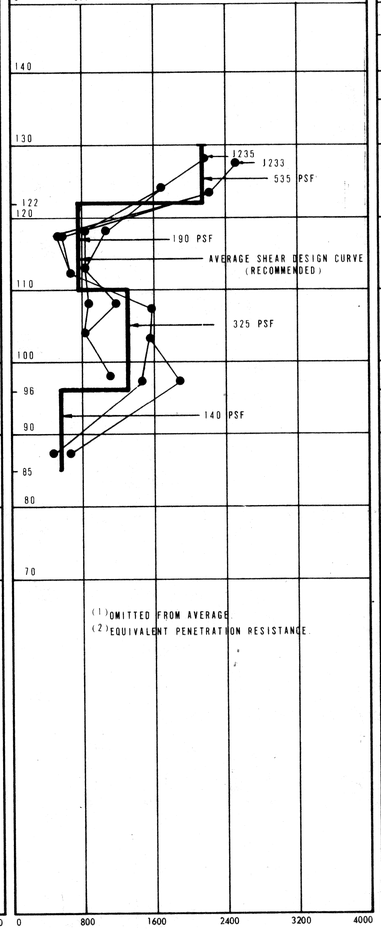
TRANSVERSE SHEARING RESISTANCE (S_t) IN LB PER SQ FT



COMPRESSION SHEARING RESISTANCE

COMPRESSION SHEARING RESISTANCE ($S_{uc}/4$) IN LB PER SQ FT

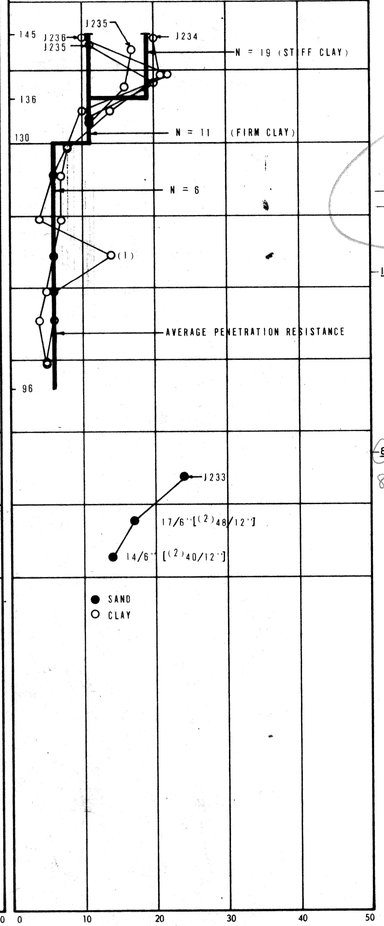
ONE-HALF COMPRESSIVE STRENGTH (S_{uc}) IN LB PER SQ FT



(1) OMITTED FROM AVERAGE
(2) EQUIVALENT PENETRATION RESISTANCE

ASTM MODIFIED PENETRATION RESISTANCE

PENETRATION RESISTANCE (N) = BLOWS PER FOOT
(USING A 140-LB WEIGHT FALLING 30 IN.)



Bott. of ftg elevs vary from 121.5 to 123.0

112 MINIMUM PILE TIP PENETRATION

87 ESTIMATED PILE TIP BEARING
84

MICHIGAN DEPARTMENT OF STATE HIGHWAYS
TESTING AND RESEARCH DIVISION
TESTING LABORATORY SECTION
SOILS LABORATORY ANN ARBOR, MICHIGAN

SOIL MECHANICS ANALYSIS

PROJECT S13 of 82123D
PROPOSED FULLERTON CROSSOVER CROSSING I-96
(JEFFRIES FREEWAY), DETROIT, MICHIGAN

PREPARED BY: Irvine D. Brooks DATE: 6-30-69
CHECKED BY: Paul R. Martin DATE: 6-30-69

COMPOSITE SUBSOIL ANALYSIS OF BORINGS J233 THROUGH J236

PRELIMINARY PLAN A DATE 9-15-69

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DESIGN - STRUCTURAL AND EXPRESSWAYS

APPROVED: STRUCTURAL ENGINEER

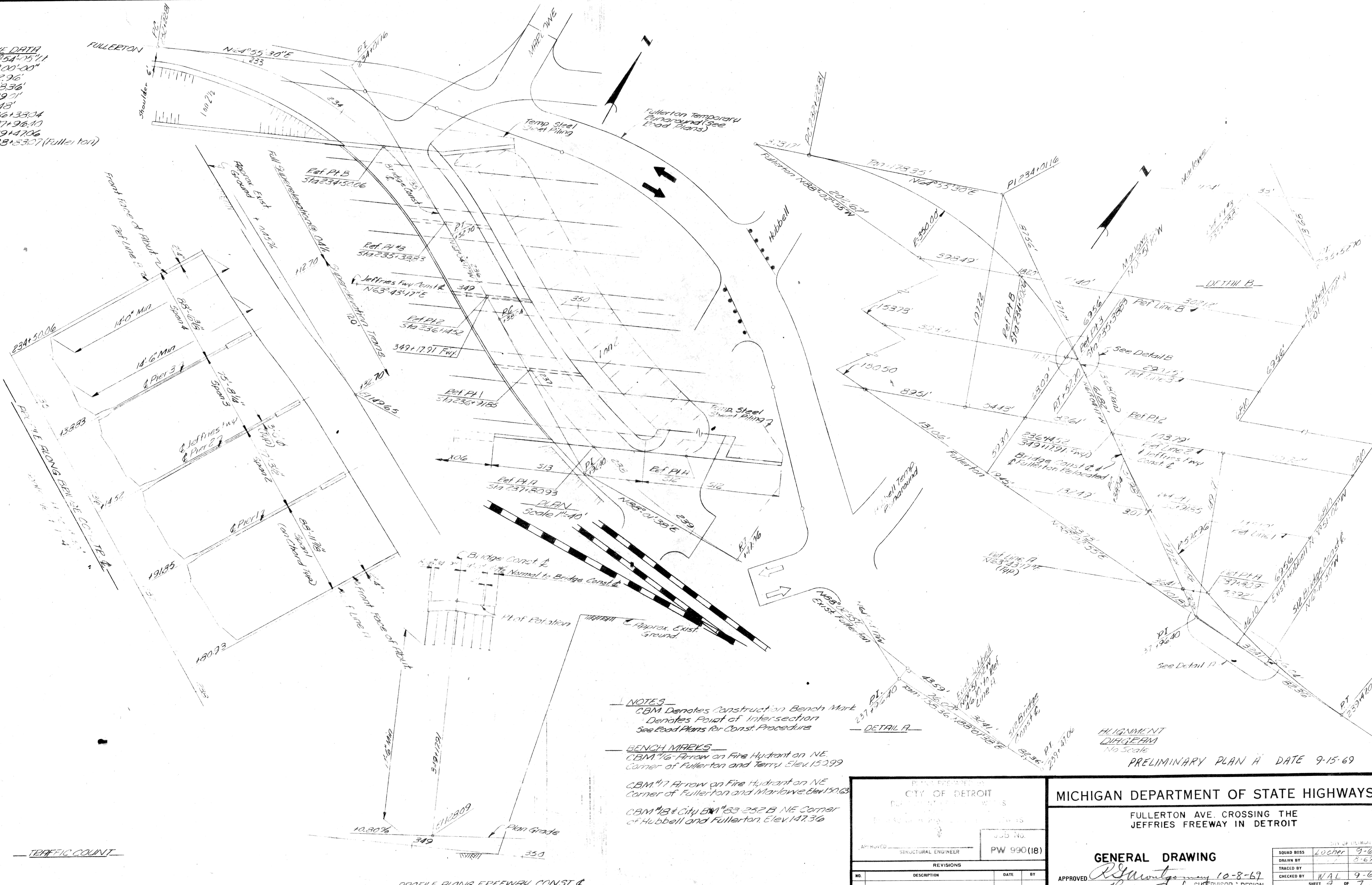
JOB NO

COMPOSITE SUBSOIL ANALYSIS OF BORINGS J-233, J-234, J-235 & J-236 DETROIT, MICHIGAN

S13 OF 82123D | STATE PROJECT | FEDERAL PROJECT | SHEET NO

FULLERTON AVE. CURVE DATA

Δ = 54°-00'-13" Rt	Δ = 30°54'-05" Lt
D = 16°-22'-13"	D = 10°-00'-00"
R = 350.00'	R = 572.96'
T = 178.35'	T = 158.36'
L = 329.89'	L = 309.01'
E = 42.82'	E = 21.48'
P.C. = 232+22.81	PC = 236+38.04
P.I. = 234+01.16	PI = 237+96.40
P.T. = 235+52.70	PT = 239+47.06
	= 238+83.07 (Fullerton)



NOTES

CBM. Denotes Construction Bench Mark

Denotes Point of Intersection

See Road Plans for Const. Procedure

BENCH MARKS

CBM #16 - Arrow on Fire Hydrant on NE. Corner of Fullerton and Terry. Elev. 150.99

CBM #17 Arrow on Fire Hydrant on NE Corner of Fullerton and Marlowe. Elev 150.63

CBM #18 & City BM #83-252 B NE Corner of Hubbell and Fullerton. Elev. 147.36

TRAFFIC COUNT

PRELIMINARY PLAN A DATE 9-15-69

PLANS PREPARED BY CITY OF DETROIT

APPROVED ______ STRUCTURAL ENGINEER

JOB No. PW 990 (18)

REVISIONS

NO.	DESCRIPTION	DATE	BY

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

FULLERTON AVE. CROSSING THE JEFFRIES FREEWAY IN DETROIT

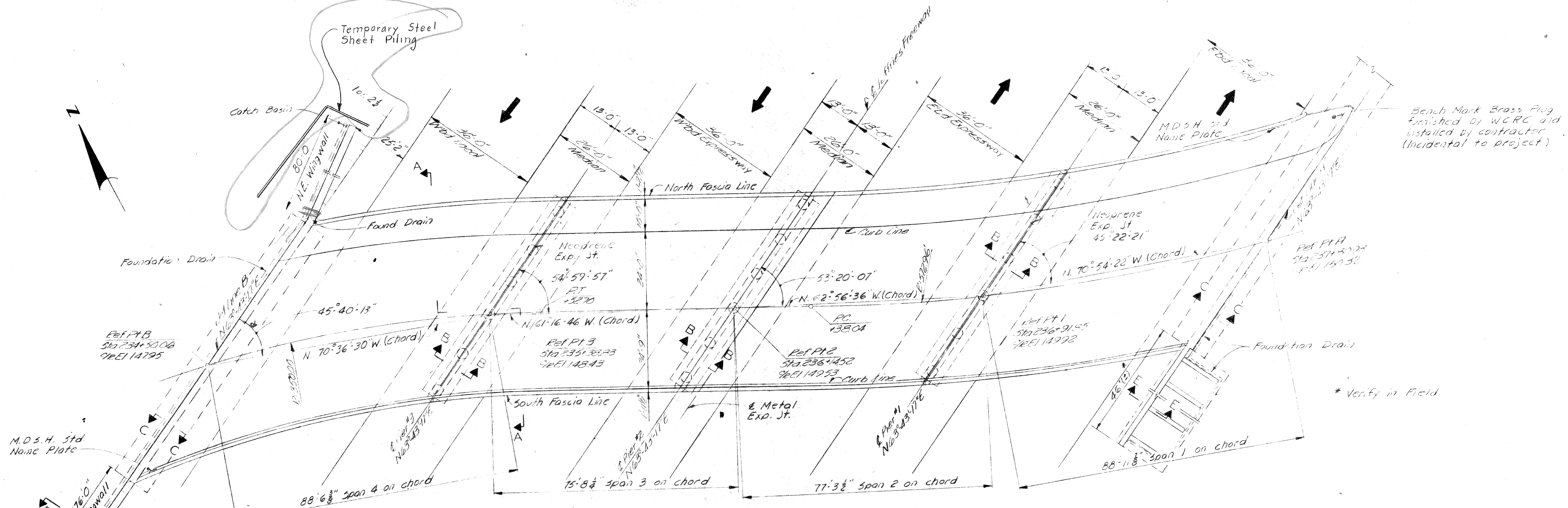
GENERAL DRAWING

APPROVED R G Montgomery 10-8-69 SUPERVISOR - DESIGN

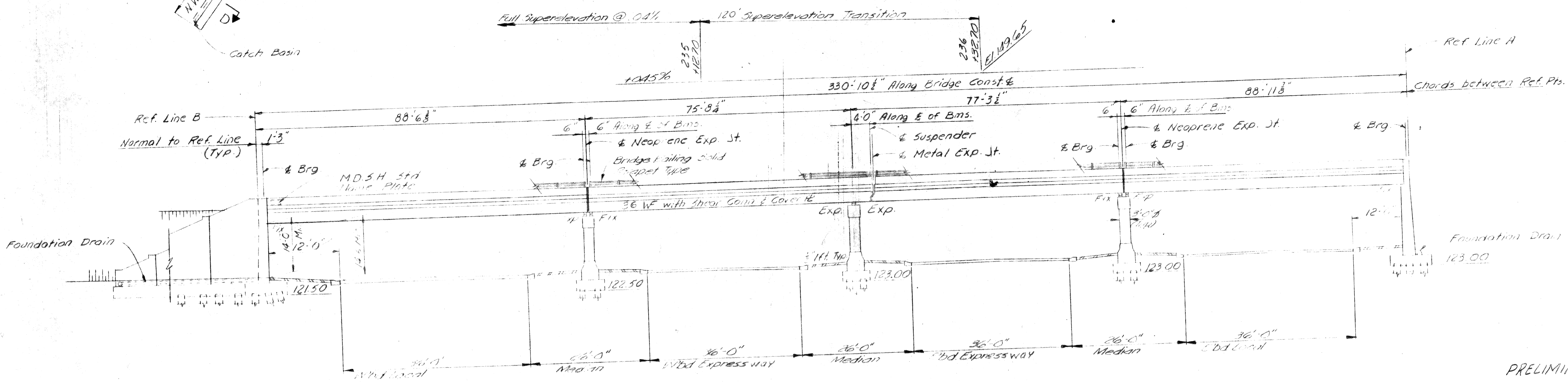
APPROVED [illegible] 10-8-69 ENGINEER

SQUAD BOSS	Locher	9-69
DRAWN BY		8-69
TRACED BY		
CHECKED BY	WAL	9-69
SHEET 4 OF 7		

S13 of 82123D



PLAN
Scale: 1/16" = 1'-0"



ELEVATION
Scale: 1/16" 1'-0"

PRELIMINARY PLAN 'A' DATE 9-15-69

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
BUREAU OF HIGHWAYS AND EXPRESSWAYS

APPROVED ____________ STRUCTURAL ENGINEER

JOB No. PW 990 (18)

REVISIONS			
NO.	DESCRIPTION	DATE	BY

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

FULLERTON AVE. CROSSING THE JEFFRIES FREEWAY IN DETROIT

GENERAL PLAN OF STRUCTURE

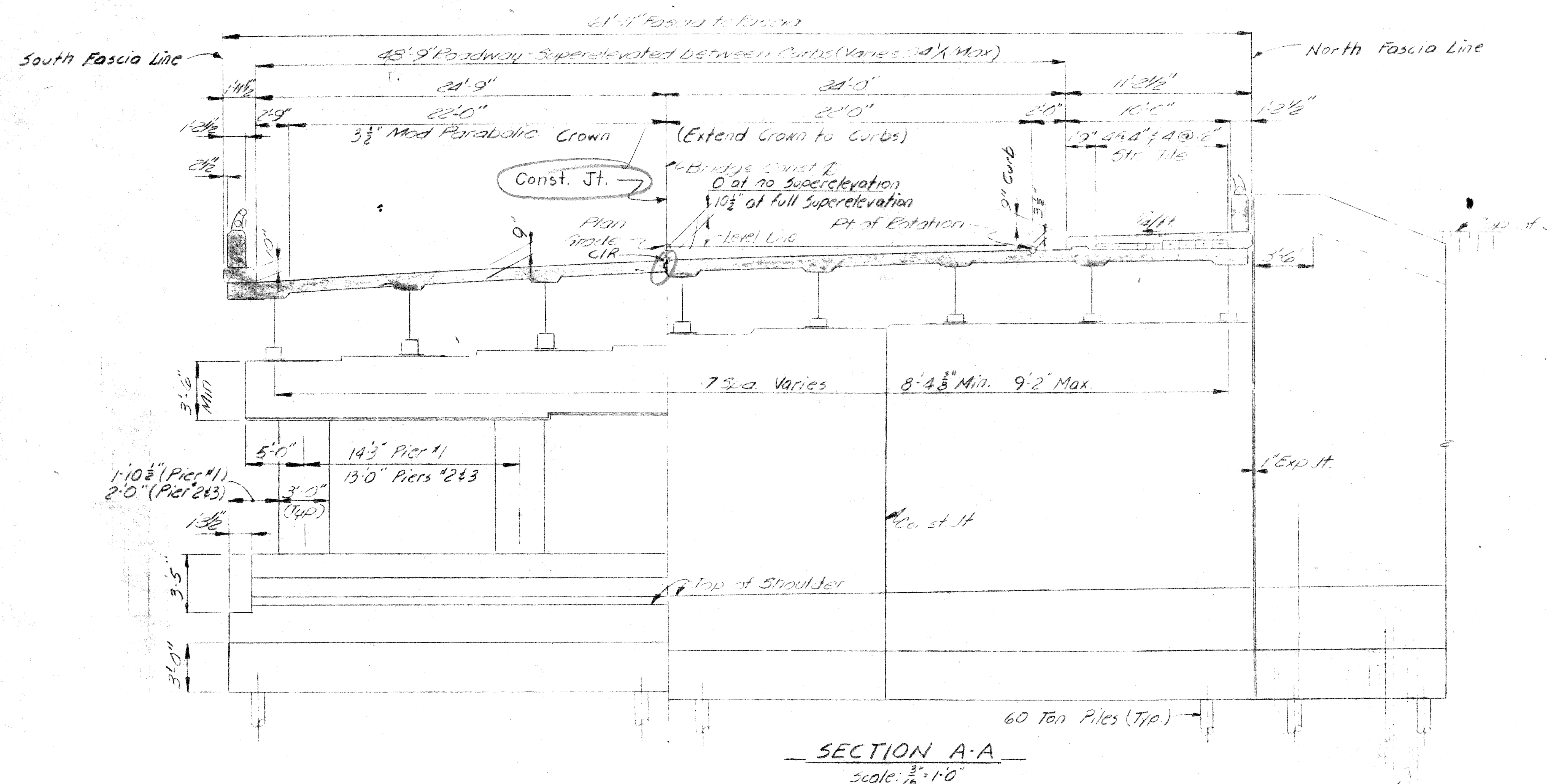
APPROVED R.G. Montgomery 10-8-69 SUPERVISOR - DESIGN

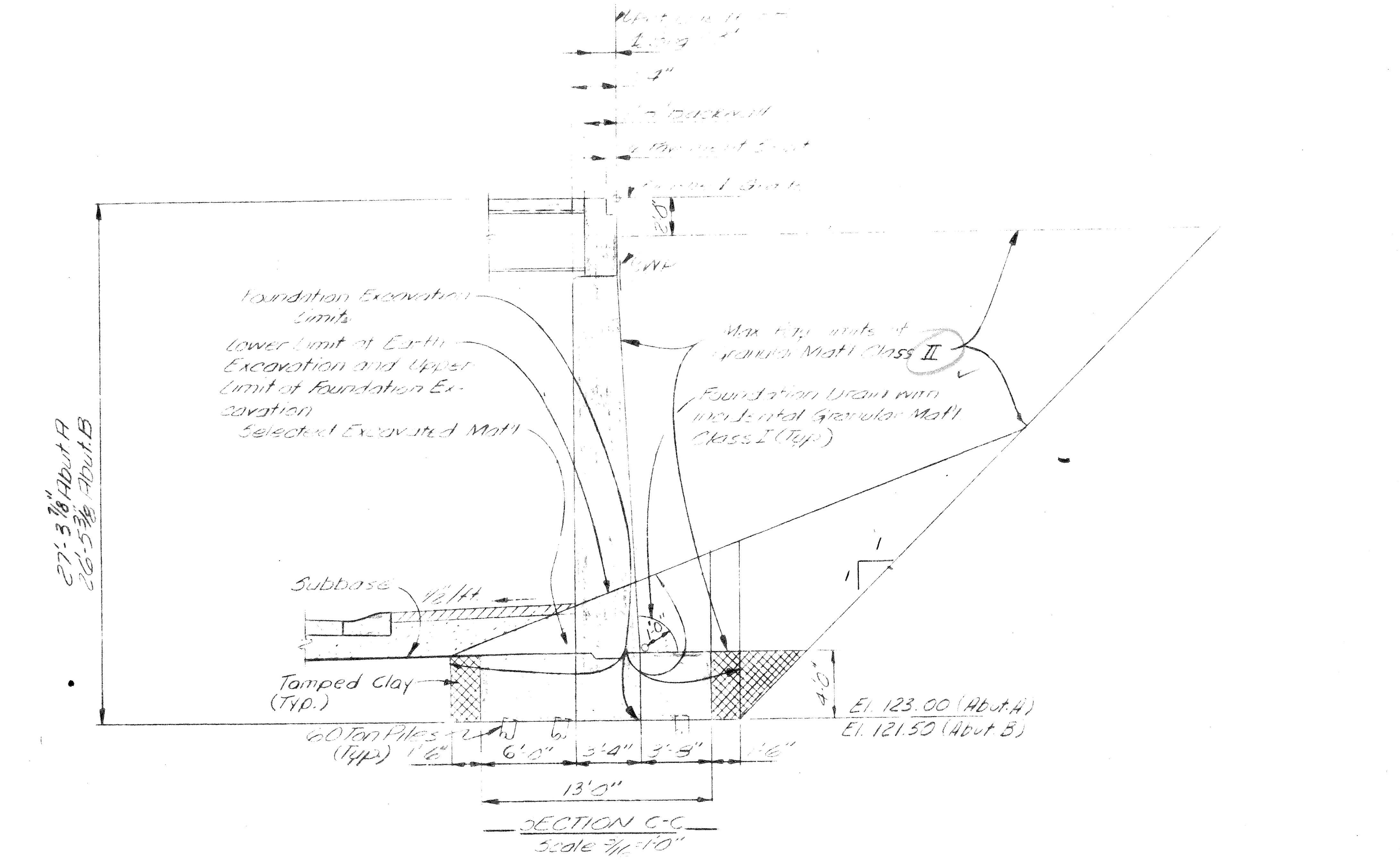
APPROVED L. J. Cook 10-8-69 ENGINEER

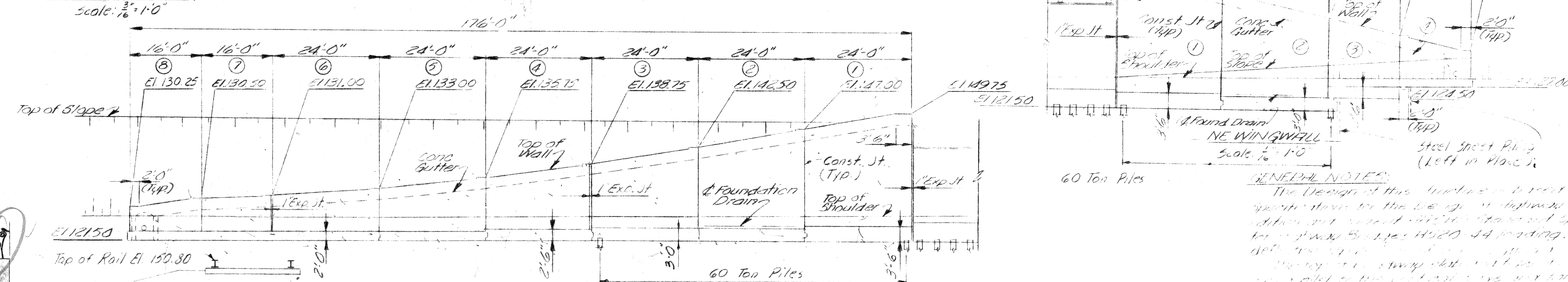
SQUAD BOSS		7-69
DRAWN BY		7-69
TRACED BY		
CHECKED BY		7-69

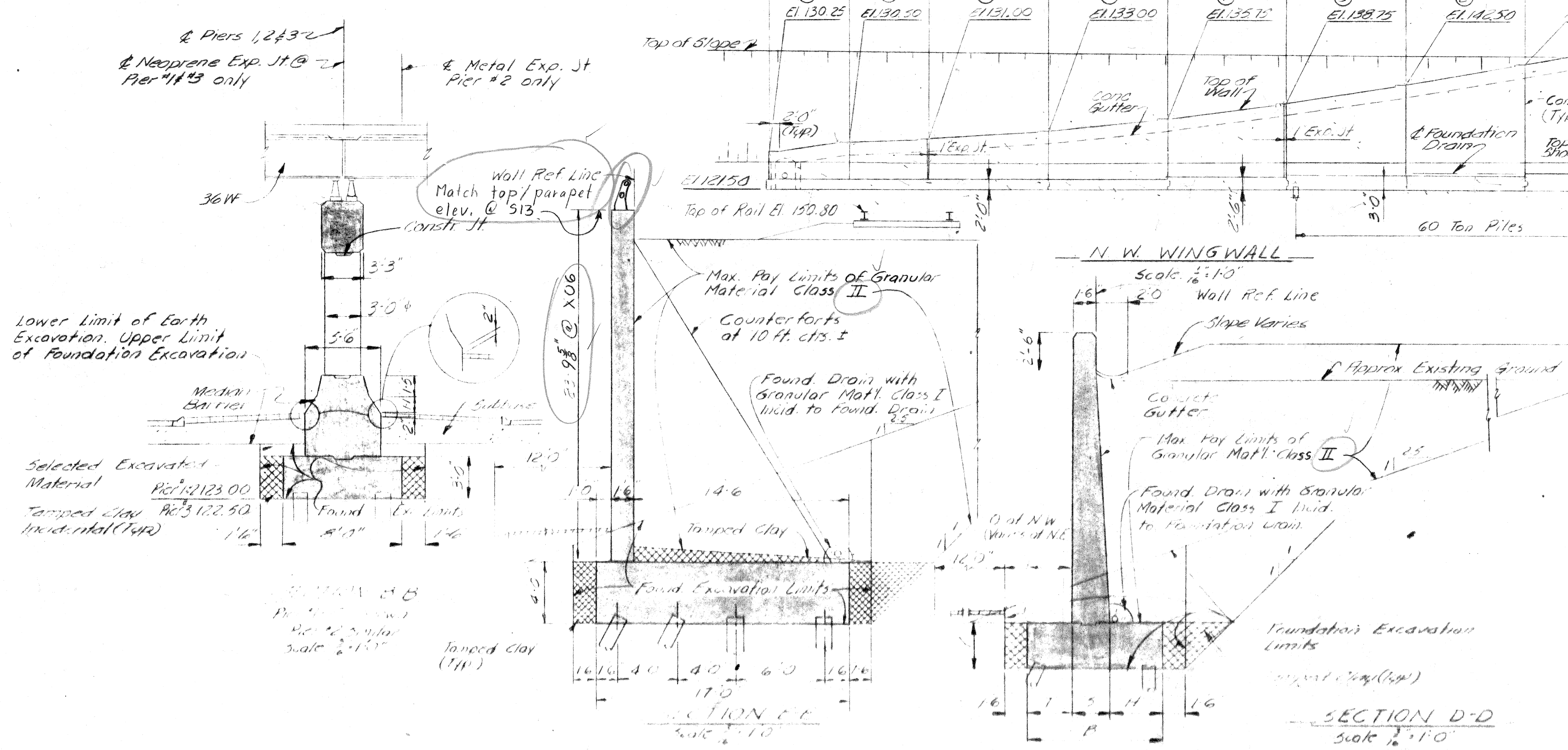
SHEET 5 OF 7

S13 of 82123D









WINGWALL DIMENSIONS						
	Section	T	S	H	B	Y
N W Wall	1	4'6"	3'6"	5'0"	13'0"	3'6
	2	3'6"	3'0"	4'6"	11'0"	3'0
	3	3'0"	2'9	4'3	10'0	3'0
	4	3'0"	2'6	4'6	10'0	2'6
	5	2'0	2'3	2'9	7'0	2'0
	6,7,8	2'0"	2'0	2'0	6'0	2'0
N E Wall	1	4'6"	3'6	5'0	13'0	3'6
	2	3'6	3'0	4'6	11'0	3'0
	3	3'0	2'6	4'6	10'0	2'6
	4	2'0"	2'0"	2'0	6'0	2'0

GENERAL NOTES:

The Design of this structure is based on the AASHO Specifications for the Design of Highway Bridges, 1953 edition and current AASHO Standard Specifications for Highway Bridges HS20-44 loading. [illegible]

[illegible]

This structure [illegible]

Granular Mat'l Class II is [illegible]

C/R denotes Crown of Roadway

The vertical pay limits of temporary steel sheet piling are the top of retained earth and the bottom of footing. The lateral pay limits are as required and determined by the Engineer.

Structural Steel shall be A.S.T.M. A-588

PRELIMINARY PLAN A DATE 9-15-69

JOB NO
PW 990(IB)

REVISIONS			
NO.	DESCRIPTION	DATE	BY

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

FULLERTON AVE CROSSING THE JEFFRIES FREEWAY IN DETROIT

GENERAL PLAN OF STRUCTURE

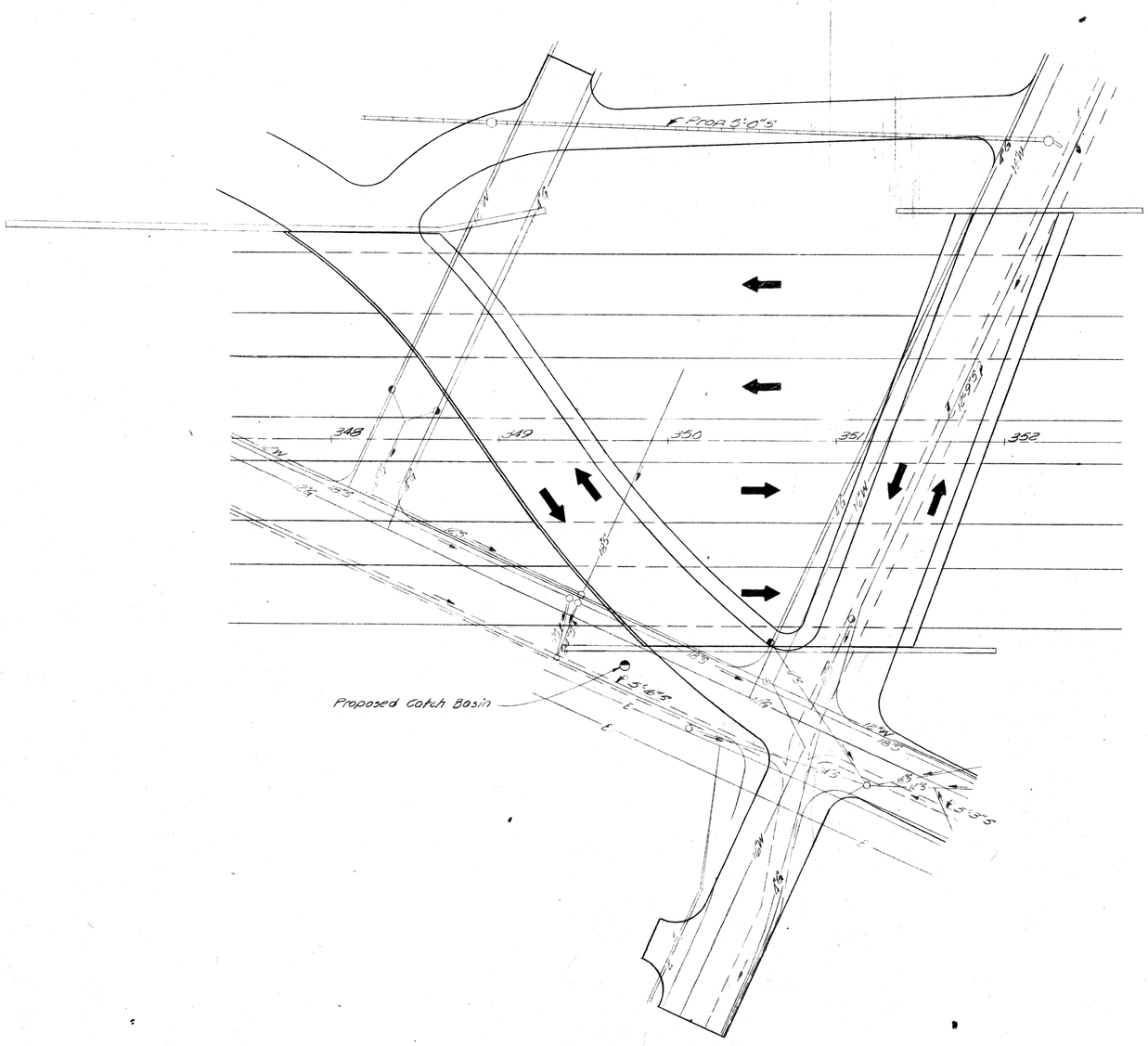
CITY OF DETROIT

SQUAD BOSS
DRAWN BY
TRACED BY
CHECKED BY

APPROVED [illegible] 10-8-69

APPROVED [illegible] 10-8-69

S13 of 82123D



SITUATION PLAN
Scale: 1"=40'

LEGEND

UTILITY	Existing	Abandoned or Deleted	New Work by Others
Michigan Consolidated Gas Co.	G	G	
Water	W	W	
Sewers	E	S	S
Detroit Edison	E	E	

The contractor shall locate all active underground utilities prior to starting work, and shall conduct his operations in in such a manner as to insure that those utilities not requiring relocation will not be disturbed.

PRELIMINARY PLAN 'A' DATE 9-15-69

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER-DIRECTOR
BUREAU OF HIGHWAYS AND EXPRESSWAYS

APPROVED _____
STRUCTURAL ENGINEER

JOB No.
PW 990

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

EXISTING UTILITIES AND PROPOSED ALTERATIONS

REVISIONS

NO	DESCRIPTION	DATE	BY

CITY OF DETROIT

SQUAD BOSS	Lochar	9-69
DRAWN BY	Hart	8-69
TRACED BY		
CHECKED BY	S. Yes	9-69

SHEET 7 OF 7

S13 of 82123D

8 Spaces @ 8'-6 7/8" = 68'-7" Railing Post Spacing
3 Spaces @ 17'-1 3/4" = 51'-5 1/4" False Joint Spacing
℄ P.L.C. Lig. Std.
South Fascia Line
Min. Lap A Bars #6 1'-11"
A248 Bars #6 (2 Sets Parapet)
℄ 1-3"ϕ P.L.C. Conduit in Brush Block
Curb Line
False Jt. (Typ.)
A239 Bars #6 Parapet
A253 Bars #4 (3 Sets Brush Block)
PLAN - BRUSH BLOCK SPAN #3
T Bars
Edge of Deck Slab
℄ Beam H
Curb Line
52 Spaces @ 1'-6" = 78'-9"
53-P201 Bars #4 (P.L.C. Encasement)
℄ 6-4"ϕ P.L.C. Conc. Encased Conduits
Provide curve in horizontal placement of P.L.C. ducts to allow straight run through joint for expansion
℄ Beam G
112 Spaces @ 7" = 65'-4"
113-A228 Bars #6 Top & Bottom
Constr. Jt.
℄ Beam F
19 Spa. @ 7" = 11'-1"
A204-A223 Bars #6 Top & Bott.
19 Spa. @ 7" = 11'-1"
A204-A223 Bars #6 Top & Bottom
℄ Expansion Joint
Single Neoprene Exp. Joint
23 Spa. @ 7" = 13'-5"
A201-A224 Bars #6 Top & Bottom
Ref. Pt. #3 Sta. 235+38.83
Ref. Pt. #2 Sta. 236+14.62
Bridge Constr. ℄
℄ Beam E
Double Neoprene Exp. Joint
110 Spaces @ 7" = 64'-2"
111-A228 Bars #6 Top & Bottom
℄ Beam D
Constr. Jt.
21 @ 7" = 12'-3"
A203-A224 Bars #6 Top & Bottom
A290 Bars #7 3 Sets T.&B.
℄ Expansion Joint
℄ Pier #2
21 Spa. @ 7" = 12'-3"
A202-A223 Bars #6 Top & Bottom
℄ Beam C
Constr. Jt.
Curb Line
A289 Bars #7 Top & Bottom
℄ Beam B
A289 Bar #7 Top Only
112 Spaces @ 7" = 65'-4"
113-A228 Bars #6 Top & Bott.
℄ Beam A
19 Spa. @ 7" = 11'-1"
A203-A222 Bars #6 Top & Bottom
Edge of Deck Slab
63-D202 Bars #4 Fascia & 63-D203 Bars #4 Curb
Space with alternate slab bars
75'-4 3/4"
D203 Bars #6
PLAN - DECK SPAN #3
B214
B209
B206
B204
B202
Curb Line
A252 Bars #4 (3 Sets Sidewalk)
A244 Bars #6 (Parapet 3 Sets)
False Joints (Typ)
Min. Lap A Bars #6 1'-11"
38'-11"
A230
A232
A234
A236
℄ Conc. Sign Inserts
3 Spaces @ 17'-6" = 52'-6" False Joint Spacing
North Fascia Line
8 Spaces @ 8'-9" = 70'-0" Railing Post Spacing
6"×12"×12" & 4"×12"×12" Structural Tile
Spaces @ 1'-2" = 24'-0" D201 Bars #6 in Parapet & B218 Bars #4 in Sidewalk
5-D201 Bars #6
PLAN - SIDEWALK SPAN #3

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
BUREAU OF HIGHWAYS AND EXPRESSWAYS
APPROVED ____ STRUCTURAL ENGINEER

JOB No. PW 990 (18)

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

SUPERSTRUCTURE DETAILS

REVISIONS

NO.	DESCRIPTION	DATE	BY

CITY OF DETROIT

SQUAD BOSS		
DRAWN BY		
TRACED BY	R Rosik	66 170
CHECKED BY		

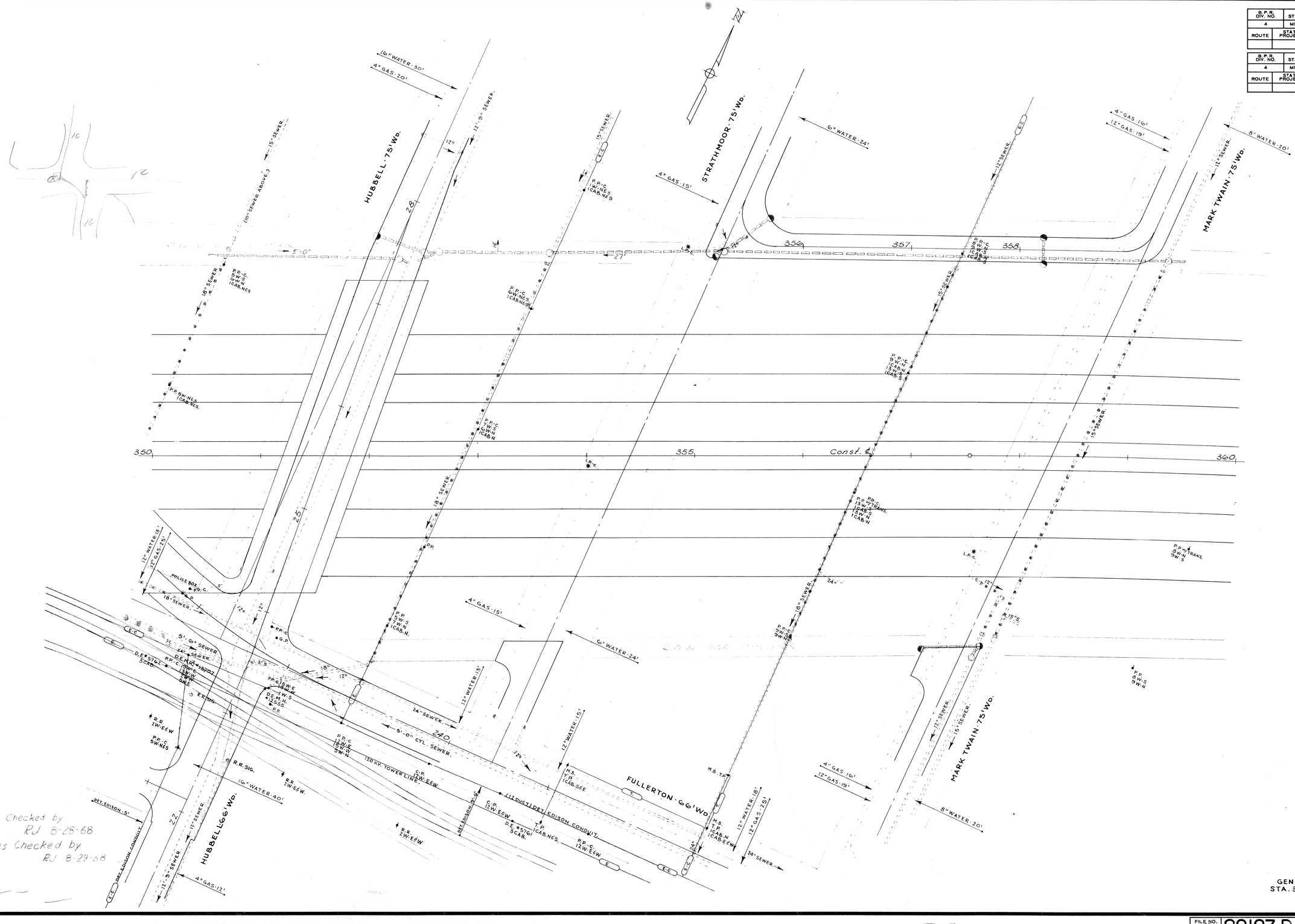
SHEET 25 OF 36

S13 of 82123D

Road Squad - Roush

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			30	
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS



Sewers Checked by
RJ 8-28-68
Utilities Checked by
RJ 8-29-68

GENERAL UTILITIES
STA. 350 TO STA. 360

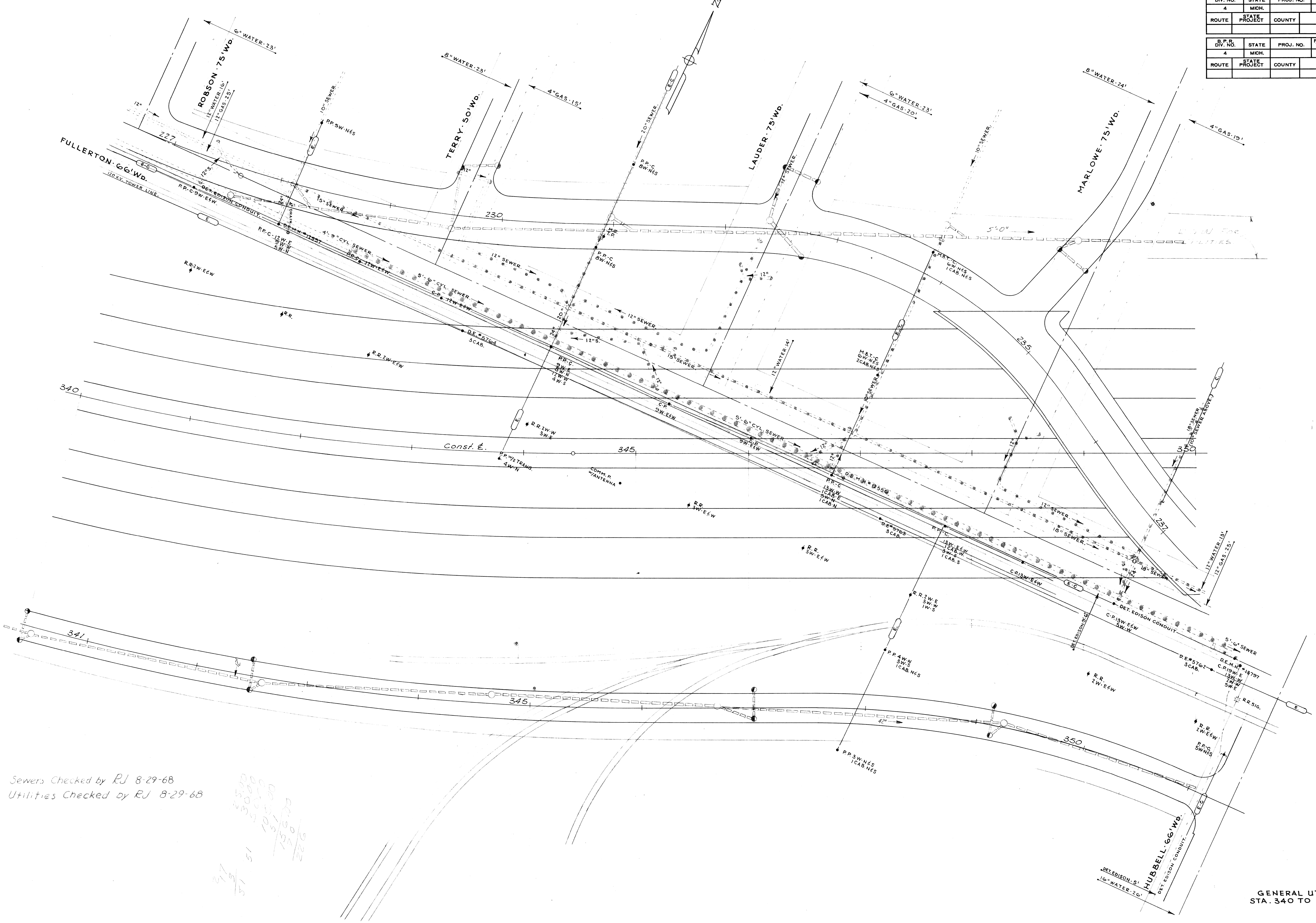
FILE NO. 1386 NO. 350 STENCIL	82123 D	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		B2123		30

Road Squad - Roush

SQUAD R. E. ROUSH

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			29	
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS



Sewers Checked by RJ 8-29-68
Utilities Checked by RJ 8-29-68

GENERAL UTILITIES
STA. 340 TO STA. 350

FILE NO. USE NO. 350 STENCIL	82123 D	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82123		29

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			10	
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

SQUAD R. E. ROUSH

FILE NO. USE NO. 350 STENCIL	82123 D	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82123 D		10

DETAILS OF ALIGNMENT
STA. 350 TO STA. 360

FILE NO. USE NO. 350 STENCIL	82123 D	STATE PROJECT	FEDERAL PROJECT	SHEET NO.

Goetsch

PIERSON

AUTH.	DATE	REVISION
		FINAL R. O. W.

E Bd Service Rd
Curve #8
Δ = 44°-41'-01" Lt
D = 11°-30-00"
R = 498.22
L = 388.55
T = 209.76
E = 40.44
PC = 10+00.00
PI = 12+04.76
PT = 13+88.55

Curve #9
Δ = 98°-58'-00"
D = 9°-30'-00"
R = 603.11
L = 410.18
T = 273.58
E = 56.63
PC = 15+53.85
PT = 17+66.65
PT = 19+63.43

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
I-96	82122	Wayne	Detroit	14	

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED		
FIELD CHECKED		
FINAL DESIGN CHECKED		
TRACED		
FINAL R.O.W. CHECK		
QUANTITIES		
QUANTITIES CHECKED		
SQUAD		

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN CHECKED		
PROFILE PLOTTED		
PROFILE CHECKED		
PRELIMINARY GRADE		
GRADE INSPECTION		
FEDERAL INSPECTION		

RAMP F

45.12

S 87°-56'-39" E 181

S 87°-36'-39" E

PC 88+01.39

10 Sidewalk

Nose Pt 99+09 ℄ 120+04.76 ℄

430' along Br. Const. ℄

N 44°-20" E

PT 113+88.55

PC 115+53.85

BRAILE

8" Water

16" Water

N 36°-20'-32" E 371

63°

12"

PATTON

12"

#20611

24"

6" Water

Sq. ft. = 430 x 43.9 = 18,900 Sq. Ft.

Before using this sheet
Check for possible revised alignment
CLB 1/27/69

10 1.21
10
12
17
3.71
43.92

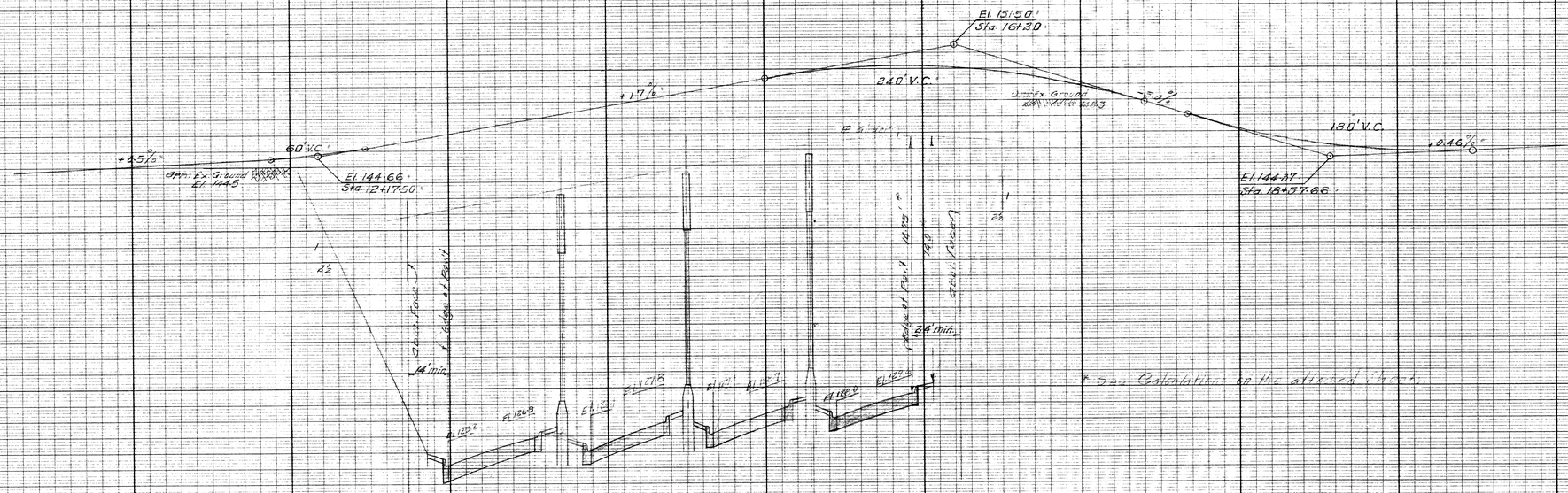
145
140
145
140

-0.60%
-0.60%
+1.40%
50' VC
40' VC
Prop FL Elev 146.15
Prop FL Elev 134.50

10 11 12 13 14 15 16 17 18 19 20 21

Schoolcraft Crossover

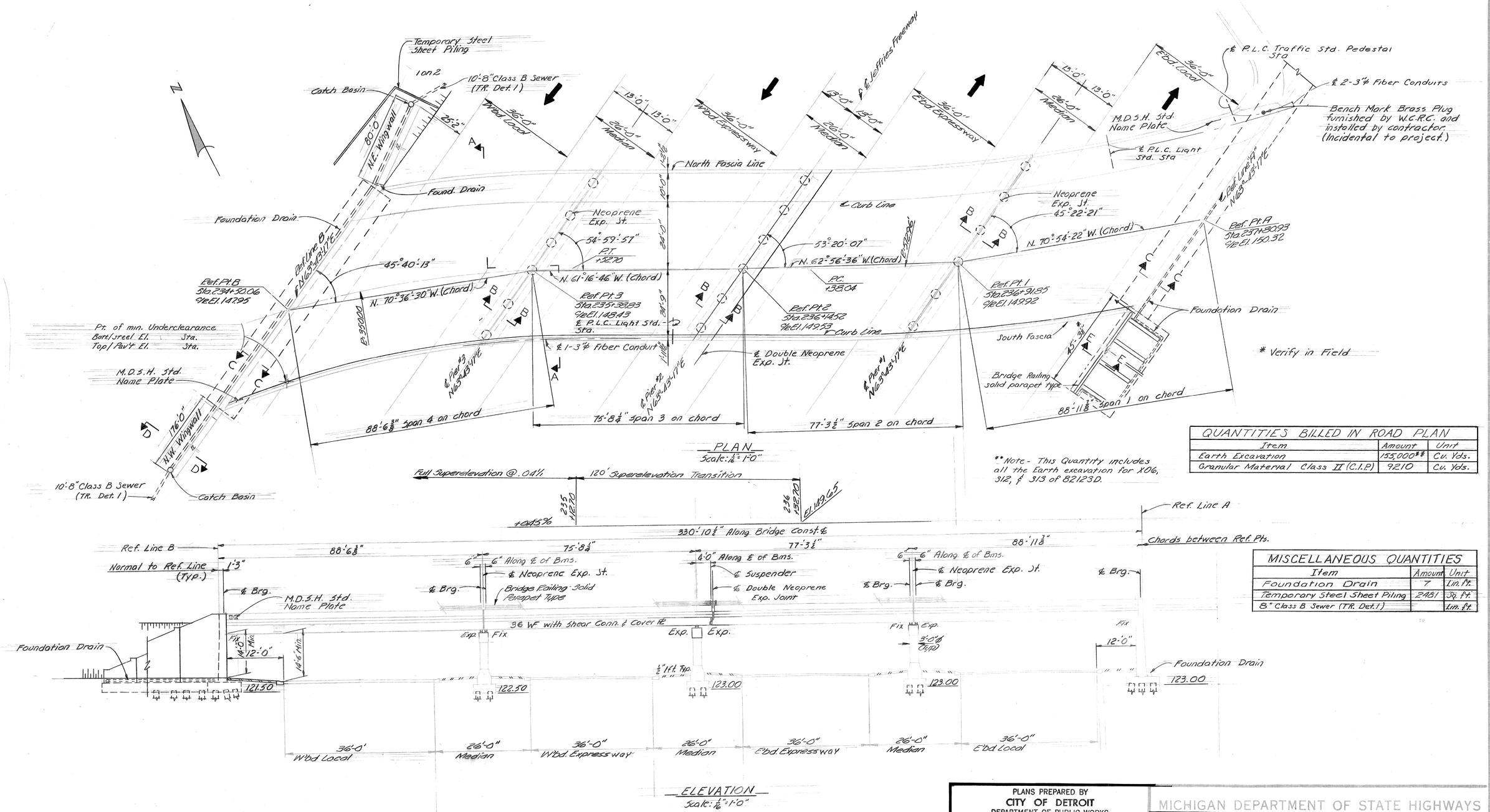
FILE NO.	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
I&B NO. STRO STENCIL	82122		



* See Calculations on the attached sheet.

Schoolcraft Crossover
by
P.G. Gifford

10 11 12 13 14 15 16 17 18 19 20 21



QUANTITIES BILLED IN ROAD PLAN		
Item	Amount	Unit
Earth Excavation	155000**	Cu. Yds.
Granular Material Class II (C.I.P)	9210	Cu. Yds.

**Note - This Quantity includes all the Earth excavation for X06, 312, & 313 of 82123D.

MISCELLANEOUS QUANTITIES		
Item	Amount	Unit
Foundation Drain	7	Lin. Ft.
Temporary Steel Sheet Piling	2481	Sq. Ft.
8" Class B Sewer (TR. Det. 1)		Lin. Ft.

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
BUREAU OF HIGHWAYS AND EXPRESSWAYS

APPROVED _____ STRUCTURAL ENGINEER

JOB No. PW 990 (18)

REVISIONS

NO.	DESCRIPTION	DATE	BY

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

FULLERTON AVE. CROSSING THE JEFFRIES FREEWAY IN DETROIT

GENERAL PLAN OF STRUCTURE

CITY OF DETROIT

SQUAD BOSS	Locher	9-69
DRAWN BY	Hart&B	7-69
TRACED BY		
CHECKED BY	D Rowes	9-69

SHEET 3 OF 36

APPROVED _____ SUPERVISOR - DESIGN

APPROVED _____ ENGINEER - DESIGN SECTION I

S13 of 82123D

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				

ROUTE	STATE PROJECT	COUNTY	Twp.	SHEET NO.	TOTAL SHEETS
I-275	82293	Wayne	Plymouth	516	

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				

ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

For	Sheet No.
North & South Plan	515
North Profile	523
South Profile	526
Eckles Rd. Reloc. Profile	534

AUTH.	DATE	REVISION
CSR	5-10-67	FINAL R. O. W.

PRELIMINARY R.O.W. CHECKED	
FINAL DESIGN	
FINAL DESIGN CHECKED	
TRACED	
FINAL R.O.W. CHECK	
QUANTITIES	
QUANTITIES CHECKED	
SQUAD	Clock 1967

SURVEYED	Jon Davis	6-65
PLAN PLOTTED	P. Austin	12-66
PLAN CHECKED	J. Eggert	1-67
PROFILE PLOTTED	P. Austin	12-66
PROFILE CHECKED	J. Eggert	1-67
PRELIMINARY GRADE		
GRADE INSPECTION		
FEDERAL INSPECTION		

FILE NO. USE NO. 350 STENCIL	R 82293 D	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82293D		516