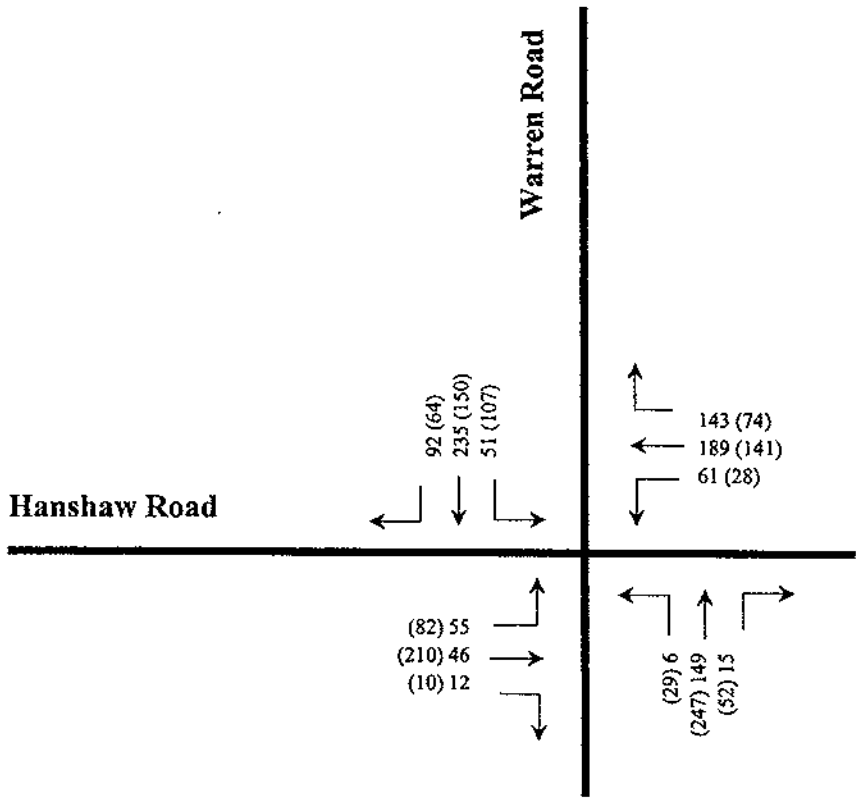
APPENDICES

APPENDIX A

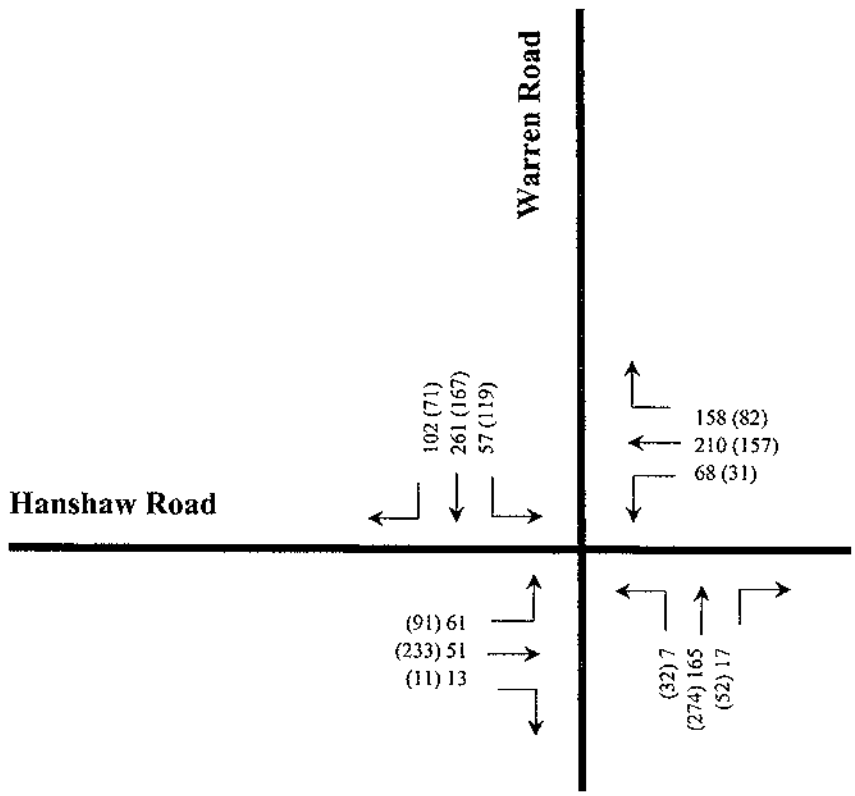
Traffic Data



Volume Key
Morning (Evening)

FISHERASSOCIATES

Hanshaw Road
Ithaca, New York
2006 Traffic Volumes

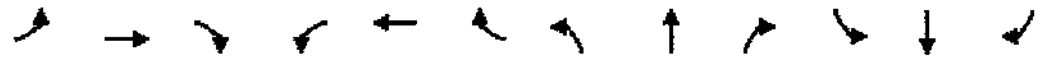


Volume Key
Morning (Evening)

Hanshaw Road
Ithaca, New York
2028 Traffic Volumes

APPENDIX B

Traffic Capacity Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	55	46	12	61	189	143	6	149	15	51	235	92
Peak Hour Factor	0.76	0.76	0.76	0.85	0.85	0.85	0.91	0.91	0.91	0.88	0.88	0.88
Hourly flow rate (vph)	72	61	16	72	222	168	7	164	16	58	267	105

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	149	462	187	430
Volume Left (vph)	72	72	7	58
Volume Right (vph)	16	168	16	105
Hadj (s)	0.05	-0.17	-0.03	-0.09
Departure Headway (s)	7.1	6.1	6.9	6.3
Degree Utilization, x	0.29	0.79	0.36	0.75
Capacity (veh/h)	426	564	452	539
Control Delay (s)	13.1	28.2	13.8	25.7
Approach Delay (s)	13.1	28.2	13.8	25.7
Approach LOS	B	D	B	D

Intersection Summary			
Delay	23.3		
HCM Level of Service	C		
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	82	210	10	28	141	74	29	247	47	107	150	64
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.83	0.83	0.83	0.82	0.82	0.82
Hourly flow rate (vph)	85	219	10	29	148	78	35	298	57	130	183	78

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	315	256	389	391
Volume Left (vph)	85	29	35	130
Volume Right (vph)	10	78	57	78
Hadj (s)	0.07	-0.13	-0.04	-0.02
Departure Headway (s)	7.8	7.9	7.4	7.4
Degree Utilization, x	0.69	0.56	0.80	0.81
Capacity (veh/h)	417	395	461	463
Control Delay (s)	26.3	20.6	34.1	34.7
Approach Delay (s)	26.3	20.6	34.1	34.7
Approach LOS	D	C	D	D

Intersection Summary			
Delay	29.9		
HCM Level of Service	D		
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	61	51	13	68	210	158	7	165	17	57	261	102
Peak Hour Factor	0.76	0.76	0.76	0.85	0.85	0.85	0.91	0.91	0.91	0.88	0.88	0.88
Hourly flow rate (vph)	80	67	17	80	247	186	8	181	19	65	297	116

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	164	513	208	477
Volume Left (vph)	80	80	8	65
Volume Right (vph)	17	186	19	116
Hadj (s)	0.05	-0.17	-0.03	-0.08
Departure Headway (s)	8.0	6.7	7.8	6.9
Degree Utilization, x	0.37	0.96	0.45	0.92
Capacity (veh/h)	423	523	435	508
Control Delay (s)	15.7	55.7	17.0	47.7
Approach Delay (s)	15.7	55.7	17.0	47.7
Approach LOS	C	F	C	E

Intersection Summary			
Delay	42.2		
HCM Level of Service	E		
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	91	233	11	31	157	82	32	274	52	119	167	71
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.83	0.83	0.83	0.82	0.82	0.82
Hourly flow rate (vph)	95	243	11	33	165	86	39	330	63	145	204	87

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	349	284	431	435
Volume Left (vph)	95	33	39	145
Volume Right (vph)	11	86	63	87
Hadj (s)	0.07	-0.13	-0.04	-0.02
Departure Headway (s)	8.9	9.1	8.5	8.5
Degree Utilization, x	0.86	0.72	1.02	1.03
Capacity (veh/h)	390	383	431	435
Control Delay (s)	47.5	32.0	78.0	81.2
Approach Delay (s)	47.5	32.0	78.0	81.2
Approach LOS	E	D	F	F

Intersection Summary			
Delay	63.1		
HCM Level of Service	F		
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.95			0.99			0.97	
Flt Protected		0.98			0.99			1.00			0.99	
Satd. Flow (prot)		1806			1760			1851			1779	
Flt Permitted		0.70			0.93			0.98			0.93	
Satd. Flow (perm)		1299			1643			1816			1668	
Volume (vph)	61	51	13	68	210	158	7	165	17	57	261	102
Peak-hour factor, PHF	0.76	0.76	0.76	0.85	0.85	0.85	0.91	0.91	0.91	0.88	0.88	0.88
Adj. Flow (vph)	80	67	17	80	247	186	8	181	19	65	297	116
RTOR Reduction (vph)	0	7	0	0	35	0	0	7	0	0	20	0
Lane Group Flow (vph)	0	157	0	0	478	0	0	201	0	0	458	0
Confl. Peds. (#/hr)	2		2	2		2	4		1	1		4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.9			16.9			16.5			16.5	
Effective Green, g (s)		17.9			17.9			17.5			17.5	
Actuated g/C Ratio		0.41			0.41			0.40			0.40	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		536			678			732			673	
v/s Ratio Prot												
v/s Ratio Perm		0.12			c0.29			0.11			c0.27	
v/c Ratio		0.29			0.70			0.28			0.68	
Uniform Delay, d1		8.5			10.6			8.7			10.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.3			3.3			0.2			2.8	
Delay (s)		8.8			13.9			8.9			13.5	
Level of Service		A			B			A			B	
Approach Delay (s)		8.8			13.9			8.9			13.5	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	43.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.96			0.98			0.97	
Flt Protected		0.99			0.99			1.00			0.98	
Satd. Flow (prot)		1827			1763			1811			1781	
Flt Permitted		0.86			0.93			0.94			0.76	
Satd. Flow (perm)		1588			1651			1707			1370	
Volume (vph)	91	233	11	31	157	82	32	274	52	119	167	71
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.83	0.83	0.83	0.82	0.82	0.82
Adj. Flow (vph)	95	243	11	33	165	86	39	330	63	145	204	87
RTOR Reduction (vph)	0	2	0	0	29	0	0	10	0	0	14	0
Lane Group Flow (vph)	0	347	0	0	255	0	0	422	0	0	422	0
Confl. Peds. (#/hr)	3		4	4		3			7	7		
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.7			14.7			18.3			18.3	
Effective Green, g (s)		15.7			15.7			19.3			19.3	
Actuated g/C Ratio		0.37			0.37			0.45			0.45	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		580			603			766			615	
v/s Ratio Prot												
v/s Ratio Perm		c0.22			0.15			0.25			c0.31	
v/c Ratio		0.60			0.42			0.55			0.69	
Uniform Delay, d1		11.1			10.2			8.7			9.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.7			0.5			0.9			3.2	
Delay (s)		12.8			10.7			9.5			12.6	
Level of Service		B			B			A			B	
Approach Delay (s)		12.8			10.7			9.5			12.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	43.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX C

Accident Rate Calculations and Diagrams

ACCIDENT SUMMARY SHEET

ROUTE: *County Route 109* **LOCATION:** *Hanshaw Road - E/O Pleasant Grove to W/O Sapsucker*

MUNICIPALITY: *Town of Ithaca* **COUNTY:** *Tomkins*

TIME PERIOD COVERED: *6/1/1999 - 5/31/2002* **REFERENCE MARKERS / NODES:** *1* - *7*

REMARKS: *All Accidents* **DATE:** *4/10/2006*

TIME OF DAY	# ACC	%
6 AM - 10 AM	5	20.0%
10 AM - 4 PM	4	16.0%
4 PM - 7 PM	9	36.0%
7 PM - 12 AM	6	24.0%
12 AM - 6 AM	1	4.0%
Unspecified	0	0.0%
Total	**25**	

DIRECTION	# ACC	%
North	2	4.9%
South	4	9.8%
East	12	29.3%
West	23	56.1%
Total	**41**	

DIRECTION	# ACC	
Northeast	0	0.0%
Northwest	0	0.0%
Southeast	0	0.0%
Southwest	0	0.0%
Unspecified	0	0.0%

WEATHER	# ACC	%
Clear	8	32.0%
Cloudy	8	32.0%
Rain	1	4.0%
Snow	7	28.0%
Sleet/Hail/Freezing Rain	1	4.0%
Fog/Smog/Smoke	0	0.0%
Unspecified	0	0.0%
Total	**25**	

ACCIDENT TYPE	# ACC	%
Rear End	10	40.0%
Overtake	1	4.0%
Right Angle	5	20.0%
Left Turn	0	0.0%
Right Turn	0	0.0%
Fixed Object	4	16.0%
Head On	0	0.0%
Sideswipe	0	0.0%

ACCIDENT TYPE	# ACC	
Pedestrian	0	0.0%
Bicycle	0	0.0%
Parked Vehicle	0	0.0%
Backing	0	0.0%
Run Off The Road	0	0.0%
Animal	5	20.0%
Other	0	0.0%
Unspecified	0	0.0%

Total **25**

SURFACE	# ACC	%
Dry	10	40.0%
Wet	6	24.0%
Mud/Slush	0	0.0%
Snow/Ice	9	36.0%
Unspecified	0	0.0%
Total	**25**	

ACCIDENT SEVERITY	# ACC	%
Fatal	0	0.0%
Injury	4	16.0%
Property Damage	16	64.0%
Non-Reportable	5	20.0%
Total	**25**	

TIME OF YEAR	# ACC	%
Winter (Dec-Feb)	11	44.0%
Spring (Mar-May)	8	32.0%
Summer (Jun-Aug)	2	8.0%
Fall (Sep-Nov)	4	16.0%
Total	**25**	

TYPE OF VEHICLE	# ACC	%
Passenger Cars	41	100.0%
Commercial Vehicles	0	0.0%
Total	**41**	

DAY OF WEEK	# ACC	%
Sunday	4	16.0%
Monday	5	20.0%
Tuesday	2	8.0%
Wednesday	0	0.0%
Thursday	3	12.0%
Friday	9	36.0%
Saturday	2	8.0%
Total	**25**	

LIGHT CONDITION	# ACC	%
Daylight	17	68.0%
Dawn/Dusk	0	0.0%
Night	8	32.0%
Unspecified	0	0.0%
Total	**25**	

SUMMARY OF ACCIDENT SEVERITY BY YEAR:

	1999	2000	2001	2002
Fatal Accidents	0	0	0	0
Injury Accidents	1	1	2	0
Property Damage Accidents	0	7	6	3
Non-Reportable Accidents	2	2	1	0
Total Accidents	**3**	**10**	**9**	**3**

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED:
FROM: *6/1/1999*
TO: *5/31/2002*
36 MONTHS

ROUTE NUMBER/STREET NAME: *County Route 109*
LOCATION: *Hanshaw Road - E/O Pleasant Grove to W/O Sapsucker*
MUNICIPALITY: *Town of Ithaca* COUNTY: *Tomkins*
REFERENCE MARKERS / NODES: *1* - *7*

CASE No. *PG - SW*
FILE: *HANSHAW ROAD*
BY: *BAB*
DATE: *4/10/2006*

No.	DATE	TIME	# VEHICLES	SEVERITY	LIGHT COND	ROAD CHAR	SURFACE	WEATHER	CONTRIB. FACTORS	ACC. TYPE	ACCIDENT DESCRIPTION	KEY #
1	5/16/2000	8:45	1	N/R	1	2	1	1	61	Anml	EB V1 hit deer	1
2	12/18/1999	14:00	1	INJ	1	1	2	2	11	FixO	EB V1 lost consciences & hit utility pole	2
3	5/27/2001	21:00	1	N/R	5	1	2	2	61	Anml	WB V1 hit SB deer	3
4	1/4/2001	17:55	2	PDO	4	1	2	2	9	Rend	EB V1 rear ended EB V2	4
5	3/17/2001	16:29	2	PDO	1	2	4	4	66 5	Ovtk	EB V2 lost control & hit WB V1	5
6	8/6/1999	7:00	1	N/R	1	1	1	1	5	FixO	SB V1 lost control & hit a tree	6
7	12/23/1999	23:45	2	N/R	1	1	4	5		Rend	NB V1 rear ended NB V2	7
8	5/26/2000	22:45	2	PDO	1	1	1	2	7 4	Rang	EB V2 hit SB V1	8
9	9/3/2000	18:16	2	PDO	1	2	1	1	17 62	Rang	WB V2 hit NB V1	9
10	12/1/2000	22:01	2	INJ	5	1	4	4	66 9	Rend	WB V2 rear ended WB V1	10
11	1/19/2001	18:19	2	PDO	4	1	4	4	9 66	Rend	WB V2 rear ended WB V1	11
12	3/18/2001	10:49	2	PDO	1	1	2	1	7	Rang	WB V2 hit NB V1	12
13	3/19/2001	17:55	2	INJ	1	1	1	1	17	Rang	WB V2 hit SB V1	13
14	2/4/2002	16:40	2	PDO	1	1	4	4	66	Rend	WB V2 rear endedt WB V1	14
15	5/12/2000	8:50	2	PDO	1	2	2	3	9	Rend	WB V2 rear ended WB V1	15
16	6/4/2001	14:32	2	PDO	1	2	1	2	9	Rend	EB V2 rear ended EB V1	16
17	12/22/2000	14:40	2	PDO	1	1	4	4	66	Rend	WB V1 rear ended WB V2	17
18	5/5/2000	23:00	1	PDO	5	2	1	2	61	Anml	WB V1 hit deer	18
19	10/13/2000	1:34	1	N/R	5	2	1	1	61	Anml	EB V1 hit deer	19
20	2/4/2002	17:09	2	PDO	1	1	4	4	66	Rend	WB V1 rear ended WB V2	20
21	1/4/2001	7:57	1	INJ	1	2	4	2	66 80	FixO	EB V1 lost control & left road hitting (2) mailboxs and culvert	21
22	2/4/2002	18:57	1	PDO	4	1	4	4	19 66	FixO	EB V1 lost control & went off the road and hit utlilty pole	22

DETAILS OF ACCIDENT HISTORY

PERIOD STUDIED:
FROM: 6/1/1999
TO: 5/31/2002
36 MONTHS

ROUTE NUMBER/STREET NAME: County Route 109
LOCATION: Hanshaw Road - E/O Pleasant Grove to W/O Sapsucker
MUNICIPALITY: Town of Ithaca COUNTY: Tomkins
REFERENCE MARKERS / NODES: 1 - 7

CASE No. PG - SW
FILE: HANSHAW ROAD
BY: BAB
DATE: 4/10/2006

No.	DATE	TIME	# VEHICLES	SEVERITY	LIGHT COND	ROAD CHAR	SURFACE	WEATHER	CONTRIB. FACTORS	ACC. TYPE	ACCIDENT DESCRIPTION	KEY #
23	12/29/2000	22:43	2	PDO	1	1	2	2	4 9	Rend	WB V1 rear ended WB V2	23
24	10/8/2000	9:48	2	PDO	1	1	1	1	7	Rang	SB V1 pulled into path of WB V2	24
25	10/30/2001	17:40	1	PDO	5	1	1	1	61	Anml	WB V1 hit SB deer	25

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JOB Mansfield Road
SHEET NO. 1 OF 1
CALCULATED BY KEM DATE 3/31/06
CHECKED BY DATE
SCALE PROJECT CORRIDOR

PROJECT CORRIDOR ACCIDENT RATE.

$$ADT = \frac{(7{,}000 \times 1.035) + (1530 \times 0.609) + (3{,}600 \times 0.706)}{2.35} =$$

$$= \frac{7{,}245 + 2{,}760 + 2{,}540}{2.35} = 5{,}340 \text{ VEH/DAY}$$

LENGTH ≈ 2.35 KM

$$\text{ACCIDENT RATE} = \frac{(25 \times 1{,}000{,}000)}{(2.35\text{ KM})(3 \times 365)(5{,}340)} = \frac{25{,}000{,}000}{13{,}741{,}155} = 1.82$$

ACC/MKM.

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JOB Monroe Road
SHEET NO. 1 OF 1
CALCULATED BY
DATE
CHECKED BY KEM DATE 3/30/06
SCALE SEGMENT ACCIDENT RATES

EAST OF PLEASANT GROVE TO EAST OF WARREN ROAD.

$$\text{ACCD. RATE} = \frac{6 \times 1{,}000{,}000}{(1.055\ \text{KM})(365 \times 3) \times (7{,}000)} = \frac{6{,}000{,}000}{7{,}950{,}275} = 0.76\ \text{ACC/MVK}$$

(7,000 ↑ 2008 COUNT)

EAST OF WARREN ROAD THRU SALEM DRIVE

$$\text{ACCD. RATE} = \frac{6 \times 1{,}000{,}000}{(0.609\ \text{KM})(365 \times 3)(4{,}530)} = \frac{6{,}000{,}000}{3{,}020{,}853} = 1.99\ \text{ACC/MVK}$$

(4,530 ↑ 2004 COUNT.)

EAST OF SALEM DRIVE THRU SCHOOLHOUSE WOODS ROAD.

$$\text{ACCD RATE} = \frac{4 \times 1{,}000{,}000}{(0.706)(1095)(3655)} = 1.42\ \text{ACC/MVK}$$

(3655 ↑ 2001 COUNT.)

STATEWIDE
ACCIDENT RATE CONVERSION 3.66 ACC/MVM × 0.62137 (M/KM) =

= 2.27 ACC/MVK

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phone (585) 334-1310 • fax (585) 334-1361
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JOB Hamlin Roads
SHEET NO. 1 OF 1
CALCULATED BY _____ DATE _____
CHECKED BY KEM DATE 3/30/06
SCALE Int. Accident Rate.

Hamlin Road and Herrey Road.

$$\text{Accd Rate} = \frac{9 \times 1{,}000{,}000}{(10 \times 1189)(3 \times 365)} = \frac{9{,}000{,}000}{13{,}019{,}550} = 0.69 \text{ Acc/MEV}$$

Statewide Accident Rate = 0.22

Aleg stop sign controlled int.

APPENDIX D

Pavement Evaluation and Subsurface Investigation

Pavement Evaluation

P.I.N. 3753.25
Hanshaw Road
(Cayuga Heights Village Line to
Dryden Town Line)
Town of Ithaca
Tompkins County

April 2006

Prepared For:
Tompkins County
Highway Department
170 Bostwick Road
Ithaca, NY 14850

Prepared By:
Fisher Associates PE, LS, PC
135 Calkins Road
Rochester, NY 14623

Through visual observation of pavement conditions and review of the subsurface investigation, the project area was split into three segments. The following table summarizes the primary pavement distress and condition rating for the roadway segments.

Roadway Segments from West to East	Approximate Segment Length	Pavement Condition Description	Condition Rating
Segment 1 Village of Cayuga Heights to Orchard Street.	590 meters	▫ wheelpath rutting visible along entire segment with wheelpath cracking on 40% of the segment ▫ longitudinal cracking along 45% ▫ edge cracking along 30% ▫ shoulder deterioration along entire segment	6 (fair condition, distress is clearly visible)
Segment 2 Orchard Street to Warren Road	240 meters	▫ wheelpath rutting visible along entire segment with wheelpath cracking on 75% of the segment ▫ longitudinal cracking along 60% ▫ edge cracking along 70% ▫ shoulder deterioration along entire segment	5 (poor condition, distress is frequent and may be severe)
Segment 3 Warren Road to Sapsucker Woods Road (Dryden town line)	1360 meters	▫ wheelpath rutting visible along entire segment with wheelpath cracking on 75% of the segment ▫ longitudinal cracking along 75% ▫ edge cracking along 85% ▫ full width transverse cracks towards western end ▫ severe shoulder deterioration along entire segment	<5 (poor condition, distress is frequent and severe)

The visual survey identified pavement distress that included wheel path cracking, wheel path rutting, full width transverse cracking, longitudinal cracking, and edge cracking. The severity of the pavement distress ranged from high to low. The severe alligator / fatigue cracks in the wheel paths in the eastern part of the project (Segment 3) indicate that the pavement has reached the end of its service life.

Severe shoulder deterioration and deformation is visible along the entire project.

Introduction

This report has been prepared to present the findings of the pavement evaluation completed for Hanshaw Road between the Village of Cayuga Heights and Sapsucker Woods Road (2.2 km (1.4 mi.) in length). Warren Road intersects with Hanshaw Road in the middle (approximately) of the project and divides the project into two roadway classifications. The western end of the project is classified as an Urban Minor Arterial and the eastern end is classified as an Urban Collector. The traffic volumes for the two sections are 7000 vehicles/day and 4530 vehicles/day respectively.

The pavement evaluation included both a visual condition survey included in Attachment B and subsurface investigations included in Attachment C.

Existing Pavement and Shoulder Condition

Pavement History

Record plans dated 1906 were available for the western section of roadway between Cayuga Heights and Warren Road. The plans indicated that the roadway was constructed as a 12' wide macadam pavement. No other record plans are available regarding materials or widths of original pavement construction.

Maintenance History

Tompkins County Highway maintenance records were available for the time period of 1963 to the present. Review of the history indicates there have been numerous surface treatments and maintenance courses applied to the pavement. Pavement cores show thicknesses that range from 0.24 m to 0.46 m (0.8 ft. to 1.5 ft.) of asphalt for the western section of the project, and from 0.15 m to 0.21 m (0.5 ft. to 0.7 ft.) of pavement for the eastern section of the project.

Distress Data Collection

Pavement Distress information was collected using the NYSDOT Material Bureau's Distress Data Form's (see Attachment B).

In general, the pavement exhibits significantly more severe pavement distress toward the eastern end of the project (Warren Road to Sapsucker Woods Road). Using a rating scale of 1 to 10, with 1 being the worst and 10 being the best, a condition rating was determined for each segment. The condition ratings can be categorized as follows:

Rating	Condition Description
9-10	Excellent – No pavement distress.
7-8	Good – Distress symptoms are beginning to show.
6	Fair – Distress is clearly visible.
1-5	Poor – Distress is frequent and may be severe.

Subsurface Investigation

Subsurface investigations were performed by PW Laboratories, Inc on May 25 and 26, 2005. Eight (8) test borings, advanced to depths ranging from 5 ft. to 15 ft. below existing ground surface, were made along the highway alignment.

The eight cores indicated the presence of 150 mm to 450 mm (6" to 18") of asphalt concrete. Shale was encounter within 8.0 ft at boring B-5, 8.8 ft at boring B-6 and within 5.0 ft at boring B-7. Ground water was encounter in the range of 5.2 ft to 11.5 ft below ground surface elevations.

The subsurface soil conditions vary from the west to east along the alignment. Along the western portion of the roadway (borings B-1 through B-3) the natural soils generally consist of deltaic or outwash deposits. These soils are visually described as brown, to red or gray-brown sands and gravels with minor amounts of silt. The soils along the western portion of the roadway typically drain well.

In the eastern portion of the roadway (borings B-4 through B-8) the natural soils generally consist of glacial till. The glacial till is visually described as red-brown to gray-brown, silt, with varying amounts of clay, sand, and gravel. In some locations thin seams or stringers of gravelly sand or sandy gravel were also encountered. The soils along the eastern portion of the roadway, drain poorly, are very hard when they are dry, and turn soft when wet.

The location of the borings, and test boring logs are included in Attachment C.

Subsurface Investigation and Pavement Summary

	Asphalt Thickness	Bedrock Depth	Groundwater Depth	Soil / Characteristics	Pavement Condition Rating
Beginning of Segment 1 Village of Cayuga Heights (Western Project Limit)					
B-1	1.0'	None Encountered	11.0'	Well Draining, Deltaic or Outwash Deposits	6
B-2	1.5'	None Encountered	11.5'		
B-3	1.5'	None Encountered	None Encountered		
Beginning of Segment 2 Orchard Street					
B-4	1.1'	None Encountered	10.0'	Poorly Draining, Glacial Till	5
B-5	0.8'	8.0' (shale)	5.2'		
Beginning of Segment 3 Warren Road					
B-6	0.7'	8.8' (refusal)	7.0'	Poorly Draining, Glacial Till	<5
B-7	0.7'	5.0' (shale)	None Encountered		
B-8	0.5'	None Encountered	8.5'		
Town of Dryden (Eastern Project Limit)					

Recommendation

One of the primary objectives of the project is to address pavement and shoulder structural deficiencies. The overall goal for the pavement design is to provide the most cost effective solution considering the life cycle cost of feasible solutions and the project budget.

A number of alternatives were considered for the restoration of the pavement section. Due to the age of the existing pavement (assumed 50+ years), the advanced levels of deterioration along segments of the project area, and the results of the subsurface exploration, the option of milling and resurfacing the pavement was eliminated in areas exhibiting severe deterioration levels. This was primarily due to the inadequate capacity of the subbase and projected short service life of this alternative.

Two options were evaluated for the reconstruction of the pavement. Option 1 removes the existing pavement section and constructs a new pavement section the entire length of the project. Option 2 consists of various rehabilitation methods to reconstruct the new roadway.

The following details the options:

1. Full Depth Reconstruction Option

   Remove the existing pavement and construct a new pavement section consisting of 300 mm (12 in.) stone subbase, 150 mm (6 in.) asphalt base course, 50 mm (2 in.) asphalt binder course and 40 mm (1.5 in.) asphalt top course.

2. Pavement Rehabilitation Option

   Village of Cayuga Heights to Orchard Street (Segment 1) – mill and remove 50 mm (2 in.) of asphalt, place 50 mm (2 in.) of asphalt top.

   Orchard Street to Warren Road (Segment 2) - 225 mm (9 in.) full depth pavement reclamation with a 75 mm (3 in.) stabilized base course and 100 mm (4 in.) of hot mix asphalt. Full depth pavement reclamation, recycles the existing pavement into a material that is used as a foundation for the new asphalt pavement section.

   Warren Road (Segment 3) - Remove the existing pavement and construct a new pavement section consisting of 300 mm (12 in.) stone subbase, 150 mm (6 in.) asphalt base course, 50 mm (2 in.) asphalt binder course and 40 mm (1.5 in.) asphalt top course

   Warren Road to Sapsucker Woods Road (Segment 4) - 225 mm (9 in.) full depth pavement reclamation with a 75 mm (3 in.) stabilized base course and 100 mm (4 in.) of hot mix asphalt. Full depth pavement reclamation, recycles the existing pavement into a material that is used as a foundation for the new asphalt pavement section

   Segment 1 has been identified as a section that can be milled and resurfaced due to the thick section of existing asphalt, favorable soil conditions and existing pavement condition. The rehabilitation of Segments 2 & 3 would include a recycled asphalt pavement foundation, which will improve the drainage of the roadway foundation.

Both of the options include reconstruction of the asphalt shoulders and improving the pavement drainage by installing underdrain pipe or by daylighting the new roadway subbase to provide positive drainage of the roadway foundation.

Costs estimates were prepared for the options to identify a preferred alternative. The estimates are:

	Estimated Cost
Option 1 – Full Depth Reconstruction (travel lanes and shoulders), option including lowering of the roadway, new granite curbs and a closed drainage system	**$3,750,000**
Option 2 – Pavement rehabilitation for travel lanes with full depth shoulders including open shallow swales / concrete gutters and a closed drainage system	**$ 2,970,000**

Identifying a preferred alternative was based on the anticipated service life, degree of maintenance anticipated, and initial construction cost versus the project budget. The full depth reclamation option / pavement milling and resurfacing option is recommended as it will provide the longest service life for a cost that is feasible in consideration of the project construction budget ($2.5 Million).

Pavement Evaluation

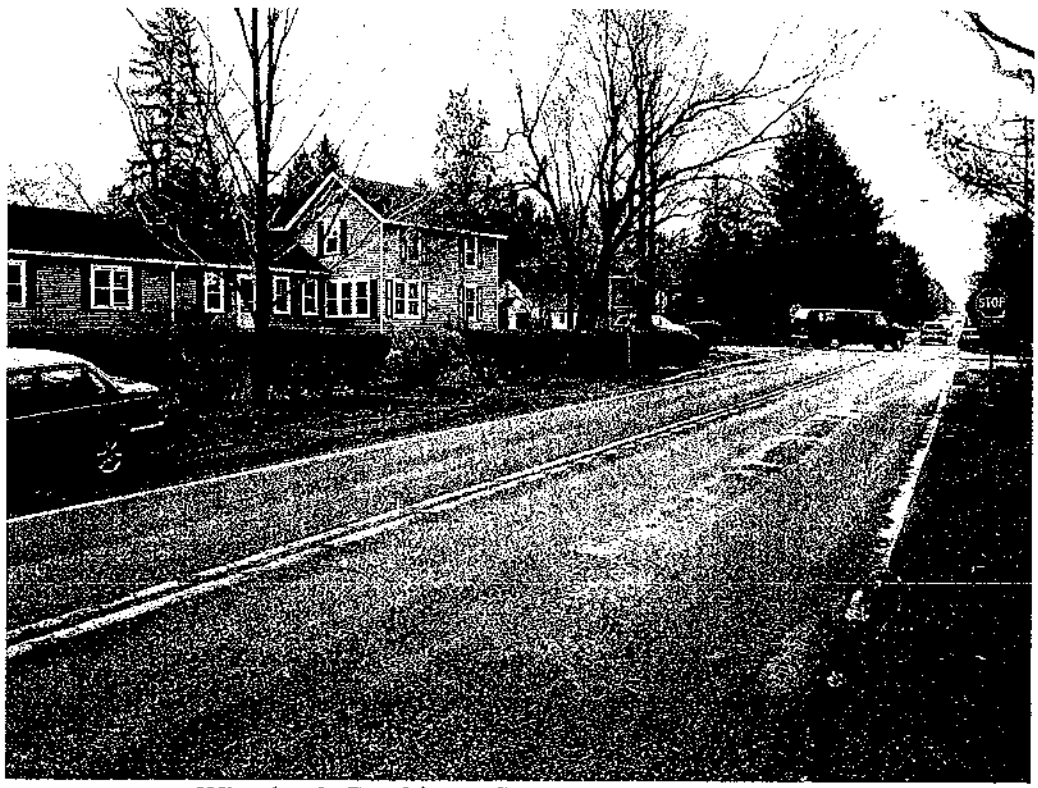
Attachment A

Photos

Wheelpath Cracking – Segment 1

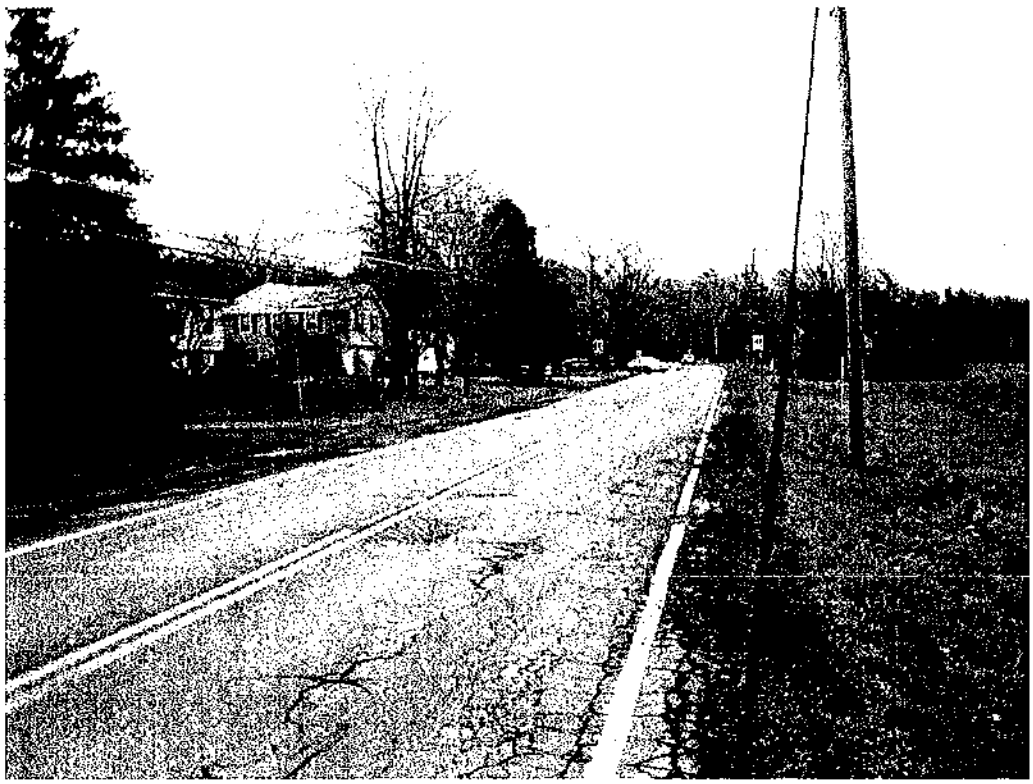
Shoulder Deterioration – End of Segment 1, Beginning of Segment 2

Wheelpath Rutting & Wheelpath Cracking – Segment 2



Wheelpath Cracking – Segment 2 at Warren Road

Pavement and Shoulder Deterioration – Segment 3



Pavement and Shoulder Deterioration – Segment 3 near Sapsucker Woods Road

Pavement Evaluation

Attachment B

Distress Data Forms

HANSHAW ROAD
PAVEMENT DISTRESS SUMMARY

OVERALL			field sheet 1	field sheet 2	field sheet 3	field sheet 4	field sheet 5	field sheet 6	field sheet 7	field sheet 8	field sheet 9	Total	%
CORRUGATIONS	N	None	50	50	50	50	50	50	50	50	20	420	100%
	P	Present	0	0	0	0	0	0	0	0	0	0	0%
SETTLEMENTS &	N	None	0	0	0	0	0	0	0	0	0	0	
	P	Present	5	0	0	5	8	0	0	0	0	18	
ASPHALT CONCRETE	N	None	0	0	0	0	0	0	0	0	0	0	
OVERLAY OR	G	Good	0	0	0	0	0	0	0	0	0	0	
SPRAY PATCH	F	Fair	0	0	0	0	0	0	0	0	0	0	
	P	Poor	0	0	0	0	0	0	0	0	0	0	
WHEELPATH	N	None	33	28	26	11	28	8	11	7	2	154	38%
CRACKING	L	Single Crack	9	7	10	10	10	11	15	16	6	94	22%
	M	Multiple Cracks	8	13	14	27	4	28	19	21	10	144	34%
	H	Multiple Cracks With Potholes	0	2	0	2	13	3	3	6	2	31	7%
FULL WIDTH	N	None	0	0	0	0	0	0	0	0	0	0	
TRANSVERSE	L	Single Crack	0	0	0	0	0	0	1	0	0	1	
CRACKING	M	Multiple Cracks	0	0	0	0	0	0	3	3	2	8	
	H	Multiple Cracks With Potholes	0	0	0	0	0	0	0	1	0	1	
LONGITUDINAL	N	None	22	37	15	29	17	8	10	14	5	157	37%
CRACKING	L	Single Crack	6	13	35	18	5	15	17	16	10	135	32%
	M	Multiple Cracks	22	0	0	3	28	22	23	20	5	123	29%
	H	Multiple Cracks With Potholes	0	0	0	0	0	5	0	0	0	5	1%
EDGE	N	None	29	31	40	14	24	2	6	5	2	153	37%
CRACKING	L	Single Crack	7	2	0	12	0	16	18	14	10	79	19%
	M	Multiple Cracks	1	17	10	19	26	28	24	26	6	157	38%
	H	Multiple Cracks With Potholes	8	0	0	5	0	4	2	5	2	26	6%
CRACKING	N	None	0	0	0	0	0	0	0	0	0	0	0%
OTHER	L	Single Crack	0	0	0	0	0	0	0	0	0	0	0%
	M	Multiple Cracks	0	0	0	0	0	0	0	0	0	0	0%
	H	Multiple Cracks With Potholes	0	0	0	0	0	0	0	0	0	0	0%
SLIPPAGE CRACKS	N	None	5	5	5	5	5	5	5	5	2	42	100%
	P	Present	0	0	0	0	0	0	0	0	0	0	0%
RAVELLING	N	None	50	47	50	48	46	50	50	50	20	411	98%
	P	Present	0	3	0	2	4	0	0	0	0	9	2%
WHEELPATH	N	None	0	0	0	0	0	0	0	0	0	0	0%
RUTTING	L	< 3/8"	2	4	5	2	1	0	0	0	0	14	33%
	M	3/8" to 3/4"	1	1	0	3	1	2	3	0	1	12	29%
	H	>3/4"	2	0	0	0	3	3	2	5	1	16	38%
WIDENING	N	None	5	5	3	5	5	5	5	5	2	40	95%
DROPOFF	L	< 3/8"	0	0	0	0	0	0	0	0	0	0	0%
	M	3/8" to 3/4"	0	0	0	0	0	0	0	0	0	0	0%
	H	>3/4"	0	0	2	0	0	0	0	0	0	2	5%
SHOULDER	N	None	0	0	0	0	0	0	0	0	0	0	0%
DETERIORATION	L	Single Crack	1	0	0	0	0	0	0	0	0	1	2%
	M	Multiple Cracks	3	5	5	3	1	0	0	0	0	17	40%
	H	Multiple Cracks With Potholes	1	0	0	2	4	5	5	5	2	24	57%
LANE/SHOULDER	N	None	5	5	5	5	5	5	5	5	2	42	100%
SEPARATION	L	< 1/4" / sealed	0	0	0	0	0	0	0	0	0	0	0%
	M	1/4" to 1"	0	0	0	0	0	0	0	0	0	0	0%
	H	>1"	0	0	0	0	0	0	0	0	0	0	0%
LANE/SHOULDER	N	None	5	5	5	5	3	5	5	5	2	40	95%
DROPOFF	L	<1"	0	0	0	0	0	0	0	0	0	0	0%
	M	1" to 2"	0	0	0	0	0	0	0	0	0	0	0%
	H	>2"	0	0	0	0	2	0	0	0	0	2	5%
SHOULDER	N	None	1	1	1	0	0	0	0	0	0	3	7%
DEFORMATION	P	Present	4	4	4	5	5	5	5	5	2	39	93%

PAVEMENT DISTRESS SUMMARY

SEGMENT 1			field sheet 1	field sheet 2	field sheet 3	field sheet 4	Total	%
CORRUGATIONS	N	None	50	50	50	10	160	100%
	P	Present	0	0	0	0	0	0%
SETTLEMENTS &	N	None	0	0	0	0	0	
	P	Present	5	0	0	1	6	
ASPHALT CONCRETE	N	None	0	0	0	0	0	
OVERLAY OR	G	Good	0	0	0	0	0	
SPRAY PATCH	F	Fair	0	0	0	0	0	
	P	Poor	0	0	0	0	0	
WHEELPATH	N	None	33	28	26	7	94	59%
CRACKING	L	Single Crack	9	7	10	1	27	17%
	M	Multiple Cracks	8	13	14	2	37	23%
	H	Multiple Cracks With Potholes	0	2	0	0	2	1%
FULL WIDTH	N	None	0	0	0	0	0	
TRANSVERSE	L	Single Crack	0	0	0	0	0	
CRACKING	M	Multiple Cracks	0	0	0	0	0	
	H	Multiple Cracks With Potholes	0	0	0	0	0	
LONGITUDINAL	N	None	22	37	15	10	84	53%
CRACKING	L	Single Crack	6	13	35	0	54	34%
	M	Multiple Cracks	22	0	0	0	22	14%
	H	Multiple Cracks With Potholes	0	0	0	0	0	0%
EDGE	N	None	29	31	40	7	107	69%
CRACKING	L	Single Crack	7	2	0	0	9	6%
	M	Multiple Cracks	1	17	10	0	28	18%
	H	Multiple Cracks With Potholes	8	0	0	3	11	7%
CRACKING	N	None	0	0	0	0	0	0%
OTHER	L	Single Crack	0	0	0	0	0	0%
	M	Multiple Cracks	0	0	0	0	0	0%
	H	Multiple Cracks With Potholes	0	0	0	0	0	0%
SLIPPAGE CRACKS	N	None	5	5	5	1	16	100%
	P	Present	0	0	0	0	0	0%
RAVELLING	N	None	50	47	50	8	155	97%
	P	Present	0	3	0	2	5	3%
WHEELPATH	N	None	0	0	0	0	0	0%
RUTTING	L	< 3/8"	2	4	5	1	12	75%
	M	3/8" to 3/4"	1	1	0	0	2	13%
	H	>3/4"	2	0	0	0	2	13%
WIDENING	N	None	5	5	3	1	14	88%
DROPOFF	L	< 3/8"	0	0	0	0	0	0%
	M	3/8" to 3/4"	0	0	0	0	0	0%
	H	>3/4"	0	0	2	0	2	13%
SHOULDER	N	None	0	0	0	0	0	0%
DETERIORATION	L	Single Crack	1	0	0	0	1	6%
	M	Multiple Cracks	3	5	5	0	13	81%
	H	Multiple Cracks With Potholes	1	0	0	1	2	13%
LANE/SHOULDER	N	None	5	5	5	1	16	100%
SEPARATION	L	< 1/4" / sealed	0	0	0	0	0	0%
	M	1/4" to 1"	0	0	0	0	0	0%
	H	>1"	0	0	0	0	0	0%
LANE/SHOULDER	N	None	5	5	5	1	16	100%
DROPOFF	L	<1"	0	0	0	0	0	0%
	M	1" to 2"	0	0	0	0	0	0%
	H	>2"	0	0	0	0	0	0%
SHOULDER	N	None	1	1	1	0	3	19%
DEFORMATION	P	Present	4	4	4	1	13	81%

PAVEMENT DISTRESS SUMMARY

SEGMENT 2

			field sheet 4	field sheet 5	Total	%
CORRUGATIONS	N	None	40	10	50	100%
	P	Present	0	0	0	0%
SETTLEMENTS &	N	None	0	0	0	
	P	Present	4	1	5	
ASPHALT CONCRETE	N	None	0	0	0	
OVERLAY OR	G	Good	0	0	0	
SPRAY PATCH	F	Fair	0	0	0	
	P	Poor	0	0	0	
WHEELPATH	N	None	4	8	12	24%
CRACKING	L	Single Crack	9	2	11	22%
	M	Multiple Cracks	25	0	25	50%
	H	Multiple Cracks With Potholes	2	0	2	4%
FULL WIDTH	N	None	0	0	0	
TRANSVERSE	L	Single Crack	0	0	0	
CRACKING	M	Multiple Cracks	0	0	0	
	H	Multiple Cracks With Potholes	0	0	0	
LONGITUDINAL	N	None	19	2	21	42%
CRACKING	L	Single Crack	18	0	18	36%
	M	Multiple Cracks	3	8	11	22%
	H	Multiple Cracks With Potholes	0	0	0	0%
EDGE	N	None	7	8	15	30%
CRACKING	L	Single Crack	12	0	12	24%
	M	Multiple Cracks	19	2	21	42%
	H	Multiple Cracks With Potholes	2	0	2	4%
CRACKING	N	None	0	0	0	0%
OTHER	L	Single Crack	0	0	0	0%
	M	Multiple Cracks	0	0	0	0%
	H	Multiple Cracks With Potholes	0	0	0	0%
SLIPPAGE CRACKS	N	None	4	1	5	100%
	P	Present	0	0	0	0%
RAVELLING	N	None	40	16	56	100%
	P	Present	0	0	0	0%
WHEELPATH	N	None	0	0	0	0%
RUTTING	L	< 3/8"	1	0	1	20%
	M	3/8" to 3/4"	3	1	4	80%
	H	>3/4"	0	0	0	0%
WIDENING	N	None	4	1	5	100%
DROPOFF	L	< 3/8"	0	0	0	0%
	M	3/8" to 3/4"	0	0	0	0%
	H	>3/4"	0	0	0	0%
SHOULDER	N	None	0	0	0	0%
DETERIORATION	L	Single Crack	0	0	0	0%
	M	Multiple Cracks	3	1	4	80%
	H	Multiple Cracks With Potholes	1	0	1	20%
LANE/SHOULDER	N	None	4	1	5	100%
SEPARATION	L	< 1/4" / sealed	0	0	0	0%
	M	1/4" to 1"	0	0	0	0%
	H	>1"	0	0	0	0%
LANE/SHOULDER	N	None	4	1	5	100%
DROPOFF	L	<1"	0	0	0	0%
	M	1" to 2"	0	0	0	0%
	H	>2"	0	0	0	0%
SHOULDER	N	None	0	0	0	0%
DEFORMATION	P	Present	4	1	5	100%

PAVEMENT DISTRESS SUMMARY

SEGMENT 3			field sheet 5	field sheet 6	field sheet 7	field sheet 8	field sheet 9	Total	%
CORRUGATIONS	N	None	40	50	50	50	20	210	100%
	P	Present	0	0	0	0	0	0	0%
SETTLEMENTS &	N	None	0	0	0	0	0	0	
	P	Present	7	0	0	0	0	7	
ASPHALT CONCRETE	N	None	0	0	0	0	0	0	
OVERLAY OR	G	Good	0	0	0	0	0	0	
SPRAY PATCH	F	Fair	0	0	0	0	0	0	
	P	Poor	0	0	0	0	0	0	
WHEELPATH	N	None	20	8	11	7	2	48	23%
CRACKING	L	Single Crack	8	11	15	16	6	56	26%
	M	Multiple Cracks	4	28	19	21	10	82	38%
	H	Multiple Cracks With Potholes	13	3	3	6	2	27	13%
FULL WIDTH	N	None	0	0	0	0	0	0	
TRANSVERSE	L	Single Crack	0	0	1	0	0	1	
CRACKING	M	Multiple Cracks	0	0	3	3	2	8	
	H	Multiple Cracks With Potholes	0	0	0	1	0	1	
LONGITUDINAL	N	None	15	8	10	14	5	52	25%
CRACKING	L	Single Crack	5	15	17	16	10	63	30%
	M	Multiple Cracks	20	22	23	20	5	90	43%
	H	Multiple Cracks With Potholes	0	5	0	0	0	5	2%
EDGE	N	None	16	2	6	5	2	31	15%
CRACKING	L	Single Crack	0	16	18	14	10	58	28%
	M	Multiple Cracks	24	28	24	26	6	108	51%
	H	Multiple Cracks With Potholes	0	4	2	5	2	13	6%
CRACKING	N	None	0	0	0	0	0	0	0%
OTHER	L	Single Crack	0	0	0	0	0	0	0%
	M	Multiple Cracks	0	0	0	0	0	0	0%
	H	Multiple Cracks With Potholes	0	0	0	0	0	0	0%
SLIPPAGE CRACKS	N	None	4	5	5	5	2	21	100%
	P	Present	0	0	0	0	0	0	0%
RAVELLING	N	None	36	50	50	50	20	206	98%
	P	Present	4	0	0	0	0	4	2%
WHEELPATH	N	None	0	0	0	0	0	0	0%
RUTTING	L	< 3/8"	1	0	0	0	0	1	5%
	M	3/8" to 3/4"	0	2	3	0	1	6	29%
	H	>3/4"	3	3	2	5	1	14	67%
WIDENING	N	None	4	5	5	5	2	21	100%
DROPOFF	L	< 3/8"	0	0	0	0	0	0	0%
	M	3/8" to 3/4"	0	0	0	0	0	0	0%
	H	>3/4"	0	0	0	0	0	0	0%
SHOULDER	N	None	0	0	0	0	0	0	0%
DETERIORATION	L	Single Crack	0	0	0	0	0	0	0%
	M	Multiple Cracks	0	0	0	0	0	0	0%
	H	Multiple Cracks With Potholes	4	5	5	5	2	21	100%
LANE/SHOULDER	N	None	4	5	5	5	2	21	100%
SEPARATION	L	< 1/4" / sealed	0	0	0	0	0	0	0%
	M	1/4" to 1"	0	0	0	0	0	0	0%
	H	>1"	0	0	0	0	0	0	0%
LANE/SHOULDER	N	None	2	5	5	5	2	19	90%
DROPOFF	L	<1"	0	0	0	0	0	0	0%
	M	1" to 2"	0	0	0	0	0	0	0%
	H	>2"	2	0	0	0	0	2	10%
SHOULDER	N	None	0	0	0	0	0	0	0%
DEFORMATION	P	Present	4	5	5	5	2	21	100%

Pavement Evaluation

Attachment C

Subsurface Investigation

SOIL SAMPLING - METHODS

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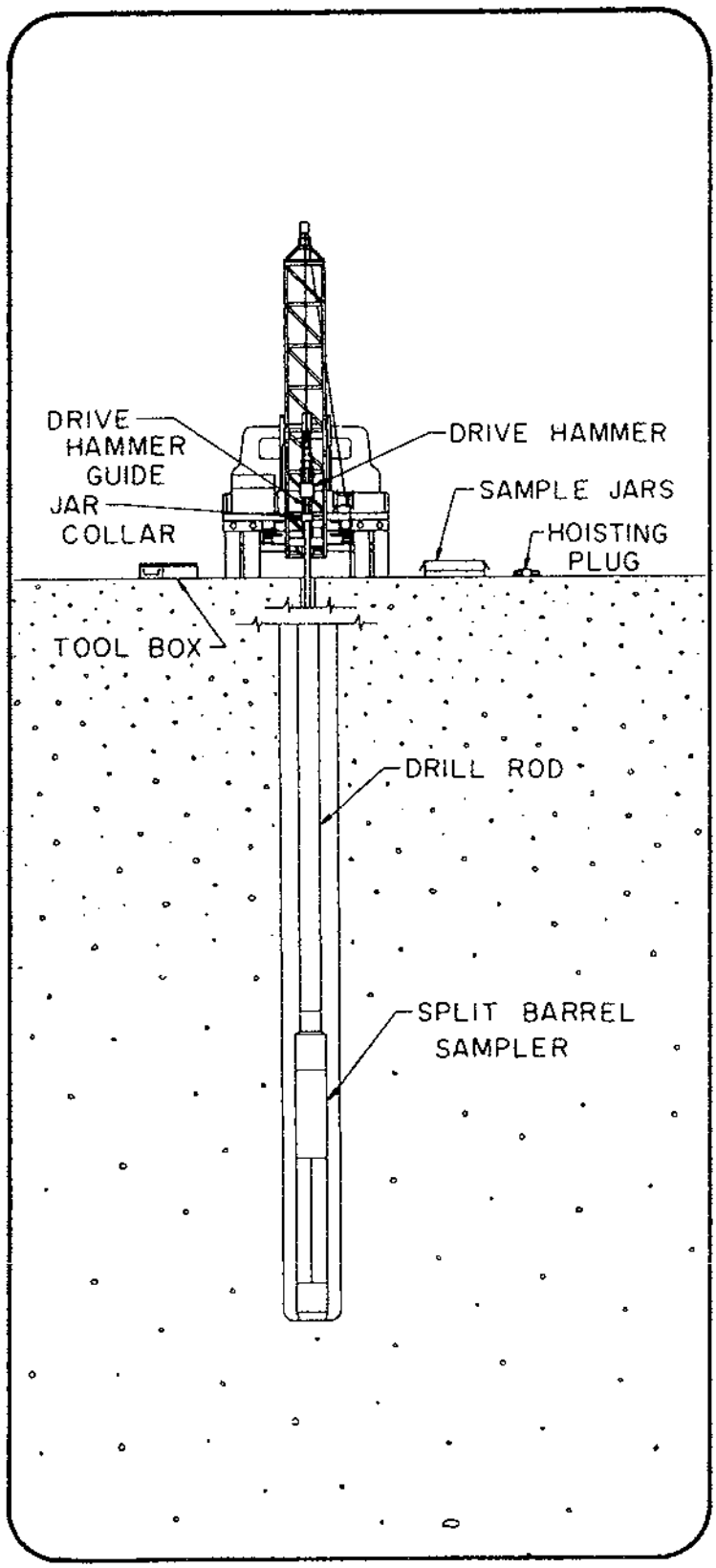

Split barrel sampling

The following excerpts are from "Standard Method for penetration test and split-barrel sampling of soils."[1] (ASTM designation: D-1586-99 AASHO Designation: T-206-87.)

1. Scope

1.1 This method describes a procedure for using a split-barrel sampler to obtain respresentative samples of soil for identification purposes and other laboratory tests, and to obtain a measure of the resistance of the soil to penetration of the sampler.

2. Apparatus

2.1 Drilling Equipment – Any drilling equipment shall be acceptable that provides a reasonably clean hole before insertion of the sampler to ensure that the penetration test is performed on undisturbed soil, and that will permit the driving of the sampler to obtain the sample and penetration record in accordance with the procedure described in 3. Procedure. To avoid "whips" under the blows of the hammer, it is recommended that the drill rod have stiffness equal to or greater than the A-rod. An "A" rod is a hollow drill rod or "steel" having an outside diameter of 1-5/8 in. or 41.2 mm and an inside diameter of 1-1/8 in. or 28.5 mm, through which the rotary motion of drilling is transferred from the drilling motor to the cutting bit. A stiffer drill rod is suggested for holes deeper than 50 ft (15m). The hole shall be limited in diameter to between 2-1/4 and 6 in. (57.2 and 152mm).

2.2 Split-Barrel Sampler – The sampler shall be constructed with the dimensions indicated (in Fig. 1.) The drive shoe shall be of hardened steel and shall be replaced or repaired when it becomes dented or distorted. The coupling head shall have four 1/2-in. (12.7-mm) (minimum diameter) vent ports and shall contain a ball check valve. If sizes other than the 2-in. (50.8-mm) sampler are permitted, the size shall be conspicuously noted on all penetration records.

2.3 Drive Weight Assembly – The assembly shall consist of a 140-lb (63.5-kg) weight, a driving head, and a guide permitting a free fall of 30 in. (0.76 m). Special precautions shall be taken to ensure that the energy of the falling weight is not reduced by friction between the drive weight and the guides.

2.4 Accessory Equipment – Labels, data sheets, sample jars, paraffin, and other necessary supplies should accompany the sampling equipment.

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GENERAL NOTES

1. Soil boring logs, notes and other data shown are the results of personal observations and interpretations made by Parratt-Wolff, Inc.

Exploration records prepared by our drilling foreman in the field form the basis of all logs, and samples of subsurface materials retained by the driller are observed by technical personnel in our laboratory to check field classifications.

2. Explanation of the classifications and terms:

a. Bedrock — Natural solid mineral matter occurring in great thickness and extent in its natural location. It is classified according to geological type and structure (joints, bedding, etc.) and described as solid, weathered, broken or fragmented depending on its condition.

b. Soils — Sediments or other unconsolidated accumulations of particles produced by the physical and chemical disintegration of rocks and which may or may not contain organic matter.

PENETRATION RESISTANCE

COHESIONLESS SOILS

Blows Per Ft.	Relative Density
0 to 4	Very Loose
4 to 10	Loose
10 to 30	Medium Dense
30 to 50	Dense
Over 50	Very Dense

COHESIVE SOILS

Blows Per Ft.	Consistency
0 to 2	Very Soft
2 to 4	Soft
4 to 8	Medium Stiff
8 to 15	Stiff
15 to 30	Very Stiff
Over 30	Hard

Size Component Terms

Boulder	Larger than 300 mm
Cobble	300 mm to 76 mm
Gravel — coarse	76 mm to 25.4 mm
— medium	25.4 mm to 9.51 mm
— fine	9.51 mm to 4.76 mm
Sand — coarse	4.76 mm to 2.00 mm
— medium	2.00 mm to 0.42 mm
— fine	0.42 mm to 0.074 mm
Silt and Clay	Finer than 0.074 mm

Proportion By Weight

Major component is shown with all letters capitalized.

Minor component percentage terms of total sample are:

and	35 to 50 percent
some	20 to 35 percent
little	10 to 20 percent
trace	1 to 10 percent

c. Gradation Terms — The terms coarse, medium and fine are used to describe gradation of Sand and Gravel.

d. The terms used to describe the various soil components and proportions are arrived at by visual estimates of the recovered soil samples. Other terms are used when the recovered samples are not truly representative of the natural materials, such as soil containing numerous cobbles and boulders which cannot be sampled, thinly stratified soils, organic soils and fills.

e. Ground water — The measurement was made during exploration work or immediately after completion, unless otherwise noted. The depth recorded is influenced by exploration methods, soil type and weather conditions during exploration. Where no water was observed it is so indicated. It is anticipated that the ground water table may rise during periods of wet weather and may fall during dry weather. In addition, perched ground water above the water levels indicated (or above the bottom of the hole where no ground water is indicated) may be encountered at changes in soil strata or top of rock.

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TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING **11.0'**

BEFORE CASING
REMOVED **9.3'**

AFTER CASING
REMOVED

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-1**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/25/05**
DATE COMPLETED: **05/25/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER
FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER
FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
							ASPHALT	**1.0'**
	1.0'-	**1**		**10**	**10**		**Brown moist medium dense fine to coarse**	
	3.0'			**7**	**5**	**17**	**SAND, some to little silt**	
	3.0'-	**2**		**5**	**6**			
5.0	**5.0'**			**6**	**7**	**12**		**5.0'**
	5.0'-	**3**		**4**	**5**		**Brown moist medium dense fine to coarse**	
	7.0'			**4**	**4**	**9**	**SAND, some silt, little fine gravel**	
	7.0'-	**4**		**6**	**5**			
	9.0'			**4**	**5**	**9**		**9.0'**
10.0	**9.0'-**	**5**		**10**	**11**		**Brown wet medium dense fine to medium**	
WL ▼	**11.0'**			**7**	**9**	**18**	**SAND, trace silt**	
	11.0'-	**6**		**11**	**6**			
	13.0'			**7**	**7**	**13**		**13.0'**
	13.0'-	**7**		**12**	**17**		**Brown wet dense fine SAND, some silt**	
15.0	**15.0'**			**21**	**22**	**38**		
							Bottom of Boring	**15.0'**

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TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING **11.5'**

BEFORE CASING
REMOVED

AFTER CASING
REMOVED

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-2**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/25/05**
DATE COMPLETED: **05/25/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER
FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER
FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
							ASPHALT	
	1.5'-	**1**			**6**			**1.5'**
	3.0'			**7**	**10**	**17**	**Brown wet medium dense coarse to fine**	
	3.0'-	**2**		**4**	**4**		**GRAVEL and coarse to fine SAND, some**	
5.0	**5.0'**			**5**	**4**	**9**	**silt**	**3.0'**
	5.0'-	**3**		**5**	**4**		**Red-brown moist loose coarse to fine**	
	7.0'			**3**	**5**	**7**	**SAND and fine GRAVEL, trace silt**	**5.0'**
	7.0'-	**4**		**7**	**5**		**Brown-gray moist to wet loose medium**	
	9.0'			**3**	**3**	**8**	**to fine GRAVEL and fine to coarse SAND,**	
10.0	**9.0'-**	**5**		**2**	**2**		**some to trace silt**	
	11.0'			**2**	**2**	**4**		
WL ▼	**11.0'-**	**6**		**2**	**2**			
	13.0'			**2**	**2**	**4**		**13.0'**
	13.0'-	**7**		**3**	**3**		**Gray wet loose fine to medium SAND**	
15.0	**15.0'**			**2**	**3**	**5**		
							Bottom of Boring	**15.0'**

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TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING

BEFORE CASING
REMOVED

AFTER CASING
REMOVED

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-3**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/25/05**
DATE COMPLETED: **05/25/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER
FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER
FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
							ASPHALT	1.5'
	1.5'-	1			7		**Tan wet stiff SILT, fine to coarse SAND**	
	3.0'			6	7	13	**and fine to coarse GRAVEL**	3.0'
	3.0'-	2		7	6		**Brown moist to wet medium dense to**	
5.0	5.0'			6	7	12	**loose medium to fine GRAVEL and coarse**	
	5.0'-	3		5	4		**to fine SAND, little silt**	
	7.0'			5	6	9		7.0'
	7.0'-	4		6	10		**Brown moist hard SILT**	
	9.0'			21	22	31		
10.0	9.0'-	5		14	14			
	11.0'			17	20	31		
	11.0'-	6		14	15			
	13.0'			20	22	35		13.0'
	13.0'-	7		21	20		**Brown-gray moist hard SILT and CLAY**	
15.0	15.0'			19	18	39		
							Bottom of Boring	15.0'

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TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING **9.0'**

BEFORE CASING
REMOVED

AFTER CASING
REMOVED **6.5'**

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-4**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/26/05**
DATE COMPLETED: **05/26/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
							ASPHALT	1.1'
	1.0'-	1		7	7		**Brown moist very stiff SILT, little coarse**	
	3.0'			10	10	17	**to fine sand, little fine gravel, trace clay**	
	3.0'-	2		11	12			
5.0	5.0'			10	9	22		
	5.0'-	3		10	7			
	7.0'			8	10	15		7.0'
	7.0'-	4		9	50-.4'		**Brown wet very dense coarse to fine**	
WL ▼	7.9'						**GRAVEL, coarse to fine SAND and SILT**	9.0'
10.0	9.0'-	5		12	18		**Gray moist hard SILT, some clay with**	
	11.0'			40	50	58	**embedded fine to medium gravel and**	
	11.0'-	6		50-.1'			**fine to coarse sand**	
	11.1'						**Bottom of Boring**	11.1'
15.0								

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TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING **5.2'**

BEFORE CASING
REMOVED **4.4'**

AFTER CASING
REMOVED

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-5**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/26/05**
DATE COMPLETED: **05/26/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
							ASPHALT	**0.8'**
	1.0'-	**1**		**4**	**4**		**Brown moist stiff to hard SILT, little clay with embedded fine to coarse gravel, fine to coarse sand and cobbles**	
	3.0'			**5**	**8**	**9**		
	3.0'-	**2**		**50-.1'**				
▼ **5.0**	**3.1'**							**5.0'**
WL	**5.0'-**	**3**		**14**	**28**		**Brown wet very dense coarse to fine GRAVEL and coarse to fine SAND, some silt**	
	6.2'			**50-.2'**				
	7.0'-	**4**		**48**	**50-.3'**			**8.0'**
	7.8'						**Gray dry hard silty weathered SHALE**	
10.0	**9.0'-**	**5**		**50-.2'**			**Bottom of Boring**	**9.2'**
	9.2'							

parratt wolff inc

TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING **7.0'**

BEFORE CASING
REMOVED

AFTER CASING
REMOVED **6.8'**

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-6**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/26/05**
DATE COMPLETED: **05/26/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER
FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER
FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
							ASPHALT	**0.7'**
	1.0'-	**1**		**17**	**21**		**Brown dry very dense medium to fine**	
	3.0'			**30**	**28**	**51**	**GRAVEL and coarse to fine SAND, trace**	
	3.0'-	**2**		**25**	**33**		**to little silt**	
5.0	**5.0'**			**32**	**29**	**65**		**5.0'**
	5.0'-	**3**		**16**	**10**		**Gray wet very stiff SILT, little clay with**	
WL ▼	**7.0'**			**11**	**12**	**21**	**embedded medium to fine gravel and**	
	7.0'-	**4**		**24**	**24**		**fine to coarse sand**	**7.0'**
	8.8'			**48**	**50-.3'**	**72**	**Gray wet very dense coarse to fine GRAVEL**	
10.0							**and coarse to fine SAND, little silt**	
							Auger Refusal	**8.8'**
							Bottom of Boring	**8.8'**

parratt wolff inc

TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING

BEFORE CASING
REMOVED

AFTER CASING
REMOVED

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-7**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/26/05**
DATE COMPLETED: **05/26/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER
FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER
FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
							ASPHALT	**0.7'**
	1.0'-	**1**		**12**	**21**		**Brown-gray moist hard SILT, some fine**	
	3.0'			**22**	**22**	**43**	**to coarse gravel, little fine to coarse sand**	**3.0'**
	3.0'-	**2**		**24**	**26**		**Gray dry hard silty weathered SHALE**	
5.0	**5.0'**			**40**	**56**	**66**	**Auger Refusal**	**5.0'**
	5.0'	**3**		**100-.0'**			**Bottom of Boring**	**5.0'**

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TEST BORING LOG

5879 Fisher Road
East Syracuse, NY 13057

PROJECT **Hanshaw Road**

LOCATION **Ithaca, New York**

GROUNDWATER DEPTH
WHILE DRILLING **8.5'**

BEFORE CASING
REMOVED **7.2'**

AFTER CASING
REMOVED

CASING TYPE **HOLLOW STEM AUGER**

HOLE NO. **B-8**
JOB NUMBER: **05138A**
SURF. EL.
DATE STARTED: **05/26/05**
DATE COMPLETED: **05/26/05**

N - NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER
FALLING 30" - ASTM D-1586 STANDARD PENETRATION TEST

C - NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER
FALLING "/ OR PERCENT CORE RECOVERY

SHEET 1 OF 1

DEPTH	SAMPLE DEPTH	SAMPLE NO.	Rec	SAMPLE DRIVE RECORD PER 6"		N	DESCRIPTION OF MATERIAL	STRATA CHANGE DEPTH
	0.5'-	1			17		ASPHALT	0.5'
	2.0'			15	19	34	Brown moist dense medium to fine	
	2.0'-	2		11	10		GRAVEL and coarse to fine SAND, little silt	2.0'
	4.0'			11	15	21	Brown moist to wet very stiff SILT, some	
5.0	4.0'-	3		9	10		clay with embedded medium to fine	
	6.0'			9	8	19	gravel and fine to coarse sand	
	6.0'-	4		9	8			
	8.0'			9	7	17		8.0'
WL ▼	8.0'-	5		2	3		Brown wet stiff SILT, CLAY, medium to	
10.0	10.0'			5	6	8	fine GRAVEL and fine to coarse SAND	10.0'
	10.0'-	6		6	8		Gray-brown wet medium dense medium	
	12.0'			15	20	23	to fine GRAVEL and fine to coarse SAND,	
	12.0'-	7		22	21		some silt	12.0'
	14.0'			19	20	40	Gray-brown wet dense coarse to fine	
15.0	14.0'-	8		23	24		GRAVEL, coarse to fine SAND and SILT	
	16.0'			24	20	48		
							Bottom of Boring	16.0'
20.0								

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.			

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

GRID NORTH

BORING B-1

BORING B-2

BORING B-3

BORING B-4

BORING B-5

BORING B-6

BORING B-7

BORING B-8

BLACKSTONE AVENUE

KAY STREET

ORCHARD STREET

MARREN ROAD

MURIEL STREET

SALEM DRIVE

SAPSUCKER WOODS ROAD

HANSHAW ROAD

SEE MATCH LINE BELOW

SEE MATCH LINE ABOVE

SEE MATCH LINE BELOW

10 0 10 20 30 m
SCALE IN METERS

AS BUILT REVISIONS

SIGNATURE DATE

BORING LOCATIONS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILE NAME	REGION	DATE	DRAWING NO.
BORINGS.DGN	3	OCT. 2005	B-1

DESIGNED BY _____ DRAFTED BY _____ CHECKED BY _____
ESTIMATED BY _____ JOB MANAGER _____ DESIGN SUPERVISOR _____

FILE NAME =
DATE/TIME = 10/11/2005
USER = Craig

APPENDIX E

Pedestrian Generator Checklist

Henshaw Road

Attachment A

PEDESTRIAN GENERATOR CHECKLIST

Note: The term "generator" in this document refers to both pedestrian generators (where pedestrians originate) and destinations (where pedestrians travel to)

A check of yes indicates a potential need to accommodate pedestrians and coordination with the Regional Bicycle and Pedestrian Coordinator is necessary during project scoping. Answers to the following questions should be checked with the local municipality to ensure accuracy.

1.	Is there an existing or planned sidewalk, trail, or pedestrian crossing facility?	YES☐ NO☒
2.	Are there bus stops, transit stations, or depots/terminals located in or within 800 m of the project area?	YES☒ NO☐
3.	Is there more than occasional pedestrian activity? Evidence of pedestrian activity may include a worn path.	YES☒ NO☐
4.	Are there existing or approved plans for generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as schools, parks, playgrounds, places of employment, places of worship, post offices, municipal buildings, restaurants, shopping centers or other commercial areas, or multiuse paths?	YES☒ NO☐
5.	Are there existing or approved plans for seasonal generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as ski resorts, state parks, camps, amusement parks?	YES☐ NO☒
6.	Is the project located in a residential area within 800 m of existing or planned pedestrian generators such as those listed in #4?	YES☒ NO☐
7.	From record plans, were pedestrian facilities removed during a previous highway reconstruction project?	YES☐ NO☒
8.	Did a study of secondary impacts indicate that the project promotes or is likely to promote commercial and/or residential development within the intended life cycle of the project?	YES☐ NO☒
9.	Does the community's comprehensive plan call for development of pedestrian facilities in the area?	YES☒ NO☐

Note: This checklist should be revisited due to a project delay or if site conditions or local planning changes during the project development process.

APPENDIX F

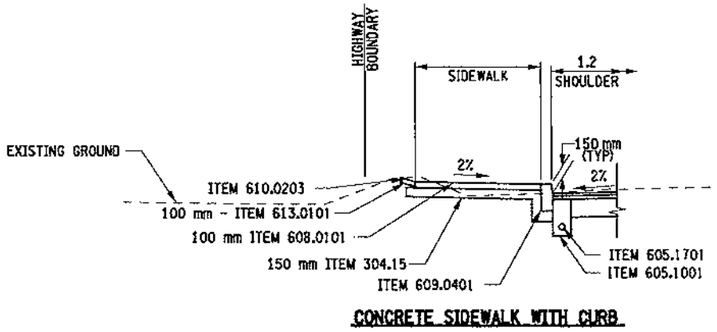
Typical Sections, Plans and Profile

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

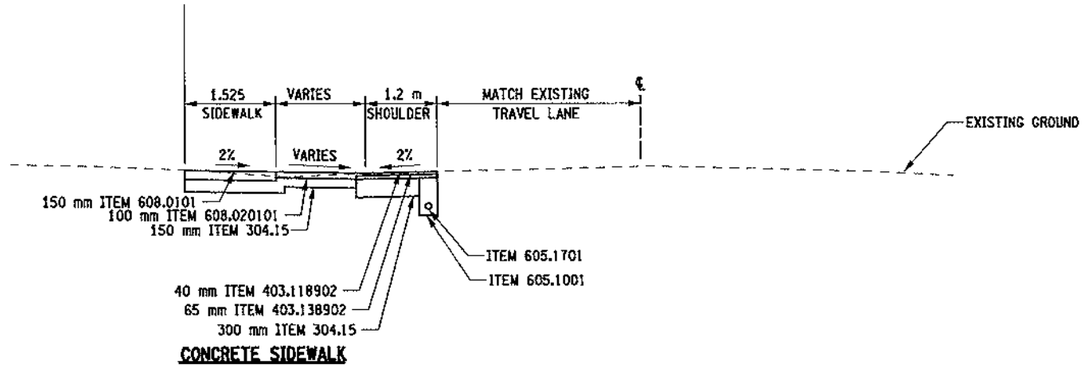
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

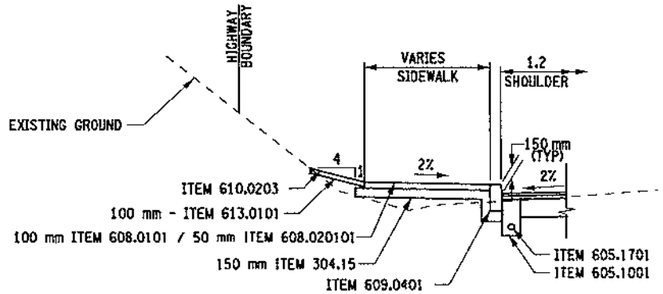


CONCRETE SIDEWALK WITH CURB



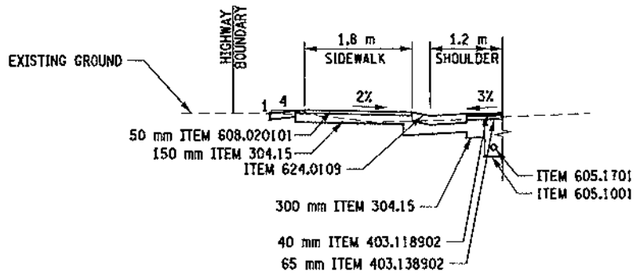
CONCRETE SIDEWALK

HANSHAW ROAD - SIDEWALK & SHOULDER CONSTRUCTION

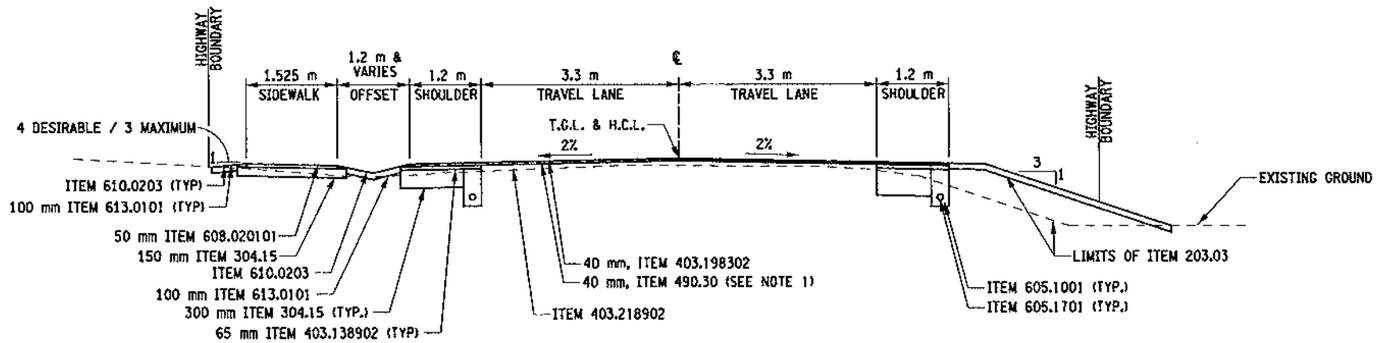


CONCRETE / ASPHALT SIDEWALK WITH CURB

STA. 1+140 TO STA. 1+390



ASPHALT SIDEWALK WITH GUTTER



ASPHALT SIDEWALK WITH SWALE

HANSHAW ROAD - MILL & RESURFACE

1 0 1 2 3 m

SCALE IN METERS

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

ITEM	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CM
304.15	SUBBASE COURSE, OPTIONAL TYPE	CM
403.118902	HOT MIX ASPHALT, TYPE 1, BASE COURSE	MT
403.138902	HOT MIX ASPHALT, TYPE 3, BINDER COURSE	MT
403.198302	HOT MIX ASPHALT, TYPE 7 F3, TOP COURSE	MT
403.218902	HOT MIX ASPHALT, TRUE AND LEVELEING COURSE	MT
407.01	TACK COAT	L
490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SQM
520.5014--08	SAW CUTTING ASPHALT PAVEMENT, ASPHALT SURFACE COURSE, CONCRETE PAVEMENT OF ASPHALT OVERLAY ON CONCRETE PAVEMENT	M
605.1001	UNDERDRAIN FILTER, TYPE II	CM
605.1701	OPTIONAL UNDERDRAIN PIPE, 100mm DIA.	M
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CM
608.020101	ASPHALT CONCRETE FOR SHOULDERS, DRIVEWAYS AND SIDEWALK	MT

ITEM	DESCRIPTION	UNIT
609.0401	CAST-IN-PLACE CONCRETE CURB, TYPE VF150	M
610.0203	ESTABLISHING TURF	SQM
613.0101	TOPSOIL	CM
624.0109	CONVENTIONALLY FORMED OR MACHINE FORMED CONCRETE GUTTER	SQM

NOTES:

1. TACK COAT SHALL BE PLACED BETWEEN ALL ASPHALT COURSES AND LIFTS.
2. CONTRACTOR SHALL MILL THE EXISTING PAVEMENT TO PROVIDE THE 2% DESIRED CROSS SLOPE.

AS BUILT REVISIONS

SIGNATURE | DATE

TYPICAL SECTIONS

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a typ.dgn	AUG 2007	TS-01

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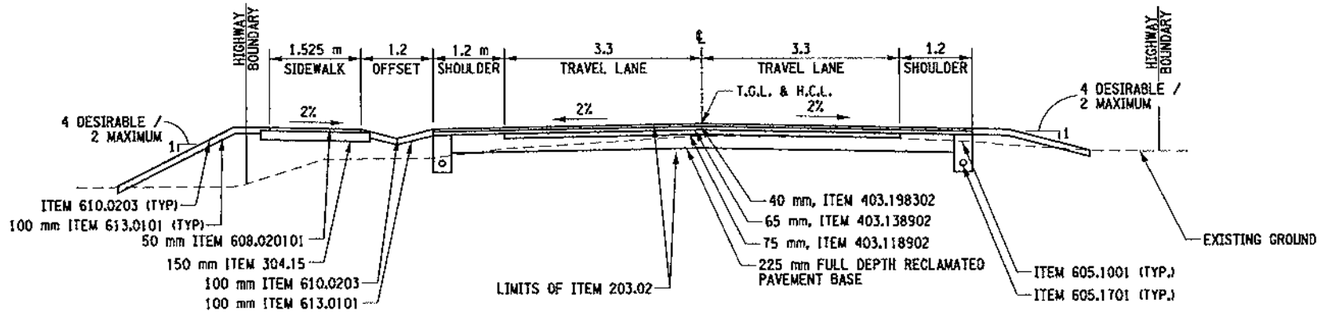
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

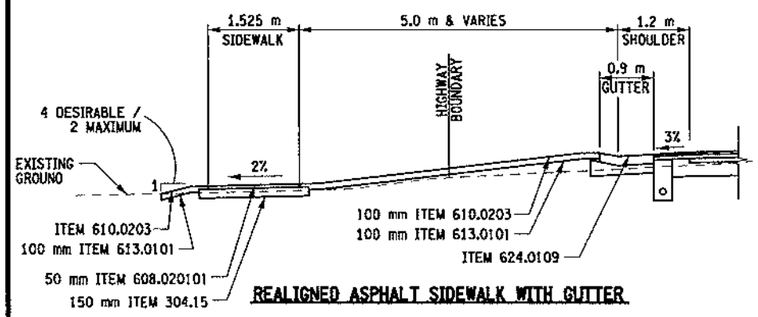
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

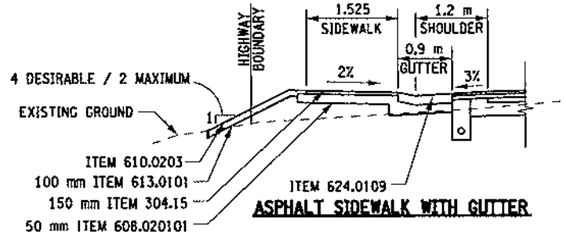
P.I.N. 3753.25 | B.I.N.



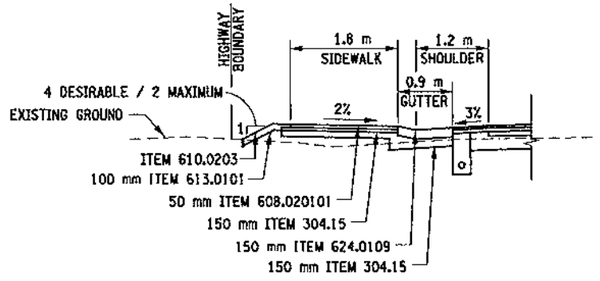
ASPHALT SIDEWALK WITH SWALE



REALIGNED ASPHALT SIDEWALK WITH GUTTER

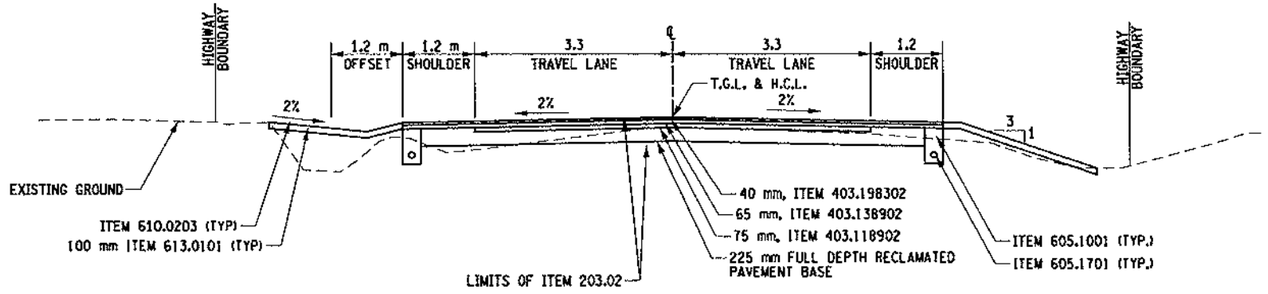


ASPHALT SIDEWALK WITH GUTTER



ASPHALT SIDEWALK WITH GUTTER

HANSHAW ROAD - FULL DEPTH RECLAMATION



HANSHAW ROAD - FULL DEPTH RECLAMATION

1 0 1 2 3 m
SCALE IN METERS

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CM	613.0101	TOPSOIL	M
304.15	SUBBASE COURSE, OPTIONAL TYPE	CM	624.0109	CONVENTIONALLY FORMED OR MACHINE FORMED CONCRETE GUTTER	SQM
403.118902	HOT MIX ASPHALT, TYPE 1, BASE COURSE	MT			
403.138902	HOT MIX ASPHALT, TYPE 3, BINDER COURSE	MT			
403.198302	HOT MIX ASPHALT, TYPE 7 F3, TOP COURSE	MT			
407.01	TACK COAT	L			
490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SQM			
520.5014--08	SAW CUTTING ASPHALT PAVEMENT, ASPHALT SURFACE COURSE, CONCRETE PAVEMENT OF ASPHALT OVERLAY ON CONCRETE PAVEMENT	M			
605.1001	UNDERDRAIN FILTER, TYPE II	CM			
605.1701	OPTIONAL UNDERDRAIN PIPE, 100mm DIA.	M			
608.020101	ASPHALT CONCRETE FOR SHOULDERS, DRIVEWAYS AND SIDEWALK	MT			
609.0401	CAST-IN-PLACE CONCRETE CURB, TYPE VF150	M			
610.0203	ESTABLISHING TURF	SQM			

NOTES:

1. TACK COAT SHALL BE PLACED BETWEEN ALL ASPHALT COURSES AND LIFTS.
2. SUBBASE COURSE (ITEM 304.15) SHALL BE 150mm BELOW CONCRETE GUTTER AND 450mm BELOW THE OPTIONAL FLEXIBLE SHOULDER.

AS BUILT REVISIONS

SIGNATURE DATE

TYPICAL SECTIONS

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a typ.dgn	AUG 2007	TS-02

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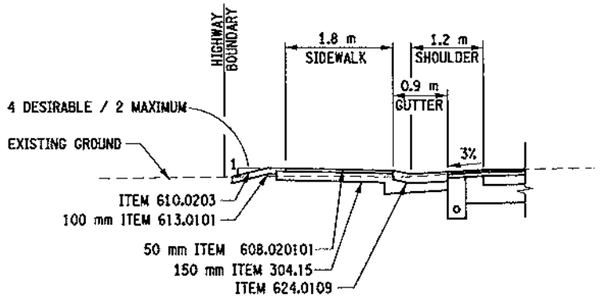
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

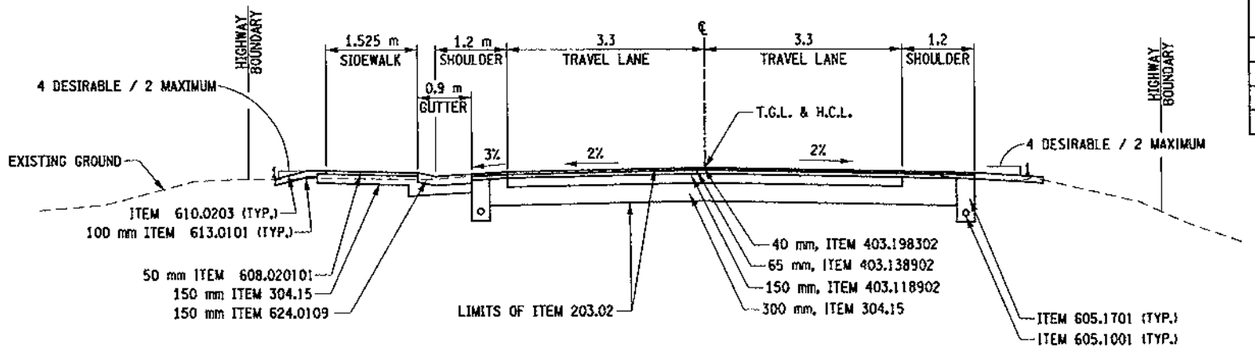
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 B.I.N.

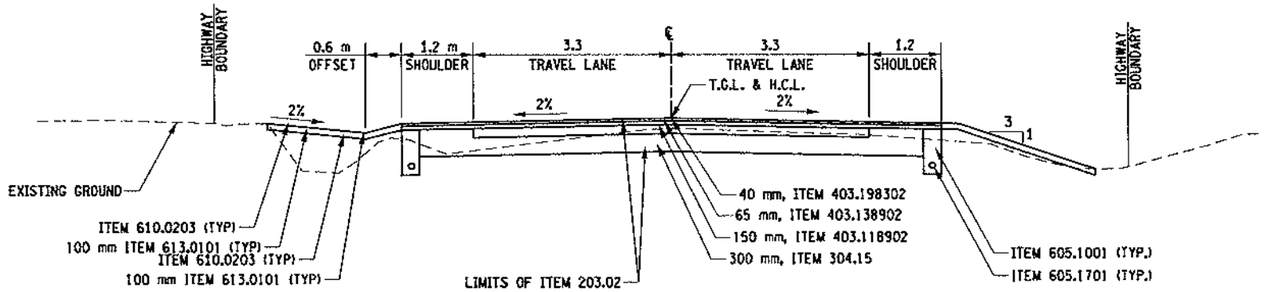


ASPHALT SIDEWALK WITH GUTTER

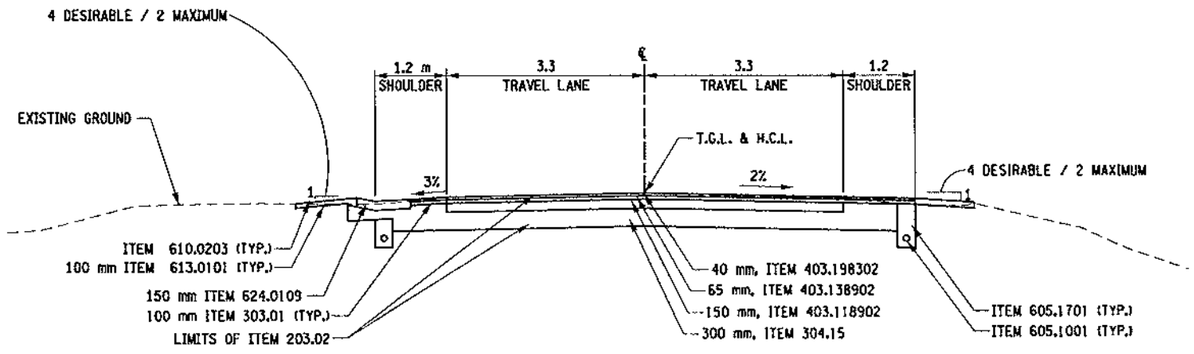


ASPHALT SIDEWALK WITH GUTTER

HANSHAW ROAD - REHABILITATION



HANSHAW ROAD - REHABILITATION



WARREN ROAD - REHABILITATION

1 0 1 2 3 m

SCALE IN METERS

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CM	613.0101	TOPSOIL	M
304.15	SUBBASE COURSE, OPTIONAL TYPE	CM	624.0109	CONVENTIONALLY FORMED OR MACHINE FORMED CONCRETE GUTTER	SQM
403.118902	HOT MIX ASPHALT, TYPE 1, BASE COURSE	MT			
403.138902	HOT MIX ASPHALT, TYPE 3, BINDER COURSE	MT			
403.198302	HOT MIX ASPHALT, TYPE 7 F3, TOP COURSE	MT			
407.01	TACK COAT	L			
490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SQM			
520.5014--08	SAW CUTTING ASPHALT PAVEMENT, ASPHALT SURFACE COURSE, CONCRETE PAVEMENT OF ASPHALT OVERLAY ON CONCRETE PAVEMENT	M			
605.1001	UNDERDRAIN FILTER, TYPE II	CM			
605.1701	OPTIONAL UNDERDRAIN PIPE, 100mm DIA.	M			
608.020101	ASPHALT CONCRETE FOR SHOULDERS, DRIVEWAYS AND SIDEWALK	MT			
609.0401	CAST-IN-PLACE CONCRETE CURB, TYPE VF150	M			
610.0203	ESTABLISHING TURF	SQM			

NOTES:

AS BUILT REVISIONS

SIGNATURE DATE

TYPICAL SECTIONS

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a typ.dgn	AUG 2007	TS-03

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ESTIMATED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH

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1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

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VILLAGE GREEN SHOPPING CENTER

1 STY WOOD FR #1002 & 1004

2 STY FR #1096

1 STY BLOCK "MOBIL GAS AND EXPRESS MART"

BEGIN OPTIONAL FLEXIBLE SHOULDER STA. HR 1+066

BEGIN CONCRETE SIDEWALK STA. HR 1+070

CURBED ISLAND

NEW 1.525 CONCRETE SIDEWALK

BEGIN NEW TYPE F150 CONCRETE CURB

RELOCATE UTILITY POLE

NEW 2.1 CONCRETE SIDEWALK

RELOCATE UTILITY POLE

END NEW CONCRETE SIDEWALK
BEGIN NEW ASPHALT SIDEWALK
STA. HR 1+160

NEW 2.1 ASPHALT SIDEWALK

(8) NEW NORWAY SPRUCE

RELOCATE UTILITY POLE
150 mm CHERRY
700mm PINE
500 mm WALNUT
600 mm PINE
150 mm CHERRY
200 mm CHERRY
150 mm CHERRY
200 mm CHERRY

TREE PROTECTION (T)

CLEAR & GRUB

300 mm SICPP

REMOVE (8) EXISTING EVERGREEN TREES

REMOVE (3) TREES

HANSHAW ROAD

HR 1+060 HR 1+080 HR 1+100 HR 1+120 HR 1+140 HR 1+160 HR 1+180 HR 1+200 HR 1+220

BEGIN MILL AND RESURFACE
STA. HR 1+140

NEW PAVEMENT STRIPING

PLEASANT GROVE ROAD

1 STY BLOCK AUTO SERVICE

1 STY FR BLDG

1 1/2 STY FR CAPE

ADJUST SANITARY MANHOLE

NEW BOX BEAM GUIDERAIL

CONNECT TO EXISTING DRAINAGE SYSTEM

MATCH TO DWG. NO. PL-02

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

0 5 10 15 20 25 m
SCALE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-01

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

RELOCATE UTILITY POLE
2 STY FR
300 mm SICPP
DRAINAGE INLET
NEW 2.1 ASPHALT SIDEWALK
RELOCATE HYDRANT
(24) NEW SHRUBS
(1) NORWAY SPRUCE
300 mm SICPP
END NEW TYPE F150 CONCRETE CURB
BEGIN TYPE B8 CONCRETE GUTTER
RELOCATE UTILITY POLE
NEW 1.8 ASPHALT SIDEWALK
NEW 1.525 ASPHALT SIDEWALK
DRAINAGE INLET
MATCH TO DWG. NO. PL-01
MATCH TO DWG. NO. PL-03
HANSHAW ROAD
REMOVE (1) EXISTING EVERGREEN TREE
CLEAR & GRUB
NEW BOX BEAM GUIDERAIL
RELOCATE MAILBOXES
RELOCATE UTILITY POLE
CLEAR & GRUB
TOWN OF ITHACA
VILLAGE OF CAYUGA HEIGHTS
CHAIN LINK FENCE
WOOD PICKET FENCE
LANDSCAPING
1 STY FR #1007
1 STY FR
1 STY FR #1019
TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

0 5 10 15 20 25 m
SCALE

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-02

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH

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1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

DESIGN SUPERVISOR C. SMITH | JOB MANAGER C. SMITH | DESIGNED BY J. VIDETTI | DRAFTED BY J. VIDETTI | ESTIMATED BY J. VIDETTI | CHECKED BY C. SMITH

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USER = Jason

MATCH TO DWG. NO. PL-02

MATCH TO DWG. NO. PL-04

HANSHAW ROAD

HR 1+440 | HR 1+460 | HR 1+480 | HR 1+500 | HR 1+520 | HR 1+540 | HR 1+560 | HR 1+580

NEW 1.8 ASPHALT SIDEWALK

300 mm SICPP

(33) NEW SHRUBS

(4) NEW SHRUBS

(3) NEW SHRUBS

(22) NEW SHRUBS

(7) NEW TREES

CLEAR & GRUB

DRAINAGE INLET (TYP)

TRIM TREES TO ACCOMMODATE PEDESTRIANS

RELOCATE UTILITY POLE

2 STY FR #1022

1 STY FR #1024

SPLIT LEVEL FR #1026

2 STY FR #1030

1 STY FR #1019

1 STY FR #1021

1 STY FR #1023

1 STY FR #1025

1 STY FR CAPE #1027

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

0 5 10 15 20 25 m
SCALE

AS BUILT REVISIONS

SIGNATURE | DATE

GENERAL PLANS

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-03

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

DESIGN SUPERVISOR C. SMITH | JOB MANAGER C. SMITH | DESIGNED BY J. VIDETTI | CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI | DRAFTED BY J. VIDETTI | CHECKED BY C. SMITH

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MATCH TO DWG. NO. PL-03

MATCH TO DWG. NO. PL-05

HANSHAW ROAD

BLACKSTONE AVENUE

OUTLET TO RENWICK BROOK

END MILL AND RESURFACE STA. BA 1+020

900 mm SICPP

END TYPE BB CONCRETE GUTTER

CONCRETE MANHOLE

NEW 1.5m ASPHALT SIDEWALK

1.2 SNOW STORAGE

REMOVE (3) EXISTING TREES

REMOVE (7) EXISTING TREES

(21) NEW SHRUBS

REMOVE (1) TREE

450 mm SICPP

300 mm SICPP

NEW 1.8 ASPHALT SIDEWALK

DRAINAGE INLET (TYP)

RESET MAILBOX

LAWN INLET

START MILL AND RESURFACE STA. BA 0+985

2 STY FR #1032

1 STY BRICK #1034

2 STY FR #1036

2 STY BRICK #1031

1 1/2 STY CAPE #1035

2 STY FR #1037

2 STY FR #1039

2 STY FR #1041

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

UTILITY QUALITY LEVEL D

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

0 5 10 15 20 25 m
SCALE

AS BUILT REVISIONS

SIGNATURE | DATE

GENERAL PLANS

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-04

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 B.I.N.

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

MATCH TO DWG. NO. PL-04

MATCH TO DWG. NO. PL-06

HANSHAW ROAD

ORCHARD STREET

900 mm SICPP
NEW 1.525 ASPHALT SIDEWALK
(4) NEW IVORY SILK TREE LILAC
REMOVE (2) TREES
DRAINAGE INLET (TYP)
900 mm SICPP
BEGIN TYPE BB CONCRETE GUTTER
END TYPE BB CONCRETE GUTTER
450 mm SICPP
CONCRETE MANHOLE
(17) NEW SHRUBS
900 mm SICPP
1.2 SNOW STORAGE
(14) NEW SHRUBS
CLEAR & GRUB
REMOVE (1) TREE
REMOVE (2) TREES
CLEAR & GRUB
300 mm SICPP
RELOCATE UTILITY POLE
300 mm SICPP
BEGIN FULL DEPTH RECLAMATION STA. OS 0+985
END MILL AND RESURFACE
BEGIN FULL DEPTH RECLAMATION STA. HR 1+850

HR 1+800 HR 1+820 HR 1+840 HR 1+860 HR 1+880 HR 1+900 HR 1+920

OS 0+960 OS 0+980

2 STY FR #104
1 STY FR #1200
1 STY FR #101
2 STY FR #103
2 STY WOOD FR #105
1 1/2 STY FR #107
2 STY WOOD FR #120

0 5 10 15 20 25 m
SCALE

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-05

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI DRAFTED BY J. VIDETTI ESTIMATED BY J. VIDETTI CHECKED BY C. SMITH CHECKED BY C. SMITH

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FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

MATCH TO DWG. NO. PL-05

MATCH TO DWG. NO. PL-07

KAY STREET

HANSHAW ROAD

END FULL DEPTH RECLAMATION
STA. KS 1+015
MATCH EXISTING

TRIM DEAD BRANCHES FROM 750 mm OAK TREE

NEW 1.525 ASPHALT SIDEWALK

(9) NEW SHRUBS

900 mm SICPP

300 mm SCIPP

1.2 SNOW STORAGE

450 mm SICPP

DRAINAGE INLET (TYP)

LAWN INLET

BEGIN TYPE BB CONCRETE GUTTER

CLEAR & GRUB

BEGIN FULL DEPTH RECONSTRUCTION
END FULL DEPTH RECLAMATION
STA. HR 2+100

END SECTION

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

SCALE 0 5 10 15 20 25 m

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-06

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DATE/TIME = 8/15/2007 9:28:02 AM
USER = jason

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI DRAFTED BY J. VIDETTI ESTIMATED BY J. VIDETTI CHECKED BY C. SMITH CHECKED BY C. SMITH

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

DESIGN SUPERVISOR C. SMITH ESTIMATED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH
JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI CHECKED BY C. SMITH

FILE NAME = H:\Projects\05\1004-Hanshaw_Rd\Eng\CU\375325a_plt.dgn
DATE/TIME = 8/15/2007 9:26:03 AM
USER = jason

MATCH TO DWG. NO. PL-06

MATCH TO DWG. NO. PL-08

WARREN ROAD

HANSHAW ROAD

END FULL DEPTH RECONSTRUCTION STA. WS 1+050

END CONCRETE GUTTER - TYPE BB

END SECTION

BEGIN FULL DEPTH RECONSTRUCTION
END FULL DEPTH RECLAMATION
STA. HR 2+100

CONCRETE MANHOLE
900 mm SICPP
LAWN INLET
NEW 1.525 ASPHALT SIDEWALK
BEGIN STAMP / COLORED PORTLAND CEMENT CONCRETE

END STAMP / COLORED PORTLAND CEMENT CONCRETE
END SECTION
BEGIN TYPE BB CONCRETE GUTTER
CONCRETE MANHOLE
NEW 1.8 ASPAHLT SIDEWALK
900 mm SICPP
LAWN INLET

NEW 1.525 ASPHALT SIDEWALK
LAWN INLET
DRAINAGE INLET (TYP)
900 mm SICPP
1.2 SNOW STORAGE

(8) SHRUBS
CLEAR & GRUB
REMOVE (1) TREE
REMOVE (2) TREES
(6) NEW IVORY SILK TREE LILAC

END STAMP / COLORED PORTLAND CEMENT CONCRETE
450 mm SICPP
END SECTION
PROPOSED LOCATION FOR NEW TRAFFIC SIGNAL
BEGIN STAMP / COLORED PORTLAND CEMENT CONCRETE
RESHAPE EXISTING DITCH

END FULL DEPTH RECONSTRUCTION
BEGIN FULL DEPTH RECLAMATION
STA. HR 2+200

BEGIN FULL DEPTH RECONSTRUCTION
STA. WS 0+960

1 STY FR #403
1 STY FR #1306
1 STY FR #1309
2 STY FR #400
2 STY FR #1305
1 1/2 STY CAPE #1301

HR 2+120 HR 2+140 HR 2+160 HR 2+180 HR 2+200 HR 2+220 HR 2+240 HR 2+260

WS 1+070 WS 1+060 WS 1+040 WS 1+020 WS 0+980 WS 0+960 WS 0+940

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

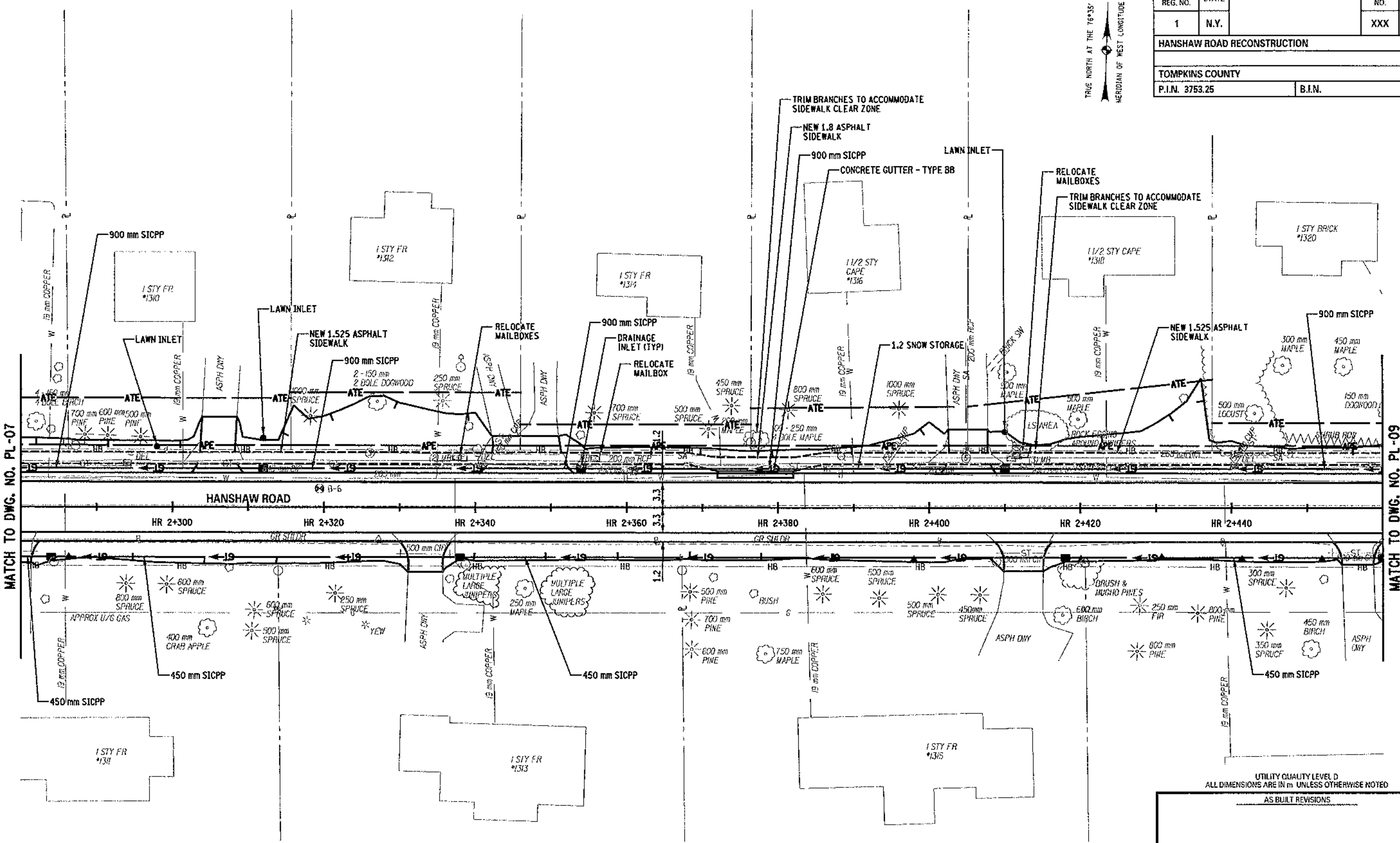
GENERAL PLANS

0 5 10 15 20 25 m
SCALE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-07



FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

AS BUILT REVISIONS

SIGNATURE | DATE

GENERAL PLANS

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-08

CHECKED BY C. SMITH
DRAFTED BY J. VIDETTI
ESTIMATED BY J. VIDETTI
CHECKED BY C. SMITH
DESIGNED BY J. VIDETTI
JOB MANAGER C. SMITH
DESIGN SUPERVISOR C. SMITH

FILE NAME = H:\Projects\051004-Hanshaw_RdEng\CUT\375325a_plt.dgn
DATE/TIME = 8/15/2007 9:28:05 AM
USER = Jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 B.I.N.

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

END FULL DEPTH RECLAMATION
STA. MS 1+015
MATCH EXISTING

MUNICIPAL STREET

MS 1+040

MS 1+020

HANSHAW ROAD

MATCH TO DWG. NO. PL-08

MATCH TO DWG. NO. PL-10

HR 2+480 HR 2+500 HR 2+520 HR 2+540 HR 2+560 HR 2+580 HR 2+600

NEW 1.525 ASPHALT SIDEWALK

900 mm SICPP

DRAINAGE INLET (TYP)

1.2 SNOW STORAGE

LOWER GROUND AROUND TREE

LAWN INLET

450 mm SICPP

300 mm SICPP

1 STY BRICK #1322

1 STY FR #1402

1 STY FR #1404

1 STY FR #1408

2 STY FR #1405

1 STY FR #1318

1 STY FR #1319

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

0 5 10 15 20 25 m
SCALE

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-09

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI CHECKED BY C. SMITH

FILE NAME = H:\Projects\051004-Hanshaw_Rd\Eng\CUT\375325a_plt.dgn
DATE/TIME = 8/15/2007 9:28:06 AM
USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

CONNECT NEW DRAINAGE SYSTEM TO THE EXISTING DRAINAGE SYSTEM LOCATED AT THE SALEM DRIVE/BIRCHWOOD DRIVE INTERSECTION. TO BE COMPLETED BY THE TOWN OF ITHACA.

600 mm SICPP
END FULL DEPTH RECLAMATION
STA. MS 1+020
MATCH EXISTING

CONCRETE MANHOLE

600 mm SICPP

SALEM DRIVE

SD 1+040

SD 1+020

450 mm SICPP

450 mm SICPP

450 mm SICPP

NEW 1.525 ASPHALT SIDEWALK

END SECTION

DRAINAGE INLET (TYP)

END SECTION

NEW 1.525 ASPHALT SIDEWALK

CONCRETE MANHOLE

1.2 SNOW STORAGE

CLEAR & GRUB

900 mm SICPP

900 mm SICPP

900 mm SICPP

(1) REMOVE TREE

(2) NEW SHRUBS

(18) NEW SHRUBS

DRAINAGE INLET

HANSHAW ROAD

MATCH TO DWG. NO. PL-09

MATCH TO DWG. NO. PL-11

HR 2+640 | HR 2+660 | HR 2+680 | HR 2+700 | HR 2+720 | HR 2+740 | HR 2+760 | HR 2+780

300 mm SICPP | 300 mm SICPP | 300 mm SICPP | 300 mm SICPP | 300 mm SICPP | 300 mm SICPP | 300 mm SICPP

1 STY FR #1407

2 STY FR #1409

1 1/2 STY CAPE #1411

1 STY FR #1413

1 STY FR #1414

1 STY FR #1416

1 STY FR #1419

1 STY FR #1420

1 STY FR #1422

1 STY FR GAR

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

GENERAL PLANS

0 5 10 15 20 25 m
SCALE

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-10

DESIGN SUPERVISOR C. SMITH | JOB MANAGER C. SMITH | DESIGNED BY J. VIDETTI | DRAFTED BY J. VIDETTI | ESTIMATED BY J. VIDETTI | CHECKED BY C. SMITH | CHECKED BY C. SMITH

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DATE/TIME = 8/15/2007 9:26:08 AM
USER = jason

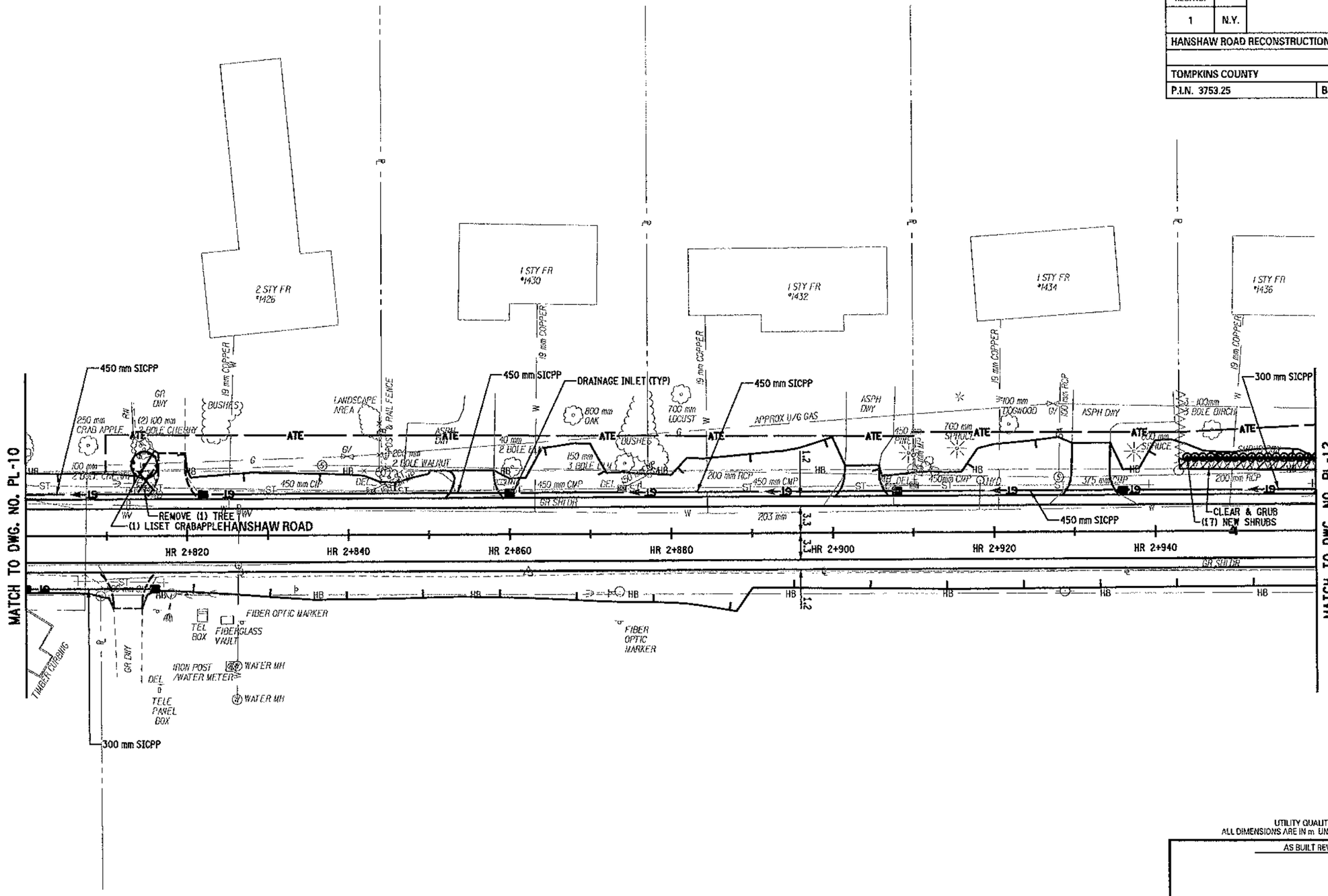
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.

TRUE NORTH AT THE 76°35' MERIDIAN OF WEST LONGITUDE



UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

0 5 10 15 20 25 m
SCALE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-11

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI DRAFTED BY J. VIDETTI ESTIMATED BY J. VIDETTI CHECKED BY C. SMITH CHECKED BY C. SMITH

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USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
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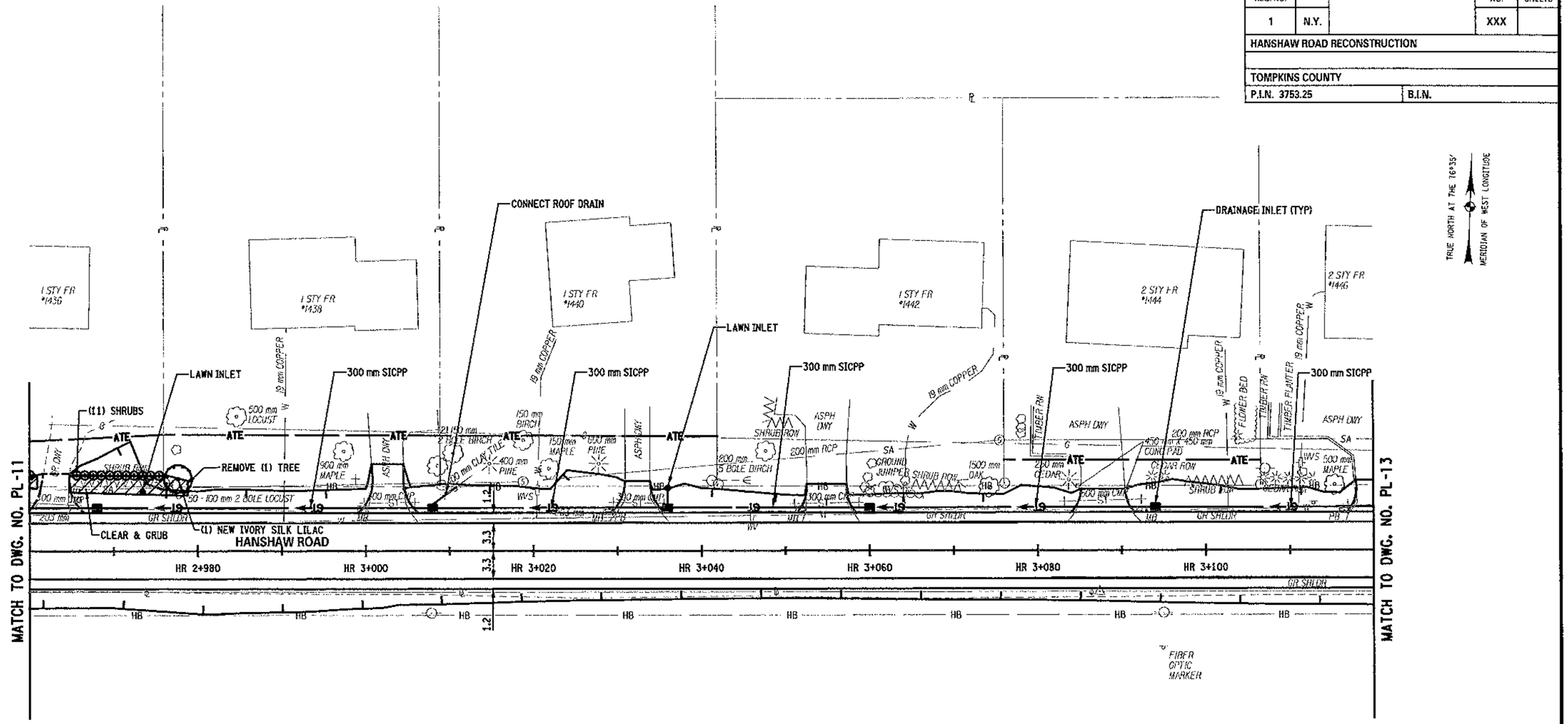
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



0 5 10 15 20 25 m
SCALE

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-12

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI DRAFTED BY J. VIDETTI ESTIMATED BY J. VIDETTI CHECKED BY C. SMITH CHECKED BY C. SMITH

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FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
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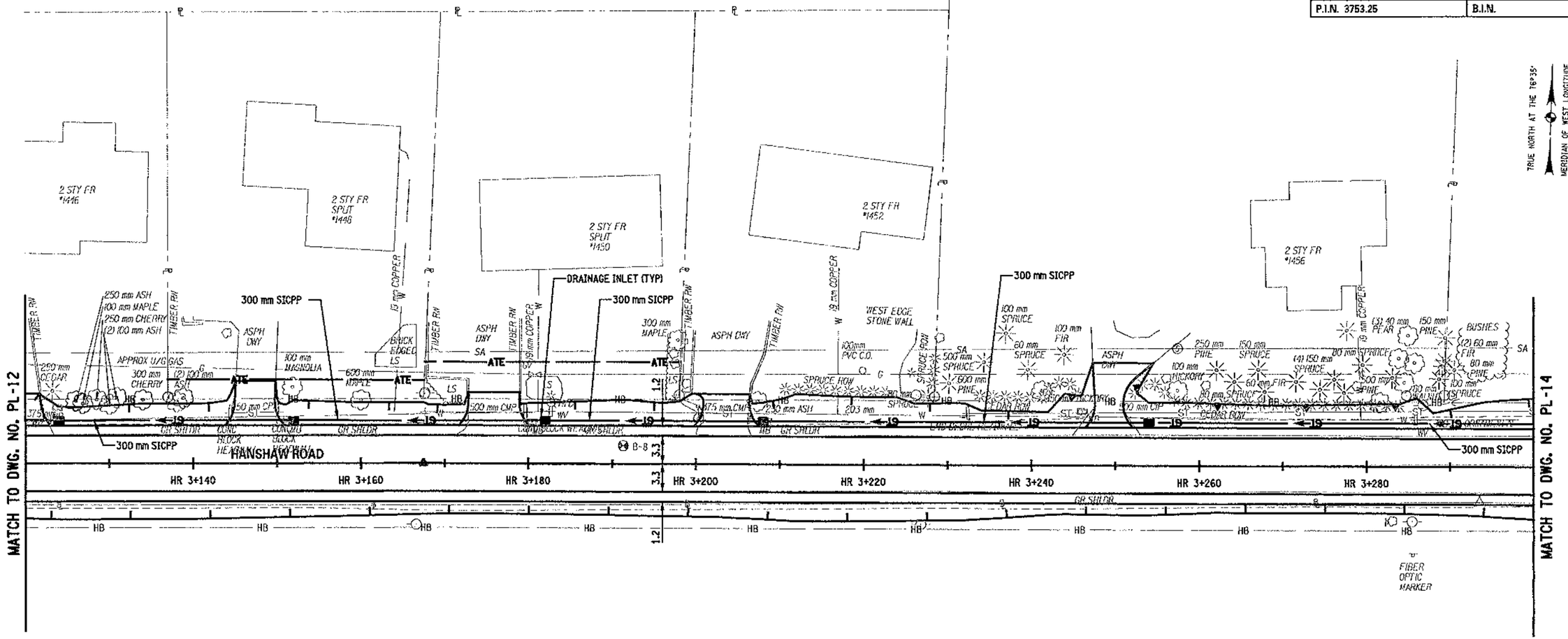
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



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ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-13

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH

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USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
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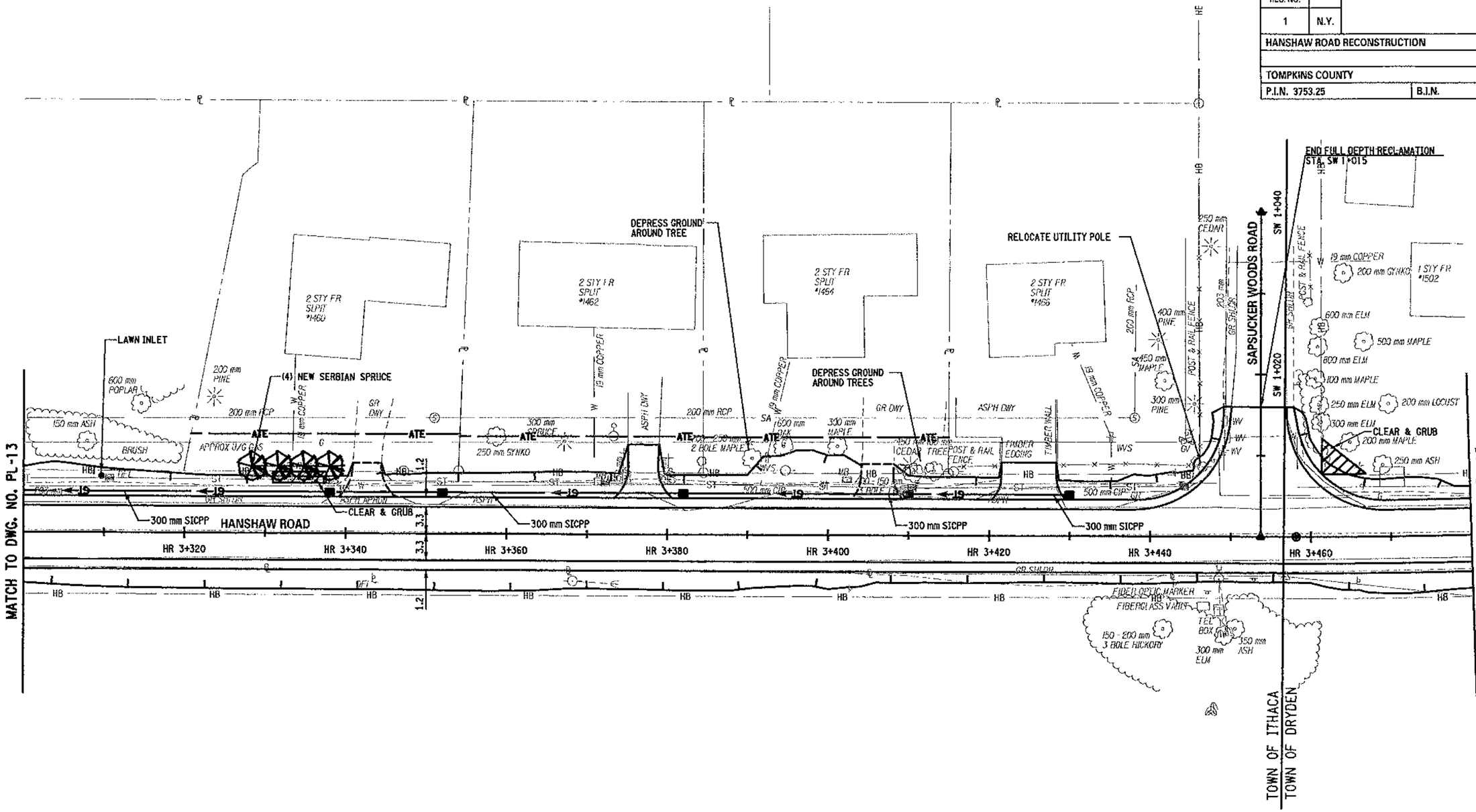
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 B.I.N.



UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

0 5 10 15 20 25 m
SCALE

FISHER ASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-14

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH

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USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
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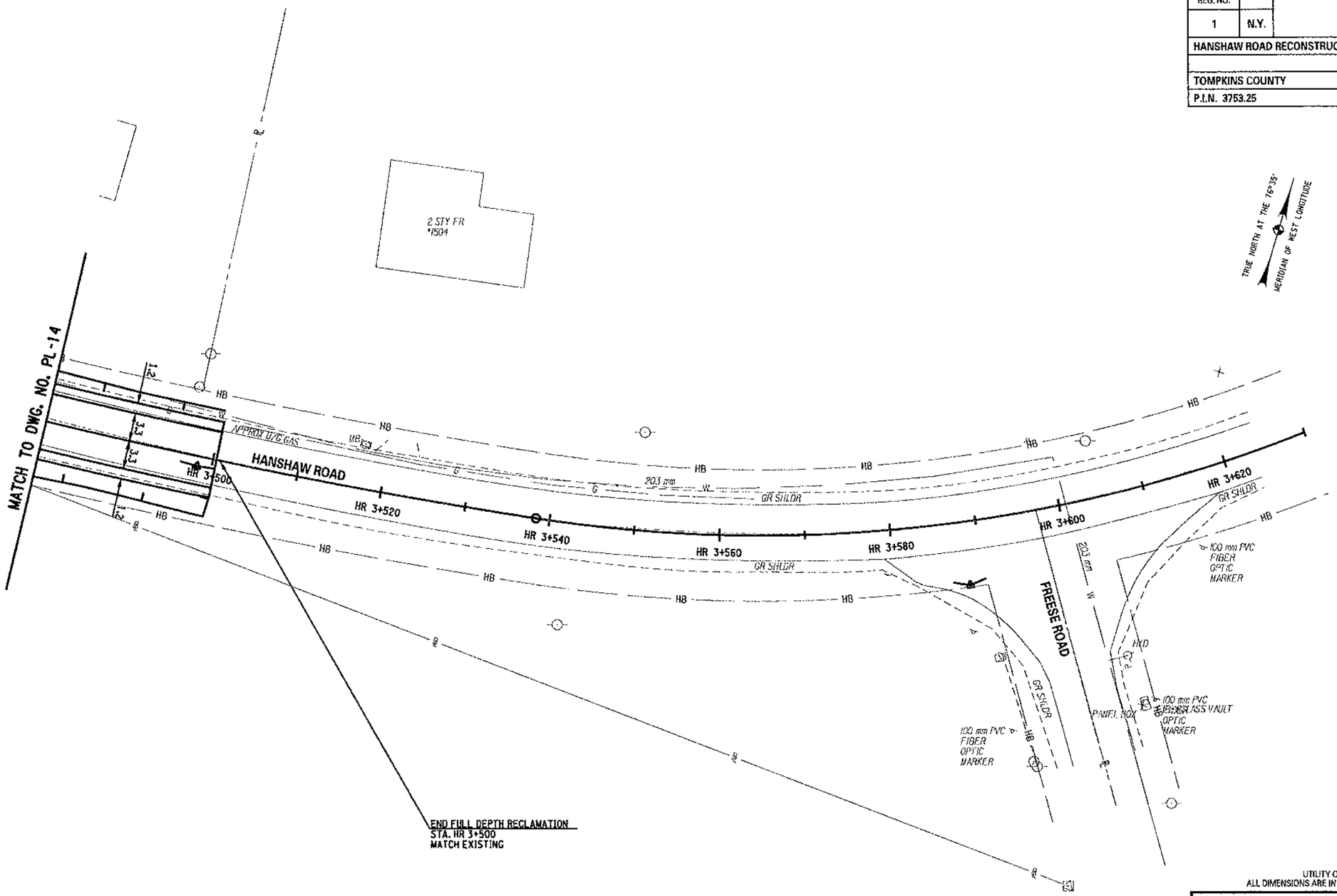
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



0 5 10 15 20 25 m
SCALE

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

GENERAL PLANS

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a plt.dgn	AUG 2007	PL-15

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH

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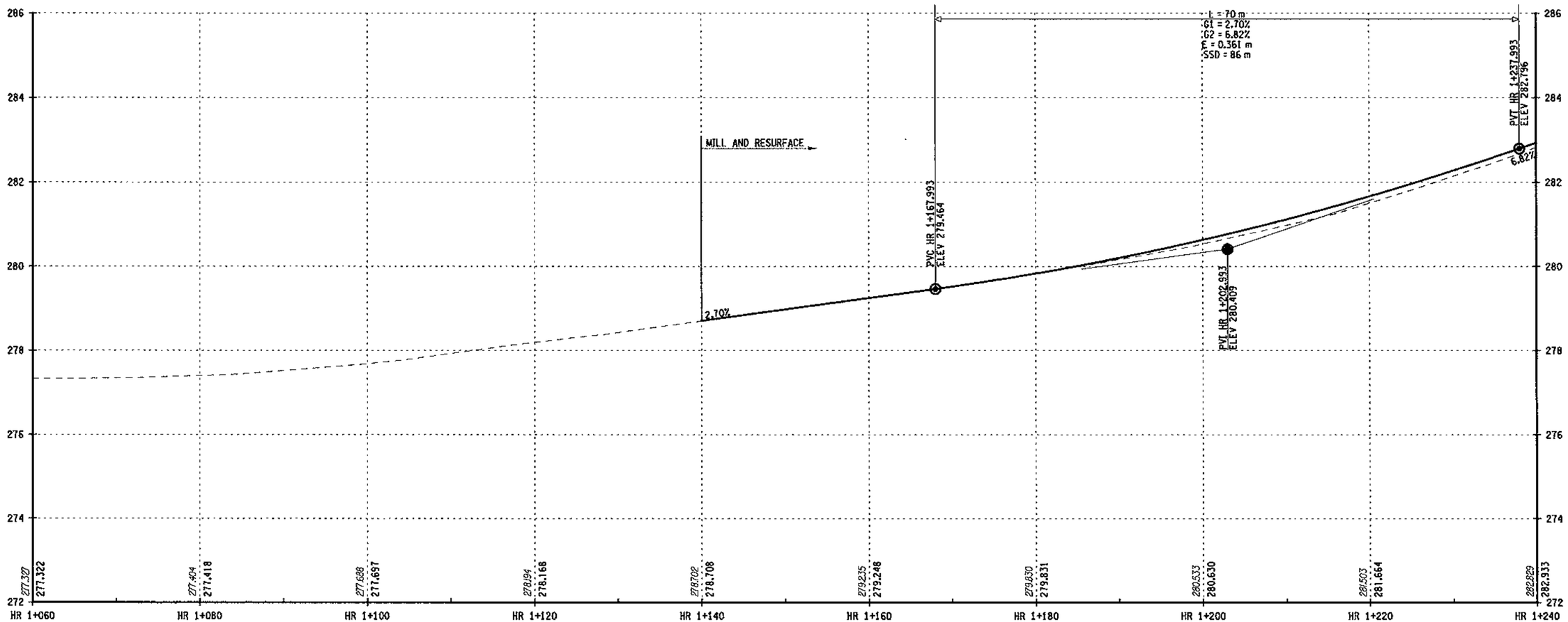
DATE/TIME = 8/15/2007 9:26:15 AM
USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

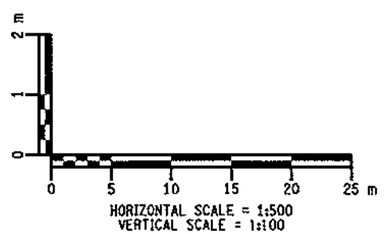
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



HANSHAW ROAD
NORMAL CROWN



UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

HR 1+060 TO HR 1+240
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-01

DESIGN SUPERVISOR C. SMITH ____ JOB MANAGER C. SMITH ____ DESIGNED BY J. VIDETTI ____ CHECKED BY C. SMITH
DRAWN BY C. SMITH ____ ESTIMATED BY J. VIDETTI ____ DRAFTED BY J. VIDETTI ____ CHECKED BY C. SMITH

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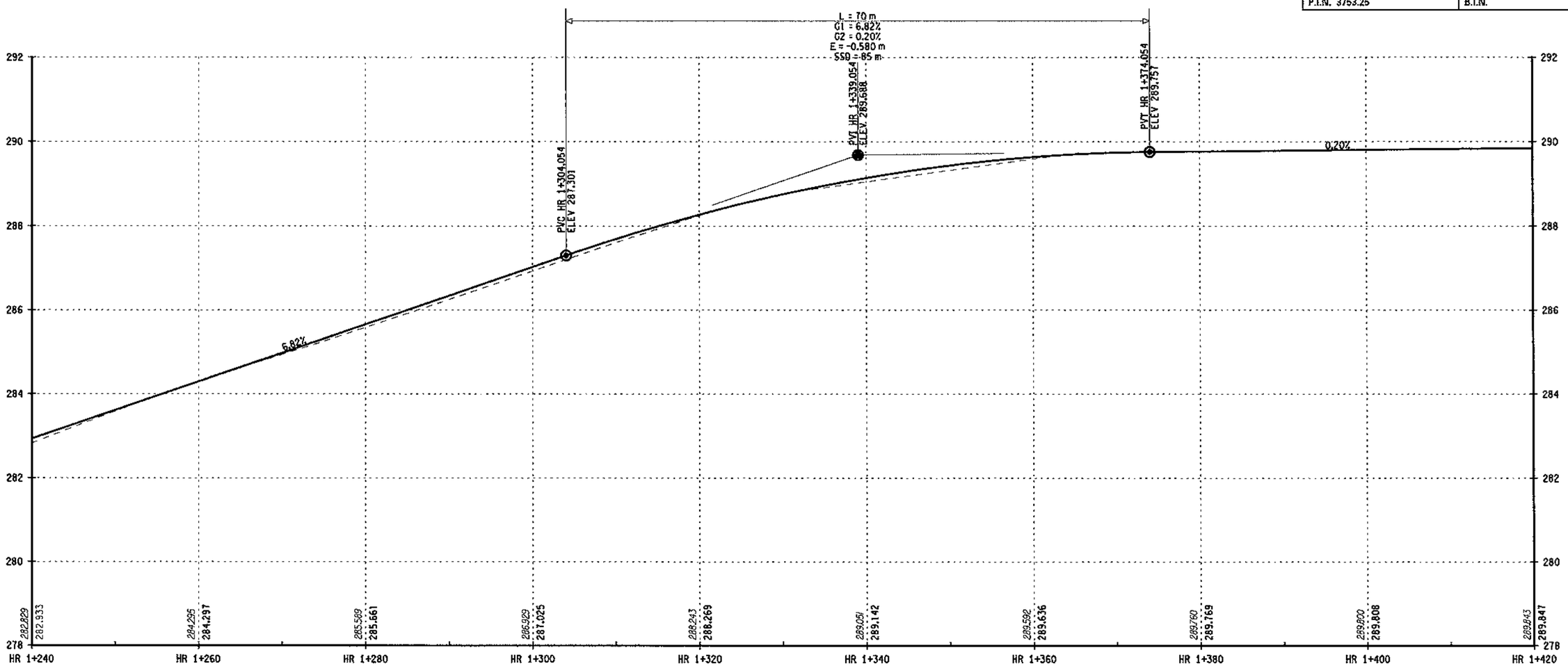
USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



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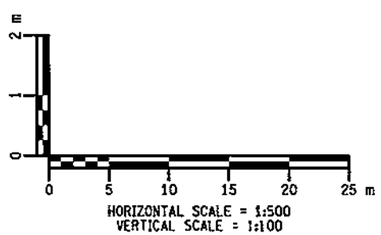

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VERTICAL SCALE = 1:100

UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

HR 1+240 TO HR 1+420
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-02

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI CHECKED BY C. SMITH

FILE NAME = h:\projects\051004-hanshaw_rd\eng\cut\375325a_pro.dgn
DATE/TIME = 8/15/2007 9:27:05 AM
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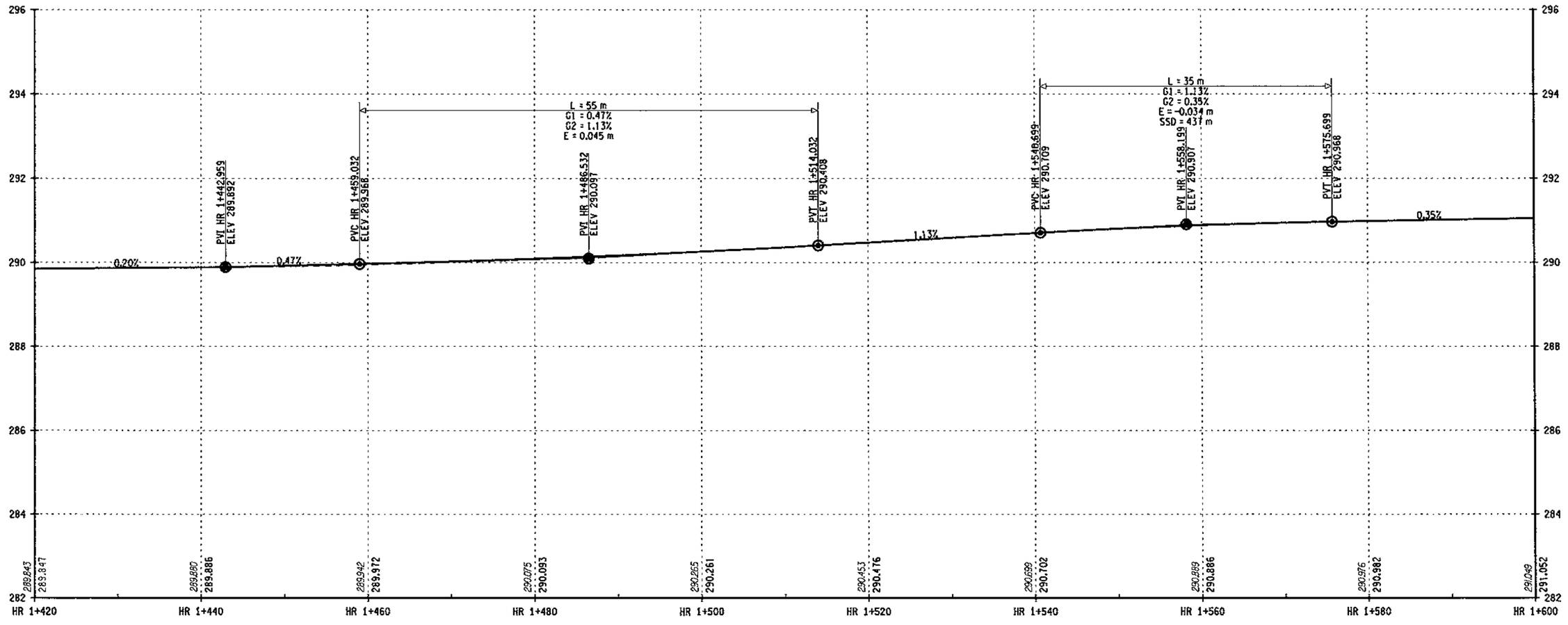
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

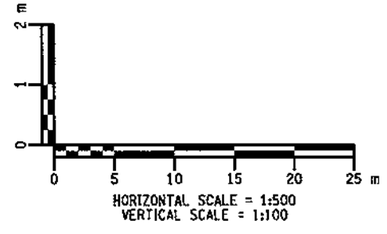
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



HANSHAW ROAD
NORMAL CROWN



UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

HR 1+420 TO HR 1+600
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-03

DESIGN SUPERVISOR C. SMITH ___ JOB MANAGER C. SMITH ___ DESIGNED BY J. VIDETTI ___ CHECKED BY C. SMITH
ESTIMATED BY J. VIDETTI ___ DRAFTED BY J. VIDETTI ___ CHECKED BY C. SMITH

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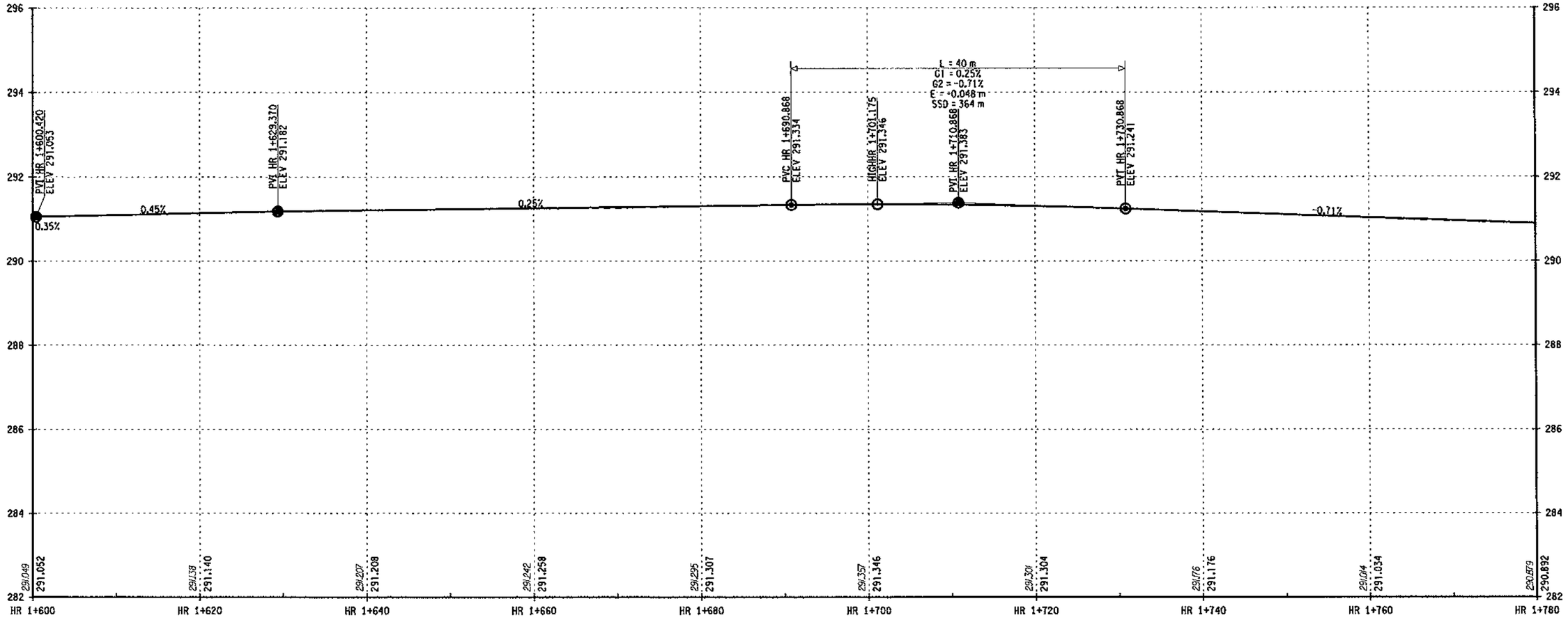
USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

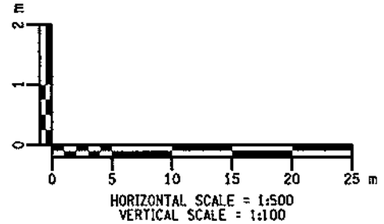
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



HANSHAW ROAD
NORMAL CROWN



UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

HR 1+600 TO HR 1+780
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-04

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI CHECKED BY C. SMITH
DRAWN BY C. SMITH ESTIMATED BY J. VIDETTI DRAFTED BY J. VIDETTI CHECKED BY C. SMITH

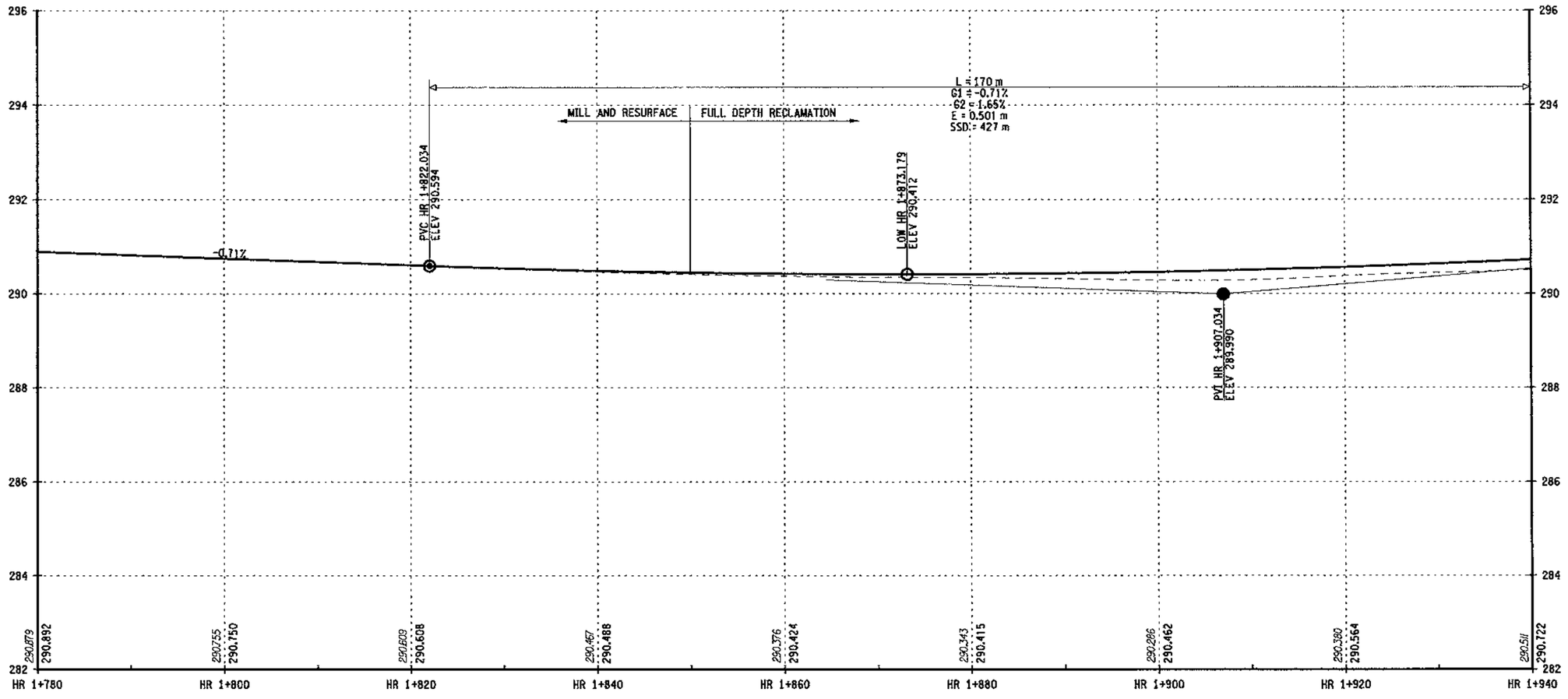
FILE NAME = h:\projects\051004-hanshaw_rd\engr\out\375325a_pro.dgn
DATE/TIME = 9/15/2007 9:27:06 AM
USER = jason

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		XXX	

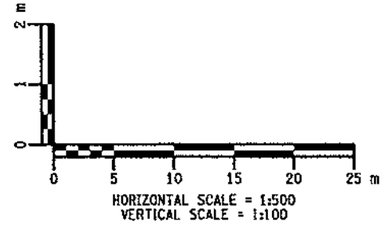
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



HANSHAW ROAD
NORMAL CROWN



HORIZONTAL SCALE = 1:500
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UTILITY QUALITY LEVEL D
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

HR 1+780 TO HR 1+940
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-05

DESIGN SUPERVISOR C. SMITH JOB MANAGER C. SMITH DESIGNED BY J. VIDETTI DRAFTED BY J. VIDETTI ESTIMATED BY J. VIDETTI CHECKED BY C. SMITH

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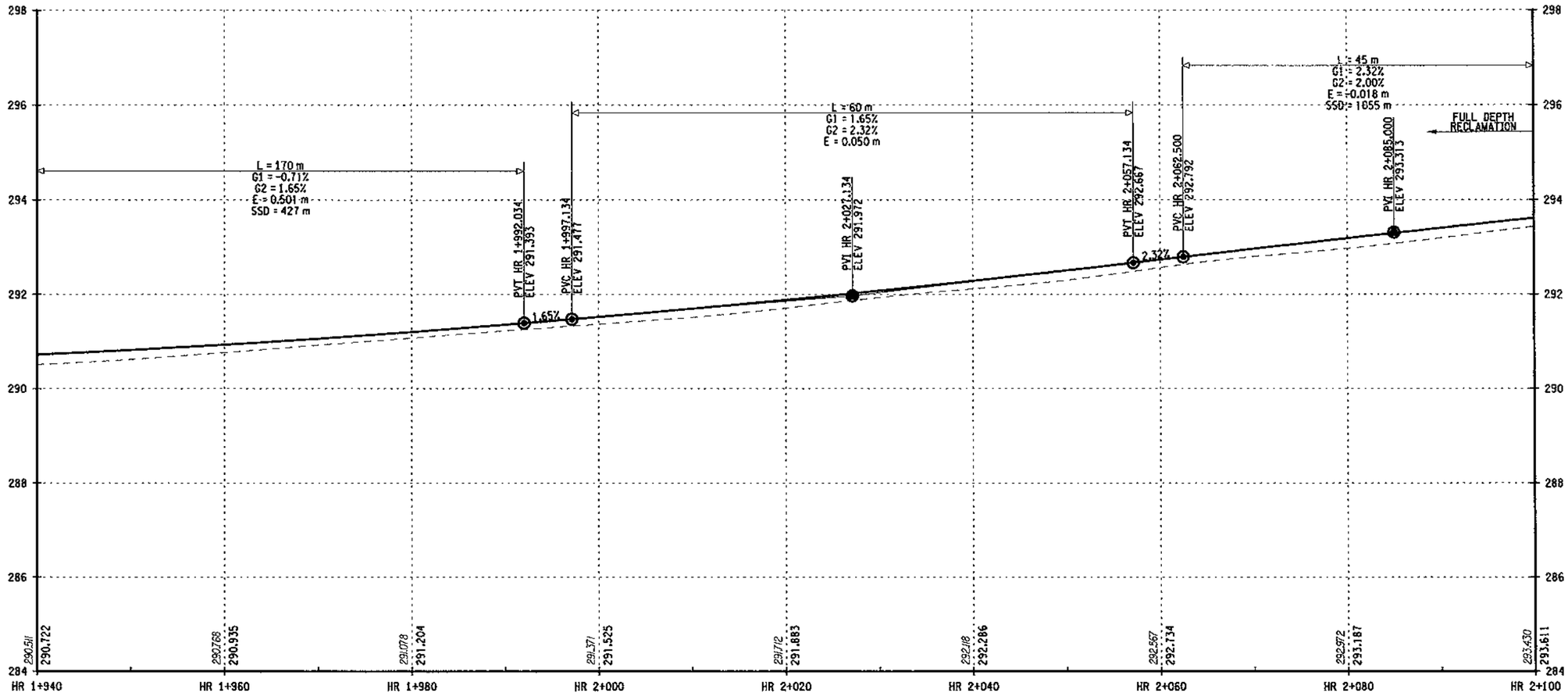
HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

P.I.N. 3753.25 | B.I.N.



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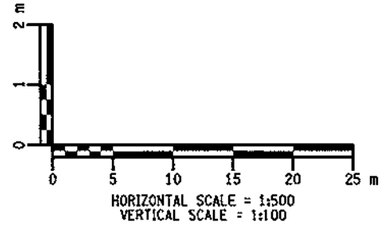

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SIGNATURE | DATE

HR 1+940 TO HR 2+100
PROFILE

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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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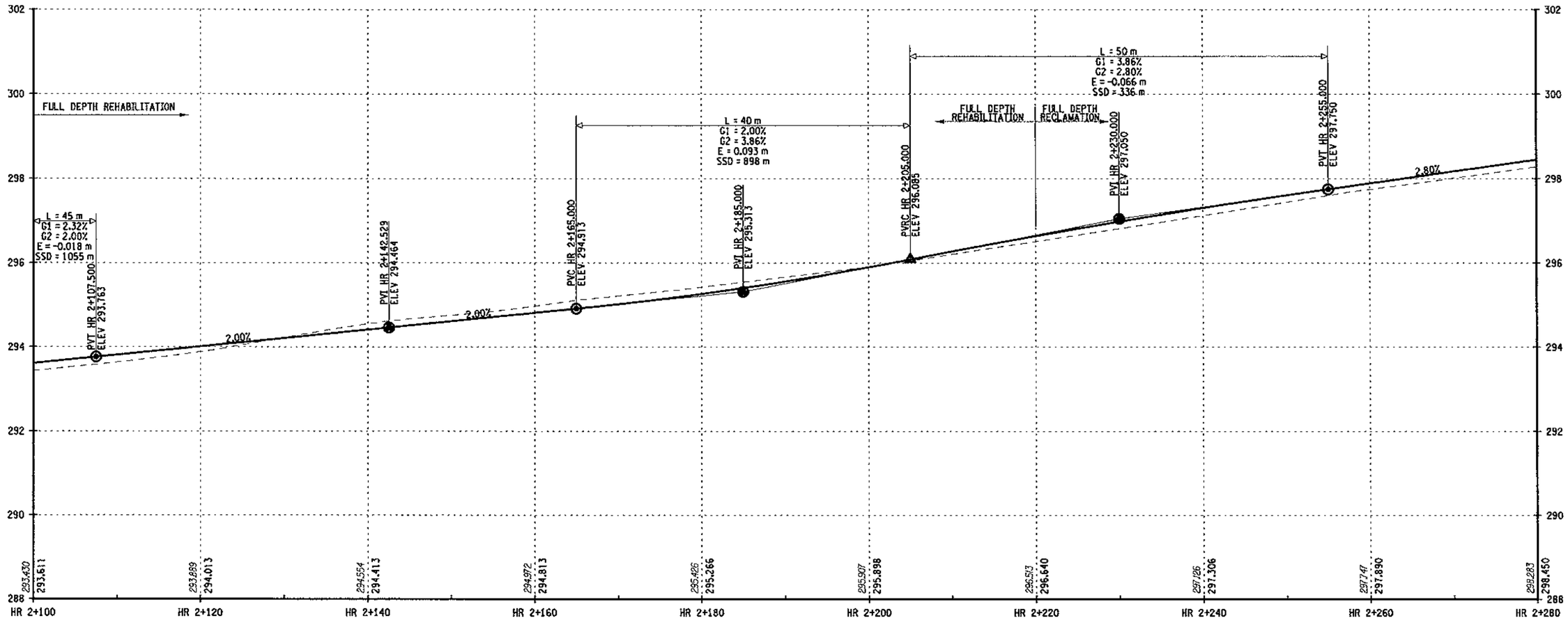

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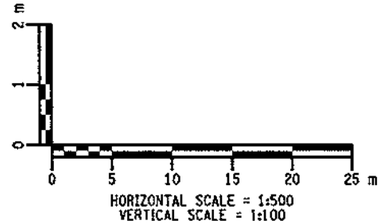

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SIGNATURE | DATE

HR 2+100 TO HR 2+280
PROFILE

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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-07

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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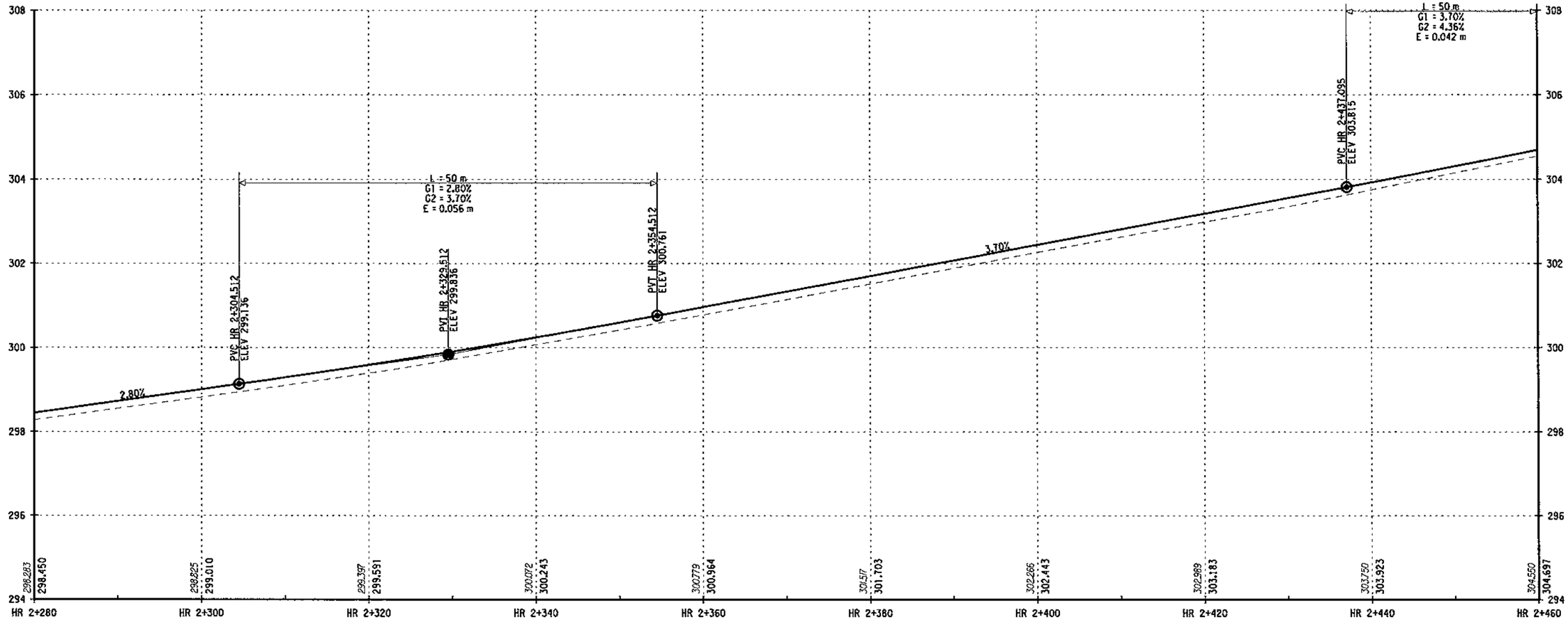

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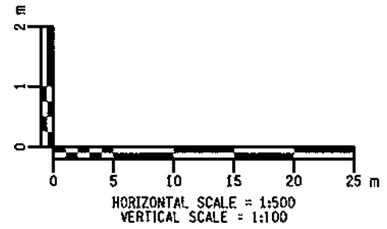

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HR 2+280 TO HR 2+460
PROFILE

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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-08

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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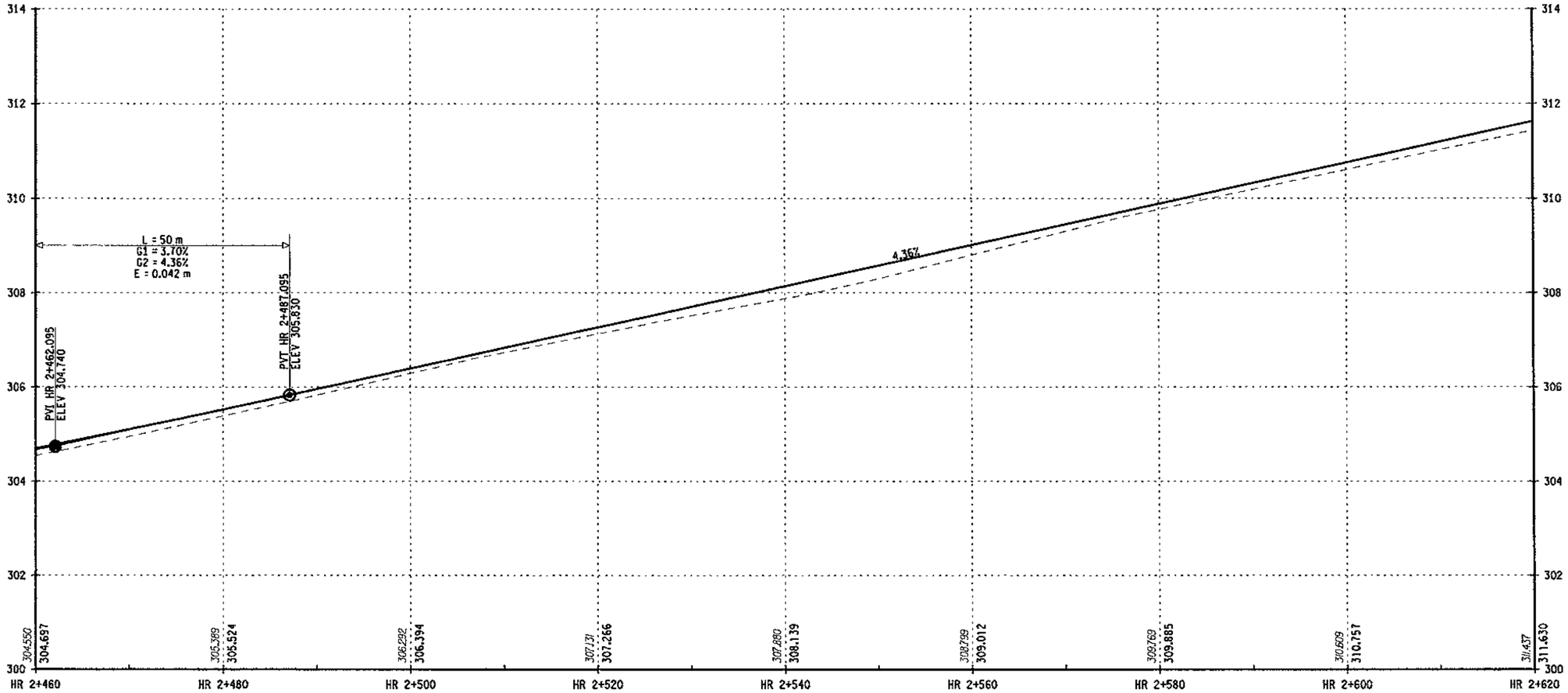

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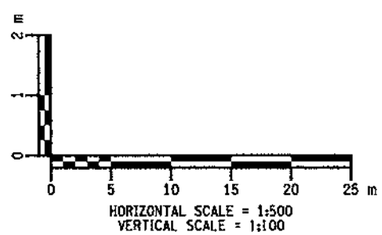

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SIGNATURE DATE

HR 2+460 TO HR 2+620
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-09

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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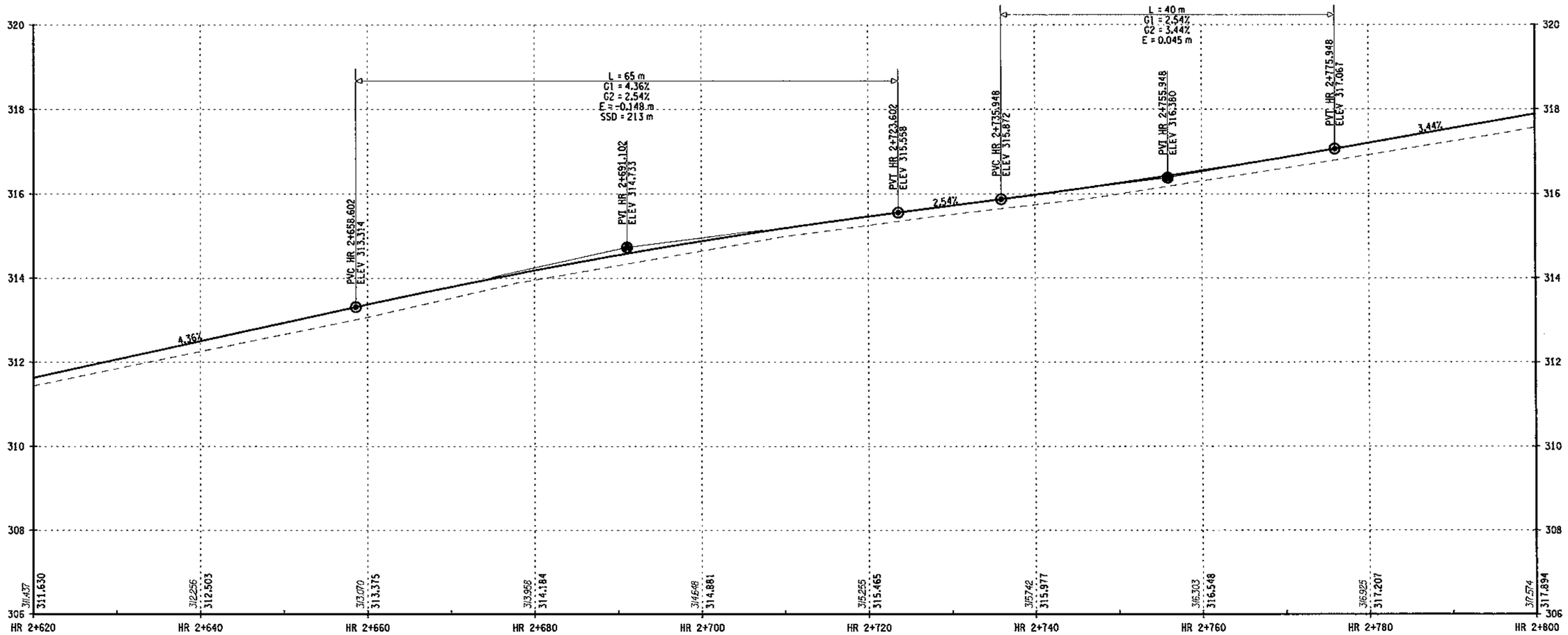

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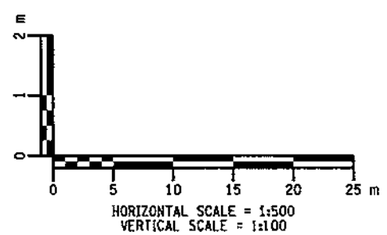

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SIGNATURE | DATE

HR 2+620 TO HR 2+800
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-10

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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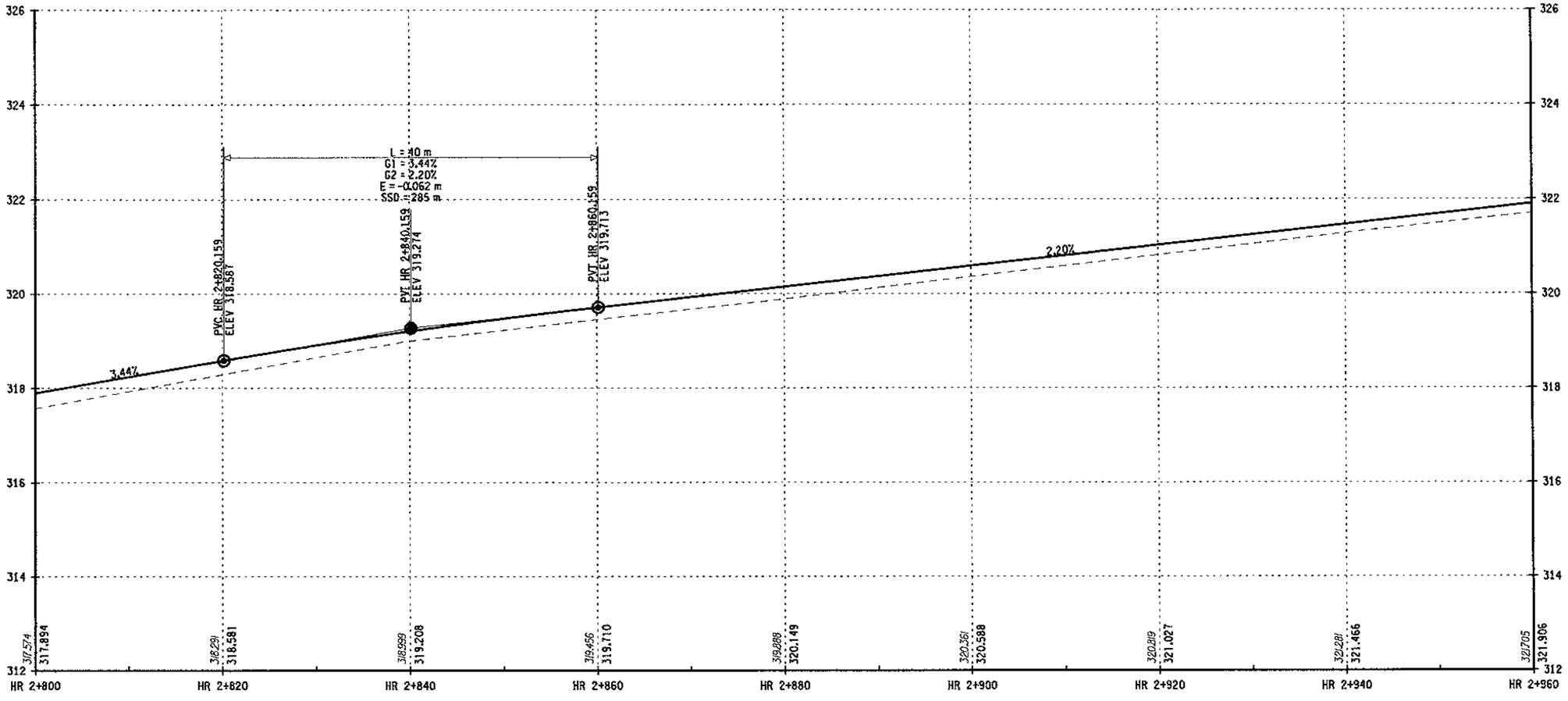

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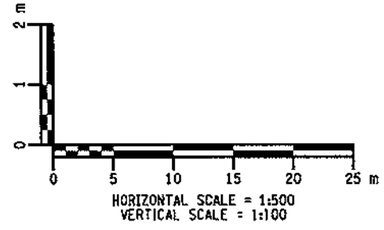

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HR 2+800 TO HR 2+960
PROFILE

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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-11

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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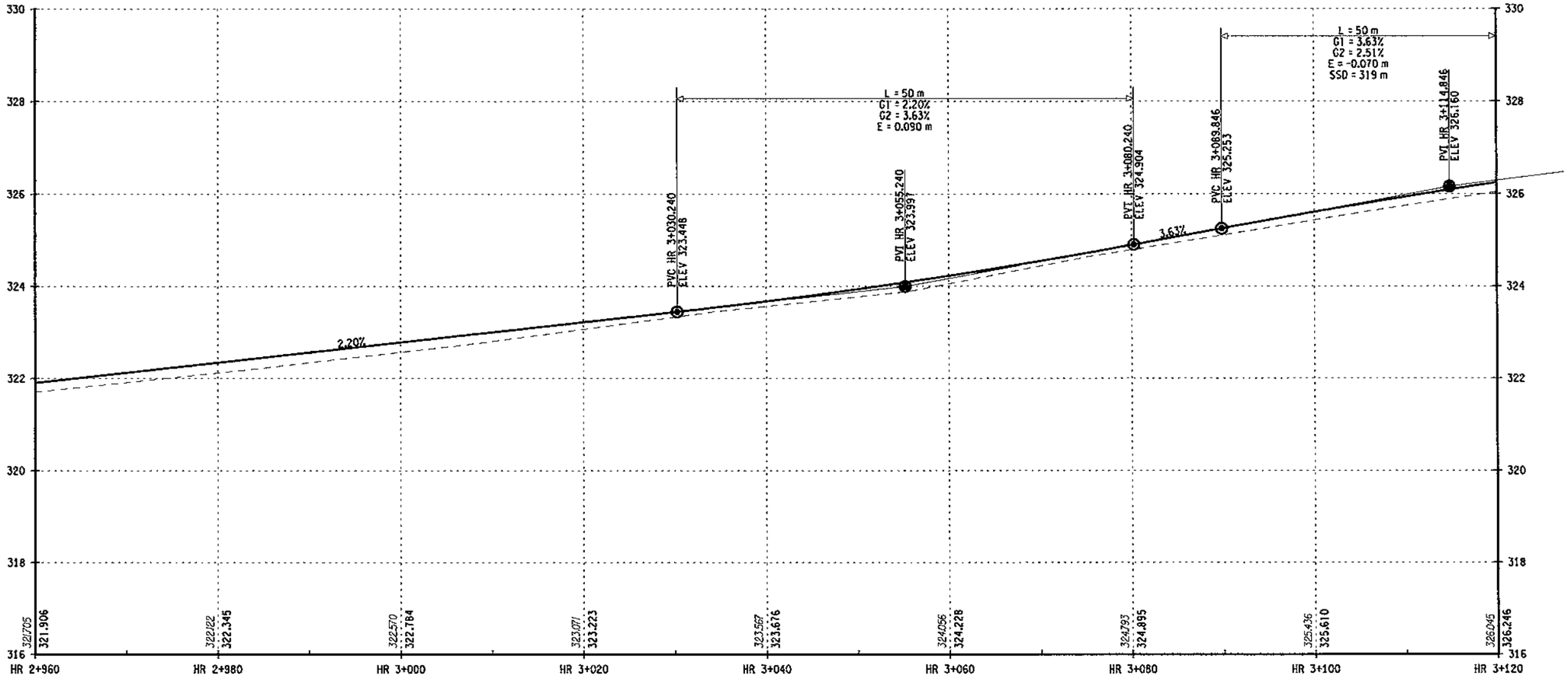

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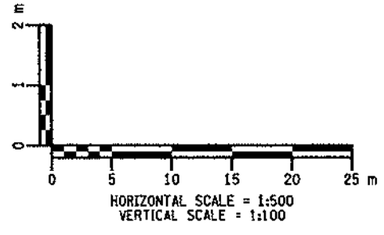

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SIGNATURE | DATE

HR 2+960 TO HR 3+120
PROFILE

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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-12

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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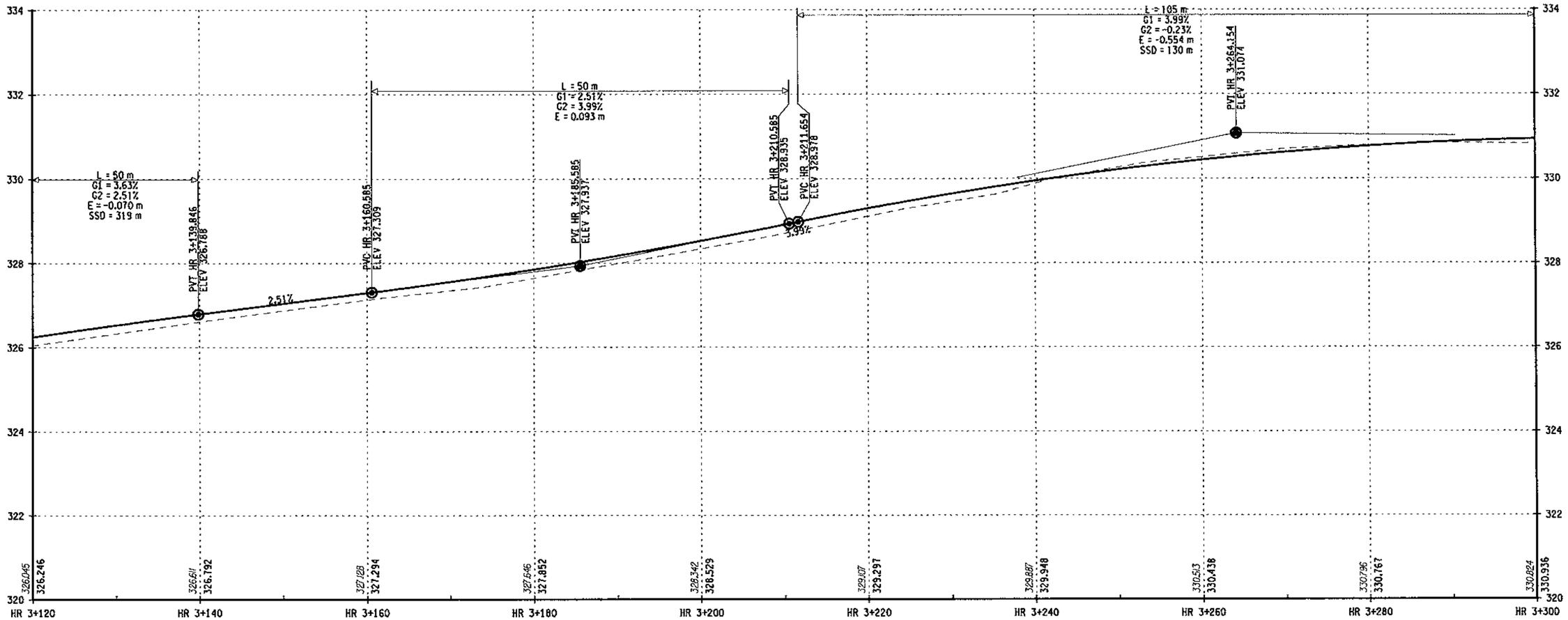

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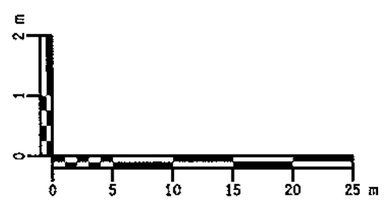

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SIGNATURE DATE

HR 3+120 TO HR 3+300
PROFILE

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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

DOCUMENT NAME	DATE	DRAWING NO.
375325a pro.dgn	AUG 2007	PR-13

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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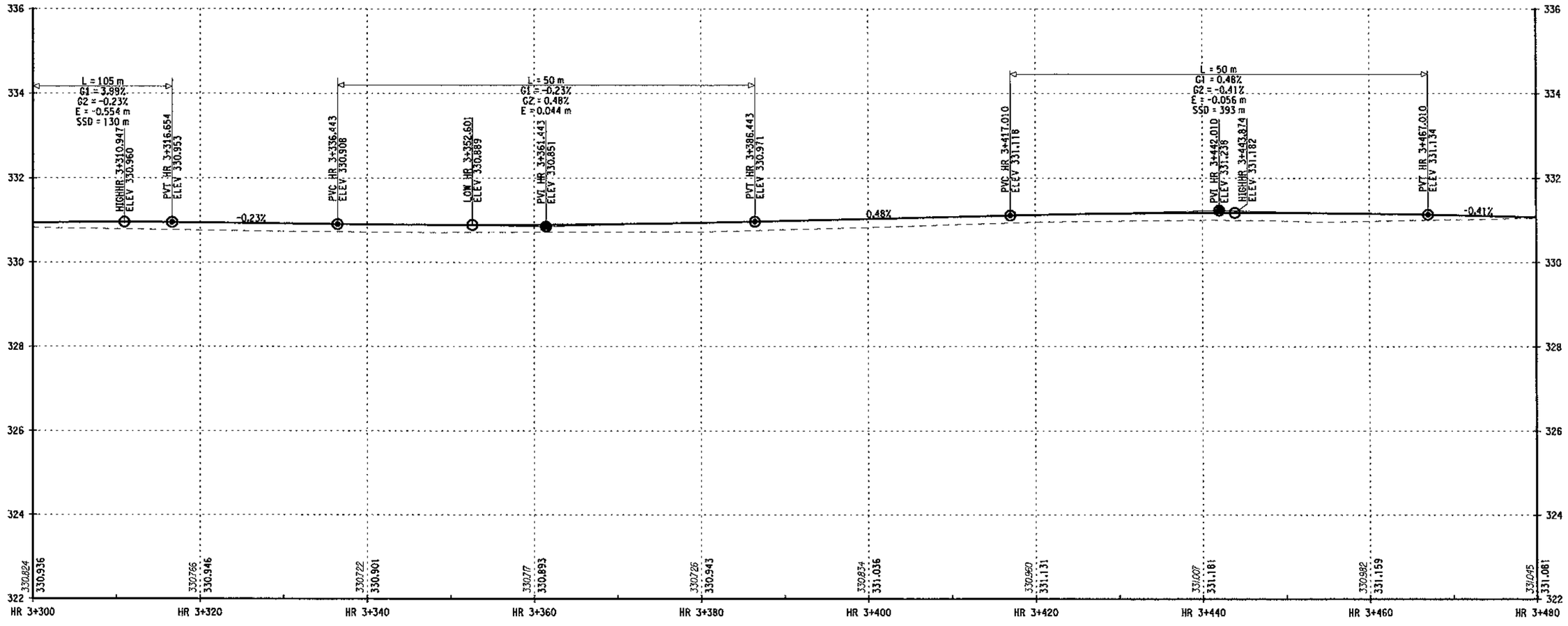

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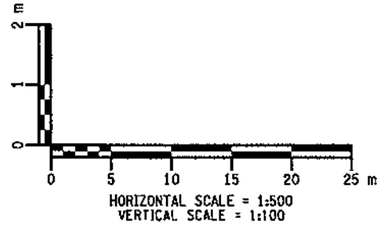

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HR 3+300 TO HR 3+480
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

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375325a pro.dgn	AUG 2007	PR-14

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HANSHAW ROAD RECONSTRUCTION

TOMPKINS COUNTY

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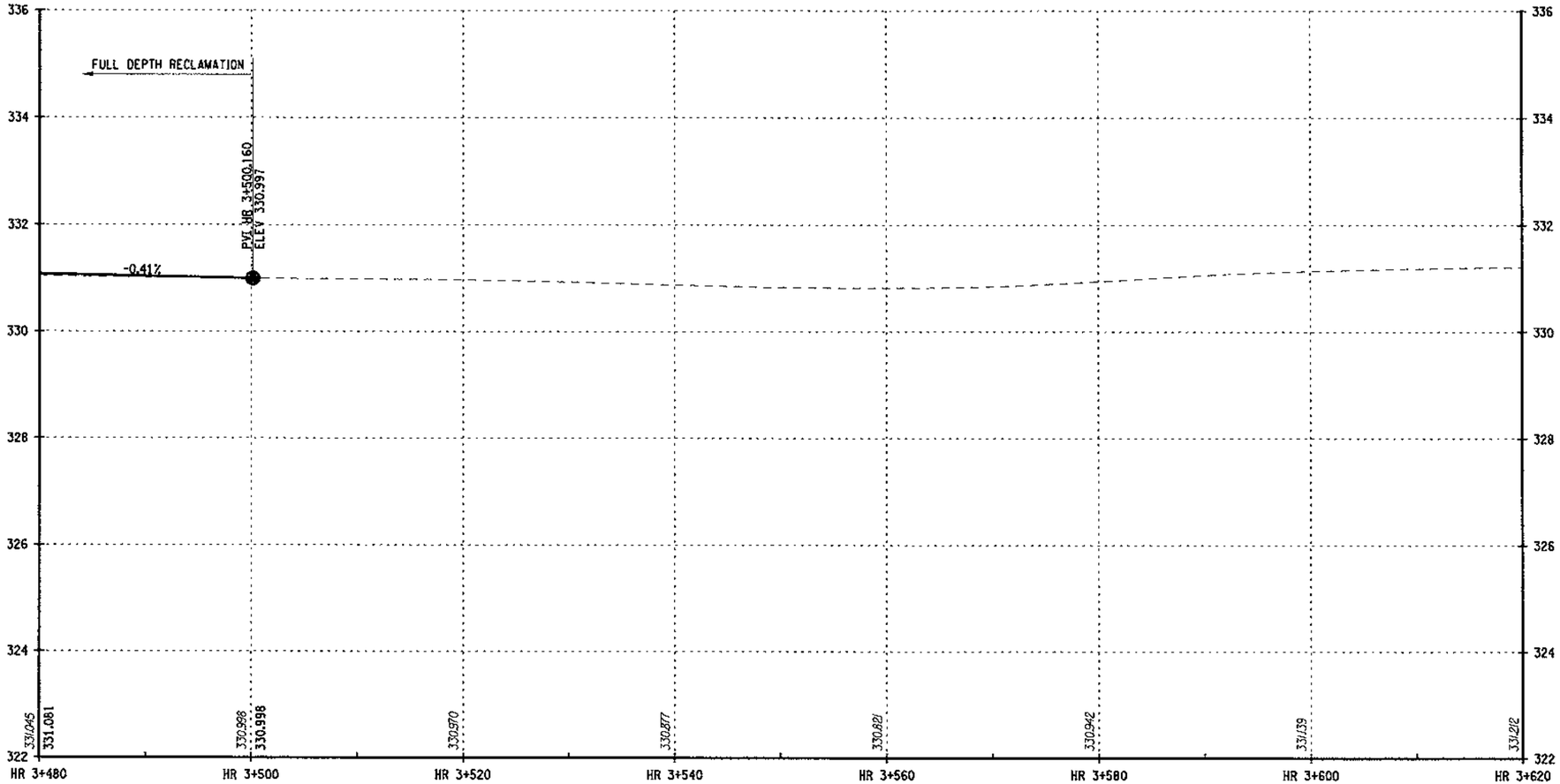

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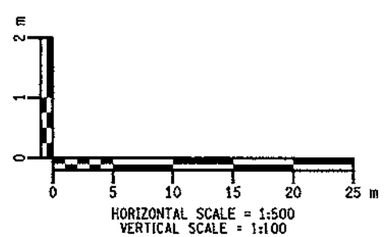

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SIGNATURE | DATE

HR 3+480 TO HR 3+620
PROFILE

FISHERASSOCIATES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION 3

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APPENDIX G

Non-Standard Feature Justification

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:	**3753.25**	NHS (Y/N):	No
Route No. & Name:	**Hanshaw Road (County Route 109**	Functional Class:	Urban Minor Arterial & Urban Collector
Project Type:	**Rehabilitation**	Design Classification: (AASHTO Class)	NA
% Trucks:	**7%**		
ADT:	**From western project limit to Warren Road = 7,000** **From Warren Road to the eastern project limit = 3600 to 4530**	Terrain:	Rolling
		Truck Access Rte:	No

1. - Description of Non-Standard Feature

Type of Feature (e.g., horizontal curve radius):	Shoulder Width		
Location:	Hanshaw Road from Pleasant Grove Road to Freese Road		
Standard Value:	**2.4 meters**	Design Speed:	**60 km/h (37 mph)**
Existing Value:	**(0.3 to 1.2 meters)**	Safe Operating Speed:	**48 km/h (30 mph) Posted**
Proposed Value:	**1.2 meters**	Safe Operating Speed:	**48 km/h (30 mph) Posted**

2. - Accident Analysis

Current Accident Rate:	1.82 Acc/MVM
Statewide Rate:	2.27 Acc/MVM
Is the non-standard feature a contributing factor?	The existing shoulder area was not a contributing factor to any accidents within the project limits. There were no bicycle accidents within the project limits.
Potential for Future Accidents and Accident Severity:	The existing accident rate within the project limits is 1.82 Acc/MVM, which is below the statewide average of 2.27 Acc/MVM for similar type roadways. There were 25 accidents with personal injuries, and no fatalities The consistent and improved 1.2 meter shoulder will provide a significantly improved travel way for motorists and bicyclists.

3. - Cost Estimates

Cost to Fully Meet Standards:	$540,000 including construction, engineering and right of way.
Cost(s) For Incremental Improvements:	$120,000 for the installation of 1.2 meter asphalt shoulders including construction and engineering (right of way is not needed).

4. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	NA
5. - Compatibility with Adjacent Segments & Future Plans:	
	The proposed shoulders will be consistent with the approach sections on each end of the project.
6. - Other Factors (e.g., Social, Economic & Environmental):	
	Installation of the 2.4 meter shoulder would have a significant negative effect on adjacent properties in this urban area, including the significant loss of trees, removal of other landscaping features, reduction of buffer to houses, and the significant increase in the number of property acquisitions along the project. Additionally, operating speeds, which already exceed the posted speed limits, would likely increase throughout the corridor.
7. - Proposed Treatment (i.e., Recommendation):	
	Provide 1.2 m wide asphalt shoulders.

APPENDIX H

SIGNAL WARRANT ANALYSIS

Fig 1C-1
Warrant 2, Four-Hour Vol. Volume

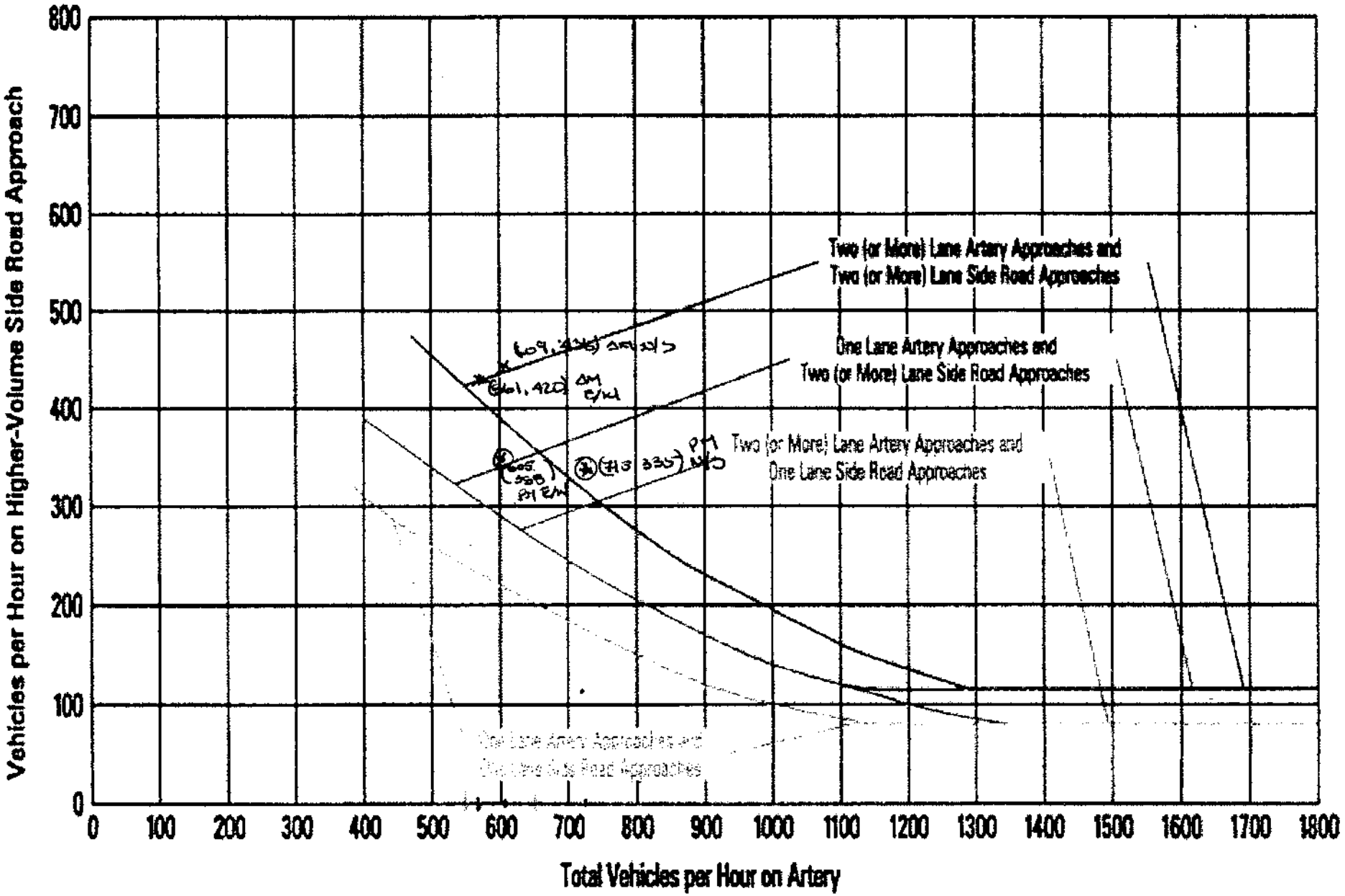
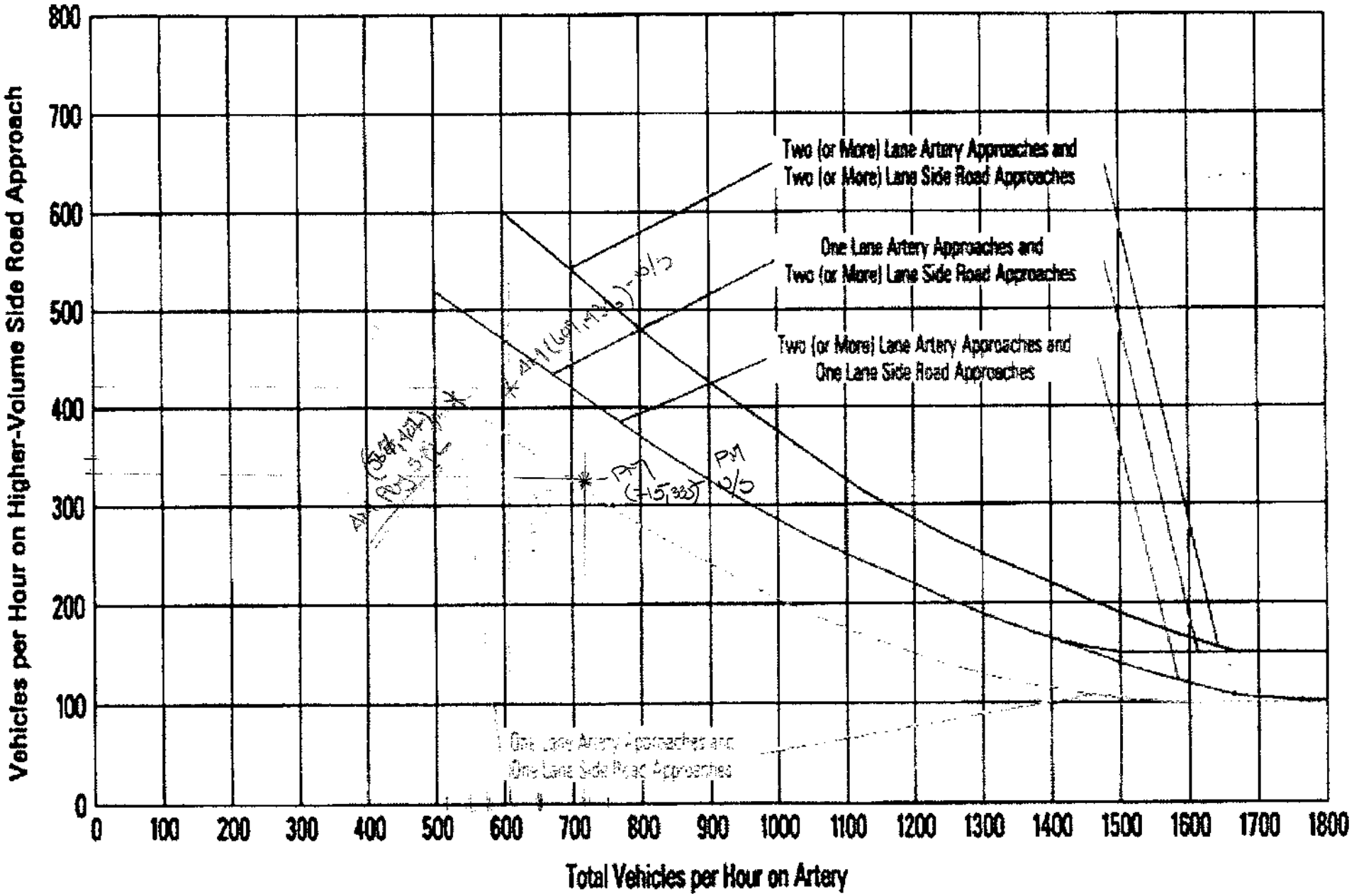
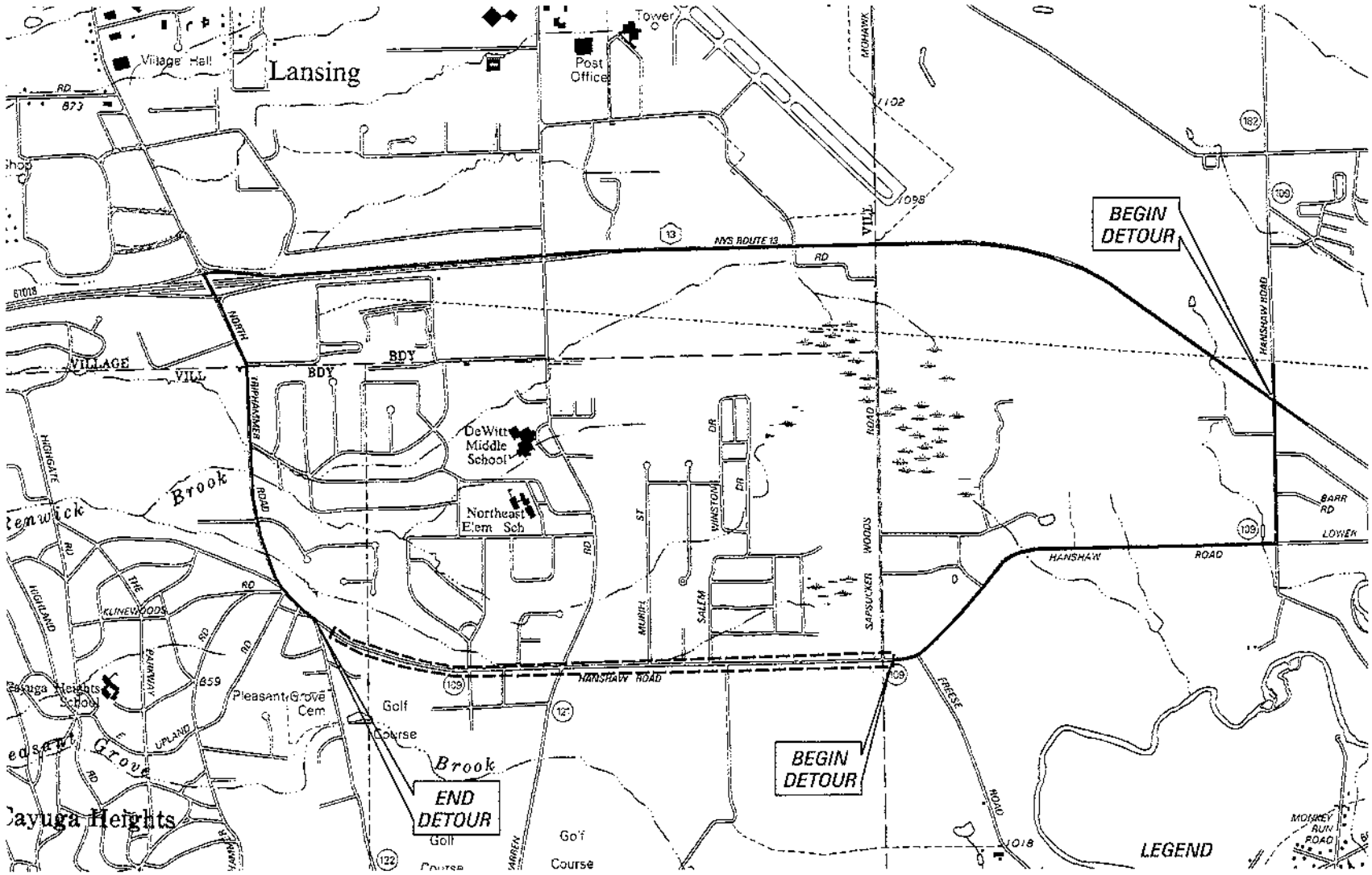


Fig 4C-3 Warrant 3
Peak Hour



APPENDIX I

Off-Site Detour



PROPOSED DETOUR ROUTE	HANSHAW ROAD TOWN OF ITHACA	PROJ. NO. 375325	DATE AUG 2007	SCALE N.T.S

APPENDIX J

NEPA and SEQR Assessment

NEPA ASSESSMENT CHECKLIST
HANSHAW ROAD RECONSTRUCTION

Answer the following questions by checking YES or NO.

I. THRESHOLD QUESTION	YES	NO
1. Does the project involve unusual circumstances as described in 23 CFR §771.117(b)?		✔

- If YES, the project does not qualify as a Categorical Exclusion and an EA or EIS is required. You may STOP COMPLETING THE CHECKLIST.
- If NO, go on.

II. AUTOMATIC CATEGORICAL EXCLUSION	YES	NO
2. Is the project an action listed as an Automatic Categorical Exclusion in 23 CFR §771.117(c) (C List) and/or is the project an element-specific project classified by FHWA as a Categorical Exclusion on July 22, 1996?		✔

- If YES to question 2, the project qualifies for a C List Categorical Exclusion. You may STOP COMPLETING THE CHECKLIST. The checklist should be included in the appendix of the Final Design Report (or Scope Summary Memorandum/Final Design Report). The CATEGORICAL EXCLUSION DETERMINATION memo is to be sent to the appropriate Main Office Design liaison unit with a copy of the Final Design Report (or Scope Summary Memorandum/Final Design Report). A copy of the CATEGORICAL EXCLUSION DETERMINATION memo must also be sent to the Office of Budget and Finance, Project and Letting Management, and others (see sample DETERMINATION memo attached).

  (Note - Even if YES to question 2, there may be specific environmental issues that still require an action such as an EO 11990 Wetland Finding or a determination of effect on cultural resources. The project is still an Automatic Categorical Exclusion but the necessary action must be taken, such as obtaining FHWA's signature on the wetland finding. Refer to the appropriate section of the Environmental Procedures Manual for guidance.)

- If NO to question 2, go on.

III. PROGRAMMATIC CATEGORICAL EXCLUSION	YES	NO
3. Is the project on new location or does it involve a change in the functional classification or added mainline capacity (add through-traffic lanes)?		✔

		YES	NO
4.	Is this a Type I project under 23 CFR 772, "Procedures for Abatement of Highway Traffic Noise and Construction"?		✔
5.	If the project is located within the limits of a designated sole source aquifer area or the associated stream flow source area, is the drainage pattern altered?		✔
6.	Does the project involve changes in travel patterns?		✔
7.	Does the project involve the acquisition of more than minor amounts of temporary or permanent right-of-way (a minor amount of right-of-way is defined as not more than 10 percent of a parcel for parcels under 4 ha (10 acres) in size, 0.4 ha (1 acre) of a parcel 4 ha to 40.5 ha (10 to 100 acres) in size and 1 percent of a parcel for parcels greater than 40.5 ha (100 acres) in size?		✔
8.	Does the project require a Section 4(f) evaluation and determination in accordance with the FHWA guidance?		✔
9.	Does the project involve commercial or residential displacement?		✔
10.	If Section 106 applies, does FHWA's determination indicate an opinion of adverse effect?		✔
11.	Does the project involve any work in wetlands requiring a Nationwide Wetland Permit #23?		✔
12.	Does the project involve any work in wetlands requiring an individual Executive Order 11990 Wetland Finding?		✔
13.	Has it been determined that the project will significantly encroach upon a flood plain based on preliminary hydraulic analysis and consideration of EO 11988 criteria as appropriate?		✔
14.	Does the project involve construction in, across or adjacent to a river designated as a component proposed for or included in the National System of Wild and Scenic Rivers?		✔
15.	Does the project involve any change in access control		✔

	YES	NO
16. Does the project involve any known hazardous materials sites or previous land uses with potential for hazardous material remains within the right-of-way?		✔
17. Does the project occur in an area where there are Federally listed endangered or threatened species or critical habitat?		✔
18. Is the project, pursuant to EPM Chapter 1A and Table 2 and Table 3 of 40 CFR Parts 51 and 93, non-exempt or does it exceed any ambient air quality standard?		✔
19. Does the project lack consistency with the New York State Coastal Zone Management Plan and policies of the Department of State, Office of Coastal Zone Management?		✔
20. Does the project impact or acquire any Prime or Unique Farmland as defined in 7 CFR Part 657 of the Federal Farmland Protection Policy Act and are there outstanding compliance activities necessary? (Note: Interpret compliance activity to mean completion of Form AD 1006.)		✔

- If NO for questions, 3-20, go on to answer question 21.
- If YES to any question 3-20, project will not qualify as a Programmatic Categorical Exclusion. Answer questions 21 and 22 for documentation only and go on to question 23.

	YES	NO
21. Does the project involve the use of a temporary road, detour or ramp closure?	✔ (*)	

* Staged one-way detour

- If NO to questions 3-20 and NO to question 21, the project qualifies as a Programmatic Categorical Exclusion. You may STOP COMPLETING THE CHECKLIST. The checklist should be included in the appendix of the Final Design Report (or Scope Summary Memorandum/Final Design Report). The CATEGORICAL EXCLUSION DETERMINATION memo is to be sent to the appropriate Main Office Design liaison unit with a copy of the Final Design Report (or Scope Summary Memorandum/Final Design Report). A copy of the Categorical Exclusion memo must also be sent to the Office of Budget and Finance, Project and Letting Management, and others (see sample DETERMINATION memo attached).
- If YES to question 21, preparer should complete question 22 (i-v). If questions 3-20 are NO and 21 is YES, the project will still qualify as a Programmatic Categorical Exclusion if questions 22 (i-v) are YES.

	YES	NO
22. Since the project involves the use of temporary road, detour or ramp closure, will all of the following conditions be met:		
i. Provisions will be made for pedestrian access, where warranted, and access by local traffic and so posted.	✔	
ii. Through-traffic dependent business will not be adversely affected.	✔	
iii. The detour or ramp closure, to the extent possible, will not interfere with any local special event or festival.	✔	
iv. The temporary road, detour or ramp closure does not substantially change the environmental consequences of the action	✔	
v. There is no substantial controversy associated with the temporary road, detour or ramp closure.	✔	

- If questions 3-20 are NO, 21 is YES and 22 (i-v) are YES, the project qualifies for a Programmatic Categorical Exclusion. You may STOP COMPLETING THE CHECKLIST. The checklist should be included in the appendix of the Final Design Report (or Scope Summary Memorandum/Final Design Report). The CATEGORICAL EXCLUSION DETERMINATION memo should be sent to the appropriate Main Office Design liaison unit with a copy of the Final Design Report (or Scope Summary Memorandum/Final Design Report.) A copy of the CATEGORICAL EXCLUSION DETERMINATION memo must also be sent to the Office of Budget and Finance, Project and Letting Management, and others (see sample DETERMINATION memo attached).

- If questions 3-20 are NO, 21 is YES and any part of 22 is NO, go on to question 23.

	YES	NO
23. Is the project section listed in 23 CFR §771.117(d) (D List) or is the project an action similar to those listed in 23 CFR §771.117(d)?		

For those questions which precluded a Programmatic Categorical Exclusion, documentation should be provided for any YES response to questions 3-20 or for a NO response to any part of questions 22 (i-v). This documentation, as well as the checklist, should be included in the Design Approval Document, i.e., Final Design Report, etc., to be submitted to the Main Office/FHWA Design liaison unit for submission to the FHWA Division for classification of the project as a D List Categorical Exclusion.

617.20
Appendix A
State Environmental Quality Review
FULL ENVIRONMENTAL ASSESSMENT FORM

Purpose: The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

Full EAF Components: The full EAF is comprised of three parts:

Part 1: Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.

Part 2: Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.

Part 3: If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

THIS AREA FOR LEAD AGENCY USE ONLY

DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions

Identify the Portions of EAF completed for this project: ☑ Part 1 ☑ Part 2 ☐ Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

☒ A. The project will not result in any large and important impact(s) and, therefore, is one which **will not** have a significant impact on the environment, therefore **a negative declaration will be prepared.**

☐ B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore **a CONDITIONED negative declaration will be prepared.***

☐ C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore **a positive declaration will be prepared**.

*A Conditioned Negative Declaration is only valid for Unlisted Actions

Rehabilitation of Hanshaw Road

Name of Action

Tompkins County Highway Division

Name of Lead Agency

William Sczesny

Print or Type Name of Responsible Officer in Lead Agency

Highway Superintendant

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (If different from responsible officer)

August 28, 2007

Date

website

PART 1--PROJECT INFORMATION
Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

Name of Action Rehabilitation of Hanshaw Road

Location of Action (include Street Address, Municipality and County)

Hanshaw Road from Pleasant Grove Road to Sapsucker Woods Road

Name of Applicant/Sponsor Tompkins County Highway Division

Address 170 Bostwick Road

City / PO Ithaca State NY Zip Code 14850

Business Telephone 607-274-0307

Name of Owner (if different)

Address

City / PO State Zip Code

Business Telephone

Description of Action:

The Hanshaw Road project includes rehabilitation of the roadway with reconstructed shoulders and a sidewalk along the north side of the road. The project also includes drainage improvements, landscaping, signage and striping.

Please Complete Each Question--Indicate N.A. if not applicable

A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present Land Use: [✓] Urban [ ] Industrial [ ] Commercial [✓] Residential (suburban) [✓] Rural (non-farm)
   [ ] Forest [✓] Agriculture [ ] Other _____

2. Total acreage of project area: 9.09 acres.

APPROXIMATE ACREAGE	PRESENTLY	AFTER COMPLETION
Meadow or Brushland (Non-agricultural)	2.3 acres	1.83 acres
Forested	0.2 acres	0.2 acres
Agricultural (Includes orchards, cropland, pasture, etc.)	0 acres	0 acres
Wetland (Freshwater or tidal as per Articles 24,25 of ECL)	0 acres	0 acres
Water Surface Area	0 acres	0 acres
Unvegetated (Rock, earth or fill)	1.0 acres	0.9 acres
Roads, buildings and other paved surfaces	5.59 acres	6.16 acres
Other (Indicate type) _____	0.0 acres	0.0 acres

3. What is predominant soil type(s) on project site?
   a. Soil drainage: [✓] Well drained 50 % of site [✓] Moderately well drained 20 % of site.
   [✓] Poorly drained 30 % of site
   b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? NA acres (see 1 NYCRR 370).

4. Are there bedrock outcroppings on project site? [■] Yes [ ] No There are 2 small rock outcrops near Village of Cayuga Heights
   a. What is depth to bedrock 0.0 - 8.0 (in feet)

5. Approximate percentage of proposed project site with slopes:
   [✓] 0-10% 90 % [✓] 10- 15% 7 % [✓] 15% or greater 3 %

6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or National Registers of Historic Places? [ ] Yes [■] No

7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? [ ] Yes [■] No

8. What is the depth of the water table? 5.0 - 11.0 (in feet)

9. Is site located over a primary, principal, or sole source aquifer? [■] Yes [ ] No

10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? [ ] Yes [■] No

11. Does project site contain any species of plant or animal life that is identified as threatened or endangered? ☐ Yes ☒ No

According to:

NYSDEC (Region 7 and Natural Heritage Program), USFWS, NOAA

Identify each species:

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations?

☐ Yes ☒ No

Describe:

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?

☐ Yes ☒ No

If yes, explain:

14. Does the present site include scenic views known to be important to the community? ☒ Yes ☐ No

View of Valley (Cornell Fields) at east end of project, and landscaping along roadway.

15. Streams within or contiguous to project area:

Renwick Brook Tributary

a. Name of Stream and name of River to which it is tributary

Cayuga Lake

16. Lakes, ponds, wetland areas within or contiguous to project area:

NA

b. Size (in acres):

NA

17. Is the site served by existing public utilities? ■ Yes ☐ No

a. If **YES**, does sufficient capacity exist to allow connection? ■ Yes ☐ No

b. If **YES**, will improvements be necessary to allow connection? ☐ Yes ■ No

18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ■ No

19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617? ☐ Yes ■ No

20. Has the site ever been used for the disposal of solid or hazardous wastes? ☐ Yes ■ No

B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate).

a. Total contiguous acreage owned or controlled by project sponsor: 9.09 acres.

b. Project acreage to be developed: 9.09 acres initially; 9.09 acres ultimately.

c. Project acreage to remain undeveloped: 0.0 acres.

d. Length of project, in miles: 1.5 (if appropriate)

e. If the project is an expansion, indicate percent of expansion proposed. NA %

f. Number of off-street parking spaces existing 0 ; proposed 0

g. Maximum vehicular trips generated per hour: 600 (upon completion of project)?

h. If residential: Number and type of housing units:

	One Family	Two Family	Multiple Family	Condominium
Initially	NA			
Ultimately				

i. Dimensions (in feet) of largest proposed structure: NA height; _____ width; _____ length.

j. Linear feet of frontage along a public thoroughfare project will occupy is? NA ft.

2. How much natural material (i.e. rock, earth, etc.) will be removed from the site? 3,000 tons/cubic yards.

3. Will disturbed areas be reclaimed ■ Yes ☐ No ☐ N/A

a. If yes, for what intended purpose is the site being reclaimed?

Highway, driveways, lawns, vegetated areas

b. Will topsoil be stockpiled for reclamation? ■ Yes ☐ No

c. Will upper subsoil be stockpiled for reclamation? ☐ Yes ■ No

4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 0.3 acres.

5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?

☐ Yes ☒ No

6. If single phase project: Anticipated period of construction: 10 months, (including demolition)

7. If multi-phased:

   a. Total number of phases anticipated NA (number)

   b. Anticipated date of commencement phase 1: _____ month _____ year, (including demolition)

   c. Approximate completion date of final phase: _____ month _____ year.

   d. Is phase 1 functionally dependent on subsequent phases? ☐ Yes ☐ No

8. Will blasting occur during construction? ☐ Yes ☒ No

9. Number of jobs generated: during construction 40 ; after project is complete 0

10. Number of jobs eliminated by this project 0 .

11. Will project require relocation of any projects or facilities? ☒ Yes ☐ No

    If yes, explain:

    Stormwater facilities, public water appurtenances, sanitary pipes and manholes, and overhead utilities.

12. Is surface liquid waste disposal involved? ☐ Yes ☒ No

    a. If yes, indicate type of waste (sewage, industrial, etc) and amount _____

    b. Name of water body into which effluent will be discharged _____

13. Is subsurface liquid waste disposal involved? ☐ Yes ☒ No Type _____

14. Will surface area of an existing water body increase or decrease by proposal? ☐ Yes ☒ No

    If yes, explain:

15. Is project or any portion of project located in a 100 year flood plain? ☐ Yes ☒ No

16. Will the project generate solid waste? ☒ Yes ☐ No (During Construction Only)

    a. If yes, what is the amount per month? 20 tons

    b. If yes, will an existing solid waste facility be used? ☒ Yes ☐ No

    c. If yes, give name TBD ; location _____

    d. Will any wastes not go into a sewage disposal system or into a sanitary landfill? ☐ Yes ☒ No

e. If yes, explain:

17. Will the project involve the disposal of solid waste? ☐ Yes ■ No

a. If yes, what is the anticipated rate of disposal? _____ tons/month.

b. If yes, what is the anticipated site life? _____ years.

18. Will project use herbicides or pesticides? ■ Yes ☐ No

19. Will project routinely produce odors (more than one hour per day)? ☐ Yes ■ No

20. Will project produce operating noise exceeding the local ambient noise levels? ■ Yes ☐ No

21. Will project result in an increase in energy use? ■ Yes ☐ No

If yes, indicate type(s)

Operating noise and energy use will temporarily increase during construction only.

22. If water supply is from wells, indicate pumping capacity NA gallons/minute.

23. Total anticipated water usage per day NA gallons/day.

24. Does project involve Local, State or Federal funding? ■ Yes ☐ No

If yes, explain:

FHWA, NYSDOT, Tompkins County, Town of Ithaca and Village of Cayuga Heights funding

25. Approvals Required:

			Type	Submittal Date
City, Town, Village Board	■ Yes	☐ No	Town (Sidewalk)	
			Village (Sidewalk)	
City, Town, Village Planning Board	☐ Yes	■ No		
City, Town Zoning Board	☐ Yes	■ No		
City, County Health Department	■ Yes	☐ No	Water	
			Sewer	
Other Local Agencies	■ Yes	☐ No	County Highway	
Other Regional Agencies	☐ Yes	■ No		
State Agencies	■ Yes	☐ No	NYSDOT Permit	
			NYSDEC	
Federal Agencies	■ Yes	☐ No	FHWA Approval	
			USCOE Approval	

C. Zoning and Planning Information

1. Does proposed action involve a planning or zoning decision? ☐ Yes ■ No

If Yes, indicate decision required:

☐ Zoning amendment ☐ Zoning variance ☐ New/revision of master plan ☐ Subdivision

☐ Site plan ☐ Special use permit ☐ Resource management plan ☐ Other

2. What is the zoning classification(s) of the site?

Medium Density Residential (MDR), Low Density Residential (LDR), and Planned Development Zone (P)

3. What is the maximum potential development of the site if developed as permitted by the present zoning?

NA

4. What is the proposed zoning of the site?

No change

5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?

NA

6. Is the proposed action consistent with the recommended uses in adopted local land use plans? ■ Yes ☐ No

Consistent with local use and transportation plan

7. What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?

Residential (MDR, LDR, P), Recreational (LDR), and open spaces (Cayuga Heights)

One (1) and/or two (2) family housing, Agriculture, Community Service Buildings, and non-conforming but allowed buildings (Town of Dryden)

8. Is the proposed action compatible with adjoining/surrounding land uses with a ¼ mile? ■ Yes ☐ No

9. If the proposed action is the subdivision of land, how many lots are proposed? NA

   a. What is the minimum lot size proposed? _____

10. Will proposed action require any authorization(s) for the formation of sewer or water districts? ☐ Yes ☒ No

11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection?

☐ Yes ☒ No

a. If yes, is existing capacity sufficient to handle projected demand? ☐ Yes ☐ No

12. Will the proposed action result in the generation of traffic significantly above present levels? ☐ Yes ☒ No

a. If yes, is the existing road network adequate to handle the additional traffic. ☐ Yes ☒ No

D. **Informational Details**

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

E. **Verification**

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name Fisher Associates as agent for Tompkins County Date 08/28/07

Signature Christy R. Hall

Title HIGHWAY MANAGER

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

PART 2 - PROJECT IMPACTS AND THEIR MAGNITUDE

Responsibility of Lead Agency

General Information (Read Carefully)

! In completing the form the reviewer should be guided by the question: Have my responses and determinations been **reasonable?** The reviewer is not expected to be an expert environmental analyst.

! The **Examples** provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.

! The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.

! The number of examples per question does not indicate the importance of each question.

! In identifying impacts, consider long term, short term and cumulative effects.

Instructions (Read carefully)

a. Answer each of the 20 questions in PART 2. Answer **Yes** if there will be **any** impact.

b. **Maybe** answers should be considered as **Yes** answers.

c. If answering **Yes** to a question then check the appropriate box(column 1 or 2)to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.

d. Identifying that an impact will be potentially large (column 2) does not mean that it is also necessarily **significant**. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.

e. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.

f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in Part 3.

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change
Impact on Land			
1. Will the Proposed Action result in a physical change to the project site? NO ☐ YES ■			
Examples that would apply to column 2			
• Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%.	☐	☐	☐ Yes ☐ No
• Construction on land where the depth to the water table is less than 3 feet.	☐	☐	☐ Yes ☐ No
• Construction of paved parking area for 1,000 or more vehicles.	☐	☐	☐ Yes ☐ No
• Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface.	■	☐	☐ Yes ■ No
• Construction that will continue for more than 1 year or involve more than one phase or stage.	☐	☐	☐ Yes ☐ No
• Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year.	☐	☐	☐ Yes ☐ No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change
• Construction or expansion of a santary landfill.	☐	☐	☐ Yes ☐ No
• Construction in a designated floodway.	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

2. Will there be an effect to any unique or unusual land forms found on the site? (i.e., cliffs, dunes, geological formations, etc.)
   ☒ NO ☐ YES

• Specific land forms:	☐	☐	☐ Yes ☐ No

Impact on Water

3. Will Proposed Action affect any water body designated as protected? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL)
   ☒ NO ☐ YES

Examples that would apply to column 2

• Developable area of site contains a protected water body.	☐	☐	☐ Yes ☐ No
• Dredging more than 100 cubic yards of material from channel of a protected stream.	☐	☐	☐ Yes ☐ No
• Extension of utility distribution facilities through a protected water body.	☐	☐	☐ Yes ☐ No
• Construction in a designated freshwater or tidal wetland.	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

4. Will Proposed Action affect any non-protected existing or new body of water?
   ☒ NO ☐ YES

Examples that would apply to column 2

• A 10% increase or decrease in the surface area of any body of water or more than a 10 acre increase or decrease.	☐	☐	☐ Yes ☐ No
• Construction of a body of water that exceeds 10 acres of surface area.	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change

5. Will Proposed Action affect surface or groundwater quality or quantity?

[■] NO [ ] YES

Examples that would apply to column 2

• Proposed Action will require a discharge permit.	☐	☐	☐ Yes	☐ No
• Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action.	☐	☐	☐ Yes	☐ No
• Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity.	☐	☐	☐ Yes	☐ No
• Construction or operation causing any contamination of a water supply system.	☐	☐	☐ Yes	☐ No
• Proposed Action will adversely affect groundwater.	☐	☐	☐ Yes	☐ No
• Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity.	☐	☐	☐ Yes	☐ No
• Proposed Action would use water in excess of 20,000 gallons per day.	☐	☐	☐ Yes	☐ No
• Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions.	☐	☐	☐ Yes	☐ No
• Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons.	☐	☐	☐ Yes	☐ No
• Proposed Action will allow residential uses in areas without water and/or sewer services.	☐	☐	☐ Yes	☐ No
• Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities.	☐	☐	☐ Yes	☐ No
• Other impacts:	☐	☐	☐ Yes	☐ No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change

6. Will Proposed Action alter drainage flow or patterns, or surface water runoff?
☐ NO ☒ YES

Examples that would apply to column 2

• Proposed Action would change flood water flows	☐	☐	☐ Yes	☐ No
• Proposed Action may cause substantial erosion.	☐	☐	☐ Yes	☐ No
• Proposed Action is incompatible with existing drainage patterns.	☐	☐	☐ Yes	☐ No
• Proposed Action will allow development in a designated floodway.	☐	☐	☐ Yes	☐ No
• Other impacts:	☒	☐	☐ Yes	☒ No

Some existing open drainage will be conveyed in a closed drainage system; one additional discharge point will be created.

IMPACT ON AIR

7. Will Proposed Action affect air quality?
☒ NO ☐ YES

Examples that would apply to column 2

• Proposed Action will induce 1,000 or more vehicle trips in any given hour.	☐	☐	☐ Yes	☐ No
• Proposed Action will result in the incineration of more than 1 ton of refuse per hour.	☐	☐	☐ Yes	☐ No
• Emission rate of total contaminants will exceed 5 lbs. per hour or a heat source producing more than 10 million BTU's per hour.	☐	☐	☐ Yes	☐ No
• Proposed Action will allow an increase in the amount of land committed to industrial use.	☐	☐	☐ Yes	☐ No
• Proposed Action will allow an increase in the density of industrial development within existing industrial areas.	☐	☐	☐ Yes	☐ No
• Other impacts:	☐	☐	☐ Yes	☐ No

IMPACT ON PLANTS AND ANIMALS

8. Will Proposed Action affect any threatened or endangered species?
☒ NO ☐ YES

Examples that would apply to column 2

• Reduction of one or more species listed on the New York or Federal list, using the site, over or near the site, or found on the site.	☐	☐	☐ Yes	☐ No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change
• Removal of any portion of a critical or significant wildlife habitat.	☐	☐	☐ Yes ☐ No
• Application of pesticide or herbicide more than twice a year, other than for agricultural purposes.	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

9. Will Proposed Action substantially affect non-threatened or non-endangered species?
☒ NO ☐ YES

Examples that would apply to column 2

• Proposed Action would substantially interfere with any resident or migratory fish, shellfish or wildlife species.	☐	☐	☐ Yes ☐ No
• Proposed Action requires the removal of more than 10 acres of mature forest (over 100 years of age) or other locally important vegetation.	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

IMPACT ON AGRICULTURAL LAND RESOURCES

10. Will Proposed Action affect agricultural land resources?
☒ NO ☐ YES

Examples that would apply to column 2

• The Proposed Action would sever, cross or limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.)	☐	☐	☐ Yes ☐ No
• Construction activity would excavate or compact the soil profile of agricultural land.	☐	☐	☐ Yes ☐ No
• The Proposed Action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultural District, more than 2.5 acres of agricultural land.	☐	☐	☐ Yes ☐ No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change
• The Proposed Action would disrupt or prevent installation of agricultural land management systems (e.g., subsurface drain lines, outlet ditches, strip cropping); or create a need for such measures (e.g. cause a farm field to drain poorly due to increased runoff).	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

IMPACT ON AESTHETIC RESOURCES

11. Will Proposed Action affect aesthetic resources? (If necessary, use the Visual EAF Addendum in Section 617.20, Appendix B.)
☐ NO ■ YES

Examples that would apply to column 2

• Proposed land uses, or project components obviously different from or in sharp contrast to current surrounding land use patterns, whether man-made or natural.	☐	☐	☐ Yes ☐ No
• Proposed land uses, or project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource.	☐	☐	☐ Yes ☐ No
• Project components that will result in the elimination or significant screening of scenic views known to be important to the area.	☐	☐	☐ Yes ☐ No
• Other impacts:	■	☐	■ Yes ☐ No

Removal and replacement of existing vegetation and landscape features.

IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES

12. Will Proposed Action impact any site or structure of historic, prehistoric or paleontological importance?
■ NO ☐ YES

Examples that would apply to column 2

• Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places.	☐	☐	☐ Yes ☐ No
• Any impact to an archaeological site or fossil bed located within the project site.	☐	☐	☐ Yes ☐ No
• Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory.	☐	☐	☐ Yes ☐ No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change
• Other impacts:	☐	☐	☐ Yes ☐ No

IMPACT ON OPEN SPACE AND RECREATION

13. Will proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?
☒ NO ☐ YES

Examples that would apply to column 2			
• The permanent foreclosure of a future recreational opportunity.	☐	☐	☐ Yes ☐ No
• A major reduction of an open space important to the community.	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

IMPACT ON CRITICAL ENVIRONMENTAL AREAS

14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)?
☒ NO ☐ YES

List the environmental characteristics that caused the designation of the CEA.

Examples that would apply to column 2			
• Proposed Action to locate within the CEA?	☐	☐	☐ Yes ☐ No
• Proposed Action will result in a reduction in the quantity of the resource?	☐	☐	☐ Yes ☐ No
• Proposed Action will result in a reduction in the quality of the resource?	☐	☐	☐ Yes ☐ No
• Proposed Action will impact the use, function or enjoyment of the resource?	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change

IMPACT ON TRANSPORTATION

15. Will there be an effect to existing transportation systems?
☐ NO ☒ YES

Examples that would apply to column 2

• Alteration of present patterns of movement of people and/or goods.	☐	☐	☐ Yes	☐ No
• Proposed Action will result in major traffic problems.	☐	☐	☐ Yes	☐ No
• Other impacts:	☒	☐	☐ Yes	☒ No

Temporary off-site detour of through traffic during construction. Project will be staged with one-way traffic permitted on the corridor at all times. Other direction to be detoured to off-site route.

IMPACT ON ENERGY

16. Will Proposed Action affect the community's sources of fuel or energy supply?

☒ NO ☐ YES

Examples that would apply to column 2

• Proposed Action will cause a greater than 5% increase in the use of any form of energy in the municipality.	☐	☐	☐ Yes	☐ No
• Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use.	☐	☐	☐ Yes	☐ No
• Other impacts:	☐	☐	☐ Yes	☐ No

NOISE AND ODOR IMPACT

17. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action?

☐ NO ☒ YES

Examples that would apply to column 2

• Blasting within 1,500 feet of a hospital, school or other sensitive facility.	☐	☐	☐ Yes	☐ No
• Odors will occur routinely (more than one hour per day).	☐	☐	☐ Yes	☐ No
• Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures.	☐	☐	☐ Yes	☐ No
• Proposed Action will remove natural barriers that would act as a noise screen.	☐	☐	☐ Yes	☐ No
• Other impacts:	☒	☐	☐ Yes	☒ No

Temporary increase in noise and odor levels during construction.

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change

IMPACT ON PUBLIC HEALTH

18. Will Proposed Action affect public health and safety?
[■] NO [ ] YES

• Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission.	[ ]	[ ]	[ ] Yes [ ] No
• Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.)	[ ]	[ ]	[ ] Yes [ ] No
• Storage facilities for one million or more gallons of liquefied natural gas or other flammable liquids.	[ ]	[ ]	[ ] Yes [ ] No
• Proposed Action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.	[ ]	[ ]	[ ] Yes [ ] No
• Other impacts:	[ ]	[ ]	[ ] Yes [ ] No

IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD

19. Will Proposed Action affect the character of the existing community?
[■] NO [ ] YES

Examples that would apply to column 2

• The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%.	[ ]	[ ]	[ ] Yes [ ] No
• The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project.	[ ]	[ ]	[ ] Yes [ ] No
• Proposed Action will conflict with officially adopted plans or goals.	[ ]	[ ]	[ ] Yes [ ] No
• Proposed Action will cause a change in the density of land use.	[ ]	[ ]	[ ] Yes [ ] No
• Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.	[ ]	[ ]	[ ] Yes [ ] No
• Development will create a demand for additional community services (e.g. schools, police and fire, etc.)	[ ]	[ ]	[ ] Yes [ ] No

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated by Project Change
• Proposed Action will set an important precedent for future projects.	☐	☐	☐ Yes ☐ No
• Proposed Action will create or eliminate employment.	☐	☐	☐ Yes ☐ No
• Other impacts:	☐	☐	☐ Yes ☐ No

20. Is there, or is there likely to be, public controversy related to potential adverse environment impacts?
☐ NO ☒ YES

There has been controversy regarding the installation of new sidewalks in the project corridor.

If Any Action in Part 2 Is Identified as a Potential Large Impact or If you Cannot Determine the Magnitude of Impact, Proceed to Part 3

Part 3 - EVALUATION OF THE IMPORTANCE OF IMPACTS

Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

Instructions (If you need more space, attach additional sheets)

Discuss the following for each impact identified in Column 2 of Part 2:

1. Briefly describe the impact.

2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).

3. Based on the information available, decide if it is reasonable to conclude that this impact is **important.**

   To answer the question of importance, consider:

   - The probability of the impact occurring
   - The duration of the impact
   - Its irreversibility, including permanently lost resources of value
   - Whether the impact can or will be controlled
   - The regional consequence of the impact
   - Its potential divergence from local needs and goals
   - Whether known objections to the project relate to this impact.

APPENDIX K

Correspondence

Project Correspondence

Date	From	To	Regarding
March 27, 2006	NYS Office of Parks, Recreation and Historic Preservation, SHPO	Fisher Associates	Section 106 review; No Adverse Effect/Impact finding
May 12, 2005	National Marine Fisheries Service Habitat Conservation Division	Fisher Associates	Threatened / Endangered / Critical Habit, No Impact
June 10, 2005	NYSDEC Division of Fish, Wildlife & Marine Program – New York Natural Heritage Program	Fisher Associates	Threatened / Endangered / Critical Habit, No Impact Speaking on the behalf of NYSDEC Region 7
June 14, 2005	U.S. Fish and Wildlife Service	Fisher Associates	Threatened / Endangered / Critical Habit, No Impact
January 26, 2006	Ithaca Town Board	N/A	Support for the Inclusion of a Town-Owned and Maintained Walkway in Conjunction with Tompkins County's Reconstruction of Hanshaw Road
August 14, 2006	Brent A. Cross, Village Engineer	Village Board of Trustees	Motion to advise the County that they have our permission to include the Village of Cayuga Heights in the Hanshaw Road project with a contribution of 20% of the estimated cost of $112,610.00.

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643

Bernadette Castro
Commissioner

March 27, 2006

Mr. Richard J. Brauer
Fisher Associates
135 Calkins Road
Rochester, N.Y. 14623

RECEIVED
MAR 31 2006
FISHER ASSOCIATES

Re: FHWA
PIN 3753.25
Hanshaw Road Reconstruction
Ithaca, Tompkins County
06PR00677

Dear Mr. Brauer:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). SHPO has reviewed the materials you submitted in accordance with Section 106 of the National Historic Preservation Act of 1966 and relevant implementing regulations and with the New York State Parks, Recreation and Historic Preservation Law, Section 14.09. The materials were received on January 30th, 2006.

The materials submitted included a Phase 1 Archeological Investigation, and drawings of the proposed work. The proposed work consists of repaving the road, providing shoulders, a sidewalk on one side and drainage on both sides.

Based upon this review, it is the SHPO's opinion that the work No Adverse Effect/Impact upon cultural resources in or eligible for inclusion in the State and National Registers of Historic Places.

SHPO appreciates the opportunity to comment on this project. Should you have any questions about this review, please contact me at 518-237-8643 ext 3284 or at marie.sarchiapone@oprhp.state.ny.us . Using the PR# above will expedite the processing of future submissions. Thank you.

Sincerely,

Marie Sarchiapone

Marie Sarchiapone
Historic Sites Restoration Coordinator

Cc:
FHWA
Mr. Robert Arnold, Division Administrator
Leo W. O'Brien Federal Building
Clinton Ave & North Pearl Street
Albany, NY 12207

Daniel Hitt
NYSDOT EAB
50 Wolf Road 4th floor
Albany, NY 12232

National Marine Fisheries Service
Habitat Conservation Division
Milford Field Office, 212 Rogers Avenue
Milford, Connecticut 06460

DATE: 12 May 2005

TO: Mr. J. Joseph Dorely, Senior Environmental Technician
Fisher Associates
135 Calkins Road
Rochester, New York 14623

SUBJECT: **Hanshaw Road Reconstruction Project, PIN 3753.25; Town of Ithaca, Tompkins County, New York**

Diane Rusanowsky
(Reviewing Biologist)

We have reviewed the information provided to us regarding the above subject project. We offer the following preliminary comments pursuant to the Endangered Species Act, the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act:

Endangered and Threatened Species

__XX__ There are no endangered or threatened species in the project area.

_____ The following endangered or threatened species may be present in the general project vicinity as transients:

_____ shortnose sturgeon (*Acipenser brevirostrum*)

Sea turtles:
____ loggerhead (*Caretta caretta*)
____ green (*Chelonia mydas*)
____ Kemp's ridley (*Lepidochelys kempii*)
____ leatherback (*Dermochelys coriacea*)

Note: Any necessary ESA consultation should be initiated by the involved federal action agency(ies). Correspondence should be directed to Ms. Mary Colligan, ARA for Protected Resources, NOAA/F, Protected Resources Division, One Blackburn Drive, Gloucester, MA 01930-2298.

Fish and Wildlife Coordination Act Species

__XX__ The following may be present in the project vicinity: Resident fish, forage and benthic species

Please contact the appropriate Regional Office of the New York State Department of Environmental Conservation to confirm the presence of anadromous or resident aquatic populations. Habitat use by some species or life stages may be seasonal (e.g. over-wintering or spawning)

Essential Fish Habitat

__XX____ No Essential Fish Habitat (EFH) has been designated in the immediate project vicinity.

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **FAX:** (518) 402-8925
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

June 10, 2005

J. Joseph Dorety
Fisher Associates
135 Calkins Road
Rochester, NY 14623

Dear Mr. Dorety:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to an Environmental Assessment for the proposed Hanshaw Road Reconstruction Project, PIN 3753.25, site as indicated on the map you provided, located in the Town of Ithaca, Tompkins County.

We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain any information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

Sincerely,

Chase Chaskey

Chase Chaskey, Information Services
New York Natural Heritage Program

Enc.
cc: Reg. 7, Wildlife Mgr.

FAX TRANSMITTAL RE: LISTED SPECIES REQUEST
U.S. FISH AND WILDLIFE SERVICE
New York Field Office
3817 Luker Road, Cortland, NY 13045
Phone: (607) 753-9334 Fax: (607) 753-9699

June 14, 2005

To: J. Joseph Dorety

This responds to your May 3, 2005, request for listed species information in the vicinity of the proposed reconstruction of Hanshaw Road in the Town of Ithaca, Tompkins County, New York (PIN 3753.25).

Except for occasional transient individuals, no Federally-listed or proposed endangered or threatened species under our jurisdiction are known to exist within the project impact area. In addition, no habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Therefore, no further ESA coordination or consultation with the U.S. Fish and Wildlife Service (Service) is required. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally-listed and proposed endangered and threatened species in New York* is available for your information. If the proposed project is not completed within one year from the date of this FAX, we recommend that you contact us to ensure that the listed species presence/absence information for the proposed project is current. Should our determination change and any part of the proposed project be authorized, funded, or carried out, in whole or in part, by a Federal agency, further consultation between the Service and that Federal agency pursuant to the ESA may be necessary.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate State regional office(s),* and:

New York State Department of Environmental Conservation
New York Natural Heritage Program Information Services
625 Broadway
Albany, NY 12233-4757
(518) 402-8935

Thank you for your time. If you require additional information please contact me at (607) 753-9334.

Sincerely,

Michael F. Stoll
Endangered Species Biologist

*Additional information referred to above may be found on our website at:
http://nyfo.fws.gov/es/section7.htm

Special Meeting of the Ithaca Town Board
Thursday, January 26, 2006

TB RESOLUTION NO. 2006-31: Support for the Inclusion of a Town-Owned and Maintained Walkway in Conjunction with Tompkins County's Reconstruction of Hanshaw Road

WHEREAS, the County of Tompkins is proposing to rebuild a section of Hanshaw Road from the Cayuga Heights Village line easterly to the Town of Ithaca-Town of Dryden line; and

WHEREAS, the preliminary design for the roadway presently contemplates a walkway on the north side of Hanshaw Road from the Cayuga Heights Village line extending at least as far east as Salem Drive; and

WHEREAS, alternate designs for the road project include options to extend a walkway or sidewalk into the Village of Cayuga Heights to connect with the existing sidewalk in the Community Corners area; and

WHEREAS, the Town of Ithaca Town Board, at its meeting on September 12, 2005, determined in TB Resolution No. 2005-122 that the area along Hanshaw Road from the Cayuga Heights Village line easterly to the Town of Ithaca-Town of Dryden line meets the criteria in the Town of Ithaca Sidewalk Policy (adopted by the Town Board on 10/23/03) to justify the need for a walkway that would be owned and maintained by the Town of Ithaca; and

WHEREAS, the Town Board, at its meeting on November 14, 2005, further determined in TB Resolution No. 2005-181 that if the reconstruction of Hanshaw Road incorporates a walkway for part or all of its length, that the Town of Ithaca will assume ownership, liability and maintenance responsibilities for the sections of the walkway within the Town of Ithaca outside of the Village of Cayuga Heights; and

WHEREAS, Tompkins County and the Town Board have provided numerous opportunities for public comment regarding the benefits and impacts of including a walkway in this road improvement project; and

WHEREAS, the County has estimated that the cost of the walkway within the Town of Ithaca will be approximately $350,000, and the Town would need to come up with a local share between 5% to 20 % of that amount to pay for the walkway portion of the project; and

WHEREAS, in the months after the Town Board adopted its position statement on June 13, 2005 regarding the project (TB Resolution No. 2005-091), Town Board members have heard concerns voiced by a number of residents regarding the possible loss of trees and other impacts of the Hanshaw Road project on their properties and on the character of the neighborhood; and

WHEREAS, County officials and their consultants thereafter met with property owners along Hanshaw Road and changed many of the project elements to mitigate many of the initially identified potential impacts; and

WHEREAS, members of the Town Board, Planning Board and staff participated in a site visit with County officials and their consultants to see first-hand the site conditions and mitigating measures that will minimize impacts of the project on adjacent properties and on the character of the area; and

WHEREAS, Tompkins County officials presented preliminary project designs and cost estimates to the Town Board at the special meeting on January 26, 2006; and

WHEREAS, The Town Board provided an additional opportunity for public comment at the meeting on January 26, 2006;

NOW THEREFORE BE IT RESOLVED, that the Town Board of the Town of Ithaca hereby supports the inclusion of the walkway along Hanshaw Road from the Cayuga Heights Village line extending easterly at least to Salem Drive, as shown on the preliminary designs presented to the Town Board at the January 26, 2006 Special Meeting, and if sufficient funds are available, would support the extension of the walkway all the way to the Town of Ithaca-Town of Dryden line at Sapsucker Woods Road; and it is further

RESOLVED, that the Town Board also supports the inclusion of either of the alternate options presented by County officials at the January 26, 2006 meeting that would extend the walkway or sidewalk into the Village of Cayuga Heights to connect with the existing sidewalk in the Community Corners area, subject to the approval of the Village of Cayuga Heights Board of Trustees, and also subject to the availability of sufficient funding; and it is further

RESOLVED, that the Town Board hereby agrees to cooperate with Village of Cayuga Heights, Tompkins County, New York State and Federal officials in the shared efforts to ensure that there are sufficient funds available to adequately incorporate the walkway and sidewalk elements referenced above into the Hanshaw Road project; and it is further

RESOLVED, that in light of the strong community need for a walkway along Hanshaw Road and the significant mitigation of initially identified potential impacts that occurred after the Town Board adopted its position statement on June 13, 2005 (TB Resolution No. 2005-091), the Town Board hereby rescinds in part TB Resolution No. 2005-091, by rescinding the provision, as it relates to the Hanshaw Road project, requesting and advising the Tompkins County Legislature ... that sidewalks or walkways be included "when wanted by a majority of the adjoining residents".

MOVED: Councilman Engman

SECONDED: Councilman Burbank

VOTE: Supervisor Valentino, aye; Councilman Burbank, aye; Councilman Engman, aye; Councilman Stein, nay; Councilman Cowie, aye; Councilwoman Leary, aye.

I HEREBY CERTIFY THAT THE FOREGOING IS A TRUE COPY OF A RESOLUTION ADOPTED BY THE TOWN BOARD OF THE TOWN OF ITHACA, TOMPKINS COUNTY, NEW YORK, ON THE 26th DAY OF January 2006 AND IS THE WHOLE OF THE SAME.

2-14-06
Date

Town Clerk/Deputy Town Clerk

Supt. Cross then reported on the Hanshaw Road Sidewalk Project. (A copy of this report is attached to these minutes.) The Board was requested to pass a motion committing to allow the County to go to bid including the Village of Cayuga Heights in the project.

Motion by Trustee Antil
Seconded by Trustee Kaplan

Motion to advise the County that they have our permission to include the Village of Cayuga Heights in the Hanshaw Road project with a contribution of 20% of the estimated cost of $112,610.00.

Trustees Antil, Bisogni, Collyer, Kaplan and Staley voted YES.

TO: VILLAGE BOARD OF TRUSTEES

FROM: Brent A. Cross, Village Engineer

RE: Hanshaw Road Sidewalk Project

REPORT: As you are aware, Tompkins County Highway Department is in the planning process of a project to rebuild Hanshaw Road from the Village line upto Sapsucker Woods Road. At the same time, the Town of Ithaca has asked the County to include the construction of a new sidewalk within the Hanshaw Road ROW. The Town has also requested the Village to continue the sidewalk from the Village line down to the Pleasant Grove Road intersection.

Even though the County doesn't own the Hanshaw Road ROW in the Village, they have agreed to include the Village portion of the work in the same construction contract. Since 80% of the work within the County ROW is being funded by Federal Highway money, the Town and the Village would only have to pay 20% towards the contract.

To qualify for the Federal funds, the project must be built to FHWA standards, which will require that the centerline of the road, within the Village, be moved 5'-10' to the south to make room on the north side to safely install the sidewalk. At this time, the County's engineering firm has estimated that the cost of the work with in the Village ROW will cost $112,610 (including 10% misc/change orders and another 15% contingency).

Although there may end up being some additional NYS funding to reduce the cost, the Village is currently being asked to commit to paying 20% of the final project cost, which would come out to $22,522 based on the current engineer's estimate. It should be noted that the commitment is to allow the County to include the Village's portion of the work in the bidding documents. If the actual bids come is higher, the Village would have the right to withdraw from the project. Also, it is likely that the 25% misc/contingency will not be completed used and therefore the final cost of the project would be less than estimated.

Finally, the schedule for the project is likely to see construction during the summer of 2007, with the Village's financial commitment coming due during the Fiscal Year 2007-08. Therefore, at this time, the Village is only commiting to allow the County to go to bid with the Village work included, and there will be a resolution required in the future to make the commit to the actual financial obligation.

Appendix L

March 27, 2007 Public Meeting Transcript and Comment Sheets Received

March 27, 2007

Hanshaw Road Public Hearing

John Lampman spoke first, welcoming attendees, introducing County and Town officials and project team members, and giving a brief overview of the meeting agenda. He discussed some of the delays the project has experienced. He also mentioned the project draft Design Report and where it is available for review. He discussed the process to sign in to make comments at this public hearing.

He also mentioned controversy surrounding a sidewalk as part of the project and that the Town of Ithaca and Village of Cayuga Heights had both endorsed its inclusion in the project.

Finally, Mr. Lampman introduced Rich Brauer, Project Manager, from Fisher Associates, who presented facts about the design. Recording of the meeting began shortly after Mr. Brauer started his presentation.

Rich Brauer:

(Showing PowerPoint Presentation)....possibly mitigate that, and you'll see some changes that we made to accommodate different property owners' concerns. Obviously, then refined design based on that, and then we're here today and then once we have your comments from today, then we'll be looking to go forward to select a preferred alternative to be designed detail, and then putting up for construction bid.

(Project Limits Slide)

Just a refresher, the project limits have always been basically just east of Sapsucker Woods Road. Originally, we had the project limits at pretty much the Village and Town line, but have recently extended the project all the way down into the Village. The pavement work stops before you get to Pleasant Grove Road, but the sidewalk on the north side will connect all the way down to where there's an existing sidewalk right before the gas station on the north side of the road. And, we'll have more to talk about that later. It's about one and a-half miles of reconstruction of the road.

(Slide Change)

What did we hear from that first public meeting and subsequent meetings? Well this is just a quick summary of the things that we heard (changing pictures with each bullet):

- we need a safe and functional shoulder on both sides of the road
- we need a safe and functional sidewalk and crossings for pedestrians
- we obviously need the pavement surface restored
- fill in the open ditches to improve safety, maintenance, and the visual quality of the corridor
- vehicle travel speeds on the corridor were too high, and we have actually done speed studies out on the corridor and confirmed that they are running anywhere from eight to ten miles per hour over the speed limit
- on-street parking particularly near the Warren Road intersection is unsafe
- the need for a snow storage area along the roadway in some area

- and that the side street entrances have too quick of a transition, and therefore are unsafe making movements in and out
- there's a need for more awareness to the stop condition at Warren Road
- there's spot areas where the drainage has nowhere to go and basically ponds up, and
- to try to save, replace, or relocate trees that are impacted shrubbery or landscape features that are along the roadside, because they are defining, in a lot of ways, how the roadway feels

(Slide Change)

So, we took all that, and I think the one thing that we want to indicate to you; we have to look at all of that from the different perspectives of the people who were involved in the project. So, obviously, there's the people who use the corridor, the pedestrians, the motorists, the transit users, the vehicles, the community, the property owners who live along the corridor, obviously, and then the people who form the neighborhoods around the roadway. For municipalities that are involved, there are maintenance issues. And we also have to work with the agencies, number one, primarily the DOT, because that's where the majority of our funding is coming from.

(Slide Change)

So, with all that taken into account, these are the objectives that we have established for the project. These are the things that we would measure our alternatives against (changing pictures with each bullet):

- improving safety
- improving accommodation for bicyclists and pedestrians and transit users
- restoring the pavement so it's structurally adequate
- providing hydraulically adequate drainage systems
- to preserve and restore the quality of the visual elements within the corridor, and
- providing a cost feasible project given the available funding

(Slide Change)

So, what is that funding? One of the things that John (Lampman) mentioned was that the reason it took so long to get from where we were to where we are today is that we previously did not have enough money for the projects that we were trying to design before. We were trying to shoehorn it in. The last time we met with you, our budget was $2.4 million. The County, through working through State, has been able to generate some additional funds coming in, and we're basically now at a $2.9 million budget.

Because 80% of the funding, and that's approximately $2.3 is coming from Federal funds, we need to meet AASHTO design standards. AASHTO is the Federal Government's version of our State DOT. So they have, if you were to use their money, certain rules that they look for you to abide by.

(Range of Highway Use Slide)

One of the things AASHTO has is a classification of every roadway from the smallest road all the way up to expressways. So, the roads that are basically providing you this access to your house versus the expressways that you run on a high speed with very limited access -- you only can get on at certain locations. So, obviously those, it's very much about movement of vehicles, and very little about providing access, whereas here, it's very little about movement of vehicles, and more about providing access.

Well our road has a split personality – it has to try to do both. We have to try to provide for both providing access, but also movement of vehicles. It's one of those in-between categories.

(Section Width Recommendations Slide)

With that category of what it is, a minor arterial, comes the certain designations that AASHTO wants you to have in terms of width. What their desire for a minor arterial is that you have a lane width of 12' and a shoulder width of 8'. So, that would be a total width of asphalt of 40'. They do say, though, that they're willing to accept some minimums, which is an 11' travel lane and an 8' shoulder, which is about 38'. Now what we've proposed for the project, and this is going to be different from what we had from before; we were originally talking about 10' and 5', we have had to go to 11' and 4'. Again, this is the same width, it's 15', but it is a different split between the shoulder and the travel lane. The reason for that is in working with DOT, they felt there was too many heavy vehicles, primarily trucks and buses, that it wouldn't warrant a 10' travel lane. We fought hard, but in order for us to get the Federal funding, they wanted 11 and 4, in stead of 10 and 5.

(Slide Change)

Just to give you a pictorial of what that is, here's the 40' that would be required under the AASHTO desired, 38' under the AASHTO recommended, and, again what we're proposing, it has been approved by DOT, is 30' at 11 and 4. That's approximately 8' less than what AASHTO recommends, so they are giving in in terms of what the requirements state.

(Bike Accommodations Slide)

The AASHTO also has a bicycle manual, and there are accommodations associated with that is that they typically would like to see 4' minimum and 5' desirable. That was one of our arguments for why we were using the 5' to begin with. Unfortunately, we have had to drop back to the 4' minimum, but it's still acceptable. There have been a lot of questions about can the sidewalk and the bicycles use the same area. And, it's really discouraged, because there is a lot of safety issues associated with both bicycle use and pedestrian use.

(Pedestrian Generator Checklist Slide)

One of the other things we do on every project is to evaluate the project for the potential for pedestrian use, and DOT puts out a questionnaire, that basically has I think it's nine questions, and if you answered "yes" to any one, then you should consider the project to have a corporation of a sidewalk or walkway. Our particular project was five answers for "yes", so that was one of the other reasons we looked strongly towards, along with the public comments, that it was needed that we incorporate a sidewalk or walkway.

("Bus"/"Bike" Cross Section Slide)

One of the questions we get is you know is why do we need 15', why can't we do 14 or 13? Well this is just a graphic representation of, and we do have a fair, this is, I think the bus route for seven different routes for buses, and they are using the corridor quite significantly. But, the problem here is the centerline of the road, to here being the edge of pavement for 15'. Now, these are to-scale. You can see how tight it is for a bicyclist and a bus, and if we were to take another foot off of this, it would become very uncomfortable.

(Pavement Options Slide)

I want to talk a little bit about the different pavement options, because that's where we're going to spend most of our money. You get two real choices in terms of the big picture. We get reconstructed road, which is basically take everything out that's there today and put everything back in brand new. The other option is to utilize the existing asphalt that's there, and to basically rehabilitate it in some way and overlay it so it will essentially have the surface characteristics of new, but it will actually re-use what's there. The big difference is when we reconstruct, we can either but it back in the same location, or we can remove and replace it by either lowering it, or shifting it. So, we have a lot more flexibility in what we can to do with the pavement. If we rehabilitate the pavement, we really are stuck with where it is today. We can't do much with it; it will be where it is, and we'll have to build on top of it.

(Slide Change)

This is just a cross-section showing you the existing roadway. And the key point here is that over time, the pavement has been built up, and the road generally sits higher than the adjacent land area, so all the runoff is generally running off to the side of the road. But, it's important that, with the pavement being raised up, if we put more pavement on it, it's going to make it obviously higher.

(Slide Change)

One of the advantages we talked about if we reconstruct it was to lower the road so all the drainage could find its way into the roadway without having swales in between, we could just run it right to the road.

(Slide Change)

We'd also have the benefit of being able to shift the road left and right, and maybe balance some impacts.

(Slide Change)

And, obviously, if we rehabilitate the road, we're going to be adding pavement to the existing, where the road is today, and that's going to, kind of, accentuate the difference between where the adjacent land is and where the roadway is.

(Slide Change)

So, we saw a lot of advantages to trying to reconstruct the road, and when we started off in our design, we looked at two options; both of 'em reconstructing the pavement, and both of 'em lowering the road so that the drainage would all go to the road. On Option I, we had a sidewalk on the north side and no sidewalk on the south side, and we shifted the road to the south to balance the impacts.

(Slide Change)

In Option II, we looked at the option of lowering the road again, but also incorporating two sidewalks, one on both sides. And, again, this is just a blow up of Option I; this is back when we were looking at 10' and 5' shoulders.

(Slide Change)

And Option II, where we incorporated the two sidewalks.

(Cost Comparison Bar Graph Slide)

Unfortunately, the cost of both far exceeded what we had available for the budget. Option I was $4 million, Option II was $4.2 million – both well over $1 million more than we even have with our current increased budget allowance.

(Pie Chart Slide)

So, we had to look at where is our cost at? Over 60% of the budget was tied up in our pavement and drainage, and really there was not a lot we could do with the drainage. The drainage was, we needed to carry this water away that we were receiving to the corridor. So that ability to reduce the cost of that was not feasible, so we had to look at a different way to treat the pavement.

(3 Options Slide)

So, that's when we introduced Option number III, and that involved rehabilitating the pavement.

(Just Option III Slide)

Option number III, if you remember back in meeting number two, at one time was 10' and 5', but it also had a 4' swale, excuse me a 6' swale, between that and the sidewalk, and we were putting in closed drainage on both sides of the road. Basically, what we did after that meeting was essentially reduce that down to 4', and that was also part of the homeowner meetings that we had out in the field. So, we reduced that swale area down to 4'. The swale is very shallow.

(Slide Change)

You can see here, it's only about 6" deep. What we are doing to the pavement from approximately the Village of Cayuga Heights to just before you get to Warren Road, we're actually going to be overlaying the pavement. We're retaining, there's actually almost 18" of asphalt in that area, so it's very strong; it just needs to have a better surface. And, then from that part forward, what we're going to be doing is chewing the existing pavement up and creating it as kind of a stone base, and then putting new hot mix asphalt on top of it. So, all of it will look new, obviously when it's constructed. It will not have the same service life as it would if we could go in and completely reconstruct it. But certainly, there's no reason that we should be back within 20 years to do a major reconstruction.

(Cost Bar Graph Slide)

That rehabilitation of the pavement saved us over $1 million. And, right now we're running approximately, for the total project cost, at about $3 million versus $2.9 for the budget, and we have some contingencies built into this, so we're obviously feeling that we can get down to that $2.9 million budget by the time we bid the project.

So that is the alternative that we're proposing.

(Slide Change)

Let me give you some more specifics about what's involved and what's changed from the last time we were out. The walkway or sidewalk will now extend, we have worked with the Village (of Cayuga Heights), and we are going to be extending the sidewalk down into the Village.

(Slide Change)

It's going to take up this area in here that right now is very difficult to walk, so this will have a sidewalk all the way from, actually tying into a sidewalk just past the truck there, there's an existing sidewalk. We'll come through the island with a sidewalk, and the sidewalk will come through this area right here. And that will extend all the way up to Salem Drive. Now, from Salem Drive to Sapsucker Woods (Road), we are not including that sidewalk in the project. And the reason for that is budgetary constraints. We had to, again, make some tough decisions on making cuts, and that was one of the cuts that we made. The rationale for that is that there is a fairly good back network for all the houses, that they can walk on very low volume roads to get to at least Salem Drive, and then take Salem Drive along Hanshaw (Road) down into the Village. So, while we certainly didn't want to do this, it's something we had to do for budgetary reasons.

Now, we are going to create the swale in that area. We're going to fill in the ditches, so you get the benefit of that, and set it up so if that there's a need in the future, for the Town to want to put a sidewalk in, it's really being pretty much prepared for that to happen. Again, the sidewalk will only be on the north side of the roadway; there will be no sidewalk on the south side of the roadway. And, as mentioned before, by John (Lampman), both the Town and the Village has indicated a willingness to take on the maintenance and the liability issues associated with the sidewalk. Now, in order to put the sidewalk in, we will need to do some permanent and temporary easements, and I'll talk a little bit more about those in a minute.

(Slide Change)

One of the things that came out of the second meeting was, in some areas, that even with the 4' swale, we were impacting some very nice landscape features, trees, and shrubbery. So, what we did in the field with the homeowners was come up with another alternative that narrowed up the section, but it had some disbenefits to it.

(Slide Change)

Basically, this is what we have as far as when we introduce the swale: we have the roadway, there's the shoulder, there's a 4' swale, and then the sidewalk. And, right now, that is about 24' wide, and the existing right-of-way is about 25'.

(Swale Depth Slide)

Just to give you an idea if you're concerned about the maintenance of the swale for mowing, it's very, very shallow. It's only about 6" deep.

(Existing Ditch VS Future Slide)

Just to give you a perspective of, this is what you have out there now, and this is what we're talking about putting back in. So, it will be much, much easier to maintain, and if somebody does tend to go off into it, it's not going to be a safety issue. They're really going to be able to recover and get back out.

(Slide Change)

It'll kind of look like this. This is a little bit wider than 4', but just to give you an idea of what it would look like, this would be an asphalt sidewalk. What would we do – let's say that this is the low point of how the roadway is going, there would be a little inlet right here, and the water would run to here and drop into a pipe, which would be right below this grassy area.

(Shoulder/Walk Cross Section Slide)

What happens is in some areas that would impact some very nice vegetation. So, what we came up with was this answer, which is the roadway with a gutter, and the sidewalk directly adjacent to it. Now, it does have some benefits; less grading impacts, less right-of-way impacts, but it has some definite drawbacks, also. It's the most costly option, there's no separation between the pedestrians and the roadway, it's much less bicycle friendly, and there's no place to store any of the snow and there's no green space. I think you probably get a better appreciation.

(Slide Change)

This is what that would kind of look like, basically the roadway, we're actually using the gutter as part of the shoulder, there would be probably be another 6" here between the stripe and the gutter, but then the asphalt sidewalk would be directly behind it. Again, one of the problems for bicycling is, even though we're providing a sufficient width, a lot of it gets taken up by these grate inlets that make it very difficult, but it also puts you pretty much directly adjacent to the traffic.

(Slide Change)

In any of the sidewalk construction where we're putting the swale in, the right-of way is directly adjacent to where the sidewalk is being constructed, and in the future, there's going to be a need for maintenance of the sidewalk, and potentially even in the long-term, replacement of the sidewalk. So, if we had it that tight, where, this is the existing right-of-way, the Town would not have space available to replace the sidewalk. So what we're proposing is to do basically 2-3' wide permanent easements behind the sidewalk. Now permanent easement is essentially, you still own the property, but the rights for it and what you can construct in that 2-3' would be limited because it has to be allowed for open space for allowing access for the Town to access it and reconstruct the sidewalk. So, it does hinder the use of that 2-3' strip, and I would recommend that if we put plantings back in, and you want to take ownership of those, that they be outside of that area.

(Slide Change)

One of the other things to consider, as we looked at the design in detail, was there's some places where the existing ground is actually going to be lower than where the sidewalk comes in. So, we have a couple of options; one of them, we could actually fit it within the right-of-way by just sticking a real quick slope down from the back of the sidewalk. The problem with that is all the water coming down here would be trapped right here and we'd have to put a drain in and run it over to our pipe over here. The other thing is for you as a homeowner it would be not that attractive, because you'd have the sidewalk, a quick slope, and then your slope going into it. So, what we've decided to do was to actually soften that out and grade it all back in nice so that your yard would basically generally slope right down into the top of the sidewalk and the water will run right off into the swale. So, it will be a better product for you, much easier to maintain. But, in order to do that, we need temporary access so that we can construct it. So, what we're showing here is wherever that grading limit for the time of construction, we would need an easement to be able to go back in and grade your yard out flat and nice so it runs right onto the new sidewalk. But, when the project is done, that easement expires, there is no longer any influence or control, you can do whatever you want with that property.

(Slide Change)

We are still looking to incorporate color into the shoulders, the issue will be budget. We will include it in the project, as what we call an add-alternate. And contractors will bid it, and if it fits within the budget, we'll incorporate it into the project.

(Slide Change)

We also did a safety analysis, and how we do our safety analysis is we look at the intersections, and then we look at the pieces in between the intersections. On the project segments between the intersections, the actual accident rate was anywhere from 1.6 to 2.0 accidents per million vehicle kilometers. We compare that to the statewide average, what we call that SWA, for all the similar roads in the State. And that had an accident rate of 2.3 accidents per million vehicle kilometers. Being below the average is good. That means you have less situations that are creating safety problems than an average roadway in the State. Unfortunately, when we looked at the intersections, and we only look at the major intersections, Pleasant Grove and Warren, both of them had accident rates that were three times the statewide average. So, what this tells us is we have issues there that we have to look at. At Pleasant Grove, a lot of it has to do with the significant skew that it comes into, and also, there's a couple of openings in the driveways, in particularly, directly adjacent to where the intersection occurs. Unfortunately, budgetary issues, but also, it's outside of our construction limits for the roadway, we are not really going to be able to address that in a major physical way. We are going to try to do some striping improvements just to try to delineate things better, but that one largely is going to stay as is.

However, at Warren Road, where we have, again, it is part of our project, it's right in the middle of our project.

(Warren Road Intersection Slide)

This is going to be a change from what you saw before, because the accident rate is three times higher, and also because right now the amount of the delay that people have for the four-way stop is not bad. I think that in the morning and the afternoon, it could be a little bit of a tiresome issue to try to get through, but it's not horrible. But, it's projected, based on our counts and projections, that within five to ten years, it will actually begin to fail. And, fail is a measure that is established for how long of a delay before it's considered to be something that people will take chances with. So, basically, what we're saying, because of the five-ten year failure mode, with the three times accident rate at the intersection, and also because we have a certain number of warrant analyses that we go through to see whether an intersection is warranting a signal, and it met enough of those, that we are recommending a signal at the Warren and Hanshaw Road intersection. And that is a change from what we had looked at before.

We are also, this is another "as budget allows", but we're looking to do colored-stamped concrete as part of the entire intersection, so that the entire awareness to the fact that it is an intersection, and there are pedestrians crossing, that whole awareness will be heightened.

(Slide Change)

One of the things we wanted to bring out is the construction activities and how we would detour traffic. One of the benefits of going to a pavement rehabilitation is it should take less time than to completely rip the road out and to put it all back new. So, our construction duration time period will be less. But, what we are proposing, because of that is that there will always be one, it'll be staged construction, they'll do one side of

the road and the other, and there'll be one lane open at all times. The one late that we selected to be open is the westbound lane, so it'll be inbound to Ithaca. The other lane, the eastbound lane would be detoured, and the detour would utilize North Triphammer, up to (Rt.) 13, and then I believe it's Hanshaw at that point that you'd come down. So, for people who want to use the corridor in the eastbound direction, we would actually sign it out on (Rt.) 13. Those people would have to take the detour if they were coming around to go this way, but you will always have one lane of traffic in for emergency vehicles coming from the westbound direction. And, at all times, driveways and side streets will be maintained open; they will not close those off.

(Slide Change)

(Showing photo presentation) We just have a series of photos to take you through the corridor. They kind of show you where the sidewalk is, where's the shoulder, where's the swale. I'm just going to flip through them, basically showing you where these things, where the sidewalk generally falls. Now, again, there will be some grading that will have to be done, and you can pick that up on the color plans. If you want to look at your property, you'll see a lighter green versus the darker green. That's the limits of how much we need to grade back the sidewalk into your property.

(Slide Change)

Again, there's the sidewalk. This would be the pavement limit, this would all be green swale.

(Slide Change)

This is on the south side of the road, so there is no sidewalk. This would give you an idea where the end of the pavement would be, and this would be the 4' swales. We would be closing off that ditch.

(Slide Change)

The same thing on the south side, no sidewalk. This would be the limit of the asphalt, you can see it lines up pretty much with where the existing gravel shoulder is. And, this is a 4' swale, and, again, we would be closing up the ditch, and you'd just have that gentle swale there. There would be pipe here, but it would not be exposed. You'd have a little inlet that it'd down itself down into the pipe. The pipe would be lowered. Again, this is on the north side, with the sidewalk. This is the edge of pavement, pretty much lining up right where the existing pavement ends today.

(Slide Change)

Again, on the north side.

(Slide Change)

Now, in the situation like this, where we are impacting the hedge, that would be replaced, and we would work with the homeowner to determine what they would like to see replaced. And, we would recommend, obviously, that it be put back behind the easement, so that it's on the homeowner's property.

(Slide Change)

Again, the sidewalk. There's the swale.

(Slide Change)

Again, it's possible in this case that the grading would impact, and you'd have to look at the color plans to show whether or not it would impact that hedge, and whether or not it was proposed to be replaced.

(Slide Change)

This is up at the Warren Road intersection. This is showing the sidewalk coming in, and then this is a gutter that we're introducing to minimize the impact so that we don't impact the trees right here.

(Slide Change)

And then, just a couple additional points:

- There will be a need to relocate some utility poles, not a lot of them, but some of them will have to be relocated.
- There's some impacts – we're gong to have to raise some sanitary manholes, but nothing significant, and I believe the Town (of Ithaca) still is working on, there's going to be a water main replacement that'll be done kind of in conjunction with the project, and if anyone has any questions, certainly you can ask the Town about that.
- The only lighting in the project will be retaining the lighting that exists out at the Warren Road intersection. There will be no other lighting introduced into the corridor.
- We are looking at providing an additional drainage outlet. The major outlet that occurs right now, that's just east of Blackstone. What we're doing is metering the amount of flow to what is coming out today. We are taking an additional pipe and taking it down below, on the west side of Blackstone, and outletting it into the creek there. So, we're basically trying to eliminate the flooding impacts of additional water getting out of that outlet that currently exists today.
- Again, any landscaping that's affected, and we're going to replace landscaping for you, we'll work directly with you, one on one with the landscape architect, and we'll make sure that we get the type of species you're looking for, what it will look like, how many, where, so all that will happen in the final design.
- There will be, for right-of-way, the amount of right-of-way we're having, there will be an eminent domain hearing that the County will have, and I'm sure they'll not only announce it, but they'll also distribute a letter to all the property owners who are affected, so you can attend that hearing.
- And, then just lastly, whenever we design projects, we have to look at what features don't meet the AASHTO design standards, and right now, the ones that don't is the shoulder width that we talked about earlier, that we're recommending 4' shoulders instead of 8'. And, the other one is there is a slight curve, vertical curve as you come down into the Village of Cayuga Heights. But, the cost to, there's no accident history associated with it, but the cost to mitigate it was quite expensive. So, we've written that as being accepted as part of the design.

(Slide Change)

Out of this, the color plans, they're exactly the same. If you, afterwards, have any questions on any of them, any of the Representatives here can answer any of those questions for you.

(Slide Change)

As John mentioned, there is a report, it's about that thick (with finger and thumb showed about 2+") It's good nighttime reading. It basically documents the entire study that we did, all the plans, it has all the environmental review, it has all the details and numbers in it on what's happening. So, if you want to, it's available on the County website. It's also available at the (Tompkins County Public) Library, and I believe it's also available at the Village of Cayuga Heights office.

(Slide Change)

Schedule, as I see it today, obviously we're at our Public Meeting. Hoping to make a selection of the preferred design alternative in May. Then completing the detailed design. What you see here are just preliminary plans. We have to go to much greater level of detail so we can put it out to bid, and then looking at construction probably starting in April of '08. It should be completed within one season. You might see the Town (of Ithaca) out doing their work ahead of the contractor. That wouldn't be part of the bid project, but they may be out earlier than that, or maybe even this fall, possibly doing work on the water main.

So, with that, I'm going to open it up to John. He's going to take your formal comments. So, John, if you want to pick it up at that point...

John Lampman:

Thank you, Rich.

I just wanted to extend the invitation, again, if you have not handed in a comment card or a request to speak, I guess, you're still free to do that if you wish to. I'd also, again, encourage people to write written statements – those will be definitely considered. They have the same force and effects as any oral statement that's made tonight.

I'm going to call people up to make statements, and, I'm asking that we limit our comments to not more than five minutes, just for the sake of everybody else that needs to speak tonight. And, one thing that I forgot to mention, Rich mentioned that any of us would be available afterwards to discuss the plans with you. Another member of our team that I didn't see when I was making introductions, Katherine Wolf is here, as well, from Trowbridge & Wolf Landscape Architects.

So, with that, what I'd like to do is arrange the room a little bit. Yes, (female in audience asking a question). If there's a point of clarification we can give you, okay.

Deb Cowan (in Audience):

....I'm wondering about where are you with the snow, you know given that it's the roadway, the curve, and then the walkways, so where's it going to be?

Rich Brauer:

There will be some areas, it's not going to be as large as other areas available, but there is a slope that goes, we have a little bit of area before the slope takes off, so, unfortunately, most of the snow is going to have to be confined into that area. More than likely, if you get a heavy snow, they're gonna have to take some of that out and move it away from, they're not going to be able to just push it aside.

Female in Audience:

When you say "that area", you mean the property, the homeowners?

Rich Brauer:

Well, there's a fairly large slope there, where we've tightened up the sidewalks is directly adjacent to the roadway, there's a little bit of a flat area, then a steep slope, so it's going to have to go, whatever we can put in that area, and whatever they can't, will have to be taken away from that area.

John Lampman:

Okay, thank you, Rich. With that, we will go on to the comment period. I pictured this with people facing us to give the comments, so, in order to do that I was going to move the lectern over here. And, what I'll do is call people's names, and they can come up to the podium and we can go that way. So, first, I'd like Ronald Shewchuk, if you're still interested? And, following Mr. Shewchuk will be Gary Turton.

Ronald Shewchuk:

(2) I would like to know if there's any room for delivery trucks and buses to get off the road to make deliveries. If there would be any change in the roadway there?

John Lampman:

Are you suggesting that there should be?

Ronald Shewchuk:

For safety reasons, there should be.

Female in Audience:

Can you repeat the question, because we can't hear?

Ronald Shewchuk:

Wondering if there will be any room in the roadway for buses and delivery trucks, especially near Salem Drive and Hanshaw Road, there's bus # 41 that stops there.

John Lampman:

We have been in communication with T-Cat about needs that transit might have, and also, the shoulder is…

Rich Brauer:

Yeah, the shoulder area is for basically disabled vehicles, or for trucks and buses that try to pull off to the side. With a total lane of 15', you should be able to get off, to stay on the pavement and still let a vehicle pass you. As far as T-Cat, they have not formalized if they're stopping at informal stops where people tend to congregate. They have to tell us where they want to officially make formal bus stops, and we will accommodate them.

John Lampman:

Thank you. Okay, thank you, Mr. Shewchuk, and now Gary Turton? Mr. Turton, if you're here.

Gary Turton:

Yes. I just filled it out in case I had a question. This is just for a question?

John Lampman:

Comment.

Gary Turton:

It's not so much a comment.

John Lampman:

Comments, or we can take questions.

Gary Turton:

Okay, my name is Gary Turton. I'm at 1027 Hanshaw Road, and I guess my question is, a few years ago, Warren Road had a project, Warren Road right out in front here, where they resurfaced, they had a large shoulder for bikes and for walking, jogging, and it seemed to be a good model, and I've asked this question before, and I never really got a good answer, why that model wouldn't work for the Hanshaw Road project. From a cost standpoint, it would seem to save a lot of money. From a safety, it seems to work. From snow removal, from practical sense, it seems like a good model, so that's my question.

John Lampman:

There are some safety concerns with that, with this design, I know that probably if you, talking to the Town, also, if we had it to do it over again, we might have done it a little differently, maybe more like the Hanshaw Road design that we've proposed.

Gary Turton:

Because of safety, or because of....

John Lampman:

Yes, pedestrian safety for one thing. Yes, the ditches are quite steep along the road, right up against the shoulder, so there are some problems with it, but it seems to be working, you're right. However, that was done with entirely local money, and this is a Federal Aid project. It probably would not be acceptable to do it to the standard that this was done.

Gary Turton:

One thing, I forget your acronym, the ASKO or whatever (Rich and John reply AASHTO), I noticed up there, you had 40 and 38' preferred for the Federal, and you're coming in with 30. That would seem to endorse a project like the Warren Road where you had, all together with the pavement and the shoulder. But, I'm not an engineer, we've been homeowners for 20-some years. I jog that loop, I've jogged it for 23 years, and it just seemed, and I know residents over here, good buddies of mine, they say that seems to be a good project, it worked well, and it's my comment and my question.

John Lampman and Rich Brauer:

Okay, thank you, Sir.

John Lampman:

I wanted to invite Peter Stein to come up, also, from the Ithaca Town Board.

Peter Stein:

Hi. I came to listen, but during the course of your presentation, I had a thought that I'd like to share with you. I'm a walker, and I walk across Hanshaw Road twice a day, almost every day, and cross at Community Corners, and I can tell you, it's a nightmare. The cars tear through Hanshaw Road, and when I looked at this long sidewalk which is going to bring people into Cayuga Heights and dump them at a place where the traffic just tears right through, I find that a little bit. I think somehow, one should prepare for what surely will happen, namely that those pedestrians will cross the street that want to go over to Community Corners, and I think they will find a stream of fast-moving traffic, and I think that really is a potential danger, and that's what I wanted to say.

John Lampman:

Thank you, Mr. Stein. Next, we have Lori Bushway? (No comment.) Okay, C.P. Meyer. (No comment.) Okay. Teresa Jordan? Following Miss Jordan, we'll have Sylvia Wahl.

Teresa Jordan:

Well, first I wanted to actually applaud the design. It looks like many things are included. (Male in Audience, we can't hear.) I applaud the design. It would be nice if it slowed traffic somehow. You didn't say anything about speed limits. It would be nice if the Warren Road crossing light has a button for pedestrians. And, while we wait for 2008 for the construction, could we have a temporary lower speed limit, because the pavement is in such dreadful condition, and I'd hate to see you put any money into repairing it now, but meanwhile, those speeding cars are careening, so if you could lower the speed limit temporarily, it would be wonderful. This is on the east of Warren Road end. Thank you.

John Lampman:

Thank you. Ms. Wahl? I've been forgetting to ask you to state your address, also.

Sylvia Wahl:

I'm Sylvia Wahl, and I live at 1426 Hanshaw Road, and it's nice to see all the neighbors. I'd, mine has to be a question and a statement. I'm still very much concerned about the trees on Hanshaw Road, and I learned that's there's a special kind of fabric or special kind of material that can be used for sidewalks, that is permeable, and it can be used to go around trees, and it can also allow for trees for freezing and thawing that causes the sidewalk to buckle. And I'm hoping that you'll use that kind of permeable material for the sidewalks, because you will have to protect the trees, and that's extremely important to me. The second, I have a question that has to do with lighting. You mentioned lighting at Warren. What about the lighting at Salem? There's a light there, also? So, it should stay, I think.

John Lampman:

Yeah, any lighting that's there now would be staying.

Sylvia Wahl:

Thank you.

John Lampman:

And also, I think we can address that first comment, too. There was some, what's called structural soil…

Rich Brauer:

And also, we are using an asphalt sidewalk, so (a comment about asphalt sidewalks being permeable)….

John Lampman:

All right.

Sylvia Wahl:

Thank you, very much.

John Lampman:

Okay, thank you. Helen Shewchuk.

Helen Shewchuk:

I'm just recovering from major surgery, and….

John Lampman:

Okay, very well. Thank you. As I continue to say, if you written comments that come up, even thoughts that you come up with later on, please don't hesitate to send them over to us. Bernie Hutchins. After Mr. Hutchins, Peter Carruthers.

Bernie Hutchins:

Yes, Bernie Hutchins, 1016 Hanshaw Road. Like Gary, I'm concerned about the fact that you did these sidewalks in the first place. I've made no secret; we've been opposed to the idea of the sidewalks. The sidewalks should not be there, because they're not wanted by the majority of the adjoining residents (Male in Audience, that's not true). No, wait a minute, don't jump the gun here. That wording is the Town of Ithaca's. They said in June of 2005 that the sidewalks would be included if they were wanted by the majority of the adjoining residents. By a nearly unanimous petition in September of 2005, we indicated that we did not want them. I believe it was probably 65 to 2, or 70 to 2, or something like that. At that same meeting, in this same building, right in the same room, Cathy Valentino stood up and said, "We can rescind that Resolution." They did. In January of 2006, the Town Board rescinded the Resolution giving the homeowners the right to vote. They cancelled the vote, they rescinded the right, if you can believe that. Peter Stein, I must say, voted against that idea, and we're very pleased about that idea. Now, some people, and somebody here just decided that they changed their mind. Yes, that's probably true. There's certainly people that have probably changed their mind. But, it is not too late to vote, again. The County knows how to get a hold of us. They can ask the people, "Do you really want these sidewalks?" You did not, do you really want them now? They know how to contact us. They get the tax bills to us, don't they? Okay, so my feeling is that even if you must go ahead with these sidewalks, it should be indicated in your plan that the people were opposed, and that the Town (of Ithaca) went

against the people's vote, their survey, and that I think that should be in the report. The report does show the Resolution, a part of the Town, but it does not say why that was necessary. The reason it was necessary is because the Town cancelled our right. And, I think we're not very happy about that, I don't know why we should be.

John Lampman:

Okay, thank you, Mr. Hutchins. Peter Carruthers? And, to be followed by Klaus Beyenbach.

Peter Carruthers:

I'm Pete Carruthers from 1008 Hanshaw Road, that's just over the line into the Village of Cayuga Heights. My one question is where are the promised traffic calming measures in this plan? The road is wider than it was, traffic going to go faster. (Audience can't hear, would you repeat that?) I just wanted to know where are the traffic calming measures in this new plan. I don't see anything that was going to calm the traffic. That was a major concern at the first two meetings. If you take a look at what (the Village of) Cayuga Heights has done in lower Hanshaw Road, they have a tiny asphalt curb on either side. That gets my attention when I'm driving through there.

(10)

John Lampman:

Okay, thank you, Mr. Carruthers. Mr. Beyenbach.

Female, then two Males in Audience:

Wait a minute, John, are you not going to answer that? We do not have an answer? No calming method?

John Lampman:

Well, we have the traffic calming of the colored pavement on the shoulders. That was one traffic calming measure that we had talked about. Unfortunately, that's being shown right now as an alternate, if the budget allows. We do have the narrowed shoulder area that, in itself, would be a traffic calming measure over the design standards. We have the sidewalk and gutter sections, which would give the perception to the driver that one was entering an area of a different character, that even though the speed limit does not show a reduction in that Salem Drive area, those visual queues would be traffic calming measures that, hopefully, will act to slow people down. We also have the colored area in the Warren Road intersection, as well as crosswalks throughout the project that, again, are accommodations for pedestrians and traffic calming at the Warren Road intersection. With the advent of the need of a traffic light there, the colored intersection may be not as required in, and again, that is now being looked at as an alternate, if the budget allows.

Rich Brauer:

To respond, your main question was about creating more of an urban feel to the character with the curbing, and that was the intent of Option I and II. We had those aspects incorporated. Unfortunately, we couldn't afford them.

Peter Carruthers (in Audience):

So, instead, we're going to widen the roadway and encourage the traffic to drive fast?

Rich Brauer:

No, I think what you saw on the photo simulations that the edge of the pavement's pretty much where the gravel asphalt area is. A lot of that asphalt has come up, but basically, we're not taking, beyond that area, we're not taking away a space to create asphalt.

John Lampman:

Okay.

Klaus Beyenbach:

I'm Klaus Beyenbach, I live on 1024 Hanshaw Road. I've lived there since 1978, and we moved there because it was a residential area. From the very beginning that you proposed widening Hanshaw Road. I've been opposed to the idea, because it would destroy the residential nature of our neighborhood. And, though I welcome improvements to the road surface, I welcome safety features, and I welcome opportunities for pedestrians and bicyclists and joggers, the parties that really have not been heard adequately in this process are the residents who are affected by this road project. And, I second Bernie Hutchins' comment how mischievous really, the Town of Ithaca was with regards to our concern. And, on one occasion at a Town of Ithaca meeting, I told the Town that I was under the impression that this Hanshaw Road project is driven by Federal monies that are available, and that we should take advantage of. And, it was not driven by a democratic grassroot movement, where the community came to you and said we would like to have this and that. So, I've been very disappointed in the process by which the citizens have interacted with the Town over the County, and you tonight, you gave, Mr. Brauer, you gave a very nice presentation. You allowed comments, but you people don't allow a dialog. You give your spiel, we give our spiel, and then you have the option of going to your office and ignoring it all. So, I could get used to the idea of having a sidewalk, and a widening of the road, but I would like to have much more cooperation with you people, and whatever verbal agreement we have had, to this point, we don't have anything in writing; we have no assurances. My biggest concerns about widening the whole road, and indeed the sidewalk and the swale and the bicycle path would have a visual effect of tremendously widening the road, and what will that do? It will increase more traffic to come down Hanshaw Road, and it will stimulate speeding. And, these were our concerns from the very beginning, and neither the Town of Ithaca nor the County has addressed it. I don't think that a red light on Warren Road is going to slow down the traffic. With today's car you can get very quickly from zero to 40 or 50 miles an hour. Well, I stand here, I feel hopeless, I feel that I really don't have an impact. I think the wheels are in motion and you're going to go ahead with the project. That's what I'm going to say tonight, and I'm not very happy with it. (Audience applause.)

John Lampman:

Okay, thank you, Mr. Beyenbach. We now have Arno Selco?

Arno Selco:

I am Arno Selco, of 311 Salem Drive. I'm aware of three separate discussions about drainage that seem to be occurring at the same time. This discussion of drainage has come up several times in connection with this Hanshaw Road project. I just received, today, the newsletter from the Town of Ithaca, and there is a Salem Drive drainage

project, and also, I'm aware of discussions having to do with drainage in connection with the Briarwood II Project. So, it seems to me that there should be some coordination between these projects. Drainage has been a huge problem in this area for over 40 years, and I have not heard about any sort of coordination as far as these drainage projects are concerned, and the problems are increasing. And, we continue to have new projects before the old problems have been solved. So, I suggest that somebody coordinate these projects. I suggest that the problems that have existed for a very long period of time be consolidated and that there be concerted effort to take care of the drainage difficulties in this area once and for all, and that there be moratorium on all new projects before these drainage difficulties are taken care of. Thank you, very much. (Audience applause.)

John Lampman:

Just to respond to that comment, we have coordinated with the Town (of Ithaca) Engineering and Planning Departments quite a bit. They have actually done drainage analyses based on what they foresee development to be in the Salem Drive, whatever area up there up around Sapsucker Woods Road, and so, those issues have been coordinated, and hopefully, those figures will prove correct in our construction, our design.

Arno Selco (in Audience):

So, then, all these difficulties are gonna be taken care of before the new projects begin, is that correct?

John Lampman:

They're to be incorporated, that's correct. I don't know, Dan, if you wanted to have any further comment on that?

Dan Walker (Ithaca Town Engineer):

No.

John Lampman:

Okay.

Dan Walker:

....with the Consultants, we provided a lot of information on storm water, and there's been talk to my staff frequently. Again, this happened two years ago, because this is when we started doing the work and it's been, so, the culvert sizing, as I understand it, the whole drainage system's being replaced where the problems exist now on Hanshaw Road and the Salem Drive and Muriel Street areas. And, the design information that we've got is we're going to correct those problems with this project.

Female in Audience:

Does that include Sapsucker Woods?

Dan Walker (Ithaca Town Engineer):

Yes.

John Lampman:

Okay.

Peter Stein (in Audience):

Can I just make a comment, answering Mr. Selco? Yes, you're right, there have been persistent drainage problems in this area for a long, long time. Yes, they are inter-related. There is a connection between the Hanshaw Road project and Briarwood II and the problems that people downstream of Briarwood II face. The Town (of Ithaca) Board recognizes those problems, and at the moment is trying its best to find a solution for the drainage problems in the whole area and are fully aware of the fact that there is an interaction between this project and other, and that we have committed ourselves to finding a solution, a permanent solution for the drainage issues in the whole area. We don't have a final plan to present to you, but we surely are committed to finding a solution.

John Lampman:

Okay. We received one more card. Bruce Levitt?

Bruce Levitt:

I'm Bruce Levitt. I live at 1002 Hanshaw Road, in Cayuga Heights, and I sympathize with the people here who feel disenfranchised. The last time I talked to Brent Cross, he's the Village (of Cayuga Heights) Engineer, the Village had said that if someone else was going to pay for it, they wouldn't mind the sidewalk. Now, I hear that the Village has agreed to pay for part of the sidewalk. There's been no Public Hearing, in Cayuga Heights, at all, and the taxpayers of Cayuga Heights who are now, apparently going to have to contribute to the sidewalk. I was never consulted nor met with any of you about my hundred feet of frontage to that sidewalk and the thousands of dollars of plantings that will be destroyed to give you the extra right-of-way and easement. So, I will do everything I can to obstruct this process, until someone enfranchises myself and some of these other people who have been opposed to this project from the beginning. Thanks. (Audience applause.)

John Lampman:

Thank you. Okay, we have another card, Gerald Gladstein? Okay.

Gerald Gladstein:

Hi, I'm Gerald Gladstein, of 1026 Hanshaw (Road). I don't know if I'm the youngest new owner, but I might be. The reason I wanted to take time is, we moved here from Keuka Lake, not Cayuga, but Keuka. And, I loved to walk along the roads there, minimum traffic, and when we decided to come to Ithaca, we said where can we find something that sort of like that. And, guess where we found a place, 1026 Hanshaw. And, my neighbor across the road there, Gary and I've gotten to know each other. And, I'm struck with this sentence: "The project goals are to enhance pavement conditions, pavement conditions, drainage, and safety, with minimal impact on the surrounding community." You are the community. I am part of the community, now. My wife is. And, I agree with the gentlemen who have stated that this will have a huge impact, whether you know it or not, on the number of cars, the number of people on bicycles, and if we are the community, do you want it to change that way? I don't. I'll even tell you that I spent a lot of money on 1026 Hanshaw Road to buy it, you probably knew the Puciks who owned it before. And the worst thing that I would like is that we now turn this into a highway which was Route 54 on Keuka Lake. We lived below that, if you know that lake. That's the end of my statement.

John Lampman:

Okay, thank you. Is there anyone else that would like to make a comment? If you could come up here, please? You can please state your name and address.

David Collum:

I'm David Collum,1456 Hanshaw Road. I'm thrilled it's not making it to my house. And, I'm dying to do this pole, maybe you can move the camera and catch it on camera. I'd like to do a straw vote here, because everyone's saying what everyone else is thinking. So what I'd like to do is to break into two pieces, if this is okay. The first vote I'd like to do is to have people vote whether they want the thing or not, who are directly impacted. Not those who think it would be a comfortable thing to have and if they think they'll use it. Those people are relevant, but first, I want to see just a vote of those people which the sidewalk will somehow hit their property. Then, what I want to do is have a vote of, we can either have everyone, or the people who intend to use it, who are not going to be directly impacted, but certainly will benefit from it. Does everyone understand? So the first vote is those, so if you're doing a term paper, you don't get to vote, just for the record, okay? So, the first vote, and I need to see a show of hands (Female in Audience asked him a question). If it's going to hit your property with the sidewalk, now, I can't vote, it's not going to hit my property anymore. (Female in Audience: ...if it doesn't actually hit your property, it's just in the right-of-way?) If you consider it to directly impact you, not in terms of convenience or inconvenience, but somehow it will impact you directly, you be more (Female in Audience: But if it's not hitting some people's property, it's just in the right-of-way.) Well that's fine, as long as you (Female in Audience: Do they get to vote?) You get to vote, yeah. The first group, I'd like to, who consider it a direct impact, I'd like to see a show of hands of those who will be directly impacted, who support it. Show your hands. So, we've got, by my count, is that five? Okay, now, let's see a show of hands for those people who it will directly impact them, who oppose it. How many is that, guys, give me a guess over there. What's that? Wow, it looks like the community doesn't give a damn meeting tonight, okay? (John Lampman: 15) So, I'd call that 20, is that fair? (John Lampman: 15 to 20) You guys put your hands down. Okay, now, there's a bunch of people here who want a sidewalk, who'll be coming off the Salem area and wanna get to Cayuga Heights. So, those who are not directly impacted, but intend to use the sidewalk, I'd like to see a show of hands, now. Let's see what happens here. Those who want the sidewalk, let's see it. Now, don't forget, you can vote for your neighbors and oppose it. That's about 20? (Audience member: 25) 22 we've got here, we've got a term paper writer who says 22. Okay, those who, out of apparent sympathy, I guess, who oppose it? Okay, we've got, we got, we got, well you actually are directly impacted, anyway. We got, you're on it, thought, right? (Male: No) No, you're not. Oh, you're on the other side. We got, oh, yeah, you're on the other side, yeah, yeah, yeah. (Male in audience: No double voting.) No double voting. I get about 5 off of that (Audience: 4). 4, it's kind of a toss-up, right? Do what you want with it, I don't know what you want. (Audience applause.)

John Lampman:

Thank you, very much. Diane, can you come on up, if you want? Okay. Could you state your name?

Female in Audience:

....., and I live in Cayuga Heights, and my intention, my reason for being here, is I'm a bicyclist. I drive up and down Hanshaw Road every day to work, and I'm hoping

that I can turn my car in and use my bike to go out to Hanshaw Road, and so, although I use the road, I think it would be a nicer use to be on my bicycle than my car twice a day. So, I want you to think about that. I don't think there's going to be more people going from Point A to Point B via Hanshaw Road, because you'll have more, a better road, I can't see why that would attract more traffic. But, think of the possibility of people walking more, biking more, choosing a neighborhood rather than using a car. (Audience applause.) The other thing I want to say, in this day and age of oil prices, you might really see people cashing in the car for other for other conveyances. The other comment I want to make, I do live in Cayuga Heights, and I constantly, incessantly walk throughout the neighborhood on our sidewalks, and I think it's the most charming thing that we have in Cayuga Heights. I walk my dog twice a day, meet other people, and it is just a perk of living in Cayuga Heights, and believe me, we pay for it. And, so I think you should consider that possibility that walking through your neighborhood might be, add some additional benefit. I've always felt sorry for people who have said to me, "You know, I can't walk much, because I live on a busy traffic road, and there's no place to walk." Because I get that, in my profession, I'm always asking people about walking and exercise. So, I think that would be a lovely benefit to having a sidewalk there. I can understand that we wouldn't want to pull out plantings and things like that, but there's always a little bit of a trade off, and I would hope that there would be a minimum of that. So that's my comment and my interest for being here.

John Lampman:

Thank you. Again, could people come on up here please, just to...

Diane Feldman in Audience:

My name is Diane Feldman on 1404 Hanshaw Road. I only have one question. You stated many times that it's Federal money that is precipitating this process. My question is, why this particular road at this particular time? If you had all the roads in the County to choose, where kids walk to school, side streets where you would have more people walking, I'm not saying I'm for or against the sidewalk, I'm just asking a question, why this particular road, at this time? Because there's Federal money? I just wanna know, I want, and I'd like an answer tonight from somebody here, why this road was chosen.

(17)

John Lampman:

Well, this road was chosen mainly because of the pavement condition and the drainage problems that the County has known existed for some time....

Diane Feldman in Audience:

Why the sidewalk portion of it is what I'm asking?

John Lampman:

In the course of the design process, we've been aware, even at the start of the proposal, that there were pedestrian and bicycle safety concerns, needs may be out there. I know the Town's transportation plan calls for sidewalks in this sort of area, also. The, but mainly, again, there's a need on this road as far as the travelling public, the condition of the road is getting quite deteriorated. Drainage is an issue. We took advantage of the Federal process, because it is eligible for Federal funding, and it seems like it would be a disservice to the taxpayers if we did not do that. And, the pedestrian and bicycle

accommodations are things that we need to verify, and design for as part of the design process.

Diane Feldman in Audience:

But, there are far more children that walk up a lot of the side streets that go to school, that end up in "the path", that would use it more than they would use Hanshaw Road.

John Lampman:

Okay, well thank you. Any other comments, please come on up front.

Kevin Cowan:

Kevin Cowan, 1022 Hanshaw. I want to address some of the things. One is your bike thing? It has nothing to do with the sidewalks. The problem with the road surface now, nobody uses the shoulder to bike on, because you can't, unless you mountain bike. They resurface the road and don't put in a sidewalk, it doesn't affect the bikers in any way, shape, or form, they're still gonna be in that same lane, you're still gonna have that. And, the next thing is, you put a sidewalk in, where you go down it like this, all the way down it, what's gonna happen at night when people are walking along that sidewalk? The road's terribly lit, nobody, I walk out there at night, and I can tell you, you can't see anything out there on that road, nothing. So, I don't see the benefit in having a sidewalk that jogs in and out for one, that's one thing that really bothers me on how the road's gonna look. You know, the foot path just continually goes and snakes in and out. And the next thing is, I don't think it affects the bike path at all, in any way, shape, or form, to have it there. In fact, with the sidewalk, whether it's there or not, shouldn't make a difference to the bike path. And, that that's my comment. (Audience applause.)

John Lampman:

Okay, thank you. I guess we have one more.

Victoria Wishart:

Victoria Wishart, and I live at 1211 Hanshaw Road. And, I agree with the fact that sidewalks make it a more neighborhood. When I was growing up, it was wonderful to walk along and see neighbors sitting on front porches and be able to say, "hello", and see what's going on. Now, you can't go out, you can't walk along Hanshaw Road, because of the curbs, or lack of curbs, and the roads are so broken up, it's really impossible. We've got a new dog; we have to carry her or drive her someplace so that we can walk it, because we can't walk along the road. So, I think that the sidewalk is going to be an added benefit to a neighborhood, not a deterrent. I think it's something that would help, and we're talking about our children now being overweight, and obese, and everybody needs to lose some weight. Well, if you don't want your children to drive, to walk along these busy roads, you have to drive 'em. Where, if you had a sidewalk, someplace they could safely walk, I think it would benefit all of us. So, that's my comment.

John Lampman:

Thank you. We have one more, are there any more after this? Okay, this will be our closing commenter....

Dave Zajac:

I'm Dave Zajac, last name with a "Z", normally I'm in the end, so, I'm used to it. I live on 107 Maplewood Drive, new resident with small children. We heard rumors when we moved in, that in fact, there might be a sidewalk. First, I want to address those in the community that'll be sacrificing some areas. I, for one, apologize for them, also very thankful that the sidewalk is going in, and I appreciate, even though you might have negative comments toward it, and I acknowledge that, and I can appreciate that. But, I believe that it'll benefit the majority. And someone always has to, there's always positives and negatives. But, as far as what the last woman addressed with obesity epidemic, but then, also safety for kids. I, for one, would love to walk my children down to Corners Community. It's only a mile and a half. But, I'd like to say, I apologize for your inconvenience, but for those of us that aren't impacted, we appreciate your sacrifices, so thank you. Now, to address some other concerns, I just wanted to make sure for the Planners, and I didn't hear it, at pedestrian crossings, are there going to be any ADA accessible curbs? I didn't those, so that was ...

Rich Brauer:

There are no curbs, other than down in the Village area, and there will be ADA accessible curbs.

Dave Zajac:

Okay, so at the Warren intersection, there are, more or less, it's going to be flat.

Rich Brauer:

Right.

Dave Zajac:

All right. And, then, it was a wonderful idea, and if you can add it in there for pedestrian crossing light, for safety reasons, and I understand. And then, a lot of people mentioned safety with traffic and speeding. I actually moved here from Hawaii, within a community that had sidewalks, but had about 4-6" curbs, so elderly people, families with children had difficulty maneuvering around the neighborhoods because of the curb, so I think that's great that they're more or less ADA accessible. But, then also with the speeding, in Hawaii, they actually targeted areas, so I'm getting video taped here, but maybe the Town (of Ithaca) can go back to the (Village of) Cayuga (Heights) police, or then also the Ithaca police, and maybe target Hanshaw. Because, if people get an idea and see a police pulling somebody over, it creates an awareness and a threat. And that, more or less, can mitigate things. So, I'm going on record saying that that is a possible option. So, thank you for your time, I appreciate it.

John Lampman:

Okay. Thank you. (Audience applause.) Okay, Deb...

Deb Cowan:

Hi, I'm Deb Cowan. I live at 1022 (Hanshaw Road), and I was not planning to say anything tonight. But, I would like to speak to the safety issue, and what I have seen as the sidewalk design. The walkway for much of the length of Hanshaw, particularly I've looked mostly from Blackstone to the Village (of Cayuga Heights), 'cause that's the part I live in, is not a walkway that's set into the property or away from the road. It's

right adjacent to the road, with a curb between them, and this gentleman who just spoke who had an issue with curbs. I have a child, as well, she's 14 now, but I would certainly, there seems to be a contradiction here. We talked a lot in the beginning about speeds, and how increasing the width of the road would increase traffic speed. So, we've done that. We've also, put next to this road, which has already a lot of the speeding traffic, is likely, perhaps to have at least the same or higher speeds, a sidewalk right adjacent to it with a little curb on the end. And, 4', am I correct, a 4' shoulder?

John Lampman:

Some places there's the 4' offset area, swale area.

Deb Cowan:

Right, but in the gray, if you look at it, in a lot of the road, although it's not considered the preferred configuration, a lot of the road doesn't have the swale. So, you've got a lot of the roadway with faster traffic, you've got a curb, and then you've got your walkway right next to it. I would not feel comfortable walking, having my children, or my 14-year old, or younger children taking their bike, walking themselves. I think, as a parent, you'd still have to be on guard. Something my husband mentioned, which never occurred to me, was the lighting issue, so, this can only be used during daylight hours, anyway. So, if you're at dusk, you're still compromised. My other question there would be, I still don't completely understand, where's the snow gonna go? If you are, if you have the kind of snowfall we had this winter, and you're moving that snow off, and a great proportion of your sidewalks do not have swales, you're gonna be putting that snow on the sidewalk, or close to the sidewalk. So, then you have that issue, where are you going? You're having to walk out in the road, again. So, it just, you know, these are the issues that occurred to me tonight, listening to this.

John Lampman:

Okay. Thank you. (Audience applause.) One more, good.

Jinyong Hutchins:

You had asked, do I want to have a sidewalk? Yes, I love to have sidewalk. If they ask me, you want to go back to your land to sidewalk go by for the other people to walk? I don't want it. That's where we are. And, then you, sidewalk is not straight. Sidewalk is (with hand motions) is a go, and then went out, and come back. Why can't they have it straight? What's wrong with we have a sidewalk like Warren Road? I like to have a little wider road, too, but I don't want to have a sidewalk, I like to have like Warren Road, they have a wide road, so just they get by pretty good. And sidewalk we have are, and Town (of Ithaca) say they will clean the snow, but you know Government working. Yeah, how long they gonna do? Maybe couple years later we'll have to shovel the snow. I don't wanna go by the other people to work, and I have to go out and shovel the snow. So, we like to have just the wide road. We don't want a sidewalk. That's all I wanted.

John Lampman:

Okay. Thank you. (Audience applause.) At that, I think we will close things down. Hopefully, nobody gets cut off, but we will be here for a few more minutes if you wanted to look at the drawings, speak one-on-one with any of the team... But, thank you for very much for coming.

Comment Sheet

Name: John Lampman — Note to file

Street Address: _____

E-mail: _____

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

Deb Cowan + the Ptaks would like the same consideration given the Begenbacks, namely move the sidewalk to the curb past their properties to reduce impacts / need for ROW takings.

Comment Sheet

(24)

Name: John Lampman ; note to file

Street Address: _____

E-mail: _____

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

Woman living at 1st house on right (west) on Blackstone south of Hanshaw, requested that removal of large trees at Blackstone intersection, both sides of Hanshaw, be re-considered. She feels the intersections do not need to be widened - no truck traffic.

Comment Sheet

Name: John Lampman ; note to file

Street Address: _____

E-mail: _____

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

Several people expressed concerns about pedestrian safety at the intersection of Pleasant Grove Rd after the hearing.

- Some thought a light (signal) would be more appropriate there than at Warren Rd. (25)
- Some thought the sidewalk would be better on the south side of ~~H~~Hanshaw at that point.
- A crossing, beacon, or signal at Blackstone was also suggested.
- One said the village had been considering a south side walk several years ago.

Comment Sheet Re: The reconstruction on Hanshaw Rd.

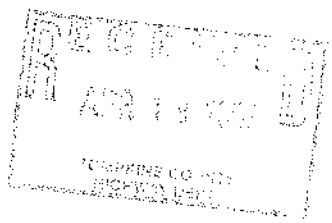
Name: Janet Wagner

Street Address: 206 Winston Drive

E-mail: janetkwagner@msn.com

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman



Comments:

(1) Corner of Pleasant Grove Road and Hanshaw Rd. needs traffic light. People on Pleasant Rd. pull out in front of traffic on Hanshaw many times in a day. I always slow down when I see them that corner and I still have to slam on the brakes several times every month. This is a dangerous corner! Furthermore, during late afternoon on weekdays traffic backs up badly on Pleasant Grove because of the difficulty of entering Hanshaw.

(2) Please do not color the shoulder (over) →

Color shoulders Green
accidents [illegible] [illegible]
recommend signs

of Hanshaw when you re-do it. Green shoulders ~~as~~ really do look unnatural, and red ones are garish! The natural color of

20 asphalt blends into the background and lets the green of vegetation stand out — or at least our eyes are so used to asphalt that we don't notice its color.

From: "Bruce Brittain" <bruceb2@mindspring.com>
To:
Date: 4/13/2007 3:49 PM
Subject: Proposed Hanshaw Road Rebuild PIN 3753.25
Attachments: hanshaw.brittain.doc

Message Date: 4/13/2007 15:49

From: Bruce Brittain <bruceb2@mindspring.com>
To: jlampman <jlampman@tompkins-co.org>

Hi John--

Sorry we weren't able to make the recent Hanshaw Road public hearing. Attached as a Word document are Doug's and my thoughts, which are being submitted within the comment period.

Please let me know if you have any trouble opening it.

We'd be happy to discuss this with you further if you wish.

Thank you. And best of luck with this project.

--Bruce

DATE: April 13, 2007
TO: John Lampman
CC: Members of the Ithaca Town Board
FROM: Doug and Bruce Brittain
RE: Proposed Hanshaw Road Rebuild PIN 3753.25

Thank you for the opportunity to comment on the proposed rebuilding of Hanshaw Road. We concur with the project's stated needs of addressing deteriorated pavement and of accommodating pedestrian activity in the roadway corridor. Unfortunately, the proposed design, as shown in the March 2007 Draft Design Report, would result in more speeding, increased delays for drivers, a reduced quality of life for residents, and the loss of valuable streetscape vegetation. These are inappropriate and retrograde steps that we recommend against taking.

It is clear that this project is well intentioned. It is also clear that local officials are operating within unrealistic and inappropriate constraints apparently set by NYSDOT as the funding agency. The resulting plan is unacceptable. This project will have to be rethought if we are to achieve satisfactory results.

ROADWAY WIDTH AND DESIGN SPEED

Widening Hanshaw Road by adding paved shoulders seems to be unjustified. Appendix G states that "The existing shoulder area was not a contributing factor to any accidents within the project limits." Indeed, all three roadway segments had accident rates that were lower than the State-wide average. Changing Hanshaw's design so that it is more consistent with less-safe roads may not be in our best interests.

Adding paved shoulders is a common technique for increasing roadway capacity. The effect is to increase vehicle free-speed and to decrease headway between vehicles. On roads where speeding and tailgating are already concerns, this will exacerbate the situation. Drivers on Hanshaw already regularly exceed the speed limit. Adding paved shoulders will encourage them to drive even faster. In fact, this plan calls for increasing the design speed on Hanshaw Road to well above the speed limit. Speeding will become a bigger problem, and enforcement will be a continuing necessity. Although bicyclists are often cited as the beneficiaries of paved shoulders, the resulting higher vehicle speeds could compensate for any benefit that bicyclists might otherwise enjoy. Residents, too, have an interest in controlling or reducing vehicle speeds.

The beginning point of this planning process should have been to determine how to redesign the road in order to increase driver compliance with the posted speed limits. Drivers must be given a physical reason to travel more slowly than they do now. The road could be made narrower with some undulations added. A meandering road centerline could do much to decrease vehicle speeds and to preserve existing vegetation. Planting trees closer to the road would help, rather than removing vegetation as called for in the current plan. Unless the road is reconstructed to a lower design speed, drivers can not be expected to obey the speed limit.

SIDEWALKS

If the road is kept to more reasonable dimensions, then it should be possible to provide pedestrian facilities without encroaching on existing trees, lawns, shrubs, hedgerows, and plantings. The real trade-off is not between pedestrians and homeowners. The real problem is the unnecessarily wide roadway that forces the sidewalk into people's yards. With the current road, there is enough room for pedestrians between the road and the hedgerows. With an appropriate design, this would still be the case after the road is rebuilt. A car is 6 ft wide. A pedestrian is 2 ft wide. Surely it should be possible to fit two cars and two pedestrians into a 50 ft wide ROW. There should even be room to include a bicycle or two.

VEGETATION

The loss of significant roadside vegetation is both regrettable and avoidable. By providing a narrower roadway footprint, and by introducing more curvature/sinuosity into the roadway, it should be possible to preserve much of the impacted vegetation. Even the simple expedient of shifting the road centerline slightly to the south would preserve much of the impacted landscaping on the north side of the road. In a few locations, the width of the buffer between the road and the sidewalk has been reduced or eliminated in order to protect significant vegetation. We applaud these efforts, but feel that more of this could be done.

In some cases, trees are slated for removal, even though they do not interfere with any proposed facilities. For example, the large maple tree at the southeast corner of the Blackstone/Hanshaw intersection is slated for removal, even though it is well off the road and well beyond the shoulder. The curved Acquisition of Temporary Easement ("ATE") line at this corner of the intersection seems to have been straightened out so that it barely nicks the tree. Even with this line, it would still be possible to perform grading around this tree. The loss of this fine old tree is completely unjustified.

HANSHAW/WARREN INTERSECTION

Like the rest of the road, the Hanshaw Road / Warren Road intersection is being made larger, for no apparent reason. In its current state, the intersection is already large enough to accommodate school and TCAT buses. There is no demonstrated need for intersection enlargement.

In addition, the installation of a traffic signal at this intersection would be counterproductive for a variety of reasons:

Warrants

The old NYS MUTCD Warrants were used for determining the suitability of a traffic light at this location. However, the New York State MUTCD Supplement states that "Traffic control devices installed or replaced after September 13, 2007 must conform to the National MUTCD upon installation." So this analysis will have to be redone using the National MUTCD Warrants. In any case, this intersection appears to currently meet none of either the old NYS or current National Warrants for a traffic signal. The Warrants that are reported as being met or conditionally met appear to be Warrants for installing a signal on an otherwise-uncontrolled arterial with long delays for cross streets, and would not apply in this case, where the arterial is already controlled by an all-way stop. While traffic volumes may be higher in 20 years, this is hardly a reason to install a signal now. In fact, the National MUTCD (2003, p 4C-1) states that a traffic control signal that is installed under projected

conditions should be removed if the projected need is not met within one year of putting the signal into operation. Installing a traffic signal now, based on volumes and delays that are not currently experienced, and that may not be experienced even in 20 years, seems to be a violation of MUTCD policy.

Delay

Installing a traffic signal at this intersection is likely to increase delay, congestion and travel time. It appears that current intersection delay was not directly measured, but modeled using software compatible with the Highway Capacity Manual. Unfortunately, the model's predictions are not consistent with observed functioning of the intersection.

The report indicates an existing northbound traffic flow of 389 vph with a delay of 34.1 seconds. We observed the intersection during evening rush hour, and noted that even with a northbound vehicle arrival rate of 480 vph, the longest delay we were able to record was 18 seconds. The average delay for that intersection (for all approaches) appears to be closer to 5 seconds during rush hour, rather than the 20.6 – 34.7 seconds predicted by the model (Appendix B: Traffic Capacity Analysis). While queues do form, they tend to dissipate fairly quickly. (Much more quickly than the far-longer queues which form on Pleasant Grove Road, for which the plan offers no remediation.) Since the model presents an inaccurate representation of existing conditions, it can not be expected to make accurate predictions about the future.

During most of the day (the 22 off-peak hours, representing some 80% of traffic flows), it is rare for drivers to experience more than a few seconds of delay at this intersection. However, with a traffic light installed, delays of up to 30 seconds will be routine, as drivers have to stop and wait at a red light. Even if a traffic signal does not significantly increase delays during rush hour, over the course of a full day the delays and lost time will likely be far greater than with the existing all-way stop.

Left Turns

Left turns are common at this intersection, and are readily accommodated with the existing all-way stop. However, with a traffic light, it is harder to make left turns in the face of opposing through traffic. It is therefore conceivable that a signal would lead to increased congestion at this intersection, as left-turning drivers hold up the queue behind them. When it is seen that a traffic light doesn't work, the typical engineering approach is to add turn lanes, decreasing green-time for other movements. This makes the intersection even bigger and takes more land. We would be far better off to leave the intersection as an all-way stop, rather than to introduce new problems which can not be easily remedied.

Safety

All-way stop intersections tend to have good accident safety records, and this one is no exception. While there may occasionally be etiquette problems, there are not many safety problems. Traffic is moving at very low speeds, and it is hard to do much physical damage or to sustain serious injuries. With a traffic signal, however, it is more likely that a collision will happen at 30 mph, which is far more severe than the fender-benders currently experienced. Installing a traffic light would therefore compromise safety at this intersection. In addition, traffic signals can be dangerous during power outages because the lights stop working, whereas all-way stops continue to operate as intended.

RECOMMENDATION

We therefore suggest that instead of pursuing an out-of-scale solution to a non-existent problem, the road should be rebuilt in the spirit of the NESTS Livability recommendations and the draft Town Transportation Plan. Since the project won't be constructed until 2008, this should provide enough time to develop a modest, nondestructive plan which would satisfy the needs of all parties. The road could be reconstructed at its current or smaller scale, drivers could be encouraged to drive at a reasonable rate, pedestrians could be accommodated within the clear width between existing hedgerows, and vegetation could be preserved or even enhanced. This more-modest project would be less expensive than that currently proposed, so if the State proves inflexible in its funding requirements, then this project should be small enough that it could be funded locally. This might free up the State's funding to be used on other worthy projects in the County. But in any case, damaging the functioning and aesthetics of the Hanshaw Road corridor is not a bargain, even if the State is willing to pay for most of it.

Thank you very much. We'd be happy to discuss this with you more at your convenience.

April 2, 2007

Dear Mr. Lampman,

Per our conversations with you and Mr. and Mrs. Cowan at the public hearing at DeWitt Middle School March 27, 2007 regarding the Hanshaw Road rehabilitation project and the agreed modifications to the plans for the walkway in front of our property (1018) and the Cowan's property (1022). We want the sidewalk to stay adjacent to the road with a gutter (no grassy swale) and to remain continuous with our section of Hanshaw Road (Blackstone Rd. to Community Corners).

To recapitulate the concerns we stated at the public meeting, there are numerous reasons that we are not in favor of the current design for the walkway in front of our property. First, the visual appeal of the road is important to our neighbors and us. We feel that the section of the road between Blackstone Rd. and Community Corners should be a continuous design and not weave back and forth. Second, we are concerned about the impact that the current design has on our property. The current design puts the walkway adjacent to our wooden fence. Per our conversations, the designs lack accommodations for snow removal, making it necessary to move our fence in several feet to accommodate the walkway and provide a snow removal area. By moving the fence, numerous mature plantings, including trees (some not shown in the design plans), will need to be removed or trimmed substantially. When we were considering buying this property a year and a half ago, the beautiful mature trees and shrubbery were high on our list of pros. We are especially saddened by the thought of the damage that will occur to the beautiful crabapple tree along the fence line to accommodate the walkway. In addition, the design shows that at the beginning of our property, the street will move south 2 feet. We wonder why, with this extra room, does the design need to encroach further onto our property.

We feel that we currently have one of the nicest sections of road frontage along the North side of the street for bikers and walkers. Our property has provided the public with a safe area for pedestrians with a fence outside the supposed ROW. Instead of working with the nice open stretch of property that we have available, the currently plans want to further encroach onto our property. Are we being punished for having substantial road frontage already clear of obstructions? Why do you want more? Again, we want the sidewalk with a gutter adjacent to the road minimizing any impact on our property, especially the fence.

In addition, the current set of plans for our property are either incomplete or a falsehood since the true project impact is not even hinted at. If there is to be any impact on the location of our fence and therefore plantings located just within the fence, they need to be accounted for in the plans. An assessment needs to be done on the cost of moving the fence as well as on the cost of removing and replacing the numerous trees and shrubs. This assessment appears not to have been done, as there is not even evidence of the true major impact on the current "incomplete" plans. The main reason given to us for the invasiveness of the current plans is money, cost. How can this be a reason if the true costs are not adequately assessed? Such reasoning based on an incomplete and untrue plan is completely illogical. And again it is unfair that budgetary constraints have caused our concerns to be ignored while other neighbor's concerns have been accommodated at great expense to the project. Why have we been targeted to take up the slack in the budget? We plan to step up our opposition to the project until the impact on our property has been recognized and reduced to a minimum.

We hope that this time you have not only heard but also listened to our concerns. The current plans do not reflect the issues that we have voiced numerous times in the past regarding the impact on our property, especially the fence and crabapple tree. We hope, Mr. Lampman, that this time you will follow through with the agreement that you have made with us and the Cowans and modify the plans to our properties in a way that will minimize any negative impact.

Best regards,
Christopher and Celeste Ptak

Christopher T. Ptak

Celeste A. Ptak

Comment Sheet

Name: Christopher & April Celeste Ptak

Street Address: 1018 Hanshaw Rd. Ithaca, NY 14850

E-mail: cpp6@cornell.edu, acp49@cornell.edu

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

Located on back of page >

Geri Lockwood

Date sent: **Wed, 28 Mar 2007 15:11:32 -0400**
To: **highway@tompkins-co.org**
From: **John Young <Jack@Youngbros.com>**
Subject: **Hanshaw Road improvements**

35

Hi,

We just wanted to send a letter of support for the Hanshaw Road project described in today's Ithaca Journal.

My wife and I have gone running along that stretch of Hanshaw Road many times, and the lack of sidewalks together with the fact that many people do like to walk or run in the adjacent neighborhoods makes for an unsafe situation, especially in winter. Personally, I think that the project will make the place much prettier and give it a neighborhood feel, which it currently doesn't have now.

Our neighborhood in Cayuga Heights has sidewalks and we love them. I would never attack a project like this that is good for safety and the neighborhood based on my own landscaping plans, as some appeared to do in today's paper. I hope you won't let selfish property owners slow you down or cause you to abandon this great project.

The plan was the subject of several conversations we had with friends this morning, and everyone was behind the idea. I can hardly wait until the work is done and we can actually take our small children walking or biking in that direction to visit friends nearby, something we would never do now.

Jack Young

Geri Lockwood

Date sent: **Wed, 28 Mar 2007 21:37:21 -0400**
To: **highway@tompkins-co.org**
From: **Paul Allen <pea1@cornell.edu>**
Subject: **Hanshaw Road project comments**

Greetings,

I'd like to provide comments on the proposed Hanshaw Road project. If you cannot accept comments via email please let me know.

(26)

I think that adding sidewalks/walkways and bike lanes to that section of Hanshaw Road would vastly improve the conditions and safety of pedestrians using that route. I own a house on Christopher Lane and walk the area everyday with my dog. We currently avoid that section of road because it isn't pleasant. Further, I work at the Lab of Ornithology, and walk to work
many days. I am grateful for the Town of Ithaca pedestrian pathways (e.g., Lisa Lane), but there currently isn't a very safe way for me to bicycle to work, since I don't like riding on Hanshaw Road as it is now (and the Lab doesn't like bikes on it's trails).

It is unfortunate that some property owners along the road resist this change. I understand that the project plans made every effort to use existing rights-of-way and I applaud that. I doubt that many of those who resist the sidewalks and bike lanes have much experience as a pedestrian on
that stretch of road, even if they own property along it.

Sincerely,

Paul Allen
208 Christopher Lane
Ithaca, NY 14850

607-257-1368

Date sent: **Wed, 28 Mar 2007 11:12:44 -0400**
From: **"Charlotte Williams" <charwwill@gmail.com>**
To: **klh7@cornell.edu**
Subject: **In support of Hanshaw Road project**
Copies to: **jlampman@tompkins-co.org, Ken <kw14850@gmail.com>**

To: Ms Katherine Luz Herrera, Chairperson, Tomkins County Facilities and Infrastructure Committee
CC: Mr. John Lampman, Hanshaw Rd. Project Manager, Tompkins County Highway
Division

37

From: Kenneth and Charlotte Williams, 1036 Hanshaw Rd, Ithaca

Dear Ms. Herrera:

We wish to encourage you and the Tompkins County Legislature to approve the
Hanshaw Road project proposal that Mr. John Lampman's team has produced.

We are homeowners on the north side of Hanshaw Rd, which is the side of the
proposed walkway. The project proposes to remove ten of our existing trees
and replace them with shrubs as part of the plan to allow the walkway. We
wished the legislature to know that we very much support the proposed plan
that includes a walkway. The road improvements are very much needed, with
the walkway and allocated space for bikes and pedestrians being essential,
in our opinion. We see many bikers and pedestrians along the road every day
and the plan for the walkway would greatly improve public safety. We believe
it would also enhance the sense of community in the neighborhood.

Mr. Lampman and his team have done a very thorough job of examining the needs of the area and have created a plan that addresses those needs wonderfully. As affected homeowners, we feel that Mr. Lampman has always responded to our questions and concerns with great consideration and thoughtfulness. We also appreciate that they have made the project information available to us in many ways, including online, which has been
most efficient for us.

Overall, we are impressed and pleased with the Hanshaw Rd. project proposal
and sincerely hope that the county legislature will approve it.

Thank you and best wishes,
Charlotte and Kenneth

Comment Sheet

33)

Name: Niels Olson

Street Address: 217 Tarrytown Dr

E-mail: nfo1@cornell.edu

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

The grading of Muriel Drive where it intersects Hanshaw Rd. is very steep and dangerous in the winter. Cars on Muriel Dr. are in danger of sliding out into traffic on Hanshaw Rd, as they try to stop at the intersection. Does the project include regrading Muriel Dr. near the intersection with Hanshaw Rd.?

Comment Sheet

(39)

Name: Ernest Dorgan

Street Address: 1463 Hanshaw

E-mail: _____

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

Need to pipe replaced under Stringbrook Lane to increase capacity of existing swale. Water currently jumps the ditch and floods his house.

Comment Sheet

4

Name: Lori Bushway

Street Address: /

E-mail: LJBushway@hotmail.com

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments: I would like a sidewalk!!! Thank you!
It is a good thing to consider all modes of transportation in a ~~a~~ roadway project. I appreciate your consideration and incorporation of safe avenues for pedestrians + bikers. ~~This~~ promotes healthy lifestyles for individuals ~~and~~ and offering opportunities reduce our use of cars is an added bonus.

~~I~~ I do want to have this change in my community. I do not think this will have a negative impact.

~~The pro~~ You are not directly impacting much property. Mostly right of ways ~~that~~ the property owners don't own!

Comment Sheet

(4)

Name: James Fenner

Street Address: 1308 Hanshaw Rd

E-mail: JHF23@CORNELL.EDU

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

I have concerns about the quality of the proposed sidewalk.
I hope it will be thick enough to withstand the freezing and thawing as the seasons changes
Too thin, without proper subsurface, will crack after a few years.

Geri Lockwood

Date sent: **Sun, 08 Apr 2007 19:09:42 -0400**
To: **highway@tompkins-co.org**
From: **Tori Wishart <vw11@cornell.edu>**
Subject: **John Lampman - Hanshaw Rd. Project**

Sec. 19

Dear Mr. Lampman:

I am writing this to encourage you to pass the Hanshaw Rd. project as presented at the recent public hearing on March 27. There is a great deal of support for sidewalks on Hanshaw Rd. Residents on Hanshaw Rd. with whom
I have spoken favor the plan.

Sidewalks would help alleviate some of the problems on Hanshaw Rd. The current situation for walkers is extremely dangerous, particularly given the number of buses and other large vehicles that use Hanshaw Rd. I take the bus often and after getting off the bus and out of the way to walk is nearly impossible. There is no place to go. Winter months only exacerbate
the problem. The snow banks make walking nearly impossible on Hanshaw Rd.

Sidewalks would enhance the neighborhood and possibly increase property values. Having sidewalks would instill more of a community where people could walk and meet their neighbors. Children would be able to walk more places and not have to be driven. This would not only eliminate the number
of cars on the road but also increase the exercise that our children need.

Sidewalks in my opinion would discourage some of the speeding. They would give motorists the feeling of a residential area, not a thruway. The visual effect of sidewalks alone would suggest this.

Global warming is something with which we all need to be concerned. Every time we can reduce the use of an automobile we are taking steps to eliminate this crisis. One less car on the road and one more person getting exercise - everyone wins!

Sincerely,

Tori Wishart
1211 Hanshaw Rd.

Comment Sheet

4/16/07 42

Name: CHRIS STREBEL

Street Address: 305 ST CATHERINE CIRCLE, ITHACA

E-mail: CHRIS@STREBELCPA.COM

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

I THINK IT WILL BE GREAT TO HAVE SIDEWALKS. AS AN AVID RUNNER, I SEE MYSELF USING THEM QUITE OFTEN. THE WIDER THE BETTER. YOU'RE NOT GOING TO PLEASE EVERYONE BUT I THINK THE COMMUNITY WILL BENEFIT GREATLY. LET'S JUST GET IT DONE.

THANK YOU!

CJS

Comment Sheet

(43)

Name: Kevin Mahaney

Street Address: 1446 Hanshaw Road

E-mail: Kmahaney@twcny.rr.com

Please return Comment Sheet to:

Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850
Attn: John Lampman

Comments:

I support the project and the sidewalk. The sidewalk will improve the neighborhood and safety. I only wish it was extending further East. The decreased shoulder width for bikers is unfortunate, but understandable. I do worry about speed on the improved road. Let's move forward with the project!

(43)

March 28, 2007

Tompkins County Highway Division
170 Bostwick Road
Ithaca, NY 14850
ATTN: John Lampman

I attended the public hearing on March 27th regarding the Hanshaw Road Reconstruction project and made written comments at that time. I would like to add to those comments.

It is apparent that some individuals who made comments at the meeting believe that the only legitimate opinions regarding the new sidewalk are those expressed by people who own property directly impacted by the sidewalk. I view the sidewalk as an improvement that will benefit the entire community and I urge the Town to continue considering the community-wide benefits of the sidewalk. While the opinions of the property owners impacted by the sidewalk are important, they represent a minority of Northeast residents. I sympathize with some of their concerns, but my sympathy is tempered by the fact that I wish the sidewalk was running across my property. I was disappointed to learn that costs will keep the sidewalk from extending East of Salem Drive. I believe that by increasing safety and a sense of community, the sidewalk will increase property values.

While unfortunate compromises have needed to be made due to cost, such as narrowing the shoulders to 4 feet, I support the reconstruction, sidewalk included, as presented and urge the Town to proceed.

Sincerely,

Kevin Mahaney
1446 Hanshaw Road
kmahaney@twcny.rr.com

March 28, 2007

(44)

To Whom It May Concern,

I am writing in support of the proposed walkway on Hanshaw Road. I live at 1436 Hanshaw Rd. I see the walkway as a very much needed safety addition, as well as a neighborhood enhancement. Runners, bikers, strollers, and all manner of people already heavily use this stretch of Hanshaw Rd. for pleasure, exercize, and transportation. We need to make this way safe for non-car use. It is the right thing to do environmentally, and to serve the community. I stand to lose some of my property and plantings. I will happily do this to encourage alternatives to cars. Thankyou for your thoughtful and careful planning.

Yours truly,

Barbara Apt
227-7833
1436 Hanshaw Rd
Ithaca, NY 14850

5) Hanshaw Road has obviously become a major thoroughfare to Cornell and its outlying parking lots, especially the one on Pleasant Grove Road. It is probably the preferred road because its speed limit is higher than the speed limit on most other nearby campus access roads, such as Triphammer Road.

6) Due to the obscured 30MPH speed limit sign at the village line, motorists enter the congested Community Corners area and Pleasant Grove-Hanshaw intersection at 40MPH and above. In addition the road suddenly narrows without warning.

7) Motorists traveling 40MPH (towards the village) at the crest of the hill are unable to stop for unexpected obstacles in the road.

8) During slippery winter weather, cars frequently slide off the North side of the road in front of our house.

9) We do not have permanent right of way for our present driveway and will eventually have to add one more driveway to Hanshaw Road, just inside the Village line. With over 250 feet of frontage, the Cayuga Heights Village Board RELUCTANTLY approved only one possible entry site onto Hanshaw Road due to the traffic problems.

Thank you for considering these issues. Should you have any further questions, please write the above address or call us at 607-272-7640 or 607-257-2095 during normal business hours.

Thank you.

Sincerely,

Peter A. Carruthers
Janet Carruthers

1008 Hanshaw Rd.
Ithaca, N.Y. 14850
November 3, 1990
607-257-2095

Mr. Barry Stevens
Regional Traffic Engineer
N.Y. Department of Transportation
333 E. Washington St
Syracuse, N. Y. 13202

RE: Hanshaw Road Speed Limit (Ithaca, N.Y.)
Beyenbach Speed Limit Petition, Hanshaw Rd. , Ithaca, N.Y.

Dear Mr. Stevens:

We were recently advised of the Beyenbach's Hanshaw Road speed limit petition. We were not aware of this petition at the time it was circulated, otherwise it would also bear our names. This letter is intended to provide additional information in support of the Beyenbach's petition.

Our home is in the village of Cayuga Heights. Our current driveway, which passes through the property at 1010 Hanshaw Rd., enters Hanshaw Rd from the North side, just east of of the Cayuga Heights line, at the top of a rise and corner in the road. In addition, the speed limit turns to 40MPH just west of the driveway. We are responsible for maintaining some of the brush responsible for the "obstructed views" mentioned in the reference petition.

We are certain that the present 40MPH speed limit has been carefully researched and may indeed be a reasonable limit for some parts of the road. The local drivers' tendency for flagrant speeding and poor attention to the road, is a possible cause of resident's complaints. Discussions with the Village police indicate that they are unable to enforce the nearby 30 MPH speed limit. Apparently the motorists entering this speed zone invariably escape with excuses about "not having time to slow down", "didn't see the sign", etc.

We therefore offer the following reasons in support of a lower speed limit on Hanshaw Road:

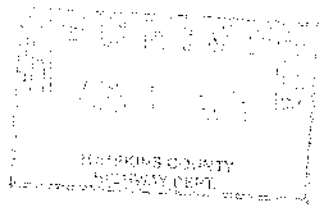
1) At age 35, we are afraid to cross the street to get our mail, especially in the dark or in the winter.

2) We have been rear-ended while attempting to enter our driveway. There are daily close calls, complete with obscene gestures, squealing tires, and flattened mailboxes. We sometimes have to pass by the driveway and double back in order to assure safe entry.

3) Due to the relentless high speed traffic, it is difficult and dangerous to keep the roadside vegetation on our lot under control.

4) Driveway exit to the left is difficult due to a combination of poor visibility and traffic accelerating up the hill.

1008 Hanshaw Road
Ithaca, New York 14850
April 9, 2007



John Lampman
Tompkins County Highway Division
170 Bostwick Road
Ithaca, New York 14850

Subject: Comments for Hanshaw Road Reconstruction Public Hearing on March 27, 2007.

Copies: Brent Cross, Village of Cayuga Heights

Dear Mr. Lampman:

Here are my written comments for the meeting. This is broken into two sections, first general issues, and the second section pertaining to my lot.

1. The "Light Arterial" roadway classification is the root of contention between the residents and the County. The residents would prefer to move the classification towards "Rural Road" while the County appears to be moving the classification towards "Expressway". As the county imposes their plans on us, our property values, privacy and quality of life diminish. I will push for an assessment reduction to help recover our losses.

2. It is clear that Hanshaw and North Triphammer Road are used as thoroughfares to Cornell University; perhaps Cornell should provide some of their property, such as the golf course or Equine Research Park to deal with this issue. They could build a 4-lane highway to A-lot.

3. The updated plan removed all traffic calming measures. Traffic calming was promised to be a priority in earlier meetings. The current plan of widening the road and clearing an area for a sidewalk will increase traffic speeds further. High velocity, reckless traffic has been a pervasive problem for the 23 years I have lived here, and I am quite disappointed with the new plan. I have attached a letter that I wrote to the DOT in 1990 about the speed limit for Hanshaw Road. Despite the cooperation of the DOT, traffic speeds did not diminish; and local law enforcement has been ineffective.

4. The proposed traffic light at Warren and Hanshaw is likely to encourage speeders, who will not even slow at the intersection if the light is green. The existing 4-way stop sign works very well; I use this intersection twice a day at rush hour.

5. Please reconsider an early recommendation) from some residents (instantly rejected without consideration at an earlier meeting to add 3 or 4-way stop signs at Salem or Muriel or Blackstone, which should reduce traffic speeds and make the road less attractive as a shortcut.

6. Much can be learned from a brief tour of adjoining Cayuga Heights. Here sidewalks are much more modest, though they "violate" all requirements rigidly imposed on the Hanshaw project. The sidewalks are too narrow, cross the road, or stray too close to the road. However they are much less grandiose and invasive, and still perform their intended function. Lower Hanshaw also has a very effective traffic calming measure: a simple and inexpensive asphalt curb. I know this slows traffic; it definitely gets my attention. Perhaps the use of federal funding needs to be reconsidered in favor of rational allocation of local funds. Hanshaw was last resurfaced in 1989, while sidestreets such as Blackstone and Christopher Lane have been unnecessarily resurfaced several times during this same time interval.

7. Since the plan has changed, I request physical re-marking of the trees to be removed. (50)

8. Yew trees were erroneously classified as brush in the previous plan. They are still not marked on the current plan. If any removal of Yew trees is planned this must be so indicated. (51)

The following items pertain specifically to my lot and an adjoining property:

9. My property at 1008 Hanshaw will need a curb cut as I do not have a permanent right of way through the adjacent property at 1010 Hanshaw Road. Preferred location of this curb cut is at the East end of the property; the proposed Western location on the survey map is not very practical. The new roadway should no longer have a line of sight issue for an entrance here, *especially if traffic speeds are reasonable*. Note that there is some chance that this curb cut will not be used, as I have first option to purchase the adjacent lot. (52)

10. Temporary easements seem excessive, some coming in 30-40 feet from the alleged 25ft ROW. It is not clear why they would be used to fill low areas and prevent water pooling at the 1008 and 1010 locations, since the land is significantly higher than the existing roadway. Reasonable and plausible explanations will be required before any such easement is granted. (53)

Please note that items 7 through 10 request further action from the County.

Thank you,

Peter Carruthers

1016 Hanshaw Rd
Ithaca, NY 14850
April 2, 2007

John Lampman
Tompkins County Highway

Dear John,

Here are some comments regarding the Hanshaw Rd. plan as presented in the March 15 design report and/or at the March 27, 2007 meeting.

GENERAL PROBLEMS

Neighborhood Opposition to Sidewalks

I think it was abundantly clear from the "show of hands" that Dave Collum so brilliantly orchestrated at the March 27, 2007 hearing that there is still severe opposition (80%) to the sidewalks on the part of adjoining residents, while those who do not have to put up with them didn't generally mind if the impacted residents were inconvenienced. It was surprising that those who were not impacted were not savvy enough to keep their hands down rather than appear as hypocrites in the second phase of the "vote."

I feel it is important that as the plan moves forward that this opposition be included in the record. At least, don't try to pretend that the residents are in favor as you have in the past (at least with the first meeting). [By the way, the March 27 meeting was the fourth, not the third as you kept saying.]

Design is NOT Safer

In general, it seems that the design will result in a less safe neighborhood. There was at that hearing the "embarrassing moment" when in response to Peter Carruthers you were unable to come up with a single example of "traffic calming." Elsewhere (F&I, Sept 12, 2006) I read that "[Mr. Sczesny] indicated it is always assumed that when an improvement is completed to a road speeds have a tendency to increase between 5 to 8 miles per hour." Further, below I indicate the specific unsafe pedestrian situation caused by the sidewalk (as suggested by Peter Stein).

PROBLEMS RELATING TO MY PROPERTY

One problem at my property is that you failed to notice my second entrance (we spoke about this at the end of the March 27 meeting). This second entrance is just gravel, but it is important. In making this second curb cut, you would then have an isolated segment of curbing perhaps 5 to 10 feet long, and then the curbing would end with Ptak's property. Sooner or later, this is going to be hidden by leaves or snow and give someone (a pedestrian, biker, or plow truck) a nasty surprise. A much better transition to the "no curb" option to the east should be used. Further, one of the problems with our having the main entrance open has been that it is the first good chance to turn once a driver heading east from PG Road discovers he is going the wrong way. Therefore we are not looking to have the second entrance improved or emphasized in any way, but we need to get across

PROBLEMS NOTED WHILE READING THE REPORT

Page II-4 RIGHT-OF-WAY ISSUES

Under II.C.1.e. (1) you say that the existing ROW is approximately 50 feet for the length of the project. At my property, the existing ROW is well-argued to be just 17 feet from the current centerline, as you well know. Seventeen feet is not approximately 25 feet. In contrast, Page III-15, under III.C.2.I, there is what is a more detailed and perhaps a more realistic view of ROW, which contradicts Page 11-4. Which is right?

Page II-20 LACK OF COMMITMENT TO SIDEWALKS BY CAYUGA HEIGHTS

Under II.C.1.v. (last paragraph) you say that "the Village of Cayuga Heights passed a resolution indicating a financial commitment to fund the portion of the sidewalk in the village." What they actually said was "...there will be a resolution required in the future to make the commit to the actual financial obligation." So I guess that's why you said "indicating." In truth, a far less positive word than "indicating" should have been used here.

Page III-10 A HAZARDOUS PEDESTRIAN CONDITION AT THE HANSHAW/PLEASANT GROVE INTERSECTION

At the bottom of the page and top of the next page, you address the safety issue at the Pleasant Grove/Hanshaw intersection. You state *"In addition, the proposed sidewalk and shoulder construction on the north side of Hanshaw Road in the vicinity of this intersection would not increase the accident potential at the intersection or create additional conflicting movements for vehicles at this intersection. Providing a designated walking area and an improved shoulder would improve the safety of pedestrians and bicyclists."* {Additional safety details, including the fact that the intersection has an accident rate above state average, appears on Page II-16.}

The analysis in this paragraph ignores the circumstances that the changes in PEDESTRIAN patterns expected as a result of sidewalks drastically changes the safety situation. As pointed out by Peter Stein at the March 27, 2007 hearing, the sidewalk will concentrate pedestrian traffic (presumably in greater numbers than present) moving up and down the north side of Hanshaw, and at the north end of the west side P.G. sidewalk (bus stop and to/from campus), trying to cross on foot at that very difficult intersection (at the Mobil station). This is a very dangerous situation. Envision every walker needing to cross, standing, waiting for a chance to dart across, never actually having the right of way.

At present, walkers avoid this crossing, wisely taking individual responsibility for their own safety. This they do by using the south side of Hanshaw and the east side of PG, using individually selected opportunities to cross (jaywalk?) near the top of the hill on Hanshaw and near the fire station on PG. A north side sidewalk clearly improves pedestrian safety while <u>on</u> the sidewalk, but concentrates danger into a cross-fire at the intersection. The existing pedestrian crosswalk several hundred feet west of the intersection is not an answer. People will not walk down and back. They are already late! And that crosswalk is not that much safer anyway.

It strikes me that the County needs to address this safety issue, that is ultimately the responsibility of the Village one would assume. It is hard to see a simple solution. Presumably, walkers might be trapped at the gas station once or twice before wisely readapting the double jaywalk option, using the south side shoulder of Hanshaw rather than the north side sidewalk of the CH portion. More to the point, you must have an all-way stop at Hanshaw/PG, with pedestrian crosswalks, and good signage. Another alternative would be and a traffic signal with pedestrian buttons.

Can you state that you do not believe this is a safety issue, or that you have specific plans to deal with it?

Page III-12 JURISDICTIONAL ISSUES FOR ROW AND MAINTENANCE

In III.C.2.g. you say here that maintenance will be the responsibility of the Town of Ithaca, and of the Village of C.H. We know of the local law in the Town, but where has the Village assumed maintenance? On page III-15 it says that a ROW would be obtained by the County and would then "transfer jurisdiction for the parcels within the Village portion of the project." What about transferring to the Town? Is Town maintenance still on, or is the County retaining ownership of the Town portion? Further, the County does not own the portion of the road in the Village, so how do they, as opposed to C.H., even ask for an easement? If compensation for a granted easement is due for the portion within C.H., does this come from the County or the Village?

Page II-17 DRAINAGE

In II.C.1.q. Drainage Systems: there is absolutely no mention of any existing drainage problems in the western portion of the project between Blackstone and the Village. Of course, there are no drainage facilities here at the peasant, and none are needed. As I have told you before, as is well known (e.g., O.D. von Engeln, The Finger Lakes Region - Its Origin and Nature, Cornell U. Press, 1961), this portion of the project is a former delta of a former version of Fall Creek into high-level Lake Ithaca. It's a big sand and gravel bank. Your geological data in the report confirms this (water table at 11 feet!). All that you accomplish with your storm runoff efforts at this end is converting water that normally sinks in peacefully into run-off, dumping it on C.H. This is a big waste of resources and is contrary to policies of trying to reduce storm runoff.

Instead why not eliminate the stormwater handling on this end. If it seems to be necessary to handle stormwater for a few houses west of Blackstone, run it back east to the side of Blackstone and into the brook (the slope supports this anyway). No need to trouble C.H.

NOWHERE IN REPORT - TRAFFIC CALMING

Many of the residents have mentioned the need to slow the traffic down, not to speed it up, and I believe everyone pretty much agrees that smoothening the road and widening the perceived vista will increase speed by at least 5 mph. Where are the "traffic calming" measures. When Peter Carruthers asked about this at the March 27, 2007 meeting, there was an awkward silence, and only when the residents reminded you that you had ignored his question did you come up with the lame excuse (sorry - that's what it was!) that colored pavement might help if you could afford it.

I think you will agree that the notion of traffic calming, at least as it applies to this project, is a category without any content. I haven't heard anything that would help. We all know this. So there is really no point to include safety issues as reasons for doing anything related to this project.

Here are three things that would work: speed bumps, stop signs at every intersection, and plywood silhouette cutouts of police officers. Seriously!

Page III-16 COST

What are the costs? Rich Brauer said at the meeting that they had gone from an early estimate of 2.4 million to 2.9 million. The report says 3.826 million. If the report is right, why did Rich say 2.9 at the meeting?

That's all I have for the moment.

Sincerely,

Bernie Hutchins

Tompkins County Highway
Hanshaw Road Reconstruction Public Hearing
Tuesday, March 27, 2007

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