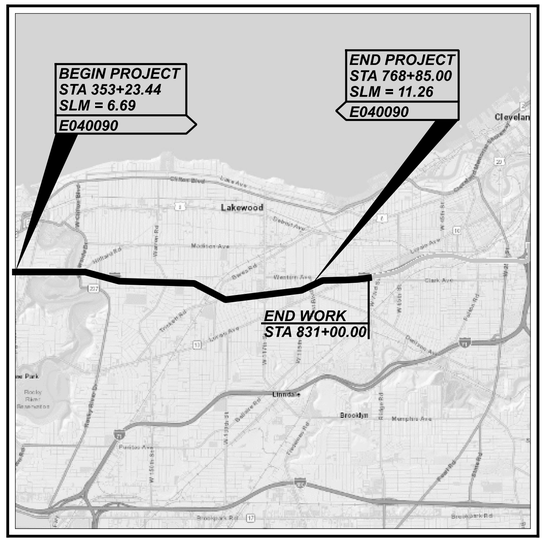
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CUY-90-6.69

CITIES OF CLEVELAND, LAKEWOOD & ROCKY RIVER

CUYAHOGA COUNTY



LOCATION MAP

LATITUDE: 41° 27' 28" LONGITUDE: 81° 46' 08"

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

SEE SHEET P.0002

DESIGN SPEED 60
LEGAL SPEED 60
DESIGN FUNCTIONAL CLASSIFICATION:
PRINCIPAL ARTERIAL INTERSTATE
NHS PROJECT YES

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATES	SHEET NUMBERS
SHOULDER WIDTH	03/03/23	409, 417, 419, 421, 425-429
SUPERELEVATION RATE	03/02/23	463
VERTICAL CLEARANCE	06/15/22	388, 391, 420, 422
HORIZONTAL CURVE RADIUS	03/02/23	454, 459, 463

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
AMERICAN STRUCTUREPOINT INC.
600 SUPERIOR AVE EAST, STE 1300
CLEVELAND, OH 44114
TEL 440.302.3694
www.structurepoint.com

INDEX OF SHEETS:

SEE SHEET P.0002

FEDERAL PROJECT NUMBER

E040090

RAILROAD INVOLVEMENT

GREATER CLEVELAND REGIONAL TRANSITY AUTHORITY
NORFOLK SOUTHERN RAILWAY (KEYSTONE DIV. MP CD-186.80)

PROJECT DESCRIPTION

FULL DEPTH PAVEMENT REPLACEMENT OF I-90 BETWEEN HILLIARD BOULEVARD AND WEST BOULEVARD, INCLUDING WIDENING OF THE INSIDE EASTBOUND SHOULDER TO ACCOMMODATE FUTURE BUS ON SHOULDER APPLICATION. ADDITIONAL WORK INCLUDES NEW DRAINAGE INFRASTRUCTURE, VERTICAL CLEARANCE IMPROVEMENTS, STRUCTURE REHABILITATIONS, AND NEW SIGNING AND PAVEMENT MARKINGS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 75.00 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 29.00 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 104.00 ACRES

THE TOTAL PROJECT EDA IS 222.00 ACRES, INCLUDING 147 ACRES EAST OF STA. 684+61, WHICH DRAINS TO A COMBINED SEWER. EXCLUDING THIS AREA, THE TOTAL PROJECT EDA TO BE TREATED WITH POST CONSTRUCTION BMPS IS 74.45 ACRES.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF INTERSTATE 90. SOME RAMPS WILL BE CLOSED AS NOTED WITHIN. PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

ENGINEER'S SEAL	ENGINEER'S SEAL	ENGINEER'S SEAL	ENGINEER'S SEAL
ROADWAY	LIGHTING/TRAFFIC CONTROL	BRIDGE/RETAINING WALLS 1348-1351,1360-1383,1410-1483	BRIDGE/RETAINING WALLS 1352-1359,1384-1409,1484-1501
STATE OF OHIO THOMAS J HIBBARD E-54971 PROFESSIONAL ENGINEER REGISTERED	STATE OF OHIO SEAN MILROY E-66150 PROFESSIONAL ENGINEER REGISTERED	STATE OF OHIO CHRISTOPHER D CUMMINGS E-68633 PROFESSIONAL ENGINEER REGISTERED	STATE OF OHIO JULIA A HART E-69738 PROFESSIONAL ENGINEER REGISTERED

STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL
FOR STANDARD CONSTRUCTION DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS, SEE SHEET P.0002.	

John Picuri, P.E., P.S.
District 12 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY: AMERICAN STRUCTUREPOINT INC.
DESIGNER: BER
REVIEWER: VDK 08/09/23
PROJECT ID: 76779
SHEET P.0001 TOTAL P.1587

CUY-90-6.69

MODEL: Title Sheet PAPERSIZE: 34x22 (in.) DATE: 2/14/2025 TIME: 11:59:29 AM USER: jsima
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DESIGN DESIGNATION

BEGIN MILE POST	END MILE POST	CURRENT ADT (2027)	DESIGN YEAR ADT (2047)	DESIGN HOURLY	DIRECTIONAL DISTRIBUTION	TRUCKS (24 HOUR B&C)
5.769	7.099	85,500	88,800	9,800	85%	7%
7.099	8.385	112,000	141,000	13,400	70%	3%
8.385	9.420	102,000	107,500	9,700	70%	6%
9.671	10.424	119,000	132,000	13,200	70%	6%
9.420	9.671	109,000	135,000	13,500	70%	5%
10.424	11.146	127,000	138,000	16,600	70%	6%
11.146	12.271	114000	125000	15,000	70%	6%
12.271	13.285	139000	156300	18,800	70%	6%
13.285	13.621	125000	143000	17,200	70%	6%
13.621	14.510	139000	155700	20,200	90%	6%
14.510	14.914	30500	41000	5,300	100%	8%

STANDARD CONSTRUCTION DRAWINGS

BP-2.1	1/21/22	DM-2.1	1/18/13	MGS-5.3	7/15/16	AS-1-15	1/20/23	HL-30.22	1/17/25			MT-95.71	7/21/23	MT-101.80	1/17/20	TC-41.20	10/18/13	TC-72.20	1/17/25
BP-2.2	1/15/21	DM-4.1	7/17/20	MGS-6.1	1/19/18	AS-2-15	7/21/23	HL-30.31	1/17/25			MT-95.72	7/19/24	MT-101.90	7/17/20	TC-41.30	4/21/23	TC-73.20	1/17/25
BP-2.4	7/19/13					EXJ-4-87	1/19/24	HL-30.41	1/17/25			MT-95.73	7/19/24	MT-102.10	7/21/23	TC-41.40	10/18/13	TC-74.10	7/21/23
BP-3.1	1/19/24	I-2	7/19/24	MH-1	7/15/22	GSD-1-19	7/19/24	HL-40.20	1/17/25	ITS-14.10	1/17/25	MT-95.82	7/19/13	MT-102.20	4/19/19	TC-41.41	7/19/19	TC-81.22	1/17/25
BP-5.1	1/17/25	I-2A	7/19/24	MH-2	7/19/24	PCB-91	7/17/20	HL-50.21	7/15/22	ITS-14.11	1/17/25	MT-97.10	4/19/19	MT-102.30	10/16/15	TC-41.50	10/18/13	TC-82.10	1/17/25
BP-6.1	7/19/13	I-3B, 3B1	1/17/25	MH-3	7/19/24	RB-1-55	7/19/24	HL-60.11	7/21/17	ITS-14.50	1/17/25	MT-97.12	1/20/17	MT-103.10	1/21/22	TC-42.10	10/18/13	TC-83.10	1/17/20
BP-7.1	1/17/25	I-3C, 3C1	1/17/25	MH-4	7/16/21	SBR-1-20	7/19/24	HL-60.31	7/19/24	ITS-14.60	1/17/25	MT-98.10	1/17/20	MT-104.10	1/19/24	TC-42.20	10/18/13	TC-83.20	7/19/24
BP-9.1	1/18/19	I-3D	7/19/24	MH-5	7/19/24	SBR-2-20	7/19/24					MT-98.11	1/17/20	MT-105.10	1/17/20	TC-51.11	1/15/16	TC-84.20	1/19/24
						SICD-1-21	1/19/24					MT-98.22	1/17/20	MT-110.10	7/19/13	TC-51.12	1/15/16	TC-85.10	1/19/24
CB-1	7/19/24	F-1.1	7/19/13	RM-3.1	7/20/18	SICD-2-14	1/15/21					MT-98.28	1/17/20			TC-52.10	10/18/13	TC-85.20	4/21/23
CB-2-2A, 2B, 2C	7/19/24	F-3.1	7/19/13	RM-4.1	1/17/20	VPF-1-90	7/19/24			MT-95.30	7/19/19	MT-98.29	1/17/20	TC-12.31	4/15/22	TC-52.20	1/15/21		
CB-2-3, 2-4	7/19/24	F-3.3	7/19/13	RM-4.2	7/19/24					MT-95.31	7/19/19	MT-98.30	7/16/21	TC-15.116	1/19/24	TC-61.10	4/21/23		
CB-3	7/19/24	F-3.4	7/19/13	RM-4.3	1/17/25	HL-10.11	7/21/23			MT-95.32	4/19/19	MT-99.20	4/19/19	TC-21.11	7/16/21	TC-61.30	7/19/24		
CB-3A	7/19/24			RM-4.4	1/17/25	HL-10.12	7/21/23			MT-95.40	7/21/23	MT-99.30	1/17/20	TC-21.21	1/20/23	TC-65.10	1/17/14		
CB-4	7/19/24	MGS-1.1	1/17/25	RM-4.5	1/17/25	HL-10.13	1/20/23			MT-95.41	7/21/23	MT-99.50	7/21/23	TC-21.50	1/17/25	TC-65.11	1/17/25		
CB-5	7/19/24	MGS-2.1	1/17/25	RM-4.5M	6/30/95	HL-20.11	7/21/23			MT-95.45	7/21/23	MT-100.00	1/19/24	TC-22.10	1/17/25	TC-71.10	4/21/23		
		MGS-3.1	1/19/18	RM-4.6	7/19/24	HL-20.13	1/17/25			MT-95.70	7/21/23	MT-101.60	1/17/25	TC-41.10	7/19/13				
DM-1.1	1/17/25	MGS-3.2	1/18/13	RM-5.2	7/21/23	HL-30.11	7/21/23					MT-101.70	7/19/24						
DM-1.2	1/17/25	MGS-4.2	1/17/25			HL-30.21	4/17/20					MT-101.75	7/21/23						

CITY OF CLEVELAND STANDARD DRAWINGS & SPECIFICATIONS

CB-1	7/8/08

SUPPLEMENTAL SPECIFICATIONS

800	1/17/25	866	4/21/17
807	1/17/25	873	4/16/21
808	7/19/24	878	1/21/22
809	1/17/25	896	7/21/17
816	10/18/19	904	7/15/22
821	4/20/12	907	10/18/19
829	1/20/17	908	1/17/25
832	7/19/24	909	1/17/25
840	1/17/25	921	7/19/24
848	7/19/24	929	7/21/23
850	7/21/23	996	7/21/23

SPECIAL PROVISIONS

INDEX OF SHEETS / DESIGN DESIGNATION

DESIGN AGENCY
STRUCTUREPOINT LLC

DESIGNER BER
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0002 TOTAL P.1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/5/2025 TIME: 9:43:08 AM USER: jsima
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13 STA STA 83+10.00, ℄ CONST RAMP MC = STA 583+10, 61.00' LT, ℄ CONST IR 90

14 STA 15+77.03, ℄ CONST RIVERSIDE DR = STA 583+82.38, ℄ CONST IR 90

15 STA 16+40.13, ℄ CONST RIVERSIDE DR = STA 83+87.02, ℄ CONST RAMP MC

16 STA 86+93.07, ℄ CONST RAMP MD = STA 586+93.07, 73.00' RT, ℄ CONST IR 90

17 STA 142+15.42, ℄ CONST HILLIARD RD = STA 88+41.24, ℄ CONST RAMP MD

18 STA 143+11.17, ℄ CONST HILLIARD RD = STA 589+00.40, ℄ CONST IR 90

19 STA 144+05.14, ℄ CONST HILLIARD RD = STA 89+64.10, ℄ CONST RAMP MC

20 STA 101+71.95, ℄ CONST RAMP MC = STA 1+61.37, ℄ CONST RAMP MF = STA 13+72.51, ℄ CONST MCKINLEY AVE

21 STA 11+99.41, ℄ CONST MCKINLEY AVE = STA 601+96.62, ℄ CONST IR 90

22 STA 10+20.96, ℄ CONST MCKINLEY AVE = STA 2+21.52, ℄ CONST RAMP ME

23 STA 9+56.40, ℄ CONST WOODWARD AVE = STA 14+65.47, ℄ CONST RAMP MF

24 STA 8+73.32, ℄ CONST WOODWARD AVE = STA 614+73.70, ℄ CONST IR 90

25 STA 7+92.35, ℄ CONST WOODWARD AVE = STA 14+74.57, ℄ CONST RAMP ME

26 STA 17+27.88, ℄ CONST RAMP MF = STA 617+27.88, 73.00' LT, ℄ CONST IR 90

27 STA 17+55.81, ℄ CONST RAMP ME = STA 617+60.00, 73.00' RT, ℄ CONST IR 90

28 STA 47+35.31, ℄ CONST W 159TH ST = STA 620+93.04, ℄ CONST IR 90

29 STA 24+33.17, ℄ CONST RAMP W2 = STA 624+33.17, 71.50' RT, ℄ CONST IR 90

A PC STA 583+76.86, ℄ CONST IR 90

B PT STA 595+47.31, ℄ CONST RAMP HB

C PC STA 608+95.40, ℄CONST IR 90

D PCC STA 617+16.30, ℄ CONST IR 90

E PC STA 83+76.88, ℄ CONST RAMP MC

F PT STA 92+56.13, ℄ CONST RAMP MC

G PT STA 90+54.99, ℄ CONST RAMP MD

H PC STA 96+70.47, ℄ CONST RAMP MD

I PT STA 98+65.79, ℄ CONST RAMP MD

J POT STA 102+20.96, ℄ CONST RAMP MD

K PC STA 9+07.54, ℄ CONST RAMP ME

L PT STA 10+55.88, ℄ CONST RAMP ME

M PC STA 12+50.48, ℄ CONST RAMP ME

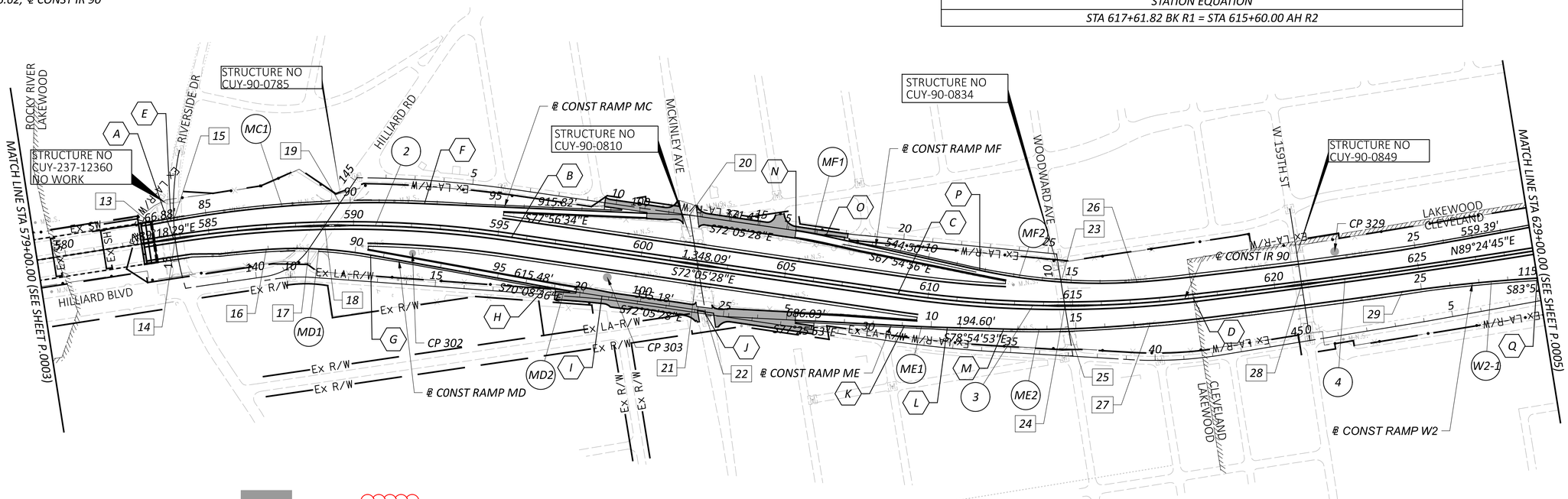
N PC STA 5+32.80, ℄ CONST RAMP MF

O PT STA 6+37.19, ℄ CONST RAMP MF

P PC STA 11+81.70, ℄ CONST RAMP MF

Q PT STA 29+00.73, ℄ CONST RAMP W2

STATION OVERLAP AREA	
REGION 1	REGION 2
STA 615+60.00 R1 TO STA 617+61.82 BK R1	STA 615+60.00 R2 TO STA 617+61.82 BK R2
STATION EQUATION	
STA 617+61.82 BK R1 = STA 615+60.00 AH R2	



2 CURVE DATA IR 90
P.I. = STA 589+66.50
Δ = 17°10'00" RT
Dc = 01°28'00"
R = 3,906.53'
T = 589.64'
L = 1,170.45'
E = 44.25'
Emax = 0.036
PC STA 583+76.86
PT STA 595+47.31

3 CURVE DATA IR 90
P.I. = STA 614+09.70
Δ = 15°00'00" LT
Dc = 01°28'00"
R = 3,906.53'
T = 514.30'
L = 1,022.72'
E = 33.71'
Emax = 0.036
PC STA 608+95.40
PCC STA 617+16.30

4 CURVE DATA IR 90
P.I. = STA 623+63.66
Δ = 02°38'45" LT
Dc = 00°12'16"
R = 28,032.38'
T = 647.36'
L = 1,294.49'
E = 7.47'
Emax = NC
PCC STA 617+16.30
PT STA 630+10.79

MF1 CURVE DATA RAMP F
P.I. = STA 5+85.02
Δ = 04°10'33" RT
Dc = 04°00'00"
R = 1,432.39'
T = 52.22'
L = 104.39'
E = .95'
Emax = 0.028
PC STA 5+32.80
PT STA 6+37.19

MF2 CURVE DATA RAMP F
P.I. = STA 14+56.67
Δ = 16°23'08" LT
Dc = 03°00'00"
R = 1,909.86'
T = 274.97'
L = 546.18'
E = 19.69'
Emax = 0.045
PC STA 11+81.70
PT STA 17+27.88

ME1 CURVE DATA RAMP E
P.I. = STA 9+81.71
Δ = 01°29'00" LT
Dc = 01°00'00"
R = 5,729.58'
T = 74.17'
L = 148.33'
E = 0.48'
Emax = 0.020
PC STA 9+07.54
PT STA 10+55.88

ME2 CURVE DATA RAMP E
P.I. = STA 15+03.49
Δ = 07°19'38" LT
Dc = 01°27'00"
R = 3,951.43'
T = 253.01'
L = 505.33'
E = 8.09'
Emax = 0.036
PC STA 12+50.48
PT STA 17+55.81

MC1 CURVE DATA RAMP C
P.I. = STA 88+18.33
Δ = 12°44'57" RT
Dc = 01°27'00"
R = 3,951.43'
T = 441.45'
L = 879.25'
E = 24.58'
Emax = 0.036
PC STA 83+76.88
PT STA 92+56.13

MD1 CURVE DATA RAMP D
P.I. = STA 88+75.00
Δ = 14°28'36" RT
Dc = 04°00'00"
R = 1,432.39'
T = 181.93'
L = 361.92'
E = 11.51'
Emax = 0.052
PC STA 86+93.07
PT STA 90+54.99

MD2 CURVE DATA RAMP D
P.I. = STA 97+68.14
Δ = 01°56'52" LT
Dc = 00°59'50"
R = 5,745.58'
T = 97.67'
L = 195.32'
E = 0.83'
Emax = NC
PC STA 96+70.47
PT STA 98+65.79

W2-1 CURVE DATA RAMP W2
P.I. = STA 26+67.08
Δ = 04°40'32" RT
Dc = 01°00'00"
R = 5,729.58'
T = 233.91'
L = 467.56'
E = 4.77'
Emax = 0.020
PC STA 24+33.17
PT STA 29+00.73

HORIZONTAL SCALE IN FEET
0 100 200 400

SCHEMATIC PLAN
STA 579+00.00 TO STA 629+00.00

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER	CFA
REVIEWER	VDK 08/09/23
PROJECT ID	76779
SHEET	P.0004
TOTAL	P.1587

CUY-90-6.69

MODEL: 76779_GB002 PAPERSIZE: 34x22 (in.) DATE: 1/6/2025 TIME: 7:41:54 PM USER: jslma
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30 STA 33+29.05, ℄ CONST IR 90 EB = STA 633+29.05, 59.50' RT, ℄ CONST IR 90

31 STA 24+51.26, ℄ CONST RAMP W1 = STA 624+50.00, 71.50' LT, ℄ CONST IR 90

32 STA 40+00.48, ℄ CONST IR 90 WB = STA 640+.00.48, 71.50' LT, ℄ CONST IR 90

33 STA 46+81.96, ℄ CONST ALGER RD = STA 43+55.48, ℄ CONST IR 90 EB

34 STA 47+83.17, ℄ CONST ALGER RD = STA 643+55.22, ℄ CONST IR 90

35 STA 48+58.82, ℄ CONST ALGER RD = STA 43+55.89, ℄ CONST IR 90 WB

36 STA 49+44.69, ℄ CONST ALGER RD = STA 43+58.99, ℄ CONST RAMP W1

37 STA 74+26.71, ℄ CONST WARREN RD = STA 52+63.44, ℄ CONST IR 90 EB

38 STA 75+57.02, ℄ CONST WARREN RD = STA 652+59.28, ℄ CONST IR 90

39 STA 76+47.97, ℄ CONST WARREN RD = STA 52+47.25, ℄ CONST IR 90 WB

40 STA 54+45.37, ℄ CONST IR 90 WB = STA 54+45.37, 48.00' LT, ℄ CONST IR 90 WB

41 STA 54+45.37, ℄ CONST IR 90 WB = STA 54+654+45.98, 45.31' LT, ℄ CONST IR 90

42 STA 65+73.91, ℄ CONST RAMP W2A = STA 65+73.91, 25.00' RT, ℄ CONST IR 90 EB

43 STA 67+17.41, ℄ CONST IR 90 WB = STA 667+15.40, 35.00' LT, ℄ CONST IR 90

44 STA 70+29.73, ℄ CONST RAMP W1A = STA 670+29.73, 95.00' LT, ℄ CONST IR 90 WB

45 STA 45+70.53, ℄ CONST W 140TH ST = STA 72+19.97, ℄ CONST RAMP 140-3

46 STA 43+58.28, ℄ CONST W 140TH ST = STA 673+17.29, ℄ CONST IR 90

47 STA 42+66.87, ℄ CONST W 140TH ST = STA 73+14.45, ℄ CONST IR 90 EB

48 STA 76+98.67, ℄ CONST IR 90 EB = STA 677+29.01, 83.00' RT, ℄ CONST IR 90

A PT STA 630+10.79, ℄ CONST IR 90

B PCC STA 664+67.97, ℄ CONST IR 90

C PT STA 41+86.19, ℄ CONST IR 90 EB

D PT STA 43+42.22, ℄ CONST IR 90 EB

E PT STA 51+99.26, ℄ CONST IR 90 EB

F TS STA 65+73.91, ℄ CONST IR 90 EB

G SC STA 69+73.91, ℄ CONST IR 90 EB

H PT STA 41+99.51, ℄ CONST IR 90 WB

I PC STA 57+40.73, ℄ CONST IR 90 WB

J POT STA 55+29.66, ℄ CONST RAMP W1A

K PT STA 63+93.84, ℄ CONST RAMP W1A

L POT STA 55+03.92, ℄ CONST RAMP W2A

M PT STA 56+88.36, ℄ CONST RAMP W2A

N PC STA 63+46.94, ℄ CONST RAMP W2A

O POT STA 73+94.73, ℄ CONST RAMP 140-4 = POT STA 41+56.94, ℄ CONST W 140TH ST

P PC STA 77+96.98, ℄ CONST RAMP 140-4

Q PC STA 30+16.53, ℄ CONST RAMP W2

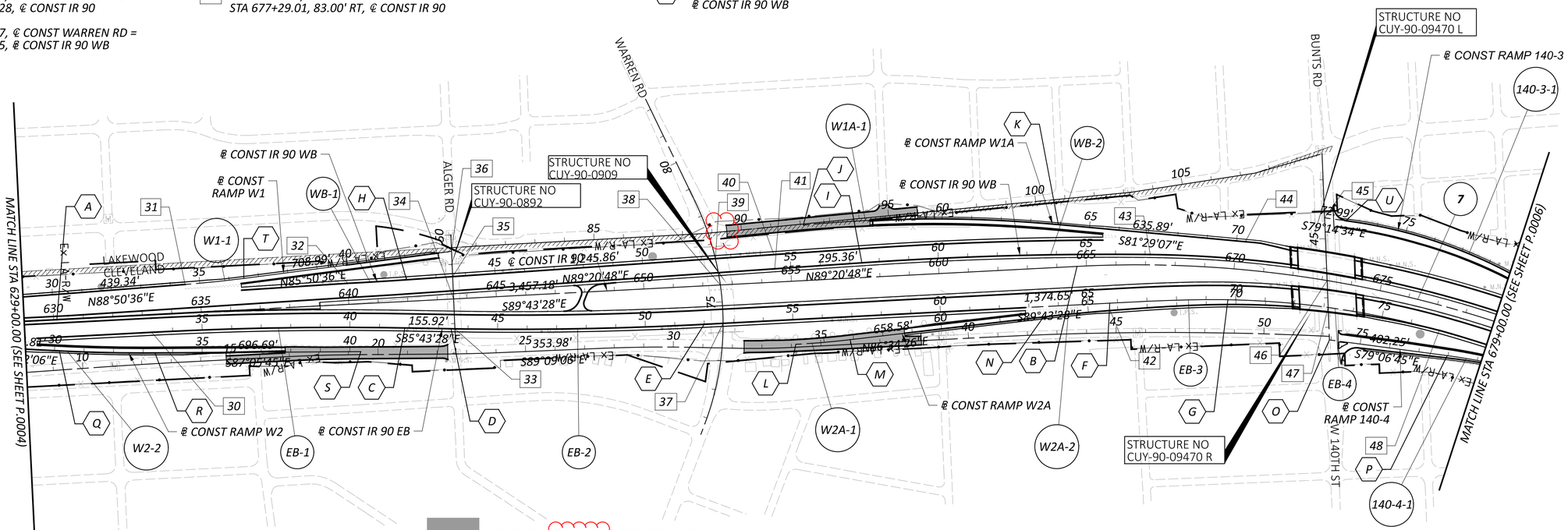
R PT STA 33+40.18, ℄ CONST RAMP W2

S POT STA 40+36.87, ℄ CONST RAMP W2

T PT STA 36+50.00, ℄ CONST RAMP W1

U PC STA 72+92.96, ℄ CONST RAMP 140-3

HORIZONTAL SCALE IN FEET
0 100 200 400



- PAVEMENT PLANING & RESURFACING

W2-2 CURVE DATA RAMP W2
P.I. = STA 31+78.40
Δ = 03°13'39" LT
Dc = 00°59'50"
R = 5,745.58'
T = 161.87'
L = 323.65'
E = 2.28'
Emax = 0.017
PC STA 30+16.53
PT STA 33+40.18

W1-1 CURVE DATA RAMP W1
P.I. = STA 35+50.02
Δ = 03°00'00" LT
Dc = 01°30'00"
R = 3,819.72'
T = 100.02'
L = 200.00'
E = 1.31'
Emax = 0.028
PC STA 34+00.00
PT STA 36+50.00

W1A-1 CURVE DATA RAMP 1A
P.I. = STA 59+63.03
Δ = 10°45'53" RT
Dc = 01°14'44"
R = 4,599.66'
T = 433.37'
L = 864.18'
E = 20.37'
Emax = 0.016
PC STA 55+29.66
PT STA 63+93.84

EB-1 CURVE DATA IR 90 EB
P.I. = STA 37+57.80
Δ = 04°00'00" RT
Dc = 00°28'00"
R = 12,277.67'
T = 428.75'
L = 857.14'
E = 7.48'
Emax = NC
PC STA 33+29.05
PT STA 41+86.19

EB-2 CURVE DATA IR 90 EB
P.I. = STA 47+70.86
Δ = 04°00'00" LT
Dc = 00°28'00"
R = 12,277.67'
T = 428.75'
L = 857.14'
E = 7.48'
Emax = NC
PC STA 43+42.12
PT STA 51+99.26

EB-3 CURVE DATA IR 90 EB
P.I. = STA 68+40.65
Ls = 400.00'
ϑs = 04°00'00"
LT = 266.73'
ST = 133.40'
x = 399.81'
y = 9.31'
k = 199.97'
p = 2.33'
C = 399.91'
Emax = 0.047
TS STA 65+73.91
SC STA 69+73.91
C.B. = S88°23'29"E

EB-4 CURVE DATA IR 90 EB
P.I. = STA 73+38.24
Δ = 14°29'43" RT
Dc = 02°00'00"
R = 2,864.79'
T = 364.33'
L = 724.76'
E = 23.07'
Emax = 0.047
SC STA 69+73.91
PC STA 76+98.67

W2A-1 CURVE DATA RAMP 2A
P.I. = STA 55+96.17
Δ = 03°42'06" LT
Dc = 02°00'25"
R = 2,854.79'
T = 92.25'
L = 184.44'
E = 1.49'
Emax = 0.016
POT STA 55+03.92
PT STA 56+88.36

W2A-2 CURVE DATA RAMP 2A
P.I. = STA 64+60.44
Δ = 02°16'11" RT
Dc = 01°00'00"
R = 5,729.58'
T = 113.5'
L = 226.97'
E = 1.12'
Emax = 0.020
PC STA 63+46.94
PT STA 65+73.91

140-3-1 CURVE DATA RAMP 140-3
P.I. = STA 76+19.19
Δ = 22°32'28" RT
Dc = 03°30'00"
R = 1,637.02'
T = 326.23'
L = 644.03'
E = 32.19'
Emax = 0.026
PC STA 72+92.96
PT STA 78+36.98

140-4-1 CURVE DATA RAMP 140-4
P.I. = STA 80+91.85
Δ = 16°19'39" RT
Dc = 02°47'15"
R = 2,055.52'
T = 294.88'
L = 585.76'
E = 21.04'
Emax = 0.045
PC STA 77+96.98
PT STA 83+82.74

WB-1 CURVE DATA IR 90 WB
P.I. = STA 41+00.00
Δ = 00°55'44" LT
Dc = 00°28'00"
R = 12,277.67'
T = 99.52'
L = 199.03'
E = 0.40'
Emax = NC
PT STA 41+99.51
PT STA 40+00.48

WB-2 CURVE DATA IR 90 WB
P.I. = STA 62+29.33
Δ = 04°33'28" RT
Dc = 00°28'00"
R = 12,277.67'
T = 488.6'
L = 976.68'
E = 9.72'
Emax = NC
PC STA 57+40.73
PT STA 67+17.41

7 CURVE DATA IR 90
PI = STA 674+45.06
Δ = 28°05'07" RT
Dc = 01°28'00"
R = 3,906.53'
T = 977.1'
L = 1,914.91'
E = 120.34'
Emax= 0.036
PC STA 664+67.97
PT STA 683+82.87

SCHEMATIC PLAN
STA 629+00.00 TO STA 679+00.00

DESIGN AGENCY
STRUCTUREPOINT LLC

DESIGNER CFA
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0005 TOTAL P.1587

CUY-90-6.69

MODEL: 76779_GB003 PAPERSIZE: 34x22 (in.) DATE: 1/16/2025 TIME: 7:43:54 PM USER: Jsima
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A — PC STA 757+06.97 ℄ CONST IR 90

B — PT STA 769+68.34 ℄ CONST IR 90

C — TS STA 775+57.77 ℄ CONST IR 90

D — PCC STA 32+68.23 ℄ CONST RAMP 117-5

E — POT STA 36+00.00 ℄ CONST RAMP 117-5

F — PC STA 30+27.46 ℄ CONST RAMP 117-8

G — PT STA 31+81.54 ℄ CONST RAMP 117-8

H — CS STA 29+80.51 ℄ CONST RAMP 117-7

I — PT STA 31+59.30 ℄ CONST RAMP 117-9

J — CS STA 29+80.51 ℄ CONST RAMP 117-9

K — PCC STA 38+33.73 ℄ CONST RAMP 117-9

L — SC STA 36+79.81 ℄ CONST RAMP 117-11

M — PC STA 35+16.41 ℄ CONST RAMP 117-12

N — PT STA 36+25.25 ℄ CONST RAMP 117-12

O — PC STA 37+75.26 ℄ CONST RAMP 117-12

P — PCC STA 40+04.93 ℄ CONST RAMP 117-12

Q — PCC STA 42+77.50 ℄ CONST RAMP 117-12

R — PT STA 66+24.87 ℄ CONST RAMP W13

S — PC STA 69+11.09 ℄ CONST RAMP W13

T — PT STA 66+12.25 ℄ CONST RAMP W14

57 — STA 34+84.86, ℄ CONST RAMP 117-5 = STA 53+75, 54.00' LT, ℄ CONST W 117TH ST

58 — STA 54+21.47, ℄ CONST W 117TH ST = STA 33+23.64, ℄ CONST RAMP 117-12

59 — STA 42+52.48, ℄ CONST RAMP 117-11 = STA 52+20.55, 42.00' RT, ℄ CONST W 117TH ST

60 — STA 34+79.81, ℄ CONST RAMP 117-11 = STA 734+79.81, 108.00' LT, ℄ CONST IR 90

61 — STA 31+80.51, ℄ CONST RAMP 117-7 = STA 731+80.51, 112.00' RT, ℄ CONST IR 90

62 — STA 49+22.24, ℄ CONST W 117TH ST = STA 733+45.21, ℄ CONST IR 90

63 — STA 22+90.62, ℄ CONST RAMP 117-7 = STA 45+91.62, 42.00' LT, ℄ CONST W 117TH ST

64 — STA 43+72.95, ℄ CONST W 117TH ST = STA 34+04.10, ℄ CONST RAMP 117-8

65 — STA 30+57.77, ℄ CONST RAMP 117-9 = STA 42+54.20, 42.00' RT, ℄ CONST W 117TH ST

66 — STA 41+69.57, ℄ CONST RAMP 117-9 = STA 741+71.61, 112.08' RT, ℄ CONST IR 90

67 — STA 48+65.94, ℄ CONST W 114TH ST PED BRIDGE = STA 43+53.13, ℄ CONST RAMP 117-12

68 — STA 50+00.00, ℄ CONST W 114TH ST PED BRIDGE = STA 743+55.00, ℄ CONST IR 90

69 — STA 48+99.87, ℄ CONST RAMP 117-12 = STA 748+99.87, 95.00' LT, ℄ CONST IR 90

70 — STA 46+77.70, ℄ CONST W 110TH ST = STA 750+37.04, ℄ CONST IR 90

71 — STA 56+56.44, ℄ CONST RAMP W14 = STA 756+56.44, 99.00' RT, ℄ CONST IR 90

72 — STA 48+73.85, ℄ CONST W 106TH ST = STA 758+63.75, ℄ CONST IR 90

73 — STA 47+72.59, ℄ CONST W 106TH ST = STA 58+51.42, ℄ CONST RAMP W14

74 — STA 63+74.87, ℄ CONST RAMP W13 = STA 763+74.87, 108.00' LT, ℄ CONST IR 90

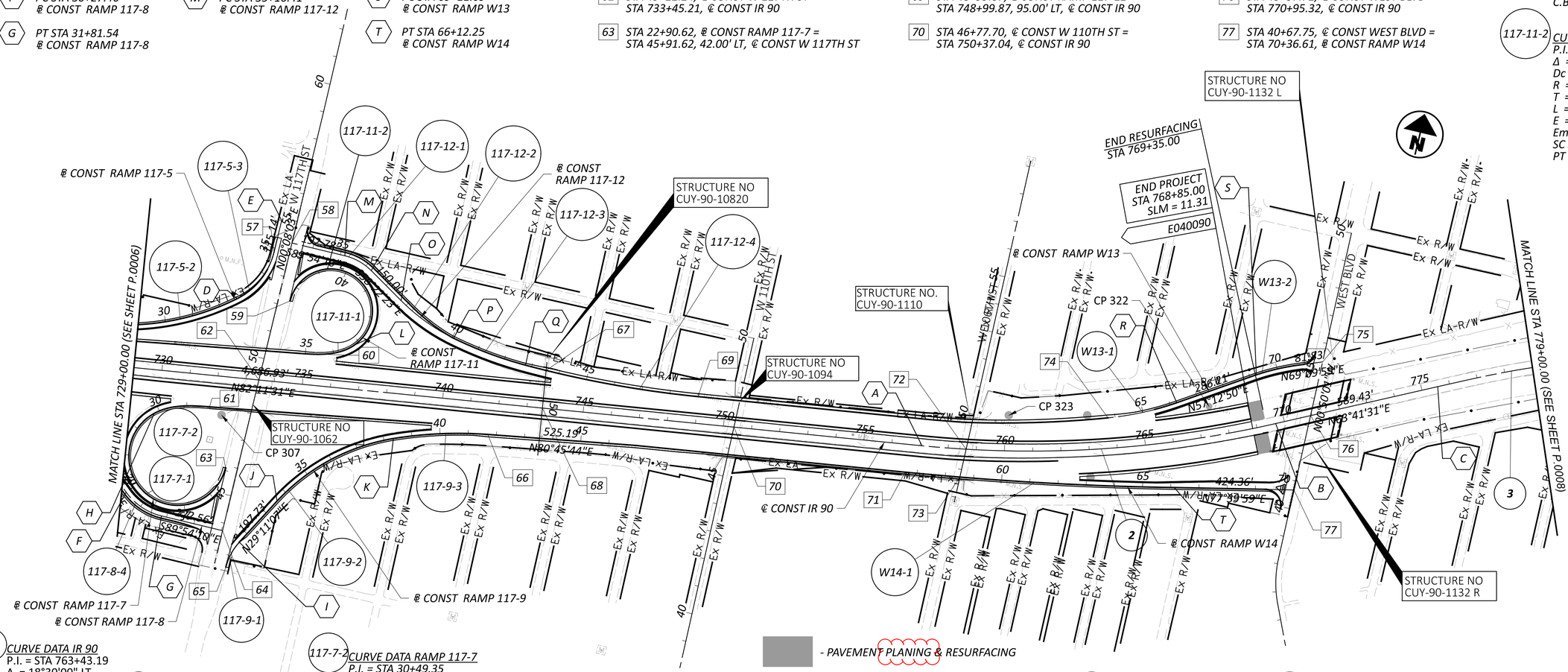
75 — STA 45+32.66, ℄ CONST WEST BLVD = STA 71+63.67, ℄ CONST RAMP W13

76 — STA 43+37.71, ℄ CONST WEST BLVD = STA 770+95.32, ℄ CONST IR 90

77 — STA 40+67.75, ℄ CONST WEST BLVD = STA 70+36.61, ℄ CONST RAMP W14

117-11-1 CURVE DATA 117-11
P.I. = STA 36+16.48
Ls = 200.00'
ϑs = 38°45'00"
LT = 136.67'
ST = 69.71'
x = 191.04'
y = 43.64'
k = 98.49'
p = 11.09'
C = 195.96'
Emax = 0.060
POT STA 34+79.81
SC STA 36+79.81
C.B. = N67°53'38"E

117-11-2 CURVE DATA 117-11
P.I. = STA 40+65.88
Δ = 221°54'45" LT
Dc = 38°45'00"
R = 147.86'
T = 386.07'
L = 572.68'
E = 265.55'
Emax = 0.060
SC STA 36+79.81
PT STA 42+52.49



2 CURVE DATA IR 90
P.I. = STA 763+43.19
Δ = 18°30'00" LT
Dc = 01°28'00"
R = 3,906.53'
T = 636.22'
L = 1,261.36'
E = 51.47'
Emax = 0.036
PC STA 757+06.97
PT STA 769+68.34

3 SPIRAL DATA IR 90
P.I. = STA C 778+24.59
Ls = 400.00'
ϑs = 06°00'00"
LT = 266.82'
ST = 133.47'
x = 399.56'
y = 13.95'
k = 199.93'
p = 3.49'
C = 399.81'
Emax = 0.053
TS STA 775+57.77
ST STA 779+57.77
C.B. = N65°41'30"E

117-7-1 CURVE DATA RAMP 117-7
P.I. = STA 26+83.69
Δ = 227°39'46" RT
Dc = 33°00'00"
R = 173.62'
T = 393.07'
L = 689.89'
E = 256.09'
Emax = 0.059
PC STA 22+90.62
CS STA 29+80.51

117-7-2 CURVE DATA RAMP 117-7
P.I. = STA 30+49.35
Ls = 200.00'
ϑs = 33°00'00"
LT = 135.73'
ST = 68.85'
x = 182.68'
y = 73.92'
k = 98.90'
p = 9.49'
C = 197.07'
Emax = 0.059
CS STA 29+80.51
ST STA 31+80.51
C.B. = N69°47'27"E

117-8-4 CURVE DATA RAMP 117-8
P.I. = STA 31+07.91
Δ = 40°40'22" LT
Dc = 26°23'51"
R = 217.05'
T = 80.45'
L = 154.08'
E = 14.43'
Emax = 0.057
PC STA 30+28.12
PT STA 31+82.20

W13-1 CURVE DATA 13
P.I. = STA 65+00.48
Δ = 13°45'00" LT
Dc = 05°30'00"
R = 1,041.74'
T = 125.60'
L = 250.00'
E = 7.54'
Emax = 0.058
PC STA 63+74.87
PT STA 66+24.87

W13-2 CURVE DATA 13
P.I. = STA 69+96.77
Δ = 11°57'09" RT
Dc = 07°00'00"
R = 818.51'
T = 85.69'
L = 170.75'
E = 4.47'
Emax = 0.039
PC STA 69+11.09
PT STA 70+81.84

117-5-2 CURVE DATA RAMP 117-5
P.I. = STA 30+80.23
Δ = 24°50'11" LT
Dc = 06°30'00"
R = 881.47'
T = 194.10'
L = 382.10'
E = 21.12'
Emax = 0.055
PC STA 28+86.13
PCC STA 32+68.23

117-5-3 CURVE DATA RAMP 117-5
P.I. = STA 33+83.93
Δ = 49°49'34" LT
Dc = 23°00'00"
R = 249.11'
T = 115.70'
L = 216.64'
E = 25.56'
Emax = 0.06
PCC STA 32+68.23
PT STA 34+84.86

117-9-1 CURVE DATA 117-9
P.I. = STA 31+09.65
Δ = 29°05'17" LT
Dc = 28°38'52"
R = 200.00'
T = 51.89'
L = 101.54'
E = 6.62'
Emax = 0.016
PCC STA 30+57.77
PT STA 31+59.30

117-9-2 CURVE DATA RAMP 117-9
P.I. = STA 36+04.59
Δ = 38°08'09" RT
Dc = 08°00'00"
R = 716.20'
T = 247.56'
L = 476.70'
E = 41.58'
Emax = 0.060
PC STA 33+57.03
PCC STA 38+33.73

117-9-3 CURVE DATA RAMP 117-9
P.I. = STA 40+02.43
Δ = 13°26'01" RT
Dc = 04°00'00"
R = 1,432.39'
T = 168.70'
L = 335.84'
E = 9.90'
Emax = 0.052
PCC STA 38+33.73
PT STA 41+69.57

W14-1 CURVE DATA RAMP W14
P.I. = STA 61+34.62
Δ = 04°46'45" LT
Dc = 00°30'00"
R = 11,459.16'
T = 478.18'
L = 955.81'
E = 9.97'
Emax = 0.02
PC STA 56+56.44
PT STA 66+12.25

117-12-1 CURVE DATA 117-12
P.I. = STA 35+72.25
Δ = 31°31'47" RT
Dc = 28°58'10"
R = 197.78'
T = 55.84'
L = 108.84'
E = 7.73'
Emax = 0.02
PC STA 35+16.41
PT STA 36+25.25

117-12-2 CURVE DATA 117-12
P.I. = STA 38+91.16
Δ = 19°00'39" LT
Dc = 08°16'39"
R = 692.20'
T = 115.90'
L = 229.67'
E = 9.64'
Emax = 0.056
PC STA 37+75.26
PCC STA 40+04.93

117-12-3 CURVE DATA 12
P.I. = STA 41+41.64
Δ = 11°05'19" LT
Dc = 04°04'05"
R = 1,408.39'
T = 136.71'
L = 272.57'
E = 6.62'
Emax = 0.046
PCC STA 40+04.93
PCC STA 42+77.50

117-12-4 CURVE DATA 117-12
P.I. = STA 45+89.38
Δ = 09°20'08" LT
Dc = 01°30'00"
R = 3,819.72'
T = 311.88'
L = 622.37'
E = 12.71'
Emax = 0.028
PCC STA 42+77.50
PT STA 48+99.87

HORIZONTAL SCALE IN FEET
0 100 200 400

SCHEMATIC PLAN STA 729+00.00 TO STA 779+00.00

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER CFA
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0007 TOTAL P.1587

CUY-90-6.69

MODEL: 76779_GB005 PAPERSIZE: 34x22 (in.) DATE: 1/20/2025 TIME: 9:43:41 AM USER: jslma
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EXISTING LEGEND

A ASPHALT OVERLAY (THICKNESS VARIES; 2.5"-4.5")

BEGIN PROJECT TO STA 684+34.85: 3" TYPICAL (VARIES 2.5" TO 4.5")
STA 684+34.85 TO STA 768+85.00: 3.75" TYPICAL (VARIES 2.5" TO 4.5")

B 10" REINFORCED CONCRETE BASE

C SUBBASE: *4" TYPICAL (VARIES 2.75" TO 7")*

D EXISTING GUARDRAIL

E EXISTING CONCRETE BARRIER

F 9" REINFORCED CONCRETE PAVEMENT

G EXISTING CURB

PROPOSED LEGEND

1 ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), AS PER PLAN, PG 76-22M

2 ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)

3 ITEM 302 - 8.5" ASPHALT CONCRETE BASE, PG64-22, (449), AS PER PLAN, 25.0 MM GYRATORY MIX (TO BE PLACED IN 2 - 4.25" LIFTS)

4 ITEM 304 - 6" AGGREGATE BASE

5 ITEM 407 - TACK COAT

6 ITEM 204 - PROOF ROLLING

7 ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC

8 SUBGRADE TREATMENT, SEE GENERAL NOTES

9 ITEM 452 - 11.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA

10 ITEM 609 - CURB, TYPE 4-C

11 ITEM 609 - CURB, TYPE 4-A

12 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1, AS PER PLAN

13 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN

14 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D

15 ITEM 659 - SEEDING AND MULCHING

16 ITEM 606 - GUARDRAIL, TYPE MGS

17 ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15"), AS PER PLAN

18 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5")

19 ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN

20 ITEM 601 - CONCRETE SLOPE PROTECTION

21 ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN

22 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN

23 ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M

24 ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, VARIABLE, PG 76-22M

25 ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN

26 ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN

27 ITEM 609 - 4" CONCRETE TRAFFIC ISLAND

28 ITEM 622 - CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN

CJ CONSTRUCTION JOINT, CONSTRUCTED AS PER AS-2-15

LJ LONGITUDINAL JOINT, CONSTRUCTED AS PER BP-2.1

NOTES:
1. GRADING ON THE TYPICAL SECTIONS IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL CONSTRUCT THE PROPOSED GRADING PER THE CROSS SECTIONS.

TYPICAL SECTION LEGEND

CUY-90-6.69

MODEL: TYPICAL SECTION LEGEND PAPERSIZE: 34x22 (in.) DATE: 1/24/2025 TIME: 2:48:15 PM USER: jsima
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DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER
BER

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0015 TOTAL P.1587

DRAINAGE (CONTINUED)

ITEM 611 - CONDUIT BORED OR JACKED

WHERE IT IS SPECIFIED THAT A CONDUIT BE INSTALLED BY THE METHOD OF BORING OR JACKING, NO TRENCH EXCAVATION SHALL BE CLOSER THAN 6 FEET TO THE EDGE OF ANY TRAVEL LANE.

THE CONTRACTOR SHALL SUBMIT A CONDUIT INSTALLATION PLAN REQUIRED BY 611.04.B TO THE ENGINEER FOR APPROVAL. ADDITIONALLY, THE CONTRACTOR SHALL SUBMIT EXCAVATION BRACING PLANS TO THE ENGINEER FOR APPROVAL ACCORDING TO 503.03 FOR ALL CONDUITS THAT WILL BE BORED OR JACKED.

PROVIDE A STEEL CASING PIPE CONFORMING TO 748.06. JOINTS WITH A CIRCUMFERENTIAL FULLY PENETRATING B-U4B WELD THAT IS PERFORMED BY A CERTIFIED WELDER FOR WELDING CODE AMERICAN WELDING SOCIETY (AWS) D1.1 OR MACHINED INTERLOCKING JOINTS ARE PERMITTED. THE INSTALLED CASING PIPE IS THE STORM WATER CONVEYANCE CARRIER UNLESS OTHERWISE SPECIFIED IN THE PLANS. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE.

ITEM 611 - CONDUIT MISC.: (##)" CONDUIT, TYPE (X) ROCK CUT

BASED ON THE SUBSURFACE INVESTIGATION, SOME DRAINAGE CONDUIT RUNS ARE LOCATED IN AREAS WHERE ROCK IS LIKELY TO BE ENCOUNTERED. THE UNIT PRICE BID FOR EACH CONDUIT RUN SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE EACH CONDUIT INSTALLATION AND WILL BE PAID FOR ACCORDING TO THE PERTINENT 611 ITEM BASED ON THE CONDUIT SIZE AND TYPE:

ITEM 611 - CONDUIT, MISC.: (##)" CONDUIT, TYPE (X), ROCK CUT

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

CAREFULLY REMOVE AND STORE ALL CASTINGS WITHIN THE RIGHT OF WAY FOR SALVAGE BY DEPARTMENT FORCES.

PAYMENT FOR ALL OF THE ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

CONDUITS WITH PREMIUM JOINTS

DUE TO TUFA CONCERNS, ALL PROPOSED CONDUITS SHALL BE FITTED WITH PREMIUM, WATER-TIGHT JOINTS.

PAYMENT FOR PREMIUM JOINTS IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 ITEM.

MANHOLE, MISC.: MH-3 MODIFIED

MANHOLE, MISC: MH-3 MODIFIED AT STA 582+86.41, 76.94' LT SHALL BE PRE-CAST PER SCD MH-3 EXCEPT THE BASE SHALL BE POURED IN THE FIELD. PRIOR TO THE REMOVAL OF THE EXISTING MANHOLE, THE CONTRACTOR SHALL INSPECT THE BASE AND CONFIRM NO VOIDS OR UNDERMINING IS PRESENT. IF VOIDS ARE IDENTIFIED, THE CONTRACTOR SHALL FILL THE AREA WITH LSM AS DIRECTED BY THE ENGINEER. IF REQUIRED, THE PROPOSED MANHOLE SHALL BE FIELD MODIFIED AS NEEDED TO MATCH THE DIMENSIONS OF THE 60"OUTFALL CONDUIT. PLACE THE MANHOLE IN-LINE WITH THE EXISTING 60"OUTFALL CONDUIT AND CAST-IN-PLACE THE MANHOLE BASE AND INVERTS IN THE FIELD. INSTALL THE PROPOSED 66"CONDUIT AND GROUT ALL JOINTS BETWEEN THE CONDUITS AND THE MANHOLE. THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, AND INCIDENTALS REQUIRED TO INSTALL THE MANHOLE INCLUDING LSM IF REQUIRED.

PAVEMENT

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

ITEM 441 – ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG 70-22M

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

ITEM 302 - ASPHALT CONCRETE BASE, PG64-22, (449), AS PER PLAN, 25.0 MM GYRATORY MIX

MIX DESIGN
FOLLOW THE REQUIREMENTS OF 302.02 EXCEPT AS MODIFIED BELOW:

- THE TSR TEST PER SUPPLEMENT 1051 IS REQUIRED AND THE MINIMUM TSR IS 0.80 FOLLOWING THE 150 MM GYRATORY COMPACTED SPECIMEN PROCEDURE. USE ANTISTRIP ADDITIVE AS SPECIFIED IN 440.06.
- USE 150 MM DIAMETER SUPERPAVE GYRATORY COMPACTOR MOLDS. FILL MOLDS DURING COMPACTION IN ONE LIFT AND NOT TWO AS YOU WOULD DO WITH 302 MIXES. DO NOT SPADE. VOLUMETRIC PILL HEIGHTS OF 110 TO 120 MM. USE A PILL HEIGHT OF 95 MM FOR STABILITY AND FLOW AND CONVERT, IF NEEDED, USING TABLE 302-02-2.
- REPLACE TABLE 302-02-1 WITH THE FOLLOWING:

TABLE 302.02-1 MIX COMPOSITION

PROPERTY	LIMITS
1 1/2 INCH (37.5 MM) [1]	100
1 INCH (25.0 MM) [1]	90 TO 100
3/4 INCH (19.0 MM) [1] [2]	90 MAX
1/2 INCH (12.5 MM) [1] [2]	
3/8 INCH (9.5 MM) [1] [2]	
NO. 8 (2.36 MM) [1]	19 TO 45
NO. 200 (μM) [1]	1 TO 7
ASPHALT BINDER [3]	4.1 - 5.5 [4]
DESIGN GYRATIONS [5]	50
STABILITY, LB [6] (N)	3000 (13,345) [MIN]
FLOW, 0.25 MM [6]	28 [MAX]
DESIGN AIR VOIDS [7]	3.5
F/A, MAX. [8]	1.2
VMA, MIN. [9]	12.0
CTINDEX, MIN. [10]	60

[1] SIEVE, PERCENT PASSING
[2] PROVIDE AGGREGATE TO RETAIN A MINIMUM OF 7 PERCENT OF THE MATERIAL ON EACH OF THESE SIEVES. THIS REQUIREMENT APPLIES TO THE GRADATION OF THE JMF ONLY.
[3] PERCENT OF TOTAL MIX. MINIMUM VIRGIN ASPHALT BINDER CONTENT IS 2.2% FOR METHOD 1 AND 2.0% FOR METHOD 2.
[4] PERCENT OF TOTAL MIX
[5] NINI AND NMAX DO NOT APPLY.
[6] ASTM D5581
[7] PERCENT, SUPPLEMENT 1036
[8] CALCULATE THE F/A RATION USING THE EFFECTIVE ASPHALT BINDER CONTENT
[9] PERFORM THE IDEAL-CT AND REPORT RESULTS ACCORDING TO SUPPLEMENT 1033

ITEM 302 - ASPHALT CONCRETE BASE, (449), PG64-22, AS PER PLAN (CON'T.)

QUALITY CONTROL AND ACCEPTANCE
FOLLOW THE REQUIREMENTS AS SPECIFIED IN 403 USING 446 ACCEPTANCE EXCEPT AS MODIFIED BELOW:

- RUN MSG AND AIR VOIDS AND FOLLOW 403.06.G INSTEAD OF 403.06.F.

TABLE 403.06-1

MIX CHARACTERISTIC	OUT OF SPECIFICATION LIMITS [5]
ASPHALT BINDER CONTENT [1]	-0.30% TO 0.30%
1/2 INCH (12.5 MM) SIEVE [1]	-6% TO 6%
NO. 4 (4.75 MM) SIEVE [1]	-5% TO 5%
NO. 8 (2.36 MM) SIEVE [1]	-4% TO 4%
NO. 200 (75 μM) SIEVE [1]	-2.0% TO 2.0%
AIR VOIDS [2]	2.5% TO 4.5%
MSG [3]	-0.012 TO 0.012
F/A [4]	1.2 MAX
VMA	11.5 MIN

[1] DEVIATION FROM THE JMF.
[2] FOR DESIGN AIR VOIDS OF 3.5%. USE A GYRATORY COMPACTOR.
[3] DEVIATION FROM THE MTD.
[4] CALCULATE THE F/A RATIO USING THE EFFECTIVE ASPHALT BINDER CONTENT.
[5] DO NOT FOLLOW THE MINIMUM 7% RETAINED DURING PRODUCTION PER 403.06.F.5.

- FOLLOW REQUIREMENTS OF 446 AND REPLACE MSG COMPARISON IN TABLE 403.10-1 WITH 0.012.
- FOR INFORMATION ONLY AND WHEN REQUESTED BY THE DEPARTMENT UP TO FIVE DIFFERENT PRODUCTION DAYS, HOT-COMPACTED 10 GYRATORY SPECIMENS PER SUPPLEMENT 1033. DO NOT TEST THESE PILLS.
- NOTIFY ERIC BIEHL - OMM 614-275-1380 AND JULIA MILLER – OCA 614-466-3165 TWO WEEKS PRIOR TO PLANNED BEGINNING PRODUCTION AND PLACEMENT. YOU MAY EMAIL THEM AS WELL.

PLACEMENT
ENSURE THE COMPACTION DEPTH OF ANY ONE LAYER IS A MINIMUM OF 4.0 INCHES AND A MAXIMUM OF 6.0 INCHES. IF THE PLAN THICKNESS IS 6.0 TO 7.75 INCHES, THE 302 MAY BE PLACED IN TWO LIFTS IF REQUESTED BY THE CONTRACTOR.

DENSITY ACCEPTANCE
FOLLOW THE REQUIREMENTS OF 446 ASPHALT CONCRETE CORE DENSITY ACCEPTANCE, INCLUDING JOINT CORES, EXCEPT AS MODIFIED BELOW:

- OBTAIN 6-INCH DIAMETER CORES ON EACH LIFT PLACED.
- OBTAIN JOINT CORES AT COLD LONGITUDINAL JOINTS SUCH THAT THE CORE'S CLOSEST EDGE IS 6 INCHES (152 MM) FROM THE EDGE OF THE MAT.
- PAY FACTORS FOR EACH LIFT OF 302 APP WILL BE AS SPECIFIED IN THE FOLLOWING TABLE.

MEAN OF LOT CORE DENSITY[1]	PAY FACTOR
	302, APP
>98.0%	[2]
>97.0% TO 98.0%	[3]
93.0% TO 97.0%	1.00
92.0% TO 92.9%	0.90
91.0% TO 91.9%	0.80
90.0% TO 90.9%	0.70
<90.0%	[4]

[1] MEAN OF CORES AS PERCENT OF AVERAGE MSG FOR THE PRODUCTION DAY.
[2] THE DISTRICT WILL DETERMINE WHETHER THE MATERIAL MAY REMAIN IN PLACE. THE PAY FACTOR FOR MATERIAL ALLOWED TO REMAIN IN PLACE IS 0.50.
[3] THE DISTRICT WILL DETERMINE WHETHER THE MATERIAL MAY REMAIN IN PLACE. THE PAY FACTOR FOR MATERIAL ALLOWED TO REMAIN IN PLACE IS 0.70.
[4] THE DISTRICT WILL DETERMINE WHETHER THE MATERIAL MAY REMAIN IN PLACE. THE PAY FACTOR FOR MATERIAL ALLOWED TO REMAIN IN PLACE IS 0.50.

IF MATERIAL IS REMOVED AND REPLACED THE CONTRACTOR WILL REMOVE AND REPLACE THIS COURSE AND ALL COURSES PAVED ON THIS COURSE.

GENERAL NOTES

DESIGN AGENCY
STRUCTUREPOINT LLC
DESIGNER BER
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0049 TOTAL P.1587

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PAVEMENT (CONTINUED)

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN

THIS ITEM OF WORK SHALL BE USED TO PREPARE PROPOSED AND EXISTING GUARDRAIL RUNS FOR PAVING UNDER GUARDRAIL, INCLUDING THE REMOVAL AND DISPOSAL OF EXISTING ASPHALT UNDER GUARDRAIL.

A SAWCUT WILL BE PERFORMED, WHEN APPLICABLE, TO ASSIST THE REMOVAL OF EXISTING ASPHALT UNDER GUARDRAIL AND MINIMIZE DAMAGE TO EXISTING SHOULDER ASPHALT. PAYMENT FOR SAWCUTTING WILL BE INCLUDED IN THE BID PRICE FOR ITEM 209 RESHAPING UNDER GUARDRAIL, AS PER PLAN.

FILL ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS AND ANCHOR ASSEMBLIES WITH GRANULAR MATERIAL. DO NOT USE FILL MATERIAL CONTAINING SOD. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER AND SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE IS INCLUDED IN THE APPLICABLE GUARDRAIL ITEM.

RESHAPE AND COMPACT SUBGRADE TO ENSURE POSITIVE DRAINAGE. ESTABLISH A CROSS-SLOPE OF 0.042 (HALF INCH PER FOOT). GRADE TO A MAXIMUM WIDTH OF 6' TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE TRAVEL LANES.

ALL COLLECTED DEBRIS AND TOPSOIL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 105.17 OF THE CMS.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO SECTION 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209 RESHAPING UNDER GUARDRAIL, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARDRAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

EACH SUCCESSFUL BIDDER MUST BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO A DEPTH OF 3"AND A MAXIMUM WIDTH OF 4' USING ONE OF THE FOLLOWING METHODS:

METHOD A:
1. *SET GUARDRAIL POSTS*
2. *PLACE ITEM 441*

METHOD B:
1. *PLACE ITEM 441*
2. *BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)*
3. *SET GUARDRAIL POSTS*
4. *PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.*

ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN.

ITEM 618 - RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN

FOR ALL FREEWAYS, THE LATERAL POSITION OF EDGE LINE RUMBLE STRIPS SHOWN IN STANDARD CONSTRUCTION DRAWING (SCD) BP-9.1 IS REVISED AS FOLLOWS:

1. *MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDERS LESS THAN 6': DIMENSION A AND B ARE EQUAL TO 6".*
2. *MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDERS 6' TO 12': DIMENSION A AND B ARE EQUAL TO HALF THE SHOULDER WIDTH MINUS 12".*
3. *MEDIAN AND OUTSIDE SHOULDER OFFSET FOR SHOULDERS GREATER THAN 12': DIMENSION A AND B ARE EQUAL TO 5'.*

THE FOLLOWING ESTIMATED QUANTITY SHALL BE USED TO CONSTRUCT ITEM 618 – RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN:

ITEM 618 - RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN 16.79 MILES

ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), AS PER PLAN, PWL, PG 76-22M

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO A BLEND OF AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM 60% OF ACBFS OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. AT LEAST 50% OF FINE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO ACBFS OR TRAP ROCK FROM ONTARIO.

TABLE 442.02-2 APPLIES EXCEPT NO. 4 SIEVE REQUIREMENTS ARE 52 TO 60 TOTAL PERCENT PASSING. FOR THE NO. 4 SIEVE DO NOT EXCEED 63 IN PRODUCTION.

WHEN ACBFS IS USED FOR A FRACTION OF THE COARSE AGGREGATE, PROVIDE A TOTAL ASPHALT BINDER CONTENT GREATER THAN OR EQUAL TO 6.2 PERCENT. IF ACBFS MAKES UP 100% OF THE COARSE AGGREGATE, APPLY THE BINDER CONTENT REQUIREMENTS OF C&MS 442.

ALL REQUIREMENTS OF C&MS ITEM 442 APPLY EXCEPT AS SHOWN.

MAT DENSITY ACCEPTANCE - FOLLOW THE REQUIREMENTS OF 447 MAT DENSITY ACCEPTANCE, EXCEPT AS MODIFIED BELOW.

OBTAIN 6-INCH DIAMETER CORES FOR EACH LOT.

THE PWL CALCULATOR, LOCATED ON THE ODOT WEBSITE AT THE OFFICE OF CONSTRUCTION ADMINISTRATION, WILL BE USED TO DETERMINE THE LOT PWL AND THE LOT AASHTO PAY FACTORS.

THE DEPARTMENT WILL DETERMINE THE PAY FACTOR FOR EACH LOT CORED BY THE FOLLOWING TABLE.

LOWER SPECIFICATION LIMIT	PAY FACTOR CRITERIA	PAY FACTOR (PF)
92.6%	IF AVE DENSITY IS ≥ 93% AND PWL ≥ 90	PF = 1 ON AASHTO PF WHICHEVER IS GREATER
	IF 90 > PWL > 50	AASHTO PF
	IF PWL ≤ 50	REMOVE AND REPLACE

ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (449), AS PER PLAN, PG 76-22M

THIS ITEM SHALL BE USED FOR THE INTERMEDIATE COURSE(S) FOR THE FEATHER SECTION FROM STA 768+85 TO STA 769+35.

ALL PROVISIONS LISTED IN THE ITEM 442 – ASPHALT CONCRETE SURFACE COURSE, 12.5MM,TYPE A (447), AS PER PLAN, PG 76-22M NOTE ABOVE SHALL APPLY EXCEPT VARIABLE LIFT THICKNESSES ARE PERMITTED. THE MAXIMUM LIFT THICKNESS OF ANY INTERMEDIATE COURSE SHALL BE 2 INCHES.

LONGITUDINAL JOINTS IN FLEXIBLE PAVEMENT

LONGITUDINAL JOINTS BETWEEN A PAVEMENT LANE AND ADJOINING SHOULDER OR SPEED CHANGE LANE, AND BETWEEN A SPEED CHANGE LANE AND THE ADJOINING SHOULDER SHALL BE MADE THE SAME DAY. ALL LONGITUDINAL JOINTS SHALL BE HOT WITH THE EXCEPTION OF ONE COLD JOINT PER PHASE AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLAN. LOCATE THE COLD JOINT ALONG THE CENTERLINE OR A LANE LINE. ALL LONGITUDINAL JOINT LOCATIONS SHALL BE AS APPROVED BY THE ENGINEER.

ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED IN SCD BP-3.1 AND C&MS 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL USE A CERTIFIED 702.01 PG BINDER TO SEAL THE FOLLOWING LOCATIONS:

- *ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.*
- *BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.*
- *FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.*
- *PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.*
- *ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.*
- *THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.*

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

LONGITUDINAL JOINT SPACING IN RIGID PAVEMENT

PROVIDE LONGITUDINAL JOINTS PER SCD BP-6.1. IN LOCATIONS WHERE THE TRAVEL LANES TAPER AND THE TYPICAL LONGITUDINAL JOINT SPACING PER SCD BP-6.1 CANNOT BE PROVIDED, THE WIDTH BETWEEN ADJACENT JOINTS SHALL VARY FROM 8'-0" ON THE SINGLE LANE RAMP END TO 12'-0" ON THE TWO LANE RAMP END WITHIN THE LIMITS OF THE PAVEMENT TAPER AREA. WHERE A TWO-LANE RAMP TRANSITIONS TO A THREE-LANE RAMP, THE LONGITUDINAL JOINT ALONG THE TAPERED PAVEMENT EDGE WILL BEGIN AT A TRANSVERSE JOINT WHERE THE WIDTH OF THE ADDITIONAL LANE IS A MINIMUM OF 2'-0" WIDE.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442)

A QUANTITY OF THIS ITEM HAS BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL BE USED FOR REPAIRING THE LOCATIONS OF PREVIOUSLY LAID INTERMEDIATE COURSE THAT HAVE BEEN USED FOR MAINTAINING TRAFFIC FOR LONGER THAN FOUR MONTHS THAT EXHIBIT SURFACE DETERIORATION. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER WILL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED WITHIN SEVEN CALANDAR DAYS PRIOR TO THE PAVING OF THE FINAL SURFACE COURSE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442) 2,000 SQ YD

GENERAL NOTES

MODEL: Sheet 6 PAPERSIZE: 34x22 (in.) DATE: 1/24/2025 TIME: 2:23:58 PM USER: jsima
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DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.
DESIGNER BER
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0050 TOTAL P.1587

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	45	46	48	332	337	338	340	341	346		01/IMS/04	02/IMS/13	03/IMS/13						
																		ROADWAY	
	LS										LS			201	11000	LS		CLEARING AND GRUBBING	
				420,404							420,404			202	23000	420,404	SY	PAVEMENT REMOVED	
						6,343					6,343			202	30000	6,343	SF	WALK REMOVED	
				37,701							37,701			202	30700	37,701	FT	CONCRETE BARRIER REMOVED	
				2,234							2,234			202	30800	2,234	SY	TRAFFIC ISLAND REMOVED	
				54,446							54,446			202	32000	54,446	FT	CURB REMOVED	
				204							204			202	32800	204	SY	CONCRETE SLOPE PROTECTION REMOVED	
									8,260		8,260			202	35100	8,260	FT	PIPE REMOVED, 24" AND UNDER	
									9,500		9,500			202	35200	9,500	FT	PIPE REMOVED, OVER 24"	
				12,989							12,989			202	38000	12,989	FT	GUARDRAIL REMOVED	
				39							39			202	42010	39	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
				25							25			202	42040	25	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
				33							33			202	47000	33	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
				2							2			202	47800	2	EACH	IMPACT ATTENUATOR REMOVED	
									37		37			202	58000	37	EACH	MANHOLE REMOVED	
									101		101			202	58100	101	EACH	CATCH BASIN REMOVED	
									150		150			202	58200	150	EACH	INLET REMOVED	
									5,033		5,033			SPECIAL	20270000	5,033	FT	FILL AND PLUG EXISTING CONDUIT, 15"	P.0048
									950		950			SPECIAL	20270000	950	FT	FILL AND PLUG EXISTING CONDUIT, 18"	P.0048
									906		906			SPECIAL	20270000	906	FT	FILL AND PLUG EXISTING CONDUIT, 21"	P.0048
									1,058		1,058			SPECIAL	20270000	1,058	FT	FILL AND PLUG EXISTING CONDUIT, 24"	P.0048
									247		247			SPECIAL	20270000	247	FT	FILL AND PLUG EXISTING CONDUIT, 30"	P.0048
									575		575			SPECIAL	20270000	575	FT	FILL AND PLUG EXISTING CONDUIT, 36"	P.0048
									670		670			SPECIAL	20270000	670	FT	FILL AND PLUG EXISTING CONDUIT, 42"	P.0048
									773		773			SPECIAL	20270000	773	FT	FILL AND PLUG EXISTING CONDUIT, 48"	P.0048
									2,278		2,278			SPECIAL	20270000	2,278	FT	FILL AND PLUG EXISTING CONDUIT, 54"	P.0048
									2,744		2,744			SPECIAL	20270000	2,744	FT	FILL AND PLUG EXISTING CONDUIT, 60"	P.0048
			500						145		645			SPECIAL	20270110	645	FT	PIPE CLEANOUT, 24" AND UNDER	P.0048
			500						190		690			SPECIAL	20270120	690	FT	PIPE CLEANOUT, 27" TO 48"	P.0048
			500								500			SPECIAL	20270130	500	FT	PIPE CLEANOUT OVER 48"	P.0048
							41,942				41,942			202	75000	41,942	FT	FENCE REMOVED	
											LS			202	98000	LS		REMOVAL MISC.:TRAFFIC MONITORING EQUIPMENT	P.1268
								252,249			252,249			203	10001	252,249	CY	EXCAVATION, AS PER PLAN	P.0046
								9,830			9,830			203	20001	9,830	CY	EMBANKMENT, AS PER PLAN	P.0046
		24									24			203	98600	24	EACH	ROADWAY, MISC.:TEST HOLE	P.0046
37,166											37,166			204	13001	37,166	CY	EXCAVATION OF SUBGRADE, AS PER PLAN	P.0046
		71									71			204	45000	71	HOUR	PROOF ROLLING	
5,786											5,786			206	10500	5,786	TON	CEMENT	
221,079											221,079			206	11000	221,079	SY	CURING COAT	
204,209											204,209			206	15010	204,209	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP	
16,870											16,870			206	15020	16,870	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
		LS									LS			206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	
					0.25						0.25			209	15051	0.25	MILE	RESHAPING UNDER GUARDRAIL, AS PER PLAN	P.0050
					20,246						20,246			606	15051	20,246	FT	GUARDRAIL, TYPE MGS, AS PER PLAN	P.0046
					125						125			606	15151	125	FT	GUARDRAIL, TYPE MGS HALF POST SPACING, AS PER PLAN	P.0046
					62.5						62.5			606	15251	62.5	FT	GUARDRAIL, TYPE MGS QUARTER POST SPACING, AS PER PLAN	P.0046
					57						57			606	26150	57	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
					35						35			606	26550	35	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
					42						42			606	35002	42	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
					20						20			606	35102	20	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
							41,913				41,913			607	23000	41,913	FT	FENCE, TYPE CLT	
							41,913				41,913			607	70000	41,913	FT	FENCELINE SEEDING AND MULCHING	

GENERAL SUMMARY

DESIGN AGENCY
AVIERON STRUCTUREPOINT INC

DESIGNER
BER

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0316 TOTAL P.1587

CUY-90-6.69

MODEL: Sheet 1 PAPERSIZE: 34x22 (in.) DATE: 1/24/2025 TIME: 3:21:06 PM USER: jsima
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SHEET NUM.												PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	50	61	66	337	1290							01/IMS/04	02/IMS/13	03/IMS/13						
																			PAVEMENT	
	2,000											2,000			251	01020	2,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (442)	
16,847			15,381									32,228			254	01000	32,228	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	
		375										375			254	01000	375	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3"	
89,922												89,922			302	56001	89,922	CY	ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG 64-22, 25.0 MM GYRATORY MIX	P.0049
111,594												111,594			304	20000	111,594	CY	AGGREGATE BASE	
63,641		45	847									64,533			407	10000	64,533	GAL	TACK COAT	
671												671			441	10101	671	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG 70-22M	P.0049
		500	641									1,141			441	70101	1,141	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), AS PER PLAN, PG64-22	P.0061
				724								724			441	70801	724	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	P.0050
18,367												18,367			442	10080	18,367	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
15,807												15,807			442	10301	15,807	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG 76-22M	P.0050
42												42			442	22101	42	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG76-22M	P.0050
49,422												49,422			452	14122	49,422	SY	11.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
159												159			609	14000	159	FT	CURB, TYPE 2-A	
34												34			609	23001	34	FT	COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN	P.0046
18,952												18,952			609	24000	18,952	FT	CURB, TYPE 4-A	
31,848												31,848			609	24510	31,848	FT	CURB, TYPE 4-C	
950												950			609	50000	950	SY	4" CONCRETE TRAFFIC ISLAND	
	16.79											16.79			618	40601	16.79	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	P.0050
																			LIGHTING	
					423							423			625	00450	423	EACH	CONNECTION, FUSED PULL APART	
					207							207			625	00480	207	EACH	CONNECTION, UNFUSED PERMANENT	
					58							58			625	10494	58	EACH	LIGHT POLE, LOW MAST, ALM50	
					142							142			625	10494	142	EACH	LIGHT POLE, LOW MAST, ATLM50	
					40							40			625	10614	40	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	
					1							1			625	14000	1	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
					142							142			625	14200	142	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP	
					48							48			625	14307	48	EACH	MEDIAN LIGHT POLE FOUNDATION, 10' DEEP, AS PER PLAN	P.1309
					75,825							75,825			625	23200	75,825	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
					30,150							30,150			625	23400	30,150	FT	NO. 10 AWG POLE AND BRACKET CABLE	
					43,650							43,650			625	24320	43,650	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
					749							749			625	25300	749	FT	CONDUIT, 1-1/2", 725.04	
					950							950			625	25304	950	FT	CONDUIT, 1-1/2", 725.051	
					3,729							3,729			625	25408	3,729	FT	CONDUIT, 2", 725.051	
					3,746							3,746			625	25902	3,746	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
					200							200			625	26273	200	EACH	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN, 480V	P.1310
					11							11			625	27503	11	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN, 480V	P.1310
					4							4			625	27503	4	EACH	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN, CPP FIXTURE	P.1310
					32,377							32,377			625	29000	32,377	FT	TRENCH	
					14							14			625	29900	14	EACH	JUNCTION BOX	
					8							8			625	29930	8	EACH	MEDIAN JUNCTION BOX	
					56							56			625	30700	56	EACH	PULL BOX, 725.08, 18"	
					16							16			625	30706	16	EACH	PULL BOX, 725.08, 24"	
					3							3			625	30731	3	EACH	PULL BOX, 725.08, 48", TYPE 1, AS PER PLAN	P.1310
					1							1			625	31510	1	EACH	PULL BOX REMOVED	
					191							191			625	32000	191	EACH	GROUND ROD	
					3							3			625	33001	3	EACH	STRUCTURE GROUNDING SYSTEM, AS PER PLAN	P.1310
					7							7			625	34001	7	EACH	POWER SERVICE, AS PER PLAN	P.1309
					2							2			625	34450	2	EACH	CONTROL CENTER CABINET, COMPLETE	
					1							1			625	35010	1	EACH	REMOVE AND REERECT EXISTING LIGHT POLE	

GENERAL SUMMARY

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER
BER

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0320 TOTAL P.1587

CUY-90-6.69

MODEL: Sheet 5 PAPERSIZE: 34x22 (in.) DATE: 1/24/2025 TIME: 3:22:22 PM USER: jsima
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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	335	337	1268	1270	1290	1165	1173	1184			01/IMS/04	02/IMS/13	03/IMS/13						
																		LIGHTING CONT.	
					32,377						32,377			625	36010	32,377	FT	UNDERGROUND WARNING/MARKING TAPE	
					6						6			625	37100	6	EACH	SERVICE TO UNDERPASS LIGHTING	
					1						1			625	37101	1	EACH	SERVICE TO UNDERPASS LIGHTING, AS PER PLAN	P.1309
					9						9			625	39520	9	EACH	PULL BOX CLEANED	
					LS						LS			SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	P.1310
					59						59			625	75350	59	EACH	LIGHT TOWER REMOVED	
					110						110			625	75400	110	EACH	LIGHT POLE REMOVED	
					65						65			625	75500	65	EACH	LIGHT POLE FOUNDATION REMOVED	
					11						11			625	75540	11	EACH	LIGHT TOWER FOUNDATION REMOVED	
					31						31			625	75800	31	EACH	DISCONNECT CIRCUIT	
					14						14			625	98000	14	EACH	LIGHTING, MISC.: CONNECT PROPOSED CIRCUIT TO EXISTING CIRCUIT	P.1310
					13						13			625	98000	13	EACH	LIGHTING, MISC.: CONNECT PROPOSED CIRCUIT TO EXISTING CONTROL CENTER	P.1310
					3						3			625	98000	3	EACH	LIGHTING, MISC.: DISCONNECT EXISTING WIRES FROM EXISTING CONTROL CENTER	P.1310
					7						7			625	98000	7	EACH	LIGHTING, MISC.: TEST NEW CIRCUITS	P.1310
																		TRAFFIC SURVEILLANCE	
				160							160			625	25102	160	FT	CONDUIT, 1", 725.05	
				40							40			625	25402	40	FT	CONDUIT, 2", 725.05	
				108							108			625	25600	108	FT	CONDUIT, 4", 725.04	
				1,050							1,050			625	25908	1,050	FT	CONDUIT, JACKED OR DRILLED, 725.052, 2"	
				222							222			625	25908	222	FT	CONDUIT, JACKED OR DRILLED, 725.052, 4"	
				108							108			625	29002	108	FT	TRENCH, 24" DEEP	
				40							40			625	29010	40	FT	TRENCH, 30" DEEP	
				21							21			625	29931	21	EACH	MEDIAN JUNCTION BOX, AS PER PLAN	P.1268
				2							2			625	30700	2	EACH	PULL BOX, 725.08, 18"	
				6							6			625	30711	6	EACH	PULL BOX, 725.08, 32", AS PER PLAN	P.1268
				148							148			625	36010	148	FT	UNDERGROUND WARNING/MARKING TAPE	
				45,384							45,384			809	20000	45,384	FT	MICRO-DUCT PATHWAY, 1 CELL 14/10	
			LS								LS			809	70000	LS		MAINTAINING ITS DURING CONSTRUCTION	
				LS							LS			809	70050	LS		AS-BUILT CONSTRUCTION PLANS	
																		TRAFFIC CONTROL	
						11					11			620	60000	11	EACH	DELINEATOR, POST SURFACE MOUNTED	
						2,318					2,318			621	00100	2,318	EACH	RPM	
2,312											2,312			621	54000	2,312	EACH	RAISED PAVEMENT MARKER REMOVED	
								35			35			625	32000	35	EACH	GROUND ROD	
	387										387			626	00102	387	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
		395									395			626	00116	395	EACH	BARRIER REFLECTOR, TYPE 5, ONE WAY	
								528.6			528.6			630	02100	528.6	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
								2,605.4			2,605.4			630	03100	2,605.4	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
								1,150			1,150			630	04100	1,150	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
								194.9			194.9			630	06400	194.9	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	
								351.3			351.3			630	06500	351.3	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W6X9	
								75.6			75.6			630	07600	75.6	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12	
								3			3			630	08004	3	FT	ONE WAY SUPPORT, NO. 3 POST	
								185			185			630	08600	185	EACH	SIGN POST REFLECTOR	
								28			28			630	09000	28	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
								2			2			630	72110	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-9.11, DESIGN 2	
								2			2			630	72320	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 6	
								3			3			630	72330	3	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 10	
								12			12			630	72340	12	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 12	
								8			8			630	72420	8	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 2	
								1			1			630	72530	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-16.22, DESIGN 9	

GENERAL SUMMARY

CUY-90-6.69

MODEL: Sheet 6 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 4:57:02 PM USER: jsima
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DESIGN AGENCY
STRUCTUREPOINT INC
AVERGON

DESIGNER
BER

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0321 TOTAL P.1587

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
1173	1184	1165									01/IMS/04	02/IMS/13	03/IMS/13						
																		TRAFFIC CONTROL CONT.	
	1										1			630	72540	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-16.22, DESIGN 12	
	14										14			630	79500	14	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
	7										7			630	79600	7	EACH	SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, TYPE 1	
	5										5			630	79604	5	EACH	SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, TYPE 2	
	7										7			630	79610	7	EACH	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED	
	2,593.9										2,593.9			630	80100	2,593.9	SF	SIGN, FLAT SHEET	
	656										656			630	80200	656	SF	SIGN, GROUND MOUNTED EXTRUSHEET	
	6,142.7										6,142.7			630	80224	6,142.7	SF	SIGN, OVERHEAD EXTRUSHEET	
	2										2			630	84010	2	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50	
	36										36			630	84500	36	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
	33										33			630	84510	33	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
229											229			630	84900	229	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
1											1			630	85000	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	
7											7			630	85100	7	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
9											9			630	85400	9	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
1											1			630	85600	1	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	
256											256			630	86002	256	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
36											36			630	86102	36	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
9											9			630	86310	9	EACH	REMOVAL OF STRUCTURE MOUNTED SIGN AND DISPOSAL	
103											103			630	87400	103	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
20											20			630	87500	20	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	
2											2			630	89704	2	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-16.21	
17											17			630	89706	17	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30	
8											8			630	89804	8	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115	
		5.42									5.42			642	00104	5.42	MILE	EDGE LINE, 6", TYPE 1	
		8.25									8.25			642	00204	8.25	MILE	LANE LINE, 6", TYPE 1	
		6,026									6,026			642	00404	6,026	FT	CHANNELIZING LINE, 12", TYPE 1	
		3,286									3,286			642	01510	3,286	FT	DOTTED LINE, 6", TYPE 1	
		2,505									2,505			642	01560	2,505	FT	DOTTED LINE, 12", TYPE 1	
		0.2									0.2			646	10010	0.2	MILE	EDGE LINE, 6"	
		1.02									1.02			646	10110	1.02	MILE	LANE LINE, 6"	
		3,802									3,802			646	10310	3,802	FT	CHANNELIZING LINE, 12"	
		380									380			646	10400	380	FT	STOP LINE	
		1,700									1,700			646	10510	1,700	FT	CROSSWALK LINE, 12"	
		489									489			646	10620	489	FT	CHEVRON MARKING	
		21									21			646	10800	21	SF	ISLAND MARKING	
		49									49			646	20300	49	EACH	LANE ARROW	
		32									32			646	20320	32	EACH	WRONG WAY ARROW	
		6									6			646	20350	6	EACH	LANE REDUCTION ARROW	
		3									3			646	20410	3	EACH	WORD ON PAVEMENT, 96"	
		405									405			646	20504	405	FT	DOTTED LINE, 6"	
		18.35									18.35			807	12010	18.35	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"	
		18.42									18.42			807	12110	18.42	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	
		14,121									14,121			807	12310	14,121	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"	
		5,761									5,761			807	12410	5,761	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"	
		4,765									4,765			807	12430	4,765	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12"	
		28.94									28.94			850	10010	28.94	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
		3,621									3,621			850	10110	3,621	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
		17,925									17,925			850	10130	17,925	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)	
		8.97									8.97			850	20010	8.97	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)	
		1,974									1,974			850	20110	1,974	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)	
		1,127									1,127			850	20130	1,127	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE)	

GENERAL SUMMARY

CUY-90-6.69

MODEL: Sheet 7 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 4:58:35 PM USER: jsima
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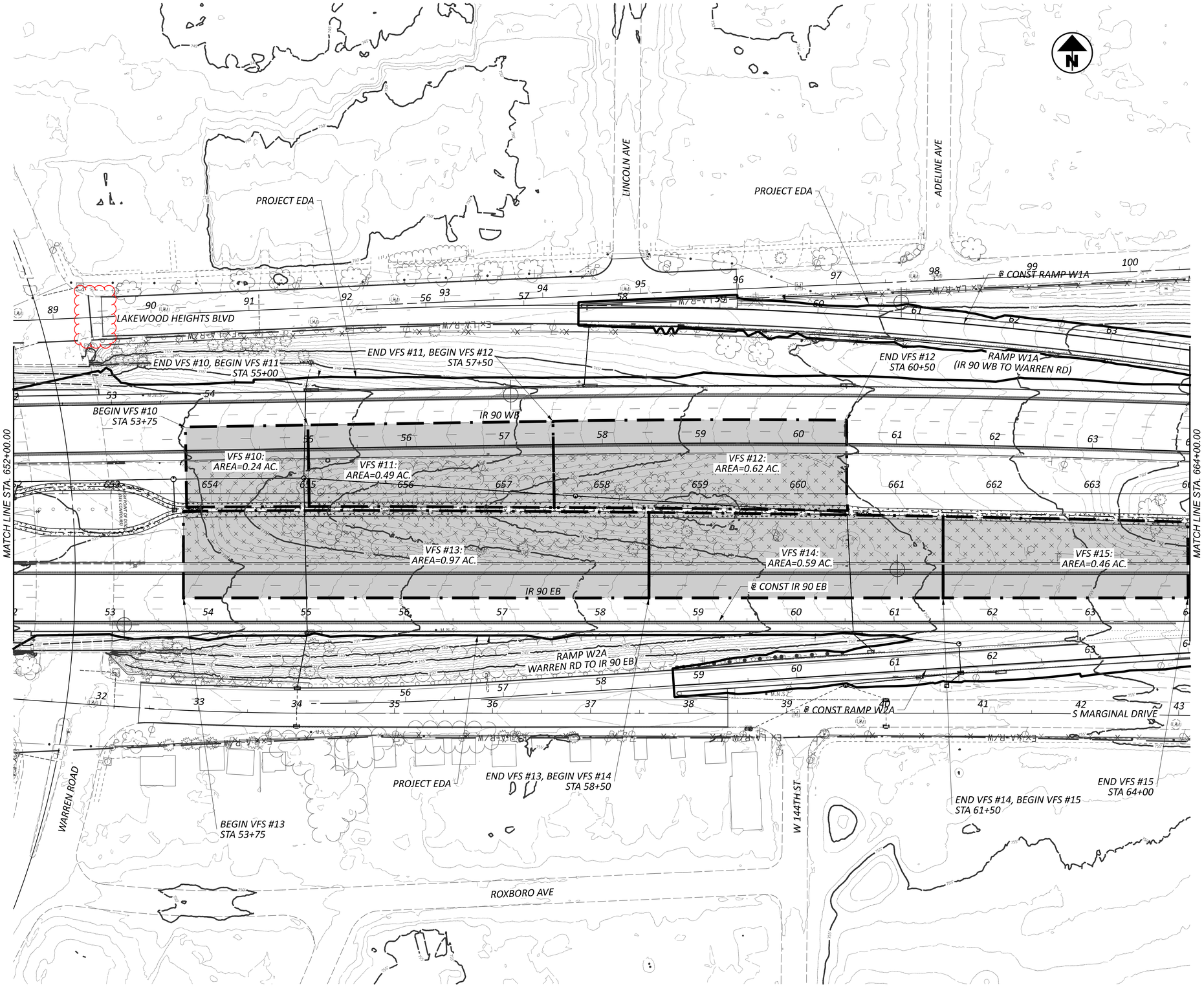
DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER
BER

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0322 TOTAL P.1587



HORIZONTAL SCALE IN FEET
0 25 50 100

PROJECT SITE PLAN
STA 652+00.00 TO STA 664+00.00

CUY-90-6.83

MODEL: 76779_GP00 - Plan (3 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/13/2025 TIME: 3:48:25 PM USER: Jslma
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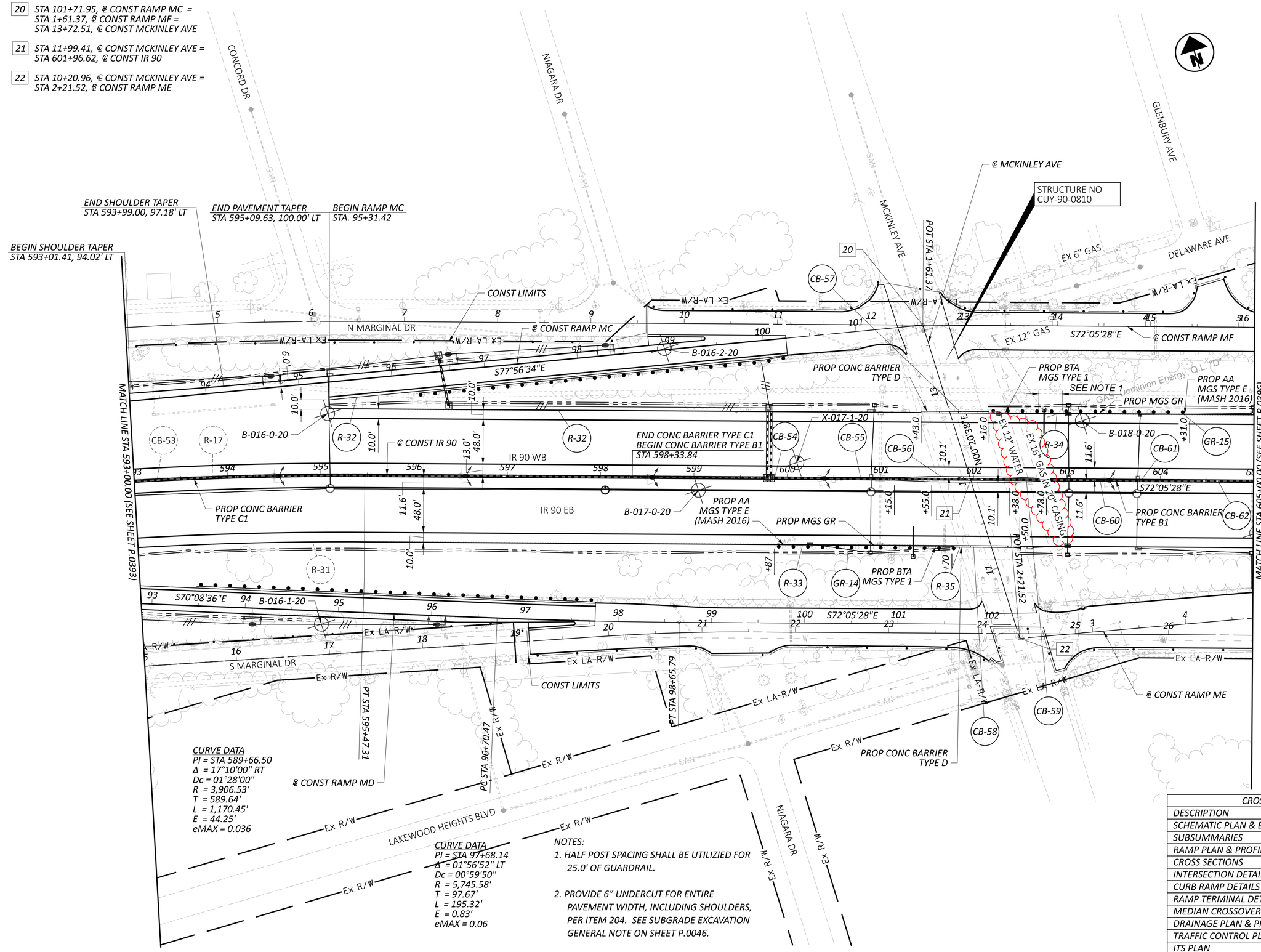
DESIGN AGENCY
MOODY ENGINEERING

DESIGNER	CNK
REVIEWER	LET 10/18/22
PROJECT ID	76779
SHEET	P.0382
TOTAL	P.1587

20 STA 101+71.95, ℄ CONST RAMP MC = STA 1+61.37, ℄ CONST RAMP MF = STA 13+72.51, ℄ CONST MCKINLEY AVE

21 STA 11+99.41, ℄ CONST MCKINLEY AVE = STA 601+96.62, ℄ CONST IR 90

22 STA 10+20.96, ℄ CONST MCKINLEY AVE = STA 2+21.52, ℄ CONST RAMP ME



CURVE DATA
PI = STA 589+66.50
Δ = 17°10'00" RT
Dc = 01°28'00"
R = 3,906.53'
T = 589.64'
L = 1,170.45'
E = 44.25'
eMAX = 0.036

CURVE DATA
PI = STA 97+68.14
Δ = 01°56'52" LT
Dc = 00°59'50"
R = 5,745.58'
T = 97.67'
L = 195.32'
E = 0.83'
eMAX = 0.06

NOTES:
1. HALF POST SPACING SHALL BE UTILIZIED FOR 25.0' OF GUARDRAIL.
2. PROVIDE 6" UNDERCUT FOR ENTIRE PAVEMENT WIDTH, INCLUDING SHOULDERS, PER ITEM 204. SEE SUBGRADE EXCAVATION GENERAL NOTE ON SHEET P.0046.

CROSS REFERENCES:	
DESCRIPTION	SHEET NO
SCHEMATIC PLAN & BENCHMARKS	P.0003-P.0009
SUBSUMMARIES	P.0328-P.0370
RAMP PLAN & PROFILES	P.0425-P.0469
CROSS SECTIONS	P.0470-P.0803
INTERSECTION DETAILS	P.0982-P.0991
CURB RAMP DETAILS	P.0992-P.1003
RAMP TERMINAL DETAILS	P.1004-P.1034
MEDIAN CROSSOVER DETAILS	P.1045-P.1046
DRAINAGE PLAN & PROFILES	P.1047-P.1149
TRAFFIC CONTROL PLAN	P.1154-P.1267
ITS PLAN	P.1268-P.1289
FENCE PLANS	P.1502-P.1520

HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN SHEET - IR 90
STA 593+00.00 TO STA 605+00.00

DESIGN AGENCY
STRUCTUREPOINT LLC
DESIGNER BER
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0395 TOTAL P.1587

CUY-90-6.69

MODEL: 76779_GP100 - Plan 8 (Sheet)_STA 593+00 TO STA 605+00 PAPERSIZE: 34x22 (in.) DATE: 1/29/2025 TIME: 4:13:11 PM USER: jsima
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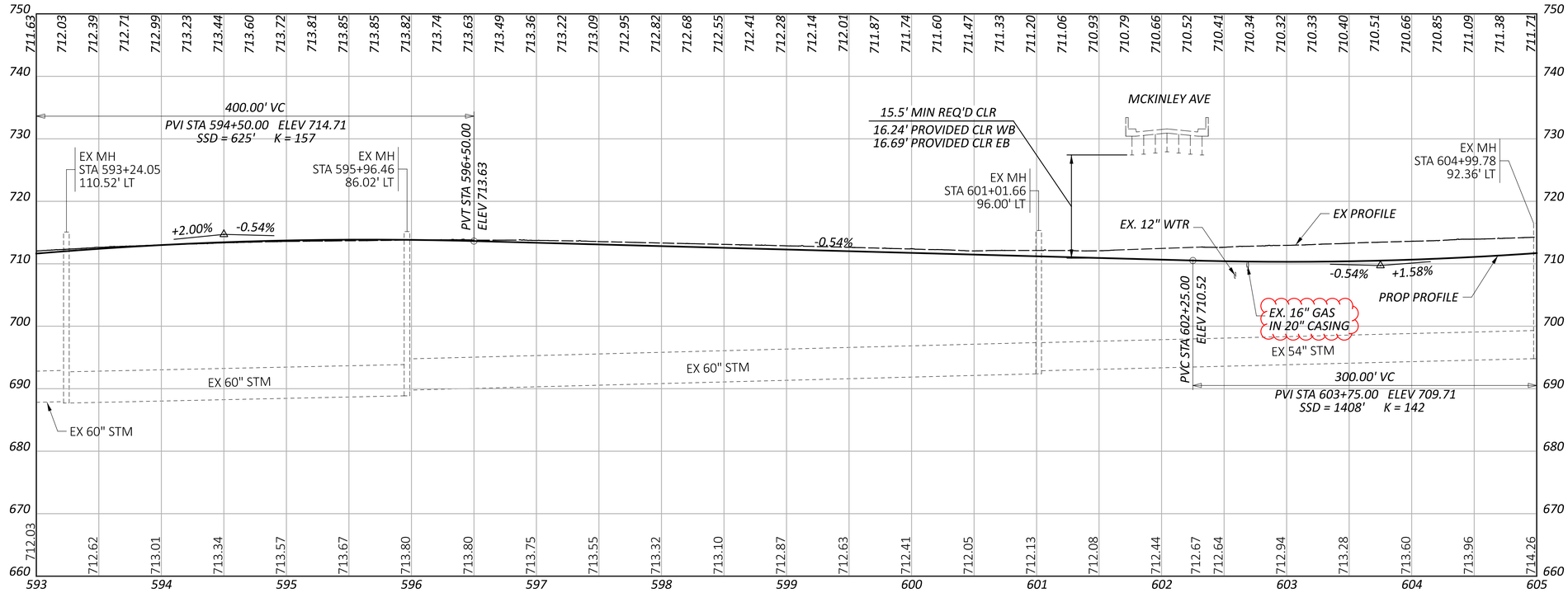

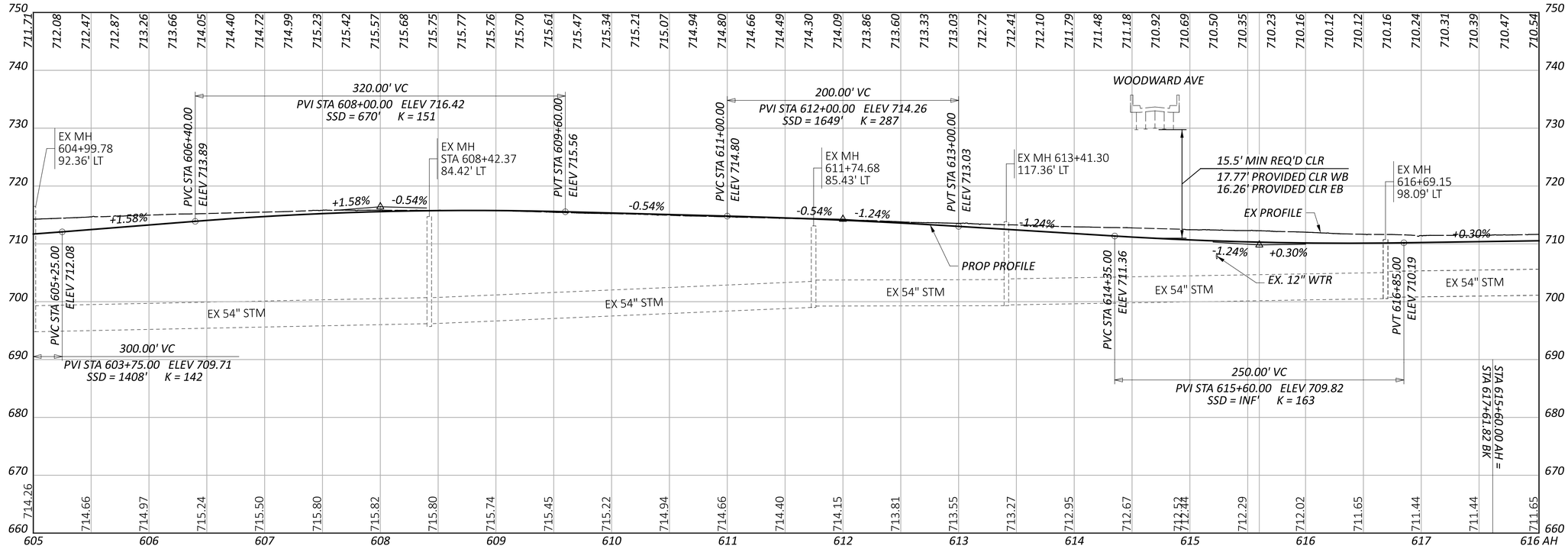

CROSS REFERENCES:	
DESCRIPTION	SHEET NO
DRAINAGE PROFILES	P.1068-P.1149

PROFILE SHEET - IR 90
STA 593+00.00 TO STA 616+00.00

DESIGN AGENCY
STRUCTUREPOINT LLC
MEMBER

DESIGNER
BER

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0397 TOTAL P.1587

CUY-90-6.69

MODEL: 08 - IR 90 - 593+00 to 616+00 PAPERSIZE: 34x22 (in) DATE: 1/29/2025 TIME: 4:28:16 PM USER: jsima
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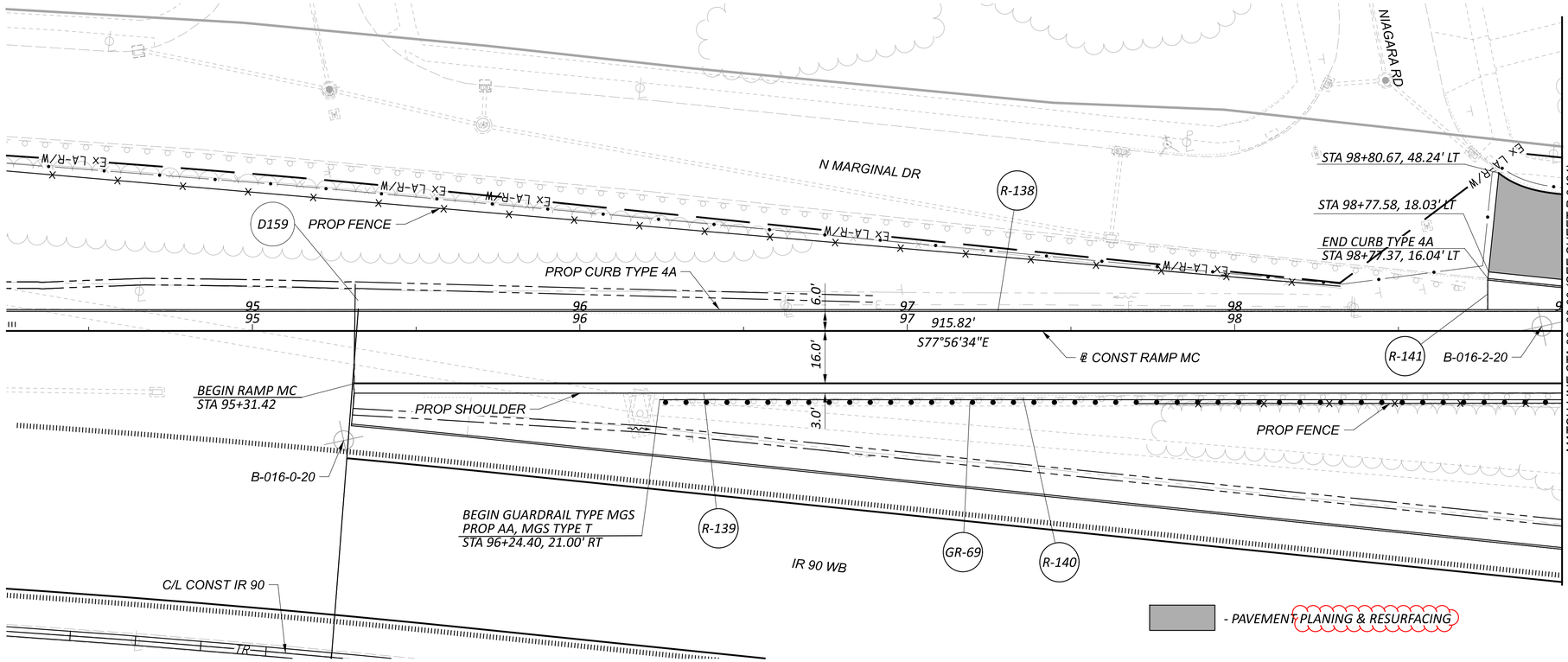
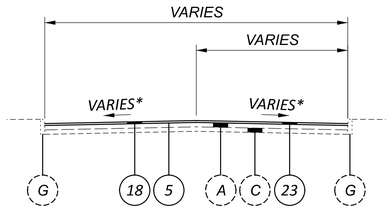


CROSS REFERENCES:	
DESCRIPTION	SHEET NO
SCHEMATIC PLAN & BENCHMARKS	P.0003-P.0009
SUBSUMMARIES	P.0328-P.0370
CROSS SECTIONS	P.0804-P.0966
INTERSECTION DETAILS	P.0982-P.0991
CURB RAMP DETAILS	P.0992-P.1003
RAMP TERMINAL DETAILS	P.1004-P.1034
DRAINAGE PLAN & PROFILES	P.1047-P.1149
TRAFFIC CONTROL PLAN	P.1154-P.1267
ITS PLAN	P.1268-P.1289
FENCE PLANS	P.1502-P.1520



RESURFACING SECTION

*MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE AND CROWN POSITION

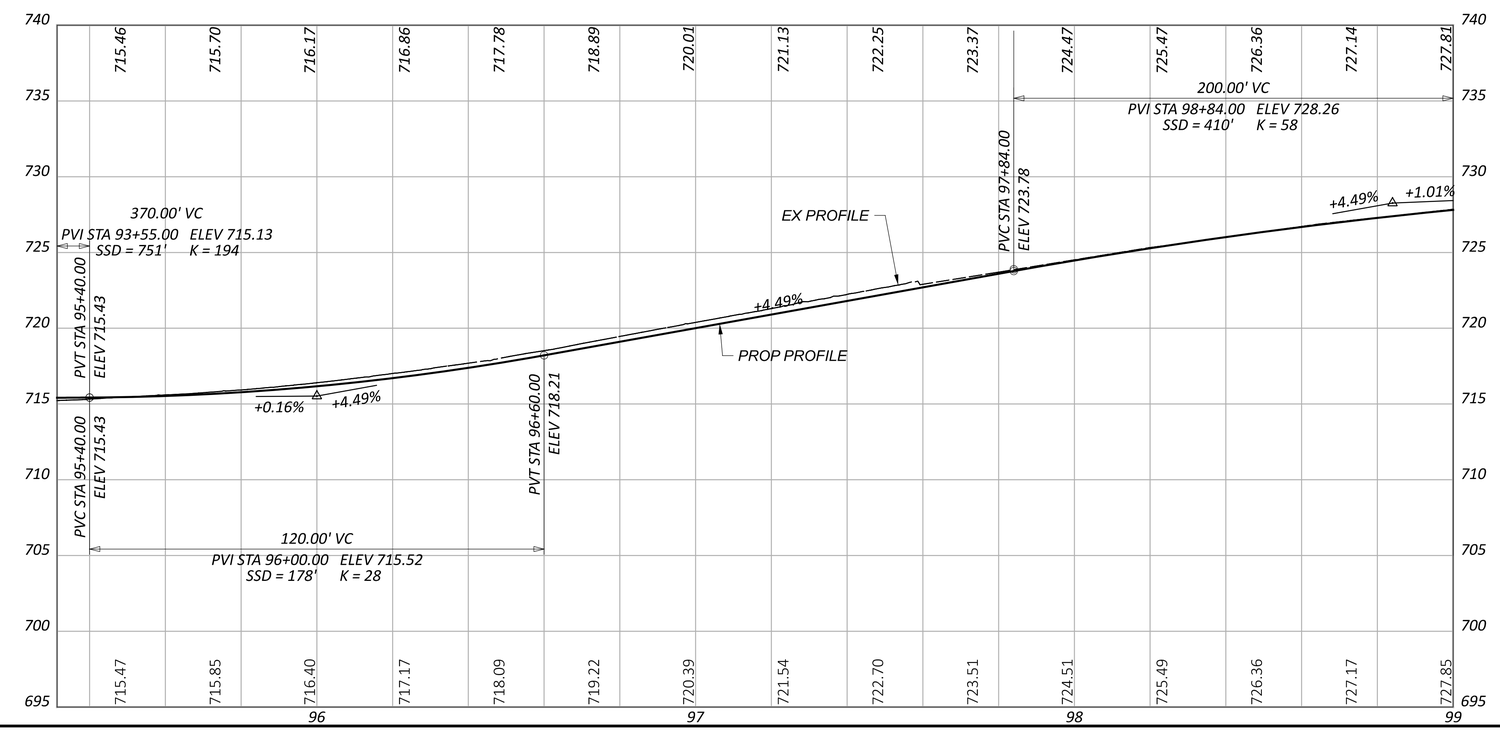
STA 98+77.58 TO STA 99+00.00

EXISTING LEGEND

- A ASPHALT OVERLAY (THICKNESS VARIES; 5"-6")
- C SUBBASE (VARIABLE)
- G EXISTING CURB

PROPOSED LEGEND

- 5 ITEM 407 - TACK COAT
- 18 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5")
- 23 ITEM 441 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN PG70-22M



HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - RAMP MC (MCKINLEY AVE TO IR 90 WB)
STA 94+25.00 TO STA 99+00.00

DESIGN AGENCY
MOODY ENGINEERING
300 SPRUCE STREET SUITE 200 COLUMBUS, OHIO 43215
P: 614.280.8999
MOODY-ENG.COM

DESIGNER
CNK

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0430 TOTAL P.1587

CUY-90-6.69

MODEL: BLX_R090_MCI - McKinley Ramp C-Plan I PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 10:24:41 AM USER: jsima
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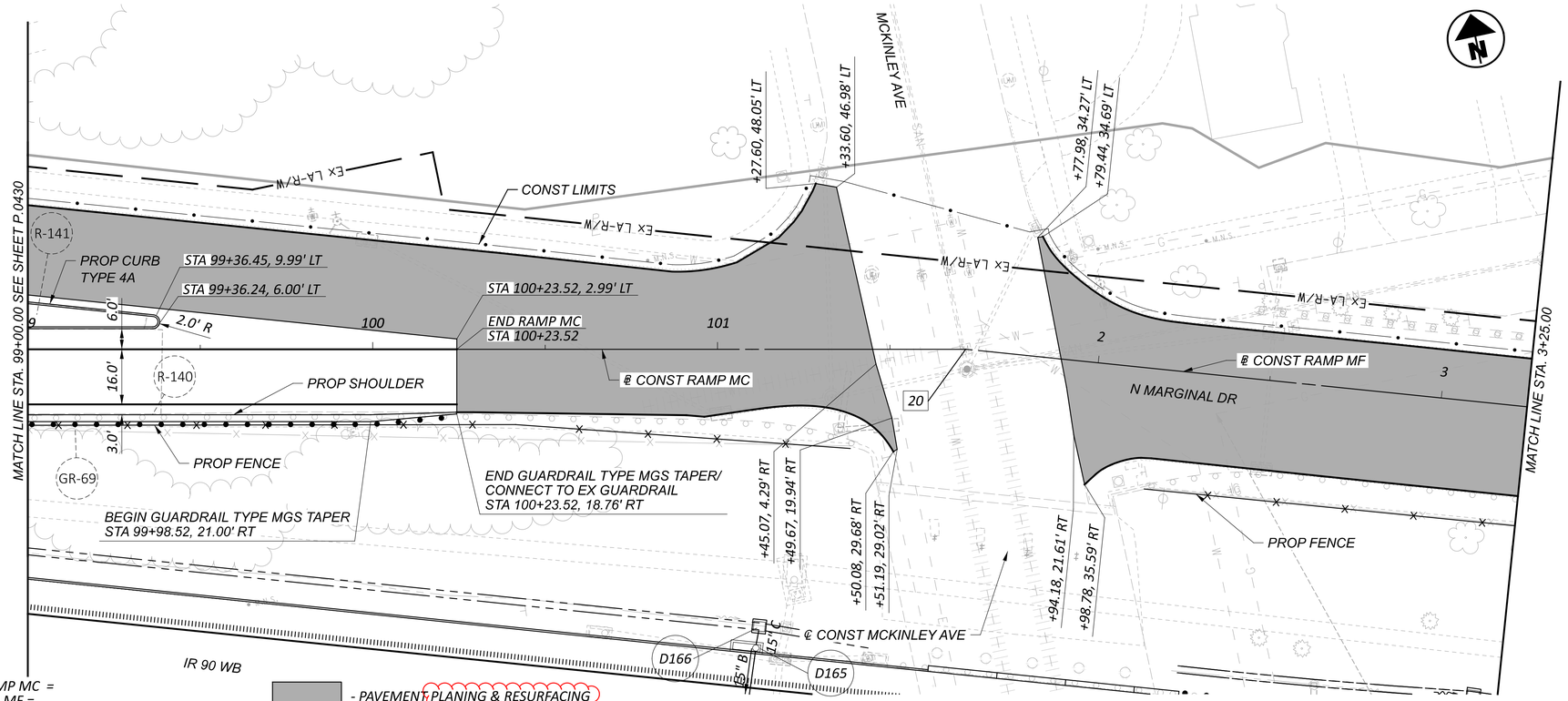
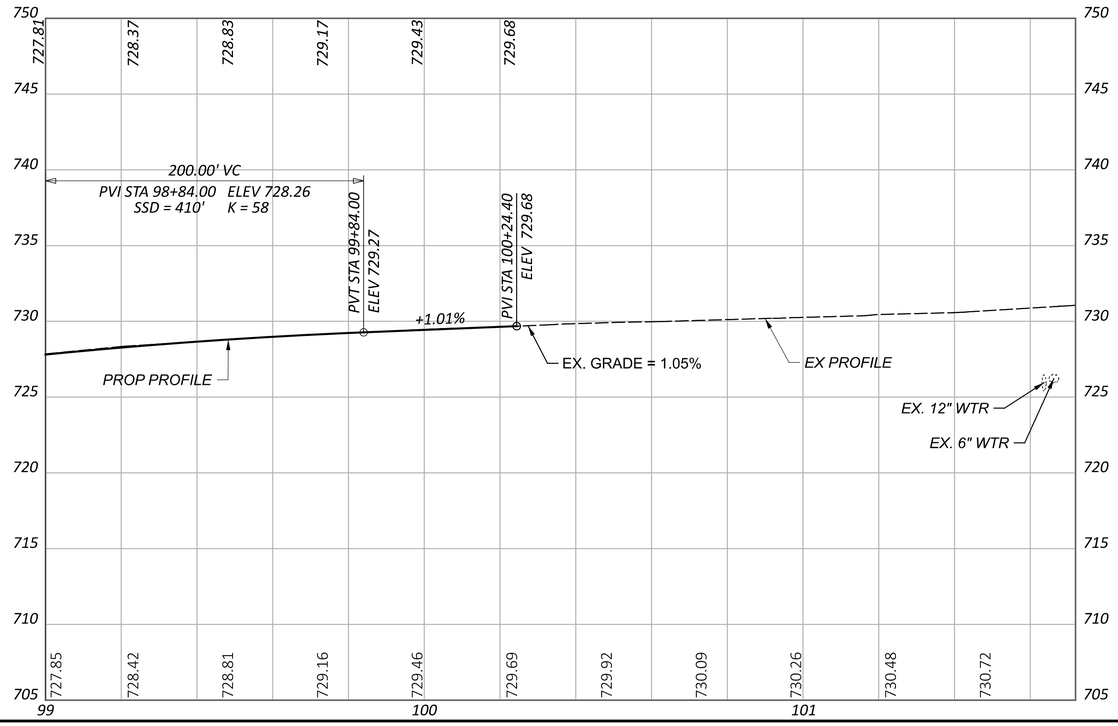
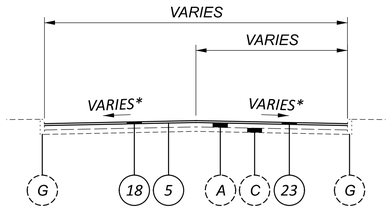


20 STA 101+71.95, ℄ CONST RAMP MC =
STA 1+61.37, ℄ CONST RAMP MF =
STA 13+72.51, ℄ CONST MCKINLEY AVE

- PAVEMENT PLANING & RESURFACING



CROSS REFERENCES:	
DESCRIPTION	SHEET NO
SCHEMATIC PLAN & BENCHMARKS	P.0003-P.0009
SUBSUMMARIES	P.0328-P.0370
CROSS SECTIONS	P.0804-P.0966
INTERSECTION DETAILS	P.0982-P.0991
CURB RAMP DETAILS	P.0992-P.1003
RAMP TERMINAL DETAILS	P.1004-P.1034
DRAINAGE PLAN & PROFILES	P.1047-P.1149
TRAFFIC CONTROL PLAN	P.1154-P.1267
ITS PLAN	P.1268-P.1289
FENCE PLANS	P.1502-P.1520



RESURFACING SECTION

*MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE AND CROWN POSITION

STA 99+00.00 TO STA 101+71.95
STA 1+61.37 TO STA 3+25.00

EXISTING LEGEND

- (A) ASPHALT OVERLAY (THICKNESS VARIES; 5"-6")
- (C) SUBBASE (VARIABLE)
- (G) EXISTING CURB

PROPOSED LEGEND

- (5) ITEM 407 - TACK COAT
- (18) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5")
- (23) ITEM 441 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN PG70-22M

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - RAMP MC (MCKINLEY AVE TO IR 90 WB)
STA 99+00.00 TO STA 3+25.00

DESIGN AGENCY
MOODY ENGINEERING
305 SPRUCE STREET SUITE 200 COLUMBUS, OHIO 43215
P: 614.360.9999
MOODY-ENG.COM

DESIGNER CNK
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0431 TOTAL P.1587

CUY-90-6.69

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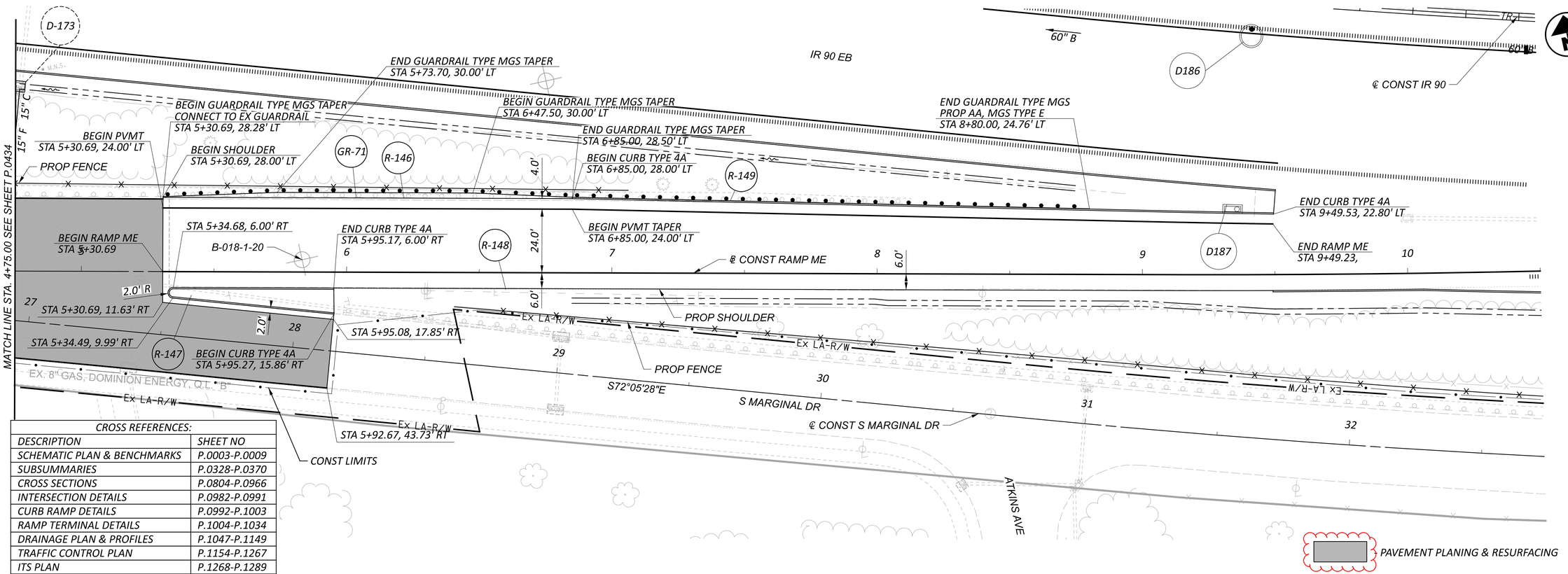
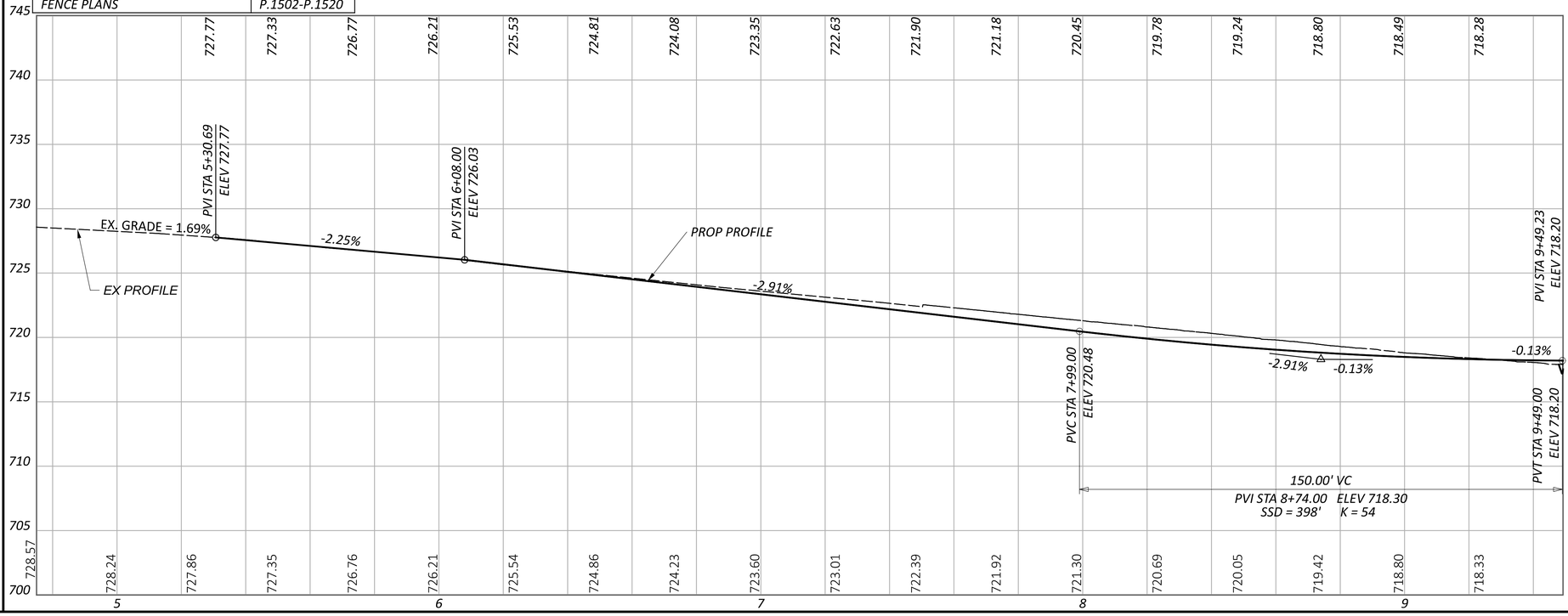
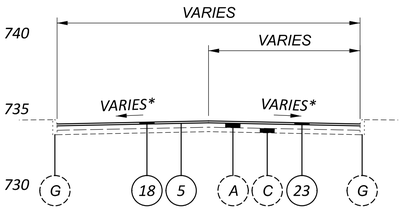


CROSS REFERENCES:	
DESCRIPTION	SHEET NO
SCHEMATIC PLAN & BENCHMARKS	P.0003-P.0009
SUBSUMMARIES	P.0328-P.0370
CROSS SECTIONS	P.0804-P.0966
INTERSECTION DETAILS	P.0982-P.0991
CURB RAMP DETAILS	P.0992-P.1003
RAMP TERMINAL DETAILS	P.1004-P.1034
DRAINAGE PLAN & PROFILES	P.1047-P.1149
TRAFFIC CONTROL PLAN	P.1154-P.1267
ITS PLAN	P.1268-P.1289
FENCE PLANS	P.1502-P.1520





RESURFACING SECTION

*MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE AND CROWN POSITION

STA 4+75.00 TO STA 5+95.08

EXISTING LEGEND

- A ASPHALT OVERLAY (THICKNESS VARIES; 5"-6")
- C SUBBASE (VARIABLE)
- G EXISTING CURB

PROPOSED LEGEND

- 5 ITEM 407 - TACK COAT
- 18 ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5")
- 23 ITEM 441 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN PG70-22M

HORIZONTAL SCALE IN FEET 0 10 20 40

PLAN AND PROFILE - RAMP ME (MCKINLEY AVE TO I-90 EB)
STA 4+75.00 TO STA 10+50.00

DESIGN AGENCY
MOODY ENGINEERING

DESIGNER CNK
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0435 TOTAL P.1587

CUY-90-6.69

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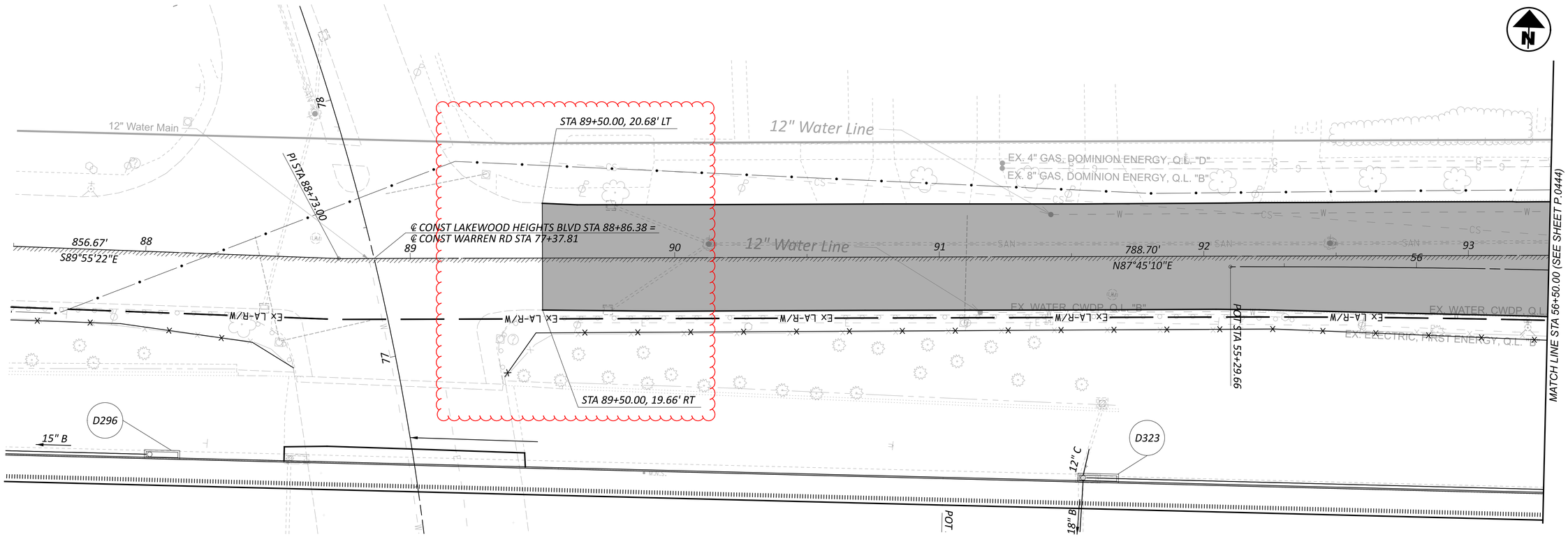

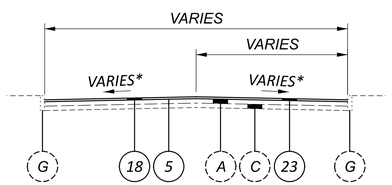

RESURFACING SECTION

*MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE AND CROWN POSITION

~~STA 89+50.00 TO STA 92+10.04~~
~~STA 55+29.66 TO STA 56+50.00~~

EXISTING LEGEND

- (A) ASPHALT OVERLAY (THICKNESS VARIES; 5"-6")
- (C) SUBBASE (VARIABLE)
- (G) EXISTING CURB

PROPOSED LEGEND

- (5) ITEM 407 - TACK COAT
- (18) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5")
- (23) ITEM 441 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN PG70-22M

CROSS REFERENCES:	
DESCRIPTION	SHEET NO
SCHEMATIC PLAN & BENCHMARKS	P.0003-P.0009
SUBSUMMARIES	P.0328-P.0370
CROSS SECTIONS	P.0804-P.0966
INTERSECTION DETAILS	P.0982-P.0991
CURB RAMP DETAILS	P.0992-P.1003
RAMP TERMINAL DETAILS	P.1004-P.1034
DRAINAGE PLAN & PROFILES	P.1047-P.1149
TRAFFIC CONTROL PLAN	P.1154-P.1267
ITS PLAN	P.1268-P.1289
FENCE PLANS	P.1502-P.1520

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN - WARREN RD AND LAKEWOOD HEIGHTS BLVD
STA. 87+50.00 TO STA. 56+50.00

DESIGN AGENCY
MOODY ENGINEERING
300 SPRUCE STREET SUITE 100 COLUMBUS, OHIO 43215 P: 614 360 8999 MOODY-ENG.COM

DESIGNER SJC
REVIEWER VDK 08/09/23
PROJECT ID 76779
SHEET P.0440 TOTAL P.1587

CUY-90-6.69

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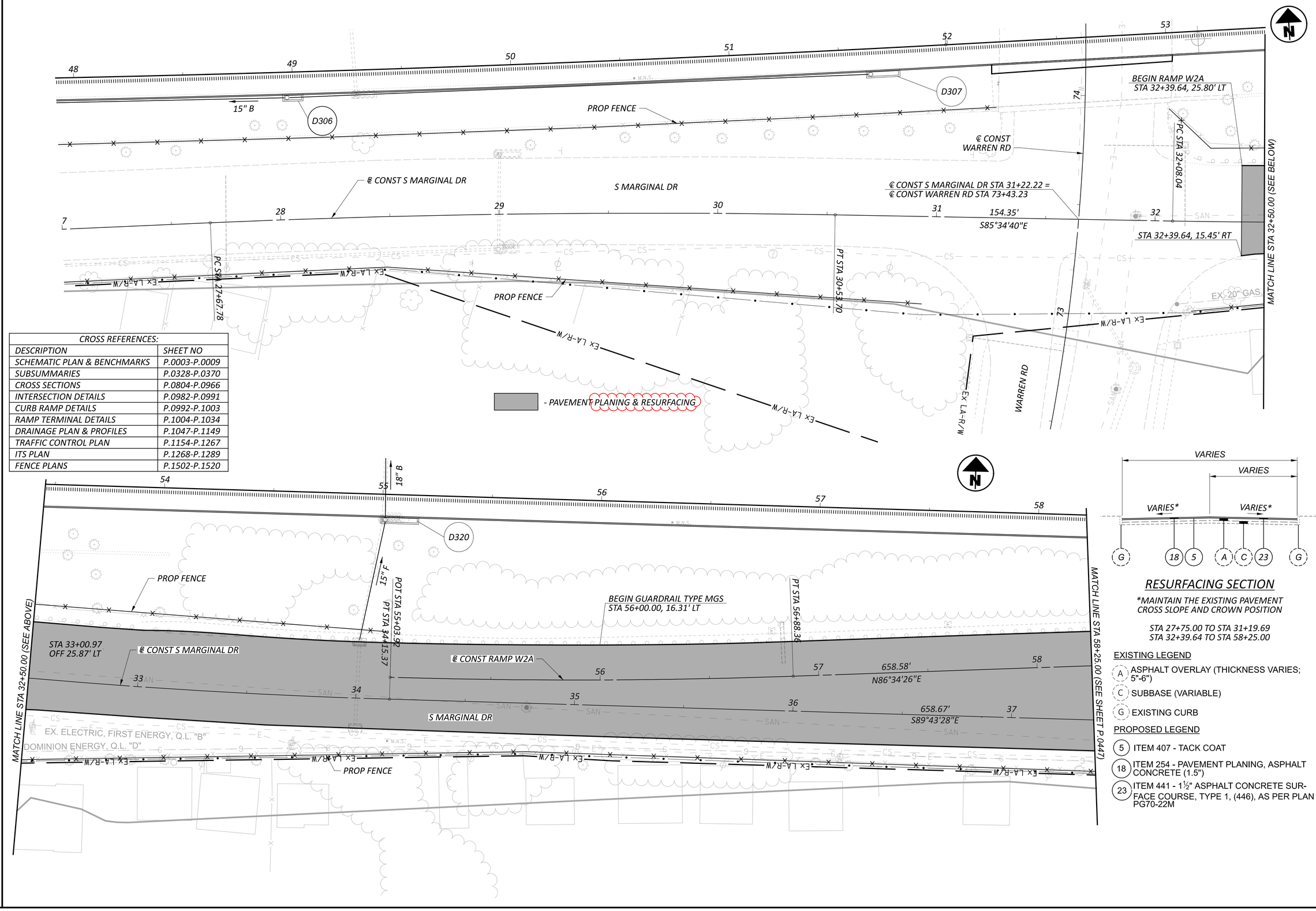

CROSS REFERENCES:	
DESCRIPTION	SHEET NO
SCHEMATIC PLAN & BENCHMARKS	P.0003-P.0009
SUBSUMMARIES	P.0328-P.0370
CROSS SECTIONS	P.0804-P.0966
INTERSECTION DETAILS	P.0982-P.0991
CURB RAMP DETAILS	P.0992-P.1003
RAMP TERMINAL DETAILS	P.1004-P.1034
DRAINAGE PLAN & PROFILES	P.1047-P.1149
TRAFFIC CONTROL PLAN	P.1154-P.1267
ITS PLAN	P.1268-P.1289
FENCE PLANS	P.1502-P.1520

RESURFACING SECTION

*MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE AND CROWN POSITION

STA 27+75.00 TO STA 31+19.69
STA 32+39.64 TO STA 58+25.00

EXISTING LEGEND

- (A) ASPHALT OVERLAY (THICKNESS VARIES; 5"-6")
- (C) SUBBASE (VARIABLE)
- (G) EXISTING CURB

PROPOSED LEGEND

- (5) ITEM 407 - TACK COAT
- (18) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5")
- (23) ITEM 441 - 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN PG70-22M

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN - WARREN RD AND S MARGINAL DR
STA. 27+75.00 TO STA. 58+25.00

DESIGN AGENCY
MOODY ENGINEERING
300 SPRUCE STREET SUITE 200 COLUMBUS, OHIO 43215 P: 614 280 9999 MOODY-ENG.COM

DESIGNER
SJC

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.0446 TOTAL P.1587

CUY-90-6.69

MODEL: Warren S - Warren S 3 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 10:39:39 AM USER: jslma
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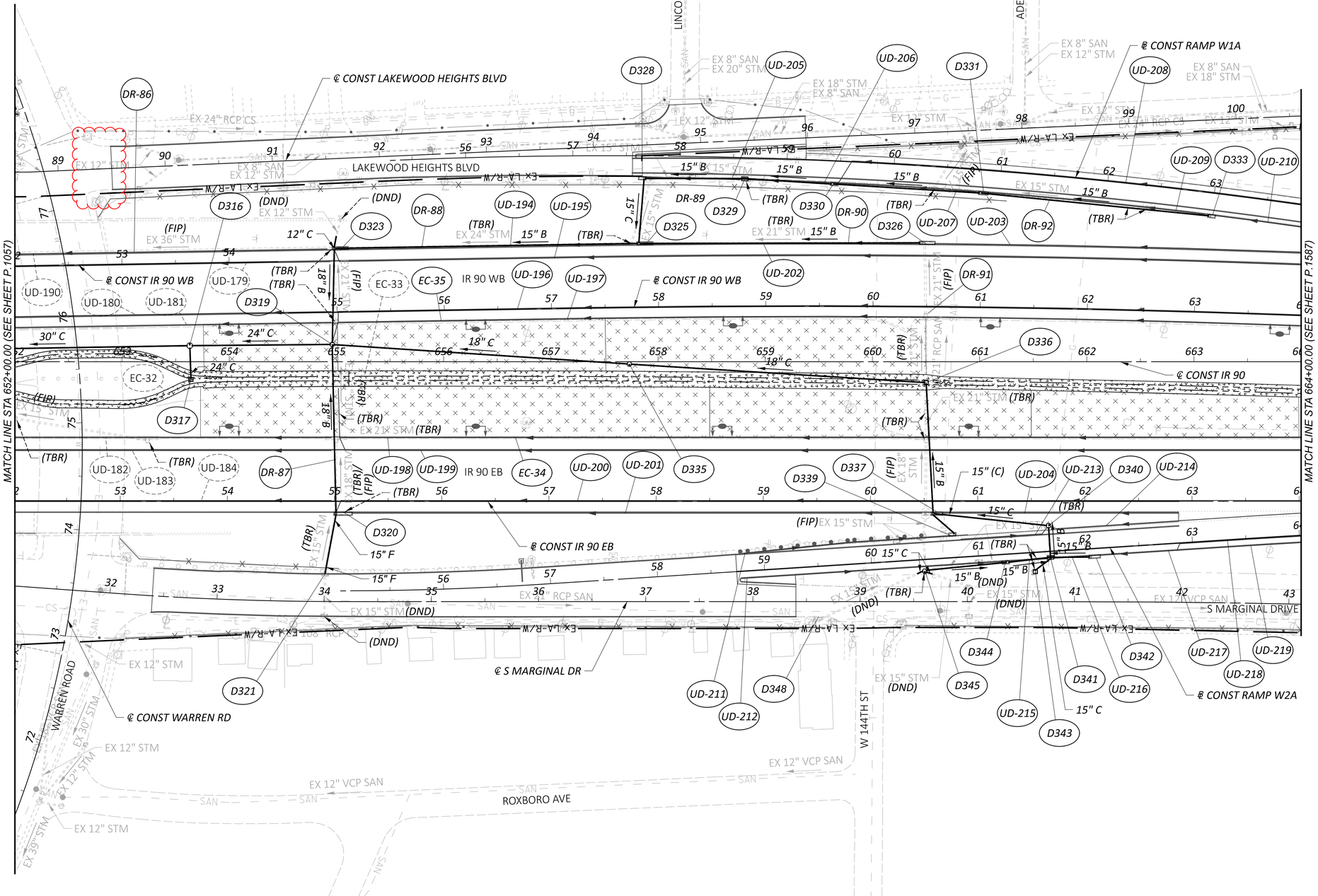
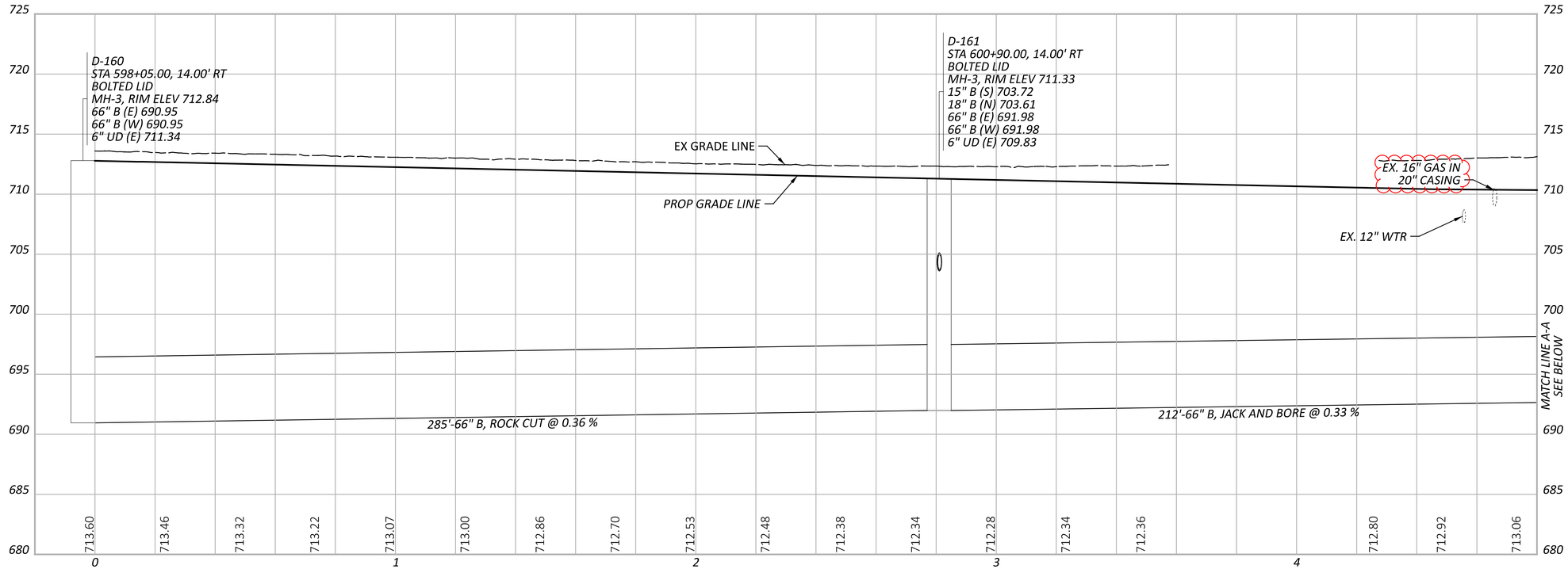
NOTES:

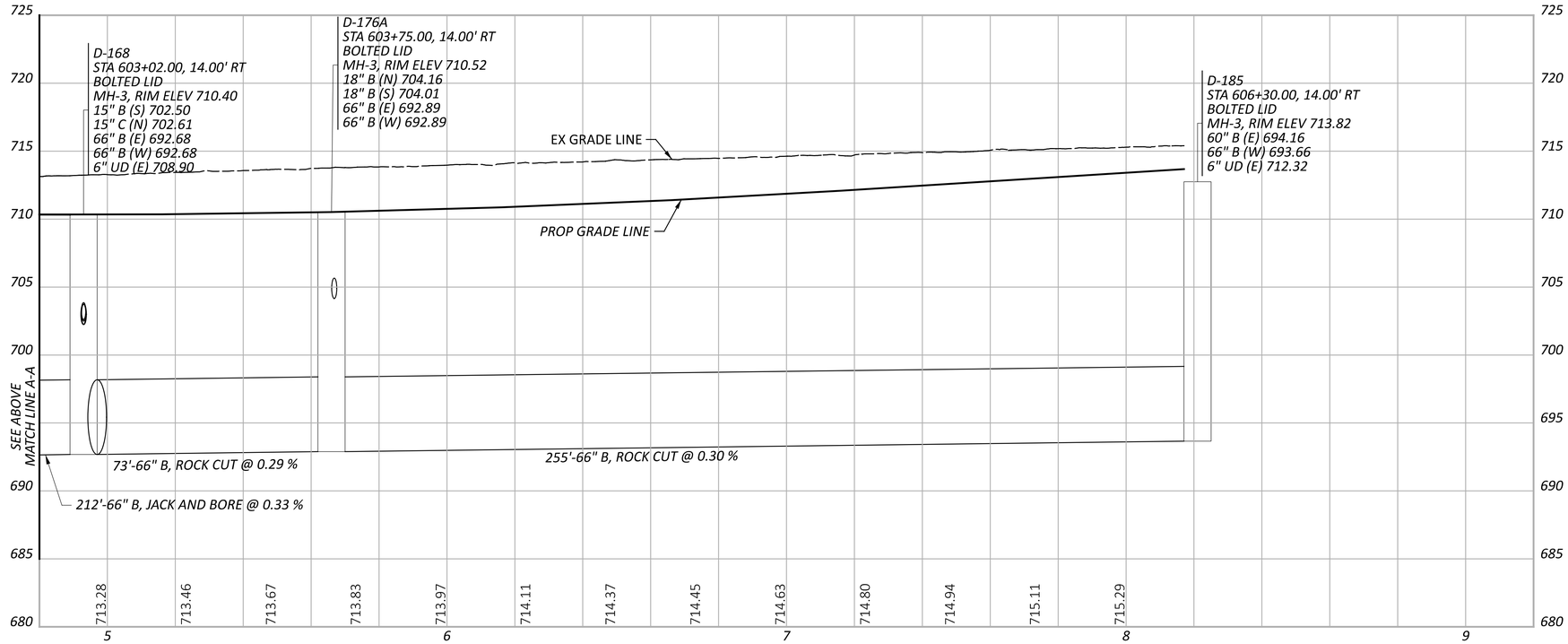
1. FOR LEGEND, SEE SHEET P.1047
2. FOR STORM SEWER PROFILES, SEE SHEETS P.1068 - P.1149
3. ALL CONNECTIONS TO EXISTING STRUCTURES TO BE CORED IN THE FIELD
4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM


LINCOLN AVE
ADELINE AVE
LAKEWOOD HEIGHTS BLVD
℄ CONST LAKEWOOD HEIGHTS BLVD
℄ CONST RAMP W1A
℄ CONST IR 90 WB
℄ CONST IR 90
℄ CONST IR 90 EB
℄ CONST RAMP W2A
℄ CONST WARREN RD
℄ S MARGINAL DR
IR 90 WB
IR 90 EB
S MARGINAL DRIVE
WARREN ROAD
W 144TH ST
ROXBORO AVE
MATCH LINE STA 652+00.00 (SEE SHEET P.1057)
MATCH LINE STA 664+00.00 (SEE SHEET P.1587)
EX 24" RCP CS
EX 12" STM
EX 8" SAN
EX 12" SAN
EX 20" STM
EX 18" STM
EX 8" SAN
EX 15" STM
EX 12" STM
EX 12" STM
EX 8" SAN
EX 18" STM
EX 12" STM
EX 12" RCP CS
EX 12" STM
EX L A-R/W
EX 36" STM
EX 12" STM
EX 24" STM
EX 15" STM
EX 21" STM
EX 21" STM
EX 15" STM
EX 15" STM
EX 15

NOTES:

1. ALL STATIONING TAKEN FROM ℄ CONST IR 90 UNLESS OTHERWISE NOTED
2. FOR DRAINAGE PLAN SHEETS, SEE SHEET P.1047 - P.1067
3. ALL EXISTING CONNECTIONS TO BE CORED IN THE FIELD
4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM





STORM SEWER PROFILES
OUTFALL D

CUY-90-6.69

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DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER
AJO

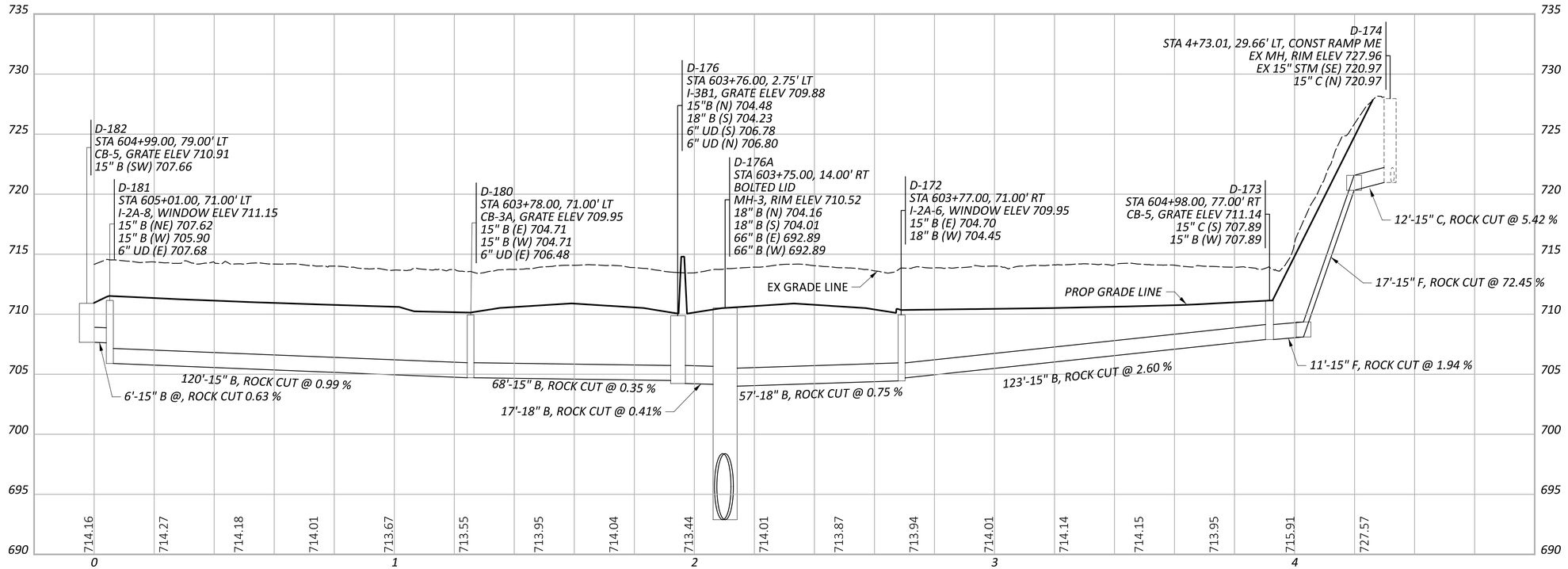
REVIEWER
KEM 08/09/23

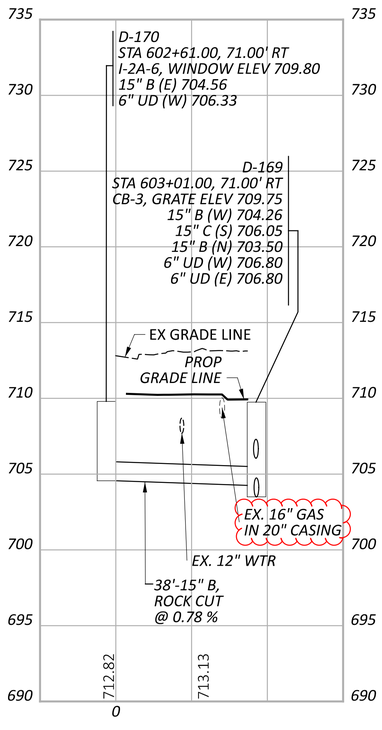
PROJECT ID
76779

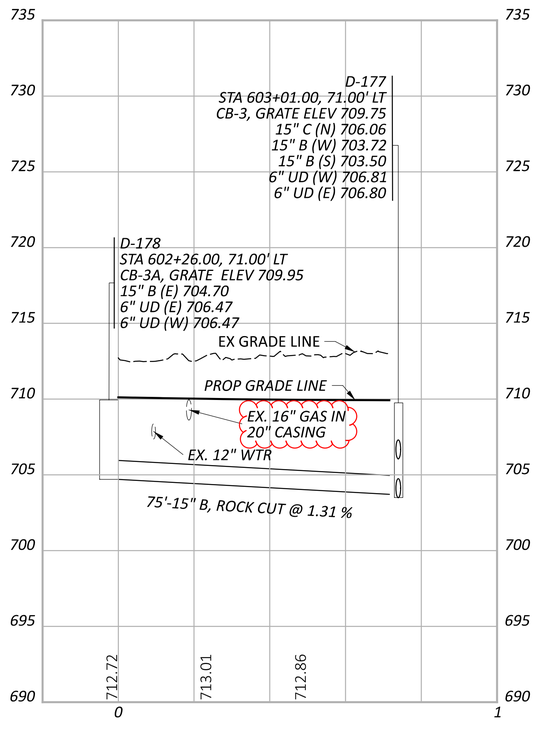
SHEET P.1086 TOTAL P.1587

NOTES:

1. ALL STATIONING TAKEN FROM ℄ CONST IR 90 UNLESS OTHERWISE NOTED
2. FOR DRAINAGE PLAN SHEETS, SEE SHEET P.1047 - P.1067
3. ALL EXISTING CONNECTIONS TO BE CORED IN THE FIELD
4. ALL PROPOSED PIPES TO BE CONNECTED TO EXISTING SHALL BE FITTED WITH A MASONRY COLLAR PER SCD DM-1.1. COST INCLUDED IN THE UNIT BID PRICE FOR THE PERTINENT CONDUIT ITEM







STORM SEWER PROFILES
OUTFALL D

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER
AJO

REVIEWER
KEM 08/09/23

PROJECT ID
76779

SHEET P.1097 TOTAL P.1587

CUY-90-6.69

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PAVEMENT MARKING SUBSUMMARY (WEST) (1 OF 10)

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		I.R. 90																																	
EW-1	P.1185	353+23.44	540+44.00	RT	WHITE																			0.25					0.25						
EW-2	P.1185	353+23.44	543+02.00	LT	WHITE																			0.30					0.30						
LL-1	P.1185	353+23.44	574+65.00	LT	WHITE		59																		0.90				0.90						
LL-2	P.1185	353+23.44	574+65.00	LT	WHITE		59																		0.90				0.90						
EY-1	P.1185	353+23.44	574+65.00	LT	YELLOW																			0.90					0.90						
EY-2	P.1185	353+23.44	574+65.00	RT	YELLOW																			0.90					0.90						
LL-3	P.1185	353+23.44	574+65.00	RT	WHITE		59																		0.90				0.90						
LL-4	P.1185	353+23.44	574+65.00	RT	WHITE		59																		0.90				0.90						
CL-1	P.1185	540+44.00	556+00.00	RT	WHITE																					1556				1556					
		RAMP HA																																	
XW-2	P.1185	33+05.00	33+35.00	LT/RT	WHITE												44																		
XW-2	P.1185	33+20.00	33+48.00	LT/RT	WHITE												41																		
EY-3	P.1185	33+20.00	40+45.00	LT	YELLOW		9																	0.14								0.14			
LL-5	P.1185	33+35.00	40+45.00	LT	WHITE		6																		0.13							0.13			
XW-3	P.1185	33+97.00	34+24.00	RT	WHITE												45																		
XW-3	P.1185	33+97.00	34+23.00	RT	WHITE												36																		
EW-3	P.1185	34+21.00	40+45.00	RT/CL	WHITE																			0.14								0.14			
LR	P.1185	37+74.00	40+98.00		WHITE																	2													
CL-2	P.1185	40+45.00	41+98.00	LT	WHITE		4																			153							153		
DW-1	P.1185	40+45.00	41+98.00	LT	WHITE																		153												
EW-4	P.1185	40+45.00	54+08.00	CL	WHITE																			0.26					0.26						
		RAMP HB																																	
XW-1	P.1185	30+83.00	31+28.00	LT/RT	WHITE												82																		
XW-1	P.1185	30+99.00	31+35.00	LT/RT	WHITE												65																		
DY-1	P.1185	31+09.00	31+25.00	RT	YELLOW																		61												
S-1	P.1185	31+15.00	31+49.00	LT/RT	WHITE											59																			
EW-5	P.1185	31+15.00	43+02.00	LT/CL	WHITE																			0.22								0.22			
CL-3	P.1185	31+23.00	32+50.00	CL	WHITE		3								127																				
CL-4	P.1185	31+32.00	32+50.00	RT	WHITE		3								118																				
CL-5	P.1185	31+40.00	32+50.00	RT	WHITE		3								110																				
EY-4	P.1185	31+49.00	43+02.00	RT	YELLOW		14																	0.22								0.22			
LA	P.1185	31+74.00	32+40.00		WHITE															8															
LL-6	P.1185	32+50.00	38+50.00	CL	WHITE		5																		0.11							0.11			
LL-7	P.1185	32+50.00	43+02.00	RT	WHITE		9																		0.20							0.20			
WA	P.1185	33+06.00			WHITE																3														
		I.R. 90																																	
DW-2	P.1186	541+96.00	550+65.00	RT	WHITE																							869			869				
CL-6	P.1186	541+97.00	556+00.00	RT	WHITE		35																			1403					1403				
C -1	P.1186	543+02.00	546+89.00	LT	WHITE													128																	
CL-7	P.1186	543+02.00	546+89.00	LT	WHITE		10																			387					387				
WD-1	P.1186	552+14.00	574+65.00	LT	WHITE																								2252		2252				
EW-6	P.1186	552+14.00	574+65.00	LT	WHITE																			0.43					0.43						
EW-7	P.1186	554+07.00	574+65.00	RT	WHITE																			0.39					0.39						
		RAMP HB																																	
EW-8	P.1186	43+02.00	52+14.00	CL	WHITE																			0.17					0.17						
CL-8	P.1186	43+03.00	46+90.00	RT	WHITE		10																			388					388				
TOTALS CARRIED TO SHEET P.1165						0	347	0	0	0	0	0	0	0	355	59	313	128	0	8	3	2	0	214	4.32	4.04	3887	869	2252	7.20	869	6139	1.16	0	0

CUY-90-6.69

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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1156 TOTAL P.1587

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		RAMP HB (CONT.)																																		
CL-9	P.1186	43+03.00	52+14.00	RT	WHITE		23																			912						912				
		I.R. 90																																		
LL-8	P.1187	556+00.00	574+65.00	RT	WHITE		23																		0.35				0.35							
WD-2	P.1188	574+65.00	578+50.00	LT	WHITE																							385							385	
LL-9	P.1188	574+65.00	582+73.00	LT	WHITE		10																		0.15								0.15			
LL-10	P.1188	574+65.00	582+73.00	LT	WHITE		10																		0.15								0.15			
EY-5	P.1188	574+65.00	582+73.00	LT	YELLOW																				0.15								0.15			
EW-10	P.1188	574+65.00	582+75.00	LT	WHITE																				0.15								0.15			
EY-6	P.1188	574+65.00	582+73.00	RT	YELLOW																				0.15								0.15			
LL-11	P.1188	574+65.00	582+73.00	RT	WHITE		10																			0.15							0.15			
EW-9	P.1188	574+65.00	582+73.00	RT	WHITE																				0.15								0.15			
LL-12	P.1188	574+65.00	582+73.00	RT	WHITE		10																			0.15							0.15			
LL-13	P.1188	574+65.00	582+73.00	RT	WHITE		10																			0.15							0.15			
LL-14	P.1189	578+50.00	582+73.00	LT	WHITE		5																			0.08							0.08			
EW-12	P.1189	582+73.00	586+93.00	RT	WHITE																				0.08				0.08							
LL-16	P.1189	582+73.00	633+29.00	RT	WHITE		63																			1.00			1.00							
EY-7	P.1189	582+73.00	633+29.00	RT	YELLOW																				1.00				1.00							
LL-15	P.1189	582+73.00	633+29.00	RT	WHITE		63																			1.00			1.00							
LL-17	P.1189	582+73.00	633+29.00	RT	WHITE		63																			1.00			1.00							
LL-20	P.1189	582+73.00	640+00.00	LT	WHITE		72																			1.12			1.12							
EY-8	P.1189	582+73.00	640+00.00	LT	YELLOW																				1.12				1.12							
LL-18	P.1189	582+73.00	640+00.00	LT	WHITE		72																			1.12			1.12							
LL-19	P.1189	582+73.00	640+00.00	LT	WHITE		72																			1.12			1.12							
EW-11	P.1189	582+73.00	583+10.00	LT	WHITE																				0.01				0.01							
DL-1	P.1189	583+10.00	591+96.00	LT	WHITE																									899						
DL-2	P.1189	584+30.00	588+31.00	RT	WHITE																									401					401	
CL-10	P.1189	588+31.00	590+52.00	RT	WHITE		6																				221					221				
EW-13	P.1189	590+52.00	609+71.00	RT	WHITE																				0.36				0.36							
		RAMP MD																																		
EW-14	P.1189	86+93.00	90+44.00	CL	WHITE																				0.07				0.07							
CL-11	P.1189	88+28.00	90+44.00	LT	WHITE		5																				216					216				
EY-9	P.1189	90+44.00	97+75.00	LT	YELLOW		9																		0.14								0.14			
EW-15	P.1189	90+44.00	97+75.00	CL	WHITE																				0.14								0.14			
		RAMP MC																																		
EW-16	P.1189	83+10.00	95+31.00	CL	WHITE																				0.23				0.23							
		I.R. 90																																		
CL-12	P.1190	591+96.00	595+10.00	LT	WHITE																						318					318				
EW-17	P.1190	595+10.00	612+65.00	LT	WHITE																				0.33				0.33							
		RAMP MD																																		
WA	P.1190	96+02.00	97+52.00		WHITE															3																
LL-21	P.1190	97+04.00	99+91.00	RT	WHITE									0.05																						
CL-13	P.1190	97+75.00	99+00.00	CL	WHITE		3								125																						
CL-14	P.1190	97+75.00	99+00.00	RT/CL	WHITE		3								125																						
WA	P.1190	99+00.00			WHITE															3																
CL-15	P.1190	99+91.00	101+88.00	RT	WHITE										197																						
TOTALS CARRIED TO SHEET P.1165						0	532	0	0	0	0	0	0	0.05	447	0	0	0	0	0	0	6	0	0	0	4.08	7.54	1667	1300	385	9.91	899	1667	1.71	401	385

PAVEMENT MARKING SUBSUMMARY (WEST) (2 OF 10)

DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1157 TOTAL P.1587

CUY-90-6.69

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REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		RAMP MD (CONT.)																																		
CL-16	P.1190	99+91.00	101+90.00	LT	WHITE										199																					
LA	P.1190	100+22.00	101+54.00		WHITE															8																
WP	P.1190	100+88.00			WHITE																		1													
S-2	P.1190	101+79.00	101+98.00	LT/RT	WHITE											59																				
		RAMP MC																																		
CL-17	P.1190	92+11.00	95+31.00	RT	WHITE		8																					320								
EY-10	P.1190	95+31.00	100+24.00	RT	YELLOW		6																		0.09								0.09		
EW-18	P.1190	95+31.00	100+24.00	CL	WHITE																				0.09								0.09		
LL-22	P.1190	98+77.00	100+71.00	LT	WHITE									0.04																					
		RAMP ME																																		
XW-5	P.1190	2+41.00	2+65.00	LT/RT	WHITE												76																			
XW-5	P.1190	2+55.00	2+73.00	LT/RT	WHITE												58																			
LL-23	P.1190	2+89.00	5+30.00	LT	WHITE		2							0.03																						
		RAMP MF																																		
XW-4	P.1190	1+76.00	2+03.00	LT/RT	WHITE												70																			
XW-4	P.1190	1+93.00	2+12.00	LT/RT	WHITE												55																			
S-3	P.1190	2+01.00	2+18.00	LT/RT	WHITE											48																				
CL-18	P.1190	2+01.00	4+24.00	CL	WHITE										223																					
CL-19	P.1190	2+01.00	4+24.00	RT	WHITE										223																					
LA	P.1190	2+58.00			WHITE															3																
WP	P.1190	3+24.00			WHITE																		2													
		I.R. 90																																		
CL-20	P.1191	609+71.00	616+05.00	RT	WHITE																							643						643		
CL-21	P.1191	612+65.00	615+54.00	LT	WHITE		7																					289						289		
WD-3	P.1191	615+54.00	624+50.00	LT	WHITE																								896					896		
		RAMP ME																																		
LL-24	P.1191	3+47.00	5+95.00	RT	WHITE									0.05																						
CL-23	P.1191	4+21.00	5+30.00	LT/CL	WHITE										110																					
CL-22	P.1191	4+21.00	5+30.00	LT/RT	WHITE										110																					
LL-25	P.1191	5+30.00	6+85.00	LT	WHITE									0.03																						
EY-11	P.1191	5+30.00	9+49.00	LT	YELLOW		5																		0.08								0.08		
EW-19	P.1191	5+30.00	9+50.00	CL	WHITE																				0.08								0.08		
LR	P.1191	5+85.00	5+85.00		WHITE																	1														
DW-3	P.1191	6+85.00	9+50.00	LT	WHITE																								265						265	
CL-24	P.1191	9+49.00	15+96.00	LT	WHITE		16																					645					645		
DW-4	P.1191	9+50.00	11+16.00	LT	WHITE																								166					166		
EW-20	P.1191	9+50.00	17+56.00	CL	WHITE																				0.15					0.15						
		RAMP MF																																		
LA	P.1191	3+90.00			WHITE															3																
LL-26	P.1191	4+24.00	5+33.00	CL	WHITE									0.02																						
LL-27	P.1191	4+24.00	5+33.00	RT	WHITE									0.02																						
S-4	P.1191	4+52.00	4+72.00	LT	WHITE											20																				
WA	P.1191	5+33.00	10+66.00	LT/RT	WHITE																6															
EY-12	P.1191	5+33.00	12+75.00	RT	YELLOW		9																		0.14								0.14		
WA	P.1191	5+33.00			WHITE																1															
CL-25	P.1191	5+33.00	6+37.00	CL	WHITE										104																					
TOTALS CARRIED TO SHEET P.1165						0	53	0	0	0	0	0	0	0.19	969	127	259	0	0	14	7	1	3	0	0.63	0	1897	431	896	0.15	0	2959	0.48	265	0

PAVEMENT MARKING SUBSUMMARY (WEST) (3 OF 10)

CUY-90-6.69

MODEL: Sheet-03 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 3:16:11 PM USER: Alexandria.Summers
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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1158 TOTAL P.1587

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		RAMP MF (CONT.)																																	
CL-26	P.1191	5+33.00	6+38.00	CL/LT	WHITE										106																				
LL-28	P.1191	5+33.00	9+00.00	RT	WHITE		3							0.07																					
EW-21	P.1191	6+37.00	12+75.00	CL	WHITE																			0.14								0.14		
EW-22	P.1191	12+75.00	17+28.00	CL	WHITE																			0.09					0.09					
CL-27	P.1191	12+75.00	15+54.00	RT	WHITE		7																			281					281			
C -2	P.1191	13+16.00	15+54.00	RT	WHITE													77																	
		I.R. 90																																	
WD-4	P.1192	616+05.00	626+28.00	RT	WHITE																								1232		1232				
EW-23	P.1192	617+28.00	624+50.00	LT	WHITE																			0.36					0.36					
EW-24	P.1192	617+56.00	624+33.00	RT	WHITE																			0.17					0.17					
CL-28	P.1192	624+50.00	636+40.00	LT	WHITE																					1190					1190			
CL-29	P.1192	626+28.00	629+40.00	RT	WHITE		8																			312					312			
		RAMP W1																																	
CL-30	P.1192	24+51.00	36+39.00	RT	WHITE		30																			1188					1188			
		RAMP W2																																	
EW-25	P.1192	24+33.00	29+41.00	CL	WHITE																			0.10					0.10					
CL-31	P.1192	26+28.00	29+41.00	LT	WHITE		8																			313					313			
		I.R. 90																																	
EW-26	P.1193	629+41.00	633+29.00	RT	WHITE																			0.07					0.07					
EW-27	P.1193	636+40.00	640+00.00	LT	WHITE																			0.07					0.07					
		I.R. 90 EB																																	
EW-28	P.1193	33+29.00	62+87.00	CL	WHITE																			0.56					0.56					
LL-29	P.1193	33+29.00	72+10.00	LT	WHITE		49																		0.74					0.74				
LL-30	P.1193	33+29.00	72+13.00	LT	WHITE		49																		0.74					0.74				
LL-31	P.1193	33+29.00	72+16.00	LT	WHITE		49																		0.74					0.74				
EY-13	P.1193	33+29.00	74+14.00	LT	YELLOW																			0.77					0.77					
		RAMP W1																																	
EW-29	P.1193	24+51.00	36+39.00	CL	WHITE																			0.23					0.23					
EW-30	P.1193	36+39.00	43+14.00	CL	WHITE																			0.13					0.13					
EY-14	P.1193	36+39.00	43+14.00	RT	YELLOW		6																	0.13					0.13					
		RAMP W2																																	
C -3	P.1193	26+27.00	29+14.00	LT	WHITE													96																	
EW-31	P.1193	29+41.00	37+80.00	CL/LT	WHITE																			0.16								0.16		
EY-15	P.1193	29+41.00	37+81.00	LT	YELLOW		10																	0.16								0.16		
WA	P.1193	35+60.00	37+78.00		WHITE																3														
CL-32	P.1193	35+81.00	39+15.00	RT/LT	WHITE										334																				
LL-32	P.1193	35+81.00	43+24.00	RT	WHITE									0.10																					
CL-33	P.1193	37+81.00	39+15.00	LT	WHITE										134																				
		I.R. 90 WB																																	
EW-32	P.1194	40+00.00	65+57.00	CL/LT	WHITE																			0.48					0.48					
LL-33	P.1194	40+00.00	67+17.00	RT/LT	WHITE		34																		0.51					0.51				
LL-34	P.1194	40+00.00	67+17.00	RT/LT	WHITE		34																		0.51					0.51				
LL-35	P.1194	40+00.00	67+17.00	RT/LT	WHITE		34																		0.51					0.51				
EY-16	P.1194	40+00.00	67+17.00	RT/CL	YELLOW																			0.51					0.51					
TOTALS CARRIED TO SHEET P.1165						0	321	0	0	0	0	0	0	0.17	574	0	0	173	0	0	3	0	0	0	4.13	3.75	3284	0	1232	7.42	0	4516	0.46	0	0

PAVEMENT MARKING SUBSUMMARY (WEST) (4 OF 10)

CUY-90-6.69

MODEL: Sheet-04 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 3:16:12 PM USER: Alexandria.Summers
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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1159 TOTAL P.1587

PAVEMENT MARKING SUBSUMMARY (WEST) (5 OF 10)

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		S MARGINAL DR.																																	
S-5	P.1194	22+27.00	22+31.00	RT/LT	WHITE											45																			
XW-6	P.1194	22+32.00	22+37.00	RT/LT	WHITE												49																		
XW-6	P.1194	22+42.00	22+48.00	RT/LT	WHITE												58																		
		RAMP W2																																	
LL-38	P.1194	39+15.00	41+03.00	LT	WHITE									0.04																					
WA	P.1194	39+77.00		LT/RT	WHITE																3														
CL-34	P.1194	41+03.00	43+23.00	LT	WHITE										223																				
CL-35	P.1194	41+03.00	43+23.00	RT	WHITE										223																				
		I.R. 90 EB																																	
GL-38	P.1195	62+87.00	67+02.00	GL	WHITE																								415					415	
		RAMP W1A																																	
LL-41	P.1195	52+70.00	56+40.00	LT/RT	WHITE									0.07																					
LL-42	P.1195	52+70.00	59+16.00	LT	WHITE									0.12																					
CL-39	P.1195	56+50.00	57+58.00	LT	WHITE										106																				
CL-40	P.1195	56+50.00	57+58.00	RT	WHITE										106																				
EY-17	P.1195	57+56.00	65+47.00	RT	YELLOW		10																		0.15								0.15		
EW-33	P.1195	57+58.00	65+47.00	RT/CL	WHITE																				0.15								0.15		
WA	P.1195	59+31.00	64+31.00		WHITE																3														
		RAMP W2A																																	
EW-34	P.1195	37+86.00	59+28.00	RT	WHITE								0.01																						
LL-43	P.1195	53+28.00	56+74.00	CL	WHITE									0.11																					
LL-44	P.1195	53+28.00	59+27.00	RT	WHITE									0.07																					
CL-41	P.1195	56+74.00	58+74.00	CL	WHITE										200																				
CL-42	P.1195	56+74.00	58+74.00	CL/RT	WHITE										200																				
EY-18	P.1195	58+74.00	62+88.00	LT	YELLOW		5																		0.08								0.08		
EW-35	P.1195	58+74.00	62+88.00	CL	WHITE																				0.08								0.08		
CL-43	P.1195	62+88.00	67+02.00	LT	WHITE		10																				414					414			
EW-36	P.1195	62+88.00	72+15.00	CL	WHITE																				0.18				0.18						
		I.R. 90																																	
CL-44	P.1196	667+15.00	668+55.00	LT	WHITE		3																				142					142			
LL-45	P.1196	667+15.00	672+06.00	LT	WHITE		6																			0.09				0.09					
LL-46	P.1196	667+15.00	672+09.00	LT	WHITE		6																			0.09				0.09					
LL-47	P.1196	667+15.00	672+11.00	LT	WHITE		6																			0.09				0.09					
EY-19	P.1196	667+17.00	672+13.00	LT	YELLOW																				0.09					0.09					
DL-3	P.1196	668+55.00	671+80.00	LT	WHITE																							332			332				
EW-37	P.1196	670+30.00	672+04.00	LT	WHITE																				0.03								0.03		
EW-38	P.1196	672+04.00	673+97.00	LT	WHITE																				0.04								0.04		
LL-48	P.1196	672+06.00	674+00.00	LT	WHITE		2																			0.04								0.04		
LL-49	P.1196	672+09.00	674+03.00	LT	WHITE		2																			0.04								0.04		
LL-50	P.1196	672+11.00	674+06.00	LT	WHITE		2																			0.04								0.04		
EY-20	P.1196	672+13.00	674+08.00	LT	YELLOW																				0.04								0.04		
EW-39	P.1196	673+97.00	681+78.00	LT	WHITE																				0.15				0.15						
LL-51	P.1196	674+00.00	684+65.00	LT	WHITE		13																			0.20				0.20					
LL-52	P.1196	674+03.00	684+64.00	LT	WHITE		13																			0.20				0.20					
LL-53	P.1196	674+06.00	684+64.00	LT	WHITE		13																			0.20				0.20					
EY-21	P.1196	674+08.00	684+63.00	LT	YELLOW																				0.20				0.20						
TOTALS CARRIED TO SHEET P.1165						0	91	0	0	0	0	0	0.01	0.41	1058	45	107	0	0	0	6	0	0	0	1.19	0.99	971	332	0	1.49	332	971	0.69	0	0

CUY-90-6.69

MODEL: Sheet-05 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 3:16:13 PM USER: Alexandria.Summers
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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1160 | TOTAL P.1587

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		I.R. 90 EB																																	
DL-4	P.1196	67+02.00	72+16.00	CL	WHITE																						513			513					
EY-22	P.1196	72+09.00	74+03.00	LT	YELLOW																			0.04							0.04				
LL-54	P.1196	72+10.00	74+05.00	LT	WHITE		2																		0.04						0.04				
LL-55	P.1196	72+12.00	74+08.00	LT	WHITE		2																		0.04						0.04				
LL-56	P.1196	72+14.00	74+10.00	LT	WHITE		2																		0.04						0.04				
DL-5	P.1196	72+16.00	74+13.00	CL	WHITE																						197					197			
EW-40	P.1196	72+17.00	74+14.00	RT	WHITE																			0.04							0.04				
EY-23	P.1196	74+03.00	76+99.00	LT	YELLOW																			0.06					0.06						
LL-57	P.1196	74+05.00	76+99.00	LT	WHITE		4																			0.06			0.06						
LL-58	P.1196	74+08.00	76+99.00	LT	WHITE		4																			0.06			0.06						
LL-59	P.1196	74+10.00	76+99.00	LT	WHITE		4																			0.05			0.05						
DL-6	P.1196	74+13.00	76+99.00	CL	WHITE																						286			286					
EW-41	P.1196	74+14.00	76+99.00	RT/CL	WHITE																			0.05					0.05						
		I.R. 90 WB																																	
CL-45	P.1196	65+57.00	67+17.00	LT	WHITE		4																			160				160					
		RAMP W1A																																	
CL-46	P.1196	65+47.00	68+51.00	RT	WHITE		8																			304				304					
EW-42	P.1196	65+47.00	70+30.00	CL	WHITE																			0.09					0.09						
		RAMP 140-3																																	
DY-2	P.1196	72+35.00	72+60.00	RT	YELLOW																		40												
XW-12	P.1196	72+55.00	72+61.00	LT/RT	WHITE												33																		
EW-43	P.1196	72+62.00	81+75.00	LT/CL	WHITE																			0.17							0.17				
XW-12	P.1196	72+67.00	72+70.00	LT/RT	WHITE												48																		
S-10	P.1196	72+77.00	72+80.00	LT/RT	WHITE											27																			
CL-47	P.1196	72+79.00	75+29.00	RT	WHITE		6																			250								250	
LA	P.1196	72+80.00	75+21.00		WHITE															6															
EY-24	P.1196	72+80.00	81+73.00	RT	YELLOW		11																	0.17							0.17				
		RAMP 140-4																																	
XW-13	P.1196	74+27.00	74+31.00	LT/RT	WHITE												25																		
XW-14	P.1196	74+35.00	74+48.00	RT	WHITE												26																		
XW-13	P.1196	74+37.00	74+41.00	LT/RT	WHITE												30																		
EY-25	P.1196	74+37.00	80+98.00	LT	YELLOW		8																	0.13							0.13				
LL-60	P.1196	74+39.00	76+61.00	LT	WHITE		3																		0.04						0.04				
XW-14	P.1196	74+43.00	74+53.00	RT	WHITE												29																		
EW-44	P.1196	74+94.00	80+98.00	RT	WHITE																			0.11							0.11				
LR	P.1196	76+00.00	76+00.00	LT	WHITE																	1													
DL-7	P.1196	76+61.00	81+05.00	LT/RT	WHITE																						441			441					
		I.R. 90																																	
EW-45	P.1197	676+99.00	680+88.00	RT	WHITE																			0.07							0.07				
LL-62	P.1197	676+99.00	684+57.00	RT	WHITE		9																		0.14				0.14						
LL-61	P.1197	676+99.00	684+57.00	RT	WHITE		9																		0.14				0.14						
LL-63	P.1197	676+99.00	684+58.00	RT	WHITE		9																		0.14				0.14						
EY-26	P.1197	676+99.00	684+59.00	RT	YELLOW																			0.14					0.14						
CL-48	P.1197	680+88.00	684+56.00	RT	WHITE																					368				368					
CL-49	P.1197	681+78.00	684+56.00	LT	WHITE		7																			278				278					
DL-8	P.1197	684+54.00	684+66.00	LT	WHITE																						11			11					
TOTALS CARRIED TO SHEET P.1165						0	92	0	0	0	0	0	0	0	0	27	191	0	0	6	0	1	0	40	1.07	0.75	1360	1448	0	0.93	1251	1110	0.89	197	250

PAVEMENT MARKING SUBSUMMARY (WEST) (6 OF 10)

CUY-90-6.69

MODEL: Sheet-06 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 3:16:14 PM USER: Alexandria.Summers
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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1161 TOTAL P.1587

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED	621 RPM	642 EDGE LINE, 6", TYPE 1	642 LANE LINE, 6", TYPE 1	642 CHANNELIZING LINE, 12", TYPE 1	642 DOTTED LINE, 6", TYPE 1	642 DOTTED LINE, 12", TYPE 1	646 EDGE LINE, 6"	646 LANE LINE, 6"	646 CHANNELIZING LINE, 12"	646 STOP LINE	646 CROSSWALK LINE, 12"	646 CHEVRON MARKING	646 ISLAND MARKING	646 LANE ARROW	646 WRONG WAY ARROW	646 LANE REDUCTION ARROW	646 WORD ON PAVEMENT, 96"	646 DOTTED LINE, 6"	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12"	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE)
						EACH	EACH	MILE	MILE	FT	FT	FT	MILE	MILE	FT	FT	FT	FT	SF	EACH	EACH	EACH	EACH	FT	MILE	MILE	FT	FT	FT	MILE	FT	FT	MILE	FT	FT
		I.R. 90 (CONT.)																																	
EW-46	P.1197	684+55.00	691+12.00	RT	WHITE																			0.12								0.12		
CL-51	P.1197	684+56.00	685+02.00	RT	WHITE																					46								46	
CL-50	P.1197	684+56.00	685+02.00	RT	WHITE		1																			46								46	
LL-65	P.1197	684+57.00	691+14.00	RT	WHITE		8																		0.12							0.12		
LL-64	P.1197	684+57.00	691+14.00	RT	WHITE		8																		0.12							0.12		
LL-66	P.1197	684+58.00	691+15.00	RT	WHITE		8																		0.12							0.12		
EY-27	P.1197	684+59.00	691+16.00	RT	YELLOW																			0.12								0.12		
EY-28	P.1197	684+63.00	691+20.00	LT	YELLOW																			0.12								0.12		
LL-67	P.1197	684+64.00	691+20.00	LT	WHITE		8																		0.12							0.12		
LL-68	P.1197	684+64.00	691+21.00	LT	WHITE		8																		0.12							0.12		
LL-69	P.1197	684+66.00	691+22.00	LT	WHITE		8																		0.12							0.12		
DL-9	P.1197	684+66.00	689+67.00	LT	WHITE																						501						501	
EW-47	P.1197	684+67.00	691+22.00	LT	WHITE																			0.12								0.12		
DL-10	P.1197	685+02.00	691+13.00	RT	WHITE																						610						610	
LR	P.1197	688+03.00	688+03.00	RT	WHITE																	1													
		RAMP 140-3																																	
WA	P.1197	76+28.00			WHITE																1														
CL-52	P.1197	81+75.00	84+55.00	RT	WHITE		7																			280					280				
EW-48	P.1197	81+75.00	84+67.00	CL	WHITE																			0.06							0.06				
		RAMP 140-4																																	
CL-53	P.1197	80+98.00	83+81.00	LT	WHITE		7																			283					283				
EW-49	P.1197	80+98.00	84+55.00	RT/CL	WHITE																			0.07							0.07				
LR	P.1197	83+22.00	83+22.00	LT	WHITE																	1													
		I.R. 90																																	
EW-50	P.1198	691+12.00	695+45.00	RT	WHITE																			0.08							0.08				
DL-11	P.1198	691+13.00	693+83.00	RT	WHITE																						270					270			
LL-71	P.1198	691+14.00	695+44.00	RT	WHITE		5																		0.08							0.08			
LL-70	P.1198	691+14.00	695+42.00	RT	WHITE		5																		0.08							0.08			
LL-72	P.1198	691+15.00	695+40.00	RT	WHITE		5																		0.08							0.08			
EY-29	P.1198	691+16.00	695+38.00	RT	YELLOW																			0.08							0.08				
EY-30	P.1198	691+20.00	695+28.00	LT	YELLOW																			0.08							0.08				
LL-73	P.1198	691+20.00	695+27.00	LT	WHITE		5																		0.08							0.08			
LL-74	P.1198	691+21.00	695+25.00	LT	WHITE		5																		0.08							0.08			
LL-75	P.1198	691+22.00	695+23.00	LT	WHITE		5																		0.08							0.08			
EW-51	P.1198	691+22.00	695+21.00	LT	WHITE																			0.08							0.08				
EW-52	P.1198	695+21.00	696+12.00	LT	WHITE																			0.02								0.02			
LL-76	P.1198	695+23.00	696+14.00	LT	WHITE		1																		0.02							0.02			
LL-77	P.1198	695+25.00	696+16.00	LT	WHITE		1																		0.02							0.02			
LL-78	P.1198	695+27.00	696+17.00	LT	WHITE		1																		0.02							0.02			
EY-31	P.1198	695+28.00	696+19.00	LT	YELLOW																			0.02								0.02			
EY-32	P.1198	695+38.00	696+28.00	RT	YELLOW																			0.02								0.02			
LL-79	P.1198	695+40.00	696+29.00	RT	WHITE		1																		0.02							0.02			
LL-80	P.1198	695+42.00	696+31.00	RT	WHITE		1																		0.02							0.02			
LL-81	P.1198	695+44.00	696+33.00	RT	WHITE		1																		0.02							0.02			
EW-53	P.1198	695+45.00	696+34.00	RT	WHITE																			0.02								0.02			
EW-54	P.1198	696+12.00	724+75.00	LT	WHITE			0.54																							0.54				
LL-82	P.1198	696+14.00	768+85.00	LT	WHITE		91		1.38																										
TOTALS CARRIED TO SHEET P.1165						0	190	0.54	1.38	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1.01	1.32	655	1381	0	1.47	270	563	1.40	1111	92

PAVEMENT MARKING SUBSUMMARY (WEST) (7 OF 10)

CUY-90-6.69

MODEL: Sheet-07 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 3:16:15 PM USER: Alexandria.Summers
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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1162 TOTAL P.1587

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		I.R. 90 (CONT.)																																	
LL-83	P.1198	696+16.00	768+85.00	LT	WHITE		91		1.38																										
LL-84	P.1198	696+17.00	768+85.00	LT	WHITE		91		1.38																										
EY-33	P.1198	696+19.00	768+85.00	LT	YELLOW			1.38																											
EY-34	P.1198	696+28.00	768+85.00	RT	YELLOW			1.37																											
LL-85	P.1198	696+29.00	768+85.00	RT	WHITE		91		1.37																										
LL-86	P.1198	696+31.00	768+85.00	RT	WHITE		91		1.37																										
LL-87	P.1198	696+33.00	768+85.00	RT	WHITE		91		1.37																										
EW-55	P.1198	696+34.00	720+33.00	RT	WHITE			0.45																											
DL-13	P.1200	714+75.00	723+55.00	LT	WHITE						880																								
DL-12	P.1200	715+26.00	721+76.00	RT	WHITE						650																								
CL-54	P.1200	721+76.00	724+04.00	RT	WHITE		6			228																									
CL-55	P.1200	723+55.00	724+87.00	LT	WHITE		3			132																									
CL-56	P.1200	723+55.00	727+07.00	LT	WHITE		9			352																									
EW-56	P.1200	724+04.00	730+41.00	RT	WHITE			0.12																											
DL-14	P.1200	724+83.00	733+59.00	LT	WHITE						876																								
		RAMP 117-8																																	
CL-57	P.1200	21+76.00	24+03.00	CL	WHITE		6			227																									
EW-57	P.1200	24+03.00	33+19.00	CL/RT	WHITE																				0.17								0.17		
EY-35	P.1200	24+03.00	33+40.00	LT	YELLOW		12																		0.18								0.18		
		RAMP 117-5																																	
EW-58	P.1200	24+76.00	27+06.00	CL	WHITE			0.04																											
CL-58	P.1200	24+76.00	27+06.00	RT	WHITE		6			230																									
		I.R. 90																																	
CL-59	P.1201	730+41.00	733+00.00	RT	WHITE					259																									
DL-15	P.1201	733+00.00	741+81.00	RT	WHITE						880																								
CL-60	P.1201	733+60.00	736+13.00	LT	WHITE					253																									
EW-60	P.1201	736+13.00	743+75.00	LT	WHITE			0.14																											
		RAMP 117-5																																	
EY-36	P.1201	27+06.00	33+88.00	RT	YELLOW		9																		0.13								0.13		
EW-59	P.1201	27+06.00	34+19.00	CL	WHITE																				0.14								0.14		
XW-18	P.1201	33+88.00	34+19.00	RT/CL	WHITE												31																		
XW-18	P.1201	42+11.00	42+42.00	RT/CL	WHITE												31																		
		RAMP 117-7																																	
CL-61	P.1201	30+42.00	33+00.00	LT	WHITE		6			258																									
EW-61	P.1201	30+42.00	39+70.00	CL	WHITE			0.18																											
		RAMP 117-11																																	
EW-62	P.1201	27+07.00	36+09.00	CL	WHITE			0.17																											
CL-62	P.1201	33+60.00	36+09.00	RT	WHITE		6			249																									
EY-37	P.1201	36+09.00	41+61.00	RT	YELLOW		7																		0.10								0.10		
EW-63	P.1201	36+09.00	42+16.00	CL	WHITE																				0.11								0.11		
XW-20	P.1201	41+54.00	41+89.00	RT/LT	WHITE												44																		
XW-20	P.1201	41+64.00	42+16.00	RT/CL	WHITE												61																		
		I.R. 90																																	
CL-63	P.1202	739+70.00	745+36.00	RT	WHITE		14			566																									
EW-64	P.1202	741+72.00	756+57.00	RT	WHITE			0.28																											
C -5	P.1202	743+75.00	745+96.00	LT	WHITE													79																	
TOTALS CARRIED TO SHEET P.1165						0	539	4.13	6.87	2754	3286	0	0	0	0	0	167	79	0	0	0	0	0	0	0.83	0	0	0	0	0	0	0	0.83	0	0

PAVEMENT MARKING SUBSUMMARY (WEST) (8 OF 10)

CUY-90-6.69

MODEL: Sheet-08 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 3:16:17 PM USER: Alexandria.Summers
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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1163 TOTAL P.1587

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		I.R. 90 (CONT.)																																	
CL-64	P.1202	743+75.00	745+96.00	LT	WHITE		6			221																									
WD-5	P.1202	745+36.00	759+26.00	RT	WHITE							1390																							
WD-6	P.1202	749+00.00	760+15.00	LT	WHITE							1115																							
EW-65	P.1202	749+00.00	763+75.00	LT	WHITE			0.28																											
		RAMP 117-9																																	
CL-65	P.1202	39+69.00	45+36.00	LT	WHITE		14			567																									
EW-66	P.1202	39+70.00	41+70.00	CL	WHITE			0.04																											
		RAMP 117-12																																	
CL-66	P.1202	43+77.00	45+98.00	RT	WHITE		6			221																									
CL-67	P.1202	43+77.00	49+00.00	RT	WHITE		13			523																									
EW-67	P.1202	43+77.00	49+00.00	CL	WHITE			0.10																											
		I.R. 90																																	
CL-68	P.1203	759+26.00	762+63.00	RT	WHITE		8			337																									
C -6	P.1203	759+31.00	762+56.00	RT	WHITE													109																	
CL-69	P.1203	760+15.00	763+72.00	LT	WHITE		9			357																									
CL-70	P.1203	760+15.00	765+48.00	LT	WHITE					533																									
EW-68	P.1203	762+63.00	768+85.00	RT	WHITE			0.12																											
		RAMP W14																																	
EW-69	P.1203	56+56.00	62+77.00	CL/RT	WHITE			0.12																											
CL-71	P.1203	59+31.00	62+77.00	LT	WHITE		9			346																									
EW-70	P.1203	62+77.00	69+71.00	CL/RT	WHITE		2																	0.13								0.13		
EY-38	P.1203	62+77.00	69+82.00	LT	YELLOW		11																	0.13								0.13		
		RAMP W13																																	
CL-72	P.1203	63+75.00	65+42.00	RT	WHITE		4			167																									
EW-71	P.1203	63+75.00	65+42.00	CL	WHITE			0.03																											
		I.R. 90																																	
EW-72	P.1204	765+48.00	768+85.00	LT	WHITE			0.06																											
		RAMP W14																																	
WA	P.1204	66+56.00			WHITE																1													
LA	P.1204	67+50.00	69+48.00		WHITE															6														
CL-73	P.1204	67+50.00	69+50.00	LT	WHITE		5																			200							200	
EW-70B	P.1204	69+50.00	69+78.00	LT	WHITE		2																	0.01								0.01		
EW-70A	P.1204	69+50.00	69+79.00	LT	WHITE		2																	0.01								0.01		
S-13	P.1204	69+70.00	69+78.00	RT/LT	WHITE											20																		
IW-1	P.1204	69+73.00	69+79.00	LT	WHITE	11													21															
XW-21	P.1204	69+78.00	69+86.00	RT	WHITE												20																	
S-14	P.1204	69+78.00	69+82.00	LT	WHITE											19																		
XW-21	P.1204	69+85.00	69+94.00	RT	WHITE												22																	
XW-22	P.1204	69+89.00	69+94.00	LT	WHITE												20																	
XW-22	P.1204	70+00.00	70+05.00	LT	WHITE												22																	
		RAMP W13																																	
EY-39	P.1204	65+42.00	71+02.00	RT	YELLOW		7																	0.11								0.11		
EW-73	P.1204	65+42.00	71+10.00	CL/LT	WHITE																			0.11								0.11		
XW-23	P.1204	71+02.00	71+12.00	RT/LT	WHITE												33																	
XW-23	P.1204	71+10.00	71+25.00	RT/LT	WHITE												45																	
TOTALS CARRIED TO SHEET P.1165						11	98	0.75	0	3272	0	2505	0	0	0	39	162	109	21	6	1	0	0	0	0.50	0	200	0	0	0	0	0	0.50	0	200

PAVEMENT MARKING SUBSUMMARY (WEST) (9 OF 10)

CUY-90-6.69

MODEL: Sheet-09 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 3:16:18 PM USER: Alexandria.Summers
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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1164 TOTAL P.1587

PAVEMENT MARKING SUBSUMMARY (WEST) (10 OF 10)

REF NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	COLOR	620 DELINEATOR, POST SURFACE MOUNTED EACH	621 RPM EACH	642 EDGE LINE, 6", TYPE 1 MILE	642 LANE LINE, 6", TYPE 1 MILE	642 CHANNELIZING LINE, 12", TYPE 1 FT	642 DOTTED LINE, 6", TYPE 1 FT	642 DOTTED LINE, 12", TYPE 1 FT	646 EDGE LINE, 6" MILE	646 LANE LINE, 6" MILE	646 CHANNELIZING LINE, 12" FT	646 STOP LINE FT	646 CROSSWALK LINE, 12" FT	646 CHEVRON MARKING FT	646 ISLAND MARKING SF	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 LANE REDUCTION ARROW EACH	646 WORD ON PAVEMENT, 96" EACH	646 DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6" MILE	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6" FT	807 WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12" FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT) FT	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) MILE	850 GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE) FT	850 GROOVING FOR 12" RECESSED PAVEMENT MARKING, (CONCRETE) FT
		RAMP 117-8																																	
EW-74	P.1205	20+33.00	24+03.00	CL	WHITE																				0.07						0.07				
LL-88	P.1205	30+00.00	31+40.00	LT	WHITE		1																		0.03								0.03		
CL-74	P.1205	31+40.00	33+40.00	LT	WHITE		5																				200								200
S-11	P.1205	33+40.00	33+40.00	LT/RT	WHITE											38																			
XW-15	P.1205	33+50.00	33+50.00	LT/RT	WHITE												69																			
DW-5	P.1205	33+60.00	34+35.00	LT	WHITE																			76											
XW-15	P.1205	33+60.00	33+60.00	LT/RT	WHITE												51																			
		RAMP 117-7																																	
XW-16	P.1205	23+40.00	23+85.00	CL/LT	WHITE												53																			
EW-75	P.1205	23+58.00	31+81.00	CL	WHITE																				0.16								0.16		
XW-16	P.1205	23+60.00	23+98.00	RT/LT	WHITE												47																			
EY-40	P.1205	23+91.00	30+42.00	LT	YELLOW		8																		0.12								0.12		
WA	P.1205	31+20.00		LT/RT	WHITE																2															
LA	P.1205	31+93.00	33+25.00	LT/RT	WHITE															6																
		RAMP 117-9																																	
XW-17	P.1205	30+91.00	31+65.00	CL/LT	WHITE												48																			
XW-17	P.1205	31+32.00	31+73.00	CL/LT	WHITE												83																			
EW-76	P.1205	31+32.00	41+70.00	CL	WHITE																				0.20								0.20		
EY-41	P.1205	31+66.00	39+69.00	LT	YELLOW		10																		0.15								0.15		
		RAMP 117-12																																	
DW-6	P.1206	33+09.00	33+67.00	RT	WHITE																			58											
DW-7	P.1206	33+50.00	33+67.00	LT	WHITE																			17											
XW-19	P.1206	33+66.00	33+68.00	RT/LT	WHITE												64																			
XW-19	P.1206	33+77.00	33+78.00	RT/LT	WHITE												86																			
S-12	P.1206	33+87.00	33+88.00	RT/LT	WHITE											45																				
EY-42	P.1206	33+87.00	43+77.00	RT	YELLOW		12						0.19																							
CL-75	P.1206	33+87.00	35+85.00	RT	WHITE		5								199																					
CL-76	P.1206	33+87.00	35+87.00	CL	WHITE		5								200																					
EW-77	P.1206	33+88.00	43+77.00	LT/CL	WHITE																				0.19								0.19		
LA	P.1206	34+11.00	35+44.00	LT/RT	WHITE															9																
LL-89	P.1206	35+85.00	43+77.00	RT	WHITE		7							0.15																						
LL-90	P.1206	35+87.00	38+50.00	CL	WHITE		2							0.05																						
WA	P.1206	36+32.00		LT/RT	WHITE																3															
TOTALS FROM THIS SHEET						0	55	0	0	0	0	0	0.19	0.20	399	83	501	0	0	15	5	0	0	151	0.89	0.03	200	0	0	0.07	0	0	0.85	0	200
TOTALS FROM SHEET P.1156						0	347	0	0	0	0	0	0	0	355	59	313	128	0	8	3	2	0	214	4.32	4.04	3887	869	2252	7.20	869	6139	1.16	0	0
TOTALS FROM SHEET P.1157						0	532	0	0	0	0	0	0	0.05	447	0	0	0	0	0	6	0	0	0	4.08	7.54	1667	1300	385	9.91	899	1667	1.71	401	385
TOTALS FROM SHEET P.1158						0	53	0	0	0	0	0	0	0.19	969	127	259	0	0	14	7	1	3	0	0.63	0	1897	431	896	0.15	0	2959	0.48	265	0
TOTALS FROM SHEET P.1159						0	321	0	0	0	0	0	0	0.17	574	0	0	173	0	0	3	0	0	0	4.13	3.75	3284	0	1232	7.42	0	4516	0.46	0	0
TOTALS FROM SHEET P.1160						0	91	0	0	0	0	0	0.01	0.41	1058	45	107	0	0	0	6	0	0	0	1.19	0.99	971	332	0	1.49	332	971	0.69	0	0
TOTALS FROM SHEET P.1161						0	92	0	0	0	0	0	0	0	0	27	191	0	0	6	0	1	0	40	1.07	0.75	1360	1448	0	0.93	1251	1110	0.89	197	250
TOTALS FROM SHEET P.1162						0	190	0.54	1.38	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1.01	1.32	655	1381	0	1.47	270	563	1.40	1111	92
TOTALS FROM SHEET P.1163						0	539	4.13	6.87	2754	3286	0	0	0	0	0	167	79	0	0	0	0	0	0	0.83	0	0	0	0	0	0	0	0.83	0	0
TOTALS FROM SHEET P.1164						11	98	0.75	0	3272	0	2505	0	0	0	39	162	109	21	6	1	0	0	0	0.50	0	200	0	0	0	0	0	0.50	0	200
TOTALS CARRIED TO GENERAL SUMMARY						11	2318	5.42	8.25	6026	3286	2505	0.20	1.02	3802	380	1700	489	21	49	32	6	3	405	18.65	18.42	14121	5761	4765	28.64	3621	17925	8.97	1974	1127

CUY-90-6.69

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DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM

REVIEWER MKD 08/09/23

PROJECT ID 76779

SHEET P.1165 TOTAL P.1587

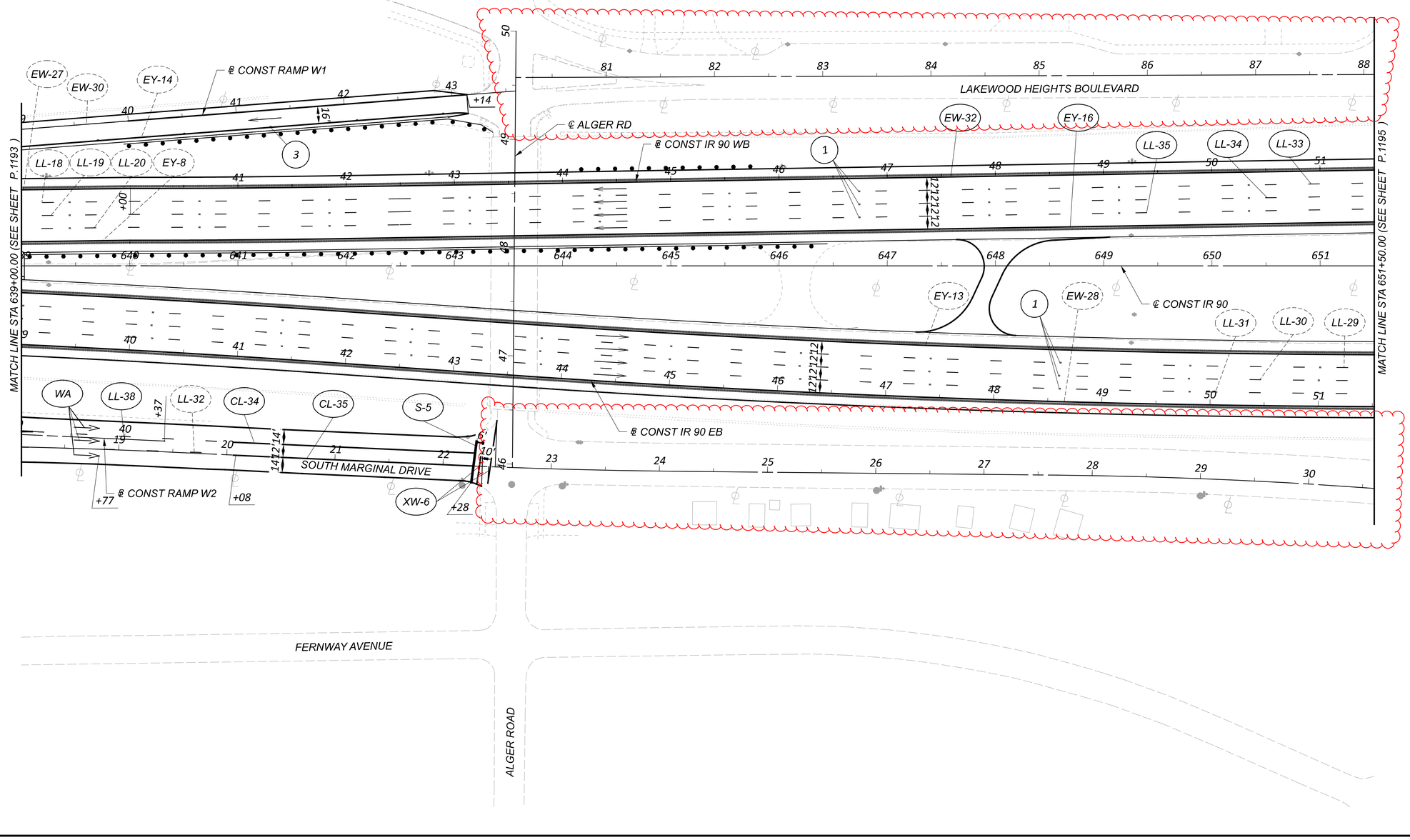
LEGEND

EW	EDGE LINE, WHITE, 6"
EY	EDGE LINE, YELLOW, 6"
LL	LANE LINE, 6"
DL	DOTTED LINE, WHITE, 6" 3' LINE 9' GAP
WD	DOTTED LINE, WHITE, 12" 3' LINE 9' GAP
DW	DOTTED LINE, WHITE, 6" 2' LINE 6' GAP
DY	DOTTED LINE, YELLOW, 6" 2' LINE 6' GAP
WP	WORD ON PAVEMENT
	RUMBLE STRIPS

CL	CHANNELIZING LINE, 12"
C	CHEVRON, 24"
S	STOP LINE, 24"
XW	CROSSWALK, 12"
LA	LANE ARROW
WA	WRONG-WAY ARROW
LR	LANE REDUCTION ARROW
IW	ISLAND MARKING, WHITE
	TRAFFIC DIRECTION

RAISED PAVEMENT MARKER (RPM)

1. 1 WAY (WHITE) @ 80' C/C (ON LANE LINE)
2. 2 WAY (WHITE/RED) @ 40' C/C (ON CHANNELIZING LANE)
3. 2 WAY (YELLOW/RED) @ 80' C/C (ON RAMP EDGE LINE, YELLOW)
4. 2 WAY (WHITE/RED) @ 80' C/C (ON LANE LINE)



PAVEMENT MARKING PLAN - IR 90
STA 639+00.00 TO STA 651+50.00

DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER KJM
REVIEWER MKD 08/09/23
PROJECT ID 76779
SHEET P.1194 TOTAL P.1587

CUY-90-6.69

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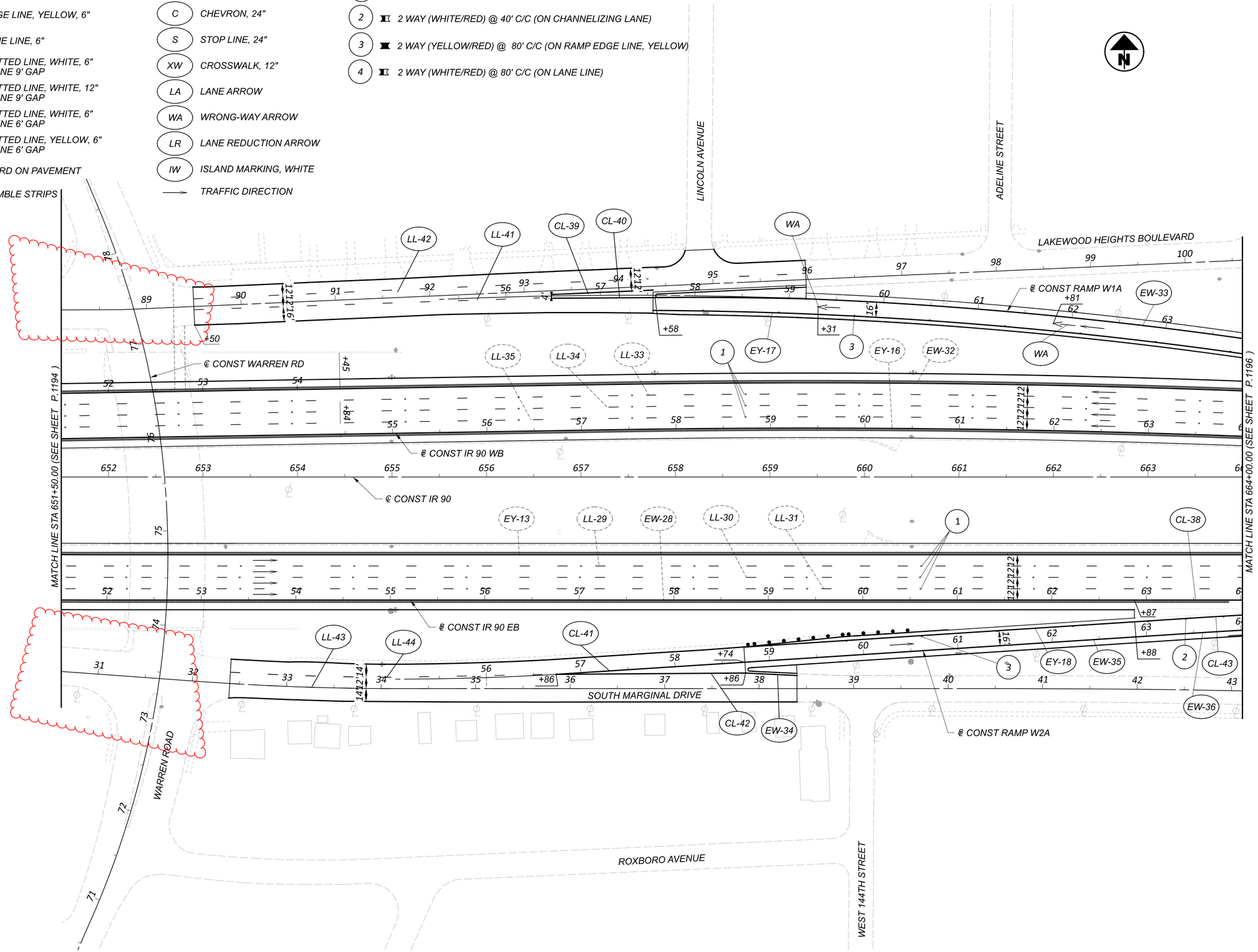
LEGEND

EW	EDGE LINE, WHITE, 6"
EY	EDGE LINE, YELLOW, 6"
LL	LANE LINE, 6"
DL	DOTTED LINE, WHITE, 6" 3' LINE 9' GAP
WD	DOTTED LINE, WHITE, 12" 3' LINE 9' GAP
DW	DOTTED LINE, WHITE, 6" 2' LINE 6' GAP
DY	DOTTED LINE, YELLOW, 6" 2' LINE 6' GAP
WP	WORD ON PAVEMENT
	RUMBLE STRIPS
CL	CHANNELIZING LINE, 12"
C	CHEVRON, 24"
S	STOP LINE, 24"
XW	CROSSWALK, 12"
LA	LANE ARROW
WA	WRONG-WAY ARROW
LR	LANE REDUCTION ARROW
IW	ISLAND MARKING, WHITE
	TRAFFIC DIRECTION

RAISED PAVEMENT MARKER (RPM)

1	1 WAY (WHITE) @ 80' C/C (ON LANE LINE)
2	2 WAY (WHITE/RED) @ 40' C/C (ON CHANNELIZING LANE)
3	2 WAY (YELLOW/RED) @ 80' C/C (ON RAMP EDGE LINE, YELLOW)
4	2 WAY (WHITE/RED) @ 80' C/C (ON LANE LINE)



HORIZONTAL SCALE IN FEET
0 25 50 100

PAVEMENT MARKING PLAN - IR 90
STA 651+50.00 TO STA 664+00.00

CUY-90-6.69

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DESIGN AGENCY
Michael Baker INTERNATIONAL

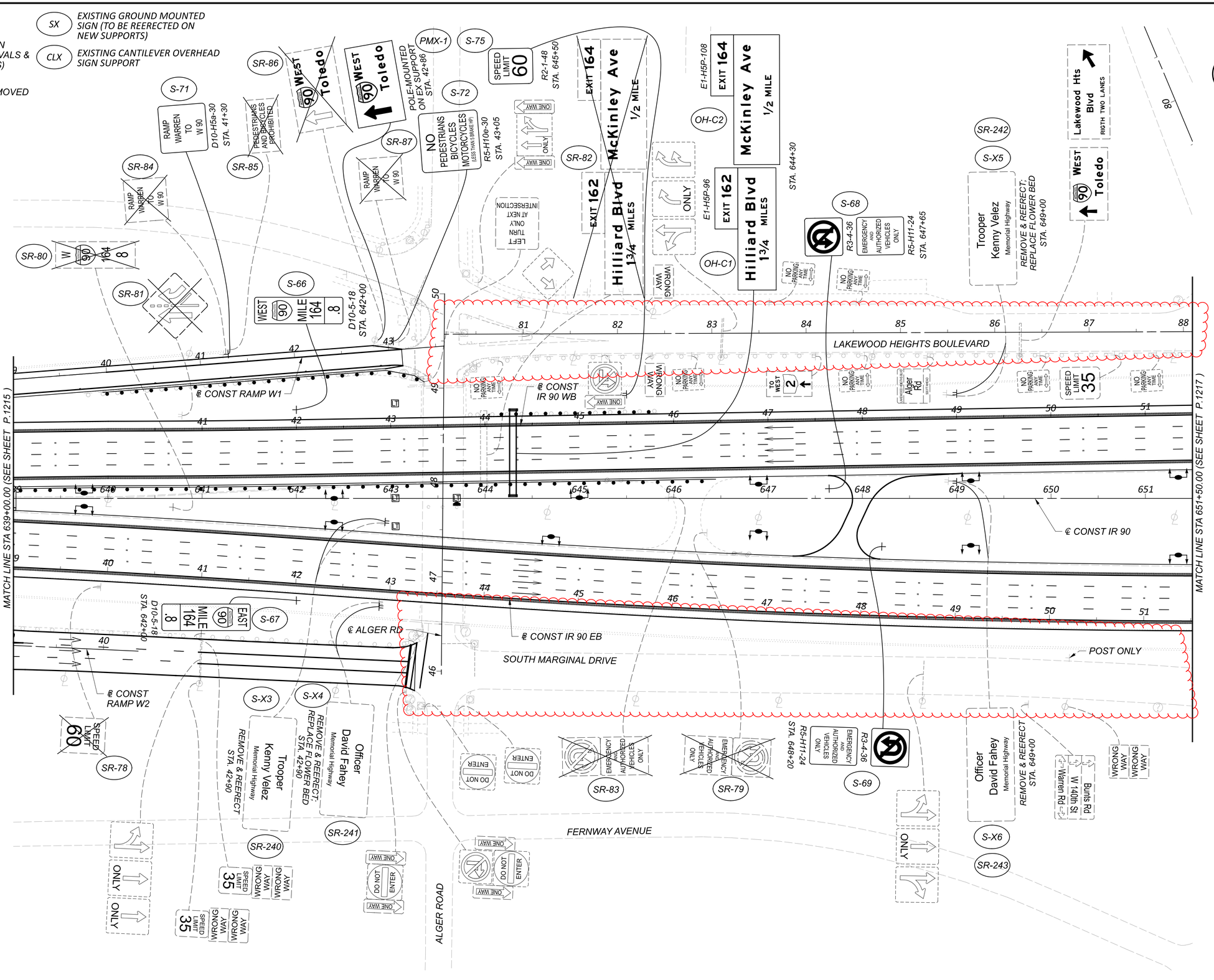
DESIGNER	KJM
REVIEWER	MKD 08/09/23
PROJECT ID	76779
SHEET	P.1195
TOTAL	P.1587

LEGEND

- EXISTING SIGN TO REMAIN (RELOCATIONS AND REMOVALS & STORAGE NOTED IN PLANS)
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN

SR — SIGN/SIGN SUPPORT REMOVAL
S — GROUND MOUNTED YIELDING POST
GM — GROUND MOUNTED STRUCTURAL BEAM SIGN SUPPORT
CL — CANTILEVER OVERHEAD SIGN SUPPORT
OH — TRUSS OVERHEAD SIGN SUPPORT
SM — STRUCTURE MOUNTED SIGN SUPPORT
OHX — EXISTING TRUSS OVERHEAD SIGN SUPPORT
PMX — EXISTING POLE MOUNTED SIGN SUPPORT

SX — EXISTING GROUND MOUNTED SIGN (TO BE REERECTED ON NEW SUPPORTS)
CLX — EXISTING CANTILEVER OVERHEAD SIGN SUPPORT



HORIZONTAL SCALE IN FEET
0 25 50 100

SIGNING PLAN - IR 90
STA 639+00.00 TO STA 651+50.00

DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	CEO
REVIEWER	MKD 08/09/23
PROJECT ID	76779
SHEET	P.1216
TOTAL	P.1587

CUY-90-6.69

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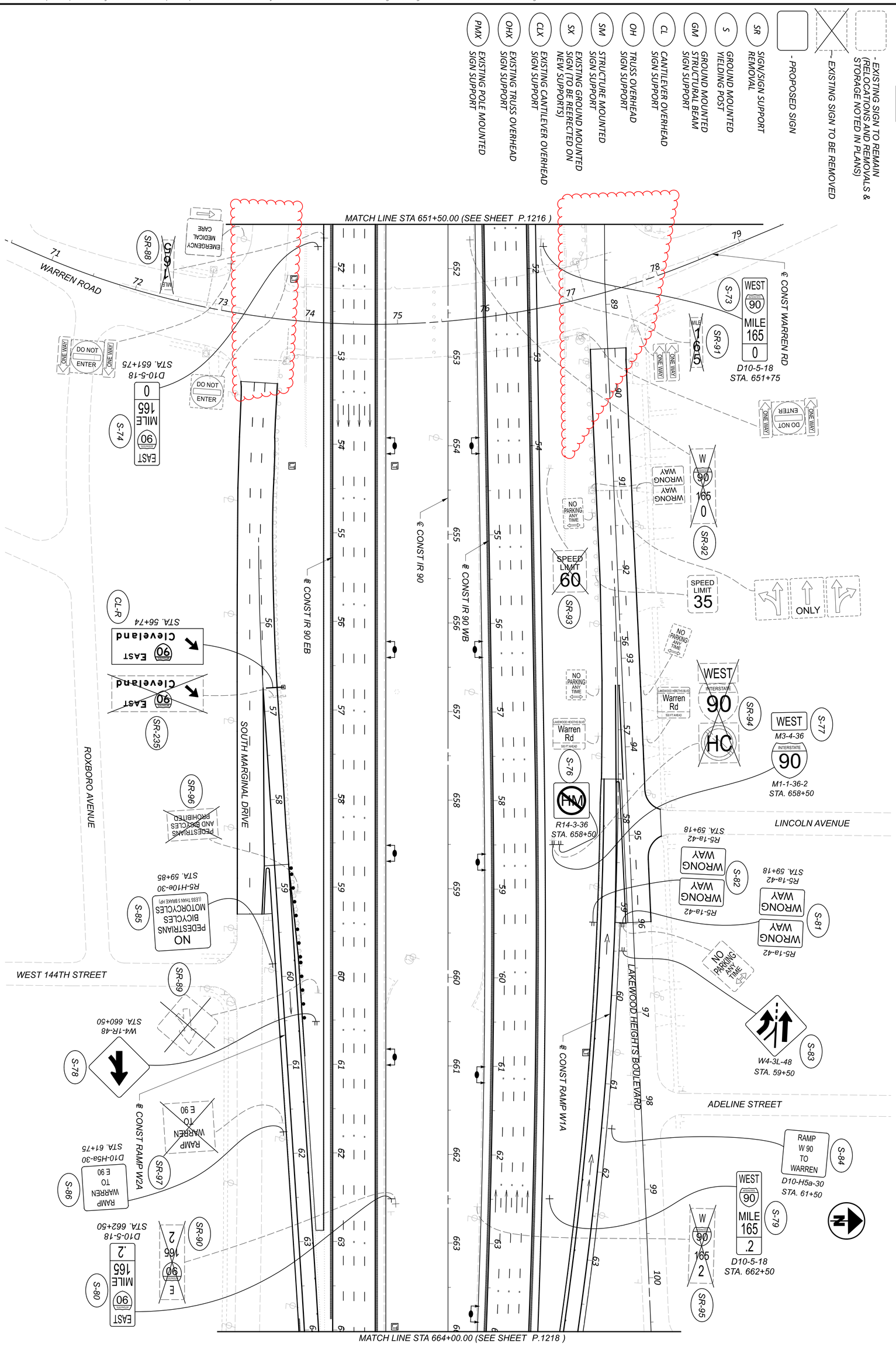
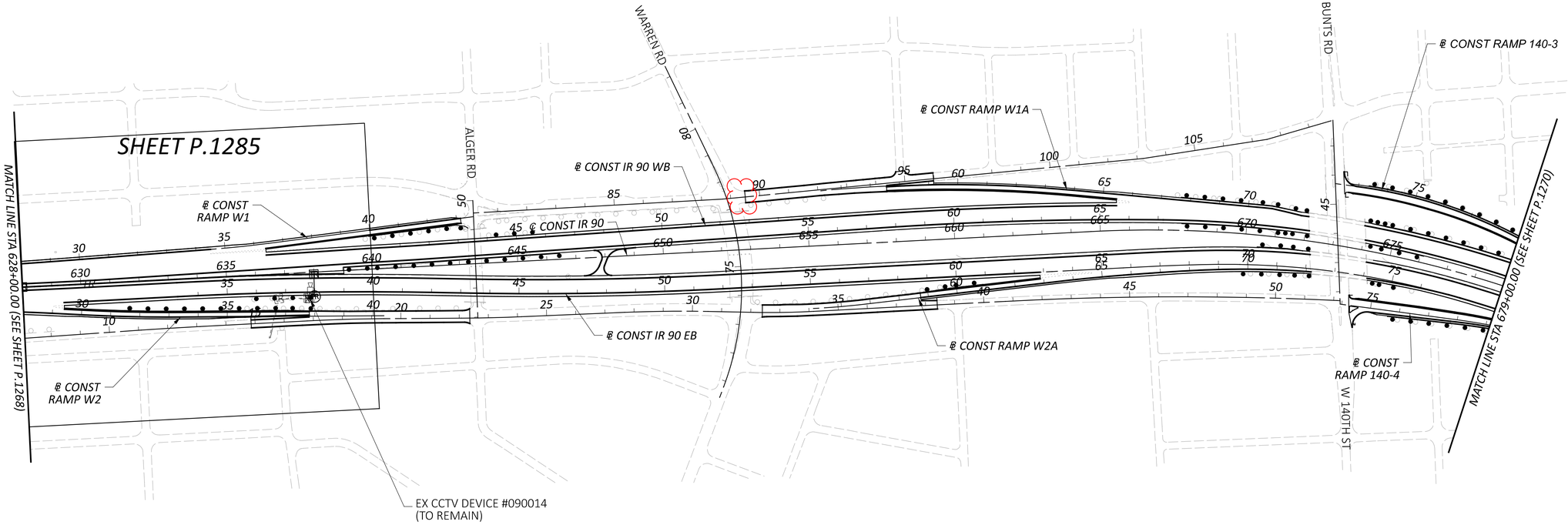


SHEET P.1217 TOTAL P.1587	DESIGNER CEO	REVIEWER MKD 08/09/23	PROJECT ID 76779	DESIGN AGENCY Michael Baker INTERNATIONAL

SIGNING PLAN - IR 90
STA 651+50.00 TO STA 664+00.00

HORIZONTAL SCALE IN FEET
0 50
25 100

NO WORK FROM STA 640+00 TO STA 679+00



HORIZONTAL SCALE IN FEET
0 100 200 400

ITS SCHEMATIC PLAN
STA 628+00.00 TO STA 679+00.00

DESIGN AGENCY
MICHAEL BAKER INTERNATIONAL
STRUCTUREPOINT INC.

DESIGNER
EMS

REVIEWER
SMM 08/09/23

PROJECT ID
76779

SHEET P.1273 TOTAL P.1587

CUY-90-6.69

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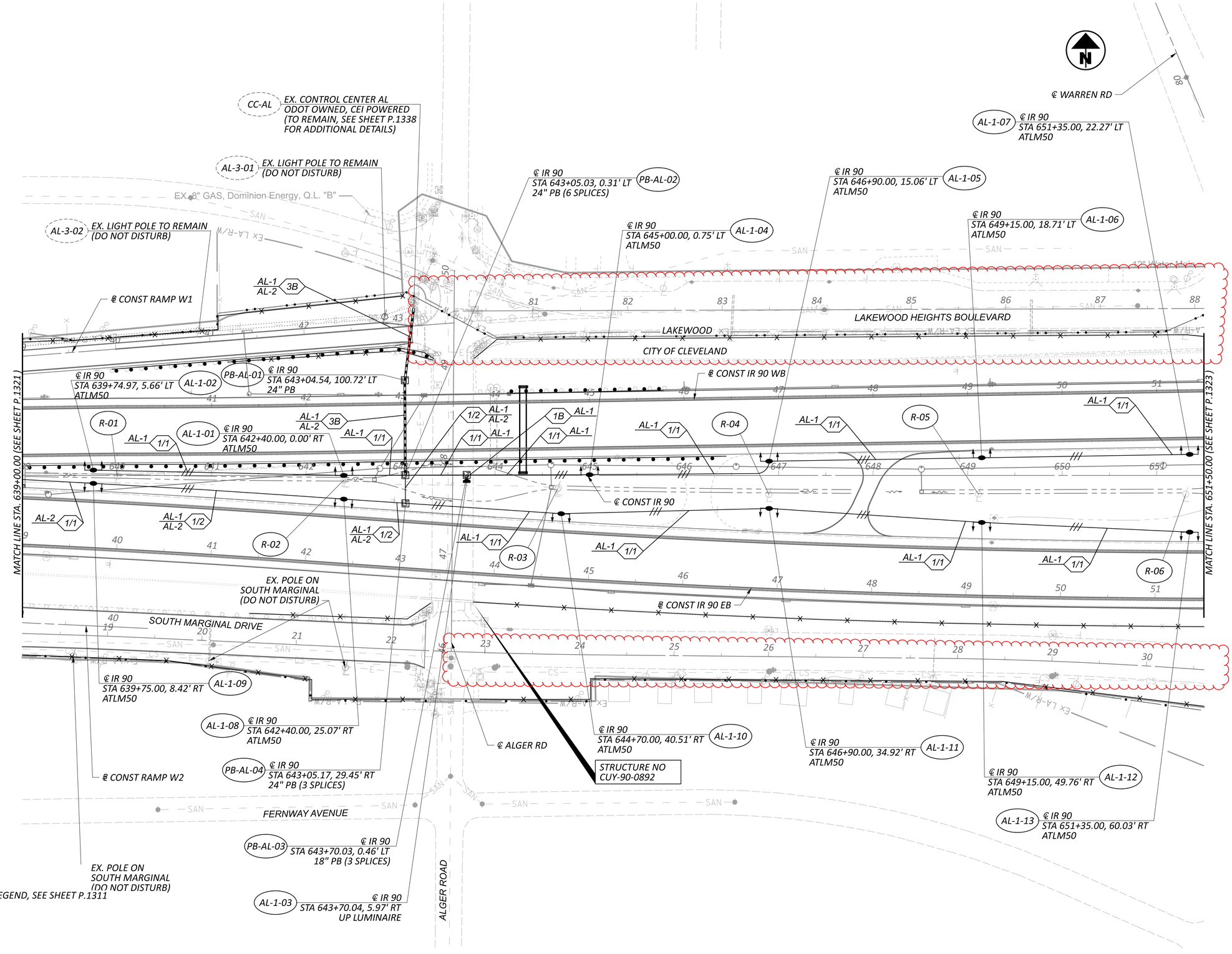

HORIZONTAL SCALE IN FEET
0 25 50 100

LIGHTING PLAN
IR 90 - STA. 639+00 TO STA. 651+50

CUY-90-6.69

DESIGN AGENCY
2LMN

DESIGNER ANL
REVIEWER SM 08/09/23
PROJECT ID 76779
SHEET P.1322 TOTAL P.1587

MODEL: 76779_LPI10 PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 10:29:22 AM USER: Alexandria.Summers
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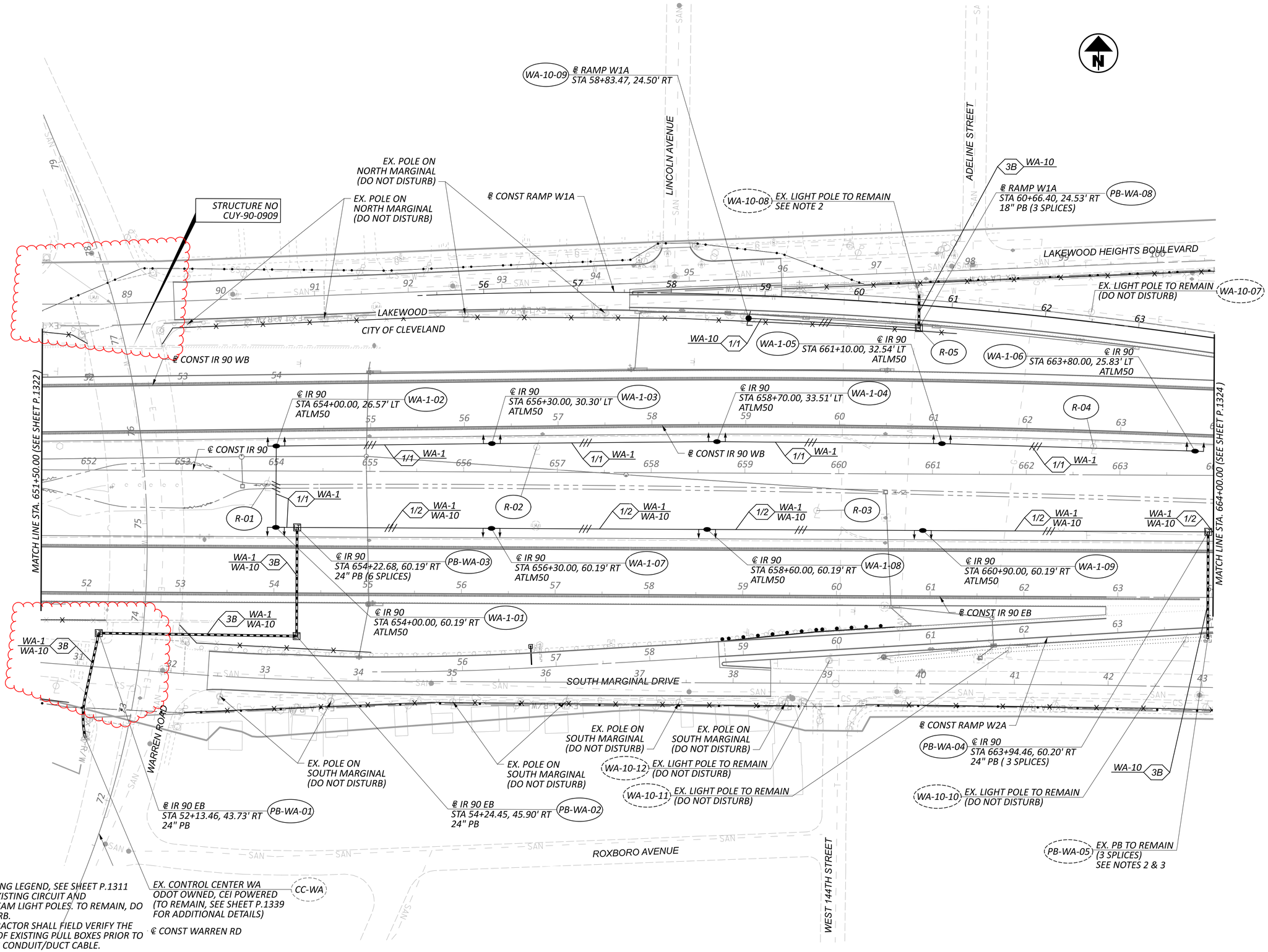

NOTES:
1. FOR LIGHTING LEGEND, SEE SHEET P.1311
2. TIE INTO EXISTING CIRCUIT AND DOWNSTREAM LIGHT POLES. TO REMAIN, DO NOT DISTURB.
3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING PULL BOXES PRIOR TO INSTALLING CONDUIT/DUCT CABLE.

HORIZONTAL SCALE IN FEET 0 25 50 100

LIGHTING PLAN
IR 90 - STA. 651+50 TO STA. 664+00

DESIGN AGENCY
Michael Baker INTERNATIONAL

DESIGNER JAR
REVIEWER SM 08/09/23
PROJECT ID 76779
SHEET P.1323 TOTAL P.1587

CUY-90-6.69

MODEL: 76779_LPIII PAPERSIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 10:30:03 AM USER: Alexandria.Summers
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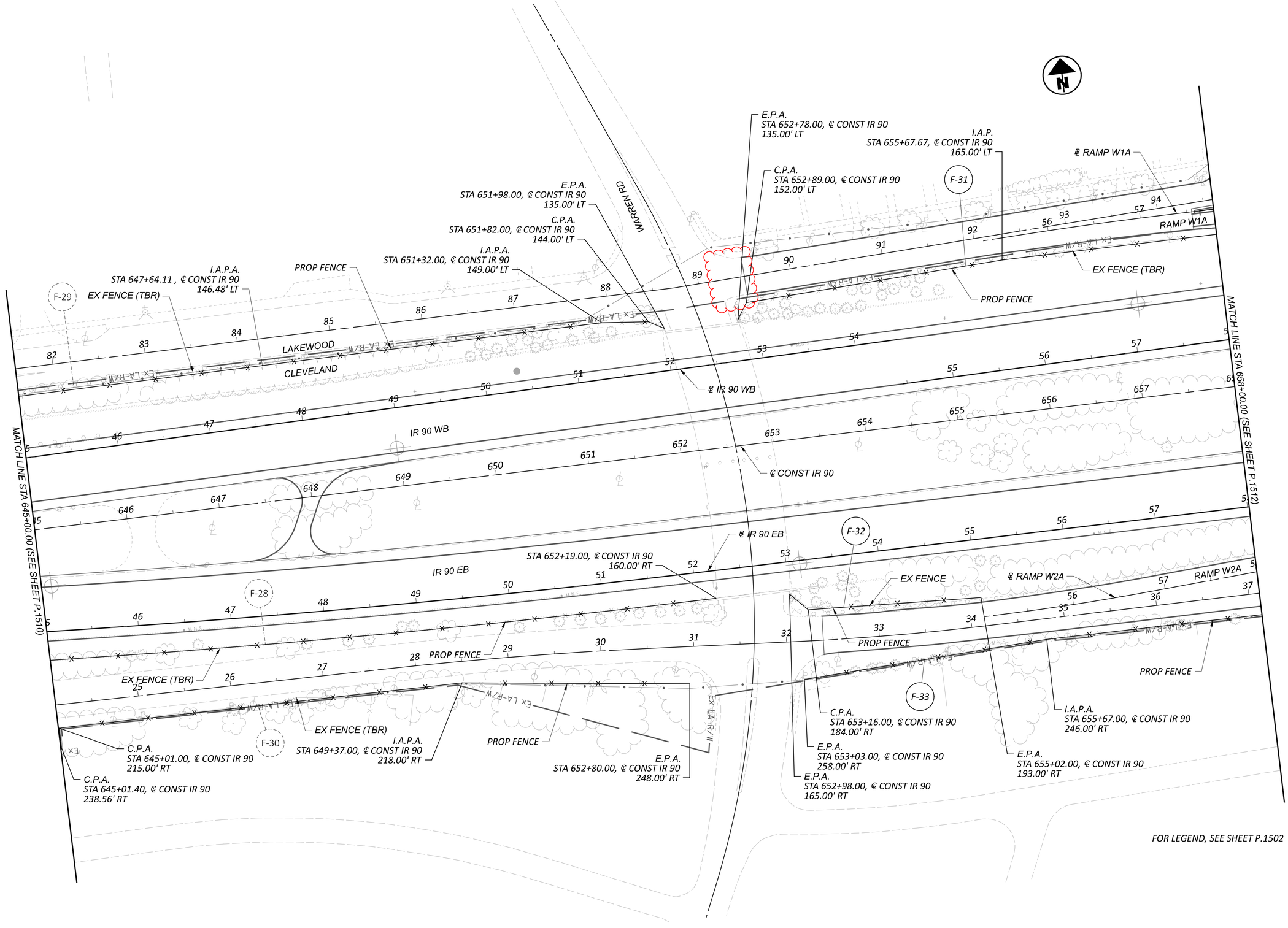

FOR LEGEND, SEE SHEET P.1502

HORIZONTAL SCALE IN FEET
0 25 50 100

FENCING PLAN
STA 645+00.00 TO STA 658+00.00

DESIGN AGENCY
AMERICAN STRUCTUREPOINT INC.

DESIGNER
BER

REVIEWER
VDK 08/09/23

PROJECT ID
76779

SHEET P.1511 TOTAL P.1587

CUY-90-6.69

MODEL: CLX_1090_100 - Plan 10 PAPERSIZE: 34x22 (in.) DATE: 1/13/2025 TIME: 4:31:58 PM USER: jslma
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PROJECT DESCRIPTION

THIS PROJECT INCLUDES THE FULL-DEPTH PAVEMENT REPLACEMENT OF BOTH DIRECTIONS OF IR 90 BEGINNING FROM JUST EAST OF LAKEVIEW AVENUE IN ROCKY RIVER TO THE WEST EDGE OF THE IR 90/IR 71 INTERCHANGE IN CLEVELAND INCLUDING ALL ON- AND OFF-RAMPS, FOR A TOTAL LENGTH OF APPROXIMATELY 7.8 MILES. IN ADDITION TO REPLACING THE PAVEMENT, THE PROFILE OF IR 90 WILL BE LOWERED AS MUCH AS 2 FEET NEAR MULTIPLE BRIDGES TO PROVIDE A MINIMUM CLEARANCE OF 15.5 FEET, OR PREFERRED CLEARANCE OF 16 FEET. ADDITIONALLY, VARIOUS REPAIRS TO BRIDGES WITHIN THE PROJECT ALIGNMENT MAY BE PERFORMED DURING THE PAVEMENT REPLACEMENT CONSTRUCTION.

THE PROJECT HAS BEEN DIVIDED INTO TWO PARTS TO FACILITATE CONSTRUCTION CONTRACTS. PART 1 (PID 76779) EXTENDS FROM THE WEST TERMINUS OF THE PROJECT (WEST OF HILLIARD BOULEVARD) TO SLM 11.31 (WEST BOULEVARD). PART 2 (PID 117881) EXTENDS FROM SLM 11.31 (WEST BOULEVARD) TO THE EASTERN TERMINUS OF THE PROJECT (IR 90/71/490 INTERCHANGE). THE SOIL PROFILE SHEETS PRESENTED HEREIN APPLY TO THE ENTIRE PROJECT ALIGNMENT (PARTS 1 AND 2).

IN ADDITION TO REPLACING THE PAVEMENT, NEW OR REPLACEMENT LIGHT POLES WILL BE INSTALLED WITHIN THE PROJECT CORRIDOR. SOIL NOT MEETING THE MINIMUM STRENGTH CRITERIA FOR STANDARD LIGHT POLE FOUNDATION DESIGN WAS IDENTIFIED IN THE VICINITY OF SIX (6) LIGHT POLE LOCATIONS. ADDITIONAL BORINGS WERE PERFORMED NEAR THE AFFECTED LIGHT POLE LOCATIONS TO ASSESS THE EXISTING SOIL CONDITIONS AND TO PROVIDE RECOMMENDATIONS FOR A CUSTOM LIGHT TOWER FOUNDATION DESIGN IF IT WAS DETERMINED THAT SOILS NOT MEETING THE MINIMUM STRENGTH CRITERIA FOR ODOT'S STANDARD LIGHT POLE FOUNDATION DESIGN WERE PRESENT.

THE PROJECT ALSO INCLUDES IMPROVEMENTS TO THE STORM SEWER SYSTEM WITHIN THE PROJECT CORRIDOR AND S&ME WAS REQUESTED TO PERFORM 29 UTILITY BORINGS AND A 2D MULTI-CHANNEL ANALYSIS OF SURFACE WAVES (MASW) SURVEY NEAR PROPOSED STORM SEWER STRUCTURES. THE UTILITY EXPLORATION WAS PERFORMED ONLY WITHIN PART 1 (BETWEEN HILLIARD BOULEVARD AND WEST BOULEVARD).

HISTORIC RECORDS

NUMEROUS HISTORIC BORINGS ARE AVAILABLE WITHIN THE PROJECT LIMITS, HOWEVER, WITH AGREEMENT FROM ODOT DISTRICT 12, NO HISTORIC SUBGRADE EXPLORATION INFORMATION HAS BEEN INCLUDED IN THESE SHEETS.

HOWEVER, A HISTORIC STRUCTURE BORING (B-009-0-69) WAS PERFORMED NEAR ONE OF THE PROPOSED LIGHT POLES ON THE RAMP TO NORTH MARGINAL ROAD AND HAS BEEN INCLUDED IN THESE SHEETS.

GEOLOGY

THIS PROJECT SITE IS IN A PORTION OF OHIO WHICH WAS GLACIATED AND WITHIN THE ERIE LAKE PLAINS PHYSIOGRAPHIC REGION. THIS PORTION OF THE STATE IS CHARACTERIZED AS AN ICE-AGE LAKE BASIN SEPARATED FROM MODERN LAKE ERIE BY SHORELINE CLIFFS WITH MAJOR STREAMS IN DEEP GORGES. PLEISTOCENE-AGE LACUSTRINE SAND, SILT, CLAY, AND WAVE-PLANED GLACIAL TILL OVER DEVONIAN- AND MISSISSIPPIAN-AGE SHALES AND SANDSTONES ARE TYPICALLY PRESENT. THE ODNR "OHIO KARST AREAS" MAP INDICATES THAT THIS SITE IS NOT IN AN AREA OF KNOWN KARST FEATURES. ADDITIONALLY, THIS PROJECT IS NOT LOCATED IN AN AREA OF OHIO SUBJECT TO SEVERE SLOPE FAILURES, AND NO MAPPED ABANDONED UNDERGROUND MINES ARE REPORTED IN THIS AREA.

THE HYDROGEOLOGIC SETTING FOR MOST OF THE PROJECT LIMITS IS CHARACTERIZED BY FLAT TOPOGRAPHY WITH A VARIABLE THICKNESS OF FINE-GRAINED SEDIMENTS THAT OVERLIE SEQUENCES OF FRACTURED SEDIMENTARY ROCKS. THE GLACIAL LAKE DEPOSITS ARE COMPOSED OF FINE-GRAINED SILTS AND CLAYS INTERLAID WITH FINE SAND THAT SETTLED OUT IN GLACIAL LAKES AND EXHIBIT ALTERNATING LAYERS RELATING TO SEASONAL FLUCTUATIONS. ON THE EAST END OF THE PROJECT NEAR THE IR 90/IR 71 INTERCHANGE, THE HYDROLOGIC SETTING IS CHARACTERIZED BY THICK DEPOSITS OF SAND AND GRAVEL THAT HAVE BEEN DEPOSITED IN A BURIED VALLEY BY GLACIAL MELT WATERS. GLACIAL TILL OR RECENT ALLUVIUM OFTEN OVERLIES THE BURIED VALLEY IN THIS AREA.

RECONNAISSANCE

SITE RECONNAISSANCE VISITS WERE MADE BY S&ME PERSONNEL ON JULY 24 THROUGH 31, 2020, TO OBSERVE THE PROJECT SITE WITH RESPECT TO DRILLING ACCESS AND SAFETY, AND FIELD MARK THE PLANNED BORING LOCATIONS. PORTIONS OF THE EXISTING INTERSTATE PAVEMENT SURFACE WERE OBSERVED TO HAVE HAD ISOLATED REPAIRS, ALONG WITH SOME POTHOLES FILLED WITH ASPHALT. SOME TRANSVERSE AND LONGITUDINAL CRACKING WERE ALSO NOTED WITH FEW LONGITUDINAL REPAIRS THAT HAD BEEN MADE.

S&ME VISITED THE LOCATIONS OF THE PROPOSED LIGHT POLES ON MAY 3, 2024, TO OBSERVE THE PROJECT SITE WITH RESPECT TO DRILLING ACCESS AND SAFETY, AND FIELD MARK THE PLANNED BORING LOCATIONS. THE W. 41ST STREET RAMP PAVEMENT IS IN FAIR CONDITION WITH MANY LONGITUDINAL AND TRANSVERSE CRACKS AND ISOLATED AREAS OF ALLIGATOR CRACKING. A STORM SEWER WAS NOTED ALONG THE OUTSIDE EDGE OF THE RAMP IN THE LOWER (EASTERN) PORTION OF THE RAMP. NO OTHER MARKERS OR DISCERNABLE EVIDENCE OF OVERHEAD OR UNDERGROUND UTILITIES WERE NOTED. A GRASSY SLOPE IS PRESENT BEYOND THE OUTSIDE EDGE OF THE PAVEMENT SLOPING DOWN TO AN EXISTING DITCH. NO EVIDENCE OF SLOPE INSTABILITY WAS NOTED, AND THE SLOPE SLOWLY FLATTENS TO THE WEST UNTIL THE GRASSY AREA IS ESSENTIALLY FLAT NEAR THE INTERSECTION OF THE RAMP WITH W. 41ST STREET.

THE N. MARGINAL ROAD RAMP PAVEMENT IS IN GOOD CONDITION WITH ONLY OCCASIONAL LONGITUDINAL AND TRANSVERSE CRACKS. A STORM SEWER ALSO RUNS ALONG THE OUTSIDE EDGE OF THE RAMP PAVEMENT IN THE LOWER (EASTERN) PORTION OF THE RAMP. NO OTHER MARKERS OR DISCERNABLE EVIDENCE OF OVERHEAD OR UNDERGROUND UTILITIES WERE NOTED. A GRASSY SLOPE (WHICH IS COVERED BY CONCRETE PANELS BENEATH THE PEDESTRIAN BRIDGE) IS PRESENT BEYOND THE OUTSIDE EDGE OF THE PAVEMENT, SLOPING UP TO N. MARGINAL ROAD. NO EVIDENCE OF SLOPE INSTABILITY WAS OBSERVED.

S&ME REVISITED THE SITE ON NOVEMBER 22, 2024, TO MARK THE LOCATIONS OF THE UTILITY BORINGS. SIMILAR SITE CONDITIONS TO THOSE NOTED ABOVE WERE OBSERVED DURING THE BORING LAYOUT.

SUBSURFACE EXPLORATION

S&ME SELECTED AND MARKED THE BORING AND CORE LOCATIONS IN THE FIELD AT THE APPROXIMATE LOCATIONS APPROVED BY ODOT DISTRICT 12. A HANDHELD GPS WITH HORIZONTAL SUB-METER ACCURACY WAS USED TO RECORD THESE LOCATIONS. THE COORDINATES OBTAINED BY S&ME AND THE GROUND SURFACE ELEVATIONS WERE PROVIDED BY ASI.

DURING THE PERIOD OF AUGUST 10 THROUGH SEPTEMBER 17, 2020, A TOTAL OF 167 SOIL BORINGS (IDENTIFIED AS B-001-0-20 THROUGH B-112-1-20 AND HEREAFTER REFERRED TO WITHOUT THE TWO-DIGIT YEAR DESIGNATION) AND 250 PAVEMENT CORES (167 CORES AT BORING LOCATIONS AND 83 CORES IN THE SHOULDERS AND BRIDGE APPROACH SLABS) WERE PERFORMED TO EXPLORE THE EXISTING SUBGRADE SOILS ALONG THE PROJECT LENGTH. THE SUBGRADE BORINGS WERE DRILLED AT APPROXIMATE 400-FOOT INTERVALS AND WERE POSITIONED IN THE EXISTING OUTSIDE AND INSIDE LANES AND SHOULDERS OF EASTBOUND AND WESTBOUND IR 90, ALONG WITH SUBGRADE BORINGS BEING DRILLED ON THE ENTRANCE AND EXIT RAMPS THROUGHOUT THE PROJECT LIMITS. THE BORINGS WERE GENERALLY ADVANCED TO A DEPTH OF 7.5 TO 8 FEET, EXCEPT FOR THOSE LOCATED IN AN AREA WHERE LOWERING OF THE IR 90 PROFILE IS ANTICIPATED NEAR OVERPASS BRIDGES, WHICH WERE ADVANCED TO DEPTHS RANGING FROM 9.0 TO 9.5 FEET.

LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
GRAVEL	A-1-a	15	10
GRAVEL WITH SAND	A-1-b	30	36
GRAVEL WITH SAND AND SILT	A-2-4	6	4
GRAVEL WITH SAND, SILT AND CLAY	A-2-6	4	6
FINE SAND	A-3	8	9
COARSE AND FINE SAND	A-3a	27	47
SANDY SILT	A-4a	78	102
SILT	A-4b	42	47
SILT AND CLAY	A-6a	57	94
SILTY CLAY	A-6b	26	38
CLAY	A-7-6	3	20
	TOTAL	296	413
SHALE	VISUAL		
UNCONTROLLED FILL	VISUAL		
SANDSTONE	VISUAL		

PAVEMENT OR BASE = X = APPROXIMATE THICKNESS

SOD AND TOPSOIL = X = APPROXIMATE THICKNESS

PROJECT BORING LOCATION - PLAN VIEW.

HISTORIC BORING LOCATION - PLAN VIEW.

DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.

WC — INDICATES WATER CONTENT IN PERCENT.

N_{60} — INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.

N — INDICATES STANDARD PENETRATION RESISTANCE FOR HISTORIC BORING.

X/D" — NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT):
X/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.

X/Y/D" — NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT):
X = NUMBER OF BLOWS FOR FIRST 6 INCHES (UNCORRECTED).
Y/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.

X/Y/Z/D" — NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT):
X = NUMBER OF BLOWS FOR FIRST 6 INCHES (UNCORRECTED).
Y = NUMBER OF BLOWS FOR SECOND 6 INCHES (UNCORRECTED).
Z/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.

W — INDICATES FREE WATER ELEVATION.

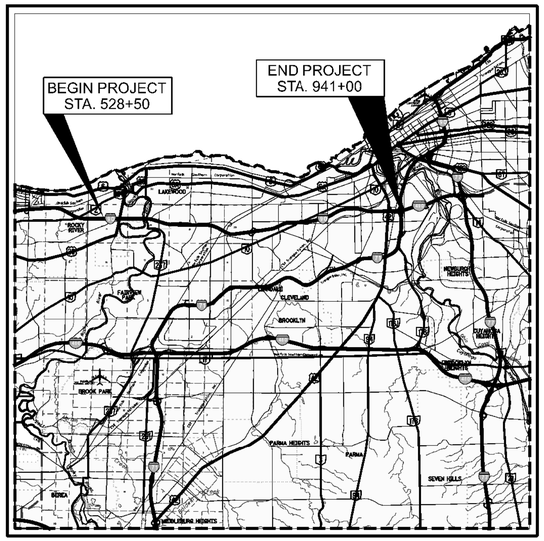
INDICATES WATER ELEVATION AT THE COMPLETION OF DRILLING.

INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.

INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25 % OR GREATER THAN 19 % WITH A WET APPEARANCE.

SS — INDICATES A SPLIT SPOON SAMPLE.

NP — INDICATES A NON-PLASTIC SAMPLE.



LOCATION MAP

SCALE IN MILES

0 1 2 3 4

PARTICLE SIZE DEFINITIONS

12"	3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm
BOULDERS	COBBLES	GRAVEL	COARSE SAND	FINE SAND	SILT	CLAY
		No. 10 SIEVE	No. 40 SIEVE	No. 200 SIEVE		

LEGEND

HISTORIC BORING DESCRIPTIONS	ODOT CLASS	CLASSIFIED MECH./VISUAL	
SANDY SILT	A-4a	2	--
SILT	A-4b	2	--
SILT AND CLAY	A-6a	3	--
	TOTAL	7	--

SUBSURFACE EXPLORATION CONTINUED, SEE SHEET 2.

RECON. - *S&ME 11/23/21, 5/3/24, 11/22/24*

DRILLING - *S&ME 10/13/21 - 10/15/21, 12/1/21 - 12/3/21, 12/6/21, 12/20/21 - 12/21/21, 2/7/22, 5/15/24 - 5/16/24, 12/2/24 - 12/18/24*

DRAWN - *KAH 3/7/22 - 3/15/22, 8/15/22 - 8/26/22, 3/29/23 - 4/17/23, 8/3/23 - 8/10/23, 8/19/24 - 8/22/24, 1/6/25 - 1/24/25*

REVIEWED - *BKS 3/16/22, 8/24/22, 4/16/23, 8/10/23, 9/9/24, 1/21/25 - 1/22/25*

SOIL PROFILE - ROADWAY

DESIGN AGENCY

DESIGNER KAH

REVIEWER BKS

PROJECT ID 76779

SUBSET 1 | TOTAL 67

SHEET 1521 | TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 3:17:00 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76779_YC0001.dgn

SUBSURFACE EXPLORATION (CONTINUED)

THE BORINGS WERE ADVANCED BY A TRUCK-MOUNTED DRILL RIG USING A 2¼-INCH I.D. HOLLOW-STEM AUGER. DISTURBED, BUT REPRESENTATIVE, SOIL SAMPLES WERE PROCURED BY LOWERING A 2-INCH O.D. SPLIT-BARREL SAMPLER TO THE BOTTOM OF THE BORING, AND THEN DRIVING THE SAMPLER INTO THE SOIL WITH BLOWS FROM A 140-POUND HAMMER FREELY FALLING 30 INCHES (AASHTO T206 STANDARD PENETRATION TEST, SPT). IN ACCORDANCE WITH THE ODOT (*SGE*), THE HAMMER SYSTEM ON THE DRILL RIG WAS CALIBRATED ON JUNE 25, 2020, IN ACCORDANCE WITH ASTM D4633 AND A DRILL ROD ENERGY RATIO OF 94% WAS DETERMINED. THE DRILL ROD ENERGY RATIO WAS LIMITED TO 90% PER SECTION 404.3 OF THE ODOT *SGE*. SPT SAMPLES WERE EXAMINED IMMEDIATELY AFTER RECOVERY AND REPRESENTATIVE PORTIONS WERE PRESERVED IN AIRTIGHT GLASS JARS. UPON COMPLETION OF EACH BORING, GROUNDWATER OBSERVATIONS WERE RECORDED AND THE BORING WAS BACKFILLED USING SOIL CUTTINGS. THE PAVEMENT SURFACE WAS REPAIRED WITH COLD-PATCH ASPHALT.

ON MAY 15 AND 16, 2024, A TOTAL OF FIVE (5) SOIL BORINGS (IDENTIFIED AS B-065-2-23, B-066-1-23, B-100-3-23, B-100-4-23 AND B-101-2-23 AND HEREAFTER REFERRED TO WITHOUT THE TWO-DIGIT YEAR DESIGNATION) WERE PERFORMED TO EXPLORE THE EXISTING SUBSURFACE SOILS NEAR PROPOSED LIGHT POLE LOCATIONS. THE TWO (2) BORINGS PERFORMED ON THE RAMP FROM IR 90 WB TO N. MARGINAL ROAD IMMEDIATELY WEST OF THE LORAIN AVENUE OVERPASS BRIDGE WERE TERMINATED AT THE DEPTHS OF 9.3 AND 16.5 FEET AFTER ENCOUNTERING SHALE BEDROCK. THE THREE (3) BORINGS PERFORMED ON THE RAMP FROM IR 90 WB TO W. 41ST STREET WERE TERMINATED AT A DEPTH OF 25 FEET EACH.

THE LIGHT POLE BORINGS WERE ADVANCED BY A TRUCK-MOUNTED DRILL RIG USING A 2¼-INCH I.D. HOLLOW-STEM AUGER AND SPT SAMPLING. IN ACCORDANCE WITH THE ODOT *SGE*, THE HAMMER SYSTEM ON THE DRILL RIG WAS CALIBRATED IN ACCORDANCE WITH ASTM D4633 ON DECEMBER 22, 2022, AND A DRILL ROD ENERGY OF 91% WAS MEASURED. THE DRILL ROD ENERGY WAS LIMITED TO 90% PER SECTION 404.3 OF THE ODOT *SGE*. SPT SAMPLES WERE EXAMINED IMMEDIATELY AFTER RECOVERY AND REPRESENTATIVE PORTIONS WERE PRESERVED IN AIRTIGHT GLASS JARS. UPON COMPLETION OF EACH BORING, GROUNDWATER OBSERVATIONS WERE RECORDED, THE BORING WAS BACKFILLED USING SOIL CUTTINGS MIXED WITH BENTONITE GRAVEL, AND THE PAVEMENT SURFACE WAS REPAIRED WITH COLD-PATCH ASPHALT.

AT EACH BORING LOCATION ON THE W. 41ST STREET RAMP S&ME OBTAINED AN 8-INCH DIAMETER CORE OF THE EXISTING PAVEMENT. THESE CORES WERE PERFORMED USING A TRUCK-MOUNTED CORE RIG EQUIPPED WITH A DIAMOND-IMPREGNATED CORE BIT TO PENETRATE THE EXISTING ASPHALT AND/OR CONCRETE PAVEMENT.

BETWEEN DECEMBER 2 AND 18, 2024, A TOTAL OF 29 SOIL BORINGS WERE PERFORMED FOR THE UTILITY EXPLORATION (IDENTIFIED AS B-002-5-24, B-003-2-24, B-005-2-24, B-006-1-24, B-012-2-24, B-013-1-24, B-015-1-24, B-018-3-24, B-019-2-24, B-021-2-24, B-023-1-24, B-025-2-24, B-026-3-24, B-028-2-24, B-029-1-24, B-031-1-24, B-034-1-24, B-037-2-24, B-041-3-24, B-043-3-24, B-044-1-24, B-048-6-24, B-049-4-24, B-051-6-24, B-053-1-24, B-054-3-24, B-056-1-24, B-057-3-24 AND B-059-5-24 AND HEREAFTER REFERRED TO WITHOUT THE TWO DIGIT YEAR DESIGNATION). THE BORINGS WERE PERFORMED IN THE INSIDE OR OUTSIDE SHOULDERS OF IR 90 IN BOTH THE EASTBOUND AND WESTBOUND DIRECTIONS. THE BORINGS WERE TERMINATED AT DEPTHS RANGING FROM 14 TO 41.2 FEET.

THE BORINGS WERE ADVANCED BY TRUCK- OR ATV-MOUNTED DRILL RIGS USING A 3¼-INCH I.D. HOLLOW-STEM AUGER AND SPT SAMPLING. SPT SAMPLES WERE EXAMINED IMMEDIATELY AFTER RECOVERY AND REPRESENTATIVE PORTIONS WERE PRESERVED IN AIRTIGHT GLASS JARS. IN ACCORDANCE WITH THE ODOT *SGE*, THE HAMMER SYSTEM ON THE DRILL RIGS WAS CALIBRATED IN ACCORDANCE WITH ASTM D4633. THREE RIGS WERE UTILIZED TO PERFORM THE BORINGS AND THE DRILL ROD ENERGY AND CALIBRATION DATES ARE AS FOLLOWS:

- OTB MOBILE B-57 TRUCK RIG, CALIBRATED ON 12/22/2022 WITH A DRILL ROD ENERGY OF 91.0%.
- OTB D50 ATV RIG, CALIBRATED ON 12/22/2022 WITH A DRILL ROD ENERGY OF 79.1%
- WERTZ CME 55 TRUCK RIG, CALIBRATED ON 10/4/2024 WITH A DRILL ROD ENERGY OF 92.8%

THE DRILL ROD ENERGIES EXCEEDING 90% HAVE BEEN LIMITED TO 90% PER SECTION 404.3 OF THE ODOT *SGE*. IN 12 BORINGS, BEDROCK WAS CORED WITH A NQ SIZE DIAMOND BIT CORE BARREL USING WATER AS A CIRCULATING FLUID. RECOVERED BEDROCK CORE SPECIMENS WERE PLACED IN CARDBOARD OR WOODEN ROCK CORE STORAGE BOXES FOR OBSERVATION AND TRANSPORT, WITH SELECT BEDROCK SPECIMENS PRESERVED IN PLASTIC FOR POTENTIAL UNCONFINED STRENGTH TESTING IN THE LABORATORY.

AT EACH BORING LOCATION S&ME OBTAINED AN 8-INCH DIAMETER CORE OF THE EXISTING PAVEMENT PRIOR TO PERFORMING THE DRILLING AND SAMPLING. EACH RECOVERED CORE WAS OBSERVED IN THE FIELD AND THE THICKNESS OF THE PAVEMENT MATERIALS WAS RECORDED, AND THE THICKNESS OF THE UNDERLYING BASE MATERIALS WERE THEN MEASURED. UPON COMPLETION OF EACH BORING, GROUNDWATER OBSERVATIONS WERE RECORDED, AND THE BORING WAS BACKFILLED USING SOIL CUTTINGS MIXED WITH BENTONITE OR A CEMENT/BENTONITE MIXTURE. THE PAVEMENT SURFACE WAS REPAIRED WITH COLD-PATCH ASPHALT.

EXPLORATION FINDINGS

THE THICKNESS OF EXISTING PAVEMENT MEASURED FROM THE PAVEMENT CORE CONSIST OF 1-1/2 TO 15-3/4 INCHES OF ASPHALT (AVERAGE OF 4-1/2 INCHES) OVER 2-1/2 TO 18-1/4 INCHES OF CONCRETE (AVERAGE OF 10 INCHES). REINFORCEMENT WAS NOTED WITHIN THE EXISTING CONCRETE PAVEMENT IN MANY OF THE RECOVERED PAVEMENT CORES.

THE BORINGS DRILLED DURING THIS EXPLORATION ENCOUNTERED A WIDE VARIETY OF MATERIALS INCLUDING FILL, POSSIBLE FILL, NATURAL SOIL AND BEDROCK, BUT THAT CAN BE GENERALLY SUMMARIZED AS INCLUDED IN THE FOLLOWING SECTIONS.

STA. 528+50 TO STA. 563+00 IR 90 MAINLINE AND RAMPS

THIS SECTION RUNS FROM LAKEVIEW AVENUE TO APPROXIMATELY 1100 FEET WEST OF VALLEY VIEW DRIVE AND INCLUDES THE HILLIARD BOULEVARD RAMPS. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-001-0 THROUGH B-009-0. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS NATURAL SOILS CONSISTING PREDOMINANTLY OF COHESIVE STIFF TO HARD SANDY SILT (A-4a) AND SILT AND CLAY (A-6a) WITH OCCASIONAL LAYERS OF LOOSE TO VERY-DENSE GRAVEL WITH SAND (A-1-b), GRAVEL WITH SAND, SILT, AND CLAY (A-2-6), COARSE AND FINE SAND (A-3a).

STA. 563+00 TO STA. 659+00 IR 90 MAINLINE AND RAMPS

THIS SECTION RUNS FROM APPROXIMATELY 1100 FEET WEST OF VALLEY VIEW DRIVE TO APPROXIMATELY 600 FEET EAST OF WARREN ROAD AND INCLUDES MULTIPLE RAMPS TO AND FROM NORTH MARGINAL DRIVE AND SOUTH MARGINAL DRIVE. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-010-0 THROUGH B-032-0. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- HIGHLY TO SEVERELY WEATHERED SHALE AND/OR SANDSTONE BEDROCK WAS ENCOUNTERED IMMEDIATELY BENEATH THE AGGREGATE/GRANULAR BASE LAYER.

- SOILS VISUALLY IDENTIFIED AS POSSIBLE FILL WERE ENCOUNTERED IN BORING B-016-1 AND CONSISTED OF DENSE TO VERY-DENSE GRAVEL WITH SAND (A-1-b).

- NATURAL SOILS CONSISTING OF COHESIVE VERY-STIFF TO HARD SANDY SILT (A-4a), SILT AND CLAY (A-6a), SILTY CLAY (A-6b) WERE ENCOUNTERED IN RAMP BORINGS B-016-2, B-018-1 AND B-019-1.. SHALE COBBLES OR BOULDER WERE ENCOUNTERED IN THE UPPER 4.5 FEET OF BORING B-018-1.

EXPLORATION FINDINGS (CONT.)

STA. 659+00 TO STA. 726+00 IR 90 MAINLINE AND RAMPS

THIS SECTION RUNS FROM APPROXIMATELY 600 FEET EAST OF WARREN ROAD TO THE WEST EDGE OF THE W. 117TH STREET INTERCHANGE AND INCLUDES RAMPS TO AND FROM SOUTH MARGINAL DRIVE, LAKEWOOD HEIGHTS BOULEVARD AND W. 140TH STREET. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-032-1 THROUGH B-048-0. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- SOILS VISUALLY IDENTIFIED AS FILL OR POSSIBLE FILL WERE ENCOUNTERED IN NINE (9) OF THE BORINGS WITHIN THIS SECTION AND CONSISTED OF STIFF TO HARD SANDY SILT (A-4a), SILT AND CLAY (A-6a), SILTY CLAY (A-6b), CLAY (A-7-6) WITH OCCASIONAL LAYERS OF MEDIUM-DENSE GRAVEL WITH SAND (A-1-b) AND GRAVEL WITH SAND, SILT AND CLAY (A-2-6). THE FILL SOILS WERE PRIMARILY CONCENTRATED BETWEEN APPROXIMATELY STA. 692+00 AND STA. 716+00, EXTENDING TO THE BORING TERMINATION DEPTH IN THREE (3) OF THE BORINGS.

- NATURAL SOILS CONSISTING OF COHESIVE STIFF TO HARD SANDY SILT (A-4a), SILT AND CLAY (A-6a), SILTY CLAY (A-6b), CLAY (A-7-6) WITH OCCASIONAL LAYERS OF MEDIUM-DENSE GRAVEL WITH SAND (A-1-b), GRAVEL WITH SAND SILT (A-2-4), AND GRAVEL WITH SAND, SILT, AND CLAY (A-2-6).

- HIGHLY TO SEVERELY WEATHERED SHALE AND/OR SANDSTONE BEDROCK WAS ENCOUNTERED IMMEDIATELY BENEATH THE AGGREGATE/GRANULAR BASE LAYER IN B-037-0 AND B-038-0, AND AT DEEPER DEPTHS IN THREE OTHER BORINGS.

STA. 726+00 TO STA. 738+00 IR 90 MAINLINE

THIS SECTION RUNS ALONG THE IR 90 MAINLINE FROM THE WEST EDGE OF THE W. 117TH STREET INTERCHANGE TO APPROXIMATELY 400 FEET EAST OF W. 117TH STREET. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-049-0, B-050-0 AND B-051-0. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE INCLUDED HIGHLY TO SEVERELY WEATHERED SHALE AND/OR SANDSTONE BEDROCK WAS ENCOUNTERED IMMEDIATELY BENEATH THE AGGREGATE/GRANULAR BASE LAYER.

STA. 726+00 TO STA. 738+00 W. 117TH STREET INTERCHANGE RAMPS

THIS SECTION INCLUDES THE RAMPS AT THE W. 117TH STREET INTERCHANGE, INCLUDING B-048-1 THRU B-048-3, B-049-1, B-049-2, B-050-1, B-050-2, AND B-051-1 THRU B-051-3. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- NATURAL SOILS CONSISTING OF STIFF TO HARD SANDY SILT (A-4a), SILT (A-4b), SILT AND CLAY (A-6a), SILTY CLAY (A-6b) WITH A LAYER OF MEDIUM-DENSE SANDY SILTY (A-4a) AT THE BOTTOM OF B-051-2.

- SEVERELY WEATHERED SHALE AND/OR SANDSTONE BEDROCK WAS ENCOUNTERED IMMEDIATELY BENEATH THE AGGREGATE/GRANULAR BASE LAYER IN B-048-1, B-048-2, B-048-3, AND B-049-1, AND AT A DEPTH OF 4.5 FEET IN B-050-1.

STA. 738+00 TO STA. 883+50 IR 90 MAINLINE AND RAMPS

THIS SECTION RUNS FROM APPROXIMATELY 400 FEET EAST OF W. 117TH STREET TO W. 44TH STREET AND INCLUDES RAMPS TO AND FROM WEST BOULEVARD, SOUTH AND NORTH MARGINAL DRIVE, CLARK AVENUE, AND W. 44TH STREET. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-052-0 THROUGH B-097-1. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- SOILS VISUALLY IDENTIFIED AS FILL OR POSSIBLE FILL WERE ENCOUNTERED IN 12 OF THE BORINGS WITHIN THIS SECTION AND CONSISTED OF LOOSE TO VERY-DENSE GRAVEL (A-1-a), SANDY SILT (A-4a) AND SILT (A-4b) WITH OCCASIONAL LAYERS OF VERY-STIFF TO HARD SILT AND CLAY (A-6a), SILTY CLAY (A-6b) AND CLAY (A-7-6). THE FILL SOILS WERE PRIMARILY CONCENTRATED BETWEEN APPROXIMATELY STA. 819+00 AND STA. 835+00, EXTENDING TO THE BORING TERMINATION DEPTH IN TWO (2) OF THE BORINGS.

- NATURAL SOILS CONSISTING OF COHESIVE STIFF TO HARD SANDY SILT (A-4a), SILT (A-4b), SILT AND CLAY (A-6a), CLAY (A-7-6) WITH LAYERS OF LOOSE TO VERY-DENSE GRAVEL (A-1-a), GRAVEL WITH SAND (A-1-b), FINE SAND (A-3), COARSE AND FINE SAND (A-3a), SANDY SILT (A-4a), AND SILT (A-4b).

- NUMEROUS AREAS WITHIN THIS SECTION ENCOUNTERED SILT (A-4b) SOILS AT OR WITHIN 3 FEET OF THE PROPOSED SUBGRADE. THE STRETCH FROM APPROXIMATELY STA. 792+00 TO STA. 841+00 CONTAINS SIGNIFICANT AREAS OF RELATIVELY DEEP SILT DEPOSITS.

- HIGHLY WEATHERED SHALE AND/OR SANDSTONE BEDROCK WAS ENCOUNTERED IN B-055-0 AND B-056-0.

STA. 883+50 TO STA. 941+00 IR 90 MAINLINE AND RAMPS

THIS SECTION RUNS FROM APPROXIMATELY W. 44TH STREET TO THE EAST END OF THE PROJECT AT THE IR 71/90/490 INTERCHANGE AND INCLUDES RAMPS TO AND FROM THE FOLLOWING RAMPS:

- W. 41ST STREET; W. 25TH STREET; IR 90 EASTBOUND TO IR 71 SOUTHBOUND; WESTERN PORTION OF IR 90 EASTBOUND TO IR 71 NORTHBOUND; IR 71 SOUTHBOUND TO IR 90 WESTBOUND; AND WESTERN PORTION OF IR 71 NORTHBOUND TO IR 90 WESTBOUND.

BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-097-1 THROUGH B-112-1. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- SOILS VISUALLY IDENTIFIED AS FILL OR PROBABLE FILL WERE ENCOUNTERED IN SEVEN (7) OF THE BORINGS WITHIN THIS SECTION AND CONSISTED OF LOOSE TO VERY-DENSE GRAVEL (A-1-a), GRAVEL WITH SAND (A-1-b), SANDY SILT (A-4a) AND SILT (A-4b) WITH OCCASIONAL LAYERS OF HARD SANDY SILT (A-4a). THE FILL SOILS WERE PRIMARILY CONCENTRATED BETWEEN APPROXIMATELY STA. 914+80 AND STA. 925+00, EXTENDING TO THE BORING TERMINATION DEPTH IN FOUR (4) OF THE BORINGS.

- NATURAL SOILS CONSISTING OF GRANULAR LOOSE TO VERY-DENSE GRAVEL (A-1-a), GRAVEL WITH SAND (A-1-b), FINE SAND (A-3), COARSE AND FINE SAND (A-3a), SANDY SILT (A-4a), SILT (A-4b) WITH OCCASIONAL LAYERS OF VERY-STIFF TO HARD SANDY SILT (A-4a), SILT (A-4b), SILT AND CLAY (A-6a).

- A FEW AREAS WITHIN THIS SECTION ENCOUNTERED SILT (A-4b) SOILS AT OR WITHIN 3 FEET OF THE PROPOSED SUBGRADE.

- SEVERELY WEATHERED SANDSTONE BEDROCK ENCOUNTERED IN B-099-0.

DURING DRILLING, SEEPAGE OR GROUNDWATER WAS NOTED IN 31 BORINGS (ROUGHLY 19% OF THE BORINGS) AT DEPTHS RANGING FROM 0.7 TO 8.7 FEET BELOW THE EXISTING GROUND SURFACE. AT THE END OF DRILLING (EOD) IN NINE (9) BORINGS, WATER WAS MEASURED AT DEPTHS RANGING FROM 0.9 TO 4.7 FEET, EITHER INSIDE THE HOLLOW-STEM AUGER OR IN THE BORE HOLE AFTER THE AUGERS HAD BEEN PULLED AND THE HOLE CAVED. NO LONG-TERM GROUNDWATER MEASUREMENTS WERE OBTAINED IN ANY OF THESE EXPLORATIONS.

LIGHT POLE BORINGS - W. 41ST STREET AND N. MARGINAL ROAD RAMPS

THE THREE (3) BORINGS DRILLED ON THE W. 41ST STREET RAMP ENCOUNTERED 2¼ TO 3½ INCHES OF ASPHALT OVER 9 TO 10 INCHES OF CONCRETE WHICH WAS UNDERLAIN BY 10½ TO 12½ INCHES OF GRANULAR BASE. BENEATH THE GRANULAR BASE, THE BORINGS ENCOUNTERED 3.5 FEET OF EXISTING FILL MATERIALS CONSISTING OF LOOSE TO MEDIUM DENSE BROWN AND BLACK GRAVEL WITH SAND (A-1-b) AND COARSE AND FINE SAND (A-3a) OR DENSE TO VERY DENSE BROWN AND BLACK GRAVEL WITH SAND AND SILT (A-2-4) CONTAINING CINDERS, BRICK FRAGMENTS AND CLAY TILE FRAGMENTS. BELOW THE FILL, THE BORINGS ENCOUNTERED 15.0 TO 17.5 FEET OF NATURAL SOIL CONSISTING OF PREDOMINANTLY VERY LOOSE TO LOOSE BROWN COARSE AND FINE SAND (A-3a), SANDY SILT (A-4a) OR SILT (A-4b). ALL OF THESE BORINGS WERE TERMINATED AT A DEPTH OF 25 FEET AFTER PENETRATING 2.0 TO 4.5 FEET INTO A LAYER OF MEDIUM DENSE SANDY SILT (A-4a).

EXPLORATION FINDINGS (CONT.)

THE EXISTING PAVEMENT ENCOUNTERED ON THE MARGINAL ROAD RAMP CONSISTED OF RED 3 INCHES OF ASPHALT AND 8 INCHES OF CONCRETE OVER 12 INCHES OF GRANULAR BASE AT BORING B-065-2-23, AND 9 INCHES OF ASPHALT OVER 8 INCHES OF CONCRETE AND 17 INCHES OF GRANULAR BASE IN BORING B-066-1-23. BENEATH THE PAVEMENT MATERIALS, THE BORINGS ENCOUNTERED NATURAL SOILS CONSISTING OF MEDIUM STIFF TO HARD BROWN AND/OR GRAY SANDY SILT (A-4a), VERY STIFF TO HARD BROWN SILT (A-4b) AND VERY STIFF TO HARD BROWN SILT AND CLAY (A-6a). BELOW THE NATURAL SOILS, SHALE BEDROCK WAS ENCOUNTERED AT DEPTHS OF 15.5 FEET (EL. 685.9) AND 6.7 FEET (EL. 684.2) IN BORINGS B-065-2-23 AND B-066-1-23, RESPECTIVELY. BORING B-065-2-23 WAS TERMINATED AT A DEPTH OF 16.5 FEET AND BORING B-066-1-23 WAS TERMINATED AT A DEPTH OF 9.3 FEET.

HISTORIC BORING B-009-0-69 WAS PERFORMED FOR THE EXISTING PEDESTRIAN BRIDGE OVER IR-90 AT A LOCATION ADJACENT TO THE CURRENT N. MARGINAL RD. OFF-RAMP. THIS BORING PENETRATED APPROXIMATELY 20.5 FEET OF MEDIUM DENSE TO DENSE BROWN AND/OR GRAY SANDY SILT (A-4a), SILT (A-4b) AND SILT AND CLAY (A-6a) BEFORE ENCOUNTERING SHALE BEDROCK AT EL. 685.5. THE CURRENT GROUND SURFACE (FOLLOWING CONSTRUCTION OF THE IR 90 CORRIDOR) IS APPROXIMATELY 10 FEET LOWER THAN THE GROUND SURFACE PRESENT AT THE TIME OF THE BORING BEING PERFORMED IN 1969.

UTILITY BORINGS

THE BORINGS DRILLED DURING THE UTILITY EXPLORATION ENCOUNTERED A WIDE VARIETY OF MATERIALS BENEATH THE PAVEMENT, INCLUDING UNCONTROLLED FILL, FILL/POSSIBLE FILL, NATURAL SOIL, AND BEDROCK WHICH ARE GENERALLY SUMMARIZED IN THE FOLLOWING SECTIONS. THE THICKNESS OF EXISTING PAVEMENT MEASURED FROM PAVEMENT CORES CONSISTS OF 2 TO 14 INCHES OF ASPHALT OVER 8 TO 11-1/2 INCHES OF CONCRETE EXCEPT AT SIX (6) BORINGS WHERE CONCRETE WAS NOT ENCOUNTERED. GRANULAR BASE THICKNESS RANGED FROM 3 TO 13-1/2 INCHES.

STA. 533+00 TO STA. 574+00 IR 90 MAINLINE AND RAMP HA

THIS SECTION IS FROM THE HILLIARD BOULEVARD OVERPASS TO THE WEST ABUTMENT OF THE BRIDGE OVER THE ROCKY RIVER AND INCLUDES BORINGS B-002-5 THROUGH B-012-2 AND BORING B-006-1 PERFORMED ON RAMP HA (HILLIARD BOULEVARD TO IR 90 EASTBOUND). CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- POSSIBLE FILL WAS ENCOUNTERED IN BORINGS B-005-2 AND B-012-2 TO DEPTHS OF 3.4 AND 11.5 FEET, RESPECTIVELY. THE FILL MATERIALS IN BORING B-005-2 CONSISTED OF VERY STIFF TO HARD BROWN AND/OR GRAY SILT AND CLAY (A-6a), AND LOOSE TO MEDIUM DENSE COARSE AND FINE SAND (A-3a) IN BORING B-012-2.

- NATURAL SOIL CONSISTING PREDOMINANTLY OF VERY STIFF TO HARD BROWN AND/OR GRAY SANDY SILT (A-4a), SILT AND CLAY (A-6a) AND SILTY CLAY (A-6b) OR DENSE TO VERY DENSE SANDY SILT (A-4a). A FEW LAYERS OF MEDIUM DENSE TO DENSE BROWN GRAVEL WITH SAND (A-1-b) AND FINE SAND (A-3) WERE ALSO PRESENT IMMEDIATELY BENEATH THE GRANULAR BASE IN BORING B-006-1. IN BORING B-012-2, THE NATURAL SOILS CONSISTED PREDOMINANTLY OF LOOSE BROWN AND GRAY COARSE AND FINE SAND (A-3a) WITH THIN LAYERS OF MEDIUM STIFF TO STIFF BROWN SILT AND CLAY (A-6a).

- BEDROCK WAS ONLY ENCOUNTERED IN BORING B-006-1 AT A DEPTH OF 37 FEET AND CONSISTED OF HIGHLY WEATHERED, VERY WEAK, GRAY SHALE.

- SEEPAGE OR GROUNDWATER WAS ENCOUNTERED IN BORINGS B-006-1 AND B-012-2 BETWEEN DEPTHS OF 3.7 AND 18 FEET.

STA. 585+00 TO STA. 610+00 IR 90 MAINLINE

THIS SECTION EXTENDS FROM THE EAST ABUTMENT OF THE BRIDGE OVER THE ROCKY RIVER TO APPROXIMATELY 450 FEET WEST OF THE WOODWARD AVENUE OVERPASS. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-013-1 THROUGH B-019-2. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- EXISTING FILL CONSISTING OF MEDIUM DENSE GRAY GRAVEL WITH SAND (A-1-b) AND/OR VERY STIFF TO HARD SILT AND CLAY (A-6a) IN BORINGS B-013-1 AND B-015-1 TO DEPTHS RANGING FROM 3.5 TO 4.0 FEET.

- NATURAL SOIL IN BORINGS B-018-3 AND B-019-2 CONSISTING OF HARD GRAY SILT AND CLAY (A-6a) AND DESCRIBED AS BEING SIMILAR TO SEVERELY WEATHERED SHALE BEDROCK.

- SHALE BEDROCK IN ALL BORINGS, ENCOUNTERED BETWEEN DEPTHS OF 3.5 AND 4.0 FEET, RANGED FROM SEVERELY TO SLIGHTLY WEATHERED, VERY WEAK TO MODERATELY STRONG AND GRAY TO DARK GRAY/BLACK.

- SEEPAGE OR GROUNDWATER WAS ENCOUNTERED IN BORINGS B-013-1 AND B-018-3 BETWEEN DEPTHS OF 4.0 AND 12.5 FEET.

STA. 610+00 TO STA. 654+00 IR 90 MAINLINE

THIS SECTION EXTENDS FROM 450 FEET WEST OF THE WOODWARD AVENUE OVERPASS TO APPROXIMATELY 100 FEET EAST OF THE WARREN ROAD OVERPASS. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-021-2 THROUGH B-031-1. CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- EXISTING FILL CONSISTING OF VERY STIFF GRAY SILT AND CLAY (A-6a) ONLY IN BORING B-029-1 TO A DEPTH OF 1.7 FEET.

- SHALE BEDROCK IN ALL BORINGS, ENCOUNTERED BETWEEN DEPTHS OF 0.9 AND 2.0 FEET, RANGED FROM SEVERELY TO SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY STRONG AND GRAY OR DARK BROWN. IN ALL EXCEPT BORING B-029-1 WHERE BEDROCK WAS BENEATH EXISTING FILL, BEDROCK WAS ENCOUNTERED IMMEDIATELY BENEATH THE GRANULAR BASE LAYER.

- SEEPAGE OR GROUNDWATER WAS ENCOUNTERED IN BORINGS B-028-2, B-029-1 AND B-031-1 BETWEEN DEPTHS OF 1.1 AND 10.5 FEET.

EXPLORATION FINDINGS CONTINUED, SEE SHEET 3.

SOIL PROFILE - ROADWAY

DESIGN AGENCY

DESIGNER KAH

REVIEWER BKS

PROJECT ID 76779

SUBSET 2 TOTAL 67

SHEET 1522 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 3:24:59 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76779_YC0002.dgn

EXPLORATION FINDINGS (CONT.)

STA. 654+00 TO STA. 710+00 IR 90 MAINLINE AND RAMP W2A

THIS SECTION RUNS FROM APPROXIMATELY 100 FEET EAST OF THE WARREN ROAD OVERPASS TO APPROXIMATELY 1,500 FEET EAST OF THE BEREA ROAD OVERPASS (A LITTLE WEST OF THE W. 117TH STREET INTERCHANGE) AND INCLUDES RAMP W2A FROM W. 140TH STREET TO IR 90 EASTBOUND. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE B-034-1 THROUGH B-044-1. THE SUBSURFACE CONDITIONS ENCOUNTERED WITHIN THIS STATION RANGE MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- SOILS VISUALLY IDENTIFIED AS FILL OR POSSIBLE FILL WERE ENCOUNTERED IN ALL OF THE BORINGS WITHIN THIS SECTION TO DEPTHS RANGING FROM 5.5 TO 24.5 FEET AND CONSISTED OF STIFF TO HARD BROWN, GRAY AND/OR BLACK SILT AND CLAY (A-6a), SILTY CLAY (A-6b) AND CLAY (A-7-6). BORING B-041-3 WAS TERMINATED WITHIN FILL SOILS.

- UNCONTROLLED FILL WAS ENCOUNTERED AT THE BASE OF THE EXISTING FILL IN BORINGS B-034-1, B-037-2 AND B-043-3 AT DEPTHS OF 11.3, 24.0 AND 10.0 FEET, RESPECTIVELY. THE LAYERS RANGED FROM 0.5 TO 2.5 FEET THICK AND INCLUDED BRICK, SLAG, CONCRETE, WOOD AND/OR METAL FRAGMENTS OR SHALE BOULDERS.

- NATURAL SOILS CONSISTED PREDOMINANTLY OF STIFF TO HARD BROWN AND GRAY SANDY SILT (A-4a), SILT AND CLAY (A-6a), SILTY CLAY (A-6b) AND CLAY (A-7-6) WITH A LAYER OF DENSE BROWN AND GRAY GRAVEL WITH SAND, SILT, AND CLAY (A-2-6) IMMEDIATELY ABOVE BEDROCK IN BORING B-043-3.

- SHALE BEDROCK IN ALL BORINGS, EXCEPT BORING B-041-3, ENCOUNTERED BETWEEN DEPTHS OF 11.5 TO 31.8 FEET, RANGED FROM HIGHLY TO SEVERELY WEATHERED, VERY WEAK TO SLIGHTLY STRONG AND GRAY OR BROWN.

- SEEPAGE OR GROUNDWATER WAS ENCOUNTERED IN BORINGS B-034-1, B-037-2, B-043-3 AND B-044-1 BETWEEN DEPTHS OF 3.5 AND 13.5 FEET.

STA. 724+00 TO STA. 769+00 IR 90 MAINLINE

THIS SECTION RUNS ALONG THE IR 90 MAINLINE FROM THE WEST EDGE OF THE W. 117TH STREET INTERCHANGE TO WEST BOULEVARD. BORINGS PERFORMED WITHIN THIS SECTION INCLUDE BORINGS B-048-6 THROUGH B-059-5, WHICH ENCOUNTERED CONDITIONS THAT MAY BE GENERALLY DESCRIBED AS FOLLOWS:

- EXISTING FILL AND POSSIBLE FILL WERE ENCOUNTERED TO DEPTHS RANGING FROM 3.5 TO 16.4 FEET IN ALL OF THE BORINGS WITHIN THIS SECTION EXCEPT BORINGS B-048-6 AND B-049-4. THESE MATERIALS CONSISTED OF VERY SOFT TO HARD BROWN, GRAY OR BLACK SILT AND CLAY (A-6a) AND SILTY CLAY (A-6b), OR LOOSE TO VERY DENSE BROWN, GRAY OR BLACK GRAVEL WITH SAND (A-1-b), GRAVEL WITH SAND AND SILT (A-2-4), GRAVEL WITH SAND, SILT AND CLAY (A-2-6), COARSE AND FINE SAND (A-3a) AND SANDY SILT (A-4a).

- NATURAL SOIL CONSISTING OF VERY STIFF TO HARD GRAY OR BROWN SANDY SILT (A-4a) AND SILT AND CLAY (A-6a) WITH OCCASIONAL LAYERS OF LOOSE TO DENSE GRAY OR BROWN GRAVEL WITH SAND AND SILT (A-2-4), SANDY SILT (A-4a) AND SILT (A-4b) WERE ENCOUNTERED IN BORINGS B-057-3 AND B-059-5. NATURAL SOILS WERE NOT ENCOUNTERED IN BORING B-049-4 WHERE BEDROCK WAS IMMEDIATELY BENEATH THE GRANULAR BASE AND IN BORING B-056-1 WHERE FILL WAS PRESENT DOWN TO THE TOP OF ROCK.

- SHALE BEDROCK IN ALL BORINGS, ENCOUNTERED BETWEEN DEPTHS OF 1.5 AND 19.1 FEET, RANGED FROM SEVERELY TO SLIGHTLY WEATHERED, VERY WEAK TO SLIGHTLY STRONG AND GRAY TO DARK GRAY.

- SEEPAGE OR GROUNDWATER WAS ENCOUNTERED IN BORINGS B-049-4, B-056-1, B-057-3 AND B-059-5 BETWEEN THE DEPTHS OF 2.4 AND 16 FEET.

SPECIFICATIONS

THE GEOTECHNICAL EXPLORATION FOR THE SUBGRADE EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JANUARY 2020.

THE GEOTECHNICAL EXPLORATION FOR THE LIGHT POLE FOUNDATIONS WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JANUARY 2024.

THIS GEOTECHNICAL EXPLORATION FOR THE UTILITY EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2024.

AVAILABLE INFORMATION

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE SOIL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.

BEDROCK TEST SUMMARY

BORING NO.	SAMPLE DEPTH	SAMPLE ELEVATION	Q_u (psi)	LITHOLOGY
B-015-1-24	13.0' - 13.4'	697.5 - 697.1	3,902	SHALE
B-015-1-24	20.0' - 20.4'	690.5 - 690.1	2,350	SHALE
B-018-3-24	20.4' - 20.8'	693.2 - 692.8	732	SHALE
B-019-2-24	23.4' - 23.8'	692.3 - 691.9	2,433	SHALE
B-021-2-24	13.2' - 13.6'	698.5 - 698.1	5,514	SHALE
B-023-1-24	12.5' - 12.9'	701.0 - 700.6	6,967	SHALE
B-025-2-24	9.1' - 9.5'	706.8 - 706.4	2,071	SHALE
B-026-3-24	7.3' - 7.7'	710.9 - 710.5	4,198	SHALE
B-026-3-24	11.7' - 12.1'	706.5 - 706.1	2,006	SHALE
B-028-2-24	13.5' - 13.9'	707.0 - 706.6	2,631	SHALE
B-049-4-24	11.6' - 12.0'	724.2 - 723.8	1,406	SHALE
B-056-1-24	14.2' - 14.6'	703.4 - 703.0	2,070	SHALE
B-057-3-24	23.3' - 23.7'	703.3 - 702.9	2,617	SHALE
B-057-3-24	27.9' - 28.3'	698.7 - 698.3	535	SHALE
B-059-5-24	29.9' - 30.3'	706.4 - 706.0	2,454	SHALE
B-059-5-24	36.0' - 36.4'	700.3 - 699.9	3,217	SHALE

SOIL PROFILE - ROADWAY

DESIGN AGENCY

DESIGNER KAH

REVIEWER BKS

PROJECT ID 76779

SUBSET 3 TOTAL 67

SHEET 1523 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 3:27:22 PM USER: kharper
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SUMMARY OF SOIL TEST DATA
I.R. 90

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-001-0-20	2.0 - 3.5	SS-1	20	72	4.5+	7	10	13	30	40	28	15	13	12	A-6a (8)	566
Sta. 529+04, 13' RT	3.5 - 5.0	SS-2	17	78	4.5+	11	10	12	28	39	30	15	15	13	A-6a (8)	
Latitude: 41.471944	5.0 - 6.5	SS-3	17	100	4.5+					SAME AS SS-2				13	A-6a (VISUAL)	
Longitude: -81.842653	6.5 - 8.0	SS-4	33	67	4.5+					SAME AS SS-2				14	A-6a (VISUAL)	
B-002-0-20	1.5 - 3.0	SS-1	20	67	4.5+	16	9	11	36	28	27	15	12	10	A-6a (7)	556
Sta. 533+01, 20' LT	3.0 - 4.5	SS-2	18	78	4.5+	8	10	12	37	33	28	15	13	13	A-6a (8)	
Latitude: 41.472041	4.5 - 6.0	SS-3	15	100	4.5+					SAME AS SS-2				13	A-6a (VISUAL)	
Longitude: -81.841205	6.0 - 7.5	SS-4	30	100	4.5+					SAME AS SS-2				14	A-6a (VISUAL)	
B-003-0-20	1.5 - 3.0	SS-1	21	100	4.5+	7	13	11	27	42	29	16	13	13	A-6a (8)	517
Sta. 537+01, 5' RT	3.0 - 4.5	SS-2	18	100	4.5+	7	11	12	28	42	29	16	13	14	A-6a (8)	
Latitude: 41.471981	4.5 - 6.0	SS-3	20	100	4.5+					SAME AS SS-2				15	A-6a (VISUAL)	
Longitude: -81.839745	6.0 - 7.5	SS-4	21	100	4.5+					SAME AS SS-2				15	A-6a (VISUAL)	
B-004-0-20	1.5 - 3.0	SS-1	23	94	4.5+	7	10	13	41	29	25	16	9	10	A-4a (7)	81
Sta. 541+11, 51' LT	3.0 - 4.5	SS-2	36	100	4.5+	7	10	13	47	23	24	17	7	9	A-4a (7)	
Latitude: 41.472146	4.5 - 6.0	SS-3	42	100	4.5+					SAME AS SS-2				11	A-4a (VISUAL)	
Longitude: -81.838249	6.0 - 7.5	SS-4	56	100	4.5+					SAME AS SS-2				9	A-4a (VISUAL)	
B-005-0-20	1.5 - 3.0	SS-1	27	100	4.5+	9	10	13	42	26	26	15	11	11	A-6a (7)	0
Sta. 44+95, 41' LT	3.0 - 4.5	SS-2	48	100	4.5+	8	10	13	46	23	24	15	9	9	A-4a (7)	
Latitude: 41.471895	4.5 - 6.0	SS-3	50	100	4.5+					SAME AS SS-2				6	A-4a (VISUAL)	
Longitude: -81.836855	6.0 - 7.5	SS-4	62	72	4.5+					SAME AS SS-2				11	A-4a (VISUAL)	
B-006-0-20	1.5 - 3.0	SS-1	24	100	4.5+	5	8	10	43	34	27	16	11	10	A-6a (8)	579
Sta. 49+02, 6' LT	3.0 - 4.5	SS-2	30	89	4.5+	11	8	8	33	40	28	17	11	12	A-6a (8)	
Latitude: 41.472218	4.5 - 6.0	SS-3	36	100	4.5+					SAME AS SS-2				12	A-6a (VISUAL)	
Longitude: -81.835363	6.0 - 7.5	SS-4	42	100	4.5+					SAME AS SS-2				13	A-6a (VISUAL)	
B-007-0-20	1.5 - 3.0	SS-1	21	78	4.5+	17	12	9	24	38	30	17	13	11	A-6a (7)	472
Sta. 553+03, 12' RT	3.0 - 4.5	SS-2	30	78	4.5+	16	8	8	27	41	31	16	15	12	A-6a (9)	
Latitude: 41.472000	4.5 - 6.0	SS-3	35	94	4.5+					SAME AS SS-2				13	A-6a (VISUAL)	
Longitude: -81.833900	6.0 - 7.5	SS-4	45	100	4.5+					SAME AS SS-2				13	A-6a (VISUAL)	
B-008-0-20	1.5 - 3.0	SS-1	15	67	3.5	23	18	37	19	3	NP	NP	NP	12	A-3a (0)	410
Sta. 557+01, 18' LT	3.0 - 4.5	SS-2	18	72	-	2	5	56	31	6	NP	NP	NP	15	A-4a (0)	
Latitude: 41.472075	4.5 - 6.0	SS-3	23	100	-					SAME AS SS-2				20	A-4a (VISUAL)	
Longitude: -81.832447	6.0 - 7.5	SS-4	29	89	-					SAME AS SS-2				21	A-4a (VISUAL)	
B-009-0-20	1.5 - 3.0	SS-1	44	39	-	27	41	12	16	4	31	19	12	13	A-2-6 (0)	916
Sta. 561+01, 65' RT	3.0 - 4.5	SS-2	21	89	-	40	36	8	4	12	34	19	15	14	A-2-6 (0)	
Latitude: 41.471823	4.5 - 6.0	SS-3	9	100	-					SAME AS SS-2				18	A-2-6 (VISUAL)	
Longitude: -81.830993	6.0 - 7.5	SS-4	11	100	-					SAME AS SS-2				21	A-2-6 (VISUAL)	
B-010-0-20	1.5 - 3.0	SS-1	24	67	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	106
Sta. 565+03, 63' LT	3.0 - 4.5	SS-2	53	78	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.472152	-															
Longitude: -81.829516	-															
B-011-0-20	1.5 - 2.5	SS-1	-	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	934
Sta. 568+98, 55' RT	-															
Latitude: 41.471805	-															
Longitude: -81.828085	-															
B-012-0-20	1.5 - 2.9	SS-1	-	94	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	1625
Sta. 573+01, 67' LT	-															
Latitude: 41.472118	-															
Longitude: -81.826604	-															
B-013-0-20	1.5 - 2.3	SS-1	-	100	-	SHALE, GRAY, HIGHLY WEATHERED, WEAK								-	ROCK (VISUAL)	784
Sta. 583+01, 7' RT	3.0 - 3.8	SS-2	-	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.471859	-															
Longitude: -81.822963	-															
B-014-0-20	1.5 - 2.4	SS-1	-	55	-	SHALE, GRAY, HIGHLY WEATHERED, WEAK								-	ROCK (VISUAL)	176
Sta. 587+02, 17' LT	3.0 - 3.8	SS-2	-	89	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.471865	5.0 - 5.3	SS-3	-	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Longitude: -81.821495	-															
B-015-0-20	1.5 - 2.1	SS-1	-	86	-	SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK								-	ROCK (VISUAL)	715
Sta. 90+88, 42' LT	3.0 - 3.5	SS-2	-	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.471472	-															
Longitude: -81.820111	-															
B-016-0-20	1.5 - 3.0	SS-1	20	100	-	SANDSTONE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	953
Sta. 95+23, 32' RT	3.0 - 4.5	SS-2	39	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.471544	4.5 - 6.0	SS-3	17	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Longitude: -81.818574	6.0 - 7.5	SS-4	51	94	-	SAME AS SS-1								-	ROCK (VISUAL)	
B-017-0-20	1.5 - 3.0	SS-1	101	89	-	SHALE, GRAY, HIGHLY WEATHERED, WEAK								-	ROCK (VISUAL)	323
Sta. 599+05, 14' RT	3.0 - 4.0	SS-2	-	67	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.470986	-															
Longitude: -81.817270	-															
B-018-0-20	1.5 - 3.0	SS-1	42	33	-	SANDSTONE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	0
Sta. 603+14, 60' LT	3.0 - 3.8	SS-2	-	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	
Latitude: 41.470825	-															
Longitude: -81.815767	-															
B-019-0-20	1.5 - 2.8	SS-1	-	87	-	SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK								-	-	399
Sta. 606+95, 56' RT	3.0 - 3.2	SS-2	-	50	-	SAME AS SS-1								-	-	
Latitude: 41.470192	-															
Longitude: -81.814582	-															
B-020-0-20	1.5 - 3.0	SS-1	24	28	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	604
Sta. 11+19, 55' RT	3.0 - 4.5	SS-2	33	67	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.470177	-															
Longitude: -81.813046	-															
B-021-0-20	1.5 - 3.0	SS-1	32	67	-	SHALE, GRAY, HIGHLY WEATHERED, WEAK								-	ROCK (VISUAL)	698
Sta. 615+17, 12' RT	3.0 - 4.5	SS-2	42	78	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.469726	4.5 - 5.9	SS-3	-	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Longitude: -81.811630	-															
B-022-0-20	1.5 - 2.4	SS-1	-	100	-	SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK								-	Rock (VISUAL)	442
Sta. 616+87, 18' LT	3.0 - 3.9	SS-2	-	100	-	SAME AS SS-1								-	Rock (VISUAL)	
Latitude: 41.469692	-															
Longitude: -81.810273	-															
B-023-0-20	1.5 - 2.4	SS-1	-	100	-	SHALE, GRAY, HIGHLY WEATHERED, WEAK								-	Rock (VISUAL)	636
Sta. 621+37, 5' RT	-															
Latitude: 41.469565	-															
Longitude: -81.808636	-															
B-024-0-20	1.5 - 2.0	SS-1	-	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	Rock (VISUAL)	464
Sta. 625+00, 77' LT	-															
Latitude: 41.469752	-															
Longitude: -81.807305	-															
B-025-0-20	1.5 - 3.0	SS-1	33	78	-	SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK								-	Rock (VISUAL)	750
Sta. 28+94, 31' LT	3.0 - 3.7	SS-2	-	25	-	SAME AS SS-1								-	Rock (VISUAL)	
Latitude: 41.469342	-															
Longitude: -81.805876	-															
B-026-0-20	1.5 - 2.3	SS-1	-	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	Rock (VISUAL)	862
Sta. 633+07, 62' LT	3.0 - 3.5	SS-2	-	67	-	SAME AS SS-1								-	Rock (VISUAL)	
Latitude: 41.469671	-															
Longitude: -81.804366	-															

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 4:01:33 PM USER: kharper
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SUMMARY OF SOIL TEST DATA
I.R. 90

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-027-0-20	1.5 - 2.5	SS-1	-	100	-			SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK						-	Rock (VISUAL)	923
Sta. 36+97, 5' LT	3.0 - 4.0	SS-2	-	100	-			SAME AS SS-1						-	Rock (VISUAL)	
Latitude: 41.469321	-															
Longitude: -81.802948	-															
B-028-0-20	1.5 - 2.9	SS-1	-	94	-			SHALE, GRAY, SEVERELY WEATHERED, WEAK						-	Rock (VISUAL)	1030
Sta. 41+02, 8' LT	3.0 - 3.4	SS-2	-	100	-			SAME AS SS-1						-	Rock (VISUAL)	
Latitude: 41.469691	-															
Longitude: -81.801465	-															
B-029-0-20	1.5 - 2.8	SS-1	-	88				SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK						-	Rock (VISUAL)	321
Sta. 45+09, 48' LT	3.0 - 3.9	SS-2	-	100				SAME AS SS-1						-	Rock (VISUAL)	
Latitude: 41.469286	4.5 - 5.9	SS-3	-	100				SAME AS SS-1						-	Rock (VISUAL)	
Longitude: -81.799981	6.0 - 7.4	SS-4	-	100				SAME AS SS-1						-	Rock (VISUAL)	
B-030-0-20	1.5 - 3.0	SS-1	36	100	-			SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK						-	Rock (VISUAL)	427
Sta. 648+97, 41' LT	3.0 - 3.9	SS-2	-	100	-			SAME AS SS-1						-	Rock (VISUAL)	
Latitude: 41.469557	4.5 - 5.9	SS-3	-	100	-			SAME AS SS-1						-	Rock (VISUAL)	
Longitude: -81.798566	6.0 - 6.4	SS-4	-	100	-			SAME AS SS-1						-	Rock (VISUAL)	
B-031-0-20	1.5 - 1.8	SS-1	-	80	-			SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK						-		788
Sta. 53 + 15, 4' RT	3.0 - 3.3	SS-2	-	89	-			SAME AS SS-1						-		
Latitude: 41.469063	-															
Longitude: -81.797058	-															
B-032-0-20	1.5 - 2.3	SS-1	-	100	-			SHALE, GRAY, SEVERELY WEATHERED, WEAK						-	Rock (VISUAL)	1029
Sta. 57+07, 49' LT	-															
Latitude: 41.469686	-															
Longitude: -81.795610	-															
B-033-0-20	1.5 - 3.0	SS-1	15	67	-	44	14	7	17	18	35	19	16	12	A-2-6 (1)	468
Sta. 61+03, 53' LT	3.0 - 4.5	SS-2	9	100	-	44	14	8	15	19	35	19	16	13	A-2-6 (1)	
Latitude: 41.469190	4.5 - 6.0	SS-3	12	89	-				SAME AS SS-2					17	A-2-6 (VISUAL)	
Longitude: -81.794177	6.0 - 7.5	SS-4	14	78	-	56	18	9	1	16	-	-	-	9	A-1-b (VISUAL)	
B-034-0-20	1.5 - 3.0	SS-1	14	100	-	47	14	8	19	12	-	-	-	10	A-2-4 (VISUAL)	637
Sta. 64+92, 22' RT	3.0 - 4.5	SS-2	18	72	-	27	18	12	29	14	NP	NP	NP	11	A-4a (2)	
Latitude: 41.469644	4.5 - 6.0	SS-3	12	100	-				SAME AS SS-2					11	A-4a (VISUAL)	
Longitude: -81.792703	6.0 - 7.5	SS-4	15	78	-				SAME AS SS-2					14	A-4a (VISUAL)	
B-035-0-20	1.5 - 3.0	SS-1	11	11	1.50				SAME AS SS-2					12	A-6a (VISUAL)	1433
Sta. 68+87, 12'	3.0 - 4.5	SS-2	9	78	2.00	34	16	12	19	19	33	20	13	15	A-6a (1)	
Latitude: 41.468970	4.5 - 6.0	SS-3	9	100	2.50	30	14	11	21	24	35	18	17	15	A-6b (4)	
Longitude: -81.791325	6.0 - 7.5	SS-4	11	100	2.50				SAME AS SS-3					18	A-6b (VISUAL)	
B-036-0-20	2.0 - 3.5	SS-1	15	11	-	FILL: MEDIUM-DENSE GRAY GRAVEL WITH SAND, SILT, AND CLAY								11	A-2-6 (VISUAL)	740
Sta. 671+88, 85' LT	3.5 - 5.0	SS-2	17	61	2.00	31	16	11	23	19	-	-	-	12	A-6a (VISUAL)	
Latitude: 41.469409	5.0 - 6.5	SS-3	17	78	-	48	18	10	14	10	-	-	-	9	A-1-b (VISUAL)	
Longitude: -81.790167	6.5 - 8.0	SS-4	14	100	-									10	A-1-b (VISUAL)	
	-					MEDIUM-DENSE GRAY GRAVEL WITH SAND, LITTLE SILT										
B-037-0-20	1.5 - 3.0	SS-1	18	67	-									-	ROCK (VISUAL)	1225
Sta. 75+72, 5' RT	3.0 - 4.5	SS-2	15	72	-			SHALE, GRAY, SEVERELY WEATHERED, VERY WEAK						-	ROCK (VISUAL)	
Latitude: 41.468671	4.5 - 6.0	SS-3	26	100	-				SAME AS SS-1					-	ROCK (VISUAL)	
Longitude: -81.788868	6.0 - 7.5	SS-4	29	72	-				SAME AS SS-1					-	ROCK (VISUAL)	
	-								SAME AS SS-1							
B-038-0-20	1.5 - 3.0	SS-1	18	100	-									-	ROCK (VISUAL)	881
Sta. 679+90, 38' LT	3.0 - 4.5	SS-2	18	78	-			SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK						-	ROCK (VISUAL)	
Latitude: 41.468629	4.5 - 6.0	SS-3	11	100	-				SAME AS SS-1					12	ROCK (VISUAL)	
Longitude: -81.787383	6.0 - 7.5	SS-4	17	72	-				SAME AS SS-1					14	ROCK (VISUAL)	
	-								SAME AS SS-1							
B-039-0-20	1.5 - 3.0	SS-1	12	94	4.50	8	11	11	28	42	40	19	21	19	A-6b (11)	701
Sta. 684+26, 34' RT	3.0 - 4.5	SS-2	8	72	4.00	14	11	11	29	35	39	19	20	19	A-6b (10)	
Latitude: 41.467921	4.5 - 6.0	SS-3	21	67	3.50				SAME AS SS-2					14	A-6b (VISUAL)	
Longitude: -81.786073	6.0 - 7.5	SS-4	32	89	-			SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK						-	ROCK (VISUAL)	
B-040-0-20	1.5 - 3.0	SS-1	30	22	-	FILL: MEDIUM-DENSE GRAY GRAVEL WITH SAND, SOME SILT								12	A-1-b (VISUAL)	406
Sta. 692+01, 30' LT	3.0 - 4.5	SS-2	21	33	3.50	6	11	10	42	31	41	20	21	17	A-7-6 (12)	
Latitude: 41.467051	4.5 - 6.0	SS-3	12	67	4.50	16	10	11	29	34	40	19	21	17	A-6b (10)	
Longitude: -81.783480	6.0 - 7.5	SS-4	27	100	3.50				SAME AS SS-3					12	A-6b (VISUAL)	
B-041-0-20	2.0 - 3.5	SS-1	11	72	3.50	13	9	19	28	31	35	16	19	20	A-6b (8)	958
Sta. 695+35, 30' RT	3.5 - 5.0	SS-2	12	78	2.50	2	2	15	49	32	38	17	21	20	A-6b (12)	
Latitude: 41.466463	5.0 - 6.5	SS-3	9	100	2.00				SAME AS SS-2					21	A-6b (VISUAL)	
Longitude: -81.782522	6.5 - 8.0	SS-4	14	89	2.00	12	8	13	40	27	-	-	-	22	A-6b (VISUAL)	
B-042-0-20	1.5 - 3.0	SS-1	15	67	2.00	37	15	8	26	14	-	-	-	15	A-4a (VISUAL)	683
Sta. 700+15, 83' LT	3.0 - 4.5	SS-2	15	67	3.00	12	8	12	31	37	41	20	21	20	A-7-6 (11)	
Latitude: 41.466190	4.5 - 6.0	SS-3	21	39	4.00				SAME AS SS-2					20	A-7-6 (VISUAL)	
Longitude: -81.780787	6.0 - 7.5	SS-4	89	33	2.00			FILL: STIFF BROWNISH-GRAY SILT AND CLAY, SOME GRAVEL						16	A-6a (VISUAL)	
B-043-0-20	1.5 - 3.0	SS-1	18	11	-			FILL: RANDOM FILL (RUBBER, METAL, GLASS, BRICK)						15	VISUAL (VISUAL)	677
Sta. 704+05, 76' RT	3.0 - 4.5	SS-2	11	11	-				SAME AS SS-1					20	VISUAL (VISUAL)	
Latitude: 41.465539	4.5 - 6.0	SS-3	11	11	-				SAME AS SS-1					23	VISUAL (VISUAL)	
Longitude: -81.779524	6.0 - 7.5	SS-4	12	100	2.00	17	15	18	26	24	34	19	15	22	A-6a (5)	
B-044-0-20	1.5 - 3.0	SS-1	11	100	3.50	21	10	12	32	25	42	21	21	20	A-7-6 (9)	519
Sta. 708+03, 88' LT	3.0 - 4.5	SS-2	9	78	1.50	1	3	16	33	47	52	21	31	33	A-7-6 (18)	
Latitude: 41.466005	4.5 - 6.0	SS-3	11	100	2.50			VERY-STIFF CLAY, SOME SILT, LITTLE FINE TO COARSE SAND						26	A-7-6 (VISUAL)	
Longitude: -81.778081	6.0 - 7.5	SS-4	15	100	2.00				SAME AS SS-4					34	A-7-6 (VISUAL)	
B-045-0-20	1.5 - 3.0	SS-1	6	89	1.50	4	5	21	37	33	43	21	22	33	A-7-6 (12)	337
Sta. 712+09, 78' RT	3.0 - 4.5	SS-2	8	67	1.50	4	5	40	24	27	28	14	14	19	A-6a (5)	
Latitude: 41.465690	4.5 - 6.0	SS-3	12	89	2.00				SAME AS SS-2					15	A-6a (VISUAL)	
Longitude: -81.776543	6.0 - 7.5	SS-4	20	78	4.00				SAME AS SS-2					14	A-6a (VISUAL)	
B-046-0-20	1.5 - 3.0	SS-1	15	100	4.50	8	6	16	30	40	40	19	21	19	A-6b (11)	428
Sta. 716+02, 30' LT	3.0 - 4.5	SS-2	12	78	3.50	0	3	10	44	43	54	27	27	31	A-7-6 (18)	
Latitude: 41.466121	4.5 - 6.0	SS-3	11	100	3.00	2	3	10	49	36	29	17	12	20	A-6a (9)	
Longitude: -81.775171	6.0 - 7.5	SS-4	17	100	3.50				SAME AS SS-3					21	A-6a (VISUAL)	
B-047-0-20	1.5 - 3.0	SS-1	15	89	4.00	7	6	12	39	36	34	20	14	18	A-6a (10)	2799
Sta. 720+03, 98' RT	3.0 - 4.5	SS-2	17	100	4.50	5	5	12	42	36	34	18	16	18	A-6b (10)	
Latitude: 41.465911	4.5 - 6.0	SS-3	24	100	-			SHALE INTERBEDDED WITH SANDSTONE, GRAYISH-BROWN						-	ROCK (VISUAL)	
Longitude: -81.773660	6.0 - 7.5	SS-4	30	100	-				SAME AS SS-1					-	ROCK (VISUAL)	
	-								SAME AS SS-3							
B-048-0-20	1.5 - 3.0	SS-1	14	100	4.00	11	6	26	33		20	14	6	22	A-4a (4)	517
Sta. 723+96, 40' LT	3.0 - 4.5	SS-2	20	100	4.50	20	16	12	28	24	22	15	7	11	A-4a (3)	
Latitude: 41.466424	4.5 - 6.0	SS-3	42	100	4.5+					24				10	A-4a (VISUAL)	
Longitude: -81.772301	6.0 - 7.5	SS-4	68	94	-				SAME AS SS-2					-	ROCK (VISUAL)	
	-							SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK								
B-049-0-20	1.5 - 3.0	SS-1	68	100	-									-	ROCK (VISUAL)	782
Sta. 728+08, 33' RT	3.0 - 4.5	SS-2	135	100	-			INTERBEDDED SHALE AND SANDSTONE, GRAY, WEAK						-	ROCK (VISUAL)	
Latitude: 41.466372	4.5 - 5.3	SS-3	-	100	-				SAME AS SS-1					-	ROCK (VISUAL)	
Longitude: -81.770775	6.0 - 6.5	SS-4	-	100	-				SAME AS SS-1					-	ROCK (VISUAL)	
	-								SAME AS SS-1							
B-050-0-20	1.5 - 2.3	SS-1	-	80	-									-	ROCK (VISUAL)	500
Sta. 732+01, 101' LT	3.0 - 3.8	SS-2	-	80	-			SANDSTONE, GRAY, SEVERELY WEATHERED, WEAK						-	ROCK (VISUAL)	
Latitude: 41.466872	-							SAME AS SS-1								
Longitude: -81.769416	-															
B-051-0-20	2.0 - 3.5	SS-1	18	89	-			SHALE, GRAY, SEVERELY WEATHERED, VERY WEAK						-	ROCK (VISUAL)	1255
Sta. 736+13, 90' RT	3.5 - 5.0	SS-2	21	67	-				SAME AS SS-1					-	ROCK (VISUAL)	
Latitude: 41.466497	5.0 - 6.5	SS-3	21	94	-				SAME AS SS-1					-	ROCK (VISUAL)	
Longitude: -81.767838	6.5 - 8.0	SS-4	27	100	-				SAME AS SS-1					-	ROCK (VISUAL)	
B-052-0-20	1.5 - 3.0	SS-1	69	39	-	77	16	6	1	0	-	-	-	7	A-1-a (VISUAL)	736
Sta. 740+15, 83' LT	3.0 - 4.5	SS-2	11	22	2.50	31	18	12	17	22	-	-	-	19	A-6a (VISUAL)	
Latitude: 41.467110	4.5 - 6.0	SS-3	15	100	4.00	4	4	7	42	43	25	15	10	17	A-4a (8)	
Longitude: -81.766463	6.0 - 7.5	SS-4	30	100	4.50				SAME AS SS-3					22	A-4a (VISUAL)	
	7.5 - 9.0	SS-5	42	67	4.50				SAME AS SS-3					13	A-4a (VISUAL)	

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 4:03:55 PM USER: kharper
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SUMMARY OF SOIL TEST DATA
I.R. 90

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-053-0-20	1.5 - 3.0	SS-1	74	100	-	62	23	10	5	0	-	-	-	13	A-1-a (VISUAL)	462
Sta. 744+03, 27' RT	3.0 - 4.5	SS-2	68	100	-	0	1	8	76	15	21	15	6	13	A-4b (8)	
Latitude: 41.466946	4.5 - 6.0	SS-3	23	100	-					SAME AS SS-4				15	A-4b (VISUAL)	
Longitude: -81.765009	6.0 - 7.5	SS-4	29	94	-	5	2	8	72	13	NP	NP	NP	16	A-4b (8)	
	7.5 - 9.0	SS-5	21	100	-					SAME AS SS-4				17	A-4b (VISUAL)	
B-054-0-20	1.5 - 3.0	SS-1	41	100	3.50	13	22	18	24	23	-	-	-	19	A-6a (VISUAL)	786
Sta. 748+05, 39' LT	3.0 - 4.5	SS-2	15	72	4.5+	9	9	11	28	43	26	15	11	13	A-6a (8)	
Latitude: 41.467267	4.5 - 6.0	SS-3	84	100	4.5+	9	14	15	40	22	33	17	16	13	A-6b (8)	
Longitude: -81.763585	6.0 - 7.5	SS-4	23	78	4.5+					SAME AS SS-3				12	A-6b (VISUAL)	
	7.5 - 7.8	SS-5	-	67	-				VERY-DENSE GRAY COARSE AND FINE SAND, SOME GRAVEL					9	A-3a (VISUAL)	
B-055-0-20	1.5 - 3.0	SS-1	42	100	4.50	21	12	12	35	20	24	14	10	8	A-4a (4)	932
Sta. 751+96, 34' RT	3.0 - 4.5	SS-2	38	100	3.00	22	14	12	43	9	24	15	9	11	A-4a (3)	
Latitude: 41.467205	4.5 - 6.0	SS-3	48	89	-				INTERBEDDED SHALE AND SANDSTONE, GRAY, WEAK					-	ROCK (VISUAL)	
Longitude: -81.762133	6.0 - 7.5	SS-4	47	100	-					SAME AS SS-3				-	ROCK (VISUAL)	
	7.5 - 9.0	SS-5	41	94	-					SAME AS SS-3				-	ROCK (VISUAL)	
B-056-0-20	1.5 - 3.0	SS-1	36	100	4.5+					SAME AS SS-2				16	A-4a (VISUAL)	956
Sta. 756+03, 30' LT	3.0 - 4.5	SS-2	45	89	4.5+	21	6	10	45	18	24	15	9	12	A-4a (6)	
Latitude: 41.467521	4.5 - 6.0	SS-3	27	100	4.5+	19	8	7	51	15	23	15	8	10	A-4b (6)	
Longitude: -81.760692	6.0 - 7.5	SS-4	32	100	4.5+					SAME AS SS-3				10	A-4b (VISUAL)	
	7.5 - 8.9	SS-5	-	94	-				SHALE, GRAY, HIGHLY WEATHERED, VERY WEAK					4	ROCK (VISUAL)	
B-057-0-20	1.5 - 3.0	SS-1	26	100	-					SAME AS SS-2				22	A-3a (VISUAL)	300
Sta. 60+12, 6' RT	3.0 - 4.5	SS-2	21	72	-	2	17	57	24	0	NP	NP	NP	15	A-3a (0)	
Latitude: 41.467319	4.5 - 6.0	SS-3	18	100	4.5+	5	9	14	46	26	23	15	8	12	A-4a (7)	
Longitude: -81.759152	6.0 - 7.5	SS-4	24	100	4.5+	1	0	5	58	36	26	17	9	17	A-4b (8)	
	7.5 - 9.0	SS-5	33	67	4.5+					SAME AS SS-4				16	A-4b (VISUAL)	
B-058-0-20	1.5 - 3.0	SS-1	21	100	4.5+					SAME AS SS-2				12	A-6a (VISUAL)	814
Sta. 64+34, 27' RT	3.0 - 4.5	SS-2	32	100	4.5+	6	5	13	41	35	24	13	11	11	A-6a (8)	
Latitude: 41.468134	4.5 - 6.0	SS-3	26	100	-	1	0	45	39	15	NP	NP	NP	17	A-4a (4)	
Longitude: -81.757799	6.0 - 7.5	SS-4	47	67.00	-	1	1	75	17	6	NP	NP	NP	22	A-3a (0)	
	7.5 - 9.0	SS-5	51	100	-					SAME AS SS-4				24	A-3a (VISUAL)	
B-059-0-20	1.5 - 3.0	SS-1	24	100	4.5+	12	4	25	34	25	21	14	7	11	A-4a (5)	802
Sta. 768+03, 77' RT	3.0 - 4.5	SS-2	21	89	4.5+	3	5	11	42	39	25	15	10	13	A-4a (8)	
Latitude: 41.468075	4.5 - 6.0	SS-3	23	100	3.50					SAME AS SS-2				11	A-4a (VISUAL)	
Longitude: -81.756344	6.0 - 7.5	SS-4	21	67	4.00				HARD GRAYISH-BROWN SILTY CLAY, LITTLE SAND					15	A-6b (VISUAL)	
B-060-0-20	2.0 - 3.5	SS-1	27	89	4.5+	3	3	20	46	28	25	13	12	4	A-6a (9)	933
Sta. 772+57, 84' LT	3.5 - 5.0	SS-2	27	100	4.50	17	5	26	33	19	22	13	9	11	A-4a (3)	
Latitude: 41.469010	5.0 - 6.5	SS-3	23	89	4.5+					SAME AS SS-2				11	A-4a (VISUAL)	
Longitude: -81.755096	6.5 - 8.0	SS-4	18	39	3.00					SAME AS SS-2				11	A-4a (VISUAL)	
B-061-0-20	1.5 - 3.0	SS-1	33	100	4.5+	6	7	17	42	28	28	15	13	11	A-6A (8)	698
Sta. 775+98, 34' RT	3.0 - 4.5	SS-2	21	78	2.50	4	4	25	45	22	21	13	8	11	A-4a (6)	
Latitude: 41.469128	4.5 - 6.0	SS-3	29	78	4.5+	2	2	15	52	29	23	14	9	11	A-4b (8)	
Longitude: -81.753787	6.0 - 7.5	SS-4	26	94	4.5+					SAME AS SS-3				13	A-4b (VISUAL)	
B-062-0-20	2.0 - 3.5	SS-1	11	67	4.50	5	6	13	45	31	30	16	14	15	A-6a (10)	3605
Sta. 779+45, 31' LT	3.5 - 5.0	SS-2	17	67	4.5+	5	5	9	39	42	35	17	18	16	A-6b (11)	
Latitude: 41.469672	5.0 - 6.5	SS-3	18	67	4.5+					SAME AS SS-2				15	A-6b (VISUAL)	
Longitude: -81.752721	6.5 - 8.0	SS-4	26	100	4.50					SAME AS SS-2				14	A-6b (VISUAL)	
B-063-0-20	1.5 - 3.0	SS-1	29	100	4.5+	6	3	8	46	37	34	16	18	14	A-6b (11)	453
Sta. 782+51, 34' RT	3.0 - 4.5	SS-2	29	100	4.5+	10	7	11	42	30	32	17	15	14	A-6a (9)	
Latitude: 41.469729	4.5 - 6.0	SS-3	29	100	4.5+					SAME AS SS-2				19	A-6a (VISUAL)	
Longitude: -81.751583	6.0 - 7.5	SS-4	29	100	4.5+					SAME AS SS-2				16	A-6a (VISUAL)	
B-064-0-20	1.5 - 3.0	SS-1	14	67	4.00	9	8	13	27	43	31	16	15	14	A-6a (9)	3398
Sta. 787+05, 39' LT	3.0 - 4.5	SS-2	23	100	3.50	6	5	10	30	49	44	20	24	19	A-7-6 (14)	
Latitude: 41.470034	4.5 - 6.0	SS-3	24	100	4.50	6	7	7	34	46	36	18	18	17	A-6b (11)	
Longitude: -81.749963	6.0 - 7.5	SS-4	20	72	4.5+					SAME AS SS-3				17	A-6b (VISUAL)	
B-065-0-20	1.5 - 3.0	SS-1	57	100	3.50	28	6	10	25	31	39	19	20	15	A-6b (8)	1363
Sta. 790+98, 33' RT	3.0 - 4.5	SS-2	20	67	3.00	6	6	11	30	47	37	18	19	18	A-6b (12)	
Latitude: 41.469845	4.5 - 6.0	SS-3	20	61	3.00					SAME AS SS-2				21	A-6b (VISUAL)	
Longitude: -81.748526	6.0 - 7.5	SS-4	27	89	4.50					SAME AS SS-2				20	A-6b (VISUAL)	
B-066-0-20	1.5 - 3.0	SS-1	21	78	4.50					SAME AS SS-2				17	A-6a (VISUAL)	1714
Sta. 795+03, 31' LT	3.0 - 4.5	SS-2	15	33	4.5+	4	14	10	35	37	33	18	15	14	A-6a (9)	
Latitude: 41.470029	4.5 - 6.0	SS-3	14	100	4.00	12	3	6	32	47	30	17	13	18	A-6a (9)	
Longitude: -81.747051	6.0 - 7.5	SS-4	17	100	4.00					SAME AS SS-3				20	A-6a (VISUAL)	
	7.5 - 9.0	SS-5	33	72	4.50				HARD GRAY SANDY SILT, SOME CLAY, TRACE FINE GRAVEL					14	A-4a (VISUAL)	
B-067-0-20	1.5 - 3.0	SS-1	57	100	-	2	8	25	60	5	NP	NP	NP	18	A-6b (6)	800
Sta. 799+00, 98' RT	3.0 - 4.5	SS-2	14	100	3.50	2	3	7	37	51	30	17	13	21	A-6a (9)	
Latitude: 41.469684	4.5 - 6.0	SS-3	9	100	2.50	2	4	8	38	48	28	17	11	20	A-6a (8)	
Longitude: -81.745597	6.0 - 7.5	SS-4	8	100	4.50					SAME AS SS-3				19	A-6a (VISUAL)	
	7.5 - 9.0	SS-5	12	100	3.50					SAME AS SS-3				17	A-6a (VISUAL)	
B-068-0-20	1.5 - 3.0	SS-1	84	89	-					SAME AS SS-2				15	A-4a (VISUAL)	375
Sta. 803+07, 102' LT	3.0 - 4.5	SS-2	38	94	-	2	5	50	41	2	NP	NP	NP	18	A-4a (2)	
Latitude: 41.470244	4.5 - 6.0	SS-3	20	100	4.5+	4	7	18	46	25	22	14	8	15	A-4a (2)	
Longitude: -81.744123	6.0 - 7.5	SS-4	23	100	4.50					SAME AS SS-3				17	A-4a (VISUAL)	
	7.5 - 9.0	SS-5	18	28	3.50					SAME AS SS-3				15	A-4a (VISUAL)	
B-069-0-20	1.5 - 3.0	SS-1	78	100	-	0	3	11	70	16	NP	NP	NP	17	A-4b (8)	10
Sta. 807+55, 35' RT	3.0 - 4.5	SS-2	32	89	-	0	1	7	74	18	NP	NP	NP	21	A-4b (8)	
Latitude: 41.469932	4.5 - 6.0	SS-3	20	100	-					SAME AS SS-2				19	A-4b (VISUAL)	
Longitude: -81.742473	6.0 - 7.5	SS-4	21	100	-					SAME AS SS-2				22	A-4b (VISUAL)	
B-070-0-20	1.5 - 3.0	SS-1	89	100	-	2	6	27	51	14	NP	NP	NP	10	A-4b (6)	0
Sta. 810+95, 40' LT	3.0 - 4.5	SS-2	71	72	-	2	3	28	52	15	NP	NP	NP	10	A-4b (6)	
Latitude: 41.470233	4.5 - 6.0	SS-3	29	100	-				MEDIUM-DENSE TO DENSE SILT, SOME SAND,LITTLE CLAY					17	A-4b (VISUAL)	
Longitude: -81.741266	6.0 - 7.5	SS-4	36	78	-					SAME AS SS-3				18	A-4b (VISUAL)	
B-071-0-20	1.5 - 3.0	SS-1	-	100	-	0	5	26	58	11	NP	NP	NP	18	A-4b (7)	162
Sta. 814+94, 33' RT	3.0 - 4.5	SS-2	-	100	-	20	16	8	48	8	NP	NP	NP	17	A-4a (4)	
Latitude: 41.470201	4.5 - 6.0	SS-3	44	100	-					SAME AS SS-4				18	A-4b (VISUAL)	
Longitude: -81.739789	6.0 - 7.5	SS-4	35	94	-	0	1	6	82	11	NP	NP	NP	25	A-4b (8)	
B-072-0-20	1.5 - 3.0	SS-1	-	91	-	60	26	11	2	1	NP	NP	NP	7	A-1-a (0)	4
Sta. 819+03, 84' LT	3.0 - 4.5	SS-2	42	100	-	5	2	31	49	13	NP	NP	NP	15	A-4a (5)	
Latitude: 41.470715	4.5 - 6.0	SS-3	21	100	-					SAME AS SS-2				12	A-4a (VISUAL)	
Longitude: -81.738396	6.0 - 7.5	SS-4	26	100	-					SAME AS SS-2				7	A-4a (VISUAL)	
B-073-0-20	1.5 - 2.9	SS-1	-	100	-	69	21	9	0	1	-	-	-	7	A-1-a (VISUAL)	0
Sta. 822+87, 33' RT	3.0 - 3.8	SS-2	-	89	-	0	5	46	36	13	NP	NP	NP	17	A-4a (3)	
Latitude: 41.470588	4.5 - 6.0	SS-3	146	100	-	0	0	65	26	9	NP	NP	NP	33	A-3a (0)	
Longitude: -81.736942	6.0 - 6.9	SS-4	-	100	-					SAME AS SS-3				29	A-3a (VISUAL)	
B-074-0-20	2.0 - 3.0	SS-1	-	100	-	55	28	12	2.5	2.5	NP	NP	NP	6	A-1a (0)	0
Sta. 827+01, 5' LT	3.5 - 5.0	SS-2	84	100	-	1	0	12	75	12	NP	NP	NP	12	A-4b (8)	
Latitude: 41.471095	5.0 - 6.5	SS-3	38	100	-	0	0	9	74	17	NP	NP	NP	17	A-4b (8)	
Longitude: -81.735531	6.5 - 8.0	SS-4	44	100	-					SAME AS SS-3				36	A-4b (VISUAL)	
	8.0 - 9.5	SS-5	38	100	-					SAME AS SS-3				19	A-4b (VISUAL)	
B-075-0-20	1.5 - 3.0	SS-1	113	100	-	19	9	8	52	12	NP	NP	NP	11	A-4b (6)	10
Sta. 827+02, 76' RT	3.0 - 4.5	SS-2	93	94	-	0	0	9	73	18	NP	NP	NP	12	A-4b (8)	
Latitude: 41.470672	4.5 - 6.0	SS-3	53	67	-	1	0	8	80	11	NP	NP	NP	14	A-4b (8)	
Longitude: -81.735425	6.0 - 7.5	SS-4	60	100	-					SAME AS SS-3				16	A-4b (VISUAL)	
	7.5 - 9.0	SS-5	59	100	-					SAME AS SS-3				17	A-4b (VISUAL)	

SUMMARY OF SOIL TEST DATA
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EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-076-0-20	1.5 - 2.4	SS-1	-	100	-	64	21	11	2	2	-	-	-	6	A-1-a (VISUAL)	2697
Sta. 831+00, 29' LT	3 - 4.5	SS-2	54	100	-	2	3	45	38	12	NP	NP	NP	10	A-4a (3)	
Latitude: 41.471417	4.5 - 6.0	SS-3	42	100	-	0	0	49	43	8	NP	NP	NP	15		
Longitude: -81.734139	6.0 - 7.5	SS-4	56	100	-				SAME AS SS-3					17	A-4a (VISUAL)	
	7.5 - 9.0	SS-5	60	100	-				SAME AS SS-3					17	A-4a (VISUAL)	
B-077-0-20	1.5 - 3.0	SS-1	-	58	-	54	29	13	2	2	NP	NP	NP	8	A-1-a (0)	325
Sta. 831+00, 33' RT	3.0 - 4.5	SS-2	48	100	-	1	3	24	53	19	NP	NP	NP	12	A-4b (7)	
Latitude: 41.470984	4.5 - 6.0	SS-3	45	100	-				SAME AS SS-2					12	A-4b (VISUAL)	
Longitude: -81.734023	6.0 - 7.5	SS-4	35	78	-				SAME AS SS-2					10	A-4b (VISUAL)	
	7.5 - 9.0	SS-5	33	94	1.00	0	3	81	7	9	NP	NP	NP	6	A-3a (0)	
B-078-0-20	1.5 - 3.0	SS-1	59	100	-	62	24	10	1	3	NP	NP	NP	27	A-1-a (0)	3276
Sta. 834+97, 41' RT	3.0 - 4.5	SS-2	44	100	-	0	0	37	60	3	NP	NP	NP	22	A-4b (6)	
Latitude: 41.471545	4.5 - 6.0	SS-3	20	100	-				SAME AS SS-2					22	A-4b (VISUAL)	
Longitude: -81.732678	6.0 - 7.5	SS-4	15	100	-				SAME AS SS-2					29	A-4b (VISUAL)	
B-079-0-20	1.5 - 3.0	SS-1	27	89	-	1	1	48	40	10	NP	NP	NP	15	A-4a (3)	51
Sta. 834+89, 37' LT	3.0 - 4.5	SS-2	17	94	4.50	4	7	19	49	21	33	19	14	19	A-6a (9)	
Latitude: 41.471179	4.5 - 6.0	SS-3	11	100	2.50				SAME AS SS-2					18	A-6a (VISUAL)	
Longitude: -81.732634	6.0 - 7.5	SS-4	17	100	3.50				SAME AS SS-2					21	A-6a (VISUAL)	
B-080-0-20	1.5 - 3.0	SS-1	114	100	-	57	26	14	3	0	NP	NP	NP	7	A-1-a (0)	0
Sta. 839+01, 31' RT	3.0 - 4.5	SS-2	42	89	-	0	0	43	53	4	NP	NP	NP	21	A-4b (4)	
Latitude: 41.471946	4.5 - 6.0	SS-3	27	100	-				SAME AS SS-2					19	A-4b (VISUAL)	
Longitude: -81.731297	6.0 - 7.5	SS-4	24	100	-				SAME AS SS-2					22	A-4b (VISUAL)	
B-081-0-20	1.5 - 3.0	SS-1	23	100	-	1	1	16	64	18	23	17	6	14	A-4b (8)	1795
Sta. 839+95, 27' RT	3.0 - 4.5	SS-2	23	100	-	0	1	14	62	22	23	18	5	15	A-4b (8)	
Latitude: 41.471390	4.5 - 6.0	SS-3	24	100	-				SAME AS SS-2					11	A-4b (VISUAL)	
Longitude: -81.730794	6.0 - 7.5	SS-4	32	78	-				DENSE GRAY SILT, SOME CLAY, LITTLE SAND					13	A-4b (VISUAL)	
B-082-0-20	1.5 - 3.0	SS-1	6	6	-				SAME AS SS-1					3	A-4a (VISUAL)	0
Sta. 843+03, 19' RT	3.0 - 4.5	SS-2	14	39	4.5+	4	16	30	29	21	20	14	6	12	A-4a (3)	
Latitude: 41.471728	4.5 - 6.0	SS-3	17	100	4.50	4	6	11	42	37	39	16	14	15	A-6a (10)	
Longitude: -81.729759	6.0 - 7.5	SS-4	29	67	2.50				SAME AS SS-3					17	A-6a (VISUAL)	
B-083-0-20	1.5 - 3.0	SS-1	56	100	-	67	20	10	2	1	-	-	-	7	A-1-a (VISUAL)	41
Sta. 843+32, 17' LT	3.0 - 4.5	SS-2	42	100	-	1	5	54	25	15	NP	NP	NP	10	A-4a (1)	
Latitude: 41.472525	4.5 - 6.0	SS-3	32	100	-				SAME AS SS-3					11	A-4a (VISUAL)	
Longitude: -81.729912	6.0 - 7.5	SS-4	33	100	-				SAME AS SS-3					10	A-4a (VISUAL)	
B-084-0-20	1.5 - 3.0	SS-1	32	100	3.50	19	20	31	26	4	16	14	2	10	A-3a (0)	99
Sta. 847+17, 18' RT	3.0 - 4.5	SS-2	36	78	2.50	10	15	30	36	9	24	18	6	13	A-4a (2)	
Latitude: 41.472249	4.5 - 6.0	SS-3	20	100	4.50				SAME AS SS-3					11	A-4a (VISUAL)	
Longitude: -81.728410	6.0 - 7.5	SS-4	26	94	4.50				SAME AS SS-3					14	A-4a (VISUAL)	
B-085-0-20	1.5 - 3.0	SS-1	95	100	-	55	29	12	2	2	NP	NP	NP	11	A-1-a (0)	155
Sta. 846+91, 16' LT	3.0 - 4.5	SS-2	35	100	4.5+	6	7	22	37	28	24	14	10	11	A-4a (6)	
Latitude: 41.472952	4.5 - 6.0	SS-3	27	100	4.5+	2	2	6	44	46	26	15	11	14	A-6a (8)	
Longitude: -81.728734	6.0 - 7.5	SS-4	38	89	4.5+				SAME AS SS-3					13	A-6a (VISUAL)	
B-086-0-20	1.5 - 3.0	SS-1	35	100	-	4	8	55	22	11	NP	NP	NP	10	A-3a (0)	0
Sta. 851+01, 37' LT	3.0 - 4.5	SS-2	32	72	-	9	17	37	24	13	NP	NP	NP	10	A-4a (0)	
Latitude: 41.472929	4.5 - 6.0	SS-3	17	100	-	3	5	46	31	15	NP	NP	NP	12	A-4a (2)	
Longitude: -81.727318	6.0 - 7.5	SS-4	15	100	-				SAME AS SS-3					15	A-4a (VISUAL)	
B-087-0-20	1.5 - 3.0	SS-1	24	67	-	4	8	44	32	12	NP	NP	NP	11	A-4a (2)	0
Sta. 850+89, 30' RT	3.0 - 4.5	SS-2	15	67	-	26	29	27	11	7	NP	NP	NP	8	A-1-b (0)	
Latitude: 41.473357	4.5 - 6.0	SS-3	8	100	-				LOOSE GRAY SANDY SILT, TRACE TO LITTLE CLAY					29	A-4a (VISUAL)	
Longitude: -81.727375	6.0 - 7.5	SS-4	11	67	-				MEDIUM-DENSE GRAVEL WITH SAND, LITTLE SILT, LITTLE CLAY					11	A-1-b (VISUAL)	
B-088-0-20	1.5 - 3.0	SS-1	11	78	-	8	13	38	27	14	NP	NP	NP	13	A-4a (1)	1951
Sta. 855+03, 29' LT	3.0 - 4.5	SS-2	9	100	-	9	14	42	22	13	NP	NP	NP	12	A-3a (0)	
Latitude: 41.473491	4.5 - 6.0	SS-3	35	100	-				DENSE TO VERY-DENSE SANDY SILT, LITTLE CLAY					10	A-4a (VISUAL)	
Longitude: -81.726054	6.0 - 7.5	SS-4	69	100	-				SAME AS SS-3					12	A-4a (VISUAL)	
B-089-0-20	2.0 - 3.5	SS-1	41	78	-	25	22	32	16	5	NP	NP	NP	9	A-3a (0)	3828
Sta. 854+89, 40' RT	3.5 - 5.0	SS-2	23	100	-	23	34	29	10	4	NP	NP	NP	8	A-1-b (0)	
Latitude: 41.473863	5.0 - 6.5	SS-3	8	100	2.00				SAME AS SS-4					22	A-6b (VISUAL)	
Longitude: -81.726077	6.5 - 8.0	SS-4	12	100	3.50	0	1	2	48	49	40	18	22	23	A-6b (13)	
B-090-0-20	1.5 - 3.0	SS-1	33	100	4.5+	8	4	22	44	22	21	13	8	11	A-4a (6)	0
Sta. 858+92, 18' RT	3.0 - 4.5	SS-2	30	100	4.5+	5	7	25	46	17	21	15	6	11	A-4a (6)	
Latitude: 41.473887	4.5 - 6.0	SS-3	35	100	4.5+				SAME AS SS-2					11	A-4a (VISUAL)	
Longitude: -81.724727	6.0 - 7.5	SS-4	72	100	2.00				SAME AS SS-2					11	A-4a (VISUAL)	
B-091-0-20	1.5 - 3.0	SS-1	53	100	4.50	9	5	19	40	27	22	14	8	9	A-4a (6)	678
Sta. 858+94, 18' LT	3.0 - 4.5	SS-2	75	100	-	0	1	31	49	19	NP	NP	NP	12	A-4a (7)	
Latitude: 41.474489	4.5 - 6.0	SS-3	59	100	-				SAME AS SS-2					10	A-4a (VISUAL)	
Longitude: -81.724847	6.0 - 7.5	SS-4	54	100	-				SAME AS SS-2					12	A-4a (VISUAL)	
B-092-0-20	1.5 - 3.0	SS-1	36	100	-	1	1	18	56	24	NP	NP	NP	13	A-4b (8)	818
Sta. 862+98, 19' LT	3.0 - 4.5	SS-2	30	100	-	1	3	20	56	20	22	18	4	13	A-4b (8)	
Latitude: 41.474872	4.5 - 6.0	SS-3	24	100	-				SAME AS SS-2					14	A-4b (VISUAL)	
Longitude: -81.723456	6.0 - 7.5	SS-4	29	100	-				SAME AS SS-2					18	A-4b (VISUAL)	
B-093-0-20	1.5 - 3.0	SS-1	24	100	-	3	14	52	26	5	NP	NP	NP	12	A-3a (0)	1759
Sta. 863+49, 27' RT	3.0 - 4.5	SS-2	23	89	-	2	3	37	50	8	19	16	3	15	A-4b (5)	
Latitude: 41.474335	4.5 - 6.0	SS-3	45	100	-				SAME AS SS-2					15	A-4b (VISUAL)	
Longitude: -81.723178	6.0 - 7.5	SS-4	42	100	-				SAME AS SS-2					12	A-4b (VISUAL)	
B-094-0-20	1.5 - 3.0	SS-1	30	100	4.5+	8	13	15	39	25	24	16	8	14	A-4a (6)	356
Sta. 867+01, 32' RT	3.0 - 4.5	SS-2	29	89	-	2	1	36	49	12	NP	NP	NP	13	A-4a (5)	
Latitude: 41.475007	4.5 - 6.0	SS-3	24	100	-				SAME AS SS-2					14	A-4a (VISUAL)	
Longitude: -81.721988	6.0 - 7.5	SS-4	36	100	-				SAME AS SS-2					14	A-4a (VISUAL)	
B-095-0-20	1.5 - 3.0	SS-1	54	100	4.50	3	4	39	39	15	19	15	5	5	A-4a (4)	447
Sta. 870+81, 38' LT	3.0 - 4.5	SS-2	54	100	4.5+	7	4	37	35	17	18	14	4	9	A-4a (VISUAL)	
Latitude: 41.474970	4.5 - 6.0	SS-3	47	100	2.50				SAME AS SS-2					12	A-4a (VISUAL)	
Longitude: -81.720633	6.0 - 7.5	SS-4	51	100	4.5+	14	10	34	24	18	25	16	9	12	A-4a (VISUAL)	
B-096-0-20	1.5 - 3.0	SS-1	20	78	4.5+	2	13	33	26	26	21	14	7	19	A-4a (3)	1234
Sta. 875+11, 35' LT	3.0 - 4.5	SS-2	11	100	2.50	0	1	13	41	45	37	18	19	26	A-6b (12)	
Latitude: 41.475191	4.5 - 6.0	SS-3	6	100	2.00	1	0	1	33	65	52	22	30	35	A-7-6 (18)	
Longitude: -81.719080	6.0 - 7.5	SS-4	8	100	2.00				SAME AS SS-3					34	A-7-6 (VISUAL)	
B-097-0-20	1.5 - 3.0	SS-1	24	100	2.00	0	0	25	54	21	23	16	7	18	A-4b (8)	0
Sta. 879+05, 0' LT	3.0 - 4.5	SS-2	18	100	4.50	0	0	11	69	20	23	17	6	14	A-4b (8)	
Latitude: 41.475155	4.5 - 6.0	SS-3	9	100	2.00				SAME AS SS-2					23	A-4b (VISUAL)	
Longitude: -81.717634	6.0 - 7.5	SS-4	14	100	2.00				SAME AS SS-2					23	A-4b (VISUAL)	
B-098-0-20	1.5 - 3.0	SS-1	-	100	-	59	27	12	1	1	NP	NP	NP	4	A-1-a (0)	682
Sta. 882+69, 55' LT	3.0 - 4.5	SS-2	26	100	-	0	0	91	3	6	NP	NP	NP	8	A-3 (0)	
Latitude: 41.475330	4.5 - 6.0	SS-3	17	100	-	0	1	91	8	0	NP	NP	NP	24	A-3 (0)	
Longitude: -81.716271	6.0 - 7.5	SS-4	23	100	-				SAME AS SS-3					29	A-3 (VISUAL)	
B-099-0-20	2.0 - 2.9	SS-1	-	100	-				SANDSTONE, TAN, SEVERELY WEATHERED, WEAK					-	ROCK (VISUAL)	762
Sta. 886+66, 54' RT	3.5 - 3.8	SS-2	-	67	-				SAME AS SS-1					-	ROCK (VISUAL)	
Latitude: 41.474920																
Longitude: -81.714872																
B-100-0-20	2.0 - 3.5	SS-1	35	100	-				SAME AS SS-1					5	A-3 (VISUAL)	598
Sta. 891+13, 53' LT	3.5 - 5.0	SS-2	15	100	-	0	8	82	10	0	NP	NP	NP	5	A-3 (0)	
Latitude: 41.474950	5.0 - 6.5	SS-3	18	100	-	0	0	45	55	0	NP	NP	NP	26	A-4b (4)	
Longitude: -81.713195	6.5 - 8.0	SS-4	21	100	-				SAME AS SS-3					26	A-4b (VISUAL)	
	8.0 - 9.5	SS-5	24	100	-				SAME AS SS-3					25	A-4b (VISUAL)	

SUMMARY OF SOIL TEST DATA
I.R. 90

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-101-0-20	1.5 - 3.0	SS-1	30	100	-	5	7	27	49	12	NP	NP	NP	16	A-4a (5)	377
Sta. 894+69, 8' RT	3.0 - 4.5	SS-2	27	89	-	3	12	47	28	10	NP	NP	NP	13	A-4a (1)	
Latitude: 41.474528	4.5 - 6.0	SS-3	21	33	-					SAME AS SS-2				12	A-4a (VISUAL)	
Longitude: -81.712002	6.0 - 7.5	SS-4	21	94	-	13	41	28	14	4	NP	NP	NP	11	A-1-b (0)	
	7.5 - 9.0	SS-5	26	94	-					SAME AS SS-4				10	A-1-b (VISUAL)	
B-102-0-20	2.0 - 3.5	SS-1	36	6	-	21	21	34	17	7	-	-	-	14	A-3a (VISUAL)	873
Sta. 902+29, 16' LT	3.5 - 5.0	SS-2	9	11	-					SAME AS SS-3				12	A-3a (VISUAL)	
Latitude: 41.474060	5.0 - 6.5	SS-3	9	67	-	9	13	44	21	13	NP	NP	NP	11	A-3a (0)	
Longitude: -81.709304	6.5 - 8.0	SS-4	8	100	-					SAME AS SS-3				12	A-3a (VISUAL)	
B-103-0-20	1.5 - 3.0	SS-1	32	44	4.5+	0	4	33	43	20	22	14	8	5	A-4a (6)	13
Sta. 905+66, 9' RT	3.0 - 4.5	SS-2	50	100	-	4	8	49	27	12	NP	NP	NP	9	A-4a (1)	
Latitude: 41.473902	4.5 - 6.0	SS-3	38	100	-					SAME AS SS-2				10	A-4a (VISUAL)	
Longitude: -81.708094	6.0 - 7.5	SS-4	35	89	-	4	9	44	27	16	NP	NP	NP	11	A-4a (2)	
B-104-0-20	2.0 - 3.5	SS-1	38	100	-	2	2	30	48	18	NP	NP	NP	10	A-4a (6)	196
Sta. 910+72, 13' LT	3.5 - 5.0	SS-2	27	89	3.00	11	8	22	40	19	24	15	9	7	A-4a (5)	
Latitude: 41.473983	5.0 - 6.5	SS-3	29	100	4.00					SAME AS SS-2				11	A-4a (VISUAL)	
Longitude: -81.706247	6.5 - 8.0	SS-4	50	100	4.00					SAME AS SS-2				10	A-4a (VISUAL)	
B-105-0-20	1.5 - 3.0	SS-1	45	100	-	0	1	16	61	22	20	17	3	13	A-4b (8)	76
Sta. 914+80, 7' RT	3.0 - 4.5	SS-2	47	89	4.5+	10	12	30	31	17	21	14	7	8	A-4a (3)	
Latitude: 41.473954	4.5 - 6.0	SS-3	44	100	4.5+					SAME AS SS-2				9	A-4a (VISUAL)	
Longitude: -81.704758	6.0 - 7.5	SS-4	56	100	-	11	16	35	24	14	NP	NP	NP	10	A-4a (1)	
B-106-0-20	2.0 - 3.5	SS-1	47	11	-	21	7	21	34	17	-	-	-	10	A-4a (VISUAL)	324
Sta. 918+70, 6' LT	3.5 - 5.0	SS-2	38	100	4.5+					SAME AS SS-3				12	A-4a (VISUAL)	
Latitude: 41.474013	5.0 - 6.5	SS-3	24	89	4.5+	5	6	29	41	19	21	15	6	13	A-4a (5)	
Longitude: -81.703334	6.5 - 8.0	SS-4	51	100	4.5+					SAME AS SS-3				9	A-4a (VISUAL)	
B-107-0-20	1.5 - 3.0	SS-1	57	100	-	47	23	10	19	1	NP	NP	NP	8	A-1-b (0)	330
Sta. 922+92, 62' RT	3.0 - 4.5	SS-2	59	78	-	12	15	37	31	5	NP	NP	NP	8	A-4a (0)	
Latitude: 41.473852	4.5 - 6.0	SS-3	47	100	-	21	31	30	16	2	NP	NP	NP	7	A-1-b (0)	
Longitude: -81.701792	6.0 - 7.5	SS-4	50	72	-					SAME AS SS-3				8	A-1-b (VISUAL)	
B-108-0-20	1.5 - 3.0	SS-1	99	6	-					SAME AS SS-2				4	A-3a (VISUAL)	155
Sta. 26+68, 31' RT	3.0 - 4.5	SS-2	45	67	-	1	19	60	18	2	NP	NP	NP	6	A-3a (0)	
Latitude: 41.474233	4.5 - 6.0	SS-3	23	100	-	2	34	46	16	2	NP	NP	NP	8	A-3a (0)	
Longitude: -81.700429	6.0 - 7.5	SS-4	29	67	-					SAME AS SS-3				5	A-3a (VISUAL)	
B-109-0-20	1.5 - 3.0	SS-1	50	100	-	0	0	54	38	8	NP	NP	NP	21	A-4a (2)	443
Sta. 930+69, 5' RT	3.0 - 4.5	SS-2	35	78	-	0	0	62	35	3	NP	NP	NP	21	A-4a (V)	
Latitude: 41.474054	4.5 - 6.0	SS-3	29	100	-					SAME AS SS-2				20	A-4a (VISUAL)	
Longitude: -81.698961	6.0 - 7.5	SS-4	33	78	-					SAME AS SS-2				20	A-4a (VISUAL)	
B-110-0-20	1.5 - 3.0	SS-1	27	100	-	17	22	45	13	3	NP	NP	NP	7	A-3a (0)	174
Sta. 931+91, 38' LT	3.0 - 4.5	SS-2	80	100	-					SAME AS SS-1				9	A-3a (VISUAL)	
Latitude: 41.474197	4.5 - 6.0	SS-3	54	100	-	2	6	42	44	6	NP	NP	NP	17	A-4a (3)	
Longitude: -81.697498	6.0 - 7.5	SS-4	41	100	-					SAME AS SS-3				19	A-4a (VISUAL)	
B-111-0-20	1.5 - 3.0	SS-1	-	100	-	11	24	48	12	5	NP	NP	NP	11	A-3a (0)	248
Sta. 935+97, 5' RT	3.0 - 4.5	SS-2	-	88	-	70	17	9	3	1	NP	NP	NP	6	A-1-a (0)	
Latitude: 41.474103	4.5 - 6.0	SS-3	18	100	4.00	0	1	5	60	34	25	17	8	20	A-4b (8)	
Longitude: -81.696011	6.0 - 7.5	SS-4	23	78	4.00					SAME AS SS-3				20	A-4b (VISUAL)	
B-112-0-20	1.5 - 1.9	SS-1	-	40	-	55	23	15	5	2	NP	NP	NP	16	A-1-a (0)	197
Sta. 937+90, 5' LT	3.0 - 3.4	SS-2	-	80	-	55	19	15	8	3	NP	NP	NP	17	A-1-a (VISUAL)	
Latitude: 41.474142	4.5 - 4.9	SS-3	-	100	-					SAME AS SS-2				21	A-1-a (VISUAL)	
Longitude: -81.695310	6.0 - 6.5	SS-4	SS-5	100	-					SAME AS SS-2				15	A-1-a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO HILLIARD BLVD

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-002-1-20	1.5 - 3.0	SS-1	62	100	-	24	39	32	4	1	NP	NP	NP	9	A-1-b (0)	1748
Sta. 32+71, 7' LT	3.0 - 4.5	SS-2	23	100	-					SAME AS SS-1				11	A-1-b (VISUAL)	
Latitude: 41.471515	4.5 - 6.0	SS-3	12	100	2.00	0	2	17	43	38	30	16	14	22	A-6a (10)	
Longitude: -81.840913	6.0 - 7.5	SS-4	14	100	1.50					SAME AS SS-3				23	A-6a (VISUAL)	
B-002-2-20	1.5 - 3.0	SS-1	23	100	4.5+	8	10	15	34	33	24	15	9	13	A-4a (6)	473
Sta. 39+53, 4' RT	3.0 - 4.5	SS-2	24	100	4.5+	10	8	12	25	45	27	14	13	13	A-6a (8)	
Latitude: 41.472325	4.5 - 6.0	SS-3	24	100	4.5+					SAME AS SS-2				13	A-6a (VISUAL)	
Longitude: -81.838822	6.0 - 7.5	SS-4	33	100	4.5+					SAME AS SS-2				13	A-6a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP HILLIARD BLVD TO IR 90 EB

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-002-3-20	1.5 - 3.0	SS-1	24	100	4.5+	6	10	13	28	43	31	18	13	15	A-6a (8)	317
Sta. 33+79, 3' LT	3.0 - 4.5	SS-2	21	89	4.5+	13	9	12	24	42	31	17	14	14	A-6a (8)	
Latitude: 41.471210	4.5 - 6.0	SS-3	27	100	4.5+					SAME AS SS-2				14	A-6a (VISUAL)	
Longitude: -81.840751	6.0 - 7.5	SS-4	36	100	4.5+					SAME AS SS-2				16	A-6a (VISUAL)	
B-002-4-20	1.5 - 3.0	SS-1	18	78	3.5	10	9	13	37	31	27	14	13	13	A-6a (8)	804
Sta. 37+82, 9' LT	3.0 - 4.5	SS-2	17	72	4.5+	14	9	12	34	31	28	14	14	12	A-6a (8)	
Latitude: 41.471699	4.5 - 6.0	SS-3	23	100	4.5+					SAME AS SS-2				14	A-6a (VISUAL)	
Longitude: -81.839449	6.0 - 7.5	SS-4	35	89	4.5+					SAME AS SS-2				14	A-6a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO S MARGINAL DR

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-016-1-20	1.5 - 3.0	SS-1	90	100	-	32	34	26	6	2	NP	NP	NP	12	A-1-b (0)	643
Sta. 94+82, 14' RT	3.0 - 4.5	SS-2	42	89	-	27	31	32	10	0	NP	NP	NP	12	A-1-b (0)	
Latitude: 41.470995	4.5 - 6.0	SS-3	32	33		FILL: DENSE BLACK & GRAY GRAVEL WITH SAND, LITTLE SILT								5	A-1-b (VISUAL)	
Longitude: -81.818814	6.0 - 7.5	SS-4	38	56		52	15	8	17	8	-	-	-	8	A-1-b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP N MARGINAL DR TO IR 90 WB

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-016-2-20	1.5 - 3.0	SS-1	20	100	4.00	16	7	12	32	33	25	16	9	14	A-4a (6)	398
Sta. 98+94, 1' LT	3.0 - 4.5	SS-2	41	100	4.5+	10	9	14	34	33	28	16	12	13	A-6a (7)	
Latitude: 41.471413	4.5 - 6.0	SS-3	18	78	4.50	HARD BROWN-GRAY SILTYCLAY,LITTLE FINE TO COARSE SAND								14	A-6b (VISUAL)	
Longitude: -81.817225	6.0 - 7.5	SS-4	26	67	4.5+					SAME AS SS-3				14	A-6b (VISUAL)	

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 4:11:34 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YD0006.dgn

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO HILLIARD BLVD

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-018-1-20	1.5 - 3.0	SS-1	53	100	-	SAME AS SS-3								3	A-4a (VISUAL)	620
Sta. 5+83, 5' LT	3.0 - 4.5	SS-2	38	78	-	SAME AS SS-3								-	A-4a (VISUAL)	
Latitude: 41.470068	4.5 - 6.0	SS-3	29	100	4.50	6	5	9	40	40	25	15	10	15	A-4a (8)	
Longitude: -81.814963	6.0 - 7.5	SS-4	38	67	4.5+	SAME AS SS-3								9	A-4a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO N MARGINAL DR

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-019-1-20	1.5 - 3.0	SS-1	21	100	4.00	12	9	13	34	32	25	17	8	16	A-4a (VISUAL)	228
Sta. 8+22, 4' RT	3.0 - 4.5	SS-2	35	100	4.5+	1	4	8	37	50	32	18	14	18	A-6a (10)	
Latitude: 41.470617	4.5 - 6.0	SS-3	17	100	3.00	3	18	20	30	29	34	17	17	20	A-6b (8)	
Longitude: -81.813974	6.0 - 7.5	SS-4	30	100	3.00	SAME AS SS-3								21	A-6b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO S MARGINAL DR

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-026-1-20	1.5 - 2.8	SS-1	-	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	Rock (VISUAL)	757
Sta. 33+06, 11' RT																
Latitude: 41.469161																
Longitude: -81.804390																

SUMMARY OF SOIL TEST DATA
RAMP N MARGINAL DR TO IR 90 WB

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-028-1-20	1.5 - 3.0	SS-1	71	100	-	SHALE, GRAY, SEVERELY WEATHERED, VERY WEAK								-	Rock (VISUAL)	695
Sta. 41+05, 14' LT	3.0 - 3.25	SS-2	-	67	-	SAME AS SS-1								-	Rock (VISUAL)	
Latitude: 41.469856																
Longitude: -81.801458																

SUMMARY OF SOIL TEST DATA
RAMP S MARGINAL DR TO IR 90 EB

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-032-1-20	1.5 - 3.0	SS-1	12	56	2.00	2	8	17	30	43	42	19	23	23	A-7-6 (13)	783
Sta. 59+02, 16' RT	3.0 - 4.5	SS-2	12	100	3.50	3	12	10	32	43	41	19	22	21	A-7-6 (13)	
Latitude: 41.468876	4.5 - 6.0	SS-3	14	100	4.5+	6	14	18	43	19	33	18	15	14	A-6a (VISUAL)	
Longitude: -81.794913	6.0 - 7.5	SS-4	27	100	4.5+	SAME AS SS-3								14	A-6a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO N MARGINAL DR

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-033-1-20	1.5 - 3.0	SS-1	14	100	2.50	29	2	5	23	41	37	20	17	17	A-6b (9)	833
Sta. 60+84, 17' LT	3.0 - 4.5	SS-2	26	100	4.5+	3	4	8	44	41	38	21	17	17	A-6b (VISUAL)	
Latitude: 41.469894	4.5 - 6.0	SS-3	15	100	4.00	SAME AS SS-2								20	A-6b (VISUAL)	
Longitude: -81.794159	6.0 - 7.5	SS-4	29	100	4.5+	SAME AS SS-2								18	A-6b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO BUNTS RD

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-036-1-20	1.5 - 3.0	SS-1	9	100	2.50	31	14	11	22	22	32	19	13	14	A-6a (3)	667
Sta. 74+32, 4' RT	3.0 - 4.5	SS-2	18	100	3.00	1	5	16	42	36	38	23	15	24	A-6a (10)	
Latitude: 41.469549	4.5 - 6.0	SS-3	11	100	3.00	SAME AS SS-2								31	A-6a (VISUAL)	
Longitude: -81.788996	6.0 - 7.5	SS-4	23	100	4.00	SAME AS SS-2								18	A-6a (VISUAL)	
B-036-2-20	1.5 - 3.0	SS-1	14	100	4.5+	39	12	8	19	22	32	21	11	12	A-6a (1)	742
Sta. 78+60, 3' RT	3.0 - 4.5	SS-2	18	100	4.5+	28	13	9	26	24	34	20	14	11	A-6a (4)	
Latitude: 41.469083	4.5 - 6.0	SS-3	21	100	4.5+	SAME AS SS-2								11	A-6a (VISUAL)	
Longitude: -81.787573	6.0 - 7.5	SS-4	21	78	4.5+	SAME AS SS-2								7	A-6a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP BUNTS RD TO IR 90 EB

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-037-1-20	1.5 - 3.0	SS-1	18	100	-	49	16	9	20	6	-	-	-	9	A-2-4 (VISUAL)	620
Sta. 78+19, 4' RT	3.0 - 4.5	SS-2	12	67	-	LOOSE TO MED-DENSE GRAY-BROWN GRAVEL WITH SAND & SILT								11	A-2-4 (VISUAL)	
Latitude: 41.468314	4.5 - 6.0	SS-3	9	67	-	45	17	10	13	15	-	-	-	10	A-2-4 (VISUAL)	
Longitude: -81.788272	6.0 - 7.5	SS-4	12	61	-	48	15	9	20	8	-	-	-	12	A-2-4 (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO W 117TH ST

EXPLORATION ID., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-048-1-20	1.5 - 3.0	SS-1	87	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	705
Sta. 26+91, 11' LT	3.0 - 3.9	SS-2	-	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.465865																
Longitude: -81.771167																
B-048-2-20	1.5 - 3.0	SS-1	56	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	852
Sta. 30+77, 10' RT	3.0 - 4.4	SS-2	-	94	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.465230	4.5 - 5.4	SS-3	-	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Longitude: -81.770026																

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 4:14:35 PM USER: kharper
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SUMMARY OF SOIL TEST DATA
RAMP W 117TH ST SB TO IR 90 EB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-048-3-20	1.5 - 2.3	SS-1	-	80	-	SHALE INTERBEDDED & SANDSTONE,GRAY,SEVERELY WEATHERED									ROCK (VISUAL)	470
Sta. 28+53, 4' LT																
Latitude: 41.465833																
Longitude: -81.770322																

SUMMARY OF SOIL TEST DATA
RAMP W 117TH ST SB TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-049-1-20	1.5 - 3.0	SS-1	141	100	-	SHALE, GRAY, SEVERELY WEATHERED, WEAK								-	ROCK (VISUAL)	
Sta. 29+01, 1' LT	3.0 - 3.5	SS-2	-	100	-	SAME AS SS-1								-	ROCK (VISUAL)	
Latitude: 41.466910																
Longitude: -81.770538																
B-049-2-20	1.5 - 3.0	SS-1	12	100	1.50	28	10	15	30	17	29	17	12	13	A-6a (3)	725
Sta. 332+37, 2' RT	3.0 - 4.5	SS-2	17	100	2.50	26	12	17	29	16	-	-	-	17	A-6a (VISUAL)	
Latitude: 41.467487	4.5 - 6.0	SS-3	15	100	4.50	HARD BROWN-GRAY SILTY CLAY, LITTLE SAND								21	A-6b (VISUAL)	
Longitude: -81.769204	6.0 - 7.5	SS-4	26	67	4.50	SAME AS SS-3								16	A-6b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP W 117TH ST NB TO IR 90 EB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-050-1-20	1.5 - 3.0	SS-1	15	67	-	0	1	4	51	44	37	12	16	19	A-6b (10)	754
Sta. 32+40, 15' LT	3.0 - 4.5	SS-2	32	94	-	7	10	12	48	23	36	22	14	12	A-6a (9)	
Latitude: 41.465282	4.5 - 5.9	SS-3	-	94	-	INTERBEDDED SHALE & SANDSTONE, GRAY, WEAK								-	ROCK (VISUAL)	
Longitude: -81.768525	6.0 - 6.8	SS-4	-	100	-	SAME AS SS-3								-	ROCK (VISUAL)	
B-050-2-20	1.5 - 3.0	SS-1	15	78	4.5+	8	11	14	42	25	24	15	9	11	A-4a (6)	1962
Sta. 38+12, 12' LT	3.0 - 4.5	SS-2	15	100	4.5+	6	11	14	43	26	24	15	9	12	A-4a (7)	
Latitude: 41.466400	4.5 - 6.0	SS-3	20	100	4.5+	SAME AS SS-2								12	A-4a (VISUAL)	
Longitude: -81.767083	6.0 - 7.5	SS-4	24	100	4.5+	SAME AS SS-2								11	A-4a (VISUAL)	

SUMMARY OF SOIL TEST DATA -13-
RAMP W 117TH ST NB TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-051-1-20	1.5 - 3.0	SS-1	24	100	4.5+	11	11	17	36	25	21	13	8	19	A-4a (5)	539
Sta. 36+47, 10' RT	3.0 - 4.5	SS-2	30	100	4.5+	6	10	15	38	31	23	14	9	12	A-4a (7)	
Latitude: 41.467101	4.5 - 6.0	SS-3	23	100	4.5+	SAME AS SS-2								11	A-4a (VISUAL)	
Longitude: -81.767812	6.0 - 7.5	SS-4	30	100	4.5+	SAME AS SS-2								11	A-4a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO W 117TH ST

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-051-2-20	1.5 - 3.0	SS-1	14	100	4.50	3	2	8	55	32	32	18	14	19	A-6a (10)	843
Sta. 35+74, 11' LT	3.0 - 4.5	SS-2	24	100	4.50	1	1	13	64	21	24	17	7	19	A-4b (8)	
Latitude: 41.467948	4.5 - 6.0	SS-3	15	100	3.50	SAME AS SS-2								18	A-4b (VISUAL)	
Longitude: -81.767912	6.0 - 7.5	SS-4	24	100	-	MEDIUM-DENSE GRAY SANDY SILT, LITTLE CLAY								22	A-4a (VISUAL)	
B-051-3-20	1.5 - 3.0	SS-1	29	100	1.50	0	0	10	84	6	NP	NP	NP	22	A-4b (8)	385
Sta. 41+14, 5' LT	3.0 - 4.5	SS-2	36	100	2.50	1	0	8	80	11	NP	NP	NP	17	A-4b (8)	
Latitude: 41.467360	4.5 - 6.0	SS-3	20	100	3.50	SAME AS SS-2								14	A-4b (VISUAL)	
Longitude: -81.766126	6.0 - 7.5	SS-4	17	100	4.50	SAME AS SS-2								15	A-4b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO WEST BLVD

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-057-1-20	1.5 - 3.0	SS-1	18	100	4.5+	4	4	6	36	50	30	17	13	15	A-6a (9)	2241
Sta. 64+19, 2' LT	3.0 - 4.5	SS-2	20	100	4.5+	2	3	8	41	46	28	14	14	14	A-6a (10)	
Latitude: 41.467532	4.5 - 6.0	SS-3	38	100	4.5+	SAME AS SS-2								11	A-6a (VISUAL)	
Longitude: -81.757693	6.0 - 7.5	SS-4	48	100	3.50	SAME AS SS-2								17	A-6a (VISUAL)	
	-															
B-057-2-20	1.5 - 3.0	SS-1	21	56	-	1	1	37	44	17	18	14	4	13	A-4a (5)	690
Sta. 68+26, 7' LT	3.0 - 4.5	SS-2	27	67	-	0	0	52	33	15	NP	NP	NP	15	A-4a (3)	
Latitude: 41.467768	4.5 - 6.0	SS-3	72	39	-	4	2	42	42	10	NP	NP	NP	10	A-4a (3)	
Longitude: -81.756244	6.0 - 7.5	SS-4	50	33	-	SAME AS SS-3								14	A-4a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP WEST BLVD TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-059-1-20	1.5 - 3.0	SS-1	11	100	4.00	16	11	16	33	24	31	17	14	17	A-6a (6)	668
Sta. 68+06, 0' RT	3.0 - 4.5	SS-2	14	100	3.00	6	6	13	49	26	24	14	10	14	A-4a (8)	
Latitude: 41.468705	4.5 - 6.0	SS-3	12	67	2.50	13	8	25	38	18	22	14	8	14	A-4a (4)	
Longitude: -81.756656	6.0 - 7.5	SS-4	18	100	1.50	SAME AS SS-3								13	A-4a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP CLARK AVE TO IR 90 EB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-064-1-20	1.5 - 3.0	SS-1	8	33	-	80	9	4	3	4	-	-	-	7	A-1-a (VISUAL)	627
Sta. 90+02, 13' RT	3.0 - 4.5	SS-2	9	6	-	FILL: LOOSE GRAY-BROWN GRAVEL, LITTLE SAND								4	A-1-a (VISUAL)	
Latitude: 41.469570	4.5 - 6.0	SS-3	26	44	2.50	11	3	5	26	55	38	19	19	17	A-6b (12)	
Longitude: -81.748870	6.0 - 7.5	SS-4	32	39	2.50	FILL: VERY-STIFF BROWN SILTY CLAY, LITTLE FINE GRAVEL								19	A-6b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO N MARGINAL DR

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-065-1-20	1.5 - 3.0	SS-1	27	100	-	4	3	15	68	10	NP	NP	NP	17	A-4b (8)	1121
Sta. 92+20, 6' LT	3.0 - 4.5	SS-2	23	100	-	SAME AS SS-1								21	A-4b (VISUAL)	
Latitude: 41.470306	4.5 - 6.0	SS-3	9	100	1.50	5	7	15	42	31	21	14	7	19	A-4a (8)	
Longitude: -81.748079	6.0 - 7.5	SS-4	9	100	1.00	SAME AS SS-3								17	A-4a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP W 84TH ST/CLARK AVE TO IR 90 EB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-069-1-20	1.5 - 3.0	SS-1	59	100	-	SAME AS SS-1								6	A-3 (VISUAL)	685
Sta. 8+52, 4' LT	3.0 - 4.5	SS-2	41	100	-	16	28	52	4	0	NP	NP	NP	7	A-3 (0)	
Latitude: 41.469362	4.5 - 6.0	SS-3	24	33	-	20	4	18	40	18	NP	NP	NP	16	A-4a (5)	
Longitude: -81.741758	6.0 - 7.5	SS-4	41	100	-	6	1	41	38	14	NP	NP	NP	14	A-4a (3)	
	7.5 - 9.0	SS-5	42	100	-	SAME AS SS-4								12	A-4a (VISUAL)	
B-069-2-20	1.5 - 3.0	SS-1	63	89	-	0	3	75	22	0	NP	NP	NP	19	A-3a (0)	0
Sta. 12+61, 5' LT	3.0 - 4.5	SS-2	26	72	-	0	0	45	55	0	NP	NP	NP	25	A-4b (4)	
Latitude: 41.469324	4.5 - 6.0	SS-3	21	36	-	0	0	27	73	0	NP	NP	NP	21	A-4b (8)	
Longitude: -81.740324	6.0 - 7.5	SS-4	36	100	-	SAME AS SS-3								21	A-4b (VISUAL)	
	7.5 - 9.0	SS-5	36	100	-	SAME AS SS-3								21	A-4b (VISUAL)	
B-069-3-20	1.5 - 3.0	SS-1	102	100	-	67	20	9	-	-	-	-	-	17	A-1-a (VISUAL)	1853
Sta. 17+15, 6' LT	3.0 - 4.5	SS-2	68	100	-	0	1	54	45	0	NP	NP	NP	23	A-4a (2)	
Latitude: 41.469971	4.5 - 6.0	SS-3	68	100	-	0	0	12	88	0	NP	NP	NP	18	A-4b (8)	
Longitude: -81.738907	6.0 - 7.5	SS-4	59	100	-	SAME AS SS-3								18	A-4b (VISUAL)	
	7.5 - 9.0	SS-5	51	100	-	SAME AS SS-3								17	A-4b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO LORAIN AVE

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-071-1-20	1.5 - 3.0	SS-1	-	100	-	SAME AS SS-2								7	A-1-b (VISUAL)	262
Sta. 15+00, 4' LT	3.0 - 4.5	SS-2	11	100	-	29	32	34	3	2	NP	NP	NP	4	A-1-b (0)	
Latitude: 41.470785	4.5 - 6.0	SS-3	90	100	-	48	32	13	5	2	-	-	-	5	A-1-b (VISUAL)	
Longitude: -81.739907	6.0 - 7.5	SS-4	66	100	-	SAME AS SS-2								5	A-1-b (VISUAL)	
B-071-2-20	1.5 - 3.0	SS-1	23	100	-	53	33	11	3	0	-	-	-	14	A-1-a (VISUAL)	1448
Sta. 19+06, 6' RT	3.0 - 4.5	SS-2	42	67	-	DENSE GRAY GRAVEL, "AND" SAND, TRACE SILT								16	A-1-a (VISUAL)	
Latitude: 41.470892	4.5 - 6.0	SS-3	104	100	-	2	2	74	17	5	NP	NP	NP	23	A-3a (0)	
Longitude: -81.738435	6.0 - 7.5	SS-4	104	100	-	SAME AS SS-3								21	A-3a (VISUAL)	

SOIL PROFILE - ROADWAY
SUMMARY OF SOIL TEST DATA

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO W 44TH ST

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-096-1-20	1.5 - 3.0	SS-1	42	100	-	22	26	37	15	0	NP	NP	NP	12	A-3a (0)	149
Sta. 74+91, 6' LT	3.0 - 4.5	SS-2	23	100	-					SAME AS SS-1				13	A-3a (VISUAL)	
Latitude: 41.474713	4.5 - 6.0	SS-3	18	100	4.50	0	2	2	51	45	43	19	24	28	A-7-6 (14)	
Longitude: -81.719076	6.0 - 7.5	SS-4	21	100	2.50					SAME AS SS-3				29	A-7-6 (VISUAL)	
B-096-2-20	1.5 - 3.0	SS-1	15	33	-				MEDIUM-DENSE BROWN GRAVEL, SOME SAND					10	A-1-a (VISUAL)	94
Sta. 78+93, 6' LT	3.0 - 4.5	SS-2	17	100	4.50	0	3	6	48	43	43	22	21	28	A-7-6 (13)	
Latitude: 41.474709	4.5 - 6.0	SS-3	125	100	-	5	4	80	11	0	NP	NP	NP	25	A-3a (0)	
Longitude: -81.717608	6.0 - 7.5	SS-4	129	100	-					SAME AS SS-3				22	A-3a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP W 44TH ST/N MARGINAL RD TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-097-1-20	1.5 - 3.0	SS-1	21	100	4.50	11	11	42	21	15	NP	NP	NP	11	A-4a (0)	0
Sta. 79+84, 6' RT	3.0 - 4.5	SS-2	20	100	4.5+	1	4	14	34	47	39	18	21	18	A-6b (12)	
Latitude: 41.475652	4.5 - 6.0	SS-3	11	100	2.50	0	3	43	30	24	21	14	7	16	A-4a (4)	
Longitude: -81.717373	6.0 - 7.5	SS-4	14	72	3.00					SAME AS SS-3				17	A-4a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP W 41ST ST/S MARGINAL RD TO IR 90 EB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-100-1-20	1.5 - 3.0	SS-1	21	100	4.5+	5	4	20	60	11	25	15	0	16	A-4b (7)	2112
Sta. 92+13, 11' LT	3.0 - 4.5	SS-2	18	100	-	8	17	48	24	3	NP	NP	NP	12	A-3a (0)	
Latitude: 41.474318	4.5 - 6.0	SS-3	33	100	4.5+				HARD BROWN SILT AND CLAY, SOME TO LITTLE SAND					16	A-6a (VISUAL)	
Longitude: -81.713025	6.0 - 7.5	SS-4	33	100	4.50					SAME AS SS-3				28	A-6a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 WB TO W 41ST ST/N MARGINAL RD

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-100-2-20	1.5 - 3.0	SS-1	8	72	-	24	24	23	19	10	NP	NP	NP	15	A-2-4 (0)	749
Sta. 91+25, 18' RT	3.0 - 4.5	SS-2	14	26	-	14	26	27	20	13	19	15	4	17	A-3a (0)	
Latitude: 41.475319	4.5 - 6.0	SS-3	0	11	-					SAME AS SS-2				16	A-2-4 (VISUAL)	
Longitude: -81.701510	6.0 - 7.5	SS-4	2	22	-					SAME AS SS-2				17	A-2-4 (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO W 25TH ST/WADE AVE

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-107-1-20	1.5 - 3.0	SS-1	36	100	-	45	32	14	5	4	NP	NP	NP	7	A-1-b (0)	1510
Sta. 23+69, 2' RT	3.0 - 4.5	SS-2	6	100	-	18	44	29	3	6	NP	NP	NP	5	A-1-b (0)	
Latitude: 41.473654	4.5 - 6.0	SS-3	21	67	-					SAME AS SS-2				6	A-1-b (VISUAL)	
Longitude: -81.701510	6.0 - 7.5	SS-4	9	67	-					SAME AS SS-2				8	A-1-b (VISUAL)	
B-107-2-20	1.5 - 3.0	SS-1	42	100	-	21	25	31	12	11	NP	NP	NP	8	A-3a (0)	739
Sta. 927+67, 153' RT	3.0 - 4.5	SS-2	24	100	-	32	34	20	6	8	NP	NP	NP	7	A-1-b (0)	
Latitude: 41.473630	4.5 - 6.0	SS-3	11	67	-					SAME AS SS-2				10	A-1-b (VISUAL)	
Longitude: -81.700050	6.0 - 7.5	SS-4	8	100	-					SAME AS SS-2				7	A-1-b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP VEGA AVE TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-108-1-20	1.5 - 3.0	SS-1	17	33	-	27	38	26	6	3	NP	NP	NP	7	A-1-b (0)	2057
Sta. 25+81, 17' LT	3.0 - 4.5	SS-2	14	78	-	49	21	18	8	4	NP	NP	NP	8	A-1-b (0)	
Latitude: 41.474435	4.5 - 6.0	SS-3	6	44	-					SAME AS SS-2				6	A-1-b (VISUAL)	
Longitude: -81.700763	6.0 - 7.5	SS-4	11	61	-					SAME AS SS-2				7	A-1-b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP W 25TH ST TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-109-1-20	1.5 - 3.0	SS-1	21	100	-	36	30	24	5	5	NP	NP	NP	8	A-1-b (0)	276
Sta. 36+92, 14' RT	3.0 - 4.5	SS-2	20	89	-	43	34	13	8	2	NP	NP	NP	6	A-1-b (0)	
Latitude: 41.475250	4.5 - 6.0	SS-3	9	100	-					SAME AS SS-2				7	A-1-b (VISUAL)	
Longitude: -81.698947	6.0 - 7.5	SS-4	11	100	-					SAME AS SS-2				8	A-1-b (VISUAL)	
B-109-2-20	1.5 - 3.0	SS-1	18	100	-	0	0	58	34	8	NP	NP	NP	20	A-4a (1)	944
Sta. 31+43, 14' RT	3.0 - 4.5	SS-2	18	100	-					SAME AS SS-1				24	A-4a (VISUAL)	
Latitude: 41.474339	4.5 - 6.0	SS-3	17	100	-	1	2	69	25	3	NP	NP	NP	20	A-3a (0)	
Longitude: -81.698694	6.0 - 7.5	SS-4	17	100	-					SAME AS SS-3				24	A-3a (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP BARBER AVE TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-109-3-20	1.5 - 3.0	SS-1	12	100	-	18	43	32	1	6	NP	NP	NP	8	A-1-b (0)	1029
Sta. 5+99, 3' LT	3.0 - 4.5	SS-2	14	100	-	21	33	34	8	4	NP	NP	NP	9	A-1-b (0)	
Latitude: 41.475335	4.5 - 6.0	SS-3	8	100	-					SAME AS SS-2				8	A-1-b (VISUAL)	
Longitude: -81.697982	6.0 - 7.5	SS-4	8	100	-					SAME AS SS-2				7	A-1-b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 71 SB TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-110-1-20	1.5 - 3.0	SS-1	26	44	-	23	29	39	8	1	NP	NP	NP	11	A-1-b (0)	1605
Sta. 25+06, 7' LT	3.0 - 4.5	SS-2	15	78	-					SAME AS SS-1				20	A-1-b (VISUAL)	
Latitude: 41.474448	4.5 - 6.0	SS-3	21	100	-	52	22	18	8	0	-	-	-	17	A-1-b (VISUAL)	
Longitude: -81.696033	6.0 - 7.5	SS-4	30	33	-				MEDIUM-DENSE GRAY GRAVEL, "AND" SAND, TRACE SILT					15	A-1-b (VISUAL)	
B-110-2-20	1.5 - 3.0	SS-1	30	100	-	1	6	79	9	5	NP	NP	NP	7	A-3a (0)	213
Sta. 21+10, 4' LT	3.0 - 4.5	SS-2	36	100	-	2	10	75	10	3	NP	NP	NP	6	A-3a (0)	
Latitude: 41.474785	4.5 - 6.0	SS-3	14	100	-					SAME AS SS-2				4	A-3a (VISUAL)	
Longitude: -81.694669	6.0 - 7.5	SS-4	14	72	-					SAME AS SS-2				4	A-3a (VISUAL)	
B-110-3-20	1.5 - 3.0	SS-1	33	100	-	29	27	28	8	8	NP	NP	NP	8	A-1-b (0)	172
Sta. 17+15, 5' LT	3.0 - 4.5	SS-2	41	100	-	41	28	19	6	6	NP	NP	NP	6	A-1-b (0)	
Latitude: 41.475666	4.5 - 6.0	SS-3	14	89	-					SAME AS SS-2				6	A-1-b (VISUAL)	
Longitude: -81.693861	6.0 - 7.5	SS-4	18	78	-					SAME AS SS-2				7	A-1-b (VISUAL)	
B-110-4-20	1.5 - 3.0	SS-1	32	100	-	40	29	19	6	6	NP	NP	NP	7	A-1-b (0)	1987
Sta. 13+11, 6' LT	3.0 - 4.5	SS-2	51	100	-	36	24	23	11	6	NP	NP	NP	10	A-1-b (0)	
Latitude: 41.476769	4.5 - 6.0	SS-3	44	100	-					SAME AS SS-2				11	A-1-b (VISUAL)	
Longitude: -81.693690	6.0 - 7.5	SS-4	57	67	-					SAME AS SS-2				9	A-1-b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO IR 71 NB/90 EB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-111-1-20	1.5 - 3.0	SS-1	32	100	-	4	20	67	3	6	NP	NP	NP	5	A-3 (0)	153
Sta. 138+03, 8' LT	3.0 - 4.5	SS-2	33	100	-					SAME AS SS-1				5	A-3 (VISUAL)	
Latitude: 41.473737	4.5 - 6.0	SS-3	11	100	-	2	24	64	3	7	NP	NP	NP	5	A-3 (0)	
Longitude: -81.695265	6.0 - 7.5	SS-4	15	100	-					SAME AS SS-3				5	A-3 (VISUAL)	
B-111-4-20	1.5 - 3.0	SS-1	29	100	-	6	12	64	9	9	NP	NP	NP	7	A-3a (0)	119
Sta. 141+28, 7' LT	3.0 - 4.5	SS-2	30	100	-					SAME AS SS-1				6	A-3a (VISUAL)	
Latitude: 41.473784	4.5 - 6.0	SS-3	14	100	-	3	57	33	0	7	NP	NP	NP	5	A-1-b (0)	
Longitude: -81.694092	6.0 - 7.5	SS-4	15	100	-					SAME AS SS-3				4	A-1-b (VISUAL)	

SUMMARY OF SOIL TEST DATA
RAMP IR 90 EB TO IR 71 SB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-111-2-20	1.5 - 3.0	SS-1	33	100	-	4	5	25	55	11	17	16	1	11	A-4b (6)	407
Sta. 42+08, 2' RT	3.0 - 4.5	SS-2	62	100	-	13	18	35	29	5	NP	NP	NP	7	A-3a (0)	
Latitude: 41.473035	4.5 - 6.0	SS-3	44	100	-					SAME AS SS-2				18	A-3a (VISUAL)	
Longitude: -81.694099	6.0 - 7.5	SS-4	81	89	-					SAME AS SS-2				8	A-3a (VISUAL)	
B-111-3-20	1.5 - 3.0	SS-1	50	100	-	8	22	43	26	1	NP	NP	NP	6	A-3a (0)	215
Sta. 44+92, 1' RT	3.0 - 4.5	SS-2	87	78	-	9	13	33	35	10	21	15	6	8	A-4a (2)	
Latitude: 41.472291	4.5 - 6.0	SS-3	78	78	-					SAME AS SS-2				12	A-4a (VISUAL)	
Longitude: -81.693811	6.0 - 7.5	SS-4	84	100	-					SAME AS SS-2				8	A-4a (VISUAL)	

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 4:18:55 PM USER: kharper
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SUMMARY OF SOIL TEST DATA
RAMP IR 77 NB TO IR 90 WB

EXPLORATION NO., STATION & OFFSET	FROM - TO	SAMPLE ID	N_{60}	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO_4
B-112-1-20	1.5 - 3.0	SS-1	24	100	-	3	13	75	5	4	NP	NP	NP	6	A-3 (0)	294
Sta. 16+69, 4' RT	3.0 - 4.5	SS-2	24	100	-					SAME AS SS-1				-	A-3 (VISUAL)	
Latitude: 41.474481	4.5 - 6.0	SS-3	17	100	-	0	3	88	6	3	NP	NP	NP	5	A-3 (0)	
Longitude: -81.694399	6.0 - 7.5	SS-4	20	94	-					SAME AS SS-3				8	A-3 (VISUAL)	

SOIL PROFILE - ROADWAY
SUMMARY OF SOIL TEST DATA

BEGIN PROJECT
STA. 353+23.44

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

Ex LA-R/W

BASELINE RAMP IR 90 WB TO HILLIARD BLVD

℄ CONST. IR 90

B-001-0-20

B-002-0-20

B-002-5-24

B-002-1-20

B-003-0-20

B-002-2-20

B-004-0-20

B-002-4-20

B-003-2-24

B-002-3-20

MATCHLINE STA. 541+50

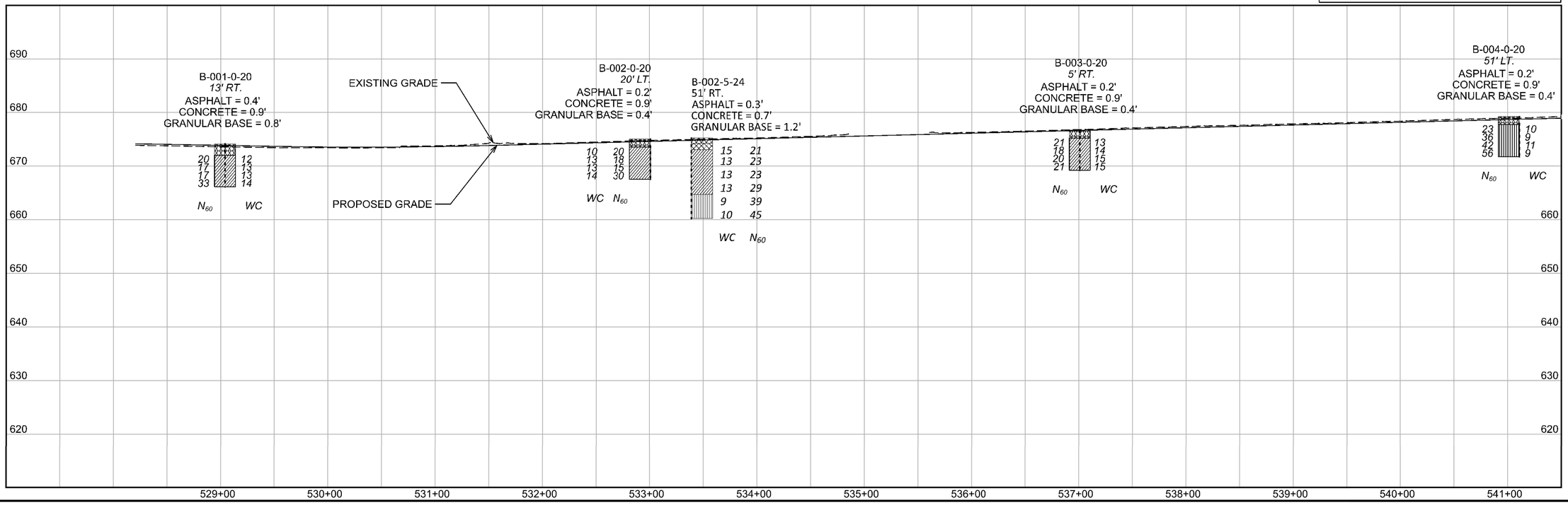
BASELINE RAMP HILLIARD BLVD TO IR 90 EB

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

Ex R/W

NOTE: SEE SHEET 13 FOR PROFILES OF BORINGS B-002-1-20 THROUGH B-002-4-20 AND B-003-2-24.



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.83
STA. 528+50 TO STA. 541+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 5 TOTAL 67
SHEET 1525 TOTAL 1587

CUY-90-6.83

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/22/2025 TIME: 5:35:33 PM USER: Kharper
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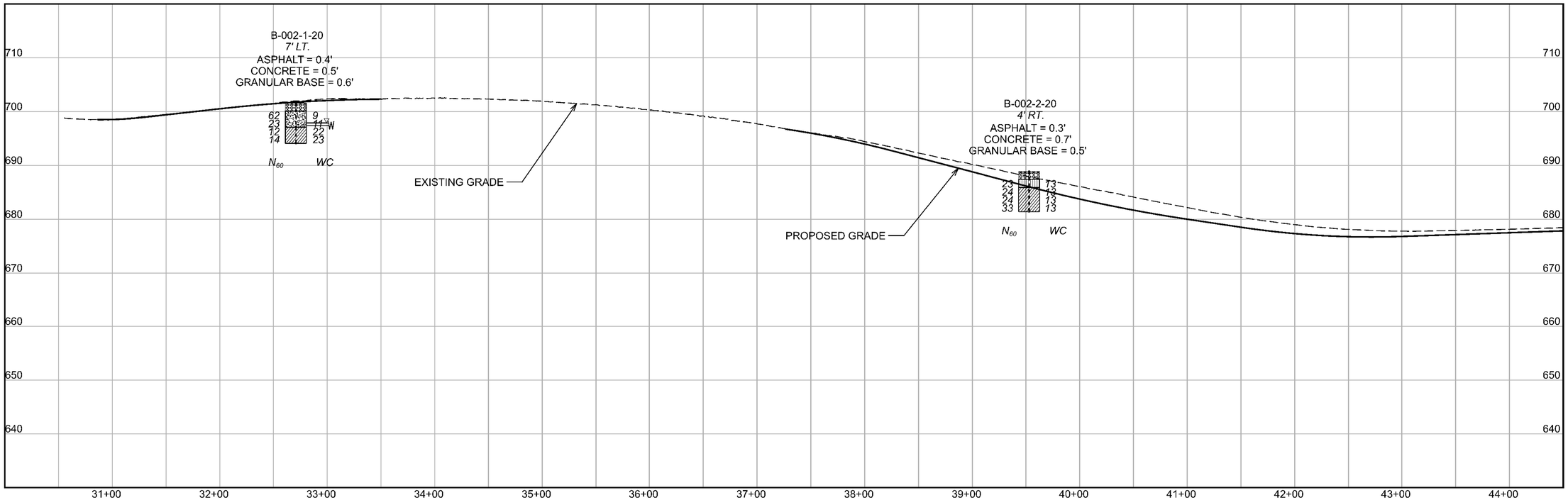
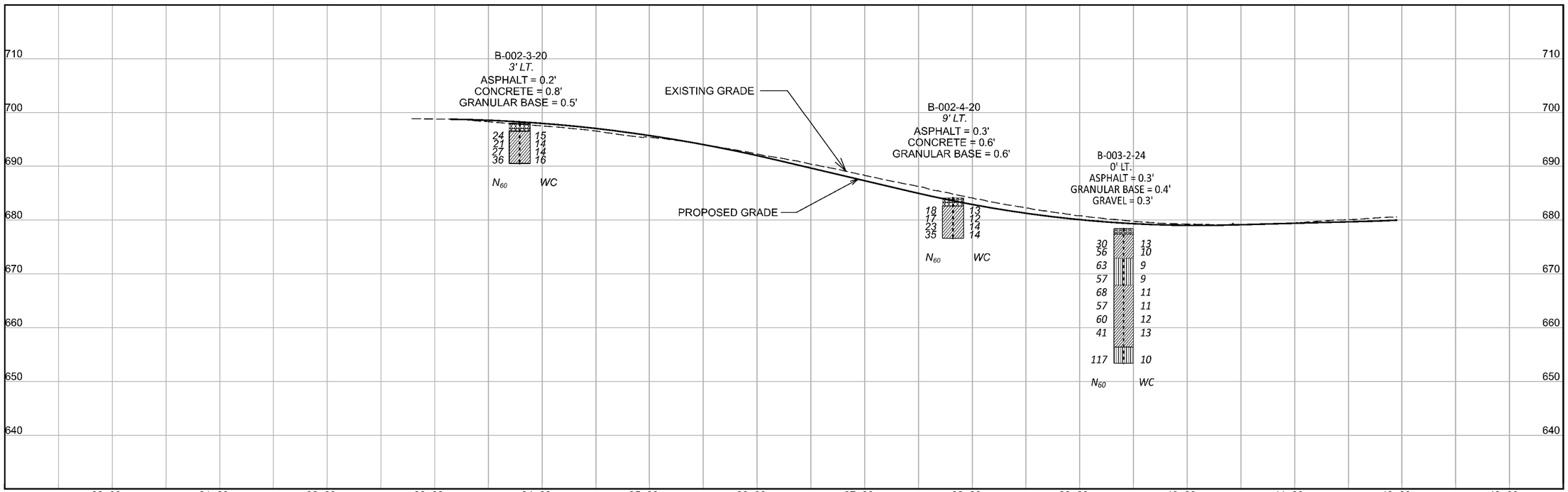
RAMP IR 90 WB TO HILLIARD BLVD



RAMP HILLIARD BLVD TO IR 90 EB



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP IR 90 WB TO HILLIARD BLVD STA. 30+00 TO 44+00
RAMP HILLIARD BLVD TO IR 90 EB STA. 33+00 TO STA. 42+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 5A | TOTAL 67
SHEET 1525A | TOTAL 1587

CUY-90-6.83

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/22/2025 TIME: 5:00:49 PM USER: khorner
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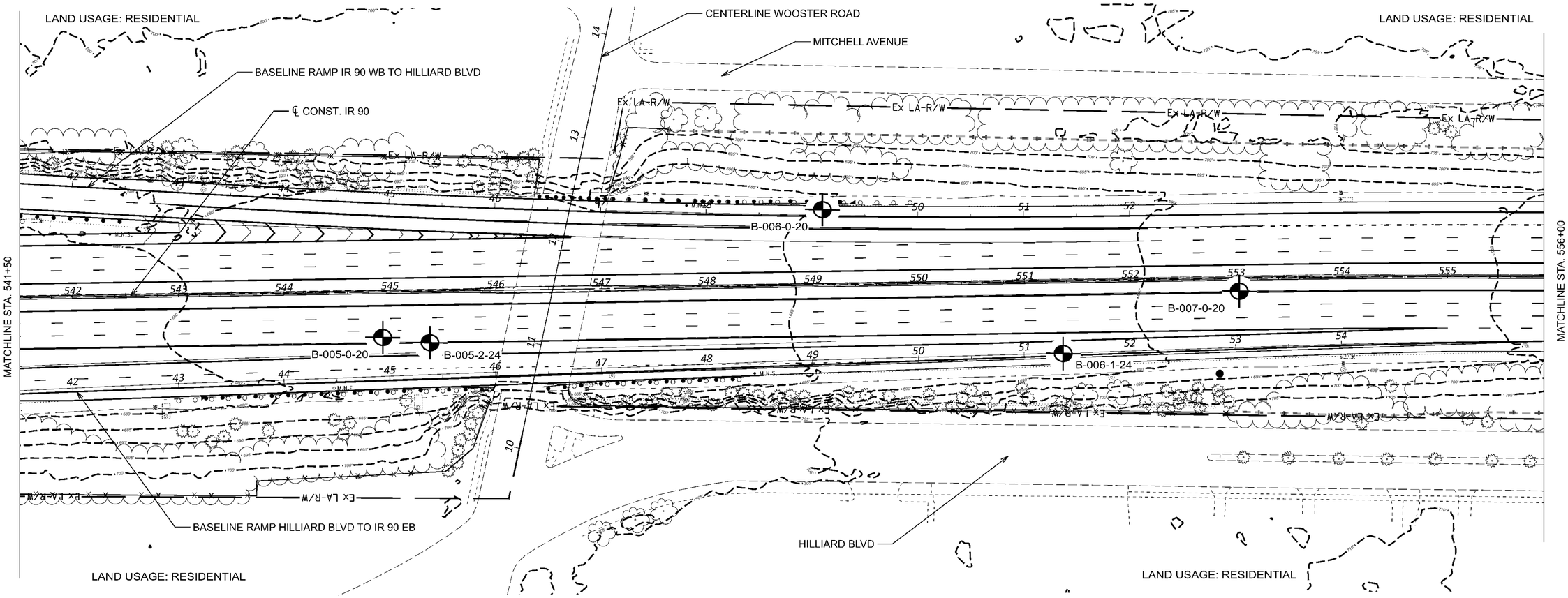

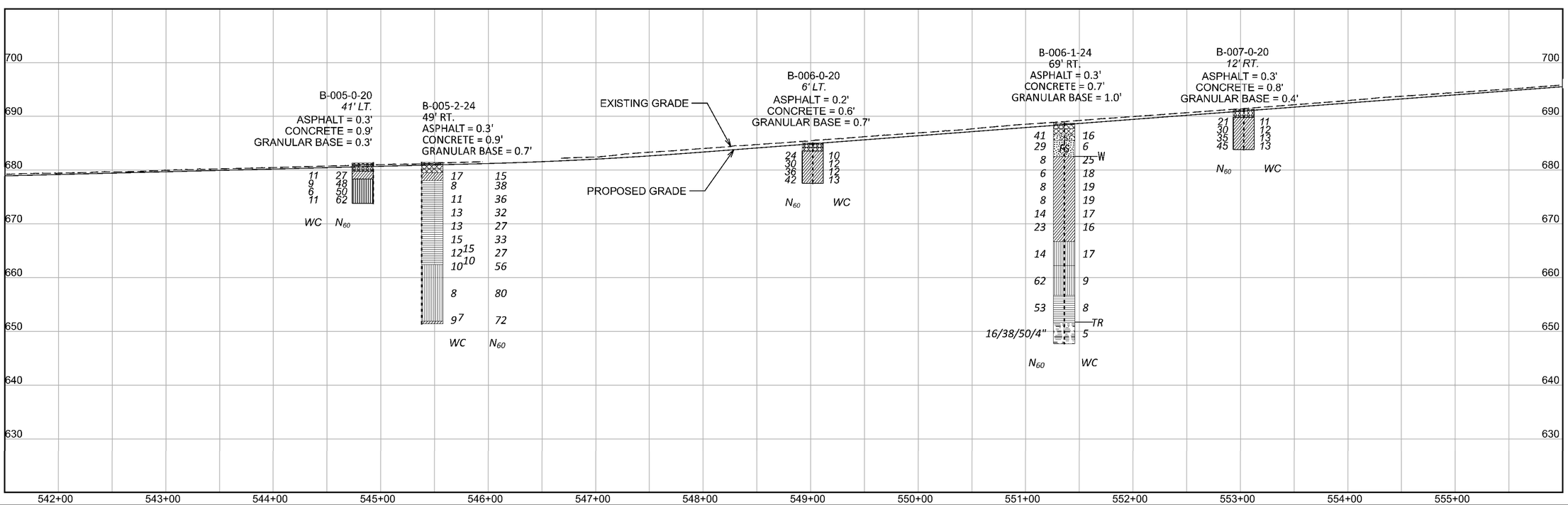

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.83
STA. 541+50 TO STA. 556+00

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	6
TOTAL	67
SHEET	1526
TOTAL	1587

CUY-90-6.83

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 5:45:16 PM USER: kharper
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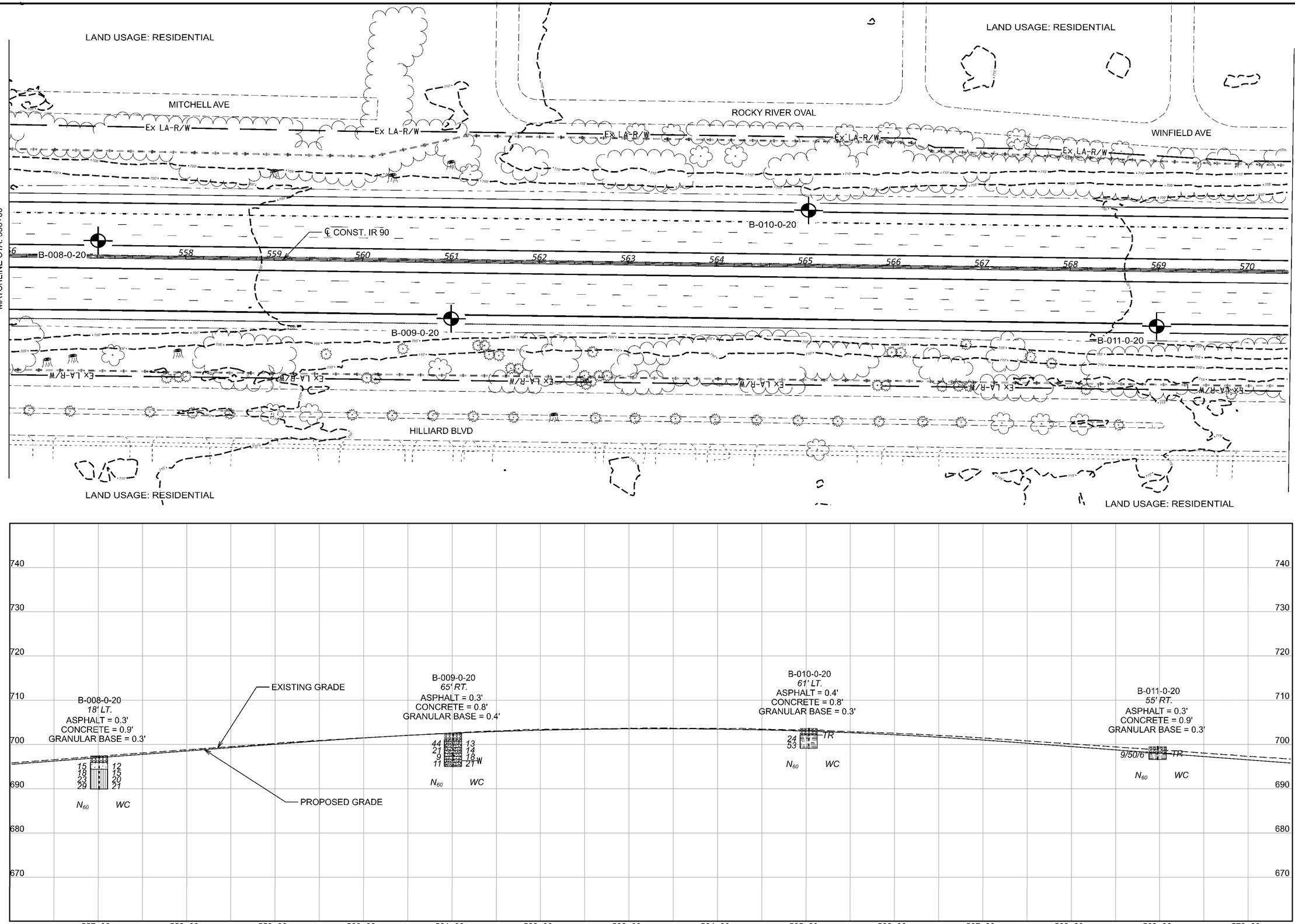

CUY-90-6.69

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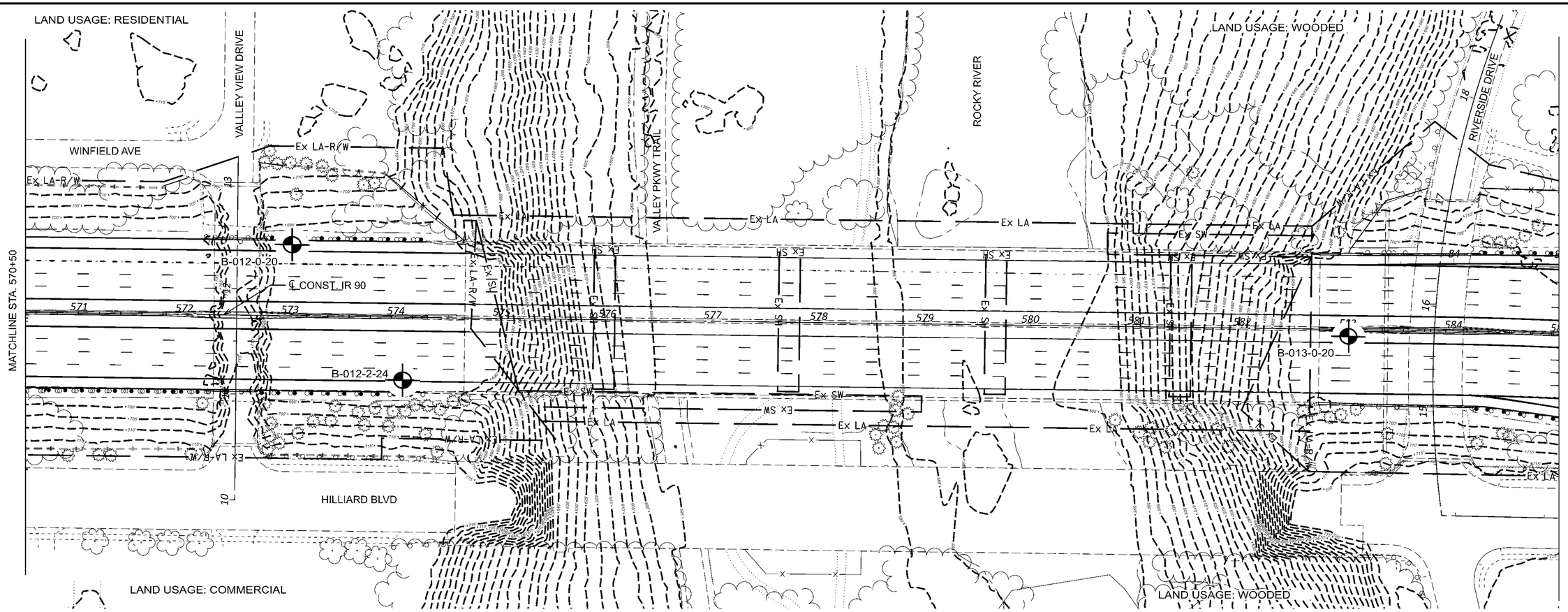
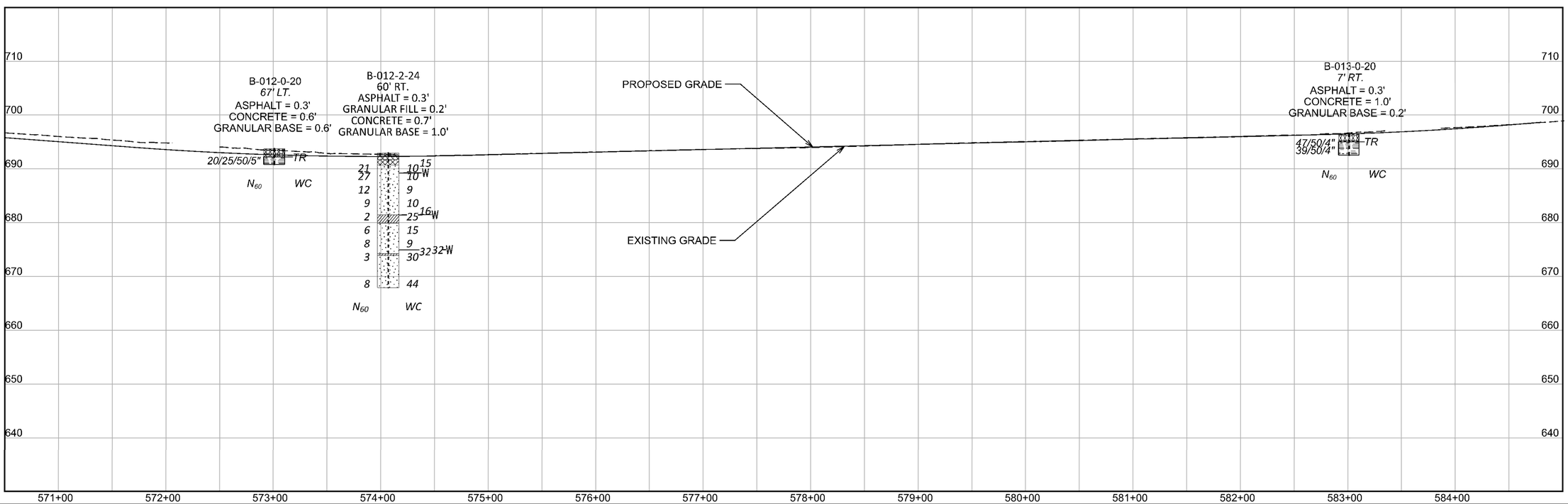
HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 556+00 TO STA. 570+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 7 TOTAL 67
SHEET 1527 TOTAL 1587





HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 570+50 TO STA. 585+00

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	8
TOTAL	67
SHEET	1528
TOTAL	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 6:21:08 PM USER: kharper
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LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

CONCORD DR

NIAGARA DR

N. MARGINAL DRIVE

S. MARGINAL DRIVE

HILLIARD RD

MATCHLINE STA. 585+00

MATCHLINE STA. 599+50

℄ CONST. IR 90

Ex LA-R/W

B-013-1-24

B-014-0-20

B-015-0-20

B-015-1-24

B-016-0-20

B-016-1-20

B-016-2-20

B-017-0-20

NOTE: SEE SHEET 18 FOR PROFILES OF BORINGS B-016-1-20 AND B-016-2-20

HORIZONTAL SCALE IN FEET
0 25 50 100

EXISTING GRADE

PROPOSED GRADE

B-013-1-24
5' RT.
ASPHALT = 0.2'
CONCRETE = 0.9'
GRANULAR BASE = 0.9'

B-014-0-20
17' LT.
ASPHALT = 0.3'
CONCRETE = 1.0'
GRANULAR BASE = 0.2'

B-015-0-20
66' RT.
ASPHALT = 0.2'
CONCRETE = 0.9'
GRANULAR BASE = 0.4'

B-015-1-24
6' RT.
ASPHALT = 0.3'
CONCRETE = 1.0'
GRANULAR BASE = 0.7'

B-016-0-20
66' LT.
ASPHALT = 0.3'
CONCRETE = 0.8'
GRANULAR BASE = 0.4'

B-017-0-20
14' RT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'

730 720 710 700 690 680 670 660

586+00 587+00 588+00 589+00 590+00 591+00 592+00 593+00 594+00 595+00 596+00 597+00 598+00 599+00

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 585+00 TO STA. 599+50

DESIGN AGENCY

DESIGNER KAH

REVIEWER BKS

PROJECT ID 76779

SUBSET 9 | TOTAL 67

SHEET 1529 | TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 6:10:33 AM USER: kharper
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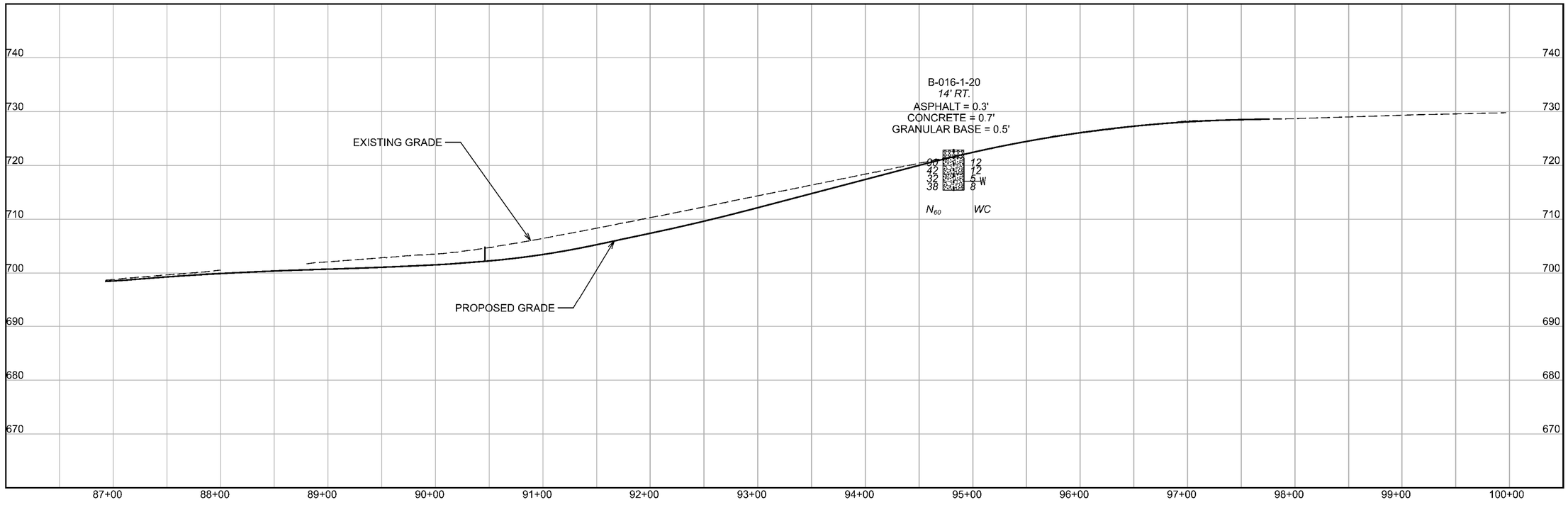
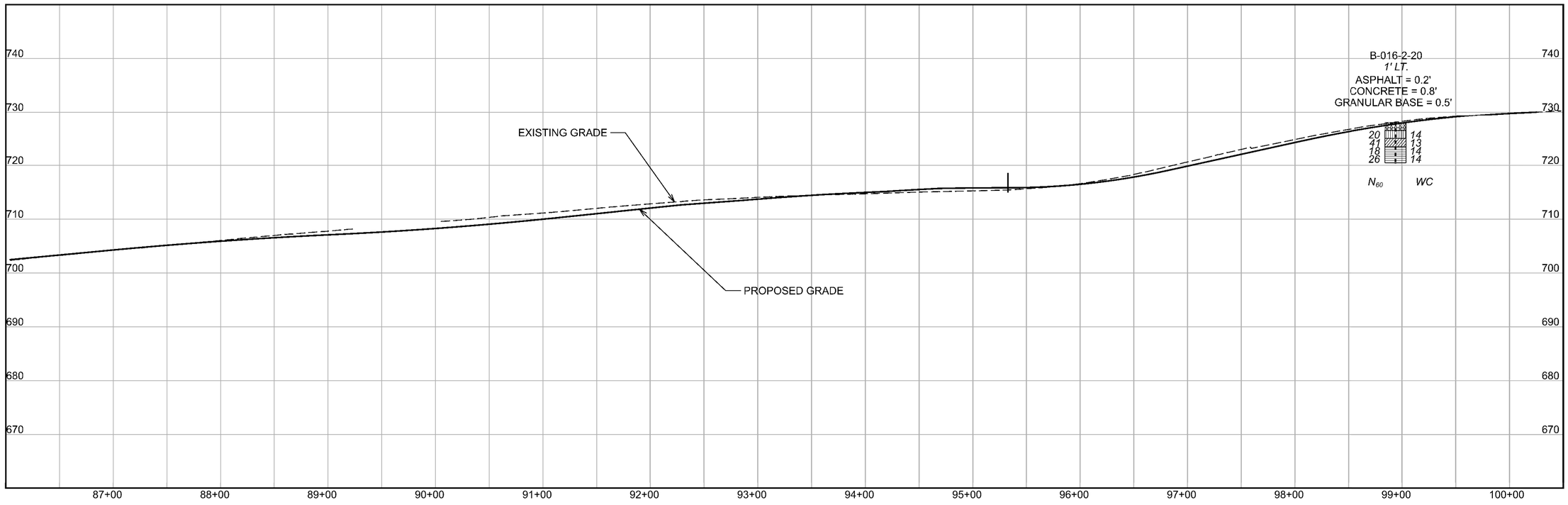
RAMP IR 90 EB TO S MARGINAL DR



RAMP N MARGINAL DR TO IR 90 WB



N

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP IR 90 EB TO S MARGINAL DR STA. 86+00 TO 100+50
RAMP N MARGINAL DR TO IR 90 WB STA. 86+00 TO STA. 101+50

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET	TOTAL
9A	67
SHEET	TOTAL
1529A	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 6:23:22 AM USER: kharper
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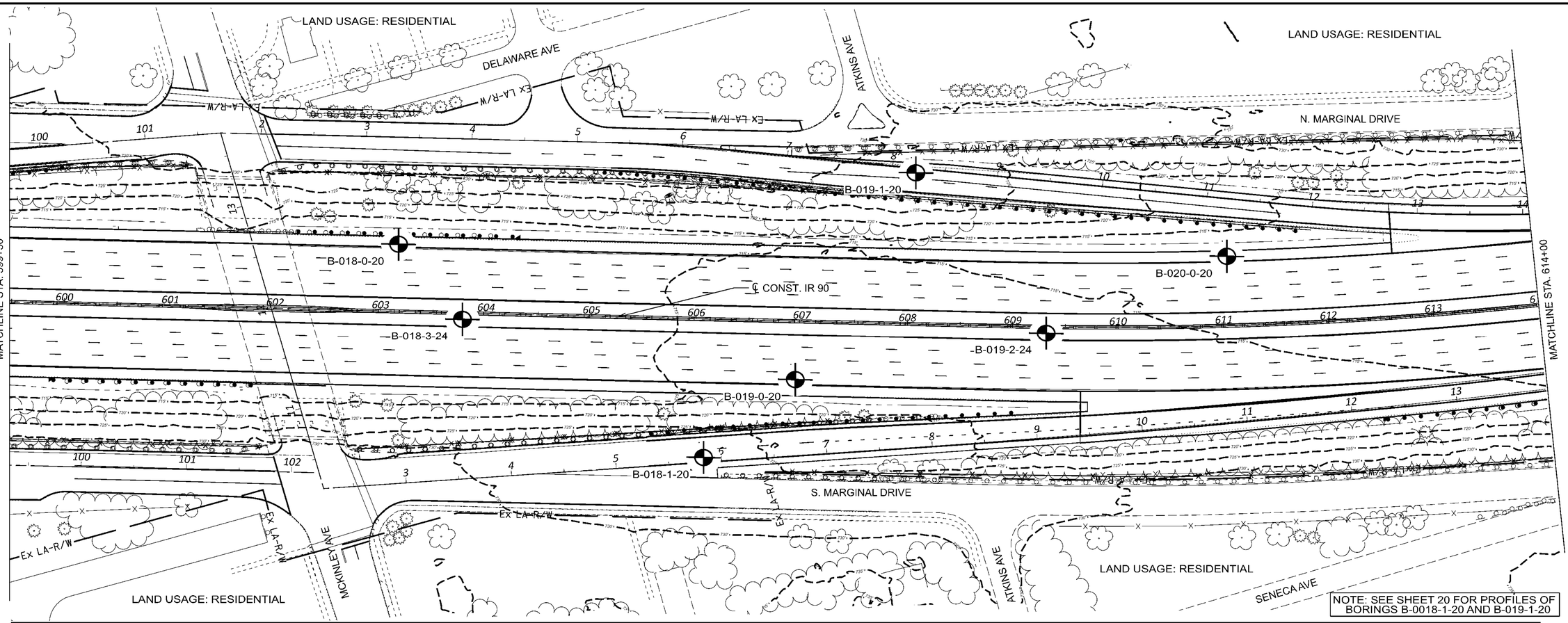
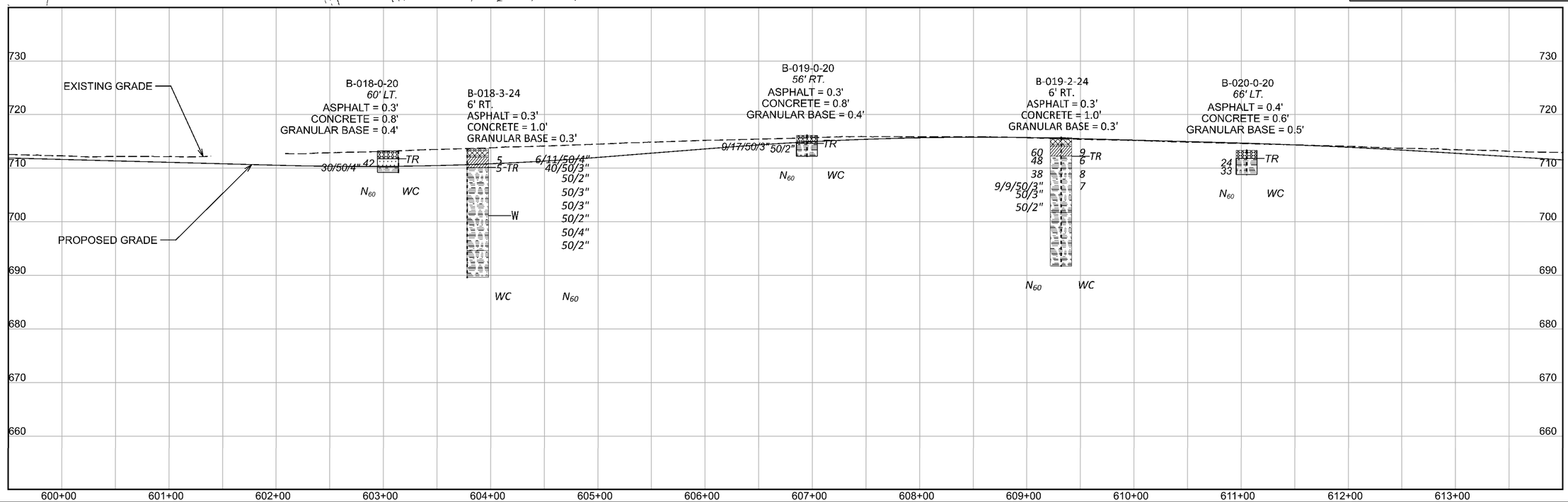


NOTE: SEE SHEET 20 FOR PROFILES OF BORINGS B-0018-1-20 AND B-019-1-20



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 599+50 TO STA. 614+00

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	10
TOTAL	67
SHEET	1530
TOTAL	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 6:30:32 AM USER: kharper
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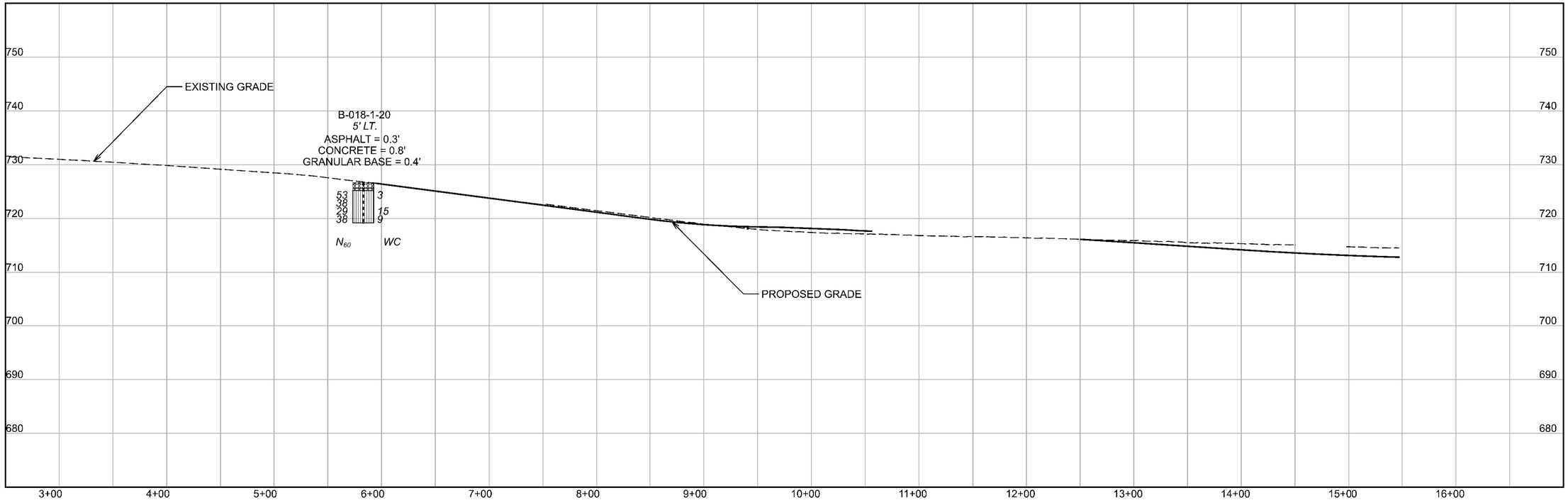
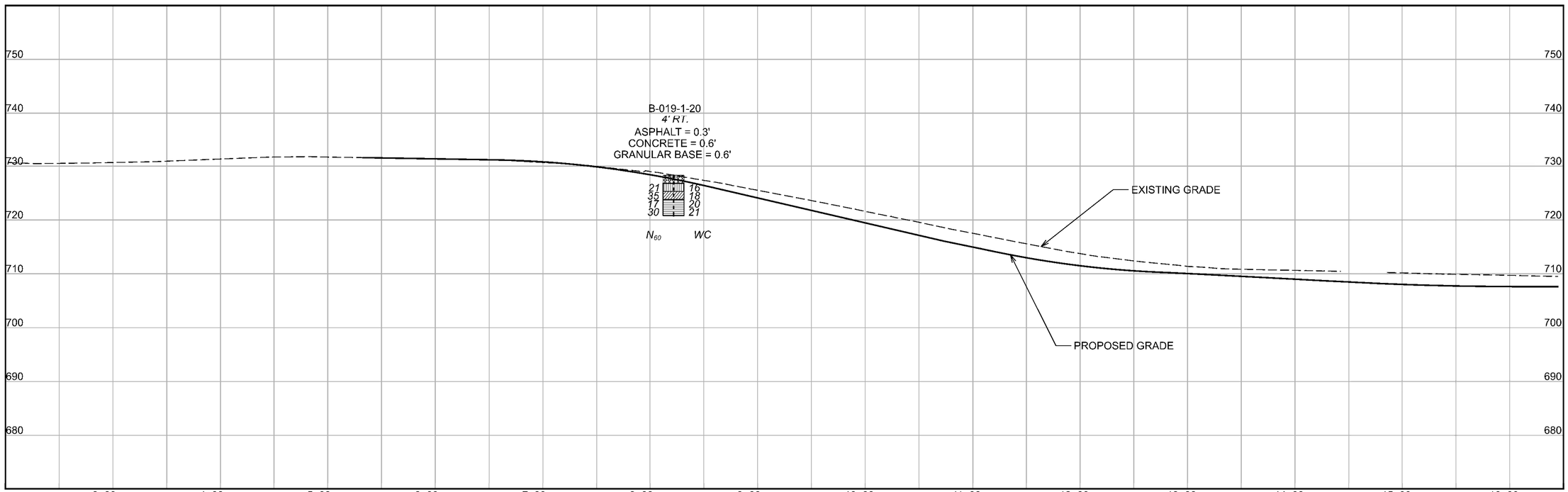
RAMP S MARGINAL DR TO IR 90 EB



RAMP IR 90 WB TO N MARGINAL DR



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP S MARGINAL DR TO IR 90 EB STA. 2+50 TO 17+00
RAMP IR 90 WB TO N MARGINAL DR STA. 2+00 TO 16+50

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	10A
TOTAL	67
SHEET	1530A
TOTAL	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in) DATE: 1/23/2025 TIME: 6:41:15 AM USER: kharper
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LAND USAGE: RESIDENTIAL

N. MARGINAL DRIVE

LAND USAGE: RESIDENTIAL

MATCHLINE STA. 614+00

MATCHLINE STA. 626+50

B-021-0-20

B-021-2-24

B-022-0-20

B-023-0-20

B-023-1-24

B-024-0-20

℄ CONST. IR 90

EX LA-R/W

S. MARGINAL DRIVE

WOODWARD AVE

W. 159TH ST.

FERNWAY AVE

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

B-021-0-20
12' RT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'
32
42
15/19/50/5"
TR
N_{60} WC

B-021-2-24
7' RT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.8'
11/50/5"
50/4"
29/50/3"
5
4
6
TR
N_{60} WC

B-022-0-20
18' LT.
ASPHALT = 0.2'
CONCRETE = 0.8'
GRANULAR BASE = 0.5'
16/50/5"
30/50/5"
TR
N_{60} WC

EXISTING GRADE

PROPOSED GRADE

B-023-0-20
5' RT.
ASPHALT = 0.2'
CONCRETE = 0.8'
GRANULAR BASE = 0.5'
TR 13/50/5"
N_{60} WC

B-023-1-24
5' RT.
ASPHALT = 0.2'
CONCRETE = 0.8'
GRANULAR BASE = 0.5'
4 TR
4
2/50/5"
40/50/2"
WC N_{60}

B-024-0-20
77' LT.
ASPHALT = 0.3'
CONCRETE = 0.5'
GRANULAR BASE = 0.7'
50/6"
TR
N_{60} WC

730
720
710
700
690
680
670
660

615+00 616+00 617+00 616+00 617+00 618+00 619+00 620+00 621+00 622+00 623+00 624+00 625+00 626+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 614+00 TO STA. 626+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 11 TOTAL 67
SHEET 1531 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 7:03:37 AM USER: kharper
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LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

MATCHLINE STA. 626+50

MATCHLINE STA. 641+00

POT 40+00.00

B-026-0-20

℄ CONST. IR 90

B-025-2-24

B-026-3-24

B-025-0-20

B-027-0-20

B-026-1-20

S. MARGINAL DRIVE

FERNWAY AVE

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

NOTE: SEE SHEET 23 FOR PROFILE OF BORING B-026-1-20

B-025-0-20
63' RT.
ASPHALT = 0.3'
CONCRETE = 0.7'
GRANULAR BASE = 0.5'
16/50/2"33 TR
WC N_{60}

B-025-2-24
4' RT.
ASPHALT = 0.3'
CONCRETE = 0.8'
GRANULAR BASE = 0.4'
10 TR 50/3"42
WC N_{60}

B-026-0-20
62' LT.
ASPHALT = 0.4'
CONCRETE = 0.8'
GRANULAR BASE = 0.3'
15/50/4" 50/6" TR
N_{60} WC

B-026-3-24
8' RT.
ASPHALT = 0.3'
CONCRETE = 0.7'
GRANULAR BASE = 0.5'
18/50/2"125 13 TR 11
N_{60} WC

B-027-0-20
60' RT.
ASPHALT = 0.3'
CONCRETE = 0.7'
GRANULAR BASE = 0.5'
15/50/6" 32/50/6" TR
N_{60} WC

EXISTING GRADE

PROPOSED GRADE

730 720 710 700 690 680 670 660

627+00 628+00 629+00 630+00 631+00 632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 626+50 TO STA. 641+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 12 TOTAL 67
SHEET 1532 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in) DATE: 1/23/2025 TIME: 7:12:20 AM USER: kharper
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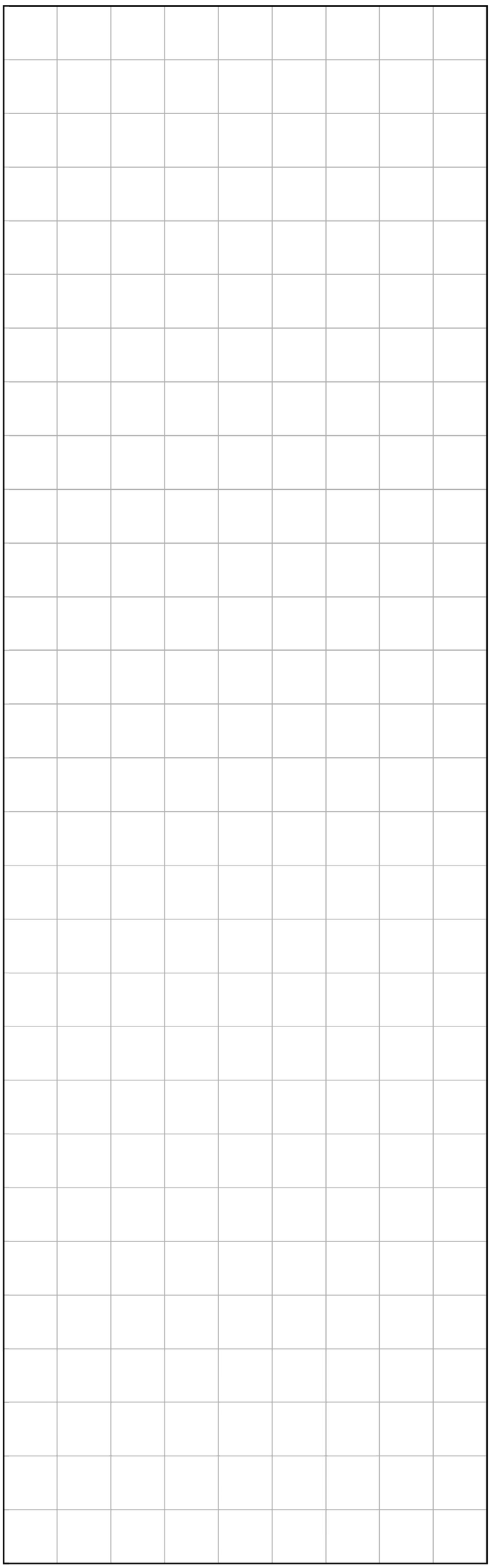
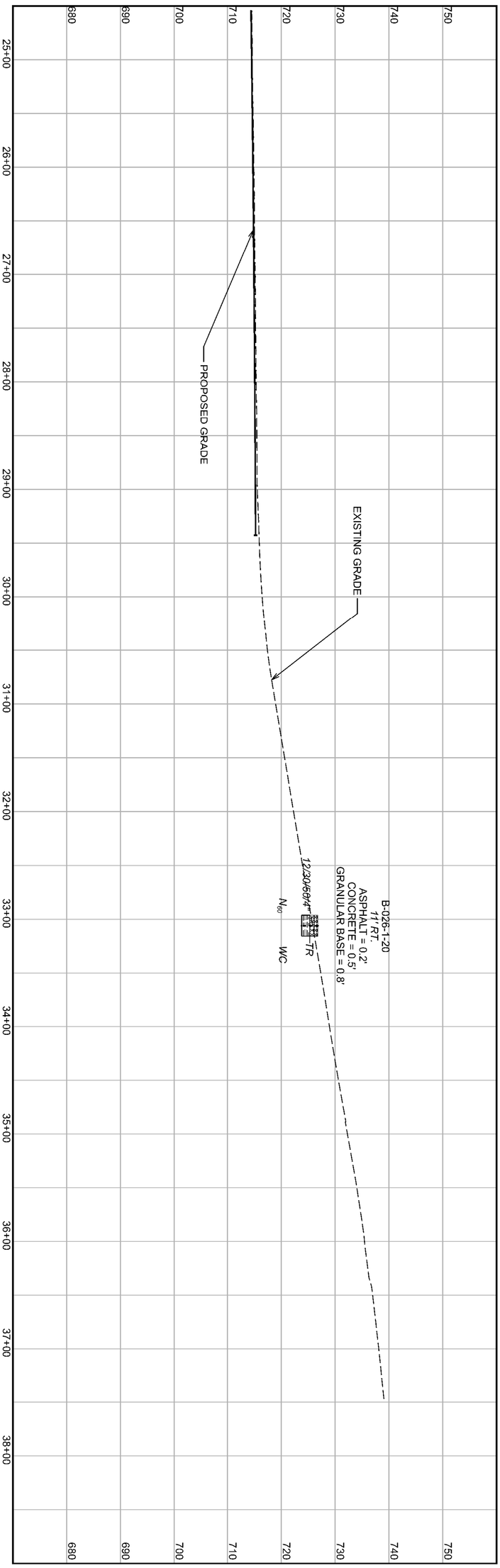
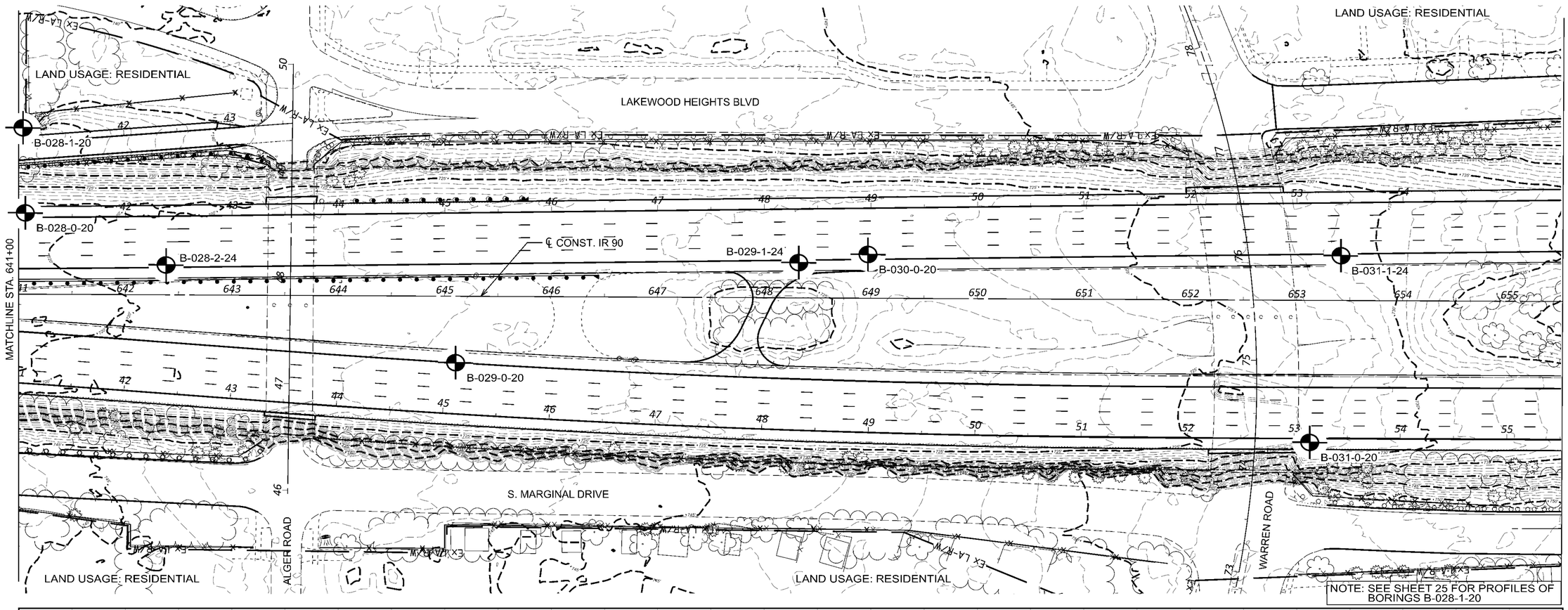


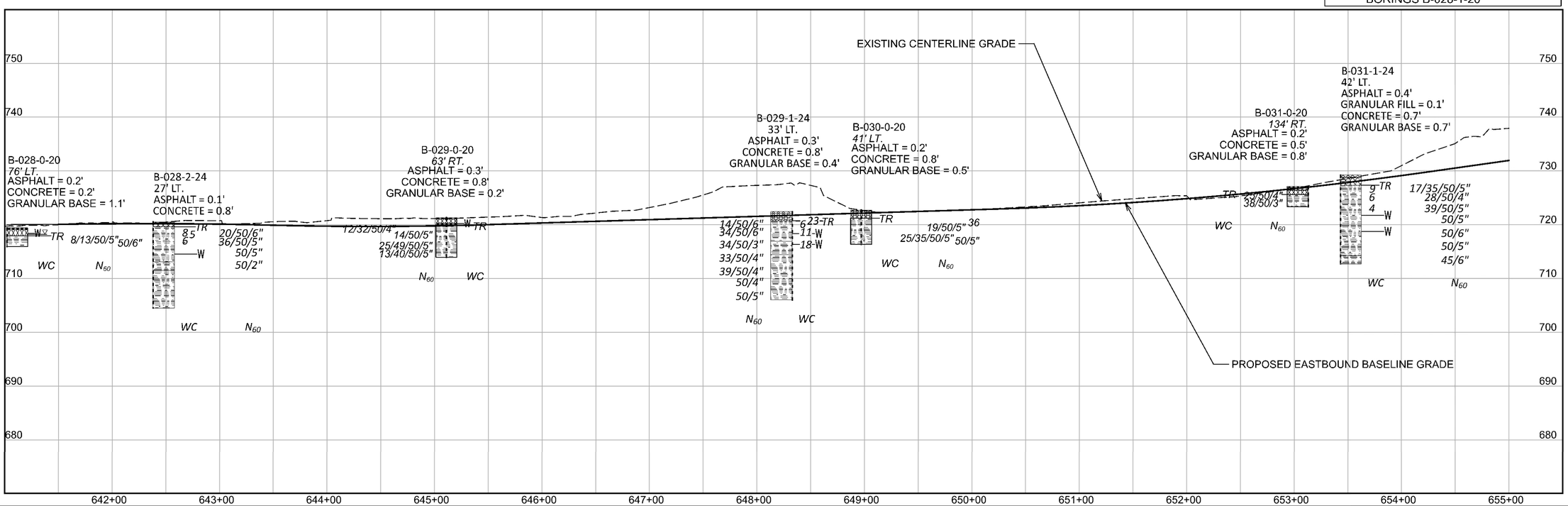


SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP IR 90 EB TO S MARGINAL DR. STA. 24+50 TO STA. 39+00

HORIZONTAL SCALE IN FEET
0 50
25 100

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 12A TOTAL 67
SHEET 1532A TOTAL 1587
DESIGN AGENCY





HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 641+00 TO STA. 655+50

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	13
TOTAL	67
SHEET	1533
TOTAL	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 7:29:44 AM USER: kharper
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CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 7:33:47 AM USER: kharper
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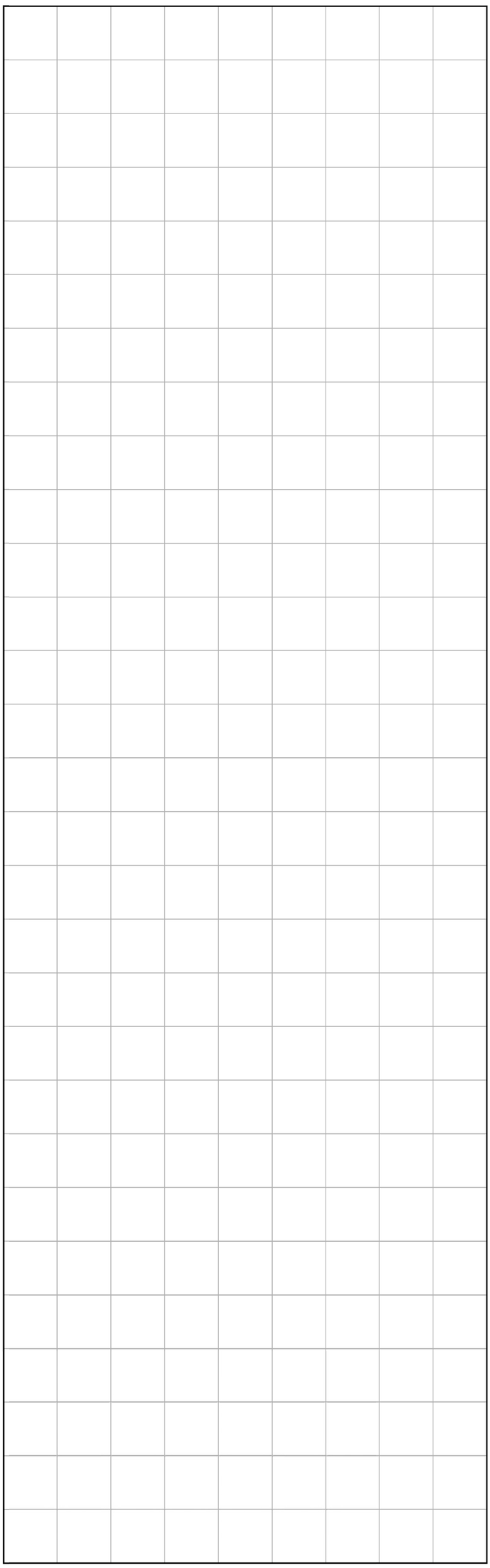
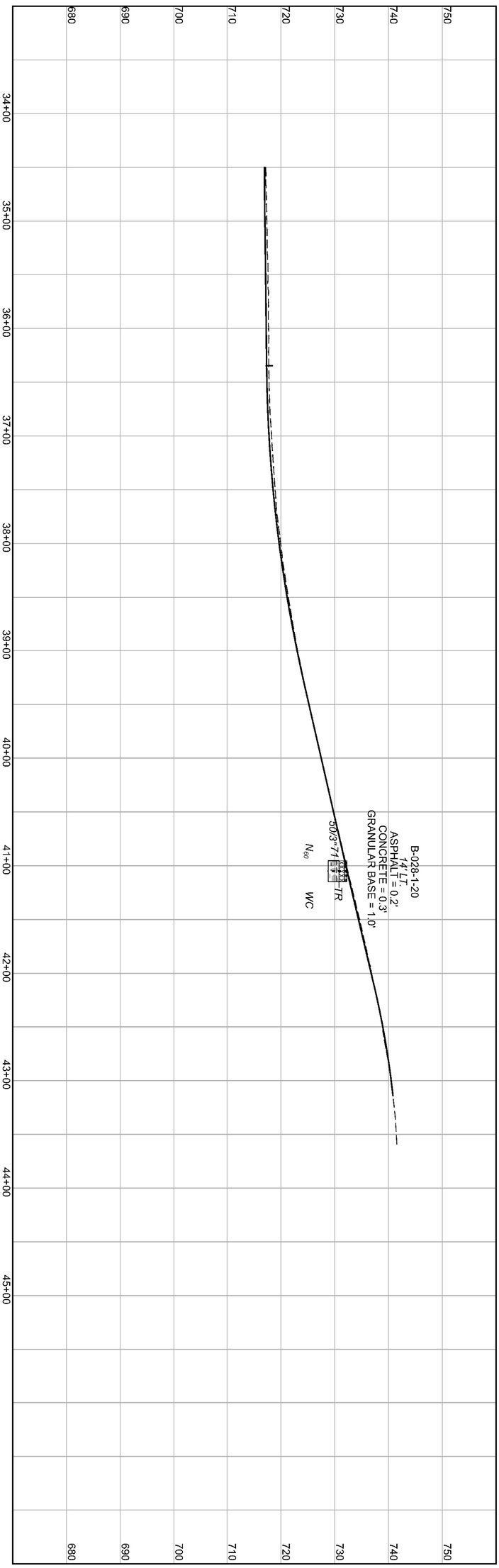


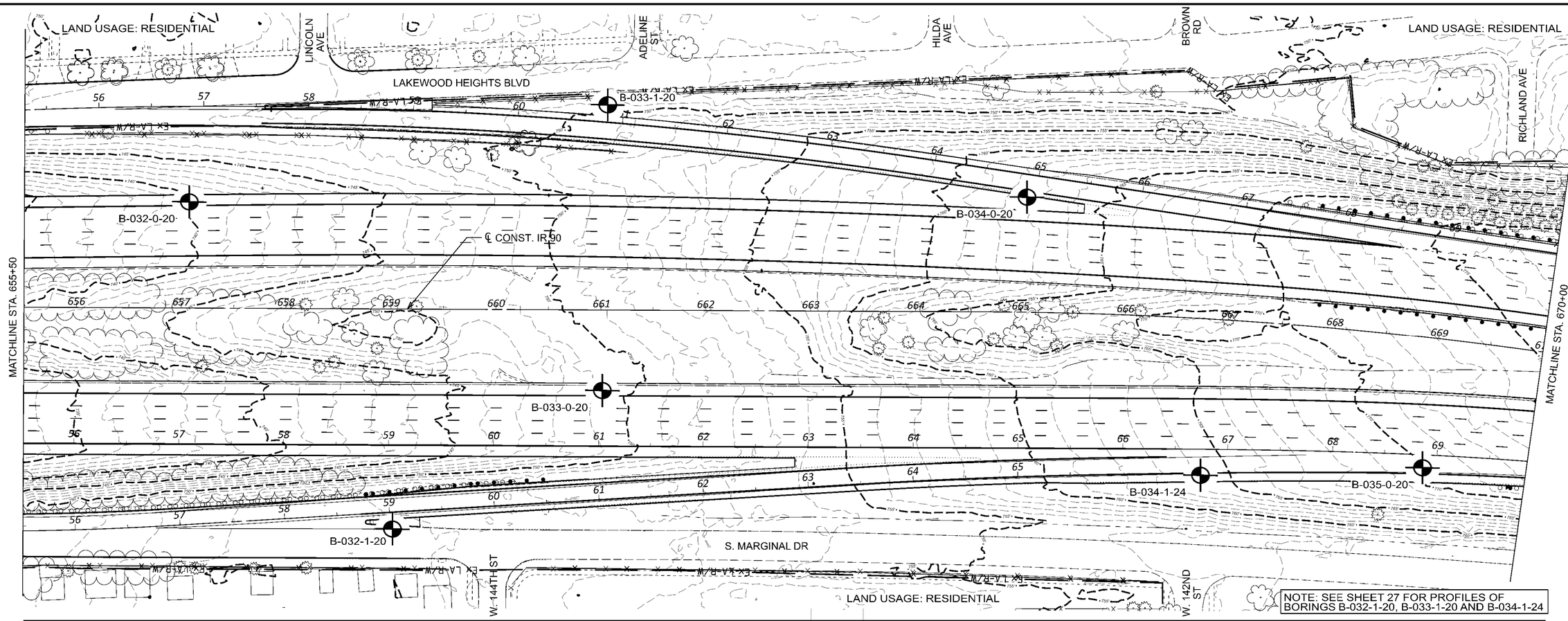


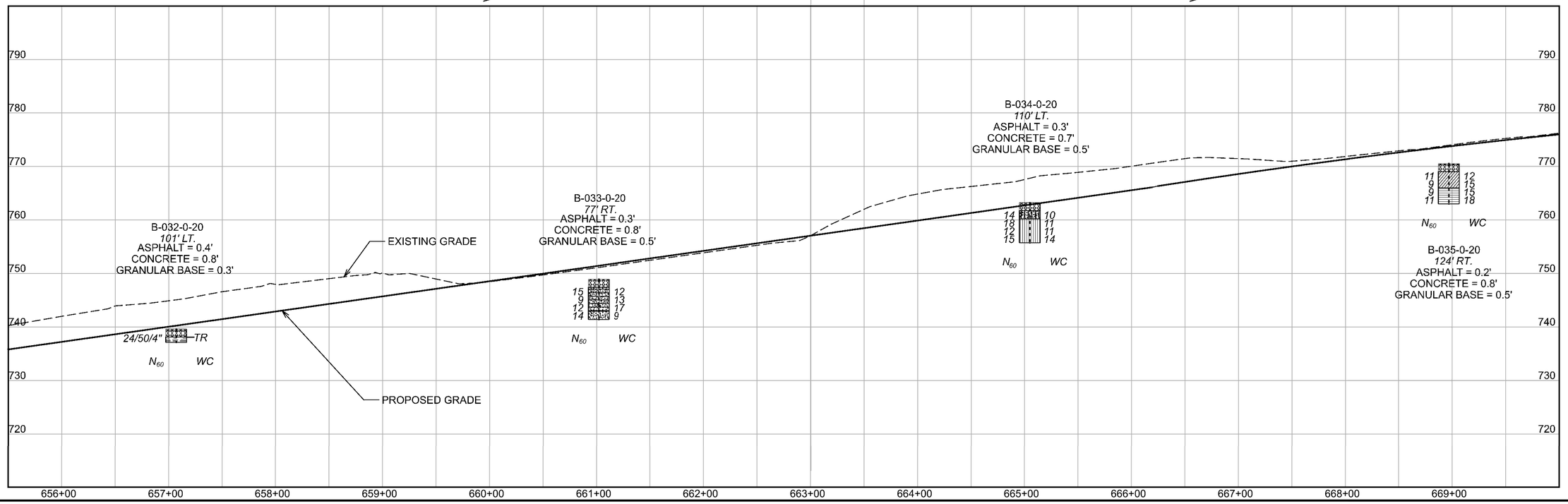
SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP N MARGINAL DR TO IR 90 WB STA. 34+50 TO 44+00

HORIZONTAL SCALE IN FEET
0 50
25 100

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 13A TOTAL 67
SHEET 1533A TOTAL 1587





HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 655+50 TO STA. 670+00

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	14
TOTAL	67
SHEET	1534
TOTAL	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 9:43:33 AM USER: kharper
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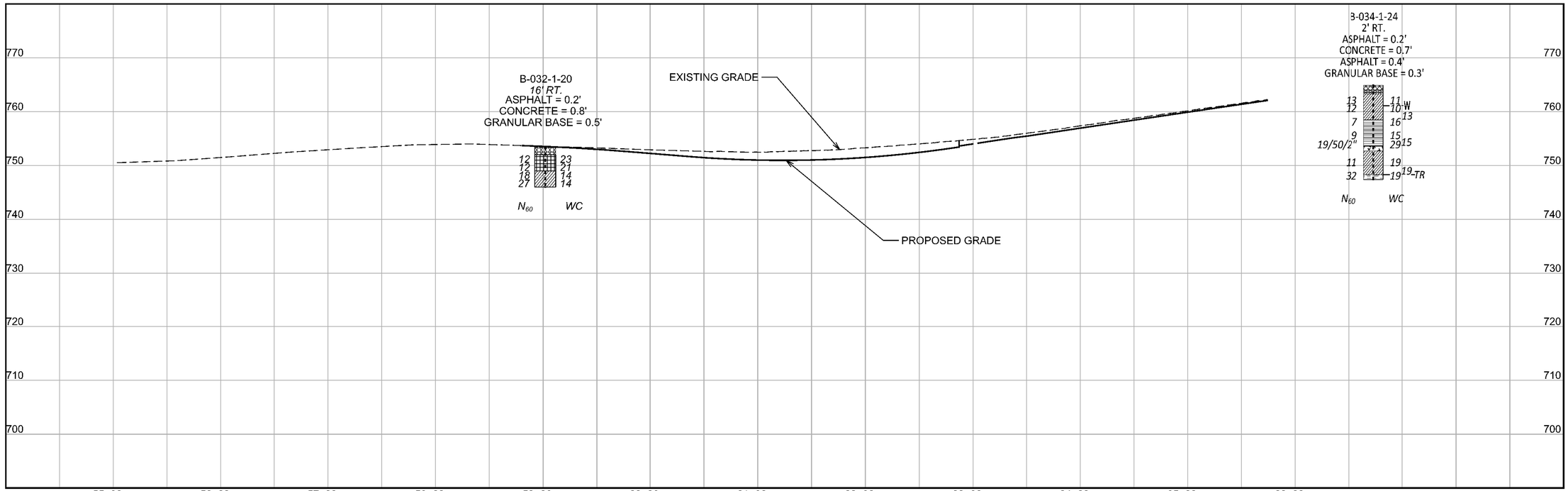
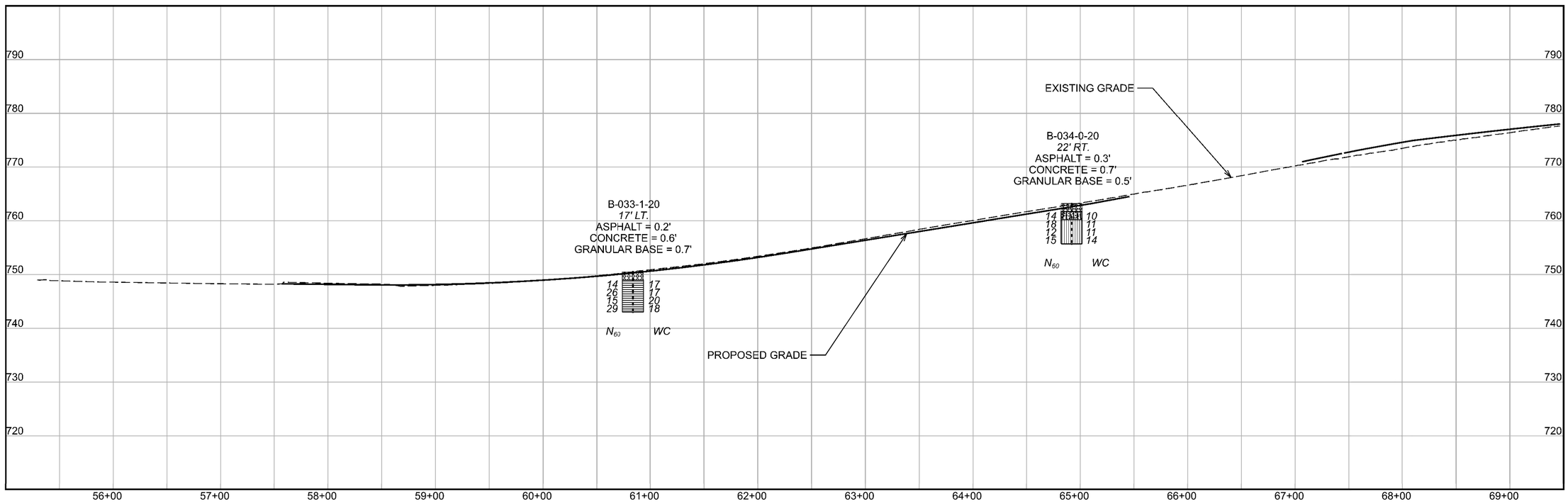
RAMP S MARGINAL DR TO IR 90 EB



RAMP IR 90 WB TO LAKEWOOD HEIGHTS BLVD



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP S MARGINAL DR TO IR 90 EB STA. 55+00 TO 66+00
RAMP IR 90 WB TO LAKEWOOD HEIGHTS BLVD STA. 55+00 TO 69+50

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	14A
TOTAL	67
SHEET	1534A
TOTAL	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 9:49:07 AM USER: khorper
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LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

B-036-1-20

B-036-2-20

B-036-0-20

℄ CONST. IR 90

B-038-0-20

B-037-0-20

B-037-2-24

B-039-0-20

B-037-1-20

W. 140TH ST

MATCHLINE STA. 670+00

MATCHLINE STA. 684+50

NOTE: SEE SHEET 29 FOR PROFILES OF BORINGS B-036-1-20, B-036-2-20, AND B-037-1-20

B-036-0-20
85' LT.
ASPHALT = 0.2'
CONCRETE = 1.5'
GRANULAR BASE = 0.4'

B-037-0-20
88' RT.
ASPHALT = 0.3'
CONCRETE = 0.5'
GRANULAR BASE = 0.7'

B-037-2-24
84' RT.
ASPHALT = 0.3'
CONCRETE = 0.7'
GRANULAR BASE = 0.5'

B-038-0-20
38' LT.
ASPHALT = 0.4'
CONCRETE = 0.8'
GRANULAR BASE = 0.3'

B-039-0-20
34' RT.
ASPHALT = 0.3'
CONCRETE = 0.7'
GRANULAR BASE = 0.5'

N_{60} WC

TR

W

810 800 790 780 770 760 750 740 730

671+00 672+00 673+00 674+00 675+00 676+00 677+00 678+00 679+00 680+00 681+00 682+00 683+00 684+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 670+00 TO STA. 684+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 15 TOTAL 67
SHEET 1535 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 7x11in DATE: 1/23/2025 TIME: 10:00:04 AM USER: kharper
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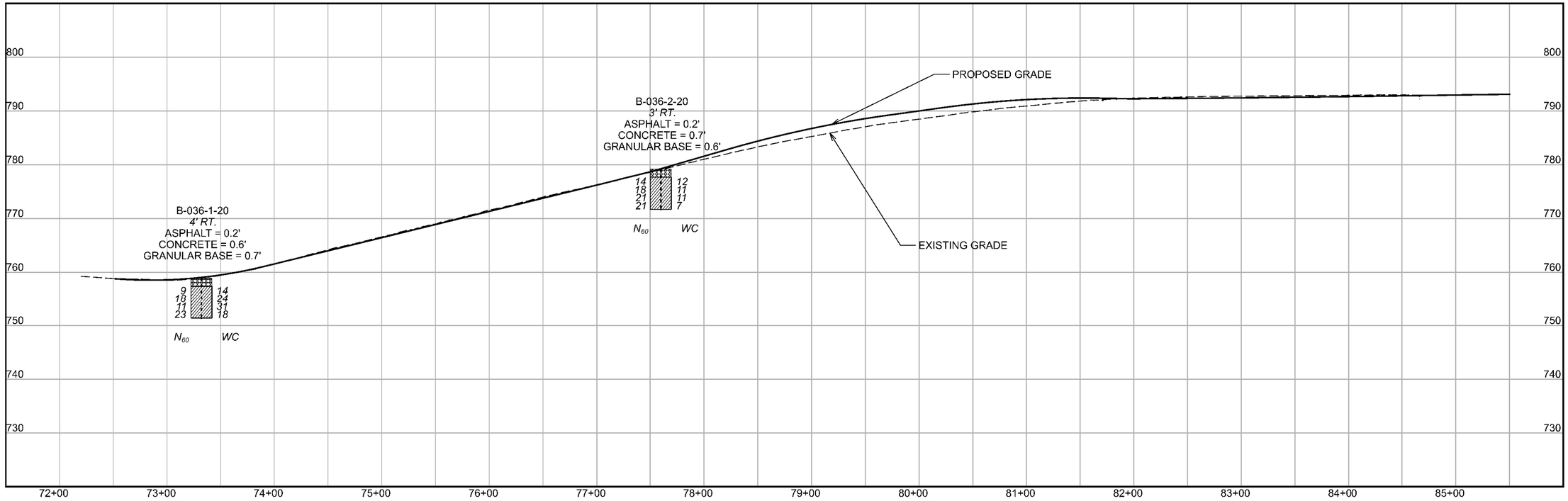
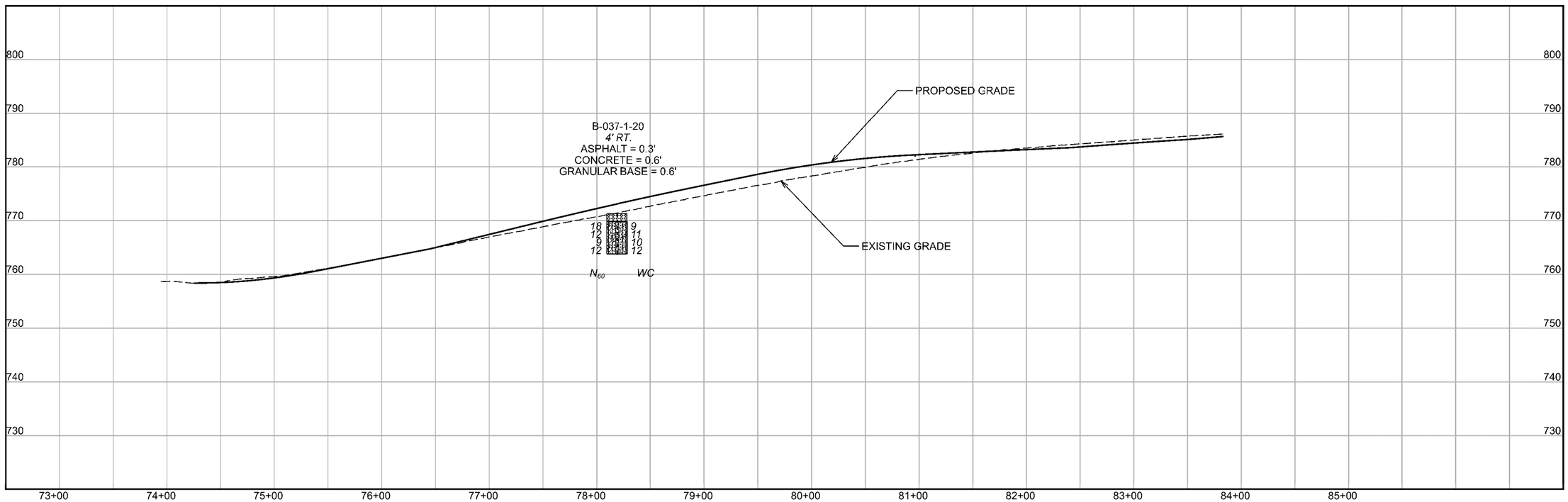
RAMP IR 90 WB TO W. 140TH ST



RAMP W. 140TH ST TO IR 90 EB



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP IR 90 WB TO W. 140TH ST STA. 72+00 TO STA. 85+50
RAMP W. 140TH ST TO IR 90 EB STA. 73+50 TO STA. 84+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 15A TOTAL 67
SHEET 1535A TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in) DATE: 1/23/2025 TIME: 10:02:38 AM USER: kharper
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LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

MATCHLINE STA. 684+50

MATCHLINE STA. 699+00

℄ CONST. IR 90

B-040-0-20

B-041-0-20

B-041-3-24

EX LA-R/W

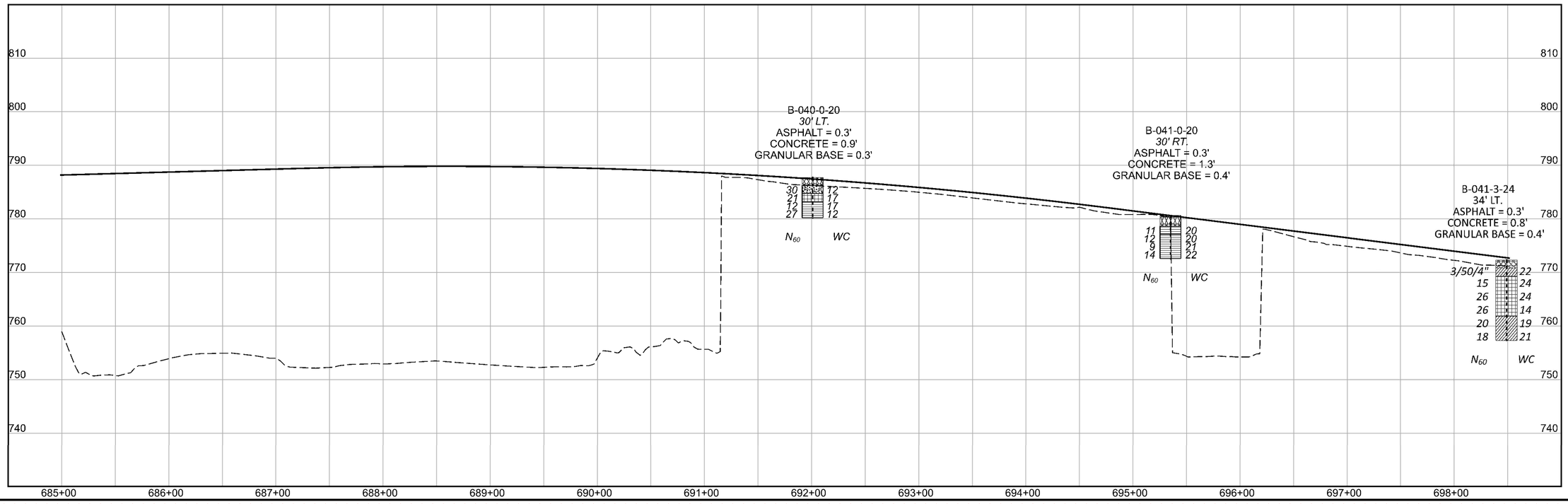
JOSLYN ROAD

RTA TRACKS

BEREA ROAD

LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 684+50 TO STA. 699+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 16 TOTAL 67
SHEET 1536 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 10:21:22 AM USER: kharper
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LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

MATCHLINE STA. 699+00

MATCHLINE STA. 713+50

B-042-0-20

B-043-0-20

B-043-3-24

B-044-0-20

B-044-1-24

B-045-0-20

℄ CONST. IR 90

700 701 702 703 704 705 706 707 708 709 710 711 712 713

LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

PROPOSED GRADE

EXISTING GRADE

B-042-0-20
83' LT.
ASPHALT = 0.3'
CONCRETE = 0.8'
GRANULAR BASE = 0.4'

B-043-0-20
76' RT.
ASPHALT = 0.4'
CONCRETE = 0.8'
GRANULAR BASE = 0.3'

B-043-3-24
33' LT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.5'

B-044-0-20
88' LT.
ASPHALT = 0.9'
GRANULAR BASE = 0.3'

B-044-1-24
35' LT.
ASPHALT = 1.2'

B-045-0-20
78' RT.
ASPHALT = 0.4'
CONCRETE = 0.9'
GRANULAR BASE = 0.2'

790 780 770 760 750 740 730 720

700+00 701+00 702+00 703+00 704+00 705+00 706+00 707+00 708+00 709+00 710+00 711+00 712+00 713+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 699+00 TO STA. 713+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 17 TOTAL 67
SHEET 1537 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 10:26:27 AM USER: kharper
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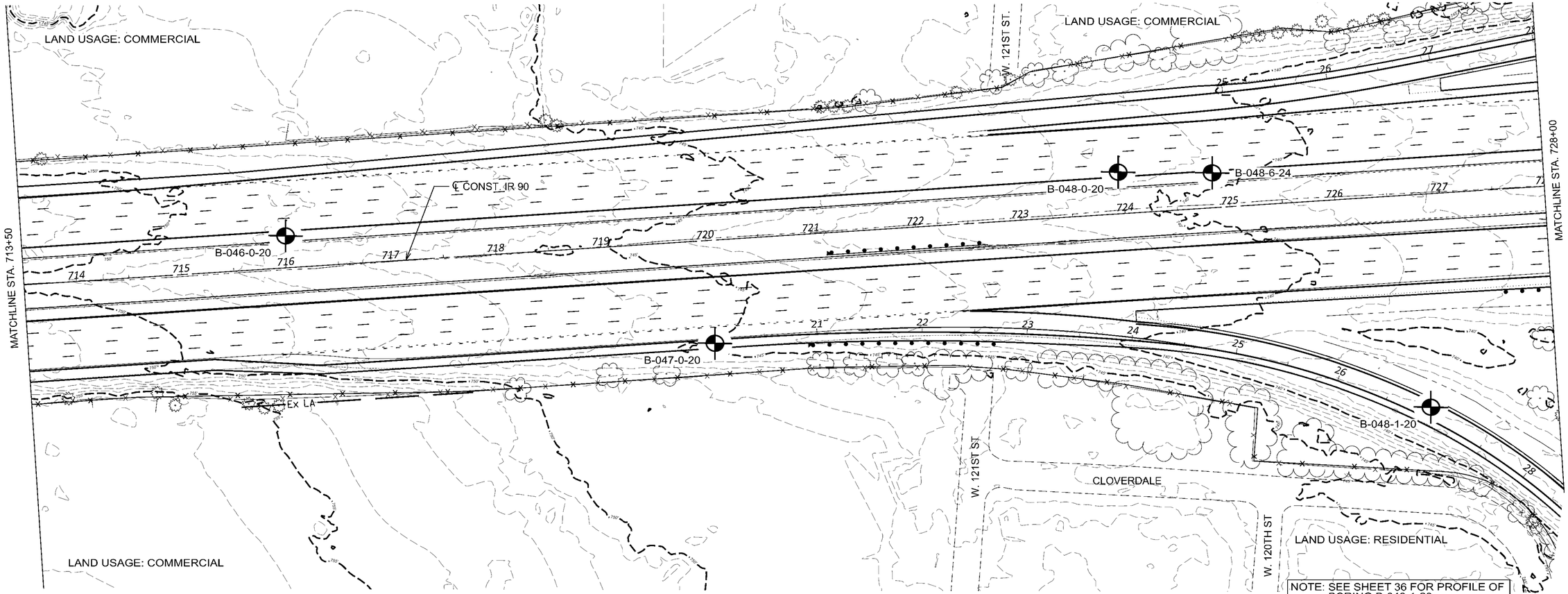

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 713+50 TO STA. 728+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 18 TOTAL 67
SHEET 1538 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 10:30:32 AM USER: kharper
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LAND USAGE: COMMERCIAL

LAND USAGE: RESIDENTIAL

B-049-2-20

B-051-2-22

RAMP W 117TH ST SB TO IR 90 WB

RAMP W 117TH ST NB TO IR 90 WB

RAMP IR 90 WB TO W 117TH ST

W. 117TH ST

B-049-1-20

B-051-3-20

B-051-1-20

B-050-0-20

B-052-0-20

℄ CONST. IR 90

MATCHLINE STA. 728+00

B-049-4-24

B-051-6-24

MATCHLINE STA. 742+50

B-049-0-20

B-051-0-20

B-050-2-20

S. FRONTAGE

RAMP W 117TH ST SB TO IR 90 EB

B-048-3-20

RAMP IR 90 EB TO W 117TH ST

RAMP W 117TH ST NB TO IR 90 EB

W. 115TH ST

W. 114TH ST

W. 116TH ST

B-048-2-20

B-050-1-20

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

NOTE: SEE SHEET 34 FOR PROFILES OF BORINGS B-049-0-20 THROUGH B-052-0-20. SEE SHEET 35 FOR PROFILES OF BORINGS B-049-1-20, B-049-2-20, B-051-2-20 AND B-051-3-20. SEE SHEET 36 FOR PROFILES OFBORINGS B-048-2-20 AND B-048-3-20. SEE SHEET 37 FOR PROFILES OFBORINGS B-050-1-20 AND B-050-2-20.

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 728+00 TO STA. 742+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 19 TOTAL 67
SHEET 1539 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 10:35:05 AM USER: kharper
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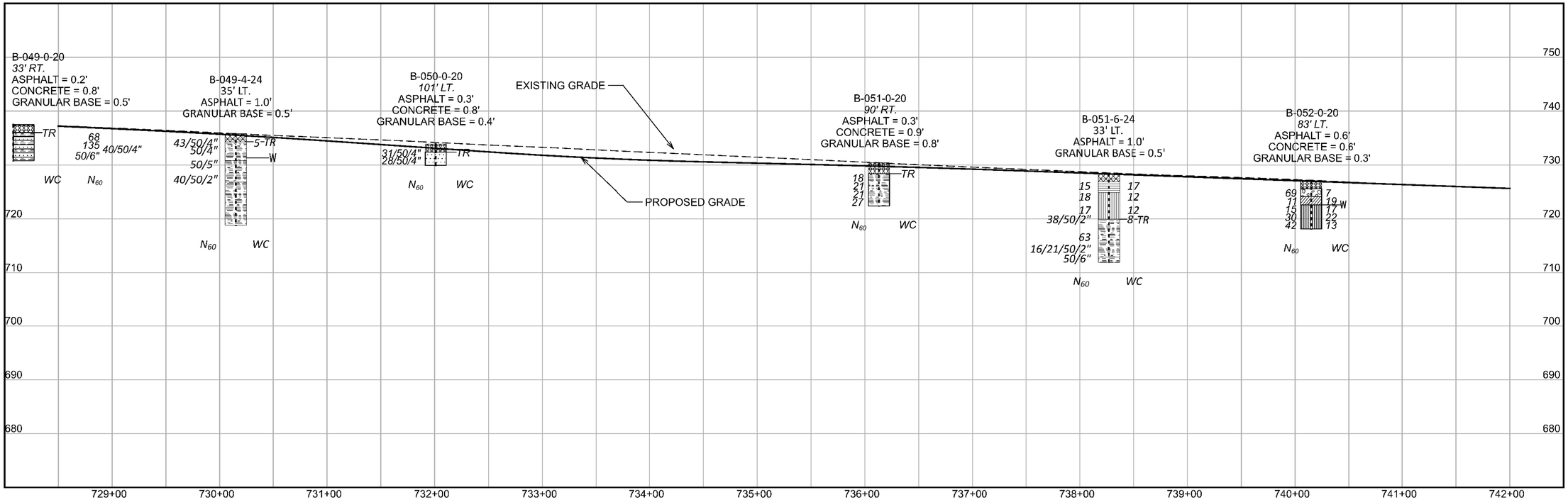
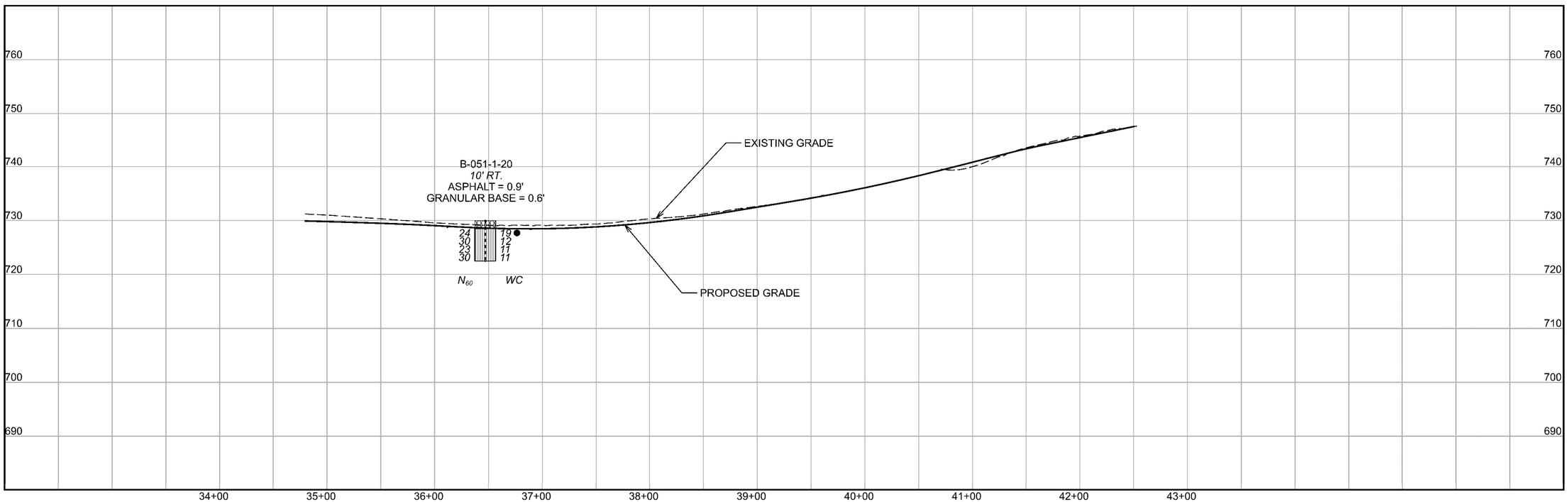
IR 90 CENTERLINE



RAMP W 117TH ST NB TO IR 90 WB



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
I.R. 90 STA. 728+00 TO STA. 742+50
RAMP W 117TH ST NB TO IR 90 WB STA. 34+50 TO STA. 43+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 19A TOTAL 67
SHEET 1539A TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in) DATE: 1/23/2025 TIME: 10:02:32 AM USER: kharper
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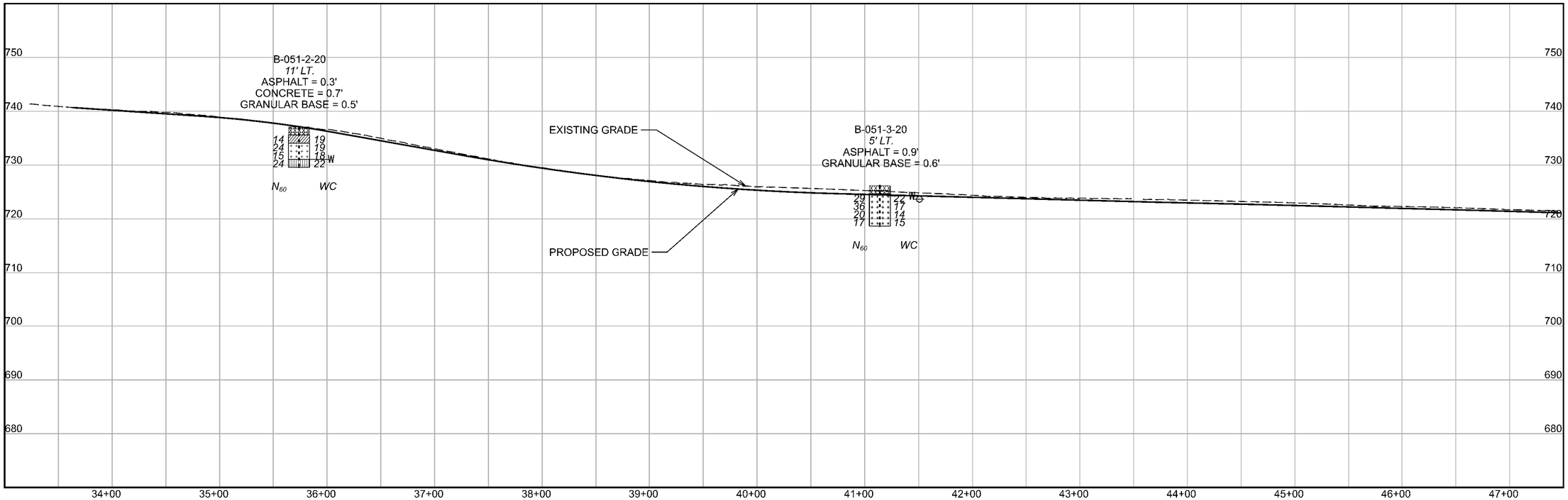
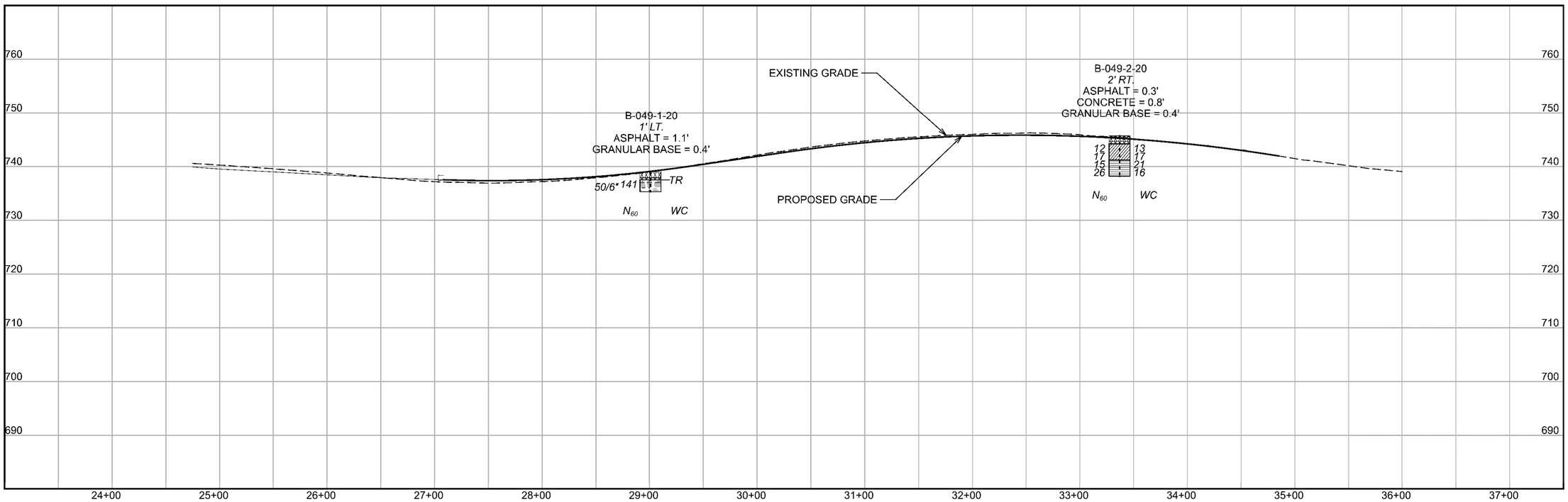
RAMP IR 90 WB TO W 117TH ST



RAMP W 117TH ST SB TO IR 90 WB



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP IR 90 WB TO W 117TH ST STA. 33+00 TO STA. 47+50
RAMP W 117TH ST SB TO IR 90 WB STA. 24+50 TO STA. 36+00

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET 19B TOTAL 67

SHEET 1539B TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in) DATE: 1/23/2025 TIME: 10:06:00 AM USER: kharper
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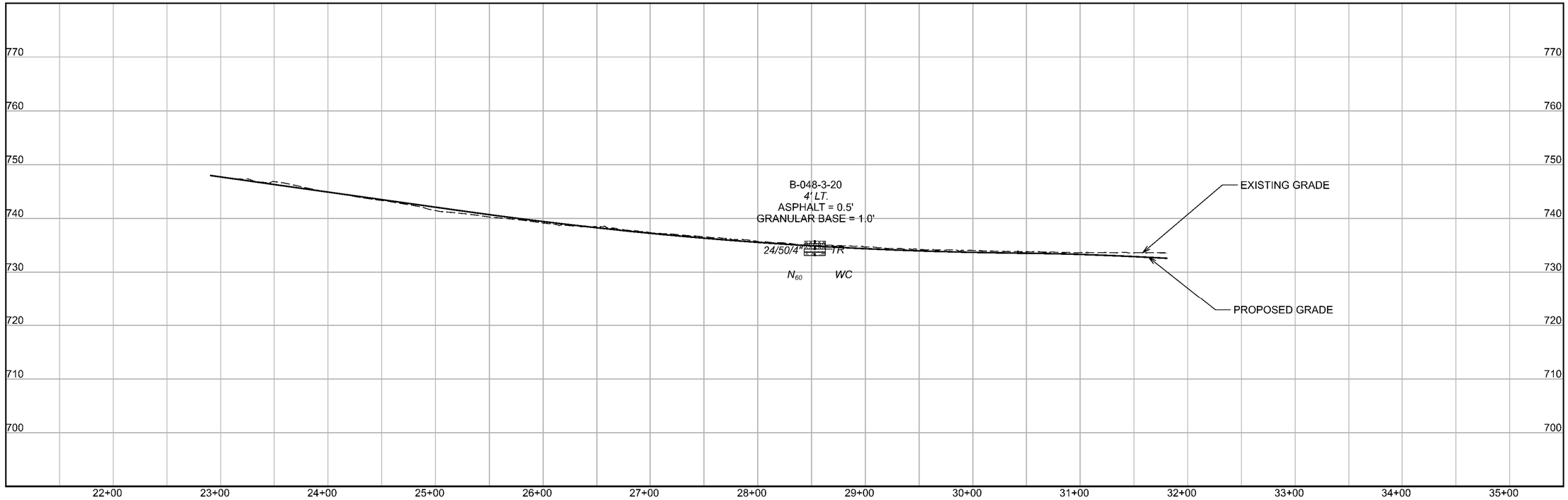
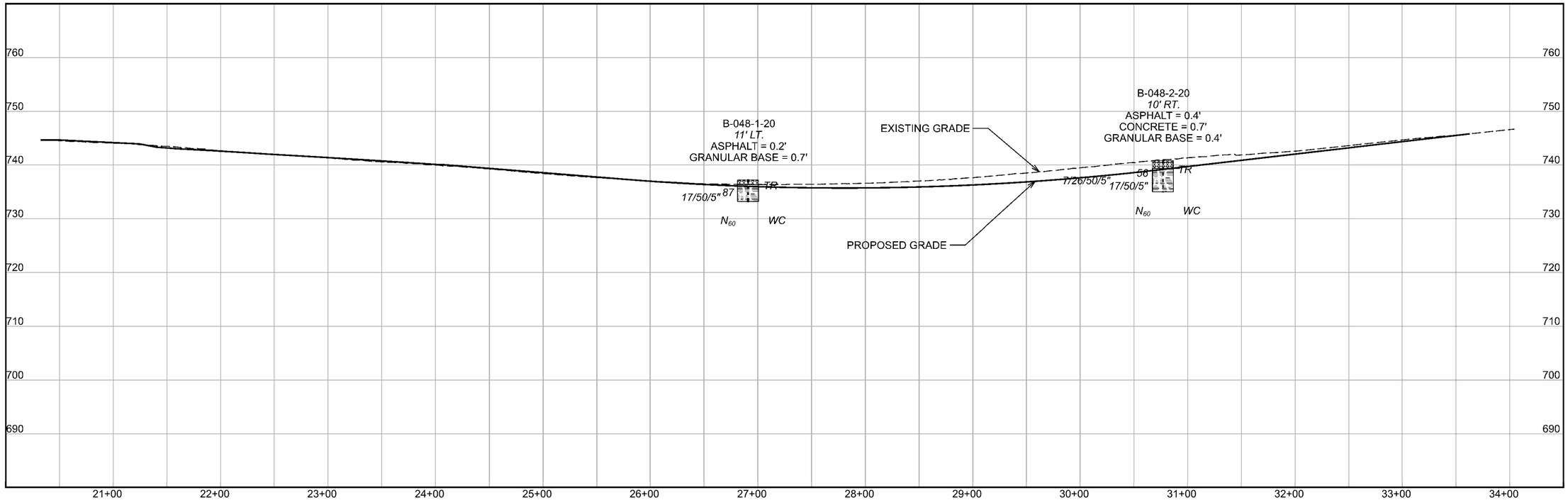
RAMP W 117TH ST SB TO IR 90 EB



RAMP IR 90 EB TO W 117TH ST



N

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY

RAMP W 117TH ST SB TO IR 90 EB STA. 22+50 TO STA. 32+00
RAMP IR 90 EB TO W 117TH ST STA. 20+00 TO STA. 34+50

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET	TOTAL
19C	67
SHEET	TOTAL
1539C	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 11:11:05 AM USER: kharper
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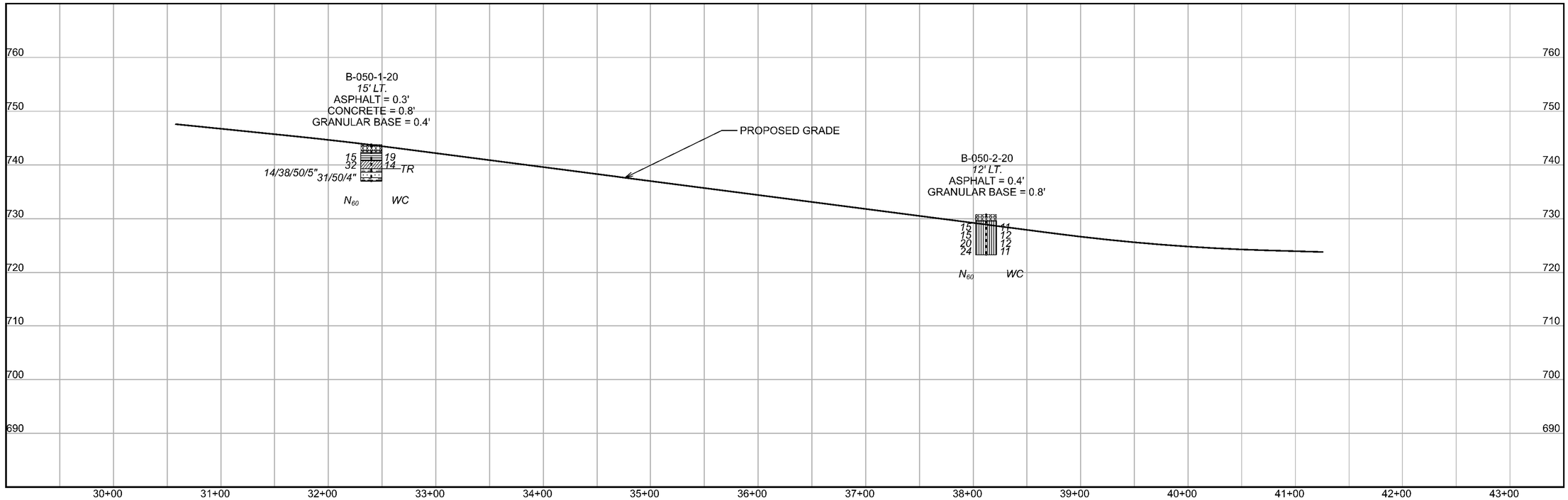
RAMP W 117TH ST NB TO IR 90 EB



CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 11:11:22 AM USER: khorper
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HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP W 117TH ST NB TO IR 90 EB STA. 30+50 TO STA. 41+50

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET 19D | TOTAL 67

SHEET 1539D | TOTAL 1587

LAND USAGE: RESIDENTIAL

W. 112TH ST

W. 111TH ST

W. 110TH ST

LAND USAGE: COMMERCIAL

MATCHLINE STA. 742+50

MATCHLINE STA. 757+00

PEDESTRIAN BRIDGE

℄ CONST. IR 90

B-053-1-24

B-053-0-20

B-054-0-20

B-054-3-24

B-055-0-20

B-056-0-20

Ex LA

S. FRONTAGE

LAND USAGE: RESIDENTIAL

LAND USAGE: COMMERCIAL

B-053-0-20
27' RT.
ASPHALT = 0.8'
GRANULAR BASE = 0.7'

B-053-1-24
32' LT.
ASPHALT = 1.0'
GRANULAR BASE = 0.5'

B-054-0-20
39' LT.
ASPHALT = 0.4'
CONCRETE = 0.8'
GRANULAR BASE = 0.3'

B-054-3-24
35' LT.
ASPHALT = 1.0'
GRANULAR BASE = 0.7'

B-055-0-20
34' RT.
ASPHALT = 0.3'
CONCRETE = 0.8'
GRANULAR BASE = 0.4'

B-056-0-20
30' LT.
ASPHALT = 0.3'
CONCRETE = 0.8'
GRANULAR BASE = 0.4'

EXISTING GRADE

PROPOSED GRADE

743+00 744+00 745+00 746+00 747+00 748+00 749+00 750+00 751+00 752+00 753+00 754+00 755+00 756+00

750 740 730 720 710 700 690 680

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 742+50 TO STA. 757+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 20 TOTAL 67
SHEET 1540 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 11x17in DATE: 1/23/2025 TIME: 11:25:26 AM USER: khorper
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LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

W. 106TH PL

W. 105TH ST

W. 106TH ST

N. FRONTAGE

S. FRONTAGE

WEST BLVD

MATCHLINE STA. 757+00

MATCHLINE STA. 771+50

℄ CONSL IR 90

B-056-1-24

B-057-0-20

B-057-1-20

B-057-2-20

B-057-3-24

B-058-0-20

B-059-1-20

B-059-0-20

B-059-5-24

NOTE: SEE SHEET 40 FOR PROFILES OF BORINGS B-057-1-20, B-057-2-20, AND B-059-1-20

HORIZONTAL SCALE IN FEET
0 25 50 100

PROPOSED GRADE

EXISTING GRADE

B-056-1-24
34' LT.
ASPHALT = 1.2'
GRANULAR BASE = 0.9'

B-057-0-20
111' RT.
ASPHALT = 0.9'
GRANULAR BASE = 0.6'

B-057-3-24
36' LT.
ASPHALT = 0.4'
CONCRETE = 0.9'
GRANULAR BASE = 0.4'

B-058-0-20
84' LT.
ASPHALT = 0.4'
CONCRETE = 0.8'
GRANULAR BASE = 0.3'

B-059-0-20
77' RT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'

B-059-5-24
33' LT.
ASPHALT = 0.3'
CONCRETE = 1.0'
GRANULAR BASE = 0.9'

N_{60} WC

760 750 740 730 720 710 700 690

758+00 759+00 760+00 761+00 762+00 763+00 764+00 765+00 766+00 767+00 768+00 769+00 770+00 771+00

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 757+00 TO STA. 771+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 21 TOTAL 67
SHEET 1541 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 11:53:43 AM USER: kharper
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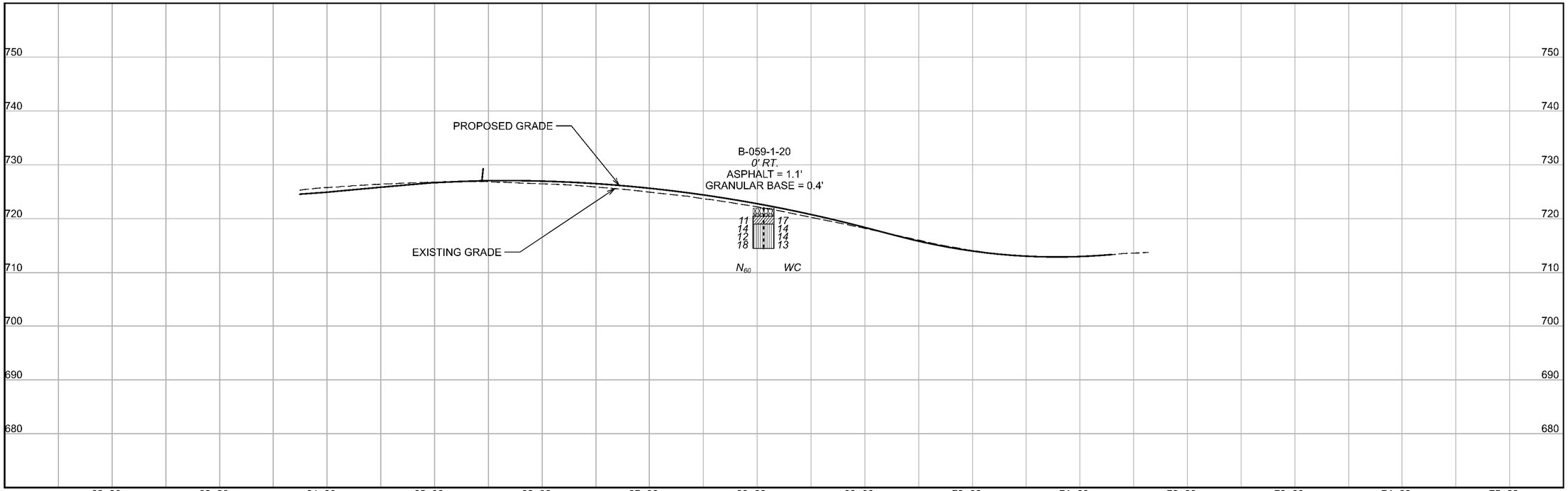
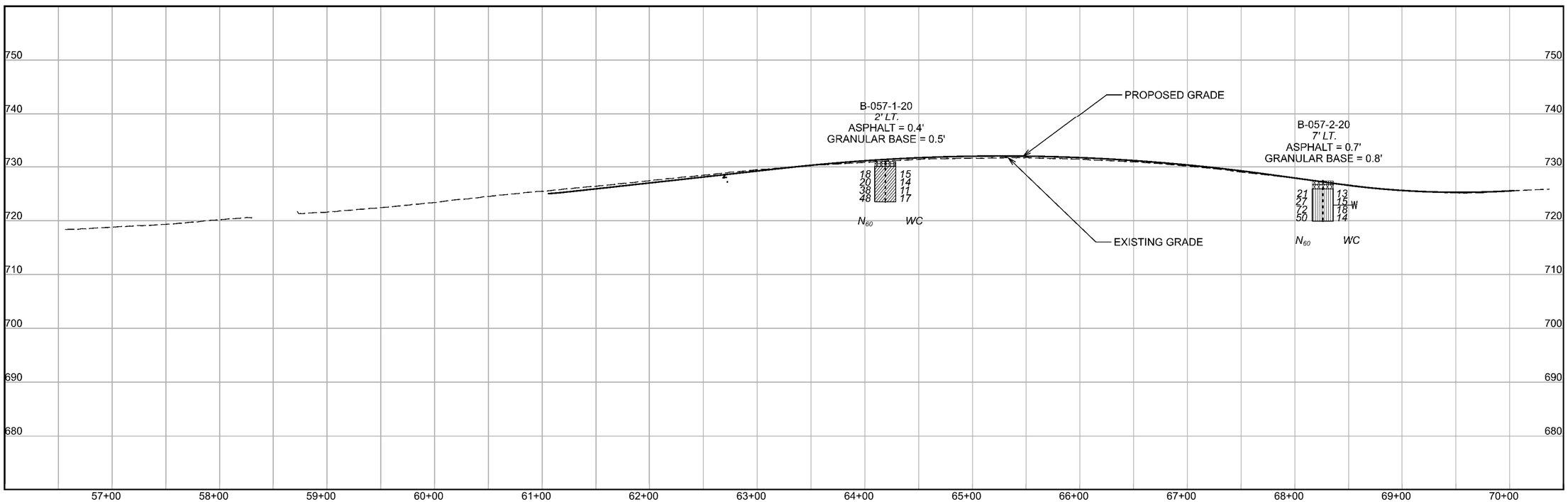
RAMP WEST BLVD TO IR 90 WB



RAMP IR 90 EB TO WEST BLVD



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE
RAMP WEST BLVD TO IR 90 WB STA. 63+50 TO STA. 72+00
RAMP IR 90 EB TO WEST BLVD STA. 56+50 TO STA. 70+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 21A TOTAL 67
SHEET 1541A TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in) DATE: 1/23/2025 TIME: 11:57:50 AM USER: kharper
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LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

WEST BLVD

W. 100TH ST

N. MARGINAL DRIVE

W. 98TH ST

S. MARGINAL DRIVE

MATCHLINE STA. 771+50

MATCHLINE STA. 786+00

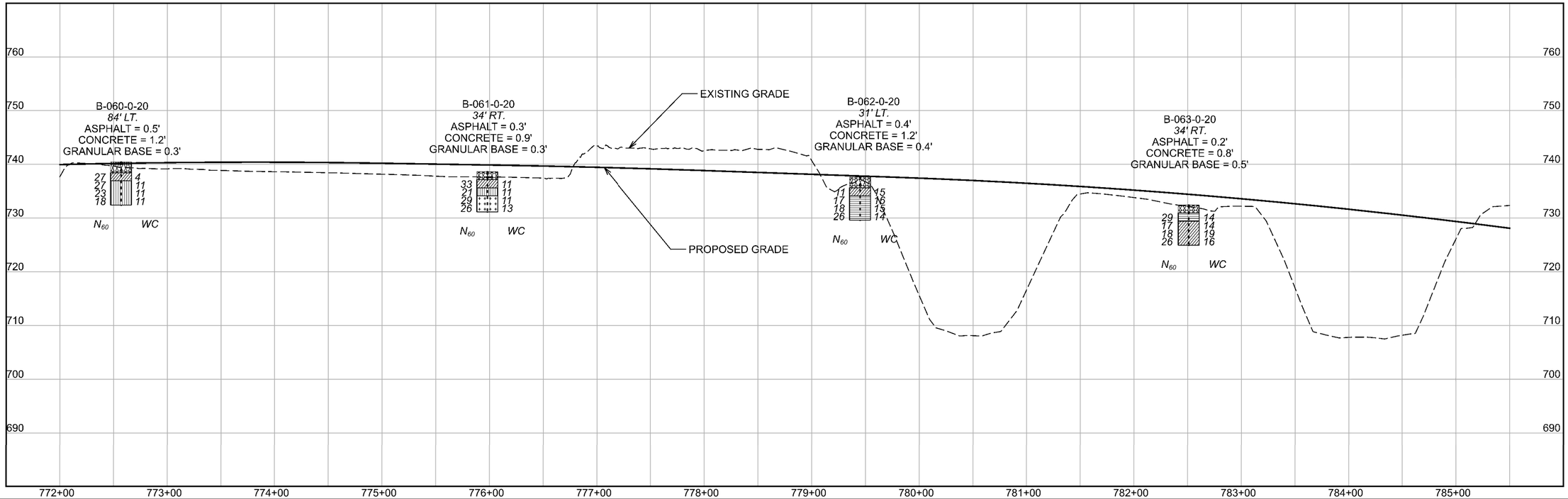
℄ CONST. HR 90

B-060-0-20

B-061-0-20

B-062-0-20

B-063-0-20



SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 771+50 TO STA. 786+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 22 TOTAL 67
SHEET 1542 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 12:05:4 PM USER: kharper
I:\Columbus-II70\Projects\2020\II79-20-02_ASL_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheet

LAND USAGE: RESIDENTIAL

W. 95TH ST

W. 93RD ST

W. 91ST ST

LAND USAGE: RESIDENTIAL

N. MARGINAL DRIVE

B-065-1-20

B-065-2-23

B-066-1-23

B-009-0-69

℄ CONST. IR 90

B-064-0-20

B-066-0-20

MATCHLINE STA. 786+00

MATCHLINE STA. 800+50

B-065-0-20

PEDESTRIAN BRIDGE

B-067-0-20

B-064-1-20

S. MARGINAL DRIVE

W. 97TH ST

W. 96TH ST

W. 95TH ST

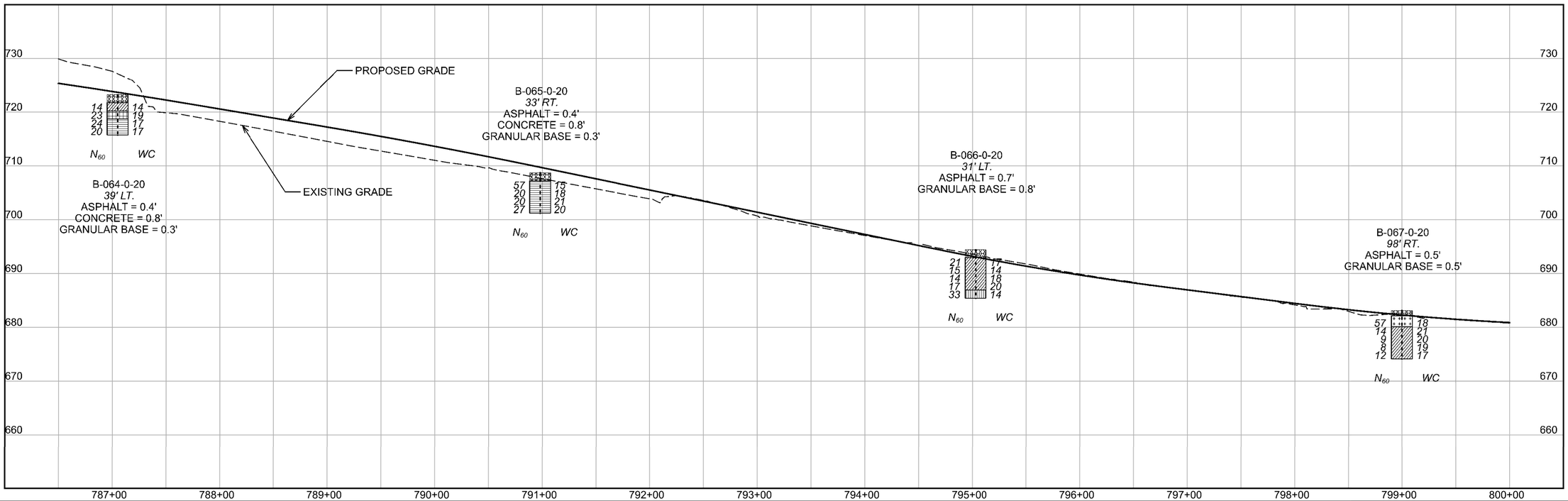
W. 93RD ST

LORAIN AVE

W. 95TH ST

LAND USAGE: RESIDENTIAL

NOTE: SEE SHEET 43 FOR PROFILES OF BORINGS
B-064-1-20 THROUGH B-066-1-23 and B-009-0-69



SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 786+00 TO STA. 800+50

HORIZONTAL SCALE IN FEET
0 25 50 100

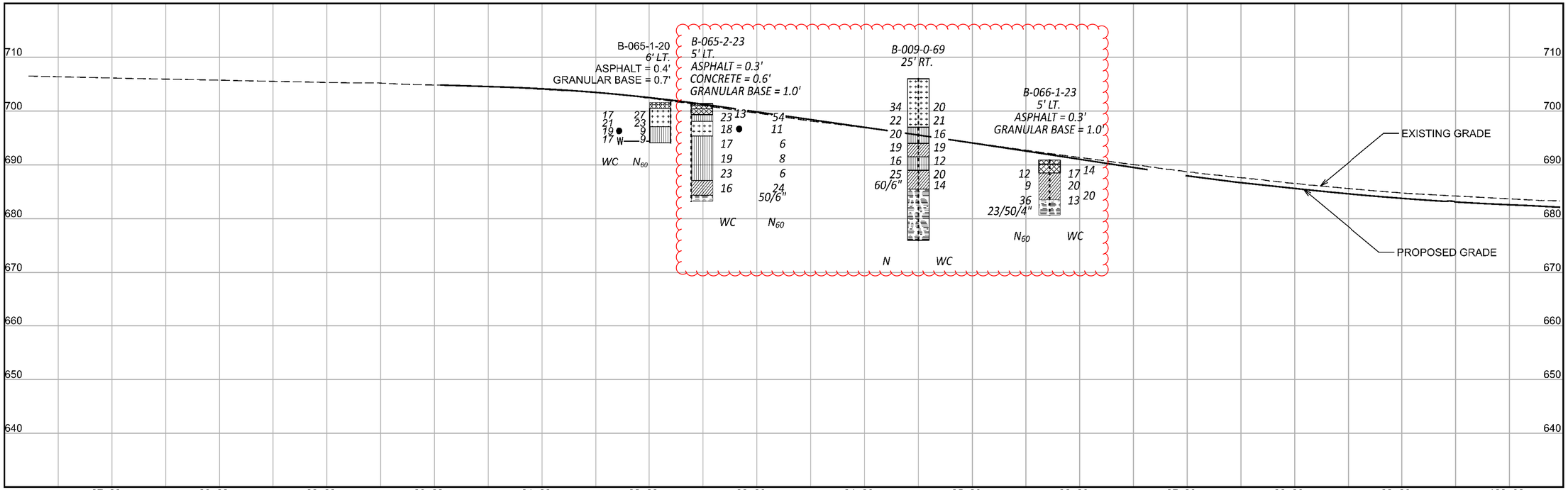
DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 23 TOTAL 67
SHEET 1543 TOTAL 1587

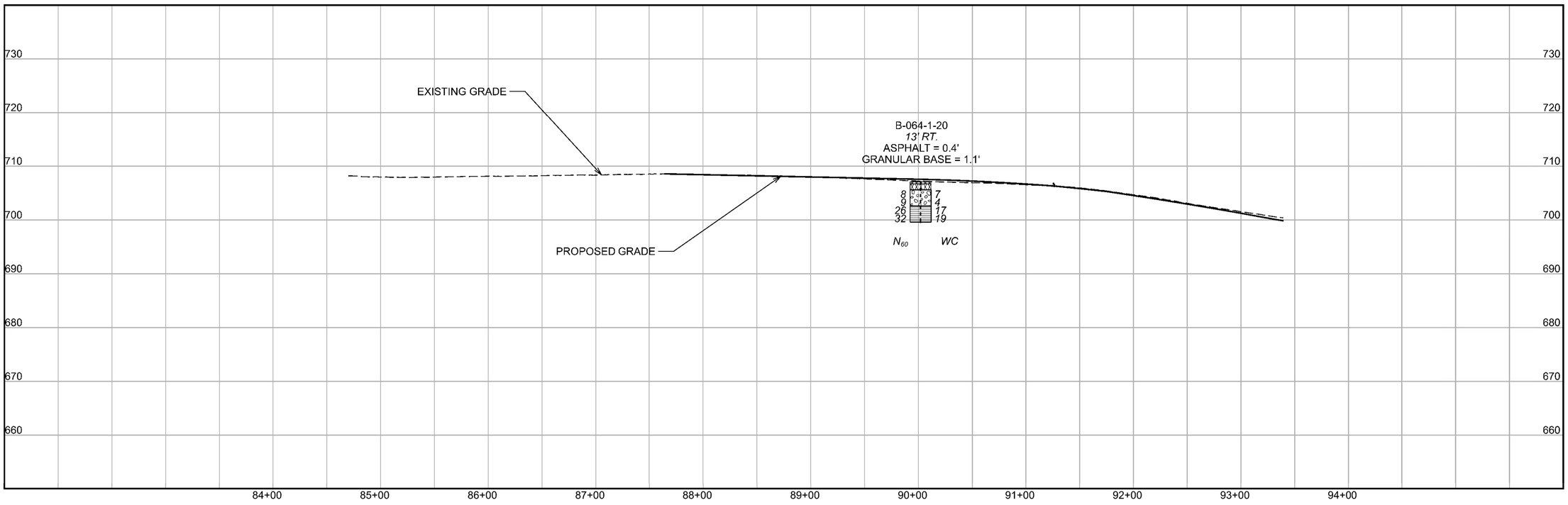
CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 12:45:11PM USER: kharper
F:\Columbus-ILTO\Projects\2020\II79-20-02_ASL\CUY-90-6.83 Pavement\CADD\76779\400-Engineering\Geotechnical\Sheets\76779_YPOI3 (Sta. 786+00 - 800+50).dgn

RAMP IR 90 WB TO N MARGINAL DR



RAMP S. MARGINAL TO IR 90 EB



N

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP IR 90 WB TO N MARGINAL DR STA. 86+00 TO STA. 100+50
RAMP S. MARGINAL TO IR 90 EB STA. 84+50 TO STA. 93+50

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET 23A TOTAL 67

SHEET 1543A TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 12:15:59 PM USER: kharper
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LAND USAGE: RESIDENTIAL

LORAIN AVE

W. 85TH ST

W. 83RD ST

B-068-0-20

B-069-0-20

B-070-0-20

B-071-1-20

B-071-0-20

℄ CONST. IR 90

MATCHLINE STA. 800+50

MATCHLINE STA. 815+00

LAND USAGE: RESIDENTIAL

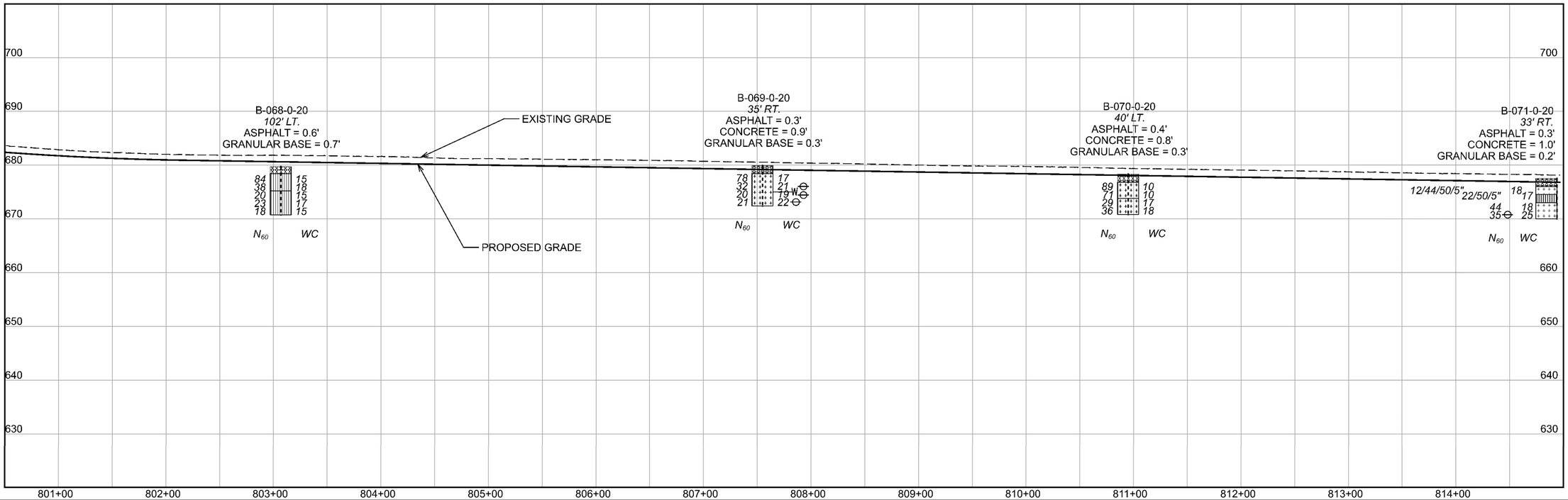
NOTE: SEE SHEET 46 FOR PROFILES OF BORINGS B-071-1-20

LAND USAGE: RESIDENTIAL

W. 86TH ST

W. 86TH ST

CLARK AVE



SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 800+50 TO STA. 815+00

HORIZONTAL SCALE IN FEET
0 25 50 100

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 24 TOTAL 67
SHEET 1544 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 12:43:35 PM USER: kharper
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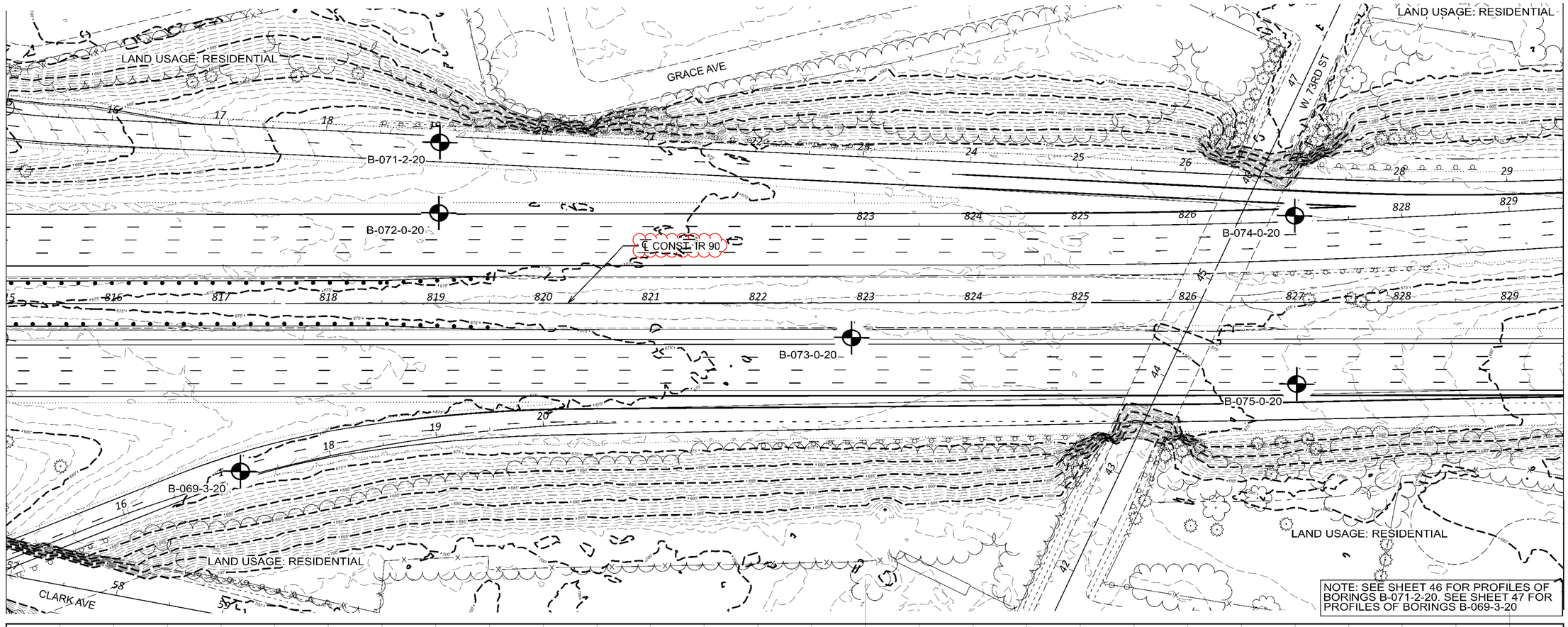

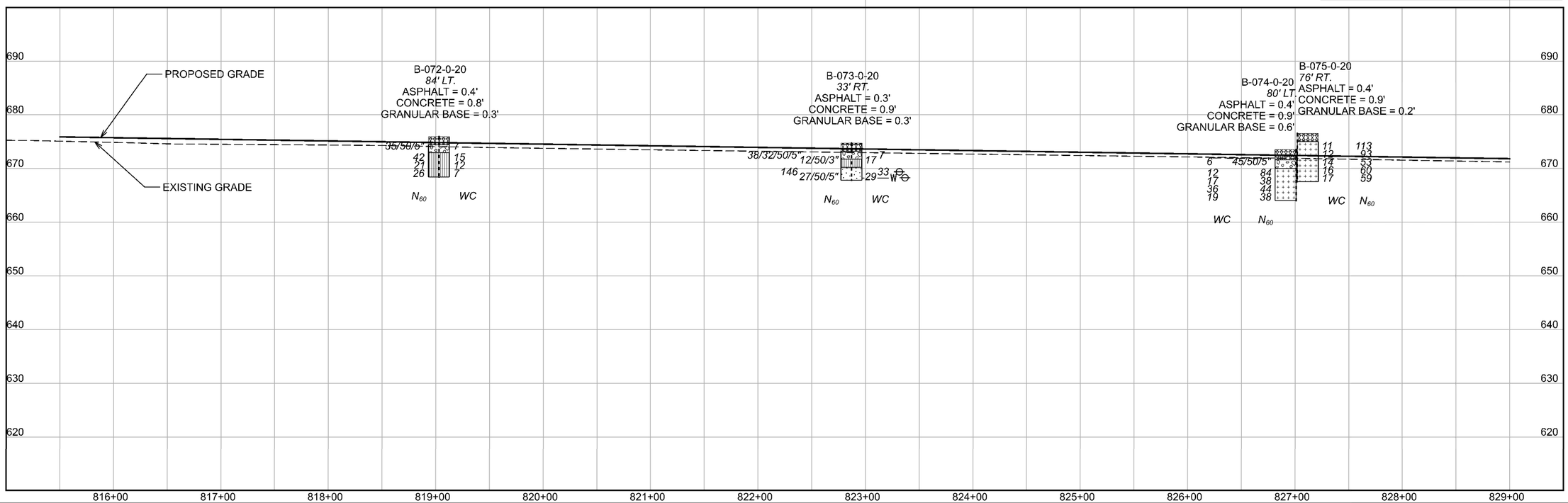

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 815+00 TO STA. 829+50

DESIGN AGENCY

DESIGNER: KAH
REVIEWER: BKS
PROJECT ID: 76779
SUBSET: 25 TOTAL: 67
SHEET: 1545 TOTAL: 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 12:51:26 PM USER: kharper
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CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 05:18 PM USER: kharper
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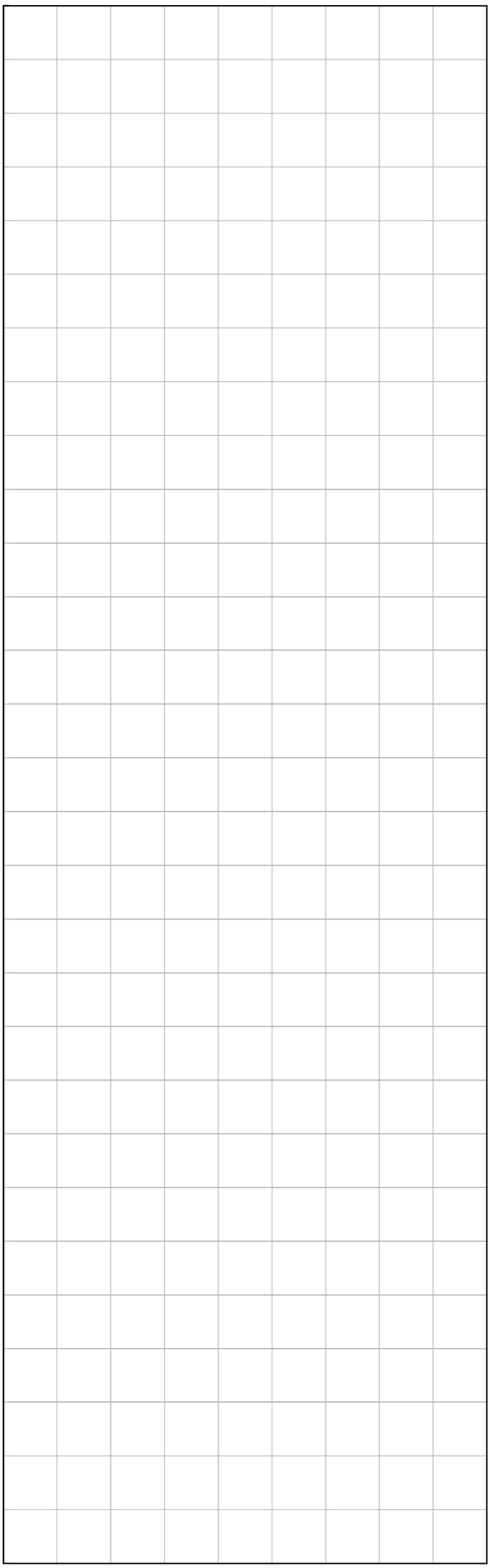
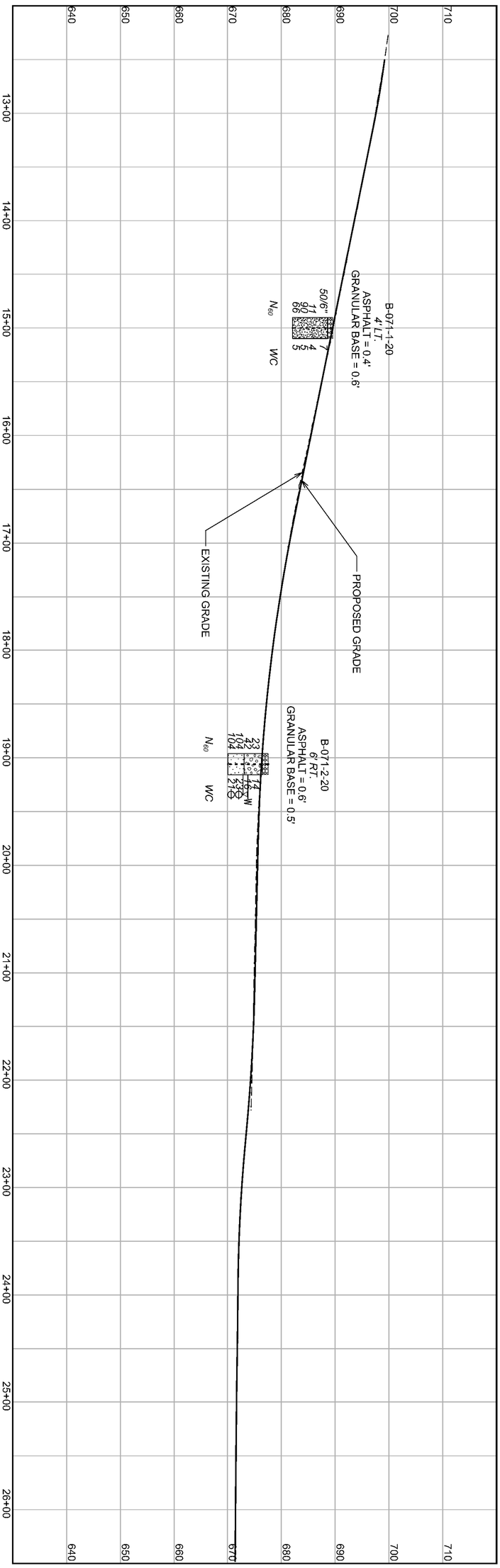




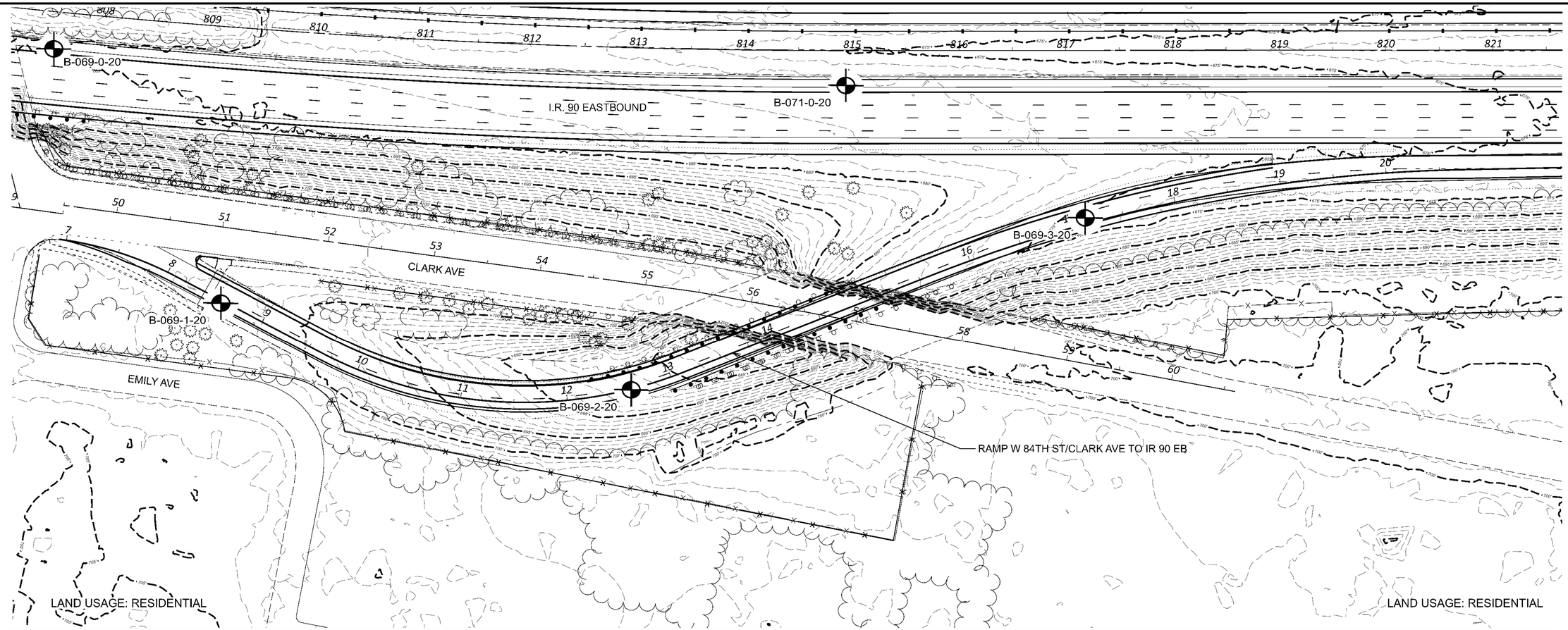
SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP IR 90 WB TO LORAIN AVE STA. 12+00 TO STA. 26+50

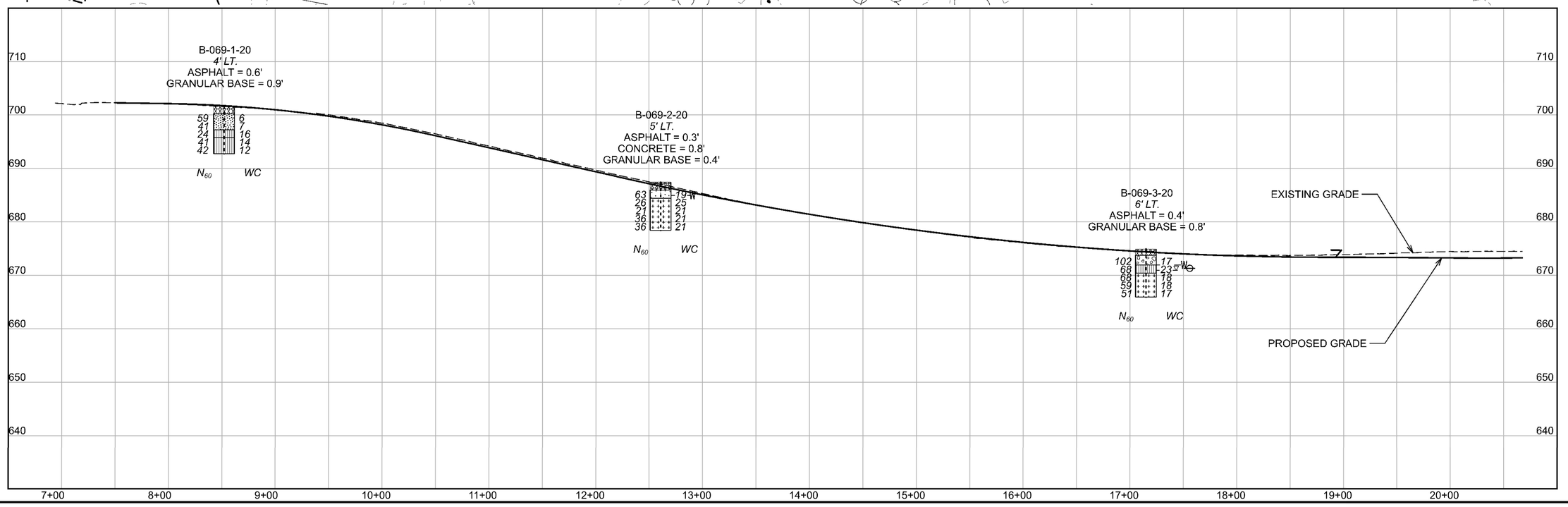
HORIZONTAL SCALE IN FEET
0 50
25 100

N

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 25A TOTAL 67
SHEET 1545A TOTAL 1587





HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP W 84TH ST/CLARK AVE TO IR 90 EB STA. 7+00 TO STA. 21+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 26 TOTAL 67
SHEET 1546 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 1:09:57 PM USER: kharper
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LAND USAGE: RESIDENTIAL

℄ CONST. IR 90 WESTBOUND

LAND USAGE: RESIDENTIAL

B-083-0-20

B-076-0-20

B-080-0-20

B-078-0-20

MATCHLINE STA. 829+50

℄ CONST. IR 90

W. 65TH ST

B-077-0-20

B-079-0-20

B-082-0-20

MATCHLINE STA. 844+00

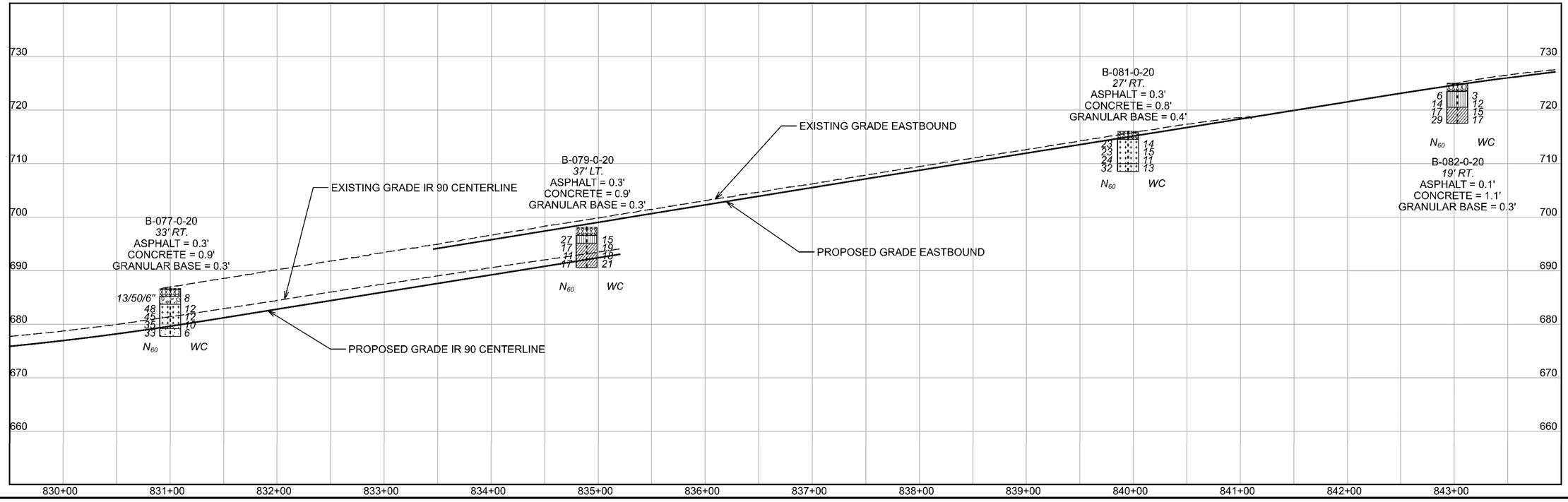
B-081-0-20

HOPE AVE

℄ CONST. IR 90 EASTBOUND

LAND USAGE: RESIDENTIAL

LAND USAGE: COMMERCIAL



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 829+50 CENTERLINE TO STA. 844+00 EASTBOUND

DESIGN AGENCY

DESIGNER KAH

REVIEWER BKS

PROJECT ID 76779

SUBSET 27 TOTAL 67

SHEET 1547 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 1:26:11 PM USER: khorper
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LAND USAGE: RESIDENTIAL

℄ CONST. IR 90 WESTBOUND

LAND USAGE: RESIDENTIAL

B-083-0-20

B-076-0-20

B-080-0-20

B-078-0-20

MATCHLINE STA. 829+50

℄ CONST. IR 90

B-077-0-20

B-079-0-20

W. 66TH ST

B-082-0-20

MATCHLINE STA. 844+00

B-081-0-20

HOPE AVE

℄ CONST. IR 90 EASTBOUND

LAND USAGE: RESIDENTIAL

LAND USAGE: COMMERCIAL

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 829+50 CENTERLINE TO STA. 844+00 WESTBOUND

EXISTING GRADE WESTBOUND

PROPOSED GRADE

B-076-0-20
29' LT. (IR 90 WB)
ASPHALT = 0.6'
GRANULAR BASE = 0.6'

B-078-0-20
41' RT. (IR 90 WB)
ASPHALT = 0.6'
GRANULAR BASE = 0.7'

B-080-0-20
31' RT. (IR 90 WB)
ASPHALT = 0.3'
CONCRETE = 0.8'
GRANULAR BASE = 0.4'

B-083-0-20
17' LT. (IR 90 WB)
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'

700 690 680 670 660 650 640 630

830+00 831+00 832+00 833+00 834+00 835+00 836+00 837+00 838+00 839+00 840+00 841+00 842+00 843+00

DESIGN AGENCY

DESIGNER KAH

REVIEWER BKS

PROJECT ID 76779

SUBSET 28 TOTAL 67

SHEET 1548 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 1:35:31 PM USER: khorper
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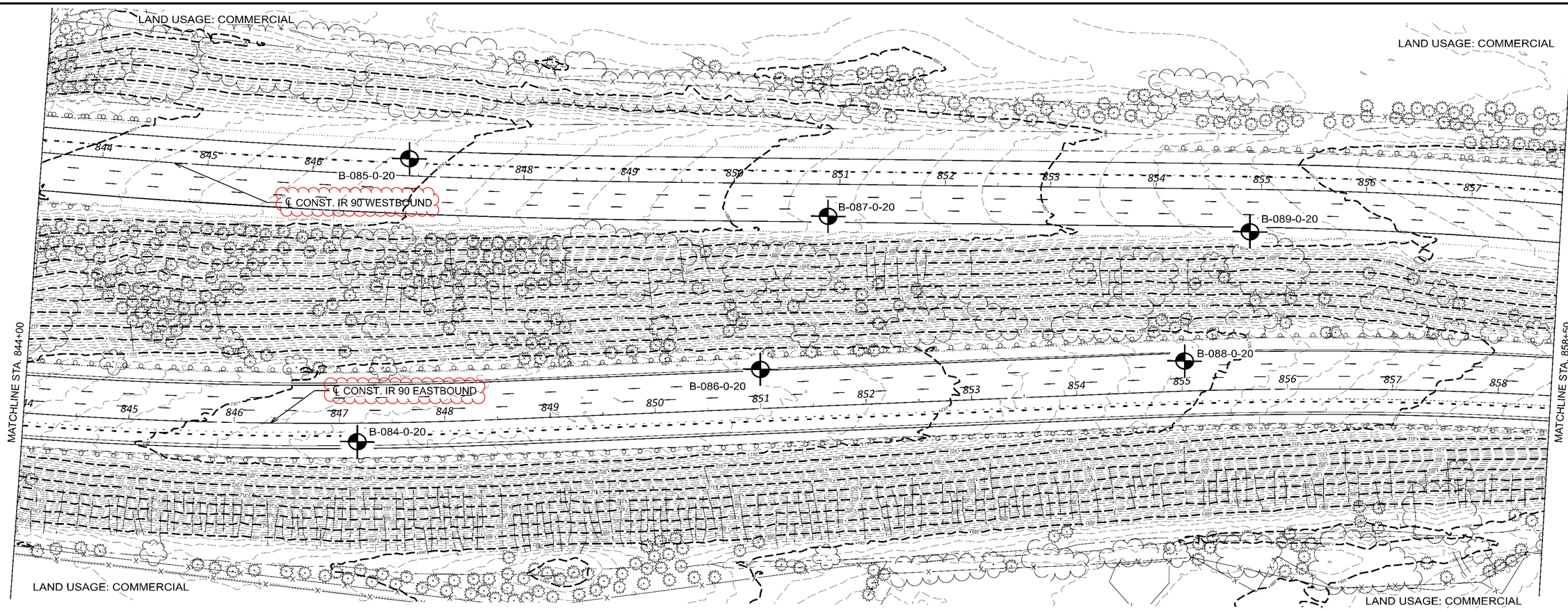

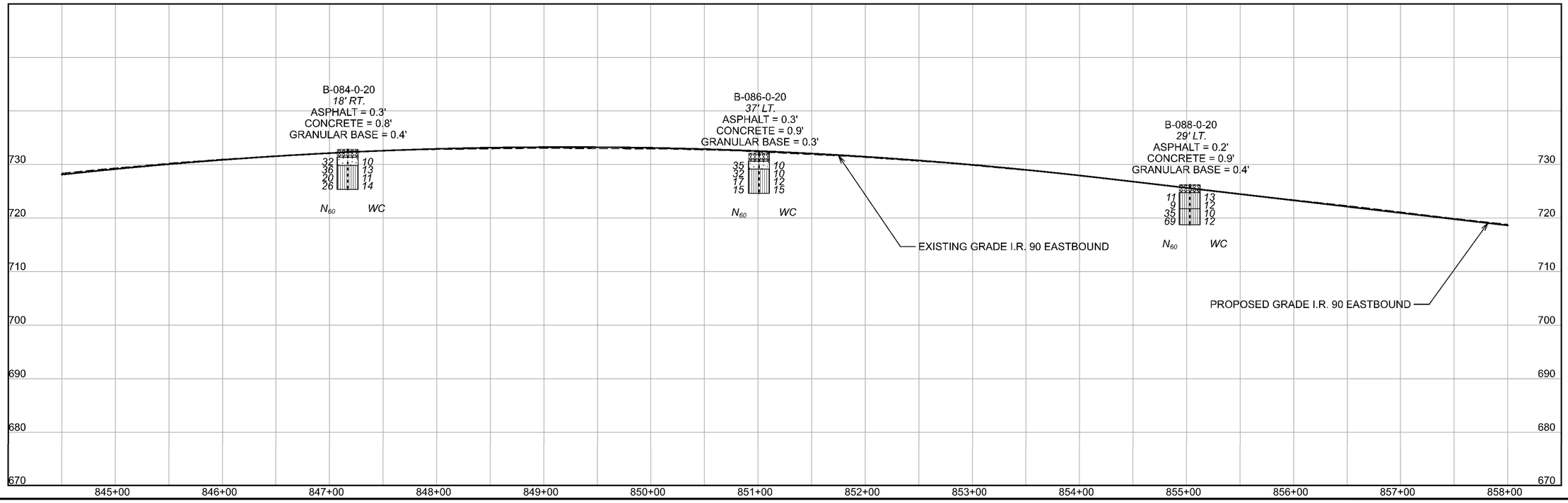

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 844+00 TO STA. 858+50 EASTBOUND

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 29 TOTAL 67
SHEET 1549 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 1:46:40 PM USER: kharper
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LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

MATCHLINE STA. 844+00

MATCHLINE STA. 858+50

B-085-0-20

℄ CONST. IR 90 WESTBOUND

B-087-0-20

B-089-0-20

B-088-0-20

B-086-0-20

℄ CONST. IR 90 EASTBOUND

B-084-0-20

LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

B-085-0-20
16' LT. (IR 90 WB)
ASPHALT = 0.3'
CONCRETE = 1.0'
GRANULAR BASE = 0.2'

95 GRS 11
35 11
27 14
38 13

N_{60} WC

B-087-0-20
30' RT. (IR 90 WB)
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'

24
15
8
11

N_{60} WC

EXISTING GRADE I.R. 90 WESTBOUND

PROPOSED GRADE I.R. 90 WESTBOUND

41 9
23 6
8 22
12 23

N_{60} WC

B-089-0-20
40' RT. (IR 90 WB)
ASPHALT = 0.3'
CONCRETE = 1.0'
GRANULAR BASE = 0.7'

700 690 680 670 660 650 640 630

845+00 846+00 847+00 848+00 849+00 850+00 851+00 852+00 853+00 854+00 855+00 856+00 857+00 858+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 844+00 TO STA. 858+50 WESTBOUND

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 30 TOTAL 67
SHEET 1550 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 2:01:44 PM USER: kharper
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LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

B-091-0-20

B-092-0-20

℄ CONST. IR 90 WESTBOUND

B-094-0-20

℄ CONST. IR 90 EASTBOUND

B 093 0 20

B-090-0-20

B-095-0-20

MATCHLINE STA. 858+50

MATCHLINE STA. 872+50

W. 53RD ST

WALWORTH AVE

FENWICK AVE

LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

B-090-0-20
18' RT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'

33 11
30 11
35 11
72 11
N_{60} WC

B-093-0-20
27' RT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'

24 12
53 15
45 15
42 12
N_{60} WC

EXISTING GRADE EASTBOUND

PROPOSED GRADE EASTBOUND

B-095-0-20
38' LT.
ASPHALT = 0.3'
CONCRETE = 0.9'
GRANULAR BASE = 0.3'

54 20
54 9
47 12
51 12
N_{60} WC

720 710 700 690 680 670 660 650

859+00 860+00 861+00 862+00 863+00 864+00 865+00 866+00 867+00 868+00 869+00 870+00 871+00 872+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 858+50 TO STA. 872+50 EASTBOUND

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 31 TOTAL 67
SHEET 1551 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 11x17in DATE: 1/23/2025 TIME: 2:34:02 PM USER: kharper
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LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

B-091-0-20

B-092-0-20

℄ CONST. IR 90 WESTBOUND

B-094-0-20

℄ CONST. IR 90 EASTBOUND

B 093 0 20

B-095-0-20

B-090-0-20

MATCHLINE STA. 858+50

MATCHLINE STA. 872+50

W. 53RD ST

WALWORTH AVE

FENWICK AVE

LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

B-091-0-20
18' LT. (IR 90 WB)
ASPHALT = 0.3'
CONCRETE = 0.8'
GRANULAR BASE = 0.4'

N_{60}	WC
53	9
75	12
59	10
54	12

B-092-0-20
19' LT. (IR 90 WB)
ASPHALT = 0.2'
CONCRETE = 0.9'
GRANULAR BASE = 0.4'

N_{60}	WC
36	13
30	13
24	14
29	18

B-094-0-20
32' RT. (IR 90 WB)
ASPHALT = 0.4'
CONCRETE = 0.8'
GRANULAR BASE = 0.3'

N_{60}	WC
30	14
29	13
24	14
36	14

EXISTING GRADE WESTBOUND

PROPOSED GRADE WESTBOUND

720 710 700 690 680 670 660 650

859+00 860+00 861+00 862+00 863+00 864+00 865+00 866+00 867+00 868+00 869+00 870+00 871+00 872+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 858+50 TO STA. 872+50 WESTBOUND

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 32 TOTAL 67
SHEET 1552 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 11x17in DATE: 1/23/2025 TIME: 2:37:33 PM USER: kharper
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LAND USAGE: RESIDENTIAL

LAND USAGE: RESIDENTIAL

N. MARGINAL DRIVE

B-097-1-20

B-098-0-20

℄ CONST. IR 90

B-096-0-20

B-097-0-20

I.R. 90 EASTBOUND

MATCHLINE STA. 872+50

MATCHLINE STA. 887+00

B-099-0-20

S. MARGINAL DRIVE

B-096-1-20

B-096-2-20

FENWICK AVE

W. 44TH ST

BUCKLEY AVE

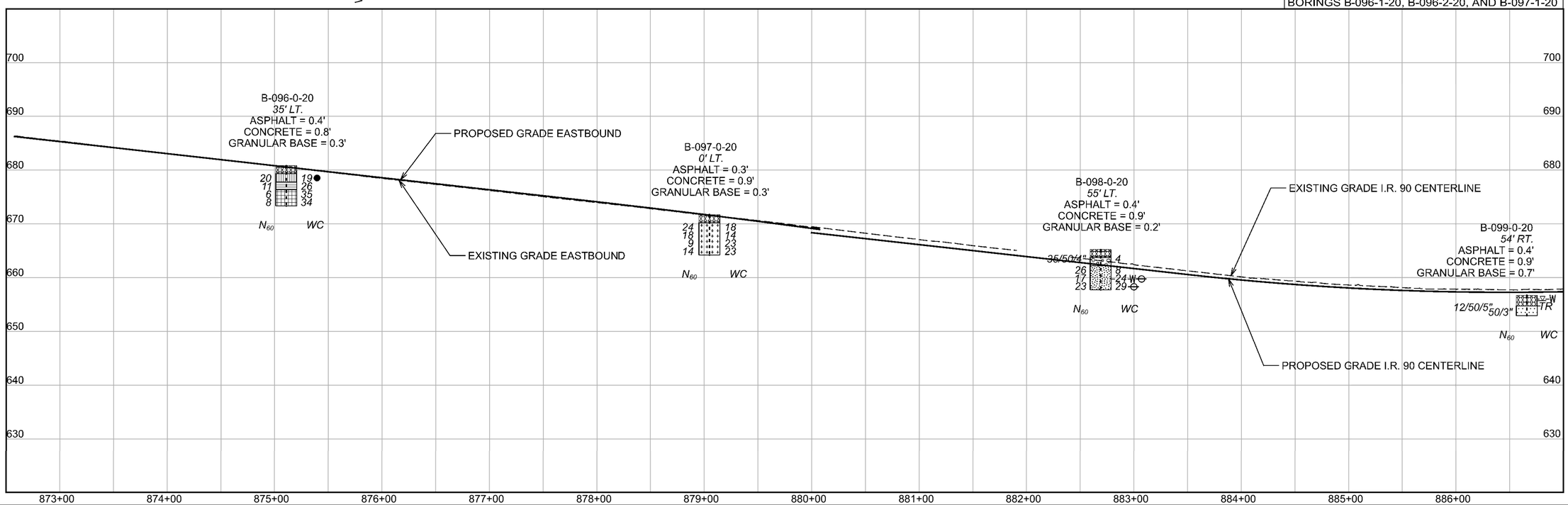
W. 46TH PL

W. 45TH ST

LAND USAGE: RESIDENTIAL

LAND USAGE: COMMERCIAL

NOTE: SEE SHEET 55 FOR PROFILES OF BORINGS B-096-1-20, B-096-2-20, AND B-097-1-20



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 872+50 TO STA. 887+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 33 TOTAL 67
SHEET 1553 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in) DATE: 1/23/2025 TIME: 2:42:07 PM USER: kharper
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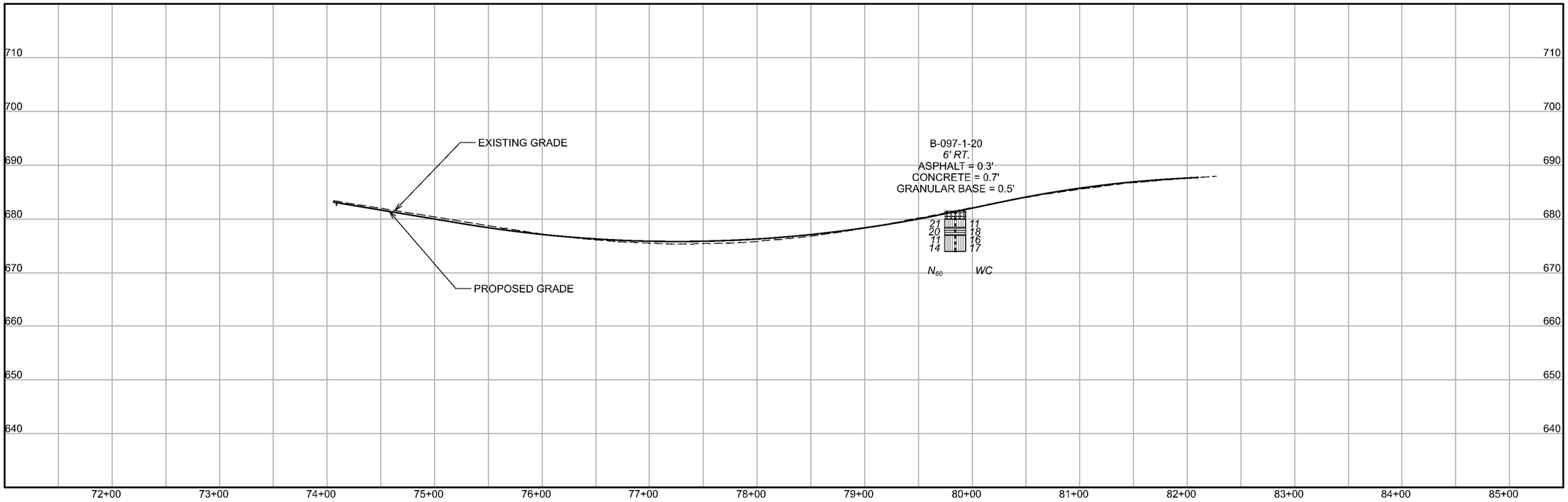
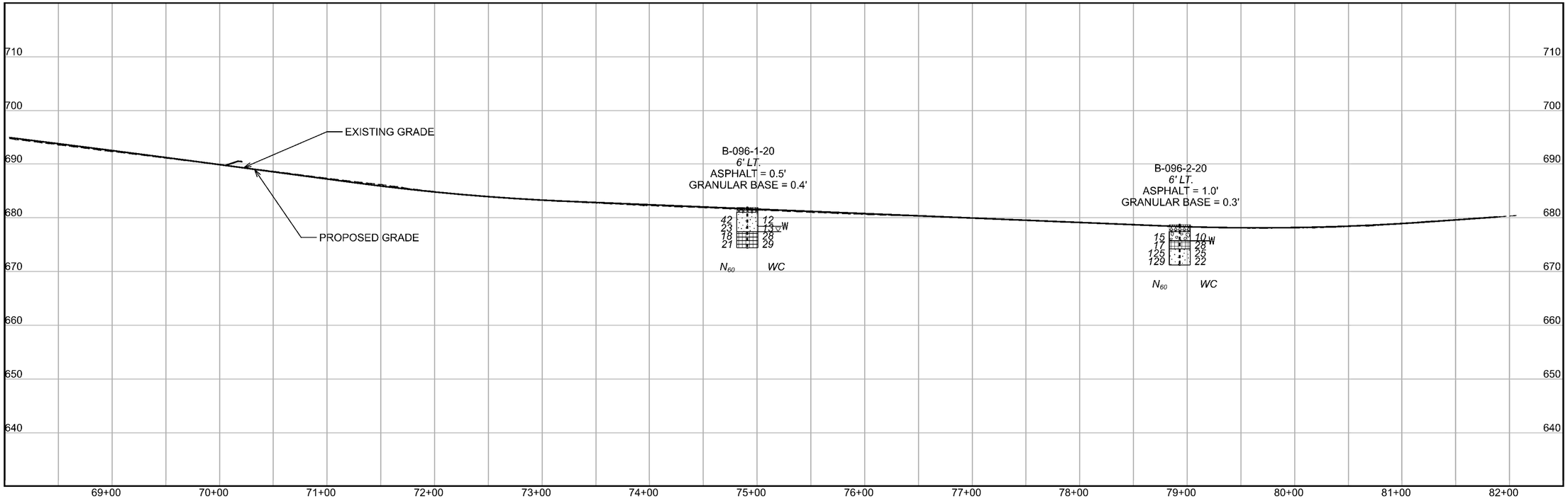
RAMP W 44TH ST/N MARGINAL RD TO IR 90 WB



RAMP IR 90 EB TO W 44TH ST



N

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP W 44TH ST/N MARGINAL RD TO IR 90 WB STA. 74+00 TO STA. 82+50
RAMP IR 90 EB TO W 44TH ST STA. 68+00 TO STA. 82+50

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET 33A TOTAL 67

SHEET 1553A TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 2:50:51PM USER: kharper
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LAND USAGE: RESIDENTIAL

N. MARGINAL DRIVE

W. 41ST ST

W. 40TH ST

W. 38TH ST

LAND USAGE: COMMERCIAL

MATCHLINE STA. 887+00

MATCHLINE STA. 901+50

B-100-3-23

B-100-2-20

B-100-4-23

B-101-2-23

B-100-0-20

℄ CONST IR 90

B-101-0-20

B-100-1-20

RR TRACKS

S. MARGINAL DRIVE

BUCKLEY AVE

LAND USAGE: COMMERCIAL

LAND USAGE: COMMERCIAL

NOTE: SEE SHEET 57 FOR PROFILES OF BORINGS B-100-1-20 THROUGH B-101-2-23

B-100-0-20
53' LT.
ASPHALT = 0.5'
CONCRETE = 0.4'
GRANULAR BASE = 1.1'

B-101-0-20
8' RT.
ASPHALT = 0.4'
CONCRETE = 0.8'
GRANULAR BASE = 0.3'

EXISTING GRADE

PROPOSED GRADE

N_{60} WC

700 690 680 670 660 650 640 630

888+00 889+00 890+00 891+00 892+00 893+00 894+00 895+00 896+00 897+00 898+00 899+00 900+00 901+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 887+00 TO STA. 901+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 34 TOTAL 67
SHEET 1554 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in DATE: 1/23/2025 TIME: 2:56:54 PM USER: kharper
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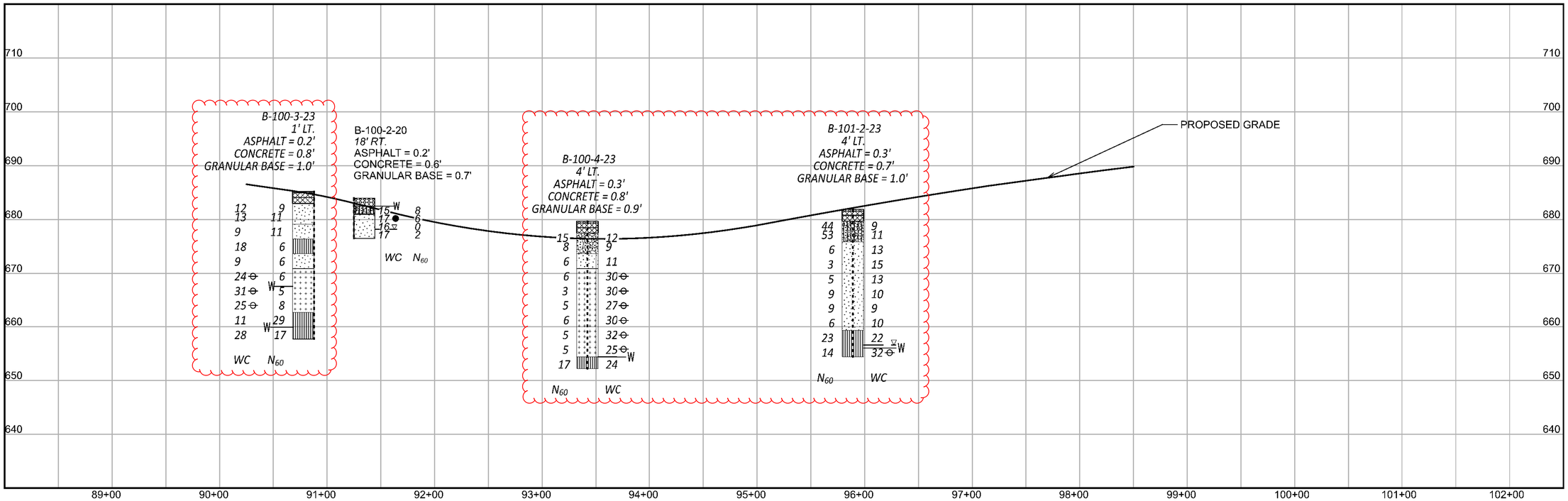
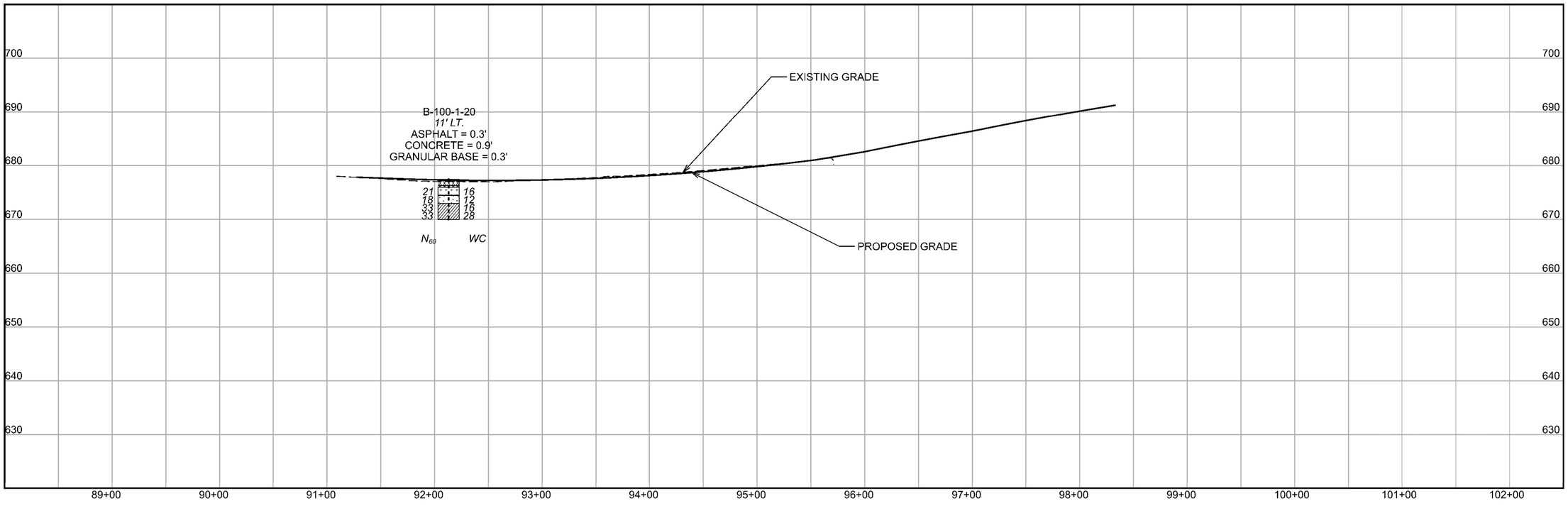
RAMP IR 90 WB TO W 41ST ST/N MARGINAL RD



RAMP W 41ST ST/S MARGINAL RD TO IR 90 EB



N

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP IR 90 WB TO W 41ST ST/N MARGINAL RD STA. 90+00 TO STA. 98+50
RAMP W 41ST ST/S MARGINAL RD TO IR 90 EB STA. 91+00 TO STA. 98+50

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET 34A | TOTAL 67

SHEET 1554A | TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 3:09:02 PM USER: kharper
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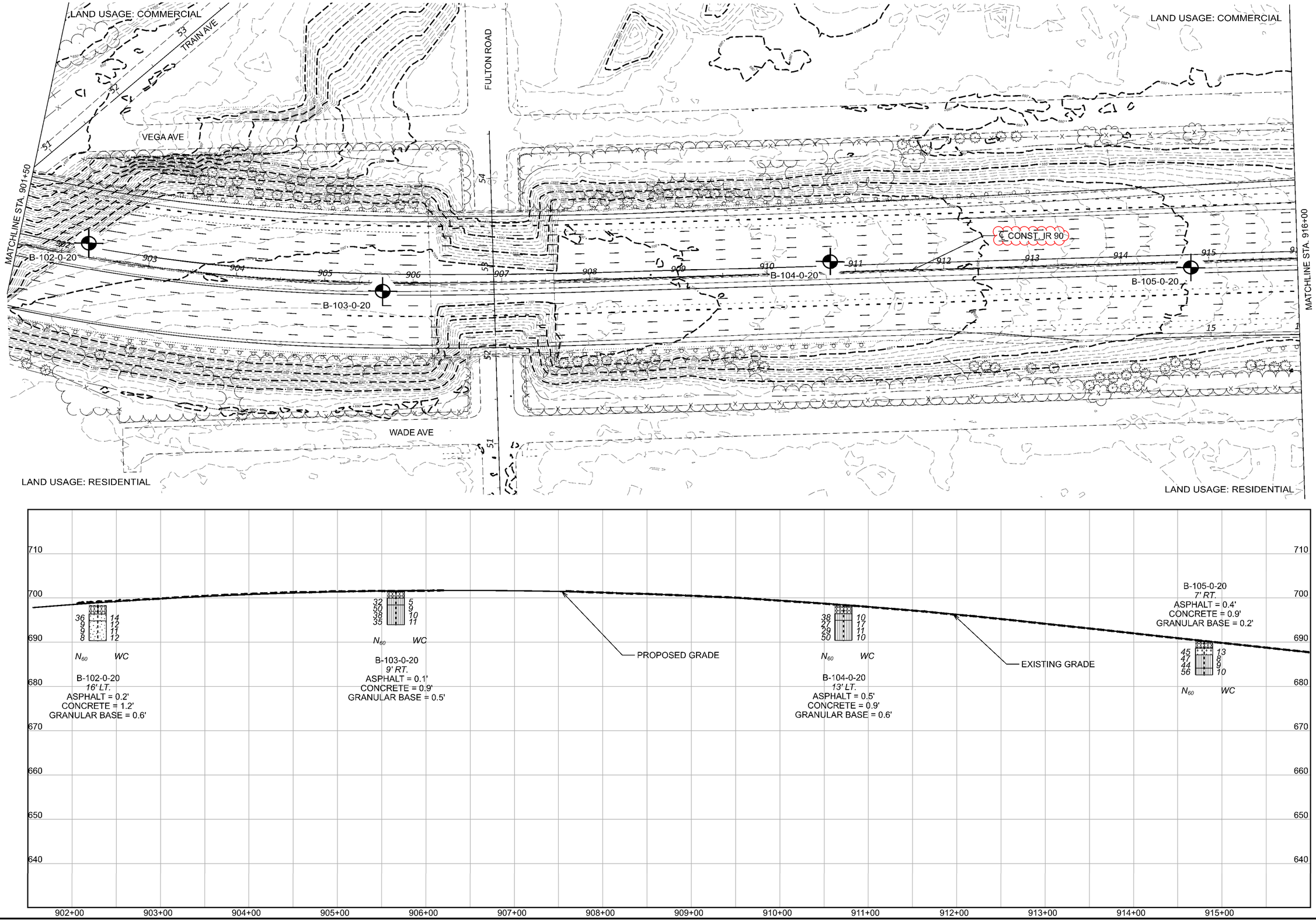

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 901+50 TO STA. 916+00

DESIGN AGENCY

DESIGNER: KAH
REVIEWER: BKS
PROJECT ID: 76779
SUBSET: 35 TOTAL: 67
SHEET: 1555 TOTAL: 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 3:44:4 PM USER: kharper
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LAND USAGE: RESIDENTIAL

W. 32ND ST

W. 30TH ST

VEGA AVE

MATCHLINE STA. 916+00

MATCHLINE STA. 929+50

℄ CONST. IR 90

B-106-0-20

B-107-0-20

B-107-1-20

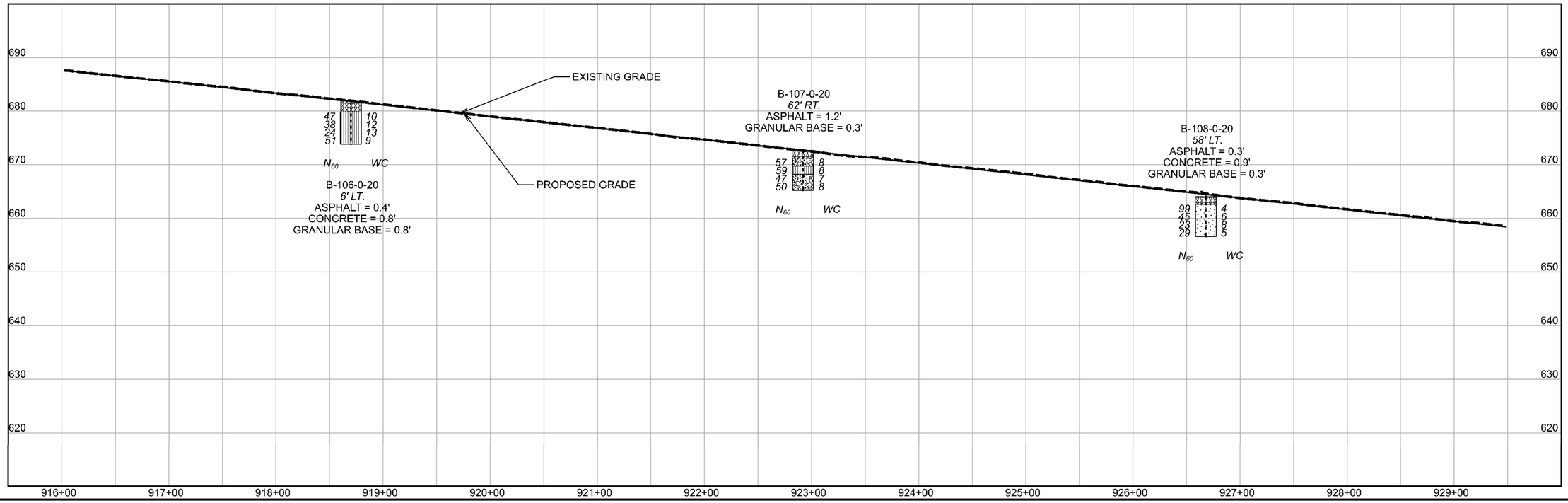
B-107-2-20

B-108-1-20

B-108-0-20

WADE AVE

NOTE: SEE SHEET 60 FOR PROFILES OF BORINGS B-107-1-20, B-107-2-20, AND B-108-1-20



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 916+00 TO STA. 929+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 36 TOTAL 67
SHEET 1556 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 3:19:19 PM USER: kharper
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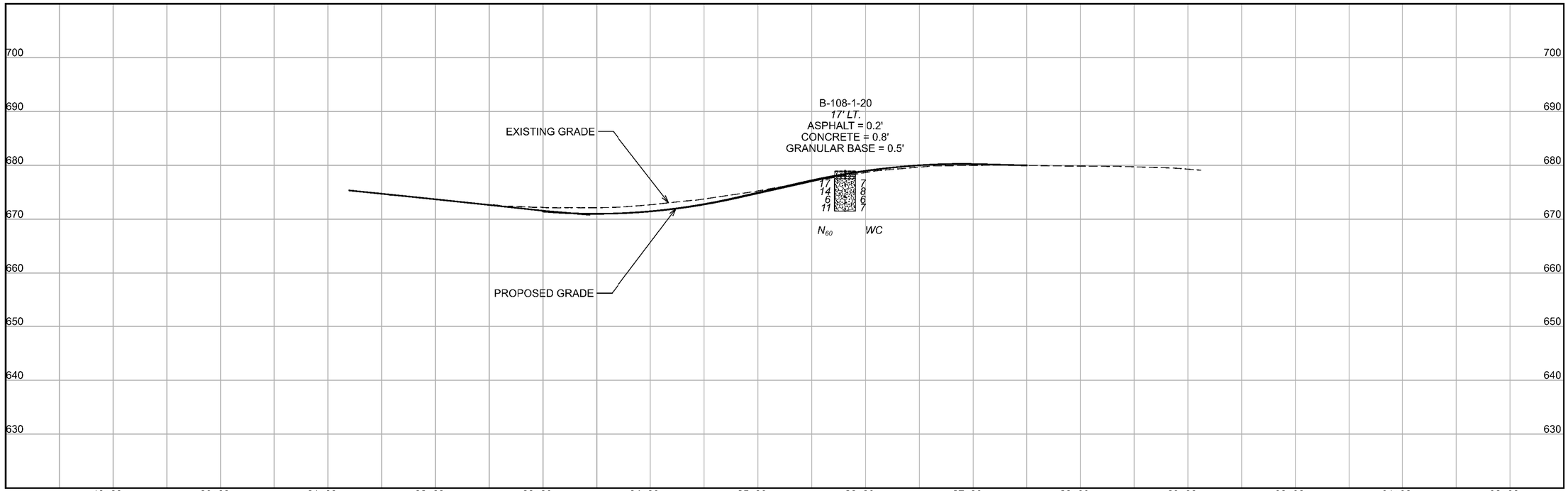
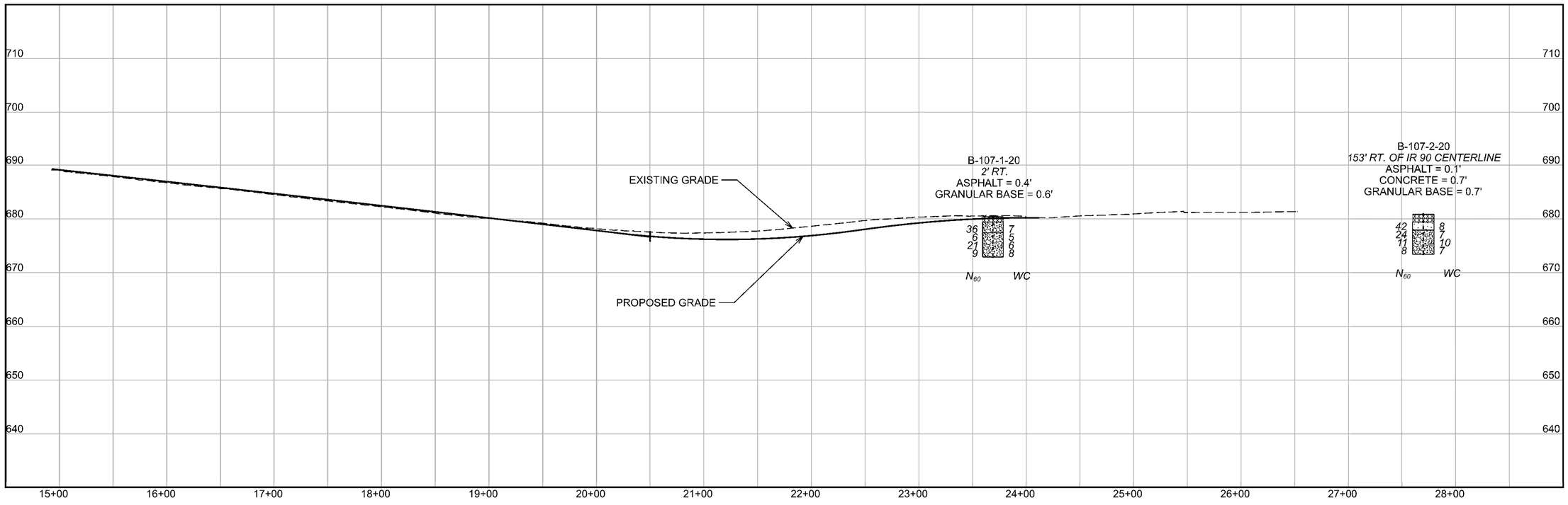
RAMP VEGA AVE TO IR 90 WB



RAMP IR 90 EB TO W 25TH ST/WADE AVE



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
RAMP VEGA AVE TO IR 90 WB STA. 21+00 TO STA. 29+50
RAMP IR 90 EB TO W 25TH ST/WADE AVE STA. 14+50 TO STA. 28+00

DESIGN AGENCY

DESIGNER	KAH
REVIEWER	BKS
PROJECT ID	76779
SUBSET	36A
TOTAL	67
SHEET	1556A
TOTAL	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE:17x11in DATE:1/23/2025 TIME:3:20:58 PM USER:kharper
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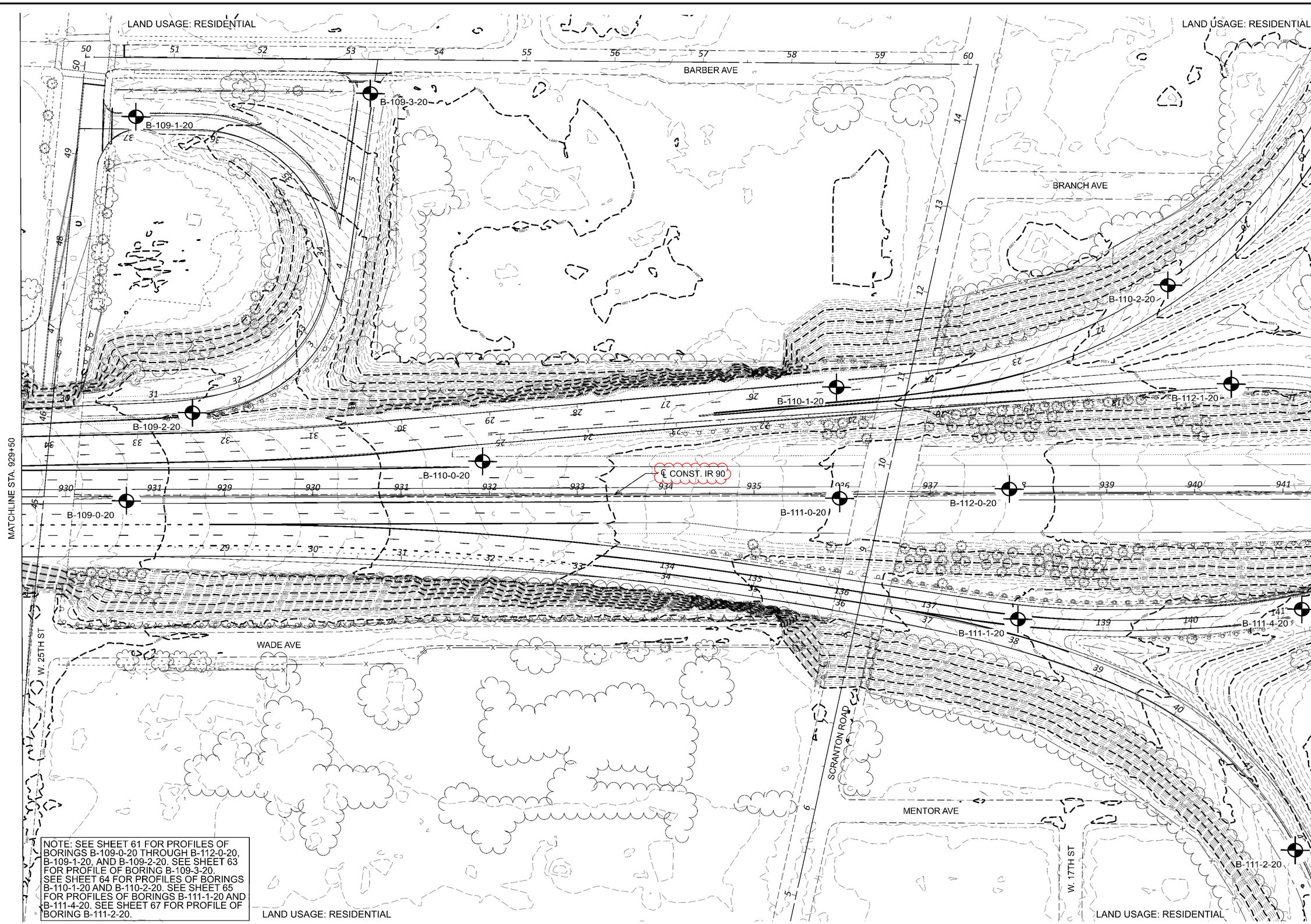

NOTE: SEE SHEET 61 FOR PROFILES OF BORINGS B-109-0-20 THROUGH B-112-0-20, B-109-1-20, AND B-109-2-20. SEE SHEET 63 FOR PROFILE OF BORING B-109-3-20. SEE SHEET 64 FOR PROFILES OF BORINGS B-110-1-20 AND B-110-2-20. SEE SHEET 65 FOR PROFILES OF BORINGS B-111-1-20 AND B-111-4-20. SEE SHEET 67 FOR PROFILE OF BORING B-111-2-20.

N

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
STA. 929+50 TO STA. 941+50

DESIGN AGENCY

DESIGNER
KAH

REVIEWER
BKS

PROJECT ID
76779

SUBSET	TOTAL
37	67
SHEET	TOTAL
1557	1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 3:31:27 PM USER: kharper
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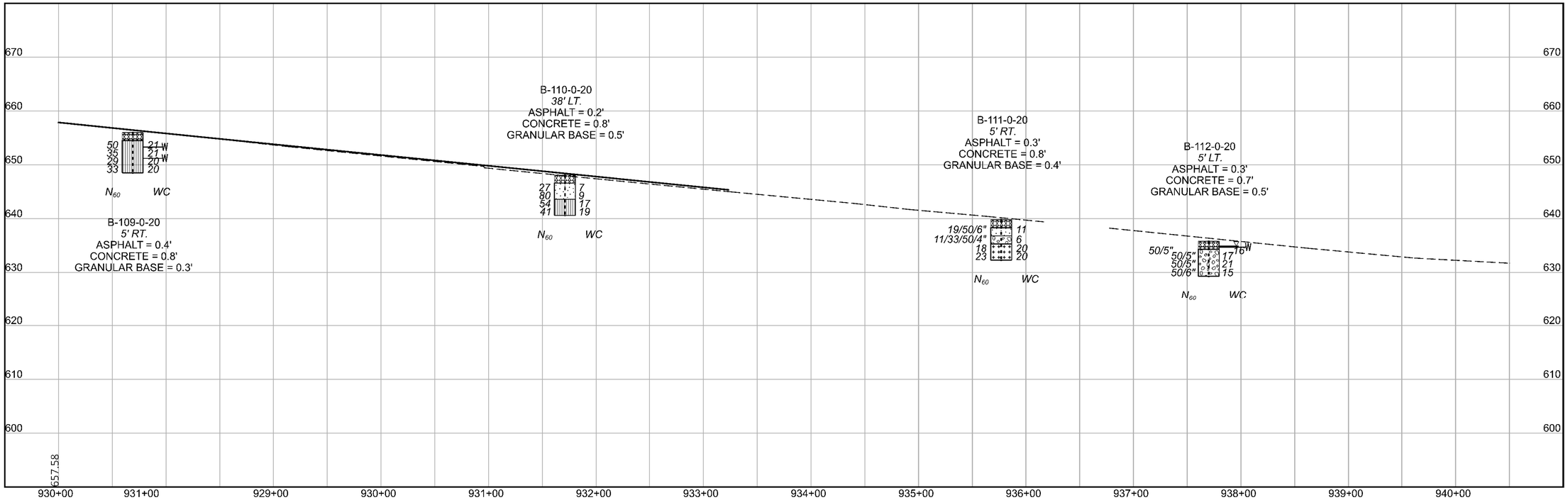
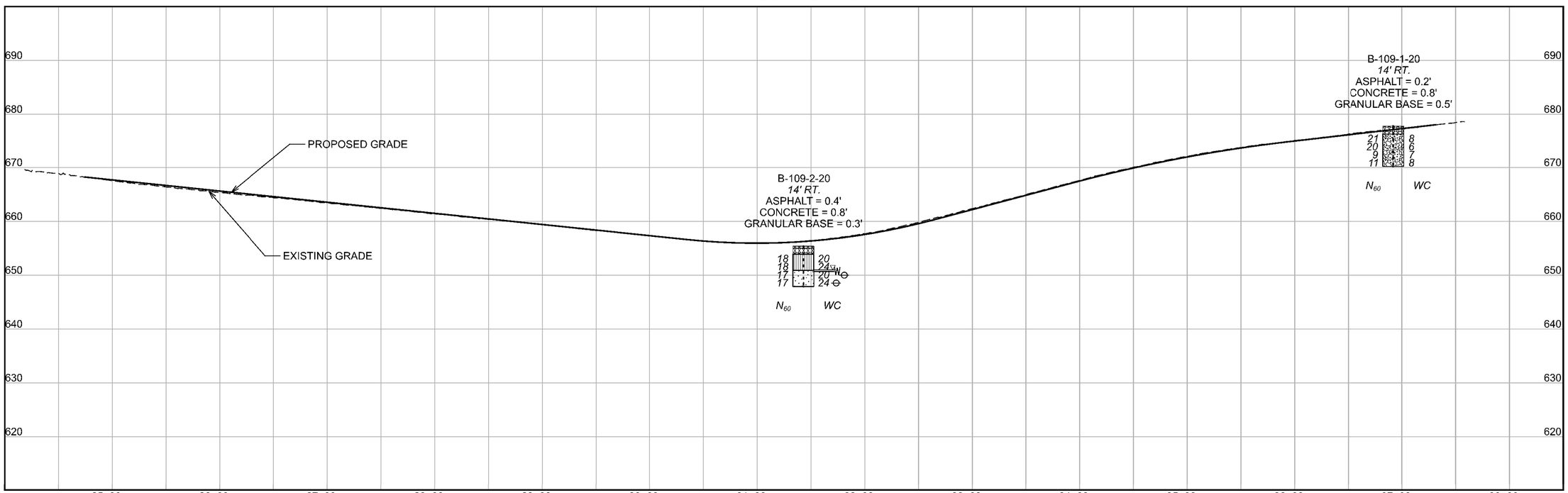
IR 90 CENTERLINE



RAMP W 25TH ST TO IR 90 WB



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
MAINLINE STA. 929+50 TO STA. 941+00
RAMP W 25TH ST TO IR 90 WB STA. 24+00 TO 38+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 37A TOTAL 67
SHEET 1557A TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11in.) DATE: 1/23/2025 TIME: 3:35:30 PM USER: khorper
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CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 3:37:48 PM USER: kharper
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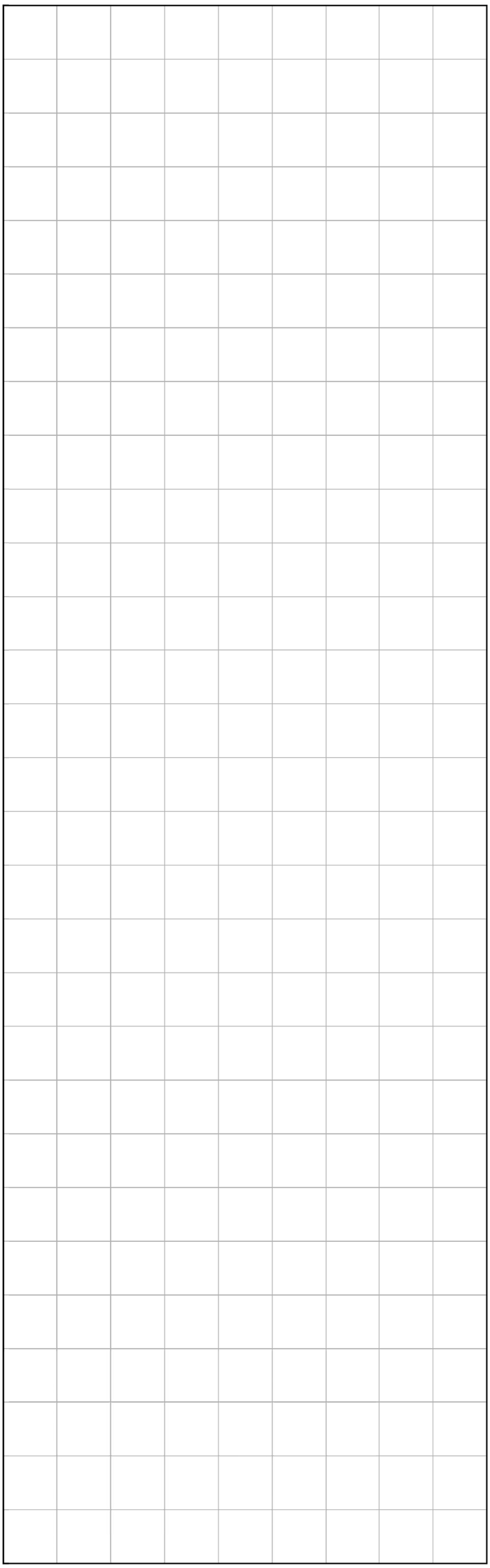
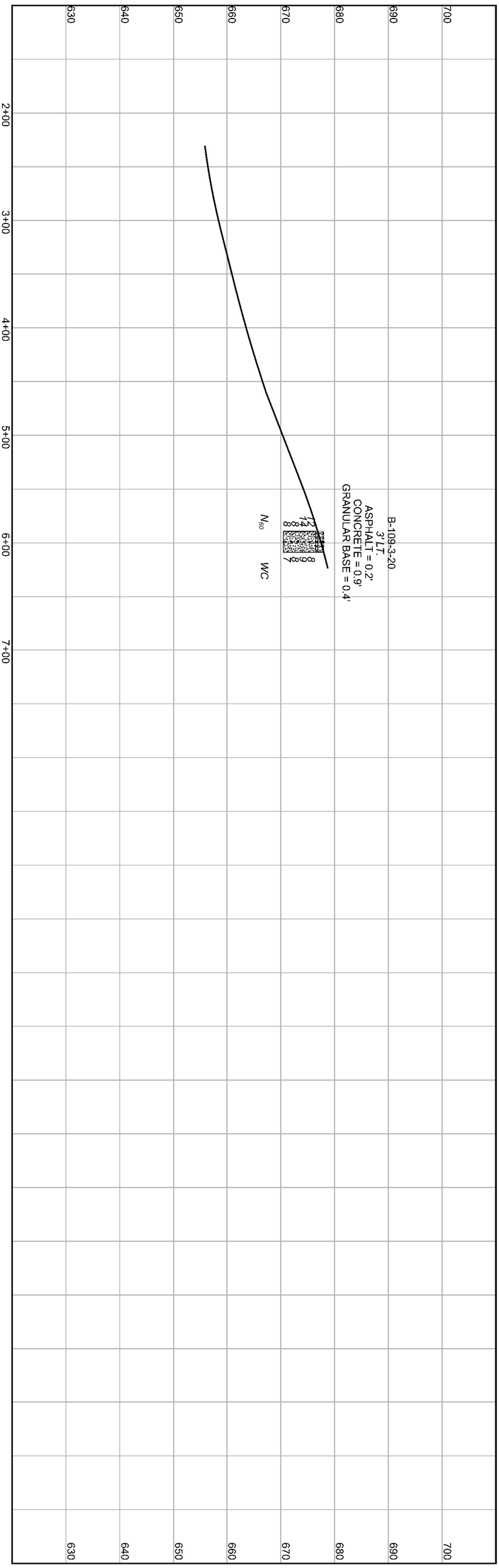


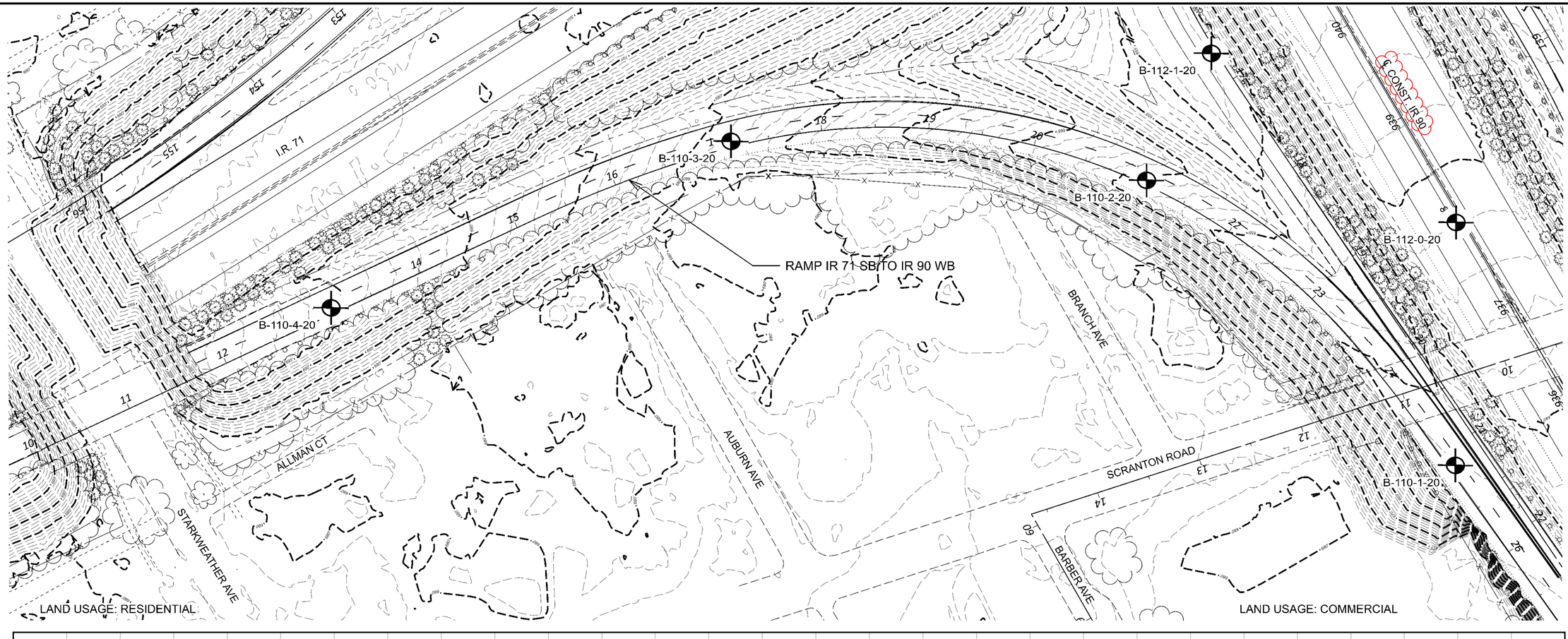


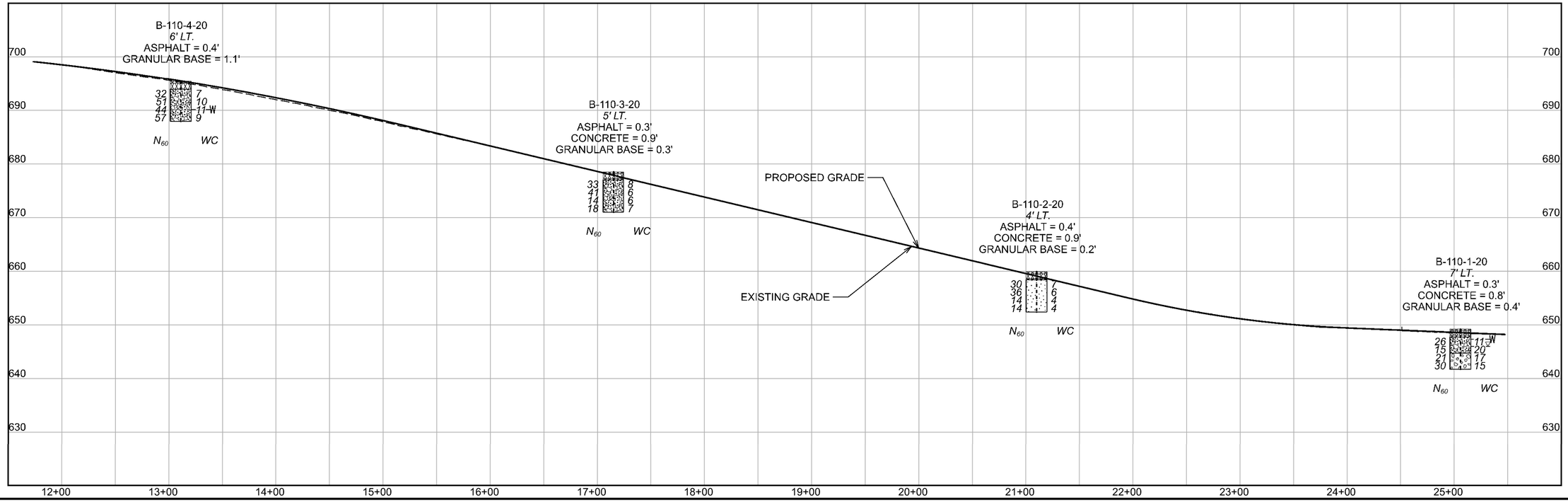
SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP BARBER AVE TO IR 90 WB STA. 2+00 TO 7+00

HORIZONTAL SCALE IN FEET
0 50
25 100

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET TOTAL 67
SHEET 157B
TOTAL 1587





HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP IR 71 SB TO IR 90 WB STA. 11+50 TO STA. 25+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 38 TOTAL 67
SHEET 1558 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11(in.) DATE: 1/23/2025 TIME: 3:52:56 PM USER: kharper
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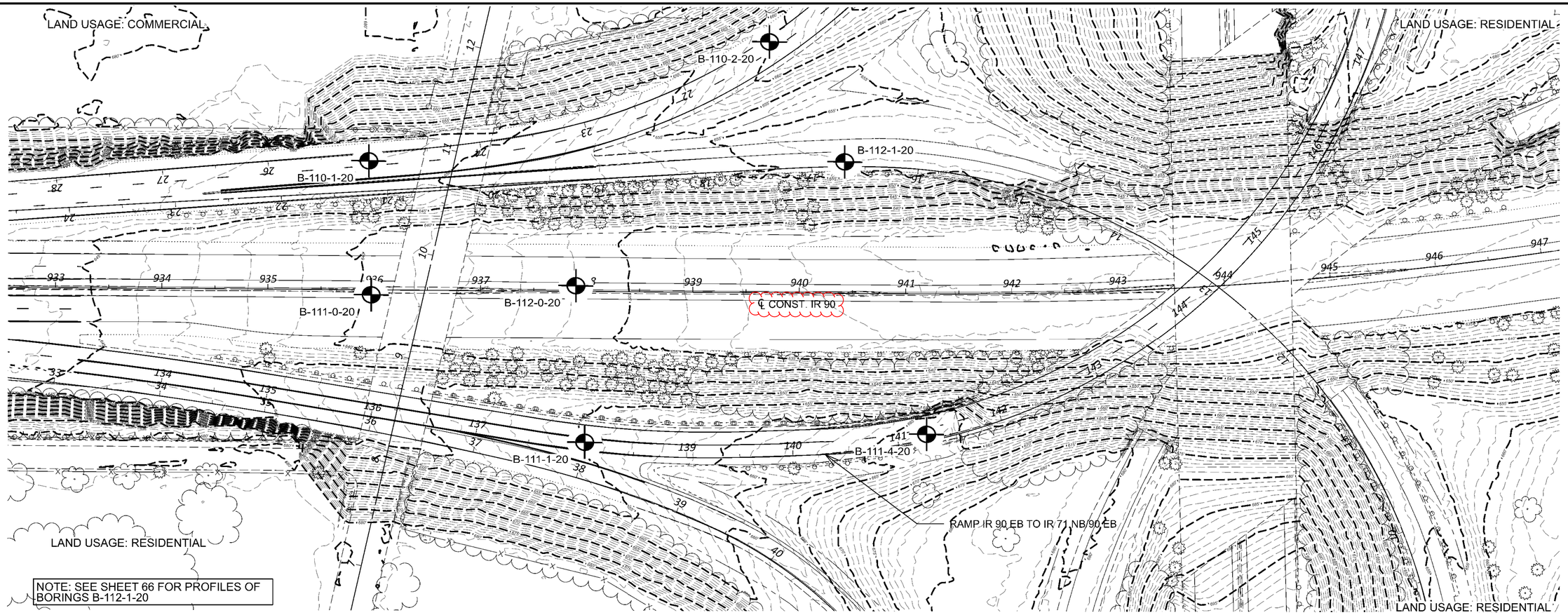
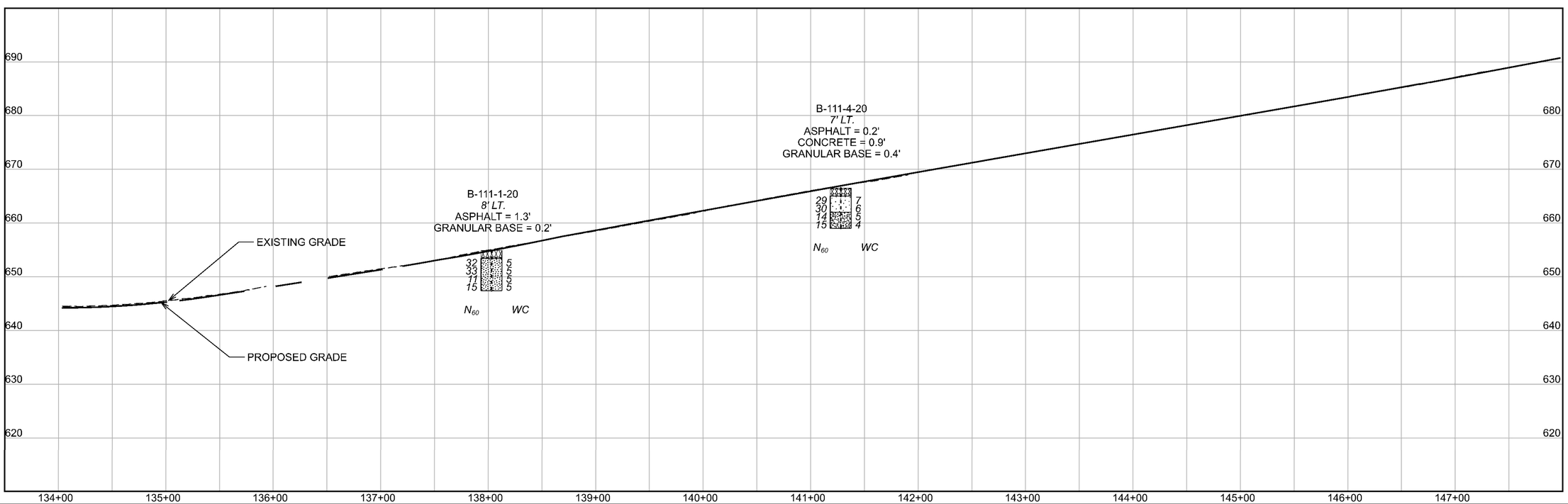


NOTE: SEE SHEET 66 FOR PROFILES OF BORINGS B-112-1-20



HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP IR 90 EB TO IR 71 NB/90 EB STA. 134+00 TO STA. 148+00

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 39 TOTAL 67
SHEET 1559 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/23/2025 TIME: 3:56:25 PM USER: kharper
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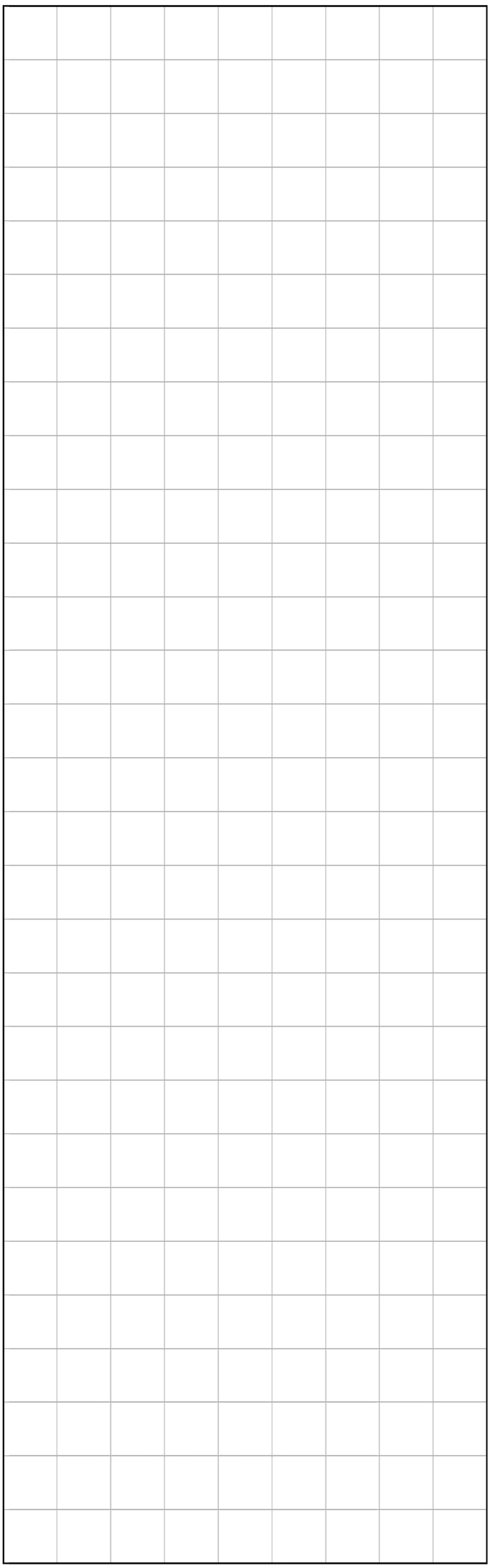
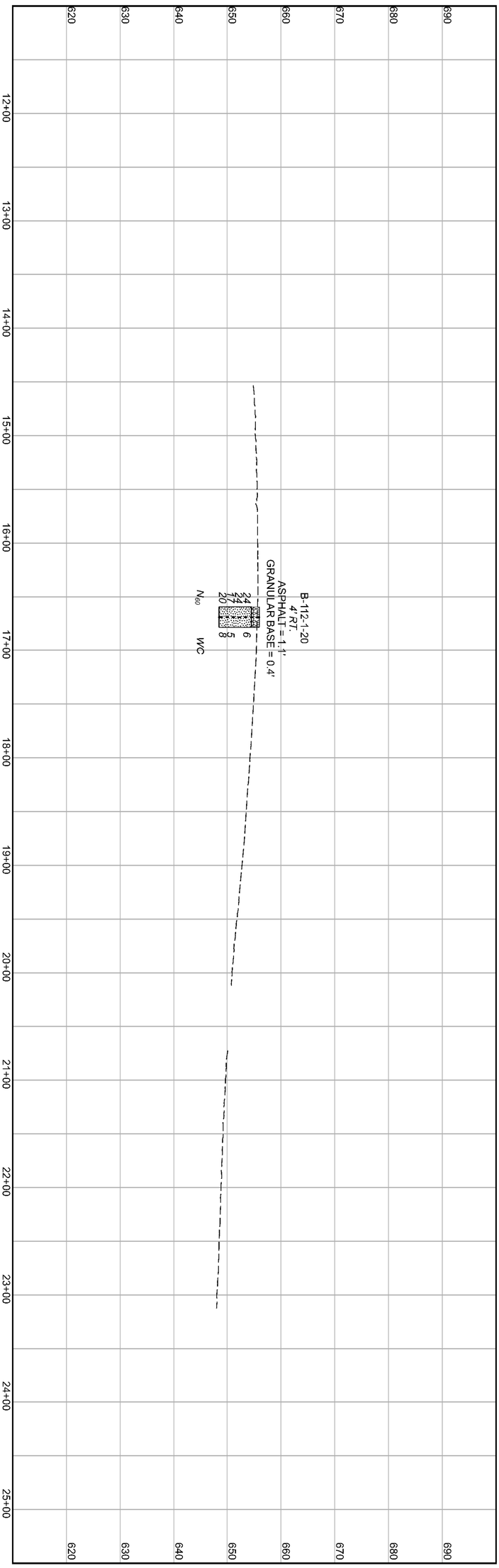




SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP IR 77 NB TO IR 90 WB STA. 14+50 TO STA. 23+12

HORIZONTAL SCALE IN FEET
0 50
25 100

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET TOTAL 67
SHEET 39A
TOTAL 1587
1559A

B-112-0-20
B-110-1-20
B-111-1-20
B-111-0-20
B-011-2-20
B-011-3-20
℄ CONST. IR 90
W. 117TH ST
MENTOR AVE
SCRANTON ROAD
LAND USAGE: RESIDENTIAL
LAND USAGE: RESIDENTIAL

B-111-1-20
34' LT.
ASPHALT = 1.3'
GRANULAR BASE = 0.2'
32 5
33 5
17 5
15 5
N_{60} WC

B-111-2-20
2' RT.
ASPHALT = 1.2'
GRANULAR BASE = 0.3'
33 11
62 7
44 18
81 8
N_{60} WC

B-111-3-20
1' RT.
ASPHALT = 1.2'
GRANULAR BASE = 0.3'
50 6
87 8
78 12
84 8
N_{60} WC

EXISTING GRADE
PROPOSED GRADE

680 670 660 650 640 630 620 610
34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00 44+00 45+00 14+00 15+00

HORIZONTAL SCALE IN FEET
0 25 50 100

SOIL PROFILE - ROADWAY
CUY-90-6.69
RAMP IR 90 EB TO IR 71 SB STA. 34+00 TO STA. 15+50

DESIGN AGENCY

DESIGNER KAH
REVIEWER BKS
PROJECT ID 76779
SUBSET 40 TOTAL 67
SHEET 1560 TOTAL 1587

CUY-90-6.69

MODEL: Sheet PAPERSIZE: TxWin DATE: 1/23/2025 TIME: 4:02:35 PM USER: kharper
T:\Columbus-ill70\Projects\2020\ill79-20-02_ASL_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76779_YP032 (Ramp Sta. 32+00 - 46+00).dgn

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:14:35 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL004 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB MOBILE B-57 | STATION / OFFSET: 533+39, 51' RT | EXPLORATION ID: B-002-5-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / K. HARPER | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 675.2 (MSL) EOB: 15.0 ft.
START: 12/9/24 END: 12/9/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.471848 N, 81.841063 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 675.2	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3-1/2 INCHES	674.9																	
CONCRETE - 9 INCHES	674.2																	
GRANULAR BASE - 13-1/2 INCHES	673.0																	
Hard gray **SILT AND CLAY**, little fine to coarse sand, trace fine to coarse gravel, damp.		1																
		2	11 6 8	21	44	SS-1	-	-	-	-	-	-	-	-	-	15	A-1-b (V)	
		3																
		4	4 6 9	23	100	SS-2	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
		5																
		6																
		7	4 7 8	23	100	SS-3	4.5+	10	9	10	26	45	31	17	14	13	A-6a (9)	
		8																
		9	4 9 10	29	100	SS-4	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
	664.7	10																
Hard gray **SANDY SILT**, some clay, trace fine to coarse gravel, damp.		11																
		12	7 13 13	39	100	SS-5	4.5+	7	10	14	40	29	24	14	10	9	A-4a (7)	
		13																
		14																
	660.2	EOB 15	9 15 15	45	100	SS-6	4.5+	-	-	-	-	-	-	-	-	10	A-4a (V)	

NOTES:
- No water encountered during drilling.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 39+40, 0' LT | EXPLORATION ID: B-003-2-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: WERTZ / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: RAMP HA | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 10/4/24 | ELEVATION: 678.4 (MSL) EOB: 25.0 ft.
START: 12/13/24 END: 12/13/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.471719 N, 81.838872 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 678.4	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4 INCHES	678.1																	
GRANULAR BASE - 5 INCHES	677.7																	
GRAVEL - 3 INCHES	677.4																	
Hard gray **SILT AND CLAY**, little fine to coarse sand, trace fine gravel, damp.		1																
		2	24 6 14	30	67	SS-1	4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
		3																
		4	11 18 19	56	89	SS-2	4.5+	-	-	-	-	-	-	-	-	10	A-6a (V)	
	672.9	5																
Hard gray **SANDY SILT**, some clay, trace fine to coarse gravel, damp.		6																
		7	11 19 23	63	89	SS-3	4.5+	-	-	-	-	-	-	-	-	9	A-6a (V)	
		8																
		9	11 17 21	57	100	SS-4	4.5+	9	9	11	40	31	26	16	10	9	A-4a (7)	
	667.9	10																
Hard gray **SILT AND CLAY**, little fine to coarse sand, trace fine gravel, damp.		11																
		12	16 22 23	68	94	SS-5	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
		13																
		14	11 17 21	57	100	SS-6	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
		15																
		16																
		17	12 17 23	60	100	SS-7	4.5+	-	-	-	-	-	-	-	-	12	A-6a (V)	
		18																
		19	8 12 15	41	89	SS-8	-	5	7	7	28	53	30	18	12	13	A-6a (9)	
	656.4	20																
Hard gray **SANDY SILT**, little clay, trace fine gravel, damp.		21																
		22																
		23																
		24	24 31 47	117	100	SS-9	-	-	-	-	-	-	-	-	-	10	A-4a (V)	
	653.4	EOB 25																

NOTES:
- No water encountered during drilling.
- Borehole caved at 16.5' and was dry after augers removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 14:35 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 14:36 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1561	41	76779	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-002-5-24 & B-003-2-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:18:20 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL005 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 545+38, 49' RT	EXPLORATION ID B-005-2-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / S. SMITH	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 681.4 (MSL) EOB: 30.0 ft.	PAGE 1 OF 1
START: 12/17/24 END: 12/17/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	COORD: 41.471882 N, 81.836688 W	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3-1/4 INCHES	681.1																	
CONCRETE - 10-1/2 INCHES	680.2																	
GRANULAR BASE - 8 INCHES	679.5																	
POSSIBLE FILL: Very stiff to hard gray **SILT AND CLAY**, little fine to coarse sand, trace fine gravel, damp.	678.0		3 3 7	15	44	SS-1	2.0-4.5	-	-	-	-	-	-	-	-	17	A-6a (V)	
Very stiff to hard brown and gray **SILTY CLAY**, little fine to coarse sand, trace fine gravel, damp.			10 13 12	38	78	SS-2	4.5+	-	-	-	-	-	-	-	-	8	A-6b (V)	
			7 11 13	36	67	SS-3	4.5+	-	-	-	-	-	-	-	-	11	A-6b (V)	
			9 10 11	32	78	SS-4	4.5+	-	-	-	-	-	-	-	-	13	A-6b (V)	
			5 7 11	27	83	SS-5	4.0-4.5	-	-	-	-	-	-	-	-	13	A-6b (V)	
			5 10 12	33	89	SS-6	4.5+	4	6	7	27	56	34	18	16	15	A-6b (10)	
@ 16.4' to 16.7', gray sandy silt seam			5 9 9	27	89	SS-7ABC	4.5+	-	-	-	-	-	-	-	-	15	A-6b (V)	
							4.0	-	-	-	-	-	-	-	-	12	A-6b (V)	
	662.4																	
Hard gray **SANDY SILT**, some clay, trace fine gravel, damp.			8 12 25	56	100	SS-8AB	4.5+	-	-	-	-	-	-	-	-	10	A-6b (V)	
							4.5+	2	2	29	46	21	19	14	5	10	A-4a (6)	
			18 23 30	80	100	SS-9AB	4.5+	9	11	13	42	25	24	16	8	8	A-4a (6)	
	651.9		13 16 32	72	100	SS-10AB	-	-	-	-	-	-	-	-	-	7	A-4a (V)	
Hard gray **SILT AND CLAY**, little fine gravel, little fine to coarse sand, damp.	651.4	EOB					4.5+	-	-	-	-	-	-	-	-	9	A-6a (V)	

NOTES:
- No water encountered during drilling.
- Borehole caved at 22.0' and was dry after augers removed.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT MYLAR (11X17) - SGE 01/2019 - OH DOT.GDT - 1/16/25 14:46 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1562	42	76799	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOG B-005-2-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:20:30 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL006 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 51+37, 2' LT	EXPLORATION ID B-006-1-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / K. HARPER	HAMMER: CME AUTOMATIC	ALIGNMENT: RAMP HA	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 688.7 (MSL) EOB: 41.0 ft.	PAGE 1 OF 1
START: 12/13/24 END: 12/13/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	COORD: 41.471840 N, 81.834510 W	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3 INCHES	688.4																	
ASPHALT - 9 INCHES	687.7																	
GRANULAR BASE - 12 INCHES	686.7																	
Dense brown **GRAVEL WITH SAND**, trace silt, damp.	685.5		9 13 14	41	100	SS-1	-	-	-	-	-	-	-	-	-	-	A-1-b (V)	
							-	-	-	-	-	-	-	-	-	16	A-1-b (V)	
Medium dense brown **FINE SAND**, little coarse sand, trace silt, damp.	682.5	W 682.5	6 9 10	29	100	SS-2	-	-	-	-	-	-	-	-	-	6	A-3 (V)	
Very stiff to hard gray **SILT AND CLAY**, some fine to coarse sand, trace fine gravel, moist to wet.			3 2 3	8	39	SS-3	3.0	-	-	-	-	-	-	-	-	25	A-6a (V)	
			2 2 2	6	100	SS-4	3.0	9	10	16	30	35	30	18	12	18	A-6a (7)	
			2 3 2	8	100	SS-5	4.5+	-	-	-	-	-	-	-	-	19	A-6a (V)	
			2 3 2	8	44	SS-6	3.5	-	-	-	-	-	-	-	-	19	A-6a (V)	
			3 4 5	14	100	SS-7	4.5+	-	-	-	-	-	-	-	-	17	A-6a (V)	
			4 7 8	23	100	SS-8	4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)	
	666.7																	
Very stiff to hard gray **SANDY SILT**, some clay, little fine gravel, few shale fragments, damp.			3 4 5	14	100	SS-9	3.5-4.5	13	12	12	30	33	27	18	9	17	A-4a (6)	
	662.2																	
Very-dense gray **SANDY SILT**, some clay, little fine gravel, few shale fragments, damp.			13 15 26	62	100	SS-10	-	-	-	-	-	-	-	-	-	9	A-4a (V)	
	656.7																	
Hard gray **SILTY CLAY**, little fine gravel, trace fine to coarse sand, few shale fragments, damp.			9 17 18	53	100	SS-11	-	18	1	1	44	36	37	21	16	8	A-6b (10)	
	651.7	TR																
SHALE, gray, highly weathered, very weak.			16 38 50/4"	-	100	SS-12	-	-	-	-	-	-	-	-	-	5	Rock (V)	
	647.7	EOB																

NOTES:
- Water encountered at 6.2'.
- Borehole caved at 39.7' and was dry after augers removed.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT MYLAR (11X17) - SGE 01/2019 - OH DOT.GDT - 1/16/25 14:50 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1563	43	76799	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOG B-006-1-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:22:34 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL007 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB MOBILE B-57 | STATION / OFFSET: 574+07, 60' RT | EXPLORATION ID: B-012-2-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 692.9 (MSL) EOB: 25.0 ft.
START: 12/17/24 END: 12/17/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.471764 N, 81.826229 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 692.9	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4 INCHES	692.6																	
GRANULAR FILL - 2 INCHES	692.4																	
CONCRETE - 8 INCHES	691.7																	
GRANULAR BASE - 12 INCHES	690.7																	
POSSIBLE FILL: Loose to medium dense brown **COARSE AND FINE SAND**, little fine gravel, little silt, trace clay, damp.		W 689.2	14 7 7	21	72	SS-1A	-	-	-	-	-	-	-	-	-	15	A-3a (V)	
						SS-1B	-	-	-	-	-	-	-	-	-	10	A-3a (V)	
			3 8 10	27	72	SS-2	-	-	-	-	-	-	-	-	-	10	A-3a (V)	
			5 4 4	12	89	SS-3	-	14	15	56	11	4	NP	NP	NP	9	A-3a (0)	
			5 3 3	9	67	SS-4	-	-	-	-	-	-	-	-	-	10	A-3a (V)	
	681.4	W 681.4	2 1 0	2	67	SS-5A	-	-	-	-	-	-	-	-	-	16	A-3a (V)	
Medium stiff to stiff brown **SILT AND CLAY**, little fine to coarse sand, trace fine gravel, damp.	679.9					SS-5B	0.5-1.5	-	-	-	-	-	-	-	-	25	A-6a (V)	
Loose brown **COARSE AND FINE SAND**, little silt, trace clay, trace fine to coarse gravel, damp.			2 2 2	6	100	SS-6	-	-	-	-	-	-	-	-	-	15	A-3a (V)	
@16.1' to 16.5', clay seam		W 674.9	2 2 3	8	89	SS-7	-	6	9	68	11	6	NP	NP	NP	9	A-3a (0)	
	674.2					SS-8A	-	-	-	-	-	-	-	-	-	32	A-3a (V)	
Stiff brown **SILT AND CLAY**, little fine to coarse sand, trace fine gravel, moist.	673.9		1 1 1	3	83	SS-8B	1.0-1.5	-	-	-	-	-	-	-	-	32	A-6a (V)	
						SS-8C	-	-	-	-	-	-	-	-	-	30	A-3a (V)	
Very loose to loose brown becoming gray **COARSE AND FINE SAND**, some silt, trace clay, wet.																		
	667.9	EOB	1 2 3	8	100	SS-9	-	0	5	65	23	7	NP	NP	NP	44	A-3a (0)	

NOTES:
- Seepage encountered at 3.7' and 11.5' during drilling.
- Water encountered at 18' during drilling.
- Borehole caved at 14' and was dry after augers removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / J. MINCHAK | DRILL RIG: OTB ATV D50 | STATION / OFFSET: 585+31, 5' RT | EXPLORATION ID: B-013-1-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / K. HARPER | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 698.9 (MSL) EOB: 16.3 ft.
START: 12/10/24 END: 12/10/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79.1 | COORD: 41.471843 N, 81.822127 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 698.9	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 2-1/2 INCHES	698.7																	
CONCRETE - 10-1/2 INCHES	697.8																	
GRANULAR BASE - 11 INCHES	696.9																	
FILL: Medium dense gray **GRAVEL WITH SAND**, trace silt, damp.	695.7		7 6 5	15	78	SS-1A	-	-	-	-	-	-	-	-	-	-	A-1-b (V)	
						SS-1B	-	-	-	-	-	-	-	-	-	5	A-1-b (V)	
Hard gray **SILT AND CLAY**, trace fine to coarse sand, trace fine to coarse gravel, damp.	694.9	W 694.9	3 50/5"	-	100	SS-2A	4.5+	-	-	-	-	-	-	-	-	10	A-6a (V)	
		TR				SS-2B	-	-	-	-	-	-	-	-	-	10	Rock (V)	
SHALE, gray, severely weathered, very weak.			50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			40 44 48	121	100	SS-4	-	-	-	-	-	-	-	-	-	15	Rock (V)	
	687.9																	
SHALE, gray, highly weathered, weak to slightly strong.			43 50/5"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			45 50/4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	682.6	EOB	50/3"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:
- Water encountered at 4.0' during drilling.
- Water measured at 14.1' inside augers at end of drilling.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 14:53 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 14:56 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:25:00 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL008 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB ATV D50 | STATION / OFFSET: 591+90, 6' RT | EXPLORATION ID: B-015-1-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / K. HARPER | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA / NQ | CALIBRATION DATE: 12/22/22 | ELEVATION: 710.5 (MSL) EOB: 25.0 ft.
START: 12/10/24 END: 12/18/24 | SAMPLING METHOD: SPT / NQ | ENERGY RATIO (%): 79.1 | COORD: 41.471580 N, 81.819753 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 710.5	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3 INCHES	710.2																	
CONCRETE - 12 INCHES	709.2																	
GRANULAR BASE - 9 INCHES	708.5																	
FILL: Very stiff gray **SILT AND CLAY**, little to some fine to coarse sand, little fine gravel, few shale fragments, damp.	707.0	TR	5 6 5	15	67	SS-1	2.5	-	-	-	-	-	-	-	-	12	A-6a (V)	
SHALE, gray, severely weathered, very weak to weak.			36 50/3"	-	100	SS-2	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			50/4"	-	50	SS-3	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	700.5		50/5"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, dark gray to black, slightly to moderately weathered, slightly to moderately strong, laminated to thick bedded, fissile, few diagonal fractures, highly to moderately fractured, tight to narrow aperture, slightly rough surfaces, RQD = 49%, REC = 95%. @ 13.0' - 13.4'; Q_u = 3,902 psi; γ_d = 149.2 pcf			42		98	NQ-5												CORE
@ 16.0', change to gray			21		100	NQ-6												CORE
@ 20.0' - 20.4'; Q_u = 2,350 psi; γ_d = 151.1 pcf			62		100	NQ-7												CORE
			54		83	NQ-8												CORE
	685.5	EOB																

NOTES:
- No water encountered during drilling.
- Rock coring performed in offset hole 5' east of original boring with OTB Mobile B-57 rig on 12/18/24.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 603+78, 6' RT | EXPLORATION ID: B-018-3-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: WERTZ / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA / NQ | CALIBRATION DATE: 10/4/24 | ELEVATION: 713.6 (MSL) EOB: 24.0 ft.
START: 12/11/24 END: 12/11/24 | SAMPLING METHOD: SPT / NQ | ENERGY RATIO (%): 90* | COORD: 41.470596 N, 81.815623 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 713.6	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4 INCHES	713.3																	
CONCRETE - 12 INCHES	712.3																	
GRANULARL BASE - 3 INCHES	712.0																	
Hard gray **SILT AND CLAY**, some fine to coarse gravel (shale fragments), similar to severely weathered shale, dry to damp.	710.1	TR	6 11 50/4"	-	100	SS-1	-	-	-	-	-	-	-	-	-	5	A-6a (V)	
SHALE, gray, highly to severely weathered, weak to slightly strong.			40 50/3"	-	100	SS-2	-	-	-	-	-	-	-	-	-	5	Rock (V)	
			50/2"	-	100	SS-3	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/3"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/3"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		W 701.1																
			50/2"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/4"	-	75	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	694.6		50/2"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, gray, moderately to highly weathered, very weak to weak, thinly laminated to very thickly bedded, fissile, highly fractured to moderately fractured, narrow aperture, slightly rough surfaces, RQD = 32%, REC = 100%. @ 20.4' - 20.8'; Q_u = 732 psi; γ_d = 144.6 pcf			32		100	NQ-9												CORE
	689.6	EOB																

NOTES
- Water encountered at 12.5' during drilling.
- Water was not observed in the augers prior to rock coring.
- Borehole caved at 16.0' after rock core barrel removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 15:18 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 15:21 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	TOTAL
1565	1587

SUBSET	TOTAL
45	67

PROJECT ID: 76779
REVIEWER: BKS
DESIGNER: KAH
DESIGN AGENCY

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-015-1-24 & B-018-3-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:27:17 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL009 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 609+32, 6' RT | EXPLORATION ID: B-019-2-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: WERTZ / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA / NQ | CALIBRATION DATE: 10/4/24 | ELEVATION: 715.7 (MSL) EOB: 24.0 ft.
START: 12/11/24 END: 12/11/24 | SAMPLING METHOD: SPT / NQ | ENERGY RATIO (%): 90* | COORD: 41.470118 N, 81.813706 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 715.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4 INCHES	715.4																	
CONCRETE - 11 INCHES	714.4																	
GRANULAR BASE - 4 INCHES	714.1																	
Hard gray **SILT AND CLAY**, some fine to coarse gravel (shale fragments), similar to severely weathered shale, dry to damp.	712.2	TR	7 12 28	60	72	SS-1	-	-	-	-	-	-	-	-	-	9	A-6a (V)	
SHALE, gray, highly to severely weathered, weak to slightly strong.			27 18 14	48	78	SS-2	-	-	-	-	-	-	-	-	-	6	Rock (V)	
			8 11 14	38	83	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			9 9 50/3"	-	80	SS-4	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			50/3"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	701.7		50/2"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, gray, moderately to highly weathered, weak to slightly strong, thinly laminated to thick bedded, highly fractured to moderately fractured, narrow aperture, slightly rough surfaces, RQD = 51%, REC = 100%.			51		100	NQ-7	-										CORE	
@ 23.4' - 23.8'; Q_u = 2,433 psi; γ_d = 147.8 pcf	691.7	EOB																

NOTES
- Water not encountered during drilling.
- The borehole caved at 13.0' after rock core barrel removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 15:43 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WP\PROJECTS\117920021 SEWER BORINGS.GPJ

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB MOBILE B-57 | STATION / OFFSET: 616+67, 7' RT | EXPLORATION ID: B-021-2-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / K. HARPER | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA / NQ | CALIBRATION DATE: 12/22/22 | ELEVATION: 711.7 (MSL) EOB: 18.5 ft.
START: 12/11/24 END: 12/11/24 | SAMPLING METHOD: SPT / NQ | ENERGY RATIO (%): 90* | COORD: 41.469682 N, 81.811084 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 711.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3 INCHES	711.4																	
CONCRETE - 11-1/2 INCHES	710.5																	
GRANULAR BASE - 9-1/2 INCHES	709.7	TR	11 50/5"	-	100	SS-1A SS-1B	- -	- -	- -	- -	- -	- -	- -	- -	- -	7 5	A-1-b (V) Rock (V)	
SHALE, gray, severely weathered, very weak to weak.			50/4"	-	100	SS-2	-	-	-	-	-	-	-	-	-	4	Rock (V)	
			29 50/3"	-	100	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	
	703.2																	
SHALE, gray, slightly to moderately weathered, moderately strong, laminated to thick bedded, highly fractured to moderately fractured, narrow aperture, slighty rough surfaces, 0.5-inch limestone seam at 12.6', RQD = 84%, REC = 100%.			67		100	NQ-4											CORE	
			81		100	NQ-5											CORE	
@ 13.2' - 13.6'; Q_u = 5,514 psi; γ_d = 145.7 pcf			93		100	NQ-6											CORE	
	693.2	EOB																

NOTES:
- Water not encountered during drilling.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 15:44 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WP\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1566	1587	46	67	76779	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-019-2-24 & B-021-2-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:44:53 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL010 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 621+70, 5' RT	EXPLORATION ID B-023-1-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / K. HARPER	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA / NQ	CALIBRATION DATE: 12/22/22	ELEVATION: 713.5 (MSL) EOB: 14.4 ft.	PAGE 1 OF 1
START: 12/11/24 END: 12/11/24	SAMPLING METHOD: SPT / NQ	ENERGY RATIO (%): 90*	COORD: 41.469562 N, 81.808516 W	

MATERIAL DESCRIPTION AND NOTES	ELEV. 713.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 2 INCHES	713.3																	
CONCRETE - 10 INCHES	712.5																	
GRANULAR BASE - 6 INCHES	712.0	TR																
SHALE, gray, severely weathered, very weak to weak.		1	2 50/5"	-	100	SS-1	-	-	-	-	-	-	-	-	-	4	Rock (V)	
		2																
		3																
		4	40 50/2"	-	100	SS-2	-	-	-	-	-	-	-	-	-	4	Rock (V)	
	706.5	5																
		6																
SHALE, gray, slightly to moderately weathered, moderately strong, laminated to thick bedded, highly fractured to moderately fractured, narrow aperture, slightly rough surfaces, RQD = 55%, REC = 91%.		7																
		8																
		9	36		83	NQ-3											CORE	
		10																
		11																
@ 12.5' - 12.9'; Q_u = 6,967 psi; γ_d = 151.3 pcf		12	76		100	NQ-4											CORE	
		13																
	699.1	EOB 14																

NOTES:
- Water not encountered during drilling.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 15:46 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WP\PROJECTS\117920021 SEWER BORINGS.GPJ

PLATE 1

S&M JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 629+07, 4' RT	EXPLORATION ID B-025-2-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / S. SMITH	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA / NQ	CALIBRATION DATE: 12/22/22	ELEVATION: 715.9 (MSL) EOB: 14.0 ft.	PAGE 1 OF 1
START: 12/18/24 END: 12/18/24	SAMPLING METHOD: SPT / NQ	ENERGY RATIO (%): 90*	COORD: 41.469504 N, 81.805830 W	

MATERIAL DESCRIPTION AND NOTES	ELEV. 715.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3 INCHES	715.6																	
CONCRETE - 10 INCHES	714.8																	
GRANULAR BASE - 5 INCHES	714.4	TR																
SHALE, gray, severely to highly weathered, very weak to weak.		1																
		2																
		3	4 19 9	42	83	SS-1	-	-	-	-	-	-	-	-	-	10	Rock (V)	
	711.9	4	50/3"	-	100	SS-2	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, gray, moderately to highly weathered, weak to slightly strong, thin bedded, fissile, highly to moderately fractured, narrow to open aperture, slightly rough surfaces, 0.5-inch limestone seam at 17.6', RQD = 29%, REC = 100%.		5																
		6																
		7																
		8																
		9	29		100	NQ-3	-										CORE	
@ 9.1' - 9.5'; Q_u = 2,071 psi; γ_d = 146.8 pcf		10																
		11																
		12																
	701.9	13																
		EOB 14																

NOTES:
- Water not encountered during drilling.
- Borehole caved at 9.0' after removing core barrel.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 15:47 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WP\PROJECTS\117920021 SEWER BORINGS.GPJ

PLATE 1

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1567	47	76799	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-023-1-24 & B-025-2-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:48:00 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL011 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 635+74, 8' RT	EXPLORATION ID B-026-3-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / S. SMITH	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA / NQ	CALIBRATION DATE: 12/22/22	ELEVATION: 718.2 (MSL) EOB: 15.0 ft.	PAGE 1 OF 1
START: 12/18/24 END: 12/18/24	SAMPLING METHOD: SPT / NQ	ENERGY RATIO (%): 90*	COORD: 41.469469 N, 81.803397 W	

MATERIAL DESCRIPTION AND NOTES	ELEV. 718.2	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3 INCHES	717.9																	
CONCRETE - 9 INCHES	717.2																	
GRANULAR BASE - 6 INCHES	716.7	TR																
SHALE, gray, severely to highly weathered, very weak to weak.		1	21															
		2	33 50	125	94	SS-1	-	-	-	-	-	-	-	-	-	13	Rock (V)	
		3	18 50/2"	-	88	SS-2	-	-	-	-	-	-	-	-	-	11	Rock (V)	
	713.2	4																
SHALE, gray, moderately to highly weathered, slightly to moderately strong, laminated to thick bedded, fissile, highly to moderately fractured, narrow aperture, slightly rough surfaces, 1-inch limestone seam at 13', RQD = 40%, REC = 100%.		5																
@ 7.3' - 7.7'; Q_u = 4,198 psi; γ_d = 148.5 pcf		6																
		7																
		8																
		9																
		10	40		100	NQ-3	-										CORE	
@ 11.7' - 12.1'; Q_u = 2,006 psi; γ_d = 149.0 pcf		11																
		12																
		13																
		14																
	703.2	EOB 15																

NOTES:
- Water not encountered during drilling.
- The borehole caved at 5.0' after removing core barrel.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH: SOIL CUTTINGS MIXED WITH BENTONITE

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON	DRILL RIG: WERTZ CME 55 TRUCK	STATION / OFFSET: 642+38, 27' LT	EXPLORATION ID B-028-2-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / N. KACHMAR	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA / NQ	CALIBRATION DATE: 10/4/24	ELEVATION: 720.5 (MSL) EOB: 16.0 ft.	PAGE 1 OF 1
START: 12/16/24 END: 12/16/24	SAMPLING METHOD: SPT / NQ	ENERGY RATIO (%): 90*	COORD: 41.469541 N, 81.800972 W	

MATERIAL DESCRIPTION AND NOTES	ELEV. 720.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	HOLE SEALED
ASPHALT - 2 INCHES	720.4																	
CONCRETE - 9 INCHES	719.6	TR																
SHALE, gray, highly weathered, very weak to weak, few clay seams, dry.		1																
		2	20 50	-	92	SS-1A	-	-	-	-	-	-	-	-	-	8	Rock (V)	
		3				SS-1B	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		4	36 50/5"	-	100	SS-2A	-	-	-	-	-	-	-	-	-	6	Rock (V)	
						SS-2B	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		5																
	W 714.5	6	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	713.1	7																
SHALE, gray, highly weathered, weak, fissile, dry.		8																
	711.5	9	50/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, gray, highly to moderately weathered with some severely weathered seams, slightly strong, laminated to thick bedded, fissile, highly fractured to moderately fractured, narrow aperture, slightly rough surfaces, RQD = 62%, REC = 88%.		10																
		11																
		12																
		13	62		88	NQ-5											CORE	
@ 13.5' - 13.9'; Q_u = 2,631 psi; γ_d = 149.9 pcf		14																
		15																
	704.5	EOB 16																

NOTES
- Water was encountered during drilling at 6.0'.
- The borehole caved at 9.0' and water was measured at 5.5' after removing augers.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH: BENTONITE AND CEMENT GROUT

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:04 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1568	1587	48	67	76779	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-026-3-24 & B-028-2-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 1:49:48 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL012 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / J. MINCHAK | DRILL RIG: OTB ATV D50 | STATION / OFFSET: 648+33, 33' LT | EXPLORATION ID: B-029-1-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 722.4 (MSL) EOB: 16.4 ft.
START: 12/11/24 END: 12/11/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79.1 | COORD: 41.469538 N, 81.798801 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 722.4	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3-1/2 INCHES	722.1																	
CONCRETE - 9-1/2 INCHES	721.3																	
GRANULAR BASE - 5 INCHES	720.9																	
FILL: Very stiff gray **SILT AND CLAY**, some fine to coarse sand, little fine to coarse gravel, few shale fragments, moist.	720.7	TR	14 50	-	83	SS-1A SS-1B	3.0	- -	- -	- -	- -	- -	- -	- -	- -	23 6	A-6a (V) Rock (V)	
SHALE, gray, severely weathered, very weak to weak.		W 718.3	34 50	-	58	SS-2	-	-	-	-	-	-	-	-	-	11	Rock (V)	
	716.9	W 716.3	34 50/3"	-	89	SS-3	-	-	-	-	-	-	-	-	-	18	Rock (V)	
SHALE, dark gray, severely to highly weathered, very weak to weak, few zones of clay.	714.4																	
SHALE, dark gray, highly weathered, weak.			33 50/4"	-	60	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
- Few very weak zones from 11.0' to 13.5'.			39 50/4"	-	50	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/4"	-	50	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	706.0	EOB	50/5"	-	20	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES
- Seepage observed in base material at 1.1'.
- Seepage encountered at 4.1' during drilling.
- Water encountered at 6.1' during drilling.
- Water measured at 11.0' in the augers at completion.
- Borehole caved at 12.5' and was dry after augers removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / J. MINCHAK | DRILL RIG: OTB ATV D50 | STATION / OFFSET: 653+43, 42' LT | EXPLORATION ID: B-031-1-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 729.2 (MSL) EOB: 16.5 ft.
START: 12/11/24 END: 12/11/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79.1 | COORD: 41.469543 N, 81.796940 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 729.2	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4-1/2 INCHES	728.8																	
GRANULAR FILL - 1 INCH	728.7																	
CONCRETE - 8-1/2 INCHES	728.0	W 727.3 TR																
GRANULAR BASE - 8 INCHES	727.3																	
SHALE, gray and dark brown, highly to severely weathered, very weak to weak.			17 35 50/5"	-	100	SS-1	-	-	-	-	-	-	-	-	-	9	Rock (V)	
			28 50/4"	-	90	SS-2	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		W 721.7	39 50/5"	-	73	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	
			50/5"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		W 718.7	50	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/5"	-	80	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	714.2																	
SHALE, gray, highly weathered, weak.	712.7	EOB	45	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES
- Seepage encountered at 1.9', 7.5', and 10.5'.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:08 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:09 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1569	49	76779	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-029-1-24 & B-031-1-24

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / J. MINCHAK	DRILL RIG: OTB ATV D50	STATION / OFFSET: 66+74, 2' RT
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / S. SMITH	HAMMER: CME AUTOMATIC	ALIGNMENT: RAMP W2A
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 764.9 (MSL) EOB: 17.5 ft.
START: 12/13/24 END: 12/13/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 79.1	COORD: 41.468959 N, 81.792098 W

EXPLORATION ID **B-034-1-24**

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 764.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 2 INCHES	764.7																	
CONCRETE - 9 INCHES	764.0																	
ASPHALT - 4-1/2 INCHES	763.6																	
GRANULAR BASE - 4 INCHES	763.3																	
FILL: Very stiff dark gray to black **SILT AND CLAY**, some fine to coarse sand, little fine to coarse gravel, damp.		W 761.1	4 5 5	13	61	SS-1	3.0-4.0	-	-	-	-	-	-	-	-	11	A-6a (V)	
			2 5 4	12	78	SS-2	3.0-4.0	-	-	-	-	-	-	-	-	10	A-6a (V)	
	758.5					SS-3A	2.0-3.0	-	-	-	-	-	-	-	-	13	A-6a (V)	
FILL: Stiff to very stiff gray, black and brown **SILTY CLAY**, some fine to coarse sand, some fine to coarse gravel, few concrete fragments, damp.			2 3 2	7	61	SS-3B	1.0-3.0	-	-	-	-	-	-	-	-	16	A-6b (V)	
			2 3 4	9	94	SS-4	1.5-3.0	23	19	10	17	31	39	21	18	15	A-6b (5)	
	753.6		19 50/2"	-	100	SS-5A	3.5	-	-	-	-	-	-	-	-	15	A-6b (V)	
UNCONTROLLED FILL: Brick, slag, concrete and wood debris.	752.7					SS-5B	-	-	-	-	-	-	-	-	-	29	Visual (V)	
Stiff to hard gray mottled brown **SILT AND CLAY**, some fine to coarse sand, trace fine gravel, few shale fragments, damp to moist.			2 4 4	11	78	SS-6	1.5-2.5	4	6	19	28	43	40	17	23	19	A-6b (12)	
	748.3	TR	7 10 14	32	72	SS-7A	4.5+	-	-	-	-	-	-	-	-	19	A-6b (V)	
SHALE, gray, severely weathered, very weak, few clay seams.	747.4	EOB				SS-7B	-	-	-	-	-	-	-	-	-	19	Rock (V)	

NOTES:
- Seepage encountered at 3.8'.
- Borehole caved at 12.0' and was dry after augers removed.
- Auger refusal encountered at 11.3' in uncontrolled fill. The boring was offset 4 feet east and 3 feet south and completed.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:12 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1570 TOTAL 1587	50 TOTAL 67	76799	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOG B-034-1-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 2:46:08 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL014 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB ATV D50	STATION / OFFSET: 678+13, 84' RT	EXPLORATION ID B-037-2-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / S. SMITH	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 781.5 (MSL) EOB: 41.2 ft.	PAGE 1 OF 1
START: 12/13/24 END: 12/16/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 79.1	COORD: 41.468498 N, 81.788144 W	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4 INCHES	781.5																	
CONCRETE - 8 INCHES	781.2																	
GRANULAR BASE - 6 INCHES	780.5																	
FILL: Very stiff to hard gray **SILT AND CLAY**, "and" fine to coarse gravel (mostly shale fragments), some fine to coarse sand, damp.	780.0		4 6 5	15	61	SS-1	3.0-4.5	-	-	-	-	-	-	-	-	16	A-6a (V)	
			4 4 5	12	72	SS-2	2.5-4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
		W 775.2	4 8 10	24	89	SS-3	3.5-4.5+	37	13	9	22	19	34	20	14	10	A-6a (2)	
	773.5																	
FILL: Stiff to very stiff gray and black **SILT AND CLAY**, some fine to coarse gravel (mostly shale fragments), some fine to coarse sand, damp.			3 3 4	9	67	SS-4	1.5-2.5	-	-	-	-	-	-	-	-	12	A-6a (V)	
	771.0																	
FILL: Very stiff to hard gray and reddish-brown **SILTY CLAY**, some fine to coarse sand, little fine to coarse gravel, few shale fragments, damp.			5 8 11	25	67	SS-5	3.5-4.5	-	-	-	-	-	-	-	-	13	A-6b (V)	
	768.5																	
FILL: Very stiff to hard gray **SILT AND CLAY**, some fine to coarse gravel (mostly shale fragments), some fine to coarse sand, damp to moist.			4 5 5	13	72	SS-6	2.0-4.0	-	-	-	-	-	-	-	-	11	A-6a (V)	
			4 10 14	32	100	SS-7	3.5-4.5+	28	12	10	26	24	36	21	15	11	A-6a (5)	
			4 8 11	25	100	SS-8	3.5-4.5+	-	-	-	-	-	-	-	-	21	A-6a (V)	
	757.5		26 50/4"	-	100	SS-9AB	2.0-3.0	-	-	-	-	-	-	-	-	14	A-6a (V)	
UNCONTROLLED FILL: Concrete, metal and brick debris.	757.0						-	-	-	-	-	-	-	-	-	6	Visual (V)	
Stiff brown and gray **CLAY**, "and" silt, little fine to coarse sand, moist.			2 1 3	5	100	SS-10	1.0-1.5	0	1	13	44	42	45	24	21	27	A-7-6 (13)	
	749.7	TR																
SHALE, dark brown and gray, severely to highly weathered, very weak.			20 50/5"	-	73	SS-11	-	-	-	-	-	-	-	-	-	8	Rock (V)	
	744.7																	
SHALE, gray, highly weathered, weak.			50/5"	-	100	SS-12	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	740.3	EOB	50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:
- Seepage was encountered at 6.3'.
- Borehole caved at 22.0' and was "dry" after removing augers.
- SS-1 through SS-8 (0' - 20') were drilled on 12/13/24 with a Deitrich D50 ATV rig (Energy Ratio 79.1%)
- SS-9 through SS-13 (20' - 41.2') were drilled on 12/16/24 with a Mobile B-57 Truck rig (Energy Ratio 91%, limited to 90% per SGE)

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME ODOT MYLAR (11X17) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:16 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1571 TOTAL 1587	51 TOTAL 67	76799	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOG B-037-2-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 2:48:37 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL015 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 698+49, 34' LT | EXPLORATION ID: B-041-3-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: WERTZ / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 10/4/24 | ELEVATION: 772.3 (MSL) EOB: 15.0 ft.
START: 12/17/24 END: 12/17/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.466229 N, 81.781395 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 772.3	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4 INCHES	772.0																	
CONCRETE - 10 INCHES	771.2																	
GRANULAR BASE - 5 INCHES	770.8																	
FILL: Hard gray **SILT AND CLAY**, little fine to coarse sand, little fine to coarse gravel, few organic pockets, moist.	769.3		3 50/4"	-	90	SS-1	1.5	-	-	-	-	-	-	-	-	22	A-6a (V)	
FILL: Very stiff gray **CLAY**, "and" fine to coarse gravel, some fine to coarse gravel, little silt, damp.			8 5 5	15	44	SS-2	2.5	-	-	-	-	-	-	-	-	24	A-7-6 (V)	
			6 7 10	26	89	SS-3	2.5	-	-	-	-	-	-	-	-	24	A-7-6 (V)	
	761.8		9 7 10	26	44	SS-4	3.0	38	11	10	20	21	48	23	25	14	A-7-6 (5)	
FILL: Stiff to very stiff brown becoming gray **SILT AND CLAY**, some fine to coarse gravel, little fine to coarse sand, contains few brick and asphalt fragments, moist.			5 5 8	20	100	SS-5	-	-	-	-	-	-	-	-	-	19	A-6a (V)	
	757.3	EOB	3 4 8	18	83	SS-6	2.0	-	-	-	-	-	-	-	-	21	A-6a (V)	

NOTES
- Borehole caved at 11.5 feet and was "dry" after removing augers.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH: SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:31 - R:\SERVICE LINES\CS-2557\COLUMBUS\IGINTW\PROJECTS\117920021 SEWER BORINGS.GPJ

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB MOBILE B-57 | STATION / OFFSET: 704+07, 33' LT | EXPLORATION ID: B-043-3-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 759.7 (MSL) EOB: 15.0 ft.
START: 12/6/24 END: 12/6/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.465839 N, 81.779478 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 759.7	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3-1/4 INCHES	759.4																	
CONCRETE - 10-3/4 INCHES	758.5																	
GRANULAR BASE - 5 INCHES	758.0																	
FILL: Stiff to hard dark brown and gray **SILTY CLAY**, some fine to coarse sand, some fine to coarse gravel, few brick, slag and wood fragments, damp to moist.		W 756.2	3 5 12	26	72	SS-1	2.5-4.5	-	-	-	-	-	-	-	-	18	A-6b (V)	
	754.2		3 4 4	12	50	SS-2	1.0	26	14	13	24	23	38	21	17	24	A-6b (5)	
FILL: Stiff to hard dark gray **SILT AND CLAY**, some fine to coarse gravel, some fine to coarse sand, few shale fragments, damp.			3 3 4	11	0	SS-3	3.0-4.5	-	-	-	-	-	-	-	-	19	A-6a (V)	
	749.7		2 1 22	35	50	SS-4	1.0-1.5	24	12	10	31	23	34	22	12	19	A-6a (5)	
UNCONTROLLED FILL (possible construction debris) or shale boulder.	747.2		32 32 37	104	6	SS-5	-	-	-	-	-	-	-	-	-	7	Visual (V)	
Dense brown and gray **GRAVEL WITH SAND, SILT AND CLAY**, few shale fragments, damp.	745.6	TR																
SHALE, gray, highly weathered, very weak to weak.	744.7	EOB	8 13 17	45	89	SS-6A SS-6B	- -	- -	- -	- -	- -	- -	- -	- -	- -	11 9	A-2-6 (V) Rock (V)	

NOTES
- Encountered water at 3.5' during drilling.
- Drillers reported hard drilling from approximately 9' to 12'.
- Borehole caved at 7.0 feet and water was measured at 6.0 feet after the augers were removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH: PLASTIC HOLE PLUG: SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:32 - R:\SERVICE LINES\CS-2557\COLUMBUS\IGINTW\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET 1572 | TOTAL 1587 | SUBSET 52 | TOTAL 67 | PROJECT ID 76779 | REVIEWER BKS | DESIGNER KAH | DESIGN AGENCY

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-041-3-24 & B-043-3-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 2:54:09 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL016 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB MOBILE B-57 | STATION / OFFSET: 709+47, 35' LT | EXPLORATION ID: B-044-1-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 754.9 (MSL) EOB: 15.0 ft.
START: 12/6/24 END: 12/6/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.465905 N, 81.777542 W

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 14 INCHES	754.9 / 753.7																	
FILL: Stiff to very stiff gray with dark brown **CLAY**, some silt, little fine to coarse sand, trace fine gravel, slight organic odor, damp.	751.4		2 3 6	14	78	SS-1	1.8-2.8	-	-	-	-	-	-	-	-	19	A-7-6 (V)	
POSSIBLE FILL: Very stiff to hard brown mottled gray **SILTY CLAY**, some fine to coarse sand, little fine gravel, slight organic odor, damp.	749.4		3 5 6	17	72	SS-2	3.5-4.5+	-	-	-	-	-	-	-	-	20	A-6b (V)	
Stiff to very stiff brown mottled with gray **CLAY**, little fine to coarse sand, trace fine gravel, damp.	748.2		2 4 4	12	72	SS-3A	1.8-2.5	1	2	12	30	55	61	21	40	30	A-7-6 (20)	
Stiff to very stiff brown mottled with gray **SILT AND CLAY**, little fine to coarse sand, trace fine gravel, medium stiff zone from 9.5' to 9.8', damp.	744.4					SS-3B	1.0-2.5	-	-	-	-	-	-	-	-	25	A-6a (V)	
			3 3 4	11	89	SS-4	2.0-3.0	4	7	13	35	41	34	20	14	21	A-6a (10)	
Hard gray **SANDY SILT**, little clay, trace fine gravel, similar to severely weathered shale, dry.	743.4	TR	4 12 28	60	100	SS-5A	4.5+	-	-	-	-	-	-	-	-	5	A-4a (V)	
SHALE, dark gray, highly to severely weathered, very weak.	742.8					SS-5B	-	-	-	-	-	-	-	-	-	8	Rock (V)	
SHALE, gray, highly weathered, weak to slightly strong.	741.9					SS-5C	-	-	-	-	-	-	-	-	-	4	Rock (V)	
SHALE, dark gray, severely weathered, very weak to weak, many thin clay seams.	740.7	W 741.4	28 37 22	89	100	SS-6A	-	-	-	-	-	-	-	-	-	11	Rock (V)	
SHALE, gray, highly to severely weathered, very weak to weak.	739.9	EOB				SS-6B	-	-	-	-	-	-	-	-	-	12	Rock (V)	

NOTES
- Groundwater encountered during drilling at 13.5'.
- Borehole caved at 8.5' and was "dry" after removing augers.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; PLASTIC HOLE PLUG; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 724+85, 33' LT | EXPLORATION ID: B-048-6-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: WERTZ / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 10/4/24 | ELEVATION: 740.6 (MSL) EOB: 14.3 ft.
START: 12/17/24 END: 12/17/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.466438 N, 81.771975 W

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 14 INCHES	740.6 / 739.4																	
GRANULAR BASE - 3 INCHES	739.1																	
Very stiff gray **SILT AND CLAY**, little fine to coarse sand, little fine gravel, damp to moist.	736.1		3 6 8	21	83	SS-1	3.0	-	-	-	-	-	-	-	-	15	A-6a (V)	
SHALE, gray, highly to severely weathered, very weak to weak.		TR	9 13 50	95	78	SS-2A	3.5	-	-	-	-	-	-	-	-	7	A-6a (V)	
						SS-2B	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50	-	100	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	
			50	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	729.6																	
SHALE, gray, highly weathered, weak.			50	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	726.3	EOB	50 50/4"	- -	0 100	SS-6 SS-7	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	Rock (V) Rock (V)	

NOTES:
- No water encountered during drilling.
- Borehole caved at 11.0' and was dry after augers removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:54 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021 SEWER BORINGS.GPJ

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 16:55 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1573	1587	53	67	76779	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-044-1-24 & B-048-6-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 2:56:05 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL017 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 730+15, 35' LT | EXPLORATION ID: B-049-4-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA / NQ | CALIBRATION DATE: 10/4/24 | ELEVATION: 735.8 (MSL) EOB: 17.0 ft.
START: 12/17/24 END: 12/17/24 | SAMPLING METHOD: SPT / NQ | ENERGY RATIO (%): 90* | COORD: 41.466628 N, 81.770060 W

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 12 INCHES	735.8																	
GRANULAR BASE - 6 INCHES	734.8																	
SHALE, gray, highly to severely weathered, very weak to weak.	734.3	TR	43 50/4"	-	100	SS-1	-	-	-	-	-	-	-	-	-	5	Rock (V)	
			50/4"	-	100	SS-2	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	730.8	W 731.3																
SHALE, gray, highly weathered, weak.			50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	726.8		40 50/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, dark gray, slightly to moderately weathered, weak to slightly strong, laminated to thick bedded, fractured to moderately fractured, narrow aperature, slightly rough surfaces, RQD = 8%, REC = 98%. @ 11.6' - 12.0'; Q_u = 1,406 psi; γ_d = 144.2 pcf			8		98	NQ-5	-										CORE	
	718.8	EOB																

NOTES:
- Groundwater encountered at 4.5' during drilling.
- Borehole caved at 8.0' and was dry after core barrel removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 17:00 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WP\PROJECTS\117920021 SEWER BORINGS.GPJ

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 738+27, 33' LT | EXPLORATION ID: B-051-6-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: WERTZ / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 10/4/24 | ELEVATION: 728.4 (MSL) EOB: 16.5 ft.
START: 12/9/24 END: 12/9/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.466908 N, 81.767119 W

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 12 INCHES	728.4																	
GRANULAR BASE - 6 INCHES	727.4																	
FILL: Hard gray **SILTY CLAY**, little fine to coarse sand, trace fine gravel, damp to moist.	726.9		3 5 5	15	72	SS-1	4.5+	-	-	-	-	-	-	-	-	17	A-6b (V)	
Hard gray **SANDY SILT**, "and" clay, trace fine gravel, damp.	724.9		5 5 7	18	100	SS-2	4.5+	-	-	-	-	-	-	-	-	12	A-4a (V)	
			5 5 6	17	100	SS-3	4.5+	8	13	13	28	38	24	14	10	12	A-4a (6)	
	719.9	TR																
SHALE, gray, highly to severely weathered, very weak to weak.			38 50/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	
			32 26 16	63	89	SS-5	-	-	-	-	-	-	-	-	-	7	Rock (V)	
			16 21 50/2"	-	100	SS-6	-	-	-	-	-	-	-	-	-	7	Rock (V)	
	712.9																	
SHALE, gray, highly weathered, weak.	711.9	EOB	50	-	100	SS-7	-	-	-	-	-	-	-	-	-	5	Rock (V)	

NOTES:
- No water encountered during drilling.
- Borehole caved at 10.0' and was dry after augers removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 17:01 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WP\PROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1574	1587	54	67	76779	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-049-4-24 & B-051-6-24

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: WERTZ / R. JACKSON | DRILL RIG: WERTZ CME 55 TRUCK | STATION / OFFSET: 744+94, 32' LT | EXPLORATION ID: B-053-1-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: WERTZ / N. KACHMAR | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 10/4/24 | ELEVATION: 723.6 (MSL) EOB: 14.4 ft.
START: 12/9/24 END: 12/9/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 90* | COORD: 41.467138 N, 81.764704 W

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 12 INCHES	723.6																	
GRANULAR BASE - 6 INCHES	722.6																	
FILL: Very dense gray and black **GRAVEL WITH SAND**, trace to little silt, trace clay, fwe asphalt and shale fragments, damp.	722.1		28 25 15	60	94	SS-1		-	-	-	-	-	-	-	-	11	A-1-b (V)	
Very stiff gray **SANDY SILT**, "and", trace fine gravel, damp.	720.1		10 10 10	30	100	SS-2	2.0-3.5	-	-	-	-	-	-	-	-	19	A-4a (V)	
			6 7 5	18	100	SS-3	2.0	3	6	8	42	41	23	13	10	17	A-4a (8)	
Hard gray **SANDY SILT**, some clay, similar to severely weathered shale, dry to damp.	715.1		7 10 7	26	100	SS-4	4.5+	-	-	-	-	-	-	-	-	14	A-4a (V)	
SHALE, gray, very weak to weak, highly to severely weathered.	712.6	TR	17 14 50/4"	-	100	SS-5		-	-	-	-	-	-	-	-	10	Rock (V)	
	709.2	EOB	50/4"	-	50	SS-6		-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:
- Water not encountered during drilling.
- Borehole caved at 9.0' and was dry after augers removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / J. MINCHAK | DRILL RIG: OTB ATV D50 | STATION / OFFSET: 751+25, 35' LT | EXPLORATION ID: B-054-3-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA | CALIBRATION DATE: 12/22/22 | ELEVATION: 719.2 (MSL) EOB: 14.0 ft.
START: 12/9/24 END: 12/9/24 | SAMPLING METHOD: SPT | ENERGY RATIO (%): 79.1 | COORD: 41.467367 N, 81.762424 W

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 12 INCHES	719.2																	
GRANULAR BASE - 8 INCHES	718.2																	
FILL: Very dense dark brown and gray **GRAVEL WITH SAND**, little silt, trace clay, many slag fragments, damp.	717.5		7 26 20	61	78	SS-1A	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
	716.7					SS-1B	-	-	-	-	-	-	-	-	-	14	A-4a (V)	
FILL: Dense to very dense gray **SANDY SILT**, some fine to coarse gravel (shale fragments), little clay, damp.	715.2		8 13 14	36	100	SS-2A	-	-	-	-	-	-	-	-	-	11	A-4a (V)	
	714.8					SS-2B	-	-	-	-	-	-	-	-	-	8	A-3a (V)	
FILL: Dense brown **COARSE AND FINE SAND**, little silt, trace clay, damp.						SS-2C	-	-	-	-	-	-	-	-	-	10	A-4a (V)	
Very stiff gray **SANDY SILT**, some fine to coarse gravel (shale fragments), little clay, damp.	711.2	TR	6 12 12	32	78	SS-3	3.0-4.0	26	23	12	25	14	21	16	5	12	A-4a (1)	
SHALE, gray, highly to severely weathered, very weak.	708.7		17 50	-	100	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	
SHALE, gray, highly weathered, very weak to weak.	705.2	EOB	50/4"	-	50	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
			50/4"	-	50	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	

NOTES:
- Water not encountered during drilling.
- Borehole caved at 12.0' and was dry after augers removed.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 17:18 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\PROJECTS\117920021 SEWER BORINGS.GPJ

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 2:59:29 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL019 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB MOBILE B-57 | STATION / OFFSET: 758+20, 34' LT | EXPLORATION ID: B-056-1-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA / NQ | CALIBRATION DATE: 12/22/22 | ELEVATION: 717.6 (MSL) EOB: 17.7 ft.
START: 12/3/24 END: 12/3/24 | SAMPLING METHOD: SPT / NQ | ENERGY RATIO (%): 90* | COORD: 41.467611 N, 81.759913 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 717.6	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 14 INCHES	716.4																	
GRANUALR BASE - 11 INCHES	715.5																	
FILL: Hard brownish gray **SILT AND CLAY**, some fine to coarse sand, trace to little fine gravel, few concrete, slag and brick fragments, damp.	715.1		3 4 6	15	78	SS-1A	4.5+	-	-	-	-	-	-	-	-	11	A-6a (V)	
	714.1					SS-1B	4.5+	-	-	-	-	-	-	-	-	10	A-4a (V)	
FILL: Hard gray and black **SANDY SILT**, some clay, trace fine gravel, few slag and shale fragments, calcareous, damp.	712.1		6 5 7	18	78	SS-2	-	54	12	12	14	8	24	16	8	10	A-2-4 (0)	
FILL: Medium dense gray **GRAVEL WITH SAND AND SILT**, trace clay, few slag fragments, damp.	711.1	W TR 711.1	2 12 20	48	100	SS-3A	-	-	-	-	-	-	-	-	-	14	A-2-6 (V)	
POSSIBLE FILL: Loose brown **GRAVEL WITH SAND, SILT AND CLAY**, few shale fragments, damp.						SS-3B	-	-	-	-	-	-	-	-	-	4	Rock (V)	
SHALE, gray, highly to severely weathered, very weak.			50/5"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	706.0	W 706.6	23 50/1"	-	100	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, gray, highly weathered, very weak to weak.	703.6		50/2"	-	50	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, dark gray, slightly to moderately weathered, slightly strong, laminated to thick bedded, highly fractured to moderately fractured, narrow aperture, slightly rough surfaces, RQD = 43%, REC = 100%. @ 14.2' - 14.6'; Q_u = 2,070 psi; γ_d = 152.8 pcf	699.9	EOB	43		100	NQ-7											CORE	

NOTES:
- The asphalt from 5 inches to 14 inches was deteriorated.
- Seepage observed at 6.5'.
- Water encountered during drilling at 11.0'.
- No water accumulated in the augers prior to rock coring.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS WITH CEMENT

S&ME JOB: 117920021

PROJECT: CUY-90-6.69 | DRILLING FIRM / OPERATOR: OTB / C. SVITAK | DRILL RIG: OTB MOBILE B-57 | STATION / OFFSET: 763+06, 36' LT | EXPLORATION ID: B-057-3-24
TYPE: UTILITY | SAMPLING FIRM / LOGGER: S&ME / S. SMITH | HAMMER: CME AUTOMATIC | ALIGNMENT: IR 90 | PAGE: 1 OF 1
PID: 76779 BR ID: N/A | DRILLING METHOD: 3.25" HSA / NQ | CALIBRATION DATE: 12/22/22 | ELEVATION: 726.6 (MSL) EOB: 29.0 ft.
START: 12/10/24 END: 12/10/24 | SAMPLING METHOD: SPT / NQ | ENERGY RATIO (%): 90* | COORD: 41.467904 N, 81.758199 W

MATERIAL DESCRIPTION AND NOTES	ELEV. 726.6	DEPTHS	SPT/RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 5 INCHES	726.2																	
CONCRETE - 10-1/2 INCHES	725.3																	
GRANULAR BASE - 5 INCHES	724.9																	
FILL: Stiff gray and dark gray **SILT AND CLAY**, some fine to coarse sand, trace fine gravel, moist.	724.5		5 3 7	15	78	SS-1A	1.5-2.0	-	-	-	-	-	-	-	-	15	A-6a (V)	
						SS-1B	-	-	-	-	-	-	-	-	-	13	A-3a (V)	
FILL: Medium dense brown **COARSE AND FINE SAND**, little silt, trace clay, trace fine gravel, damp.	722.5		6 11 12	35	78	SS-2A	-	-	-	-	-	-	-	-	-	13	A-3a (V)	
						SS-2B	-	-	-	-	-	-	-	-	-	22	A-4a (V)	
Dense gray **SANDY SILT**, trace fine gravel, trace clay, moist.	720.6																	
Hard gray **SANDY SILT**, some clay, little fine to coarse gravel, damp.	718.1		5 6 13	29	89	SS-3	4.5+	19	10	13	34	24	23	14	9	11	A-4a (5)	
Dense gray **GRAVEL WITH SAND AND SILT**, trace clay, many shale fragments, damp.	716.1	TR	9 11 17	42	72	SS-4	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
SHALE, gray, highly to severely weathered, very weak, partly similar to soil from 15.5' to 16.7'.		W 713.1	22 41 50/3"	-	73	SS-5	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		W 710.6	22 31 50/4"	-	56	SS-6	-	-	-	-	-	-	-	-	-	10	Rock (V)	
	709.9		5 17 50/3"	-	100	SS-7A	-	-	-	-	-	-	-	-	-	13	Rock (V)	
SHALE, gray, highly to severely weathered, very weak to weak.	706.6		50/2"	-	50	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, dark gray, moderately to highly weathered, very weak to slightly strong, thinly laminated to thick bedded, highly fractured to moderately fractured, narrow aperture, slightly rough surfaces, clay seam at 24.8', RQD = 35%, REC = 100%. @ 23.3' - 23.7'; Q_u = 2,617 psi; γ_d = 148.0 pcf @ 27.9' - 28.3'; Q_u = 535 psi; γ_d = 153.5 pcf			33		100	NQ-9											CORE	
	697.6	EOB	38		100	NQ-10											CORE	

NOTES:
- Seepage encountered at 13.5' and 16.0'.
- No water accumulated in the augers prior to rock coring.
- Borehole caved at 16.0' and water was measured at 11.0'.

NOTES: SEE ABOVE.
ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS WITH CEMENT

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 17:21 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021 SEWER BORINGS.GPJ

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 1/16/25 17:21 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021 SEWER BORINGS.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1576	1587	56	67	76799	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-056-1-24 & B-057-3-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 3:01:32 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL020 (8.5x11 log).dgn

S&ME JOB: 117920021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 768+23, 33' LT	EXPLORATION ID B-059-5-24
TYPE: UTILITY	SAMPLING FIRM / LOGGER: S&ME / S. SMITH	HAMMER: CME AUTOMATIC	ALIGNMENT: IR 90	
PID: 76779 BR ID: N/A	DRILLING METHOD: 3.25" HSA / NQ	CALIBRATION DATE: 12/22/22	ELEVATION: 736.3 (MSL) EOB: 40.3 ft.	PAGE 1 OF 1
START: 12/4/24 END: 12/4/24	SAMPLING METHOD: SPT / NQ	ENERGY RATIO (%): 90*	COORD: 41.468375 N, 81.756440 W	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 4 INCHES	736.3																	
CONCRETE - 11-1/4 INCHES	736.0																	
GRANULAR BASE - 11 INCHES	735.0																	
FILL: Medium dense brown **SANDY SILT**, trace to little clay, trace fine gravel, few pockets of silty clay, moist.	734.1		4 5 6	17	78	SS-1	-	-	-	-	-	-	-	-	-	11	A-4a (V)	
FILL: Very stiff to hard **SILT AND CLAY**, some fine to coarse sand, some fine gravel, damp.	732.8		4 7 8	23	83	SS-2	3.5-4.5+	26	13	12	24	25	29	16	13	11	A-6a (4)	
			4 5 5	15	67	SS-3	4.5+	-	-	-	-	-	-	-	-	14	A-6a (V)	
	727.8																	
FILL: Medium dense black **COARSE AND FINE SAND**, contains cinders, wood, brick fragments, intermixed with gravel and pockets of silty clay, damp.	727.0		4 5 15	30	78	SS-4AB	-	-	-	-	-	-	-	-	-	26	A-3a (V)	
	726.3						4.0-4.5+	-	-	-	-	-	-	-	-	13	A-6a (V)	
FILL: Hard dark brown **SILT AND CLAY**, little to some fine to coarse sand, little fine gravel, few slag, shale and brick fragments, damp.	724.7		4 6 3	14	61	SS-5AB	-	-	-	-	-	-	-	-	-	9	A-1-b (V)	
FILL: Medium dense **GRAVEL WITH SAND** (predominantly lightweight slag), trace silt, dry.	723.3						0.0-0.2	-	-	-	-	-	-	-	-	15	A-6a (V)	
FILL: Very soft brown **SILT AND CLAY**, some fine to coarse sand, little fine gravel, few slag fragments, damp to moist.	722.1		2 2 2	6	89	SS-6AB	1.5-2.0	15	12	22	27	24	31	19	12	19	A-6a (4)	
FILL: Stiff brown and dark brown **SILT AND CLAY**, some fine to coarse sand, little fine to coarse gravel, damp.							1.0-2.0	-	-	-	-	-	-	-	-	23	A-6b (V)	
FILL: Stiff to very stiff dark brown **SILTY CLAY**, little to some fine to coarse sand, little fine gravel, few brick fragments, damp.	719.9						3.0-4.0	-	-	-	-	-	-	-	-	25	A-6b (V)	
Loose dark brown **SANDY SILT**, little clay, moist.	719.1		2 4 2	9	100	SS-7ABC	-	-	-	-	-	-	-	-	-	24	A-4a (V)	
Loose brown and gray **SILT**, "and" fine sand, little clay, trace coarse sand, moist.	718.3						-	-	-	-	-	-	-	-	-	26	A-4b (V)	
Hard gray **SILT AND CLAY**, trace fine to coarse sand, trace fine gravel, damp.	717.2		3 7 16	35	72	SS-8ABC	4.5+	1	2	6	27	64	33	20	13	19	A-6a (9)	
SHALE, dark gray, slightly to highly weathered, weak.	716.9	TR					-	-	-	-	-	-	-	-	-	11	Rock (V)	
SHALE, gray, severely weathered (soil like structure), very weak.	715.3						-	-	-	-	-	-	-	-	-	14	Rock (V)	
SHALE, gray, slightly to highly weathered, very weak to weak.			50/5"	-	100	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	706.8		50/2"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)	
SHALE, gray, moderately to highly weathered, slightly strong, laminated to thick bedded, highly fractured to slightly fractured, pyritic, narrow aperture, slightly rough surfaces, RQD = 39%, REC = 90%. @ 29.9' - 30.3'; Q_u = 2,454 psi; γ_d = 148.9 pcf			52		99	NQ-11											CORE	
@ 36.0' - 36.4'; Q_u = 3,217 psi; γ_d = 148.6 pcf	696.0	EOB	23		82	NQ-12											CORE	

NOTES:
- Seepage observed at 2.4' and 8.9'
- Borehole caved at 28.0' and water was measured at 21.0' after core barrel removed.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: ASPHALT PATCH; SOIL CUTTINGS WITH CEMENT

S&ME ODOT MYLAR (11X17) - SGE 01/2019 - OH DOT.GDT - 1/16/25 17:42 - R:\SERVICE LINES\CS-2557\COLUMBUS\GINT\WPROJECTS\117920021_SEWER BORINGS.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1577 TOTAL 1587	57 TOTAL 67	76799	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOG B-059-5-24

S&ME JOB: 1179-20-021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 92+39, 5' LT	EXPLORATION ID	B-065-2-23
TYPE: LIGHT POLE	SAMPLING FIRM / LOGGER: S&ME / B. SEARS	HAMMER: CME AUTOMATIC	ALIGNMENT: WB 90 TO N. MARGINAL		
PID: 76779 BR ID: N/A	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 701.4 (MSL) EOB: 16.5 ft.	PAGE	1 OF 1
START: 5/16/24 END: 5/16/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	COORD: 41.470355 N, 81.748045 W		

MATERIAL DESCRIPTION AND NOTES	ELEV. 701.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3 INCHES	701.1	1																
CONCRETE - 8 INCHES	700.5																	
GRANULAR BASE - 12 INCHES	699.5	2	11 22 14	54	94	SS-1A	-	-	-	-	-	-	-	-	-	13	A-1-b (V)	
Hard brown **SANDY SILT**, some clay, trace fine gravel, moist.	698.4					SS-1B	4.5+	-	-	-	-	-	-	-	-	23	A-4a (V)	
Very stiff to hard brown **SILT**, some clay, little fine to coarse sand, trace fine gravel, moist.	695.9	3 4 5	7 3 4	11	50	SS-2	2.5- 4.5	2	4	10	56	28	20	14	6	18	A-4b (8)	
Medium stiff to stiff brown and gray **SANDY SILT**, "and" clay, trace fine gravel, moist.		6 7 8	1 2 2	6	78	SS-3	0.7- 1.7	-	-	-	-	-	-	-	-	17	A-4a (V)	
		9 10	1 2 3	8	78	SS-4	0.7- 1.5	2	4	10	47	37	24	15	9	19	A-4a (8)	
@ 11.0'-12.5'; few wet silt pockets	688.4	11 12 13	1 2 2	6	89	SS-5	0.8- 1.3	-	-	-	-	-	-	-	-	23	A-4a (V)	
Hard dark-brown **SILT AND CLAY**, trace fine to coarse sand, trace fine gravel, few shale fragments, damp.	685.9	14 15	3 7 9	24	78	SS-6	4.2- 4.5+	-	-	-	-	-	-	-	-	16	A-6a (V)	
SHALE, gray, severely weathered, very weak to weak.	684.9	16	50	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		EOB																

NOTES:
- No water encountered during drilling.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS MIXED WITH BENTONITE

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/22/24 11:20 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\1179-20-021.GPJ

S&ME JOB: 1179-20-021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 95+72, 5' LT	EXPLORATION ID	B-066-1-23
TYPE: LIGHT POLE	SAMPLING FIRM / LOGGER: S&ME / B. SEARS	HAMMER: CME AUTOMATIC	ALIGNMENT: WB 90 TO N. MARGINAL		
PID: 76779 BR ID: N/A	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 690.9 (MSL) EOB: 9.3 ft.	PAGE	1 OF 1
START: 5/16/24 END: 5/16/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	COORD: 41.470322 N, 81.746793 W		

MATERIAL DESCRIPTION AND NOTES	ELEV. 690.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 9 INCHES	690.2	1																
GRANULAR BASE - 17 INCHES	688.7	2	7 4 4	12	72	SS-1A	-	-	-	-	-	-	-	-	-	14	A-1-b (V)	
Very stiff to hard brown **SILT AND CLAY**, trace fine to coarse sand, trace fine gravel, damp.	684.2	3 4 5				SS-1B	4.0- 4.5	-	-	-	-	-	-	-	-	17	A-6a (V)	
			2 3 3	9	67	SS-2	2.0- 2.5	4	2	5	31	58	32	18	14	20	A-6a (10)	
SHALE, gray, severely weathered, very weak to weak, arenaceous.	681.6	6 7 8 9	3 8 16	36	94	SS-3A	2.2- 2.7	-	-	-	-	-	-	-	-	20	A-6a (V)	
						SS-3B	-	-	-	-	-	-	-	-	-	13	Rock (V)	
			23 50/4"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		EOB																

NOTES:
- No water encountered during drilling.
- Boring caved at 7.0' and was dry.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: SOIL CUTTINGS

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/22/24 11:21 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\1179-20-021.GPJ

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 12:43:27 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL002 (8.5x11 log).dgn

S&ME JOB: 1179-20-021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 90+88, 1' LT	EXPLORATION ID B-100-3-23
TYPE: LIGHT POLE	SAMPLING FIRM / LOGGER: S&ME / K. HARPER	HAMMER: CME AUTOMATIC	ALIGNMENT: WB 90 TO W 41ST	
PID: 76779 BR ID: N/A	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 685.2 (MSL) EOB: 25.0 ft.	PAGE 1 OF 1
START: 5/15/24 END: 5/15/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	COORD: 41.475412 N, 81.713051 W	

MATERIAL DESCRIPTION AND NOTES	ELEV. 685.2	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 2-1/4 INCHES	685.0																	
CONCRETE - 9 INCHES	684.2																	
GRANULAR BASE - 12-1/2 INCHES	683.2																	
FILL: Loose to medium dense brown and black **COARSE AND FINE SAND**, little silt, little fine gravel, trace clay, few brick and clay tile fragments, few cinders, iron oxide staining, damp.			5 4 2	9	100	SS-1	-	-	-	-	-	-	-	-	-	12	A-3a (V)	
			2 3 4	11	100	SS-2	-	17	26	28	19	10	21	15	6	13	A-3a (0)	
	679.7																	
Medium dense brown **COARSE AND FINE SAND**, trace to little fine gravel, trace silt, trace clay, iron oxide staining, damp.			4 4 3	11	100	SS-3	-	-	-	-	-	-	-	-	-	9	A-3a (V)	
	677.2																	
Loose brown **SANDY SILT**, trace to little clay, trace fine gravel, iron oxide staining, moist.			3 2 2	6	100	SS-4	-	-	-	-	-	-	-	-	-	18	A-4a (V)	
	674.7																	
Loose brown **COARSE AND FINE SAND**, little fine gravel, trace silt, trace clay, iron oxide staining, damp.			2 2 2	6	100	SS-5	-	16	32	38	9	5	NP	NP	NP	9	A-3a (0)	
	672.2																	
Loose brown **SILT**, some fine sand, little clay, few gray pockets, moist to wet.			2 2 2	6	100	SS-6	-	0	0	25	62	13	22	16	6	24	A-4b (8)	
		W 669.2																
			1 1 2	5	100	SS-7	-	-	-	-	-	-	-	-	-	31	A-4b (V)	
			2 2 3	8	100	SS-8	-	-	-	-	-	-	-	-	-	25	A-4b (V)	
	664.7																	
Medium dense brown **SANDY SILT**, trace to little clay, moist to wet.			5 10 9	29	100	SS-9	-	-	-	-	-	-	-	-	-	11	A-4a (V)	
		W 662.2																
			4 5 6	17	100	SS-10	-	-	-	-	-	-	-	-	-	28	A-4a (V)	
	660.2	EOB																

NOTES:
- Seepage encountered at 16.0'
- Groundwater encountered at 23.0'.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/22/24 11:22 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\1179-20-021.GPJ

S&ME JOB: 1179-20-021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 93+42, 4' LT	EXPLORATION ID B-100-4-23
TYPE: LIGHT POLE	SAMPLING FIRM / LOGGER: S&ME / K. HARPER	HAMMER: CME AUTOMATIC	ALIGNMENT: WB 90 TO W 41ST	
PID: 76779 BR ID: N/A	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 679.7 (MSL) EOB: 25.0 ft.	PAGE 1 OF 1
START: 5/15/24 END: 5/15/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	COORD: 41.475079 N, 81.712237 W	

MATERIAL DESCRIPTION AND NOTES	ELEV. 679.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3-1/2 INCHES	679.4																	
CONCRETE - 10 INCHES	678.6																	
GRANULAR BASE - 10-1/2 INCHES	677.7																	
FILL: Loose to medium dense brown and black **GRAVEL WITH SAND**, trace silt, trace clay, iron oxide statining, damp to moist.			4 5 5	15	100	SS-1	-	-	-	-	-	-	-	-	-	12	A-1-b (V)	
			4 3 2	8	100	SS-2	-	47	22	20	7	4	NP	NP	NP	9	A-1-b (0)	
	674.2																	
Loose brown **COARSE AND FINE SAND**, little fine gravel, trace silt, trace clay, damp to moist.			2 2 2	6	100	SS-3	-	-	-	-	-	-	-	-	-	11	A-3a (V)	
	671.7																	
Very loose to loose brown **SILT**, little clay, trace fine sand, moist to wet.			2 2 2	6	100	SS-4	-	0	0	4	79	17	24	18	6	30	A-4b (8)	
			1 1 1	3	100	SS-5	-	-	-	-	-	-	-	-	-	30	A-4b (V)	
			1 1 2	5	100	SS-6	-	-	-	-	-	-	-	-	-	27	A-4b (V)	
			2 2 2	6	100	SS-7	-	-	-	-	-	-	-	-	-	30	A-4b (V)	
			1 1 2	5	100	SS-8	-	-	-	-	-	-	-	-	-	32	A-4b (V)	
			1 1 2	5	100	SS-9	-	-	-	-	-	-	-	-	-	25	A-4b (V)	
	656.7	W 656.7																
Medium dense brown **SANDY SILT** trace to little clay, trace fine gravel, moist to wet.			4 5 6	17	100	SS-10	-	-	-	-	-	-	-	-	-	24	A-4a (V)	
	654.7	EOB																

NOTES:
- Seepage encountered at 23.0'
- Boring caved at 11.0' and was observed to be dry after HSA were removed.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS

PLATE 1

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/22/24 11:23 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINTW\PROJECTS\1179-20-021.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1579	59	76799	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOGS B-100-3-23 & B-100-4-23

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 12:53:48 PM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YL003 (8.5x11 log).dgn

S&ME JOB: 1179-20-021

PROJECT: CUY-90-6.69	DRILLING FIRM / OPERATOR: OTB / C. SVITAK	DRILL RIG: OTB MOBILE B-57	STATION / OFFSET: 95+89, 4' LT
TYPE: LIGHT POLE	SAMPLING FIRM / LOGGER: S&ME / K. HARPER	HAMMER: CME AUTOMATIC	ALIGNMENT: WB 90 TO W 41ST
PID: 76779 BR ID: N/A	DRILLING METHOD: 2.25" HSA	CALIBRATION DATE: 12/22/22	ELEVATION: 681.9 (MSL) EOB: 25.0 ft.
START: 5/15/24 END: 5/15/24	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	COORD: 41.474732 N, 81.711469 W

EXPLORATION ID **B-101-2-23** PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT - 3 INCHES	681.6																	
CONCRETE - 9-1/2 INCHES	680.9																	
GRANULAR BASE - 11-1/2 INCHES	679.9																	
FILL: Dense to very dense brown and black **GRAVEL WITH SAND AND SILT**, trace clay, few cinders, iron oxide staining, damp.	676.4		3 13 16	44	100	SS-1	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	
			13 16 19	53	100	SS-2	-	-	-	-	-	-	-	-	-	11	A-2-4 (V)	
Very loose to loose brown **COARSE AND FINE SAND**, little to some silt, trace to little fine gravel, trace to little clay, iron oxide staining above 10', damp to moist.			2 2 2	6	100	SS-3	-	15	22	31	21	11	19	13	6	13	A-3a (0)	
			1 1 1	3	100	SS-4	-	-	-	-	-	-	-	-	-	15	A-3a (V)	
			1 2 1	5	100	SS-5	-	-	-	-	-	-	-	-	-	13	A-3a (V)	
			3 4 2	9	100	SS-6	-	0	2	80	13	5	NP	NP	NP	10	A-3a (0)	
			3 3 3	9	100	SS-7	-	-	-	-	-	-	-	-	-	9	A-3a (V)	
	661.4		2 2 2	6	100	SS-8	-	-	-	-	-	-	-	-	-	10	A-3a (V)	
Medium dense brown **SANDY SILT**, trace clay, moist to wet.		▽ 658.9	4 8 7	23	100	SS-9	-	0	0	64	30	6	NP	NP	NP	22	A-4a (0)	
		W 658.4																
	656.9	EOB	2 3 6	14	100	SS-10	-	-	-	-	-	-	-	-	-	32	A-4a (V)	

NOTES:
- Seepage encountered at 23.5'
- Boring did not cave and water was measured at 23.0' after HSA were removed.

NOTES: SEE ABOVE.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLASTIC HOLE PLUG DEVICE; SOIL CUTTINGS

S&ME ODOT LOG (8.5X11) - SGE 01/2019 - OH DOT.GDT - 8/22/24 11:23 - R:\SERVICE LINES\CS-2557\CLEVELAND\01 - LABORATORY\02 - GINT\WPROJECTS\1179-20-021.GPJ

PLATE 1

B-009-0-69

LOG OF BORING

Date Started 8-19-69 Sample Type SS Dia 1 3/8"
Date Completed 8-20-69 Casing Length 20' Dia 3 1/2"
Boring No B-9 Station & Offset 51+13, CL. (9th Pier)
Water Elev
Surface Elev 706.0'

Elev	Depth	Std Pen (N)	Rec ft.	Loss ft.	Description	Sample No	Physical Characteristics % Agg	% CS	% FS	% Silt	% Clay	LL	PL	WC	SHTL Class.
706.0	0														
	2														
	4														
701.0	6	17/17			Brownish-Gray Sandy Silt	1	5	3	12	68	12	NP	NP	20	A-4b
698.5	8	10/12			Brownish-Gray Silt	2	0	1	18	62	19	NP	NP	21	A-4b
696.0	10	9/11			Gray Silt	3	10	2	4	38	46	NP	NP	16	A-4a
693.5	12														
	14	8/11			Gray Sandy Clay	4	7	3	13	46	31	28	11	19	A-6a
691.0	16	8/8			Brownish-Gray Sandy Silt	5	13	6	13	34	34	23	18	12	A-4a
688.5	18	11/14			Gray Silt and Clay	6	0	2	5	33	60	31	12	20	A-6a
686.0	20														
685.5		60/4			Gray Sandy Clay with Stone Fragments	7	33	13	5	21	28	29	11	14	A-6a
	22				TOP OF ROCK										
	24		4.3	0.2											
	26				Shale, gray, medium-firm to firm, argillaceous, pyritiferous in part, micaceous, interbedded with fine arenaceous lamina. Core loss 7%.											
	28		4.5	0.5											
676.0	30				BOTTOM OF BORING										

*Refusal

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1580 TOTAL 1587	60 TOTAL 67	76779	BKS	KAH	

SOIL PROFILE - ROADWAY
CUY-90-6.69
BORING LOG B-101-2-23 & HISTORIC BORING LOG B-009-0-69

S&ME, Inc.

2.0'

B-015-1-24 (1 of 2)



Run #:	Depth		Recovery		RQD	
NQ-5	10.0'	14.0'	47"/48"	98%	20"/48"	42%
NQ-6	14.0'	16.0'	24"/24"	100%	5"/24"	21%
CUY-90-6.69 PID 76779						

S&ME, Inc.

2.0'

B-015-1-24 (2 of 2)

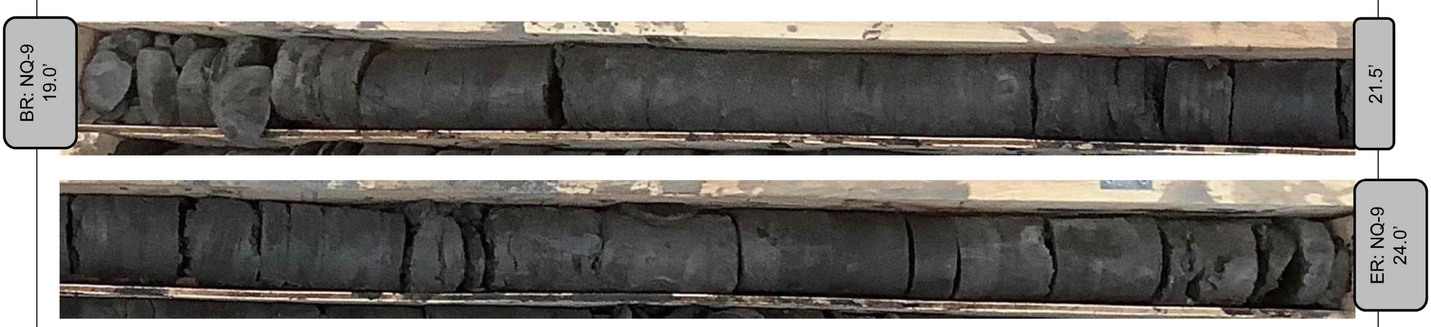


Run #:	Depth		Recovery		RQD	
NQ-7	16.0'	21.0'	60"/60"	100%	37"/60"	62%
NQ-8	21.0'	25.0'	40"/48"	83%	26"/48"	54%
CUY-90-6.69 PID 76779						

PLATE 39

S&ME, Inc.

B-018-3-24



Run #:	Depth		Recovery		RQD	
NQ-9	19.0'	24.0'	60"/60"	100%	19"/60"	32%
CUY-90-6.69 PID 76779						

S&ME, Inc.

B-019-2-24



Run #:	Depth		Recovery		RQD	
NQ-7	14.0'	24.0'	120"/120"	100%	61"/120"	51%
CUY-90-6.69 PID 76779						

PLATE 41

S&ME, Inc.

2.0'

B-021-2-24



Run #:	Depth		Recovery		RQD	
NQ-4	8.5'	10.5'	24"/24"	100%	16"/24"	67%
NQ-5	10.5'	13.5'	36"/36"	100%	29"/36"	81%
NQ-6	13.5'	18.5'	60"/60"	100%	56"/60"	93%
CUY-90-6.69 PID 76779						

S&ME, Inc.

2.0'

B-023-1-24



Run #:	Depth		Recovery		RQD	
NQ-3	7.0'	10.9'	39"/47"	83%	17"/47"	36%
NQ-4	10.9'	14.4'	42"/42"	100%	32"/47"	76%
CUY-90-6.69 PID 76779						

PLATE 43

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 11:26:21 AM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YR004 (8.5x11 rock).dgn

S&ME, Inc.

2.0'

B-025-2-24 (1 of 2)



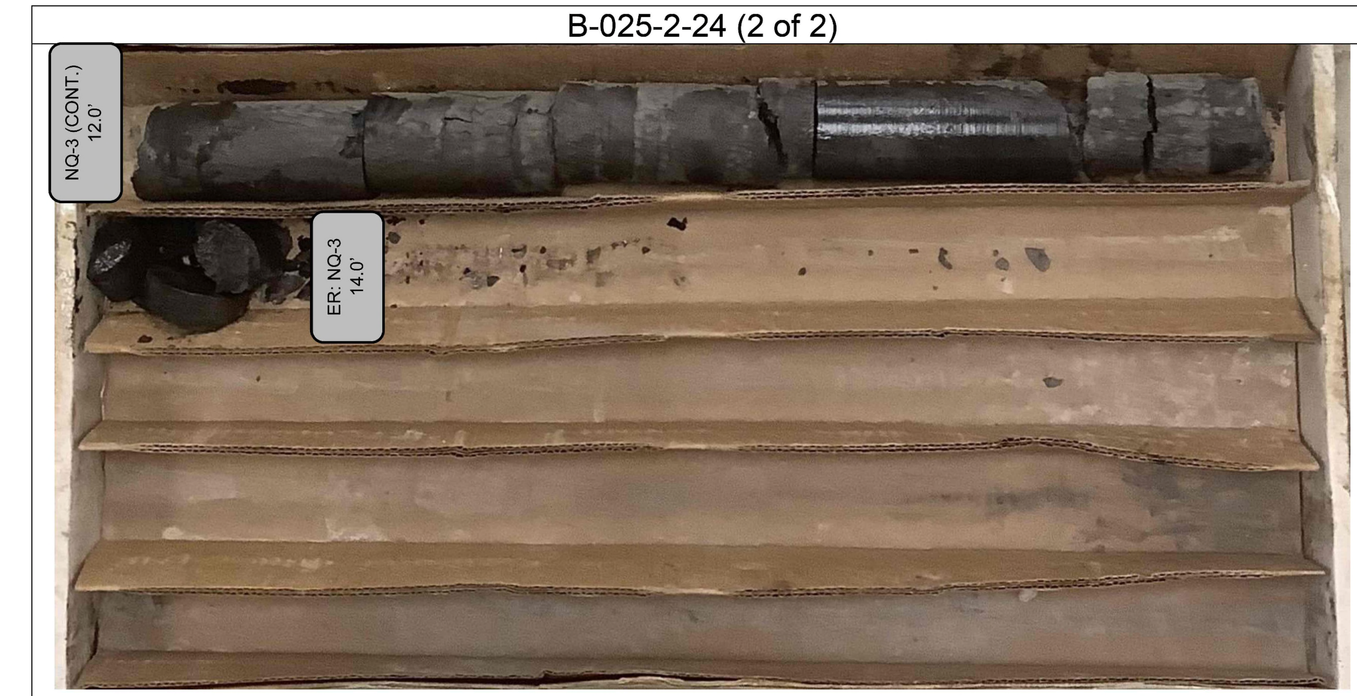
Run #:	Depth		Recovery		RQD	
NQ-3	4.0'	14.0'	120"/120"	100%	35"/120"	29%

CUY-90-6.69 PID 76779

S&ME, Inc.

2.0'

B-025-2-24 (2 of 2)



See previous page for core run information

CUY-90-6.69 PID 76779

PLATE 45

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1584	64	76799	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
ROCK CORE PHOTOS FOR B-025-2-24

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 1/22/2025 TIME: 11:31:33 AM USER: kharper
T:\Columbus-1170\Projects\2020\1179-20-021_ASI_CUY-90-6.83 Pavement\CAD\76779\400-Engineering\Geotechnical\Sheets\76799_YR005 (8.5x11 rock).dgn

S&ME, Inc.

B-026-3-24



Run #:	Depth		Recovery		RQD	
NQ-3	5.0'	15.0'	120"/120"	100%	48"/120"	40%
CUY-90-6.69 PID 76779						

S&ME, Inc.

B-028-2-24



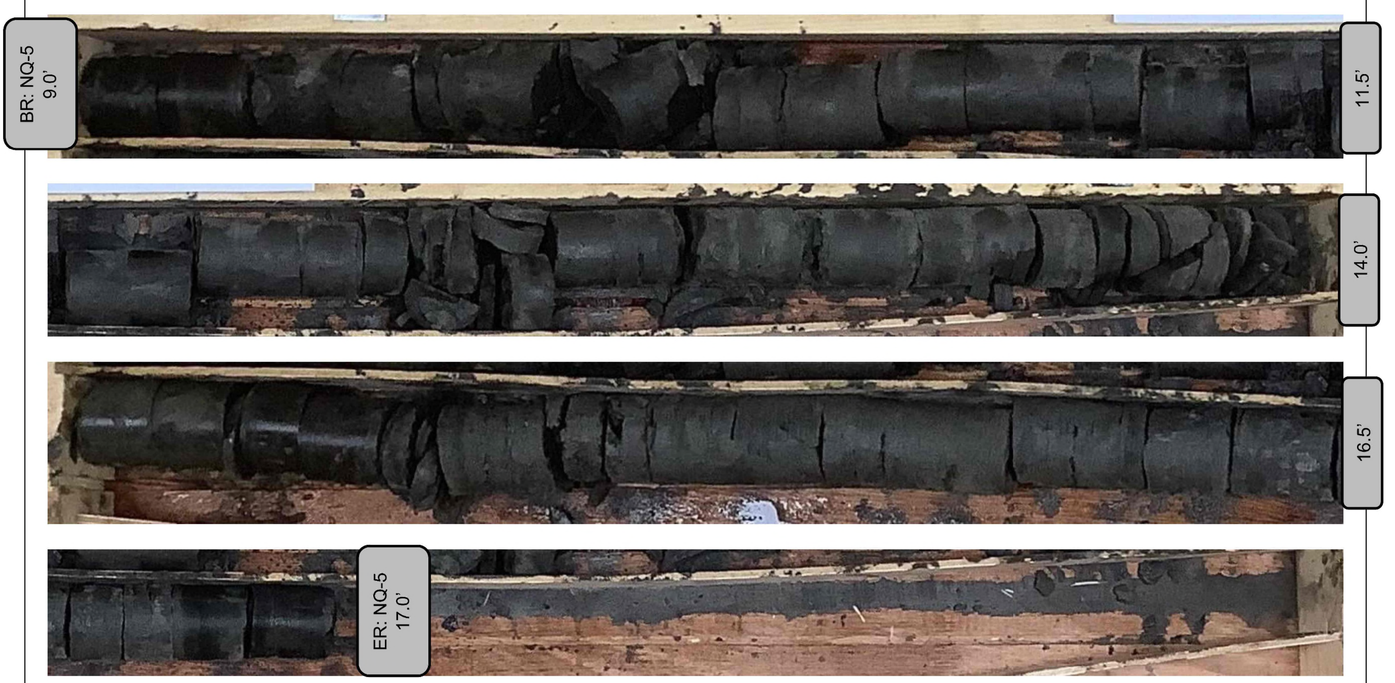
Run #:	Depth		Recovery		RQD	
NQ-5	9.0'	16.0'	74"/84"	88%	52"/84"	62%
CUY-90-6.69 PID 76779						

PLATE 47

S&ME, Inc.

2.5'

B-049-4-24



Run #:	Depth		Recovery		RQD	
NQ-5	9.0'	17.0'	94"/96"	98%	8"/96"	8%

CUY-90-6.69 PID 76779

S&ME, Inc.

2.0'

B-056-1-24



Run #:	Depth		Recovery		RQD	
NQ-7	14.0'	17.7'	44"/44"	100%	19"/44"	43%

CUY-90-6.69 PID 76779

PLATE 49

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
1586	66	76799	BKS	KAH	
TOTAL 1587	TOTAL 67				

SOIL PROFILE - ROADWAY
CUY-90-6.69
ROCK CORE PHOTOS FOR B-049-4-24 & B-056-1-24

S&ME, Inc.

2.0'

B-057-3-24



Run #:	Depth		Recovery		RQD	
NQ-9	20.0'	25.0'	60"/60"	100%	20"/60"	33%
NQ-10	25.0'	29.0'	48"/48"	100%	18"/48"	38%
CUY-90-6.69 PID 76779						

S&ME, Inc.

2.0'

B-059-5-24



Run #:	Depth		Recovery		RQD	
NQ-11	29.5'	35.3'	67"/69"	97%	36"/69"	52%
NQ-12	35.3'	40.3'	49"/60"	82%	14"/60"	23%
CUY-90-6.69 PID 76779						

PLATE 51