

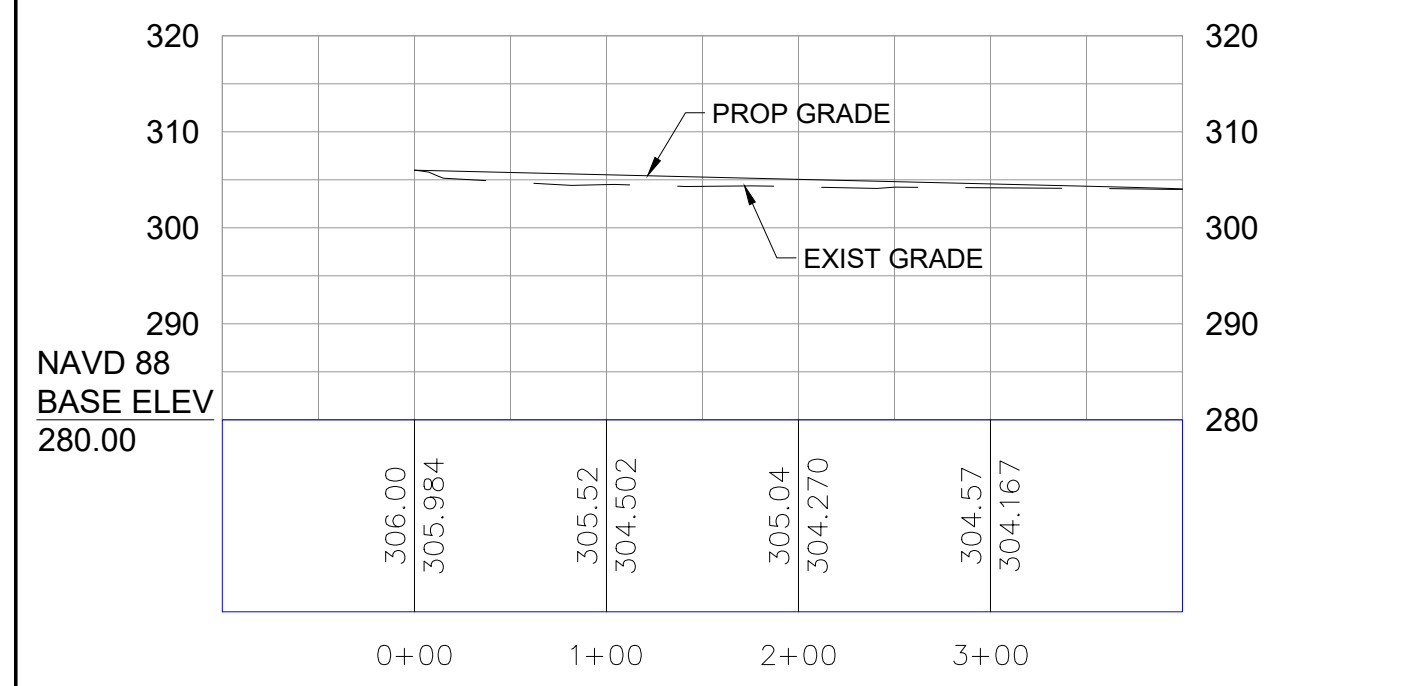


APPENDIX 16-A REVISED

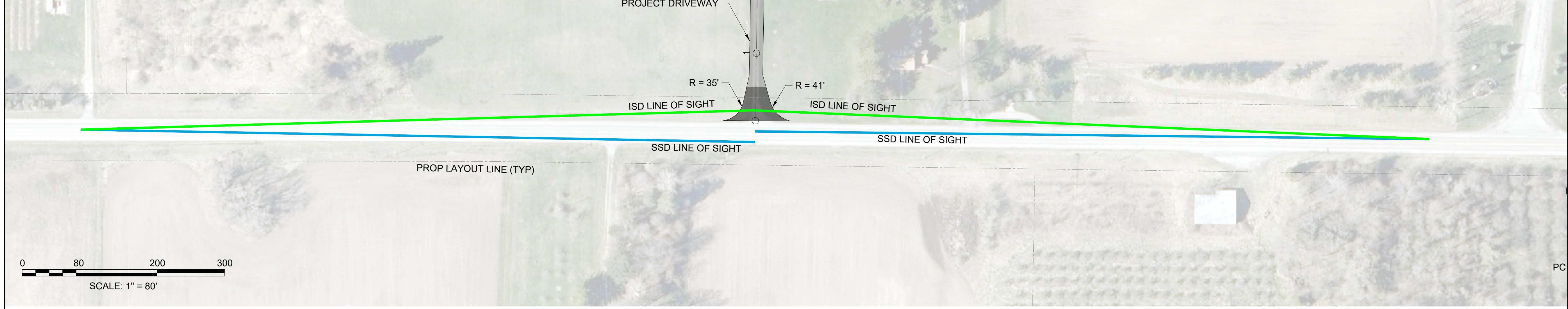
Transportation Data and Figures

Sight Distance Figures

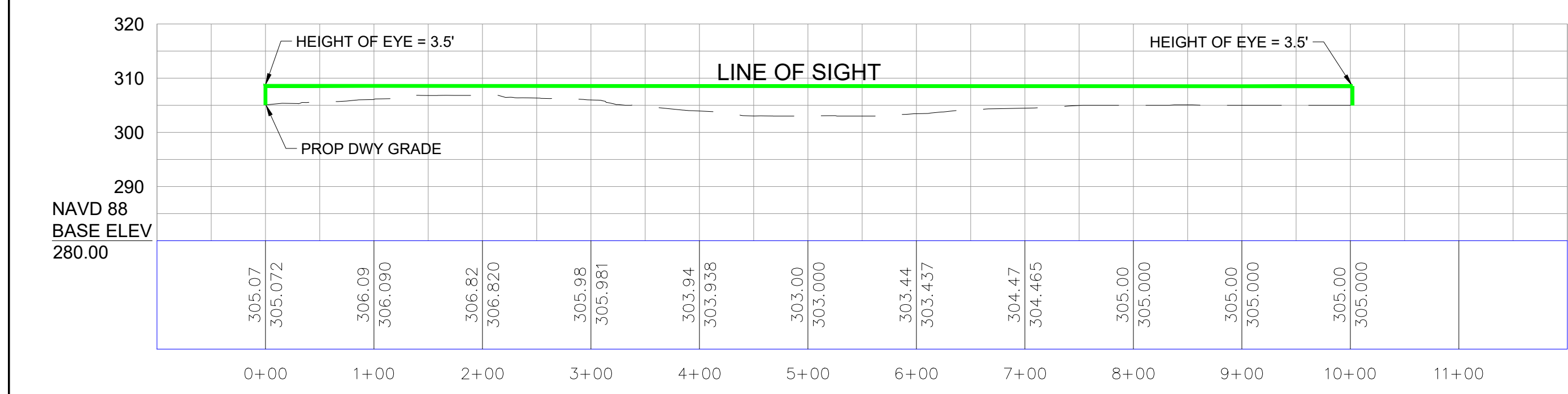
PROFILE: SITE ENTRANCE



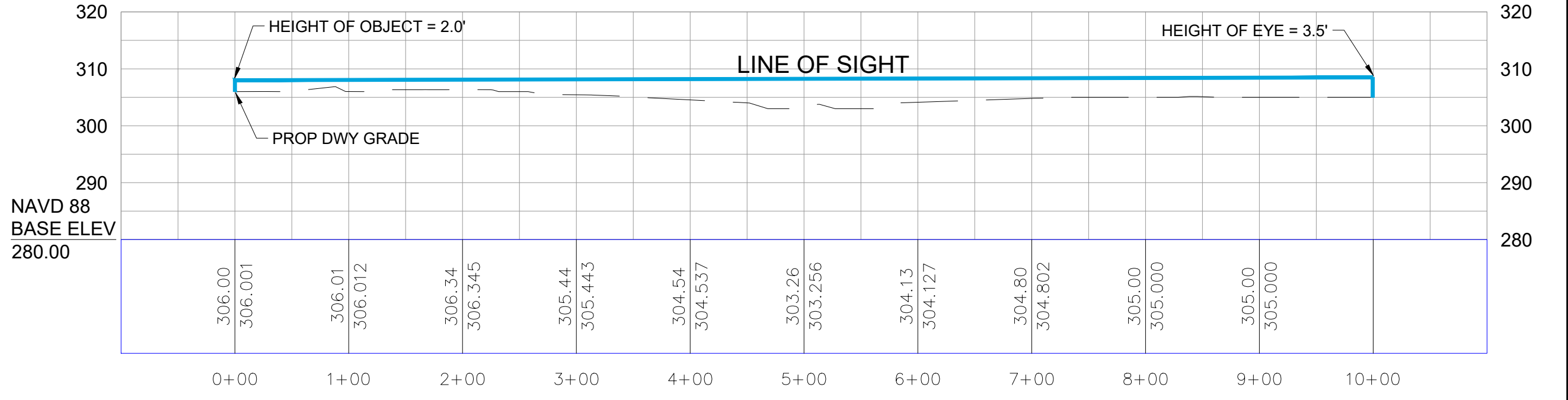
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.01



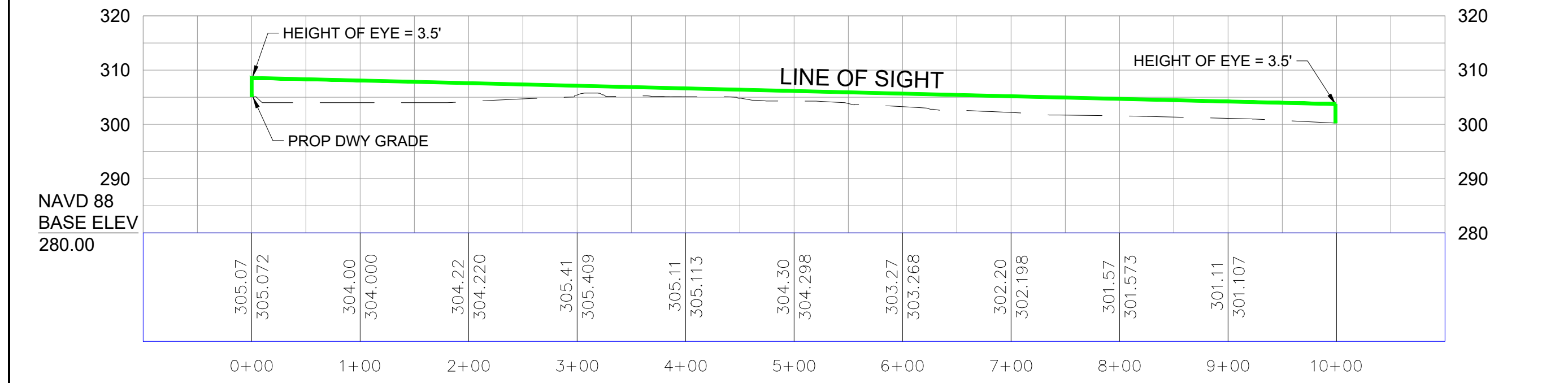
PROFILE: ISD TO/FROM EAST (1,000 FEET)



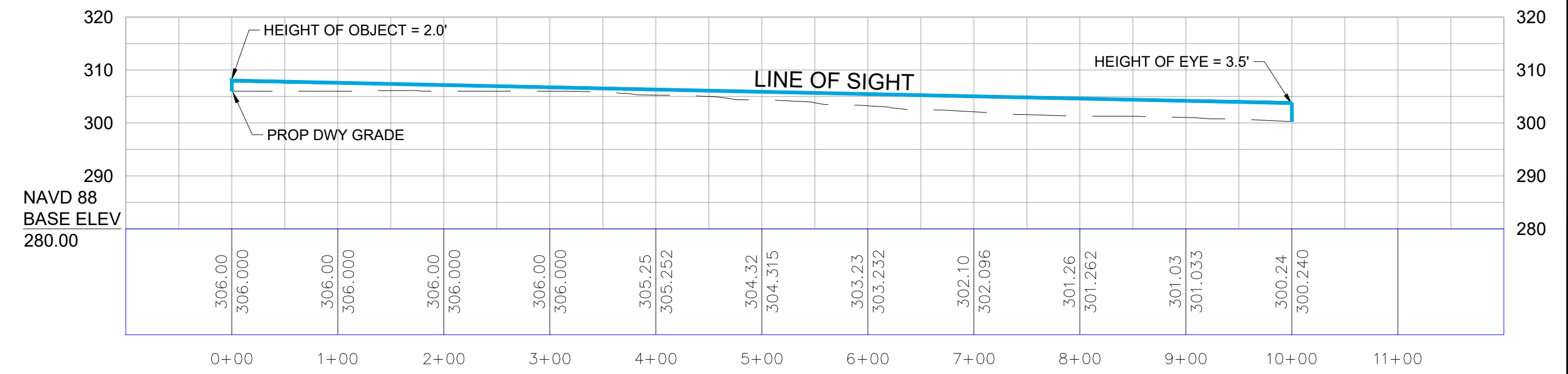
PROFILE: SSD TO/FROM EAST (1,000 FEET)



PROFILE: ISD TO/FROM WEST (1,000 FEET)



PROFILE: SSD TO/FROM WEST (1,000 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYS DOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE.



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PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

LAKE ROAD SOMERSET, NY

SHEET TITLE & DESCRIPTION:

DRIVEWAY SIGHT DISTANCE PLAN AND PROFILES AREA 1 AT LAKE ROAD

PROJ NUM: SU02.0012

DES: 94-C SUBMITTAL

DWN:

CHK:

APV: BMS

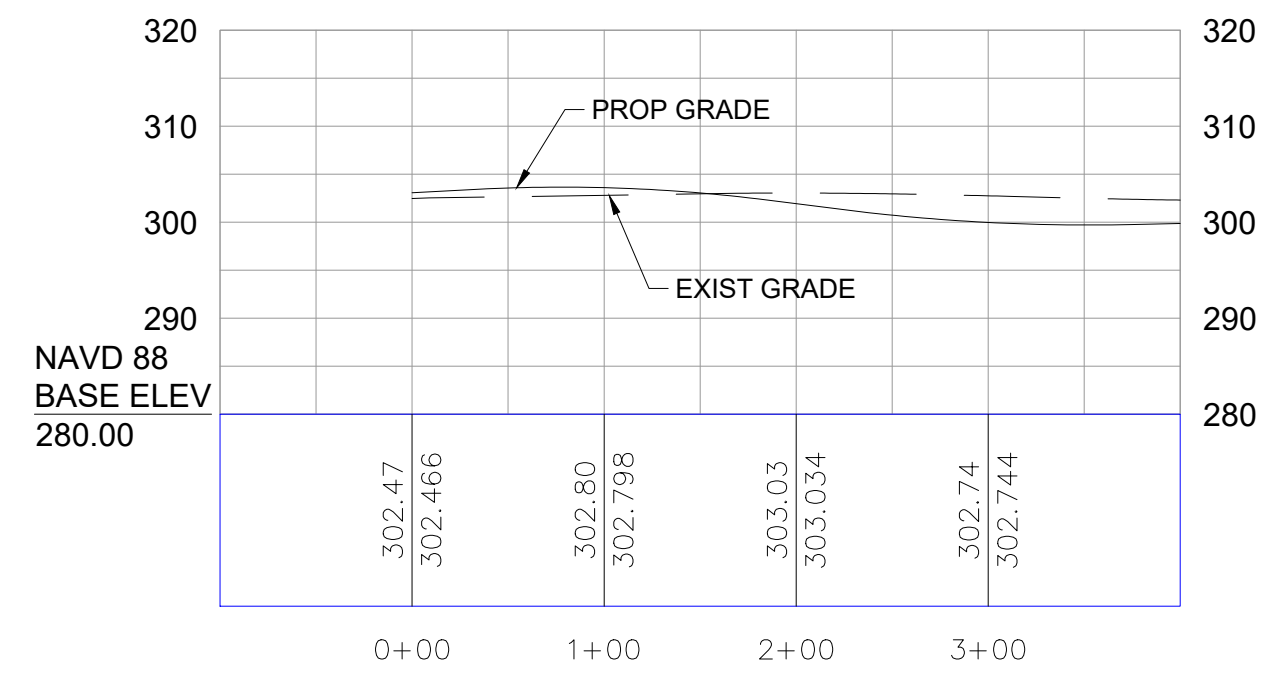
DATE: 12/14/2022

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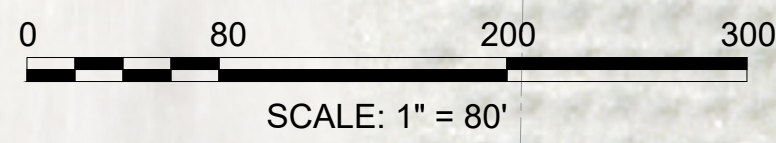
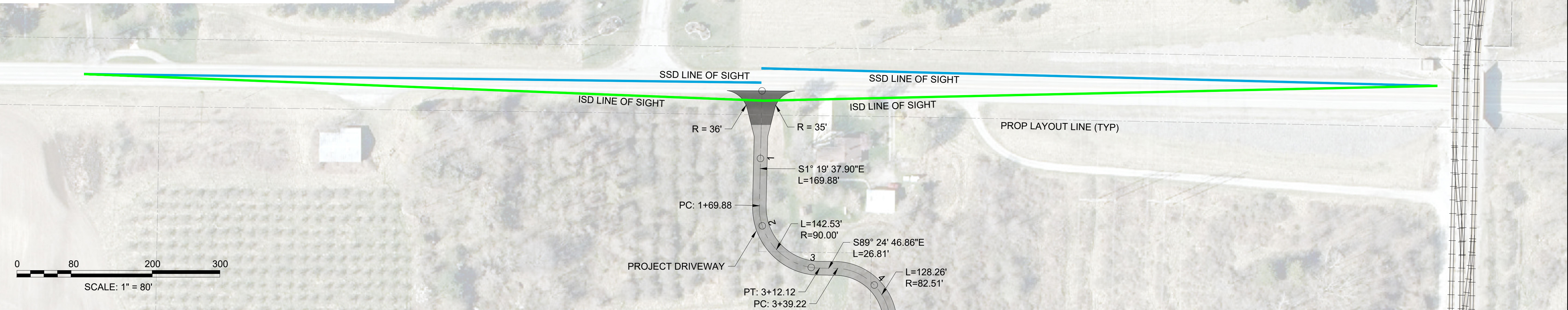
AS SHOWN

SHEET NO: REV:

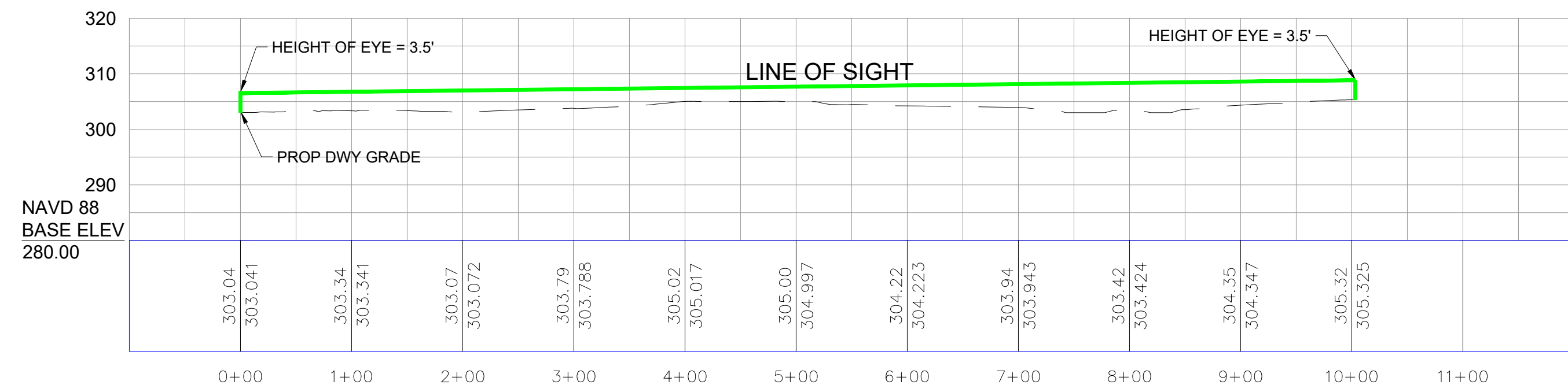
PROFILE: SITE ENTRANCE



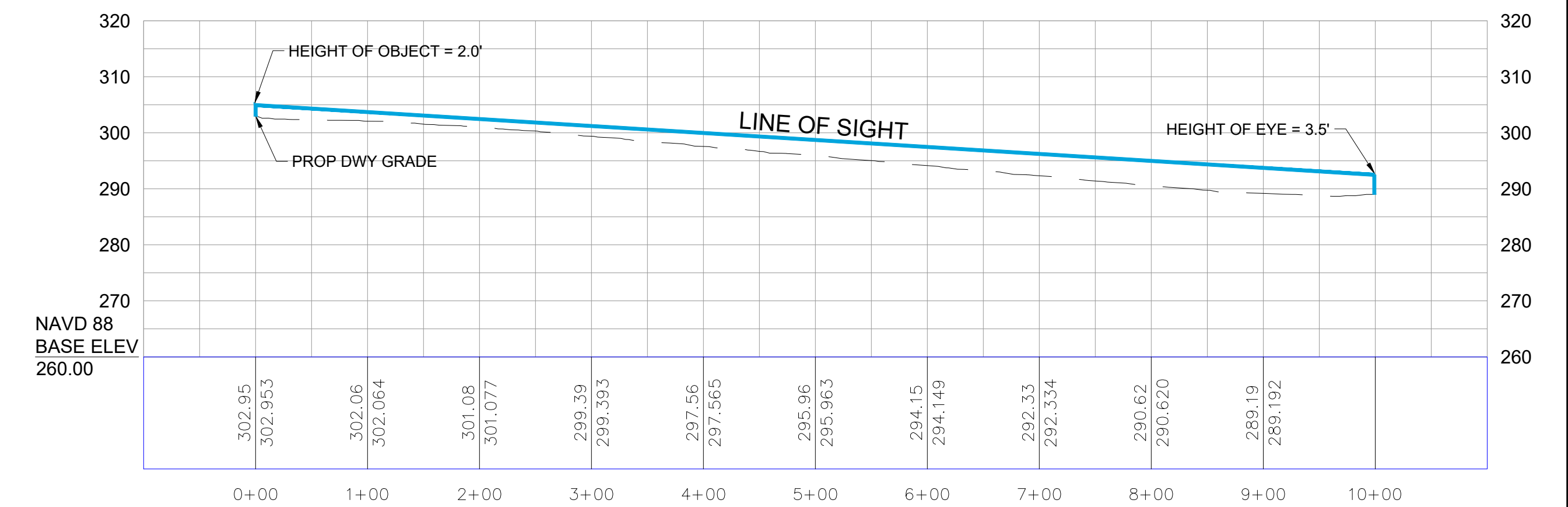
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.01



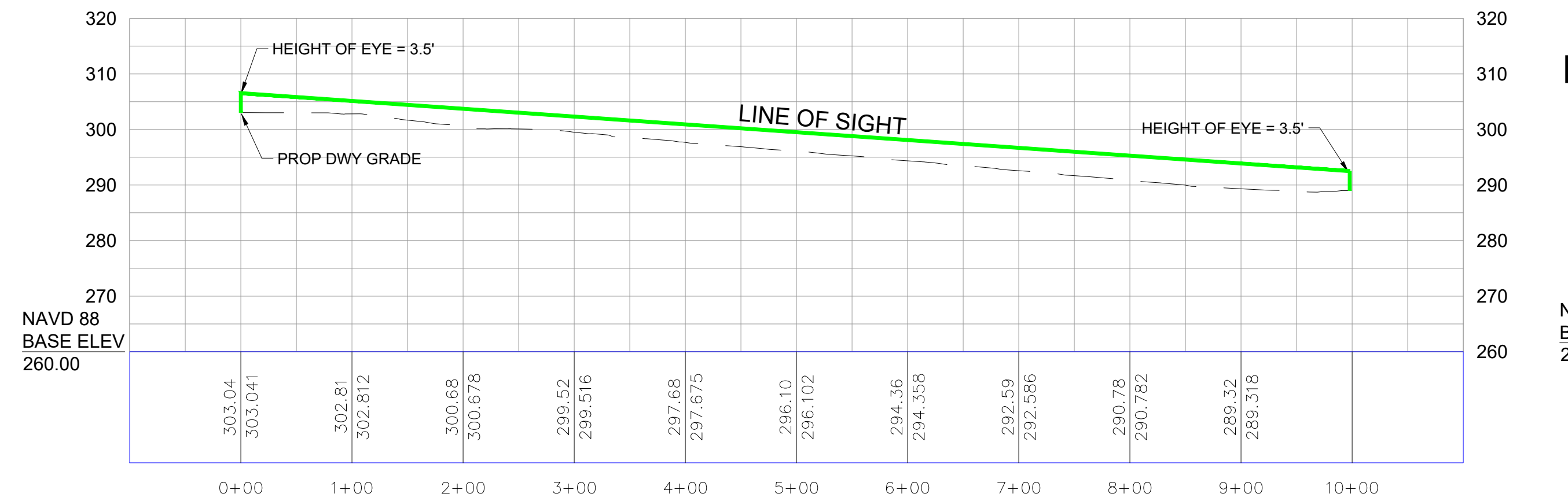
PROFILE: ISD TO/FROM WEST (1,000 FEET)



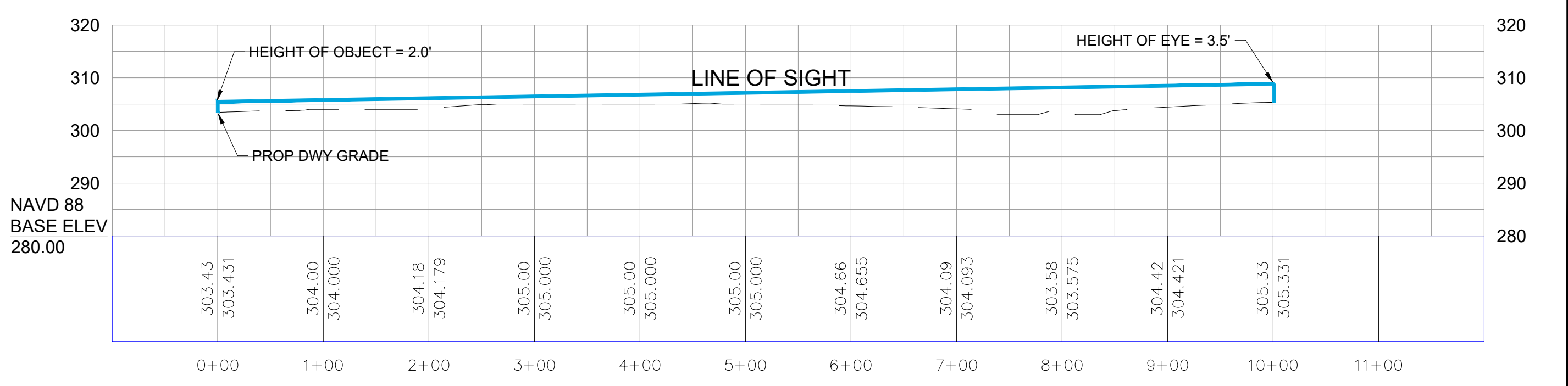
PROFILE: SSD TO/FROM EAST (1,000 FEET)



PROFILE: ISD TO/FROM EAST (1,000 FEET)



PROFILE: SSD TO/FROM WEST (1,000 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYS DOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE.



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PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

LAKE ROAD
SOMERSET, NY

SHEET TITLE & DESCRIPTION:

**DRIVEWAY SIGHT
DISTANCE PLAN AND
PROFILES
AREA 2 AT LAKE ROAD**

PRELIMINARY
NOT FOR CONSTRUCTION

PROJ NUM: SU02.0012

DES: 94-C SUBMITTAL

DWN:

CHK:

APV: BMS

DATE: 12/14/2022

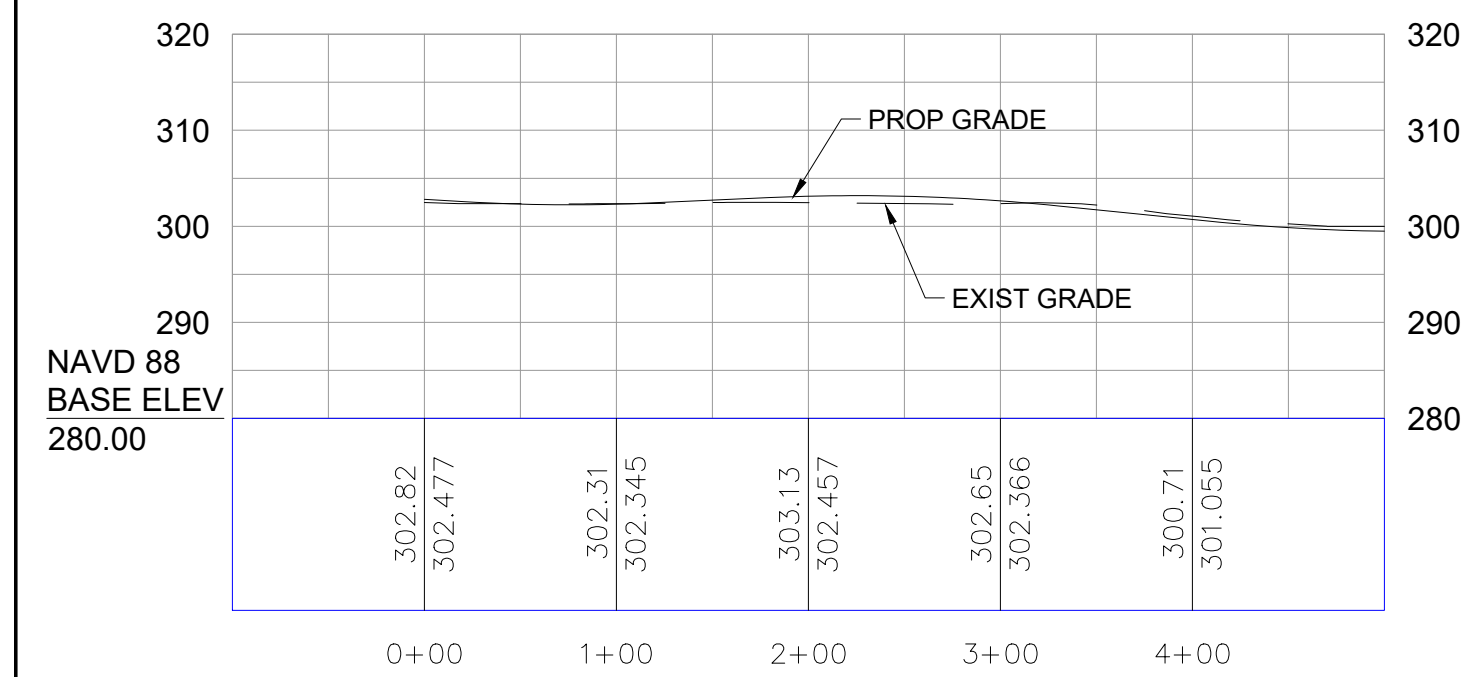
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AS SHOWN

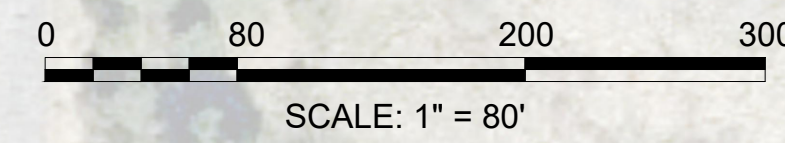
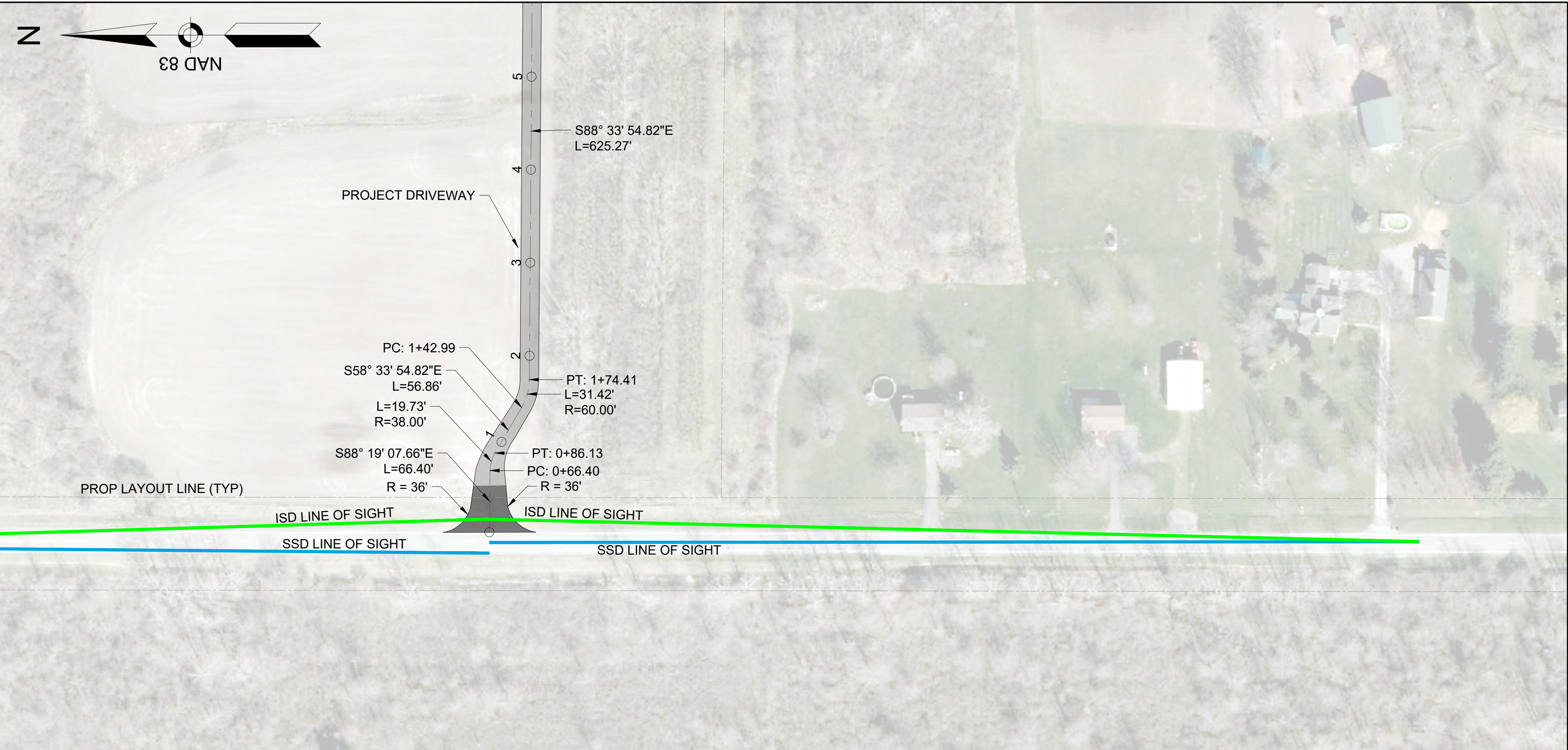
SHEET NO:

REV:

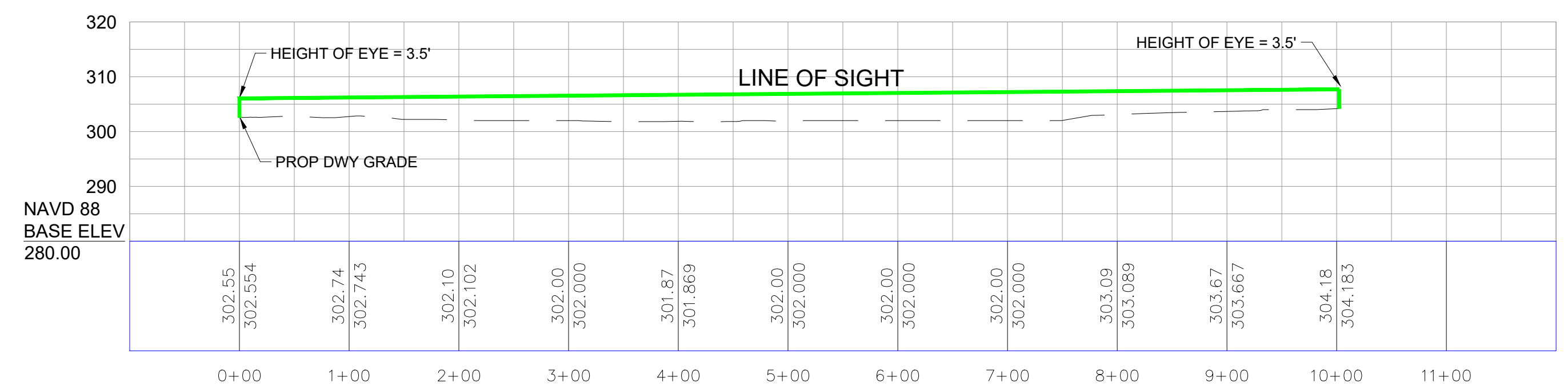
PROFILE: SITE ENTRANCE



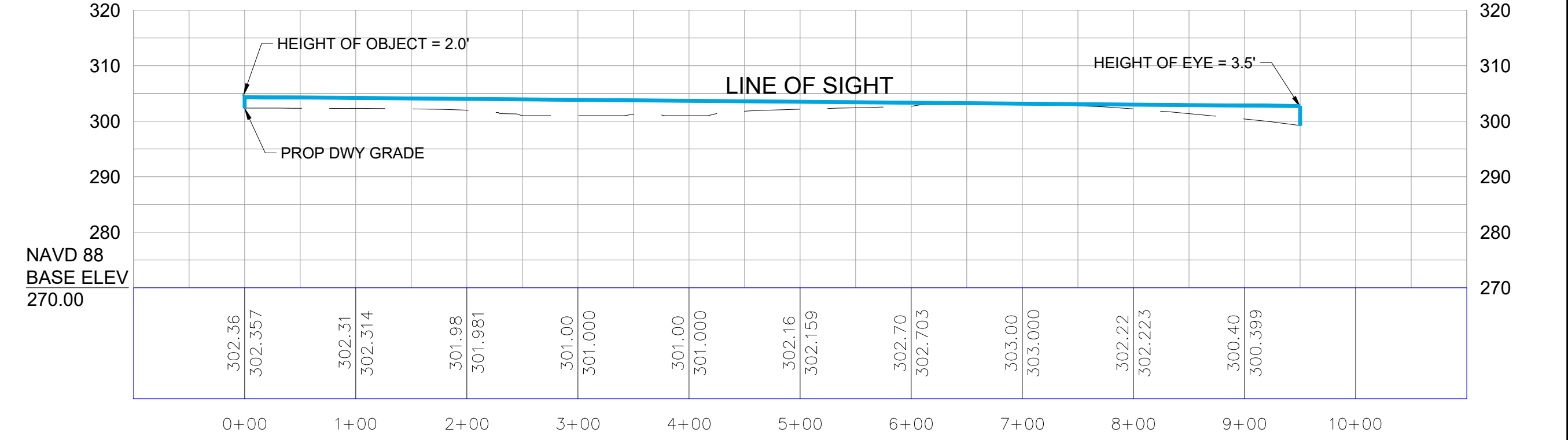
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.01



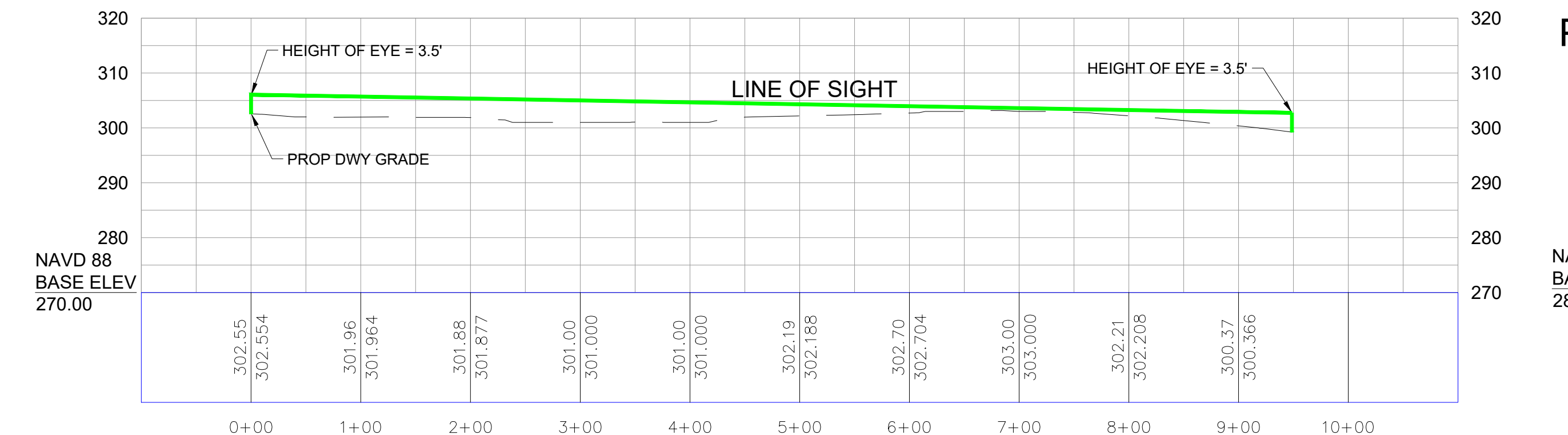
PROFILE: ISD TO/FROM SOUTH (1,000 FEET)



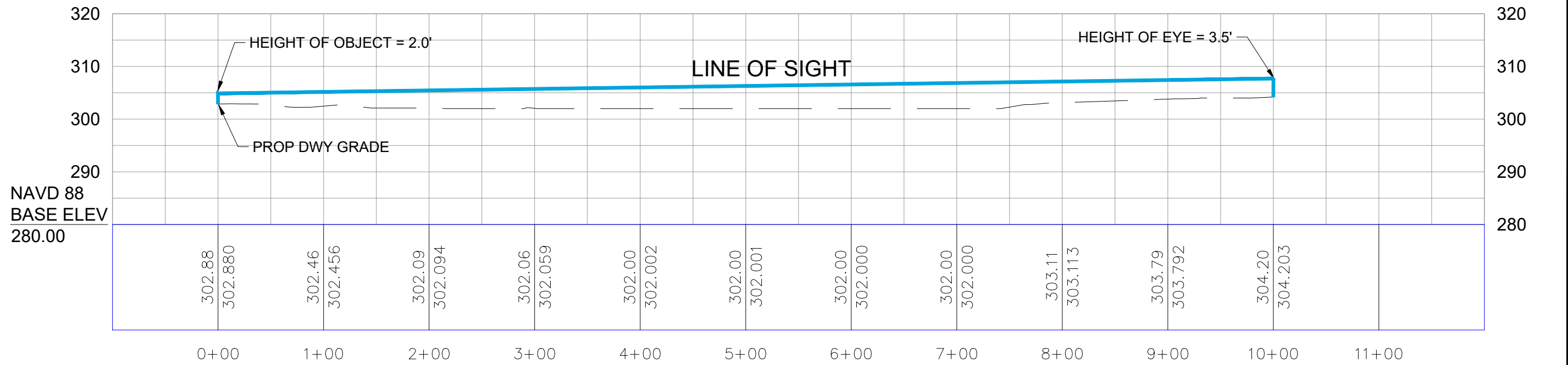
PROFILE: SSD TO/FROM NORTH (950 FEET)



PROFILE: ISD TO/FROM NORTH (950 FEET)



PROFILE: SSD TO/FROM SOUTH (1,000 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYS DOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE.



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PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

LAKE ROAD SOMERSET, NY

SHEET TITLE & DESCRIPTION:

DRIVEWAY SIGHT DISTANCE PLAN AND PROFILES AREA 3 AT HOSMER ROAD

PRELIMINARY NOT FOR CONSTRUCTION

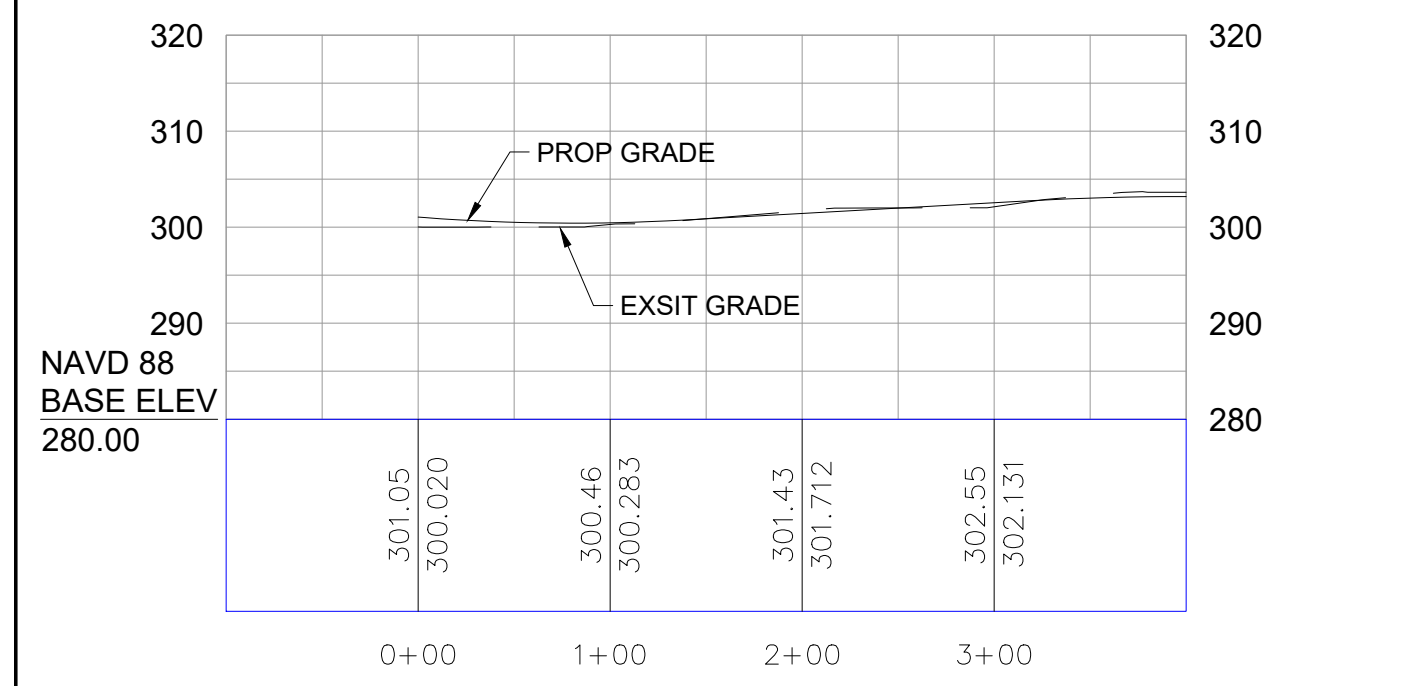
PROJ NUM:	SU02.0012
DES:	94-C SUBMITTAL
DWN:	
CHK:	
APV:	BMS
DATE:	12/14/2022

SCALE AT 22" x 34":

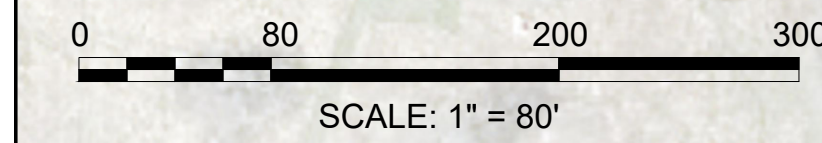
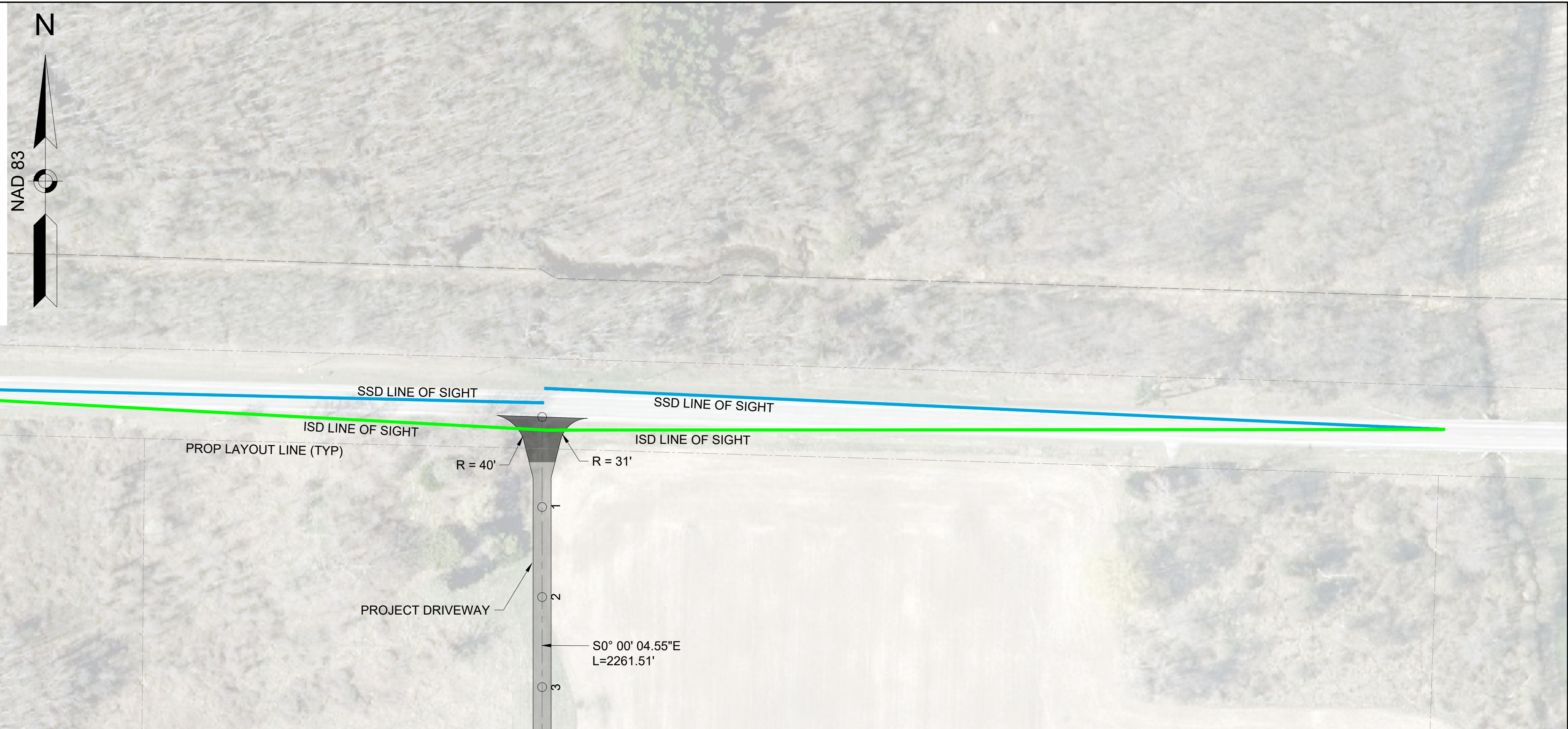
AS SHOWN

SHEET NO:	REV:
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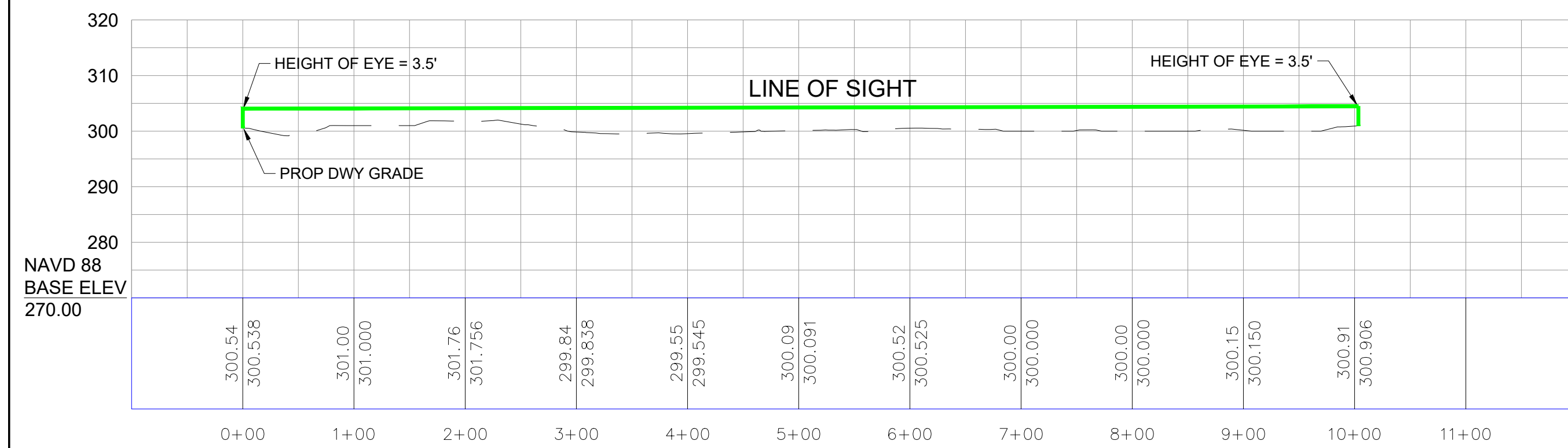
PROFILE: SITE ENTRANCE



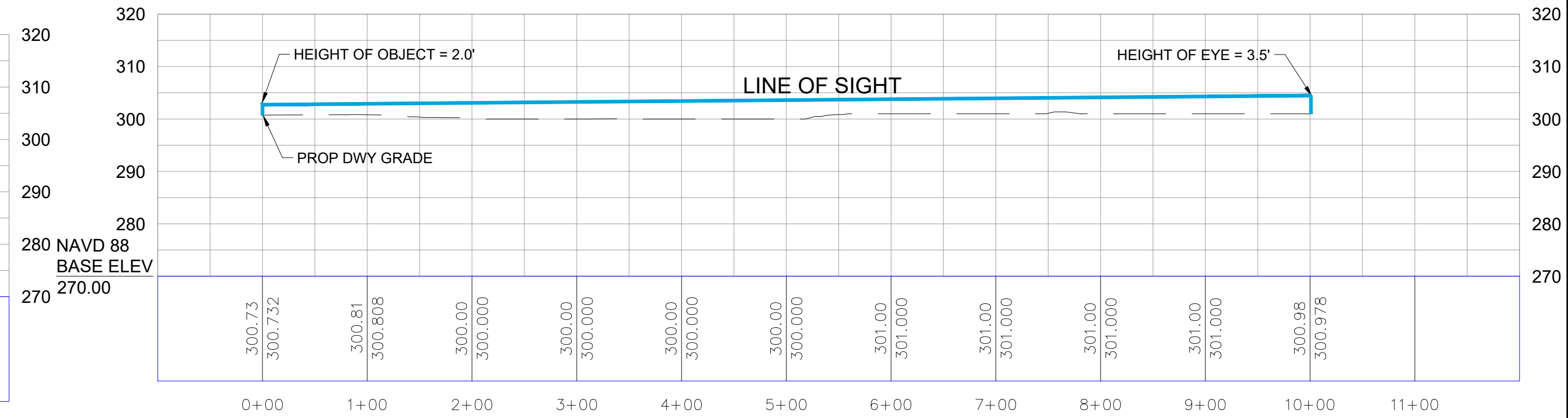
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.02



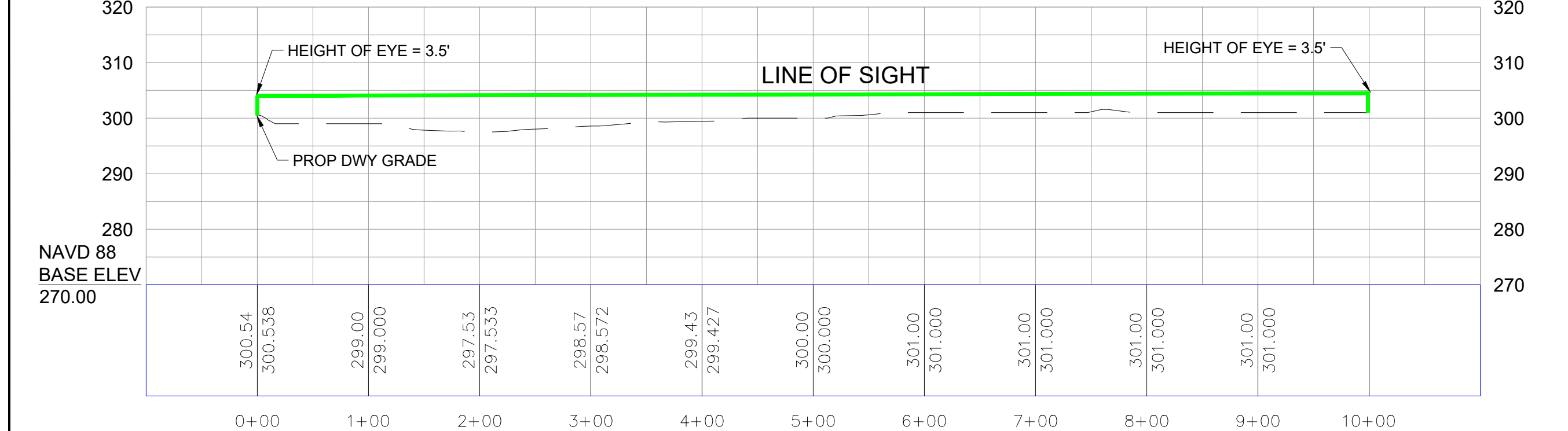
PROFILE: ISD TO/FROM WEST (1,000 FEET)



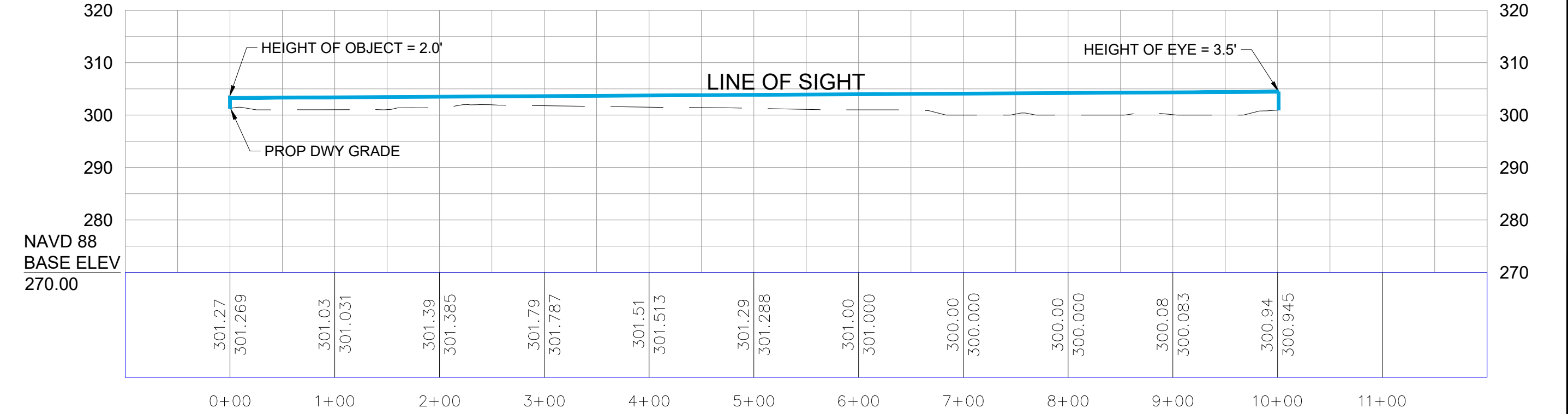
PROFILE: SSD TO/FROM EAST (1,000 FEET)



PROFILE: ISD TO/FROM EAST (1,000 FEET)



PROFILE: SSD TO/FROM WEST (1,000 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYS DOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE.



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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

LAKE ROAD
SOMERSET, NY

SHEET TITLE & DESCRIPTION:

DRIVEWAY SIGHT
DISTANCE PLAN AND
PROFILES
AREA 4 AT LAKE ROAD

PRELIMINARY
NOT FOR CONSTRUCTION

PROJ NUM: SU02.0012

DES: 94-C SUBMITTAL

DWN:

CHK:

APV: BMS

DATE: 12/14/2022

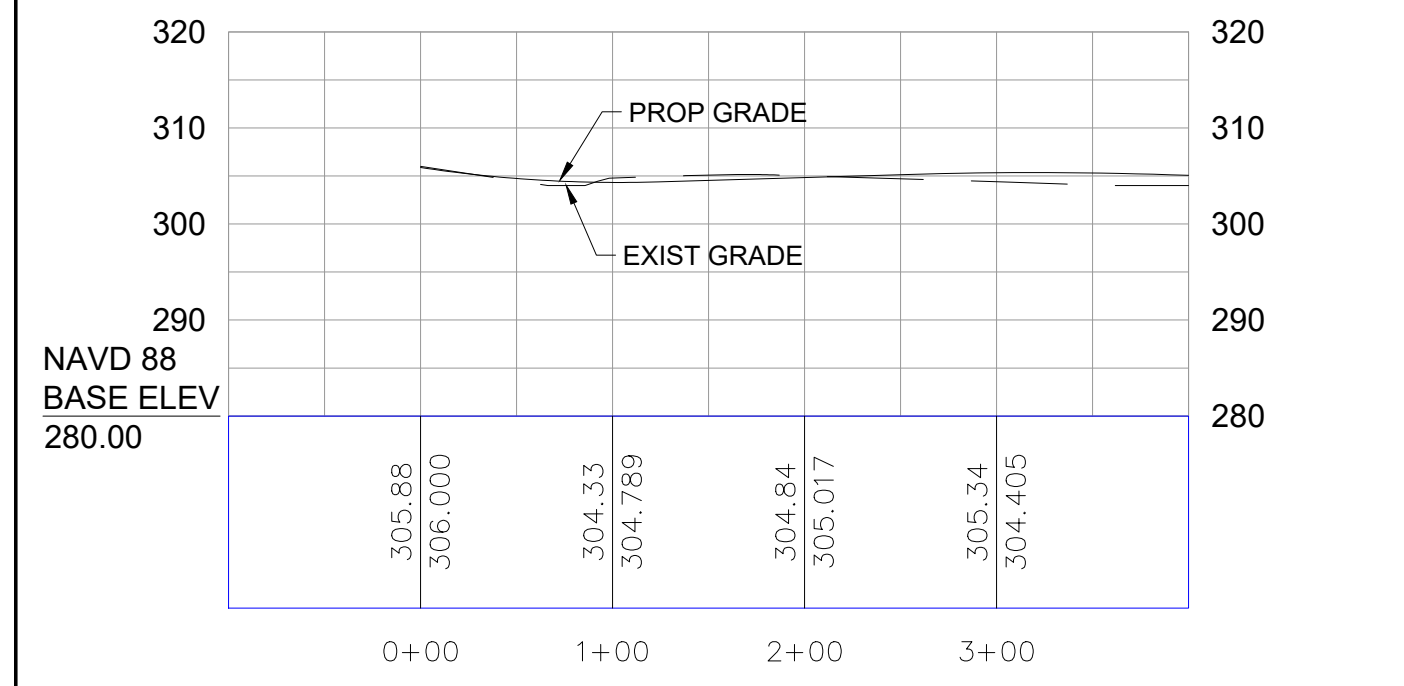
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AS SHOWN

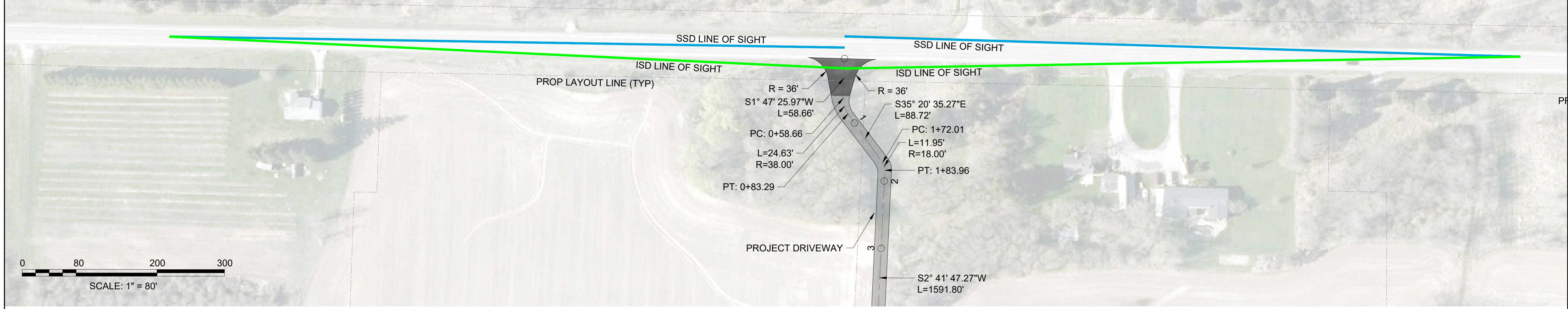
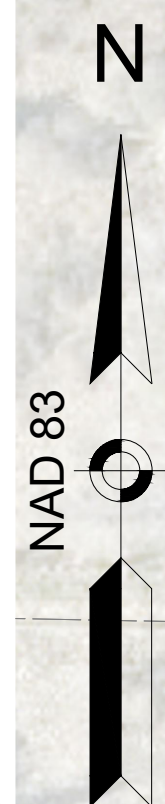
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REV:

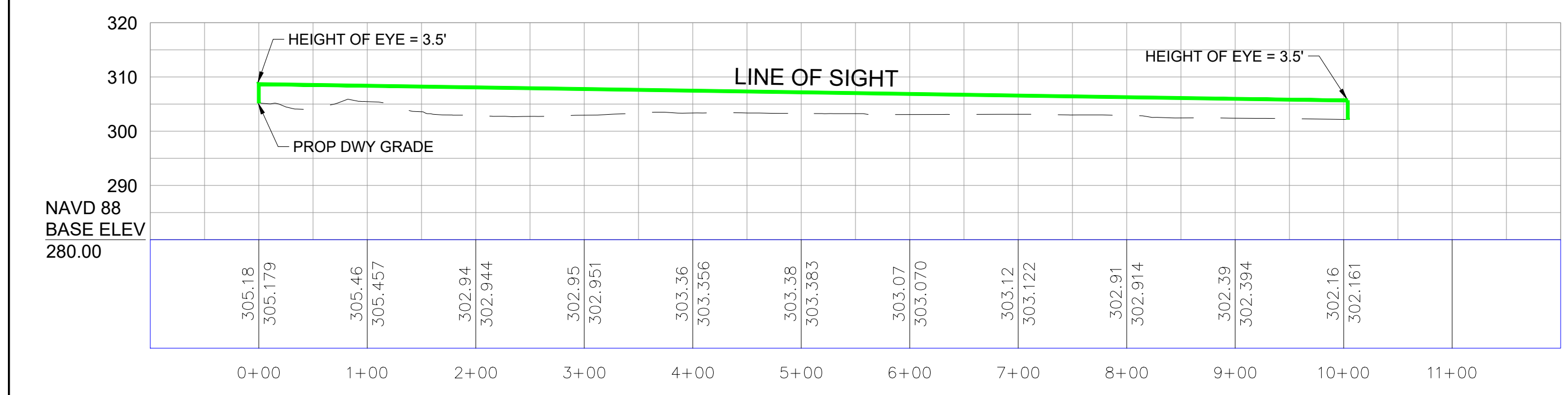
PROFILE: SITE ENTRANCE



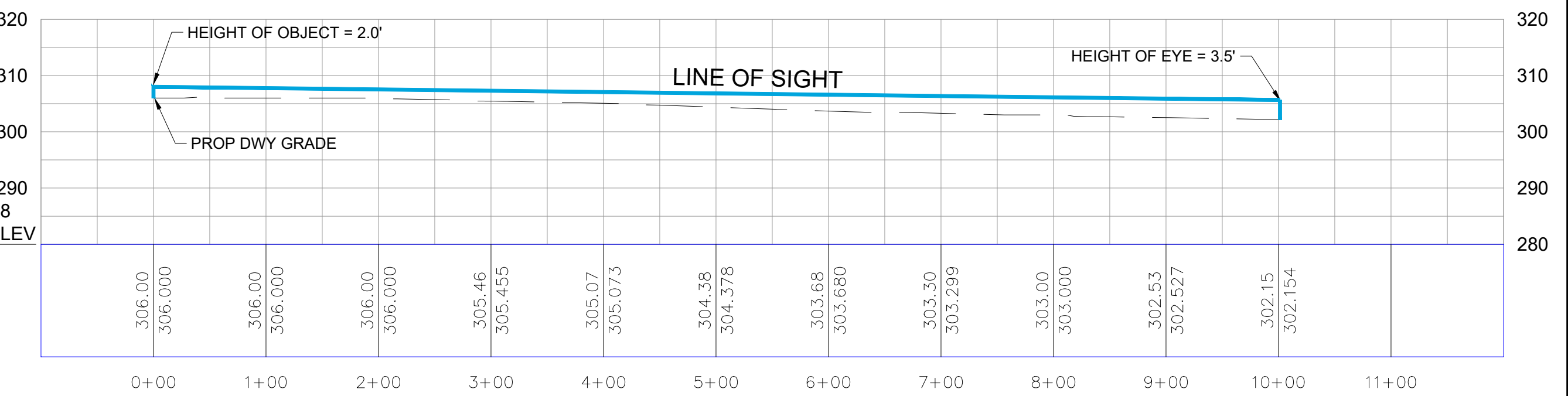
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.02



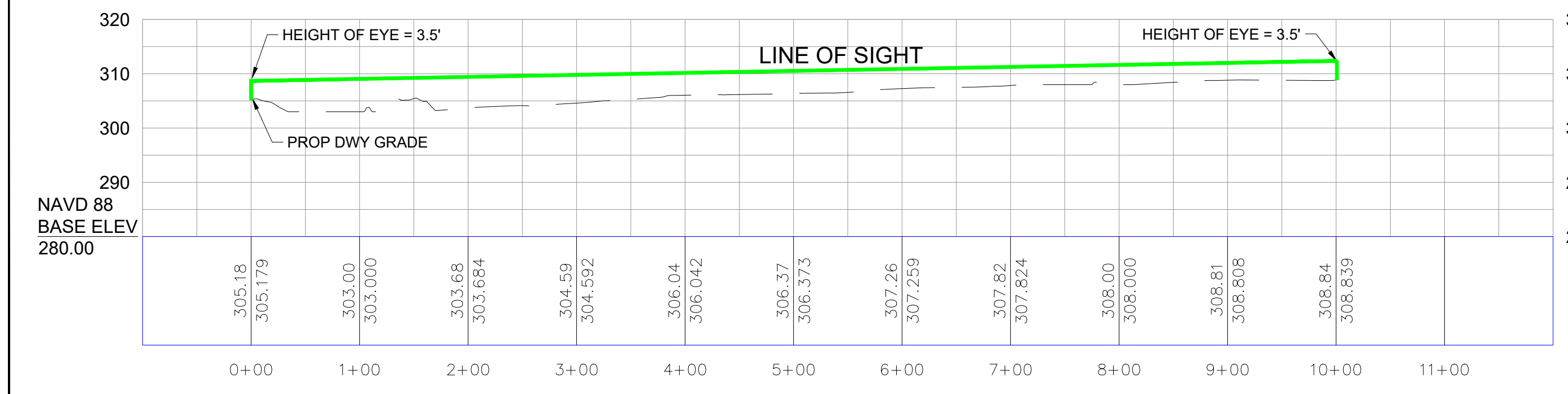
PROFILE: ISD TO/FROM WEST (1,000 FEET)



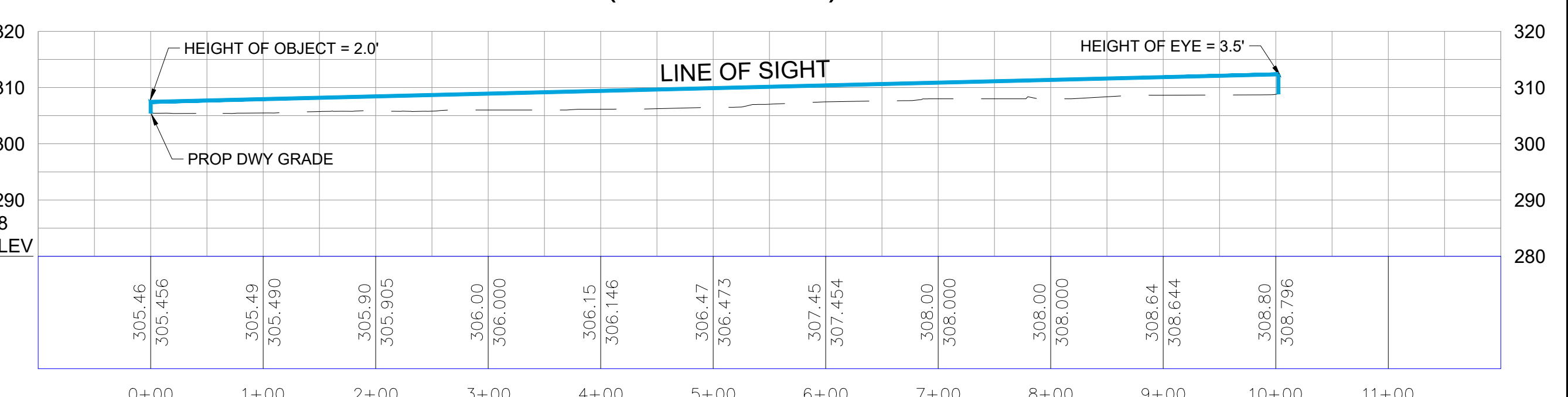
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PROFILE: ISD TO/FROM EAST (1,000 FEET)



PROFILE: SSD TO/FROM EAST (1,000 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYSOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE.



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PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

**LAKE ROAD
SOMERSET, NY**

SHEET TITLE & DESCRIPTION:

**DRIVEWAY SIGHT
DISTANCE PLAN AND
PROFILES
AREA 5 AT LAKE ROAD**

PROJ NUM: SU02.0012

DES: 94-C SUBMITTAL

DWN:

CHK:

APV: BMS

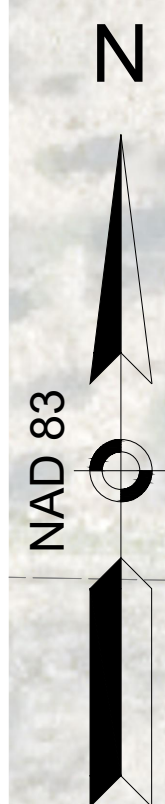
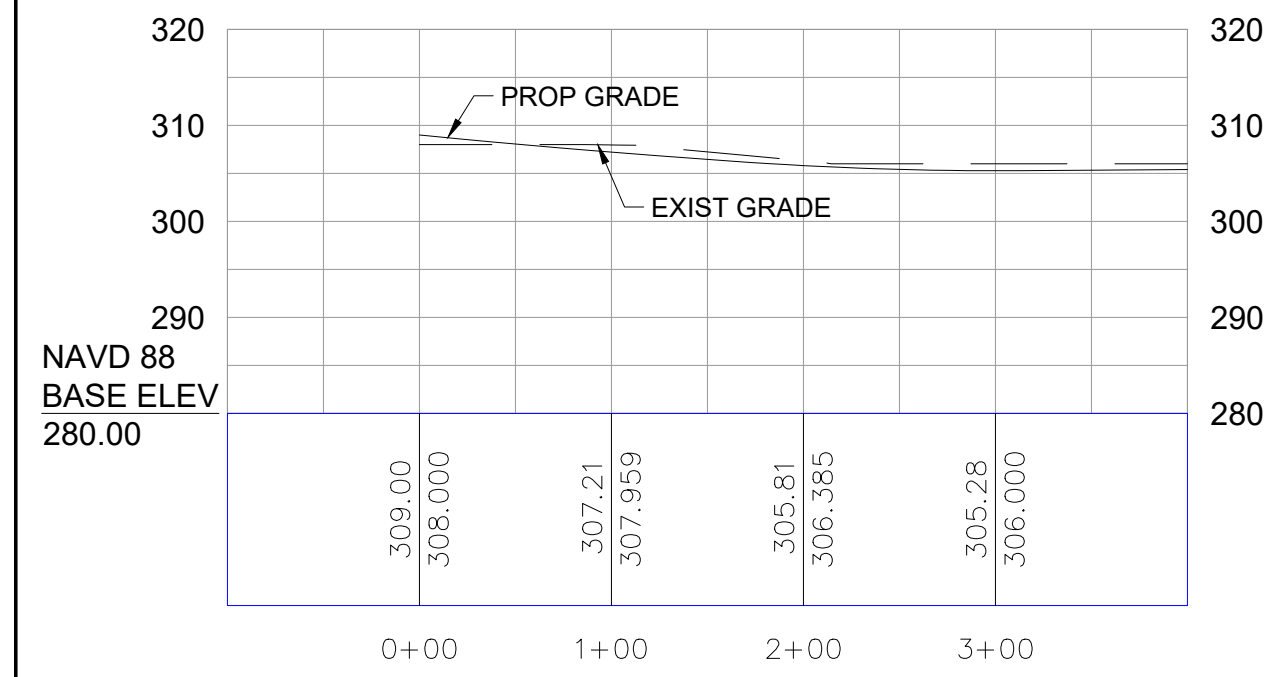
DATE: 12/14/2022

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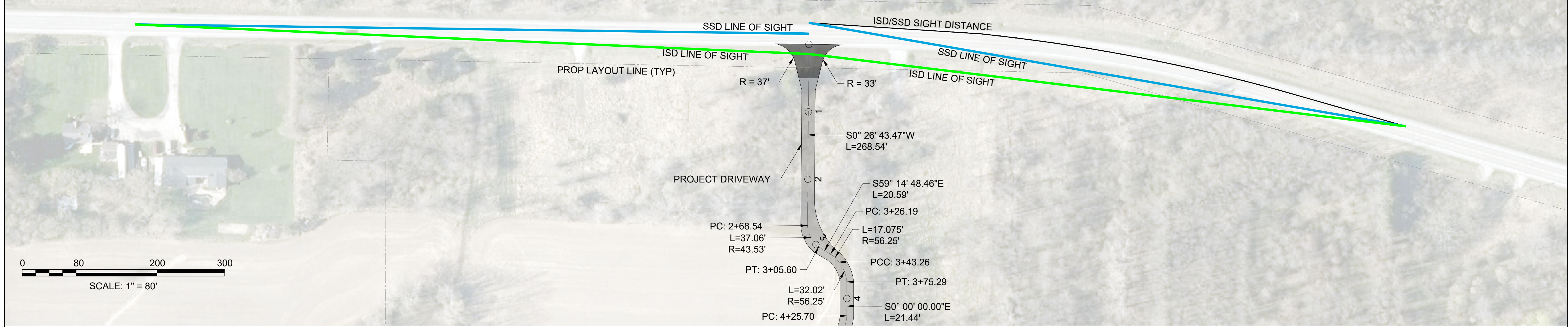
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SHEET NO: REV:

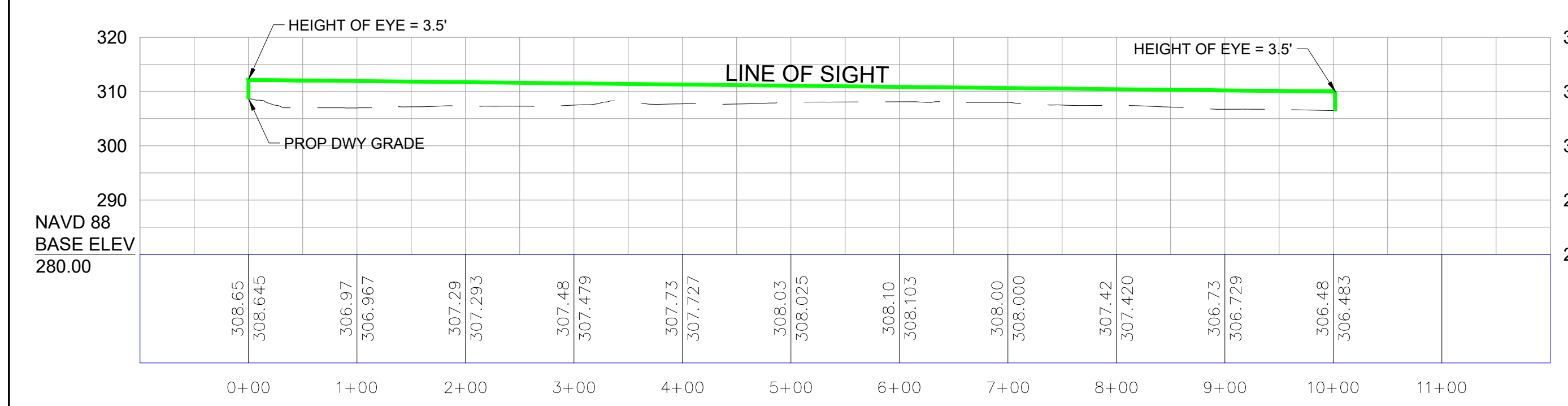
PROFILE: SITE ENTRANCE



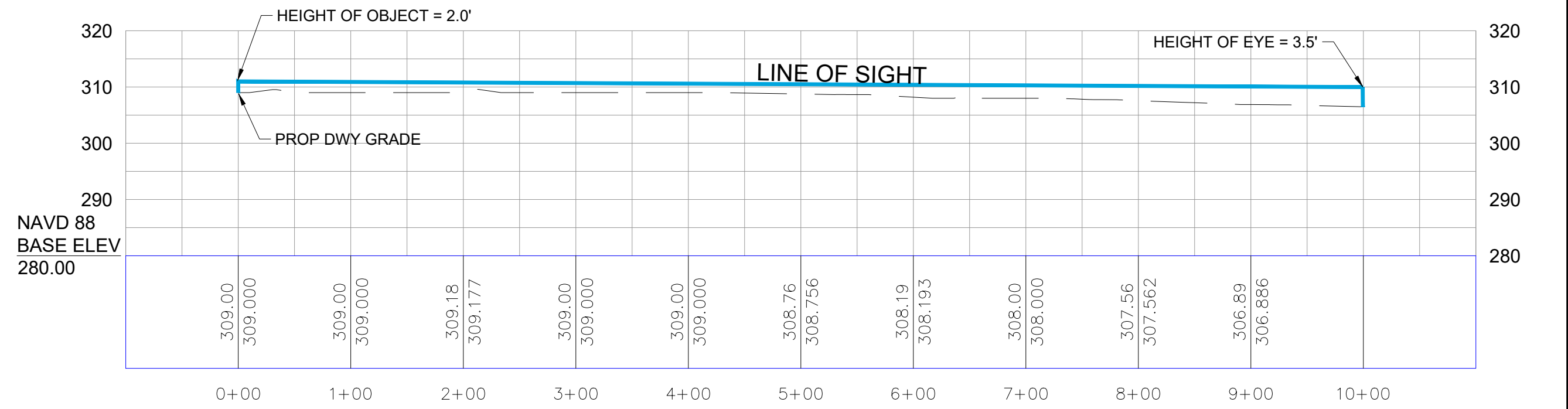
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.02



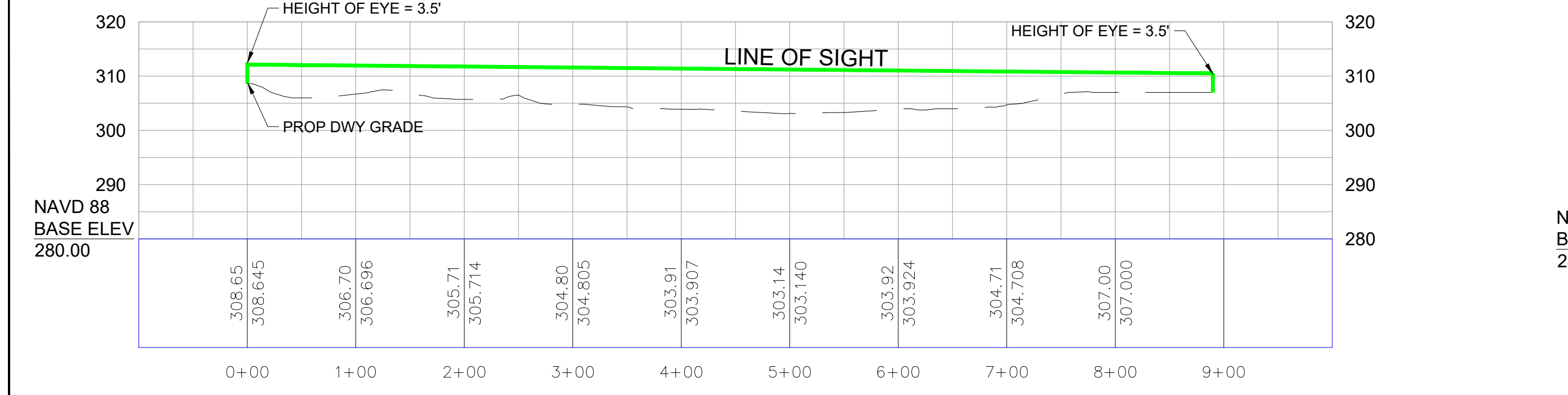
PROFILE: ISD TO/FROM WEST (1,000 FEET)



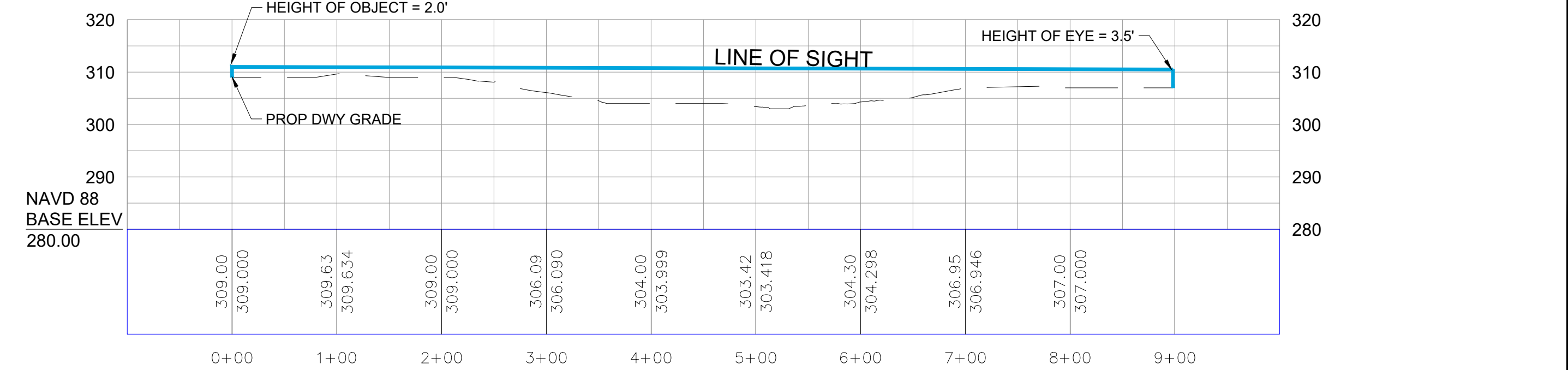
PROFILE: SSD TO/FROM EAST (1,000 FEET)



PROFILE: ISD TO/FROM EAST (>850 FEET)



PROFILE: SSD TO/FROM WEST (900 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYS DOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE.



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PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

**LAKE ROAD
SOMERSET, NY**

SHEET TITLE & DESCRIPTION:

**DRIVEWAY SIGHT
DISTANCE PLAN AND
PROFILES
AREA 6 AT LAKE ROAD**

PROJ NUM: SU02.0012

DES: 94-C SUBMITTAL

DWN:

CHK:

APV: BMS

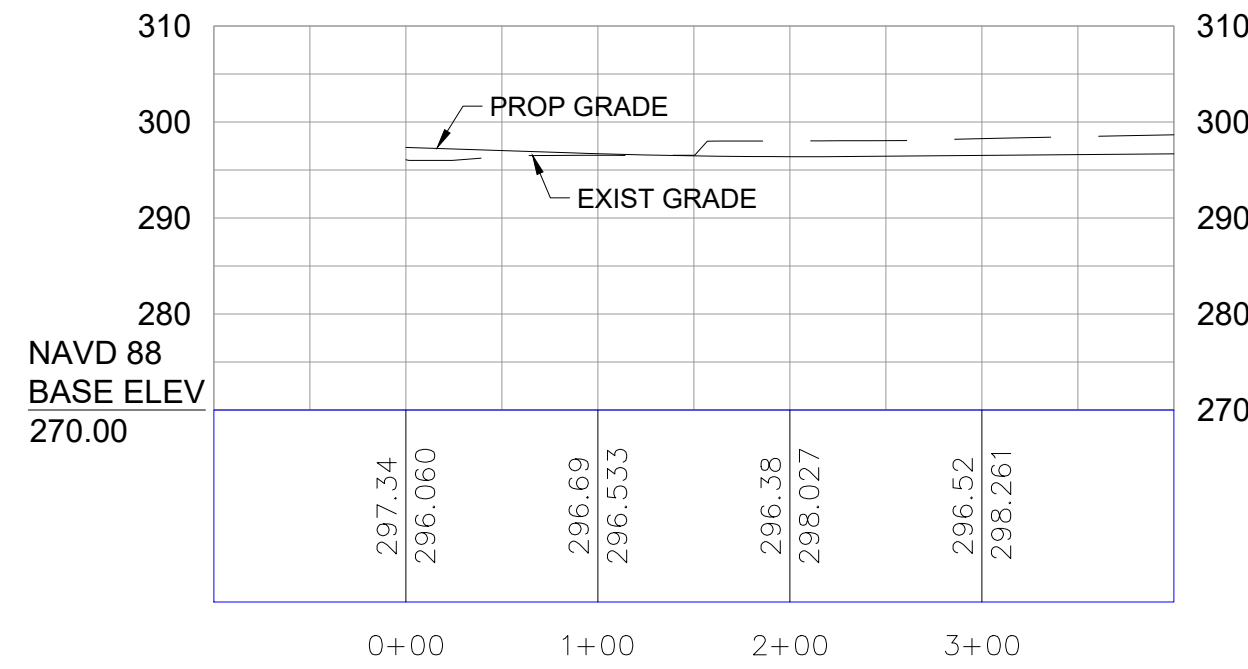
DATE: 12/14/2022

SCALE AT 22" x 34":

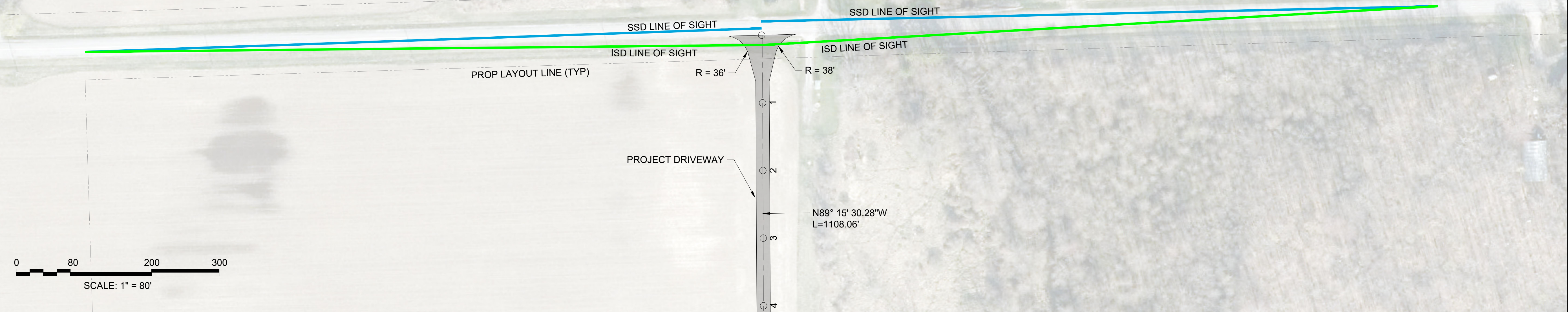
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SHEET NO: REV:

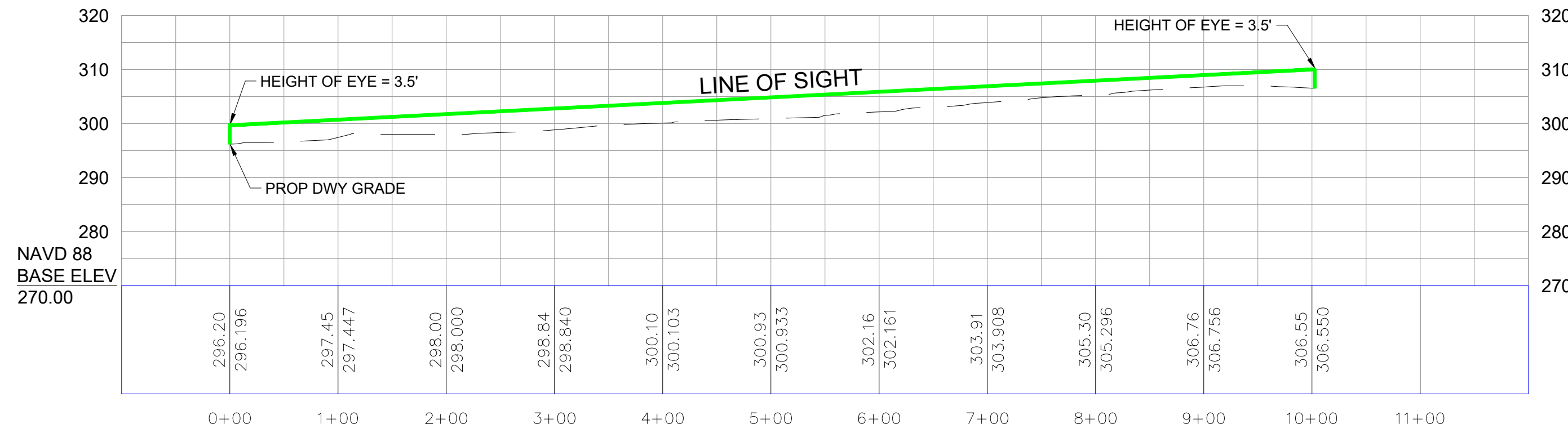
PROFILE: SITE ENTRANCE



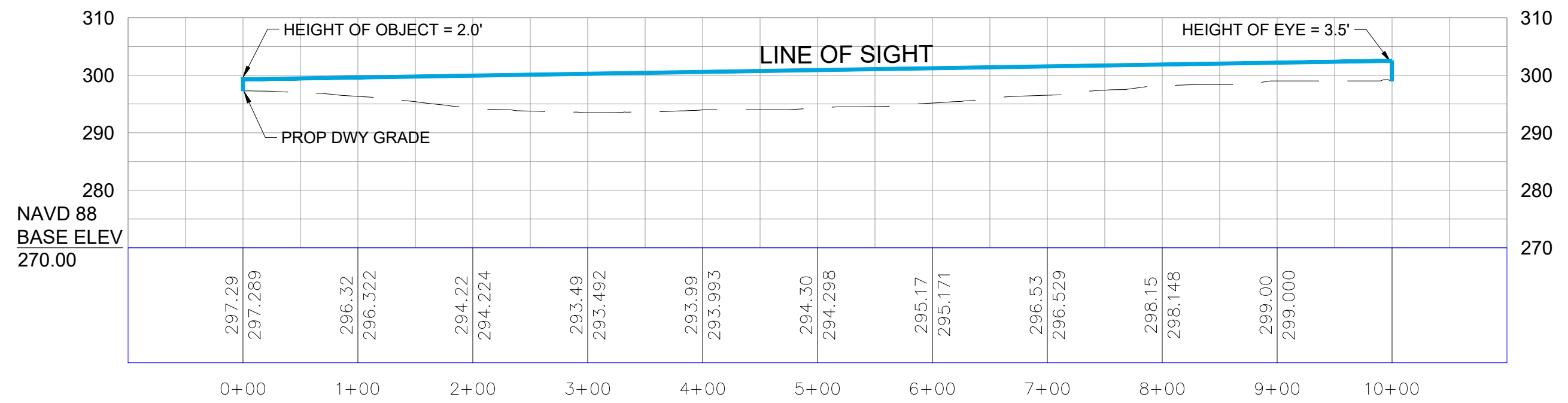
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.02



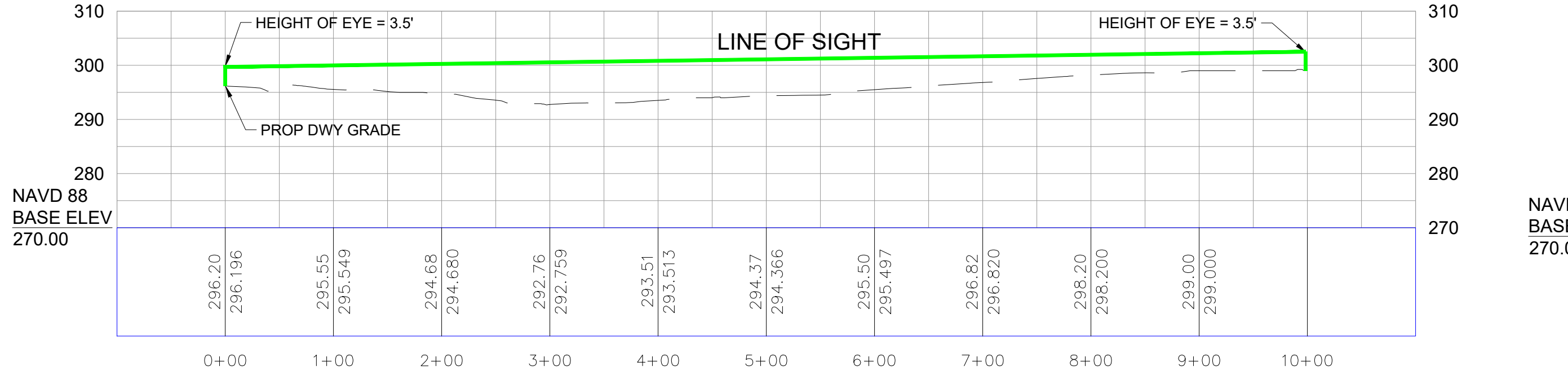
PROFILE: ISD TO/FROM SOUTH (1,000 FEET)



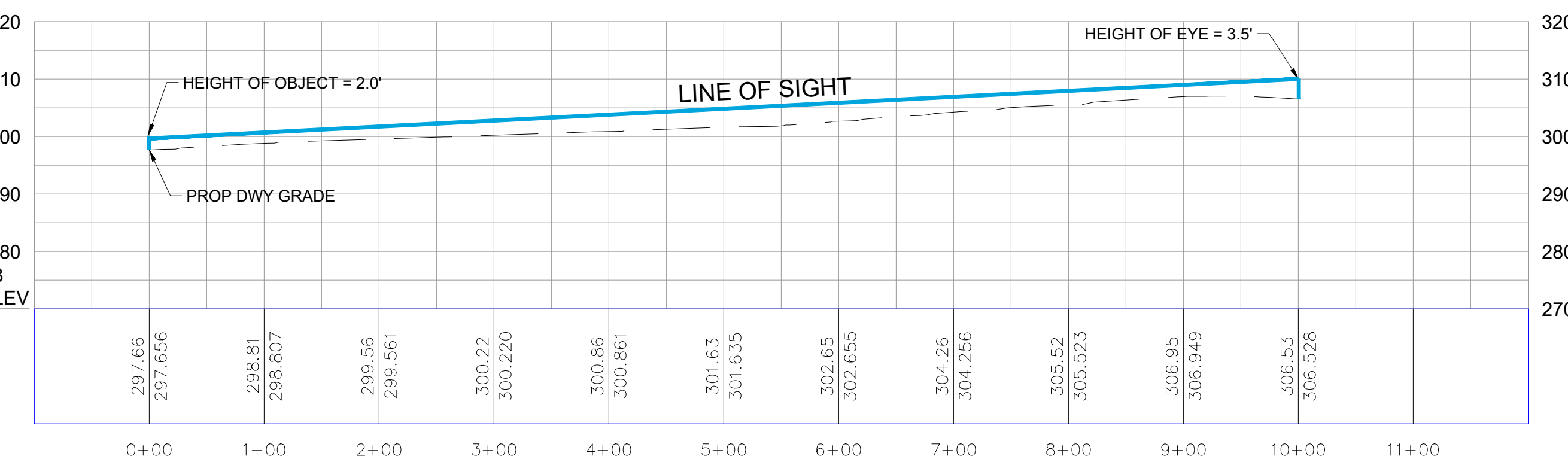
PROFILE: SSD TO/FROM SOUTH (1,000 FEET)



PROFILE: ISD TO/FROM NORTH (1,000 FEET)



PROFILE: SSD TO/FROM NORTH (1,000 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYS DOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE.



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KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

LAKE ROAD
SOMERSET, NY

SHEET TITLE & DESCRIPTION:

**DRIVEWAY SIGHT
DISTANCE PLAN AND
PROFILES
AREA 7 AT HARTLAND ROAD**

PRELIMINARY
NOT FOR CONSTRUCTION

PROJ NUM: SU02.0012

DES: 94-C SUBMITTAL

DWN:

CHK:

APV: BMS

DATE: 12/14/2022

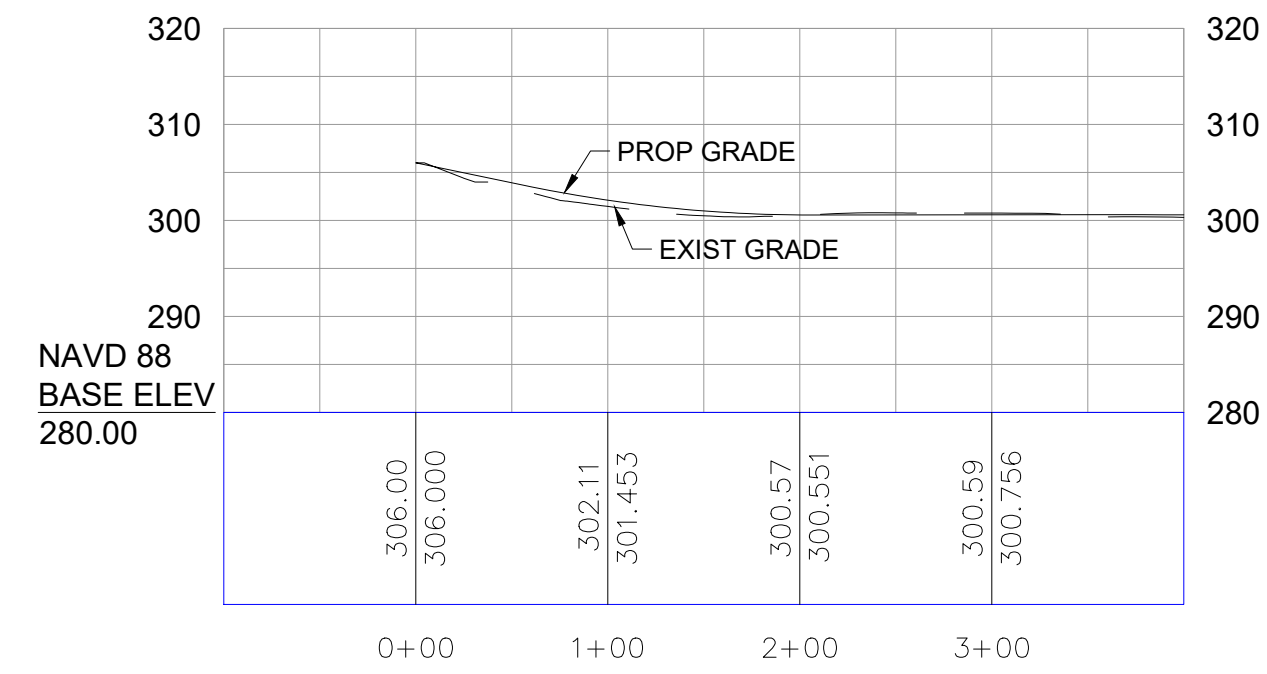
SCALE AT 22" x 34":

AS SHOWN

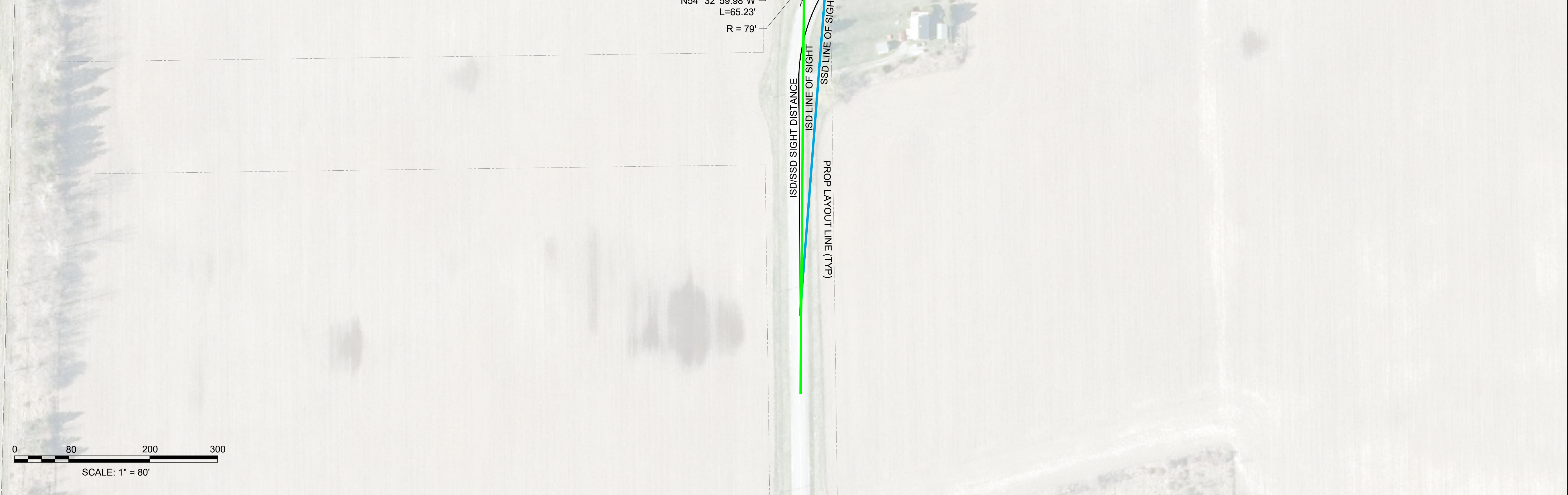
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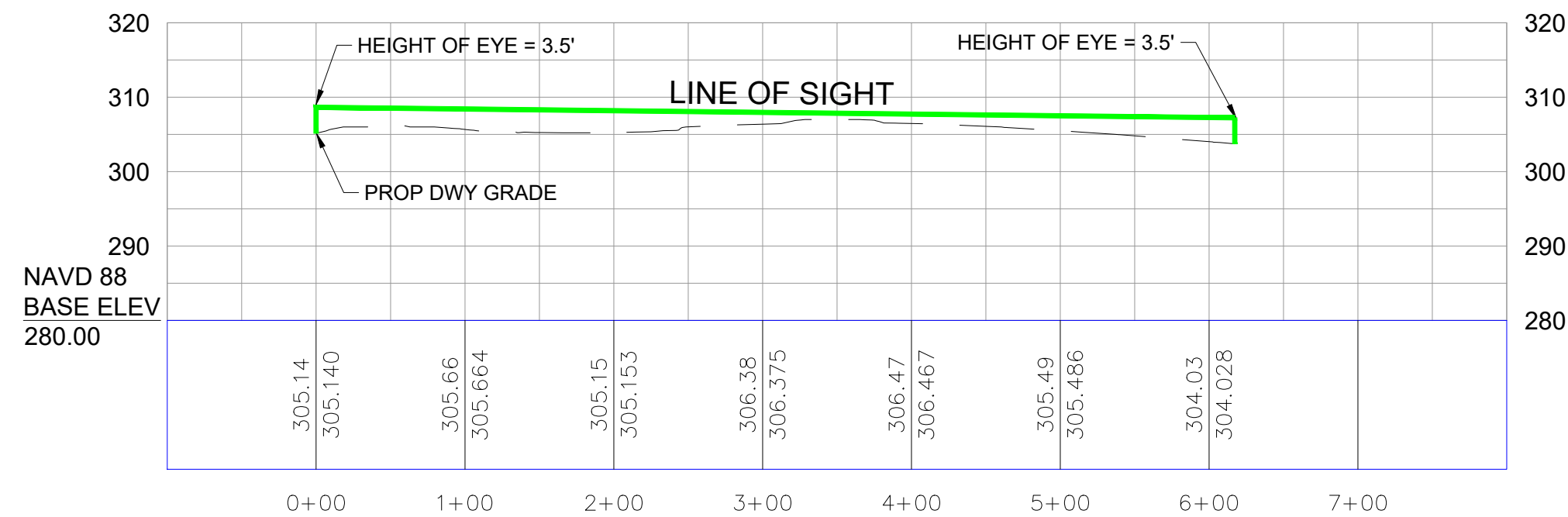
PROFILE: SITE ENTRANCE



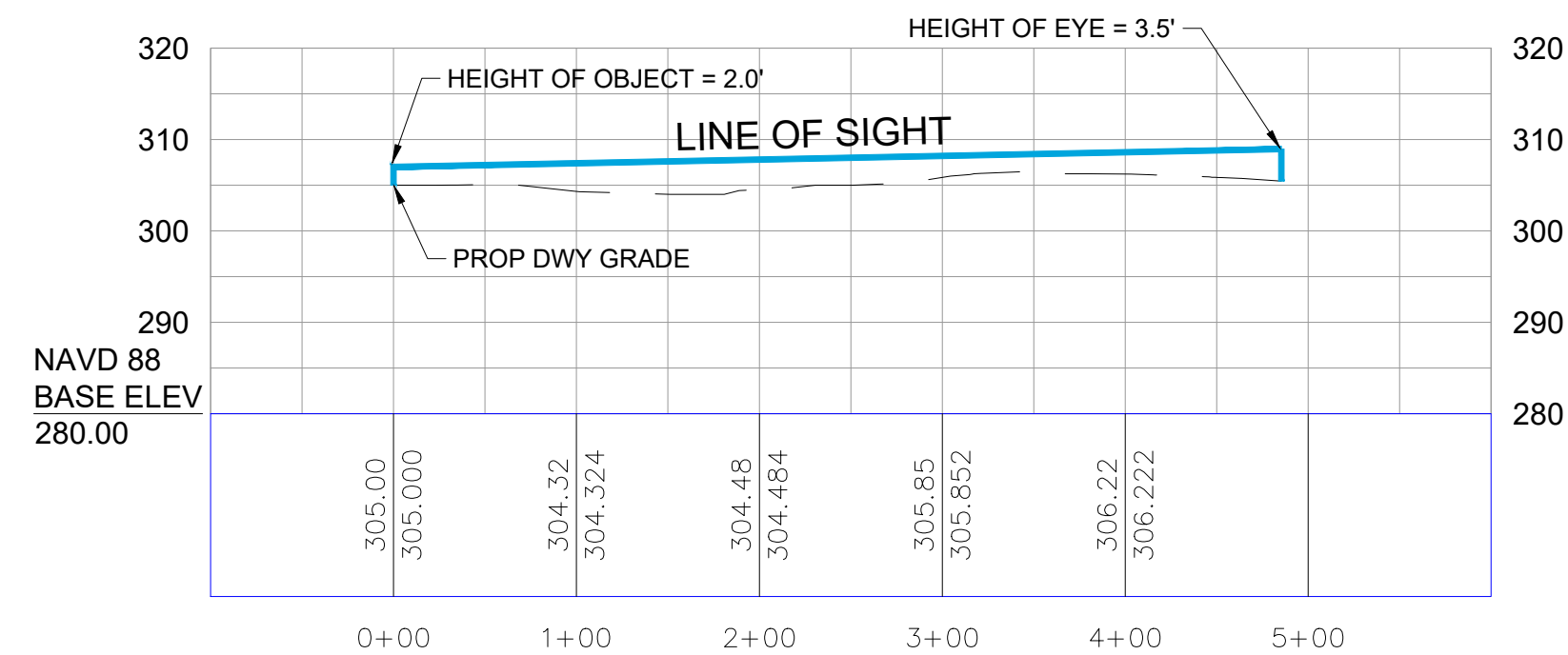
NOTE: SEE FULL DRIVEWAY PROFILE ON SHEET PV-C.06.02



PROFILE: ISD TO/FROM SOUTH (610 FEET)



PROFILE: SSD TO/FROM SOUTH (495 FEET)



NOTE: SIGHT DISTANCE BASED ON AASHTO AND NYSDOT GUIDELINES; ALL OBJECTS AND VEGETATION WITHIN THE SIGHT TRIANGLES SHOULD BE KEPT TO A HEIGHT OF 2 FEET OR LESS SO AS NOT TO IMPEDE SIGHT DISTANCE. PROFILE TO AND FROM THE EAST (LT) IS UNAVAILABLE DUE TO LACK OF SURVEY AND AVAILABLE SIGHT DISTANCE BASED ON FIELD MEASUREMENTS, PHOTOS AND AERIAL IMAGERY



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PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
A	08/05/2022	94-C SUBMITTAL

PROJECT TITLE:

SOMERSET SOLAR PROJECT

PROJECT LOCATION:

LAKE ROAD
SOMERSET, NY

SHEET TITLE & DESCRIPTION:

DRIVEWAY SIGHT DISTANCE PLAN AND PROFILES AREA 8 AT HARTLAND ROAD

PRELIMINARY
NOT FOR CONSTRUCTION

PROJ NUM: SU02.0012

DES: 94-C SUBMITTAL

DWN:

CHK:

APV: BMS

DATE: 12/14/2022

SCALE AT 22" x 34":

AS SHOWN

SHEET NO:

REV:

DESIGN CRITERIA

Exhibit 2-7 Design Criteria for Non-NHS Local Rural Roads

Design Speed	Travel Lane Width (ft.) Based on Design Year AADT ^{1,2}			Turn Lane (ft.)		Max. Percent Grade			Min. Stopping Sight Distance (ft.)	Min. Radius Curve (ft.) e _{max} = 8%
	AADT Under 400	AADT 400-2,000 ³	AADT Over 2,000 ⁴	Minimum	Desirable	Terrain				
						Level	Rolling	Mountainous		
20	9	10	11	10	Match Travel Lane Width	8	11	16	97	70
25	9	10	11			7	11	15	133	113
30	9	10	11			7	11	15	175	167
35	9	10	11			7	10	14	220	233
40	9	10	11			7	10	13	271	314
45	10	11	11			7	9	12	327	409
50	10	11	11			6	8	10	387	521
55	11	11	11			6	7	10	452	651
Shoulder Width (ft) ¹				Notes:						
All Speeds	2 ^{5,6}	4 ⁶	6	<ol style="list-style-type: none"> For bridges, refer to the NYS DOT Bridge Manual, Section 2. Where the Bridge Manual only furnishes roadway width, subtract the lane width on this table from the roadway width to determine the shoulder width. Minimum travel lane width is 10 ft. for routes designated as Access Highways and for routes within 1 mile of Qualifying Highways on the National Network (1982 STAA Highways). For roads in mountainous terrain with a design volume under 3,000 AADT and a design speed of 40 mph or less, use 9 ft. lanes (except where Note 2 applies). 12 ft. lanes should be considered where the crash rate is above the statewide rate for similar facilities and there is substantial truck traffic. The minimum shoulder width is 4 ft. if roadside barrier is used on low-volume roads. In uncurbed areas, a 4 ft. min. shoulder width is recommended where the route is a designated bicycle route or anticipated bicycle demand is high and cyclists will be accommodated on the shoulder. In curbed areas, a 4 ft. min. width shoulder, 5 ft. min. width bicycle lane or 13 ft. min. shared lane should be provided where there is high bicycling demand and/or a bicycle route is present and no parallel bicycle facility present. If neither the min. width shoulder nor lane can be provided, a justification is required for the nonstandard shoulder width. Refer to HDM §2.6.2.1 and Exhibit 2-1a. 						

**APPENDIX 5C
INTERSECTION SIGHT DISTANCE CHARTS**

Table 5C-3 Design Intersection Sight Distance (in feet) - Case B1 - Left Turn From Stop

Design speed (mph)	Passenger Car Lanes Crossed			Single-Unit Truck Lanes Crossed			Combination Truck Lanes Crossed		
	1	2	3	1	2	3	1	2	3
15	170	180	190	210	225	245	255	270	285
20	225	240	250	280	300	325	340	360	380
25	280	295	315	350	375	405	425	450	475
30	335	355	375	420	450	485	510	540	570
35	390	415	440	490	525	565	595	630	665
40	445	475	500	560	600	645	680	720	760
45	500	530	565	630	675	725	765	810	855
50	555	590	625	700	750	805	850	900	950
55	610	650	690	770	825	885	930	990	1045
60	665	710	750	840	900	965	1015	1080	1140
65	720	765	815	910	975	1045	1100	1170	1235
70	775	825	875	980	1050	1125	1185	1260	1330

Sight Distance Calculations

Location: Hartland Road at Proposed Solar Driveway

STOPPING SIGHT DISTANCE:

STOPPING SIGHT DISTANCE FROM SOUTH

Inputs

V= speed, mph	V= 55 (Design Speed)
G= percent of grade	G= 0 (%)
t= brake reaction time	t= 2.5
a= deceleration rate, ft/sec ²	a= 11.2

Calculations

Brake Reaction Distance	$1.47Vt$	202 feet
Braking Distance	$\frac{V^2}{30(a/32.2)+G}$	289.9 feet
Stopping Sight Distance =	$1.47Vt + \frac{V^2}{30(a/32.2)+G}$	495 feet

STOPPING SIGHT DISTANCE FROM NORTH

Inputs

V= speed, mph	V= 55 (Design Speed)
G= percent of grade	G= 0 (%)
t= brake reaction time	t= 2.5
a= deceleration rate, ft/sec ²	a= 11.2

Calculations

Brake Reaction Distance	$1.47Vt$	202 feet
Braking Distance	$\frac{V^2}{30(a/32.2)+G}$	289.9 feet
Stopping Sight Distance =	$1.47Vt + \frac{V^2}{30(a/32.2)+G}$	495 feet

Source: A Policy on Geometric Design of Highways and Streets, 2018, Seventh Edition, prepared by AASHTO, p. 3-4 to 3-5.

INTERSECTION SIGHT DISTANCE:

INTERSECTION SIGHT DISTANCE - LEFT FROM MINOR APPROACH - TO THE SOUTH-

Inputs

V= design speed, mph	V= 55 (Design Speed)
t= time gap for minor road vehicle to enter the major road	t= 7.50 (choose value based on Table 1)

Calculations

Int. Sight Distance =	$1.47Vt$	610 feet
-----------------------	----------	----------

Table 1 - Time Gap Factors				
Design Vehicle	Time Gap ¹ , t (sec) for Grades <=3%	Grade of Minor Approach	Number of Additional Lanes to Cross	Adjusted Time Gap, t (sec)
passenger car	7.5	0%	0	7.50
single-unit truck	9.5	0%	0	9.50
combination truck	11.5	0%	0	11.50

INTERSECTION SIGHT DISTANCE - LEFT FROM MINOR APPROACH - TO THE NORTH-

Inputs

V= design speed, mph	V= 55 (Design Speed)
t= time gap for minor road vehicle to enter the major road	t= 7.50 (choose value based on Table 1)

Calculations

Int. Sight Distance =	$1.47Vt$	610 feet
-----------------------	----------	----------

Design Vehicle	Time Gap ¹ , t (sec) for Grades <=3%	Grade of Minor Approach	Number of Additional Lanes to Cross	Adjusted Time Gap, t (sec)
passenger car	7.5	0%	0	7.50
single-unit truck	9.5	0%	0	9.50
combination truck	11.5	0%	0	11.50

Notes:

1. Time Gap values are applicable for major roads with grades 3 percent or less and no median and a minor street approach with a grade of 3 percent or less. Otherwise, the table values should be adjusted.

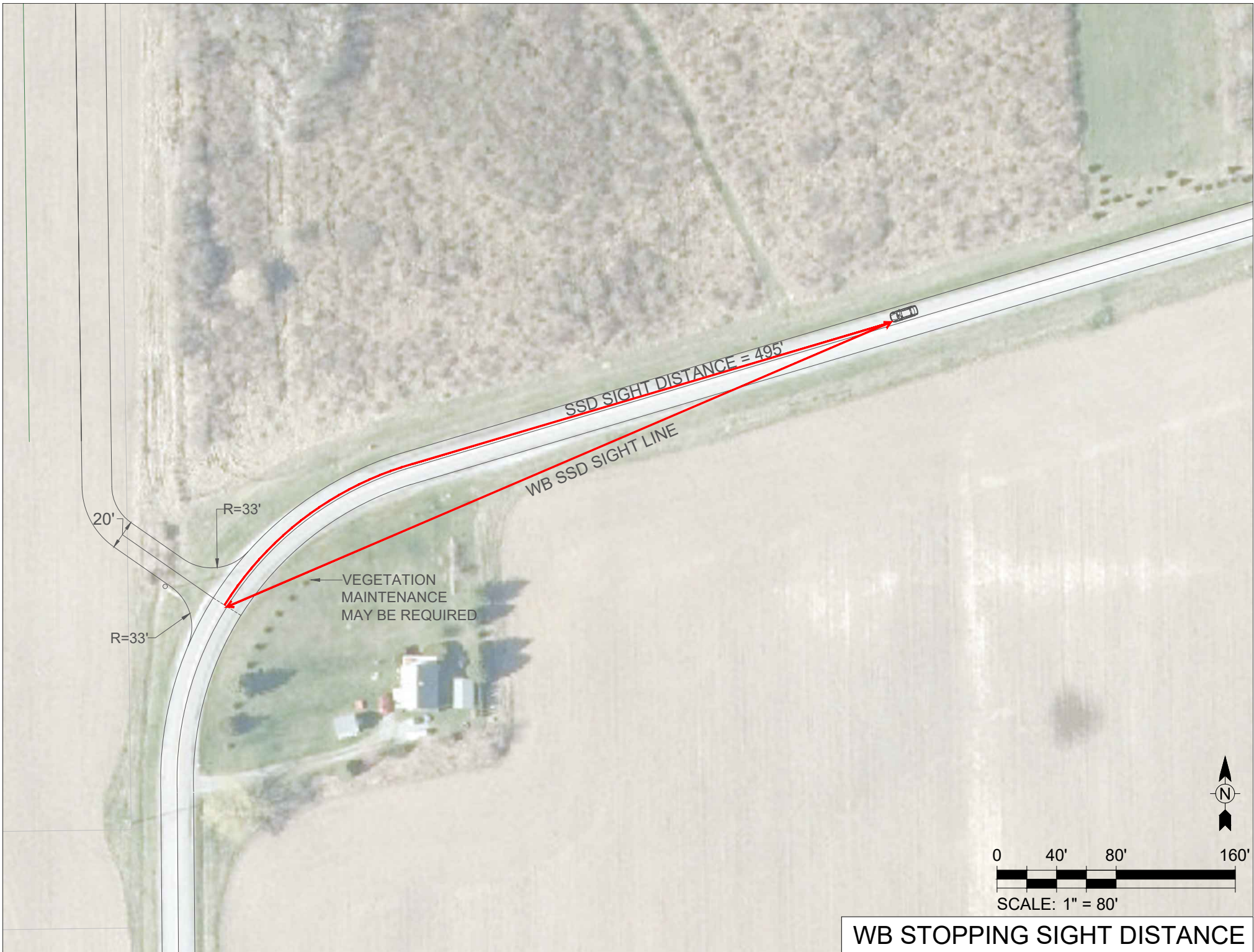
**If the minor street has an upward grade of more than 3 percent then add 0.2 sec. to t for each percent grade (including the first 3 percent).

**Increase t by 0.5 seconds (for passenger cars) or 0.7 seconds (for trucks) for every additional lane from the left, in excess of one, to be crossed by the turning vehicle.

**If the major approach is a divided highway with a median not wide enough to store the design vehicle, then the median width should be converted to equivalent lanes.

Source: A Policy on Geometric Design of Highways and Streets, 2018, Seventh Edition, prepared by AASHTO, p. 9-42 to 9-47.

Sight Distance Plans/Profiles



SSD SIGHT DISTANCE = 495'

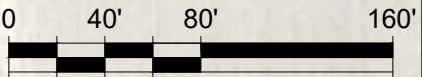
WB SSD SIGHT LINE

VEGETATION MAINTENANCE MAY BE REQUIRED

R=33'

R=33'

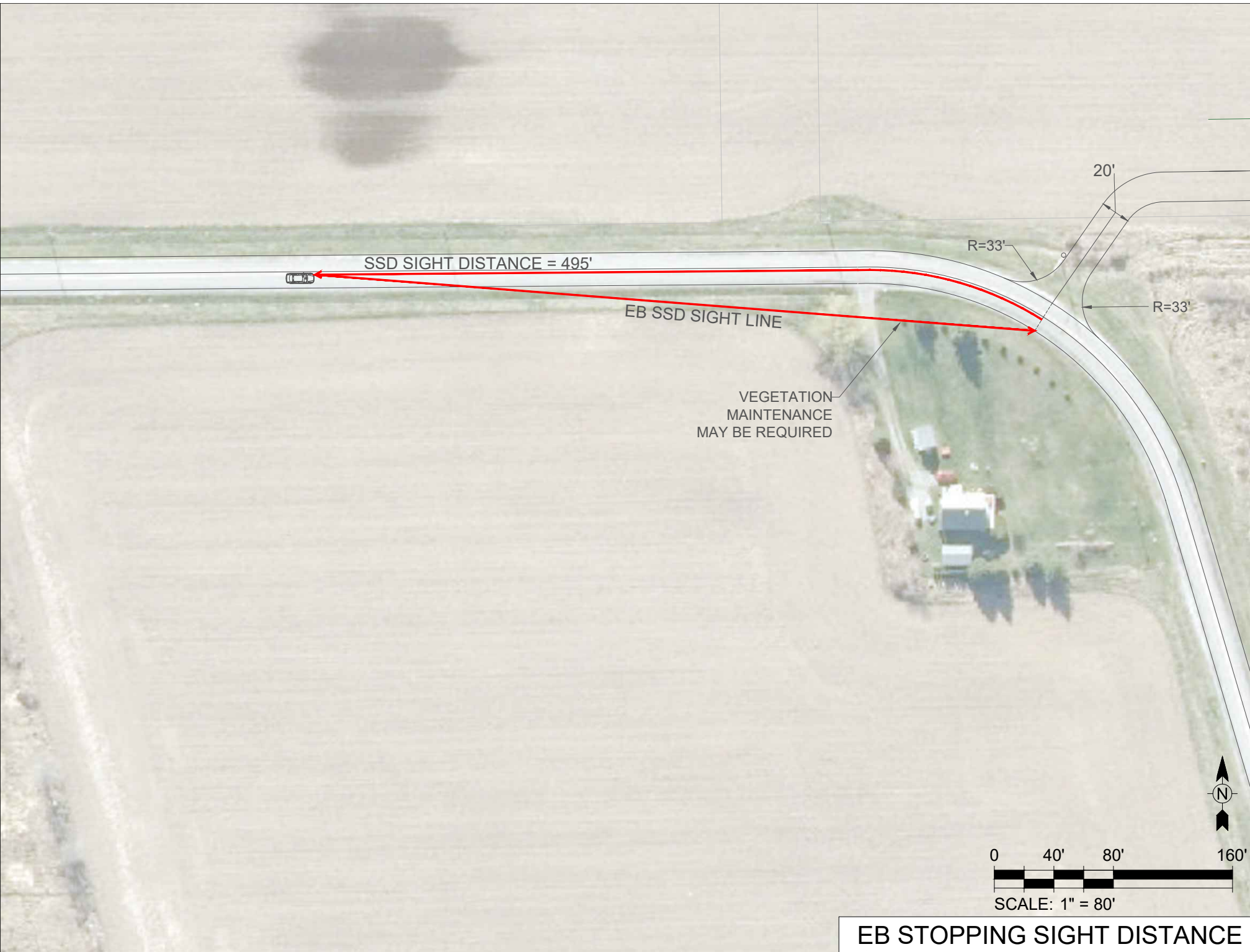
20'



SCALE: 1" = 80'

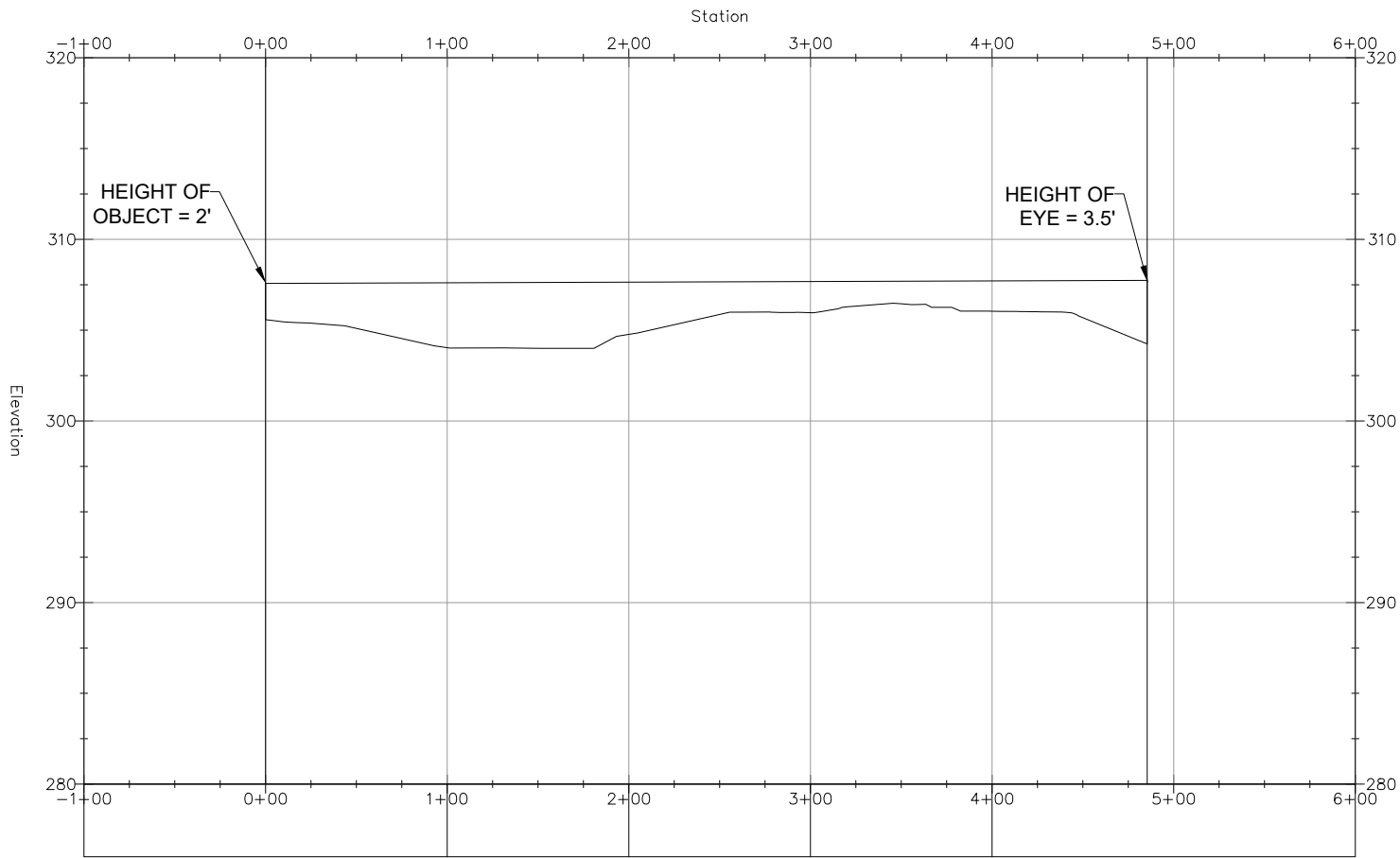


WB STOPPING SIGHT DISTANCE



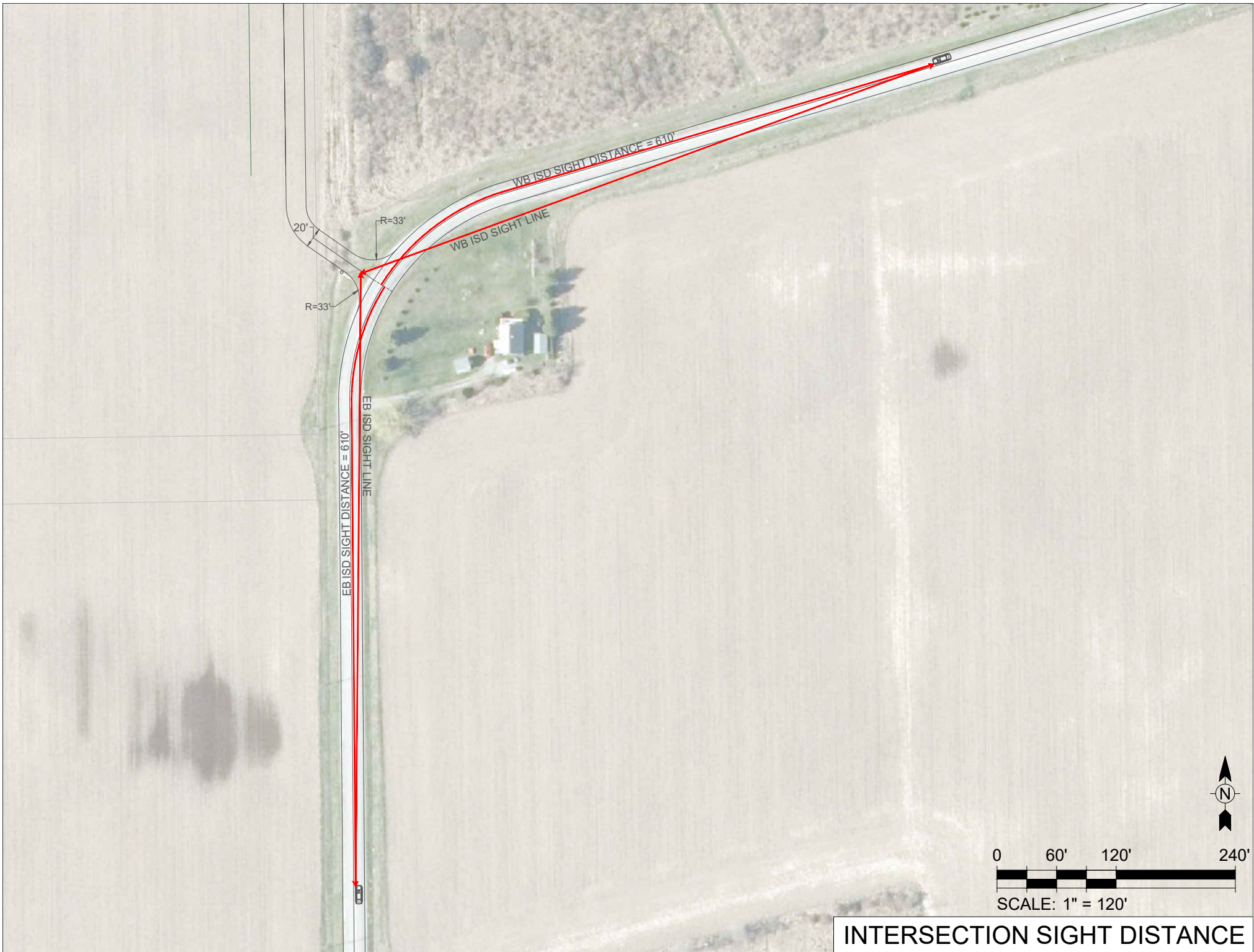
EB STOPPING SIGHT DISTANCE

Alignment - (SSD 495') PROFILE



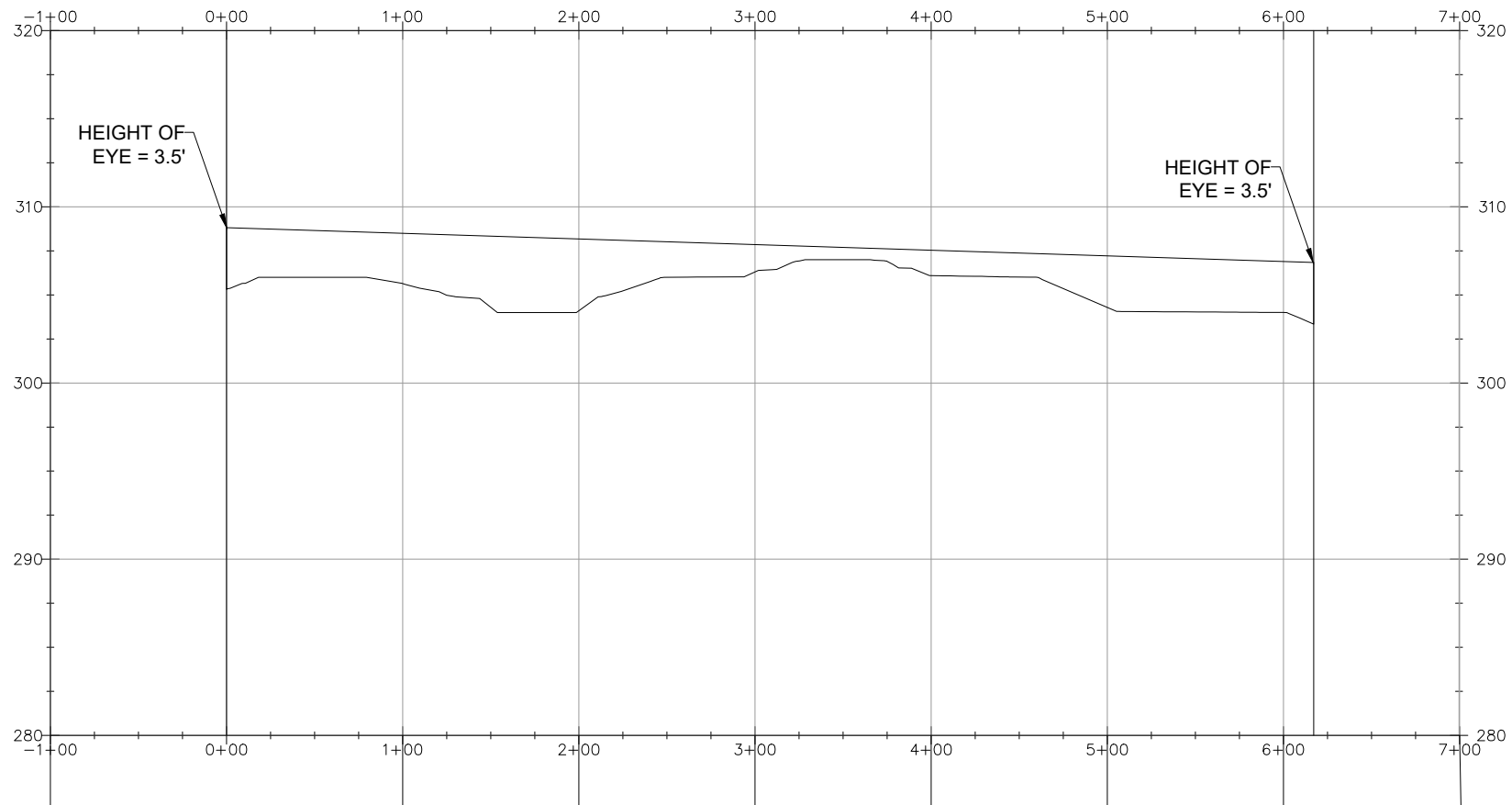
PROFILE TO AND FROM EAST UNAVAILABLE DUE TO LACK OF SURVEY

EB STOPPING SIGHT DISTANCE PROFILES



INTERSECTION SIGHT DISTANCE

Alignment - (ISD 610') PROFILE



PROFILE TO AND FROM EAST UNAVAILABLE DUE TO LACK OF SURVEY

EB INTERSECTION SIGHT DISTANCE PROFILES

Sight Distance Tables

AASHTO Sight Distance

Scenario 1: Stopping Sight Distance on Level Roadways

Table 3-1. Stopping Sight Distance on Level Roadways

U.S. Customary					Metric				
Design Speed (mph)	Brake Reaction Distance (ft)	Braking Distance on Level (ft)	Stopping Sight Distance		Design Speed (km/h)	Brake Reaction Distance (m)	Braking Distance on Level (m)	Stopping Sight Distance	
			Calculated (ft)	Design (ft)				Calculated (m)	Design (m)
15	55.1	21.6	76.7	80	20	13.9	4.6	18.5	20
20	73.5	38.4	111.9	115	30	20.9	10.3	31.2	35
25	91.9	60.0	151.9	155	40	27.8	18.4	46.2	50
30	110.3	86.4	196.7	200	50	34.8	28.7	63.5	65
35	128.6	117.6	246.2	250	60	41.7	41.3	83.0	85
40	147.0	153.6	300.6	305	70	48.7	56.2	104.9	105
45	165.4	194.4	359.8	360	80	55.6	73.4	129.0	130
50	183.8	240.0	423.8	425	90	62.6	92.9	155.5	160
55	202.1	290.3	492.4	495	100	69.5	114.7	184.2	185
60	220.5	345.5	566.0	570	110	76.5	138.8	215.3	220
65	238.9	405.5	644.4	645	120	83.4	165.2	248.6	250
70	257.3	470.3	727.6	730	130	90.4	193.8	284.2	285
75	275.6	539.9	815.5	820	140	97.3	224.8	322.1	325
80	294.0	614.3	908.3	910					
85	313.5	693.5	1007.0	1010					

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 11.2 ft/s² [3.4 m/s²] used to determine calculated sight distance.

Scenario 2: Stopping Sight Distance on Grades

Table 3-2. Stopping Sight Distance on Grades

U.S. Customary							Metric						
Design Speed (mph)	Stopping Sight Distance (ft)						Design Speed (km/h)	Stopping Sight Distance (m)					
	Downgrades			Upgrades				Downgrades			Upgrades		
	3%	6%	9%	3%	6%	9%		3%	6%	9%	3%	6%	9%
15	80	82	85	75	74	73	20	20	20	20	19	18	18
20	116	120	126	109	107	104	30	32	35	35	31	30	29
25	158	165	173	147	143	140	40	50	50	53	45	44	43
30	205	215	227	200	184	179	50	66	70	74	61	59	58
35	257	271	287	237	229	222	60	87	92	97	80	77	75
40	315	333	354	289	278	269	70	110	116	124	100	97	93
45	378	400	427	344	331	320	80	136	144	154	123	118	114
50	446	474	507	405	388	375	90	164	174	187	148	141	136
55	520	553	593	469	450	433	100	194	207	223	174	167	160
60	598	638	686	538	515	495	110	227	243	262	203	194	186
65	682	728	785	612	584	561	120	263	281	304	234	223	214
70	771	825	891	690	658	631	130	302	323	350	267	254	243
75	866	927	1003	772	736	704	140	341	367	398	302	287	274
80	965	1035	1121	859	817	782							
85	1070	1149	1246	949	902	862							

Scenario 3: Intersection Sight Distance – Left Turn from Stop

Table 9-7. Design Intersection Sight Distance—Case B1, Left Turn from Stop

U.S. Customary				Metric			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars		Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)			Calculated (m)	Design (m)
15	80	165.4	170	20	20	41.7	45
20	115	220.5	225	30	35	62.6	65
25	155	275.6	280	40	50	83.4	85
30	200	330.8	335	50	65	104.3	105
35	250	385.9	390	60	85	125.1	130
40	305	441.0	445	70	105	146.0	150
45	360	496.1	500	80	130	166.8	170
50	425	551.3	555	90	160	187.7	190
55	495	606.4	610	100	185	208.5	210
60	570	661.5	665	110	220	229.4	230
65	645	716.6	720	120	250	250.2	255
70	730	771.8	775	130	285	271.1	275
75	820	826.9	830				
80	910	882.0	885				

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Scenario 4: Intersection Sight Distance – Right Turn from Stop

Table 9-9. Design Intersection Sight Distance—Case B2, Right Turn from Stop

U.S. Customary				Metric			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars		Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)			Calculated (m)	Design (m)
15	80	143.3	145	20	20	36.1	40
20	115	191.1	195	30	35	54.2	55
25	155	238.9	240	40	50	72.3	75
30	200	286.7	290	50	65	90.4	95
35	250	334.4	335	60	85	108.4	110
40	305	382.2	385	70	105	126.5	130
45	360	430.0	430	80	130	144.6	145
50	425	477.8	480	90	160	162.6	165
55	495	525.5	530	100	185	180.7	185
60	570	573.3	575	110	220	198.8	200
65	645	621.1	625	120	250	216.8	220
70	730	668.9	670	130	285	234.9	235
75	820	716.6	720				
80	910	764.4	765				

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane roadway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Scenario 5: Intersection Sight Distance – Left Turn from Major Road

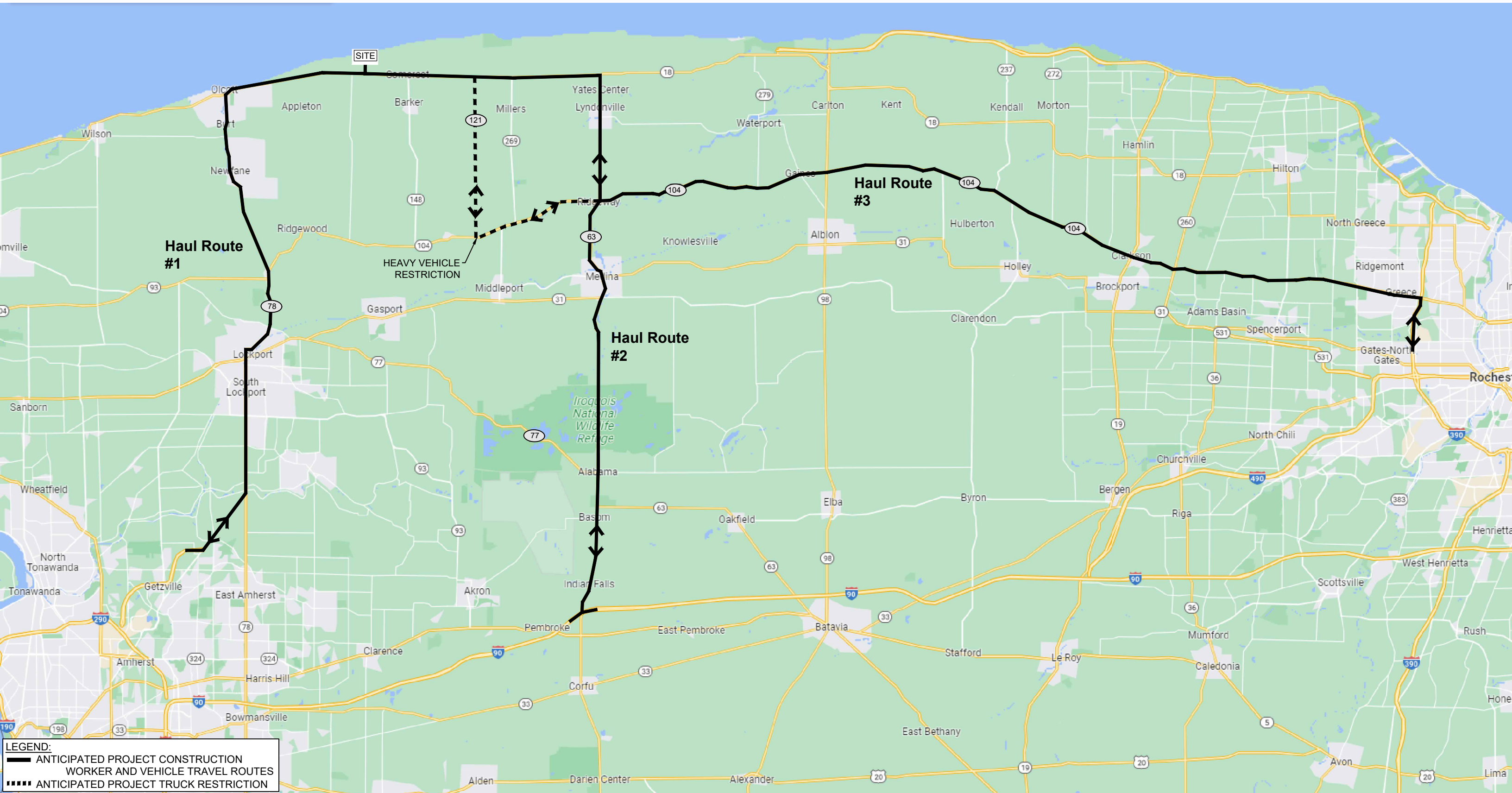
Table 9-17. Intersection Sight Distance—Case F, Left Turn from the Major Road

U.S. Customary				Metric			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance		Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance	
		Passenger Cars				Passenger Cars	
		Calculated (ft)	Design (ft)			Calculated (m)	Design (m)
15	80	121.3	125	20	20	30.6	35
20	115	161.7	165	30	35	45.9	50
25	155	202.1	205	40	50	61.2	65
30	200	242.6	245	50	65	76.5	80
35	250	283.0	285	60	85	91.7	95
40	305	323.4	325	70	105	107.0	110
45	360	363.8	365	80	130	122.3	125
50	425	404.3	405	90	160	137.6	140
55	495	444.7	445	100	185	152.9	155
60	570	485.1	490	110	220	168.2	170
65	645	525.5	530	120	250	183.5	185
70	730	566.0	570	130	285	198.8	200
75	820	606.4	610				
80	910	646.8	650				

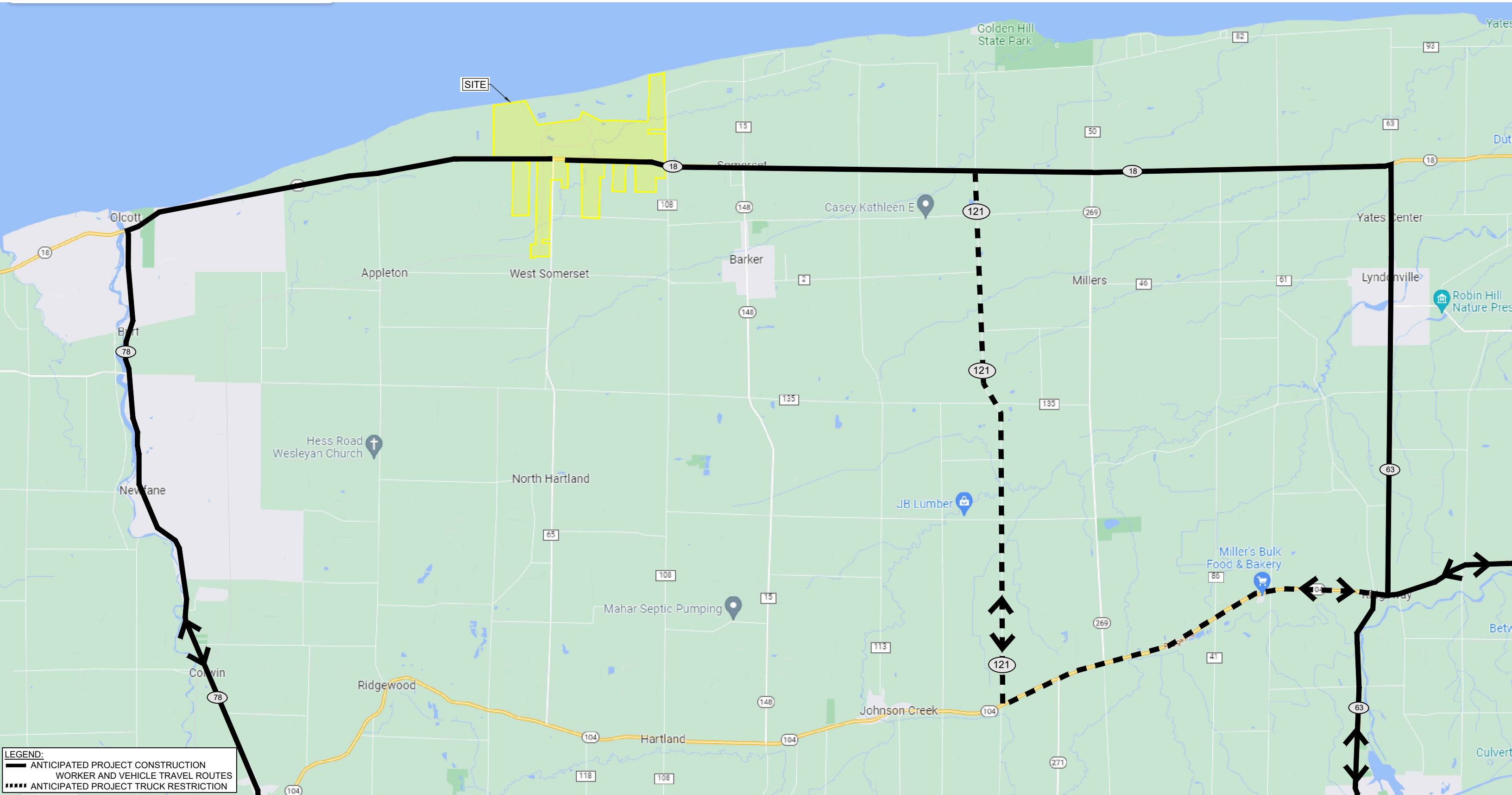
Note: Intersection sight distance shown is for a passenger car making a left turn from an undivided roadway. For other conditions and design vehicles, the time gap should be adjusted and the sight distance recalculated.

Truck Haul Routes

Regional Map to Interstate Highway Systems



Truck Routes



LEGEND:
— ANTICIPATED PROJECT CONSTRUCTION WORKER AND VEHICLE TRAVEL ROUTES
- - - ANTICIPATED PROJECT TRUCK RESTRICTION

Height Restrictions

☆ Height Restricted Bridges

BIN:	7715490
Carried:	Somerset RR
Permitted Vertical Clearance ON:	99' 12"
Crossed:	18 18 54011250
Permitted Vertical Clearance UNDER:	14' 0"
Crossed Minimum Vertical Clearance Desc:	18 18 54011250
Location:	3 MI NW of Barker
County:	NIAGARA
Primary Owner:	60 - Railroad
Political Unit:	0786 - Town of SOMERSET

☆ Height Restricted Bridges

BIN:	2213670
Carried:	HARTLAND ROAD
Permitted Vertical Clearance ON:	99' 12"
Crossed:	FISH CREEK
Permitted Vertical Clearance UNDER:	0' 0"
Crossed Minimum Vertical Clearance Desc:	
Location:	2.4 MI NW OF BARKER
County:	NIAGARA
Primary Owner:	40 - Town
Political Unit:	0786 - Town of SOMERSET

☆ Height Restricted Bridges

BIN:	1060060
Carried:	18 18 54011299
Permitted Vertical Clearance ON:	99' 12"
Crossed:	FISH CREEK
Permitted Vertical Clearance UNDER:	0' 0"
Crossed Minimum Vertical Clearance Desc:	
Location:	2.0 MI W JCT RTS 18 & 148
County:	NIAGARA
Primary Owner:	NYS DOT
Political Unit:	0786 - Town of SOMERSET

☆ Height Restricted Bridges

BIN:	3328940
Carried:	CARMEN ROAD
Permitted Vertical Clearance ON:	99' 12"
Crossed:	JOHNSON CREEK
Permitted Vertical Clearance UNDER:	0' 0"
Crossed Minimum Vertical Clearance Desc:	
Location:	3.4 MI NW OF JOHNSON CRK
County:	NIAGARA
Primary Owner:	30 - County
Political Unit:	0379 - Town of HARTLAND

☆ Height Restricted Bridges


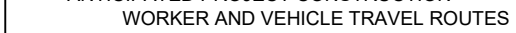
BIN:	1014690
Carried:	18 18 54011348
Permitted Vertical Clearance ON:	99' 12"
Crossed:	GOLDEN HILL CREEK
Permitted Vertical Clearance UNDER:	0' 0"
Crossed Minimum Vertical Clearance Desc:	
Location:	2.8 MI E JCT RTS 18 & 148
County:	NIAGARA
Primary Owner:	NYS DOT
Political Unit:	0786 - Town of SOMERSET

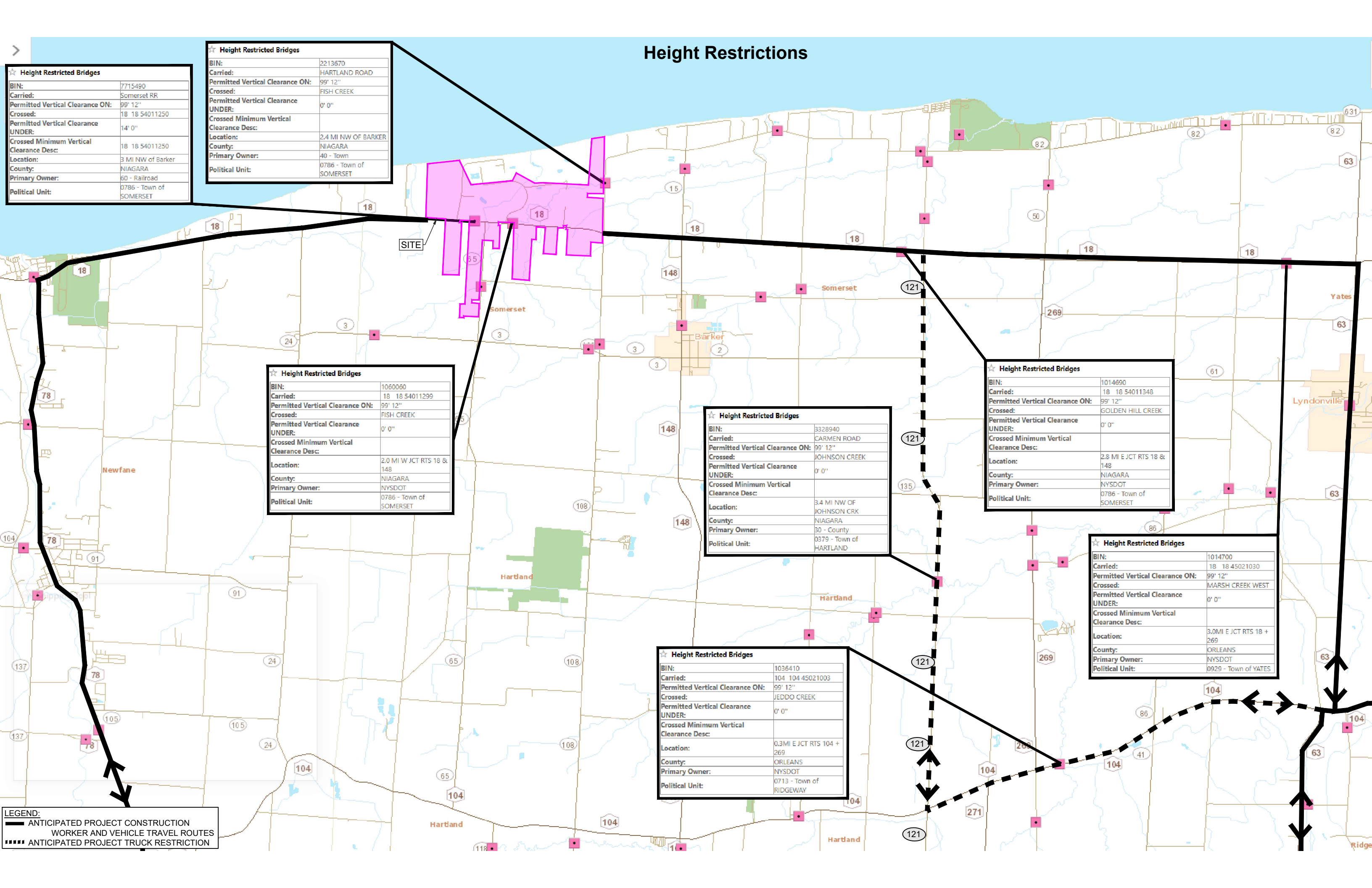
☆ Height Restricted Bridges

BIN:	1014700
Carried:	18 18 45021030
Permitted Vertical Clearance ON:	99' 12"
Crossed:	MARSH CREEK WEST
Permitted Vertical Clearance UNDER:	0' 0"
Crossed Minimum Vertical Clearance Desc:	
Location:	3.0 MI E JCT RTS 18 + 269
County:	ORLEANS
Primary Owner:	NYS DOT
Political Unit:	0929 - Town of YATES

☆ Height Restricted Bridges

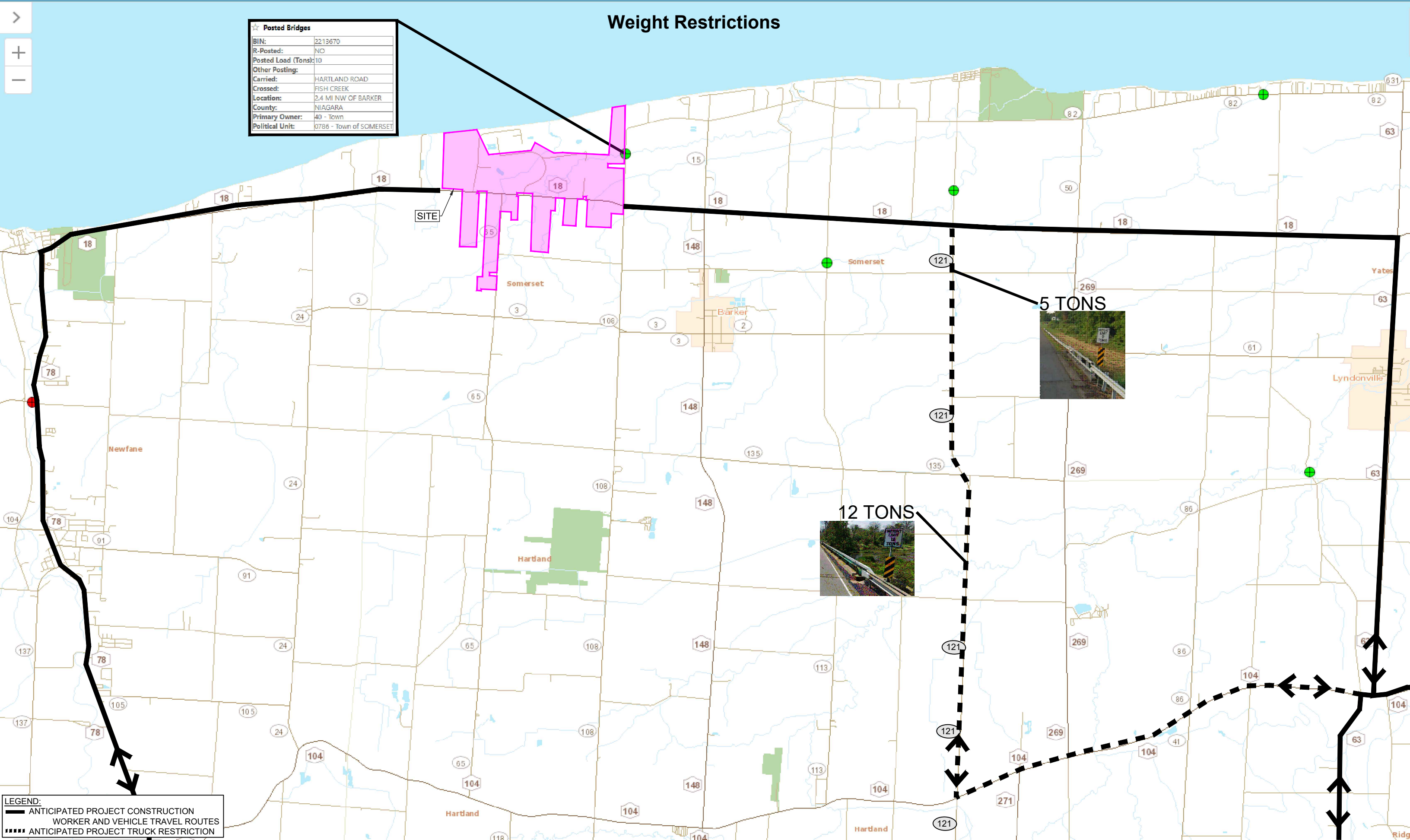
BIN:	1036410
Carried:	104 104 45021003
Permitted Vertical Clearance ON:	99' 12"
Crossed:	JEDDO CREEK
Permitted Vertical Clearance UNDER:	0' 0"
Crossed Minimum Vertical Clearance Desc:	
Location:	0.3 MI E JCT RTS 104 + 269
County:	ORLEANS
Primary Owner:	NYS DOT
Political Unit:	0713 - Town of RIDGEWAY

LEGEND:
 ANTICIPATED PROJECT CONSTRUCTION WORKER AND VEHICLE TRAVEL ROUTES
 ANTICIPATED PROJECT TRUCK RESTRICTION



Weight Restrictions

★ Posted Bridges	
BIN:	2213670
R-Posted:	NO
Posted Load (Tons):	10
Other Posting:	
Carried:	HARTLAND ROAD
Crossed:	FISH CREEK
Location:	2.4 MI NW OF BARKER
County:	NIAGARA
Primary Owner:	40 - Town
Political Unit:	0786 - Town of SOMERSET



LEGEND:
— ANTICIPATED PROJECT CONSTRUCTION
— WORKER AND VEHICLE TRAVEL ROUTES
- - - - - ANTICIPATED PROJECT TRUCK RESTRICTION

