J.V. Burkes & Associates, Inc.
1805 Shortcut Highway
Slidell, Louisiana 70458

985.649.0075 office
985.649.0154 fax
www.jvburkes.com

DATE: November 26, 2024

TO: Mr. Peter Tufaro
Vela Developments, LLC
518 Marina Road
Chalmette, LA 70043

FROM: Johnny W. Bordelon, P.E., P.T.O.E.
J.V. Burkes & Associates

STATE OF LOUISIANA
JOHNNY W. BORDELON
REG. NO. 27444
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEER
11/26/24

SUBJECT: **1951 Gause Boulevard Development – Traffic Impact Analysis (Revised)**

This report presents the findings of a Traffic Impact Analysis (TIA) for the 1951 Gause Boulevard development located in the southwest quadrant of the intersection of US 190 (Gause Boulevard) @ Bridge Water Drive near the City of Slidell, St. Tammany Parish, Louisiana. *A Site Location Map and Aerial View of Project Site are provided in* ***Attachment A****.*

The proposed development is a building for commercial businesses with a total square footage of 11,200 square feet. The businesses will consist of the following.

- Small Office Building (9,700 S.F.)
- Fast-Food Restaurant with Drive-Through Window (1,500 S.F.)

Two access connections are proposed for the site. The first is a right-in/right-out only driveway along US 190 (Gause Boulevard) already permitted by DOTD, and the second an exit only driveway located along Bridge Water Drive. ***Attachment A*** *provides the site plan for the proposed development including the proposed exit only driveway along Bridge Water Drive.*

This analysis assessed the potential impact of the proposed development on the present traffic operation of the adjacent roadways and nearby intersection. The study scope provided by St. Tammany Parish included the following intersections in the study area.

- US 190 (Gause Boulevard) @ Bridge Water Drive
- All Proposed Driveway Locations

Following are the results of the Traffic Impact Analysis.

Traffic Volume Counts

48-hour traffic volume counts in 15-minute intervals were collected along US 190 (Gause Boulevard) near Bridge Water Drive.

These counts indicate the following Average Daily Traffic (ADT) along the roadways.

US 190 (Gause Boulevard) near Bridge Water Drive 28,000 vehicles/day (2023)

The traffic volume counts are provided in ***Appendix A.***

Peak Hour Determination

A review of the graphs and tables of the traffic volume counts indicated morning and afternoon peak periods occurring between 7:00 – 9:00 A.M. and 4:00 – 6:00 P.M., respectively. Peak Period Turning Movement Counts (TMC) were then collected at the existing intersection of US 190 (Gause Boulevard) @ Bridge Water Drive. *The raw Peak Period TMC's are provided in* ***Appendix B***. The counts and analysis show the peak hours of traffic occurring between 7:30 – 8:30 A.M. in the morning and 4:30 – 5:30 P.M. in the afternoon.

ITE Trip Generation

Estimates of the traffic generated by the proposed development were determined using the Institute of Transportation Engineers report Trip Generation (11th Edition) and are shown in the table below.

TRIP GENERATION RATES ITE Land Use (11th Edition)	Units	A.M. Peak Hour						
		Total	Enter			Exit		
			% of Total	Rate of Pass-Bys	New	% of Total	Rate of Pass-Bys	New
(712) Small Offic Building	9,700 Sq. Ft.	16	82% 13	0.00 0	13	18% 3	0.00 0	3
(934) Fast-Food Restaurant with Drive-Through Window	1,500 Sq. Ft.	67	51% 34	0.50 17	17	49% 33	0.50 17	16
Total		83	47	17	30	36	17	19

TRIP GENERATION RATES ITE Land Use (11th Edition)	Units	P.M. Peak Hour						
		Total	Enter			Exit		
			% of Total	Rate of Pass-Bys	New	% of Total	Rate of Pass-Bys	New
(712) Small Offic Building	9,700 Sq. Ft.	21	34% 7	0.00 0	7	66% 14	0.00 0	14
(934) Fast-Food Restaurant with Drive-Through Window	1,500 Sq. Ft.	50	52% 26	0.55 14	12	48% 24	0.55 14	10
Total		71	33	14	19	38	14	24

ITE Trip Generation (Continued)

Directional distribution of traffic to the development was established based on review of existing peak hour traffic counts and established land-use in the region. Following this directional distribution of traffic, the projected numbers of peak hour new trips and pass-by trips resulting from the development were assigned onto the surrounding roadways. Future peak hour traffic volumes were achieved by adding the generated new trips and pass-by trips to the existing peak hour traffic volumes with a 2% traffic growth applied to the existing background traffic. *The Trip Generation diagrams are provided in* ***Appendix C.***

Level of Service Analysis

A Level of Service (LOS) analysis was performed for existing and expected future traffic conditions resulting from the development using Synchro Software. *The table below provides a comparison of Existing Versus Future results of the LOS analysis for both peak hours. Synchro Software output files are provided in* ***Appendix C***

			A.M. Peak Hour				P.M. Peak Hour			
Intersection	**Approach**		**Existing**		**Future**		**Existing**		**Future**	
			DELAY (Sec/Veh) V/C Ratio 95th Queue (ft)	**LOS**	**DELAY (Sec/Veh) V/C Ratio 95th Queue (ft)**	**LOS**	**DELAY (Sec/Veh) V/C Ratio 95th Queue (ft)**	**LOS**	**DELAY (Sec/Veh) V/C Ratio 95th Queue (ft)**	**LOS**
US 190 (Gause Blvd) (EB & WB) @ Bridge Water Drive (NB) **One-Way Stop**	EB	Thru	0.0/0.37/0	-	0.0/0.38/0	-	0.0/0.51/0	-	0.0/0.52/0	-
		Thru/RT	0.0/0.20/0	-	0.0/0.20/0	-	0.0/0.28/0	-	0.0/0.29/0	-
	WB	LT	10.1/0.00/0	B	10.2/0.00/0	B	12.3/0.03/2	B	12.6/0.03/2	B
		Thru (2 Lns)	0.0/0.36/0		0.0/0.37/0		0.0/0.37/0		0.0/0.38/0	
	NB	LT/RT	16.1/0.16/14	C	19.8/0.22/20	C	22.1/0.09/7	C	25.9/0.23/21	D
	Intersection LOS		0.5	-	0.6	-	0.2	-	0.5	-
US 190 (Gause Blvd) (EB & WB) @ Proposed Driveway A (NB) **One-Way Stop**	EB	Thru	NA	NA	0.0/0.38/0	-	NA	NA	0.0/0.54/0	-
		Thru/RT	NA	NA	0.0/0.22/0	-	NA	NA	0.0/0.29/0	-
	WB	Thru (2 Lns)	NA	NA	0.0/0.39/0	-	NA	NA	0.0/0.39/0	-
	NB	RT	NA	NA	12.3/0.02/1	B	NA	NA	14.8/0.03/2	B
	Intersection LOS		NA	NA	0.0	-	NA	NA	0.1	-
Bridge Water Drive (NB & SB) @ Proposed Driveway B (EB) **One-Way Stop**	NB	Thru	NA	NA	0.0/0.02/0	-	NA	NA	0.0/0.01/0	-
	SB	Thru	NA	NA	0.0/0.01/0	-	NA	NA	0.0/0.04/0	-
	EB	LT/RT	NA	NA	8.9/0.03/3	A	NA	NA	9.1/0.03/3	A
	Intersection LOS		NA	NA	3.0	-	NA	NA	2.3	-

Findings and Recommendations

As noted earlier, DOTD has already issued a permit for the right-in/right-out only driveway connection (Proposed Driveway A) along US 190 (Gause Boulevard).

The Level of Service Analysis indicates the development will have minor impact on the existing intersection of US 190 (Gause Boulevard) @ Bridge Water Drive, with the overall intersection delay seeing a 0.1 and 0.3 second increase in delay during the A.M. and P.M. peak hours, respectively.

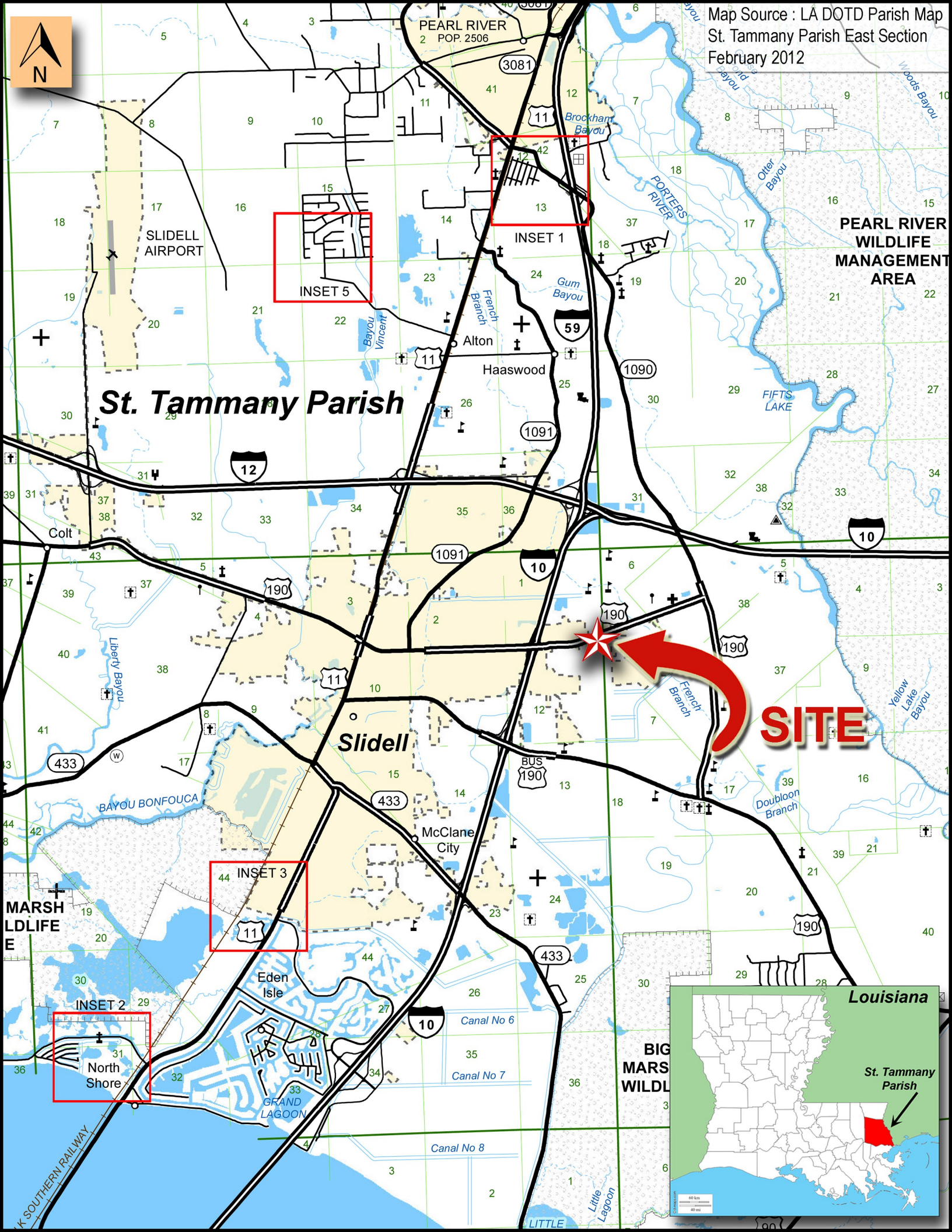
The Level of Service Analysis also reveals that both proposed driveway connections to the development (Proposed Driveway A and Proposed Driveway B) will operate at very good levels of service during both the A.M. and P.M. peak hours.

Based on the results of this analysis the following driveway connection is recommended in addition to the previously approved DOTD driveway connection along US 190 (Gause Boulevard).

- **New Access Connection – Bridge Water Drive @ Proposed Driveway B.** This driveway will serve as an exit only connection allowing left-turns and right-turns out of the development. The connection will operate with stop sign control.

THIS CONCLUDES THE TRAFFIC IMPACT ANALYSIS NARRATIVE

ATTACHMENT A

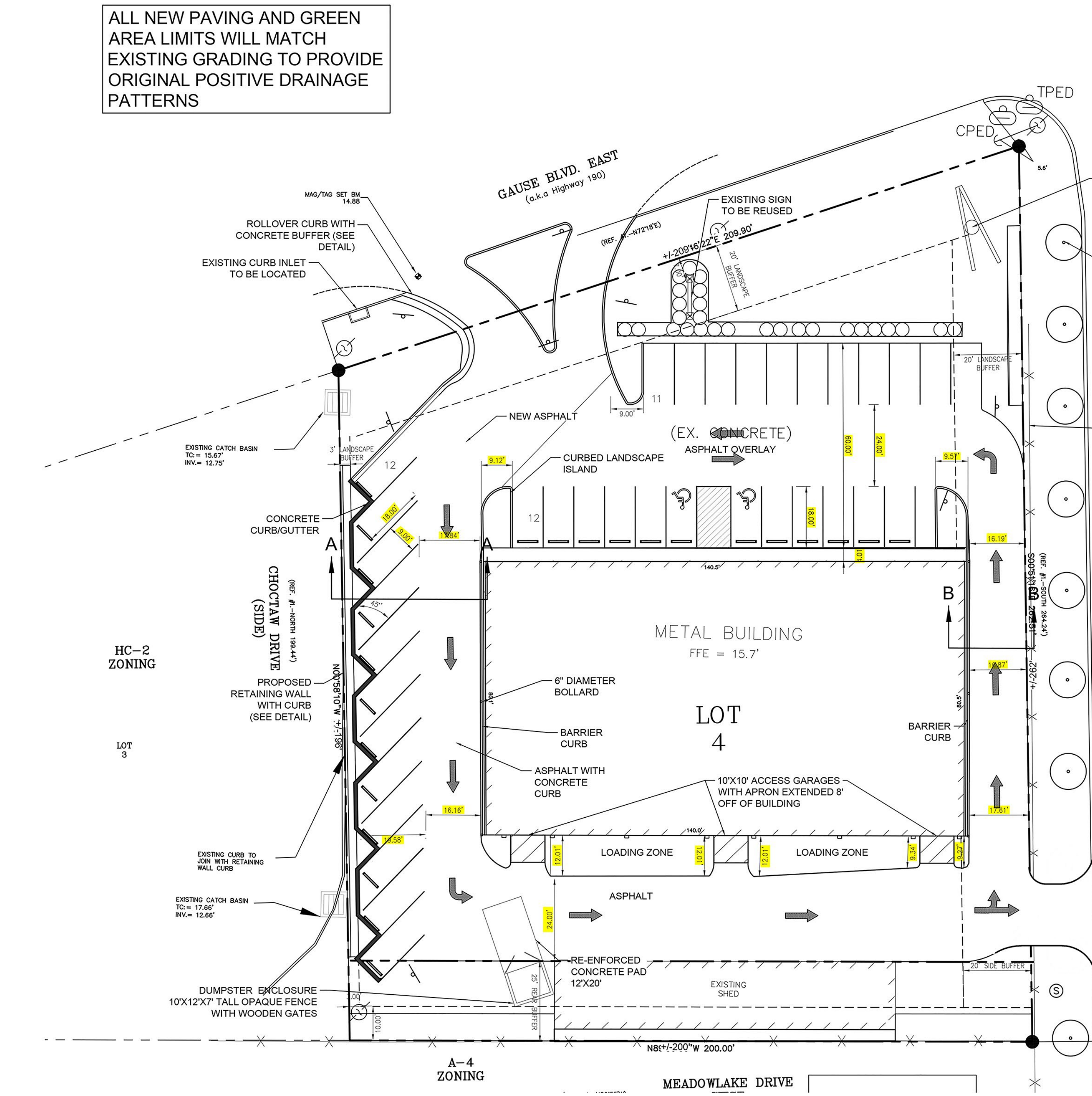

Map Source : LA DOTD Parish Map
St. Tammany Parish East Section
February 2012
N
PEARL RIVER
POP. 2506
3081
SLIDELL
AIRPORT
INSET 5
INSET 1
Brockham
Bayou
PORTERS
RIVER
Otter
Bayou
Woods Bayou
PEARL RIVER
WILDLIFE
MANAGEMENT
AREA
Gum
Bayou
French
Branch
Bayou
Vincent
Alton
Haaswood
59
1090
FIFTS
LAKE
St. Tammany Parish
12
1091
10
Colt
190
Liberty Bayou
11
Slidell
SITE
French
Branch
Yellow
Lake
Bayou
433
BUS
190
BAYOU BONFOUCA
McClane
City
Doubloon
Branch
INSET 3
MARSH
LDLIFE
E
Eden
Isle
INSET 2
North
Shore
Canal No 6
Canal No 7
GRAND
LAGOON
Canal No 8
BIG
MARS
WILDL
Little
Lagoon
LITTLE
K SOUTHERN RAILWAY
Louisiana
St. Tammany
Parish


N
Gause Boulevard
190
190
Bridge Water Drive
Project Site
Google

GENERAL NOTES

1. Bases, anchor bolts, conduit, and wiring for all signs are by the General Contractor.
2. 3/4" empty conduit to locations shown at the lot perimeter for lot lighting is by the General Contractor. Lighting fixtures, bases, poles, conduit, and wiring are by the General Contractor.
3. Lot lighting concrete footings to conform with the soils report recommendations for this particular site.
4. The Contractor shall coordinate with all utility companies to determine exact point of service connection at existing utility. Refer to the building electrical and plumbing drawings for utility service entrance locations, sizes, and circuiting.
5. General Contractor must provide exact "as built" information upon completion.
6. All elevations shown are in reference to the benchmark and must be verified by the General Contractor at groundbreaking.
7. Curb elevations shall be 6" above finish pavement unless noted otherwise.
8. All landscape areas shall be rough graded to 6" below top of all walks and curbs. Finished grading, landscaping and sprinkler system are by the Owner/Operator.
9. It is strongly recommended that no contractual agreements of any kind be signed prior to receiving and thoroughly reviewing all approvals from all of the regulatory authorities having jurisdiction over this project.
10. Due to the nature of the work, all dimensions shown shall be considered approximate. Contractor shall field verify all dimensions prior to beginning construction. Shop drawings shall be submitted to the Architect and/or Engineer for approval prior to fabrication or installation of any item. Failure to adhere to this procedure shall place full responsibility for an errors directly upon the Contractor.
11. Sidewalks around building shall be same subgrade preparation as building foundation.
12. All materials and construction within easements and R.O.W. shall conform to all governing authorities' jurisdictional standard construction details and specifications.
13. Topographic information taken from a Topographic Survey performed by J.V. Burkes & Associates, Inc. The Contractor shall notify the Engineer immediately, in writing of any discrepancies or omissions to the topographic information. The Contractor(s) shall be responsible for confirming the location (horizontal/vertical) of any buried cables, conduits, pipes, and structures (storm sewer, sanitary sewer, water, gas, television, telephone, etc.) which impacts the construction site. The Contractor(s) shall notify the Owner and Engineer if any discrepancies are found between the actual conditions versus the data contained in the construction plans. Any costs incurred as the result of not confirming the actual location (horizontal/vertical) of said cables, conduits, pipes, and structures shall be borne by the Contractor. Additionally, the Contractor(s) shall notify the Owner and Engineer if any errors or discrepancies are found on the construction documents (ps&e), which negatively impact the project. The Engineer and Owner shall be indemnified of problems and/or cost which may result from the Contractor's failure to notify Engineer and Owner.
14. Owner reserves the right to request a compaction and/or a core sample. If tests prove correct, per the soils report, tests will be at the expense of Owner, otherwise G.C. will be charged.
15. Contractor shall comply to the fullest extent with the latest standards of OSHA directives or any other agency having jurisdiction for excavation and trenching procedure. Contractor shall use support systems, sloping, benching, or other means of protection, including but is not limited to, access and egress from all excavation and trenching. Contractor is responsible to comply with performance criteria for OSHA.

ALL NEW PAVING AND GREEN AREA LIMITS WILL MATCH EXISTING GRADING TO PROVIDE ORIGINAL POSITIVE DRAINAGE PATTERNS

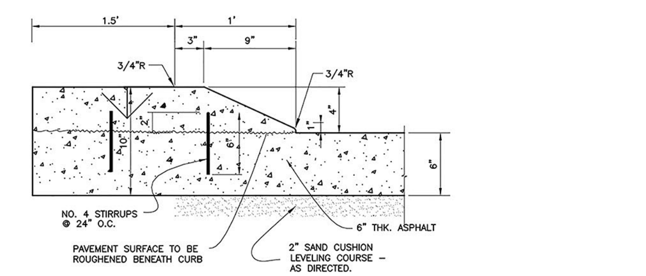


STRIPING LEGEND

STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN AND DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT YELLOW TM5495
HANDICAP STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN AND DRY. TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT BLUE "H.C" BLUE

SITE NOTES

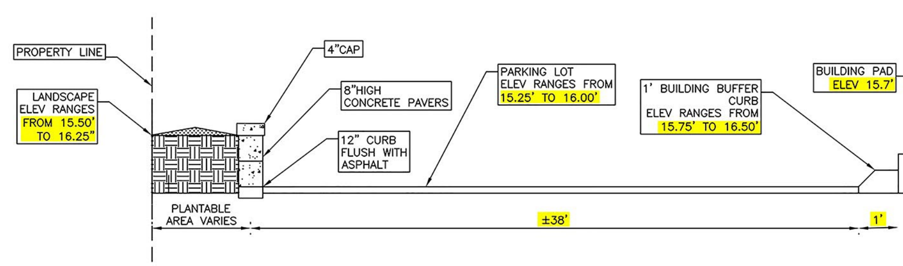
1. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS, PINS. AND BENCHMARKS
2. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO: DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
3. ALL WORK ON THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH SITE WORK SPECIFICATIONS.
4. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE PUBLIC DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: CONSTRUCTION FENCING, BARRICADES, SIGNAGE, ETC.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES AND NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION.
7. REFERENCE ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND UTILITY PLANS FOR FURTHER IMPROVEMENTS WITHIN THIS CONTRACT.
8. REFERENCE LANDSCAPING PLANS FOR MOUNDING, PLANTING, AND IRRIGATION CONSTRUCTION.
9. ALL INSPECTION AND TESTING WILL BE TO THE CITY OF SLIDELL STANDARDS.
10. ALL P.C.C CURB, GUTTER, SIDEWALK, AND SLOPE PAVING SHALL BE CLASS AA OR 4000 PSI, WITH BROOM FINISH, UNLESS OTHERWISE INDICATED.
11. CONCRETE SIDEWALKS SHALL HAVE 1/2" EXPANSION JOINTS EVERY 30 FOOT INTERVAL, AT ALL POINTS ABUTTING BUILDINGS OR STRUCTURES, AND AT ALL CURB RETURNS UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER OR RECORD. EXPANSION JOINTS ABUTTING BUILDINGS SHALL HAVE SILICONE APPLIED TO THE JOINT TO PREVENT WATER INTRUSION. WEAKENED PLANE JOINTS SHALL BE EVERY 10 FEET AND STRUCK-THRU AS THE SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION INDICATES.
12. IN ALL AREAS WHERE NEW ASPHALT PAVEMENT OR PATCH IS TO MATCH EXISTING PAVEMENT, THE CONTRACTOR SHALL SAWCUT AND REMOVE EXISTING PAVEMENT 24" FROM SUCH IMPROVEMENTS OR AS INDICATED ON THE PLANS. NEW PAVEMENT OR PAVEMENT PATCH SHALL CONFORM TO THE EXISTING PAVEMENT AT THIS POINT AND TRANSITION SMOOTHLY TO THE NEW IMPROVEMENTS.
13. IN THE AREAS WHERE NEW CURB, GUTTER OR SIDEWALKS IS TO THE MATCHING EXISTING, THE CONTRACTOR SHALL REMOVE THE EXISTING CURB, GUTTER OR SIDEWALK TO THE BUILDING SITE.
14. THE CONTRACTOR SHALL CLOSELY COORDINATE CONSTRUCTION WITH OTHER TRADE CONTRACTORS, TO INSURE ADEQUATE ACCESS TO THE BUILDING SITE.
15. THE CONTRACTOR SHALL MAINTAIN FIRE ACCESS TO ALL THE BUILDINGS TO THE SATISFACTION OF THE CITY'S FIRE DEPARTMENT.
16. ALL DIMENSIONS AND DISTANCES ARE TO FRONT FACE OF CURB, CURB RETURNS, FACE OF BUILDINGS, FACE OF WALL, FLOWLINE, PROPERTY LINE, CENTER OF STRIPING, CENTERLINE OF PIPE OR MANHOLES, CENTER OF FENCING, OR END OF IMPROVEMENTS.
17. THE MAIN BUILDING IS 11,200 SQUARE FEET AND 9700 SQUARE FEET WILL BE FOR OFFICE/PROFESSIONAL AND 1500 SQUARE FEET WILL BE FOR RESTAURANT USE. THE REAR SHED IS 2000 SQUARE FEET AND WILL BE USED AS STORAGE FOR THE FRONT TENANT.
18. THE PARKING REQUIREMENTS WERE DETERMINED FOR OFFICE/PROFESSIONAL AND RESTAURANT USE: 1 SPACE PER EACH 350 SQUARE FEET = 9700 SF/350 SF = 28 REQUIRED SPOTS FOR OFFICE/PROFESSIONAL. THE PROPOSED PARKING HAS 33 SPOTS. 1 SPACE PER EACH 3 OCCUPANTS PLUS ONE FOR EACH EMPLOYEE = NO SEATING, 4 EMPLOYEES = 4 SPACES. THE TOTAL REQUIRED PARKING IS 32 SPACES AND THE SITE HAS 35 SPACES.



1 MOUNTABLE CURB WITH CONCRETE BUFFER
Scale: N.T.S.

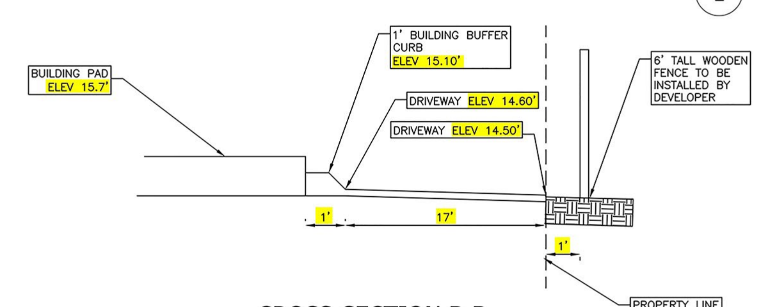
LEGEND

- SEWER MANHOLE , SEWER LINE
- WATER MANHOLE , WATER LINE
- GAS MANHOLE , GAS LINE
- TELE. MANHOLE , TELE. LINE
- DRAIN MANHOLE , DRAIN LINE
- DRAIN INLET , DRAIN LINE
- POWER POLE / OVERHEAD LINES ELECTRIC,TELEPHONE,CABLE TV
- ELEC. TOWER / OVERHEAD LINES
- CATCH BASIN
- LIGHT STANDARD
- TRAFFIC LIGHT
- TELE. , ELEC. , CATV PEDESTAL
- GAS , WATER , ELECTRIC METER
- GAS , WATER VALVE
- SEWER , DRAIN CLEANOUT
- FIRE HYDRANT
- GUY WIRE ANCHOR
- SIGN
- PYLON
- MAILBOX
- TREE
- SHRUB
- FENCE



CROSS-SECTION A-A SCALE: N.T.S

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



CROSS-SECTION B-B SCALE: N.T.S

I CERTIFY THAT THIS PLAT DOES REPRESENT AN ACTUAL GROUND SURVEY AND THAT TO THE BEST OF MY KNOWLEDGE NO ENCROACHMENTS EXIST EITHER WAY ACROSS ANY OF THE PROPERTY LINES, EXCEPT AS SHOWN. ENCUMBRANCES SHOWN HEREON ARE NOT NECESSARILY EXCLUSIVE. ENCUMBRANCES OF RECORD AS SHOWN ON TITLE OPINION OR TITLE POLICY WILL BE ADDED HERETO UPON REQUEST, AS SURVEYOR HAS NOT PERFORMED ANY TITLE SEARCH OR ABSTRACT.

PROPERTY IS NOT SURVEYED IN ACCORDANCE WITH THE LOUISIANA "STANDARDS OF PRACTICE FOR PROPERTY BOUNDARY SURVEYS." BEARINGS ARE BASED ON RECORD BEARINGS UNLESS NOTED OTHERWISE.

Commercial Plans RECEIVED 7/20/2023 DEPARTMENT OF ENGINEERING

ENGINEERING REVIEW COPY

SEAN M. BURKES LA REG. NO. 27642

J.V. Burkes & Associates, Inc.
SURVEYING ENGINEERING ENVIRONMENTAL
1805 Shortcut Highway Slidell, Louisiana 70458
E-mail: jvbassoc@jvburkes.com
Phone: 985-649-0075 Fax: 985-649-0154

NO.	DESCRIPTION REVISIONS	DATE	BY	CHK'D

SITE PLAN
LOT 4, SLIDELL SUBURBAN ACRES SUBDIVISION IN SECTION 1, T-9-S, R-14-E, GREENSBURG LAND DISTRICT ST. TAMMANY PARISH, LOUISIANA

VELA DEVELOPMENTS, LLC

DECLARATION IS MADE TO ORIGINAL PURCHASER OF THE SURVEY, IT IS NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS. SURVEY IS VALID ONLY IF PRINT HAS ORIGINAL SEAL OF SURVEYOR.

SCALE:	1" = 20'
DATE:	3/22/2023
DRAWN BY: EJB	CHECKED BY: SMB
DWG. NO.	20220363
SHEET	1 OF 10

APPENDIX A

Tuesday *May 2, 2023*

US 190 (Gause Boulevard) near Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Major Street: EB & WB

EB: US 190 (Gause Boulevard)

WB: US 190 (Gause Boulevard)

Time Start	Major Street				
	EB	WB	Total		
12 A.M.	42	19	61		
1 A.M.	27	18	45		
2 A.M.	18	32	50		
3 A.M.	13	44	57		
4 A.M.	32	116	148		
5 A.M.	58	282	340		
6 A.M.	268	669	937		
7 A.M.	670	1194	1864		
8 A.M.	951	1058	2009		
9 A.M.	802	946	1748		
10 A.M.	803	931	1734		
11 A.M.	922	1048	1970		
12 P.M.	1009	979	1988		
1 P.M.	959	895	1854		
2 P.M.	1118	990	2108		
3 P.M.	1255	971	2226		
4 P.M.	1160	1164	2324		
5 P.M.	1083	915	1998		
6 P.M.	872	690	1562		
7 P.M.	657	552	1209		
8 P.M.	514	356	870		
9 P.M.	285	189	474		
10 P.M.	187	97	284		
11 P.M.	75	56	131		
Total	13780	14211	27991		

Wednesday *May 3, 2023*

US 190 (Gause Boulevard) near Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Major Street: EB & WB
US 190 (Gause Boulevard)
US 190 (Gause Boulevard)

Time Start	Major Street				
	EB	WB	Total		
12 A.M.	45	26	71		
1 A.M.	29	22	51		
2 A.M.	18	30	48		
3 A.M.	17	47	64		
4 A.M.	29	102	131		
5 A.M.	59	290	349		
6 A.M.	290	662	952		
7 A.M.	684	1203	1887		
8 A.M.	923	1020	1943		
9 A.M.	830	997	1827		
10 A.M.	847	964	1811		
11 A.M.	932	977	1909		
12 P.M.	1043	1028	2071		
1 P.M.	1112	1013	2125		
2 P.M.	1150	1036	2186		
3 P.M.	1205	955	2160		
4 P.M.	1192	1086	2278		
5 P.M.	1121	911	2032		
6 P.M.	813	746	1559		
7 P.M.	691	546	1237		
8 P.M.	579	390	969		
9 P.M.	356	275	631		
10 P.M.	184	119	303		
11 P.M.	100	72	172		
Total	14249	14517	28766		

Tuesday - Wednesday (Average)

May 2-3, 2023

US 190 (Gause Boulevard) near Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Major Street: EB & WB

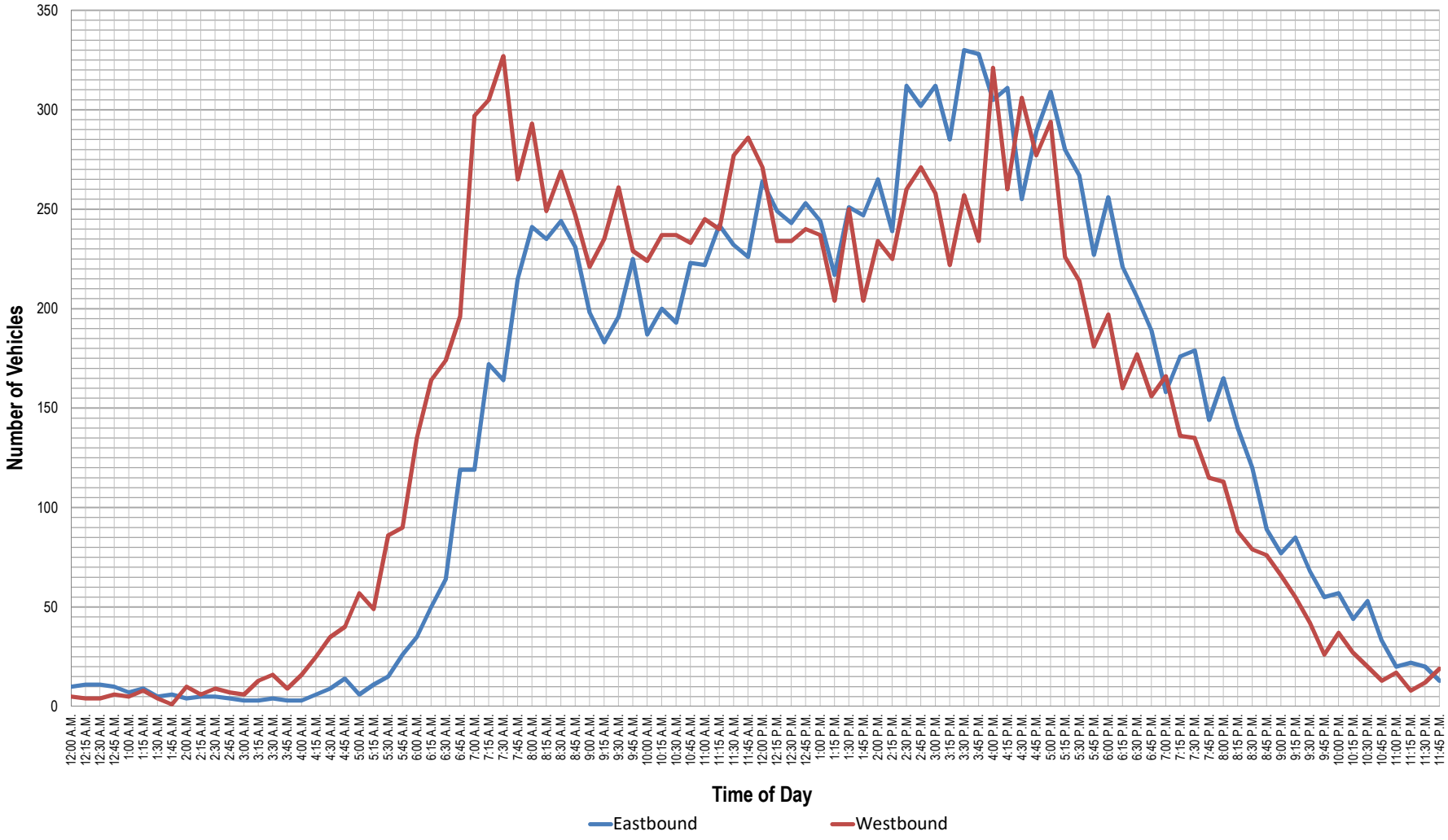
EB: US 190 (Gause Boulevard)

WB: US 190 (Gause Boulevard)

Time Start	Major Street				
	EB	WB	Total		
12 A.M.	44	23	66		
1 A.M.	28	20	48		
2 A.M.	18	31	49		
3 A.M.	15	46	61		
4 A.M.	31	109	140		
5 A.M.	59	286	345		
6 A.M.	279	666	945		
7 A.M.	677	1199	1876		
8 A.M.	937	1039	1976		
9 A.M.	816	972	1788		
10 A.M.	825	948	1773		
11 A.M.	927	1013	1940		
12 P.M.	1026	1004	2030		
1 P.M.	1036	954	1990		
2 P.M.	1134	1013	2147		
3 P.M.	1230	963	2193		
4 P.M.	1176	1125	2301		
5 P.M.	1102	913	2015		
6 P.M.	843	718	1561		
7 P.M.	674	549	1223		
8 P.M.	547	373	920		
9 P.M.	321	232	553		
10 P.M.	186	108	294		
11 P.M.	88	64	152		
Total	14015	14364	28379		

US 190 (Gause Boulevard) near Bridge Water Drive

Near the City of Slidell, St. Tammany Parish



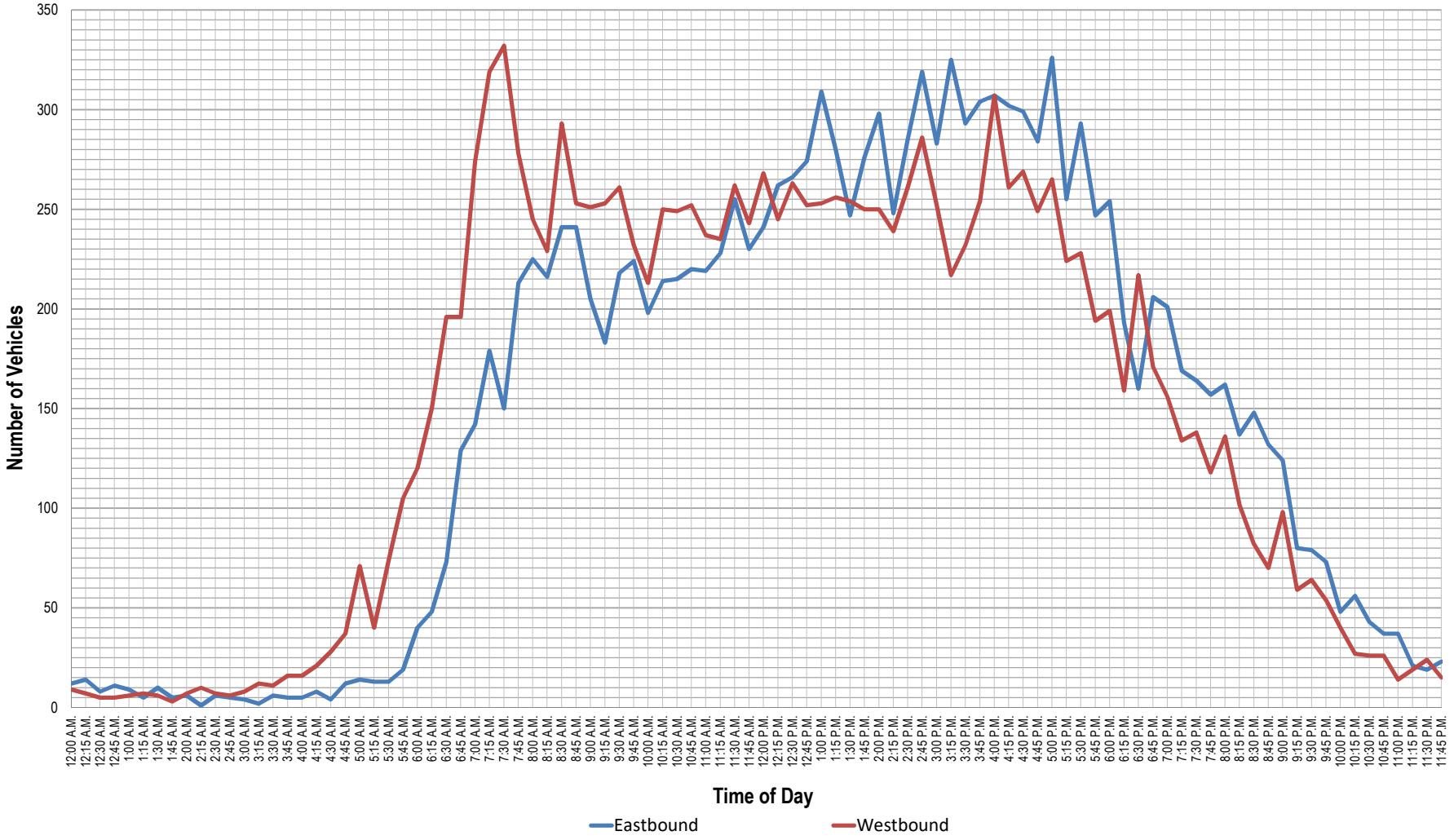
Tuesday
May 2, 2023

24-Hour, 15-Minute Interval Traffic Volumes

Eastbound US 190 (Gause Boulevard)
Westbound US 190 (Gause Boulevard)

US 190 (Gause Boulevard) near Bridge Water Drive

Near the City of Slidell, St. Tammany Parish



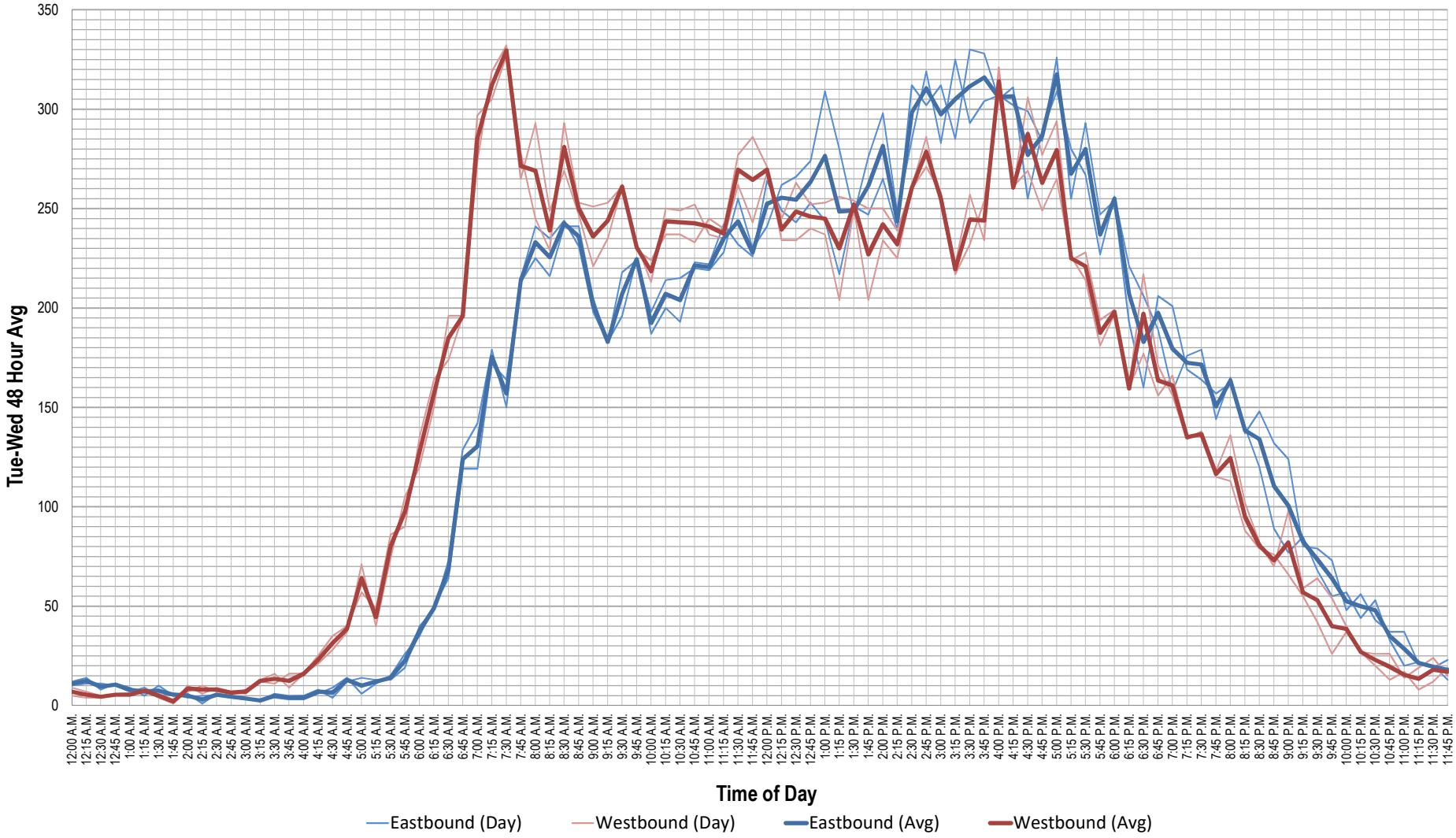
Wednesday
May 3, 2023

24-Hour, 15-Minute Interval Traffic Volumes

Eastbound US 190 (Gause Boulevard)
Westbound US 190 (Gause Boulevard)

US 190 (Gauss Boulevard) near Bridge Water Drive

Near the City of Slidell, St. Tammany Parish



Tuesday - Wednesday (48-Hour Average)

May 2-3, 2023

24-Hour, 15-Minute Interval Traffic Volumes

Eastbound **US 190 (Gause Boulevard)**
Westbound **US 190 (Gause Boulevard)**

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Tuesday, 05/02/2023
Unit ID: JVB 2500 Counter 3
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Eastbound Volume
00:00 - 00:14	10
00:15 - 00:29	11
00:30 - 00:44	11
00:45 - 00:59	10
01:00 - 01:14	7
01:15 - 01:29	9
01:30 - 01:44	5
01:45 - 01:59	6
02:00 - 02:14	4
02:15 - 02:29	5
02:30 - 02:44	5
02:45 - 02:59	4
03:00 - 03:14	3
03:15 - 03:29	3
03:30 - 03:44	4
03:45 - 03:59	3
04:00 - 04:14	3
04:15 - 04:29	6
04:30 - 04:44	9
04:45 - 04:59	14
05:00 - 05:14	6
05:15 - 05:29	11
05:30 - 05:44	15
05:45 - 05:59	26
06:00 - 06:14	35
06:15 - 06:29	50
06:30 - 06:44	64
06:45 - 06:59	119
07:00 - 07:14	119
07:15 - 07:29	172
07:30 - 07:44	164
07:45 - 07:59	215
08:00 - 08:14	241
08:15 - 08:29	235
08:30 - 08:44	244
08:45 - 08:59	231
09:00 - 09:14	198
09:15 - 09:29	183
09:30 - 09:44	196
09:45 - 09:59	225
10:00 - 10:14	187
10:15 - 10:29	200
10:30 - 10:44	193
10:45 - 10:59	223
11:00 - 11:14	222
11:15 - 11:29	242
11:30 - 11:44	232
11:45 - 11:59	226
12:00 - 12:14	264
12:15 - 12:29	249
12:30 - 12:44	243
12:45 - 12:59	253

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Tuesday, 05/02/2023
Unit ID: JVB 2500 Counter 3
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Eastbound Volume
13:00 - 13:14	244
13:15 - 13:29	217
13:30 - 13:44	251
13:45 - 13:59	247
14:00 - 14:14	265
14:15 - 14:29	239
14:30 - 14:44	312
14:45 - 14:59	302
15:00 - 15:14	312
15:15 - 15:29	285
15:30 - 15:44	330
15:45 - 15:59	328
16:00 - 16:14	305
16:15 - 16:29	311
16:30 - 16:44	255
16:45 - 16:59	289
17:00 - 17:14	309
17:15 - 17:29	280
17:30 - 17:44	267
17:45 - 17:59	227
18:00 - 18:14	256
18:15 - 18:29	221
18:30 - 18:44	206
18:45 - 18:59	189
19:00 - 19:14	158
19:15 - 19:29	176
19:30 - 19:44	179
19:45 - 19:59	144
20:00 - 20:14	165
20:15 - 20:29	140
20:30 - 20:44	120
20:45 - 20:59	89
21:00 - 21:14	77
21:15 - 21:29	85
21:30 - 21:44	68
21:45 - 21:59	55
22:00 - 22:14	57
22:15 - 22:29	44
22:30 - 22:44	53
22:45 - 22:59	33
23:00 - 23:14	20
23:15 - 23:29	22
23:30 - 23:44	20
23:45 - 23:59	13
Totals	**13780**
AM Peak Time	**07:54 - 08:53**
AM Peak Volume	**951**
PM Peak Time	**15:33 - 16:32**
PM Peak Volume	**1280**

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Wednesday, 05/03/2023
Unit ID: JVB 2500 Counter 3
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Eastbound Volume
00:00 - 00:14	12
00:15 - 00:29	14
00:30 - 00:44	8
00:45 - 00:59	11
01:00 - 01:14	9
01:15 - 01:29	5
01:30 - 01:44	10
01:45 - 01:59	5
02:00 - 02:14	6
02:15 - 02:29	1
02:30 - 02:44	6
02:45 - 02:59	5
03:00 - 03:14	4
03:15 - 03:29	2
03:30 - 03:44	6
03:45 - 03:59	5
04:00 - 04:14	5
04:15 - 04:29	8
04:30 - 04:44	4
04:45 - 04:59	12
05:00 - 05:14	14
05:15 - 05:29	13
05:30 - 05:44	13
05:45 - 05:59	19
06:00 - 06:14	40
06:15 - 06:29	48
06:30 - 06:44	73
06:45 - 06:59	129
07:00 - 07:14	142
07:15 - 07:29	179
07:30 - 07:44	150
07:45 - 07:59	213
08:00 - 08:14	225
08:15 - 08:29	216
08:30 - 08:44	241
08:45 - 08:59	241
09:00 - 09:14	205
09:15 - 09:29	183
09:30 - 09:44	218
09:45 - 09:59	224
10:00 - 10:14	198
10:15 - 10:29	214
10:30 - 10:44	215
10:45 - 10:59	220
11:00 - 11:14	219
11:15 - 11:29	228
11:30 - 11:44	255
11:45 - 11:59	230
12:00 - 12:14	241
12:15 - 12:29	262
12:30 - 12:44	266
12:45 - 12:59	274

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Wednesday, 05/03/2023
Unit ID: JVB 2500 Counter 3
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Eastbound Volume
13:00 - 13:14	309
13:15 - 13:29	280
13:30 - 13:44	247
13:45 - 13:59	276
14:00 - 14:14	298
14:15 - 14:29	248
14:30 - 14:44	285
14:45 - 14:59	319
15:00 - 15:14	283
15:15 - 15:29	325
15:30 - 15:44	293
15:45 - 15:59	304
16:00 - 16:14	307
16:15 - 16:29	302
16:30 - 16:44	299
16:45 - 16:59	284
17:00 - 17:14	326
17:15 - 17:29	255
17:30 - 17:44	293
17:45 - 17:59	247
18:00 - 18:14	254
18:15 - 18:29	193
18:30 - 18:44	160
18:45 - 18:59	206
19:00 - 19:14	201
19:15 - 19:29	169
19:30 - 19:44	164
19:45 - 19:59	157
20:00 - 20:14	162
20:15 - 20:29	137
20:30 - 20:44	148
20:45 - 20:59	132
21:00 - 21:14	124
21:15 - 21:29	80
21:30 - 21:44	79
21:45 - 21:59	73
22:00 - 22:14	48
22:15 - 22:29	56
22:30 - 22:44	43
22:45 - 22:59	37
23:00 - 23:14	37
23:15 - 23:29	21
23:30 - 23:44	19
23:45 - 23:59	23
Totals	**14249**
AM Peak Time	**10:58 - 11:57**
AM Peak Volume	**935**
PM Peak Time	**15:22 - 16:21**
PM Peak Volume	**1235**

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Tuesday, 05/02/2023
Unit ID: JVB 2500 Counter 4
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Westbound Volume
00:00 - 00:14	5
00:15 - 00:29	4
00:30 - 00:44	4
00:45 - 00:59	6
01:00 - 01:14	5
01:15 - 01:29	8
01:30 - 01:44	4
01:45 - 01:59	1
02:00 - 02:14	10
02:15 - 02:29	6
02:30 - 02:44	9
02:45 - 02:59	7
03:00 - 03:14	6
03:15 - 03:29	13
03:30 - 03:44	16
03:45 - 03:59	9
04:00 - 04:14	16
04:15 - 04:29	25
04:30 - 04:44	35
04:45 - 04:59	40
05:00 - 05:14	57
05:15 - 05:29	49
05:30 - 05:44	86
05:45 - 05:59	90
06:00 - 06:14	135
06:15 - 06:29	164
06:30 - 06:44	174
06:45 - 06:59	196
07:00 - 07:14	297
07:15 - 07:29	305
07:30 - 07:44	327
07:45 - 07:59	265
08:00 - 08:14	293
08:15 - 08:29	249
08:30 - 08:44	269
08:45 - 08:59	247
09:00 - 09:14	221
09:15 - 09:29	235
09:30 - 09:44	261
09:45 - 09:59	229
10:00 - 10:14	224
10:15 - 10:29	237
10:30 - 10:44	237
10:45 - 10:59	233
11:00 - 11:14	245
11:15 - 11:29	240
11:30 - 11:44	277
11:45 - 11:59	286
12:00 - 12:14	271
12:15 - 12:29	234
12:30 - 12:44	234
12:45 - 12:59	240

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Tuesday, 05/02/2023
Unit ID: JVB 2500 Counter 4
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Westbound Volume
13:00 - 13:14	237
13:15 - 13:29	204
13:30 - 13:44	250
13:45 - 13:59	204
14:00 - 14:14	234
14:15 - 14:29	225
14:30 - 14:44	260
14:45 - 14:59	271
15:00 - 15:14	258
15:15 - 15:29	222
15:30 - 15:44	257
15:45 - 15:59	234
16:00 - 16:14	321
16:15 - 16:29	260
16:30 - 16:44	306
16:45 - 16:59	277
17:00 - 17:14	294
17:15 - 17:29	226
17:30 - 17:44	214
17:45 - 17:59	181
18:00 - 18:14	197
18:15 - 18:29	160
18:30 - 18:44	177
18:45 - 18:59	156
19:00 - 19:14	166
19:15 - 19:29	136
19:30 - 19:44	135
19:45 - 19:59	115
20:00 - 20:14	113
20:15 - 20:29	88
20:30 - 20:44	79
20:45 - 20:59	76
21:00 - 21:14	66
21:15 - 21:29	55
21:30 - 21:44	42
21:45 - 21:59	26
22:00 - 22:14	37
22:15 - 22:29	27
22:30 - 22:44	20
22:45 - 22:59	13
23:00 - 23:14	17
23:15 - 23:29	8
23:30 - 23:44	12
23:45 - 23:59	19
Totals	**14211**
AM Peak Time	**07:07 - 08:06**
AM Peak Volume	**1234**
PM Peak Time	**16:00 - 16:59**
PM Peak Volume	**1164**

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Wednesday, 05/03/2023
Unit ID: JVB 2500 Counter 4
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Westbound Volume
00:00 - 00:14	9
00:15 - 00:29	7
00:30 - 00:44	5
00:45 - 00:59	5
01:00 - 01:14	6
01:15 - 01:29	7
01:30 - 01:44	6
01:45 - 01:59	3
02:00 - 02:14	7
02:15 - 02:29	10
02:30 - 02:44	7
02:45 - 02:59	6
03:00 - 03:14	8
03:15 - 03:29	12
03:30 - 03:44	11
03:45 - 03:59	16
04:00 - 04:14	16
04:15 - 04:29	21
04:30 - 04:44	28
04:45 - 04:59	37
05:00 - 05:14	71
05:15 - 05:29	40
05:30 - 05:44	74
05:45 - 05:59	105
06:00 - 06:14	120
06:15 - 06:29	150
06:30 - 06:44	196
06:45 - 06:59	196
07:00 - 07:14	274
07:15 - 07:29	319
07:30 - 07:44	332
07:45 - 07:59	278
08:00 - 08:14	245
08:15 - 08:29	229
08:30 - 08:44	293
08:45 - 08:59	253
09:00 - 09:14	251
09:15 - 09:29	253
09:30 - 09:44	261
09:45 - 09:59	232
10:00 - 10:14	213
10:15 - 10:29	250
10:30 - 10:44	249
10:45 - 10:59	252
11:00 - 11:14	237
11:15 - 11:29	235
11:30 - 11:44	262
11:45 - 11:59	243
12:00 - 12:14	268
12:15 - 12:29	245
12:30 - 12:44	263
12:45 - 12:59	252

J. V. Burkes & Associates

Daily Vehicle Volume Report

Study Date: Wednesday, 05/03/2023
Unit ID: JVB 2500 Counter 4
Location: US 190 (Gause Boulevard)
Comments: Near Bridge Water Drive

	Westbound Volume
13:00 - 13:14	253
13:15 - 13:29	256
13:30 - 13:44	254
13:45 - 13:59	250
14:00 - 14:14	250
14:15 - 14:29	239
14:30 - 14:44	261
14:45 - 14:59	286
15:00 - 15:14	252
15:15 - 15:29	217
15:30 - 15:44	232
15:45 - 15:59	254
16:00 - 16:14	307
16:15 - 16:29	261
16:30 - 16:44	269
16:45 - 16:59	249
17:00 - 17:14	265
17:15 - 17:29	224
17:30 - 17:44	228
17:45 - 17:59	194
18:00 - 18:14	199
18:15 - 18:29	159
18:30 - 18:44	217
18:45 - 18:59	171
19:00 - 19:14	156
19:15 - 19:29	134
19:30 - 19:44	138
19:45 - 19:59	118
20:00 - 20:14	136
20:15 - 20:29	102
20:30 - 20:44	82
20:45 - 20:59	70
21:00 - 21:14	98
21:15 - 21:29	59
21:30 - 21:44	64
21:45 - 21:59	54
22:00 - 22:14	40
22:15 - 22:29	27
22:30 - 22:44	26
22:45 - 22:59	26
23:00 - 23:14	14
23:15 - 23:29	19
23:30 - 23:44	24
23:45 - 23:59	15
Totals	**14517**
AM Peak Time	**06:58 - 07:57**
AM Peak Volume	**1209**
PM Peak Time	**15:53 - 16:52**
PM Peak Volume	**1109**

APPENDIX B

US 190 (Gause Boulevard) @ Bridge Water Drive

The City of Slidell, St. Tammany Parish, Louisiana

File Name : am peak period
Site Code : 00000111
Start Date : 5/10/2024
Page No : 1

Groups Printed- Unshifted

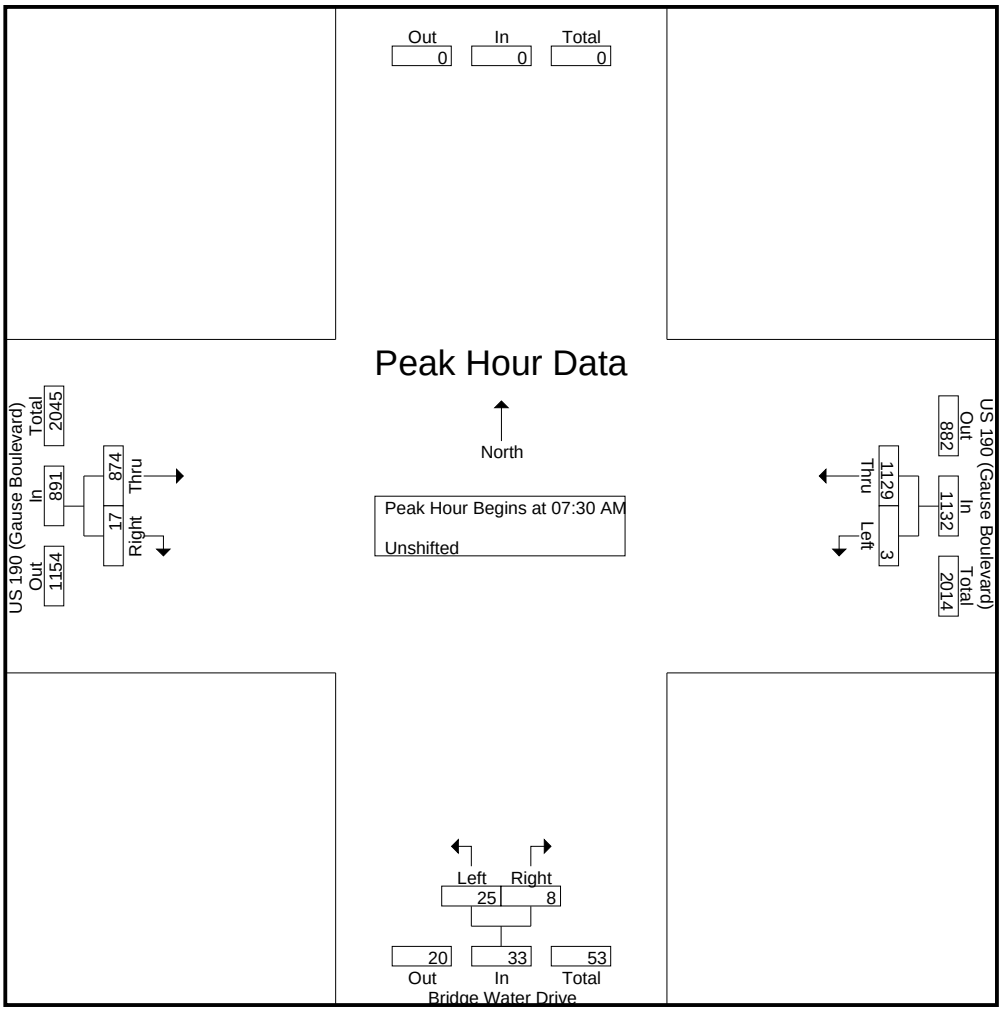
	From North	US 190 (Gause Boulevard) From East			Bridge Water Drive From South			US 190 (Gause Boulevard) From West			
Start Time	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	276	277	4	1	5	115	3	118	400
07:15 AM	0	0	301	301	4	0	4	176	2	178	483
07:30 AM	0	1	298	299	8	1	9	198	4	202	510
07:45 AM	0	0	288	288	6	1	7	202	7	209	504
Total	0	2	1163	1165	22	3	25	691	16	707	1897
08:00 AM	0	1	291	292	7	1	8	242	3	245	545
08:15 AM	0	1	252	253	4	5	9	232	3	235	497
08:30 AM	0	3	251	254	5	1	6	234	8	242	502
08:45 AM	0	0	245	245	3	0	3	231	2	233	481
Total	0	5	1039	1044	19	7	26	939	16	955	2025
Grand Total	0	7	2202	2209	41	10	51	1630	32	1662	3922
Apprch %		0.3	99.7		80.4	19.6		98.1	1.9		
Total %	0	0.2	56.1	56.3	1	0.3	1.3	41.6	0.8	42.4	

US 190 (Gause Boulevard) @ Bridge Water Drive

The City of Slidell, St. Tammany Parish, Louisiana

File Name : am peak period
Site Code : 00000111
Start Date : 5/10/2024
Page No : 2

	From North	US 190 (Gause Boulevard) From East			Bridge Water Drive From South			US 190 (Gause Boulevard) From West			
Start Time	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:30 AM											
07:30 AM	0	1	298	299	8	1	9	198	4	202	510
07:45 AM	0	0	288	288	6	1	7	202	7	209	504
08:00 AM	0	1	291	292	7	1	8	242	3	245	545
08:15 AM	0	1	252	253	4	5	9	232	3	235	497
Total Volume	0	3	1129	1132	25	8	33	874	17	891	2056
% App. Total		0.3	99.7		75.8	24.2		98.1	1.9		
PHF	.000	.750	.947	.946	.781	.400	.917	.903	.607	.909	.943



US 190 (Gause Boulevard) @ Bridge Water Drive

The City of Slidell, St. Tammany Parish, Louisiana

File Name : PM Peak Period
Site Code : 00000111
Start Date : 5/10/2024
Page No : 1

Groups Printed- Unshifted

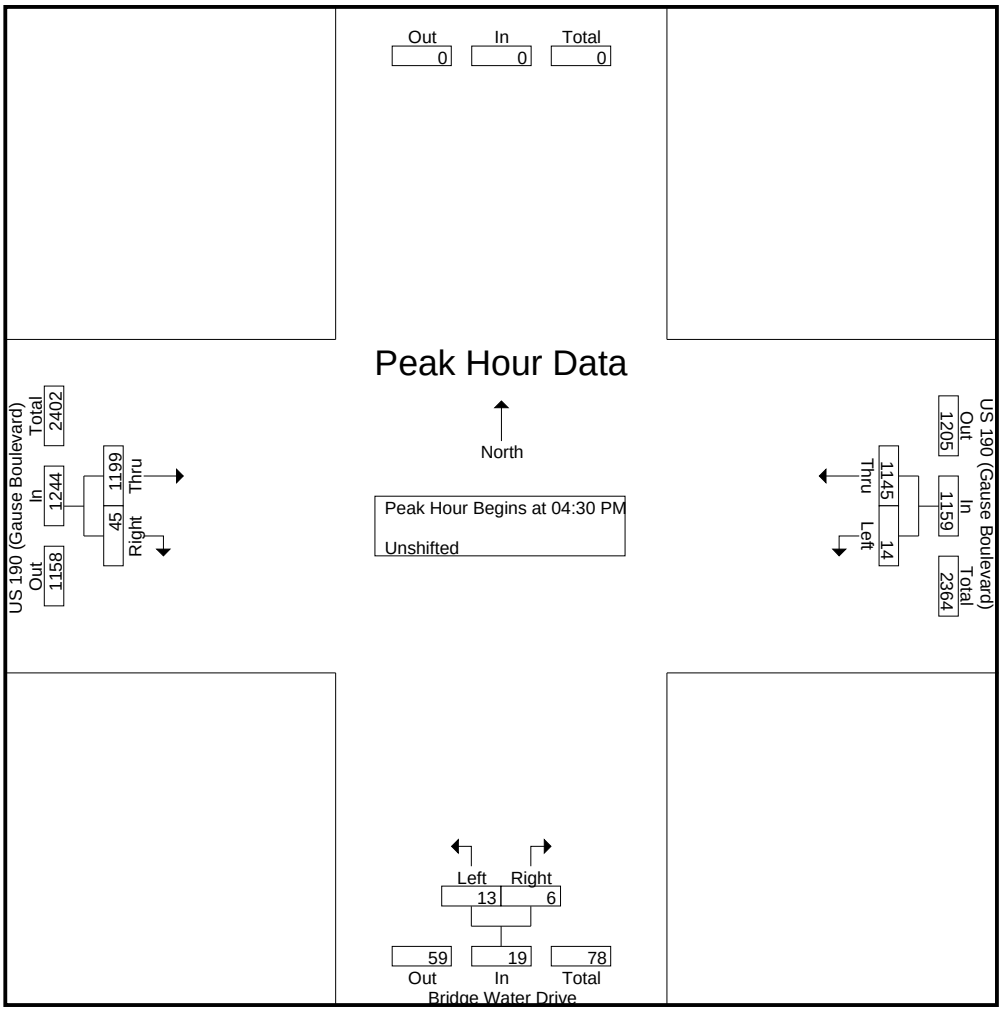
	From North	US 190 (Gause Boulevard) From East			Bridge Water Drive From South			US 190 (Gause Boulevard) From West			
Start Time	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	275	277	2	0	2	295	7	302	581
04:15 PM	0	1	262	263	2	1	3	282	8	290	556
04:30 PM	0	2	292	294	5	0	5	301	13	314	613
04:45 PM	0	4	281	285	3	1	4	298	11	309	598
Total	0	9	1110	1119	12	2	14	1176	39	1215	2348
05:00 PM	0	3	296	299	3	2	5	302	12	314	618
05:15 PM	0	5	276	281	2	3	5	298	9	307	593
05:30 PM	0	3	211	214	2	1	3	262	10	272	489
05:45 PM	0	0	180	180	3	0	3	215	8	223	406
Total	0	11	963	974	10	6	16	1077	39	1116	2106
Grand Total	0	20	2073	2093	22	8	30	2253	78	2331	4454
Apprch %		1	99		73.3	26.7		96.7	3.3		
Total %	0	0.4	46.5	47	0.5	0.2	0.7	50.6	1.8	52.3	

US 190 (Gause Boulevard) @ Bridge Water Drive

The City of Slidell, St. Tammany Parish, Louisiana

File Name : PM Peak Period
Site Code : 00000111
Start Date : 5/10/2024

	From North	US 190 (Gause Boulevard) From East			Bridge Water Drive From South			US 190 (Gause Boulevard) From West			
Start Time	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:30 PM											
04:30 PM	0	2	292	294	5	0	5	301	13	314	613
04:45 PM	0	4	281	285	3	1	4	298	11	309	598
05:00 PM	0	3	296	299	3	2	5	302	12	314	618
05:15 PM	0	5	276	281	2	3	5	298	9	307	593
Total Volume	0	14	1145	1159	13	6	19	1199	45	1244	2422
% App. Total		1.2	98.8		68.4	31.6		96.4	3.6		
PHF	.000	.700	.967	.969	.650	.500	.950	.993	.865	.990	.980



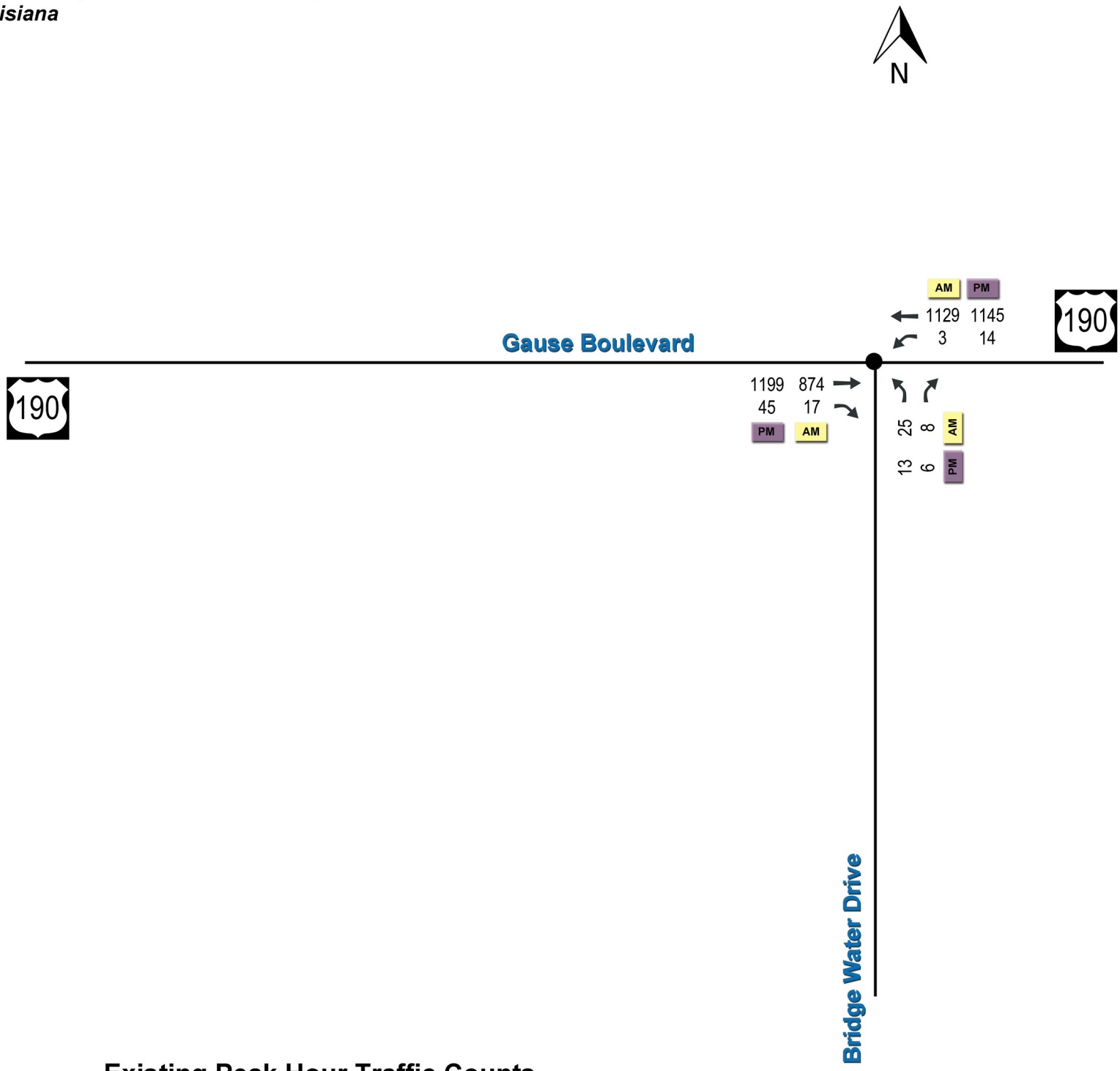
APPENDIX C

Proposed 1951 Gause Boulevard Development

US 190 (Gause Boulevard) @ Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Louisiana



Existing Peak Hour Traffic Counts

Peak Hour of Adjacent Street Traffic

AM **7:30 - 8:30 A.M.**

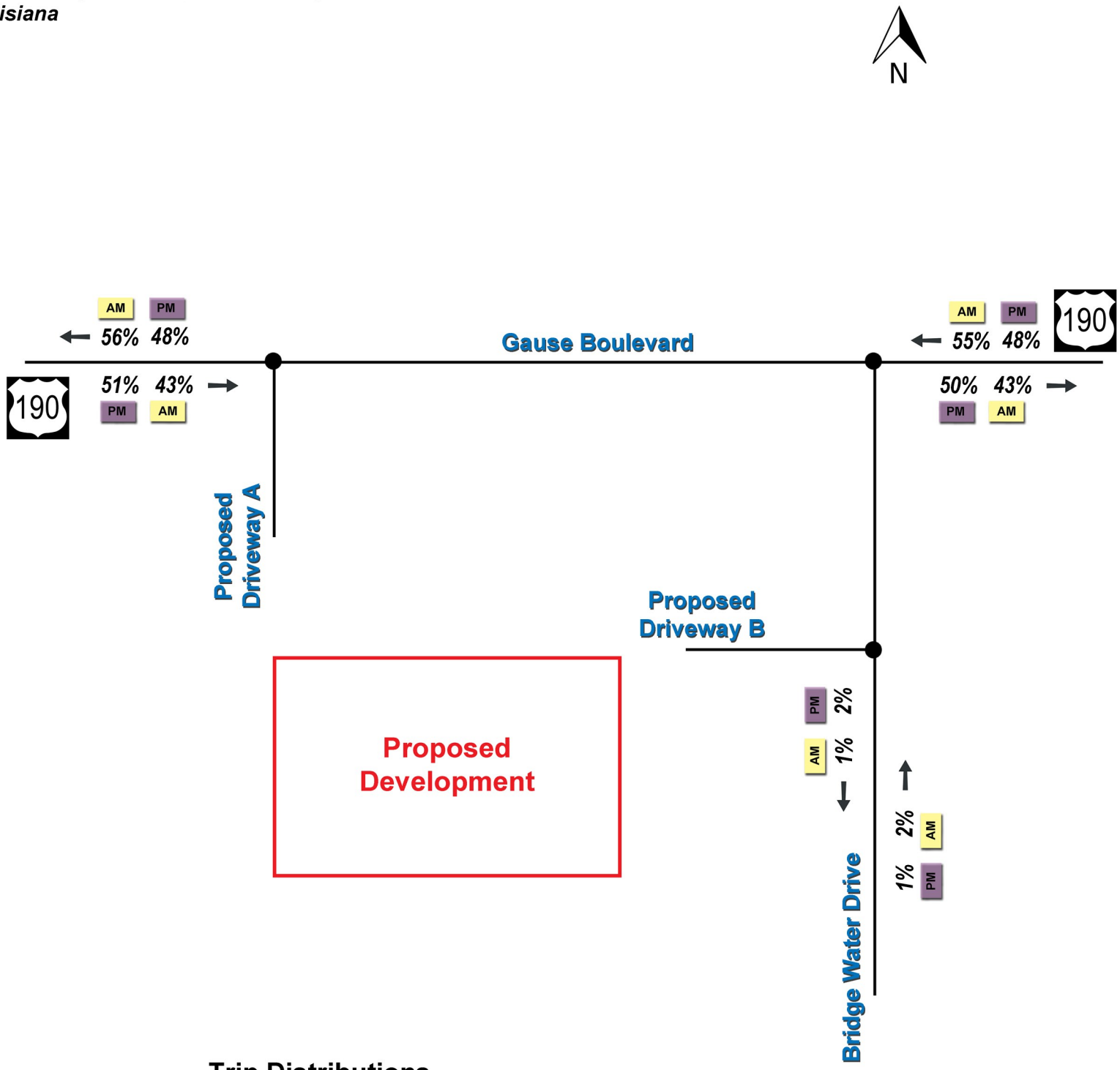
PM **4:30 - 5:30 P.M.**

Proposed 1951 Gause Boulevard Development

US 190 (Gause Boulevard) @ Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Louisiana



Trip Distributions

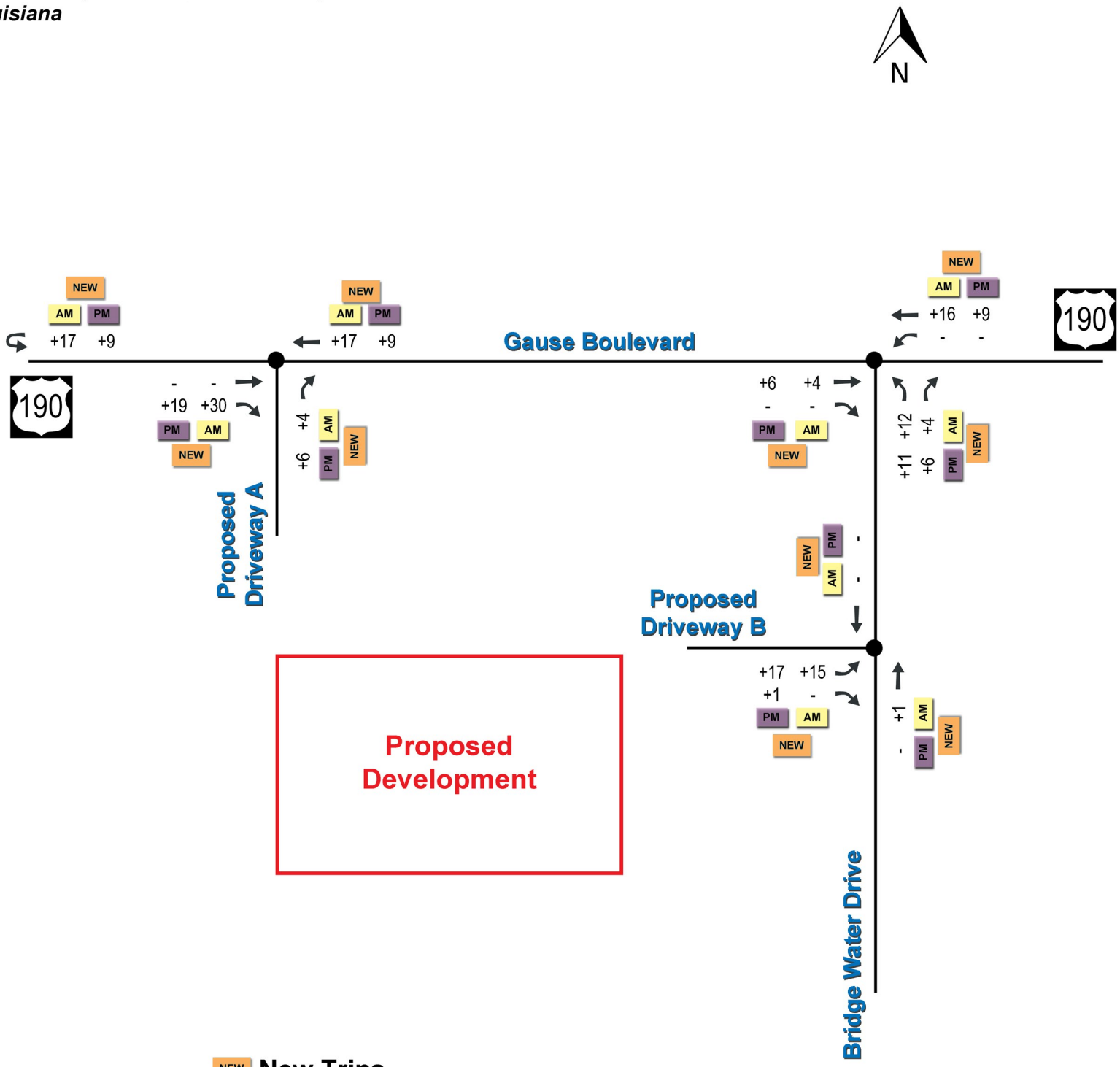
Peak Hour of Adjacent Street Traffic	
AM	7:30 - 8:30 A.M.
PM	4:30 - 5:30 P.M.

Proposed 1951 Gause Boulevard Development

US 190 (Gause Boulevard) @ Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Louisiana



NEW **New Trips**

Peak Hour of Adjacent Street Traffic

AM **7:30 - 8:30 A.M.**

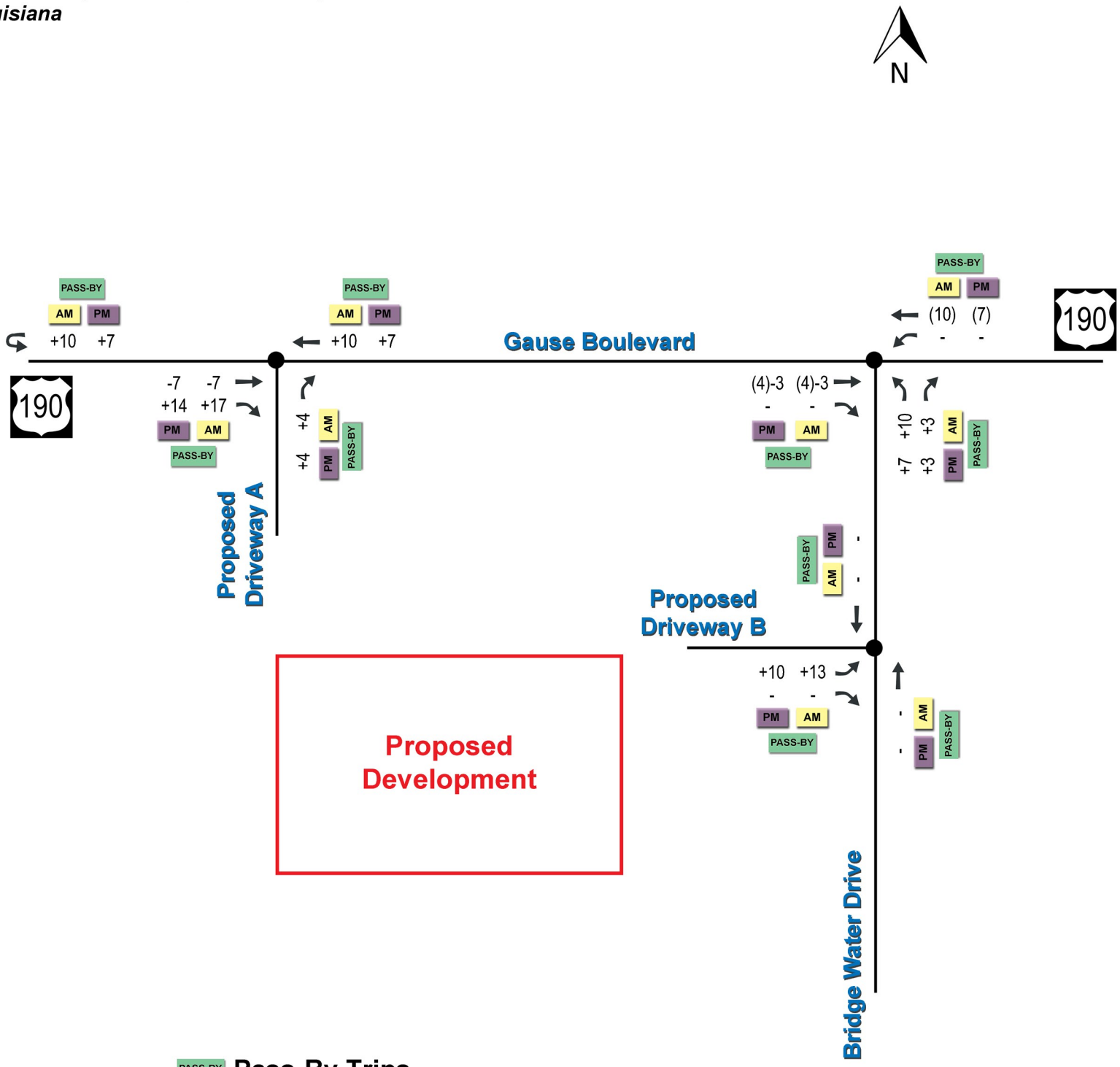
PM **4:30 - 5:30 P.M.**

Proposed 1951 Gause Boulevard Development

US 190 (Gause Boulevard) @ Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Louisiana



PASS-BY **Pass-By Trips**

Peak Hour of Adjacent Street Traffic

AM **7:30 - 8:30 A.M.**

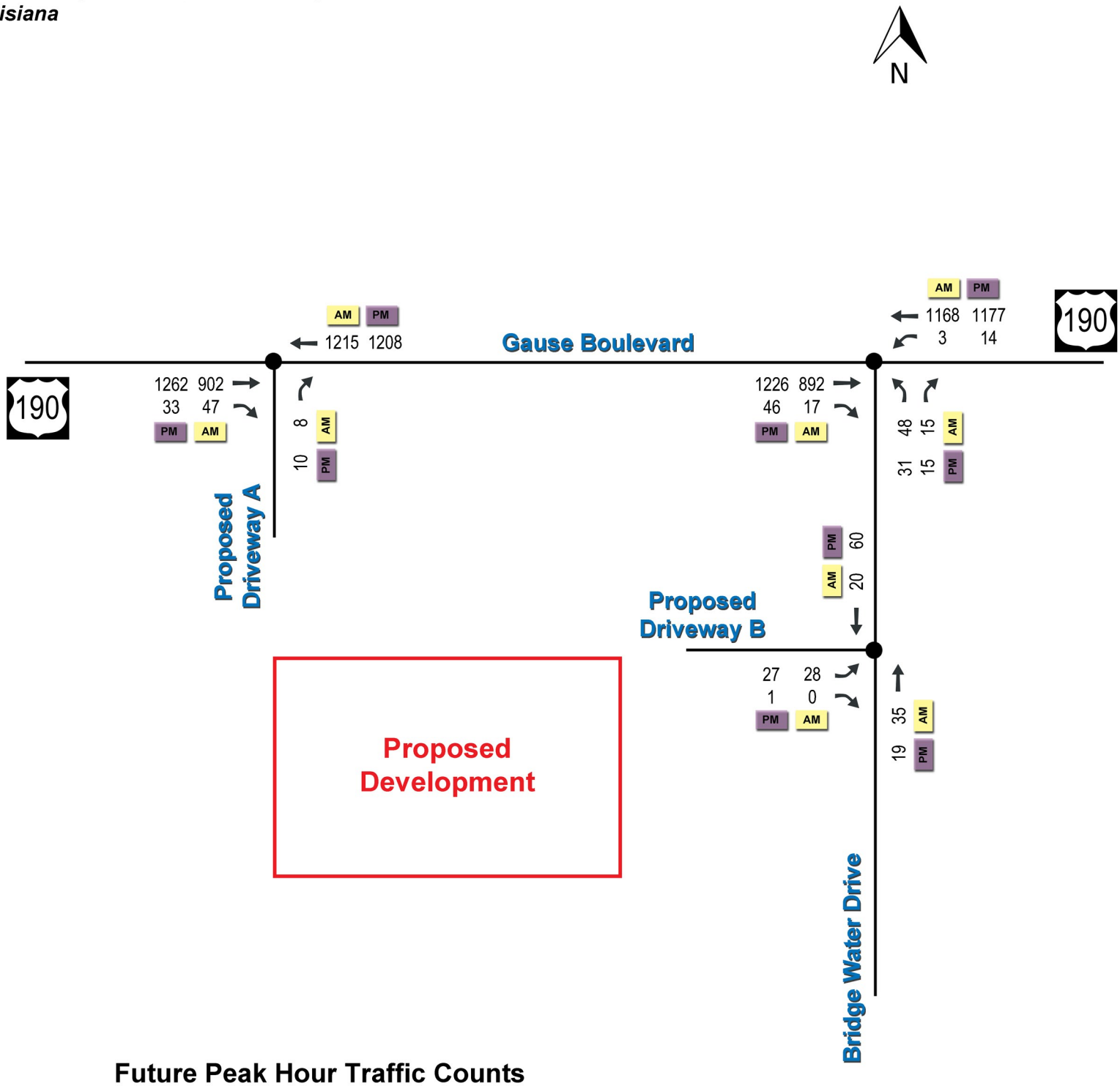
PM **4:30 - 5:30 P.M.**

Proposed 1951 Gause Boulevard Development

US 190 (Gause Boulevard) @ Bridge Water Drive

Near the City of Slidell, St. Tammany Parish

Louisiana



Future Peak Hour Traffic Counts

Peak Hour of Adjacent Street Traffic

AM **7:30 - 8:30 A.M.**

PM **4:30 - 5:30 P.M.**

*** 2% Growth Rate Applied to Existing Background Traffic.**

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	874	17	3	1129	25	8
Future Volume (Veh/h)	874	17	3	1129	25	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	950	18	3	1227	27	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			968		1578	484
vC1, stage 1 conf vol					959	
vC2, stage 2 conf vol					620	
vCu, unblocked vol			968		1578	484
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		90	93
cM capacity (veh/h)			707		284	529

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	633	335	3	614	614	36
Volume Left	0	0	3	0	0	27
Volume Right	0	18	0	0	0	9
cSH	1700	1700	707	1700	1700	386
Volume to Capacity	0.37	0.20	0.00	0.36	0.36	0.16
Queue Length 95th (ft)	0	0	0	0	0	14
Control Delay (s)	0.0	0.0	10.1	0.0	0.0	16.1
Lane LOS			B			C
Approach Delay (s)	0.0		0.0			16.1
Approach LOS						C

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	41.3%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1199	45	14	1145	13	6
Future Volume (Veh/h)	1199	45	14	1145	13	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1303	49	15	1245	14	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1352		1980	676
vC1, stage 1 conf vol					1328	
vC2, stage 2 conf vol					652	
vCu, unblocked vol			1352		1980	676
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			97		93	98
cM capacity (veh/h)			505		192	396

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	869	483	15	622	622	21
Volume Left	0	0	15	0	0	14
Volume Right	0	49	0	0	0	7
cSH	1700	1700	505	1700	1700	232
Volume to Capacity	0.51	0.28	0.03	0.37	0.37	0.09
Queue Length 95th (ft)	0	0	2	0	0	7
Control Delay (s)	0.0	0.0	12.3	0.0	0.0	22.1
Lane LOS			B			C
Approach Delay (s)	0.0		0.1			22.1
Approach LOS						C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	892	17	3	1168	48	15
Future Volume (Veh/h)	892	17	3	1168	48	15
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	970	18	3	1270	52	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			988		1620	494
vC1, stage 1 conf vol					979	
vC2, stage 2 conf vol					641	
vCu, unblocked vol			988		1620	494
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		81	97
cM capacity (veh/h)			695		276	521

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	647	341	3	635	635	68
Volume Left	0	0	3	0	0	52
Volume Right	0	18	0	0	0	16
cSH	1700	1700	695	1700	1700	311
Volume to Capacity	0.38	0.20	0.00	0.37	0.37	0.22
Queue Length 95th (ft)	0	0	0	0	0	20
Control Delay (s)	0.0	0.0	10.2	0.0	0.0	19.8
Lane LOS			B			C
Approach Delay (s)	0.0		0.0			19.8
Approach LOS						C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	902	47	0	1215	0	8
Future Volume (Veh/h)	902	47	0	1215	0	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	980	51	0	1321	0	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1031		1666	516
vC1, stage 1 conf vol					1006	
vC2, stage 2 conf vol					660	
vCu, unblocked vol			1031		1666	516
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			670		268	504

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	653	378	660	660	9
Volume Left	0	0	0	0	0
Volume Right	0	51	0	0	9
cSH	1700	1700	1700	1700	504
Volume to Capacity	0.38	0.22	0.39	0.39	0.02
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	12.3
Lane LOS					B
Approach Delay (s)	0.0		0.0		12.3
Approach LOS					B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	36.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	28	1	0	35	20	0
Future Volume (Veh/h)	28	1	0	35	20	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	30	1	0	38	22	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	60	22	22			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	60	22	22			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	100	100			
cM capacity (veh/h)	947	1055	1593			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	31	38	22
Volume Left	30	0	0
Volume Right	1	0	0
cSH	950	1700	1700
Volume to Capacity	0.03	0.02	0.01
Queue Length 95th (ft)	3	0	0
Control Delay (s)	8.9	0.0	0.0
Lane LOS	A		
Approach Delay (s)	8.9	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1226	46	14	1177	31	15
Future Volume (Veh/h)	1226	46	14	1177	31	15
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1333	50	15	1279	34	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1383		2028	692
vC1, stage 1 conf vol					1358	
vC2, stage 2 conf vol					670	
vCu, unblocked vol			1383		2028	692
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			97		82	96
cM capacity (veh/h)			491		185	387

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	889	494	15	640	640	50
Volume Left	0	0	15	0	0	34
Volume Right	0	50	0	0	0	16
cSH	1700	1700	491	1700	1700	222
Volume to Capacity	0.52	0.29	0.03	0.38	0.38	0.23
Queue Length 95th (ft)	0	0	2	0	0	21
Control Delay (s)	0.0	0.0	12.6	0.0	0.0	25.9
Lane LOS			B			D
Approach Delay (s)	0.0		0.1			25.9
Approach LOS						D

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1262	33	0	1208	0	10
Future Volume (Veh/h)	1262	33	0	1208	0	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1372	36	0	1313	0	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1408		2046	704
vC1, stage 1 conf vol					1390	
vC2, stage 2 conf vol					656	
vCu, unblocked vol			1408		2046	704
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			481		180	379

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	915	493	656	656	11
Volume Left	0	0	0	0	0
Volume Right	0	36	0	0	11
cSH	1700	1700	1700	1700	379
Volume to Capacity	0.54	0.29	0.39	0.39	0.03
Queue Length 95th (ft)	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	14.8
Lane LOS					B
Approach Delay (s)	0.0		0.0		14.8
Approach LOS					B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	1	0	19	60	0
Future Volume (Veh/h)	27	1	0	19	60	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	1	0	21	65	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	86	65	65			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	86	65	65			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	100	100			
cM capacity (veh/h)	915	999	1537			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	30	21	65
Volume Left	29	0	0
Volume Right	1	0	0
cSH	918	1700	1700
Volume to Capacity	0.03	0.01	0.04
Queue Length 95th (ft)	3	0	0
Control Delay (s)	9.1	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.1	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		