

BDC007-3 - ORIGINAL SHEET



State of New Jersey
Department of Transportation



SAMPLE PLANS

2001

(U.S. Customary English Units)

SAMPLE PLANS

The Sample Plans illustrate presentation format and have been developed with the purpose of instituting uniformity in the presentation of roadway construction plans. It is not the intent of the Sample Plans to reproduce all presentation situations that are already adequately covered by the New Jersey Department of Transportation Design Manuals, Standard Specifications, Procedures Manual and other publications readily available to the Designer.

The various plan sheets of the Sample Plans have been compiled from an assortment of projects and should not be used by Designers for design purposes. The presentation and format of the plan sheets should be used as guidance in preparation of contract plans prior to their development. When used in conjunction with good engineering knowledge, the Sample Plans should enable the Designer to submit an acceptable set of contract plans.

The Sample Plans do not depict all possible circumstances that may be encountered in the design of the various sheets, nor do they depict all possible types of pay items that may be encountered on a particular 'type' of sheet. It is recognized that situations will occur where good engineering judgement dictates deviations from the presentation shown in the Sample Plans.

Though implementation of the presentation format is highly desirable, exemptions from the presentation format may be made by the Project Manager and approved by the Program Manager. However, if the implementation would delay the project schedule or increase the project cost, the Designer shall contact the Department's Project Manager to determine how to proceed.

Pay items and standard items are shown for illustrative purposes only. Sheet numbers represent the numbering of the sample sheets and do not correspond to the actual numbers to be used for a project. The following commentary shall be used as a guide in conjunction with the sample plan sheets.

GENERAL

Plan sheets for contract sets of plans shall be standard 22" x 36" size sheets of 4 mils thick polyester film, such as Mylar or Herculene, which is matted on both sides and drafted in black ink. Plan sheets produced by CADD shall also be submitted on Mylar. Cross Section sheets, however, may be matted on one side and may be 3 mils thick. Electrical drawings shall also be matted on one side and shall be produced by CADD in accordance with Traffic Signal and Safety Standards. Adhesive backed reproduction film of any type (stick-ons) will not be permitted.

Due to the approximate half scale size of the Sample Plans, the standard element sizes shown have been increased for clarity purposes. Plan presentation should conform to the "on line" CADD standards and information available through the NJDOT, Design Services web site. Other sizes will be accepted as long as it is legible at a reduced scale and reasonably matches the standards.

A microfilm mark shall be shown on all plan sheets. This mark shall extend downward, perpendicular, 1/4" from the bottom border line at the center of the sheet. The weight of the line shall be the same as the border.

A split circle for the sheet number shall be shown in the lower right corner on all plan sheets. All plan sheets shall be numbered consecutively in the upper portion of the split circle beginning with Number 1 for the Key Sheet. The total number of sheets shall be indicated in the lower portion of the circle on the first and last sheets. Plan sheet numbers shall not be repeated with letter designations.

CROSS-OUTS ON PLAN SHEETS WILL NOT BE PERMITTED. If a revision requires deletion of information on the plan sheets, the information shall be removed from the drawing rather than crossed out.

A double reference numbering system, as specified under the headings of the various plan sheets, shall be established for each 'type of plan' in the contract set of plans. The following abbreviations and preferred order of plans shall be utilized for the double reference numbering:

1. E-DOQ: Estimate and Distribution of Quantities - Roadway
2. TS: Typical Sections
3. PSI: Plan Sheet Index
4. C: Construction Plans
5. EP: Environmental Plans
6. D: Drainage Plans
7. P: Profiles
8. T: Ties
9. G: Grade
10. TC: Traffic Control (and Staging Plans)
11. E: Electrical Plans
12. TSP: Traffic Signal Plans
13. HL: Highway Lighting Plans
14. L: Landscape Plans
15. SL: Sign Location Plans
16. TSS: Traffic Signaling and Striping Plans
17. STD: Sign Text Detail
18. MS: Method of Cross Sections
19. X: Cross Sections
20. DTL: Construction Details
21. EOQB: Estimate of Quantities - Bridge
22. B: Bridge Plans

As examples, the first Construction Plan sheet, of 20 total construction plan sheets, shall be labeled C-1 of C-20, the second C-2 of C-20, and the last construction plan sheet shall be labeled C-20 of C-20. Construction Plan sheets between these sheets shall be labeled consecutively, C-3, C-4, etc. The first Electrical Plan sheet, of six total electrical plan sheets, shall be labeled E-1 of E-6. The remaining plan sheets shall be labeled consecutively in the same manner. Each 'type of plan' shall be labeled in accordance with the above listing. The location of the double reference number shall be in a box above the title block and used as part of the match line stationing as shown in this sample plan set.

Variations to the above abbreviations for combined plan sheets are acceptable. The double reference number would then be a combination of the individual plans (Example: D&L - Drainage and Landscaping Plans). The plan that appears first in the plan sheet listing shall be first in the abbreviation.

Federal blocks located in the upper right corner of the plan sheets shall show a Federal Project Number(s) when applicable. On 100% State funded projects, the Federal block shall remain on the plan sheet but shall remain blank.

All sheets, except Estimate-Distribution of Quantities, Estimate of Quantities-Bridge, Tie Sheets, Cross Sections, Construction Details and sheets with charts or text, shall show a graphic scale. The graphic scale shall be placed at the top center of each plan sheet or centered above the title block but the location shall remain consistent throughout the construction set. Cross sectional type sheets shall delineate scale either by appropriate numbers on the heavy vertic and horizontal lines or by a graphic scale.

STANDARD ITEM NUMBERS

Standard Item Numbers issued by the Department consist of 5-digit alphanumeric characters. The first two digits consist of a number and a letter, representing its numeric equivalent, and indicates the Section in the Standard and/or Special Provisions where that item can be found while the last three digits consist of two numbers and a letter which distinguish the Standard Items (ie: The 4D of 4D04B - Bituminous Concrete Surface Course Mix 1-4 indicates that the item can be found in Section 404).

The Standard Item Numbers also indicate the order that the items should appear on the Estimate-Distribution of Quantities sheet when the numbers are taken in ascending order. To indicate the items used for construction, Standard Item Numbers shall be used in conjunction with Pay Item Numbers and Item Descriptions and shall be included on all contract plans where appropriate.

Standard Item Numbers shall appear on all plan sheets to indicate proposed work, such as Construction Plans, Drainage Plans, etc. in **TO BE CONSTRUCTED BOXES**.

When pay items are not included in the Standard Pay Item Identification booklet listing of Standard Items or in subsequent revisions to the booklet, the items shall be considered non-standard. Non-standard items shall be assigned a 5-digit alphanumeric number by the Designer preparing the plans.

The first digit of this number shall be an "N" to denote non-standard. The next two digits shall consist of a number and a letter to represent the Section in the Specifications where the item can be found. The last two digits shall be numeric and shall be so established to distinguish multiple non-standard items in a Section (a maximum of 99 non-standard items per Section). These non-standard items shall appear as specified above for Standard Item Numbers. Before assigning an item a Non-Standard Number, the Designer shall make certain that the item needed is not already a Standard Item and that the appropriate Section in the Specification is specified. An example of this would be pay item number 33 (N7B01) on the sample EQDG sheet can be found in section 702 of the Special Provisions.

KEY

The Key sheet shall include a Key Map indicating the location of the project. The Key Map shall be centered on the sheet and shall be drawn to a scale of about 1"=1000' to 1"=4000', except Local Highway projects which may be submitted at a smaller scale. Contours shall not be shown on the Map. The delineation of the proposed project shall be clearly indicated by BEGIN PROJECT and END PROJECT, with a Federal Project Number (Construction) when applicable, and all STOPS and RESUMES shall be noted and marked by stationing on the Key Map. To delineate BEGIN PROJECT and END PROJECT, provide the mainline BEGINNING and ENDING station at the major construction work limits of the project. Mile marker references should also be included. Do not provide the BEGIN PROJECT or END PROJECT location at proposed signage, striping, or traffic control items installed in advance of, or beyond the major construction work of the project. When the project involves more than one State Highway, provide a BEGIN PROJECT and END PROJECT for each State Highway.

A north arrow, station equations, names and locations of corporate lines, municipalities, counties, streets, structures, railroads, and waterways shall be clearly shown on the map.

The Control Section number, when applicable, shall be shown above the right corner of the Key Map. The type of highway as obtained from the Bureau of Transportation Data Development shall be indicated below the left corner of the Map. A graphic scale for the Key Map, and the length of the project and length of the Federal project in linear feet and miles shall appear beneath the Map.

The Project Category abbreviation shall be identified on the key sheet for all projects (located at the left corner over the Key Map). The six categories of projects, followed by the accepted abbreviation, are shown below:

- Interstate New Construction or Reconstruction (I - NEW/RECON)
- Interstate Resurfacing, Restoration, and Rehabilitation (I - 3R)
- National Highway System New Construction or Reconstruction (NHS-NEW/RECON)
- National Highway System Resurfacing, Restoration, and Rehabilitation (NHS - 3R)
- Non National Highway System (Non - NHS)
- Major / Unusual

The following note shall appear below the index of sheets box. Designer shall indicate the year applicable to the project:

Standard Roadway Construction/Traffic Control/Bridge Construction Details Booklet dated (Month and Year) and Standard Electrical Details dated (Month and Year) are applicable to this project except for those details contained herein.

Utilities

All utilities located within the project limits shall be listed in the Utilities box in the upper left corner of the Key sheet regardless of utility involvement. Pole lines, gas mains, transmission lines, rail roads, etc. shall be noted. Electrical installations of the N.J.D.O.T. for Traffic Signals and Lighting, shall also be listed.

Right of Way

When Right of Way is required for the project, the Route and Right of Way Section shall be shown below the right corner of the Key Map.

Proposed Structures

Bridges, walls, sign structures, temporary structures, noise barriers, culverts to be constructed and structures to be demolished as part of the project shall be listed in a box on the left hand side of the Key sheet. The listing shall include a description of the type of proposed structure(s) and a legend to denote the structure(s). Structure numbers shall also be included, if available. The location of the proposed structure(s) shall be indicated on the Key Map by use of the legend.

Design Traffic Data

The Design Traffic Data box shall be shown in the lower left portion of the Key sheet. Information to be included shall be as shown on the sample Key sheet and as described in the N.J.D.O.T. Roadway Design Manual.

The present year to be shown shall be the anticipated date of construction. The future year for new construction and reconstruction projects shall be 20 years beyond the anticipated date of construction, and 10 years beyond the anticipated date of construction for resurfacing, restoration, and rehabilitation projects.

Index of Sheets

All sheets contained in the contract plans shall be listed in the Index of Sheets box provided in the upper right portion of the Key sheet. The listing of the sheets shall follow the order shown in the section titled "General" on Page 1 of these Sample Plans. When the project includes Bridge Plans, the Estimate of Quantities - Bridge sheet shall be included in the plans as shown on the listing included under General Information. If the number of contract plan sheets is large enough to require the sheets to be divided into multiple parts, the Index of Sheets box shall be modified to indicate the various parts as shown on the sample Key sheet. Generally, each part shall consist of approximately 150 sheets.

Consultant Signature

The name of the Designer shall appear in the lower left hand border of the sheet. The following statement shall be added to the Key sheet of all projects designed by Consultants:

"CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY THE CONSULTANT MAY BE DETERMINED BY COMPARISON OF THE PLANS FILED AT THE DEPARTMENT WITH THOSE FILED AT THE OFFICE OF THE CONSULTANT".

(NAME OF CONSULTANT)
 (ENGINEER'S SIGNATURE) (DATE)
 (ENGINEER'S NAME PRINTED)
 (TYPE OF LICENSE AND NO.)

Each sheet in a Consultant designed set of plans, excluding plan sheets provided by the N.J.D.O.T., shall be signed by a New Jersey licensed Professional Engineer just prior to the Designer's P.S.&E. submission.

Project Description

The titling of the Key Sheet shall include the following information and adhere to the format in the following example:

- Approved Project Description
- Route and Contract Number (or local street name when applicable)
- Work Description (i.e. Grading, Paving, Sign Structures, etc.)
- Work Limits (i.e. from Riverdale Road to vicinity of South Main St.)

State of New Jersey Department of Transportation

PLANS OF
ROUTE 287

FROM SOUTH OF ROUTE 23 TO PATERSON-HAMBURG TURNPIKE

AND

ROUTE 23

FROM RIVERDALE ROAD TO COTLUSS ROAD

CONTRACT NO. 045961901

GRADING, PAVING, & STRUCTURES

BOROUGH OF RIVERDALE

MORRIS COUNTY

TOWNSHIPS OF MONTVILLE, KINNELON AND PEQUANNOCK

SCALES AS INDICATED

JULY 2000

(Month and Year project
will be advertised)

Projects will be identified by using a Route and a nine digit Contract Number. The criteria for developing the Contract Number is as follows:

The first three numbers represent the beginning milepost to the nearest mile and the remaining six numbers consist of the Universal Project Code (UPC). The UPC is established by the Bureau of Program Coordination when the project is created. The Program Manager establishes the Contract Number at the beginning of design development. Contract numbers must be developed for all projects.

When the project involves more than one State Highway, the beginning milepost will be determined from the following list:

1. Interstate Highway
2. U.S. Highway
3. State Highway

If the project involves highways with the same priority, the beginning milepost of the lower numbered route will be used. For projects involving statewide improvements, the milepost designation will be replaced with an "SWI" designation (ie. SWIxxxxxx).

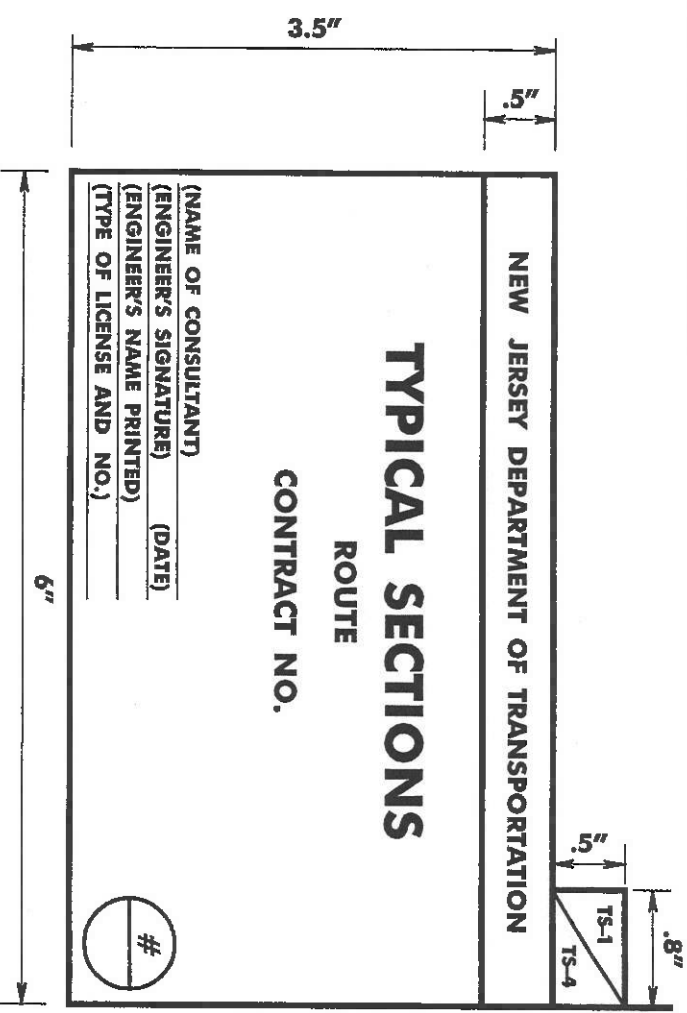
The Contract Number for a project on a county or municipal route will be determined as noted above for State Highways. If more than one County Route is involved, the 500 Route Series will have precedence over the 600 Route Series. Should more than one route of the same series be involved, the beginning milepost on the lower numbered route will be used. If the route is not mileposted, the first three letters of the county will be substituted for the milepost designation (ie. Mercer - Merxxxxxx).

Once established, the Contract Number should not be changed, even if the beginning milepost of the project is revised due to a change in project scope.

A Department signature block shall be included in the lower right corner of the Key sheet as shown with the titles, Director Project Management and Assistant Commissioner Capital Program Management.

TITLE BLOCKS

In the lower right hand corner, a title block shall be provided to include Project description, Consultant information, and Type of sheet as shown below. The title blocks shall be applicable for all sheets except Ket Sheet and the Bridge and E-DOQ sheets. For Bridge Title Blocks, see Plate 3.1-5 of the N.J.D.O.T. Bridges and Structures Design Manual. For E-DOQ Sheets, see Estimate-Distribution of Quantities.



When a project involves work that has been prepared by a Subconsultant, both the Subconsultant and the Consultant must sign the plan sheets that have been developed by the Subconsultant. The Subconsultant title block shall appear adjacent to the Consultant title block as shown below. For Bridge Title Blocks, see Plate 3.1-5 of the N.J.D.O.T. Bridges and Structures Design Manual.

(ITEM DESIGNED BY SUBCONSULTANT)	
(NAME OF SUBCONSULTANT)	
(SUBCONSULTANT'S SIGNATURE)	
(SUBCONSULTANT'S NAME PRINTED)	
(TYPE OF LICENSE AND NO.)	
	NEW JERSEY DEPARTMENT OF TRANSPORTATION
	CONSTRUCTION PLAN
	ROUTE
	CONTRACT NO.
(NAME OF CONSULTANT)	
(ENGINEER'S SIGNATURE)	(DATE)
(ENGINEER'S NAME PRINTED)	
(TYPE OF LICENSE AND NO.)	

ESTIMATE-DISTRIBUTION OF QUANTITIES

This sheet shall show a complete listing of the pay items, contract quantities, and the quantity distribution for all roadway items in the project. The nomenclature, unit designation, and order of the items shall be in accordance with current "New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction".

The project description (Route and Contract Number or, local street name if applicable) shall be as shown in this sample set and should match the Key Sheet. The Estimate of Quantities portion is on the left hand side of the E-DOQ sheet. The Distribution of Quantities portion of the sheet is on the right hand side. Each column provided in the plan sheet number as divided into two subcolumns. The left hand subcolumn is for the quantities portion as described in the double reference numbering system (e.g. C-1, E-1, L-1, X-1, etc.) on sheet 1 of these Sample Plans while the right hand subcolumn is for the quantities. Standard Item Numbers shall be inserted in the column and row provided in ascending order.

Temporary Pollution Control Quantities shall be included in the column for the If and Where Directed Quantities along with the Soil Erosion Control Items not provided as plan sheet totals. The quantities from cross sections shall be entered as a plan sheet total on the right hand subcolumn as shown on Pay Item No. 6 of the E-DOQ sheet in these Sample Plans.

If the description of the pay item does not fit adequately in the space provided, it shall be continued in the next row and the horizontal line separating these two rows shall be erased as shown on Pay Item No. 41. If part of the description will continue on the next sheet, the entire description shall be written on the next sheet. Also, at least 3-4 rows shall be left blank on the sheet at Final Design Submission in order to accommodate changes.

If the columns provided for the Distribution of Quantities portion of the sheet are not sufficient, the following rows shall be used to enter the information. These rows shall then be separated by a dotted horizontal line as shown on Pay Items No. 22 and 24. If the quantities from one item will continue on the next sheet, the entire description and quantity listing shall be written on the next sheet.

Abbreviations in item nomenclature will not be permitted. Abbreviations of pay units shall be as shown on the sample sheet. Alternate items shall appear on the Estimate-Distribution of Quantities and Estimate of Quantities - Bridge sheets as shown in these Sample Plans. Letter designations "A" through "M" shall be used for alternate groups of Roadway items, letter designations "N" through "Z" with the exception of letter "O" shall be used for alternate groups of Bridge items. At Final Design Submission, two "No Items" shall be added at the end of each roadway Division, for a maximum of 14 "No Items", should additional items be required prior to Bid.

On projects with bridge involvement, separate Estimate of Quantities sheets shall be prepared for bridge items. The Estimate of Quantities - Bridge sheet shall be the first sheet of the Bridge Plans and shall be identified on the Key sheet in the Index of Sheets box. The bridge estimate sheet shall have a "B" sheet number.

The roadway design unit shall provide the bridge design unit with the last roadway pay item number so that the bridge Estimate of Quantities sheet can continue with the next consecutive pay item number for the first bridge pay item. The Estimate of Quantities - Bridge sheet shall not include "Plan Sheet Total" or "If and Where Directed" columns or the "Distribution: Plan Sheet Quantity" columns since the bridge pay items are not distributed. The title of the sheet shall be Estimate of Quantities - Bridge.

Multiple Funded Projects

All of the above comments pertaining to the Estimate-Distribution of Quantities and Estimate of Quantities - Bridge sheets shall remain valid for projects with more than one funding source.

Bridge projects with more than one Federal Project Number or cost sharing shall utilize the format shown on the sample Estimate of Quantities - Bridge sheet. By utilizing this format, as-built quantities will be charged to the appropriate Federal Project Number or funding source.

Projects with more than one Federal funding category (for example I, IR), having the same pro-rata percentages (90% - 10%), must show individual Federal breakout columns. A column shall be provided for each Federal Project Number.

Quantity breakouts for each funding source shall be shown in their respective columns.

Each quantity breakout column shall be labeled with a Federal Project Number or cost sharing source. A column labeled State Quantity shall be shown on Federal projects whenever a portion of the project within designated limits does not have Federal funding participation. A separate column is not required when there are relatively few non-participating items.

The amount to be shown in the "Contract Quantity" column shall be the total of all combined funding quantities. Further instruction for the treatment of breakouts will be discussed under the headings Plan Sheet Index and Construction Plans.

For all projects involving earthwork, a quantity for Fertilizing and Seeding, Type F shall be included under the heading "If and Where Directed". This quantity shall be 10% of the total of all fertil and seeding for all seed types, including Type F, Turf Repair Strip (converted to Square Yards), Regrade Berm (Linear Feet) from plan sheet totals, Cross Sections and "If and Where Directed" equal quantity of Straw Mulching shall be provided wherever any item of Fertilizing and Seeding is specified.

Quantities for the following items shall not be shown as plan sheet quantities but shall be shown in the "If and Where Directed" column:

- Maintenance of Traffic Items (except items which will remain upon completion of constructor Prime Coat
- Tack Coat
- Construction Driveway
- Earth Excavation for Test Pits
- Traffic Stripe Items
- Bituminous Concrete Patch
- Sealing of Cracks and Joints in Concrete Surface Course
- Sealing of Cracks in Bituminous Concrete Surface Course
- Sawing and Sealing of Joints in Bituminous Concrete Overlay
- Treatment of Cracks and Joints in Concrete Surface Course
- Pavement Reflectors
- Rumble Strips
- Flexible Delineators

Traffic striping quantities shall be rounded up to the next ten. The quantity for Miscellaneous Concrete shall be carried to tenths and rounded off in the "If and Where Directed" column up to the next whole number. The item Striping shall be carried to hundredths of an acre and rounded up to the next acre in the "If and Where Directed" column.

Up to 10% shall be added to the quantity for each Bituminous paving item (Bituminous-Stabilized Base Course, and Bituminous Concrete Surface Courses, Dense Graded Friction Courses, and Open-Graded Friction Course) in the "If and Where Directed" column.

All pay item quantities shall be rounded to whole numbers.

TYPICAL SECTION SHEETS

Typical sections need only be shown where roadway conditions are 'typical' or representative of the project. It is not necessary to show a separate typical section to delineate minor variations from the basic typical, however, whenever an area is not covered by a typical section, the pavement materials, thicknesses, and grades should be clearly shown elsewhere on the plans.

The typical sections shall show all the existing and proposed roadway conditions. The proposed resurfacing and/or widening shall be superimposed over the existing conditions.

The proposed typical sections shall agree with the approved pavement recommendation issued or approved by the Geotechnical Engineering Unit.

The following features shall be shown for each typical section:

1. Profile control, baseline and survey line
2. Limiting stations, or road names, for each typical section
3. Type of proposed and existing pavement with thicknesses, subbases, etc.
4. Topsoiling, Fertilizing and Seeding, or Turf Repair Strips with their respective limits
5. Slopes for various heights of fill and cut
6. Lane, shoulder, and sidewalk widths with cross slopes shown
7. Pay limits in rock cuts, wet excavation, unsuitable material, or Zone 2 Backfill
8. Slope and pay limits defined
9. Channels, ditches or surcharge placement
10. Vertical curb and barrier curb sizes with curb reveal dimensions
11. Proposed Guide Rail location
12. Indicate rollover on superelevated sections
13. R.O.W. lines (existing and proposed)

UTILITY POLES SHALL NOT BE SHOWN ON THE TYPICAL SECTIONS.

When ramp or auxiliary road profiles are included in the plans, their design speed (V) shall be indicated on their typical sections.

A Legend of Materials Box with the proposed Pay Item Numbers and Standard Item Numbers shall be shown on each Typical Section sheet. The Pay Item Numbers shall be used as construct notes or to denote proposed items and the relative location where the work is to be performed on the typical section.

PLAN SHEET INDEX

This sheet shall show the layout of plan sheets with existing and proposed conditions and shall be drawn to a scale of 1"=200'. A Plan Sheet Index covering the entire length of project shall be included in the plans when interchanges, ramps, and intersections are involved. Soil borings when applicable, shall be shown on these sheets by use of a legend. When a Plan Sheet Index is not included in the plans, borings shall be shown on the Construction Plans. Plan sheets shall be overlapped 1 inch minimum or match lines may be used for the layout.

For projects with multiple funding sources (more than one Federal Project Number or cost sharing involvement), the location limits for each funding shall be clearly indicated on the Plan Sheet Index with station to station limits. If a Federal Project Number or category is provided exclusively for landscaping items, bridge items, etc., and applicable throughout the project or for a specific portion of the project, a plan sheet by plan sheet breakout shall not be required except that a note indicating the designated limits and appropriate funding shall be included

A north arrow and graphic scale shall be provided on all sheets.

The double reference numbering system designated for the project plan sheets shall be included on the Plan Sheet Index. Only sheets with proposed work shall be referenced.

CONSTRUCTION PLAN SHEETS

The sample Construction Plan sheets are provided as a basic standard format for 'typical' construction plan sheets. In almost all cases, this format can be adhered to with proper planning. The scale to be used for roadway construction plans is generally 1"=30'.

General comments pertaining to the Construction Plan sheets are as follows:

1. North arrow, graphic scale, municipality and county shall be shown on all sheets.
2. The existing topography for 500 feet before the beginning and beyond the end of the project shall be shown. For projects involving local roads, this distance may be reduced, but to no less than 100 feet.
3. Stationed BEGIN and END OF PROJECT shall be noted for State and Federal projects; All project STOPS and RESUMES shall be noted and stationed with topography shown 500 feet beyond the STOP and 500 feet before the RESUME. On Federal projects with multiple funding sources, funding limits shall be noted with stations.
4. All existing topography shall be shown with thin lines, proposed with thicker lines and lettered as shown in this sample set. Screened drawings may be used when the proposed information on the plan needs to stand out from the other proposed line work. Plans such as Drainage Plans, Landscape Plans, and Signing and Striping Plans are examples of acceptable plan types for screening.
5. Baselines, survey lines, etc. shall be labeled with stations at 100 foot intervals. Station equations shall be noted where required. Baselines of side roads and streets must be provided with sufficient information for complete layout.
An equation should be shown, if required, on the first construction plan sheet which shows how the new survey baseline ties into the old survey.

6. When the same stationing appears on more than one baseline, the baselines shall be designated A, B, etc. Westbound, Eastbound, etc. baselines may be designated on dual highways. All stationing shall be shown in the same direction. When practical, it is desired for proposed ramps to be stationing in the direction of travel.
7. The Standard Legend and General Notes shall be on the first construction plan sheet. If additional symbols are required for the project, they shall be incorporated into the Standard Legend. No topography is to be shown on this sheet.
8. Topography shall not be shown beyond match lines. Match lines shall be stationing with the full station number. Double reference sheet numbers shall also be shown as discussed under General comments.
9. Each plan sheet shall include a **TO BE CONSTRUCTED** box. Plan sheets without proposed work shall not be included in the contract set except as required by General comment No. 2.
10. Type of pavement for all existing roads shall be noted.
11. Lane widths for all proposed pavements shall be shown at the match line on all plan sheets, and at changes of lane widths.
12. Existing and proposed easements, R.O.W. lines and limits of **NO ACCESS** lines shall be noted.
13. Bench marks must be shown at approximate 400 to 600 foot spacing for vertical control. A description and elevation shall appear in the lower left hand corner of the sheet. Bench mark elevations shall be shown to a 0.001 foot accuracy.
14. Quantity totals from construction notes shall appear in **TO BE CONSTRUCTED** boxes. Individual construct notes and totals require back-up calculations which shall be bound and submitted for review with the plans. The calculations shall be complete to cover all plan quantities.
- ALL PAY ITEM QUANTITIES, EXCEPT MISCELLANEOUS CONCRETE AND PERMANENT SIGNS, SHALL BE ROUNDED UP TO WHOLE NUMBERS.**
15. Projects with more than one funding source shall utilize the format shown on sample construction sheet C-3. Separate columns shall be set for each funding category. Designers shall break-out quantities for pay items which fall within designated funding limits and provide quantity break-outs in the appropriate columns. This format shall be used only when there is more than one funding indicated on the plan sheet.
- If the project has multiple fundings and a specific funding is applicable throughout the project (for example, landscape items), it shall not be necessary to show a breakout of quantities for this funding on the plan sheets. A general note to this effect shall be made on the Plan Sheet Index.
16. Proposed construction shall be denoted with construction notes consisting of the pay item number placed in a circular symbol along with the pay item quantity and unit designation. **TO BE CONSTRUCTED** boxes shall conform to those shown on these sample sheets with pay items appearing in numeric order along with their corresponding standard item number.
17. Presentation of Alternate Items shall be as shown in these Sample Plans. When used as a construct note or to denote proposed items of work, the alternate items shall be placed in connected square symbols. In **TO BE CONSTRUCTED** boxes, alternate items shall be kept together with headings as indicated under the Estimate-Distribution of Quantities sheet.
18. All existing drainage structures shall be shown. Type and size of existing pipes and structures shall be labeled, flow direction (arrow) and existing invert elevations shall be shown when drainage is affected by proposed work.
19. Proposed drainage may be shown on the Construction Plans except when drainage construction is extensive or there is a need to enhance clarity on Construction Plans. In these instances, separate Drainage Plans shall be considered. In either case, proposed drainage shall be shown with:
- type of proposed structure noted (Inlet Type E, Inlet Type D-1, Manholes, etc.
 - proposed grate and invert elevations (except as noted below)
 - or depth of proposed structure clearly indicated
 - proposed flow direction with an arrow
 - type of proposed pipe (R.C.C.P., C.I.P., etc)
 - length of proposed pipe
 - proposed high and low points indicated (by arrow symbol)
- The following shall also apply:
- When Drainage Plans are included in the set of plans, the Construction Plan must show the location and type of the proposed drainage structure along with the proposed invert and grate or rim elevations need not be shown on the Construction Plans.
- When Grade Sheets are included in the set of plans, the proposed grate and rim elevations shall be shown on the Grade Sheets, therefore, grate or rim elevations need not be repeated on the Construction or Drainage Plans.
20. Begin and end station limits of various size proposed curbs (vertical and barrier) and their transition lengths shall be noted.
21. Stations shall be noted for Limits of Paving, Removal of Concrete Base Course and Concrete Surface Course, Milling, Joint Removal, and Removal of Bituminous Concrete Overlay.
22. Where driveways are proposed, the 'type' of existing driveway shall be noted (gravel, bituminous concrete, concrete, etc.) along with the proposed width dimensions and limits of paving. Proposed driveways shall conform to the State Highway Access Management Code. All existing driveways shall be shown.
23. Designers shall include Construction Details for transitioning proposed pavement to existing pavement, details for transitions at bridge decks, details for maintaining existing vertical clearances at overpasses and any additional transition details required for milled areas.
24. Existing monuments within project limits must be shown. Monuments within the travelway shall be reset or shall be enclosed in a monument box. Proposed Monuments shall be located by station and offset.

- 25. If inlets are to be cleaned, the depth of the inlets shall be shown. If pipes are to be cleaned, diameter and the length of pipe to be cleaned shall be noted.
- 26. Drainage structures which are non-standard shall be so noted on the plans. A detail from the public utility (or municipality) is needed if work is proposed.
- 27. Baseline station and offset for proposed guide rail locations, including end treatments, shall be provided.
- 28. Public utilities within the project limits shall be noted and include type, size, and location of all above and below ground existing utility facilities. Aerial pole line facilities shall be limited to the indication of poles. The location of all proposed utility facilities relocated within the project limits shall be shown.
- 29. When work is to be performed "by others", Designers shall specify who will be performing the work. (For example: by N.J. Bell, by Public Service Electric and Gas, by Sunshine Developers, etc.)

- 30. At locations showing riprap, the area of the proposed riprap shall be fully dimensioned, the thickness indicated and the calculated d50 stone size noted at each location.
- 31. Soil Borings, when required, shall be shown on the Construction Plans for small projects that do not require a Plan Sheet Index.

- 32. On plan sheets where space is limited and enhanced clarity is needed, in place of construct notes, a separate quantity box may be used to denote items of work. The box shall show Pay Item Numbers, stations and offsets of work to be performed, and item quantities. Typical use of this box may be when numerous driveway items are proposed on a sheet or where joint removal is required. The Designer shall also consider separating specific aspects of the design such as drainage or utilities onto separate plan sets to enhance the clarity of the information being presented. The creation of separate plans shall be discussed with the Project Manager prior to the Initial Design Submission.

- 33. When proposing cross drain replacement by trenching, Designers must indicate the appropriate standard construction detail to be used at its relative location on the construction plans. Specifications provide that payment for pipe items include the cost of excavating the pipe trench. When constructing cross drains in existing concrete pavement, appropriate pay items for excavating concrete pavement and for replacing the existing pavement surface must be indicated separately. Complete information shall be provided to determine the depth of the pipe trench, especially in areas not covered by cross sections.

- 34. When the pay item Demolition of Buildings is proposed, the following additional information shall be shown:
 - buildings to be demolished clearly designated by heavy solid outlines and shown as per legend symbol.
 - house numbers
 - R.O.W. parcel numbers
 - demolition numbers
 - building type (frame dwelling, brick, etc.)
 - number of floors
 - basement noted where applicable
 - additional buildings on the property (garages, sheds, etc.) to be removed shall be clearly indicated

- 35. When proposing Portland Cement Concrete pavements, show the location of the transverse expansion joints and irregular slabs at critical locations. The location of slabs shall be shown at mainline intersections with ramps and crossroads, the approach and exit sides of bridges and other locations where irregular slab shapes or sizes are required.

- 36. Some Standard Construction Detail Sheets may indicate more than one "treatment" or "type" of construction for an item of work; examples are: Construction Driveway, Curb Ramps, Guide Rail Attachments at Bridges. When proposing such items of work, Designer's must indicate the "type" to be constructed on the Construction Plan sheet. This may be shown by indicating the "type" below the pay item number, or when several "types" are to be constructed on a plan sheet, a box may be provided with Standard Item Number, baseline location and offset and "type" to be constructed.
- 37. Location of existing and proposed curb ramps must be shown at intersections. Traffic signals, lighting, guide rail in the vicinity of the ramps, must be shown with every effort made to avoid locating the proposed work within limits of curb ramps.

ENVIRONMENTAL PLANS

The purpose of the Environment Plans is to show the location of soil erosion and sediment control items, and to identify sensitive environmental areas to be avoided or where activities restricted, such as wetlands, flood plains, regulated streams, parklands, historic sites, conservati lands, endangered species habitats, contaminated sites and any other environmentally sensiti areas which pertain to the project.

The Designer shall contact the Bureau of Environmental Services and the Project Manager to determine whether there is a need to identify environmentally sensitive areas on the project. If there are no sensitive areas or permits to be identified, then the Soil Erosion and Sediment Control items of work may be shown on the Construction Plans. Other plan sheets may be u when necessary, such as Traffic Control and Staging Plans for interim measures. Separate sheets should be used only when absolutely necessary for clarity and continuity.

In general, the plan scale should not be smaller than 1"=60' provided the installation of erosion and sedimentation control devices can be clearly shown. In addition, when there are extensive environmentally sensitive areas on a project, a small scale Environmental Plan (typically 1"=100' or 1"=200') may be included to clearly identify those areas.

If environmentally sensitive areas must be identified, but there is no need for erosion and sediment control measures, a 1"=100' or 1"=200' scale Environmental Plan shall be provided.

The first sheet of the Environmental Plan shall include a list of any environmental commitments are used and permits including date of issue, date of expiration and conditions (if any). Also, if symbols are used to identify environmentally sensitive areas, a legend shall be provided identifying 1 symbols used.

The plans shall be clearly marked in areas where the Contractor is not permitted to perform work, store materials or enter upon with construction equipment. Also, constraints to any construction activities (i.e., town's "Founder's Day" festival or night work that will not be permit adjacent to a hospital, etc.), or any other specific Department commitments shall by noted.

PROFILE SHEETS

The existing mainline profile line shall be shown for 500 feet before the start and 500 feet beyond the proposed work. On local road projects, this distance may be reduced, but to no less than 100 feet. The existing ground line and the proposed finished grade line shall be plotted with station elevations shown at 50 feet intervals. All elevations shall be shown in feet.

The following items shall be labeled on the profiles:

Profile Identification (Ramp A, Rt. 295 S.B., etc.)

Datum

Scales

Vertical Curve Limits

P.V.C., P.V.I., P.V.T.

L - Length of Vertical Curve

E - Difference between P.V.I. Elevations and Vertical Curve Elevations at the P.V.I. Stations

High and Low Points with Stations and Elevations

Culvert and Invert Elevations

Limits of Borrow Excavation Bridge Foundation and Porous Fill

Slope in %

Minimum Vertical Clearances at Bridges and Structures

Ramp Design Speeds

The definition of "E" shall be shown on the first Profile Sheet.

TIE SHEETS

ALL CONTROL POINTS MUST BE TIED TO A BASELINE. Ties shall be stationed and offset and may be shown on the Construction Plans if not too congested, but preferably on a separate Tie sheet. The baseline designation shall be clearly labeled and identified. A Legend may be required to explain the designation. Assumed baselines shall be designated 'survey lines' and shall be used only if extensive investigation does not disclose a baseline.

Notes on the first Tie Sheet must state the following:

Horizontal datum

Vertical datum

Field book reference

All projects involving new alignment or major reconstruction shall include coordinates for all control points tied to the New Jersey Plane Coordinate System. Tie sheets shall provide a listing of the Geodetic Control Monuments used for the project. Notes shall also state the date of the recovery of the monument. In addition, any other monuments used to establish the control line shall be listed and shown on the tie sheets. Existing Geodetic Control Points and previous project baseline monuments or control points shall be used where possible and made part of the control network.

Where a field survey line differs from a project baseline, control ties and connections from the survey line to all P.C.'s, P.I.'s, and P.T.'s shall be shown.

A description of the control shall be provided with a detailed sketch showing distances and directions to locations (or reference) points. All control points shall have a minimum of three location (reference) marks.

Tie sheets shall also show bench mark locations from the survey line or baseline. In addition, a note shall be added to indicate whether the bench mark is located in an area that will be affected by construction activity. The note may specify or recommend to relocate the bench mark, prior to construction activity.

A note shall be added to the Tie sheets when affected monuments need to be preserved.

Horizontal and Vertical Datum

The Survey Datum information shall be included as shown on the first sample Tie Sheet of the Sample Plans.

Survey datums should be referenced to the recommended datums as described in the current version of the NJDOT Survey Manual. When elevations are based on other survey datums, the appropriate datum information must be provided.

GRADE SHEETS

Proposed grades and cross slopes shall be shown at 25 feet intervals in areas where finished grades deviate from the typical sections. Grades shall also be shown in areas that require additional clarification. Contours may be shown for infield areas that are not fully covered by cross section

Grade Sheets shall include the following:

- proposed high and low points
- type of proposed drainage structure
- proposed grate or rim elevations
- North arrow
- graphic scale

When Grade Sheets are not included in the Plans, the grate and rim elevations shall be shown on the Construction or Drainage Plans. (see item No. 19 under the "Construction Plan Sheet" heading for additional information).

TRAFFIC CONTROL PLAN SHEETS

The purpose of Traffic Control Plans is to provide guidance and establish procedures to assure that adequate consideration of safety is given to motorists, pedestrians, and construction workers during the construction project.

Sufficient data must be provided to the Contractor that will enable the Contractor to construct the project as designated for the full range of worksite situations. The proper and adequate placement of highway signs, pavement markings, barricades, and other traffic control devices shall be in accordance with the current Standard Traffic Control Details, Manual on Uniform Traffic Control Devices (MUTCD), Section 14 of the NJDOT Design Manual, Roadway and Standard Specifications for Road and Bridge Construction.

The first two sheets of the Traffic Control Plans should be Standard Traffic Control Detail sheets T and TCD-2 appropriately modified for individual project needs. Designers should delete notes from these sheets which are not applicable to the project. Crossing out of notes is not acceptable. TC- this set of Sample Plans depicts a typical treatment of selecting project specific information to be provided.

Traffic Control Plan Sheet TC-1 shall also contain project specific notes that are not covered by the General Notes on the Traffic Control Details in the Standard Detail Booklet. The notes shall include, but not be limited to: specific restrictions placed on travel lanes, duration of closures, hours when work may be performed, number of lanes of unobstructed traffic to be maintained in each direction, allowable minimum widths of traveled way, number of lanes to be open to traffic, diversionary routes with any restrictions, and traffic lanes or patterns to be maintained during construction for local roads affected by construction.

In order to estimate the required quantity of Construction signs in square feet, Designers should prepare a summary of signs for the project. This summary of construction signs should be shown in a table, and included on the first sheet of the Traffic Control Plans. An example of a completed table listing the Sign Designation, quantity and area in square feet is shown on TC-1 of the Sample Plans. The total quantity of construction signs in square feet should be shown on the Estimate-Distribution of Quantities (E-DOQ) sheet. On E-DOQ sheet, the total quantity of signs in square feet should be indicated as "If and Where Directed" items.

For quantity purposes, the If and Where Directed number of units or linear feet of traffic control devices and signs shall be the maximum quantity required to be in use at any one time. For purposes of indicating speed limits or speed reductions through the construction zone, 35 square feet of additional CONSTRUCTION SIGNS shall be provided.

Additional Traffic Control Plans shall be included to show plan views of project specific work sites when these locations are not adequately covered by the Standard Traffic Control Details or where design features of traffic control devices (such as the type of precast construction barrier) or temporary pavement markings need to be indicated. The scale of the Traffic Control Plans shall be selected so that the optimum amount of information is shown on a minimum number of plan sheets.

Construction Details shall be provided for traffic control devices not adequately covered by Standard Construction Details. Separate details showing placement of Crash Cushions, Inertial Barrier System, _____, Modules shall be provided and designated by location when more than one configuration of modules are required for the project. Also, any construction sign not depicted on the Standard Construction Details shall be shown in detail.

All plan sheets except Traffic Control Details shall show a graphic scale and north arrow.

TRAFFIC CONTROL AND STAGING PLANS

All comments pertaining to Traffic Control Plans shall remain valid for Traffic Control and Staging Plans.

Traffic Control and Staging Plans shall be utilized when a staging or sequence of construction needs to be specified. These plans should not be utilized for projects involving lane closures without sequence of work (such as simple resurfacing or electrical installations).

Notes pertaining to the various stages of construction shall be included on the Traffic Control and Staging Plans. The notes shall thoroughly describe each phase of construction in the sequence to be performed, including the establishment and removal of temporary traffic control items.

The Legend on Traffic Control and Staging Plan Sheet TC-1 shall be modified to differentiate work to be performed during each stage of construction, and work already completed during previous stages.

When temporary pavement areas are required, a Typical Section shall be provided. Temporary pavement to be used for Traffic Control shall be shown with plan sheet quantities. Pay Item Numbers with construct quantities and a TO BE CONSTRUCTED box shall be shown on the Traffic Control and Staging Plans when temporary pavement is to be constructed. Pay items for the removal of temporary pavement must be provided.

ELECTRICAL PLANS

The purpose of the Electrical Plans (E) are to provide guidance as to the preparation of the electrical engineering aspects of a complete traffic signal installation including traffic signal timing and intersection lighting. Each traffic signal design requires Electrical Plans.

The Electrical Plan for the traffic signal is used for presenting the electrical design of the traffic including all underground and above ground elements. The plan is to include the block wiring diagram, loop detector schedule and TO BE CONSTRUCTED items. An additional sheet can be to show sketches that require more detail in order to facilitate construction. A separate sheet the traffic signal timing and operation is required to facilitate its implementation in the field.

The Title block for each Electrical plan (E) should be completed by the designer, as shown in Sample Plans.

All Electrical Plans are to be prepared according to current Department and Traffic Signal and Safety Engineering CADD standards. These standards can be obtained upon written request to the Manager of Traffic Signal and Safety Engineering.

TRAFFIC SIGNAL PLANS

The purpose of the Traffic Signal Plans (TSP) are to provide guidance as to the preparation of the traffic engineering aspects of a complete traffic signal installation. Each traffic signal design requires Traffic Signal Plans.

The Traffic Signal plan is the traffic engineering plan that includes all the above ground traffic signal equipment, the regulatory, warning and mast arm signing that pertain to the operation of the traffic signal, and the overall areas of detection. The Traffic Signal plan is necessary before upon activation of the traffic signal, it is submitted for final approval and becomes the Department legal document for the operation of the signal and its associated signing and striping. Because the final plan must be signed by the Manager of Traffic Signal and Safety Engineering (TSSE) the title block shown on this plan is to be used for all Traffic Signal plans.

The Title block for each Traffic Signal plan should be completed by the designer, as shown in the Sample Plans.

All Traffic Signal plans (TSP) are to be prepared according to current Department and Traffic Signal and Safety Engineering CADD standards. These standards can be obtained upon written request to the Manager of Traffic Signal and Safety Engineering.

HIGHWAY LIGHTING PLANS

The purpose of the Highway Lighting Plans (HL) are to present the lighting design using appropriate Department lighting design software. The Highway Lighting plans are used to present the underground and above ground electrical elements in the designated nomenclature and the TO BE CONSTRUCTED items and quantities. The Highway Lighting plan format is to be used for both intersections and for highway interchanges.

The Title block for each Highway Lighting Plan should be completed by the designer, as shown in the Sample Plans.

All Highway Lighting plans (HL) are to be prepared according to current Department and Traffic Signal and Safety Engineering CADD standards. These standards can be obtained upon written request to the Manager of Traffic Signal and Safety Engineering.

LANDSCAPE PLANS

Landscape planting sheets shall include:

- Proposed planting and landscape architectural work
- Existing topography, where applicable
- Drainage
- Guide rail
- Curbs
- Walks
- Signs
- Top and toe of slopes
- R.O.W. lines and No Access Lines
- Bridge Structures
- Proposed and existing fencing
- Easements
- Proposed roadway

Planting sheets should not show additional information unrelated to Landscape unless approved by the Project Manager.

TRAFFIC SIGNING AND STRIPING PLANS

The number of plan sheets included for Traffic Signing and Striping shall be kept to a minimum by using such drafting techniques as break-lines and out of scale drawings. Traffic Signing and Striping Plans produced by superimposing traffic stripes and signs on other plan view sheets will only be accepted for smaller projects having three or less plan view sheets.

When Permanent Warning or Regulatory Signs are included in the project, a similar sign table as shown on TC-1 of the Sample Plans shall be placed on the first signing and striping plan sheet. The total quantity of Permanent Signs in square feet should be shown on the Estimate-Distribution of Quantities (E-DOQ) sheet. On the E-DOQ sheet, the total quantity of signs in square feet should be indicated as "If and Where" items.

METHOD OF CROSS SECTIONS

A Method of Cross Sections sheet shall be provided for interchange areas or any area where Cross Sections may vary from the normal method of sections. Stations shall be shown and shall conform to the cross sections. The baseline from which the sections are taken shall be clearly indicated.

CROSS SECTIONS

Cross Section sheets shall follow the format shown in this sample plan set. Scale shall normally be 1"=10' or 1"=5'. Sections shall be shown in ink on polyester type cross sectional Mylar or CADD generated equivalent. Sections shall show the existing ground line plus the proposed section template and baseline.

Original ground elevation shall be shown at the baseline and proposed elevations shall be shown at the profile line. Designers are reminded that excavation and embankment quantities shown on the Cross Sections shall be measured between the dashed lines representing the surface of the existing ground and the solid lines representing the limits of excavation or embankment. Where Topsoiling is proposed, the solid lines shall indicate the bottom of the proposed Topsoil. Sections shall not show location of vertical or barrier curbs. Retaining walls, crib wall, abutments, piers, and building foundations shall be shown. Equations shall be noted where necessary.

In order to clarify the method used to determine earthwork quantities from cross sections, the standard notes and legend shall be shown on the first Cross Section sheet as indicated on the sample sheet. A Datum shall be indicated for each section (vertical and horizontal). Pay limits for Topsoiling, Striping, Wet Excavation, and Zone I or Zone II backfill shall be noted on the sections. Items such as Removal of Concrete Base and Surface Courses, Porous Fill, Borrow Excavation Bridge Foundation and any select embankments shall be calculated and shown as plan sheet quantities. Placement limits shall be shown on the cross sections so that no additional quantities of other items are calculated. Sections indicating areas of Wet Excavation and Unusable Material shall show apparent firm bottom with side slope ratios.

Ditch or Channel sections shall be noted with quantities. Quantities shall also be noted for Topsoiling, Striping, and cuts and fills in the units shown on the legend.

It shall be noted on the Cross Sections, that additional embankment available from the project shall be used to reduce the amount of Borrow Excavation accordingly.

Above the title block, the location (Main Line, Ramp Z, etc.) and station to station of the sheet shall be noted.

Cross Sections are an important element of the Construction Plans. **CROSS SECTIONS SHOULD NOT BE DISREGARDED, EVEN ON RESURFACING PROJECTS.** Resurfacing projects shall include Cross Sections for the following reasons:

- Without Cross Sections, bituminous courses may bury the curb on the high side of super-elevation and undercut pavement on the low side. Drainage problems may be created in the areas adjacent to the traveled way or shoulder.
- Without Cross Sections, driveway touch down limits are unknown on the high side of the super-elevation.
- The effect of the super-elevation on the sidewalk area may require an additional R.O.W. acquisition.
- Design exceptions may be required to vary cross slopes of super-elevation to lessen the impact on sidewalks or driveways.
- Without Cross Sections, the Contractor cannot properly bid the item Milling because the depth of Milling is not known.
- Without Cross Sections, the amount of paving material required to meet the proposed cross slopes or grades is not properly estimated.
- If bituminous thickness is not known, the Contractor cannot determine the number of passes required to construct the bottom courses of bituminous paving.

EXCEPTIONS TO THE REQUIREMENT FOR CROSS SECTIONS ON RESURFACING PROJECTS OR PORTIONS OF RESURFACING PROJECTS MUST BE APPROVED BY THE PROJECT MANAGER. EXCEPTIONS WILL BE ALLOWED IF THE FOLLOWING CRITERIA IS MET:

1. Cross slopes are unchanged with milling and paving the same thickness.
2. The proposed and existing Typical Section is an umbrella section roadway and cross slopes will not change significantly.
3. The proposed and existing Typical Section is a curb section where cross slopes do not significantly change and the elevation of the curb will not change. Cross Sections may be required in critical areas to determine curb reveal.

Alternate Retaining Wall System

For projects with Alternate Retaining Wall Design, Bridge Plans provide the option of constructing alternate types of retaining walls. This work shall include the construction of the walls as shown on the bridge plans, including any required Excavation and Embankment within the "common work limit" of the Structures. The "common work limit" is the limit that defines the maximum amount of Excavation and/or Embankment affected by any one of the alternate retaining walls, as determined for each location shown in the contract plans.

The Cross Sections shall clearly denote, at each site, the common work limit which applies to all the alternate retaining wall designs, as shown on the sample sheet. The payment for Roadway Excavation and for Backfill within the common work limit for Alternate Walls shall be made under the pay item for the Alternate Walls, therefore, the quantity for Roadway Excavation and Backfill shall not be included in the roadway earthwork calculations.

Earthwork Summary

ANY PROJECT WITH CROSS SECTIONS MUST INCLUDE AN EARTHWORK SUMMARY.

The Earthwork Summary shall appear on the last Cross Section sheet or on the same sheet as the Earthwork Chart. The Earthwork Summary will vary from project to project, but basically, the format provided in this sample set shall be used as a guide.

The following items shall be noted when preparing the summary:

- The quantity for stripping in cuts shall be deducted from the Roadway Excavation from Cross Sections. This total plus the total added to Roadway Excavation from Plan Sheets shall be shown as the pay quantity for Roadway Excavation.
- The total area of stripping times the stripping thickness indicated in the quantity calculations shall equal the total quantity of stripping in cut plus the stripping in fill.
- All earthwork quantities from Cross Sections, Plan Sheets, and If and Where Directed shall be reflected in the earthwork summary.
- If detour roads require temporary embankments, ensure that the removal quantity for the detour road has been included in the excavation total.
- Staging of construction shall be considered in determining the excavation that will be available for embankment or the borrow excavation that will be required for embankment.
- The total quantity for Stripping available will be compared with the quantity required for topsoil.

- The pay item, Borrow Topsoil, is required when the quantity required for Topsoil is greater than the Stripping available.

The three formats shown shall be used as a guide in preparing the suitable Earthwork Summary.

Sample No. 1
Format to be used when additional Borrow Excavation is required.

Sample No. 2
Format to be used when total Excavation available for Embankment is more than the amount required for Embankment.

Sample No. 3
Format to be used for projects with multiple funding sources.

Earthwork Chart Sheet

An Earthwork Chart Sheet should be provided only when the project is a large earth moving project and complex enough to warrant a graphic picture of available embankment sites. If the Designer feels that an Earthwork Chart is necessary, the subject shall be discussed with the Project Manager and a determination will be made.

ROADWAY CONSTRUCTION DETAILS

Two Standard Construction Detail Booklets are available to Designers and Contractors; one containing Standard Roadway Construction Details, Standard Traffic Control Details and Bridge Standard Details, and the other containing Standard Electrical Details. These booklets are available for purchase through the Engineering Documents Unit (609-530-5587), @ 1035 Parkway Ave., Engineering and Operations Building, Trenton, N.J. 08625.

A note shall be placed on the Key Sheet immediately below the Index of Sheets box, stating the applicable booklet for the project. Standard details will not be included in the plans. HOWEVER, DETAILS REVISED BY BASELINE DOCUMENT CHANGE (BDC) MEMORANDUM SUBSEQUENT TO THE ISSUANCE OF THE BOOKLETS APPLICABLE FOR THE PROJECT, NON-STANDARD DETAILS, AND SHEETS THAT REQUIRE DESIGN SPECIFIC INFORMATION SHALL BE INCLUDED IN THE PLANS. Non-Standard details shall be signed by the Designer and inserted in the Contract Plans.

The order to be followed when inserting Construction Details shall be the same order as the items appear in the Special Provisions.

There are 3 Sign Support sheets (CD-619-6, CD-619-12, and CD-619-15), one Landscape sheet (CD-813-1), and two Electrical sheets (L-1094M and L-1794M) that contain the following note in the booklets only.

"THIS SHEET REQUIRES DESIGN SPECIFIC INFORMATION TO BE ADDED AND INCLUDED IN THE CONTRACT PLANS."

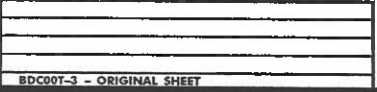
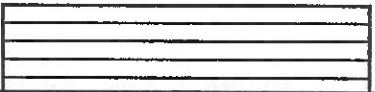
Therefore, these sheets will always be included in the plans with the design specific information added, if they are to be applicable.

BRIDGE CONSTRUCTION DETAILS

Any detail that does not represent the proposed bridge construction detail to be used on a given project, shall be modified and placed in the Bridge plans. The Designer shall include notes in the Bridge plans that identifies which Bridge Construction Details have been changed and are no longer valid for the given project. The Designer's attention is directed to the following comments concerning the use of the Bridge Construction Details sheets:

- Sheets numbered BCD-1A, BCD-1B, BCD-1C, and BCD-1D are for bridge deck rehabilitation repair work. The details shown on these sheets shall not be used for deck patching repair work. Details for bridge deck patching shall be developed by the Designer from information provided by Structural Engineering. Bridge deck patching details shall be included in the bridge plans. Deck patching repair work differs from deck rehabilitation work in the type of repairs to be performed and the way in which the repairs are to be done.
- Sheet numbered BCD-2 shows strip seal deck joints as a general guide. Variations in details shall be submitted for Engineer's approval in accordance with working drawing specifications.
- Sheet numbered BCD-3 shows various types of bridge parapets. The Designer shall identify by details or notes on the bridge plans the type of bridge parapet to be used for each bridge in the project. The Designer may need to make changes to the bridge parapets for the addition of metal railings or fencing. All changes to bridge parapets shall be approved by Structural Engineering.
- Sheet numbered BCD-4, view titled, "BRIDGE MEDIAN BARRIER", shows the height of the bridge barrier at 32 inches. The Designer shall verify that the heights of the roadway approach barriers match the height of the bridge barrier to ensure a smooth transition between the barriers.
- Sheet numbered BCD-5 shows details for sawcut grooving on bridge decks.
- Sheet numbered BCD-6, view titled, "TYPICAL PLAN - CULVERT AND HEADWALL", identifies a concrete apron is to be used at the culvert ends when required by hydraulic design. The Designer shall provide a detail on the Bridge plans as to size and location of concrete aprons, if aprons are required to be constructed at the ends of the culvert. See view titled, "TYPICAL PLAN - ABUTMENTS", this detail identifies joints between the abutment wall and retaining walls. The Designer shall show by note(s) on the Bridge plans whether these joints are expansion or contraction joints.
- Sheet numbered BCD-7, view titled, "DRAINAGE BACK OF WALL", the invert elevations for the underdrain pipe shall be shown on the Bridge plans. The Designer shall investigate and identify the location of the nearest roadway inlet for the steel culvert pipe to connect with. This information shall be noted on the Bridge plans.
- Sheets numbered BCD-8A and BCD-8B show details of 6'-3" curved top bridge chain link fence and 6'-3" vertical bridge chain link fence respectively.
- Sheet numbered BCD-9 shows details of stay-in-place bridge deck forms.

The Bridge Construction Detail sheets were developed from various Guide Sheets contained in the NJDOT "Bridges and Structures Design Manual". The Bridge Design Manual also contains Standard Drawings. The Standard Drawings are full size (22" x 36") drawings and are intended to be incorporated into the Bridge plans, if applicable to the project. This practice of including Bridge Standard Drawings in the plans will be maintained and is unaffected by using the Bridge Construction Detail sheets. Section 17.4 of the "NJDOT Procedures Manual" contains more information on the use of Bridge Standard Drawings.



UTILITIES

PUBLIC SERVICE ELECTRIC & GAS (GAS MAINS)
 JERSEY CENTRAL POWER & LIGHT CO. (POLE LINES, CONDUIT)
 NEW JERSEY BELL (POLE LINES, CONDUIT)
 ALGONQUIN GAS TRANSMISSION (TRANSMISSION MAINS)
 CONRAIL (RAILROAD FACILITIES)
 BOROUGH OF RIVERDALE (WATER MAINS)
 BOROUGH OF POMPTON LAKES M.U.A. (WATER MAINS)
 U.A.COLUMBIA CABLEVISION
 NEW JERSEY DEPARTMENT OF TRANSPORTATION (TRAFFIC SIGNALS AND HIGHWAY LIGHTING)

BRIDGES IN THIS CONTRACT

1	BRIDGE NO. 1003-007 RTE. 23 OVER I-287
2	BRIDGE NO. 1003-008 RTE. 23 OVER RAMP C

WALLS IN THIS CONTRACT

3	WALL NO. 2 BETWEEN RAMP C & D
4	WALL NO. 3 AT RELOCATED HIGHLAND AVE.
5	WALL NO. 4 AT RAMP LM

SIGN SUPPORT STRUCTURES IN THIS CONTRACT

6	CANTILEVER SIGN SUPPORT STRUCTURE NO. 3
7	CANTILEVER SIGN SUPPORT STRUCTURE NO. 4
8	CANTILEVER SIGN SUPPORT STRUCTURE NO. 5
9	OVERHEAD SIGN SUPPORT STRUCTURE NO. 7
10	CANTILEVER SIGN SUPPORT STRUCTURE NO. 8
11	BRIDGE MOUNTED SIGN SUPPORT STRUCTURE NO. 9
12	CANTILEVER SIGN SUPPORT STRUCTURE NO. 10
13	OVERHEAD SIGN SUPPORT STRUCTURE NO. 11
14	OVERHEAD SIGN SUPPORT STRUCTURE NO. 12

TEMPORARY STRUCTURE UNDER RTE. 23 DETOUR

15	TEMPORARY STRUCTURE UNDER RTE. 23 DETOUR
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CULVERTS IN THIS CONTRACT

16	CULVERT UNDER MAINLINE
17	CULVERT UNDER MAINLINE

DESIGN TRAFFIC DATA - RTE. 287

A.D.T. (2000) - 2 WAY	=	48,460
A.D.T. (2020) - 2 WAY	=	74,680
D.H.V. (2020) - 2 WAY	=	8,550
D	=	50%
T	=	15%
V	=	60 M.P.H.

DESIGN TRAFFIC DATA - RTE. 23

A.D.T. (2000) - 2 WAY	=	32,350
A.D.T. (2020) - 2 WAY	=	51,740
D.H.V. (2020) - 2 WAY	=	4,990
D	=	50%
T	=	15%
V	=	60 M.P.H.

"CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY THE CONSULTANT MAY BE DETERMINED BY COMPARISON OF THE PLANS FILED AT THE DEPARTMENT WITH THOSE FILES AT THE OFFICE OF THE CONSULTANT."

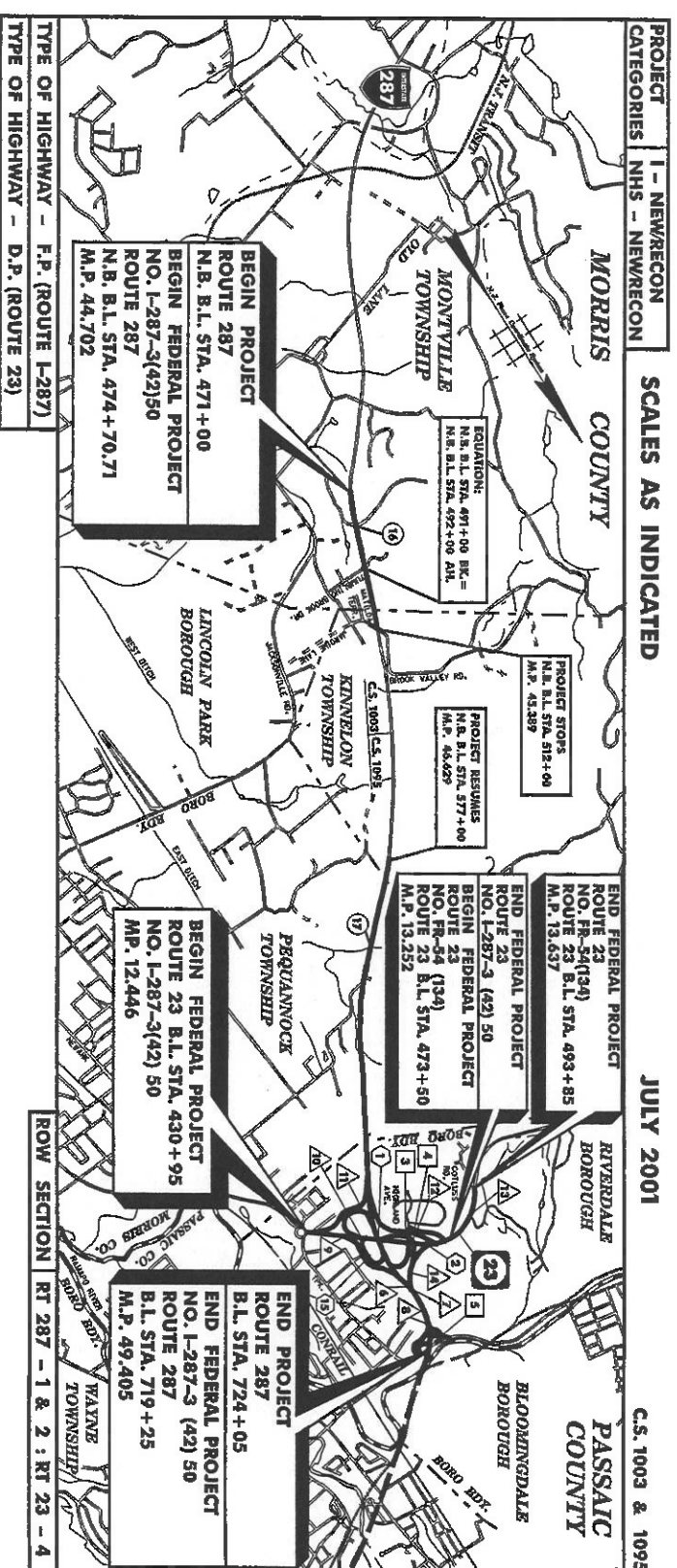
Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999



State of New Jersey
Department of Transportation

PLANS OF
ROUTE 287
AND
ROUTE 23

FROM THE VICINITY OF RIVERDALE ROAD TO THE VICINITY OF COTLUSS ROAD
CONTRACT NO. 045961901
GRADING, PAVING & STRUCTURES
 BOROUGH OF RIVERDALE
 TOWNSHIPS OF KINNELON, PEQUANNOCK & MONTVILLE
 MORRIS COUNTY



INDEX OF SHEETS

SHEET NUMBERS	DESCRIPTION
1	KEY
2-9	ESTIMATE - DISTRIBUTION OF
10-15	TYPICAL SECTIONS
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37-43	ENVIRONMENTAL PLANS
44-55	PROFILES
56-61	TIES
62-67	GRADES
68-115	TRAFFIC CONTROL AND STAGN
116-121	ELECTRICAL PLANS
122-128	ELECTRICAL DETAILS
129-154	LANDSCAPE PLANS
155-180	TRAFFIC STRIPING AND SIGNI
181	METHOD OF CROSS SECTIONS
182-245	CROSS SECTIONS
246-247	CONSTRUCTION DETAILS
248-249	ESTIMATE OF QUANTITIES - BRI
248-249	BRIDGE PLANS

STANDARD ROADWAY CONSTRUCTION-TRAFFIC CONTROL BOOKLET (Year) AND STANDARD ELECTRICAL DETAILS BOOK (Year) ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

PART 1 OF 3

2001 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO GOVERN

TOTAL LENGTH OF FEDERAL PROJECT NO. I-287-3(42)50 = 22,109 LIN. FT. OR 4.187 MILES
 TOTAL LENGTH OF FEDERAL PROJECT NO. FR-54 (134) = 2,035 LIN. FT. OR 0.385 MILES

LENGTH OF PROJECT ROUTE 287 = 18,705 LIN. FT. OR 3.542 MILES
 LENGTH OF PROJECT ROUTE 23 = 6,290 LIN. FT. OR 1.191 MILES
 TOTAL LENGTH OF PROJECT = 24,995 LIN. FT. OR 4.733 MILES

Submitted by _____
 Director, Division Of Project Management

Approved by _____
 Assistant Commissioner, Capital Program Management

RDC007-3 - ORIGINAL SHEET

PROPOSED MATERIALS

PAY ITEM NO.	STD. ITEM NO.	DESCRIPTION
26	2B25N	MILLING, 2" VARIABLE DEPTH
27	2B40N	MILLING, 3 1/2" VARIABLE DEPTH
31	4C15D	DENSE-GRADED FRICTION COURSE, MIX 1-4
53	6ET1D	9" x 16" CONCRETE VERTICAL CURB
55	6L21B	BEAM GUIDE RAIL
58	6L11F	RUB RAIL
59	6R11C	TRAFFIC STRIPES
64	8F04C	TOPSOILING, 4" THICK
66	8H23C	FERTILIZING AND SEEDING, TYPE A3
67	8K31C	STRAW MULCHING
68	8N05B	NONVEGETATIVE SURFACE, BITUMINOUS CONCRETE

ROUTE 18

STA. 60+00 TO STA. 71+50

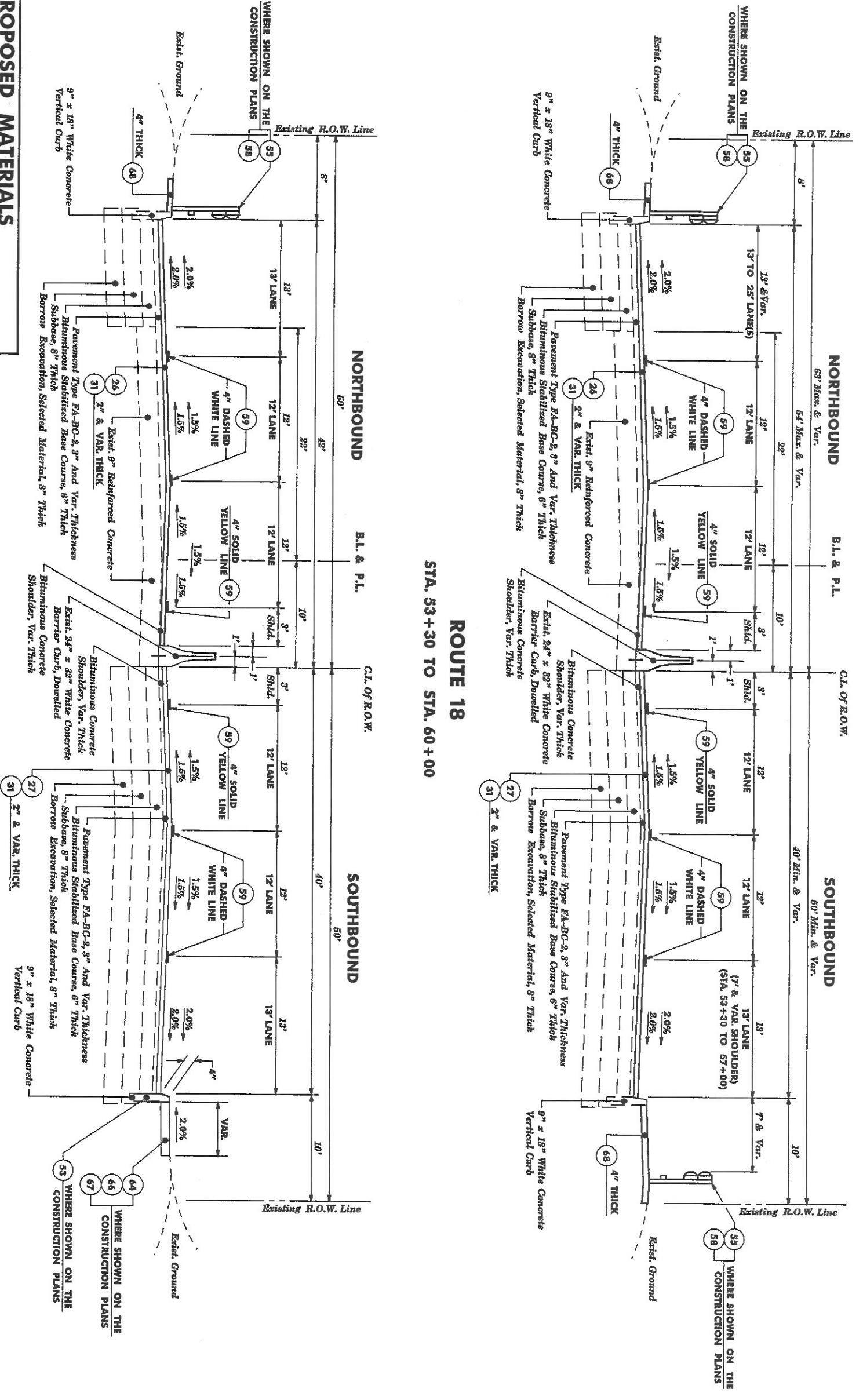
N.T.S.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

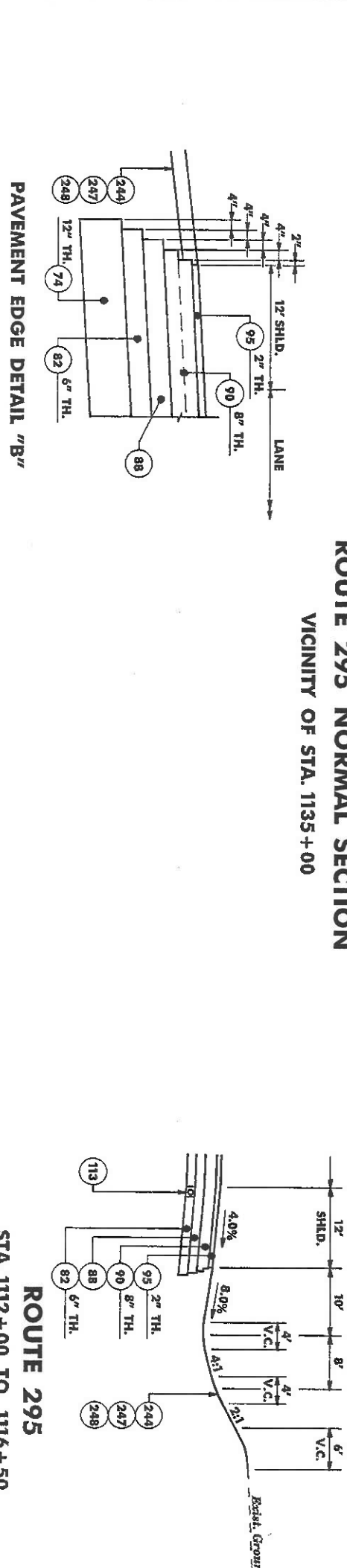
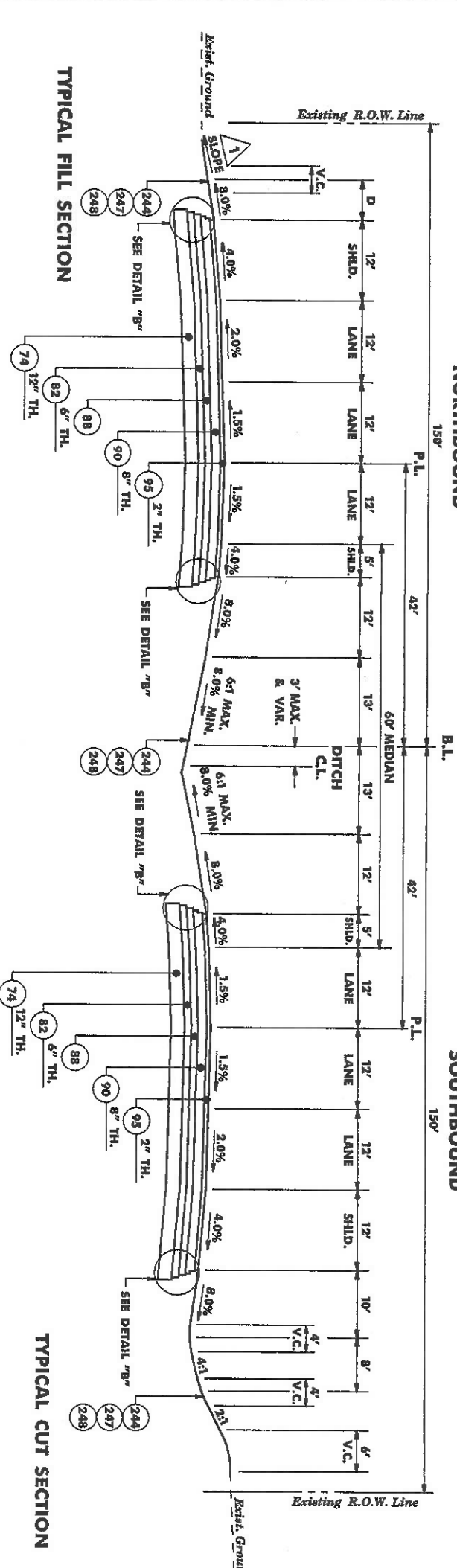
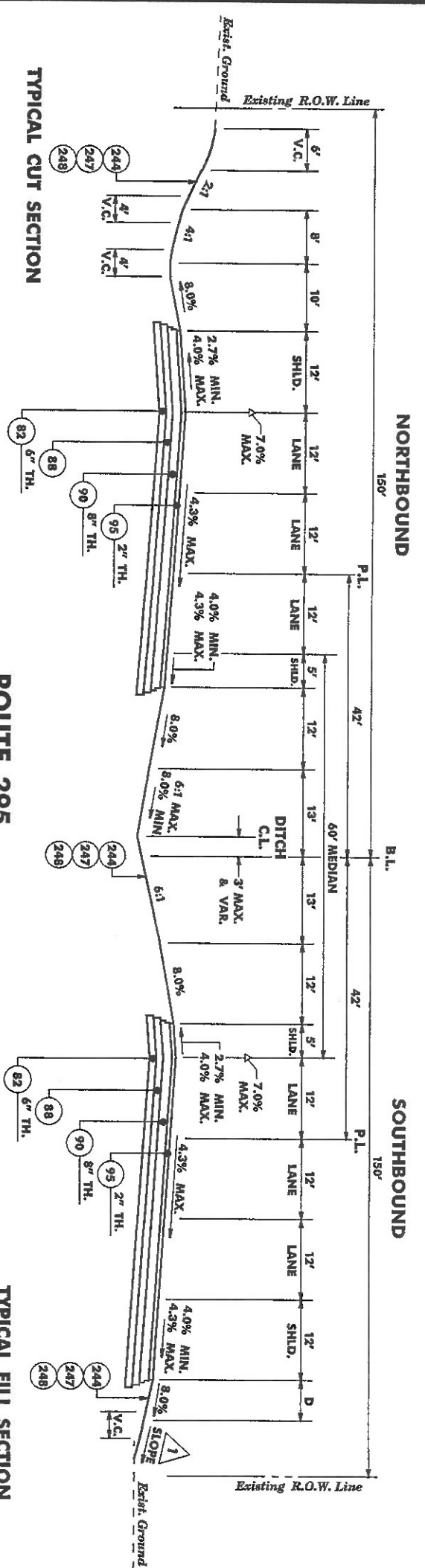
TYPICAL SECTION I

ROUTE 18
CONTRACT NO. 010010

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999



BDC007-3 - ORIGINAL SHEET



PROPOSED MATERIALS	
PAY ITEM NO.	DESCRIPTION
74	BORROW EXCAVATION, SELECTED MATERIAL
82	SUBBASE, DESIGNATION L-2
88	DENSE GRADED AGGREGATE BASE COURSE, 6" TH
90	BITUMINOUS-STABILIZED BASE COURSE, MIX L-2
95	BITUMINOUS CONCRETE SURFACE COURSE MIX L-4
113	LONGITUDINAL UNDERDRAIN
244	TOPSOILING, 4" THICK
247	FERTILIZING AND SEEDING, TYPE A3
248	FERTILIZING AND SEEDING, TYPE F

SLOPE TREATMENT IN FILL			
FILL HEIGHT	D	V.C.	SLOPE
0 TO 5'	2'	4'	6:1
5' TO 10'	3'	6'	4:1
OVER 10'	7'	6'	2:1

N.T.S.

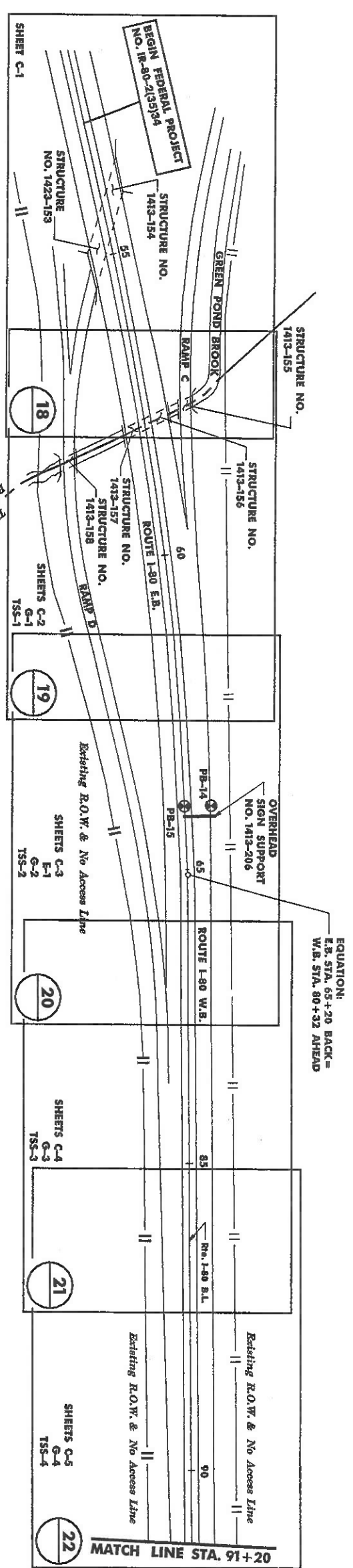
NEW JERSEY DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION I

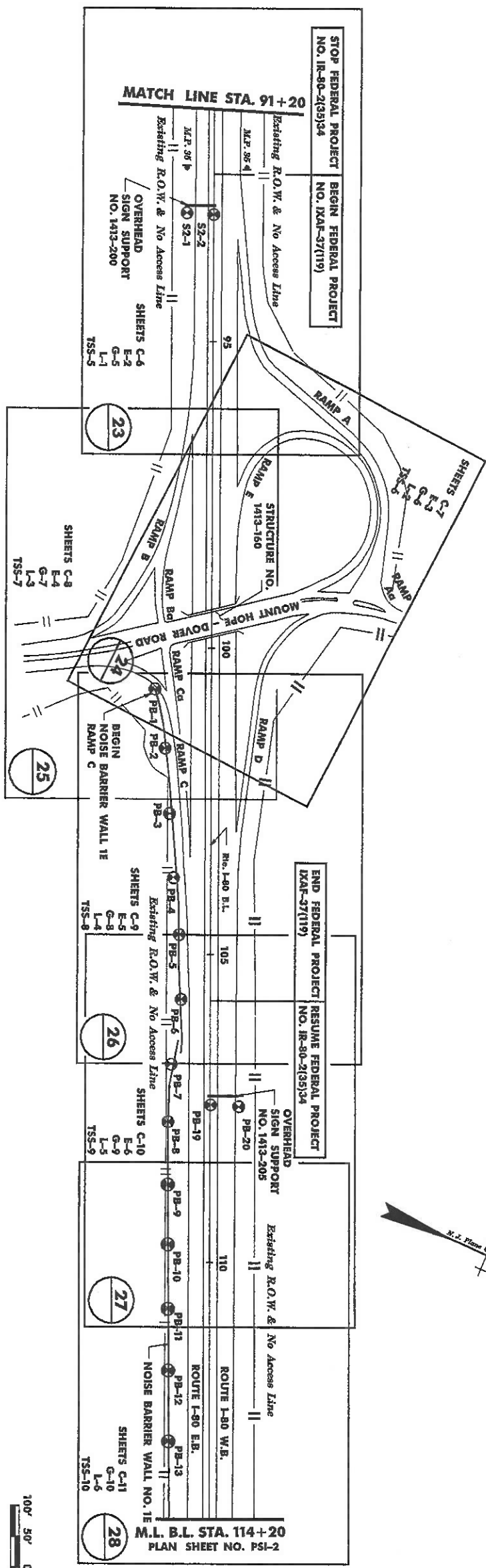
ROUTE 295
 CONTRACT NO. 010010

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

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FEDERAL PARTICIPATION LIMITS



- LEGEND**
- SHEET C = CONSTRUCTION PLANS
 - SHEET E = ELECTRICAL PLANS
 - SHEET G = GRADES
 - SHEET TSS = TRAFFIC STRIPING PLANS
 - SHEET L = LANDSCAPE PLANS
 - ⊕ = BORING FOR NOISE BARRIER WALL AND FOR SIGN SUPPORT

FEDERAL PARTICIPATION LIMITS



NEW JERSEY DEPARTMENT OF TRANSPORTATION

PLAN SHEET INI

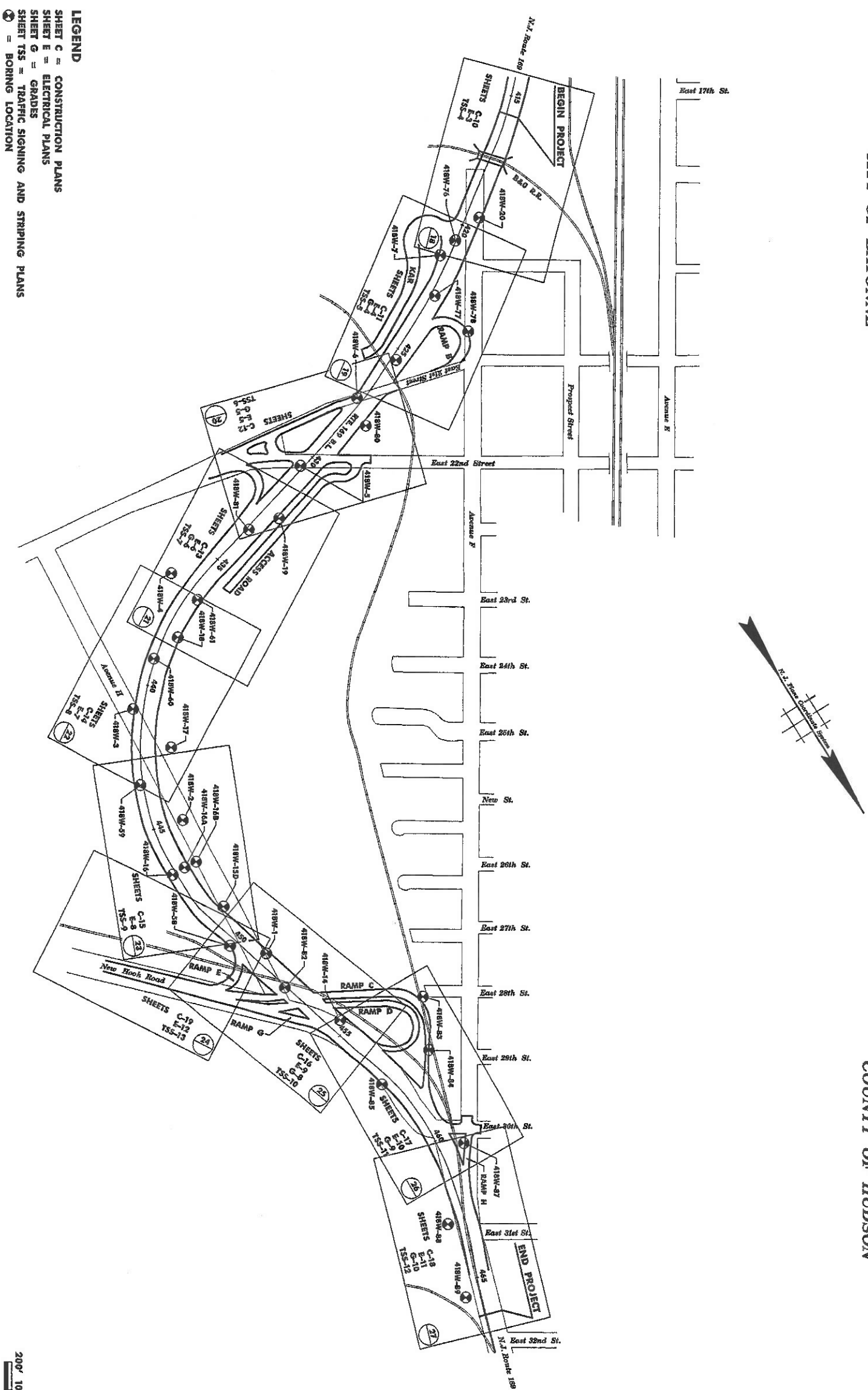
ROUTE 80
CONTRACT NO. 010011

Individual Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

CITY OF BAYONNE

COUNTY OF HUDSON

STATE
N.J.



NEW JERSEY DEPARTMENT OF TRANSPORTATION

PLAN SHEET INDI

ROUTE 169

CONTRACT NO. 01000100

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

\\roads\roads\2_plot\tablehalf-scale.tbl

Linear Features

Existing	PROPOSED	DESCRIPTION
W	W	Water Main (Size)
G	G	Gas Main (Size)
T	T	Telephone Conduit
E	E	Electric Conduit (Highway or Utility)
CTV	CTV	Cable TV
FO	FO	Fiber Optic
(Size & Type) (Over 30" - Drive to Size)	(SIZE & TYPE)	Sanitary Sewers or Storm Drains
		Pavements (Concrete or Bituminous)
		Shoulders
		Curbs
(F) (C)	(S) (F)	Slopes (Cut & Fill)
6+00	B.L.	Base Line
	B.L.	Twp., City, County Lines
Existing R.O.W. Line	PROPOSED R.O.W. LINE	Right of Way Lines (Access Permitted)
Exist. R.O.W. & No Access Line	PROP. R.O.W. & NO ACCESS LINE	Right of Way Lines (No Access)
PL		Easements
X - X - X		Property Line
		Fence (Size & Type)
		Reset Fence
		Beam Guide Rail
		Reset Beam Guide Rail
		Noise Walls
		Wetland Limit Line
		Silt Fence
		Ditches
		Railroad Tracks
		Tree Line

Topographical Features

Existing	PROPOSED	DESCRIPTION
		Inlets (Label Type)
		Inlets (Type E5)
		Manholes (Label Type or Utility)
		Reset (Inlets or Manholes)
		Reconstructed (Inlets or Manholes)
		Cast Iron Extension (Frame or Ring)
		New Manhole Casting, Square Frame, Circular Cover
		R.C. End Section or C.M. Headwall
		Headwalls
		Headwall & Aprons
		Water Gate Valves
		Reset Water Gate Valves
		Gas Gate Valves
		Reset Gas Gate Valves
		Hydrants
		Reset Hydrants
		Utility Pole (Type & Number)
		Temporary Utility Pole
		Traffic Signal
		Junction Box
		Fiber Optic Junction Box
		Junction Box Foundation
		Signs
		Vertical Panels
		Guide Rail End Terminals
		Beam Guide Rail Anchorages

Topographical Features

Existing	PROPOSED	DESCRIPTION
		Monuments
		ROW Monument (ROW Control Points)
		Tear Pit
		Borings (Boring Number)
		Deadwood Tree (Size, Kind)
		Evergreens
		Bush
		Hedges
		Swamp

Double Reference Codes

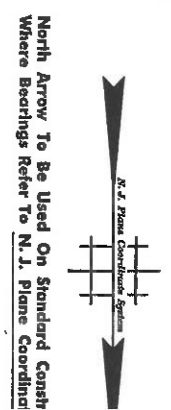
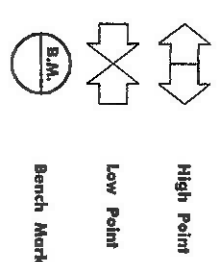
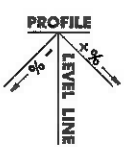
- E-DOQ - EST. & DIST. OF QTY - ROADWAY
- TS - TYPICAL SECTIONS
- PSI - PLAN SHEET INDEX
- C - CONSTRUCTION PLANS
- EP - ENVIRONMENTAL PLANS
- D - DRAINAGE PLANS
- P - PROFILES
- T - TIES
- G - GRADES
- TC - TRAFFIC CONTROL (AND STAGING PLANS)
- E - ELECTRICAL PLANS
- TSP - TRAFFIC SIGNAL PLANS
- HL - HIGHWAY LIGHTING PLANS
- L - LANDSCAPE PLANS
- SL - SIGN LOCATION PLANS
- TSS - TRAFFIC SIGNING AND STRIPPING PLANS
- STD - SIGN TEXT DETAILS
- MS - METHOD OF CROSS SECTIONS
- X - CROSS SECTIONS
- DTL - CONSTRUCTION DETAILS
- FOQB - ESTIMATE OF QUANTITIES - BRIDGE
- B - BRIDGE PLANS

GENERAL NOTES:

- ANY TREES NOT SPECIFIED FOR REMOVAL WHICH ARE DAMAGED OR DESTROYED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN KIND AT NO COST TO THE STATE.
- PRESERVE ALL EXISTING VEGETATION WITHIN THE STATES' RIGHT OF WAY ON ROUTE 123.
- THE PROPOSED GAS LINE MUST BE CONSTRUCTED TO CAUSE THE LEAST INTERFERENCE TO ALL RESIDENCES WITHIN THE LIMITS OF THE PROJECT.

Miscellaneous Symbols

		Items With No Alternate
	OR	Alternate (C) = (M) =
		Milling
		Building to be Demolished
		Removal of Concrete Base Courses
		Concrete Surface Courses
		Building to be Removed & Field for Under Clearing Site
		Demolition No. & Parcel No. of Building to be Demolished



CONSTRUCTION PL

NEW JERSEY DEPARTMENT OF TRANSPORTATION
 ROUTE 295
 CONTRACT NO. 0100100
 Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

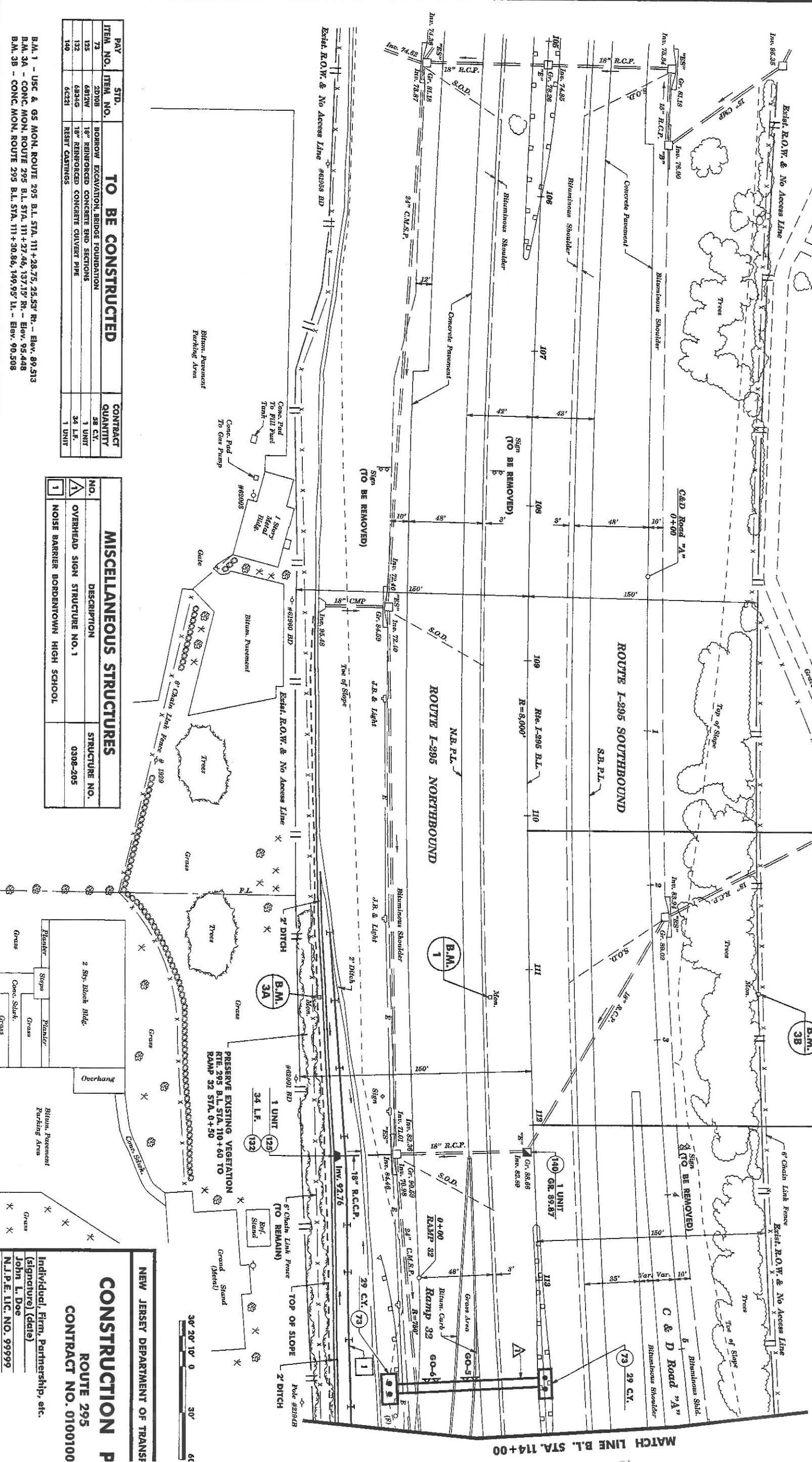
TOWNSHIP OF BORDENTOWN

COUNTY OF BURLINGTON



BEGIN PROJECT
RTE. I-295 B.L.
STA. 110+10.00

BEGIN FEDERAL PROJECT
NO. I-295-2(93) 61
RTE. I-295 B.L.
STA. 112+00.00



TO BE CONSTRUCTED			CONTRACT QUANTITY	
ITEM NO.	STD. ITEM NO.	DESCRIPTION	QTY.	UNIT
73	2010B	BORROW EXCAVATION, BRIDGE FOUNDATION	28	C.Y.
125	6812W	18" REINFORCED CONCRETE END SECTIONS	1	UNIT
132	6834G	18" REINFORCED CONCRETE CURVE/VERT PIPE	34	L.F.
140	6C221	REST CURBS	1	UNIT

MISCELLANEOUS STRUCTURES		
NO.	DESCRIPTION	STRUCTURE NO.
1	OVERHEAD SIGN STRUCTURE NO. 1	0308-205
1	NOISE BARRIER BORDENTOWN HIGH SCHOOL	

NEW JERSEY DEPARTMENT OF TRANSPORTATION
CONSTRUCTION P
ROUTE 295
CONTRACT NO. 0100100

B.M. 1 - USC & GS MON, ROUTE 295 B.L. STA. 111+28.75, 25.53' R. - Elev. 89.513
B.M. 3A - CONC. MON, ROUTE 295 B.L. STA. 111+27.46, 137.13' R. - Elev. 95.448
B.M. 3B - CONC. MON, ROUTE 295 B.L. STA. 111+30.86, 149.95' L. - Elev. 90.508

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 999999

MATCH LINE B.L. STA. 114+00

PLAN SHEET NO. C-2
MATCH LINE B.L. STA. 109+00

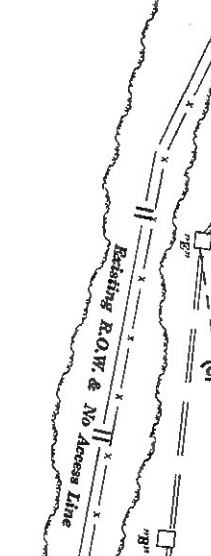
TOWNSHIP OF BORDENTOWN

COUNTY OF BURLINGTON

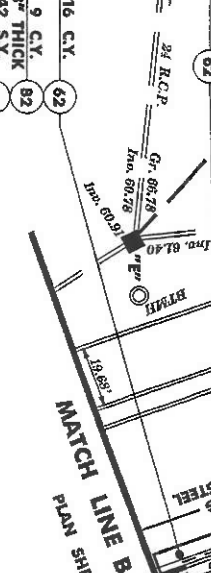
STATE OF N.J.

NO.	DESCRIPTION	STRUCTURE NO.
1	ROUTE 295 N.B. OVER ROUTE 130	0328-149
2	LIGHTING TOWER, ROUTE 295 B.L. STA. 111+65.227 RT.	
4	OVERHEAD SIGN STRUCTURE NO. 4	0328-306
9	BRIDGE MOUNTED SIGN STRUCTURE NO. 3	GOX-1

MISCELLANEOUS STRUCTURES



WORK TO BE PERFORMED BY P.S.E. & G.



MATCH LINE B.L. STA. 13+50



MATCH LINE B.L. STA. 109+00

ITEM NO.	ITEM	QTY	UNIT
1	ROADWAY EXCAVATION UNCLASSIFIED	48	C.Y.
2	BORROW EXCAVATION, BRIDGE FOUNDATION	48	C.Y.
3	BORROW EXCAVATION, SLOPED MATERIAL	50	C.Y.
4	20% CONC.	18	CU.
5	UNDERLAY PREPARATION	1200	S.Y.
6	DEBRIS GRADED AGGREGATE BASE COURSE, 6" THICK	4200	S.Y.
7	DEBRIS GRADED AGGREGATE BASE COURSE, 6" THICK	4200	S.Y.
8	DEBRIS GRADED AGGREGATE BASE COURSE, 6" THICK	4200	S.Y.
9	NON-STABILIZED OPEN GRADED DRAINAGE LAYER, 6" THICK	4200	S.Y.
10	1.5" X 1.5" CONCRETE CURB, 12" HIGH	1200	L.F.
11	CONCRETE CURB, 12" HIGH	1200	L.F.
12	BRIDGE APPROACH SLABS, 12" THICK	327	S.Y.
13	BRIDGE APPROACH SLABS, 12" THICK	327	S.Y.
14	TRANSVERSE EXPANSION JOINT, TYPE A	2	EA.
15	1.5" X 4" CONCRETE BARBER CURB	444	L.F.
16	1.5" X 4" CONCRETE BARBER CURB	444	L.F.
17	CONCRETE ISLAND, 4" THICK	7	S.Y.

TO BE CONSTRUCTED

END FEDERAL PROJECT
NO. I-295-2(93)61
ROUTE 130 B.L.
STA. 11+69.29

RESUME FEDERAL PROJECT
NO. 1XA-F-37(119)
ROUTE 130 B.L.
STA. 11+69.29

FOR PROPOSED DRAINAGE ITEM QUANTITIES, SEE DRAINAGE SHEET

NEW JERSEY DEPARTMENT OF TRANSPORTATION
CONSTRUCTION P
ROUTE 295
CONTRACT NO. 0100100

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. Lic. NO. 999999

124 C.Y. 12" THICK
74 STA. 117+50 TO 118+00
92 6" THICK
344 C.Y.
88 2,067 S.Y.
92 6" THICK
951 TONS
92 8" THICK
237 TONS
95 2" THICK

6 C.Y.
82 5" THICK
25 S.Y.
83 25 S.Y.
87 25 S.Y.
90 25 S.Y.
Equation:
Route I-295 B.L. Sta. 116+48.66 BH =
Route I-295 B.L. Sta. 136+00.00 Ah.

114 C.Y. 6" THICK & VAR.
468 S.Y.
83 149 S.Y.
103 319 S.Y.
105 36 L.F.
107

197 C.Y. 6" THICK
87 1,180 S.Y.
90 1,180 S.Y.
109 468 S.Y.
72 L.F. 139

29 C.Y. 6" THICK
82 163 S.Y.
89 66 TONS
92 7" THICK
99 19 TONS
2" THICK

PLAN SHEET NO. C-2

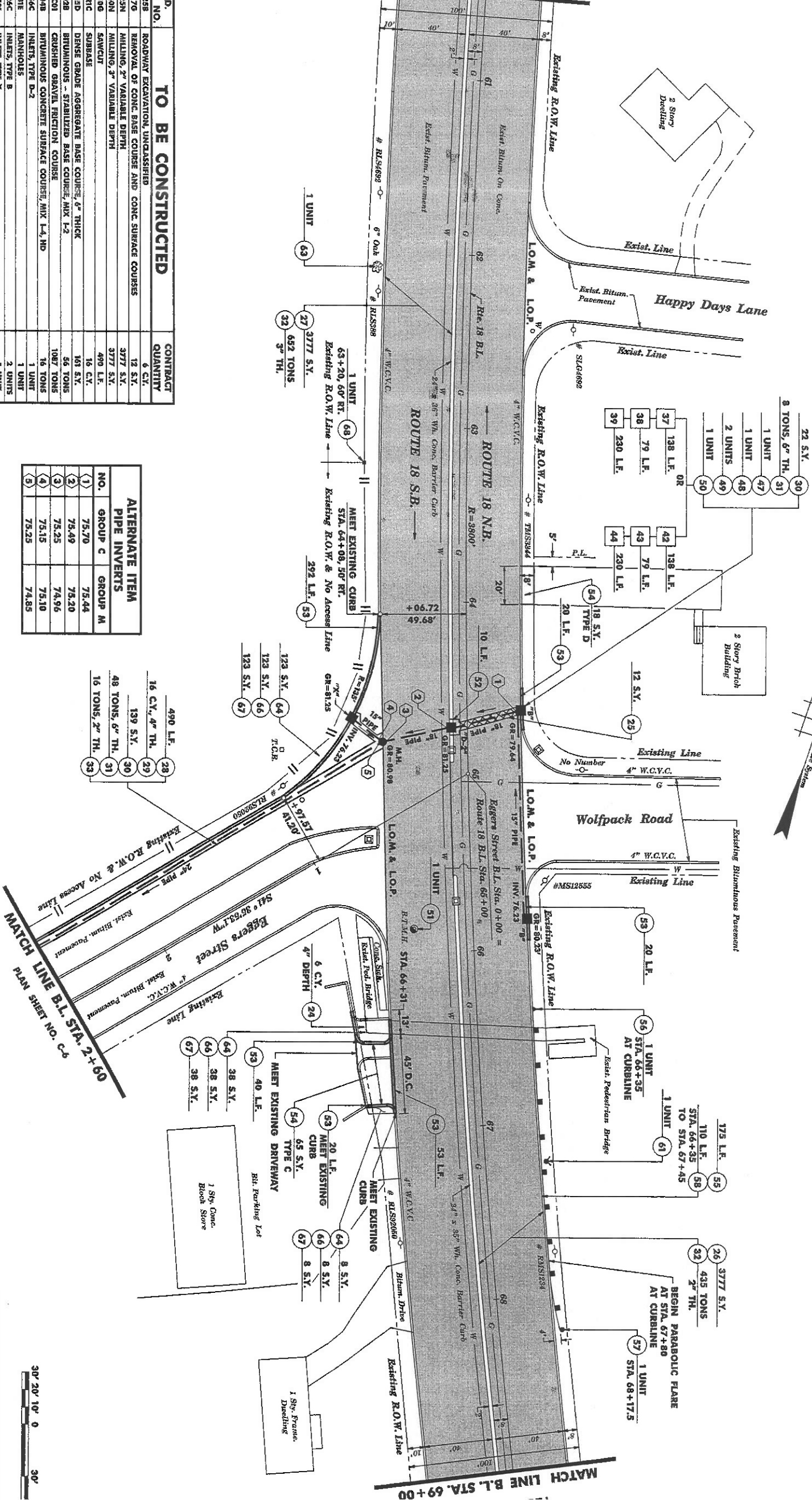
MATCH LINE B.L. STA. 109+00

BDC007-3 - ORIGINAL SHEET

TOWNSHIP OF EAST BRUNSWICK

COUNTY OF MIDDLESEX

PLAN SHEET NO. C-3
MATCH LINE B.L. STA. 60+50



ITEM NO.	STD.	TO BE CONSTRUCTED	CONTRACT QUANTITY
24	28238	ROADWAY EXCAVATION, UNCLASSIFIED	6 C.Y.
25	28176	REMOVAL OF CONC. BASE COURSE AND CONC. SURFACE COURSES	12 S.Y.
26	28328	MILLING, 2" VARIABLE DEPTH	3777 S.Y.
27	28408	MILLING, 3" VARIABLE DEPTH	3777 S.Y.
28	28598	SAWCUT	490 L.F.
29	28112	SUBBASE	16 C.Y.
30	34112	DENSE GRADE AGGREGATE BASE COURSE, 6" THICK	161 S.Y.
31	38028	BRUNSWICK STABILIZED BASE COURSE, MIX F-2	56 TONS
32	40048	BRUNSWICK GRAVEL FRICTION COURSE	1087 TONS
33	40048	BRUNSWICK CONCRETE SURFACE COURSE, MIX L-4, HD	16 TONS
47	60562	MANHOLES, TYPE D-2	1 UNIT
48	60562	MANHOLES, TYPE B	2 UNITS
49	60562	MANHOLES, TYPE X	1 UNIT
50	60562	MANHOLES, TYPE X	1 UNIT
51	60562	MANHOLES, TYPE X	1 UNIT
52	60562	MANHOLES, TYPE X	1 UNIT
53	60562	MANHOLES, TYPE X	1 UNIT
54	60562	MANHOLES, TYPE X	1 UNIT
55	60562	MANHOLES, TYPE X	1 UNIT
56	60562	MANHOLES, TYPE X	1 UNIT
57	60562	MANHOLES, TYPE X	1 UNIT
58	60562	MANHOLES, TYPE X	1 UNIT
59	60562	MANHOLES, TYPE X	1 UNIT
60	60562	MANHOLES, TYPE X	1 UNIT
61	60562	MANHOLES, TYPE X	1 UNIT
62	60562	MANHOLES, TYPE X	1 UNIT
63	60562	MANHOLES, TYPE X	1 UNIT
64	60562	MANHOLES, TYPE X	1 UNIT
65	60562	MANHOLES, TYPE X	1 UNIT
66	60562	MANHOLES, TYPE X	1 UNIT
67	60562	MANHOLES, TYPE X	1 UNIT
68	60562	MANHOLES, TYPE X	1 UNIT

ITEM NO.	STD.	TO BE CONSTRUCTED	CONTRACT QUANTITY
30	75.70	GROUP C	75.44
31	75.49	GROUP M	75.20
32	75.25	GROUP M	74.96
33	75.15	GROUP M	75.10
34	75.25	GROUP M	74.85

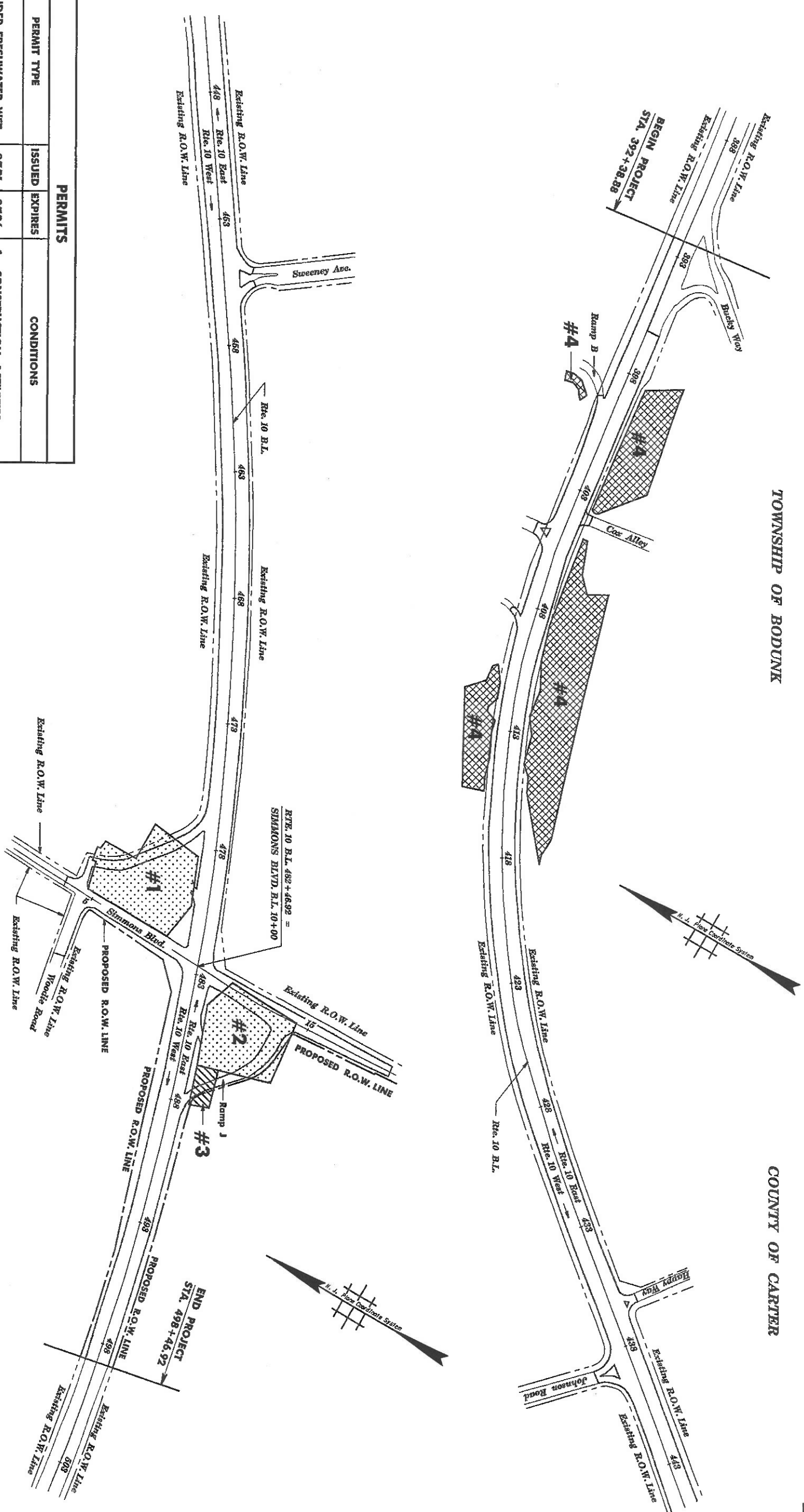
ITEM NO.	STD.	TO BE CONSTRUCTED	CONTRACT QUANTITY
28	490 L.F.	16 C.Y., 4" TH.	138 L.F.
29	139 S.Y.	48 TONS, 6" TH.	79 L.F.
30	139 S.Y.	16 TONS, 2" TH.	230 L.F.
31	139 S.Y.	15" CORRUGATED METAL CULVERT PIPE	138 L.F.
32	139 S.Y.	18" CORRUGATED METAL CULVERT PIPE	79 L.F.
33	139 S.Y.	24" CORRUGATED METAL CULVERT PIPE	230 L.F.
34	139 S.Y.	ALTERNATE GROUP M	138 L.F.
35	139 S.Y.	ALTERNATE GROUP C	79 L.F.
36	139 S.Y.	ALTERNATE GROUP M	230 L.F.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
CONSTRUCTION
 ROUTE 18
 CONTRACT NO. 010

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

TOWNSHIP OF BODUNK

COUNTY OF CARTER



PERMITS		
PERMIT TYPE	ISSUED	EXPIRES
1. NJDEP FRESHWATER WETLANDS GENERAL PERMIT NOS. 10&11 WATER QUALITY CERTIFICATION AND TRANSITION AREA WAIVER, FILE NOS. 1432-91-0014.4 AND 1432-91-0014.5	9/7/01	9/7/06
2. NJDEP STREAM ENCROACHMENT PERMIT NO. 1432-91-0014.3 SEA.	5/18/01	5/18/06

CONDITIONS		
1. CONSTRUCTION ACTIVITIES WITHIN THE BANKS OF ANY ON SITE STREAM ARE PROHIBITED BETWEEN SEPT. 15TH AND MARCH 15TH OF THE FOLLOWING YEAR.	1. CONSTRUCTION ACTIVITIES WITHIN THE BANKS OF ANY ON SITE STREAM ARE PROHIBITED BETWEEN SEPT. 15TH AND MARCH 15TH OF THE FOLLOWING YEAR.	
1. CONSTRUCTION ACTIVITIES WITHIN THE BANKS OF ANY ON SITE STREAM ARE PROHIBITED BETWEEN SEPT. 15TH AND MARCH 15TH OF THE FOLLOWING YEAR.		

ENVIRONMENTAL COMMITMENTS

- A SENSITIVE AREAS - ASBESTOS REMOVAL REQUIRED PRIOR TO DEMOLITION. SEE ENVIRONMENTAL PLANS EP-5 AND EP-6
- B SENSITIVE AREA - UNDERGROUND STORAGE TANKS, PRIOR TO DEMOLITION ALL U.S.T.S. MUST BE REMOVED.
- C SENSITIVE AREA - WETLANDS, SEE ENVIRONMENTAL PLANS EP-2 THROUGH EP-4

LEGEND

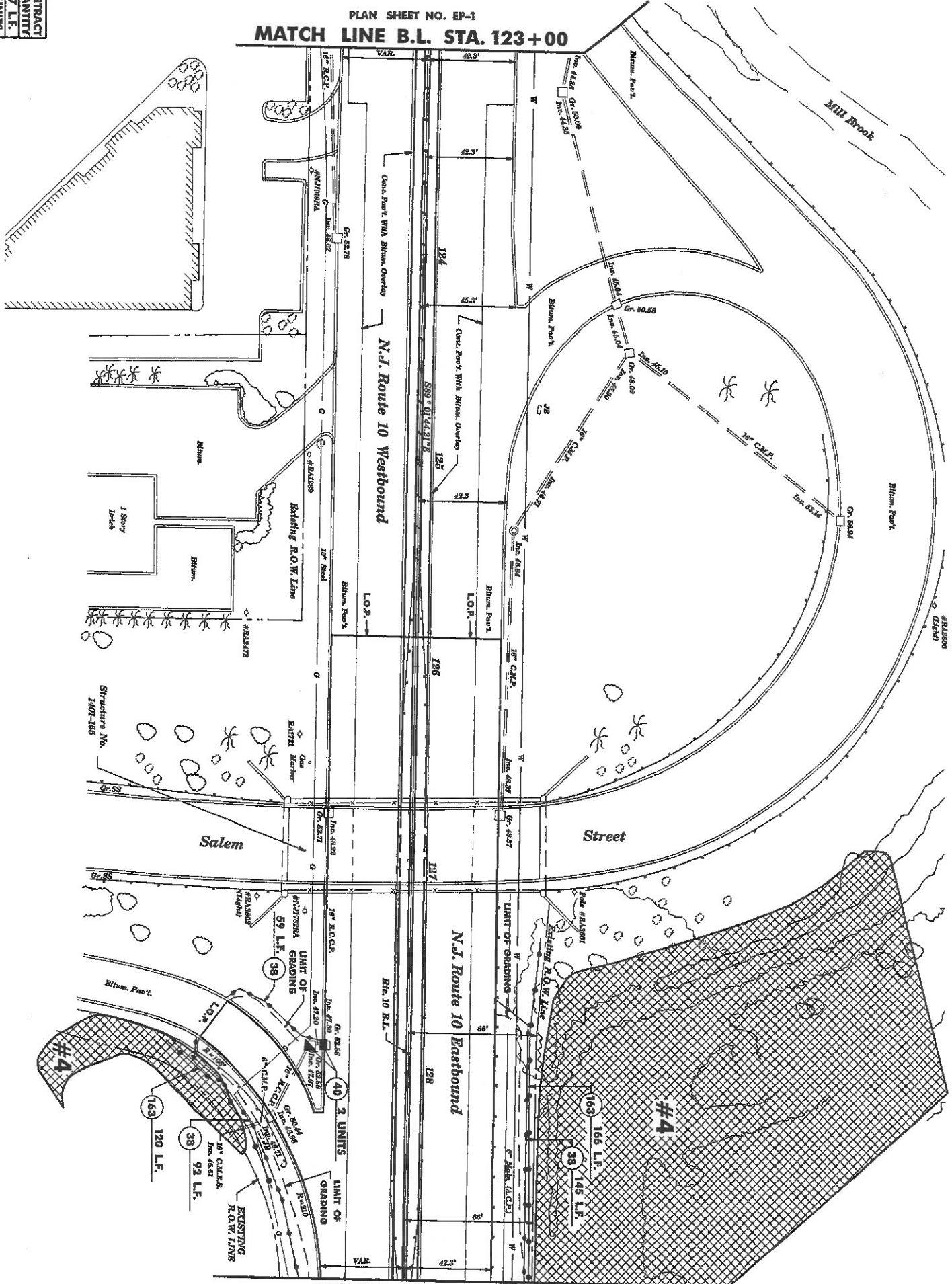
- #1 - #2 SENSITIVE AREAS - ASBESTOS, SEE ENVIRONMENTAL COMMITMENT A
- #3 SENSITIVE AREA - UNDERGROUND STORAGE TANKS, SEE ENVIRONMENTAL COMMITMENT B
- #4 SENSITIVE AREA - WETLANDS, SEE ENVIRONMENTAL COMMITMENT C

NEW JERSEY DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL PLAN
ROUTE 10
CONTRACT NO. 0100100

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LLC, NO. 99999

PAY ITEM NO.	STD. ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
38	2105A	SILT FENCE	297 L.F.
40	2122C	INLET FILTERS	2 UNITS
163	6N165	SNOW FENCE PLASTIC	286 L.F.

PLAN SHEET NO. EP-1
MATCH LINE B.L. STA. 123+00



MATCH LINE B.L. STA. 129+00
PLAN SHEET NO. EP-3

TOWNSHIP OF BODUNK

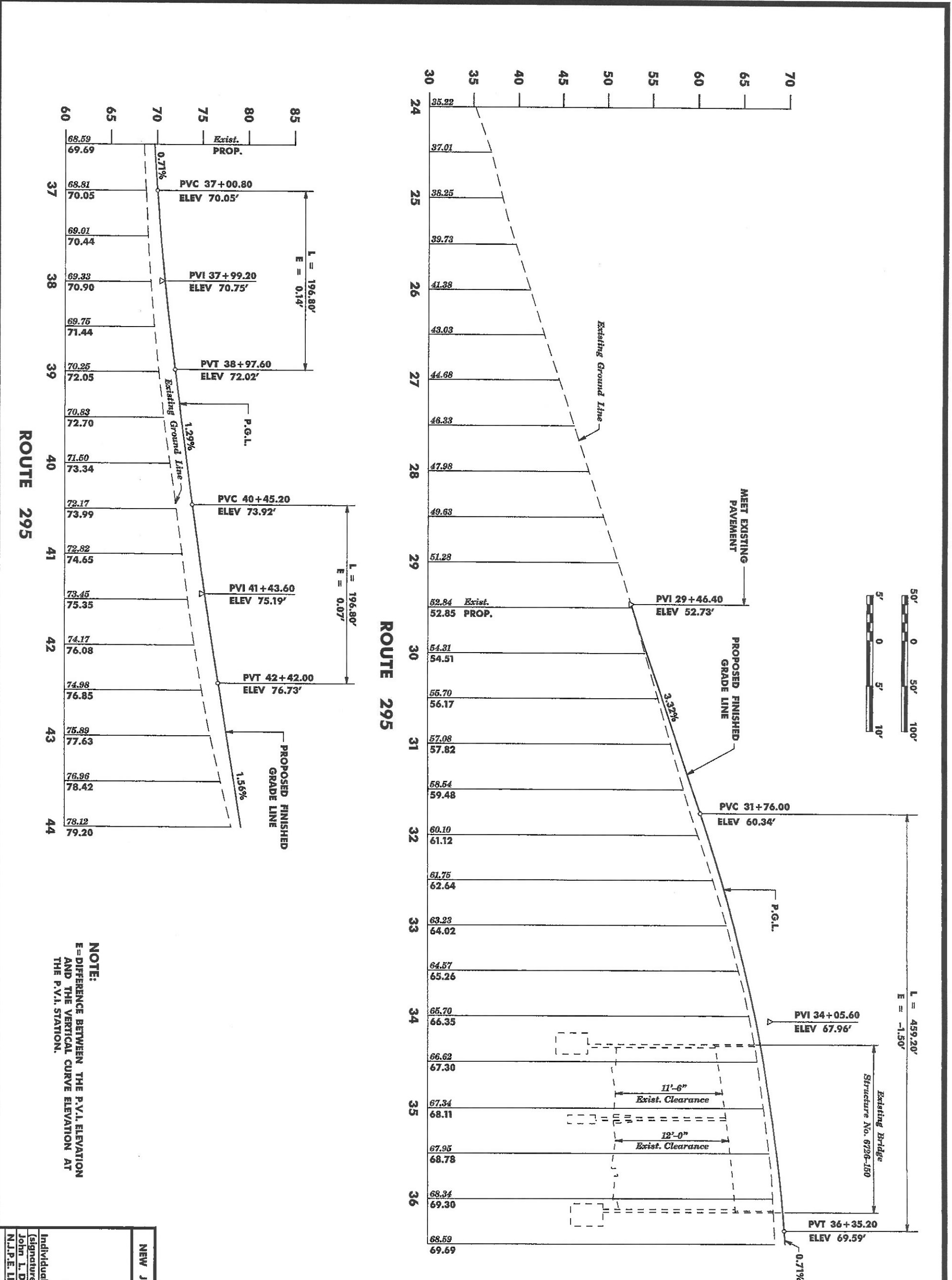
COUNTY OF CARTER



NEW JERSEY DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL PI
 ROUTE 10
 CONTRACT NO. 01001004

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

RDC00T-3 - ORIGINAL SHEET



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

NEW JERSEY DEPARTMENT OF TRANSPORTATION

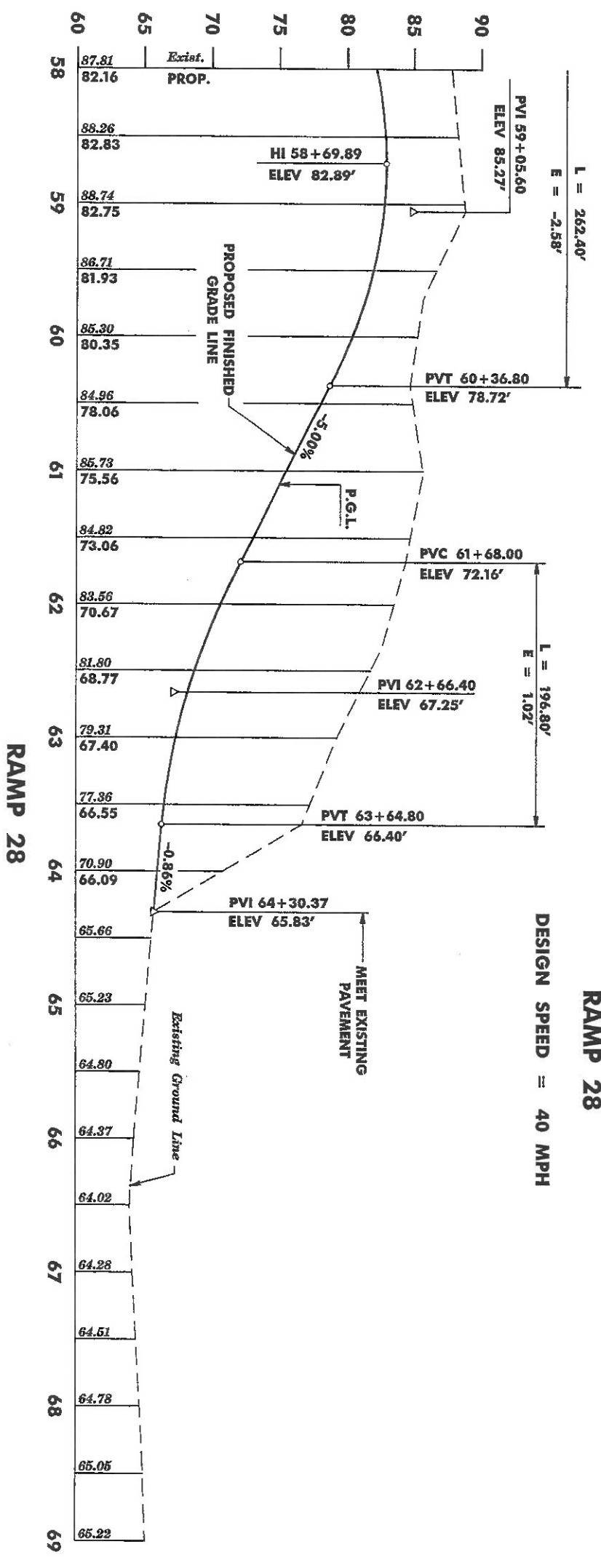
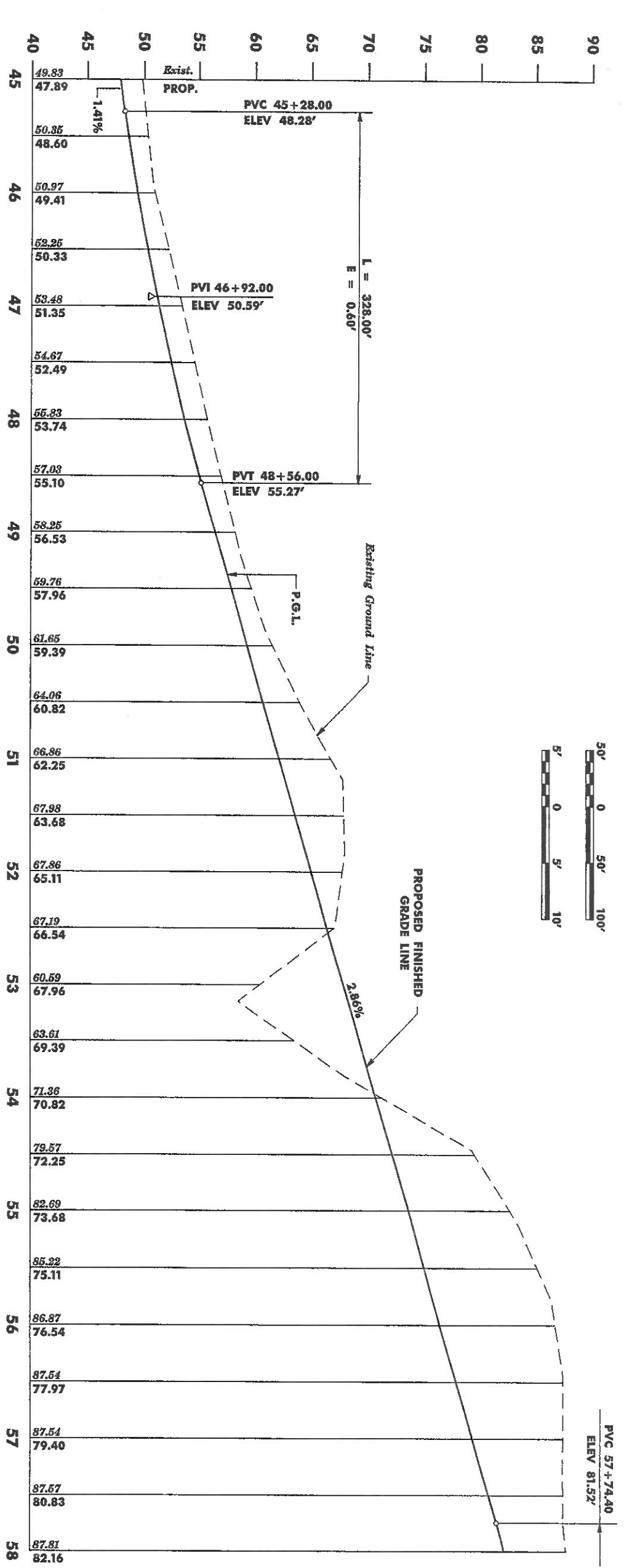
PROFILES

ROUTE 295

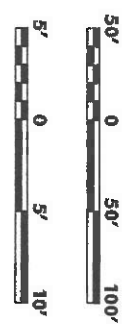
CONTRACT NO. 0100100

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

RD0007-3 - ORIGINAL SHEET



DESIGN SPEED = 40 MPH



NEW JERSEY DEPARTMENT OF TRANS

PROFILES

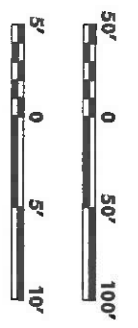
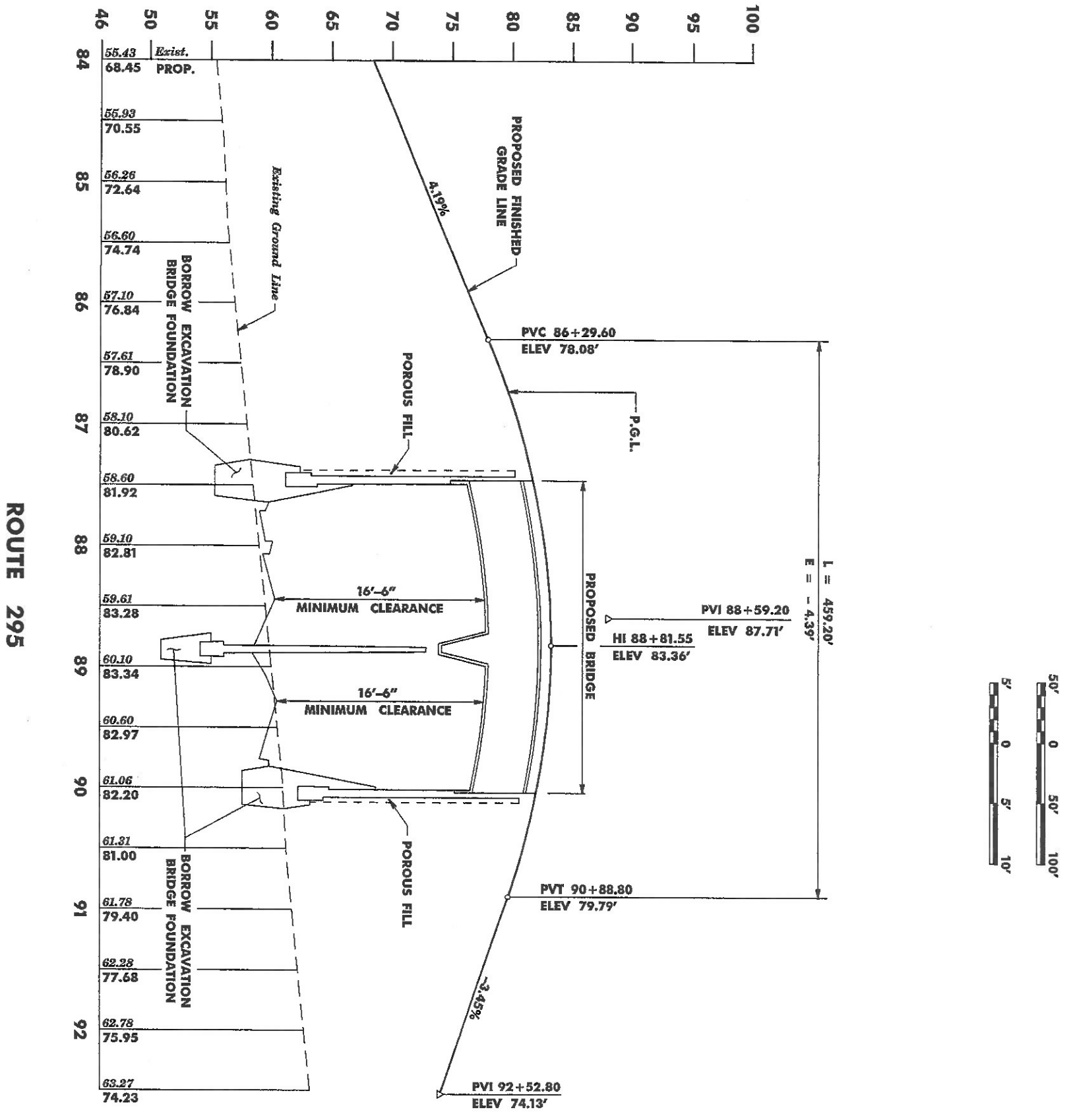
ROUTE 295

CONTRACT NO. 0100100

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

STATE
N.J.

BDC007-3 - ORIGINAL SHEET

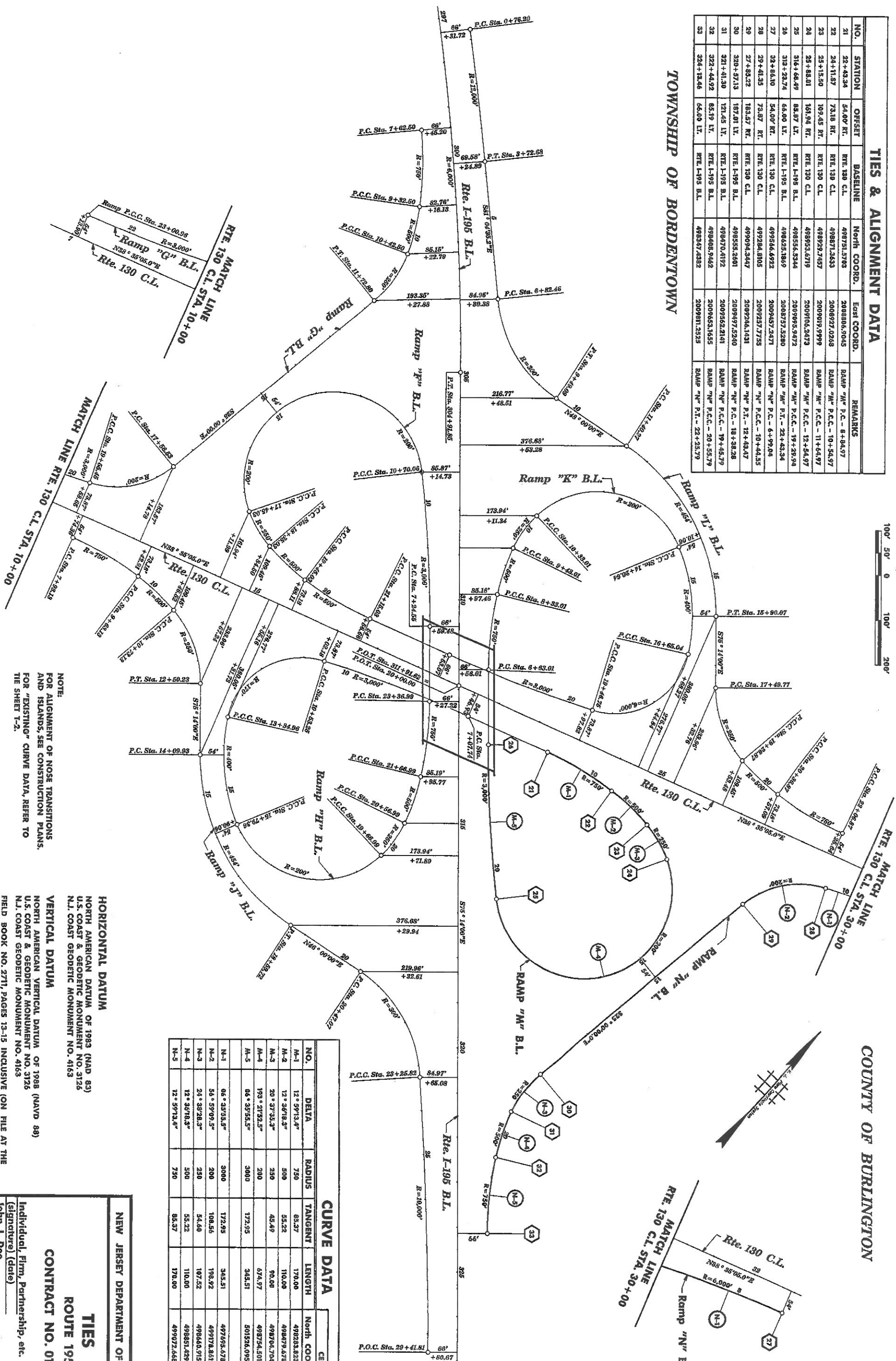


NEW JERSEY DEPARTMENT OF TRANSPORTATION
PROFILES
 ROUTE 295
 CONTRACT NO. 010011C

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

TIES & ALIGNMENT DATA

NO.	STATION	OFFSET	BASELINE	NORTH COORD.	EAST COORD.	REMARKS
21	22+43.34	54.00' RT.	RTE. 130 C.L.	498751.3703	2008306.9045	RAMP "M" P.C.C. - 8+94.97
22	24+11.57	73.18' RT.	RTE. 130 C.L.	498871.3633	2008927.0268	RAMP "M" P.C.C. - 10+54.97
23	25+15.50	109.45' RT.	RTE. 130 C.L.	498923.7497	2009015.9999	RAMP "M" P.C.C. - 11+44.97
24	25+88.01	161.94' RT.	RTE. 130 C.L.	498953.6719	2009106.2473	RAMP "M" P.C.C. - 12+54.97
25	31+68.49	95.97' LT.	RTE. 1-195 B.L.	498556.5344	2009895.5472	RAMP "M" P.C.C. - 19+35.94
26	31+23.74	54.00' LT.	RTE. 1-195 B.L.	498625.1859	2008757.5280	RAMP "M" P.C.C. - 6+99.04
27	27+83.22	73.87' RT.	RTE. 130 C.L.	499094.3447	2009246.1331	RAMP "M" P.C.C. - 18+38.28
28	29+41.35	183.57' RT.	RTE. 130 C.L.	499284.8105	2009497.5240	RAMP "M" P.C.C. - 19+43.47
29	27+83.22	183.57' RT.	RTE. 1-195 B.L.	499355.2801	2009497.5240	RAMP "M" P.C.C. - 19+43.47
30	32+57.13	187.01' LT.	RTE. 1-195 B.L.	499470.4192	2009562.2141	RAMP "M" P.C.C. - 19+43.47
31	32+41.39	121.45' LT.	RTE. 1-195 B.L.	499408.9462	2009553.1555	RAMP "M" P.C.C. - 20+55.79
32	32+44.92	85.19' LT.	RTE. 1-195 B.L.	499408.9462	2009553.1555	RAMP "M" P.C.C. - 22+23.79
33	32+12.46	65.00' LT.	RTE. 1-195 B.L.	499347.4282	2009811.2325	RAMP "M" P.C.C. - 22+23.79



CURVE DATA

NO.	DELTA	RADIUS	TANGENT	LENGTH	CENTER POI
M-1	12° 59'13.4"	750	83.37	176.00	Eg
M-2	12° 36'18.3"	500	55.22	110.00	Eg
M-3	20° 27'33.3"	250	45.49	90.00	Eg
M-4	193° 21'53.5"	250	474.97	49274.5019	Eg
M-5	06° 35'53.5"	3000	172.35	344.51	Eg
N-1	06° 35'53.5"	3000	172.35	344.51	Eg
N-2	55° 59'09.5"	200	106.56	196.92	Eg
N-3	24° 38'28.3"	250	54.40	107.52	Eg
N-4	12° 36'18.3"	500	55.22	110.00	Eg
N-5	12° 59'13.4"	750	83.37	176.00	Eg

NOTE:
FOR ALIGNMENT OF NOSE TRANSITIONS
AND ISLANDS, SEE CONSTRUCTION PLANS.
FOR "EXISTING" CURVE DATA, REFER TO
THE SHEET T-2.

HORIZONTAL DATUM
NORTH AMERICAN DATUM OF 1983 (NAD 83)
U.S. COAST & GEODETIC MONUMENT NO. 3126
N.J. COAST GEODETIC MONUMENT NO. 4163

VERTICAL DATUM
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
U.S. COAST & GEODETIC MONUMENT NO. 3126
N.J. COAST GEODETIC MONUMENT NO. 4163

FIELD BOOK NO. 2711, PAGES 13-15 INCLUSIVE (ON FILE AT THE NJDOT REGION 3 FIELD SURVEY OFFICE - "PHONE: 609-388-4692")

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES

ROUTE 195

CONTRACT NO. 01000100

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 999999

100' 50' 0 100' 200'

COUNTY OF BURLINGTON

STATE
N.J.

ALIGNMENT DATA

NO.	STATION	OFFSET	BASELINE	North COORD.	East COORD.	REMARKS
J-1	7+93.13	0'	RAMP J	497,837.8012	2,008,077.8411	P.C.
J-2	9+63.13	0'	"	497,957.5922	2,008,197.9617	P.C.C.
J-3	10+73.13	0'	"	498,015.9683	2,008,290.9371	P.C.C.
J-4	12+50.23	0'	"	498,032.6733	2,008,463.5514	P.T.
J-5	14+09.93	0'	"	497,991.9710	2,008,617.9741	P.C.
J-6	18+59.73	0'	"	498,093.5802	2,009,037.4727	P.T.
J-7	20+47.07	0'	"	498,218.9485	2,009,176.6911	P.C.
J-8	23+25.82	0'	"	498,290.2473	2,009,435.8912	P.C.C.
J-9	29+41.81	0'	RAMP J	498,151.6831	2,010,035.9911	P.T.
J-10	31+63.24	66' RT.	RAMP Y.R.	497,901.0455	2,008,141.0921	P.C.
J-11	9+61.18	0'	RAMP J	497,956.3882	2,008,196.4401	P.C.C.
J-12	10+06.30	27' LT.	"	498,005.4439	2,008,218.0012	CTR. NOSE
J-13	10+59.67	22' LT.	RAMP J	498,029.4817	2,008,268.7816	P.C.
J-14	14+26.90	54' RT.	RAMP Y.R.	498,113.3773	2,008,297.7113	P.T.
J-15	22+16.16	22' LT.	RAMP J	498,313.3926	2,009,323.1422	P.C.C.
J-16	23+03.59	18.11' LT.	"	498,311.7412	2,009,416.1521	P.C.C.
J-17	23+25.82	18' LT.	"	498,307.9076	2,009,439.4051	CTR. NOSE
J-18	25+95.62	14' LT.	"	498,247.7655	2,009,702.8711	CTR. NOSE
J-19	23+59.01	10' RT.	"	498,273.9283	2,009,466.4412	P.R.C.
J-20	23+42.46	5.01' RT.	RAMP J	498,282.0763	2,009,451.2213	P.R.C.
A-1	9+61.00	0'	ACCESS RD. I	497,091.8573	2,007,413.6131	P.O.T.
A-2	10+36.00	0'	"	497,138.6362	2,007,354.9811	P.C.
A-3	11+14.54	0'	"	497,208.9086	2,007,347.0816	P.T.
A-4	16+37.00	0'	ACCESS RD. I	497,617.3077	2,007,672.9251	P.O.T.
A-5	0+27.11	43.01 LT.	RAMP Y.R.	497,079.6883	2,007,348.8719	P.C.C.
A-6	10+53.11	19.97 LT.	ACCESS RD. I	497,121.2272	2,007,344.7918	P.R.C.
A-7	11+14.54	15.00 LT.	ACCESS RD. I	497,218.2546	2,007,335.3615	P.T.
A-8	1+65.38	45.06 LT.	RAMP Y.R.	497,189.0445	2,007,433.5151	P.C.C.
A-9	1+18.43	51.25 LT.	RAMP Y.R.	497,156.2099	2,007,399.3919	P.C.C.
A-10	11+14.54	15.00 RT.	ACCESS RD. I	497,199.5482	2,007,358.8118	P.T.
ML-1	269+31.90	0'	B.L. RTE. 195	498,636.8467	2,004,430.9811	P.C.
ML-2	304+91.85	0'	"	498,773.3984	2,007,936.2814	P.T.
ML-3	367+64.56	0'	"	497,174.5944	2,014,001.8151	P.C.
ML-4	381+23.98	0'	"	496,739.9585	2,015,288.7713	P.T.
ML-5	415+52.99	0'	"	495,424.6530	2,018,455.4931	P.C.
ML-6	430+61.24	0'	"	494,953.1503	2,019,866.6510	P.T.
ML-7	461+27.31	0'	"	494,215.8176	2,022,863.7512	P.C.
ML-8	475+15.82	0'	"	493,766.9904	2,024,174.8615	P.T.
ML-9	504+05.93	0'	B.L. RTE. 195	492,598.0199	2,026,818.0001	P.O.T.

CURVE DATA

NO.	DELTA	RADIUS	TANGENT	LENGTH	North COORD.	East COORD.
JA	12° 59' 13.4"	750'	85.37	170.00	497,370.0433	2,008,664.1111
JB	12° 36' 18.3"	500'	55.22	110.00	497,565.8928	2,008,508.7312
JC	40° 35' 23.3"	250'	92.45	177.11	497,790.9330	2,008,399.8321
JD	56° 46' 00.0"	454'	245.31	449.81	498,430.9782	2,008,733.6815
JE	53° 50' 14.4"	300'	150.35	278.75	497,996.0088	2,009,377.4371
JE	3° 31' 45.6"	10,000'	308.09	615.98	488,481.9612	2,007,487.1551
JG	12° 50' 18.9"	350'	39.38	78.43	497,682.7572	2,008,414.6961
JH	2° 33' 48.3"	3,000'	67.12	134.22	496,242.3639	2,010,642.7719
JI	21° 26' 40.3"	250'	47.34	93.57	498,066.9674	2,009,365.2913
JI	1° 40' 59.9"	10,000'	146.91	293.79	488,520.8347	2,007,381.9241
JK	33° 39' 09.0"	30'	9.07	17.62	498,260.8233	2,009,430.0421
JL	33° 27' 44.5"	30'	9.02	17.52	498,303.3382	2,009,472.3911
RA	90° 00' 00.0"	50'	50.00	78.54	497,177.7162	2,007,386.1771
RB	88° 16' 24.1"	70'	67.92	107.85	497,174.5977	2,007,390.0712
RC	88° 08' 50.7"	30'	29.05	46.15	497,098.3459	2,007,325.3816
RD	163° 24' 21.6"	30'	205.72	85.56	497,180.8382	2,007,382.2681
RE	18° 09' 47.3"	150'	23.98	47.55	497,279.3449	2,007,313.7316
MA	33° 59' 43.0"	6,000'	1,834.10	3,559.95'	492,971.5674	2,006,406.9812
MB	7° 47' 20.0"	10,000'	680.76	1,359.42	487,504.8755	2,011,452.9811
MC	8° 38' 30.0"	10,000'	755.56	1,508.26	504,659.7371	2,022,291.2881
MD	9° 56' 40.0"	8,000'	696.00	1,388.51	486,450.6149	2,020,939.0401

SURVEY BASELINE DATA

NO.	North COORD.	East COORD.	REMARKS
TR-A	493,919.464	2,023,899.690	2"x3"x18" Hub
TR-B	494,065.847	2,023,252.052	IP - #5 Rebar (36")
TR-C	494,319.892	2,022,919.641	2"x3"x18" Hub
TR-D	494,139.989	2,022,189.984	D.H. (6" W. Corner Step)
TR-E	494,805.564	2,020,502.930	PK w/Ribbon
TR-F	496,584.600	2,018,347.601	PK w/Ribbon
TR-G	495,884.561	2,017,767.792	2"x3"x18" Hub
TR-H	496,160.653	2,017,167.175	IP - #5 Rebar (36")
TR-I	496,391.688	2,016,561.661	PK w/Ribbon
TR-J	496,664.396	2,016,033.945	DH Stub.
TR-K	496,534.626	2,015,609.300	DH Stub.
TR-L	497,031.642	2,015,202.612	2"x3"x18" Hub
TR-M	497,235.056	2,013,977.108	PK w/Ribbon
TR-N	497,310.665	2,013,521.615	PK w/Ribbon
TR-O	497,689.779	2,012,016.452	2"x3"x18" Hub
TR-P	497,084.782	2,010,893.275	2"x3"x18" Hub
TR-Q	498,131.948	2,010,286.160	2"x3"x18" Hub
TR-R	498,614.004	2,008,538.355	DH Stub.
TR-S	498,605.107	2,008,588.959	2"x3"x18" Hub
TR-T	498,931.933	2,007,750.951	2"x3"x18" Hub
TR-U	498,876.158	2,007,346.677	2"x3"x18" Hub
TR-V	498,628.028	2,020,694.244	USC&G Mon. #8140
TR-W	494,853.604	2,020,508.588	USC&G Mon. #8141
TR-X	490,480.510	2,009,264.223	USC&G Mon. #2126

NEW JERSEY DEPARTMENT OF TRANSP

TIES

ROUTE 195

CONTRACT NO. 01001001

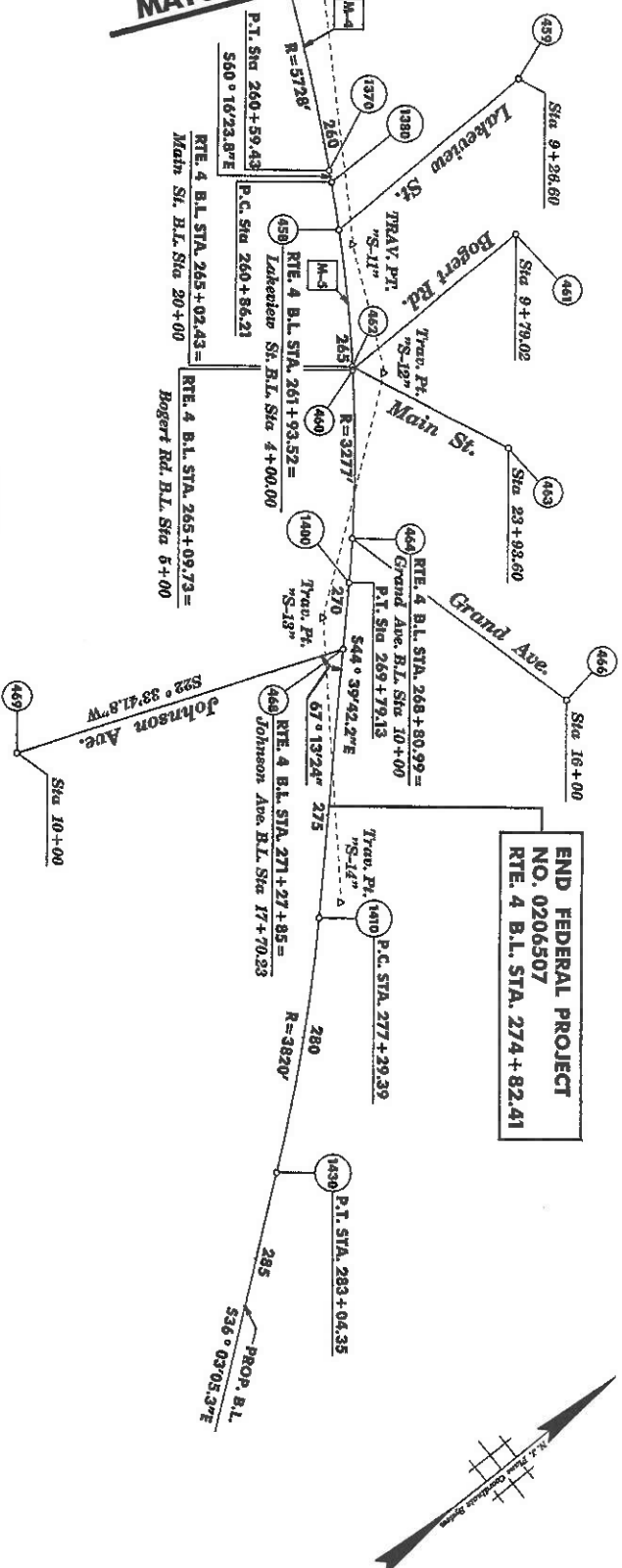
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LLC, NO. 99999

BOROUGH OF PARAMUS

COUNTY OF BERGEN

Acadestodex_plottablehalf-scale.plt

PLAN SHEET NO. T-2
MATCH LINE 256+50



END FEDERAL PROJECT
NO. 0206507
RTE. 4 B.L. STA. 274+82.41

CURVE DATA				CENTER POINT		
NO.	DELTA	RADIUS	TANGENT	LENGTH	North COORD.	East C
M-4	19° 28' 7.8"	5728'	524.76'	1044.59'	754957.522	216574
M-5	13° 36' 41.5"	3277'	449.24'	892.92'	751519.938	216595

TRAVERSE ALIGNMENT DATA

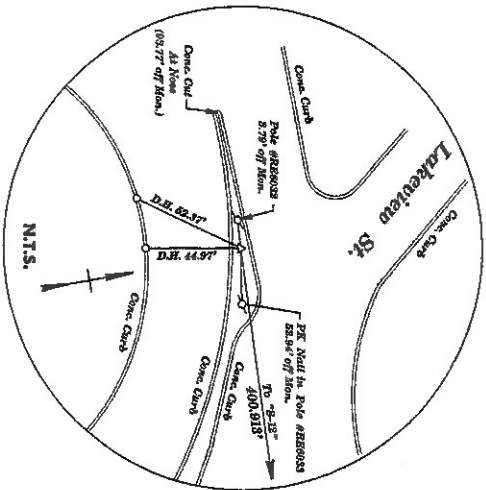
No.	Stations	Offset	Baseline	North Coord.	East Coord.	Benchmark
B-11	261+76.85	44.66' IA.	Bk. 4	707,638.1676	5,172,330.0938	Traverse Pk
B-12	265+69.39	160.21' IA.	Bk. 4	707,468.3476	5,172,693.6892	Traverse Pk
B-13	270+66.61	44.89' RA.	Bk. 4	707,082.2409	5,172,922.5378	Traverse Pk
B-14	278+70.87	47.72' IA.	Bk. 4	706,678.0988	5,173,476.6108	Traverse Pk

HORIZONTAL DATUM

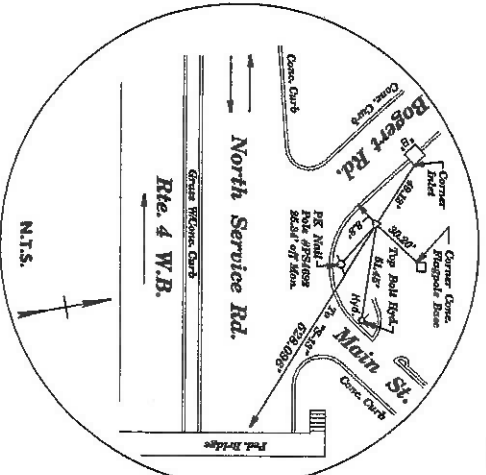
NORTH AMERICAN DATUM OF 1983 (NAD 83)
U.S. COAST & GEODETIC MONUMENT NO. 3126
N.J. GEODETIC MONUMENT NO. 4163

VERTICAL DATUM

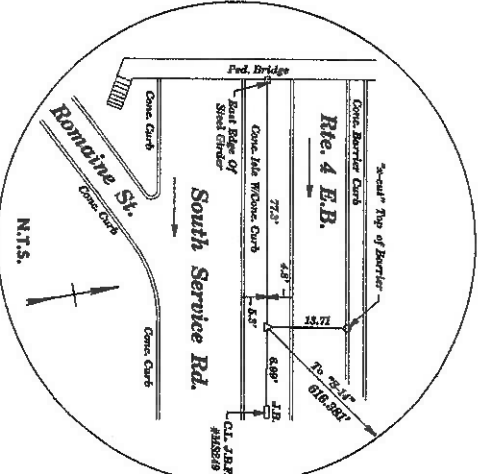
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
U.S. COAST & GEODETIC MONUMENT NO. 3126
N.J. GEODETIC MONUMENT NO. 4163
FIELD BOOK NO. 2711, PAGES 19-15 INCLUSIVE (ON FILE AT THE
FIELD AREA "B" FIELD SURVEY OFFICE - "PHONE: 001-388-46927")



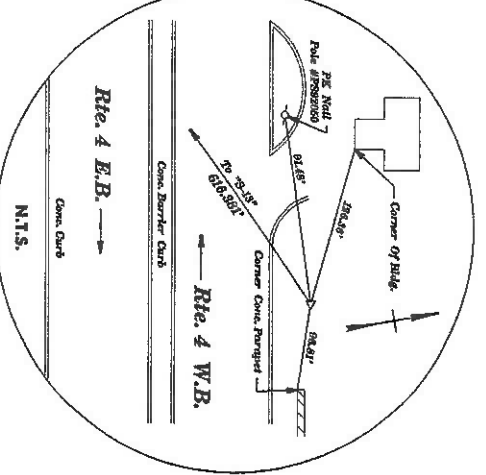
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Mon. Plug W/Punch (Mon. Box)
Sta. 261+76.88, 44.96' Lt.



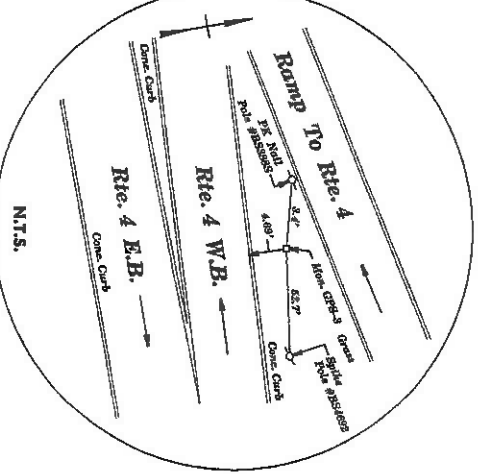
Trav. Pt. "S-12"
Conc. Mon. W/Drill Hole
Sta. 265+62.38, 100.21' Lt.



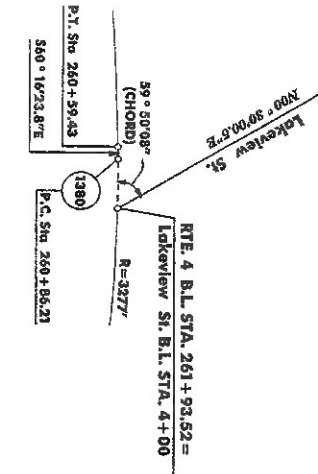
Trav. Pt. "S-13"
Mon. Plug W/Punch (Mon. Box)
Sta. 270+66.51, 44.99' Rt.



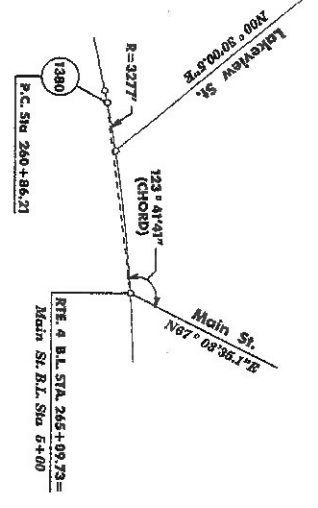
Trav. Pt. "S-14"
"x" Steel Angle Iron (3" Above Ground)
Sta. 276+75.87, 47.72' Lt.



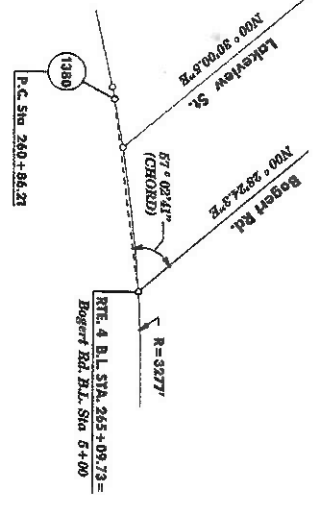
G.P.S. Monument #3, Elev. 73.964
Sta. 281+74.01, 44.96' Lt.



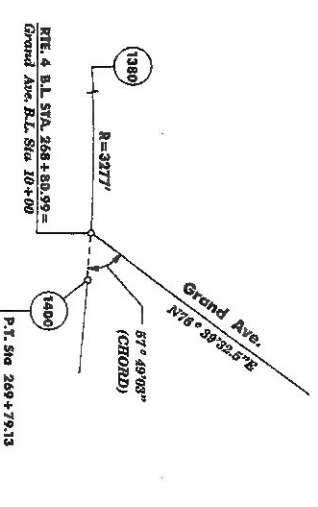
N.T.S.
Lakewood St.



N.T.S.
Main St.



N.T.S.
Bogert Rd.



N.T.S.
Grand Ave.



NEW JERSEY DEPARTMENT OF TRANSPORTATION
TIES
ROUTE 4
CONTRACT NO. 0100100

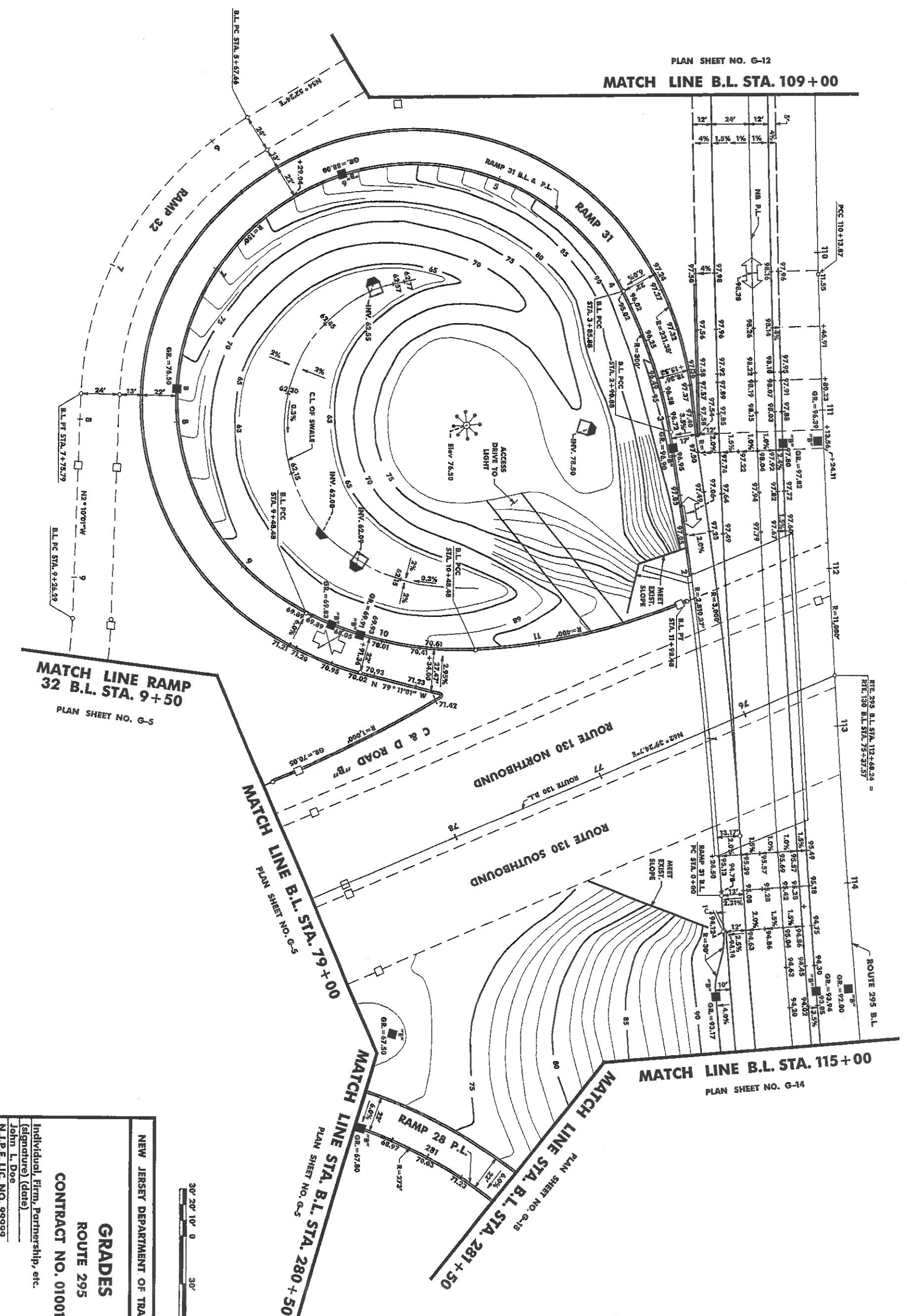
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 999999

BDC00T-3 - ORIGINAL SHEET

TOWNSHIP OF BORDENTOWN

COUNTY OF BURLINGTON

PLAN SHEET NO. G-12
MATCH LINE B.L. STA. 109+00



MATCH LINE RAMP 32 B.L. STA. 9+50
PLAN SHEET NO. G-5

MATCH LINE B.L. STA. 79+00
PLAN SHEET NO. G-5

MATCH LINE STA. B.L. STA. 280+50
PLAN SHEET NO. G-5

MATCH LINE B.L. STA. 115+00
PLAN SHEET NO. G-14

NEW JERSEY DEPARTMENT OF TRANSPORTATION

GRADES

ROUTE 295

CONTRACT NO. 0100100

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999



SCALE
N.T.

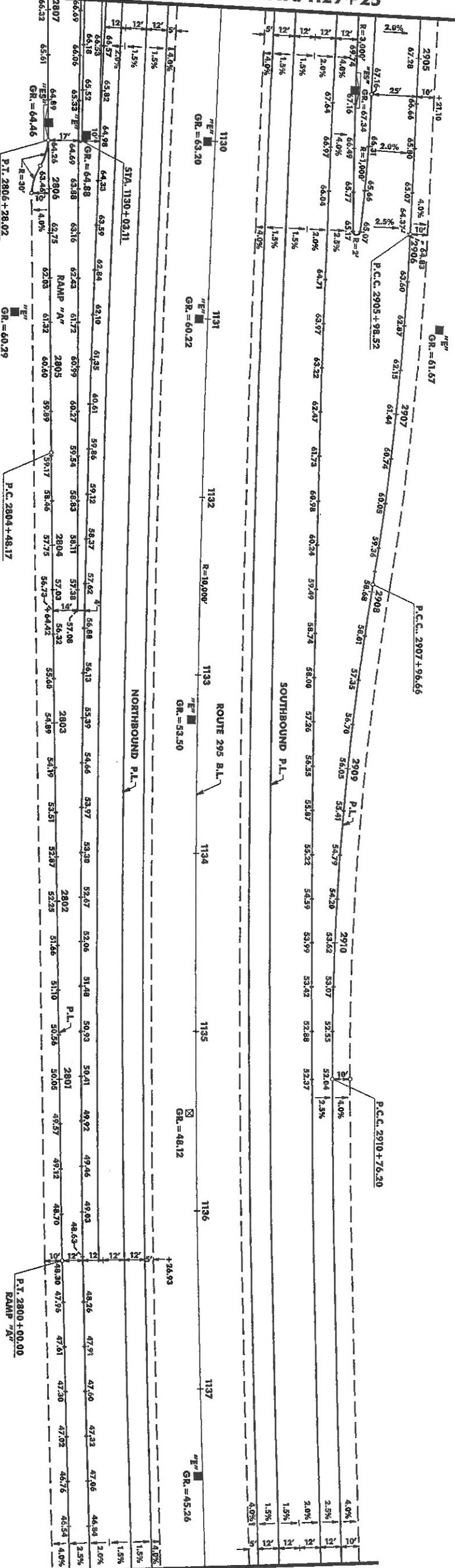
TOWNSHIP OF MOORESTOWN

COUNTY OF BURLINGTON

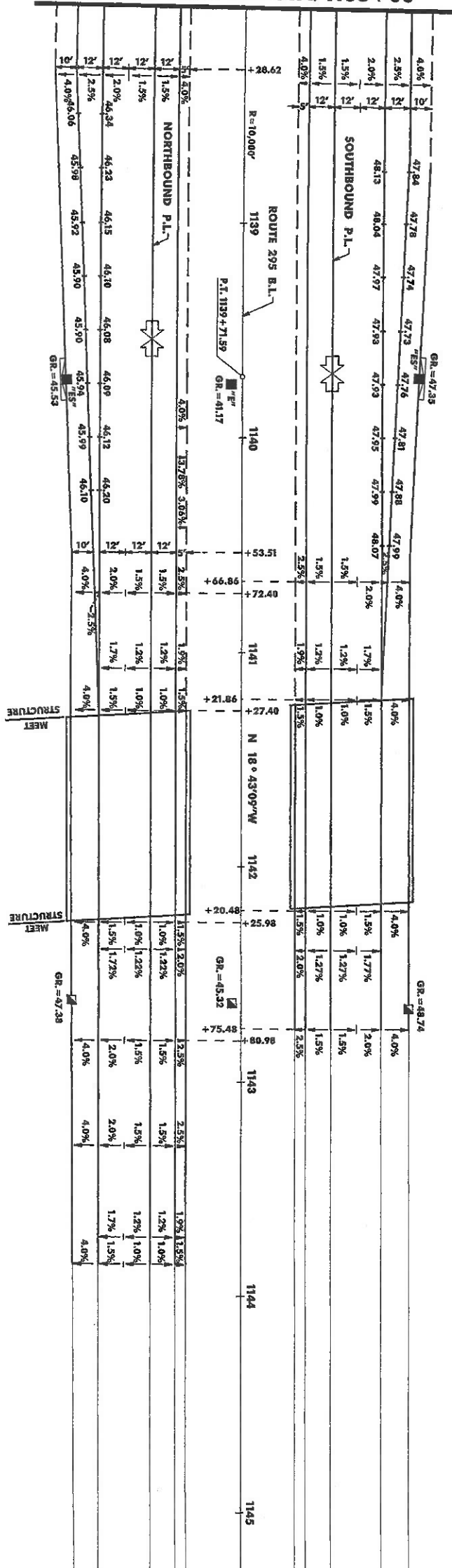
STATE
N.J.

PLAN SHEET NO. G-1

MATCH LINE B.L. STA. 1129 + 25



MATCH LINE B.L. STA. 1138 + 00



NEW JERSEY DEPARTMENT OF TRANSPORTATION
GRADES
 ROUTE 295
 CONTRACT NO. 0100100

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

30' 20' 10' 0 30' 6

LEGEND

- BREAKAWAY BARRICADES
- BREAKAWAY BARRICADES WITH SIGN
- CONSTRUCTION SIGNS
- DRUMS
- CONE
- PRECAST CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)
- DIRECTION OF TRAFFIC FLOW
- FLAGGER
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE
- SHOWING CAUTION MODE
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)
- TEMPORARY CRASH CUSHION, (all other approved)
- TEMPORARY CRASH CUSHION, (all other approved)
- BUFFER ZONE
- WORK AREA
- PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

CONSTRUCTION SIGN TABLE

SIGN DESIGNATION	MESSAGE	SIZE	AREA IN S.F.	REQUIRED QUANTITY IN NUMBER	TOTAL AREA IN S.F.
W20-1D	ROAD WORK 1/2 OR 1 MILE	48" x 48"	16	4	64
W20-5D(M)	LEFT TWO LANES CLOSED 3/4 MILE	48" x 48"	16	2	32
W20-5A	LEFT TWO LANES CLOSED 1500 FT.	48" x 48"	16	2	32
W20-5B	LEFT TWO LANES CLOSED 1000 FT.	48" x 48"	16	2	32
W4-2(S)	N/A	48" x 48"	16	4	64
W20-4(F(M))	SINGLE LANE AHEAD	48" x 48"	16	2	32
W1-6	N/A	48" x 24"	8	6	48
G20-2A	END ROAD WORK	60" x 24"	10	2	20
CONSTRUCTION SIGN TOTAL					324

GENERAL NOTES:

- 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.
- THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY 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.
- PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
- 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.
- ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR FLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER.
- CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY, OR PROPOSED TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
- MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS" UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE ENGINEER.
- CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
- 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.
- CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) SHALL BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION.
- 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.
- MOVING WORK AREAS IN A PERMANENT LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING TRUCK MOUNTED CRASH CUSHION THAT SHALL MOVE WITH THE WORK AREAS TO KEEP A 75 FOOT MINIMUM AND 175 FOOT MAXIMUM BUFFER IN ADVANCE OF EACH WORK AREA.
- THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE 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 STANDARD SPECIFICATIONS.
- TRAFFIC SAFETY SERVICES SHALL BE USED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL, SECTION 617.
- 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 PRECAST CONCRETE CURB CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.

- WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE ENGINEER.
- 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.
- THE PLACEMENT AND OR 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
- CONSTRUCTION ZONE SPEED LIMIT WILL BE DETERMINED BY THE REGIONAL TRAFFIC ENGINEER AT THE TIME OF OR DURING CONSTRUCTION, AS REQUESTED BY THE RESIDENT ENGINEER.

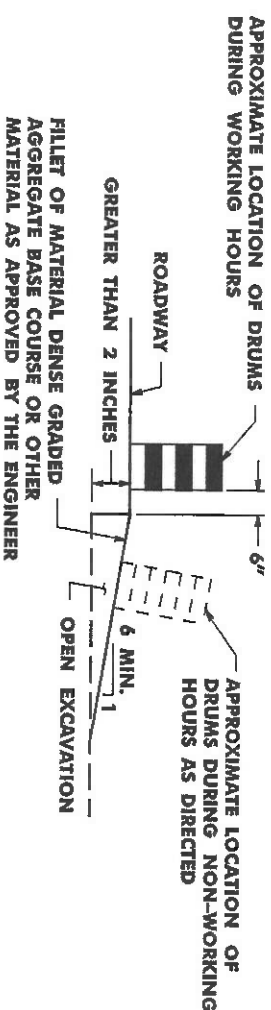
NOTES -- TRAFFIC CONTROL PLANS

- ONE LANE OF 11 FEET WIDE UNOBSTRUCTED TRAVELED WAY SHALL BE MAINTAIN ON ROUTE 38 AT ALL TIMES BETWEEN THE HOURS OF 8:00 P.M. AND 5:30 A.M.
- ROUTE 38 ROADWAY CONSTRUCTION FOR THE VARIOUS STAGES SHALL BE COMPLETED TO THE TOP OF THE BITUMINOUS CONCRETE SURFACE COURSE MIX 1-4 SO THAT THE FINAL SURFACE COURSE CAN BE PLACED IN ONE CONTINUOUS OPERATION DURING THE FINAL STAGE.
- LANE CLOSURES WILL NOT BE PERMITTED AFTER NOON OF THE DAY BEFORE, UNTIL NOON OF THE DAY AFTER THE FOLLOWING HOLIDAYS OR HOLIDAY WEEK PERIODS: NEW YEAR'S DAY, PRESIDENT'S DAY, GOOD FRIDAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, COLUMBUS DAY, THANKSGIVING, AND CHRISTMAS. LANE CLOSURES WILL NOT BE PERMITTED ON ELECTION DAY BETWEEN THE HOURS OF 7AM AND 8PM.
- THE CONTRACTOR SHALL PERFORM THE WORK ON ROUTE 38 IN ACCORDANCE WITH THE FOLLOWING SCHEDULES:

	MONDAY THRU THURSDAY	FRIDAY	SATURDAY	SUNDAY
NO CLOSURE	6:00 AM to 11:00 AM and 2:00 PM to 8:00 PM	6:00 AM to 11:00 AM and 2:00 PM to 8:00 PM		6:00 AM to 4:00 PM
ONE LANE CLOSURE	11:00 AM to 2:00 PM and 8:00 PM to 11:00 PM	11:00 AM to 2:00 PM and 8:00 PM to MIDNIGHT	6:00 AM to 9:00 PM	6:00 AM to 4:00 PM
TWO LANE CLOSURES	11:00 PM to 6:00 AM	MIDNIGHT TO 6:00 AM	6:00 AM to 9:00 PM to MIDNIGHT	MIDNIGHT to 6:00 AM and 4:00 PM to MIDNIGHT

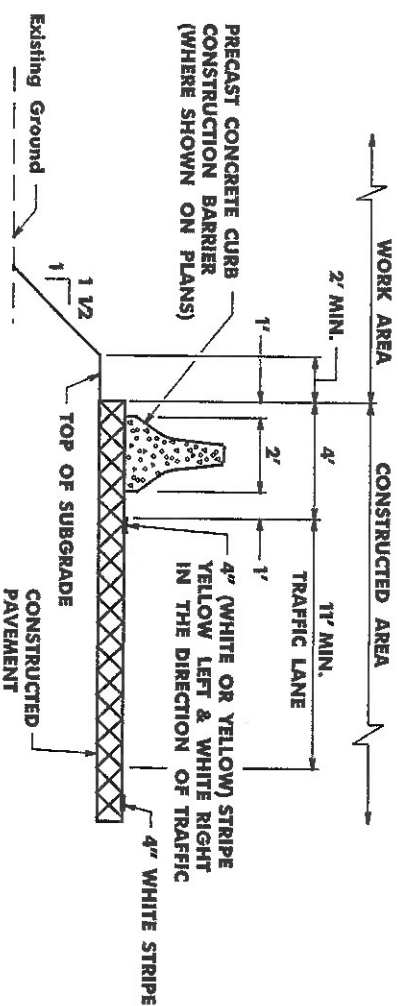
TRAFFIC CONTROL STAGING PLAN

NEW JERSEY DEPARTMENT OF TRANSPORTATION
 ROUTE 38
 CONTRACT NO. 0100100
 Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999



NOTE:
ESCAPE RAMPS MUST BE CONSTRUCTED AND MAINTAINED DURING NON-WORKING HOURS WHERE A VERTICAL DROP GREATER THAN 2 INCHES EXISTS ADJACENT TO TRAVELED LANE.

ESCAPE RAMP DETAIL



**TYPICAL SECTION
PLACEMENT OF PRECAST CONCRETE
CONSTRUCTION BARRIER**

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

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 NIDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
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.

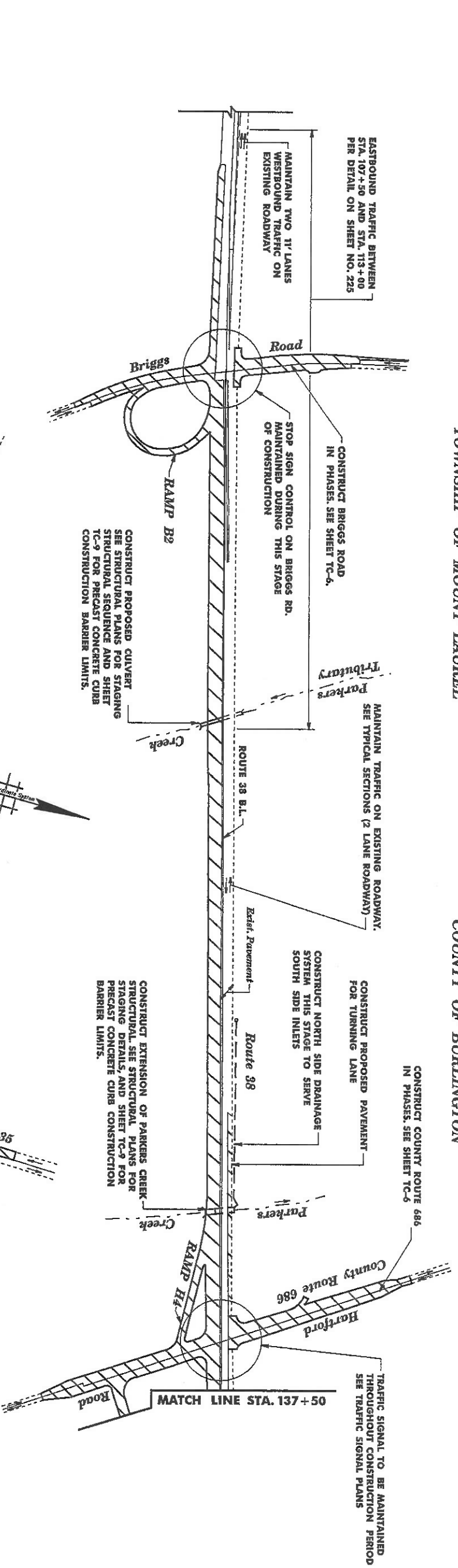
REGULATORY APPROACH SPEED OF TRAFFIC MILESHOUR	RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS				RECOMMENDED SPACING ALONG TANGENTS	
	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	MINIMUM TAPER LENGTH L - FOR LANE WIDTHS	MINIMUM TAPER LENGTH L - FOR LANE WIDTHS	MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET	
25	10.5:1	105	115	25	50	
30	15:1	150	165	30	60	
35	20.5:1	205	225	35	70	
40	27:1	270	300	40	80	
45	43:1	450	495	45	90	
50	50:1	500	550	50	100	
55	55:1	550	605	55	110	
60	60:1	600	660	60	120	
65	65:1	650	715	65	130	

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

N.T.S.

TOWNSHIP OF MOUNT LAUREL

COUNTY OF BURLINGTON



EASTBOUND TRAFFIC BETWEEN STA. 107+50 AND STA. 113+00 PER DETAIL ON SHEET NO. 225

CONSTRUCT BRIGGS ROAD IN PHASES. SEE SHEET TC-6.

MAINTAIN TRAFFIC ON EXISTING ROADWAY. SEE TYPICAL SECTIONS (2 LANE ROADWAY).

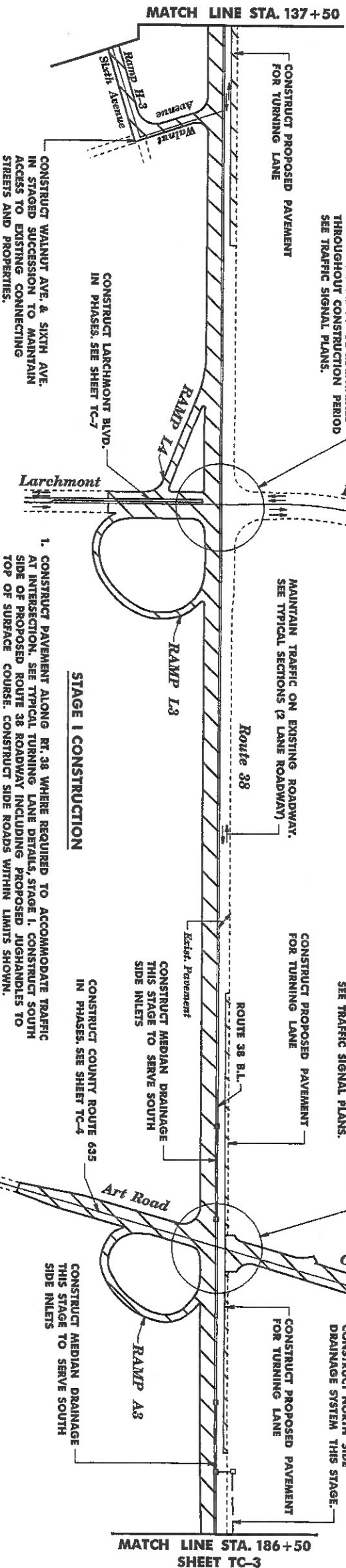
CONSTRUCT COUNTY ROUTE 686 IN PHASES. SEE SHEET TC-6.

TRAFFIC SIGNAL TO BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD SEE TRAFFIC SIGNAL PLANS

TRAFFIC SIGNAL TO BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD SEE TRAFFIC SIGNAL PLANS.

TRAFFIC SIGNAL TO BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD SEE TRAFFIC SIGNAL PLANS.

CONSTRUCT NORTH SIDE DRAINAGE SYSTEM THIS STAGE.



CONSTRUCT WALNUT AVE. & SIXTH AVE. IN STAGED SUCCESSION TO MAINTAIN ACCESS TO EXISTING CONNECTING STREETS AND PROPERTIES.

CONSTRUCT LARCHMONT BLVD. IN PHASES. SEE SHEET TC-7.

CONSTRUCT COUNTY ROUTE 635 IN PHASES. SEE SHEET TC-4.

CONSTRUCT MEDIAN DRAINAGE THIS STAGE TO SERVE SOUTH SIDE INLETS

CONSTRUCT MEDIAN DRAINAGE THIS STAGE TO SERVE SOUTH SIDE INLETS

STAGE I CONSTRUCTION

1. CONSTRUCT PAVEMENT ALONG RT. 38 WHERE REQUIRED TO ACCOMMODATE TRAFFIC AT INTERSECTION. SEE TYPICAL TURNING LANE DETAILS, STAGE I. CONSTRUCT SOUTH SIDE OF PROPOSED ROUTE 38 ROADWAY INCLUDING PROPOSED JUGHANDLES TO TOP OF SURFACE COURSE. CONSTRUCT SIDE ROADS WITHIN LIMITS SHOWN.
2. MAINTAIN TRAFFIC ON EXISTING RTE. 38 ROADWAY WITH ONE LANE IN EACH DIRECTION. AT SIGNALIZED INTERSECTIONS (HARTFORD RD., LARCHMONT BLVD. AND PARK RD.) PROVIDE SEPARATE TURNING LANES. (SEE TYPICAL TURNING LANE DETAIL).
3. MAINTAIN TRAFFIC ON SIDE ROADS (ONE LANE IN EACH DIRECTION WITH CONSTRUCTION PHASED AS PER DETAILS ON SIDE ROAD PHASING PLANS. ALSO SEE TEMPORARY PAVEMENT DETAIL.
4. FOR STRUCTURE STAGING SEE STRUCTURAL PLANS.
5. PROVIDE BITUMINOUS RAMPING BETWEEN EXISTING & NEW PAVEMENT AT INTERSECTIONS AS REQUIRED.
6. CONSTRUCT DRAINAGE ON NORTH SIDE AND MEDIAN AREAS OF RTE. 38 AS SHOWN TO SERVE NEW SOUTH SIDE ROADWAY INLETS.

STAGE I CONSTRUCTION - TRAFFIC MAINTAINED ON EXISTING ROADWAY



NEW JERSEY DEPARTMENT OF TRANSPORTATION

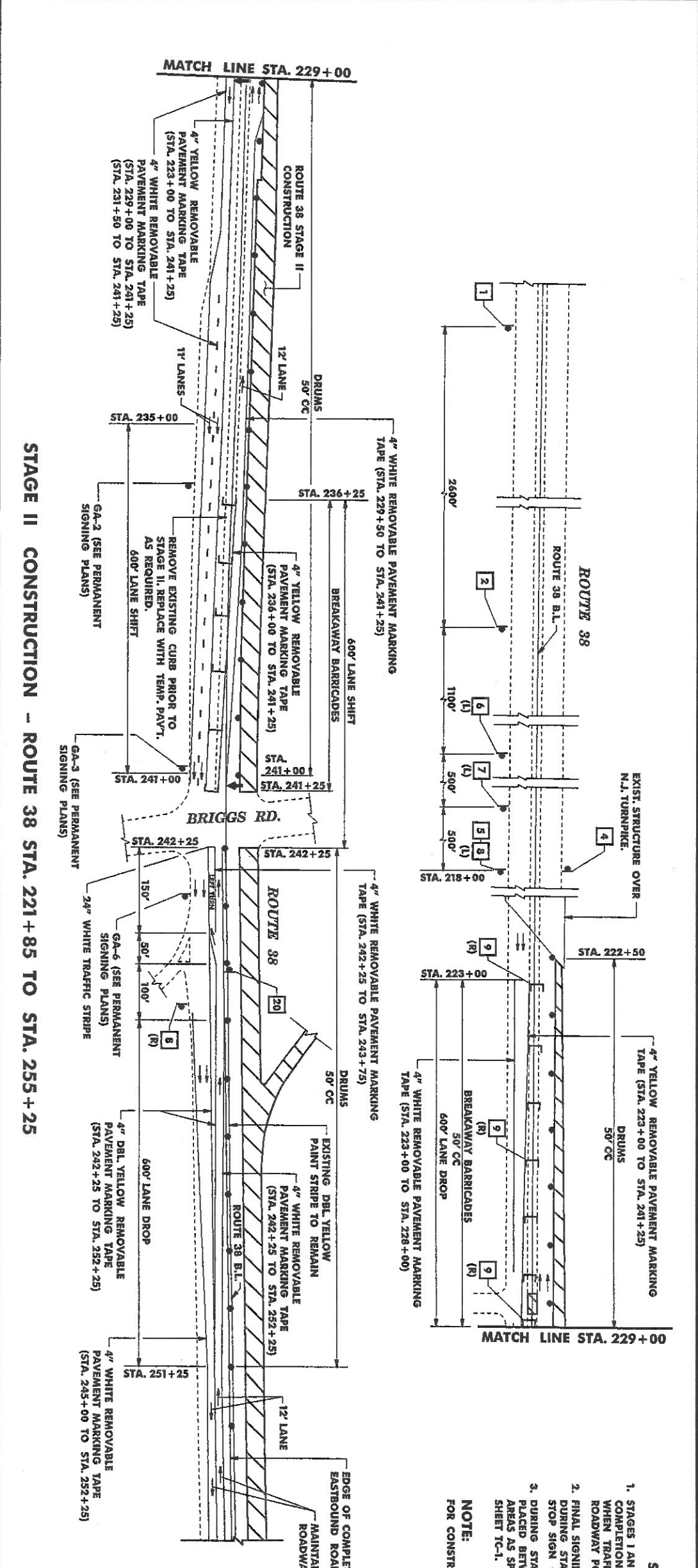
TRAFFIC CONTROL STAGING PLAN

ROUTE 38

CONTRACT NO. 01001C

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

RD00073 - ORIGINAL SHEET



STAGE II CONSTRUCTION - ROUTE 38 STA. 221+85 TO STA. 255+25

STAGE I CONSTRUCTION - ROUTE 38 STA. 221+85 TO STA. 255+25

STAGE CONSTRUCTION NOTES

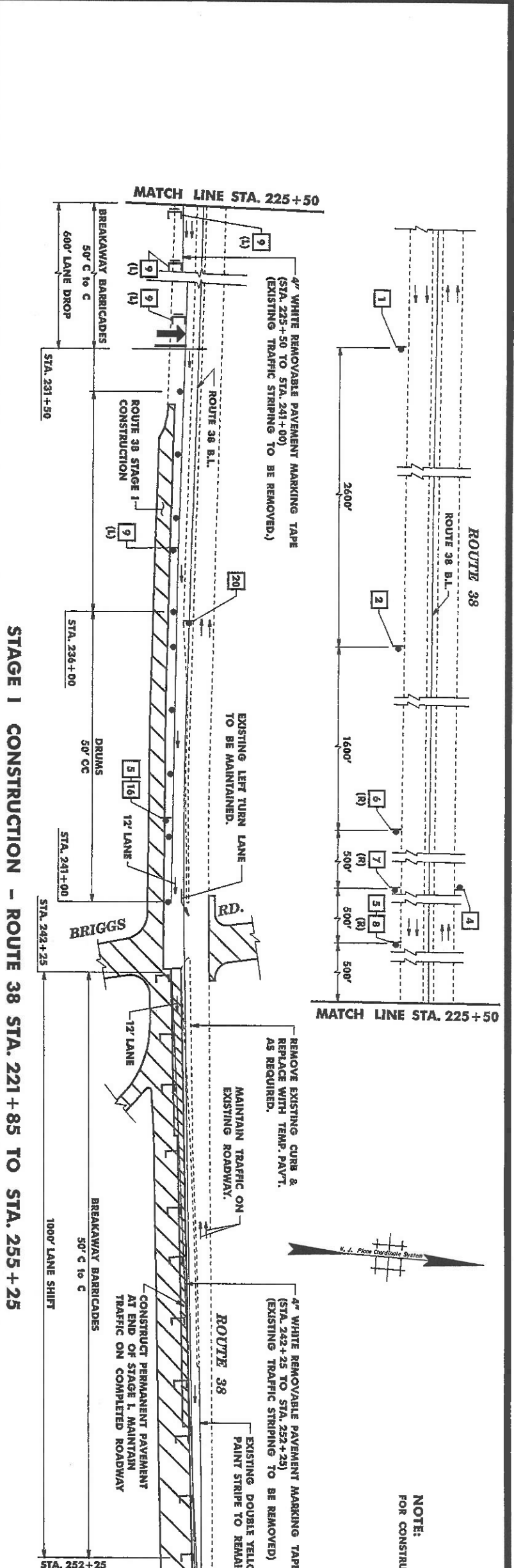
1. STAGES I AND II SHOWN. STAGE III CONSTRUCTION INCLUDES COMPLETION OF CENTER (MEDIAN) PORTION OF ROADWAY WHEN TRAFFIC IS MAINTAINED ON COMPLETED OUTER ROADWAY PORTION WITH NEW JUGHANDLES IN SERVICE.
2. FINAL SIGNING MUST BE IN PLACE FOR TRAFFIC OPERATION DURING STAGE III CONSTRUCTION. BRIGGS RD. TO BE STOP SIGN CONTROLLED UNTIL TRAFFIC SIGNALS ARE OPERATIONAL.
3. DURING STAGE III, TRAFFIC CONTROL DEVICES MUST BE PLACED BETWEEN ACTIVE TRAFFIC LANES AND WORK AREAS AS SPECIFIED IN TRAFFIC CONTROL TABLE ON SHEET TC-1.

NOTE:
FOR CONSTRUCTION SIGN LEGEND SEE SHEET TC-1.

NTS

NEW JERSEY DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL STAGING PLAN
ROUTE 38
CONTRACT NO. 010010

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 999999



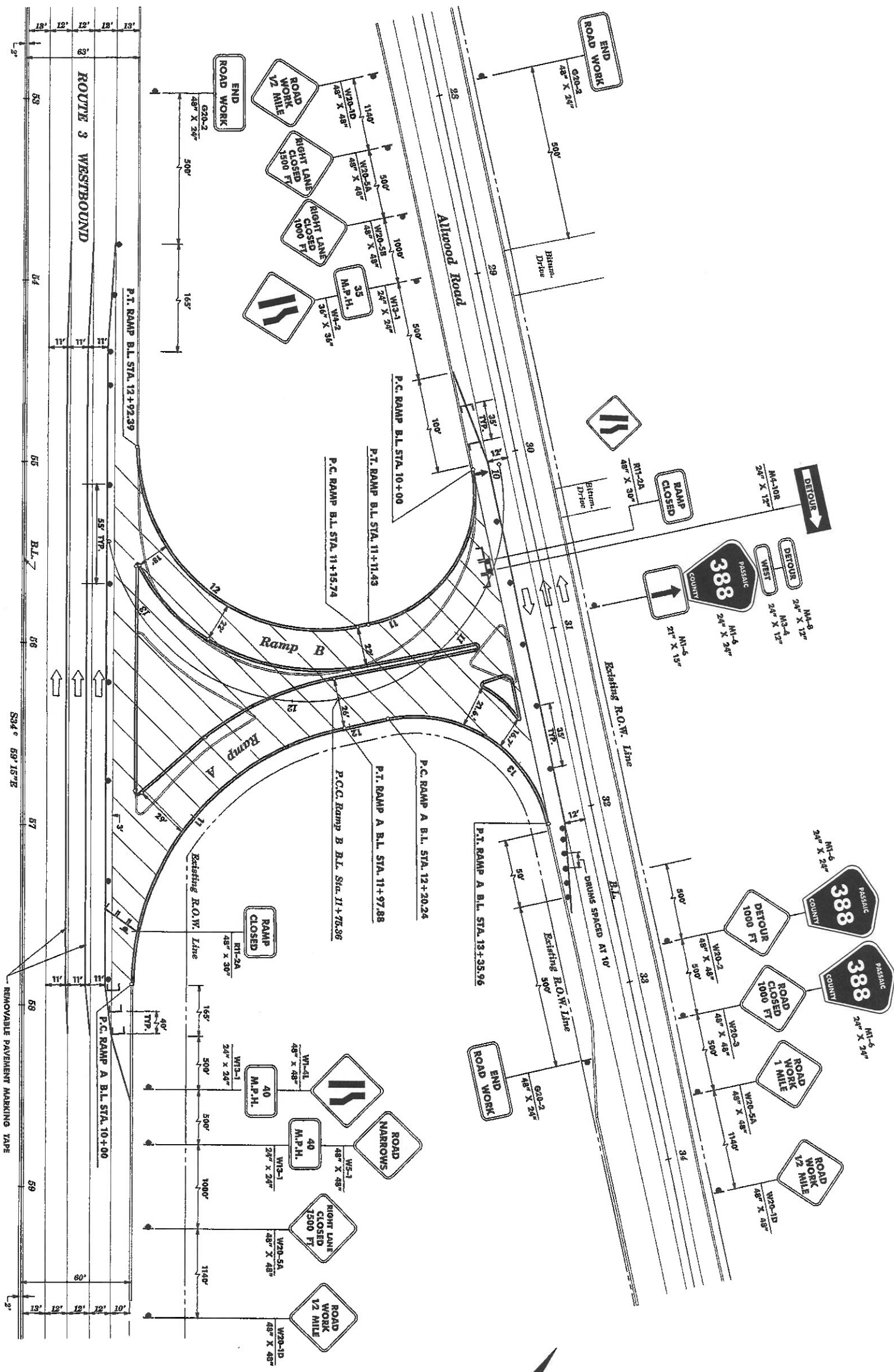
NOTE:
FOR CONSTRUCTION SIGN LEGEND SEE SHEET TC-1.

NTS

NEW JERSEY DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL STAGING PLAN
ROUTE 38
CONTRACT NO. 010010

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 999999

BDC007-3 - ORIGINAL SHEET



NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

ROUTE 10

CONTRACT NO. 01001C

Individual, Firm, Partnership, etc.




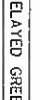
(signature) (date)

John L. Doe

N.J.P.E. LIC. NO. 99999

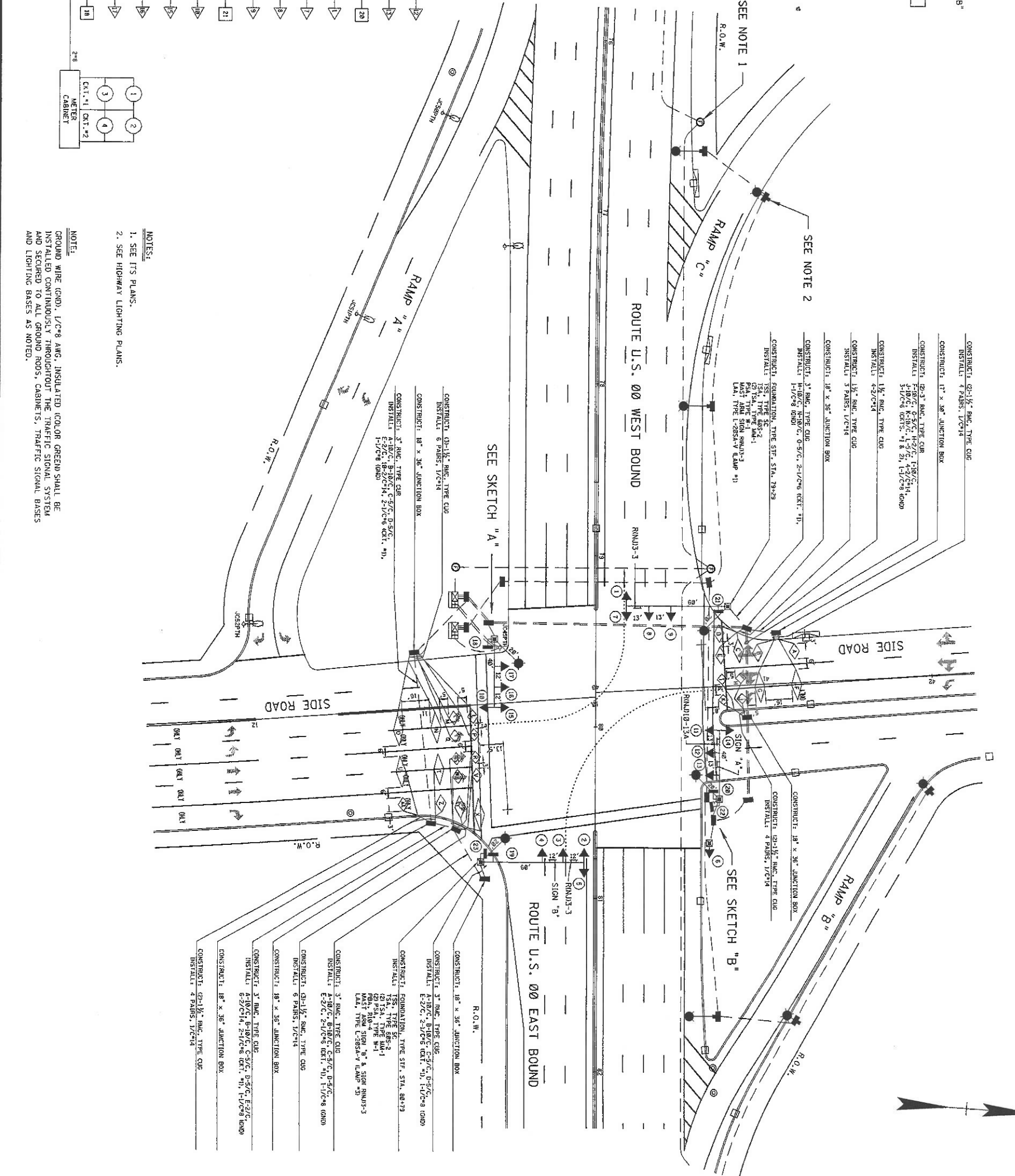
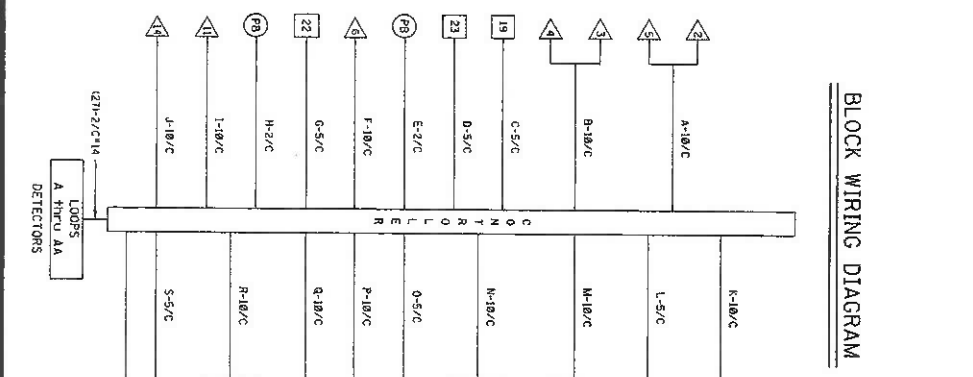
31A

SIGN LEGEND

-  SIGN "A"
48" x 18"
-  MAST ARM SIGN "B"
48" x 18"
-  NO TURNS
RNUJ3-3
60" x 12"
-  DELAYED GREEN
RNUJ10-13A
60" x 12"

REFERENCE

ACCOUNT	ELECTRICAL			
DIRECTORY	edetails			
DWG. NAME	k:\edetails\esamples\ampel.dgn			
PLOT DATE	23-APR-2001 11:55			
REVISION	DESCRIPTION	BY	CHECKED	DATE



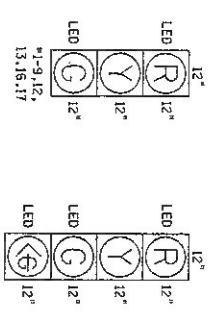
- NOTES:**
- SEE ITS PLANS.
 - SEE HIGHWAY LIGHTING PLANS.
- NOTE:**
- GROUND WIRE (GND) 1/2" x 8 ANG. INSULATED (COLOR GREEN) SHALL BE INSTALLED CONTINUOUSLY THROUGHOUT THE TRAFFIC SIGNAL SYSTEM AND SECURED TO ALL GROUND RODS, CABINETS, TRAFFIC SIGNAL BASES AND LIGHTING BASES AS NOTED.

LOOP DETECTOR SCHEM

DETECTOR NO./CHANNEL	LOOP	MODE	SIZE
1	A	PRESENCE	6' x 9'
1	B	PRESENCE	6' x 10'
1	C	PRESENCE	6' x 14'
1	D	PRESENCE	6' x 10'
2	E	PRESENCE	6' x 10'
2	F	PRESENCE	6' x 10'
2	G	PRESENCE	6' x 10'
3	H	PRESENCE	6' x 10'
3	I	PRESENCE	6' x 6'
3	J	PRESENCE	6' x 6'
3	K	PRESENCE	6' x 6'
3	L	PRESENCE	6' x 8'
4	M	PRESENCE	6' x 8'
4	N	PRESENCE	6' x 18'
4	O	PRESENCE	6' x 18'
5	P	PRESENCE	6' x 7'
5	Q	PRESENCE	6' x 7'
5	R	PRESENCE	6' x 7'
5	S	PRESENCE	6' x 7'
6	T	PRESENCE	6' x 18'
6	U	PRESENCE	6' x 18'
6	V	PRESENCE	6' x 8'
6	W	PRESENCE	6' x 8'
7	X	PRESENCE	6' x 19'
7	Y	PRESENCE	6' x 13'
7	Z	PRESENCE	6' x 10'
7	AA	PRESENCE	6' x 8'

* NUMBER OF TURNS TO BE DETERMINED IN

SIGNAL LEGEND



NOTE:
SIGNAL HEAD #6 IS TO BE MOUNTED AT A HEIGHT OF 12'.



NEW JERSEY DEPARTMENT OF TRANS

ELECTRICAL PLANS

ROUTE 00
MUNICIPALITY
COUNTY

ROUTE 00 & SIDE ROAD

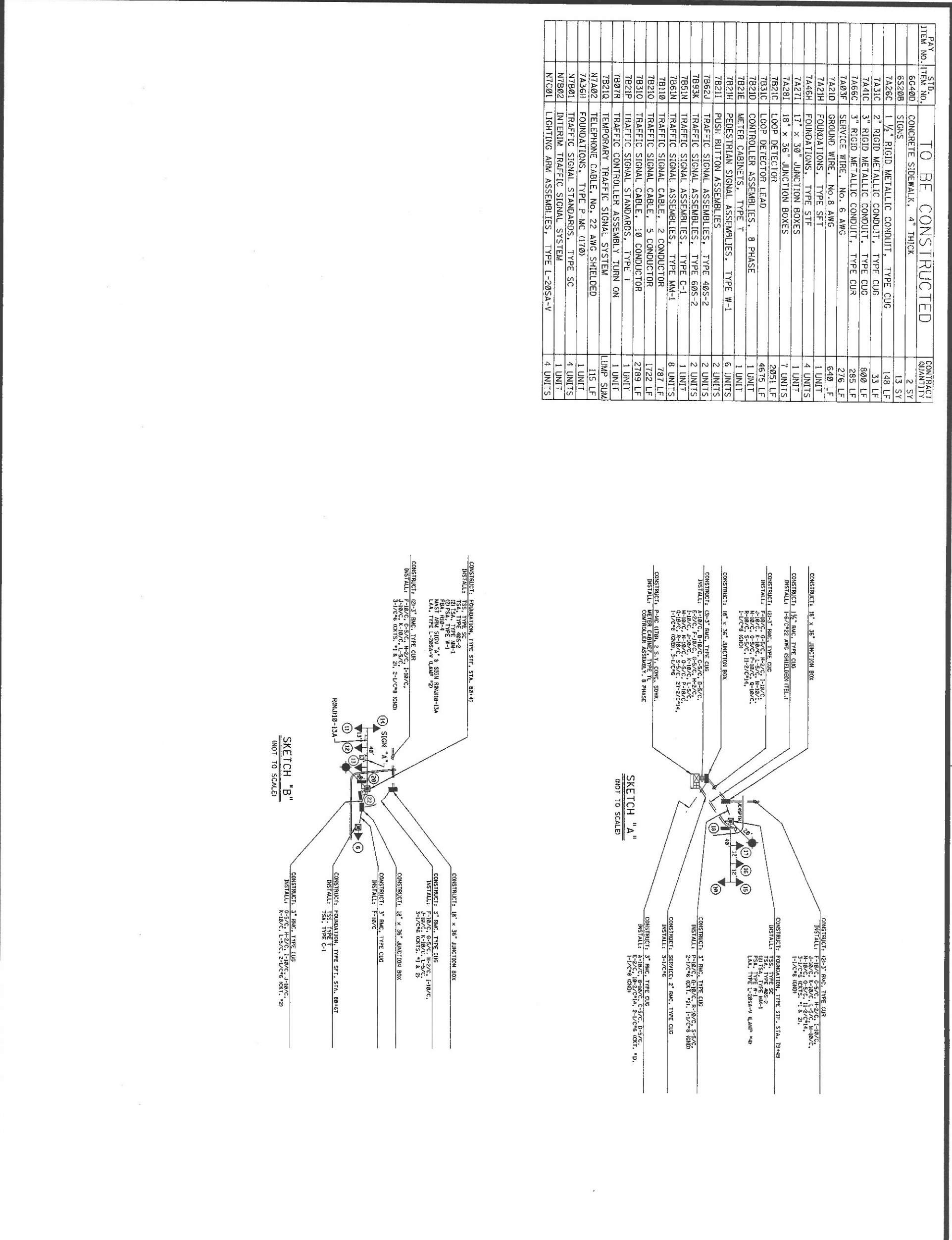
Individual, Firm, Partnership, etc.
(signature)(date)
John L. Doe
N.J.P.E. LLC, NO. 98999

REFERENCE

ITEM NO.	DESCRIPTION	CONTRACT QUANTITY
TO BE CONSTRUCTED		
66400	CONCRETE SIDEWALK, 4" THICK	2 SY
65208	SIGNS	13 SY
7A26C	1 1/2" RIGID METALLIC CONDUIT, TYPE CUG	148 LF
7A31C	2" RIGID METALLIC CONDUIT, TYPE CUG	33 LF
7A41C	3" RIGID METALLIC CONDUIT, TYPE CUG	800 LF
7A68C	3" RIGID METALLIC CONDUIT, TYPE CUR	285 LF
7A03F	SERVICE WIRE, No. 6 AWG	276 LF
7A21D	GROUND WIRE, No. 8 AWG	640 LF
7A21H	FOUNDATIONS, TYPE SFT	1 UNIT
7A21J	FOUNDATIONS, TYPE STE	4 UNITS
7A27I	17" x 30" JUNCTION BOXES	1 UNIT
7A28I	18" x 36" JUNCTION BOXES	7 UNITS
7B21C	LOOP DETECTOR	2051 LF
7B31C	LOOP DETECTOR LEAD	4675 LF
7B21D	CONTROLLER ASSEMBLIES, 8 PHASE	1 UNIT
7B21E	METER CABINETS, TYPE T	1 UNIT
7B21H	PEDESTRIAN SIGNAL ASSEMBLIES, TYPE W-1	6 UNITS
7B21I	PUSH BUTTON ASSEMBLIES	2 UNITS
7B62J	TRAFFIC SIGNAL ASSEMBLIES, TYPE 40S-2	2 UNITS
7B93K	TRAFFIC SIGNAL ASSEMBLIES, TYPE 60S-2	2 UNITS
7B51N	TRAFFIC SIGNAL ASSEMBLIES, TYPE C-1	1 UNIT
7B61N	TRAFFIC SIGNAL ASSEMBLIES, TYPE MM-1	8 UNITS
7B110	TRAFFIC SIGNAL CABLE, 2 CONDUCTOR	787 LF
7B210	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR	1722 LF
7B310	TRAFFIC SIGNAL CABLE, 10 CONDUCTOR	2789 LF
7B21P	TRAFFIC SIGNAL STANDARDS, TYPE T	1 UNIT
7B07R	TRAFFIC CONTROLLER ASSEMBLY TURN ON	1 UNIT
7B21Q	TEMPORARY TRAFFIC SIGNAL SYSTEM	LUMP SUM
N7A02	TELEPHONE CABLE, No. 22 AWG SHIELDED	115 LF
7A36H	FOUNDATIONS, TYPE P-MC (170)	1 UNIT
N7B01	TRAFFIC SIGNAL STANDARDS, TYPE SC	4 UNITS
N7B02	INTERIM TRAFFIC SIGNAL SYSTEM	1 UNIT
N7C01	LIGHTING ARM ASSEMBLIES, TYPE L-20SA-V	4 UNITS

NJDOT CADD DATA

ACCOUNT	ELECTRICAL			
DIRECTORY	edetails			
DWG. NAME	R:\edetails\esamples\smpe1.dgn			
PLOT DATE	23-APR-2001 15:20	REVISION	DESCRIPTION	BY
		CHECKED		DATE



SKETCH "A" (NOT TO SCALE)

SKETCH "B" (NOT TO SCALE)



NEW JERSEY DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLANS

ROUTE 00 CONTRACT

MUNICIPALITY COUNTY

ROUTE 00 & SIDE ROAD

Individual, Firm, Partnership, etc.

(signature)

John L. Doe

N.J.P.E. LLC, NO. 98998

STATE	FEDERAL PROJECT NO.	SHEET
N.J.		

TOWNSHIP OF XXXXXX ROUTE 00 & SIDE ROAD COUNTY OF XXXXXX

SIGNAL INDICATIONS

WITHOUT PEDESTRIAN ACTUATION

1-9, 10,11 12,13 14,15 16,17 18-21 22,23 TIME (sec)
I II

1. Rte. U.S. 00 R.O.W. G R R R R R W DW DW 30-10 60-35
Ped. Clear G R R R R R FDW DW 25 25
CHANGE Y R R R R R DW DW 5* 5**
CLEARANCE R R R R R DW DW 2 2

2. Side Rd. S/B R.O.W. R R R R G/<G- G DW DW 7-17 7-22
CHANGE R R R R Y Y DW DW 4 4
CLEARANCE R R R R R DW DW 3 3

3. Side Rd. N/B R.O.W. R G/<G- G R R R DW DW 7-17 7-17
CHANGE R R Y Y Y R DW DW 4 4
CLEARANCE R R R R R DW DW 3 3

WITH PEDESTRIAN ACTUATION

1. Rte. U.S. 00 R.O.W. G R R R R R W DW DW 5 35
Ped. Clear G R R R R R FDW DW 25 25
CHANGE Y R R R R R DW DW 5* 5**
CLEARANCE R R R R R DW DW 2 2

2. Side Rd. S/B R.O.W. R R R R G/<G- G DW DW 7 7
CHANGE R R R R Y Y DW DW 4 4
CLEARANCE R R R R R DW DW 3 3

3. Side Rd. N/B R.O.W. R G/<G- G R R R DW DW 5 5
Ped. Clear G/<G- G R R R FDW DW 27 27
CHANGE R R Y Y Y R DW DW 4 4
CLEARANCE R R R R R DW DW 3 3
EMERGENCY Y R R R R DARK DARK

* An Offset of 8 seconds is to be measured from the beginning of yellow to Route U.S. 00 at Reference Road to the beginning of yellow to Route U.S. 00 at this Intersection.
** An Offset of 0 seconds is to be measured from the beginning of yellow to Route U.S. 00 at this Intersection.

Memory-disconnected

Vehicle Extension-2 seconds

Manual Control-disconnected

Timing Schedule II (120 seconds Background Cycle) is to be in effect Monday-Friday, 6:30 a.m.-9:00 a.m.
Timing Schedule I (90 seconds Background Cycle) is to be in effect all other times.

The Side Road N.B. right turn loops are to be equipped with a 10 second delay.

(NOTE: TEXT HAS BEEN ENLARGED FOR VISUAL PRESENTATION IN THE SAMPLE PLAN SET.)

ACCOUNT	ELECTRICAL				
DIRECTORY	edetails				
DWG. NAME	ki:edetails@esamples@empel.dgn				
PLOT DATE	23-APR-2001 12:00	REVISION	DESCRIPTION	BY	CHECKED DATE

REFERENCE

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLANS

ROUTE 00 CONTRACT COUNTY
MUNICIPALITY ROUTE 00 & SIDE ROAD

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

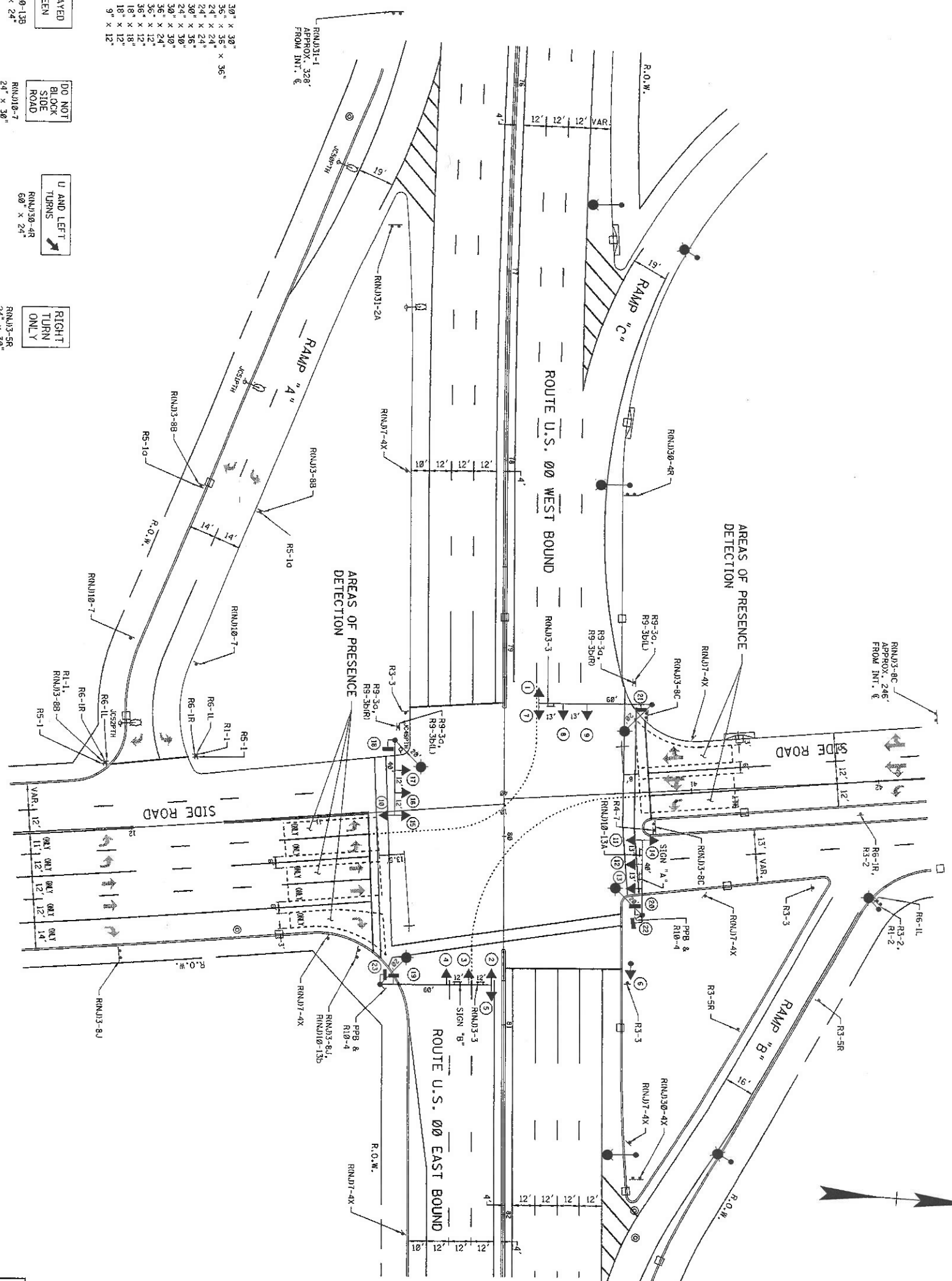
REFERENCE

NJDOT CADD DATA

ACCOUNT	ELECTRICAL
DIRECTORY	edetails
DWG. NAME	k:\edetails\esamples\smpl.dgn
PLOT DATE	23-APR-2001 11:54

- SIGN LEGEND**
- R1-1 STOP 30" x 30"
 - R1-2 YIELD 36" x 36"
 - R1-3 NO LEFT TURN (SYMBOL) 24" x 24"
 - R1-4 NO LEFT TURN (TEXT) 24" x 24"
 - R2-1 NO LEFT TURN (SYMBOL) 24" x 24"
 - R2-2 NO LEFT TURN (TEXT) 24" x 24"
 - R2-3 NO LEFT TURN (SYMBOL) 24" x 24"
 - R2-4 NO LEFT TURN (TEXT) 24" x 24"
 - R2-5 NO LEFT TURN (SYMBOL) 24" x 24"
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 - R2-98 NO LEFT TURN (TEXT) 24" x 24"
 - R2-99 NO LEFT TURN (SYMBOL) 24" x 24"
 - R2-100 NO LEFT TURN (TEXT) 24" x 24"

- NO TURNS RNUJ3-3 60" x 12"
- DELATED GREEN RNUJ10-13A 60" x 12"
- DELATED GREEN RNUJ10-13B 24" x 24"
- DO NOT BLOCK SIDE ROAD RNUJ10-7 24" x 30"
- U AND LEFT TURNS RNUJ30-4R 60" x 24"
- RIGHT TURN ONLY RNUJ3-5R 24" x 30"
- ALL TURNS FROM RIGHT LANE RNUJ31-1 60" x 36"
- NO TURNS ONLY RNUJ3-8B 30" x 30"



- SIGNAL LEGEND**
- LED 12" (R) 12"
 - LED 12" (Y) 12"
 - LED 12" (G) 12"
 - LED 12" (R) 12"
 - LED 12" (Y) 12"
 - LED 12" (G) 12"
 - LED 12" (R) 12"
 - LED 12" (Y) 12"
 - LED 12" (G) 12"

NOTE:
SIGNAL HEAD #6 IS TO BE MOUNTED AT A HEIGHT OF 12'.
30' 20' 10' 0' 30' 0'

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING AND SAFE TRAFFIC SIGNAL PLAN

ROUTE	00 & SIDE ROAD
MUNICIPALITY	
DESIGN APPROVED - BUREAU OF TRAFFIC SIGNAL & SAFETY ENGINEERING	
CHECKED	
SUBMITTED	
APPROVED	
DATE	
BY	
DESCRIPTION	
REVISION	

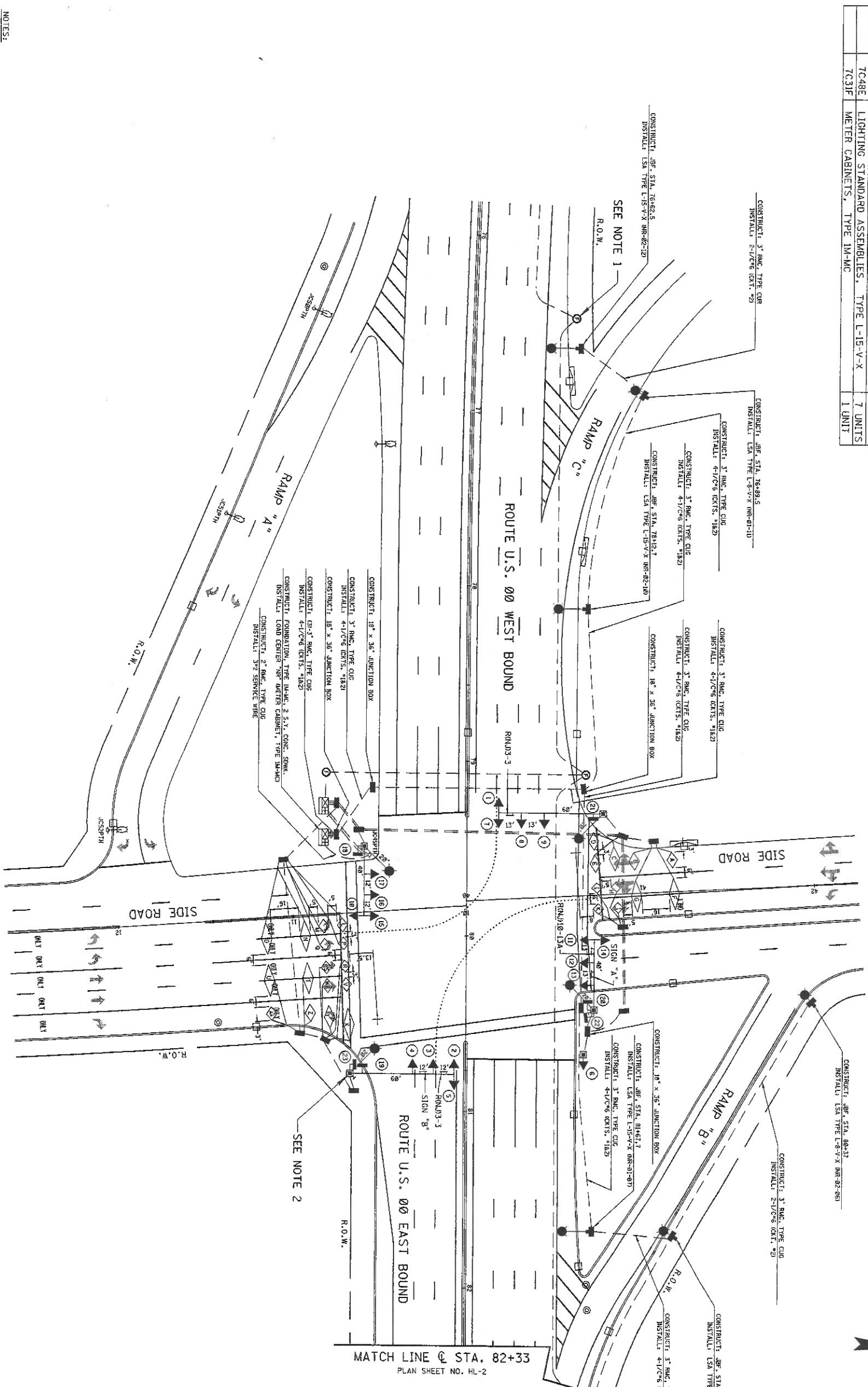
COI

TS-XX

ITEM NO.	STD.	TO BE CONSTRUCTED	CONTRACT QUANTITY
6G40D	CONCRETE SIDEWALK, 4" THICK	2 SY	
7A31C	2" RIGID METALLIC CONDUIT, TYPE CUG	28 LF	
7A41C	3" RIGID METALLIC CONDUIT, TYPE CUG	669 LF	
7A66C	3" RIGID METALLIC CONDUIT, TYPE CUR	272 LF	
7A06E	MULTIPLE LIGHTING WIRE, NO. 6 AWG	6562 LF	
7A02F	SERVICE WIRE, NO. 2 AWG	246 LF	
7A81H	FOUNDATIONS, TYPE 1M-MC	1 UNIT	
7A21I	JUNCTION BOX FOUNDATIONS	10 UNITS	
7A28I	18" x 36" JUNCTION BOXES	4 UNITS	
7C28E	LIGHTING STANDARD ASSEMBLIES, TYPE L-8-V-X	3 UNITS	
7C48E	LIGHTING STANDARD ASSEMBLIES, TYPE L-15-V-X	7 UNITS	
7C31F	METER CABINETS, TYPE 1M-MC	1 UNIT	

REFERENCE

ACCOUNT	ELECTRICAL				
DIRECTORY	edetails				
DWG. NAME	k:\edetails\esamples\smpei.dgn				
PLOT DATE	23-APR-2001 11:56	REVISION	DESCRIPTION	BY	CHECKED
					DATE



- NOTES:
- SEE ITS PLANS.
 - SEE TRAFFIC SIGNAL ELECTRICAL PLANS.



NEW JERSEY DEPARTMENT OF TRANS
HIGHWAY LIGHTING PLAN

ROUTE 00
 MUNICIPALITY
 COUNTY

ROUTE 00 & SIDE ROAD

Individual, Firm, Partnership, etc.
 Signature: (dofra)
 John L. Doe
 N.J.P.E. LIC. NO. 98999

STATE	FEDERAL PROJECT NO.	SHEET
N.J.		

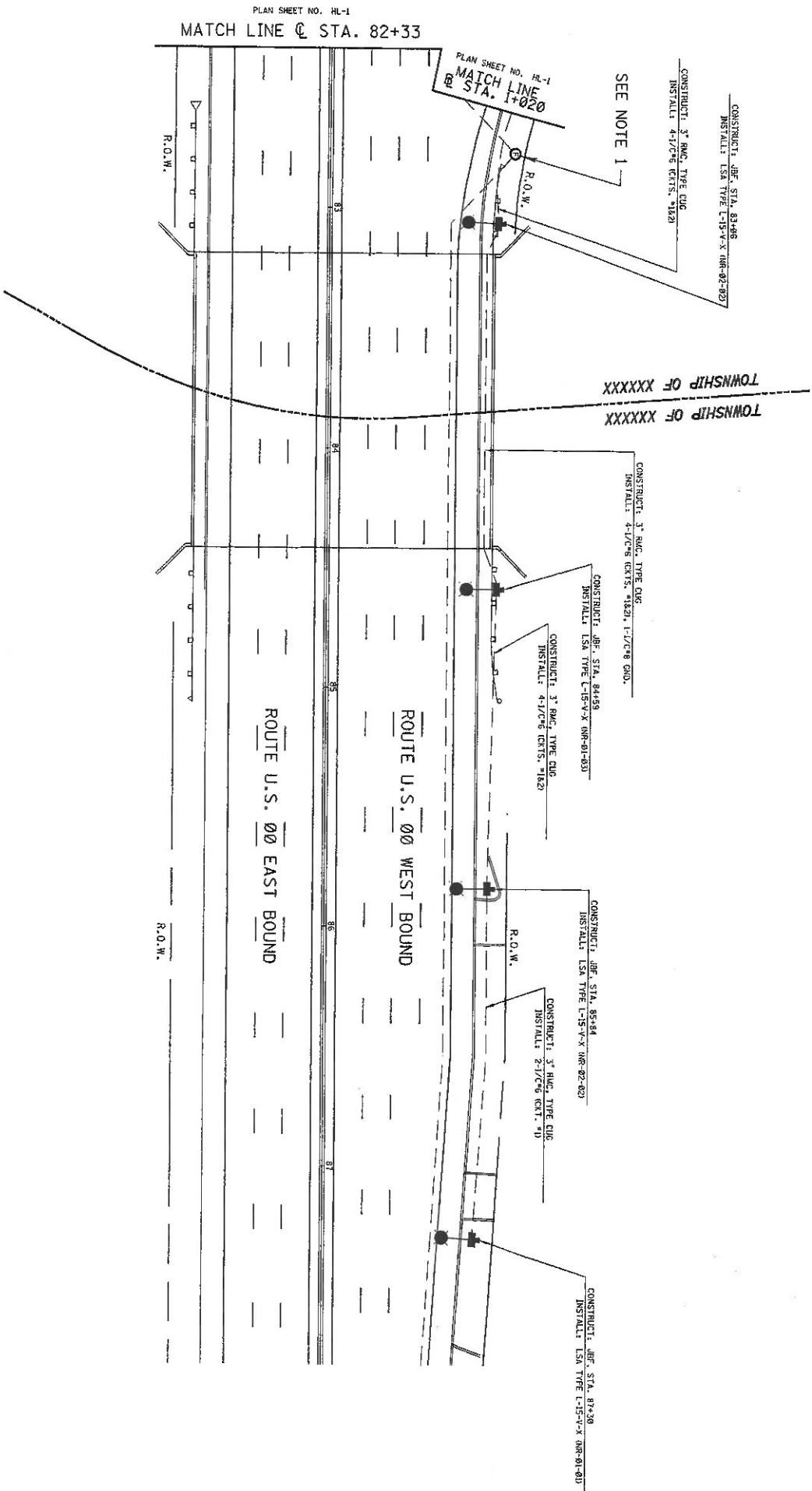
PAY ITEM NO.	STD. ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
66400		CONCRETE SIDEWALK, 4" THICK	2 SY
7A31C		2" RIGID METALLIC CONDUIT, TYPE CUG	28 LF
7A41C		3" RIGID METALLIC CONDUIT, TYPE CUG	669 LF
7A66C		3" RIGID METALLIC CONDUIT, TYPE CUR	272 LF
7A06E		MULTIPLE LIGHTING WIRE, No. 6 AWG	6562 LF
7A02E		SERVICE WIRE, No. 2 AWG	246 LF
7A01H		FOUNDATIONS, TYPE IM-MC	1 UNIT
7A21I		JUNCTION BOX FOUNDATIONS	10 UNITS
7A28I		18" x 36" JUNCTION BOXES	4 UNITS
7C28E		LIGHTING STANDARD ASSEMBLIES, TYPE L-8-V-X	3 UNITS
7C48E		LIGHTING STANDARD ASSEMBLIES, TYPE L-15-V-X	7 UNITS
7C31F		METER CABINETS, TYPE IM-MC	1 UNIT

STATE PROJECT NO. SHEET
N.J.

REFERENCE

NJDOT CADD DATA			
ACCOUNT	ELECTRICAL		
DIRECTORY	edetails		
DWG. NAME	k:\edetails\esamples\esmpa2.dgn		
PLOT DATE	23-APR-2001 12:08		
REVISION	DESCRIPTION	BY	CHECKED DATE

- NOTES:
1. SEE ITS PLANS.
2. SEE TRAFFIC SIGNAL ELECTRICAL PLANS.



PLAN SHEET NO. HL-1
MATCH LINE @ STA. 82+33

PLAN SHEET NO. HL-1
MATCH LINE @ STA. 1+020

SEE NOTE 1

CONSTRUCT, 18" x 36" JUNCTION BOX FOUNDATIONS
INSTALL, LSA TYPE L-15-V-X 08-01-03

CONSTRUCT, 3" RIG. TYPE CUG
INSTALL, 4-1/2" x 6" EXTS. *1A2

CONSTRUCT, 18" x 36" JUNCTION BOX FOUNDATIONS
INSTALL, LSA TYPE L-15-V-X 08-01-03

CONSTRUCT, 3" RIG. TYPE CUG
INSTALL, 4-1/2" x 6" EXTS. *1A2

CONSTRUCT, 18" x 36" JUNCTION BOX FOUNDATIONS
INSTALL, LSA TYPE L-15-V-X 08-02-02

CONSTRUCT, 3" RIG. TYPE CUG
INSTALL, 4-1/2" x 6" EXTS. *1A2

CONSTRUCT, 18" x 36" JUNCTION BOX FOUNDATIONS
INSTALL, LSA TYPE L-15-V-X 08-01-03



NEW JERSEY DEPARTMENT OF TRANSPORTATION

HIGHWAY LIGHTING PLANS

ROUTE 00 CONTRACT COUNTY

MUNICIPALITY COUNTY

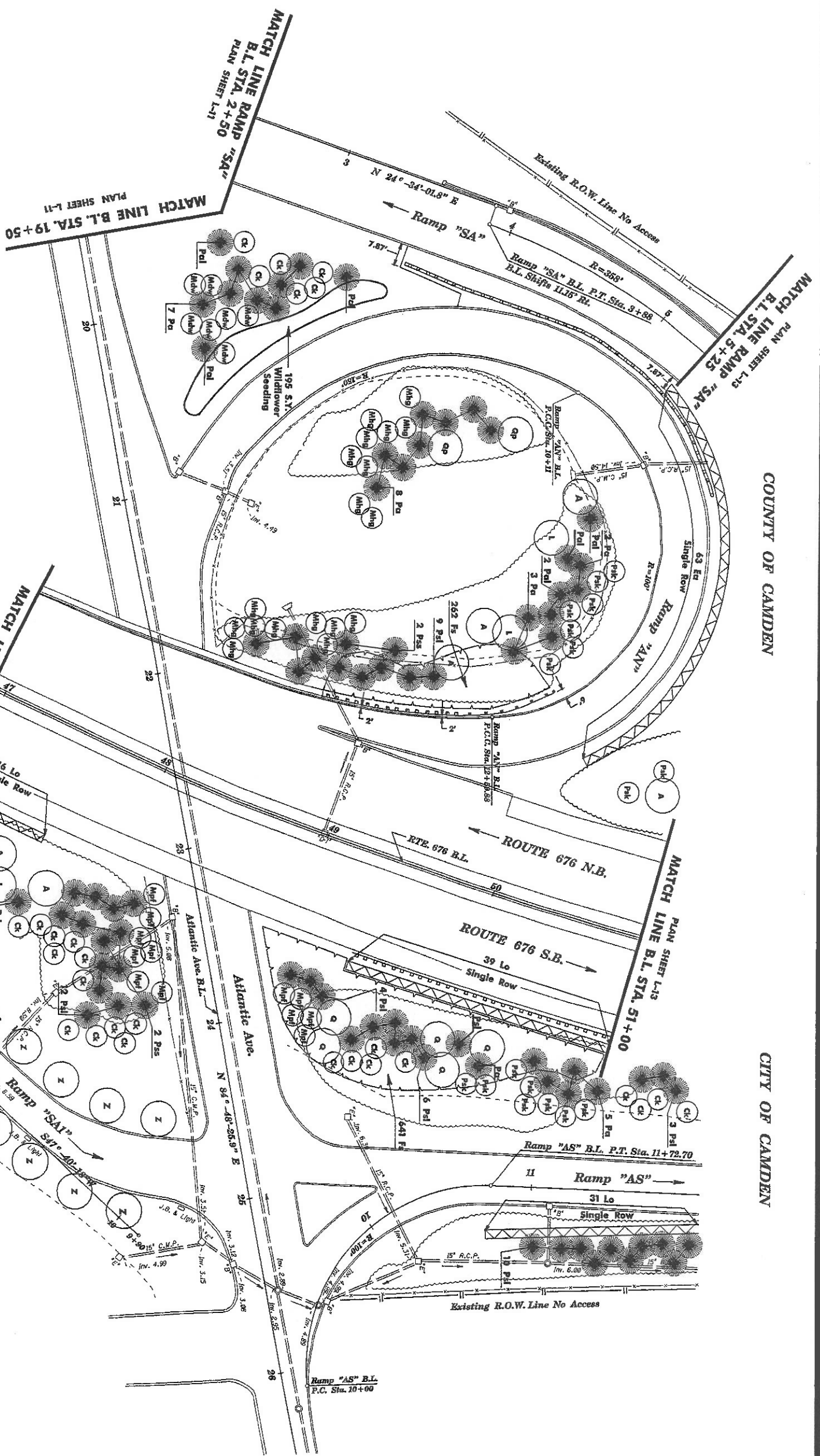
ROUTE 00 & SIDE ROAD

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

BDC007-3 - ORIGINAL SHEET

COUNTY OF CAMDEN

CITY OF CAMDEN



TO BE PLANTED

ITEM NO.	STD. ITEM NO.	SYM.	PLANT NAME	ROOT CALIPER & HEIGHT	SPACING	CONTRACT QUANTITY
70	BH27A	A	Acer rubrum 'Red Sunset'	2'-2 1/2" 12'-14'		6
79	BH41L	L	Liquidambar styraciflua	2'-2 1/2" 10'-12'		3
90	BH11Q	Qp	Quercus prinus	2'-2 1/2" 12'-14'		2
91	BH31Q	Q	Quercus rubra	2'-2 1/2" 12'-14'		2
93	BH07Z	Z	Zelkova serotina 'Green Vein'	2'-2 1/2" 12'-14'		9
84	BH13P	Pa	Plant obis	5'-4'		27
83	BH11P	Pa	Plant obis	5'-4'		9
86	BH23P	Pa	Pinus strobus	5'-4'		46
85	BH23P	Pa	Pinus strobus	5'-4'		4
74	BH15C	Ck	Cornus Kousa	5'-4'		27
80	NBH05	Mdw	Nadua 'Donald Wymore'	1 1/2"-1 3/4" 6'-7'		7
81	NBH06	Mhw	Nadua 'Harvest Gold'	1 1/2"-1 3/4" 6'-7'		18

TO BE PLANTED

ITEM NO.	STD. ITEM NO.	SYM.	PLANT NAME	ROOT CALIPER & HEIGHT	SPACING	CONTRACT QUANTITY
82	BH15M	Mpl	Malus 'Prostrata'	5'-4'		12
89	BH33P	Pk	Prunus serrulata 'Kanzan'	5'-4'		17
75	BH09E	Es	Euroyria alata 'Compact'	2'-3'		63
76	BH02F	Fs	Forsythia intermedia 'Speciosa'	2'-3'		903
78	BH22L	Lo	Ligustrum obtusifolium 'Regelianum'	2'-3'		55

NEW JERSEY DEPARTMENT OF TRANSPORTATION
LANDSCAPE PLA
 ROUTE 676
 CONTRACT NO. 010010

Individual Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

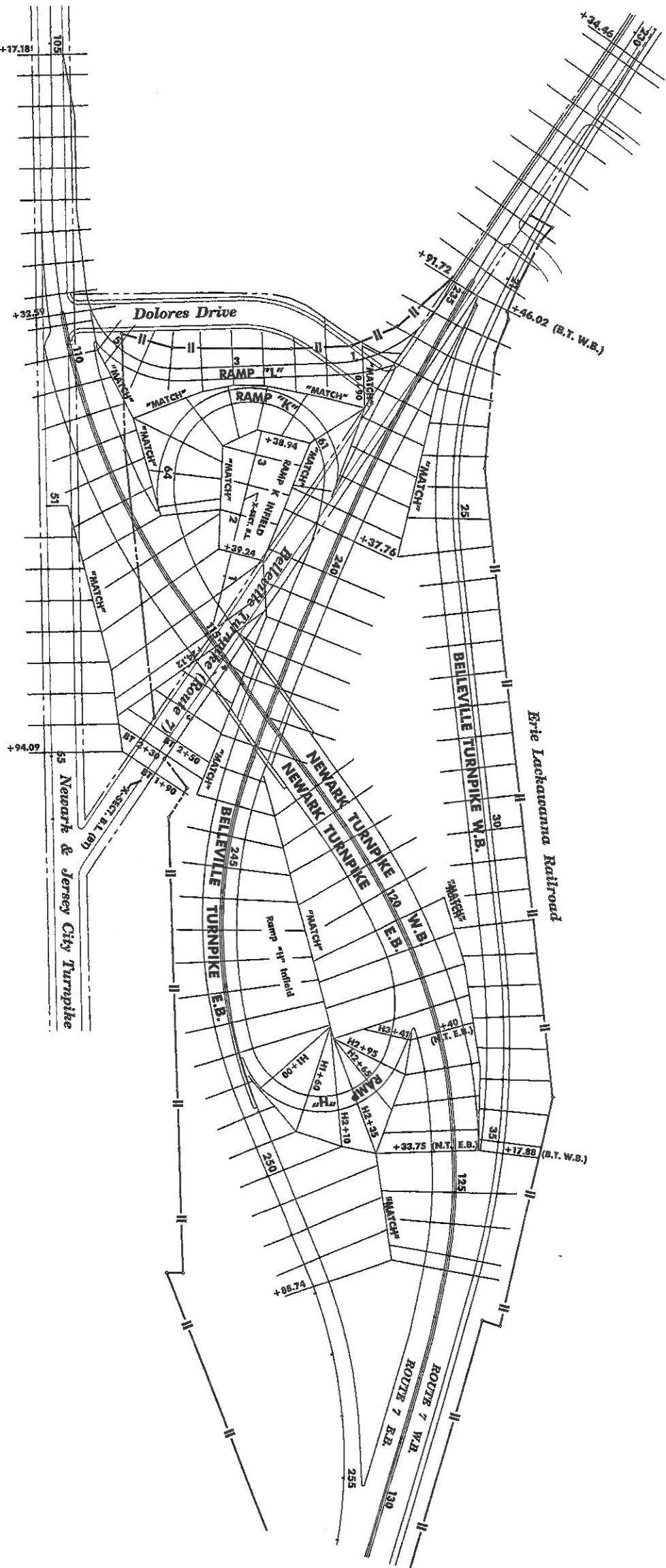


STATION

BDC00T-3 - ORIGINAL SHEET

TOWNSHIP OF BORDENTOWN

COUNTY OF BURLINGTON



NOTE:
ALL CROSS SECTIONS ARE TAKEN RADIAL TO
A BASE LINE AND AT 50' INTERVALS UNLESS
OTHERWISE NOTED.



NEW JERSEY DEPARTMENT OF TRAN

METHOD OF CROSS SI

ROUTE 295

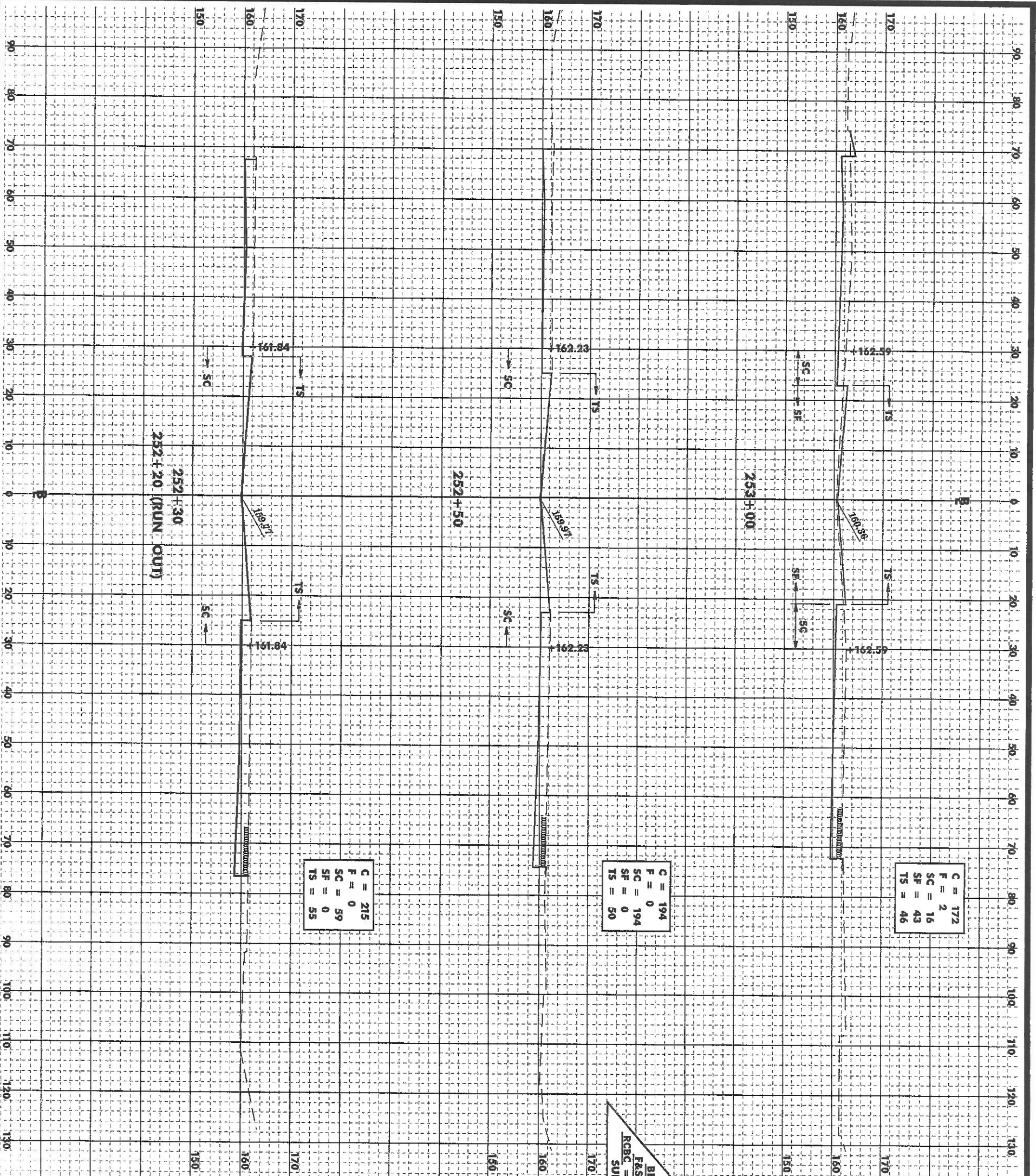
CONTRACT NO. 010010

Individual, Firm, Partnership, etc.

(signature) (date)

John L. Doe

N.J.P.E. LIC. NO. 99999



C	=	172
F	=	2
SC	=	16
SF	=	43
TS	=	46

C	=	194
F	=	0
SC	=	194
SF	=	0
TS	=	50

C	=	215
F	=	0
SC	=	59
SF	=	0
TS	=	55

LEGEND

- Z-1 = ZONE 1
- F = FILL
- C = CUT
- DE = DITCH EXCAVATION
- WE = WET EXCAVATION
- Z-2 = ZONE 2
- CE = CHANNEL EXCAVATION
- UMX = UNSUITABLE MATERIAL (TO BE PAID FOR AS RDWY. EXCAV.)

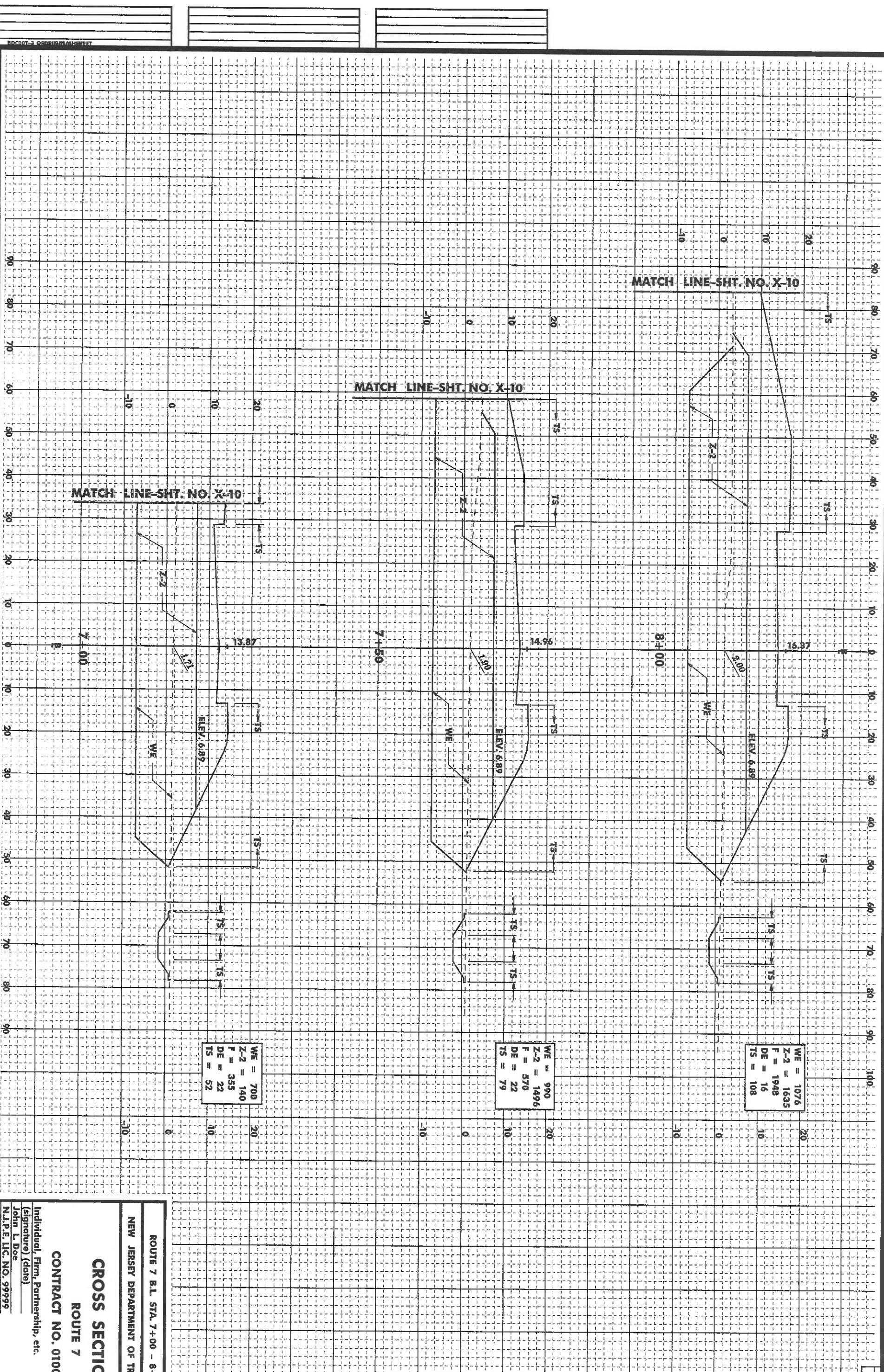
- SM = SELECTED MATERIAL
- TS = TOPSOILING, 4 INCH THICK
- SC = STRIPPING CUT
- SF = STRIPPING FILL
- BEFB = BORROW EXCAVATION, BRIDGE FOUNDATION
- F&S = FERTILIZING AND SEEDING
- RCBC = REMOVAL OF CONC BASE COURSE & CONCRETE SURFACE COURSES (PAID AS A PLAN SHEET QUANTITY)

NOTES

ALL CROSS-SECTIONS ARE RADIAL OR AT RIGHT ANGLES TO BASE LINES EXCEPT WHERE OTHER METHODS ARE INDICATED. EXCAVATION AND EMBANKMENT QUANTITIES SHOWN ON THESE SECTIONS ARE MEASURED BETWEEN THE DASHED LINES REPRESENTING THE SURFACE OF THE EXISTING GROUND AND SOLID LINES REPRESENTING THE LIMITS OF EXCAVATION AND EMBANKMENT. WHERE TOPSOIL IS PROPOSED, THE SOLID LINES INDICATE THE BOTTOM OF THE PROPOSED TOPSOIL. THE PROPOSED GRADES SHOWN ON THE CROSS-SECTIONS ESTIMATING QUANTITIES.

ROUTE 295 B.L. STA. 252+30 - 253
 NEW JERSEY DEPARTMENT OF TRANSPORTATION
CROSS SECTION
 ROUTE 295
 CONTRACT NO. 01001C

Individual Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999



WE = 1076
 Z-2 = 1635
 F = 1948
 DE = 16
 TS = 108

WE = 990
 Z-2 = 1496
 F = 570
 DE = 22
 TS = 79

WE = 700
 Z-2 = 140
 F = 355
 DE = 22
 TS = 52

ROUTE 7 B.L. STA. 7+00 - 8+00
 NEW JERSEY DEPARTMENT OF TRANSPORTATION

CROSS SECTION:

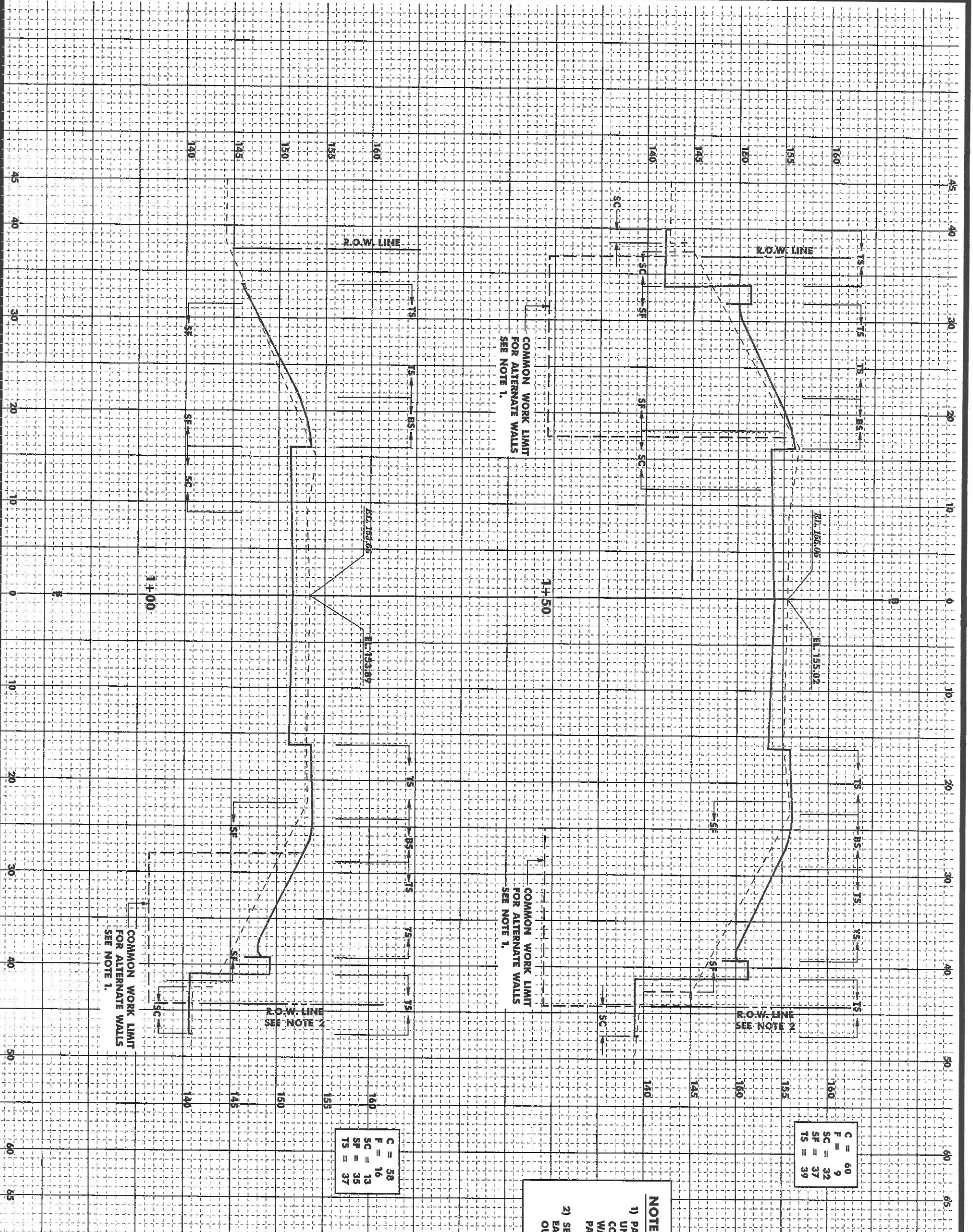
ROUTE 7

CONTRACT NO. 0100100

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

STATE
 N.J.

BDC001-3 - ORIGINAL SHEET



C =	60
F =	9
SC =	32
SF =	37
TS =	39

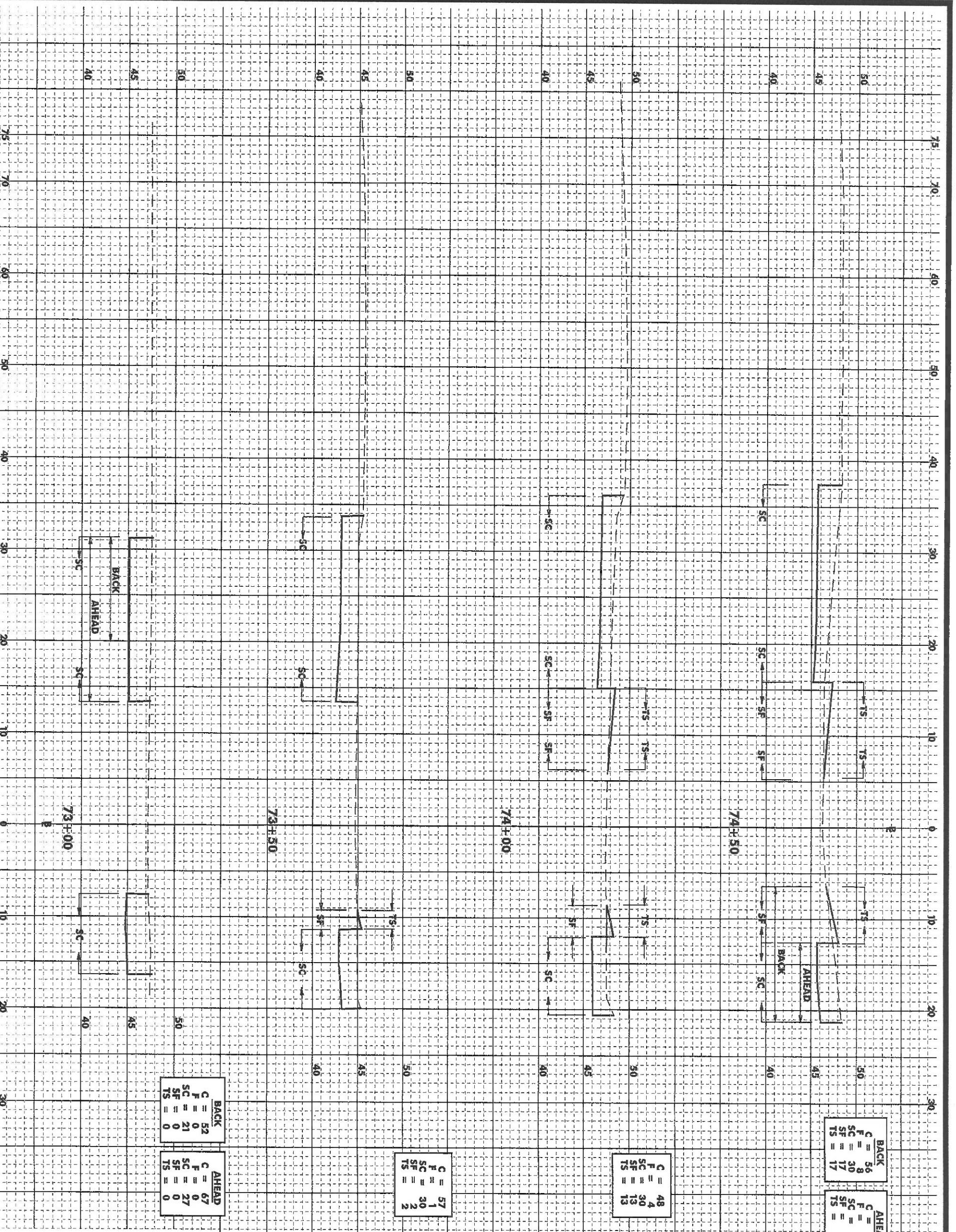
C =	58
F =	16
SC =	13
SF =	35
TS =	37

- NOTES**
- 1) PAYMENT FOR ROADWAY EXCAVATION, UNCLASSIFIED AND BACKFILL WITHIN THE COMMON WORK LIMIT FOR ALTERNATE WALLS SHALL BE MADE UNDER THE PAY ITEMS FOR ALTERNATE WALLS.
 - 2) SEE CONSTRUCTION PLAN FOR CONSTRUCT EASEMENT LINES WHEN WORK IS PROPOSED OUTSIDE OF EXISTING R.O.W.

BASELINE STA. 1+00 - 1+50
 NEW JERSEY DEPARTMENT OF TRANSPORTATION
CROSS SECTION
TUTTLE PARKWAY BRLE
CONTRACT NO. 010010

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LLC, NO. 99999

BDC001-3 - ORIGINAL SHEET



BACK	C = 56
	F = 8
	SC = 30
	SF = 17
	TS = 17
AHEAD	C = 56
	F = 3
	SC = 30
	SF = 11
	TS = 11

BACK	C = 48
	F = 4
	SC = 30
	SF = 13
	TS = 13
AHEAD	C = 57
	F = 1
	SC = 30
	SF = 2
	TS = 2

BACK	C = 52
	F = 0
	SC = 21
	SF = 0
	TS = 0
AHEAD	C = 67
	F = 0
	SC = 27
	SF = 0
	TS = 0

BACK	C = 52
	F = 0
	SC = 21
	SF = 0
	TS = 0
AHEAD	C = 67
	F = 0
	SC = 27
	SF = 0
	TS = 0

3/11 N.J.

CROSS SECTION
ROUTE 295
CONTRACT NO. 01001C

NEW JERSEY DEPARTMENT OF TRANSPORTATION
 ROUTE 295 S.B. B.L. STA. 73+00 - 74+50

Individual, Firm, Partnership, etc.
 (signature) (date)
 John L. Doe
 N.J.P.E. LIC. NO. 99999

SAMPLE NO. 1

EARTHWORK SUMMARY

EXCAVATION	Roadway Excavation From Cross Sections	=	899,004 C.Y.
	Strippling In Cuts	=	- 24,369 C.Y.
	Subtotal	=	874,635 C.Y.
	Roadway Excavation From Plan Sheets	=	+ 7,871 C.Y.
	Total Roadway Excavation	=	882,506 C.Y.
	Ditch Excavation	=	+ 4,101 C.Y.
	TOTAL	=	886,607 C.Y.
	TOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	=	797,046 C.Y.
	With 10% Shrinkage = (885,607 C.Y. x 0.90)		
EMBANKMENT	Embankment From Cross Sections	=	794,297 C.Y.
	Strippling In Fill	=	+ 18,993 C.Y.
	Subtotal	=	813,290 C.Y.
	Embankment From Plan Sheets	=	+ 2,116 C.Y.
	Total Embankment Required	=	815,406 C.Y.
	Total Excavation Available For Embankment	=	- 797,046 C.Y.
	TOTAL BORROW EXCAVATION, ZONE 3	=	18,360 C.Y.
TOPSOIL	Strippling In Cuts	=	24,407 C.Y.
	Strippling In Fills	=	+ 19,023 C.Y.
	TOTAL STRIPPLING AVAILABLE FOR TOPSOIL	=	43,430 C.Y.
	Topsoil Required	=	398,148 S.Y.
	Topsoil, 4" Thick From Cross Sections	=	+ 24,040 S.Y.
	Topsoil, 4" Thick From Plan Sheets	=	422,188 S.Y.
	TOTAL TOPSOIL, 4" THICK	=	46,862 C.Y.
	Topsoil, 4" Thick (422,188 S.Y. x 0.111 YD.)	=	650 C.Y.
	Topsoil For Planting	=	47,512 C.Y.
	TOTAL TOPSOIL REQUIRED	=	43,430 C.Y.
	Total Strippling Available For Topsoil	=	43,430 C.Y.
	TOTAL BORROW TOPSOIL	=	4,082 C.Y.
WET EXCAVATION	Wet Excavation From Cross Sections	=	34,871 C.Y.
	Wet Excavation From Plan Sheets	=	+ 707 C.Y.
	TOTAL WET EXCAVATION	=	35,578 C.Y.
BORROW EXCAVATION, ZONE 2	Borrow Excavation, Zone 2 From Cross Sections	=	37,205 C.Y.
	Borrow Excavation, Zone 2 From Plan Sheets	=	+ 472 C.Y.
	TOTAL BORROW EXCAVATION, ZONE 2	=	37,677 C.Y.
BORROW EXCAVATION, BRIDGE FOUNDATION	Borrow Ex., Bridge Foundation From Cross Section	=	25,969 C.Y.
	Strippling For Borrow Excavation, Bridge Foundation	=	+ 1,016 C.Y.
	Subtotal	=	26,985 C.Y.
	Borrow Ex., Bridge Foundation From Plan Sheets	=	+ 399 C.Y.
	TOTAL Borrow Excavation, Bridge Foundation	=	27,384 C.Y.
CHANNEL EXCAVATION	TOTAL CHANNEL EXCAVATION	=	437 C.Y.
DITCH EXCAVATION	Ditch Excavation From Cross Sections	=	4,810 C.Y.
	Strippling In Ditch Excavation	=	- 872 C.Y.
	Subtotal	=	3,938 C.Y.
	Ditch Excavation From Plan Sheets	=	+ 163 C.Y.
	TOTAL DITCH EXCAVATION	=	4,101 C.Y.

NOTE:
IF ADDITIONAL SUITABLE MATERIAL FOR EMBANKMENT IS OBTAINED FROM ANY EXCAVATION, THE QUANTITY OF BORROW WILL BE REDUCED ACCORDINGLY.

SAMPLE NO. 2

EARTHWORK SUMMARY

EXCAVATION	Roadway Excavation From Cross Sections	=	343,588 C.Y.
	Strippling In Cuts	=	- 12,516 C.Y.
	Subtotal	=	331,072 C.Y.
	Roadway Excavation From Plan Sheets	=	+ 3,289 C.Y.
	TOTAL ROADWAY EXCAVATION	=	334,361 C.Y.
EXCAVATION AVAILABLE FOR EMBANKMENT	Total Roadway Excavation Undersluffed	=	334,361 C.Y.
	Removal of Conc. Base Course & Conc. Surface Course	=	+ 27,578 C.Y.
	Foundation Excavation	=	+ 2,700 C.Y.
	Bridge Excavation	=	+ 3,939 C.Y.
	Excavation @ Noise Barriers	=	+ 821 C.Y.
	Ditch Excavation, Undersluffed	=	+ 3,381 C.Y.
	Subtotal	=	372,780 C.Y.
	TOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	=	335,502 C.Y.
	With 10% Shrinkage = (372,780 C.Y. x 0.90)		
EMBANKMENT	Embankment From Cross Sections	=	325,512 C.Y.
	Strippling In Fill	=	+ 8,670 C.Y.
	Embankment From Plan Sheets	=	+ 0 C.Y.
	TOTAL EMBANKMENT REQUIRED	=	334,182 C.Y.
TOPSOIL	Strippling In Cuts	=	12,533 C.Y.
	Strippling In Fills	=	+ 8,684 C.Y.
	TOTAL STRIPPLING AVAILABLE FOR TOPSOIL	=	21,217 C.Y.
	Topsoil Required	=	24,398 S.Y.
	Topsoil, 4" Thick From Cross Sections	=	+ 957 S.Y.
	Topsoil, 4" Thick From Plan Sheets	=	23,355 S.Y.
	TOTAL TOPSOIL, 4" THICK	=	2,814 C.Y.
	Topsoil, 4" Thick (23,355 S.Y. x 0.111 YD.)	=	450 C.Y.
	Topsoil For Planting	=	3,264 C.Y.
	TOTAL TOPSOIL REQUIRED	=	3,264 C.Y.
WET EXCAVATION	TOTAL WET EXCAVATION	=	14,024 C.Y.
BORROW EXCAVATION, SELECT MATERIAL	Borrow Excavation, Selected Material From Cross Sections	=	7,364 C.Y.
	Borrow Excavation, Selected Material From Plan Sheets	=	+ 7,968 C.Y.
	TOTAL BORROW EXCAVATION, SELECT MATERIAL	=	15,332 C.Y.
BORROW EXCAVATION, ZONE 2	Borrow Excavation, Zone 2 From Cross Sections	=	64,341 C.Y.
	Borrow Excavation, Zone 2 From Plan Sheets	=	+ 18 C.Y.
	TOTAL BORROW EXCAVATION, ZONE 2	=	64,359 C.Y.
BORROW EXCAVATION, BRIDGE FOUNDATION	TOTAL BORROW EXCAVATION, BRIDGE FOUNDATION	=	15,894 C.Y.
DITCH EXCAVATION	Ditch Excavation From Cross Sections	=	3,431 C.Y.
	Strippling In Ditch Excavation	=	- 93 C.Y.
	Ditch Excavation From Plan Sheets	=	+ 143 C.Y.
	TOTAL DITCH EXCAVATION	=	3,481 C.Y.
POROUS FILL	TOTAL POROUS FILL	=	2,163 C.Y.

NOTE:
IF ADDITIONAL SUITABLE MATERIAL FOR EMBANKMENT IS OBTAINED FROM ANY EXCAVATION, THE QUANTITY OF BORROW WILL BE REDUCED ACCORDINGLY.

SAMPLE NO. 3

EARTHWORK SUMMARY

EXCAVATION	Roadway Excavation From Cross Sections	=	42,000 C.Y.
	Strippling In Cuts	=	- 6,310 C.Y.
	Subtotal	=	35,690 C.Y.
	Roadway Excavation From Plan Sheets	=	+ 7,639 C.Y.
	Total Roadway Excavation (TRX)	=	43,329 C.Y.
	TOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	=	38,996 C.Y.
	With 10% Shrinkage = (TRX C.Y. x 0.90)		
EMBANKMENT	Embankment From Cross Sections	=	4,297 C.Y.
	Strippling In Fill	=	+ 839 C.Y.
	Subtotal	=	5,136 C.Y.
	Embankment From Plan Sheets	=	+ 2,146 C.Y.
	TOTAL EMBANKMENT REQUIRED	=	7,282 C.Y.
WET EXCAVATION	Wet Excavation From Cross Sections	=	4,871 C.Y.
	Wet Excavation From Plan Sheets	=	+ 307 C.Y.
	TOTAL WET EXCAVATION	=	5,178 C.Y.
TOWN CENTER ASSOCIATES	QUANTITY		
	BHF-29(135)		
100% STATE QUANTITY			
CONTRACT NO. 0100100			

NOTE:
IF ADDITIONAL SUITABLE MATERIAL FOR EMBANKMENT IS OBTAINED FROM ANY EXCAVATION, THE QUANTITY OF BORROW WILL BE REDUCED ACCORDINGLY.

NEW JERSEY DEPARTMENT OF TRANSI

CROSS SECTION:

ROUTE 287

CONTRACT NO. 0100100

Individual Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

PROJECT : ROUTE 23 SECTION 1E

DESCRIPTION

PAY ITEM NO.	STANDARD ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	AS-BUILT QUANTITY	BHF-29(135) QUANTITY	IXAF-37(115) QUANTITY	STATE QUANTITY
STRUCTURE NO. 0703-152								
280	2A21D	CLEARING SITE, BRIDGE (STRUCTURE NO. 0703-152)	LUMP SUM	LUMP SUM				
281	2A21B	TEMPORARY SHIELDING	LUMP SUM	LUMP SUM				
282	2F21C	FOUNDATION EXCAVATION	CU. YD.	25720		60%		40%
283	2F21D	BRIDGE EXCAVATION	CU. YD.	4075		60%		40%
284	2F21E	COURSE AGGREGATE LAYER	CU. YD.	1125		25720		
285	9Z99Z	NO ITEM				4075		
286	9Z99Z	NO ITEM				1125		
287	5A21C	CONCRETE IN STRUCTURES, FOOTINGS	CU. YD.	18890		15146		3744
288	5A21C	CONCRETE IN STRUCTURES, RETAINING WALLS	CU. YD.	199		170		25
289	5A41C	CONCRETE IN SUBSTRUCTURES, ABUTMENT WALLS	CU. YD.	445		262		183
290	5A51C	CONCRETE IN SUBSTRUCTURES, PIER COLUMNS AND CAPS	CU. YD.	23415		19880		3535
291	5A71C	CONCRETE IN SUPERSTRUCTURE, DECK SLABS	CU. YD.	14760		13080		1680
292	5A21E	REINFORCEMENT STEEL IN STRUCTURES	POUND	5514526		4411617		1102903
293	5A31E	REINFORCEMENT STEEL IN STRUCTURES, EPOXY COATED	POUND	2382720		1909816		477454
294	5A21H	EPOXY WATERPROOFING SEAL COAT	SQ. YD.	2370		2370		
295	5A51K	STRIP SEAL EXPANSION DAM	LIN. FT.	1618		1618		
296	5A21L	SAWCUT GROOVED DECK SURFACE	SQ. FT.	387943		387943		
297	5C21C	STRUCTURAL STEEL (WT. = 17,116.695 LBS)	LUMP SUM	LUMP SUM		100%		
298	5C21F	STRUCTURAL STEEL DECK JOINTS (WT. = 144,250 LBS)	LUMP SUM	LUMP SUM		100%		
299	5C31H	SHEAR CONNECTORS	UNIT	139700		139700		
300	---	BRIDGE BEARINGS, TYPE 1	UNIT	629		629		
301	---	BRIDGE BEARINGS, TYPE 2	UNIT					
302	5E21C	PREPARED HOLES	LIN. FT.	1529				1529
303	5M21C	TEMPORARY SHEETING	SQ. FT.	30935		30935		
304	5Q21E	8 INCH STEEL ALLOY PIPE	LIN. FT.	2655		2297		358
305	5Q25E	12 INCH STEEL ALLOY PIPE	LIN. FT.	1665		1410		255
306	5R21E	CONCRETE DECK OVERLAY PROTECTIVE SYSTEM, TYPE LATEX MODIFIED CONCRETE	CU. YD.	1585				1585
307	9Z99Z	NO ITEM						
308	9Z99Z	NO ITEM						
309	4A08E	8 INCH CORRUGATED STEEL, UNDERDRAIN PIPE	LIN. FT.	495		495		
310	9Z09Z	NO ITEM						
311	9Z99Z	NO ITEM						
OVERHEAD SIGN SUPPORT STRUCTURES								
312	2F21C	FOUNDATION EXCAVATION	CU. YD.	71			71	
313	2F21D	BRIDGE EXCAVATION	CU. YD.	895			895	
314	9Z99Z	NO ITEM						
315	9Z99Z	NO ITEM						
316	5A21G	CONCRETE IN STRUCTURES, FOOTING	CU. YD.	118			118	
317	5A21E	REINFORCEMENT STEEL IN STRUCTURES	POUND	10635			10635	
318	5I21F	OVERHEAD SIGN SUPPORT, STRUCTURE NO. 1	UNIT	1			1	
319	5I23F	OVERHEAD SIGN SUPPORT, STRUCTURE NO. 2	UNIT	1			1	
320	5I25F	OVERHEAD SIGN SUPPORT, STRUCTURE NO. 3	UNIT	1			1	
321	5I27F	OVERHEAD SIGN SUPPORT, STRUCTURE NO. 4	UNIT	1			1	
322	---	RELOCATION OF SIGN SUPPORT NO. 8	LUMP SUM	LUMP SUM				
323	5M21C	TEMPORARY SHEETING	SQ. FT.	1270		80%		20%
324	9Z99Z	NO ITEM						
325	9Z99Z	NO ITEM						
BRIDGE MOUNTED SIGN SUPPORT STRUCTURES								
326	5I21D	BRIDGE MOUNTED SIGN SUPPORT STRUCTURE NO. 1	UNIT	1			1	
327	---	REMOVAL OF SIGN SUPPORT 7A AND 7B	LUMP SUM	LUMP SUM				
328	9Z99Z	NO ITEM					80%	20%
329	9Z99Z	NO ITEM						
RAMP A RETAINING WALL								
330	2E21C	FOUNDATION EXCAVATION	CU. YD.	1355			1177	178
331	9Z99Z	NO ITEM						
332	9Z99Z	NO ITEM						
333	5A21C	CONCRETE IN STRUCTURES, FOOTINGS	CU. YD.	806			640	166
334	5A31C	CONCRETE IN STRUCTURES, RETAINING WALLS	CU. YD.	1010			811	199
335	5A91C	CONCRETE IN SUPERSTRUCTURE, PARAPETS	LIN. FT.	276			164	112
336	5A21E	REINFORCEMENT STEEL IN STRUCTURES	POUND	1726025			1294311	431514
337	5A31E	REINFORCEMENT STEEL IN STRUCTURES, EPOXY COATED	POUND	6300			5040	1260
338	9Z99Z	NO ITEM						
339	9Z99Z	NO ITEM						
RAMP B RETAINING WALL								
340	5T21C	RETAINING WALL, LOCATION NO. 1	SQ. FT.	5655			4250	1405
341	9Z99Z	NO ITEM						

ESTIMATE OF QUANTITIES - BRIDGE

BRIDGE SHEET B1 OF B15

FORM-1