

RAILROAD COORDINATION

DeIDOT

Winter Workshop

March 14, 2014

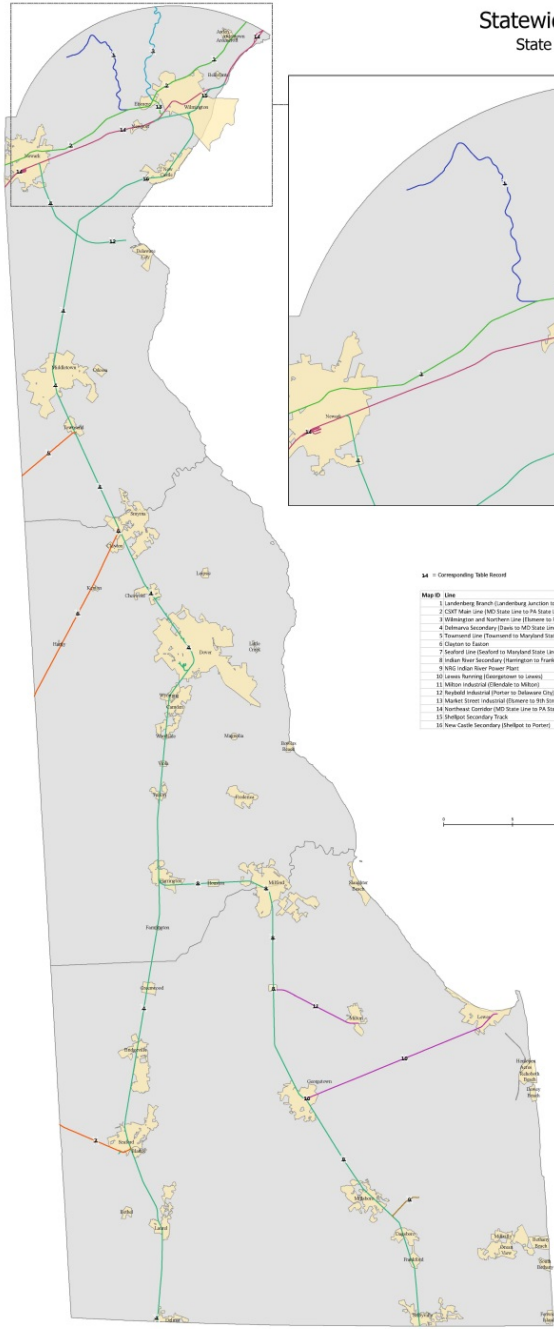
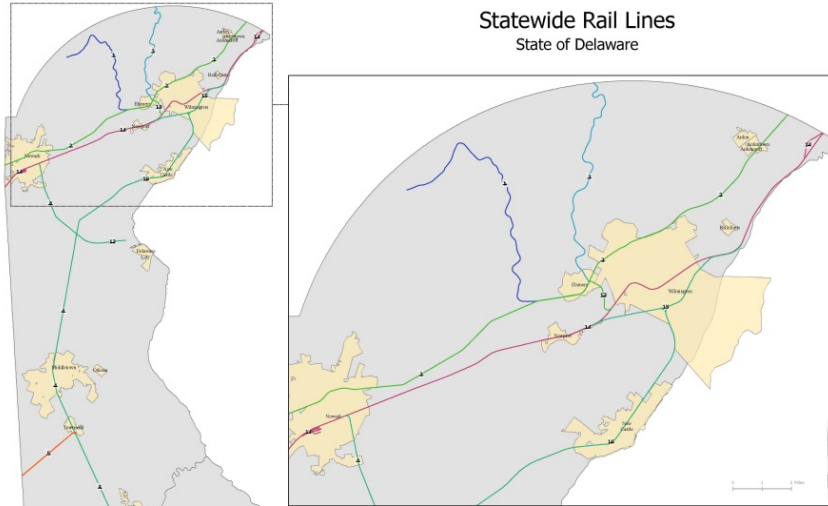
- **DeIDOT's Process**
 - History
 - Goals Moving Forward
 - Overall Project Coordination
- **ADA Requirements for At-Grade Railroad Crossings**
- **DEMUTCD Striping Guidelines**

RAILROAD COORDINATION

- **Seven (7) Rail Operators in Delaware**
 - Amtrak
 - CSX
 - Norfolk Southern
 - East Penn
 - Maryland and Delaware
 - Delaware Coast Line
 - Wilmington & Western
 - Several Private / Industry Sidings
 - PBF (Refinery)
 - Printpack
 - Evraz Steel
- **Over 300 At-Grade Railroad Crossings & Over 70 Grade Separated Crossings**

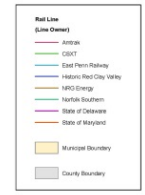
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Statewide Rail Lines State of Delaware



14 - Corresponding Table Record

Map ID	Line	Line Owner	Operating Railroad (Franchise Right)
1	Landsberg Branch (Landsberg Junction to Stockton)	Harbor Rail Clay Valley	Wilmington and Vicinity
2	CSX Main Line (MD State Line to PA State Line)	CSX	CSX
3	Wilmington and Northern Line (Wilmington to PA State Line)	East Penn Railway	East Penn Railway
4	Delaware Secondary (Dover to MD State Line)	Norfolk Southern	Norfolk Southern
5	Transit and Placement to Maryland State Line	State of Maryland	Maryland and Delaware
6	Douglas to Easton	State of Maryland	State of Maryland
7	Southern Line (Easton to Maryland State Line)	State of Maryland	Maryland and Delaware
8	Sabon River Secondary (Harrington to Funksville)	Norfolk Southern	Norfolk Southern
9	MD State Line (Harrington to Funksville)	MD Cargo	Norfolk Southern & MD Cargo
10	Lanes Running (Georgetown to Lewis)	State of Delaware	Delaware Coast Line Railroad Company
11	Wilson Industrial (Georgetown to Milton)	State of Delaware	Delaware Coast Line Railroad Company
12	Seaboard Industrial (Porter to Delaware City)	Norfolk Southern	Norfolk Southern
13	Market Street Industrial (Downtown to 28th Street)	CSX	CSX
14	Northeast Corridor (DND State Line to PA State Line)	Amtrak	Amtrak / CSX / Norfolk Southern
15	Delight Secondary Track	Norfolk Southern	Norfolk Southern
16	New Castle Secondary (Delaport to Porter)	Norfolk Southern	Norfolk Southern



Prepared by:
Delaware Department of Transportation
GIS/SCRP/Facilities
Last Revised: 10/13/2008

- **General Railroad Facts:**
 - **Railroad Owns the Right of Way across the roadway.**
 - **Railroad maintains the physical track crossing surface.**
 - **Agreement required for work within the Railroad Right of Way.**

RAILROAD COORDINATION

- In the Past....



RAILROAD COORDINATION

- In the Past....



RAILROAD COORDINATION

- In the Past....



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RAILROAD COORDINATION

- In the Past....



RAILROAD COORDINATION

- **Moving Forward**
 - **Enhanced Coordination with all DeIDOT Sections**
 - **Planning (Transportation Alternatives and Trails Program)**
 - **Design**
 - **Bridge**
 - **Maintenance**
 - **Pavement and Rehab**

 - **Early Project Scoping**
 - **Identify Projects with Railroad Involvement**
 - **At-Grade Crossings**
 - **Railroad Right of Way Encroachment**
 - **Road Structure Crossing over Railroad**
 - **Railroad Structure Crossing over Road**

RAILROAD COORDINATION

- **Coordination with the Railroads**
 - **Prioritization of the Crossing Replacement Program**
 - **Identification of required Railroad Agreements**
 - **Identification of required Right of Way Agreements**
 - **Identification of the Specific Construction Parameters for the location, e.g.**
 - **Railroad Flaggers and Funding**
 - **Temporary Construction Crossings**
 - **Railroad Service Interruptions**

RAILROAD COORDINATION

- **Identification of Projects with Specific ADA Requirements**
 - Doing “nothing” is not an option.
 - Continue the Accessible Path through the At-Grade Railroad Crossing where pedestrian facilities are present today.
 - Planning for future Pedestrian and Bicycle Facilities

RAILROAD COORDINATION

- **ADA Requirements**



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RAILROAD COORDINATION

- **ADA Requirements**

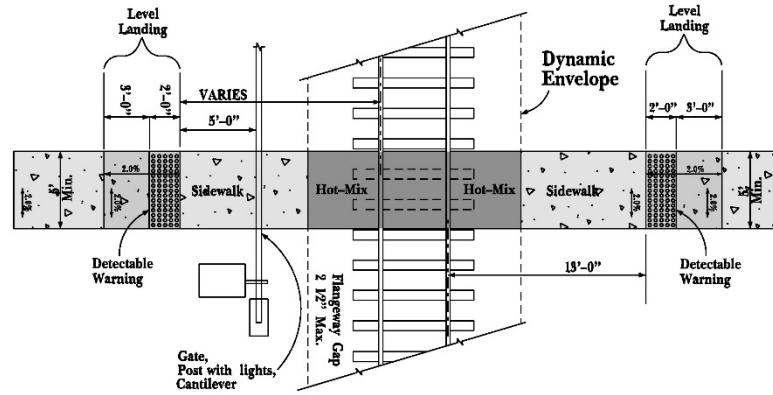


RAILROAD COORDINATION

- **Finalizing DeIDOT ADA Guidelines for At-Grade Freight Rail Crossings**
- **Working with:**
 - DeIDOT
 - FHWA
 - FRA
 - AREMA
 - Rail Operators
 - Other DOT's
- **Incorporate into DeIDOT Standard Construction Details**

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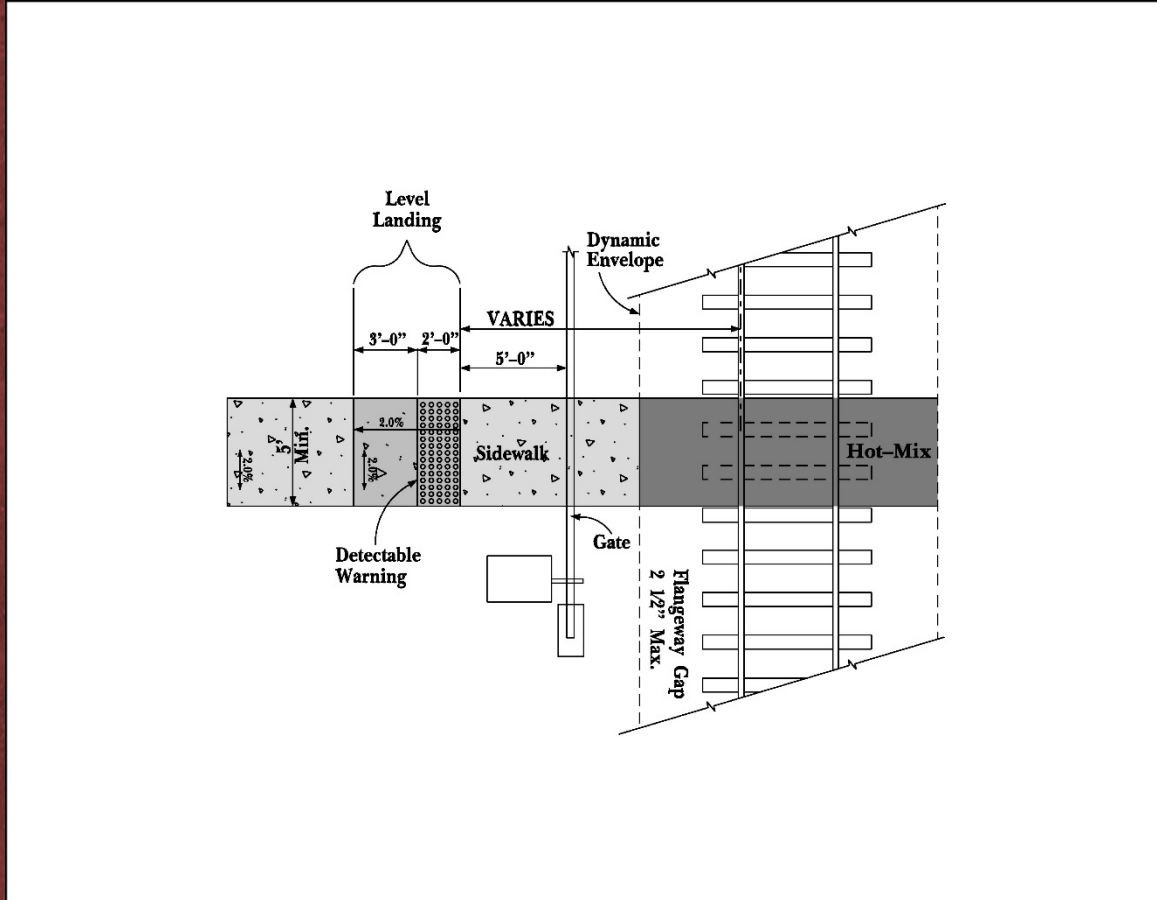
- Proposed ADA Details (Draft)



Plan View

RAILROAD COORDINATION

- Proposed ADA Details (Draft)



RAILROAD COORDINATION

- **Recent Examples of ADA Improvements at Railroad Crossings**
 - **US40 Improvements**
 - **Felton (with Railroad)**
 - **Harrington Pavement and Rehab**
 - **Loockerman Pavement and Rehab**
 - **SR48 Maintenance Contract**
 - **SR41 Railroad Project (Future)**
 - **Wilmington Avenue (Future)**
 - **New Castle Avenue (Future)**

RAILROAD COORDINATION

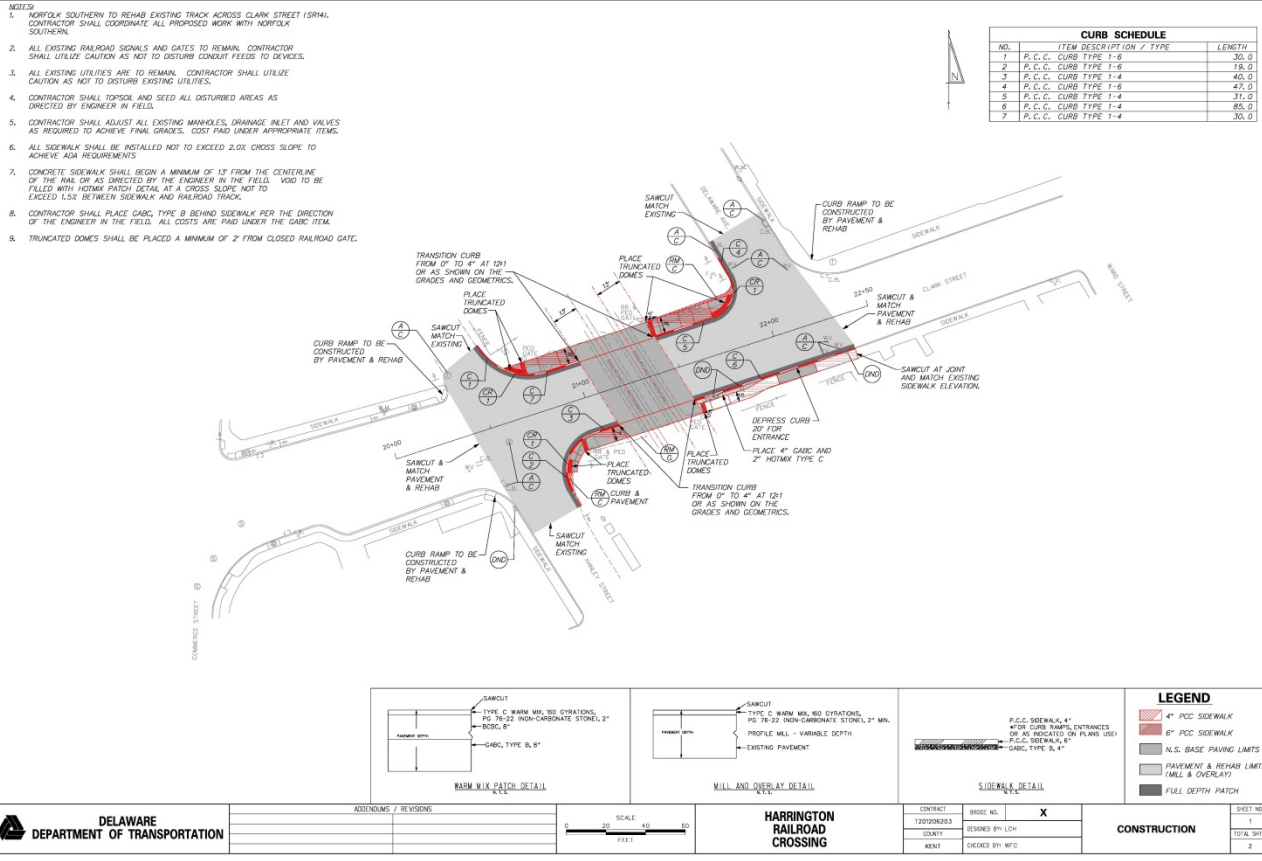
- **ADA Improvements - Harrington**



Pre-Construction Conditions

RAILROAD COORDINATION

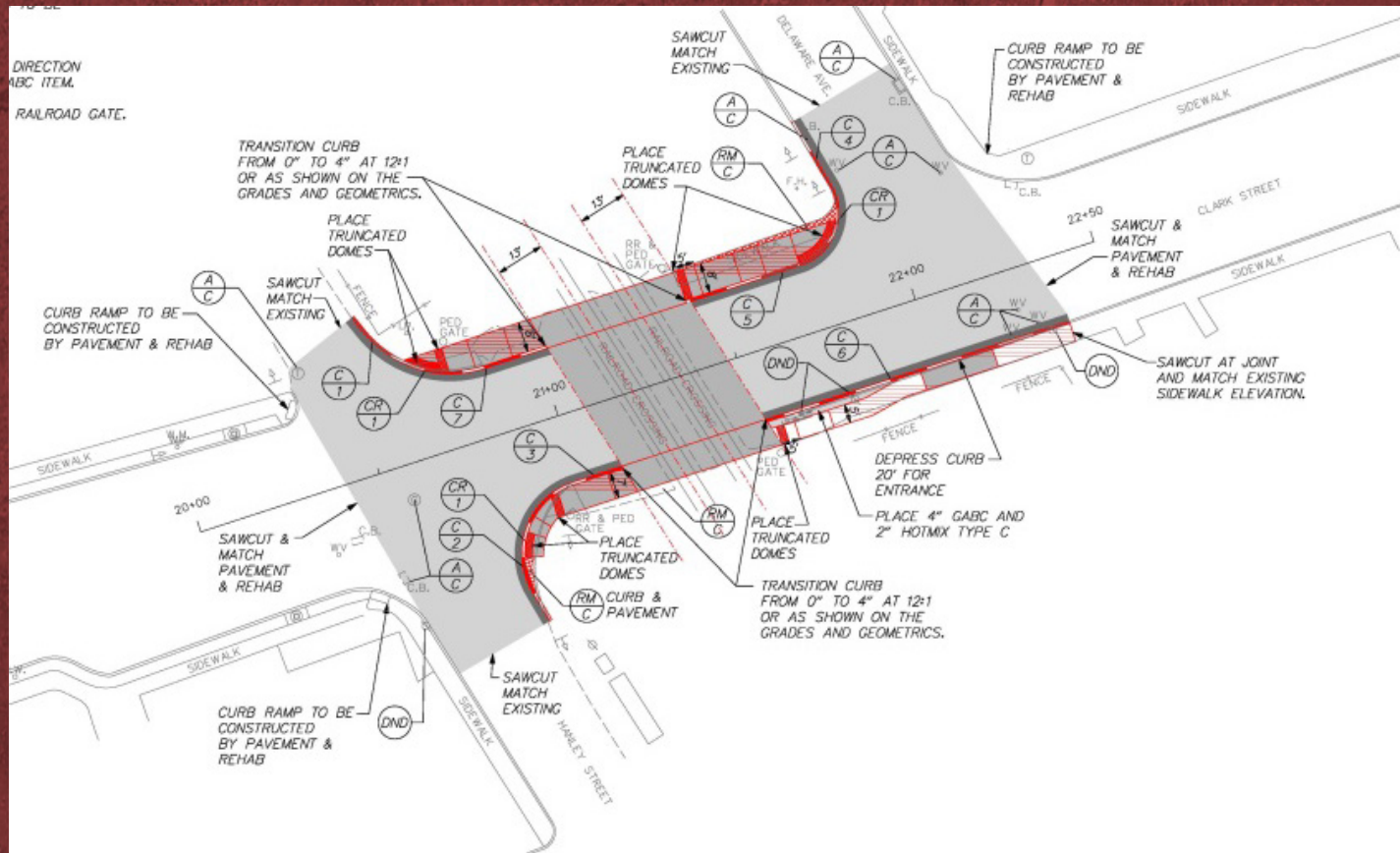
• ADA Improvements - Harrington



Proposed Improvement Plan

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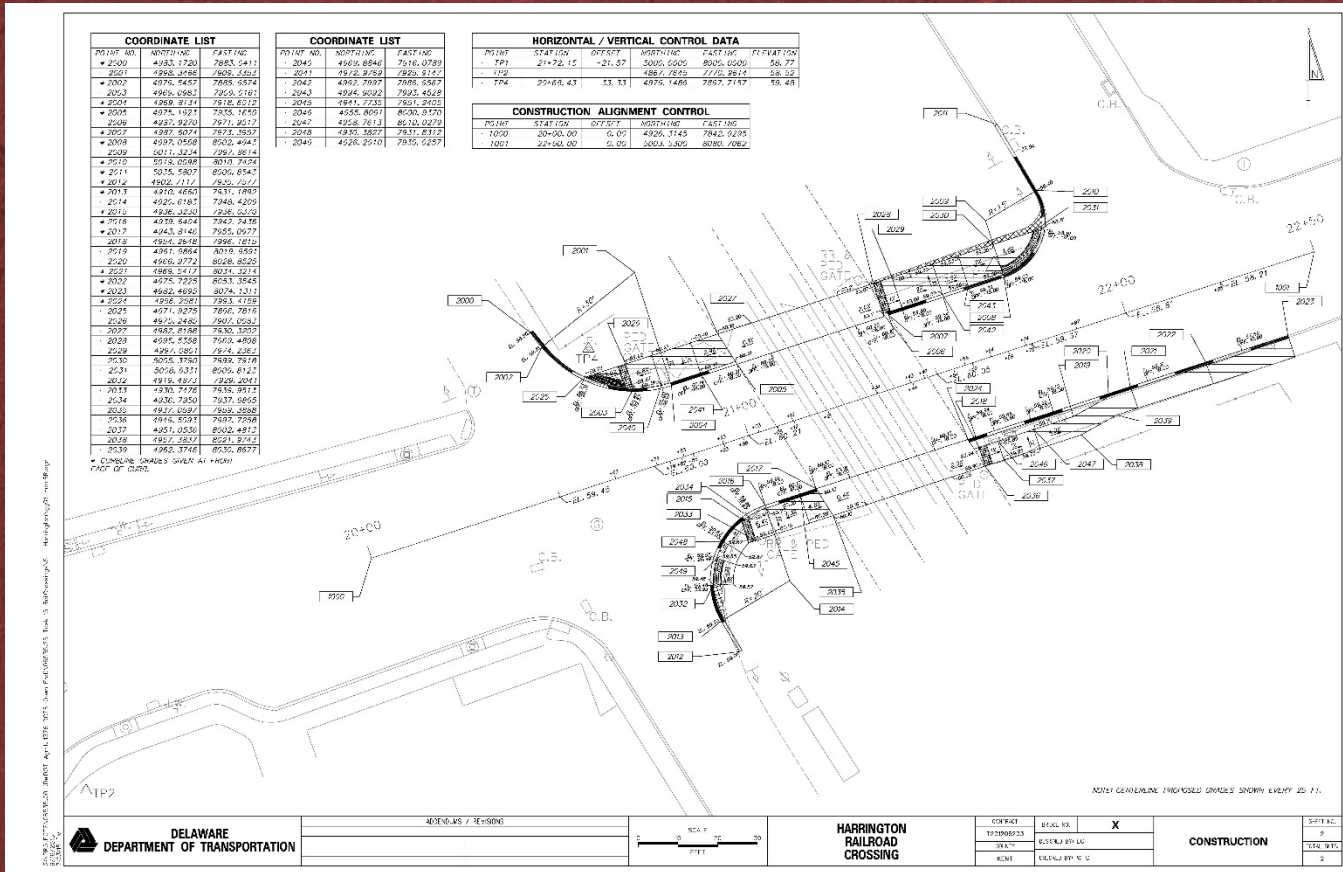
• ADA Improvements - Harrington



Proposed Improvement Detail

RAILROAD COORDINATION

• ADA Improvements - Harrington



Grades and Geometrics

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- **ADA Improvements - Harrington**



Post-Construction

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- **ADA Improvements - Harrington**

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- **ADA Improvements – SR48**

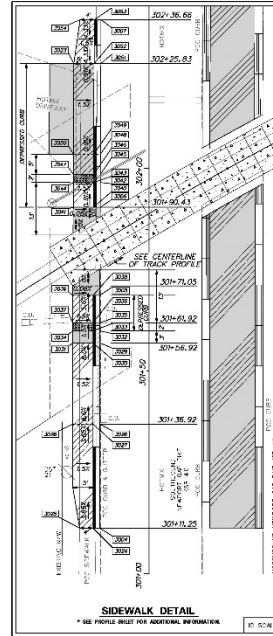
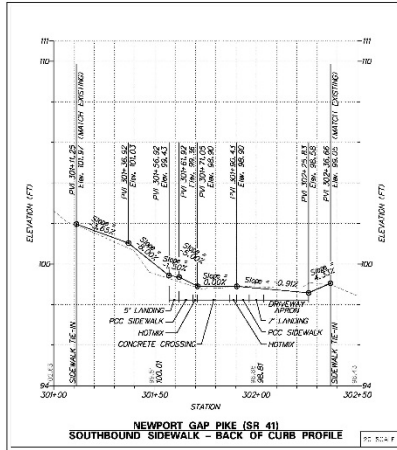


Post-Construction

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• ADA Improvements – SR41

NEW SR-41



COORDINATE LIST					
POINT NO.	STATION	OFF-SET	NORTHING	EASTING	ELEVATION
-5004	301+11.25	-12.17'	4515.2850	9910.2297	MATCH EXIST
-3005	301+68.70	-12.14'	4972.7160	8911.7930	98.94'
-5006	301+80.41	-12.08'	4994.4203	4912.4611	98.82'
-3007	302+36.66	-11.87'	5040.5436	9913.8933	MATCH EXIST
-3027	302+25.84	-18.59'	5035.0078	9906.8852	98.66'
-5024	301+11.25	-13.63'	4515.3346	9908.5637	MATCH EXIST
-3025	301+11.25	-17.15'	4515.4280	9905.2502	MATCH EXIST
-3026	301+36.92	-12.16'	4940.9951	9910.5263	100.36'
-3027	301+36.92	-13.87'	4940.9936	9909.8522	101.03'
-3028	301+36.92	-18.82'	4941.1280	8904.2840	101.11'
-3029	301+56.93	-12.15'	4902.9468	9911.4726	99.35'
-3030	301+56.93	-13.82'	4860.9915	9909.8063	98.43'
-3031	301+56.93	-18.82'	4681.1256	9904.8683	99.51'
-3032	301+56.93	-12.15'	4963.9457	9911.5342	99.31'
-3033	301+56.93	-13.81'	4863.9904	6809.8881	99.39'
-3034	301+56.93	-18.81'	4804.1245	9904.8897	98.47'
-3035	301+81.93	-12.15'	4965.9449	9911.6097	98.29'
-3036	301+81.93	-13.81'	4865.9896	9909.9125	99.36'
-3037	301+81.93	-18.81'	4866.1237	9904.8444	98.44'
-3038	301+68.70	-13.81'	4972.7852	8910.1989	98.03'
-3039	301+68.70	-18.81'	4972.8982	9905.1283	99.03'
-3040	301+80.41	-13.73'	4984.4511	9910.7007	98.90'
-3041	301+80.41	-18.73'	4984.8992	9905.7923	98.91'
-3042	301+96.53	-12.07'	5000.5308	9912.8494	98.76'
-3043	301+96.53	-13.70'	5000.5796	9910.8783	98.84'
-3044	301+96.53	-18.70'	5000.7097	6905.8811	98.92'
-3045	301+96.53	-12.07'	5002.5299	8912.7110	98.79'
-3046	301+96.53	-13.70'	5002.5747	9911.8193	98.85'
-3047	301+96.53	-18.70'	5002.7088	9906.8428	98.91'
-3048	302+03.53	-12.01'	5007.2678	9912.8650	98.70'
-3049	302+03.53	-13.68'	5007.2724	9911.1950	98.78'
-3050	302+03.53	-18.68'	5007.7065	8906.1970	98.86'
-3051	302+25.84	-11.59'	5009.8207	9912.5518	98.58'
-3052	302+25.84	-13.59'	5020.8653	9911.8812	98.58'
-3053	302+36.66	-13.59'	5040.6901	9912.9179	MATCH EXIST
-3054	302+36.66	-17.03'	5040.7841	9908.7298	MATCH EXIST



DELAWARE
DEPARTMENT OF TRANSPORTATION

APPROVED / REVISIONS	
DATE	REVISION

STATEWIDE RAILROAD CROSSING
REPAIR II, 2011

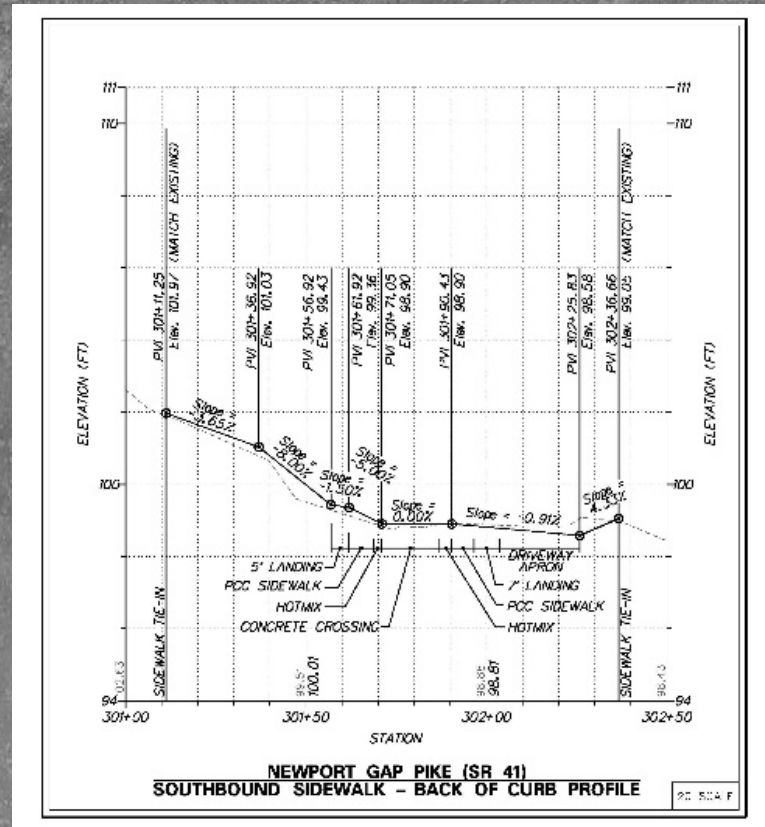
DATE	BY	CHKD	APP'D

NEWPORT GAP PIKE (SR 41)
CONSTRUCTION PLAN

DATE	BY	CHKD	APP'D

RAILROAD COORDINATION

- ADA Improvements – SR41

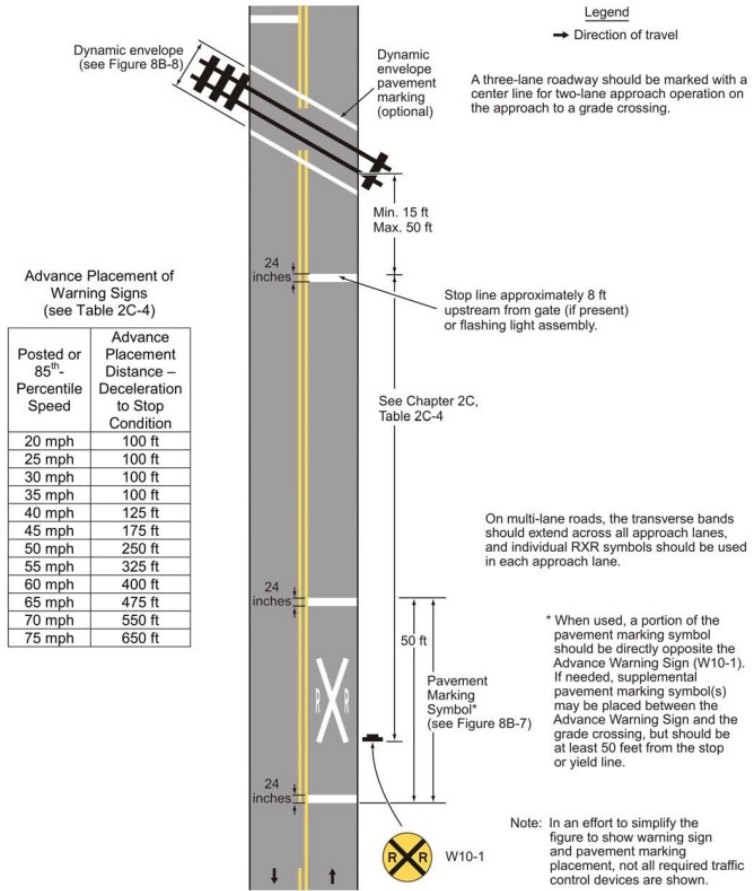


RAILROAD COORDINATION

- **DEMUTCD Striping Guidelines**
 - **Part 8 - Traffic Controls for Highway-Rail Grade Crossings**

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Figure 8B-6B. Example of Placement of Warning Signs and Pavement Markings for Active Grade Crossings (Delaware Revision)



Revision 1, December 2012

RAILROAD COORDINATION

- **QUESTIONS?**



- **Contact Information**

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- **Email: Robert.Perrine@state.de.us**

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