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REVISED TRAFFIC ANALYSIS FOR THE HOME DEPOT STORE, HUNTINGTON BEACH, CALIFORNIA

This revised traffic analysis evaluates the development of a 130,536 square foot Home Depot Store on the site that was occupied by a 126,560 square foot Kmart Store until October 2004. The project site is located in the southwest quadrant of the Garfield Avenue/Magnolia Street intersection in the City of Huntington Beach. The scope and focus of the study was developed in consultation with the Huntington Beach Public Works Department. It was determined that the critical issues to be addressed in this traffic analysis are project impacts to the Garfield Avenue/Magnolia Street and Magnolia Street/Hyde Park Drive intersections, site access and accident rates on the adjacent street system.

Project Weekday Trip Generation. The project site plan is illustrated on Figure 1. Table 1 summarizes the average daily, A.M. and P.M. peak hour trip generation estimates for the proposed project. The trip generation rates are based on traffic counts collected by ATE on July 14, 2005 for the Home Depot Store located at Golden West Street and Warner Avenue in the City of Huntington Beach. The trip generation rates published in the Institute of Transportation (ITE), Trip Generation Manual, 7th Edition for Home Improvement Superstores such as a Home Depot were determined to be lower than those based on the driveway counts collected at the existing store in the City of Huntington Beach. The average daily, A.M. and P.M. peak hour trip generation estimates for the previous Kmart Store are based on rates published in the Institute of Transportation (ITE), **Trip Generation Manual**, 7th Edition.

Table 1
Project Weekday Trip Generation

Land Use	Size	Daily		A.M. Peak Hour				P.M. Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Home Improvement Store	130, 536sq.ft.	57.62	7,521	4.26	556	300	256	4.61	602	283	319
Kmart Store	126,560 sq.ft.	56.02	7,090	0.84	106	72	34	5.06	640	320	320
Net Trip Generation Change:			+431		+450	+228	+222		-38	-37	-1

The project is projected to generate 7,521 average daily, 556 A.M. and 602 P.M. peak hour trips as shown on Table 1. The previous Kmart Store was projected to have generated 7,090 average daily, 106 A.M. and 640 P.M. peak hour trips based on ITE rates. The proposed Home Depot project would result in a net trip increase of 431 average daily and 450 A.M. peak hour trips and a net decrease of 38 P.M. peak hour trips as illustrated on Table 1.

Trip Distribution and Assignment. The trip distribution percentages for the Home Depot project are listed in Table 2. The project trip distribution and assignment are illustrated on Figure 2. The trip distribution and assignment in Table 2 is reflective of the current project's site plan and proposed full access as illustrated in Figure 1. Modifications to the projects's site access and trip assignment is discussed in the site access and circulation section.

Table 2
Project Weekday Trip Distribution/Assignment

Route	Origin/Destination	Percent	Trips		
			ADT	A.M. Peak Hour	P.M. Peak Hour
Magnolia Street	North of Garfield Ave.	25%	1,880	139	151
	South of Garfield Ave.	40%	3,008	222	241
Garfield Avenue	East of Magnolia St.	15%	1,129	84	90
	West of Magnolia St.	20%	1,504	111	120

Based on the project trip distribution, project trips were assigned to the adjacent street system as presented in Table 2.

Existing + Project Conditions

The Kmart store building on the subject property is currently vacant. The Garfield Avenue/Magnolia Street intersection operates at LOS "B" during the A.M. and P.M. peak hours periods under existing conditions. The existing (Year 2004) peak one hour period traffic volumes between 7:00 - 9:00 A.M. and 4:00 - 6:00 P.M. for the Garfield Avenue/Magnolia Street intersection are shown on Figure 3. These volumes were collected in November of 2004 by Associated Transportation Engineers (ATE).

In determining the operational characteristics of intersections, Levels of Service (LOS) "A" through "F" are applied, with LOS "A" indicating uncongested free flow conditions and LOS "F" indicating congested forced flow conditions. Existing levels of service for the study-area intersections were calculated using the Intersection Capacity Utilization (ICU)methodology for signalized intersections. Worksheets illustrating the level of service calculations are attached for reference. The existing level of service for the Garfield Avenue/Magnolia Street intersection is listed on Table 3.

The Garfield Avenue/Magnolia Street intersection would continue to operate at LOS "B" during the A.M. and the P.M. peak hour periods for existing + project conditions. The delayed side street movements at the unsignalized Magnolia Street/Hyde Park Drive intersection would operate in the LOS "E"- "F" range with the addition of project traffic. The existing + project traffic volumes as shown on Table 3 and illustrated in Figure 4.

Table 3
Existing + Project Intersection Levels of Service

	A.M. Peak Hour				P.M. Peak Hour			
	Existing		Existing + Project		Existing		Existing + Project	
Intersection	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Magnolia Street/Hyde Park Drive								
northbound left:	9.3 sec.	LOS A	9.7 sec.	LOS A	10.9 sec.	LOS A	11.6 sec.	LOS B
southbound left:	10.5 sec.	LOS B	11.2 sec.	LOS B	10.9 sec.	LOS B	11.5 sec.	LOS B
westbound approach:	32.5 sec.	LOS D	43.0 sec.	LOS E	38.0 sec.	LOS E	52.9 sec.	LOS F
eastbound approach:	39.6 sec.	LOS E	51.8 sec.	LOS F	45.4 sec.	LOS E	70.0 sec.	LOS F
Garfield Avenue/Magnolia Street	0.61	LOS B	0.66	LOS B	0.65	LOS B	0.70	LOS B

Cumulative + Project Conditions

The following section presents the cumulative traffic conditions in the vicinity of the proposed Home Depot store. The cumulative conditions were assessed applying a 2 percent growth factor to the existing traffic volumes projected to the opening day of the Home Depot Store (1Year) to account for traffic generated by background development. The cumulative and cumulative + project traffic volumes are illustrated in Figures 5 and 6.

Table 4
Cumulative + Project Intersection Levels of Service

Intersection	A.M. Peak Hour				P.M. Peak Hour			
	Cumulative		Cumulative + Project		Cumulative		Cumulative + Project	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Magnolia Street/Hyde Park Drive								
northbound left:	9.4 sec.	LOS A	9.8 sec.	LOS A	11.0 sec.	LOS B	11.8 sec.	LOS B
southbound left:	10.6 sec.	LOS B	11.3 sec.	LOS B	11.0 sec.	LOS B	11.7 sec.	LOS B
westbound approach:	34.0 sec.	LOS D	45.1 sec.	LOS E	40.1 sec.	LOS E	56.1 sec.	LOS F
eastbound approach:	41.4 sec.	LOS E	54.3 sec.	LOS F	48.2 sec.	LOS E	76.0 sec.	LOS F
Garfield Avenue/Magnolia Street	0.62	LOS B	0.67	LOS B	0.66	LOS B	0.72	LOS C

The Garfield Avenue/Magnolia Street intersection would operate at LOS "C" or better during the A.M. and P.M. peak hour periods with the addition of project traffic as shown in Table 4. The delayed side street movements at the Magnolia Street/Hyde Park Drive unsignalized intersection would operate in the LOS "E" -"F" range with project traffic.

Site Access and Circulation

Access to the project as shown on the project site plan will be provided by three driveways on Magnolia Street and two driveways on Garfield Avenue as shown in Figure 1. Two driveways on Magnolia Street will allow for both inbound and outbound left and right-turns. Driveways on the east side of Magnolia Street provide similar inbound and outbound access for the adjacent land uses. The southernmost driveway is restricted to right-turn only. The westerly driveway on Garfield Avenue is right-turn only. The easterly driveway on Garfield Avenue will be restricted to right-turns in and right and left-turns outbound. Project driveways will be designed as street approaches. The maximum northbound left-turn queues entering the project at the main project driveway would be less than 50 feet based the attached level of service worksheets. The existing continuous left-turn lane on Magnolia Street would be adequate to accommodate project left-turns and traffic attracted to the land uses on the east side of Magnolia Street. Given the forecast weekday and Saturday volumes at the project driveways, the throats lengths shown on the project site plan are adequate prevent on-site vehicular queue conflicts. The proposed Home Depot site access is sufficient and adequately serves the project. Continued use of the center left-turn lane will provide adequate access to the project and the land-uses on the east side of Magnolia Street.

The project frontages on Garfield Avenue and Magnolia Street are fully improved and other than the changing of the driveways no additional improvements are proposed. The ADA pedestrian connection north of the main driveway will be extended to Magnolia Street. It appears that the ADA walk from the Taco Bell area is connected to Magnolia Street through the Taco Bell site. The 6 foot wide area adjacent to the driveways can be utilized as pedestrian walks.

The truck path is illustrated in Figure 8. The project's final site plan is to be reviewed and approved by the City's Traffic Engineer.

Left-turns (inbound and outbound) on Magnolia Street are currently allowed. ATE evaluated the following restricted left-turn access scenario for the project.

1. Project inbound and outbound left-turns are made at the Magnolia Street/Hyde Park intersection with joint access between the adjacent commercial properties. The final driveway design and joint access agreement to be determined at a later date.

Scenario 1. Project left-turns are made at the Magnolia Street/Hyde Park Drive intersection. In general restricting project left-turns on Magnolia Street as suggested by City staff, would result in a redistribution of the project driveway traffic as shown on Figure 9. This scenario would require a shared access agreement between the project and the adjacent property to the south. The existing + project and cumulative + project traffic volumes with the left-turn restriction are illustrated on Figures 10 and 11. The delayed side street movements at the unsignalized Magnolia Street/Hyde Park Drive intersection would operate at LOS "F"under existing + project and cumulative + project conditions.

Overall intersection operations at Garfield Avenue/Magnolia Street are not significantly affected by the redistribution of project traffic. Restricting project left-turns on Magnolia Street with a raised median effects the site access patterns of the existing land uses on the eastside of Magnolia Street. Additional U-turns at the Garfield Avenue/Magnolia Street and Magnolia Street/Hyde Park Drive intersections would be created. The U-turns would be attributable to the redistribution of driveway traffic from existing land-uses on the eastside of Magnolia Street. Based on driveway counts, the increase in U-turns at the two intersections during the A.M. and P.M. peak hour periods would be less than 50 vehicles per hour.

A signal warrant analysis was prepared for the Magnolia Street/Hyde Park Drive intersection based on the Caltrans eight hour rural signal warrant, average daily traffic volume warrant and crash warrant. The cumulative + project traffic volumes with the project's left-turns restricted on Magnolia Street and shared access, at the Magnolia Street/Hyde Park Drive intersection would satisfy both the eight hour volume warrant and the ADT volume warrant. Based on the reported accident records the crash warrant is not satisfied. Though there were 6 broadside accidents reported along Magnolia Street, there was only one broadside reported in the last 12 month period from which the data was received. To satisfy the crash warrant 5 or more broadside accidents within a 12 month period is needed.

Accident Summary

An issue raised by City of Huntington Beach staff was accidents on Magnolia Street and Garfield Avenue in the project vicinity. ATE staff reviewed City accident records for Magnolia Street from Garfield Avenue to the Hyde Park Drive and Garfield Avenue from Magnolia Street to Newland Street for the three year period December 2001 to December 2004. Accident data is attached for City staff to review. Only 1 of the 36 reported accidents occurred after the Kmart Store was closed. There were 30 accidents with injuries, 6 property damage only and no fatalities. Of the total, 32 accidents involved 2 or more vehicles and 3 were single vehicle events and 1 was an accident involving a bicycle. The primary collision factors listed were unsafe speed, improper turning, right-of-way violations, following to close and driving under the influence. There were 13 accidents that occurred on Magnolia Street between Garfield Avenue and Hyde Park Drive, 21 at the intersection of Garfield Avenue and Magnolia Street and 2 on Garfield Avenue between Magnolia Street and Newland Street. The accidents along Magnolia Street between Garfield Avenue and Hyde Park Drive would not be correctable by a signalized intersection. As part of ATE's analysis of the accidents records we looked at the accident rate for the three areas. The actual rates were consistent with the statewide expected rate for similar types of facility based upon the 2002 Collision Data on California State Highways, a Caltrans publication. The trip generation comparison between the Home Depot Store and the Kmart Store indicates that the traffic volumes will be very similar, thus ATE has concluded that there would not be a significant increase in the accident rate when the project is operational.

Pedestrian Summary

The City of Huntington Beach Public Works Department conducted a pedestrian survey along Magnolia Street and Garfield Avenue adjacent to the project frontage. The survey data was collected between the hours of 7:30-8:30 A.M. and 2:20-3:20 P.M. Adjacent to the project along Magnolia Street, the peak pedestrian volume of 25 occurred during the P.M. peak hour period. Along Garfield Avenue the peak the peak pedestrian volume of 9 occurred during the A.M. peak hour period. During the P.M. peak hour observation period, 13 pedestrians were observed cutting through the property. The pedestrian survey data and diagram is attached.

Project Saturday Trip Generation

For the purpose of estimating the number of trips which would be generated by the Home Depot Store on a Saturday, rates developed from driveway counts collected by ATE on July 9, 2005 at the Home Depot Store located at Golden West Street and Warner Avenue in the City of Huntington Beach. The estimated Saturday and peak hour trips are summarized and compared in Table 5.

City of Huntington Beach

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Table 5
Project Saturday Trip Generation

Land Use	Size	Saturday		Peak Hour			
		Rate	Trips	Rate	Trips	In	Out
Home Improvement Store	130,536 sq.ft.	75.33	9,833	9.04	1,180	625	555
Kmart Store	126,560 sq.ft.	71.19	9,010	7.58	959	489	470
Net Trip Generation Change:			+823		+221	+136	+85

The Home Depot store would generate a total of 9,833 Saturday trips and 1,180 peak hour trips as shown in Table 5. The previous Kmart Store is projected to generate 9,010 Saturday trips and 959 Saturday peak hour trips based on ITE rates. The proposed Home Depot project would result in a net trip increase of 823 Saturday trips and a net increase of 221 Saturday peak hour trips as illustrated on Table 5. Since Saturday trips traditionally occur outside the peak periods of the adjacent roadways and study-area intersections, the project would not have a significant impact to the study-area facilities. Project Saturday traffic volumes were assigned to the adjacent street network as illustrated on Figure 11.

The Garfield Avenue/Magnolia Street intersection currently operates at LOS "A" during the Saturday peak hour period with the volumes illustrated on Figure 12. The Garfield Avenue/Magnolia Street intersection would operate at LOS "C" during the peak hour period for existing Saturday + project conditions. The level of service for existing Saturday + project traffic volumes are shown on Table 6 and illustrated in Figure 13.

Table 6
Existing Saturday + Project Intersection Levels of Service

Intersection	Peak Hour			
	Existing		Existing + Project	
	V/C	LOS	V/C	LOS
Garfield Avenue/Magnolia Street	0.60	LOS A	0.72	LOS C

Cumulative Saturday + Project Conditions

The following section presents the cumulative Saturday traffic conditions in the vicinity of the proposed Home Depot store. The cumulative conditions were assessed applying a 2 percent growth factor to the existing traffic volumes projected to the opening day of the Home Depot Store (1Year) to account for traffic generated by background development. The cumulative and cumulative Saturday + project traffic volumes are illustrated in Figures 14 and 15.

Table 7
Cumulative Saturday + Project Intersection Levels of Service

Intersection	Peak Hour			
	Cumulative		Cumulative + Project	
	V/C	LOS	V/C	LOS
Garfield Avenue/Magnolia Street	0.62	LOS B	0.74	LOS C

The Garfield Avenue/Magnolia Street intersection would operate at LOS "C" or better during the Saturday peak hour period with the addition of project traffic as shown in Table 7.

Associated Transportation Engineers

By: Richard L. Pool, P.E.
President

Attachments: Figures 1 through 16
Exhibit "B"
Pedestrian Volumes and Diagram
Existing Home Depot Traffic Counts
Eastside Driveway Counts
Accident History
Intersection LOS Worksheets
Caltrans Signal Warrants

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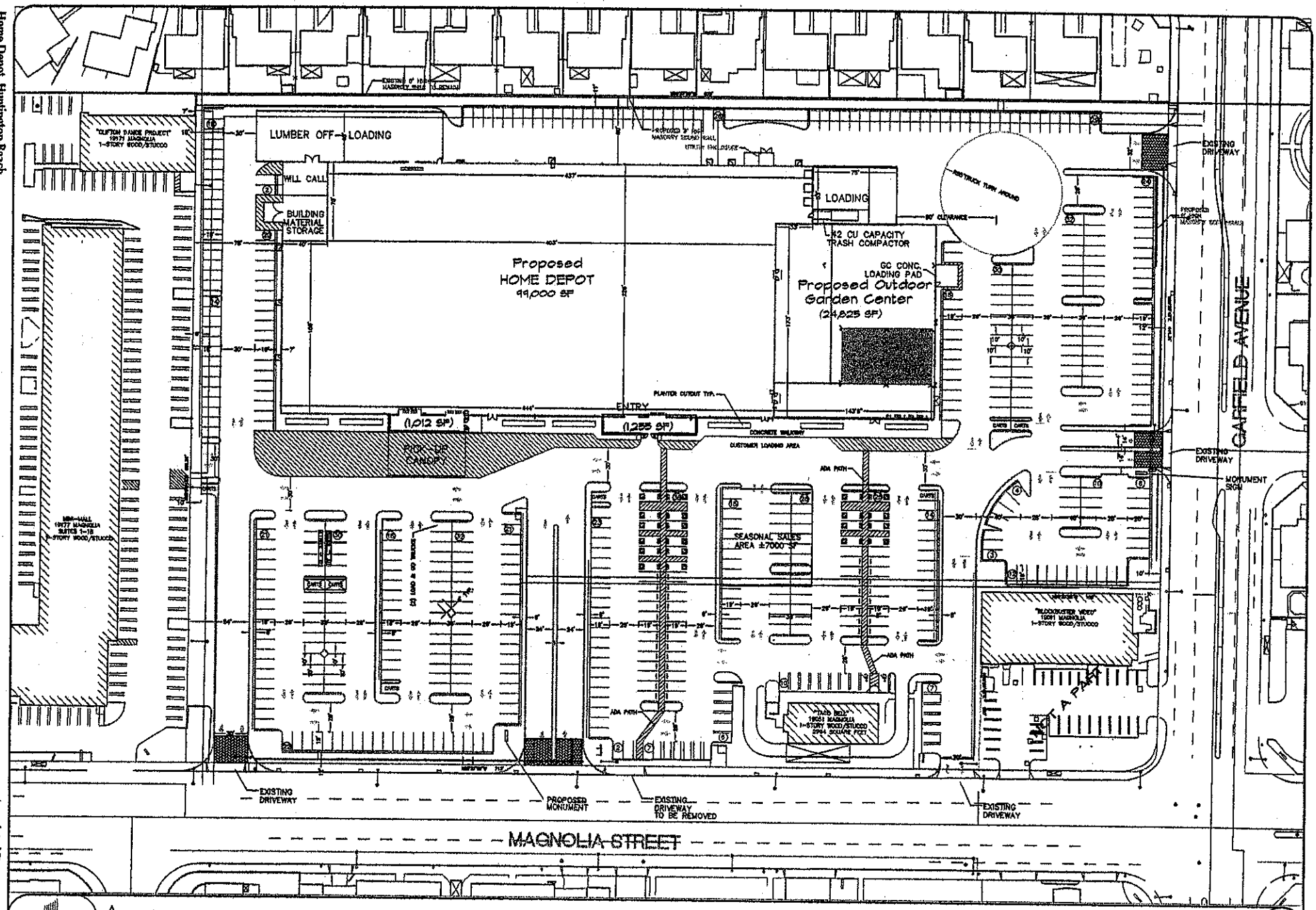

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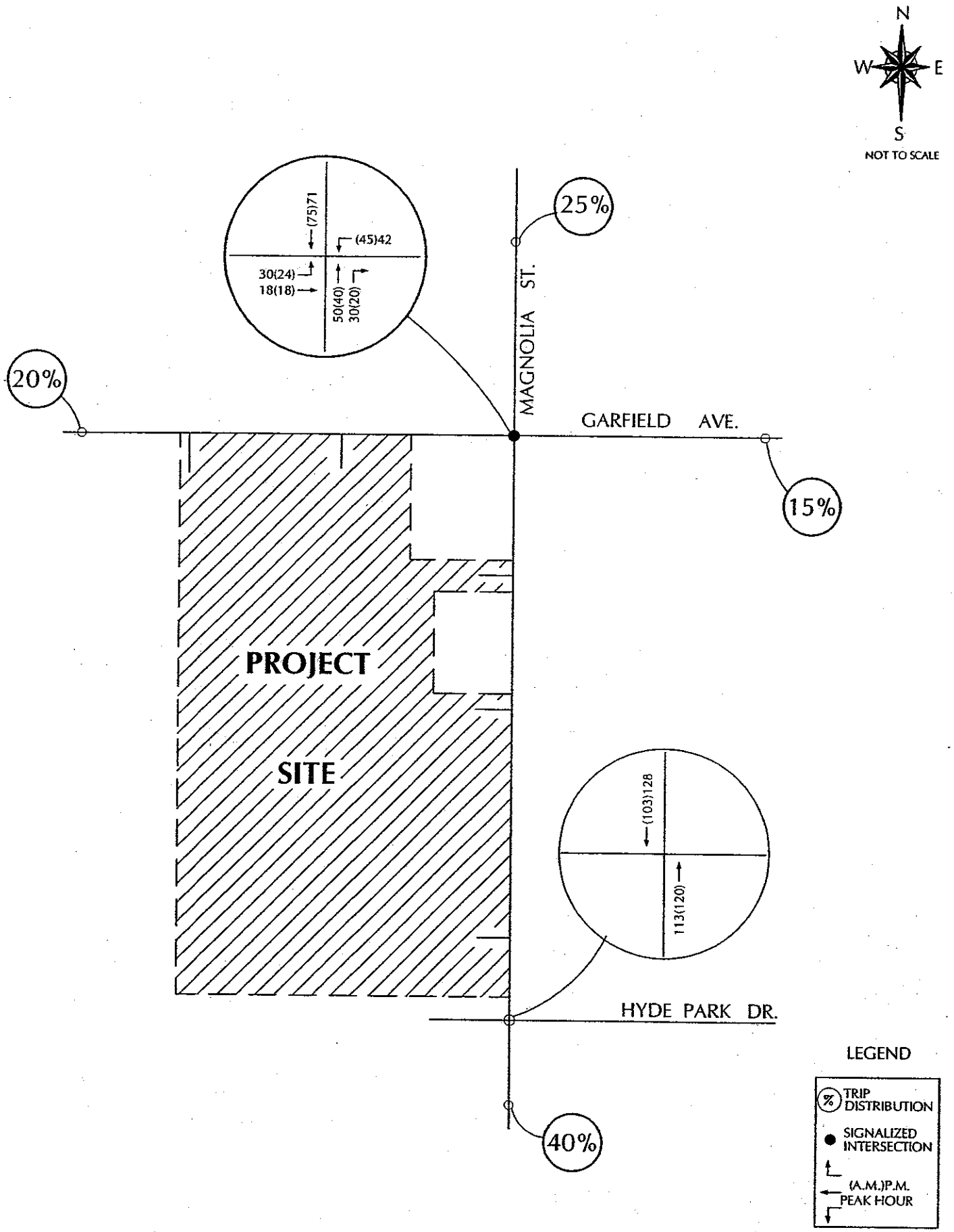
PROJECT SITE PLAN

FIGURE 1



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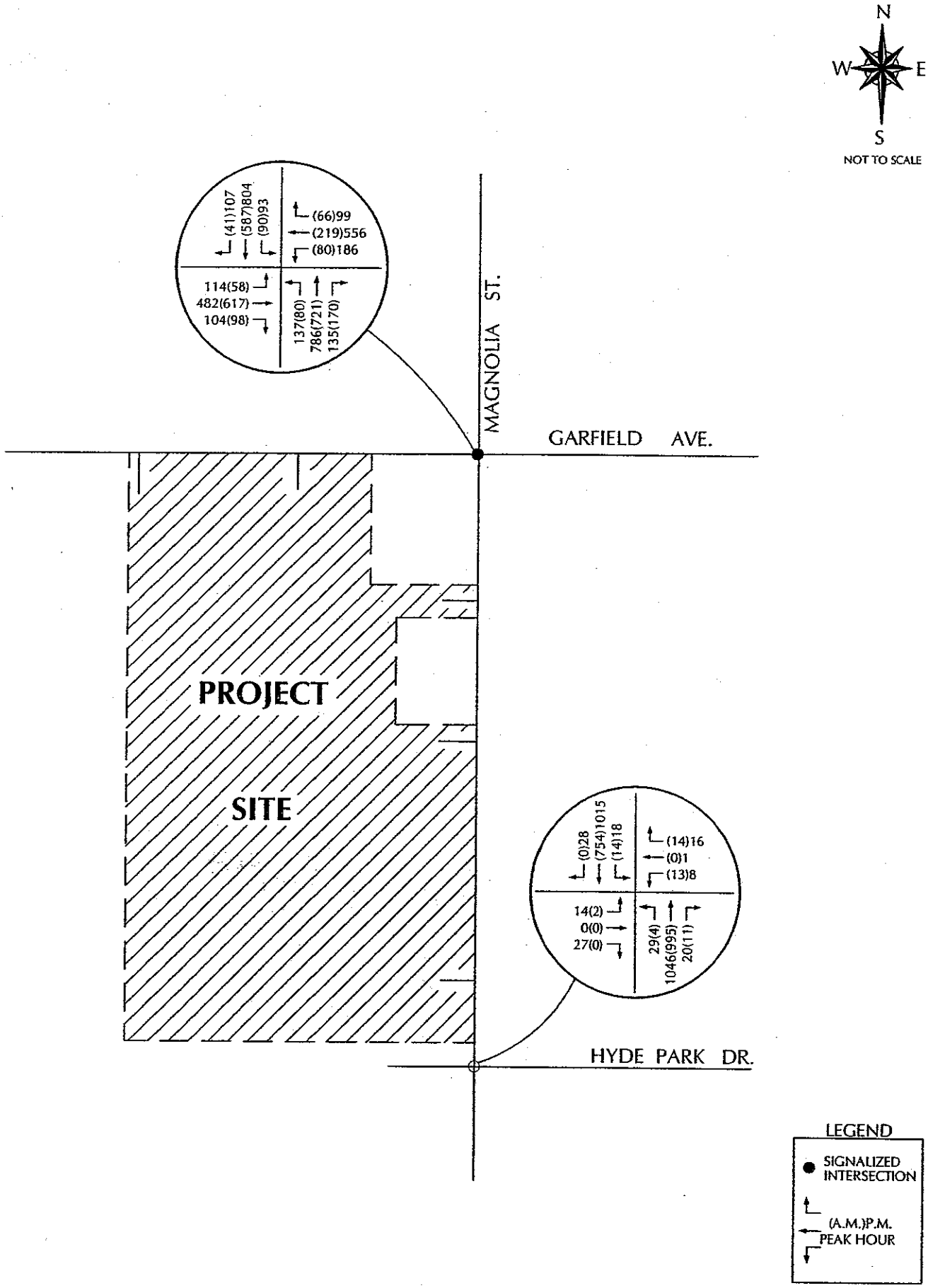
PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 2



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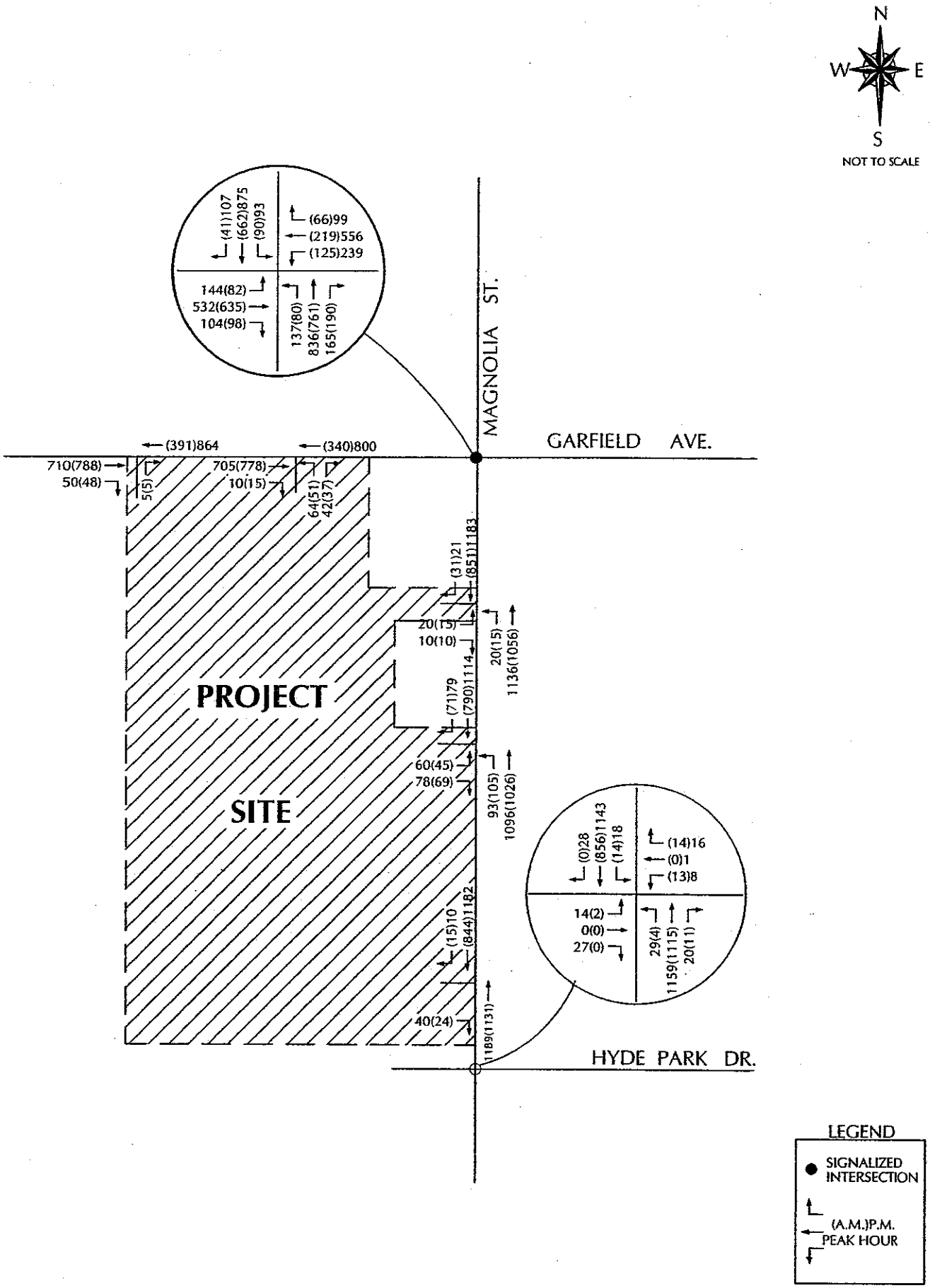
EXISTING TRAFFIC VOLUMES

FIGURE 3



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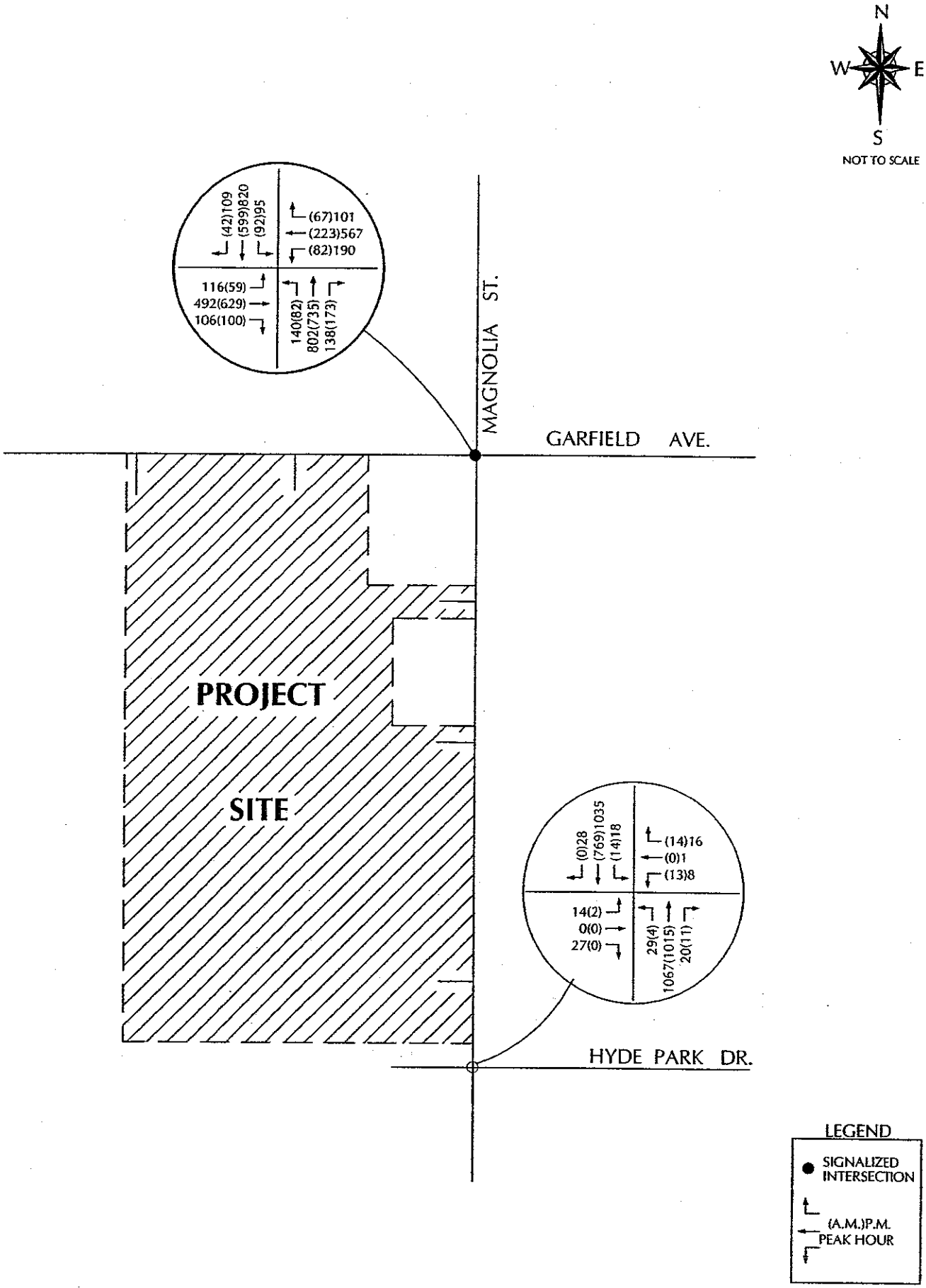
EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 4



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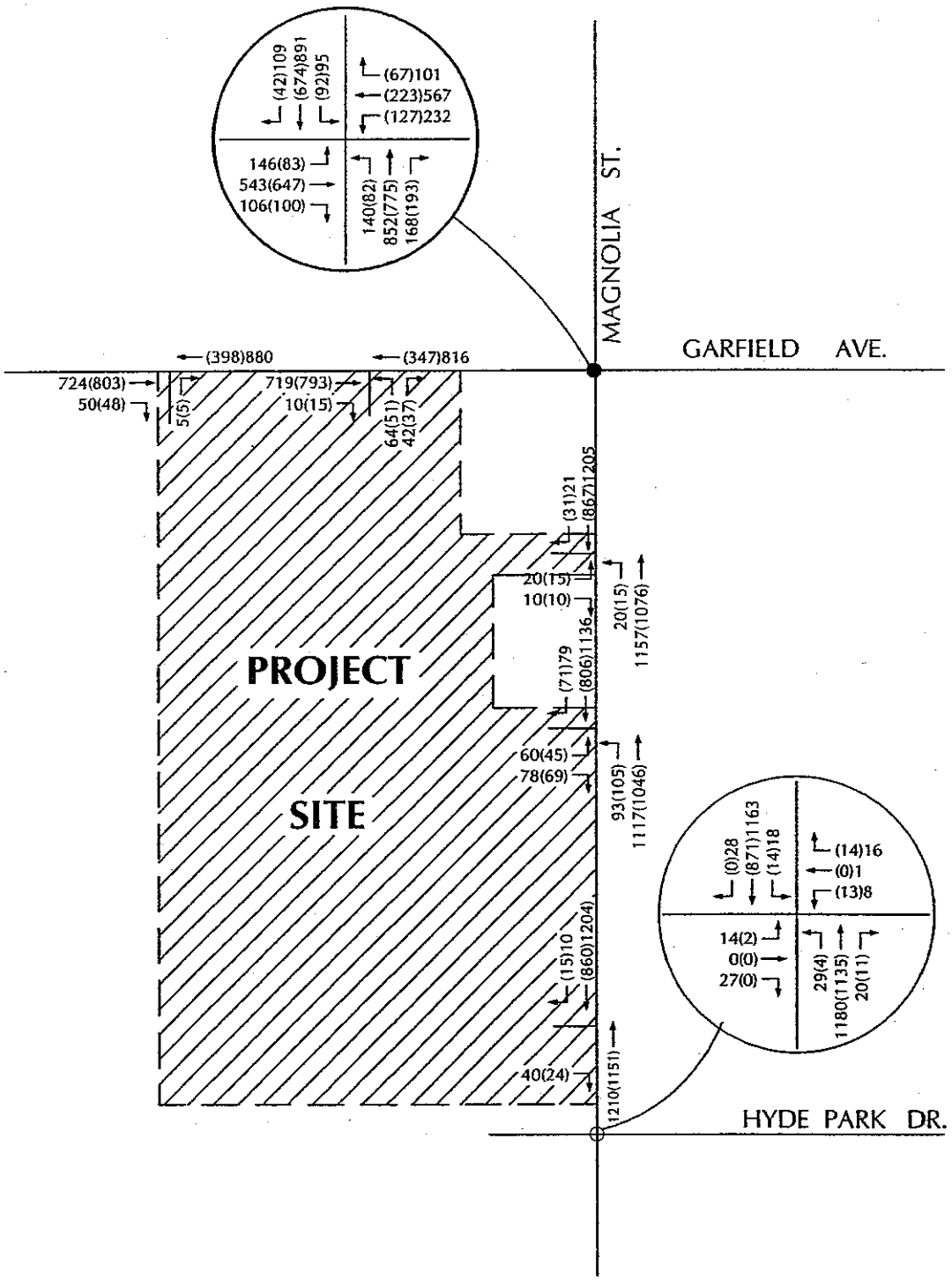
CUMULATIVE TRAFFIC VOLUMES

FIGURE 5



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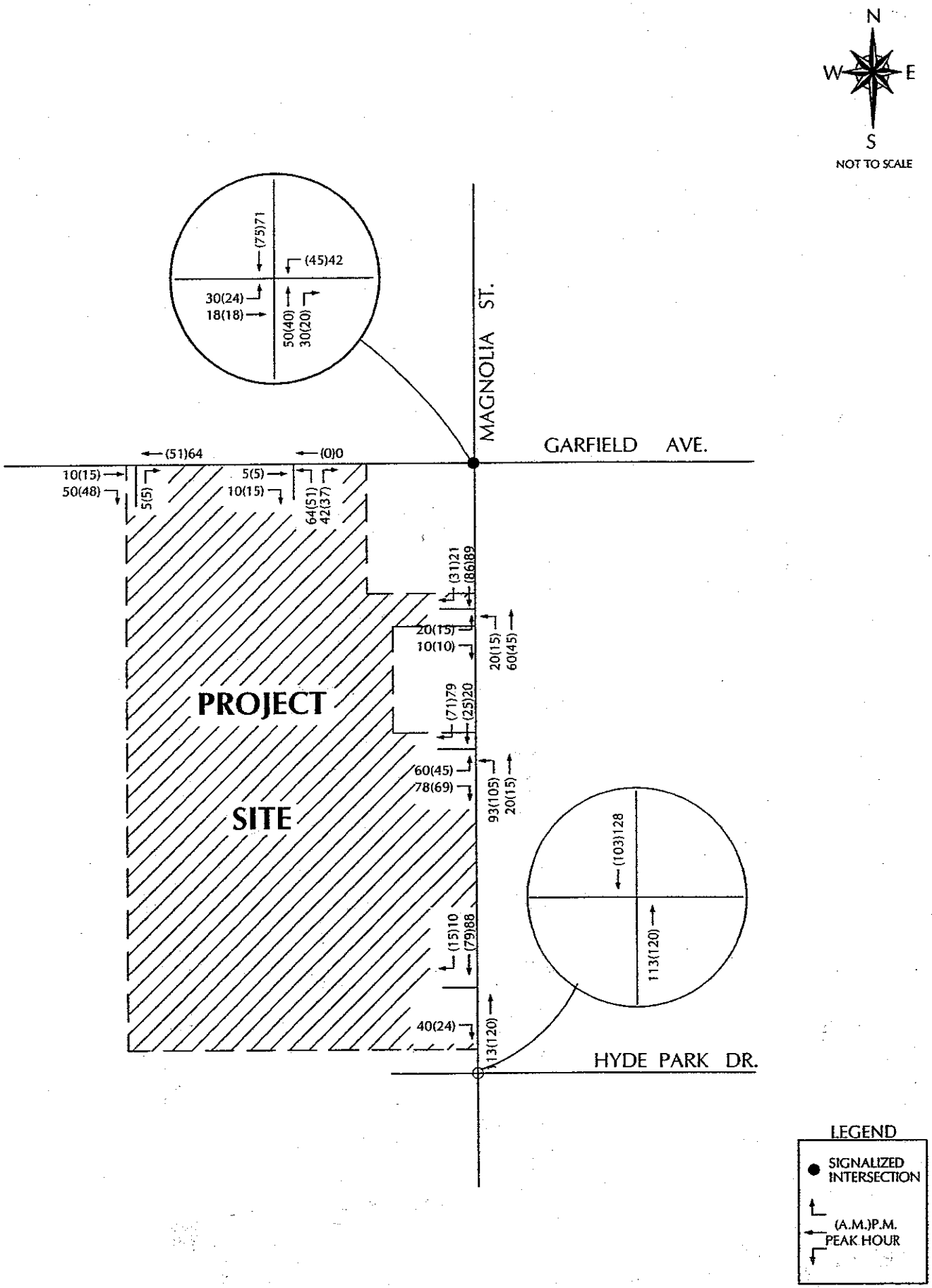
CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 6



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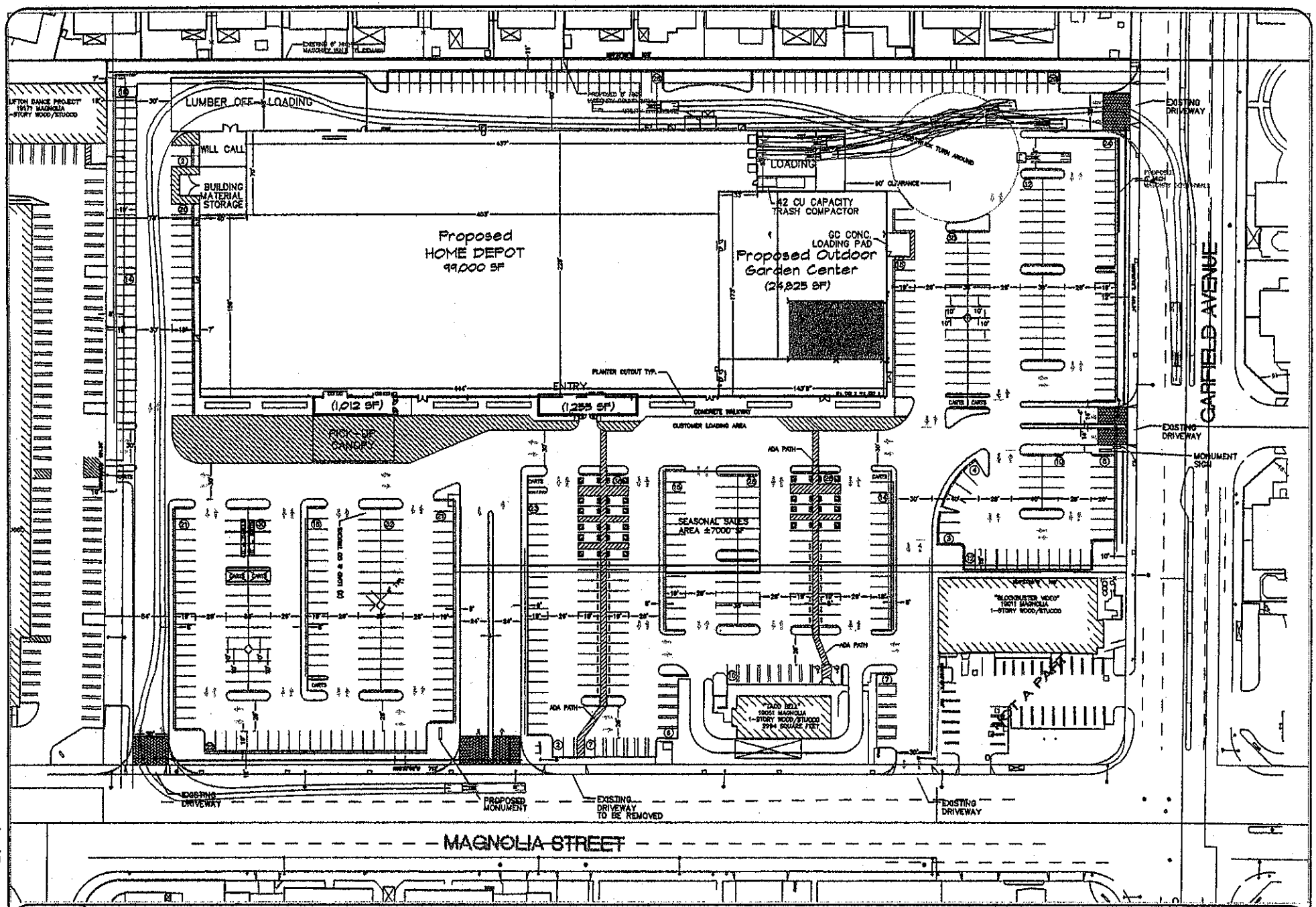
PROJECT DRIVEWAY VOLUMES

FIGURE 7



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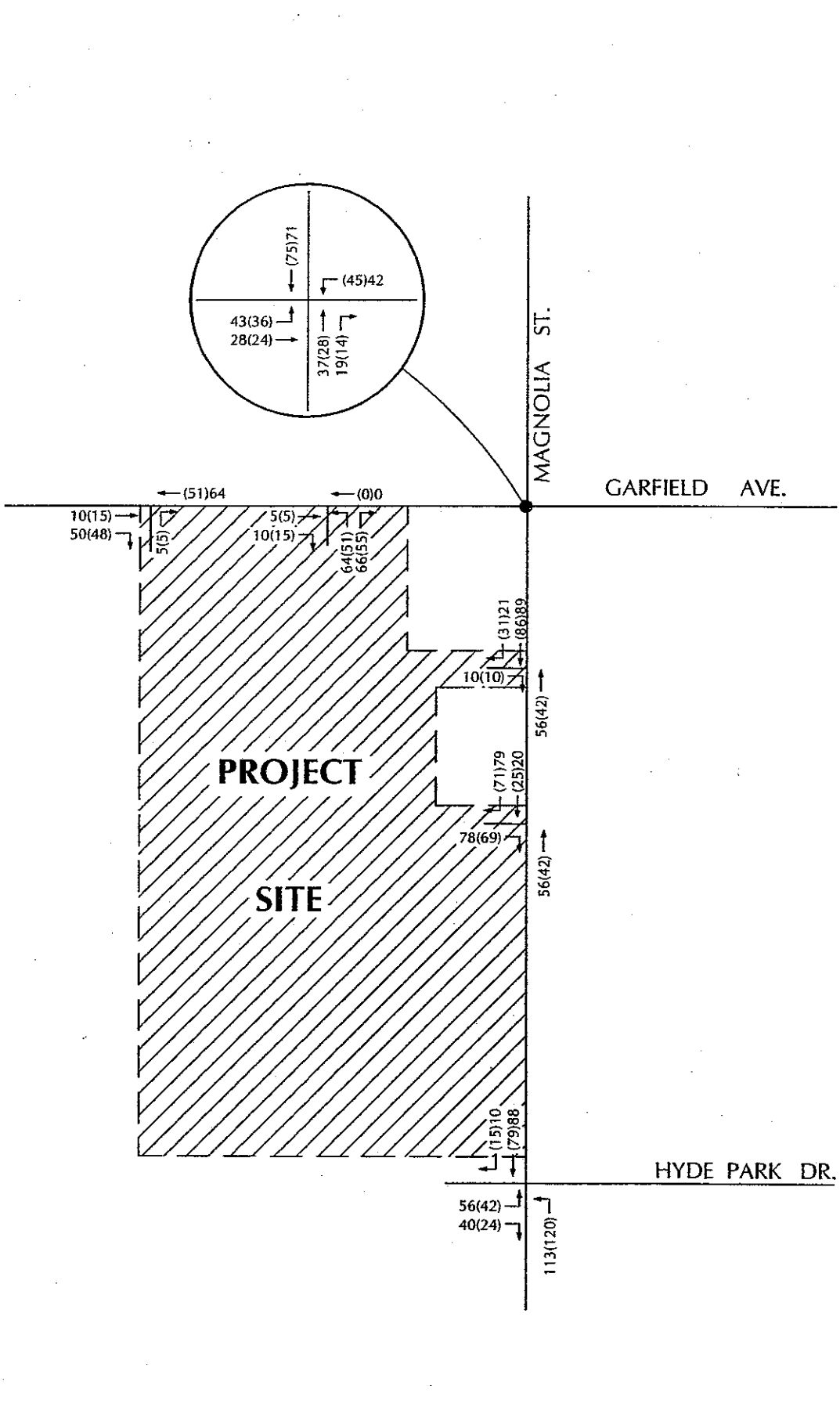
TRUCK ACCESS AND CIRCULATION

FIGURE 8



LEGEND

● SIGNALIZED INTERSECTION

(A.M.)P.M. PEAK HOUR

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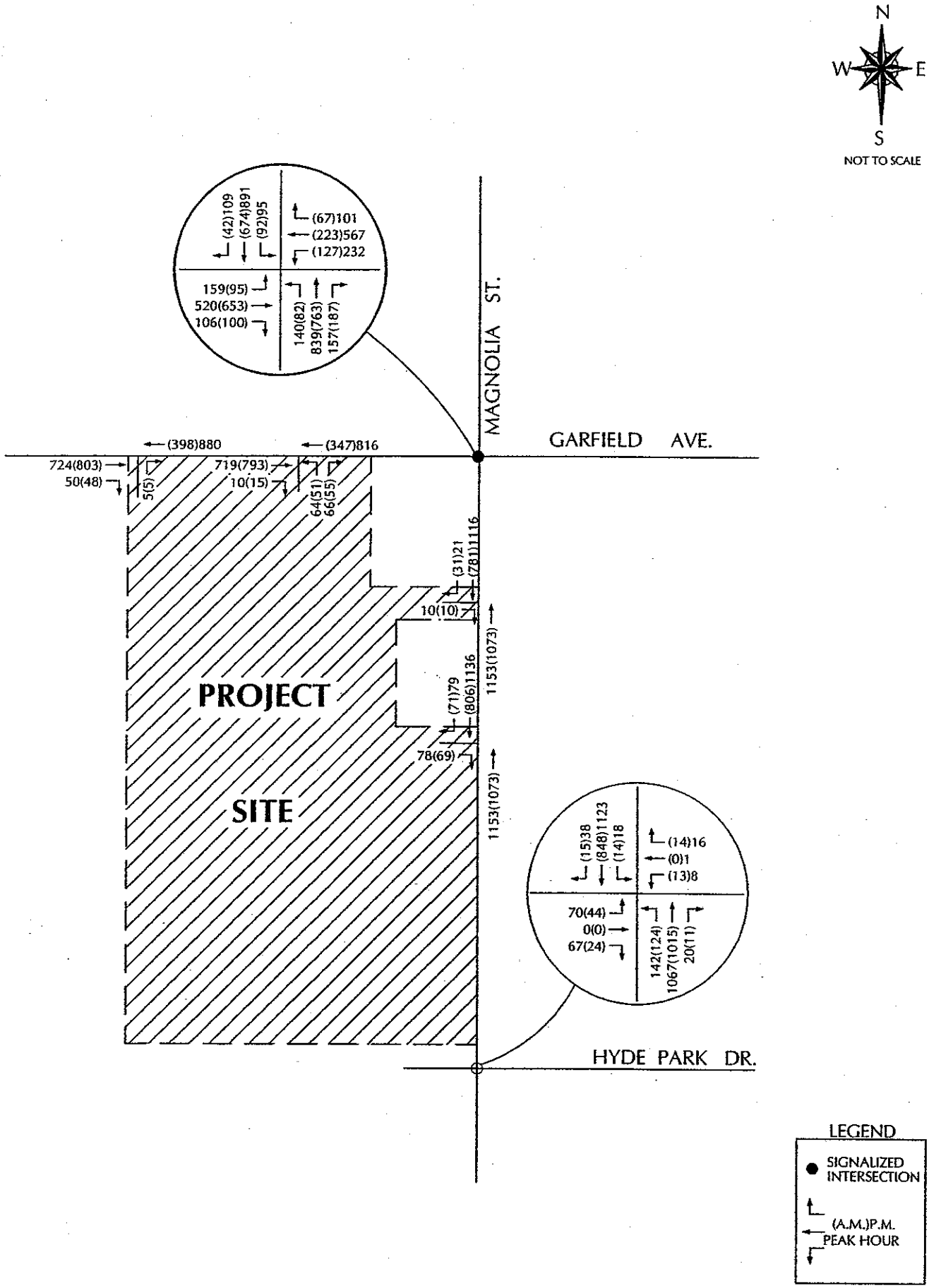
PROJECT DRIVEWAY VOLUMES
WITH SHARED ACCESS AT HYDE PARK DR

FIGURE 9



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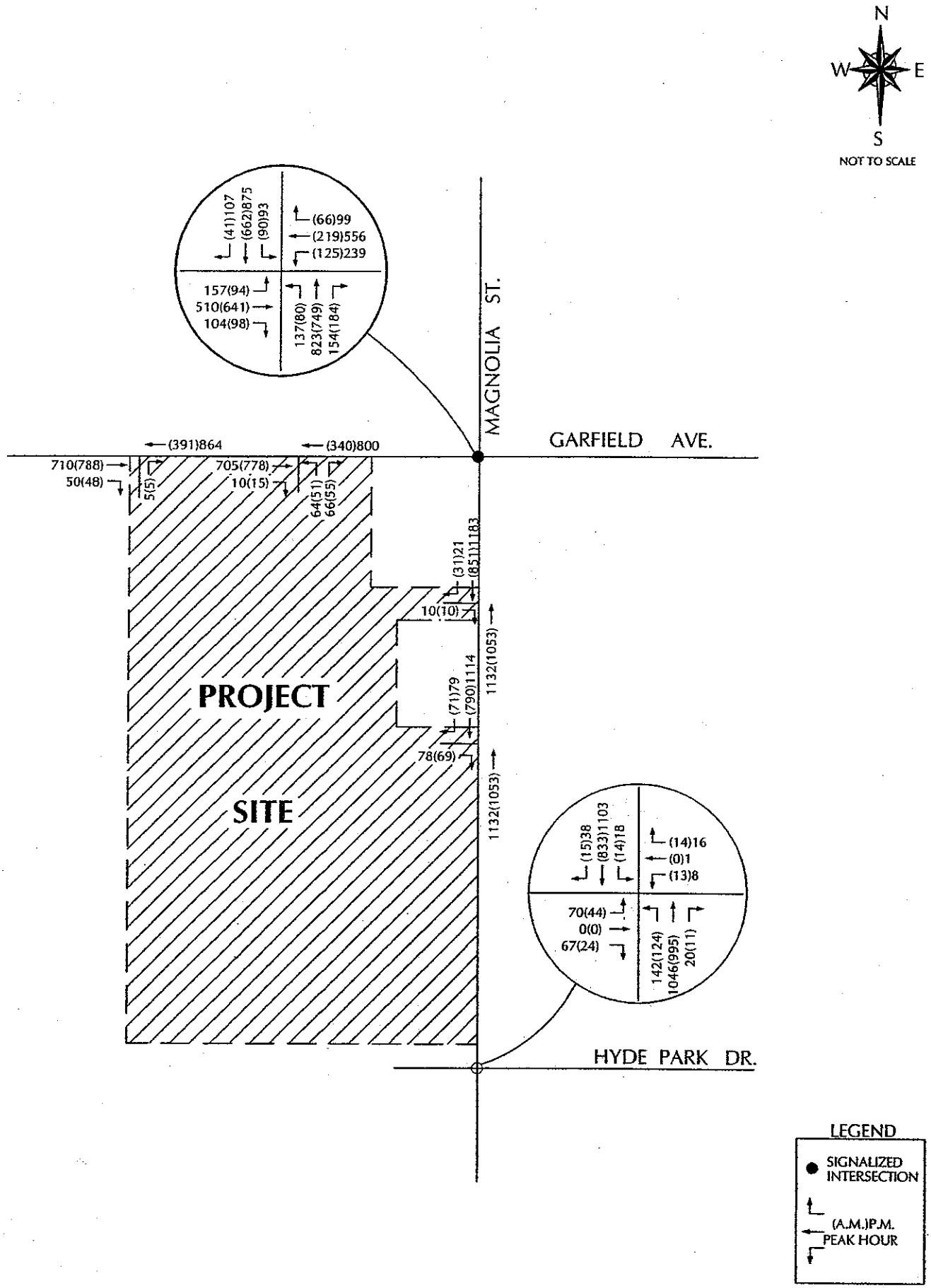
CUMULATIVE + PROJECT TRAFFIC VOLUMES
WITH SHARED ACCESS AT HYDE PARK DR

FIGURE 11



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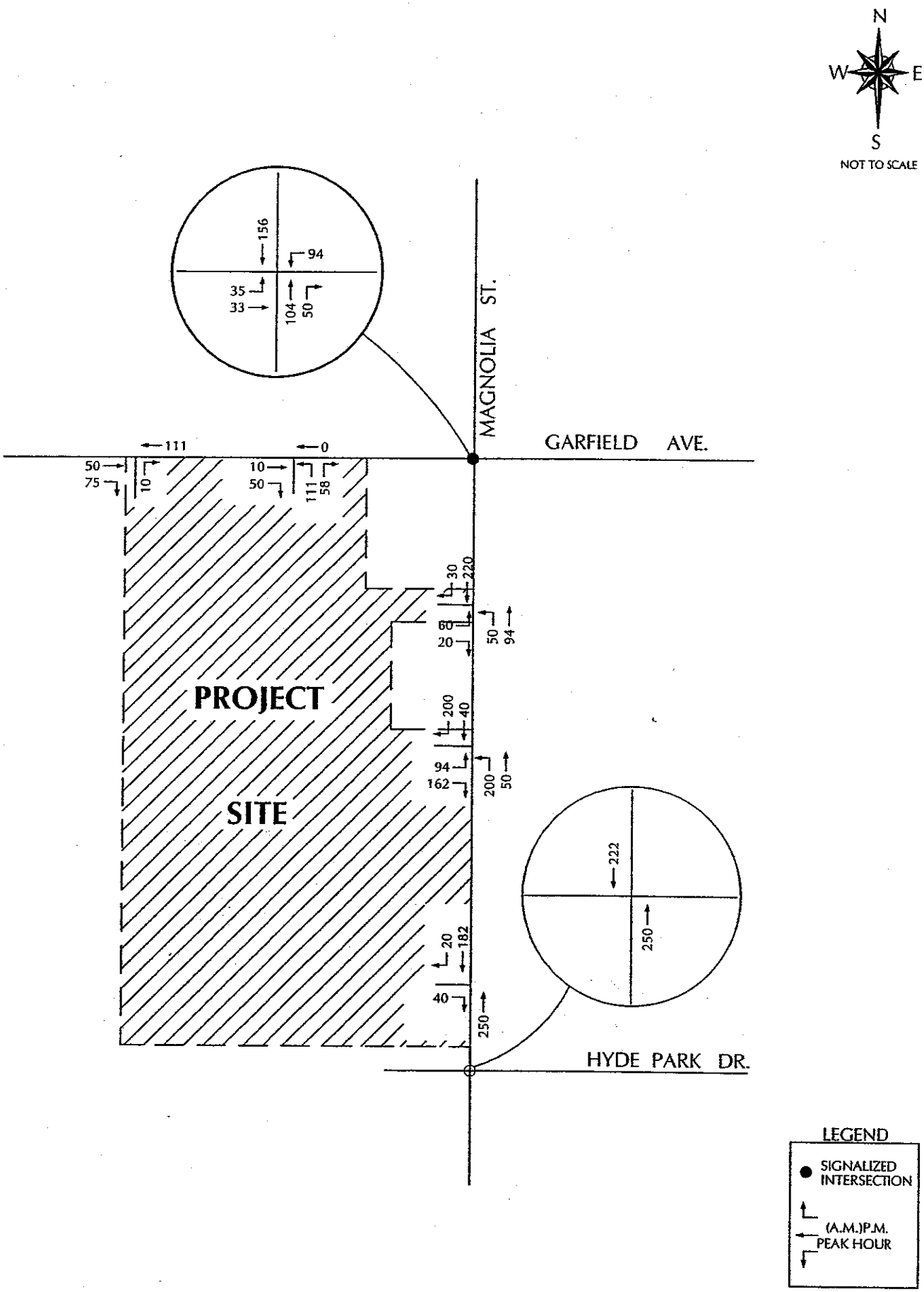
EXISTING + PROJECT TRAFFIC VOLUMES
WITH SHARED ACCESS AT HYDE PARK DR

FIGURE 10



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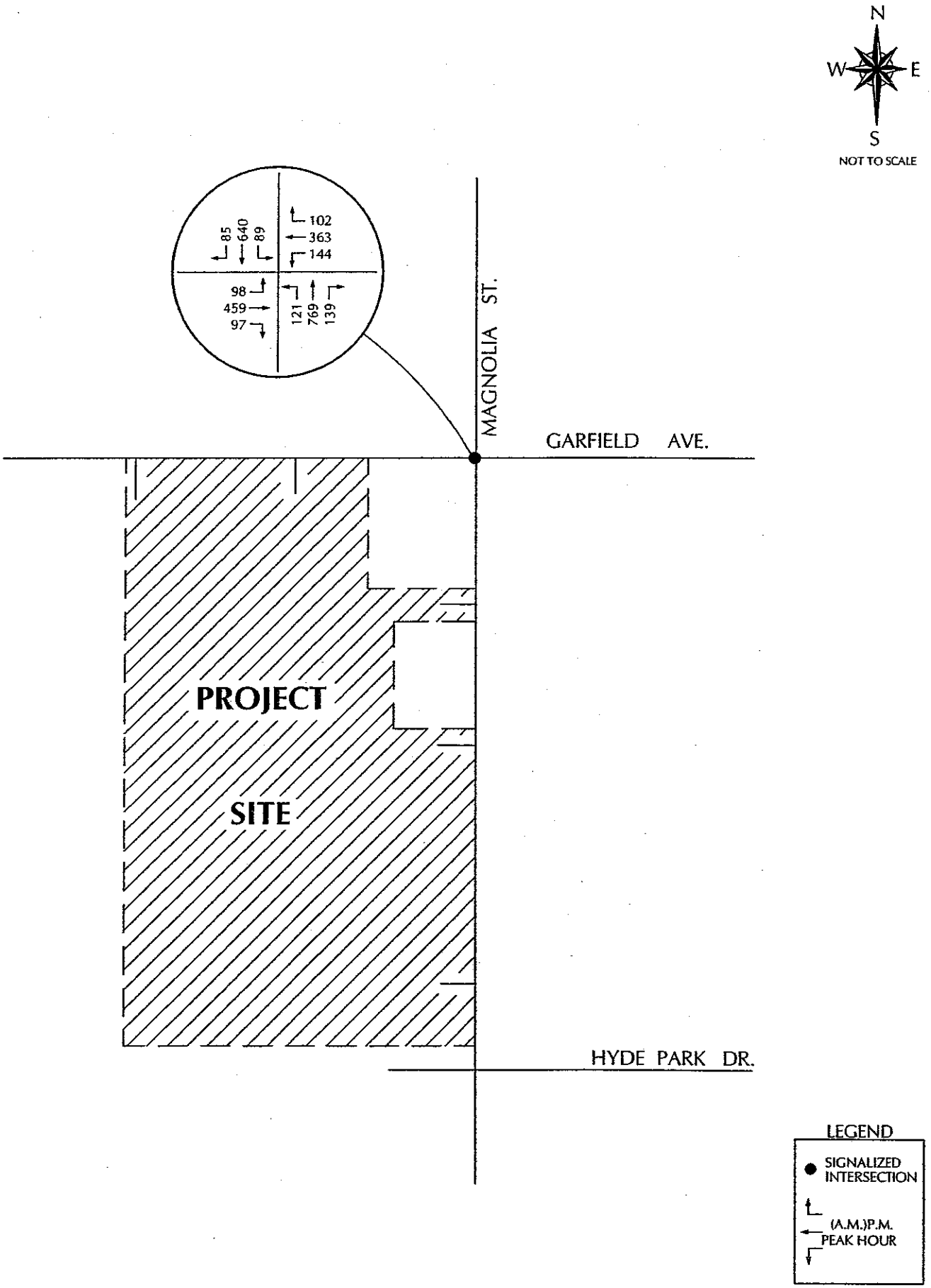
PROJECT SATURDAY DRIVEWAY VOLUMES

FIGURE 12



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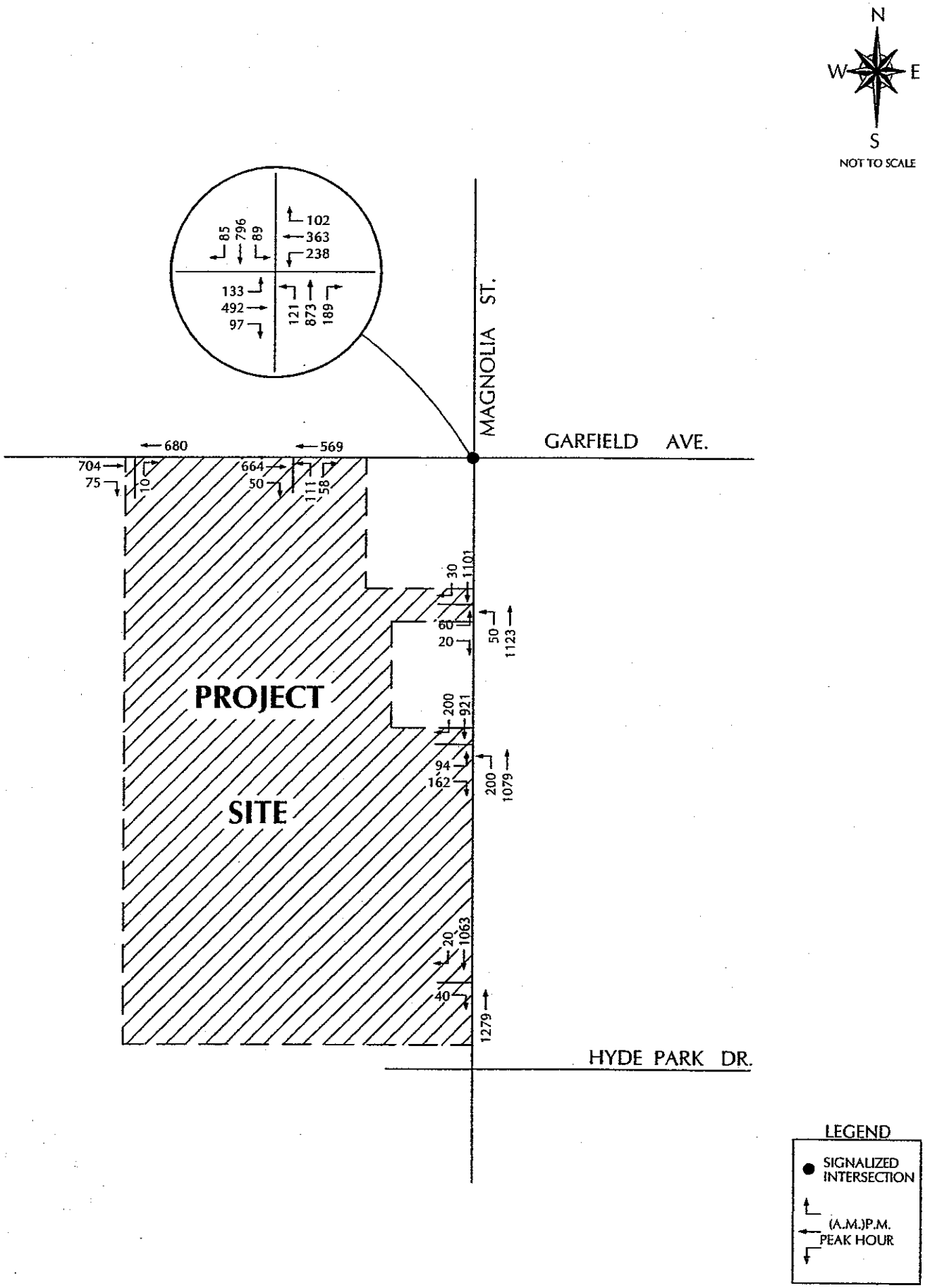
EXISTING SATURDAY TRAFFIC VOLUMES

FIGURE 13



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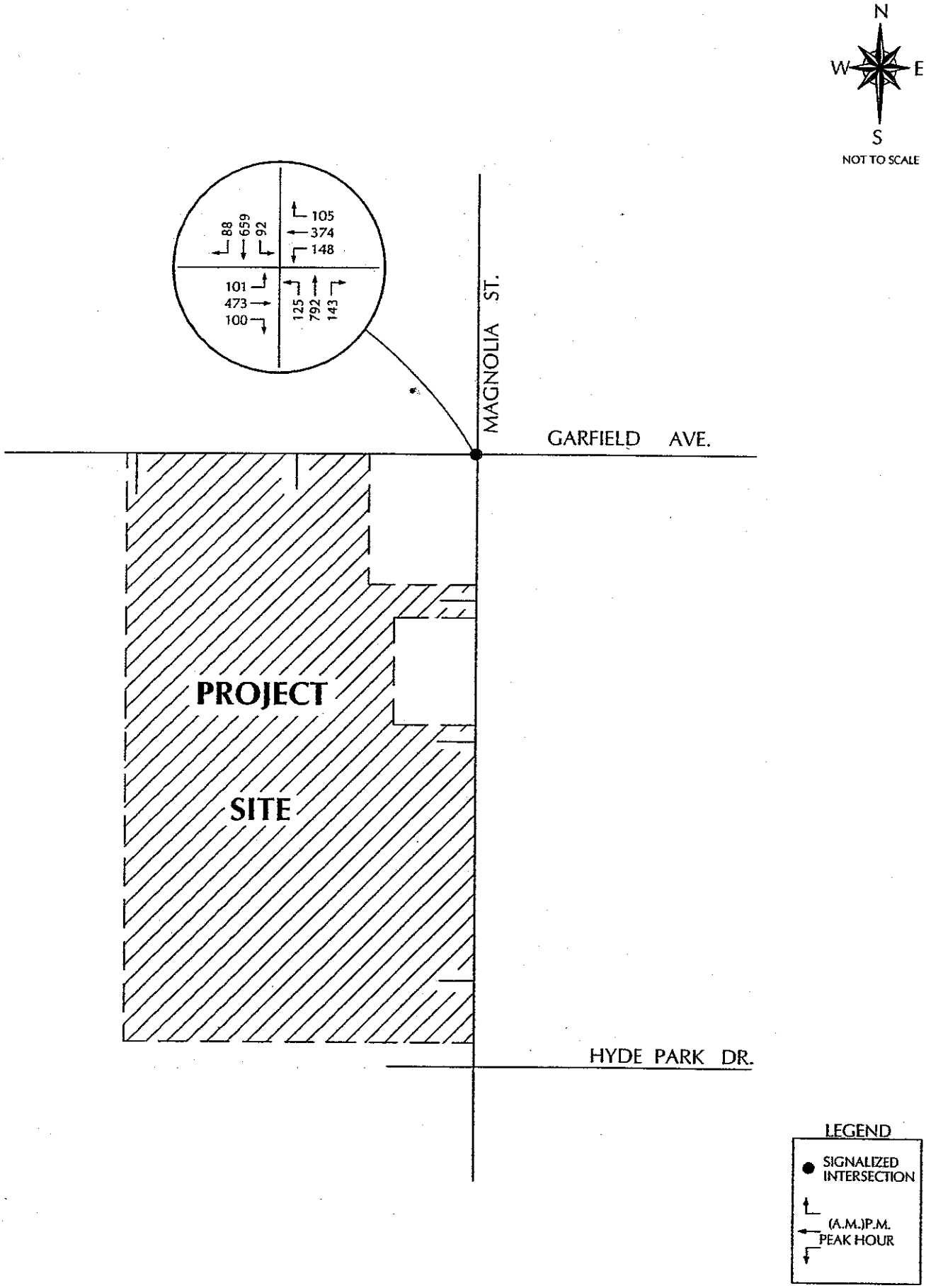
EXISTING + PROJECT SATURDAY TRAFFIC VOLUMES

FIGURE 14



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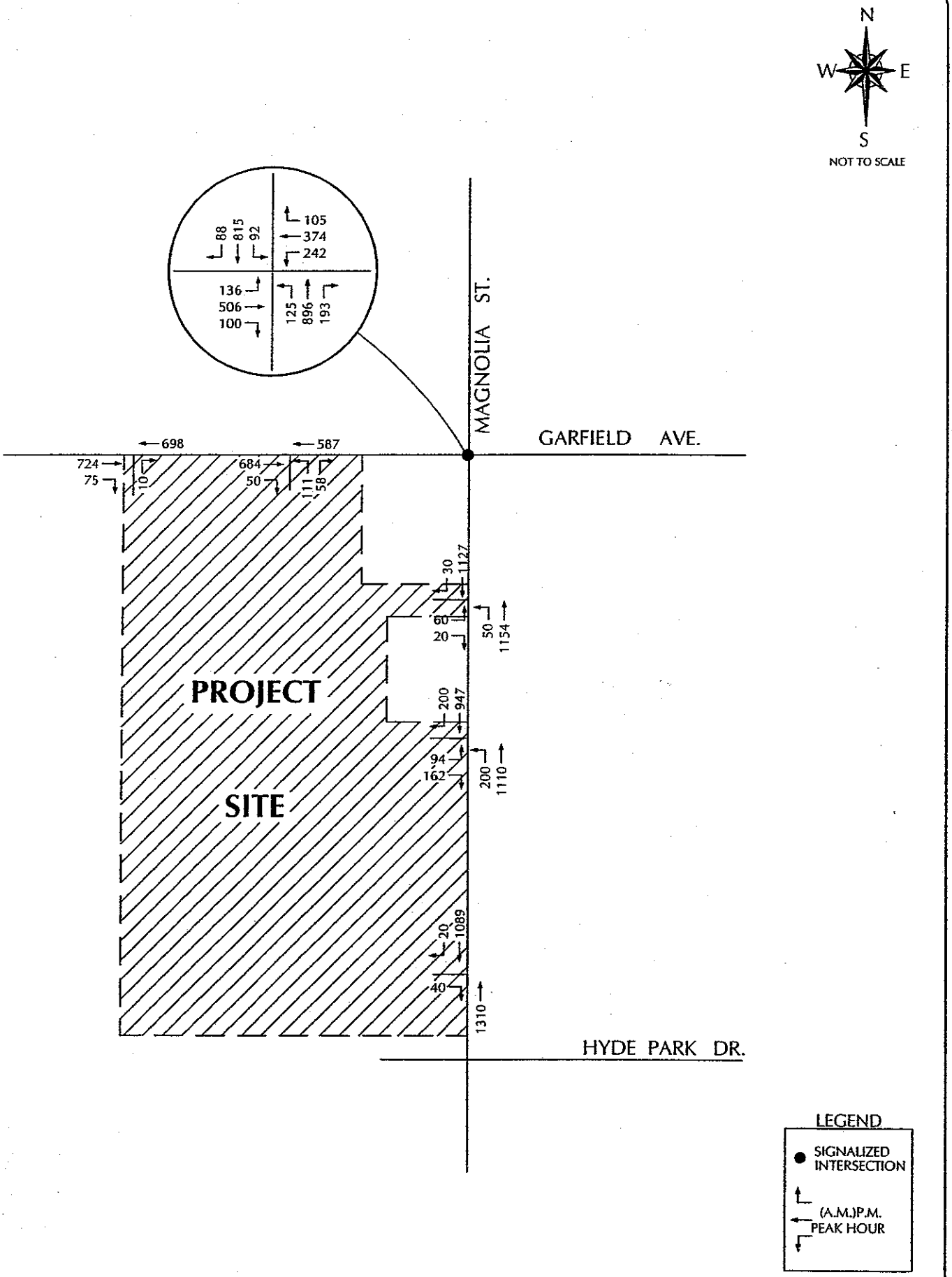
CUMULATIVE SATURDAY TRAFFIC VOLUMES

FIGURE 15



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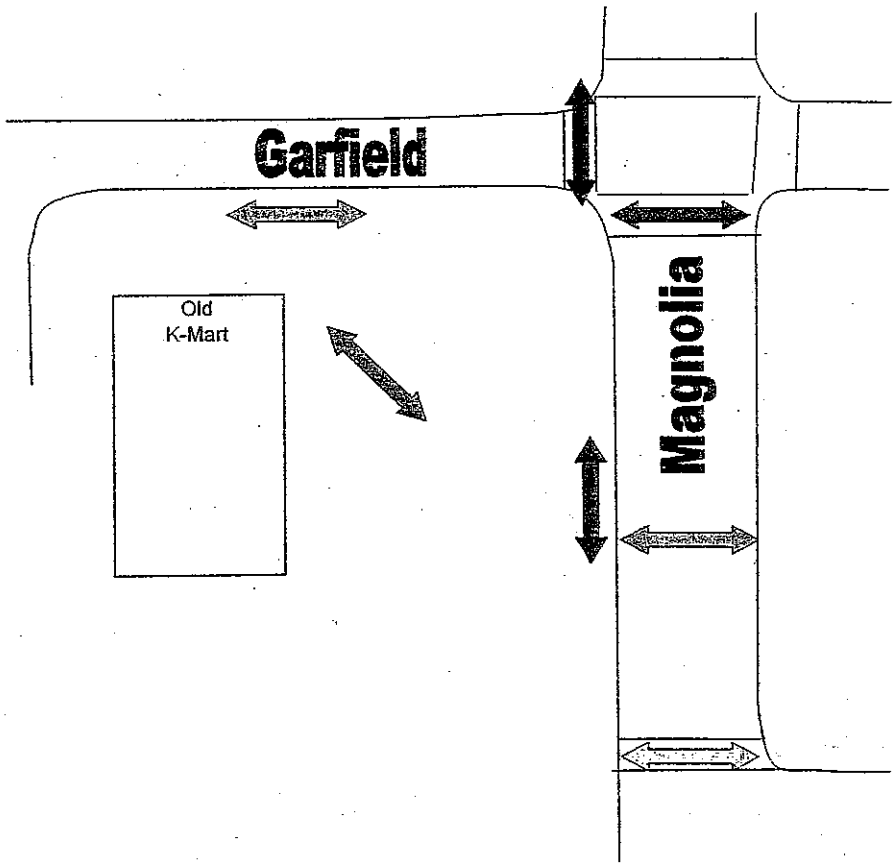
CUMULATIVE + PROJECT SATURDAY TRAFFIC VOLUMES

FIGURE 16

Date of Observations: September 29, 2005

	School Pedestrian Volumes						
	1	2	3	4	5	6	7
Observation Period							
7:30 - 8:00 am	1	4	0	0	4	0	1
8:00 - 8:30 am	5	2	5	0	1	2	0
Total	6	6	5	0	5	2	1
2:20 - 2:50 pm	0	6	0	9	2	8	0
2:50 - 3:20 pm	2	7	0	9	0	2	0
Total	2	13	0	18	2	10	0

	Adult Pedestrian Volumes						
	1	2	3	4	5	6	7
Observation Period							
7:30 - 8:00 am	0	0	0	0	0	0	0
8:00 - 8:30 am	3	1	3	1	0	0	1
Total	3	1	3	1	0	0	1
2:20 - 2:50 pm	2	0	2	6	1	1	0
2:50 - 3:20 pm	1	0	1	1	0	0	0
Total	3	0	3	7	1	1	0



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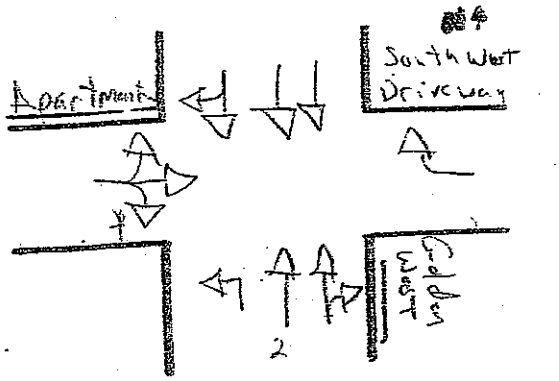
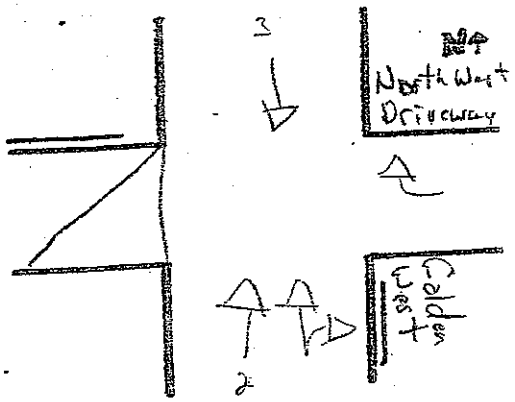
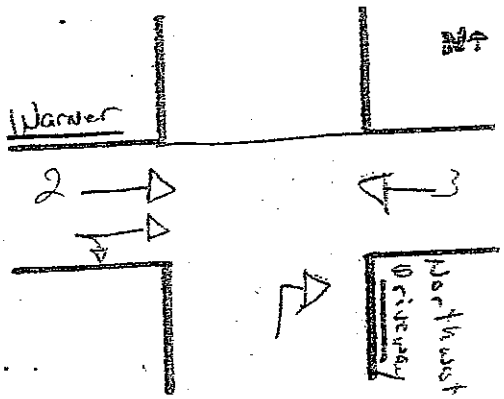
PEDESTRIAN VOLUMES

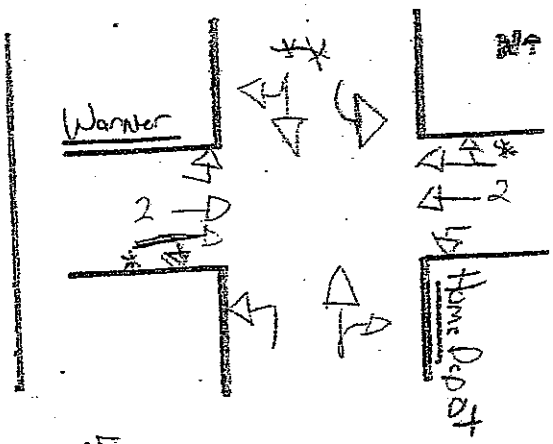
FIGURE C

Existing Home Depot Driveways









Note: East & West have Protected Left Arrows

* Free

** Arrows painted on street Do not Show Turning Direction, only thru.

Home Depot Counts

ALL TRAFFIC RESOURCES
5312 W. AVE L-14
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN WEST & SW DRIVEWAY
Site Code : 07130501
Start Date : 07/13/2005
Page No : 1

Groups Printed- Unshifted

	GOLDEN WEST ST From North				SOUTHWEST DRIVEWAY From East				GOLDEN WEST ST From South				APARTMENTS ENTRANCE From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	1	163	0	0	0	0	1	0	0	174	0	0	0	0	5	0	344
07:15 AM	1	209	0	0	2	0	1	0	0	227	0	0	4	0	8	0	452
07:30 AM	1	227	0	0	1	0	0	0	1	234	1	0	2	0	8	0	475
07:45 AM	1	259	0	0	1	0	1	0	1	286	0	0	5	0	4	0	558
Total	4	858	0	0	4	0	3	0	2	921	1	0	11	0	25	0	1829
08:00 AM	5	287	1	0	0	0	2	0	0	239	1	0	4	0	7	0	546
08:15 AM	2	244	0	0	2	0	0	0	0	264	1	0	5	0	4	0	522
08:30 AM	3	233	0	0	4	0	1	0	1	244	0	0	2	0	5	0	493
08:45 AM	1	227	2	0	4	0	0	0	1	291	0	0	7	0	3	0	536
Total	11	991	3	0	10	0	3	0	2	1038	2	0	18	0	19	0	2097
04:00 PM	1	310	0	0	2	0	2	0	4	330	10	0	1	0	1	0	661
04:15 PM	4	275	0	0	7	0	0	0	4	283	1	0	0	0	3	0	577
04:30 PM	4	306	0	0	3	0	0	0	2	374	2	0	0	0	4	0	695
04:45 PM	4	317	0	0	1	0	1	0	1	317	2	0	0	0	1	0	644
Total	13	1208	0	0	13	0	3	0	11	1304	15	0	1	0	9	0	2577
05:00 PM	6	327	0	0	1	0	0	0	0	388	3	0	0	0	4	0	729
05:15 PM	8	301	2	0	1	0	0	0	2	337	8	0	3	0	4	0	666
05:30 PM	6	308	1	0	4	0	0	0	0	329	4	0	0	0	4	0	656
05:45 PM	2	261	0	0	2	0	1	0	3	331	2	0	0	0	0	0	602
Total	22	1197	3	0	8	0	1	0	5	1385	17	0	3	0	12	0	2653
Grand Total	50	4254	6	0	35	0	10	0	20	4648	35	0	33	0	65	0	9156
Apprch %	1.2	98.7	0.1	0.0	77.8	0.0	22.2	0.0	0.4	98.8	0.7	0.0	33.7	0.0	66.3	0.0	
Total %	0.5	46.5	0.1	0.0	0.4	0.0	0.1	0.0	0.2	50.8	0.4	0.0	0.4	0.0	0.7	0.0	

Home Depot Count

ALL TRAFFIC RESOURCES
5312 W. AVE L-14
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN WEST & NW DRIVEWAY
Site Code : 07130502
Start Date : 07/13/2005
Page No : 1

Groups Printed- Unshifted

	GOLDEN WEST ST From North				NORTHWEST DRIVEWAY From East				GOLDEN WEST ST From South				From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	157	0	0	10	0	0	0	5	178	0	0	0	0	0	0	350
07:15 AM	0	212	0	0	11	0	0	0	6	244	0	0	0	0	0	0	473
07:30 AM	0	227	0	0	10	0	0	0	16	236	0	0	0	0	0	0	489
07:45 AM	0	254	0	0	12	0	0	0	19	300	0	0	0	0	0	0	585
Total	0	850	0	0	43	0	0	0	46	958	0	0	0	0	0	0	1897
08:00 AM	0	286	0	0	25	0	0	0	13	250	0	0	0	0	0	0	574
08:15 AM	0	250	0	0	14	0	0	0	10	267	0	0	0	0	0	0	541
08:30 AM	0	233	0	0	16	0	0	0	17	257	0	0	0	0	0	0	523
08:45 AM	0	239	0	0	25	0	0	0	15	289	0	0	0	0	0	0	568
Total	0	1008	0	0	80	0	0	0	55	1063	0	0	0	0	0	0	2206
04:00 PM	0	319	0	0	36	0	0	0	14	332	0	0	0	0	0	0	701
04:15 PM	0	284	0	0	23	0	0	0	18	296	0	0	0	0	0	0	621
04:30 PM	0	319	0	0	27	0	0	0	18	381	0	0	0	0	0	0	745
04:45 PM	0	320	0	0	25	0	0	0	12	320	0	0	0	0	0	0	677
Total	0	1242	0	0	111	0	0	0	62	1329	0	0	0	0	0	0	2744
05:00 PM	0	330	0	0	30	0	0	0	19	393	0	0	0	0	0	0	772
05:15 PM	0	306	0	0	22	0	0	0	23	335	0	0	0	0	0	0	686
05:30 PM	0	316	0	0	32	0	0	0	12	340	0	0	0	0	0	0	700
05:45 PM	0	276	0	0	27	0	0	0	21	342	0	0	0	0	0	0	666
Total	0	1228	0	0	111	0	0	0	75	1410	0	0	0	0	0	0	2824
Grand Total	0	4328	0	0	345	0	0	0	238	4760	0	0	0	0	0	0	9671
Apprch %	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	4.8	95.2	0.0	0.0	0.0	0.0	0.0	0.0	
Total %	0.0	44.8	0.0	0.0	3.6	0.0	0.0	0.0	2.5	49.2	0.0	0.0	0.0	0.0	0.0	0.0	

Home Depot Counts

ALL TRAFFIC RESOURCES
5312 W. AVE L-14
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : WARNER & NW DRIVEWAY
Site Code : 07130503
Start Date : 07/14/2005
Page No : 1

Groups Printed- Unshifted

	From North				WARNER AVE From East				NORTHWEST DRIVEWAY From South				WARNER AVE From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	0	0	0	0	137	0	0	5	0	0	0	18	346	0	0	506
07:15 AM	0	0	0	0	0	170	0	0	9	0	0	0	14	435	0	0	628
07:30 AM	0	0	0	0	0	161	0	0	6	0	0	0	19	383	0	0	569
07:45 AM	0	0	0	0	0	210	0	0	5	0	0	0	27	450	0	0	692
Total	0	0	0	0	0	678	0	0	25	0	0	0	78	1614	0	0	2395
08:00 AM	0	0	0	0	0	174	0	0	8	0	0	0	19	387	0	0	588
08:15 AM	0	0	0	0	0	163	0	0	11	0	0	0	20	400	0	0	594
08:30 AM	0	0	0	0	0	200	0	0	13	0	0	0	24	336	0	0	573
08:45 AM	0	0	0	0	0	221	0	0	18	0	0	0	31	401	0	0	671
Total	0	0	0	0	0	758	0	0	50	0	0	0	94	1524	0	0	2426
04:00 PM	0	0	0	0	0	346	0	0	16	0	0	0	24	318	0	0	704
04:15 PM	0	0	0	0	0	362	0	0	16	0	0	0	24	281	0	0	683
04:30 PM	0	0	0	0	0	379	0	0	21	0	0	0	34	306	0	0	740
04:45 PM	0	0	0	0	0	377	0	0	12	0	0	0	25	346	0	0	760
Total	0	0	0	0	0	1464	0	0	65	0	0	0	107	1251	0	0	2887
05:00 PM	0	0	0	0	0	412	0	0	17	0	0	0	27	418	0	0	874
05:15 PM	0	0	0	0	0	407	0	0	17	0	0	0	29	385	0	0	838
05:30 PM	0	0	0	0	0	402	0	0	11	0	0	0	18	369	0	0	800
05:45 PM	0	0	0	0	0	383	0	0	19	0	0	0	33	287	0	0	722
Total	0	0	0	0	0	1604	0	0	64	0	0	0	107	1459	0	0	3234
Grand Total	0	0	0	0	0	4504	0	0	204	0	0	0	386	5848	0	0	10942
Apprch %	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	6.2	93.8	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	41.2	0.0	0.0	1.9	0.0	0.0	0.0	3.5	53.4	0.0	0.0	

Home Depot Counts

ALL TRAFFIC RESOURCES
5312 W. AVE L-14
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : HOME DEPOT & WARNER
Site Code : 07130504
Start Date : 07/14/2005
Page No : 1

Groups Printed- Unshifted

	HOME DEPOT From North				WARNER AVE From East				HOME DEPOT From South				WARNER AVE From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	UTURN	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	5	0	10	0	4	135	19	0	8	1	4	0	1	340	5	0	532
07:15 AM	5	2	17	0	12	156	39	13	7	0	6	0	1	422	2	0	682
07:30 AM	6	0	10	0	1	142	25	4	11	0	9	0	2	368	3	0	581
07:45 AM	0	3	9	0	4	192	20	0	14	0	10	0	5	437	10	0	704
Total	16	5	46	0	21	625	103	17	40	1	29	0	9	1567	20	0	2499
08:00 AM	1	0	9	0	8	163	28	0	17	0	8	0	4	376	6	0	620
08:15 AM	3	2	6	0	4	150	26	1	25	1	5	0	0	381	11	0	615
08:30 AM	9	0	8	0	5	174	33	0	19	1	14	0	2	327	7	0	599
08:45 AM	9	2	9	0	5	205	33	0	21	1	11	0	4	391	9	0	700
Total	22	4	32	0	22	692	120	1	82	3	38	0	10	1475	33	0	2534
04:00 PM	26	1	29	0	24	278	39	1	18	2	7	0	2	276	29	0	732
04:15 PM	27	2	32	0	32	319	21	1	26	1	10	0	3	284	14	0	772
04:30 PM	27	1	19	0	21	317	22	0	11	2	12	0	2	260	22	0	716
04:45 PM	20	0	24	0	14	325	20	0	17	1	7	0	0	361	17	0	806
Total	100	4	104	0	91	1239	102	2	72	6	36	0	7	1181	82	0	3026
05:00 PM	26	2	43	0	16	301	30	0	16	0	10	0	2	337	24	0	807
05:15 PM	20	2	27	0	26	332	15	0	18	2	12	0	0	376	19	0	849
05:30 PM	28	0	38	0	21	335	24	0	16	1	8	0	1	372	22	0	866
05:45 PM	22	0	32	0	23	383	24	0	13	1	6	0	0	282	23	0	809
Total	96	4	140	0	86	1351	93	0	63	4	36	0	3	1367	88	0	3331
Grand Total	234	17	322	0	220	3907	418	20	257	14	139	0	29	5590	223	0	11390
Apprch %	40.8	3.0	56.2	0.0	4.8	85.6	9.2	0.4	62.7	3.4	33.9	0.0	0.5	95.7	3.8	0.0	
Total %	2.1	0.1	2.8	0.0	1.9	34.3	3.7	0.2	2.3	0.1	1.2	0.0	0.3	49.1	2.0	0.0	

Home Depot Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH HOME DEPOT TRAFFIC COUNTS
DATE:		SATURDAY, JULY 9TH, 2005
PERIOD:		10:00 AM TO 2:00 PM
LOCATION:	N/S	GOLDWEST STREET
	E/W	DRIVEWAY 1 & 2

DRIVEWAY #1

15 MIN COUNTS

PERIOD	NBRT IN	WBRT OUT
1000-1015	7	4
1015-1030	2	5
1030-1045	3	6
1045-1100	6	4
1100-1115	6	6
1115-1130	6	4
1130-1145	5	6
1145-1200	2	2
1200-1215	7	4
1215-1230	2	7
1230-1245	3	6
1245-100	1	3
100-115	4	2
115-130	3	3
130-145	3	5
145-200	6	5
TOTAL	50	57

HOUR TOTALS

TIME	NBRT	WBRT
1000-1100	18	19
1015-1115	17	21
1030-1130	21	20
1045-1145	23	20
1100-1200	19	18
1115-1215	20	16
1130-1230	16	19
1145-1245	14	19
1200-100	13	20
1215-115	10	18
1230-130	11	14
1245-145	11	13
100-200	16	15

DRIVEWAY #2

15 MIN COUNTS

PERIOD	NBRT IN	WBRT OUT
1000-1015	37	38
1015-1030	25	42
1030-1045	44	46
1045-1100	38	42
1100-1115	32	46
1115-1130	39	55
1130-1145	23	46
1145-1200	29	57
1200-1215	21	64
1215-1230	32	46
1230-1245	25	46
1245-100	36	43
100-115	34	39
115-130	20	44
130-145	32	32
145-200	28	44
TOTAL	381	571

HOUR TOTALS

TIME	NBRT	WBRT
1000-1100	144	168
1015-1115	139	176
1030-1130	153	189
1045-1145	132	189
1100-1200	123	204
1115-1215	112	222
1130-1230	105	213
1145-1245	107	213
1200-100	114	199
1215-115	127	174
1230-130	115	172
1245-145	122	158
100-200	114	159

Home Depot Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH HOME DEPOT TRAFFIC COUNTS
DATE:		SATURDAY, JULY 9TH, 2005
PERIOD:		10:00 AM TO 2:00 PM
LOCATION:	N/S	DRIVEWAY 3
	E/W	WARNER AVENUE

DRIVEWAY 3		
15 MIN COUNTS		
PERIOD	EBRT	NBRT
	IN	OUT
1000-1015	41	16
1015-1030	46	36
1030-1045	56	27
1045-1100	48	25
1100-1115	52	20
1115-1130	50	39
1130-1145	52	35
1145-1200	51	36
1200-1215	45	33
1215-1230	47	30
1230-1245	40	26
1245-100	47	31
100-115	63	32
115-130	39	39
130-145	43	33
145-200	40	32
TOTAL	575	354
HOUR TOTALS		
TIME	EBRT	NBRT
1000-1100	191	104
1015-1115	202	108
1030-1130	206	111
1045-1145	202	119
1100-1200	205	130
1115-1215	198	143
1130-1230	195	134
1145-1245	183	125
1200-100	179	120
1215-115	197	119
1230-130	189	128
1245-145	192	135
100-200	185	136

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT: ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT: HUNTINGTON BEACH HOME DEPOT TRAFFIC COUNTS
DATE: SATURDAY, JULY 9TH, 2005
PERIOD: 10:00 AM TO 2:00 PM
LOCATION: N/S DRIVEWAY 4
E/W WARNER AVENUE

DRIVEWAY #4

15 MIN COUNTS	EBRT	SBTH	WBLT		NBLT	NBTH	NBRT	
PERIOD	IN	IN	IN	TOTAL	OUT	OUT	OUT	TOTAL
1000-1015	6	1	36	43	8	1	22	31
1015-1030	7	4	47	58	13	3	20	36
1030-1045	0	2	51	53	12	2	41	55
1045-1100	2	1	37	40	17	2	34	53
1100-1115	3	1	45	49	12	1	30	43
1115-1130	4	3	52	59	12	2	53	67
1130-1145	4	1	44	49	21	0	30	51
1145-1200	2	3	60	65	25	1	30	56
1200-1215	2	5	31	38	18	2	58	78
1215-1230	8	1	43	52	10	2	25	37
1230-1245	3	2	43	48	8	1	22	31
1245-100	3	2	30	35	15	5	37	57
100-115	6	3	55	64	8	1	51	60
115-130	4	2	30	36	14	4	47	65
130-145	5	7	31	43	10	4	32	46
145-200	3	0	56	59	15	3	38	56
TOTAL	62	38	691	791	218	34	570	822

HOUR TOTALS

TIME	EBRT IN	SBTH IN	WBLT IN	TOTAL	NBLT OUT	NBTH OUT	NBRT OUT	TOTAL
1000-1100	15	8	171	194	50	8	117	175
1015-1115	12	8	180	200	54	8	125	187
1030-1130	9	7	185	201	53	7	158	218
1045-1145	13	6	178	197	62	5	147	214
1100-1200	13	8	201	222	70	4	143	217
1115-1215	12	12	187	211	76	5	171	252
1130-1230	16	10	178	204	74	5	143	222
1145-1245	15	11	177	203	61	6	135	202
1200-100	16	10	147	173	51	10	142	203
1215-115	20	8	171	199	41	9	135	185
1230-130	16	9	158	183	45	11	157	213
1245-145	18	14	146	178	47	14	167	228
100-200	18	12	172	202	47	12	168	227

Home Depot Count

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT: ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT: HUNTINGTON BEACH TRAFFIC COUNTS
DATE: TUESDAY, OCTOBER 4TH, 2005
PERIOD: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
LOCATION: N/S MAGNOLIA STREET
E/W DRIVEWAY #1 (OIL& LUBE DRIVEWAY)

15-MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
700-715	0	0	0	0	0	0
715-730	0	0	0	0	0	0
730-745	0	0	0	0	0	0
745-800	0	0	0	0	0	0
800-815	0	0	0	0	0	0
815-830	0	0	0	0	0	0
830-845	0	0	0	0	0	0
845-900	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
700-800	0	0	0	0	0	0
715-815	0	0	0	0	0	0
730-830	0	0	0	0	0	0
745-845	0	0	0	0	0	0
800-900	0	0	0	0	0	0

15-MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
400-415	0	0	0	0	0	0
415-430	0	0	0	1	0	1
430-445	0	0	0	0	0	0
445-500	0	0	0	0	0	0
500-515	0	0	0	0	0	0
515-530	0	0	0	0	0	0
530-545	0	0	0	0	0	0
545-600	0	0	0	0	0	0
TOTAL	0	0	0	1	0	1
HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
400-500	0	0	0	1	0	1
415-515	0	0	0	1	0	1
430-530	0	0	0	0	0	0
445-545	0	0	0	0	0	0
500-600	0	0	0	0	0	0

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT: ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT: HUNTINGTON BEACH TRAFFIC COUNTS
DATE: TUESDAY, OCTOBER 4TH, 2005
PERIOD: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
LOCATION: N/S MAGNOLIA STREET
E/W DRIVEWAY #2 (OIL& LUBE DRIVEWAY)

15MIN COUNTS

PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
700-715	0	0	0	0	0	0
715-730	0	0	0	0	0	0
730-745	0	0	0	1	0	1
745-800	0	0	0	0	0	0
800-815	0	0	0	0	0	0
815-830	0	0	0	0	0	0
830-845	0	0	0	0	1	1
845-900	0	0	0	1	0	1
TOTAL	0	0	0	2	1	3

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
700-800	0	0	0	1	0	1
715-815	0	0	0	1	0	1
730-830	0	0	0	1	0	1
745-845	0	0	0	0	1	1
800-900	0	0	0	1	1	2

15MIN COUNTS

PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
400-415	0	0	0	0	0	0
415-430	0	0	0	0	0	0
430-445	0	2	2	0	0	0
445-500	0	1	1	1	0	1
500-515	0	0	0	0	0	0
515-530	0	0	0	0	0	0
530-545	0	0	0	0	0	0
545-600	0	0	0	0	0	0
TOTAL	0	3	3	1	0	1

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
400-500	0	3	3	1	0	1
415-515	0	3	3	1	0	1
430-530	0	3	3	1	0	1
445-545	0	1	1	1	0	1
500-600	0	0	0	0	0	0

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH TRAFFIC COUNTS
DATE:		TUESDAY, OCTOBER 4TH, 2005
PERIOD:		7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
LOCATION:	N/S	MAGNOLIA STREET
	E/W	DRIVEWAY #3 (MEDICAL CENTER DRIVEWAY)

15MIN COUNTS

PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
700-745	1	1	2	0	0	0
745-800	1	1	2	2	0	2
800-845	3	1	4	1	0	1
845-900	2	4	6	0	0	0
700-815	3	5	8	1	0	1
815-830	1	5	6	4	0	4
830-845	0	5	5	4	0	4
845-900	1	6	7	2	0	2
TOTAL	12	28	40	14	0	14

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
700-800	7	7	14	3	0	3
715-815	9	11	20	4	0	4
730-830	9	15	24	6	0	6
745-845	6	19	25	9	0	9
800-900	5	21	26	11	0	11

15MIN COUNTS

PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
400-415	1	3	4	4	0	4
415-430	0	2	2	9	0	9
430-445	0	2	2	6	1	7
445-500	0	2	2	4	5	9
500-515	1	4	5	3	0	3
515-530	0	1	1	3	0	3
530-545	0	2	2	3	0	3
545-600	1	0	1	4	1	5
TOTAL	3	16	19	36	7	43

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
400-500	1	9	10	23	6	29
415-515	1	10	11	22	6	28
430-530	1	9	10	16	6	22
445-545	1	9	10	13	5	18
500-600	2	7	9	13	1	14

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT: ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT: HUNTINGTON BEACH TRAFFIC COUNTS
DATE: TUESDAY, OCTOBER 4TH, 2005
PERIOD: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
LOCATION: N/S MAGNOLIA STREET
E/W DRIVEWAY #4 (MEDICAL CENTER DRIVEWAY)

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
700-715	0	0	0	0	0	0
715-730	1	0	1	0	0	0
730-745	0	1	1	0	0	0
745-800	5	3	8	0	0	0
800-815	5	1	6	0	0	0
815-830	0	2	2	1	1	2
830-845	1	1	2	0	0	0
845-900	1	0	1	0	0	0
TOTAL	13	8	21	1	1	2

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
700-800	6	4	10	0	0	0
715-815	11	5	16	0	0	0
730-830	10	7	17	1	1	2
745-845	11	7	18	1	1	2
800-900	7	4	11	1	1	2

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
400-415	0	2	2	3	1	4
415-430	0	0	0	2	1	3
430-445	0	0	0	2	1	3
445-500	0	0	0	2	2	4
500-515	2	1	3	5	10	15
515-530	0	3	3	2	5	7
530-545	0	1	1	1	2	3
545-600	0	0	0	2	0	2
TOTAL	2	7	9	19	22	41

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
400-500	0	2	2	9	5	14
415-515	2	1	3	11	14	25
430-530	2	4	6	11	18	29
445-545	2	5	7	10	19	29
500-600	2	5	7	10	17	27

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT: ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT: HUNTINGTON BEACH TRAFFIC COUNTS
DATE: TUESDAY, OCTOBER 4TH, 2005
PERIOD: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
LOCATION: N/S MAGNOLIA STREET
E/W DRIVEWAY #5 (GATED APARTMENT DRIVEWAY)

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
700-715	0	0	[illegible]	1	0	[illegible]
715-730	1	0	[illegible]	3	2	[illegible]
730-745	0	0	[illegible]	3	2	[illegible]
745-800	0	0	[illegible]	5	1	[illegible]
800-815	1	1	[illegible]	0	1	[illegible]
815-830	1	1	[illegible]	2	3	[illegible]
830-845	1	2	[illegible]	3	4	[illegible]
845-900	0	4	[illegible]	3	2	[illegible]
TOTAL	4	8	[illegible]	20	15	35
HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
700-800	1	0	[illegible]	12	5	[illegible]
715-815	2	1	[illegible]	11	6	[illegible]
730-830	2	2	[illegible]	10	7	[illegible]
745-845	3	4	[illegible]	10	9	[illegible]
800-900	3	8	[illegible]	8	10	[illegible]

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
400-415	0	1	[illegible]	2	1	[illegible]
415-430	5	2	[illegible]	2	0	[illegible]
430-445	1	1	[illegible]	0	0	[illegible]
445-500	5	2	[illegible]	2	1	[illegible]
500-515	3	1	[illegible]	1	1	[illegible]
515-530	3	3	[illegible]	1	1	[illegible]
530-545	2	1	[illegible]	0	2	[illegible]
545-600	5	3	[illegible]	2	3	[illegible]
TOTAL	24	14	[illegible]	10	9	[illegible]
HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
400-500	11	6	[illegible]	6	2	[illegible]
415-515	14	6	[illegible]	5	2	[illegible]
430-530	12	7	[illegible]	4	3	[illegible]
445-545	13	7	[illegible]	4	5	[illegible]
500-600	13	8	[illegible]	4	7	[illegible]

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH TRAFFIC COUNTS
DATE:		TUESDAY, OCTOBER 4TH, 2005
PERIOD:		7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
LOCATION:	N/S	MAGNOLIA STREET
	E/W	DRIVEWAY #6 (GATED APARTMENT DRIVEWAY)

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
700-745	0	0	[illegible]	2	0	[illegible]
715-730	0	0	[illegible]	4	1	[illegible]
730-745	0	1	[illegible]	2	3	[illegible]
745-800	0	0	[illegible]	3	3	[illegible]
800-815	1	0	[illegible]	4	5	[illegible]
815-830	0	0	[illegible]	0	1	[illegible]
830-845	0	0	[illegible]	3	2	[illegible]
845-900	1	1	[illegible]	1	3	[illegible]
TOTAL	2	2	[illegible]	19	18	[illegible]
HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
700-800	0	1	[illegible]	11	7	[illegible]
715-815	1	1	[illegible]	13	12	[illegible]
730-830	1	1	[illegible]	9	12	[illegible]
745-845	1	0	[illegible]	10	11	[illegible]
800-900	2	1	[illegible]	8	11	[illegible]

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
400-415	3	2	[illegible]	0	0	[illegible]
415-430	1	1	[illegible]	1	0	[illegible]
430-445	0	3	[illegible]	2	0	[illegible]
445-500	3	1	[illegible]	2	3	[illegible]
500-515	0	4	[illegible]	1	2	[illegible]
515-530	1	1	[illegible]	4	0	[illegible]
530-545	2	5	[illegible]	0	1	[illegible]
545-600	1	2	[illegible]	2	3	[illegible]
TOTAL	11	19	30	12	9	21
HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
400-500	7	7	[illegible]	5	3	[illegible]
415-515	4	9	[illegible]	6	5	[illegible]
430-530	4	9	[illegible]	9	5	[illegible]
445-545	6	11	17	7	6	13
500-600	4	12	16	7	6	[illegible]

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH TRAFFIC COUNTS
DATE:		SATURDAY, OCTOBER 8TH, 2005
PERIOD:		10:00 AM TO 2:00 PM
LOCATION:	N/S	MAGNOLIA STREET
	E/W	DRIVEWAY #1 (OIL& LUBE DRIVEWAY)

15MIN COUNTS

PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
1000-1001	0	0	0	0	0	0
1015-1030	0	1	1	0	0	0
1030-1045	0	0	0	0	0	0
1045-1100	0	0	0	0	0	0
1100-1115	0	0	0	0	0	0
1115-1130	0	0	0	0	0	0
1130-1145	0	0	0	0	0	0
1145-1200	0	0	0	0	0	0
1200-1215	0	0	0	0	0	0
1215-1230	0	0	0	0	0	0
1230-1245	0	0	0	0	0	0
1245-100	0	0	0	0	0	0
100-115	0	0	0	0	0	0
115-130	0	0	0	0	0	0
130-145	0	0	0	0	0	0
145-200	0	0	0	0	0	0
TOTAL	0	1	1	0	0	0

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
1000-1000	0	1	1	0	0	0
1015-1015	0	1	1	0	0	0
1030-1030	0	0	0	0	0	0
1045-1045	0	0	0	0	0	0
1100-1100	0	0	0	0	0	0
1115-1115	0	0	0	0	0	0
1130-1130	0	0	0	0	0	0
1145-1145	0	0	0	0	0	0
1200-1200	0	0	0	0	0	0
1215-1215	0	0	0	0	0	0
1230-1230	0	0	0	0	0	0
1245-1245	0	0	0	0	0	0
100-200	0	0	0	0	0	0

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH TRAFFIC COUNTS
DATE:		SATURDAY, OCTOBER 8TH, 2005
PERIOD:		10:00 AM TO 2:00 PM
LOCATION:	N/S	MAGNOLIA STREET
	E/W	DRIVEWAY #2 (OIL& LUBE DRIVEWAY)

15MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
1000-1015	0	0	0	0	0	0
1015-1030	0	1	1	0	0	0
1030-1045	0	0	0	0	0	0
1045-1100	0	0	0	0	0	0
1100-1115	0	0	0	0	1	1
1115-1130	0	1	1	0	0	0
1130-1145	0	0	0	0	0	0
1145-1200	0	2	2	0	0	0
1200-1215	0	1	1	2	0	2
1215-1230	0	1	1	0	0	0
1230-1245	0	0	0	0	0	0
1245-100	0	2	2	0	0	0
100-115	0	1	1	0	0	0
115-130	0	0	0	2	2	4
130-145	0	1	1	1	0	1
145-200	0	0	0	0	0	0
TOTALS	0	10	10	5	3	8

HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
1000-100	0	1	1	0	0	0
1015-1115	0	1	1	0	1	1
1030-1130	0	1	1	0	1	1
1045-145	0	1	1	0	1	1
1100-1200	0	3	3	0	1	1
1115-1215	0	4	4	2	0	2
1130-1230	0	4	4	2	0	2
1145-1245	0	4	4	2	0	2
1200-100	0	4	4	2	0	2
1215-115	0	4	4	0	0	0
1230-130	0	3	3	2	2	4
1245-145	0	4	4	3	2	5
100-200	0	2	2	3	2	5

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT: ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT: HUNTINGTON BEACH TRAFFIC COUNTS
DATE: SATURDAY, OCTOBER 8TH, 2005
PERIOD: 10:00 AM TO 2:00 PM
LOCATION: N/S MAGNOLIA STREET
E/W DRIVEWAY #3 (MEDICAL CENTER DRIVEWAY)

15 MIN COUNTS						
PERIOD	SELF IN	OTHER IN	TOTAL IN	SELF OUT	OTHER OUT	TOTAL OUT
1000-1015	1	3	[illegible]	1	0	[illegible]
1015-1030	1	2	[illegible]	3	0	[illegible]
1030-1045	0	3	[illegible]	1	1	[illegible]
1045-1100	1	2	[illegible]	0	0	[illegible]
1100-1115	1	2	[illegible]	6	0	[illegible]
1115-1130	0	2	[illegible]	3	1	[illegible]
1130-1145	0	1	[illegible]	1	0	[illegible]
1145-1200	2	2	[illegible]	4	0	[illegible]
1200-1215	0	2	[illegible]	1	0	[illegible]
1215-1230	3	1	[illegible]	1	0	[illegible]
1230-1245	0	0	[illegible]	2	0	[illegible]
1245-1300	2	2	[illegible]	2	1	[illegible]
1300-1315	0	0	[illegible]	1	0	[illegible]
1315-1330	1	1	[illegible]	2	0	[illegible]
1330-1345	0	1	[illegible]	1	0	[illegible]
1345-1400	0	0	[illegible]	1	0	[illegible]
TOTAL	12	24	36	30	3	33

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
1000-1100	3	10	[illegible]	5	1	[illegible]
1015-1115	3	9	[illegible]	10	1	[illegible]
1030-1130	2	9	[illegible]	10	2	[illegible]
1045-1145	2	7	[illegible]	10	1	[illegible]
1100-1200	3	7	[illegible]	14	1	[illegible]
1115-1215	2	7	[illegible]	9	1	[illegible]
1130-1230	5	6	[illegible]	7	0	[illegible]
1145-1245	5	5	[illegible]	8	0	[illegible]
1200-1300	5	5	[illegible]	6	1	[illegible]
1215-1315	5	3	[illegible]	6	1	[illegible]
1230-1330	3	3	[illegible]	7	1	[illegible]
1245-1345	3	4	[illegible]	6	1	[illegible]
1300-1400	1	2	[illegible]	5	0	[illegible]

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH TRAFFIC COUNTS
DATE:		SATURDAY, OCTOBER 8TH, 2005
PERIOD:		10:00 AM TO 2:00 PM
LOCATION:	N/S	MAGNOLIA STREET
	E/W	DRIVEWAY #4 (MEDICAL CENTER DRIVEWAY)

15MIN COUNTS						
PERIOD	SBLT IN	NBLT IN	TOTAL	DWY 1 OUT	DWY 1 OUT	TOTAL
1000-1015	0	0	[illegible]	1	0	[illegible]
1015-1030	0	0	[illegible]	1	0	[illegible]
1030-1045	0	0	[illegible]	0	0	[illegible]
1045-1100	0	0	[illegible]	0	1	[illegible]
1100-1115	0	0	[illegible]	0	0	[illegible]
1115-1130	0	0	[illegible]	1	0	[illegible]
1130-1145	0	0	[illegible]	1	0	[illegible]
1145-1200	1	0	[illegible]	0	0	[illegible]
1200-1215	0	0	[illegible]	1	0	[illegible]
1215-1230	0	1	[illegible]	1	0	[illegible]
1230-1245	0	0	[illegible]	0	0	[illegible]
1245-1300	1	0	[illegible]	0	1	[illegible]
1300-1315	0	0	[illegible]	0	0	[illegible]
1315-1330	0	0	[illegible]	0	0	[illegible]
1330-1345	0	0	[illegible]	2	0	[illegible]
1345-2000	0	0	[illegible]	0	0	[illegible]
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

HOUR TOTALS

TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
1000-1100	0	0	[illegible]	2	1	[illegible]
1015-1115	0	0	[illegible]	1	1	[illegible]
1030-1130	0	0	[illegible]	1	1	[illegible]
1045-1145	0	0	[illegible]	2	1	[illegible]
1100-1200	1	0	[illegible]	2	0	[illegible]
1115-1215	1	0	[illegible]	3	0	[illegible]
1130-1230	1	1	[illegible]	3	0	[illegible]
1145-1245	1	1	[illegible]	2	0	[illegible]
1200-1300	1	1	[illegible]	2	1	[illegible]
1215-1315	1	1	[illegible]	1	1	[illegible]
1230-1330	1	0	[illegible]	0	1	[illegible]
1245-1345	1	0	[illegible]	2	1	[illegible]
1300-2000	0	0	[illegible]	2	0	[illegible]

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH TRAFFIC COUNTS
DATE:		SATURDAY, OCTOBER 8TH, 2005
PERIOD:		10:00 AM TO 2:00 PM
LOCATION:	N/S	MAGNOLIA STREET
	E/W	DRIVEWAY #5 (GATED APARTMENT DRIVEWAY)

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
1000-1015	0	1	1	9	0	9
1015-1030	1	1	2	2	0	2
1030-1045	1	0	1	3	0	3
1045-1100	2	0	2	6	2	8
1100-1115	1	2	3	0	0	0
1115-1130	0	0	0	0	0	0
1130-1145	0	0	0	3	1	4
1145-1200	2	4	6	1	1	2
1200-1215	0	1	1	0	0	0
1215-1230	0	2	2	4	0	4
1230-1245	1	0	1	3	0	3
1245-100	1	0	1	2	0	2
100-115	0	2	2	0	1	1
115-130	1	0	1	0	0	0
130-145	4	1	5	3	1	4
145-200	1	2	3	1	0	1
TOTAL	15	16	31	37	6	43
HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
1000-1100	4	2	6	20	2	22
1015-1115	5	3	8	11	2	13
1030-1130	4	2	6	9	2	11
1045-1145	3	2	5	9	3	12
1100-1200	3	6	9	4	2	6
1115-1215	2	5	7	4	2	6
1130-1230	2	7	9	8	2	10
1145-1245	3	7	10	8	1	9
1200-100	2	3	5	9	0	9
1215-115	2	4	6	9	1	10
1230-130	3	2	5	5	1	6
1245-145	6	3	9	5	2	7
100-200	6	5	11	4	2	6

Eastside Driveway Counts

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

DRIVEWAY COUNT SUMMARY

CLIENT:		ASSOCIATED TRANSPORTATION ENGINEERS
PROJECT:		HUNTINGTON BEACH TRAFFIC COUNTS
DATE:		SATURDAY, OCTOBER 8TH, 2005
PERIOD:		10:00 AM TO 2:00 PM
LOCATION:	N/S	MAGNOLIA STREET
	E/W	DRIVEWAY #6 (GATED APARTMENT DRIVEWAY)

15 MIN COUNTS						
PERIOD	SBLT IN	NBRT IN	TOTAL	WBRT OUT	WBLT OUT	TOTAL
1000-1015	1	0	[illegible]	2	1	[illegible]
1015-1030	0	1	[illegible]	1	3	[illegible]
1030-1045	0	2	[illegible]	2	0	[illegible]
1045-1100	3	1	[illegible]	3	0	[illegible]
1100-1115	0	2	[illegible]	0	1	[illegible]
1115-1130	1	2	[illegible]	5	0	[illegible]
1130-1145	1	0	[illegible]	2	1	[illegible]
1145-1200	1	3	[illegible]	4	0	[illegible]
1200-1215	1	3	[illegible]	2	1	[illegible]
1215-1230	0	2	[illegible]	2	0	[illegible]
1230-1245	0	0	[illegible]	4	1	[illegible]
1245-100	0	1	[illegible]	2	2	[illegible]
100-115	1	1	[illegible]	1	0	[illegible]
115-130	3	3	[illegible]	3	1	[illegible]
130-145	1	1	[illegible]	3	1	[illegible]
145-200	1	2	[illegible]	2	0	[illegible]
TOTAL	14	24	38	38	12	50

HOUR TOTALS						
TIME	IN	IN	TOTAL	OUT	OUT	TOTAL
1000-1100	4	4	[illegible]	8	4	[illegible]
1015-1115	3	6	[illegible]	6	4	[illegible]
1030-1130	4	7	[illegible]	10	1	[illegible]
1045-1145	5	5	[illegible]	10	2	[illegible]
1100-1200	3	7	[illegible]	11	2	[illegible]
1115-1215	4	8	[illegible]	13	2	[illegible]
1130-1230	3	8	[illegible]	10	2	[illegible]
1145-1245	2	8	[illegible]	12	2	[illegible]
1200-100	1	6	[illegible]	10	4	[illegible]
1215-115	1	4	[illegible]	9	3	[illegible]
1230-130	4	5	[illegible]	10	4	[illegible]
1245-145	5	6	[illegible]	9	4	[illegible]
100-200	6	7	[illegible]	9	2	[illegible]

CITY OF HUNTINGTON BEACH
2000 Main Street
P.O. Box 190
Huntington Beach, CA
92648

FAX COVER SHEET

DATE: 12/28/04

TO: Daryl Nelson

FAX: (805) 682-8509

FROM: Bill Janusz

PHONE: (714) 536-5431
FAX: 714-374-1573

RE: Accident Data
Home Depot

Number of pages including cover sheet: 15

Message

Daryl:

Here is the accident data you requested

Please let me know if you have any other questions

Bill Janusz

City of Huntington Beach
Traffic Engineering Department

Traffic Collision History Report
Midblock Collisions

Arterial: MAGNOLIA STREET
Limit 1: GARFIELD AVENUE
Limit 2: HYDE PARK DRIVE

Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	# Inj	# Kld
2002-07215	4/30/02 15:14	162' North of	MAGNOLIA STREET/HYDE PARK DRIVE	Broadside	Other Motor Vehicle	East	Entering Traffic	North	Proceeding Straight	Auto R/W Violation	2	0
2002-07840	5/10/02 17:21	585' South of	MAGNOLIA STREET/GARFIELD AVENUE	Rear-End	Other Motor Vehicle	North	Proceeding Straight	North	Stopped In Road	Unsafe Speed	4	0
2002-13587	8/13/02 15:40	387' South of	MAGNOLIA STREET/GARFIELD AVENUE	Broadside	Other Motor Vehicle	East	Entering Traffic	North	Proceeding Straight	Auto R/W Violation	0	0
2002-18192	10/24/02 13:28	377' North of	MAGNOLIA STREET/HYDE PARK DRIVE	Broadside	Other Motor Vehicle	East	Entering Traffic	South	Proceeding Straight	Auto R/W Violation	1	0
2002-19074	11/7/02 11:55	300' South of	MAGNOLIA STREET/GARFIELD AVENUE	Broadside	Other Motor Vehicle	East	Entering Traffic	North	Making Left Turn	Auto R/W Violation	0	0
2003-00415	1/7/03 15:32	420' South of	MAGNOLIA STREET/GARFIELD AVENUE	Hit Object	Fixed Object	East	Proceeding Straight			Other Than Driver	1	0
2003-02276	2/4/03 12:23	120' South of	MAGNOLIA STREET/GARFIELD AVENUE	Rear-End	Other Motor Vehicle	South	Backing	South	Stopped In Road	Unsafe Starting or Backing	0	0
2003-08221	5/7/03 08:33	212' South of	MAGNOLIA STREET/GARFIELD AVENUE	Rear-End	Other Motor Vehicle	North	Proceeding Straight	North	Slowing/Stopping	Following Too Closely	3	0
2003-08223	5/7/03 08:40	171' South of	MAGNOLIA STREET/GARFIELD AVENUE	Rear-End	Other Motor Vehicle	North	Proceeding Straight	North	Stopped In Road	Unsafe Starting or Backing	0	0
2003-10712	6/13/03 21:03	175' South of	MAGNOLIA STREET/GARFIELD AVENUE	Rear-End	Other Motor Vehicle	North	Proceeding Straight	North	Stopped In Road	Driving Under Influence	2	0
2003-11046	6/19/03 10:54	100' North of	MAGNOLIA STREET/HYDE PARK DRIVE	Broadside	Other Motor Vehicle	North	Making U Turn	North	Proceeding Straight	Improper Turning	0	0

City of Huntington Beach
Traffic Engineering Department

Traffic Collision History Report
Midblock Collisions

Arterial: MAGNOLIA STREET
Limit 1: GARFIELD AVENUE
Limit 2: HYDE PARK DRIVE

Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	# Inj	# Kld
2004-09768	6/2/04 10:41	415' North of	MAGNOLIA STREET/HYDE PARK DRIVE	Broadside	Other Motor Vehicle	East	Making Left Turn	South	Proceeding Straight	Unknown	1	0
2004-12430	7/9/04 17:49	150' South of	MAGNOLIA STREET/GARFIELD AVENUE	Rear-End	Other Motor Vehicle	East	Making Left Turn	North	Stopped In Road	Unsafe Speed	0	0

* 1 Broadside in the past 12 months from 12/20/04

City of Huntington Beach
Traffic Engineering Department

Traffic Collision History Report
Midblock Collisions

Arterial: MAGNOLIA STREET
Limit 1: GARFIELD AVENUE
Limit 2: HYDE PARK DRIVE

Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	# Inj	# Kld

Total Number of Collisions: 13 Segment Length: 0.18 miles (970')

Settings Used For Query

Parameter	Setting
Limit 1	Do Not Include Intersection Related
Limit 2	Do Not Include Intersection Related
Intermediate Intersections	Do Not Include Intersection Related

City of Huntington Beach
Traffic Engineering Department

Midblock Collision Diagram

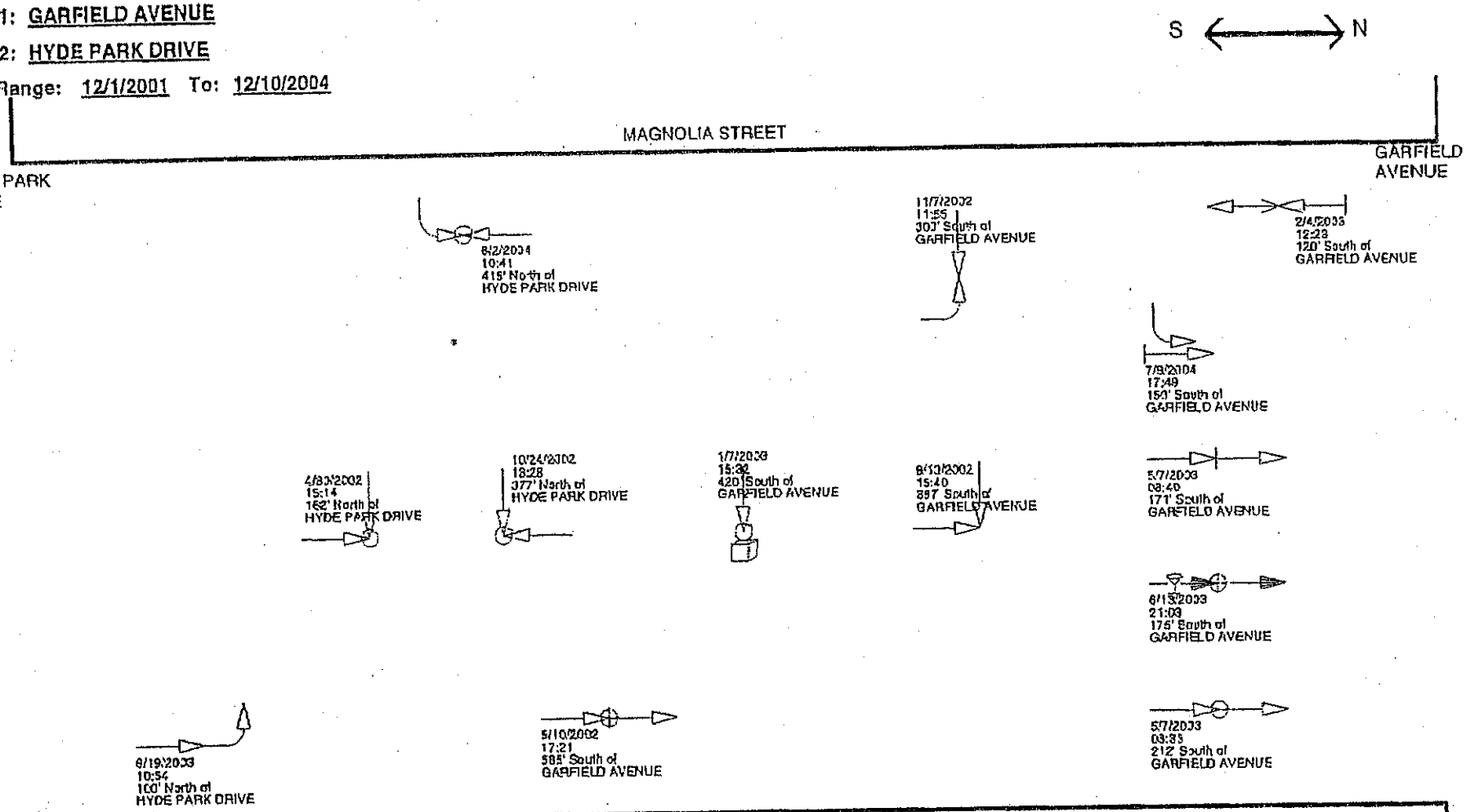
Segment Length: 970'

MAGNOLIA STREET

Limit 1: GARFIELD AVENUE

Limit 2: HYDE PARK DRIVE

Date Range: 12/1/2001 To: 12/10/2004



Number of Collisions

6	Property Damage Only
7	Injury Collisions
0	Fatal Collisions
13	Total Collisions

Legend

- Moving Vehicle
- Stopped Vehicle
- Backing Vehicle
- Ran Off Road
- Movement Unknown
- Right Turn
- Left Turn
- Sideswipe
- Day
- Night
- Pedestrian
- Fixed Object
- Bicycle
- DUI
- Injury
- Fatal

Figure 4C-101. Traffic Signal Warrants Worksheet (Sheet 4 of 4)

WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	FULFILLED
> 300 m (1000 ft)	N _____ m, S _____ m, E _____ m, W _____ m	Yes ☐ No ☐
On one way isolated streets or streets with one way traffic significance and adjacent signals are so far apart that necessary platooning and speed control would be lost.		
On 2-way streets where adjacent signals do not provide necessary platooning and speed control proposed signals could constitute a progressive signal system.		☐ ☐

WARRANT 7 - Crash Warrant
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

REQUIREMENTS	WARRANT	✓	FULFILLED
One Warrant Satisfied 80%	Warrant 1.- Minimum Vehicular Volume		
	OR		
	Warrant 2 - Interruption of Continuous Traffic		Yes ☒ No ☐
Signal Will Not Seriously Disrupt Progressive Traffic Flow			☒ ☐
Adequate Trial of Less Restrictive Remedies Has Failed to Reduce Accident Frequency			☐ ☒
Acc. Within a 12 Month Period Susceptible for Corr. & Involving Injury or ≥ $500 Damage			
MINIMUM REQUIREMENTS	NUMBER OF ACCIDENTS		
5 or More			☐ ☒

WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES			✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr				
	OR				
	During Each of Any 5 Hrs. of a Sat. and/or Sun _____ Veh/Hr				Yes ☐ No ☐
	CHARACTERISTICS OF MAJOR ROUTES	MAJOR ST.	MINOR ST.		
	Hwy. System Serving as Principal Network for Through Traffic				
	Rural or Suburban Highway Outside Of, Entering, or Traversing a City				
	Appears as Major Route on an Official Plan				
	Any Major Route Characteristics Met, Both Streets				☐ ☐

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown.

Table 4C-101. Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL Yes

1A - Minimum Vehicular Traffic

Satisfied Yes Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1.....	1.....
2 or More 24,600	1 1,700
2 or More.....	2 or More.....
1.....	2 or More.....

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

1B - Interruption of Continuos Traffic

Satisfied Yes Not Satisfied _____

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1.....	1.....
2 or More 24,600	1 1,700
2 or More.....	2 or More.....
1.....	2 or More.....

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

1A&B - Combinations

Satisfied Yes Not Satisfied _____

No one warrant satisfied, but following warrants fulfilled 80% or more..... _____ 1 _____ 2

2 Warrants	2 Warrants

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

Figure 4C-101. Traffic Signal Warrants Worksheet (Sheet 1 of 4)

DIST ____ CO ____ RTE ____ KPM ____

CALC _____ DATE _____
CHK _____ DATE _____

Major St: Magnolia Street
Minor St: Hyde Park Drive

Critical Approach Speed _____ km/h
Critical Approach Speed _____ km/h

Critical speed of major street traffic > 64 km/h (40 mph)..... ☒ or
In built up area of isolated community of < 10,000 population..... ☐ } RURAL (R)
☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume

Condition A - Minimum Vehicle Volume

100% SATISFIED YES ☒ NO ☐
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS				8:00 / 9:00	9:00 / 10:00	10:00 / 11:00	11:00 / 12:00	12:00 / 1:00	1:00 / 2:00	2:00 / 3:00	3:00 / 4:00 Hour
	U	R	U	R								
APPROACH LANES	1		2 or More									
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	1747	1265	1238	1374	1364	1488	1752	1956
Highest Approaches Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	113	137	164	167	164	171	130	119

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES ☒ NO ☐
80% SATISFIED YES ☐ NO ☐

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS				8:00 / 9:00	9:00 / 10:00	10:00 / 11:00	11:00 / 12:00	12:00 / 1:00	1:00 / 2:00	2:00 / 3:00	3:00 / 4:00 Hour
	U	R	U	R								
APPROACH LANES	1		2 or More									
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	1747	1265	1238	1374	1364	1488	1752	1956
Highest Approaches Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	113	137	164	167	164	171	130	119

Combination of Conditions A & B

SATISFIED YES ☒ NO ☐

REQUIREMENT	WARRANT	✓	FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☒ No ☐
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Main Driveway*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative + Proj. Conditions*
Analysis Time Period	*P.M. Peak Hour*		

Project Description	*Home Depot Store - #04136*
East/West Street: *Project Main Driveway*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	93	1117	0	0	1136	79
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR	97	1175	0	0	1195	83
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	60	0	78
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	0.95
Hourly Flow Rate, HFR	0	0	0	63	0	82
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (vph)	97					63		82
C (m) (vph)	550					221		424
v/c	0.18					0.29		0.19
95% queue length	0.64					1.13		0.71
Control Delay	12.9					27.7		15.5
LOS	B					D		C
Approach Delay	–	–				20.8		
Approach LOS	–	–				C		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Main Driveway*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative + Proj. Conditions*
Analysis Time Period	*A.M. Peak Hour*		

Project Description *Home Depot Store - #04136*	
East/West Street: *Project Main Driveway*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	105	1046	0	0	806	71
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR	110	1101	0	0	848	74
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	45	0	69
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	0.95
Hourly Flow Rate, HFR	0	0	0	47	0	72
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (vph)	110					47		72
C (m) (vph)	749					300		553
v/c	0.15					0.16		0.13
95% queue length	0.51					0.55		0.45
Control Delay	10.6					19.2		12.5
LOS	B					C		B
Approach Delay	–	–				15.1		
Approach LOS	–	–				C		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Main Driveway*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing + Project Conditions*
Analysis Time Period	*P.M. Peak Hour*		

Project Description *Home Depot Store - #04136*	
East/West Street: *Project Main Driveway*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	93	1096	0	0	1114	79
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR	97	1153	0	0	1172	83
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	60	0	78
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	0.95
Hourly Flow Rate, HFR	0	0	0	63	0	82
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (vph)	97					63		82
C (m) (vph)	561					227		431
v/c	0.17					0.28		0.19
95% queue length	0.62					1.09		0.69
Control Delay	12.8					26.8		15.3
LOS	B					D		C
Approach Delay	--	--				20.3		
Approach LOS	--	--				C		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Main Driveway*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing + Project Conditions*
Analysis Time Period	*A.M. Peak Hour*		

Project Description	*Home Depot Store - #04136*
East/West Street: *Project Main Driveway*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	105	1026	0	0	790	71
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR	110	1080	0	0	831	74
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	45	0	69
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.95	1.00	0.95
Hourly Flow Rate, HFR	0	0	0	47	0	72
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (vph)	110					47		72
C (m) (vph)	760					305		560
v/c	0.14					0.15		0.13
95% queue length	0.50					0.54		0.44
Control Delay	10.5					18.9		12.4
LOS	B					C		B
Approach Delay	--	--				15.0		
Approach LOS	--	--				B		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative + Proj. Conditions*
Analysis Time Period	*P.M. Peak Hour*		

Project Description	*Home Depot Store - #04136 w/left-turn restriction*
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	142	1067	20	18	1123	38
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	149	1123	21	18	1182	40
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	8	1	16	70	0	67
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	8	1	16	73	0	70
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	149	18	9		16		143	
C (m) (vph)	578	618	21		468		41	
v/c	0.26	0.03	0.43		0.03		3.49	
95% queue length	1.02	0.09	1.23		0.11		16.08	
Control Delay	13.4	11.0	270.5		13.0		1324	
LOS	B	B	F		B		F	
Approach Delay	–	–	105.7			1324		
Approach LOS	–	–	F			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative + Proj. Conditions*
Analysis Time Period	*A.M. Peak Hour*		

Project Description	*Home Depot Store - #04136 w/left-turn restriction*
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	124	1015	11	14	848	15
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	130	1068	11	14	892	15
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	13	0	14	44	0	24
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	13	0	14	46	0	25
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	130	14	13		14		71	
C (m) (vph)	759	654	42		491		72	
v/c	0.17	0.02	0.31		0.03		0.99	
95% queue length	0.62	0.07	1.04		0.09		5.10	
Control Delay	10.7	10.6	125.3		12.5		200.9	
LOS	B	B	F		B		F	
Approach Delay	–	–	66.8			200.9		
Approach LOS	–	–	F			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing + Project Conditions*
Analysis Time Period	*P.M. Peak Hour*		

Project Description	*Home Depot Store - #04136 w/left-turn restriction*
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	142	1046	20	18	1103	38
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	149	1101	21	18	1161	40
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	8	1	16	70	0	67
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	8	1	16	73	0	70
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	149	18	9		16		143	
C (m) (vph)	588	630	22		476		43	
v/c	0.25	0.03	0.41		0.03		3.33	
95% queue length	1.00	0.09	1.20		0.10		15.88	
Control Delay	13.2	10.9	254.3		12.8		1244	
LOS	B	B	F		B		F	
Approach Delay	--	--	99.8			1244		
Approach LOS	--	--	F			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing + Project Conditions*
Analysis Time Period	*A.M. Peak Hour*		

Project Description *Home Depot Store - #04136 w/left-turn restriction*	
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	124	995	11	14	838	15
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	130	1047	11	14	882	15
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	13	0	14	44	0	24
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	13	0	14	46	0	25
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	130	14	13		14		71	
C (m) (vph)	765	666	43		499		75	
v/c	0.17	0.02	0.30		0.03		0.95	
95% queue length	0.61	0.06	1.02		0.09		4.92	
Control Delay	10.7	10.5	121.6		12.4		184.5	
LOS	B	B	F		B		F	
Approach Delay	--	--	65.0			184.5		
Approach LOS	--	--	F			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative + Proj. Conditions*
Analysis Time Period	*P.M. Peak Hour*		

Project Description *Home Depot Store - #04136*	
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	29	1180	20	18	1163	28
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	30	1242	21	18	1224	29
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	8	0	16	14	0	27
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	8	0	16	14	0	28
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	30	18	8		16		42	
C (m) (vph)	562	557	34		428		90	
v/c	0.05	0.03	0.24		0.04		0.47	
95% queue length	0.17	0.10	0.75		0.12		1.97	
Control Delay	11.8	11.7	140.9		13.7		76.0	
LOS	B	B	F		B		F	
Approach Delay	--	--	56.1			76.0		
Approach LOS	--	--	F			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative + Proj. Conditions*
Analysis Time Period	*A.M. Peak Hour*		

Project Description	*Home Depot Store - #04136*
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	4	1135	11	14	871	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	4	1194	11	14	916	0
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	13	0	14	2	0	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	13	0	14	2	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	4	14	13		14		2	
C (m) (vph)	753	586	61		448		75	
v/c	0.01	0.02	0.21		0.03		0.03	
95% queue length	0.02	0.07	0.72		0.10		0.08	
Control Delay	9.8	11.3	79.3		13.3		54.3	
LOS	A	B	F		B		F	
Approach Delay	–	–	45.1			54.3		
Approach LOS	–	–	E			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative Conditions*
Analysis Time Period	*P.M. Peak Hour*		
Project Description	*Home Depot Store - #04136*		
East/West Street:	*Hyde Park Drive*	North/South Street:	*Magnolia Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	29	1067	20	18	1035	28
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	30	1123	21	18	1089	29
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	8	0	16	14	0	27
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	8	0	16	14	0	28
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	30	18	8		16		42	
C (m) (vph)	632	618	48		468		124	
v/c	0.05	0.03	0.17		0.03		0.34	
95% queue length	0.15	0.09	0.54		0.11		1.36	
Control Delay	11.0	11.0	94.4		13.0		48.2	
LOS	B	B	F		B		E	
Approach Delay	--	--	40.1			48.2		
Approach LOS	--	--	E			E		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Cumulative Conditions*
Analysis Time Period	*A.M. Peak Hour*		

Project Description *Home Depot Store - #04136*

East/West Street: *Hyde Park Drive* | North/South Street: *Magnolia Street*

Intersection Orientation: *North-South* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	4	1015	11	14	769	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	4	1068	11	14	809	0
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	13	0	14	2	0	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	13	0	14	2	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	4	14	13		14		2	
C (m) (vph)	825	654	82		491		101	
v/c	0.00	0.02	0.16		0.03		0.02	
95% queue length	0.01	0.07	0.53		0.09		0.06	
Control Delay	9.4	10.6	57.0		12.5		41.4	
LOS	A	B	F		B		E	
Approach Delay	–	–	34.0			41.4		
Approach LOS	–	–	D			E		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing + Project Conditions*
Analysis Time Period	*P.M. Peak Hour*		

Project Description	*Home Depot Store - #04136*
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	29	1159	20	18	1143	28
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	30	1220	21	18	1203	29
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	8	0	16	14	0	27
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	8	0	16	14	0	28
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	30	18	8		16		42	
C (m) (vph)	573	568	36		436		95	
v/c	0.05	0.03	0.22		0.04		0.44	
95% queue length	0.17	0.10	0.71		0.11		1.86	
Control Delay	11.6	11.5	131.6		13.6		70.0	
LOS	B	B	F		B		F	
Approach Delay	--	--	52.9			70.0		
Approach LOS	--	--	F			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing + Project Conditions*
Analysis Time Period	*A.M. Peak Hour*		

Project Description	*Home Depot Store - #04136*
East/West Street: *Hyde Park Drive*	North/South Street: *Magnolia Street*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	4	1115	11	14	856	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	4	1173	11	14	901	0
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	13	0	14	2	0	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	13	0	14	2	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	4	14	13		14		2	
C (m) (vph)	763	597	64		454		79	
v/c	0.01	0.02	0.20		0.03		0.03	
95% queue length	0.02	0.07	0.69		0.10		0.08	
Control Delay	9.7	11.2	75.1		13.2		51.8	
LOS	A	B	F		B		F	
Approach Delay	–	–	43.0			51.8		
Approach LOS	–	–	E			F		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing Conditions*
Analysis Time Period	*P.M. Peak Hour*		
Project Description	*Home Depot Store - #04136*		
East/West Street:	*Hyde Park Drive*	North/South Street:	*Magnolia Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	29	1046	20	18	1015	28
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	30	1101	21	18	1068	29
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	8	0	16	14	0	27
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	8	0	16	14	0	28
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	30	18	8		16		42	
C (m) (vph)	644	630	51		476		130	
v/c	0.05	0.03	0.16		0.03		0.32	
95% queue length	0.15	0.09	0.51		0.10		1.28	
Control Delay	10.9	10.9	88.3		12.8		45.4	
LOS	B	B	F		B		E	
Approach Delay	--	--	38.0			45.4		
Approach LOS	--	--	E			E		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Darryl Nelson*	Intersection	*Magnolia St./Hyde Park Dr.*
Agency/Co.	*ATE*	Jurisdiction	*City of Huntington Beach*
Date Performed	*8/2/2005*	Analysis Year	*Existing Conditions*
Analysis Time Period	*A.M. Peak Hour*		
Project Description	*Home Depot Store - #04136*		
East/West Street:	*Hyde Park Drive*	North/South Street:	*Magnolia Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	4	995	11	14	754	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	4	1047	11	14	793	0
Percent Heavy Vehicles	0	–	–	0	–	–
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration	LT		TR	LT		TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	13	0	14	2	0	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	13	0	14	2	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R		LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (vph)	4	14	13		14		2	
C (m) (vph)	837	666	86		499		106	
v/c	0.00	0.02	0.15		0.03		0.02	
95% queue length	0.01	0.06	0.51		0.09		0.06	
Control Delay	9.3	10.5	54.2		12.4		39.6	
LOS	A	B	F		B		E	
Approach Delay	–	–	32.5			39.6		
Approach LOS	–	–	D			E		

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HOME DEPOT PROJECT - 04136 **REFERENCE #03**

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***OCTOBER 2005***

TIME PERIOD: ***SATURDAY PEAK HOUR***

N/S STREET: MAGNOLIA STREET

E/W STREET: GARFIELD AVENUE

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING 2005	121	769	139	89	640	85	98	459	97	144	363	102
(B) PROJECT	0	104	50	0	156	0	35	33	0	94	0	0
(C) CUMULATIVE PROJECTS	125	792	143	92	659	88	101	473	100	148	374	105

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
EXISTING GEOMETRICS	L T TR	L TTR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1: EXISTING 2004 (A)
SCENARIO 2: EXISTING + PROJECT (A+B)
SCENARIO 3: CUMULATIVE
SCENARIO 4: CUMULATIVE + PROJECT (C+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	121	121	125	125	0.076	0.076	0.078	0.078
NBT	2	3200	769	873	792	896	0.284 *	0.332 *	0.292 *	0.340 *
NBR	0	0	139	189	143	193	-	-	-	-
SBL	1	1600	89	89	92	92	0.056 *	0.056 *	0.058 *	0.058 *
SBT	2	3200	640	796	659	815	0.200	0.249	0.206	0.255
SBR	1	1600	85	85	88	88	0.053	0.053	0.055	0.055
EBL	1	1600	98	133	101	136	0.061	0.083	0.063	0.085
EBT	2	3200	459	492	473	506	0.174 *	0.184 *	0.179 *	0.189 *
EBR	0	0	97	97	100	100	-	-	-	-
WBL	1	1600	144	238	148	242	0.090 *	0.149 *	0.093 *	0.151 *
WBT	2	3200	363	363	374	374	0.145	0.145	0.150	0.150
WBR	0	0	102	102	105	105	-	-	-	-
			INTERSECTION CAPACITY UTILIZATION:				**0.60**	**0.72**	**0.62**	**0.74**
			SCENARIO LEVEL OF SERVICE:				A	C	B	C

NOTES:

Printed: 12/14/05

HOME DEPOT PROJECT - 04136 **REFERENCE #01**

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***NOVEMBER 2004***

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: MAGNOLIA STREET

E/W STREET: GARFIELD AVENUE

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING 2004	137	786	135	93	804	107	114	482	104	186	556	99
(B) PROJECT	0	50	30	0	71	0	30	18	0	42	0	0
(C) CUMULATIVE PROJECTS	140	802	138	95	820	109	116	492	106	190	567	101

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T TR	L TTR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1: EXISTING 2004 (A)
SCENARIO 2: EXISTING + PROJECT (A+B)
SCENARIO 3: CUMULATIVE
SCENARIO 4: CUMULATIVE + PROJECT (C+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	137	137	140	140	0.086	0.086	0.088	0.088
NBT	2	3200	786	836	802	852	0.288 *	0.313 *	0.294 *	0.319 *
NBR	0	0	135	165	138	168	-	-	-	-
SBL	1	1600	93	93	95	95	0.058 *	0.058 *	0.059 *	0.059 *
SBT	2	3200	804	875	820	891	0.251	0.273	0.256	0.278
SBR	1	1600	107	107	109	109	0.067	0.067	0.068	0.068
EBL	1	1600	114	144	116	146	0.071	0.090	0.073	0.091
EBT	2	3200	482	500	492	510	0.183 *	0.189 *	0.187 *	0.193 *
EBR	0	0	104	104	106	106	-	-	-	-
WBL	1	1600	186	228	190	232	0.116 *	0.143 *	0.119 *	0.145 *
WBT	2	3200	556	556	567	567	0.205	0.205	0.209	0.209
WBR	0	0	99	99	101	101	-	-	-	-
			INTERSECTION CAPACITY UTILIZATION:				**0.65**	**0.70**	**0.66**	**0.72**
			SCENARIO LEVEL OF SERVICE:				**B**	**B**	**B**	**C**

NOTES:

Printed: 12/14/05

HOME DEPOT PROJECT - 04136 **REFERENCE #01**

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: ***NOVEMBER 2004***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: MAGNOLIA STREET

E/W STREET: GARFIELD AVENUE

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING 2004	80	712	170	90	587	41	58	617	98	80	219	66
(B) PROJECT	0	40	20	0	75	0	24	18	0	45	0	0
(C) CUMULATIVE PROJECTS	82	735	173	92	599	42	59	629	100	82	223	67

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T TR	L TTR	L T TR	L T TR

TRAFFIC SCENARIOS

SCENARIO 1: EXISTING 2004 (A)
SCENARIO 2: EXISTING + PROJECT (A+B)
SCENARIO 3: CUMULATIVE
SCENARIO 4: CUMULATIVE + PROJECT (C+B)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	4	SCENARIO V/C RATIOS 1	2	3	4
NBL	1	1600	80	80	82	82	0.050	0.050	0.051	0.051
NBT	2	3200	712	752	735	775	0.276 *	0.294 *	0.284 *	0.303 *
NBR	0	0	170	190	173	193	-	-	-	-
SBL	1	1600	90	90	92	92	0.056 *	0.056 *	0.058 *	0.058 *
SBT	2	3200	587	662	599	674	0.183	0.207	0.187	0.211
SBR	1	1600	41	41	42	42	0.026	0.026	0.026	0.026
EBL	1	1600	58	82	59	83	0.036	0.051	0.037	0.052
EBT	2	3200	617	635	629	647	0.223 *	0.229 *	0.228 *	0.233 *
EBR	0	0	98	98	100	100	-	-	-	-
WBL	1	1600	80	125	82	127	0.050 *	0.078 *	0.051 *	0.079 *
WBT	2	3200	219	219	223	223	0.089	0.089	0.091	0.091
WBR	0	0	66	66	67	67	-	-	-	-
			INTERSECTION CAPACITY UTILIZATION:				**0.61**	**0.66**	**0.62**	**0.67**
			SCENARIO LEVEL OF SERVICE:				**B**	**B**	**B**	**B**

NOTES:

Printed: 12/14/05

City of Huntington Beach
Traffic Engineering Department

Traffic Collision History Report
Midblock Collisions

Arterial: GARFIELD AVENUE
Limit 1: NEWLAND STREET
Limit 2: MAGNOLIA STREET

Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	# Inj	# Kld

Total Number of Collisions: 2 Segment Length: 0.50 miles (2,645')

Settings Used For Query

Parameter	Setting
Limit 1	Do Not Include Intersection Related
Limit 2	Do Not Include Intersection Related
Intermediate Intersections	Do Not Include Intersection Related

Color Legend - Highest Degree of Injury

Medium Blue = Fatal

Purple = Severe Injury

Green = Other Visible Injury

Teal = Complaint of Pain

Dark Blue = Property Damage Only

Settings Used For Query

Parameter	Setting
Limit 1	Do Not Include Intersection Related
Limit 2	Do Not Include Intersection Related
Intermediate Intersections	Do Not Include Intersection Related

City of Huntington Beach
Traffic Engineering Department

Midblock Collision Diagram

Segment Length: 778'

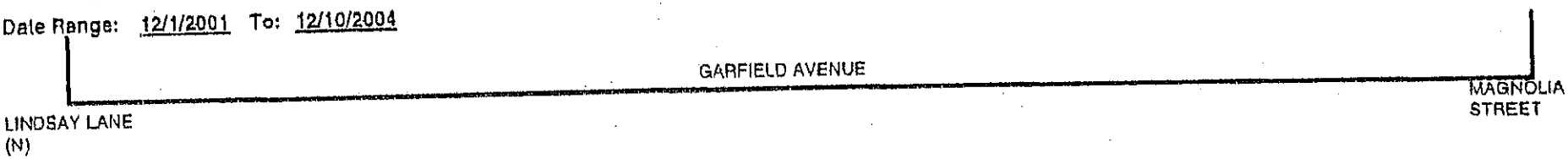
GARFIELD AVENUE

Limit 1: LINDSAY LANE (N)

Limit 2: MAGNOLIA STREET

Date Range: 12/1/2001 To: 12/10/2004

W ⟷ E



2/27/2003
10:40
78' East of
LINDSAY LANE (N)

Number of Collisions	
1	Property Damage Only
0	Injury Collisions
0	Fatal Collisions
1	Total Collisions

Legend

- Moving Vehicle
- Stopped Vehicle
- Backing Vehicle
- Ran Off Road
- Movement Unknown
- Right Turn
- Left Turn
- Sideswipe
- Day
- Night
- Pedestrian
- Fixed Object
- Bicycle
- DUI
- Injury
- Fatal

City of Huntington Beach
Traffic Engineering Department

Traffic Collision History Report
Midblock Collisions

Arterial: GARFIELD AVENUE
Limit 1: NEWLAND STREET
Limit 2: MAGNOLIA STREET

Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date Time	Dist/Dir	Location	Type of Collision	Motor Veh. Involved With	DOT1	MPC 1	DOT2	MPC 2	PCF	# Inj	# Kid
2003-02759	2/11/03 20:40	90' East of	GARFIELD AVENUE/NEWLAND STREET	Hit Object	Fixed Object	South	Making Left Turn			Driving Under Influence	0	0
2003-03759	2/27/03 10:40	78' East of	GARFIELD AVENUE/LINDSAY LANE (N)	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Proceeding Straight	Unsafe Speed	0	0

Color Legend - Highest Degree of Injury

Medium Blue = Fatal

Purple = Severe Injury

Green = Other Visible Injury

Teal = Complaint of Pain

Dark Blue = Property Damage Only

Settings Used For Query

Parameter	Setting
Street Name	Garfield Avenue
Cross Street	Magnolia Street
Starting Date	12/1/2001
Ending Date	12/10/2004
Intersection	Intersection Related

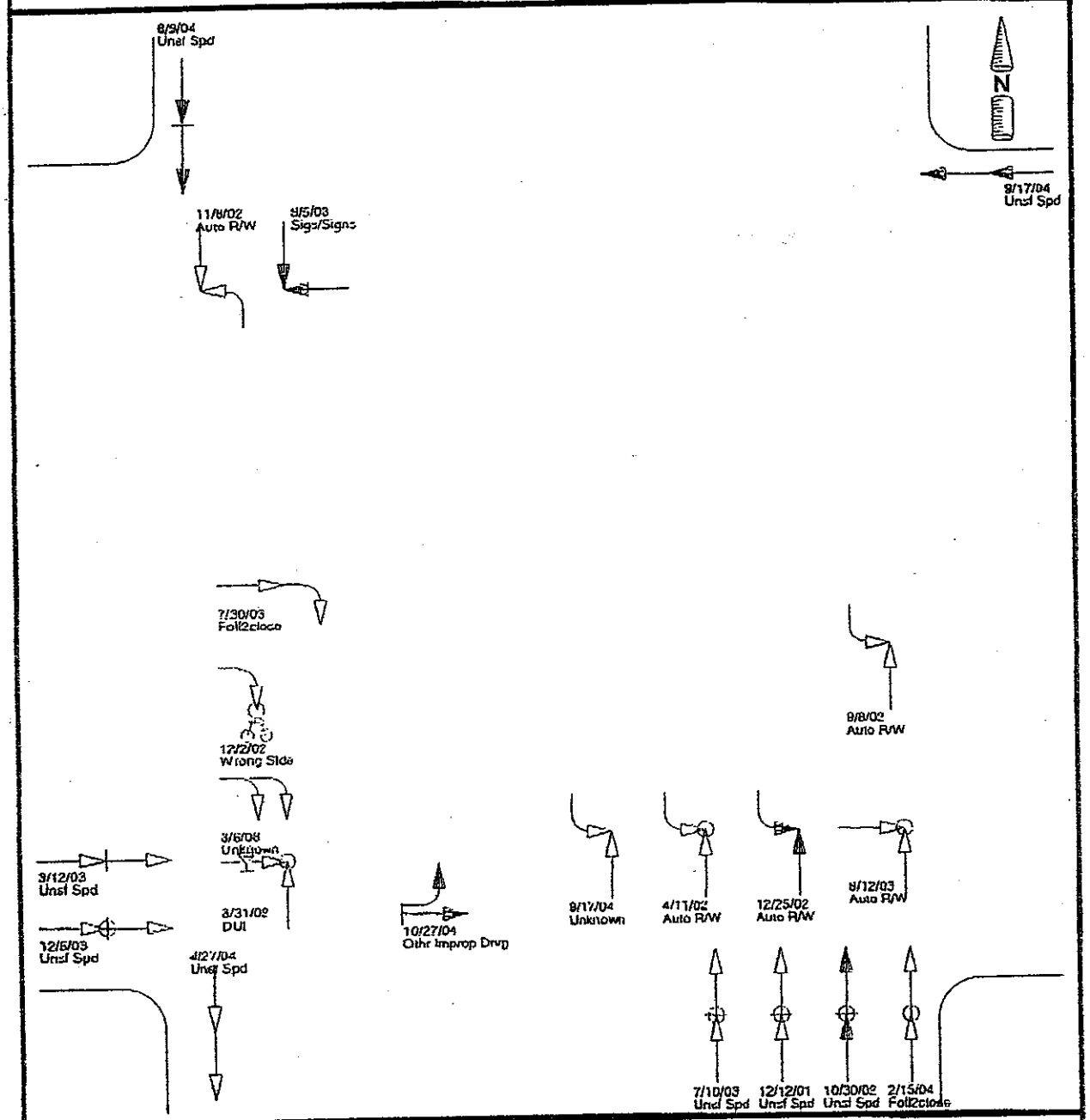
Collision Diagram

Horizontal Street: GARFIELD AVENUE

Vertical Street: MAGNOLIA STREET

From: 12/1/2001 To: 12/10/2004

Date Prepared: 12/10/2004



Number of Collisions

12	Property Damage Only
9	Injury Collisions
0	Fatal Collisions
21	Total Collisions

Legend

- Moving Vehicle
- Stopped Vehicle
- Backing Vehicle
- Ran Off Road
- Movement Unknown
- Right Turn
- Left Turn
- Sideswipe
- Day
- Night
- Pedestrian
- Fixed Object
- Bicycle
- DUI
- Injury
- Fatal

City of Huntington Beach
Traffic Engineering Department
Traffic Collision History Report

Location: Garfield Avenue / Magnolia Street
Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date	Time	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil

Total Number of Collisions: 21

Settings Used For Query

Parameter	Setting
Street Name	Garfield Avenue
Cross Street	Magnolia Street
Starting Date	12/1/2001
Ending Date	12/10/2004
Intersection	Intersection Related

City of Huntington Beach
Traffic Engineering Department
Traffic Collision History Report

Location: Garfield Avenue / Magnolia Street
Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date	Time	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil
2004-02848	2/15/04	17:05	141	South	Rear-End	Non-Collision	North	Proceeding Straight	North	Slowing/Stopping	Following Too Closely	1	0
2004-07418	4/27/04	16:14	200	South	Rear-End	Other Motor Vehicle	South	Proceeding Straight	South	Proceeding Straight	Unsafe Speed	0	0
2004-14548	8/9/04	22:32	40	North	Rear-End	Other Motor Vehicle	South	Slowing/Stopping	South	Stopped In Road	Unsafe Speed	0	0
2004-15033	8/17/04	09:38	0	In Int.	Broadside	Other Motor Vehicle	South	Making Left Turn	North	Proceeding Straight	Unknown	0	0
2004-17125	9/17/04	21:34	80	East	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Slowing/Stopping	Unsafe Speed	0	0
2004-19724	10/27/04	20:30	0	In Int.	Sideswipe	Other Motor Vehicle	East	Making U Turn	East	Stopped In Road	Other Improper Driving	0	0

City of Huntington Beach
Traffic Engineering Department
Traffic Collision History Report

Location: Garfield Avenue / Magnolia Street
Date Range Reported: 12/1/2001 - 12/10/2004

Report No.	Date	Time	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil
2001-21706	12/12/01	09:57	69	South	Rear-End	Other Motor Vehicle	North	Proceeding Straight	North	Stopped In Road	Unsafe Speed	1	0
2002-05380	3/31/02	14:55	0	In Int.	Broadside	Other Motor Vehicle	East	Proceeding Straight	North	Proceeding Straight	Driving Under Influence	6	0
2002-06045	4/11/02	11:18	0	In Int.	Broadside	Other Motor Vehicle	South	Making Left Turn	North	Proceeding Straight	Auto R/W Violation	1	0
2002-15186	9/8/02	14:56	0	In Int.	Broadside	Other Motor Vehicle	South	Making Left Turn	North	Proceeding Straight	Auto R/W Violation	0	0
2002-18604	10/30/02	20:13	70	South	Rear-End	Other Motor Vehicle	North	Proceeding Straight	North	Stopped In Road	Unsafe Speed	2	0
2002-19148	11/8/02	13:16	0	In Int.	Broadside	Other Motor Vehicle	North	Making Left Turn	South	Proceeding Straight	Auto R/W Violation	0	0
2002-20560	12/2/02	07:20	0	In Int.	Broadside	Bicycle	North	Entering Traffic	East	Making Right Turn	Wrong Side of Road	1	0
2002-21935	12/25/02	19:32	0	In Int.	Broadside	Other Motor Vehicle	South	Making Left Turn	North	Proceeding Straight	Auto R/W Violation	0	0
2003-04202	3/6/03	16:00	0	In Int.	Broadside	Other Motor Vehicle	East	Making Right Turn	East	Making Right Turn	Unknown	0	0
2003-04611	3/12/03	15:41	30	West	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	0	0
2003-12489	7/10/03	14:40	150	South	Rear-End	Other Motor Vehicle	North	Proceeding Straight	North	Stopped In Road	Unsafe Speed	1	0
2003-13881	7/30/03	17:59	34	West	Rear-End	Other Motor Vehicle	East	Making Right Turn	East	Slowing/Stopping	Following Too Closely	0	0
2003-14264	8/5/03	00:13	0	In Int.	Broadside	Other Motor Vehicle	South	Proceeding Straight	West	Proceeding Straight	Traffic Signals and Signs	0	0
2003-14772	8/12/03	12:37	0	In Int.	Broadside	Other Motor Vehicle	North	Entering Traffic	East	Proceeding Straight	Auto R/W Violation	1	0
2003-22242	12/6/03	14:30	100	West	Rear-End	Other Motor Vehicle	East	Proceeding Straight	East	Stopped In Road	Unsafe Speed	2	0

Color Legend - Highest Degree of Injury

Medium Blue = Fatal

Purple = Severe Injury

Green = Other Visible Injury

Teal = Complaint of Pain

Dark Blue = Property Damage Only

Settings Used For Query

Parameter	Setting
Limit 1	Do Not Include Intersection Related
Limit 2	Do Not Include Intersection Related
Intermediate Intersections	Do Not Include Intersection Related