State of New Jersey

Department of Transportation

SAMPLE PLANS

2007

BDC07-05 - ORIGINAL SHEET

Sample Plans-2007

The Sample Plans illustrate presentation format and have been developed with the purpose of instituting uniformity in the presentation of Roadway and Bridge 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 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 in conjunction with QA Team Leader. 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.

Item numbers and descriptions 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.

1.0 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 of the plans. 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	EDQ	Estimate and Distribution of Quantities - Roadway
2	TS	Typical Sections
3	PSI	Plan Sheet Index
4	C	Construction Plans
5	EP	Environmental Plans & Soil Erosion & Sediment Control Plans
6	D	Drainage Plans
7	DTL	Construction Details
8	P	Profiles
9	T	Ties
10	G	Grades
11	TC	Traffic Control (and Staging Plans)
12	TSP	Traffic Signal Plans
13	E	Electrical Plans
14	HL	Highway Lighting Plans
15	ITS	Intelligent Transportation System Plans
16	SL	Sign Location Plans
17	TSS	Traffic Signing and Striping Plans
18	STD	Sign Text Detail
19	L	Landscape Plans
20	MS	Method of Cross Sections
21	X	Cross Sections
22	EQB	Estimate of Quantities - Bridge
23	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 should remain consistent throughout the construction set. Cross section sheets shall delineate scale either by appropriate numbers on the heavy vertical and horizontal lines or by a graphic scale.

2.0 Item Numbers

The item number consists of seven characters: first three numbers correspond to the specification section number; the following three numbers are sequential numbers from 001 to 999, and the suffix "M" or "P" designates if the item is either a measured quantity or a proposal quantity.

Item Numbers on all plan sheets to indicate proposed work, such as Construction Plans, Drainage Plans, etc. in **"TO BE CONSTRUCTED"** boxes and in the elliptical shaped bubbles. Provide Item numbers with the suffix "M" or "P" in **"TO BE CONSTRUCTED"** box. However, suffix "M" or "P" is not required in the elliptical shaped bubbles due to space constraints.

For more instructions on how to handle Item numbers, refer to the **CONSTRUCTION COST ESTIMATE GUIDELINES.**

3.0 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, related to 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.

The longitude and latitude for the mid-point of the project must be shown on the key map in the following format: DDº MM' SS" (with direction).

Definition of mid-point of project:

For a continuous project, it would be the actual mid-point.

For a non-continuous project, identify the mid-point as if the project were continuous.

For an intersection improvement, draw a circle around all the intersections and use the center of the circle as the mid-point.

For Statewide projects, use the geographical center of NJ, which is:

Longitude: 74º 38' 42" W

Latitude: 40º 11' 01" N

For Bridge projects, use the center of the entire project as the mid-point.

For multiple bridges, draw a circle around all the bridges and use the center of the circle as the mid-point.

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 Non - 3R)
- 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.

3.1 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 NJDOT (Traffic Signals and Lighting) shall also be listed.

3.2 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.

3.3 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.

Bridge Sample Plans provide guidance on the proper presentation of projects that include multiple structure types; such as, bridge structures, sign support structures and retaining walls. A General Note format to specify the design and construction specifications, concrete strengths and type of superstructure material is provided. Other drawings present guidance on abutment, deck slab, substructure element and framing plan illustrations.

3.4 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 NJDOT 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.

3.5 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.

3.6 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) (CERTIFICATE OF AUTHORIZATION NO.___ OR PROFESSIONAL ASSOCIATION)

(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 NJDOT and utility companies, shall have the name of the consultant (consulting firm) and shall also state "Certificate of Authorization No. ____" or Professional Association" as applicable, in the space adjacent to the name. In the space under "Engineer's name printed" state "New Jersey Professional Engineer License No. ____". Each consultant-designed sheet shall be signed and dated by the consultant in the space provided under the "name of the consultant", just prior to the designer's plans, specifications, and estimate submission. However, if the utility company provides the design, it is also responsible for providing its professional engineer's signature.

3.7 Project Description Name

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

- Approved Project name
- 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 2007
(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 are 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.

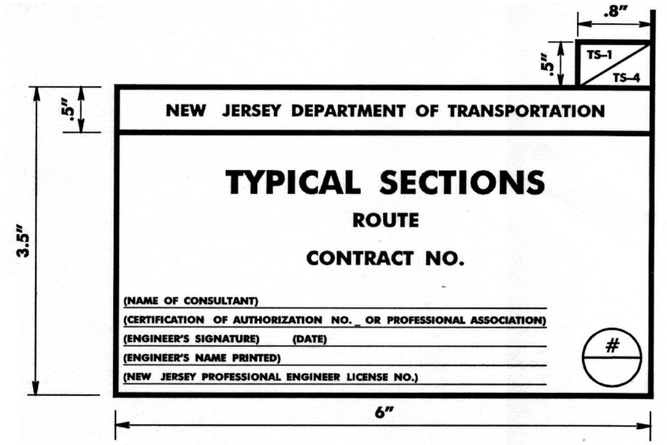
A Department signature block shall be included in the lower right corner of the Key sheet as shown with the titles, Director Project Management and State Transportation Engineer.

For Local-Aid projects, the key sheet must bear the signature of the County Engineer, or County Representative or Municipal Engineer, as applicable.

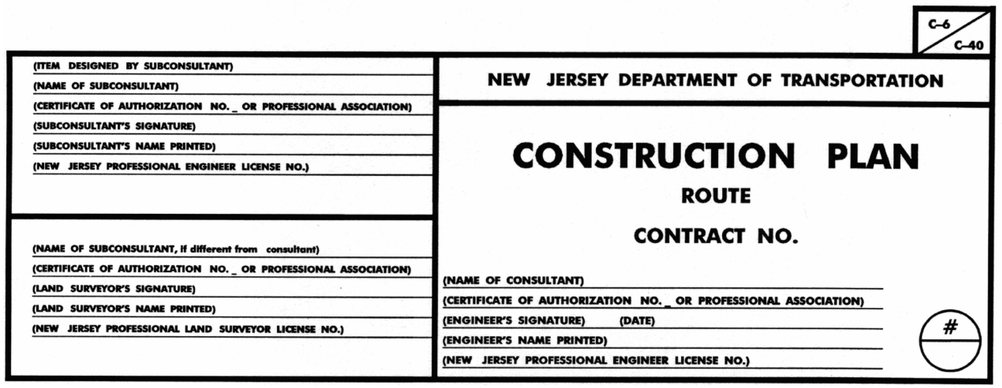
4.0 Title Blocks

Roadway Plans:

In the lower right hand corner, a title block shall be provided to include Consultant information as shown below. The title blocks shall be applicable for all sheets except Key Sheet and EDQ sheets.



When a project involves work that has been prepared by a Subconsultant and/or Land Surveyor; Subconsultant, Land Surveyor and the Consultant, all must sign the plan sheets that have been developed by the Subconsultant and Land Surveyor. The Subconsultant and Land Surveyor title block shall appear adjacent to the Consultant title block as shown below.



Structural Plans:

The title block for structural plans will be in accordance with the Design Manual for Bridges and Structures.

5.0 Estimate-Distribution of Quantities

This sheet shall show a complete listing of the 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".

Route and Contract Number or, local street name if applicable shall be shown to the right of center of the bottom box and should match the Title Block. The Estimate of Quantities portion is on the left hand side of the EDQ sheet. The Distribution of Quantities portion of the sheet is on the right hand side. Each column provided in the Distribution portion has been divided into two subcolumns. The left hand subcolumn is for the plan sheet number as described in the double reference numbering system (e.g. C-1, E-1, L-1, X-1, etc.) on sheet 2 of these Sample Plans while the right hand subcolumn is for the quantities. Item Numbers shall be inserted in the column and row provided in ascending order.

If the description of the item does not fit adequately in the space provided, it shall be continued in the next row. 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 the EDQ sheet. 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 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. 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. 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 if there is only one structure in the contract. If there are two or more structures in the contract, this sheet shall be the second sheet of the Bridge Plans. The bridge estimate sheet shall have a "B" sheet number.

Use of "No Item" is allowed only when an Item has been eliminated during the PS&E submission or during the post-advertisement revision. The eliminated Item shall be replaced by number 999999.

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 items are not distributed.

5.1 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.

5.2 Contract Quantity

Add all plan sheet quantities, and the IWD quantity. Enter the resulting number under the column "Contract Quantity". However, the quantities for the following Items must be provided under "Contract Quantities" column only. (Do not provide quantities for these Items under plan sheet quantities).

- All Pavement Reflectors Items
- All Raised Pavement Markers (RPM) Items
- Flexible Delineators, Ground Mounted
- Rumble Strips

5.3 If and Where Directed (IWD) Quantity

Provide IWD quantities for the following Items only unless the Department SME concurs with the inclusion of other Items that have not been designated as such. Round off all IWD quantities to the nearest whole numbers and do not show as plan sheet quantities.

- Soil Erosion and Sediment Control and Water Quality Control Items. Specify in the Special Provisions if the provided Items are to remain after the Completion.
- Traffic Control Items.

  Specify in the Special Provisions if the provided Items are to remain after the Completion.
- Prime Coat
- Tack Coat / Tack Coat 64-22
- Construction Driveway
- Excavation, Test Pit
- Traffic Stripes, Long Life, Epoxy Resin (round off quantities to nearest ten)
- Traffic Markings, Thermoplastic
- HMA Patch
- All Concrete Pavement Rehabilitation (CPR) Items
- Sealing of Cracks in HMA Surface Course
- Sawing and Sealing Joints in HMA Overlay

6.0 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 and transition area, however, whenever an area is not covered by a typical section, clearly show pavement materials, thicknesses, and grades 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 Bureau of Pavement & Drainage Management and Technology.

The following features shall be shown for each typical section:

1. Profile control, baseline and survey line
2. Limiting stations, or road names
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. Limits in rock cuts, unsuitable material, or I-11 Backfill
8. Slope limits defined
9. Vertical curb and barrier curb sizes with curb reveal dimensions
10. Proposed and existing Guide Rail and fence location
11. Indicate rollover on superelevated sections
12. R.O.W. lines (existing and proposed)
13. Crossover Crown Line

Structures including Noise Barriers, Walls, Piers, Abutments, Overhead Sign Structures, 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 Item Numbers shall be shown on each Typical Section sheet. The 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.

7.0 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 boring symbol and number. 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.

8.0 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 standout 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 stationed 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 stationed 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 note 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) R.O.W. lines, limits of NO ACCESS lines and existing and proposed easements, except for Slope, Temporary Site Mitigation Work and Temporary Site Alternative Access easements, 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 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 item quantities, except 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 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 funding 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 item number placed in an elliptical symbol along with the item quantity and unit designation. TO BE CONSTRUCTED boxes shall conform to those shown on these sample sheets with items appearing in numeric order.

(17) Presentation of Alternate Items shall be as shown in these Sample Plans sheet No: 2. 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..P., C.M.P., etc)
- length of proposed pipe
- proposed high and low points indicated (by arrow symbol)

The following shall also apply:

When separate 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 pipe. 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, Milling, Joint Removal, and Removal of Pavement.

(22) Where driveways are proposed, the 'type' of existing driveway shall be noted (gravel, HMA, 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 traveled way shall be relocated or shall be enclosed in a monument box. Proposed Monuments shall be located by station and offset.

(25) If Drainage structures are to be cleaned, the depth of the Drainage structures 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 for such structure shall be provided in the plan set.

(27) Baseline station and offset for proposed guide rail locations, including end treatments and all breakpoints along the guide rail, shall be provided.

(28) All above and below ground existing utility facilities located within the project limits shall be noted by type, size and location. Aerial pole line facilities shall be limited to the indication of poles and their corresponding pole numbers. All proposed poles and utility facilities relocated within the project limits shall be located on the plans with types and sizes shown.

When separate Utility Plans are included in the set of plans, the construction plans shall provide all existing utility facilities and poles with type and size. Existing and proposed facilities shall be shown on the Utility Plans as indicated above.

(29) When work is to be performed "by others", Designers shall specify who will be performing the work. (For example: by Verizon, 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 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 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 Preliminary 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 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 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 Concrete pavements, show the location of the transverse expansion joints and irregular slabs at critical locations. The location of the 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, and 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 item number, or when several "types" are to be constructed on a plan sheet, a box may be provided with 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.

(38) Show actual Milling depths (i.e. 1” or 4”) on plan sheets, but used item that has correct range of depth (i. e. 0-3, or 3-6).

9.0 Environmental and Soil Erosion & Sediment Control Plans

The purpose of the Environmental and Soil Erosion & Sediment Control 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 are restricted, such as wetlands, floodplains, regulated streams, parklands, historic sites, conservation lands, endangered species habitats, contaminated sites and any other environmentally sensitive areas that pertain to the project.

Contact the Bureau of Landscape Architecture and Environmental Solutions 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 show the Soil Erosion and Sediment Control items of work on sheets labeled as Soil Erosion and Sediment Control Plans. Other plan sheets may be used, such as Traffic Control and Staging Plans, with permission, for small projects with few plan sheets.

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 soil erosion and sediment control measures, provide a 1"=100' or 1"=200' scale Environmental Plan.

The first sheet of the Environmental and Soil Erosion & Sediment Control Plans includes the list of environmental commitments (including those made to the State Historic Preservation Office, other agencies, or local governments), 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.

Clearly indicate onthe plans the areas where the Contractor is not permitted to perform work, locate a concrete washout facility, store materials or enter with construction equipment. Also, note constraints to any construction activities (e.g., town's "Founder's Day" festival or night work that will not be permitted adjacent to a hospital, etc.) or other specific Department commitments.

Depict caution fence locations on the plans to delineate areas where the contractor is not permitted. Caution fence may be used alone to prevent encroachment into an environmentally sensitive area (such as a wetland, historic site, etc.) where potential sedimentation is not an issue. In areas where both silt fence and caution fence are warranted, use heavy duty silt fence, orange in place of the combined rows of fencing (e.g., to protect a wetland from sedimentation and encroachment by the contractor).

Design silt fences (regular silt fence, heavy duty silt fence, black and heavy duty silt fence, orange) according to anticipated soil loss, topography, and adjacent sensitive areas. Clearly show the limits of each type of silt fence on the plans.

In reference to the concrete washout system in Section 158 of the Standard Specifications for Road and Bridge Construction, the distance for the placement of the concrete washout facility (ies) from environmentally sensitive areas may need to be greater than 50 feet, depending on project specific conditions/restrictions, such as the presence of exceptional value wetlands or Category One Waters, as designated by NJDEP, which have larger buffer zone requirements. More than one facility may be necessary depending on ease of access and the amount of concrete being poured at one time.

Provide at least 2 oil-only emergency spill kits with each kit capable of cleaning up at least 95 gallons of spill.

10.0 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
- 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.

11.0 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

11.1 Horizontal and Vertical Datum

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

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 relocating the bench mark, prior to construction activity.

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

12.0 Grade Sheets

Proposed grades and cross slopes shall be shown at 25 feet intervals in transition area and 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 sections.

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).

13.0 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 TCD-1 and TCD-2 appropriately modified for individual project needs. Designers shall delete notes from these sheets which are not applicable to the project. Crossing out of notes is not acceptable. TC-1 in 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 (EDQ) sheet. On EDQ 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.

14.0 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. 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. Items for the removal of temporary pavement and restoration to original when required must be provided.

15.0 Electrical Plans

The purpose of the Electrical Plans is 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 signal, 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 used to show sketches that require more detail in order to facilitate construction. A separate sheet showing the traffic signal timing and operation is required to facilitate its implementation in the field.

The Title block for each Electrical Plan should be completed by the designer, as shown in the 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 from the Department's web site or upon written request to the Manager of Traffic Signal and Safety Engineering.

16.0 Traffic Signal Plans

The purpose of the Traffic Signal Plans is 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 because upon activation of the traffic signal, it is submitted for final approval and becomes the Departments 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 are to be prepared according to current Department and Traffic Signal and Safety Engineering CADD standards. These standards can be obtained from the Department's web site or upon written request to the Manager of Traffic Signal and Safety Engineering.

17.0 Highway Lighting Plans

The purpose of the Highway Lighting Plans is to present the lighting design using approved 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 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.

18.0 ITS Plans

The purpose of the ITS Plans is to provide guidance as to the preparation of the ITS Engineering aspects of a complete ITS system installation design including the power and communication sources. The various communication links of all individual devices installed in the field to the designated Traffic Operation Centers is to be determined by the designer and must be shown in the plans. Each plan including any ITS device installation design requires a 1:30 scale ITS Plan. ITS Plans showing only the layout of conduits and junction boxes are to be on a scale of 1:100.

The ITS Plans are used for presenting the layout of underground conduits carrying fiber optic cables or other communication cables as well as electrical service conduits and conductors along with all devices.

The plan is to include existing and proposed junction boxes, conduits, power and communications sources, meter cabinets, control cabinets, foundations, devices, grid pavers, guide rail (if warranted) and "To Be Constructed" items. Proposed junction boxes for fiber optic trunk cable shall generally be located at 2500 feet intervals. All non-concrete junction boxes shall not be in the paved area or in an area where there is a possibility of widening in the future. Additional sheets are also necessary to show details of the work in order to facilitate construction. Separate details including a system block diagram, rack profiles and fiber assignment diagrams are required in order to show the communication equipment components, configuration parameters and the designated fibers for each communication link. The system block diagram must also include separate blocks for each field device and their interconnection with the existing and proposed TOC equipment including any routing through communication hubs.

If there are more than four plans to show the ITS sites, then a large scale, 200 to 500 scale, ITS Location Plan shall be provided. The ITS legend and General Notes, with applicable electrical symbols, shall be included on this ITS Location Plan or the first ITS Plan sheet for those Contracts without an ITS Location Plan. Applicable legends for non-ITS work impacting the ITS work shall be included also such as guide rail.

The ITS Plans shall show the following existing/proposed information:

- Existing topography, where applicable to the ITS deployment
- Roadway including striping of the lane configurations
- Drainage with low and high points indicated on the highway
- Guide rail.
- Grid Pavers
- Static Signs
- Top and toe of slopes
- R.O.W., including fencing
- Bridge Structures
- Utility facilities Note: The associated items for work not covered under Division 700 shall be on the respective Construction Plans unless the Contract is for ITS work only.

  Add note on plans for orientation of the CCTV blind spot (medians).

All ITS Plans are to be prepared according to the current Department CADD standards including specifics for ITS. These standards can be obtained from the Department's web site.

ITS symbols for existing and proposed ITS facilities shall be shown on the Construction Plans.

19.0 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
- Utilities (overhead and under ground)

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

20.0 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 (EDQ) sheet. On the EDQ sheet, the total quantity of signs in square feet should be indicated as "If and Where" items.

21.0 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.

22.0 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). Limits for Topsoiling, Stripping, and I-7 soil aggregate or I-11 soil aggregate shall be noted on the sections. Items such as Removal of pavement, I-9 soil aggregate, I-10 soil aggregate 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 Excavation unclassified (wet areas) and Unsuitable Material shall show apparent firm bottom with side slope ratios.

Unclassified excavation in ditches or channels shall be noted with quantities. Quantities shall also be noted for Topsoiling, Stripping, 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, HMA courses may bury the curb on the high side of superelevation 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 superelevation.
- The effect of the superelevation on the sidewalk area may require an additional R.O.W. acquisition.
- Design exceptions may be required to vary cross slopes of superelevation 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 HMA thickness is not known, the Contractor cannot determine the number of passes required to construct the bottom courses of HMA 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 ARE 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.

22.1 Retaining Wall System

For projects with Retaining Walls, refer to Bridge Plans for 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 "limits of common structure volume" of the Structures. For showing the limits of common structure volume, on contract plans, refer to sample control plan standard drawings of the NJDOT “Bridge and Structures Design Manual”.

The Cross Sections shall clearly denote, at each site, the limits of common structure volume. Which applies to all alternate retaining wall designs. The payment for Roadway Excavation, Unclassified and for Backfill within the “limits of common structure volume” for Retaining Walls shall be made under the item for the Retaining Walls; therefore, the quantity for Roadway Excavation and Backfill shall not be included in the roadway earthwork calculations.

22.2 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 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.
- Excavation, Unclassified from plan Sheets shall be quantities not covered on Cross Sections.
- All earthwork quantities from Cross Sections and Plan Sheets shall be reflected in the earthwork summary.
- 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.
- 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 suitable excavated material that will be available for embankment, or to be borrowed as required for the embankment.
- The total quantity for Stripping available will be compared with the quantity required for topsoil.
- The item, Borrow Topsoil, is required when the quantity required for Topsoil is greater than the Stripping available.

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

Sample No. 1 (Format to be used for project with single funding sources).

Sample No. 2 (Format to be used for projects with multiple funding sources).

22.3 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.

23.0 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. It is also available on Department’s website for download.

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) ANNOUNCEMENT 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.

24.0 Structural Plans

Structural plans shall be prepared in accordance with criteria that are provided in the Design Manual for Bridges and Structures.

24.1 Bridge Construction Details (BCD)

Any standard detail or BCD that does not represent the proposed bridge construction concept that is to used on a given project, shall be modified and placed in the Bridge plans. The Designer shall include notes in the Bridge plans that identify which Bridge Construction Detail has been changed and is 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:-

- Bridge deck rehabilitation details 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 and paid for.
- Variations in details that are provided for deck joint assemblies shall be submitted for the RE's approval in accordance with working drawing submission requirements
- 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. - BRIDGE MEDIAN BARRIER" details indicate 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 or a smooth transition between the barriers shall be provided.
- Details for sawcut grooving on bridge decks are indicated. This work is to be included in the overall cost of constructing the deck.
- The "TYPICAL PLAN - CULVERT AND HEADWALL" detail identifies a concrete apron 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.
- To complete the "DRAINAGE BACK OF WALL" presentation, 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 pipe to connect with. This information shall be noted on the Bridge plans.
- Details of 6'-3" curved top bridge chain link fence and 6'-3" vertical bridge chain link fence are provided.
- The Bridge Construction Detail sheets for stay in place (SIP) forms were developed from various Guide Sheets contained in the NJDOT "Bridges and Structures Design Manual".
- Details for provision of bridge approach slabs are included as Bridge Construction Details.

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. Final Design submission guidelines are provided in the Bridges and Structures Design Manual.

STATE	FEDERAL PROJECT NO.
N.J.	I–287–3(42)50

FR–54(134)

State of New Jersey
Department of Transportation

PLANS OF

ROUTE 287

FROM SOUTH OF ROUTE 23 TO PATERSON–HAMBURG TURNPIKE

AND

ROUTE 23

FROM THE VICINITY OF RIVERDALE ROAD TO THE VICINITY OF COTLUSS ROAD

CONTRACT NO. 045961901
GRADING, PAVING & STRUCTURES

BOROUGH OF RIVERDALE — MORRIS COUNTY

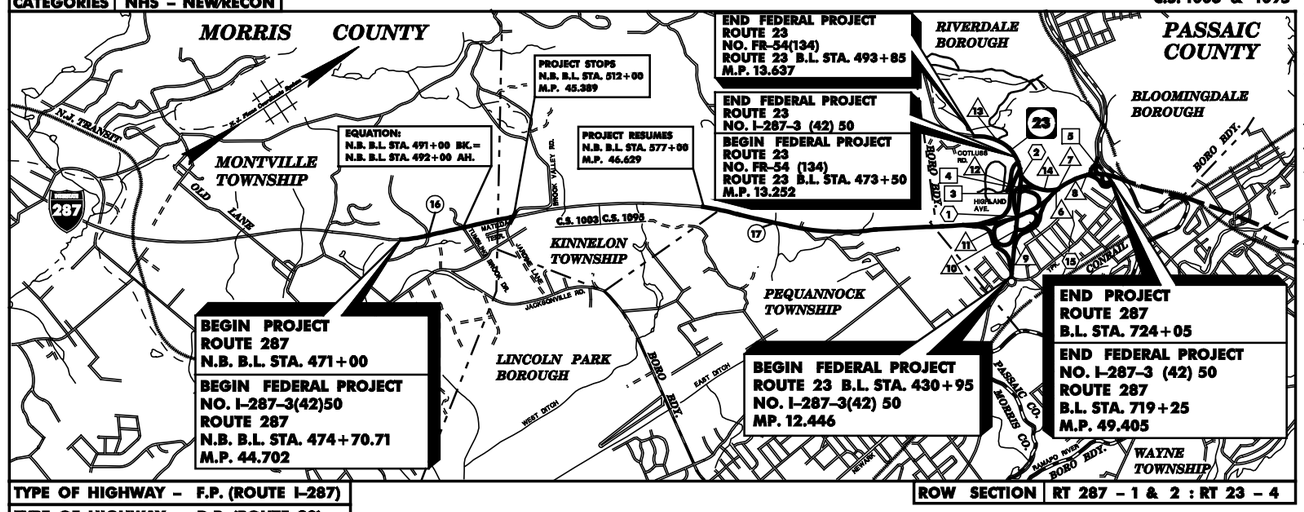
TOWNSHIPS OF KINNELON, PEQUANNOCK & MONTVILLE

PROJECT CATEGORIES	I – NEW/RECON
	NHS – NEW/RECON

SCALES AS INDICATED

JULY 2007

C.S. 1003 & 1095



TYPE OF HIGHWAY – F.P. (ROUTE I–287)	ROW SECTION	RT 287 – 1 & 2 : RT 23 – 4
TYPE OF HIGHWAY – D.P. (ROUTE 23)		

KEY MAP

5280′ 2640′ 0 5280′

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

MID–POINT OF PROJECT
LONGITUDE: 74 ° 38′ 42″ W
LATITUDE: 40 ° 11′ 01″ N

INDEX OF SHEETS

	SHEET NUMBERS	DESCRIPTION
PART 1	1	KEY
	2–9	ESTIMATE – DISTRIBUTION OF QUANTITIES
	10–15	TYPICAL SECTIONS
	16–17	PLAN SHEET INDEX
	18–36	CONSTRUCTION PLANS
	37–43	ENVIRONMENTAL PLANS
	44–55	PROFILES
	56–61	TIES
	62–87	GRADES
	88–115	TRAFFIC CONTROL AND STAGING PLANS
PART 2	116–121	ELECTRICAL PLANS
	122–128	ELECTRICAL DETAILS
	129–154	LANDSCAPE PLANS
	155–180	TRAFFIC STRIPING AND SIGNING PLANS
	181	METHOD OF CROSS SECTIONS
	182–236	CROSS SECTIONS
	237–245	CONSTRUCTION DETAILS
PART 3	246–247	ESTIMATE OF QUANTITIES – BRIDGE
	248–390	BRIDGE PLANS

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 RAMPS 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 STRUCTURES IN THIS CONTRACT	
15	TEMPORARY STRUCTURE UNDER RTE. 23 DETOUR
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
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 99999

BOUND AS – ORIGINAL SHEET

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

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

2007 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO GOVERN

PART 1 OF 3

Submitted by _____ Date _____
Director, Division Of Project Management

Approved by _____ Date _____
State Transportation Engineer

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	PLAN SHEET TOTALS	IF AND WHERE DIRECTED	AS-BUILT QUANTITY	BHF-17(121) QUANTITY	IXAF-26(112) QUANTITY	STATE QUANTITY	DISTRIBUTION: PLAN SHEET QUANTITY
151003M	PERFORMANCE BOND AND PAYMENT BOND	L.S.	L.S.		L.S.		40%	40%	20%	
155009M	FIELD OFFICE TYPE C SET-UP	U	1		1		50%	30%	20%	
155027M	FIELD OFFICE TYPE C MAINTENANCE	M.O.	24		24		12	7	8	
202009P	EXCAVATION, UNCLASSIFIED	C.Y.	90697	90697			301	90076	320	C-2 111 C-3 223 C-9 287 X-90 9007
	BEGIN ALTERNATE GROUP ITEMS									
	ALTERNATE GROUP C – CONCRETE PIPE									
601112P	15" REINFORCED CONCRETE PIPE	L.F.	112	112			112			C-2 62 C-3 50
601114P	18" REINFORCED CONCRETE PIPE	L.F.	76	76			76			C-2 46 C-3 30
601118P	24" REINFORCED CONCRETE PIPE	L.F.	118	118			118			C-2 78 C-3 40
	ALTERNATE GROUP M – METAL PIPE									
601076P	15" CORRUGATED METAL PIPE	L.F.	112	112			112			C-2 62 C-3 50
601078P	18" CORRUGATED METAL PIPE	L.F.	76	76			76			C-2 62 C-3 50
601082P	24" CORRUGATED METEL PIPE	L.F.	118	118			118			C-2 78 C-3 40
	END ALTERNATE GROUP ITEMS									
159003M	BREAKAWAY BARRICADES	U	25		25		15	5	5	
159015M	CONSTRUCTION IDENTIFICATION SIGNS, 4' x 8'	U	2		2				2	
651057P	8" DUCTILE IRON WATER PIPE, CLASS 52	L.F.	4716	4716						C-2 2608 C-3 2108
701006P	2" RIGID METALLIC CONDUIT, TYPE CUG	L.F.	18500	18500						E-1 804 E-2 804 E-3 804 E-8 804 E-9 804 E-10 804 E-11 2000 E-12 4002 E-13 4002
										E-15 1000 E-16 1000 E-17 1000 E-18 672
701087M	FOUNDATIONS, TYPE SFT	U	5	5			3	2		E-2 2 E-9 2 E-15 1
702015M	TRAFFIC SIGNAL STANDARD, STEEL	U	5	5			2	3		E-3 2 E-9 2 E-15 1
804006P	TOPSOILING, 4" THICK	S.Y.	390	390			100	100	190	C-3 200 L-1 100 L-2 50 L-3 40
806018P	FERTILIZING AND SEEDING, TYPE F	S.Y.	38		38		10	10	18	
806006P	FERTILIZING AND SEEDING, TYPE A-3	S.Y.	390	390			100	100	190	C-3 200 L-1 100 L-2 50 L-3 40
809009P	STRAW MULCHING	S.Y.	428	390	38		110	110	208	C-3 200 L-1 100 L-2 50 L-3 40
811006M	LARGE DECIDUOUS TREE, 2-2 1/2" CALIPER, B&B	U	24	24			12	10	2	
9999999	NO ITEM									
9999999	NO ITEM									

STATE: N.J. | FEDERAL PROJECT NO.: BHF-17 (121) IXAF-26 (112)

BX2077-05 - ORIGINAL SHEET

New Jersey Department Of Transportation

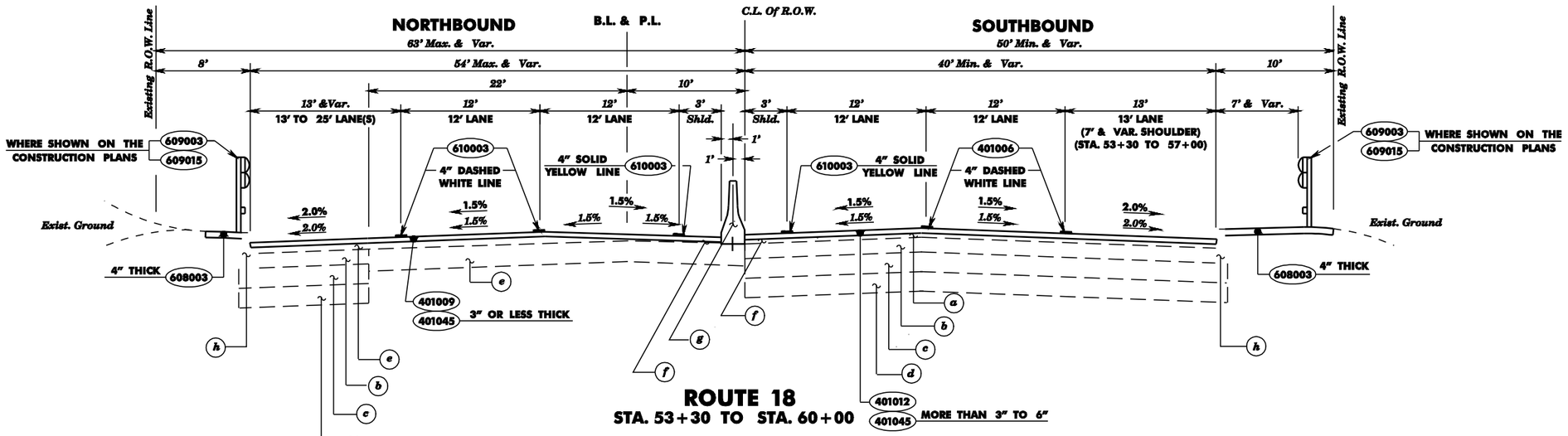
ESTIMATE-DISTRIBUTION OF QUANTITIES

PROJECT: ROUTE 795
ROUTE 43
CONTRACT NO. 010010001

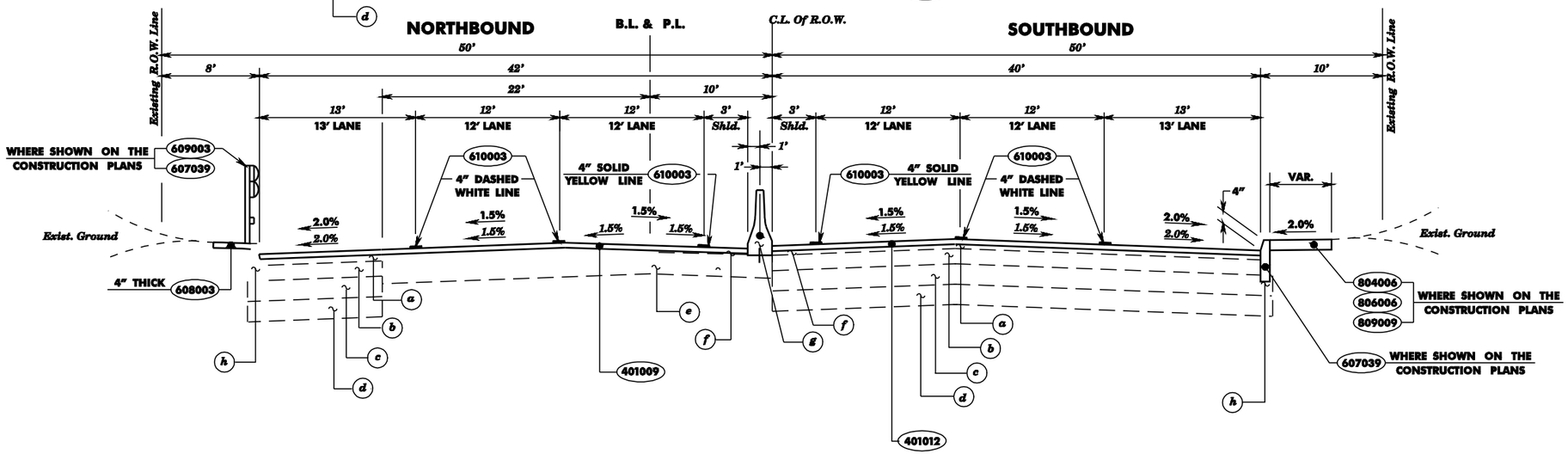
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe

EDQ-1 / EDQ-1

STATE	FEDERAL PROJECT NO.
N.J.	I-IH-IR-18-2(97)53



ROUTE 18
STA. 53+30 TO STA. 60+00



ROUTE 18
STA. 60+00 TO STA. 71+50

PROPOSED MATERIALS

ITEM NO.	DESCRIPTION
401009P	HMA MILLING, 3" OR LESS
401012P	HMA MILLING, MORE THAN 3" TO 6"
401045M	HOT MIX ASPHALT 9.5 H 64 SURFACE COURSSE
607039P	9" x 16" CONCRETE VERTICAL CURB
609003M	BEAM GUIDE RAIL
609015M	RUB RAIL
610003M	TRAFFIC STRIPES, LONG LIFE, EPOXY RESIN 4" THICK
804006P	TOPSOILING, 4" THICK
806006P	FERTILIZING AND SEEDING, TYPE A3
809009M	STRAW MULCHING
608003P	NON-VEGETATIVE SURFACE,HOT MIX ALPHALT

Existing Materials

Symbol	Description
a	Pavement Type FA-BC-2, 3" And Variable Thickness
b	Bituminous Stabilized Base Course, 6" Thick
c	Subbase, 8" Thick
d	Borrow Excavation, Selected Material, 8" Thick
e	Existing 9" Reinforced Concrete
f	Bituminous Concrete Shoulder Variable Thick
g	Existing 24"x 32" White Concrete Barrier Curb, Dowelled
h	9"x 18" White Concrete Vertical Curb

N.T.S.

TS-1 / TS-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

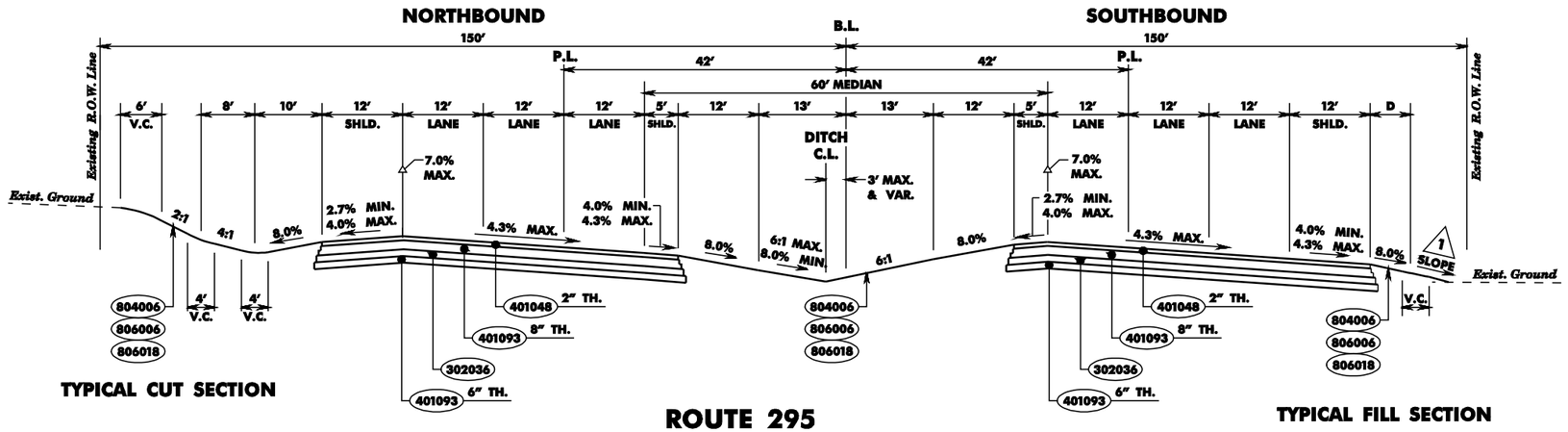
ROUTE 18
CONTRACT NO. 010010001

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

3

BOOT AS - ORIGINAL SHEET

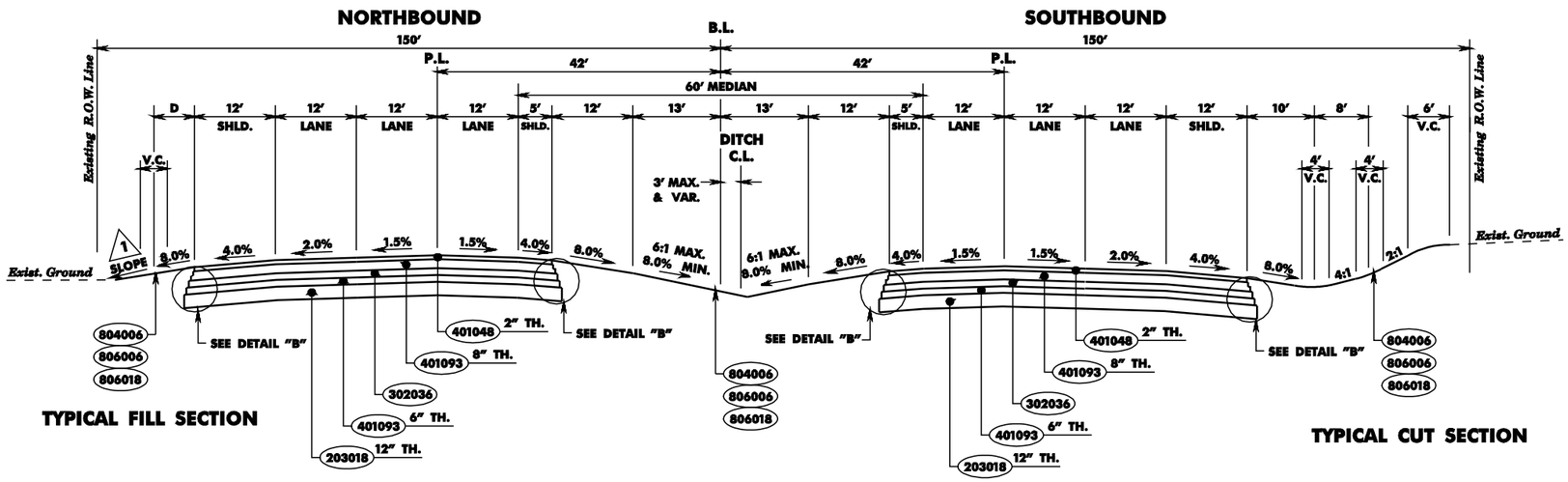
STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93)61



TYPICAL CUT SECTION

TYPICAL FILL SECTION

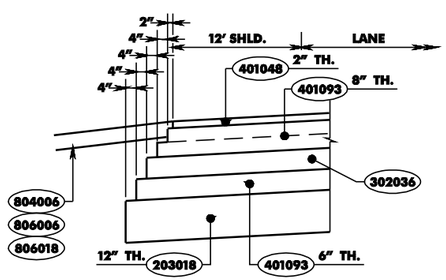
ROUTE 295
SUPERELEVATED SECTION (RIGHT)
VICINITY OF STA. 960+00



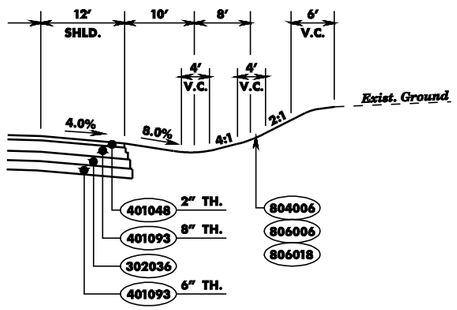
TYPICAL FILL SECTION

TYPICAL CUT SECTION

ROUTE 295 NORMAL SECTION
VICINITY OF STA. 1135+00



PAVEMENT EDGE DETAIL "B"



ROUTE 295
STA. 1112+00 TO 1116+50

PROPOSED MATERIALS

ITEM NO.	DESCRIPTION
203018P	I – 13 SOIL AGGREGATE
401093M	HOT MIX ASPHALT 25 M 64 BASE COURSE
302036P	DENSE GRADED AGGREGATE BASE COURSE, 6″ THICK
401093M	HOT MIX ASPHALT 25 M 64 BASE COURSE
401048M	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE
804006P	TOPSOILING, 4″ THICK
806006P	FERTILIZING AND SEEDING, TYPE A3
806018P	FERTILIZING AND SEEDING, TYPE F

△1

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.

TS-2
TS-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
ROUTE 295
CONTRACT NO. 010010001

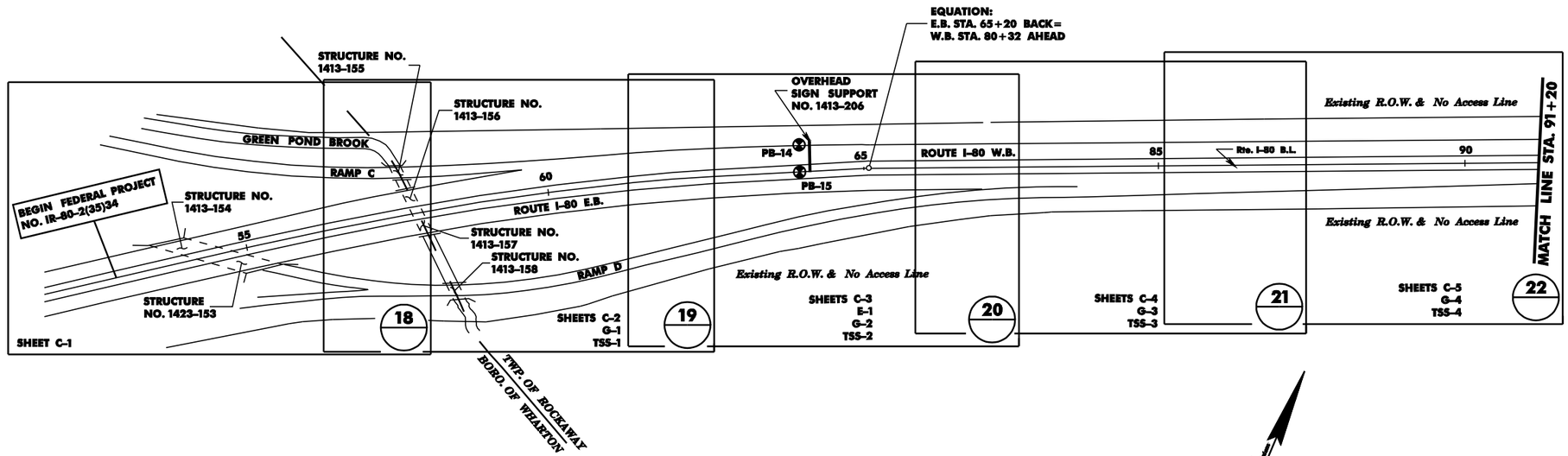
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

4

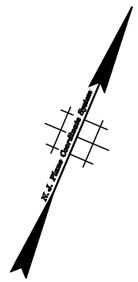
PLOTTED - ORIGINAL SHEET

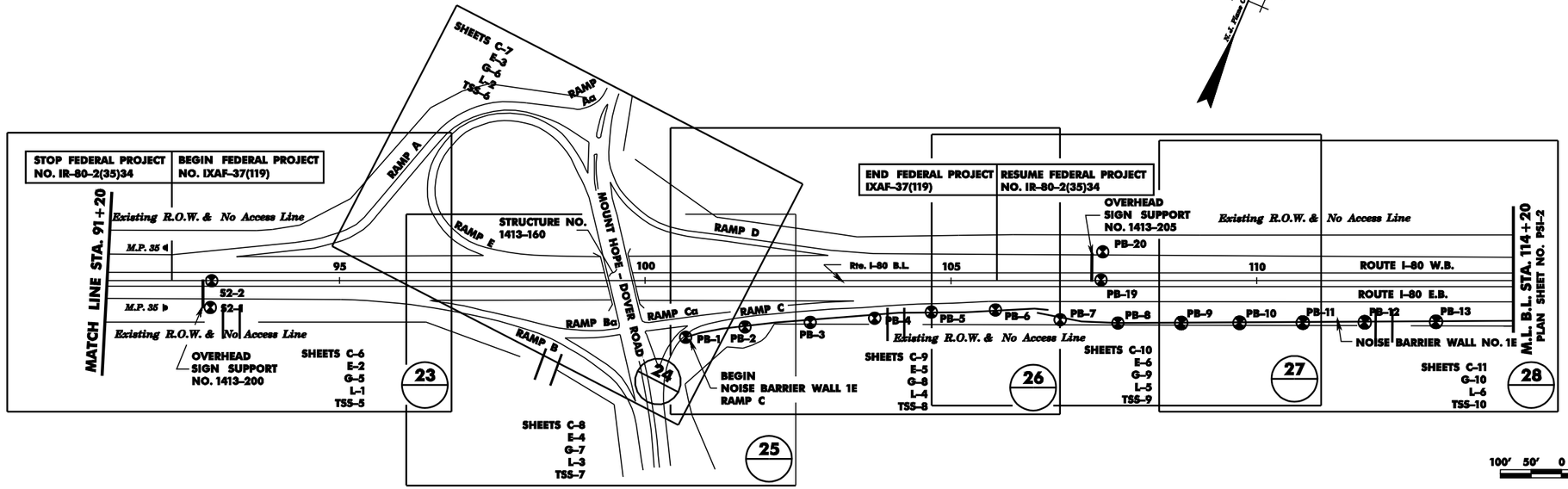
STATE	FEDERAL PROJECT NO.
N.J.	IR-80-2(35)34
	IXAF-37(119)

BOROUGH OF WHARTON *TOWNSHIP OF ROCKAWAY* *COUNTY OF MORRIS*



FEDERAL PARTICIPATION LIMITS





FEDERAL PARTICIPATION LIMITS

100′ 50′ 0 100′ 200′

PSI-1 / PSI-2

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

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PLAN SHEET INDEX

ROUTE 80
CONTRACT NO. 010010001

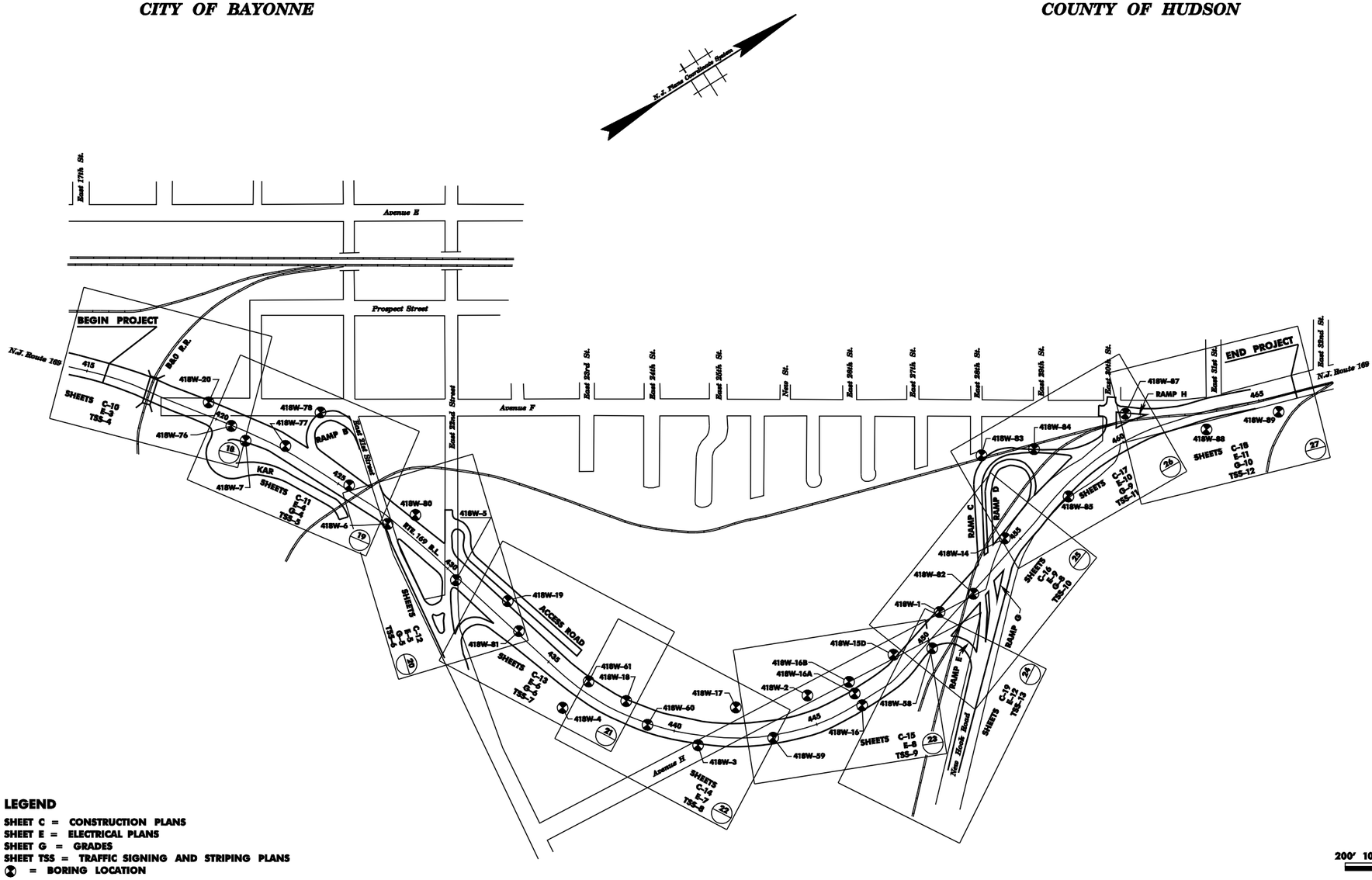
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

5

STATE	FEDERAL PROJECT NO.
N.J.	TOM-7513(108)

CITY OF BAYONNE

COUNTY OF HUDSON



LEGEND

SHEET C = CONSTRUCTION PLANS
SHEET E = ELECTRICAL PLANS
SHEET G = GRADES
SHEET TSS = TRAFFIC SIGNING AND STRIPING PLANS
⧗ = BORING LOCATION

200′ 100′ 0 200′ 400′

PSI-2
PSI-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PLAN SHEET INDEX

ROUTE 169
CONTRACT NO. 010010001

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

6

BOARD OF CHOSEN FREEHOLDERS

NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD LEGEND

STATE	FEDERAL PROJECT NO.
N.J.	*

Linear Features

Existing	PROPOSED	
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
ITS	ITS	Intelligent Transpotation System (Wires & Cables)
(Size & Type) (Over 30" - Draw to Size)	(SIZE & TYPE)	Sanitary Sewers or Storm Drains
		Pavements (Concrete or Bituminous)
		Shoulders
		Curbs
(F) (C)	(C) (F)	Slopes (Cut & Fill)
5+00 ℄	℄ 10+00	Base Line
		Twp., City, County Lines
Existing R.O.W. Line	PROPOSED R.O.W. LINE	Right of Way Lines (Access Permitted)
Existing R.O.W. & No Access Line	PROP. R.O.W. & NO ACCESS LINE	Right of Way Lines (No Access)
		Easements
℄		Property Line
- x — x — x — x — x -		Fence (Size & Type)
		Reset Fence
		Beam Guide Rail
		Reset Beam Guide Rail
		Noise Walls
		Wetland Limit Line
		Silt Fence
Ditch	DITCH	Ditches
		Railroad Tracks
		Tree Line

Topographical Features

Existing	PROPOSED	
□	■	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) (Inlet or Manholo)
	■	New Manhole Casting, Square Frame, Circular Cover
		R.C. End Section or C.M. Headwall
▭	▬	Headwalls
		Headwalls & Aprons
W	•	Water Gate Valves
	•	Reset Water Gate Valves
G	•	Gas Gate Valves
	•	Reset Gas Gate Valves
Hyd.		Hydrants
		Reset Hydrants
		Utility Pole (Type & Number)
	TEMP	Temporary Utility Pole
		Traffic Signal
J.B.	J.B.	Junction Box
Ⓕ	Ⓕ	Fiber Optic Junction Box
J.B. & Light	J.B.	Junction Box Foundation
		Signs
		Vertical Panels
		Camera (With Blind Spot)
		Dynamic Message Sign (DMS)

Topographical Features

Existing	PROPOSED	
○	●	Guide Rail End Terminals
△	▲	Beam Guide Rail Anchorages
Mon.	■	Monuments
		ROW Monument (ROW Control Points)
	TEST PIT NUMBER	Test Pit
Boring Number	BORING NUMBER	Borings (Boring Number)
		Deciduos Tree (Size, Kind)
		Evergreens
		Bush
		Hedges
		Swamp

Double Reference Codes

EDQR	ESTIMATE AND DISTRIBUTION OF QUANTITIES - ROADWAY
TS	TYPICAL SECTIONS
PSI	PLAN SHEET INDEX
C	CONSTRUCTION PLANS
EP	ENVIRONMENTAL PLANS & SOIL EROSION & SEDIMENT CONTROL PLANS
D	DRAINAGE PLANS
DTL	CONSTRUCTION DETAILS
P	PROFILES
T	TIES
G	GRADES
TC	TRAFFIC CONTROL AND STAGING PLANS
TSP	TRAFFIC SIGNAL PLANS
E	ELECTRICAL PLANS
HL	HIGHWAY LIGHTING PLANS
ITS	INTELLIGENT TRANSPORTATION SYSTEM PLANS
SL	SIGN LOCATION PLANS
TSS	TRAFFIC SIGNING AND STRIPING PLANS
STD	SIGN TEXT DETAILS
L	LANDSCAPE PLANS
MS	METHOD OF CROSS SECTIONS
X	CROSS SECTIONS
EQB	ESTIMATE OF QUANTITIES - BRIDGE
B	BRIDGE PLANS

Miscellaneous Symbols

- Items With No Alternate
- Alternate Items OR — For Alternate Pipe Items (C) = Concrete (M) = Metal
- Milling
- Building to be Demolished
- Removal of Concrete Base Course & Concrete Surface Courses
- Building to be Removed & Paid for Under Clearing Site
- PARCEL — Demolition No. & Parcel No. of Building to be Demolished
- PROFILE +% LEVEL LINE -%
- High Point
- Low Point
- B.M. — Bench Mark

GENERAL NOTES:

ABBREVIATIONS USED IN THIS CONTRACT

AH., BK.	AHEAD, BACK	J.B.	JUNCTION BOX	RCP, R.C.P.	REINFORCED CONCRETE PIPE
℄, B.L.	BASELINE	LT., RT.	LEFT, RIGHT	RMC, R.M.C.	RIGID METALLIC CONDUIT
B.M.	BENCH MARK	L.O.P.	LIMIT OF PAVEMENT (PAVING)	RNMC, R.N.M.C.	RIGID NON-METALLIC CONDUIT
B.T.	BELL TELEPHONE	L.O.M.	LIMIT OF MILLING	ROW, R.O.W.	RIGHT OF WAY
BIT., BITUM.	BITUMINOUS	M.B.	MAILBOX	R.R.	RAILROAD
BLDG.	BUILDING	M.P.	MILE POST	RTE., RT.	ROUTE
℄, C.L.	CENTERLINE	MAX.	MAXIMUM	SAN.	SANITARY
C.I.P.	CAST IRON PIPE	MIN.	MINIMUM	SDWK.	SIDEWALK
C.M.P.	CORRUGATED METAL PIPE	NO.	NUMBER	S.H.D.	STATE HIGHWAY DEPARTMENT
CONC.	CONCRETE	N.T.S.	NOT TO SCALE	SHLD.	SHOULDER
CULV.	CULVERT	PAV'T.	PAVEMENT	℄, S.L.	SURVEY LINE
D, DIA.	DIAMETER	PERF.	PERFORATED	S.O.D.	SUBBASE OUTLET DRAIN
D.C.	DROP CURB	P.G.L.	PROFILE GRADE LINE	STY.	STORY
DE	DITCH EXCAVATION	ℙ, P.L.	PROPERTY LINE, PROFILE LINE	T	TANGENT
DEP., DP	DEPRESSED CURB	PK	PARKER KAYLON MASONRY NAIL	TBA	TO BE ABANDONED
DH	DRILL HOLE	POC, P.O.C.	POINT ON CURVE	TBR	TO BE REMOVED
DWY	DRIVEWAY	POL, P.O.L.	POINT ON LINE	TEL.	TELEPHONE
E.B., W.B., N.B., S.B.	EASTBOUND, WESTBOUND NORTHBOUND, SOUTHBOUND	POT, P.O.T.	POINT ON TANGENT	TEMP.	TEMPORARY
		PRC, P.R.C.	POINT OF REVERSE CURVE	THK., TH.	THICK
EL., ELEV.	ELEVATION	PROP.	PROPOSED	TYP.	TYPICAL
EXIST.	EXISTING	PT, P.T.	POINT OF TANGENCY	U.D.	UNDERDRAIN
GR.	GRATE	PVC, P.V.C.	POLYVINYL CHLORIDE PIPE, POINT OF VERTICAL CURVATURE	UP, U.P.	UTILITY POLE
HT.	HEIGHT			VAR.	VARIABLE, VARIES
H.W.	HEADWALL	PVI, P.V.I.	POINT OF VERTICAL INTERSECTION	W.C.V.C.	WHITE CONCRETE VERTICAL CURB
HYD.	HYDRANT	PVT, P.V.T.	POINT OF VERTICAL TANGENCY, PAVEMENT	WM	WATER METER
INV.	INVERT	R	RADIUS	X-SECT	CROSS SECTION
IP	IRON PIN	RCCP, R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE		

ELECTRICAL PLAN ABBREVIATIONS

CF	CUTOFF LUMINAIRE, TYPE ____
E	EXPRESSWAY LUMINAIRE
ID	IMAGE DETECTOR
IDC	IMAGE DETECTOR CABLE
JBF	JUNCTION BOX FOUNDATION
L	LUMINAIRE
LMA-A	LIGHTING MAST ARM, ALUMINUM
LMA-S	LIGHTING MAST ARM, STEEL
LSA	LIGHTING STANDARD, ALUMINUM
LSF	LIGHTING STANDARD, FIBERGLASS
LSS	LIGHTING STANDARD, STEEL
MAS	MAST ARM SIGN
MSC II	MEDIUM SEMI-CUTOFF LUMINAIRE, TYPE 2
MSC III	MEDIUM SEMI-CUTOFF LUMINAIRE, TYPE 3
PB	PUSH BUTTON
PSH	PEDESTRIAN SIGNAL HEAD
PSS	PEDESTRIAN SIGNAL STANDARD
TSH	TRAFFIC SIGNAL HEAD
TSMA-A	TRAFFIC SIGNAL MAST ARM, ALUMINUM
TSMA-S	TRAFFIC SIGNAL MAST ARM, STEEL
TSS-C	TRAFFIC SIGNAL STANDARD, ALUMINUM "C"
TSS-K	TRAFFIC SIGNAL STANDARD, ALUMINUM "K"
TSS-S	TRAFFIC SIGNAL STANDARD, STEEL
TSS-SC	TRAFFIC SIGNAL STANDARD, STEEL COMBINATION
TSS-T	TRAFFIC SIGNAL STANDARD, ALUMINUM "T"
UL-P	UNDERDECK LIGHTING, TYPE "P"
UL-W	UNDERDECK LIGHTING, TYPE "W"
V	VERTICAL LUMINAIRE

Proposed Bridge

Bridge Appoach Slabs and Transition Slabs

N.J. Plane Coordinate System

North Arrow To Be Used On Standard Construction Sheets Where Bearings Refer To N. J. Plane Coordinate System

N.T.S.

C-1 / C-6

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLANS

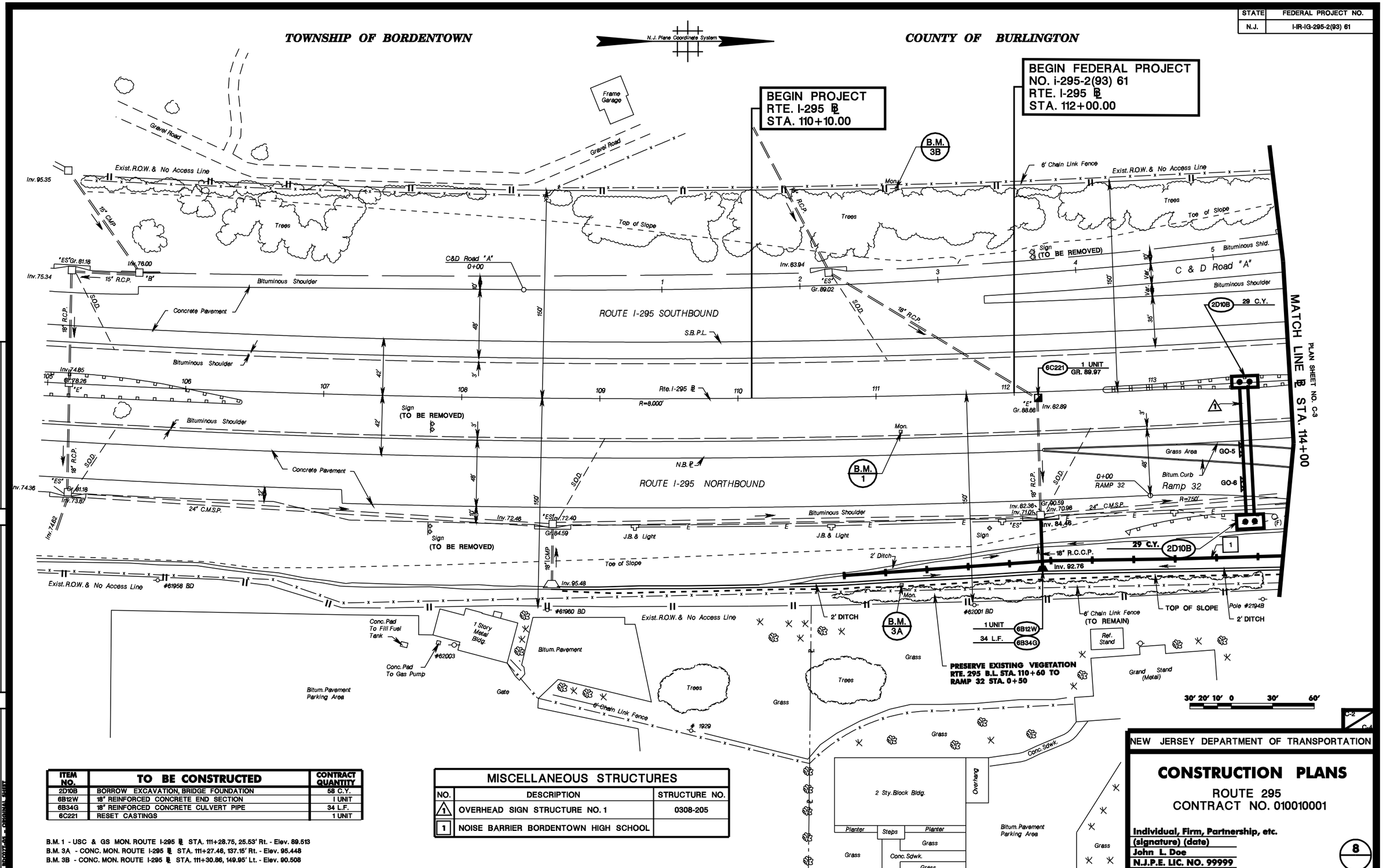
ROUTE *

CONTRACT NO. *

7 / *

ID=TPKXHA3 date=25-FEB-2008 18:59 scale=63.525650:1.000000 pen table=\\Wdotpw\vSystem\WJDOT\W9\Projects\NJDOT\Eng\plot\TBL\Roadway\dot.TBL file=

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93) 61



ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
2D10B	BORROW EXCAVATION, BRIDGE FOUNDATION	58 C.Y.
6B12W	18" REINFORCED CONCRETE END SECTION	1 UNIT
6B34G	18" REINFORCED CONCRETE CULVERT PIPE	34 L.F.
6C221	RESET CASTINGS	1 UNIT

B.M. 1 - USC & GS MON. ROUTE I-295 ℄ STA. 111+28.75, 25.53' Rt. - Elev. 89.513
B.M. 3A - CONC. MON. ROUTE I-295 ℄ STA. 111+27.46, 137.15' Rt. - Elev. 95.448
B.M. 3B - CONC. MON. ROUTE I-295 ℄ STA. 111+30.86, 149.95' Lt. - Elev. 90.508

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 PLANS

ROUTE 295
CONTRACT NO. 010010001

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

8

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93) 61
	1XAF-37(119)

TOWNSHIP OF BORDENTOWN

COUNTY OF BURLINGTON

N. J. Plane Coordinate System

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

MATCH LINE B.L. STA. 136+50
PLAN SHEET NO. C-5

29 C.Y. 6" THICK 163 S.Y. — 301003, 302042
66 TONS 7" THICK 19 TONS 2" THICK — 401093, 401048
301003 197 C.Y. 6" THICK; 302033 1,180 S.Y.; 405009 1,180 S.Y.
PCC 110+82.58
B.M. 4 Mon.
72 L.F. 607039
301003 114 C.Y. 6" THICK & VAR.; 507051 149 S.Y.; 405021 36 L.F.
BEGIN BRIDGE STA. 112+50.03
Rte. I-295 B.L. Sta. 113+34.11 = Rte. 130 B.L. Sta. 8+70.00
607039 115 L.F.
ROUTE I-295 B.L.
301003 6 C.Y. 5" THICK; 302033 25 S.Y.; 405009 25 S.Y.
Equation : Route I-295 B.L. Sta. 116+48.56 Bk. = Route I-295 B.L. Sta. 135+00.00 Ah.
203018 124 C.Y. 12" THICK STA. 117+50 TO 118+00
301003 344 C.Y. 6" THICK; 302036 2,067 S.Y.; 401093 951 TONS 8" THICK; 401048 237 TONS 2" THICK
R=8,000' R=11,000'
15" R.C.C.P. 15" R.C.P.
STRUCTURE NO. 0328-169
N.B. P.I.
UNDERDRAIN
ROUTE I-295 NORTHBOUND
7 S.Y. 606075
LONGITUDINAL UNDERDRAIN
TOP OF SLOPE
952 L.F. 607039
END BRIDGE STA. 114+34.03
FOR GUIDE RAIL ACROSS BRIDGE SEE BRIDGE PLANS
MEET EXIST. CURB
GOX-1
R=231.38'
R=2,788'
R=30'
607039 360 L.F.
Existing R.O.W. & No Access Line
301003 66 C.Y. 6" THICK; 302042 393 S.Y.; 401093 45 TONS 7" THICK; 401048 45 TONS 2" THICK
RAMP 31
PCC 2+91.54
PCC 3+84.98
RAMP 31 B.L.
Inv. 69.54 Gr. 74.98 Inv. 69.90
Top of Slope
J.B. & Light
R=894'
ROUTE 130 NORTHBOUND
ROUTE 130 SOUTHBOUND
N62° 39'24"E
50.51'
62.98'
4" W.C.Y.C.
J.B. & Light
To Be Removed PRC 0+000 RAMP 31
B.M. 5B Mon.
301003 83 C.Y. 6" THICK & VAR.; 507051 178 S.Y.; 405021 17 L.F.
END FEDERAL PROJECT NO. I-295-2(93)61 ROUTE 130 B.L. STA. 11+69.29
RESUME FEDERAL PROJECT NO. 1XAF-37(119) ROUTE 130 B.L. STA. 11+69.29
49 C.Y. AT RAMP CLOSURE 202009
Existing R.O.W. & No Access Line
PCC 10+65.70
FOR SLOPE LINES, SEE GRADE SHEETS G-3 & G-5
DETENTION BASIN
MEET EXIST. PAV'T.
MEET EXIST. CURBS
24" C.M.P.
15" C.M.P.
24" C.M.S.P. (TO BE REMOVED)
UNDERDRAIN
R=130'
RAMP 31
TOP OF SLOPE
C & D ROAD "B"
PC Sta. 12+91.96 B.L. ROUTE 130
Bituminous Pavement
S.O.D.
Gr. 68.26 Inv. 62.76
Gr. 68.19 Inv. 62.24
Gr. 70.03 Inv. 63.06
Gr. 68.60 Inv. 63.11
Gr. 66.78 Inv. 60.78
Inv. 61.40
Inv. 60.91
WORK TO BE PERFORMED BY P.S.E. & G.
24 R.C.P.
4" STEEL
MATCH LINE B.L. STA. 13+50
PLAN SHEET NO. C-4
799 C.Y. 12" THICK 377 C.Y. 6" THICK 2,172 S.Y. — 203018, 301003, 302036
564 TONS 5" THICK 226 TONS 2" THICK — 401093, 401048
607039 840 L.F.
30 L.F. 607003; 4 S.Y. 606075
9 C.Y. 202009; 42 S.Y. 302042; 13 TONS 7" THICK 4 TONS 2" THICK — 401093, 401048
202009 16 C.Y.; 301003 9 C.Y. 6" THICK 42 S.Y. 302042; 401093 13 TONS 7" THICK; 401048 4 TONS 2" THICK
607003 16 L.F.; 606075 2 S.Y.
203012 50 C.Y.

FOR PROPOSED DRAINAGE ITEMS AND QUANTITIES, SEE DRAINAGE SHEET D-3

30' 20' 10' 0 30' 60'

C-3 / C-4

MISCELLANEOUS STRUCTURES

NO.	DESCRIPTION	STRUCTURE NO.
1	ROUTE 295 N.B. OVER ROUTE 130	0328-169
2	LIGHTING TOWER, ROUTE 295 B.L. STA. 111+62, 227' RT.	
4	OVERHEAD SIGN STRUCTURE NO. 4	0328-206
9	BRIDGE MOUNTED SIGN STRUCTURE NO. 3	GOX-1

B.M. 4 – CONC. MON. RT. 295 B.L. STA. 110+82.58, 0.0', ELEV. 29.401
B.M. 5B – CONC. MON. RT. 295 B.L. STA. 114+71.92, 168.67' RT., ELEV. 28.466

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	I-295-3(93)61 QUANTITY	1XAF-37(119) QUANTITY	CONTRACT QUANTITY
202009P	EXCAVATION, UNCLASSIFIED	49 C.Y.	41 C.Y.	90 C.Y.
203012P	I-19 SOIL AGGREGATE		50 C.Y.	50 C.Y.
203018P	I-13 SOIL AGGREGATE	923 C.Y.		923 C.Y.
301003P	SUBBASE	1,216 C.Y.	18 C.Y.	1,216 C.Y.
302033P	DENSE GRADED AGGREGATE BASE COURSE, 4" THICK	1,305 S.Y.		1,305 S.Y.
302036P	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK	4,239 S.Y.		4,239 S.Y.
302042P	DENSE GRADED AGGREGATE BASE COURSE, 8" THICK	556 S.Y.	84 S.Y.	640 S.Y.
401093M	HOT MIX ASPHALT 28 M 64 BASE COURSE	1,739 TONS	26 TONS	1,765 TONS
401048M	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE	527 TONS	8 TONS	535 TONS
405009P	CONCRETE SURFACE COURSE, 9" THICK	1,305 S.Y.		1,305 S.Y.
507031P	CONCRETE BRIDGE APPROACH	327 S.Y.		327 S.Y.
405021M	EXPANSION JOINT ASSEMBLY	53 L.F.		53 L.F.
607003P	15" x 41" CONCRETE BARRIER CURB		46 L.F.	
607039P	9" x 16" CONCRETE VERTICAL CURB	2339 L.F.		2339 L.F.
606075P	CONCRETE ISLAND, 4" THICK	7 S.Y.	6 S.Y.	13 S.Y.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN

ROUTE 295
CONTRACT NO. 010010001

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

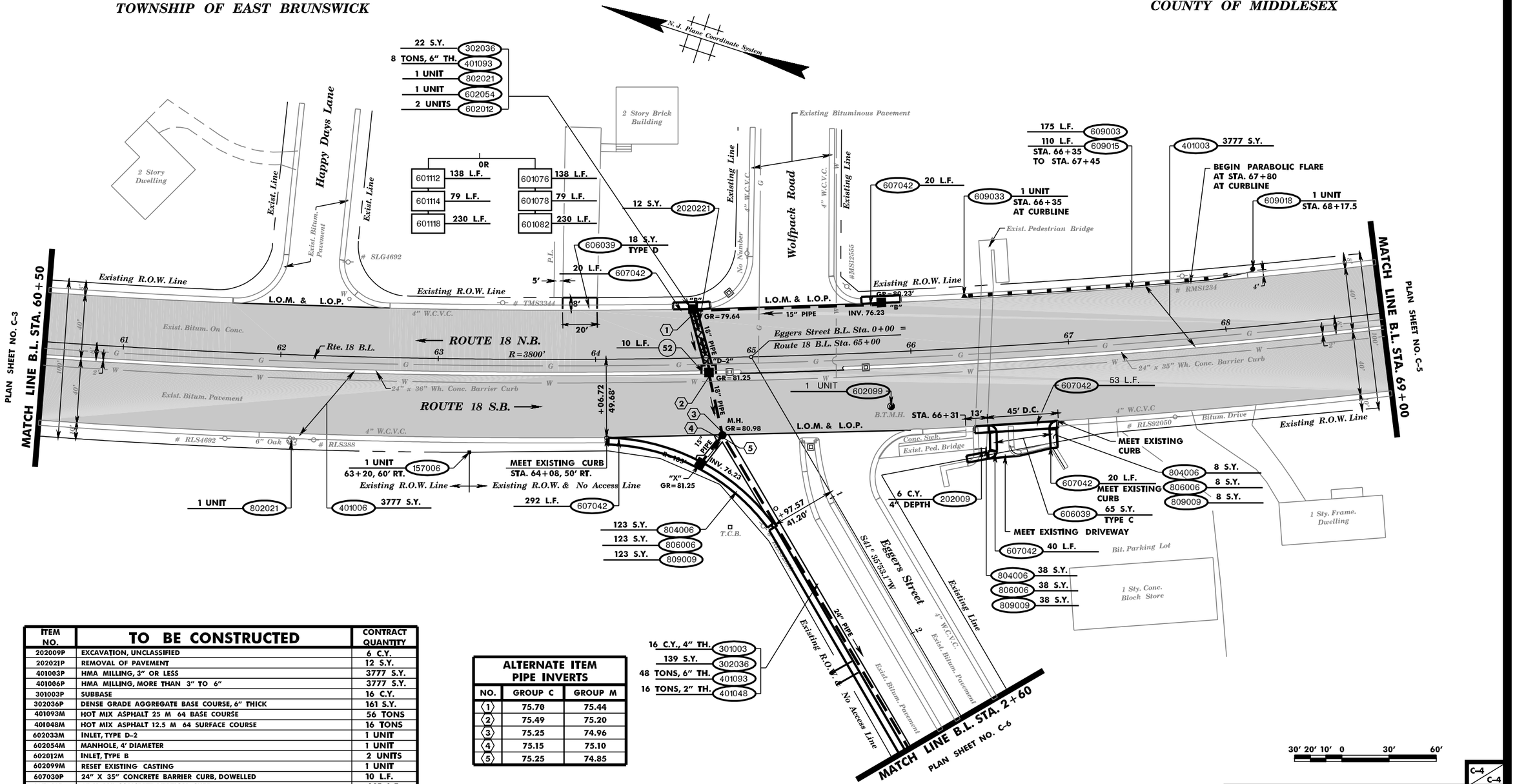
9

ROUTE 295 – ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-18-2(93) 61

TOWNSHIP OF EAST BRUNSWICK

COUNTY OF MIDDLESEX



ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
202009P	EXCAVATION, UNCLASSIFIED	6 C.Y.
202021P	REMOVAL OF PAVEMENT	12 S.Y.
401003P	HMA MILLING, 3" OR LESS	3777 S.Y.
401006P	HMA MILLING, MORE THAN 3" TO 6"	3777 S.Y.
301003P	SUBBASE	16 C.Y.
302036P	DENSE GRADE AGGREGATE BASE COURSE, 6" THICK	161 S.Y.
401093M	HOT MIX ASPHALT 25 M 64 BASE COURSE	56 TONS
401048M	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE	16 TONS
602033M	INLET, TYPE D-2	1 UNIT
602054M	MANHOLE, 4' DIAMETER	1 UNIT
602012M	INLET, TYPE B	2 UNITS
602099M	RESET EXISTING CASTING	1 UNIT
607030P	24" X 35" CONCRETE BARRIER CURB, DOWELLED	10 L.F.
607042P	9" X 18" CONCRETE VERTICAL CURB	445 L.F.
606039P	HOT MIX ASPHALT DRIVEWAY, 6" THICK	72 S.Y.
609003M	BEAM GUIDE RAIL	175 L.F.
609033M	BEAM GUIDE RAIL ANCHORAGE	1 UNIT
609018M	FLARED GUIDE RAIL TERMINAL	1 UNIT
609015M	RUB RAIL	110 L.F.
802021M	TREE REMOVAL, OVER 6" TO 12" DIAMETER	1 UNIT
804006P	TOPSOILING, 4" THICK	169 S.F.
806006P	FERTILIZING AND SEEDING, TYPE A-3	169 S.F.
809009P	STRAW MULCHING	169 S.F.
157006M	MONUMENTS	1 UNIT

ALTERNATE ITEM PIPE INVERTS		
NO.	GROUP C	GROUP M
1	75.70	75.44
2	75.49	75.20
3	75.25	74.96
4	75.15	75.10
5	75.25	74.85

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
	ALTERNATE GROUP C	
601112P	15" REINFORCED CONCRETE PIPE	138 L.F.
601114P	18" REINFORCED CONCRETE PIPE	79 L.F.
601118P	24" REINFORCED CONCRETE PIPE	230 L.F.
	ALTERNATE GROUP M	
601076P	15" CORRUGATED METAL PIPE	138 L.F.
601078P	18" CORRUGATED METAL PIPE	79 L.F.
601082P	24" CORRUGATED METAL PIPE	230 L.F.

C-4 / C-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN

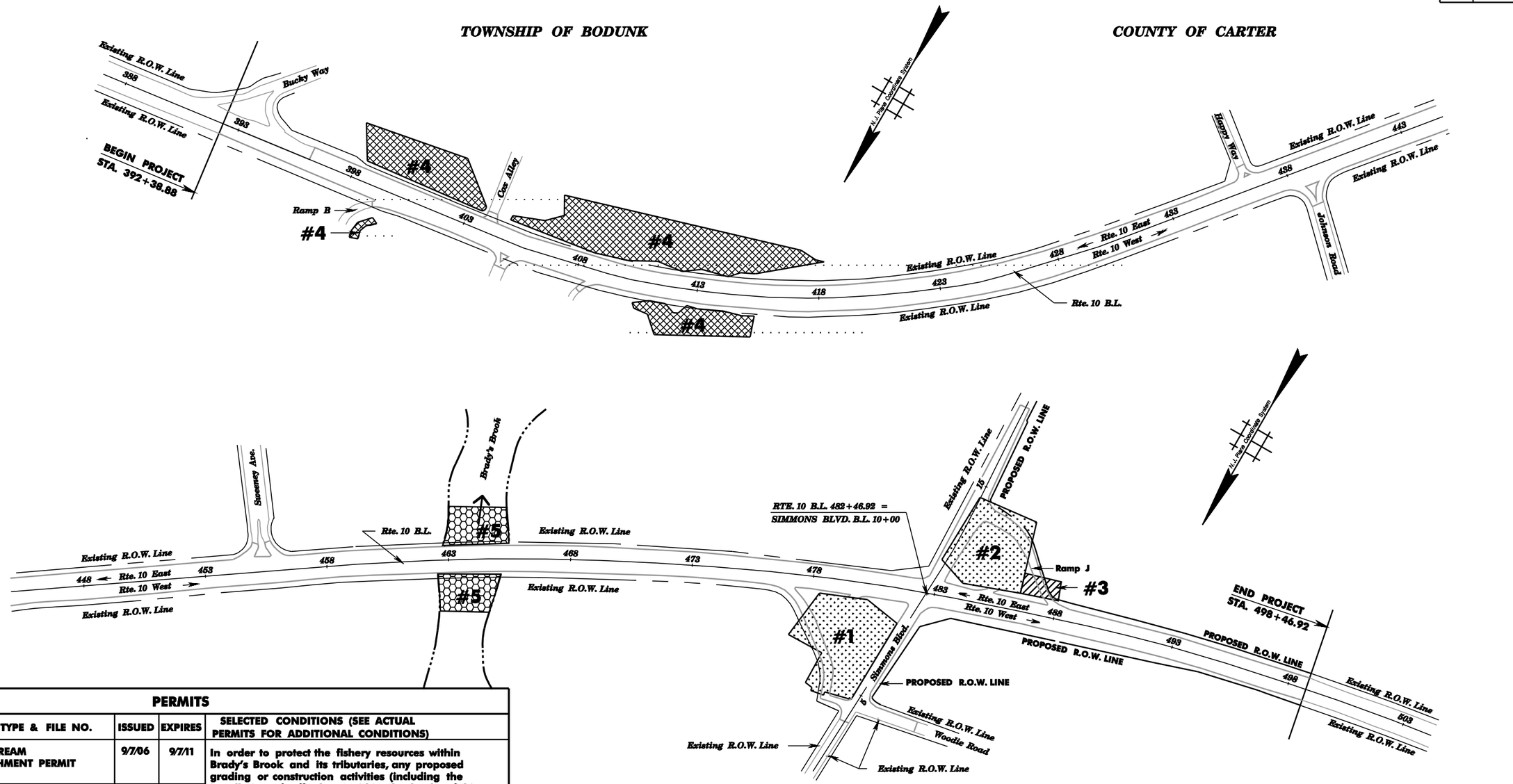
ROUTE 18
CONTRACT NO. 010010001

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

10

ROUTE 18 ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	NH-4567(258)



PERMITS

PERMIT TYPE & FILE NO.	ISSUED	EXPIRES	SELECTED CONDITIONS (SEE ACTUAL PERMITS FOR ADDITIONAL CONDITIONS)
NJDEP STREAM ENCROACHMENT PERMIT NO. XX.	9/7/06	9/7/11	In order to protect the fishery resources within Brady's Brook and its tributaries, any proposed grading or construction activities (including the installation of cofferdams) within the banks of this or any other waterbody on site are prohibited between May 1 and June 30 of each year. In addition, any activity within the 100-year floodplain or flood hazard area draining to the waterbody (ies) that could introduce sediment into said waterbody (ies) or that could cause an increase in the natural level of turbidity is also prohibited during this period. The NJDEP reserves the right to suspend all regulated activities on site should it be determined that proper precautions have not been taken to ensure continuous compliance with these conditions. In addition, Refer to the Environmental Notes and Commitments on Sheet Number XX and the Soil Erosion and Sediment Control General Notes on Sheet Number XX.
NJDEP FRESHWATER WET-LANDS GENERAL PERMIT NOS. 10B & 11, MO. WATER QUALITY CERTIFICATION AND TRANSITION AREA WAIVER, FILE NOS. XX AND XX	9/7/06	9/7/11	
NJPDES 5G3 – CONSTRUCTION ACTIVITY STORMWATER GENERAL PERMIT (NJG0088323) (REQUEST FOR AUTHORIZATION (RFA) IS REQUIRED)	3/15/07	2/29/12	

ENVIRONMENTALLY SENSITIVE AREAS

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
D	SENSITIVE AREA – STATE OPEN WATERS, SEE ENVIRONMENTAL PLANS EP-7

LEGEND

#1 – #2	SENSITIVE AREAS – ASBESTOS, SEE ENVIRONMENTALLY SENSITIVE AREA A
#3	SENSITIVE AREA – UNDERGROUND STORAGE TANKS, SEE ENVIRONMENTALLY SENSITIVE AREA B
#4	SENSITIVE AREA – WETLANDS, SEE ENVIRONMENTALLY SENSITIVE AREA C
#5	SENSITIVE AREA – STATE OPEN WATERS, SEE ENVIRONMENTALLY SENSITIVE AREA D

EP-1A / EP-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL & SOIL EROSION & SEDIMENT CONTROL PLANS

ROUTE 10 OVER BRADY'S BROOK

CONTRACT NO. 012345678

(NAME OF CONSULTANT)
(CERTIFICATE OF AUTHORIZATION NO. _ OR PROFESSIONAL ASSOCIATION)
(ENGINEERS SIGNATURE) (DATE)
(ENGINEERS NAME PRINTED)
(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)

11

ID=TPXOHA3 date=25-FEB-2009 19:02 scale=53.996803:1.000000 pen table=\\Njdotprjws\v8system\NJDOTWS\Projects\NJDOTEng\Iplot\TBLs\Roadway\dot.TBL

file=

TOWNSHIP OF SEATOWN

COUNTY OF CAPE MAY

STATE N.J. | FEDERAL PROJECT NO.

LEGEND OF ENVIRONMENTALLY SENSITIVE AREAS

- SENSITIVE AREAS A - WETLANDS , SEE ENVIRONMENTAL PLANS XX.
- SENSITIVE AREA B - PARKLAND (GREEN ACRES) SEE ENVIRONMENTAL PLANS XX.
- SENSITIVE AREA C - THREATENED/ENDANGERED SPECIES - HERON ROOKERY, SEE ENVIRONMENTAL PLANS XX.
- SENSITIVE AREA D - UNDERGROUND STORAGE TANK, PRIOR TO DEMOLITION ALL U.S.T.S MUST BE REMOVED. SEE ENVIRONMENTAL PLANS XX.
- SENSITIVE AREA E - HISTORIC PROPERTY, SEE ENVIRONMENTAL PLANS XX.

N.J. Plane Coordinate System NAD83

EGRET CHANNEL

BEGIN PROJECT
MEET EXISTING PAVEMENT
℄ STA. 2375+40

END PROJECT
MEET EXISTING PAVEMENT
℄ STA. 2381+25

PARKLAND (GREEN ACRES)

B

285 LF 158009

85 LF 158009

110 LF 158048

100 LF 158048

345 LF 158012

D

Buried Tank

Wooden Building

Wooden Building

Propsed R.O.W. Line

US ROUTE 11

2374 2375 2376 2377 2378 2379 2380 2381 2382 2383

N 5°39'52" E

+40 Bit.

+75

Cofferdam

(F)

E

HISTORIC PROPERTY

Existing Parking Lot

300 LF 158009

175 LF 605009

140 LF 158003

158003 360 LF

PROPOSED ELEVATED BOARDWALK

PROPOSED FISHING PIER

WETLANDS

A

158045 245 LF

158009 105 LF

158009 100 LF

C

HERON ROOKERY

Wooded Area

Cofferdam for Pile Construction

158048 45 LF

158048 45 LF

Creosoted Fender System To Be Removed

158060 110 LF

158009 385 LF

1"=30'

30 0 30 60

EP-1B
EP-5

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
158009M	Heavy Duty Silt Fence, Orange	1260 LF
158012M	Heavy Duty Silt Fence, Black	345 LF
158060M	Absorbent Boom	110 LF
158003M	Caution Fence	500 LF
158045M	Floating Turbidity Barrier, Type 2	245 LF
605009P	Chain-Link Fence, Aluminum-Coated Steel, 6' High	175 LF
158048M	Floating Turbidity Barrier, Type 3	175 LF

PERMITS

PERMIT TYPE AND FILE NUMBER	ISSUED	EXPIRES	SELECTED PERMIT CONDITIONS (SEE ACTUAL PERMITS FOR ADDITIONAL CONDITIONS)
New Jersey Department of Environmental Protection CAFRA Permit (NJDEP File No. XX), Waterfront Development Permit (NJDEP File No. XX), and Coastal Wetlands Permit (NJDEP File No. XX).	3/1/07	3/1/12	Construction activities that could cause noise and/or vibration are prohibited from April 1 through August 15 of each year in order to protect the heron rookery.
US Army Corps of Engineers NP#23 (USACOE File No. XX)	4/5/07	3/18/12	To protect the anadromous fish run during migration and spawning, a timing restriction of April 1 to June 30 of each year, prohibiting in-water construction activities is imposed to reduce the possibility of increases in turbidity.
US Coast Guard Bridge Permit (USCG File No. XX)	4/15/07	4/15/12	In addition, refer to the Environmental Notes and Commitments on Sheet Number XX and the Soil Erosion and Sediment Control General Notes on Sheet Number XX.
NJPDES 5G3 - Construction Activity Stormwater General Permit (NJG0088323) (Request for Authorization (RFA) is required.)	6/15/07	2/29/12	

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL & SOIL EROSION & SEDIMENT CONTROL PLANS

ROUTE 11 OVER EGRET CHANNEL

CONTRACT NO. 012345678

(NAME OF CONSULTANT)

(CERTIFICATE OF AUTHORIZATION NO. _ OR PROFESSIONAL ASSOCIATION)

(ENGINEERS SIGNATURE) (DATE)

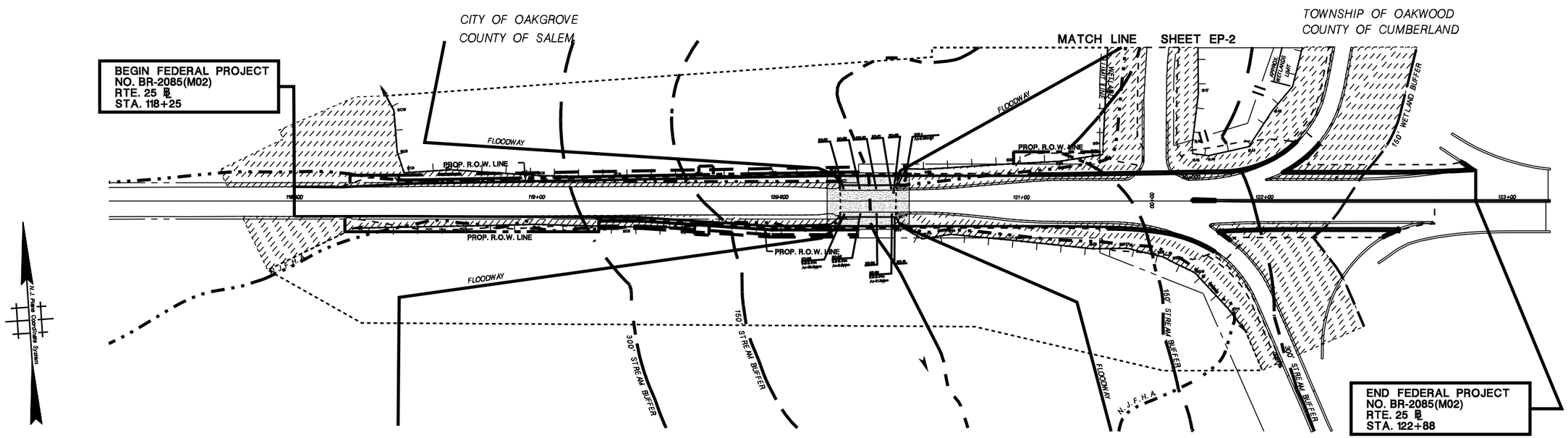
(ENGINEERS NAME PRINTED)

(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)

12

a-TPXOHA3 date=25-FEB-2009 19:02:64.55 49691.000900 \\Njdotpwa\vdsystem\NJDOTWS\Projects\NJDOTEng\plot\TBLa\Roadway\dot.TBL

STATE	FEDERAL PROJECT NO.
N.J.	NH-4567(123)



ENVIRONMENTALLY SENSITIVE AREAS

A. SENSITIVE AREA: WETLANDS - SEE ENVIRONMENTAL PLANS EP-3 TO EP-4

B. SENSITIVE AREA: 150' WETLAND TRANSITION AREA - SEE ENVIRONMENTAL PLANS EP-3 TO EP-8

C. SENSITIVE AREA: N.J. FLOOD HAZARD AREA - SEE ENVIRONMENTAL PLANS EP-3 TO EP-7

D. SENSITIVE AREA: FLOODWAY - SEE ENVIRONMENTAL PLANS EP-3 TO EP-8

E. SENSITIVE AREA: SPECIAL WATER RESOURCE PROTECTION AREA - SEE ENVIRONMENTAL PLANS EP-4 TO EP-6, EP-8

F. SENSITIVE AREA: REGULATED WASTE (ARSENIC) - SEE ENVIRONMENTAL PLAN EP-4

PERMITS

PERMIT TYPE	NJDEP FILE No.	ISSUED	EXPIRES	CONDITIONS
1. NJDEP FRESHWATER WETLANDS:				
STATEWIDE GENERAL PERMIT NO. 10B;	0000-05-0016.1 FWW-050001	6/30/05	6/30/10	
STATEWIDE GENERAL PERMIT NO. 21;	0000-05-0016.1 FWW-050002	6/30/05	6/30/10	
TRANSITION AREA, SPECIAL ACTIVITY WAIVER FOR LINEAR DEVELOPMENT;	0000-05-0016.1 FWW-050003	6/30/05	6/30/10	SEE PERMIT CONDITIONS 1 - 18
TRANSITION AREA, SPECIAL ACTIVITY WAIVER FOR STORMWATER MANAGEMENT	0000-05-0016.1 FWW-050004	6/30/05	6/30/10	
2. NJDEP MAJOR STREAM ENCROACHMENT PERMIT AND HARDSHIP WAIVER REQUEST	0000-05-0016.1 FHA-050001	6/30/05	6/30/10	

ENVIRONMENTAL NOTES AND COMMITMENTS

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND/OR AREA IS STABILIZED.
2. ALL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PROJECT WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NJDOT SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
3. ALL CONSTRUCTION SOIL DISTURBANCES, INCLUDING UTILITY REMOVAL AND INSTALLATION, WHERE SOIL IS SUBJECT TO MOVEMENT OUTSIDE OF PROJECT LIMITS WILL REQUIRE SILT FENCING AROUND THE TEMPORARY CONSTRUCTION DISTURBANCE.
4. ALL TERMS AND CONDITIONS OF THE ENVIRONMENTAL PERMITS SHALL BE ADHERED TO. NO CHANGES IN THE CONDITIONS, PLANS OR SPECIFICATIONS SHALL BE MADE EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF THE NJDEP.
5. A COPY OF THE PERMITS SHALL BE KEPT AT THE WORK SITE AND SHALL BE EXHIBITED UPON REQUEST OF ANY PERSON.
6. AREAS OF TEMPORARY DISTURBANCE SHALL BE RESTORED TO ORIGINAL GRADE AND SHALL BE REPLANTED WITH APPROPRIATE VEGETATION UPON COMPLETION OF CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER IN CONSULTATION WITH THE ENVIRONMENTAL TEAM AND THE LANDSCAPE AND URBAN DESIGN UNIT.
7. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE OF THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY, WILL BE REMOVED IMMEDIATELY. PAVED ROADS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
8. CONTRACTOR IS RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFF-SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
9. CONTRACTOR IS RESPONSIBLE TO VISIT THE SENSITIVE AREAS PERIODICALLY AND TO INSURE THE EROSION CONTROLS ARE FUNCTIONING PROPERLY AND INTRODUCE ADDITIONAL CONTROL IF IT IS NECESSARY. ALSO, ANY ADDITIONAL EROSION AND SEDIMENTATION THAT OCCURS WITHIN THE PROJECT SITE NEEDS TO BE PROPERLY ADDRESSED.
10. GROUNDWATER MONITORING WELLS IN AND NEAR THE CONSTRUCTION ZONE (UNLESS OTHERWISE INDICATED) MUST BE BARRICADED TO PREVENT THEM FROM BEING DAMAGED. ANY WELLS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
11. THE TOP 2 FEET OF SEDIMENT IS TO BE HANDLED AS REGULATED WASTE (K032 WASTE - ARSENIC).
12. GROUNDWATER AND SURFACE WATER ARE KNOWN TO CONTAIN ARSENIC AND WILL BE HANDLED PER NJDEP REQUIREMENTS.

PERMIT CONDITIONS

1. Method of Construction

   -All activities approved by this permit shall be performed under the supervision and direction of a Professional Engineer licensed in the State of New Jersey, and shall be undertaken using the best management practices available. Furthermore, the site shall be subject to inspection at any time by representatives of the Department to ensure the continuous application of the provisions of this permit.

   -During the course of construction, neither the applicant nor its agents shall cause or permit any unreasonable interference with the free flow of the stream by placing or dumping any materials, equipment, debris or structures within or adjacent to the stream corridor. Upon completion or abandonment of the work, the applicant and/or its agents shall remove and dispose of in a lawful manner all excess materials, equipment and debris from the stream corridor and adjacent lands.

   -All activities authorized by this permit shall be stabilized in accordance with Standards for Soil Erosion and Sediment Control in New Jersey (obtainable from local Soil Conservation District offices), or equal engineering specifications, to prevent eroded soil and sediment from entering adjacent waterways and wetlands at any time during and subsequent to construction. The Department reserves the right to order the suspension of any activity if unacceptable levels of erosion or turbidity result from the same. Furthermore, the applicant shall maintain the stream corridor as shown on the approved drawing/s for either such time as is required for the channel and/or banks to become reasonably stabilized, or for one year after completion of the project (as evidenced by a Certificate of Completion), whichever period of time is longer.
2. Any and all precautions shall be taken to prevent raw concrete (e.g., footings and abutments) from coming in contact with the waters of the Legume River since raw concrete is toxic to aquatic biota.
3. In order to protect the trout stocked waters and the recreational use as well as any pickerel and warmwater fish spawning within the Legume River, any proposed grading or construction activities within the banks of this or any other stream on site are prohibited between March 15 and June 30 of each year. In addition, any activity within the 100 year floodplain or flood hazard area of this watercourse which could introduce sediment into said stream or which would cause an increase in the natural level of turbidity is also prohibited during this period. The Department reserves the right to suspend all regulated activities on site should it be determined that the applicant has not taken proper precautions to ensure continuous compliance with this condition.
4. The bridge span shall be sized so that the natural streambed will remain stable under storm flows without the aid of instream armoring. Also, the streambed shall be left intact and any minor disturbances are to be restored using native substrate.
5. Since the project area is in proximity to the Division of Fish and Wildlife's Legume Wildlife Management Area, the Southern Bureau of Lands Management (John Doe, 856-555-5555) shall be informed of the construction schedules a minimum of two weeks prior to the projects implementation.
6. All workers shall be instructed to remove any turtles and/or any wildlife in general out of harms way. Silt fencing should be placed along active construction areas/excavations in order to prevent their access into these areas.
7. Freshwater Wetlands General Permit Nos. 10B, 21 and Special Activity Waivers

   -The Transition Area, Special Activity Waiver for Linear Development, authorizes the disturbance of a maximum of 2.294 acres of transition area for road improvements and removal of the existing Legume River Parkway.

   -The Transition Area, Special Activity Waiver for Stormwater Management, authorizes the disturbance of a maximum of 0.575 acres of transition area for a stormwater management basin.

   -In addition, this permit to conduct a regulated activity in a wetland or open water includes the Department's approval of a Water Quality Certificate for these activities.
8. The total amount of permanent wetland, transition area or State open water disturbance associated with this authorization shall not exceed 3.092 acres.
9. Dewatering of cofferdams must include properly sized temporary sediment basins or other filtering methods to reduce turbidity. The stream area to receive return water discharged from cofferdams must be encompassed by turbidity barrier. The turbidity barrier must be located parallel to the stream banks and anchored to the shoreline to maintain free flow of the stream center. In order to avoid obstruction of stream flows or fish passage, turbidity barriers must not be placed across the stream channel.
10. The amount of riprap or other energy dissipating material placed shall be the minimum necessary to prevent erosion, and shall not exceed 200 cubic yards fill, unless a larger amount is required in order to comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.
11. Areas of temporary excavation must be restored with native, indigenous species. The stream bank must be restored with native vegetation and stabilized with the use of bioengineering materials, such as biologs, fiber matting, etc., except where riprap is required.
12. The upper-most 18-inches of any temporary trench excavation is backfilled with the original soil material if feasible, and otherwise with clean suitable material free from toxic pollutants (see 40 CFR 401) in toxic amounts, and shall comply with all applicable Department rules and specifications regarding use of dredged or fill material. Excavations must be backfilled to the pre-existing elevations, where feasible.
    -The area above the excavation must be replanted with indigenous species.
    -The activity is designed so as not to interfere with the natural hydraulic characteristics of the wetland and watershed.
13. All substrate removed for construction activities, must be stockpiled outside of freshwater wetlands, transition areas and State open waters. The replaced native substrate must be placed to meet existing stream bottom invert and cross-channel profile as found immediately upstream and downstream of the crossing.
14. The proposed riprap shall be embedded in the stream bed and be concave shaped to concentrate low water flows.
15. Prior to any construction activities, the project site must be surveyed for the presence of Eastern Box turtle, Carpenters frog and Fowlers toad. Any turtles/ frogs/toads encountered must be removed from the construction site to safe areas. Immediately following the survey, the construction site must be encompassed by silt fencing or other small mesh fencing to prevent turtles/frogs/toads from re-entering the construction area.
16. In-stream sediment filter bags shall remain in place until all in-water work is complete. These barriers shall be removed once work is complete.
17. Positive means shall be taken to prevent any hot work, debris or construction material from entering the waterway. This includes sand blasting material, paint or epoxy and any concrete by-products. If welding or burning is to take place, some type of flame-proof material shall be the uppermost protective containment material.
18. All pavement/fill removal associated with the existing Legume River Parkway shall be taken down to the natural substrate. The areas outside of the authorized infiltration basin shall be stabilized with a mixture of warm and cool seasonal grasses, containing at least 20% warm seasonal grasses.

LEGEND

- SENSITIVE AREA: WETLANDS - SEE ENVIRONMENTALLY SENSITIVE AREA A
- SENSITIVE AREA: 150' WETLAND TRANSITION AREA - SEE ENVIRONMENTALLY SENSITIVE AREA B
- SENSITIVE AREA: N.J. FLOOD HAZARD AREA - SEE ENVIRONMENTALLY SENSITIVE AREA C
- SENSITIVE AREA: FLOODWAY - SEE ENVIRONMENTALLY SENSITIVE AREA D
- SENSITIVE AREA: 150' STREAM BUFFER - SEE ENVIRONMENTALLY SENSITIVE AREA E
- SENSITIVE AREA: 300' STREAM BUFFER - SEE ENVIRONMENTALLY SENSITIVE AREA E
- SENSITIVE AREA: REGULATED WASTE (ARSENIC) - SEE ENVIRONMENTALLY SENSITIVE AREA F

SUMMARY OF WETLAND IMPACTS – ENTIRE PROJECT

PERMIT NAME	AREA OF IMPACT (WETLANDS)	AREA OF IMPACT (TRANSITION AREA)	TOTALS
STATEWIDE GENERAL PERMIT NO. 10B	0.215 AC.	0.007 AC.	(.222 AC.
TRANSITION AREA, SPECIAL ACTIVITY WAIVER FOR LINEAR DEVELOPMENT	0.000 AC.	.294 AC.	2.294 AC.
TRANSITION AREA, SPECIAL ACTIVITY WAIVER FOR STORMWATER MANAGEMENT	0.000 AC.	0.575 AC.	0.575 AC.
STATEWIDE GENERAL PERMIT NO. 21 (FOR UTILITY POLES)	0.0007 AC.	0.0005 AC.	0.001 AC.
TOTAL	0.216 AC.	2.876 AC.	3.092 AC.

20 10 0 20 40
SCALE IN FEET

EP-1C / EP-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL & SOIL EROSION & SEDIMENT CONTROL PLANS

ROUTE 25 OVER LEGUME RIVER

CONTRACT NO. 123567486

(NAME OF CONSULTANT)

(CERTIFICATE OF AUTHORIZATION NO. _ OR PROFESSIONAL ASSOCIATION)

(ENGINEERS SIGNATURE) (DATE)

(ENGINEERS NAME PRINTED)

(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)

13

D:\TPXOHA3 date=25-FEB-2009 19:03scale=45.179273:1.000000open table=\\Njdotprjws\v8system\NJDOTWS\Projects\...\Roadway\dot.TBL

file=

STATE	FEDERAL PROJECT NO.
N.J.	NH-4567(123)

1. SENSITIVE AREA - DO NOT ENCROACH UPON OR STORE ANY EQUIPMENT/VEHICLE/MATERIALS IN WETLANDS/TRANSITION AREAS/STATE OPEN WATER AREAS/FLOODPLAINS BEYOND THE HEAVY DUTY ORANGE SILT FENCE OR CAUTION FENCE AS SHOWN ON THE PLANS. ADHERE TO THE LOCATIONS OF THE SILT FENCE AND CAUTION FENCE. THE ENVIRONMENTAL PERMITS DO NOT ALLOW FOR ENCROACHMENT BEYOND THE FENCING LOCATIONS. IN ADDITION, DO NOT LOCATE STOCKPILES, VEHICLES, CONCRETE WASHOUT FACILITIES, AND/OR EQUIPMENT WITHIN 50 FEET, IF FEASIBLE, OF A SLOPE, DRAINAGE FACILITY, WATERBODY, WETLAND, FLOODPLAIN, OR OTHER ENVIRONMENTALLY SENSITIVE AREA. PROTECT STOCKPILE BASES WITH A HAY BALE BARRIER OR SILT FENCE.

> NOTE TO DESIGNER:
>
> THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS. ALSO, THE PLACEMENT OF FENCING SHOULD BE BASED ON PROJECT SPECIFIC ENVIRONMENTAL CONSTRAINTS AND ENCROACHMENTS AUTHORIZED BY THE ENVIRONMENTAL PERMITS.
>
> THERE MAY BE OTHER ENVIRONMENTALLY SENSITIVE AREAS INCLUDING, BUT NOT LIMITED TO, PARKLAND, HISTORIC SITES, CONSERVATION LANDS, ENDANGERED SPECIES HABITAT, AND CONTAMINATED SITES THAT WOULD REQUIRE PROTECTION FROM ENCROACHMENT BY THE CONTRACTOR THROUGH THE USE OF FENCING AND, ON A PROJECT-SPECIFIC BASIS, MAY REQUIRE PRE-CONSTRUCTION PHOTO DOCUMENTATION. THE ABOVE NOTE MAY NEED TO BE AMENDED TO INCLUDE THESE ADDITIONAL SENSITIVE AREAS.

2. ALL TERMS AND CONDITIONS OF THE ENVIRONMENTAL PERMITS ARE TO BE ADHERED TO. KEEP A COPY OF ALL PERMITS/APPROVALS AT THE WORK SITE, AND EXHIBIT THEM UPON REQUEST OF ANY PERSON.

3. MAKE NO CHANGES IN PERMIT-RELATED PLANS OR SPECIFICATIONS EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF THE NJDEP. ANY CONSTRUCTION, GRADING, REMOVAL OF VEGETATION, OR OTHER ACTIVITY AT THIS SITE THAT AFFECTS A REGULATED AREA, OTHER THAN SPECIFICALLY APPROVED BY THE ENVIRONMENTAL PERMITS OR AS DETAILED BY THE APPROVED DRAWINGS, REQUIRES ADDITIONAL WRITTEN APPROVALS FROM THE NJDEP. THE COMMENCEMENT OF SUCH REGULATED ACTIVITIES WITHOUT THE APPROPRIATE APPROVALS IS IN VIOLATION OF STATE LAW. CONSULT WITH THE NJDOT BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' ENVIRONMENTAL TEAM REGARDING POTENTIAL PERMIT MODIFICATIONS.

> NOTE TO DESIGNER: THE ISSUING AGENCY OF THE PERMIT MAY BE ANOTHER AGENCY, SUCH AS THE U.S. ARMY CORPS OF ENGINEERS. THIS NOTE SHOULD BE REVISED ACCORDINGLY AND MAY ALSO NEED TO REFER TO FEDERAL LAW.

4. PERFORM THE WORK IN ACCORDANCE WITH THE NJDOT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL AND AS SPECIFIED IN THE CURRENT NJDOT SPECIFICATIONS.

5. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES AND CAUTION FENCE ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED. CORRECT NON-FUNCTIONING SOIL EROSION AND SEDIMENT CONTROL MEASURES AND SITE WASTE CONTROL MEASURES WITHIN 24 HOURS AND AS SPECIFIED IN SECTION 158 OF THE SPECIFICATIONS. ALL ORANGE FENCE WILL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION. THE COLOR OF THE SILT FENCE INDICATED ON THE PLANS MUST BE ADHERED TO. BLACK SILT FENCE CAN NOT BE SUBSTITUTED FOR ORANGE AND VICE VERSA.

> NOTE TO DESIGNER: THE LIMITS OF BLACK SILT FENCE VERSUS ORANGE HEAVY DUTY SILT FENCE SHOULD BE CLEARLY SHOWN ON THE PLANS. IN AREAS WHERE BOTH SILT FENCE AND CAUTION FENCE ARE WARRANTED, ORANGE HEAVY DUTY SILT FENCE IS TO BE USED IN PLACE OF THE COMBINED ROWS OF FENCING.

6. THE RE MAY LIMIT CLEARING, GRUBBING, GRADING, OR OTHER SOIL DISTURBING ACTIVITIES TO A MAXIMUM OF 17 ACRES BASED ON SITE CONDITIONS AND THE CONTRACTOR'S ABILITY TO INSTALL AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROL MEASURES.

7. IN ORDER TO PROTECT THE FISHERY RESOURCES WITHIN (INSERT NAME OF WATERBODY) AND ITS TRIBUTARIES, ANY PROPOSED GRADING OR CONSTRUCTION ACTIVITIES (INCLUDING THE INSTALLATION OF COFFERDAMS) WITHIN THE BANKS OF THIS OR ANY OTHER WATERBODY ON SITE ARE PROHIBITED BETWEEN (INSERT RESTRICTION DATES FROM PERMIT CONDITION) OF EACH YEAR. IN ADDITION, ANY ACTIVITY WITHIN THE 100-YEAR FLOODPLAIN OR FLOOD HAZARD AREA DRAINING TO THE WATERBODY(IES) THAT COULD INTRODUCE SEDIMENT INTO SAID WATERBODY(IES) OR THAT COULD CAUSE AN INCREASE IN THE NATURAL LEVEL OF TURBIDITY IS ALSO PROHIBITED DURING THIS PERIOD. THE NJDEP RESERVES THE RIGHT TO SUSPEND ALL REGULATED ACTIVITIES ON SITE SHOULD IT BE DETERMINED THAT PROPER PRECAUTIONS HAVE NOT BEEN TAKEN TO ENSURE CONTINUOUS COMPLIANCE WITH THESE CONDITIONS.

> NOTE TO DESIGNER:
>
> THE ISSUING AGENCY OF THE PERMIT WITH THE TIMING RESTRICTION MAY BE ANOTHER AGENCY, SUCH AS THE U.S. ARMY CORPS OF ENGINEERS. THIS NOTE SHOULD BE REVISED ACCORDINGLY.
>
> SEPARATE COMMITMENTS MAY NEED TO BE INCLUDED ON THE PLANS IF ADDITIONAL TIMING RESTRICTIONS ARE REQUIRED TO PROTECT THREATENED/ENDANGERED SPECIES.

8. LOW FLOW FISH PASSAGE: THE PLACEMENT OF PIPE CULVERTS MUST BE AT OR JUST SLIGHTLY BELOW EXISTING STREAM BOTTOM INVERTS AS FOUND IMMEDIATELY UPSTREAM AND DOWNSTREAM OF THE CROSSINGS. ASSOCIATED APRON(S) MUST HAVE A CONCAVE BOTTOM TO MATCH THE PIPES AND RIP-RAP MUST BE PLACED, SHAPED AND/OR EMBEDDED INTO THE CHANNEL IN ACCORDANCE WITH THE CULVERT PIPE(S) PLACEMENT TO ALLOW FOR LOW FLOW FISH PASSAGE. THE NJDEP RESERVES THE RIGHT TO SUSPEND ALL REGULATED ACTIVITIES ON SITE SHOULD IT BE DETERMINED THAT PROPER PRECAUTIONS HAVE NOT BEEN TAKEN TO ENSURE CONTINUOUS COMPLIANCE WITH THESE CONDITIONS.

9. ENSURE THE FLOW OF WATERBODIES IS MAINTAINED AT ALL TIMES. PLACE FLOATING TURBIDITY BARRIER AROUND THE WORK AREA/DEWATERING ACTIVITY DISCHARGE SO THAT IT DOES NOT RESTRICT A STREAM CHANNEL BY MORE THAN 50% OF ITS WIDTH/CROSS SECTIONAL AREA. INSTALL THE BARRIER AS CLOSE TO THE SHORE OR STRUCTURE AS PRACTICABLE. PLACEMENT IS TO BE PARALLEL TO STREAM FLOW AND ANCHORED TO THE SHORELINE UPSTREAM AND DOWNSTREAM OF THE WORK AREA, UNLESS OTHERWISE DIRECTED BY THE RE. IF NEEDED, A COFFERDAM SHOULD CORRAL THE WORK AREA. ERECT FLOATING TURBIDITY BARRIER AROUND THE WORK AREA (OUTSIDE OF WHERE THE COFFERDAM WILL BE INSTALLED) PRIOR TO CONSTRUCTING A COFFERDAM. LEAVE THE FLOATING TURBIDITY BARRIER IN PLACE UNTIL WORK IN THAT AREA IS COMPLETED, THE COFFERDAM IS REMOVED (IF APPLICABLE) AND, IF APPLICABLE, THE ADJACENT GROUND AREA HAS ESTABLISHED A FIRM STAND OF VEGETATION.

> NOTE TO DESIGNER: THE DESIGNER WILL SPECIFY THE TYPE OF FLOATING TURBIDITY BARRIER AND THE CURTAIN DEPTHS AND WEIGHTS THAT ARE REQUIRED FOR A SPECIFIC PROJECT. IN ADDITION, TURBIDITY BARRIERS ARE NEEDED AROUND PILES THAT ARE TO BE JETTED, AND AROUND THE SHAFT DURING THE DRILLING AND FILLING PROCESSES OF THE DRILLED SHAFT CONSTRUCTION.

10. DURING THE COURSE OF CONSTRUCTION, NEITHER THE APPLICANT NOR ITS AGENTS WILL CAUSE OR PERMIT ANY UNREASONABLE INTERFERENCE WITH THE FREE FLOW OF THE STREAM BY PLACING OR DUMPING ANY MATERIALS, EQUIPMENT, DEBRIS OR STRUCTURES WITHIN OR ADJACENT TO THE STREAM CORRIDOR UPON COMPLETION OR ABANDONMENT OF THE WORK. THE APPLICANT AND/OR ITS AGENTS WILL REMOVE AND DISPOSE OF IN A LAWFUL MANNER ALL EXCESS MATERIAL, EQUIPMENT AND DEBRIS FROM THE STREAM CORRIDOR AND ADJACENT LANDS.

11. EARTHEN BERMS WILL NOT BE USED AS COFFERDAMS.

12. PRECAUTIONS MUST BE TAKEN TO PREVENT RAW CONCRETE/GROUT FROM COMING INTO CONTACT WITH WATERBODIES. RAW CONCRETE/GROUT IS TOXIC TO AQUATIC BIOTA. ANY RAW CONCRETE/GROUT THAT COMES IN CONTACT WITH A WATERBODY MUST BE REMOVED IMMEDIATELY. NO PUMPED WATER FROM CONCRETE/GROUT OPERATIONS MAY BE DISCHARGED DIRECTLY TO A WATERBODY. ALL PUMPED WATER IS TO BE DISCHARGED TO A HOLDING TANK OR CONCRETE WASHOUT FACILITY AND MANAGED AS SPECIFIED IN THE CONCRETE WASHOUT SYSTEM SPECIFICATION IN SECTION 158.

13. THE CONTRACTOR IS NOT ALLOWED TO DROP WASTE CONCRETE, DEBRIS, OR OTHER CONSTRUCTION MATERIAL INTO WATERBODIES, UNIMPACTED WETLANDS/TRANSITION AREAS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS. TEMPORARY SHIELDING IS TO BE USED DURING DEMOLITION OF BRIDGES OVER THESE ENVIRONMENTALLY SENSITIVE AREAS TO CATCH DEBRIS. TEMPORARY SHIELDING IS TO BE DESIGNED TO PREVENT FINES, AS WELL AS LARGER PIECES OF DEBRIS, FROM ENTERING THE WATERBODY. IF DEBRIS DOES ACCIDENTALLY FALL INTO ANY OF THESE ENVIRONMENTALLY SENSITIVE AREAS, PROMPTLY REMOVE IT. THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' ENVIRONMENTAL TEAM SHOULD BE CONTACTED FOR GUIDANCE IF RETRIEVAL OF DEBRIS MAY POTENTIALLY CAUSE DAMAGE TO THE ENVIRONMENTALLY SENSITIVE AREA.

14. PUMPING OF SEDIMENT-LADEN WATER FROM DEWATERING ACTIVITIES DIRECTLY INTO WATERBODIES, WETLANDS, OR INLETS IS PROHIBITED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. PERFORM DEWATERING AS SPECIFIED IN SECTION 501 OF THE SPECIFICATIONS. STANDARD SOIL EROSION AND SEDIMENT CONTROL ITEMS ARE LISTED IN SECTION 158. BASINS/SEDIMENT CONTROL TANKS/SEDIMENT CONTROL BAGS NEEDED FOR DEWATERING ACTIVITIES SHOULD NOT BE LOCATED IN UNIMPACTED WETLAND OR TRANSITION AREAS OR IN FLOODPLAINS, IF FEASIBLE. OTHERWISE, PERMIT MODIFICATIONS MAY BE REQUIRED. CONSTRUCTION OF DEWATERING FACILITIES INVOLVING GROUND DISTURBANCE NEAR A WATERBODY IS TO BE DONE OUTSIDE OF ANY REGULATORY PERMIT TIMING RESTRICTION PERIOD. CLEAN AND CLEAR WATER FROM DEWATERING ACTIVITIES SHOULD BE RETURNED TO A PORTION OF THE WATERBODY THAT IS PROTECTED BY TURBIDITY BARRIER WITHOUT CAUSING SCOUR OR EROSION.

15. PLACE SILT FENCE/HAY BALES AROUND SEDIMENT CONTROL BAGS WHERE APPLICABLE. ALSO PLACE FLOATING TURBIDITY BARRIERS TO CORRAL THE DISCHARGE AREA IF THE DISCHARGE FROM THE SEDIMENT CONTROL BAG FLOWS INTO A RECEIVING WATERBODY.

16. IMMEDIATELY CEASE AN ACTIVITY THAT CAUSES TURBIDITY BEYOND CONTROL MEASURES.

17. PROTECT ALL DRAINAGE SYSTEM INLETS (NEW AND EXISTING) FROM SILTATION.

18. STABILIZE STORM DRAINAGE OUTLETS BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.

19. DUST/DIRT CONTROL/TRACKING: EMPLOY CONSTRUCTION METHODS THAT MINIMIZE AIRBORNE DUST AND PREVENT SOILS AND OTHER MATERIALS FROM BEING DEPOSITED ON EXISTING ROADWAYS. APPLY WATER OR OTHER RE APPROVED MATERIALS TO UNPAVED AREAS TO CONTROL DUST CAUSED BY HAULING OR OTHER CONSTRUCTION OPERATIONS. IMMEDIATELY REMOVE ALL SOIL OR OTHER MATERIALS WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE OF THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS. PAVED ROADS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.

20. DURING SAWCUTTING, MILLING, CORE SAMPLING, INSTALLING LONGITUDINAL JOINT TIES, DIAMOND GRINDING, SLIP-FORM PAVING, PLACEMENT OF PERMANENT ROADWAY REFLECTIVE MARKERS, AND SIMILAR OPERATIONS THAT COULD CAUSE DUST, SLURRY, AND STORMWATER RUNOFF PROBLEMS, DO NOT CREATE A DUST HAZARD AND ENSURE THAT DEBRIS AND SLURRY DO NOT ENTER INLETS OR ENVIRONMENTALLY SENSITIVE AREAS, SUCH AS WETLANDS AND WATERBODIES. THIS INCLUDES, BUT IS NOT LIMITED TO, BRIDGE DECK, APPROACH SLAB, AND TRANSITION SLAB SAWCUTTING. PROVIDE FOR CONTINUOUS REMOVAL OF GRINDING RESIDUE FROM THE PAVEMENT SURFACE BEFORE IT IS BLOWN ABOUT BY TRAFFIC MOTION, WIND, OR PRECIPITATION. CONTAIN THE CONCRETE SLURRY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS. THE CONTRACTOR MAY MANAGE THE SLURRY IN A CONCRETE WASHOUT FACILITY IF THAT ITEM IS PART OF THE CONTRACT.

21. ACID-PRODUCING SOIL: ACID PRODUCING SOIL IS TO BE TREATED ACCORDING TO THE NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL AND AS SPECIFIED IN 202.03.05 OF THE SPECIFICATIONS. ENSURE THE CLEANING OF EQUIPMENT USED TO MOVE ACID-PRODUCING SOIL IS CONDUCTED AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA.

> NOTE TO DESIGNER: THE POTENTIAL FOR ACID-PRODUCING SOIL SHOULD BE IDENTIFIED. ALL KNOWN AREAS OF ACID-PRODUCING SOIL SHOULD BE IDENTIFIED ON THE PLANS. THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS.

22. EXCAVATED MATERIAL THAT WILL NOT BE USED AS BACKFILL MUST BE DISPOSED OF IN A LAWFUL MANNER OUTSIDE OF ANY REGULATED FLOODPLAIN, OPEN WATER, WETLAND, OR TRANSITION AREA, AND IN SUCH A WAY AS NOT TO INTERFERE WITH THE POSITIVE DRAINAGE OF THE RECEIVING AREA.

23. ENSURE THAT TREES, SHRUBS, GRASSES, AND OTHER VEGETATION LOCATED ON STREAM BANKS AND WITHIN 50 FEET FROM THE TOP OF ALL STREAM BANKS ON SITE ARE NOT DISTURBED FOR ANY REASON, EXCEPT WHERE APPROVED BY THE NJDEP. THIS CONDITION APPLIES TO ALL STREAMS AND WATERWAYS ON SITE, REGARDLESS OF THE CONTRIBUTORY DRAINAGE AREA.

> NOTE TO DESIGNER: A DISTANCE GREATER THAN 50 FEET MAY BE NEEDED FOR WATERCOURSES SUCH AS THOSE ASSOCIATED WITH TROUT, CATEGORY ONE WATERS, THREATENED/ENDANGERED SPECIES, OR ACID-PRODUCING SOILS.

24. ENSURE ALL VEGETATION OUTSIDE LIMITS OF DISTURBANCE IS PRESERVED.

25. UPON COMPLETION OF THE PROJECT, ALL TEMPORARILY DISTURBED AREAS, INCLUDING UPLANDS, STATE OPEN WATER, WETLANDS, AND TRANSITION AREAS, MUST BE RESTORED TO THEIR PRE-CONSTRUCTION GRADES USING NATIVE SOILS AND PLANTED WITH INDIGENOUS NON-INVASIVE VEGETATION AS DIRECTED BY THE RE IN CONSULTATION WITH THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' ENVIRONMENTAL TEAM.

26. IN ORDER TO AVOID ADDITIONAL MITIGATION REQUIREMENTS, ALL TEMPORARY DISTURBANCES TO WETLANDS MUST BE COMPLETED WITHIN SIX MONTHS AFTER THEY ARE BEGUN AND THESE AREAS MUST BE RESTORED TO PRE-CONSTRUCTION CONDITIONS.

27. ENSURE TIMBER MATTING IS USED UNDER EQUIPMENT IN WET AREAS TO PREVENT SOIL COMPACTION.

28. DURING THE INSTALLATION OR REMOVAL OF TREATED TIMBERS IN A WATERBODY, PLACE OIL-ABSORBENT BOOMS AROUND THE WORK AREA.

29. TREATED TIMBERS: TREATED TIMBER PRODUCTS ARE PROHIBITED IN SHELLFISH AREAS (MARINE AND FRESHWATER) AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SUCH AS, BUT NOT LIMITED TO, ESSENTIAL FISH HABITAT, ENDANGERED/THREATENED SPECIES HABITAT, CATEGORY ONE WATERS, TROUT-ASSOCIATED WATERS, AND WETLANDS. NON-POLLUTING MATERIALS, SUCH AS FIBERGLASS COMPOSITES, ARE TO BE USED IN THESE AREAS. USE OF TREATED TIMBER PRODUCTS IN OTHER AREAS REQUIRES NJDOT BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' APPROVAL PRIOR TO USAGE EXCEPT WHERE SPECIFIED IN THE CONTRACT.

> NOTE TO DESIGNER: THIS ITEM IS INTENDED TO PROVIDE DIRECTION TO THE DESIGNER, AS WELL AS THE CONTRACTOR, REGARDING THE USE OF NON-POLLUTING MATERIALS.

30. IF DIVERS ARE TO BE USED TO INSPECT THE BED OF A WATERBODY, A VIDEO OF THIS INSPECTION MUST BE SUPPLIED TO THE RE FOR HIS REVIEW AND APPROVAL.

31. IF AN ARCHAEOLOGY SITE OR UNDERGROUND STORAGE TANKS ARE UNEXPECTEDLY DISCOVERED DURING CONSTRUCTION, CEASE OPERATIONS IMMEDIATELY AND CONTACT THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS THROUGH THE RE.

32. ENSURE A SITE SPECIFIC HEALTH AND SAFETY PLAN IS SUBMITTED AND IMPLEMENTED IN ACCORDANCE WITH ALL APPLICABLE HEALTH AND SAFETY REQUIREMENTS FOR WORK IN AND WITH CONTAMINATED SOIL, SEDIMENT, WASTE AND WATER. THE PLAN GOVERNS ALL HEALTH AND SAFETY FACETS OF THE PROJECT CONSTRUCTION AND ENCOMPASSES THE ACTIVITIES OF ALL PERSONS WHO ENTER THE SITE.

> NOTE TO DESIGNER:
>
> THIS SHEET REQUIRES DESIGN SPECIFIC INFORMATION TO BE ADDED AND INCLUDED IN THE CONTRACT PLANS. THESE NOTES CAN BE AMENDED/OMITTED TO REFLECT PROJECT SPECIFIC CONDITIONS. ADDITIONAL NOTES MAY BE NEEDED.
>
> COORDINATE WITH NJDOT BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS WHEN DEVELOPING THE NOTES FOR A SPECIFIC PROJECT.
>
> REMOVE THIS NOTE AND OTHER DESIGNER NOTES AFTER DESIGN SPECIFIC INFORMATION IS ADDED.

ENVIRONMENTAL NOTES AND COMMITMENTS

N.T.S.

EP-2 / EP-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL & SOIL EROSION & SEDIMENT CONTROL PLANS

ROUTE 10 OVER BRADY'S BROOK

CONTRACT NO. 012345678

(NAME OF CONSULTANT)
(CERTIFICATE OF AUTHORIZATION NO._ OR PROFESSIONAL ASSOCIATION)
(ENGINEERS SIGNATURE) (DATE)
(ENGINEERS NAME PRINTED)
(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)

33. ENSURE ALL PERSONNEL, EQUIPMENT, AND ANCILLARY SERVICES ARE PROVIDED TO COLLECT, ANALYZE, AND TRANSPORT ENVIRONMENTAL SAMPLES REQUIRED TO CHARACTERIZE CONTAMINATED MATERIAL IN ACCORDANCE WITH THE CURRENT VERSIONS OF THE NJDEP FIELD SAMPLING PROCEDURES MANUAL, NJDEP MANAGEMENT OF EXCAVATED SOILS GUIDELINES, APPENDIX I OF THE NJDEP WASTE CLASSIFICATION FORM, AND ACCORDING TO THE RECYCLING OR DISPOSAL FACILITY ACCEPTING THE WASTE.

34. ENSURE ALL PERSONNEL, MATERIALS AND EQUIPMENT ARE PROVIDED TO PROPERLY STORE AND PROTECT CONTAMINATED MATERIAL AT THE EXCAVATION AND IN TEMPORARY STOCKPILES. LOCATE TEMPORARY STOCKPILES IN DRY AREAS SELECTED BY THE CONTRACTOR AND APPROVED BY THE RE. PLACE STOCKPILES ON PLASTIC SHEETING TO PREVENT MIGRATION OF CONTAMINANTS INTO ADJACENT SOILS, SURFACE WATER, AND GROUNDWATER.

35. ENSURE A POLLUTION PREVENTION AND CONTROL PLAN IS DEVELOPED AND IMPLEMENTED TO MANAGE CONTAMINATED WATER AND GROUNDWATER. DO NOT DISCHARGE CONTAMINATED STORMWATER, GROUNDWATER, SEDIMENTS OR FREE PRODUCT TO LOCAL STORM SEWER SYSTEMS OR WATERWAYS EXCEPT AS AUTHORIZED BY A DISCHARGE APPROVAL OR PERMIT.

36. ENSURE ALL PERSONNEL, MATERIALS AND EQUIPMENT ARE PROVIDED TO MOBILIZE, OPERATE AND MAINTAIN AN OIL-WATER SEPARATOR FOR REMOVAL OF FREE PRODUCT AND CONTAMINATED SEDIMENTS GENERATED DURING DEWATERING ACTIVITIES IN AREAS OF PETROLEUM-CONTAMINATED GROUNDWATER. ENSURE THE OIL-WATER SEPARATOR IS A SELF-CONTAINED, FACTORY ASSEMBLED UNIT CAPABLE OF MEETING ALL DISCHARGE APPROVALS OR PERMITS OBTAINED BY THE CONTRACTOR.

37. ENSURE A MATERIAL HANDLING PLAN IS DEVELOPED AND IMPLEMENTED TO MANAGE CONTAMINATED SOIL.

NOTE TO DESIGNER: IN THE INTEREST OF PROMOTING ENVIRONMENTAL STEWARDSHIP, THE FOLLOWING NOTES SHOULD BE INCLUDED ON ALL PROJECTS (WITH THE EXCEPTION BEING THE NOTE REGARDING CONCRETE WASHOUT SYSTEM, WHICH IS NOT REQUIRED FOR PROJECTS THAT DO NOT INVOLVE THE PLACEMENT OF CONCRETE):

38. STORE PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTI-FREEZE, PAINTS AND PAINT THINNERS, CLEANING SOLVENTS AND ACIDS, DETERGENTS, CHEMICAL ADDITIVES, AND CONCRETE CURING COMPOUNDS IN CONTAINERS IN A DRY COVERED AREA. ENSURE MANUFACTURERS' RECOMMENDED APPLICATION RATES, USES, AND METHODS ARE STRICTLY FOLLOWED TO THE EXTENT NECESSARY TO PREVENT OR MINIMIZE THE PRESENCE OF WASTE FROM SUCH MATERIALS IN THE STORMWATER DISCHARGE/RUNOFF FROM THE PROJECT LIMITS. STORE PRODUCTS AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA.

NOTE TO DESIGNER: THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS.

39. ENSURE THE HANDLING OF WASTE BUILDING MATERIAL, RUBBLE AND OTHER CONSTRUCTION SITE WASTES, INCLUDING LITTER AND HAZARDOUS AND SANITARY WASTES, IS IN ACCORDANCE WITH THE STATE SOLID WASTE MANAGEMENT ACT, N.J.S.A. 13:1E-1 ET SEQ., AND ITS IMPLEMENTING RULES AT N.J.A.C. 7:26, 7:26A, AND 7:26G; THE NEW JERSEY PESTICIDE CONTROL CODE AT N.J.A.C. 7:30; THE STATE LITTER STATUTE (N.J.S.A. 13:1E-99.3); AND OSHA REQUIREMENTS FOR SANITATION AT 29 C.F.R. 1926.

40. ENSURE THE PROJECT LIMITS ARE KEPT CLEAN AND FREE OF DEBRIS, TRASH AND LITTER. CONTAIN LITTER AND WASTE THAT HAS THE POTENTIAL TO BE TRANSPORTED BY STORMWATER DISCHARGE/RUNOFF. ENSURE THE PROJECT LIMITS HAVE ONE OR MORE DESIGNATED WASTE COLLECTION AREAS ONSITE OR ADJACENT TO THE SITE, AND AN ADEQUATE NUMBER OF CONTAINERS (WITH LIDS OR COVERS) FOR WASTE. ENSURE WASTE IS COLLECTED FROM SUCH CONTAINERS BEFORE THEY OVERFLOW. IMMEDIATELY CLEANUP SPILLS AT SUCH CONTAINERS SHOULD THEY OCCUR.

41. CONCRETE WASHOUT SYSTEM: CONCRETE WASHOUT WITHIN THE PROJECT LIMITS IS PROHIBITED OUTSIDE OF DESIGNATED AREAS. PROVIDE CONCRETE WASHOUT FACILITY(IES) AS SPECIFIED IN THE CONCRETE WASHOUT SYSTEM SPECIFICATION IN SECTION 158. MORE THAN ONE DESIGNATED CONCRETE WASHOUT FACILITY LOCATION MAY BE NECESSARY DEPENDING ON EASE OF ACCESS AND THE AMOUNT OF CONCRETE BEING POURED AT ONE TIME.

NOTE TO DESIGNER: A PAY ITEM FOR CONCRETE WASHOUT SYSTEM IS REQUIRED ON ALL PROJECTS THAT INVOLVE THE PLACEMENT OF CONCRETE, REGARDLESS OF THE AMOUNT. THE DISTANCE FOR THE LOCATION OF THE CONCRETE WASHOUT FACILITY(IES) FROM ENVIRONMENTALLY SENSITIVE AREAS MAY NEED TO BE GREATER THAN 50 FEET, DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, AS DESIGNATED BY NJDEP, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS.

42. SANITARY SEWAGE/SEPTAGE DISPOSAL: DISCHARGES OF RAW SANITARY SEWAGE OR SEPTAGE ONSITE ARE STRICTLY PROHIBITED. ENSURE PROPER DISPOSAL OF SANITARY SEWAGE/SEPTAGE. PROVIDE AND MAINTAIN ADEQUATE FACILITIES ADJACENT TO THE WORK SITE FOR ALL WORKERS AND OTHER SANITARY NEEDS.

43. BEFORE THE START OF CONSTRUCTION OPERATIONS, PROVIDE A MINIMUM OF TWO (2) OIL-ONLY EMERGENCY SPILL KITS THAT ARE READILY AVAILABLE WITHIN THE PROJECT LIMITS, WITH EACH KIT CAPABLE OF CLEANING UP AT LEAST 95 GALLONS OF SPILL. ENSURE THE KITS ARE AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158. IMMEDIATELY CONTAIN AND CLEAN UP ALL SPILLS. ENSURE CLEANED UP MATERIALS ARE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS AND AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. REPLACE COMPONENTS OF SPILL KITS AS USED.

NOTE TO DESIGNER: THE NUMBER OF SPILL KITS MAY VARY DEPENDING ON PROJECT SPECIFIC SITE CONDITIONS, THE AMOUNT OF PETROLEUM PRODUCTS AND TYPES OF EQUIPMENT THAT WILL BE ON THE PROJECT SITE, AND EASE OF ACCESS TO THE LOCATION OF THE SPILL KITS. HOWEVER, EACH KIT SHOULD STILL HAVE THE CAPABILITY TO CLEAN UP AT LEAST 95 GALLONS OF SPILL AND A MINIMUM OF TWO (2) KITS IS REQUIRED. THE DESIGNER MAY CONTACT THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS FOR GUIDANCE IN DETERMINING THE NUMBER OF SPILL KITS.
ADDITIONAL OIL-ONLY EMERGENCY SPILL KIT(S) WILL BE REQUIRED IF A BARGE OR SOME OTHER FLOATING DEVICE IS USED TO TRANSPORT, OR IS USED AS A PLATFORM FOR, CONSTRUCTION MACHINERY. THESE ADDITIONAL SPILL KITS SHALL BE PLACED ON THE BARGE OR FLOATING DEVICE WHILE ON THE PROJECT. IF REFUELING OCCURS ON A BARGE OR FLOATING DEVICE ON A WATERBODY, ABSORBENT BOOMS AND OIL CONTAINMENT BOOMS WILL BE REQUIRED TO SURROUND THE OPERATION.
OIL CONTAINMENT BOOMS ARE A SEPARATE PAY ITEM. FOR PROJECTS THAT WILL UTILIZE A BARGE OR FLOATING DEVICE TO TRANSPORT, OR AS A PLATFORM FOR, CONSTRUCTION MACHINERY, THE FOLLOWING TEXT SHOULD BE INCLUDED IN THE SPILL KIT NOTE: 'PLACE ADDITIONAL SPILL KITS AND OIL CONTAINMENT BOOMS ON BARGES OR FLOATING DEVICES USED TO TRANSPORT, OR AS A PLATFORM FOR, CONSTRUCTION EQUIPMENT. IF REFUELING OCCURS ON A BARGE OR FLOATING DEVICE ON A WATERBODY, ABSORBENT BOOMS AND OIL CONTAINMENT BOOMS ARE REQUIRED TO SURROUND THE OPERATION.'
(THE DESIGNER SHOULD SPECIFY THE NUMBER OF KITS AND OIL CONTAINMENT BOOMS TO BE PLACED ON THE BARGES OR FLOATING DEVICES AND THIS NUMBER SHOULD BE STATED IN THE NOTE ON THE PLANS AND INCLUDED IN THE QUANTITIES FOR THE PROJECT.)

44. IF A SPILL OCCURS, IMMEDIATELY CONTAIN IT AND IMMEDIATELY CONTACT THE NJDEP HOTLINE AT 1-877-WARN DEP (1-877-927-6337), AS WELL AS THE RE. CLEAN UP AND REMEDIATE THE SPILL AS DIRECTED BY NJDEP. SUBMIT AN INCIDENT REPORT TO THE RE AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158.

45. DISCHARGES OF HAZARDOUS SUBSTANCES (AS DEFINED IN N.J.A.C. 7:1E-1.6) IN CONSTRUCTION SITE WASTES ARE SUBJECT TO THE PROVISIONS OF THE SPILL COMPENSATION AND CONTROL ACT, N.J.S.A. 58:10-23.11 ET SEQ., AND OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES FOR DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES AT N.J.A.C. 7:1E.

46. ENSURE REFUELING OPERATIONS ARE CONDUCTED AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA. DO NOT STORE FUEL TANKS CLOSER THAN 50 FEET, WHERE FEASIBLE, FROM THESE SENSITIVE AREAS. IMMEDIATELY REPAIR LEAKING EQUIPMENT OR REMOVE IT FROM THE PROJECT LIMITS. CLEAN UP THE TAINTED MATERIAL AND DISPOSE OF THE MATERIAL AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. PROTECT FUELING AREAS FROM RUN-ON AND RUNOFF.

NOTE TO DESIGNER: THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS. ALSO, SEE THE NOTE TO DESIGNER, REGARDING THE SPILL KIT ENVIRONMENTAL NOTE, FOR PROJECTS INVOLVING REFUELING THAT WILL OCCUR ON A BARGE OR FLOATING DEVICE ON A WATERBODY.

47. ENVIRONMENTAL COMPLIANCE INSPECTIONS (INCLUDING, BUT NOT LIMITED TO, SOIL EROSION AND SEDIMENT CONTROL MEASURES, WATER QUALITY MEASURES, AND SITE WASTE CONTROL OPERATIONS) ARE TO BE PERFORMED BY THE CONTRACTOR AND THE RE AS SPECIFIED IN SECTION 158 OF THE SPECIFICATIONS. COMPLETE THE NJDOT ENVIRONMENTAL COMPLIANCE CHECKLIST AND INSPECTION FORM FOR EACH INSPECTION AND RETAIN THE ORIGINAL WITHIN THE PROJECT LIMITS. MAKE THE FORM AVAILABLE UPON REQUEST.

PERMITS BOX

NOTE TO DESIGNER: IN ADDITION TO LISTING THE PERMITS THAT ARE SPECIFICALLY ISSUED FOR A PROJECT, REFERENCE TO THE NJPDES 5G3 CONSTRUCTION ACTIVITY STORMWATER GENERAL PERMIT (NJG0088323) SHOULD BE INCLUDED IN THE PERMITS BOX IF THE PROJECT DISTURBS ONE ACRE OR MORE OF LAND. THIS PERMIT REGULATES STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES INCLUDING CLEARING, GRADING, AND EXCAVATION ACTIVITIES. THE PERMIT SHOULD BE REFERENCED AS FOLLOWS: 'NJPDES 5G3 - CONSTRUCTION ACTIVITY STORMWATER GENERAL PERMIT (NJG0088323) (REQUEST FOR AUTHORIZATION (RFA) IS REQUIRED.)'

EXCEPTION: THE PERMIT IS NOT APPLICABLE TO ROUTINE MAINTENANCE PROJECTS THAT ARE PERFORMED TO MAINTAIN THE ORIGINAL LINE AND GRADE, HYDRAULIC CAPACITY, OR ORIGINAL PURPOSE OF THE FACILITY THAT RESULT IN LAND DISTURBANCE OF EQUAL TO OR GREATER THAN ONE ACRE OF LAND AND LESS THAN FIVE ACRES. HOWEVER, IN AN EFFORT TO PROMOTE ENVIRONMENTAL STEWARDSHIP, THE CONCRETE WASHOUT (IF THE PROJECT INVOLVES THE PLACEMENT OF CONCRETE), SPILL KIT, AND INSPECTION REQUIREMENTS ARE TO BE IMPLEMENTED ON ALL NJDOT PROJECTS, REGARDLESS OF THE SIZE OF LAND DISTURBANCE.

NOTE TO DESIGNER: INCLUDE THE FOLLOWING NOTE AS THE LAST ITEM IN THE SELECTED CONDITIONS COLUMN OF THE PERMITS BOX: 'IN ADDITION, REFER TO THE ENVIRONMENTAL NOTES AND COMMITMENTS ON SHEET NUMBER __ AND THE SOIL EROSION AND SEDIMENT CONTROL GENERAL NOTES ON SHEET NUMBER __.' IF THE SOIL EROSION AND SEDIMENT CONTROL PLANS ARE SEPARATE FROM THE ENVIRONMENTAL PLANS, ALSO REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLANS.

NOTE TO DESIGNER:

THIS SHEET REQUIRES DESIGN SPECIFIC INFORMATION TO BE ADDED AND INCLUDED IN THE CONTRACT PLANS. THESE NOTES CAN BE AMENDED/OMITTED TO REFLECT PROJECT SPECIFIC CONDITIONS. ADDITIONAL NOTES MAY BE NEEDED.

COORDINATE WITH NJDOT BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS WHEN DEVELOPING THE NOTES FOR A SPECIFIC PROJECT.

REMOVE THIS NOTE AND OTHER DESIGNER NOTES AFTER DESIGN SPECIFIC INFORMATION IS ADDED.

ENVIRONMENTAL NOTES AND COMMITMENTS

N.T.S.

EP-3 / EP-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL & SOIL EROSION & SEDIMENT CONTROL PLANS

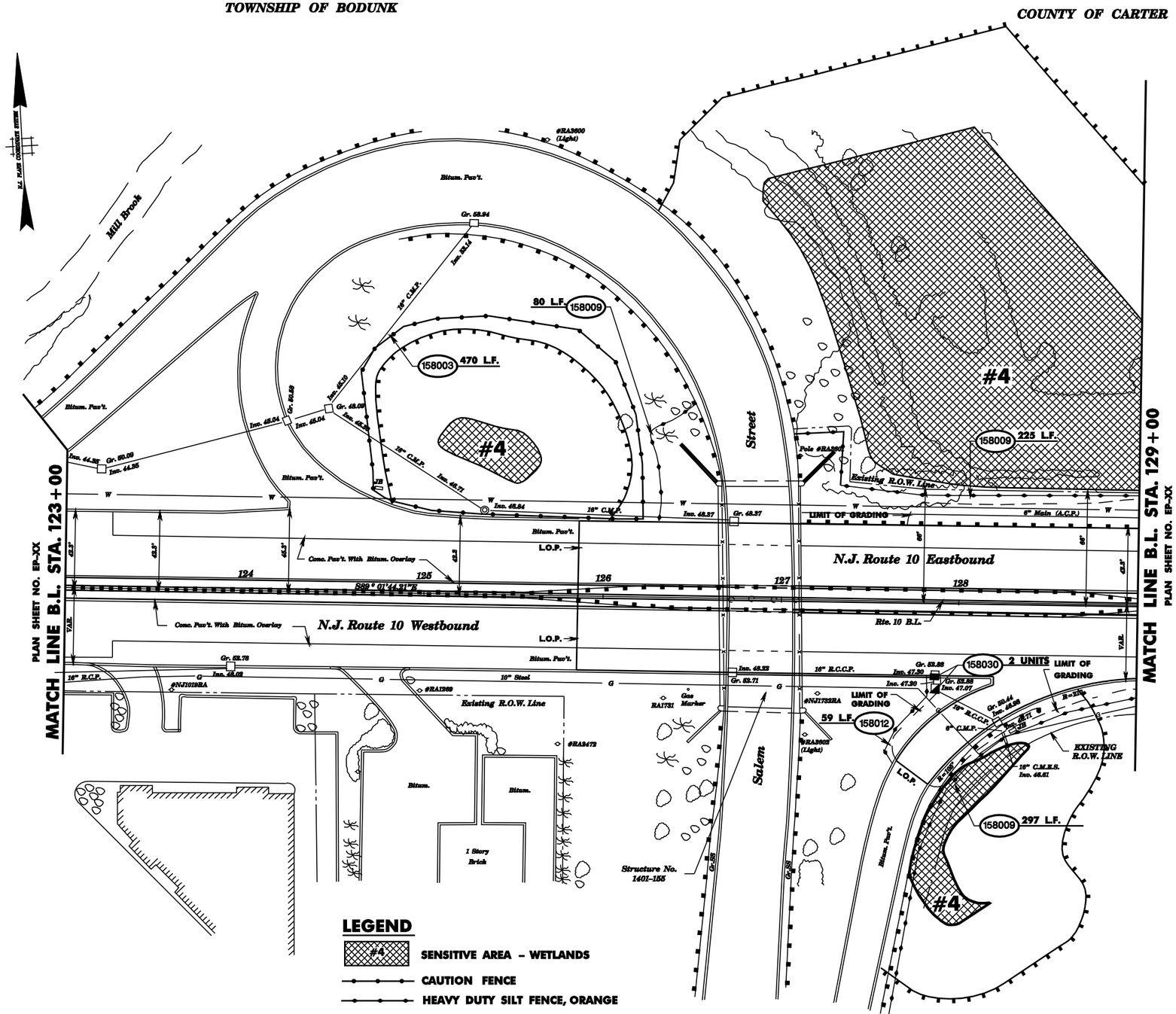
ROUTE 25 OVER LEGUME RIVER

CONTRACT NO. 123567486

(NAME OF CONSULTANT)
(CERTIFICATE OF AUTHORIZATION NO. _ OR PROFESSIONAL ASSOCIATION)
(ENGINEERS SIGNATURE) (DATE)
(ENGINEERS NAME PRINTED)
(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)

ID=TPXOHA3 date=25-FEB-2009 19:05 scale=63.525523:1.000000 pen table=\\Njdotprjws\v8system\NJDOTWS\Projects\NJDOTEng\Iplot\TBLs\Roadway\dot.TBL
BDC07T-05 - ORIGINAL SHEET
file=

STATE	FEDERAL PROJECT NO.
N.J.	NH-4500(123)



LEGEND

- #4 — SENSITIVE AREA – WETLANDS
- CAUTION FENCE
- HEAVY DUTY SILT FENCE, ORANGE
- HEAVY DUTY SILT FENCE, BLACK
- WETLAND TRANSITION AREA BOUNDARY

Soil Erosion and Sediment Control General Notes:

1. Ensure that all Soil Erosion and Sediment Control measures are in accordance with the "New Jersey Department of Transportation Standards for Soil Erosion and Sediment Control" and the Standard Specifications for Road and Bridge Construction.
2. Install all Soil Erosion and Sediment Control measures prior to major soil disturbance or construction operations. Clear proposed construction areas only as required. Install caution fence and silt fence or orange heavy duty silt fence prior to grubbing, clearing, or other earth disturbing construction operations. Protect inlets with inlet filters prior to initial site disturbance and construct construction driveways in accordance with Section 160 (201) of the standard Specifications. Maintain and inspect Soil Erosion and Sediment Control measures and site waste control measures at least weekly, and after weather events that could cause erosion or damage to Soil Erosion and Sediment Control measures and in 24-hour intervals if a prolonged storm until permanent stabilization is established.
3. Install and employ additional control measures beyond those necessary during construction under direction of RE. These additional control measures are required when erosion occurs along the edges of the pavement or in order to control sediment.
4. Apply temporary seeding with straw mulch (or suitable equivalent) to any disturbed area that will be left exposed for more than fourteen (14) days and is not subject to construction traffic.
5. Include permanent grass seeding and provide temporary seeding, when the site is being prepared for permanent vegetative stabilization. Non-vegetative means of permanent ground stabilizations must be employed when removal or treatment of the soil will not provide suitable conditions.
6. Seed or sod all exposed areas within ten (10) days after the final grading for permanent vegetation control. Protect seeded areas with mulch until turf is established.
7. Submit revisions to the Certified Soil Erosion and Sediment Control Plans to NJDOT for approval. These revised plans must meet all current NJDOT Soil Erosion and Sediment Control Standards. The contractor shall also remediate any erosion or sediment problems from ongoing construction.
8. The contractor is responsible for any erosion or sedimentation that occurs below the stormwater outfalls, or offsite, as a result of any construction on the project. Do not discharge effluent from dewatering directly into any waterway.
9. The contractor must be in accordance with the Standards for High Acid-Producing Soil. Cover soil having a pH of 4 or less, or containing iron sulphides, with a layer of limestone, and a minimum of twelve (12) inches of soil having a pH of 5 or more prior to seedbed preparation and a minimum of twenty four(24) inches for tree and shrub planting areas and structures.

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
158012M	HEAVY DUTY SILT FENCE, BLACK	59 L.F.
158030M	INLET FILTERS, TYPE 2 2' X 4'	2 UNITS
158003M	CAUTION FENCE	470 L.F.
158009M	HEAVY DUTY SILT FENCE, ORANGE	602 L.F.

30' 20' 10' 0 30' 60'

EP-4 / EP-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL & SOIL EROSION & SEDIMENT CONTROL PLANS

ROUTE 10 OVER BRADY'S BROOK

CONTRACT NO. 123567486

(NAME OF CONSULTANT)

(CERTIFICATE OF AUTHORIZATION NO. _ OR PROFESIONAL ASSOCIATION)

(ENGINEERS SIGNATURE) (DATE)

(ENGINEERS NAME PRINTED)

(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)

16

ID=TPXCH1A3 date=25-FEB-2009 19:05 scale=76.230628:1.000000 pen table=\\Nj\dotpw\v\eyrpw\NJDOT\V8\Projects\NJDOT\V8\Projects\NJDOT\Eng\Splot\TSLe\Roadway\dot.TBL
file=

STATE	FEDERAL PROJECT NO.
N.J.	STP-0005(123) CON

CITY OF NORTHFIELD

ATLANTIC COUNTY

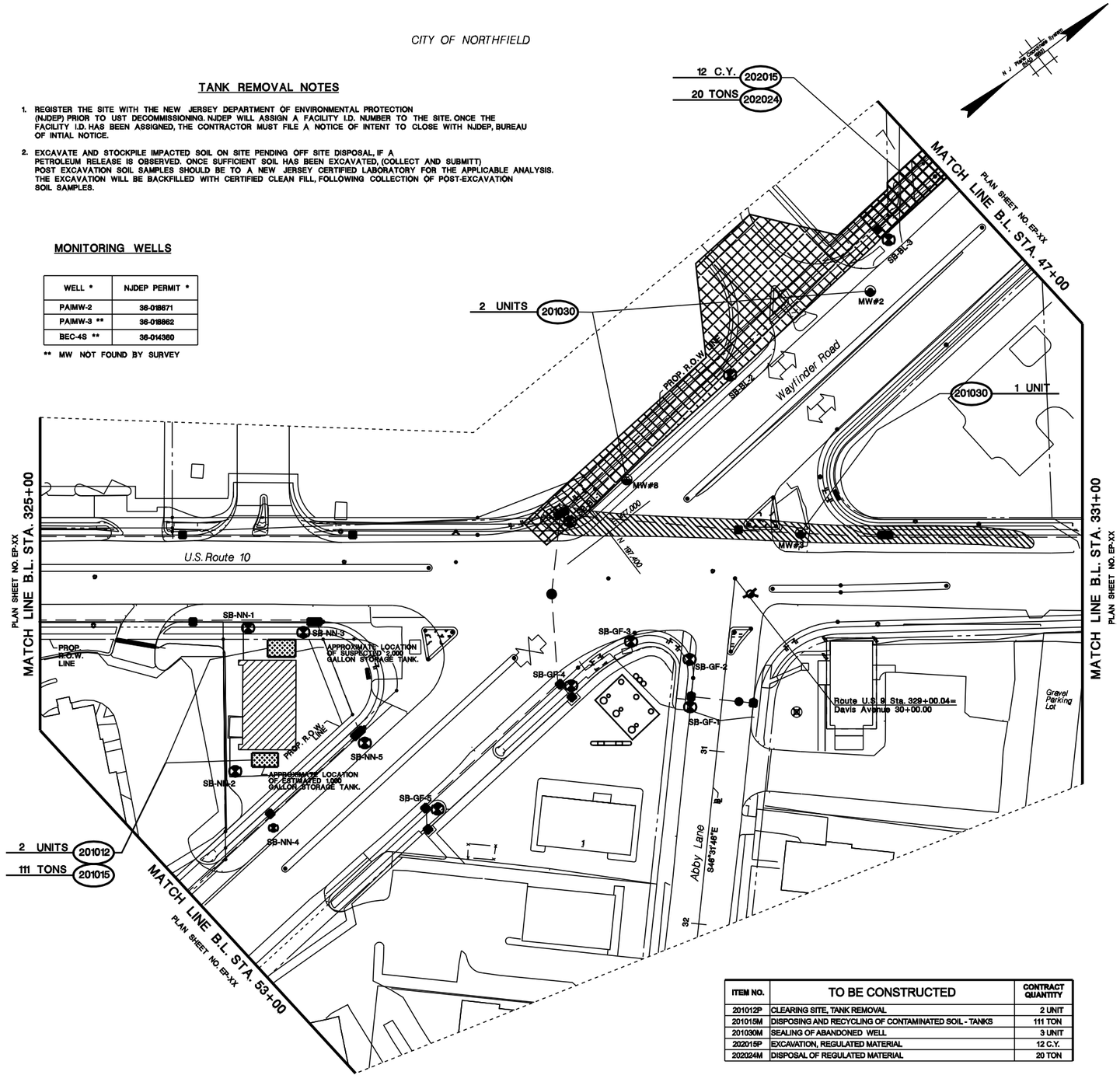
TANK REMOVAL NOTES

1. REGISTER THE SITE WITH THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP) PRIOR TO UST DECOMMISSIONING. NJDEP WILL ASSIGN A FACILITY I.D. NUMBER TO THE SITE. ONCE THE FACILITY I.D. HAS BEEN ASSIGNED, THE CONTRACTOR MUST FILE A NOTICE OF INTENT TO CLOSE WITH NJDEP, BUREAU OF INTIAL NOTICE.
2. EXCAVATE AND STOCKPILE IMPACTED SOIL ON SITE PENDING OFF SITE DISPOSAL. IF A PETROLEUM RELEASE IS OBSERVED. ONCE SUFFICIENT SOIL HAS BEEN EXCAVATED, (COLLECT AND SUBMITT) POST EXCAVATION SOIL SAMPLES SHOULD BE TO A NEW JERSEY CERTIFIED LABORATORY FOR THE APPLICABLE ANALYSIS. THE EXCAVATION WILL BE BACKFILLED WITH CERTIFIED CLEAN FILL, FOLLOWING COLLECTION OF POST-EXCAVATION SOIL SAMPLES.

MONITORING WELLS

WELL *	NJDEP PERMIT *
PAIMW-2	36-018671
PAIMW-3 **	36-018662
BEC-4S **	36-014360

** MW NOT FOUND BY SURVEY



GENERAL NOTES

1. PREPARE, SUBMIT, AND IMPLEMENT A SITE SPECIFIC HEALTH AND SAFETY PLAN IN ACCORDANCE WITH ALL APPLICABLE HEALTH AND SAFETY REQUIREMENTS FOR WORK IN AND WITH CONTAMINATED SOIL, SEDIMENT, WASTE AND WATER AND THE MAJOR LANDFILL DISRUPTION APPROVAL. THE PLAN SHALL GOVERN ALL HEALTH AND SAFETY FACETS OF THE PROJECT CONSTRUCTION AND ENCOMPASS THE ACTIVITIES OF ALL PERSONS WHO ENTER THE SITE.
2. PROVIDE ALL PERSONNEL, EQUIPMENT, AND ANCILLARY SERVICES TO COLLECT, ANALYZE, AND TRANSPORT ENVIRONMENTAL SAMPLES REQUIRED TO CHARACTERIZE CONTAMINATED MATERIAL IN ACCORDANCE WITH THE CURRENT VERSIONS OF THE NJDEP FIELD SAMPLING PROCEDURES MANUAL, NJDEP MANAGEMENT OF EXCAVATED SOILS GUIDELINES, APPENDIX 1 OF THE NJDEP WASTE CLASSIFICATION FORM, AND ACCORDING TO THE RECYCLING OR DISPOSAL FACILITY ACCEPTING THE WASTE.
3. PROVIDE ALL PERSONNEL, MATERIALS AND EQUIPMENT TO PROPERLY STORE AND PROTECT CONTAMINATED MATERIALS AT THE EXCAVATION AND IN TEMPORARY STOCKPILES. SELECT ALL TEMPORARY STOCKPILE LOCATIONS AND APPROVED BY THE RE. TEMPORARY STOCKPILE LOCATIONS SHALL BE LOCATED IN DRY AREAS AND BE PLACED ON PLASTIC SHEETING, TO PREVENT MIGRATION OF CONTAMINANTS INTO ADJACENT SOILS, SURFACE WATER, AND GROUNDWATER.
4. DEVELOP AND IMPLEMENT A POLLUTION PREVENTION AND CONTROL PLAN TO MANAGE CONTAMINATED WATER AND GROUNDWATER. CONTAMINATED STORMWATER, GROUNDWATER, SEDIMENTS OR FREE PRODUCT SHALL NOT BE DISCHARGED TO LOCAL STORM SEWER SYSTEMS OR WATERWAYS EXCEPT AS AUTHORIZED BY A DISCHARGE APPROVAL OR PERMIT.
5. PROVIDE PERSONNEL, MATERIALS AND EQUIPMENT TO MOBILIZE, OPERATE AND MAINTAIN AN OIL-WATER SEPARATOR FOR REMOVAL OF FREE PRODUCT AND CONTAMINATED SEDIMENTS GENERATED DURING DEWATERING ACTIVITIES IN AREAS OF PETROLEUM-CONTAMINATED GROUNDWATER. OBTAIN PERMITS OR FACTORY ASSEMBLED UNITS CAPABLE OF MEETING ALL DISCHARGE APPROVALS OF SELF CONTAINED THE OIL-WATER SEPARATOR.
6. DEVELOP AND IMPLEMENT A MATERIAL HANDLING PLAN TO MANAGE CONTAMINATED SOIL.

SOIL SAMPLING RESULTS

(Results in parts per million [ppm].)

SAMPLE	SB-GF-1	SB-GF-2	SB-GF-3	SB-GF-4	RDCSCC	NRDCSCC	IGWSCC
DEPTH OF SAMPLE (FT)	4.5-5.0	5.0-5.5	5.0-5.5	5.5-6.0			
TPHCs	49	13	8	66	1,000	1,000	1,000
VO+10	ND	ND	ND	ND	CS	CS	CS

(Results in parts per million [ppm].)

SAMPLE	SB-BL-1	SB-BL-2*	SB-BL-3	RDCSCC	NRDCSCC	IGWSCC
DEPTH OF SAMPLE (FT)	4.5-5.0	3.0-3.5	4.5-5.0			
TPHCs	*5.2	22	*5.1	1,000	1,000	1,000
TOLUENE	ND	0.17	ND	1,000	1,000	500
ETHYLBENZENE	ND	1.78	0.15	1,000	1,000	100
XYLENES (TOTAL)	ND	14.4	0.17	410	1,000	67
TICs (TOTAL)	ND	17.3	11.4	1,000	1,000	1,000

* SOIL SAMPLE SB-BL-2 EXHIBITED DISCOLORATION AND A PETROLEUM ODOR.

(Results in parts per million [ppm].)

SAMPLE	SB-NN-1	SB-NN-2	SB-NN-3	SB-NN-4	SB-NN-5	RDCSCC	NRDCSCC	IGWSCC
DEPTH OF SAMPLE (FT)	6.0-6.5	6.0-6.5	3.0-0.5	6.0-6.5	6.0-6.5			
TPHCs	*5.4	2,545	483	*5.3	*5.4	1,000	1,000	1,000
VO*10	ND	ND	ND	ND	ND	CS	CS	CS

RDCSCC - Residential Direct Contact Soil Cleanup Criteria
NRDCSCC - Nonresidential Direct Contact Soil Cleanup Criteria;
IGWSCC - Impact to Groundwater Soil Cleanup Criteria
1,000 ppm is the action level
TPHCs - Total Petroleum Hydrocarbons
ND - Notdetected
CS - Compound Specific
TICs - Tentatively Indentified Compounds

30' 20' 10' 0 30' 60'

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
201012P	CLEARING SITE, TANK REMOVAL	2 UNIT
201015M	DISPOSING AND RECYCLING OF CONTAMINATED SOIL - TANKS	111 TON
201030M	SEALING OF ABANDONED WELL	3 UNIT
202015P	EXCAVATION, REGULATED MATERIAL	12 C.Y.
202024M	DISPOSAL OF REGULATED MATERIAL	20 TON

LEGEND

- SENSITIVE AREA - GROUNDWATER CONTAMINATION
- AREA OF REGULATED WASTE
- UST LOCATION, TO BE REMOVED
- SOIL SAMPLE LOCATION
- MONITORING WELL

EP-5
EP-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL & SOIL EROSION & SEDIMENT CONTROL PLANS

ROUTE 10 OVER WAYFINDER ROAD

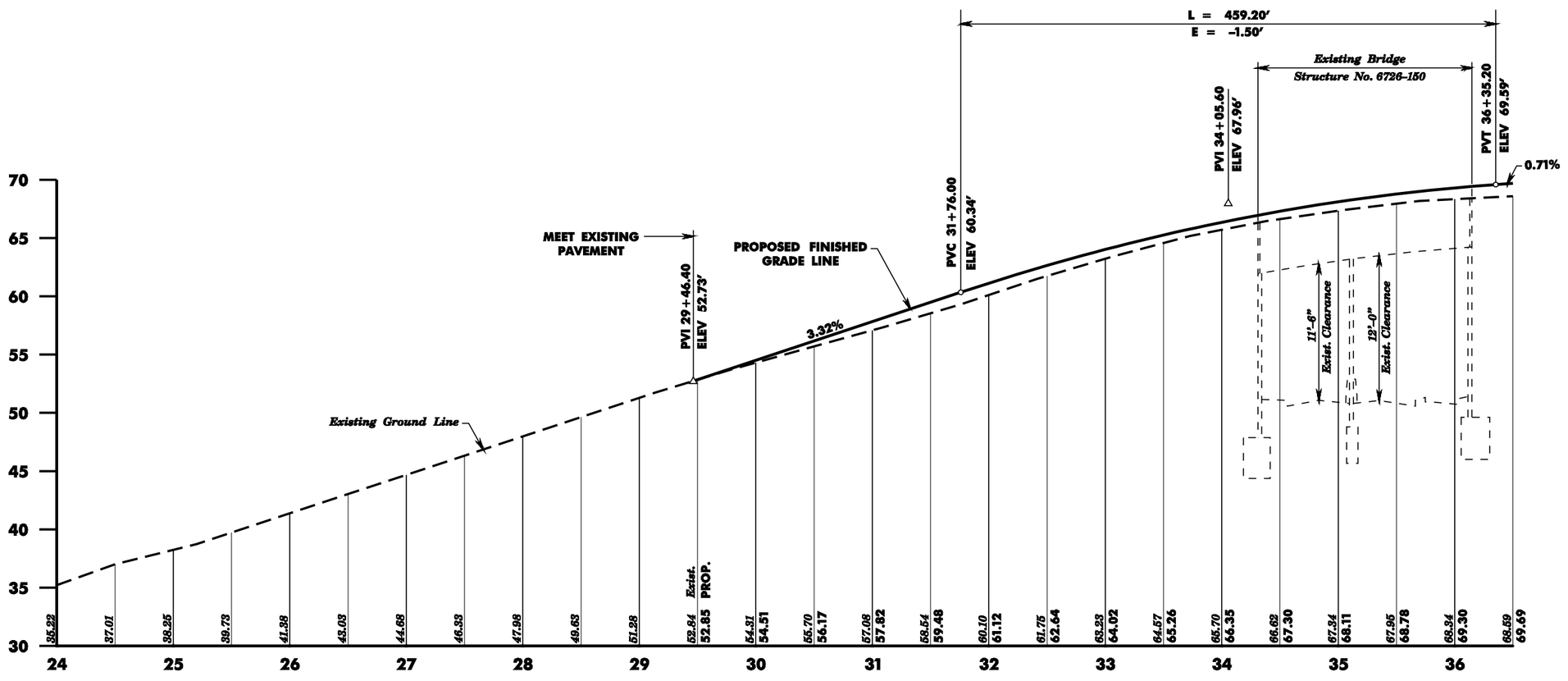
CONTRACT NO. 123567486

(NAME OF CONSULTANT)
(CERTIFICATE OF AUTHORIZATION NO._ OR PROFESSIONAL ASSOCIATION)
(ENGINEERS SIGNATURE) (DATE)
(ENGINEERS NAME PRINTED)
(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)

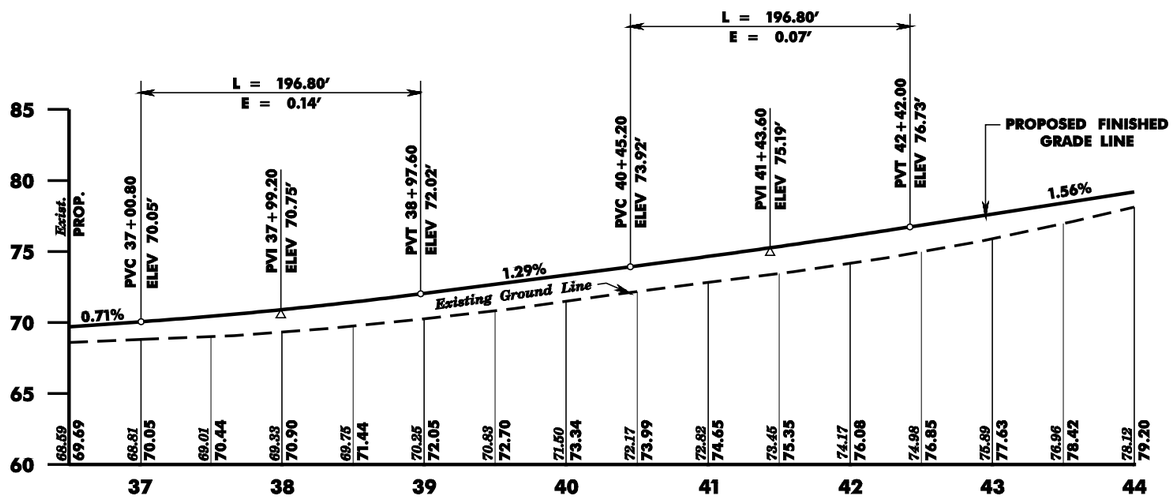
17

ID=TFXOHA3 date=25-FEB-2009 19:06 scale=67.759164:1.000000 pen table=\\Njdotpw\v8system\NJDOTDsg\Plot\TELe Roadway\dot.TBL
file=

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93)61



ROUTE 295



ROUTE 295

HORIZONTAL 50′ 0 50′ 100′

VERTICAL 5′ 0 5′ 10′

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

P–1 / P–3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PROFILES

ROUTE 295

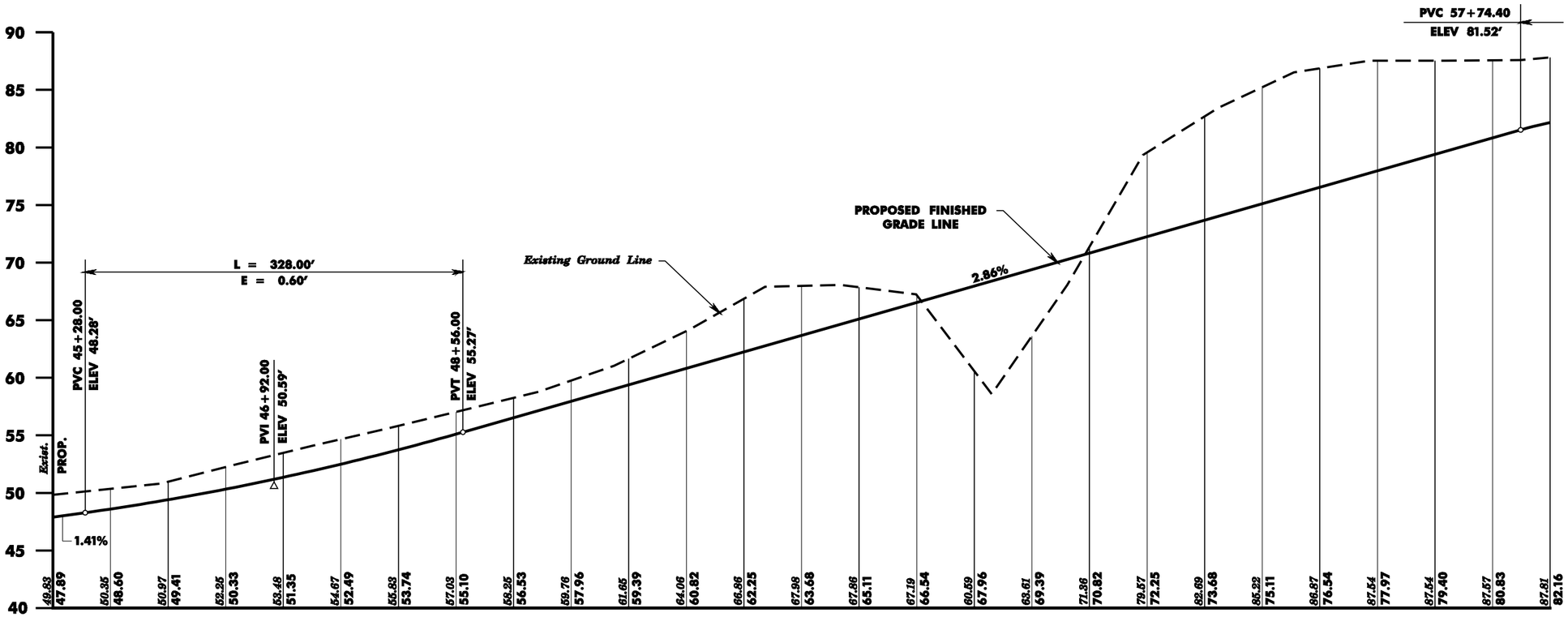
CONTRACT NO. 010010001

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

18

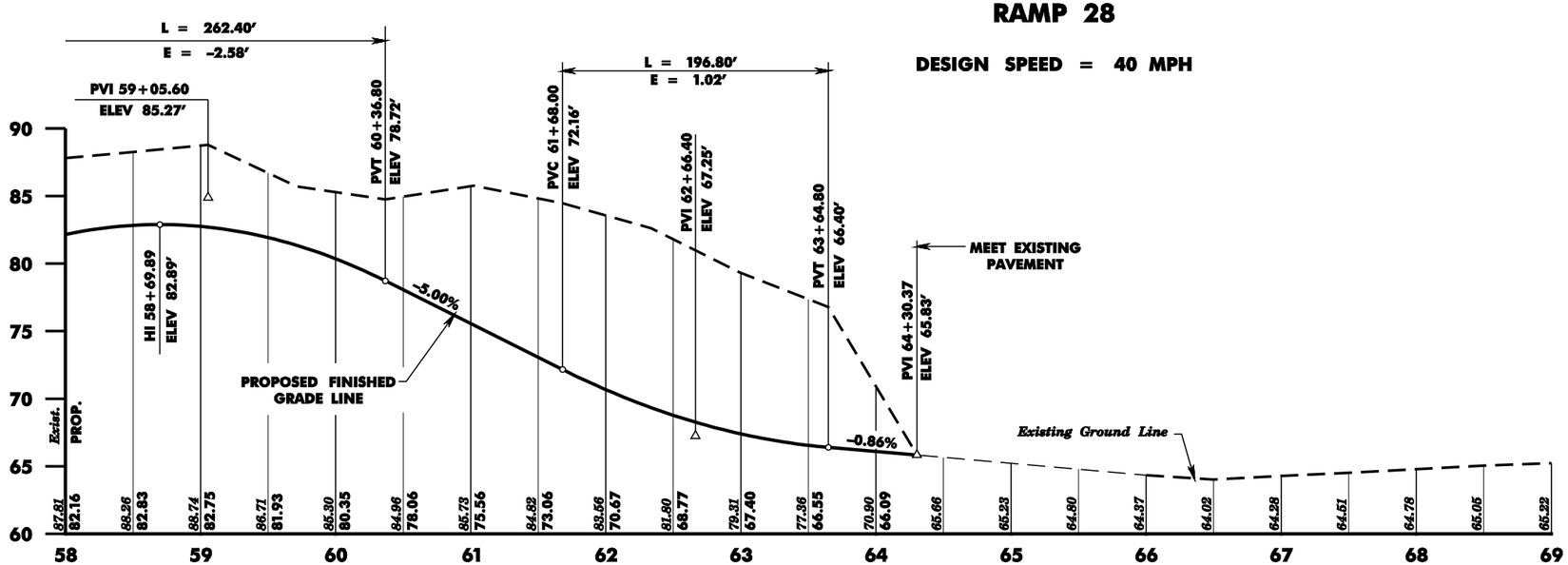
ROUTE 295 ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93)61



RAMP 28

DESIGN SPEED = 40 MPH



RAMP 28

HORIZONTAL 50′ 0 50′ 100′

VERTICAL 5′ 0 5′ 10′

P-2
P-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PROFILES

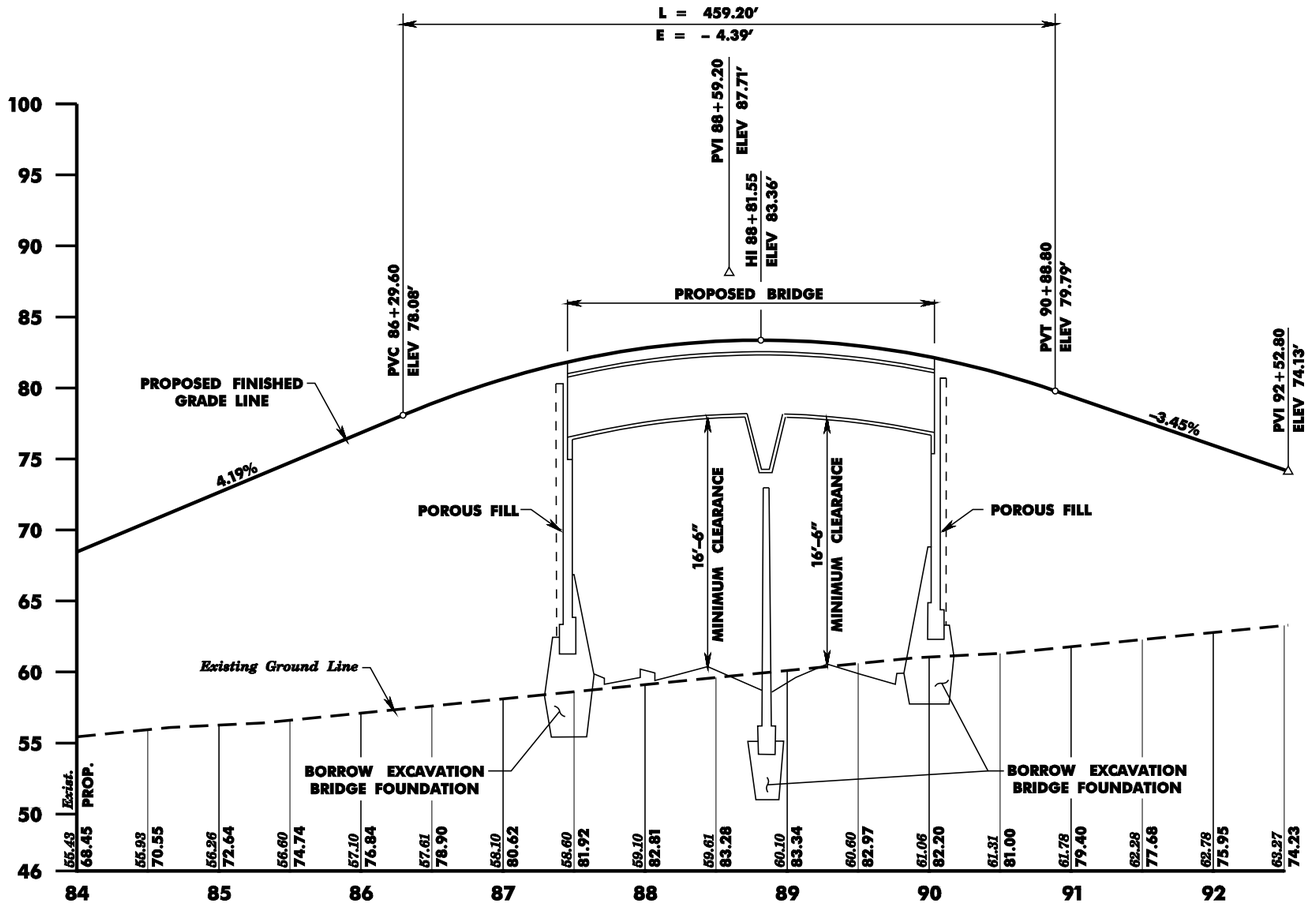
ROUTE 295

CONTRACT NO. 010010001

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

19

STATE	FEDERAL PROJECT NO.
N.J.	I-295-2(93)61



ROUTE 295

HORIZONTAL 50′ 0 50′ 100′

VERTICAL 5′ 0 5′ 10′

P-3 / P-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

PROFILES

ROUTE 295

CONTRACT NO. 010010001

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

20

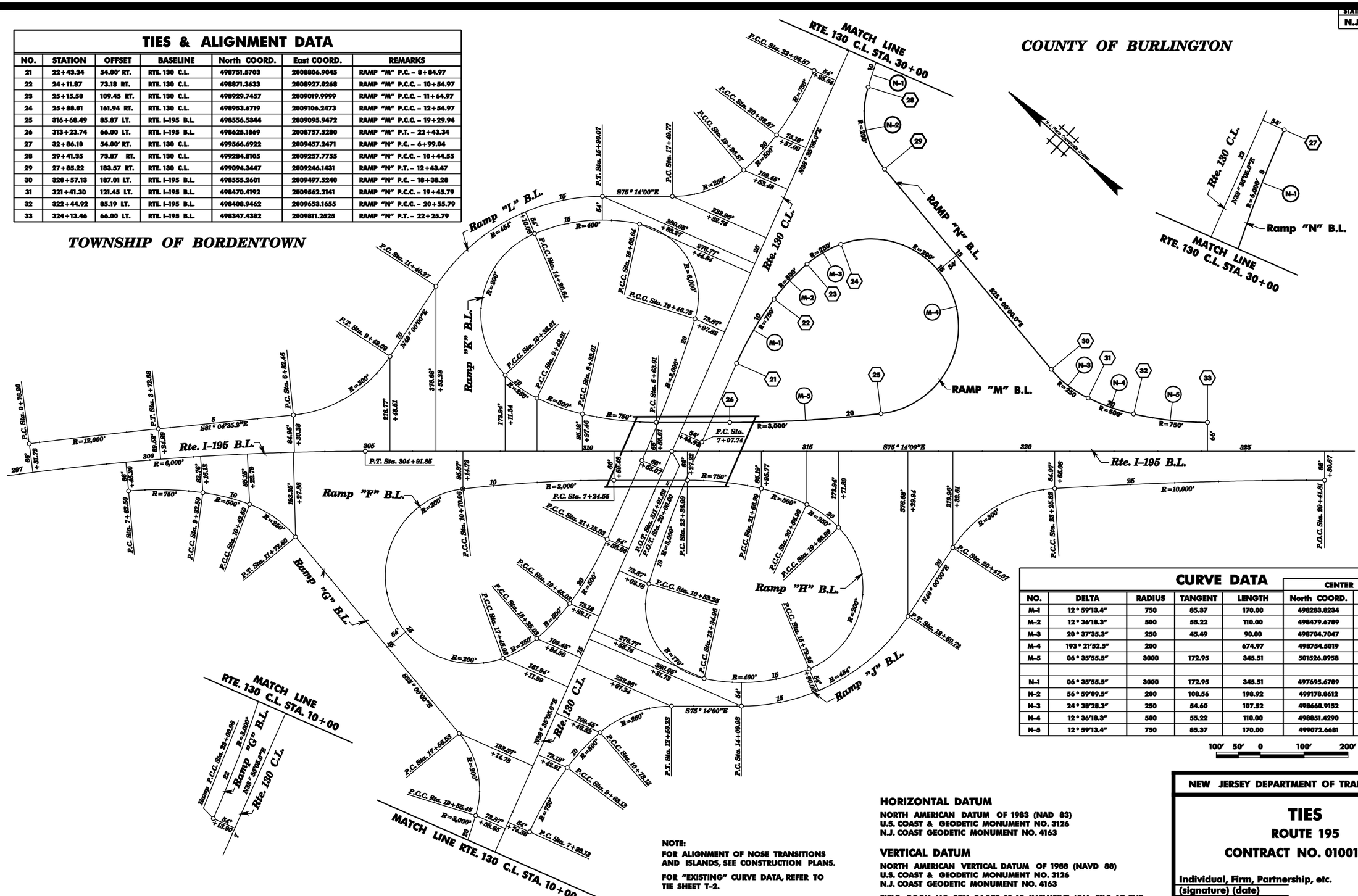
STATE	FEDERAL PROJECT NO.
N.J.	IR-195-(138) 7

TIES & ALIGNMENT DATA

NO.	STATION	OFFSET	BASELINE	North COORD.	East COORD.	REMARKS
21	22+43.34	54.00' RT.	RTE. 130 C.L.	498751.5703	2008806.9045	RAMP "M" P.C. – 8+84.97
22	24+11.87	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.	498929.7457	2009019.9999	RAMP "M" P.C.C. – 11+64.97
24	25+88.01	161.94 RT.	RTE. 130 C.L.	498953.6719	2009106.2473	RAMP "M" P.C.C. – 12+54.97
25	316+68.49	85.87 LT.	RTE. I-195 B.L.	498556.5344	2009095.9472	RAMP "M" P.C.C. – 19+29.94
26	313+23.74	66.00 LT.	RTE. I-195 B.L.	498625.1869	2008757.5280	RAMP "M" P.T. – 22+43.34
27	32+86.10	54.00' RT.	RTE. 130 C.L.	499566.6922	2009457.2471	RAMP "N" P.C. – 6+99.04
28	29+41.35	73.87 RT.	RTE. 130 C.L.	499284.8105	2009257.7755	RAMP "N" P.C.C. – 10+44.55
29	27+85.22	183.57 RT.	RTE. 130 C.L.	499094.3447	2009246.1431	RAMP "N" P.T. – 12+43.47
30	320+57.13	187.01 LT.	RTE. I-195 B.L.	498555.2601	2009497.5240	RAMP "N" P.C. – 18+38.28
31	321+61.30	121.45 LT.	RTE. I-195 B.L.	498470.4192	2009562.2141	RAMP "N" P.C.C. – 19+45.79
32	322+44.92	85.19 LT.	RTE. I-195 B.L.	498408.9462	2009653.1655	RAMP "N" P.C.C. – 20+55.79
33	324+13.46	66.00 LT.	RTE. I-195 B.L.	498347.4382	2009811.2525	RAMP "N" P.T. – 22+25.79

TOWNSHIP OF BORDENTOWN

COUNTY OF BURLINGTON



CURVE DATA

NO.	DELTA	RADIUS	TANGENT	LENGTH	CENTER POINT North COORD.	CENTER POINT East COORD.
M-1	12° 59'13.4"	750	85.37	170.00	498283.8234	2009393.1723
M-2	12° 36'18.3"	500	55.22	110.00	498479.6789	2009237.7855
M-3	20° 37'35.3"	250	45.49	90.00	498704.7047	2009124.3653
M-4	193° 21'52.5"	200		674.97	498754.5019	2009124.3698
M-5	06° 35'55.5"	3000	172.95	345.51	501526.0958	2009522.1785
N-1	06° 35'55.5"	3000	172.95	345.51	497695.6789	2011802.3009
N-2	56° 59'09.5"	200	108.56	198.92	499178.8612	2009427.4122
N-3	24° 38'28.3"	250	54.60	107.52	498660.9152	2009724.1061
N-4	12° 36'18.3"	500	55.22	110.00	498851.4290	2009885.9979
N-5	12° 59'13.4"	750	85.37	170.00	499072.6681	2010002.4161

100' 50' 0 100' 200'

NOTE:
FOR ALIGNMENT OF NOSE TRANSITIONS AND ISLANDS, SEE CONSTRUCTION PLANS.

FOR "EXISTING" CURVE DATA, REFER TO TIE 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")

T-1 / T-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES
ROUTE 195
CONTRACT NO. 010010001

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

21

ROUTE 195 - ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	IR-195-(136) 7

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	11+63.24	64′ 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+33.11	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	2,019,886.6510	P.T.
ML-7	461+27.31	0′	″	494,215.8176	2,022,862.7512	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.
J-A	12° 59′13.4″	750′	85.37	170.00	497,370.0433	2,008,664.1111
J-B	12° 36′18.3″	500′	55.22	110.00	497,565.8928	2,008,508.7312
J-C	40° 35′23.3″	250′	92.45	177.11	497,790.9330	2,008,399.8321
J-D	56° 46′00.0″	454′	245.31	449.81	498,430.9782	2,008,733.6815
J-E	53° 50′14.4″	300′	150.35	278.75	497,996.0088	2,009,377.4371
J-F	3° 31′45.6″	10,000′	308.09	615.98	488,481.9612	2,007,487.1551
J-G	12° 50′18.8″	350′	39.38	78.43	497,682.7572	2,008,414.6961
J-H	2° 33′48.3″	3,000′	67.12	134.22	496,242.3639	2,010,642.7719
J-I	21° 26′40.3″	250′	47.34	93.57	498,066.9674	2,009,365.2913
J-J	1° 40′59.9″	10,000′	146.91	293.79	488,520.8347	2,007,381.9241
J-K	33° 39′09.0″	30′	9.07	17.62	498,260.8233	2,009,430.0421
J-L	33° 27′44.5″	30′	9.02	17.52	498,303.3382	2,009,472.3911
AR-A	90° 00′00.0″	50′	50.00	78.54	497,177.7162	2,007,386.1771
AR-B	88° 16′24.1″	70′	67.92	107.85	497,174.5977	2,007,390.0712
AR-C	88° 08′50.7″	30′	29.05	46.15	497,098.3459	2,007,325.3816
AR-D	163° 24′21.6″	30′	205.72	85.56	497,180.8382	2,007,382.2681
AR-E	18° 09′47.3″	150′	23.98	47.55	497,279.3449	2,007,313.7316
ML-A	33° 59′42.0″	6,000′	1,834.10	3,559.95′	492,971.5674	2,006,406.9812
ML-B	7° 47′20.0″	10,000′	680.76	1,359.42	487,504.8755	2,011,452.9811
ML-C	8° 38′30.0″	10,000′	755.56	1,508.26	504,659.7371	2,022,291.2881
ML-D	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	*493,919.454*	*2,023,889.690*	*2″x2″x18″ Hub*
TR-B	*494,055.347*	*2,023,252.052*	*IP – #5 Rebar (36″)*
TR-C	*494,319.892*	*2,022,919.641*	*2″x2″x18″ Hub*
TR-D	*494,139.989*	*2,022,189.984*	*D.H. (S.W. Corner Step)*
TR-E	*494,805.554*	*2,020,502.930*	*PK w/Ribbon*
TR-F	*495,584.560*	*2,018,347.601*	*PK w/Ribbon*
TR-G	*495,864.561*	*2,017,767.792*	*2″x2″x18″ Hub*
TR-H	*496,160.553*	*2,017,157.175*	*IP – #5 Rebar (36″)*
TR-K	*496,391.688*	*2,016,561.661*	*PK w/Ribbon*
TR-L	*496,664.295*	*2,016,032.945*	*DH Sdwk.*
TR-M	*496,834.526*	*2,015,602.300*	*DH Curb*
TR-N	*497,031.642*	*2,015,202.612*	*2″x2″x18″ Hub*
TR-0	*497,235.056*	*2,013,977.108*	*PK w/Ribbon*
TR-P	*497,310.665*	*2,013,521.615*	*PK w/Ribbon*
TR-Q	*497,689.779*	*2,012,015.452*	*2″x2″x18″ Hub*
TR-R	*497,984.782*	*2,010,893.275*	*2″x2″x18″ Hub*
TR-S	*498,131.948*	*2,010,226.160*	*2″x2″x18″ Hub*
TR-T	*498,307.678*	*2,009,691.814*	*DH Curb*
TR-U	*498,614.004*	*2,008,535.355*	*DH Sdwk.*
TR-V	*498,605.107*	*2,008,568.959*	*2″x2″x18″ Hub*
TR-W	*498,931.933*	*2,007,750.851*	*2″x2″x18″ Hub*
TR-X	*498,876.158*	*2,007,346.677*	*2″x2″x18″ Hub*
M-1	*493,628.028*	*2,020.694.244*	*USC&G Mon. #8140*
M-2	*494,853.604*	*2,020,505.588*	*USC&G Mon. #8141*
M-3	*499,480.510*	*2,009,264.223*	*USC&G Mon. #2156*

T-2 / T-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES

ROUTE 195

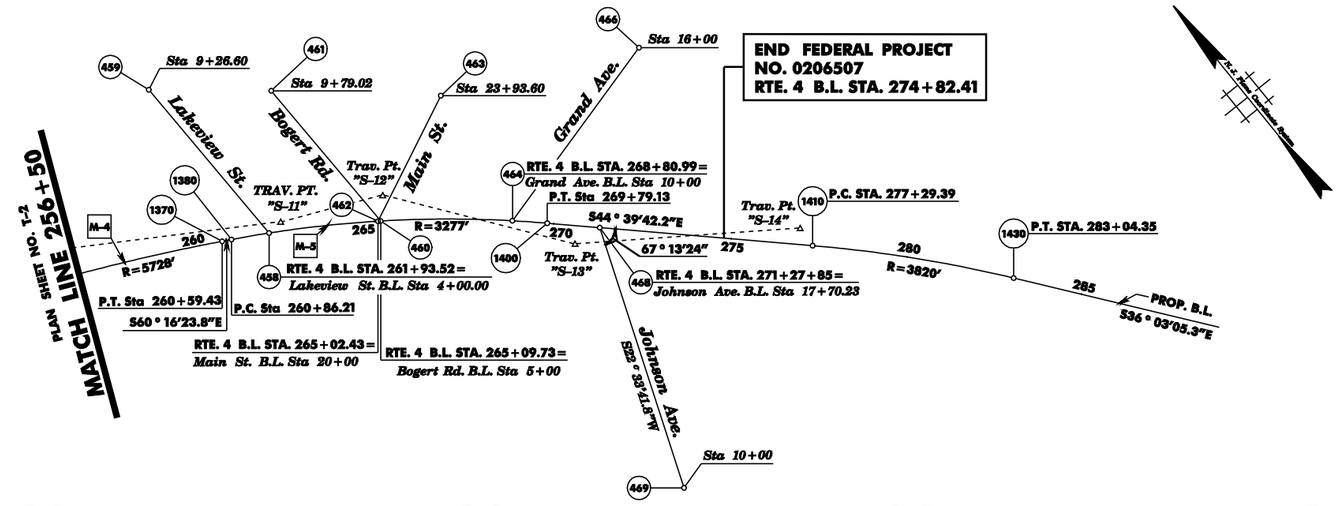
CONTRACT NO. 010010001

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

STATE	FEDERAL PROJECT NO.
N.J.	NH-56(147)

BOROUGH OF PARAMUS

COUNTY OF BERGEN



CURVE DATA

NO.	DELTA	RADIUS	TANGENT	LENGTH	CENTER POINT North COORD.	CENTER POINT East COORD.
M-4	10° 28'7.8"	5728'	524.76'	1046.59'	754957.922	2167840.995
M-5	15° 36'41.5"	3277'	449.24'	892.92'	756159.950	2169992.625

TRAVERSE ALIGNMENT DATA

No.	Station	Offset	Baseline	North Coord.	East Coord.	Remarks
S-11	261+76.88	44.96' Lt.	Rte.4	757,639.1676	2,172,330.9932	Traverse Point
S-12	265+62.38	100.21' Lt.	Rte.4	757,468.3475	2,172,693.6952	Traverse Point
S-13	270+66.51	44.99' Rt.	Rte.4	757,026.2409	2,172,952.5376	Traverse Point
S-14	276+75.87	47.72' Lt.	Rte.4	756,675.9858	2,173,476.8169	Traverse Point

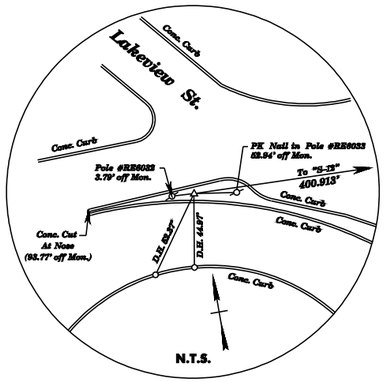
HORIZONTAL DATUM

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

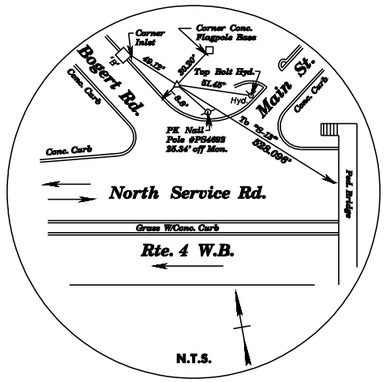
VERTICAL DATUM

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

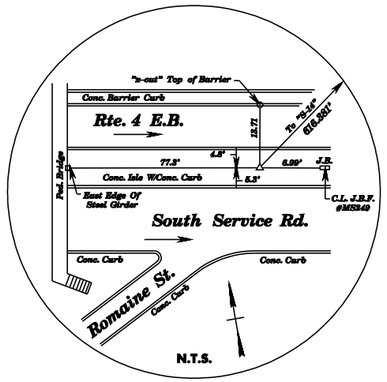
FIELD BOOK NO. 2711, PAGES 13-15 INCLUSIVE (ON FILE AT THE NJDOT AREA "B" FIELD SURVEY OFFICE – "PHONE: 001-388-4692")



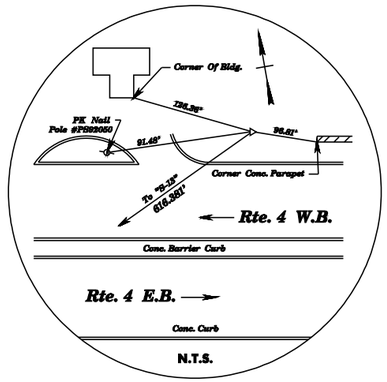
Trav. Pt. "S-11"
Mon. Plug W/Punch (Mon. Box)
Sta. 261+76.88, 44.96' Lt.



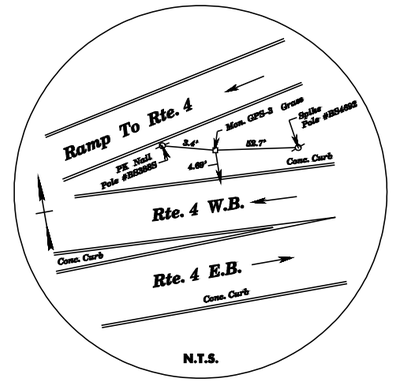
Trav. Pt. "S-12"
Conc. Mon. W/Drill Hole
Sta. 265+62.38, 100.21' Lt.



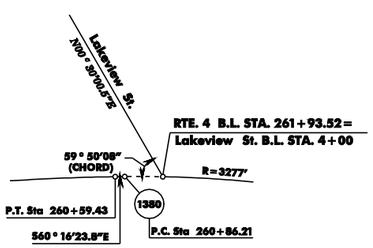
Trav. Pt. "S-13"
Mon. Plug W/Punch (Mon. Box)
Sta. 270+66.51, 44.99' Rt.



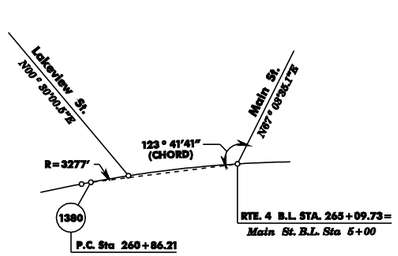
Trav. Pt. "S-14"
"x" Steel Angle Iron (3" Above Ground)
Sta. 276+75.87, 47.72' Lt.



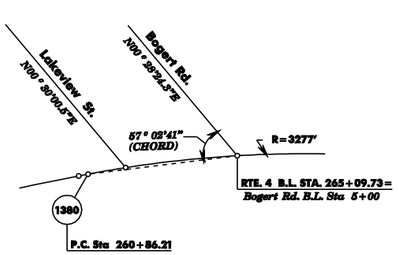
G.P.S. Monument #3, Elev. 73.964
Sta. 281+74.61, 44.96' Lt.



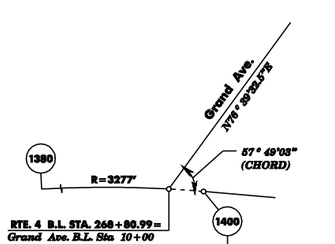
Lakeview St.



Main St.



Bogert Rd.



Grand Ave.

200' 100' 0 200' 400'

T-3 / T-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES
ROUTE 4
CONTRACT NO. 010010001

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

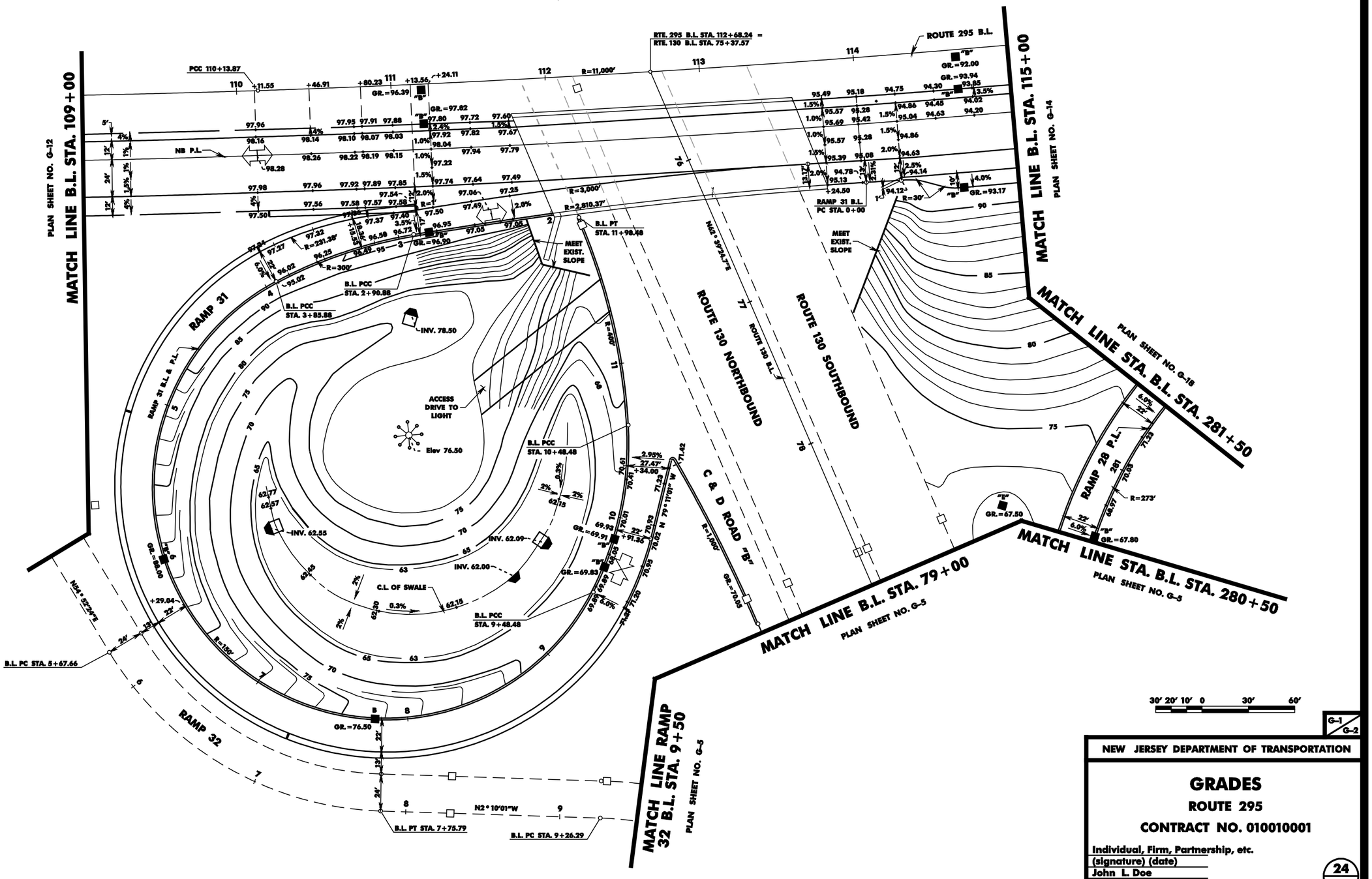
23

STATE	FEDERAL PROJECT NO.
N.J.	NH-4692(388)

TOWNSHIP OF BORDENTOWN

N.J. Plane Coordinate System

COUNTY OF BURLINGTON



30' 20' 10' 0 30' 60'

G-1 / G-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

GRADES

ROUTE 295

CONTRACT NO. 010010001

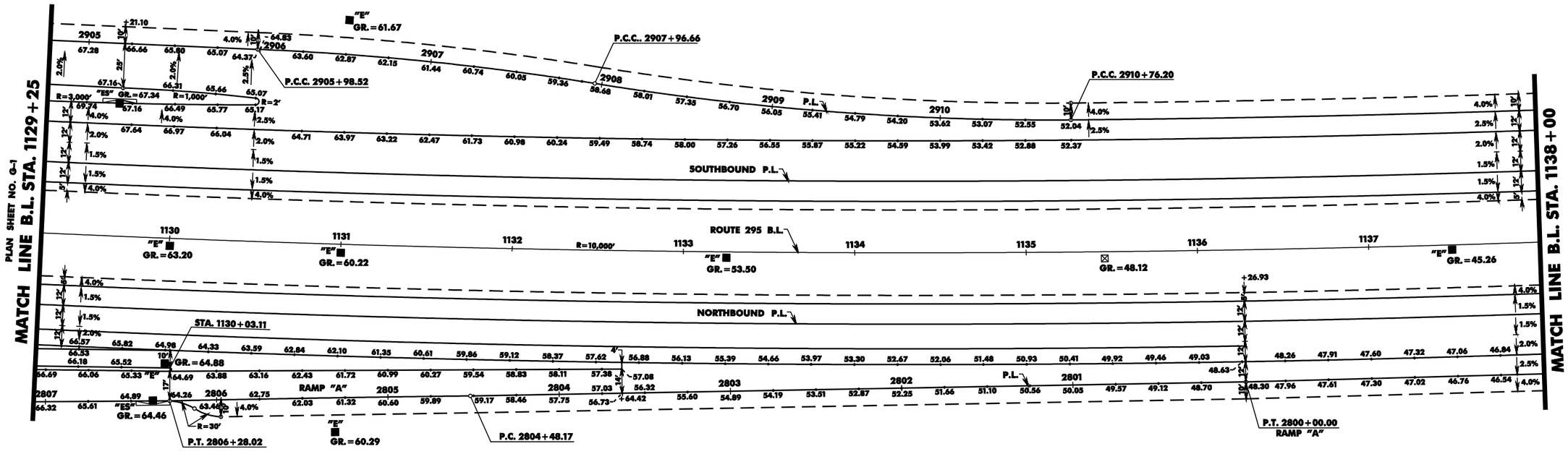
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

24

ROUTE 295 - ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93)61

TOWNSHIP OF MOORESTOWN *COUNTY OF BURLINGTON*



G-2 / G-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

GRADES
ROUTE 295
CONTRACT NO. 010010001

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

25

LEGEND

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

NOTES – TRAFFIC CONTROL PLANS

1. ONE LANE OF 11 FEET WIDE UNOBSTRUCTED TRAVELED WAY SHALL BE MAINTAINED ON ROUTE 38 AT ALL TIMES BETWEEN THE HOURS OF 8:00 P.M. AND 5:30 A.M..

2. ROUTE 38 ROADWAY CONSTRUCTION FOR THE VARIOUS STAGES SHALL BE COMPLETED TO THE TOP OF THE BITUMINOUS CONCRETE SURFACE COURSE MIX I-4 SO THAT THE FINAL SURFACE COURSE CAN BE PLACED IN ONE CONTINUOUS OPERATION DURING THE FINAL STAGE.

3. LANE CLOSURES WILL NOT BE PERMITTED AFTER NOON OF THE DAY BEFORE, DURING, AND UNTIL NOON OF THE DAY AFTER THE FOLLOWING HOLIDAY'S OR HOLIDAY WEEKEND 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.

4. 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		
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	MIDNIGHT to 6:00 AM and 9:00 PM to MIDNIGHT	MIDNIGHT to 6:00 AM and 4:00 PM to MIDNIGHT

GENERAL NOTES:

1. ADVANCE WARNING SIGNS DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT DIRECTION OF THE DEPARTMENT, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.

2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS APPROVED BY RE TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION. ILLUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.

3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.

4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-IF SIGN (ROAD WORK AHEAD) AS A MINIMUM.

5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE RE.

6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY,OR PROPOSED TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.

7. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART VI "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.

8. CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.

9. A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH SHALL BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.

10. CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) SHALL BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION.

11. CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE AS DIRECTED BY THE RE.

12. MOVING WORK AREAS IN A LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER, THE TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION THAT SHALL MOVE WITH THE WORK AREAS TO KEEP A 60 FEET MIN. AND 150 FEET MAX. BUFFER IN ADVANCE OF EACH WORK AREA.

13. 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 RE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

14. TRAFFIC SAFETY SERVICES SHALL BE USED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL.

15. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON AT LEAST 6H : 1V SLOPE BEFORE THE END OF EACH WORK DAY. OTHER EXCAVATED AREA WITHIN THE CLEAR ZONE SHALL BE BACKFILLED.

16. WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE RE.

17. 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.

18. 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.

19. CONSTRUCTION ZONE SPEED LIMIT WILL BE DETERMINED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING, REGIONAL TRAFFIC ENGINEER - WORK ZONE, AT THE TIME OF OR DURING CONSTRUCTION, AS REQUESTED BY THE R.E..

20. THE SPEED LIMIT, R2-1 (BLACK ON WHITE) WITH ADDED WORK ZONE PLATE (BLACK ON ORANGE) SIGNS SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING REGIONAL TRAFFIC ENGINEER - WORK ZONE.

21. THE REDUCED SPEED AHEAD SIGN, W3-5(S) (BLACK ON ORANGE) SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.

22. TRAFFIC FINES DOUBLED IN WORK AREA R(NJ)5-17(S) , 4 FEET BY 2.5 FEET SIGN SHALL BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN SHALL ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN SHALL BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.

23. THE FINAL HMA SURFACE PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE FINAL STAGE OF THE PROJECT UNLESS OTHERWWISE DIRECTED BY THE RE OR INDICATED ON THE PLANS. MANHOLES AND INLETS SHALL BE SET TO FINISHED GRADE AND TEMPORARY PAVEMENT RAMPS ARE TO BE CONSTRUCTED AROUND THEM WITH A MINIMUM 20H : 1V SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE.

24. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.

25. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE RE.

26. TRAFFIC IMPACT NOTICES AND CHANGES

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

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

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

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

B. ADVANCE NOTICES

FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING, ON THE ADVANCE FORM TO-103 PROVIDED BY THE DEPARTMENT, OF THE PROPOSED DATE. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN) CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING, ON ADVANCE FORM TO-103, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN) DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

STARTING THE ESTABLISHMENT OF A NEW PERMANENT TRAFFIC PATTERN SHALL BEGIN NO EARLIER THAN 11:00 PM FRIDAY AND SHALL BE COMPLETED AND READY FOR OPERATIONS BY 6:00 PM THE FOLLOWING SUNDAY. THE ESTABLISHMENT SHALL BE COMPLETED IN ACCORDANCE WITH THE LANE CLOSURE HOURS SPECIFIED IN THE CONTRACT.

ADVANCE NOTICES SENT PRIOR TO THE PRE-CONSTRUCTION MEETING SHALL BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 101.04 OF THE SPECIAL PROVISIONS.

C. PROGRESS NOTICES

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

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

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

D. CHANGES TO THE SCHEDULED CLOSURES
REQUEST FOR A CHANGE TO THE TRAFFIC CONTROL REQUIREMENTS IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE RE AS FOLLOWS:

CHANGES TO THE SCHEDULED HOURS FOR "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE R.E. AT LEAST EIGHT CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START.

OTHER PROPOSED CHANGES TO "TEMPORARY LANE CLOSURES" AND ALL CHANGES TO "PERMANENT LANE CLOSURES" SHALL BE SUBMITTED TO THE RE AS SPECIFIED IN THE SPECIFICATIONS.

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
W20-5A	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
G20-2A	END ROAD WORK	60" x 24"	10	2	20
				CONSTRUCTION SIGN TOTAL	212

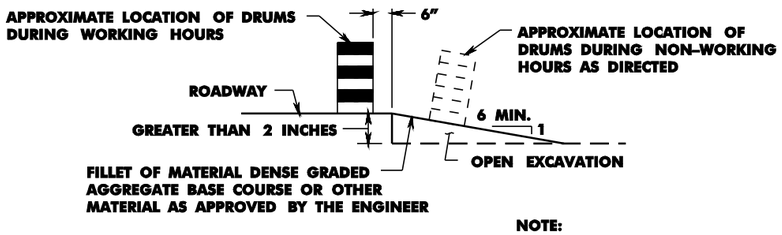
TC-1 / TC-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLAN
ROUTE 38
CONTRACT NO. 010010001

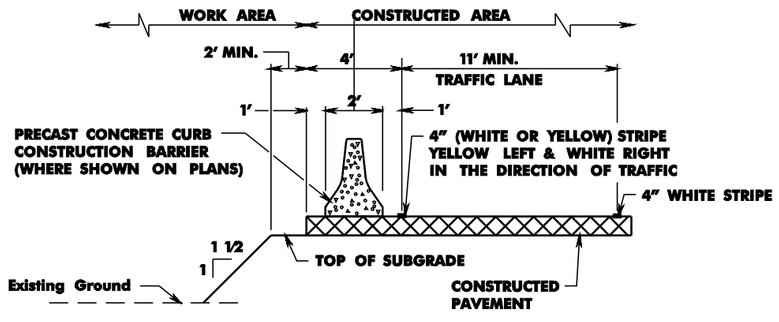
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

ID=TPXOHA3 date=25-FEB-2009 19:10 scale=63.525650:1.000000 pen table=\\Njdotprjws\v8system\NJDOTWS\Projects\NJDOTEng\Iplot\TBLs\Roadway\tc.tbl
BDC07T-05 - ORIGINAL SHEET
file=



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

NOTES:

1. AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
2. RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
3. RURAL AND URBAN ROAD DESIGNATIONS SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
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.

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

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

N.T.S.

TC-2
TC-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLAN
ROUTE 38
CONTRACT NO. 010010001

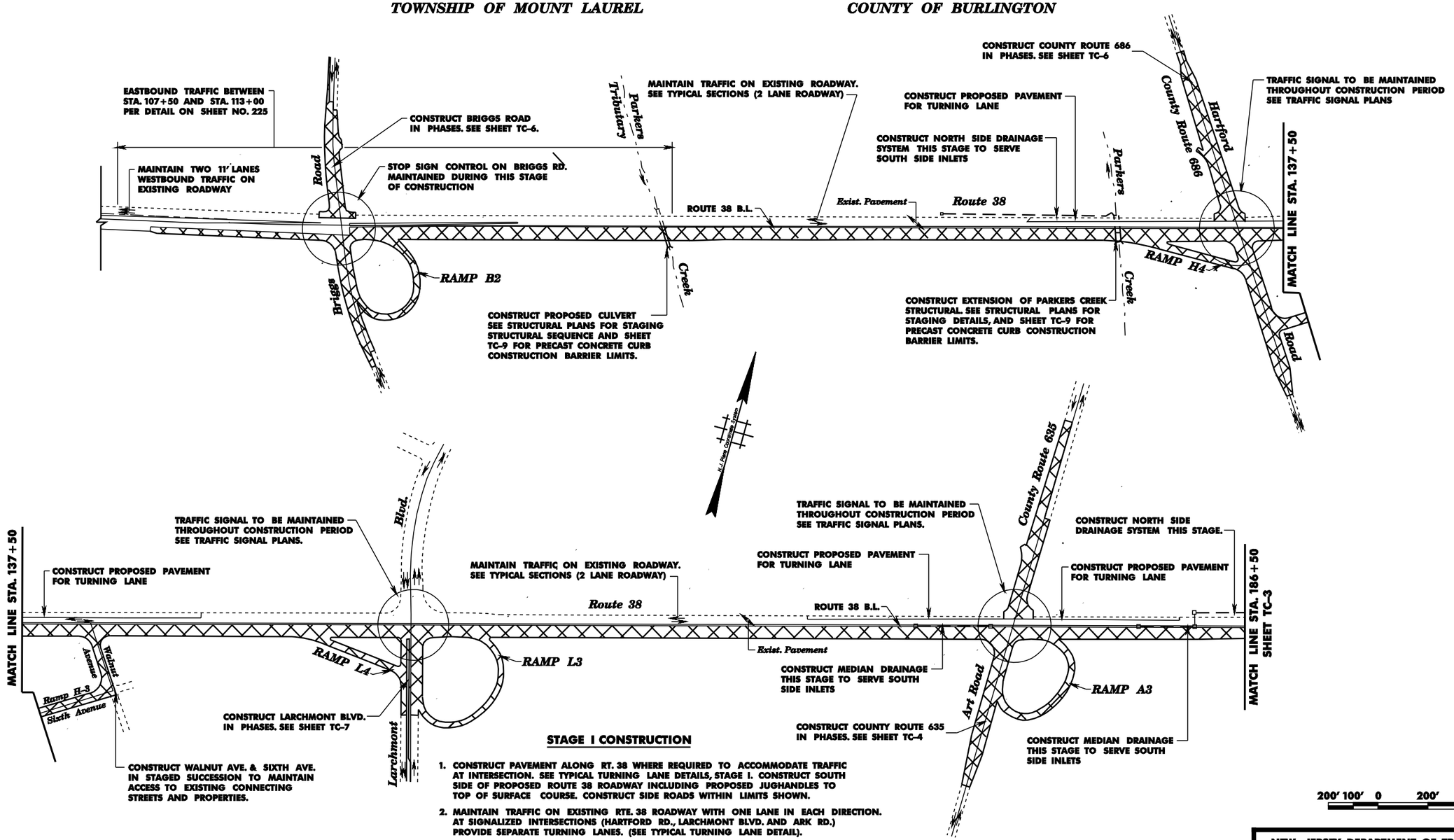
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

ROUTE 38 - ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	FR-20(115)

TOWNSHIP OF MOUNT LAUREL

COUNTY OF BURLINGTON



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 ARK 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

200′ 100′ 0 200′ 400′

TC-3 / TC-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLAN

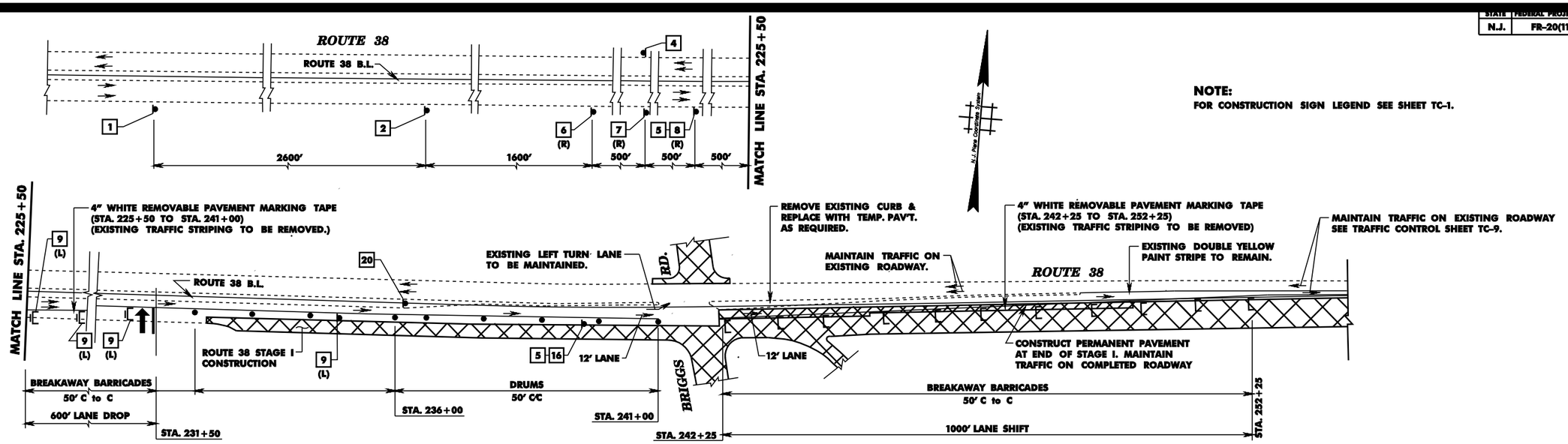
ROUTE 38

CONTRACT NO. 010010001

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

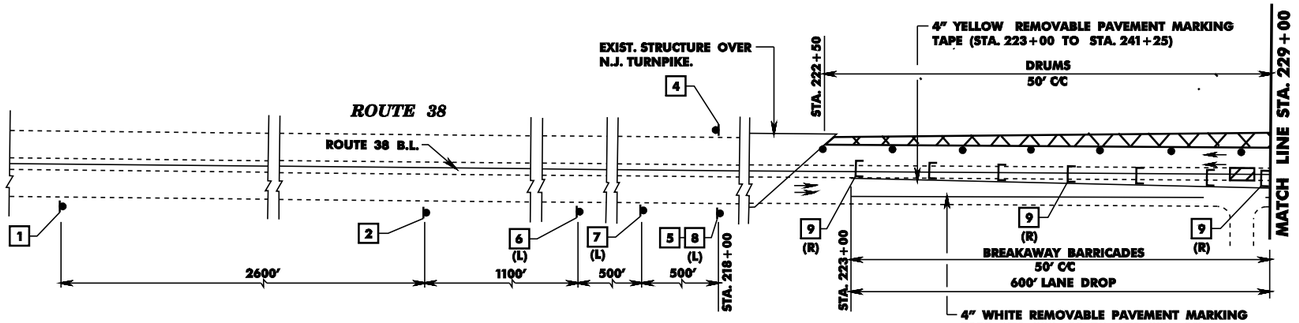
28

STATE	FEDERAL PROJECT NO.
N.J.	FR-20(115)



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

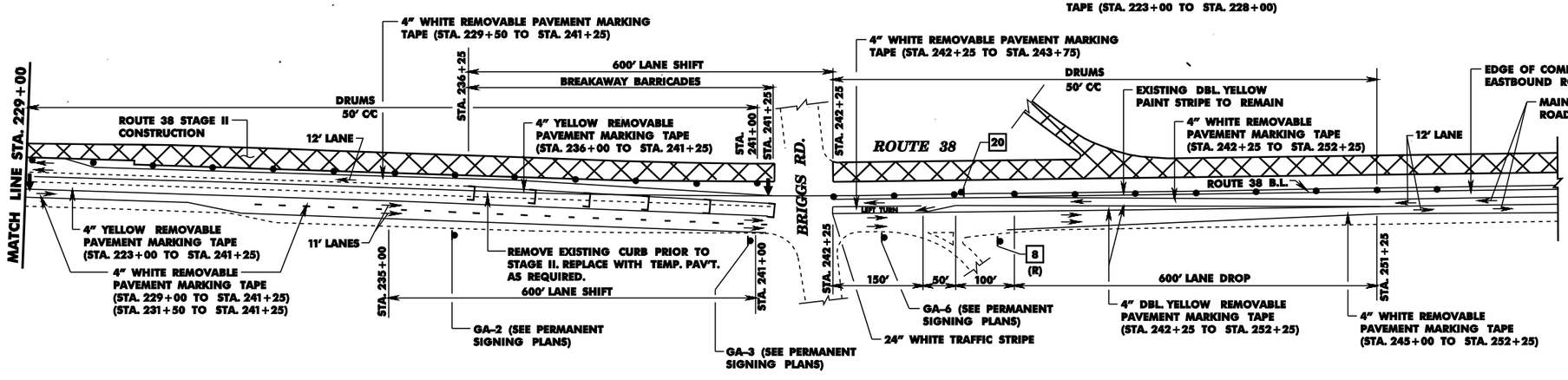
STAGE I CONSTRUCTION – ROUTE 38 STA. 221+85 TO STA. 255+25



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.



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

NTS

TC-4
TC-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLAN

ROUTE 38
CONTRACT NO. 010010001

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

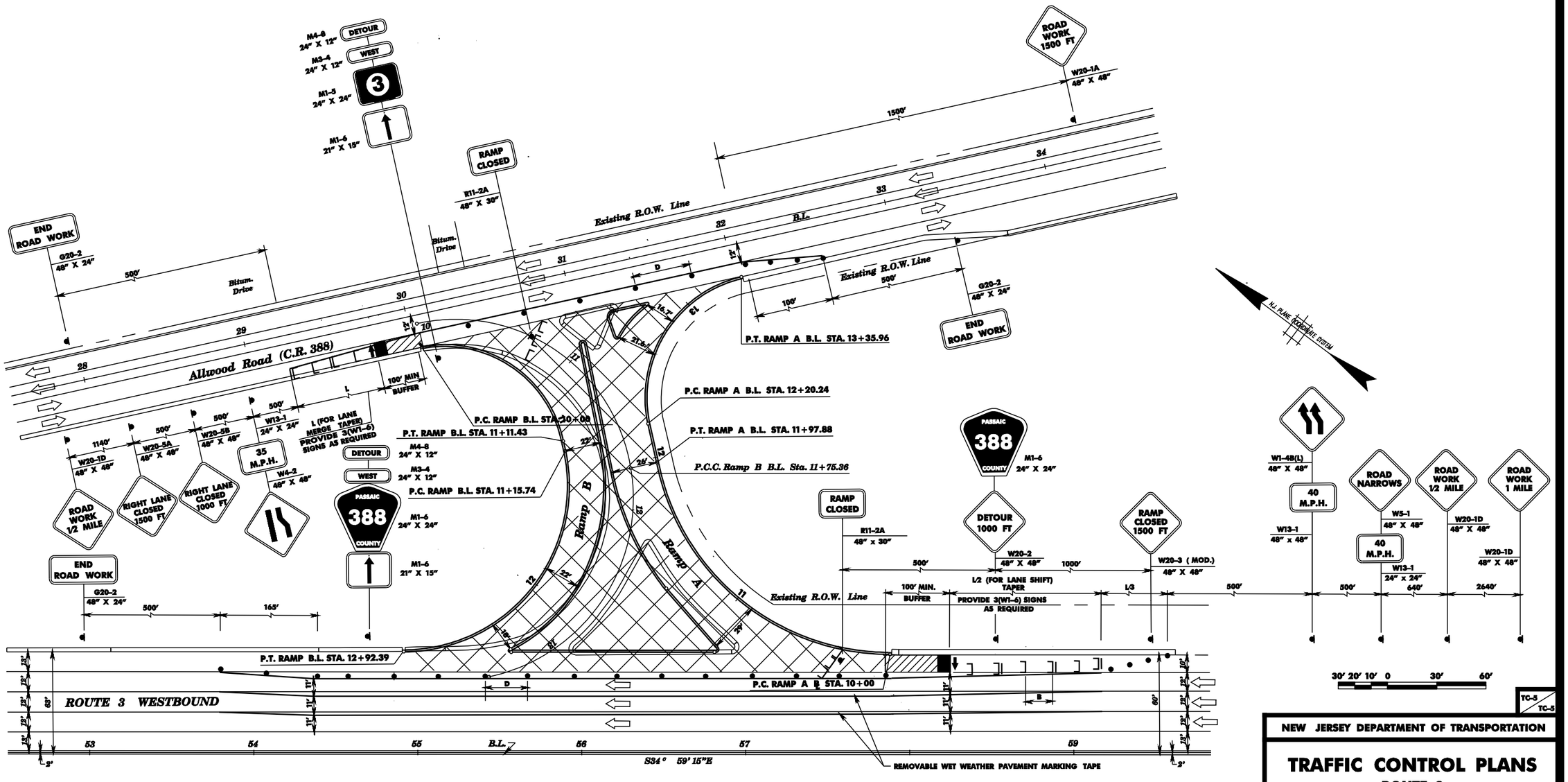
29

DATE TRAINING - 10/2004

STATE	FEDERAL PROJECT NO.
N.J.	FR-20(115)

CITY OF CLIFTON

COUNTY OF PASSAIC



TC-5 / TC-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

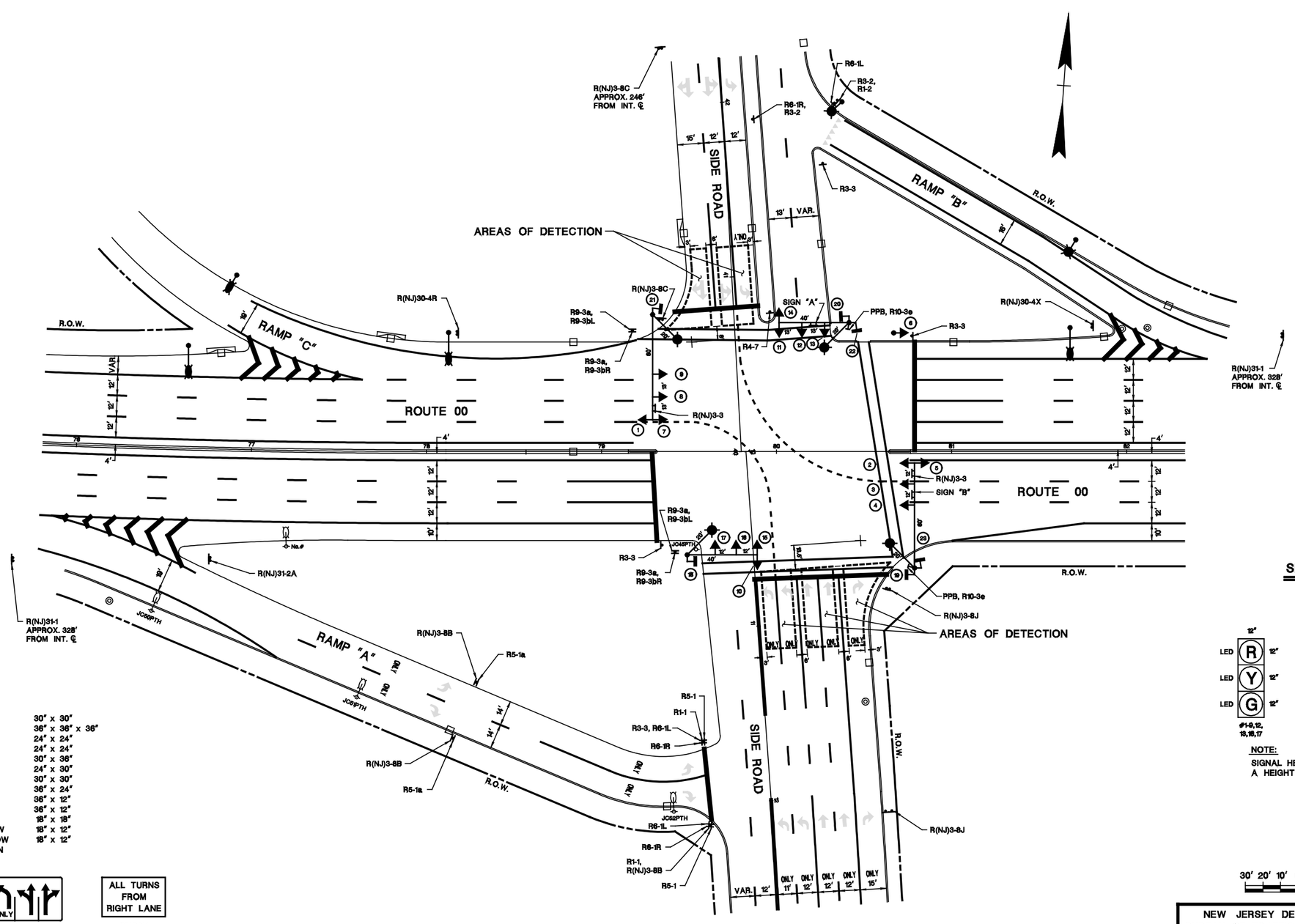
ROUTE 3

CONTRACT NO. 010010001

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

30

STATE	FEDERAL PROJECT NO.
N.J.	*



SIGN LEGEND

R1-1	STOP	30" x 30"
R1-2	YIELD	36" x 36" x 36"
R3-2	NO LEFT TURN (SYMBOL)	24" x 24"
R3-3	NO TURNS	24" x 24"
R3-5R	RIGHT (ARROW) ONLY	30" x 36"
R4-7	KEEP RIGHT (SYMBOL)	24" x 30"
R5-1	DO NOT ENTER	30" x 30"
R5-1a	WRONG WAY	36" x 24"
R6-1L	ONE WAY (LEFT)	36" x 12"
R6-1R	ONE WAY (RIGHT)	36" x 12"
R9-3a	NO PEDESTRIAN CROSSING	18" x 18"
R9-3bL	USE CROSSWALK LEFT ARROW	18" x 12"
R9-3bR	USE CROSSWALK RIGHT ARROW	18" x 12"
R10-3e	COUNTDOWN PEDESTRIAN SIGN	

W 00 E
MAST ARM SIGN "A"
48" x 18"
DOUBLE SIDED

Side Rd
MAST ARM SIGN "B"
48" x 18"
DOUBLE SIDED

ONLY
R(NJ)3-8C
48" x 30"

ALL TURNS FROM RIGHT LANE
R(NJ)31-1
60" x 36"

NO TURNS
R(NJ)3-3
60" x 12"
DOUBLE SIDED

U AND LEFT TURNS
R(NJ)30-4R
60" x 24"

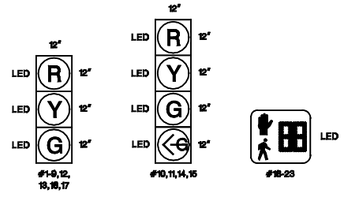
ONLY ONLY
R(NJ)3-8B
30" x 30"

ONLY ONLY ONLY ONLY ONLY
R(NJ)3-8J
84" x 30"

ALL TURNS
R(NJ)31-2A
72" x 18"

U AND LEFT TURNS
R(NJ)30-4X
60" x 24"

SIGNAL LEGEND



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

30' 20' 10' 0 30' 60'

TSP-1
TSP-1

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING AND INVESTIGATIONS
TRAFFIC SIGNAL INSTALLATION

ROUTE 00 & SIDE ROAD

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

DESIGN AUTHORIZED - BUREAU OF TRAFFIC SIGNAL & SAFETY ENGINEERING DATE

SUBMITTED
CHECKED
AUTHORIZED

DRAWN
CHECKED

SCALE: 1" = 30'

TS-XXXX 31

REVISION DESCRIPTION	CADD	BY	C'K'D	DATE

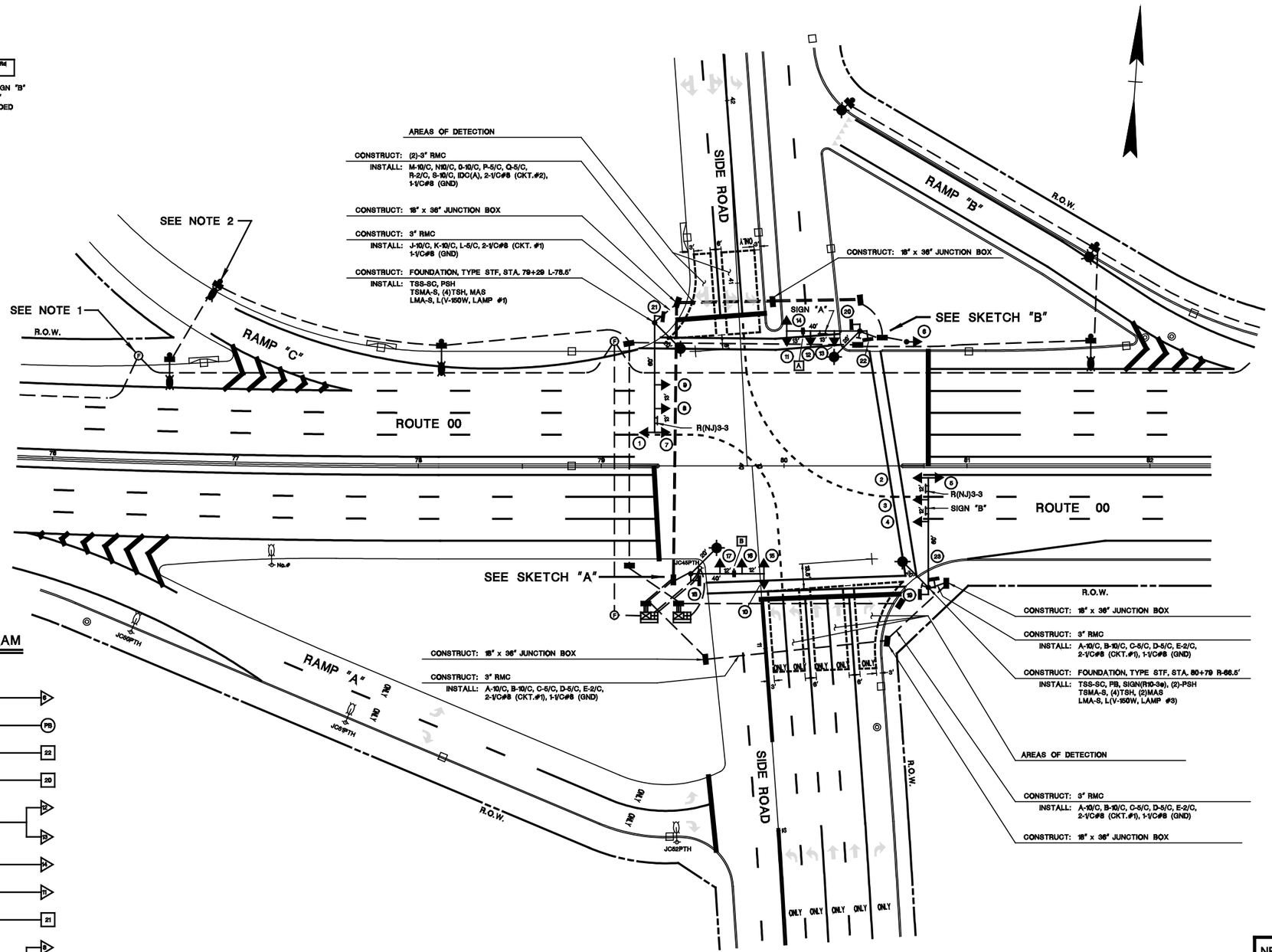
STATE	FEDERAL PROJECT NO.
N.J.	*

SIGN LEGEND

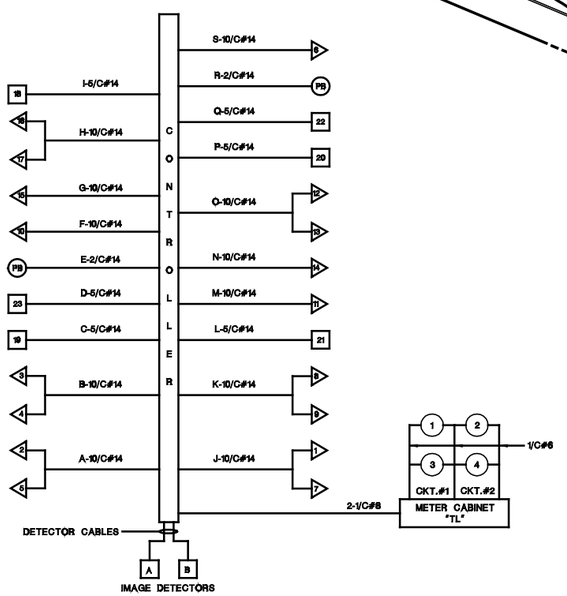
W ← 00 → E — MAST ARM SIGN "A" 48" x 18" DOUBLE SIDED

Side Rd — MAST ARM SIGN "B" 48" x 18" DOUBLE SIDED

NO TURNS — R(NJ)3-3 60" x 12" DOUBLE SIDED



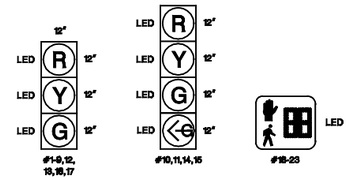
BLOCK WIRING DIAGRAM



NOTES:
1. SEE ITS PLANS.
2. SEE HIGHWAY LIGHTING PLANS.
3. UNLESS OTHERWISE NOTED ALL LUMINAIRES ARE TYPE III.

* NOTE:
INSTALL GROUND WIRE (GND), 1/C#8 AWG, INSULATED (COLOR GREEN) CONTINUOUSLY THROUGHOUT THE TRAFFIC SIGNAL SYSTEM. SECURE TO ALL GROUND RODS, CABINETS, TRAFFIC SIGNAL BASES AND LIGHTING BASES AS NOTED.

SIGNAL LEGEND



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

30' 20' 10' 0 30' 60'

E-1 / E-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLANS

ROUTE 00 *

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

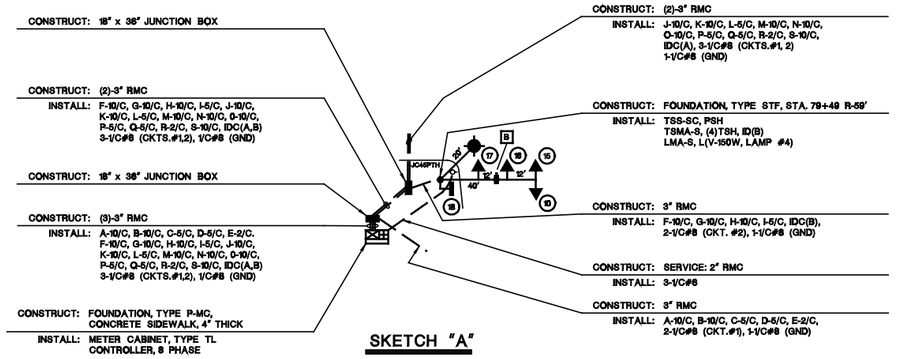
ROUTE 00 & SIDE ROAD
LOAD CENTER "NR"

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 00000

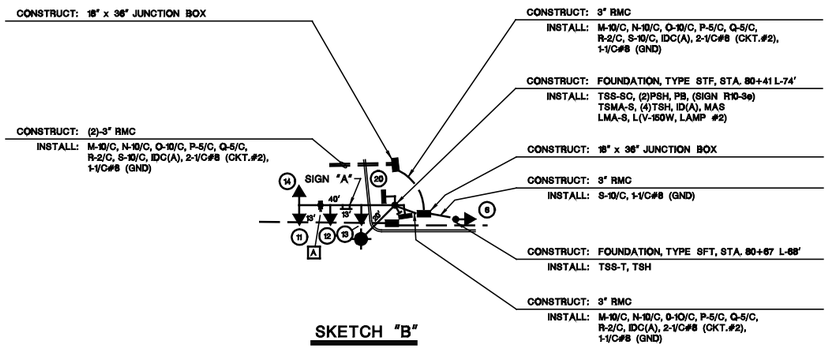
32

STATE	FEDERAL PROJECT NO.
N.J.	*

ITEM NUMBER	TO BE CONSTRUCTED	CONTRACT QUANTITY
606012P	CONCRETE SIDEWALK 4" THICK	2 SY
701012P	1½" RIGID METALLIC CONDUIT	13 LF
701015P	2" RIGID METALLIC CONDUIT	148 LF
701021P	3" RIGID METALLIC CONDUIT	833 LF
701102M	18" x 36" JUNCTION BOX	11 UNITS
701123M	FOUNDATION, TYPE SFT	1 UNIT
701132M	FOUNDATION, TYPE P-MC	1 UNIT
701138M	FOUNDATION, TYPE STF	4 UNITS
701171M	METER CABINET, TYPE TL	1 UNIT
701192P	GROUND WIRE, NO. 8 AWG	276 LF
701201P	MULTIPLE LIGHTING WIRE, NO. 8 AWG	450 LF
701213P	SERVICE WIRE, NO. 6 AWG	285 LF
702009M	CONTROLLER, 8 PHASE	1 UNIT
702012M	TRAFFIC SIGNAL STANDARD, ALUMINUM	1 UNIT
702015M	TRAFFIC SIGNAL STANDARD, STEEL	4 UNITS
702024M	TRAFFIC SIGNAL MAST ARM, STEEL	4 UNITS
702027P	TRAFFIC SIGNAL CABLE, 2 CONDUCTOR	787 LF
702030P	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR	1722 LF
702033P	TRAFFIC SIGNAL CABLE, 10 CONDUCTOR	2789 LF
702036M	TRAFFIC SIGNAL HEAD	17 UNITS
702039M	PEDESTRIAN SIGNAL HEAD	6 UNITS
702042M	PUSH BUTTON	2 UNITS
702045M	IMAGE DETECTOR	2 UNITS
702057M	INTERIM TRAFFIC SIGNAL SYSTEM, LOCATION 1	LUMP SUM
702060M	CONTROLLER TURN-ON	1 UNIT
703015M	LIGHTING MAST ARM, STEEL	4 UNITS
703018M	LUMINAIRE	4 UNITS



SKETCH "A"



SKETCH "B"

30' 20' 10' 0 30' 60'

E-2
E-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLANS

ROUTE 00 *

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

ROUTE 00 & SIDE ROAD
LOAD CENTER "NR"

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 00000

CONTROL SECTION NO. XXXXXX

33

STATE	FEDERAL PROJECT NO.
N.J.	*

ROUTE 00 & SIDE ROAD

TOWNSHIP OF XXXXXX

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	TIME (sec) II
1. Rte. 00 R.O.W.	G	R	R	R	R	W	DW	40-20	60-35
PED. CLEARANCE	G	R	R	R	R	FDW	DW	25	25
CHANGE	Y	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	G/<G-	G	DW	DW	7-17	7-22
CHANGE	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	DW	DW	7-17	7-17
CHANGE	R	Y	Y	R	R	DW	DW	4	4
CLEARANCE	R	R	R	R	R	DW	DW	3	3

WITH PEDESTRIAN ACTUATION

1. Rte. 00 R.O.W.	G	R	R	R	R	W	DW	10	30
PED. CLEARANCE	G	R	R	R	R	FDW	DW	25	25
CHANGE	Y	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	G/<G-	G	DW	DW	7	7
CHANGE	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	DW	W	5	5
PED. CLEARANCE	R	G/<G-	G	R	R	DW	FDW	32	32
CHANGE	R	Y	Y	R	R	DW	DW	4	4
CLEARANCE	R	R	R	R	R	DW	DW	3	3
EMERGENCY FLASH	Y	R	R	R	R	DARK	DARK		

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

** An Offset of 0 seconds is to be measured from the beginning of yellow to Route 00 at this intersection.

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

Memory-disconnected

Vehicle Extension-2 seconds

Manual Control-disconnected

HOURS OF OPERATION:

Timing Schedule II (120 Second Background Cycle) is to be in effect Monday-Friday, 6:30 a.m.-9:00 a.m.

Timing Schedule I (100 Second Background Cycle) is to be in effect all other times.

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

E-2 / E-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLANS

ROUTE 00 *

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

ROUTE 00 & SIDE ROAD
LOAD CENTER "NR"

Individual, Firm, Partnership, etc.

(signature) (date)

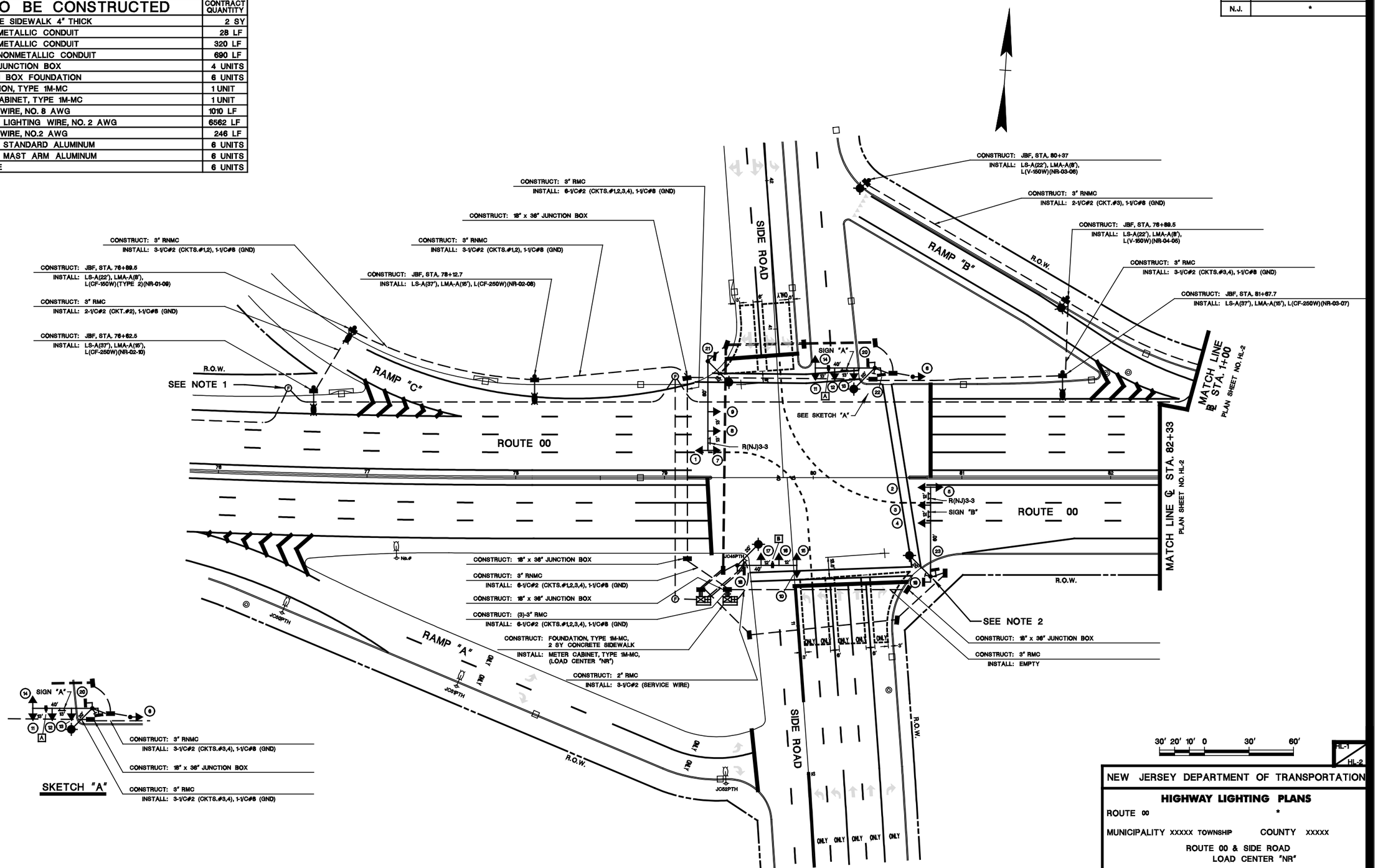
John L. Doe

N.J.P.E. LIC. NO. 00000

34

STATE	FEDERAL PROJECT NO.
N.J.	*

ITEM NUMBER	TO BE CONSTRUCTED	CONTRACT QUANTITY
606012P	CONCRETE SIDEWALK 4" THICK	2 SY
701015P	2" RIGID METALLIC CONDUIT	28 LF
701021P	3" RIGID METALLIC CONDUIT	320 LF
701030P	3" RIGID NONMETALLIC CONDUIT	690 LF
701102M	18" x 36" JUNCTION BOX	4 UNITS
701117M	JUNCTION BOX FOUNDATION	6 UNITS
701159M	FOUNDATION, TYPE 1M-MC	1 UNIT
701177M	METER CABINET, TYPE 1M-MC	1 UNIT
701192P	GROUND WIRE, NO. 8 AWG	1010 LF
701195P	MULTIPLE LIGHTING WIRE, NO. 2 AWG	6562 LF
701210P	SERVICE WIRE, NO.2 AWG	246 LF
703003M	LIGHTING STANDARD ALUMINUM	6 UNITS
703012M	LIGHTING MAST ARM ALUMINUM	6 UNITS
703018M	LUMINAIRE	6 UNITS



NOTES:
1. SEE ITS PLANS.
2. SEE TRAFFIC SIGNAL ELECTRICAL PLANS FOR SIGNAL POLE LIGHTING.
3. UNLESS OTHERWISE NOTED ALL LUMINAIRES ARE TYPE III.

HL-1
HL-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

HIGHWAY LIGHTING PLANS

ROUTE 00 *

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

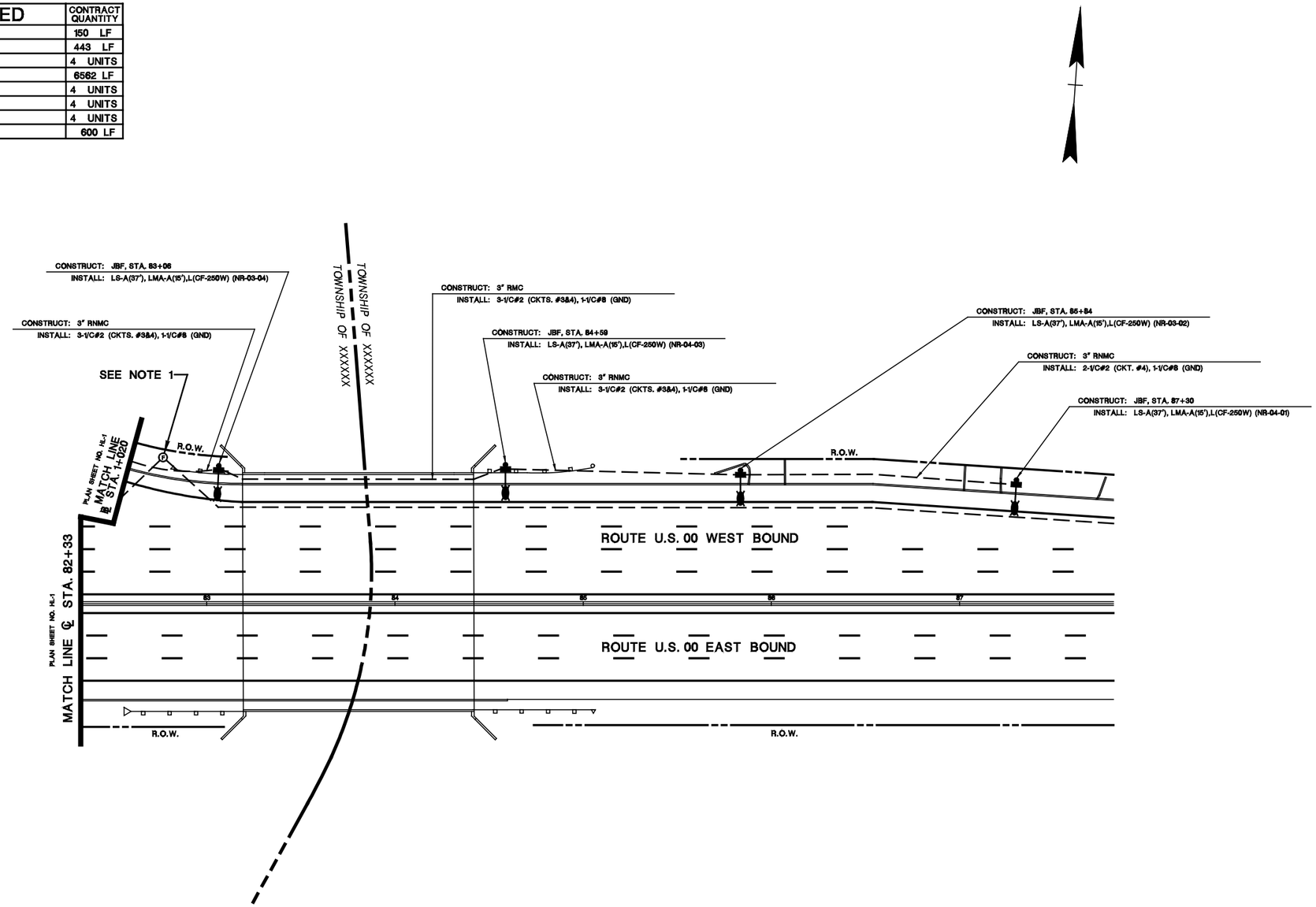
ROUTE 00 & SIDE ROAD
LOAD CENTER "NR"

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 00000

35

ITEM NUMBER	TO BE CONSTRUCTED	CONTRACT QUANTITY
701021P	3" RIGID METALLIC CONDUIT	150 LF
701030P	3" RIGID NONMETALLIC CONDUIT	443 LF
701117M	JUNCTION BOX FOUNDATION	4 UNITS
701195P	MULTIPLE LIGHTING WIRE, NO. 2 AWG	6562 LF
703003M	LIGHTING STANDARD ALUMINUM	4 UNITS
703012M	LIGHTING MAST ARM ALUMINUM	4 UNITS
703018M	LUMINAIRE	4 UNITS
701192P	GROUND WIRE, NO. 8 AWG	600 LF

STATE	FEDERAL PROJECT NO.
N.J.	*



NOTES:
1. SEE ITS PLANS.
2. UNLESS OTHERWISE NOTED ALL LUMINAIRES ARE TYPE III.

30' 20' 10' 0 30' 60'

HL-1 / HL-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

HIGHWAY LIGHTING PLANS

ROUTE 00 *

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

ROUTE 00 & SIDE ROAD
LOAD CENTER "NR"

Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 00000

CONTROL SECTION NO. XXXXXX

36

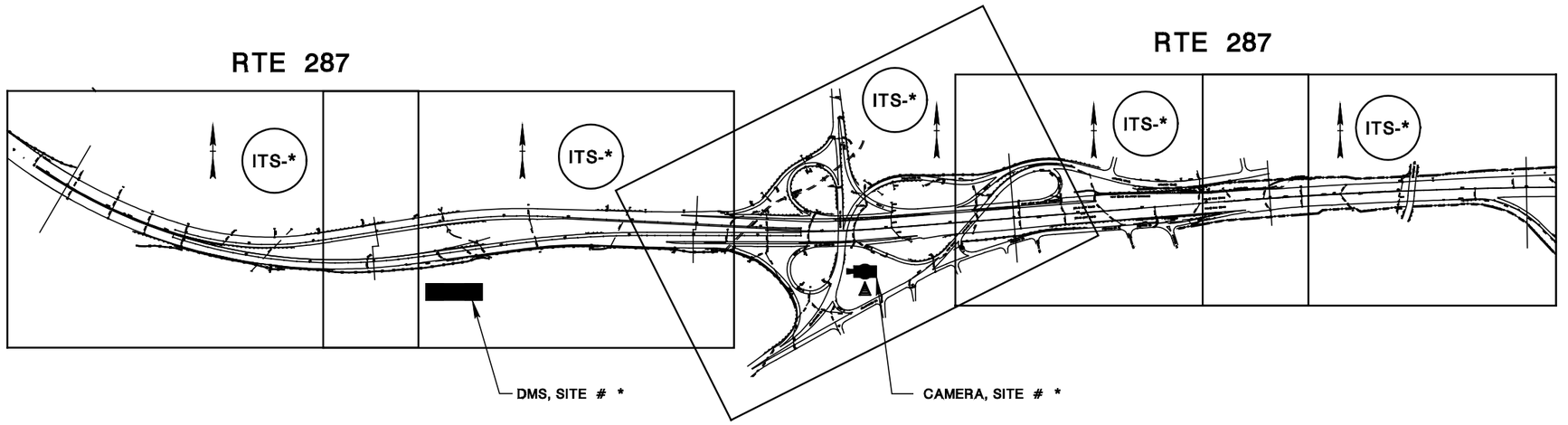
STATE	FEDERAL PROJECT NO.
N.J.	*

SITE LOCATION CHART

TOC N/S	JOB SITE	PLAN SHEET	ROUTE AND INTERSECTION	MUNICIPALITY	COUNTY	DEVICE	TYPE	COMMUNICATIONS
N	*	ITS-*	ROUTE 78 EB M.P. 28.6	BEDMINSTER TOWNSHIP	SOMERSET	DMS	FRONT ACCESS 27" X 90"	WIRELESS
N	*	ITS-*	ROUTE 78 EB M.P. 34.7	BEDMINSTER TOWNSHIP	SOMERSET	DMS	FRONT ACCESS 27" X 70"	WIRELESS
N	*	ITS-*	ROUTE 287 SB M.P. 23.55	FAR HILLS BOROUGH	SOMERSET	CAMERA	DOME	FIBEROPTIC
N	*	ITS-*	ROUTE 287 NB PRIOR TO EXIT 30 M.P. 28.2	BERNARDS TOWNSHIP	SOMERSET	DMS	WALK-IN 27" X 90"	FIBEROPTIC
N	*	ITS-*	ROUTE 287 AT NORTH MAPLE AVE.	BERNARDS TOWNSHIP	SOMERSET	CAMERA	DOME	FIBEROPTIC
N	*	ITS-*	ROUTE 287 AT MT. AIRY ROAD	BERNARDS TOWNSHIP	SOMERSET	CAMERA	DOME	DSL
N	*	ITS-*	ROUTE 287 FROM M.P. 21	BEDMINSTER TOWNSHIP	SOMERSET	HUB	N/A	FIBEROPTIC
N	*	ITS-*	ROUTE 287/ROUTE 78 HAR	BEDMINSTER TOWNSHIP	SOMERSET	HAR	N/A	FIBEROPTIC
N	*	ITS-*	ROUTE 287 AND ROUTE 10	HANOVER TOWNSHIP	MORRIS	CAMERA	POSITIONAL	BROAD BAND CABLE

GENERAL CONSTRUCTION NOTES

1. STATIONS ARE APPROXIMATE AND ARE FOR INFORMATIONAL PURPOSES ONLY.
2. ENSURE THAT THE MINIMUM DISTANCE SPECIFIED BY THE UTILITY OWNER IS MAINTAINED, BETWEEN ALL EXISTING UNDERGROUND UTILITIES AND ALL PROPOSED UNDERGROUND
3. COMPLETE GUIDE RAIL INSTALLATIONS AND UPGRADES PRIOR TO INSTALLING ABOVE GROUND ITS FACILITIES.
4. CONTACT TRAFFIC OPERATIONS FOR MARK OUT OF EXISITNG ITS UNDERGROUND WIRES AND CABLES.



LEGEND OF SYMBOLS AND NOTATIONS

EXISTING	PROPOSED	
Ⓕ	Ⓕ	JUNCTION BOX ITS
		CAMERA (WITH BLIND SPOT)
		HIGHWAY ADVISORY RADIO ANTENNA
HAR	HAR	HAR SIGN
DMS	DMS	DMS
		TRAVEL TIME SYSTEM
ITS	ITS	ITS WIRES & CABLES
		CONTROLLER CABINET W/SIDEWALK
		18" X 36" JUNCTION BOX
		METER CABINET
		CONTROLLER
		IMAGE DETECTOR
		GRID PAVERS

500′ 0 500′ 1000′

ITS-1
ITS-A

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ITS LOCATION PLAN

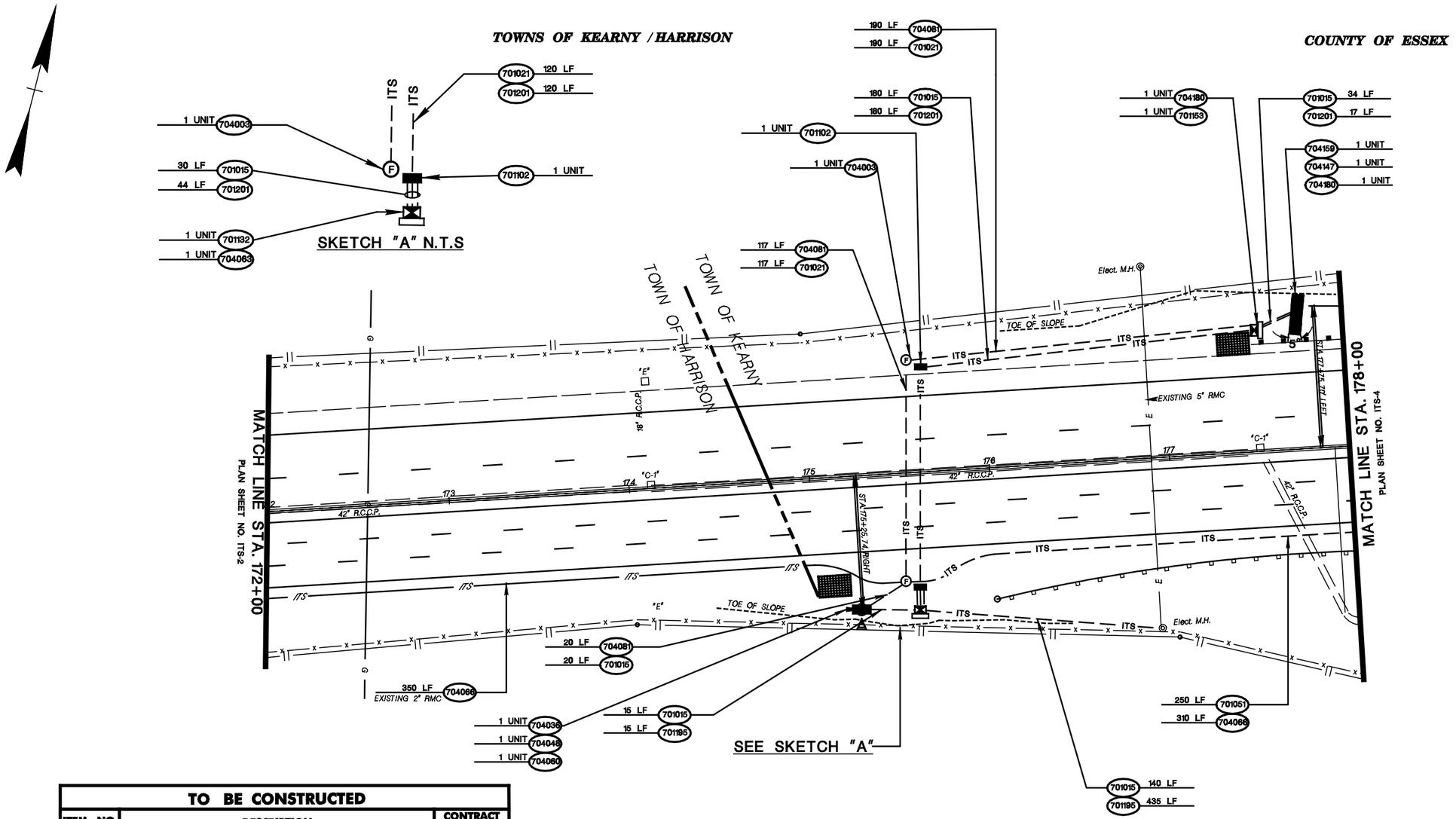
ROUTE 00

CONTRACT NO. 1234567

Individual, Firm, Partnership, etc.
(signature) (date)
Name
N.J.P.E. LIC. NO. *

37

STATE	FEDERAL PROJECT NO.
N.J.	*



TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	CONTRACT QUANTITY
701015P	2" RIGID METALLIC CONDUIT	420 LF
701021P	3" RIGID METALLIC CONDUIT	427 LF
701051P	3-1¼" FLEXIBLE NONMETALLIC CONDUIT	250 LF
701102M	18" x 36" JUNCTION BOX	2 UNIT
701132M	FOUNDATION, TYPE P-MC	1 UNIT
701153M	FOUNDATION, TYPE 1M	1 UNIT
701195P	MULTIPLE LIGHTING WIRE, NO. 2 AWG	450 LF
701201P	MULTIPLE LIGHTING WIRE, NO. 8 AWG	361 LF
704003M	JUNCTION BOX ITS, TYPE A	2 UNIT
704036M	FOUNDATION CSS TYPE A	1 UNIT
704048M	CAMERA STANDARD, TYPE A	1 UNIT
704060M	CAMERA	1 UNIT
704063M	CONTROLLER CAMERA	1 UNIT
704066P	FIBER OPTIC CABLE TYPE A	660 LF
704081P	FIBER OPTIC CABLE TYPE F	327 LF
704147M	FOUNDATION DMS TYPE A	1 UNIT
704159M	DMS STANDARD TYPE A	1 UNIT
704180M	DMS SIGN WITH CONTROLLER INSTALL	1 UNIT

NOTE:
DMS IS DAKTRONICS MODEL NO. VF-2000- 27X70-66-A

30' 20' 10' 0 30' 60'

ITS-2
ITS-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

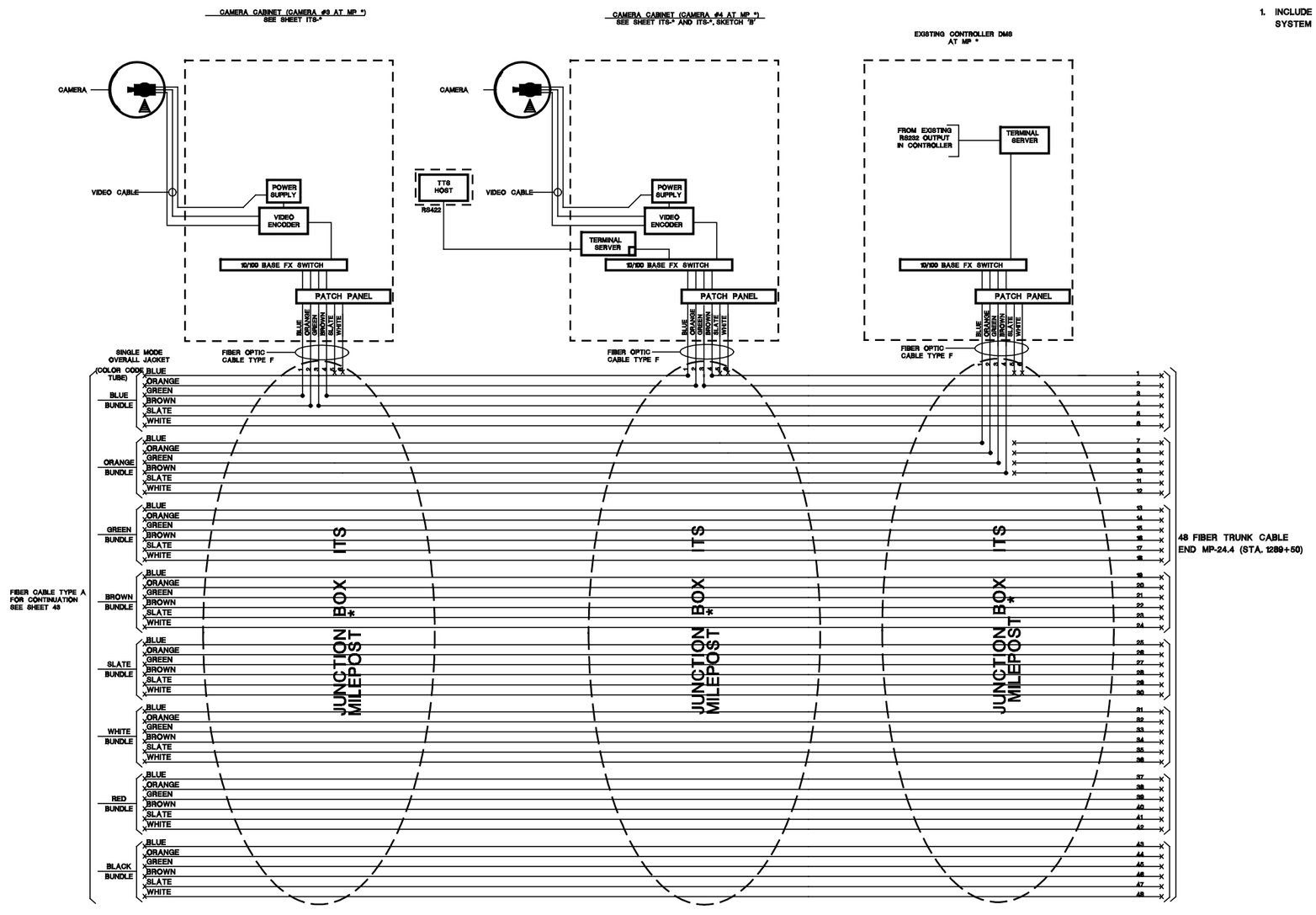
ITS PLANS

ROUTE 00

CONTRACT NO. 1234567

Individual, Firm, Partnership, etc.
(signature) (date)
Name
N.J.P.E. LIC. NO. *

38



FIBER OPTIC CABLE INTERCONNECTIONS
N.T.S.

1. INCLUDE TEMPORARY COMMUNICATIONS ARRANGEMENTS IN THE SYSTEM WORKING DRAWING SUBMITTAL.

ITS-3
ITS-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

FIBER SYSTEM BLOCK DIAGRAM

ROUTE *

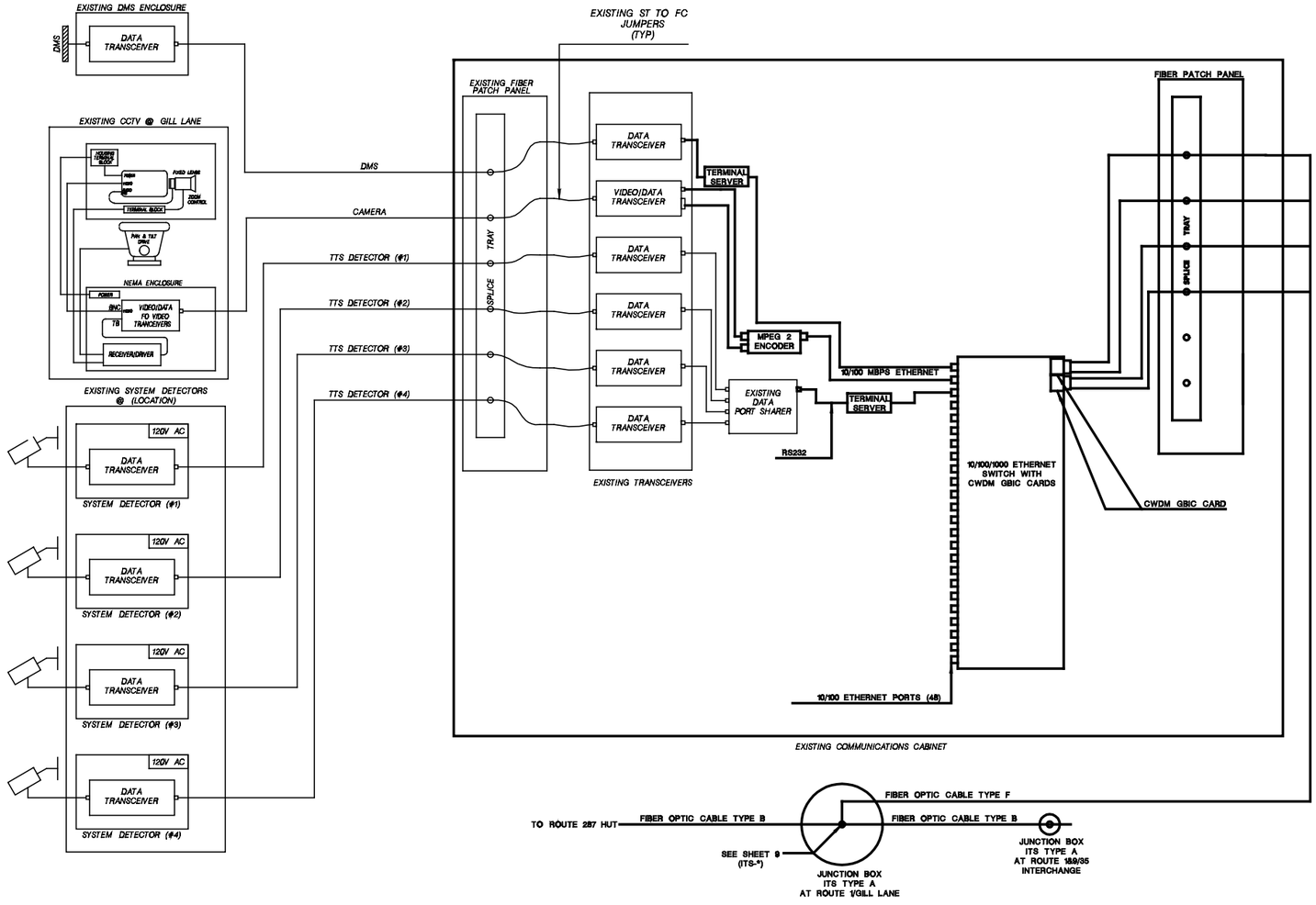
CONTRACT NO. *

Individual, Firm, Partnership, etc.
(signature) (date)
Name
N.J.P.E. LIC. NO. *

39

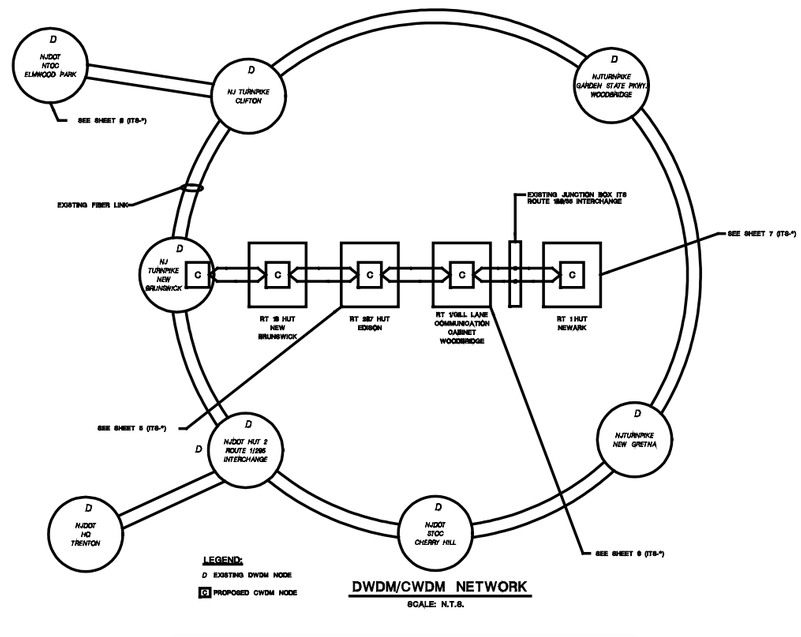
BDC07-05 - ORIGINAL SHEET

STATE	FEDERAL PROJECT N.
N.J.	*



COMMUNICATION CABINET - BLOCK DIAGRAM (LOCATION)

N.T.S.



DWDM/CWDM NETWORK

SCALE: N.T.S.

TABLE D

MODIFICATIONS TO COMMUNICATIONS EQUIPMENT

EQUIPMENT NAME	NTOC, ELMWOOD PARK	NEWARK HUT	ROUTE 1/GILL LANE COMMUNICATIONS CABINET WOODBRIDGE	ROUTE 287 HUT EDISON	ROUTE 18 HUT NEW BRUNSWICK	NJTA BUILDING NEW BRUNSWICK
CWDM GBIC CARD		2	2	2	2	1
ONS CARD AT DWDM SWITCH	1					1
GLC CARD AT ETHERNET SWITCH	1					1
10/100/1000 ETHERNET SWITCH	1	1	1	1	1	1
MPEG2 ENCODER		10	1	2		
MPEG2 DECODER	22					
TERMINAL SERVER	3	1	2	2		
PORT SHARER	4					
MULTIDROP DATA MODEMS				2		
FIBER OPTIC PATCH PANEL		1		1		

REFERENCE

BY	CHECKED	DATE

EDOT77-05 – ORIGINAL SHEET

REVISION PRESCRIPTION

ITS-4
ITS-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ITS SYSTEM BLOCK DIAGRAM

ROUTE *

CONTRACT NO. *

Individual, Firm, Partnership, etc.

(signature) (date)

Name

N.J.P.E. LIC. NO. *

40

STATE	FEDERAL PROJECT NO.
N.J.	NH-4589(103)

PLANTING SUMMARY

ITEM NO.	DESCRIPTION	SYM.	PLANT NAME	PLAN SHEET QUANTITY	"IF & WHERE" DIRECTED QUANTITY	CONTRACT QUANTITY	AS-BUILT QUANTITY
811003M	**Large Deciduous Tree, 3"-3 1/2" Caliper, B&B**					10	
		Ar	Acer rubrum 'Red Sunset'	5			
		Tc	Tilia cordata 'Greenspire'	5			
811006M	**Large Deciduous Tree, 2"-2 1/2" Caliper, B&B**					12	
		Lt	Liriodendron tulipifera	3	5		
		Ls	Liquidambar styraciflua	4			
811009M	**Large Deciduous Tree, 1"-1 1/4" Caliper, B&B**					10	
		As	Acer saccharum 'Green Mountain'	4			
		Mg	Magnolia grandiflora	6			
811021M	**Small Deciduous Tree, 3"-3 1/2" Caliper, B&B**					7	
		Pc	Pyrus calleryana 'Aristocrat'	7			
811024M	**Small Deciduous Tree, 2"-2 1/2" Caliper, B&B**					4	
		Pr	Pyrus calleryana 'Red Spire'	4			
811027M	**Small Deciduous Tree, 1 1/4"-1 1/2" Caliper, B&B**					14	
		Mp	Malus 'Pink Perfection'	6			
		Pr	Prunus sargentii	8			
811033M	**Evergreen Tree, 9'-10' High, B&B**					18	
		Pa	Picea abies	8			
		Pm	Pseudotsuga menziesii	3	7		
811036M	**Evergreen Tree, 8'-9' High, B&B**					15	
		Pi	Pinus strobus	11			
		To	Thuja orientalis	4			
811045M	**Evergreen Tree, 4'-5' High, B&B**					10	
		Ps	Pinus strobus	3			
		P	Picea abies	7			
811057M	**Deciduous Shrub, 3'-4' High, B&B**					19	
		E	Euonymus alata	10			
		V	Viburnum dentatum	9			
811060M	**Deciduous Shrub, 2'-3' High, B&B**					33	
		S	Spiraea bumalda 'Anthony Waterer'	18			
		F	Forsythia intermedia spectabilis	15			
811066M	**Deciduous Shrub, 15"-18" High, #2 Container**					41	
		A	Aronia arbutifolia	15			
		C	Clethra alnifolia	26			
811072M	**Evergreen Shrub, 30"-36" High, B&B**					48	
		Im	Ilex x. meserveae 'Blue Maid'	32			
		Ip	Ilex x. meserveae 'Blue Prince'	16			
811075M	**Evergreen Shrub, 24"-30" High, B&B**					18	
		In	Ilex 'Nellie R. Stevens'	6			
		Ig	Ilex glabra	12			
811078M	**Evergreen Shrub, 18"-24" High, #3 Container**					25	
		Rc	Rhododendron catawbiense 'Roseum Elegans'	10			
		Ad	Azalea 'Delaware Valley White'	15			
811084M	**Evergreen Shrub, 3'-4' Spread, B&B**					63	
		Tx	Taxus densiforma	56	7		
811093M	**Evergreen Shrub, 18"-24" Spread, #3 Container**					20	
		Jw	Juniperus horizontalis 'Wiltoni'	20			
811096M	**Evergreen Shrub, 12"-15" Spread, #2 Container**					69	
		Jc	Juniperus chinensis Sargentii	23			
		Cs	Cotoneaster dammeri 'Skogsholmen'	46			
811099M	**Groundcover or Vine, #1 Container**					81	
		Cr	Campsis radicans	39			
		Pe	Phlox paniculata 'Eva Cullum'	42			
811102M	**Groundcover or Vine, 4" Pot**					264	
		Pt	Parthenocissus tricuspidata 'Veitchi'	264			
811105M	**Groundcover or Vine, 2 1/4" Pot**					226	
		Hb	Hedera helix 'Baltica'	226			
811108M	**Groundcover or Vine, 2" Plug**					1462	
		Sa	Spartina alterniflora	567			
		Spp	Spartina patens	895			
811111M	**Perennial, #1 Container**					819	
		Ep	Echinacea purpurea	289	55		
		Ca	Calamagrostis arundinacea 'Karl Foerster'	475			
811114M	**Perennial, #SP5**					1075	
		Hh	Hemerocallis 'Happy Returns'	600			
		Hl	Hemerocallis 'Little Grapette'	475			
811117M	**Perennial, #SP4**					785	
		Rh	Rudbeckia hirta	785			
811120M	**Perennial, 2" Plug**					960	
		Ana	Aster novae-angliae	650			
		Cv	Coreopsis verticillata 'Moonbeam	310			
811123M	**Bulb**					2129	
		N	Narcissus	1254			
		Iv	Iris versicolor	875			
811135M	**Rhizome**					578	
		Ac	Acorus calamus	254			
		Na	Nuphar advena	324			
811129M	**Tuber**					268	
		Ap	Alisma plantago-aquatica	268			
811132M	**Root**					186	
		Sp	Sparganium americanum	186			
			** Full size description will be on the individual plan sheets				

L-1 / L-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLANS

ROUTE 676
CONTRACT NO. 000000000

41

pen table= \\Widotpyfnw\v9system\WDOTW9\Projects\WDOTFEng\Vplot\TBLs\Non-Roadway\land.tbl
scale=63.525650:1.000000
date=25-FEB-2009 19:46
ID=TTXOHA3
file=

STATE	FEDERAL PROJECT NO.
N.J.	

COUNTY OF CAMDEN

CITY OF CAMDEN

MATCH LINE RAMP "SA" B.L. STA. 5+25 PLAN SHEET L-13

MATCH LINE RAMP "SA" B.L. STA. 2+50 PLAN SHEET L-11

MATCH LINE B.L. STA. 19+50 PLAN SHEET L-11

MATCH LINE B.L. STA. 46+92 PLAN SHEET L-10

MATCH LINE RAMP "SA1" B.L. STA. 11+25 PLAN SHEET L-10

MATCH LINE B.L. STA. 51+00 PLAN SHEET L-13

Ramp "SA" B.L. P.T. Sta. 3+88 B.L. Shifts 11.15° Rt.

Ramp "SA" B.L. P.C.C. Sta. 10+11

Ramp "AM" B.L. P.C.C. Sta. 12+59.88

Ramp "AS" B.L. P.T. Sta. 11+72.70

Ramp "AS" B.L. P.C. Sta. 10+00

Ramp "SA1" S47°-40'-49"W

Ramp "AN" R=100'

Ramp "SA" N 24°-34'-01.8" E

Ramp "AS"

Existing R.O.W. Line No Access

Existing R.O.W. Line No Access

ROUTE 676 N.B.

ROUTE 676 S.B.

RTE. 676 B.L.

Atlantic Ave.

Atlantic Ave. B.L.

N 84°-48'-25.9" E

63 Ea Single Row

39 Lo Single Row

31 Lo Single Row

16 Lo Single Row

210 S.Y. Selective Thinning 801006

262 Fs

641 Fs

195 S.Y. Wildflower Seeding 806030

15" R.C.P.

15" C.M.P.

18" R.C.P.

24" C.M.P.

30" C.M.P.

Inv. 14.66

Inv. 4.49

Inv. 3.51

Inv. 6.51

Inv. 6.99

Inv. 4.89

Inv. 2.89

Inv. 2.95

Inv. 3.12

Inv. 3.08

Inv. 3.51

Inv. 3.15

Inv. 5.08

Inv. 8.50

Inv. 8.59

Inv. 4.89

R=100'

R=150'

R=358'

TO BE CONSTRUCTED		
ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
801006M	Selective Thinning	210 S.Y.
806030P	Wildflower Seeding	195 S.Y.

30' 20' 10' 0 30' 60'

L-2 / L-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLANS

ROUTE 676

CONTRACT NO. 000000000

42

TO BE PLANTED						
ITEM NO.	DESCRIPTION	SYM.	PLANT NAME	SPACING	CONTRACT QUANTITY	AS-BUILT QUANTITY
811006M	Large Deciduous Tree, 2"-2 1/2" Caliper, B&B	A	Acer rubrum 'Red Sunset'		6	
811006M	Large Deciduous Tree, 2"-2 1/2" Caliper, B&B	L	Liquidambar styraciflua		3	
811006M	Large Deciduous Tree, 2"-2 1/2" Caliper, B&B	Qp	Quercus palustris		2	
811006M	Large Deciduous Tree, 2"-2 1/2" Caliper, B&B	Q	Quercus rubra		5	
811006M	Large Deciduous Tree, 2"-2 1/2" Caliper, B&B	Z	Zelkova serrata 'Green Vase'		9	
811036M	Evergreen Tree, 8'-9' High, B&B	Pa	Picea abies		27	
811045M	Evergreen Tree, 4'-5' High, B&B	Pai	Picea abies		9	
811036M	Evergreen Tree, 8'-9' High, B&B	Psi	Pinus strobus		46	
811045M	Evergreen Tree, 4'-5' High, B&B	Pss	Pinus strobus		4	
811030M	Small Deciduous Tree, 5'-6' High, B&B	Ck	Cornus Kousa		27	
811027M	Small Deciduous Tree, 1 1/4"-1 1/2" Caliper, B&B	Mdw	Malus 'Donald Wyman'		7	
811027M	Small Deciduous Tree, 1 1/4"-1 1/2" Caliper, B&B	Mhg	Malus 'Harvest Gold'		18	

TO BE PLANTED						
ITEM NO.	DESCRIPTION	SYM.	PLANT NAME	SPACING	CONTRACT QUANTITY	AS-BUILT QUANTITY
811027M	Small Deciduous Tree, 1 1/4"-1 1/2" Caliper, B&B	Mpf	Malus 'Prairiefire'		12	
811027M	Small Deciduous Tree, 1 1/4"-1 1/2" Caliper, B&B	Psk	Prunus serrulata 'Kwanzan'		17	
811060M	Deciduous Shrub, 2'-3' High, B&B	Ea	Euonymus alata 'Compacta'	4'	63	
811060M	Deciduous Shrub, 2'-3' High, B&B	Fs	Forsythia intermedia 'Spectabilis'	4'	903	
811060M	Deciduous Shrub, 2'-3' High, B&B	Lo	Ligustrum obtusifolium 'Regelianum'	4'	55	

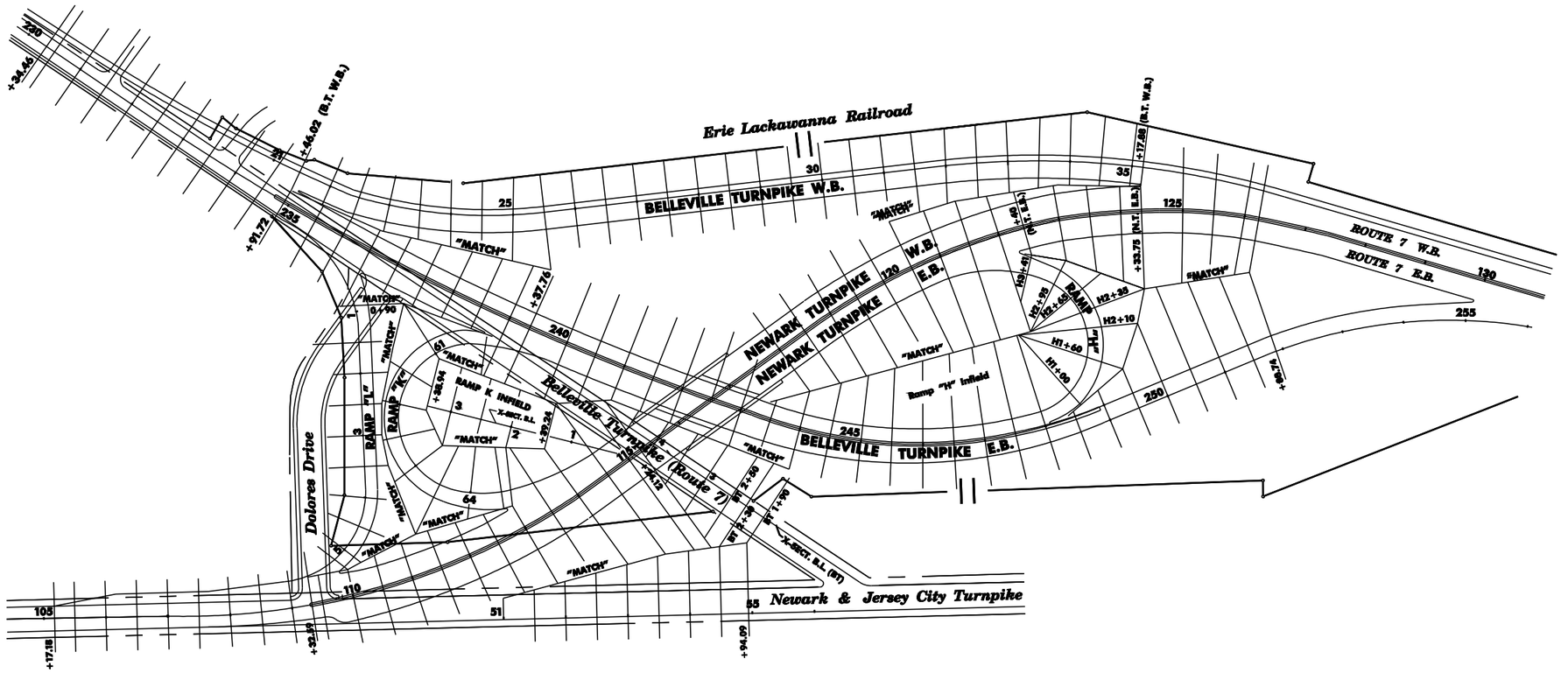
ID=TTXC01A3 date=25-FEB-2009 19:18 scale=63.999692::1.000000 pen table= \\Wildcatpw\vSystem\NJDOTW5\Projects\NJDOTW5\Eng\plot\TSLA\Non-Roadway\land.tbl
file=

STATE	FEDERAL PROJECT NO.
N.J.	F-3(62)41

TOWNSHIP OF BORDENTOWN

COUNTY OF BURLINGTON

N.J. Plane Coordinate System



100′ 50′ 0 100′ 200′

MS-1
MS-1

NEW JERSEY DEPARTMENT OF TRANSPORTATION

METHOD OF CROSS SECTIONS

ROUTE 295

CONTRACT NO. 010010001

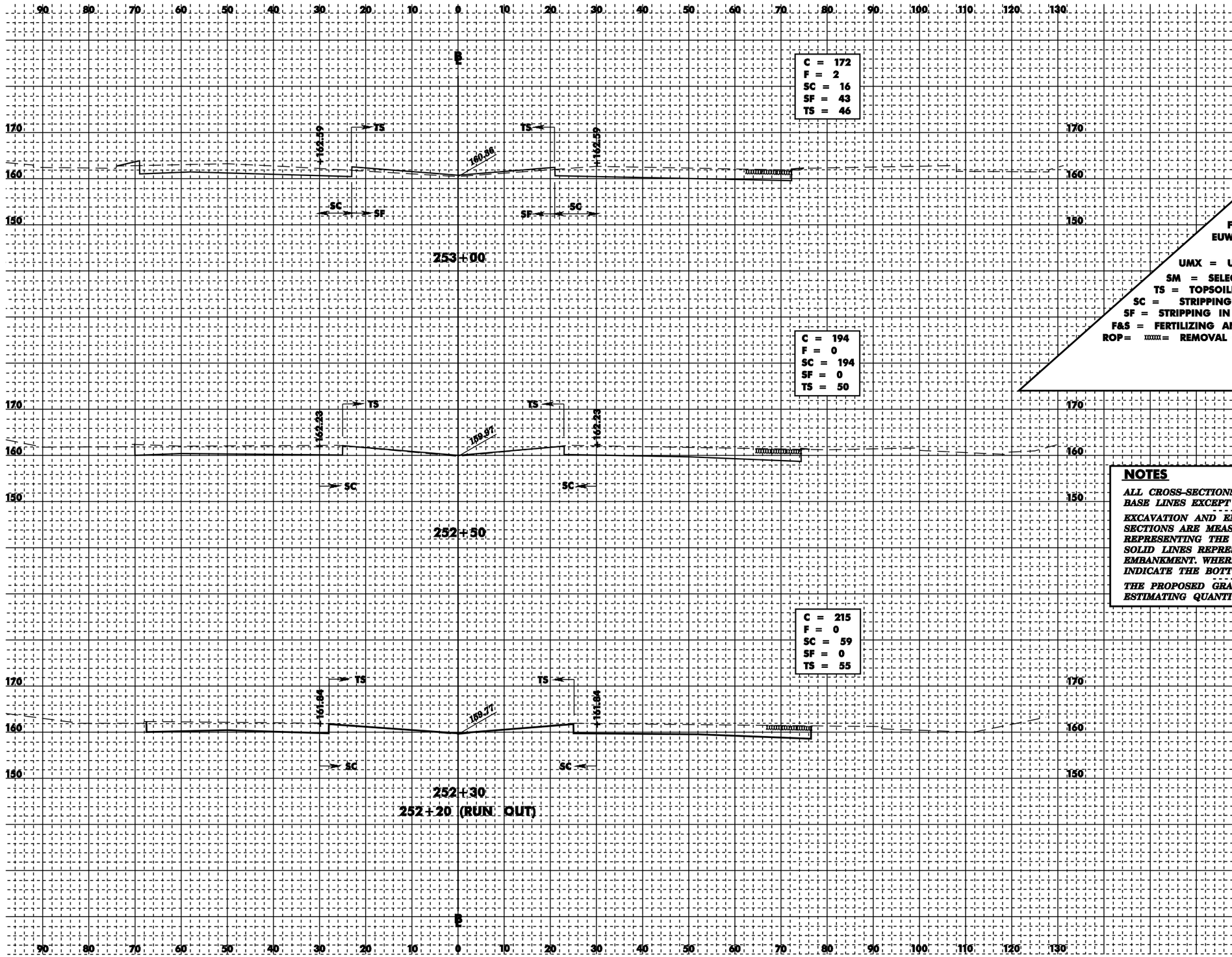
NOTE:
ALL CROSS SECTIONS ARE TAKEN RADIAL TO A BASE LINE AND AT 50′ INTERVALS UNLESS OTHERWISE NOTED.

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

43

PLOTTED AS ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	I-295-2(93)61



LEGEND

C = CUT	SQ. FT.
F = FILL	SQ. FT.
EUW = EXCAVATION, UNCLASSIFIED IN WET AREA	SQ. FT.
UMX = UNSUITABLE MATERIAL	SQ. FT.
SM = SELECTED MATERIAL	SQ. FT.
TS = TOPSOILING, 4 INCH THICK	LIN. FT.
SC = STRIPPING IN CUT	LIN. FT.
SF = STRIPPING IN FILL	LIN. FT.
F&S = FERTILIZING AND SEEDING	LIN. FT.
ROP= ▨ = REMOVAL OF PAVEMENT	SQ. FT.

NOTES

ALL CROSS-SECTIONS ARE RADIAL OR AT RIGHT ANGLES TO THE BASE LINES EXCEPT WHERE OTHER METHODS ARE INDICATED.

EXCAVATION AND EMBANKMENT QUANTITIES SHOWN ON THE CROSS SECTIONS ARE MEASURED BETWEEN THE DASHED LINES REPRESENTING THE SURFACE OF THE EXISTING GROUND AND THE SOLID LINES REPRESENTING THE LIMITS OF EXCAVATION OR EMBANKMENT. WHERE TOPSOIL IS PROPOSED, THE SOLID LINES INDICATE THE BOTTOM OF THE PROPOSED TOPSOIL.

THE PROPOSED GRADES SHOWN ON THE CROSS-SECTIONS ARE FOR ESTIMATING QUANTITIES.

ROUTE 295 B.L. STA. 252+30 – 253+00 | X-1 / X-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

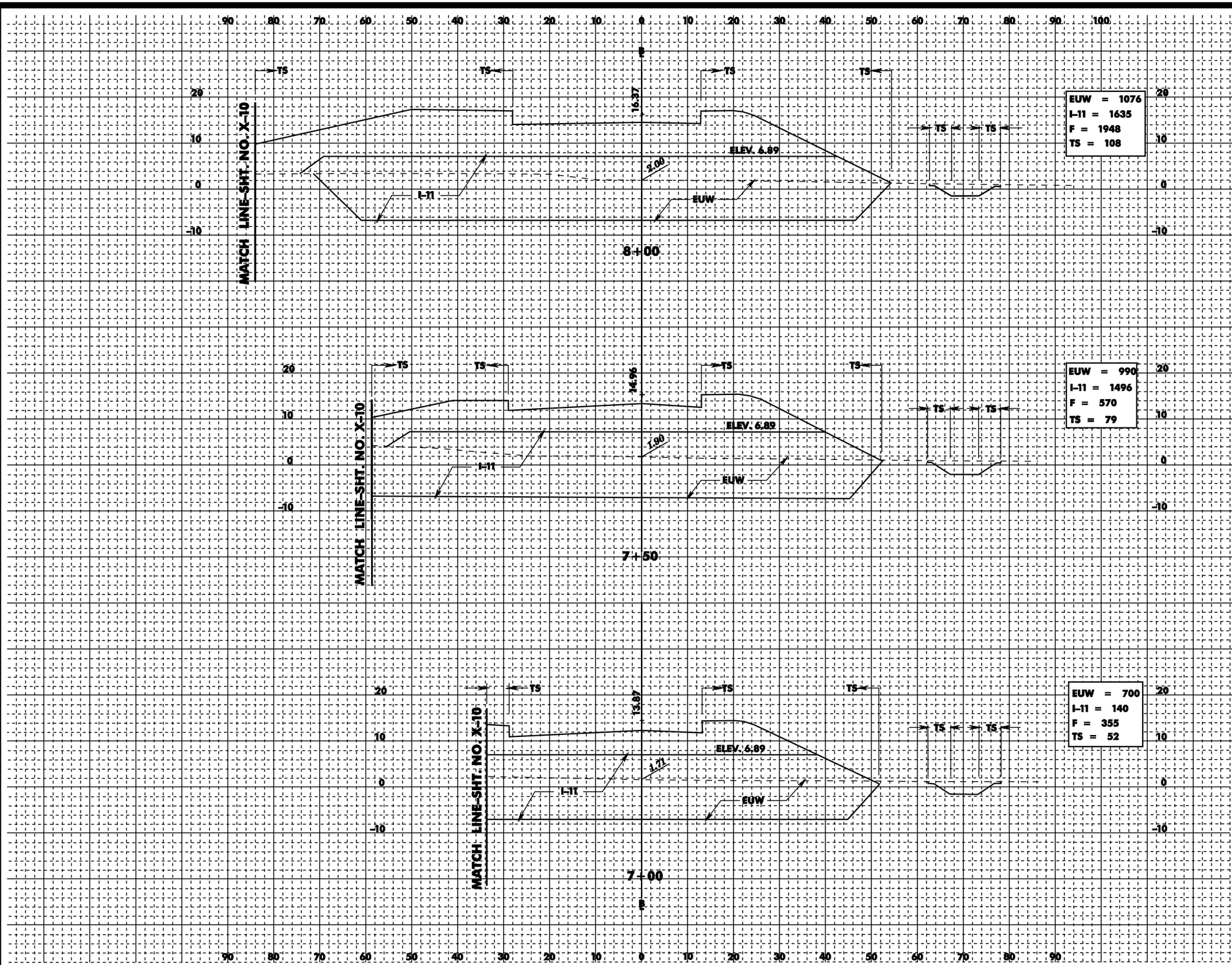
ROUTE 295

CONTRACT NO. 010010001

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

BDC071-05 – ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	F-3(62)41



ROUTE 7 B.L. STA. 7+00 – 8+00 | X-2 / X-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

ROUTE 7

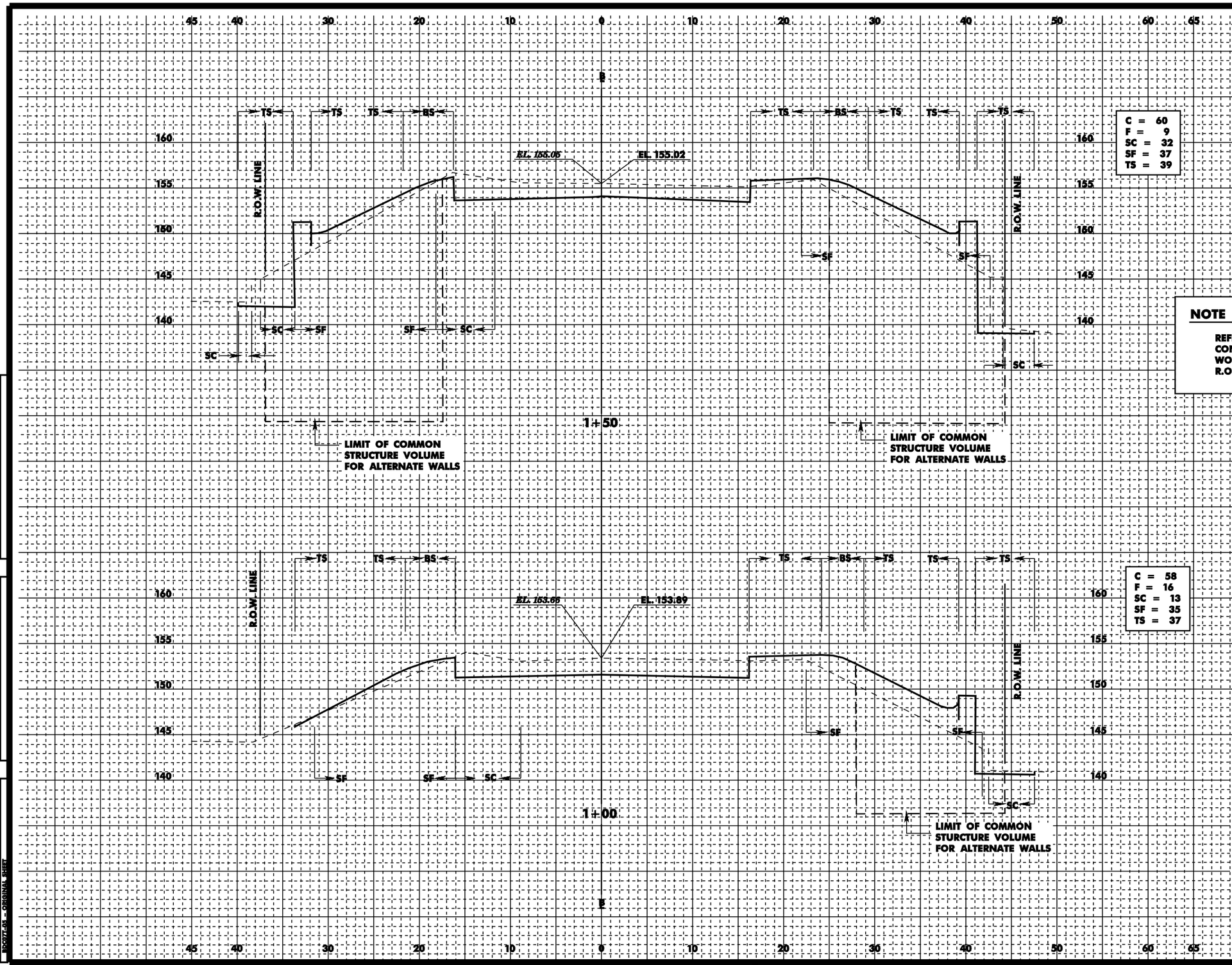
CONTRACT NO. 010010001

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

45

BDC07-05 – ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	BRZ-2020(103)



NOTE

REFER TO CONSTRUCTION PLANS FOR CONSTRUCTION EASEMENT LINES WHEN WORK IS PROPOSED OUTSIDE OF EXISTING R.O.W.

BASELINE STA. 1+00 – 1+50 | X-3 / X-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

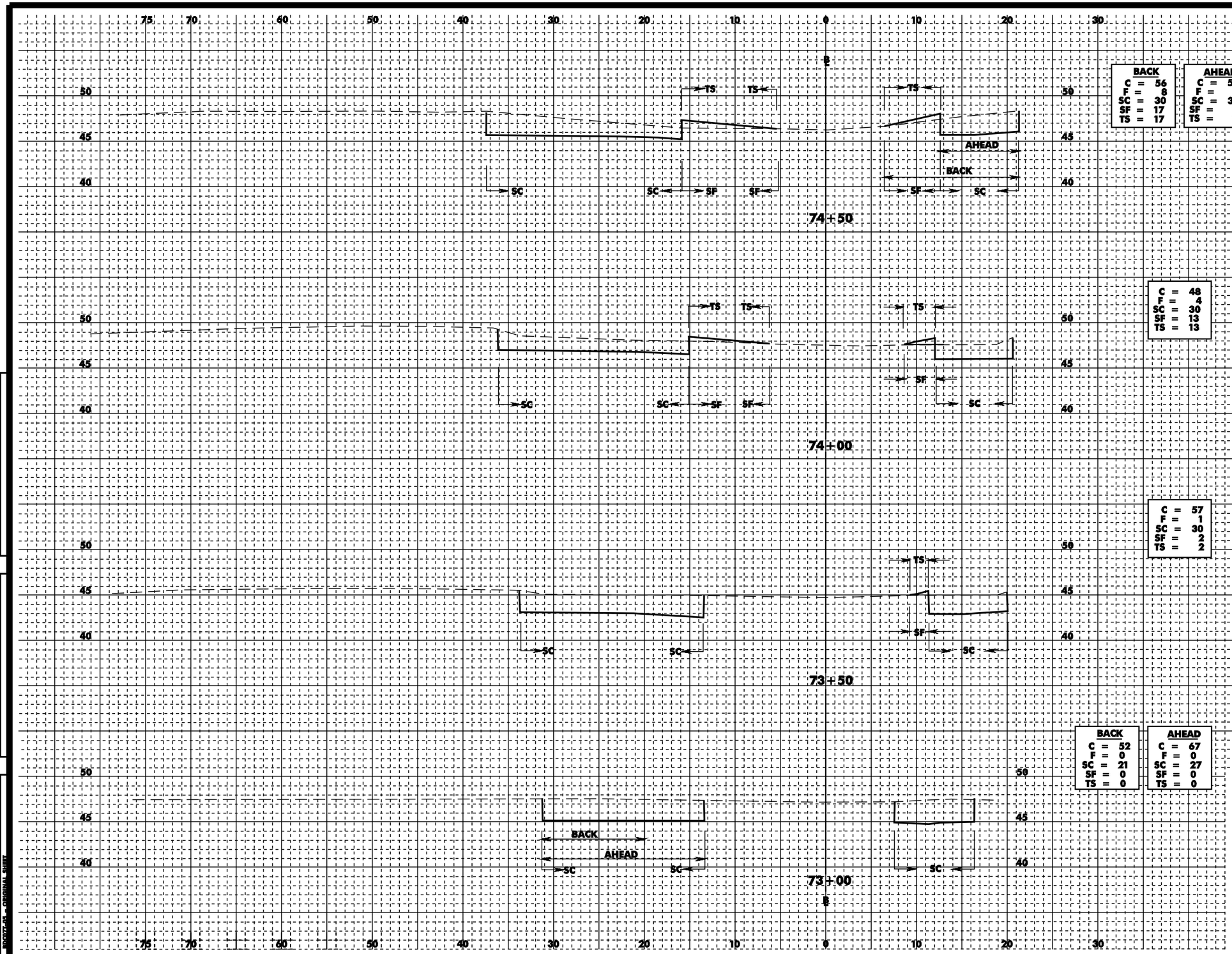
TUTTLE PARKWAY BRIDGE

CONTRACT NO. 010010001

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

BDC07T-05 – ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93)61



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

C =	48
F =	4
SC =	30
SF =	13
TS =	13

C =	57
F =	1
SC =	30
SF =	2
TS =	2

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

ROUTE 295 S.B. B.L. STA. 73+00 – 74+50 X-4 / X-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

ROUTE 295

CONTRACT NO. 010010001

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

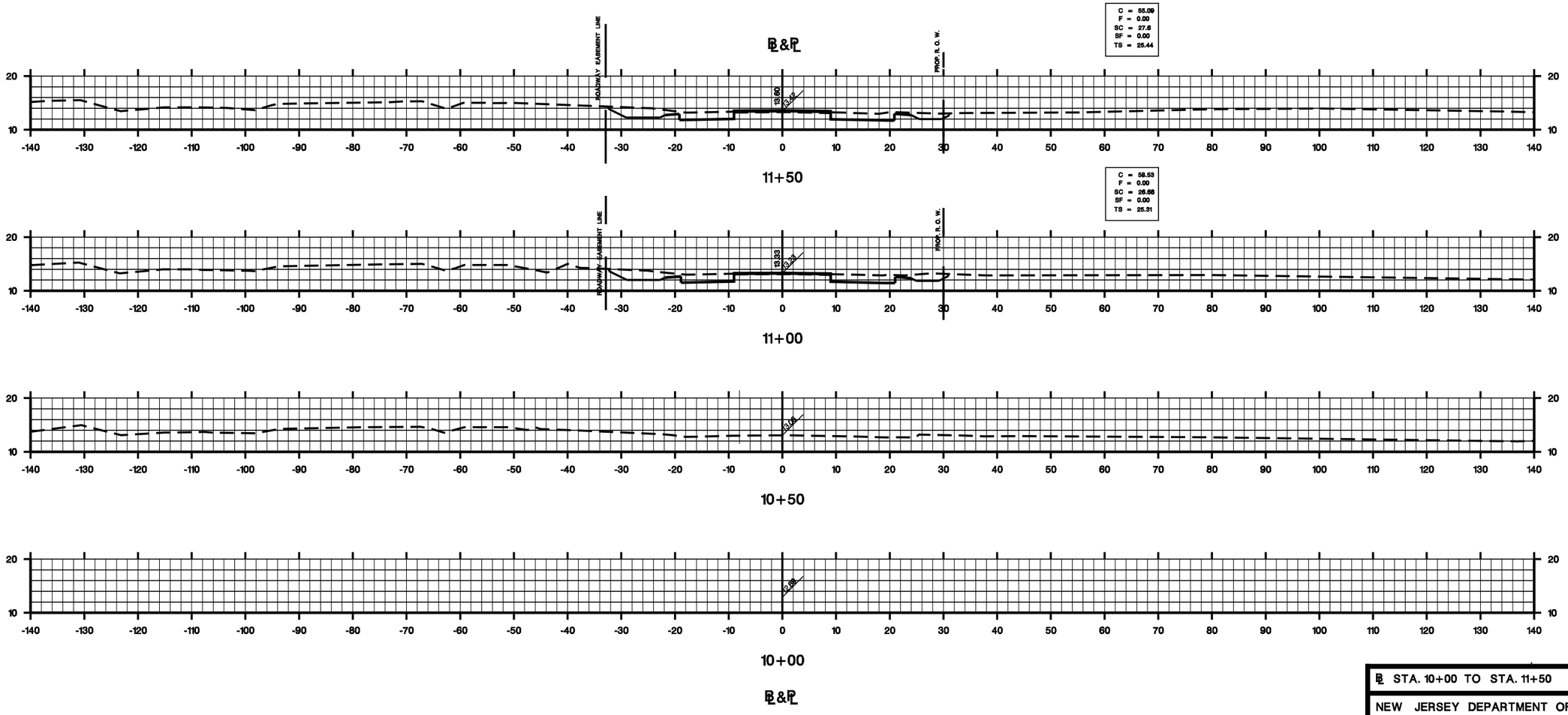
BDC077-05 - ORIGINAL SHEET

NOTES:

ALL CROSS-SECTIONS ARE RADIAL OR AT RIGHT ANGLES TO THE BASE LINES EXCEPT WHERE OTHER METHODS ARE INDICATED.

EXCAVATION AND EMBANKMENT QUANTITIES SHOWN ON THE CROSS SECTIONS ARE 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 INDICATE THE BOTTOM OF THE PROPOSED TOPSOIL.

THE PROPOSED GRADES SHOWN ON THE CROSS-SECTIONS ARE FOR ESTIMATING QUANTITIES.



BL STA. 10+00 TO STA. 11+50

X-5 / X-6

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

ROUTE U.S. 9
AND BENNETTS CROSSING ROAD

CONTRACT NO. 004950203

48

pen table=\\Njdotprjws\v8system\NJDOTWS\Projects\NJDOTEng\plot\TBLs\Roadway\rgrid.tbl

scale=21.175137:1.000000

date=25-FEB-2009 19:20

ID=TPXOHA3

file=IP_PWP:dms10532\SP48 Cross Sections X-5.dgn

STATE	FEDERAL PROJECT NO.
N.J.	BHF-29(135)

Sample No: 1

Earthwork Summary

Description	Contract Quantity
Excavation	
(A) Excavated Materials	
(1) Excavation, Unclassified available for I-14 Embankment	
Excavation from Cross Sections (except for Regulated Material and/or Acid Producing Soil)	9,396 CY
Excavation from Plan Sheets (except for Regulated Material and/or Acid Producing Soil)	5,053 CY
Less Removal of Pavement (2,790 SY x 12" thick)	-921 CY
Stripping in Cuts (1818 SY x 4" thick)	-200 CY
Total Excavation, Unclassified	13,328 CY
Removal of Pavement (2,790 SY x 12" thick)	921 CY
Less Unsuitable Excavation Unclassified	-300 CY
Unsuitable Pavement (820 SY x 12" thick)	-271 CY
Total	**13,678 CY**
(2) Excavation, Regulated Material available for I-14 Embankment	
Excavation, Regulated from Cross Sections	10,671 CY
Excavation, Regulated from Plan Sheets	420 CY
Excavation, Regulated of pipes, inlets & other substructures	65 CY
Total Excavation, Regulated Material	11,156 CY
Less Unsuitable Excavation Regulated Material, Hazardous	-210 CY
Unsuitable Excavation Regulated Material	-300 CY
Total	**10,646 CY**
Disposal of Regulated Material, Hazardous (210 * 1.755 TON/CY)	369 TON
Disposal of Regulated Material (300 * 1.755 TON/CY)	527 TON
(3) Excavation, Acid Producing Soil available for I-14 Embankment	
Excavation, Acid Producing Soil from Cross Sections	2,100 CY
Excavation, Acid Producing Soil from Plan Sheets	520 CY
Excavation, Acid Producing Soil of pipes, inlets & other substructures	145 CY
Total Excavation, Acid Producing Soil	2,765 CY
Less Unsuitable Excavation Acid Producing Soil	-700 CY
Total	**2,065 CY**
Disposal of Acid Producing Soil (700 * 1.755 TON/CY)	1,229 TON
Total Excavated Materials available for I-14 Embankment (Total of 1+2+3)	**23,750 CY**
(13678 +10,646 + 2,065)* 0.90 shrinkage)	
(B) I-14 Embankment Quantity Required	
Embankment from Cross Sections	7,986 CY
Embankment from Plan Sheets	2,840 CY
Less I-13 Soil Aggregate	-300 CY
I-11 Soil Aggregate	-250 CY
I-10 Soil Aggregate	-145 CY
I-9 Soil Aggregate	-85 CY
I-7 Soil Aggregate	-100 CY
Stripping in Fill	175 CY
Total	**10,121 CY**
Excavated Materials Excess (Suitable for I-14 Embankment)	**13,629 CY**
Excavated Materials to be Borrowed (Suitable for I-14 Embankment)	**0 CY**
Topsoiling	
(A) Topsoil Available	
Stripping in Cut	200 CY
Stripping in Fill	175 CY
Total Stripping available for Topsoil	**375 CY**
(B) Topsoil Required	
Topsoiling, 4" Thick from Cross Sections	2,750 SY
Topsoiling, 4" Thick from Plan Sheets	1,450 SY
Total Topsoiling 4" Thick required in SY	4,200 SY
Total Topsoiling 4" Thick required in CY (4,200 SY x 4" thick)	**466 CY**
Excess Topsoil	**0 CY**
Borrow Topsoil	**91 CY**

Sample No: 2

Earthwork Summary

Description	Federal Quantity	Town center Associates Quantity	100% State Quantity	Contract Quantity
Excavation				
(A) Excavated Materials				
(1) Excavation, Unclassified available for I-14 Embankment				
Excavation from Cross Sections (except for Regulated Material and/or Acid Producing Soil)	5,696 CY	0 CY	3,700 CY	9,396 CY
Excavation from Plan Sheets (except for Regulated Material and/or Acid Producing Soil)	5,053 CY	0 CY	0 CY	5,053 CY
Less Removal of Pavement (2,790 SY x 12" thick)	-800 CY	-21 CY	-100 CY	-921 CY
Stripping in Cuts (1818 SY x 4" thick)	-150 CY	-50 CY	0 CY	-200 CY
Total Excavation, Unclassified	9,799 CY	-71 CY	3,600 CY	13,328 CY
Removal of Pavement (2,790 SY x 12" thick)	800 CY	21 CY	100 CY	921 CY
Less Unsuitable Excavation Unclassified	-300 CY	0 CY	0 CY	-300 CY
Unsuitable Pavement (820 SY x 12" thick)	-226 CY	0 CY	-45 CY	-271 CY
Total	**10,073**	**-50**	**3,655**	**13,678 CY**
(2) Excavation, Regulated Material available for I-14 Embankment				
Excavation, Regulated from Cross Sections	6,311 CY	3,671 CY	689 CY	10,671 CY
Excavation, Regulated from Plan Sheets	220 CY	0 CY	200 CY	420 CY
Excavation, Regulated of pipes, inlets & other substructures	55 CY	10.00 CY	0.00 CY	65 CY
Total Excavation, Regulated Material	6,586 CY	3,681 CY	889 CY	11,156 CY
Less Unsuitable Excavation Regulated Material, Hazardous	-210 CY	0.00 CY	0.00 CY	-210 CY
Unsuitable Excavation Regulated Material	-300 CY	0 CY	0 CY	-300 CY
Total	**6,076.00 CY**	**3,681.00 CY**	**889.00 CY**	**10,646 CY**
Disposal of Regulated Material, Hazardous (210 * 1.755 TON/CY)	369 TON	0 TON	0 TON	369 TON
Disposal of Regulated Material (300 * 1.755 TON/CY)	527 TON	0 TON	0 TON	527 TON
(3) Excavation, Acid Producing Soil available for I-14 Embankment				
Excavation, Acid Producing Soil from Cross Sections	2,000 CY	0 CY	100 CY	2,100 CY
Excavation, Acid Producing Soil from Plan Sheets	485 CY	0 CY	35 CY	520 CY
Excavation, Acid Producing Soil of pipes, inlets & other substructures	145 CY	0 CY	0 CY	145 CY
Total Excavation, Acid Producing Soil	2,630 CY	0 CY	135 CY	2,765 CY
Less Unsuitable Excavation Acid Producing Soil	-700 CY	0 CY	0 CY	-700 CY
Total	**1,930 CY**	**0 CY**	**135 CY**	**2,065 CY**
Disposal of Acid Producing Soil (700 * 1.755 TON/CY)	1,229 TON	0 TON	0 TON	1,229 TON
Total Excavated Materials available for I-14 Embankment (Total of 1+2+3)	**16,271 CY**	**3,268 CY**	**4,211 CY**	**23,750 CY**
(13678 +10,646 + 2,065)* 0.90 shrinkage)				
(B) I-14 Embankment Quantity Required				
Embankment from Cross Sections	7,236 CY	500 CY	250 CY	7,986 CY
Embankment from Plan Sheets	2,360 CY	480 CY	0 CY	2,840 CY
Less I-13 Soil Aggregate	-300 CY	0 CY	0 CY	-300 CY
I-11 Soil Aggregate	-350 CY	0 CY	100 CY	-250 CY
I-10 Soil Aggregate	-185 CY	40 CY	0 CY	-145 CY
I-9 Soil Aggregate	-85 CY	0 CY	0 CY	-85 CY
I-7 Soil Aggregate	-100 CY	0 CY	0 CY	-100 CY
Stripping in Fill	100 CY	25 CY	50 CY	175 CY
Total	**8,676 CY**	**1,045 CY**	**400 CY**	**10,121 CY**
Excavated Materials Excess (Suitable for I-14 Embankment)	**7,595 CY**	**2,223 CY**	**3,811 CY**	**13,629 CY**
Excavated Materials to be Borrowed (Suitable for I-14 Embankment)	**0 CY**	**0 CY**	**0 CY**	**0 CY**
Topsoiling				
(A) Topsoil Available				
Stripping in Cut	150 CY	50 CY	0 CY	200 CY
Stripping in Fill	75 CY	0 CY	100 CY	175 CY
Total Stripping available for Topsoil	**225 CY**	**50 CY**	**100 CY**	**375 CY**
(B) Topsoil Required				
Topsoiling, 4" Thick from Cross Sections	1,450 SY	800 SY	500 SY	2,750 SY
Topsoiling, 4" Thick from Plan Sheets	1,000 SY	0 SY	450 SY	1,450 SY
Total Topsoiling 4" Thick required in SY	2,450 SY	800 SY	950 SY	4,200 SY
Total Topsoiling 4" Thick required in CY (4,200 SY x 4" thick)	**272 CY**	**89 CY**	**105 CY**	**466 CY**
Excess Topsoil	**0 CY**	**0 CY**	**0 CY**	**0 CY**
Borrow Topsoil	**47 CY**	**39 CY**	**5 CY**	**91 CY**

X-6 / X-6

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

ROUTE 287

CONTRACT NO. 010010001

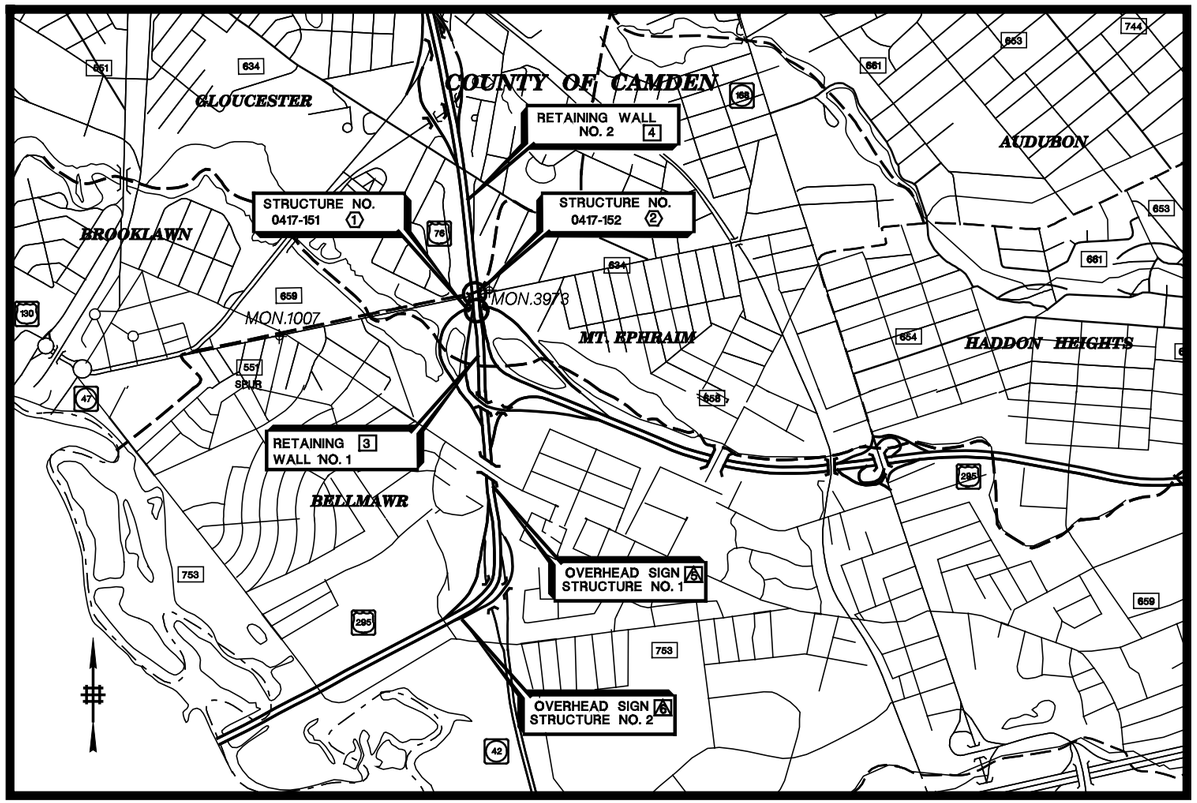
Individual, Firm, Partnership, etc.
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 99999

DO NOT PLOT - ORIGINAL SHEET

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

PROJECT:
RTE. I-76, OVER RTE. 295 RAMP "C"
RTE. I-76, OVER KINGS HIGHWAY



1000' 500' 0 1000' 2000'

KEY PLAN
Scale: 1" = 1000'-0"

STRUCTURES IN THIS CONTRACT

NO.	STRUCTURE NO.	DESCRIPTION
		BRIDGES
1	0417-151	ROUTE I-76 OVER ROUTE 295 RAMP "C"
2	0417-152	ROUTE I-76 OVER KINGS HIGHWAY
		RETAINING WALLS
3		RETAINING WALL LOCATION NO. 1
4		RETAINING WALL LOCATION NO. 2
		SIGN SUPPORT STRUCTURES
5	0417-998	OVERHEAD SIGN STRUCTURE NO. 1
6	0417-999	CANTILEVER SIGN STRUCTURE NO. 1

CONTROL SECTION		JOB NO.
DES. BY		CHK. BY
DWN. BY		CHK. BY
EST. BY		CHK. BY
SPECS. BY		

IN CHARGE OF

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

KEY PLAN TO STRUCTURES

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

SCALE : AS SHOWN

BRIDGE SHEET NO. B1 OF B21

50

BDOC/T.DS. - ORIGINAL SHEET

pen table= \\Nj\dot\hrw\ntsystem\NJDOT16\Projects\NJDOT16\Standards\NJDOTStds.tbl
scale=0.179273:1.000000
date=25-FEB-2009 12:23
ID=TPXCOSAS
file=

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	AS - BUILT QUANTITY
	ROUTE I-76 OVER ROUTE 295 RAMP "C" (STRUCTURE NO. ____-___)			
201006P	CLEARING SITE, BRIDGE (________)	LS	LUMP SUM	
201039P	TEMPORARY SHIELDING	LS	LUMP SUM	
507024P	CONCRETE BRIDGE DECK, HPC	CY	400	
507039P	CONCRETE BRIDGE PARAPETS, HPC	LF	160	
507051P	CONCRETE BRIDGE APPROACH	CY	56	
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LB	76,000	
507003P	1¾"x 1¾" PREFORMED ELASTOMERIC JOINT ASSEMBLY	LF	600	
504024P	CONCRETE ABUTMENT WALL	CY	1200	
504030P	CONCRETE PIER SHAFT	CY	680	
504015P	CONCRETE FOOTING	CY	1050	
506003P	STRUCTURAL STEEL	LS	LUMP SUM	
999999	NO ITEM			
999999	NO ITEM			
	ROUTE I-76 OVER KINGS HIGHWAY (STRUCTURE NO. ____-___)			
201006P	CLEARING SITE, BRIDGE (________)	LS	LUMP SUM	
201039P	TEMPORARY SHIELDING	LS	LUMP SUM	
507024P	CONCRETE BRIDGE DECK, HPC	CY	460	
507039P	CONCRETE BRIDGE PARAPET, HPC	LF	180	
507051P	CONCRETE BRIDGE APPROACH	CY	80	
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LB	93,000	
507003P	1¾"x 1¾" PREFORMED ELASTOMERIC JOINT ASSEMBLY	LF	570	
504024P	CONCRETE ABUTMENT WALL	CY	680	
504030P	CONCRETE PIER SHAFT	CY	190	
504015P	CONCRETE FOOTING	CY	14,300	
506012P	SHEAR CONNECTOR	U	7,308	
506003P	STRUCTURAL STEEL	LS	LUMP SUM	
501003P	TEMPORARY SHEETING	SF	1,000	
999999	NO ITEM			
999999	NO ITEM			
	RETAINING WALL, LOCATION NO. 1			
513003P	RETAINING WALL, LOCATION NO. 1	SF	1000	
999999	NO ITEM			
999999	NO ITEM			
	RETAINING WALL, LOCATION NO. 2			
513003P	RETAINING WALL, LOCATION NO. 2	SF	880	
999999	NO ITEM			
999999	NO ITEM			
	OVERHEAD SIGN SUPPORT STRUCTURE NO. 1 (STRUCTURE No. ____-___)			
201009P	CLEANING SITE, STRUCTURE (________)	LS	LS	
202009P	EXCAVATION, UNCLASSIFIED	CY	144	
504015P	CONCRETE FOOTING	CY	42	
504003P	REINFORCEMENT STEEL	LB	2105	
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LB	1205	
512012M	OVERHEAD SIGN SUPPORT STRUCTURE NO. 1	U	1	
501003P	TEMPORARY SHEETING	SF	1344	
999999	NO ITEM			
999999	NO ITEM			

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	AS - BUILT QUANTITY
	CANTILEVER SIGN SUPPORT STRUCTURE NO. 1 (STRUCTURE No. ____-___)			
201009P	CLEANING SITE, STRUCTURE (________)	LS	LS	
202009P	EXCAVATION, UNCLASSIFIED	CY	76	
504015P	CONCRETE FOOTING	CY	20	
504003P	REINFORCEMENT STEEL	LB	1876	
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LB	1360	
512003P	CANTILEVER SIGN SUPPORT STRUCTURE NO. 1	U	1	
501003P	TEMPORARY SHEETING	SF	685	
999999	NO ITEM			
999999	NO ITEM			

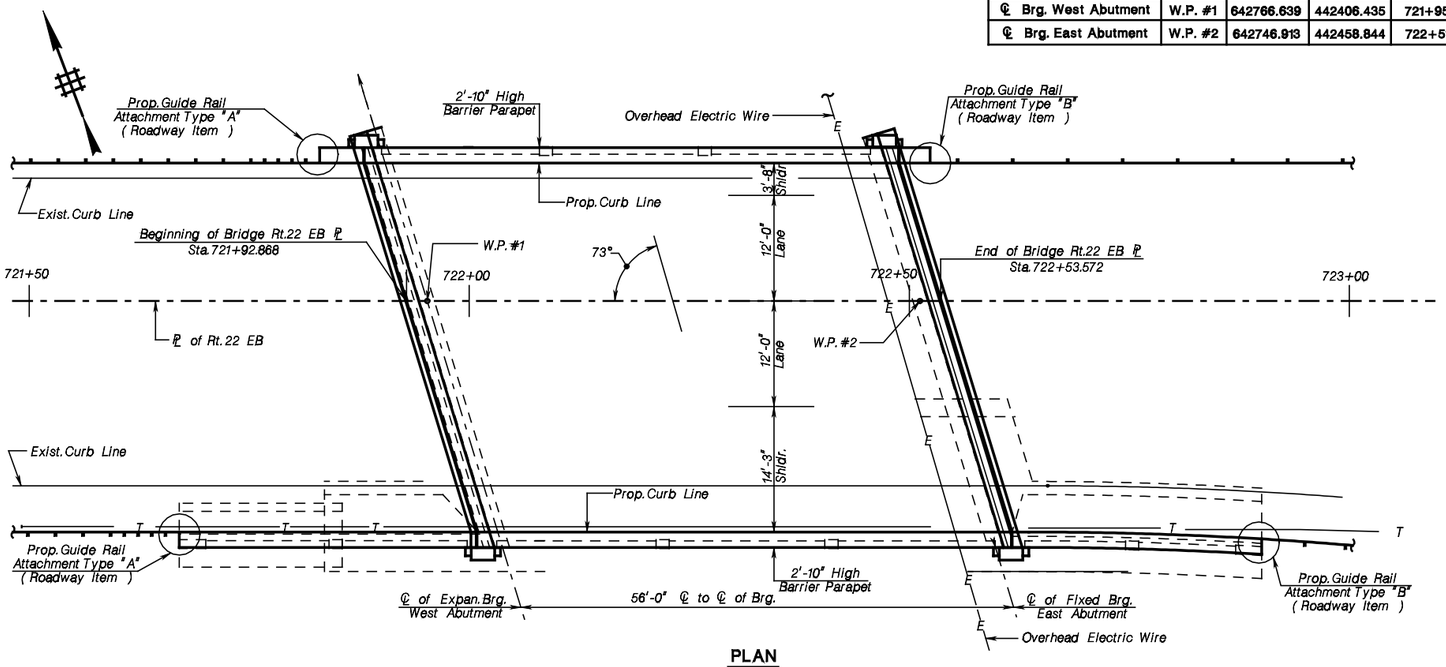
ESTIMATE OF QUANTITIES

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

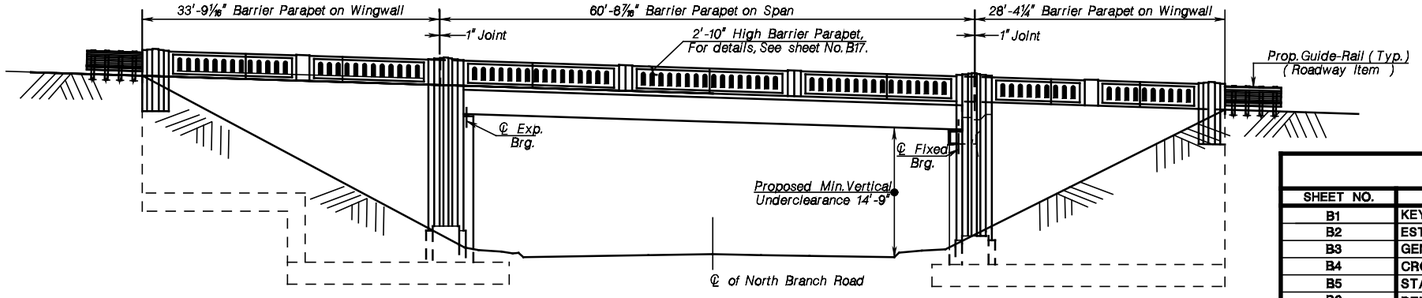
SHEET NO. B2 OF B21

pen table=\\Njdotprjws\v8system\NJDOTWS\Projects\NJDOTEng\Iplot\TBLs\Non-Roadway\bridge.tbl
scale=0.179293:1.000000
date=25-FEB-2009 19:23
ID=TPXOHA3
BDC07T-05 - ORIGINAL SHEET
file=

	Working Point	Coordinates		℄ of Rt. 22 EB	
		North	East	Station	Offset
℄ Brg. West Abutment	W.P. #1	642766.639	442406.435	721+95.222	0
℄ Brg. East Abutment	W.P. #2	642746.913	442458.844	722+51.219	0



PLAN
Scale: 1/8"=1'-0"



SOUTH ELEVATION
Scale: 1/8"=1'-0"

GENERAL NOTES

1. Design Specifications
   The 2007 (4th Edition) AASHTO LRFD Bridge Design Specifications, with current Interims, as modified by Section 3 of the 2008 (5th Edition) NJDOT Design Manual for Bridges and Structures.
2. Construction Specifications
   2007 NJDOT Standard Specifications for Road and Bridge Construction as modified by the Special Provisions.
3. Live Load
   AASHTO LRFD HL-93 Vehicular Live Loading or NJDOT Permit Vehicle, whichever governs.
4. Concrete Design Stresses
   (a) Design Compressive Strengths - (f'c)
   Class A ---------- 4,000 psi
   Class B ---------- 3,000 psi
   Class P-1 ---------- 5,500 psi
   (b) Class Mix Design Strengths
   (In accordance with Table 903.03.06-3 of the NJDOT Standard Specifications)
   Class A ---------- 4,600 psi
   Class B ---------- 3,700 psi
   Class P-1 ---------- 6,000 psi
5. Reinforcement Steel
   (a) ASTM A615M (Grade 60)
6. Superstructure
   (a) Dead load includes a 25 lbs./sq.ft. provision for a future 2 inch thick concrete overlay protective system on the bridge deck.
7. Seismic Design:
   Seismic Design Category = A
   Site Class Definition = A
8. Borings:
   ✚ Indicates location of Boring
   LOG No.
9. Foundation Design Criteria:
   Abutment and Wingwalls: spread footings on soil
   Nominal bearing resistance = 14 KSF
   Factored bearing resistance = 6 KSF
   Friction coefficient for sliding 0.45 for abutment and wingwall
10. Datum
    Elevations shwon are based on the North America Vertical Datum (NAVD) of 1988.

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
201006P	CLEARING SITE, BRIDGE	LS	LUMP SUM
504024P	CONCRETE ABUTMENT WALL	CY	31
507024P	CONCRETE BRIDGE DECK, HPC	CY	51
513006P	RETAINING WALL, CAST-IN-PLACE, LOCATION NO.__	SF	100
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LB	11,120
504036P	EPOXY WATERPROOFING	SY	30
507036P	CONCRETE BRIDGE PARAPET, HPC	LF	193
505030P	PRESTRESSED CONCRETE BOX BEAMS (TYPE B11-48), 48" X 33"	LF	576
514003P	TEMPORARY STRUCTURE, ONE-WAY	LS	LUMP SUM
701021P	3" RIGID METALLIC CONDUIT	LF	482
201039P	TEMPORARY SHIELDING	LS	LUMP SUM
"	"	"	"

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
B1	KEY PLAN TO STRUCTURES
B2	ESTIMATE OF QUANTITIES
B3	GENERAL PLAN AND ELEVATION
B4	CROSS SECTION & PROFILE
B5	STAGING DETAILS
B6	DEMOLITION PLAN NO. 1
B7	DEMOLITION PLAN NO. 2
B8	WEST ABUTMENT
B9	NORTHWEST & SOUTHWEST RETAINING WALLS
B10	PIER 1 PLAN AND ELEVATION
B11	PIER SECTIONS & DETAILS
B12	FRAMING PLAN
B13	STEEL DETAILS
B14	BOX BEAM DETAILS
B15	78" PRETENSIONED PRESTRESSED CONCRETE BEAMS
B16	PRESTRESSED CONCRETE BEAM DETAIL
B17	DECK SLAB PLAN
B18	RETAINING WALL, GENERAL PLAN & ELEVATION
B19	RETAINING WALL, SECTION AND DETAILS
B20	OVERHEAD SIGN SUPPORT STRUCTURE - GENERAL PLAN & ELEVATION
B21	CANTILEVER SIGN SUPPORT STRUCTURE - GENERAL PLAN & ELEVATION

1'0 8' 16'
1/4"=1'-0"

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

GENERAL PLAN AND ELEVATION

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

REVISION	BY	C'K'D	DATE

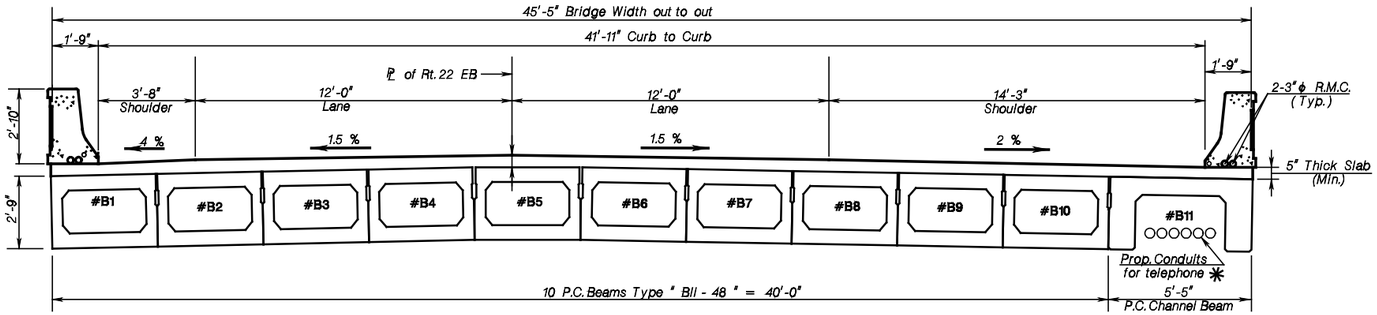
SCALE : AS SHOWN

BRIDGE SHEET NO. B3 OF B21

52

ROCKY7.A5 - ORIGINAL SHEET
ID=1220CE1A5 date=25-FEB-2009 19:23 scale=0.079293:1.000000 plan tables= \\Nbridgefnw\wingmas\NJDOTWS\Projects\NJDOT\Proj\Splot\STEVA\Work-Roadway\bridge.tbl
file=

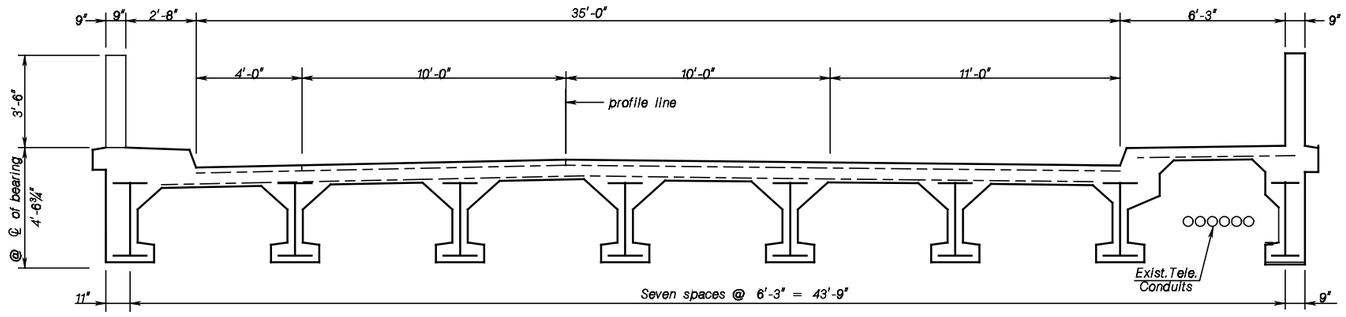
STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			



TYPICAL PROPOSED SECTION

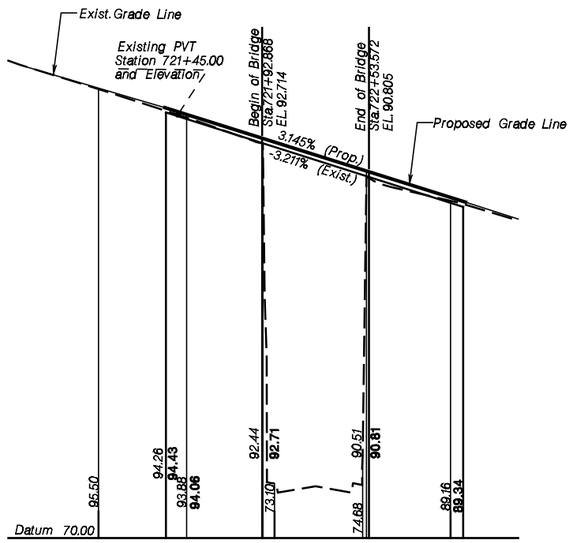
Scale: ⅜"=1'-0"

✱ See note 16 on plan sheet B entitled "P.C. Channel Beam Details No. 2"



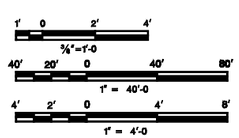
TYPICAL EXISTING SECTION

Scale: ⅜"=1'-0"



ROUTE 22 EASTBOUND PROFILE

Scale: HOR. 1" = 40'-0"
VERT. 1" = 4'-0"



NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

CROSS SECTION AND PROFILE

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			
IN CHARGE OF			

REVISION	BY	C'K'D	DATE

SCALE : AS SHOWN

BRIDGE SHEET NO. B4 OF B21

53

ROCKY AR. - ORIGINAL SHEET

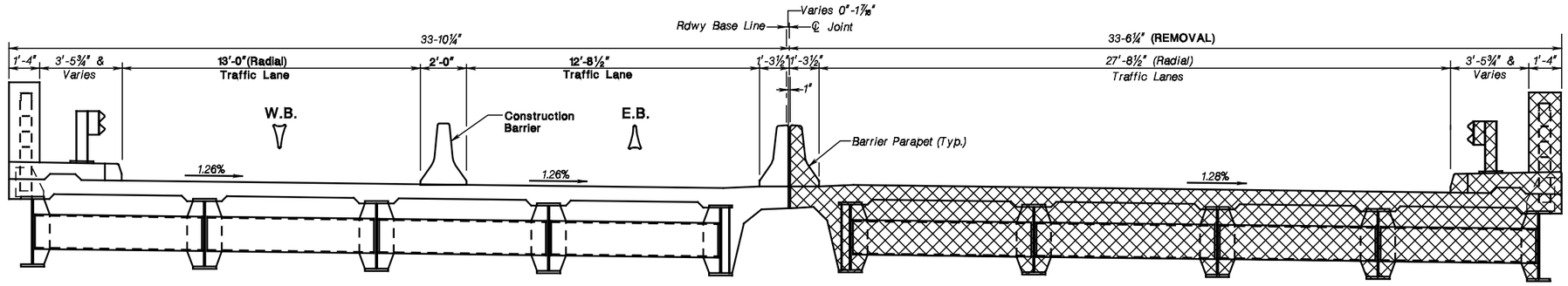
file=

ID=TPXCB2A5 date=25-FEB-2009 19:24 scale=0.179293:1.000000 pen table=\\Bbdcptrnw\ntsystem\NJDOTW8\Projects\NJDOTW8\Projects\NJDOTRing\Splot\STEVA\Vista-Broadway\bridge.tbl

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

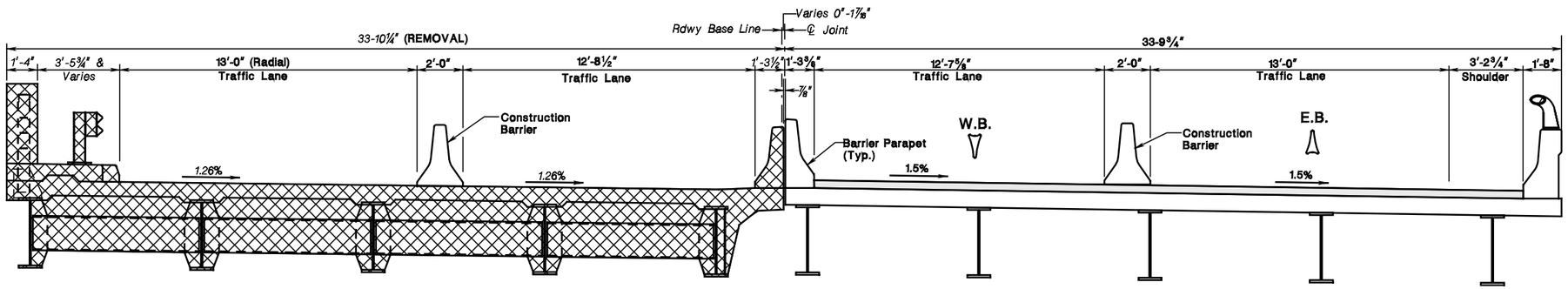
STRUCTURE NO.

STRUCTURE NAME



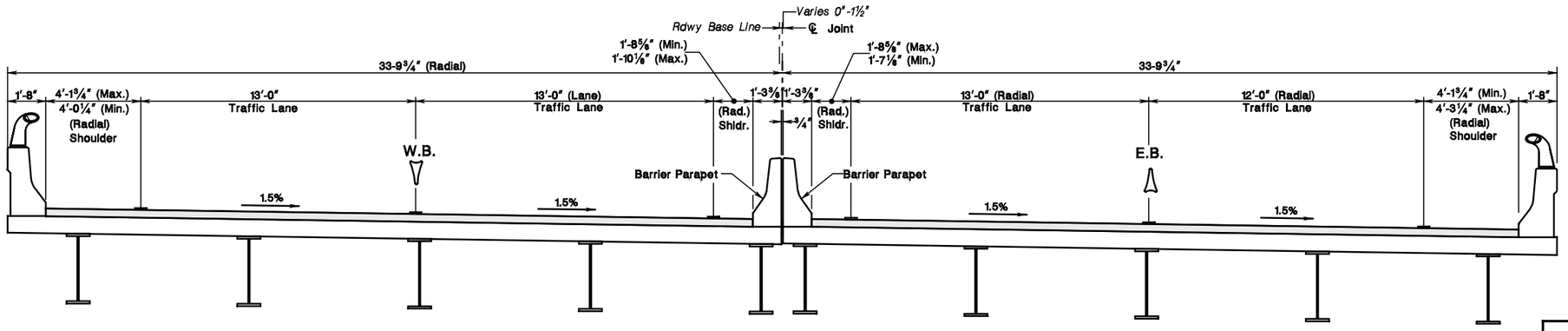
STAGE I

Scale: ⅜"=1'-0"



STAGE II

Scale: ⅜"=1'-0"



FINAL STAGE

Scale: ⅜"=1'-0"

LEGEND:

AREA OF REMOVAL

NOTES:

1. See traffic control plans for locations of traffic control devices and allowable lane closure houres.

1' 0 2' 4'

⅜"=1'-0

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY			
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

STAGING DETAILS

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

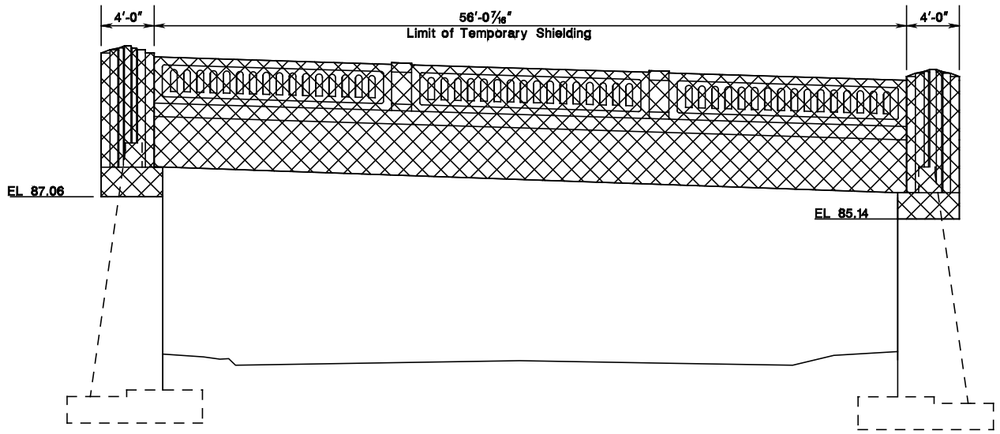
SCALE : AS SHOWN

BRIDGE SHEET NO. B5 OF B21

54

DO NOT ADD ORIGINAL SHEET
ID=TPXCEIA3 date=25-FEB-2009 19:24 scale=0.7929511000000 |cen tables=\\Bridgeprev\e$\eptsys\NJDOT\RWA\Projects\NJDOT\Rwy\Splice\STEA\Work-Roadway\bridge.tbl
file=

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			



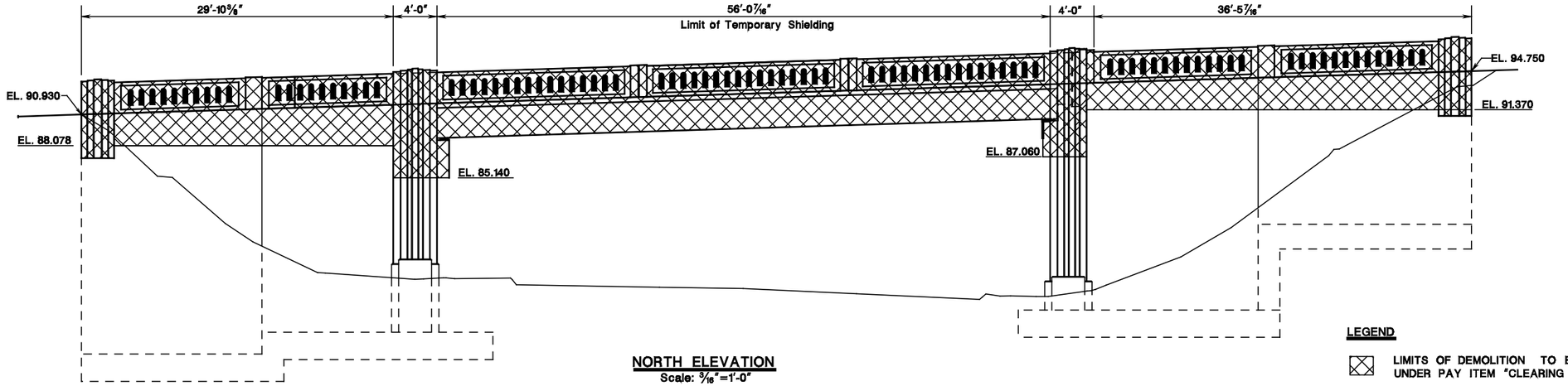
SOUTH ELEVATION
Scale: 3/16"=1'-0"

DEMOLITION NOTES :

1. The information presented hereon is for information purpose only and is not guaranteed to be correct. Bidders shall visit the site before submitting bids to ascertain the extent of work.
2. The contractor is alerted to the fact that there are utilities in this area. The utilities have been located on the contract drawings using the most up-to-date available information. This does not relieve the contractor from the responsibility of contacting the utility agencies and accurately locating all the utilities which may interfere with the construction of this project prior to the start of any work. The contractor shall include all the locations of the utilities on any applicable working drawings.
3. The removal of the existing bridge shall be paid under the pay item "Clearing Site, Bridge (_____)".
4. Temporary shielding shall be provided as directed by the RE to prevent debris from falling on the roadway traffic, paid under the pay item " Temporary shieling ".
5. Work this sheet with Sheet No. B__.
6. Prior to beginning a partial demolition of any structural element a ½" deep Saw cut shall be made first along all edges adjacent to concrete to remain.

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
201039P	TEMPORARY SHIELDING	LS	LUMP SUM
'	"	'	'



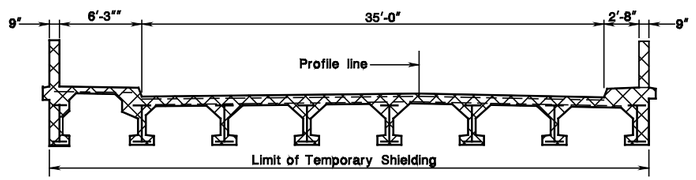
NORTH ELEVATION
Scale: 3/16"=1'-0"

LEGEND

LIMITS OF DEMOLITION TO BE INCLUDED UNDER PAY ITEM "CLEARING SITE, BRIDGE (_____)"

DEMOLITON QUANTITIES - FOR INFORMATION ONLY

DESCRIPTION	UNIT	CONTRACT QUANTITY
CONCRETE BRIDGE DECK	CY	77
CONCRETE BRIDGE PARAPET	LF	172
CONCRETE RETAINING WALLS	CY	19
CONCRETE ABUTMENT	CY	14
ENCASEMENT CONCRETE	CY	36
STRUCTURAL STEEL	LBS	92,512
'	'	'
'	'	'



EXISTING TYPICAL SECTION
Scale: 3/16"=1'-0"

1' 0 5' 10'
3/16"=1'-0"

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			
IN CHARGE OF			

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

DEMOLITION PLAN NO. 1

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

SCALE : AS SHOWN

BRIDGE SHEET NO. B6 OF B21

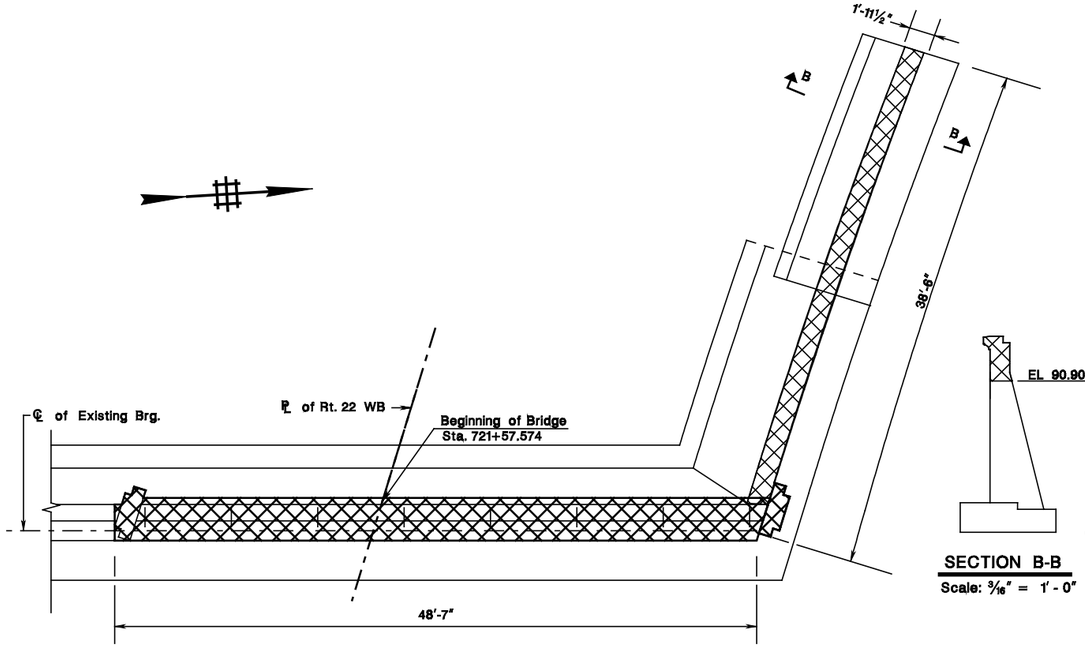
55

ROUTE OF ORIGINAL SHEET
ID=TPKORIAS date=25-FEB-2009 19:25 scale=0.178293:1.000000 pen table=\\Bridgetrax\vtaystaxs\NJDOT\WS\Projects\NJDOTBag\Splot\ITEM\Xtra-Roadway\bridge.tbl
file=

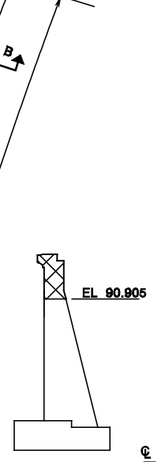
STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			

NOTES :

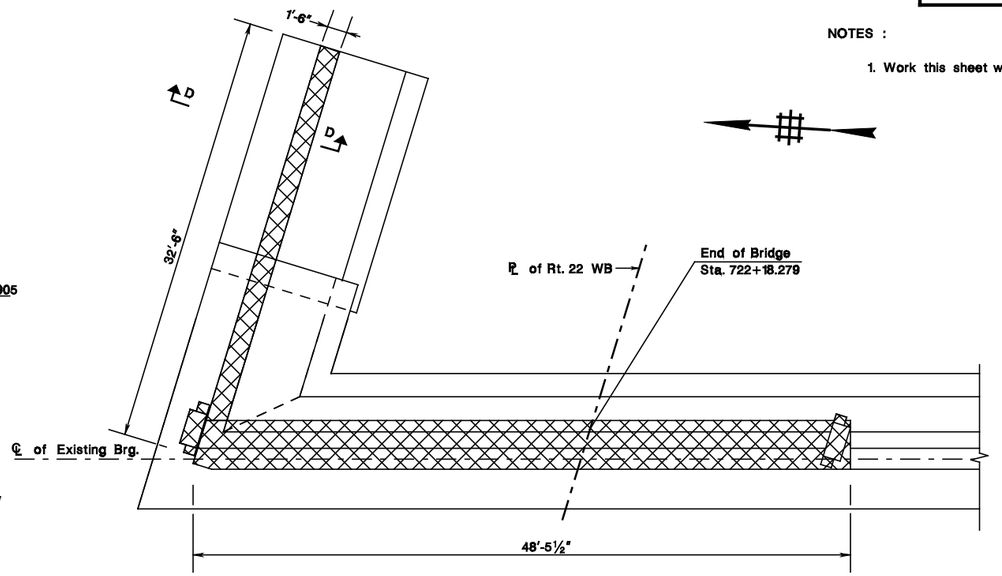
1. Work this sheet with Sheet No. B__.



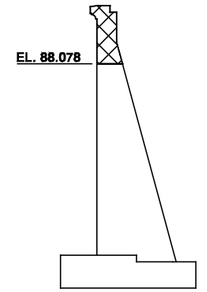
PLAN - WEST ABUTMENT
Scale: 3/16" = 1' - 0"



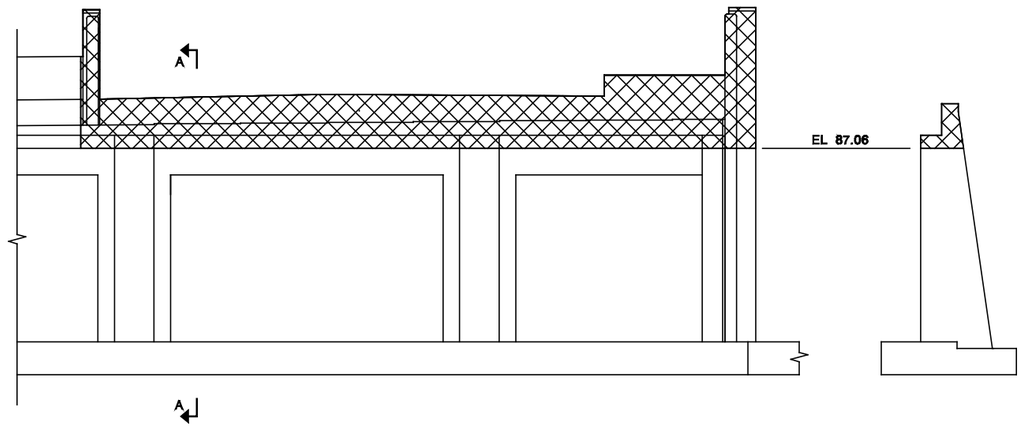
SECTION B-B
Scale: 3/16" = 1' - 0"



PLAN - EAST ABUTMENT
Scale: 3/16" = 1' - 0"

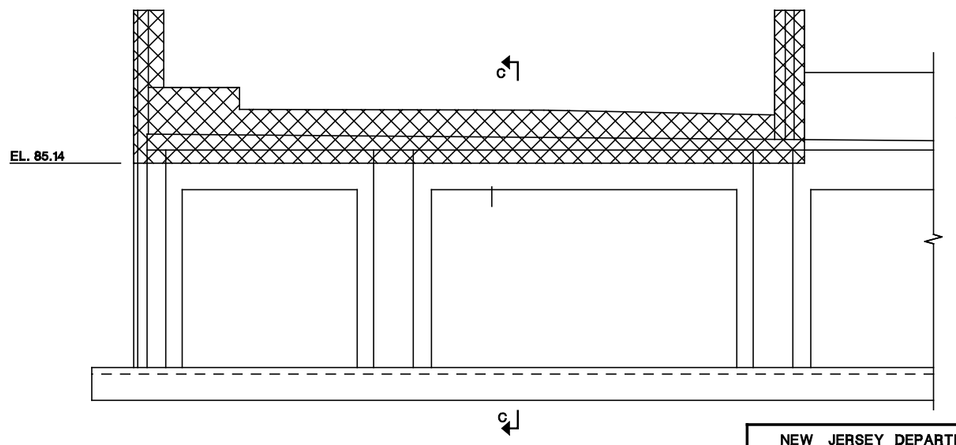


SECTION D-D
Scale: 3/16" = 1' - 0"

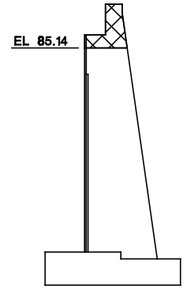


ELEVATION - WEST ABUTMENT
(LOOKING WEST)
Scale: 3/16" = 1' - 0"

SECTION A-A
Scale: 3/16" = 1' - 0"



ELEVATION - EAST ABUTMENT
(LOOKING EAST)



SECTION C-C
Scale: 3/16" = 1' - 0"

LEGEND

LIMITS OF DEMOLITION TO BE INCLUDED UNDER PAY ITEM "CLEARING SITE, BRIDGE (_____)"

1' 0 5' 10'
3/16"=1'-0"

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

DEMOLITION PLAN NO. 2

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

SCALE : AS SHOWN

BRIDGE SHEET NO. B7 OF B21

56

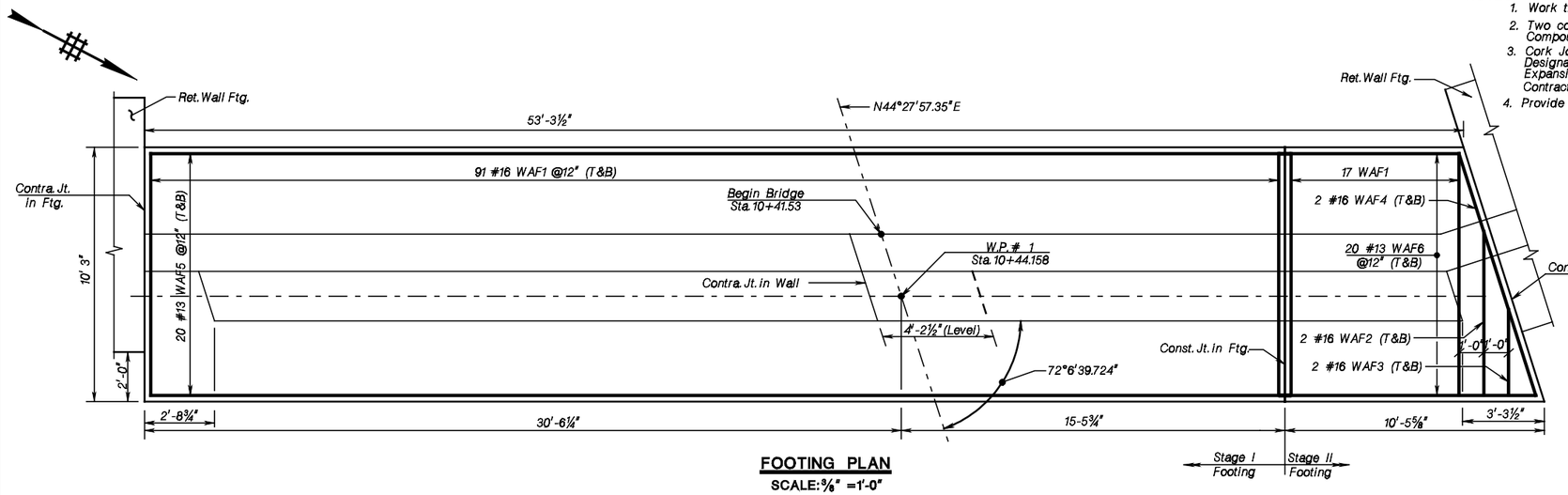
RD/CONT.NO. - ORIGINAL - SHEET

ID=1?X3CE1A5 date=25-FEB-2009 19:25 scale=0.?9293:1.000000 join tables= \\Nbdgsrvw\designmstr\NJDOTWS\Projects\NJDOTMsg\Xplot\?ITEA-\Xcns-Roadway_bridge.tbl
file=

NOTES:

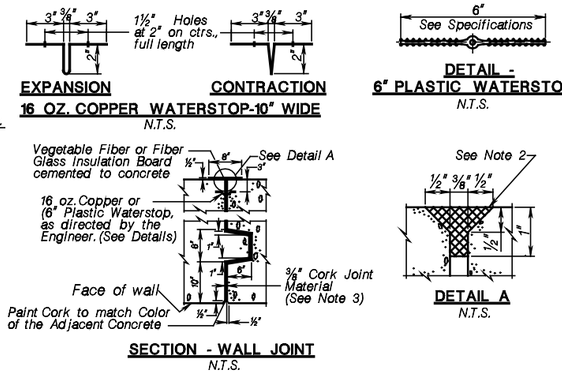
1. Work this Sheet with Sheets No. B_....
2. Two component, Rubber Type, Cold-applied Joint Sealing Compound or an approved equal, as per Specifications.
3. Cork Joint Material: conforming to AASHTO Specifications, Designation M 153, Type 2, where joint is noted as Expansion Joint. Contraction Joints shall be tight and Paraffin coated.
4. Provide Geotextile Filter Fabric around Course Aggregate.

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			



FOOTING PLAN

SCALE: ⅜" =1'-0"



EXPANSION **CONTRACTION**

16 OZ. COPPER WATERSTOP-10" WIDE

N.T.S.

DETAIL - 6" PLASTIC WATERSTOP

N.T.S.

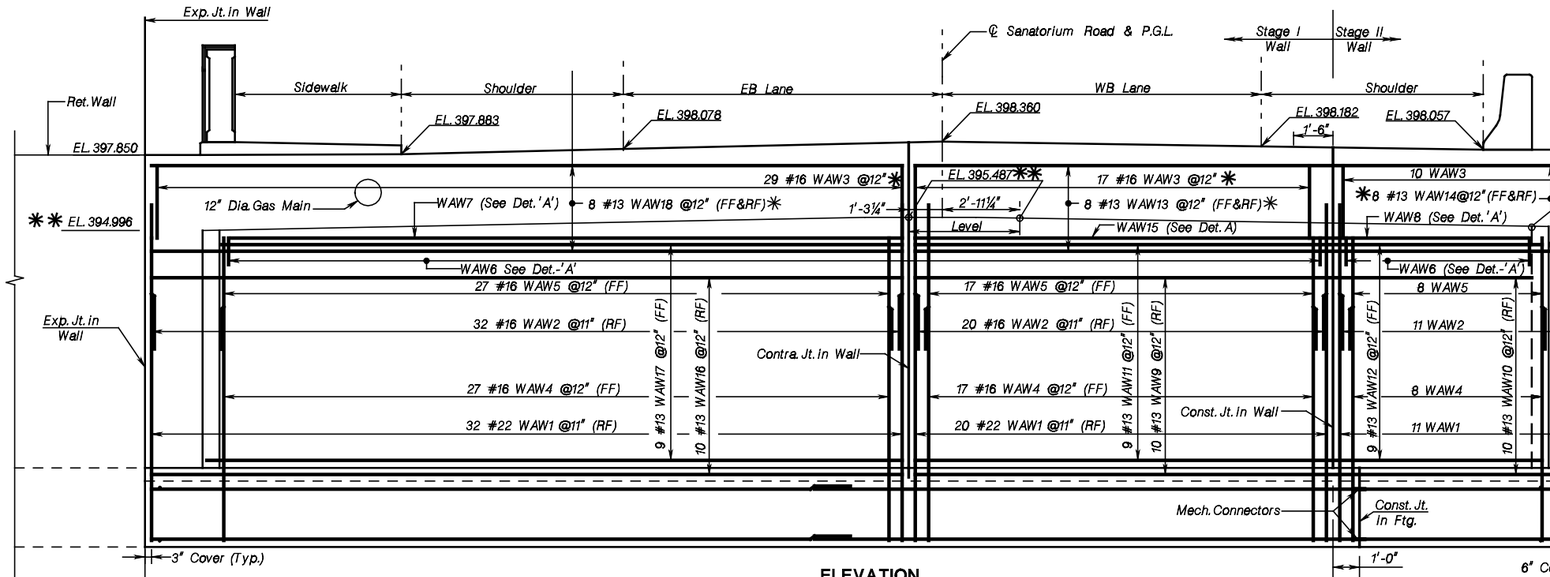
DETAIL A

N.T.S.

SECTION - WALL JOINT

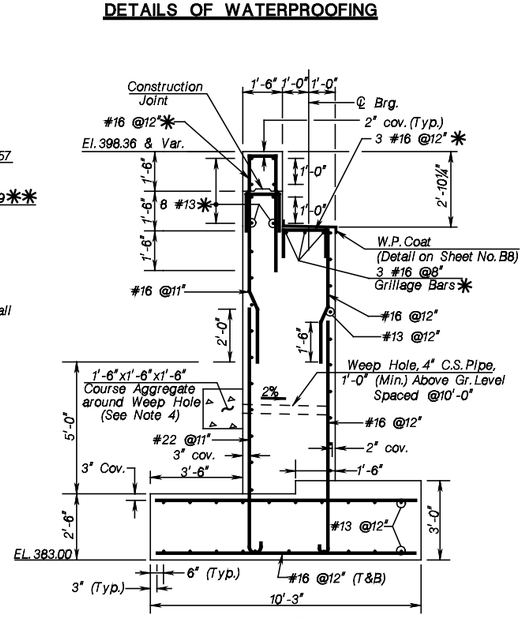
N.T.S.

DETAILS OF WATERPROOFING



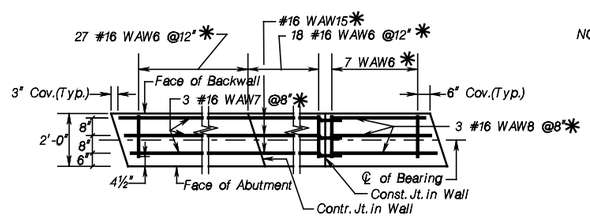
ELEVATION

SCALE: ⅜"=1'-0"



SECTION

SCALE: ⅜"=1'-0"



GRILLAGE BAR DETAIL "A"

SCALE: ⅜"=1'-0"

NOTES:

* Bars Shall be Epoxy-Coated
** Elevation shown along Front face of Backwall.

QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
504015P	CONCRETE FOOTING	CY	60
504024P	CONCRETE ABUTMENT WALL	CY	100
504003P	REINFORCEMENT STEEL	LBS	5,350
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LBS	1,200
504036P	EPOXY WATERPROOFING	SY	20

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			
IN CHARGE OF			

1' 0 2' 4'
⅜"=1'-0

REVISION	BY	CK'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

WEST ABUTMENT

ROUTE : CONTRACT NO. :

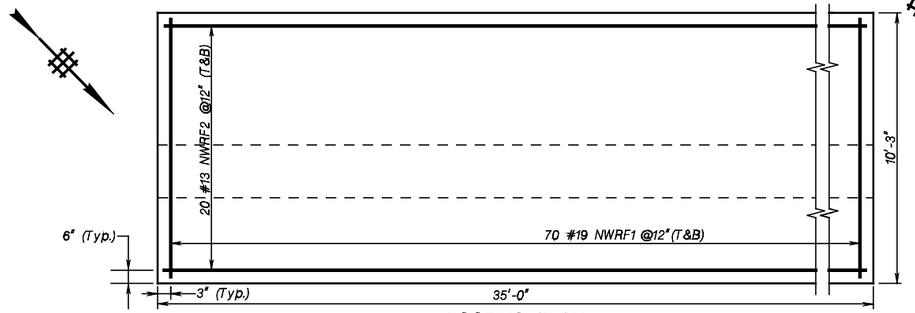
MUNICIPALITY COUNTY

SCALE : AS SHOWN

BRIDGE SHEET NO. B8 OF B21

57

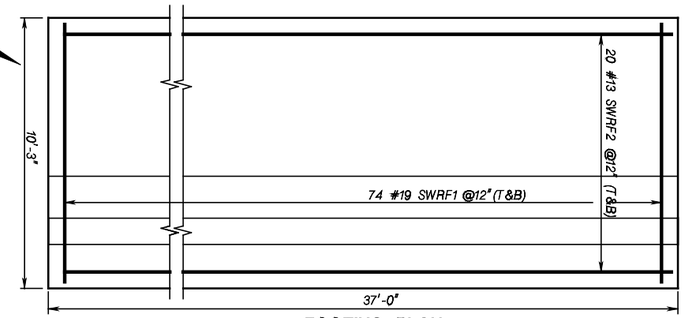
ROCKTAPE - ORIGINAL SHEET
date=25-FEB-2009 19:25
scale=0.179299:1.000000
pen table=\\Bdnpfnvs\vfsystem\NJDOTWIN\Projects\NJDOTBag\Upld\TSSLa\Xtra-Roadway\bridge.tbl
ID=TPXCHEAS
file=



FOOTING PLAN

NORTHWEST RETAINING WALL

SCALE: 3/8"=1'-0"



FOOTING PLAN

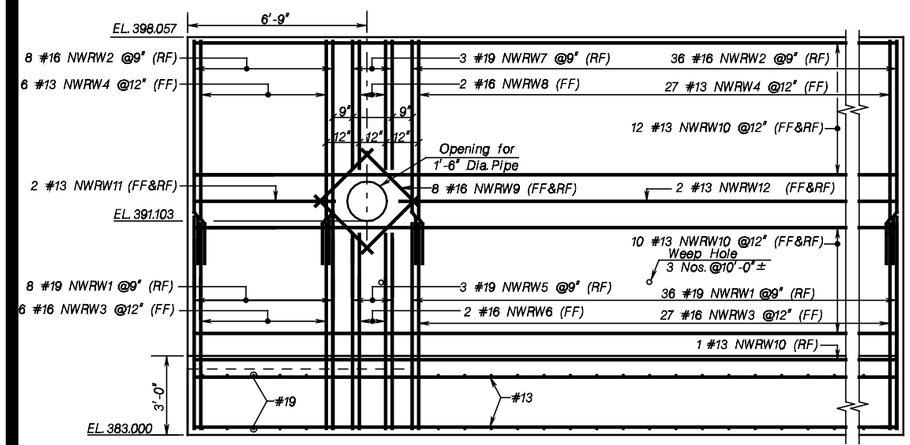
SOUTHWEST RETAINING WALL

SCALE: 3/8"=1'-0"

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			

NOTES:

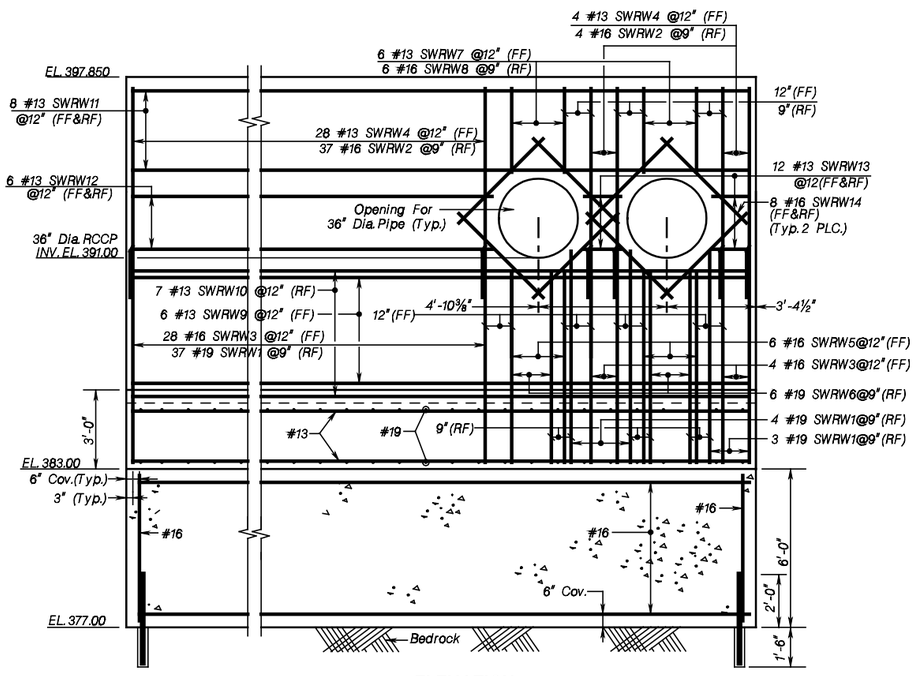
1. Work this Sheet with Sheet No. B__.
2. Provide Geotextile Filter Fabric around Course Aggregate.
3. The cost of drilling and grouting the dowels into the bedrock to be included under pay item _____.
4. Core drill 2" (min.) Dia. holes in bedrock and epoxy grout after installing dowels.



ELEVATION

NORTHWEST RETAINING WALL

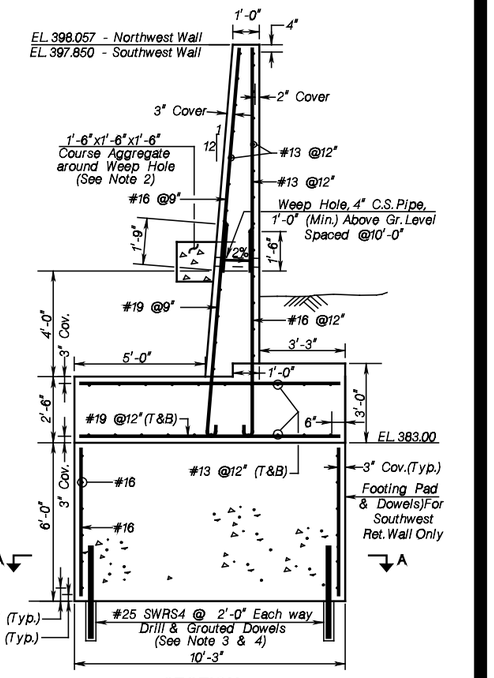
SCALE: 3/8"=1'-0"



ELEVATION

SOUTHWEST RETAINING WALL

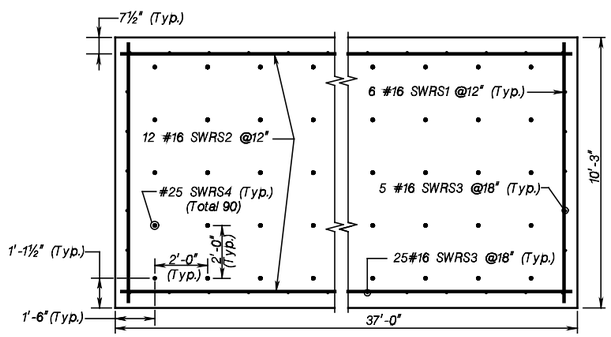
SCALE: 3/8"=1'-0"



SECTION

NORTHWEST AND SOUTHWEST RETAINING WALLS

SCALE: 3/8" = 1'-0"



FOOTING PAD PLAN (SECT. A-A)

SOUTHWEST RETAINING WALL

SCALE: 3/8"=1'-0"

QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
504015P	CONCRETE FOOTING	CY	80
504018P	CONCRETE WING WALL	CY	50
504003P	REINFORCEMENT STEEL	LBS	9,050
"	"	"	"
"	"	"	"

1' 0 2' 4'

3/8"=1'-0

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

NORTHWEST & SOUTHWEST RETAINING WALLS

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

SCALE : AS SHOWN

BRIDGE SHEET NO. B9 OF B21

58

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

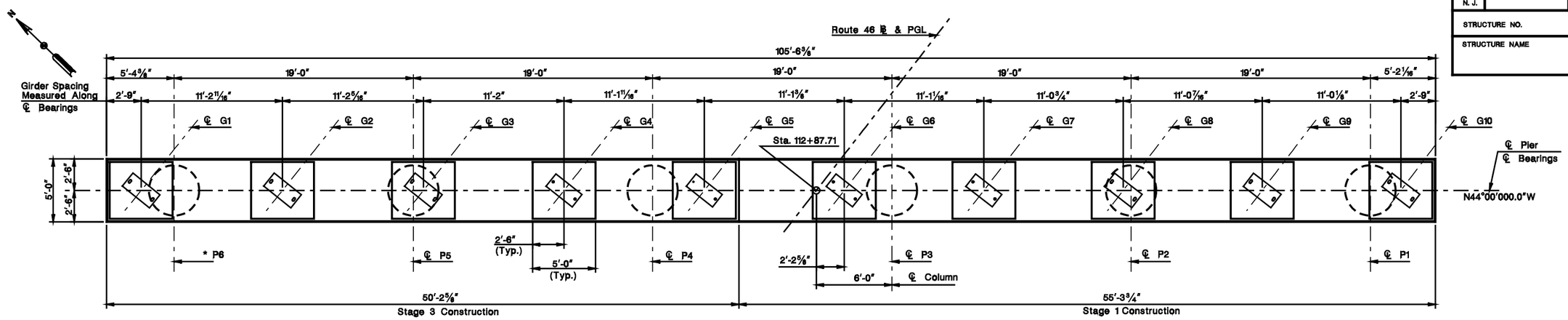
RECOMMENDED - ORIGINAL SHEET

pen table= \\Mdotpwv\wsystem\MDOT\WS\Projects\MDOTBag\plot\TSEd\Nov-Standard\plotdge.tbl
scale=0.779283:1.000000
date=25-FEB-2009 19:26
ID=TPEKOSAS
file=

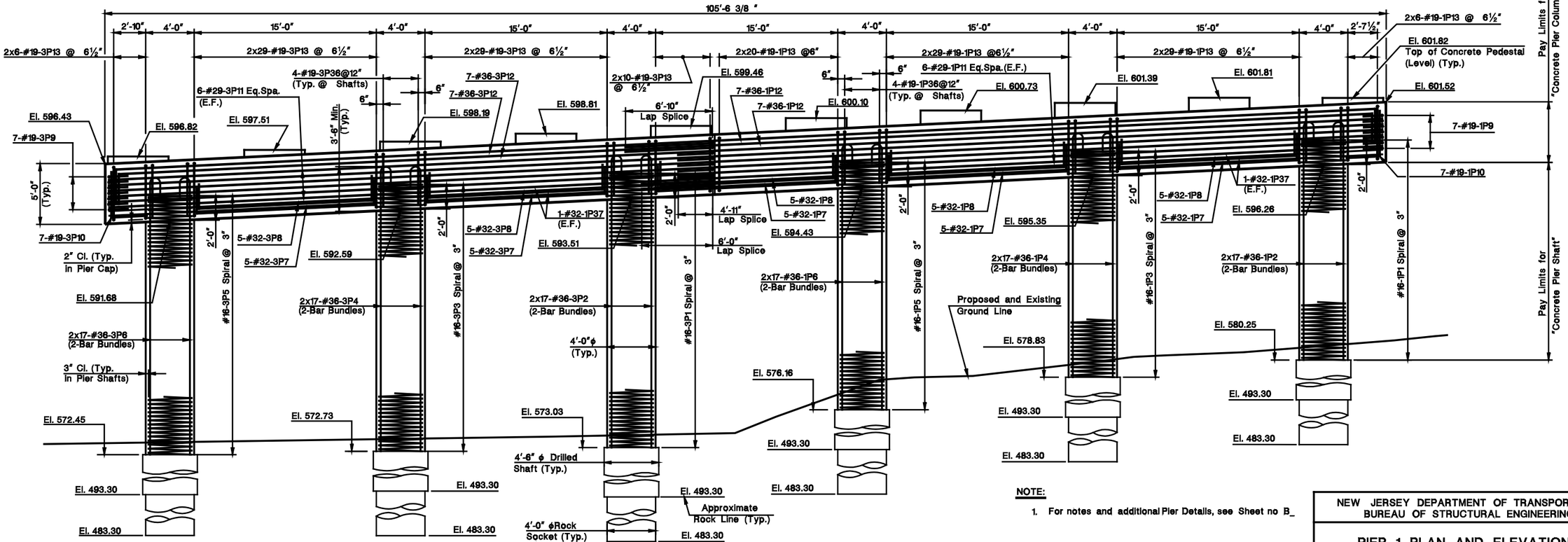
STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

STRUCTURE NAME



PLAN
Scale: ¼"=1'-0"



ELEVATION
Scale: ¼"=1'-0"

NOTE:

1. For notes and additional Pier Details, see Sheet no B_

QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
504003P	Reinforcement Steel	LBS	84,000
504027P	Concrete Pier Columns and Caps	CY	104
504036P	Epoxy Waterproofing	SY	90
504030P	Concrete Pier Shaft	CY	52

1' 0 4' 8'
¼" = 1'-0"

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY			
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

BDC07-05 - ORIGINAL SHEET

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

PIER 1 PLAN AND ELEVATION

ROUTE : CONTRACT NO. :

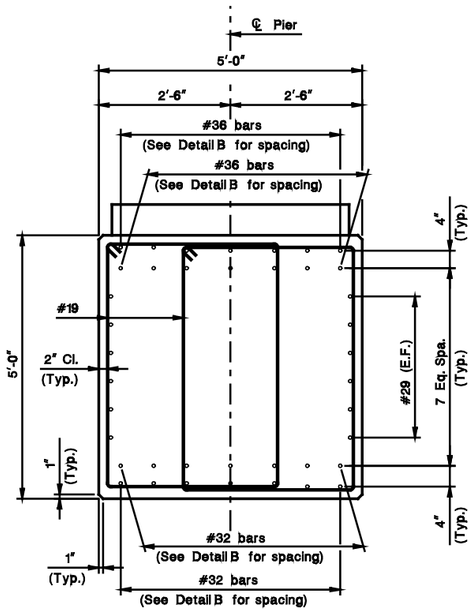
MUNICIPALITY COUNTY

SCALE : AS SHOWN

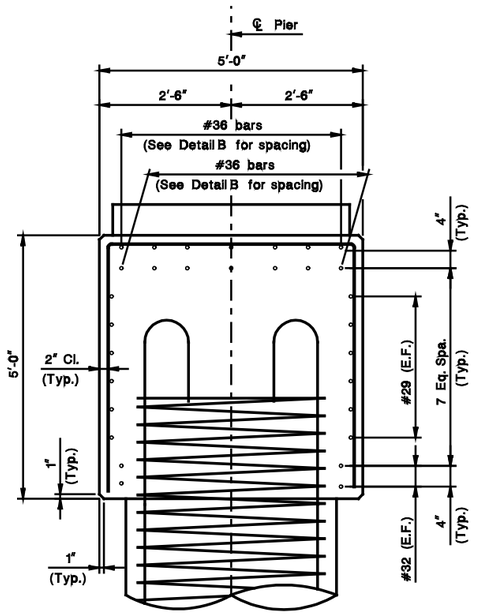
BRIDGE SHEET NO. B10 OF B21

59

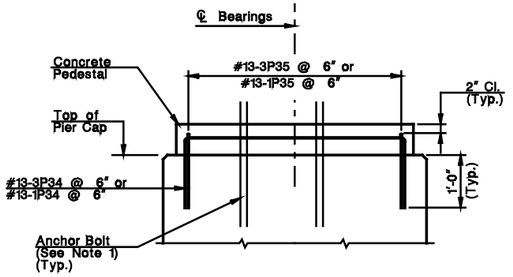
pen table= \\Nj4dcgpfvw1\vkeystone\1\DOT\WS\Projects\1\DOT\Bag\Plot\TRLA\Non-Roadway\unidgn.tbl
scale=0.779283:1.000000
date=25-FEB-2009 19:26
ID=TPXCHEA3
file=



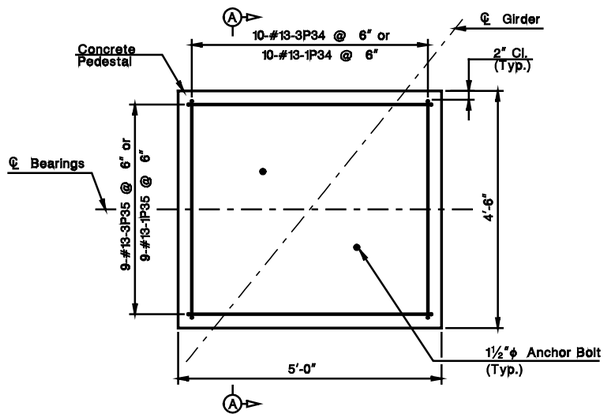
PIER CAP CROSS SECTION
Scale: 3/4" = 1'-0"



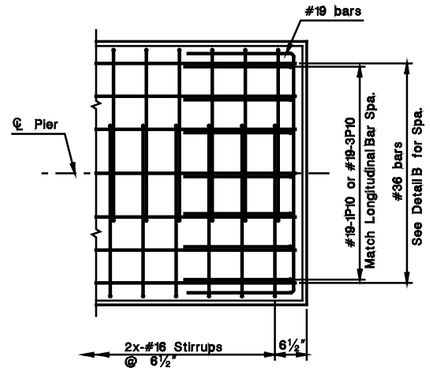
PIER CAP CROSS SECTION
AT COLUMN
Scale: 3/4" = 1'-0"



SECTION A-A
N.T.S.



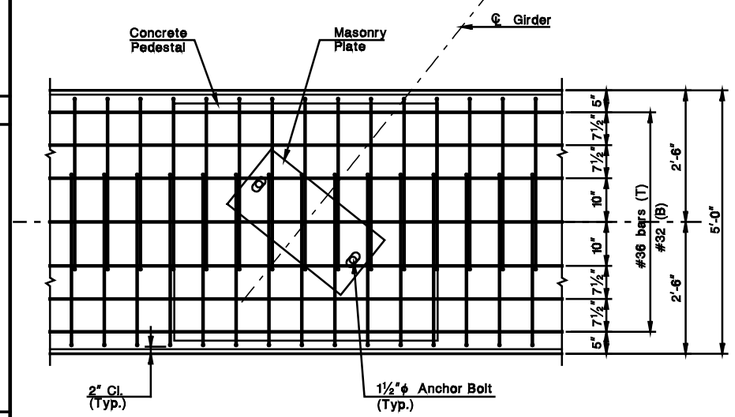
TYPICAL GRILLAGE
REINFORCEMENT PLAN
N.T.S.



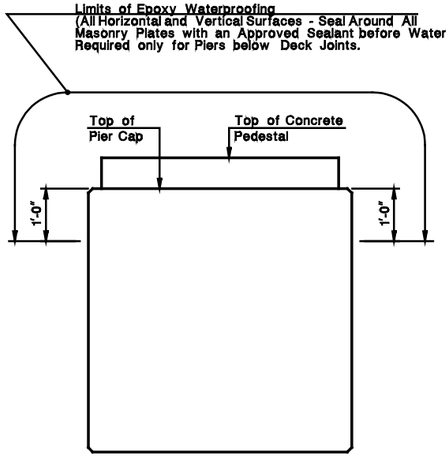
TYPICAL PIER CAP END
REINFORCEMENT LAYOUT
Scale: 3/4" = 1'-0"

NOTES:

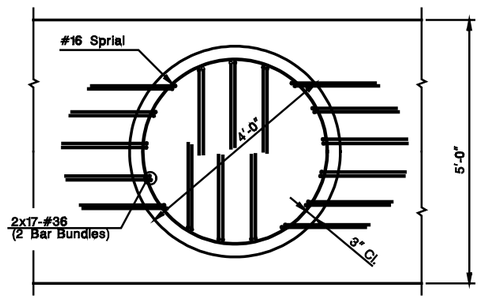
1. Anchor bolts shall be set in place prior to pouring cast-in-place concrete pier cap. Adjust placement of pedestal reinforcement to avoid anchor bolts
2. For bearing details, see Dwgs. No. B_.
3. For drilled shaft and rock socket details and pay item limits, see Dwg. No. B_.
4. Pier shaft vertical reinforcement is continuous with reinforcement in drilled shaft. Reinforcement in drilled shaft shall be paid for under corresponding drilled shaft item, as shown on Dwg. No. B_.
5. Rebar splices are not permitted in the pier shafts above ground level and shall only be made within the drilled shaft, as specified on Dwg. No. B_.
6. Mechanical couplers may be used in lieu of lap splices in the pier caps, at no additional cost to the state. Couplers shall be staggered at 24 inches minimum and shall develop at least 125% of specified yield strength of the bar.
7. All concrete in pier caps, columns, and pedestals shall be Class A, with a design compressive strength of 4000 psi.



DETAIL B
Scale: 3/4" = 1'-0"



TYPICAL SECTION
THROUGH PIER CAP
N.T.S.



PIER COLUMN TO CAP CONNECTION
PLAN VIEW
N.T.S.

1' 6" 0 1' 2'
3/4" = 1'-0"

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

STRUCTURE NAME

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

BDC07-05 - ORIGINAL SHEET

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

PIER SECTIONS & DETAILS

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

REVISION	BY	C'K'D	DATE

SCALE : AS SHOWN

BRIDGE SHEET NO. B11 OF B21

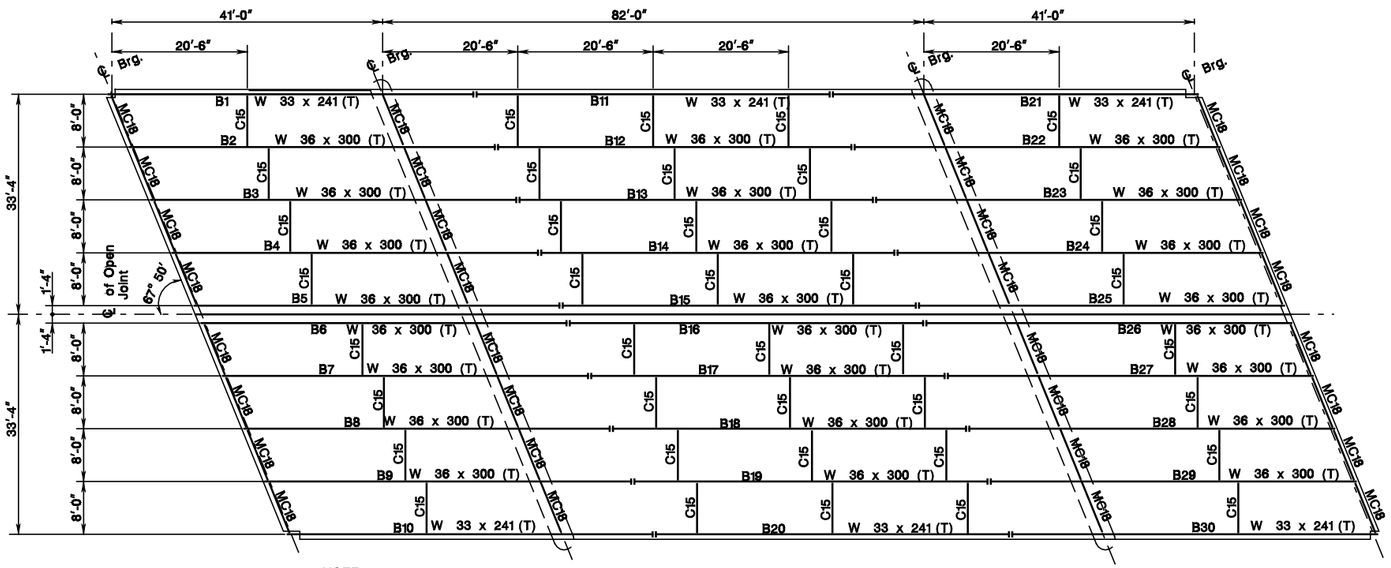
60

pen table=\\Widgetnet\Widgetnet\NJDOT2k8\pltbl\TitleA Non-Roadway Untitled.tbl
scale=0.779283:1.000000
date=25-FEB-2009 19:27
ID=TYKOKHA3
file=

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

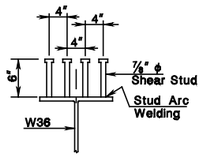
STRUCTURE NAME



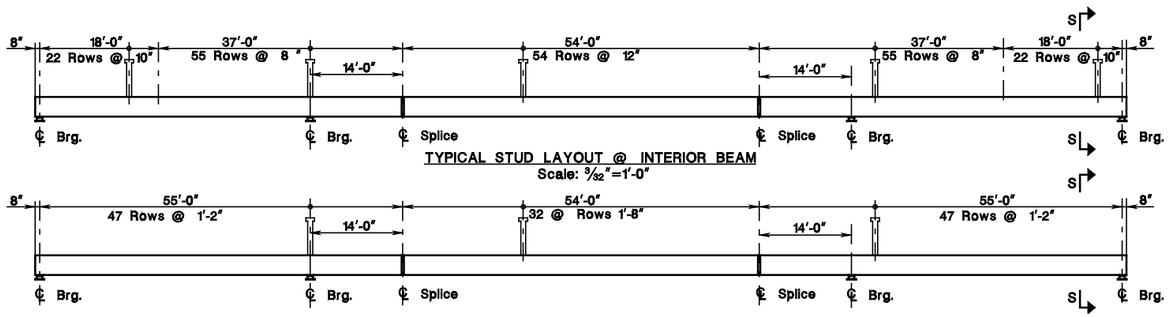
NOTE:
C15 Indicates Diphragm C15 x 33.9
MC18 Indicates End Diphragm C18 x 42.7

FRAMING PLAN
Scale: 3/32"=1'-0"

TOP ELEVATION AT CENTER LINE OF BEAM					
Beam No.	Elevation At ℄ Brg. West Abutment	Elevation At ℄ Brg. West Pier	Beam No.	Elevation At ℄ Brg. East Pier	Elevation At ℄ Brg. East Abutment
B1	174.91	175.16	B21	175.12	174.77
B2	175.14	175.38	B22	175.30	174.94
B3	175.16	175.38	B23	175.28	174.90
B4	175.52	175.68	B24	175.55	175.20
B5	175.54	175.69	B25	175.53	175.16
B6	175.55	175.69	B26	175.52	175.15
B7	175.57	175.69	B27	175.49	175.10
B8	175.25	175.40	B28	175.17	174.73
B9	175.27	175.41	B29	175.15	174.69
B10	175.08	175.20	B30	174.91	174.44



SECTION S-S
N.T.S.



TYPICAL STUD LAYOUT @ INTERIOR BEAM
Scale: 3/32"=1'-0"

NOTE:
1. Superstructure Steel: AASHTO M270, Grade 50W with supplementary requirements for Charpy V-Notch Toughness for all member components marked (T).
2. All field connections shall be made with AASHTO M253.
3. All bolted connections shall be Slip-Critical connections in accordance with The current AASHTO LRFD Bridge Design Specifications. Contact surface for bolted parts shall be Class B in accordance with AASHTO LRFD table 6.13.2.8-3.
4. Shear connectors shall be in accordance with AASHTO M169.
5. Shear connectors may be moved to clear field splice plates, provided the total number of shear connectors remain unchanged.
6. Work this drawing with drawing entitled "Steel Details".
7. All Steel Girders shall be painted within 9 ft. of girder ends. This shall include Diaphragms within 9 ft. of girder ends.
The Top Coat Color shall be FED-STD-595B BROWN Color Chip 30111.

QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
506003P	STRUCTURAL STEEL	LS	LS
506012P	SHEAR CONNECTOR	UNIT	7670

1' 6" 0 1' 2'
3/4"=1'-0

10 5' 10' 15' 20'
3/32"= 1'-0

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

FRAMING PLAN

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

REVISION	BY	C'K'D	DATE

SCALE : AS SHOWN

BRIDGE SHEET NO. B12 OF B21

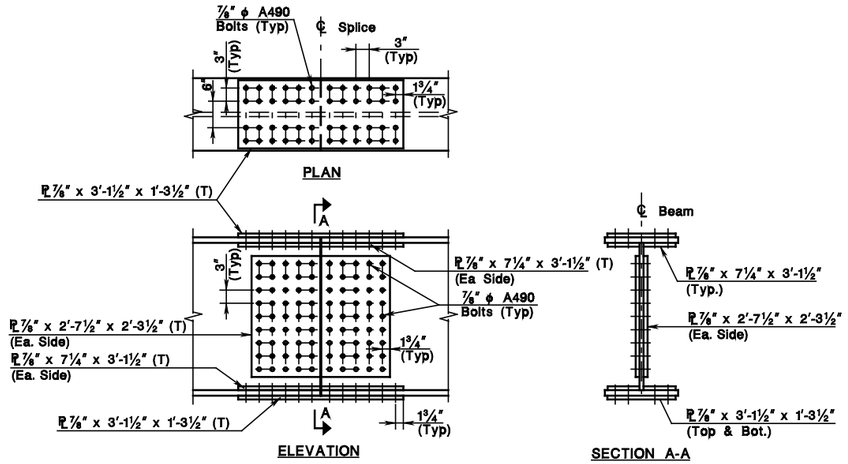
61

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY			
EST. BY		CHK. BY	
SPECS. BY			

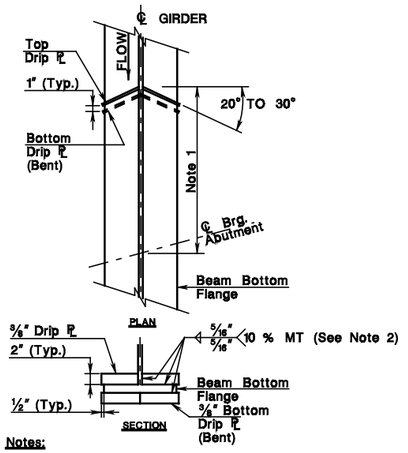
IN CHARGE OF

ACCEPTABLE - ORIGINAL SHEET

plan tables=\\Widotpfnw\w9system\NJDOT\W9\Projects\NJDOTBag\plan\[TBLA
date=25-FEB-2009 19:27
scale=0.792393:1.000000
ID=TPXOH1A3
file=

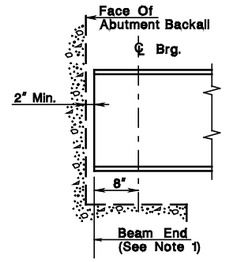


TYPICAL BEAM SPLICE DETAIL
Scale: ¾"=1'-0"



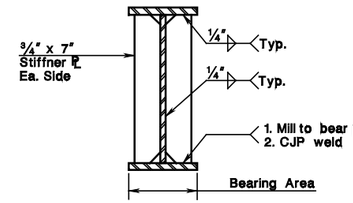
Notes:
1. Drip plates shall be located at a distance that ensures no runoff on substructure.
2. The drip plates shall be clipped to clear the web/flange weld.

DRIP PLATE DETAIL
@ West Abutment Only
N.T.S.

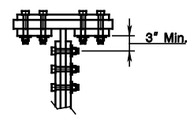


NOTES:
1. Beam ends and bearing stiffeners shall be normal to flange.

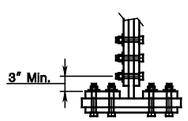
TYPICAL BEAM END CLEARANCE
N.T.S.



BEARING STIFFENERS
N.T.S.

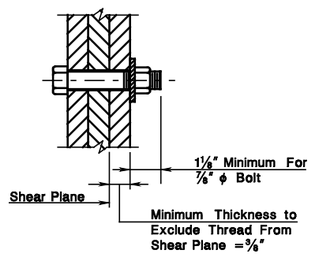


TOP FLANGE



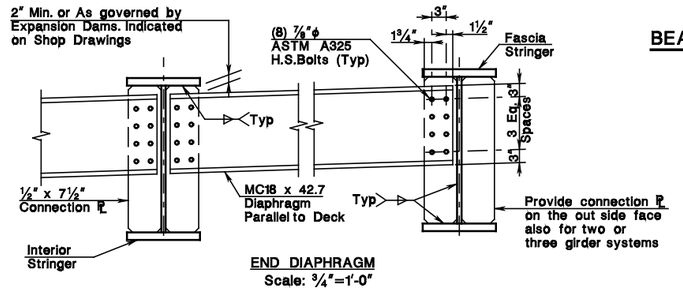
BOTTOM FLANGE

⅞" DIAMETER BOLT ENTERING AND TIGHTENING CLEARANCES

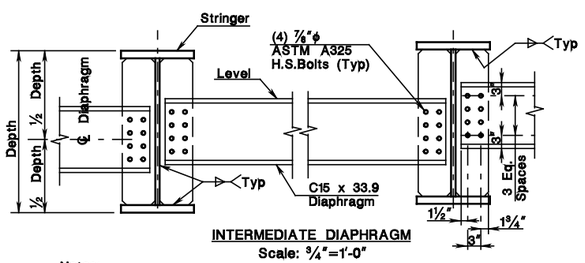


BOLT SHEAR PLANE
Minimum Plate Thickness is ⅜".

NOTE:
Based on 1½" Thread Length For ⅞" ϕ Bolt



END DIAPHRAGM
Scale: ¾"=1'-0"



INTERMEDIATE DIAPHRAGM
Scale: ¾"=1'-0"

Notes:
1. 1⅛" ϕ holes in connection PL, ⅞" ϕ holes in connecting member for ⅞" ϕ AASHTO M164 bolts. Standard size holes are permitted.
2. Use ⅞" ϕ AASHTO M164 bolts having an unthreaded shank of sufficient length to not allow any threads to exist in the plane between the two connected parts (shear plane).

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

STEEL DETAILS

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

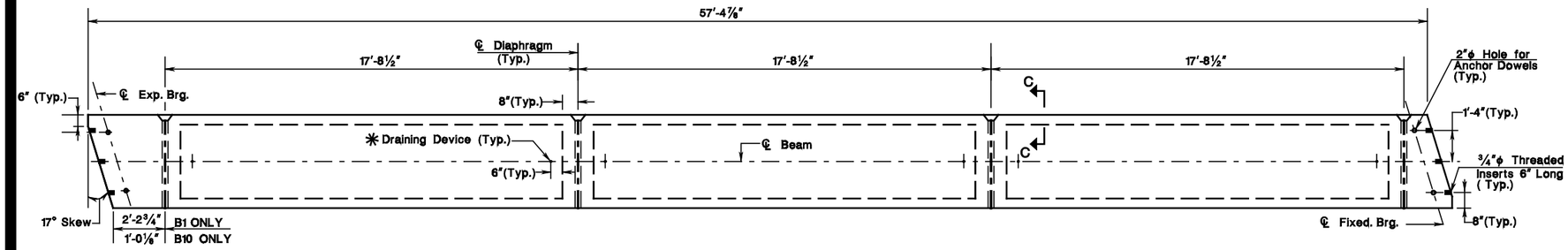
SCALE : AS SHOWN

BRIDGE SHEET NO. B13 OF B21

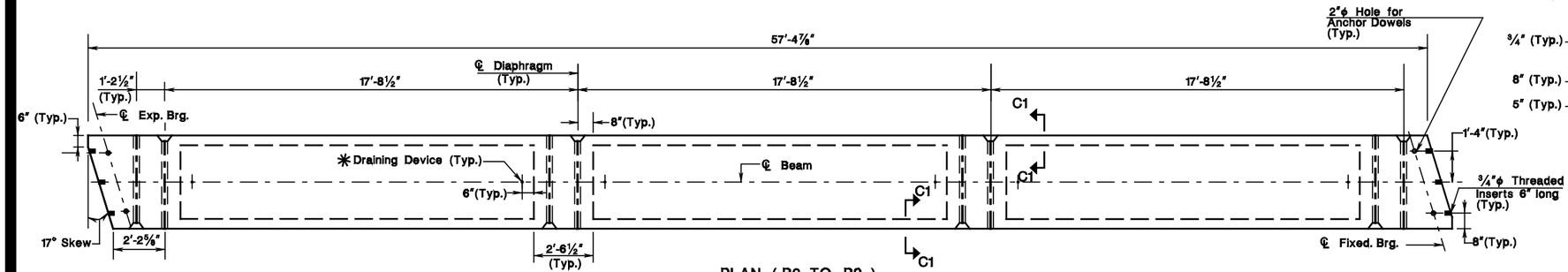
62

BIDDIST A1 ORIGINAL SHEET
ID=72920A3 date=25-FEB-2009 19:28 scale=0.179293:1.000000 plan table=\\Nj4sdgdrive\v4systems\NJDOT\WS\Projects\NJDOT\Bag\Splot\STEEL\Vcon-Roadway\bridge.tbl
file=

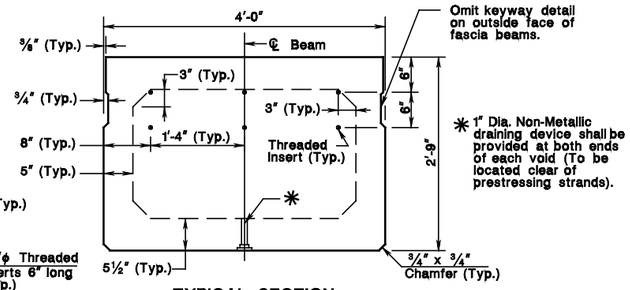
STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME			



PLAN (B1& B10)
Scale: ⅜" = 1'-0"



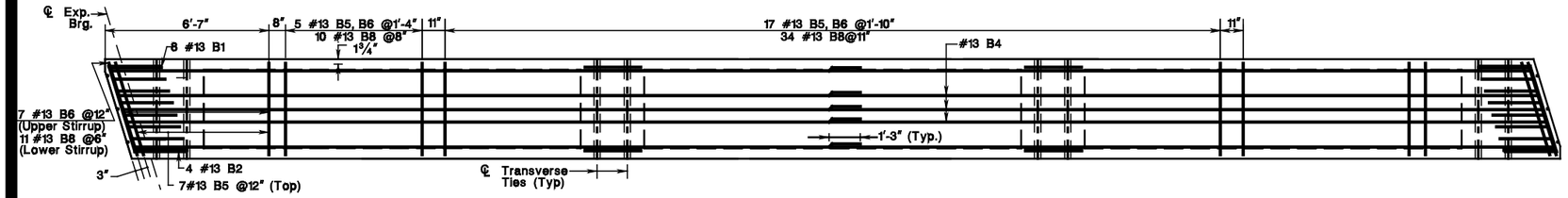
PLAN (B2 TO B9)
Scale: ⅜" = 1'-0"



TYPICAL SECTION
Scale: 1" = 1'-0"

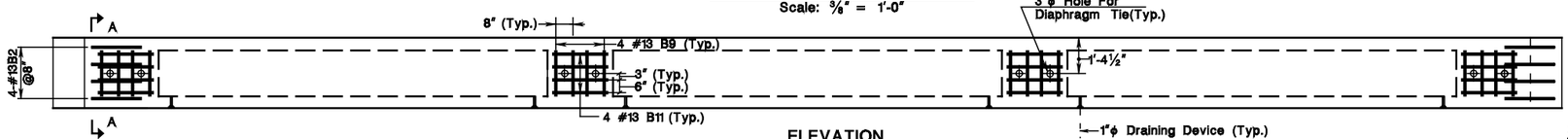
NOTES:

1. Threaded Inserts shall be provided for #16 bars at both ends. (See Section B-B, Bridge Sheet No.__) The cost shall be included in the Pay Item "Prestessed Concrete Box Beams (Type BII -48) , 48" x 33" ".
2. Contractor shall insure that holes for transverse tie rod line up after erection. See Bridge Sheet No. B__

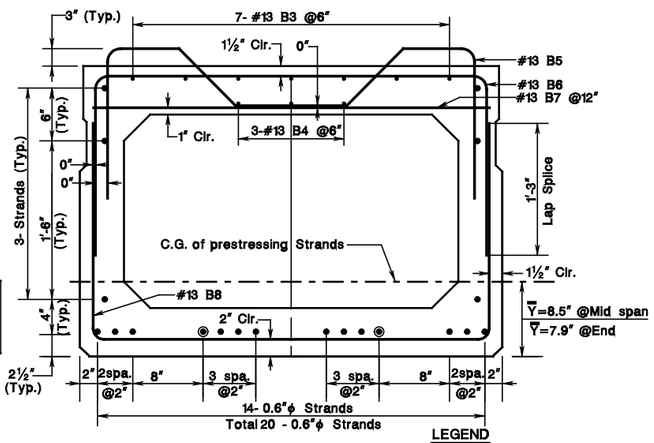


NOTE: B5 & B6 Shall be Staggered

PLAN-REINFORCEMENT DETAIL
Scale: ⅜" = 1'-0"



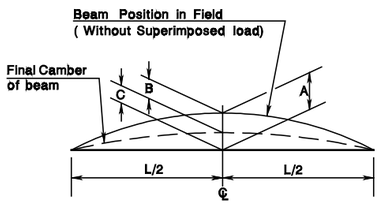
ELEVATION
Scale: ⅜" = 1'-0"



REINFORCEMENT DETAIL
Scale: 1½" = 1'-0"

LEGEND

- • STRANDS
- ◉ DEBONDED STRANDS, L=10'-0" @ BOTH ENDS
- • REBARS

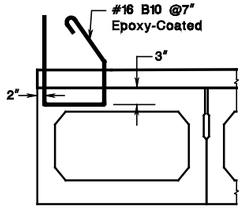


CAMBER DIAGRAM
N.T.S.

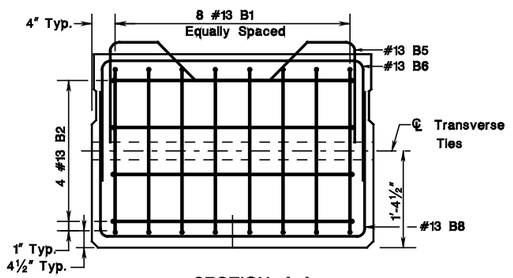
A = 0.3094"
B = 0.1167"
C = 0.1927"
L = 56'-0"

A = Estimated prestressed camber minus deflection of beam. (Shall be compared with actual mesured in field at time of Erection & shall be reported to the Engineer.)

B = Deflection due to dead load of slab plus secondary dead load (Parapet, Sidewalk etc...).



FASCIA BEAM -B1
N.T.S.



SECTION A-A
Scale: 1" = 1'-0"

1' 0 2' 4'
⅜"=1'-0

1' 6" 0 1' 2'
1"=1'-0

1' 9" 6" 3" 0 1'
1½"=1'-0

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY			
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

P.C. BOX BEAM DETAILS

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

SCALE : AS SHOWN

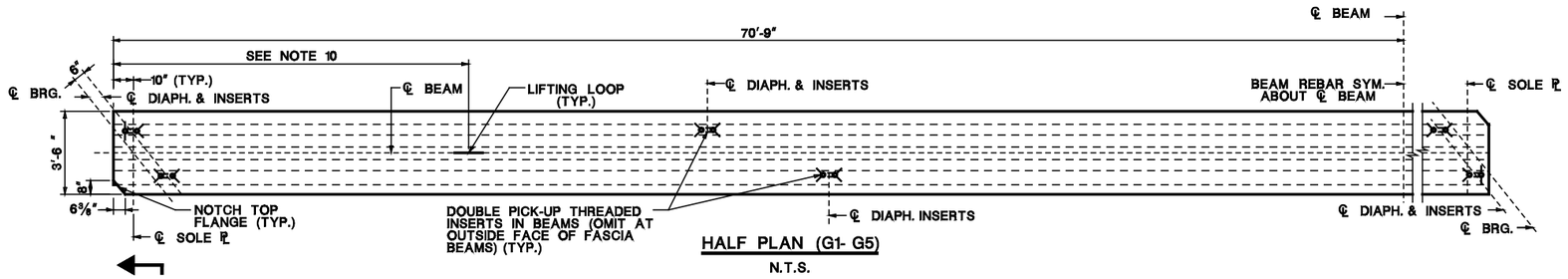
BRIDGE SHEET NO. B14 OF B21

63

ID=TPXCBEA3 date=25-FEB-2009 19:28 scale=0.792393:1.000000 pen table=\\Bdcgnfvw\e$\system\NJDOT\V8i\Projects\NJDOTV8i\Projects\NJDOTBag\bjurk\TBEA\Non-Roadway\bridge.tbl

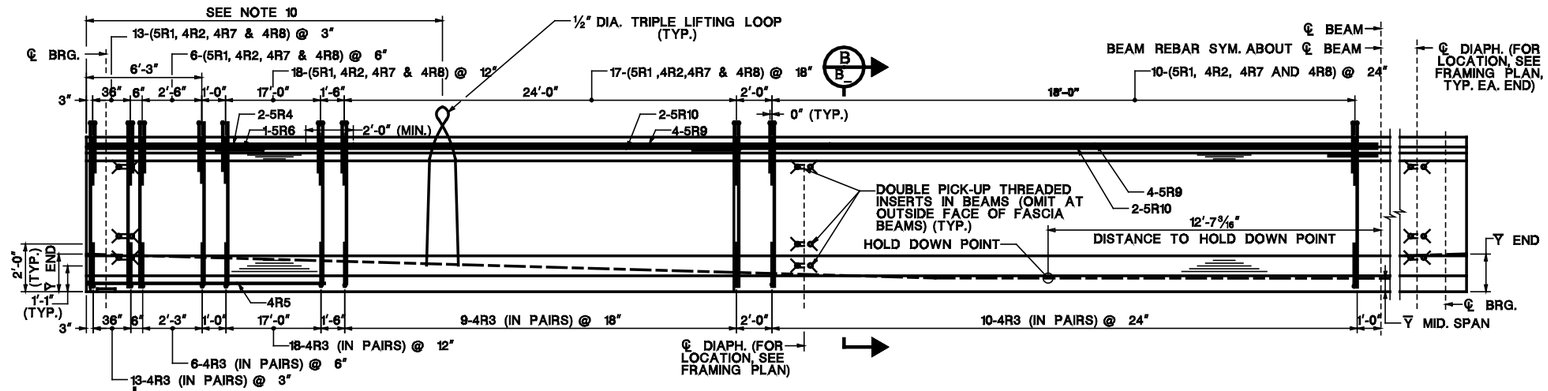
file=

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			



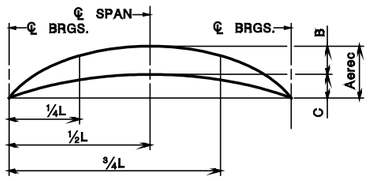
HALF PLAN (G1- G5)

N.T.S.



HALF ELEVATION (G1 - G5)

N.T.S.



CAMBER DIAGRAM

N.T.S.

Arel = ESTIMATED PRESTRESS CAMBER AT RELEASE LESS Δ DUE TO D.L. OF BM

Aerec = ESTIMATED PRESTRESS CAMBER AT RELEASE LESS Δ DUE TO D.L. X CREEP FACTOR C = 1.5

B = Δ DUE TO D.L. OF SLAB, FORMS, PARAPET, DIAPHRAGMS, AND FUTURE PAVING

C = NET FINAL CAMBER (Aerec - B)

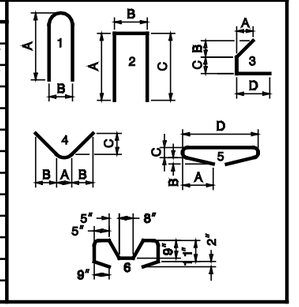
ESTIMATED BEAM CAMBER (INCH)

LOCATION		Arel	Aerec	B	C
G1, G5	¼L	3¼	4⅞	-1⅛	3¾
	½L	4¼	6¼	-1⅝	4¾
	¾L	3¼	4⅞	-1⅛	3¾
G2, G3, G4	¼L	3¼	4⅞	-1⅜	3½
	½L	4¼	6¼	-2	4⅜
	¾L	3¼	4⅞	-1⅜	3½

POSITIVE VALUE INDICATES UPWARD DEFLECTION.

SCHEDULE OF MILD STEEL REINFORCEMENT

No.	MARK	SIZE	LENGTH	TYPE	A	B	C	D
128	5R1 *	16	14'-0"	1	6'-9½"	5"	—	—
128	4R2 *	13	6'-10"	5	1'-6"	4"	2½"	3'-3"
256	4R3 *	13	3'-5"	3	11"	11"	6"	1'-7"
4	5R4 *	16	10'-6"	2	9'-0"	1'-6"	—	—
2	4R5 *	13	20'-11½"	2	9'-6"	1'-11½"	9'-6"	—
2	5R6 *	16	21'-0"	2	9'-0"	3'-0"	9'-0"	—
128	4R7 *	13	2'-0"	4	5"	6½"	6½"	—
128	4R8 *	13	6'-7"	6	—	—	—	—
16	5R9 *	16	33'-4"	STR.	—	—	—	—
8	5R10 *	16	37'-10"	STR.	—	—	—	—



* EPOXY BARS

BEAM NO.	∇ MIDSPAN	∇ ENDS	NO. OF STRANDS
G1 - G5	6'-7"	19.46"	56

NOTES:

1. FOR GENERAL NOTES, SEE SH. B__
2. PRESTRESSING STRANDS:
   THE PRESTRESSING STRANDS SHALL BE 0.6 IN. DIA.7-WIRE UNCOATED STEEL STRANDS CONFORMING TO AASHTO M203 (ASTM A416) GRADE 270 AND SHALL BE LOW RELAXATION. EACH STRAND SHALL BE GIVEN AN INITIAL TENSION OF 0.75 f's As, AS SPECIFIED IN APPLICABLE SECTIONS OF PCI DESIGN HANDBOOK PRECAST AND PRESTRESSED CONCRETE, FIFTH EDITION. CONTRACTOR SHALL SUBMIT FOR APPROVAL HIS PROPOSED SEQUENCE OF RELEASING STRANDS. ANY CHANGE IN THE SYSTEM OF PRESTRESSING MUST BE ACCOMPANIED BY COMPLETE CALCULATIONS FOR APPROVAL BY ENGINEER. SHOP DRAWINGS SHALL INCLUDE CALCULATIONS OF PRESTRESS LOSSES FOR THE ENGINEER'S REVIEW AND APPROVAL.
3. CONCRETE DESIGN STRENGTH:
   DESIGN COMPRESSIVE STRENGTH (f'c) = 8,000 PSI, CLASS HPC CONCRETE. COMPRESSIVE STRENGTH OF PRESTRESS (f'ci) = 6,400 PSI.
4. CONCRETE:
   ALL EXPOSED CORNERS SHALL BE CHAMFERED ¾" OR ROUNDED TO ¾" RADIUS. ANGLES OF INTERSECTION BETWEEN WEBS AND FLANGES SHALL BE ROUNDED TO NOT LESS THAN ¾" RADIUS. TOP SURFACE OF BEAMS SHALL BE ROUGHENED TO THE SATISFACTION OF THE ENGINEER. AT APPROXIMATE TIME OF INITIAL SET, ALL LAITANCE SHALL BE REMOVED WITH A STIFF WIRE BRUSH
5. SOLE PLATES:
   SOLE PLATES SHALL CONFORM TO AASHTO M183 AND SHALL CONFORM TO AASHTO M183 AND SHALL BE HOT-DIPPED GALVANIZED AS PER SPECIFICATIONS. COST OF SOLE PLATES SHALL BE INCLUDED IN PRICE BID FOR PRESTRESSED CONCRETE BEAMS.
6. BEAM LENGTHS:
   LENGTHS SHOWN ON DRAWINGS DO NOT INCLUDED EFFECTS OF ELASTIC SHORTENING, CREEP, OR SHRINKAGE. CONTRACTOR SHALL COMPENSATE FOR THE EFFECTS IN COMPUTING CASTING LENGTHS.
7. MILD STEEL REINFORCEMENT:
   REINFORCEMENT BARS SHALL CONFORM TO AASHTO M31, GRADE 60. MINIMUM CLEAR COVER SHALL BE 1½" UNLESS OTHERWISE NOTED.
8. CAMBER AND DEFLECTION:
   THE ERECTION CAMBER Aerec IS AN ESTIMATE OF THE CAMBER AT THE TIME OF GIRDER ERECTION. THE ERECTION CAMBER SHALL BE CHECKED BY THE CONTRACTOR IN THE FIELD TO ESTABLISH PROPER CONCRETE HAUNCH AND DECK ELEVATIONS. DEAD LOAD DEFLECTION INCLUDES THE COMBINED EFFECT OF THE WEIGHT OF SLAB STAY-IN-PLACE FORMS, DIAPHRAGMS, AND SUPERIMPOSED DEAD LOADS.
9. FABRICATION OF PRESTRESSED BEAMS SHALL BE IN ACCORDANCE WITH SECTION 502 OF THE SPECIFICATIONS.
10. LIFTING SYSTEM:
    LIFTING HOOK SIZE AND LOCATION SHALL BE DESIGNED BY THE CONTRACTOR AND SHOWN IN THE SHOP/ERECTION DRAWINGS. LIFTING HOOK SHALL BE DESIGNED WITH A FACTOR OF SAFETY OF 4.0, AND AS SPECIFIED IN APPLICABLE SECTIONS OF PCI PRECAST AND PRESTRESSED CONCRETE HANDBOOK. LIFTING SYSTEM SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW JERSEY. ALL CALCULATIONS AND MATERIAL SPECIFICATIONS SHALL BE INCLUDED WITH THE SHOP DRAWINGS.
11. THE CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS AND DETAILS FOR TEMPORARY SUPPORT OF BEAMS DURING ERECTION. SUBMISSION SHALL BE MADE PRIOR TO OR CONCURRENT WITH BEAM SHOP DRAWINGS. AS A MINIMUM, THE TEMPORARY BRACING SHALL BE LOCATED AT BEARING LOCATION.
12. PAYMENT:
    THE COST OF ALL CONCRETE REINFORCING STEEL, PRESTRESSED STRANDS, MATERIALS EMBEDDED IN THE BEAM CONCRETE, SOLE PLATE ASSEMBLIES, GROUTING ENDS OF BEAMS, TEMPORARY BRACING AND INCIDENTAL ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PRESTRESSED CONCRETE BEAMS.

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY			
SPECS. BY			

IN CHARGE OF

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

78" PRETENSIONED PRESTRESSED CONCRETE BEAMS

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

REVISION	BY	C'K'D	DATE

SCALE : AS SHOWN

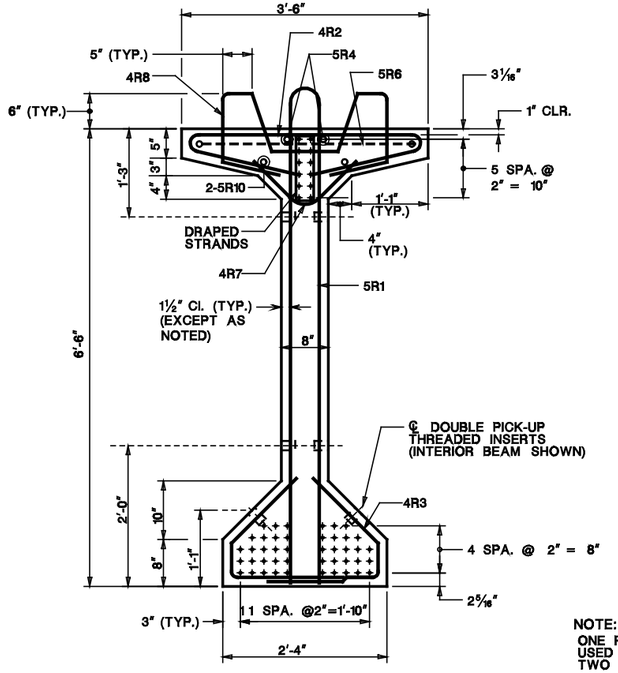
BRIDGE SHEET NO. B15 OF B21

64

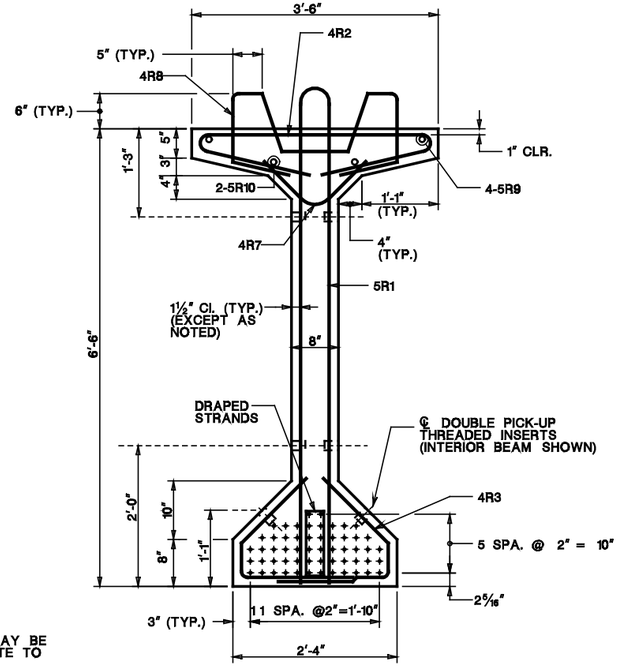
BDC07T-05 - ORIGINAL SHEET

pen table= \\Widepview\v4sysvol\TRLA\Nico-Roadway\Unidgn.tbl
scale= 0.779283:1.000000
date= 25-FEB-2009 19:29
ID= TRKOHEA3
file=

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			



END



MIDSPAN

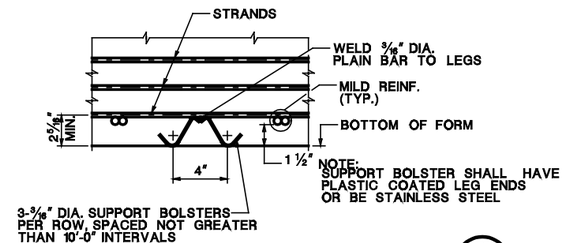
NOTE:
ONE PIECE STIRRUPS MAY BE USED AS AN ALTERNATE TO TWO PIECE STIRRUPS.

SECTION A B_
3/4" = 1'-0"

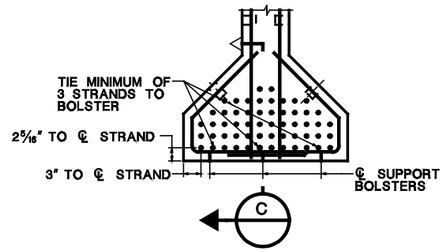
LEGEND:

⌖ INDICATES FULLY BONDED STRANDS

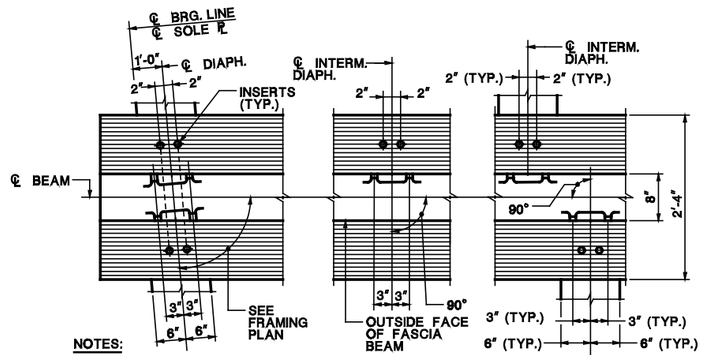
SECTION B B_
3/4" = 1'-0"



SECTION C —
N.T.S.



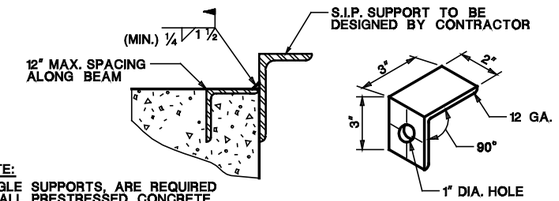
STRAND SUPPORT BOLSTER
N.T.S.



NOTES:
1. OMIT ALL INSERTS AT OUTSIDE FACE OF FASCIA BEAMS.
2. FOR INSERTS OF END DIAPHRAGM AT PIERS, SEE SH. B_.

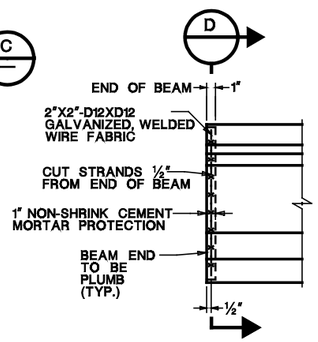
AT FASCIA BEAM AT INT. BEAM
AT END DIAPH. AT INTERMEDIATE DIAPH.

LOCATION PLAN OF THREADED INSERTS
N.T.S.

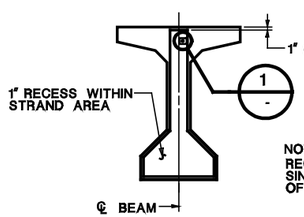


NOTE:
ANGLE SUPPORTS, ARE REQUIRED IN ALL PRESTRESSED CONCRETE BEAMS FOR S.I.P. DECK FORMS UNLESS AN ALTERNATE DECK PANEL SUPPORT DETAIL IS APPROVED.

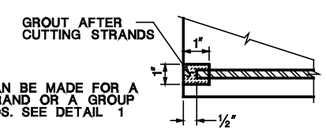
ANGLE SUPPORT DETAILS
N.T.S.



END OF BEAM ELEVATION
N.T.S.



SECTION D —
N.T.S.



NOTE:
RECESS CAN BE MADE FOR A SINGLE STRAND OR A GROUP OF STRANDS. SEE DETAIL 1

DETAIL 1
N.T.S.

3/4" = 1'-0"
1' 0 1' 2' 4'

NOTE:
1. FOR PRESTRESSED CONCRETE BEAM NOTES, SEE SH. B_

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			
IN CHARGE OF			

BDC077-05 - ORIGINAL SHEET

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

PRESTRESSED CONCRETE BEAM DETAIL

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

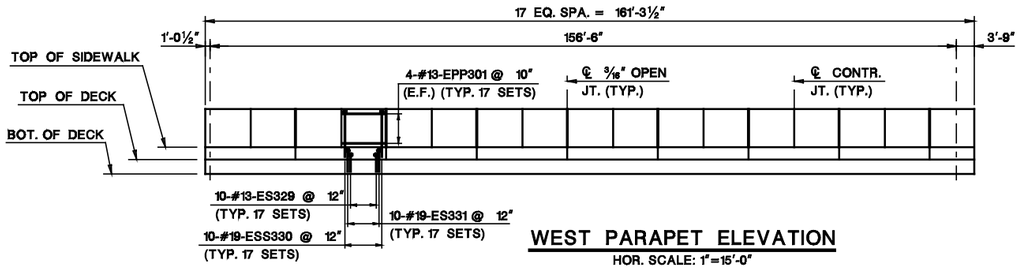
SCALE : AS SHOWN

BRIDGE SHEET NO. B16 OF B21

65

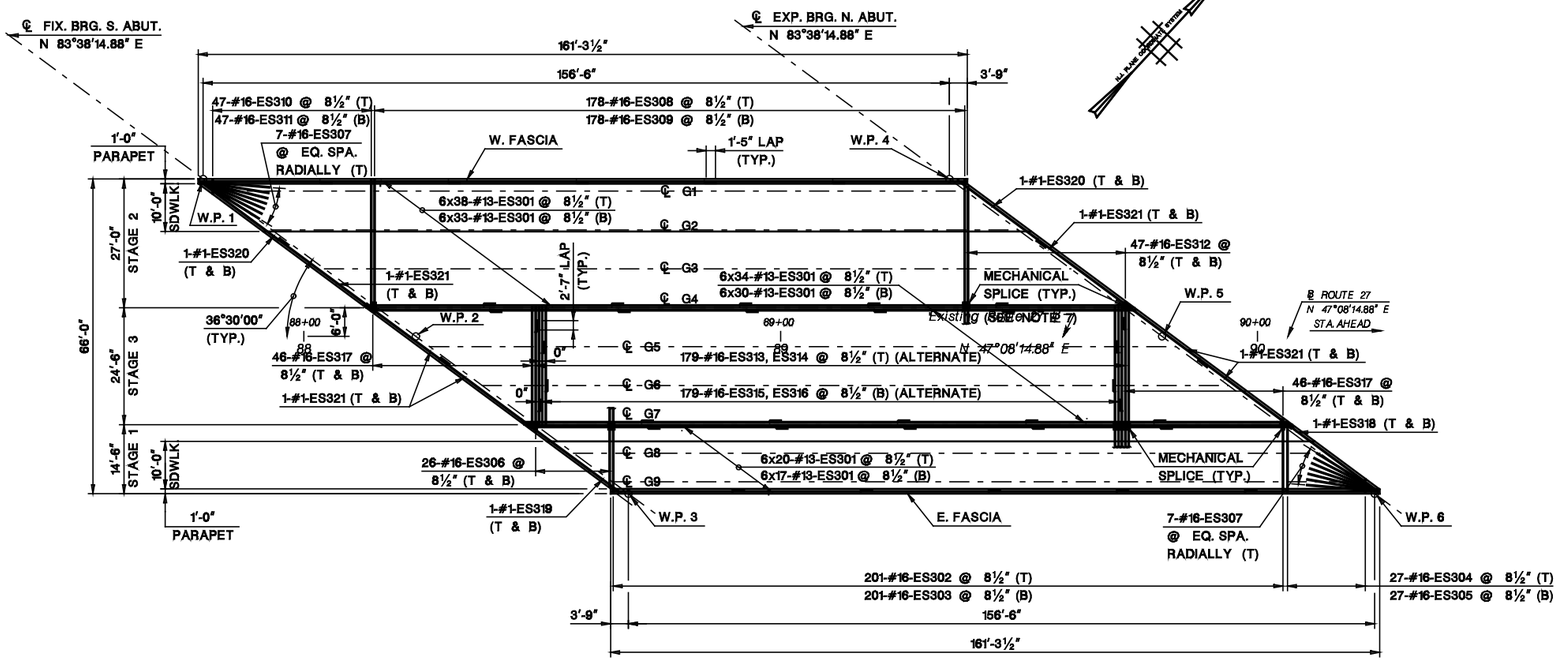
pen table= \\Nj1dot\nwv\vdgvdesn\NJDOT\Bin\Violet\TBLA\Non-Roadway\bridge.tbl
scale=0.179283:1.000000
date=25-FEB-2009 19:29
ID=TFXCKEAS
file=

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N.J.	'	'	'
STRUCTURE NO.			
STRUCTURE NAME:			



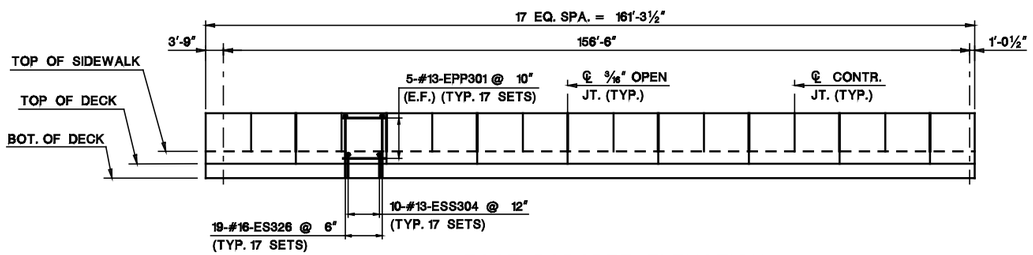
WEST PARAPET ELEVATION

HOR. SCALE: 1"=15'-0"
VERT. SCALE: 1"=10'-0"



DECK SLAB PLAN

SCALE: 1"=15'-0"



EAST PARAPET ELEVATION

HOR. SCALE: 1"=15'-0"
VERT. SCALE: 1"=10'-0"

15' 10' 5' 0 15' 30'
SCALE: 1"=15'-0"

NOTES:

1. ALL DECK SLAB, SIDEWALK AND PARAPET REINFORCEMENT SHALL BE EPOXY COATED.
2. TRANSVERSE REINFORCEMENT SHALL BE PLACED NORMAL TO THE GIRDERS.
3. LAP SPLICES ARE CLASS B UNLESS OTHERWISE NOTED.
4. NO SUPPORTS FOR STAY-IN-PLACE FORMS SHALL EXTEND INTO THE THEORETICAL BOTTOM OF SLAB.
5. ANY CONSTRUCTION RELATED HARDWARE OR MATERIALS LEFT EMBEDDED IN CONCRETE MUST BE EPOXY COATED.
6. ALL TRANSVERSE REINFORCEMENT SHALL BE CONNECTED AT STAGE WITH MECHANICAL SPLICE AT STAGE LINE. MECHANICAL SPLICES INCIDENTAL TO THE COST OF REINFORCEMENT.

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY			
SPECS. BY			
IN CHARGE OF			

BDC07-05 - ORIGINAL SHEET

REVISION	BY	C'K'D	DATE

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

DECK SLAB PLAN

ROUTE : CONTRACT NO. :

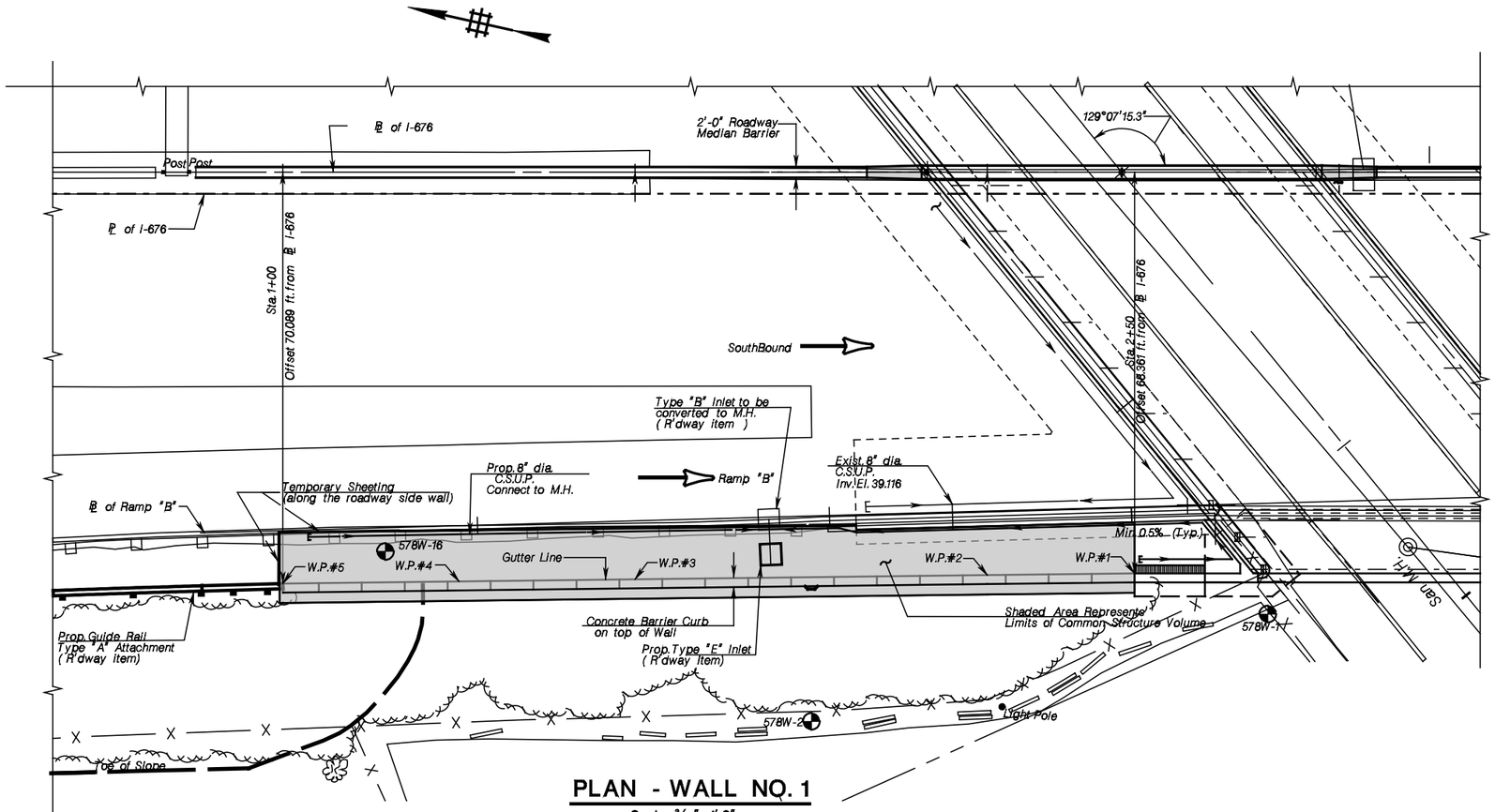
MUNICIPALITY COUNTY

SCALE : AS SHOWN

BRIDGE SHEET NO. B17 OF B21

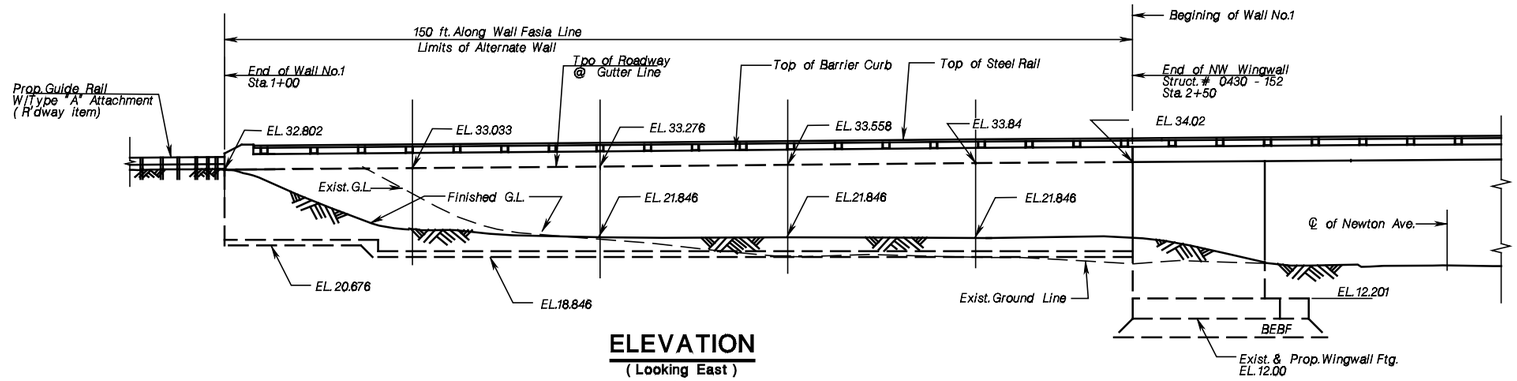
66

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			
STRUCTURE NO.			
STRUCTURE NAME	RETAINING WALL, LOCATION NO.1		



PLAN - WALL NO. 1

Scale: 3/32"=1'-0"



ELEVATION

(Looking East)

Scale: 3/32"=1'-0"

GENERAL NOTES:

*

1. DESIGN SPECIFICATIONS
   (A) 2007 (4TH EDITION) AASHTO LRFD SPECIFICATIONS FOR HIGHWAY BRIDGES (WITH CURRENT INTERIMS) AS MODIFIED BY SECTION 3A OF NJDOT DESIGN MANUAL FOR BRIDGES AND STRUCTURES.
   (B) SEISMIC DESIGN CATEGORY = A.
   SITE CLASS DEFINITION = A
2. CONSTRUCTION SPECIFICATIONS
   2007 NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH CURRENT SUPPLEMENTAL SPECIFICATIONS, AS MODIFIED BY THE SPECIAL PROVISIONS.
3. LIVE LOADINGS
   LIVE LOAD SURCHARGE EQUAL TO 2'-0" OF EARTH PRESSURE.
4. CONCRETE DESIGN STRESSES
   (A) SPECIFIED DESIGN COMPRESSIVE STRENGTHS (f'c)
   CLASS A CONCRETE (PARAPETS) ----------4,000 PSI
   CLASS B CONCRETE (FOOTINGS, LEVELING PADS) -----3,000 PSI
   CLASS P CONCRETE (PRECAST UNITS)----------5,000 PSI
   (B) CLASS DESIGN STRENGTHS
   CLASS A CONCRETE (PARAPETS) ----------4,600 PSI
   CLASS B CONCRETE (FOOTINGS, LEVELING PADS) -----3,700 PSI
   CLASS P CONCRETE (PRECAST UNITS)----------5,500 PSI
5. REINFORCEMENT STEEL
   AASHTO M31 (GRADE 60)
6. BORINGS
   ⊕ INDICATES LOCATION OF BORINGS
   LOG NO.
7. PREAPPROVED ALTERNATES:
   AT THIS LOCATION, ALTERNATE WALL TYPES ARE PERMITTED.
   LISTED BELOW ARE THE WALL TYPES THAT MAY BE USED
   PREFABRICATED MODULAR WALLS
   MECHANICALLY STABILIZED EARTH WALL

* The note should be modified to reflect applicable year and updated Specifications.

SUMMARY OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
513003P	RETAINING WALL, LOCATION NO. 1	SF	1000
'	'	'	'

INDEX OF DRAWINGS

SHEET NO.	TITLE
	GENERAL PLAN AND ELEVATION
	SECTION AND DETAILS
	PARAPET DETAILS
	GUIDE RAIL ATTACHMENT DETAILS
	RAILING DETAILS

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			
IN CHARGE OF			

NJDOT 07-05 - ORIGINAL SHEET

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

RETAINING WALL, GENERAL PLAN AND ELEVATION

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

REVISION	BY	CK'D	DATE

SCALE : AS SHOWN

BRIDGE SHEET NO. B18 OF B21

67

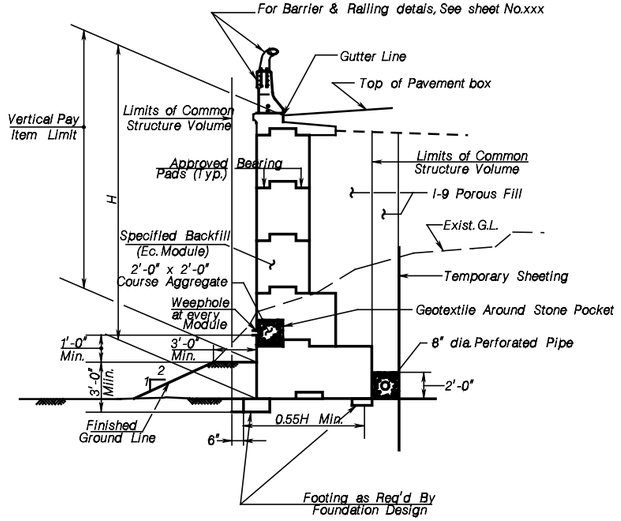
file=
ID=1220284 date=25-FEB-2009 19:30 scale=0.792393:1.000000 Jean tablet= \\Nbridgefnm\designfnm\NJDOTRing\Styles\STEA\Vicon-Roadway\bridge.tbl

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

STRUCTURE NAME

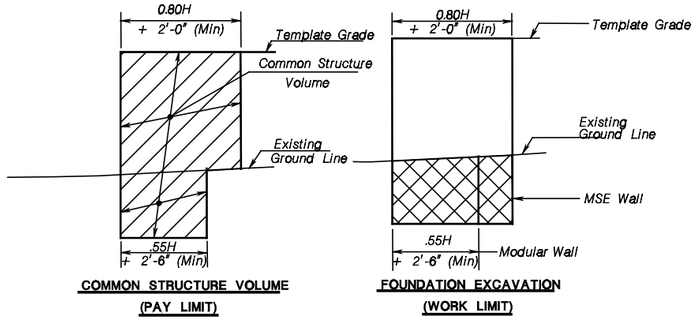
RETAINING WALL, LOCATION NO. 1



LIMITS OF COMMON STRUCTURE VOLUME

PREFABRICATED MODULAR WALL

N.T.S.



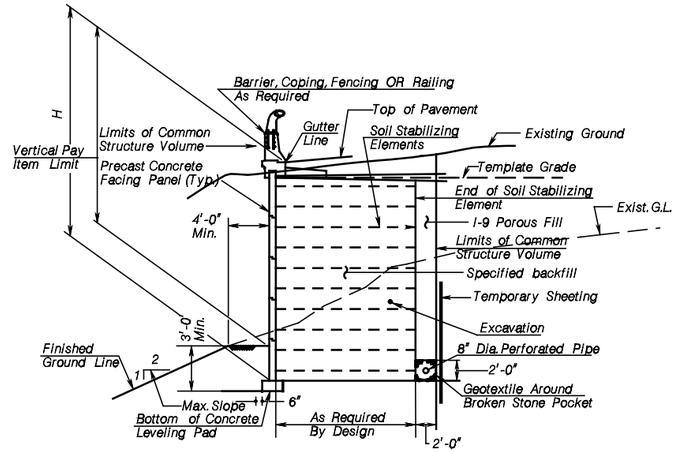
LIMITS FOR PROPRIETARY WALL

IN CUT AND FILL SECTION

NTS

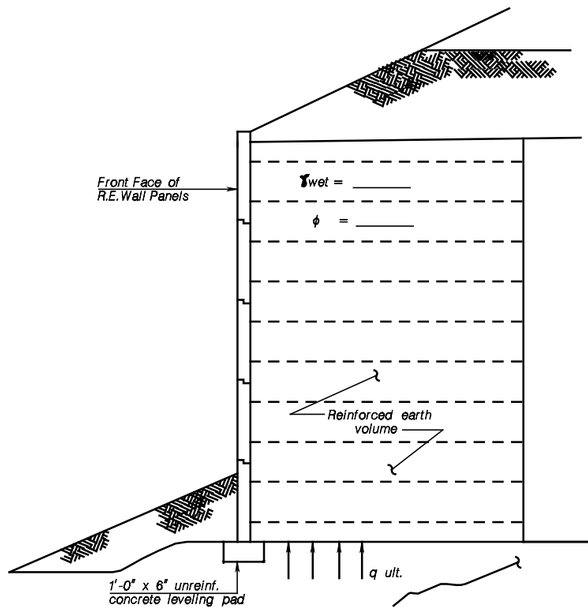
NOTES:

1. For General notes, See sheet General Plan and Elevation.
2. Bottom of leveling pad (OR footing) as shown on sheet No. BXX, Maintain a minimum 3'-0" frost cover. The contractor has the option to place the leveling pad(footing) below the elevation shown.
3. The contractor is responsible for providing a cast in place barrier (OR precast) section for the end unit where a Guide Rail attachment is required. Details shall be in accordance with those shown in Highway Construction Details, CD-612-14.
4. The color of the concrete for the barrier unit and wall panels shall be the same.
5. All reinfocement shall be corrosion protected.
6. If Precast barrier unit is selected, anchor bolts for the railing shall be provided in barrier during casting. No drilling shall be allowed in precast units.



TYPICAL SECTION

MECHANICALLY STABILIZED EARTH WALL



FOUNDATION SOILS DATA

Unit Weight (γwet) = _____

Angle of Internal Friction (ϕ) = _____

Unit Cohesion (c) = _____

Ultimate Bearing Capacity (q ult.) = _____

RETAINED SOILS DATA

γwet = _____

ϕ = _____

C = _____

WORK ITEM - RETAINING WALL, LOCATION NUMBER 1

For Information Only

(Price to be included in wall item)

DESCRIPTION	UNIT	Modular Wall	MSE Wall
FOUNDATION EXCAVATION	CY	100	125
CONCRETE IN SUPER STRUCTURE, PARAPET ✱	LF	50	50
HEAVY TRUCK PARAPET STEEL RAILNG	LF	50	50
3" R.M.C., TYPE CUG	LF	50	50
10" BY 3'-0" JUNCTION BOXES	UNIT	1	1
CONCRETE LEVELING PAD	LF	49	49
SPECIFIED BACKFILL	CY	275	350
POROUS FILL I-9	CY	345	50
TEMPORARY SHEETING	SF	225	225

✱ REINFORCING STEEL (EPOXY COATED) INCLUDED

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			
IN CHARGE OF			

BDCD17-06 - ORIGINAL SHEET

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

RETAINING WALL, SECTION AND DETAILS

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

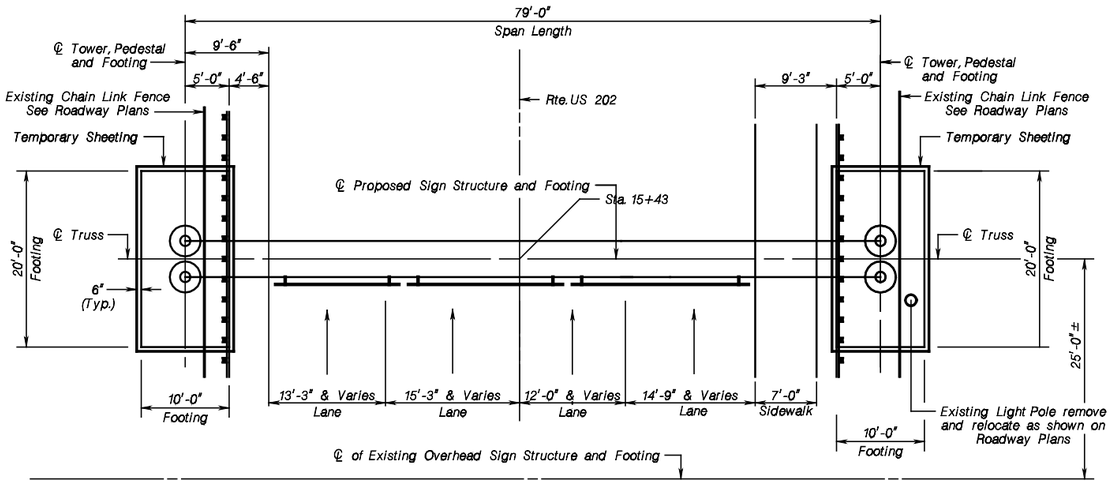
REVISION	BY	CK'D	DATE

SCALE : AS SHOWN

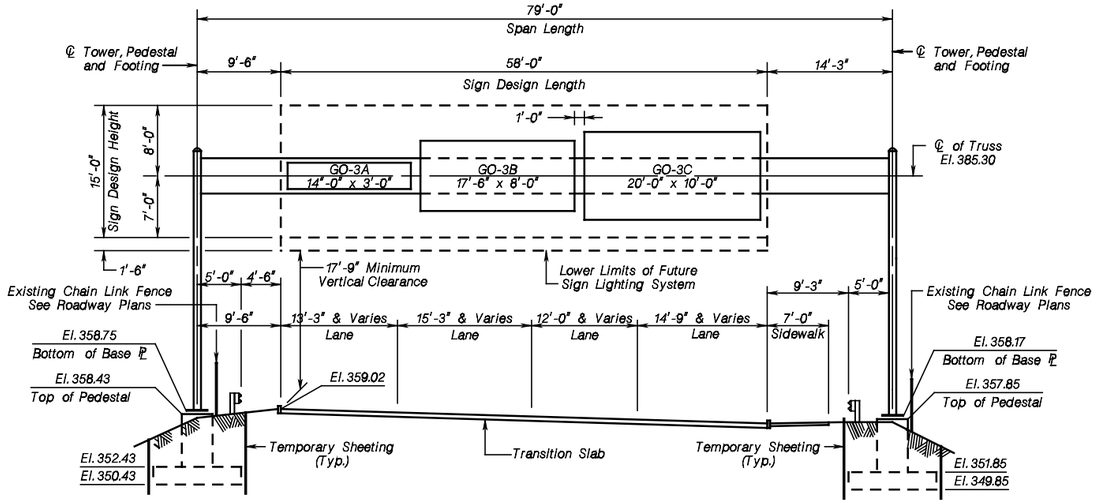
BRIDGE SHEET NO. B19 OF B21

68

jcen table= \\Nbridgefnw\wingmen\NJDOTWSB\Projects\NJDOTBag\Jobs\TRE.a\Non-Roadway\bridge.tbl
scale=0.779293:1.000000
date=25-FEB-2009 19:37
ID=1TXCSE1A5
file=



PLAN
Scale: ⅛"=1'-0"



ELEVATION
OVERHEAD SIGN SUPPORT STRUCTURE NO. _____
RT. ____ AT M.P. ____ STA. NO. ____
LOOKING UPSTATION
Scale: ⅛"=1'-0"

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

STRUCTURE NAME
OVERHEAD SIGN SUPPORT STRUCTURE NO. 1

NOTES:

1. For General Notes and Index Of Drawings see sheet entitled, "Overhead Sign Support Structures, General Notes, Plan and Elevations" (Standard Drawing Plate No. OH-D1). For Quantities, see sheet entitled "Overhead Sign Support Structures Schedule Of Structures" (Standard Drawing Plate No. OH-D2).
2. Top of Pedestals shall be set 4" minimum above the finished ground line.
3. The elevation of the bottom of the Tower Shaft Base Plates shall be set at (Anchor Bolt Dia.+ 1") above top of Pedestal or top of Barrier Pedestal see sheet entitled, "Overhead Sign Support Structures Tower Shaft Base And Truss Seat Details" (Standard Drawing Plate No.OH-D8).
4. The dimensions shown on the Plan are along the Centerline of the Structure.
5. For details of Barrier Pedestal, Pedestal and Foundations see sheets entitled "Overhead Sign Support Structures Schedule Of Foundations And Miscelaneous Details" (Standard Drawing Plate No. OH-D3) and "Overhead Sign Support Structures Foundation Details" (Standard Drawing Plate No.OH-D4).
6. OSHA proximity rules regarding the Overhead High Voltage Transmission Lines shall be adhered to when using the construction equipment.
7. The point at a minimum vertical clearance elevation shall be used to locate the proposed sign structure.
8. The highest point of Roadway Elevations is taken from Existing Microfilm Plans. The Contractor shall verify elevations in the field. Any discrepancies shall be reported to the Design Unit. The Contractor shall get an approval before Sign Support fabrication.
9. For Gude Rail, Existing and Proposed Utilities' locations and details refer to Roadway Plans.
10. Existing Sign Structure Pedestals shall be removed to a deprh of 2 feet below ground level and the area shall be restored with backfilling, topsoiling, fertilizing, seeding and straw mulching in accordance with Roadway Plans.
11. Existing Sign Structure and Pedestals shall be removed to a deprh of 2 feet below ground level and the area shall be restored with backfilling, topsoiling, fertilizing, seeding and straw mulching in accordance with Roadway Plans. The cost shall be included in "Clearing Site, Structure".

THE CONTRACTOR SHALL COMPLY WITH THE STATE'S UNDERGROUND FACILITY PROTECTION ACT AND NOTIFY THE STATE'S ONE CALL SYSTEM AND IDENTIFY ITSELF AS THE STATE'S CONTRACTOR AND SPECIFY THE ROUTE AND MILEPOST OF THE SIGN STRUCTURE BEFORE PERFORMING WORK ON THE PROJECT. THE ONE CALL SYSTEM CAN BE REACHED BY CALLING 1-800-272-1000. THE CONTRACTOR SHALL ALSO MAKE SEPARATE NOTIFICATIONS TO THE DEPARTMENT'S ELECTRICAL MAINTENANCE AND TRAFFIC OPERATIONS BUREAUS WHERE CONSTRUCTION MAY IMPACT OR BE ADJACENT TO THIER RESPECTIVE EXISTING FACILITIES. NO DEPARTMENT-OWNED FACILITIES AS DESCRIBED IN THE SPECIAL PROVISIONS SHALL BE ACCESSED, MODIFIED, REMOVED OR DISTURBED IN ANY MANNER, WITHOUT MAKING SUCH NOTIFICATIONS.

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
201009P	CLEARING SITE, STRUCTURE (_____)	LUMP SUM	LUMP SUM
202009P	EXCAVATION, UNCLASSIFIED	CY	144
504015P	CONCRETE FOOTING	CY	42
504003P	REINFORCEMENT STEEL	LBS	2105
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LBS	1205
512012M	OVERHEAD SIGN SUPPORT, STRUCTURE NO. 1	UNIT	1
501003P	TEMPORARY SHEETING	SF	1344

1'0 8' 16'
¼"=1'-0"

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

GENERAL PLAN AND ELEVATION

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

SCALE : AS SHOWN

BRIDGE SHEET NO. B20 OF B21

69

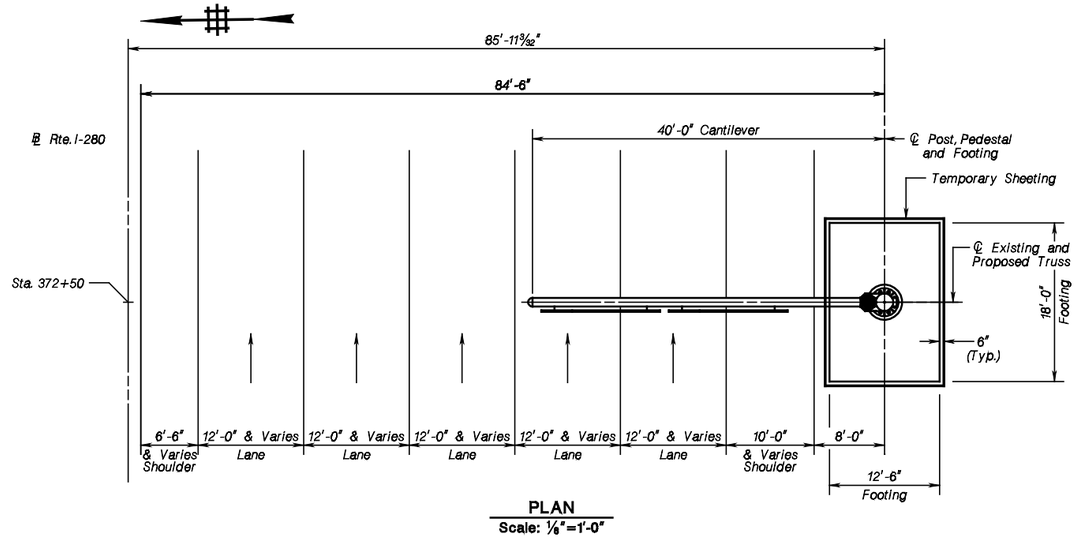
REVISION	BY	C'K'D	DATE

BDC07-08 - ORIGINAL SHEET

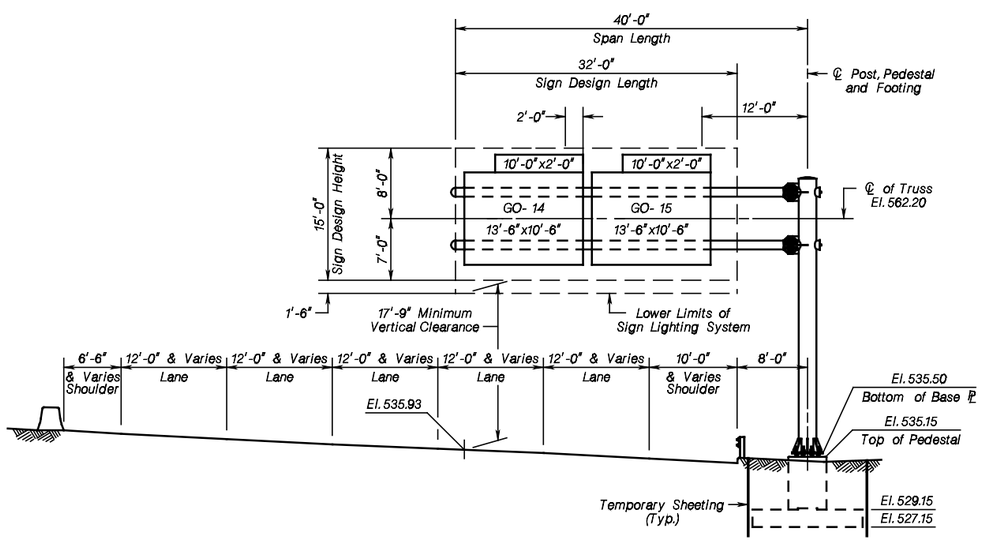
CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

plan table= \\Mdapfpvw\vfsystem\VDOT\WIN\Projects\VDOTBldg\plan\[TitleA]Vista-Roadway\bridge.tbl
scale= 0.179229:1.000000
date= 25-FEB-2009 19:31
ID= T7SCHRAS
file=



PLAN
Scale: 1/8"=1'-0"



ELEVATION
CANTILEVER SIGN SUPPORT STRUCTURE NO. _____
RT. ___ EASTBOUND AT M.P. ___ STA. _____
LOOKING UPSTATION
Scale: 1/8"=1'-0"

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

STRUCTURE NAME
CANTILEVER SIGN SUPPORT STRUCTURE NO. 1

NOTES:

1. For General Notes and Index Of Drawings see sheet entitled, "Cantilever Sign Support Structures General Notes and Elevations" (Standard Drawing Plate No. CA-D1). For Quantities, see sheet entitled "Cantilever Sign Support Structures Structure And Foundation Schedules" (Standard Drawing Plate No. CA-D2).
2. Top of Pedestals shall be set 4" minimum above the finished ground line.
3. The elevation of the bottom of the Tower Shaft Base Plates shall be set at (Anchor Bolt Dia. + 1") above top of Pedestal or top of Barrier Pedestal see sheet entitled, "Cantilever Sign Support Structures Post Base And Foundation Details" (Standard Drawing Plate No.CA-D6).
4. The dimensions shown on the Plan are along the Centerline of the Structure.
5. For details of Barrier Pedestal, Pedestal and Footing see sheet entitled "Cantilever Sign Support Structures Foundation Details" (Standard Drawing Plate No. CA-D3).
6. OSHA proximity rules regarding the Overhead High Voltage Transmission Lines shall be adhered to when using the construction equipment.
7. The point at a minimum vertical clearance elevation shall be used to locate the proposed sign structure.
8. The highest point of Roadway Elevations is taken from the Field Survey. The Contractor shall verify elevations in the field. Any discrepancies shall be reported to the Design Unit. The Contractor shall get an approval before Sign Support fabrication.
9. For Guide Rail, Existing and Proposed Utilities locations and details refer to Roadway Plans.
10. The Proposed Sign Support Structure is not relocated. The Contractor shall shall remove the Existing Footings and Pedestals. Build new Footings and Pedestals as shown on the plan. The cost of removal of the Existing Footings and Pedestals shall be included in "Clearing Site, Structure".
11. The Proposed Sign Support Structure is not relocated. The Contractor shall shall remove the Existing Footings and Pedestals. Build new Footings and Pedestals as shown on the plan. The cost of removal of the Existing Footings and Pedestals shall be included in "Clearing Site, Structure".
12. The Sign Structure shall receive Lumitrack Lighting System. Refer to Special Provisions for details. Fixtures shall be included in "Sign Lighting Assembly" see Roadway Plans.
13. Sign panel hangers shall not be used for supporting Lumitrack Lighting System. Lumitrack Lighting System shall be independently supported by steel truss.

THE CONTRACTOR SHALL COMPLY WITH THE STATE'S UNDERGROUND FACILITY PROTECTION ACT AND NOTIFY THE STATE'S ONE CALL SYSTEM AND IDENTIFY ITSELF AS THE STATE'S CONTRACTOR AND SPECIFY THE ROUTE AND MILEPOST OF THE SIGN STRUCTURE BEFORE PERFORMING WORK ON THE PROJECT. THE ONE CALL SYSTEM CAN BE REACHED BY CALLING 1-800-272-1000. THE CONTRACTOR SHALL ALSO MAKE SEPARATE NOTIFICATIONS TO THE DEPARTMENT'S ELECTRICAL MAINTENANCE AND TRAFFIC OPERATIONS BUREAUS WHERE CONSTRUCTION MAY IMPACT OR BE ADJACENT TO THIER RESPECTIVE EXISTING FACILITIES. NO DEPARTMENT-OWNED FACILITIES AS DESCRIBED IN THE SPECIAL PROVISIONS SHALL BE ACCESSED, MODIFIED, REMOVED OR DISTURBED IN ANY MANNER, WITHOUT MAKING SUCH NOTIFICATIONS.

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
201009P	CLEARING SITE, STRUCTURE (_____)	LUMP SUM	LUMP SUM
202009P	EXCAVATION, UNCLASSIFIED	CY	76
504015P	CONCRETE FOOTING	CY	20
504003P	REINFORCEMENT STEEL	LBS	1876
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LBS	1380
512003M	CANTILEVER SIGN SUPPORT STRUCTURE NO. 1	UNIT	1
501003P	TEMPORARY SHEETING	SF	685

1'0 8' 16'
1/8"=1'-0"

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

GENERAL PLAN AND ELEVATION

ROUTE : CONTRACT NO. :

MUNICIPALITY COUNTY

REVISION	BY	CK'D	DATE

SCALE : AS SHOWN

BRIDGE SHEET NO. B21 OF B21

70
70

CONTROL SECTION	_____	JOB NO. _____	
DES. BY		CHK. BY	
DWN. BY		CHK. BY	
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF _____

ORIGINAL SHEET

ID=1TXCDEA5 date=25-FEB-2009 19:32 scale=0.179293:1.000000 jcen tables=\\Nbdgsrvw\wegmans\NJDOTWS\Projects\NJDOTBlog\Jobs\TEMP\Non-Roadway\bridge.tbl file=