TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS

PROJECT NAME:	**DOLLAR GENERAL -ROUTE 52**
PROJECT NO.:	**23-25**
PROJECT LOCATION:	**SECTION 60, BLOCK 2, LOT 65**
REVIEW DATE:	**1 MARCH 2024**
MEETING DATE:	**7 MARCH 2024**
PROJECT REPRESENTATIVE:	**MECURIO-NORTON TAROLLI-MARSHALL- ENGINEERING & LAND SURVEYING**

1. The floodplain development permit will be required for grading and filling activities within the floodplain. Compliance with Town of Newburgh Floodplain Development Ordinance should be documented.

2. A sidewalk has been added along the property frontage for proposed Lot 1. A 2-lot subdivision is now proposed for the site separating off 0.64 +/- acres to the on the northern portion of the site.

3. A Stormwater Management/SWPPP must be provided for the site.

4. Zoning variances for parking and rear yard setback have been granted.

5. The Dollar General facility located on NYS Route 9w currently has outdoor storage of racks and other product storage materials. Notes should be added to the plans that no outdoor storage of materials is permitted.

6. It is noted in the field that no left turn signs exist at the access road with NYS Route 52.

7. The application and fees for the subdivision should be submitted.

8. The Town of Newburgh's standard sanitary sewer notes should be added to the plans (Copy Attached).

9. Water and sewer utility connections should be depicted on the plan.

10. Confirmation of areas for curbing should be clearly delineated on the plan. The Planning Board requires curbing on commercial site plans.

11. The area depicted as what appears to be gravel on the northwest portion of the site should be identified. Are access easements proposed to Lot 2?

12. The applicants are requested to address access to proposed Lot 2. All access to the original subdivision was to be from the current access to the storage facility.

13. Treatment of the sidewalk at the roadway pipe crossing/drainage swales should be addressed.

14. The building will be required to be sprinklered in accordance with Town Code. Watermain layout per the attached detail is required.

15. A Stormwater Facilities Maintenance Agreement is required.

16. Orange County Department of Planning review is required once SWPPP has been submitted for a complete application.

17. Comments from NYSDOT regarding the land dedication sidewalk and access should be coordinated.

18. Landscaping plans should be submitted to the Town's Landscape Architect Consultant for review.

19. Truck-tracking diagram depicts trucks leaving the paved surface at the access drive. Discussions regarding delivery times should be undertaken as tractor trailers shown depicting the site will block parking.

20. Notice of Intent for Lead Agency should be circulated. NYSDOT is now an involved agency due to the sidewalk and parcel boundary dedication.

Respectfully submitted,

MHE Engineering, D.P.C.

Patrick J. Hines
Principal

PJH/ltm

TOWN SEWER SYSTEM NOTES

1. Construction of sanitary sewer facilities and connection to the Town of Newburgh sanitary sewer system requires a permit from the Town of Newburgh Sewer Department. All construction shall conform to the requirements of the NYSDEC and the Town of Newburgh.

2. All sewer pipe installation shall be subject to inspection by the Town of Newburgh Sewer Department. The Contractor shall be responsible for coordinating all inspections as required with the Town of Newburgh Sewer Department.

3. All gravity sanitary sewer service lines shall be 4 inches in diameter or larger and shall be SDR-35 PVC pipe conforming to ASTM D-3034-89. Joints shall be push-on with elastomeric ring gasket conforming ASTM D-3212. Fittings shall be as manufactured by the pipe supplier or equal and shall have a bell and spigot configuration compatible with the pipe.

4. The sewer main shall be tested in accordance with Town of Newburgh requirements. All testing shall be coordinated with the Town of Newburgh Sewer Department.

5. The final layout of the proposed water and/or sewer connection, including all materials, size and location of service and all appurtenances, is subject to the review and approval of the Town of Newburgh Water and/or Sewer Department. No permits shall be issued for a water and/or sewer connection until a final layout is approved by the respective Department.

Stephan A. Maffia, P.E.
Consulting Engineer

TRAFFIC IMPACT STUDY

DOLLAR GENERAL

NYS Route 52 (S. Plank Road)

Town of Newburgh
Orange County, New York

February 22, 2024

103 South Vacation Drive : Wappingers Falls, NY 12590 : (914) 475–2466 : stephanmaffia@gmail.com

INTRODUCTION

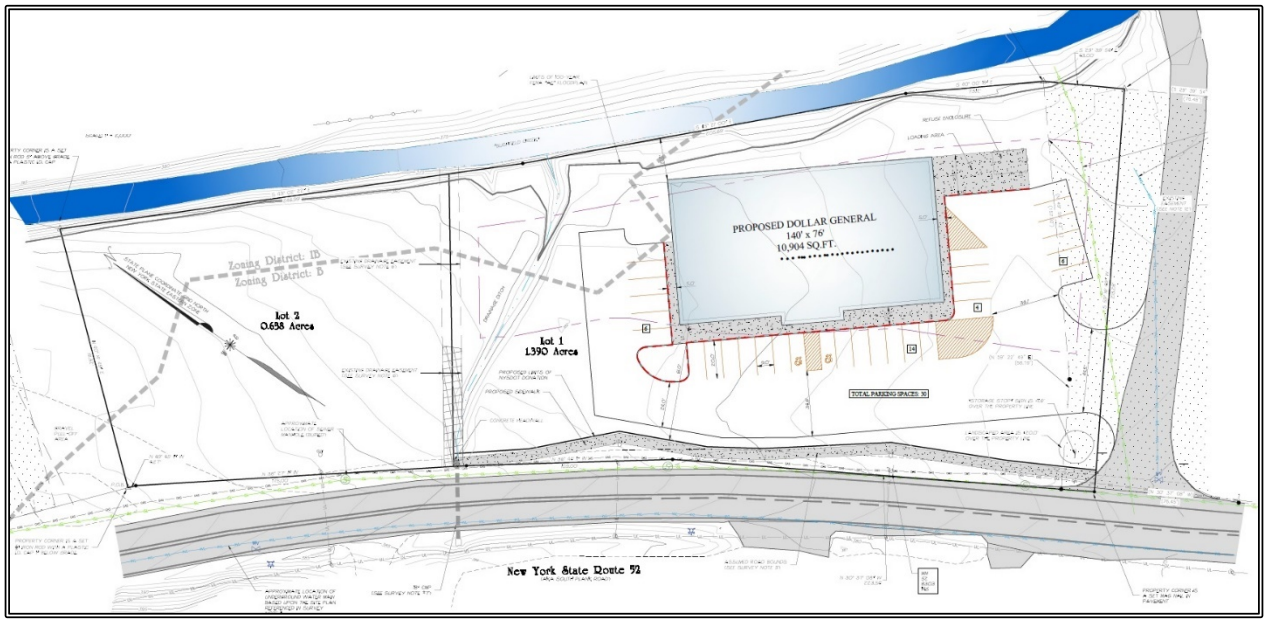
The purpose of this Traffic Impact Study is to identify potential adverse traffic issues that may result due to the development of a Dollar General store on property located on New York State Route 52 in the Town of Newburgh, New York. The proposed Project would consist of 10,904 sq. ft. of floor space – a typical floor area for this particular "dollar" chain store. The site will have access from an existing driveway to Route 52 now serving the existing Storage Stop self-storage facility. Route 52 is under the jurisdiction of the New York State Department of Transportation (DOT). The Project build-out is estimated to be about 18 months, i.e., completed and occupied by the end of 2025.

The site and its environs are shown on the aerial map and in the site plan below. The aerial map shows the proposed site and the existing Storage Stop; the site plan was prepared by Mercurio-Norton-Tarolli-Marshall, PC, Engineering - Land Surveying.

Site Location Map

Source: Google Earth

Site Plan



Source: Mercurio-Norton-Tarolli-Marshall, PC

EXISTING CONDITIONS

The following is a description of existing travel conditions near the site of the proposed Dollar General:

Roadways:

Route 52 is a two-lane generally east/west major arterial running through the Town of Newburgh and is also known as South Plank Road. An intersection with NYS Route 300 is located about 0.4 miles to the east of the project site. Route 52 directly serves the project site as well as numerous other commercial uses. There is no on-street parking on Route 52, and the pavement was observed to be in good condition. The posted speed limit at the site frontage is 40 mph. Immediately west of the site and the Thruway overpass, the speed limit increases to 45 mph. The access to the project is the existing driveway to the Storage Stop and is controlled by a stop sign while Route 52 maintains free flowing movements. Travel lanes are 11 to 12 feet in width and there are paved shoulders from two to approximately eight feet in width on both sides. At the Route 300 intersection, the 8-foot shoulder on the eastbound Route 52 approach was observed to act as a de facto right turn lane.

Route 300 is a two-lane generally north/south major arterial running through the Town of Newburgh and is also known as Union Avenue. Route 300 directly serves numerous other commercial uses. There is no on-street parking on Route 300, and the pavement was observed to be in good condition. The posted speed limit north of Route 52 is 40 mph; south of Route 52, the speed limit increases to 45 mph. The Route 300/Route 52 intersection is controlled

by a traffic signal and there are exclusive left turn lanes on the Route 300 approaches. Travel and turning lanes are 11 to 13 feet in width and there are narrow paved shoulders on both sides.

Traffic Volumes:

As proposed, the Project will include a 10,904 sq. ft. retail space. To evaluate the potential "worst-case" impacts of this type of development, peak hour manual turning movement counts were collected at the following key study intersections:

1. Route 52 (South Plank Road) at East Meadow Wind Lane
2. Route 52 at Storage Stop Access (Dollar General site)
3. Route 52 at Route 300 (Union Avenue)

The counts were conducted on Thursday February 8 during the AM and PM peak hours and on Saturday February 10 during the midafternoon peak hours. The resulting intersection peak hour volumes are shown graphically in Figures 1, 2 and 3 in **Appendix A** for the AM, PM and Saturday peak hours, respectively. Those time periods were chosen because the combination of existing street traffic and peak traffic generation from the site results in the most conservative analysis of potential impacts.

FUTURE TRAFFIC CONDITIONS

Other Development and Traffic Growth:

To develop future traffic conditions, the 2024 Base Traffic volumes were increased in this study by an additional 2% - to account for traffic from other potential area developments or unidentified increases in traffic that may occur between 2024 and 2025. Note that there are only two small developments near the project that could add traffic to the studied intersections – Patton Ridge and MKJC. Patton Ridge is a 16-unit single family subdivision off of Route 52 to the west of the Dollar General site. MKJC is a 10,000 square-foot office and retail development on Route 32 just east of Route 300. No other significant residential or commercial development was identified. Traffic that may result from any development in the general area – occurring before the end of 2025 is accounted for in the 2% growth factor used in this study.

The resulting traffic volumes – projected future traffic without the proposed Project – are shown in Figures 4, 5 and 6 in **Appendix A** for the AM, PM and Saturday peak hours, respectively. This study refers to this future condition as the "No Build" scenario.

The Proposed Project:

The site is proposed to include a typical Dollar General store. To estimate the potential trips generated by the project, several sources were referenced. Those sources were as follows:

1. A 24-hour driveway count conducted in 2015 by this office at the existing Dollar General store on Route 209 in Wurtsboro, NY.
2. New (2024) peak hour driveway counts at the existing Dollar General store on Route 52 in Walden, NY.
3. New (2024) peak hour driveway counts at the existing Dollar General store on Route 9W in Newburgh, NY.
4. The industry standard trip generation reference *"The Trip Generation Manual – 11th Edition"* from the Institute of Transportation Engineers (ITE) – *Land Use #814: Variety Store.*

The results of the trip evaluation – with the average trip volumes used in subsequent analyses at the studied intersections, are summarized as follows:

Table 1: Trip Generation

TRIP GENERATION EVALUATION							
TIME	DIRECTION	SOURCE: Existing Dollar General or ITE Variety Store				TOTAL	AVG
		DG NY 209 WURTSBORO	DG NY 52 WALDEN	DG US 9W NEWBURGH	ITE #814		
AM	IN	11	9	30	18	68	17
	OUT	8	9	22	15	54	14
PM	IN	30	16	44	37	127	32
	OUT	25	10	33	36	104	26
SAT	IN	41	25	46	20	132	33
	OUT	37	24	46	22	129	32

Note that the trips generated at the US 9W store are higher than those counted at both Wurtsboro and Walden stores. This is likely due to the fact that US 9W carries significantly higher traffic volumes than the other roadways. Therefore, including the US 9W counts increased the average, thereby providing a more conservative estimate – an estimate that is fairly consistent with the ITE data.

It has been established by ongoing ITE sponsored studies that retail development draws both new trips and trips from the existing stream of traffic passing the site. The latter are known as "pass-by" trips, which are trips already on the adjacent street that simply turn into the retail site then return to the street continuing to travel in the same direction as the original route. For "dollar stores," an ITE recommended average reduction for pass-by trips is ±35%. This reduction was applied to the average trips calculated from existing and ITE data. The resulting new and pass-by trips for the proposed Route 52 Newburgh Dollar General are shown as follows:

Table 2: Pass-by Adjusted Trip Generation

Proposed Route 52 Newburgh Dollar General		Trip Generation			
		65% New		35% Pass By	
Peak Hour	Time Period	Enter	Exit	Exit	Exit
AM	Peak Hour of Adjacent Street	11	9	6	5
PM	Peak Hour of Adjacent Street	21	17	11	9
Saturday	Peak Hour of the Generator	21	21	12	11

Traffic from the proposed development was distributed to the surrounding street network based on the travel patterns exhibited by the recent field counts. The higher distribution to/from the east is due to the proximity of Route 300, additional development and access to the regional highway system to the east and south of the project site. The result is a 78% east/22% west split on Route 52 to and from the site. The resulting trip volume assignments are shown in Figures 7, 8 and 9 of **Appendix A** for the AM, PM and Saturday peak hours, respectively.

The traffic generated by the site was then added to the above-described No Build traffic scenario resulting in the Build scenario – the future traffic volumes with both other background growth traffic and traffic from the proposed project. The resulting Build traffic is shown in Figures 10, 11 and 12 in **Appendix A** for the AM, PM and Saturday peak hours, respectively.

Level of Service Analysis:

The *2016 Highway Capacity Manual (HCM-6th)*, published by the Transportation Research Board, defines Level of Service (LOS) for signalized and unsignalized intersections as a function of the average vehicle control delay. LOS may be calculated per movement or per approach for any intersection configuration, but LOS for the intersection as a whole is only defined for signalized and all-way stop configurations. In this analysis, the study locations are all unsignalized intersections.

Delay is defined in the *HCM-6th* as "the additional travel time experienced by a driver, passenger, bicyclist, or pedestrian beyond that is required to travel at the desired speed."

Intersections where a minor road intersects a major road, and the major road has free through movements while the minor road movements are controlled by a stop sign, are referred to as two-way stop-controlled intersections. The minor movements that are subject to control delays are rated on a scale of "A" to "F," with LOS "A" exhibiting very short delays – less than 10 seconds on average – and LOS "F" exhibiting much longer delays – more than 50 seconds per vehicle on average.

In the Level of Service analyses, the through movements on the major road and right turns from the major road are assumed to have no delay. LOS for those movements is not an

integral part of the analysis, because LOS is determined by control delay, and for these "free" movements, the control delay is zero.

Movements that are subject to small to moderate control delays include left turns from the major road, through movements on the minor road and right turns from the minor road. Movements that are most affected by control delay include left turns from the minor road or, in this analysis, all movements from the minor, single lane approaches.

The relationship of LOS to delay times is shown in the following table (Note: LOS/Delay relationships for signal controlled intersections are generally higher, e.g., for LOS F, the control delay is >80 seconds):

Table 3: Level of Service and Control Delay

Level of Service	Average Control Delay (sec/vehicle)	
	Stop Sign Control	Traffic Signal Control
A	≤10 sec	≤10 sec
B	10–15 sec	>10–20 sec
C	15–25 sec	>20–35 sec
D	25–35 sec	>35–55 sec
E	35–50 sec	>55–80 sec
F	≥50 sec	>80 sec

Generally accepted software (Synchro 11) was used to compute control delays and Levels of Service. Synchro uses the methodologies published in the *Highway Capacity Manual 2016* and requires input from the user specific to the intersections being studied. Among other items, that information includes the following:

1. Traffic Volumes – from field counts.
2. Lane Configuration and Width – from field measurements.
3. Traffic Control – Stop Sign and Traffic Signal.
4. Peak Hour Factor – PHF – from peak hour counts.
5. Vehicle Mix/Classification (heavy truck percent) – from DOT traffic data.
6. Buses – no scheduled bus routes.
7. Pedestrians and Bicycles – none, from field observations.

The Levels of Service and corresponding control delays for the three key Route 52 study locations are summarized in the following table for the AM, PM and Saturday peak hours. To show the potential impact of the proposed development, only the No Build and Build conditions were compared; the impact can be identified in the changes in Level of Service (LOS) when comparing the two. Note that the Route 52/Route 300 intersection was analyzed with the signal timings provided by the State Department of Transportation (DOT) and the use of the wide right shoulder on the eastbound Route 52 approach as a right turn lane. The detailed LOS summary reports are contained in **Appendix B**. The results are summarized in the following table:

Table 4: Level of Service Summary – No Build to Build Comparison

INTERSECTION	APPROACH	MVMT.	NO BUILD						BUILD					
			AM		PM		SATURDAY		AM		PM		SATURDAY	
			DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS
Route 52 at E.MeadowWind	Route 52	WB Left	8.4	A	9.4	A	8.3	A	8.4	A	9.4	A	8.3	A
	E.Meadow Wind	NB Left	13.8	B	19.8	C	15.9	C	13.8	B	19.9	C	16.0	C
(stop sign control)		NB Right	11.1	B	12.7	B	10.2	B	11.1	B	12.7	B	10.3	B
Route 52 at Site Drive	Route 52	EB Left	8.0	A	0.0	A	0.0	A	8.1	A	8.5	A	8.5	A
(stop sign control)	Site Drive	SB	10.3	B	11.3	B	11.3	B	14.2	B	20.6	C	15.7	C
Route 52 at Route 300	Route 52	EB	28.7	C	54.6	D	25.2	C	28.7	C	60.8	E	25.5	C
		WB	26.4	C	25.0	C	34.2	C	26.4	C	25.3	C	35.2	D
(signal control)	Route 300	NB	12.2	B	28.3	C	16.7	B	12.4	B	28.5	C	17.2	B
		SB	13.3	B	39.5	D	17.8	B	13.6	B	40.7	D	18.7	B
		OVERALL	19.3	B	38.4	D	24.0	C	19.4	B	40.7	D	24.7	C

NB=northbound; SB=southbound; EB=eastbound; WB=westbound

Upon review of the summary table for No Build and Build conditions, it is clear that traffic from the proposed Dollar General store will have little impact on the key studied intersections. Control delay times would increase by six seconds or less and the few LOS changes would be minimal. Note that the LOS D to E change on eastbound Route 52 at Route 300 during the PM peak hour could be eliminated with a slight 2-second signal timing adjustment. The DOT signal timings used through/right turn maximum splits of 45 seconds on both Route 52 and Route 300. The 2-second change would be to increase the Route 52 maximum split to 47 seconds while reducing the Route 300 maximum split to 43 seconds. Upon review by the DOT, this modification could be made at their discretion. No other mitigation would be needed.

SIGHT DISTANCE ANALYSIS

The sight distance analysis for the project's access to Route 52 (an existing driveway to the Storage Stop) – as standardized by the American Association of State Highway and Transportation Officials (AASHTO) – included the following items:

A. Posted speed
B. Design speed
C. Sight Distance Related Movements
D. Required and available sight distances for each type of turning movement
E. Variance (if any) and support for variance or recommendations
F. Labeled and dimensioned sight distance triangles shown on plans.

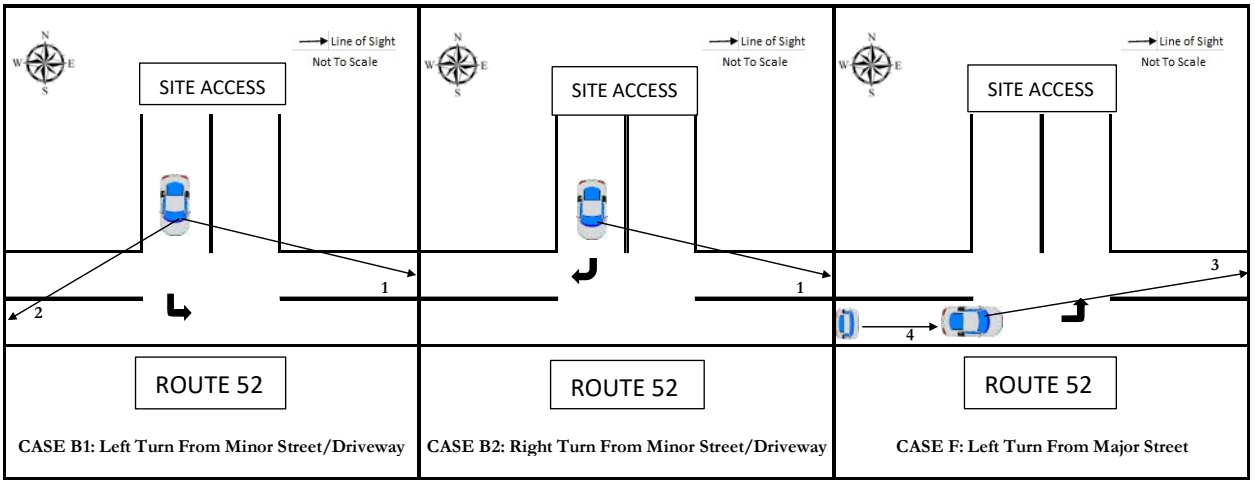
The following analyses and field surveys were conducted:

A. Posted Speed: The posted speed limit on Route 52 near the site is 40 mph.

B. Design Speed: The DOT count records included speed information for the section of Route 52 west of the project site where the posted speed limit is 45 mph. The 85th percentile speed was listed at 50 mph. Assuming the 85th percentile speed at the site also to be 5 mph higher than the posted limit, the design speed was conservatively placed at 45 mph.

C. Sight Distance Related Movements: AASHTO identifies three cases to analyze when reviewing sight distances at intersections like the Route 52/site access serving the proposed project:
   1. Case B1: Left Turn from Minor Street/Driveway
   2. Case B2: Right Turn from Minor Street/Driveway
   3. Case F: Left Turn from Major Street

The key movements and sight lines evaluated in this study are shown in the following Diagram:



The sight lines are numbered in the Diagram as follows:

1. Looking left (to the east) from site access for approaching traffic.
2. Looking right (to the west) from site access for approaching traffic.
3. Looking east on Route 52 at the site access for gaps in approaching westbound traffic to make left turns into the site.
4. Looking east from Route 52 approaching the site access for possible stopped vehicles waiting to turn left.

D. Required and Available Sight Distances: An important safety consideration of a minor street or driveway intersection at a major roadway is the provision of adequate sight distances for vehicles to safely enter (or cross) the roadway. There are two types of Sight Distance measurements – Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD). SSD is the minimum distance required for a vehicle on the major roadway to perceive a vehicle entering or crossing the roadway from a side street or driveway or stopped in the roadway, and be able to stop without hitting the other vehicle. ISD is the desired distance for a vehicle on the major roadway to perceive the other vehicle in the roadway and need to only slightly or not slow down at all. The Stopping Sight Distance is the critical measurement that should be provided in all cases if possible. ISDs also should be provided, if possible, but in certain cases where physical conditions are prohibitive, providing distances as close as possible to the desired values are considered acceptable. At

times, simple mitigating measures such as clearing roadside vegetation or relocating small roadside signs can be undertaken to provide the maximum sight distances.

For roadways under New York State jurisdiction including Route 52 – and in many cases other County and local roadways – the standards published by AASHTO in *A Policy on Geometric Design of Highways and Streets, 7th Edition, 2018 (the "Green Book")* are applied. Sight distance requirements and recommendations are based primarily on the speeds on the subject roadway. At the site, the 85th percentile speed on Route 52 is 45 mph.

For a speed of 45 mph, the AASHTO SSD and ISD values were compared to the available sight distances, and those comparisons are shown in the following Tables.

Table 5:

Stopping Sight Distance (SSD)

SHTO Case	Sight Line(s)	Speed	AASHTO Standard	Available	Notes
B-1 Left Turn from Stop	1	45	360	700	Exceeds AASHTO
	2		360	485	Exceeds AASHTO
B-2 Right Turn from Stop	1	45	360	700	Exceeds AASHTO
F Left Turn from Major Road	3	45	360	450	Exceeds AASHTO
	4		360	700	Exceeds AASHTO

Note that all available SSDs exceed the AASHTO standards.

Table 6:

Intersection Sight Distance (ISD)

SHTO Case	Sight Line(s)	Speed	AASHTO Standard	Available	Notes
B-1 Left Turn from Stop	1	45	500	700	Exceeds AASHTO
	2		500	485	+/- 15 feet less than standard. No variance required.
B-2 Right Turn from Stop	1	45	430	700	Exceeds AASHTO
F Left Turn from Major Road	3	45	365	450	Exceeds AASHTO
	4		365	700	Exceeds AASHTO

Note that only sight line 2 falls short of the desirable AASHTO ISD – by only 15 feet. This is not considered significant, and a variance would not be required.

E. Variance: No variances are required.

F. Sight Distance Triangles: The site plan will include the sight triangles on the corners of the intersection within the site itself and will include a note indicating that they are to be kept clear of any obstruction or vegetation that grows to more than three feet in height.

Note that there is an existing "No Left Turn" condition on eastbound Route 52 at the driveway to the Storage Stop. Since Route 52 is a State highway, the DOT was contacted to determine the reason for the turn restriction. DOT has no knowledge of a previous project at the location and therefore, could not determine why the "No Left Turn" condition was established.

ACCIDENT ASSESSMENT

The NYSDOT provided accident data for the section of Route 52 from E. Meadow Wind Lane to Route 300 – for a three-year period from September 2020 to August 2023. A summary of the data is shown in the following Table, and the complete accident history is contained in **Appendix C**.

Table 7: Accident Summary

INTERSECTION ACCIDENT SUMMARY					
ON STREET	AT OR NEAR CROSS-STREET	NUMBER OF ACCIDENTS			
		2020*	2021	2022	2023**
ROUTE 52	ROUTE 300	4	11	7	5
	COREL PLACE	0	2	2	1
	MONKEY RUN ROAD	0	1	0	0
	"DRIVEWAY"	0	7	8	5
	EAST MEADOW WIND LANE	0	1	0	0
	I-87	0	0	2	0
	UNKNOWN	0	4	2	0

* September 1 thru December 31
** January 1 thru August 31

The accidents at the Route 52/Route 300 intersection were of three types – rear-end, passing and right-angle. Of the three, the rear-end accident was by far the most frequent. Such accident experience is not uncommon at a signal controlled intersection like Route 52/Route 300, where the apparent contributing factor was usually identified as "following too closely." Also, the location identified above as "driveway" is the combined accident experience at the numerous commercial driveways along Route 52 between E. Meadow Wind Lane and Route 300.

There were totals of 26 and 21 accidents recorded in the two full calendar years (2021 and 2022) and 15 accidents in the combination of the two partial years (2020 and 2023). During the entire period, there were 13 injury accidents and 49 property-damage-only accidents. There were no accidents that resulted in fatalities.

The detailed summaries in **Appendix C** include information about each accident, such as location, date and time, severity, type, weather and roadway conditions, and apparent contributing factors.

The basic method of measuring the relative safety history of each study intersection is frequency – or the number of accidents per year. Frequency is simply read from the Summary Table for each location and year. For example, in 2022 there were seven (7) accidents at the Route 52/Route 300 intersection.

For intersections controlled by stop signs and traffic signals, frequencies of six or more accidents per year – or a consistent frequency in that range for several consecutive years - are typically indicative of a possible unsafe condition that would bear further study. This is not the condition at the area's stop sign controlled intersections.

However, at the signal controlled 52/300 intersection, frequencies were recorded at higher levels in past years. This is especially true when, in 2021, the intersection experienced 11 accidents. Notwithstanding that record, since 2021, the accident experience has decreased significantly – i.e., only seven (7) in 2022 and five (5) in the first eight months of 2023.

It is concluded that the proposed Dollar General development will not adversely impact the accident history in the study area. The added volume from the site is not significant relative to the flows of traffic already on Route 52, Route 300 and the adjacent streets, and the traffic will be distributed in several directions thereby spreading out the potential increases. No safety issues are expected due to site generated traffic.

PARKING

Parking for the proposed Dollar General is shown in the MNTM site plan as providing 30 parking spaces. The plan also shows that by Town Code, the required parking would be 73 spaces. However, Dollar General and other typical "dollar" stores require significantly less parking and a request for a variance is expected.

In support of a variance from the Town to allow 30 parking spaces, two assessments were undertaken:

1. The ITE *Parking Generation – 5th Edition* was referenced for parking supplies associated with variety stores – ITE Land Use #814, which is described as

including "dollar" stores. In the ITE reference, a 10,000 square foot store would use approximately 11 to 15 spaces.

2. During the same peak hour driveway counts at the two existing Dollar General stores in Newburgh and Walden, accumulated parking was observed to not exceed 15 vehicles. This was the case at both stores even though the traffic on Route 9W Newburgh is significantly higher than that on Route 52 in Walden.

The lower parking demand is due to the nature of the typical store patron's visit, whose stay inside the store is much less than an hour – usually only 5 to 10 minutes as based on personal observations.

TRAFFIC IMPACTS DURING CONSTRUCTION

All necessary work permits will be obtained from the appropriate agencies in accordance with all relevant policies and standards. Impacts due to construction traffic will be temporary in nature, lasting for the duration of the on-going building program at the site. Traffic would consist of occasional heavy trucks delivering building materials to the project site and daily traffic from vehicles belonging to construction workers. Typically, large pieces of construction equipment such as bulldozers and excavators are brought to the site (if needed) at the beginning of the project and kept on-site until no longer needed. Construction may also require the temporary, short-term closure of traffic lanes and flagging to direct traffic during the closure. This will be coordinated with the local Police Department if required. Construction workers' vehicles would be parked on- site.

CONCLUSIONS

The Traffic Impact Study summarized above indicates that, while there will be minor increases in traffic volumes on the adjacent streets, control delay times at key intersections and traffic flows and Levels of Service would not be negatively impacted. Sight distances are more than adequate and current safety conditions would not be negatively impacted. The "No Left Turn" restriction on Route 52 at the site driveway may be removed as there were no records of the reason for it being established, and the sight distance assessment determined that the critical Stopping Sight Distances all would be exceeded. Furthermore, the proposed 30-space parking supply will be more than adequate in filling the demand of Dollar General's customers. A parking variance should be granted. It is concluded that the proposed project will not adversely impact traffic conditions on the adjacent streets and at intersections in the study area. Therefore, no mitigation is required.

APPENDIX A

24-HOUR NYSDOT COUNT DETAILS

MANUAL COUNT SUMMARIES

NYSDOT TRAFFIC VOLUMES				
NY Route 52				
FUNCTIONAL_CLASS	16			
FACTOR_GROUP	30			
MONTH	11			
DAY_OF_FIRST_DATA	1			
YEAR	2016			
SPECIFIC_RECORDER_PLACEMENT				
112' S of Elmhurst Rd				
SEASONAL_FACTOR	1.017			
AXLE_FACTOR	1			
Time Period		Average Hourly Volume		
From	To	Eastbound	Westbound	Total
12:00AM	1:00 AM	16	22	38
1:00 AM	2:00 AM	7	17	24
2:00 AM	3:00 AM	9	11	20
3:00 AM	4:00 AM	18	9	27
4:00 AM	5:00 AM	33	10	43
5:00 AM	6:00 AM	77	21	98
6:00 AM	7:00 AM	242	77	319
7:00 AM	8:00 AM	303	143	446
8:00 AM	9:00 AM	316	150	466
9:00 AM	10:00 AM	246	155	401
10:00 AM	11:00 AM	202	165	367
11:00 AM	12:00 PM	212	193	405
12:00 PM	1:00 PM	210	202	412
1:00 PM	2:00 PM	214	236	450
2:00 PM	3:00 PM	218	269	487
3:00 PM	4:00 PM	263	329	592
4:00 PM	5:00 PM	256	392	648
5:00 PM	6:00 PM	280	412	692
6:00 PM	7:00 PM	232	343	575
7:00 PM	8:00 PM	157	234	391
8:00 PM	9:00 PM	96	169	265
9:00 PM	10:00 PM	65	120	185
10:00 PM	11:00 PM	47	71	118
11:00 PM	12:00 AM	29	48	77
	AADT	**3685**	**3735**	**7420**

Project: Dollar General - Newburgh

Intersection: Route 52 at E. Meadow Wind Lane

AM PEAK HOUR

Day/Date Thursday 2/8/2024

		1 EB L	2 EB T	3 EB R	4 WB L	5 WB T	6 WB R	7 NB L	8 NB T	9 NB R	10 SB L	11 SB T	12 SB R
	Field #		**2**	**3**	**4**	**1**		**5**		**6**			
7:30 AM	7:45 AM		81	0	5	82		1		11			
7:45 AM	8:00 AM		111	1	12	85		1		21			
8:00 AM	8:15 AM		101	0	6	87		0		15			
8:15 AM	8:30 AM		104	0	6	93		2		15			
8:30 AM	8:45 AM		110	2	7	88		0		9			
8:45 AM	9:00 AM		114	0	5	90		0		8			
9:00 AM	9:15 AM		117	0	7	85		1		10			
9:15 AM	9:30 AM		100	1	6	83		2		10			
9:30 AM	9:45 AM												
9:45 AM	10:00 AM												
10:00 AM	10:15 AM												
10:15 AM	10:30 AM												

7:30 AM	7:45 AM	0	81	0	5	82	0	1	0	11	0	0	0
7:45 AM	8:00 AM	0	111	1	12	85	0	1	0	21	0	0	0
8:00 AM	8:15 AM	0	101	0	6	87	0	0	0	15	0	0	0
8:15 AM	8:30 AM	0	104	0	6	93	0	2	0	15	0	0	0
8:30 AM	8:45 AM	0	110	2	7	88	0	0	0	9	0	0	0
8:45 AM	9:00 AM	0	114	0	5	90	0	0	0	8	0	0	0
9:00 AM	9:15 AM	0	117	0	7	85	0	1	0	10	0	0	0
9:15 AM	9:30 AM	0	100	1	6	83	0	2	0	10	0	0	0
9:30 AM	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
		0	426	3	31	353	0	3	0	60	0	0	0

7:45 AM 8:45 AM 5

PHF 0.95 4

3

2

EB	T	426
EB	R	3
WB	L	31
WB	T	353
NB	L	3
NB	R	60

Project	Dollar General - Newburgh
Intersection	Route 52 at E. Meadow Wind Lane

PM PEAK HOUR

Day/Date Thursday 2/8/2024

		1 EB L	2 EB T	3 EB R	4 WB L	5 WB T	6 WB R	7 NB L	8 NB T	9 NB R	10 SB L	11 SB T	12 SB R
	Field #		**2**	**3**	**4**	**1**		**5**		**6**			
4:30 PM	4:45 PM		147	7	11	95		0		9			
4:45 PM	5:00 PM		155	9	24	99		3		9			
5:00 PM	5:15 PM		161	6	17	107		3		9			
5:15 PM	5:30 PM		150	7	13	115		3		8			
5:30 PM	5:45 PM		160	6	25	110		3		11			
5:45 PM	6:00 PM		155	7	10	111		1		8			
6:00 PM	6:15 PM		154	3	13	120		2		10			
6:15 PM	6:30 PM		159	2	10	115		1		9			
6:30 PM	6:45 PM												
6:45 PM	7:00 PM												
7:00 PM	7:15 PM												
7:15 PM	7:30 PM												

4:30 PM	4:45 PM	0	147	7	11	95	0	0	0	9	0	0	0
4:45 PM	5:00 PM	0	155	9	24	99	0	3	0	9	0	0	0
5:00 PM	5:15 PM	0	161	6	17	107	0	3	0	9	0	0	0
5:15 PM	5:30 PM	0	150	7	13	115	0	3	0	8	0	0	0
5:30 PM	5:45 PM	0	160	6	25	110	0	3	0	11	0	0	0
5:45 PM	6:00 PM	0	155	7	10	111	0	1	0	8	0	0	0
6:00 PM	6:15 PM	0	154	3	13	120	0	2	0	10	0	0	0
6:15 PM	6:30 PM	0	159	2	10	115	0	1	0	9	0	0	0
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
		0	626	28	79	431	0	12	0	37	0	0	0

4:45 PM	5:45 PM		5
	PHF	0.96	4
			3
			2

EB	T	626
EB	R	28
WB	L	79
WB	T	431
NB	L	12
NB	R	37

Project	Dollar General - Newburgh
Intersection	Route 52 at E. Meadow Wind Lane

SAT PEAK HOUR

Day/Date 2/10/2024

		1	2	3	4	5	6	7	8	9	10	11	12
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R
	Field #		**2**	**3**	**4**	**1**		**5**		**6**			
3:00 PM	3:15 PM		60	0	37	72		0		27			
3:15 PM	3:30 PM		77	1	40	80		3		25			
3:30 PM	3:45 PM		71	1	35	85		3		21			
3:45 PM	4:00 PM		70	2	35	80		2		23			
4:00 PM	4:15 PM		70	1	45	77		1		27			
4:15 PM	4:30 PM		78	0	30	76		3		21			
4:30 PM	4:45 PM		69	1	31	80		1		21			
4:45 PM	5:00 PM		70	3	36	81		2		19			
5:00 PM	5:15 PM												
5:15 PM	5:30 PM												
5:30 PM	5:45 PM												
5:45 PM	6:00 PM												

3:00 PM	3:15 PM	0	60	0	37	72	0	0	0	27	0	0	0
3:15 PM	3:30 PM	0	77	1	40	80	0	3	0	25	0	0	0
3:30 PM	3:45 PM	0	71	1	35	85	0	3	0	21	0	0	0
3:45 PM	4:00 PM	0	70	2	35	80	0	2	0	23	0	0	0
4:00 PM	4:15 PM	0	70	1	45	77	0	1	0	27	0	0	0
4:15 PM	4:30 PM	0	78	0	30	76	0	3	0	21	0	0	0
4:30 PM	4:45 PM	0	69	1	31	80	0	1	0	21	0	0	0
4:45 PM	5:00 PM	0	70	3	36	81	0	2	0	19	0	0	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
		0	288	5	155	322	0	9	0	96	0	0	0

3:15 PM	4:15 PM		5
	PHF	0.97	4
			3
			2

EB	T	288
EB	R	5
WB	L	155
WB	T	322
NB	L	9
NB	R	96

Project	Dollar General - Newburgh
Intersection	Roue 52 at Storage Stop Driveway

AM PEAK HOUR

Day/Date Thursday 2/8/2024

		1 EB L	2 EB T	3 EB R	4 WB L	5 WB T	6 WB R	7 NB L	8 NB T	9 NB R	10 SB L	11 SB T	12 SB R
	Field #	**3**	**2**			**1**	**4**				**6**		**5**
7:30 AM	7:45 AM	0	99			90	1				0		0
7:45 AM	8:00 AM	0	121			87	0				0		0
8:00 AM	8:15 AM	0	115			93	0				0		0
8:15 AM	8:30 AM	1	119			96	0				0		0
8:30 AM	8:45 AM	0	122			87	1				0		0
8:45 AM	9:00 AM	0	123			87	0				0		1
9:00 AM	9:15 AM	0	119			91	0				0		1
9:15 AM	9:30 AM	0	110			80	1				1		0
9:30 AM	9:45 AM												
9:45 AM	10:00 AM												
10:00 AM	10:15 AM												
10:15 AM	10:30 AM												

7:30 AM	7:45 AM	0	99	0	0	90	1	0	0	0	0	0	0
7:45 AM	8:00 AM	0	121	0	0	87	0	0	0	0	0	0	0
8:00 AM	8:15 AM	0	115	0	0	93	0	0	0	0	0	0	0
8:15 AM	8:30 AM	1	119	0	0	96	0	0	0	0	0	0	0
8:30 AM	8:45 AM	0	122	0	0	87	1	0	0	0	0	0	0
8:45 AM	9:00 AM	0	123	0	0	87	0	0	0	0	0	0	1
9:00 AM	9:15 AM	0	119	0	0	91	0	0	0	0	0	0	1
9:15 AM	9:30 AM	0	110	0	0	80	1	0	0	0	1	0	0
9:30 AM	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
		1	483	0	0	361	1	0	0	0	0	0	2

8:15 AM 9:15 AM 7

PHF 0.98 6

5

4

EB	L	1
EB	T	483
WB	T	361
WB	R	1
SB	L	0
SB	R	2

Project	Dollar General - Newburgh
Intersection	Roue 52 at Storage Stop Driveway

PM PEAK HOUR

Day/Date Thursday 2/8/2024

		1	2	3	4	5	6	7	8	9	10	11	12
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R
	Field #	**3**	**2**			**1**	**4**				**6**		**5**
4:30 PM	4:45 PM	1	156			91	0				1		0
4:45 PM	5:00 PM	0	166			111	1				0		0
5:00 PM	5:15 PM	0	170			121	0				0		0
5:15 PM	5:30 PM	0	161			131	0				0		1
5:30 PM	5:45 PM	0	170			120	0				0		0
5:45 PM	6:00 PM	0	165			126	0				0		0
6:00 PM	6:15 PM	0	161			123	0				1		0
6:15 PM	6:30 PM	0	163			127	0				0		0
6:30 PM	6:45 PM												
6:45 PM	7:00 PM												
7:00 PM	7:15 PM												
7:15 PM	7:30 PM												

4:30 PM	4:45 PM	1	156	0	0	91	0	0	0	0	1	0	0
4:45 PM	5:00 PM	0	166	0	0	111	1	0	0	0	0	0	0
5:00 PM	5:15 PM	0	170	0	0	121	0	0	0	0	0	0	0
5:15 PM	5:30 PM	0	161	0	0	131	0	0	0	0	0	0	1
5:30 PM	5:45 PM	0	170	0	0	120	0	0	0	0	0	0	0
5:45 PM	6:00 PM	0	165	0	0	126	0	0	0	0	0	0	0
6:00 PM	6:15 PM	0	161	0	0	123	0	0	0	0	1	0	0
6:15 PM	6:30 PM	0	163	0	0	127	0	0	0	0	0	0	0
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
		0	666	0	0	498	0	0	0	0	0	0	1

5:00 PM	6:00 PM		6
	PHF	0.99	5
			4
			3

EB	L	0
EB	T	666
WB	T	498
WB	R	0
SB	L	0
SB	R	1

Project	Dollar General - Newburgh
Intersection	Roue 52 at Storage Stop Driveway

SAT PEAK HOUR

Day/Date 2/10/2024

		1 EB L	2 EB T	3 EB R	4 WB L	5 WB T	6 WB R	7 NB L	8 NB T	9 NB R	10 SB L	11 SB T	12 SB R
	Field #	**3**	**2**			**1**	**4**				**6**		**5**
3:00 PM	3:15 PM	0	93			112	0				0		1
3:15 PM	3:30 PM	0	97			120	2				0		0
3:30 PM	3:45 PM	0	90			122	0				0		0
3:45 PM	4:00 PM	0	88			117	1				0		1
4:00 PM	4:15 PM	0	93			118	3				0		1
4:15 PM	4:30 PM	0	94			99	1				0		1
4:30 PM	4:45 PM	0	86			112	1				0		1
4:45 PM	5:00 PM	0	90			118	0				1		0
5:00 PM	5:15 PM												
5:15 PM	5:30 PM												
5:30 PM	5:45 PM												
5:45 PM	6:00 PM												

3:00 PM	3:15 PM	0	93	0	0	112	0	0	0	0	0	0	1
3:15 PM	3:30 PM	0	97	0	0	120	2	0	0	0	0	0	0
3:30 PM	3:45 PM	0	90	0	0	122	0	0	0	0	0	0	0
3:45 PM	4:00 PM	0	88	0	0	117	1	0	0	0	0	0	1
4:00 PM	4:15 PM	0	93	0	0	118	3	0	0	0	0	0	1
4:15 PM	4:30 PM	0	94	0	0	99	1	0	0	0	0	0	1
4:30 PM	4:45 PM	0	86	0	0	112	1	0	0	0	0	0	1
4:45 PM	5:00 PM	0	90	0	0	118	0	0	0	0	1	0	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
		0	368	0	0	477	6	0	0	0	0	0	2

3:15 PM	4:15 PM		5
	PHF	0.97	4
			3
			2

EB	L	0
EB	T	368
WB	T	477
WB	R	6
SB	L	0
SB	R	2

Project	Dollar General - Newburgh
Intersection	Route 300 at Route 52

AM PEAK HOUR

Day/Date Thursday 2/8/2024

		1	2	3	4	5	6	7	8	9	10	11	12
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R
	Field #	**7**	**8**	**9**	**1**	**2**	**3**	**10**	**11**	**12**	**4**	**5**	**6**
7:30 AM	7:45 AM	15	63	27	7	58	20	9	61	13	19	70	11
7:45 AM	8:00 AM	21	74	40	5	61	15	11	70	24	27	91	14
8:00 AM	8:15 AM	17	61	30	6	63	17	17	70	11	23	77	12
8:15 AM	8:30 AM	16	66	33	9	60	18	11	81	17	17	80	13
8:30 AM	8:45 AM	18	60	31	8	63	21	20	70	12	17	90	15
8:45 AM	9:00 AM	17	63	27	12	41	24	24	90	9	21	99	12
9:00 AM	9:15 AM	19	55	26	11	47	23	15	77	13	30	93	17
9:15 AM	9:30 AM	18	59	27	7	50	21	13	78	11	26	100	17
9:30 AM	9:45 AM												
9:45 AM	10:00 AM												
10:00 AM	10:15 AM												
10:15 AM	10:30 AM												

7:30 AM	7:45 AM	15	63	27	7	58	20	9	61	13	19	70	11
7:45 AM	8:00 AM	21	74	40	5	61	15	11	70	24	27	91	14
8:00 AM	8:15 AM	17	61	30	6	63	17	17	70	11	23	77	12
8:15 AM	8:30 AM	16	66	33	9	60	18	11	81	17	17	80	13
8:30 AM	8:45 AM	18	60	31	8	63	21	20	70	12	17	90	15
8:45 AM	9:00 AM	17	63	27	12	41	24	24	90	9	21	99	12
9:00 AM	9:15 AM	19	55	26	11	47	23	15	77	13	30	93	17
9:15 AM	9:30 AM	18	59	27	7	50	21	13	78	11	26	100	17
9:30 AM	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
		72	237	111	38	201	89	72	315	45	94	382	61

8:30 AM 9:30 AM 8

PHF 0.95 7

6

5

EB	L	72
EB	T	237
EB	R	111
WB	L	38
WB	T	201
WB	R	89
NB	L	72
NB	T	315
NB	R	45
SB	L	94
SB	T	382
SB	R	61

Project	Dollar General - Newburgh
Intersection	Route 300 at Route 52

PM PEAK HOUR

Day/Date Thursday 2/8/2024

		1	2	3	4	5	6	7	8	9	10	11	12
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R
	Field #	**7**	**8**	**9**	**1**	**2**	**3**	**10**	**11**	**12**	**4**	**5**	**6**
4:30 PM	4:45 PM	19	111	30	7	63	30	41	87	9	20	86	27
4:45 PM	5:00 PM	18	121	30	11	61	27	36	91	8	23	89	26
5:00 PM	5:15 PM	17	117	27	12	60	30	44	121	17	27	91	21
5:15 PM	5:30 PM	16	150	31	9	57	36	61	149	11	21	121	30
5:30 PM	5:45 PM	15	144	33	11	61	31	39	99	16	30	111	27
5:45 PM	6:00 PM	13	131	37	10	66	27	44	77	11	21	117	23
6:00 PM	6:15 PM	13	121	20	10	55	22	37	83	13	21	88	17
6:15 PM	6:30 PM	14	122	26	13	51	27	39	81	10	17	83	19
6:30 PM	6:45 PM												
6:45 PM	7:00 PM												
7:00 PM	7:15 PM												
7:15 PM	7:30 PM												

4:30 PM	4:45 PM	19	111	30	7	63	30	41	87	9	20	86	27
4:45 PM	5:00 PM	18	121	30	11	61	27	36	91	8	23	89	26
5:00 PM	5:15 PM	17	117	27	12	60	30	44	121	17	27	91	21
5:15 PM	5:30 PM	16	150	31	9	57	36	61	149	11	21	121	30
5:30 PM	5:45 PM	15	144	33	11	61	31	39	99	16	30	111	27
5:45 PM	6:00 PM	13	131	37	10	66	27	44	77	11	21	117	23
6:00 PM	6:15 PM	13	121	20	10	55	22	37	83	13	21	88	17
6:15 PM	6:30 PM	14	122	26	13	51	27	39	81	10	17	83	19
6:30 PM	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
		61	542	128	42	244	124	188	446	55	99	440	101

5:00 PM	6:00 PM		6
	PHF	0.89	5
			4
			3

EB	L	61
EB	T	542
EB	R	128
WB	L	42
WB	T	244
WB	R	124
NB	L	188
NB	T	446
NB	R	55
SB	L	99
SB	T	440
SB	R	101

Project	Dollar General - Newburgh
Intersection	Route 300 at Route 52

SAT PEAK HOUR

Day/Date 2/10/2024

		1	2	3	4	5	6	7	8	9	10	11	12
		EB L	EB T	EB R	WB L	WB T	WB R	NB L	NB T	NB R	SB L	SB T	SB R
	Field #	**7**	**8**	**9**	**1**	**2**	**3**	**10**	**11**	**12**	**4**	**5**	**6**
3:00 PM	3:15 PM	12	78	12	27	90	12	30	70	12	7	40	7
3:15 PM	3:30 PM	11	76	10	30	95	11	31	75	9	11	55	8
3:30 PM	3:45 PM	9	71	10	27	80	17	33	81	7	10	61	10
3:45 PM	4:00 PM	13	78	11	17	80	11	36	76	13	9	55	10
4:00 PM	4:15 PM	10	79	13	25	85	9	31	77	11	13	47	9
4:15 PM	4:30 PM	9	73	14	24	72	10	30	77	9	11	59	11
4:30 PM	4:45 PM	10	70	9	31	73	12	35	76	7	17	60	9
4:45 PM	5:00 PM	10	68	8	23	80	10	30	70	7	17	49	9
5:00 PM	5:15 PM												
5:15 PM	5:30 PM												
5:30 PM	5:45 PM												
5:45 PM	6:00 PM												

3:00 PM	3:15 PM	12	78	12	27	90	12	30	70	12	7	40	7
3:15 PM	3:30 PM	11	76	10	30	95	11	31	75	9	11	55	8
3:30 PM	3:45 PM	9	71	10	27	80	17	33	81	7	10	61	10
3:45 PM	4:00 PM	13	78	11	17	80	11	36	76	13	9	55	10
4:00 PM	4:15 PM	10	79	13	25	85	9	31	77	11	13	47	9
4:15 PM	4:30 PM	9	73	14	24	72	10	30	77	9	11	59	11
4:30 PM	4:45 PM	10	70	9	31	73	12	35	76	7	17	60	9
4:45 PM	5:00 PM	10	68	8	23	80	10	30	70	7	17	49	9
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
		43	304	44	99	340	48	131	309	40	43	218	37

3:15 PM	4:15 PM		5	
	PHF	0.98	4	
			3	
			2	

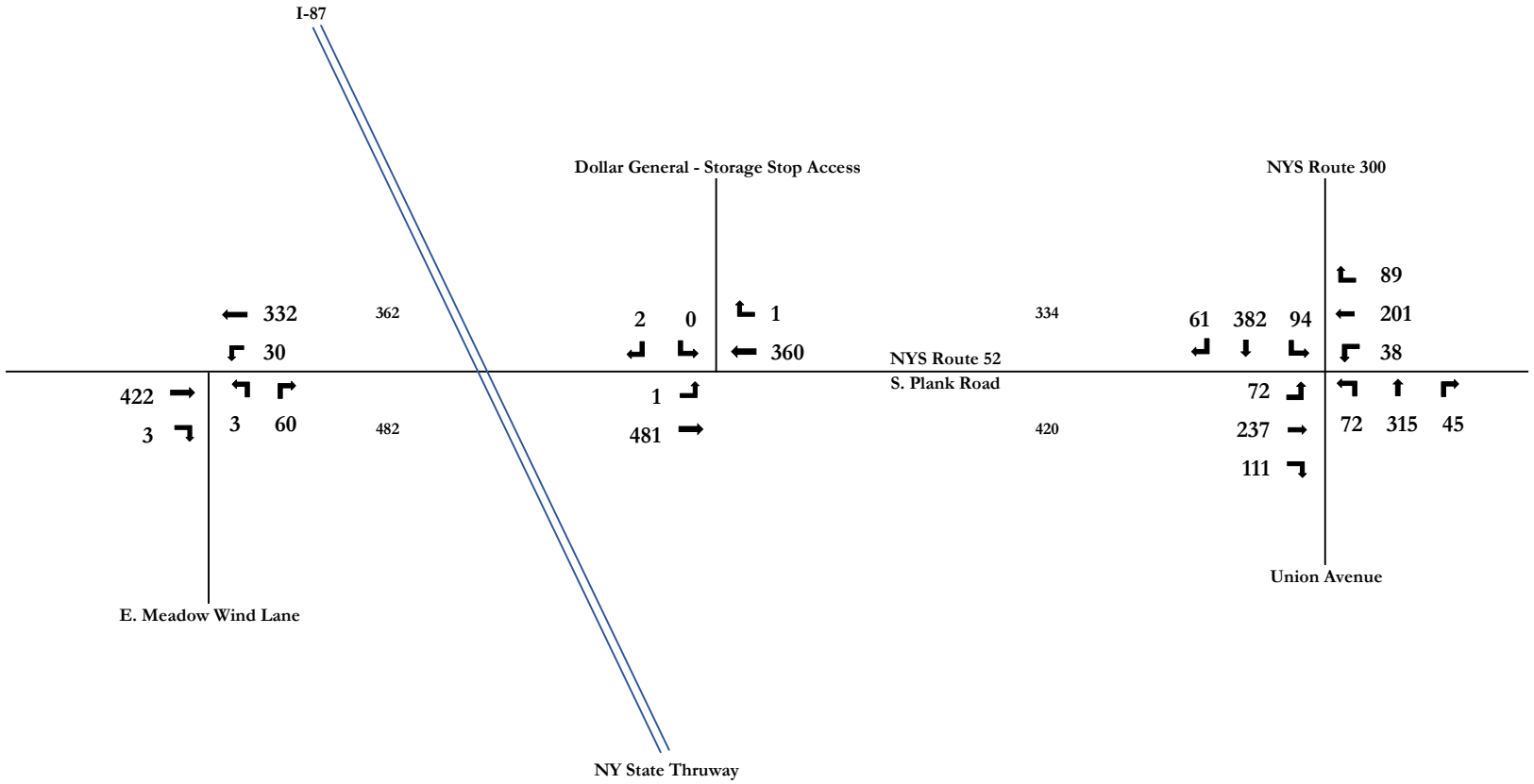
EB	L	43
EB	T	304
EB	R	44
WB	L	99
WB	T	340
WB	R	48
NB	L	131
NB	T	309
NB	R	40
SB	L	43
SB	T	218
SB	R	37

APPENDIX B

TRAFFIC VOLUME DIAGRAMS

FIGURE	TITLE	
1	AM Peak Hour	2024 Base Volumes
2	PM Peak Hour	
3	Saturday Peak Hour	
4	AM Peak Hour	2025 No Build Volumes
5	PM Peak Hour	
6	Saturday Peak Hour	
7	AM Peak Hour	Site Generated Traffic Volumes
8	PM Peak Hour	
9	Saturday Peak Hour	
10	AM Peak Hour	2025 Build Volumes
11	PM Peak Hour	
12	Saturday Peak Hour	

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

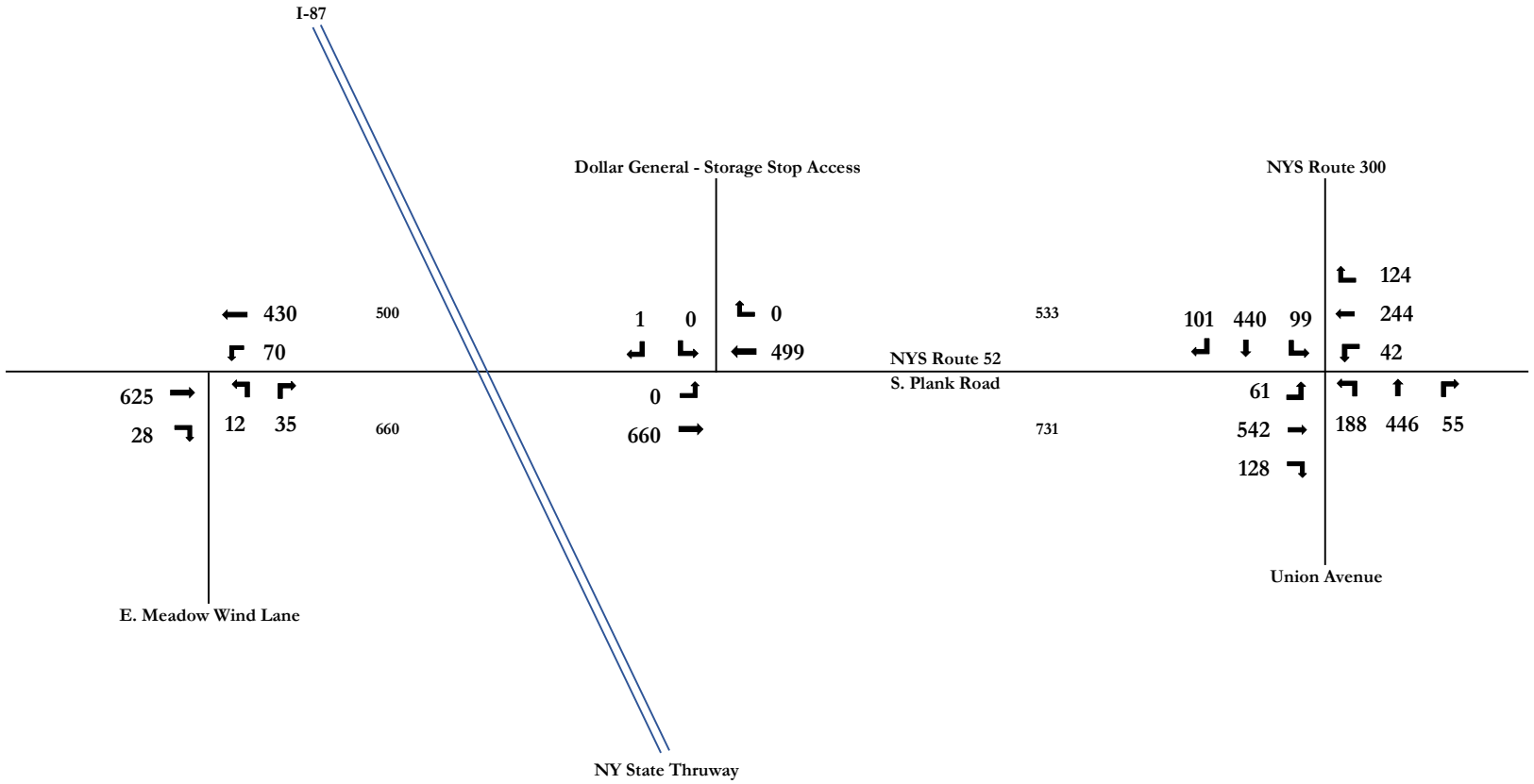
FIGURE 1

AM PEAK HOUR

2024 BASE

TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

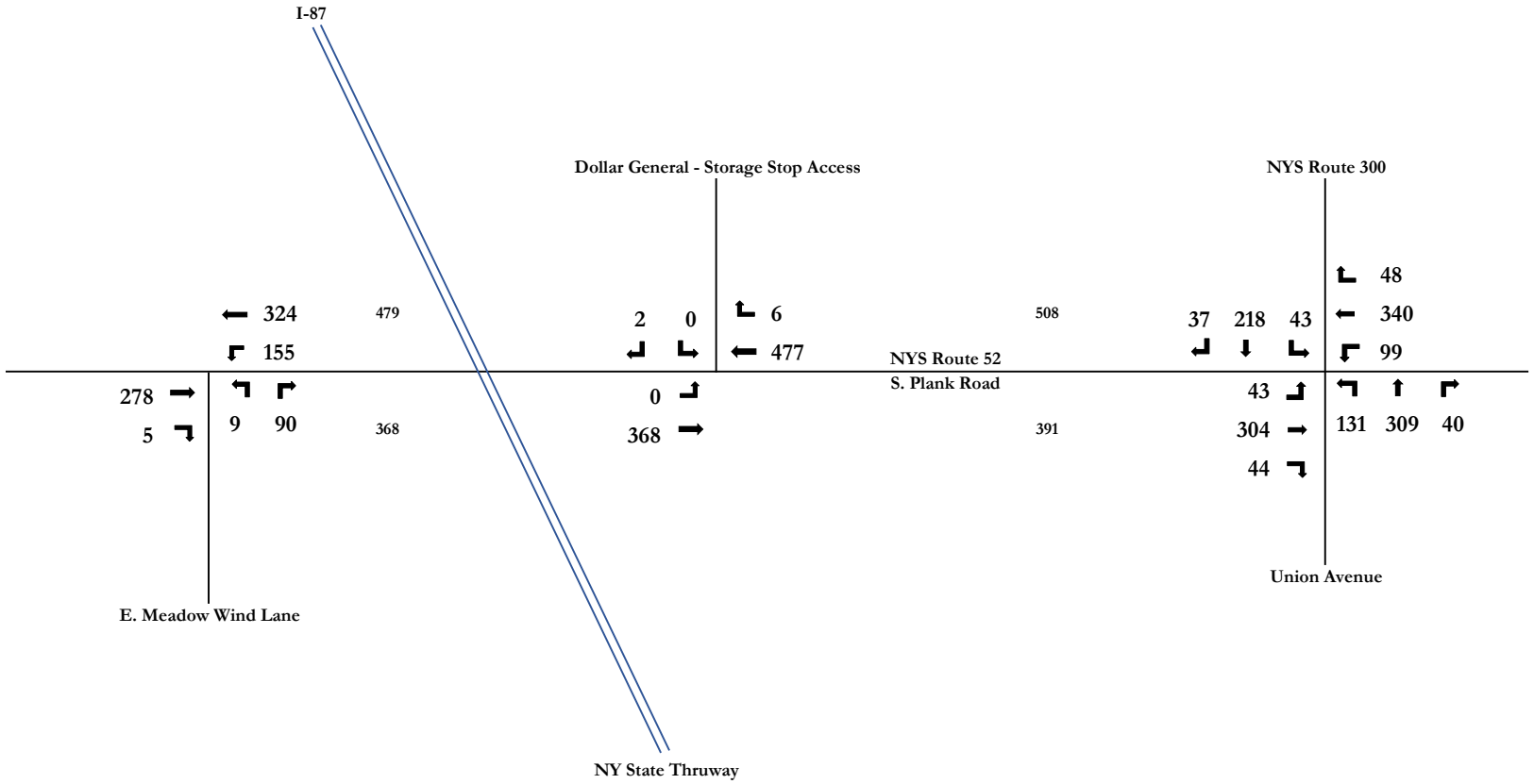
Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 2

PM PEAK HOUR

2024 BASE
TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

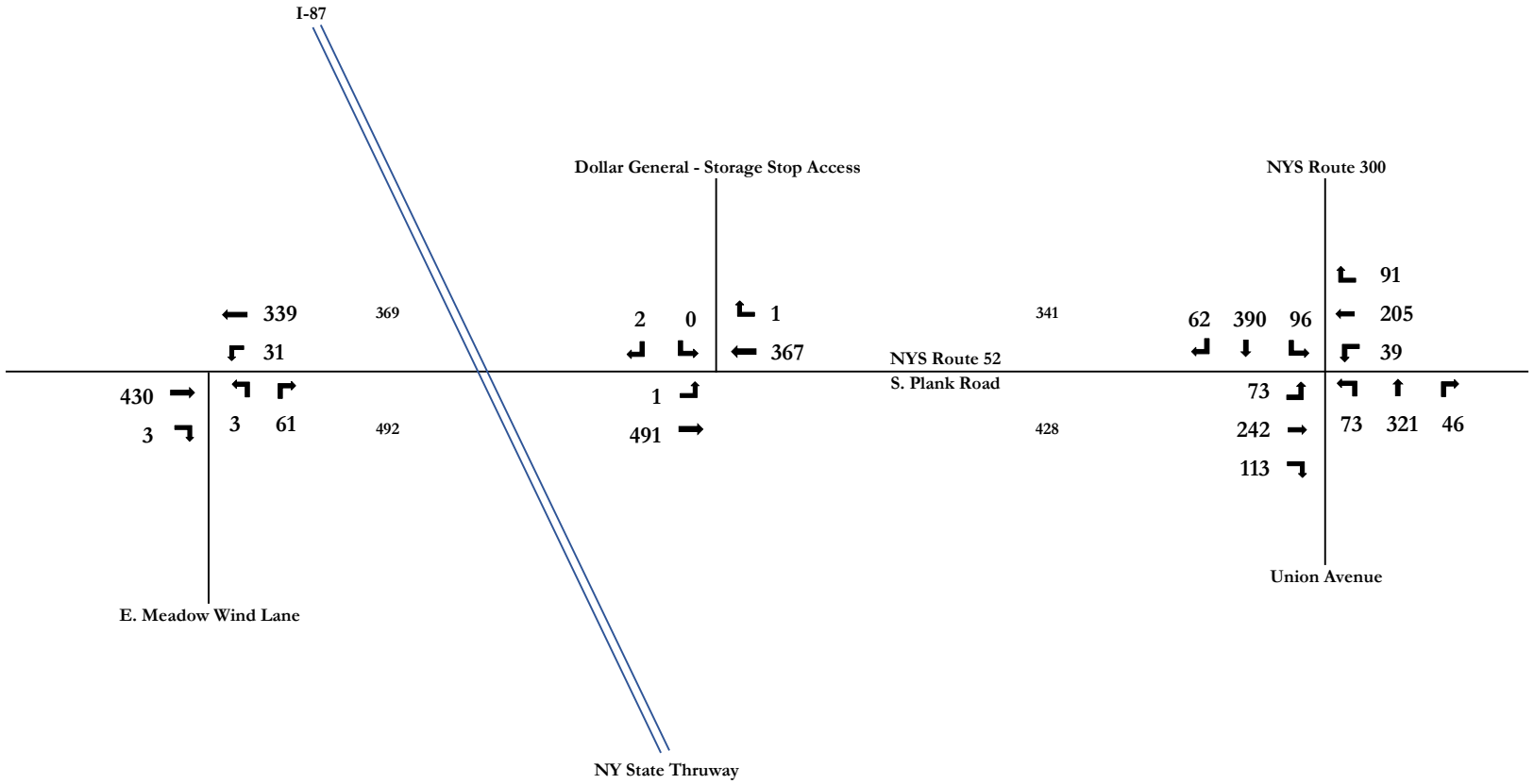
FIGURE 3

SAT PEAK HOUR

2024 BASE

TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

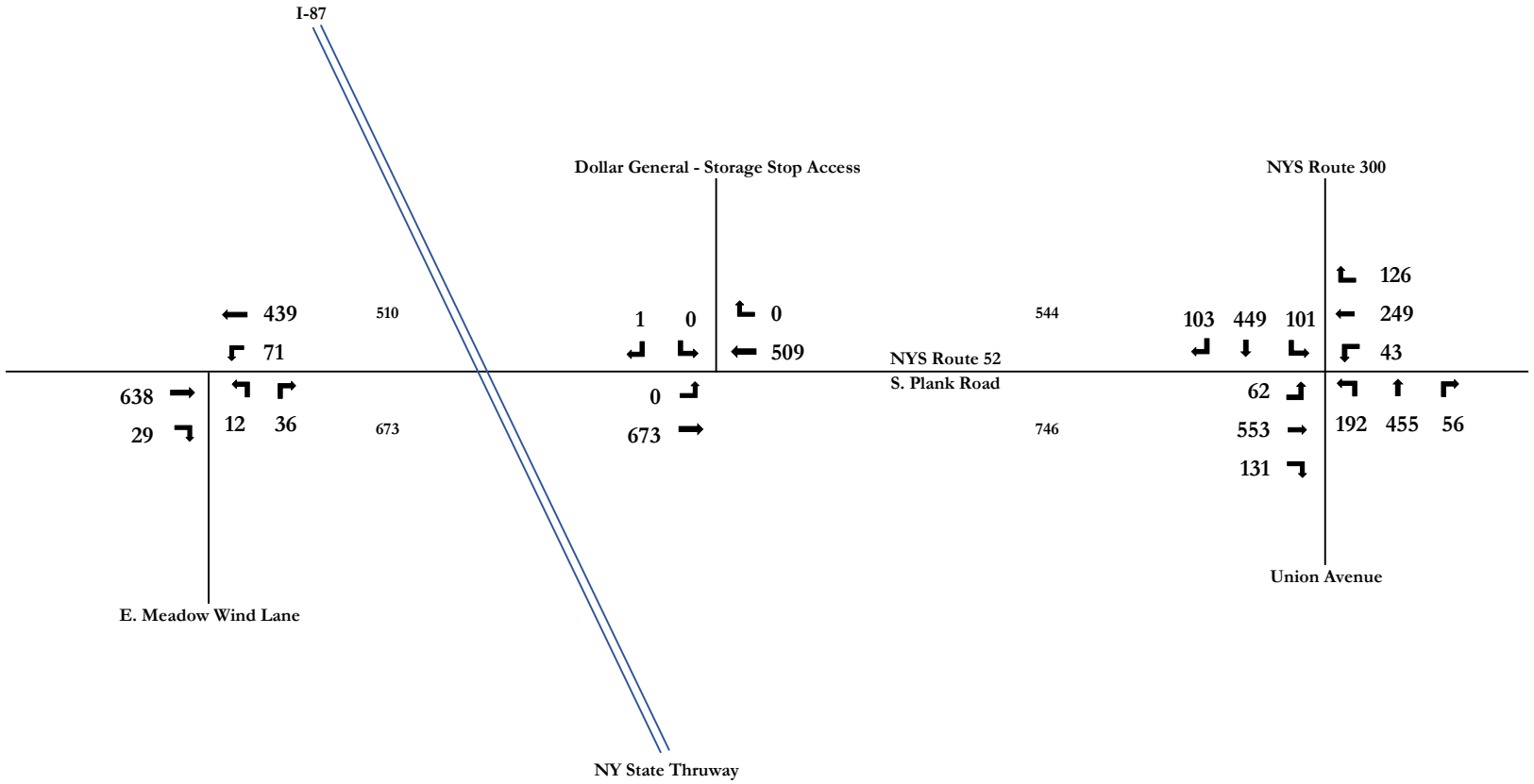
FIGURE 4

AM PEAK HOUR

2025 NO BUILD

TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

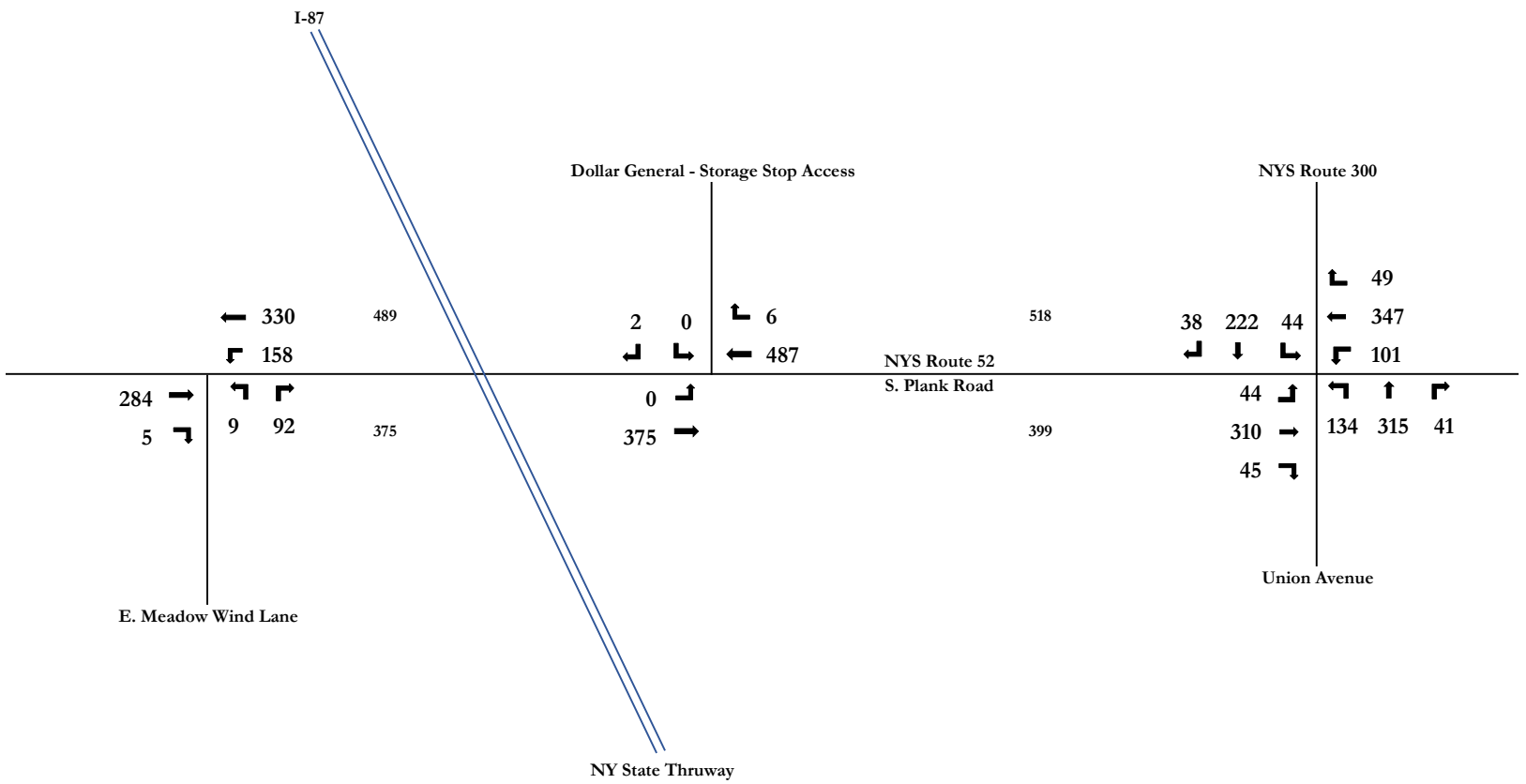
FIGURE 5

PM PEAK HOUR

2025 NO BUILD

TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

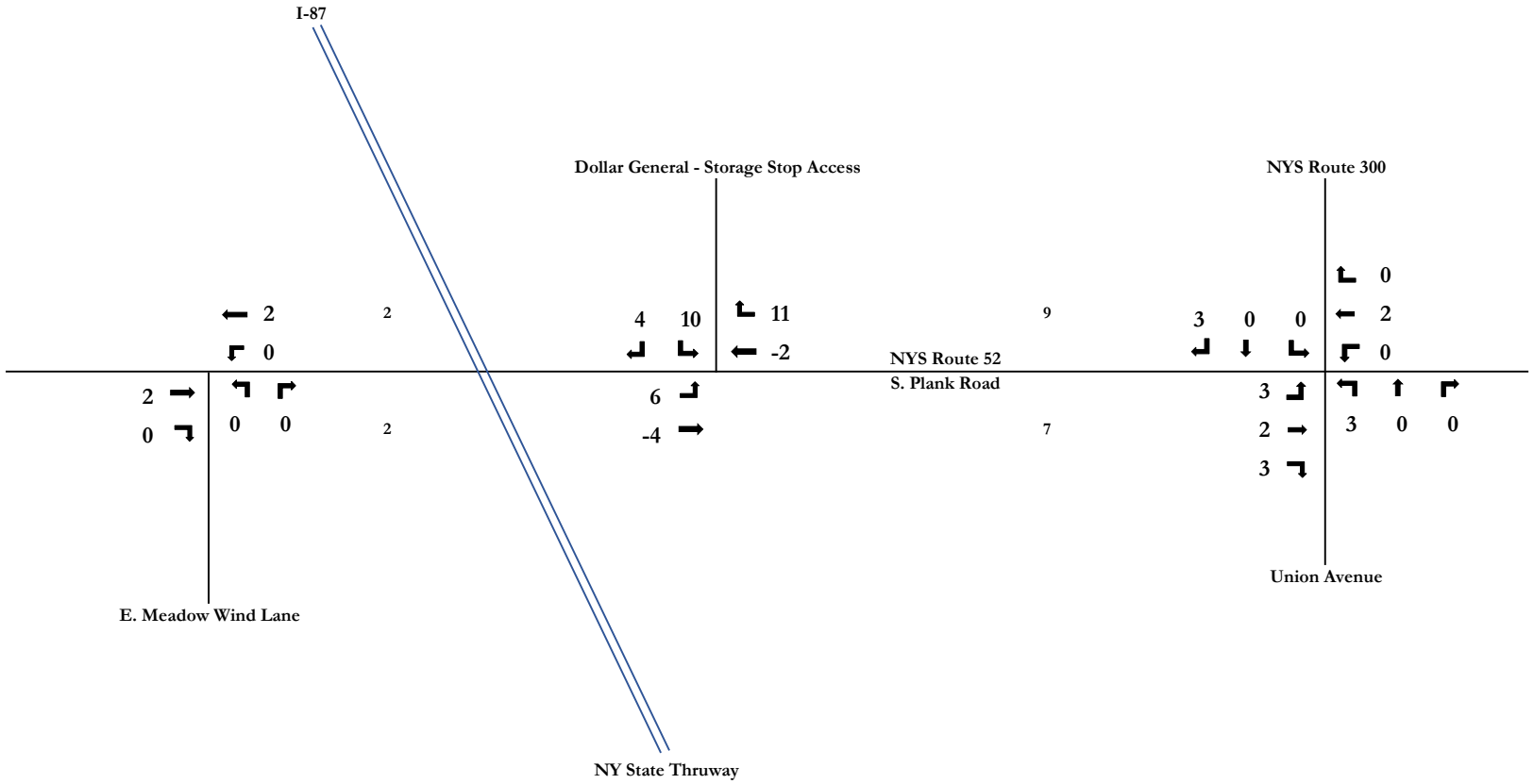
FIGURE 6

SAT PEAK HOUR

2025 NO BUILD

TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

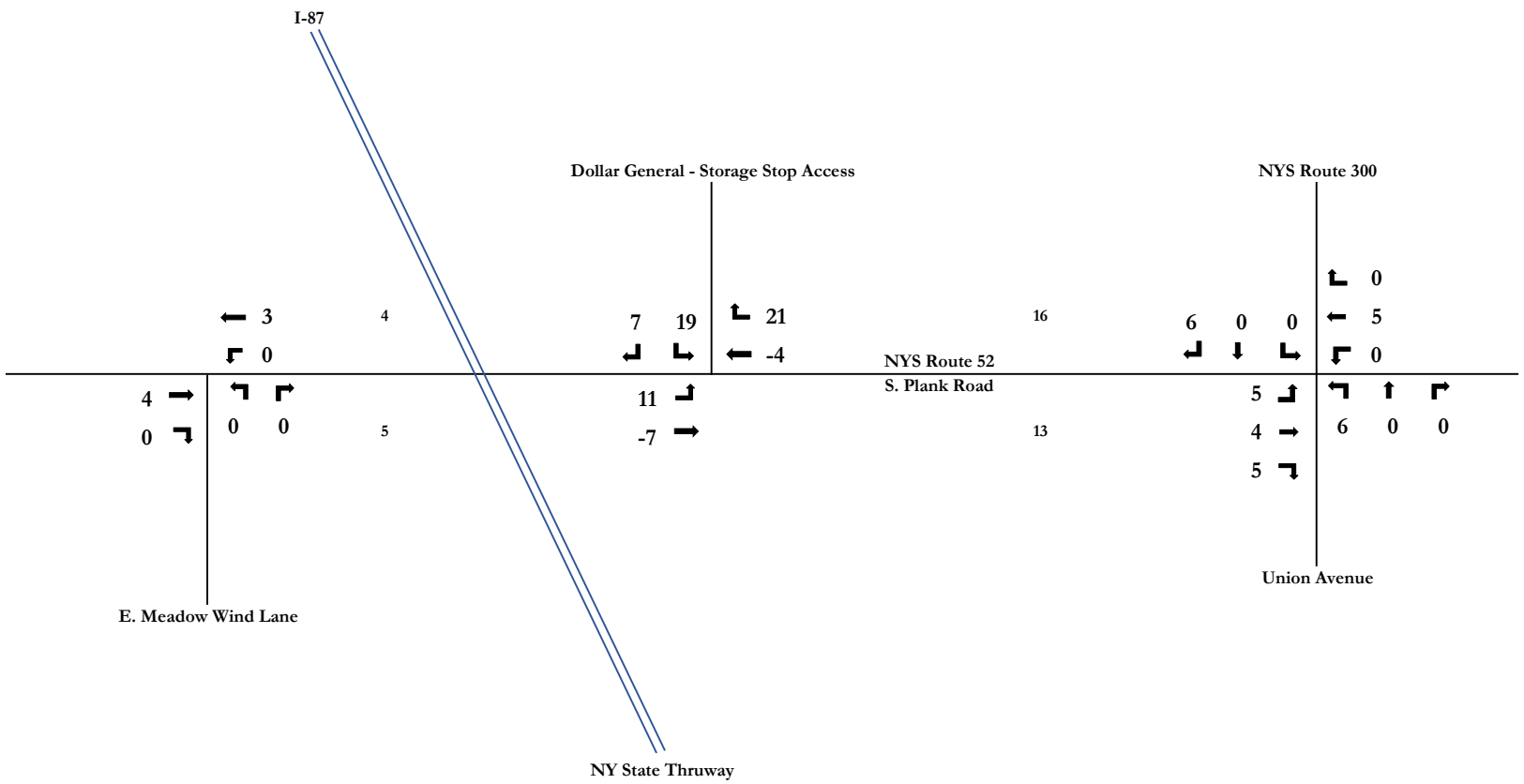
Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 7

AM PEAK HOUR

SITE GENERATED
TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

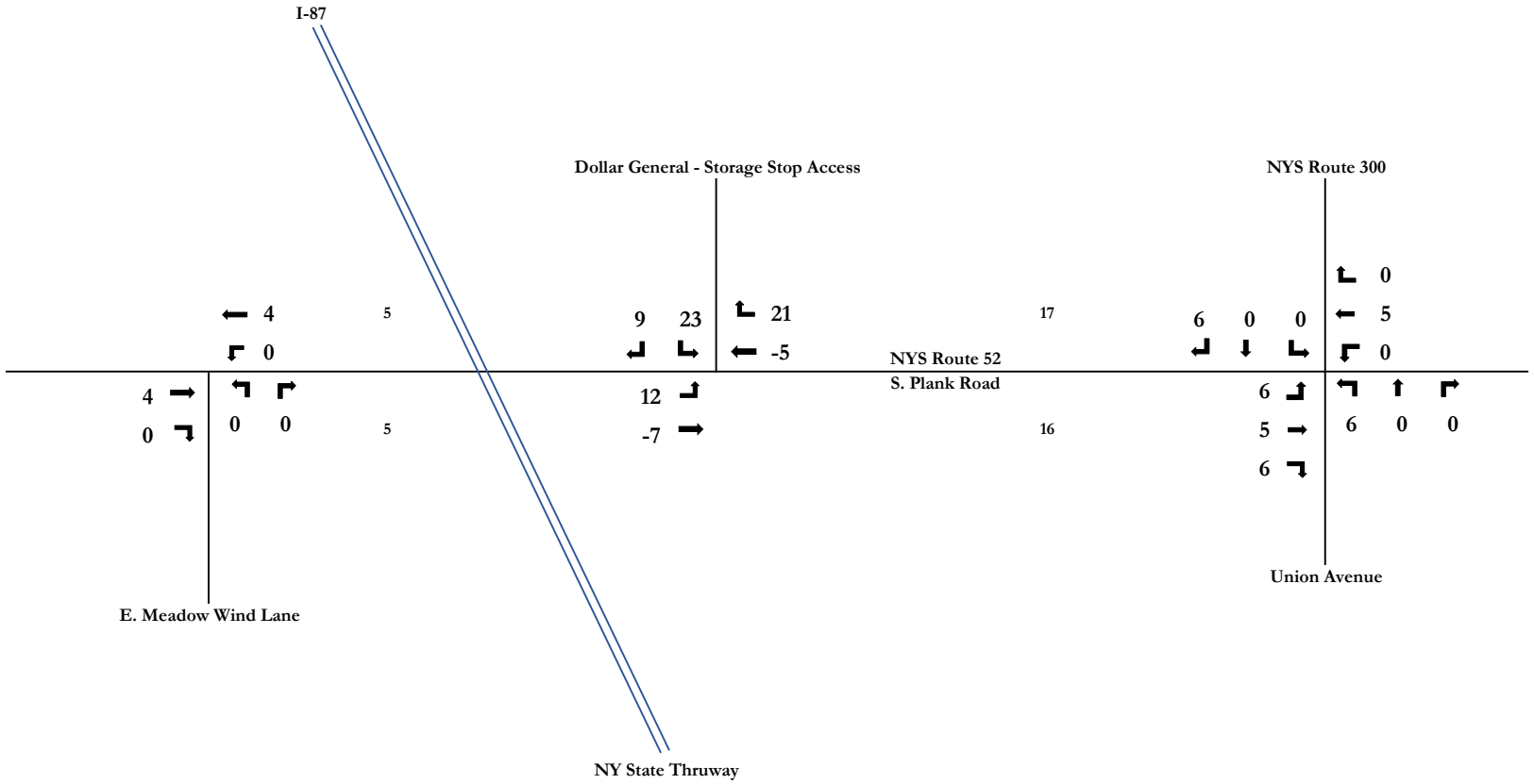
Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 8

PM PEAK HOUR

SITE GENERATED
TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

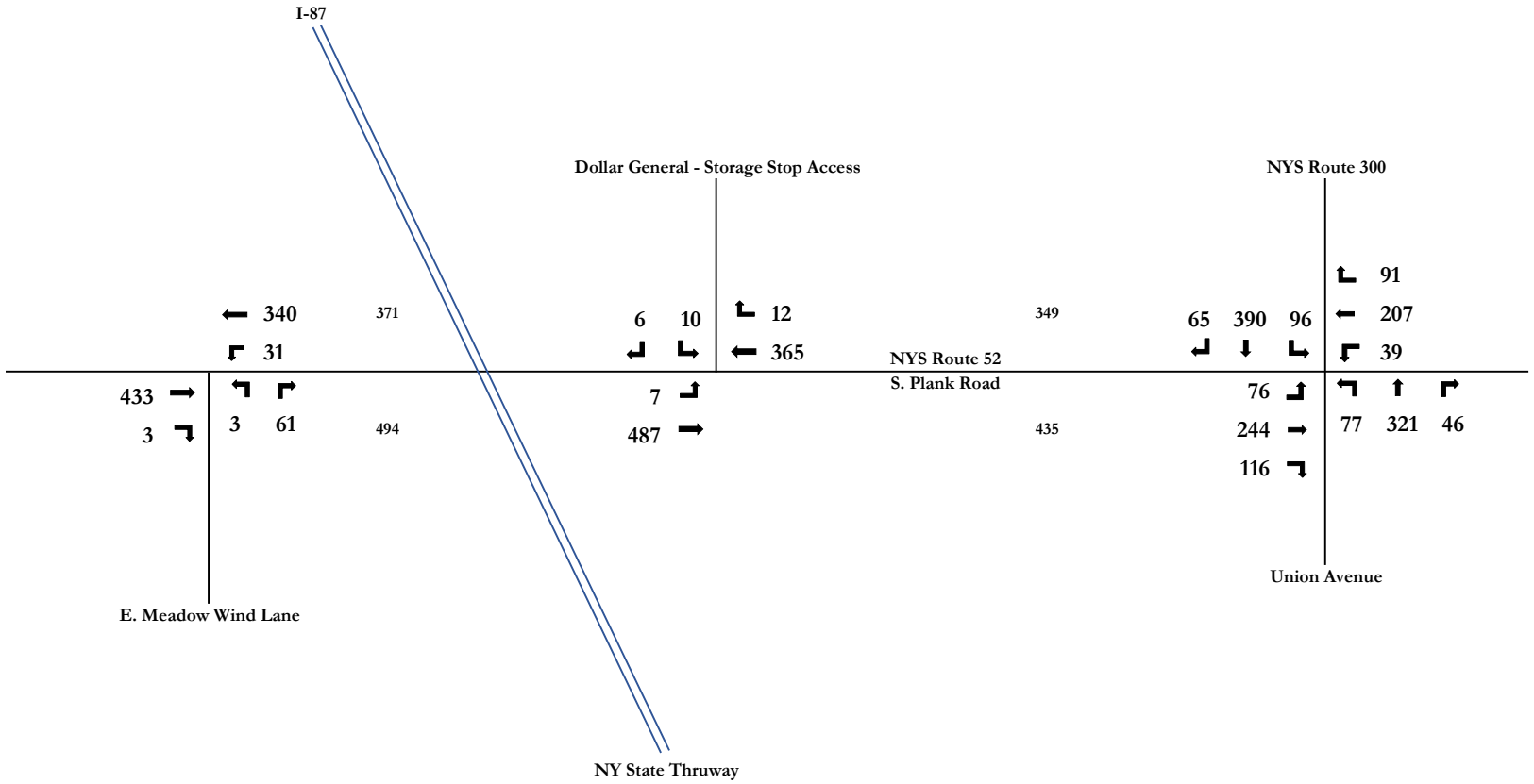
Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 9

SAT PEAK HOUR

SITE GENERATED
TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

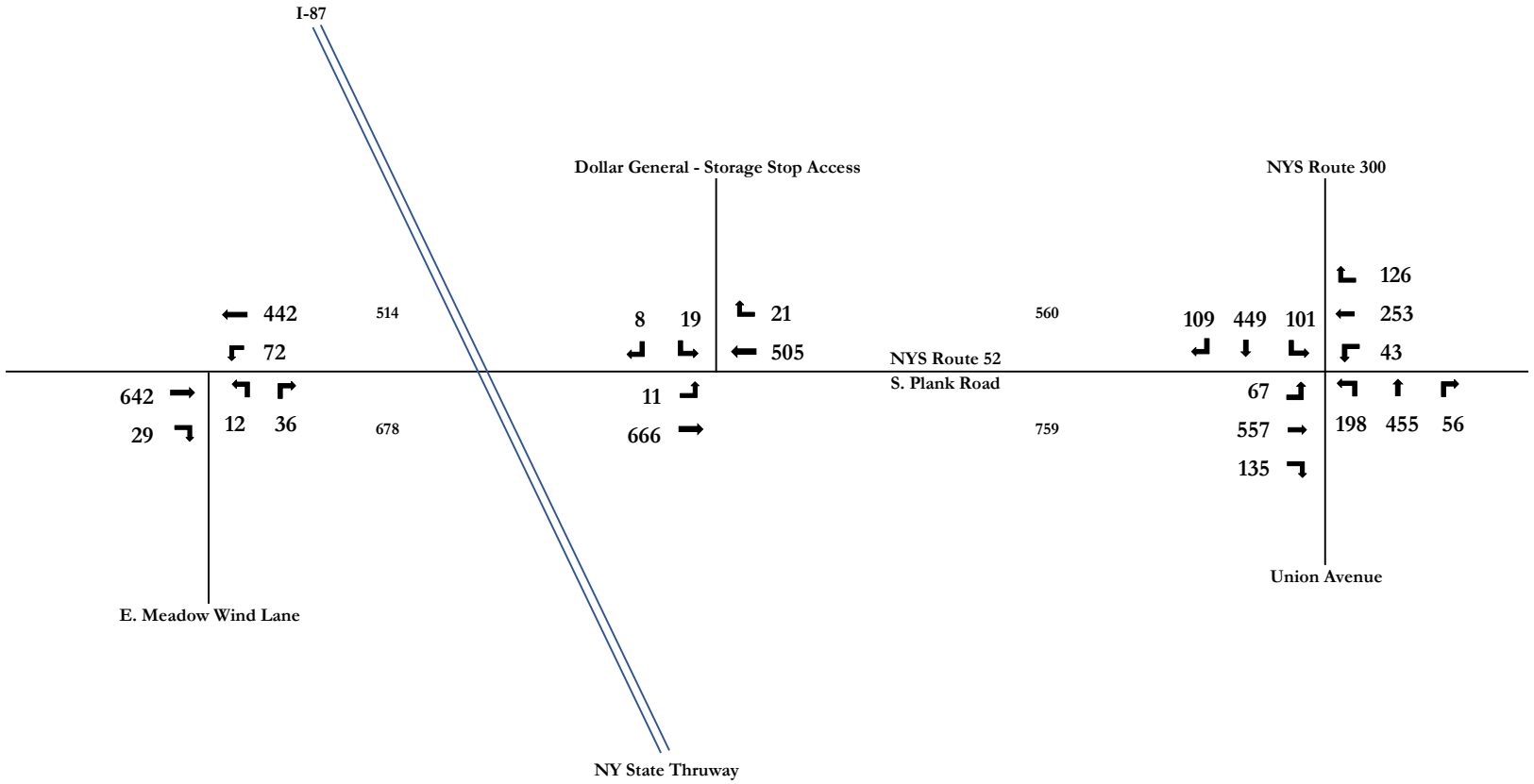
FIGURE 10

AM PEAK HOUR

2025 BUILD

TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

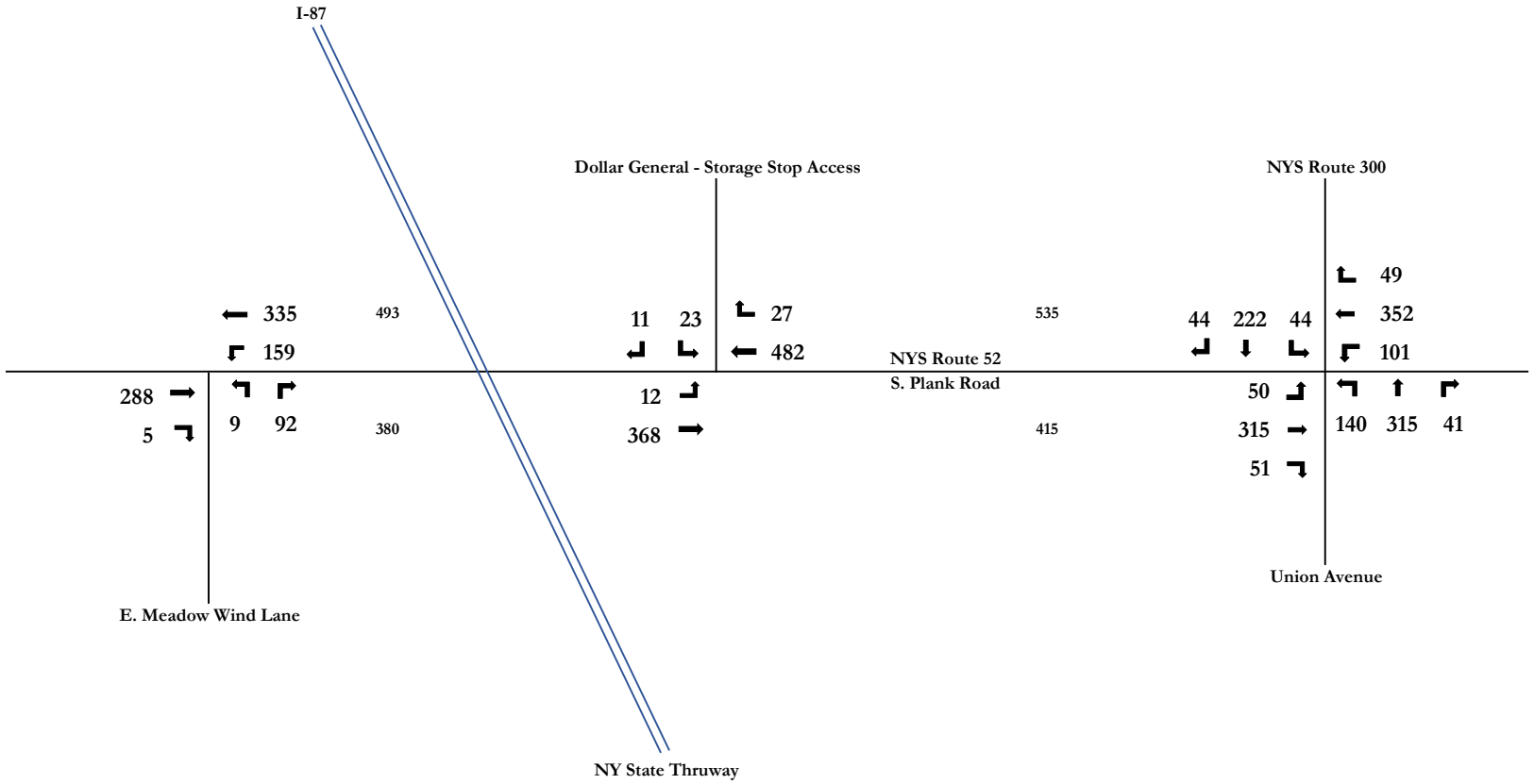
FIGURE 11

PM PEAK HOUR

2025 BUILD

TRAFFIC VOLUME CONDITIONS

NOT TO SCALE



DOLLAR GENERAL

TOWN OF NEWBURGH, NY

Prepared by: STEPHAN A. MAFFIA, P.E.

FIGURE 12

SAT PEAK HOUR

2025 BUILD

TRAFFIC VOLUME CONDITIONS

APPENDIX C

DETAILED LEVEL OF SERVICE SUMMARIES

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	422	3	30	332	3	60
Future Vol, veh/h	422	3	30	332	3	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	444	3	32	349	3	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	447	0	859	446
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	413	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1113	-	435	660
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	766	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1113	-	422	660
Mov Cap-2 Maneuver	-	-	-	-	422	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	422	660	-	-	1113	-
HCM Lane V/C Ratio	0.007	0.096	-	-	0.028	-
HCM Control Delay (s)	13.6	11	-	-	8.3	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	481	360	1	0	2
Future Vol, veh/h	1	481	360	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	1	491	367	1	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	368	0	-	0	861	368
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	493	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1191	-	-	-	342	684
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	631	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1191	-	-	-	342	684
Mov Cap-2 Maneuver	-	-	-	-	342	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	631	-

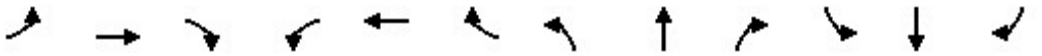
Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1191	-	-	-	684
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	8	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	237	111	38	201	89	72	315	45	94	382	61
Future Volume (veh/h)	72	237	111	38	201	89	72	315	45	94	382	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	76	249	117	40	212	94	76	332	47	99	402	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	131	322	378	94	364	371	545	912	129	610	839	134
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.51	0.51	0.06	0.52	0.52
Sat Flow, veh/h	311	1348	1580	169	1525	1553	1902	1780	252	1836	1623	258
Grp Volume(v), veh/h	325	0	117	252	0	94	76	0	379	99	0	466
Grp Sat Flow(s),veh/h/ln	1659	0	1580	1694	0	1553	1902	0	2032	1836	0	1881
Q Serve(g_s), s	4.4	0.0	4.8	0.0	0.0	3.8	1.4	0.0	8.7	1.9	0.0	12.4
Cycle Q Clear(g_c), s	14.4	0.0	4.8	10.0	0.0	3.8	1.4	0.0	8.7	1.9	0.0	12.4
Prop In Lane	0.23		1.00	0.16		1.00	1.00		0.12	1.00		0.14
Lane Grp Cap(c), veh/h	453	0	378	458	0	371	545	0	1041	610	0	973
V/C Ratio(X)	0.72	0.00	0.31	0.55	0.00	0.25	0.14	0.00	0.36	0.16	0.00	0.48
Avail Cap(c_a), veh/h	900	0	809	912	0	795	812	0	1041	859	0	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	24.4	26.3	0.0	24.1	8.7	0.0	11.4	8.2	0.0	12.1
Incr Delay (d2), s/veh	2.1	0.0	0.5	1.0	0.0	0.4	0.1	0.0	1.0	0.1	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	1.7	4.0	0.0	1.4	0.5	0.0	3.6	0.6	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	0.0	24.9	27.3	0.0	24.4	8.8	0.0	12.4	8.3	0.0	13.8
LnGrp LOS	C	A	C	C	A	C	A	A	B	A	A	B
Approach Vol, veh/h		442			346			455			565	
Approach Delay, s/veh		28.7			26.5			11.8			12.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	45.0		23.7	9.0	45.4		23.7				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	3.9	10.7		16.4	3.4	14.4		12.0				
Green Ext Time (p_c), s	0.1	2.2		2.3	0.1	2.9		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			19.1									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	625	28	70	430	12	35
Future Vol, veh/h	625	28	70	430	12	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	651	29	73	448	13	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	680	0	1260	666
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	594	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	912	-	286	513
Stage 1	-	-	-	-	638	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	912	-	263	513
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	638	-
Stage 2	-	-	-	-	618	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	263	513	-	-	912	-
HCM Lane V/C Ratio	0.048	0.071	-	-	0.08	-
HCM Control Delay (s)	19.4	12.6	-	-	9.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	660	499	0	0	1
Future Vol, veh/h	0	660	499	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	0	667	504	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	504	0	-	0	1171	504
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	667	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1061	-	-	-	227	576
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	529	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1061	-	-	-	227	576
Mov Cap-2 Maneuver	-	-	-	-	227	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	529	-

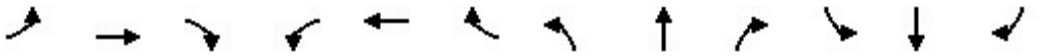
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1061	-	-	-	576
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s)	0	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	80

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	542	128	42	244	124	188	446	55	99	440	99
Future Volume (veh/h)	61	542	128	42	244	124	188	446	55	99	440	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	69	609	144	47	274	139	211	501	62	111	494	111
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	93	617	607	84	454	597	313	756	94	339	586	132
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.42	0.42	0.05	0.38	0.38
Sat Flow, veh/h	143	1606	1580	115	1181	1553	1902	1812	224	1836	1524	342
Grp Volume(v), veh/h	678	0	144	321	0	139	211	0	563	111	0	605
Grp Sat Flow(s),veh/h/ln	1749	0	1580	1296	0	1553	1902	0	2037	1836	0	1866
Q Serve(g_s), s	24.0	0.0	6.4	0.0	0.0	6.3	6.8	0.0	23.2	3.8	0.0	30.7
Cycle Q Clear(g_c), s	40.0	0.0	6.4	16.0	0.0	6.3	6.8	0.0	23.2	3.8	0.0	30.7
Prop In Lane	0.10		1.00	0.15		1.00	1.00		0.11	1.00		0.18
Lane Grp Cap(c), veh/h	710	0	607	538	0	597	313	0	849	339	0	717
V/C Ratio(X)	0.95	0.00	0.24	0.60	0.00	0.23	0.68	0.00	0.66	0.33	0.00	0.84
Avail Cap(c_a), veh/h	710	0	607	538	0	597	421	0	849	504	0	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.1	0.0	21.7	24.0	0.0	21.7	22.2	0.0	24.4	19.6	0.0	29.2
Incr Delay (d2), s/veh	23.2	0.0	0.2	1.8	0.0	0.2	2.6	0.0	4.1	0.6	0.0	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.6	0.0	2.3	5.9	0.0	2.2	3.0	0.0	11.3	1.6	0.0	15.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.2	0.0	21.9	25.9	0.0	21.9	24.8	0.0	28.5	20.2	0.0	40.8
LnGrp LOS	E	A	C	C	A	C	C	A	C	C	A	D
Approach Vol, veh/h		822			460			774			716	
Approach Delay, s/veh		49.4			24.6			27.5			37.6	
Approach LOS		D			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	48.4		45.0	14.1	45.0		45.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	5.8	25.2		42.0	8.8	32.7		18.0				
Green Ext Time (p_c), s	0.2	2.9		0.0	0.3	2.2		2.4				

Intersection Summary			
HCM 6th Ctrl Delay		36.1	
HCM 6th LOS		D	

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	278	5	155	324	9	90
Future Vol, veh/h	278	5	155	324	9	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	287	5	160	334	9	93

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	292	0	944	290
Stage 1	-	-	-	-	290	-
Stage 2	-	-	-	-	654	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1270	-	399	786
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	643	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1270	-	349	786
Mov Cap-2 Maneuver	-	-	-	-	349	-
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	562	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	349	786	-	-	1270	-
HCM Lane V/C Ratio	0.027	0.118	-	-	0.126	-
HCM Control Delay (s)	15.6	10.2	-	-	8.2	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0.4	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	368	477	6	0	2
Future Vol, veh/h	0	368	477	6	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	0	379	492	6	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	498	0	-	0	874	495
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	379	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1066	-	-	-	336	582
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	707	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1066	-	-	-	336	582
Mov Cap-2 Maneuver	-	-	-	-	336	-
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	707	-

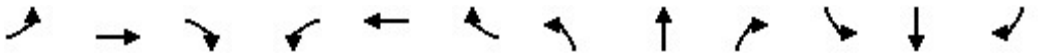
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1066	-	-	-	582
HCM Lane V/C Ratio	-	-	-	-	0.004
HCM Control Delay (s)	0	-	-	-	11.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	304	44	99	340	48	131	309	40	43	218	37
Future Volume (veh/h)	43	304	44	99	340	48	131	309	40	43	218	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	44	310	45	101	347	49	134	315	41	44	222	38
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	88	507	533	145	403	524	609	831	108	514	703	120
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.06	0.46	0.46	0.04	0.44	0.44
Sat Flow, veh/h	129	1505	1580	288	1195	1553	1902	1801	234	1836	1604	275
Grp Volume(v), veh/h	354	0	45	448	0	49	134	0	356	44	0	260
Grp Sat Flow(s),veh/h/ln	1634	0	1580	1483	0	1553	1902	0	2035	1836	0	1879
Q Serve(g_s), s	0.0	0.0	1.8	10.9	0.0	2.0	3.5	0.0	10.4	1.2	0.0	8.2
Cycle Q Clear(g_c), s	15.6	0.0	1.8	26.5	0.0	2.0	3.5	0.0	10.4	1.2	0.0	8.2
Prop In Lane	0.12		1.00	0.23		1.00	1.00		0.12	1.00		0.15
Lane Grp Cap(c), veh/h	595	0	533	549	0	524	609	0	939	514	0	823
V/C Ratio(X)	0.59	0.00	0.08	0.82	0.00	0.09	0.22	0.00	0.38	0.09	0.00	0.32
Avail Cap(c_a), veh/h	767	0	693	707	0	681	808	0	939	748	0	823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	0.0	20.6	28.9	0.0	20.7	12.8	0.0	16.0	13.3	0.0	16.7
Incr Delay (d2), s/veh	1.0	0.0	0.1	5.8	0.0	0.1	0.2	0.0	1.2	0.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.6	9.6	0.0	0.7	1.3	0.0	4.7	0.5	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	0.0	20.7	34.7	0.0	20.8	12.9	0.0	17.2	13.3	0.0	17.7
LnGrp LOS	C	A	C	C	A	C	B	A	B	B	A	B
Approach Vol, veh/h		399			497			490			304	
Approach Delay, s/veh		25.3			33.3			16.0			17.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	47.1		35.8	10.5	45.0		35.8				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	3.2	12.4		17.6	5.5	10.2		28.5				
Green Ext Time (p_c), s	0.0	2.0		2.2	0.2	1.5		2.3				

Intersection Summary			
HCM 6th Ctrl Delay		23.5	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	430	3	31	339	3	61
Future Vol, veh/h	430	3	31	339	3	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	453	3	33	357	3	64

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	456	0	878	455
Stage 1	-	-	-	-	455	-
Stage 2	-	-	-	-	423	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1105	-	427	653
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1105	-	414	653
Mov Cap-2 Maneuver	-	-	-	-	414	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	414	653	-	-	1105	-
HCM Lane V/C Ratio	0.008	0.098	-	-	0.03	-
HCM Control Delay (s)	13.8	11.1	-	-	8.4	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	491	367	1	0	2
Future Vol, veh/h	1	491	367	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	1	501	374	1	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	375	0	-	0	878	375
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	503	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1183	-	-	-	334	678
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	625	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1183	-	-	-	334	678
Mov Cap-2 Maneuver	-	-	-	-	334	-
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	625	-

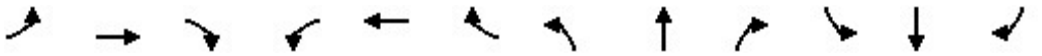
Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1183	-	-	-	678
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	8	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	242	113	39	205	91	73	321	46	96	390	62
Future Volume (veh/h)	73	242	113	39	205	91	73	321	46	96	390	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	77	255	119	41	216	96	77	338	48	101	411	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	132	328	386	95	370	379	532	905	129	600	834	132
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.51	0.51	0.06	0.51	0.51
Sat Flow, veh/h	308	1345	1580	170	1515	1553	1902	1779	253	1836	1625	257
Grp Volume(v), veh/h	332	0	119	257	0	96	77	0	386	101	0	476
Grp Sat Flow(s),veh/h/ln	1653	0	1580	1684	0	1553	1902	0	2032	1836	0	1882
Q Serve(g_s), s	4.6	0.0	4.8	0.0	0.0	3.9	1.5	0.0	9.1	2.0	0.0	13.0
Cycle Q Clear(g_c), s	14.9	0.0	4.8	10.3	0.0	3.9	1.5	0.0	9.1	2.0	0.0	13.0
Prop In Lane	0.23		1.00	0.16		1.00	1.00		0.12	1.00		0.14
Lane Grp Cap(c), veh/h	460	0	386	464	0	379	532	0	1033	600	0	966
V/C Ratio(X)	0.72	0.00	0.31	0.55	0.00	0.25	0.14	0.00	0.37	0.17	0.00	0.49
Avail Cap(c_a), veh/h	892	0	804	903	0	790	796	0	1033	846	0	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	24.3	26.2	0.0	24.0	9.0	0.0	11.7	8.4	0.0	12.5
Incr Delay (d2), s/veh	2.2	0.0	0.4	1.0	0.0	0.3	0.1	0.0	1.0	0.1	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	1.7	4.1	0.0	1.4	0.5	0.0	3.7	0.7	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	0.0	24.8	27.2	0.0	24.3	9.1	0.0	12.8	8.6	0.0	14.3
LnGrp LOS	C	A	C	C	A	C	A	A	B	A	A	B
Approach Vol, veh/h		451			353			463			577	
Approach Delay, s/veh		28.7			26.4			12.2			13.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	45.0		24.2	9.1	45.4		24.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	4.0	11.1		16.9	3.5	15.0		12.3				
Green Ext Time (p_c), s	0.2	2.2		2.3	0.1	2.9		1.8				

Intersection Summary												
HCM 6th Ctrl Delay			19.3									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	638	29	71	439	12	36
Future Vol, veh/h	638	29	71	439	12	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	665	30	74	457	13	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	695	0	1285	680
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	605	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	901	-	279	505
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	667	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	901	-	256	505
Mov Cap-2 Maneuver	-	-	-	-	256	-
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	612	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	256	505	-	-	901	-
HCM Lane V/C Ratio	0.049	0.074	-	-	0.082	-
HCM Control Delay (s)	19.8	12.7	-	-	9.4	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	673	509	0	0	1
Future Vol, veh/h	0	673	509	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	0	680	514	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	514	0	-	0	1194	514
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	680	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1052	-	-	-	220	569
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	523	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1052	-	-	-	220	569
Mov Cap-2 Maneuver	-	-	-	-	220	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	523	-

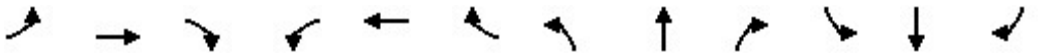
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1052	-	-	-	569
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s)	0	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	553	131	43	249	126	192	455	56	101	449	103
Future Volume (veh/h)	62	553	131	43	249	126	192	455	56	101	449	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	70	621	147	48	280	142	216	511	63	113	504	116
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	92	613	606	84	452	596	304	756	93	334	582	134
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.42	0.42	0.06	0.38	0.38
Sat Flow, veh/h	142	1597	1580	115	1179	1553	1902	1813	224	1836	1516	349
Grp Volume(v), veh/h	691	0	147	328	0	142	216	0	574	113	0	620
Grp Sat Flow(s),veh/h/ln	1739	0	1580	1293	0	1553	1902	0	2037	1836	0	1865
Q Serve(g_s), s	23.1	0.0	6.6	0.0	0.0	6.5	7.0	0.0	23.8	3.8	0.0	32.0
Cycle Q Clear(g_c), s	40.0	0.0	6.6	16.9	0.0	6.5	7.0	0.0	23.8	3.8	0.0	32.0
Prop In Lane	0.10		1.00	0.15		1.00	1.00		0.11	1.00		0.19
Lane Grp Cap(c), veh/h	705	0	606	536	0	596	304	0	850	334	0	716
V/C Ratio(X)	0.98	0.00	0.24	0.61	0.00	0.24	0.71	0.00	0.68	0.34	0.00	0.87
Avail Cap(c_a), veh/h	705	0	606	536	0	596	409	0	850	496	0	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.7	0.0	21.8	24.3	0.0	21.8	22.7	0.0	24.7	19.8	0.0	29.7
Incr Delay (d2), s/veh	28.8	0.0	0.2	2.1	0.0	0.2	3.7	0.0	4.3	0.6	0.0	13.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.3	0.0	2.4	6.1	0.0	2.3	3.1	0.0	11.6	1.6	0.0	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	0.0	22.0	26.4	0.0	22.0	26.4	0.0	28.9	20.4	0.0	43.0
LnGrp LOS	E	A	C	C	A	C	C	A	C	C	A	D
Approach Vol, veh/h		838			470			790			733	
Approach Delay, s/veh		54.6			25.0			28.3			39.5	
Approach LOS		D			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	48.5		45.0	14.3	45.0		45.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	5.8	25.8		42.0	9.0	34.0		18.9				
Green Ext Time (p_c), s	0.2	2.9		0.0	0.3	2.0		2.4				

Intersection Summary												
HCM 6th Ctrl Delay			38.4									
HCM 6th LOS			D									

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	284	5	158	330	9	92
Future Vol, veh/h	284	5	158	330	9	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	293	5	163	340	9	95

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	298	0	962	296
Stage 1	-	-	-	-	296	-
Stage 2	-	-	-	-	666	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1263	-	391	781
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	638	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1263	-	341	781
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	556	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	341	781	-	-	1263	-
HCM Lane V/C Ratio	0.027	0.121	-	-	0.129	-
HCM Control Delay (s)	15.9	10.2	-	-	8.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0.4	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	375	487	6	0	2
Future Vol, veh/h	0	375	487	6	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	0	387	502	6	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	508	0	-	0	892	505
Stage 1	-	-	-	-	505	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1057	-	-	-	328	575
Stage 1	-	-	-	-	623	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1057	-	-	-	328	575
Mov Cap-2 Maneuver	-	-	-	-	328	-
Stage 1	-	-	-	-	623	-
Stage 2	-	-	-	-	701	-

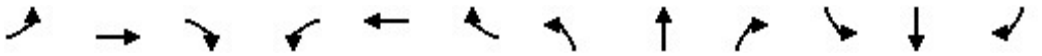
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1057	-	-	-	575
HCM Lane V/C Ratio	-	-	-	-	0.004
HCM Control Delay (s)	0	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	310	45	101	347	49	134	315	41	44	222	38
Future Volume (veh/h)	44	310	45	101	347	49	134	315	41	44	222	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	45	316	46	103	354	50	137	321	42	45	227	39
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	88	514	545	147	408	535	596	821	107	501	692	119
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.06	0.46	0.46	0.04	0.43	0.43
Sat Flow, veh/h	129	1491	1580	287	1183	1553	1902	1799	235	1836	1603	275
Grp Volume(v), veh/h	361	0	46	457	0	50	137	0	363	45	0	266
Grp Sat Flow(s),veh/h/ln	1620	0	1580	1470	0	1553	1902	0	2035	1836	0	1878
Q Serve(g_s), s	0.0	0.0	1.8	11.5	0.0	2.0	3.6	0.0	10.9	1.2	0.0	8.7
Cycle Q Clear(g_c), s	16.2	0.0	1.8	27.8	0.0	2.0	3.6	0.0	10.9	1.2	0.0	8.7
Prop In Lane	0.12		1.00	0.23		1.00	1.00		0.12	1.00		0.15
Lane Grp Cap(c), veh/h	602	0	545	555	0	535	596	0	928	501	0	811
V/C Ratio(X)	0.60	0.00	0.08	0.82	0.00	0.09	0.23	0.00	0.39	0.09	0.00	0.33
Avail Cap(c_a), veh/h	750	0	682	691	0	671	788	0	928	730	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	20.5	29.1	0.0	20.5	13.3	0.0	16.7	13.8	0.0	17.4
Incr Delay (d2), s/veh	1.0	0.0	0.1	6.6	0.0	0.1	0.2	0.0	1.2	0.1	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.6	10.1	0.0	0.7	1.4	0.0	4.9	0.5	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	0.0	20.5	35.7	0.0	20.6	13.5	0.0	17.9	13.9	0.0	18.5
LnGrp LOS	C	A	C	D	A	C	B	A	B	B	A	B
Approach Vol, veh/h		407			507			500			311	
Approach Delay, s/veh		25.2			34.2			16.7			17.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	47.2		36.9	10.7	45.0		36.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	3.2	12.9		18.2	5.6	10.7		29.8				
Green Ext Time (p_c), s	0.0	2.0		2.2	0.2	1.5		2.2				

Intersection Summary			
HCM 6th Ctrl Delay		24.0	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	433	3	31	340	3	61
Future Vol, veh/h	433	3	31	340	3	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	456	3	33	358	3	64

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	459	0	882	458
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	424	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1102	-	425	651
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	760	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1102	-	412	651
Mov Cap-2 Maneuver	-	-	-	-	412	-
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	737	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	412	651	-	-	1102	-
HCM Lane V/C Ratio	0.008	0.099	-	-	0.03	-
HCM Control Delay (s)	13.8	11.1	-	-	8.4	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	487	365	12	10	6
Future Vol, veh/h	7	487	365	12	10	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	7	497	372	12	10	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	384	0	-	0	889	378
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	511	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1174	-	-	-	330	676
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	620	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1174	-	-	-	327	676
Mov Cap-2 Maneuver	-	-	-	-	327	-
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	620	-

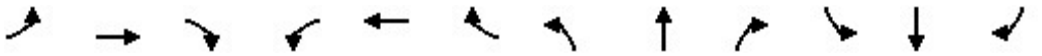
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1174	-	-	-	406
HCM Lane V/C Ratio	0.006	-	-	-	0.04
HCM Control Delay (s)	8.1	0	-	-	14.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	244	116	39	207	91	77	321	46	96	390	62
Future Volume (veh/h)	76	244	116	39	207	91	77	321	46	96	390	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	80	257	122	41	218	96	81	338	48	101	411	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	135	329	393	94	376	386	527	899	128	595	828	131
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.51	0.51	0.06	0.51	0.51
Sat Flow, veh/h	317	1325	1580	168	1514	1553	1902	1779	253	1836	1625	257
Grp Volume(v), veh/h	337	0	122	259	0	96	81	0	386	101	0	476
Grp Sat Flow(s),veh/h/ln	1642	0	1580	1682	0	1553	1902	0	2032	1836	0	1882
Q Serve(g_s), s	4.9	0.0	5.0	0.0	0.0	3.9	1.6	0.0	9.2	2.0	0.0	13.1
Cycle Q Clear(g_c), s	15.3	0.0	5.0	10.4	0.0	3.9	1.6	0.0	9.2	2.0	0.0	13.1
Prop In Lane	0.24		1.00	0.16		1.00	1.00		0.12	1.00		0.14
Lane Grp Cap(c), veh/h	464	0	393	471	0	386	527	0	1027	595	0	958
V/C Ratio(X)	0.73	0.00	0.31	0.55	0.00	0.25	0.15	0.00	0.38	0.17	0.00	0.50
Avail Cap(c_a), veh/h	883	0	799	897	0	785	788	0	1027	840	0	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	24.2	26.1	0.0	23.8	9.2	0.0	11.9	8.6	0.0	12.7
Incr Delay (d2), s/veh	2.2	0.0	0.4	1.0	0.0	0.3	0.1	0.0	1.1	0.1	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	1.8	4.1	0.0	1.4	0.5	0.0	3.8	0.7	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	0.0	24.7	27.1	0.0	24.1	9.3	0.0	13.0	8.8	0.0	14.6
LnGrp LOS	C	A	C	C	A	C	A	A	B	A	A	B
Approach Vol, veh/h		459			355			467			577	
Approach Delay, s/veh		28.7			26.3			12.4			13.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	45.0		24.7	9.2	45.3		24.7				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	4.0	11.2		17.3	3.6	15.1		12.4				
Green Ext Time (p_c), s	0.2	2.2		2.3	0.1	2.9		1.8				

Intersection Summary												
HCM 6th Ctrl Delay			19.4									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	642	29	71	442	12	36
Future Vol, veh/h	642	29	71	442	12	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	669	30	74	460	13	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	699	0	1292	684
Stage 1	-	-	-	-	684	-
Stage 2	-	-	-	-	608	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	898	-	277	503
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	665	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	898	-	254	503
Mov Cap-2 Maneuver	-	-	-	-	254	-
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	610	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	254	503	-	-	898	-
HCM Lane V/C Ratio	0.049	0.075	-	-	0.082	-
HCM Control Delay (s)	19.9	12.7	-	-	9.4	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	666	505	21	19	8
Future Vol, veh/h	11	666	505	21	19	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	11	673	510	21	19	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	531	0	-	0	1216	521
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	695	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1036	-	-	-	214	563
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	515	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1036	-	-	-	210	563
Mov Cap-2 Maneuver	-	-	-	-	210	-
Stage 1	-	-	-	-	603	-
Stage 2	-	-	-	-	515	-

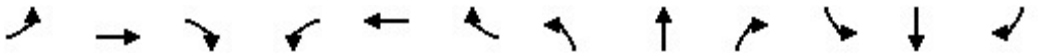
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	20.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1036	-	-	-	258
HCM Lane V/C Ratio	0.011	-	-	-	0.106
HCM Control Delay (s)	8.5	0	-	-	20.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	557	135	43	253	126	198	455	56	101	449	109
Future Volume (veh/h)	67	557	135	43	253	126	198	455	56	101	449	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	75	626	152	48	284	142	222	511	63	113	504	122
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	96	600	605	84	455	595	301	758	93	335	574	139
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.42	0.42	0.06	0.38	0.38
Sat Flow, veh/h	151	1567	1580	115	1189	1553	1902	1813	224	1836	1500	363
Grp Volume(v), veh/h	701	0	152	332	0	142	222	0	574	113	0	626
Grp Sat Flow(s),veh/h/ln	1718	0	1580	1304	0	1553	1902	0	2037	1836	0	1863
Q Serve(g_s), s	22.7	0.0	6.9	0.0	0.0	6.5	7.2	0.0	23.8	3.8	0.0	32.6
Cycle Q Clear(g_c), s	40.0	0.0	6.9	17.3	0.0	6.5	7.2	0.0	23.8	3.8	0.0	32.6
Prop In Lane	0.11		1.00	0.14		1.00	1.00		0.11	1.00		0.19
Lane Grp Cap(c), veh/h	696	0	605	539	0	595	301	0	852	335	0	713
V/C Ratio(X)	1.01	0.00	0.25	0.62	0.00	0.24	0.74	0.00	0.67	0.34	0.00	0.88
Avail Cap(c_a), veh/h	696	0	605	539	0	595	402	0	852	497	0	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.3	0.0	22.0	24.5	0.0	21.9	22.9	0.0	24.6	19.8	0.0	30.0
Incr Delay (d2), s/veh	35.9	0.0	0.2	2.1	0.0	0.2	4.8	0.0	4.2	0.6	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.0	0.0	2.5	6.3	0.0	2.3	3.3	0.0	11.6	1.6	0.0	16.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.2	0.0	22.2	26.6	0.0	22.1	27.7	0.0	28.9	20.4	0.0	44.3
LnGrp LOS	F	A	C	C	A	C	C	A	C	C	A	D
Approach Vol, veh/h		853			474			796			739	
Approach Delay, s/veh		60.8			25.3			28.5			40.7	
Approach LOS		E			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	48.7		45.0	14.5	45.0		45.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	5.8	25.8		42.0	9.2	34.6		19.3				
Green Ext Time (p_c), s	0.2	2.9		0.0	0.3	1.9		2.4				

Intersection Summary			
HCM 6th Ctrl Delay		40.7	
HCM 6th LOS		D	

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	288	5	159	335	9	92
Future Vol, veh/h	288	5	159	335	9	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	1	-6	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	2	2	5	2	2
Mvmt Flow	297	5	164	345	9	95

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	302	0	973	300
Stage 1	-	-	-	-	300	-
Stage 2	-	-	-	-	673	-
Critical Hdwy	-	-	4.12	-	5.22	5.62
Critical Hdwy Stg 1	-	-	-	-	4.22	-
Critical Hdwy Stg 2	-	-	-	-	4.22	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1259	-	387	777
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	634	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1259	-	337	777
Mov Cap-2 Maneuver	-	-	-	-	337	-
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	552	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	337	777	-	-	1259	-
HCM Lane V/C Ratio	0.028	0.122	-	-	0.13	-
HCM Control Delay (s)	16	10.3	-	-	8.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0.4	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	358	482	27	23	11
Future Vol, veh/h	12	358	482	27	23	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	-1	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	5	5	2	2	2
Mvmt Flow	12	369	497	28	24	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	525	0	-	0	904	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	393	-
Critical Hdwy	4.12	-	-	-	6.22	6.12
Critical Hdwy Stg 1	-	-	-	-	5.22	-
Critical Hdwy Stg 2	-	-	-	-	5.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1042	-	-	-	323	571
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	697	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1042	-	-	-	318	571
Mov Cap-2 Maneuver	-	-	-	-	318	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1042	-	-	-	371
HCM Lane V/C Ratio	0.012	-	-	-	0.094
HCM Control Delay (s)	8.5	0	-	-	15.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	20	45	45	20	45	45
Maximum Split (%)	18.2%	40.9%	40.9%	18.2%	40.9%	40.9%
Minimum Split (s)	10	23	23	10	23	23
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	2	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	20	65	0	20	65
End Time (s)	20	65	0	20	65	0
Yield/Force Off (s)	15	60	105	15	60	105
Yield/Force Off 170(s)	15	49	94	15	49	94
Local Start Time (s)	90	0	45	90	0	45
Local Yield (s)	105	40	85	105	40	85
Local Yield 170(s)	105	29	74	105	29	74

Intersection Summary	
Cycle Length	110
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Union Ave/Route 300 & Route 52/S. Plank Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	315	51	101	352	49	140	315	41	44	222	44
Future Volume (veh/h)	50	315	51	101	352	49	140	315	41	44	222	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1832	1832	1832	1997	2077	2077	1928	1928	1928
Adj Flow Rate, veh/h	51	321	52	103	359	50	143	321	42	45	227	45
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	5	5	5	3	3	3	4	4	4	6	6	6
Cap, veh/h	94	501	557	145	411	547	584	813	106	493	664	132
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.06	0.45	0.45	0.04	0.42	0.42
Sat Flow, veh/h	144	1422	1580	279	1166	1553	1902	1799	235	1836	1562	310
Grp Volume(v), veh/h	372	0	52	462	0	50	143	0	363	45	0	272
Grp Sat Flow(s),veh/h/ln	1566	0	1580	1445	0	1553	1902	0	2035	1836	0	1872
Q Serve(g_s), s	0.0	0.0	2.1	11.3	0.0	2.0	3.9	0.0	11.2	1.3	0.0	9.2
Cycle Q Clear(g_c), s	17.9	0.0	2.1	29.2	0.0	2.0	3.9	0.0	11.2	1.3	0.0	9.2
Prop In Lane	0.14		1.00	0.22		1.00	1.00		0.12	1.00		0.17
Lane Grp Cap(c), veh/h	595	0	557	556	0	547	584	0	919	493	0	795
V/C Ratio(X)	0.63	0.00	0.09	0.83	0.00	0.09	0.24	0.00	0.40	0.09	0.00	0.34
Avail Cap(c_a), veh/h	716	0	671	669	0	660	766	0	919	718	0	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	20.4	29.4	0.0	20.4	13.8	0.0	17.2	14.4	0.0	18.2
Incr Delay (d2), s/veh	1.2	0.0	0.1	7.5	0.0	0.1	0.2	0.0	1.3	0.1	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	0.7	10.5	0.0	0.7	1.5	0.0	5.1	0.5	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	20.5	36.8	0.0	20.5	14.1	0.0	18.5	14.5	0.0	19.4
LnGrp LOS	C	A	C	D	A	C	B	A	B	B	A	B
Approach Vol, veh/h		424			512			506			317	
Approach Delay, s/veh		25.5			35.2			17.2			18.7	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	47.5		38.2	11.0	45.0		38.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	40.0		40.0	15.0	40.0		40.0				
Max Q Clear Time (g_c+I1), s	3.3	13.2		19.9	5.9	11.2		31.2				
Green Ext Time (p_c), s	0.0	2.0		2.3	0.2	1.5		2.0				

Intersection Summary			
HCM 6th Ctrl Delay		24.7	
HCM 6th LOS		C	

APPENDIX D

ACCIDENT DATA

Case Year	Number	On Street	Closest Cross Street	Crash Date	Crash Time	Crash Severity	Non Reportable	# of Injuries	# of Fatalities	# of Vehicles	Crash Type	Collision Type	Traffic Control	Light Conditions	Weather Conditions	Road Surface Conditions	Apparent Contributing Factor
2020	4	[Route] 52	[Route] 300	9/10/2020	11:56 AM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	NONE	DAYLIGHT	CLOUDY	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,DRIVER INATTENTION)
		[Route] 300	[Route] 52	10/30/2020	3:40 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE	DAYLIGHT	CLEAR	WET	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,PAVEMENT SLIPPERY)
		[Route] 52	[Route] 300	9/18/2020	4:02 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(PASSING OR LANE USAGE IMPROPERLY,NOT APPLICABLE)
		S PLANK RD	Union Ave	11/26/2020	5:32 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DARK-ROAD LIGHTED	CLEAR	DRY	V1:(DRIVER INATTENTION,FOLLOWING TOO CLOSELY) / V2:(NOT APPLICABLE,NOT APPLICABLE)

Case Year	Number	On Street	Closest Cross Street	Crash Date	Crash Time	Crash Severity	Non Reportable	# of Injuries	# of Fatalities	# of Vehicles	Crash Type	Collision Type	Traffic Control	Light Conditions	Weather Conditions	Road Surface Conditions	Apparent Contributing Factor
2021	26	S PLANK RD	Union Ave	3/5/2021	7:13 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (WITH OTHER CAR)	NONE	DARK-ROAD LIGHTED	CLEAR	DRY	V1:(FAILURE TO YIELD RIGHT OF WAY,TURNING IMPROPER) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		S PLANK RD		3/10/2021	9:08 PM	PROPERTY DAMAGE	0	0	0	1	COLLISION WITH DEER	OTHER	NONE	DARK-ROAD UNLIGHTED	CLEAR	DRY	V1:(ANIMALS ACTION, NOT APPLICABLE)
		S PLANK RD	E Meadow Wind Ln	4/21/2021	9:39 PM	PROPERTY DAMAGE	1	0	0	1	COLLISION WITH OTHER	OTHER	NONE	DARK-ROAD UNLIGHTED	CLOUDY	DRY	V1:(OBSTRUCTION/DEBRIS,NOT APPLICABLE)
		[Route] 300	[Route] 52	5/8/2021	12:13 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE	DAYLIGHT	RAIN	WET	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,DRIVER INATTENTION)
		[Route] 52	Driveway	5/21/2021	9:24 AM	PROPERTY DAMAGE	1	0	0	1	OTHER NON-COLLISION	OTHER	NONE	DAYLIGHT	CLEAR	DRY	V1:(OBSTRUCTION/DEBRIS,NOT APPLICABLE)
		S PLANK RD	Corel Pl	5/28/2021	6:29 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	NONE	DAYLIGHT	RAIN	WET	V1:(FAILURE TO KEEP RIGHT,NOT APPLICABLE) / V2:(FAILURE TO KEEP RIGHT,NOT APPLICABLE)
		[Route] 52	COREL PL	6/16/2021	1:36 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	NONE	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FAILURE TO YIELD RIGHT OF WAY,NOT APPLICABLE)
		S PLANK RD		7/16/2021	3:53 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE	DAYLIGHT	CLEAR	DRY	V1:(DRIVER INATTENTION, FOLLOWING TOO CLOSELY) / V2:(NOT ENTERED,NOT ENTERED)
		S PLANK RD	Union Ave	10/12/2021	3:22 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	NONE	DAYLIGHT	CLEAR	DRY	V1:(PASSING OR LANE USAGE IMPROPERLY,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,AGGRESSIVE DRIVING/ROAD RAGE)
		S PLANK RD	Monkey Run Rd	11/12/2021	7:13 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	NONE	DARK-ROAD UNLIGHTED	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(BACKING UNSAFELY,NOT APPLICABLE)
		S PLANK RD	Driveway	12/24/2021	10:13 PM	PROPERTY DAMAGE	1	0	0	1	COLLISION WITH DEER	OTHER	NONE	DARK-ROAD UNLIGHTED	CLEAR	WET	V1:(ANIMALS ACTION, NOT APPLICABLE)
		[Route] 300	[Route] 52	3/3/2021	1:38 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,NOT APPLICABLE)
		[Route] 52	[Route] 300	3/16/2021	8:43 AM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL	DAYLIGHT	CLOUDY	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(PASSING OR LANE USAGE IMPROPERLY,NOT APPLICABLE)
		UNION AVE	S Plank Rd	4/17/2021	7:31 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,NOT APPLICABLE)
		UNION AVE	S Plank Rd	5/13/2021	8:40 AM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(UNSAFE LANE CHANGE,NOT APPLICABLE)
		[Route] 52	[Route] 300	5/23/2021	1:57 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(FOLLOWING TOO CLOSELY,DRIVER INATTENTION) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		S PLANK RD	Union Ave	6/4/2021	10:12 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DARK-ROAD LIGHTED	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,DRIVER INATTENTION)
		S PLANK RD	Union Ave	6/14/2021	7:29 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	RAIN	WET	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,PAVEMENT SLIPPERY)
		UNION AVE	S Plank Rd	7/6/2021	1:23 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(DRIVER INATTENTION,NOT APPLICABLE)
		[Route] 300	[Route] 52	8/18/2021	5:48 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,NOT APPLICABLE)
		[Route] 300	[Route] 52	8/20/2021	7:24 AM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(TURNING IMPROPER,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		[Route] 52	[Route] 300	9/14/2021	11:04 AM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(PASSING OR LANE USAGE IMPROPERLY,NOT APPLICABLE) / V2:(DRIVER INATTENTION,TURNING IMPROPER)
		S PLANK RD		9/15/2021	8:29 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL	DARK-ROAD LIGHTED	CLEAR	DRY	V1:(UNSAFE LANE CHANGE,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		S PLANK RD		11/8/2021	8:16 AM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(FOLLOWING TOO CLOSELY, GLARE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		[Route] 300	[Route] 52	12/18/2021	10:03 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DARK-ROAD LIGHTED	RAIN	WET	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,NOT APPLICABLE)
		S PLANK RD	UNION AVE	5/6/2021	12:30 PM	PROPERTY DAMAGE	0	0	0	1	COLLUSION WITH SIGN POST	OTHER	UNKNOWN	DAYLIGHT	CLEAR	UNKNOWN	V1:(NOT ENTERED,NOT ENTERED)

Case Year	Number	On Street	Closest Cross Street	Crash Date	Crash Time	Crash Severity	Non Reportable	# of Injuries	# of Fatalities	# of Vehicles	Crash Type	Collision Type	Traffic Control	Light Conditions	Weather Conditions	Road Surface Conditions	Apparent Contributing Factor
2022	21	S PLANK RD		1/20/2022	8:41 AM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE	DAYLIGHT	SNOW	SNOW/ICE	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(PAVEMENT SLIPPERY,FOLLOWING TOO CLOSELY)
		S PLANK RD	Union Ave	1/31/2022	11:25 AM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE	DAYLIGHT	CLOUDY	DRY	V1:(BACKING UNSAFELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		[Route] 52	COREL PL	2/15/2022	10:27 AM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE	DAYLIGHT	CLOUDY	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,DRIVER INATTENTION)
		S PLANK RD	Spring Square Business Park	4/15/2022	8:35 PM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	HEAD ON	NONE	DARK-ROAD LIGHTED	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FAILURE TO KEEP RIGHT,ALCOHOL INVOLVEMENT)
		STATE HWY 52	Corel Pl	5/11/2022	3:58 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE	DAYLIGHT	CLEAR	DRY	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		E MEADOW WIND LN	S Plank Rd	6/8/2022	11:32 PM	PROPERTY DAMAGE	0	0	0	1	COLLISION WITH DEER	OTHER	NONE	DARK-ROAD LIGHTED	CLOUDY	DRY	V1:(ANIMALS ACTION,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	8/17/2022	5:45 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	NONE	DAYLIGHT	CLEAR	DRY	V1:(TURNING IMPROPER,FAILURE TO YIELD RIGHT OF WAY) / V2:(TURNING IMPROPER,FAILURE TO YIELD RIGHT OF WAY)
		STATE ROUTE 300	SOUTH PLANK ROAD	10/24/2022	5:30 AM	PROPERTY DAMAGE	0	0	0	1	COLLISION WITH DEER	OTHER	NONE	DARK-ROAD LIGHTED	RAIN	WET	V1:(NOT ENTERED,NOT ENTERED)
		SOUTH PLANK ROAD	INTERSTATE 87	2022-11-02T00:00:00	5:32 PM	INJURY	0	3	0	3	COLLISION WITH MOTOR VEHICLE	OTHER	NONE	DAYLIGHT	CLEAR	DRY	V1:(FOLLOWING TOO CLOSELY,DRIVER INATTENTION) / V2:(NOT APPLICABLE,NOT APPLICABLE) / V3:(NOT APPLICABLE,NOT APPLICABLE)
		SOUTH PLANK ROAD	INTERSTATE 87	11/4/2022	6:23 PM	PROPERTY DAMAGE	0	0	0	1	COLLISION WITH DEER	OTHER	NONE	DARK-ROAD UNLIGHTED	CLEAR	DRY	V1:(ANIMALS ACTION,NOT APPLICABLE)
		[Route] 52	[Route] 300	2/14/2022	8:39 AM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(PASSING OR LANE USAGE IMPROPERLY,NOT APPLICABLE)
		[Route] 300	[Route] 52	3/10/2022	1:15 PM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(DRIVER INATTENTION,FAILURE TO YIELD RIGHT OF WAY) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		[Route] 52	[Route] 300	3/14/2022	6:25 AM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL	DAWN	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(AGGRESSIVE DRIVING/ROAD RAGE,TURNING IMPROPER)
		[Route] 300	[Route] 52	3/21/2022	2:39 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(UNSAFE LANE CHANGE,NOT APPLICABLE) / V2:(UNSAFE LANE CHANGE,NOT APPLICABLE)
		S PLANK RD		4/26/2022	11:32 AM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL	DAYLIGHT	CLOUDY	DRY	V1:(UNSAFE LANE CHANGE,NOT APPLICABLE) / V2:(UNSAFE LANE CHANGE,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	8/2/2022	12:31 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(DRIVER INATTENTION,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	9/26/2022	12:15 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL	DAYLIGHT	CLOUDY	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(PASSING OR LANE USAGE IMPROPERLY,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	10/3/2022	3:06 PM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	11/12/2022	11:04 AM	INJURY	0	2	0	2	COLLISION WITH MOTOR VEHICLE	UNKNOWN	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(TRAFFIC CONTROL DEVICES DISREGARDED,FAILURE TO YIELD RIGHT OF WAY) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	12/7/2022	5:23 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DARK-ROAD LIGHTED	CLOUDY	WET	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		STATE ROUTE 300	SOUTH PLANK ROAD	8/10/2022	5:30 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	V1:(NOT ENTERED,NOT ENTERED) / V2:(NOT ENTERED,NOT ENTERED)

Case Year	Number	On Street	Closest Cross Street	Crash Date	Crash Time	Crash Severity	Non Reportable	# of Injuries	# of Fatalities	# of Vehicles	Crash Type	Collision Type	Traffic Control	Light Conditions	Weather Conditions	Road Surface Conditions	Apparent Contributing Factor
2023	11	SOUTH PLANK ROAD	STATE ROUTE 300	3/30/2023	5:31 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	NONE	DAYLIGHT	CLEAR	DRY	V1:(FAILURE TO YIELD RIGHT OF WAY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	4/13/2023	6:41 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	NONE	DAYLIGHT	CLEAR	DRY	V1:(BACKING UNSAFELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	6/12/2023	3:40 PM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	OTHER	NONE	DAYLIGHT	CLEAR	DRY	V1:(BACKING UNSAFELY,NOT APPLICABLE) / V2:(BACKING UNSAFELY,NOT APPLICABLE)
		SOUTH PLANK ROAD	SPRING SQUARE BUSINESS PARK	6/30/2023	4:32 PM	PROPERTY DAMAGE	1	0	0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	NONE	DAYLIGHT	CLOUDY	DRY	V1:(FAILURE TO YIELD RIGHT OF WAY,NOT APPLICABLE) / V2:(FAILURE TO YIELD RIGHT OF WAY,NOT APPLICABLE)
		SOUTH PLANK ROAD	COREL PLACE	8/30/2023	7:41 PM	PROPERTY DAMAGE	0	0	0	1	COLLISION WITH BUILDING/WALL	OTHER	NONE	DUSK	CLEAR	DRY	V1:(TURNING IMPROPER,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	1/4/2023	5:15 PM	PROPERTY DAMAGE	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DUSK	CLOUDY	WET	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	3/26/2023	6:11 PM	PROPERTY DAMAGE	0	0	0	1	COLLISION WITH GUIDE RAIL	OTHER	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(TURNING IMPROPER,NOT APPLICABLE)
		INTERSTATE 84	SOUTH PLANK ROAD	5/21/2023	2:51 PM	INJURY	0	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(FOLLOWING TOO CLOSELY,NOT APPLICABLE) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	6/1/2023	11:15 AM	INJURY	0	2	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(TRAFFIC CONTROL DEVICES DISREGARDED,NOT APPLICABLE)
		SOUTH PLANK ROAD	STATE ROUTE 300	6/10/2023	7:57 AM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL	DAYLIGHT	CLEAR	DRY	V1:(TRAFFIC CONTROL DEVICES DISREGARDED,FAILURE TO YIELD RIGHT OF WAY) / V2:(NOT APPLICABLE,NOT APPLICABLE)
		INTERSTATE 84	DRIVEWAY	7/16/2023	5:53 AM	INJURY	0	1	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL	DAYLIGHT	RAIN	WET	V1:(NOT APPLICABLE,NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY,NOT APPLICABLE)

Survey Notes:

1.) THE INFORMATION SHOWN HEREON IS BASED UPON AN ACTUAL FIELD SURVEY COMPLETED BY MERCURIO-NORTON-TAROLLI-MARSHALL ENGINEERING & LAND SURVEYING, P.C. ON NOVEMBER 17, 2023

2.) THIS SURVEY IS BASED ON TITLE ABSTRACT REPORT NUMBER M-088606 PREPARED BY SMPR TITLE AGENCY, INC. DATED OCTOBER 3, 2023.

3.) SUBJECT TO UTILITY GRANTS OF RECORD.

4.) SUBJECT TO THAT PORTION OF LAND WITHIN THE BOUNDS OF NEW YORK STATE ROUTE 52 (SOUTH PLANK ROAD) FOR USE AS A PUBLIC HIGHWAY.

5.) THE SUBJECT PARCEL IS KNOWN AS A PORTION OF LOTS 1 & 2 ON A MAP ENTITLED "3 LOT COMMERCIAL SUBDIVISION LANDS OF IRA CONKLIN III" PREPARED BY VINCENT J. DOCE ASSOCIATES AND FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON SEPTEMBER 17, 1998 AS MAP NO. 160-98 AND IS ALSO KNOWN AS LOT 1 ON A MAP ENTITLED "LOT LINE CHANGE PLAN LANDS OF ANTHONY COCCHI, JR. AND STORAGE STOP, INC." PREPARED BY VINCENT J. DOCE ASSOCIATES AND FILED ORANGE COUNTY CLERK'S OFFICE ON AUGUST 16, 2007 AS MAP NO. 718-07. SUBJECT TO ALL NOTES AND DETAILS ON SAID FILED MAPS.

6.) THE 10' WIDE DRAINAGE EASEMENT SHOWN AND DESCRIBED IN LIBER 722 PAGE 397 EXTENDS 160' FROM THE NORTHEASTERLY SIDE OF NEW YORK STATE ROUTE 52 TO THE WESTERLY EDGE OF A STREAM AS IT EXISTED IN 1930. SAID STREAM IS PRESUMED TO HAVE BEEN RELOCATED SINCE SAID DEED & MAP WERE PRODUCED AS THE WESTERLY EDGE OF THE STREAM (KNOWN AS BUSHFIELD CREEK) IS NOW 158' FROM THE EASTERLY SIDE OF NEW YORK STATE ROUTE 52. FILED MAP #160-98 APPEARS TO SHOW THE LIMITS OF THE EASEMENT DESCRIBED AND SHOWN IN LIBER 722 PAGE 397 AS WELL AS AN EXTENSION OF THE EASEMENT TO THE EASTERLY SIDE OF BUSHFIELD CREEK. AS PER NOTE #6 OF FILED MAP #160-98 "EASEMENTS PROVIDED TO NEW YORK STATE SHALL BE EXTENDED TO STREAM AS SHOWN AND THE DRAINAGE SWALE WILL BE RE-CONSTRUCTED WITHIN THE BOUNDS OF EACH EASEMENT". FILED MAP #718-07 SHOWS THE 10' WIDE DRAINAGE EASEMENT BEING 158 FROM THE EASTERLY SIDE OF NEW YORK STATE ROUTE 52. IT IS NOT KNOWN IF THE GRANTING OF THE DRAINAGE EASEMENT TO NEW YORK STATE DEPARTMENT OF PUBLIC WORKS WAS FORMALLY ACCEPTED BY THE RECEIVING PARTY. AS SUCH, THE VALIDITY OF THE EXTENSION CANNOT BE VERIFIED.

7.) THE CULVERT RUNNING UNDER NEW YORK STATE ROUTE 52 IS PRESUMED TO BE AN 18" CMP (AS PER FILED MAP 160-98 & 718-07). SAID CULVERT WAS NOT VISIBLE DUE TO DEBRIS CLOGGING THE INLET & OUTLET LOCATIONS ON EITHER SIDE OF NEW YORK STATE ROUTE 52.

8.) THE TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON ACTUAL FIELD LOCATIONS COMPLETED DURING THE BOUNDARY SURVEY. VERTICAL DATUM IS NAVD88.

9.) THE ASSUMED ROAD BOUNDS OF NEW YORK STATE ROUTE 52 IS A 1.5 ROD WIDE OFFSET FROM THE CENTER OF THE AFOREMENTIONED ROAD BASED UPON THE LOCATION OF THE CENTERLINE AS IT WAS LOCATED ON NOVEMBER 17, 2023.

10.) THE EASEMENT AREA LOCATED NORTHWESTERLY OF THE SUBJECT PROPERTY IS SHOWN ON FILED MAP #718-07, DUE TO THE LOT LINE CHANGE SHOWN ON #718-07, THE EASEMENT DOES NOT APPEAR TO CONNECT TO ANY PORTION OF THE BENEFITED PARCEL (TAX PARCEL 60-2-65), BUT DOES NOT APPEAR TO HAVE BEEN EXTINGUISHED.

11.) BASED UPON SHEET 2 OF A PREVIOUS SITE PLAN OF THE SUBJECT PROPERTY ENTITLED "GRADING, DRAINAGE & UTILITY PLAN FOR TRINITY SQUARE" FILED IN THE TOWN OF NEWBURGH BUILDING DEPARTMENT AND PROVIDED BY THE TOWN OF NEWBURGH ENGINEERING DEPARTMENT, WATER AND SEWER SERVICE LINES FOR LOT 2 (TAX PARCEL 60-2-66) ENCROACH INTO THE PROPERTY OF LOT 1 (TAX PARCEL 60-2-65) AND ARE LOCATED WITHIN THE EASEMENT AREA WHICH BENEFITS LOT 1 (TAX PARCEL 60-2-65).

12.) TOGETHER WITH THE RIGHTS OF INGRESS AND EGRESS, AS WELL AS THE RIGHT TO PLACE UTILITIES OVER THOSE PORTIONS OF LOT 2 (TAX PARCEL 60-2-66) WHICH ADJOINS NEW YORK STATE ROUTE 52, LIBER 4908 PAGE 35 ONLY DESCRIBES THE EASEMENT AREA OVER THE EXISTING DRIVE LEADING TO LOT 2 (TAX PARCEL 60-2-66). WHEREAS FILED MAP #160-98 & FILED MAP #718-07 SHOW 2 EASEMENT AREAS IN FAVOR OF LOT 1 (TAX PARCEL 60-2-65, SEE SURVEY NOTE 10. THE ORIGINAL EASEMENT GRANTED ALONG THE SOUTHEASTERLY BOUNDS OF THE SUBJECT PARCEL ON FILED MAP NO. 160-98 EXTENDS INTO THE CURRENTLY BENEFITED PARCEL (TAX PARCEL 60-2-65) DUE TO THE LOT LINE CHANGE COMPLETED IN FILED MAP #718-07. THE ENTIRE BOUNDS OF THE EASEMENT HAVE BEEN SHOWN.

13.) SUBJECT TO UTILITY EASEMENTS IN FAVOR OF NEW YORK TELEPHONE COMPANY AS DESCRIBED IN LIBER 969 PAGE 246 & LIBER 969 PAGE 248. SAID EASEMENTS ARE NOT PLOTTABLE, HOWEVER, GRANT ACCESS TO NEW YORK TELEPHONE COMPANY TO MAINTAIN, CONSTRUCT, PROVIDE CLEARANCE, ETC. OF 10' FROM THE WIRES OF SAID CORPORATION AS DESCRIBED IN THE AFOREMENTIONED DEEDS.

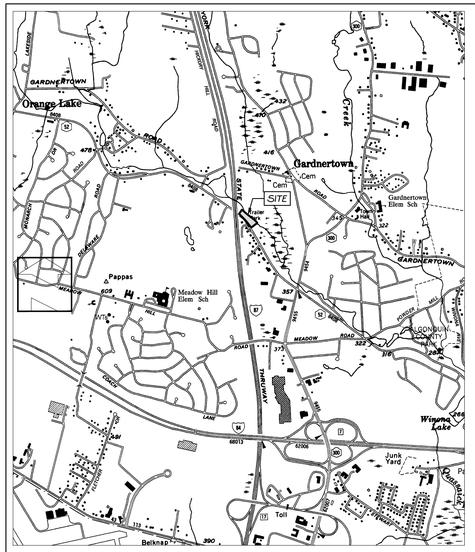
14.) THE SUBJECT PARCEL WAS PREVIOUSLY SUBJECT TO A PERMANENT DRAINAGE EASEMENT AS SHOWN AND DESCRIBED IN LIBER 1497 PAGE 62. SAID EASEMENT DOES NOT AFFECT THE SUBJECT PROPERTY DUE TO THE LOT LINE CHANGE SHOWN ON FILED MAP #718-07.

15.) SUBJECT TO THE TERMS SET FORTH IN A SEWER OUTSIDE USER AGREEMENT DESCRIBED IN LIBER 3578 PAGE 179. (NOT PLOTTABLE)

16.) SUBJECT TO A CROSS EASEMENT AND MAINTENANCE DECLARATION IN LIBER 4873 PAGE 88. NO METES AND BOUNDS DESCRIPTIONS ARE GIVEN FOR SAID EASEMENTS, HOWEVER, REFERS TO THE EASEMENT AREAS SHOWN ON FILED MAP #160-98 & #718-07 (SEE NOTE 10)

Location Map

SCALE: 1" = 2,000'



Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD WITH PLASTIC ID CAP AT PROPERTY CORNER
- ADJOINER PROPERTY LINE
- L. XXXX, P. XXX — DEED LIBER, PAGE
- XX-X-XX — TAX PARCEL DESIGNATION (SECTION - BLOCK - LOT)
- UL — UL — EXISTING UTILITY POLE & LINE
- XX" — EXISTING CULVERT & SIZE
- CHAIN LINK FENCE
- WATERCOURSE
- APPROXIMATE LOCATION OF EXISTING BUILDING / STRUCTURE
- SIGN LOCATION
- 380 / 8300 / 0383 — EXISTING MILE MARKER & INFORMATION
- XXX — EXISTING CONTOUR LINE
- S — EXISTING SEWER MANHOLE
- SL — SL — EXISTING UNDERGROUND SEWER LINE
- EXISTING FIRE HYDRANT
- GAS — GAS — EXISTING UNDERGROUND GAS LINE

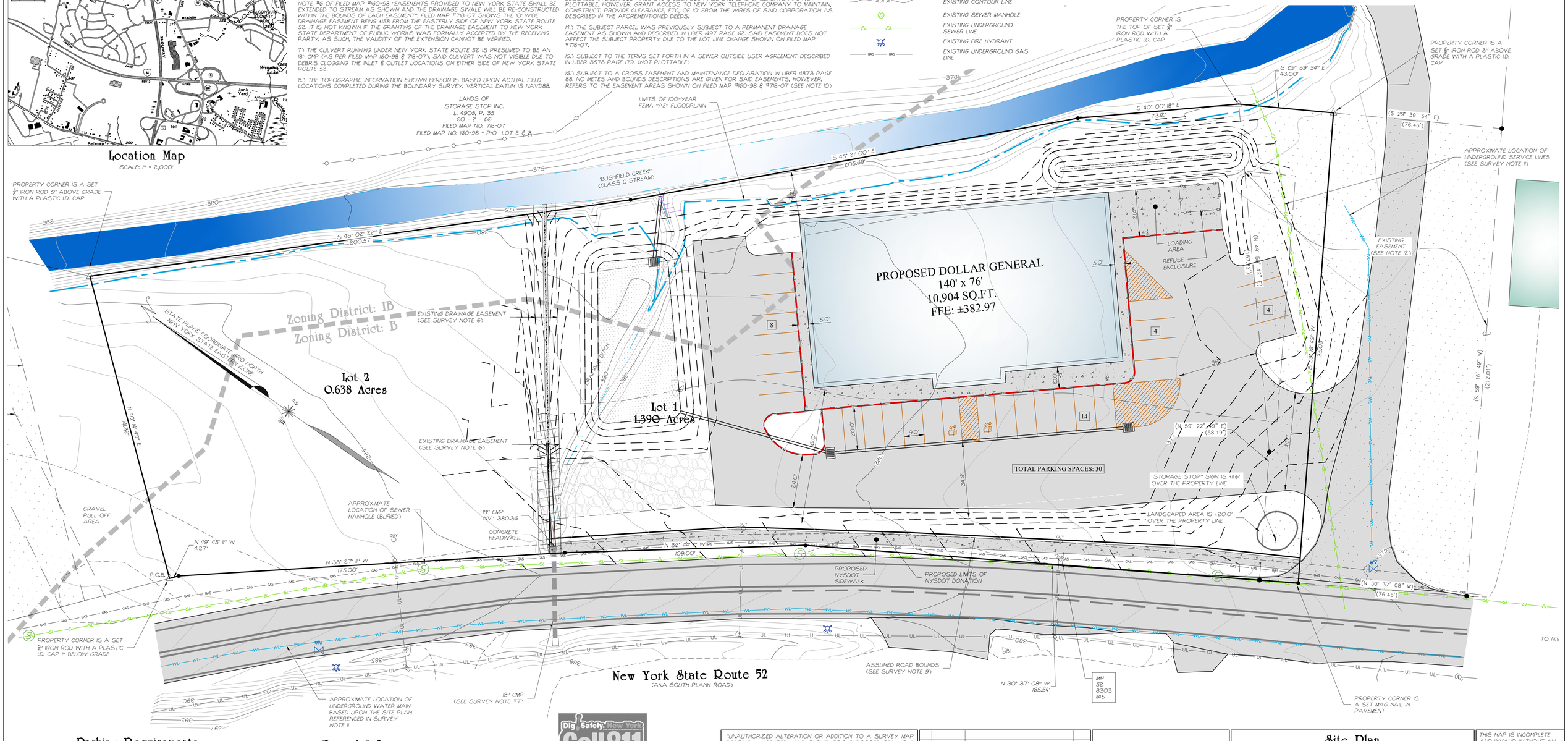
Zoning Legend: B

RETAIL STORE	REQUIRED	LOT 1	LOT 2
MINIMUM LOT AREA	15,000 S.F.	60,541 S.F.	27,809 S.F.
MINIMUM LOT WIDTH	100'	347.7'	187.0'
MINIMUM LOT DEPTH	125'	175.9'	146.6'
MINIMUM FRONT YARD	60'	61.0'	-
MINIMUM REAR YARD	30'	212'	-
MINIMUM SIDE YARD - ONE	15'	86.5'	-
MINIMUM SIDE YARD - BOTH	30'	201.9'	-
MAXIMUM LOT BUILDING COVERAGE (1)	60%	18.0%	-
MAXIMUM BUILDING HEIGHT	35'	<35'	-
MAXIMUM LOT SURFACE COVERAGE (2)	85%	57.2%	-

(1) LOT BULDING COVERAGE DEFINED AS THE PERCENTAGE OF THE AREA OF THE LOT COVERED BY A BUILDING OR BUILDINGS.
(2) LOT SURFACE COVERAGE DEFINED AS THE PERCENTAGE OF THE AREA OF LOT COVERED BY ANY IMPERVIOUS SURFACE, INCLUDING BUILDINGS, PARKING LOTS, ETC.

TOWN OF NEWBURGH PROJECT NO. 2023-25

PLANNING BOARD APPROVAL



Parking Requirements

USE:	TOWN PARKING REQUIREMENT:	PROPOSED CRITERIA:	SPACES REQUIRED:
RETAIL	1 SPACE PER 150 SQ.FT.	10,904 SQ.FT.	73
TOTAL SPACES REQUIRED:			73
TOTAL SPACES PROVIDED:			30
PARKING VARIANCE REQUIRED:			43

Parcel Information

TAX PARCEL:	60 - 2 - 65
AREA:	2.21 ACRES (92,418 SQ. FT.)
RECORD OWNER:	TRINITY SQUARE, LLC P.O. BOX 311 MARLBORO NY 12542
DEED REFERENCE:	LIBER 12498 PAGE 1764
MAP REFERENCE:	FILED MAP NO. 718-07 - LOT 1 & FILED MAP NO. 160-98 - P/O LOT 1 (SEE NOTE 5)

Dig Safely. New York Call 811 before you dig

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

LAWRENCE MARSHALL PE #087107

Site Plan for Dollar General

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 60 - 2 - 65
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: KMW
DATE: NOVEMBER 17, 2023
PROJECT: 4980
SHEET: 1 /

Survey Notes:

1.) THE INFORMATION SHOWN HEREON IS BASED UPON AN ACTUAL FIELD SURVEY COMPLETED BY MERCURIO-NORTON-TAROLLI-MARSHALL ENGINEERING & LAND SURVEYING, P.C. ON NOVEMBER 17, 2023

2.) THIS SURVEY IS BASED ON TITLE ABSTRACT REPORT NUMBER M-088606 PREPARED BY SMPR TITLE AGENCY, INC. DATED OCTOBER 3, 2023.

3.) SUBJECT TO UTILITY GRANTS OF RECORD.

4.) SUBJECT TO THAT PORTION OF LAND WITHIN THE BOUNDS OF NEW YORK STATE ROUTE 52 (SOUTH PLANK ROAD) FOR USE AS A PUBLIC HIGHWAY.

5.) THE SUBJECT PARCEL IS KNOWN AS A PORTION OF LOTS 1 & 2 ON A MAP ENTITLED "3 LOT COMMERCIAL SUBDIVISION LANDS OF IRA CONKLIN III" PREPARED BY VINCENT J. DOCE ASSOCIATES AND FILED IN THE ORANGE COUNTY CLERK'S OFFICE ON SEPTEMBER 17, 1998 AS MAP NO. 160-98 AND IS ALSO KNOWN AS LOT 1 ON A MAP ENTITLED "LOT LINE CHANGE PLAN LANDS OF ANTHONY COCCHI, JR. AND STORAGE STOP, INC." PREPARED BY VINCENT J. DOCE ASSOCIATES AND FILED ORANGE COUNTY CLERK'S OFFICE ON AUGUST 16, 2007 AS MAP NO. 718-07. SUBJECT TO ALL NOTES AND DETAILS ON SAID FILED MAPS.

6.) THE 10' WIDE DRAINAGE EASEMENT SHOWN AND DESCRIBED IN LIBER 722 PAGE 397 EXTENDS 160' FROM THE NORTHEASTERLY SIDE OF NEW YORK STATE ROUTE 52 TO THE WESTERLY EDGE OF A STREAM AS IT EXISTED IN 1930. SAID STREAM IS PRESUMED TO HAVE BEEN RELOCATED SINCE SAID DEED & MAP WERE PRODUCED AS THE WESTERLY EDGE OF THE STREAM (KNOWN AS BUSHFIELD CREEK) IS NOW ±158' FROM THE EASTERLY SIDE OF NEW YORK STATE ROUTE 52. FILED MAP #160-98 APPEARS TO SHOW THE LIMITS OF THE EASEMENT DESCRIBED AND SHOWN IN LIBER 722 PAGE 397 AS WELL AS AN EXTENSION OF THE EASEMENT TO THE EASTERLY SIDE OF BUSHFIELD CREEK. AS PER NOTE #6 OF FILED MAP #160-98 "EASEMENTS PROVIDED TO NEW YORK STATE SHALL BE EXTENDED TO STREAM AS SHOWN AND THE DRAINAGE SWALE WILL BE RE-CONSTRUCTED WITHIN THE BOUNDS OF EACH EASEMENT". FILED MAP #718-07 SHOWS THE 10' WIDE DRAINAGE EASEMENT BEING ±158 FROM THE EASTERLY SIDE OF NEW YORK STATE ROUTE 52. IT IS NOT KNOWN IF THE GRANTING OF THE DRAINAGE EASEMENT TO NEW YORK STATE DEPARTMENT OF PUBLIC WORKS WAS FORMALLY ACCEPTED BY THE RECEIVING PARTY. AS SUCH, THE VALIDITY OF THE EXTENSION CANNOT BE VERIFIED.

7.) THE CULVERT RUNNING UNDER NEW YORK STATE ROUTE 52 IS PRESUMED TO BE AN 18" CMP (AS PER FILED MAP 160-98 & 718-07). SAID CULVERT WAS NOT VISIBLE DUE TO DEBRIS CLOGGING THE INLET & OUTLET LOCATIONS ON EITHER SIDE OF NEW YORK STATE ROUTE 52.

8.) THE TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON ACTUAL FIELD LOCATIONS COMPLETED DURING THE BOUNDARY SURVEY. VERTICAL DATUM IS NAVD88.

9.) THE ASSUMED ROAD BOUNDS OF NEW YORK STATE ROUTE 52 IS A 1.5 ROD WIDE OFFSET FROM THE CENTER OF THE AFOREMENTIONED ROAD BASED UPON THE LOCATION OF THE CENTERLINE AS IT WAS LOCATED ON NOVEMBER 17, 2023.

10.) THE EASEMENT AREA LOCATED NORTHWESTERLY OF THE SUBJECT PROPERTY IS SHOWN ON FILED MAP #718-07. DUE TO THE LOT LINE CHANGE SHOWN ON #718-07, THE EASEMENT DOES NOT APPEAR TO CONNECT TO ANY PORTION OF THE BENEFITED PARCEL (TAX PARCEL 60-2-65), BUT DOES NOT APPEAR TO HAVE BEEN EXTINGUISHED.

11.) BASED UPON SHEET 2 OF A PREVIOUS SITE PLAN OF THE SUBJECT PROPERTY ENTITLED "GRADING, DRAINAGE & UTILITY PLAN FOR TRINITY SQUARE" FILED IN THE TOWN OF NEWBURGH BUILDING DEPARTMENT AND PROVIDED BY THE TOWN OF NEWBURGH ENGINEERING DEPARTMENT, WATER AND SEWER SERVICE LINES FOR LOT 2 (TAX PARCEL 60-2-66) ENCROACH INTO THE PROPERTY OF LOT 1 (TAX PARCEL 60-2-65) AND ARE LOCATED WITHIN THE EASEMENT AREA WHICH BENEFITS LOT 1 (TAX PARCEL 60-2-65).

12.) TOGETHER WITH THE RIGHTS OF INGRESS AND EGRESS, AS WELL AS THE RIGHT TO PLACE UTILITIES OVER THOSE PORTIONS OF LOT 2 (TAX PARCEL 60-2-66) WHICH ADJOINS NEW YORK STATE ROUTE 52. LIBER 4906 PAGE 35 ONLY DESCRIBES THE EASEMENT AREA OVER THE EXISTING DRIVE LEADING TO LOT 2 (TAX PARCEL 60-2-66). WHEREAS FILED MAP #160-98 & FILED MAP #718-07 SHOW 2 EASEMENT AREAS IN FAVOR OF LOT 1 (TAX PARCEL 60-2-65, SEE SURVEY NOTE 10. THE ORIGINAL EASEMENT GRANTED ALONG THE SOUTHEASTERLY BOUNDS OF THE SUBJECT PARCEL ON FILED MAP NO. 160-98 EXTENDS INTO THE CURRENTLY BENEFITED PARCEL (TAX PARCEL 60-2-65) DUE TO THE LOT LINE CHANGE COMPLETED IN FILED MAP #718-07. THE ENTIRE BOUNDS OF THE EASEMENT HAVE BEEN SHOWN.

13.) SUBJECT TO UTILITY EASEMENTS IN FAVOR OF NEW YORK TELEPHONE COMPANY AS DESCRIBED IN LIBER 969 PAGE 246 & LIBER 969 PAGE 248. SAID EASEMENTS ARE NOT PLOTTABLE, HOWEVER, GRANT ACCESS TO NEW YORK TELEPHONE COMPANY TO MAINTAIN, CONSTRUCT, PROVIDE CLEARANCE, ETC. OF 10' FROM THE WIRES OF SAID CORPORATION AS DESCRIBED IN THE AFOREMENTIONED DEEDS.

14.) THE SUBJECT PARCEL WAS PREVIOUSLY SUBJECT TO A PERMANENT DRAINAGE EASEMENT AS SHOWN AND DESCRIBED IN LIBER 1497 PAGE 62. SAID EASEMENT DOES NOT AFFECT THE SUBJECT PROPERTY DUE TO THE LOT LINE CHANGE SHOWN ON FILED MAP #718-07.

15.) SUBJECT TO THE TERMS SET FORTH IN A SEWER OUTSIDE USER AGREEMENT DESCRIBED IN LIBER 3578 PAGE 179. (NOT PLOTTABLE)

16.) SUBJECT TO A CROSS EASEMENT AND MAINTENANCE DECLARATION IN LIBER 4873 PAGE 88. NO METES AND BOUNDS DESCRIPTIONS ARE GIVEN FOR SAID EASEMENTS, HOWEVER, REFERS TO THE EASEMENT AREAS SHOWN ON FILED MAP #160-98 & #718-07 (SEE NOTE 10)

Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD WITH PLASTIC ID CAP AT PROPERTY CORNER
- ADJOINER PROPERTY LINE
- L. XXXX, P. XXX — DEED LIBER, PAGE
- XX-X-XX — TAX PARCEL DESIGNATION (SECTION - BLOCK - LOT)
- UL — UL — EXISTING UTILITY POLE & LINE
- XX" — EXISTING CULVERT & SIZE
- CHAIN LINK FENCE
- WATERCOURSE
- APPROXIMATE LOCATION OF EXISTING BUILDING / STRUCTURE
- SIGN LOCATION
- 300 \ 8300 \ 1080 — EXISTING MILE MARKER & INFORMATION
- XXX — EXISTING CONTOUR LINE
- EXISTING SEWER MANHOLE
- SL — SL — EXISTING UNDERGROUND SEWER LINE
- EXISTING FIRE HYDRANT
- GAS — GAS — EXISTING UNDERGROUND GAS LINE

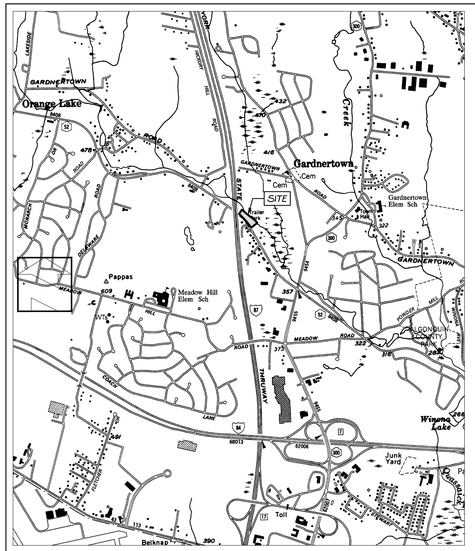
Zoning Legend: B

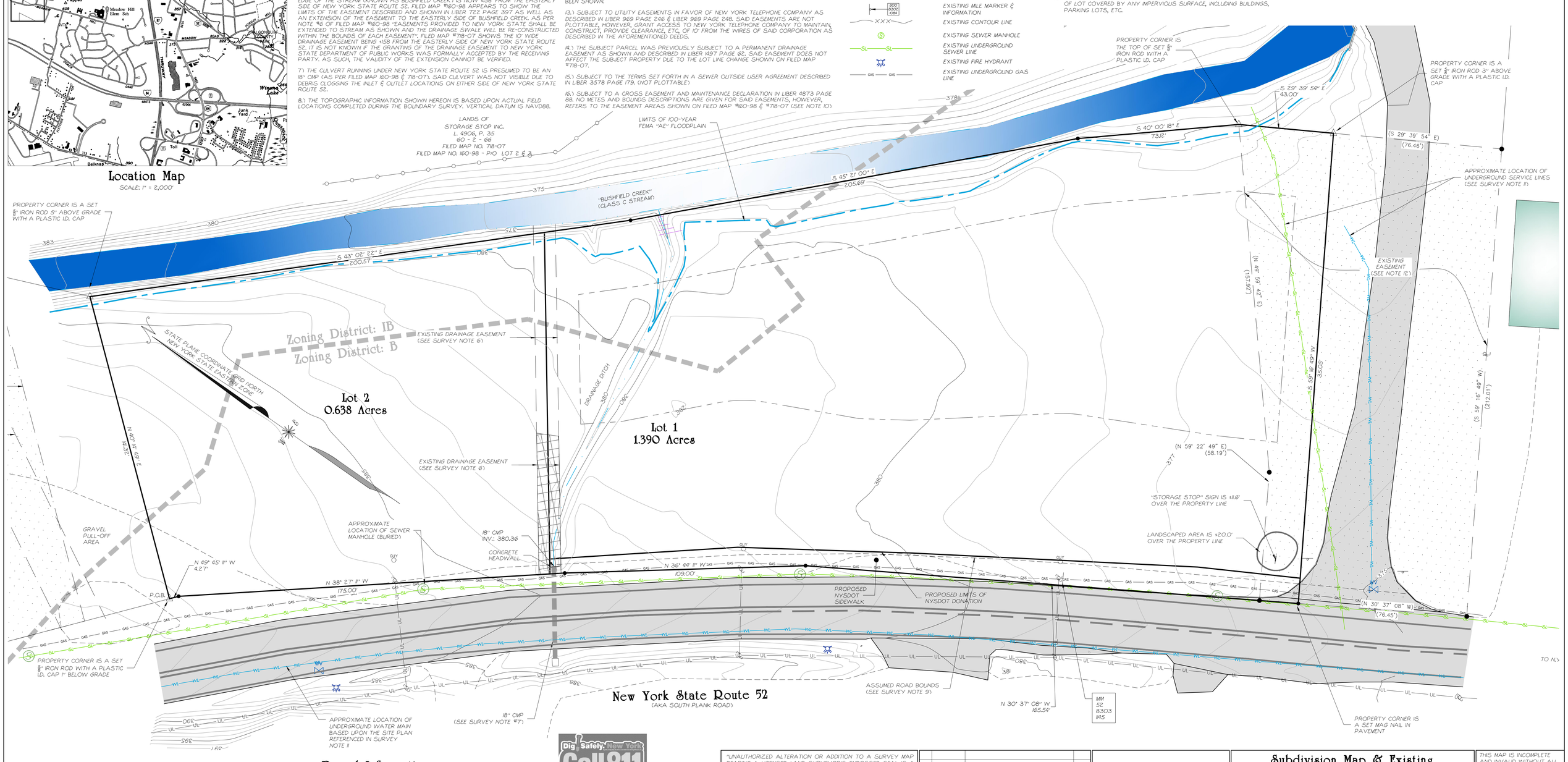
RETAIL STORE	REQUIRED	LOT 1	LOT 2
MINIMUM LOT AREA	15,000 S.F.	60,541 S.F.	27,809 S.F.
MINIMUM LOT WIDTH	100'	347.7'	187.0'
MINIMUM LOT DEPTH	125'	175.9'	146.6'
MINIMUM FRONT YARD	60'	61.0'	-
MINIMUM REAR YARD	30'	212'	-
MINIMUM SIDE YARD - ONE	15'	86.5'	-
MINIMUM SIDE YARD - BOTH	30'	201.9'	-
MAXIMUM LOT BUILDING COVERAGE (1)	60%	18.0%	-
MAXIMUM BUILDING HEIGHT	35'	<35'	-
MAXIMUM LOT SURFACE COVERAGE (2)	85%	57.2%	-

(1) LOT BULDING COVERAGE DEFINED AS THE PERCENTAGE OF THE AREA OF THE LOT COVERED BY A BUILDING OR BUILDINGS.
(2) LOT SURFACE COVERAGE DEFINED AS THE PERCENTAGE OF THE AREA OF LOT COVERED BY ANY IMPERVIOUS SURFACE, INCLUDING BUILDINGS, PARKING LOTS, ETC.

Location Map

SCALE: 1" = 2,000'





Parcel Information

TAX PARCEL:	60 - 2 - 65
AREA:	2.121 ACRES (92,418 SQ. FT.)
RECORD OWNER:	TRINITY SQUARE, LLC P.O. BOX 311 MARLBORO NY 12542
DEED REFERENCE:	LIBER 12496 PAGE 1764
MAP REFERENCE:	FILED MAP NO. 718-07 - LOT 1 & FILED MAP NO. 160-98 - P/O LOT 1 (SEE NOTE 5)

Dig Safely. New York Call 811 before you dig

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

LAWRENCE MARSHALL PE #087107

Subdivision Map & Existing Conditions Plan for Dollar General

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 60 - 2 - 65
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: KMV
DATE: NOVEMBER 17, 2023
PROJECT: 4980
SHEET: 2 / [illegible]

Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD WITH PLASTIC ID CAP AT PROPERTY CORNER
- ADJOINER PROPERTY LINE
- L. XXXX, P. XXX — DEED LIBER, PAGE
- XX-X-XX — TAX PARCEL DESIGNATION (SECTION - BLOCK - LOT)
- UL — UL — EXISTING UTILITY POLE & LINE
- XX" — EXISTING CULVERT & SIZE
- CHAIN LINK FENCE
- WATERCOURSE
- APPROXIMATE LOCATION OF EXISTING BUILDING / STRUCTURE
- SIGN LOCATION
- EXISTING MILE MARKER & INFORMATION
- XXX — EXISTING CONTOUR LINE
- S — EXISTING SEWER MANHOLE
- SL — SL — EXISTING UNDERGROUND SEWER LINE
- EXISTING FIRE HYDRANT
- GAS — GAS — EXISTING UNDERGROUND GAS LINE

Parking Requirements

USE:	TOWN PARKING REQUIREMENT:	PROPOSED CRITERIA:	SPACES REQUIRED:
RETAIL	1 SPACE PER 150 SQ.FT.	10,904 SQ.FT.	73
TOTAL SPACES REQUIRED:			73
TOTAL SPACES PROVIDED:			30
PARKING VARIANCE REQUIRED:			43

PROPERTY CORNER IS A SET 5/8" IRON ROD 5" ABOVE GRADE WITH A PLASTIC I.D. CAP

PROPERTY CORNER IS THE TOP OF SET 5/8" IRON ROD WITH A PLASTIC I.D. CAP

PROPERTY CORNER IS A SET 5/8" IRON ROD 3" ABOVE GRADE WITH A PLASTIC I.D. CAP

PROPERTY CORNER IS A SET 5/8" IRON ROD WITH A PLASTIC I.D. CAP 1' BELOW GRADE

LANDS OF STORAGE STOP INC. L. 4906, P. 35 60 - 2 - 66 FILED MAP NO. 718-07 FILED MAP NO. 160-98 - P/O LOT 2 & 3

LIMITS OF 100-YEAR FEMA "AE" FLOODPLAIN

"BUSHFIELD CREEK" (CLASS C STREAM)

15" HDPE OUTLET INV.: 374.50

APPROXIMATE LOCATION OF UNDERGROUND SERVICE LINES (SEE SURVEY NOTE 11)

PROPOSED DOLLAR GENERAL
140' x 76'
10,904 SQ.FT.
FFE: ±382.97

LOADING AREA

REFUSE ENCLOSURE

PROPOSED OS-1
FRAME ELEV.: 378.00
15" HDPE INV. OUT: 375.00
SUMP: 378.00

EXISTING DRAINAGE EASEMENT (SEE SURVEY NOTE 6)

18" HDPE OUTLET INV.: 379.41

12" HDPE 70 L.F. @ 0.59%

12" HDPE 135 L.F. @ 0.50%

PROPOSED CB-1
FRAME ELEV.: 382.24
12" HDPE INV. IN: 378.96
12" HDPE INV. OUT: 378.86
SUMP: 378.36

PROPOSED CB-2
FRAME ELEV.: 382.24
12" HDPE INV. OUT: 379.63
SUMP: 379.13

TOTAL PARKING SPACES: 30

"STORAGE STOP" SIGN IS ±1.6' OVER THE PROPERTY LINE

LANDSCAPED AREA IS ±2.0.0' OVER THE PROPERTY LINE

18" HDPE 146 L.F. @ 2.05%

APPROXIMATE LOCATION OF SEWER MANHOLE (BURIED)

18" CMP INV.: 380.36

CONCRETE HEADWALL

GRAVEL PULL-OFF AREA

P.O.B.

PROPOSED NYSDOT SIDEWALK

PROPOSED LIMITS OF NYSDOT DONATION

MM 52 8303 845

PROPERTY CORNER IS A SET MAG NAIL IN PAVEMENT

TO N.Y.S. R

New York State Route 52
(AKA SOUTH PLANK ROAD)

18" CMP (SEE SURVEY NOTE #7)

APPROXIMATE LOCATION OF UNDERGROUND WATER MAIN BASED UPON THE SITE PLAN REFERENCED IN SURVEY NOTE #

±1057' TO E. MEADOW WIND LANE

STATE PLANE COORDINATE GRID NORTH NEW YORK STATE EASTERN ZONE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Dig Safely. New York Call 811 before you dig

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."
"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED VALID, TRUE COPIES."
"CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

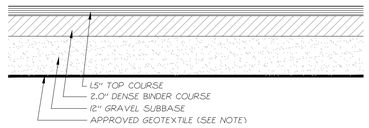
LAWRENCE MARSHALL PE #087107

Site Plan Detail for Dollar General

Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

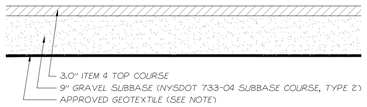
THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 60 - 2 - 65
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: KMV
DATE: NOVEMBER 17, 2023
PROJECT: 4980
SHEET: 3 /



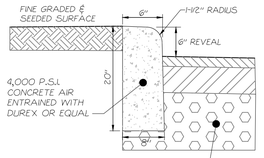
NOTES:
1.) GEOTEXTILE IS ONLY REQUIRED IN AREAS WHERE SUBBASE IS NOT ACCEPTABLY STABLE. GEOTEXTILE SHALL BE APPROVED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER.

Standard Asphalt Pavement Section



NOTES:
1.) GEOTEXTILE IS ONLY REQUIRED IN AREAS WHERE SUBBASE IS NOT ACCEPTABLY STABLE. GEOTEXTILE SHALL BE APPROVED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER.

Gravel Pavement Section

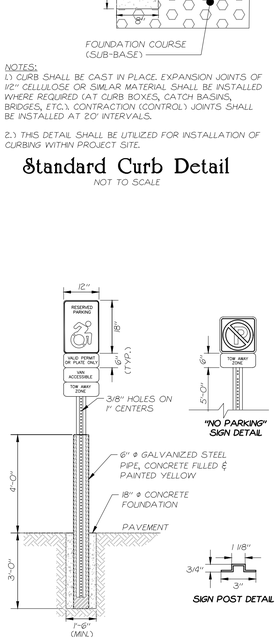


NOTES:
1.) CURB SHALL BE CAST IN PLACE. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE INSTALLED WHERE REQUIRED (AT CURB BOXES, CATCH BASINS, BRIDGES, ETC.). CONTRACTION (CONTROL) JOINTS SHALL BE INSTALLED AT 20' INTERVALS.

2.) THIS DETAIL SHALL BE UTILIZED FOR INSTALLATION OF CURBING WITHIN PROJECT SITE.

Standard Curb Detail

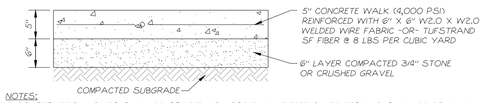
NOT TO SCALE



NOTES:
1. SIGNS TO BE MOUNTED ON POST AS SHOWN

Accessible Signage Details

NOT TO SCALE



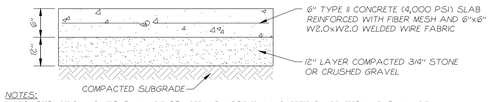
NOTES:
1.) CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 15 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD. CONSTRUCTION JOINTS SHALL BE CUT OR FORMED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE STANDARDS AND JOINT SEALANT RECOMMENDATIONS

2.) DOWELS SHALL BE PLACED ACROSS SLAB EXPANSION JOINTS TO LIMIT DIFFERENTIAL SETTLEMENTS.

3.) THE OUTER 2 FEET OF CONCRETE SHALL HAVE A THICKNESS OF 12 INCHES WHERE THE CONCRETE ADJOINS THE ASPHALT PAVEMENT. THE THICKNESS SHALL TAPER BACK TO THE THICKNESS SHOWN AT A 45 DEGREE ANGLE.

4.) SEE HEAVY-DUTY CONCRETE DETAIL FOR CONCRETE IN DUMPSTER ENCLOSURE DETAIL.

Standard Concrete Pavement Section

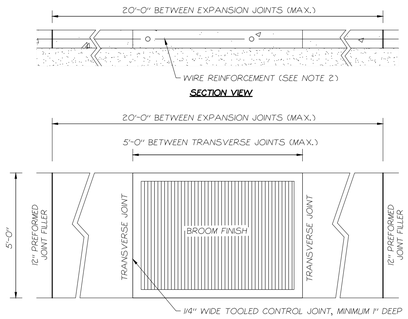


NOTES:
1.) CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 12 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD.

2.) CONSTRUCTION JOINTS SHALL BE CUT OR FORMED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE STANDARDS AND JOINT SEALANT RECOMMENDATIONS.

3.) SEE DUMPSTER ENCLOSURE DETAIL. FOR ALL OTHER AREAS, SEE TYPICAL CONCRETE DETAIL.

Heavy Duty Concrete Pavement Section

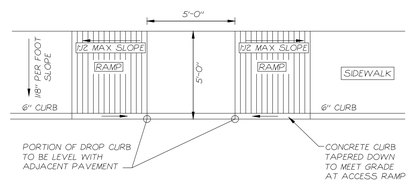


NOTES:
1.) SEE STANDARD CONCRETE PAVEMENT DETAIL FOR MATERIAL SPECIFICATIONS.

2.) SIDEWALK REINFORCEMENT SHALL CONSIST OF 6"x6" W2.9xW2.9 WELDED WIRE FABRIC.

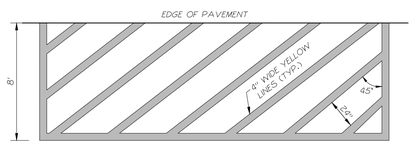
Typical Sidewalk Detail

NOT TO SCALE



Typical Accessible Drop Curb Detail

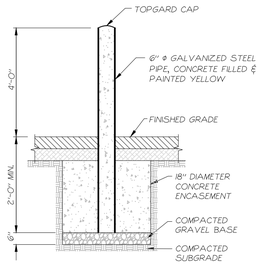
NOT TO SCALE



NOTES:
1.) PROPOSED STRIPING SHALL CONSIST OF SHERWIN WILLIAMS PROMAR TRAFFIC MARKING PAINT, YELLOW, TM5713

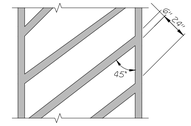
Typical Fire Lane Detail

NOT TO SCALE



Typical Bollard Detail

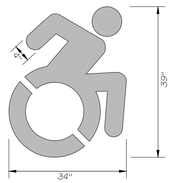
NOT TO SCALE



NOTES:
1.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
PARKING LOT STRIPING: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, YELLOWTM5494

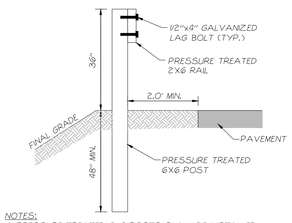
Island Striping Detail

NOT TO SCALE



Accessibile Parking Symbol

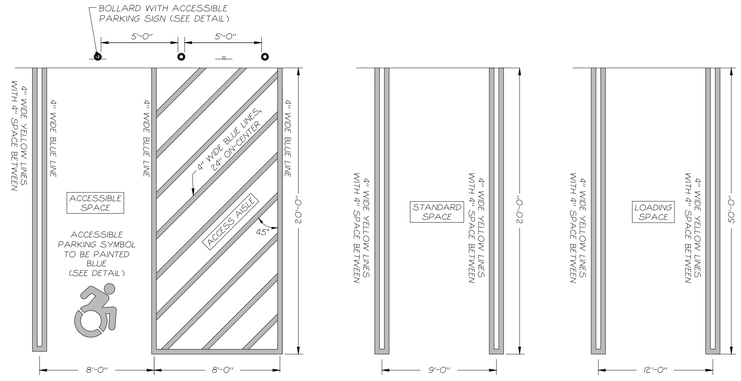
NOT TO SCALE



NOTES:
1.) PRESSURE TREATED 6x6 POSTS SHALL BE INSTALLED AT A MAXIMUM OF SIX (6) FEET ON CENTER.
2.) RAILS TO BE INSTALLED ON UPSLOPE SIDE.

Typical Wood Guide Rail Detail

NOT TO SCALE



NOTES:
1.) ALL ACCESSIBLE RAMP AND ACCESS AISLES SHALL MEET ALL CURRENT CODES AND ADAAG REGULATIONS.

2.) PROPOSED ACCESS RAMP SHALL CONSIST OF COLORED TOOLED/SERRATE SLIP RESISTANT SURFACING AND/OR TACTILE WARNING DEVICE AS REQUIRED BY AMERICANS WITH DISABILITIES ACT ACCESSBILITY GUIDELINES AND CODE REGULATIONS.

3.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
CURBING & BOLLARDS: TWO (2) COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL, SAFETY YELLOW B55Y300
PARKING LOT STRIPING & WHEELSTOPS: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, YELLOWTM5494
ACCESSIBLE STRIPING & DETAIL: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, "H.C." BLUE

4.) ALL CURBING LESS THAN 6" HIGH SHALL BE PAINTED IN KIND WITH THE BOLLARDS.

5.) THE MAXIMUM DESIGN SLOPE ACROSS THE ACCESSIBLE SPACES AND ACCESS AISLES SHALL BE 1.5%.

Typical Parking Space Details

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

LAWRENCE MARSHALL PE #087107

Construction Details for Dollar General

MNTM
Mercurio-Norton-Tarolli-Marshall
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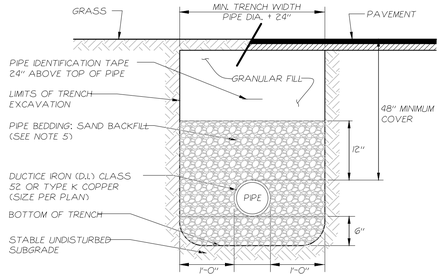
THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 60 - 2 - 65
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: FEBRUARY 20, 2024
PROJECT: 4980
SHEET: 4 /



NOTES:
1.) PIPE INSTALLATION MUST ADHERE TO APPLICABLE AWWA C600 STANDARDS, LATEST REVISION.

2.) GRANULAR FILL SHALL CONSIST OF SELECT GRANULAR FILL OR SUITABLE ON-SITE EXCAVATED SOIL (LARGEST STONE SHALL BE LESS THAN 3"). GRANULAR FILL SHALL BE INSTALLED IN 6" LIFTS & COMPACTED TO 95% PROCTOR DENSITY.

3.) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE RUN-OF- BANK GRAVEL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

4.) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL. REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 6" ITEM 4 LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 2" ASPHALT TOP COURSE.

5.) PIPE BEDDING SHALL CONSIST OF SAND MEETING NYSDOT 703-06 CUSHION SAND SPECIFICATIONS AND COMPACTED TO 95% PROCTOR DENSITY IN 6" MAXIMUM LIFTS.

Typical Water Pipe Bedding Detail

Sewer Design Calculations:

1.) THE DESIGN FLOW RATE FOR THE PROPOSED USES WAS DETERMINED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

ASSUME 10 EMPLOYEES
15 GPD PER EMPLOYEE * 10 EMPLOYEES = 150 GPD

DESIGN FLOW = 150 GPD

Water System Notes:

1.) CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK STATE DEPARTMENT OF HEALTH, ORANGE COUNTY DEPARTMENT OF HEALTH, AND TOWN OF NEWBURGH.

2.) ALL WATER SERVICE LINES FOUR (4) INCHES AND LARGER IN DIAMETER SHALL BE CEMENT LINED CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51 FOR DUCTILE IRON PIPE, LATEST REVISION. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS REQUIRED.

3.) THRUST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF JOINT RESTRAINT. THRUST BLOCKS ARE NOT ACCEPTABLE, EXCEPT AS SHOWN FOR THE HYDRANT INSTALLATIONS. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETAINER GLANDS. ALL FITTINGS AND VALVES SHALL ALSO BE INSTALLED WITH RETAINER GLANDS FOR JOINT RESTRAINT. JOINT RESTRAINTS SHALL BE EBAA IRON MEGALUG SERIES 1100 FOR FLANGED FITTINGS AND EBAA IRON MEGALUG SERIES 1700 RESTRAINT HARNESSES FOR PIPES WITH PUSH ON JOINTS. MAKE AND MODEL MAY BE SUBSTITUTED WITH AN APPROVED EQUAL. THE USE OF A MANUFACTURED RESTRAINED JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE MUNICIPAL WATER DEPARTMENT.

4.) ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA C110/A21.10 FOR DUCTILE AND GRAY IRON FITTINGS OR ANSI/AWWA C153/A21.53 FOR DUCTILE IRON COMPACT FITTINGS, LATEST REVISION.

5.) ALL VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509, LATEST REVISION, SUCH AS MUELLER MODEL A-2360-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT (COUNTERCLOCKWISE).

6.) TAPPING SLEEVE SHALL BE MECHANICAL JOINT SUCH AS MUELLER H-615 OR EQUAL. TAPPING VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509, LATEST REVISION, SUCH AS MUELLER MODEL T-2360-19 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE MUNICIPAL WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.

7.) HYDRANTS SHALL BE DRY-BARREL HYDRANTS, TYPE MUELLER SUPER CENTURION, IN ACCORDANCE WITH AWWA C502. HYDRANTS SHALL HAVE A MAIN VALVE SIZE OPENING OF FIVE INCHES NOMINAL, ONE (1) FIVE-INCH STORZ DISHARGE, TWO (2) TWO-AND-A-HALF-INCH NST HOSE NOZZLES, A ONE-AND-ONE-HALF-INCH PENTAGON OPERATING NUT AND A SIX-INCH MECHANICAL JOINT INLET SHOW CONNECTION WITH ACCESSORIES. THE HYDRANT DIRECTION OF OPENING SHALL BE LEFT (COUNTERCLOCKWISE).

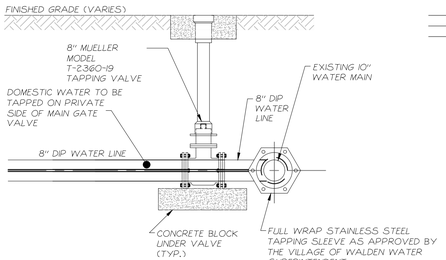
8.) ALL WATER SERVICE LINES TWO (2") INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING. CORPORATION STOPS SHALL BE MUELLER H-15020N FOR 3/4 AND 1 INCH, MUELLER H-15000N OR B-25000N FOR 1 1/2 AND 2 INCH SIZES. CURB VALVES SHALL BE MUELLER H-1502-2N FOR 3/4 AND 1 INCH AND MUELLER B-25204N FOR 1 1/2 AND 2 INCH SIZES. CURB BOXES SHALL BE MUELLER H-10346N FOR 3/4 AND 1 INCH AND MUELLER H-10360N FOR 1 1/2 AND 2 INCH SIZES.

9.) ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE MUNICIPAL WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE LOCAL MUNICIPALITIES AND THE MUNICIPAL WATER DEPARTMENT. ALL DUCTILE IRON PIPES SHALL BE INSTALLED IN ACCORDANCE WITH AWWA STANDARD C600-17 OR LATEST REVISION.

10.) THE WATER MAIN SHALL BE TESTED, DISINFECTED AND FLUSHED IN ACCORDANCE WITH TOWN OF NEWBURGH, ORANGE COUNTY DEPARTMENT OF HEALTH, NEW YORK STATE DEPARTMENT OF HEALTH REQUIREMENTS AND AWWA STANDARD C651-14 OR LATEST REVISION REQUIREMENTS. ALL TESTING, DISINFECTION AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT. PRIOR TO PUTTING THE WATER MAIN IN SERVICE, SATISFACTORY SANITARY RESULTS FROM A CERTIFIED LAB MUST BE SUBMITTED TO THE TOWN OF NEWBURGH. THE TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY.

11.) A BACKFLOW PREVENTION DEVICE (RPZ) IS REQUIRED TO BE DESIGNED AND INSTALLED ON THE DOMESTIC WATER SUPPLY LINE AS PART OF THE BUILDING PLUMBING PLANS. A DOUBLE CHECK VALVE SHALL BE DESIGNED AND INSTALLED ON THE FIRE SUPPRESSION LINE AS PART OF THE BUILDING PLUMBING PLANS. THE BACKFLOW PREVENTION DEVICE AND DOUBLE CHECK VALVE SHALL BE REVIEWED AND APPROVED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH PRIOR TO INSTALLATION.

12.) THE FINAL LAYOUT OF THE PROPOSED WATER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF THE SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.



NOTES:
1.) WET TAP TO BE PERFORMED BY CONTRACTOR WITH VILLAGE OF WALDEN WATER SUPERINTENDENT AND VILLAGE ENGINEER ON SITE.

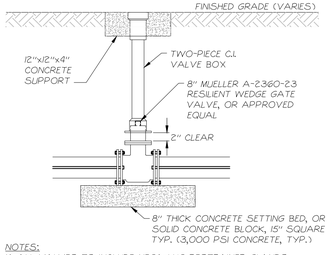
2.) CONTRACTOR TO CONTACT VILLAGE OF WALDEN WATER DEPARTMENT FOR ALL INSTALLATION REQUIREMENTS.

3.) TAPPING SLEEVE SHALL BE SELECTED TO FIT EXISTING PIPE MATERIAL (CAST IRON, DUCTILE IRON, A.C.) AND OUTSIDE DIAMETERS.

4.) MEGA LUGS TO BE USED ON ALL MECHANICAL JOINT FITTINGS.

Water Wet Tap Detail

NOT TO SCALE

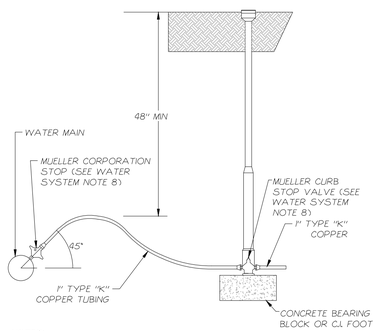


NOTES:
1.) ALL VALVES TO INCLUDE MEGA-LUG RESTRAINER GLANDS.

2.) WATER MAIN VALVES FOR FOUR-INCH THROUGH FORTY-EIGHT-INCH SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509, LATEST REVISION, SUCH AS MUELLER MODEL A-2360-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT (COUNTERCLOCKWISE).

Typical Water Valve Detail

NOT TO SCALE

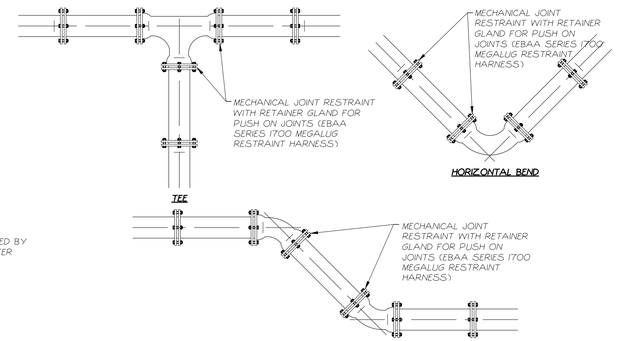


NOTES:
1.) ALL CORPORATION STOP, CURB STOP, CURB BOX, AND SERVICE LINES SHALL MEET MUNICIPAL WATER DEPARTMENT REGULATIONS. SEE WATER SYSTEM NOTES.

2.) THIS DETAIL APPLIES ONLY TO THE WATER SERVICE FOR OFFICE, MODEL, AND STORAGE BUILDING.

Water Service Detail

NOT TO SCALE



NOTE:
1.) ALL RESTRAINING GLANDS TO BE IN ACCORDANCE WITH LOCAL MUNICIPALITY AND MUNICIPAL WATER DEPARTMENT STANDARDS.

2.) ALL PIPES SHALL BE STANDARD PUSH ON BELL JOINTS.

Water Main Pipe Thrust Restraint Detail

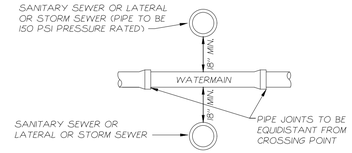
NOT TO SCALE

NOTES:
1.) A MINIMUM HORIZONTAL LATERAL SEPARATION OF TEN (10) FEET IS REQUIRED.

2.) NO EXCEPTION WITHOUT WRITTEN PERMISSION OF COUNTY DEPARTMENT OF HEALTH.

Parallel Sanitary Sewer / Storm Sewer Water Main Installation

NOT TO SCALE

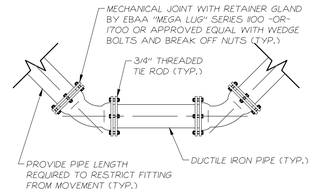


NOTES:
1.) A MINIMUM VERTICAL LATERAL SEPARATION OF EIGHTEEN (18) INCHES IS REQUIRED.

2.) NO EXCEPTION WITHOUT WRITTEN PERMISSION OF COUNTY DEPARTMENT OF HEALTH.

Storm / Sanitary Sewer - Water Main Crossing

NOT TO SCALE



NOTES:
1.) THRUST BLOCKING IS NOT PERMITTED.

2.) PIPE RESTRAINING TO BE USED FOR VERTICAL DEFLECTIONS ALSO.

3.) SEE TABLES A AND B FOR REQUIRED RESTRAINED LENGTH FOR DUCTILE IRON PIPE. ALL MINIMUM RESTRAINT LENGTHS BASED UPON A TESTING PRESSURE OF 100 PSI. MINIMUM LENGTHS ARE NOT VALID AT HIGHER TESTING PRESSURES.

4.) PIPE BEDDING SHALL BE IN ACCORDANCE WITH WATER PIPE TRENCH DETAIL.

5.) THE CONTRACTOR SHALL PERFORM SOIL TEST TO DETERMINE SOIL TYPE(S) INDICATED IN TABLES A AND B.

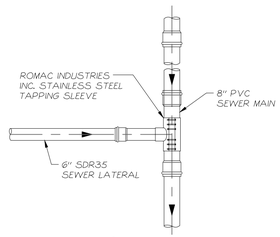
TABLE A - REQUIRED RESTRAINED LENGTH FOR 8" DUCTILE IRON PIPE (ALL VALUES IN FEET UNLESS OTHERWISE NOTED

PIPE SIZE		8"											
BEND ANGLE		45 DEGREE			22.5 DEGREE			11.25 DEGREE			TEE (8X4)	TEE (8X6)	DEAD END
TYPE OF TEE		H BEND	V BEND (UP)	V BEND (DN)	H BEND	V BEND (UP)	V BEND (DN)	H BEND	V BEND (UP)	V BEND (DN)			
UNIFIED SOIL CLASSIFICATION	CL	5	5	11	3	2	6	2	1	3	1	3	19
	ML	6	6	12	3	3	6	2	2	3	1	8	27
	GC, SC	5	5	10	2	2	5	1	1	3	1	2	19
	GM, SM	5	5	10	3	2	5	2	1	3	1	5	24
	SW, GW	4	4	8	2	2	4	1	1	2	1	1	19
	SP	5	5	10	3	2	5	2	1	3	1	4	23

TABLE B - REQUIRED RESTRAINED LENGTH FOR 6" DUCTILE IRON PIPE (ALL VALUES IN FEET UNLESS OTHERWISE NOTED

PIPE SIZE		6"										
BEND ANGLE		45 DEGREE			22.5 DEGREE			11.25 DEGREE			TEE (6X4)	DEAD END
TYPE OF TEE		H BEND	V BEND (UP)	V BEND (DN)	H BEND	V BEND (UP)	V BEND (DN)	H BEND	V BEND (UP)	V BEND (DN)		
UNIFIED SOIL CLASSIFICATION	CL	4	4	8	2	2	4	1	1	2	1	14
	ML	4	4	9	2	2	5	1	1	3	1	21
	GC, SC	3	3	8	2	2	4	1	1	2	1	15
	GM, SM	4	4	8	2	2	4	1	1	2	1	18
	SW, GW	3	3	6	2	2	3	1	1	2	1	15
	SP	4	4	8	2	2	4	1	1	2	1	18

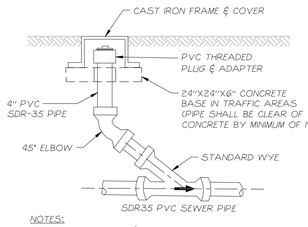
Water Main Pipe Restraint Tables



NOTES:
1.) FIELD LOCATION AND ALIGNMENT OF NEW SADDLE TO BE APPROVED BY THE TOWN OF NEWBURGH WATER/SEWER SUPERINTENDENT PRIOR TO INSTALLATION.

2.) NEW STAINLESS STEEL TAPPING SLEEVE ON EXISTING SANITARY SEWER MAIN IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, TOWN OF NEWBURGH CODE, AND TEN STATE STANDARDS.

Sanitary Sewer Lateral Tap Detail

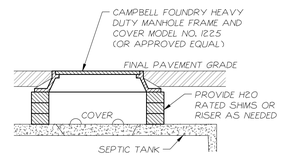


NOTES:
1.) CAST IRON FRAME & COVER AND CONCRETE BASE SHALL ONLY BE INSTALLED IF CLEANOUT IS IN VEHICULAR TRAFFIC AREAS.

2.) IN LAWN AREAS, CLEANOUT SHALL BE INSTALLED A MINIMUM OF 4" ABOVE FINAL GRADE.

In-Line Sewer Cleanout

NOT TO SCALE



Typical Riser Detail

NOT TO SCALE

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

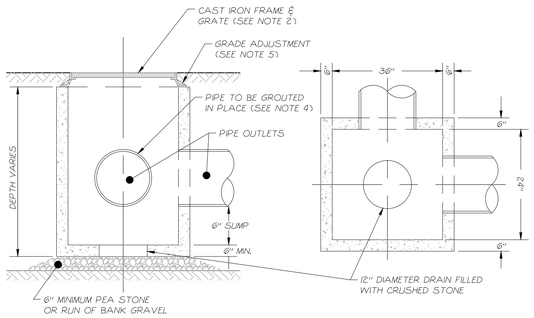
LAWRENCE MARSHALL PE #087107

Water & Sewer Connection Details for
Dollar General

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 60 - 2 - 65
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: FEBRUARY 20, 2024
PROJECT: 4980
SHEET: 5 /



NOTES:
1.) CATCH BASINS SHALL BE PRECAST CONCRETE CATCH BASIN MODEL 24"x36", OR APPROVED EQUAL, AS MANUFACTURED BY :
A & R CONCRETE PRODUCTS
7 RUSCITTI ROAD
NEW WINDSOR, NEW YORK 12553
(845) 562-0640
WWW.ARCONCRETE.COM

2.) CATCH BASINS SHALL BE EQUIPPED WITH A FLAT TOP FRAME AND GRATE, MODEL GRATE-30x48. GRATES SHALL BE BICYCLE GRATES. FRAMES AND GRATES.

3.) STEPS SHALL BE PROVIDED 12" ON CENTER WHEN DEPTH OF BASIN EXCEEDS 4'-0".

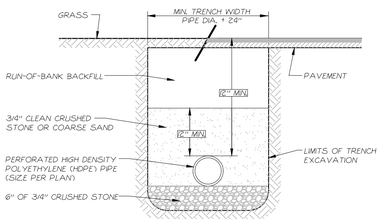
4.) CONNECTIONS BETWEEN BASIN AND PIPE SHALL BE MADE BY FILLING THE SPACE AROUND EACH PIPE WITH MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIAL, OR CONCRETE REPAIR MATERIAL.

5.) GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 2.5" SHALL BE MADE WITH BEDDING MATERIAL MEETING THE REQUIREMENTS OF MORTAR FOR CONCRETE MASONRY, CONCRETE GROUTING MATERIALS OR CONCRETE REPAIR MATERIAL. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 6" SHALL BE MADE WITH COMBINATION OF PRECAST CONCRETE PAVERS AND BEDDING MATERIALS. GRADE ADJUSTMENT FOR TOP SLABS AND/OR FRAMES AND GRATES OF UP TO 12" SHALL BE MADE WITH CAST-IN-PLACE CONCRETE OR A COMBINATION OF PRECAST CONCRETE ADJUSTMENT ELEMENTS AND BEDDING MATERIALS.

6.) ALL CATCH BASINS SHALL BE CONSTRUCTED TO WITHSTAND A MINIMUM OF H-20 LOADING.

Typical Catch Basin Detail

NOT TO SCALE



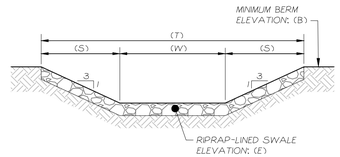
NOTES:
1.) RUN-OF-BANK BACKFILL SHALL BE INSTALLED IN 6" LIFTS & COMPACTED TO 95% PROCTOR DENSITY. RUN OF BANK GRAVEL SHALL NOT CONTAIN STONES LARGER THAN 4".

2.) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE RUN-OF- BANK GRAVEL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

3.) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL. REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 4" ITEM 4 LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 1-1/2" ASPHALT TOP COURSE.

Typical Storm Sewer Trench Detail

NOT TO SCALE



NOTES:
1.) THE SWALE SHALL BE SLOPED WITH 1.0% MINIMUM SLOPE TO THE OUTLET.

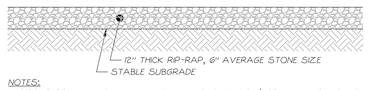
2.) THE SWALE SHALL BE STABILIZED WITH RIPRAP IMMEDIATELY UPON COMPLETION. ANY DISTURBED AREAS ADJACENT TO THE SWALE SHALL ALSO BE STABILIZED WITH 3" MINIMUM TOPSOIL, SEEDED & MULCHED IMMEDIATELY FOLLOWING COMPLETION.

3.) INDIVIDUAL RIPRAP SWALE SPECIFICATIONS ARE INCLUDED IN THE TABLE BELOW:

SWALE ID	(W)	(E)	(S)	(T)	(B)
SW-1	6'	1340.50	3'	12'	1341.25
SW-2	2'	1340.00	3'	16'	1341.00

Typical Riprap Swale Detail

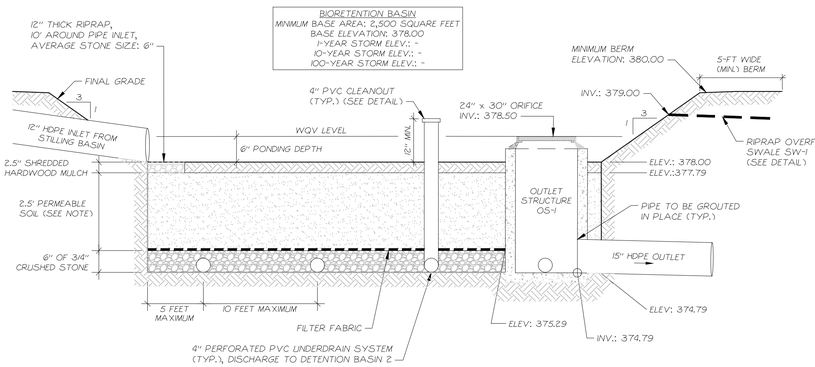
NOT TO SCALE



NOTES:
1.) RIPRAP PROTECTITON AT CULVERT INLETS, OUTLETS, & SPECIFIED AREAS AS SHOWN ON THE SITE PLAN SHALL CONFORM TO THE SECTION SPECIFICATIONS NOTED ABOVE, UNLESS OTHER SPECIFIED.

Riprap Protection Section

NOT TO SCALE



NOTES:
1.) SPECIAL CARE SHALL BE TAKEN DURING CONSTRUCTION TO AVOID PLUGGING THE BIORETENTION AREA WITH SILT AND SEDIMENT. SIDE SLOPES AND AREAS TRIBUTARY TO THE BASIN SHALL BE STABILIZED IMMEDIATELY FOLLOWING INSTALLATION.

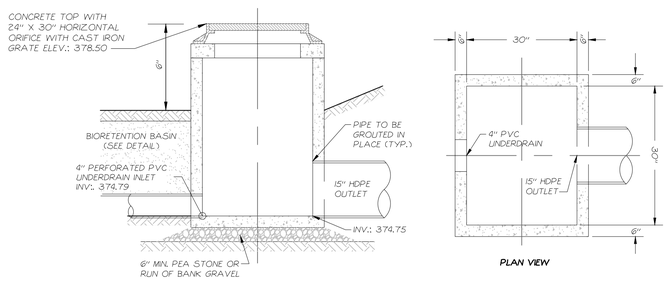
2.) OUTLET STRUCTURE 'OS-1' SHALL BE CONSISTENT WITH THE CONSTRUCTION SPECIFICATIONS OF THE TYPICAL CATCH BASIN DETAIL.

3.) THE BIORETENTIONBASIN SHALL BE LANDSCAPED IN ACCORDANCE WITH THE LANDSCAPING PLAN. MINIMUM OF 2.5-INCHES OF WELL-AGED SHREDDED HARDWOOD MULCH SHALL COVER THE SURFACE OF THE BASIN AND SURROUND THE PLANTINGS WITHIN.

4.) FINAL CONSTRUCTION OF THE BIORETENTION BASIN, INCLUDING INSTALLATION OF UNDERDRAIN & PERMEABLE SOIL, SHALL NOT OCCUR UNTIL ALL TRIBUTARY AREAS HAVE BEEN STABILIZED.

Bioretention Basin #1 Detail

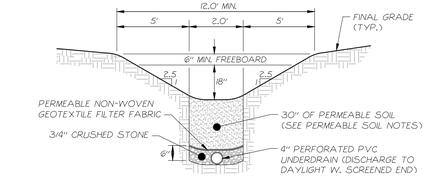
NOT TO SCALE



NOTES:
1.) OUTLET STRUCTURE "OS-1" SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS NOTED IN THE TYPICAL CATCH BASIN DETAIL INCLUDED IN THE SITE PLAN SET.

Outlet Structure 1 Detail

NOT TO SCALE



NOTES:
1.) THE DRY SWALE SHALL HAVE A LONGITUDINAL SLOPE OF 1.0%.

2.) DRY SWALE SHALL HAVE AN INTERIOR SIDE SLOPE OF 2.5:1 AND A MINIMUM LENGTH OF 78'.

3.) SPECIAL CARE SHALL BE TAKEN DURING CONSTRUCTION TO AVOID PLUGGING THE DRY SWALE WITH SILT AND SEDIMENT. SIDE SLOPES AND DISTURBED AREAS TRIBUTARY TO THE SWALE SHALL BE STABILIZED IMMEDIATELY AFTER SWALE INSTALLATION.

4.) THE 4" PERFORATED PVC UNDERDRAIN SHALL DISCHARGE WITH A MINIMUM SLOPE OF 0.5% TO GRADE. THE PIPE OUTLET SHALL BE EQUIPPED WITH A SCREENED END CAP.

Dry Swale #1 Detail

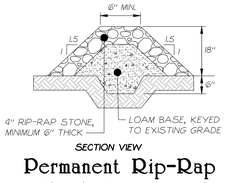
Permeable Soil Notes

1.) PLANTING SOIL SHALL BE A SANDY LOAM, LOAMY SAND, LOAM, OR A LOAM/SAND MIX (CONTAINING 35-60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHALL BE LESS THAN 25% BY VOLUME. SOILS SHALL FALL WITHIN THE SM, OR ML CLASSIFICATIONS OF THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 10 FEET PER DAY (0.5"/HR) IS REQUIRED. THE SOIL SHALL BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER AND BRUSH OR SEEDS FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHALL BE IN LIFTS OF 12 TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET).

2.) THE SOIL SPECIFICATIONS ARE AS FOLLOWS:

PARAMETER	VOLUME
PH RANGE	5.2 - 7.0
ORGANIC MATTER	3.0% - 5.0%
MAGNESIUM	35 LBS. PER ACRE, MINIMUM
PHOSPHORUS	75 LBS. PER ACRE, MINIMUM
POTASSIUM	85 LBS. PER ACRE, MINIMUM
SOLUABLE SALTS	500 PPM
CLAY	0% - 10%
SILT	10% - 20%
SAND	75% MINIMUM

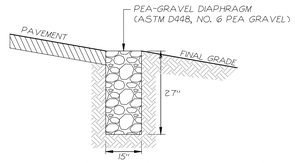
3.) A MINIMUM OF 2.5" OF MULCH SHALL BE APPLIED ON THE INTERIOR OF THE BASIN. MULCH SHALL ALSO BE APPLIED AROUND INDIVIDUAL PLANTINGS WITHIN THE BASIN. THE MULCH LAYER SHALL BE STANDARD LANDSCAPE STYLE, SINGLE OR DOUBLE, SHREDDED HARDWOOD MULCH OR CHIPS. THE MULCH LAYER SHALL BE WELL AGED (STOCKPILE OR STORED FOR AT LEAST TWELVE (12) MONTHS), UNIFORM IN COLOR, AND FREE OF OTHER MATERIALS, SUCH AS WEED SEEDS, STONES, ROOTS, ETC.



SECTION VIEW

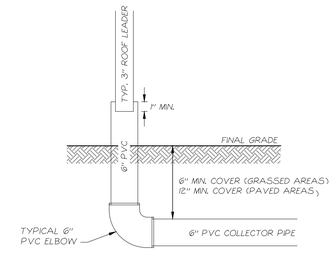
Permanent Rip-Rap Check Dam Detail

NOT TO SCALE



Pea-Gravel Diaphragm Detail

NOT TO SCALE



Typical Roof Drain Detail

NOT TO SCALE

Stormwater Facility Maintenance Requirements

THE OWNER / OPERATOR WILL BE RESPONSIBLE FOR ENSURING LONG TERM MAINTENANCE OF THE POST-CONSTRUCTION WATER QUALITY AND QUANTITY CONTROL DEVICES. MAINTENANCE OF THE DEVICES IS REQUIRED TO ENSURE PROPER TREATMENT OF STORMWATER RUNOFF. DESCRIPTIONS OF THE MAINTENANCE REQUIREMENTS FOR THE PROPOSED PRACTICES ARE PROVIDED BELOW AND ARE INCLUDED IN APPENDIX N OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT.

1. DIVERSION SWALES:
DIVERSION SWALES SHALL BE INSPECTED REGULARLY TO ENSURE PROPER FUNCTION. PARTICULAR ATTENTION SHALL BE GIVEN TO EVIDENCE OF SCOURING ALONG THE BOTTOM OF THE SWALE AND THE ACCUMULATION OF SEDIMENT. ANY AND ALL DEBRIS SHALL BE REMOVED DURING MOWING OPERATIONS. THE SWALE AND EMBANKMENT SHALL BE MOWED ON A SEMI-ANNUAL BASIS. ANY SCOURING OR EROSION OF PREVIOUSLY STABILIZED AREAS SHALL BE REPAIRED AND IMMEDIATELY STABILIZED ON AN ANNUAL BASIS.

2. DRY SWALES:
DRY SWALES SHALL BE INSPECTED REGULARLY TO ENSURE PROPER FUNCTION. PARTICULAR ATTENTION SHALL BE GIVEN TO EVIDENCE OF SCOURING ALONG THE BOTTOM OF THE SWALE AND THE ACCUMULATION OF SEDIMENT. ANY AND ALL DEBRIS SHALL BE REMOVED DURING MOWING OPERATIONS. THE SWALE AND EMBANKMENT SHALL BE MOWED ON A SEMI-ANNUAL BASIS. ANY SCOURING OR EROSION OF PREVIOUSLY STABILIZED AREAS SHALL BE REPAIRED AND IMMEDIATELY STABILIZED ON AN ANNUAL BASIS.

3. BIORETENTION BASINS:
BIORETENTION BASINS SHALL BE INSPECTED REGULARLY TO ENSURE THE DEVICES ARE PROPERLY FUNCTIONING. PARTICULAR ATTENTION SHALL BE GIVEN TO CLOGGING OF DEVICES, EVIDENCE OF EROSION, ACCUMULATION OF SEDIMENT. ANY AND ALL DEBRIS LOCATED WITHIN THE BASIN SHALL BE REMOVED DURING MOWING OPERATIONS. SPECIAL ATTENTION SHOULD BE GIVEN TO THE OUTLET OF THE DETENTION AREA AND THE OUTLET STRUCTURE TO ENSURE PROPER FUNCTION. THE BERM AND EMBANKMENT OF THE BASIN SHALL BE MOWED ANNUALLY. ALL OTHER AREAS AROUND THE BASIN SHALL BE MOWED ON A SEMI-ANNUAL BASIS. ANY SCOURING OR EROSION OF PREVIOUSLY STABILIZED AREAS SHALL BE REPAIRED ON AN ANNUAL BASIS.

4. OUTLET STRUCTURES:
OUTLET STRUCTURES SHALL BE INSPECTED REGULARLY TO ENSURE THE DEVICES ARE PROPERLY FUNCTIONING. ANY AND ALL DEBRIS LOCATED WITHIN THE BASINS SHALL BE REMOVED DURING INSPECTION. SPECIAL ATTENTION SHOULD BE GIVEN TO THE OUTLET PIPE TO ENSURE PROPER DISCHARGE.

5. ROCK PROTECTION:
ROCK PROTECTION AREAS SHALL BE INSPECTED REGULARLY FOR EVIDENCE OF EROSION OR SEDIMENT TRANSFER. ANY AND ALL DEBRIS SHALL BE REMOVED DURING THE COURSE OF THE INSPECTION. THE ROCK PAD SHALL BE CLEANED AND REPAIRED OR REPLACED WHENEVER MORE THAN ONE (1) INCH OF SEDIMENT HAS ACCUMULATED ON THE SURFACE OF THE STONE. ACCUMULATED SEDIMENT AT THE OUTLET IS INDICATIVE OF SCOURING OR EROSION OCCURRING UPSLOPE. IF SEDIMENT ACCUMULATION IS EVIDENT AT THE ROCK PROTECTION AREA, A THOROUGH INSPECTION OF THE UPSLOPE DRAINAGE SYSTEM SHOULD BE COMPLETED TO DETERMNE THE CAUSE.

6. SOIL RESTORATION:
VEGETATED AREAS SHALL BE INSPECTED REGULARLY FOR EVIDENCE OF EROSION OR SCOURING. BARE OR ERODED AREAS SHALL BE REPAIRED AND RESEEDED TO ESTABLISH A STABILIZED VEGETATIVE COVER. VEGETATED AREAS SHALL BE MOWED ON A SEMI-ANNUAL BASIS AND SHALL BE KEPT CLEAR OF VEHICULAR AND FOOT TRAFFIC.

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

LAWRENCE MARSHALL PE #087107

Stormwater Details for Dollar General

Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.
TAX MAP PARCEL: 60 - 2 - 65
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: FEBRUARY 20, 2024
PROJECT: 4980
SHEET: 6 /

Construction Sequence:

THE PROPOSED DEVELOPMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. DURING THE COURSE OF CONSTRUCTION, IT MAY BECOME NECESSARY TO AMEND, ALTER, OR OTHERWISE CHANGE THE ORDER OF WORK TO ACCOMMODATE EXISTING SITE CONDITIONS OR SPECIFIC ISSUES THAT DEVELOP. ANY ALTERATION TO THE SEQUENCE OF CONSTRUCTION SHALL BE REVIEWED AND APPROVED BY THE SWPPP PREPARER OR DESIGN ENGINEER AND APPROPRIATE CHANGES SHALL BE MADE AND IMPLEMENTED IN THE FIELD. THE SEQUENCE OF CONSTRUCTION IS AS FOLLOWS:

1. HOLD A PRE-CONSTRUCTION MEETING WITH THE SITE CONTRACTORS, DESIGN ENGINEER, AND, AS NECESSARY, PERMITTING AUTHORITIES TO REVIEW THE PROPOSED SITE WORK AND CONSTRUCTION SEQUENCE. IDENTIFY THE TRAINED CONTRACTOR(S) AND QUALIFIED INSPECTOR RESPONSIBLE FOR THE SWPPP INSPECTIONS.
2. INSTALL THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ASSOCIATED WITH THE PROPOSED PHASE I DISTURBANCE (STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE)
3. EXCAVATE THE TEMPORARY SEDIMENT TRAPS ASSOCIATED WITH THE CURRENT DISTURBANCE AND IMMEDIATELY STABILIZE. DIRECT ALL RUNOFF FROM DISTURBED AREAS TO THE SEDIMENT TRAP DURING CONSTRUCTION, UTILIZING TEMPORARY DIVERSION SWALES WITH CHECK DAMS WHERE NECESSARY.
4. COMPLETE SITE CLEARING AND ROUGH GRADING ASSOCIATED WITH THE PROPOSED DISTURBANCE. STOCKPILE TOPSOIL AND SUBSOIL FOR FINAL GRADING AND STABILIZATION. INSTALL SILT FENCING AROUND STOCKPILES AND TEMPORARILY STABILIZE. DO NOT COMPLETE FINAL INSTALLATION OF STORMWATER FACILITIES AT THIS TIME.
5. INSTALL CATCH BASINS AND STORM DRAINAGE FOR THE PROPOSED DISTURBANCE. INSTALL FABRIC DROP INLET PROTECTION AT EACH CATCH BASIN.
6. INSTALL GRAVEL SUBBASE ALONG ACCESS DRIVE AND PARKING AREAS.
7. PERFORM SOIL RESTORATION IN THE AREAS OF DISTURBANCE. ALL NON-IMPERVIOUS DISTURBED AREAS SHALL BE ADEQUATELY STABILIZED WITH SOD, TOPSOIL, SEED, & HAY, OR LANDSCAPING MULCH.
8. BEGIN CONSTRUCTION OF PROPOSED BUILDING AND ASSOCIATED UTILITIES.
9. INSTALL BASE COURSE PAVEMENT ALONG ACCESS DRIVE AND PARKING AREAS.
10. AFTER ALL DISTURBED AREAS ARE STABILIZED, ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (SILT FENCE, CHECK DAMS) SHALL BE REMOVED.
11. ONCE ALL TRIBUTARY AREAS HAVE BEEN STABILIZED CONSTRUCT THE PROPOSED STORMWATER FACILITIES IN ACCORDANCE WITH PLAN SPECIFICATIONS.
12. INSTALL TOP COURSE PAVEMENT ALONG ACCESS DRIVE AND PARKING AREAS.
13. SUPPLEMENT, REPAIR, AND RE-STABILIZE ALL DISTURBED AREAS AS NECESSARY TO ACHIEVE FINAL STABILIZATION AS DEFINED BY NYSDEC.
14. WHEN ALL DISTURBED AREAS REACH FINAL STABILIZATION (AS DEFINED IN GP 0-20-001), THE NOTICE OF TERMINATION (NOT) MAY BE FILED IN ACCORDANCE WITH PERMIT SPECIFICATIONS.

Erosion & Sediment Control Notes:

1.) DUST CONTROL SHALL BE PROVIDED IN TIMES OF DRY WEATHER. AREAS SHALL BE SPRAYED WITH WATER TO PREVENT DUST FROM TRANSFERRING TO ADJACENT PROPERTIES.

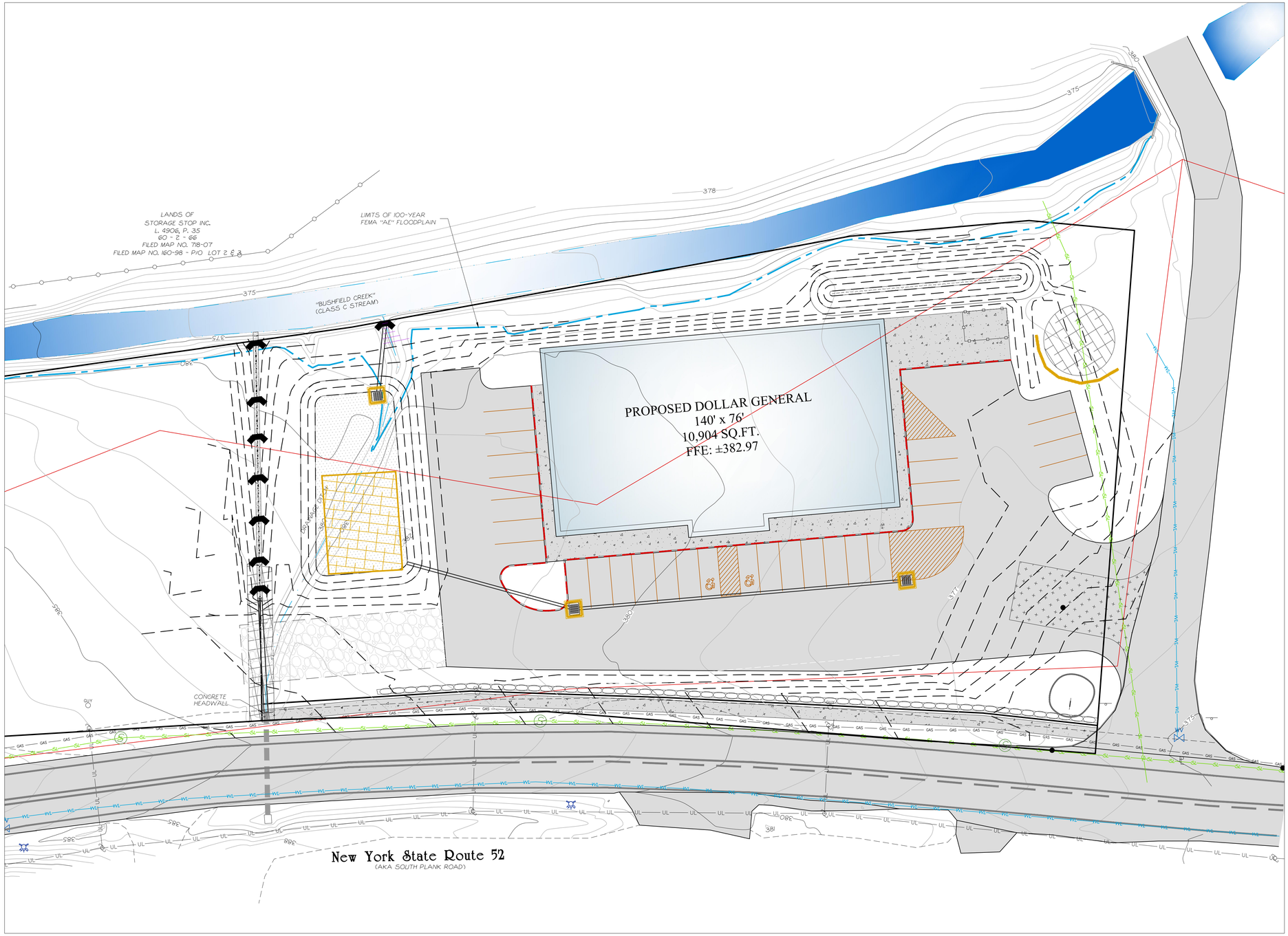
2.) THE PROPOSED AREA OF DISTURBANCE IS APPROXIMATELY ___ ACRES.

3.) DURING CONSTRUCTION, DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION REQUIREMENTS IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, JULY 2016 EDITION. TEMPORARY STABILIZATION SPECIFICATIONS INCLUDE:

- ANNUAL OR PERENNIAL RYEGRASS SEEDING WITH STRAW MULCHING AT A RATE OF 30 LBS PER ACRE.
- COARSE WOOD CHIPS AT A RATE OF 500 LBS PER ACRE.
- WOOD FIBER HYDROMULCH, AS PER MANUFACTURERS SPECIFICATIONS.

Legend

- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED SILT FENCE (SEE DETAIL)
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL)
- PROPOSED TEMPORARY CHECK DAM (SEE DETAIL)
- PROPOSED TEMPORARY SEDIMENT TRAP (SEE DETAIL)
- PROPOSED SLOPE STABILIZATION MATTING (SEE DETAIL)
- PROPOSED CONCRETE WASHOUT AREA
- PROPOSED TEMPORARY SOIL STOCKPILE LOCATION
- PROPOSED FABRIC DROP INLET PROTECTION (SEE DETAIL)



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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."
"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED VALID, TRUE COPIES."
"CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS, ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

LAWRENCE MARSHALL PE #087107

Erosion & Sediment Control Plan for Dollar General

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL:
60 - 2 - 65

TOWN OF NEWBURGH

COUNTY OF ORANGE

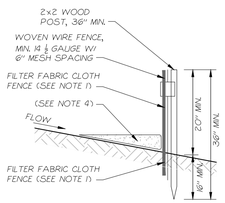
STATE OF NEW YORK

DRAFTED BY: ZAP

DATE: FEBRUARY 20, 2024

PROJECT: 4980

SHEET: 7 /



NOTES:
1.) FILTER CLOTH SHALL BE FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL.

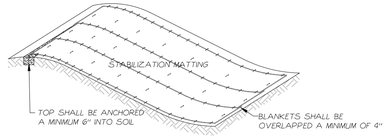
2.) SILT FENCE SHALL BE EMBEDDED A MINIMUM OF 8" INTO EXISTING GRADE.

3.) ENDS SHALL BE OVERLAPPED BY A MINIMUM OF 6" AND FOLDED WHEREVER TWO SECTIONS OF SILT FENCE OVERLAP.

4.) SEDIMENT SHALL BE REMOVED WHENEVER A DEPTH OF 6" HAS ACCUMULATED OR WHEN BULGES DEVELOP IN THE FENCE. DAMAGED SECTIONS SHALL BE REMOVED AND REPLACED AS NEEDED.

5.) SILT FENCE SHALL BE INSTALLED DOWN SLOPE OF ALL DISTURBED AREAS.

Silt Fence Detail
NOT TO SCALE



NOTES:
1.) BIODEGRADABLE MATTING SHALL CONSIST OF THE FOLLOWING:
"NORTH AMERICAN GREEN" - C350 COMPOSITE TURF REINFORCEMENT MAT
"VERDYOL" - ERO-MAT VTSS (S.D.) SINGLE NET STRAW BLANKET

2.) MATTING SHALL BE STAPLED WITH 8" WIRE STAPLES ALONG ALL SEAMS (12" ON CENTER) AND EVERY 3' ON CENTER WITHIN THE BLANKET.

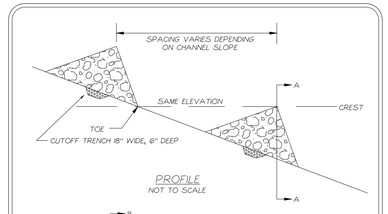
3.) ALL SLOPES SHALL BE SEEDED IN ACCORDANCE WITH THE SPECIFICATIONS ON THE LANDSCAPING PLAN (SHEET 10) PRIOR TO INSTALLATION OF BIODEGRADABLE MATTING.

4.) BIODEGRADABLE MATTING SHALL BE INSTALLED ON ALL DISTURBED SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL.

Slope Stabilization Detail

NOTES:
1.) SWALE SHALL BE STABILIZED WITH TOPSOIL, SEED, & MULCH IMMEDIATELY FOLLOWING CONSTRUCTION.

Temporary Diversion Swale Detail
NOT TO SCALE



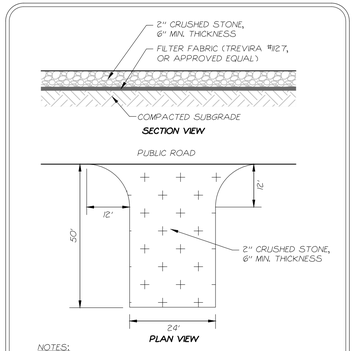
1. SET SPACING OF CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.

2. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.

3. INSTALL IN ROAD SWALES AFTER SWALE IS SHAPED. CHECK DAMS SHALL BE MAINTAINED UNTIL ROAD IS PAVED & SWALES ARE STABILIZED. REMOVE CHECK DAMS AFTER PAVEMENT & SWALE STABILIZATION IS COMPLETED.

4. EXACT LOCATION OF TEMPORARY CHECK DAMS TO BE DETERMINED IN THE FIELD BASED UPON SITE CONDITIONS.

Temporary Check Dam Detail



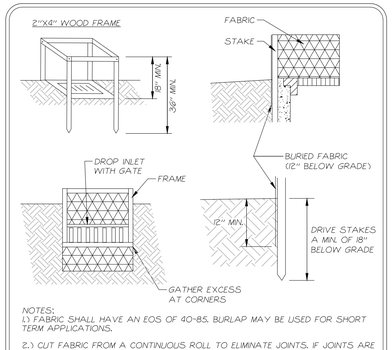
NOTES:
1.) ENTRANCE SHALL BE MAINTAINED AS CONDITIONS DEMAND TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY.

2.) ALL SEDIMENTATION WILL BE INSPECTED & MAINTAINED ON A REGULAR BASIS.

3.) PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.

4.) THE WIDTH OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE 12' MINIMUM, BUT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE INGRESS/EGRESS AREA BEING USED.

Stabilized Construction Entrance Detail
NOT TO SCALE



NOTES:
1.) FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.

2.) CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.

3.) STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF THREE (3) FEET.

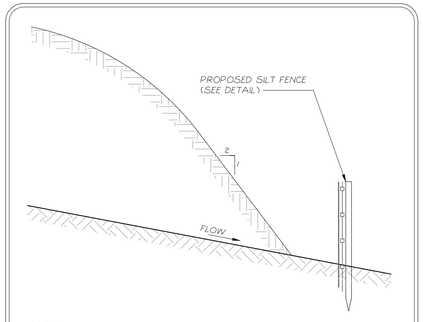
4.) SPACE STAKES EVENLY AROUND INLET THREE (3) FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.

5.) FABRIC SHALL BE EMBEDDED ONE (1) FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.

6.) A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

7.) MAXIMUM DRAINAGE AREA ONE (1) ACRE

Fabric Drop Inlet Protection



NOTES:
1.) SILT FENCE SHALL BE INSTALLED DOWN SLOPE OF TOPSOIL STOCKPILE AREA.

2.) MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1 (HORIZONTAL:VERTICAL).

3.) STOCKPILES SHALL BE TEMPORARILY STABILIZED WITHIN 14 DAYS OF CREATION OR DISTURBANCE.

4.) STOCKPILES SHALL BE LOCATED AWAY FROM ENVIRONMENTALLY SENSITIVE AREAS (IE: WETLANDS, WETLAND BUFFERS, STREAMS, WATER BODIES).

Topsoil Stockpile Detail
NOT TO SCALE

TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT	COMMENTS/EXAMPLES
NO SOIL DISTURBANCE	RESTORATION NOT PERMITTED	PRESERVATION OF NATURAL FEATURES
MINIMAL SOIL DISTURBANCE	RESTORATION NOT REQUIRED	CLEARING AND GRUBBING
AREAS WHERE TOPSOIL IS STRIPPED ONLY-NO CHANGE IN GRADE	AERATE * AND APPLY 6 INCHES OF TOPSOIL	PROTECT AREA FROM ANY ON GOING CONSTRUCTION ACTIVITIES
AREAS OF CUT OR FILL	APPLY FULL SOIL RESTORATION	
HEAVY TRAFFIC AREAS ON SITE (ESPECIALLY IN A ZONE 5-25 FEET AROUND BUILDINGS BUT NOT WITHIN A 5 FOOT PERIMETER AROUND FOUNDATION WALLS)	APPLY FULL SOIL RESTORATION (RESTORATION/DECOMPACTION AND COMPOST ENHANCEMENT)	
AREAS WHERE RUNOFF REDUCTION AND-OR INFILTRATION PRACTICES ARE APPLIED	RESTORATION NOT REQUIRED, BUT MAY BE APPLIED TO ENHANCE THE REDUCTION SPECIFIED FOR APPROPRIATE PRACTICES	KEEP CONSTRUCTION EQUIPMENT FROM CROSSING THESE AREAS. TO PROTECT NEWLY INSTALLED PRACTICE FROM ANY ONGOING CONSTRUCTION ACTIVITIES CONSTRUCT A SINGLE PHASE OPERATION FENCE AREA
REDEVELOPMENT PROJECTS	SOIL RESTORATION IS REQUIRED ON REDEVELOPMENT PROJECTS IN AREAS WHERE EXISTING IMPERVIOUS AREA WILL BE CONVERTED TO PREVIOUS AREA.	

*AERATION INCLUDES THE USE OF MACHINES SUCH AS TRACTOR-DRAWN IMPLEMENTS WITH COULTERS MAKING A NARROW SLIT IN THE SOIL, A ROLLER WITH MANY SPIKES MAKING INDENTATIONS IN THE SOIL, OR PRONGS WHICH FUNCTION LIKE A MINI-SUBSOILER.

FULL SOIL RESTORATION SPECIFICATIONS:

1.) SOIL RESTORATION SHALL BE PERFORMED DURING THE LANDSCAPING PHASE OF THE PROJECT. SOIL RESTORATION SHALL INCLUDE THE FOLLOWING STEPS:
- A. APPLY 3" OF COMPOST OVER SUBSOIL.
- B. TILL COMPOST INTO SUBSOIL TO A MINIMUM DEPTH OF 12".
- C. REMOVE ALL STONE/ROCK MATERIAL GREATER THAN 4" IN SIZE.
- D. APPLY 6" OF TOPSOIL.
- E. VEGETATE IN ACCORDANCE WITH THE LANDSCAPING PLAN.

2.) COMPOST SHALL BE AGED AND FROM PLANT DERIVED MATERIALS, FREE OF WEEDS, SEEDS, WATER, AND DUST. COMPOST SHOULD PASS THROUGH A HALF INCH SCREEN AND HAVE SUITABLE PH FOR PLANT GROWTH.

3.) MAINTENANCE SHALL INCLUDE THE FOLLOWING:
- A. INSPECTIONS AFTER EACH STORM EVENT GREATER THAN HALF-INCH FOR THE FIRST SIX MONTHS.
- B. RESEEDING OF BARE OR ERODING AREAS TO ESTABLISH A STABILIZED COVER.
- C. WATER ONCE EVERY THREE DAYS FOR THE FIRST MONTH, THEN PROVIDE A HALF INCH OF WATER PER WEEK.

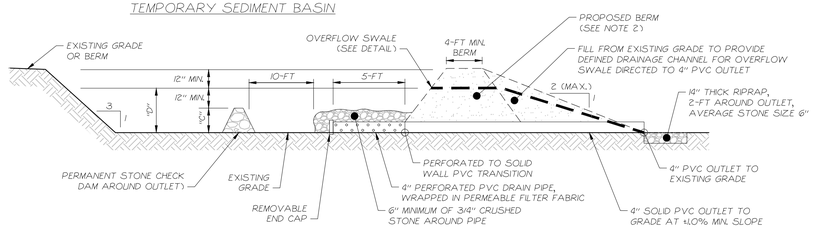
4.) VEGETATED AREAS SHALL BE KEPT FREE OF VEHICULAR AND FOOT TRAFFIC.

5.) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED.

NOTES:
1.) SOIL RESTORATION AS SPECIFIED IN THE CHART ABOVE SHALL BE APPLIED TO ALL AREAS DISTURBED DURING THE CONSTRUCTION PROCESS.M

Soil Restoration Specifications
NOT TO SCALE

TEMPORARY SEDIMENT BASIN



NOTES:
1.) INSTALL AND MAINTAIN TEMPORARY SEDIMENT BASINS THROUGHOUT THE COURSE OF SITE CONSTRUCTION. A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE OF TRIBUTARY AREA SHALL BE PROVIDED.

2.) THE PROPOSED BERM SHALL CONSIST OF CRUSHED STONE OR OVERBURDEN MATERIAL. INSTALL A MINIMUM OF 2.5" TOPSOIL OVER THE PROPOSED BERM, IMMEDIATELY SEED AND MULCH TO PROMOTE VEGETATIVE GROWTH AND STABILIZATION. SLOPE STABILIZATION MATTING SHALL BE UTILIZED IN THE EVENT VEGETATIVE GROWTH CANNOT BE ACHEVED IN A TIMELY MANNER.

3.) THE AREA UNDER THE BERM SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGEATION AND ROOT MAT. THE TOP OF THE BERM SHALL BE A MINIMUM OF FOUR (4) FEET WIDE.

4.) ALL FILL SLOPES SHALL BE 2:1 OR FLATTER. ALL CUT SLOPES SHALL BE 1:1 OR FLATTER. SLOPES SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION.

5.) SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED MORE THAN HALF OF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED ON TOP OF OR NEXT TO PREVIOUSLY EXCAVATED MATERIAL AND STABILIZED IMMEDIATELY.

6.) THE TEMPORARY SEDIMENT BASIN SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRED AS NECESSARY.

7.) THE TEMPORARY SEDIMENT BASIN SHALL BE REMOVED AND THE AREA STABILIZED ONCE THE TRIBUTARY DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

8.) SEDIMENT BASINS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

BASIN	DEPTH: "D"	BASIN WIDTH: "W"	BASIN LENGTH: "L"	CHECK DAM: "C"	TRIBUTARY AREA	REQUIRED VOLUME	PROVIDED VOLUME
A	3-FT	60-FT	230-FT	2-FT	±2.3 ACRES	8,280 C.F.	8,280 C.F.
B	2-FT	45-FT	60-FT	1-FT	±1.5 ACRES	5,400 C.F.	5,400

Temporary Sediment Trap Detail
NOT TO SCALE

Dig Safely: New York Call 811 before you dig

NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

LAWRENCE MARSHALL PE #087107

Erosion & Sediment Control Details for Dollar General

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 60 - 2 - 65
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: FEBRUARY 20, 2024
PROJECT: 4980
SHEET: 8 /

LANDS OF
STORAGE STOP INC.
L. 4906, P. 35
60 - 2 - 66
FILED MAP NO. 718-07
FILED MAP NO. 160-98 - P/O LOT 2 & 3

"BUSHFIELD CREEK"
(CLASS C STREAM)

PROPOSED DOLLAR GENERAL
140' x 76'
10,904 SQ.FT.
FFE: ±382.97

WB-67
AASHTO 2018 (US)

CONCRETE HEADWALL

New York State Route 52
(AKA SOUTH PLANK ROAD)

TO N.Y.S. RTE. 300

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."
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NO.	DATE	REVISION	BY
1	2-26-24	DETAILED SITE PLAN	ZAP

LAWRENCE MARSHALL PE #087107

Turning Diagram for Dollar General

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Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING

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Lawrence J. Marshall, P.E. Timothy J. Martz, L.S. Zachary A. Peters, P.E.

February 26, 2024

Planning Board
Town of Newburgh
21 Hudson Valley Professional Plaza
Newburgh, NY 12550

Re: Job No. 4980
Tax Parcel: 60-2-65
NYS Route 52
Town of Newburgh
Orange County
Dollar General Site Plan
Town of Newburgh Project No.: 2023-25

Dear Board Members:

Enclosed please find the following items in reference to the above-captioned project:

1. Ten (10) copies of the Detailed Site Plan

The following comments are in response to a review by Patrick J. Hines, of McGoey, Hauser, & Edsall Consulting Engineers, dated November 29, 2023:

1. To accommodate the requested sidewalk, the proposed site plan has been revised to include a NYSDOT dedication area. The building location and site layout have been updated to reflect the change. The project scope has also been updated to include a 2-lot subdivision of the existing parcel.
2. Parking has been situated to the sides of the building to the greatest extent practicable. To mitigate the proposed parking spaces remaining within the front setback a decorative stone wall has been proposed along the site frontage. The wall will be supplemented with proposed site landscaping.
3. The limits of the 100-year floodplain have been included on the plan.
4. The project site is primarily overgrown lawn with small growth trees around the northerly lot bounds. No significant tree clearing of trees greater than 4-inches d.b.h. that would result in impacts to the Indiana Bat are anticipated.
5. A boundary survey has been prepared for the project site. Notes pertaining to the existing easements are included on sheets 1 and 2 of the plan set.
6. An area variance was granted by the Town of Newburgh Zoning Board of Appeals (ZBA) on February 22, 2024, to permit thirty (30) proposed parking spaces currently shown.
7. The bulk table has been revised to specify a 60-foot front yard setback. As a result of the proposed sidewalk, a dedication along the NYSDOT right-of-way will be required. To maintain the minimum required front setback, the building location was shifted to the northeast. An area variance was granted by the Town of Newburgh Zoning Board of

Appeals (ZBA) on February 22, 2024, for the proposed 21.8' rear yard setback (30-foot required) currently shown.

8. No response required.
9. The site is proposed to be served by connections to the existing public water and sewer mains along NYS Route 52. There is also an existing gas main along the site frontage.
10. No response required.
11. No response required.
12. A detailed site plan has been prepared. Stormwater detailing and a Stormwater Pollution Prevention Plan (SWPPP) are currently being prepared. An Erosion & Sediment Control Plan has been prepared and included in the current plan set.

The following comments are in response to a review by Kenneth Wersted, P.E., of Creighton Manning, dated December 4, 2023:

1. No response required.
2. A NYSDOT dedication is proposed to accommodate the required sidewalk along the site frontage. Specifications regarding the sidewalk and dedication area will be coordinated with NYSDOT as the project progresses.
3. The proposed parking layout has been adjusted to accommodate the current layout and parking variance granted on February 22, 2024.
4. The required sidewalk has been shown on the plans.
5. A turning diagram depicting a standard WB-67 design vehicle has been included on sheet 9 of the plan set.
6. A Traffic Impact Study will be prepared and submitted for review as discussed at the December 2023 Planning Board meeting.

Please place this project on the March 7, 2024, meeting agenda for continued discussion.

If you have any questions or concerns, please feel free to contact me at (845) 744-3620 or by email at zpeters@mntm.co.

Sincerely,

Zachary A. Peters, P.E.

ZAP/zap
Enc.

Cc: Primax Properties, LLC *(via email) – w.enc.*
Dominic Cordisco, Esq. *(via email) – w.enc.*
Kenneth Wersted, P.E.. *(via email) – w.enc.*
Patrick Hines *(via mail & email) – w.enc.*