

Executive Summary
County: Fulton PI No.:0010925
Project Name: I-285 Ramps at CR 209/Riverside Drive
Date: May 19, 2012

MPO and TIP Number: This project is identified in the Plan 2040 Regional Transportation Plan and FY 2012-2017 Transportation Improvement Program by reference number: AR-118-2015.

Project Description: The project consists of safety improvements to the existing interchange of I-285 at Riverside Drive. The project would convert the two existing signalized intersections at each ramp terminal at Riverside Drive with a single lane roundabout. Each approach to the roundabout will be widened to two lanes one lane entering the roundabout and the other serving as a right turn lane.

Modeling Assumptions: Estimation of traffic-related sound levels associated with the existing (2012), no-build (2035) and build (2035) alternatives were conducted using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM), version 2.5. Inputs to the model include existing and future roadway alignments, area terrain, and the shielding effects of existing noise barriers within the corridor.

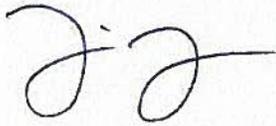
To provide a "worst case" analysis of the existing and future conditions, traffic volumes were based on a level of service (LOS) C capacity for each travel lane operating at the posted speed limit. Existing and future condition 24 hour truck percentage of 8.0% (7% medium truck, 1% heavy truck) was used along Riverside Drive.

Summary of Findings:

Impacted Receiver #	# of Receptors Represented	Property Identification	Is Abatement Feasible & Reasonable	Approximate cost of abatement
0	0	N/A	N/A	N/A

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 Signature May 19, 2012
 Date

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 Date

Andrew Clay, 5-21-2014
 Approved By: GDOT
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**NOISE IMPACT ASSESSMENT
FULTON COUNTY
I-285 RAMPS AT CR 209/RIVERSIDE DRIVE
PI No. 0010925
DATE May 19, 2012**

1. INTRODUCTION

In compliance with 23 USC Section 109(h) and (i), the Federal Highway Administration (FHWA) established a standard for the assessment of highway traffic-generated noise. The standard, published as Part 772 of Title 23 of the Code of Federal Regulations (23 CFR Part 772), provide procedures to be followed in conducting noise analyses that will protect the public health, welfare and livability. In accordance with the Noise Control Act of 1972, coordination of this regulation with the Environmental Protection Agency (EPA) has been completed. The following assessment has been prepared in accordance with 23 CFR Part 772.

This report focuses on the human environment and documents the results of a noise analysis completed for the proposed project, in order to:

- a. Provide baseline noise levels that will be used in determining project impact.
- b. Predict the effects that the proposed project would have on the noise environment.
- c. Identify impacted locations where noise abatement is feasible and reasonable and likely to be included in the project, and locations where impacts will occur and abatement is not feasible and reasonable.

1.1 What is The Proposed Project?

The project consists of safety improvements to the existing interchange of I-285 at Riverside Drive. The project would convert the two existing signalized intersections at each ramp terminal at Riverside Drive with a single lane roundabout. Figure 1 on page 2 shows the project location map. Figure 2 on page 3 shows the proposed concept layout.

Project Details:

Each approach to the roundabout would be widened to two lanes with one lane entering the roundabout and the other serving as a right turn lane. The outside shoulders would remain 10 feet. Construction activity on Riverside Drive would extend approximately 450 feet to the north from the west bound on ramp to I-285 and approximately 325 feet to the south from the east bound exit ramp.

A five foot wide sidewalk would be added to both sides of the roadway along Riverside Drive within the limits of the project. The project is approximately 0.5 mile in length.

The project would also include routine rehabilitation of the existing bridge. This work includes replacement of the joints at bent 2 and abutments 1 and 5. All construction joints will be resealed and the bridge deck would be sealed with a two-part polymer overlay. Concrete spalling would be repaired on bents 3 & 4 and abutment 5. Figure 2 on page 3 shows the proposed concept layout.

Figure 1: Project Location Map



Figure 2: Project Concept Layout



1.2 What is a Type I Project?

“Highway Traffic Noise Policy and Guidance,” was issued in July 2010 (revised January 2011) by the FHWA. In compliance with this guidance, a Type I project is defined below:

- (1) The construction of a highway on new location; or,
- (2) The physical alteration of an existing highway where there is either:
 - (i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - (ii) Substantial Vertical Alteration. A project that removes shielding therefore exposes the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,
- (3) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a (high occupancy vehicle (HOV) lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
- (4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,
- (5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
- (6) restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane, except for when the auxiliary lane is a turn lane; or,
- (7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

1.3 How is this Project Classified as a Type I Project?

The proposed I-285 at Riverside Drive interchange reconstruction improvement would involve physical alteration of the existing roadway to accommodate the proposed roundabouts and therefore, would be classified as a Type I project.

2. What is the Existing Noise Environment?

According to 23 CFR 772 existing noise levels are defined as “the worst noise hour resulting from the combination of natural and mechanical sources and human activity usually present in a particular area.”

The study area has a high concentration of single family residential neighborhoods and single isolated residential lots. There are currently three neighborhoods located in the vicinity of the study area: Fair Oaks Manor, Coldstream, and Foxridge neighborhoods. The Presbytery of Saint Andrew church is located in the southeast quadrant of the study area.

The principal source of noise in the study area is vehicular traffic, including automobiles and trucks. As an existing transportation corridor, most adjacent land uses are exposed to at least moderate noise levels.

Details:

This chapter presents background information on the characteristics of sound and sound levels, the criteria used by the FHWA and GDOT to measure noise impacts, and the results of noise measurements conducted in the study area at noise-sensitive sites.

2.1 Background

2.1.1 How is Noise Defined?

Noise is typically defined as unwanted or undesirable sound. The basic parameters of noise that affect humans are:

- (1) intensity or level,
- (2) frequency content, and
- (3) variation with time.

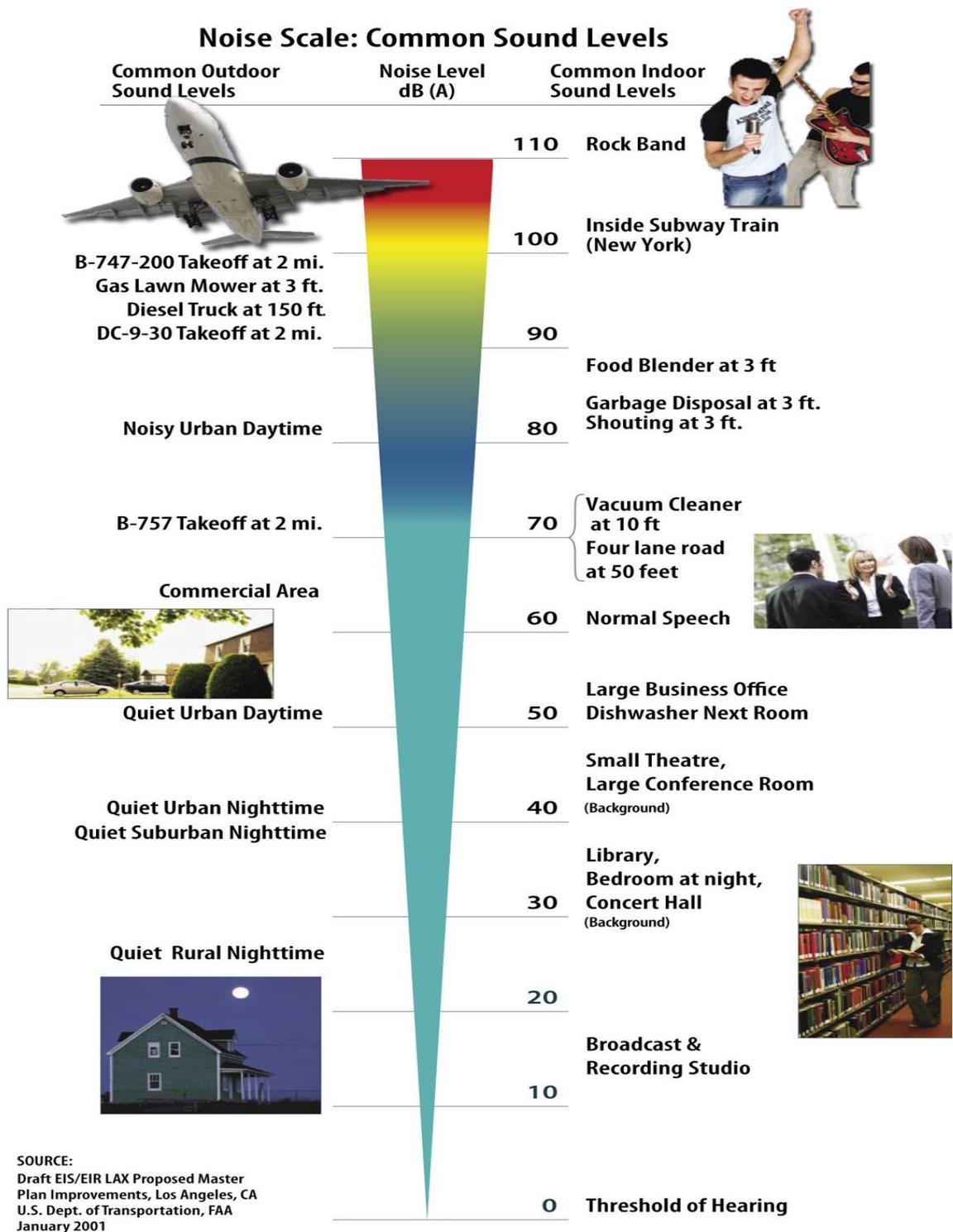
Details:

The first parameter is determined by the level of sound, which is expressed in units of decibels (dB). By using this scale, the range of normally encountered sound can be expressed by values between 0 and 120 dB. On a relative basis, a 3-dB change in sound level generally represents a barely perceptible change in a common outdoor setting, to someone with average hearing. A 5-dB positive change presents a “noticeable” change, and a 10-dB positive change is typically perceived as a doubling in the loudness while a 10-dB decrease in noise levels is perceived as a 50 percent reduction in loudness.

The frequency of noise is related to the tone or pitch of the sound and is expressed in terms of cycles per second called hertz (Hz). The human ear can detect a wide range of frequencies from about 20 Hz to 17,000 Hz. However, because the sensitivity of human hearing varies with frequency, the A-weighting system is commonly used. Sound levels measured using this weighting system are called “A-weighted” sound levels and are expressed in decibel notation as “dBA.” The A-weighted sound level is widely accepted as a proper unit for describing environmental noise.

Because environmental noise fluctuates from moment to moment, it is common practice to condense all of this information into a single number called the “equivalent” sound level (Leq). The Leq is a measure of the average sound energy during a specified period of time (typically 1 hour or 24 hours). The Leq is defined as the constant level that, over a given period of time, transmits the same amount of acoustical energy to the receiver as the actual time-varying sound. Studies have shown that Leq is well correlated with human annoyance to sound, and therefore, this descriptor is widely used for environmental noise impact assessment. The Leq measured over a 1-hour period is the hourly Leq (1-hour), which is used to analyze highway noise impacts and abatement.

2.1.2 What are Typical Hourly Sound Levels?



2.1.3 What Factors Affect Traffic Noise Levels?

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Many factors affect noise. Traffic noise level at a site depends on both site geometry (distance, land cover, topography, etc.) and traffic characteristics (volume, vehicle type, speed, truck numbers, etc.) of proposed roadways near a noise site.

Details:

As mentioned above, traffic noise level at a site depends on both site geometry and traffic characteristics of proposed roadways near the site. As an example, for a straight, at-grade roadway with a steady stream of vehicles, the Leq noise level decreases with distance from the roadway. Generally, in areas where the land between the roadway and the receptor site is primarily grass, lawn, or other sound absorptive material, the noise level decreases at a rate of 4.5 dBA per a doubling of the distance. Conversely, in more urban areas with concrete, the noise level drops off at a much slower rate—typically around 3 dBA per a doubling of the distance. These drop-off rates assume vehicle travel speeds remain constant and flat open terrain occurs between the receptor and the roadway. Higher drop off rates will typically occur in areas where there is excess shielding caused by building rows or variations in the terrain.

Assuming similar vehicle mix and travel speeds, a doubling in traffic volume over a given period of time produces a doubling in the sound energy. A doubling in sound energy corresponds to a barely perceptible 3-dBA increase in noise level. At locations where traffic volumes and noise levels are already high, a large change in traffic volume is required to cause a perceptible change in the noise level.

Noise levels from trucks are much greater than noise levels from automobiles. The noise generated by a single heavy truck is as loud as 10 automobiles. Consequently, at a given constant travel speed, noise level changes are more sensitive to the distance of nearby truck lanes and/or to changes in truck volumes than changes in overall traffic flow. However, travel speeds do play a factor, and on a roadway that is carrying a given volume of traffic, road-traffic noise levels increase by approximately 5 to 6 dBA as the speed increases from 30 to 45 mph, and by another 3 dBA as the speed increases to 55 mph.

2.2 What Methodology is used to Predict Noise?

The FHWA Traffic Noise Model (TNM) Version 2.5 was used to predict Leq (1-hour) traffic noise levels. The TNM model is used to obtain reasonable estimates of traffic noise at discrete locations by considering interactions between different noise sources and the effects of topographical features on altering predicted noise levels. A *receiver* is a discrete point modeled in the TNM program where as a *receptor* is defined as a representative location of a noise sensitive area for various land uses. In areas where there is a common noise environment, one modeled TNM receiver can be considered representative of many receptors. This occurs in places like multi-family buildings where noise level estimates at one modeled TNM receiver on a given floor may be representative of noise conditions for all the receptors on that floor. For this project, **18** receivers, representing **18** receptors, were modeled.

Details:

The TNM model estimates the total sound energy perceived at a modeling receiver by determining the logarithmic sum of the sound energy generated from each of the adjacent roadway segments. The total noise level estimated at a given receiver is a function of the number of automobiles, medium trucks, heavy trucks, and travel speed at which these vehicles are moving on each roadway segment. Moreover, roadway segments with a higher number of heavy trucks generate more noise than those with lower truck volumes. In the TNM model, these factors are combined in an empirical formula governing the relationship of the reference mean noise emission level of each vehicle type as a function of travel speed.

In general, roadway segments located further away contribute less to the estimated total noise level than those roadway segments closer to the receiver. In addition, the TNM model also considers attenuating effects of distance, building rows, topography, average pavement surface, ground surface conditions outside the roadway boundary, trees zones, atmospheric absorption, and any existing noise barriers. Noise generated from sources other than traffic is not included in the model.

Major roadways, existing noise barriers, terrain lines and sensitive receivers were modeled in TNM by importing Microstation roadway design files into the TNM program. Elevations for the TNM model runs were obtained from existing contour and proposed grade information and existing and proposed Microstation surfaces. Lastly, the number of automobiles, medium trucks, and heavy trucks and their associated travel speeds for each modeled roadway segment were input into the model. The TNM model preparation was completed and the program executed. Upon completion, noise level estimates at the receivers were provided in an output summary table. Traffic data used for the noise modeling were based on the level of service (LOS) C conditions, which generates the loudest (worst case) traffic noise condition consisting of high traffic volume and travel speeds. Level of Service is defined as the maximum hourly rate at which a vehicles can reasonably be expected to traverse a point /section of a lane or roadway during a given time period. For this project LOS C traffic volumes were used as traffic volume input to the noise model. The memorandum that outlines the methodology for traffic volume input is included in Appendix A.

2.3 What is Considered a Noise Impact?

The GDOT defines a noise impact as occurring when design-year build noise levels approach or exceed the NAC thresholds listed in Table 1 on page 9 or when predicted design-year build noise levels result in a substantial noise level increase over existing noise levels. The GDOT considers approach levels as 1 dBA less than the noise levels shown in Table 1 on page 9 and defines a substantial noise level increase as being 15 dBA or greater than existing noise levels.

Details:

The National Environmental Policy Act (NEPA) provides broad authority and responsibility for evaluating and mitigating adverse environmental effects, including highway traffic noise. Implementation of NEPA requires federal government agencies to use all practical means and measures to promote the general welfare and foster a healthy environment. The Federal-Aid Highway Act of 1970 required FHWA to develop standards for highway noise.

In response to the problems associated with highway traffic noise, 23 CFR Part 772 “Procedures for Abatement of Highway Traffic Noise and Construction Noise” establishes standards for impact determination and consideration of abatement. The regulation contains noise impact criteria for various land use activities as shown in Table 1 on page 9, FHWA Noise Abatement Criteria (NAC). The FHWA will not approve the plans and specifications for a federally aided highway project, unless the project includes an adequate evaluation of potential noise abatement measures to comply with the standards.

The FHWA regulations contain NAC, which if approached or exceeded on Type I roadway improvement projects require consideration for noise abatement. In addition to these absolute limits, noise impacts can occur if there is a substantial increase in future build noise levels over comparable existing noise levels. The GDOT defines a substantial noise level increase as 15 dBA or greater. The regulations emphasize that the NAC are not design goals. The NAC are simply impact criteria that when approached or exceeded require consideration of noise abatement. Also, the regulations require noise abatement where

impacts occur and abatement is determined feasible and reasonable in accordance with 23 CFR Part 772.13 and the GDOT noise policy.

Table 1 provides a summary of the FHWA traffic NAC for each type of land use activity category based on the noisiest hourly Leq value. The GDOT defines a noise impact as occurring when design-year build (a 20 year design horizon) noise levels approach or exceed the NAC thresholds listed in Table 1 or when predicted design-year build noise levels result in a substantial noise level increase over existing (year of the traffic study) noise levels. The GDOT considers approach levels as 1 dBA less than the noise levels shown in Table 1 and defines a substantial noise level increase as being 15 dBA or greater than existing noise levels. For example, the approach noise level for Category B land use activities is 66 dBA. The approach noise level for all NAC categories represent absolute noise impact thresholds, when exceeded constitutes an impact. For example, for NAC land use Category B, a noise level of 65.9 dBA at residential property is not considered an impact, but a noise level of 66.0 dBA or greater is considered a noise impact.

Table 1
FHWA Noise Abatement Criteria (NAC)
Hourly A-Weighted Sound Level - decibels (dBA)

Activity Category	Leq(h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Residential
C	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F
F	-	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	-	Undeveloped lands that are not permitted

Source: FHWA, 23 CFR Part 772

Once the study area has been defined and land use categories determined, each property in the study area is assigned an Activity Category in accordance with Table 1 on page 9. A detailed description of each type of land use included in each of the seven NAC Activity Categories is outlined in Section 2.4.

2.4 How Were Activity Categories Assigned?

Activity categories are assigned based on how land is being used. This means if the land is being used as a residence, business, church, etc, it is matched up to the corresponding activity category as defined in Table 1 on page 9, section 2.3. Current land use in this project area consists of mostly single family residential lots. The Presbytery of Saint Andrew church is located in the southeast quadrant of the study area.

Any area with a building permit prior to project disclosure, which is defined as approval of the NEPA document, is considered planned. Therefore, it is evaluated under the corresponding NAC category of the permit. For this project, permits were reviewed though 03-13-2012. During the NEPA reevaluation process the proposed project will be re-examined to determine if any new permits were issued between the date permits were reviewed and the date the NEPA document is approved. If building permits are issued between these times the permitted land use will be studied under the appropriate NAC category and mitigation measures would be studied as required.

Using the City of Sandy Springs Permit Go! Database, the undeveloped addresses identified within the area were checked and found to not have a development permit issued or pending.

Details:

For purposes of noise analysis modeling, study area noise receptors were assigned one of seven different land use or activity categories—Activity Category A through G. These are described in the following paragraphs.

Activity Category A: This category includes exterior activities and relates to lands, as stated in 23 CFR Part 772, “on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential for the area to continue to serve its intended purpose.” Some examples of land uses designated as Activity Category A include the Tomb of the Unknown Soldier and a monastery. There are no receptors of this activity category located within the study area.

There are **0** receivers, representing **0** receptors, of this activity category located within the study area.

Activity Category B: This category includes exterior activities for single-family and multi-family residences.

There are **17** receivers, representing **17** receptors, of this activity category located within the study area.

Activity Category C: This category includes exterior activities for Section 4(f) sites and nonresidential public and private facilities that tolerate less noise (e.g., recording studios, amphitheatres, libraries) than Activity Category E (see below).

For cemeteries, parks, and other expansive Category C activities, the number of required receptors shall be determined as follows: 1) determine the typical linear highway frontage of parcels in the surrounding community; and 2) divide the proposed highway frontage length of the Category C site by the amount determined in step 1 above with any remainder counting as an additional receptor.

Presbytery of Saint Andrew church is included in this category. There is **1** receiver, representing **1** receptor, of this activity category located within the study area.

Activity Category D: This category includes interior impacts for Activity Category C facilities that may have a noise-sensitive interior use. An indoor analysis is typically done only after exhausting all outdoor analysis options. In situations where no exterior activities would be affected by the traffic noise, or where the exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, Activity Category D is typically used as the basis of determining noise impacts.

There are **0** receivers, representing **0** receptors, of this activity category located within the study area.

Activity Category E: This category includes exterior activities for certain commercial and developed lands (e.g., restaurants, offices, hotels) that are less sensitive to highway noise.

There are **0** receivers, representing **0** receptors, of this activity category located within the study area.

Activity Category F: This category includes land use activities that are generally not sensitive to highway noise. No noise analysis is required for this activity category.

Activity Category G: This category addresses future noise levels on undeveloped lands without a building permit. For undeveloped lands without a building permit, noise contours were developed on vacant lands using the TNM. In accordance with 23 CFR Part 772 (772.17) and as outlined in the GDOT Noise Abatement Policy, information is to be provided to local officials “that can help them to be aware of incompatible land uses near state highways.” Large undeveloped lands without permitted/anticipated future development along the project corridor were modeled at 50-foot and then 100-foot intervals from the nearest edge of pavement.

One undeveloped site (Study Area A) where noise conditions are anticipated to change were identified along the corridor. The detailed results of this analysis are provided in Section 3.3.2 (*Projected Sound Levels for Undeveloped Land Without a Permit*) of this document.

Receiver inputs for existing/no-build and build conditions can be found in Appendix B.

2.5 When Were Field Measurements Taken?

Field measurements were collected on February 20th 2012 at 8 locations within the study area between (10:00am-3:00pm). These noise monitoring sites are depicted on Figure 3 on page 13. The sites were chosen based on their location to the adjacent roadway network as well as their location to existing noise barriers. Noise measurements were collected at residential locations. Copies of the field notes are provided in Appendix G. Field measurements indicate existing noise levels ranged, at the time measurements were taken, between 56.4 dBA and 64.5 dBA.

Details:

Noise measurements for each site were performed in accordance with procedures described in Measurement of Highway-Related Noise (FHWA, 1996). The measurements were recorded using a laboratory calibrated Rion NL-42 sound level meter. All measurements were performed under acceptable weather and street surface conditions consistent with GDOT policy guidelines. These measurements were taken for 15 minutes at each location. The locations of field measurements and the observed sound levels are provided in Table 2.

**Table 2
Existing Field Measurements and TNM Results (dBA L_{eq})**

Field Receiver #	Time Range	Figure Location	Field Measurement	TNM Calculation	Difference
R-3	10:20am to 10:35am	Residential	57.6	56.7	-0.9
R-5	10:45am to 11:00 am	Residential	57.5	57.8	0.3
R-6	12:30pm to 12:45 pm	Residential	63.0	64.2	1.2
R-7	2:25 pm to 2:40 pm	Residential	64.5	63.9	-0.6
R-10	1:15 pm to 1:30 pm	Residential	56.4	54.5	-1.9
R-12	1:35 pm to 1:50 pm	Residential	59.9	56.9	-3.0
R-15	2:00 pm to 2:15 pm	Residential	56.8	57.3	0.5
R-16	12:50 pm to 1:05 pm	Residential	61.9	62.1	0.2

Figure 3: Noise Monitoring Sites



2.5.1 Was the Model Validated?

The model was validated, all results were within 3dBA. Three decibels is considered validated since it is the threshold, generally considered perceptible by the human ear.

Details:

Field measurements were compared with TNM-modeled noise levels to confirm the applicability of the model for this analysis. Traffic counts, by vehicle type (cars, medium trucks, and heavy trucks) were collected along the project corridor including Riverside Drive and I-285 on and off ramps during the field measurements. I-285 traffic was also modeled as part of this analysis because of the close proximity to the study area. I-285 vehicle classification count data (November 2011) was used for the hourly traffic volumes modeled in TNM. Volumes corresponding to the time of day that existing noise measurements were taken were used as input volumes into to TNM for model validation. Total traffic counts were input into the TNM to determine if the model is accurately predicting sound levels along the corridor. However, level of service (LOS) C traffic volumes were used as input volumes for existing, no-build and build noise models. The comparisons of field measurements to modeled levels are shown in Table 2 on page 12 above. The TNM modeled results for the field measurements indicated existing noise levels between 54.5 dBA and 64.2 dBA.

A difference of approximately three decibels is generally considered acceptable. Because each of the field measurements were within the accepted three-decibel range of the model, the model is considered applicable for use in analysis of noise levels within the study area. Therefore, existing noise levels for the receivers within the study area were calculated with TNM for comparison with the build and no build alternatives. The field notes summary, model calibration inputs, and outputs can be found in Appendix G.

2.6 How Was the Project Modeled?

Noise levels were calculated using the *FHWA TNM 2.5*. Input to the model includes the existing and proposed roadway alignment, existing and projected traffic volumes, (based on *LOS C levels*) vehicle speeds of 55 mph were used on I-285 and a speed of 35 mph on Riverside Drive. A speed of 45 mph was used on all on ramps and a speed of 35 mph was used on all off ramps. A speed limit of 20 mph was used for traffic inside the proposed roundabout. This speed limit was determined based on the traffic analysis that has been completed for this proposed interchange improvement.

Details:

Major roadways and sensitive receivers were modeled in TNM by importing Microstation based roadway design files into the TNM program. Table 3 and Table 4 on pages 18 and 19 summarize the roadway details input to the TNM model for the existing/no-build and build conditions, respectively. Receptor locations, terrain lines, and existing noise barriers were also input into the TNM program using this same method. Elevations for the TNM model runs were obtained from existing contours and proposed grade information and existing and proposed Microstation surfaces. Lastly, the number of automobiles, medium trucks, and heavy trucks and their associated travel speeds for each modeled roadway segment and year were input into the model. A map showing the locations of the receivers relative to the project study area is shown in Figure 4 on page 16.

The proposed roundabout project will increase the footprint of the intersection because of the increased lane widths and required center island. In order to accommodate the proposed roundabouts, existing noise

barriers located in the northeast and southwest quadrants of the interchange will be modified. Approximately 68 feet of noise barrier 1 and approximately 81 feet of noise barrier 3 have to be removed and replaced to accommodate the proposed roundabouts. The location and alignment of the replacement noise barrier were determined based on constructability. The top of noise barrier heights for the replacement noise barrier sections were maintained the same as existing conditions. Since the project would remove and replace sections of the noise barrier, the replacement barrier was coded in TNM as part of the build conditions and not as a proposed barrier. Detailed noise analysis was conducted to confirm if the same top of noise barrier heights provided similar sound level reductions. The replaced segment length of noise barrier 1 is approximately 49 feet in length, has a height that ranges from 12 to 16 feet and a surface area of approximately 766 square feet. The replaced segment length of noise barrier 3 is approximately 81 feet in length, has a height that ranges from 20 to 23 feet and a surface area of approximately 1548 square feet. Figure 5 on page 17 shows the existing and replaced noise barriers for the proposed project.

There are no anticipated impacts for noise barrier 2.

Barrier inputs for existing/no-build and build conditions (showing the modifications to the existing noise barriers in order to accommodate the proposed roundabouts) can be found in Appendix E.

Figure 4: Receiver Location Map



Figure 5: Noise Barrier Replacements

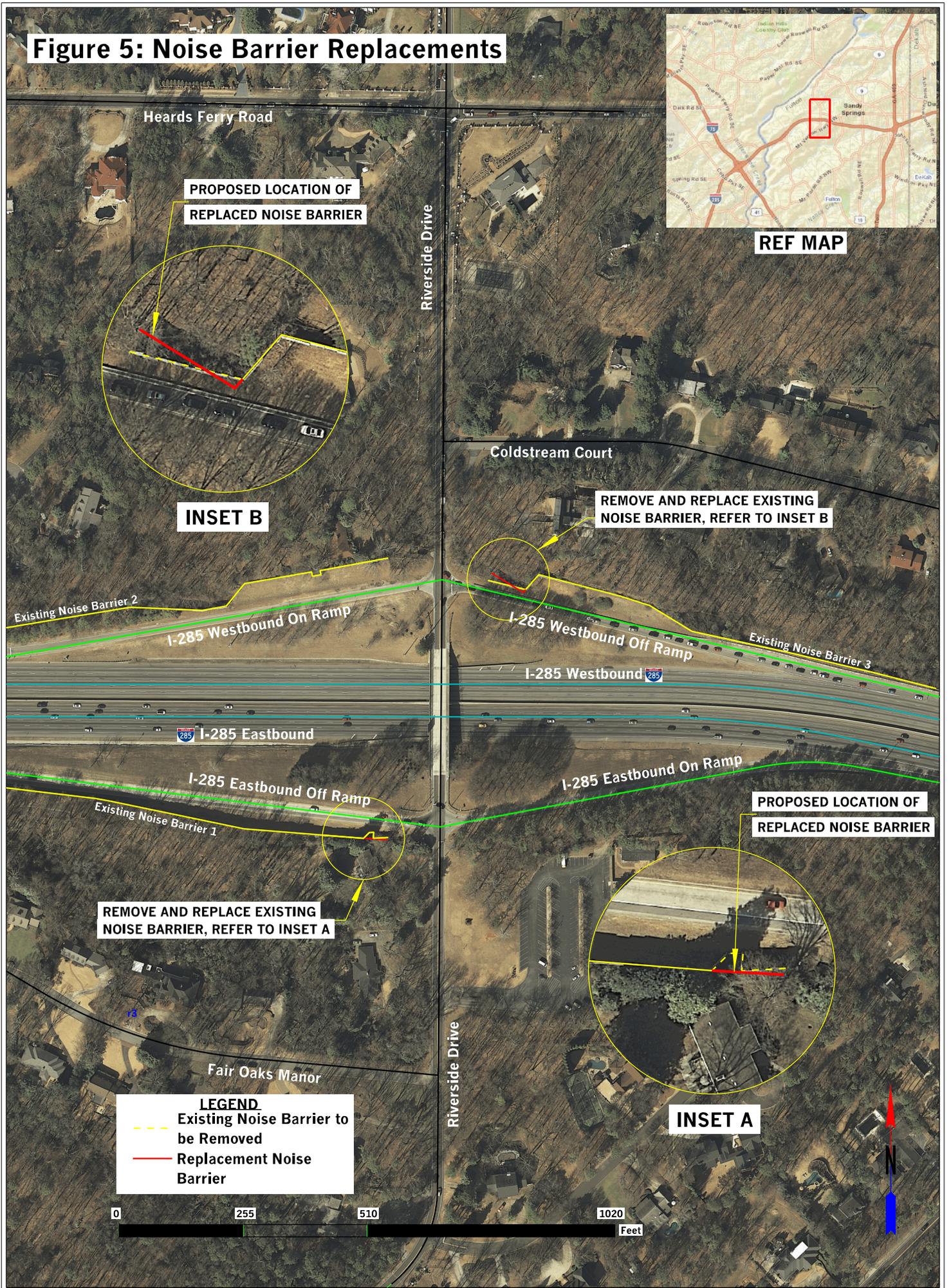


Table 3
Model Inputs Existing (2012)/No-Build (2035)

Road*	Direction	Between Cross Streets	Lane Width Input	# of lanes Rep.	Truck Percent	Total DHV Existing/No-Build	Cars Existing/No-Build	Medium Trucks Existing/No-Build	Heavy Trucks Existing/No-Build
Riverside Drive	NB & SB	Mount Vernon Hwy and Heards Ferry Road	12'	1	7% Medium & 1% Heavy	600/600	552/552	42/42	6/6
I-285 (Inside 2 Lanes)	EB & WB	N/A	24'	2	0% Medium & 0% Heavy	2660/2660	2660/2660	0/0	0/0
I-285** (Outside 3 Lanes)	EB & WB	N/A	36'	3	2% Medium & 5% Heavy	4491/4491	3990/3990	143/143	358/358
R123/EB Off Ramp	EB	N/A	12'	1	2.0% Medium	600/600	588/588	12/12	0/0
R124/EB On Ramp	EB	N/A	12'	1	9.5% Medium & 1% Heavy	600/600	537/537	57/57	6/6
R723/WB Off Ramp	WB	N/A	12'	1	3% Medium & 1% Heavy	600/600	576/576	18/18	6/6
R724/WB On Ramp	WB	N/A	12'	1	3% Medium & .5% Heavy	600/600	579/579	18/18	3/3

*Study area classified as urban high density

** Interstate 285 truck traffic was only applied to outside 3 lanes

Table 4
Model Inputs Build (2035)

Road*	Direction	Between Cross Streets	Lane Width Input	# of lanes Rep.	Truck Percent	Total DHV Build	Cars Build	Medium Trucks Build	Heavy Trucks Build
Riverside Drive	NB & SB	Mount Vernon Hwy and Heards Ferry Road	12'	1	7% Medium & 1% Heavy	600	552	42	6

Table 4 continued on Page 19.

**Table 4 continued
Model Inputs Build (2035)**

Road*	Direction	Between Cross Streets	Lane Width Input	# of lanes Rep.	Truck Percent	Total DHV Build	Cars Build	Medium Trucks Build	Heavy Trucks Build
I-285 (Inside 2 Lanes)	EB & WB	N/A	24'	2	0% Medium & 0% Heavy	2660	2660	0	0
I-285** (Outside 3 Lanes)	EB & WB	N/A	36'	3	2% Medium & 5% Heavy	4491	3990	143	358
R123/EB Off Ramp	EB	N/A	12'	1	2.0% Medium	600	588	12	0
R124/EB On Ramp	EB	N/A	12'	1	9.5% Medium & 1% Heavy	600	537	57	6
R723/WB Off Ramp	WB	N/A	12'	1	3% Medium & 1% Heavy	600	576	18	6
R724/WB On Ramp	WB	N/A	12'	1	3% Medium & .5% Heavy	600	579	18	3
Riverside Drive	Roundabout	I-285 WB Ramp	18'	1	7% Medium & 1% Heavy	800***	736	56	8
Riverside Drive	Roundabout	I-285 EB Ramp	18'	1	7% Medium & 1% Heavy	800***	736	56	8

*Study area classified as urban high density

**Interstate 285 truck traffic was only applied to outside 3 lanes

*** *Circulating Flow*

The circulating flow of the proposed roundabouts was calculated using the “Exhibit 4-3 of FHWA Roundabouts: An Informational Guide”, Approach Capacity of a Single Lane Roundabout. Based on the proposed roundabout characteristics, the Urban Compact Roundabout values were used to determine the circulatory flow. The LOS C volume for Riverside Drive 600 (veh/h) was used as the maximum entry flow. Therefore, the circulatory flow was found to be 800 (veh/h). Roadway inputs for existing/no-build and build conditions can be found in Appendix C. Traffic inputs for existing/no-build and build conditions can be found in Appendix D.

3. What are the Results of the Noise Model?

Existing (2012) Noise levels range between: 55.1 dBA and 65.0 dBA
 No-Build (2035) Noise levels range between: 55.1 dBA and 65.0 dBA
 Build (2035) Noise Levels range between: 54.7 dBA and 65.1 dBA

No receivers/receptors along the project corridor are predicted to be impacted in the build alternative based on approaching/exceeding the NAC and on a substantial increase. The predicted noise levels for existing, no-build and build conditions and their associated impacts are summarized in Table 5. Figure 6 and Figure 7 on pages 21 and 22, respectively, shows the existing/no-build impacts and build impacts, respectively.

Details:

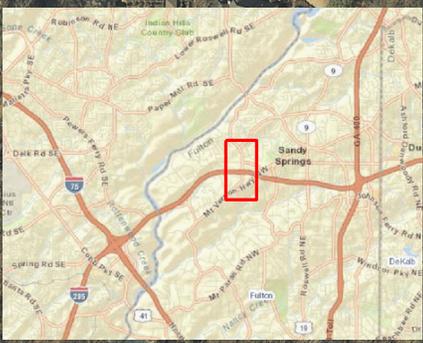
Upon completion, noise level estimates at the receivers were compiled in an output summary table. See Table 5 below. Receiver Outputs for existing/no-build and build conditions can be found in Appendix F.

**Table 5
 TNM Noise Results Output Summary Table**

Receiver #	# of Receptors Represented	NAC Category	Property Identification	Outdoor area of frequent use yes or no*	Existing 2012 (dBA)	No Build 2035 (dBA)	Build 2035 (dBA)	Increase between Build and Existing	Impact
R1	1	B	Single Family Home	Yes	59.5	59.5	59.7	0.2	NO
R2	1	B	Single Family Home	Yes	56.7	56.7	56.5	-0.2	NO
R3	1	B	Single Family Home	Yes	57.4	57.4	57.1	-0.3	NO
R4	1	B	Single Family Home	Yes	56.8	56.8	55.8	-1	NO
R5	1	B	Single Family Home	Yes	60.7	60.7	59.9	-0.8	NO
R6	1	B	Single Family Home	Yes	65	65	63.3	-1.7	NO
R7	1	B	Single Family Home	Yes	64.8	64.8	65.1	0.3	NO
R8	1	B	Single Family Home	Yes	55.4	55.4	54.7	-0.7	NO
R9	1	B	Single Family Home	Yes	57.8	57.8	57.1	-0.7	NO
R10	1	B	Single Family Home	Yes	55.4	55.4	54.9	-0.5	NO
R11	1	B	Single Family Home	Yes	55.1	55.1	54.7	-0.4	NO
R12	1	B	Single Family Home	Yes	57.6	57.6	57.5	-0.1	NO
R13	1	B	Single Family Home	Yes	58.7	58.7	58.7	0	NO
R14	1	B	Single Family Home	Yes	58.2	58.2	58.1	-0.1	NO
R15	1	B	Single Family Home	Yes	58.1	58.1	57.8	-0.3	NO
R16	1	B	Single Family Home	Yes	63	63	62.1	-0.9	NO
R17	1	C	Church	Yes	62.9	62.9	62.7	-0.2	NO
R18	1	B	Single Family Home	Yes	59.4	59.4	59	-0.4	NO

*if no and the NAC category is not D this is for informational purposes only and there cannot be an impact. Note: All NAC D receptors with an outdoor impact will be studied for interior impacts if exterior impacts cannot be abated. In the event there is no outdoor area of frequent use, or if it is far from or shielded from the road interior levels will be studied to determine if there is an impact.

Figure 6: Existing/No-Build Year Noise Impact



REF MAP

LEGEND

Activity Category
B C

● ■ Not Impacted

0 255 510 1020 Feet

Figure 7: Design Year Noise Impacts



Table 6 summarizes the number of receptors exceeding their corresponding NAC by activity category.

Table 6
Number of Receptors Approaching/Exceeding the NAC by Activity Category

NAC/Threshold	Existing	Build	No Build
A - 57	0	0	0
B - 67	0	0	0
C - 67	0	0	0
D - 52	0	0	0
E - 72	0	0	0

No receptor sites along the project corridor would experience noise level increases of greater than 15 dBA. Therefore, **no receptors** are considered impacted based on the substantial increase criterion.

3.3.2 Projected Sound Levels for Undeveloped Land Without a Permit

In accordance with 23 CFR Part 772 (772.17) and as outlined in the GDOT Noise Abatement Policy (July 2011), information is to be provided to local officials “that can help them to be aware of incompatible land uses near state highways.” At a minimum, this information is to include “an estimation of future design year noise levels at various distances from the edge of the nearest travel lane of the proposed project where future noise levels are within one decibel of the corresponding exterior values shown in Table 1 (NAC table) on page 9 or until the parcel ends.

The data in Table 8 below provides information to aid local officials with jurisdiction over properties in proximity to the project. Large undeveloped lands without permitted/anticipated future development along the project corridor were modeled at 50-foot (from the nearest edge of pavement), 100 feet, and then 100 foot intervals. Sites were selected for this analysis at each location along the corridor where noise conditions are anticipated to change. A draft letter was prepared for local officials summarizing the results of the noise analysis for the undeveloped lands in the vicinity of the site. A copy of this letter can be found in Appendix H.

As previously noted in section 2.4 on page 10, for the purposes of this project, one location (Study Area A) was identified for this analysis. The location of this study area relative to the proposed project is shown in Figure 8 on page 25. The study area depicted on the graphics represents large sample areas.

- Study Area A covers vacant parcels located

Local officials with jurisdiction over the development of parcels along the project corridor are encouraged to consider the information provided in Table 7 below and Table 1 NAC on page 9 when considering future land use and development changes. The information is provided by GDOT to discourage development that would be incompatible with the sound levels that are anticipated along the project corridor at these locations.

**Table 7
Projected Sound Levels to Aid Local Officials**

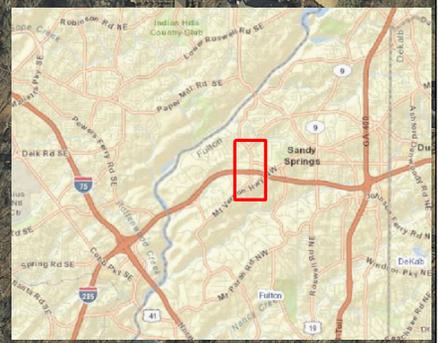
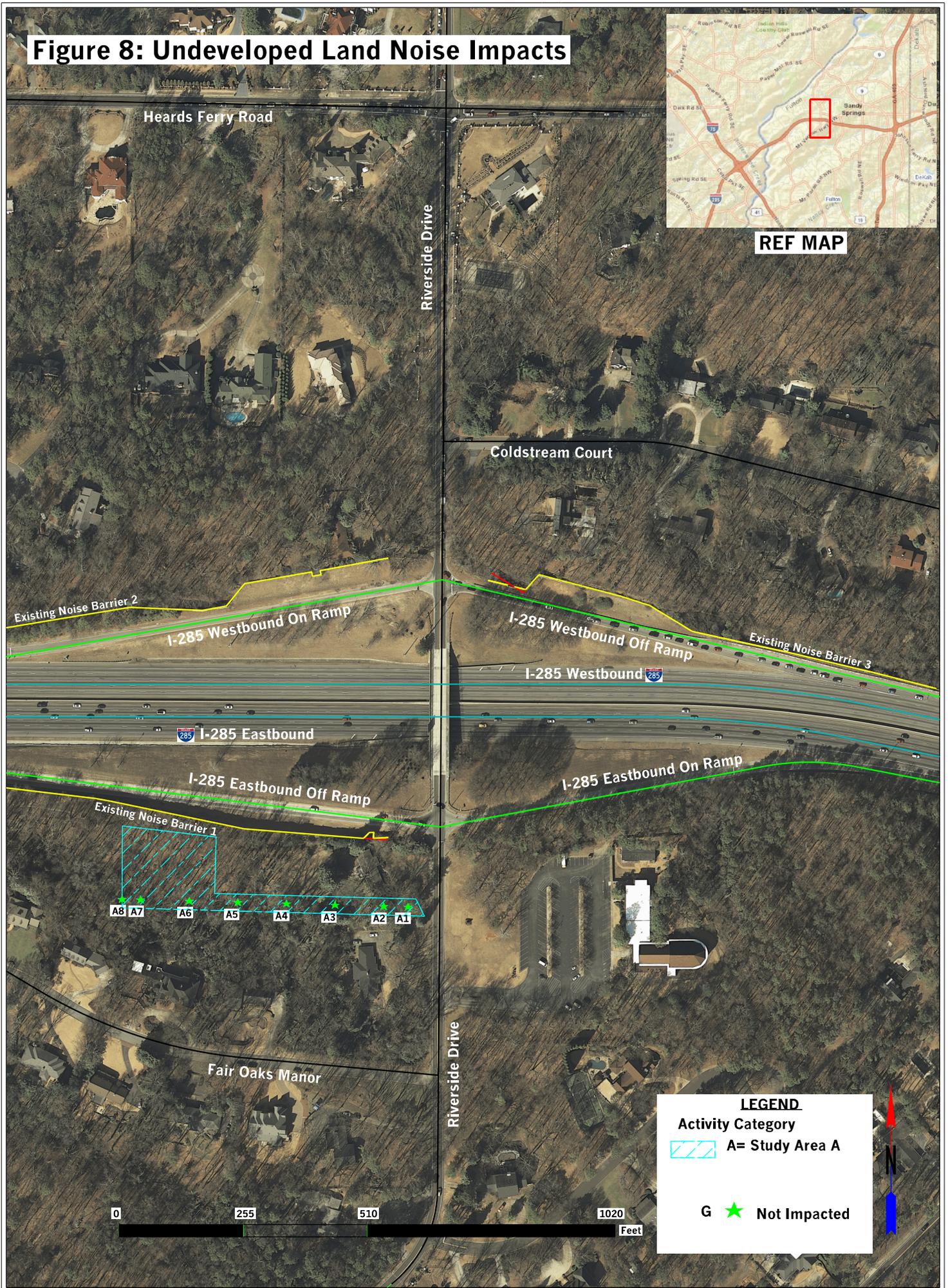
Study Area	50 feet	100 feet	200 feet	300 feet	400 feet	500 feet	600 feet	700 feet	800 feet
A	65.8	63.1	58.1	56.8	56.2	55.4	55.4	55.4**	N/A

*Distance shown is from roadway edge of pavement

**Receiver located on back of property line

N/A property not large enough for additional analysis

Figure 8: Undeveloped Land Noise Impacts



REF MAP

Heards Ferry Road

Riverside Drive

Coldstream Court

I-285 Westbound On Ramp

I-285 Westbound Off Ramp

I-285 Eastbound

I-285 Eastbound Off Ramp

I-285 Eastbound On Ramp

Existing Noise Barrier 1

A8 A7 A6 A5 A4 A3 A2 A1

Fair Oaks Manor

Riverside Drive

LEGEND

Activity Category

 A= Study Area A

 G Not Impacted

0 255 510 1020 Feet

4. What types of Noise Abatement were considered?

In accordance with 23 CFR Part 772, all impacts need to be studied to determine if abatement measures in the forms of, acquisition of rights-of-way, traffic management, alteration of horizontal and vertical alignments, and structural barriers are feasible and reasonable.

4.1 Acquisition of rights-of-way/Land Use and Zoning

Land use to create buffer zones or separation between noise sensitive receivers and traffic is considered during the design of a project. One noise abatement measure is the application of land use controls to minimize impacts to future development. In particular, land use controls can be used to create buffer zones. Although GDOT is typically not able to acquire land to create buffer zones, it is sometimes possible to relocate an impacted property outside of the potential noise impact zone. This approach is sometimes applied to mobile home parks where relocation of the homes to a location outside the impact zone is possible. Typically, this approach would be made in consultation with the owner of the mobile home. However, none of the receivers are impacted. Therefore, such action is not appropriate for consideration for this project.

Constructive land use or zoning designations to create a “buffer” between developed areas and roads are most effective prior to development of areas adjacent to the road. The results of this noise study will be sent to local officials for use in future compatible land use planning.

4.2 Traffic Management

Traffic management techniques such as the restriction of truck traffic, use by only certain types of vehicles, restricting use to certain times of the day, traffic calming devices, and reduction in operating speeds were considered for noise abatement measures to the impacted receivers. Heavy truck traffic is prohibited on Riverside Drive. However, medium single unit truck traffic is still observed. In addition, it should be noted that a roundabout is classified as a traffic calming device and would contribute to a decrease in noise levels. No receivers are impacted and therefore application of special traffic management techniques is not needed.

4.3 Alignment Alterations

A change in alignment was not considered to reduce noise impacts. Based on the level of development along Riverside Drive, an alignment shift to reduce impacts to these receivers would likely result in additional impacts to other receivers. In addition, a shift significant enough to achieve a required reduction level in noise impacts could result in displacements. This project is on an established roadway therefore, a shift in alignment is not considered a reasonable noise abatement measure. No impacts were identified for this project; therefore, there is not a need to revisit alignment alterations.

4.4 Structural Barriers

The use of structural barriers (earth berms and freestanding walls) must be considered for impacted receivers. The optimum situation for the use of freestanding noise barriers exists when a dense concentration of impacted sites are located directly adjacent to (and parallel with) the highway right-of-way. In these instances, one barrier can protect many people at a relatively low cost per impacted site.

Barriers are considered feasible when:

Feasible

- *Noise reduction:* a calculated noise reduction of at least 5 dB(A) must be achievable for a minimum of one impacted receptor. Each noise receptor which receives a 5 dB(A) reduction (whether classified as impacted or not) is considered to be a benefited receptor.
- *Constructability:* a noise abatement measure must be able to be constructed using reliable and common engineering practices.
- *Safety and Maintainability:* an exterior noise abatement measure should conform to the AASHTO Green Book and Roadside Design Guide and should be accessible to maintenance personnel and not prevent access to other highway appurtenances (e.g., drainage structures). The maximum barrier height that can feasibly be maintained is 30 feet.
- *Access:* an abatement measure must allow sufficient access to adjacent properties.

No impacts were identified for this project. Therefore, abatement measures were not considered. A reevaluation of the noise analysis will occur during final design, should changes warrant a reevaluation.

5. How is Construction Noise Handled?

GDOT recognizes that minimizing construction noise is important; however, in the absence of standardized federal criteria for assessing construction noise impacts related to transportation projects (FHWA Construction Noise Handbook, 2006), it is necessary to primarily rely on the standards and requirements developed by local governments to determine the criteria to which contractors must adhere.

In Georgia, contractors on all highway construction projects are required to adhere to GDOT Standard Specification Section 107.01 – Laws to Be Observed, which states in part, “The Contractor shall at all times observe and comply with all such laws, ordinances, codes, regulations, orders and decrees...” unless the necessary variance is obtained. Additionally, night time construction is proposed for the proposed project. All construction activities would adhere to Special Provision 150.11.

In order to further minimize construction noise, GDOT’s Office of Environmental Services will give the Project Manager and the design team the noise sensitive receptor information as early as possible during project development. This information would be used for the incorporation of construction noise control strategies in the project layout and design. For example, haul roads could be relocated to areas that would minimize construction vehicle noise exposure to noise sensitive receivers. The sequencing of construction activities and techniques could also be developed to minimize construction noise impacts. For example, permanent noise barriers included in project design could be constructed as early as possible, and daytime (or specified) hours could be required for certain activities.

6. WHAT ARE THE CONCLUSIONS REACHED BASED ON THE NOISE ANALYSIS?

The construction of this project will result in **0** impacts by approaching and/or exceeding the NAC and **0** by substantial increase. The noise levels for the proposed project are close to the estimated noise levels for the no-build condition. The proposed project in the design year (2035) would result in a **0.3** decibel increase in traffic generated noise. This noise reduction can be contributed to the proposed roundabout interchange that will decrease traffic speeds, which in turn will lower noise levels in the surrounding area. Existing noise levels range from **55.1 dBA to 65.0 dBA**. The predicted no-build noise levels will range from **55.1 dBA to 65.0 dBA**.

In order to accommodate the proposed roundabouts, existing noise barriers located in the northeast and southwest quadrants of the interchange of I-285 at Riverside Drive will be modified. This study analyzed the build conditions assuming the project would remove and replace the impacted sections of the existing noise barriers. The location and alignment of the replacement noise barrier were determined based on constructability. The top of noise barrier heights for the replacement noise barrier sections were maintained the same as existing conditions. Since the project would remove and replace sections of the noise barrier, the replacement barrier was coded as part of the build conditions and not as a proposed barrier. The predicted build noise levels will range from **54.7 dBA to 65.1 dBA**. No impacts were identified for this project. Therefore, abatement measures were not considered. See Table 8 Summary of Findings below.

**Table 8
Summary of Findings**

Impacted Receiver #	# of Receptors Represented	Property Identification	Is Abatement Feasible & Reasonable	Approximate cost of abatement
0	0	N/A	N/A	N/A

7. WHAT IS THE LIKELIHOOD A PROPOSED BARRIER WILL BE CONSTRUCTED

No impacts were identified for this project. Therefore, abatement measures were not considered. A reevaluation of the noise analysis will occur during final design, should changes warrant a reevaluation.

A reevaluation of the noise analysis will occur during final design, should changes warrant a reevaluation. If during final design it has been determined that conditions have changed such that noise abatement is not feasible and reasonable, the abatement measures might not be provided. The final decision on the installation of any abatement measure(s) will be made upon the completion of the project’s final design and the public involvement processes.

- Appendix A - Traffic Volumes Memorandum**
- Appendix B - Receiver Inputs (Existing/No-Build) and (Build)**
- Appendix C - Roadway Inputs (Existing/No-Build) and (Build)**
- Appendix D - Traffic Inputs (Existing/No-Build) and (Build)**
- Appendix E - Barrier Inputs (Existing/No-Build) and (Build)**
- Appendix F - Receiver Outputs (Existing/No-Build) and (Build)**
- Appendix G - Field Notes (Calibration Inputs) and (Calibration Outputs)**
- Appendix H - Draft Letter to Officials**
- Appendix I - NEPA Summary**

Appendix A
Traffic Volumes Memorandum



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MEMO

To:
Adam Promesse, GDOT
Office of Environmental Services

Copies:
Marlo Clowers, GDOT
Amber Phillips, GDOT
Shamir Poudel, ARCADIS
Koushik Arunachalam, ARCADIS

From:
Luis Velasquez, EIT

Date:
February 21, 2014

ARCADIS Project No.:
GADT0201.0141

Subject:
I-285 at CR 209/Riverside Drive – Input Traffic Volumes for Noise Impact
Assessment
P.I. 0010925

The purpose of this memorandum is to provide the methodology that will be used by ARCADIS U.S., Inc. (ARCADIS) to develop traffic volumes necessary to complete the noise impact assessment for the I-285 at CR 209/Riverside Drive Interchange Reconstruction Project (P.I. 0010925). The noise analysis will be conducted in accordance with the current Georgia Department of Transportation (GDOT) Noise Policy and with 23 USC Section 109(h) and (i) of the Federal Highway Administration's (FHWA) established guidelines for the assessment of highway traffic-generated noise. These guidelines published as Part 772 of Title 23 of the Code of Federal Regulations (23 CFR Part 772).

Methodology for Traffic Volume Development:

The proposed project is located on Riverside Drive at the interchange with I-285 in Fulton County Georgia and is within the city limits of Sandy Springs. The project consists of safety improvements to the existing interchange which will convert the two existing signalized intersections at each ramp terminal with roundabouts. Riverside Drive is a north-south, two-lane, undivided roadway with a posted speed limit of 35 mph in the vicinity of the study area. This section of Riverside Drive is located in a densely residential area. Traffic volumes are heaviest in the northern part of the study area between Interstate-285 and Heards Ferry Road.

Level-of-Service C Traffic Volumes

For this project LOS C traffic volume thresholds were based on the Highway Capacity Manual 2010¹ (HCM 2010) and values set by the Atlanta Regional Commission (ARC)². The HCM 2010 provided LOS C traffic volumes for free-flow Interstates and Freeways. For all other roadway classifications within the project limits ARC LOS C traffic volumes were selected based on the ARC Functional Classification maps

by county. The classifications were compared to the ARC facility types table in Appendix A. The study area fall under urban high density and has the following facility types:

- Interstate/Freeway Free-Flow (Facility Type) – or – Urban Interstate Principal Arterial (ARC Functional Classification)
- On Ramp with Intersection
- Off Ramp with Intersection
- Minor Arterial - Class I (Facility Type) – or – Urban Minor Arterial Street (ARC Functional Classification)

Traffic volumes for roadways within the study area are summarized in Table 1. Operating speeds are assumed to be the posted speed limit. These LOS C traffic volumes will be multiplied by the number of through lanes and input into TNM.

Table 1: LOS C Traffic Volumes, by Facility Type, by Lane, for Urban High Density Facilities

Road Name	Facility Type	Posted Speed Limit (mph)	LOS C Traffic Volumes (vph) per lane
Riverside Drive	Minor Arterial – Class I	35	600
Interstate 285 (I-285)	Interstate/Freeway Free-Flow	55	1,430
Interstate 285 EB Exit Ramp	Off Ramp with Intersection		600
Interstate 285 EB Entrance Ramp	On Ramp with Intersection		600
Interstate 285 WB Exit Ramp	Off Ramp with Intersection		600
Interstate 285 WB Entrance Ramp	On Ramp with Intersection		600

Table 2 shows the comparison of LOS C volumes and GDOT approved traffic volumes (October 2013).

Table 2: LOS C Volumes vs. GDOT Approved Traffic Volumes, by facility type

Road Name	Direction of Travel	Posted Speed Limit (mph)	LOS C Volume	Design Hour Volumes (PM)
				Existing (2012)
Riverside Drive	North	35	600	280
Riverside Drive	North	35	600	905
Riverside Drive	North	35	600	1200
Riverside Drive	South	35	600	670
Riverside Drive	South	35	600	415
Riverside Drive	South	35	600	520
I-285	East	55	7150	6710
I-285	West	55	7150	6620
I-285 EB Exit Ramp	East		600	975
I-285 EB Entrance	East		600	245
I-285 WB Exit Ramp	West		600	350
I-285 WB Entrance	West		600	390

As can be seen in Table 2, the existing traffic volumes are greater than the LOS C volumes along Riverside Drive, north of I-285. The approved traffic volumes are shown to be lower than the LOS C traffic volumes along Riverside Drive, south of I-285. Based on field observations during the PM peak hours, sections of Riverside Drive and I-285 operate as congested sections. The operating speeds are much lower than the posted speed limits. In order to realistically capture the worst case for noise levels, we recommend adopting the LOS C approach to input volumes for all roadways in the study area. Under LOS C conditions, the volumes are reasonably high enough and vehicles operate at or around posted limits to capture the worst case noise impacts.

Noise levels are highest at optimum traffic density; commonly known as LOS C. Optimum traffic density occurs at maximum traffic flow and operating speeds. Facilities observed operating at LOS C typically serve the highest number vehicles that would operate at speeds close to the posted speed limit. Therefore a reasonable approach for evaluating worse case noise impacts is to use LOS C traffic volumes and posted speed limits.

In summary, ARCADIS will complete the noise impact assessment for the I-285 at Riverside Drive Interchange Reconstruction Project (P.I. 0010925) using LOS C traffic volumes set by the ARC for existing, no-build and build conditions. The traffic volumes will be based on the facility type multiplied by the number of through lanes and input into TNM. The operating speeds are assumed to be the same as the posted speed limits.

References

1. TRB. 2010. *Highway Capacity Manual*, the Transportation Research Board (TRB), Washington, DC., Exhibit 11-17
2. ARC. 2011. *The Travel Forecasting Model Set For the Atlanta Region 2010 Documentation*, the Atlanta Regional Commission (ARC), Atlanta, GA, Table 9.6

Appendix

Appendix A: Atlanta Regional Commission ARC (Look-Up) Table

Atlanta Regional Commission (ARC) Look-up Table

Facility Type	LOS E CAPACITY													
	AT1	AT2	AT3	AT4	AT5	AT6	AT7	AT1	AT2	AT3	AT4	AT5	AT6	AT7
1 Interstate/Freeway	1900	1900	2000	2000	2050	2100	2100	1900	1900	2000	2000	2050	2100	2100
2 Expressway	1200	1200	1300	1350	1400	1450	1450	1200	1200	1300	1350	1400	1450	1450
3 Parkway	1150	1150	1250	1300	1350	1400	1400	1150	1150	1250	1300	1350	1400	1400
4 Freeway HOV (concurrent)	1900	1900	2000	2000	2050	2100	2100	1900	1900	2000	2000	2050	2100	2100
5 Freeway HOV (barrier seperated)	1900	1900	2000	2000	2050	2100	2100	1900	1900	2000	2000	2050	2100	2100
6 Freeway Truck Only	1900	1900	2000	2000	2050	2100	2100	1900	1900	2000	2000	2050	2100	2100
7 System to System Ramp	1300	1400	1500	1600	1700	1700	1700	1300	1400	1500	1600	1700	1700	1700
8 Exit Ramp	850	850	850	850	850	900	900	850	850	850	850	900	900	900
9 Entrance Ramp	900	900	950	950	1000	1050	1100	900	900	950	950	1000	1050	1100
10 Principal Arterial	1000	1050	1100	1150	1200	1250	1300	1000	1050	1100	1150	1200	1250	1300
11 Minor Arterial	900	900	950	1000	1050	1100	1100	900	900	950	1000	1050	1100	1100
12 Arterial HOV	1000	1050	1100	1150	1200	1250	1300	1000	1050	1100	1150	1200	1250	1300
13 Arterial Truck Only	900	900	950	1000	1050	1100	1100	900	900	950	1000	1050	1100	1100
14 Collector	750	800	800	850	850	900	900	750	800	800	850	850	900	900

LOS	V/C
C	0.7

Facility Type	LOS C CAPACITY													
	AT1	AT2	AT3	AT4	AT5	AT6	AT7	AT1	AT2	AT3	AT4	AT5	AT6	AT7
1 Interstate/Freeway	1300	1300	1400	1400	1400	1500	1500	1300	1300	1400	1400	1400	1500	1500
2 Expressway	800	800	900	900	1000	1000	1000	800	800	900	900	1000	1000	1000
3 Parkway	800	800	900	900	900	1000	1000	800	800	900	900	1000	1000	1000
4 Freeway HOV (concurrent)	1300	1300	1400	1400	1400	1500	1500	1300	1300	1400	1400	1400	1500	1500
5 Freeway HOV (barrier seperated)	1300	1300	1400	1400	1400	1500	1500	1300	1300	1400	1400	1400	1500	1500
6 Freeway Truck Only	1300	1300	1400	1400	1400	1500	1500	1300	1300	1400	1400	1400	1500	1500
7 System to System Ramp	900	1000	1100	1100	1200	1200	1200	900	1000	1100	1100	1200	1200	1200
8 Exit Ramp	600	600	600	600	600	600	600	600	600	600	600	600	600	600
9 Entrance Ramp	600	600	700	700	700	700	700	600	600	700	700	700	700	700
10 Principal Arterial	700	700	800	800	800	900	900	700	700	800	800	800	900	900
11 Minor Arterial	600	600	700	700	700	700	700	600	600	700	700	700	700	700
12 Arterial HOV	700	700	800	800	800	800	800	700	700	800	800	800	800	800
13 Arterial Truck Only	600	600	700	700	700	700	700	600	600	700	700	700	700	700
14 Collector	500	600	600	600	600	600	600	500	600	600	600	600	600	600

Area Type	Description
AT1	Urban Very High Density
AT2	Urban High Density
AT3	Urban Medium Density
AT4	Urban Low Density
AT5	Suburban
AT6	Exurban
AT7	Rural

Facility Type	Free-Flow Speeds													
	AT1	AT2	AT3	AT4	AT5	AT6	AT7	AT1	AT2	AT3	AT4	AT5	AT6	AT7
1 Interstate/Freeway	64	64	64	64	64	64	64	64	64	64	64	64	64	64
2 Expressway	43	43	44	44	44	44	44	43	43	44	44	44	44	44
3 Parkway	41	41	43	43	44	44	44	41	41	43	44	44	44	44
4 Freeway HOV (concurrent)	64	64	64	64	64	64	64	64	64	64	64	64	64	64
5 Freeway HOV (barrier seperated)	64	64	64	64	64	64	64	64	64	64	64	64	64	64
6 Freeway Truck Only	64	64	64	64	64	64	64	64	64	64	64	64	64	64
7 System to System Ramp	50	50	50	50	50	50	50	50	50	50	50	50	50	50
8 Exit Ramp	25	25	25	25	25	25	25	25	25	25	25	25	25	25
9 Entrance Ramp	25	25	25	25	25	25	25	25	25	25	25	25	25	25
10 Principal Arterial	29	31	33	33	33	33	33	29	31	33	33	33	33	33
11 Minor Arterial	26	28	28	28	28	28	28	26	28	28	28	28	28	28
12 Arterial HOV	25	27	27	27	27	27	27	25	27	27	27	27	27	27
13 Arterial Truck Only	25	27	27	27	27	27	27	25	27	27	27	27	27	27
14 Collector	25	26	26	26	26	26	26	25	26	26	26	26	26	26

Appendix B
Receiver Inputs (Existing/ No-Build)

Appendix B – Cont.
Receiver Inputs (Build)

INPUT: RECEIVERS

I-285 at Riverside Drive

ARCADIS							5 May 2014					
LJV							TNM 2.5					
INPUT: RECEIVERS												
PROJECT/CONTRACT:			I-285 at Riverside Drive									
RUN:			Build (2035)									
Receiver												
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.	
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal		
			ft	ft	ft	ft	dBA	dBA	dB	dB		
R1	511	1	2,224,071.2	1,423,818.0	1,064.00	4.92	0.00	66	10.0	5.0	Y	
R2	512	1	2,223,089.8	1,423,996.5	1,038.00	4.92	0.00	66	10.0	5.0	Y	
R3	513	1	2,223,288.5	1,423,974.1	1,046.00	4.92	0.00	66	10.0	5.0	Y	
R4	514	1	2,223,439.5	1,423,941.4	1,038.00	4.92	0.00	66	10.0	5.0	Y	
R5	515	1	2,223,663.8	1,423,994.0	1,042.00	4.92	0.00	66	10.0	5.0	Y	
R7	517	1	2,223,603.8	1,424,907.9	1,029.00	4.92	0.00	66	10.0	5.0	Y	
R8	518	1	2,223,366.0	1,425,163.2	973.00	4.92	0.00	66	10.0	5.0	Y	
R9	519	1	2,223,596.5	1,425,210.0	978.00	4.92	0.00	66	10.0	5.0	Y	
R10	521	1	2,224,155.2	1,425,233.4	996.00	4.92	0.00	66	10.0	5.0	Y	
R11	522	1	2,224,284.8	1,425,168.4	998.00	4.92	0.00	66	10.0	5.0	Y	
R12	523	1	2,224,705.0	1,424,831.6	1,013.00	4.92	0.00	66	10.0	5.0	Y	
R13	524	1	2,224,545.0	1,424,790.5	1,017.00	4.92	0.00	66	10.0	5.0	Y	
R14	525	1	2,224,413.0	1,424,858.4	1,018.00	4.92	0.00	66	10.0	5.0	Y	
R15	526	1	2,224,239.8	1,424,932.0	1,018.00	4.92	0.00	66	10.0	5.0	Y	
R16	527	1	2,223,962.2	1,424,931.9	1,025.00	4.92	0.00	66	10.0	5.0	Y	
R17	528	1	2,224,142.5	1,424,037.4	1,056.00	4.92	0.00	66	10.0	5.0	Y	
A1	529	1	2,223,711.8	1,424,131.8	1,049.00	4.92	0.00	66	10.0	5.0	Y	
A2	530	1	2,223,661.5	1,424,133.2	1,049.00	4.92	0.00	66	10.0	5.0	Y	
A3	531	1	2,223,561.5	1,424,136.1	1,038.00	4.92	0.00	66	10.0	5.0	Y	
A4	532	1	2,223,461.5	1,424,139.0	1,030.00	4.92	0.00	66	10.0	5.0	Y	
A5	533	1	2,223,361.5	1,424,141.9	1,022.00	4.92	0.00	66	10.0	5.0	Y	
A6	534	1	2,223,261.5	1,424,144.8	1,010.00	4.92	0.00	66	10.0	5.0	Y	

INPUT: RECEIVERS**I-285 at Riverside Drive**

R6	544	1	2,223,652.8	1,424,214.8	1,046.00	4.92	0.00	66	10.0	5.0	Y
A7	548	1	2,223,161.8	1,424,147.6	1,006.00	4.92	0.00	66	10.0	5.0	Y
A8	549	1	2,223,123.5	1,424,148.8	1,004.00	4.92	0.00	66	10.0	5.0	Y
R18	553	1	2,223,942.8	1,425,209.2	1,004.00	4.92	0.00	66	10.0	5.0	Y

Appendix C
Roadway Inputs (Existing/No-Build)

INPUT: ROADWAYS

I-285 at Riverside Drive

ARCADIS LJV		19 March 2014 TNM 2.5									
INPUT: ROADWAYS		I-285 at Riverside Drive					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:		Existing (2014) No-Build (2035)									
RUN:											
Roadway		Points			Coordinates (pavement)			Flow Control		Segment	
Name	Width	Name	No.	X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
I-285 EB right 1	36.0	point1	1	2,219,762.0	1,424,236.1	942.00				Average	
		point2	2	2,219,980.0	1,424,312.9	945.00				Average	
		point3	3	2,220,220.0	1,424,382.2	948.00				Average	
		point4	4	2,220,601.0	1,424,464.1	951.00				Average	
		point5	5	2,220,839.8	1,424,497.5	954.00				Average	
		point6	6	2,221,053.5	1,424,516.2	957.00				Average	
		point7	7	2,221,330.8	1,424,527.1	959.00				Average	
		point8	8	2,221,568.0	1,424,526.0	962.00				Average	
		point9	9	2,221,766.5	1,424,524.5	964.00					
I-285 EB right 2	36.0	point15	15	2,221,766.5	1,424,524.5	964.00				Average	
		point16	16	2,221,983.8	1,424,521.8	968.00				Average	
		point17	17	2,222,156.5	1,424,521.4	972.00				Average	
		point18	18	2,222,325.0	1,424,519.4	976.00				Average	
		point19	19	2,222,512.5	1,424,518.8	980.00				Average	
		point20	20	2,222,672.8	1,424,515.2	984.00				Average	
		point21	21	2,222,833.5	1,424,514.9	988.00				Average	
		point22	22	2,223,005.2	1,424,512.4	992.00				Average	
		point23	23	2,223,170.2	1,424,511.4	996.00				Average	
		point24	24	2,223,311.0	1,424,510.4	1,000.00				Average	
		point25	25	2,223,458.2	1,424,509.9	1,004.00				Average	
		point26	26	2,223,624.5	1,424,507.0	1,008.00				Average	
		point27	27	2,223,742.8	1,424,507.2	1,012.00				Average	
		point28	28	2,223,917.5	1,424,503.9	1,018.00				Average	
		point29	29	2,224,116.5	1,424,502.0	1,022.00				Average	
		point30	30	2,224,300.8	1,424,499.1	1,028.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point31	31	2,224,421.5	1,424,492.2	1,034.00				Average
		point32	32	2,224,541.5	1,424,479.0	1,040.00				Average
		point33	33	2,224,671.0	1,424,459.2	1,046.00				Average
		point34	34	2,224,784.8	1,424,437.1	1,048.00				Average
		point35	35	2,224,895.0	1,424,409.9	1,051.00				Average
		point36	36	2,225,017.8	1,424,377.4	1,054.00				Average
		point37	37	2,225,127.5	1,424,342.9	1,057.00				Average
		point38	38	2,225,236.8	1,424,299.8	1,060.00				Average
		point39	39	2,225,415.0	1,424,227.5	1,063.00				
I-285 EB left 1	24.0	point152	152	2,219,757.8	1,424,265.5	942.00				Average
		point153	153	2,219,974.0	1,424,340.0	945.00				Average
		point154	154	2,220,210.5	1,424,408.1	948.00				Average
		point155	155	2,220,591.5	1,424,486.2	951.00				Average
		point156	156	2,220,835.5	1,424,524.1	954.00				Average
		point157	157	2,221,053.2	1,424,542.2	957.00				Average
		point158	158	2,221,331.5	1,424,553.9	959.00				Average
		point159	159	2,221,572.2	1,424,553.4	962.00				Average
		point160	160	2,221,766.0	1,424,552.0	964.00				
I-128 EB left 2	24.0	point173	173	2,223,747.2	1,424,533.8	1,012.00				Average
		point174	174	2,223,920.8	1,424,532.2	1,018.00				Average
		point175	175	2,224,115.8	1,424,529.5	1,022.00				Average
		point176	176	2,224,301.2	1,424,527.4	1,028.00				Average
		point177	177	2,224,423.8	1,424,517.9	1,034.00				Average
		point178	178	2,224,545.2	1,424,503.6	1,040.00				Average
		point179	179	2,224,674.8	1,424,485.1	1,046.00				Average
		point180	180	2,224,789.2	1,424,462.9	1,048.00				Average
		point181	181	2,224,903.2	1,424,437.1	1,051.00				Average
		point182	182	2,225,023.8	1,424,402.9	1,054.00				Average
		point183	183	2,225,137.2	1,424,365.1	1,057.00				Average
		point184	184	2,225,247.5	1,424,323.1	1,060.00				Average
		point185	185	2,225,423.2	1,424,246.2	1,063.00				Average
		point186	186	2,225,577.0	1,424,174.0	1,065.00				
WB right 11	36.0	point396	396	2,224,918.2	1,424,506.5	1,051.00				Average
		point397	397	2,224,804.2	1,424,532.9	1,048.00				Average
		point398	398	2,224,686.5	1,424,557.4	1,046.00				Average
		point399	399	2,224,554.2	1,424,577.2	1,040.00				Average
		point400	400	2,224,431.2	1,424,590.9	1,034.00				Average
		point401	401	2,224,304.8	1,424,599.1	1,028.00				Average
		point402	402	2,224,117.5	1,424,603.1	1,022.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point403	403	2,223,921.5	1,424,603.2	1,018.00				Average	
		point404	404	2,223,749.5	1,424,603.8	1,012.00				Average	
		point405	405	2,223,626.8	1,424,604.8	1,008.00				Average	
		point406	406	2,223,462.2	1,424,606.2	1,004.00				Average	
		point407	407	2,223,316.5	1,424,608.2	1,000.00				Average	
		point408	408	2,223,168.8	1,424,610.6	996.00				Average	
		point409	409	2,223,002.2	1,424,611.9	992.00				Average	
		point410	410	2,222,835.8	1,424,613.1	988.00				Average	
		point411	411	2,222,673.2	1,424,613.1	984.00				Average	
		point412	412	2,222,512.8	1,424,612.2	980.00				Average	
		point413	413	2,222,327.0	1,424,613.9	976.00					
Wb right 12	36.0	point414	414	2,222,322.0	1,424,614.9	976.00				Average	
		point415	415	2,222,159.0	1,424,617.1	972.00				Average	
		point416	416	2,221,984.5	1,424,618.8	968.00				Average	
		point417	417	2,221,766.8	1,424,619.0	964.00				Average	
		point418	418	2,221,573.0	1,424,622.1	962.00				Average	
		point419	419	2,221,329.8	1,424,622.6	959.00				Average	
		point420	420	2,221,047.8	1,424,613.9	957.00				Average	
		point421	421	2,220,827.2	1,424,593.1	954.00				Average	
		point422	422	2,220,574.8	1,424,556.2	951.00				Average	
		point423	423	2,220,192.5	1,424,474.1	948.00				Average	
		point424	424	2,219,950.0	1,424,405.8	945.00				Average	
		point425	425	2,219,733.8	1,424,330.2	942.00					
WB left 10	24.0	point522	522	2,226,986.0	1,423,751.0	1,029.00				Average	
		point523	523	2,226,836.0	1,423,777.2	1,033.00				Average	
		point524	524	2,226,690.5	1,423,806.4	1,037.00				Average	
		point525	525	2,226,579.0	1,423,832.5	1,041.00				Average	
		point526	526	2,226,479.2	1,423,859.1	1,045.00				Average	
		point527	527	2,226,383.2	1,423,888.8	1,050.00				Average	
		point528	528	2,226,262.2	1,423,929.0	1,055.00				Average	
		point529	529	2,226,108.2	1,423,987.4	1,060.00				Average	
		point530	530	2,225,604.5	1,424,211.4	1,065.00				Average	
		point531	531	2,225,444.0	1,424,287.5	1,063.00				Average	
		point532	532	2,225,266.8	1,424,365.2	1,060.00				Average	
		point533	533	2,225,152.8	1,424,411.8	1,057.00				Average	
		point534	534	2,225,036.5	1,424,448.0	1,054.00					
WB left 11	24.0	point535	535	2,225,036.5	1,424,448.0	1,054.00				Average	
		point536	536	2,224,913.5	1,424,480.2	1,051.00				Average	
		point537	537	2,224,796.2	1,424,504.0	1,048.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point538	538	2,224,680.0	1,424,528.8	1,046.00				Average
		point539	539	2,224,550.2	1,424,546.6	1,040.00				Average
		point540	540	2,224,428.2	1,424,559.0	1,034.00				Average
		point541	541	2,224,302.8	1,424,568.1	1,028.00				Average
		point542	542	2,224,116.2	1,424,570.1	1,022.00				Average
		point543	543	2,223,921.2	1,424,572.2	1,018.00				Average
		point544	544	2,223,747.8	1,424,573.8	1,012.00				Average
		point545	545	2,223,626.5	1,424,574.8	1,008.00				Average
		point546	546	2,223,462.0	1,424,576.4	1,004.00				Average
		point547	547	2,223,314.8	1,424,578.4	1,000.00				Average
		point548	548	2,223,169.2	1,424,580.8	996.00				Average
		point549	549	2,223,005.0	1,424,582.0	992.00				Average
		point550	550	2,222,835.5	1,424,581.8	988.00				Average
		point551	551	2,222,673.2	1,424,583.2	984.00				Average
		point552	552	2,222,512.8	1,424,583.8	980.00				Average
		point553	553	2,222,327.0	1,424,584.4	976.00				
WB left 12	24.0	point554	554	2,222,327.0	1,424,584.4	976.00				Average
		point555	555	2,222,158.8	1,424,586.4	972.00				Average
		point556	556	2,221,984.2	1,424,588.8	968.00				Average
		point557	557	2,221,766.5	1,424,592.6	964.00				Average
		point558	558	2,221,572.8	1,424,593.4	962.00				Average
		point559	559	2,221,330.8	1,424,593.9	959.00				Average
		point560	560	2,221,050.8	1,424,583.8	957.00				Average
		point561	561	2,220,830.8	1,424,563.9	954.00				Average
		point562	562	2,220,583.0	1,424,528.6	951.00				Average
		point563	563	2,220,200.8	1,424,447.0	948.00				Average
		point564	564	2,219,962.0	1,424,376.5	945.00				Average
		point565	565	2,219,745.8	1,424,302.2	942.00				
I-285 EB left 1-2	24.0	point1329	1329	2,221,766.0	1,424,552.0	964.00				Average
		point161	161	2,221,984.0	1,424,548.2	968.00				Average
		point162	162	2,222,158.2	1,424,546.4	972.00				Average
		point163	163	2,222,326.5	1,424,544.4	976.00				Average
		point164	164	2,222,512.5	1,424,543.8	980.00				Average
		point165	165	2,222,673.0	1,424,543.2	984.00				Average
		point166	166	2,222,835.2	1,424,541.8	988.00				Average
		point167	167	2,223,004.8	1,424,540.8	992.00				Average
		point168	168	2,223,170.5	1,424,537.9	996.00				Average
		point169	169	2,223,314.2	1,424,538.4	1,000.00				Average
		point170	170	2,223,461.5	1,424,536.4	1,004.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point171	171	2,223,626.2	1,424,533.2	1,008.00				Average
		point172	172	2,223,747.2	1,424,533.8	1,012.00				
I-285 EB Right 3	36.0	point40	1349	2,225,415.0	1,424,227.5	1,063.00				Average
		point41	1350	2,225,568.8	1,424,150.9	1,067.00				Average
		point42	1351	2,226,073.2	1,423,917.1	1,060.00				Average
		point43	1352	2,226,230.0	1,423,851.2	1,055.00				Average
		point44	1353	2,226,354.8	1,423,810.6	1,050.00				Average
		point45	1354	2,226,458.8	1,423,778.2	1,045.00				Average
		point46	1355	2,226,557.5	1,423,754.4	1,041.00				Average
		point47	1356	2,226,673.8	1,423,727.8	1,037.00				Average
		point48	1357	2,226,821.2	1,423,701.8	1,033.00				Average
		point49	1358	2,226,973.5	1,423,675.6	1,029.00				
I-285 EB Left 3	24.0	point187	1375	2,225,577.0	1,424,174.0	1,065.00				Average
		point188	1376	2,226,083.2	1,423,947.4	1,060.00				Average
		point189	1377	2,226,242.5	1,423,882.8	1,055.00				Average
		point190	1378	2,226,361.0	1,423,841.1	1,050.00				Average
		point191	1379	2,226,460.8	1,423,811.2	1,045.00				Average
		point192	1380	2,226,565.2	1,423,785.2	1,041.00				Average
		point193	1381	2,226,680.2	1,423,759.9	1,037.00				Average
		point194	1382	2,226,826.5	1,423,734.4	1,033.00				Average
		point195	1383	2,226,979.8	1,423,707.1	1,029.00				
WB Right 10	36.0	point381	1404	2,227,123.8	1,423,757.4	1,026.00				Average
		point383	1406	2,226,854.0	1,423,805.0	1,033.00				Average
		point384	1407	2,226,701.8	1,423,835.8	1,037.00				Average
		point385	1408	2,226,594.0	1,423,862.5	1,041.00				Average
		point386	1409	2,226,493.5	1,423,886.0	1,045.00				Average
		point387	1410	2,226,396.0	1,423,918.4	1,050.00				Average
		point388	1411	2,226,275.5	1,423,959.0	1,055.00				Average
		point389	1412	2,226,122.0	1,424,015.6	1,060.00				Average
		point390	1413	2,225,613.5	1,424,237.0	1,065.00				Average
		point391	1414	2,225,455.0	1,424,310.9	1,063.00				Average
		point392	1415	2,225,276.8	1,424,392.4	1,060.00				Average
		point393	1416	2,225,168.8	1,424,435.5	1,057.00				Average
		point394	1417	2,225,045.5	1,424,474.0	1,054.00				Average
		point395	1418	2,224,918.2	1,424,506.5	1,051.00				
Riverside NB 1	12.0	point1534	1534	2,223,234.0	1,422,967.2	1,056.00				Average
		point1535	1535	2,223,282.0	1,423,010.2	1,057.00				Average
		point1536	1536	2,223,319.8	1,423,043.1	1,056.00				Average
		point1537	1537	2,223,357.5	1,423,075.8	1,056.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1538	1538	2,223,395.5	1,423,108.6	1,058.00				Average
		point1539	1539	2,223,433.0	1,423,141.4	1,059.00				Average
		point1540	1540	2,223,471.0	1,423,174.2	1,059.00				Average
		point1541	1541	2,223,508.5	1,423,207.0	1,059.00				Average
		point1542	1542	2,223,546.5	1,423,239.8	1,059.00				Average
		point1543	1543	2,223,584.0	1,423,272.5	1,059.00				Average
		point1544	1544	2,223,622.0	1,423,305.2	1,059.00				Average
		point1545	1545	2,223,659.5	1,423,338.1	1,059.00				Average
		point1546	1546	2,223,696.8	1,423,371.2	1,059.00				Average
		point1547	1547	2,223,728.8	1,423,409.2	1,058.00				Average
		point1548	1548	2,223,750.8	1,423,453.2	1,057.00				Average
		point1549	1549	2,223,769.5	1,423,498.8	1,056.00				Average
		point1550	1550	2,223,776.8	1,423,547.9	1,054.00				Average
		point1551	1551	2,223,778.2	1,423,648.2	1,050.10				Average
		point1552	1552	2,223,777.8	1,423,697.8	1,048.00				Average
		point1553	1553	2,223,778.8	1,423,747.9	1,046.30				Average
		point1554	1554	2,223,778.5	1,423,797.8	1,045.10				Average
		point1555	1555	2,223,778.5	1,423,848.1	1,045.30				Average
		point1556	1556	2,223,778.5	1,423,897.6	1,046.60				Average
		point1557	1557	2,223,778.5	1,423,947.9	1,048.10				Average
		point1558	1558	2,223,778.8	1,423,997.8	1,049.30				Average
		point1559	1559	2,223,778.5	1,424,047.8	1,050.30				Average
		point1560	1560	2,223,778.5	1,424,098.0	1,050.40				Average
		point1561	1561	2,223,779.0	1,424,147.8	1,050.10				Average
		point1562	1562	2,223,778.8	1,424,197.8	1,049.80				Average
		point1563	1563	2,223,778.8	1,424,248.2	1,049.60				Average
		point1564	1564	2,223,779.0	1,424,267.5	1,049.60				
I-285 EB On Ramp	12.0	point1565	1565	2,223,813.2	1,424,311.2	1,048.70				Average
		point1566	1566	2,223,863.0	1,424,319.6	1,047.70				Average
		point1567	1567	2,223,913.0	1,424,328.4	1,046.70				Average
		point1568	1568	2,223,962.5	1,424,336.9	1,045.70				Average
		point1569	1569	2,224,010.0	1,424,345.8	1,044.40				Average
		point1570	1570	2,224,059.2	1,424,356.6	1,042.90				Average
		point1571	1571	2,224,109.5	1,424,365.8	1,041.50				Average
		point1572	1572	2,224,158.0	1,424,375.8	1,040.20				Average
		point1573	1573	2,224,207.2	1,424,385.4	1,038.60				Average
		point1574	1574	2,224,256.8	1,424,393.1	1,037.30				Average
		point1575	1575	2,224,305.5	1,424,401.8	1,035.80				Average
		point1576	1576	2,224,355.0	1,424,410.2	1,034.40				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1577	1577	2,224,405.2	1,424,417.1	1,033.30				Average	
		point1578	1578	2,224,454.5	1,424,423.0	1,032.80				Average	
		point1579	1579	2,224,505.0	1,424,423.9	1,033.30				Average	
		point1580	1580	2,224,554.8	1,424,423.0	1,034.10				Average	
		point1581	1581	2,224,604.5	1,424,419.9	1,035.80				Average	
		point1582	1582	2,224,653.5	1,424,415.2	1,037.60				Average	
		point1583	1583	2,224,704.0	1,424,408.5	1,039.10				Average	
		point1584	1584	2,224,753.5	1,424,402.5	1,041.10				Average	
		point1585	1585	2,224,802.5	1,424,394.2	1,042.50				Average	
		point1586	1586	2,224,852.0	1,424,382.9	1,044.60				Average	
		point1587	1587	2,224,900.2	1,424,371.1	1,046.20				Average	
		point1588	1588	2,224,948.8	1,424,359.2	1,047.50				Average	
		point1589	1589	2,224,997.0	1,424,346.8	1,049.20				Average	
		point1590	1590	2,225,030.2	1,424,336.6	1,050.60				Average	
		point1591	1591	2,225,076.5	1,424,321.4	1,052.10				Average	
		point1592	1592	2,225,116.8	1,424,309.2	1,053.50				Average	
		point1593	1593	2,225,151.8	1,424,300.1	1,054.80				Average	
		point1594	1594	2,225,181.0	1,424,297.9	1,061.00				Average	
		point1595	1595	2,225,316.2	1,424,244.6	1,061.00				Average	
		point1596	1596	2,225,415.0	1,424,227.5	1,063.00					
I-285 Eb Off Ramp	12.0	point1597	1597	2,221,765.8	1,424,523.6	964.00				Average	
		point1598	1598	2,221,879.5	1,424,505.9	967.00				Average	
		point1599	1599	2,222,067.8	1,424,495.0	974.00				Average	
		point1600	1600	2,222,363.5	1,424,466.2	974.00				Average	
		point1601	1601	2,222,402.2	1,424,465.2	974.10				Average	
		point1602	1602	2,222,448.0	1,424,460.8	975.50				Average	
		point1603	1603	2,222,495.0	1,424,454.9	977.30				Average	
		point1604	1604	2,222,546.0	1,424,445.5	979.60				Average	
		point1605	1605	2,222,597.0	1,424,443.8	982.40				Average	
		point1606	1606	2,222,651.0	1,424,438.0	985.50				Average	
		point1607	1607	2,222,692.0	1,424,432.2	987.90				Average	
		point1608	1608	2,222,742.5	1,424,428.1	990.80				Average	
		point1609	1609	2,222,798.5	1,424,422.2	994.10				Average	
		point1610	1610	2,222,841.2	1,424,410.5	996.80				Average	
		point1611	1611	2,222,897.8	1,424,402.9	1,000.20				Average	
		point1612	1612	2,222,948.8	1,424,399.6	1,003.30				Average	
		point1613	1613	2,222,991.8	1,424,394.2	1,005.90				Average	
		point1614	1614	2,223,040.0	1,424,391.1	1,008.80				Average	
		point1615	1615	2,223,090.0	1,424,386.8	1,011.90				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1616	1616	2,223,140.0	1,424,382.2	1,014.90				Average
		point1617	1617	2,223,199.0	1,424,374.0	1,018.40				Average
		point1618	1618	2,223,239.0	1,424,370.0	1,020.80				Average
		point1619	1619	2,223,288.2	1,424,362.2	1,023.80				Average
		point1620	1620	2,223,338.5	1,424,353.2	1,026.90				Average
		point1621	1621	2,223,386.5	1,424,345.5	1,029.80				Average
		point1622	1622	2,223,445.0	1,424,345.9	1,033.30				Average
		point1623	1623	2,223,486.0	1,424,338.1	1,035.90				Average
		point1624	1624	2,223,539.8	1,424,335.4	1,039.20				Average
		point1625	1625	2,223,589.0	1,424,327.6	1,042.20				Average
		point1626	1626	2,223,633.8	1,424,322.0	1,044.70				Average
		point1627	1627	2,223,691.5	1,424,315.8	1,047.20				Average
		point1628	1628	2,223,735.5	1,424,310.8	1,048.50				
Riverside SB 3	12.0	point1629	1629	2,223,767.5	1,424,267.4	1,049.40				Average
		point1630	1630	2,223,767.8	1,424,198.0	1,049.60				Average
		point1631	1631	2,223,767.5	1,424,148.1	1,049.70				Average
		point1632	1632	2,223,767.5	1,424,098.0	1,050.00				Average
		point1633	1633	2,223,767.5	1,424,048.2	1,050.30				Average
		point1634	1634	2,223,767.0	1,423,998.1	1,050.20				Average
		point1635	1635	2,223,767.0	1,423,948.2	1,049.40				Average
		point1636	1636	2,223,767.0	1,423,898.0	1,048.00				Average
		point1637	1637	2,223,766.5	1,423,848.0	1,046.50				Average
		point1638	1638	2,223,766.5	1,423,798.1	1,045.00				Average
		point1639	1639	2,223,766.8	1,423,748.0	1,045.00				Average
		point1640	1640	2,223,766.2	1,423,698.2	1,046.30				Average
		point1641	1641	2,223,766.0	1,423,648.2	1,048.10				Average
		point1642	1642	2,223,766.0	1,423,598.1	1,050.20				Average
		point1643	1643	2,223,764.8	1,423,548.1	1,052.00				Average
		point1644	1644	2,223,757.0	1,423,498.0	1,054.00				Average
		point1645	1645	2,223,737.5	1,423,451.8	1,056.00				Average
		point1646	1646	2,223,713.5	1,423,407.6	1,057.00				Average
		point1647	1647	2,223,680.5	1,423,369.8	1,058.00				Average
		point1648	1648	2,223,643.2	1,423,336.2	1,059.00				Average
		point1649	1649	2,223,605.2	1,423,303.6	1,059.00				Average
		point1650	1650	2,223,567.5	1,423,271.0	1,059.00				Average
		point1651	1651	2,223,529.5	1,423,238.4	1,059.00				Average
		point1652	1652	2,223,491.5	1,423,205.9	1,059.00				Average
		point1653	1653	2,223,453.5	1,423,173.2	1,059.00				Average
		point1654	1654	2,223,415.8	1,423,140.8	1,059.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1655	1655	2,223,377.8	1,423,108.1	1,059.00				Average	
		point1656	1656	2,223,340.0	1,423,075.5	1,058.00				Average	
		point1657	1657	2,223,302.0	1,423,042.9	1,056.00				Average	
		point1658	1658	2,223,264.0	1,423,010.2	1,056.00				Average	
		point1659	1659	2,223,226.0	1,422,977.8	1,057.00					
Riverside NB 2	12.0	point1660	1660	2,223,782.0	1,424,344.9	1,048.50				Average	Y
		point1661	1661	2,223,782.8	1,424,395.1	1,047.20				Average	Y
		point1662	1662	2,223,783.0	1,424,445.2	1,045.60				Average	Y
		point1663	1663	2,223,783.8	1,424,495.1	1,043.30				Average	Y
		point1664	1664	2,223,784.8	1,424,545.2	1,040.80				Average	Y
		point1665	1665	2,223,785.0	1,424,595.1	1,037.80				Average	Y
		point1666	1666	2,223,785.8	1,424,645.1	1,034.60				Average	Y
		point1667	1667	2,223,786.0	1,424,695.1	1,029.60				Average	Y
		point1668	1668	2,223,787.5	1,424,744.8	1,025.50				Average	Y
		point1669	1669	2,223,786.0	1,424,770.5	1,023.20					
Riverside SB 2	12.0	point1670	1670	2,223,774.5	1,424,769.5	1,023.20				Average	Y
		point1671	1671	2,223,774.5	1,424,745.1	1,025.40				Average	Y
		point1672	1672	2,223,774.0	1,424,695.2	1,029.70				Average	Y
		point1673	1673	2,223,773.5	1,424,645.5	1,034.20				Average	Y
		point1674	1674	2,223,773.0	1,424,595.1	1,037.70				Average	Y
		point1675	1675	2,223,772.5	1,424,545.2	1,040.70				Average	Y
		point1676	1676	2,223,771.5	1,424,495.2	1,043.20				Average	Y
		point1677	1677	2,223,771.5	1,424,445.2	1,045.30				Average	Y
		point1678	1678	2,223,770.5	1,424,395.4	1,047.30				Average	Y
		point1679	1679	2,223,770.2	1,424,345.1	1,048.40					
Riverside NB 3	12.0	point1680	1680	2,223,784.8	1,424,840.8	1,016.80				Average	
		point1681	1681	2,223,784.8	1,424,890.8	1,011.20				Average	
		point1682	1682	2,223,784.8	1,424,940.8	1,007.40				Average	
		point1683	1683	2,223,785.0	1,424,990.8	1,002.20				Average	
		point1684	1684	2,223,785.0	1,425,040.8	998.30				Average	
		point1685	1685	2,223,785.5	1,425,091.0	994.20				Average	
		point1686	1686	2,223,786.5	1,425,140.8	990.90				Average	
		point1687	1687	2,223,787.8	1,425,190.8	987.30				Average	
		point1688	1688	2,223,788.5	1,425,240.8	987.30				Average	
		point1689	1689	2,223,789.5	1,425,290.8	981.20				Average	
		point1690	1690	2,223,790.5	1,425,340.8	979.30				Average	
		point1691	1691	2,223,790.5	1,425,390.8	979.10				Average	
		point1692	1692	2,223,790.0	1,425,440.8	980.40				Average	
		point1693	1693	2,223,790.2	1,425,490.8	982.10				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1694	1694	2,223,790.5	1,425,540.8	984.50				Average
		point1695	1695	2,223,791.0	1,425,590.8	987.40				Average
		point1696	1696	2,223,790.8	1,425,640.8	989.80				Average
		point1697	1697	2,223,791.2	1,425,690.6	992.20				Average
		point1698	1698	2,223,791.8	1,425,739.2	994.00				
Roadway189	12.0	point1699	1699	2,223,779.5	1,425,738.0	993.70				Average
		point1700	1700	2,223,779.2	1,425,690.2	991.90				Average
		point1701	1701	2,223,779.0	1,425,640.2	989.70				Average
		point1702	1702	2,223,778.8	1,425,590.2	987.10				Average
		point1703	1703	2,223,778.8	1,425,540.2	984.60				Average
		point1704	1704	2,223,778.2	1,425,490.2	982.10				Average
		point1705	1705	2,223,778.0	1,425,440.2	980.20				Average
		point1706	1706	2,223,778.2	1,425,390.2	978.90				Average
		point1707	1707	2,223,778.5	1,425,340.4	979.70				Average
		point1708	1708	2,223,778.0	1,425,290.2	981.40				Average
		point1709	1709	2,223,777.2	1,425,240.2	983.90				Average
		point1710	1710	2,223,776.2	1,425,190.2	987.50				Average
		point1711	1711	2,223,775.8	1,425,140.2	990.90				Average
		point1712	1712	2,223,775.5	1,425,090.2	994.50				Average
		point1713	1713	2,223,774.2	1,425,040.2	998.70				Average
		point1714	1714	2,223,773.8	1,424,990.2	1,002.50				Average
		point1715	1715	2,223,773.2	1,424,940.2	1,007.20				Average
		point1716	1716	2,223,772.5	1,424,890.4	1,011.60				Average
		point1717	1717	2,223,772.0	1,424,840.8	1,016.80				
I-285 WB On Ramp	12.0	point1718	1718	2,223,736.8	1,424,797.4	1,019.50				Average
		point1719	1719	2,223,688.0	1,424,788.4	1,018.70				Average
		point1720	1720	2,223,637.8	1,424,779.8	1,018.10				Average
		point1721	1721	2,223,588.8	1,424,771.4	1,016.80				Average
		point1722	1722	2,223,539.8	1,424,762.8	1,014.70				Average
		point1723	1723	2,223,488.5	1,424,754.5	1,012.50				Average
		point1724	1724	2,223,440.8	1,424,745.0	1,010.50				Average
		point1725	1725	2,223,392.0	1,424,737.4	1,008.30				Average
		point1726	1726	2,223,343.5	1,424,728.2	1,006.10				Average
		point1727	1727	2,223,293.0	1,424,721.2	1,003.80				Average
		point1728	1728	2,223,244.8	1,424,713.1	1,001.60				Average
		point1729	1729	2,223,194.5	1,424,705.0	999.80				Average
		point1730	1730	2,223,145.0	1,424,698.4	997.20				Average
		point1731	1731	2,223,096.0	1,424,688.9	995.50				Average
		point1732	1732	2,223,046.5	1,424,681.2	993.10				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1733	1733	2,222,997.0	1,424,673.2	991.10				Average
		point1734	1734	2,222,948.2	1,424,667.9	989.20				Average
		point1735	1735	2,222,897.8	1,424,662.4	987.50				Average
		point1736	1736	2,222,847.8	1,424,659.8	985.60				Average
		point1737	1737	2,222,798.0	1,424,657.4	984.30				Average
		point1738	1738	2,222,748.2	1,424,655.8	984.30				Average
		point1739	1739	2,222,698.5	1,424,652.5	981.20				Average
		point1740	1740	2,222,648.5	1,424,648.8	979.60				Average
		point1741	1741	2,222,599.0	1,424,647.0	978.40				Average
		point1742	1742	2,222,548.0	1,424,644.6	977.10				Average
		point1743	1743	2,222,374.8	1,424,629.0	977.00				Average
		point1744	1744	2,222,327.2	1,424,614.4	976.00				
I-285 WB Off Ramp	12.0	point1745	1745	2,224,918.2	1,424,506.5	1,051.00				Average
		point1746	1746	2,224,856.2	1,424,539.1	1,049.00				Average
		point1747	1747	2,224,752.0	1,424,570.4	1,047.00				Average
		point1748	1748	2,224,731.2	1,424,572.2	1,043.50				Average
		point1749	1749	2,224,683.0	1,424,583.4	1,043.50				Average
		point1750	1750	2,224,634.0	1,424,594.8	1,043.50				Average
		point1751	1751	2,224,585.0	1,424,606.6	1,043.50				Average
		point1752	1752	2,224,536.8	1,424,618.0	1,043.50				Average
		point1753	1753	2,224,488.0	1,424,628.2	1,041.60				Average
		point1754	1754	2,224,439.2	1,424,641.1	1,040.60				Average
		point1755	1755	2,224,390.0	1,424,651.6	1,039.00				Average
		point1756	1756	2,224,342.0	1,424,662.2	1,037.60				Average
		point1757	1757	2,224,293.5	1,424,673.4	1,035.60				Average
		point1758	1758	2,224,245.0	1,424,687.8	1,033.50				Average
		point1759	1759	2,224,196.0	1,424,698.2	1,031.50				Average
		point1760	1760	2,224,147.0	1,424,710.6	1,029.40				Average
		point1761	1761	2,224,098.8	1,424,722.8	1,027.40				Average
		point1762	1762	2,224,051.2	1,424,734.2	1,025.20				Average
		point1763	1763	2,224,001.8	1,424,747.2	1,024.00				Average
		point1764	1764	2,223,953.0	1,424,758.2	1,022.50				Average
		point1765	1765	2,223,904.5	1,424,769.8	1,021.80				Average
		point1766	1766	2,223,856.8	1,424,782.5	1,020.80				Average
		point1767	1767	2,223,808.0	1,424,794.8	1,020.30				

Appendix C – Cont.
Roadway Inputs (Build)

ARCADIS LJV		21 March 2014 TNM 2.5									
INPUT: ROADWAYS		I-285 at Riverside Drive					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:		Build (2035)									
RUN:											
Roadway Name	Width	Points		Coordinates (pavement)			Flow Control			Segment	
		Name	No.	X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
I-285 EB right 1	36.0	point1	1	2,219,762.0	1,424,236.1	942.00				Average	
		point2	2	2,219,980.0	1,424,312.9	945.00				Average	
		point3	3	2,220,220.0	1,424,382.2	948.00				Average	
		point4	4	2,220,601.0	1,424,464.1	951.00				Average	
		point5	5	2,220,839.8	1,424,497.5	954.00				Average	
		point6	6	2,221,053.5	1,424,516.2	957.00				Average	
		point7	7	2,221,330.8	1,424,527.1	959.00				Average	
		point8	8	2,221,568.0	1,424,526.0	962.00				Average	
		point9	9	2,221,766.5	1,424,524.5	964.00					
I-285 EB right 2	36.0	point15	15	2,221,766.5	1,424,524.5	964.00				Average	
		point16	16	2,221,983.8	1,424,521.8	968.00				Average	
		point17	17	2,222,156.5	1,424,521.4	972.00				Average	
		point18	18	2,222,325.0	1,424,519.4	976.00				Average	
		point19	19	2,222,512.5	1,424,518.8	980.00				Average	
		point20	20	2,222,672.8	1,424,515.2	984.00				Average	
		point21	21	2,222,833.5	1,424,514.9	988.00				Average	
		point22	22	2,223,005.2	1,424,512.4	992.00				Average	
		point23	23	2,223,170.2	1,424,511.4	996.00				Average	
		point24	24	2,223,311.0	1,424,510.4	1,000.00				Average	
		point25	25	2,223,458.2	1,424,509.9	1,004.00				Average	
		point26	26	2,223,624.5	1,424,507.0	1,008.00				Average	
		point27	27	2,223,742.8	1,424,507.2	1,012.00				Average	
		point28	28	2,223,917.5	1,424,503.9	1,018.00				Average	
		point29	29	2,224,116.5	1,424,502.0	1,022.00				Average	
		point30	30	2,224,300.8	1,424,499.1	1,028.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point31	31	2,224,421.5	1,424,492.2	1,034.00				Average
		point32	32	2,224,541.5	1,424,479.0	1,040.00				Average
		point33	33	2,224,671.0	1,424,459.2	1,046.00				Average
		point34	34	2,224,784.8	1,424,437.1	1,048.00				Average
		point35	35	2,224,895.0	1,424,409.9	1,051.00				Average
		point36	36	2,225,017.8	1,424,377.4	1,054.00				Average
		point37	37	2,225,127.5	1,424,342.9	1,057.00				Average
		point38	38	2,225,236.8	1,424,299.8	1,060.00				Average
		point39	39	2,225,415.0	1,424,227.5	1,063.00				
I-285 EB left 1	24.0	point152	152	2,219,757.8	1,424,265.5	942.00				Average
		point153	153	2,219,974.0	1,424,340.0	945.00				Average
		point154	154	2,220,210.5	1,424,408.1	948.00				Average
		point155	155	2,220,591.5	1,424,486.2	951.00				Average
		point156	156	2,220,835.5	1,424,524.1	954.00				Average
		point157	157	2,221,053.2	1,424,542.2	957.00				Average
		point158	158	2,221,331.5	1,424,553.9	959.00				Average
		point159	159	2,221,572.2	1,424,553.4	962.00				Average
		point160	160	2,221,766.0	1,424,552.0	964.00				
I-128 EB left 2	24.0	point173	173	2,223,747.2	1,424,533.8	1,012.00				Average
		point174	174	2,223,920.8	1,424,532.2	1,018.00				Average
		point175	175	2,224,115.8	1,424,529.5	1,022.00				Average
		point176	176	2,224,301.2	1,424,527.4	1,028.00				Average
		point177	177	2,224,423.8	1,424,517.9	1,034.00				Average
		point178	178	2,224,545.2	1,424,503.6	1,040.00				Average
		point179	179	2,224,674.8	1,424,485.1	1,046.00				Average
		point180	180	2,224,789.2	1,424,462.9	1,048.00				Average
		point181	181	2,224,903.2	1,424,437.1	1,051.00				Average
		point182	182	2,225,023.8	1,424,402.9	1,054.00				Average
		point183	183	2,225,137.2	1,424,365.1	1,057.00				Average
		point184	184	2,225,247.5	1,424,323.1	1,060.00				Average
		point185	185	2,225,423.2	1,424,246.2	1,063.00				Average
		point186	186	2,225,577.0	1,424,174.0	1,065.00				
WB right 11	36.0	point396	396	2,224,918.2	1,424,506.5	1,051.00				Average
		point397	397	2,224,804.2	1,424,532.9	1,048.00				Average
		point398	398	2,224,686.5	1,424,557.4	1,046.00				Average
		point399	399	2,224,554.2	1,424,577.2	1,040.00				Average
		point400	400	2,224,431.2	1,424,590.9	1,034.00				Average
		point401	401	2,224,304.8	1,424,599.1	1,028.00				Average
		point402	402	2,224,117.5	1,424,603.1	1,022.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point403	403	2,223,921.5	1,424,603.2	1,018.00				Average	
		point404	404	2,223,749.5	1,424,603.8	1,012.00				Average	
		point405	405	2,223,626.8	1,424,604.8	1,008.00				Average	
		point406	406	2,223,462.2	1,424,606.2	1,004.00				Average	
		point407	407	2,223,316.5	1,424,608.2	1,000.00				Average	
		point408	408	2,223,168.8	1,424,610.6	996.00				Average	
		point409	409	2,223,002.2	1,424,611.9	992.00				Average	
		point410	410	2,222,835.8	1,424,613.1	988.00				Average	
		point411	411	2,222,673.2	1,424,613.1	984.00				Average	
		point412	412	2,222,512.8	1,424,612.2	980.00				Average	
		point413	413	2,222,327.0	1,424,613.9	976.00					
Wb right 12	36.0	point414	414	2,222,322.0	1,424,614.9	976.00				Average	
		point415	415	2,222,159.0	1,424,617.1	972.00				Average	
		point416	416	2,221,984.5	1,424,618.8	968.00				Average	
		point417	417	2,221,766.8	1,424,619.0	964.00				Average	
		point418	418	2,221,573.0	1,424,622.1	962.00				Average	
		point419	419	2,221,329.8	1,424,622.6	959.00				Average	
		point420	420	2,221,047.8	1,424,613.9	957.00				Average	
		point421	421	2,220,827.2	1,424,593.1	954.00				Average	
		point422	422	2,220,574.8	1,424,556.2	951.00				Average	
		point423	423	2,220,192.5	1,424,474.1	948.00				Average	
		point424	424	2,219,950.0	1,424,405.8	945.00				Average	
		point425	425	2,219,733.8	1,424,330.2	942.00					
WB left 10	24.0	point522	522	2,226,986.0	1,423,751.0	1,029.00				Average	
		point523	523	2,226,836.0	1,423,777.2	1,033.00				Average	
		point524	524	2,226,690.5	1,423,806.4	1,037.00				Average	
		point525	525	2,226,579.0	1,423,832.5	1,041.00				Average	
		point526	526	2,226,479.2	1,423,859.1	1,045.00				Average	
		point527	527	2,226,383.2	1,423,888.8	1,050.00				Average	
		point528	528	2,226,262.2	1,423,929.0	1,055.00				Average	
		point529	529	2,226,108.2	1,423,987.4	1,060.00				Average	
		point530	530	2,225,604.5	1,424,211.4	1,065.00				Average	
		point531	531	2,225,444.0	1,424,287.5	1,063.00				Average	
		point532	532	2,225,266.8	1,424,365.2	1,060.00				Average	
		point533	533	2,225,152.8	1,424,411.8	1,057.00				Average	
		point534	534	2,225,036.5	1,424,448.0	1,054.00					
WB left 11	24.0	point535	535	2,225,036.5	1,424,448.0	1,054.00				Average	
		point536	536	2,224,913.5	1,424,480.2	1,051.00				Average	
		point537	537	2,224,796.2	1,424,504.0	1,048.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point538	538	2,224,680.0	1,424,528.8	1,046.00				Average	
		point539	539	2,224,550.2	1,424,546.6	1,040.00				Average	
		point540	540	2,224,428.2	1,424,559.0	1,034.00				Average	
		point541	541	2,224,302.8	1,424,568.1	1,028.00				Average	
		point542	542	2,224,116.2	1,424,570.1	1,022.00				Average	
		point543	543	2,223,921.2	1,424,572.2	1,018.00				Average	
		point544	544	2,223,747.8	1,424,573.8	1,012.00				Average	
		point545	545	2,223,626.5	1,424,574.8	1,008.00				Average	
		point546	546	2,223,462.0	1,424,576.4	1,004.00				Average	
		point547	547	2,223,314.8	1,424,578.4	1,000.00				Average	
		point548	548	2,223,169.2	1,424,580.8	996.00				Average	
		point549	549	2,223,005.0	1,424,582.0	992.00				Average	
		point550	550	2,222,835.5	1,424,581.8	988.00				Average	
		point551	551	2,222,673.2	1,424,583.2	984.00				Average	
		point552	552	2,222,512.8	1,424,583.8	980.00				Average	
		point553	553	2,222,327.0	1,424,584.4	976.00					
WB left 12	24.0	point554	554	2,222,327.0	1,424,584.4	976.00				Average	
		point555	555	2,222,158.8	1,424,586.4	972.00				Average	
		point556	556	2,221,984.2	1,424,588.8	968.00				Average	
		point557	557	2,221,766.5	1,424,592.6	964.00				Average	
		point558	558	2,221,572.8	1,424,593.4	962.00				Average	
		point559	559	2,221,330.8	1,424,593.9	959.00				Average	
		point560	560	2,221,050.8	1,424,583.8	957.00				Average	
		point561	561	2,220,830.8	1,424,563.9	954.00				Average	
		point562	562	2,220,583.0	1,424,528.6	951.00				Average	
		point563	563	2,220,200.8	1,424,447.0	948.00				Average	
		point564	564	2,219,962.0	1,424,376.5	945.00				Average	
		point565	565	2,219,745.8	1,424,302.2	942.00					
I-285 EB left 1-2	24.0	point1329	1329	2,221,766.0	1,424,552.0	964.00				Average	
		point161	161	2,221,984.0	1,424,548.2	968.00				Average	
		point162	162	2,222,158.2	1,424,546.4	972.00				Average	
		point163	163	2,222,326.5	1,424,544.4	976.00				Average	
		point164	164	2,222,512.5	1,424,543.8	980.00				Average	
		point165	165	2,222,673.0	1,424,543.2	984.00				Average	
		point166	166	2,222,835.2	1,424,541.8	988.00				Average	
		point167	167	2,223,004.8	1,424,540.8	992.00				Average	
		point168	168	2,223,170.5	1,424,537.9	996.00				Average	
		point169	169	2,223,314.2	1,424,538.4	1,000.00				Average	
		point170	170	2,223,461.5	1,424,536.4	1,004.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point171	171	2,223,626.2	1,424,533.2	1,008.00				Average
		point172	172	2,223,747.2	1,424,533.8	1,012.00				
I-285 EB Right 3	36.0	point40	1349	2,225,415.0	1,424,227.5	1,063.00				Average
		point41	1350	2,225,568.8	1,424,150.9	1,067.00				Average
		point42	1351	2,226,073.2	1,423,917.1	1,060.00				Average
		point43	1352	2,226,230.0	1,423,851.2	1,055.00				Average
		point44	1353	2,226,354.8	1,423,810.6	1,050.00				Average
		point45	1354	2,226,458.8	1,423,778.2	1,045.00				Average
		point46	1355	2,226,557.5	1,423,754.4	1,041.00				Average
		point47	1356	2,226,673.8	1,423,727.8	1,037.00				Average
		point48	1357	2,226,821.2	1,423,701.8	1,033.00				Average
		point49	1358	2,226,973.5	1,423,675.6	1,029.00				
I-285 EB Left 3	24.0	point187	1375	2,225,577.0	1,424,174.0	1,065.00				Average
		point188	1376	2,226,083.2	1,423,947.4	1,060.00				Average
		point189	1377	2,226,242.5	1,423,882.8	1,055.00				Average
		point190	1378	2,226,361.0	1,423,841.1	1,050.00				Average
		point191	1379	2,226,460.8	1,423,811.2	1,045.00				Average
		point192	1380	2,226,565.2	1,423,785.2	1,041.00				Average
		point193	1381	2,226,680.2	1,423,759.9	1,037.00				Average
		point194	1382	2,226,826.5	1,423,734.4	1,033.00				Average
		point195	1383	2,226,979.8	1,423,707.1	1,029.00				
WB Right 10	36.0	point381	1404	2,227,123.8	1,423,757.4	1,026.00				Average
		point383	1406	2,226,854.0	1,423,805.0	1,033.00				Average
		point384	1407	2,226,701.8	1,423,835.8	1,037.00				Average
		point385	1408	2,226,594.0	1,423,862.5	1,041.00				Average
		point386	1409	2,226,493.5	1,423,886.0	1,045.00				Average
		point387	1410	2,226,396.0	1,423,918.4	1,050.00				Average
		point388	1411	2,226,275.5	1,423,959.0	1,055.00				Average
		point389	1412	2,226,122.0	1,424,015.6	1,060.00				Average
		point390	1413	2,225,613.5	1,424,237.0	1,065.00				Average
		point391	1414	2,225,455.0	1,424,310.9	1,063.00				Average
		point392	1415	2,225,276.8	1,424,392.4	1,060.00				Average
		point393	1416	2,225,168.8	1,424,435.5	1,057.00				Average
		point394	1417	2,225,045.5	1,424,474.0	1,054.00				Average
		point395	1418	2,224,918.2	1,424,506.5	1,051.00				
Riverside NB 1	12.0	point1798	1798	2,223,234.0	1,422,967.2	1,056.00				Average
		point1799	1799	2,223,282.0	1,423,010.2	1,057.00				Average
		point1800	1800	2,223,319.8	1,423,043.1	1,056.00				Average
		point1801	1801	2,223,357.5	1,423,075.8	1,056.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1802	1802	2,223,395.5	1,423,108.6	1,058.00				Average	
		point1803	1803	2,223,433.0	1,423,141.4	1,059.00				Average	
		point1804	1804	2,223,471.0	1,423,174.2	1,059.00				Average	
		point1805	1805	2,223,508.5	1,423,207.0	1,059.00				Average	
		point1806	1806	2,223,546.5	1,423,239.8	1,059.00				Average	
		point1807	1807	2,223,584.0	1,423,272.5	1,059.00				Average	
		point1808	1808	2,223,622.0	1,423,305.2	1,059.00				Average	
		point1809	1809	2,223,659.5	1,423,338.1	1,059.00				Average	
		point1810	1810	2,223,696.8	1,423,371.2	1,059.00				Average	
		point1811	1811	2,223,728.8	1,423,409.2	1,058.00				Average	
		point1812	1812	2,223,750.8	1,423,453.2	1,057.00				Average	
		point1813	1813	2,223,769.5	1,423,498.8	1,056.00				Average	
		point1814	1814	2,223,776.8	1,423,547.9	1,054.00				Average	
		point1815	1815	2,223,778.2	1,423,648.2	1,050.10				Average	
		point1816	1816	2,223,777.8	1,423,697.8	1,048.00				Average	
		point1817	1817	2,223,778.8	1,423,747.9	1,046.30				Average	
		point1818	1818	2,223,778.5	1,423,797.8	1,045.10				Average	
		point1819	1819	2,223,778.5	1,423,848.1	1,045.30				Average	
		point1820	1820	2,223,778.5	1,423,897.6	1,046.60				Average	
		point1821	1821	2,223,778.5	1,423,947.9	1,048.10				Average	
		point1822	1822	2,223,778.8	1,423,997.8	1,050.00				Average	
		point1823	1823	2,223,781.2	1,424,049.8	1,050.00				Average	
		point1824	1824	2,223,781.5	1,424,078.4	1,050.00				Average	
		point1825	1825	2,223,782.5	1,424,096.8	1,050.00				Average	
		point1826	1826	2,223,782.8	1,424,125.6	1,050.00					
I-285 EB On-Ramp	18.0	point1827	1827	2,223,865.8	1,424,277.4	1,048.00	Onramp	20.00	100	Average	
		point1828	1828	2,223,910.2	1,424,300.4	1,047.00				Average	
		point1829	1829	2,223,955.8	1,424,320.5	1,046.00				Average	
		point1830	1830	2,224,002.5	1,424,337.9	1,045.00				Average	
		point1831	1831	2,224,050.5	1,424,352.2	1,043.00				Average	
		point1832	1832	2,224,099.0	1,424,363.8	1,042.00				Average	
		point1833	1833	2,224,111.0	1,424,366.2	1,040.00				Average	
		point1834	1834	2,224,158.0	1,424,375.8	1,041.00					
I-285 Eb Off Ramp	12.0	point1859	1859	2,221,765.8	1,424,523.6	964.00				Average	
		point1860	1860	2,221,879.5	1,424,505.9	967.00				Average	
		point1861	1861	2,222,067.8	1,424,495.0	974.00				Average	
		point1862	1862	2,222,363.5	1,424,466.2	974.00				Average	
		point1863	1863	2,222,402.2	1,424,465.2	974.10				Average	
		point1864	1864	2,222,448.0	1,424,460.8	975.50				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1865	1865	2,222,495.0	1,424,454.9	977.30				Average	
		point1866	1866	2,222,546.0	1,424,445.5	979.60				Average	
		point1867	1867	2,222,597.0	1,424,443.8	982.40				Average	
		point1868	1868	2,222,651.0	1,424,438.0	985.50				Average	
		point1869	1869	2,222,692.0	1,424,432.2	987.90				Average	
		point1870	1870	2,222,742.5	1,424,428.1	990.80				Average	
		point1871	1871	2,222,798.5	1,424,422.2	994.10				Average	
		point1872	1872	2,222,841.2	1,424,410.5	996.80				Average	
		point1873	1873	2,222,897.8	1,424,402.9	1,000.20				Average	
		point1874	1874	2,222,948.8	1,424,399.6	1,003.30				Average	
		point1875	1875	2,222,991.8	1,424,394.2	1,005.90				Average	
		point1876	1876	2,223,040.0	1,424,391.1	1,008.80				Average	
		point1877	1877	2,223,090.0	1,424,386.8	1,011.90				Average	
		point1878	1878	2,223,140.0	1,424,382.2	1,014.90				Average	
		point1879	1879	2,223,199.0	1,424,374.0	1,018.40				Average	
		point1880	1880	2,223,239.0	1,424,370.0	1,020.80					
Riverside NB 2	18.0	point1920	1920	2,223,832.5	1,424,277.5	1,049.50				Average	
		point1921	1921	2,223,833.5	1,424,308.4	1,049.00				Average	
		point1922	1922	2,223,818.8	1,424,328.8	1,049.00				Average	
		point1923	1923	2,223,800.2	1,424,345.4	1,048.50				Average	
		point1924	1924	2,223,788.5	1,424,366.8	1,048.00				Average	
		point1925	1925	2,223,783.2	1,424,391.9	1,047.50				Average	
		point1926	1926	2,223,783.0	1,424,445.2	1,046.00					
Roadway202	12.0	point1934	1934	2,223,783.0	1,424,445.2	1,045.60				Average	Y
		point1935	1935	2,223,783.8	1,424,495.1	1,043.30				Average	Y
		point1936	1936	2,223,784.8	1,424,545.2	1,040.80				Average	Y
		point1937	1937	2,223,785.0	1,424,595.1	1,037.80				Average	Y
		point1938	1938	2,223,785.8	1,424,645.1	1,034.00					
Riverside NB 4	18.0	point1945	1945	2,223,785.8	1,424,645.1	1,034.00				Average	
		point1946	1946	2,223,783.5	1,424,680.2	1,032.00				Average	
		point1947	1947	2,223,790.5	1,424,704.2	1,029.50				Average	
		point1948	1948	2,223,802.5	1,424,726.2	1,027.50				Average	
		point1949	1949	2,223,819.0	1,424,744.9	1,024.80				Average	
		point1950	1950	2,223,830.0	1,424,767.4	1,024.50				Average	
		point1951	1951	2,223,825.8	1,424,801.8	1,022.00					
Rvierside NB 4	16.0	point1952	1952	2,223,819.5	1,424,837.8	1,020.00				Average	
		point1953	1953	2,223,810.5	1,424,855.5	1,019.00				Average	
		point1954	1954	2,223,804.5	1,424,879.8	1,017.00				Average	
		point1955	1955	2,223,799.5	1,424,904.2	1,015.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1956	1956	2,223,795.2	1,424,928.9	1,013.00				Average
		point1957	1957	2,223,791.8	1,424,954.9	1,010.00				Average
		point1958	1958	2,223,789.0	1,424,978.5	1,008.00				Average
		point1959	1959	2,223,787.0	1,425,003.4	1,005.50				Average
		point1960	1960	2,223,786.0	1,425,028.4	1,003.00				Average
		point1961	1961	2,223,786.5	1,425,053.4	1,001.00				Average
		point1962	1962	2,223,787.0	1,425,078.4	998.50				Average
		point1963	1963	2,223,787.5	1,425,103.4	996.00				Average
		point1964	1964	2,223,788.0	1,425,128.4	994.00				Average
		point1965	1965	2,223,788.5	1,425,153.4	991.00				Average
		point1966	1966	2,223,787.8	1,425,190.8	987.00				
Riverside SB 12	12.0	point1989	1989	2,223,779.5	1,425,738.0	993.70				Average
		point1990	1990	2,223,779.2	1,425,690.2	991.90				Average
		point1991	1991	2,223,779.0	1,425,640.2	989.70				Average
		point1992	1992	2,223,778.8	1,425,590.2	987.10				Average
		point1993	1993	2,223,778.8	1,425,540.2	984.60				Average
		point1994	1994	2,223,778.2	1,425,490.2	982.10				Average
		point1995	1995	2,223,778.0	1,425,440.2	980.20				Average
		point1996	1996	2,223,778.2	1,425,390.2	978.90				Average
		point1997	1997	2,223,778.5	1,425,340.4	979.70				Average
		point1998	1998	2,223,778.0	1,425,290.2	981.40				Average
		point1999	1999	2,223,777.2	1,425,240.2	983.90				Average
		point2000	2000	2,223,776.5	1,425,190.4	988.00				Average
		point2001	2001	2,223,776.5	1,425,154.4	991.00				Average
		point2002	2002	2,223,776.0	1,425,129.4	993.50				Average
		point2003	2003	2,223,775.5	1,425,104.4	996.00				Average
		point2004	2004	2,223,775.0	1,425,076.8	999.00				
Riverside SB 13	18.0	point2005	2005	2,223,775.0	1,425,076.8	999.00				Average
		point2006	2006	2,223,774.8	1,425,051.8	1,001.00				Average
		point2007	2007	2,223,774.5	1,425,026.8	1,003.00				Average
		point2008	2008	2,223,774.5	1,425,001.8	1,006.00				Average
		point2009	2009	2,223,774.2	1,424,976.8	1,008.00				Average
		point2010	2010	2,223,775.0	1,424,951.8	1,010.50				Average
		point2011	2011	2,223,776.2	1,424,926.8	1,013.00				Average
		point2012	2012	2,223,778.5	1,424,901.8	1,015.00				Average
		point2013	2013	2,223,776.5	1,424,876.9	1,017.50				Average
		point2014	2014	2,223,769.5	1,424,852.9	1,018.00				Average
		point2015	2015	2,223,763.5	1,424,841.8	1,020.00				
Riverside SB 14	18.0	point2016	2016	2,223,763.8	1,425,076.8	999.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point2017	2017	2,223,763.8	1,425,051.8	1,001.00				Average
		point2018	2018	2,223,763.5	1,425,026.8	1,003.00				Average
		point2019	2019	2,223,763.2	1,425,001.8	1,006.00				Average
		point2020	2020	2,223,763.0	1,424,976.8	1,008.00				Average
		point2021	2021	2,223,763.0	1,424,951.8	1,010.50				Average
		point2022	2022	2,223,761.5	1,424,926.8	1,013.00				Average
		point2023	2023	2,223,756.2	1,424,902.2	1,015.00				Average
		point2024	2024	2,223,749.5	1,424,878.2	1,017.50				Average
		point2025	2025	2,223,738.0	1,424,856.1	1,018.00				Average
		point2026	2026	2,223,724.2	1,424,835.2	1,020.00				Average
		point2027	2027	2,223,708.5	1,424,815.8	1,022.00				
Riverside Rnd AB1	20.0	point2028	2028	2,223,825.8	1,424,801.8	1,022.00				Average
		point2029	2029	2,223,801.5	1,424,825.2	1,021.00				Average
		point2030	2030	2,223,777.0	1,424,830.2	1,021.00				Average
		point2031	2031	2,223,753.0	1,424,823.1	1,022.00				Average
		point2032	2032	2,223,730.2	1,424,795.9	1,022.00				
Riverside SB 15	18.0	point2040	2040	2,223,730.2	1,424,795.9	1,022.00				Average
		point2041	2041	2,223,727.2	1,424,778.2	1,022.00				Average
		point2042	2042	2,223,733.0	1,424,754.2	1,025.00				Average
		point2043	2043	2,223,748.5	1,424,734.8	1,027.00				Average
		point2044	2044	2,223,762.5	1,424,714.0	1,029.00				Average
		point2045	2045	2,223,771.0	1,424,690.8	1,031.00				Average
		point2046	2046	2,223,773.5	1,424,645.5	1,034.00				
I-285 WB On Ramp	18.0	point2047	2047	2,223,703.0	1,424,800.5	1,021.00	Onramp	20.00	100	Average
		point2048	2048	2,223,679.5	1,424,792.5	1,020.00				Average
		point2049	2049	2,223,655.5	1,424,785.5	1,020.00				Average
		point2050	2050	2,223,631.0	1,424,779.5	1,019.00				Average
		point2051	2051	2,223,606.5	1,424,774.5	1,018.00				Average
		point2052	2052	2,223,584.8	1,424,770.8	1,016.00				Average
		point2053	2053	2,223,539.8	1,424,762.4	1,014.00				Average
		point2054	2054	2,223,488.5	1,424,754.5	1,012.50				
I-285 WB Off Left	18.0	point2079	2079	2,223,905.8	1,424,763.4	1,023.00				Average
		point2078	2078	2,223,881.5	1,424,769.5	1,023.00				Average
		point2077	2077	2,223,857.5	1,424,776.8	1,023.00				Average
		point2076	2076	2,223,841.5	1,424,785.6	1,023.00				
I-285 WB Off Right	18.0	point2080	2080	2,223,905.8	1,424,763.4	1,023.00				Average
		point2081	2081	2,223,889.0	1,424,787.2	1,024.00				Average
		point2082	2082	2,223,868.5	1,424,801.1	1,022.00				Average
		point2083	2083	2,223,848.8	1,424,816.8	1,021.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point2084	2084	2,223,833.8	1,424,830.5	1,020.00						
I-285 WB Off Ramp	12.0	point2085	2085	2,224,918.2	1,424,506.5	1,051.00					Average	
		point2086	2086	2,224,856.2	1,424,539.1	1,049.00					Average	
		point2087	2087	2,224,752.0	1,424,570.4	1,047.00					Average	
		point2088	2088	2,224,731.2	1,424,572.2	1,043.50					Average	
		point2089	2089	2,224,683.0	1,424,583.4	1,043.50					Average	
		point2090	2090	2,224,634.0	1,424,594.8	1,043.50					Average	
		point2091	2091	2,224,585.0	1,424,606.6	1,043.50					Average	
		point2092	2092	2,224,536.8	1,424,618.0	1,043.50					Average	
		point2093	2093	2,224,488.0	1,424,628.2	1,041.60					Average	
		point2094	2094	2,224,439.2	1,424,641.1	1,040.60					Average	
		point2095	2095	2,224,390.0	1,424,651.6	1,039.00					Average	
		point2096	2096	2,224,342.0	1,424,662.2	1,037.60					Average	
		point2097	2097	2,224,293.5	1,424,673.4	1,035.60					Average	
		point2098	2098	2,224,245.0	1,424,687.8	1,033.50					Average	
		point2099	2099	2,224,196.0	1,424,698.2	1,032.00						
Riverside SB 17	18.0	point2112	2112	2,223,771.0	1,424,379.8	1,048.00					Average	
		point2113	2113	2,223,763.8	1,424,355.4	1,049.00					Average	
		point2114	2114	2,223,753.5	1,424,332.5	1,049.00					Average	
		point2115	2115	2,223,740.2	1,424,311.5	1,049.00					Average	
		point2116	2116	2,223,739.5	1,424,277.5	1,049.00						
Riverside Bridge	12.0	point2136	2136	2,223,773.5	1,424,645.5	1,034.50					Average	Y
		point2135	2135	2,223,773.0	1,424,595.1	1,042.00					Average	Y
		point2134	2134	2,223,772.5	1,424,545.2	1,041.00					Average	Y
		point2133	2133	2,223,771.5	1,424,495.2	1,044.00					Average	Y
		point2132	2132	2,223,771.5	1,424,445.2	1,045.50					Average	Y
		point2131	2131	2,223,770.5	1,424,395.4	1,047.00					Average	Y
		point2130	2130	2,223,771.0	1,424,379.8	1,048.00						
I-285 EB Left	18.0	point2143	2143	2,223,548.2	1,424,333.9	1,040.50					Average	
		point2142	2142	2,223,628.8	1,424,330.6	1,045.00					Average	
		point2141	2141	2,223,655.5	1,424,328.4	1,046.00					Average	
		point2140	2140	2,223,683.5	1,424,320.1	1,047.00					Average	
		point2139	2139	2,223,695.0	1,424,314.1	1,047.50					Average	
		point2138	2138	2,223,722.5	1,424,292.9	1,049.00					Average	
		point2137	2137	2,223,730.0	1,424,283.8	1,049.00						
I-285 Eb Right	18.0	point2157	2157	2,223,548.2	1,424,333.9	1,040.50					Average	
		point2158	2158	2,223,586.5	1,424,324.5	1,042.00					Average	
		point2159	2159	2,223,609.8	1,424,321.2	1,043.50					Average	
		point2160	2160	2,223,657.0	1,424,305.2	1,045.00					Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point2161	2161	2,223,698.2	1,424,277.2	1,049.00				Average
		point2162	2162	2,223,733.0	1,424,241.5	1,049.50				
Riverside SB Rnd About 2	12.0	point2168	2168	2,223,739.5	1,424,277.5	1,049.00				Average
		point2169	2169	2,223,760.8	1,424,247.8	1,049.50				Average
		point2170	2170	2,223,784.5	1,424,240.9	1,050.00				Average
		point2171	2171	2,223,808.5	1,424,245.4	1,050.00				Average
		point2172	2172	2,223,832.5	1,424,277.5	1,049.50				
I-285 EB On Right	18.0	point2173	2173	2,223,782.8	1,424,125.6	1,050.00				Average
		point2174	2174	2,223,809.5	1,424,174.0	1,050.00				Average
		point2175	2175	2,223,830.2	1,424,219.2	1,049.00				Average
		point2176	2176	2,223,855.5	1,424,262.2	1,048.00				
Riverside NB Left	18.0	point2177	2177	2,223,782.8	1,424,125.6	1,050.00				Average
		point2178	2178	2,223,784.0	1,424,149.6	1,050.00				Average
		point2179	2179	2,223,787.5	1,424,185.8	1,050.00				Average
		point2180	2180	2,223,791.8	1,424,199.1	1,050.00				Average
		point2181	2181	2,223,798.8	1,424,219.4	1,050.00				Average
		point2182	2182	2,223,804.2	1,424,233.0	1,050.00				
Riverside SB 1	12.0	point2183	2183	2,223,752.5	1,424,235.2	1,050.00				Average
		point2184	2184	2,223,758.5	1,424,208.9	1,050.00				Average
		point2185	2185	2,223,764.2	1,424,176.4	1,050.00				Average
		point2186	2186	2,223,766.2	1,424,149.6	1,050.00				Average
		point2187	2187	2,223,769.5	1,424,099.8	1,050.00				Average
		point2188	2188	2,223,769.2	1,424,049.8	1,050.00				Average
		point2189	2189	2,223,767.0	1,423,998.1	1,050.00				Average
		point2190	2190	2,223,767.0	1,423,948.2	1,049.40				Average
		point2191	2191	2,223,767.0	1,423,898.0	1,048.00				Average
		point2192	2192	2,223,766.5	1,423,848.0	1,046.50				Average
		point2193	2193	2,223,766.5	1,423,798.1	1,045.00				Average
		point2194	2194	2,223,766.8	1,423,748.0	1,045.00				Average
		point2195	2195	2,223,766.2	1,423,698.2	1,046.30				Average
		point2196	2196	2,223,766.0	1,423,648.2	1,048.10				Average
		point2197	2197	2,223,766.0	1,423,598.1	1,050.20				Average
		point2198	2198	2,223,764.8	1,423,548.1	1,052.00				Average
		point2199	2199	2,223,757.0	1,423,498.0	1,054.00				Average
		point2200	2200	2,223,737.5	1,423,451.8	1,056.00				Average
		point2201	2201	2,223,713.5	1,423,407.6	1,057.00				Average
		point2202	2202	2,223,680.5	1,423,369.8	1,058.00				Average
		point2203	2203	2,223,643.2	1,423,336.2	1,059.00				Average
		point2204	2204	2,223,605.2	1,423,303.6	1,059.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point2205	2205	2,223,567.5	1,423,271.0	1,059.00				Average
		point2206	2206	2,223,529.5	1,423,238.4	1,059.00				Average
		point2207	2207	2,223,491.5	1,423,205.9	1,059.00				Average
		point2208	2208	2,223,453.5	1,423,173.2	1,059.00				Average
		point2209	2209	2,223,415.8	1,423,140.8	1,059.00				Average
		point2210	2210	2,223,377.8	1,423,108.1	1,059.00				Average
		point2211	2211	2,223,340.0	1,423,075.5	1,058.00				Average
		point2212	2212	2,223,302.0	1,423,042.9	1,056.00				Average
		point2213	2213	2,223,264.0	1,423,010.2	1,056.00				Average
		point2214	2214	2,223,226.0	1,422,977.8	1,057.00				
I-285 EB On-Ramp-2	12.0	point2215	2215	2,224,158.0	1,424,375.8	1,041.00				Average
		point1835	1835	2,224,207.2	1,424,385.4	1,038.60				Average
		point1836	1836	2,224,256.8	1,424,393.1	1,037.30				Average
		point1837	1837	2,224,305.5	1,424,401.8	1,035.80				Average
		point1838	1838	2,224,355.0	1,424,410.2	1,034.40				Average
		point1839	1839	2,224,405.2	1,424,417.1	1,033.30				Average
		point1840	1840	2,224,454.5	1,424,423.0	1,032.80				Average
		point1841	1841	2,224,505.0	1,424,423.9	1,033.30				Average
		point1842	1842	2,224,554.8	1,424,423.0	1,034.10				Average
		point1843	1843	2,224,604.5	1,424,419.9	1,035.80				Average
		point1844	1844	2,224,653.5	1,424,415.2	1,037.60				Average
		point1845	1845	2,224,704.0	1,424,408.5	1,039.10				Average
		point1846	1846	2,224,753.5	1,424,402.5	1,041.10				Average
		point1847	1847	2,224,802.5	1,424,394.2	1,042.50				Average
		point1848	1848	2,224,852.0	1,424,382.9	1,044.60				Average
		point1849	1849	2,224,900.2	1,424,371.1	1,046.20				Average
		point1850	1850	2,224,948.8	1,424,359.2	1,047.50				Average
		point1851	1851	2,224,997.0	1,424,346.8	1,049.20				Average
		point1852	1852	2,225,030.2	1,424,336.6	1,050.60				Average
		point1853	1853	2,225,076.5	1,424,321.4	1,052.10				Average
		point1854	1854	2,225,116.8	1,424,309.2	1,053.50				Average
		point1855	1855	2,225,151.8	1,424,300.1	1,054.80				Average
		point1856	1856	2,225,181.0	1,424,297.9	1,061.00				Average
		point1857	1857	2,225,316.2	1,424,244.6	1,061.00				Average
		point1858	1858	2,225,415.0	1,424,227.5	1,063.00				
I-285 Eb Off Ramp-2	20.0	point2216	2216	2,223,239.0	1,424,370.0	1,020.80				Average
		point1881	1881	2,223,288.2	1,424,362.2	1,023.80				Average
		point1882	1882	2,223,338.5	1,424,353.2	1,026.90				Average
		point1883	1883	2,223,417.0	1,424,344.8	1,032.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1884	1884	2,223,467.0	1,424,341.4	1,035.00				Average
		point1885	1885	2,223,516.8	1,424,338.0	1,038.00				Average
		point1886	1886	2,223,548.2	1,424,333.9	1,040.50				
I-285 WB Off Ramp-2	24.0	point2217	2217	2,224,196.0	1,424,698.2	1,032.00				Average
		point2100	2100	2,224,156.2	1,424,707.8	1,030.00				Average
		point2101	2101	2,224,107.8	1,424,719.2	1,028.00				Average
		point2102	2102	2,224,059.0	1,424,730.9	1,026.00				Average
		point2103	2103	2,224,010.5	1,424,742.4	1,024.50				Average
		point2104	2104	2,223,958.0	1,424,752.1	1,023.50				Average
		point2105	2105	2,223,905.8	1,424,763.4	1,023.00				
I-285 WB On Ramp-2	12.0	point2218	2218	2,223,488.5	1,424,754.5	1,012.50				Average
		point2055	2055	2,223,440.8	1,424,745.0	1,010.50				Average
		point2056	2056	2,223,392.0	1,424,737.4	1,008.30				Average
		point2057	2057	2,223,343.5	1,424,728.2	1,006.10				Average
		point2058	2058	2,223,293.0	1,424,721.2	1,003.80				Average
		point2059	2059	2,223,244.8	1,424,713.1	1,001.60				Average
		point2060	2060	2,223,194.5	1,424,705.0	999.80				Average
		point2061	2061	2,223,145.0	1,424,698.4	997.20				Average
		point2062	2062	2,223,096.0	1,424,688.9	995.50				Average
		point2063	2063	2,223,046.5	1,424,681.2	993.10				Average
		point2064	2064	2,222,997.0	1,424,673.2	991.10				Average
		point2065	2065	2,222,948.2	1,424,667.9	989.20				Average
		point2066	2066	2,222,897.8	1,424,662.4	987.50				Average
		point2067	2067	2,222,847.8	1,424,659.8	985.60				Average
		point2068	2068	2,222,798.0	1,424,657.4	984.30				Average
		point2069	2069	2,222,748.2	1,424,655.8	984.30				Average
		point2070	2070	2,222,698.5	1,424,652.5	981.20				Average
		point2071	2071	2,222,648.5	1,424,648.8	979.60				Average
		point2072	2072	2,222,599.0	1,424,647.0	978.40				Average
		point2073	2073	2,222,548.0	1,424,644.6	977.10				Average
		point2074	2074	2,222,374.8	1,424,629.0	977.00				Average
		point2075	2075	2,222,327.2	1,424,614.4	976.00				
Rvierside NB 4-2	12.0	point2219	2219	2,223,787.8	1,425,190.8	987.00				Average
		point1967	1967	2,223,788.5	1,425,240.8	987.30				Average
		point1968	1968	2,223,789.5	1,425,290.8	981.20				Average
		point1969	1969	2,223,790.5	1,425,340.8	979.30				Average
		point1970	1970	2,223,790.5	1,425,390.8	979.10				Average
		point1971	1971	2,223,790.0	1,425,440.8	980.40				Average
		point1972	1972	2,223,790.2	1,425,490.8	982.10				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1973	1973	2,223,790.5	1,425,540.8	984.50				Average	
		point1974	1974	2,223,791.0	1,425,590.8	987.40				Average	
		point1975	1975	2,223,790.8	1,425,640.8	989.80				Average	
		point1976	1976	2,223,791.2	1,425,690.6	992.20				Average	
		point1977	1977	2,223,791.8	1,425,739.2	994.00					

Appendix D
Traffic Inputs (Existing/No-Build)

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

ARCADIS		16 May 2014										
LJV		TNM 2.5										
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:		I-285 at Riverside Drive										
RUN:		Existing (2014) No-Build (2035)										
Roadway	Points											
Name	Name	No.	Segment		MTrucks		HTrucks		Buses		Motorcycles	
			Autos		V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-285 EB right 1	point1	1	3990	55	143	55	358	55	0	0	0	0
	point2	2	3990	55	143	55	358	55	0	0	0	0
	point3	3	3990	55	143	55	358	55	0	0	0	0
	point4	4	3990	55	143	55	358	55	0	0	0	0
	point5	5	3990	55	143	55	358	55	0	0	0	0
	point6	6	3990	55	143	55	358	55	0	0	0	0
	point7	7	3990	55	143	55	358	55	0	0	0	0
	point8	8	3990	55	143	55	358	55	0	0	0	0
	point9	9										
I-285 EB right 2	point15	15	3990	55	143	55	358	55	0	0	0	0
	point16	16	3990	55	143	55	358	55	0	0	0	0
	point17	17	3990	55	143	55	358	55	0	0	0	0
	point18	18	3990	55	143	55	358	55	0	0	0	0
	point19	19	3990	55	143	55	358	55	0	0	0	0
	point20	20	3990	55	143	55	358	55	0	0	0	0
	point21	21	3990	55	143	55	358	55	0	0	0	0
	point22	22	3990	55	143	55	358	55	0	0	0	0
	point23	23	3990	55	143	55	358	55	0	0	0	0
	point24	24	3990	55	143	55	358	55	0	0	0	0
	point25	25	3990	55	143	55	358	55	0	0	0	0
	point26	26	3990	55	143	55	358	55	0	0	0	0
	point27	27	3990	55	143	55	358	55	0	0	0	0
	point28	28	3990	55	143	55	358	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point29	29	3990	55	143	55	358	55	0	0	0	0
	point30	30	3990	55	143	55	358	55	0	0	0	0
	point31	31	3990	55	143	55	358	55	0	0	0	0
	point32	32	3990	55	143	55	358	55	0	0	0	0
	point33	33	3990	55	143	55	358	55	0	0	0	0
	point34	34	3990	55	143	55	358	55	0	0	0	0
	point35	35	3990	55	143	55	358	55	0	0	0	0
	point36	36	3990	55	143	55	358	55	0	0	0	0
	point37	37	3990	55	143	55	358	55	0	0	0	0
	point38	38	3990	55	143	55	358	55	0	0	0	0
	point39	39										
I-285 EB left 1	point152	152	2660	55	0	0	0	0	0	0	0	0
	point153	153	2660	55	0	0	0	0	0	0	0	0
	point154	154	2660	55	0	0	0	0	0	0	0	0
	point155	155	2660	55	0	0	0	0	0	0	0	0
	point156	156	2660	55	0	0	0	0	0	0	0	0
	point157	157	2660	55	0	0	0	0	0	0	0	0
	point158	158	2660	55	0	0	0	0	0	0	0	0
	point159	159	2660	55	0	0	0	0	0	0	0	0
	point160	160										
I-128 EB left 2	point173	173	2660	55	0	0	0	0	0	0	0	0
	point174	174	2660	55	0	0	0	0	0	0	0	0
	point175	175	2660	55	0	0	0	0	0	0	0	0
	point176	176	2660	55	0	0	0	0	0	0	0	0
	point177	177	2660	55	0	0	0	0	0	0	0	0
	point178	178	2660	55	0	0	0	0	0	0	0	0
	point179	179	2660	55	0	0	0	0	0	0	0	0
	point180	180	2660	55	0	0	0	0	0	0	0	0
	point181	181	2660	55	0	0	0	0	0	0	0	0
	point182	182	2660	55	0	0	0	0	0	0	0	0
	point183	183	2660	55	0	0	0	0	0	0	0	0
	point184	184	2660	55	0	0	0	0	0	0	0	0
	point185	185	2660	55	0	0	0	0	0	0	0	0
	point186	186										
WB right 11	point396	396	3990	55	143	55	358	55	0	0	0	0
	point397	397	3990	55	143	55	358	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point398	398	3990	55	143	55	358	55	0	0	0	0
	point399	399	3990	55	143	55	358	55	0	0	0	0
	point400	400	3990	55	143	55	358	55	0	0	0	0
	point401	401	3990	55	143	55	358	55	0	0	0	0
	point402	402	3990	55	143	55	358	55	0	0	0	0
	point403	403	3990	55	143	55	358	55	0	0	0	0
	point404	404	3990	55	143	55	358	55	0	0	0	0
	point405	405	3990	55	143	55	358	55	0	0	0	0
	point406	406	3990	55	143	55	358	55	0	0	0	0
	point407	407	3990	55	143	55	358	55	0	0	0	0
	point408	408	3990	55	143	55	358	55	0	0	0	0
	point409	409	3990	55	143	55	358	55	0	0	0	0
	point410	410	3990	55	143	55	358	55	0	0	0	0
	point411	411	3990	55	143	55	358	55	0	0	0	0
	point412	412	3990	55	143	55	358	55	0	0	0	0
	point413	413										
Wb right 12	point414	414	3990	55	143	55	358	55	0	0	0	0
	point415	415	3990	55	143	55	358	55	0	0	0	0
	point416	416	3990	55	143	55	358	55	0	0	0	0
	point417	417	3990	55	143	55	358	55	0	0	0	0
	point418	418	3990	55	143	55	358	55	0	0	0	0
	point419	419	3990	55	143	55	358	55	0	0	0	0
	point420	420	3990	55	143	55	358	55	0	0	0	0
	point421	421	3990	55	143	55	358	55	0	0	0	0
	point422	422	3990	55	143	55	358	55	0	0	0	0
	point423	423	3990	55	143	55	358	55	0	0	0	0
	point424	424	3990	55	143	55	358	55	0	0	0	0
	point425	425										
WB left 10	point522	522	2660	55	0	0	0	0	0	0	0	0
	point523	523	2660	55	0	0	0	0	0	0	0	0
	point524	524	2660	55	0	0	0	0	0	0	0	0
	point525	525	2660	55	0	0	0	0	0	0	0	0
	point526	526	2660	55	0	0	0	0	0	0	0	0
	point527	527	2660	55	0	0	0	0	0	0	0	0
	point528	528	2660	55	0	0	0	0	0	0	0	0
	point529	529	2660	55	0	0	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point530	530	2660	55	0	0	0	0	0	0	0	0
	point531	531	2660	55	0	0	0	0	0	0	0	0
	point532	532	2660	55	0	0	0	0	0	0	0	0
	point533	533	2660	55	0	0	0	0	0	0	0	0
	point534	534										
WB left 11	point535	535	2660	55	0	0	0	0	0	0	0	0
	point536	536	2660	55	0	0	0	0	0	0	0	0
	point537	537	2660	55	0	0	0	0	0	0	0	0
	point538	538	2660	55	0	0	0	0	0	0	0	0
	point539	539	2660	55	0	0	0	0	0	0	0	0
	point540	540	2660	55	0	0	0	0	0	0	0	0
	point541	541	2660	55	0	0	0	0	0	0	0	0
	point542	542	2660	55	0	0	0	0	0	0	0	0
	point543	543	2660	55	0	0	0	0	0	0	0	0
	point544	544	2660	55	0	0	0	0	0	0	0	0
	point545	545	2660	55	0	0	0	0	0	0	0	0
	point546	546	2660	55	0	0	0	0	0	0	0	0
	point547	547	2660	55	0	0	0	0	0	0	0	0
	point548	548	2660	55	0	0	0	0	0	0	0	0
	point549	549	2660	55	0	0	0	0	0	0	0	0
	point550	550	2660	55	0	0	0	0	0	0	0	0
	point551	551	2660	55	0	0	0	0	0	0	0	0
	point552	552	2660	55	0	0	0	0	0	0	0	0
	point553	553										
WB left 12	point554	554	2660	55	0	0	0	0	0	0	0	0
	point555	555	2660	55	0	0	0	0	0	0	0	0
	point556	556	2660	55	0	0	0	0	0	0	0	0
	point557	557	2660	55	0	0	0	0	0	0	0	0
	point558	558	2660	55	0	0	0	0	0	0	0	0
	point559	559	2660	55	0	0	0	0	0	0	0	0
	point560	0	2660	55	0	0	0	0	0	0	0	0
	point561	561	2660	55	0	0	0	0	0	0	0	0
	point562	562	2660	55	0	0	0	0	0	0	0	0
	point563	563	2660	55	0	0	0	0	0	0	0	0
	point564	564	2660	55	0	0	0	0	0	0	0	0
	point565	565										

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

I-285 EB left 1-2	point1329	1329	2660	55	0	0	0	0	0	0	0	0
	point161	161	2660	55	0	0	0	0	0	0	0	0
	point162	162	2660	55	0	0	0	0	0	0	0	0
	point163	163	2660	55	0	0	0	0	0	0	0	0
	point164	164	2660	55	0	0	0	0	0	0	0	0
	point165	165	2660	55	0	0	0	0	0	0	0	0
	point166	166	2660	55	0	0	0	0	0	0	0	0
	point167	167	2660	55	0	0	0	0	0	0	0	0
	point168	168	2660	55	0	0	0	0	0	0	0	0
	point169	169	2660	55	0	0	0	0	0	0	0	0
	point170	170	2660	55	0	0	0	0	0	0	0	0
	point171	171	2660	55	0	0	0	0	0	0	0	0
	point172	172										
I-285 EB Right 3	point40	1349	3990	55	143	55	358	55	0	0	0	0
	point41	1350	3990	55	143	55	358	55	0	0	0	0
	point42	1351	3990	55	143	55	358	55	0	0	0	0
	point43	1352	3990	55	143	55	358	55	0	0	0	0
	point44	1353	3990	55	143	55	358	55	0	0	0	0
	point45	1354	3990	55	143	55	358	55	0	0	0	0
	point46	1355	3990	55	143	55	358	55	0	0	0	0
	point47	1356	3990	55	143	55	358	55	0	0	0	0
	point48	1357	3990	55	143	55	358	55	0	0	0	0
	point49	1358										
I-285 EB Left 3	point187	1375	2660	55	0	0	0	0	0	0	0	0
	point188	1376	2660	55	0	0	0	0	0	0	0	0
	point189	1377	2660	55	0	0	0	0	0	0	0	0
	point190	1378	2660	55	0	0	0	0	0	0	0	0
	point191	1379	2660	55	0	0	0	0	0	0	0	0
	point192	1380	2660	55	0	0	0	0	0	0	0	0
	point193	1381	2660	55	0	0	0	0	0	0	0	0
	point194	1382	2660	55	0	0	0	0	0	0	0	0
	point195	1383										
WB Right 10	point381	1404	3990	55	143	55	358	55	0	0	0	0
	point383	1406	3990	55	143	55	358	55	0	0	0	0
	point384	1407	3990	55	143	55	358	55	0	0	0	0
	point385	1408	3990	55	143	55	358	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point386	1409	3990	55	143	55	358	55	0	0	0	0
	point387	1410	3990	55	143	55	358	55	0	0	0	0
	point388	1411	3990	55	143	55	358	55	0	0	0	0
	point389	1412	3990	55	143	55	358	55	0	0	0	0
	point390	1413	3990	55	143	55	358	55	0	0	0	0
	point391	1414	3990	55	143	55	358	55	0	0	0	0
	point392	1415	3990	55	143	55	358	55	0	0	0	0
	point393	1416	3990	55	143	55	358	55	0	0	0	0
	point394	1417	3990	55	143	55	358	55	0	0	0	0
	point395	1418										
Riverside NB 1	point1534	1534	552	35	42	35	6	35	0	0	0	0
	point1535	1535	552	35	42	35	6	35	0	0	0	0
	point1536	1536	552	35	42	35	6	35	0	0	0	0
	point1537	1537	552	35	42	35	6	35	0	0	0	0
	point1538	1538	552	35	42	35	6	35	0	0	0	0
	point1539	1539	552	35	42	35	6	35	0	0	0	0
	point1540	1540	552	35	42	35	6	35	0	0	0	0
	point1541	1541	552	35	42	35	6	35	0	0	0	0
	point1542	1542	552	35	42	35	6	35	0	0	0	0
	point1543	1543	552	35	42	35	6	35	0	0	0	0
	point1544	1544	552	35	42	35	6	35	0	0	0	0
	point1545	1545	552	35	42	35	6	35	0	0	0	0
	point1546	1546	552	35	42	35	6	35	0	0	0	0
	point1547	1547	552	35	42	35	6	35	0	0	0	0
	point1548	1548	552	35	42	35	6	35	0	0	0	0
	point1549	1549	552	35	42	35	6	35	0	0	0	0
	point1550	1550	552	35	42	35	6	35	0	0	0	0
	point1551	1551	552	35	42	35	6	35	0	0	0	0
	point1552	1552	552	35	42	35	6	35	0	0	0	0
	point1553	1553	552	35	42	35	6	35	0	0	0	0
	point1554	1554	552	35	42	35	6	35	0	0	0	0
	point1555	1555	552	35	42	35	6	35	0	0	0	0
	point1556	1556	552	35	42	35	6	35	0	0	0	0
	point1557	1557	552	35	42	35	6	35	0	0	0	0
	point1558	1558	552	35	42	35	6	35	0	0	0	0
	point1559	1559	552	35	42	35	6	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1560	1560	552	35	42	35	6	35	0	0	0	0
	point1561	1561	552	35	42	35	6	35	0	0	0	0
	point1562	1562	552	35	42	35	6	35	0	0	0	0
	point1563	1563	552	35	42	35	6	35	0	0	0	0
	point1564	1564										
I-285 EB On Ramp	point1565	1565	537	45	57	45	6	45	0	0	0	0
	point1566	1566	537	45	57	45	6	45	0	0	0	0
	point1567	1567	537	45	57	45	6	45	0	0	0	0
	point1568	1568	537	45	57	45	6	45	0	0	0	0
	point1569	1569	537	45	57	45	6	45	0	0	0	0
	point1570	1570	537	45	57	45	6	45	0	0	0	0
	point1571	1571	537	45	57	45	6	45	0	0	0	0
	point1572	1572	537	45	57	45	6	45	0	0	0	0
	point1573	1573	537	45	57	45	6	45	0	0	0	0
	point1574	1574	537	45	57	45	6	45	0	0	0	0
	point1575	1575	537	45	57	45	6	45	0	0	0	0
	point1576	1576	537	45	57	45	6	45	0	0	0	0
	point1577	1577	537	45	57	45	6	45	0	0	0	0
	point1578	1578	537	45	57	45	6	45	0	0	0	0
	point1579	1579	537	45	57	45	6	45	0	0	0	0
	point1580	1580	537	45	57	45	6	45	0	0	0	0
	point1581	1581	537	45	57	45	6	45	0	0	0	0
	point1582	1582	537	45	57	45	6	45	0	0	0	0
	point1583	1583	537	45	57	45	6	45	0	0	0	0
	point1584	1584	537	45	57	45	6	45	0	0	0	0
	point1585	1585	537	45	57	45	6	45	0	0	0	0
	point1586	1586	537	45	57	45	6	45	0	0	0	0
	point1587	1587	537	45	57	45	6	45	0	0	0	0
	point1588	1588	537	45	57	45	6	45	0	0	0	0
	point1589	1589	537	45	57	45	6	45	0	0	0	0
	point1590	1590	537	45	57	45	6	45	0	0	0	0
	point1591	1591	537	45	57	45	6	45	0	0	0	0
	point1592	1592	537	45	57	45	6	45	0	0	0	0
	point1593	1593	537	45	57	45	6	45	0	0	0	0
	point1594	1594	537	45	57	45	6	45	0	0	0	0
	point1595	1595	537	45	57	45	6	45	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1596	1596										
I-285 Eb Off Ramp	point1597	1597	588	35	12	35	0	0	0	0	0	0
	point1598	1598	588	35	12	35	0	0	0	0	0	0
	point1599	1599	588	35	12	35	0	0	0	0	0	0
	point1600	1600	588	35	12	35	0	0	0	0	0	0
	point1601	1601	588	35	12	35	0	0	0	0	0	0
	point1602	1602	588	35	12	35	0	0	0	0	0	0
	point1603	1603	588	35	12	35	0	0	0	0	0	0
	point1604	1604	588	35	12	35	0	0	0	0	0	0
	point1605	1605	588	35	12	35	0	0	0	0	0	0
	point1606	1606	588	35	12	35	0	0	0	0	0	0
	point1607	1607	588	35	12	35	0	0	0	0	0	0
	point1608	1608	588	35	12	35	0	0	0	0	0	0
	point1609	1609	588	35	12	35	0	0	0	0	0	0
	point1610	1610	588	35	12	35	0	0	0	0	0	0
	point1611	1611	588	35	12	35	0	0	0	0	0	0
	point1612	1612	588	35	12	35	0	0	0	0	0	0
	point1613	1613	588	35	12	35	0	0	0	0	0	0
	point1614	1614	588	35	12	35	0	0	0	0	0	0
	point1615	1615	588	35	12	35	0	0	0	0	0	0
	point1616	1616	588	35	12	35	0	0	0	0	0	0
	point1617	1617	588	35	12	35	0	0	0	0	0	0
	point1618	1618	588	35	12	35	0	0	0	0	0	0
	point1619	1619	588	35	12	35	0	0	0	0	0	0
	point1620	1620	588	35	12	35	0	0	0	0	0	0
	point1621	1621	588	35	12	35	0	0	0	0	0	0
	point1622	1622	588	35	12	35	0	0	0	0	0	0
	point1623	1623	588	35	12	35	0	0	0	0	0	0
	point1624	1624	588	35	12	35	0	0	0	0	0	0
	point1625	1625	588	35	12	35	0	0	0	0	0	0
	point1626	1626	588	35	12	35	0	0	0	0	0	0
	point1627	1627	588	35	12	35	0	0	0	0	0	0
	point1628	1628										
Riverside SB 3	point1629	1629	552	35	42	35	6	35	0	0	0	0
	point1630	1630	552	35	42	35	6	35	0	0	0	0
	point1631	1631	552	35	42	35	6	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1632	1632	552	35	42	35	6	35	0	0	0	0
	point1633	1633	552	35	42	35	6	35	0	0	0	0
	point1634	1634	552	35	42	35	6	35	0	0	0	0
	point1635	1635	552	35	42	35	6	35	0	0	0	0
	point1636	1636	552	35	42	35	6	35	0	0	0	0
	point1637	1637	552	35	42	35	6	35	0	0	0	0
	point1638	1638	552	35	42	35	6	35	0	0	0	0
	point1639	1639	552	35	42	35	6	35	0	0	0	0
	point1640	1640	552	35	42	35	6	35	0	0	0	0
	point1641	1641	552	35	42	35	6	35	0	0	0	0
	point1642	1642	552	35	42	35	6	35	0	0	0	0
	point1643	1643	552	35	42	35	6	35	0	0	0	0
	point1644	1644	552	35	42	35	6	35	0	0	0	0
	point1645	1645	552	35	42	35	6	35	0	0	0	0
	point1646	1646	552	35	42	35	6	35	0	0	0	0
	point1647	1647	552	35	42	35	6	35	0	0	0	0
	point1648	1648	552	35	42	35	6	35	0	0	0	0
	point1649	1649	552	35	42	35	6	35	0	0	0	0
	point1650	1650	552	35	42	35	6	35	0	0	0	0
	point1651	1651	552	35	42	35	6	35	0	0	0	0
	point1652	1652	552	35	42	35	6	35	0	0	0	0
	point1653	1653	552	35	42	35	6	35	0	0	0	0
	point1654	1654	552	35	42	35	6	35	0	0	0	0
	point1655	1655	552	35	42	35	6	35	0	0	0	0
	point1656	1656	552	35	42	35	6	35	0	0	0	0
	point1657	1657	552	35	42	35	6	35	0	0	0	0
	point1658	1658	552	35	42	35	6	35	0	0	0	0
	point1659	1659										
Riverside NB 2	point1660	1660	552	35	42	35	6	35	0	0	0	0
	point1661	1661	552	35	42	35	6	35	0	0	0	0
	point1662	1662	552	35	42	35	6	35	0	0	0	0
	point1663	1663	552	35	42	35	6	35	0	0	0	0
	point1664	1664	552	35	42	35	6	35	0	0	0	0
	point1665	1665	552	35	42	35	6	35	0	0	0	0
	point1666	1666	552	35	42	35	6	35	0	0	0	0
	point1667	1667	552	35	42	35	6	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1668	1668	552	35	42	35	6	35	0	0	0	0
	point1669	1669										
Riverside SB 2	point1670	1670	552	35	42	35	6	35	0	0	0	0
	point1671	1671	552	35	42	35	6	35	0	0	0	0
	point1672	1672	552	35	42	35	6	35	0	0	0	0
	point1673	1673	552	35	42	35	6	35	0	0	0	0
	point1674	1674	552	35	42	35	6	35	0	0	0	0
	point1675	1675	552	35	42	35	6	35	0	0	0	0
	point1676	1676	552	35	42	35	6	35	0	0	0	0
	point1677	1677	552	35	42	35	6	35	0	0	0	0
	point1678	1678	552	35	42	35	6	35	0	0	0	0
	point1679	1679										
Riverside NB 3	point1680	1680	552	35	42	35	6	35	0	0	0	0
	point1681	1681	552	35	42	35	6	35	0	0	0	0
	point1682	1682	552	35	42	35	6	35	0	0	0	0
	point1683	1683	552	35	42	35	6	35	0	0	0	0
	point1684	1684	552	35	42	35	6	35	0	0	0	0
	point1685	1685	552	35	42	35	6	35	0	0	0	0
	point1686	1686	552	35	42	35	6	35	0	0	0	0
	point1687	1687	552	35	42	35	6	35	0	0	0	0
	point1688	1688	552	35	42	35	6	35	0	0	0	0
	point1689	1689	552	35	42	35	6	35	0	0	0	0
	point1690	1690	552	35	42	35	6	35	0	0	0	0
	point1691	1691	552	35	42	35	6	35	0	0	0	0
	point1692	1692	552	35	42	35	6	35	0	0	0	0
	point1693	1693	552	35	42	35	6	35	0	0	0	0
	point1694	1694	552	35	42	35	6	35	0	0	0	0
	point1695	1695	552	35	42	35	6	35	0	0	0	0
	point1696	1696	552	35	42	35	6	35	0	0	0	0
	point1697	1697	552	35	42	35	6	35	0	0	0	0
	point1698	1698										
Roadway189	point1699	1699	552	35	42	35	6	35	0	0	0	0
	point1700	1700	552	35	42	35	6	35	0	0	0	0
	point1701	1701	552	35	42	35	6	35	0	0	0	0
	point1702	1702	552	35	42	35	6	35	0	0	0	0
	point1703	1703	552	35	42	35	6	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1704	1704	552	35	42	35	6	35	0	0	0	0
	point1705	1705	552	35	42	35	6	35	0	0	0	0
	point1706	1706	552	35	42	35	6	35	0	0	0	0
	point1707	1707	552	35	42	35	6	35	0	0	0	0
	point1708	1708	552	35	42	35	6	35	0	0	0	0
	point1709	1709	552	35	42	35	6	35	0	0	0	0
	point1710	1710	552	35	42	35	6	35	0	0	0	0
	point1711	1711	552	35	42	35	6	35	0	0	0	0
	point1712	1712	552	35	42	35	6	35	0	0	0	0
	point1713	1713	552	35	42	35	6	35	0	0	0	0
	point1714	1714	552	35	42	35	6	35	0	0	0	0
	point1715	1715	552	35	42	35	6	35	0	0	0	0
	point1716	1716	552	35	42	35	6	35	0	0	0	0
	point1717	1717										
I-285 WB On Ramp	point1718	1718	579	45	18	45	3	45	0	0	0	0
	point1719	1719	579	45	18	45	3	45	0	0	0	0
	point1720	1720	579	45	18	45	3	45	0	0	0	0
	point1721	1721	579	45	18	45	3	45	0	0	0	0
	point1722	1722	579	45	18	45	3	45	0	0	0	0
	point1723	1723	579	45	18	45	3	45	0	0	0	0
	point1724	1724	579	45	18	45	3	45	0	0	0	0
	point1725	1725	579	45	18	45	3	45	0	0	0	0
	point1726	1726	579	45	18	45	3	45	0	0	0	0
	point1727	1727	579	45	18	45	3	45	0	0	0	0
	point1728	1728	579	45	18	45	3	45	0	0	0	0
	point1729	1729	579	45	18	45	3	45	0	0	0	0
	point1730	1730	579	45	18	45	3	45	0	0	0	0
	point1731	1731	579	45	18	45	3	45	0	0	0	0
	point1732	1732	579	45	18	45	3	45	0	0	0	0
	point1733	1733	579	45	18	45	3	45	0	0	0	0
	point1734	1734	579	45	18	45	3	45	0	0	0	0
	point1735	1735	579	45	18	45	3	45	0	0	0	0
	point1736	1736	579	45	18	45	3	45	0	0	0	0
	point1737	1737	579	45	18	45	3	45	0	0	0	0
	point1738	1738	579	45	18	45	3	45	0	0	0	0
	point1739	1739	579	45	18	45	3	45	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1740	1740	579	45	18	45	3	45	0	0	0	0
	point1741	1741	579	45	18	45	3	45	0	0	0	0
	point1742	1742	579	45	18	45	3	45	0	0	0	0
	point1743	1743	579	45	18	45	3	45	0	0	0	0
	point1744	1744										
I-285 WB Off Ramp	point1745	1745	576	35	18	35	6	35	0	0	0	0
	point1746	1746	576	35	18	35	6	35	0	0	0	0
	point1747	1747	576	35	18	35	6	35	0	0	0	0
	point1748	1748	576	35	18	35	6	35	0	0	0	0
	point1749	1749	576	35	18	35	6	35	0	0	0	0
	point1750	1750	576	35	18	35	6	35	0	0	0	0
	point1751	1751	576	35	18	35	6	35	0	0	0	0
	point1752	1752	576	35	18	35	6	35	0	0	0	0
	point1753	1753	576	35	18	35	6	35	0	0	0	0
	point1754	1754	576	35	18	35	6	35	0	0	0	0
	point1755	1755	576	35	18	35	6	35	0	0	0	0
	point1756	1756	576	35	18	35	6	35	0	0	0	0
	point1757	1757	576	35	18	35	6	35	0	0	0	0
	point1758	1758	576	35	18	35	6	35	0	0	0	0
	point1759	1759	576	35	18	35	6	35	0	0	0	0
	point1760	1760	576	35	18	35	6	35	0	0	0	0
	point1761	1761	576	35	18	35	6	35	0	0	0	0
	point1762	1762	576	35	18	35	6	35	0	0	0	0
	point1763	1763	576	35	18	35	6	35	0	0	0	0
	point1764	1764	576	35	18	35	6	35	0	0	0	0
	point1765	1765	576	35	18	35	6	35	0	0	0	0
	point1766	1766	576	35	18	35	6	35	0	0	0	0
	point1767	1767										

Appendix D – Cont.
Traffic Inputs (Build)

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

ARCADIS			16 May 2014									
LJV			TNM 2.5									
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:			I-285 at Riverside Drive									
RUN:			Build (2035)									
Roadway	Points											
Name	Name	No.	Segment		MTrucks		HTrucks		Buses		Motorcycles	
			Autos		V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-285 EB right 1	point1	1	3990	55	143	55	358	55	0	0	0	0
	point2	2	3990	55	143	55	358	55	0	0	0	0
	point3	3	3990	55	143	55	358	55	0	0	0	0
	point4	4	3990	55	143	55	358	55	0	0	0	0
	point5	5	3990	55	143	55	358	55	0	0	0	0
	point6	6	3990	55	143	55	358	55	0	0	0	0
	point7	7	3990	55	143	55	358	55	0	0	0	0
	point8	8	3990	55	143	55	358	55	0	0	0	0
	point9	9										
I-285 EB right 2	point15	15	3990	55	143	55	358	55	0	0	0	0
	point16	16	3990	55	143	55	358	55	0	0	0	0
	point17	17	3990	55	143	55	358	55	0	0	0	0
	point18	18	3990	55	143	55	358	55	0	0	0	0
	point19	19	3990	55	143	55	358	55	0	0	0	0
	point20	20	3990	55	143	55	358	55	0	0	0	0
	point21	21	3990	55	143	55	358	55	0	0	0	0
	point22	22	3990	55	143	55	358	55	0	0	0	0
	point23	23	3990	55	143	55	358	55	0	0	0	0
	point24	24	3990	55	143	55	358	55	0	0	0	0
	point25	25	3990	55	143	55	358	55	0	0	0	0
	point26	26	3990	55	143	55	358	55	0	0	0	0
	point27	27	3990	55	143	55	358	55	0	0	0	0
	point28	28	3990	55	143	55	358	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point29	29	3990	55	143	55	358	55	0	0	0	0
	point30	30	3990	55	143	55	358	55	0	0	0	0
	point31	31	3990	55	143	55	358	55	0	0	0	0
	point32	32	3990	55	143	55	358	55	0	0	0	0
	point33	33	3990	55	143	55	358	55	0	0	0	0
	point34	34	3990	55	143	55	358	55	0	0	0	0
	point35	35	3990	55	143	55	358	55	0	0	0	0
	point36	36	3990	55	143	55	358	55	0	0	0	0
	point37	37	3990	55	143	55	358	55	0	0	0	0
	point38	38	3990	55	143	55	358	55	0	0	0	0
	point39	39										
I-285 EB left 1	point152	152	2660	55	0	0	0	0	0	0	0	0
	point153	153	2660	55	0	0	0	0	0	0	0	0
	point154	154	2660	55	0	0	0	0	0	0	0	0
	point155	155	2660	55	0	0	0	0	0	0	0	0
	point156	156	2660	55	0	0	0	0	0	0	0	0
	point157	157	2660	55	0	0	0	0	0	0	0	0
	point158	158	2660	55	0	0	0	0	0	0	0	0
	point159	159	2660	55	0	0	0	0	0	0	0	0
	point160	160										
I-128 EB left 2	point173	173	2660	55	0	0	0	0	0	0	0	0
	point174	174	2660	55	0	0	0	0	0	0	0	0
	point175	175	2660	55	0	0	0	0	0	0	0	0
	point176	176	2660	55	0	0	0	0	0	0	0	0
	point177	177	2660	55	0	0	0	0	0	0	0	0
	point178	178	2660	55	0	0	0	0	0	0	0	0
	point179	179	2660	55	0	0	0	0	0	0	0	0
	point180	180	2660	55	0	0	0	0	0	0	0	0
	point181	181	2660	55	0	0	0	0	0	0	0	0
	point182	182	2660	55	0	0	0	0	0	0	0	0
	point183	183	2660	55	0	0	0	0	0	0	0	0
	point184	184	2660	55	0	0	0	0	0	0	0	0
	point185	185	2660	55	0	0	0	0	0	0	0	0
	point186	186										
WB right 11	point396	396	3990	55	143	55	358	55	0	0	0	0
	point397	397	3990	55	143	55	358	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point398	398	3990	55	143	55	358	55	0	0	0	0
	point399	399	3990	55	143	55	358	55	0	0	0	0
	point400	400	3990	55	143	55	358	55	0	0	0	0
	point401	401	3990	55	143	55	358	55	0	0	0	0
	point402	402	3990	55	143	55	358	55	0	0	0	0
	point403	403	3990	55	143	55	358	55	0	0	0	0
	point404	404	3990	55	143	55	358	55	0	0	0	0
	point405	405	3990	55	143	55	358	55	0	0	0	0
	point406	406	3990	55	143	55	358	55	0	0	0	0
	point407	407	3990	55	143	55	358	55	0	0	0	0
	point408	408	3990	55	143	55	358	55	0	0	0	0
	point409	409	3990	55	143	55	358	55	0	0	0	0
	point410	410	3990	55	143	55	358	55	0	0	0	0
	point411	411	3990	55	143	55	358	55	0	0	0	0
	point412	412	3990	55	143	55	358	55	0	0	0	0
	point413	413										
Wb right 12	point414	414	3990	55	143	55	358	55	0	0	0	0
	point415	415	3990	55	143	55	358	55	0	0	0	0
	point416	416	3990	55	143	55	358	55	0	0	0	0
	point417	417	3990	55	143	55	358	55	0	0	0	0
	point418	418	3990	55	143	55	358	55	0	0	0	0
	point419	419	3990	55	143	55	358	55	0	0	0	0
	point420	420	3990	55	143	55	358	55	0	0	0	0
	point421	421	3990	55	143	55	358	55	0	0	0	0
	point422	422	3990	55	143	55	358	55	0	0	0	0
	point423	423	3990	55	143	55	358	55	0	0	0	0
	point424	424	3990	55	143	55	358	55	0	0	0	0
	point425	425										
WB left 10	point522	522	2660	55	0	0	0	0	0	0	0	0
	point523	523	2660	55	0	0	0	0	0	0	0	0
	point524	524	2660	55	0	0	0	0	0	0	0	0
	point525	525	2660	55	0	0	0	0	0	0	0	0
	point526	526	2660	55	0	0	0	0	0	0	0	0
	point527	527	2660	55	0	0	0	0	0	0	0	0
	point528	528	2660	55	0	0	0	0	0	0	0	0
	point529	529	2660	55	0	0	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point530	530	2660	55	0	0	0	0	0	0	0	0
	point531	531	2660	55	0	0	0	0	0	0	0	0
	point532	532	2660	55	0	0	0	0	0	0	0	0
	point533	533	2660	55	0	0	0	0	0	0	0	0
	point534	534										
WB left 11	point535	535	2660	55	0	0	0	0	0	0	0	0
	point536	536	2660	55	0	0	0	0	0	0	0	0
	point537	537	2660	55	0	0	0	0	0	0	0	0
	point538	538	2660	55	0	0	0	0	0	0	0	0
	point539	539	2660	55	0	0	0	0	0	0	0	0
	point540	540	2660	55	0	0	0	0	0	0	0	0
	point541	541	2660	55	0	0	0	0	0	0	0	0
	point542	542	2660	55	0	0	0	0	0	0	0	0
	point543	543	2660	55	0	0	0	0	0	0	0	0
	point544	544	2660	55	0	0	0	0	0	0	0	0
	point545	545	2660	55	0	0	0	0	0	0	0	0
	point546	546	2660	55	0	0	0	0	0	0	0	0
	point547	547	2660	55	0	0	0	0	0	0	0	0
	point548	548	2660	55	0	0	0	0	0	0	0	0
	point549	549	2660	55	0	0	0	0	0	0	0	0
	point550	550	2660	55	0	0	0	0	0	0	0	0
	point551	551	2660	55	0	0	0	0	0	0	0	0
	point552	552	2660	55	0	0	0	0	0	0	0	0
	point553	553										
WB left 12	point554	554	2660	55	0	0	0	0	0	0	0	0
	point555	555	2660	55	0	0	0	0	0	0	0	0
	point556	556	2660	55	0	0	0	0	0	0	0	0
	point557	557	2660	55	0	0	0	0	0	0	0	0
	point558	558	2660	55	0	0	0	0	0	0	0	0
	point559	559	2660	55	0	0	0	0	0	0	0	0
	point560	560	2660	55	0	0	0	0	0	0	0	0
	point561	561	2660	55	0	0	0	0	0	0	0	0
	point562	562	2660	55	0	0	0	0	0	0	0	0
	point563	563	2660	55	0	0	0	0	0	0	0	0
	point564	564	2660	55	0	0	0	0	0	0	0	0
	point565	565										

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I-285 EB left 1-2	point1329	1329	2660	55	0	0	0	0	0	0	0	0
	point161	161	2660	55	0	0	0	0	0	0	0	0
	point162	162	2660	55	0	0	0	0	0	0	0	0
	point163	163	2660	55	0	0	0	0	0	0	0	0
	point164	164	2660	55	0	0	0	0	0	0	0	0
	point165	165	2660	55	0	0	0	0	0	0	0	0
	point166	166	2660	55	0	0	0	0	0	0	0	0
	point167	167	2660	55	0	0	0	0	0	0	0	0
	point168	168	2660	55	0	0	0	0	0	0	0	0
	point169	169	2660	55	0	0	0	0	0	0	0	0
	point170	170	2660	55	0	0	0	0	0	0	0	0
	point171	171	2660	55	0	0	0	0	0	0	0	0
	point172	172										
I-285 EB Right 3	point40	1349	3990	55	143	55	358	55	0	0	0	0
	point41	1350	3990	55	143	55	358	55	0	0	0	0
	point42	1351	3990	55	143	55	358	55	0	0	0	0
	point43	1352	3990	55	143	55	358	55	0	0	0	0
	point44	1353	3990	55	143	55	358	55	0	0	0	0
	point45	1354	3990	55	143	55	358	55	0	0	0	0
	point46	1355	3990	55	143	55	358	55	0	0	0	0
	point47	1356	3990	55	143	55	358	55	0	0	0	0
	point48	1357	3990	55	143	55	358	55	0	0	0	0
	point49	1358										
I-285 EB Left 3	point187	1375	2660	55	0	0	0	0	0	0	0	0
	point188	1376	2660	55	0	0	0	0	0	0	0	0
	point189	1377	2660	55	0	0	0	0	0	0	0	0
	point190	1378	2660	55	0	0	0	0	0	0	0	0
	point191	1379	2660	55	0	0	0	0	0	0	0	0
	point192	1380	2660	55	0	0	0	0	0	0	0	0
	point193	1381	2660	55	0	0	0	0	0	0	0	0
	point194	1382	2660	55	0	0	0	0	0	0	0	0
	point195	1383										
WB Right 10	point381	1404	3990	55	143	55	358	55	0	0	0	0
	point383	1406	3990	55	143	55	358	55	0	0	0	0
	point384	1407	3990	55	143	55	358	55	0	0	0	0
	point385	1408	3990	55	143	55	358	55	0	0	0	0

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	point386	1409	3990	55	143	55	358	55	0	0	0	0
	point387	1410	3990	55	143	55	358	55	0	0	0	0
	point388	1411	3990	55	143	55	358	55	0	0	0	0
	point389	1412	3990	55	143	55	358	55	0	0	0	0
	point390	1413	3990	55	143	55	358	55	0	0	0	0
	point391	1414	3990	55	143	55	358	55	0	0	0	0
	point392	1415	3990	55	143	55	358	55	0	0	0	0
	point393	1416	3990	55	143	55	358	55	0	0	0	0
	point394	1417	3990	55	143	55	358	55	0	0	0	0
	point395	1418										
Riverside NB 1	point1798	1798	552	35	42	35	6	35	0	0	0	0
	point1799	1799	552	35	42	35	6	35	0	0	0	0
	point1800	1800	552	35	42	35	6	35	0	0	0	0
	point1801	1801	552	35	42	35	6	35	0	0	0	0
	point1802	1802	552	35	42	35	6	35	0	0	0	0
	point1803	1803	552	35	42	35	6	35	0	0	0	0
	point1804	1804	552	35	42	35	6	35	0	0	0	0
	point1805	1805	552	35	42	35	6	35	0	0	0	0
	point1806	1806	552	35	42	35	6	35	0	0	0	0
	point1807	1807	552	35	42	35	6	35	0	0	0	0
	point1808	1808	552	35	42	35	6	35	0	0	0	0
	point1809	1809	552	35	42	35	6	35	0	0	0	0
	point1810	1810	552	35	42	35	6	35	0	0	0	0
	point1811	1811	552	35	42	35	6	35	0	0	0	0
	point1812	1812	552	35	42	35	6	35	0	0	0	0
	point1813	1813	552	35	42	35	6	35	0	0	0	0
	point1814	1814	552	35	42	35	6	35	0	0	0	0
	point1815	1815	552	35	42	35	6	35	0	0	0	0
	point1816	1816	552	35	42	35	6	35	0	0	0	0
	point1817	1817	552	35	42	35	6	35	0	0	0	0
	point1818	1818	552	35	42	35	6	35	0	0	0	0
	point1819	1819	552	35	42	35	6	35	0	0	0	0
	point1820	1820	552	35	42	35	6	35	0	0	0	0
	point1821	1821	552	35	42	35	6	35	0	0	0	0
	point1822	1822	552	35	42	35	6	35	0	0	0	0
	point1823	1823	552	35	42	35	6	35	0	0	0	0

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	point1824	1824	552	35	42	35	6	35	0	0	0	0
	point1825	1825	552	35	42	35	6	35	0	0	0	0
	point1826	1826										
I-285 EB On-Ramp	point1827	1827	537	45	57	45	6	45	0	0	0	0
	point1828	1828	537	45	57	45	6	45	0	0	0	0
	point1829	1829	537	45	57	45	6	45	0	0	0	0
	point1830	1830	537	45	57	45	6	45	0	0	0	0
	point1831	1831	537	45	57	45	6	45	0	0	0	0
	point1832	1832	537	45	57	45	6	45	0	0	0	0
	point1833	1833	537	45	57	45	6	45	0	0	0	0
	point1834	1834										
I-285 Eb Off Ramp	point1859	1859	588	35	12	35	0	0	0	0	0	0
	point1860	1860	588	35	12	35	0	0	0	0	0	0
	point1861	1861	588	35	12	35	0	0	0	0	0	0
	point1862	1862	588	35	12	35	0	0	0	0	0	0
	point1863	1863	588	35	12	35	0	0	0	0	0	0
	point1864	1864	588	35	12	35	0	0	0	0	0	0
	point1865	1865	588	35	12	35	0	0	0	0	0	0
	point1866	1866	588	35	12	35	0	0	0	0	0	0
	point1867	1867	588	35	12	35	0	0	0	0	0	0
	point1868	1868	588	35	12	35	0	0	0	0	0	0
	point1869	1869	588	35	12	35	0	0	0	0	0	0
	point1870	1870	588	35	12	35	0	0	0	0	0	0
	point1871	1871	588	35	12	35	0	0	0	0	0	0
	point1872	1872	588	35	12	35	0	0	0	0	0	0
	point1873	1873	588	35	12	35	0	0	0	0	0	0
	point1874	1874	588	35	12	35	0	0	0	0	0	0
	point1875	1875	588	35	12	35	0	0	0	0	0	0
	point1876	1876	588	35	12	35	0	0	0	0	0	0
	point1877	1877	588	35	12	35	0	0	0	0	0	0
	point1878	1878	588	35	12	35	0	0	0	0	0	0
	point1879	1879	588	35	12	35	0	0	0	0	0	0
	point1880	1880										
Riverside NB 2	point1920	1920	736	20	56	20	8	20	0	0	0	0
	point1921	1921	736	20	56	20	8	20	0	0	0	0
	point1922	1922	736	20	56	20	8	20	0	0	0	0

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	point1923	1923	736	20	56	20	8	20	0	0	0	0
	point1924	1924	736	20	56	20	8	20	0	0	0	0
	point1925	1925	736	20	56	20	8	20	0	0	0	0
	point1926	1926										
Roadway202	point1934	1934	552	35	42	35	6	35	0	0	0	0
	point1935	1935	552	35	42	35	6	35	0	0	0	0
	point1936	1936	552	35	42	35	6	35	0	0	0	0
	point1937	1937	552	35	42	35	6	35	0	0	0	0
	point1938	1938										
Riverside NB 4	point1945	1945	552	20	42	20	6	20	0	0	0	0
	point1946	1946	552	20	42	20	6	20	0	0	0	0
	point1947	1947	552	20	42	20	6	20	0	0	0	0
	point1948	1948	552	20	42	20	6	20	0	0	0	0
	point1949	1949	552	20	42	20	6	20	0	0	0	0
	point1950	1950	552	20	42	20	6	20	0	0	0	0
	point1951	1951										
Riverside NB 4	point1952	1952	552	35	42	35	6	35	0	0	0	0
	point1953	1953	552	35	42	35	6	35	0	0	0	0
	point1954	1954	552	35	42	35	6	35	0	0	0	0
	point1955	1955	552	35	42	35	6	35	0	0	0	0
	point1956	1956	552	35	42	35	6	35	0	0	0	0
	point1957	1957	552	35	42	35	6	35	0	0	0	0
	point1958	1958	552	35	42	35	6	35	0	0	0	0
	point1959	1959	552	35	42	35	6	35	0	0	0	0
	point1960	1960	552	35	42	35	6	35	0	0	0	0
	point1961	1961	552	35	42	35	6	35	0	0	0	0
	point1962	1962	552	35	42	35	6	35	0	0	0	0
	point1963	1963	552	35	42	35	6	35	0	0	0	0
	point1964	1964	552	35	42	35	6	35	0	0	0	0
	point1965	1965	552	35	42	35	6	35	0	0	0	0
	point1966	1966										
Riverside SB 12	point1989	1989	552	35	42	35	6	35	0	0	0	0
	point1990	1990	552	35	42	35	6	35	0	0	0	0
	point1991	1991	552	35	42	35	6	35	0	0	0	0
	point1992	1992	552	35	42	35	6	35	0	0	0	0
	point1993	1993	552	35	42	35	6	35	0	0	0	0

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	point1994	1994	552	35	42	35	6	35	0	0	0	0
	point1995	1995	552	35	42	35	6	35	0	0	0	0
	point1996	1996	552	35	42	35	6	35	0	0	0	0
	point1997	1997	552	35	42	35	6	35	0	0	0	0
	point1998	1998	552	35	42	35	6	35	0	0	0	0
	point1999	1999	552	35	42	35	6	35	0	0	0	0
	point2000	2000	552	35	42	35	6	35	0	0	0	0
	point2001	2001	552	35	42	35	6	35	0	0	0	0
	point2002	2002	552	35	42	35	6	35	0	0	0	0
	point2003	2003	552	35	42	35	6	35	0	0	0	0
	point2004	2004										
Riverside SB 13	point2005	2005	552	35	42	35	6	35	0	0	0	0
	point2006	2006	552	35	42	35	6	35	0	0	0	0
	point2007	2007	552	35	42	35	6	35	0	0	0	0
	point2008	2008	552	35	42	35	6	35	0	0	0	0
	point2009	2009	552	35	42	35	6	35	0	0	0	0
	point2010	2010	552	35	42	35	6	35	0	0	0	0
	point2011	2011	552	35	42	35	6	35	0	0	0	0
	point2012	2012	552	35	42	35	6	35	0	0	0	0
	point2013	2013	552	35	42	35	6	35	0	0	0	0
	point2014	2014	552	35	42	35	6	35	0	0	0	0
	point2015	2015										
Riverside SB 14	point2016	2016	0	0	0	0	0	0	0	0	0	0
	point2017	2017	0	0	0	0	0	0	0	0	0	0
	point2018	2018	0	0	0	0	0	0	0	0	0	0
	point2019	2019	0	0	0	0	0	0	0	0	0	0
	point2020	2020	0	0	0	0	0	0	0	0	0	0
	point2021	2021	0	0	0	0	0	0	0	0	0	0
	point2022	2022	0	0	0	0	0	0	0	0	0	0
	point2023	2023	0	0	0	0	0	0	0	0	0	0
	point2024	2024	0	0	0	0	0	0	0	0	0	0
	point2025	2025	0	0	0	0	0	0	0	0	0	0
	point2026	2026	0	0	0	0	0	0	0	0	0	0
	point2027	2027										
Riverside Rnd AB1	point2028	2028	736	20	56	20	8	20	0	0	0	0
	point2029	2029	736	20	56	20	8	20	0	0	0	0

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	point2030	2030	736	20	56	20	8	20	0	0	0	0
	point2031	2031	736	20	56	20	8	20	0	0	0	0
	point2032	2032										
Riverside SB 15	point2040	2040	736	20	56	20	8	20	0	0	0	0
	point2041	2041	736	20	56	20	8	20	0	0	0	0
	point2042	2042	736	20	56	20	8	20	0	0	0	0
	point2043	2043	736	20	56	20	8	20	0	0	0	0
	point2044	2044	736	20	56	20	8	20	0	0	0	0
	point2045	2045	736	20	56	20	8	20	0	0	0	0
	point2046	2046										
I-285 WB On Ramp	point2047	2047	579	45	18	45	3	45	0	0	0	0
	point2048	2048	579	45	18	45	3	45	0	0	0	0
	point2049	2049	579	45	18	45	3	45	0	0	0	0
	point2050	2050	579	45	18	45	3	45	0	0	0	0
	point2051	2051	579	45	18	45	3	45	0	0	0	0
	point2052	2052	579	45	18	45	3	45	0	0	0	0
	point2053	2053	579	45	18	45	3	45	0	0	0	0
	point2054	2054										
I-285 WB Off Left	point2079	2079	0	0	0	0	0	0	0	0	0	0
	point2078	2078	0	0	0	0	0	0	0	0	0	0
	point2077	2077	0	0	0	0	0	0	0	0	0	0
	point2076	2076										
I-285 WB Off Right	point2080	2080	576	35	18	35	6	35	0	0	0	0
	point2081	2081	576	35	18	35	6	35	0	0	0	0
	point2082	2082	576	35	18	35	6	35	0	0	0	0
	point2083	2083	576	35	18	35	6	35	0	0	0	0
	point2084	2084										
I-285 WB Off Ramp	point2085	2085	576	35	18	35	6	35	0	0	0	0
	point2086	2086	576	35	18	35	6	35	0	0	0	0
	point2087	2087	576	35	18	35	6	35	0	0	0	0
	point2088	2088	576	35	18	35	6	35	0	0	0	0
	point2089	2089	576	35	18	35	6	35	0	0	0	0
	point2090	2090	576	35	18	35	6	35	0	0	0	0
	point2091	2091	576	35	18	35	6	35	0	0	0	0
	point2092	2092	576	35	18	35	6	35	0	0	0	0
	point2093	2093	576	35	18	35	6	35	0	0	0	0

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	point2094	2094	576	35	18	35	6	35	0	0	0	0
	point2095	2095	576	35	18	35	6	35	0	0	0	0
	point2096	2096	576	35	18	35	6	35	0	0	0	0
	point2097	2097	576	35	18	35	6	35	0	0	0	0
	point2098	2098	576	35	18	35	6	35	0	0	0	0
	point2099	2099										
Riverside SB 17	point2112	2112	552	20	42	20	6	20	0	0	0	0
	point2113	2113	552	20	42	20	6	20	0	0	0	0
	point2114	2114	552	20	42	20	6	20	0	0	0	0
	point2115	2115	552	20	42	20	6	20	0	0	0	0
	point2116	2116										
Riverside Bridge	point2136	2136	552	35	42	35	6	35	0	0	0	0
	point2135	2135	552	35	42	35	6	35	0	0	0	0
	point2134	2134	552	35	42	35	6	35	0	0	0	0
	point2133	2133	552	35	42	35	6	35	0	0	0	0
	point2132	2132	552	35	42	35	6	35	0	0	0	0
	point2131	2131	552	35	42	35	6	35	0	0	0	0
	point2130	2130										
I-285 EB Left	point2143	2143	588	35	12	35	0	0	0	0	0	0
	point2142	2142	588	35	12	35	0	0	0	0	0	0
	point2141	2141	588	35	12	35	0	0	0	0	0	0
	point2140	2140	588	35	12	35	0	0	0	0	0	0
	point2139	2139	588	35	12	35	0	0	0	0	0	0
	point2138	2138	588	35	12	35	0	0	0	0	0	0
	point2137	2137										
I-285 Eb Right	point2157	2157	0	0	0	0	0	0	0	0	0	0
	point2158	2158	0	0	0	0	0	0	0	0	0	0
	point2159	2159	0	0	0	0	0	0	0	0	0	0
	point2160	2160	0	0	0	0	0	0	0	0	0	0
	point2161	2161	0	0	0	0	0	0	0	0	0	0
	point2162	2162										
Riverside SB Rnd About 2	point2168	2168	736	20	56	20	8	20	0	0	0	0
	point2169	2169	736	20	56	20	8	20	0	0	0	0
	point2170	2170	736	20	56	20	8	20	0	0	0	0
	point2171	2171	736	20	56	20	8	20	0	0	0	0
	point2172	2172										

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I-285 EB On Right	point2173	2173	0	0	0	0	0	0	0	0	0	0
	point2174	2174	0	0	0	0	0	0	0	0	0	0
	point2175	2175	0	0	0	0	0	0	0	0	0	0
	point2176	2176										
Riverside NB Left	point2177	2177	552	35	42	35	6	35	0	0	0	0
	point2178	2178	552	35	42	35	6	35	0	0	0	0
	point2179	2179	552	35	42	35	6	35	0	0	0	0
	point2180	2180	552	35	42	35	6	35	0	0	0	0
	point2181	2181	552	35	42	35	6	35	0	0	0	0
	point2182	2182										
Riverside SB 1	point2183	2183	552	35	42	35	6	35	0	0	0	0
	point2184	2184	552	35	42	35	6	35	0	0	0	0
	point2185	2185	552	35	42	35	6	35	0	0	0	0
	point2186	2186	552	35	42	35	6	35	0	0	0	0
	point2187	2187	552	35	42	35	6	35	0	0	0	0
	point2188	2188	552	35	42	35	6	35	0	0	0	0
	point2189	2189	552	35	42	35	6	35	0	0	0	0
	point2190	2190	552	35	42	35	6	35	0	0	0	0
	point2191	2191	552	35	42	35	6	35	0	0	0	0
	point2192	2192	552	35	42	35	6	35	0	0	0	0
	point2193	2193	552	35	42	35	6	35	0	0	0	0
	point2194	2194	552	35	42	35	6	35	0	0	0	0
	point2195	2195	552	35	42	35	6	35	0	0	0	0
	point2196	2196	552	35	42	35	6	35	0	0	0	0
	point2197	2197	552	35	42	35	6	35	0	0	0	0
	point2198	2198	552	35	42	35	6	35	0	0	0	0
	point2199	2199	552	35	42	35	6	35	0	0	0	0
	point2200	2200	552	35	42	35	6	35	0	0	0	0
	point2201	2201	552	35	42	35	6	35	0	0	0	0
	point2202	2202	552	35	42	35	6	35	0	0	0	0
	point2203	2203	552	35	42	35	6	35	0	0	0	0
	point2204	2204	552	35	42	35	6	35	0	0	0	0
	point2205	2205	552	35	42	35	6	35	0	0	0	0
	point2206	2206	552	35	42	35	6	35	0	0	0	0
	point2207	2207	552	35	42	35	6	35	0	0	0	0
	point2208	2208	552	35	42	35	6	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point2209	2209	552	35	42	35	6	35	0	0	0	0
	point2210	2210	552	35	42	35	6	35	0	0	0	0
	point2211	2211	552	35	42	35	6	35	0	0	0	0
	point2212	2212	552	35	42	35	6	35	0	0	0	0
	point2213	2213	552	35	42	35	6	35	0	0	0	0
	point2214	2214										
I-285 EB On-Ramp-2	point2215	2215	537	45	57	45	6	45	0	0	0	0
	point1835	1835	537	45	57	45	6	45	0	0	0	0
	point1836	1836	537	45	57	45	6	45	0	0	0	0
	point1837	1837	537	45	57	45	6	45	0	0	0	0
	point1838	1838	537	45	57	45	6	45	0	0	0	0
	point1839	1839	537	45	57	45	6	45	0	0	0	0
	point1840	1840	537	45	57	45	6	45	0	0	0	0
	point1841	1841	537	45	57	45	6	45	0	0	0	0
	point1842	1842	537	45	57	45	6	45	0	0	0	0
	point1843	1843	537	45	57	45	6	45	0	0	0	0
	point1844	1844	537	45	57	45	6	45	0	0	0	0
	point1845	1845	537	45	57	45	6	45	0	0	0	0
	point1846	1846	537	45	57	45	6	45	0	0	0	0
	point1847	1847	537	45	57	45	6	45	0	0	0	0
	point1848	1848	537	45	57	45	6	45	0	0	0	0
	point1849	1849	537	45	57	45	6	45	0	0	0	0
	point1850	1850	537	45	57	45	6	45	0	0	0	0
	point1851	1851	537	45	57	45	6	45	0	0	0	0
	point1852	1852	537	45	57	45	6	45	0	0	0	0
	point1853	1853	537	45	57	45	6	45	0	0	0	0
	point1854	1854	537	45	57	45	6	45	0	0	0	0
	point1855	1855	537	45	57	45	6	45	0	0	0	0
	point1856	1856	537	45	57	45	6	45	0	0	0	0
	point1857	1857	537	45	57	45	6	45	0	0	0	0
	point1858	1858										
I-285 Eb Off Ramp-2	point2216	2216	588	35	12	35	0	0	0	0	0	0
	point1881	1881	588	35	12	35	0	0	0	0	0	0
	point1882	1882	588	35	12	35	0	0	0	0	0	0
	point1883	1883	588	35	12	35	0	0	0	0	0	0
	point1884	1884	588	35	12	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1885	1885	588	35	12	35	0	0	0	0	0	0
	point1886	1886										
I-285 WB Off Ramp-2	point2217	2217	576	35	18	35	6	35	0	0	0	0
	point2100	2100	576	35	18	35	6	35	0	0	0	0
	point2101	2101	576	35	18	35	6	35	0	0	0	0
	point2102	2102	576	35	18	35	6	35	0	0	0	0
	point2103	2103	576	35	18	35	6	35	0	0	0	0
	point2104	2104	576	35	18	35	6	35	0	0	0	0
	point2105	2105										
I-285 WB On Ramp-2	point2218	2218	579	45	18	45	3	45	0	0	0	0
	point2055	2055	579	45	18	45	3	45	0	0	0	0
	point2056	2056	579	45	18	45	3	45	0	0	0	0
	point2057	2057	579	45	18	45	3	45	0	0	0	0
	point2058	2058	579	45	18	45	3	45	0	0	0	0
	point2059	2059	579	45	18	45	3	45	0	0	0	0
	point2060	2060	579	45	18	45	3	45	0	0	0	0
	point2061	2061	579	45	18	45	3	45	0	0	0	0
	point2062	2062	579	45	18	45	3	45	0	0	0	0
	point2063	2063	579	45	18	45	3	45	0	0	0	0
	point2064	2064	579	45	18	45	3	45	0	0	0	0
	point2065	2065	579	45	18	45	3	45	0	0	0	0
	point2066	2066	579	45	18	45	3	45	0	0	0	0
	point2067	2067	579	45	18	45	3	45	0	0	0	0
	point2068	2068	579	45	18	45	3	45	0	0	0	0
	point2069	2069	579	45	18	45	3	45	0	0	0	0
	point2070	2070	579	45	18	45	3	45	0	0	0	0
	point2071	2071	579	45	18	45	3	45	0	0	0	0
	point2072	2072	579	45	18	45	3	45	0	0	0	0
	point2073	2073	579	45	18	45	3	45	0	0	0	0
	point2074	2074	579	45	18	45	3	45	0	0	0	0
	point2075	2075										
Rvierside NB 4-2	point2219	2219	552	35	42	35	6	35	0	0	0	0
	point1967	1967	552	35	42	35	6	35	0	0	0	0
	point1968	1968	552	35	42	35	6	35	0	0	0	0
	point1969	1969	552	35	42	35	6	35	0	0	0	0
	point1970	1970	552	35	42	35	6	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes**I-285 at Riverside Drive**

	point1971	1971	552	35	42	35	6	35	0	0	0	0
	point1972	1972	552	35	42	35	6	35	0	0	0	0
	point1973	1973	552	35	42	35	6	35	0	0	0	0
	point1974	1974	552	35	42	35	6	35	0	0	0	0
	point1975	1975	552	35	42	35	6	35	0	0	0	0
	point1976	1976	552	35	42	35	6	35	0	0	0	0
	point1977	1977										

Appendix E
Barrier Inputs (Existing/No-Build)

INPUT: BARRIERS

I-285 at Riverside Drive

ARCADIS		19 March 2014																	
LJV		TNM 2.5																	
INPUT: BARRIERS																			
PROJECT/CONTRACT:	I-285 at Riverside Drive																		
RUN:	Existing (2014) No-Build (2035)																		

Barrier									Points										
Name	Type	Height		If Wall \$ per Unit Area	If Berm \$ per Unit Vol.	Top Width	Run:Rise	Add'tnl \$ per Unit Length	Name	No.	Coordinates (bottom)			Height at Point	Segment			Important Reflec- tions?	
		Min	Max								X	Y	Z		Incr- ment	#Up	#Dn		On Struct?
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft			ft	ft	ft	ft	ft				
Existing Wall 1	W	0.00	99.99	0.00				0.00	point161	161	2,221,678.2	1,424,699.0	978.00	3.00	0.00	0	0		
									point162	162	2,221,748.0	1,424,658.6	974.00	7.00	0.00	0	0		
									point163	163	2,221,778.0	1,424,659.0	960.00	20.00	0.00	0	0		
									point164	164	2,221,808.0	1,424,659.5	961.00	17.00	0.00	0	0		
									point165	165	2,221,878.0	1,424,660.8	962.00	16.00	0.00	0	0		
									point166	166	2,221,978.0	1,424,662.4	963.50	16.50	0.00	0	0		
									point167	167	2,222,078.0	1,424,664.0	971.00	15.00	0.00	0	0		
									point168	168	2,222,478.0	1,424,670.6	976.00	16.00	0.00	0	0		
									point169	169	2,222,661.5	1,424,673.6	979.00	19.00	0.00	0	0		
									point170	170	2,222,778.2	1,424,701.8	988.00	19.00	0.00	0	0		
									point171	171	2,222,878.5	1,424,715.2	1,003.00	11.00	0.00	0	0		
									point172	172	2,223,058.5	1,424,739.8	1,014.00	4.00	0.00	0	0		
									point173	173	2,223,150.2	1,424,752.1	1,017.00	7.00	0.00	0	0		
									point174	174	2,223,178.8	1,424,751.1	1,020.00	6.00	0.00	0	0		
									point175	175	2,223,238.8	1,424,748.9	1,003.00	19.00	0.00	0	0		
									point176	176	2,223,301.8	1,424,746.6	1,003.00	19.00	0.00	0	0		
									point177	177	2,223,333.8	1,424,751.8	1,006.00	16.00	0.00	0	0		
									point178	178	2,223,344.2	1,424,753.5	1,009.50	12.00	0.00	0	0		
									point179	179	2,223,380.2	1,424,801.8	1,022.00	7.00	0.00	0	0		
									point180	180	2,223,464.2	1,424,817.0	1,028.00	7.90	0.00	0	0		
									point181	181	2,223,544.2	1,424,831.5	1,031.50	7.90	0.00	0	0		
									point182	182	2,223,579.5	1,424,837.9	1,032.00	7.90	0.00	0	0		
									point183	183	2,223,679.5	1,424,856.1	1,024.50	7.90					
Existing Wall 2	W	0.00	99.99	0.00				0.00	point184	184	2,223,873.0	1,424,812.0	1,021.00	20.70	0.00	0	0		
									point185	185	2,223,922.8	1,424,795.8	1,022.70	17.30	0.00	0	0		
									point186	186	2,223,952.8	1,424,785.9	1,028.00	17.00	0.00	0	0		
									point187	187	2,223,979.0	1,424,817.5	1,026.00	10.00	0.00	0	0		
									point188	188	2,223,988.0	1,424,815.2	1,043.00	8.00	0.00	0	0		
									point189	189	2,224,172.8	1,424,768.5	1,044.00	7.00	0.00	0	0		
									point190	190	2,224,191.0	1,424,763.9	1,044.00	7.00	0.00	0	0		
									point191	191	2,224,198.5	1,424,759.5	1,034.00	16.00	0.00	0	0		
									point192	192	2,224,272.2	1,424,716.5	1,042.00	12.00	0.00	0	0		
									point193	193	2,224,299.8	1,424,700.5	1,037.00	9.30	0.00	0	0		
									point194	194	2,224,471.8	1,424,660.2	1,039.00	13.90	0.00	0	0		
									point195	195	2,224,608.5	1,424,626.4	1,043.00	11.00	0.00	0	0		

INPUT: BARRIERS

I-285 at Riverside Drive

									point196	196	2,224,763.2	1,424,586.4	1,047.00	12.50	0.00	0	0		
									point197	197	2,224,872.8	1,424,554.2	1,049.00	13.50	0.00	0	0		
									point198	198	2,224,953.2	1,424,533.8	1,052.00	13.50	0.00	0	0		
									point199	199	2,225,057.2	1,424,501.6	1,054.00	12.00	0.00	0	0		
									point200	200	2,225,126.5	1,424,479.4	1,057.00	12.00	0.00	0	0		
									point201	201	2,225,189.5	1,424,459.1	1,057.00	12.00	0.00	0	0		
									point202	202	2,225,282.0	1,424,427.1	1,060.00	12.00	0.00	0	0		
									point203	203	2,225,404.5	1,424,432.6	1,088.00	12.00	0.00	0	0		
									point204	204	2,225,437.2	1,424,418.9	1,093.00	12.00	0.00	0	0		
									point205	205	2,225,557.0	1,424,368.2	1,093.00	12.00					
Existing Wall 8	W	0.00	99.99	0.00			0.00		point226	226	2,221,560.5	1,424,426.0	980.56	5.44	0.00	0	0		
									point227	227	2,221,611.8	1,424,435.0	977.52	8.48	0.00	0	0		
									point228	228	2,221,661.8	1,424,443.8	975.21	10.79	0.00	0	0		
									point229	229	2,221,712.0	1,424,452.5	970.00	12.31	0.00	0	0		
									point230	230	2,221,871.8	1,424,480.5	969.77	16.23	0.00	0	0		
									point231	231	2,222,176.2	1,424,454.8	977.15	16.23	0.00	0	0		
									point232	232	2,222,221.0	1,424,410.0	980.00	16.70	0.00	0	0		
									point233	233	2,222,410.0	1,424,387.8	998.72	18.28	0.00	0	0		
									point234	234	2,222,504.5	1,424,380.4	990.12	31.88	0.00	0	0		
									point235	235	2,222,778.2	1,424,395.9	1,007.98	25.02	0.00	0	0		
									point236	236	2,223,077.8	1,424,358.6	1,007.98	25.02	0.00	0	0		
									point237	237	2,223,357.2	1,424,297.6	1,040.05	13.95	0.00	0	0		
									point238	238	2,223,617.0	1,424,275.0	1,040.05	13.95	0.00	0	0		
									point239	239	2,223,628.8	1,424,286.8	1,042.17	17.83	0.00	0	0		
									point240	240	2,223,658.8	1,424,286.8	1,042.17	17.83					
median 1	W	0.00	99.99	0.00			0.00		point267	267	2,219,756.0	1,424,284.6	942.00	6.00	0.00	0	0		
									point268	268	2,219,964.5	1,424,356.8	945.00	6.00	0.00	0	0		
									point269	269	2,220,205.0	1,424,426.0	948.00	6.00	0.00	0	0		
									point270	270	2,220,583.0	1,424,506.8	951.00	6.00	0.00	0	0		
									point271	271	2,220,829.0	1,424,544.0	954.00	6.00	0.00	0	0		
									point272	272	2,221,048.5	1,424,564.0	957.00	6.00	0.00	0	0		
									point273	273	2,221,331.5	1,424,574.6	959.00	6.00	0.00	0	0		
									point274	274	2,221,572.8	1,424,574.0	962.00	6.00	0.00	0	0		
									point275	275	2,221,751.8	1,424,571.8	964.00	6.00	0.00	0	0		
									point276	276	2,221,971.5	1,424,567.2	968.00	6.00	0.00	0	0		
									point277	277	2,222,156.5	1,424,567.2	972.00	6.00	0.00	0	0		
									point278	278	2,222,322.5	1,424,565.0	976.00	6.00	0.00	0	0		
									point279	279	2,222,511.8	1,424,564.9	980.00	6.00	0.00	0	0		
									point280	280	2,222,670.5	1,424,562.5	984.00	6.00	0.00	0	0		
									point281	281	2,222,833.8	1,424,562.0	988.00	6.00	0.00	0	0		
									point282	282	2,223,005.0	1,424,563.2	992.00	6.00					
median 2	W	0.00	99.99	0.00			0.00		point283	283	2,224,109.8	1,424,549.5	1,022.00	6.00	0.00	0	0		
									point284	284	2,224,296.2	1,424,549.0	1,028.00	6.00	0.00	0	0		
									point285	285	2,224,420.5	1,424,539.5	1,034.00	6.00	0.00	0	0		
									point286	286	2,224,543.5	1,424,526.0	1,040.00	6.00	0.00	0	0		
									point287	287	2,224,674.2	1,424,506.1	1,046.00	6.00	0.00	0	0		
									point288	288	2,224,786.2	1,424,486.0	1,048.00	6.00	0.00	0	0		
									point289	289	2,224,901.2	1,424,458.8	1,051.00	6.00	0.00	0	0		
									point290	290	2,225,021.8	1,424,427.8	1,054.00	6.00	0.00	0	0		

INPUT: BARRIERS

I-285 at Riverside Drive

									point291	291	2,225,138.2	1,424,391.9	1,057.00	6.00	0.00	0	0		
									point292	292	2,225,248.0	1,424,347.0	1,060.00	6.00	0.00	0	0		
									point293	293	2,225,428.0	1,424,266.5	1,063.00	6.00	0.00	0	0		
									point294	294	2,225,584.0	1,424,194.4	1,065.00	6.00	0.00	0	0		
									point295	295	2,226,094.0	1,423,969.1	1,060.00	6.00	0.00	0	0		
									point296	296	2,226,250.8	1,423,904.5	1,055.00	6.00	0.00	0	0		
									point297	297	2,226,365.8	1,423,864.8	1,050.00	6.00	0.00	0	0		
									point298	298	2,226,466.5	1,423,834.5	1,045.00	6.00	0.00	0	0		
									point299	299	2,226,567.2	1,423,808.0	1,041.00	6.00	0.00	0	0		
									point300	300	2,226,681.8	1,423,782.2	1,037.00	6.00	0.00	0	0		
									point301	301	2,226,831.8	1,423,754.6	1,033.00	6.00	0.00	0	0		
									point302	302	2,226,981.2	1,423,729.0	1,029.00	6.00					

Appendix E – Cont.
Barrier Inputs (Build)

ARCADIS LJV		25 March 2014 TNM 2.5																		
INPUT: BARRIERS PROJECT/CONTRACT: RUN:		I-285 at Riverside Drive Build (2035)																		
Barrier									Points											
Name	Type	Height		If Wall \$ per Unit Area	If Berm \$ per Unit Vol.	Top Width	Run:Rise	Add'tnl \$ per Unit Length	Name	No.	Coordinates (bottom)			Height at Point	Segment				Important Reflec- tions?	
		Min	Max								X	Y	Z		Seg Incre- ment	Ht	Perturbs #Up #Dn	On Struct?		
		ft	ft	\$/sq ft	\$/cu yd	ft	ft:ft	\$/ft		ft	ft	ft	ft	ft						
Existing Wall 1	W	0.00	99.99	0.00				0.00	point161	161	2,221,678.2	1,424,699.0	978.00	3.00	0.00	0	0			
									point162	162	2,221,748.0	1,424,658.6	974.00	7.00	0.00	0	0			
									point163	163	2,221,778.0	1,424,659.0	960.00	20.00	0.00	0	0			
									point164	164	2,221,808.0	1,424,659.5	961.00	17.00	0.00	0	0			
									point165	165	2,221,878.0	1,424,660.8	962.00	16.00	0.00	0	0			
									point166	166	2,221,978.0	1,424,662.4	963.50	16.50	0.00	0	0			
									point167	167	2,222,078.0	1,424,664.0	971.00	15.00	0.00	0	0			
									point168	168	2,222,478.0	1,424,670.6	976.00	16.00	0.00	0	0			
									point169	169	2,222,661.5	1,424,673.6	979.00	19.00	0.00	0	0			
									point170	170	2,222,778.2	1,424,701.8	988.00	19.00	0.00	0	0			
									point171	171	2,222,878.5	1,424,715.2	1,003.00	11.00	0.00	0	0			
									point172	172	2,223,058.5	1,424,739.8	1,014.00	4.00	0.00	0	0			
									point173	173	2,223,150.2	1,424,752.1	1,017.00	7.00	0.00	0	0			
									point174	174	2,223,178.8	1,424,751.1	1,020.00	6.00	0.00	0	0			
									point175	175	2,223,238.8	1,424,748.9	1,003.00	19.00	0.00	0	0			
									point176	176	2,223,301.8	1,424,746.6	1,003.00	19.00	0.00	0	0			
									point177	177	2,223,333.8	1,424,751.8	1,006.00	16.00	0.00	0	0			
									point178	178	2,223,344.2	1,424,753.5	1,009.50	12.00	0.00	0	0			
									point179	179	2,223,380.2	1,424,801.8	1,022.00	7.00	0.00	0	0			
									point180	180	2,223,464.2	1,424,817.0	1,028.00	7.90	0.00	0	0			
									point181	181	2,223,544.2	1,424,831.5	1,031.50	7.90	0.00	0	0			
									point182	182	2,223,579.5	1,424,837.9	1,032.00	7.90	0.00	0	0			
									point183	183	2,223,679.5	1,424,856.1	1,024.50	7.90						
median 1	W	0.00	99.99	0.00				0.00	point267	267	2,219,756.0	1,424,284.6	942.00	6.00	0.00	0	0			
									point268	268	2,219,964.5	1,424,356.8	945.00	6.00	0.00	0	0			
									point269	269	2,220,205.0	1,424,426.0	948.00	6.00	0.00	0	0			
									point270	270	2,220,583.0	1,424,506.8	951.00	6.00	0.00	0	0			
									point271	271	2,220,829.0	1,424,544.0	954.00	6.00	0.00	0	0			
									point272	272	2,221,048.5	1,424,564.0	957.00	6.00	0.00	0	0			
									point273	273	2,221,331.5	1,424,574.6	959.00	6.00	0.00	0	0			
									point274	274	2,221,572.8	1,424,574.0	962.00	6.00	0.00	0	0			
									point275	275	2,221,751.8	1,424,571.8	964.00	6.00	0.00	0	0			
									point276	276	2,221,971.5	1,424,567.2	968.00	6.00	0.00	0	0			
									point277	277	2,222,156.5	1,424,567.2	972.00	6.00	0.00	0	0			
									point278	278	2,222,322.5	1,424,565.0	976.00	6.00	0.00	0	0			

INPUT: BARRIERS

I-285 at Riverside Drive

									point279	279	2,222,511.8	1,424,564.9	980.00	6.00	0.00	0	0		
									point280	280	2,222,670.5	1,424,562.5	984.00	6.00	0.00	0	0		
									point281	281	2,222,833.8	1,424,562.0	988.00	6.00	0.00	0	0		
									point282	282	2,223,005.0	1,424,563.2	992.00	6.00					
median 2	W	0.00	99.99	0.00				0.00	point283	283	2,224,109.8	1,424,549.5	1,022.00	6.00	0.00	0	0		
									point284	284	2,224,296.2	1,424,549.0	1,028.00	6.00	0.00	0	0		
									point285	285	2,224,420.5	1,424,539.5	1,034.00	6.00	0.00	0	0		
									point286	286	2,224,543.5	1,424,526.0	1,040.00	6.00	0.00	0	0		
									point287	287	2,224,674.2	1,424,506.1	1,046.00	6.00	0.00	0	0		
									point288	288	2,224,786.2	1,424,486.0	1,048.00	6.00	0.00	0	0		
									point289	289	2,224,901.2	1,424,458.8	1,051.00	6.00	0.00	0	0		
									point290	290	2,225,021.8	1,424,427.8	1,054.00	6.00	0.00	0	0		
									point291	291	2,225,138.2	1,424,391.9	1,057.00	6.00	0.00	0	0		
									point292	292	2,225,248.0	1,424,347.0	1,060.00	6.00	0.00	0	0		
									point293	293	2,225,428.0	1,424,266.5	1,063.00	6.00	0.00	0	0		
									point294	294	2,225,584.0	1,424,194.4	1,065.00	6.00	0.00	0	0		
									point295	295	2,226,094.0	1,423,969.1	1,060.00	6.00	0.00	0	0		
									point296	296	2,226,250.8	1,423,904.5	1,055.00	6.00	0.00	0	0		
									point297	297	2,226,365.8	1,423,864.8	1,050.00	6.00	0.00	0	0		
									point298	298	2,226,466.5	1,423,834.5	1,045.00	6.00	0.00	0	0		
									point299	299	2,226,567.2	1,423,808.0	1,041.00	6.00	0.00	0	0		
									point300	300	2,226,681.8	1,423,782.2	1,037.00	6.00	0.00	0	0		
									point301	301	2,226,831.8	1,423,754.6	1,033.00	6.00	0.00	0	0		
									point302	302	2,226,981.2	1,423,729.0	1,029.00	6.00					
Barrier Wall 8	W	0.00	99.99	0.00				0.00	point410	410	2,221,560.5	1,424,426.0	980.56	5.44	0.00	0	0		
									point411	411	2,221,611.8	1,424,435.0	977.52	8.48	0.00	0	0		
									point412	412	2,221,661.8	1,424,443.8	975.21	10.79	0.00	0	0		
									point413	413	2,221,712.0	1,424,452.5	970.00	12.31	0.00	0	0		
									point414	414	2,221,871.8	1,424,480.5	969.77	16.23	0.00	0	0		
									point415	415	2,222,176.2	1,424,454.8	977.15	16.23	0.00	0	0		
									point416	416	2,222,221.0	1,424,410.0	980.00	16.70	0.00	0	0		
									point417	417	2,222,410.0	1,424,387.8	998.72	18.28	0.00	0	0		
									point418	418	2,222,504.5	1,424,380.4	990.12	31.88	0.00	0	0		
									point419	419	2,222,778.2	1,424,395.9	1,007.98	25.02	0.00	0	0		
									point420	420	2,223,077.8	1,424,358.6	1,007.98	25.02	0.00	0	0		
									point421	421	2,223,357.2	1,424,297.6	1,040.05	13.95	0.00	0	0		
									point422	422	2,223,617.0	1,424,275.0	1,040.00	13.95	0.00	0	0		
									point423	423	2,223,650.8	1,424,272.0	1,044.00	16.00	0.00	0	0		
									point424	424	2,223,655.0	1,424,271.8	1,045.00	15.00	0.00	0	0		
									point425	425	2,223,659.5	1,424,271.5	1,046.00	14.00	0.00	0	0		
									point426	426	2,223,663.8	1,424,271.2	1,047.00	13.00	0.00	0	0		
									point427	427	2,223,668.0	1,424,271.0	1,048.00	12.00	0.00	0	0		
									point428	428	2,223,669.5	1,424,270.9	1,048.00	12.00					
Barrier Wall 3	W	0.00	99.99	0.00				0.00	point483	483	2,223,884.5	1,424,819.8	1,020.00	22.00	0.00	0	0		
									point484	484	2,223,888.5	1,424,817.4	1,020.00	22.00	0.00	0	0		
									point485	485	2,223,894.0	1,424,814.0	1,020.00	22.00	0.00	0	0		
									point486	486	2,223,899.2	1,424,810.8	1,020.00	22.00	0.00	0	0		
									point487	487	2,223,908.2	1,424,805.2	1,019.00	23.00	0.00	0	0		
									point488	488	2,223,917.0	1,424,799.8	1,020.00	20.00	0.00	0	0		

INPUT: BARRIERS

I-285 at Riverside Drive

									point489	489	2,223,952.8	1,424,785.9	1,028.00	17.00	0.00	0	0		
									point490	490	2,223,979.0	1,424,817.5	1,026.00	10.00	0.00	0	0		
									point491	491	2,223,988.0	1,424,815.2	1,043.00	8.00	0.00	0	0		
									point492	492	2,224,172.8	1,424,768.5	1,044.00	7.00	0.00	0	0		
									point493	493	2,224,191.0	1,424,763.9	1,044.00	7.00	0.00	0	0		
									point494	494	2,224,198.5	1,424,759.5	1,034.00	16.00	0.00	0	0		
									point495	495	2,224,272.2	1,424,716.5	1,042.00	12.00	0.00	0	0		
									point496	496	2,224,299.8	1,424,700.5	1,037.00	9.30	0.00	0	0		
									point497	497	2,224,471.8	1,424,660.2	1,039.00	13.90	0.00	0	0		
									point498	498	2,224,608.5	1,424,626.4	1,043.00	11.00	0.00	0	0		
									point499	499	2,224,763.2	1,424,586.4	1,047.00	12.50	0.00	0	0		
									point500	500	2,224,872.8	1,424,554.2	1,049.00	13.50	0.00	0	0		
									point501	501	2,224,953.2	1,424,533.8	1,052.00	13.50	0.00	0	0		
									point502	502	2,225,057.2	1,424,501.6	1,054.00	12.00	0.00	0	0		
									point503	503	2,225,126.5	1,424,479.4	1,057.00	12.00	0.00	0	0		
									point504	504	2,225,189.5	1,424,459.1	1,057.00	12.00	0.00	0	0		
									point505	505	2,225,282.0	1,424,427.1	1,060.00	12.00	0.00	0	0		
									point506	506	2,225,404.5	1,424,432.6	1,088.00	12.00	0.00	0	0		
									point507	507	2,225,437.2	1,424,418.9	1,093.00	12.00	0.00	0	0		
									point508	508	2,225,557.0	1,424,368.2	1,093.00	12.00					

Appendix F
Receiver Outputs (Existing/No-Build)

Appendix F – Cont.
Receiver Outputs (Build)

RESULTS: SOUND LEVELS

I-285 at Riverside Drive

ARCADIS LJV									16 May 2014 TNM 2.5 Calculated with TNM 2.5				
RESULTS: SOUND LEVELS PROJECT/CONTRACT: RUN: BARRIER DESIGN:		I-285 at Riverside Drive Build (2035) INPUT HEIGHTS								Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:		68 deg F, 50% RH											

Receiver													
Name	No.	#DUs	Existing	No Barrier		Increase over existing		Type	With Barrier		Noise Reduction	Goal	Calculated minus Goal
			LAeq1h	LAeq1h	Calculated	Crit'n	Calculated		Crit'n Sub'l Inc	Calculated			
			dBA	dBA	dBA	dB	dB	Impact	dBA	dB	dB	dB	
R1	511	1	0.0	59.7	66	59.7	10	----	59.7	0.0	5	-5.0	
R2	512	1	0.0	56.5	66	56.5	10	----	56.5	0.0	5	-5.0	
R3	513	1	0.0	57.1	66	57.1	10	----	57.1	0.0	5	-5.0	
R4	514	1	0.0	55.8	66	55.8	10	----	55.8	0.0	5	-5.0	
R5	515	1	0.0	59.9	66	59.9	10	----	59.9	0.0	5	-5.0	
R7	517	1	0.0	65.1	66	65.1	10	----	65.1	0.0	5	-5.0	
R8	518	1	0.0	54.7	66	54.7	10	----	54.7	0.0	5	-5.0	
R9	519	1	0.0	57.1	66	57.1	10	----	57.1	0.0	5	-5.0	
R10	521	1	0.0	54.9	66	54.9	10	----	54.9	0.0	5	-5.0	
R11	522	1	0.0	54.7	66	54.7	10	----	54.7	0.0	5	-5.0	
R12	523	1	0.0	57.5	66	57.5	10	----	57.5	0.0	5	-5.0	
R13	524	1	0.0	58.7	66	58.7	10	----	58.7	0.0	5	-5.0	
R14	525	1	0.0	58.1	66	58.1	10	----	58.1	0.0	5	-5.0	
R15	526	1	0.0	57.8	66	57.8	10	----	57.8	0.0	5	-5.0	
R16	527	1	0.0	62.1	66	62.1	10	----	62.1	0.0	5	-5.0	
R17	528	1	0.0	62.7	66	62.7	10	----	62.7	0.0	5	-5.0	
A1	529	1	0.0	65.8	66	65.8	10	----	65.8	0.0	5	-5.0	
A2	530	1	0.0	63.1	66	63.1	10	----	63.1	0.0	5	-5.0	
A3	531	1	0.0	58.1	66	58.1	10	----	58.1	0.0	5	-5.0	
A4	532	1	0.0	56.8	66	56.8	10	----	56.8	0.0	5	-5.0	
A5	533	1	0.0	56.2	66	56.2	10	----	56.2	0.0	5	-5.0	
A6	534	1	0.0	55.4	66	55.4	10	----	55.4	0.0	5	-5.0	
R6	544	1	0.0	63.3	66	63.3	10	----	63.3	0.0	5	-5.0	
A7	548	1	0.0	55.4	66	55.4	10	----	55.4	0.0	5	-5.0	

RESULTS: SOUND LEVELS

I-285 at Riverside Drive

A8	549	1	0.0	55.4	66	55.4	10	----	55.4	0.0	5	-5.0
R18	553	1	0.0	59.0	66	59.0	10	----	59.0	0.0	5	-5.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		26	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Appendix G

Field Notes Summary

Summarized Filed Notes

Project ID: 0010925

Project Name: I-285 Ramps at CR 209/Riverside Drive

Site Visit: February 20th 2014

Conducted by: Luis Velasquez

Assisted by: Doriann Clayton

Date: March 12, 2014

Site Location: Fair Oaks Manor / Riverside Drive – Receiver 2

Site Reading 1 – Duration 15 Minutes

Weather Conditions: 63 Sky: Cloudy Humidity:84% Wind: South @ 8 mph

Traffic Volumes are shown below in Table 1.

Table 1						
Receiver 6 – Riverside Dr 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R2	15 min	66	7	0	0	0
	*1 Hour	264	28	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Site pictures are located on the next page.





Site Location: Riverside Drive / I-285 EB Off Ramp – Receiver 5

Site Reading 2 – Duration 15 Minutes

Weather Conditions: 63 Sky: Cloudy Humidity:84% Wind: South @ 7 mph

Traffic Volumes are shown below in Table 2 and Table 3.

Table 2						
Receiver 8 – Riverside Dr 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R5	15 min	59	8	0	0	0
	*1 Hour	236	24	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Table 3						
Receiver 8 – I-285 EB Off Ramp 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R5	15 min	70	0	0	0	0
	*1 Hour	280	0	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Site pictures are located on the next page.





Site Location: Riverside Drive / I-285 WB Off Ramp – Receiver 16

Site Reading 3 – Duration 15 Minutes

Weather Conditions: 64 Sky: Overcast Humidity:79% Wind: South @ 10 mph

Traffic Volumes are shown below in Table 4 and Table 5.

Table 4						
Receiver 8 – Riverside Dr 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R16	15 min	282	9	0	0	0
	*1 Hour	1128	36	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Table 5						
Receiver 8 – I-285 WB Off Ramp 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R16	15 min	60	3	0	0	0
	*1 Hour	240	9	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Site pictures are located on the next page.





Site Location: Riverside Drive – Receiver 10

Site Reading 4 – Duration 15 Minutes

Weather Conditions: 65 Sky: Party Cloudy Humidity:77% Wind: SSE @ 9mph

Traffic Volumes are shown below in Table 6.

Table 6						
Receiver 17 – Riverside Dr 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R10	15 min	272	7	0	0	0
	*1 Hour	1088	28	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Site pictures are located on the next page.





Site Location: I-285 WB– Receiver 12

Site Reading 5 – Duration 15 Minutes

Weather Conditions: 65 Sky: Party Cloudy Humidity:74% Wind: SSE @ 9mph

Traffic Volumes are shown below in Table 7.

Table 7						
Receiver 19 – I-285 WB 55 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R12	1 Hour	4243	1262	760	0	0

Volume from tube count data

Site pictures are located on the next page.





Site Location: I-285 WB– Receiver 15

Site Reading 6 – Duration 15 Minutes

Weather Conditions: 65 Sky: Party Cloudy Humidity:74% Wind: SSE @ 9mph

Traffic Volumes are shown below in Table 8.

Table 8						
Receiver 22 – I-285 WB 55 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R15	1 Hour	4243	1262	760	0	0

Volume from tube count data

Site pictures are located on the next page.



Site Location: Riverside Drive / I-285 WB On Ramp – Receiver 7

Site Reading 7 – Duration 15 Minutes

Weather Conditions: 64 Sky: Overcast Humidity:79% Wind: South @ 10 mph

Traffic Volumes are shown below in Table 9 and Table 10.

Table 9						
Receiver 11 – Riverside Dr 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R7	15 min	328	9	0	0	0
	*1 Hour	1312	36	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Table 10						
Receiver 11 – I-285 WB On Ramp 45 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R7	15 min	71	2	0	0	0
	*1 Hour	284	8	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Site pictures are located on the next page.



Site Location: Riverside Drive – Receiver 6

Site Reading 8 – Duration 15 Minutes

Weather Conditions: 65 Sky: Party Cloudy Humidity:77% Wind: SSE @ 9mph

Traffic Volumes are shown below in Table 6.

Table 6						
Receiver 8 – Riverside Dr 35 mph						
Receiver	Count Duration	Cars	Medium	Heavy	Buses	Motorcycle
R6	15 min	59	8	0	0	0
	*1 Hour	236	24	0	0	0

*Estimated by multiplying 15 minute traffic volume by four.

Site pictures are located on the next page.





Appendix G – Cont.
Model Calibration Inputs

INPUT: RECEIVERS

I-285 at Riverside

ARCADIS							8 May 2014				
LJV							TNM 2.5				
INPUT: RECEIVERS											
PROJECT/CONTRACT:			I-285 at Riverside								
RUN:			Model Calibration - South Side								
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
R3	482	1	2,223,288.5	1,423,974.1	1,046.00	4.92	0.00	66	10.0	5.0	Y
R5	484	1	2,223,663.8	1,423,994.0	1,042.00	4.92	0.00	66	10.0	5.0	Y
R6	510	1	2,223,660.0	1,424,211.2	1,047.00	4.92	0.00	66	10.0	5.0	Y

INPUT: RECEIVERS

I-285 at Riverside Drive

ARCADIS							8 May 2014				
LJV							TNM 2.5				
INPUT: RECEIVERS											
PROJECT/CONTRACT:		I-285 at Riverside Drive									
RUN:		Model Calibration - North Side									
Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
R7	487	1	2,223,603.8	1,424,907.9	1,029.00	4.92	0.00	66	10.0	5.0	Y
R10	493	1	2,224,155.2	1,425,233.4	996.00	4.92	0.00	66	10.0	5.0	Y
R12	495	1	2,224,705.0	1,424,831.6	1,013.00	4.92	0.00	66	10.0	5.0	Y
R15	498	1	2,224,239.8	1,424,932.0	1,018.00	4.92	0.00	66	10.0	5.0	Y
R16	499	1	2,223,962.2	1,424,931.9	1,025.00	4.92	0.00	66	10.0	5.0	Y

INPUT: ROADWAYS

I-285 at Riverside

ARCADIS LJV		8 May 2014 TNM 2.5									
INPUT: ROADWAYS		I-285 at Riverside					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:		I-285 at Riverside									
RUN:		Model Calibration - South Side									
Roadway		Points			Coordinates (pavement)			Flow Control		Segment	
Name	Width	Name	No.	X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
I-285 EB right 1	36.0	point1	1	2,219,762.0	1,424,236.1	942.00				Average	
		point2	2	2,219,980.0	1,424,312.9	945.00				Average	
		point3	3	2,220,220.0	1,424,382.2	948.00				Average	
		point4	4	2,220,601.0	1,424,464.1	951.00				Average	
		point5	5	2,220,839.8	1,424,497.5	954.00				Average	
		point6	6	2,221,053.5	1,424,516.2	957.00				Average	
		point7	7	2,221,330.8	1,424,527.1	959.00				Average	
		point8	8	2,221,568.0	1,424,526.0	962.00				Average	
		point9	9	2,221,766.5	1,424,524.5	964.00					
I-285 EB right 2	36.0	point15	15	2,221,766.5	1,424,524.5	964.00				Average	
		point16	16	2,221,983.8	1,424,521.8	968.00				Average	
		point17	17	2,222,156.5	1,424,521.4	972.00				Average	
		point18	18	2,222,325.0	1,424,519.4	976.00				Average	
		point19	19	2,222,512.5	1,424,518.8	980.00				Average	
		point20	20	2,222,672.8	1,424,515.2	984.00				Average	
		point21	21	2,222,833.5	1,424,514.9	988.00				Average	
		point22	22	2,223,005.2	1,424,512.4	992.00				Average	
		point23	23	2,223,170.2	1,424,511.4	996.00				Average	
		point24	24	2,223,311.0	1,424,510.4	1,000.00				Average	
		point25	25	2,223,458.2	1,424,509.9	1,004.00				Average	
		point26	26	2,223,624.5	1,424,507.0	1,008.00				Average	
		point27	27	2,223,742.8	1,424,507.2	1,012.00				Average	
		point28	28	2,223,917.5	1,424,503.9	1,018.00				Average	
		point29	29	2,224,116.5	1,424,502.0	1,022.00				Average	
		point30	30	2,224,300.8	1,424,499.1	1,028.00				Average	

INPUT: ROADWAYS

I-285 at Riverside

		point31	31	2,224,421.5	1,424,492.2	1,034.00				Average
		point32	32	2,224,541.5	1,424,479.0	1,040.00				Average
		point33	33	2,224,671.0	1,424,459.2	1,046.00				Average
		point34	34	2,224,784.8	1,424,437.1	1,048.00				Average
		point35	35	2,224,895.0	1,424,409.9	1,051.00				Average
		point36	36	2,225,017.8	1,424,377.4	1,054.00				Average
		point37	37	2,225,127.5	1,424,342.9	1,057.00				Average
		point38	38	2,225,236.8	1,424,299.8	1,060.00				Average
		point39	39	2,225,415.0	1,424,227.5	1,063.00				
I-285 EB left 1	24.0	point152	152	2,219,757.8	1,424,265.5	942.00				Average
		point153	153	2,219,974.0	1,424,340.0	945.00				Average
		point154	154	2,220,210.5	1,424,408.1	948.00				Average
		point155	155	2,220,591.5	1,424,486.2	951.00				Average
		point156	156	2,220,835.5	1,424,524.1	954.00				Average
		point157	157	2,221,053.2	1,424,542.2	957.00				Average
		point158	158	2,221,331.5	1,424,553.9	959.00				Average
		point159	159	2,221,572.2	1,424,553.4	962.00				Average
		point160	160	2,221,766.0	1,424,552.0	964.00				
I-128 EB left 2	24.0	point173	173	2,223,747.2	1,424,533.8	1,012.00				Average
		point174	174	2,223,920.8	1,424,532.2	1,018.00				Average
		point175	175	2,224,115.8	1,424,529.5	1,022.00				Average
		point176	176	2,224,301.2	1,424,527.4	1,028.00				Average
		point177	177	2,224,423.8	1,424,517.9	1,034.00				Average
		point178	178	2,224,545.2	1,424,503.6	1,040.00				Average
		point179	179	2,224,674.8	1,424,485.1	1,046.00				Average
		point180	180	2,224,789.2	1,424,462.9	1,048.00				Average
		point181	181	2,224,903.2	1,424,437.1	1,051.00				Average
		point182	182	2,225,023.8	1,424,402.9	1,054.00				Average
		point183	183	2,225,137.2	1,424,365.1	1,057.00				Average
		point184	184	2,225,247.5	1,424,323.1	1,060.00				Average
		point185	185	2,225,423.2	1,424,246.2	1,063.00				Average
		point186	186	2,225,577.0	1,424,174.0	1,065.00				
WB right 11	36.0	point396	396	2,224,918.2	1,424,506.5	1,051.00				Average
		point397	397	2,224,804.2	1,424,532.9	1,048.00				Average
		point398	398	2,224,686.5	1,424,557.4	1,046.00				Average
		point399	399	2,224,554.2	1,424,577.2	1,040.00				Average
		point400	400	2,224,431.2	1,424,590.9	1,034.00				Average
		point401	401	2,224,304.8	1,424,599.1	1,028.00				Average
		point402	402	2,224,117.5	1,424,603.1	1,022.00				Average

INPUT: ROADWAYS

I-285 at Riverside

		point403	403	2,223,921.5	1,424,603.2	1,018.00				Average	
		point404	404	2,223,749.5	1,424,603.8	1,012.00				Average	
		point405	405	2,223,626.8	1,424,604.8	1,008.00				Average	
		point406	406	2,223,462.2	1,424,606.2	1,004.00				Average	
		point407	407	2,223,316.5	1,424,608.2	1,000.00				Average	
		point408	408	2,223,168.8	1,424,610.6	996.00				Average	
		point409	409	2,223,002.2	1,424,611.9	992.00				Average	
		point410	410	2,222,835.8	1,424,613.1	988.00				Average	
		point411	411	2,222,673.2	1,424,613.1	984.00				Average	
		point412	412	2,222,512.8	1,424,612.2	980.00				Average	
		point413	413	2,222,327.0	1,424,613.9	976.00					
Wb right 12	36.0	point414	414	2,222,322.0	1,424,614.9	976.00				Average	
		point415	415	2,222,159.0	1,424,617.1	972.00				Average	
		point416	416	2,221,984.5	1,424,618.8	968.00				Average	
		point417	417	2,221,766.8	1,424,619.0	964.00				Average	
		point418	418	2,221,573.0	1,424,622.1	962.00				Average	
		point419	419	2,221,329.8	1,424,622.6	959.00				Average	
		point420	420	2,221,047.8	1,424,613.9	957.00				Average	
		point421	421	2,220,827.2	1,424,593.1	954.00				Average	
		point422	422	2,220,574.8	1,424,556.2	951.00				Average	
		point423	423	2,220,192.5	1,424,474.1	948.00				Average	
		point424	424	2,219,950.0	1,424,405.8	945.00				Average	
		point425	425	2,219,733.8	1,424,330.2	942.00					
WB left 10	24.0	point522	522	2,226,986.0	1,423,751.0	1,029.00				Average	
		point523	523	2,226,836.0	1,423,777.2	1,033.00				Average	
		point524	524	2,226,690.5	1,423,806.4	1,037.00				Average	
		point525	525	2,226,579.0	1,423,832.5	1,041.00				Average	
		point526	526	2,226,479.2	1,423,859.1	1,045.00				Average	
		point527	527	2,226,383.2	1,423,888.8	1,050.00				Average	
		point528	528	2,226,262.2	1,423,929.0	1,055.00				Average	
		point529	529	2,226,108.2	1,423,987.4	1,060.00				Average	
		point530	530	2,225,604.5	1,424,211.4	1,065.00				Average	
		point531	531	2,225,444.0	1,424,287.5	1,063.00				Average	
		point532	532	2,225,266.8	1,424,365.2	1,060.00				Average	
		point533	533	2,225,152.8	1,424,411.8	1,057.00				Average	
		point534	534	2,225,036.5	1,424,448.0	1,054.00					
WB left 11	24.0	point535	535	2,225,036.5	1,424,448.0	1,054.00				Average	
		point536	536	2,224,913.5	1,424,480.2	1,051.00				Average	
		point537	537	2,224,796.2	1,424,504.0	1,048.00				Average	

INPUT: ROADWAYS

I-285 at Riverside

		point538	538	2,224,680.0	1,424,528.8	1,046.00				Average
		point539	539	2,224,550.2	1,424,546.6	1,040.00				Average
		point540	540	2,224,428.2	1,424,559.0	1,034.00				Average
		point541	541	2,224,302.8	1,424,568.1	1,028.00				Average
		point542	542	2,224,116.2	1,424,570.1	1,022.00				Average
		point543	543	2,223,921.2	1,424,572.2	1,018.00				Average
		point544	544	2,223,747.8	1,424,573.8	1,012.00				Average
		point545	545	2,223,626.5	1,424,574.8	1,008.00				Average
		point546	546	2,223,462.0	1,424,576.4	1,004.00				Average
		point547	547	2,223,314.8	1,424,578.4	1,000.00				Average
		point548	548	2,223,169.2	1,424,580.8	996.00				Average
		point549	549	2,223,005.0	1,424,582.0	992.00				Average
		point550	550	2,222,835.5	1,424,581.8	988.00				Average
		point551	551	2,222,673.2	1,424,583.2	984.00				Average
		point552	552	2,222,512.8	1,424,583.8	980.00				Average
		point553	553	2,222,327.0	1,424,584.4	976.00				
WB left 12	24.0	point554	554	2,222,327.0	1,424,584.4	976.00				Average
		point555	555	2,222,158.8	1,424,586.4	972.00				Average
		point556	556	2,221,984.2	1,424,588.8	968.00				Average
		point557	557	2,221,766.5	1,424,592.6	964.00				Average
		point558	558	2,221,572.8	1,424,593.4	962.00				Average
		point559	559	2,221,330.8	1,424,593.9	959.00				Average
		point560	560	2,221,050.8	1,424,583.8	957.00				Average
		point561	561	2,220,830.8	1,424,563.9	954.00				Average
		point562	562	2,220,583.0	1,424,528.6	951.00				Average
		point563	563	2,220,200.8	1,424,447.0	948.00				Average
		point564	564	2,219,962.0	1,424,376.5	945.00				Average
		point565	565	2,219,745.8	1,424,302.2	942.00				
I-285 EB left 1-2	24.0	point1329	1329	2,221,766.0	1,424,552.0	964.00				Average
		point161	161	2,221,984.0	1,424,548.2	968.00				Average
		point162	162	2,222,158.2	1,424,546.4	972.00				Average
		point163	163	2,222,326.5	1,424,544.4	976.00				Average
		point164	164	2,222,512.5	1,424,543.8	980.00				Average
		point165	165	2,222,673.0	1,424,543.2	984.00				Average
		point166	166	2,222,835.2	1,424,541.8	988.00				Average
		point167	167	2,223,004.8	1,424,540.8	992.00				Average
		point168	168	2,223,170.5	1,424,537.9	996.00				Average
		point169	169	2,223,314.2	1,424,538.4	1,000.00				Average
		point170	170	2,223,461.5	1,424,536.4	1,004.00				Average

INPUT: ROADWAYS

I-285 at Riverside

		point171	171	2,223,626.2	1,424,533.2	1,008.00				Average
		point172	172	2,223,747.2	1,424,533.8	1,012.00				
I-285 EB Right 3	36.0	point40	1349	2,225,415.0	1,424,227.5	1,063.00				Average
		point41	1350	2,225,568.8	1,424,150.9	1,067.00				Average
		point42	1351	2,226,073.2	1,423,917.1	1,060.00				Average
		point43	1352	2,226,230.0	1,423,851.2	1,055.00				Average
		point44	1353	2,226,354.8	1,423,810.6	1,050.00				Average
		point45	1354	2,226,458.8	1,423,778.2	1,045.00				Average
		point46	1355	2,226,557.5	1,423,754.4	1,041.00				Average
		point47	1356	2,226,673.8	1,423,727.8	1,037.00				Average
		point48	1357	2,226,821.2	1,423,701.8	1,033.00				Average
		point49	1358	2,226,973.5	1,423,675.6	1,029.00				
I-285 EB Left 3	24.0	point187	1375	2,225,577.0	1,424,174.0	1,065.00				Average
		point188	1376	2,226,083.2	1,423,947.4	1,060.00				Average
		point189	1377	2,226,242.5	1,423,882.8	1,055.00				Average
		point190	1378	2,226,361.0	1,423,841.1	1,050.00				Average
		point191	1379	2,226,460.8	1,423,811.2	1,045.00				Average
		point192	1380	2,226,565.2	1,423,785.2	1,041.00				Average
		point193	1381	2,226,680.2	1,423,759.9	1,037.00				Average
		point194	1382	2,226,826.5	1,423,734.4	1,033.00				Average
		point195	1383	2,226,979.8	1,423,707.1	1,029.00				
WB Right 10	36.0	point381	1404	2,227,123.8	1,423,757.4	1,026.00				Average
		point383	1406	2,226,854.0	1,423,805.0	1,033.00				Average
		point384	1407	2,226,701.8	1,423,835.8	1,037.00				Average
		point385	1408	2,226,594.0	1,423,862.5	1,041.00				Average
		point386	1409	2,226,493.5	1,423,886.0	1,045.00				Average
		point387	1410	2,226,396.0	1,423,918.4	1,050.00				Average
		point388	1411	2,226,275.5	1,423,959.0	1,055.00				Average
		point389	1412	2,226,122.0	1,424,015.6	1,060.00				Average
		point390	1413	2,225,613.5	1,424,237.0	1,065.00				Average
		point391	1414	2,225,455.0	1,424,310.9	1,063.00				Average
		point392	1415	2,225,276.8	1,424,392.4	1,060.00				Average
		point393	1416	2,225,168.8	1,424,435.5	1,057.00				Average
		point394	1417	2,225,045.5	1,424,474.0	1,054.00				Average
		point395	1418	2,224,918.2	1,424,506.5	1,051.00				
Rvierside NB 6	12.0	point1474	1474	2,223,784.8	1,424,840.8	1,016.80				Average
		point1475	1475	2,223,784.8	1,424,890.8	1,011.20				Average
		point1476	1476	2,223,784.8	1,424,940.8	1,007.40				Average
		point1477	1477	2,223,785.0	1,424,990.8	1,002.20				Average

INPUT: ROADWAYS

I-285 at Riverside

		point1478	1478	2,223,785.0	1,425,040.8	998.30				Average	
		point1479	1479	2,223,785.5	1,425,091.0	994.20				Average	
		point1480	1480	2,223,786.5	1,425,140.8	990.90				Average	
		point1481	1481	2,223,787.8	1,425,190.8	987.30				Average	
		point1482	1482	2,223,788.5	1,425,240.8	987.30				Average	
		point1483	1483	2,223,789.5	1,425,290.8	981.20				Average	
		point1484	1484	2,223,790.5	1,425,340.8	979.30				Average	
		point1485	1485	2,223,790.5	1,425,390.8	979.10				Average	
		point1486	1486	2,223,790.0	1,425,440.8	980.40				Average	
		point1487	1487	2,223,790.2	1,425,490.8	982.10				Average	
		point1488	1488	2,223,790.5	1,425,540.8	984.50				Average	
		point1489	1489	2,223,791.0	1,425,590.8	987.40				Average	
		point1490	1490	2,223,790.8	1,425,640.8	989.80				Average	
		point1491	1491	2,223,791.2	1,425,690.6	992.20				Average	
		point1492	1492	2,223,791.8	1,425,739.2	994.00					
Riverside SB 6	12.0	point1493	1493	2,223,779.5	1,425,738.0	993.70				Average	
		point1494	1494	2,223,779.2	1,425,690.2	991.90				Average	
		point1495	1495	2,223,779.0	1,425,640.2	989.70				Average	
		point1496	1496	2,223,778.8	1,425,590.2	987.10				Average	
		point1497	1497	2,223,778.8	1,425,540.2	984.60				Average	
		point1498	1498	2,223,778.2	1,425,490.2	982.10				Average	
		point1499	1499	2,223,778.0	1,425,440.2	980.20				Average	
		point1500	1500	2,223,778.2	1,425,390.2	978.90				Average	
		point1501	1501	2,223,778.5	1,425,340.4	979.70				Average	
		point1502	1502	2,223,778.0	1,425,290.2	981.40				Average	
		point1503	1503	2,223,777.2	1,425,240.2	983.90				Average	
		point1504	1504	2,223,776.2	1,425,190.2	987.50				Average	
		point1505	1505	2,223,775.8	1,425,140.2	990.90				Average	
		point1506	1506	2,223,775.5	1,425,090.2	994.50				Average	
		point1507	1507	2,223,774.2	1,425,040.2	998.70				Average	
		point1508	1508	2,223,773.8	1,424,990.2	1,002.50				Average	
		point1509	1509	2,223,773.2	1,424,940.2	1,007.20				Average	
		point1510	1510	2,223,772.5	1,424,890.4	1,011.60				Average	
		point1511	1511	2,223,772.0	1,424,840.8	1,016.80					
Riverside SB 3	12.0	point1614	1614	2,223,767.5	1,424,267.4	1,049.40				Average	
		point1615	1615	2,223,767.8	1,424,198.0	1,049.60				Average	
		point1616	1616	2,223,767.5	1,424,148.1	1,049.70				Average	
		point1617	1617	2,223,767.5	1,424,098.0	1,050.00				Average	
		point1618	1618	2,223,767.5	1,424,048.2	1,050.30				Average	

INPUT: ROADWAYS

I-285 at Riverside

		point1619	1619	2,223,767.0	1,423,998.1	1,050.20				Average	
		point1620	1620	2,223,767.0	1,423,948.2	1,049.40				Average	
		point1621	1621	2,223,767.0	1,423,898.0	1,048.00				Average	
		point1622	1622	2,223,766.5	1,423,848.0	1,046.50				Average	
		point1623	1623	2,223,766.5	1,423,798.1	1,045.00				Average	
		point1624	1624	2,223,766.8	1,423,748.0	1,045.00				Average	
		point1625	1625	2,223,766.2	1,423,698.2	1,046.30				Average	
		point1626	1626	2,223,766.0	1,423,648.2	1,048.10				Average	
		point1627	1627	2,223,766.0	1,423,598.1	1,050.20				Average	
		point1628	1628	2,223,764.8	1,423,548.1	1,052.00				Average	
		point1629	1629	2,223,757.0	1,423,498.0	1,054.00				Average	
		point1630	1630	2,223,737.5	1,423,451.8	1,056.00				Average	
		point1631	1631	2,223,713.5	1,423,407.6	1,057.00				Average	
		point1632	1632	2,223,680.5	1,423,369.8	1,058.00				Average	
		point1633	1633	2,223,643.2	1,423,336.2	1,059.00				Average	
		point1634	1634	2,223,605.2	1,423,303.6	1,059.00				Average	
		point1635	1635	2,223,567.5	1,423,271.0	1,059.00				Average	
		point1636	1636	2,223,529.5	1,423,238.4	1,059.00				Average	
		point1637	1637	2,223,491.5	1,423,205.9	1,059.00				Average	
		point1638	1638	2,223,453.5	1,423,173.2	1,059.00				Average	
		point1639	1639	2,223,415.8	1,423,140.8	1,059.00				Average	
		point1640	1640	2,223,377.8	1,423,108.1	1,059.00				Average	
		point1641	1641	2,223,340.0	1,423,075.5	1,058.00				Average	
		point1642	1642	2,223,302.0	1,423,042.9	1,056.00				Average	
		point1643	1643	2,223,264.0	1,423,010.2	1,056.00				Average	
		point1644	1644	2,223,226.0	1,422,977.8	1,057.00					
Riverside NB 1	12.0	point1713	1713	2,223,234.0	1,422,967.2	1,056.00				Average	
		point1714	1714	2,223,282.0	1,423,010.2	1,057.00				Average	
		point1715	1715	2,223,319.8	1,423,043.1	1,056.00				Average	
		point1716	1716	2,223,357.5	1,423,075.8	1,056.00				Average	
		point1717	1717	2,223,395.5	1,423,108.6	1,058.00				Average	
		point1718	1718	2,223,433.0	1,423,141.4	1,059.00				Average	
		point1719	1719	2,223,471.0	1,423,174.2	1,059.00				Average	
		point1720	1720	2,223,508.5	1,423,207.0	1,059.00				Average	
		point1721	1721	2,223,546.5	1,423,239.8	1,059.00				Average	
		point1722	1722	2,223,584.0	1,423,272.5	1,059.00				Average	
		point1723	1723	2,223,622.0	1,423,305.2	1,059.00				Average	
		point1724	1724	2,223,659.5	1,423,338.1	1,059.00				Average	
		point1725	1725	2,223,696.8	1,423,371.2	1,059.00				Average	

INPUT: ROADWAYS

I-285 at Riverside

		point1726	1726	2,223,728.8	1,423,409.2	1,058.00				Average	
		point1727	1727	2,223,750.8	1,423,453.2	1,057.00				Average	
		point1728	1728	2,223,769.5	1,423,498.8	1,056.00				Average	
		point1729	1729	2,223,776.8	1,423,547.9	1,054.00				Average	
		point1730	1730	2,223,778.2	1,423,648.2	1,050.10				Average	
		point1731	1731	2,223,777.8	1,423,697.8	1,048.00				Average	
		point1732	1732	2,223,778.8	1,423,747.9	1,046.30				Average	
		point1733	1733	2,223,778.5	1,423,797.8	1,045.10				Average	
		point1734	1734	2,223,778.5	1,423,848.1	1,045.30				Average	
		point1735	1735	2,223,778.5	1,423,897.6	1,046.60				Average	
		point1736	1736	2,223,778.5	1,423,947.9	1,048.10				Average	
		point1737	1737	2,223,778.8	1,423,997.8	1,049.30				Average	
		point1738	1738	2,223,778.5	1,424,047.8	1,050.30				Average	
		point1739	1739	2,223,778.5	1,424,098.0	1,050.40				Average	
		point1740	1740	2,223,779.0	1,424,147.8	1,050.10				Average	
		point1741	1741	2,223,778.8	1,424,197.8	1,049.80				Average	
		point1742	1742	2,223,778.8	1,424,248.2	1,049.60				Average	
		point1743	1743	2,223,779.0	1,424,267.5	1,049.60					
Riverside NB 2	12.0	point1744	1744	2,223,782.0	1,424,344.9	1,048.50				Average	Y
		point1745	1745	2,223,782.8	1,424,395.1	1,047.20				Average	Y
		point1746	1746	2,223,783.0	1,424,445.2	1,045.60				Average	Y
		point1747	1747	2,223,783.8	1,424,495.1	1,043.30				Average	Y
		point1748	1748	2,223,784.8	1,424,545.2	1,040.80				Average	Y
		point1749	1749	2,223,785.0	1,424,595.1	1,037.80				Average	Y
		point1750	1750	2,223,785.8	1,424,645.1	1,034.60				Average	Y
		point1751	1751	2,223,786.0	1,424,695.1	1,029.60				Average	Y
		point1752	1752	2,223,787.5	1,424,744.8	1,025.50				Average	Y
		point1753	1753	2,223,786.0	1,424,770.5	1,023.20					
Riverside SB 2	12.0	point1778	1778	2,223,774.5	1,424,769.5	1,023.20				Average	Y
		point1779	1779	2,223,774.5	1,424,745.1	1,025.40				Average	Y
		point1780	1780	2,223,774.0	1,424,695.2	1,029.70				Average	Y
		point1781	1781	2,223,773.5	1,424,645.5	1,034.20				Average	Y
		point1782	1782	2,223,773.0	1,424,595.1	1,037.70				Average	Y
		point1783	1783	2,223,772.5	1,424,545.2	1,040.70				Average	Y
		point1784	1784	2,223,771.5	1,424,495.2	1,043.20				Average	Y
		point1785	1785	2,223,771.5	1,424,445.2	1,045.30				Average	Y
		point1786	1786	2,223,770.5	1,424,395.4	1,047.30				Average	Y
		point1787	1787	2,223,770.2	1,424,345.1	1,048.40					
I-285 EB On Ramp	12.0	point1834	1834	2,223,813.2	1,424,311.2	1,048.70				Average	

INPUT: ROADWAYS

I-285 at Riverside

		point1835	1835	2,223,863.0	1,424,319.6	1,047.70				Average	
		point1836	1836	2,223,913.0	1,424,328.4	1,046.70				Average	
		point1837	1837	2,223,962.5	1,424,336.9	1,045.70				Average	
		point1838	1838	2,224,010.0	1,424,345.8	1,044.40				Average	
		point1839	1839	2,224,059.2	1,424,356.6	1,042.90				Average	
		point1840	1840	2,224,109.5	1,424,365.8	1,041.50				Average	
		point1841	1841	2,224,158.0	1,424,375.8	1,040.20				Average	
		point1842	1842	2,224,207.2	1,424,385.4	1,038.60				Average	
		point1843	1843	2,224,256.8	1,424,393.1	1,037.30				Average	
		point1844	1844	2,224,305.5	1,424,401.8	1,035.80				Average	
		point1845	1845	2,224,355.0	1,424,410.2	1,034.40				Average	
		point1846	1846	2,224,405.2	1,424,417.1	1,033.30				Average	
		point1847	1847	2,224,454.5	1,424,423.0	1,032.80				Average	
		point1848	1848	2,224,505.0	1,424,423.9	1,033.30				Average	
		point1849	1849	2,224,554.8	1,424,423.0	1,034.10				Average	
		point1850	1850	2,224,604.5	1,424,419.9	1,035.80				Average	
		point1851	1851	2,224,653.5	1,424,415.2	1,037.60				Average	
		point1852	1852	2,224,704.0	1,424,408.5	1,039.10				Average	
		point1853	1853	2,224,753.5	1,424,402.5	1,041.10				Average	
		point1854	1854	2,224,802.5	1,424,394.2	1,042.50				Average	
		point1855	1855	2,224,852.0	1,424,382.9	1,044.60				Average	
		point1856	1856	2,224,900.2	1,424,371.1	1,046.20				Average	
		point1857	1857	2,224,948.8	1,424,359.2	1,047.50				Average	
		point1858	1858	2,224,997.0	1,424,346.8	1,049.20				Average	
		point1859	1859	2,225,030.2	1,424,336.6	1,050.60				Average	
		point1860	1860	2,225,076.5	1,424,321.4	1,052.10				Average	
		point1861	1861	2,225,116.8	1,424,309.2	1,053.50				Average	
		point1862	1862	2,225,151.8	1,424,300.1	1,054.80				Average	
		point1863	1863	2,225,181.0	1,424,297.9	1,061.00				Average	
		point1864	1864	2,225,316.2	1,424,244.6	1,061.00				Average	
		point1865	1865	2,225,415.0	1,424,227.5	1,063.00					
I-285 Eb Off Ramp	12.0	point1929	1929	2,221,765.8	1,424,523.6	964.00				Average	
		point1928	1928	2,221,879.5	1,424,505.9	967.00				Average	
		point1927	1927	2,222,067.8	1,424,495.0	974.00				Average	
		point1926	1926	2,222,363.5	1,424,466.2	974.00				Average	
		point1925	1925	2,222,402.2	1,424,465.2	974.10				Average	
		point1924	1924	2,222,448.0	1,424,460.8	975.50				Average	
		point1923	1923	2,222,495.0	1,424,454.9	977.30				Average	
		point1922	1922	2,222,546.0	1,424,445.5	979.60				Average	

INPUT: ROADWAYS

I-285 at Riverside

		point1921	1921	2,222,597.0	1,424,443.8	982.40				Average	
		point1920	1920	2,222,651.0	1,424,438.0	985.50				Average	
		point1919	1919	2,222,692.0	1,424,432.2	987.90				Average	
		point1918	1918	2,222,742.5	1,424,428.1	990.80				Average	
		point1917	1917	2,222,798.5	1,424,422.2	994.10				Average	
		point1916	1916	2,222,841.2	1,424,410.5	996.80				Average	
		point1915	1915	2,222,897.8	1,424,402.9	1,000.20				Average	
		point1914	1914	2,222,948.8	1,424,399.6	1,003.30				Average	
		point1913	1913	2,222,991.8	1,424,394.2	1,005.90				Average	
		point1912	1912	2,223,040.0	1,424,391.1	1,008.80				Average	
		point1911	1911	2,223,090.0	1,424,386.8	1,011.90				Average	
		point1910	1910	2,223,140.0	1,424,382.2	1,014.90				Average	
		point1909	1909	2,223,199.0	1,424,374.0	1,018.40				Average	
		point1908	1908	2,223,239.0	1,424,370.0	1,020.80				Average	
		point1907	1907	2,223,288.2	1,424,362.2	1,023.80				Average	
		point1906	1906	2,223,338.5	1,424,353.2	1,026.90				Average	
		point1905	1905	2,223,386.5	1,424,345.5	1,029.80				Average	
		point1904	1904	2,223,445.0	1,424,345.9	1,033.30				Average	
		point1903	1903	2,223,486.0	1,424,338.1	1,035.90				Average	
		point1902	1902	2,223,539.8	1,424,335.4	1,039.20				Average	
		point1901	1901	2,223,589.0	1,424,327.6	1,042.20				Average	
		point1900	1900	2,223,633.8	1,424,322.0	1,044.70				Average	
		point1899	1899	2,223,691.5	1,424,315.8	1,047.20				Average	
		point1898	1898	2,223,735.5	1,424,310.8	1,048.50					
I-285 Wb Off Ramp	12.0	point1992	1992	2,224,918.2	1,424,506.5	1,051.00				Average	
		point1991	1991	2,224,856.2	1,424,539.1	1,049.00				Average	
		point1990	1990	2,224,752.0	1,424,570.4	1,047.00				Average	
		point1989	1989	2,224,731.2	1,424,572.2	1,043.50				Average	
		point1988	1988	2,224,683.0	1,424,583.4	1,043.50				Average	
		point1987	1987	2,224,634.0	1,424,594.8	1,043.50				Average	
		point1986	1986	2,224,585.0	1,424,606.6	1,043.50				Average	
		point1985	1985	2,224,536.8	1,424,618.0	1,043.50				Average	
		point1984	1984	2,224,488.0	1,424,628.2	1,041.60				Average	
		point1983	1983	2,224,439.2	1,424,641.1	1,040.60				Average	
		point1982	1982	2,224,390.0	1,424,651.6	1,039.00				Average	
		point1981	1981	2,224,342.0	1,424,662.2	1,037.60				Average	
		point1980	1980	2,224,293.5	1,424,673.4	1,035.60				Average	
		point1979	1979	2,224,245.0	1,424,687.8	1,033.50				Average	
		point1978	1978	2,224,196.0	1,424,698.2	1,031.50				Average	

INPUT: ROADWAYS

I-285 at Riverside

		point1977	1977	2,224,147.0	1,424,710.6	1,029.40				Average
		point1976	1976	2,224,098.8	1,424,722.8	1,027.40				Average
		point1975	1975	2,224,051.2	1,424,734.2	1,025.20				Average
		point1974	1974	2,224,001.8	1,424,747.2	1,024.00				Average
		point1973	1973	2,223,953.0	1,424,758.2	1,022.50				Average
		point1972	1972	2,223,904.5	1,424,769.8	1,021.80				Average
		point1971	1971	2,223,856.8	1,424,782.5	1,020.80				Average
		point1970	1970	2,223,808.0	1,424,794.8	1,020.30				
I-285 WB On Ramp	12.0	point2020	2020	2,223,736.8	1,424,797.4	1,019.50				Average
		point2021	2021	2,223,688.0	1,424,788.4	1,018.70				Average
		point2022	2022	2,223,637.8	1,424,779.8	1,018.10				Average
		point2023	2023	2,223,588.8	1,424,771.4	1,016.80				Average
		point2024	2024	2,223,539.8	1,424,762.8	1,014.70				Average
		point2025	2025	2,223,488.5	1,424,754.5	1,012.50				Average
		point2026	2026	2,223,440.8	1,424,745.0	1,010.50				Average
		point2027	2027	2,223,392.0	1,424,737.4	1,008.30				Average
		point2028	2028	2,223,343.5	1,424,728.2	1,006.10				Average
		point2029	2029	2,223,293.0	1,424,721.2	1,003.80				Average
		point2030	2030	2,223,244.8	1,424,713.1	1,001.60				Average
		point2031	2031	2,223,194.5	1,424,705.0	999.80				Average
		point2032	2032	2,223,145.0	1,424,698.4	997.20				Average
		point2033	2033	2,223,096.0	1,424,688.9	995.50				Average
		point2034	2034	2,223,046.5	1,424,681.2	993.10				Average
		point2035	2035	2,222,997.0	1,424,673.2	991.10				Average
		point2036	2036	2,222,948.2	1,424,667.9	989.20				Average
		point2037	2037	2,222,897.8	1,424,662.4	987.50				Average
		point2038	2038	2,222,847.8	1,424,659.8	985.60				Average
		point2039	2039	2,222,798.0	1,424,657.4	984.30				Average
		point2040	2040	2,222,748.2	1,424,655.8	984.30				Average
		point2041	2041	2,222,698.5	1,424,652.5	981.20				Average
		point2042	2042	2,222,648.5	1,424,648.8	979.60				Average
		point2043	2043	2,222,599.0	1,424,647.0	978.40				Average
		point2044	2044	2,222,548.0	1,424,644.6	977.10				Average
		point2045	2045	2,222,374.8	1,424,629.0	977.00				Average
		point2046	2046	2,222,327.2	1,424,614.4	976.00				

ARCADIS LJV		8 May 2014 TNM 2.5									
INPUT: ROADWAYS		I-285 at Riverside Drive					Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA				
PROJECT/CONTRACT:		I-285 at Riverside Drive									
RUN:		Model Calibration - North Side									
Roadway		Points			Coordinates (pavement)			Flow Control		Segment	
Name	Width	Name	No.	X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
I-285 EB right 1	36.0	point1	1	2,219,762.0	1,424,236.1	942.00				Average	
		point2	2	2,219,980.0	1,424,312.9	945.00				Average	
		point3	3	2,220,220.0	1,424,382.2	948.00				Average	
		point4	4	2,220,601.0	1,424,464.1	951.00				Average	
		point5	5	2,220,839.8	1,424,497.5	954.00				Average	
		point6	6	2,221,053.5	1,424,516.2	957.00				Average	
		point7	7	2,221,330.8	1,424,527.1	959.00				Average	
		point8	8	2,221,568.0	1,424,526.0	962.00				Average	
		point9	9	2,221,766.5	1,424,524.5	964.00					
I-285 EB right 2	36.0	point15	15	2,221,766.5	1,424,524.5	964.00				Average	
		point16	16	2,221,983.8	1,424,521.8	968.00				Average	
		point17	17	2,222,156.5	1,424,521.4	972.00				Average	
		point18	18	2,222,325.0	1,424,519.4	976.00				Average	
		point19	19	2,222,512.5	1,424,518.8	980.00				Average	
		point20	20	2,222,672.8	1,424,515.2	984.00				Average	
		point21	21	2,222,833.5	1,424,514.9	988.00				Average	
		point22	22	2,223,005.2	1,424,512.4	992.00				Average	
		point23	23	2,223,170.2	1,424,511.4	996.00				Average	
		point24	24	2,223,311.0	1,424,510.4	1,000.00				Average	
		point25	25	2,223,458.2	1,424,509.9	1,004.00				Average	
		point26	26	2,223,624.5	1,424,507.0	1,008.00				Average	
		point27	27	2,223,742.8	1,424,507.2	1,012.00				Average	
		point28	28	2,223,917.5	1,424,503.9	1,018.00				Average	
		point29	29	2,224,116.5	1,424,502.0	1,022.00				Average	
		point30	30	2,224,300.8	1,424,499.1	1,028.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point31	31	2,224,421.5	1,424,492.2	1,034.00				Average
		point32	32	2,224,541.5	1,424,479.0	1,040.00				Average
		point33	33	2,224,671.0	1,424,459.2	1,046.00				Average
		point34	34	2,224,784.8	1,424,437.1	1,048.00				Average
		point35	35	2,224,895.0	1,424,409.9	1,051.00				Average
		point36	36	2,225,017.8	1,424,377.4	1,054.00				Average
		point37	37	2,225,127.5	1,424,342.9	1,057.00				Average
		point38	38	2,225,236.8	1,424,299.8	1,060.00				Average
		point39	39	2,225,415.0	1,424,227.5	1,063.00				
I-285 EB left 1	24.0	point152	152	2,219,757.8	1,424,265.5	942.00				Average
		point153	153	2,219,974.0	1,424,340.0	945.00				Average
		point154	154	2,220,210.5	1,424,408.1	948.00				Average
		point155	155	2,220,591.5	1,424,486.2	951.00				Average
		point156	156	2,220,835.5	1,424,524.1	954.00				Average
		point157	157	2,221,053.2	1,424,542.2	957.00				Average
		point158	158	2,221,331.5	1,424,553.9	959.00				Average
		point159	159	2,221,572.2	1,424,553.4	962.00				Average
		point160	160	2,221,766.0	1,424,552.0	964.00				
I-128 EB left 2	24.0	point173	173	2,223,747.2	1,424,533.8	1,012.00				Average
		point174	174	2,223,920.8	1,424,532.2	1,018.00				Average
		point175	175	2,224,115.8	1,424,529.5	1,022.00				Average
		point176	176	2,224,301.2	1,424,527.4	1,028.00				Average
		point177	177	2,224,423.8	1,424,517.9	1,034.00				Average
		point178	178	2,224,545.2	1,424,503.6	1,040.00				Average
		point179	179	2,224,674.8	1,424,485.1	1,046.00				Average
		point180	180	2,224,789.2	1,424,462.9	1,048.00				Average
		point181	181	2,224,903.2	1,424,437.1	1,051.00				Average
		point182	182	2,225,023.8	1,424,402.9	1,054.00				Average
		point183	183	2,225,137.2	1,424,365.1	1,057.00				Average
		point184	184	2,225,247.5	1,424,323.1	1,060.00				Average
		point185	185	2,225,423.2	1,424,246.2	1,063.00				Average
		point186	186	2,225,577.0	1,424,174.0	1,065.00				
WB right 11	36.0	point396	396	2,224,918.2	1,424,506.5	1,051.00				Average
		point397	397	2,224,804.2	1,424,532.9	1,048.00				Average
		point398	398	2,224,686.5	1,424,557.4	1,046.00				Average
		point399	399	2,224,554.2	1,424,577.2	1,040.00				Average
		point400	400	2,224,431.2	1,424,590.9	1,034.00				Average
		point401	401	2,224,304.8	1,424,599.1	1,028.00				Average
		point402	402	2,224,117.5	1,424,603.1	1,022.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point403	403	2,223,921.5	1,424,603.2	1,018.00				Average	
		point404	404	2,223,749.5	1,424,603.8	1,012.00				Average	
		point405	405	2,223,626.8	1,424,604.8	1,008.00				Average	
		point406	406	2,223,462.2	1,424,606.2	1,004.00				Average	
		point407	407	2,223,316.5	1,424,608.2	1,000.00				Average	
		point408	408	2,223,168.8	1,424,610.6	996.00				Average	
		point409	409	2,223,002.2	1,424,611.9	992.00				Average	
		point410	410	2,222,835.8	1,424,613.1	988.00				Average	
		point411	411	2,222,673.2	1,424,613.1	984.00				Average	
		point412	412	2,222,512.8	1,424,612.2	980.00				Average	
		point413	413	2,222,327.0	1,424,613.9	976.00					
Wb right 12	36.0	point414	414	2,222,322.0	1,424,614.9	976.00				Average	
		point415	415	2,222,159.0	1,424,617.1	972.00				Average	
		point416	416	2,221,984.5	1,424,618.8	968.00				Average	
		point417	417	2,221,766.8	1,424,619.0	964.00				Average	
		point418	418	2,221,573.0	1,424,622.1	962.00				Average	
		point419	419	2,221,329.8	1,424,622.6	959.00				Average	
		point420	420	2,221,047.8	1,424,613.9	957.00				Average	
		point421	421	2,220,827.2	1,424,593.1	954.00				Average	
		point422	422	2,220,574.8	1,424,556.2	951.00				Average	
		point423	423	2,220,192.5	1,424,474.1	948.00				Average	
		point424	424	2,219,950.0	1,424,405.8	945.00				Average	
		point425	425	2,219,733.8	1,424,330.2	942.00					
WB left 10	24.0	point522	522	2,226,986.0	1,423,751.0	1,029.00				Average	
		point523	523	2,226,836.0	1,423,777.2	1,033.00				Average	
		point524	524	2,226,690.5	1,423,806.4	1,037.00				Average	
		point525	525	2,226,579.0	1,423,832.5	1,041.00				Average	
		point526	526	2,226,479.2	1,423,859.1	1,045.00				Average	
		point527	527	2,226,383.2	1,423,888.8	1,050.00				Average	
		point528	528	2,226,262.2	1,423,929.0	1,055.00				Average	
		point529	529	2,226,108.2	1,423,987.4	1,060.00				Average	
		point530	530	2,225,604.5	1,424,211.4	1,065.00				Average	
		point531	531	2,225,444.0	1,424,287.5	1,063.00				Average	
		point532	532	2,225,266.8	1,424,365.2	1,060.00				Average	
		point533	533	2,225,152.8	1,424,411.8	1,057.00				Average	
		point534	534	2,225,036.5	1,424,448.0	1,054.00					
WB left 11	24.0	point535	535	2,225,036.5	1,424,448.0	1,054.00				Average	
		point536	536	2,224,913.5	1,424,480.2	1,051.00				Average	
		point537	537	2,224,796.2	1,424,504.0	1,048.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point538	538	2,224,680.0	1,424,528.8	1,046.00				Average	
		point539	539	2,224,550.2	1,424,546.6	1,040.00				Average	
		point540	540	2,224,428.2	1,424,559.0	1,034.00				Average	
		point541	541	2,224,302.8	1,424,568.1	1,028.00				Average	
		point542	542	2,224,116.2	1,424,570.1	1,022.00				Average	
		point543	543	2,223,921.2	1,424,572.2	1,018.00				Average	
		point544	544	2,223,747.8	1,424,573.8	1,012.00				Average	
		point545	545	2,223,626.5	1,424,574.8	1,008.00				Average	
		point546	546	2,223,462.0	1,424,576.4	1,004.00				Average	
		point547	547	2,223,314.8	1,424,578.4	1,000.00				Average	
		point548	548	2,223,169.2	1,424,580.8	996.00				Average	
		point549	549	2,223,005.0	1,424,582.0	992.00				Average	
		point550	550	2,222,835.5	1,424,581.8	988.00				Average	
		point551	551	2,222,673.2	1,424,583.2	984.00				Average	
		point552	552	2,222,512.8	1,424,583.8	980.00				Average	
		point553	553	2,222,327.0	1,424,584.4	976.00					
WB left 12	24.0	point554	554	2,222,327.0	1,424,584.4	976.00				Average	
		point555	555	2,222,158.8	1,424,586.4	972.00				Average	
		point556	556	2,221,984.2	1,424,588.8	968.00				Average	
		point557	557	2,221,766.5	1,424,592.6	964.00				Average	
		point558	558	2,221,572.8	1,424,593.4	962.00				Average	
		point559	559	2,221,330.8	1,424,593.9	959.00				Average	
		point560	560	2,221,050.8	1,424,583.8	957.00				Average	
		point561	561	2,220,830.8	1,424,563.9	954.00				Average	
		point562	562	2,220,583.0	1,424,528.6	951.00				Average	
		point563	563	2,220,200.8	1,424,447.0	948.00				Average	
		point564	564	2,219,962.0	1,424,376.5	945.00				Average	
		point565	565	2,219,745.8	1,424,302.2	942.00					
I-285 EB left 1-2	24.0	point1329	1329	2,221,766.0	1,424,552.0	964.00				Average	
		point161	161	2,221,984.0	1,424,548.2	968.00				Average	
		point162	162	2,222,158.2	1,424,546.4	972.00				Average	
		point163	163	2,222,326.5	1,424,544.4	976.00				Average	
		point164	164	2,222,512.5	1,424,543.8	980.00				Average	
		point165	165	2,222,673.0	1,424,543.2	984.00				Average	
		point166	166	2,222,835.2	1,424,541.8	988.00				Average	
		point167	167	2,223,004.8	1,424,540.8	992.00				Average	
		point168	168	2,223,170.5	1,424,537.9	996.00				Average	
		point169	169	2,223,314.2	1,424,538.4	1,000.00				Average	
		point170	170	2,223,461.5	1,424,536.4	1,004.00				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point171	171	2,223,626.2	1,424,533.2	1,008.00				Average
		point172	172	2,223,747.2	1,424,533.8	1,012.00				
I-285 EB Right 3	36.0	point40	1349	2,225,415.0	1,424,227.5	1,063.00				Average
		point41	1350	2,225,568.8	1,424,150.9	1,067.00				Average
		point42	1351	2,226,073.2	1,423,917.1	1,060.00				Average
		point43	1352	2,226,230.0	1,423,851.2	1,055.00				Average
		point44	1353	2,226,354.8	1,423,810.6	1,050.00				Average
		point45	1354	2,226,458.8	1,423,778.2	1,045.00				Average
		point46	1355	2,226,557.5	1,423,754.4	1,041.00				Average
		point47	1356	2,226,673.8	1,423,727.8	1,037.00				Average
		point48	1357	2,226,821.2	1,423,701.8	1,033.00				Average
		point49	1358	2,226,973.5	1,423,675.6	1,029.00				
I-285 EB Left 3	24.0	point187	1375	2,225,577.0	1,424,174.0	1,065.00				Average
		point188	1376	2,226,083.2	1,423,947.4	1,060.00				Average
		point189	1377	2,226,242.5	1,423,882.8	1,055.00				Average
		point190	1378	2,226,361.0	1,423,841.1	1,050.00				Average
		point191	1379	2,226,460.8	1,423,811.2	1,045.00				Average
		point192	1380	2,226,565.2	1,423,785.2	1,041.00				Average
		point193	1381	2,226,680.2	1,423,759.9	1,037.00				Average
		point194	1382	2,226,826.5	1,423,734.4	1,033.00				Average
		point195	1383	2,226,979.8	1,423,707.1	1,029.00				
WB Right 10	36.0	point381	1404	2,227,123.8	1,423,757.4	1,026.00				Average
		point383	1406	2,226,854.0	1,423,805.0	1,033.00				Average
		point384	1407	2,226,701.8	1,423,835.8	1,037.00				Average
		point385	1408	2,226,594.0	1,423,862.5	1,041.00				Average
		point386	1409	2,226,493.5	1,423,886.0	1,045.00				Average
		point387	1410	2,226,396.0	1,423,918.4	1,050.00				Average
		point388	1411	2,226,275.5	1,423,959.0	1,055.00				Average
		point389	1412	2,226,122.0	1,424,015.6	1,060.00				Average
		point390	1413	2,225,613.5	1,424,237.0	1,065.00				Average
		point391	1414	2,225,455.0	1,424,310.9	1,063.00				Average
		point392	1415	2,225,276.8	1,424,392.4	1,060.00				Average
		point393	1416	2,225,168.8	1,424,435.5	1,057.00				Average
		point394	1417	2,225,045.5	1,424,474.0	1,054.00				Average
		point395	1418	2,224,918.2	1,424,506.5	1,051.00				
Riverside NB 1	12.0	point1534	1534	2,223,234.0	1,422,967.2	1,056.00				Average
		point1535	1535	2,223,282.0	1,423,010.2	1,057.00				Average
		point1536	1536	2,223,319.8	1,423,043.1	1,056.00				Average
		point1537	1537	2,223,357.5	1,423,075.8	1,056.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1538	1538	2,223,395.5	1,423,108.6	1,058.00				Average	
		point1539	1539	2,223,433.0	1,423,141.4	1,059.00				Average	
		point1540	1540	2,223,471.0	1,423,174.2	1,059.00				Average	
		point1541	1541	2,223,508.5	1,423,207.0	1,059.00				Average	
		point1542	1542	2,223,546.5	1,423,239.8	1,059.00				Average	
		point1543	1543	2,223,584.0	1,423,272.5	1,059.00				Average	
		point1544	1544	2,223,622.0	1,423,305.2	1,059.00				Average	
		point1545	1545	2,223,659.5	1,423,338.1	1,059.00				Average	
		point1546	1546	2,223,696.8	1,423,371.2	1,059.00				Average	
		point1547	1547	2,223,728.8	1,423,409.2	1,058.00				Average	
		point1548	1548	2,223,750.8	1,423,453.2	1,057.00				Average	
		point1549	1549	2,223,769.5	1,423,498.8	1,056.00				Average	
		point1550	1550	2,223,776.8	1,423,547.9	1,054.00				Average	
		point1551	1551	2,223,778.2	1,423,648.2	1,050.10				Average	
		point1552	1552	2,223,777.8	1,423,697.8	1,048.00				Average	
		point1553	1553	2,223,778.8	1,423,747.9	1,046.30				Average	
		point1554	1554	2,223,778.5	1,423,797.8	1,045.10				Average	
		point1555	1555	2,223,778.5	1,423,848.1	1,045.30				Average	
		point1556	1556	2,223,778.5	1,423,897.6	1,046.60				Average	
		point1557	1557	2,223,778.5	1,423,947.9	1,048.10				Average	
		point1558	1558	2,223,778.8	1,423,997.8	1,049.30				Average	
		point1559	1559	2,223,778.5	1,424,047.8	1,050.30				Average	
		point1560	1560	2,223,778.5	1,424,098.0	1,050.40				Average	
		point1561	1561	2,223,779.0	1,424,147.8	1,050.10				Average	
		point1562	1562	2,223,778.8	1,424,197.8	1,049.80				Average	
		point1563	1563	2,223,778.8	1,424,248.2	1,049.60				Average	
		point1564	1564	2,223,779.0	1,424,267.5	1,049.60					
I-285 EB On Ramp	12.0	point1565	1565	2,223,813.2	1,424,311.2	1,048.70				Average	
		point1566	1566	2,223,863.0	1,424,319.6	1,047.70				Average	
		point1567	1567	2,223,913.0	1,424,328.4	1,046.70				Average	
		point1568	1568	2,223,962.5	1,424,336.9	1,045.70				Average	
		point1569	1569	2,224,010.0	1,424,345.8	1,044.40				Average	
		point1570	1570	2,224,059.2	1,424,356.6	1,042.90				Average	
		point1571	1571	2,224,109.5	1,424,365.8	1,041.50				Average	
		point1572	1572	2,224,158.0	1,424,375.8	1,040.20				Average	
		point1573	1573	2,224,207.2	1,424,385.4	1,038.60				Average	
		point1574	1574	2,224,256.8	1,424,393.1	1,037.30				Average	
		point1575	1575	2,224,305.5	1,424,401.8	1,035.80				Average	
		point1576	1576	2,224,355.0	1,424,410.2	1,034.40				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1577	1577	2,224,405.2	1,424,417.1	1,033.30				Average	
		point1578	1578	2,224,454.5	1,424,423.0	1,032.80				Average	
		point1579	1579	2,224,505.0	1,424,423.9	1,033.30				Average	
		point1580	1580	2,224,554.8	1,424,423.0	1,034.10				Average	
		point1581	1581	2,224,604.5	1,424,419.9	1,035.80				Average	
		point1582	1582	2,224,653.5	1,424,415.2	1,037.60				Average	
		point1583	1583	2,224,704.0	1,424,408.5	1,039.10				Average	
		point1584	1584	2,224,753.5	1,424,402.5	1,041.10				Average	
		point1585	1585	2,224,802.5	1,424,394.2	1,042.50				Average	
		point1586	1586	2,224,852.0	1,424,382.9	1,044.60				Average	
		point1587	1587	2,224,900.2	1,424,371.1	1,046.20				Average	
		point1588	1588	2,224,948.8	1,424,359.2	1,047.50				Average	
		point1589	1589	2,224,997.0	1,424,346.8	1,049.20				Average	
		point1590	1590	2,225,030.2	1,424,336.6	1,050.60				Average	
		point1591	1591	2,225,076.5	1,424,321.4	1,052.10				Average	
		point1592	1592	2,225,116.8	1,424,309.2	1,053.50				Average	
		point1593	1593	2,225,151.8	1,424,300.1	1,054.80				Average	
		point1594	1594	2,225,181.0	1,424,297.9	1,061.00				Average	
		point1595	1595	2,225,316.2	1,424,244.6	1,061.00				Average	
		point1596	1596	2,225,415.0	1,424,227.5	1,063.00					
I-285 Eb Off Ramp	12.0	point1597	1597	2,221,765.8	1,424,523.6	964.00				Average	
		point1598	1598	2,221,879.5	1,424,505.9	967.00				Average	
		point1599	1599	2,222,067.8	1,424,495.0	974.00				Average	
		point1600	1600	2,222,363.5	1,424,466.2	974.00				Average	
		point1601	1601	2,222,402.2	1,424,465.2	974.10				Average	
		point1602	1602	2,222,448.0	1,424,460.8	975.50				Average	
		point1603	1603	2,222,495.0	1,424,454.9	977.30				Average	
		point1604	1604	2,222,546.0	1,424,445.5	979.60				Average	
		point1605	1605	2,222,597.0	1,424,443.8	982.40				Average	
		point1606	1606	2,222,651.0	1,424,438.0	985.50				Average	
		point1607	1607	2,222,692.0	1,424,432.2	987.90				Average	
		point1608	1608	2,222,742.5	1,424,428.1	990.80				Average	
		point1609	1609	2,222,798.5	1,424,422.2	994.10				Average	
		point1610	1610	2,222,841.2	1,424,410.5	996.80				Average	
		point1611	1611	2,222,897.8	1,424,402.9	1,000.20				Average	
		point1612	1612	2,222,948.8	1,424,399.6	1,003.30				Average	
		point1613	1613	2,222,991.8	1,424,394.2	1,005.90				Average	
		point1614	1614	2,223,040.0	1,424,391.1	1,008.80				Average	
		point1615	1615	2,223,090.0	1,424,386.8	1,011.90				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1616	1616	2,223,140.0	1,424,382.2	1,014.90				Average
		point1617	1617	2,223,199.0	1,424,374.0	1,018.40				Average
		point1618	1618	2,223,239.0	1,424,370.0	1,020.80				Average
		point1619	1619	2,223,288.2	1,424,362.2	1,023.80				Average
		point1620	1620	2,223,338.5	1,424,353.2	1,026.90				Average
		point1621	1621	2,223,386.5	1,424,345.5	1,029.80				Average
		point1622	1622	2,223,445.0	1,424,345.9	1,033.30				Average
		point1623	1623	2,223,486.0	1,424,338.1	1,035.90				Average
		point1624	1624	2,223,539.8	1,424,335.4	1,039.20				Average
		point1625	1625	2,223,589.0	1,424,327.6	1,042.20				Average
		point1626	1626	2,223,633.8	1,424,322.0	1,044.70				Average
		point1627	1627	2,223,691.5	1,424,315.8	1,047.20				Average
		point1628	1628	2,223,735.5	1,424,310.8	1,048.50				
Riverside SB 3	12.0	point1629	1629	2,223,767.5	1,424,267.4	1,049.40				Average
		point1630	1630	2,223,767.8	1,424,198.0	1,049.60				Average
		point1631	1631	2,223,767.5	1,424,148.1	1,049.70				Average
		point1632	1632	2,223,767.5	1,424,098.0	1,050.00				Average
		point1633	1633	2,223,767.5	1,424,048.2	1,050.30				Average
		point1634	1634	2,223,767.0	1,423,998.1	1,050.20				Average
		point1635	1635	2,223,767.0	1,423,948.2	1,049.40				Average
		point1636	1636	2,223,767.0	1,423,898.0	1,048.00				Average
		point1637	1637	2,223,766.5	1,423,848.0	1,046.50				Average
		point1638	1638	2,223,766.5	1,423,798.1	1,045.00				Average
		point1639	1639	2,223,766.8	1,423,748.0	1,045.00				Average
		point1640	1640	2,223,766.2	1,423,698.2	1,046.30				Average
		point1641	1641	2,223,766.0	1,423,648.2	1,048.10				Average
		point1642	1642	2,223,766.0	1,423,598.1	1,050.20				Average
		point1643	1643	2,223,764.8	1,423,548.1	1,052.00				Average
		point1644	1644	2,223,757.0	1,423,498.0	1,054.00				Average
		point1645	1645	2,223,737.5	1,423,451.8	1,056.00				Average
		point1646	1646	2,223,713.5	1,423,407.6	1,057.00				Average
		point1647	1647	2,223,680.5	1,423,369.8	1,058.00				Average
		point1648	1648	2,223,643.2	1,423,336.2	1,059.00				Average
		point1649	1649	2,223,605.2	1,423,303.6	1,059.00				Average
		point1650	1650	2,223,567.5	1,423,271.0	1,059.00				Average
		point1651	1651	2,223,529.5	1,423,238.4	1,059.00				Average
		point1652	1652	2,223,491.5	1,423,205.9	1,059.00				Average
		point1653	1653	2,223,453.5	1,423,173.2	1,059.00				Average
		point1654	1654	2,223,415.8	1,423,140.8	1,059.00				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1655	1655	2,223,377.8	1,423,108.1	1,059.00				Average	
		point1656	1656	2,223,340.0	1,423,075.5	1,058.00				Average	
		point1657	1657	2,223,302.0	1,423,042.9	1,056.00				Average	
		point1658	1658	2,223,264.0	1,423,010.2	1,056.00				Average	
		point1659	1659	2,223,226.0	1,422,977.8	1,057.00					
Riverside NB 2	12.0	point1660	1660	2,223,782.0	1,424,344.9	1,048.50				Average	Y
		point1661	1661	2,223,782.8	1,424,395.1	1,047.20				Average	Y
		point1662	1662	2,223,783.0	1,424,445.2	1,045.60				Average	Y
		point1663	1663	2,223,783.8	1,424,495.1	1,043.30				Average	Y
		point1664	1664	2,223,784.8	1,424,545.2	1,040.80				Average	Y
		point1665	1665	2,223,785.0	1,424,595.1	1,037.80				Average	Y
		point1666	1666	2,223,785.8	1,424,645.1	1,034.60				Average	Y
		point1667	1667	2,223,786.0	1,424,695.1	1,029.60				Average	Y
		point1668	1668	2,223,787.5	1,424,744.8	1,025.50				Average	Y
		point1669	1669	2,223,786.0	1,424,770.5	1,023.20					
Riverside SB 2	12.0	point1670	1670	2,223,774.5	1,424,769.5	1,023.20				Average	Y
		point1671	1671	2,223,774.5	1,424,745.1	1,025.40				Average	Y
		point1672	1672	2,223,774.0	1,424,695.2	1,029.70				Average	Y
		point1673	1673	2,223,773.5	1,424,645.5	1,034.20				Average	Y
		point1674	1674	2,223,773.0	1,424,595.1	1,037.70				Average	Y
		point1675	1675	2,223,772.5	1,424,545.2	1,040.70				Average	Y
		point1676	1676	2,223,771.5	1,424,495.2	1,043.20				Average	Y
		point1677	1677	2,223,771.5	1,424,445.2	1,045.30				Average	Y
		point1678	1678	2,223,770.5	1,424,395.4	1,047.30				Average	Y
		point1679	1679	2,223,770.2	1,424,345.1	1,048.40					
Riverside NB 3	12.0	point1680	1680	2,223,784.8	1,424,840.8	1,016.80				Average	
		point1681	1681	2,223,784.8	1,424,890.8	1,011.20				Average	
		point1682	1682	2,223,784.8	1,424,940.8	1,007.40				Average	
		point1683	1683	2,223,785.0	1,424,990.8	1,002.20				Average	
		point1684	1684	2,223,785.0	1,425,040.8	998.30				Average	
		point1685	1685	2,223,785.5	1,425,091.0	994.20				Average	
		point1686	1686	2,223,786.5	1,425,140.8	990.90				Average	
		point1687	1687	2,223,787.8	1,425,190.8	987.30				Average	
		point1688	1688	2,223,788.5	1,425,240.8	987.30				Average	
		point1689	1689	2,223,789.5	1,425,290.8	981.20				Average	
		point1690	1690	2,223,790.5	1,425,340.8	979.30				Average	
		point1691	1691	2,223,790.5	1,425,390.8	979.10				Average	
		point1692	1692	2,223,790.0	1,425,440.8	980.40				Average	
		point1693	1693	2,223,790.2	1,425,490.8	982.10				Average	

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1694	1694	2,223,790.5	1,425,540.8	984.50				Average
		point1695	1695	2,223,791.0	1,425,590.8	987.40				Average
		point1696	1696	2,223,790.8	1,425,640.8	989.80				Average
		point1697	1697	2,223,791.2	1,425,690.6	992.20				Average
		point1698	1698	2,223,791.8	1,425,739.2	994.00				
Roadway189	12.0	point1699	1699	2,223,779.5	1,425,738.0	993.70				Average
		point1700	1700	2,223,779.2	1,425,690.2	991.90				Average
		point1701	1701	2,223,779.0	1,425,640.2	989.70				Average
		point1702	1702	2,223,778.8	1,425,590.2	987.10				Average
		point1703	1703	2,223,778.8	1,425,540.2	984.60				Average
		point1704	1704	2,223,778.2	1,425,490.2	982.10				Average
		point1705	1705	2,223,778.0	1,425,440.2	980.20				Average
		point1706	1706	2,223,778.2	1,425,390.2	978.90				Average
		point1707	1707	2,223,778.5	1,425,340.4	979.70				Average
		point1708	1708	2,223,778.0	1,425,290.2	981.40				Average
		point1709	1709	2,223,777.2	1,425,240.2	983.90				Average
		point1710	1710	2,223,776.2	1,425,190.2	987.50				Average
		point1711	1711	2,223,775.8	1,425,140.2	990.90				Average
		point1712	1712	2,223,775.5	1,425,090.2	994.50				Average
		point1713	1713	2,223,774.2	1,425,040.2	998.70				Average
		point1714	1714	2,223,773.8	1,424,990.2	1,002.50				Average
		point1715	1715	2,223,773.2	1,424,940.2	1,007.20				Average
		point1716	1716	2,223,772.5	1,424,890.4	1,011.60				Average
		point1717	1717	2,223,772.0	1,424,840.8	1,016.80				
I-285 WB On Ramp	12.0	point1718	1718	2,223,736.8	1,424,797.4	1,019.50				Average
		point1719	1719	2,223,688.0	1,424,788.4	1,018.70				Average
		point1720	1720	2,223,637.8	1,424,779.8	1,018.10				Average
		point1721	1721	2,223,588.8	1,424,771.4	1,016.80				Average
		point1722	1722	2,223,539.8	1,424,762.8	1,014.70				Average
		point1723	1723	2,223,488.5	1,424,754.5	1,012.50				Average
		point1724	1724	2,223,440.8	1,424,745.0	1,010.50				Average
		point1725	1725	2,223,392.0	1,424,737.4	1,008.30				Average
		point1726	1726	2,223,343.5	1,424,728.2	1,006.10				Average
		point1727	1727	2,223,293.0	1,424,721.2	1,003.80				Average
		point1728	1728	2,223,244.8	1,424,713.1	1,001.60				Average
		point1729	1729	2,223,194.5	1,424,705.0	999.80				Average
		point1730	1730	2,223,145.0	1,424,698.4	997.20				Average
		point1731	1731	2,223,096.0	1,424,688.9	995.50				Average
		point1732	1732	2,223,046.5	1,424,681.2	993.10				Average

INPUT: ROADWAYS

I-285 at Riverside Drive

		point1733	1733	2,222,997.0	1,424,673.2	991.10				Average
		point1734	1734	2,222,948.2	1,424,667.9	989.20				Average
		point1735	1735	2,222,897.8	1,424,662.4	987.50				Average
		point1736	1736	2,222,847.8	1,424,659.8	985.60				Average
		point1737	1737	2,222,798.0	1,424,657.4	984.30				Average
		point1738	1738	2,222,748.2	1,424,655.8	984.30				Average
		point1739	1739	2,222,698.5	1,424,652.5	981.20				Average
		point1740	1740	2,222,648.5	1,424,648.8	979.60				Average
		point1741	1741	2,222,599.0	1,424,647.0	978.40				Average
		point1742	1742	2,222,548.0	1,424,644.6	977.10				Average
		point1743	1743	2,222,374.8	1,424,629.0	977.00				Average
		point1744	1744	2,222,327.2	1,424,614.4	976.00				
I-285 WB Off Ramp	12.0	point1745	1745	2,224,918.2	1,424,506.5	1,051.00				Average
		point1746	1746	2,224,856.2	1,424,539.1	1,049.00				Average
		point1747	1747	2,224,752.0	1,424,570.4	1,047.00				Average
		point1748	1748	2,224,731.2	1,424,572.2	1,043.50				Average
		point1749	1749	2,224,683.0	1,424,583.4	1,043.50				Average
		point1750	1750	2,224,634.0	1,424,594.8	1,043.50				Average
		point1751	1751	2,224,585.0	1,424,606.6	1,043.50				Average
		point1752	1752	2,224,536.8	1,424,618.0	1,043.50				Average
		point1753	1753	2,224,488.0	1,424,628.2	1,041.60				Average
		point1754	1754	2,224,439.2	1,424,641.1	1,040.60				Average
		point1755	1755	2,224,390.0	1,424,651.6	1,039.00				Average
		point1756	1756	2,224,342.0	1,424,662.2	1,037.60				Average
		point1757	1757	2,224,293.5	1,424,673.4	1,035.60				Average
		point1758	1758	2,224,245.0	1,424,687.8	1,033.50				Average
		point1759	1759	2,224,196.0	1,424,698.2	1,031.50				Average
		point1760	1760	2,224,147.0	1,424,710.6	1,029.40				Average
		point1761	1761	2,224,098.8	1,424,722.8	1,027.40				Average
		point1762	1762	2,224,051.2	1,424,734.2	1,025.20				Average
		point1763	1763	2,224,001.8	1,424,747.2	1,024.00				Average
		point1764	1764	2,223,953.0	1,424,758.2	1,022.50				Average
		point1765	1765	2,223,904.5	1,424,769.8	1,021.80				Average
		point1766	1766	2,223,856.8	1,424,782.5	1,020.80				Average
		point1767	1767	2,223,808.0	1,424,794.8	1,020.30				

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

ARCADIS		8 May 2014										
LJV		TNM 2.5										
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:		I-285 at Riverside Drive										
RUN:		Model Calibration - North Side										
Roadway	Points											
Name	Name	No.	Segment		MTrucks		HTrucks		Buses		Motorcycles	
			Autos		V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-285 EB right 1	point1	1	3438	55	123	55	308	55	0	0	0	0
	point2	2	3438	55	123	55	308	55	0	0	0	0
	point3	3	3438	55	123	55	308	55	0	0	0	0
	point4	4	3438	55	123	55	308	55	0	0	0	0
	point5	5	3438	55	123	55	308	55	0	0	0	0
	point6	6	3438	55	123	55	308	55	0	0	0	0
	point7	7	3438	55	123	55	308	55	0	0	0	0
	point8	8	3438	55	123	55	308	55	0	0	0	0
	point9	9										
I-285 EB right 2	point15	15	3438	55	123	55	308	55	0	0	0	0
	point16	16	3438	55	123	55	308	55	0	0	0	0
	point17	17	3438	55	123	55	308	55	0	0	0	0
	point18	18	3438	55	123	55	308	55	0	0	0	0
	point19	19	3438	55	123	55	308	55	0	0	0	0
	point20	20	3438	55	123	55	308	55	0	0	0	0
	point21	21	3438	55	123	55	308	55	0	0	0	0
	point22	22	3438	55	123	55	308	55	0	0	0	0
	point23	23	3438	55	123	55	308	55	0	0	0	0
	point24	24	3438	55	123	55	308	55	0	0	0	0
	point25	25	3438	55	123	55	308	55	0	0	0	0
	point26	26	3438	55	123	55	308	55	0	0	0	0
	point27	27	3438	55	123	55	308	55	0	0	0	0
	point28	28	3438	55	123	55	308	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point29	29	3438	55	123	55	308	55	0	0	0	0
	point30	30	3438	55	123	55	308	55	0	0	0	0
	point31	31	3438	55	123	55	308	55	0	0	0	0
	point32	32	3438	55	123	55	308	55	0	0	0	0
	point33	33	3438	55	123	55	308	55	0	0	0	0
	point34	34	3438	55	123	55	308	55	0	0	0	0
	point35	35	3438	55	123	55	308	55	0	0	0	0
	point36	36	3438	55	123	55	308	55	0	0	0	0
	point37	37	3438	55	123	55	308	55	0	0	0	0
	point38	38	3438	55	123	55	308	55	0	0	0	0
	point39	39										
I-285 EB left 1	point152	152	2292	55	0	0	0	0	0	0	0	0
	point153	153	2292	55	0	0	0	0	0	0	0	0
	point154	154	2292	55	0	0	0	0	0	0	0	0
	point155	155	2292	55	0	0	0	0	0	0	0	0
	point156	156	2292	55	0	0	0	0	0	0	0	0
	point157	157	2292	55	0	0	0	0	0	0	0	0
	point158	158	2292	55	0	0	0	0	0	0	0	0
	point159	159	2292	55	0	0	0	0	0	0	0	0
	point160	160										
I-128 EB left 2	point173	173	2292	55	0	0	0	0	0	0	0	0
	point174	174	2292	55	0	0	0	0	0	0	0	0
	point175	175	2292	55	0	0	0	0	0	0	0	0
	point176	176	2292	55	0	0	0	0	0	0	0	0
	point177	177	2292	55	0	0	0	0	0	0	0	0
	point178	178	2292	55	0	0	0	0	0	0	0	0
	point179	179	2292	55	0	0	0	0	0	0	0	0
	point180	180	2292	55	0	0	0	0	0	0	0	0
	point181	181	2292	55	0	0	0	0	0	0	0	0
	point182	182	2292	55	0	0	0	0	0	0	0	0
	point183	183	2292	55	0	0	0	0	0	0	0	0
	point184	184	2292	55	0	0	0	0	0	0	0	0
	point185	185	2292	55	0	0	0	0	0	0	0	0
	point186	186										
WB right 11	point396	396	3496	55	125	55	313	55	0	0	0	0
	point397	397	3496	55	125	55	313	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point398	398	3496	55	125	55	313	55	0	0	0	0
	point399	399	3496	55	125	55	313	55	0	0	0	0
	point400	400	3496	55	125	55	313	55	0	0	0	0
	point401	401	3496	55	125	55	313	55	0	0	0	0
	point402	402	3496	55	125	55	313	55	0	0	0	0
	point403	403	3496	55	125	55	313	55	0	0	0	0
	point404	404	3496	55	125	55	313	55	0	0	0	0
	point405	405	3496	55	125	55	313	55	0	0	0	0
	point406	406	3496	55	125	55	313	55	0	0	0	0
	point407	407	3496	55	125	55	313	55	0	0	0	0
	point408	408	3496	55	125	55	313	55	0	0	0	0
	point409	409	3496	55	125	55	313	55	0	0	0	0
	point410	410	3496	55	125	55	313	55	0	0	0	0
	point411	411	3496	55	125	55	313	55	0	0	0	0
	point412	412	3496	55	125	55	313	55	0	0	0	0
	point413	413										
Wb right 12	point414	414	3496	55	125	55	313	55	0	0	0	0
	point415	415	3496	55	125	55	313	55	0	0	0	0
	point416	416	3496	55	125	55	313	55	0	0	0	0
	point417	417	3496	55	125	55	313	55	0	0	0	0
	point418	418	3496	55	125	55	313	55	0	0	0	0
	point419	419	3496	55	125	55	313	55	0	0	0	0
	point420	420	3496	55	125	55	313	55	0	0	0	0
	point421	421	3496	55	125	55	313	55	0	0	0	0
	point422	422	3496	55	125	55	313	55	0	0	0	0
	point423	423	3496	55	125	55	313	55	0	0	0	0
	point424	424	3496	55	125	55	313	55	0	0	0	0
	point425	425										
WB left 10	point522	522	2330	55	0	0	0	0	0	0	0	0
	point523	523	2330	55	0	0	0	0	0	0	0	0
	point524	524	2330	55	0	0	0	0	0	0	0	0
	point525	525	2330	55	0	0	0	0	0	0	0	0
	point526	526	2330	55	0	0	0	0	0	0	0	0
	point527	527	2330	55	0	0	0	0	0	0	0	0
	point528	528	2330	55	0	0	0	0	0	0	0	0
	point529	529	2330	55	0	0	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point530	530	2330	55	0	0	0	0	0	0	0	0
	point531	531	2330	55	0	0	0	0	0	0	0	0
	point532	532	2330	55	0	0	0	0	0	0	0	0
	point533	533	2330	55	0	0	0	0	0	0	0	0
	point534	534										
WB left 11	point535	535	2330	55	0	0	0	0	0	0	0	0
	point536	536	2330	55	0	0	0	0	0	0	0	0
	point537	537	2330	55	0	0	0	0	0	0	0	0
	point538	538	2330	55	0	0	0	0	0	0	0	0
	point539	539	2330	55	0	0	0	0	0	0	0	0
	point540	540	2330	55	0	0	0	0	0	0	0	0
	point541	541	2330	55	0	0	0	0	0	0	0	0
	point542	542	2330	55	0	0	0	0	0	0	0	0
	point543	543	2330	55	0	0	0	0	0	0	0	0
	point544	544	2330	55	0	0	0	0	0	0	0	0
	point545	545	2330	55	0	0	0	0	0	0	0	0
	point546	546	2330	55	0	0	0	0	0	0	0	0
	point547	547	2330	55	0	0	0	0	0	0	0	0
	point548	548	2330	55	0	0	0	0	0	0	0	0
	point549	549	2330	55	0	0	0	0	0	0	0	0
	point550	550	2330	55	0	0	0	0	0	0	0	0
	point551	551	2330	55	0	0	0	0	0	0	0	0
	point552	552	2330	55	0	0	0	0	0	0	0	0
	point553	553										
WB left 12	point554	554	2330	55	0	0	0	0	0	0	0	0
	point555	555	2330	55	0	0	0	0	0	0	0	0
	point556	556	2330	55	0	0	0	0	0	0	0	0
	point557	557	2330	55	0	0	0	0	0	0	0	0
	point558	558	2330	55	0	0	0	0	0	0	0	0
	point559	559	2330	55	0	0	0	0	0	0	0	0
	point560	560	2330	55	0	0	0	0	0	0	0	0
	point561	561	2330	55	0	0	0	0	0	0	0	0
	point562	562	2330	55	0	0	0	0	0	0	0	0
	point563	563	2330	55	0	0	0	0	0	0	0	0
	point564	564	2330	55	0	0	0	0	0	0	0	0
	point565	565										

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

I-285 EB left 1-2	point1329	1329	2292	55	0	0	0	0	0	0	0	0
	point161	161	2292	55	0	0	0	0	0	0	0	0
	point162	162	2292	55	0	0	0	0	0	0	0	0
	point163	163	2292	55	0	0	0	0	0	0	0	0
	point164	164	2292	55	0	0	0	0	0	0	0	0
	point165	165	2292	55	0	0	0	0	0	0	0	0
	point166	166	2292	55	0	0	0	0	0	0	0	0
	point167	167	2292	55	0	0	0	0	0	0	0	0
	point168	168	2292	55	0	0	0	0	0	0	0	0
	point169	169	2292	55	0	0	0	0	0	0	0	0
	point170	170	2292	55	0	0	0	0	0	0	0	0
	point171	171	2292	55	0	0	0	0	0	0	0	0
	point172	172										
I-285 EB Right 3	point40	1349	3438	55	123	55	308	55	0	0	0	0
	point41	1350	3438	55	123	55	308	55	0	0	0	0
	point42	1351	3438	55	123	55	308	55	0	0	0	0
	point43	1352	3438	55	123	55	308	55	0	0	0	0
	point44	1353	3438	55	123	55	308	55	0	0	0	0
	point45	1354	3438	55	123	55	308	55	0	0	0	0
	point46	1355	3438	55	123	55	308	55	0	0	0	0
	point47	1356	3438	55	123	55	308	55	0	0	0	0
	point48	1357	3438	55	123	55	308	55	0	0	0	0
	point49	1358										
I-285 EB Left 3	point187	1375	2292	55	0	0	0	0	0	0	0	0
	point188	1376	2292	55	0	0	0	0	0	0	0	0
	point189	1377	2292	55	0	0	0	0	0	0	0	0
	point190	1378	2292	55	0	0	0	0	0	0	0	0
	point191	1379	2292	55	0	0	0	0	0	0	0	0
	point192	1380	2292	55	0	0	0	0	0	0	0	0
	point193	1381	2292	55	0	0	0	0	0	0	0	0
	point194	1382	2292	55	0	0	0	0	0	0	0	0
	point195	1383										
WB Right 10	point381	1404	3496	55	125	55	313	55	0	0	0	0
	point383	1406	3496	55	125	55	313	55	0	0	0	0
	point384	1407	3496	55	125	55	313	55	0	0	0	0
	point385	1408	3496	55	125	55	313	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

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	point386	1409	3496	55	125	55	313	55	0	0	0	0
	point387	1410	3496	55	125	55	313	55	0	0	0	0
	point388	1411	3496	55	125	55	313	55	0	0	0	0
	point389	1412	3496	55	125	55	313	55	0	0	0	0
	point390	1413	3496	55	125	55	313	55	0	0	0	0
	point391	1414	3496	55	125	55	313	55	0	0	0	0
	point392	1415	3496	55	125	55	313	55	0	0	0	0
	point393	1416	3496	55	125	55	313	55	0	0	0	0
	point394	1417	3496	55	125	55	313	55	0	0	0	0
	point395	1418										
Riverside NB 1	point1534	1534	135	35	12	35	0	0	0	0	0	0
	point1535	1535	135	35	12	35	0	0	0	0	0	0
	point1536	1536	135	35	12	35	0	0	0	0	0	0
	point1537	1537	135	35	12	35	0	0	0	0	0	0
	point1538	1538	135	35	12	35	0	0	0	0	0	0
	point1539	1539	135	35	12	35	0	0	0	0	0	0
	point1540	1540	135	35	12	35	0	0	0	0	0	0
	point1541	1541	135	35	12	35	0	0	0	0	0	0
	point1542	1542	135	35	12	35	0	0	0	0	0	0
	point1543	1543	135	35	12	35	0	0	0	0	0	0
	point1544	1544	135	35	12	35	0	0	0	0	0	0
	point1545	1545	135	35	12	35	0	0	0	0	0	0
	point1546	1546	135	35	12	35	0	0	0	0	0	0
	point1547	1547	135	35	12	35	0	0	0	0	0	0
	point1548	1548	135	35	12	35	0	0	0	0	0	0
	point1549	1549	135	35	12	35	0	0	0	0	0	0
	point1550	1550	135	35	12	35	0	0	0	0	0	0
	point1551	1551	135	35	12	35	0	0	0	0	0	0
	point1552	1552	135	35	12	35	0	0	0	0	0	0
	point1553	1553	135	35	12	35	0	0	0	0	0	0
	point1554	1554	135	35	12	35	0	0	0	0	0	0
	point1555	1555	135	35	12	35	0	0	0	0	0	0
	point1556	1556	135	35	12	35	0	0	0	0	0	0
	point1557	1557	135	35	12	35	0	0	0	0	0	0
	point1558	1558	135	35	12	35	0	0	0	0	0	0
	point1559	1559	135	35	12	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1560	1560	135	35	12	35	0	0	0	0	0	0
	point1561	1561	135	35	12	35	0	0	0	0	0	0
	point1562	1562	135	35	12	35	0	0	0	0	0	0
	point1563	1563	135	35	12	35	0	0	0	0	0	0
	point1564	1564										
I-285 EB On Ramp	point1565	1565	282	45	14	45	0	0	0	0	0	0
	point1566	1566	282	45	14	45	0	0	0	0	0	0
	point1567	1567	282	45	14	45	0	0	0	0	0	0
	point1568	1568	282	45	14	45	0	0	0	0	0	0
	point1569	1569	282	45	14	45	0	0	0	0	0	0
	point1570	1570	282	45	14	45	0	0	0	0	0	0
	point1571	1571	282	45	14	45	0	0	0	0	0	0
	point1572	1572	282	45	14	45	0	0	0	0	0	0
	point1573	1573	282	45	14	45	0	0	0	0	0	0
	point1574	1574	282	45	14	45	0	0	0	0	0	0
	point1575	1575	282	45	14	45	0	0	0	0	0	0
	point1576	1576	282	45	14	45	0	0	0	0	0	0
	point1577	1577	282	45	14	45	0	0	0	0	0	0
	point1578	1578	282	45	14	45	0	0	0	0	0	0
	point1579	1579	282	45	14	45	0	0	0	0	0	0
	point1580	1580	282	45	14	45	0	0	0	0	0	0
	point1581	1581	282	45	14	45	0	0	0	0	0	0
	point1582	1582	282	45	14	45	0	0	0	0	0	0
	point1583	1583	282	45	14	45	0	0	0	0	0	0
	point1584	1584	282	45	14	45	0	0	0	0	0	0
	point1585	1585	282	45	14	45	0	0	0	0	0	0
	point1586	1586	282	45	14	45	0	0	0	0	0	0
	point1587	1587	282	45	14	45	0	0	0	0	0	0
	point1588	1588	282	45	14	45	0	0	0	0	0	0
	point1589	1589	282	45	14	45	0	0	0	0	0	0
	point1590	1590	282	45	14	45	0	0	0	0	0	0
	point1591	1591	282	45	14	45	0	0	0	0	0	0
	point1592	1592	282	45	14	45	0	0	0	0	0	0
	point1593	1593	282	45	14	45	0	0	0	0	0	0
	point1594	1594	282	45	14	45	0	0	0	0	0	0
	point1595	1595	282	45	14	45	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1596	1596										
I-285 Eb Off Ramp	point1597	1597	280	35	0	0	0	0	0	0	0	0
	point1598	1598	280	35	0	0	0	0	0	0	0	0
	point1599	1599	280	35	0	0	0	0	0	0	0	0
	point1600	1600	280	35	0	0	0	0	0	0	0	0
	point1601	1601	280	35	0	0	0	0	0	0	0	0
	point1602	1602	280	35	0	0	0	0	0	0	0	0
	point1603	1603	280	35	0	0	0	0	0	0	0	0
	point1604	1604	280	35	0	0	0	0	0	0	0	0
	point1605	1605	280	35	0	0	0	0	0	0	0	0
	point1606	1606	280	35	0	0	0	0	0	0	0	0
	point1607	1607	280	35	0	0	0	0	0	0	0	0
	point1608	1608	280	35	0	0	0	0	0	0	0	0
	point1609	1609	280	35	0	0	0	0	0	0	0	0
	point1610	1610	280	35	0	0	0	0	0	0	0	0
	point1611	1611	280	35	0	0	0	0	0	0	0	0
	point1612	1612	280	35	0	0	0	0	0	0	0	0
	point1613	1613	280	35	0	0	0	0	0	0	0	0
	point1614	1614	280	35	0	0	0	0	0	0	0	0
	point1615	1615	280	35	0	0	0	0	0	0	0	0
	point1616	1616	280	35	0	0	0	0	0	0	0	0
	point1617	1617	280	35	0	0	0	0	0	0	0	0
	point1618	1618	280	35	0	0	0	0	0	0	0	0
	point1619	1619	280	35	0	0	0	0	0	0	0	0
	point1620	1620	280	35	0	0	0	0	0	0	0	0
	point1621	1621	280	35	0	0	0	0	0	0	0	0
	point1622	1622	280	35	0	0	0	0	0	0	0	0
	point1623	1623	280	35	0	0	0	0	0	0	0	0
	point1624	1624	280	35	0	0	0	0	0	0	0	0
	point1625	1625	280	35	0	0	0	0	0	0	0	0
	point1626	1626	280	35	0	0	0	0	0	0	0	0
	point1627	1627	280	35	0	0	0	0	0	0	0	0
	point1628	1628										
Riverside SB 3	point1629	1629	135	35	12	35	0	0	0	0	0	0
	point1630	1630	135	35	12	35	0	0	0	0	0	0
	point1631	1631	135	35	12	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1632	1632	135	35	12	35	0	0	0	0	0	0
	point1633	1633	135	35	12	35	0	0	0	0	0	0
	point1634	1634	135	35	12	35	0	0	0	0	0	0
	point1635	1635	135	35	12	35	0	0	0	0	0	0
	point1636	1636	135	35	12	35	0	0	0	0	0	0
	point1637	1637	135	35	12	35	0	0	0	0	0	0
	point1638	1638	135	35	12	35	0	0	0	0	0	0
	point1639	1639	135	35	12	35	0	0	0	0	0	0
	point1640	1640	135	35	12	35	0	0	0	0	0	0
	point1641	1641	135	35	12	35	0	0	0	0	0	0
	point1642	1642	135	35	12	35	0	0	0	0	0	0
	point1643	1643	135	35	12	35	0	0	0	0	0	0
	point1644	1644	135	35	12	35	0	0	0	0	0	0
	point1645	1645	135	35	12	35	0	0	0	0	0	0
	point1646	1646	135	35	12	35	0	0	0	0	0	0
	point1647	1647	135	35	12	35	0	0	0	0	0	0
	point1648	1648	135	35	12	35	0	0	0	0	0	0
	point1649	1649	135	35	12	35	0	0	0	0	0	0
	point1650	1650	135	35	12	35	0	0	0	0	0	0
	point1651	1651	135	35	12	35	0	0	0	0	0	0
	point1652	1652	135	35	12	35	0	0	0	0	0	0
	point1653	1653	135	35	12	35	0	0	0	0	0	0
	point1654	1654	135	35	12	35	0	0	0	0	0	0
	point1655	1655	135	35	12	35	0	0	0	0	0	0
	point1656	1656	135	35	12	35	0	0	0	0	0	0
	point1657	1657	135	35	12	35	0	0	0	0	0	0
	point1658	1658	135	35	12	35	0	0	0	0	0	0
	point1659	1659										
Riverside NB 2	point1660	1660	135	35	12	35	0	0	0	0	0	0
	point1661	1661	135	35	12	35	0	0	0	0	0	0
	point1662	1662	135	35	12	35	0	0	0	0	0	0
	point1663	1663	135	35	12	35	0	0	0	0	0	0
	point1664	1664	135	35	12	35	0	0	0	0	0	0
	point1665	1665	135	35	12	35	0	0	0	0	0	0
	point1666	1666	135	35	12	35	0	0	0	0	0	0
	point1667	1667	135	35	12	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1668	1668	135	35	12	35	0	0	0	0	0	0
	point1669	1669										
Riverside SB 2	point1670	1670	611	35	18	35	0	0	0	0	0	0
	point1671	1671	611	35	18	35	0	0	0	0	0	0
	point1672	1672	611	35	18	35	0	0	0	0	0	0
	point1673	1673	611	35	18	35	0	0	0	0	0	0
	point1674	1674	611	35	18	35	0	0	0	0	0	0
	point1675	1675	611	35	18	35	0	0	0	0	0	0
	point1676	1676	611	35	18	35	0	0	0	0	0	0
	point1677	1677	611	35	18	35	0	0	0	0	0	0
	point1678	1678	611	35	18	35	0	0	0	0	0	0
	point1679	1679										
Riverside NB 3	point1680	1680	611	35	18	35	0	0	0	0	0	0
	point1681	1681	611	35	18	35	0	0	0	0	0	0
	point1682	1682	611	35	18	35	0	0	0	0	0	0
	point1683	1683	611	35	18	35	0	0	0	0	0	0
	point1684	1684	611	35	18	35	0	0	0	0	0	0
	point1685	1685	611	35	18	35	0	0	0	0	0	0
	point1686	1686	611	35	18	35	0	0	0	0	0	0
	point1687	1687	611	35	18	35	0	0	0	0	0	0
	point1688	1688	611	35	18	35	0	0	0	0	0	0
	point1689	1689	611	35	18	35	0	0	0	0	0	0
	point1690	1690	611	35	18	35	0	0	0	0	0	0
	point1691	1691	611	35	18	35	0	0	0	0	0	0
	point1692	1692	611	35	18	35	0	0	0	0	0	0
	point1693	1693	611	35	18	35	0	0	0	0	0	0
	point1694	1694	611	35	18	35	0	0	0	0	0	0
	point1695	1695	611	35	18	35	0	0	0	0	0	0
	point1696	1696	611	35	18	35	0	0	0	0	0	0
	point1697	1697	611	35	18	35	0	0	0	0	0	0
	point1698	1698										
Roadway189	point1699	1699	611	35	18	35	0	0	0	0	0	0
	point1700	1700	611	35	18	35	0	0	0	0	0	0
	point1701	1701	611	35	18	35	0	0	0	0	0	0
	point1702	1702	611	35	18	35	0	0	0	0	0	0
	point1703	1703	611	35	18	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1704	1704	611	35	18	35	0	0	0	0	0	0
	point1705	1705	611	35	18	35	0	0	0	0	0	0
	point1706	1706	611	35	18	35	0	0	0	0	0	0
	point1707	1707	611	35	18	35	0	0	0	0	0	0
	point1708	1708	611	35	18	35	0	0	0	0	0	0
	point1709	1709	611	35	18	35	0	0	0	0	0	0
	point1710	1710	611	35	18	35	0	0	0	0	0	0
	point1711	1711	611	35	18	35	0	0	0	0	0	0
	point1712	1712	611	35	18	35	0	0	0	0	0	0
	point1713	1713	611	35	18	35	0	0	0	0	0	0
	point1714	1714	611	35	18	35	0	0	0	0	0	0
	point1715	1715	611	35	18	35	0	0	0	0	0	0
	point1716	1716	611	35	18	35	0	0	0	0	0	0
	point1717	1717										
I-285 WB On Ramp	point1718	1718	284	45	8	45	0	0	0	0	0	0
	point1719	1719	284	45	8	45	0	0	0	0	0	0
	point1720	1720	284	45	8	45	0	0	0	0	0	0
	point1721	1721	284	45	8	45	0	0	0	0	0	0
	point1722	1722	284	45	8	45	0	0	0	0	0	0
	point1723	1723	284	45	8	45	0	0	0	0	0	0
	point1724	1724	284	45	8	45	0	0	0	0	0	0
	point1725	1725	284	45	8	45	0	0	0	0	0	0
	point1726	1726	284	45	8	45	0	0	0	0	0	0
	point1727	1727	284	45	8	45	0	0	0	0	0	0
	point1728	1728	284	45	8	45	0	0	0	0	0	0
	point1729	1729	284	45	8	45	0	0	0	0	0	0
	point1730	1730	284	45	8	45	0	0	0	0	0	0
	point1731	1731	284	45	8	45	0	0	0	0	0	0
	point1732	1732	284	45	8	45	0	0	0	0	0	0
	point1733	1733	284	45	8	45	0	0	0	0	0	0
	point1734	1734	284	45	8	45	0	0	0	0	0	0
	point1735	1735	284	45	8	45	0	0	0	0	0	0
	point1736	1736	284	45	8	45	0	0	0	0	0	0
	point1737	1737	284	45	8	45	0	0	0	0	0	0
	point1738	1738	284	45	8	45	0	0	0	0	0	0
	point1739	1739	284	45	8	45	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside Drive

	point1740	1740	284	45	8	45	0	0	0	0	0	0
	point1741	1741	284	45	8	45	0	0	0	0	0	0
	point1742	1742	284	45	8	45	0	0	0	0	0	0
	point1743	1743	284	45	8	45	0	0	0	0	0	0
	point1744	1744										
I-285 WB Off Ramp	point1745	1745	240	35	8	35	0	0	0	0	0	0
	point1746	1746	240	35	8	35	0	0	0	0	0	0
	point1747	1747	240	35	8	35	0	0	0	0	0	0
	point1748	1748	240	35	8	35	0	0	0	0	0	0
	point1749	1749	240	35	8	35	0	0	0	0	0	0
	point1750	1750	240	35	8	35	0	0	0	0	0	0
	point1751	1751	240	35	8	35	0	0	0	0	0	0
	point1752	1752	240	35	8	35	0	0	0	0	0	0
	point1753	1753	240	35	8	35	0	0	0	0	0	0
	point1754	1754	240	35	8	35	0	0	0	0	0	0
	point1755	1755	240	35	8	35	0	0	0	0	0	0
	point1756	1756	240	35	8	35	0	0	0	0	0	0
	point1757	1757	240	35	8	35	0	0	0	0	0	0
	point1758	1758	240	35	8	35	0	0	0	0	0	0
	point1759	1759	240	35	8	35	0	0	0	0	0	0
	point1760	1760	240	35	8	35	0	0	0	0	0	0
	point1761	1761	240	35	8	35	0	0	0	0	0	0
	point1762	1762	240	35	8	35	0	0	0	0	0	0
	point1763	1763	240	35	8	35	0	0	0	0	0	0
	point1764	1764	240	35	8	35	0	0	0	0	0	0
	point1765	1765	240	35	8	35	0	0	0	0	0	0
	point1766	1766	240	35	8	35	0	0	0	0	0	0
	point1767	1767										

ARCADIS		8 May 2014										
LJV		TNM 2.5										
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:		I-285 at Riverside										
RUN:		Model Calibration - South Side										
Roadway	Points											
Name	Name	No.	Segment		MTrucks		HTrucks		Buses		Motorcycles	
			Autos		V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-285 EB right 1	point1	1	3682	55	132	55	330	55	0	0	0	0
	point2	2	3682	55	132	55	330	55	0	0	0	0
	point3	3	3682	55	132	55	330	55	0	0	0	0
	point4	4	3682	55	132	55	330	55	0	0	0	0
	point5	5	3682	55	132	55	330	55	0	0	0	0
	point6	6	3682	55	132	55	330	55	0	0	0	0
	point7	7	3682	55	132	55	330	55	0	0	0	0
	point8	8	3682	55	132	55	330	55	0	0	0	0
	point9	9										
I-285 EB right 2	point15	15	3682	55	132	55	330	55	0	0	0	0
	point16	16	3682	55	132	55	330	55	0	0	0	0
	point17	17	3682	55	132	55	330	55	0	0	0	0
	point18	18	3682	55	132	55	330	55	0	0	0	0
	point19	19	3682	55	132	55	330	55	0	0	0	0
	point20	20	3682	55	132	55	330	55	0	0	0	0
	point21	21	3682	55	132	55	330	55	0	0	0	0
	point22	22	3682	55	132	55	330	55	0	0	0	0
	point23	23	3682	55	132	55	330	55	0	0	0	0
	point24	24	3682	55	132	55	330	55	0	0	0	0
	point25	25	3682	55	132	55	330	55	0	0	0	0
	point26	26	3682	55	132	55	330	55	0	0	0	0
	point27	27	3682	55	132	55	330	55	0	0	0	0
	point28	28	3682	55	132	55	330	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point29	29	3682	55	132	55	330	55	0	0	0	0
	point30	30	3682	55	132	55	330	55	0	0	0	0
	point31	31	3682	55	132	55	330	55	0	0	0	0
	point32	32	3682	55	132	55	330	55	0	0	0	0
	point33	33	3682	55	132	55	330	55	0	0	0	0
	point34	34	3682	55	132	55	330	55	0	0	0	0
	point35	35	3682	55	132	55	330	55	0	0	0	0
	point36	36	3682	55	132	55	330	55	0	0	0	0
	point37	37	3682	55	132	55	330	55	0	0	0	0
	point38	38	3682	55	132	55	330	55	0	0	0	0
	point39	39										
I-285 EB left 1	point152	152	2454	55	0	0	0	0	0	0	0	0
	point153	153	2454	55	0	0	0	0	0	0	0	0
	point154	154	2454	55	0	0	0	0	0	0	0	0
	point155	155	2454	55	0	0	0	0	0	0	0	0
	point156	156	2454	55	0	0	0	0	0	0	0	0
	point157	157	2454	55	0	0	0	0	0	0	0	0
	point158	158	2454	55	0	0	0	0	0	0	0	0
	point159	159	2454	55	0	0	0	0	0	0	0	0
	point160	160										
I-128 EB left 2	point173	173	2454	55	0	0	0	0	0	0	0	0
	point174	174	2454	55	0	0	0	0	0	0	0	0
	point175	175	2454	55	0	0	0	0	0	0	0	0
	point176	176	2454	55	0	0	0	0	0	0	0	0
	point177	177	2454	55	0	0	0	0	0	0	0	0
	point178	178	2454	55	0	0	0	0	0	0	0	0
	point179	179	2454	55	0	0	0	0	0	0	0	0
	point180	180	2454	55	0	0	0	0	0	0	0	0
	point181	181	2454	55	0	0	0	0	0	0	0	0
	point182	182	2454	55	0	0	0	0	0	0	0	0
	point183	183	2454	55	0	0	0	0	0	0	0	0
	point184	184	2454	55	0	0	0	0	0	0	0	0
	point185	185	2454	55	0	0	0	0	0	0	0	0
	point186	186										
WB right 11	point396	396	3595	55	129	55	322	55	0	0	0	0
	point397	397	3595	55	129	55	322	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point398	398	3595	55	129	55	322	55	0	0	0	0
	point399	399	3595	55	129	55	322	55	0	0	0	0
	point400	400	3595	55	129	55	322	55	0	0	0	0
	point401	401	3595	55	129	55	322	55	0	0	0	0
	point402	402	3595	55	129	55	322	55	0	0	0	0
	point403	403	3595	55	129	55	322	55	0	0	0	0
	point404	404	3595	55	129	55	322	55	0	0	0	0
	point405	405	3595	55	129	55	322	55	0	0	0	0
	point406	406	3595	55	129	55	322	55	0	0	0	0
	point407	407	3595	55	129	55	322	55	0	0	0	0
	point408	408	3595	55	129	55	322	55	0	0	0	0
	point409	409	3595	55	129	55	322	55	0	0	0	0
	point410	410	3595	55	129	55	322	55	0	0	0	0
	point411	411	3595	55	129	55	322	55	0	0	0	0
	point412	412	3595	55	129	55	322	55	0	0	0	0
	point413	413										
Wb right 12	point414	414	3595	55	129	55	322	55	0	0	0	0
	point415	415	3595	55	129	55	322	55	0	0	0	0
	point416	416	3595	55	129	55	322	55	0	0	0	0
	point417	417	3595	55	129	55	322	55	0	0	0	0
	point418	418	3595	55	129	55	322	55	0	0	0	0
	point419	419	3595	55	129	55	322	55	0	0	0	0
	point420	420	3595	55	129	55	322	55	0	0	0	0
	point421	421	3595	55	129	55	322	55	0	0	0	0
	point422	422	3595	55	129	55	322	55	0	0	0	0
	point423	423	3595	55	129	55	322	55	0	0	0	0
	point424	424	3595	55	129	55	322	55	0	0	0	0
	point425	425										
WB left 10	point522	522	2397	55	0	0	0	0	0	0	0	0
	point523	523	2397	55	0	0	0	0	0	0	0	0
	point524	524	2397	55	0	0	0	0	0	0	0	0
	point525	525	2397	55	0	0	0	0	0	0	0	0
	point526	526	2397	55	0	0	0	0	0	0	0	0
	point527	527	2397	55	0	0	0	0	0	0	0	0
	point528	528	2397	55	0	0	0	0	0	0	0	0
	point529	529	2397	55	0	0	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point530	530	2397	55	0	0	0	0	0	0	0	0
	point531	531	2397	55	0	0	0	0	0	0	0	0
	point532	532	2397	55	0	0	0	0	0	0	0	0
	point533	533	2397	55	0	0	0	0	0	0	0	0
	point534	534										
WB left 11	point535	535	2397	55	0	0	0	0	0	0	0	0
	point536	536	2397	55	0	0	0	0	0	0	0	0
	point537	537	2397	55	0	0	0	0	0	0	0	0
	point538	538	2397	55	0	0	0	0	0	0	0	0
	point539	539	2397	55	0	0	0	0	0	0	0	0
	point540	540	2397	55	0	0	0	0	0	0	0	0
	point541	541	2397	55	0	0	0	0	0	0	0	0
	point542	542	2397	55	0	0	0	0	0	0	0	0
	point543	543	2397	55	0	0	0	0	0	0	0	0
	point544	544	2397	55	0	0	0	0	0	0	0	0
	point545	545	2397	55	0	0	0	0	0	0	0	0
	point546	546	2397	55	0	0	0	0	0	0	0	0
	point547	547	2397	55	0	0	0	0	0	0	0	0
	point548	548	2397	55	0	0	0	0	0	0	0	0
	point549	549	2397	55	0	0	0	0	0	0	0	0
	point550	550	2397	55	0	0	0	0	0	0	0	0
	point551	551	2397	55	0	0	0	0	0	0	0	0
	point552	552	2397	55	0	0	0	0	0	0	0	0
	point553	553										
WB left 12	point554	554	2397	55	0	0	0	0	0	0	0	0
	point555	555	2397	55	0	0	0	0	0	0	0	0
	point556	556	2397	55	0	0	0	0	0	0	0	0
	point557	557	2397	55	0	0	0	0	0	0	0	0
	point558	558	2397	55	0	0	0	0	0	0	0	0
	point559	559	2397	55	0	0	0	0	0	0	0	0
	point560	560	2397	55	0	0	0	0	0	0	0	0
	point561	561	2397	55	0	0	0	0	0	0	0	0
	point562	562	2397	55	0	0	0	0	0	0	0	0
	point563	563	2397	55	0	0	0	0	0	0	0	0
	point564	564	2397	55	0	0	0	0	0	0	0	0
	point565	565										

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

I-285 EB left 1-2	point1329	1329	2454	55	0	0	0	0	0	0	0	0
	point161	161	2454	55	0	0	0	0	0	0	0	0
	point162	162	2454	55	0	0	0	0	0	0	0	0
	point163	163	2454	55	0	0	0	0	0	0	0	0
	point164	164	2454	55	0	0	0	0	0	0	0	0
	point165	165	2454	55	0	0	0	0	0	0	0	0
	point166	166	2454	55	0	0	0	0	0	0	0	0
	point167	167	2454	55	0	0	0	0	0	0	0	0
	point168	168	2454	55	0	0	0	0	0	0	0	0
	point169	169	2454	55	0	0	0	0	0	0	0	0
	point170	170	2454	55	0	0	0	0	0	0	0	0
	point171	171	2454	55	0	0	0	0	0	0	0	0
	point172	172										
I-285 EB Right 3	point40	1349	3682	55	132	55	330	55	0	0	0	0
	point41	1350	3682	55	132	55	330	55	0	0	0	0
	point42	1351	3682	55	132	55	330	55	0	0	0	0
	point43	1352	3682	55	132	55	330	55	0	0	0	0
	point44	1353	3682	55	132	55	330	55	0	0	0	0
	point45	1354	3682	55	132	55	330	55	0	0	0	0
	point46	1355	3682	55	132	55	330	55	0	0	0	0
	point47	1356	3682	55	132	55	330	55	0	0	0	0
	point48	1357	3682	55	132	55	330	55	0	0	0	0
	point49	1358										
I-285 EB Left 3	point187	1375	2454	55	0	0	0	0	0	0	0	0
	point188	1376	2454	55	0	0	0	0	0	0	0	0
	point189	1377	2454	55	0	0	0	0	0	0	0	0
	point190	1378	2454	55	0	0	0	0	0	0	0	0
	point191	1379	2454	55	0	0	0	0	0	0	0	0
	point192	1380	2454	55	0	0	0	0	0	0	0	0
	point193	1381	2454	55	0	0	0	0	0	0	0	0
	point194	1382	2454	55	0	0	0	0	0	0	0	0
	point195	1383										
WB Right 10	point381	1404	3595	55	129	55	322	55	0	0	0	0
	point383	1406	3595	55	129	55	322	55	0	0	0	0
	point384	1407	3595	55	129	55	322	55	0	0	0	0
	point385	1408	3595	55	129	55	322	55	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point386	1409	3595	55	129	55	322	55	0	0	0	0
	point387	1410	3595	55	129	55	322	55	0	0	0	0
	point388	1411	3595	55	129	55	322	55	0	0	0	0
	point389	1412	3595	55	129	55	322	55	0	0	0	0
	point390	1413	3595	55	129	55	322	55	0	0	0	0
	point391	1414	3595	55	129	55	322	55	0	0	0	0
	point392	1415	3595	55	129	55	322	55	0	0	0	0
	point393	1416	3595	55	129	55	322	55	0	0	0	0
	point394	1417	3595	55	129	55	322	55	0	0	0	0
	point395	1418										
Rvierside NB 6	point1474	1474	611	35	18	35	0	0	0	0	0	0
	point1475	1475	611	35	18	35	0	0	0	0	0	0
	point1476	1476	611	35	18	35	0	0	0	0	0	0
	point1477	1477	611	35	18	35	0	0	0	0	0	0
	point1478	1478	611	35	18	35	0	0	0	0	0	0
	point1479	1479	611	35	18	35	0	0	0	0	0	0
	point1480	1480	611	35	18	35	0	0	0	0	0	0
	point1481	1481	611	35	18	35	0	0	0	0	0	0
	point1482	1482	611	35	18	35	0	0	0	0	0	0
	point1483	1483	611	35	18	35	0	0	0	0	0	0
	point1484	1484	611	35	18	35	0	0	0	0	0	0
	point1485	1485	611	35	18	35	0	0	0	0	0	0
	point1486	1486	611	35	18	35	0	0	0	0	0	0
	point1487	1487	611	35	18	35	0	0	0	0	0	0
	point1488	1488	611	35	18	35	0	0	0	0	0	0
	point1489	1489	611	35	18	35	0	0	0	0	0	0
	point1490	1490	611	35	18	35	0	0	0	0	0	0
	point1491	1491	611	35	18	35	0	0	0	0	0	0
	point1492	1492										
Riverside SB 6	point1493	1493	611	35	18	35	0	0	0	0	0	0
	point1494	1494	611	35	18	35	0	0	0	0	0	0
	point1495	1495	611	35	18	35	0	0	0	0	0	0
	point1496	1496	611	35	18	35	0	0	0	0	0	0
	point1497	1497	611	35	18	35	0	0	0	0	0	0
	point1498	1498	611	35	18	35	0	0	0	0	0	0
	point1499	1499	611	35	18	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point1500	1500	611	35	18	35	0	0	0	0	0	0
	point1501	1501	611	35	18	35	0	0	0	0	0	0
	point1502	1502	611	35	18	35	0	0	0	0	0	0
	point1503	1503	611	35	18	35	0	0	0	0	0	0
	point1504	1504	611	35	18	35	0	0	0	0	0	0
	point1505	1505	611	35	18	35	0	0	0	0	0	0
	point1506	1506	611	35	18	35	0	0	0	0	0	0
	point1507	1507	611	35	18	35	0	0	0	0	0	0
	point1508	1508	611	35	18	35	0	0	0	0	0	0
	point1509	1509	611	35	18	35	0	0	0	0	0	0
	point1510	1510	611	35	18	35	0	0	0	0	0	0
	point1511	1511										
Rvierside SB 3	point1614	1614	135	35	12	35	0	0	0	0	0	0
	point1615	1615	135	35	12	35	0	0	0	0	0	0
	point1616	1616	135	35	12	35	0	0	0	0	0	0
	point1617	1617	135	35	12	35	0	0	0	0	0	0
	point1618	1618	135	35	12	35	0	0	0	0	0	0
	point1619	1619	135	35	12	35	0	0	0	0	0	0
	point1620	1620	135	35	12	35	0	0	0	0	0	0
	point1621	1621	135	35	12	35	0	0	0	0	0	0
	point1622	1622	135	35	12	35	0	0	0	0	0	0
	point1623	1623	135	35	12	35	0	0	0	0	0	0
	point1624	1624	135	35	12	35	0	0	0	0	0	0
	point1625	1625	135	35	12	35	0	0	0	0	0	0
	point1626	1626	135	35	12	35	0	0	0	0	0	0
	point1627	1627	135	35	12	35	0	0	0	0	0	0
	point1628	1628	135	35	12	35	0	0	0	0	0	0
	point1629	1629	135	35	12	35	0	0	0	0	0	0
	point1630	1630	135	35	12	35	0	0	0	0	0	0
	point1631	1631	135	35	12	35	0	0	0	0	0	0
	point1632	1632	135	35	12	35	0	0	0	0	0	0
	point1633	1633	135	35	12	35	0	0	0	0	0	0
	point1634	1634	135	35	12	35	0	0	0	0	0	0
	point1635	1635	135	35	12	35	0	0	0	0	0	0
	point1636	1636	135	35	12	35	0	0	0	0	0	0
	point1637	1637	135	35	12	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point1638	1638	135	35	12	35	0	0	0	0	0	0
	point1639	1639	135	35	12	35	0	0	0	0	0	0
	point1640	1640	135	35	12	35	0	0	0	0	0	0
	point1641	1641	135	35	12	35	0	0	0	0	0	0
	point1642	1642	135	35	12	35	0	0	0	0	0	0
	point1643	1643	135	35	12	35	0	0	0	0	0	0
	point1644	1644										
Riverside NB 1	point1713	1713	135	35	12	35	0	0	0	0	0	0
	point1714	1714	135	35	12	35	0	0	0	0	0	0
	point1715	1715	135	35	12	35	0	0	0	0	0	0
	point1716	1716	135	35	12	35	0	0	0	0	0	0
	point1717	1717	135	35	12	35	0	0	0	0	0	0
	point1718	1718	135	35	12	35	0	0	0	0	0	0
	point1719	1719	135	35	12	35	0	0	0	0	0	0
	point1720	1720	135	35	12	35	0	0	0	0	0	0
	point1721	1721	135	35	12	35	0	0	0	0	0	0
	point1722	1722	135	35	12	35	0	0	0	0	0	0
	point1723	1723	135	35	12	35	0	0	0	0	0	0
	point1724	1724	135	35	12	35	0	0	0	0	0	0
	point1725	1725	135	35	12	35	0	0	0	0	0	0
	point1726	1726	135	35	12	35	0	0	0	0	0	0
	point1727	1727	135	35	12	35	0	0	0	0	0	0
	point1728	1728	135	35	12	35	0	0	0	0	0	0
	point1729	1729	135	35	12	35	0	0	0	0	0	0
	point1730	1730	135	35	12	35	0	0	0	0	0	0
	point1731	1731	135	35	12	35	0	0	0	0	0	0
	point1732	1732	135	35	12	35	0	0	0	0	0	0
	point1733	1733	135	35	12	35	0	0	0	0	0	0
	point1734	1734	135	35	12	35	0	0	0	0	0	0
	point1735	1735	135	35	12	35	0	0	0	0	0	0
	point1736	1736	135	35	12	35	0	0	0	0	0	0
	point1737	1737	135	35	12	35	0	0	0	0	0	0
	point1738	1738	135	35	12	35	0	0	0	0	0	0
	point1739	1739	135	35	12	35	0	0	0	0	0	0
	point1740	1740	135	35	12	35	0	0	0	0	0	0
	point1741	1741	135	35	12	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point1742	1742	135	35	12	35	0	0	0	0	0	0
	point1743	1743										
Riverside NB 2	point1744	1744	135	35	12	35	0	0	0	0	0	0
	point1745	1745	135	35	12	35	0	0	0	0	0	0
	point1746	1746	135	35	12	35	0	0	0	0	0	0
	point1747	1747	135	35	12	35	0	0	0	0	0	0
	point1748	1748	135	35	12	35	0	0	0	0	0	0
	point1749	1749	135	35	12	35	0	0	0	0	0	0
	point1750	1750	135	35	12	35	0	0	0	0	0	0
	point1751	1751	135	35	12	35	0	0	0	0	0	0
	point1752	1752	135	35	12	35	0	0	0	0	0	0
	point1753	1753										
Riverside SB 2	point1778	1778	135	35	12	35	0	0	0	0	0	0
	point1779	1779	135	35	12	35	0	0	0	0	0	0
	point1780	1780	135	35	12	35	0	0	0	0	0	0
	point1781	1781	135	35	12	35	0	0	0	0	0	0
	point1782	1782	135	35	12	35	0	0	0	0	0	0
	point1783	1783	135	35	12	35	0	0	0	0	0	0
	point1784	1784	135	35	12	35	0	0	0	0	0	0
	point1785	1785	135	35	12	35	0	0	0	0	0	0
	point1786	1786	135	35	12	35	0	0	0	0	0	0
	point1787	1787										
I-285 EB On Ramp	point1834	1834	282	45	14	45	0	0	0	0	0	0
	point1835	1835	282	45	14	45	0	0	0	0	0	0
	point1836	1836	282	45	14	45	0	0	0	0	0	0
	point1837	1837	282	45	14	45	0	0	0	0	0	0
	point1838	1838	282	45	14	45	0	0	0	0	0	0
	point1839	1839	282	45	14	45	0	0	0	0	0	0
	point1840	1840	282	45	14	45	0	0	0	0	0	0
	point1841	1841	282	45	14	45	0	0	0	0	0	0
	point1842	1842	282	45	14	45	0	0	0	0	0	0
	point1843	1843	282	45	14	45	0	0	0	0	0	0
	point1844	1844	282	45	14	45	0	0	0	0	0	0
	point1845	1845	282	45	14	45	0	0	0	0	0	0
	point1846	1846	282	45	14	45	0	0	0	0	0	0
	point1847	1847	282	45	14	45	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point1848	1848	282	45	14	45	0	0	0	0	0	0
	point1849	1849	282	45	14	45	0	0	0	0	0	0
	point1850	1850	282	45	14	45	0	0	0	0	0	0
	point1851	1851	282	45	14	45	0	0	0	0	0	0
	point1852	1852	282	45	14	45	0	0	0	0	0	0
	point1853	1853	282	45	14	45	0	0	0	0	0	0
	point1854	1854	282	45	14	45	0	0	0	0	0	0
	point1855	1855	282	45	14	45	0	0	0	0	0	0
	point1856	1856	282	45	14	45	0	0	0	0	0	0
	point1857	1857	282	45	14	45	0	0	0	0	0	0
	point1858	1858	282	45	14	45	0	0	0	0	0	0
	point1859	1859	282	45	14	45	0	0	0	0	0	0
	point1860	1860	282	45	14	45	0	0	0	0	0	0
	point1861	1861	282	45	14	45	0	0	0	0	0	0
	point1862	1862	282	45	14	45	0	0	0	0	0	0
	point1863	1863	282	45	14	45	0	0	0	0	0	0
	point1864	1864	282	45	14	45	0	0	0	0	0	0
	point1865	1865										
I-285 Eb Off Ramp	point1929	1929	280	35	0	0	0	0	0	0	0	0
	point1928	1928	280	35	0	0	0	0	0	0	0	0
	point1927	1927	280	35	0	0	0	0	0	0	0	0
	point1926	1926	280	35	0	0	0	0	0	0	0	0
	point1925	1925	280	35	0	0	0	0	0	0	0	0
	point1924	1924	280	35	0	0	0	0	0	0	0	0
	point1923	1923	280	35	0	0	0	0	0	0	0	0
	point1922	1922	280	35	0	0	0	0	0	0	0	0
	point1921	1921	280	35	0	0	0	0	0	0	0	0
	point1920	1920	280	35	0	0	0	0	0	0	0	0
	point1919	1919	280	35	0	0	0	0	0	0	0	0
	point1918	1918	280	35	0	0	0	0	0	0	0	0
	point1917	1917	280	35	0	0	0	0	0	0	0	0
	point1916	1916	280	35	0	0	0	0	0	0	0	0
	point1915	1915	280	35	0	0	0	0	0	0	0	0
	point1914	1914	280	35	0	0	0	0	0	0	0	0
	point1913	1913	280	35	0	0	0	0	0	0	0	0
	point1912	1912	280	35	0	0	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point1911	1911	280	35	0	0	0	0	0	0	0	0
	point1910	1910	280	35	0	0	0	0	0	0	0	0
	point1909	1909	280	35	0	0	0	0	0	0	0	0
	point1908	1908	280	35	0	0	0	0	0	0	0	0
	point1907	1907	280	35	0	0	0	0	0	0	0	0
	point1906	1906	280	35	0	0	0	0	0	0	0	0
	point1905	1905	280	35	0	0	0	0	0	0	0	0
	point1904	1904	280	35	0	0	0	0	0	0	0	0
	point1903	1903	280	35	0	0	0	0	0	0	0	0
	point1902	1902	280	35	0	0	0	0	0	0	0	0
	point1901	1901	280	35	0	0	0	0	0	0	0	0
	point1900	1900	280	35	0	0	0	0	0	0	0	0
	point1899	1899	280	35	0	0	0	0	0	0	0	0
	point1898	1898										
I-285 Wb Off Ramp	point1992	1992	240	35	8	35	0	0	0	0	0	0
	point1991	1991	240	35	8	35	0	0	0	0	0	0
	point1990	1990	240	35	8	35	0	0	0	0	0	0
	point1989	1989	240	35	8	35	0	0	0	0	0	0
	point1988	1988	240	35	8	35	0	0	0	0	0	0
	point1987	1987	240	35	8	35	0	0	0	0	0	0
	point1986	1986	240	35	8	35	0	0	0	0	0	0
	point1985	1985	240	35	8	35	0	0	0	0	0	0
	point1984	1984	240	35	8	35	0	0	0	0	0	0
	point1983	1983	240	35	8	35	0	0	0	0	0	0
	point1982	1982	240	35	8	35	0	0	0	0	0	0
	point1981	1981	240	35	8	35	0	0	0	0	0	0
	point1980	1980	240	35	8	35	0	0	0	0	0	0
	point1979	1979	240	35	8	35	0	0	0	0	0	0
	point1978	1978	240	35	8	35	0	0	0	0	0	0
	point1977	1977	240	35	8	35	0	0	0	0	0	0
	point1976	1976	240	35	8	35	0	0	0	0	0	0
	point1975	1975	240	35	8	35	0	0	0	0	0	0
	point1974	1974	240	35	8	35	0	0	0	0	0	0
	point1973	1973	240	35	8	35	0	0	0	0	0	0
	point1972	1972	240	35	8	35	0	0	0	0	0	0
	point1971	1971	240	35	8	35	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes

I-285 at Riverside

	point1970	1970										
I-285 WB On Ramp	point2020	2020	284	45	8	45	0	0	0	0	0	0
	point2021	2021	284	45	8	45	0	0	0	0	0	0
	point2022	2022	284	45	8	45	0	0	0	0	0	0
	point2023	2023	284	45	8	45	0	0	0	0	0	0
	point2024	2024	284	45	8	45	0	0	0	0	0	0
	point2025	2025	284	45	8	45	0	0	0	0	0	0
	point2026	2026	284	45	8	45	0	0	0	0	0	0
	point2027	2027	284	45	8	45	0	0	0	0	0	0
	point2028	2028	284	45	8	45	0	0	0	0	0	0
	point2029	2029	284	45	8	45	0	0	0	0	0	0
	point2030	2030	284	45	8	45	0	0	0	0	0	0
	point2031	2031	284	45	8	45	0	0	0	0	0	0
	point2032	2032	284	45	8	45	0	0	0	0	0	0
	point2033	2033	284	45	8	45	0	0	0	0	0	0
	point2034	2034	284	45	8	45	0	0	0	0	0	0
	point2035	2035	284	45	8	45	0	0	0	0	0	0
	point2036	2036	284	45	8	45	0	0	0	0	0	0
	point2037	2037	284	45	8	45	0	0	0	0	0	0
	point2038	2038	284	45	8	45	0	0	0	0	0	0
	point2039	2039	284	45	8	45	0	0	0	0	0	0
	point2040	2040	284	45	8	45	0	0	0	0	0	0
	point2041	2041	284	45	8	45	0	0	0	0	0	0
	point2042	2042	284	45	8	45	0	0	0	0	0	0
	point2043	2043	284	45	8	45	0	0	0	0	0	0
	point2044	2044	284	45	8	45	0	0	0	0	0	0
	point2045	2045	284	45	8	45	0	0	0	0	0	0
	point2046	2046										

Appendix G – Cont.
Model Calibration Outputs

RESULTS: SOUND LEVELS

I-285 at Riverside

ARCADIS								8 May 2014						
LJV								TNM 2.5						
								Calculated with TNM 2.5						
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		I-285 at Riverside												
RUN:		Model Calibration - South Side												
BARRIER DESIGN:		INPUT HEIGHTS								Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.				
ATMOSPHERICS:		68 deg F, 50% RH												
Receiver														
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	Calculated LAeq1h	Noise Reduction		Goal	Calculated minus Goal		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact		Calculated	Goal	Calculated minus Goal		
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB		
R3	482	1	0.0	56.7	66	56.7	10	----	56.7	0.0	5	-5.0		
R5	484	1	0.0	57.8	66	57.8	10	----	57.8	0.0	5	-5.0		
R6	510	1	0.0	64.2	66	64.2	10	----	64.2	0.0	5	-5.0		
Dwelling Units		# DUs	Noise Reduction											
			Min	Avg	Max									
			dB	dB	dB									
All Selected		3	0.0	0.0	0.0									
All Impacted		0	0.0	0.0	0.0									
All that meet NR Goal		0	0.0	0.0	0.0									

RESULTS: SOUND LEVELS

I-285 at Riverside Drive

ARCADIS LJV		8 May 2014 TNM 2.5 Calculated with TNM 2.5										
RESULTS: SOUND LEVELS PROJECT/CONTRACT: RUN: BARRIER DESIGN:		I-285 at Riverside Drive Model Calibration - North Side INPUT HEIGHTS							Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.			
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name		No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier Calculated LAeq1h	Noise Reduction		
					Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	Calculated	Goal	Calculated minus Goal
				dB	dB	dB	dB	dB		dB	dB	dB
R7	487	1	0.0	63.9	66	63.9	10	----	63.9	0.0	5	-5.0
R10	493	1	0.0	54.5	66	54.5	10	----	54.5	0.0	5	-5.0
R12	495	1	0.0	56.9	66	56.9	10	----	56.9	0.0	5	-5.0
R15	498	1	0.0	57.3	66	57.3	10	----	57.3	0.0	5	-5.0
R16	499	1	0.0	62.1	66	62.1	10	----	62.1	0.0	5	-5.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		5	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Appendix H
Draft Letter to Officials



May 22, 2014

City of Sandy Springs Planning Commission
7840 Roswell Road
Sandy Springs, GA 30350

ATTN: Lee Duncan

Subject: I-285 Ramps at CR 209/Riverside Drive Interchange Improvement Project, P.I. No.0010925;

Dear Mr. Duncan:

The Georgia Department of Transportation (Department) has completed a study of noise impacts that are anticipated as a result of this project. As part of this study, the Department has identified traffic noise levels that are expected on nearby undeveloped parcels. In accordance with 23 CFR 772.17, we are providing this information to your office for use in compatible land use planning efforts. Please be aware that Georgia does not have a Type II program to construct standalone barriers without a qualifying Type I construction project. Please visit www.ecfr.gov (Title 23, part 772) for more information.

The Federal Highway Administration (FHWA) has set Noise Abatement Criteria (NAC) for different land uses in 23 CFR 772, Table 1, which is attached for reference. In accordance with the Department's criteria, areas within one decibel of the NAC are considered impacted by traffic noise. The attached results from the project's noise study shows traffic noise levels at differing distances from the proposed roadway, and the individual study areas in Table 7 can be located on Figure 7.

For a complete copy of the noise study or if any additional information is needed, please contact Amber Phillips at (404) 631-1117, aphillips@dot.ga.gov or Andrew Clay at (404) 631-1597 anclay@dot.ga.gov.

Sincerely,

A handwritten signature in blue ink that reads "Hiral Patel".

Hiral Patel, P.E.
State Environmental Administrator

HP/AP

Cc: General File (letter, report)
Project File (electronic copies of letter & report)

Project

The project consists of safety improvements to the existing interchange of I-285 at Riverside Drive. The project would convert the two existing signalized intersections at each ramp terminal at Riverside Drive with a single lane roundabout. Figure 1 on page 3 shows the project location map. Figure 2 on page 4 shows the proposed concept layout.

Project Details:

Each approach to the roundabout would be widened to two lanes with one lane entering the roundabout and the other serving as a right turn lane. The outside shoulders would remain 10 feet. Construction activity on Riverside Drive would extend approximately 450 feet to the north from the west bound on ramp to I-285 and approximately 325 feet to the south from the east bound exit ramp.

A five foot wide sidewalk would be added to both sides of the roadway along Riverside Drive within the limits of the project. The project is approximately 0.5 mile in length.

The project would also include routine rehabilitation of the existing bridge. This work includes replacement of the joints at bent 2 and abutments 1 and 5. All construction joints will be resealed and the bridge deck would be sealed with a two-part polymer overlay. Concrete spalling would be repaired on bents 3 & 4 and abutment 5. Figure 2 on page 3 shows the proposed concept layout.

Figure 1: Project Location Map

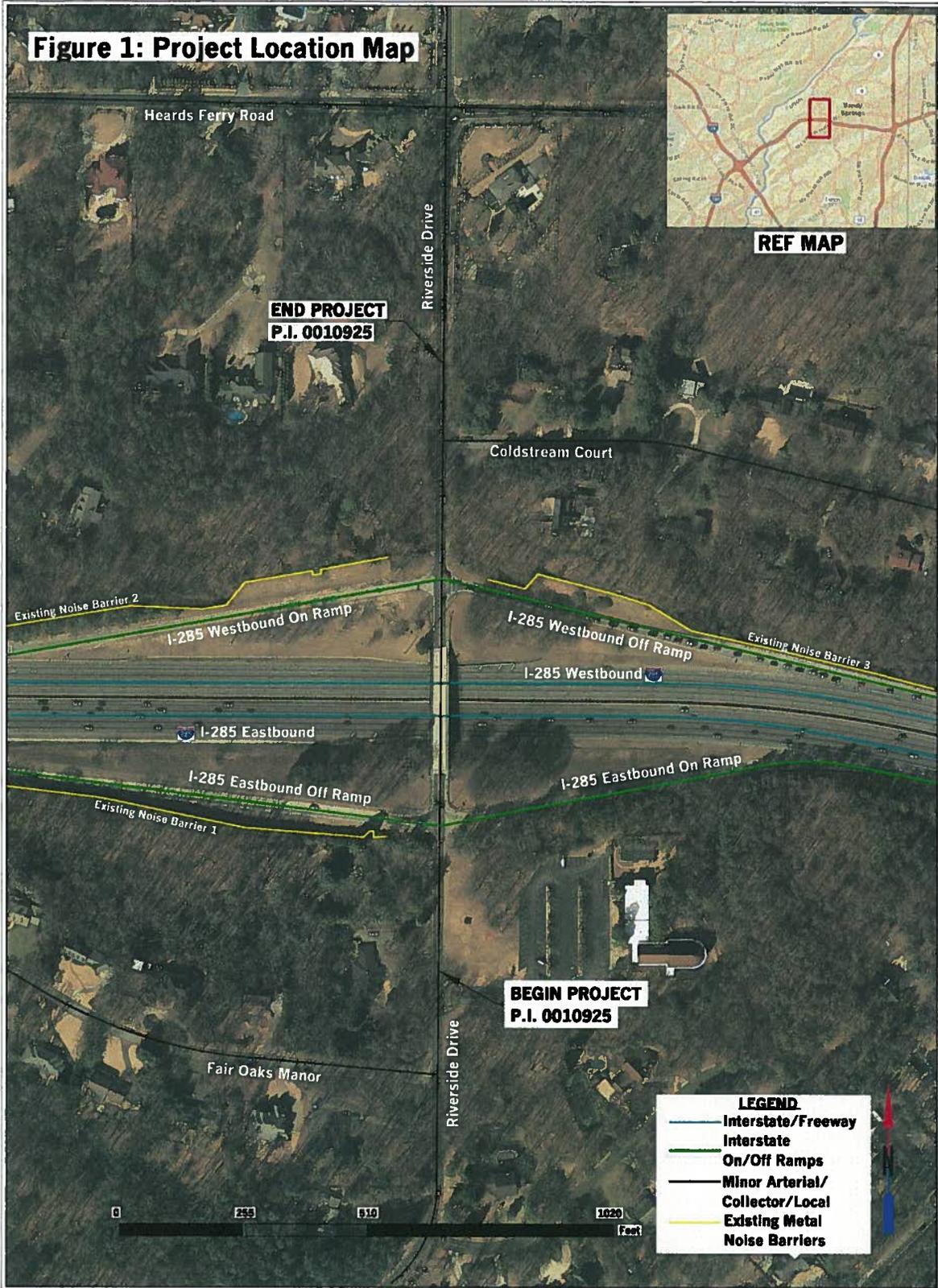


Figure 2: Project Concept Layout



Projected Sound Levels for Undeveloped Land Without a Permit

In accordance with 23 CFR Part 772 (772.17) and as outlined in the GDOT Noise Abatement Policy (July 2011), information is to be provided to local officials “that can help them to be aware of incompatible land uses near state highways.” At a minimum, this information is to include “an estimation of future design year noise levels at various distances from the edge of the nearest travel lane of the proposed project where future noise levels are within one decibel of the corresponding exterior values shown in Table 1 or until the parcel ends.

The data in Table 7 below provides information to aid local officials with jurisdiction over properties in proximity to the project. Large undeveloped lands without permitted/anticipated future development along the project corridor were modeled at 50-foot (from the nearest edge of pavement), 100 feet, and then 100 foot intervals. Sites were selected for this analysis at each location along the corridor where noise conditions are anticipated to change.

For the purposes of this project, one location (Study Area A) was identified for this analysis. The location of this study area relative to the proposed project is shown in Figure 8 on page 7. The study area depicted on the graphics represents large sample areas.

- Study Area A covers all vacant parcels located within this project corridor

Local officials with jurisdiction over the development of parcels along the project corridor are encouraged to consider the information provided in Table 7 and Table 1 when considering future land use and development changes. The information is provided by GDOT to discourage development that would be incompatible with the sound levels that are anticipated along the project corridor at these locations.

**Table 7
Projected Sound Levels to Aid Local Officials**

Study Area	50 feet*	100 feet*	200 feet*	300 feet*	400 feet*	500 feet*	600 feet*	700 feet*	800 feet*
A	65.8	63.1	58.1	56.8	56.2	55.4	55.4	55.4**	N/A

*Distance shown is from roadway edge of pavement

**Receiver located on back of property line

N/A property not large enough for additional analysis

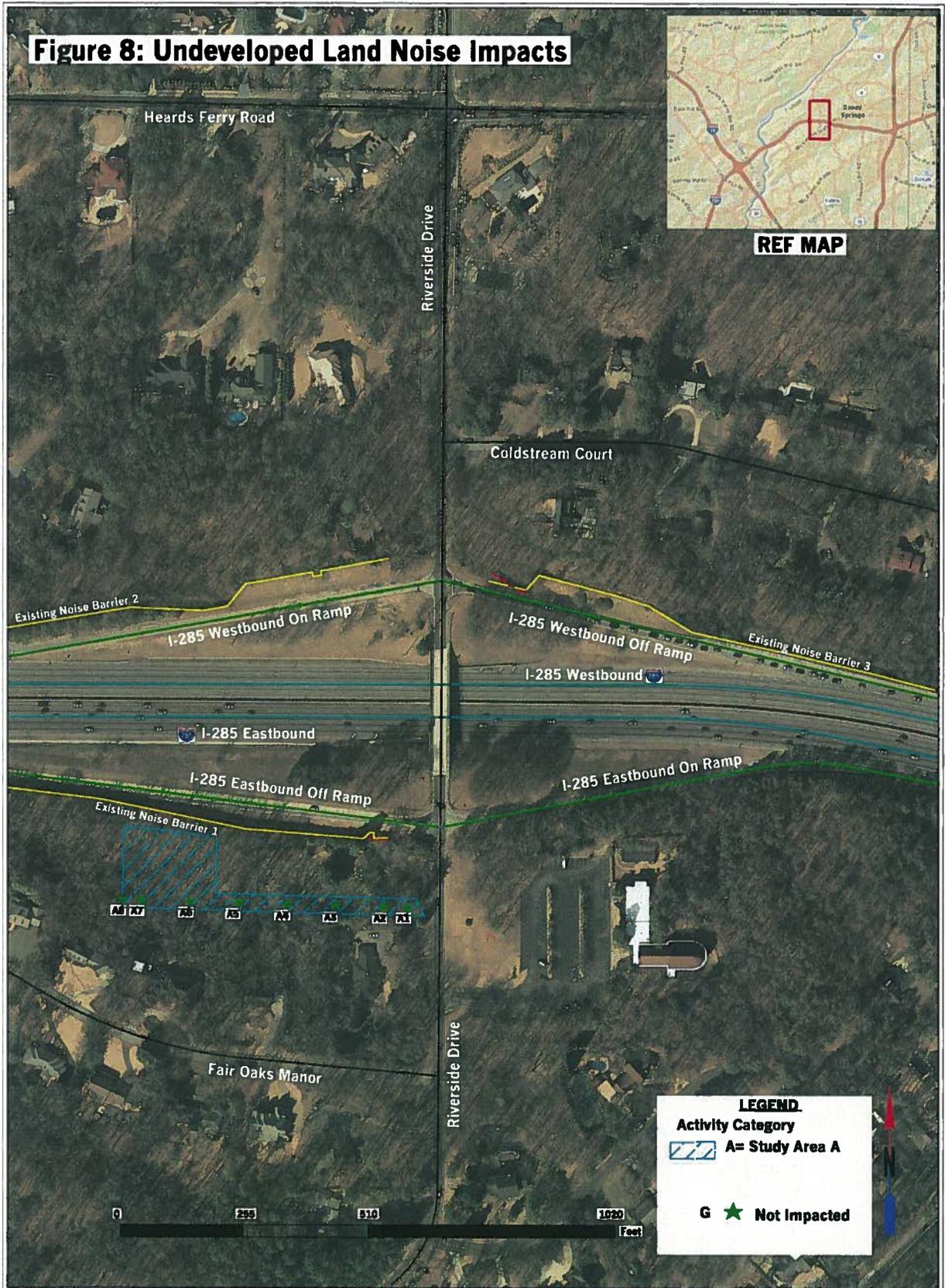
**Table 1
FHWA Noise Abatement Criteria (NAC)
Hourly A-Weighted Sound Level - decibels (dBA)**

Activity Category	Leq(h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Residential

Activity Category	Leq(h)	Description of Activity Category
C	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F
F	-	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	-	Undeveloped lands that are not permitted

Source: FHWA, 23 CFR Part 772

Figure 8: Undeveloped Land Noise Impacts



Appendix I

NEPA Summary

When is Noise Analyzed?

In compliance with 23 USC Section 109(h) and (i), the Federal Highway Administration (FHWA) established guidelines for the assessment of highway traffic-generated noise. These guidelines, published as Part 772 of Title 23 of the Code of Federal Regulations (23 CFR Part 772), provide procedures to be followed in conducting noise analyses that will protect the public health and welfare. In accordance with the Noise Control Act of 1972, coordination of this regulation with the Environmental Protection Agency (EPA) has been completed.

The proposed I-285 at Riverside Interchange reconstruction project would include the addition and relocation of interchange lanes and, therefore, would be classified as a Type I project.

The noise assessment documents the results of a noise analysis completed for the proposed project, in order to:

- a. Provide baseline noise levels that will be used in determining project impact.
- b. Predict the effects that the proposed project would have on the noise environment.
- c. Identify impacted locations where noise abatement is feasible and reasonable and likely to be included in the project and locations where impacts will occur and abatement is not feasible and reasonable.

How is land in the area classified?

Activity categories are assigned based on how land is being used. This means if the land is being used as a residence, business, church, etc, it is matched up to the corresponding activity category defined in FHWA, 23 CFR Part 772. Current land use in this project area consists of mostly single family residential lots. The Presbytery of Saint Andrew church is located in the southeast quadrant of the study area. There are 17 receivers, representing 17 receptors, of activity category B located within the study area. There is 1 receiver, representing 1 receptor, of activity category C located within the study area. One undeveloped site was identified inside the study area. Using the City of Sandy Springs Permit Go! Database, the undeveloped address identified within the area were checked and found to not have a development permit issued or pending.

What is a noise impact?

The GDOT defines a noise impact as occurring when design-year build noise levels approach or exceed the NAC thresholds listed in [Table 1](#) below or when predicted design-year build noise levels result in a substantial noise level increase over existing noise levels. The GDOT considers approach levels as 1 dBA less than the noise levels shown in [Table 1](#) below and defines a substantial noise level increase as being 15 dBA or greater than existing noise levels.

What are the results of the noise model? (See attachments x& Y for a complete list of receiver results and locations)

Table 1
Number of Receivers Exceeding the NAC by Activity Category

NAC/Threshold	NAC Description	Existing	Build	No Build
A - 57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	0	0	0
B - 67 (Exterior)	Residential	0	0	0
C - 67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.	0	0	0
D - 52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios	0	0	0
E - 72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F	0	0	0
F (Not Noise Sensitive, No Threshold)	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing	N/A	N/A	N/A
G (Not Noise Sensitive, No Threshold)	Undeveloped lands that are not permitted	N/A	N/A	N/A

No receptor sites along the project corridor would experience noise level increases of greater than 15 dBA. Therefore, **no receptors** are considered impacted based on the substantial increase criterion.

What are the conclusions reached based on the noise analysis?

The construction of this project will result in 0 impacts by approaching and/or exceeding the NAC and 0 by substantial increase. The noise levels with the proposed project would be around the estimated noise levels for the no-build condition. The change in noise levels between build and not build conditions range between 0.2 dBA to -1.5 dBA. This noise reduction can be contributed to the proposed roundabout interchange that will decrease traffic speeds, which in turn will lower noise levels in the surrounding area. Existing noise levels range from 55.1 dBA to 65.0 dBA. The predicted no-build noise levels will range from 55.1 dBA to 65.0 dBA. The predicted build noise levels will range from 54.7 dBA to 65.1 dBA.

Table 2 Summary of Findings:

Impacted Receiver #	# of Receptors Represented	Property Identification	Is Abatement Feasible & Reasonable	Approximate cost of abatement
0	0	N/A	N/A	N/A

What is the likelihood a proposed barrier will be constructed?

No impacts were identified for this project. Therefore, abatement measures were not considered. A reevaluation of the noise analysis will occur during final design, should changes warrant a reevaluation.

A reevaluation of the noise analysis will occur during final design, should changes warrant a reevaluation. If during final design it has been determined that conditions have changed such that noise abatement is not feasible and reasonable, the abatement measures might not be provided. The final decision on the installation of any abatement measure(s) will be made upon the completion of the project's final design and the public involvement processes.