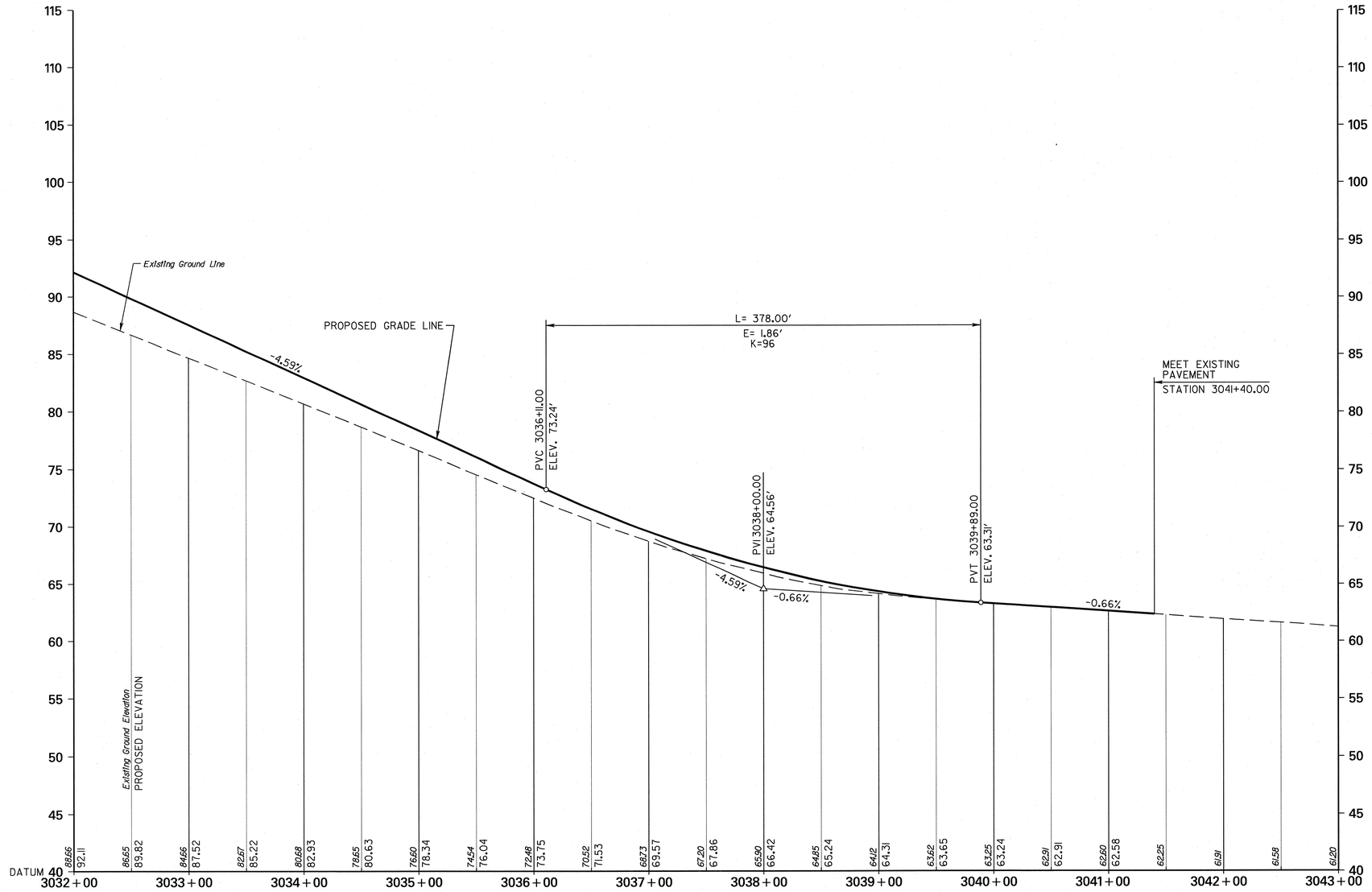
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)



ROUTE 22 – DESIGN SPEED 50 MPH

VERT. SCALE IN FEET 5' 0 5' 10'

HORIZ. SCALE IN FEET 50' 0 50' 100'

NOTE:

E = DIFFERENCE BETWEEN THE P.V.I. ELEVATION AND THE VERTICAL CURVE ELEVATION AT THE P.V.I. STATION.

P-2 / P-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PROFILES

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

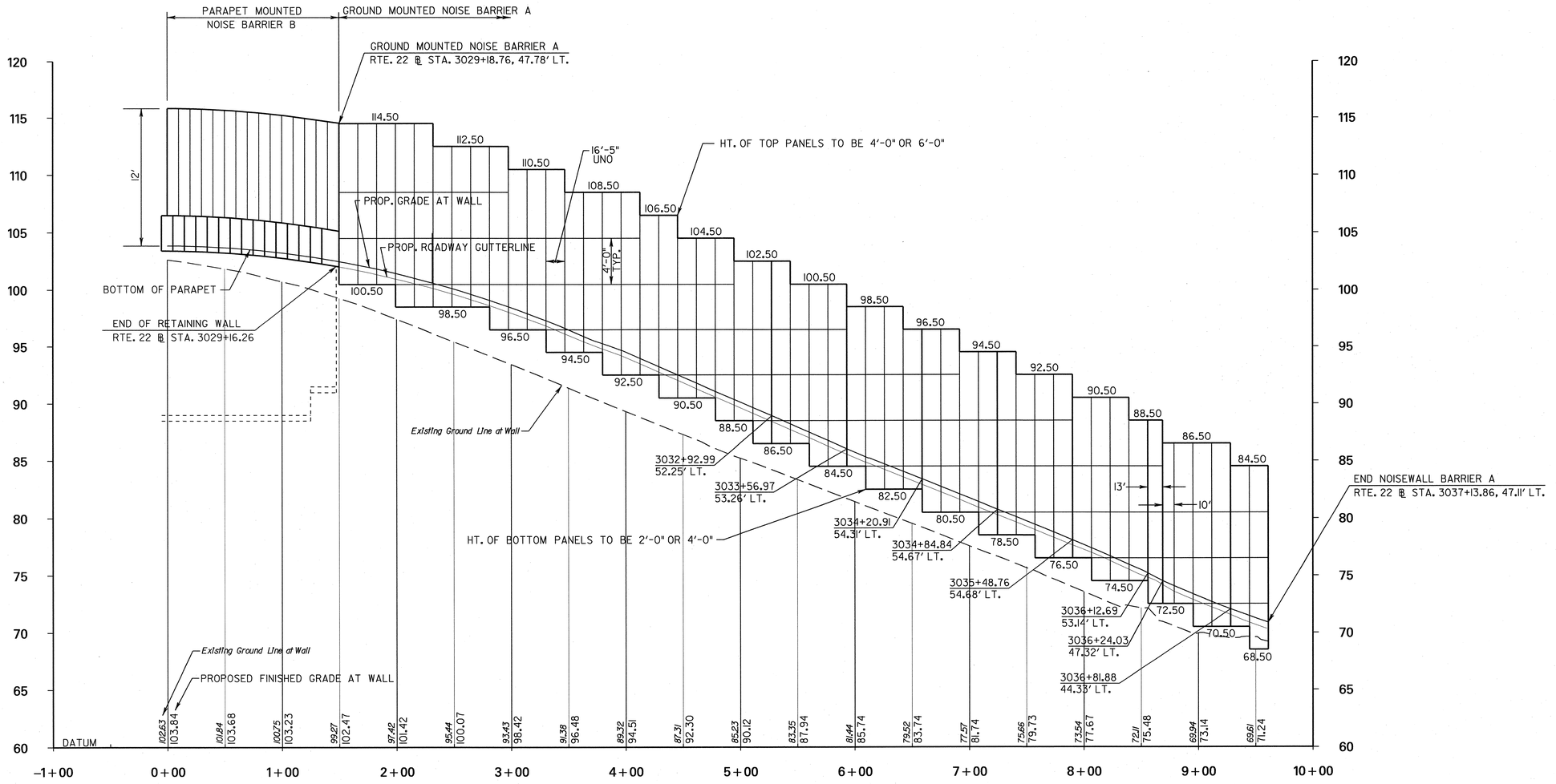
STEVEN M. ARBIZ
NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

31

PARSONS BRINCKERHOFF CADD DATA

OPERATOR	rurk	QUEUE \\Prploth\Oce_Pl
PLOT DATE	01-DEC-2009 06:37	
PENTABLE	ehx.tbl	
DESIGN FILE	T:\00404\pr02.dgn	

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)



NOISE BARRIER A & B – PROFILE

P-3
P-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PROFILES

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
STEVEN M. ARBIZ
NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

VERT. SCALE IN FEET 5' 0 5' 10'
HORIZ. SCALE IN FEET 50' 0 50' 100'

NOTE:

E=DIFFERENCE BETWEEN THE P.V.I. ELEVATION AND THE VERTICAL CURVE ELEVATION AT THE P.V.I. STATION.

32

PARSONS BRINCKERHOFF CADD DATA

OPERATOR	rcunk
PLOT DATE	04-DEC-2009 06:38
PENTABLE	ptx.tbl
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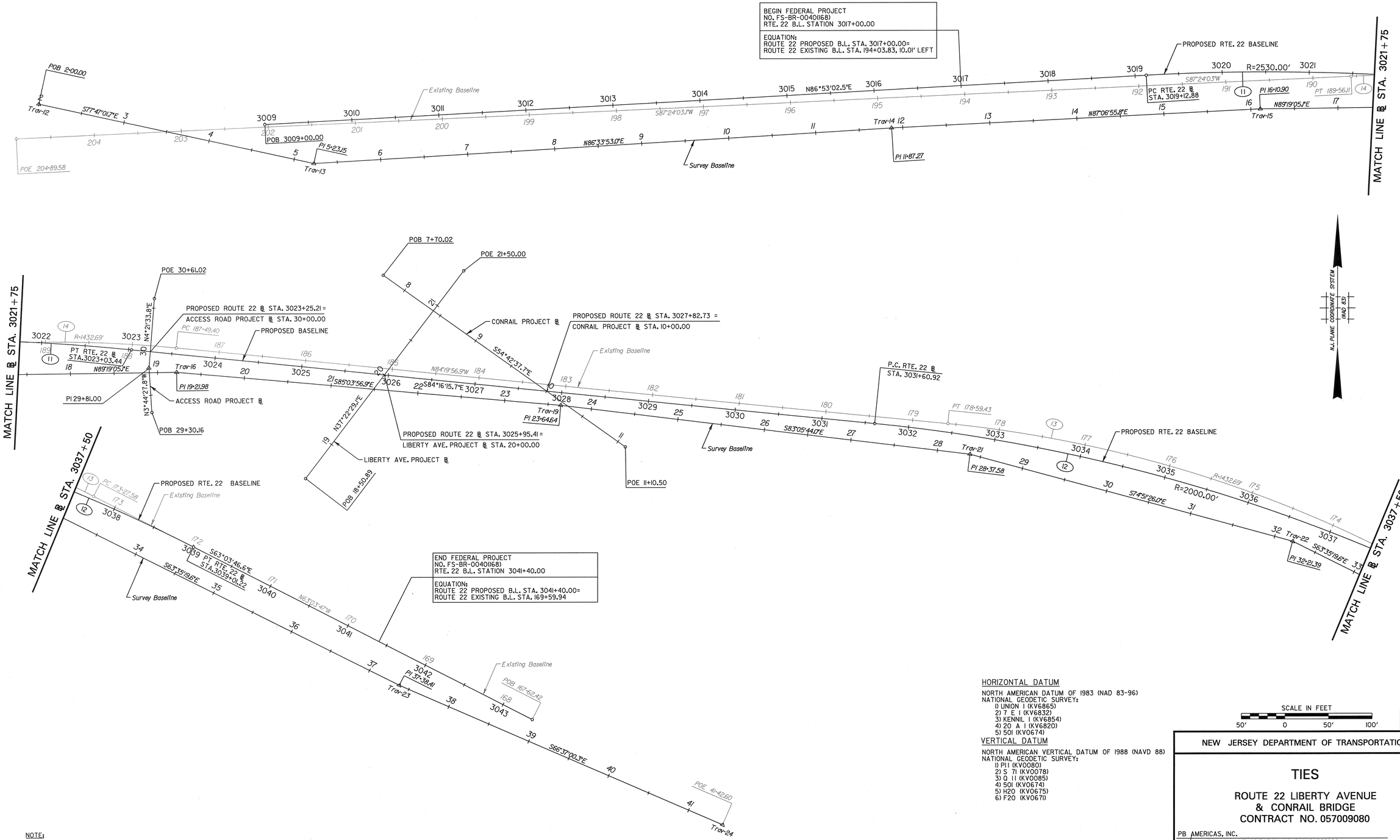
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION



HORIZONTAL DATUM

NORTH AMERICAN DATUM OF 1983 (NAD 83-96)
NATIONAL GEODETIC SURVEY:
1) UNION 1 (KV6865)
2) 7 E 1 (KV6832)
3) KENNIL 1 (KV6854)
4) 20 A 1 (KV6820)
5) 501 (KV0674)

VERTICAL DATUM

NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
NATIONAL GEODETIC SURVEY:
1) P11 (KV0080)
2) S 71 (KV0078)
3) Q 11 (KV0085)
4) 501 (KV0674)
5) H20 (KV0675)
6) F20 (KV0671)

SCALE IN FEET
50' 0 50' 100'

T-1 / T-2

NOTE:
FOR TIES, ALIGNMENT DATA AND EXISTING AND PROPOSED CURVE DATA, REFER TO TIE SHEET T-2.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

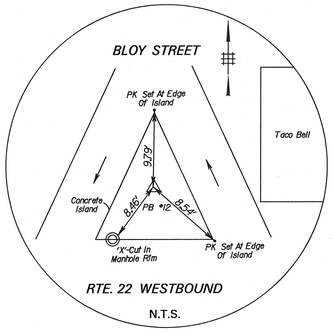
STEVEN M. ARBIZ
NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

33

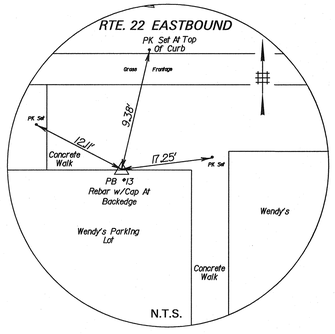
PARSONS BRINCKERHOFF CADD DATA

OPERATOR	hollinger	QUEUE	\\Priplot1\Oce_PI
PLOT DATE	03-DEC-2009 16:59		
PENTABLE	ehx.tbl		
DESIGN FILE	T:\00404\t101.dgn		

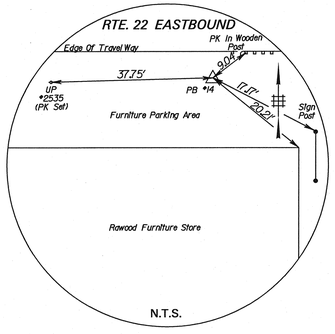
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)



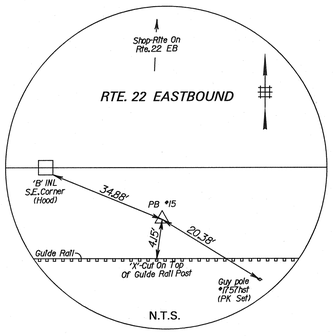
TRAV-12
PK SET IN CENTER OF
CONCRETE ISLAND NEAR
TACO BELL & BLOY STREET
SURVEY ℄ STA. 2+00.00
N 679,740.9855
E 564,582.0914
ELEV. 48.40'



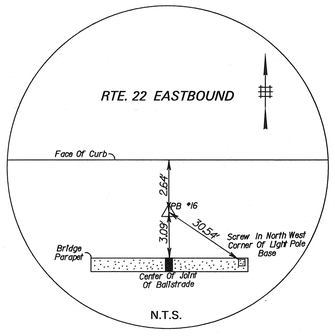
TRAV-13
REBAR AND DISC
SURVEY ℄ STA. 5+23.15
N 679,672.6059
E 564,897.9275
ELEV. 49.67'



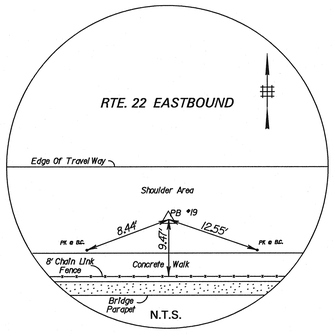
TRAV-14
REBAR AND DISC
SURVEY ℄ STA. 11+87.27
N 679,712.4005
E 565,560.8500
ELEV. 60.55'



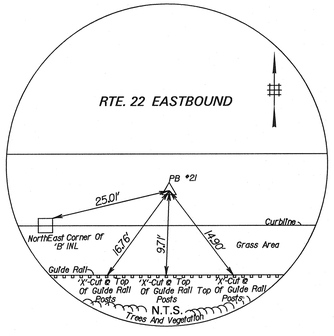
TRAV-15
REBAR AND DISC
SURVEY ℄ STA. 16+10.90
N 679,733.7190
E 565,983.9473
ELEV. 79.62'



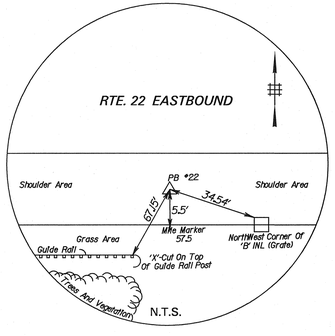
TRAV-16
RAILROAD SPIKE IN FIRST PIER
JOINT OF EASTBOUND SIDEWALK
SURVEY ℄ STA. 19+21.98
N 679,737.4213
E 566,295.0026
ELEV. 93.57'



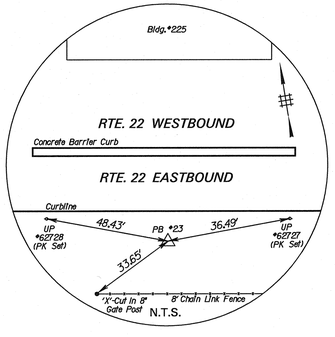
TRAV-19
PK SET IN SHOULDER AREA
NEAR EAST END OF BRIDGE
SURVEY ℄ STA. 23+64.64
N 679,699.3473
E 566,736.0245
ELEV. 102.33'



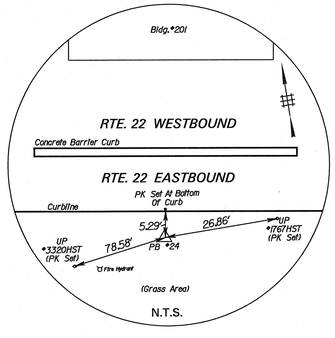
TRAV-21
RAILROAD SPIKE IN SHOULDER
AREA OF RTE #22 EB ACROSS
FROM HILLSIDE PUBLIC WORKS
SURVEY ℄ STA. 28+37.58
N 679,642.4933
E 567,205.5343
ELEV. 85.11'



TRAV-22
MON. SPIKE IN SHOULDER
AREA OF RTE #22 EB NEAR
MILE MARKER 57.5 ACROSS
FROM BASEBALL FIELD
SURVEY ℄ STA. 32+21.39
N 679,542.2343
E 567,576.0110
ELEV. 69.42'



TRAV-23
PK IN BIT. ON RTE. 22
EASTBOUND ACROSS FROM
BLDG. #225
SURVEY ℄ STA. 37+38.41
N 679,312.2580
E 568,039.0677
ELEV. 61.81'



TRAV-24
REBAR AND DISC IN FRONT
OF GOLDEN CARRIER TRUCKING CO.
SURVEY ℄ STA. 41+42.60
N 679,151.8429
E 568,410.0627
ELEV. 56.77'

PROPOSED ROUTE 22 BASELINE - CURVE DATA

NO.	DELTA	RADIUS	LENGTH	TANGENT	EXTERNAL	CENTER POINT COORDINATES NORTH	CENTER POINT COORDINATES EAST
11	8°-50'-41.8"	2530.00	390.565	195.671	7.555	677245.9895	565990.5063
12	21°-12'-29.0"	2000.00	740.301	374.436	34.749	677687.7461	566896.6093

EXIST ROUTE 22 BASELINE - CURVE DATA

NO.	DELTA	RADIUS	LENGTH	TANGENT	EXTERNAL	CENTER POINT COORDINATES NORTH	CENTER POINT COORDINATES EAST
13	21°-16'-10.3"	1432.69	531.848	269.020	25.039	678251.8805	567038.7281
14	8°-16'-00.0"	1432.69	206.709	103.534	3.736	678339.7702	566153.1085

TIES TO REFERENCE BASELINE

	POINT	REFERENCE BASELINE	BASELINE STATION	OFFSET
PROP. RTE. 22 ℄	P.O.B. 3009+00.00	SURVEY BASELINE	4+58.67	31.66 LT.
	P.C. 3019+12.88	SURVEY BASELINE	14+82.04	45.07 LT.
	P.T. 3023+03.44	SURVEY BASELINE	18+70.35	26.55 LT.
	P.C. 3031+60.92	SURVEY BASELINE	27+24.86	21.87 LT.
	P.T. 3039+01.22	SURVEY BASELINE	34+56.15	36.79 LT.
	P.O.E. 3041+40.00	SURVEY BASELINE	36+94.92	34.59 LT.
EXIST. RTE. 22 ℄	P.O.B. 167+62.42	SURVEY BASELINE	38+93.95	24.60 LT.
	P.C. 173+27.58	SURVEY BASELINE	33+27.29	37.97 LT.
	P.T. 178+59.43	SURVEY BASELINE	28+08.23	31.78 LT.
	P.C. 187+49.40	SURVEY BASELINE	19+21.91	28.04 LT.
	P.T. 189+56.11	SURVEY BASELINE	17+15.53	36.02 LT.
	P.O.E. 204+00.00	SURVEY BASELINE	2+69.71	21.21 RT.
CONRAIL PROJECT ℄	P.O.B. 7+70.02	SURVEY BASELINE	21+48.79	130.94 LT.
	P.O.E. 11+10.50	SURVEY BASELINE	24+43.96	38.42 RT.
LIBERTY AVENUE PROJECT ℄	P.O.B. 18+50.89	SURVEY BASELINE	20+79.95	108.52 RT.
	P.O.E. 21+50.00	SURVEY BASELINE	22+40.40	143.91 LT.
ACCESS RD. PROJECT ℄	P.O.B. 29+30.16	SURVEY BASELINE	18+93.03	45.57 RT.
	P.I. 29.81.00	SURVEY BASELINE	18+90.31	5.19 LT.
	P.O.E. 30+61.02	SURVEY BASELINE	18+97.34	84.90 LT.

PROPOSED ROUTE 22 BASELINE - ALIGNMENT DATA

POINT	STATION	COORDINATES NORTH	COORDINATES EAST
P.O.B.	3009+00.00	679717.1920	564841.6050
P.C.	3019+12.88	679772.2490	565852.9828
P.T.	3023+03.44	679763.3527	566243.0583
P.C.	3031+60.92	679677.7565	567096.2552
P.T.	3039+01.22	679470.7558	567802.6316
P.O.E.	3041+40.00	679362.5862	568015.5042

EXIST ROUTE 22 BASELINE - ALIGNMENT DATA

POINT	STATION	COORDINATES NORTH	COORDINATES EAST
P.O.B.	167+62.42	679273.1068	568191.5955
P.C.	173+27.58	679529.1306	567687.7527
P.T.	178+59.43	679677.5671	567180.2145
P.C.	187+49.40	679765.4568	566294.5949
P.T.	189+56.11	679770.9863	566098.1389
P.O.E.	204+89.58	679701.4465	564556.2464

SURVEY BASELINE - ALIGNMENT DATA

LABEL	POINT	STATION	COORDINATES NORTH	COORDINATES EAST
TRAV-12	P.O.B.	2+00.00	679740.9855	564582.0914
TRAV-13	P.I.	5+23.15	679672.6059	564897.9275
TRAV-14	P.I.	11+87.27	679712.4005	565560.8500
TRAV-15	P.I.	16+10.90	679733.7190	565983.9473
TRAV-16	P.I.	19+21.98	679737.4213	566295.0026
TRAV-19	P.I.	23+64.64	679699.3473	566736.0245
TRAV-21	P.I.	28+37.58	679642.4933	567205.5343
TRAV-22	P.I.	32+21.39	679542.2343	567576.0110
TRAV-23	P.I.	37+38.41	679312.2580	568039.0677
TRAV-24	P.O.E.	41+42.60	679151.8429	568410.0627

CONRAIL PROJECT BASELINE - ALIGNMENT DATA

POINT	STATION	COORDINATES NORTH	COORDINATES EAST
P.O.B.	7+70.02	679848.3711	566532.2320
P.O.E.	11+10.50	679651.6710	566810.1491

ACCESS ROAD PROJECT BASELINE- ALIGNMENT DATA

POINT	STATION	COORDINATES NORTH	COORDINATES EAST
P.O.B.	29+30.16	679691.5052	566266.5919
P.I.	29+81.00	679742.2357	566263.2748
P.O.E.	30+61.02	679822.0191	566269.3569

LIBERTY AVE. PROJECT BASELINE - ALGNMENT DATA

POINT	STATION	COORDINATES NORTH	COORDINATES EAST
P.O.B.	18+50.89	679615.7135	566443.0529
P.O.E.	21+50.00	679853.4101	566624.6197

INFORMATION ON THESE PLANS ARE STATED IN NJ STATE PLANE GRID COORDINATES AND WILL NEED TO BE ADJUSTED TO NJ STATE PLANE GROUND COORDINATES UTILIZING THE APPROPRIATE GRID SCALE FACTOR(S) PROVIDED IN THE PRIMARY SURVEY CONTROL REPORT, AND AS NOTED HERE 0.99990849

T-2 / T-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

STEVEN M. ARBIZ
NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

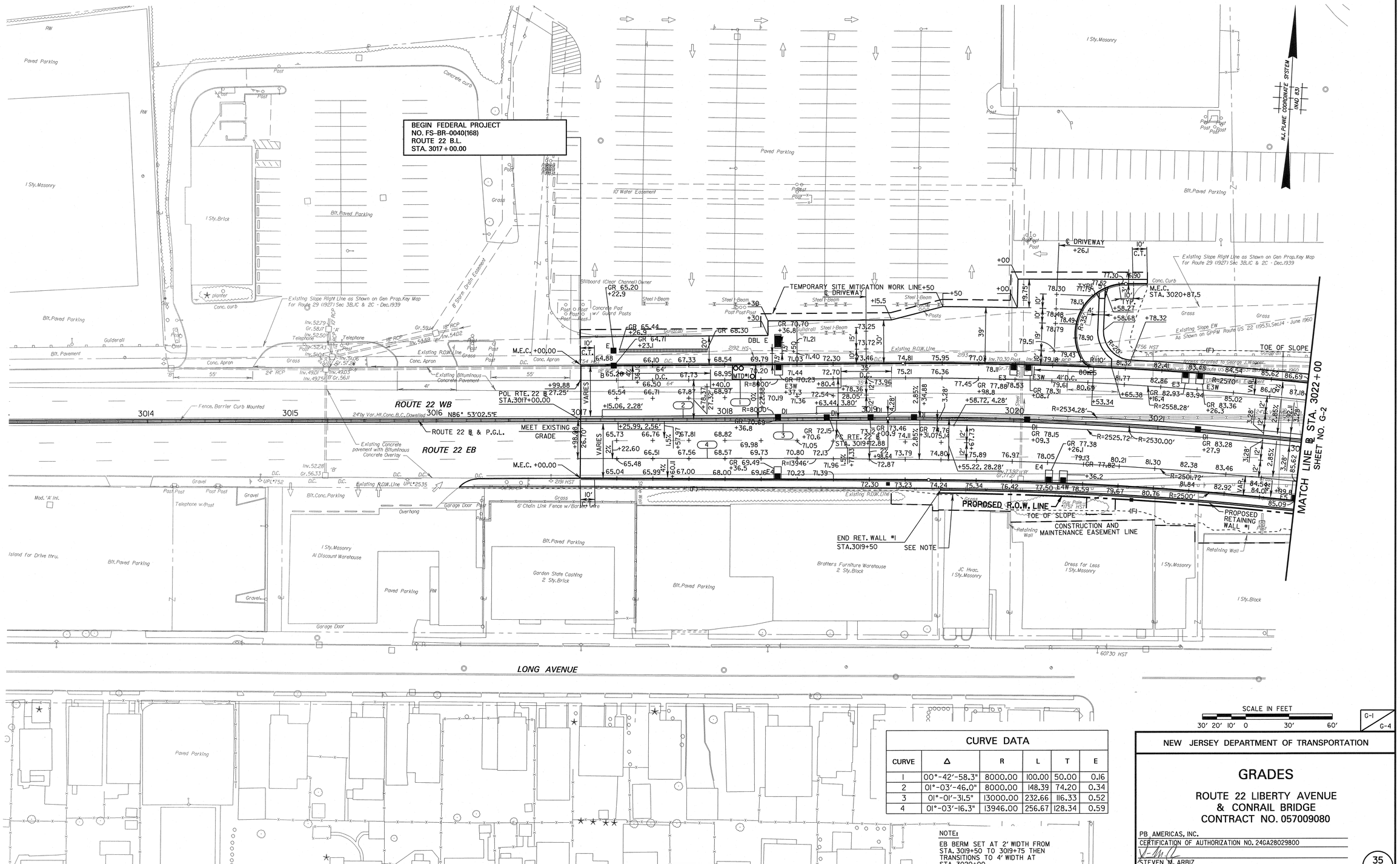
34

PARSONS BRINCKERHOFF CADD DATA

OPERATOR	holinger
PLOT DATE	03-DEC-2009 16:59
PENTABLE	ehx.tbl
DESIGN FILE	T:\00404\tl02.dgn
QUEUE	\\Prlplot1\Oce_PI

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION



SCALE IN FEET
30' 20' 10' 0 30' 60'

G-1 / G-4

CURVE DATA

CURVE	Δ	R	L	T	E
1	00°-42'-58.3"	8000.00	100.00	50.00	0.16
2	01°-03'-46.0"	8000.00	148.39	74.20	0.34
3	01°-01'-31.5"	13000.00	232.66	116.33	0.52
4	01°-03'-16.3"	13946.00	256.67	128.34	0.59

NOTE:
EB BERM SET AT 2' WIDTH FROM STA. 3019+50 TO 3019+75 THEN TRANSITIONS TO 4' WIDTH AT STA. 3020+00.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

GRADES

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
STEVEN M. ARBIZ
NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

35

PARSONS BRINCKERHOFF CADD DATA

OPERATOR	runk	QUEUE	\\Priplot1\Oce_Pl
PLOT DATE	03-DEC-2009 07:12		
PENTABLE	ehx.tbl		
DESIGN FILE	T:\100404\gr02.dgn		

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

N.J. PLANE COORDINATE SYSTEM (NAD 83)

SHELTON TERRACE

LIBERTY AVENUE

CONRAIL PROJECT

ROUTE 22 WB

ROUTE 22 EB

ROUTE 22 & P.G.L.

ACCESS ROAD

LONG AVENUE

MATCH LINE B STA. 3022+00 SHEET NO. G-1

MATCH LINE B STA. 3030+50 SHEET NO. G-3

BEGIN BRIDGE STA. 3022+80.94

BEGIN RET. WALL #2 STA. 3022+43.30

END RET. WALL #2 STA. 3022+87.33

END BRIDGE STA. 3023+87.10

POB 30+61.02

BEGIN RET. WALL #6 STA. 3023+41.02

END RET. WALL #6 STA. 3025+75.16

POB 7+70.02

UTILITY EASEMENT

BEGIN BRIDGE STA. 3025+54.39

BEGIN RET. WALL #5 STA. 3023+41.02

POB 29+30.16

END RET. WALL #1 STA. 3022+86.70

PROPOSED R.O.W. LINE

CONSTRUCTION AND MAINTENANCE EASEMENT LINE

PROPOSED T-TAKING LINE

END RET. WALL #5 STA. 3025+17.06

TEMPORARY CONSTRUCTION EASEMENT

POB 21+50.00

BEGIN RET. WALL #8 STA. 3027+63.76

BEGIN NOISE BARRIER B STA. 3027+68.76

END BRIDGE STA. 3028+28.49

END RET. WALL #8 STA. 3029+16.26

END NOISE BARRIER B STA. 3029+18.76

TOE OF SLOPE

PROPOSED BRIDGE EASEMENT LINE

ACCESS EASEMENT RETAINED BY OWNER

POB 18+50.50

BEGIN RET. WALL #7 STA. 3029+14.83

PROPOSED RETAINING WALL #7

Existing Slope Right Line as Shown on Gen Prop.Key Map for Route 29 (1927) Sec 3B,1C & 2C - Dec.1939

Existing Easement Acquired from Railroad as Shown on General Property Key Map Route No. 22 April,1958.

Access Granted to George J.Wagner As Shown on G.P.P.M. Route US 22 (1953) Section 14, June 1960

Maintenance Easement Acquired From Railroad June 2,1962

SCALE IN FEET

30' 20' 10' 0 30' 60'

G-2 / G-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

GRADES

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE CONTRACT NO. 057009080

PB AMERICAS, INC.

CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

STEVEN M. ARBIZ

NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

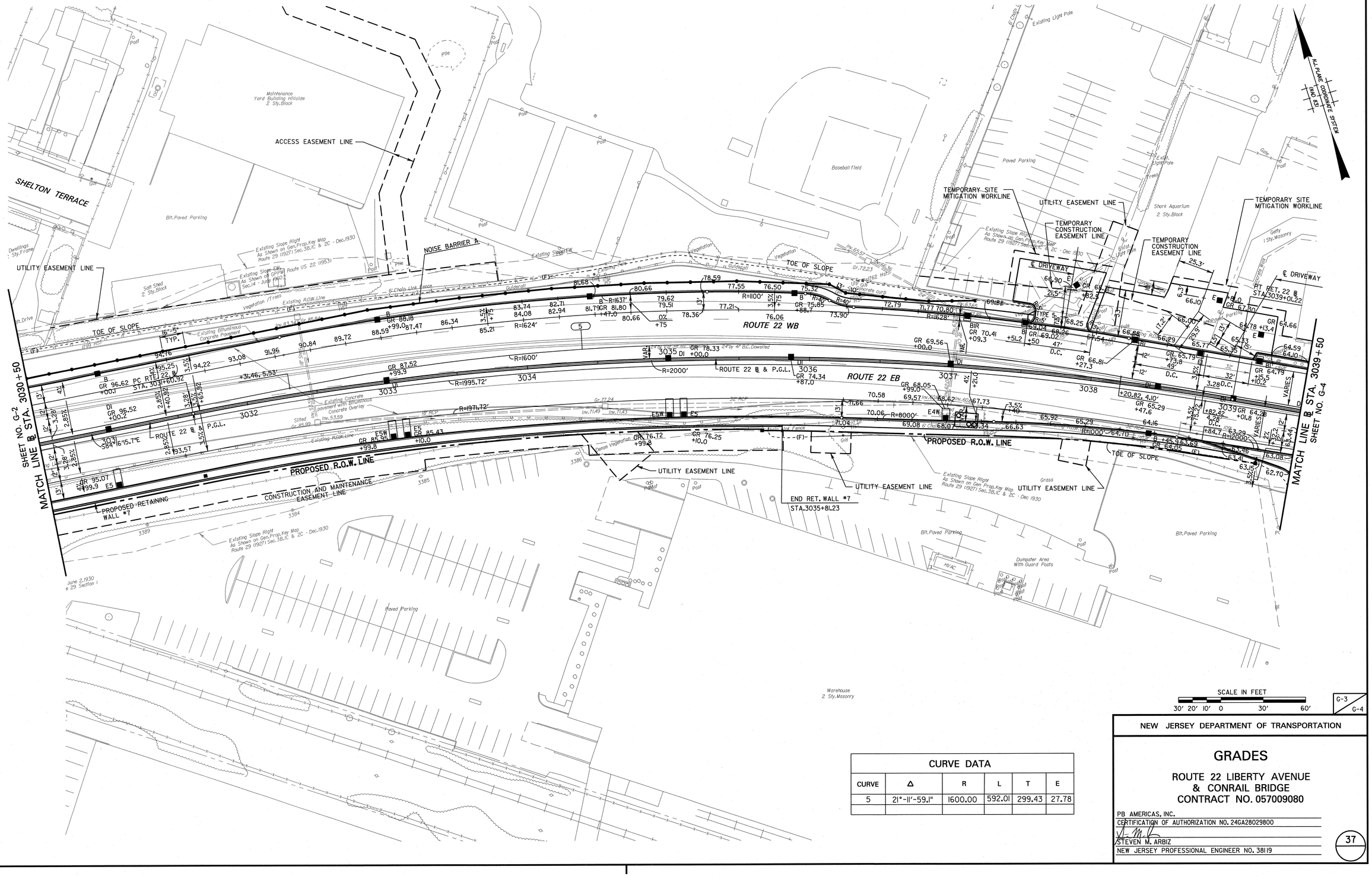
36

PARSONS BRINCKERHOFF CADD DATA

OPERATOR	rjunk	QUEUE	\\Prjplot\Oce_PI
PLOT DATE	01-DEC-2009 06:38		
PENTABLE	ehx.tbl		
DESIGN FILE	T:\00404\gr03.dgn		

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION



SCALE IN FEET
30' 20' 10' 0 30' 60'

G-3 / G-4

CURVE DATA

CURVE	Δ	R	L	T	E
5	21°-11'-59.1"	1600.00	592.01	299.43	27.78

NEW JERSEY DEPARTMENT OF TRANSPORTATION

GRADES

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

STEVEN M. ARBIZ
NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

37

PARSONS BRINCKERHOFF CADD DATA

OPERATOR	frunk
PLOT DATE	01-DEC-2009 06:38
PENTABLE	ptx_tbl
DESIGN FILE	T:\00404\gr04.dgn
LOUEUE	\\Prjpts1\Oce_PI

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

N.J. PLANE COORDINATE SYSTEM NAD 83

END FEDERAL PROJECT
NO. FS-BR-0040(168)
ROUTE 22 B.L.
STA. 3041+40.00

EQUATION
ROUTE 22 PROPOSED B.L. 3041+40.00 =
ROUTE 22 EXISTING B.L. 169+59.94

SHEET NO. G-3
MATCH LINE @ STA. 3039+50

TEMPORARY SITE MITIGATION WORK LINE

GR 63.11 +27.2
GR 63.12 +01.6
GR 63.29 +01.6
GR 63.23 +01.7
GR 63.62
GR 62.92 +27.5
GR 62.76
GR 62.16 +87.9
GR 62.59 +01.4

℄ DRIVEWAY
M.E.C.
M.E.C. +40
POE RTE 22 ℄ 3041+40.00
MEET EXISTING GRADE
ROUTE 22 ℄ & P.G.L.
Existing Route 22 ℄
ROUTE 22 WB
ROUTE 22 EB
24"by 41' B.C. Dowelled
Existing Concrete Pavement w/ Bit. Conc. Overlay
Existing R.O.W. Line
15' Existing Drainage Easement
Paved Parking
Bit. Paved Parking
Access Easement
Gate
Post
Guard Post
Fillier Caps
MH
INLET
D.C.
C.I.
R=7976'
R=12000'

CURVE DATA					
CURVE	Δ	R	L	T	E
6	00°-38'-14.4"	8000.00	88.99	44.50	0.12

SCALE IN FEET
30' 20' 10' 0 30' 60'

G-4
G-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

GRADES

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
STEVEN M. ARBIZ
NEW JERSEY PROFESSIONAL ENGINEER NO. 38119

38

PARSONS BRINCKERHOFF CADD DATA
OPERATOR runk | QUEUE \\Pr-iplot\Oce_Pl
PLOT DATE 03-DEC-2009 07:12
PENTABLE ehx.tbl
DESIGN FILE T:\00404\gr05.dgn

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

GENERAL NOTES

1. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT THE DIRECTION OF THE ENGINEER, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY NEED TO BE MODIFIED TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION. ILLUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.
3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1F SIGN (ROAD WORK AHEAD) AS A MINIMUM.
5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS, AND/OR PLOWABLE PAVEMENT REFLECTORS THAT CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED AS DIRECTED BY THE ENGINEER.
6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE EXISTING, TEMPORARY, OR PERMANENT TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
7. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART VI TEMPORARY TRAFFIC CONTROL , UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE ENGINEER.
8. CONSTRUCTION W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
9. A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH SHALL BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.
10. CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) SHALL BE PLACED AT THE INTERSECTING STREETS THAT ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION.
11. CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT AND W8-14A (GROOVED PAVEMENT)) SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE AS DIRECTED BY THE ENGINEER.
12. MOVING WORK AREAS IN A PERMANENT LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER. THE TRUCK MOUNTED CRASH CUSHION SHALL MOVE WITH THE WORK AREAS TO KEEP A 75 FEET MINIMUM AND A 175 FEET MAXIMUM BUFFER IN ADVANCE OF EACH WORK AREA.
13. THE CONTRACTOR SHALL SUBMIT A PLAN FOR SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN SHALL BE SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH SECTION 617 OF THE STANDARDS SPECIFICATIONS.
14. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 6H:1V SLOPE PRIOR TO THE END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR A TEMPORARY BARRIER SET IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC. IF BARRIER OPTION IS SELECTED, NO PAYMENT SHALL BE PROVIDED.
15. WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE ENGINEER.
16. BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES SHALL BE TRANSITIONED ON A MINIMUM 20H:1V SLOPE TO MEET THE ADJACENT EXISTING GRADE AT THE LONGITUDINAL AND TRANSVERSE LIMITS OF THE STAGE CONSTRUCTION AREAS UNLESS OTHERWISE NOTED ON THE STAGE CONSTRUCTION PLANS.
17. THE PLACEMENT AND RELOCATION OF PRECAST CONCRETE CURB, CONSTRUCTION BARRIER SHALL BE DONE DURING APPROVED OFF-PEAK HOURS WHEN TRAFFIC MAY BE REDUCED TO ONE LANE IN EACH DIRECTION.
18. CONSTRUCTION ZONE SPEED LIMIT SHALL BE DETERMINED BY THE TRAFFIC SIGNAL AND SAFETY ENGINEERING, REGIONAL TRAFFIC ENGINEER , WORKZONE AT THE TIME OF OR DURING CONSTRUCTION AS REQUESTED BY THE RESIDENT ENGINEER, WORK ZONE.
19. THE SPEED LIMIT SIGN, R2-1 (BLACK ON WHITE) WITH ADDED WORK ZONE PLATE (BLACK ON ORANGE) SIGN, SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE TRAFFIC SIGNAL AND SAFETY ENGINEERING, REGIONAL TRAFFIC ENGINEER, WORK ZONE.
20. A REDUCED SPEED AHEAD SIGN, W3-5(S) (BLACK ON ORANGE), SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS, WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
21. TRAFFIC FINES DOUBLED IN WORK AREA SIGN, R(NJ)5-17(S), 48 INCH BY 30 INCH, SHALL BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN SHALL ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS, IN WHICH CASE THE SIGN SHALL BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.
22. THE FINAL HOT MIX ASPHALT CONCRETE SURFACE PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE FINAL STAGE OF THE PROJECT. MANHOLES AND INLETS SHALL BE SET TO FINISHED GRADE AND TEMPORARY PAVEMENT RAMPS ARE TO BE CONSTRUCTED AROUND THEM WITH A MINIMUM 20H:1V SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE.
23. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
24. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON APPROVAL OF THE ENGINEER.

TRAFFIC IMPACT NOTICES AND CHANGES

1. TERMS - WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING SHALL BE AS FOLLOWS:

   IMPACTS TO NORMAL TRAFFIC FLOW - WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS, OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED.

   TEMPORARY LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.

   PERMANENT LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE

2. ADVANCE NOTICES - FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER IN WRITING, ON THE ADVANCE FORM TO103 PROVIDED BY THE DEPARTMENT, OF THE PROPOSED DATE. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RESIDENT ENGINEER, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN) CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESIDENT ENGINEER IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

   FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER IN WRITING, ON ADVANCE FORM TO103, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RESIDENT ENGINEER, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN) DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESIDENT ENGINEER IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

   STARTING THE ESTABLISHMENT OF A NEW PERMANENT TRAFFIC PATTERN SHALL BEGIN NO EARLIER THAN 11:00 PM FRIDAY AND SHALL BE COMPLETED AND READY FOR OPERATIONS BY 6:00 PM THE FOLLOWING SUNDAY. THE ESTABLISHMENT SHALL BE COMPLETED IN ACCORDANCE WITH THE LANE CLOSURE HOURS SPECIFIED IN THE CONTRACT. ADVANCE NOTICES SENT PRIOR TO THE PRECONSTRUCTION MEETING SHALL BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 101.04 OF THE SPECIAL PROVISIONS.

3. PROGRESS NOTICES - ALL "IMPACTS TO NORMAL TRAFFIC FLOW" SCHEDULED FOR THE SEVEN DAY PERIOD STARTING ON THE FOLLOWING MONDAY SHALL BE SUBMITTED TO THE RESIDENT ENGINEER BY 9:00 AM OF EACH FRIDAY ON WEEKLY FORM TO-101 PROVIDED BY THE DEPARTMENT.

   EACH DAY OF "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE RESIDENT ENGINEER BY 9:00 AM THE DAY IN ADVANCE OF THE START OF THOSE OPERATIONS ON DAILY FORM TO-102 PROVIDED BY THE DEPARTMENT.

   "TEMPORARY LANE CLOSURES" FOR WEEKENDS SHALL BE SUBMITTED TO THE RESIDENT ENGINEER BY 9:00 AM ON THE IMMEDIATELY PRECEDING FRIDAY ON THE DAILY FORM TO-102 PROVIDED BY THE DEPARTMENT.

4. CHANGES TO THE SCHEDULED CLOSURES - REQUEST FOR A CHANGE TO THE TRAFFIC CONTROL REQUIREMENTS IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE RESIDENT ENGINEER AS FOLLOWS:

   CHANGES TO THE SCHEDULED HOURS FOR "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE RESIDENT ENGINEER AT LEAST EIGHT CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START. OTHER PROPOSED CHANGES TO "TEMPORARY LANE CLOSURES" AND ALL CHANGES TO "PERMANENT LANE CLOSURES" SHALL BE SUBMITTED TO THE RESIDENT ENGINEER AT LEAST FORTY CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START.

NOTES – TRAFFIC CONTROL PLANS

5. THE ALLOWABLE SINGLE LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

   ROUTE 22 EASTBOUND (TWO TRAVEL LANES)

   ALL LANES MAINTAINED
   MONDAY THRU FRIDAY — 6:00 AM TO 8:00 PM
   SATURDAY — 9:00 AM TO 8:00 PM
   SUNDAY — 10:00 AM TO 7:00 PM

   ONE LANE MAINTAINED
   MONDAY THRU THURSDAY — 8:00 PM TO 6:00 AM (NEXT DAY)
   FRIDAY — 8:00 PM TO 9:00 AM (SATURDAY)
   SATURDAY — 8:00 PM TO 10:00 AM (SUNDAY)
   SUNDAY — 7:00 PM TO 6:00 AM (MONDAY)

   ROUTE 22 WESTBOUND (TWO TRAVEL LANES)

   ALL LANES MAINTAINED
   MONDAY THRU THURSDAY — 6:00 AM TO 9:00 PM
   FRIDAY — 6:00 AM TO 9:00 PM
   SATURDAY — 9:00 AM TO 8:00 PM
   SUNDAY — 10:00 AM TO 7:00 PM

   ONE LANE MAINTAINED
   MONDAY THRU THURSDAY — 9:00 PM TO 6:00 AM (NEXT DAY)
   FRIDAY — 9:00 PM TO 9:00 AM (SATURDAY)
   SATURDAY — 8:00 PM TO10:00 AM (SUNDAY)
   SUNDAY — 7:00 PM TO 6:00 AM (MONDAY)

   NO LANE CLOSURES WILL BE PERMITTED ON THE FOLLOWING HOLIDAYS:

   - EASTER SUNDAY (INCLUDING 6:00 AM SATURDAY UNTIL NOON MONDAY)
   - MEMORIAL DAY (SEE NOTE BELOW)
   - JULY 4TH (SEE NOTE BELOW)
   - LABOR DAY (SEE NOTE BELOW)
   - ELECTION DAY (6:00 AM UNTIL 8:00 PM THE DAY OF)
   - THANKSGIVING DAY (SEE NOTE BELOW)
   - CHRISTMAS DAY (SEE NOTE BELOW)
   - NEW YEARS DAY (SEE NOTE BELOW)

   NOTE:

IF HOLIDAY FALLS ON	NO LANE CLOSURES PERMITTED
SUNDAY OR MONDAY	6:00 AM FRIDAY UNTIL NOON TUESDAY
TUESDAY	6:00 AM FRIDAY UNTIL NOON WEDNESDAY
WEDNESDAY	6:00 AM TUESDAY UNTIL NOON THURSDAY
THURSDAY	6:00 AM WEDNESDAY UNTIL NOON MONDAY
FRIDAY OR SATURDAY	6:00 AM THURSDAY UNTIL NOON MONDAY

   THE RESIDENT ENGINEER MUST NOTIFY TRAFFIC OPERATIONS NORTH IN ACCORDANCE WITH NEW JERSEY DEPARTMENT OF TRANSPORTATION POLICY AND PROCEDURE NUMBER 108 FOR ALL PLANNED LANE AND/OR SHOULDER CLOSURES, AND OTHER TRAFFIC IMPACTS.

6. TRAFFIC PAINT SHALL BE USED WHEN TRAFFIC STRIPES OR TRAFFIC MARKINGS ARE REQUIRED ON INTERMEDIATE PAVEMENT LAYERS THAT NEED TO BE OPEN TO TRAFFIC DUE TO STAGE CONSTRUCTION. REMOVABLE PAVEMENT MARKING TAPE SHALL BE USED WHERE LANE SHIFTS ARE REQUIRED ON TOP PAVEMENT LAYERS OR ON EXISTING PAVEMENT NOT BEING REPAVED. EXISTING STRIPES ON PAVEMENT NOT BEING REPAVED THAT CONFLICT WITH PLANNED TRAFFIC CONTROL SHALL BE COVERED WITH REMOVABLE BLACK LINE MASKING TAPE.
7. ACCESS TO ALL RESIDENTIAL AND COMMERCIAL PROPERTIES MUST BE MAINTAINED AT ALL TIMES. BUS STOP MUST BE MAINTAINED AT ALL TIMES.
8. ALL TEMPORARY SOLID STRIPING IS 4 INCH SOLID WHITE LINE OR 4 INCH SOLID YELLOW LINE UNLESS OTHERWISE NOTED ON PLANS. ALL TEMPORARY BROKEN STRIPING IS 4 INCH BROKEN WHITE LINE, 10 FEET LINE AND 30 FEET SPACE, UNLESS OTHERWISE NOTED ON PLANS.
9. ALL PRECAST CONCRETE CURB, CONSTRUCTION BARRIER, SHALL BE TYPE 4, JOINT CLASS A, UNLESS OTHERWISE NOTED ON PLANS.
10. ALL TEMPORARY STRIPING IS TO MEET AND TIE INTO EXISTING STRIPING UNLESS OTHERWISE NOTED ON PLANS.
11. EXISTING REGULATORY, WARNING AND GUIDE SIGNS SHALL BE RESET UNTIL THEY ARE REPLACED BY PROPOSED SIGNS OR NO LONGER APPLICABLE, AT THE DIRECTION OF THE ENGINEER.
12. PROPOSED REGULATORY, WARNING, AND GUIDE SIGNS SHALL BE INSTALLED AS SOON AS POSSIBLE, BUT SHALL REMAIN COVERED IF NOT APPLICABLE TO CONSTRUCTION STAGE CONFIGURATION, OR AT THE DIRECTION OF THE ENGINEER.
13. ON A WEEKLY BASIS, ALL PLANNED LANE AND/OR SHOULDER CLOSURES, AND OTHER TRAFFIC IMPACTS FOR THE SEVEN (7) DAY PERIOD STARTING ON THE FOLLOWING MONDAY SHALL BE SUBMITTED TO THE RESIDENT ENGINEER BY 8 AM OF EACH FRIDAY ON WEEKLY FORMS PROVIDED BY THE DEPARTMENT. THIS SUBMITTAL SHALL INCLUDE ALL TEMPORARY AND PERMANENT CLOSURES, STAGING CHANGES, DETOURS, AND OTHER TRAFFIC IMPACTING CHANGES. PERMANENT CLOSURES AND IMPACTS ARE THOSE THAT WILL BE CONTINUOUSLY IN PLACE FOR AT LEAST 24 HOURS.
14. EACH DAY OF TEMPORARY CLOSURES AND TRAFFIC IMPACTS SHALL BE SUBMITTED TO THE RESIDENT ENGINEER AT LEAST 24 HOURS IN ADVANCE OF THE CLOSURE OR TRAFFIC IMPACT ON DAILY FORMS PROVIDED BY THE DEPARTMENT.
15. ALL TEMPORARY WEEKEND CLOSURES SHALL BE SUBMITTED TO THE RESIDENT ENGINEER BY 8 AM ON THE PRECEDING FRIDAY USING THE SAME FORMS FOR THE DAILY SUBMITTAL'S.
16. ANY DEVIATION FROM THE LANE CLOSURE SCHEDULE AND TRAFFIC PATTERNS PROVIDED IN THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO: CHANGE IN HOURS, USE OF LANE SHIFTS, SHOULDER CLOSURES, ALTERNATING TRAFFIC PATTERNS, MOVING OPERATIONS, AND TRAFFIC SLOW DOWNS, SHALL BE SUBMITTED IN WRITING TO THE RESIDENT ENGINEER AT LEAST EIGHT (8) DAYS IN ADVANCE OF THE PROPOSED CHANGE.
17. CONTRACTOR MUST COORDINATE LANE CLOSURES WITH THE ROUTE 22 MADISON AVENUE DRAINAGE AND ROUTE 22 WEEQUAHIC PARK DRAINAGE IMPROVEMENT PROJECTS.
18. REMINDER STRIPS ARE TO BE INSTALLED USING TWO LAYERS OF TRAFFIC MARKINGS, THERMOPLASTIC.
19. TEMPORARY LIGHTING SHALL BE PROVIDED WHEN THE EXISTING LIGHTING SYSTEM IS INTERRUPTED AND THE PERMANENT SYSTEM IS NOT IN PLACE. THE TEMPORARY LIGHTING SYSTEM SHALL, AS A MINIMUM, CONFORM TO THE NEC AND MATCH THE EXISTING LIGHTING LEVELS.

CONSTRUCTION SIGN TABLE

SIGN DESIGNATION	MESSAGE	SIZE INCH X INCH	AREA IN SQ. FT.	REQUIRED QUANTITY IN NUMBER	TOTAL AREA IN SQ. FT.
G20-2A	END ROAD WORK	48 X 24	8.0	4	32
R2-1(S)	SPEED LIMIT	48 X 60	20.0	2	40
R5-1(S)	DO NOT ENTER	36 X 36	9.0	3	27
R9-9	SIDEWALK CLOSED	30 X 18	3.8	6	22.8
R9-11L	SIDEWALK CLOSED (ARROW)	48 X 48	16.0	3	48
R9-11R	SIDEWALK CLOSED (ARROW)	48 X 48	16.0	3	48
R11-2	ROAD CLOSED	48 X 30	10.0	2	20
SIGN A1	MCDONALDS (ARROW)	36 X 18	4.5	1	4.5
SIGN A2	RAWOOD (ARROW)	24 X 18	3.0	1	3
SIGN A3	BURGER KING (ARROW)	36 X 18	4.5	1	4.5
SIGN A4	R&S STRAUSS (ARROW)	36 X 18	4.5	1	4.5
SIGN AH	AHEAD	24 X 18	3.0	2	6
W3-5(S)	SPEED LIMIT (AHEAD)	48 X 48	16.0	4	64
W1-4BL(S)	(DOUBLE LEFT CURVE)	48 X 48	16.0	2	32
W1-4BR(S)	(DOUBLE RIGHT CURVE)	48 X 48	16.0	2	32
W1-6(L OR R)	ARROW (LEFT OR RIGHT)	48 X 24	8.0	6	48
W4-2L(S)	(LEFT LANE ENDS)	48 X 48	16.0	2	32
W4-2R(S)	(RIGHT LANE ENDS)	48 X 48	16.0	2	32
W5-1(S)	ROAD NARROWS	48 X 48	16.0	2	32
W8-9A	(UNEVEN PAVEMENT)	48 X 48	16.0	4	64
W8-14A	GROOVED PAVEMENT	48 X 48	16.0	4	64
W9-2L(S)	LANE ENDS MERGE LEFT	48 X 48	16.0	2	32
W20-1A	ROAD WORK 1500 FT	48 X 48	16.0	2	32
W20-1B	ROAD WORK 1000 FT	48 X 48	16.0	2	32
W20-1C	ROAD WORK 500 FT	48 X 48	16.0	2	32
W20-1D(1 MILE)	ROAD WORK 1 MILE	48 X 48	16.0	2	32
W20-1D(1/2 MILE)	ROAD WORK 1/2 MILE	48 X 48	16.0	2	32
W20-1F	ROAD WORK AHEAD	48 X 48	16.0	5	80
W20-5AL	LEFT LANE CLOSED 1500 FT	48 X 48	16.0	2	32
W20-5BL	LEFT LANE CLOSED 1000 FT	48 X 48	16.0	2	32
W20-5AR	RIGHT LANE CLOSED 1500 FT	48 X 48	16.0	2	32
W20-5BR	RIGHT LANE CLOSED 1000 FT	48 X 48	16.0	2	32
W20-7A	(FLAGGER)	48 X 48	16.0	4	64
W20-7B	BE PREPARED TO STOP	48 X 48	16.0	2	32
W99-2	GIVE US A BRAKE	48 X 48	16.0	2	32
			CONSTRUCTION SIGN TOTAL		1188.3 S.F.

GENERAL LEGEND

(NOT TO SCALE)

- BREAKAWAY BARRICADE
- BREAKAWAY BARRICADE WITH SIGN
- CONSTRUCTION SIGN
- DRUM
- CONE
- PRECAST OR MOVABLE CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)
- DIRECTION OF TRAFFIC FLOW
- FLAGGER
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING CAUTION MODE
- LEFT RIGHT BOTH — ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
- LEFT RIGHT BOTH — TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN
- TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM
- TEMPORARY CRASH CUSHION, QUADGUARD
- BUFFER ZONE
- TEMPORARY PAVEMENT
- WORK AREA
- PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

TCD-1 / TCD-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

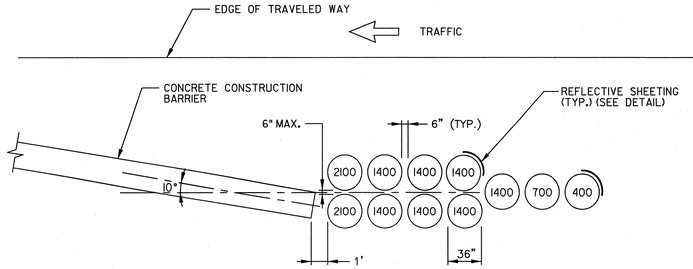
TRAFFIC CONTROL DETAILS

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

PARSONS BRINCKERHOFF CADD DATA
OPERATOR: runk | QUEUE: \\Priplot1\Oce_Pl
PLOT DATE: 01-DEC-2009 06:38
PENTABLE: tc.tbl
DESIGN FILE: T:\100404\tcd01.dgn

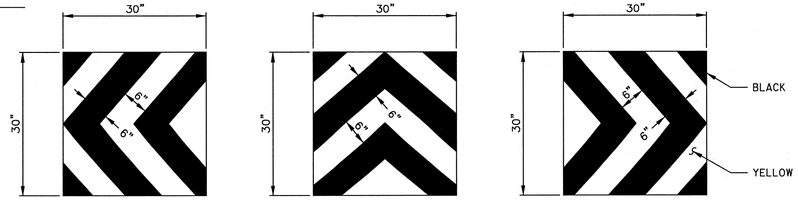
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)



NOTE:
MODULES SHALL BE PLACED ON PAVMENET, SLOPES NOT TO EXCEED 5%, EXACT LOCATIONS SHALL BE AS DIRECTED BY THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE.

TEMPORARY CRASH CUSHIONS, INERTIAL BARRIER SYSTEM

(11 MODULE, DESIGN VELOCITY 45 MPH)
N.T.S.



NOTE:
AT ALL LOCATIONS WHERE CRASH CUSHIONS ARE USED, ON THE SMOOTH SURFACE OF THE "BELLY BAND" OF HYDROCELL TYPES AND ENERGY BARRELS, INSTALL 30" X 30" PIECE OF HIGH INTENSITY COLD APPLICATION, HITACK OR SUPER HITACK SHEETING WITH EITHER OF THE THREE APPROPRIATE CROSS HATCHING SCHEMES SHOWN ABOVE ON EACH TYPE BARRELS. DUE TO RIDGED SURFACE, THE SHEETING MAY HAVE TO BE MOUNTED ON "LIGHT" STOCK AND BE POP-RIVETED ONTO THE LEAD DRUM. THESE PANELS MAY ALSO BE USED ON BEAM GUIDE RAIL ENDS.

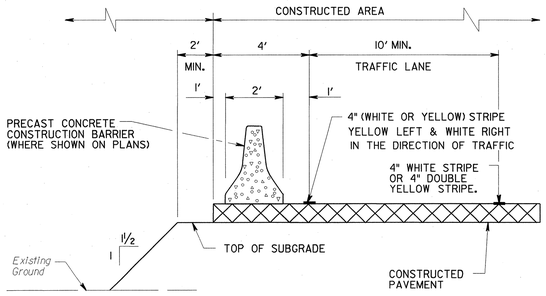
REFLECTIVE SHEETING DETAIL

N.T.S.

RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS						RECOMMENDED SPACING ALONG TANGENTS
REGULATORY APPROACH SPEED OF TRAFFIC IN MILES/HOUR	MINIMUM TAPER RATIO IN LENGTH PER METER OF WIDTH	MINIMUM TAPER LENGTH L-FOR LANE WIDTHS 10'	11'	12'	MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET
25	10.5:1	105	115	125	25	50
30	15:1	150	165	180	30	60
35	20.5:1	205	225	245	35	70
40	27:1	270	300	325	40	80
45	45:1	450	495	540	45	90
50	50:1	500	550	600	50	100
55	55:1	550	605	660	55	110
60	60:1	600	660	720	60	120
65	65:1	650	715	780	65	130

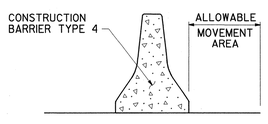
NOTE:
1. THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS		
	DESIRABLE		MINIMUM
	RURAL FEET	URBAN FEET	RURAL AND URBAN FEET
25	375	525	150
30	450	625	200
35	525	725	250
40	600	825	325
45	675	925	400
50	750	1025	475
55	875	1150	550
60	1000	1275	650
65	1050		725



TYPICAL SECTION PLACEMENT OF PRECAST CONCRETE CONSTRUCTION BARRIER

N.T.S.

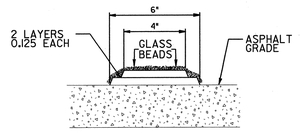


JOINT CLASS	ALLOWABLE MOVEMENT
A	20 INCHES
B	16 INCHES
C	11 INCHES
D	NO MOVEMENT

NOTES:
1. CHANGES TO THE PROPOSED JOINT CLASS AT ANY LOCATION MUST BE APPROVED BY THE ENGINEER.
2. NO ROADWAY DROP OFFS, OBSTRUCTIONS, STORAGE OF MATERIALS, OR WORK WILL BE PERMITTED IN THE CLEAR AREA UNLESS APPROVED BY THE RESIDENT ENGINEER.

CONSTRUCTION BARRIER, TYPE 4 JOINT CLASS AND ALLOWABLE MOVEMENT

N.T.S.



SECTION B–B TYPICAL

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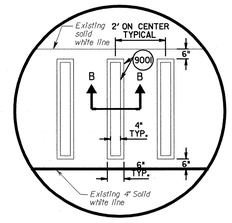


DETAIL "A" TYPICAL

N.T.S.

REMINDER STRIPS DETAIL

CONSTRUCTION BARRIER TABLE			
STAGE	LOCATION		JOINT CLASS
1A	3010+00	3019+50	A
	3019+50	3033+50	A
	3033+50	3041+80	A
1A	3008+80	3019+50	A
	3019+50	3033+50	A
	3033+50	3038+00	A
1B	3009+20	3019+50	D
	3019+50	3033+50	D
	3033+50	3042+80	D
1B	3017+00	3019+50	D
	3019+50	3033+50	D
	3033+50	3038+00	A
2A	3009+20	3019+50	D
	3019+50	3033+50	D
	3033+50	3041+40	A
2A	3017+00	3019+50	D
	3019+50	3033+50	D
	3033+50	3038+00	A
2B	3020+60	3022+80	A
	3030+00	3033+50	A
	3033+50	3038+00	A
2B	3009+20	3019+50	D
	3019+50	3033+50	D
	3033+50	3041+40	D
2C	3009+20	3019+50	A
	3019+50	3033+50	A
	3033+50	3041+40	A
2C	3008+80	3019+50	A
	3019+50	3033+50	A
	3033+50	3041+40	A
2D	3016+60	3019+50	A
	3019+50	3033+50	A
	3033+50	3039+00	A

SIGN LEGEND

WI-4BL(S)
16.0 S.F.
BLACK ON ORANGE

WI-4BR(S)
16.0 S.F.
BLACK ON ORANGE

4"C
6" X 4", 45°

SIGN AI
36" x 18"
BLACK ON ORANGE

4"C
6" X 4", 45°

SIGN A2
24" x 18"
BLACK ON ORANGE

4"D
4"D

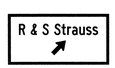
R9-9
30" x 18"
BLACK ON ORANGE

5"D

SIGN AH
24" x 18"
BLACK ON ORANGE

4"C
6" X 4", 45°

SIGN A3
36" x 18"
BLACK ON ORANGE



4"C
6" X 4", 45°

SIGN A4
36" x 18"
BLACK ON ORANGE

NOTES:
1. AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
2. RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
3. RURAL AND URBAN ROAD DESIGNATIONS SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS. THIS PROJECT IS DESIGNATED AS URBAN.
4. DESIRABLE VALUES SHALL BE PROVIDED WHEREVER POSSIBLE. IF IT IS NOT FEASIBLE OR PRACTICAL TO PROVIDE DESIRABLE VALUES BECAUSE OF HORIZONTAL OR VERTICAL CURVATURE OR IF RELOCATION OF THE TAPER IS NOT POSSIBLE, THEN MINIMUM VALUES CAN BE APPLIED. WHEN MINIMUM VALUES ARE USED, SPECIAL ATTENTION SHOULD BE GIVEN TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES FOR PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
5. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.

PARSONS BRINCKERHOFF CADD DATA

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TCD-2
TCD-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

STAGING SEQUENCE

PRIOR TO STAGE 1 (ADVANCE UTILITY RELOCATIONS AND CONTRACTOR MOBILIZATION)

- COMPLETE ADVANCED UTILITY RELOCATIONS ALONG LIBERTY AVE. FOR UNDERGROUND ELECTRIC, UNDERGROUND TELEPHONE, CABLE, GAS, SANITARY AND WATER.
- CONTRACTOR TO MOBILIZE.
- CONTRACTOR TO PROVIDE ADVANCE NOTICE TO UTILITY COMPANIES FOR STAGE I UTILITY RELOCATIONS.

STAGE 1A (REMOVAL OF MEDIAN BARRIER)

- UTILITY CONTRACTORS TO RELOCATE UTILITY POLES AND AERIAL LINE ALONG ROUTE 22 EB.
- CONTRACTOR TO RELOCATE SANITARY LINE ALONG LIBERTY AVE.
- CONSTRUCT EROSION & SEDIMENT CONTROL ITEMS.
- INSTALL TRAFFIC CONTROL DEVICES.
- MAINTAIN 2 EB LANES AND 2 WB LANES, EXCEPT DURING ALLOWABLE LANE CLOSURE TIMES.
- SHIFT ROUTE 22 EB TO UTILIZE OUTER EB LANE AND SHOULDER.
- SHIFT ROUTE 22 WB TO UTILIZE OUTER WB LANE AND SHOULDER.
- TEMPORARILY REMOVE ORNAMENTAL LIGHTING ON LIBERTY AVE.
- DEMOLISH BUILDING ON LONG AVE., EAST OF ACCESS ROAD.
- TEMPORARILY REMOVE BILLBOARD SIGN AT STA. 3022+00 RT.
- MODIFY BILLBOARD SIGN AT STA. 3023+00 RT.
- PERFORM CLEARING SITE ON EB SIDE OF ROUTE 22.
- REMOVE THE ROUTE 22 MEDIAN BARRIER (ROADWAY AND BRIDGE) FROM STA. 3009+23 TO STA. 3041+40 (PROPOSED BASELINE STATIONING).
- CONVERT EXISTING TYPE DI INLET CASTING TO A TYPE A CASTING AT STA. 3020+30±.
- CONSTRUCT TEMPORARY PAVEMENT IN ROADWAY MEDIAN, WHERE MEDIAN BARRIER WAS REMOVED.
- CONSTRUCT PATCH PAVEMENT ON BRIDGES, WHERE MEDIAN BARRIER WAS REMOVED.
- INSTALL TEMPORARY MEDIAN BARRIER.

STAGE 1B (RECONSTRUCTION OF ROUTE 22 TO THE SOUTH)

- UTILITY CONTRACTORS TO COMPLETE RELOCATION OF UTILITY POLES AND AERIAL LINES ALONG ROUTE 22 EB.
- CONTRACTOR TO COMPLETE RELOCATION OF SANITARY LINE ALONG LIBERTY AVE.
- CONSTRUCT EROSION & SEDIMENT CONTROL ITEMS.
- INSTALL TRAFFIC CONTROL DEVICES.
- MAINTAIN 2 EB LANES AND 2 WB LANES, EXCEPT DURING ALLOWABLE LANE CLOSURE TIMES.
- ROUTE 22 WB TO CONTINUE TO UTILIZE OUTER WB LANE AND SHOULDER.
- SHIFT ROUTE 22 EB TO BE ADJACENT TO THE ROUTE 22 WB LANES.
- PERFORM CLEARING SITE ON EB SIDE OF ROUTE 22, INCLUDING ROADWAY AND BRIDGE ITEMS WITHIN WORK AREA.
- RESET FENCE AT EAST END OF PROJECT FROM STA. 3035+64 TO 3038+68.
- DEMOLISH EXISTING BRIDGE IN WORK ZONE.
- CONSTRUCT PROPOSED BRIDGES, PARAPETS (WITHOUT FENCE), RETAINING WALLS, AND EMBANKMENT ALONG ROUTE 22 EB.
- REMOVE EXISTING BITUMINOUS AND CONCRETE PAVEMENT FROM STA. 3017+00 TO WEST END OF EXISTING BRIDGE, FROM EAST END OF EXISTING BRIDGE TO STA. 3037+75.
- CONSTRUCT PROPOSED DRAINAGE TRUNKLINE AND STRUCTURES.
- REINSTALL BILLBOARD SIGN AT STA. 3022+00 RT.
- CONSTRUCT PROPOSED ROADWAY CURB.
- CONSTRUCT PROPOSED ROADWAY PAVEMENT TO TOP OF INTERMEDIATE PAVEMENT COURSE.
- CONSTRUCT PROPOSED SIDEWALK, WEST OF BRIDGE OVER ACCESS ROAD.
- CONSTRUCT PROPOSED GUIDE RAIL, WEST OF BRIDGE OVER ACCESS ROAD.
- MILL ROUTE 22 EB AT LIMITS OF PROJECT AND RESURFACE TO TOP OF INTERMEDIATE PAVEMENT COURSE.

STAGE 2A (PAVING IN MEDIAN AREA)

- CONSTRUCT EROSION & SEDIMENT CONTROL ITEMS.
- INSTALL TRAFFIC CONTROL DEVICES.
- MAINTAIN 2 EB LANES AND 2 WB LANES, EXCEPT DURING ALLOWABLE LANE CLOSURE TIMES.
- SHIFT ROUTE 22 EB TO WIDENED SOUTHERN SECTION.
- ROUTE 22 WB TO CONTINUE TO UTILIZE OUTER WB LANE AND SHOULDER.
- PERFORM CLEARING FOR ROADWAY ITEMS WITHIN WORK AREA.
- REMOVE EXISTING BITUMINOUS AND CONCRETE PAVEMENT IN MEDIAN AREA FROM STA. 3017+00 TO WEST END OF EXISTING BRIDGE, FROM EAST END OF EXISTING BRIDGE TO STA. 3037+75.
- CONSTRUCT PROPOSED ROADWAY PAVEMENT, IN MEDIAN AREA, TO TOP OF INTERMEDIATE PAVEMENT COURSE.
- INSTALL PROPOSED MEDIAN BARRIER FROM THE BRIDGE OVER THE ACCESS ROAD TO THE BRIDGE OVER
- LIBERTY AVE.
  INSTALL TEMPORARY MEDIAN BARRIER AT THE APPROACHES TO THE PROPOSED BRIDGES.

STAGE 2B (RECONSTRUCTION OF ROUTE 22 TO THE NORTH)

- CONSTRUCT EROSION & SEDIMENT CONTROL ITEMS.
- INSTALL TRAFFIC CONTROL DEVICES.
- MAINTAIN 2 EB LANES AND 2 WB LANES, EXCEPT DURING ALLOWABLE LANE CLOSURE TIMES.
  ROUTE 22 EB TO CONTINUE TO UTILIZE OUTER EB LANES OF PROPOSED WIDENED SECTION.
- SHIFT ROUTE 22 WB TO BE ADJACENT TO THE ROUTE 22 EB LANES.
- PERFORM CLEARING FOR ROADWAY AND BRIDGE ITEMS WITHIN WORK AREA.
- DEMOLISH EXISTING BRIDGE IN WORK ZONE.
- CONSTRUCT PROPOSED BRIDGES, PARAPETS (WITH FENCE), RETAINING WALLS, AND EMBANKMENT ALONG ROUTE 22 WB.
- CONSTRUCT THE PROPOSED NOISE WALL ALONG ROUTE 22 WB.
- REMOVE EXISTING BITUMINOUS AND CONCRETE PAVEMENT FROM STA. 3017+00 TO WEST END OF EXISTING
- BRIDGE, FROM EAST END OF EXISTING BRIDGE TO STA. 3037+75.
- CONSTRUCT PROPOSED DRAINAGE TRUNKLINE AND STRUCTURES.
- CONSTRUCT PROPOSED ROADWAY CURB.
- UTILITY CONTRACTORS RELOCATE UTILITY POLES AND AERIAL LINES ALONG ROUTE 22 WB.
- CONSTRUCT PROPOSED ROADWAY PAVEMENT TO TOP OF INTERMEDIATE PAVEMENT COURSE.
- CONSTRUCT PROPOSED DRIVEWAYS ALONG ROUTE 22 WB.
- CONSTRUCT PROPOSED SIDEWALK.
- CONSTRUCT PROPOSED GUIDE RAIL AND SAFETY DEVICES.
- MILL ROUTE 22 WB AT LIMITS OF PROJECT AND RESURFACE TO TOP OF INTERMEDIATE PAVEMENT COURSE.
- CONSTRUCT PROPOSED DRAINAGE ALONG LIBERTY AVE.
- CONSTRUCT PROPOSED CURB ALONG LIBERTY AVE. AND ON ACCESS ROAD, IN VICINITY OF PROPOSED BRIDGES.
- INSTALL PROPOSED ORNAMENTAL LIGHTING ON LIBERTY AVE.
- CONSTRUCT PROPOSED SIDEWALK ON LIBERTY AVE. IN VICINITY OF PROPOSED BRIDGE.
- CONSTRUCT NON-VEGETATIVE SURFACE ON ACCESS ROAD IN VICINITY OF PROPOSED BRIDGE.

STAGE 2C (INSTALL FINAL MEDIAN BARRIER)

- CONSTRUCT EROSION & SEDIMENT CONTROL ITEMS.
- INSTALL TRAFFIC CONTROL DEVICES.
- MAINTAIN 2 EB LANES AND 2 WB LANES, EXCEPT DURING ALLOWABLE LANE CLOSURE TIMES.
- ROUTE 22 EB TO CONTINUE UTILIZE OUTER EB LANES OF PROPOSED WIDENED SECTION.
- SHIFT ROUTE 22 WB TO UTILIZE OUTER WB LANES OF PROPOSED WIDENED SECTION.
- INSTALL MEDIAN BARRIER, WEST OF THE BRIDGE OVER THE ACCESS ROAD.
- INSTALL MEDIAN BARRIER, EAST OF THE BRIDGE OVER LIBERTY AVE.

STAGE 2D (SOUTH SIDEWALK AND FENCE, FINAL PAVING)

- INSTALL TRAFFIC CONTROL DEVICES.
- MAINTAIN 2 EB LANES AND 2 WB LANES, EXCEPT DURING ALLOWABLE LANE CLOSURE TIMES.
- SHIFT ROUTE 22 WB TO FINAL LANE LOCATIONS.
- SHIFT ROUTE 22 EB TO BE ADJACENT TO MEDIAN BARRIER.
- REMOVE TEMPORARY PAVEMENT ALONG THE SOUTH RETAINING WALL.
- REMOVE TYPE E CASTINGS AND INSTALL TYPE B CASTINGS FOR DRAINAGE STRUCTURES ALONG ROUTE 22 EB.
- CONSTRUCT PROPOSED CURB AND SIDEWALK ALONG ROUTE 22 EB IN VICINITY OF THE PROPOSED BRIDGES
- AND APPROACHES.
- INSTALL FENCE ON THE PARAPETS OF THE PROPOSED BRIDGES AND RETAINING WALLS.
- SHIFT ROUTE 22 EB TO FINAL LANE LOCATIONS.
- CONSTRUCT FINAL SURFACE COURSE PAVEMENT.
- CONSTRUCT FINAL STRIPING.
- PERFORM FINAL LANDSCAPING.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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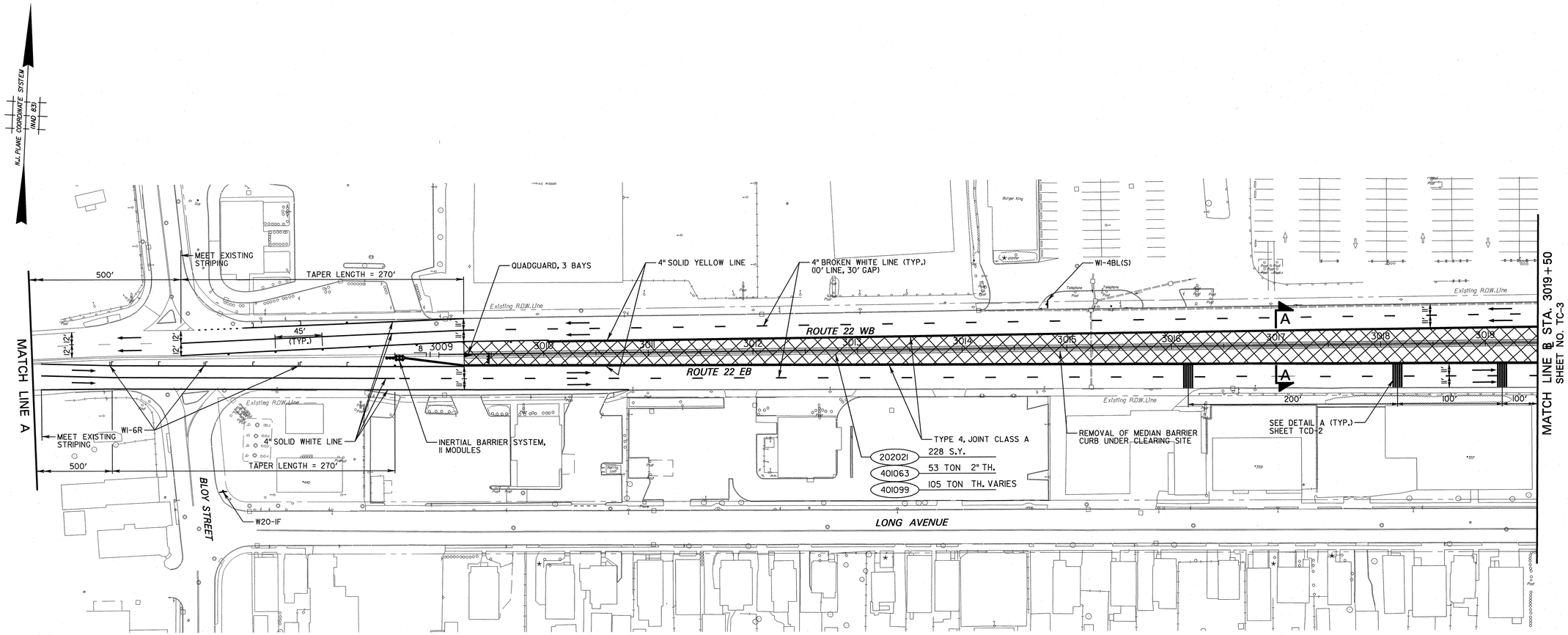
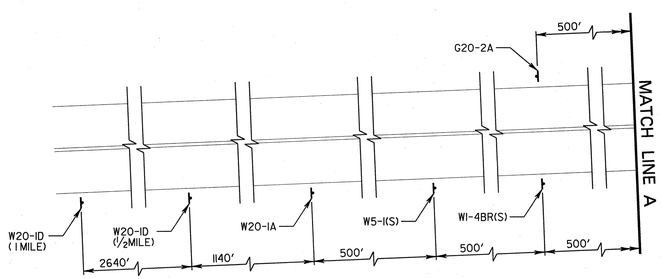
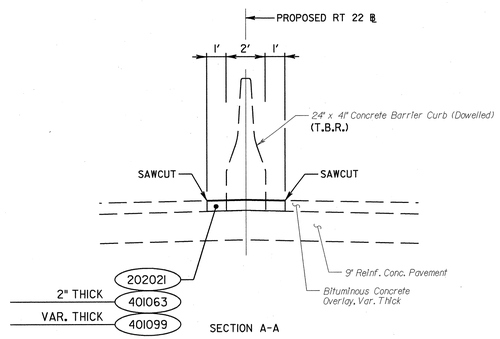
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION







MEDIAN BARRIER REMOVAL

N.T.S.

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
202021P	REMOVAL OF PAVEMENT	228 S.Y.
401063M	HOT MIX ASPHALT 12.5H76 SURFACE COURSE	53 TON
401099M	HOT MIX ASPHALT 25M64 BASE COURSE	105 TON

STAGE 1A

SCALE IN FEET

50' 0 50' 100'

TC-2 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE

CONTRACT NO. 057009080

PB AMERICAS, INC.

CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

Albert E. Schaufler

ALBERT E. SCHAUFLER

NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

PARSONS BRINCKERHOFF CADD DATA

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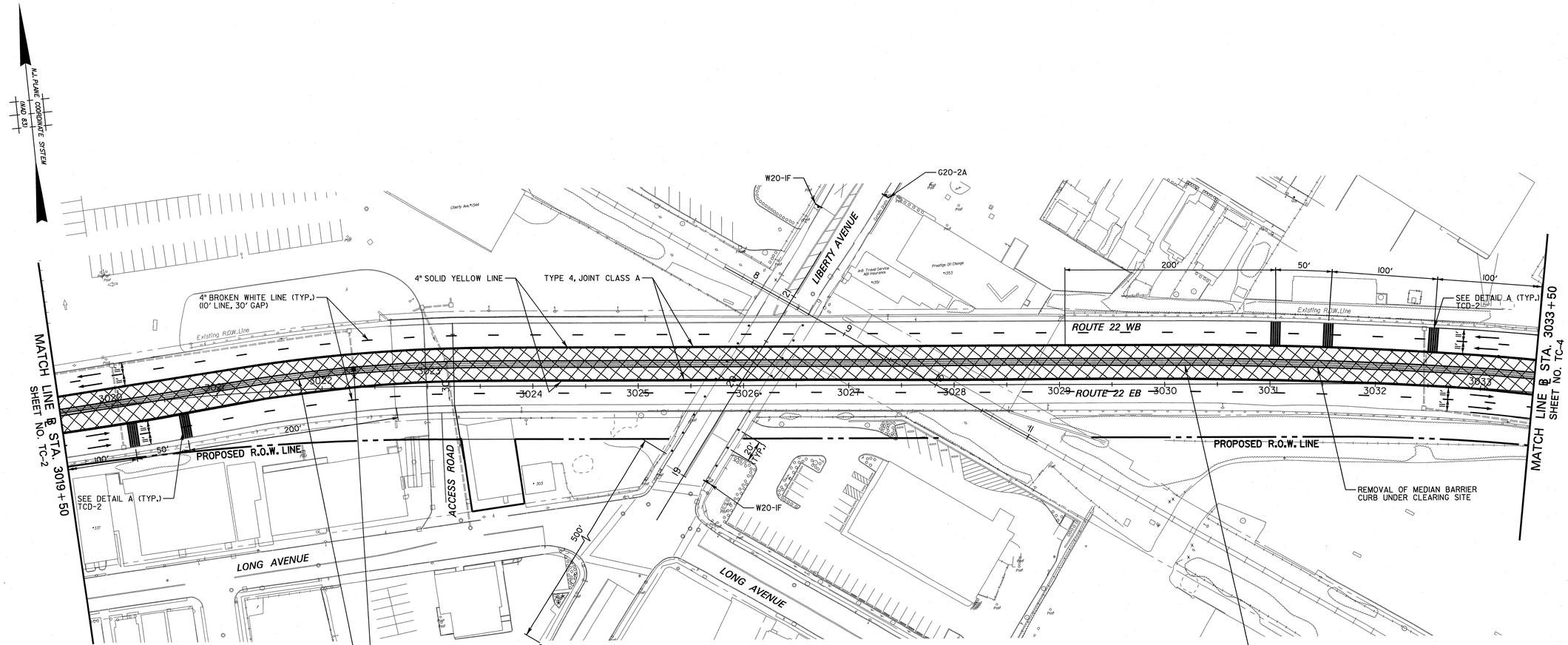
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

N.J. PLANE COORDINATE SYSTEM (NAD 83)



602102 1 UNIT

202021 75 S.Y.
401063 18 TON 2" TH.
401099 52 TON TH. VARIES

202021 128 S.Y.
401063 30 TON 2" TH.
401099 88 TON TH. VARIES

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
20202IP	REMOVAL OF PAVEMENT	203 S.Y.
401063M	HOT MIX ASPHALT 12.5H76 SURFACE COURSE	48 TON
401099M	HOT MIX ASPHALT 25M64 BASE COURSE	140 TON
602102M	SET INLET TYPE A, CASTING	1 UNIT

STAGE 1A

SCALE IN FEET
50' 0 50' 100'

TC-3
TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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TOWNSHIP OF HILLSIDE COUNTY OF UNION

STATE	FEDERAL PROJECT NO.
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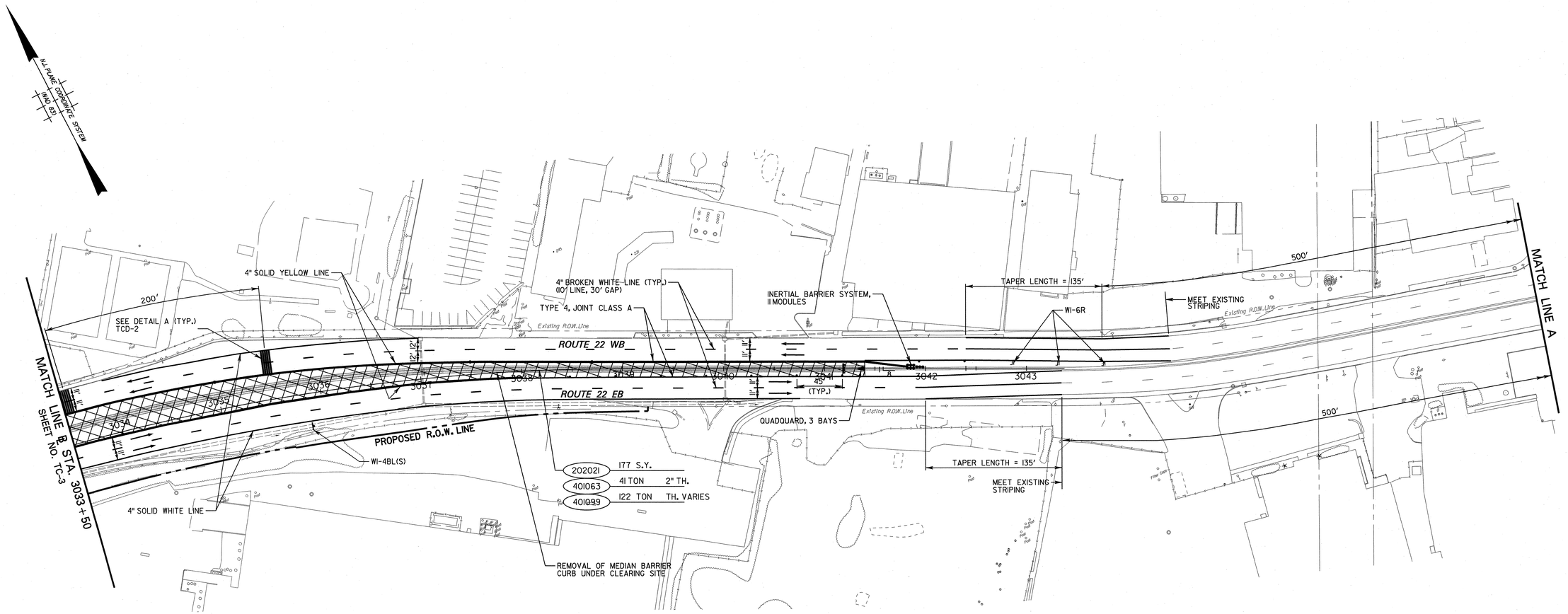

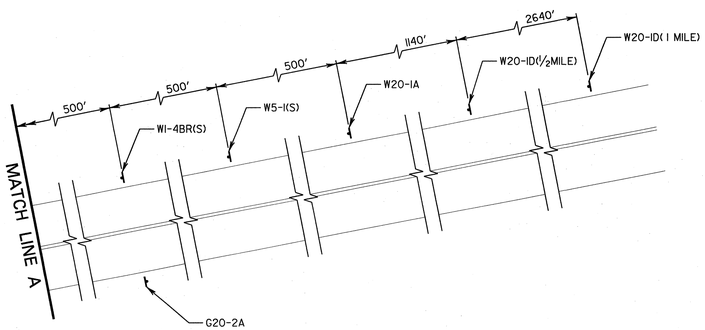

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
202021P	REMOVAL OF PAVEMENT	177 S.Y.
401063M	HOT MIX ASPHALT 12.5H76 SURFACE COURSE	41 TON
401099M	HOT MIX ASPHALT 25M64 BASE COURSE	122 TON

STAGE 1A

SCALE IN FEET
50' 0 50' 100'

TC-4
TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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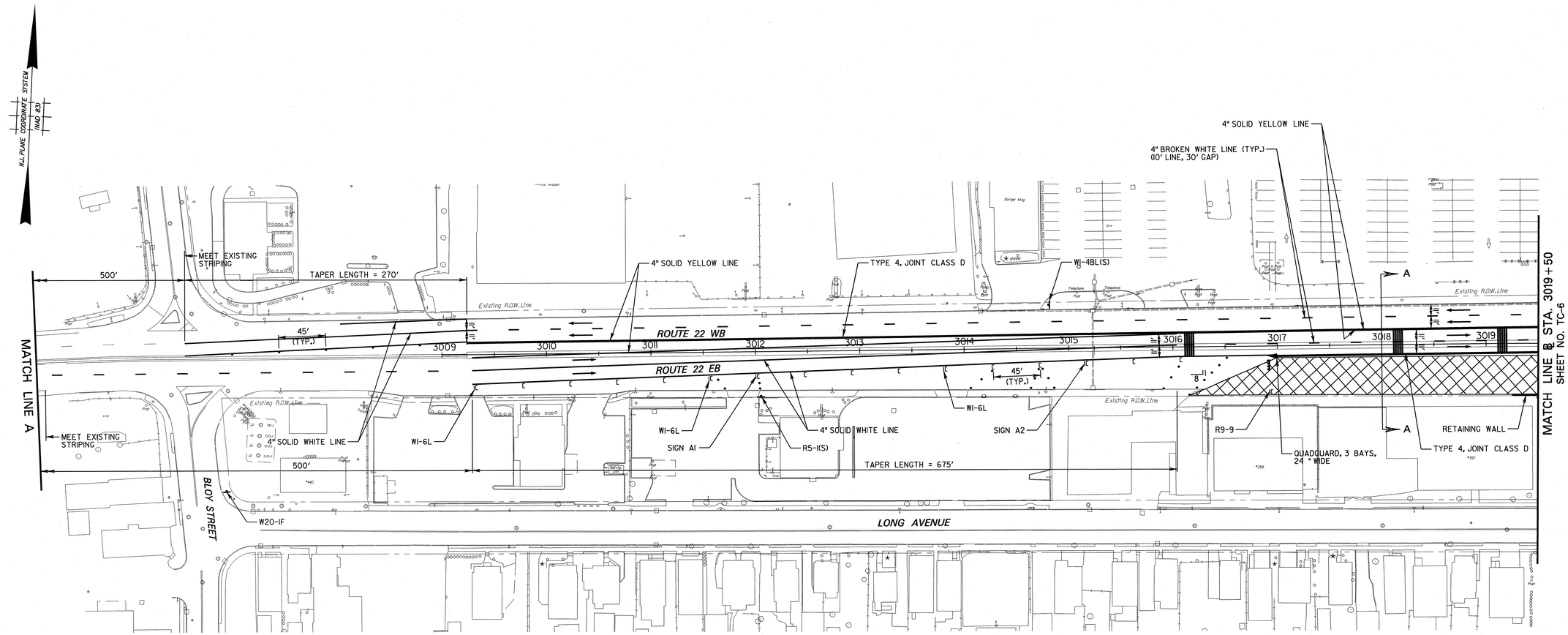
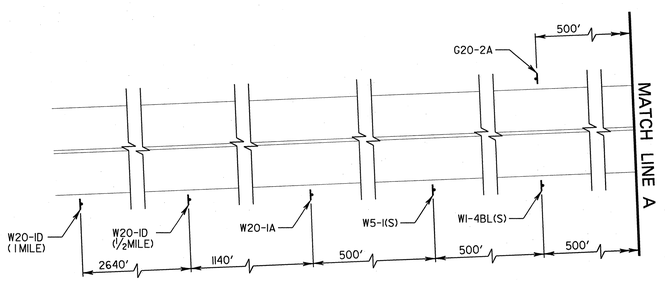
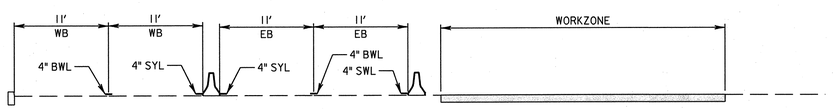
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

NJ PLANE COORDINATE SYSTEM (NAD 83)







SECTION A-A

4" BWL - 4" BROKEN WHITE LINE
4" SYL - 4" SOLID YELLOW LINE
4" SWL - 4" SOLID WHITE LINE

STAGE 1B

SCALE IN FEET
50' 0 50' 100'

TC-5 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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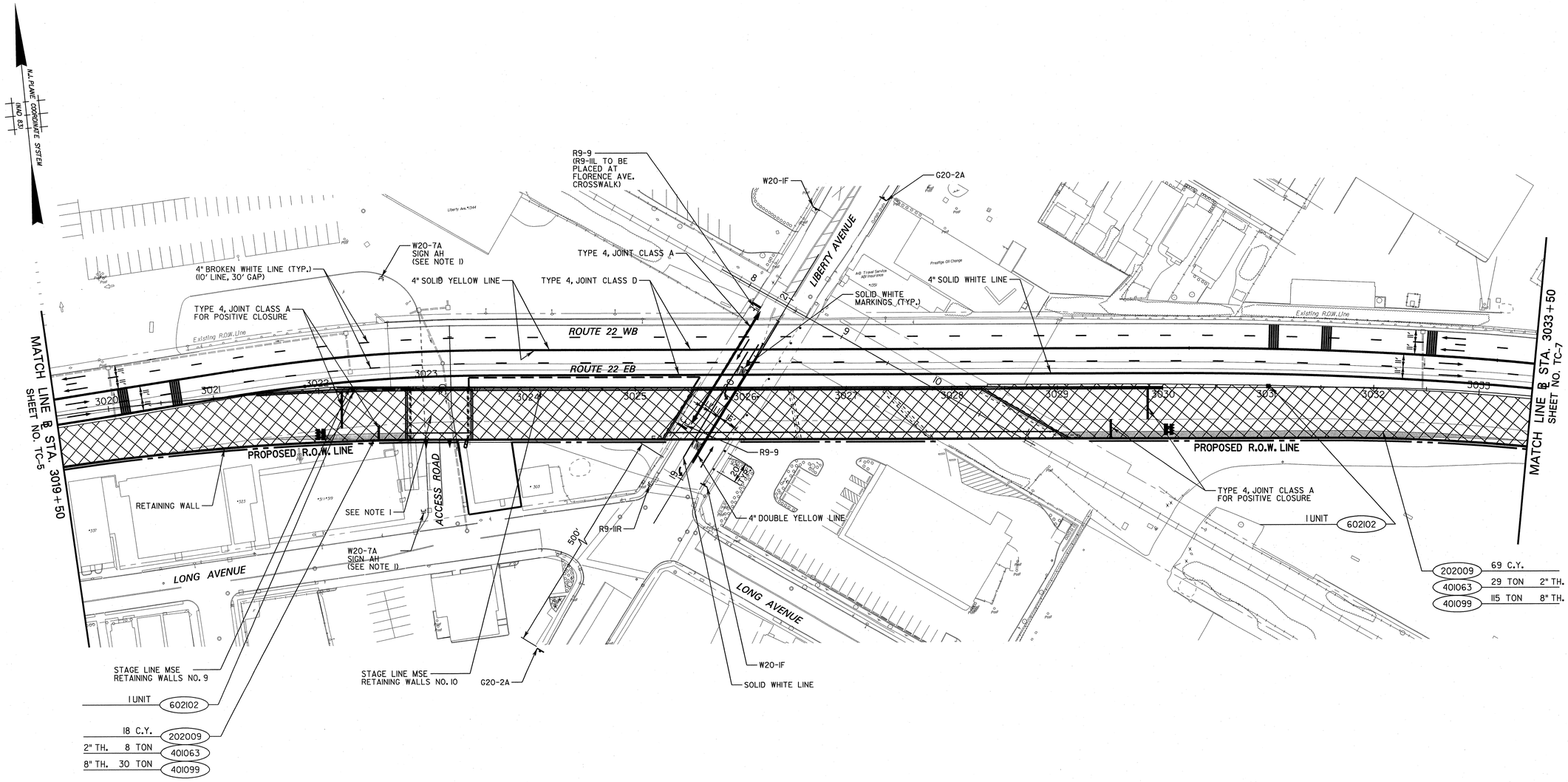
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION



STAGE 1B

SCALE IN FEET
50' 0 50' 100'

TC-6 / TC-19

NOTES:

1. THE ACCESS ROAD WILL REMAIN OPEN TO TWO-WAY TRAFFIC UNDER NORMAL CONSTRUCTION WORK. WHEN IT BECOMES NECESSARY TO RESTRICT TRAFFIC, A TEMPORARY FLAGGING OPERATION WILL BE ESTABLISHED FOR THE LENGTH OF THE UNDER PASS. DRUMS SHALL BE USED TO CHANNELIZE TRAFFIC. THIS FLAGGING OPERATION CAN BE ESTABLISHED ONLY BETWEEN THE HOURS OF 9:00PM AND 5:00AM. WITHIN THIS TIME PERIOD, IT WILL BE NECESSARY TO PERIODICALLY CLOSE BOTH DIRECTIONS OF TRAFFIC TO ACCOMMODATE CONSTRUCTION. THIS MUST BE DONE IN ACCORDANCE WITH THE GENERAL NOTES REGARDING ALL LANE SHUT DOWN. SIGNS W20-7A AND AH WILL ONLY BE DISPLAYED WHEN FLAGGERS ARE OPERATING.

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
202009P	EXCAVATION, UNCLASSIFIED	87 C.Y.
401063M	HOT MIX ASPHALT 12.5H76 SURFACE COURSE	37 TON
401099M	HOT MIX ASPHALT 25M64 BASE COURSE	145 TON
602102M	SET INLET TYPE A, CASTING	2 UNIT

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

46

PARSONS BRINCKERHOFF CADD DATA

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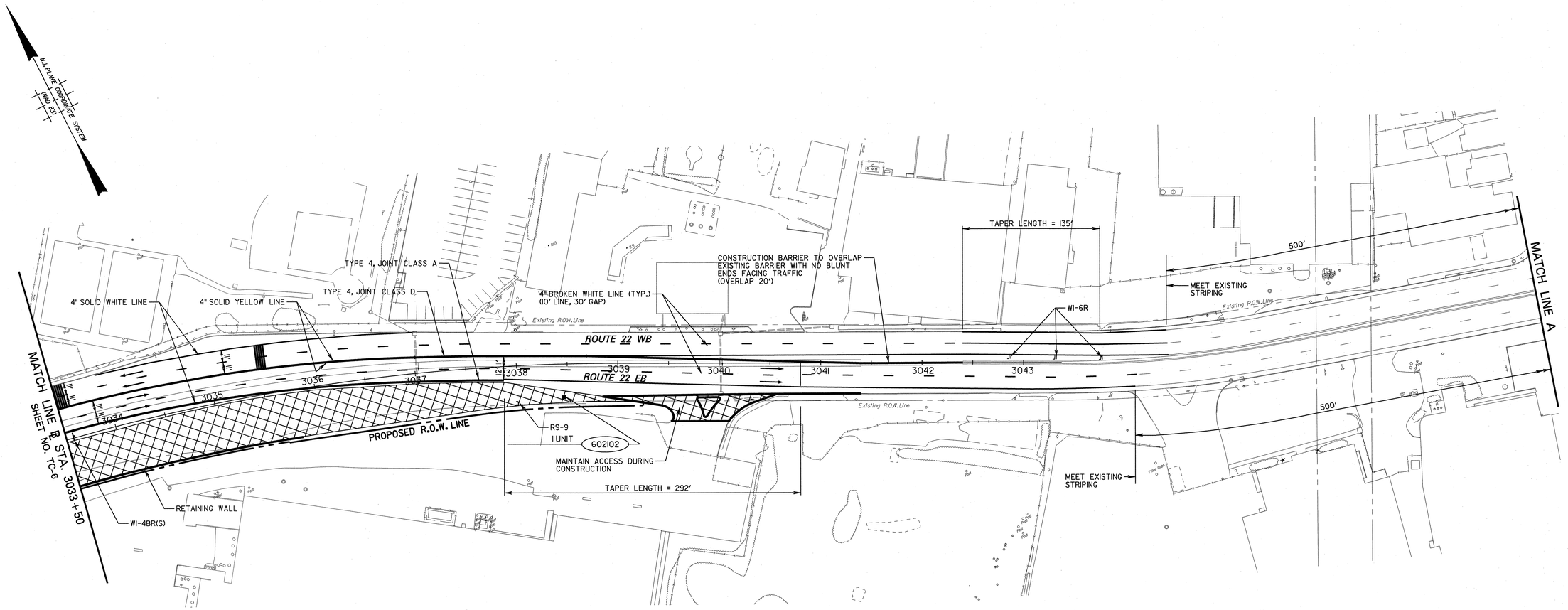
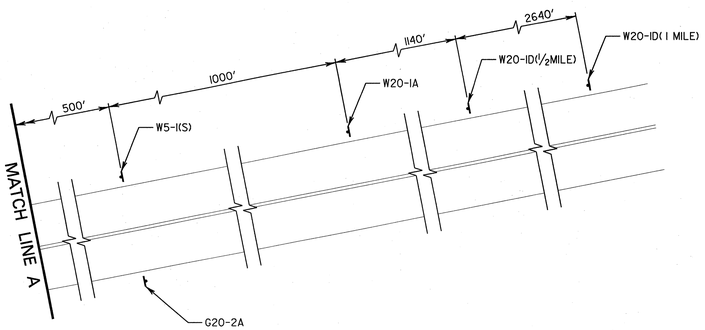
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION





STAGE 1B

SCALE IN FEET
50' 0 50' 100'

TC-7
TC-19

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
602102M	SET INLET TYPE A, CASTING	1 UNIT

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

PARSONS BRINCKERHOFF CADD DATA
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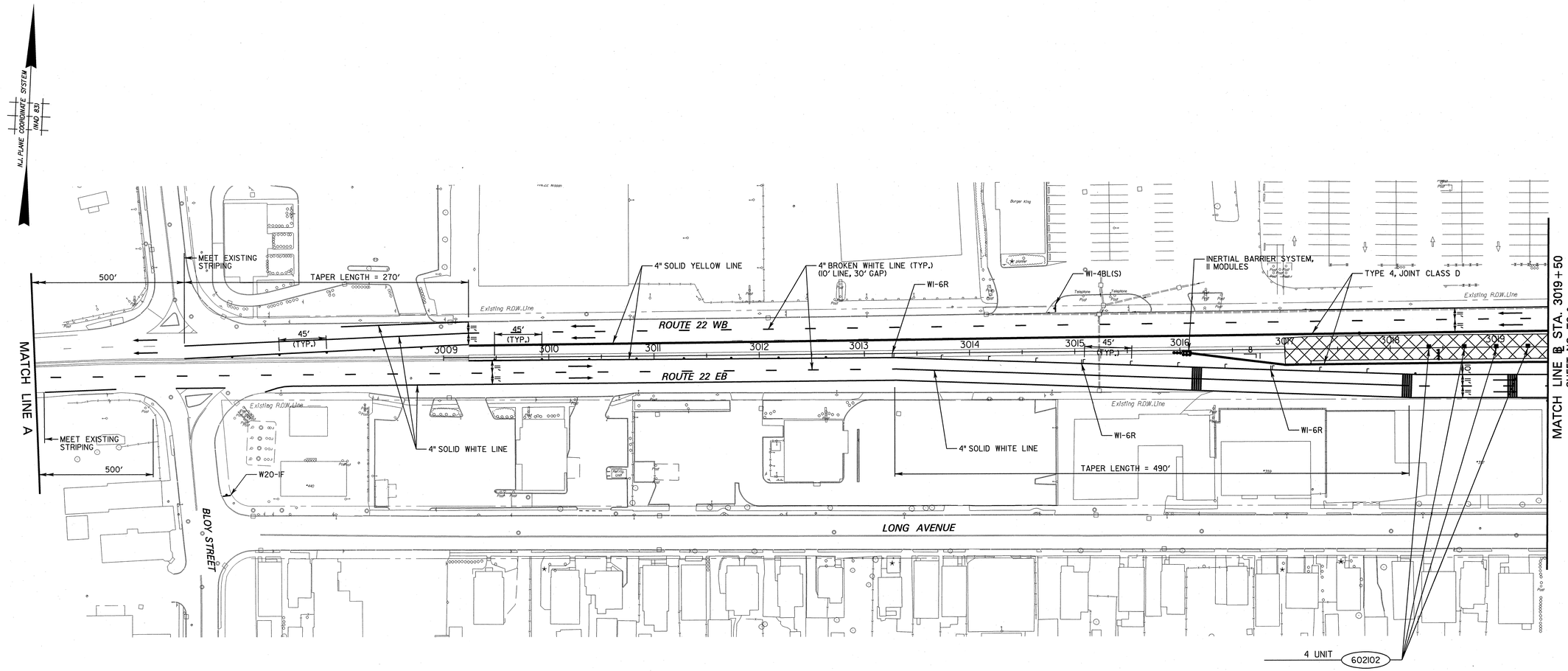
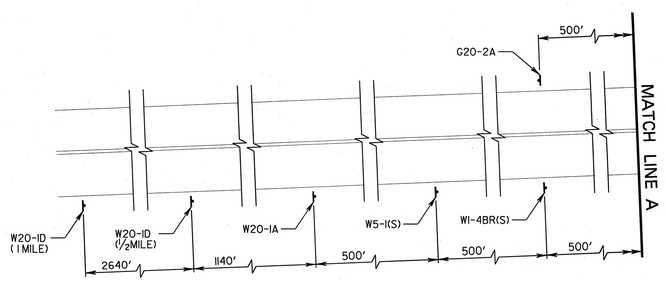
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION





ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
602102M	SET INLET TYPE A, CASTING	4 UNIT

STAGE 2A

SCALE IN FEET
50' 0 50' 100'

TC-8 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE

CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

48

PARSONS BRINCKERHOFF CADD DATA

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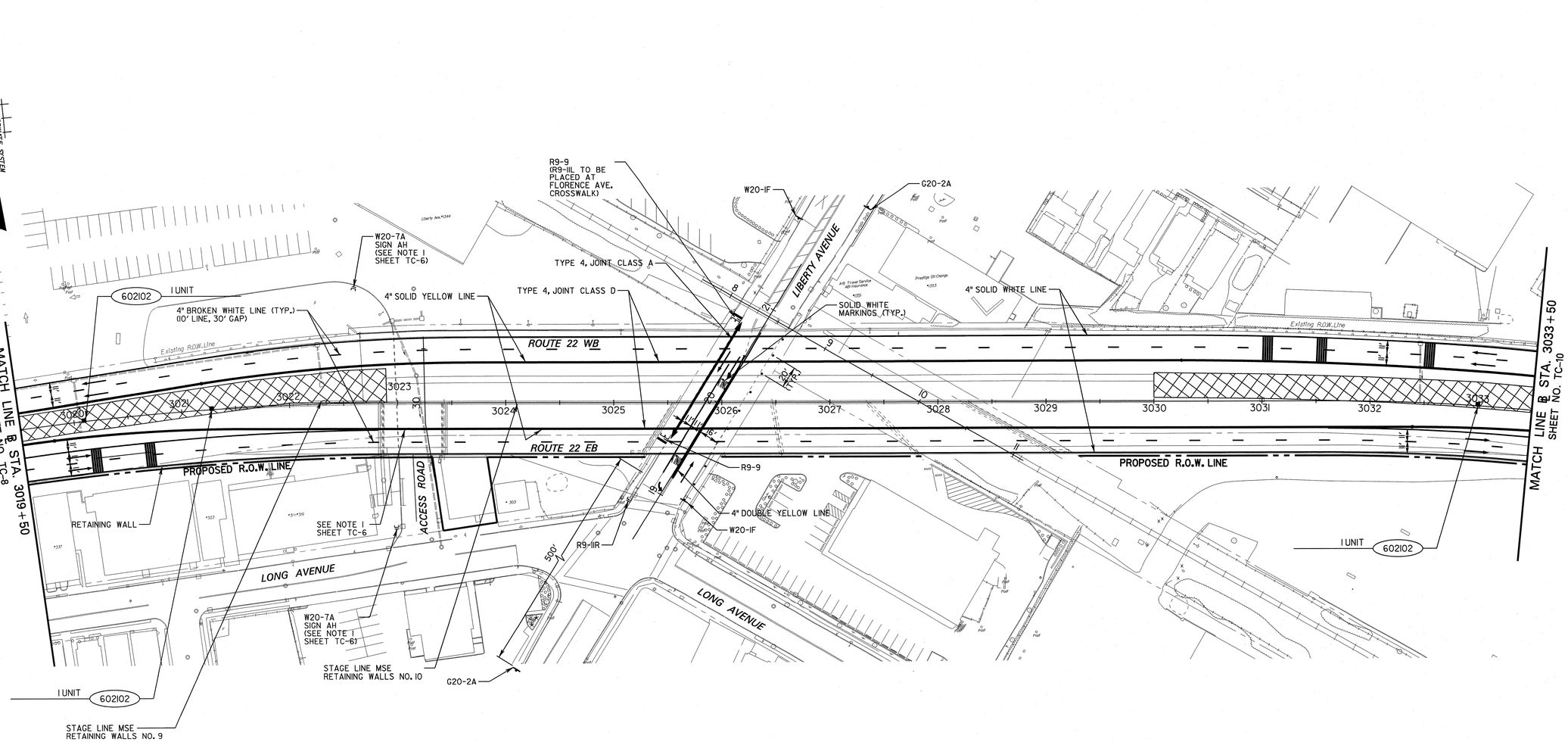
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION



ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
602102M	SET INLET TYPE A, CASTING	3 UNIT

STAGE 2A

SCALE IN FEET
50' 0 50' 100'

TC-9
TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

49

PARSONS BRINCKERHOFF CADD DATA

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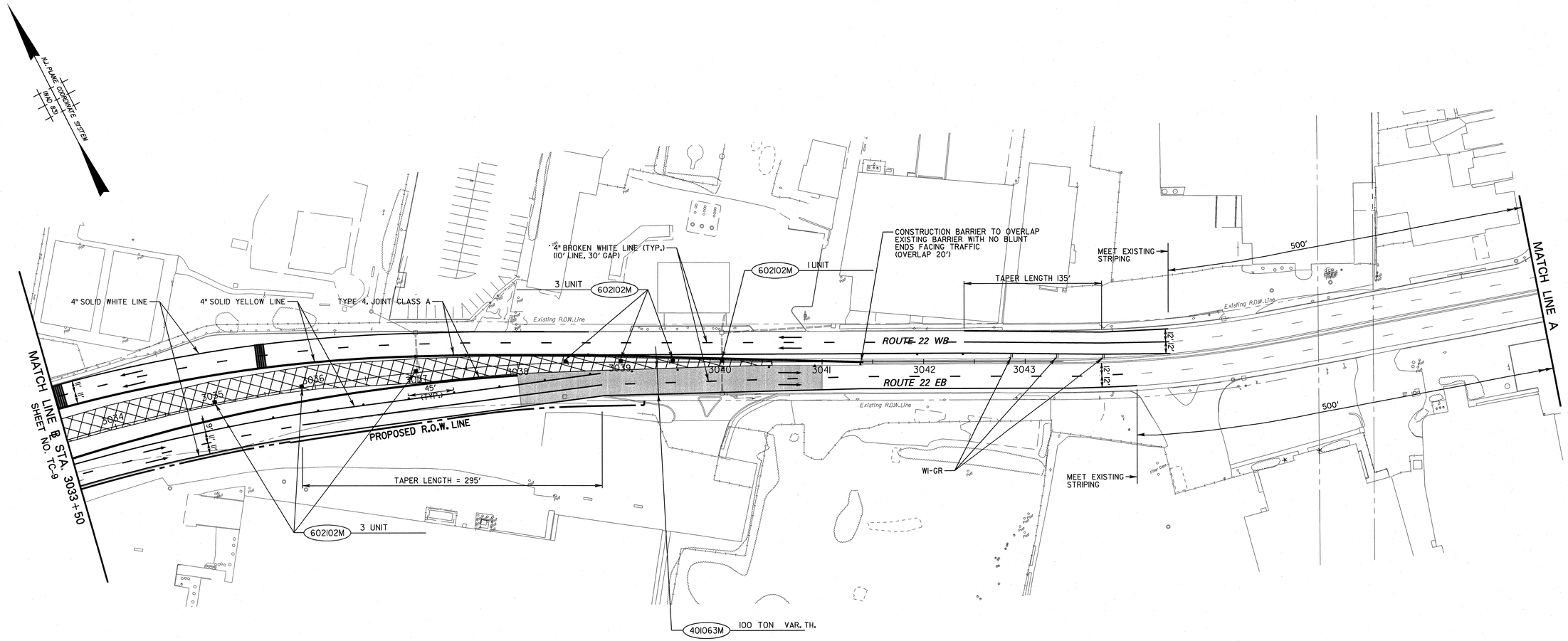
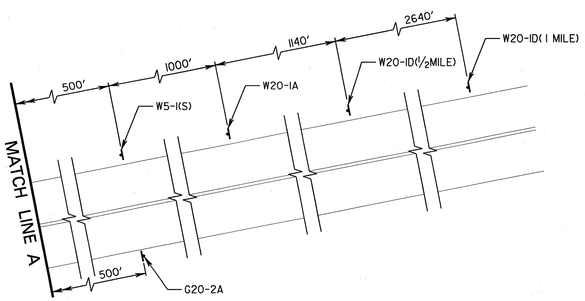
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION





ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
401063M	HOT MIX ASPHALT 12.5H76 SURFACE COURSE	100 TON
602102M	SET INLET TYPE A, CASTING	7 UNIT

STAGE 2A

SCALE IN FEET
50' 0 50' 100'

TC-10 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

50

PARSONS BRINCKERHOFF CADD DATA

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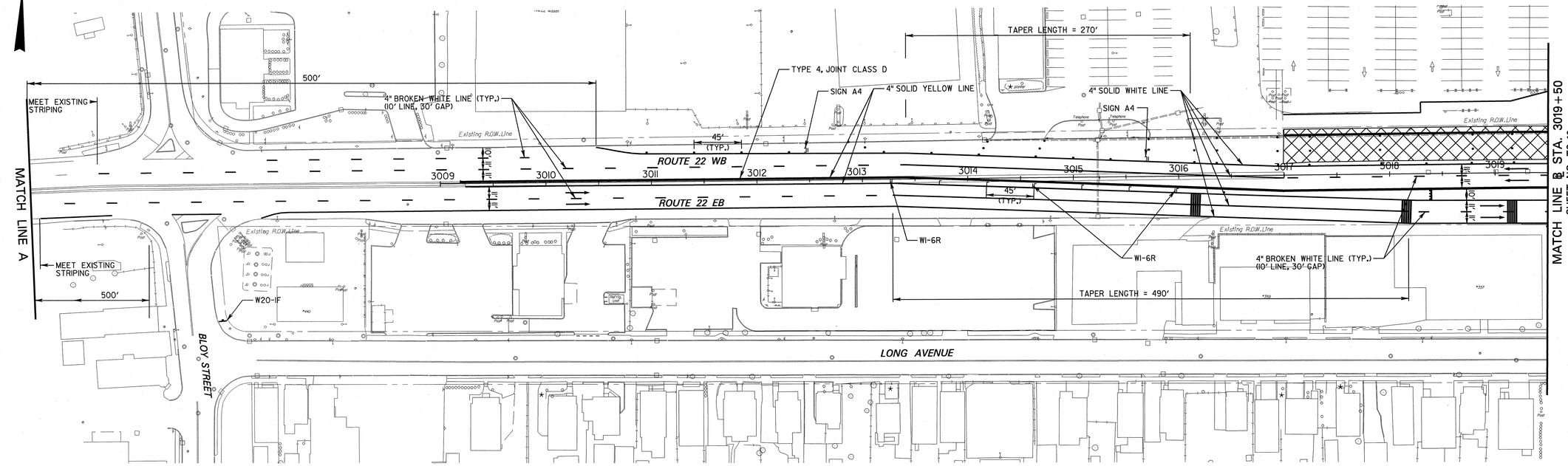
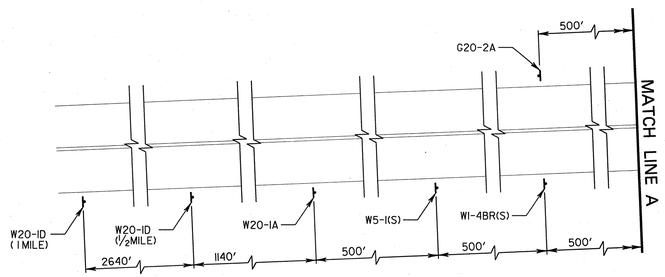
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

N.J. PLANE COORDINATE SYSTEM (NAD 83)





STAGE 2B

SCALE IN FEET
50' 0 50' 100'

TC-11
TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE

CONTRACT NO. 057009080

PB AMERICAS, INC.

CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

ALBERT E. SCHAUFLER

NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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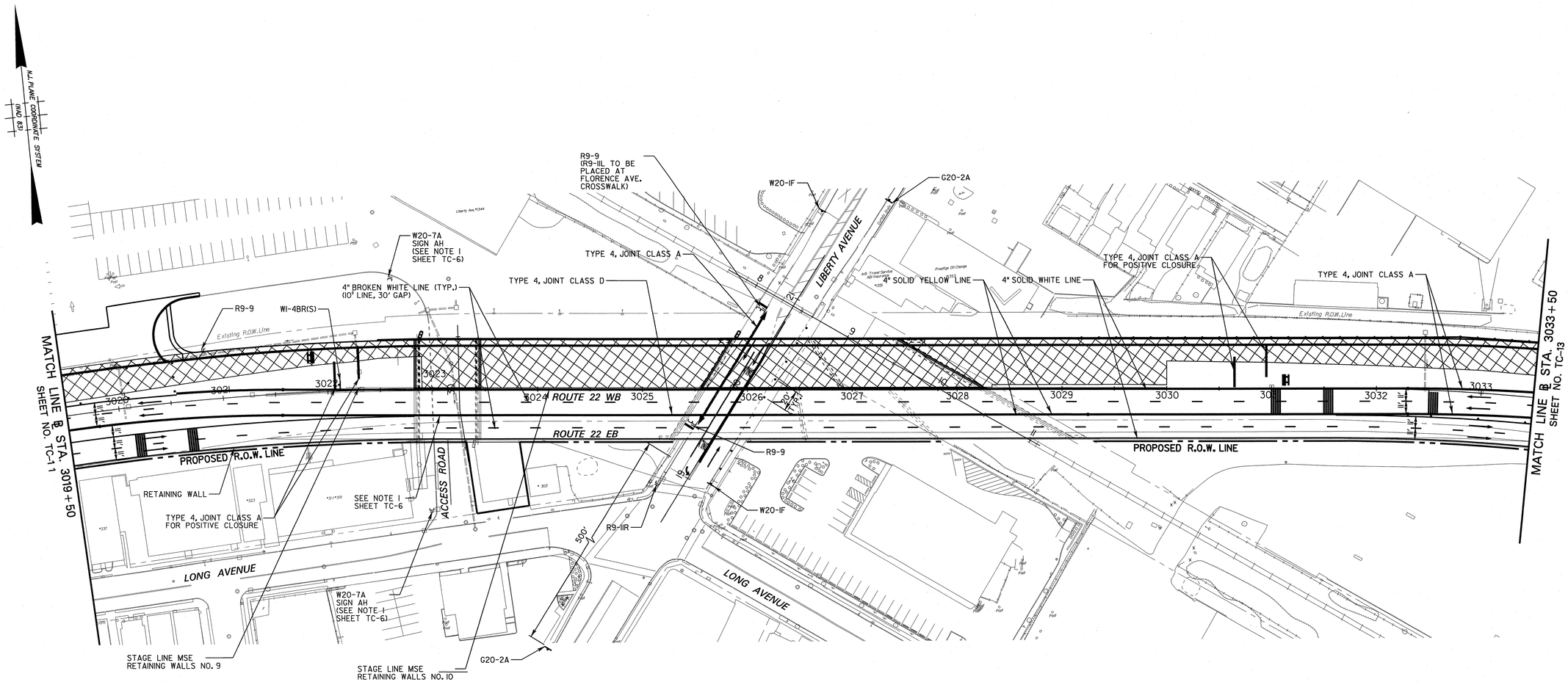
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION



STAGE 2B

SCALE IN FEET
50' 0 50' 100'

TC-12 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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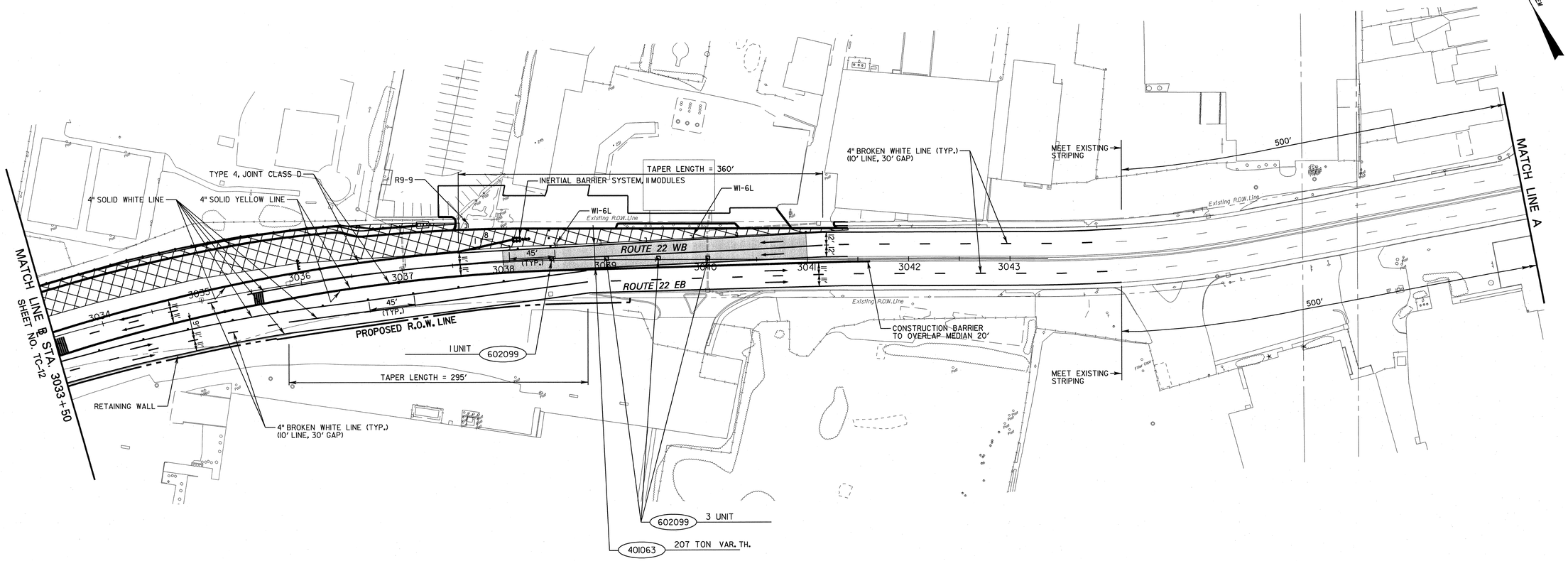
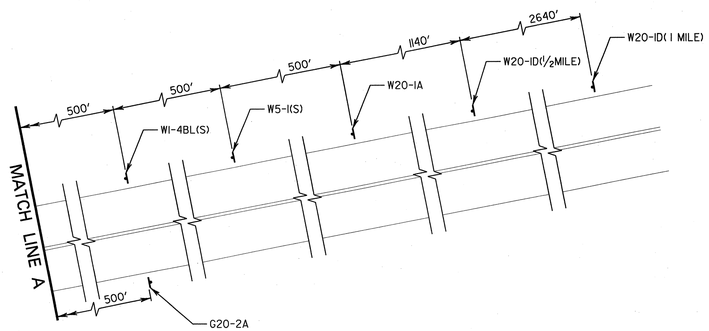
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION





ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
401063M	HOT MIX ASPHALT 12.5H76 SURFACE COURSE	207 TON
602099M	RESET EXISTING CASTING	4 UNIT

STAGE 2B

SCALE IN FEET
50' 0 50' 100'

TC-13 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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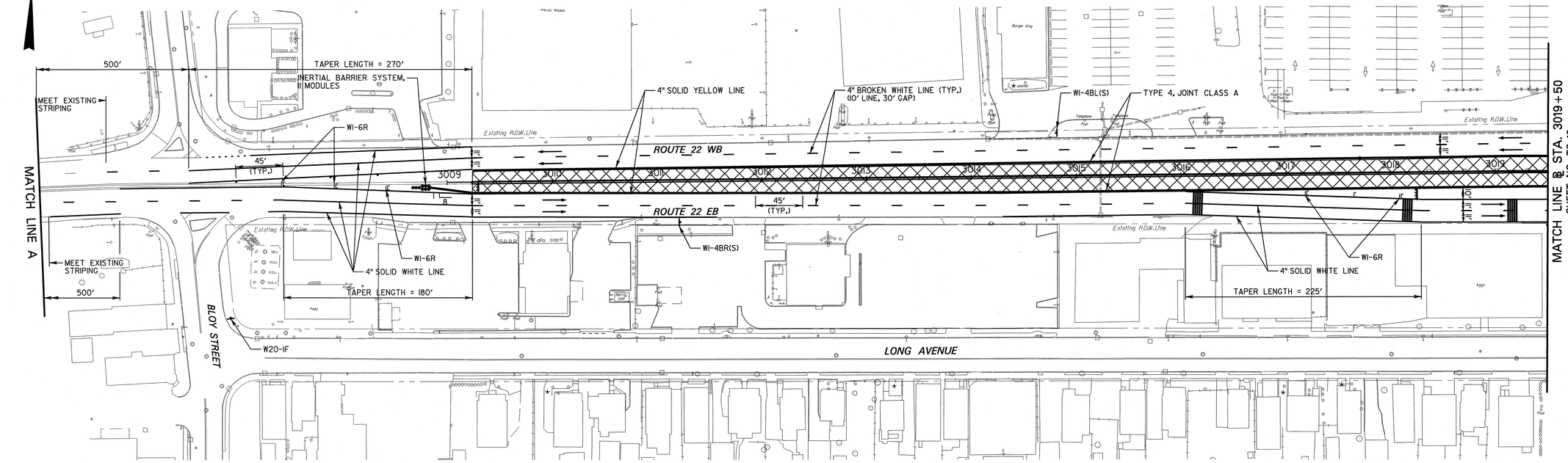
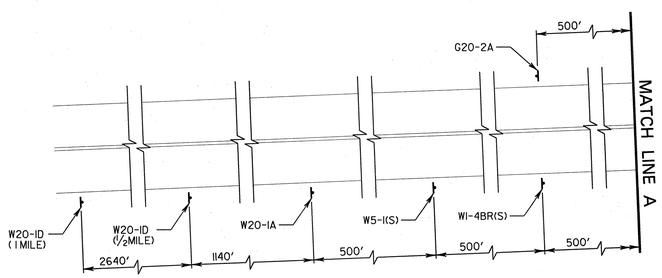
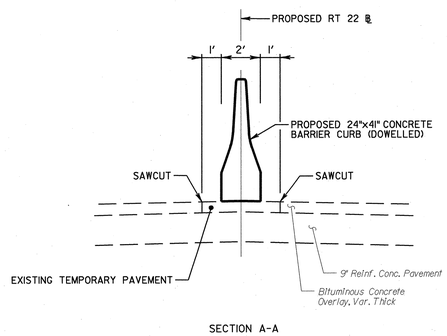
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

N.J. PLANE COORDINATE SYSTEM (NAD 83)







SECTION A-A

MEDIAN BARRIER INSTALLATION

N.T.S.

STA. 3009+20± TO STA. 3017+00±

STAGE 2C

SCALE IN FEET

50' 0 50' 100'

TC-14 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE

CONTRACT NO. 057009080

PB AMERICAS, INC.

CERTIFICATION OF AUTHORIZATION NO. 24GA28029800

ALBERT E. SCHAUFLER

NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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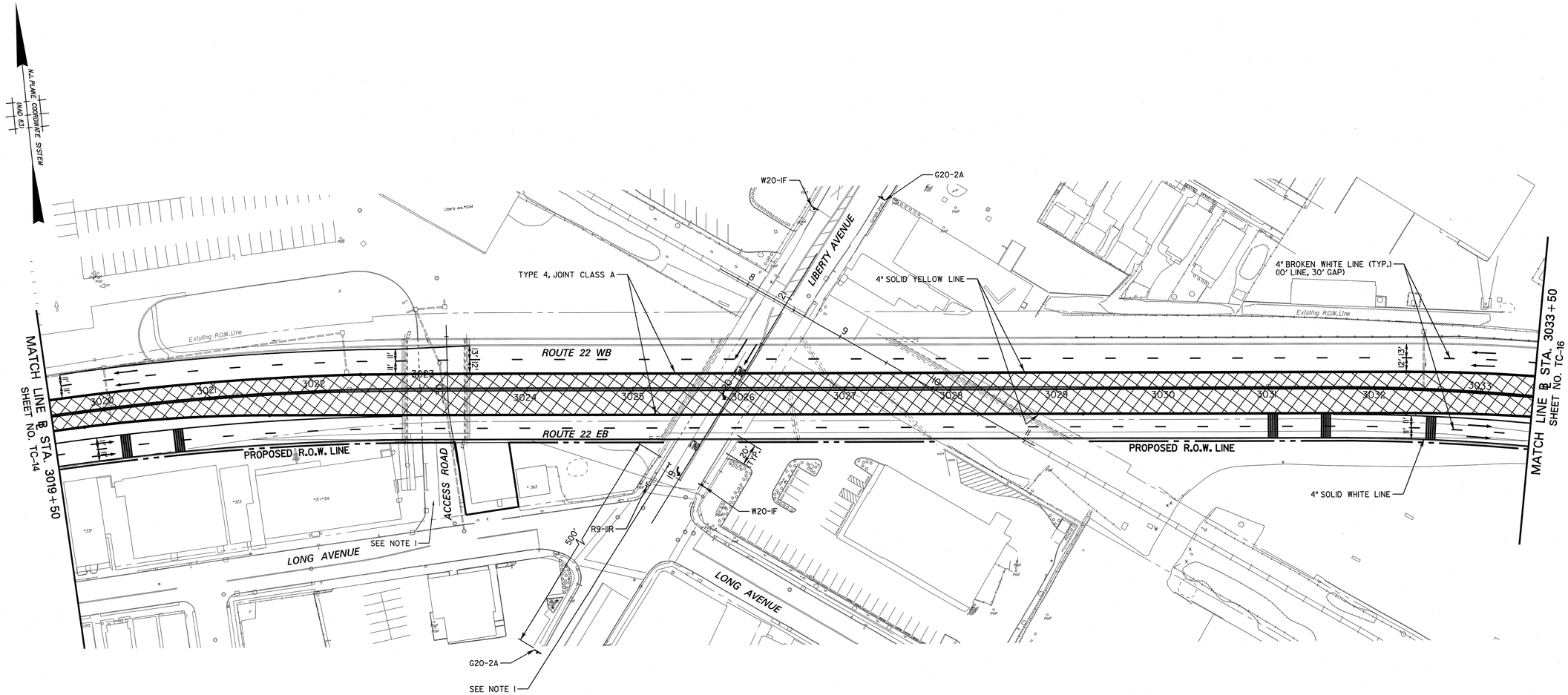
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION



STAGE 2C

SCALE IN FEET
50' 0 50' 100'

TC-15 / TC-19

NOTE:
1. LIBERTY AVENUE AND THE ACCESS ROAD TO HAVE PERMANENT STRIPES INSTALLED PRIOR TO THIS STAGE.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

PARSONS BRINCKERHOFF CADD DATA

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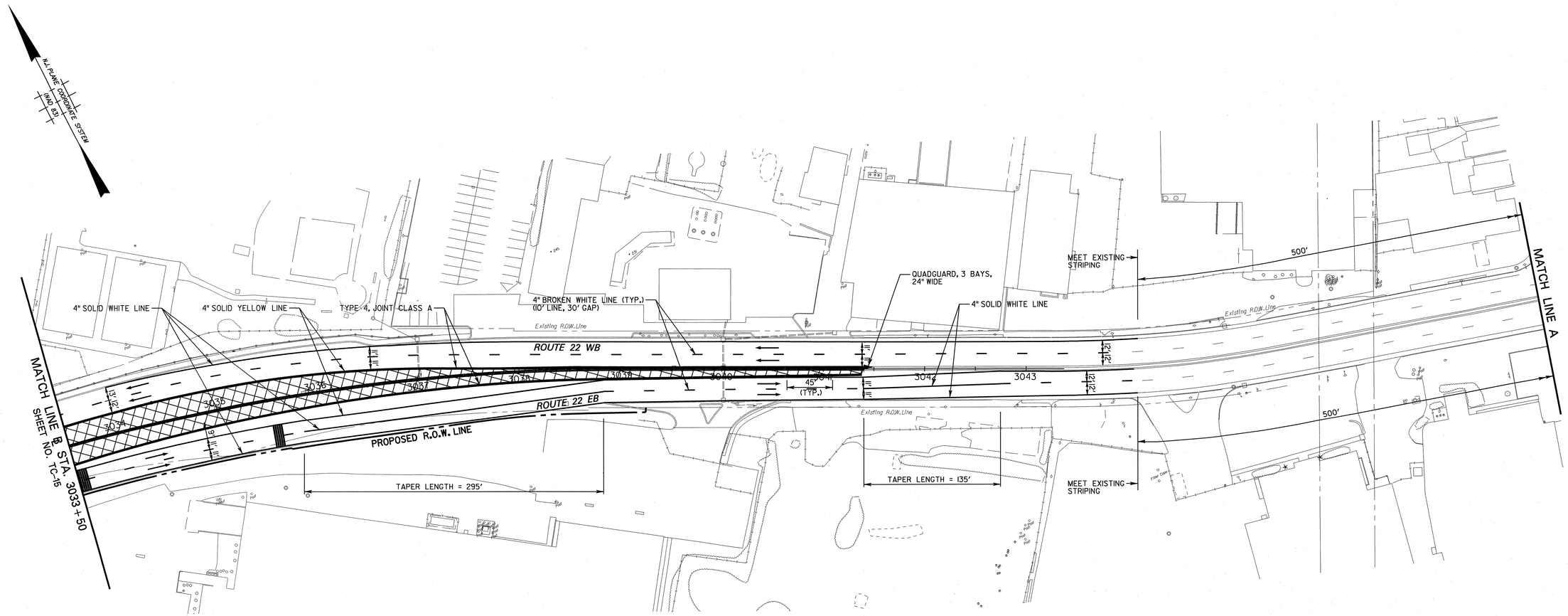
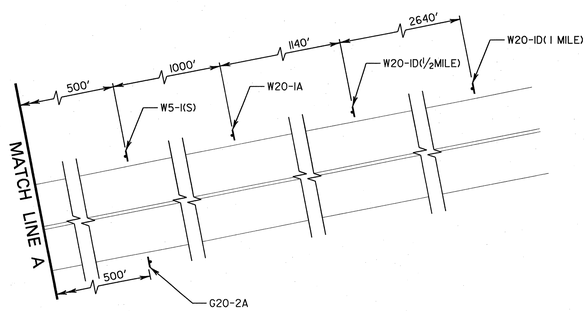
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION





STAGE 2C

SCALE IN FEET
50' 0 50' 100'

TC-16
TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE

CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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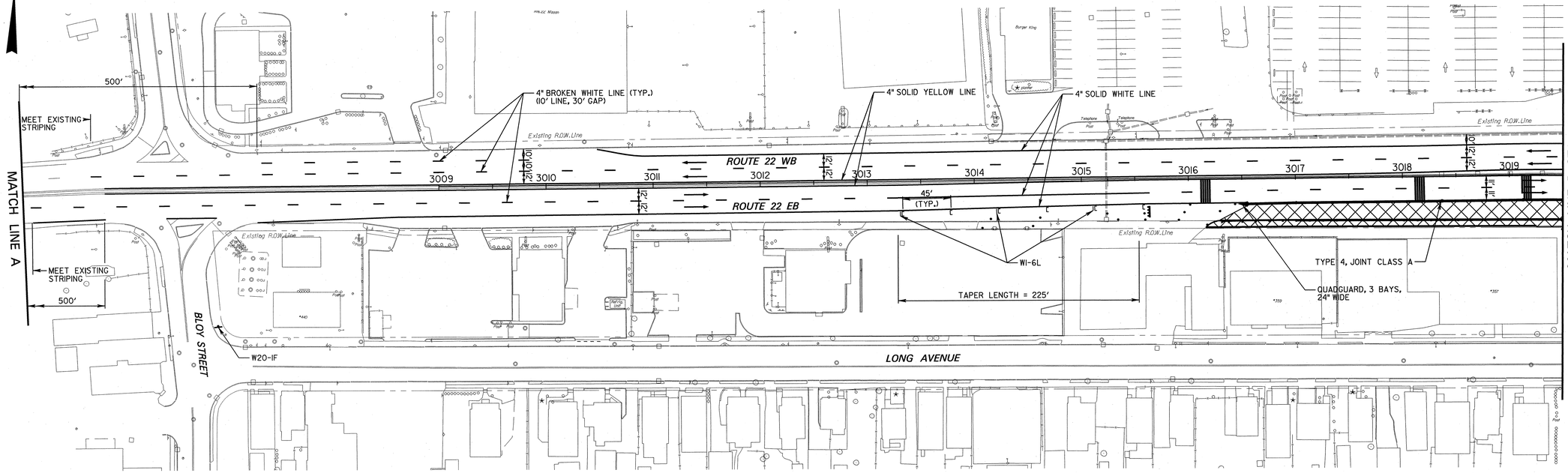
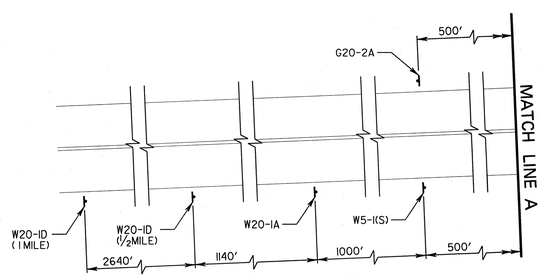
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

N.J. PLANE COORDINATE SYSTEM NAD 83





STAGE 2D

SCALE IN FEET
50' 0 50' 100'

TC-17 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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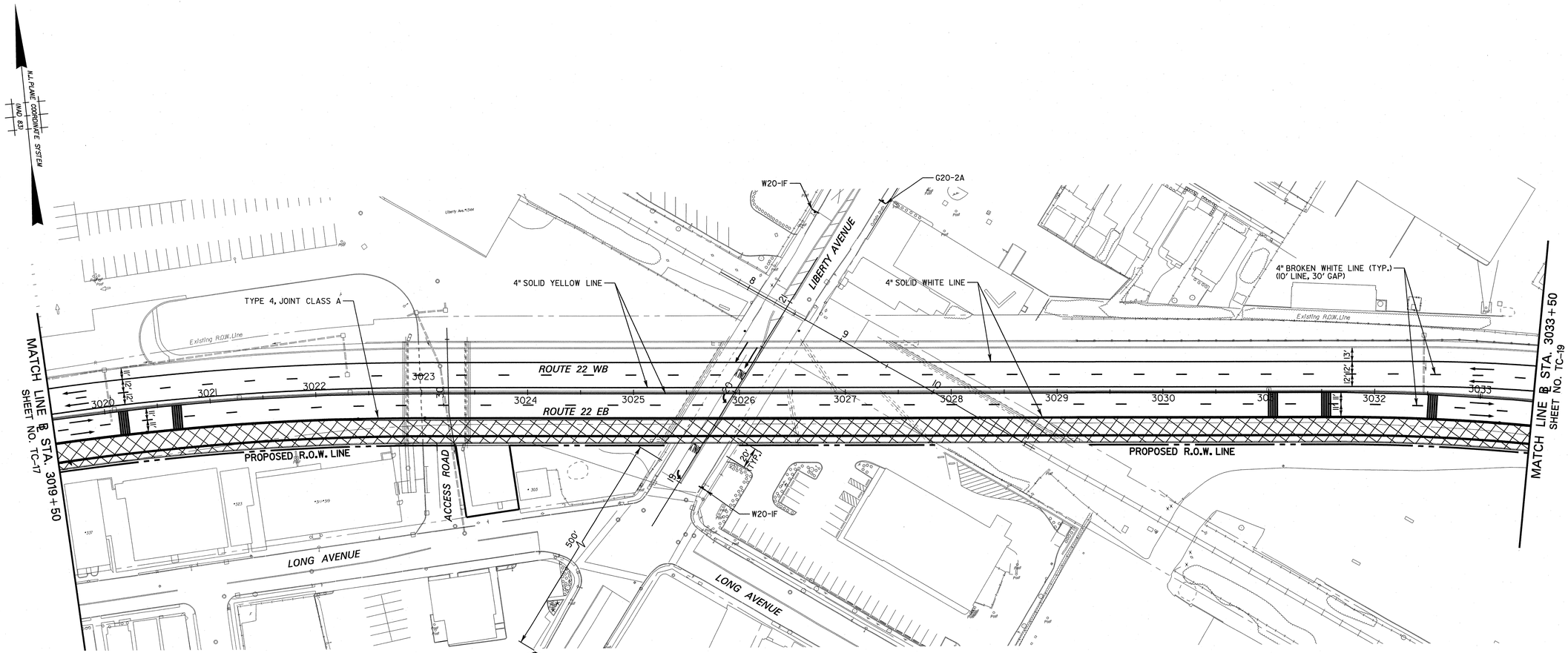
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION

N.J. PLANE COORDINATE SYSTEM (NAD 83)



STAGE 2D

SCALE IN FEET
50' 0 50' 100'

TC-18 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS
ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

58

PARSONS BRINCKERHOFF CADD DATA

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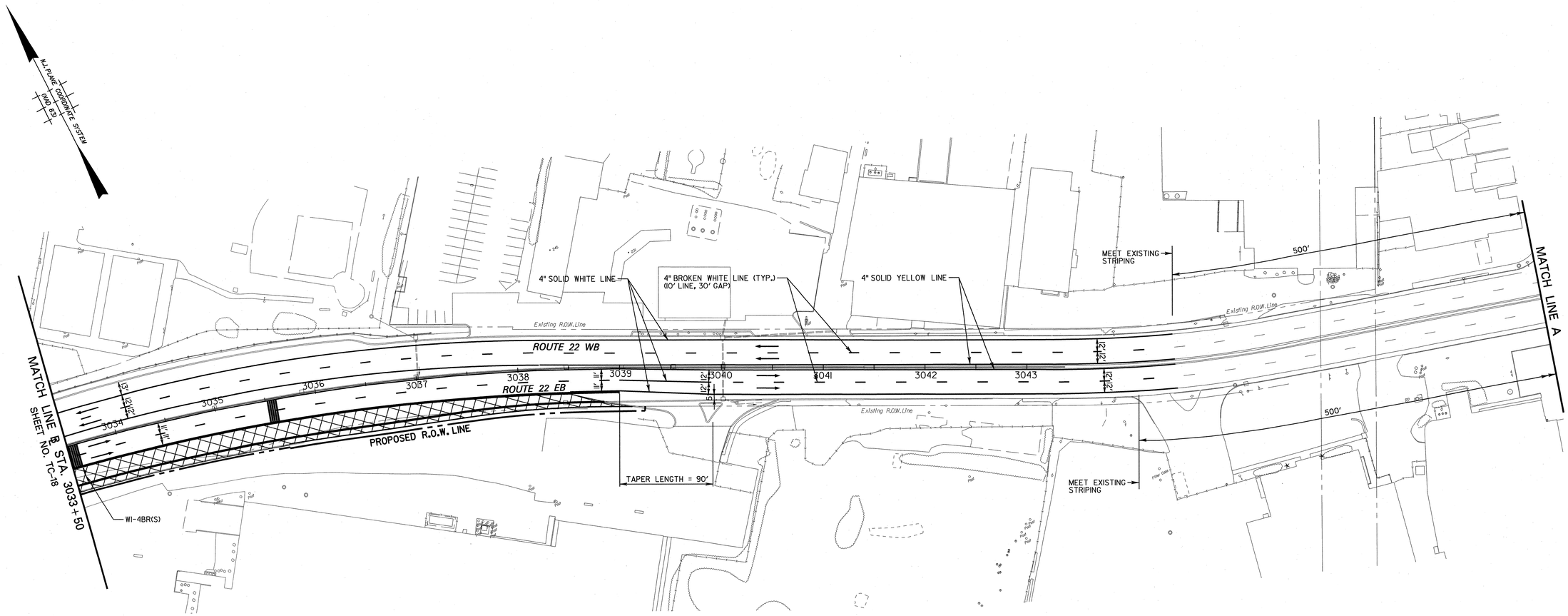
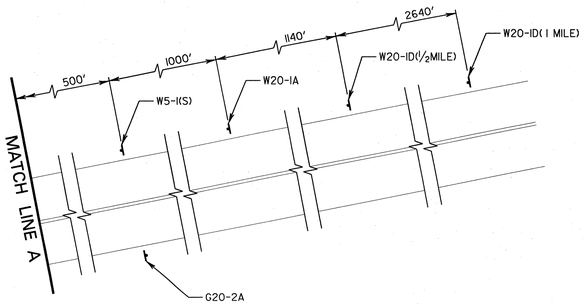
STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

TOWNSHIP OF HILLSIDE COUNTY OF UNION





STAGE 2D

SCALE IN FEET
50' 0 50' 100'

TC-19 / TC-19

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLANS

ROUTE 22 LIBERTY AVENUE
& CONRAIL BRIDGE
CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
Albert E. Schaufler
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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DESIGN FILE	T:\100404\tc03s2d.dgn		

STATE	FEDERAL PROJECT NO.
N.J.	FS-BR-0040(168)

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 400W HPS CONVENTIONAL TYPE LUMINAIRE
MOUNTED ON UTILITY POLE

RELOCATED 100W HPS ORNAMENTAL TYPE LUMINAIRE
STA. 20+34, 23' LT (RELOCATED FROM STA. 20+48)

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE
STA. 20+61, 23' RT (TO BE MAINTAINED)

N.J. PLANE COORDINATE SYSTEM
NAD 27

LIBERTY AVENUE

Existing R.O.W. Line

ROUTE 22 WB

ROUTE 22 EB

PROP. R.O.W. LINE

ACCESS ROAD

LONG AVENUE

LA-1-1 LA-1-2 LA-1-3 LA-1-4 LA-1-5 LA-1-6 LA-1-7 LA-1-9 LA-1-11 LA-1-13

LA-2-1 LA-2-2 LA-2-3 LA-2-4 LA-2-6 LA-2-10 LA-2-12

3019 3020 3021 3022 3023 3024 3025 3026 3027 3028 3029 3030 3031 3032 3033

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE
STA. 19+89, 23' RT (TO BE MAINTAINED)

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE
STA. 19+68, 23' LT (TO BE MAINTAINED)

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE

LEGEND:

- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- PROPOSED 18" X 36" JUNCTION BOX
- PROPOSED 8" X 8" X 6" METAL CAST JUNCTION BOX
- PROPOSED LIGHTING CONDUIT, TYPE AND SIZE AS NOTED
- PROPOSED 150W HPS VERTICAL MEDIUM TYPE III LUMINAIRE MOUNTED ON 22 FOOT LIGHTING STANDARD ON STRUCTURE WITH 8 FOOT ARM
- EXISTING 100W HPS ORNAMENTAL TYPE LUMINAIRE MOUNTED ON A 12 FOOT PEDESTAL
- RELOCATED 100W HPS ORNAMENTAL TYPE LUMINAIRE MOUNTED ON A 12 FOOT PEDESTAL
- PROPOSED 150W HPS TYPE IV NON-CUTOFF UNDERDECK WALL MOUNTED LUMINAIRE
- PROPOSED METER CABINET IM-MC

GENERAL NOTES:

1. EXISTING LIGHTING STANDARD ASSEMBLIES LOCATED ON ROUTE 22 BRIDGE TO BE REMOVED.
2. EXISTING ORNAMENTAL LIGHTS OWNED BY HILLSIDE TOWNSHIP AND MAINTAINED BY PSE&G. CONTRACTOR SHALL REMOVE AND RECONSTRUCT LIGHTS IMPACTED DURING CONSTRUCTION AS SHOWN ON PLANS.
3. EXISTING UTILITY POLE MOUNTED LUMINAIRES BENEATH PROPOSED ROUTE 22 BRIDGE TO BE REMOVED.
4. NO SPECIFIC PAYMENT WILL BE MADE FOR RELOCATION OF EXISTING ORNAMENTAL LIGHTING STANDARDS. ALL COSTS SHALL BE INCLUDED IN VARIOUS LIGHTING PAY ITEMS.

ABBREVIATIONS

RMC - RIGID METALLIC CONDUIT

ULA - UNDERDECK LIGHTING ASSEMBLY

NOTATIONS

LMA - A (8')
- A: ALUMINUM
- 8': ARM LENGTH
- LMA: LIGHTING MAST ARM

LS - A (22')
- A: ALUMINUM
- 22': POLE LENGTH
- LS: LIGHTING STANDARD

L (V - 150W)
- V: VERTICAL TYPE LUMINAIRE
- 150W: 150 WATTS HPS
- L: LUMINAIRE

LA - 1 - 5
- LA: LOAD CENTER NAME
- 1: CIRCUIT NUMBER
- 5: LIGHT NUMBER

SCALE IN FEET
50' 0 50' 100'

HL-1 / HL-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

HIGHWAY LIGHTING PLANS

ROUTE 22 LIBERTY AVENUE & CONRAIL BRIDGE CONTRACT NO. 057009080

PB AMERICAS, INC.
CERTIFICATION OF AUTHORIZATION NO. 24GA28029800
ALBERT E. SCHAUFLER
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE02371200

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PARSONS BRINCKERHOFF CADD DATA

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