

LIMITED SCOPE CONCEPT DEVELOPMENT REPORT

Route 33 Resurfacing Project

Eastbound: Milepost 24.2 to Milepost 28.9
Westbound: Milepost 24.3 to Milepost 28.9

Manalapan & Freehold Townships, Monmouth County



NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CAPITAL PROJECT MANAGEMENT

February 2015

Revised Per FHWA's Comments

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Westbound: Milepost 24.3 to Milepost 28.9

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I. INTRODUCTION

A. Roadway Characteristics

Within the limits of the proposed project, Route 33 functions as an Urban Freeway. There are two primary typical cross sections within the limits of the project. They are:

Milepost 24.2 to Milepost 28.4 - Route 33 consists of two 12-foot travel lanes, a 3-foot minimum and variable inside shoulder and a full 12-foot wide outside shoulder in each direction between these mileposts.

Milepost 28.4 to Milepost 28.9 - Route 33 consists of one 12-foot travel lane, a 3-foot minimum and variable inside shoulder and a full 12-foot wide outside shoulder in each direction between these mileposts.

The eastbound and westbound roadways are separated by a 30-foot wide grass median. Median guide rail exists in limited location, but for the most part, the median is unprotected with regard to cross-over incidents. Route 33 is constructed as an umbrella section throughout the project limits.

There are four (4) interchanges within the limits of the project. They are:

- Route 33 and Wemrock Road - *milepost 25.68*
- Route 33 and County Route 537 (Freehold – Mt Holly Road) - *milepost 26.59*
- Route 33 and Route 9 - *milepost 27.54*
- Route 33 and Route 79 (South Street) - *milepost 27.69*

Acceleration/Deceleration lanes exist at all ramps exiting and entering Route 33 at the interchanges.

B. Purpose and Need Statement

Purpose

The purpose is to rehabilitate the pavement surface to improve the service life of the roadway.

Need

This section of Route 33 has been identified by the Pavement Management System and the Pavement & Drainage Management office as being in need of rehabilitation.

Goals and Objectives

Within the limits of the project, both in the eastbound and westbound directions, the existing pavement exhibits various types of cracking and deterioration. Based on the most recent pavement assessment, the mainline pavement conditions vary from 'very poor' to 'good'. The condition of the shoulders within the limits of the project varies from 'fair' to 'good'. Therefore, based on the overall pavement condition, the Pavement Management System has recommended the milling and resurfacing of the pavement surface.

C. Project Location and Project Limits

The proposed project is located in the Townships of Manalapan and Freehold, Monmouth County. The proposed limits of the project are milepost 24.2 to milepost 28.9 in the eastbound direction and milepost 24.3 to milepost 28.9 in the westbound direction.

A location map and the applicable Straight Line Diagram pages are provided in *Appendix 'B'*.

D. List of Other Projects in the Vicinity

A review of all applicable databases has indicated that there is only one project within the vicinity of the proposed pavement project. This is a project to replace an existing overhead sign structure on Route 33 westbound at milepost 25.77. There are no other projects in Concept Development, Preliminary Engineering, Final Design or Construction in the vicinity of the proposed pavement project that would have an impact on the proposed project.

Coordination between the overhead sign structure replacement project and the proposed pavement project will be required.

II. EXISTING CONDITIONS ANALYSIS

A field trip was conducted on June 10, 2010 to assess the existing conditions of the pavement and to ascertain other features that could potentially have an impact on the delivery of the project. This field trip was attended by Subject Matter Experts (SMEs) of the New Jersey Department of Transportation. Based on discoveries made during this field trip and subsequent follow-up, several issues, which will be addressed as part of the project, were identified. The following provides a summary of the key issues:

A. Pavement

Mainline Route 33 consists of flexible bituminous pavement throughout the limits of the project with the exception of short sections at the western end of the project where the pavement is composite. The thickness of the bituminous pavement in the travel lanes, in the areas of flexible pavement, ranges from 8.5" to 12" in both directions. The shoulder thickness ranges from 3" to 4.8" in the eastbound direction and from 4" to 5" in the westbound direction.

The areas of composite pavement consist of 6" flexible bituminous pavement over an 8" thick PCC slab and are located as follows:

- Eastbound - milepost 24.20 to milepost 24.31
- Westbound - milepost 24.34 to milepost 24.40

The Route 33 mainline pavement exhibits 0.25" to 0.50" rutting, L/M block cracking, scattered fatigue cracking, transverse cracking and L/M longitudinal cracking between lanes. The pavement condition along the mainline lanes varies from 'very poor' to 'good'.

The shoulder pavement exhibits scattered L/M transverse, longitudinal, fatigue and block cracking. The shoulder pavement condition generally varies from 'fair' to 'good'.

B. Structures within the Project Limits

There are thirteen (13) structures within the proposed limits of the pavement project. These structures are characterized as follows:

- Route 33 traverses two (2) local roadways via structure – total of four (4) separate structures – exposed concrete decks
 - ✓ Route 33 Eastbound over Route 9 - milepost 27.54

- ✓ Route 33 Westbound over Route 9 - milepost 27.54
- ✓ Route 33 Eastbound over Route 79 - milepost 27.69
- ✓ Route 33 Westbound over Route 79 - milepost 27.69
- Four (4) local roadways cross over Route 33 – exposed concrete decks
 - ✓ Route 33 Eastbound Ramp to Route 33 Business – milepost 24.68
 - ✓ Wemrock Road over Route 33 - milepost 25.68
 - ✓ CR 537 over Route 33 - milepost 26.95
 - ✓ Willowbrook Road over Route 33 - milepost 28.24
- Five (5) culverts exist within the limits of the project.
 - ✓ Culvert #1 - milepost 24.32
 - ✓ Culvert #2 - milepost 26.23
 - ✓ Culvert #3 - milepost 27.34
 - ✓ Culvert #3 - milepost 28.09
 - ✓ Culvert #4 - milepost 28.55

The deficiencies in most of the structures range from spalls in the headers with deteriorated asphalt patches, missing sections of deck joint steel angles, missing guide rail, no guide rail attached to the parapet, and damaged or missing guiderail spacers.

In addition to the thirteen (13) bridges/culverts, there are six (6) overhead sign structures; two (2) on the eastbound side and four (4) on the westbound side of Route 33.

Individual Structure Inventory & Appraisal [SI&A] Sheets for all structures are provided in *Appendix 'D'*

C. Drainage

Route 33 is constructed as an umbrella section throughout the project limits. Curb and inlets exist along the ramps at the five interchanges. Records obtained from the Pavement & Drainage Management office indicate that within the past five (5) years there were five (5) reported incidents of flooding due to clogged inlets in the area of the ramps. The inlets were cleared by Maintenance, resolving the problem.

D. Traffic Control within the Project Limits

Route 33 within the limits of the project is an urban freeway; therefore, there are no signalized intersections within the limits of the project.

E. Utility Facilities

For the most part, there are no aerial facilities within the limits of the project. The exceptions to this are:

- At the beginning of the project [milepost 24.3] there is a mix of utility poles and street lights.
- Street lights exist on the Route 33 acceleration/deceleration lanes and ramps located at the County Route 537, Route 9, and Route 79 interchanges.

F. Access

Route 33 within the limits of the project is an urban freeway without any business, residential access points or driveways.

G. ITS Facilities

There is no ITS conduit or above ground ITS components along Route 33 within the limits of the proposed project.

H. Geometrics

Eastbound and westbound each have two (2) 12-foot wide lanes and a 12-foot wide outside shoulder. Mainline Route 33 is separated with a 30-foot wide grass median. **Based upon review of existing As-Built plans and SME field investigation of the project site, no significant cross-slope, ponding or settlement issues were evident.**

I. Community Concerns

Route 33 is a freeway section without business or residential access. There are a few residential communities that are adjacent to Route 33. Therefore, the concerns of the community should be limited to work hours (noise) and lane closures during construction (inconvenience).

J. Environmental Concerns

Based on the environmental screening, the only potential environmental concern could be impacts within the floodplain of the Manalapan Brook Tributary A (milepost 24.32) and the Debois Creek (milepost 28.55)

K. Management System Input

In addition to the Pavement Management System, the following Management Systems have been cross referenced:

- **Safety Management System:** The crash rate for this section of Route 33 exhibits relatively safe crash record (1.46 crash/mvm) as it is below the 2009 statewide average (2.12 crashes/mvm) for roadway similar cross section.
- **Bridge Management System:** no issues with any of the structures within the limits of the project.
- **Congestion Management System:** The priority rating for the length of the project on the Congestion Management System (CMS) is "Low" except at M.P. 24.40, which is rated "Medium".
- **Drainage Management System:** The project has no ranking in the Drainage Management System of the Drainage Unit's 2010 list.

L. Pedestrian and Bicycle Facilities

Route 33, within the project limits, is a freeway section with no pedestrian or bicycle facilities.

III. ALTERNATIVES ANALYSIS

A. Alternatives Analysis Narrative

This section of Route 33 has been identified by the Pavement Management System and the Pavement & Drainage Management office as being in need of rehabilitation. The pavement

condition of mainline Route 33 varies from 'very poor' to 'good', indicating the need for either a mill 'x' – pave 'x+1' treatment or a complete reconstruction of the pavement box.

The Department hired XYZ Consultants, Inc. to conduct a pavement evaluation and service life analysis. Ground Penetrating Radar (GPR), Falling Weight Deflectometer (FWD), Coring and Visual Survey were performed as part of the pavement evaluation efforts for this project.

The pavement evaluation and the service life analysis performed by Advanced Infrastructure Design, Inc. indicates that a mill 'x' - pave 'x' treatment throughout the limits of the project will provide a 10-year plus pavement life.

A no-build alternative was considered but did not address the project need of extending pavement life and meeting the Department's Pavement Management System goals.

Based on the cost of reconstructing the entire pavement box and the service life attained through the mill 'x' – pave 'x' treatment, the full reconstruction option was not considered.

Therefore, the preferred alternative selected for advancement is a mill 'x' - pave 'x' resurfacing project. The depth of the milling and paving varies 2" to 4" depending on location. Specifics of the Pavement Design Recommendation can be found in *Appendix 'C'*.

IV. PRELIMINARY PREFERRED ALTERNATIVE

A. Scope of Work

- i. **Pavement** - The scope of work, within the proposed limits of work, is to resurface Route 33. The pavement recommendation for this work varies from milling 2" to 4" and paving 3" to 5" in the mainline lanes. The recommendation for the outside shoulder is a straight mill 2", pave 3". **The maximum increase in pavement section at all locations is 1".**

The recommendation for the ramps to and from the local roads varies from milling 2" to 3" and paving 2" to 4". **The maximum increase in pavement section on the ramps is 1".**

The increase of 1" in the profile will allow for improvements to be made to existing cross-slopes as necessary.

See the Pavement Design Recommendation for specific limits of the various treatments. The Pavement Design Recommendation is provided in *Appendix 'C'*.

- ii. **Structural** - Since the *Project Need*, as identified by the Management Systems, is the resurfacing of Route 33 and the ramps at the interchanges, and since the Bridge Management System did not identify any issues with any of the structures within the limits of the proposed project, the structural scope of work will be limited to deck patching the mainline Route 33 structures over local roads.
 - Deck Patching of the following structures:
 - ✓ Route 33 Eastbound over Route 9 - milepost 27.54
 - ✓ Route 33 Westbound over Route 9 - milepost 27.54
 - ✓ Route 33 Eastbound over Route 79 - milepost 27.69
 - ✓ Route 33 Westbound over Route 79 - milepost 27.69

- iii. **Pedestrian and Bicycle Facilities** - Route 33, within the project limits, is a freeway section with no pedestrian facilities. This section of Route 33 is currently full bicycle compatible and will remain so after construction. There are no new pedestrian or Bicycle facilities planned within the limits of the project.
- iv. **Traffic Signal** - There are no signals within the limits of the project.
- v. **Incidental Roadway Work** - The scope of work shall include the upgrade of all guide rail within the limits of the project. In addition, median guide rail cross-over protection shall be added to the project where warranted.
- vi. **Drainage** - No new drainage facilities will be constructed based on the input from the Drainage Unit and the Drainage Management System.

B. Anticipated Impacts to Existing Facilities

- i. **Utility** - There are no anticipated utility impacts.
- ii. **Access** - There are no anticipated access impacts, as Route 33 within the project limits is a freeway section with no business or residential access.
- iii. **ITS** - There are no anticipated ITS impacts as there are no existing ITS facilities within the limits of the project.

C. Maintenance of Traffic During Construction

The milling and paving of Route 33 will be completed using standard single lane closure or lane shifts. The approved lane closure schedule, as developed by Traffic Operations South, is provided in *Appendix 'F'*

D. Community Concerns

The proposed improvements were presented to the local officials and received a favorable response. The community, local officials and property owners will be further consulted and apprised of the proposed work as Final Design progresses.

E. Environmental Document Summary

The project is classified as a Categorical Exclusion (CE) and does not have any significant environmental impacts.

Appendix 'A'

Concept Development Checklist

EXAMPLE

Concept Development Checklist

Mill "X" / Pave "X + 1" Resurfacing Projects

Project Name:	Route 33 Resurfacing; Eastbound and Westbound from Manalapan Brook to Halls Mill Road
Direction/Milepost limits:	Eastbound from milepost 24.2 to milepost 28.9 and westbound from milepost 24.3 to milepost 28.9
Pavement Type:	Flexible and Composite Pavement
UPC #:	113060
Municipality(ies):	Manalapan and Freehold Townships
County (ies):	Monmouth County
Project Manager:	Xxxxxx Xxxxxx
CD Designer:	Capital Project Management

Notes:

- **All item checked "Y" or "N"** shall be briefly discussed in the 'Comments' section below the checklist items.
- **NFI: Needs Further Investigation in Final Design** (explain below).

Concept Development Checklist

A. Pavement

Y	N	N/A	NFI	
X				1. Has the Pavement Recommendation been provided by Pavement Management?
	X			2. Are any additional Borings/Corings required during design?
X				3. Is the shoulder pavement box adequate to support traffic during staging?
X				4. Are Concrete Pavement Repair or Slab Replacement required?
		X		5. Does concrete slab repair/replacement recommendation need field verification?

		X		6. Is pre-cast slab replacement appropriate at this location?
X				7. Have all ramps within the limits of the project, and adjacent pavement sections been inspected to determine adequacy of pavement condition?
X				8. Are reliable As-Built plans and information available for this section of roadway and has this information been obtained from the Engineering Documents Unit?
X				9. Has a spot check of existing cross slopes been conducted to verify the information contained in the As-Built plans?

Comments:	1.	The Pavement Design Recommendation memo has been received from Pavement Management and is included in this report as <i>Appendix 'C'</i> .
	2.	All borings required for the Pavement Design were completed by Advance Infrastructure Design.
	3.	Pavement Management has reviewed the existing shoulder pavement box and has concluded that it will support traffic.
	4.	According to the Pavement Report prepared by Advance Infrastructure Design, the concrete slabs are in good condition, not requiring replacement.
	5.	N/A
	6.	N/A
	7.	All ramps have been inspected and a Pavement Design Recommendation has been received for them.
	8.	As-built plans for the construction of Route 33, dated June 1972, are available and have been obtained from the Engineering Documents Unit. The plans are labeled <i>"Route 33 Freeway, Sections 1A & 2A"</i>
	9.	Spot checks have been conducted at numerous locations to verify the as-built information.

B. Structural

	Y	N	N/A	NFI	
X					1. Are there any structures within project limits?
X					2. Is deck patching required on any of the structures? (list below in <i>'Comments'</i> section the structures that require patching)

	X			3. Is deck replacement required? (list below in 'Comments' section the structure number and the rating from the most recent inspection for all structures requiring a deck replacement). Should become a new start through the Bridge Management System.
	X			4. Will any decks within the project be overlaid with asphalt?
		X		5. Has Structures approved addition of asphalt dead load of the overlay?
	X			6. Is a superstructure replacement required? (list below in 'Comments' section the structure number and the rating from the most recent inspection for all structures requiring a superstructure replacement). If yes, the project should become a new start through the Bridge Management System.
X				7. Are approach/transition slabs present at the structures?
	X			8. Do the existing approach/transition slabs require rehabilitation/replacement?
X				9. Do structures cross over this roadway segment?
	X			10. Does the existing under-clearance meet design standards? (list below in 'Comments' section, the structure number and the existing vertical clearance for all structures with substandard under-clearance) **
		X		11. If there are structures with substandard under-clearance within the project limits, what pavement treatment will be used to maintain the vertical under-clearance? (mill 'x' – pave 'x', or replace entire pavement box under structure)
	X			12. Do Bridge Guiderail attachments meet standards?
X				13. Are OHSS in need of replacement or repair? (list below in 'Comments' section the structure number and/or milepost of all OHSS that require replacement or repair). If yes, it should become a new start through the 'Sign Structure Replacement Program'

Comments:	1.	<p>There are a total of thirteen (13) structures within the limits of the project:</p> <ul style="list-style-type: none"> • Route 33 traverses two (2) local roadways via structure – total of four (4) separate structures – exposed concrete decks <ul style="list-style-type: none"> ✓ Route 33 Eastbound over Route 9 - milepost 27.54 ✓ Route 33 Westbound over Route 9 - milepost 27.54 ✓ Route 33 Eastbound over Route 79 - milepost 27.69 ✓ Route 33 Westbound over Route 79 - milepost 27.69 • Four (4) local roadways cross over Route 33 – exposed concrete decks <ul style="list-style-type: none"> ✓ Route 33 Eastbound Ramp to Route 33 Business – milepost 24.68 ✓ Wemrock Road over Route 33 - milepost 25.68 ✓ CR 537 over Route 33 - milepost 26.95 ✓ Willowbrook Road over Route 33 - milepost 28.24 • Five (5) culverts exist within the limits of the project – overlaid with bituminous pavement <ul style="list-style-type: none"> ✓ Culvert #1 - milepost 24.32 ✓ Culvert #2 - milepost 26.23 ✓ Culvert #3 - milepost 27.34 ✓ Culvert #3 - milepost 28.09 ✓ Culvert #4 - milepost 28.55
	2.	<p>Based on visual inspection and confirmed by the most recent Structural Evaluation Report, deck patching is required on the following structures:</p> <ul style="list-style-type: none"> ✓ Route 33 Eastbound over Route 9 - milepost 27.54 ✓ Route 33 Westbound over Route 9 - milepost 27.54 ✓ Route 33 Eastbound over Route 79 - milepost 27.69 ✓ Route 33 Westbound over Route 79 - milepost 27.69
	3.	<p>According to the most recent Structural Evaluation Reports, the rating of the decks on all thirteen (13) structures within the project limits is “5” or above. Therefore, deck replacement is not warranted.</p>
	4.	<p>Consultation with Structural Design has determined that the decks within the Route 9 and Route 79 interchanges do not warrant an overlay.</p>
	5.	<p>N/A</p>
	6.	<p>According to the most recent Structural Evaluation Reports, the rating of the superstructure on all thirteen (13) structures within the project limits is “5” or above. Therefore, superstructure replacement is not warranted.</p>

	7.	Approach and Transition slabs exist at both the Route 9 and Route 79 interchanges.
	8.	All slabs are in good condition and do not require rehabilitation or replacement.
	9.	Four (4) local roadways cross over Route 33 <ul style="list-style-type: none"> ✓ Route 33 Eastbound Ramp to Route 33 Business – milepost 24.68 ✓ Wemrock Road over Route 33 - milepost 25.68 ✓ CR 537 over Route 33 - milepost 26.95 ✓ Willowbrook Road over Route 33 - milepost 28.24
	10.	According to the information contained in the S.I. & A. sheets, all four (4) structures over Rt. 33 meet the required vertical clearance.
	11.	N/A
	12.	Bridge guide rail attachments will need to be updated as part of the proposed project.
	13.	There are six overhead sign structures within the limits of the project. One is currently being replaced. The other five (5) have been identified by Structural Evaluation as being in need of replacement.

**** Coordination with the Department of Defense MUST be conducted on ALL Interstate Structures where the existing/proposed vertical under-clearance is substandard. The coordination is required if the resulting vertical under-clearance remains substandard; whether the under-clearance is reduced, maintained, or improved.**

C. Traffic Management/Operations

	Y	N	N/A	NFI	
			X		1. Detour – Is it necessary and/or feasible? Has conceptual approval been received from Traffic Operations?
X					2. Staged Construction - Is it necessary and/or feasible? Has conceptual approval been received from Traffic Operations?
X					3. Have Lane Closure Hours been provided? (if yes, provide memo from Traffic Operations as an attachment)

Comments:	1.	N/A
	2.	The existing highway section consists of two lanes and a full shoulder in each direction. Therefore, staging is feasible and recommended for this project utilizing standard lane closure and lane shifts.
	3.	Lane closure hours have been received from Traffic Operations South.

D. Bicycle and Pedestrian

Y	N	N/A	NFI	
	X			1. Are there worn paths from pedestrian activity present?
	X			2. Are new Sidewalks needed?
	X			3. Are ADA curb ramps needed?
	X			4. Are new crosswalks needed?
	X			5. Are pedestrian countdown heads needed at signalized intersections?
X				6. Is the roadway bicycle compatible?

Comments:	1.	No worn paths exist along Route 33 or on any of the ramps to be included in the project.
	2.	Route 33 is a freeway section with no pedestrian facilities. No new sidewalk is required
	3.	Route 33 is a freeway section with no pedestrian facilities. The only location within the project limits that warrants ADA curb ramps is at the terminus of the Route 33 ramp to Route 9 where ADA curb ramps already exist. No new ramps are required within the limits of the project.
	4.	No new crosswalks are required.
	5.	Pedestrian countdown heads already exist at the terminus of the Route 33 ramp to Route 9 (only signal within the limits of the project).
	6.	Route 33 is currently bicycle compatible.

E. Utility Facilities

Y	N	N/A	NFI	
X				1. Are there Aerial Facilities within the limits of the project?
	X			2. Are there underground facilities within the limits of the project?
	X			3. Are there anticipated impacts to existing facilities as a result of the proposed work beyond resetting castings and heads?
	X			4. Are any utility poles on the safety list for frequent crashes? (Utility Section Input required)

Comments:	1.	There are aerial facilities at the beginning of the project [milepost 24.3] and highway lighting at the interchanges. All poles are outside of the pavement and will not be affected by the proposed scope of work. Mill 'x' – pave 'x+1'.
	2.	No underground facilities were observed during the field visit, nor were any found on the as-built plans.
	3.	The proposed scope of work should result in no utility impacts.
	4.	A review of this section of Route 33, through the Utility Unit's safety list for frequently hit poles, did not indicate any problem poles.

F. Access

Y	N	N/A	NFI	
	X			1. Are driveways present within the project limits?

Comments:	1.	Route 33 is a freeway section with no commercial or residential access within the limits of the project.
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G. ITS

Y	N	N/A	NFI	
	X			1. Are there any CCTV's located within the project limits? (list below in the ' Comments ' section)
	X			2. Are there any DMS's located within the project limits? (list below in the ' Comments ' section)

	X			3. Are there any other ITS components within the project limits? (list below in the 'Comments' section)
				4. Are any new ITS components required within the limits of the project?

Comments:	1.	No CCTV's were observed during the field visit.
	2.	No DMS's were observed during the field visit.
	3.	Coordination with the ITS Unit has indicated that no ITS conduit or above ground ITS components exist within the limits of the project.
	4.	No new ITS facilities will be included in the project.

H. Drainage, Safety and Miscellaneous

Y	N	N/A	NFI	
X				1. Is there existing guide rail within the limits of the project? (List whether there is a non-veg. surface beneath the guiderail in the 'Comments' section below)
	X			2. If there is existing guide rail within the limits of the project, does it meet current design standards?
	X			3. Are there any locations where new guide rail is warranted, e.g., gaps?
X				4. Does highway lighting exist within the project limits?
X				5. Does highway fencing exist within the project limits?
X				6. Do rumble strips exist within the limits of project?
X				7. Are there Raised Pavement Markers within the project limits?
	X			8. Has consultation with the Regional Maintenance Engineer (RME) indicated any ponding/drainage problems within this section of roadway?
		X		9. If ponding/drainage problems have been identified by the RME, have recommendations to correct been provided? (list all Recommended Corrective Actions in the 'Comments' section below)

Comments:	1.	Median guide rail [cross-over protection] exists in limited locations and also exists at all overhead sign structure locations. Guide rail exists on the outside of the highway in limited locations; overhead sign structures and at culvert and bridge locations. Non-veg. surface beneath guiderail.
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Comments: (continued)	2.	The existing end treatments on some of the runs do not meet current design standards. Upgrading guide rail is warranted and recommended.
	3.	Based on visual inspection, no additional locations appeared to warrant installation of additional guide rail.
	4.	Highway lighting exists at interchange ramps, but not throughout the project limits.
	5.	Right of Way fence does exist throughout the limits of the project.
	6.	Rumple strips exist throughout the project limits and should be replaced in-kind.
	7.	Raised pavement markers exist throughout the project limits and should be replaced in-kind.
	8.	Records obtained from the Pavement & Drainage Management office indicate that within the past five (5) years there were five (5) reported incidents of flooding due to clogged inlets in the area of the ramps. The inlets were cleared by Maintenance, resolving the problem.
	9.	N/A

I. Community Impacts

Y	N	N/A	NFI	
	X			1. Are there any private residences within the limits of the project?
	X			2. Are there any commercial businesses within the limits of the project?
	X			3. Are there any schools within a half mile radius of the limits of the project?
	X			4. Other (e.g., Malls, Entertainment Complexes, Churches, etc. .)

Comments:	1.	Route 33 is a freeway section with no commercial or residential access within the limits of the project. Residential properties are adjacent to the highway.
	2.	Route 33 is a freeway section with no commercial or residential access within the limits of the project. Residential properties are adjacent to the highway.

Comments: (continued)	3.	The following schools have been identified to be within 500' of the project but will not be impacted in any way by the project: <ul style="list-style-type: none"> ✓ West Freehold Elementary School – access off of CR 537 ✓ Brookdale Community College – access off of Route 9. Located close to the Route 33 and Route 9 interchange.
	4.	The following mall has been identified to be within 500' of the project but will not be impacted in any way by the project: <ul style="list-style-type: none"> ✓ Freehold Raceway Mall – access from CR 537 & Route 9

J. Public Involvement Action Plan – All Information to be obtained from the Office of Community and Constituent Relations

	Y	N	30 days or more prior to FDS	30 days or less prior to Construction **
X			X	X
	X			
X				X
X			X	X
X				X
	X			
	X			
	X			
X				X

**** Pre-Construction Officials Briefings and Pre-Construction Public Information Centers, if required by O.C.C.R., should be held after the project has been awarded and should be attended by the State’s Resident Engineer and by the Contractor.**

K. SME Input*/Cross Check

Y	N	Office	Name / Phone #		
X		Structures	Xxxxxx	Xxxxxx	5-XXXX
X		ITS	Xxxxxx	Xxxxxx	5-XXXX
X		Traffic Signal and Safety Engineering	Xxxxxx	Xxxxxx	5-XXXX
X		Operations	Xxxxxx	Xxxxxx	5-XXXX
X		Traffic Operations	Xxxxxx	Xxxxxx	5-XXXX
X		Office of Community Relations	Xxxxxx	Xxxxxx	5-XXXX
X		Construction Management (Constructability Review)	Xxxxxx	Xxxxxx	5-XXXX
X		Environmental	Xxxxxx	Xxxxxx	5-XXXX
X		Communications	Xxxxxx	Xxxxxx	5-XXXX

***Provide correspondence**

L. Management System Cross-Check

Y	N	
X		Bridge
X		Drainage
X		Safety
X		Congestion
X		Maintenance
X		Project Reporting System (PRS)

M. Funding/Authorization Information

Y N

X		1. Is the Project Programmed in the STIP for all Phases of Work? Provide Line Item info below.
		2. What is the anticipated FD authorization date and estimate? Provide info below.
		3. What is the anticipated CON authorization date and estimate? Provide info below.
X		4. THIS PROJECT IS EXEMPT FROM CONFORMITY

<i>Comments:</i>	1.	Yes, Federal Resurfacing Line item
	2.	XXXX
	3.	XXXX

N. Verification of Limited Scope Project Development

Y N

X		Based on the information obtained/observed during the field visit, input obtained from SME's, and coordination/cross-checks with the various Management Systems, does the proposed scope of work for this project fit the definition of a 'Limited Scope Project'?
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Approved:

 (Insert Name), Project Manager

 Date

Appendix 'B'

Location Map & Straight Line Diagram

Provide an aerial map of the project location (Google Earth) with the project site/limits identified.

and

Provide the Straight Line Diagram Sheet(s) with the project site/limits identified.

Appendix 'C'

Pavement Design Recommendation

*Provide a copy of the Pavement Design
Recommendation that is provided by the Office of
Civil Engineering – Pavement Technology.*

Appendix 'D'

Structural SI&A Sheets

Include Structural SI&A Sheets for all structures within the limits of the project regardless of whether any work is proposed for that structure or not.

Appendix 'E'

Photos

Provide photos to clearly highlight the issues & elements discussed in the CD Report and the CD Checklist.

Appendix 'F'

Lane Closure Schedule

or

'Preliminary' Detour Schematic

Provide the Lane Closure memo as provided by the Office of Traffic Operations.

or

If traffic staging is not feasible and a detour is required, provide a schematic of a feasible detour route that has been approved by the Office of Traffic Operations.

Appendix 'G'

Environmental Screening Report

***Environmental Screening Report is to be provided by
the Bureau of Landscape Architecture &
Environmental Solutions.***

Appendix 'H'

As-Built Plans

Attach as-built plans if available.

or

*Provide as-built plans on disc if not feasible to include
in the CD Report.*

Appendix 'I'

Crash Data

This Crash Data should be the overall data for the corridor, not specific to any controlling substandard design element.

Appendix 'J'

Traffic Data

This is the Traffic Design Data and the Pavement Design Data. This should be for the design year and the design year + 20.

Appendix 'K'

Final Design Scope Statement

This is the Final Design Scope Statement.