BORING: SB # 1 | DATE DRILLED: 11/28/2006

STATION: 18+51.06 | OFFSET: -5.86 FT | ELEVATION: 96.39 | NORTHING: | EASTING:

COMMENTS:

DEPTH (FT.)	NO.	SAMPLE DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	CLASS./G.I.	REMARKS
	1	0.5' 2.0'	3 7 25	WET HARD BROWN COARSE SANDY SILT W/SOME FINE SAND AND GRAVEL. 8" RECOVERY	A-4(0)	
2.9	2	2.0' 4.0'	5 4 3 4	WET FIRM REDDISH BROWN SILT W/SOME GRAVEL, COARSE SAND AND CLAY, TRACE OF FINE SAND. 22" RECOVERY	A-4(4)	
5.8	3	4.0' 6.0'	1 2 4 5	WET FIRM REDDISH BROWN SILT W/SOME GRAVEL, COARSE TO FINE SAND AND CLAY. 20" RECOVERY	A-4(1)	
	4	6.0' 8.0'	4 5 4 8	WET STIFF REDDISH BROWN GRAVELLY SILT W/ SOME COARSE TO FINE SAND AND CLAY. 14" RECOVERY	A-4(0)	
8.7	5	8.0' 10.0'	2 2 2 2	SATURATED SOFT BROWN SILT W/SOME CLAY, TRACE OF FINE TO COARSE SAND AND GRAVEL. 20" RECOVERY	A-4(3)	
11.6	6	10.0' 12.0'	4 5 7 7	SATURATED STIFF BROWN SILT W/SOME CLAY, TRACE OF FINE TO COARSE SAND. 24" RECOVERY	A-4(5)	
	U-1	12.0' 14.0'		SATURATED REDDISH BROWN SILT W/SOME CLAY, TRACE OF FINE TO COARSE SAND AND ORGANIC MATTER. 24" RECOVERY	A-4(8)	PRESS SAMPLE - SHELBY TUBE
14.5	7	14.0' 16.0'	2 3 4 5	SATURATED FIRM REDDISH BROWN CLAYEY SILT W/TRACE OF FINE TO COARSE SAND AND GRAVEL. 24" RECOVERY	A-4(8)	
17.4	8	16.0' 18.0'	8 14 15 15	SATURATED MEDIUM DENSE BROWN COARSE SANDY GRAVEL W/SOME SILT AND FINE SAND. 18" RECOVERY	A-1-B	
20.3	9	18.0' 20.0'	9 13 14 13	SATURATED MEDIUM DENSE BROWN COARSE TO FINE SAND AND GRAVEL W/SOME SILT. 20" RECOVERY	A-1-B	
23.2						
26.1	10	24.0' 25.5'	9 15 16	SATURATED DENSE BROWN COARSE TO FINE SAND AND GRAVEL W/TRACE OF SILT. 18" RECOVERY	A-1-B	
29						
31.9	11	29.0' 30.5'	9 11 12	SATURATED MEDIUM DENSE BROWN GRAVELLY COARSE SAND W/SOME FINE SAND, TRACE OF SILT. 18" RECOVERY	A-1-B	
34.8	12	34.0' 35.5'	7 9 11	SATURATED MEDIUM DENSE BROWN COARSE SAND W/SOME GRAVEL AND FINE SAND, TRACE OF SILT. 16" RECOVERY	A-1-B	
37.7						
40.6	13	39.0' 40.5'	5 7 11	SATURATED MEDIUM DENSE BROWN COARSE SAND W/SOME GRAVEL, SILT AND FINE SAND. 16" RECOVERY	A-1-B	
43.5						
	14	44.0' 45.5'	7 11 20	SATURATED DENSE BROWN COARSE SAND W/SOME GRAVEL AND FINE SAND, TRACE OF SILT. 16" RECOVERY	A-1-B	

BORING (CONT.): SB # 1

DEPTH (FT.)	NO.	SAMPLE DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	CLASS./G.I.	REMARKS
49.3	15	49.0' 50.5'	22 33 50/5"	SATURATED VERY DENSE BROWN COARSE TO FINE SANDY GRAVEL W/SOME SILT. 14" RECOVERY	A-1-B	
52.2						
55.1	16	54.0' 55.5'	8 12 14	SATURATED MEDIUM DENSE MULTICOLORED CLAYEY GRAVEL W/SOME FINE TO COARSE SAND. 18" RECOVERY	A-2-7(4)	
58						
60.9	17	59.0' 60.5'	10 13 16	SATURATED MEDIUM DENSE MULTICOLORED SILTY FINE TO COARSE SAND W/SOME GRAVEL AND ORGANIC MATTER. 18" RECOVERY	A-2-5(0)	
63.8	18	64.0' 65.5'	18 22 28	SATURATED VERY DENSE MULTICOLORED ORGANIC COARSE TO FINE SAND W/SOME SILT. 18" RECOVERY	A-2-4(0)	
66.7						
69.6						
72.5						
75.4						
78.3						
81.2						
84.1						
87						
89.9						
92.8						

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

BRIDGE 1-651 ON NEWPORT ROAD OVER CSX

CONTRACT	BRIDGE NO.	1-651	BORING LOG	SHEET NO.
27-074-01	DESIGNED BY:			49
COUNTY				TOTAL SHTS.
NEW CASTLE	CHECKED BY:			65

BORING: SB # 2 | DATE DRILLED: 11/27/2006
STATION: 20+08.04 | OFFSET: 3.01 FT | ELEVATION: 95.99 | NORTHING: | EASTING:
COMMENTS:

DEPTH (FT.)	NO.	SAMPLE DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	CLASS./G.I.	REMARKS
	1	1.0' 2.0'	4 10	WET VERY STIFF BROWN COARSE SANDY SILT W/SOME GRAVEL, FINE SAND AND CLAY. 12" RECOVERY	A-4(0)	
2.9	2	2.0' 4.0'	10 10 9 8	WET VERY STIFF BROWNISH GRAY SILT W/SOME FINE TO COARSE SAND, GRAVEL AND CLAY. 22" RECOVERY	A-4(3)	
5.8	3	4.0' 6.0'	1 4 9 12	WET STIFF GRAY SILT W/SOME CLAY, TRACE OF COARSE TO FINE SAND AND GRAVEL. 22" RECOVERY	A-4(2)	
	4	6.0' 8.0'	7 9 7 12	SATURATED VERY STIFF GRAY SILT W/TRACE OF FINE SAND. 22" RECOVERY	A-4(0)	
8.7	U-1	8.0' 9.5'		SATURATED GRAY SILT W/SOME CLAY, TRACE OF FINE TO COARSE SAND, GRAVEL AND ORGANIC MATTER. 14" RECOVERY	A-4(4)	PRESS SAMPLE - SHELBY TUBE
	5	9.5'	50/6"	NO SAMPLE RECOVERY 0" RECOVERY		OBSTRUCTION @ 9.5' - BORING MOVED
11.6	6	10.0' 12.0'	8 11 14 15	SATURATED VERY STIFF BROWN SILT W/SOME CLAY, TRACE OF FINE TO COARSE SAND AND GRAVEL. 6" RECOVERY	A-4(2)	
14.5	7	12.0' 14.0'	14 14 13 11	SATURATED VERY STIFF BROWN SILT W/SOME GRAVEL AND CLAY, TRACE OF COARSE TO FINE SAND. 12" RECOVERY	A-4(3)	
	8	14.0' 16.0'	3 4 6 7	SATURATED STIFF REDDISH BROWN SILT W/ SOME CLAY, TRACE OF COARSE TO FINE SAND AND GRAVEL. 24" RECOVERY	A-4(7)	
17.4	9	16.0' 18.0'	8 18 27 29	SATURATED VERY DENSE REDDISH BROWN SILTY COARSE TO FINE SAND AND GRAVEL. 22" RECOVERY	A-2-4(0)	
20.3	10	18.0' 20.0'	11 12 11 12	SATURATED MEDIUM DENSE REDDISH BROWN COARSE SAND AND GRAVEL W/SOME FINE SAND, TRACE OF SILT. 22" RECOVERY	A-1-B	
26.1	11	24.0' 26.0'	8 15 13 11	SATURATED MEDIUM DENSE REDDISH BROWN GRAVELLY COARSE TO FINE SAND W/TRACE OF SILT. 22" RECOVERY	A-1-B	
31.9	12	29.0' 30.5'	7 10 11	SATURATED MEDIUM DENSE REDDISH BROWN COARSE SAND W/SOME GRAVEL AND FINE SAND, TRACE OF SILT. 18" RECOVERY	A-1-B	
34.8	13	34.0' 35.5'	8 10 12	SATURATED MEDIUM DENSE REDDISH BROWN GRAVELLY COARSE SAND W/SOME FINE SAND, TRACE OF SILT. 18" RECOVERY	A-1-B	
40.6	14	39.0' 40.5'	7 10 11	SATURATED MEDIUM DENSE REDDISH BROWN GRAVELLY COARSE SAND W/SOME FINE SAND, TRACE OF SILT. 18" RECOVERY	A-1-B	
43.5 46.4	15	44.0' 44.5' 44.5'	50/6"	SATURATED VERY DENSE BROWN COARSE SANDY GRAVEL W/SOME FINE SAND, TRACE OF SILT. 6" RECOVERY ROCK (GNEISS BOULDERS) 8" RECOVERY = 13.3% RQD = 0.0% (VERY POOR)	A-1-B	ROCK RUN - CORE # 1 RQD = ROCK QUALITY DESIGNATION

BORING (CONT.): SB # 2

DEPTH (FT.)	NO.	SAMPLE DEPTH	BLOWS/6"	SAMPLE DESCRIPTION	CLASS./G.I.	REMARKS
49.3		49.5'		8" RECOVERY		
	16	49.5' 49.8'	50/4"	NO SIEVE ANALYSIS - INDICATION OF WET VERY DENSE BROWN GRAVEL W/SOME SILT. 4" RECOVERY		
52.2						
55.1						
58						
60.9						
63.8						
66.7						
69.6						
72.5						
75.4						
78.3						
81.2						
84.1						
87						
89.9						
92.8						

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

BRIDGE 1-651 ON NRWPORT ROAD OVER CSX

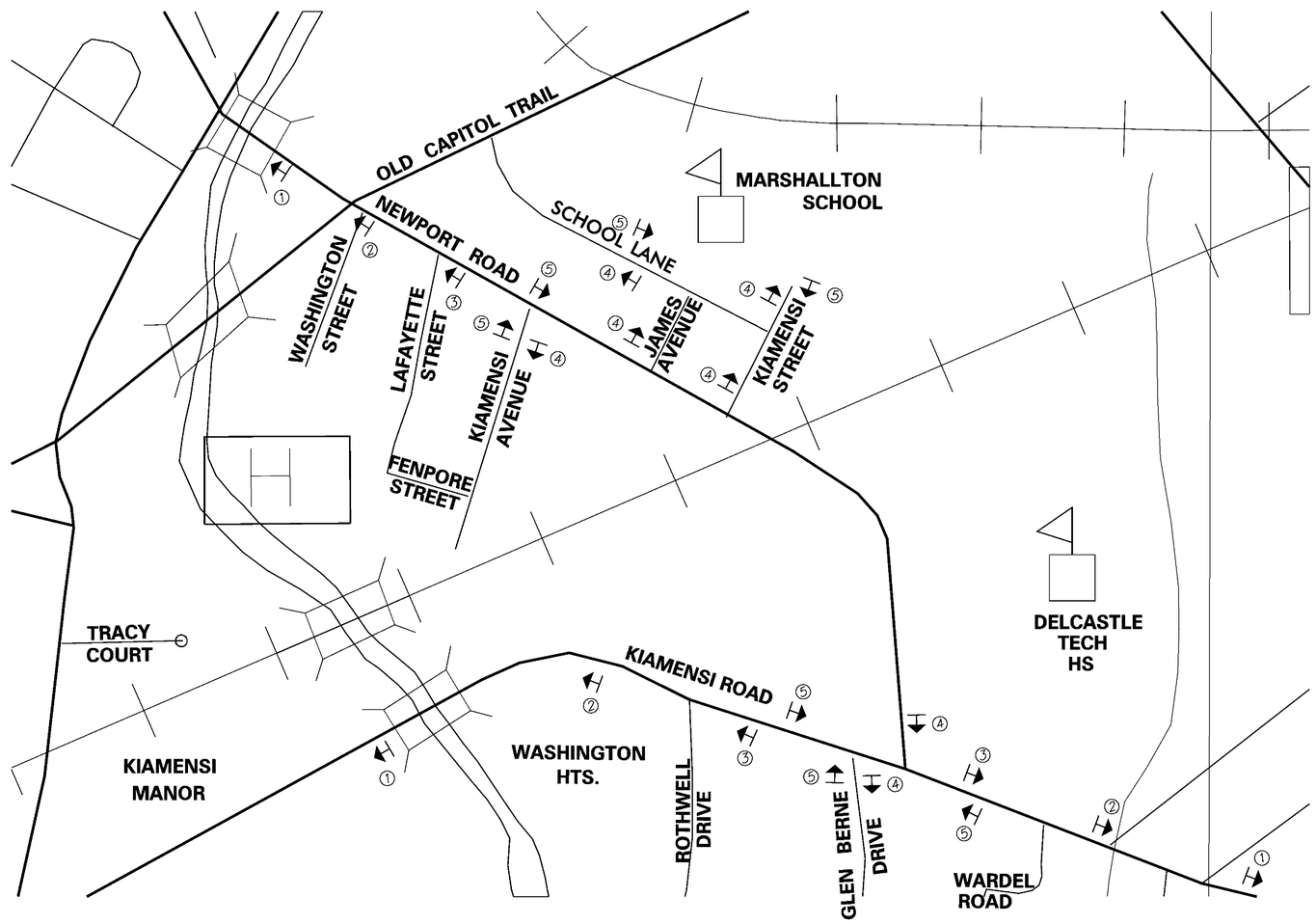
CONTRACT	BRIDGE NO.	1-651	BORING LOG	SHEET NO.
27-074-01	DESIGNED BY:			50
COUNTY				TOTAL SHTS.
NEW CASTLE	CHECKED BY:			65

WARNING SIGN LEGEND

ROAD WORK 1500 FT	ROAD WORK 1000 FT	ROAD WORK 500 FT	ROAD WORK AHEAD	END ROAD WORK
W20-1 48" X 48"	W20-1 48" X 48"	W20-1 48" X 48"	W20-1 48" X 48"	G20-2A 48" X 24"
1	2	3	4	5

NOTES:

1. SEE INDIVIDUAL PHASING PLANS FOR PLACEMENT OF TEMPORARY WARNING SIGNS. FINAL LOCATION OF ALL PERMANENT WARNING SIGNS SHALL BE COORDINATED WITH THE ENGINEER.
2. ALL WARNING SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED THROUGHOUT THE DURATION OF THE CONTRACT AND ARE TO BE PAID FOR UNDER ITEM 743504 - WARNING SIGNS.
3. ANY EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION WARNING SIGNS SHALL BE COVERED AS NEEDED, AS DIRECTED BY THE ENGINEER.



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS	SHEET NO. 51
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

MOT NOTES:

1. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS SHALL CONFORM TO CASE 6 OF THE DELAWARE MUTCD.

2. ON ALL INTERSECTING STREETS APPROACHING THE WORK AREA, "ROAD WORK 1,500 FT." "ROAD WORK 1,000 FT." AND "ROAD WORK 500 FT." PERMANENT SIGNS SHALL BE PLACED AS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER. AN "END ROAD WORK" SIGN SHALL BE PLACED ACROSS THE STREET FROM THE "ROAD WORK 500 FT." SIGN, VISIBLE TO TRAFFIC OPERATING THE WORK ZONE.

3. GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED AS A TRAVELWAY, DRIVEWAY, ACCESS RAMP, ETC. SHALL BE INCIDENTAL TO ITEM 763500 - MAINTENANCE OF TRAFFIC. EXCESS BASE COURSE MATERIAL SHALL BE PUSHED AHEAD AND USED IN THE NEXT SEGMENT AND SHALL BE INCIDENTAL TO THE PARTICULAR BASE COURSE PAY ITEM. NO PAYMENT SHALL BE MADE FOR TEMPORARY ROADWAY MATERIAL (TRM) USED TO PROTECT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY UTILIZED AS PART OF A PERMANENT ROADWAY AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT MATERIAL ITEM. CONSTRUCTION OF A PLANNED RUNAROUND OR DETOUR WOULD BE ELIGIBLE FOR PAYMENT AS SPECIFIED IN THE CONTRACT.

4. THIS PROJECT IS CONSIDERED A SIGNIFICANT PROJECT AS DEFINED BY DELDOT'S WORK ZONE MOBILITY PROCEDURES AND GUIDELINES. A TYPE B TRANSPORTATION MANAGEMENT PLAN (TMP) HAS BEEN PREPARED AND IS AVAILABLE FOR VIEWING BY CONTACTING THE DEPARTMENT'S SAFETY PROGRAMS MANAGER AT (302)659-4060. ALL MONITORING REQUIREMENTS OF THE TMP SHALL BE CONDUCTED BY DELDOT FORCES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MODIFICATIONS TO THE TMP SHALL BE COMPLETED BY THE CONTRACTOR IF CHANGES TO THE TIME RESTRICTIONS OR THE TRAFFIC CONTROL PLAN ARE DESIRED. THE MODIFIED TMP SHALL BE PREPARED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF DELAWARE.

5. A TYPE II TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE REQUIRED ON THIS PROJECT DURING THE FOLLOWING PAVEMENT OPERATIONS: TEMPORARY/PERMANENT PAVEMENT MARKINGS, ROADSIDE SPRAYING, PATCHING, MILLING, SWEEPING, TEMPORARY TRAFFIC BARRIER PLACEMENT OR AS DIRECTED BY THE ENGINEER. THE ROLL AHEAD DISTANCE SHALL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS. THE TMA SHALL CONFORM TO THE REQUIREMENTS OF SECTION 6F.82 OF THE DELAWARE MUTCD.

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL REVIEW THE EROSION AND SEDIMENT CONTROL PLANS AND FAMILIARIZE THEMSELVES WITH THE METHODS REQUIRED FOR IMPLEMENTATION.

2. THE CONTRACTOR SHALL ADHERE TO THE TERMS OF THE VARIOUS PERMITS ISSUED TO THIS PROJECT.

3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE TO ALL EROSION AND SEDIMENT CONTROL DEVICES. SEDIMENT LADEN RUNOFF FROM DISTURBED AREAS SHALL NOT BE ALLOWED TO BYPASS EROSION AND SEDIMENT CONTROL DEVICES.

4. CONSTRUCTION OF ANY PROPOSED DRAINAGE, TEMPORARY DRAINAGE, OR INSTALLATION OF EROSION CONTROL MEASURES SHALL START AT THE OUTFALL AND PROGRESS UPSTREAM FOR ALL CONSTRUCTION PHASES. WHEN SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER, SEDIMENT TRAPS SHALL BE CONSTRUCTED BEFORE STORMWATERS ARE ALLOWED TO DISCHARGE INTO WATERCOURSES.

5. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OF EACH STORMWATER MANAGEMENT FACILITY SHOWN IN THE PLANS WITH THE INSPECTION STAFF IN ORDER THAT AN INSPECTOR CAN COMPLETE THE APPROPRIATE CONSTRUCTION CHECKLIST AT THE TIME OF CONSTRUCTION. THE CURRENT VERSION OF THE APPROPRIATE CONSTRUCTION CHECKLIST CAN BE OBTAINED FROM THE STORMWATER ENGINEER.

6. AS-BUILT DRAWINGS OF STORMWATER MANAGEMENT FACILITIES: THE CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF ALL STORMWATER MANAGEMENT FACILITIES, SUCH AS PONDS, BIOFILTRATION SWALES, BIORETENTION AREAS, ETC. TO DELDOT'S STORMWATER ENGINEER. THE "AS-BUILT" DRAWINGS SHALL SHOW THE ACTUAL FINISHED GROUND CONTOURS, OUTLET STRUCTURE DIMENSIONS, AND ELEVATIONS, ETC. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF DELAWARE. ALL COSTS SHALL BE INCLUDED UNDER ITEM 763501 - CONSTRUCTION ENGINEERING.

7. SOIL STOCKPILES: STOCKPILES OF SOIL SHALL BE STABILIZED WITH ITEM 734017 TEMPORARY SEEDING, DRY GROUND AND MULCHED WITH STRAW.

LEGEND

- TEMPORARY CONSTRUCTION
- WORK AREA THIS PHASE
- EXISTING TRAFFIC FLOW ARROW
- (A) 4" WHITE TEMPORARY PAVEMENT STRIPING
- (B) 4" YELLOW TEMPORARY PAVEMENT STRIPING
- (C) 16" WHITE TEMPORARY PAVEMENT STRIPING
- TEMPORARY WARNING SIGN
- TYPE 3 BARRICADE
- PLASTIC DRUM
- PORTABLE CONCRETE SAFETY BARRIER
- CRASH CUSHION ARRAY

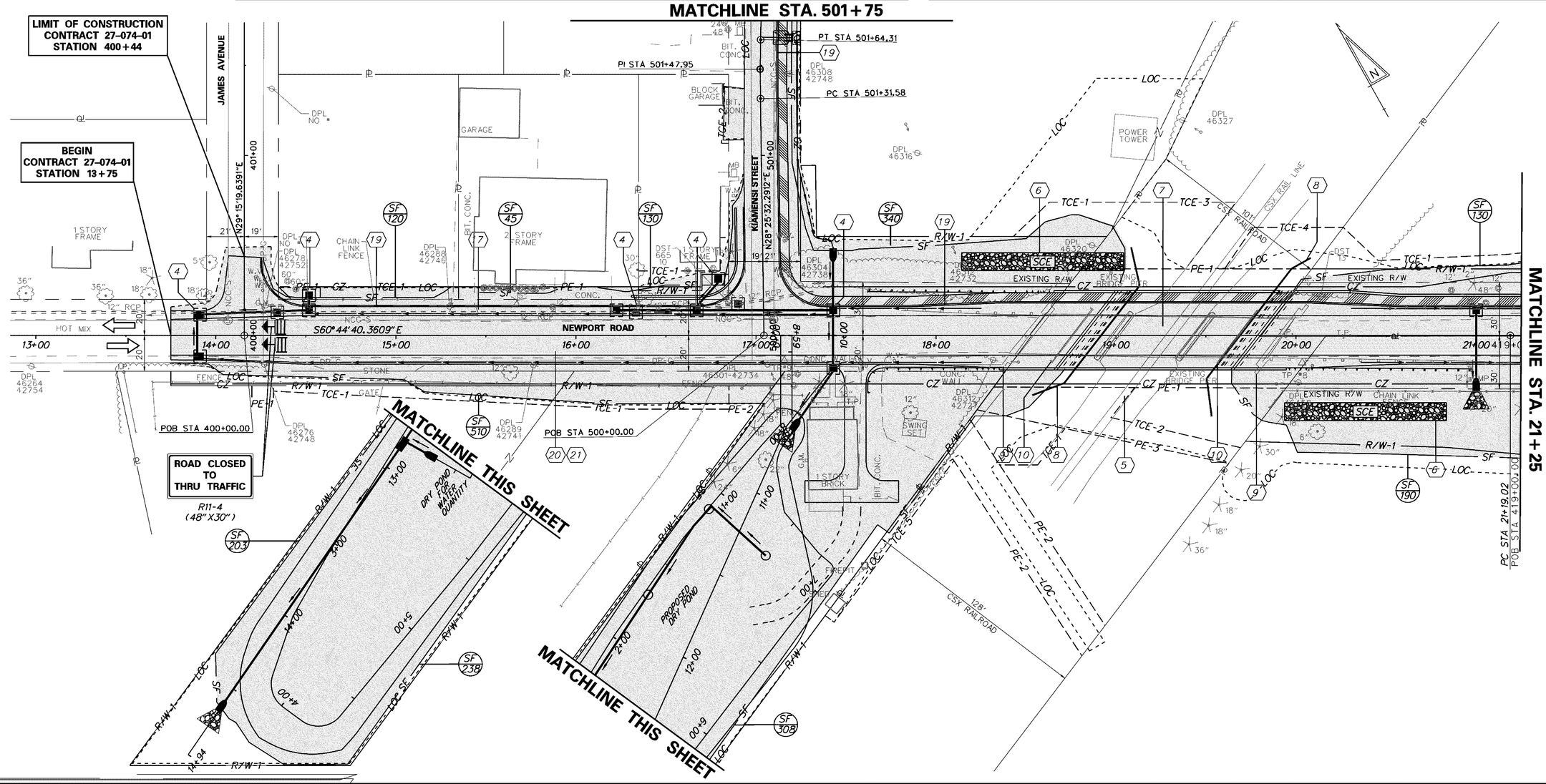
CONCEPTUAL CONSTRUCTION PHASING NOTES

PHASE I

1. PLACE TEMPORARY WARNING SIGNS TO DETOUR NEWPORT ROAD TRAFFIC (SIGNAGE SHOWN ON DETOUR PLANS).
2. BARRICADE NEWPORT ROAD FROM JAMES AVENUE TO STATION 26+00 (MAINTAIN ACCESS TO DRIVEWAYS BETWEEN JAMES STREET AND KIAMENSI STREET). MAINTAIN NORTHBOUND LANE TO STATION 23+00 TO ALLOW ACCESS TO FAULKNER DRIVEWAY AND DELCASTLE HIGH SCHOOL DRIVEWAY.
3. CONSTRUCT TEMPORARY PAVEMENT AND GUARD RAIL TO ALLOW ACCESS TO THE SCHOOL ENTRANCE AND TO THE FAULKNER DRIVEWAY, LT, STA. 23+00 WBR.
4. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN.
5. INSTALL RAILROAD BALLAST PROTECTION.
6. CONSTRUCT TEMPORARY ACCESS ROADS TO THE NORTHWEST AND THE SOUTHEAST CORNER OF BRIDGE.
7. REMOVE EXISTING SUPERSTRUCTURE.
8. INSTALL TEMPORARY SHORING IN FRONT OF EXISTING BRIDGE ABUTMENTS TO PROTECT EXISTING CSX RAILROAD.
9. REMOVE EXISTING ABUTMENTS AND EXCAVATE FOR PROPOSED ABUTMENTS AND WINGWALLS.
10. REMOVE EXISTING TIMBER PIERS. DO NOT REMOVE THE EXISTING CONCRETE PIERS AT THIS TIME. THE TWO (2) EXISTING CONCRETE PIERS MAY BE USED TO SUPPORT LAUNCHING BEAM ROLLERS FOR SETTING NEW STRUCTURAL STEEL BEAMS.

CONCEPTUAL CONSTRUCTION PHASING NOTES (CONT.)

11. CONSTRUCT BRIDGE APPROACH ROADWAY EMBANKMENT FILLS.
12. CONSTRUCT PROPOSED BRIDGE ABUTMENTS AND WINGWALLS. BACKFILL BEHIND THE ABUTMENTS AND WINGWALLS.
13. INSTALL LAUNCHING BEAM SYSTEM.
14. SET STRUCTURAL STEEL USING LAUNCHING BEAM SYSTEM.
15. REMOVE EXISTING CONCRETE PIERS.
16. PLACE PROPOSED SUPERSTRUCTURE.
17. INSTALL PROPOSED UNDERGROUND DRAINAGE FACILITIES NORTH OF THE PROPOSED BRIDGE.
18. CONSTRUCT BRIDGE PARAPETS AND BUILD UP ROADWAY SUBGRADE AND PREPARE FOR ROADWAY PAVEMENT.
19. INSTALL CURB AND GUTTER/BARRIER WITH UNDERDRAIN AND SIDEWALK AS SHOWN ON THE PLANS.
20. GRADE AND BOX OUT FOR PROPOSED PAVEMENT SECTION WITHIN THE WORK ZONE. PLACE TRM HOT MIX AS NEEDED TO PROVIDE TEMPORARY ACCESS DURING CONSTRUCTION.
21. PLACE PROPOSED HOT MIX SECTION UP TO THE TOP OF THE TYPE B HOT MIX LAYER.
22. STABILIZE ALL DISTURBED AREAS WITHIN THE WORK AREA WITH TOPSOIL, SEED, AND MULCH.

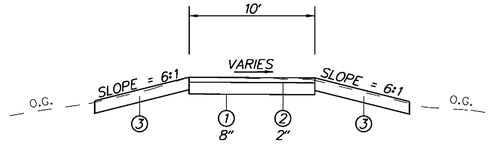


DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS PHASE 1	SHEET NO. 53
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

LEGEND

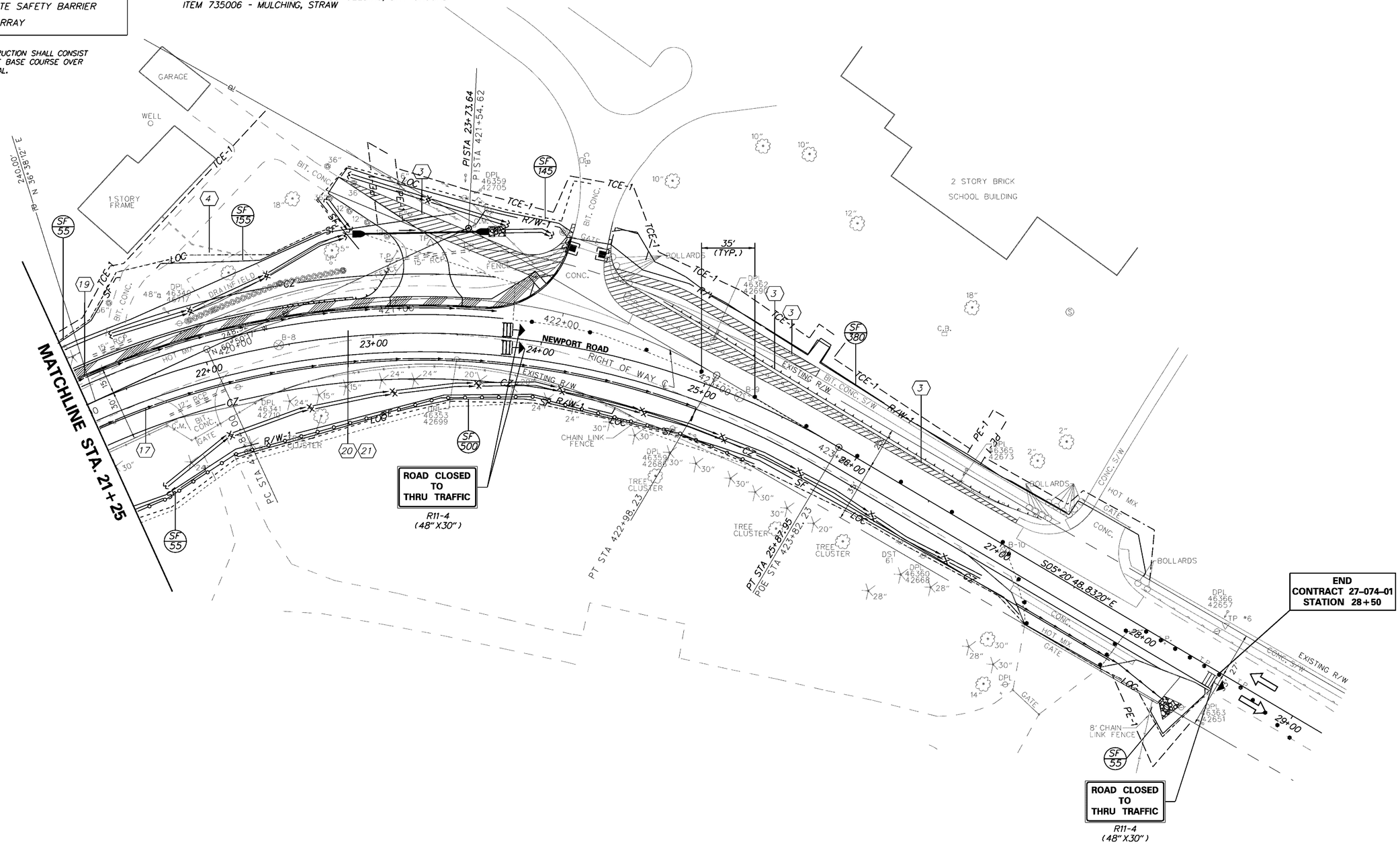
- TEMPORARY CONSTRUCTION
- WORK AREA THIS PHASE
- EXISTING TRAFFIC FLOW ARROW
- (A) 4" WHITE TEMPORARY PAVEMENT STRIPING
- (B) 4" YELLOW TEMPORARY PAVEMENT STRIPING
- (C) 16" WHITE TEMPORARY PAVEMENT STRIPING
- TEMPORARY WARNING SIGN
- TYPE 3 BARRICADE
- PLASTIC DRUM
- PORTABLE CONCRETE SAFETY BARRIER
- CRASH CUSHION ARRAY

NOTE:
TEMPORARY ROADWAY CONSTRUCTION SHALL CONSIST OF 10" OF GRADED AGGREGATE BASE COURSE OVER COMPACTED SUBGRADE MATERIAL.



TYPICAL SECTION – TEMPORARY ROADWAY

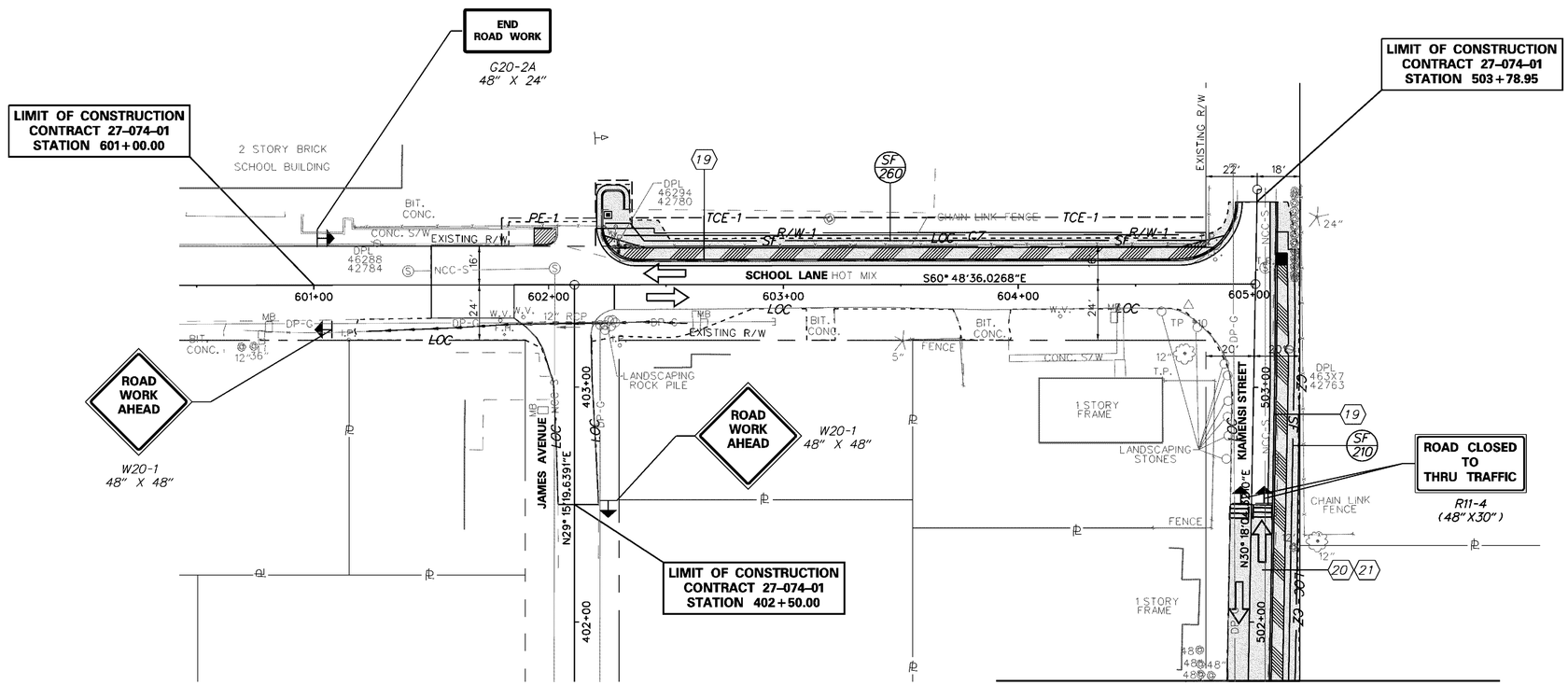
1. ITEM 302007 - GRADE AGGREGATE BASE, TYPE B
2. ITEM 401648 - SUPERPAVE, TYPE B HOT-MIX, 160 GYRATIONS, PG 64-22
3. ITEM 732002 - TOPSOIL, 6" DEPTH
   ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
   ITEM 735006 - MULCHING, STRAW



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS PHASE 1	SHEET NO. 54
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

LEGEND

- TEMPORARY CONSTRUCTION
- WORK AREA THIS PHASE
- EXISTING TRAFFIC FLOW ARROW
- (A) 4" WHITE TEMPORARY PAVEMENT STRIPING
- (B) 4" YELLOW TEMPORARY PAVEMENT STRIPING
- (C) 16" WHITE TEMPORARY PAVEMENT STRIPING
- TEMPORARY WARNING SIGN
- TYPE 3 BARRICADE
- PLASTIC DRUM
- PORTABLE CONCRETE SAFETY BARRIER
- CRASH CUSHION ARRAY



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS PHASE 1	SHEET NO. 55
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

LEGEND

- TEMPORARY CONSTRUCTION
- WORK AREA THIS PHASE
- EXISTING TRAFFIC FLOW ARROW
- (A) 4" WHITE TEMPORARY PAVEMENT STRIPING
- (B) 4" YELLOW TEMPORARY PAVEMENT STRIPING
- (C) 16" WHITE TEMPORARY PAVEMENT STRIPING
- TEMPORARY WARNING SIGN
- TYPE 3 BARRICADE
- PLASTIC DRUM
- PORTABLE CONCRETE SAFETY BARRIER
- CRASH CUSHION ARRAY

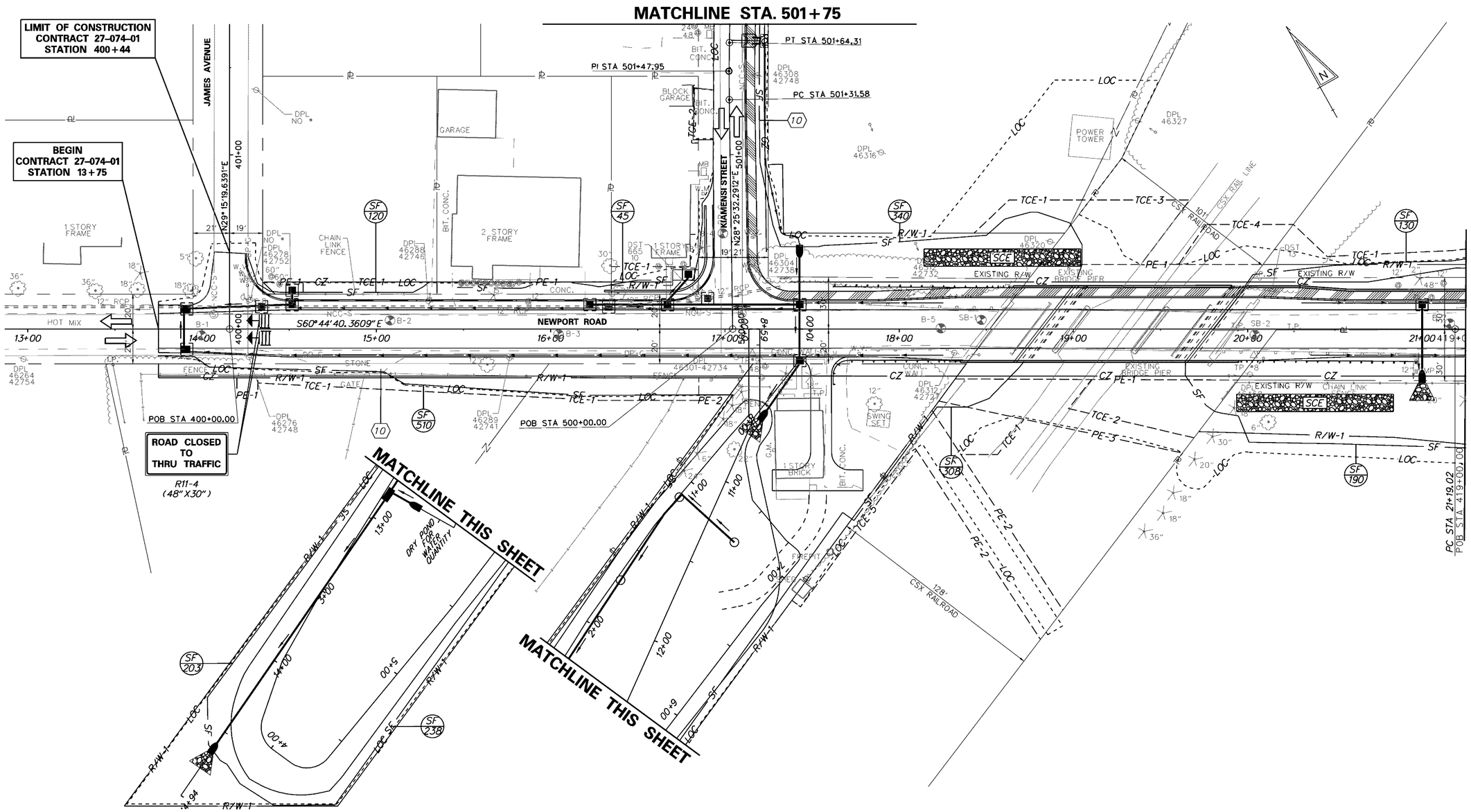
CONCEPTUAL CONSTRUCTION PHASING NOTES

PHASE II

1. INSTALL TEMPORARY DRIVEWAY TO ALLOW ACCESS TO FAULKNER PROPERTY.
2. INSTALL TEMPORARY CONCRETE BARRIER AND PORTABLE IMPACT ATTENUATOR ALONG CENTERLINE OF ROAD TO PROTECT FROM DROPOFF BETWEEN EXISTING AND PROPOSED ROADWAY. CLOSE DELCASTLE ENTRANCE AT STATION 24+25 TO RECONSTRUCT PROPOSED ROADWAY.
3. REMOVE THE TEMPORARY PAVEMENT TO STA. 23+00 THAT WAS USED IN PHASE IFOR ACCESS TO FAULKNER DRIVEWAY.
4. INSTALL PROPOSED UNDERGROUND DRAINAGE FACILITIES AS SHOWN ON THE PLANS.
5. BUILD UP ROADWAY SUBGRADE AND PREPARE FOR ROADWAY PAVEMENT.
6. INSTALL CURB AND GUTTER/BARRIER WITH UNDERDRAIN AND SIDEWALK AS SHOWN ON THE PLANS.
7. GRADE AND BOX OUT FOR PROPOSED PAVEMENT SECTION WITHIN THE WORK ZONE. PLACE TRM HOT MIX AS NEEDED TO PROVIDE TEMPORARY ACCESS DURING CONSTRUCTION.

CONCEPTUAL CONSTRUCTION PHASING NOTES

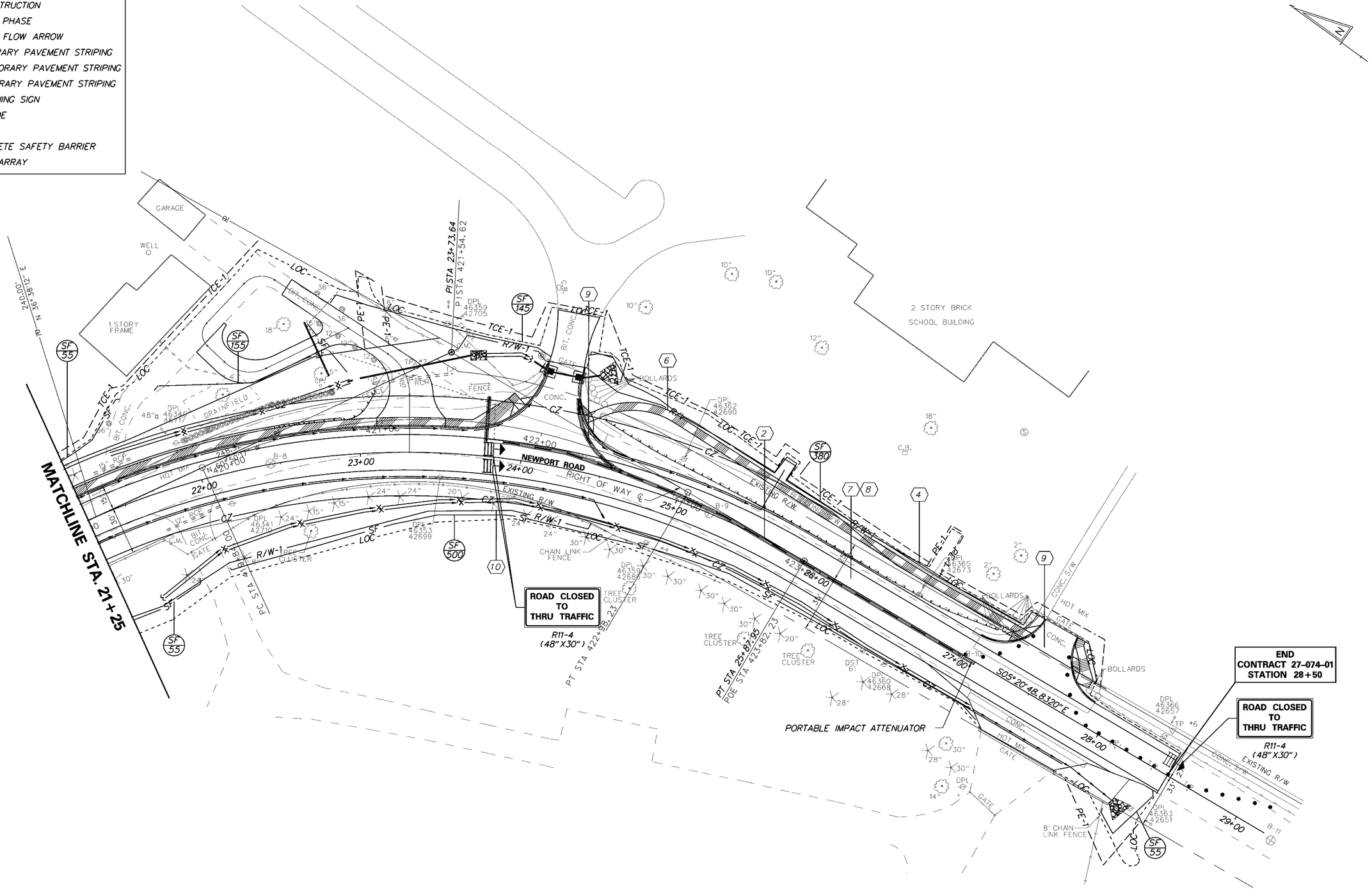
8. PLACE PROPOSED HOT MIX SECTION UP TO THE TOP OF THE TYPE B HOT MIX LAYER.
9. ADJUST TEMPORARY CONCRETE BARRIER TO OPEN DELCASTLE ENTRANCE AT STATION 24+25, CLOSE AND RECONSTRUCT DELCASTLE ENTRANCE AT STATION 27+50. MAINTAIN TEMPORARY BARRICADES AND ROAD CLOSED SIGNS AT STATION 23+90.
10. STABILIZE ALL DISTURBED AREAS WITHIN THE WORK AREA WITH TOPSOIL, SEED, AND MULCH.
11. REMOVE SEDIMENT CONTROL DEVICES.
12. PLACE TYPE C HOT MIX SECTION AND PAVEMENT MARKINGS.
13. PRIOR TO REMOVING THE CONSTRUCTION DETOUR, INSTALL PERMANENT PAVEMENT MARKINGS.
14. REMOVE TEMPORARY WARNING SIGNS FOR DETOUR OF NEWPORT ROAD.



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS PHASE 2	SHEET NO. 56
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

LEGEND

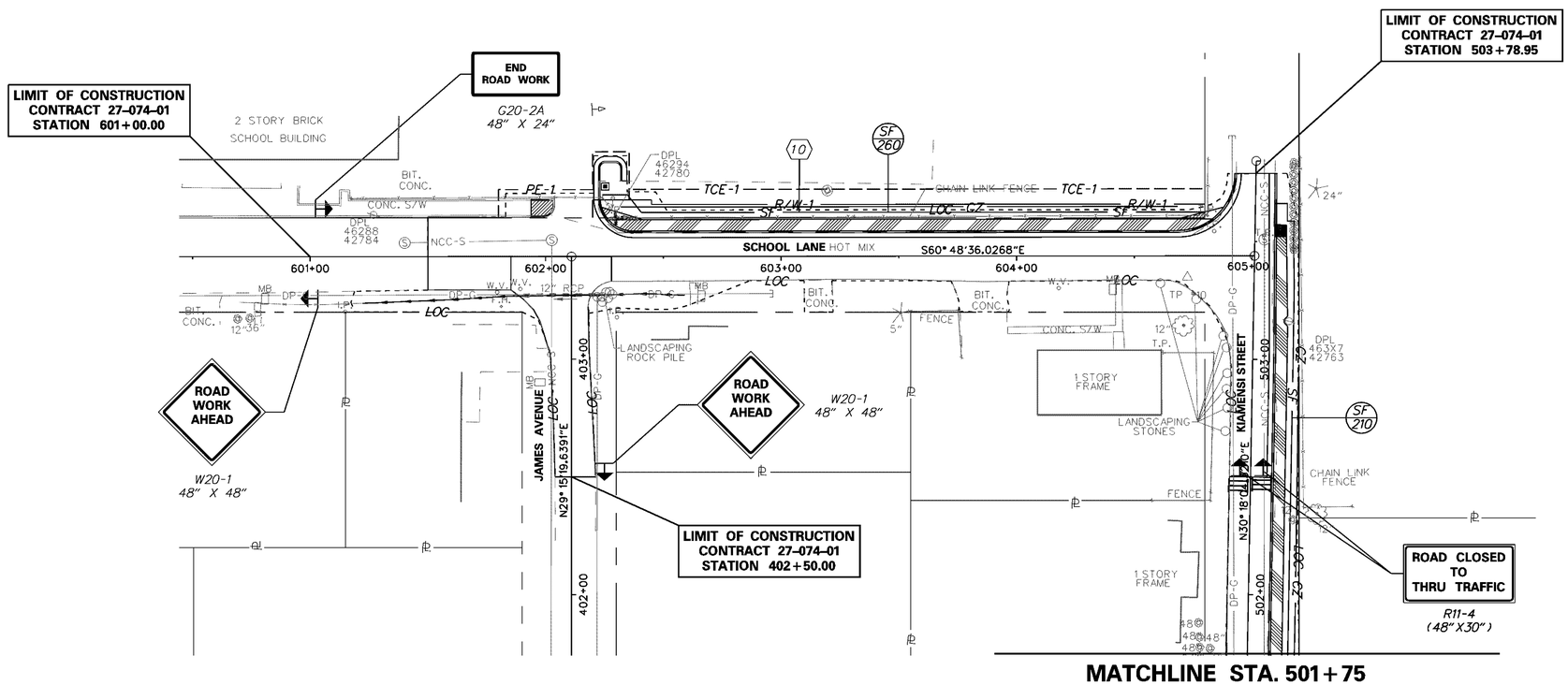
- TEMPORARY CONSTRUCTION
- WORK AREA THIS PHASE
- EXISTING TRAFFIC FLOW ARROW
- (A) 4" WHITE TEMPORARY PAVEMENT STRIPING
- (B) 4" YELLOW TEMPORARY PAVEMENT STRIPING
- (C) 16" WHITE TEMPORARY PAVEMENT STRIPING
- TEMPORARY WARNING SIGN
- TYPE 3 BARRICADE
- PLASTIC DRUM
- PORTABLE CONCRETE SAFETY BARRIER
- CRASH CUSHION ARRAY



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS PHASE 2	SHEET NO. 57
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

LEGEND

- TEMPORARY CONSTRUCTION
- WORK AREA THIS PHASE
- EXISTING TRAFFIC FLOW ARROW
- (A) 4" WHITE TEMPORARY PAVEMENT STRIPING
- (B) 4" YELLOW TEMPORARY PAVEMENT STRIPING
- (C) 16" WHITE TEMPORARY PAVEMENT STRIPING
- TEMPORARY WARNING SIGN
- TYPE 3 BARRICADE
- PLASTIC DRUM
- PORTABLE CONCRETE SAFETY BARRIER
- CRASH CUSHION ARRAY



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS PHASE 2	SHEET NO. 58
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

CHANGEABLE MESSAGE BOARDS

CMS-1 — PRIOR TO DETOUR
(10 Days prior to beginning of detour)

XXXXXXXX XXXXXXXX XXXXXXXX	XXXXXXXX XXXXXXXX XXXXXXXX

CMS-1 — DURING DETOUR

XXXXXXXX XXXXXXXX XXXXXXXX	XXXXXXXX XXXXXXXX XXXXXXXX

CMS-2 — PRIOR TO DETOUR
(10 Days prior to beginning of detour)

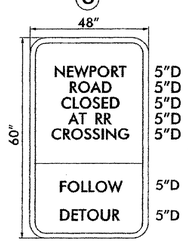
XXXXXXXX XXXXXXXX XXXXXXXX	XXXXXXXX XXXXXXXX XXXXXXXX

CMS-2 — DURING DETOUR

XXXXXXXX XXXXXXXX XXXXXXXX	XXXXXXXX XXXXXXXX XXXXXXXX

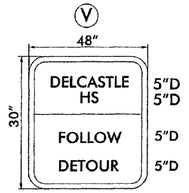
SPECIAL SIGNS

(U)

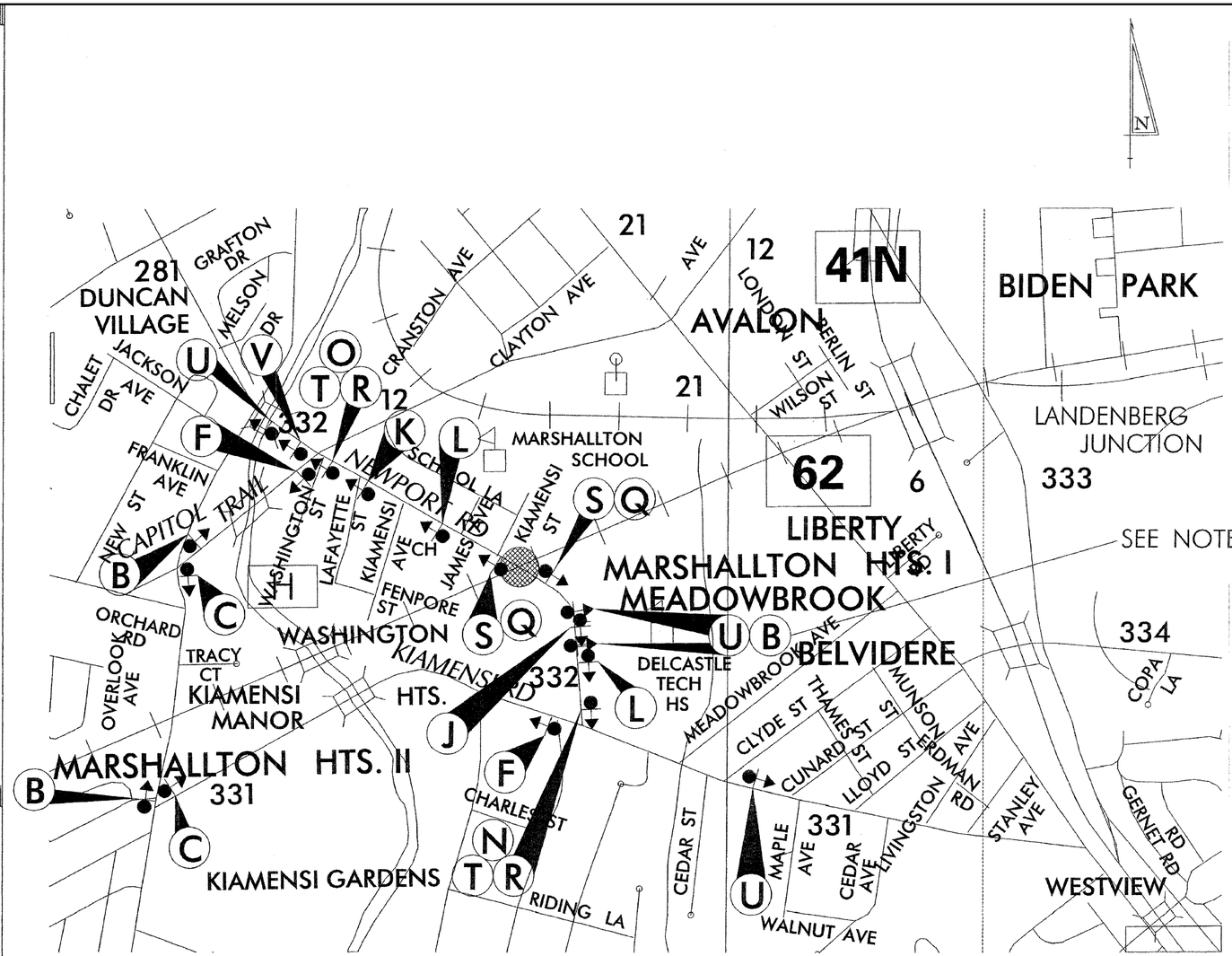


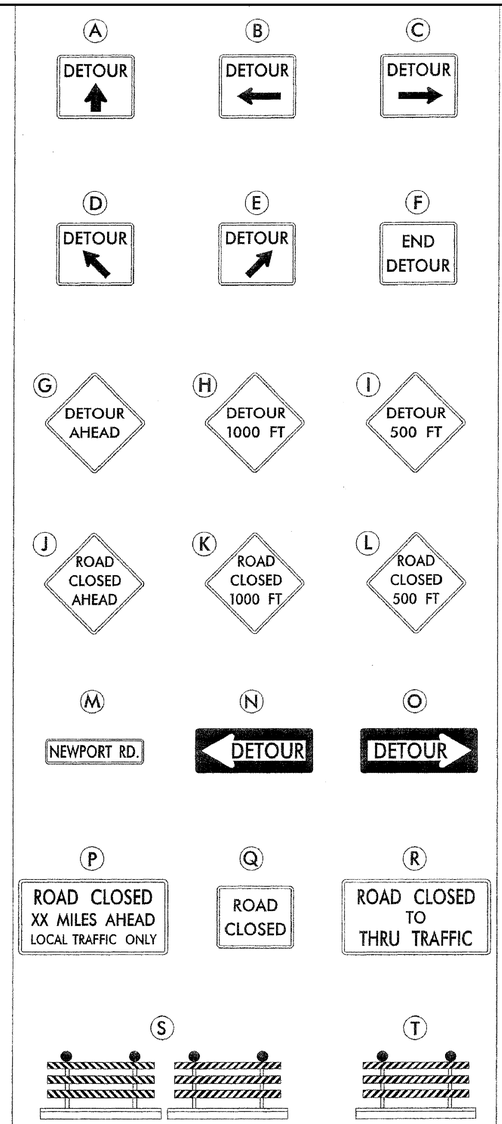
H/I ORANGE – BLACK LEGEND

(V)



H/I ORANGE – BLACK LEGEND





GENERAL NOTES

1. ALL DETOUR SIGNING INCLUDING, TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE TO THE DE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE- MUTCD PART 6) FOR LIGHTS, BARRICADES AND SIGNS.(AS PER LATEST REVISION)
3. FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WILL PREVAIL.
4. SIGNS J THROUGH L AND P THROUGH R ,THE WORD (ROAD) SHOULD BE CHANGED TO RAMP, R/R OR BRIDGE WHERE APPLICABLE.
5. WARNING SIGNS SHOULD BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT SHEETING.
6. "S" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF ROADWAY.
7. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.
8. SIGNS U AND B TO BE PLACED ON EXITS FROM DELCASTLE TECH HIGH SCHOOL.

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: _____

RECOMMENDED [signature] DATE: 4/25/08

APPROVED CHIEF SAFETY OFFICER [signature] DATE: 4-28-08

APPROVED TRAFFIC ENGINEER [signature] DATE: 4/25/08

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

NOT TO SCALE

BRIDGE 1-651 ON NEWPORT ROAD OVER CSX

CONTRACT	ROAD NO.	332
27-074-01	DESIGNED BY: GG	
COUNTY		
NEW CASTLE	CHECKED BY: MB	

DETOUR PLAN

BRIDGE 1-651

ON NEWPORT ROAD

SHEET NO. 59

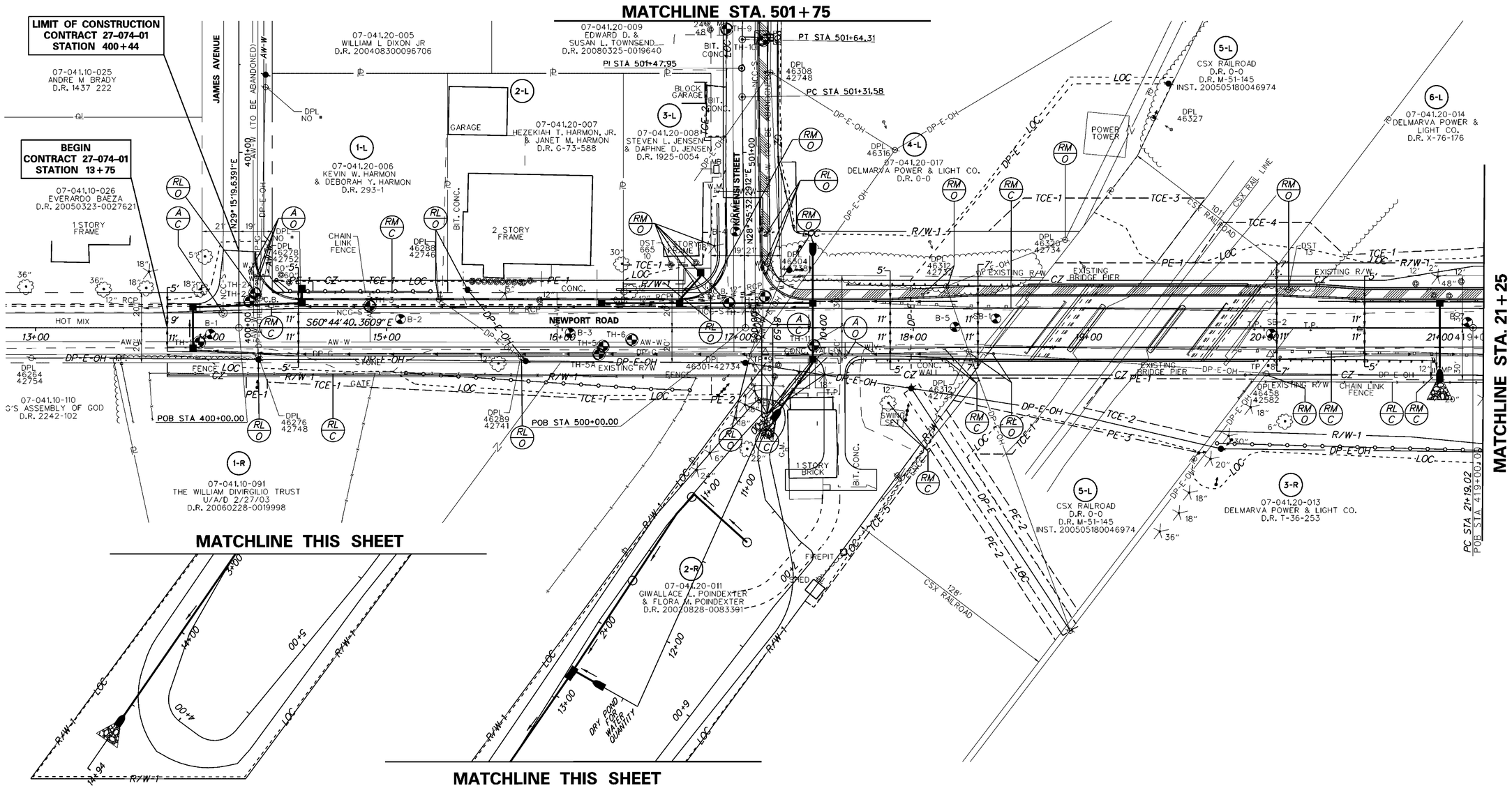
TOTAL SHTS. 65

LEGEND

- —DP-E-OH— PROPOSED DELMARVA ELECTRIC (OVERHEAD)
- - DP-E - - PROPOSED DELMARVA ELECTRIC
- —AW-W— PROPOSED ARTESIAN WATER
- — PE — PERMANENT EASEMENT

UTILITY TEST HOLE SCHEDULE

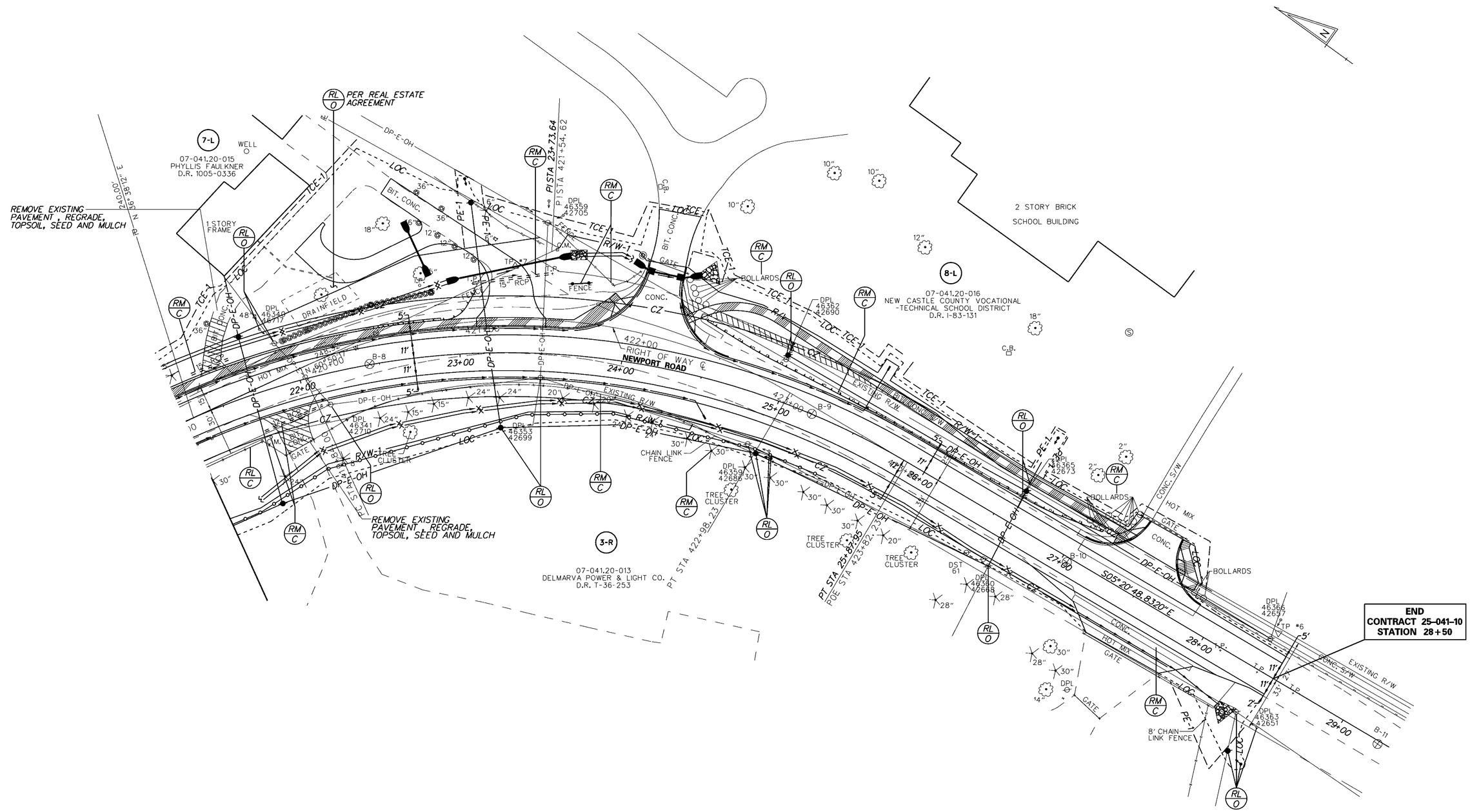
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL-OWNER
TH-1	WATER	13+93.2986	R 8.2614	84.49	88.87	4" HDPE-ARTESIAN
TH-2	WATER	14+26.0437	L 25.0236	85.44	88.88	4" HDPE-ARTESIAN
TH-2A	GAS	14+27.7424	L 16.7195	85.96	88.93	2" METAL-DELMARVA
TH-3	WATER	14+90.4341	L 12.3567	84.68	88.50	3/4" COPPER-ARTESIAN
TH-5	GAS	16+23.3272	R 10.5950	85.87	89.13	2" METAL-DELMARVA
TH-5A	UNKNOWN	16+20.9399	R 15.0666	84.71	88.52	2" PVC-UNKNOWN
TH-6	WATER	16+39.7210	R 6.9025	84.48	89.45	4" HDPE-ARTESIAN
TH-7	GAS	16+95.0709	L 14.2175	87.42	90.39	2" PLASTIC-DELMARVA
TH-8	WATER	17+15.6340	L 17.7533	87.27	90.97	4" HDPE-ARTESIAN
TH-9	GAS	501+70.1090	L 8.9942	88.23	91.23	2" METAL-DELMARVA
TH-10	WATER	501+64.0617	R 11.9669	87.89	90.95	2 1/2" METAL-ARTESIAN
TH-11	WATER	17+43.5127	R 10.1334	87.88	92.07	4" HDPE-ARTESIAN



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	UTILITY RELOCATION PLAN	SHEET NO. 60
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

LEGEND

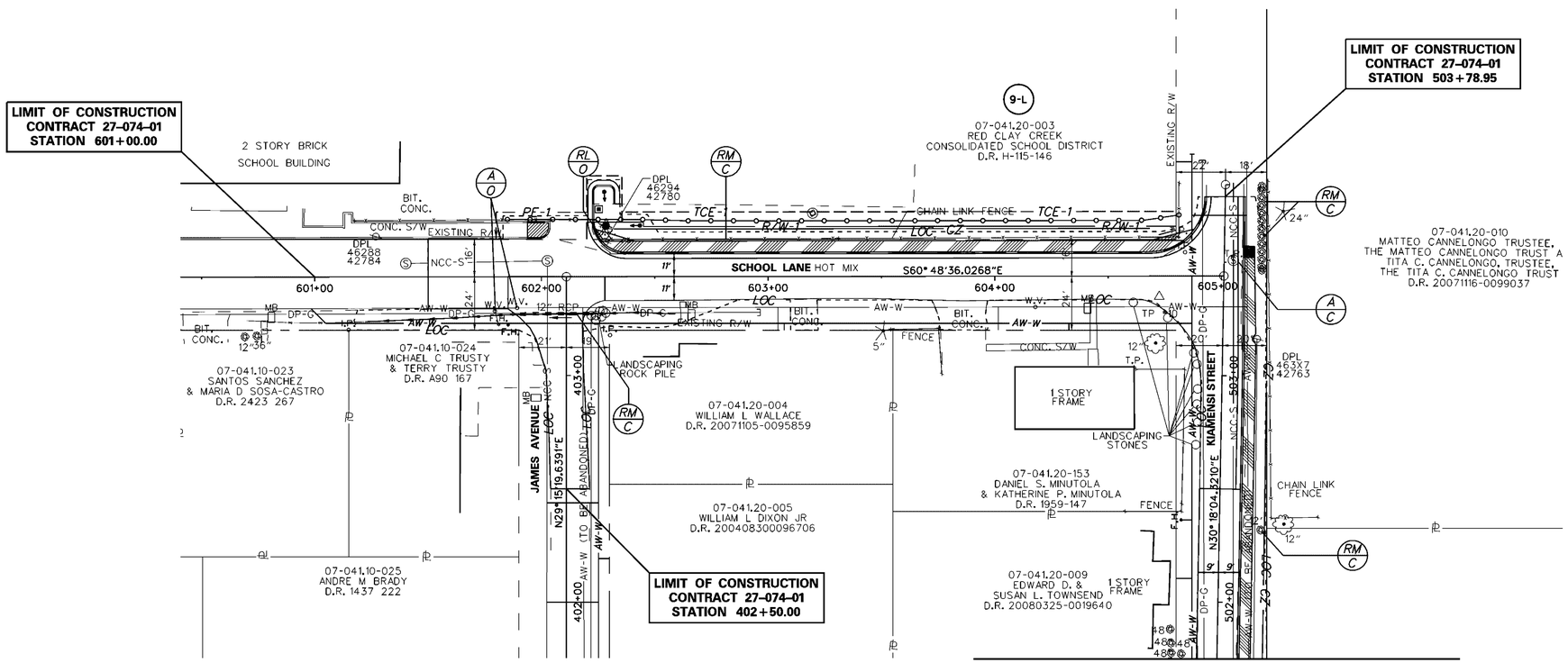
- —DP-E-OH— PROPOSED DELMARVA ELECTRIC (OVERHEAD)
- - DP-E - - PROPOSED DELMARVA ELECTRIC
- —AW-W— PROPOSED ARTESIAN WATER
- — PE — — PERMANENT EASEMENT



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	UTILITY RELOCATION PLAN	SHEET NO. 61
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

LEGEND

—DP-E-OH— PROPOSED DELMARVA ELECTRIC (OVERHEAD)
- - DP-E - - PROPOSED DELMARVA ELECTRIC
—AW-W— PROPOSED ARTESIAN WATER
— — PE — — PERMANENT EASEMENT

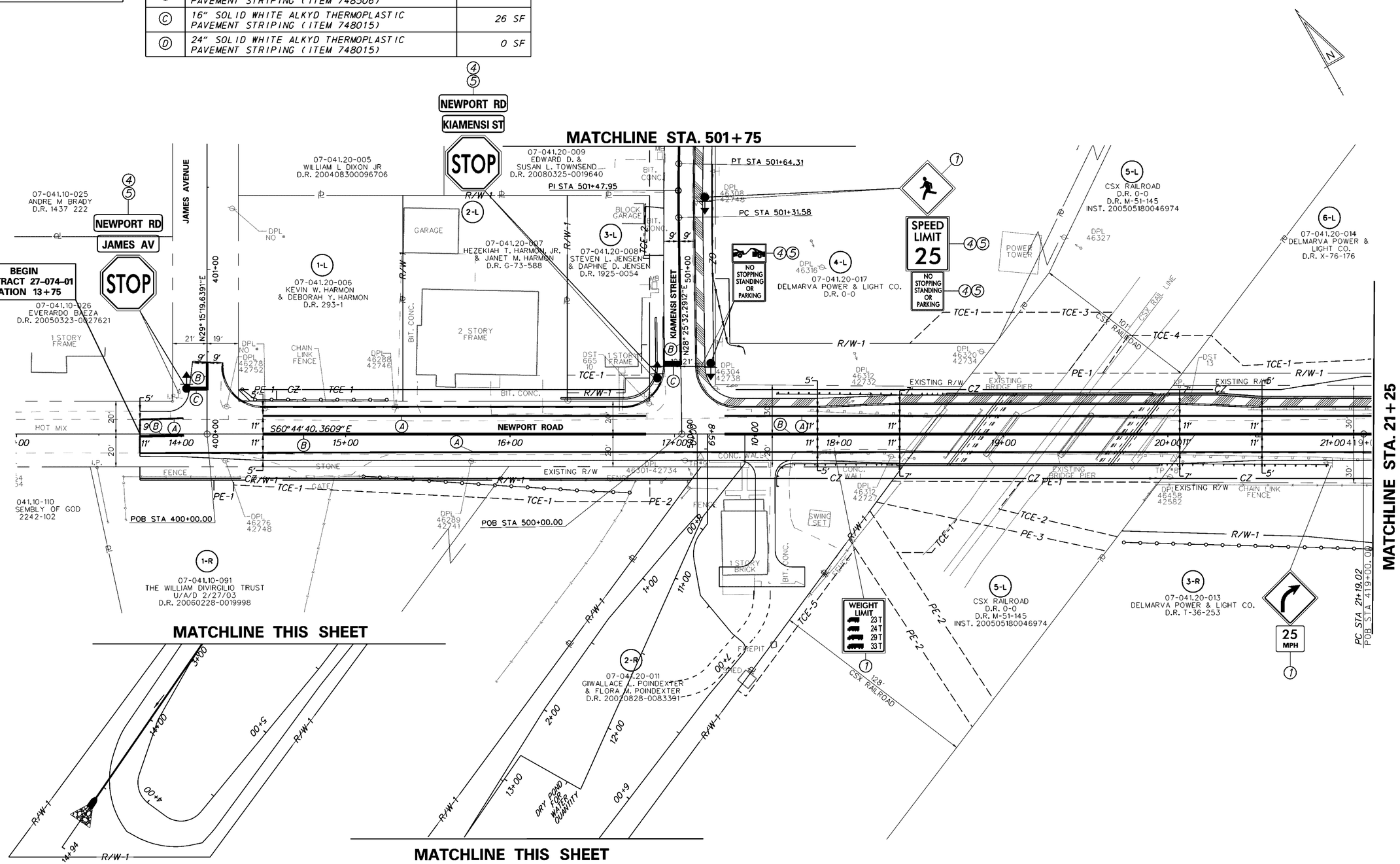


DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	UTILITY RELOCATION PLAN	SHEET NO. 62
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		

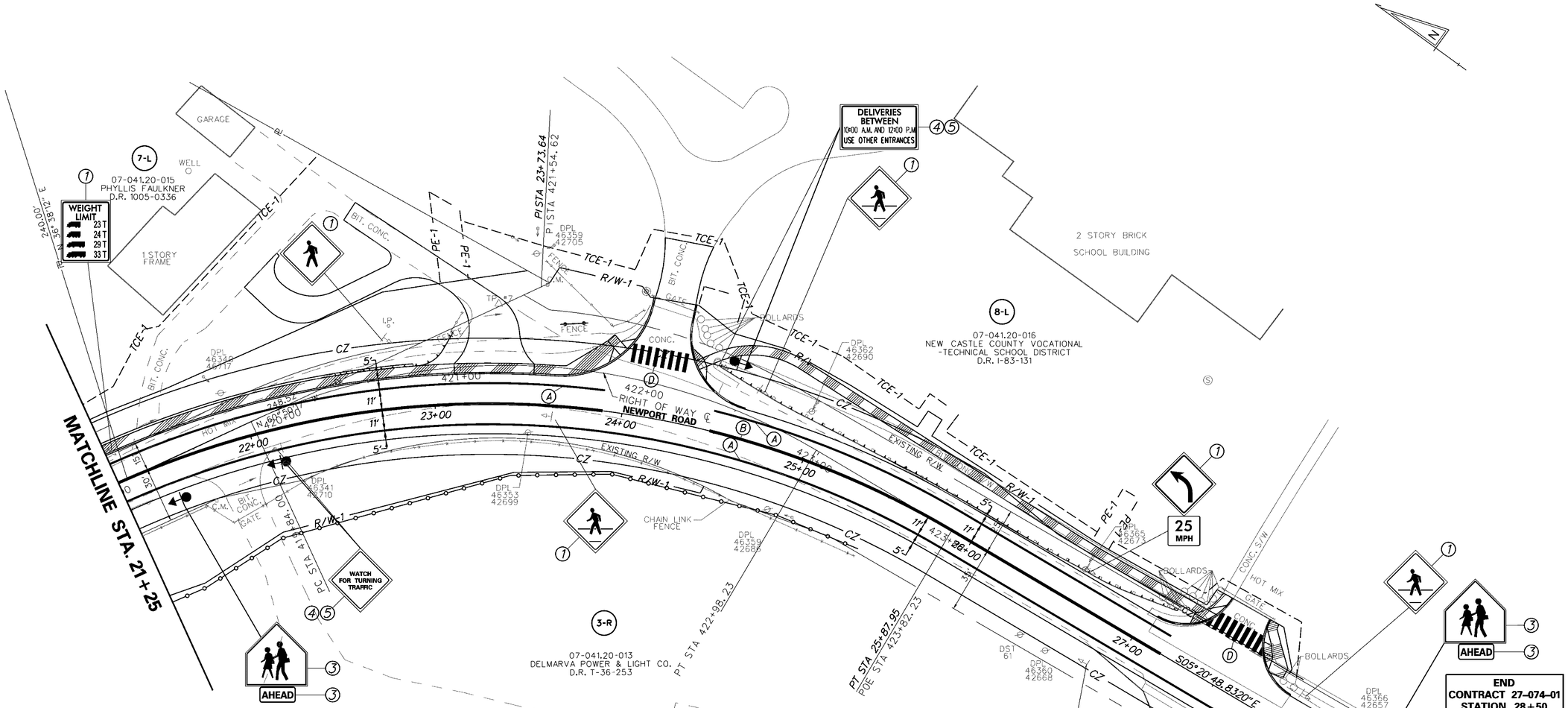
SIGNING LEGEND	
1	REMOVE EXISTING SIGN
2	EXISTING SIGN TO REMAIN
3	PLACE NEW SIGN
4	RENEW EXISTING SIGN
5	REPOSITION EXISTING SIGN

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748506)	1,500 LF
B	4" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748506)	1,610 LF
C	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	26 SF
D	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	0 SF



DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01	BRIDGE NO. BR. 1-651	SIGNING, STRIPING & CONDUIT PLAN	SHEET NO. 63
				COUNTY NEW CASTLE	DESIGNED BY: TAM / MAG		TOTAL SHTS. 65
					CHECKED BY: PAH		



SIGNING LEGEND	
1	REMOVE EXISTING SIGN
2	EXISTING SIGN TO REMAIN
3	PLACE NEW SIGN
4	RENEW EXISTING SIGN
5	REPOSITION EXISTING SIGN

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748506)	1,450 LF
B	4" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748506)	1,170 LF
C	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	0 SF
D	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	174 SF

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON

CONTRACT	BRIDGE NO.	BR. 1-651
27-074-01	DESIGNED BY:	TAM / MAG
COUNTY		
NEW CASTLE	CHECKED BY:	PAH

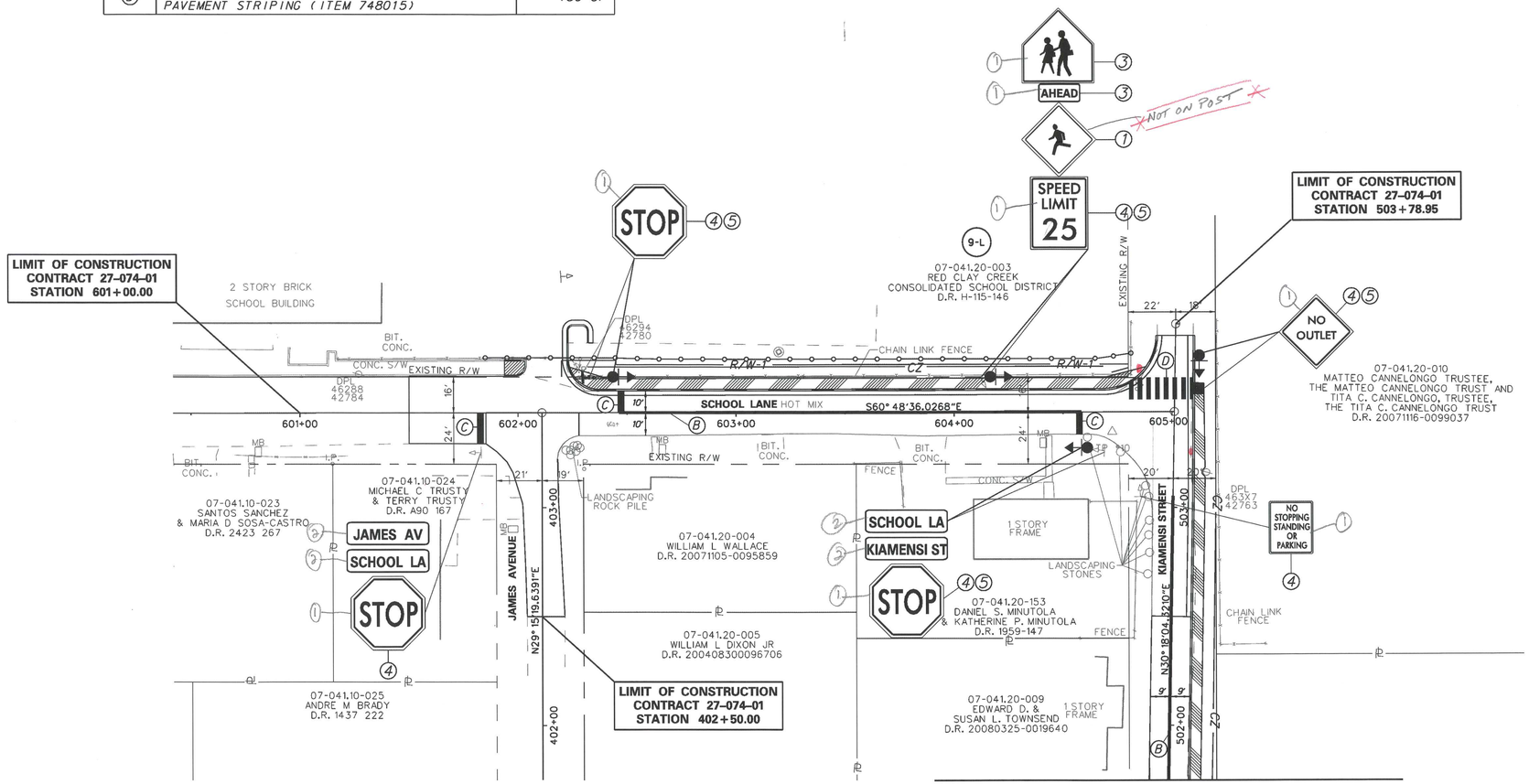
SIGNING, STRIPING & CONDUIT PLAN

SHEET NO.
64
TOTAL SHTS.
65

SIGNING LEGEND	
1	REMOVE EXISTING SIGN
2	EXISTING SIGN TO REMAIN
3	PLACE NEW SIGN
4	RENEW EXISTING SIGN
5	REPOSITION EXISTING SIGN

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748506)	0 LF
B	4" SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748506)	690 LF
C	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	80 SF
D	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	150 SF

Total Install = 16
Total Removal = 12



11/16/2010 27-074-01

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BRIDGE 1-651 ON NEWPORT ROAD RAILROAD CROSSING WILMINGTON & MARSHALLTON	CONTRACT 27-074-01 / COUNTY NEW CASTLE	BRIDGE NO. BR. 1-651 / DESIGNED BY: TAM / MAG / CHECKED BY: PAH	SIGNING, STRIPING & CONDUIT PLAN	SHEET NO. 65 / TOTAL SHTS. 65