

WILMAPCO Council:
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Maryland Dept. of Transportation
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Raymond C. Miller
Delaware Transit Corporation
Director

James H. Sills, Jr.
Mayor of Wilmington

WILMAPCO Executive Director
G. Alexander Taft

Memorandum

To: Joe Wutka, Asst. Director of Project Development
Reza Moghissi, Asst. Chief Traffic Engineer

From: Heather Ehrlich, Planner HE

Date: September 8, 1999

Re: Harvey Road Traffic Calming Conceptual Design

Enclosed is the report and cost estimate prepared by LDR and the revised consensus design report and cost estimate prepared by WILMAPCO. Please contact me at 302/737-6205 ext. 18 or e-mail me at ehrlich@wilmapco.org if you have any questions.

Wilmington Area Planning Council

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Newark, Delaware 19711
302-737-6205; Fax 302-737-9584
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Darrell J. Minott
Delaware Economic Development Office
Director

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Mayor of Wilmington

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June 9, 1999

Representative Wayne A. Smith
Majority Leader
Legislative Hall
Dover, DE 19901

Secretary Anne Canby
Delaware Department of Transportation
P.O. Box 778
Dover, DE 19903

Dear Representative Smith and Secretary Canby:

I am pleased to inform you that community leaders in the Ardens area have reached consensus on the Harvey Road Traffic Calming design as shown on the attached map. The Delaware Department of Transportation and WILMAPCO adopted the Harvey Road traffic calming project into the FY 2000 Transportation Improvement Program with the condition that consensus be reached on the proposed improvements before funds are released. You asked WILMAPCO to work with the Ardens, the Claymont Fire Company, and the surrounding communities to reach consensus on a preferred design that addresses community issues. WILMAPCO formed the committee with invited membership and open participation by community residents. The committee met on April 21, May 5, and May 25. Attendees were from the following organizations: Arden, Ardencroft, Ardentown, Claymont Fire Company, Council of Civic Organizations of Brandywine Hundred, Country Gates Maintenance Corporation, and North Graylyn Crest Civic Association.

On April 21 we established the following design goals:

- Slow traffic speeds on Harvey Road
- Increase safety for vehicles and pedestrians
- Maintain current roadway capacity
- Allow emergency vehicles excellent access to destinations

At this first meeting we reviewed the current proposal and discussed issues with the design. The main concern was that raised intersections would slow emergency response time and jostle ambulances. Other concerns were raised about the land required for traffic calming devices, sight distances from landscaping, noise and safety. WILMAPCO presented information on various traffic calming techniques to encourage discussion of alternatives to the raised intersections.

At the second meeting on May 5, WILMAPCO presented a compromise plan based on discussion from the first meeting. This compromise plan eliminated all raised intersections and replaced them with an additional traffic signal, radar speed cameras, a mini roundabout and chicanes. To allow committee members to compare traffic calming techniques, we also presented a matrix showing the location of recommended traffic calming measures and the

WILMAPCO

Partners with you in transportation planning

effects of various measures on speed reduction, response time, historic preservation, right of way acquisition, and noise.

The radar speed cameras received the strongest support from the committee because they permanently increase speed enforcement resulting in slower speeds by those who drive the road on a regular basis; also, radar speed cameras have no impact on emergency response time or the historic structure of the road. Likewise, traffic signals were considered acceptable because they would not delay emergency vehicles and would not require additional right of way.

Some concerns were raised about the use of chicanes, mini roundabouts and medians. Residents of the Ardens would accept horizontal shifts only if no additional right of way was required. The fire department would accept horizontal shifts if they were easily mountable with smooth surfaces.

Two other design options were discussed, and rejected, at this meeting: lighted crosswalks and rumble strips. Residents expressed concern that lighting the currently unlit crosswalks along Harvey Road would disturb nearby homes. Rumble strips were rejected because of the jostling effect on ambulances and the additional noise they would create.

At our final meeting on May 25, WILMAPCO presented a revised compromise plan and matrix of techniques used in the design. Photos of chicanes and mini roundabouts were shown to demonstrate design options and reach consensus. Discussion focused on the development of consensus points to guide the DelDOT engineering design process. The committee agreed to the following:

1. No speed tables or raised intersections will be used.
2. Where there is existing right of way and no need for additional land acquisition, use horizontal designs, i.e. chicanes and roundabouts.
3. Medians, chicanes and roundabouts will have low level, mountable curbs, and accompanying dividers will have smooth surfaces close to grade level.
4. Landscaping on medians, roundabouts, and right of way will be low level (i.e. groundcover and perennials) to give safe line of sight.
5. Emergency vehicles and buses must be able to safely travel the turning radii of chicanes, roundabouts, and medians.
6. Radar cameras should be used to enforce speed limit.
7. Two additional traffic signals should be installed, and all signals should have a system for emergency vehicle override.
8. The Harvey Road Traffic Calming Design Committee will be involved in the engineering design process.

Please contact me if you would like additional information about the proposed design or the process used to develop consensus.

Sincerely,



G. Alexander Taft
Executive Director

cc: Members of the Harvey Road Traffic Calming Design Committee
John Perry, Claymont Fire Company
Mike Simmons, DelDOT
Heather Ehrlich, WILMAPCO



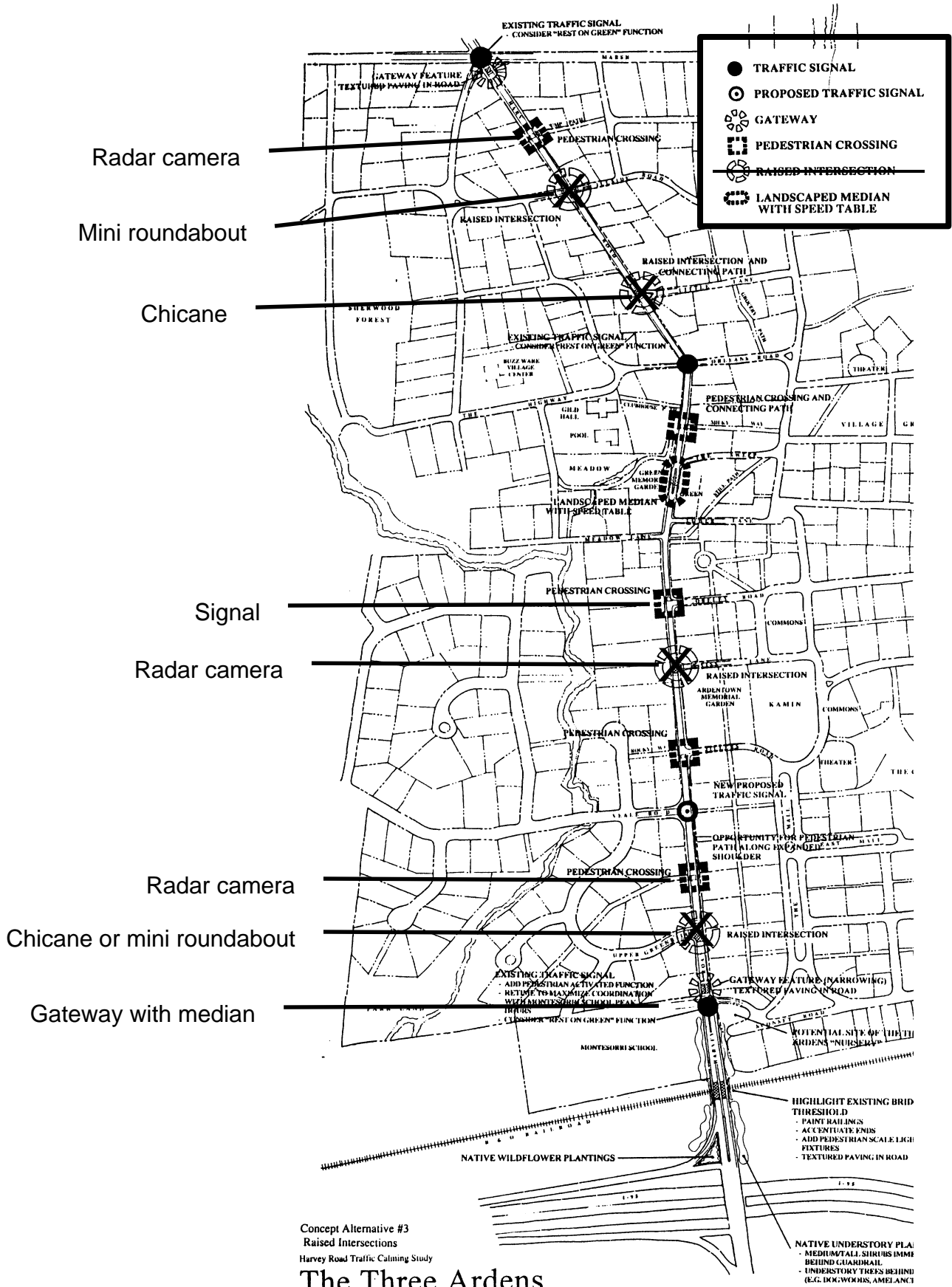
Harvey Road Traffic Calming Plan - Cost Estimate

Map #	Location	Element	Comments	Cost Estimate	Source
1	@ Marsh Road	"Rest on Green" function for existing signal		\$20,000	1
		Gateway Feature	Sign & Landscaping	\$7,000	1
		Textured paving in road	Asphalt Pavers	\$9,000	1
		Erosion & Sediment control		\$7,500	1
2	@ Mill Lane	Pedestrian Crossing		\$4,000	1
		Radar Camera		\$200,000	3
3	@ Hillside Road	Small Roundabout		\$8,000	2
		Erosion & Sediment control		\$7,500	1
4	@ Little Lane	Chicane		\$10,000	2
		Erosion & Sediment control		\$7,500	1
5	@ Orleans Road	"Rest on Green" function for existing signal		\$20,000	1
6	@ Milky Way	Pedestrian Crossing		\$4,000	1
7	@ Green Memorial Garden	Widening Road	Bituminous pavement, drainage, curb & patching	\$25,000	1
		Landscaped Median		\$20,000	1
8	@ Obeley Road	New Traffic Signal w/ Rest on Green Function		\$75,000	1
		Pedestrian Crossing		\$4,000	1
9	@ Swiss Lane	Radar Camera		\$200,000	3
		Erosion & Sediment control		\$7,500	1
10	@ Millers Road	Pedestrian Crossing		\$4,000	1
11	@ Veale Road	New Traffic Signal w/ Rest on Green Function		\$75,000	1
12	Between Veale & Upper Greenbriar Road	Pedestrian Crossing		\$4,000	1
		Radar Camera			
		Pedestrian Path along Expanded Shoulder		\$6,000	1
13	@ Upper Greenbriar	Chicane OR Small Roundabout		\$10,000	2
		Erosion & Sediment control		\$7,500	1
14	@ Upsan Downs Lane	Add pedestrian Activated Function to existing signal		\$5,000	
		Retime existing signal to maximize coordination with Montessori School Peak Hours			
		"Rest on Green" function for existing signal		\$20,000	1
		Gateway Feature.		\$5,000	1
		Landscaped Median - Narrowing Lanes		\$15,000	
		Textured paving in road	Asphalt Pavers	\$15,000	1
15	@ B&O Railroad	Paint Existing Bridge		\$5,000	1
		Add pedestrian scale lighting fixtures		\$20,000	
		Textured paving in road	Asphalt Pavers	\$60,000	1
16	@ I-95 NB Ramp	Add Native Understory plantings		\$10,000	
		TOTAL:		\$897,500	

1 = Harvey Rd Conceptual Traffic Calming Plan - 9/9/98
 2 = Portland Department of Transportation Web Site
 3 = Cost Estimate for Radar Cameras - Lockheed Martin

Harvey Road Traffic Calming Design Subcommittee

Salutation	First Name	Middle Initial	Last Name	Title	Organization	Address	City	State	Zip	Phone 1	Fax	E-mail	Home Phone
Ms.	Beverly		Barnett			2117 Meadow Lane	Wilmington	DE	19810-4124	302/529-0271		BerBarnet@aol.com	
Mr.	Walter		Borders		Harvey Road Traffic Calming Committee	2101 Harvey Road	Arden	DE	19810				
Mr.	Tim		Colgan	Chair	Arden Safety Committee	1704 Green Lane	Arden	DE	19810	302/529-1964	302/529-1962		
Mr.	Tyrone		Crittenden	Program Manager	DelDOT	P. O. Box 778	Dover	DE	19903	302/760-2162	302/739-2251		
Capt.	Bruce		DiVincenzo		Delaware State Police	603 Philadelphia Pike	Wilmington	DE	19809	302/762-6060	302/762-6787		
Mrs.	Ernita		Green	President	HOLIDAY HILLS CIVIC ASSOCIATION	2107 Westminster Drive	Wilmington	DE	19810	302/475-2527			
Mr.	Bill		Harlam	Co-President	WYNWOOD CIVIC ASSOCIATION	2316 Paulwynn Road	Wilmington	DE	19810	302/475-8682			
Mr.	Sig		Hellstrom			2043 Longcome Drive North Graylyn Crest	Wilmington	DE	19810				
Ms.	Susan		Holmes	Vice President	HOLIDAY HILLS CIVIC ASSOCIATION	2215 Carlton Lane	Wilmington	DE	19810	302/475-4232			
Mr.	Patrick		Kennedy	Safety Engineer	Federal Highway Administration	300 S. New Street, Rm. 2101	Dover	DE	19904-6726	302/734-5326			
Ms.	Lynda		Kolski	Chair	Arden Community Planning Committee	2209 The Sweep	Arden	DE	19810	302/475-1658	302/475-5733	lykolski@aol.com	
Mr.	Enno		Krebbers	Chair	Arden Traffic Calming Engineering Committee	2318 Sconset Road	Arden	DE	19810-4237	302/695-8577 302/475-2614		krebbers@compuserve.com	302/475-2614
Mr.	Louis	T.	Liarakos	President	COUNTRY GATES MAINTENANCE CORP.	7 Country Gates Drive	Wilmington	DE	19810	302/477-0429			
Ms.	Mary	L.	Marconi		Arden Community Planning Committee	2311 Woodland Road	Arden	DE	19810				
Deputy Chief	Patrick		McCarthy		Claymont Fire Company	3223 Philadelphia Pike	Claymont	DE	19703	302/798-9274			
Mr.	Tom		Mercer	Co-President	WYNWOOD CIVIC ASSOCIATION	2322 Patwynn	Wilmington	DE	19810	302/475-7725			
Mr.	Joseph	W.	Mitchell		CCOBH	610 Kilburn Road	Wilmington	DE	19803	302/652-3258	302/888-1859	locojoem@aol.com	302-478-8763
Fire Chief	John		Perry		Claymont Fire Company	3223 Philadelphia Pike	Claymont	DE	19703	302/798-9274	302/798-6310		
Ms.	Sheri		Phalan	Chair	Ardens' Landmark Committee	2401 Brae Road	Arden	DE	19810				
Mr.	Thomas		Saffo	President	N. Graylyn Crest Civic Association	2404 Caney Road	Wilmington	DE	19810	302/475-3357			
Mr.	David		Scott	Chair	Arden Town Assembly	1603 Orchard Road	Arden	DE	19810	302/429-5681		ardendel@bellatlantic.net	302/475-3077
Rep.	Wayne	A.	Smith		Delaware House of Representatives	3 Richards Drive Clair Manor	Wilmington	DE	19810	302/475-5460			
Mr.	Michael		Somers		DelDOT	P.O. Box 778	Dover	DE	19903	302/760-2118			
Mr.	Lawrence	E.	Tan	Assistant Manager	New Castle County EMS	3601 N. DuPont Highway	New Castle	DE	19720-6395	302/571-7948	302/571-7950		



- TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- ⊗ GATEWAY
- ⊞ PEDESTRIAN CROSSING
- ⊕ RAISED INTERSECTION
- ⊞ LANDSCAPED MEDIAN WITH SPEED TABLE

Radar camera

Mini roundabout

Chicane

Signal

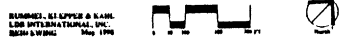
Radar camera

Radar camera

Chicane or mini roundabout

Gateway with median

Concept Alternative #3
 Raised Intersections
 Harvey Road Traffic Calming Study
The Three Ardens
 NEWCASTLE UNIVERSITY HILLSIDE



- HIGHLIGHT EXISTING BRID THRESHOLD
- PAINT BALLINGS
- ACCENTUATE ENDS
- ADD PEDESTRIAN SCALE LIGHT FIXTURES
- TEXTURED PAVING IN ROAD
- NATIVE WILDFLOWER PLANTINGS
- NATIVE UNDERSTORY PLA - MEDICAGO SATIVA (MIM)
- UNDERSTORY TREES BEHIND (E.G. DOGWOODS, AMELANT)