Noise Study Technical Report

The Detroit River International Crossing Study





November 2007

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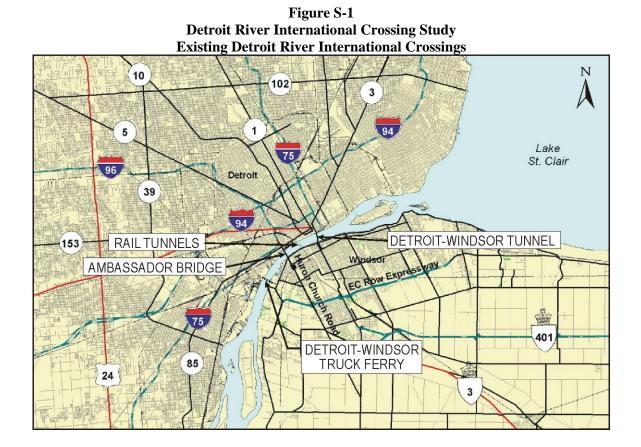
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SUMMARY

The Detroit River International Crossing (DRIC) Study is a bi-national effort to complete the environmental study processes for border crossing improvements between the United States and Canada. The study will identify solutions for border crossing infrastructure that supports the region, state, provincial and national economies while addressing civil and national defense and homeland security needs of the busiest trade corridor between the United States and Canada (Figure S-1).



The purpose of the Detroit River International Crossing Project is to: (for the foreseeable future, i.e., at least 30 years):

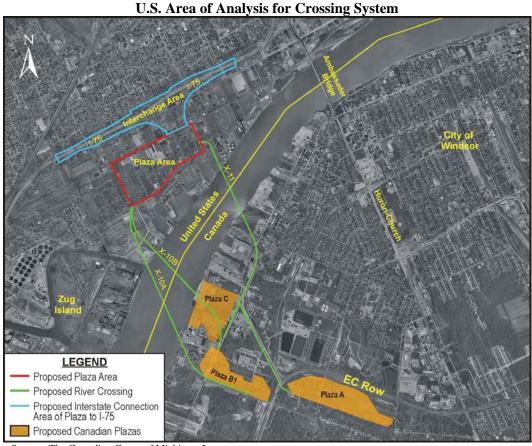
- Provide safe, efficient and secure movement of people and goods across the Canadian-U.S. border in the Detroit River area to support the economies of Michigan, Ontario, Canada and the U.S.
- Support the mobility needs of national and civil defense to protect the homeland.

To address future mobility requirements (i.e., at least 30 years) across the Canada-U.S. border, there is a need to:

- Provide new border crossing capacity to meet increased long-term demand; •
- Improve system connectivity to enhance the seamless flow of people and goods; •
- Improve operations and processing capability; and, •
- Provide reasonable and secure crossing options in the event of incidents, maintenance, • congestion, or other disruptions.

The Detroit River International Crossing Study (DRIC) Draft Environmental Impact Statement (DEIS) analyzes issues/impacts on the U.S. side of the crossing system over the Detroit River between Detroit, Michigan, and Windsor, Ontario, Canada. The alternatives are comprised of three components: the crossing, plaza (where tolls are collected), and interchange connecting the plaza to I-75 (Figure S-2).

> **Figure S-2 Detroit River International Crossing Study**



Source: The Corradino Group of Michigan, Inc.

Purpose of the Report

The purpose of the report is two-fold: 1) to provide insight into the differences among the Practical Alternatives consistent with the National Environmental Policy Act (NEPA); and 2) to abide by the policy and procedures for traffic noise analysis and abatement as indicated in Federal Regulations (23 CFR 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise* and Michigan's State Transportation Commission policy on noise abatement (Policy 10136, July 31, 2003), which includes MDOT's *Procedures and Rules for Implementation of State Transportation Commission Policy 10136 Noise Abatement* (Appendix A).

This *Noise Study Technical Report* summarizes existing and future noise conditions and indicates where noise walls were considered under the Practical Alternatives. It supports the DRIC Environmental Impact Statement.

Findings

This study used the Federal Highway Administration's (FHWA) Traffic Noise Model version 2.5 (TNM2.5) computer model to determine the need for noise mitigation for the crossings, plazas, and I-75.

The crossings are far enough removed from any sensitive receivers (such as dwelling units, churches, schools, and the like) that no noise mitigation is warranted. Sensitive receivers around the plazas would not experience noise with the project that would approach or exceed established noise abatement criteria, assuming walls are built around the plazas as part of the project to secure the U.S Customs and Border Protection operations.

The feasibility and reasonableness of 12-foot noise walls were tested along the north side of I-75 for each of the Practical Alternatives to guide analysis of the Preferred Alternative. The alternatives depend on six unique interchange configurations. Each of these was examined from the standpoint of its three dimensional geometry, traffic, and receivers that would remain after alternative implementation. A series of conclusions is reached in Section 4.3 for each interchange. The general conclusions reached in performing the noise analysis along I-75 are:

- The feasibility of noise walls along the north side of I-75 is highly dependent on the amount of traffic on the service drive. Traffic intervening between a noise wall and houses along the service drive negates the effects of walls. Traffic volumes on the service drive will be a function of how traffic is routed when roads that cross over I-75 today are closed and how ramps are rearranged. Alternative #14 causes the least increase in traffic (and hence noise) on the service drive. So, it is the best prospect for feasible and reasonable noise wall justification (Table S-1) because the noise reduction from walls along I-75 would not be interfered with by noise from the service drive.
- The plaza ramps shield areas north of I-75 to various degrees such that, in a number of situations, a noise wall to provide further mitigation is not feasible, meaning it could not achieve a further 5-dBA noise reduction (see Section 3.3). For several alternatives the Beard Early Education Center could not be protected by a wall considered to be "feasible."
- Alternatives #3 and #11 with Interchange C would shift the mainline lanes of I-75 away from the residential area to the north of I-75 so fewer receivers would be affected by

noise levels above the 66-dBA criterion. The effect is most significant between Dragoon and a point east of Junction. With Alternatives #3 and #11, noise levels north of I-75 where the sensitive receivers are located would actually be lower than experienced today.

• Building noise walls at a reasonable cost is more difficult in the segments at either end of I-75 (west of Green and east of Junction). These segments have houses oriented parallel, rather than perpendicular, to the I-75 service drive and are more spread out than other segments.

The analysis performed here used 12-foot walls to test the differences among the alternatives. Work for the Preferred Alternative will optimize wall heights, lengths and positions, and each benefiting receiver will be re-examined to ensure that mitigation reduces the noise level to 66 dBA or below.

Reasonable and feasible noise walls are listed in Table S-1. During the design phase, the specific locations and configurations of noise walls are specifically defined and changes in the project may occur that may warrant the alteration or elimination of any noise walls recommended in this technical report and the EIS.

	Location/Designation	Length (Feet)	Cost	Benefiting Receivers	Cost per Ben. Rec.
Interchange C					
Alternatives #3 and #11	Wall 1 – Along Service Drive	1400	\$777,000	23	\$33,800
	Springwells to Green				
Interchange E	Wall 1 – Along Service Drive	1400	\$777,000	23	\$33,800
Alternative #5	Waterman to Livernois				
	Wall 1 - Along Service Drive to Crawford	830	\$457,000	15 ^a	\$30,500
	Springwells to Green				
	Wall 1 – Btwn Service Drive and I-75 off-ramp	330	\$184,000	25 ^b	\$25,800
	Wall 2 – Along Service Drive to Green	840	\$462,000		
	Green to Waterman				
Interchange G	Wall 1 – Along Service Drive	1310	\$724,000	23	\$31,500
Alternative #14	Waterman to Livernois				
Anternative #14	Wall 1 - Along Service Drive to Crawford	1340	\$745,000	32 ^a	\$23,300
	Dragoon to Junction				
	Wall 1 - Along Service Drive Calvary to Junction	1110	\$615,000	16	\$38,060
	Junction to Clark				
	Wall 1 – Along Service Drive to Clark	1600	\$885,000	44	\$20,100
Interchange I	Springwells to Green				
Alternative #16	Wall 1 – Btwn Service Drive and I-75 off-ramp	330	\$184,000	25 ^b	\$25,800
Anternative #10	Wall 2 – Along Service Drive to Green	840	\$462,000		

Table S-1Detroit River International Crossing Study
Practical AlternativesFeasible and Reasonable Noise Walls

^a Counting Beard EEC as ten benefiting receivers.

^b Calculation combines Walls 1 and 2.

Source: The Corradino Group of Michigan, Inc.

1. INTRODUCTION

The Detroit River International Crossing (DRIC) Study is a bi-national effort to complete the environmental study processes for the United States, Michigan, Canada and Ontario governments. The study proposes solutions that support the region, state, provincial and national economies while addressing civil and national defense and homeland security needs of the busiest trade corridor between the United States and Canada (Figure 1-1).

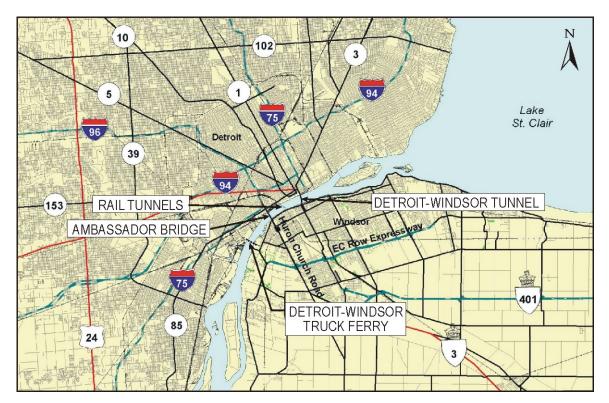


Figure 1-1 Detroit River International Crossing Study Existing Detroit River International Crossings

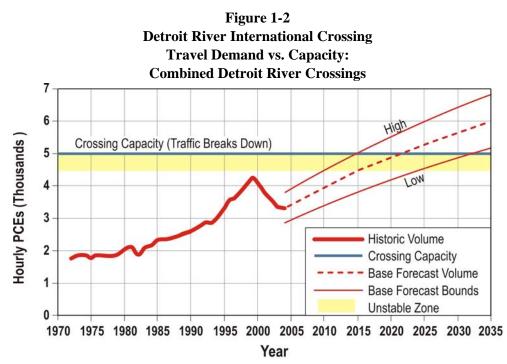
The purpose of the Detroit River International Crossing Project is to: (for the foreseeable future, i.e., at least 30 years):

- Provide safe, efficient and secure movement of people and goods across the Canadian-U.S. border in the Detroit River area to support the economies of Michigan, Ontario, Canada and the U.S.
- Support the mobility needs of national and civil defense to protect the homeland.

To address future mobility requirements (i.e., at least 30 years) across the Canada-U.S. border, there is a need to:

- Provide new border crossing <u>capacity</u> to meet increased long-term demand;
- Improve system connectivity to enhance the seamless flow of people and goods;
- Improve operations and processing capability; and,
- Provide <u>reasonable and secure crossing options</u> in the event of incidents, maintenance, congestion, or other disruptions.

Over the next 30 years, Detroit River area cross-border passenger car traffic is forecast to increase by approximately 57 percent, and movement of trucks by 128 percent. Traffic demand could exceed the "breakdown" cross-border roadway capacity as early as 2015 under high growth scenarios. Even under "low" projections of cross-border traffic, the "breakdown" roadway capacity of the existing Detroit River border crossings (bridge and tunnel combined) will be exceeded by 2033 (Figure 1-2). Additionally, the capacity of the connections and plaza operations will be exceeded in advance of capacity constraints of the roadway. Without improvements, this will result in a deterioration of operations, increased congestion and unacceptable delays to the movement of people and goods in this strategic international corridor.



Note: Figure 1-2 is from the DRIC Travel Demand Forecast Working Paper (September 2005), prepared by the IBI Group. The Passenger Car Equivalent factor (PCE) used in that report, and in Figure 1-2, is 3.0 cars per truck. SEMCOG calculates PCEs at a rate of 2.5 cars per truck in its regional roadway system. The DEIS calculates, on the ramps, the interstate system and other roadways, PCEs at 2.5 cars per truck.

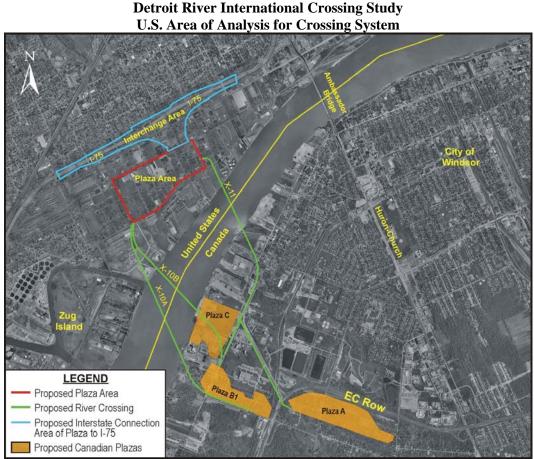
Source: IBI Group

The forecast of capacity indicates that there will be inadequacies in: 1) the roads leading to the existing bridge and tunnel; 2) the ability to process vehicles through customs and immigration; and, 3) the capacities (number of lanes) of the Ambassador Bridge and Detroit-Windsor Tunnel themselves. So, even though incremental adjustments can and will be made to the plazas and, even though there is adequate border crossing capacity today (bridge and tunnel combined), the planning, design and construction of any major international crossing takes time. Therefore, it is

prudent to address, now, how and when the capacity need is to be satisfied at the crossing itself as well as the connecting roads.

The DRIC Draft Environmental Impact Statement (DEIS) analyzes issues/impacts on the U.S. side of the border of the end-to-end crossing system over the Detroit River between Detroit, Michigan, and Windsor, Ontario, Canada. The alternatives are comprised of three components: the crossing, plaza (where tolls are collected and Customs inspections take place), and interchange connecting the plaza to I-75 (Figure 1-3). Nine alternatives exist in the U.S. These options are listed on Table 1-1 and schematically presented in Figures 1-4 and 1-5.

Figure 1-3



Source: The Corradino Group of Michigan, Inc.

Alternative	Interchange	Plaza	Crossing	Proposed Status
#1	А	P-a		Analyzed in DEIS
#2	В	P-a		Analyzed in DEIS
#3	С	P-a	X-10	Analyzed in DEIS
#5	Е	P-a		Analyzed in DEIS
#14	G	P-a		Analyzed in DEIS
#16	Ι	P-a		Analyzed in DEIS
#7	А	P-c	A	Analyzed in DEIS
#9	В	P-c	X-11	Analyzed in DEIS
#11	С	P-c] ↓	Analyzed in DEIS

Table 1-1Detroit River International Crossing StudyCrossing System Alternatives Included in DRIC DEIS

Source: The Corradino Group of Michigan, Inc.

1.1 Purpose of the Report

The purpose of the report is two-fold: 1) to provide insight into the differences among the Practical Alternatives consistent with the National Environmental Policy Act (NEPA); and 2) to abide by the policy and procedures for traffic noise analysis and abatement as indicated in Federal Regulations (23 CFR 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise* and Michigan's State Transportation Commission policy on noise abatement (Policy 10136, July 31, 2003), which includes MDOT's *Procedures and Rules for Implementation of State Transportation Commission Policy 10136 Noise Abatement* (Appendix A).

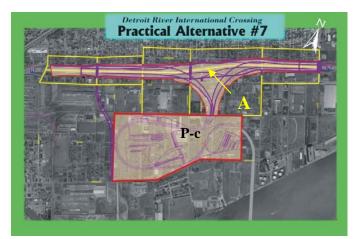
This *Noise Study Technical Report* summarizes existing and future noise conditions and indicates where noise walls should be considered under the Practical Alternatives. It supports the DRIC Environmental Impact Statement.

Figure 1-4 Detroit River International Crossing Study Schematic Representation of X-10 Crossing Alternatives #1 through #3, #5, #14 and #16



Source: The Corradino Group of Michigan, Inc. and Parsons Transportation Group

Figure 1-5 Detroit River International Crossing Study Schematic Representation of X-11 Crossing Alternatives #7, #9, #11







Source: The Corradino Group of Michigan, Inc. and Parsons Transportation Group

2. BACKGROUND

This technical report covers existing noise levels, potential future noise levels and how levels above specifically-defined criteria would be addressed, if the project were implemented. Noise levels were measured at key locations. A computer technique known as the Traffic Noise Model (Version TNM2.5) was then used to predict future noise conditions, once the model was shown to properly replicate the existing measured noise levels. Where noise levels are projected to exceed certain defined levels, noise abatement was considered. For the Practical Alternatives this is done within the TNM with 12-foot-high walls, the lengths of which take into consideration the potential effectiveness of the walls (based on the presence, position, and density of receivers) and engineering considerations such as sight distance (clear field of view) at intersections and ramps. The focus with the Practical Alternatives analysis is to differentiate among the alternatives with respect to how many houses (and other sensitive receivers translated to "equivalent dwelling units") can be reasonably protected from excessive noise levels. The alternatives vary because the location of ramps and roads that cross over I-75 vary and these dictate where walls can be placed and how effective they can be. Also, Alternatives #3 and #11 would shift the mainline of I-75 away from the residential area on the north side of I-75.

This study assumes that walls/berms will be incorporated into the engineering of the plaza for security purposes related to the border crossing and Federal Inspections Services. While these walls/berms will mitigate noise, they are not considered Type I walls under MDOT's *Noise Policy*. They are considered a part of the plaza's development costs to address security needs. Walls associated with I-75 are considered Type I walls, meaning their costs would be eligible for normal federal highway funding.

The noise unit used here is the decibel (dB). The sound spectrum is expressed for human hearing in terms of an A weighting, so the unit is called dBA. Noise levels for common sounds are expressed in dBA in Figure 2-1. A 10-dBA increase is a ten-fold increase in sound energy, but is perceived as a doubling of loudness. A 5-dBA increase is considered readily perceptible. A 3-dBA increase is a two-fold increase in sound energy and is barely perceptible to most people. This is an important relationship when discussing noise and its impacts.

In simple terms, a perceptible increase in noise is related to a doubling in traffic, or the distance between a sound source and receiver must be reduced by half. For the most part, neither will be the case with the DRIC project on I-75, but changes in traffic patterns could result in substantial changes in traffic along the southbound service drive. Many homes face the service drive or side streets that connect to the service drive.

Also, and importantly, traffic on I-75 is at a point that noise criteria are now exceeded along most of its length between Springwells Street and Clark Avenue, i.e., the footprint of the study (refer to Figure 1-3). So, even though the increase in noise resulting from the DRIC-related traffic on I-75 would not trigger the need for mitigation, noise mitigation must be considered if the DRIC project is undertaken, because noise levels already exceed the criteria.

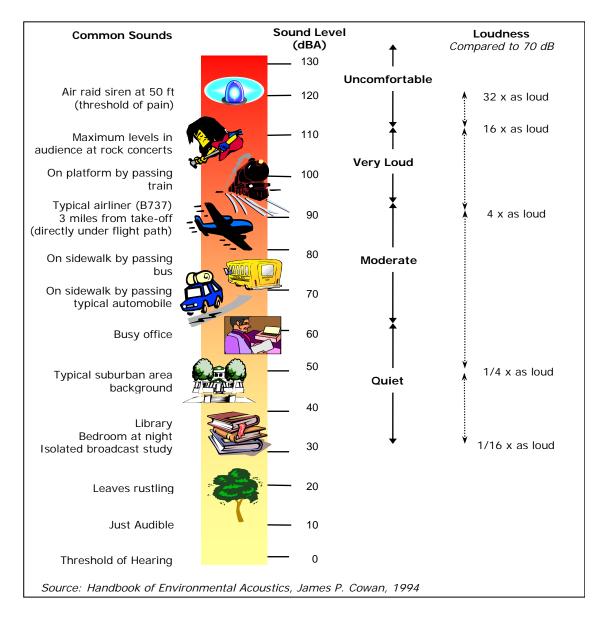


Figure 2-1 Detroit River International Crossing Study Noise Levels for Common Sounds

2.1 Definition of Impact Criteria

FHWA has promulgated Noise Abatement Criteria (NAC), which have been incorporated into MDOT's Noise Policy (Table 2-1). Federal regulations and MDOT policy focus on exterior areas, except where there are noise levels of 80 dBA (which would not occur with the DRIC). Of greatest concern are residences, churches, hospitals, parks, and libraries. Normally, mitigation is not considered in commercial areas, because commercial locations typically want their customers to be able to see their businesses, rather than being hidden from view behind a wall. For the sensitive receivers, FHWA has established an exterior noise guideline of 67 decibels (dBA), measured as an average of sound over a one-hour period (referred to as $L_{eq}(1h)$).¹ This level is not to be approached or exceeded. Should the guideline level at these sensitive receivers be approached or exceeded. Should the guideline level at these sensitive receivers be approached or exceeded. Should the guideline level at these sensitive receivers be considering mitigation is 66 dBA during the loudest hour of the day. Mitigation must also be considered if a project results in a substantial increase (10 dBA or more) in noise levels (which would not occur with the DRIC).

Along its "north" side (the side away from the Detroit River), the frontage of I-75 between Springwells and Clark Streets is predominantly occupied by single-family residential uses with some apartment buildings, an early-childhood education center, a church and some commercial uses. The 66-dBA criterion applies to all but the commercial areas. Many houses are exposed to noise levels exceeding abatement criteria today (see next section). Generally, these same areas will continue to exceed criteria with or without the project. Mitigation must be considered where new ramps would be built, the mainline of I-75 would change in horizontal and/or vertical profile, or traffic would increase on the southbound service drive, changing noise.

Table 2-1 Detroit River International Crossing Study FHWA - Noise Abatement Criteria Hourly A-Weighted Sound Level-decibels (dBA)

Activity Category	Description of Activity Category	$L_{eq}(1h)$	L ₁₀ (1h)
А	Lands on which serenity and quiet are of extraordinary significance and	57	60
	where the preservation of those qualities is essential, if the area is to	(Exterior)	(Exterior)
	continue to service its intended purpose.		
В	Picnic areas, recreation areas, playgrounds, active sports areas, parks,	67	70
	residences, motels, hotels, schools, churches, libraries, and hospitals.	(Exterior)	(Exterior)
C	Developed lands, properties, or activities not included in Categories A	72	75
	and B above.	(Exterior)	(Exterior)
D	Undeveloped lands.		
E	Residences, motels, hotels, public meeting rooms, schools, churches,	52	55
	libraries, hospitals and auditoriums.	(Interior)	(Interior)

Note: $L_{eq}(1h)$ is used in this analysis. $L_{10}(1h)$ was used in the past, but not now. It is the sound level exceeded ten percent of the time period. Source: State Transportation Commission Policy 10136 – Noise Abatement, Appendix A

¹ Title 23, Code of Federal Regulations (CFR), Part 772, revised April 1998.

3. IDENTIFICATION OF NOISE-SENSITIVE LAND USES AND EXISTING NOISE LEVELS

This section describes the steps leading up to the analysis of noise barriers: 1) noting the existing noise levels at sensitive land uses around the plaza area and at the Detroit River bridge crossings; 2) providing similar information for the I-75 interchange area; 3) indicating anticipated future noise levels in these locations with and without the project; and, 4) providing background information on when noise mitigation meets the criteria set out in MDOT's Noise Policy.

3.1 Existing Noise Conditions

Existing noise conditions were considered at the crossings, plazas, and along I-75. Also, noise measurements were made around the existing Ambassador Bridge plaza and bridge to provide a basis to define expectations at a new plaza and bridge one to two miles away.

3.1.1 Existing Crossings and Plaza Area

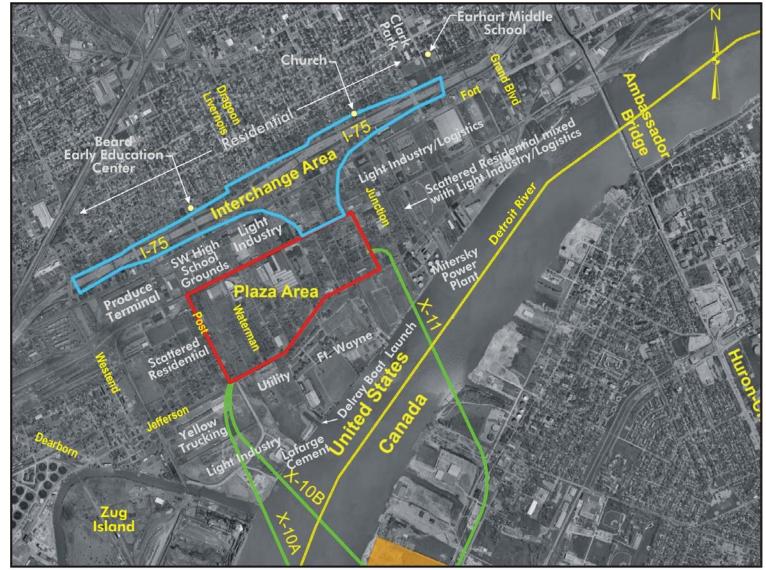
The proposed Detroit River bridges pass over industrial areas in the U.S. near the river's edge (Figure 3-1). An X-10A or X-10B bridge would cross the U.S. shoreline south of the Lafarge cement silo on Springwells Court. It would be grade-separated over Jefferson Avenue near the east end of the Yellow Trucking terminal at Post Street and come to grade level within the plaza. Several houses on the west side of Post Street would remain if Crossing X-10A or X-10B were built. Noise measurements were made in this and other areas to profile existing conditions. Detailed views of individual measurement sites and the noise data of the field work are included in Appendix B.² The noise levels around the proposed plazas are shown in the context of occupied dwelling units to provide a sense of residential density (Figure 3-2).

In the X-11 crossing corridor, the bridge would pass over Jefferson Avenue between Fort Wayne and the Mitersky Power Plant. The X-11 crossing would require the acquisition of houses along Campbell Street, but the houses on the east side of Junction Street, a block to the east, could remain. Measurements made at two locations east of the proposed plaza found noise levels of 55 dBA and 63 dBA on Campbell Street (Receiver P2) and Junction Street (Receiver P3), respectively (Figure 3-2). The principal noise source in each case is an occasional truck serving businesses in the area.

If corridor X-11 were chosen, an improved street, known as the Gateway Boulevard, on the west side of the plaza, would require acquisition of houses on Post Street (refer to the purple lines on Figure 3-2), but houses could remain a block further west on Harrington Street. So, the sensitive receivers are different, depending on the alternative. To gauge noise in this area, a measurement was made in a mid-block location on Post Street (Receiver P6) (Figure 3-2). The measurement was 58 dBA.

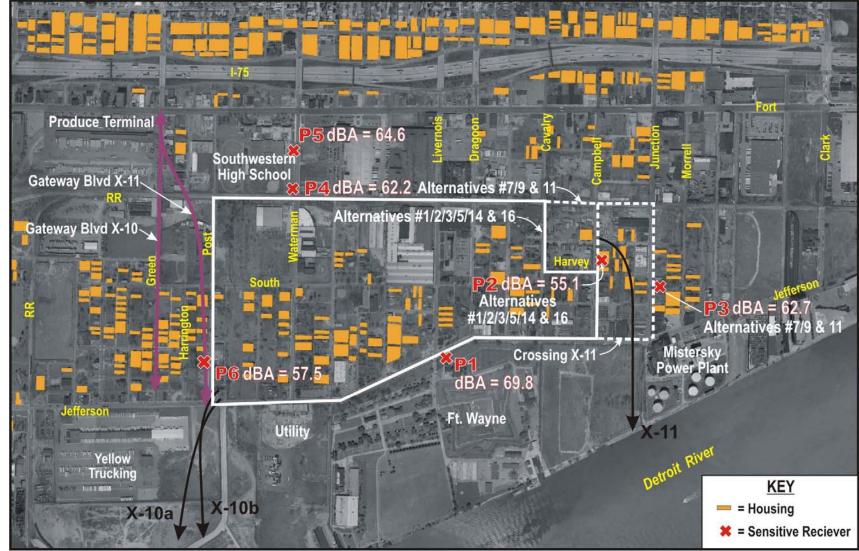
² Measurements were made in conformance with *Measurement of Highway Noise*, U.S. Department of Transportation, May 1996, and MDOT practice. A RICON NL21 noise meter was used for measurements. It was calibrated before measurements.

Figure 3-1 Detroit River International Crossing Study Project Area and Noise Sensitive Receivers



LProjects/3400/Graphics/ReportGraphics/Noise/Fig3-Ltdr Source: The Corradino Group of Michigan, Inc.

Figure 3-2 Detroit River International Crossing Study Existing Noise in Plaza Area – L_{eq}(1h)



Detroit River International Crossing Study Noise Study Technical Report 3 - 3

1:Projects/3600/Graphics/ReportGraphics/Noise/Fig3-2.cdr

Fort Wayne is a sensitive receiver common to both crossings. The nearest X-10 crossing would be approximately 400 yards away. The X-11 crossing would be approximately 300 yards away. Fort Wayne is on the *National Register of Historic Places* (NRHP) and is subject to review for impacts under Section 106 of the Historic Preservation Act. The Fort Wayne site is relatively quiet today. The primary noise source is the truck traffic on Jefferson Avenue, where a noise level reading of 70 dBA was measured on the sidewalk of Jefferson Street at the Fort's entrance (Receiver P1) (Figure 3-2). Interior to the Fort, low-level background noise can be heard from industrial processes downriver on Zug Island. There are overflights from Detroit Metropolitan Airport, ranging from the upper 50s dBA to the lower 60s dBA.

Southwestern High School is north and west of the proposed plaza areas. Its main academic building fronts onto Fort Street, with approximately 800 feet from the center of the building to the edge of the plaza area. Its gymnasium and cafeteria are adjacent to Waterman Street. Its track, ball fields and tennis courts extend further south to the railroad property that borders the school's property. Under all alternatives, the proposed plaza area would be south, across the railroad property from the school grounds. The primary noise source today at the school is truck traffic on Fort Street, which is a Michigan state trunkline (M-85). I-75, a block north, contributes background noise. The noise level measured on Waterman Street at the school's setback from Fort Street (Receiver P5 on Figure 3-2) was 65 dBA. At the south edge of the school property (Receiver P4), the measured noise level was 62 dBA. Both measurements are below the land use category B criterion of 66 dBA. Trains use the railroad tracks at the south edge of the school property and sound their horns at roadway crossings, including Post and Waterman streets. No trains were present when the noise level was measured. One feature of the proposed project would be to reroute once-a-day trains going to Zug Island so they no longer pass the school.

To aid in understanding future plaza noise in Delray, existing noise levels at the Ambassador Bridge were recorded (Appendix C) at a number of locations around the existing plaza during a period when truck activity was heavy, but not so heavy that trucks were standing at idle, which is a quieter condition. The highest noise level recorded was 66 dBA at a location within 100 feet of the plaza's truck activity, with only a chain link fence separating the noise meter from the trucks. On the other side of the plaza, where there is a 15-foot-high wall, the loudest noise level recorded was 60 dBA. Measurements taken at about 225 yards from the Ambassador Bridge, where the bridge is elevated between Fort Street and the river's edge, found the noise to be 59 dBA. As a point of reference, Fort Wayne would be at least 300 yards from the proposed X-10 and X-11 bridges.

While the bridges and plazas would generate little noise of consequence, I-75 and its heavy traffic present a different noise situation.

3.1.2 Existing I-75

The 1.7-mile section of I-75 between Springwells Street and Clark Street is densely residential on its north side (Figure 3-3). All build alternatives would change I-75 and/or its ramp system over virtually this entire distance. Noise measurements made at all nine locations on the north side (see noise data sheets and close-up aerial photography in Appendix B) exceeded the applicable criterion for land use Category B as defined in Table 2-1. Measurements of existing noise ranged from 70 to 73 dBA, versus the criterion of 66 dBA.

Figure 3-3 Detroit River International Crossing Study Existing Noise along I-75 – L_{eq}(1h)





1:/Projects/3600/Graphics/ReportGraphics/Noise/Fig3-3.cdr

Source: The Corradino Group of Michigan, Inc.

All Saints Catholic Church is on Fort Street east of Springwells Street, south of I-75. The rear of the church is on the northbound I-75 service drive. It experiences noise well above the criterion for churches (Receiver F10 – 74 dBA) (Figure 3-3). Olivet Presbyterian/Old Landmark Church of God in Christ, seven blocks to the east on Fort Street at Lewerenz is in a similar situation (Receiver F11 – 68 dBA).

Also on the south side of I-75 there is scattered single-family housing present east of Cavalry Street, centered on Campbell Street. A number of houses front on the northbound I-75 service drive between Cavalry and Junction Streets. There is a five-story, 64-unit apartment building on Campbell Street also. A measurement of existing noise along the northbound I-75 service drive in this vicinity (Receiver F12) found a noise level of 69 dBA.

Overall, these existing noise measurements would change in the future.

3.2 Future Noise Conditions

The Traffic Noise Model version 2.5 (TNM2.5), available through FHWA, was used to predict noise levels based on: roadway geometry, the location of sensitive receivers, and traffic information, such as speed and the mix of vehicles. Computer model runs were made for existing, no-build, and build conditions. Model runs of existing conditions were compared to actual field measurements to ensure the accuracy of the input to the model. Anticipated noise levels at crossings and plazas are discussed next, followed by a discussion of I-75 and its southbound service drive, which is north of the mainline freeway.

3.2.1 Future Noise Levels at Crossings and Plazas

In the absence of the DRIC project, there is little to suggest any substantial noise changes in Delray near the proposed crossings or plazas. Local noise levels would be a function of development that might occur in the vicinity of the bridge and/or plaza and truck travel patterns. Because Fort Street and/or Jefferson Avenue would not experience a doubling or halving of traffic, no noticeable change in noise is expected along either. Changes would, most likely, be on low-volume local streets that experience development of a kind that generates substantial new traffic.

With the DRIC project, an X-10 crossing is expected to generate a maximum noise level of 58 dBA (Table 3-1) at its nearest approach to Fort Wayne (400 yards), similar to the 59-dBA noise level measured at the Ambassador Bridge (Appendix C). An X-11 crossing would be 300 yards away from Fort Wayne, so it is expected to generate a higher noise level – 62 dBA. These relatively low noise levels (akin to an office) are partly attributable to the relationship of vehicular noise to speed. As speed decreases, noise decreases. The bridge, plaza and connection to I-75 would comprise a relatively low-speed system, certainly when compared to the interstate system. The bridge and ramps to I-75 would be signed at 35 miles per hour (until the point on the on ramps when the driver starts to merge onto I-75), while vehicle operations on the plaza would be slower.

Rec.	Receiver Location	Existing Measured	No Action	Alts #1/2/3/ 5/14/16	Alts #9/7/11
P1	Fort Wayne near Entrance	70	70	64	65
P2	East Side Campbell St.	55	55	57	NA
P3	East Side Junction St.	63	63	NA	63
P4	Southwestern High School near Fort Street	65	65	60	62
P5	Southwestern High School near Railroad	62	62	58	64
P6	Post Street	58	58	65	NA
P7	Harrington Street	NA	NA	59	62

Table 3-1 Detroit River International Crossing Study Plaza Area Noise Levels – L_{eq}(1h)

Source: The Corradino Group of Michigan, Inc.

Around the plaza, "build condition" noise levels would also be relatively low (Table 3-1). It is noted that Plaza P-a, the plaza of Alternatives #1, #2, #3, #5, #14 and #16, was modeled with safety barriers only on the bridge structure itself. These are the common 42-inch-high safety barriers used on interstate highways to keep vehicles from leaving the road. Besides providing a safer road, they reduce tire/pavement noise. Even with no other barriers than these, noise levels would fall within the criteria at the closest receivers to the plaza boundaries. The planned security walls around Plaza P-a, which were not taken into account, would reduce noise further than the levels shown in Table 3-1.

Plaza P-c, the plaza used by Alternatives #7, #9, and #11, was modeled with safety barriers on the bridge structure itself and walls along Jefferson Avenue and the railroad tracks. The layout of Plaza P-c routes traffic closer to the plaza edge than occurs with Plaza P-a, and traffic with Plaza P-c would approach Fort Wayne and the Southwestern High School grounds close enough that noise levels would warrant consideration of walls, if they were not already part of the plaza's construction. Modeling indicates if the walls that would be built with Plaza P-c were 10- to 12-feet high, noise levels outside the plaza would fall within establish noise abatement criteria. Neither Southwestern High School nor Fort Wayne would meet the reasonability criteria under MDOT's Noise Policy (see Section 3.3).

3.2.2 Future (2035) Noise Levels along I-75

Modeling of noise along I-75 is considerably more complex than modeling noise around the plaza area. The mainline of I-75 has low points where it passes beneath cross streets. Between these points, I-75's roadbed rises to a level closer to the surrounding ground elevation in order to better connect to the ramp system. Receivers near the higher sections of I-75 are exposed to more noise, because the noise propagates more directly from roadway to receiver.

Noise modeling is further complicated by the presence of service drives, which also carry traffic and contribute noise to adjacent houses. Likewise, several cross streets carry sufficient traffic today to contribute to the noise levels of 66 dBA, or above, at receivers on those streets. Receivers on those cross streets were not included in the analysis because it is not feasible to protect them from the multiple sources of noise around them. In other words, while these receivers could be shielded from I-75 noise, walls would not be built on the sidewalks in front of

them to shield noise emanating from cross streets that connect to the I-75 service drives. Carrying that concept further, Lafayette Street parallels the southbound service drive between Green and Cavalry Streets. It contributes noise to the "back side" of houses in the service drive area. So, receivers that are within two to three lots of Lafayette were not analyzed, as they receive noise from Lafayette, which would continue even if mitigation of I-75 noise were successful.

Similarly, All Saints Catholic Church, on Fort Street near Springwells, and the Old Landmark Church, west of Waterman Street, were not included in the analysis because they are surrounded by traffic noise from Fort Street that will continue with or without the project. The churches would experience negligible noise changes from the project and would not qualify for special (sound insulation) noise mitigation because exterior noise levels are below 80 dBA.

The housing present on the south side of I-75 at the east end of the project was not included in the analysis because the dwelling units there, including the 64-unit apartment house on Campbell Street, would be acquired by all the build alternatives, if the project were approved.

The travel demand model used to generate future traffic shows the volumes on I-75 increasing about three percent between 2004 and 2035, which translates to a negligible change in noise.³ As noted earlier, it takes a doubling or halving of traffic to get a 3-decibel noise level change. So, a three percent traffic change is small. Specifically, the equation showing the change in noise related to changes in traffic volumes is shown as:

10 x log (new volume/old volume) = Noise level change

When examining PM peak hour, two-way traffic volumes on I-75 for 2035 (new volume = 10,852) and 2004 (old volume = 10,503) near Springwells and putting those volumes into the equation, the result would be:

Travel modeling shows traffic on <u>local</u> roads in 2035 to be lower than today's.

Project changes generally would not subject new or different dwelling units to noise from I-75, as traffic would change so little. (I-75's alignment is shifted south under Alternatives #3 and #11 and that has been taken into account.) The factors that differentiate alternatives are:

- The number of dwelling units possibly subject to acquisition;
- How an alternative affects traffic on the southbound I-75 service drive; and,
- The effects of the flyover ramps to and from the plaza.

If an alternative requires acquisition of dwelling units, they are no longer included in the noise analysis. When a cross street or ramp is closed and traffic takes a new route using the southbound service drive, the potential exists to increase noise levels for some receivers. The position of flyover ramps to and from the plaza affects how receivers are shielded from I-75 noise.

Taking all the above into consideration, the three-dimensional roadway geometry and associated traffic were entered into the TNM. The results are a determination of the ranges of noise along I-

³ The Corradino Group of Michigan, Inc., *DRIC Traffic Analysis Report*, December 2007.

75 and the number of sensitive receivers experiencing noise levels at or above the 66-dBA criterion, today and in the future (Table 3-2).

			L _{eq} (1h) No	ise Levels			
Key Data l		Springwells to Green	Green to Waterman	Waterman to Livernois	Dragoon to Junction	Junction to Clark	Total
Modele	d Receivers ^a	23	29	21	64	48	185
# DUs]	Represented	26	61	23	94	51	255
	s/Churches	NA	NA	Beard EEC	Military Avenue Church	NA	NA
s	Existing (2006)	67-76	65-72	68-76	64-74	65-77	NA
Modeled Noise Levels	No Build (2035)	67-76	65-72	68-76	64-74	65-77	NA
ise	Alts #1/#7	68-74	66-73	68-77	63-72	64-78	NA
N0	Alts #2/#9	68-74	66-72	66-71	64-73	64-78	NA
eled	Alts #3/#11	67-74	66-71	69-74	61-67	63-77	NA
Iode	Alt #5	69-76	66-69	71-75	63-70	65-78	NA
N	Alt #14	67-75	66-71	68-78	63-74	66-78	NA
	Alt #16	67-76	65-72	66-71	64-73	65-77	NA
	Existing (2006)	26	49	33 ^b	70 ^c	46	224 ^{b,c}
dBA	No Build (2035)	26	49	33 ^b	70 ^c	46	224 ^{b,c}
99	Alts #1/#7	25	43	21	62	47	198
# DU over 66 dBA	Alts #2/#9	25	35	18	72	48	198
	Alts #3/#11 ^d	25	43	32	23	38	161
	Alt #5	25	40	17	45	41	168
*	Alt #14	25	52	32	66	47	227
	Alt #16	25	35	18	72	48	198

Table 3-2Detroit River International Crossing StudyExisting and Future (2035) Alternative Noise Conditions – No MitigationL_{eq}(1h) Noise Levels

^a Build alternatives have somewhat fewer modeled receivers and DUs represented, as some receivers would be acquired by the project.

^b Counting the Beard Early Child Center as 10 DUs, per MDOT's Noise Policy.

^c Counting the Military Avenue Church as 10 DUs.

^d Given the shift in the I-75 alignment, there are considerably fewer impacted receivers between Dragoon and Junction and a portion of the segment between Junction and Clark.

Source: The Corradino Group of Michigan, Inc.

Under existing and No Build conditions, the analysis found that approximately 224 dwelling units between Springwells Street and Clark Street along the north side of I-75 would be exposed to noise levels exceeding the 66-dBA criterion. This figure counts the Beard Early Education Center (EEC) and Military Avenue Church as the equivalent of ten dwelling units each, consistent with MDOT's noise policy (see next subsection and Appendix A). The All Saints Catholic Church and Old Landmark Church do not so qualify because they are not associated with adjacent residential use. Alternative #14 would result in the greatest noise exposure (227 dwelling units, prior to mitigation).

Though the build alternatives all would require acquisition of dwelling units, none of the alternatives is expected to require acquisition of the Beard EEC building. It must be avoided because it is on the *National Register of Historic Places* (23 U.S. Code 138), and because there would be a prudent and feasible alternative to use of this property.

3.3 Noise Mitigation Considerations

The test of whether noise mitigation should be pursued under MDOT's *Noise Policy* rests on whether such mitigation is feasible and reasonable. The "feasible" test relates to whether mitigation is physically or institutionally possible and can achieve the desired noise reduction of at least five decibels. Feasible solutions can generally be achieved, but not always. For example, there are engineering limitations on noise wall height, especially on bridges. Some noise sources cannot be controlled with a noise wall, or noise may be pervasive from several roadway sources. Additionally, noise wall construction must adhere to safety criteria, i.e., walls must be clear of intersections and be positioned in ramp merge areas so that motorists have a clear field of view.

The "reasonable" test addresses whether noise mitigation is cost-effective. This involves examination of how many sensitive receivers can benefit per dollar invested in building the wall. The current inflation-adjusted value allowed per benefiting dwelling unit is \$38,060 (2007 dollars). This applies to those units that would experience at least a 5-decibel reduction in the loudest hour. The current cost to construct a noise wall includes \$25.00 per square foot, plus \$250.00 per linear foot for wall foundation, drainage, and other considerations. So, for example, a ten-foot high wall would cost, in total, \$500 per linear foot at welve-foot wall would cost \$550 per linear foot for a typical installation.

Noise mitigation falls into two general project categories. "Type I" projects involve new roadway construction of a type that increases roadway capacity, i.e., projects that could serve greater traffic volumes and hence generate more traffic noise. These are eligible for federal funding through FHWA as a normal part of project construction. "Type II" projects may be described as retrofits associated with independent noise mitigation not related to any roadway capacity increase.

With the Practical Alternatives, noise mitigation along I-75 would be Type I and be included as a normal part of the I-75 project's federal funding (subject to local review and approval of property owners). With the No Build Alternative, any mitigation would not be Type I. It would be considered Type II. While MDOT does undertake Type II projects, funding is limited:

"MDOT will construct Type II sound walls only in years when MDOT's Road and Bridge Program, excluding maintenance, exceeds \$1.0 billion, adjusted to the Consumer Price Index (CPI) using 2002 as the base year. MDOT will not spend more than one half of one percent of the budget on sound walls. MDOT will give priority to those communities where the freeway was constructed through an existing neighborhood and where 80 percent or more of the existing residential units were there prior to the construction of the freeway. Communities must make application to MDOT and provide a local match of 10 percent of the cost of the sound wall."⁴

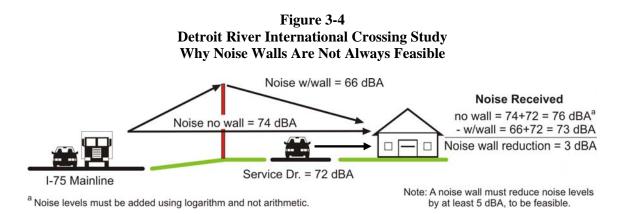
⁴ Michigan State Transportation Commission Policy, *Noise Abatement*, July 31, 2003.

A number of potential mitigation measures may be considered to reduce noises levels. These include lowering the roadway profile, restricting or prohibiting truck traffic, reducing traffic speeds, insulating public use or nonprofit institutional structures, and constructing noise berms or walls. Some lowering of the roadway will occur in the depressed section of I-75 to gain more clearance under bridges. But, connections to the numerous ramps, and the grades and tapers associated with these ramps, prevent lowering the freeway any more than it would be with the project. For these reasons, lowering the roadway profile in any substantial way is not considered feasible or reasonable.

Restricting or prohibiting truck traffic is not feasible because I-75 is an interstate highway specifically designed to accommodate commercial traffic. Similarly, lowering the speed limits for noise reduction is counter to the purpose of moving people and goods in an efficient manner over the interstate highway system. MDOT is committed to maintaining speed limits that allow safe and efficient travel, which means, maintaining a 55 mph speed limit in this section of I-75.

Noise barriers consist of earthen berms or walls, or combinations of the two. Berms occupy considerable space. In the I-75 corridor, space is at a premium due to needs for drainage and service drives and the presence of dense development. Construction of berms could also require property acquisition, meaning additional relocations and local tax base loss. Generally, if new land is needed, berms are not reasonable. This leaves noise walls as the preferred mitigation. Under special circumstances, insulating public use or nonprofit institutional structures can be considered.

A primary challenge to successful noise abatement along I-75 is the potential increase in traffic on the southbound service drive of I-75. Traffic here would reduce the effectiveness of noise walls placed in their preferred location between the I-75 mainline lanes and the service drive. The schematic provided in Figure 3-4 illustrates this point. Even though the noise wall cuts I-75 noise by 8 dBA, noise from the service drive is not reduced. Overall, the noise at the receiver is reduced by only 3 dBA. For a wall to be feasible, it must reduce noise 5 dBA. This is thoroughly reviewed in the next section.



Source: The Corradino Group of Michigan, Inc.

4. NOISE BARRIER ANALYSIS

4.1 General Considerations

Noise mitigation was examined for all sensitive (primarily residential) areas along the corridor where traffic-generated noise was expected to be 66 dBA or higher. Noise walls were modeled for placement between the I-75 mainline lanes and the southbound service drive, or between ramps and the service drive. In this position, they are on MDOT property and are effective in reducing noise. Effectiveness is compromised if service drive traffic becomes excessive. The service drive is signed at 35 mph and vehicles generally operate at this speed or below. At such speeds engine noise predominates over road and tire noise. Where service drive traffic reduces the effectiveness of walls between I-75 and the service drive, the use of sound absorbing material could be used on the residential side of the wall to reduce reflected noise.

Where ramps would be present, mainline and ramp walls were overlapped in the modeling to minimize gaps. The walls in this analysis were positioned with sight distance and clear-view angle distances taken into account in ramp areas and at intersections of the service drives with cross streets. Walls must end some distance away from intersections. Sometimes commercial uses are at these intersections. So, ending walls in these areas does not always limit the protection afforded to residential receivers.

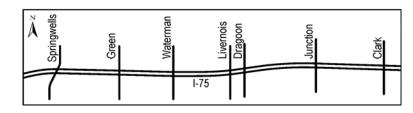
Where traffic on the southbound service drive erodes the feasibility of noise walls located between mainline I-75 and the service drive, noise walls could be positioned at the edge of the service drive nearest the adjacent houses. The service drives are local Detroit streets, not MDOT-maintained roads. This means that any such walls would ultimately be "owned" by the city of Detroit. So, wall construction would require an agreement with the City to accept ownership of the walls. Based on an agreement signed at the time of construction, MDOT would maintain the structural integrity of the walls for five years, at which time Detroit would accept ownership and maintenance of the walls. Other factors are also involved:

- Many local roads and alleys access the service drive. Any breaks in the noise wall for such roads will reduce the wall's effectiveness. Many of the roadways would have to be closed to be able to construct a feasible noise wall along the service drive.
- The acquisition of properties along the service drive for the purpose of building a noise wall would reduce the number of dwelling units benefiting from the walls and possibly eliminate the reasonableness of the abatement.

Placement of walls in this position has not been analyzed for the Practical Alternatives because of the conditions noted above, and others. Nonetheless, this option does remain, if the local community wishes to pursue it, the City of Detroit is willing to accept ownership of the noise walls, and a better overall solution cannot be reached. So, when a Preferred Alternative is identified, an analysis will be done to determine whether wall positioning of this type has merit.

The noise wall analysis examined five segments demarcated by streets that cross I-75. The sections considered are listed below. Except under Interchange #5/Alternative #14, the section between Livernois and Dragoon was not considered a feasible location for a noise wall due to traffic noise on Livernois Avenue, Dragoon Street, and Lafayette.

- Springwells to Green
- Green to Waterman
- Waterman to Livernois
- Dragoon to Junction
- Junction to Clark



4.2 Segment-by-Segment Considerations - Traffic

A schematic diagram of the ramp positions and the streets that would remain open across I-75 is provided in Figure 4-1 for each Practical Alternative. The discussion focuses on the southbound service drive and the ramps to and from it, as this is where walls could be placed to potentially benefit sensitive receivers. It is noted that all alternatives, except Alternatives #14 and #16, which are associated with Interchanges G and I, respectively, would eliminate the ramps on the north side of Springwells and on the south side of Clark. (Alternatives #14 and #16 would leave the Springwells ramps.) Closing those ramps results in more traffic on the service drive. Springwells, the Livernois/Dragoon one-way pair and Clark Street are the primary routes into Delray to the south and Southwest Detroit to the North.

The following discussion of traffic, noise and walls for mitigating noise is organized around the interchange designs, each of which has one or more alternatives associated with it. Likely traffic shifts are noted for each interchange.

4.2.1 Interchange A – Alternatives #1 and #7

Interchange A would replace southbound I-75 off-ramps at Dragoon and Springwells with an offramp in the vicinity of Junction that would serve traffic wishing to use Dragoon. The southbound on-ramps at Clark and Livernois would be replaced by a new Livernois ramp.

<u>Springwells to Green</u> – With the off-ramp to Springwells eliminated, there would be no noise from that ramp; however, Springwells-bound traffic would exit sooner, between Junction and Dragoon, and follow the service drive south, which would place the traffic closer to homes, over a longer distance.

<u>Green to Waterman</u> – Traffic on the southbound I-75 service drive would increase for the same reason.

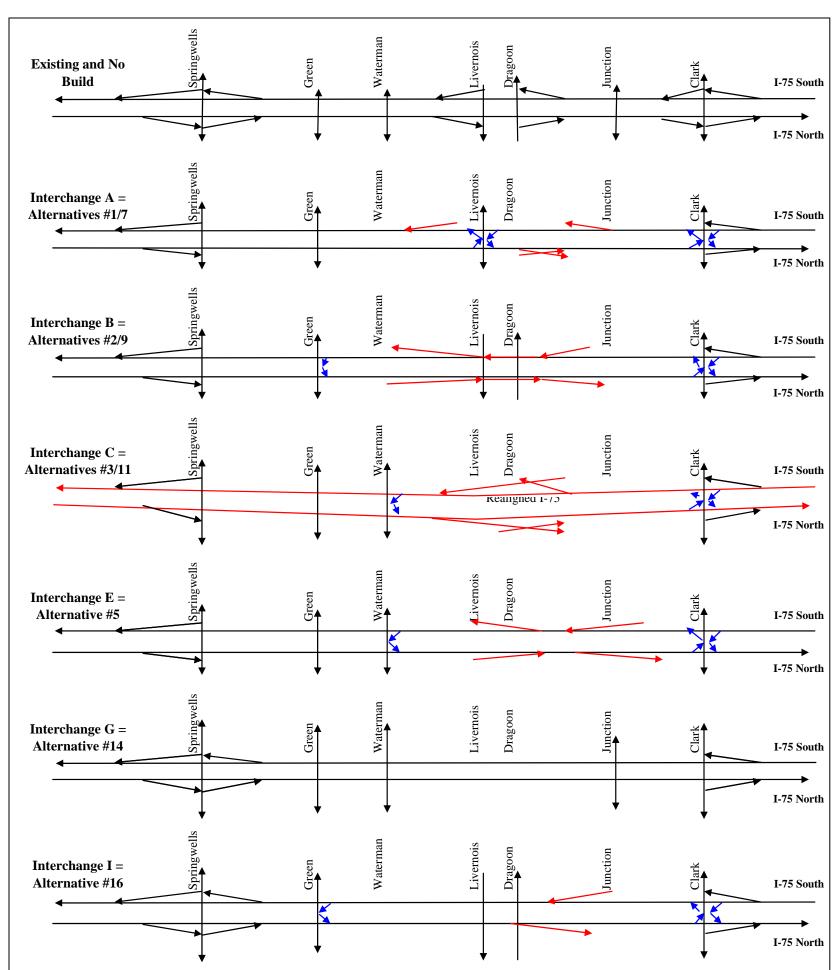
<u>Waterman to Livernois</u> - Traffic on the southbound I-75 service drive would increase for the same reason, plus traffic that now accesses I-75 at Clark Street would proceed south to the Livernois on-ramp.

<u>Dragoon to Junction</u> – Traffic now exiting I-75 at Springwells would exit sooner at Dragoon. Traffic that now accesses I-75 at Clark would proceed south to the Livernois on-ramp.

Junction to Clark – Traffic that now accesses I-75 at Clark would proceed south to the Livernois on-ramp.

In summary, traffic on the southbound I-75 service drive would likely increase over its entire length between Clark and Springwells.

Figure 4-1 Detroit River International Crossing Study Local Road and Ramp Closures and Additions



If a link is gone, it is not in future scenario = new or revised ramp = new crossover u-turn

= new crossover u-turn Source: The Corradino Group of Michigan, Inc. and Parsons Transportation Group

4.2.2 Interchange B – Alternatives #2 and #9

Interchange B would provide a southbound I-75 off-ramp past Livernois and an on-ramp before Dragoon.

<u>Springwells to Green</u> - With the I-75 off-ramp to Springwells eliminated, there would be no noise from that ramp; however, Springwells-bound traffic would exit east of Waterman and follow the service drive south. With the Livernois on-ramp to I-75 closed, traffic from Livernois would proceed on the southbound service drive to Springwells, adding traffic along the service drive.

<u>Green to Waterman</u> – The same comments apply as with the Springwells-to-Green section.

<u>Waterman to Livernois</u> – With the Livernois on-ramp to I-75 closed, traffic that now accesses I-75 at Livernois would proceed on the southbound service drive to Springwells, adding traffic along the service drive.

<u>Dragoon to Junction</u> – Traffic would be reduced on this section as it would access I-75 prior to this area and there would be no off-ramp.

<u>Junction to Clark</u> – Traffic that now leaves I-75 at Clark would proceed south to the Junction onramp.

In summary, traffic on the southbound I-75 service drive would increase over most of its length between Clark and Springwells, except between Dragoon and Junction where traffic would be reduced.

4.2.3 Interchange C – Alternatives #3 and #11

Interchange C would include "braiding" the off-ramp to Dragoon with the on-ramp near Cavalry Street. Braiding means one ramp bridges over another so the ramps can fit more tightly into a space along the freeway.

<u>Springwells to Green</u> – Traffic that now accesses I-75 at Livernois would travel south to access the freeway at Springwells.

Green to Waterman - The comment for the Springwells-to-Green section applies here.

<u>Waterman to Livernois</u> - The comment for the Springwells-to-Green section applies here.

<u>Dragoon to Junction</u> – A portion of this section would experience reduced traffic, as traffic could access I-75 near Cavalry and there would be no exit at this location.

<u>Junction to Clark</u> – All the traffic now accessing I-75 at Clark would proceed south on the service drive.

In summary, traffic on the southbound I-75 service drive would increase over most of its length between Clark and Springwells. Removing the Livernois and Dragoon bridges over I-75 would reduce the interaction of traffic with Fort Street and generally decrease traffic in the area.

4.2.4 Interchange E – Alternative #5

Interchange E would operate in a similar manner to Interchange B, except that Waterman would continue to cross I-75 and Livernois and Dragoon would not.

<u>Springwells to Green</u> – With the off-ramp to Springwells eliminated there would be no noise from that ramp; however, traffic would exit I-75 east of Waterman and follow the service drive south to Springwells, which would place the traffic closer to houses. Traffic that now accesses I-75 at Livernois would proceed on the southbound service drive to Springwells, adding traffic.

<u>Green to Waterman</u> – The comments for the Springwells-to-Green section apply here.

Waterman to Livernois – The comments for the Springwells-to-Green section apply here.

<u>Dragoon to Junction</u> – Traffic on the southbound service drive from west of Livernois to east of Junction would be reduced, as it would enter I-75 prior to this section and exit from I-75 after this section.

<u>Junction to Clark</u> – Traffic now accessing I-75 at Clark would proceed south on the service drive to Junction.

In summary, traffic on the southbound I-75 service drive would increase over most of its length between Clark and Springwells, except between Junction and Livernois where traffic would be reduced. Removing the Livernois and Dragoon bridges over I-75 would reduce the interaction of traffic with Fort Street and generally decrease traffic in the area.

4.2.5 Interchange G - Alternative #14

Interchange G would remove all on- and off-ramps to the local street network between the Springwells interchange, which would remain intact, and the Clark interchange.

<u>Springwells to Green</u> – All the traffic wishing to enter southbound I-75 would accumulate between Clark and Springwells, increasing traffic on the service drive.

<u>Green to Waterman</u> – The comment for the Springwells-to-Green section applies here.

<u>Waterman to Livernois</u> – The comment for the Springwells-to-Green section applies here.

<u>Dragoon to Junction</u> – The comment for the Springwells-to-Green section applies here.

Junction to Clark – The comment for the Springwells-to-Green section applies here.

In summary, traffic on the southbound I-75 service drive would increase over its entire length between Clark and Springwells. But, removing the Livernois and Dragoon bridges over I-75 would reduce the interaction of traffic with Fort Street and generally decrease traffic in the area. The lack of ramps in the area would also reduce overall traffic on the service drive.

4.2.6 Interchange I – Alternative #16

Interchange I would shift the southbound on-ramp from Clark to the Junction Street area. There would be no off-ramp between Clark and Springwells, but Springwells would have a full interchange with all ramps.

<u>Springwells to Clark</u> – All the traffic wishing to enter southbound I-75 would accumulate between Campbell and Springwells, increasing traffic on the service drive.

<u>Green to Waterman</u> – The comment for the Springwells-to-Green section applies here.

<u>Waterman to Livernois</u> – The comment for the Springwells-to-Green section applies here.

<u>Dragoon to Junction</u> – Traffic on this segment would be similar to No Build conditions.

<u>Junction to Clark</u> – The traffic getting on at Clark in the future would travel another five blocks over this section to get on at Junction, and Dragoon traffic would exit early at Clark Street.

In summary, traffic would increase between Junction and Clark as the on-ramp is shifted and Dragoon traffic would exit early at Clark Street. The Livernois and Dragoon bridges would remain for local access.

4.3 Noise Wall Analysis

Because the ramp positions would vary by alternative, so would noise wall locations and effectiveness. For the Practical Alternatives, the effects of uniform 12-foot-high walls were tested for each alternative. Such walls typically provide reasonable noise abatement along depressed freeways when placed at the top of the bank between the mainline lanes and the service drive. For purposes of this analysis, the Beard Early Education Center (EEC) and the Military Avenue Church were each counted as the equivalent of 10 dwelling units.

It is noted that this analysis is based on preliminary traffic estimates. Conclusions may change when more refined data are available.

Walls that were analyzed by alternative are listed in Table 4-1 and are shown on Figures 4-2a to 4-2e. The results by alternative are presented next.

4.3.1 Interchange A – Alternatives #1 and #7

Alternative #1 is the same as Alternative #7 along I-75, except the latter has slightly lower volumes on the ramps to and from the plaza. There is a negligible difference between the alternatives when background traffic is considered, so the discussion below applies to both.

Between <u>Springwells and Green</u> a noise wall does not prove reasonable, as the cost per benefiting dwelling unit is \$43,200 (Table 4-1), above the criterion that limits the unit cost to \$38,060. The reason for this conclusion is the low-density of housing along this section, as many lots face cross streets and present their long dimension to the freeway.

Table 4-1 Detroit River International Crossing Study Noise Wall Analysis (12-foot Walls) (See Figures 4-2a to 4-2f)

Interchange A Iternatives #1 and #	Location/Designation pringwells To Green Wall 1 – Along Service Drive Freen to Waterman to Livernois Wall 1 – Along Service Drive to E of Casgrain Wall 2 – Along Plaza Ramp to SB I-75 Wall 3 – Livernois ramp to SB I-75 ragoon to Junction Wall 1 – Campbell area Wall 2 – Along Ramp from SB I-75 to Plaza	(Feet) 1400 1750 450 210	Cost \$777,000 \$965,000 \$214,000 \$118,000	Receivers 18 20 0 1	Ben. Rec. \$43,200 \$48,200 Not feasible
Interchange A Iternatives #1 and #	Wall 1 – Along Service Drive Green to Waterman to Livernois Wall 1 – Along Service Drive to E of Casgrain Wall 2 – Along Plaza Ramp to SB I-75 Wall 3 – Livernois ramp to SB I-75 Tragoon to Junction Wall 1 – Campbell area	1750 450 210	\$965,000 \$214,000	20 0	\$48,200
Interchange A Alternatives #1 and	Areen to Waterman to Livernois Wall 1 – Along Service Drive to E of Casgrain Wall 2 – Along Plaza Ramp to SB I-75 Wall 3 – Livernois ramp to SB I-75 ragoon to Junction Wall 1 – Campbell area	1750 450 210	\$965,000 \$214,000	20 0	\$48,200
Interchange Alternatives #1 a	Wall 1 – Along Service Drive to E of Casgrain Wall 2 – Along Plaza Ramp to SB I-75 Wall 3 – Livernois ramp to SB I-75 ragoon to Junction Wall 1 – Campbell area	450 210	\$214,000	0	
Interchan Alternatives #	Wall 2 – Along Plaza Ramp to SB I-75 Wall 3 – Livernois ramp to SB I-75 ragoon to Junction Wall 1 – Campbell area	450 210	\$214,000	0	
Interch Alternative	Wall 3 – Livernois ramp to SB I-75 ragoon to Junction Wall 1 – Campbell area	210	. ,	-	
Alternai	ragoon to Junction Wall 1 – Campbell area		+,		\$118,000
Alter I	Wall 1 – Campbell area	200			\$110,000
₹ v		380	\$208,000	0	Not feasible
		520	\$253,000	0	Not feasible
Ju	unction to Clark		+=+++++++++++++++++++++++++++++++++++++		
	Wall 1 –Along Service Drive to Clark	1740	\$960,000	24	\$40,000
	pringwells to Green				
64 V	Wall 1 – Along Service Drive	1400	\$777,000	18	\$43,200
a Ta Gu	reen to Waterman to Livernois				
V 5 a	Wall 1 – Along Service Drive to E of Waterman	1720	\$949,000	22	\$43,100
	Wall 2 – Along Ramp to SB I-75	900	\$424,000	0	Not feasible
	ragoon to Junction				
v nat	Wall 1 – Along Service Drive near Campbell	690	\$381,000	0	Not feasible
v ter I	Wall 2 – Along Ramp from SB I-75, then to Junction	540	\$302,000	0	Not feasible
• • •	unction to Clark				
	Wall 1 – Along Service Drive to Clark	1740	\$961,000	21	\$45,800
Sp	pringwells to Green				
$\equiv v$	Wall 1 – Along Service Drive	1400	\$777,000	23	\$33,800
# G	reen to Waterman				
v and e C	Wall 1 – Along Service Drive	1310	\$725,000	3	\$241,700
	Vaterman to Livernois				
v es v	Wall 1 – Along Service Drive to Casgrain	520	\$290,000	1	\$290,000
v Itiv	Wall 2 – Along Ramp to SB I-75	740	\$348,000	0	Not feasible
L I I DI	ragoon to Junction				
v Ite	Wall 1 – Along Ramp from SB I-75	660	\$368,000	0	Not feasible
Ju	unction to Clark				
	Wall 1 – Along Service Drive to Clark	1730	\$956,000	24	\$39,800
	pringwells to Green				
	Wall 1 – Along Service Drive	1400	\$777,000	23	\$33,800
⊡ vo Gi	reen to Waterman				
v ke	Wall 1 – Along Service Drive	1310	\$724,000	10	\$72,400
	Vaterman to Livernois				
	Wall 1 – Along Service Drive to Crawford	830	\$457,000	15 ^a	\$30,500
I ite	ragoon to Junction				
v	Wall 1 – Along Service Drive Cavalry to Morell	1630	\$905,000	1	\$905,000
	unction to Clark				
V	Wall 1 – Along Service Drive to Clark	1470	\$811,000	10	\$81,100

Table 4-1 (continued) Detroit River International Crossing Study Noise Wall Analysis

	Springwells to Green				
	Wall 1 – Btwn Service Drive and I-75 off-ramp	330	\$184,000		
-	Wall 2 - Along Service Drive to Green	840	\$462,000	25	\$25,800 ^b
e G #14	Green to Waterman				
			\$724,000	23	\$31,500
ha	Waterman to Livernois				
erc	Wall 1 - Along Service Drive to Crawford	1340	\$745,000	32 ^a	\$23,300
Interchang	Dragoon to Junction				
	Wall 1 - Along Service Drive Cavalry to Junction	1110	\$615,000	16	\$38,060
	Junction to Clark				
	Wall 1 – Along Service Drive to Clark	1600	\$885,000	44	\$20,100
	Springwells to Green				
	Wall 1 – Btwn Service Drive and I-75 off-ramp	330	\$184,000		
	Wall 2 – Along Service Drive to Green	840	\$462,000	25	\$25,800 ^b
Interchange I Alternative #16	Green to Waterman to Livernois				
ng	Wall 1 – Along Service Drive to E of Waterman	1720	\$949,000	22	\$43,000
ati	Wall 2 – Along Ramp to SB I-75	900	\$424,000	0	Not feasible
ern	Dragoon to Junction				
VIto II	Wall 1 – Along Service Drive near Campbell	690	\$381,000	0	Not feasible
4	Wall 2 – Along Ramp from SB I-75, then to Junction	540	\$302,000	0	Not feasible
	Junction to Clark				
	Wall 1 – Along Service Drive to Clark	1740	\$961,000	21	\$45,800
	Beard FEC as ten benefiting receivers				

(12-foot Walls) (See Figures 4-2a to 4-2f)

^a Counting Beard EEC as ten benefiting receivers.

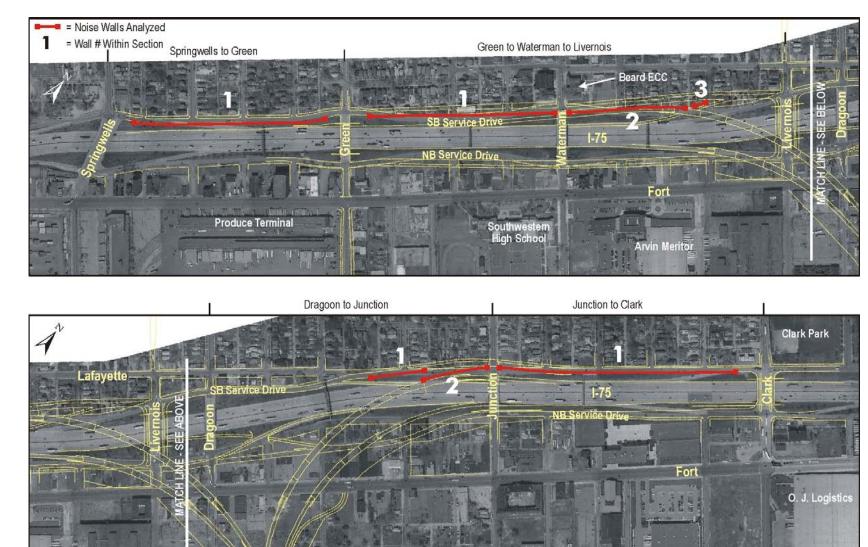
^b Calculation combines Walls 1 and 2.

Source: The Corradino Group of Michigan, Inc.

<u>Between east of Green and Livernois</u> a wall was tested that would parallel the service drive to a point past Waterman (which would be closed) then would transition to a second wall related to the flyover ramp connecting the plaza to southbound I-75. This would maintain a wall at the high point in the area of the flyover. A third wall would extend farther along the service drive to shield noise from the Livernois on-ramp to southbound I-75. The flyover ramp was assumed to be on fill material once it crosses the Livernois southbound on ramp to I-75.

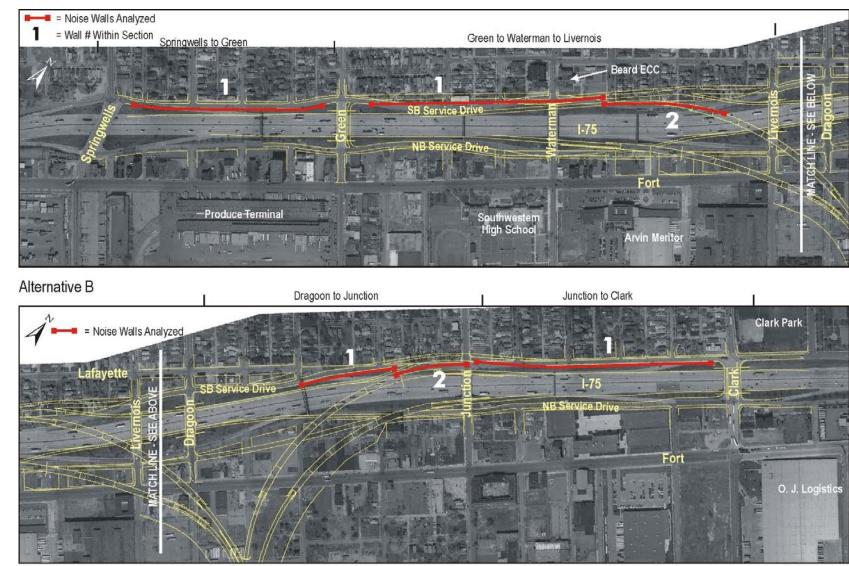
The cost of each of the three walls in this section, divided by the potential benefiting receivers, renders the walls not reasonable collectively. It is noteworthy that the new ramp from the plaza to I-75 would block enough noise to the Beard EEC that a wall does not prove feasible, either. A wall is only considered feasible if it reduces noise by 5 dBA. The shielding of the ramp cuts the noise level to the point that a noise wall cannot reduce it an additional 5 dBA. Therefore, it is not considered feasible. A wall extending only as far as the Beard EEC that includes the solid concentration of benefiting receivers to the west of Waterman, is reasonable, assuming two thirds of the \$965,000 wall cost would benefit 20 sensitive receivers for about \$32,300 per benefiting receiver. Note that some of the 20 benefiting receivers would still experience noise above 66 dBA in this 12-foot wall test. Future work with the Preferred Alternative would optimize wall heights to try to reduce noise levels to below 66 dBA for as many receivers as possible. Also, per the *Noise Policy*, at least one of the receivers should experience a noise reduction of 10 dBA.

Figure 4-2a Detroit River International Crossing Study Noise Walls Analyzed Interchange A – Alternatives #1 and #7



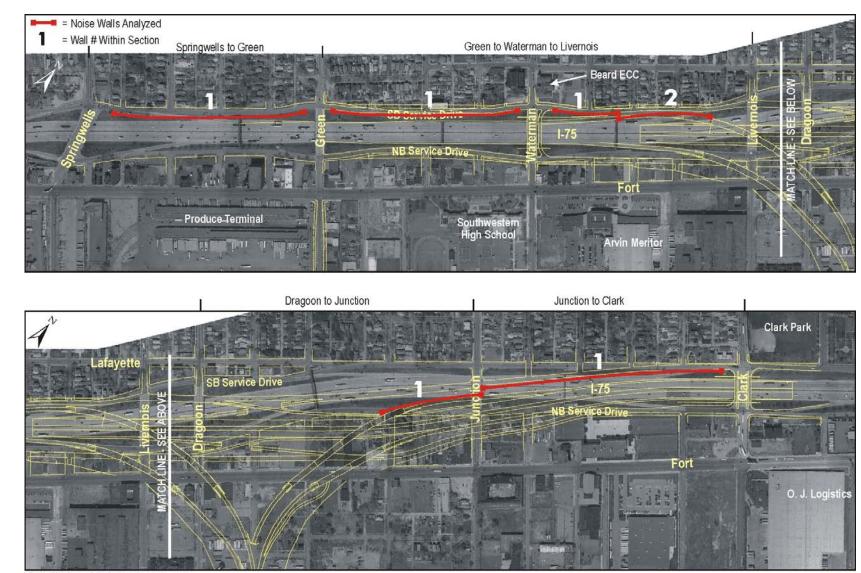
LProjects/3600/Graphics/ReportGraphics/Nose/Interchanges.cdr Source: The Corradino Group of Michigan, Inc.

Figure 4-2b Detroit River International Crossing Study Noise Walls Analyzed Interchange B – Alternatives #2 and #9



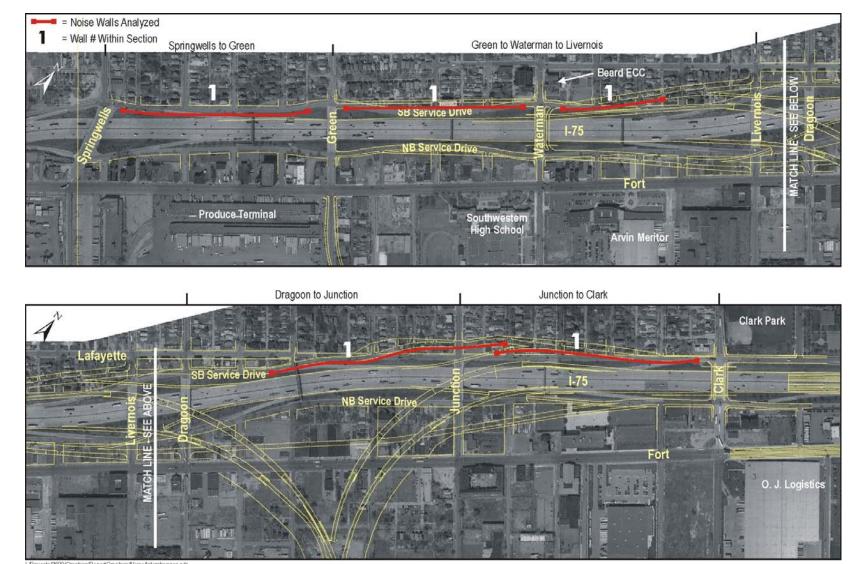
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Figure 4-2c Detroit River International Crossing Study Noise Walls Analyzed Interchange C – Alternatives #3 and #11



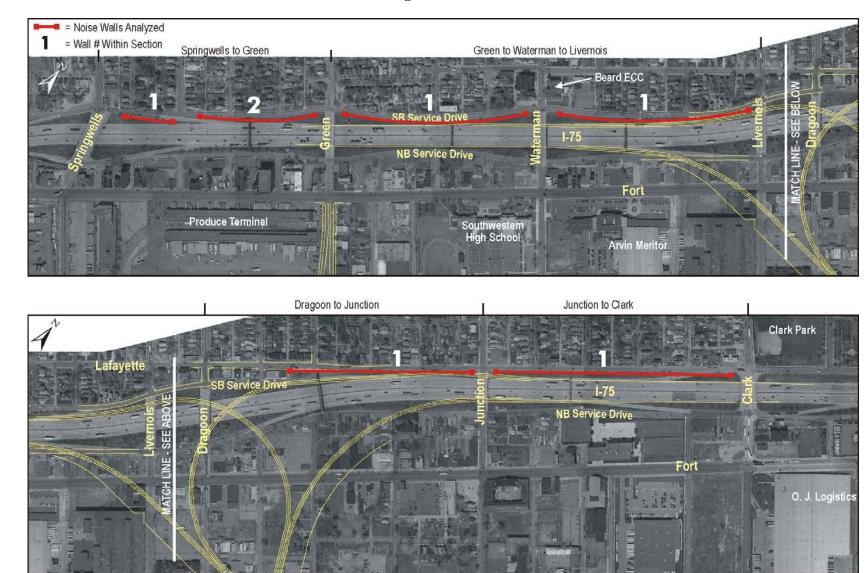
I.Projects/3800/Graphics/ReportGraphics/NoiseInterchanges.cdr Source: The Corradino Group of Michigan, Inc.

Figure 4-2d Detroit River International Crossing Study Noise Walls Analyzed Interchange E – Alternative #5



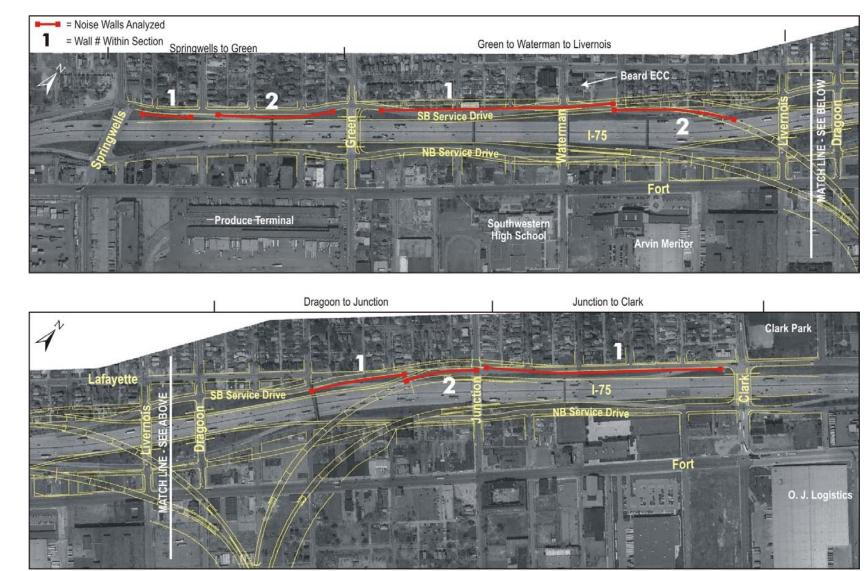
LProjects/3800/Graphics/ReportGraphics/NoseAnterchanges.cdr Source: The Corradino Group of Michigan, Inc.

Figure 4-2e Detroit River International Crossing Study Noise Walls Analyzed Interchange G – Alternative #14



LProjects/3000/Graphics/ReportGraphics/NoiseAnterchanges.cdr Source: The Corradino Group of Michigan, Inc.

Figure 4-2f Detroit River International Crossing Study Noise Walls Analyzed Interchange I – Alternative #16



l/Projects/3600/Graphics/ReportGraphics/Noise/Interchanges.cdr Source: The Corradino Group of Michigan, Inc.

<u>Dragoon to Junction</u> presents a number of challenges. The Military Avenue Church is on record as not wanting a wall, and the presence of Lafayette Boulevard traffic makes a noise wall infeasible in any case under Alternative #1. The point at which the off-ramp meets the southbound service drive in this area cannot be protected due to sight limitations, even though traffic on this off-ramp would be heavy. The first opportunity for protection is near Campbell Street, but the traffic on the service drive is too great for a wall between the service drive and I-75 to be feasible.

<u>Junction to Clark</u> is a section of relatively low-density housing. Building a noise wall to potentially benefit 24 dwelling units would cost \$40,000 per receiver (Table 4-1), above the criterion that limits the unit cost to \$38,060.

4.3.2 Interchange B – Alternatives #2 and #9

Alternative #2 is the same as Alternative #9 along I-75, except the latter has slightly lower volumes on the ramps to and from the plaza. There is a negligible difference when background traffic is considered, so the discussion below applies to both alternatives.

Between <u>Springwells and Green</u> a noise wall does not prove reasonable, as the cost per benefiting dwelling unit would be \$43,200 (Table 4-1), above the criterion that limits the unit cost to \$38,060.

<u>Between east of Green and Livernois</u> a wall was tested that would parallel the service drive past Waterman (which would be closed) to transition to a second wall on the flyover ramp connecting the plaza to southbound I-75. The flyover ramp was assumed to be on fill material once it crosses the Livernois southbound on-ramp. This means the flyover ramp itself would block noise, without a noise wall. As a consequence, Wall 2 in this section is not feasible, as tested (Table 4-1).

Wall 1, which extends beyond the Beard EEC, does not prove reasonable (Table 4-1). A wall limited to the west of Waterman is reasonable, assuming two-thirds of the \$949,000 cost would benefit 22 receivers, or \$28,900 per benefiting receiver.

<u>Dragoon to Junction</u> under Alternative #2 presents similar challenges as Alternative #1. The presence of Lafayette and the volume of traffic on the service drive would be too great for a wall between the service drive and I-75 to be feasible, i.e. it would not achieve a 5-dBA noise reduction.

<u>Junction to Clark</u> is a section of relatively low-density housing. Building a noise wall to potentially benefit 21 sensitive receivers would cost \$45,800 per receiver (Table 4-1), above the criterion that limits the unit cost to \$38,060. So, a noise wall here would not be reasonable.

4.3.3 Interchange C – Alternatives #3 and #11

Alternative #3 is the same as Alternative #11 along I-75, except the latter has slightly lower volumes on the ramps to and from the plaza. There is a negligible difference when background traffic is considered, so the discussion below applies to both alternatives.

Between <u>Springwells and Green</u> a noise wall proves reasonable, as the cost per benefiting dwelling unit would be \$33,800 (Table 4-1), below the criterion that limits the unit cost to \$38,060.

Between <u>Green and Waterman</u> a wall was tested that parallels the service drive. Building a noise wall at a cost of \$725,000 to benefit three sensitive receivers would cost \$241,700 per unit (Table 4-1), above the criterion that limits the unit cost to \$38,060. So, a wall here would not be reasonable.

Between <u>Waterman and Livernois</u> a wall was tested along the service drive east to near Casgrain Street where a second wall would pick up and follow the elevated alignment of the ramp from the plaza to southbound I-75. The shielding provided by the ramp and the traffic on the service drive with Alternatives #3 and #11 is so great that a wall could not achieve a 5-dBA reduction, rendering it not feasible.

<u>Dragoon to Junction</u> under Alternative #3 and #11 would involve no benefiting receivers, so a wall would not be feasible.

<u>Junction to Clark</u> is a section of relatively low-density housing. Building a wall to potentially benefit 24 dwelling units would not be reasonable at a cost per benefiting receiver of \$39,800.

4.3.4 Interchange E – Alternative #5

Alternative #5 shifts the plaza interchange to the east, so the relationship of the plaza ramps to the sensitive receivers north of I-75 is different than the other alternatives.

Between <u>Springwells and Green</u> a noise wall does prove reasonable, as the cost per benefiting dwelling unit would be \$33,800 (Table 4-1), less than the criterion that limits the unit cost to \$38,060.

Between <u>Green and Waterman</u> a wall was tested that parallels the service drive. Building a wall at a cost of \$724,000 to potentially benefit ten sensitive receivers would cost \$72,400 (Table 4-1), which exceeds the criterion that limits the unit cost to \$38,060.

Between <u>Waterman and Livernois</u> a wall was tested east along the service drive to near Crawford Street. Alternative #5 would remove the sensitive receivers east of this point. With this alternative, the ramp from the plaza to southbound I-75 would have a lower elevation than some other alternatives because it passes under Waterman. So, it would provide less shielding. As a result, the opportunity for a wall to be feasible is greater. Data in Table 4-1 are shown with the Beard EEC counted as ten dwelling units. A noise wall would be feasible in this case.

<u>Dragoon to Junction</u> under Alternative #5 would involve only one benefiting receiver. A wall is not considered feasible.

<u>Junction to Clark</u> is a section of relatively low-density housing. Building a wall to potentially benefit ten sensitive receivers would not be reasonable at a cost of \$81,100 per benefiting unit.

4.3.5 Interchange G – Alternative #14

Alternative #14 preserves all the receivers along the north side of I-75. The more receivers that remain close to I-75, the more likely it is to meet the reasonability criterion.

Between <u>Springwells and Green</u> the two tested noise walls taken together prove reasonable, as the cost per benefiting dwelling unit would be \$25,800, compared to the criterion that limits cost to \$38,060 per benefiting unit.

Between <u>Green and Waterman</u> a wall placed between the service drive and I-75 would be reasonable. Protection can be afforded to 23 benefiting receivers at a cost of \$31,500 each (Table 4-1).

Between <u>Waterman and Livernois</u> a wall was tested east along the service drive to near Crawford Street. With this alternative, the ramp from the plaza to southbound I-75 would have a lower elevation than some alternatives because it would pass under Waterman. So, it would provide less shielding. Data in Table 4-1 are shown with the Beard EEC counted as ten dwelling units. A noise wall would be reasonable in this area as the \$38,060 criterion is met.

<u>Dragoon to Junction</u> under Alternative #14 would involve 16 benefiting receivers. This puts the cost per benefiting receiver, as tested, just over the criterion (Table 4-1).

<u>Junction to Clark</u> would experience more benefiting receivers under Alternative #14 than any other alternative. The cost per benefiting receiver of \$20,100 meets the criterion.

4.3.6 Interchange I – Alternative #16

Interchange I/Alternative #16 preserves more of the existing road network than any other Build Alternative.

Between <u>Springwells and Green</u> the two tested noise walls taken together prove reasonable, as the cost per benefiting dwelling unit would be \$25,800, compared to the criterion that limits cost to \$38,060 per benefiting unit.

Between east of Green and Livernois a wall was tested that would parallel the service drive past Waterman (which would be closed) to transition to a second wall on the flyover ramp connecting the plaza to southbound I-75. The flyover ramp was assumed to be on fill material once it crosses the Livernois southbound on-ramp. This means the flyover ramp itself would block noise, without a noise wall. As a consequence, the walls in this section are not feasible, as tested (Table 4-1).

It is noteworthy that the new ramp from the plaza to I-75 would block enough noise to the Beard EEC that a wall does not prove feasible.

A wall limited to the west of Waterman is reasonable, assuming two-thirds of the \$949,000 cost would benefit 22 receivers, or \$29,000 per benefiting receiver.

<u>Dragoon to Junction</u> under Alternative #2 presents similar challenges as Alternative #1. The presence of Lafayette and the volume of traffic on the service drive would be too great for a wall between the service drive and I-75 to be feasible, i.e. it would not achieve a 5-dBA noise reduction.

<u>Junction to Clark</u> is a section of relatively low-density housing. Building a noise wall to potentially benefit 21 sensitive receivers would cost \$45,800 per receiver, above the criterion that limits the unit cost to \$38,060. So, a noise wall here would not be reasonable.

5. CONSTRUCTION NOISE AND VIBRATION IMPACTS AND MITIGATION

Construction generates noise and vibration impacts. Barrier walls for security purposes, included in plaza design, will be installed first, to the extent practicable, to minimize such noise in Delray, including Southwestern High School.

Construction noise also will be minimized by measures such as requiring that construction equipment have mufflers; that portable compressors meet federal noise-level standards for that equipment; and, that all portable equipment be placed away from or shielded from sensitive noise receptors, if at all possible. A local noise ordinance will be honored.

Where pavement must be fractured, structures must be removed, and/or piling or steel sheeting must be driven, care will be taken to prevent vibration damage to adjacent structures. In areas where construction-related vibration is possible, basement surveys will be offered. These areas will be identified during the design phase, and surveys will be conducted before construction begins to allow documentation of pre-construction conditions so any damage caused by MDOT construction can be determined. Geotechnical analysis conducted for the project will aid in the understanding of potential vibration impacts and mitigation. Vibration impacts are not anticipated at this time. That position will be reviewed during the design phase.

6. FINDINGS

This study used the Federal Highway Administration's (FHWA) Traffic Noise Model version 2.5 (TNM2.5) computer model to determine the need for noise mitigation for the crossings, plazas, and I-75.

The crossings are far enough removed from any sensitive receivers that no noise mitigation is warranted. Sensitive receivers around the plazas would not experience noise with the project that would approach or exceed established noise abatement criteria, assuming walls are built around the plazas as part of the project to secure the U.S Customs and Border Protection operations.

The feasibility and reasonableness of noise walls were tested along the north side of I-75 for each of the Practical Alternatives to guide analysis of the Preferred Alternative. The Practical Alternatives include six unique interchange configurations. Each of these was examined from the standpoint of its three-dimensional geometry, traffic, and receivers that would remain after alternative implementation. Twelve-foot noise walls were tested for each interchange and its related Practical Alternatives. A series of conclusions is reached in Section 4.3 for each interchange.

Broad conclusions reached in performing the noise analysis along I-75 are:

- The plaza ramps shield areas north of I-75 to various degrees such that, in a number of situations, a noise wall to provide further mitigation is not feasible, meaning it could not achieve a further 5-dBA noise reduction.
- For several alternatives the Beard Early Education Center could not be protected by a wall considered to be "feasible."
- Interchange C (Alternatives #3 and #11) would shift the mainline lanes of I-75 away from the residential area to the north of I-75 so that fewer receivers would be affected by noise levels above the 66-dBA criterion. The effect is most significant between Dragoon and a point east of Junction. With Interchange C, noise levels north of I-75 where the sensitive receivers are located would actually be lower than experienced today.
- The feasibility of noise walls along the north side of I-75 is highly dependent on the amount of traffic on the service drive. Traffic intervening between a noise wall and houses along the service drive negates the effects of walls. Traffic volumes on the service drive will be a function of how traffic is routed when roads that cross over I-75 today are closed and how ramps are rearranged. Alternative #14 has the least effect on traffic volumes on the service drive and is the best prospect for feasible and reasonable noise wall justification.
- The segments at either end of I-75 (west of Green and east of Junction) have houses oriented parallel, rather than perpendicular, to the I-75 service drive and of lower density than other segments. Building noise walls at a reasonable cost is more difficult in these segments.
- The analysis performed here used 12-foot walls to test the differences among the alternatives. Work for the Preferred Alternative will optimize wall heights, lengths and

positions, and each benefiting receiver will be re-examined to ensure that mitigation reduces the noise level to 66 dBA or below.

Reasonable and feasible noise walls are listed in Table 6-1. During the design phase, the specific locations and configurations of noise walls are specifically defined and changes in the project may occur that may warrant the alteration or elimination of any noise walls recommended in this technical report and the EIS.

	Location/Designation	Length (Feet)	Cost	Benefiting Receivers	Cost per Ben. Rec.
Interchange C	Springwells to Green				
Alternatives #3 and #11	Wall 1 – Along Service Drive	1400	\$777,000	23	\$33,800
	Springwells to Green				
Interchange E	Wall 1 – Along Service Drive	1400	\$777,000	23	\$33,800
Alternative #5	Waterman to Livernois				
	Wall 1 - Along Service Drive to Crawford	830	\$457,000	15 ^a	\$30,500
	Springwells to Green				
	Wall 1 – Btwn Service Drive and I-75 off-ramp	330	\$184,000	25 ^b	\$25,800
	Wall 2 – Along Service Drive to Green	840	\$462,000		
	Green to Waterman				
Interchange C	Wall 1 – Along Service Drive	1310	\$724,000	23	\$31,500
Interchange G Alternative #14	Waterman to Livernois				
Alternative #14	Wall 1 - Along Service Drive to Crawford	1340	\$745,000	32 ^a	\$23,300
	Dragoon to Junction				
	Wall 1 - Along Service Drive Cavalry to Junction	1110	\$615,000	16	\$38,060
	Junction to Clark				
	Wall 1 – Along Service Drive to Clark	1600	\$885,000	44	\$20,100
Interchange I	Springwells to Green				
Alternative #16	Wall 1 – Btwn Service Drive and I-75 off-ramp	330	\$184,000	25 ^b	\$25,800
	Wall 2 – Along Service Drive to Green	840	\$462,000		

Table 6-1Detroit River International Crossing Study
Feasible and Reasonable Noise Walls

^a Counting Beard EEC as ten benefiting receivers.

^b Calculation combines Walls 1 and 2.

Source: The Corradino Group of Michigan, Inc.

Appendix A

MDOT Highway Traffic Noise Analysis and Abatement Policy



JENNIFER M. GRANHOLM GOVERNOR

STATE OF MICHIGAN DEPARTMENT OF TRANSPORTATION LANSING

KIRK STEUDLE DIRECTOR

The enclosed package contains the State Transportation Commission's Policy on Noise Abatement (Guidance Document 10136), as well as the Michigan Department of Transportation's (MDOT) *Procedures and Rules for Implementation* of this policy. The *Procedures and Rules for Implementation* defines the requirements for a site to be considered for noise abatement under both the Type I and Type II Noise Mitigation Programs. This new policy went into effect on July 19, 2002 (revised on July 31, 2003), and includes changes in both mitigation programs from the 1996 policy. One change delineated in both programs will **require** local authorities to have compatible land use zoning and/or building regulations in-place precluding future noise abatement needs before they will be considered for a current noise abatement project. This is the only major change to the Type I Program, a federally mandated program, which requires MDOT to consider noise mitigation for new construction and capacity improvement projects. The policy states that MDOT must follow all federal laws, regulations and guidelines for Type I noise abatement, and the promulgated rules define the exact operating parameters MDOT has established to meet federal guidelines.

The Type II Program is a voluntary program in which MDOT participates. It has changed substantially. Please review all the rules to be sure the site for which you are applying meets the requirements. For example, local governments or authorities are required to provide 10 percent of the total cost for noise abatement. Local authorities will be required to apply annually for a specific site and provide data on that site. From those applications, a formula will be used to assign a priority number to each site. The derived formula provides potential mitigation to the greatest number of the most severely affected residences, using the least amount of money. The higher the priority number, the more likely mitigation may be provided. The application form referred to in the *Procedures and Rules for Implementation*, along with instructions for completing it, is available at http://www.mdot.state.mi.us/webforms/public/1871.pdf. Application forms must be received by October 1, 2007, to be considered for fiscal year 2010 funding. Once the evaluation process has been completed, you will be notified of your eligibility.

If you have any questions or require additional information, please do not hesitate to contact our Construction and Technology Support Area's Environmental Noise Group at 517-322-6138 or 517-322-1651.

Sincerely,

Brenda J. O'Brien, P.E. Engineer of Construction and Technology

CONSTRUCTION AND TECHNOLOGY BUILDING • P.O. BOX 30049 • LANSING, MICHIGAN 48909 www.michigan.gov • 517-322-1087

LH-LAN-0 (01/03)

MDOT 3903 (3/98)		Page	1	OF	2
4		IDENTIFIER		EFFECTI	VE DATE
Michigan Department of Transportation	COMMISSION POLICY	10136 supercedes July 1	S DATE	D	31, 2003
RESPONSIBLE OGANIZATION: E	xecutive Bureau				
SUBJECT: Noise Abatement					

Federal environmental regulation 23 CFR 772 defines two types of projects. Type I is "a proposed federal or federal-aid highway project for the construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes" (23 CFR 772.5[h]). If noise impacts are identified, noise abatement measures must be considered and implemented where reasonable and feasible. The Michigan Department of Transportation (MDOT) follows all Federal laws, regulations, and guidelines for Type I noise abatement.

Type II, or voluntary, abatement is a proposed federal or federal-aid highway project for noise abatement on an existing highway.

This policy addresses Type II noise abatement to limit the intrusion of highway noise into adjacent residential areas to reasonably achievable levels consistent with the U.S. Department of Transportation's Code of Federal Regulations (CFR), and taking into consideration MDOT's life-cycle cost analysis and safety requirements, as well as other technical and financial implications. To achieve this objective the Michigan State Transportation Commission (Commission) supports the following four approaches to alleviate traffic noise impacts:

- 1. **Reduction of Noise at the Source**. Reduction of traffic noise by design or treatment of the road surface is the most cost-effective noise control available to MDOT. Within the group of noise abatements that are reasonable and feasible under 23 CFR 772, and after MDOT's life-cycle cost analysis has selected a pavement type and other technical and financial constraints, MDOT will use the quietest surface texture available when repaving/reconstructing a freeway in residential areas.
- 2. *Noise Abatement*. MDOT will attempt to locate, design, construct and operate state highways to minimize the intrusion of traffic noise into adjacent areas. When noise impacts occur, they may be attenuated by the most reasonable and prudent means.

MDOT will construct Type II sound walls only in years when MDOT's Road and Bridge Program, excluding maintenance, exceeds \$1.0 billion, adjusted to the Consumer Price Index (CPI) using 2002 as the base year. MDOT will not spend more than one half of one percent of the budget on sound walls. MDOT will give priority to those communities where the freeway was constructed through an existing neighborhood and where 80 percent or more of the existing residential units were there prior to the construction of the freeway. Communities must make application to MDOT and provide a local match of 10 percent of the cost of the sound wall.

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		IDENTIFIER		EFFECTI	VE DATE
EMDOT	COMMISSION	10136	5	July 3	31, 2003
		SUPERCEDES DATED			
Michigan Department of Transportation	POLICY	July 19, 2002			
RESPONSIBLE OGANIZATION: Executive Bureau					
SUBJECT: Noise Abatement					

- 3. **Encouraging Compatible Adjacent Land Use**. Cities and counties have the power to control development by adoption of land-use plans and zoning, and by subdivision, building or housing regulations. The Commission encourages those who plan and develop land, and local governments controlling development or planning land use near known freeway locations, to exercise their powers and responsibility to minimize the effect of highway vehicle noise through appropriate land-use control. Where such land-use regulations are not in place, cities, townships and counties will not be eligible for MDOT noise mitigation assistance.
- 4. Noise Abatement by Others. The Commission encourages developers and local governments to coordinate their efforts to mitigate highway noise. This effort must be done without encroachment of MDOT's property right-of-way unless it is determined to be necessary, and authority granted to permit others to construct a sound barrier in the state's right-of-way. The barrier's design must meet MDOT's geometric, structural, safety and maintenance standards. MDOT shall assume no review authority or responsibility of any kind for the structural integrity or the effectiveness of a sound barrier constructed by others.

MDOT will monitor noise mitigation best practices in other states and provide an activity report to the Commission annually.

The Department shall develop instructions for the implementation of this policy. Adopted by the Michigan State Transportation Commission on July 31, 2003.

MICHIGAN DEPARTMENT OF TRANSPORTATION'S Procedures and Rules for Implementation of State Transportation Commission Policy 10136 Noise Abatement

The following contains the procedures and rules for implementation of the Michigan Department of Transportation (MDOT) Commission Policy 10136, dated July 31, 2003. These rules are based on the Federal Highway Administration's (FHWA) *Highway Traffic Noise Analysis and Abatement Policy and Guidance* document of June 1995.

Definitions

Application

The request for Type II noise abatement.

Benefiting Dwelling Unit

A dwelling unit receiving 5 dBA Leq noise reduction or more.

Date of Public Knowledge

The date that the freeway construction project's final environmental analysis and documentation (i.e., Categorical Exclusion [CE], Finding of No Significant Impact [FONSI], or Record of Decision [ROD]) was approved by FHWA.

dBA

An A-weighted sound level on the logarithmic scale.

Dwelling Unit

Any room or set of rooms used as a living space by one or more persons. Public use areas such as parks, schools, libraries, and churches shall be counted as 10 dwelling units for each occurrence when they are within or adjacent to residential dwelling unit boundaries.

Feasible

This term refers to engineering considerations, such as can a noise barrier be built given the topography of the location; can a substantial noise reduction be achieved given certain access, drainage, safety, or maintenance requirements; are other noise sources present in the area? While every reasonable effort should be made to obtain a substantial noise reduction, a noise abatement measure is not feasible if it cannot achieve at least a 5 dBA noise reduction.

Leq

The ambient or steady state sound level. An averaging technique is used to produce an equivalent continuous sound level, Leq. For example, if a one hour sound measurement were taken and all the higher levels that occurred were used to fill in all the lower levels so the sound level would be the same for the whole hour, the result would be an equivalent sound level for one hour or Leq 1 h.

Noise Abatement Criteria (NAC)

See Appendix A.

Noise Impact

Where noise levels are one dBA below or greater than the federal noise abatement criteria, as shown in Appendix A, or are expected to increase 10 dBA above existing noise levels for existing conditions, as measured with a sound level meter.

Planned Development

A planned, designed, and programmed development where a building permit has been issued.

Reasonable

A noise mitigation project will be considered reasonable if the comparative construction cost will be \$38,060 or less (in 2007 dollars) per benefiting dwelling unit. Additionally, the local jurisdiction(s) must have entered into the required agreements with MDOT regarding maintenance, land use policy, and funding participation. A majority of the affected residents must be in favor of abatement.

If during final design, the project cost becomes not reasonable (construction costs exceed the total benefited amount of \$38,060 per unit), the local jurisdiction(s) will be asked if they wish to increase their financial participation in the noise abatement project to cover the excess cost per dwelling unit (the amount over \$38,060 per unit), or have noise abatement dropped from further consideration.

Substantial Noise Reduction

A ten dBA Leq sound level reduction for at least one receptor.

Type I Projects

A Type I project is a proposed federal-aid project for the construction of a highway on a new location or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. State highway agencies are then required by federal regulations to perform a noise analysis and mitigate noise impacts where feasible and reasonable.

Type II Projects

A Type II project is a federal-aid project for noise abatement along existing highways at residential locations that were in existence prior to 1976. The following conditions must exist:

- Eighty percent of the dwelling units within 500 feet of a limited access highway
 preceded the highway or the last pre-1976 major capacity improvement.
- Zoning and building regulations are in place to preclude future noise abatement needs.
- The majority of the residents are in favor of noise abatement.

2

If noise abatement measures were previously determined to be unreasonable or unfeasible as part of a Type I project, the application will not be considered. Participation by MDOT is subject to State Transportation Commission Policy 10136, dated July 31, 2003.

Type I Projects Procedures and Rules

- 1. For a proposed highway project, a traffic noise analysis will be performed to determine if noise abatement is feasible and reasonable for developed land, undeveloped lands at planned development locations, and for local community land use planning.
- 2. Public meetings will be advertised in local news media and held in local facilities during the route location and planning stages of a roadway or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes, for the purpose of discussing the present and future environmental, social and economic impacts.
- 3. Comments on noise concerns will be solicited at public meetings from local residents, and officials of the jurisdiction(s) affected by the project. MDOT will use this information to draft the final environmental document. Once the final environmental document (i.e. CE, FONSI, or ROD) is approved by the FHWA, it is distributed to the local officials affected by the project to notify them of location approval. The FHWA approval date is the date of public knowledge.
- 4. If during final design the noise mitigation project is determined to be not reasonable, the local jurisdiction(s) will be asked if they wish to increase their financial participation in the noise abatement portion of the project to cover the cost per residence by the amount greater than \$38,060 as set forth in this document, or have noise abatement dropped from further consideration.
- 5. Noise abatement will only be provided when feasible and reasonable for residential land use locations, public land use (parks), and non-profit institutional facilities such as hospitals, libraries, schools, and churches. (Public use facilities will be equated to ten dwelling units each.)
- 6. All sites will be considered. However, it is generally known that commercial and industrial sites prefer that there be no interference with the view to their establishments. Therefore, when commercial and residential sites expected to convert to a commercial or industrial land use (e.g., some of the residential units have converted to commercial/industrial, or the area has been rezoned commercial) are found to be reasonable and feasible, they will be asked if they want noise abatement. If they do not want it, it will not be provided.
- 7. Where negative noise impacts are expected to occur, noise abatement will be considered and will be implemented if found feasible and reasonable for existing developments, and future developments were approved before the date of public knowledge. After the date of public knowledge, MDOT will not be responsible for providing noise abatement for

new developments. The provision of noise abatement for new developments becomes the responsibility of local governments and private developers.

- 8. All noise abatement will follow MDOT design standards.
- 9. MDOT will maintain the structural integrity of the noise abatement structure and will be responsible for the aesthetic condition of the structure on the freeway side only. The exception being that when the structure is on the residential side of a service road, MDOT will maintain the structural integrity for five years, but will not be responsible for either side of structure's aesthetic condition, including the surrounding grounds.
- 10. Local authorities must agree, through agreements, resolutions, or ordinances, to provide:
 - A share of the state and local funding based on population (per State of Michigan Act 51).
 - Aesthetic maintenance on the residential side of the structure, or on both sides when the structure is on the residential side of a service road.
 - Structural maintenance after five years when the structure is on the residential side of a service road.

Explanation of bullets two and three: These statements have been included because there is no right of way access to these walls for maintenance purposes.

Failure to meet all of the above requirements will make the noise abatement project unreasonable.

- 11. Where an extreme noise impact is identified (80 dBA Leq or greater), special consideration may be warranted. These sites will be considered on an individual basis.
- 12. The type of noise abatement feature must provide the benefiting dwellings with a reduction of 5 dBA Leq.

Type II Project Procedures and Rules

- Applications (available at <u>http://www.mdot.state.mi.us/webforms/public/1871.pdf</u>) for Type II
 noise abatement projects will be considered by MDOT for each fiscal year when the road
 and bridge program exceeds \$1 billion, excluding routine maintenance. Applications
 must be renewed annually.
- MDOT will analyze the area to determine the number of dwelling units impacted per guidelines defined in this document and estimate the cost of noise abatement. MDOT will furnish results of all noise analyses to local authorities.
- 3. A prioritized eligibility list will be developed using the following formula to rank sites for consideration.

dBA above the NAC (see Appendix A) X number of impacted dwelling units Total Cost / \$100,000

4

- 4. MDOT will develop noise abatement projects for the highest priority locations from the above annual list, within available funding limitations.
- All noise abatement will follow MDOT design standards. Noise abatement will be provided along the shoulder only where a roadside barrier would otherwise be present.
- 6. MDOT will maintain the structural integrity of the noise abatement structure and will be responsible for the aesthetic condition of the structure on the freeway side only. The exception being that when the structure is on the residential side of a service road, MDOT will maintain the structural integrity for five years, but will not be responsible for either side of the structure's aesthetic condition.
- If the project meets MDOT policy criteria, based on total project cost estimates, then local authorities, through agreements, resolutions, and/or ordinances, must agree to provide:
 - Ten percent of the cost of the noise abatement at the time of construction.
 - Aesthetic maintenance on the residential side of the structure or both sides when structure is on the residential side of a service road.
 - Structural maintenance after five years when the structure is on the residential side of a service road.
 - Have compatible land use zoning and/or building regulations in place precluding future noise abatement needs.

Failure to meet all of the above requirements will make the noise abatement project unreasonable.

Appendix A

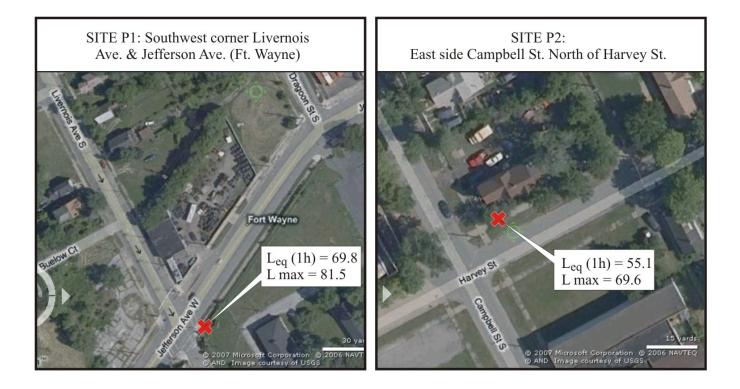
Noise Abatement Criteria (NAC) ¹ Hourly A-Weighted Sound Level - decibels (dBA)*					
Activity Category	Leq(h)	L10(h)	Description of Activity Category		
A	57 (Exterior)	60 (Exterior)	Lands of which serenity and quiet are of extraordinary significance, serve ar important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.		
В	67 (Exterior)	70(Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.		
с	72 (Exterior)	75 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.		
D			Undeveloped lands.		
Е	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.		

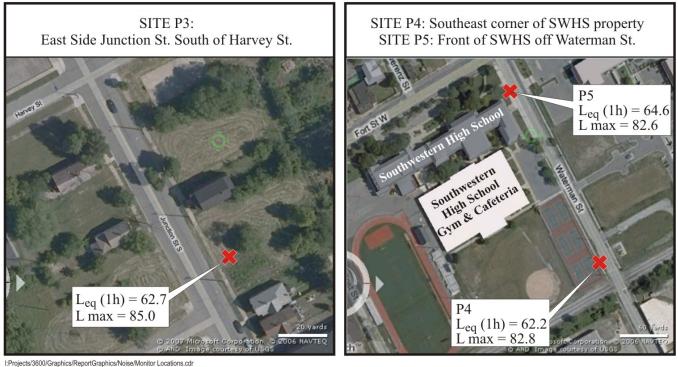
¹ Copied from FHWA publication *Highway Traffic Noise Analysis and Abatement Policy and Guidance* by the U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch, Washington, D.C., June 1995.

Appendix B

Noise Measurement Locations

Site Aerials

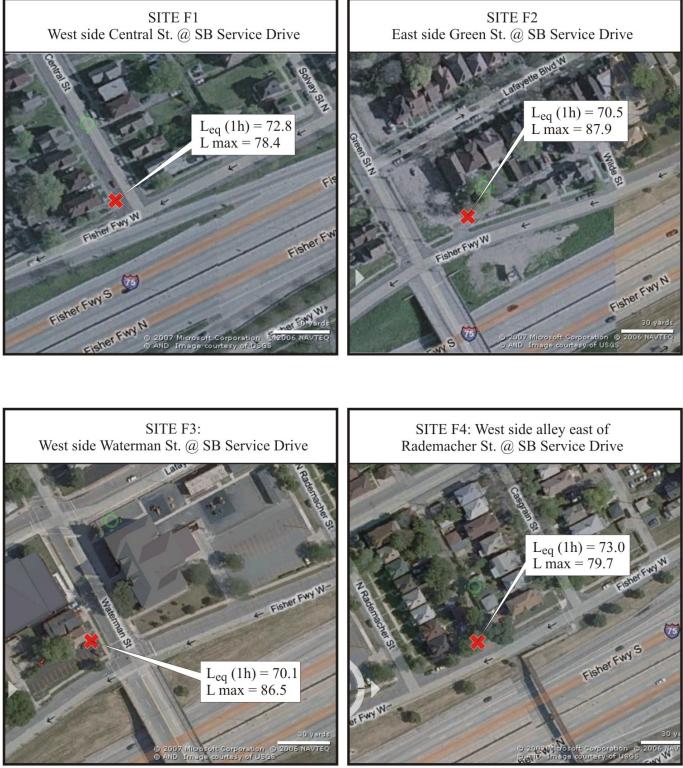




LeProjects/sourd/sraphics/Noise/Monitor Locations.cor Leq (1h) is the equivalent or "average" sound level over one hour. Lmax is the maximum noise level.



Leq (1h) is the equivalent or "average" sound level over one hour. Lmax is the maximum noise level.

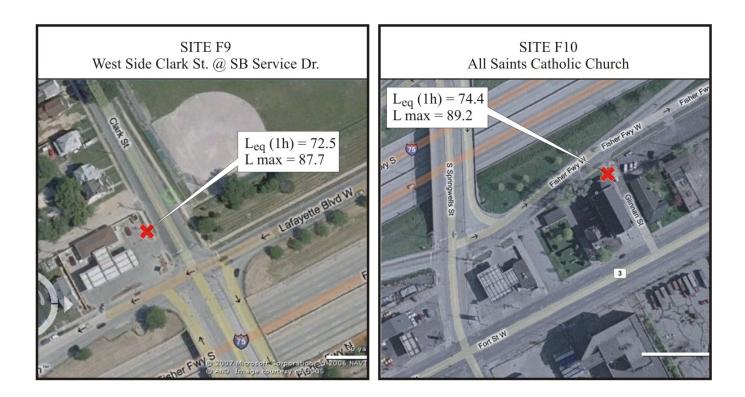


I:Projects/3600/Graphics/ReportGraphics/Noise/Monitor Locations.cdr

Leq (1h) is the equivalent or "average" sound level over one hour. Lmax is the maximum noise level.



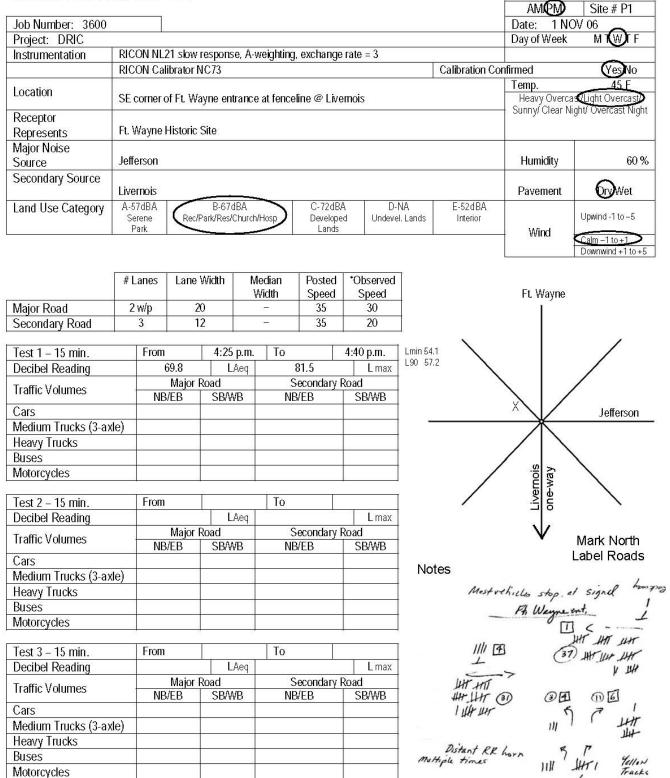
I:Projects/3600/Graphics/Noise/Monitor Locations.cdr Leq (1h) is the equivalent or "average" sound level over one hour. Lmax is the maximum noise level.





I:Projects/3600/Graphics/ReportGraphics/Noise/Monitor Locations.cdr Leq (1h) is the equivalent or "average" sound level over one hour. Lmax is the maximum noise level.

Noise Data Sheets



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Job Number: 3600									AM(PM) Date: 03 A	Site # P2
Project: DRIC									Day of Week	MTWT
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		instator i							Temp.	85 F
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		l remain after Alte	ernative #7/9/11 F	Plaza	- Sunny Clear Nig	no Overcast Night
I-75 in Dista	nce, RR on Delray spur				Humidity	60 %
Trucks on J	efferson, 1 block to S.				Pavement	Dry Wet
A-57dBA Serene Park	B-67dBA Rec/Park/Res/Church/Hosp	C-72dBA Developed Lands	D-NA Undevel. Lands	E-52dBA Interior	- Wind -	Upwind -1 to -5 Calm -1 to +1
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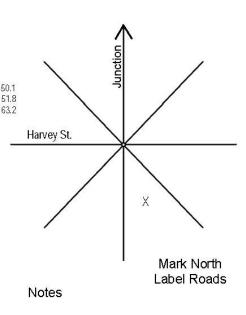
	# Lanes	Lane Width	Median Width	Posted Speed	*Observed Speed
Major Road	2	12		25	25
Secondary Road	none				

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Buses		1				
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Buses	34				
Motorcycles					

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Medium Trucks (3-axle)					
Heavy Trucks					
Buses					
Motorcycles					

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Buses														
Motorcycles														
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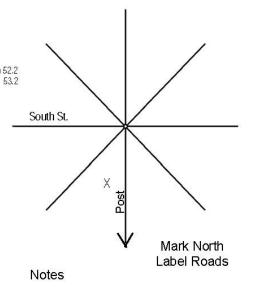
		AMPM	Site # P6
Job Number: 3600		Date: 1 NO	V 06
Project: DRIC		Day of Week	M T(₩)T F
Instrumentation	RICON NL21 slow response, A-weighting, exchange rate = 3		
	RICON Calibrator NC73 Calibratio	on Confirmed	YesNo
Location	₩ side Post south of South St. @ setback of homes	Temp. Heavy Overcas	45 F
Receptor Represents	Homes on W side of Post that would remain after Plaza construction	Sunny/ Clear Nig	ht/ Overcast Night
Major Noise Source	I-75 in Distance, RR on Delray spur	Humidity	60 %
Secondary Source	Trucks on South St. ½ block to N. RR on Delray spur	Pavement	
Land Use Category	A-57dBA B-67dBA C-72dBA D-NA E-52dI Serene Rec/Park/Res/Church/Hosp Developed Undevel. Lands Interic		Upwind -1 to -5
			Calm -1 to +1 Downwind +1 to +5

	# Lanes	Lane Width	Median Width	Posted Speed	*Observed Speed
Major Road	2	14	10-	25	25
Secondary Road	none				

Test 1 – 15 min.	From	4:45 p.m.	То	5:00 p.m.			
Decibel Reading	57.5	LAeq	75.2	L max			
Traffic Volumes	Major	Road	Secondary Road				
maine volumes	NB/EB	SBAWB	NB/EB	SBAWB			
Cars							
Medium Trucks (3-axle)							
Heavy Trucks							
Buses							
Motorcycles							

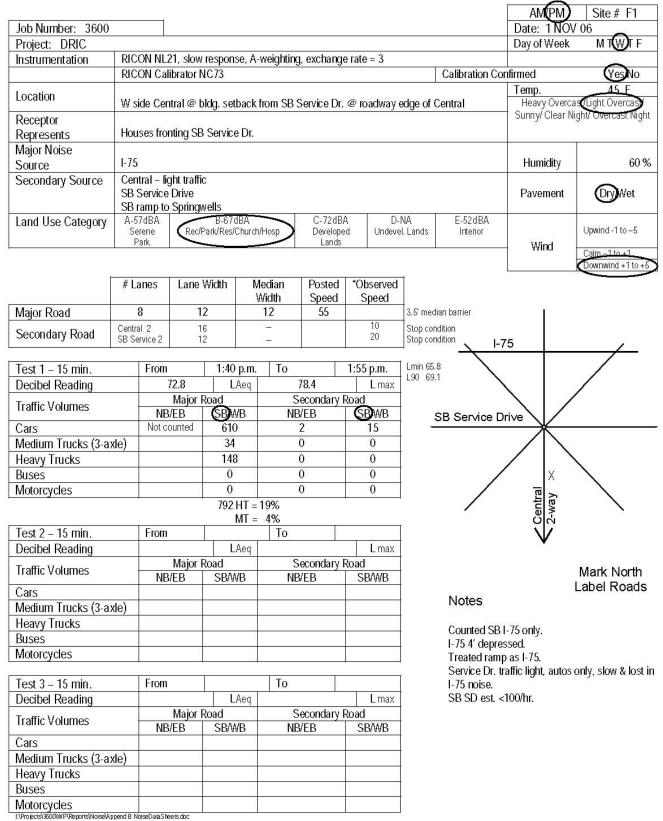
Test 2 – 15 min.	From		То			
Decibel Reading		LAeq	×	Lmax		
Traffic Volumes	Major	Road	Secondary Road			
Hame Volumes	NB/EB	SB/WB	NB/EB	SB/WB		
Cars						
Medium Trucks (3-axle)						
Heavy Trucks						
Buses						
Motorcycles						

Test 3 – 15 min.	From	¥	То	8.
Decibel Reading		LAeq		L max
Traffic Volumes	Major	Road	Secondar	y Road
Traine & Orumes	NB/EB	SB/WB	NB/EB	SB/WB
Cars				
Medium Trucks (3-axle)				
Heavy Trucks				
Buses				
Motorcycles				



One semi on South with jostling frame. Several other trucks on South St. Birds. Train horn, clanking of crossing warnings. Virtually no traffic.

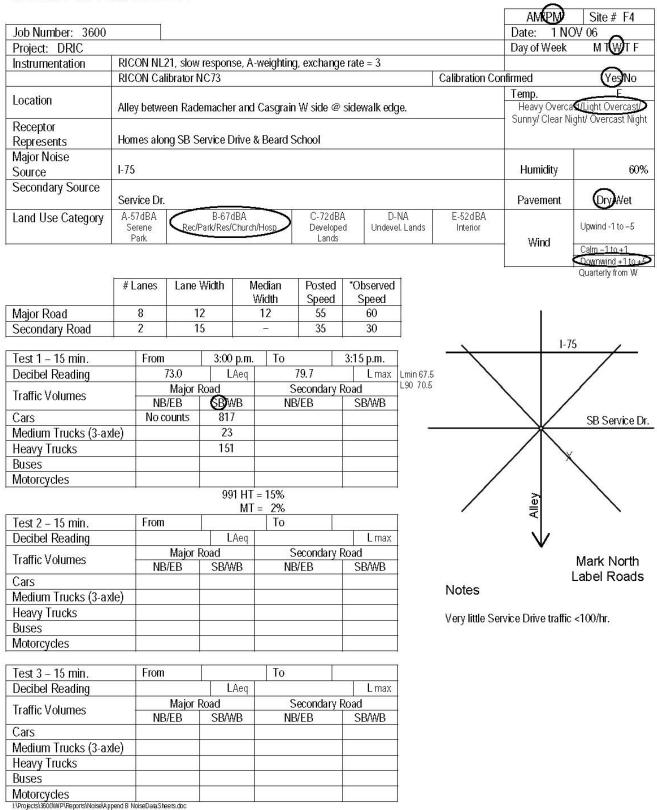
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Detroit River International Crossing Study Noise Study Technical Report *B* - 13

								AMPM	Site # F2
Job Number: 3600								Date: 1 NO\	
Project: DRIC								Day of Week	M TWT F
Instrumentation		21, slow respon:	se, A-weighting	g, exchange	e rate = 3		22		
	RICON Ca	librator NC73					Calibration Co	nfirmed	YesNo
Location	Vacant lot	E of Green @ re	ar set back of	garages on	alley			Temp. Heavy Overcar Suppy Clear Ni	<u>45 F</u> d/Light Overcast/ ght/ Overcast Night
Receptor								Sunny Crear Ng	gilu Overcast Nigili
Represents	Back yards	s of houses facin	g Lafayette					k.	
Major Noise	-3-27-56-222214							-1012277- 14122214	(2) 532-54.547
Source	1-75							Humidity	60 %
Secondary Source		e Drive and Gree		Pavement	nent OryA/et				
Land Use Category	A-57dBA Serene Park	B-670 Rec/Park/Res/		C-72dBA Develope Lands		NA el. Lands	E-52dBA Interior	Wind	Upwind -1 to -5
I					1		1:		Calm -1 to +1 Downwind +1 to +5
ð	# Lanes	Lane Width	Median Width	Posted Speed	*Observed Speed			Quar	tering wind @ 10mpl
Major Road	8	12	12	55		1		ľ	
Secondary Road sp	2	15		35	20	Stop cor	ndition		
Green	2	15		35	20	Stop cor	ndition	76	,
			23			-	-	-75	
Test 1 – 15 min.	From	1 2:10	p.m. To		2:25 p.m.				
Decibel Reading		70.5 L	Aeq	87.9	Lmax	Lmin 65. L90 67.			/
Traffic Volumes		Major Road		econdary F			7	$\setminus $	
	NE	B/EB SB/V		B/EB	SB/WB	1	SB Service I		
Cars				25	16	-	00 00111001	<u> </u>	
Medium Trucks (3-axl	e)								
Heavy Trucks				1	4		Х		N
Buses									\mathbf{i}
Motorcycles								le l	\mathbf{i}
8012						7	/	Green	
Test 2 – 15 min.	From	i j	То					Ŭ	
Decibel Reading			Aeq		Lmax			V	
Traffic Volumes	1	Major Road		econdary F					Mark North
Streamport, Post order to entropy	NE	B/EB SB/V	/B NE	B/EB	SB/WB	-			_abel Roads
Cars		2	2			ļ	Notes	2	
Medium Trucks (3-axl	e)						110100		
Heavy Trucks							Light @ Gree	en and SB S Drive	e is blinkina red.
Buses						ļ	3-way stop.		0
Motorcycles							Autos inaudil noise.	ole against backg	round 1-75 truck
Test 3 – 15 min.	From		То			I	School buse:		
Decibel Reading			Aeq		Lmax	ļ	SB SD ~ 80	veh/hr.	
Traffic Volumes	NE	Major Road 3/EB SB/4		econdary F ∛EB	Road SB/₩/B				
Cars						ļ			
Medium Trucks (3-ax	ile)								
Heavy Trucks									
D	2		5			E			
Buses									

											AM(PM)	Site # F3
Job Number: 3600											Date: 1 NO	
Project: DRIC											Day of Week	: М Т (М) Т F
Instrumentation	RICON NL			ie, A-	weighting	i, exchang	e rate =	3			÷.	~
	RICON Ca									Calibration Co	nfirmed	YesNo
Location	Across Wa	terman f	rom Bea	ird So	chool at s	etback fror	n SB SC) to s	idewalk of	school	Temp.	45 F
											Heavy Over	caselight Overcast Night/ Overcast Night
Receptor	Beard Sch	ool									- Sunnyr Ciear	Night Overcast Night
Represents											~	
Stochos recenter 1	1-75											Television -
Source											Humidity	60 %
Secondary Source	SB Service	B Service Dr. and Waterman										(Dry)/Vet
Land Use Category	A-57dBA B-67dBA C-72dBA D-NA E-52dB/ Serene Rec/Park/Res/Church/Hosp Developed Undevel, Lands Interior							E-52dBA	1	Upwing-1 to -5		
	Park	Rech	aik/Res/L	nuich	Hosp	Lands		ndeve	ei, Lands	Interior	Wind	Opwind-1 to-s
											- VVIICI	Calm -1 to +1
												Downwind +1 to +5 Quarter wind from W
1	# Lanes	Lane	Width	M	ledian	Posted	*Obse	rved				Guarter wind none w
				ł	Nidth	Speed	Spe	ed				
Major Road Water	2	2			6	35	20		Stop condi		님	
Secondary Road	2	1	2) .	35	20		Stop condi	tion	e e	
	1 -	18			1				т		SB Service Dr.	/
Test 1 – 15 min.	From		2:35		То	22.5	2:50 p.i		Lunia CD C		Sel	
Decibel Reading		70.1		Aeq		36.5	122,333	max	Lmin 63.6 L90 65.4		88	
Traffic Volumes	ME	Major I B/EB	KOad SB/M	P		econdary √EB	Road SB/M	/P	noncontra constan			
Cars	TNL	»LD	JDrm	-D		16	48				Stop	Waterman
Medium Trucks (3-axle	9						2				×	waterman
Heavy Trucks	~/			-		1		-				
Buses				-		-						
Motorcycles	2	3		8			1		4 4			\mathbf{i}
,	24				275	-	1					-75
Test 2 – 15 min.	From				То				afavette			\ <u>-</u>
Decibel Reading				Aeq			12000	max	1000			
Traffic Volumes	-	Major I				econdary						Mark North
	NE	3/EB	SB/M	B	NB	VEB	SB/M	/B	-			Label Roads
Cars				s					+	Notes		Laborrioudo
Medium Trucks (3-axle Heavy Trucks		2							ł			
Buses	0								ł		ed under Water	man.
Motorcycles				7.					ł	Distant train		
wolurcycles		-							1	SB SD ~116.	11	
Test 3 – 15 min.	From				То		1.2		Į			
Decibel Reading				Aeq	39 -2 1	0.000		max	ł			
Traffic Volumes	NE	Major I 3/EB	Road SBAA	Β		econdary /EB	Road SBAA	/B	ł			
Cars					10/01/20				1			
Medium Trucks (3-axle	e)								1			
Heavy Trucks									1			
Buses												
Motorcycles									I			
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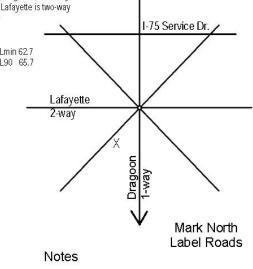
				(AM/PM	Site # F5
Job Number: 3600				Date: 1 NO\	
Project: DRIC				Day of Week	M T(W) T F
Instrumentation	RICON NL21, slow response, A-weighting, exch	nange rate = 3			0
	RICON Calibrator NC73		Calibration Cor	lfirmed	YesNo
Location	Dragoon @ Lafayette NE corner @ property line	es = edge of sidewalks		Temp. Heavy Overca	50 F st/Light Overcast/
Receptor				Sunny Clear Ni	ght/ Övercast Night
Represents	Houses along Lafayette			8	
Major Noise					
Source	Heavy trucks on Dragoon			Humidity	60%
Secondary Source	Lafayette, SB Service Drive, 1-75 depressed			Pavement	DryNet
Land Use Category	Serene Rec/Park/Res/Church/Hosp Dev	72dBA D-NA veloped Undevel. Lands ands	E-52dBA Interior	Wind	Upwind -1 to -5
		20			Calm <u>-1 to +1</u> Downwind +1 to +5
	# Lanes Lane Width Median Pos	ted *Observed			

			Width	Speed	Speed	
Major Road	3	11	14 <u>-</u>			Dragoon is one-way
Secondary Road	2	20	a c			Lafayette is two-way

Test 1 – 15 min.	From	12 noon	То	12:15 p.m.		
Decibel Reading	73.4	LAeq	85.1	Lmax		
Traffic Volumes	Major Ro	ad Drag	Secondary Road Laf			
Traine Volumes	NB EB	SBAMB	NBEP	SBAD		
Cars	81	N/A	17	22		
Medium Trucks (3-axle)	6		0	1		
Heavy Trucks	15		0	0		
Buses	1		0	0		
Motorcycles	0		0	0		

Test 2 – 15 min.	From		То	
Decibel Reading		LAeq		L max
Traffic Volumes	Major	Road	Secondar	y Road
Hame Volumes	NB/EB	SB/WB	NB/EB	SB/WB
Cars				
Medium Trucks (3-axle)				
Heavy Trucks				
Buses				
Motorcycles				

Test 3 – 15 min.	From		То	
Decibel Reading		LAeq		Lmax
Traffic Volumes	Major	Road	Secondar	y Road
IT diffe volumes	NB/EB	SB/W/B	NB/EB	SB/W/B
Cars				
Medium Trucks (3-axle)				
Heavy Trucks				
Buses				
Motorcycles				



Noise came from Dragoon, espec. Heavy truck passbys @ 80 + dBA. ~ $\frac{1}{2}$ of heavy trucks on Dragoon were hauling

containers.

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NOISE DA I	АЭПС								AM(PM)	Site # F6	
Job Number: 3600									Date: 1 NC		
Project: DRIC									Day of Week		
Instrumentation	RICON NL	21 slow	response,	A-weighting	g, exchange	e rate = 3	1				
	RICON Ca	librator l	VC73					Calibration Co	nfirmed	YesNo	
Location	Alley E of (Calvary	@ setback	of sidewall	k facing SB	Service [Dr.		Temp. 45 F Heavy Overca Clight Overcas		
Receptor Represents	Houses alo	ong SB S	Service Dr.	¢.					- Sunny/ Clear r	light/ Overcast Nigh	
Major Noise Source	1-75								Humidity	60 %	
Secondary Source	SB Service	e Dr.							Pavement	Dry A/et	
Land Use Category	A-57dBA Serene Park	Rec/	B-67dB/ Park/Res/Chu		C-72dB Develope Lands		D-NA ndevel, Lands	E-52dBA Interior	Wind	Upwind -1 to -5	
Major Road	# Lanes 8 2	1	Width 2 5	Median Width 12	Posted Speed 55 35	*Obser Spee			ſ		
Secondary Road	Z		5	~	30	- 50			-75	a I	
Test 1 – 15 min.	From		3:30 p.	m. To		3:45 p.n	n. Lmin 6 L90 6	5.2	10		
Decibel Reading		71.3 Major	LAe		80.6 Secondary	-	nax		\setminus	Calvary	
Traffic Volumes	NE	Major B/EB	SB/WB		B/EB	(B)	В	SB Service D	or V	Cal	
Cars						65			\wedge		
Medium Trucks (3-a)	xle)					2				š I	
Heavy Trucks								1		\mathbf{N}	
Buses									>		
Motorcycles	50		×						Alley		
Test 2 - 15 min.	From			То					× 1		
Decibel Reading			LAe	362	0	Lr	nax		\vee		
		Major	A.5.7 b.5	22	Secondary		00000000		ा		
Traffic Volumes	NE	B/EB	SBAWB		IB/EB	SB/W	В			Mark North	
A	1			0.						Label Roa	

Label Roads

Notes SB SD = 268 v/hr

Test 3 - 15 min. From То Decibel Reading LAeq Lmax Major Road Secondary Road Traffic Volumes NB/EB SB/WB NB/EB SB/WB Cars Medium Trucks (3-axle) Heavy Trucks Buses Motorcycles 1:\Projects\3600(\WP\Reports\Noise\Append B_NoiseDataSheets.doc

Cars

Buses Motorcycles

Medium Trucks (3-axle)

Heavy Trucks

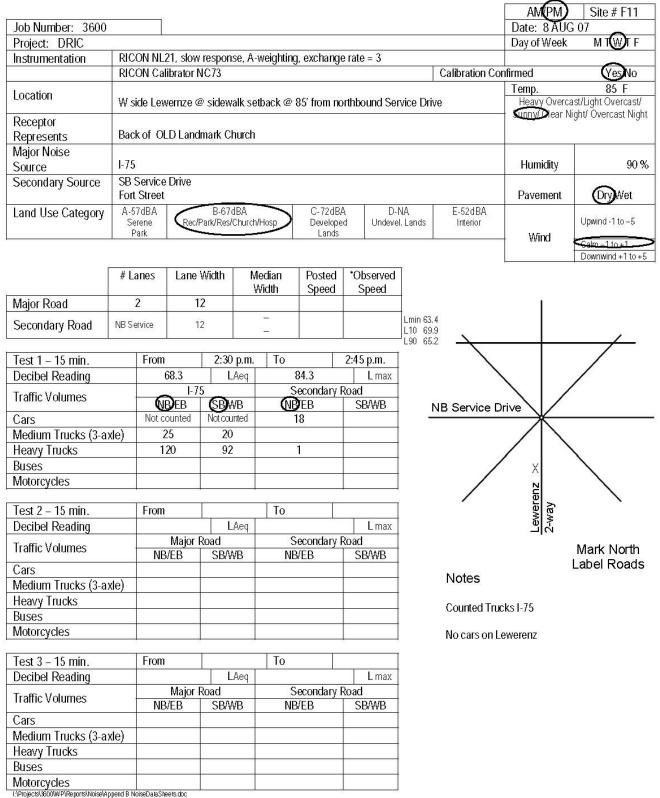
		1							AMPM	Site # F7
Job Number: 3600		100							Date: 1 NC	V 06
Project: DRIC									Day of Week	м т <mark>W</mark> T F
Instrumentation			response, A	-weighting	j, exchange	rate = 3				
	RICON C	alibrator	NC73					Calibration Co	E.	YesNo
Location	E side Ca	mpbell @	esetback of	houses fro	om SB Servi	ice Dr.			Temp. Heavy Overc	45 F as Light Overcas light/ Overcast Night
Receptor									Sunny Clear N	light Overcast Night
Represents	Houses fr	onting sid	de streets to	Service D	r.					10
Major Noise									1	
Source	I-75								Humidity	60 %
Secondary Source									Pavement	Dry)Wet
Land Use Category	A-57dBA Serene Park	Rec/	B-67dBA Park/Res/Churo	E-52dBA Interior	Wind	Upwind -1 to -5				
										Calm -1 to +1 Downwind +1 to +5
	# Lanes	Lane	Width	Median Width	Posted Speed	*Observed Speed	T			
Major Road	8		2	12	55	Speeu	-		г	
Secondary Road Cam	27.81	-	2	-			Stop Cor	ndition		
Secondary Road Cam	vcDr2		15	2 	35	35	ang an	4	1	-75
3	1775									
Test 1 – 15 min.	Fror	n	3:55 p.m	. To)	4:10 p.m.	Lmin 69.0			
Decibel Reading		73.1	LAeq		80.2	L max	L90 71.	2		/
Traffic Volumes		Aajor Roa	ad <u>- 1</u> -75		Secondary F				$\backslash \mid$	
	N	B/EB	€ ₿∕₩B	NE	B/EB	SB/WB		SB Service I	or. NZ	
Cars			870				-	10000 M 1000000000000000000000000000000	X	
Medium Trucks (3-ax	le)		11	2						
Heavy Trucks			128						/x _ `	\backslash
Buses			2					/	pe	\mathbf{X}
Motorcycles			0						Campbell	\mathbf{i}
			і 1011 HT мт	= 13% = 1%				/	a C	\mathbf{i}
Test 2 – 15 min.	Fror	n	1011	 To			T			
Decibel Reading			LAeq	1 20-20		Lmax	5		\vee	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Major			Secondary F					
Traffic Volumes	N	B/EB	SBAWB		B/EB	SB/WB	1			Mark North
Cars							1	N1 - F		Label Roads
Medium Trucks (3-ax	le)						1	Notes		
Heavy Trucks							1	CD CD down	stream ~ 180 v/	hr
Buses								SD SD UDWIR		
Motorcycles			2							
	1-		15	1 -	1.		-			
Test 3 – 15 min.	Fror	n		То			-			
Decibel Reading			LAeq			Lmax				
Traffic Volumes	N	Major B/EB	Road SB/WB		Secondary F B/EB	koad SB/WB				
Cars										
Medium Trucks (3-ax	le)						1			
Heavy Trucks										
Buses										
Motorcycles										
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induced reaction of the state of the	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -								<b>AM</b> PM	Site # F8
Job Number: 3600		-							Date: 1 NC	<u>00 V 06</u>
Project: DRIC									Day of Week	M TWT F
Instrumentation	RICON NL	21 slow	response,	A-weighting	g, exchange	e rate = 3				
	<b>RICON Ca</b>	librator M	VC73					Calibration Co	onfirmed	YesNo
1. T 1. S	Alley E of F	erdinan	d @ prop	erty line = ea	dge of sidev	valk			Temp.	50 F
Location				ed at this po					Heavy Overc	ast/Light Overcast/
Receptor		5	÷.						- Sunny Clear N	√ight/ Övercast Nigl
	SB Service	Dr Hor	nes							
Represents	00 00 100	, DI. HOI	105						6	
Major Noise	1-75								Humidity	60 9
Source	1-75								Tumuty	00
Secondary Source	CD C i	Dia							D	
	SB Service	Drive	D. 4 3 10		0.74.10		<b>D</b> 1/4		Pavement	Dry/Wet
Land Use Category	A-57dBA Serene	Good	B-67dB. Park/Res/Ch		C-72dB	Street Internet	D-NA devel, Lands	E-52dBA Interior		Upwind -1 to -5
	Park	Rech		urui/Hosp	Develope Lands		Jevel, Lanus	Interior	Wind	
									A A A A A A A A A A A A A A A A A A A	Calm -1 to +1
									s	Downwind +1 to +
						-				
	# Lanes	Lane	Width	Median	Posted	*Observ	1/ .64-	ucks were entering fr		
	1.000			Width	Speed	Speed		ucks were entening in in-ramp.	eewway@	
Major Road 1-75	8	1	2	12	55				l l	
Secondary Road										
	52	•						``	1-5	75 /
Test 1 – 15 min.	From		10:20 p.	m. To	0	10:35 p.m.	. Lmin 66	.5		
Decibel Reading		72.7	LAe	eq	85.1	Lm	ax L90 69	.7 🔪		
		Major	Road		Secondary	Road				/
Traffic Volumes	NE	EB	<b>GBW</b>		B/EB	<b>SB</b> WE	3		$\backslash$	/
Cars	~		×			22		SB Service	Dr. \/	
Medium Trucks (3-axl	e)					1	-		<u> </u>	
Heavy Trucks		49	168			1	-			
Buses			100			•	-			< <
Motorcycles	3					1		/		$\mathbf{i}$
WOLUTCYCIES		2		5						$\mathbf{i}$
Test 2 – 15 min.	From		ř	То			Ť		Alley	
	FIUII					1 1 1 2 2			R	
Decibel Reading			LA		0		ах		NZ	
Traffic Volumes	- NIE	Major I			Secondary		_		v	Mark North
2	NE	B/EB	SB/WB	5 N	B/EB	SB/WE	5			Label Roads
Cars							_	Notes		Eaborrioudu
Medium Trucks (3-axl	e)									
Heavy Trucks								Counted true	ks on I-75 as a	ck against separa
Buses								counts.		on againse sopara
Motorcycles										
	50). 		×	13		>	2	SB SD ~ 96	v/hr.	
Test 3 – 15 min.	From			To	2			1999 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 -		
Decibel Reading			LAe	eq		Lm	ax			
10 255		Major I	11	1.5.6	Secondary	Road				
Traffic Volumes	NE	B/EB	SBAWE		B/EB	SBAWE	3			
Cars			2.200 TA TA		- 11.1963.200323					
Medium Trucks (3-axl	e)	à				1	-			
	~			-			-			
Hogini nieke	1									
		2								
Heavy Trucks Buses Motorcycles										

												(A)	<b>∦</b> PM	Site # F9
Job Number: 3600												Date:		OV 06
Project: DRIC	<i>q</i>											Day of	f₩eek	M T 🕢 T F
Instrumentation					se, A-ı	veighting	, exchange	rate	= 3		1. 1925 - 1			
	RICO	)N Calil	brator N	VC73							Calibration C	Confirmed		YesNo
Location												Temp.		50 F
Lovaton	Clark	& SB \$	Service	Dr.								Heav	y Overc	ast/Light Overcast/
Receptor												Saura	rciearin	light/ Övercast Night
Represents	Clark	Park												
Major Noise														
Source	1-75,	Clark tu	urns tu	ning to	SB I-1	75 on ram	р					Hun	nidity	60 %
Secondary Source	Clark	k thru Service Dr. SB									Pave	ement	Ory A/et	
Land Use Category	A-57		1	B-67	dBA		C-72dB/	Υ.	D-	NA	E-52dBA			
Luna ose outegory	Ser	ene Irk	Rec/I	Park/Res	/Church	/Hosp	Develope Lands			el. Lands	Interior	10/	ind	Upwind -1 to -5
	2.5												inci	Calm -1 to +1
	-									<b>1</b>				
	#L	anes	1.250	ane /idth		ledian ∿idth	Posted Speed		bserved Speed	Mostven	icles operating fr	om stopped o	condition	
Major Road Clark	k 3 (1L, 1	l thru, 1R	)	12		-	35		20				F	
Secondary Road SD		3		12		8 <del></del>	35		20	one-way				
Secondary Roda of	1			37							<b>、</b> 1-7	5		
Test 1 – 15 min.	84	From		10:5	5 a.m.	То		11:1	0 a.m.					
Decibel Reading		73	2.5		Aeq	1	87.7		Lmax	Lmin 65.6		Clark Clark	5	
Traffic Volumes			Major I	Road		S	econdary I	Road		L90 68.3			2	
		NB/	EB	SBA	NB	NE	B/EB	S	B∕WB		SB Ser Dr.			
Cars											00 00 01.			
Medium Trucks (3-a)	de)		c	EE I		TE C						/	Ň	
Heavy Trucks			ು		NO I							/	$\backslash$	
Buses												/	X	$\backslash$
Motorcycles											/	/		$\mathbf{X}$
40.52					10			<i>v</i> .		•				$\mathbf{i}$
Test 2 – 15 min.		From				То		2			/			
Decibel Reading					_Aeq				Lmax				1	
Traffic Volumes			Major I				econdary I						¥	Mark North
		NB/	EB	SBA	NВ	NE	B/EB	S	B/WB					Label Roads
Cars										No	es			Labor Rouds
Medium Trucks (3-a)	(le)													_
Heavy Trucks														) * j (20
Buses										ļ	0	TMI		
Motorcycles											106	T MI 14 5		
Test 3 – 15 min.		From		ľ		То				57	58 (28)	2 1	\$	K A ES ES
Decibel Reading		TIOM			Aeq	10			Lmax				7	
		ŝ	Major I			\$	econdary I	l Soad	2 St 4 St 5		1			1 (3
Traffic Volumes	t	NB/		SBA	ΛB		B/EB		BAWB		125 * 4 = 5	00 v/hr		
Cars							9997-1000-10			t			21	4 84 2 1
Medium Trucks (3-a)	de)									t	184 H	Thr mal	kin 2	x4 8t x4 8 x4 4 8
Heavy Trucks										t	LT to	T/hr mai 1-75 SB	ramo	ų
Buses										t	& cap	w/ light + reffic	1	lar
Motorcycles										t	oposing	+ affic		0
					2	nanonanan an	States of States	÷		1	5 Z			

-

											AM		Site # F10	
Job Number: 3600											Date: 8		<u>0/</u>	
Project: DRIC	DICON	IMIO	1 dour	raceonce	e, A-weighti	ng ayahan	no rot	• · ·			Day of M	Геек	M TWT F	
Instrumentation	RICON	V IVLZ	brator N	IC73	e, A-weighu	пу, ехспан	je rat	e = 3		Calibration Co	nfirmod		YesNo	
22 Dfw	KICON	v Cali	טומוטרוע	1075							Temp.		85 F	
Location	S side	S side of SB Service Drive @ back of sidewalk corner of Glinnan										Heavy Overcast/Light Overcast/		
Receptor												icar ni	gine offerease night	
Represents	Back c	of All S	Saints C	atholic C	hurch									
Major Noise Source	I-75	1-75									Humid	ity	90 %	
Secondary Source		SB Service Drive Fort Street									Pavem	ent	Dry A/et	
Land Use Category	Serer	A-57dBA Serene Park Rec/Park/Res/Church/Hosp Lands C-72dBA Developed Undevel. Lands									Upwind -1 to -5			
									23		- OVIII.		Salm_1 to +1	
	# Lan	ies	Lane	Width	Median	Postec	20 S.20	Observed	1				Downwind +1 to +5	
N. D. J	1-75	-			₩idth	Speed		Speed	_					
Major Road	,	2	-		1 <u>11</u> 1		-		-					
Secondary Road	SB Service/F	Ramp	3	0	1	35		35	Lmin 66. L10 76. L90 69.	6				
Test 1 – 15 min.	F	From		3:00 p	o.m. To		3:1	5 p.m.						
Decibel Reading			4.4	LA		89.2		Lmax					/	
*			Ram		~~	Service E	)rive	Eman			$\mathbf{X}$	/	/	
Traffic Volumes		NBEB SBAWB		3 🚺			B/₩B	N	IB Service D	)rive	/			
Cars		11	1.5			-30						$\leftarrow$		
Medium Trucks (3-a	xle)	2										1		
Heavy Trucks		1	15			1					/x		$\mathbf{X}$	
Buses										/		a a	$\mathbf{i}$	
Motorcycles			2								Glinnan		$\backslash$	
Test 2 – 15 min.	F	From		à	То					*	Glinnan	й Л		
Decibel Reading			,	LA	eq			Lmax			10	5		
Traffic Volumes		Major Road				Secondary Road					523521. <b>•</b> 3		Mark North	
		NB/EB SB/		SBAW	NWB NB/EB			SB/WB				1	_abel Roads	
Cars										Notes				
Medium Trucks (3-a	xle)						-							
Heavy Trucks							-			Glinnan Roa	d Closed			
Buses Motorcycles							-							
motoreyolda			3		8		2							
Test 3 – 15 min.	F	From			То									
Decibel Reading		LAeq		eq	Lm									
Traffic Volumes		Major Road NB/EB SB/WB		1 6	Secondary Road NB/EB SI									
Cars														
Medium Trucks (3-a	xle)													
Heavy Trucks														
Buses					~									
Motorcycles		Dunct												
1:\Projects\3600\WP\Reports\Noise\A	ppend B Noise	evalaShee	ets.doc											



Job Number: 3600									Date: 30	
Project: DRIC	DICOM NI	01 dou	rachonca	woightin	a ovobo pa	roto 2			Day of ₩	eek M TWT F
Instrumentation	RICON NL		response, /	∢-weignuni	j, exchange	e rate = 5		Calibration Co	nfirmod	YesNo
1. 259	NICON Ca		1075					Calibration CO	Temp.	
Location	S side of N	IB SD at		Heavy Overcast/Light Overcast/						
Receptor									Sunny/ Cle	ear Night Overcast Night
Represents	Homes on	NB Serv	ice Drive							
Major Noise										
Source	I-75								Humidi	y 90 %
Secondary Source	NB Service	e Drive							Paveme	nt Dry Wet
Land Use Category	A-57dBA Serene Park	Rec/F	B-67dBA Park/Res/Chur	ch/Hosp			NA E-52dBA el. Lands Interior		- Wind	Upwind -1 to -5
								-		$\frac{\text{Gelm} - 1 \text{ to } + 1}{\text{Downwind} + 1 \text{ to } + 5}$
Г	# Lanes	Lane '	d/idth	Median	Posted	*Observed	Т			
	# Lanes	Lane	AAIOUT	Width	Speed	Speed				
Major Road	8	1	2	12	55	55	1		Λ	
Secondary Road	2	1.	4	14-	35	30	1		Y	0
		-					→ † Lmin 59.	·		1-75
Test 1 – 15 min.	From	1	11:20 a.r	1777 North 1		11:35 a.m.	L10 71			
Decibel Reading		68.6	LAeq		84.8	Lmax	L90 64			/
Traffic Volumes	6	Major F BEB	SBA/B		Secondary I B/EB	SBAWB	-		$\mathbf{X}$	/
Cars		390	387				1			NB Service Drive
Medium Trucks (3-a)		28	27					x	Ť	
Heavy Trucks	1	60	154	7			ļ ,	^		$\backslash$
Buses							ļ	/		$\mathbf{X}$
Motorcycles	14	23							le l	$\backslash$
Test 2 – 15 min.	From	1	27	То	1		1		Campbell	$\sim$
Decibel Reading			LAeq			Lmax	t		Ca Ca	
Traffic Volumes		Major Road			Secondary I		1			Mark North
	NE	3/EB	SB/WB	NE	B/EB	SB/WB	ļ			Label Roads
Cars Medium Trucks (3-a)							ł	Notes		
Heavy Trucks				2			1			
Buses							1			
Motorcycles							1			
Test 3 – 15 min.	From	Ì		То			1			
Decibel Reading		-	LAeq			Lmax	ł			
Traffic Volumes	NF	Major Ro NB/EB		5	Secondary Road B/EB SB/WB		+			
Cars			SB/WB				t			
Medium Trucks (3-a)	de)						1			
Heavy Trucks							1			
Buses							ļ			
Motorcycles I:\Projects\3600\WP\Reports\Noise\Ap										

# Appendix C

## **Existing Noise at Ambassador Bridge**

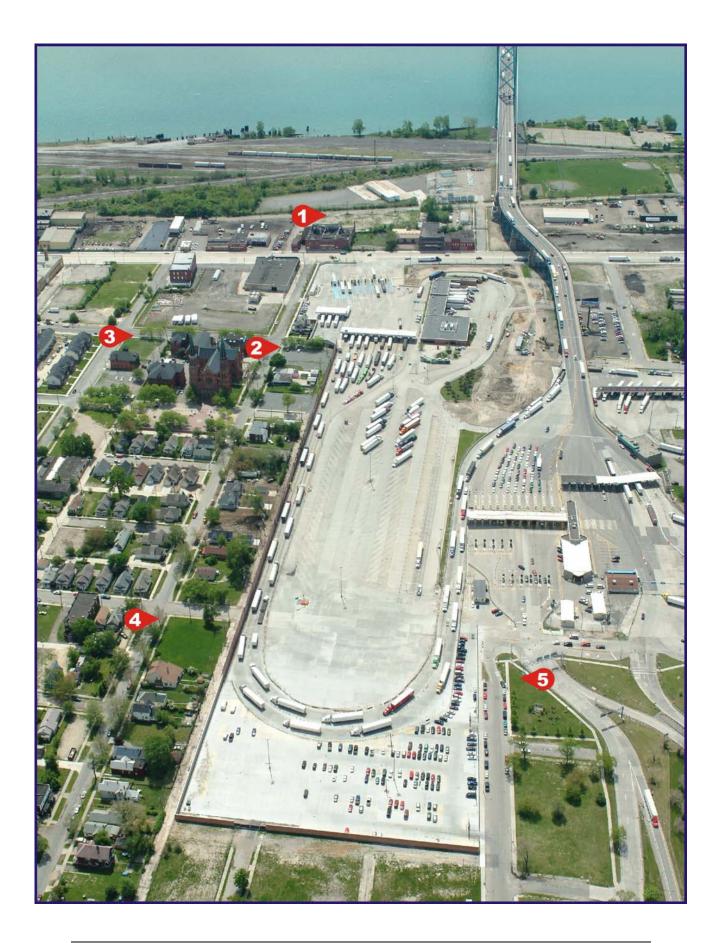
### Noise Analysis Near the Ambassador Bridge

Noise levels were recorded for playback at this meeting to give an idea of noise conditions at the existing bridge. This helps understand what to expect at a new bridge.

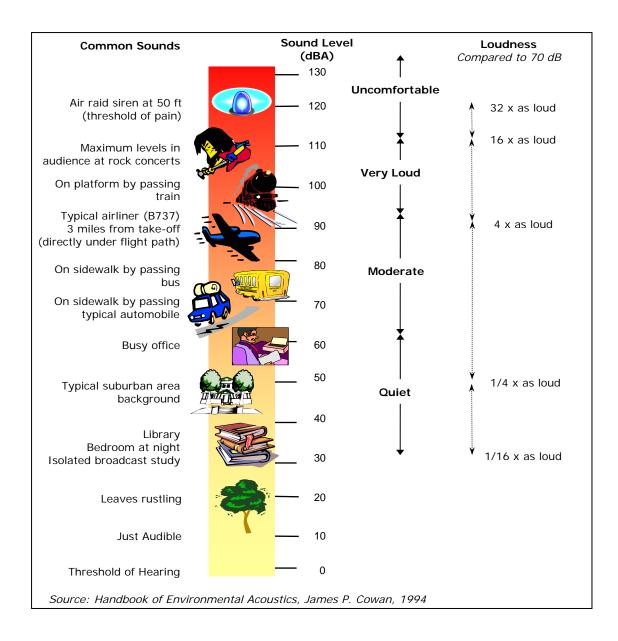
- 1. Noise was measured three times during the day at five locations.
- 2. There was, at most, a 2 decibels (dBA) change during the day.
- 3. 10-minute average sound levels ranged between 57 and 66 dBA.
- 4. The noisiest location was the truck plaza (Site 5).
- 5. By comparison most people find noises of 65 dBA or higher interfere with conversation or watching TV, and noise mitigation must be considered on highway projects when noise is at 66 dBA or higher.

Location	Morning (7:30 – 9:30 AM)	<b>Mid-day</b> (10:00 AM – Noon)	Early Afternoon (1:00 – 3:00 PM)
1	58	59	59
2	61	62	61
3	58	57	58
4	59	60	58
5	64	66	64

### Noise Measurement Results (10-min Average Sound Level, dBA)



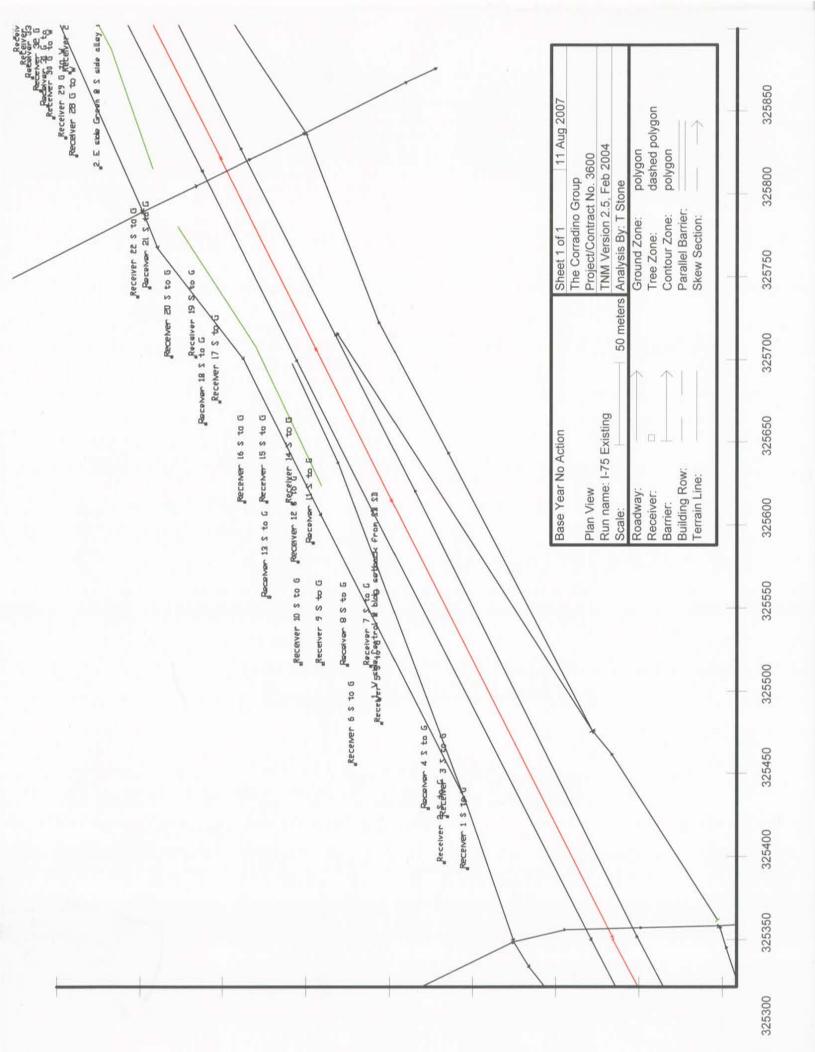


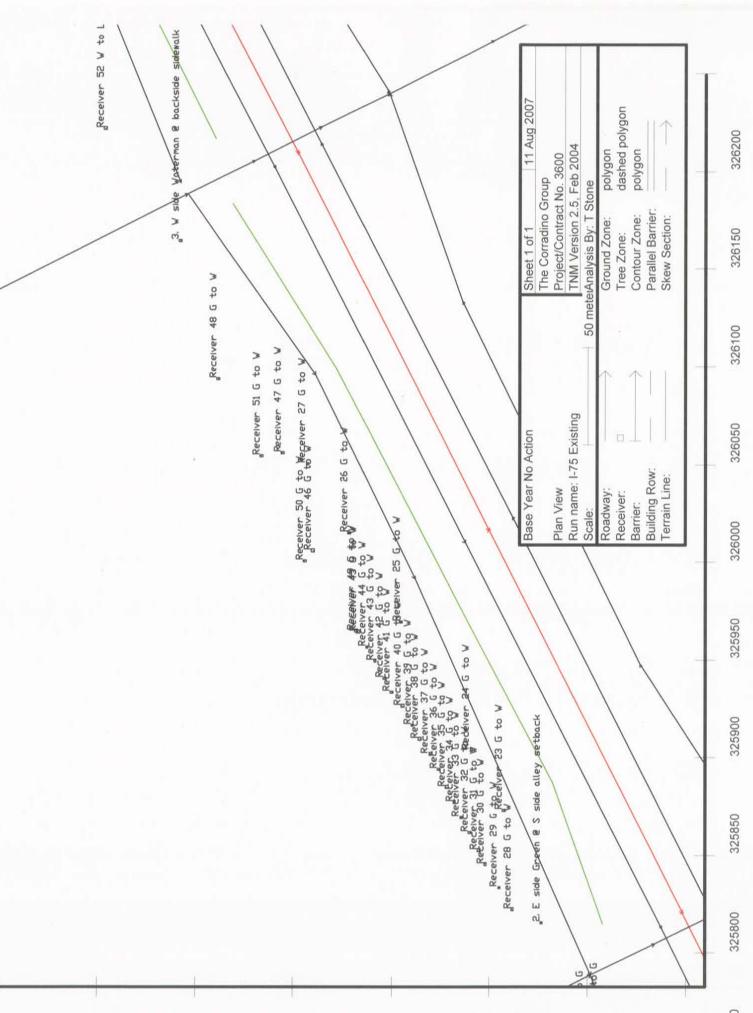


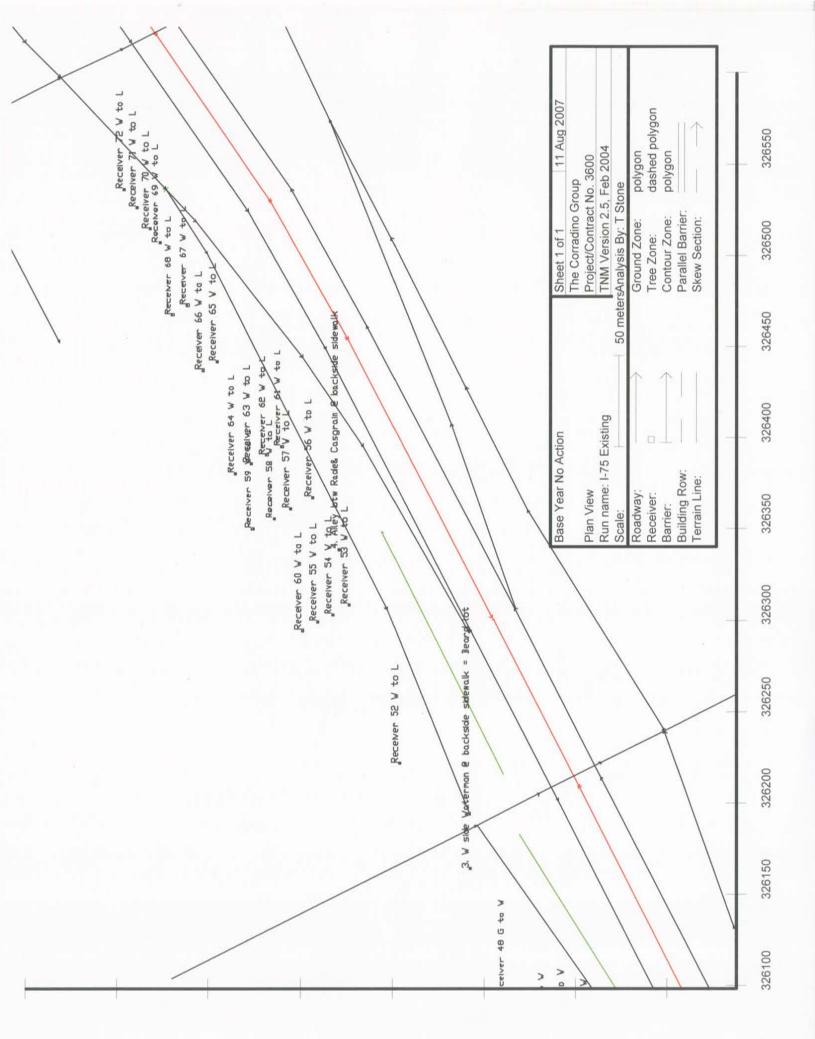
# **Appendix D**

**TNM Output** 

**Base Year No Action** 







And the second s	5700 326750 326800 326850 326900 326950 327000 327050 327100 327150
S NE Correr Brogo	326650 326700

According to the second	Base Year No Action     Sheet 1 of 1     11 Aug 2007       Plan View     The Corradino Group       Project/Contract No. 3600       Run name: I-75 Existing       Scale:       Roadway:       For econd Cone:       Barrier:       Dilding Row:       Terrain Line:	327200 327250 327300 327350 327400 327450 327500 327550 327600 327650
	R Reverver 120120 L	327150 3

The Corradino Group T Stone RESULTS: SOUND LEVELS PROJECT/CONTRACT: 3600 RUN: Base BARNIER DESIGN: Base BARRIER DESIGN: 20 de ATMOSPHERICS: 20 de Receiver No. #DUs Name No. #DUs	3600 Base Year No Action					15 August 2007	2000					
S: SOUND LEVELS T/CONTRACT: R DESIGN: PHERICS: No.	0 e Year No					22222	1007 1					
S: SOUND LEVELS T/CONTRACT: R DESIGN: HERICS: No.	0 ie Year No					<b>TNM 2.5</b>						
LTS: SOUND LEVELS ECT/CONTRACT: tier design: Spherics: ver No.	0 ie Year No					Calculate	Calculated with TNM 2.5	M 2.5				
ECT/CONTRACT: XIER DESIGN: SPHERICS: Ver No.	0 se Year No											
Ver No.	e Year No											
K DESIGN: HERICS: No. #	A REAL PROPERTY AND A REAL PROPERTY A REAL PROPERTY AND A REAL PRO	Action										
HERICS: No. 4	INPUT HEIGHTS	ITS					Average a State h	Average pavement type shall be used unless a State highway agency substantiates the use	be shall be u	sed unless ates the us		
No.	20 deg C, 50% RH	% RH					of a diffe	of a different type with approval of FHWA	n approval o	f FHWA.	2	
No.												
	Js Existing	ing No Barrier	rier					With Barrier	-			
			-	-I	Increase over existing	existing	Type	Calculated	Noise Reduction	uction		
			ated Crit'n		Calculated	Crit'n	Impact	LAeq1h	Calculated	i Goal	Calculated	ted
						Sub'l Inc					minus	
											Goal	
	dBA	dBA	dBA		dB	dB		dBA	dB	dВ	dВ	
9. W side Clark N of SB SD - Clark Park 32	-	0.0	72.9	99	72.9	10	0 Snd Lvl	72	6	0.0	80	-8.0
8. Alley E of Ferdinand @ backside sidews 34	1	0.0	75.6	99	75.6	3 10	0 Snd Lvl	75.6		0.0	80	-8.0
7. E side Campbell @ house setback fr SC 36	1	0.0	72.8	99	72.8	3 10	0 Snd Lvl	72.8		0.0	80	-8.0
6. Alley E of Calvary @ backside sidewalk 40	1	0.0	71.8	99	71.8	3 10	0 Snd Lvl	71.8		0.0	80	-8.0
5. NE Corner Dragoon & Lafyette @ backs 46	1	0.0	71.9	99	71.9	9 10	0 Snd Lvl	71.9		0.0	8	-8.0
4. Alley btw Rade& Casgrain @ backside : 48	+	0.0	75.6	99	75.6	3 10	D Snd Lvl	75.6		0.0	80	-8.0
3. W side Waterman @ backside sidewalk 53	+	0.0	70.3	99	70.3	3 10	0 Snd Lvl	70.3		0.0	8	-8.0
2. E side Green @ S side alley setback 55	2	0.0	71.5	99	71.5	5 10	0 Snd Lvl	71.5		0.0	80	-8.0
1. W side Central @ bldg. setback from SE 58	4	0.0	74.6	99	74.6	5 10	D Snd Lvl	74.6		0.0	80	-8.0
Receiver 1 S to G 60	1	0.0	75.1	99	75.1	10	0 Snd Lvl	75.1		0.0	80	-8.0
Receiver 2 S to G 61	1	0.0	0.0	99	0.0	10	0 invalid	0.0		0.0	8	0.0
Receiver 3 S to G 62	1	0.0	75.5	99	75.5	5 10	0 Snd Lvl	75.5		0.0	80	-8.0
Receiver 4 S to G 63	1	0.0	73.7	99	73.7	10	0 Snd Lvl	73.7		0.0	80	-8.0
Receiver 5 S to G 64	Ļ	0.0	73.3	99	73.3	3 10	0 Snd Lvl	73.3		0.0	80	-8.0
Receiver 6 S to G 65	1	0.0	69.8	99	69.8	3 10	D Snd Lvl	69.8		0.0	80	-8.0
Receiver 7 S to G 66	Ļ	0.0	75.1	99	75.1	10	0 Snd Lvl	75.1		0.0	80	-8.0
Receiver 8 S to G 67	F	0.0	72.9	99	72.9	9 10	0 Snd Lvl	72.9		0.0	80	-8.0
Receiver 9 S to G 68	1	0.0	70.7	99	70.7	7 10	0 Snd Lvl	70.7		0.0	80	-8.0
Receiver 10 S to G 69	2	0.0	69.4	99	69.4	10	0 Snd Lvl	69.4		0.0	80	-8.0
Receiver 11 S to G 70	+	0.0	75.6	99	75.6	5 10	0 Snd Lvl	75.6		0.0	80	-8.0
Receiver 12 S to G 71	-	0.0	72.6	99	72.6	3 10	0 Snd Lvl	72.6		0.0	8	-8.0
Receiver 13 S to G 72	2	0.0	69.6	99	69.6		0 Snd Lvl	69.69		0.0	80	-8.0
Receiver 14 S to G 73	<del>.</del> -	0.0	74.8	99	74.8	3 10	0 Snd Lvl	74.8		0.0	8	-8.0

()			1000						1.17		0	
Receiver 15 S to G	74	-	0.0	71.9	99	71.9	10	Snd Lvl	71.9	0.0	œ	-8.0
Receiver 16 S to G	75	-	0.0	70.4	66	70.4	10	Snd Lvl	70.4	0.0	80	-8.0
Receiver 17 S to G	76	2	0.0	70.5	99	70.5	10	Snd Lvl	70.5	0.0	80	-8.0
Receiver 18 S to G	11	-	0.0	69.3	99	69.3	10	Snd Lvl	69.3	0.0	80	-8.0
Receiver 19 S to G	78	-	0.0	6.9.9	99	69.9	10	Snd Lvl	69.9	0.0	80	-8.0
Receiver 20 S to G	79	-	0.0	68.3	99	68.3	10	Snd Lvl	68.3	0.0	80	-8.0
Receiver 21 S to G	80	-	0.0	68.2	99	68.2	10	Snd Lvl	68.2	0.0	80	-8.0
Receiver 22 S to G	81	÷	0.0	67.3	99	67.3	10	Snd Lvl	67.3	0.0	80	-8.0
Receiver 23 G to W	82	-	0.0	71.9	99	71.9	10	Snd Lvl	71.9	0.0	80	-8.0
Receiver 24 G to W	83	-	0.0	71.6	99	71.6	10	Snd Lvl	71.6	0.0	80	-8.0
Receiver 25 G to W	84	-	0.0	70.0	99	70.0	10	Snd Lvl	70.0	0.0	80	-8.0
Receiver 26 G to W	85	16	0.0	68.9	99	68.9	10	Snd Lvl	68.9	0.0	00	-8.0
Receiver 27 G to W	86	2	0.0	68.0	99	68.0	10	Snd Lvl	68.0	0.0	80	-8.0
Receiver 28 G to W	87	4	0.0	65.3	99	65.3	10	I	65.3	0.0	00	-8.0
Receiver 29 G to W	88	2	0.0	0.0	99	0.0	10	invalid	0.0	0.0	00	0.0
Receiver 30 G to W	89	2	0.0	62.9	99	62.9	10	I	65.9	0.0	00	-8.0
Receiver 31 G to W	06	-	0.0	66.1	99	66.1	10	Snd Lvl	66.1	0.0	60	-8.0
Receiver 32 G to W	91	-	0.0	66.7	99	66.7	10	Snd Lvl	66.7	0.0	80	-8.0
Receiver 33 G to W	92	-	0.0	6.99	99	6.99	10	Snd Lvl	66.9	0.0	00	-8.0
Receiver 34 G to W	93	2	0.0	67.0	99	67.0	10	Snd Lvl	67.0	0.0	80	-8.0
Receiver 35 G to W	94	2	0.0	67.1	99	67.1	10	Snd Lvl	67.1	0.0	00	-8.0
Receiver 36 G to W	95	2	0.0	67.5	99	67.5	10	Snd Lvl	67.5	0.0	80	-8.0
Receiver 37 G to W	96	2	0.0	67.4	99	67.4	10	Snd Lvl	67.4	0.0	00	-8.0
Receiver 38 G to W	97	-	0.0	6.99	99	66.9	10	Snd Lvl	66.9	0.0	80	-8.0
Receiver 39 G to W	98	-	0.0	66.5	99	66.5	10	Snd Lvl	66.5	0.0	80	-8.0
Receiver 40 G to W	66	2	0.0	66.1	99	66.1	10	Snd Lvl	66.1	0.0	80	-8.0
Receiver 41 G to W	100	-	0.0	66.4	99	66.4	10	Snd Lvl	66.4	0.0	80	-8.0
Receiver 42 G to W	101	2	0.0	66.1	99	66.1	10	Snd Lvl	66.1	0.0	80	-8.0
Receiver 43 G to W	102	٢	0.0	66.2	99	66.2	10	Snd Lvl	66.2	0.0	80	-8.0
Receiver 44 G to W	103	-	0.0	65.8	99	65.8	10	1	65.8	0.0	80	-8.0
Receiver 45 G to W	104	2	0.0	66.5	99	66.5	10	Snd Lvl	66.5	0.0	80	-8.0
Receiver 46 G to W	105	2	0.0	66.1	66	66.1	10	Snd Lvi	66.1	0.0	80	-8.0
Receiver 47 G to W	106	-	0.0	66.8	99	66.8	10	Snd Lvl	66.8	0.0	80	-8.0
Receiver 48 G to W	107	2	0.0	65.6	99	65.6	10	1	65.6	0.0	80	-8.0
Receiver 49 G to W	108	2	0.0	67.2	99	67.2	10	Snd Lvl	67.2	0.0	80	-8.0
Receiver 50 G to W	109	2	0.0	66.6	99	66.6	10	Snd Lvl	66.6	0.0	80	-8.0
Receiver 51 G to W	110	-	0.0	62.9	99	65.9	10	I	65.9	0.0	80	-8.0
Receiver 52 W to L	111	10	0.0	69.4	99	69.4	10	Snd Lvl	69.4	0.0	80	-8.0
Receiver 53 W to L	112	-	0.0	72.2	99	72.2	10	Snd Lvl	72.2	0.0	8	-8.0
Receiver 54 W to L	113	-	0.0	70.4	99	70.4	10	Snd Lvl	70.4	0.0	80	-8.0
		1.00	ļ			0.00						

Receiver 56 W to L	115	-	0.0	76.9	99	76.9	10	Snd Lvl	76.9	0.0	œ	-8.0
Receiver 57 W to L	116	2	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	80	-8.0
Receiver 58 W to L	117	2	0.0	70.1	99	70.1	10	Snd Lvl	70.1	0.0	80	-8.0
Receiver 59 W to L	118	-	0.0	68.3	99	68.3	10	Snd Lvl	68.3	0.0	60	-8.0
Receiver 60 W to L	119	-	0.0	67.7	99	67.7	10	Snd Lvl	67.7	0.0	0	-8.0
Receiver 61 W to L	120	-	0.0	76.7	99	76.7	10	Snd Lvl	76.7	0.0	80	-8.0
Receiver 62 W to L	121	-	0.0	72.9	99	72.9	10	Snd Lvl	72.9	0.0	8	-8.0
Receiver 63 W to L	122	-	0.0	70.8	99	70.8	10	Snd Lvl	70.8	0.0	80	-8.0
Receiver 64 W to L	123	-	0.0	69.2	99	69.2	10	Snd Lvl	69.2	0.0	60	-8.0
Receiver 65 W to L	124	÷	0.0	73.0	99	73.0	10	Snd Lvl	73.0	0.0	80	-8.0
Receiver 66 W to L	125	-	0.0	71.2	99	71.2	10	Snd Lvl	71.2	0.0	80	-8.0
Receiver 67 W to L	126	-	0.0	73.1	99	73.1	10	Snd Lvl	73.1	0.0	80	-8.0
Receiver 68 W to L	127	-	0.0	71.1	99	71.1	10	Snd Lvl	71.1	0.0	80	-8.0
Receiver 69 W to L	128	-	0.0	74.9	99	74.9	10	Snd Lvl	74.9	0.0	80	-8.0
Receiver 70 W to L	129	۲	0.0	74.8	66	74.8	10	Snd Lvl	74.8	0.0	00	-8.0
Receiver 71 W to L	130	-	0.0	74.8	99	74.8	10	Snd Lvl	74.8	0.0	8	-8.0
Receiver 72 W to L	131	-	0.0	7.4.7	99	74.7	10	Snd Lvl	74.7	0.0	80	-8.0
Receiver 73 D to J	132	9	0.0	72.4	99	72.4	10	Snd Lvl	72.4	0.0	80	-8.0
Receiver 74 D to J	133	10	0.0	72.6	99	72.6	10	Snd Lvl	72.6	0.0	80	-8.0
Receiver 75 D to J	134	2	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 76 D to J	135	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 77 D to J	136	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 78 D to J	137	10	0.0	69.9	99	69.9	10	Snd Lvl	63.9	0.0	80	-8.0
Receiver 79 D to J	138	-	0.0	69.5	99	69.5	10	Snd Lvl	69.5	0.0	80	-8.0
Receiver 80 D to J	139	3	0.0	68.9	99	68.9	10	Snd Lvl	68.9	0.0	80	-8.0
Receiver 81 D to J	140	2	0.0	68.9	99	68.9	10	Snd Lvl	68.9	0.0	80	-8.0
Receiver 82 D to J	141	2	0.0	69.1	99	69.1	10	Snd Lvl	69.1	0.0	œ	-8.0
Receiver 83 D to J	142	<u>.</u>	0.0	68.1	99	68.1	10	Snd Lvl	68.1	0.0	80	-8.0
Receiver 84 D to J	143	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 85 D to J	144	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 86 D to J	145	-	0.0	67.7	99	67.7	10	Snd Lvl	67.7	0.0	80	-8.0
Receiver 87 D to J	146	-	0.0	67.0	99	67.0	10	Snd Lvl	67.0	0.0	80	-8.0
Receiver 88 D to J	147	-	0.0	66.2	99	66.2	10	Snd Lvl	66.2	0.0	80	-8.0
Receiver 89 D to J	148	-	0.0	68.5	99	68.5	10	Snd Lvl	68.5	0.0	80	-8.0
Receiver 90 D to J	149	-	0.0	67.0	99	67.0	10	Snd Lvl	67.0	0.0	00	-8.0
Receiver 91 D to J	150	-	0.0	65.6	99	65.6	10	I	65.6	0.0	80	-8.0
Receiver 92 D to J	151	-	0.0	65.2	99	65.2	10	1	65.2	0.0	00	-8.0
Receiver 93 D to J	152	4	0.0	0.0	99	0.0	10	invalid	0.0	0.0	œ	0.0
Receiver 94 D to J	153	-	0.0	71.6	99	71.6	10	Snd Lvl	71.6	0.0	80	-8.0
Receiver 95 D to J	154	-	0.0	7.17	99	71.7	10	Snd Lvl	71.7	0.0	00	-8.0
Receiver 96 D to J	155	-	0.0	72.3	99	72.3	10	Snd Lvl	72.3	0.0	00	-8.0
					>>>						>	

Receiver 97 D to J	156	۲	0.0	72.3	99	72.3	10	Snd Lvl	72.3	0.0	80	-8.0
Receiver 98 D to J	157	F	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	80	-8.0
Receiver 99 D to J	158	-	0.0	66.0	99	66.0	10	Snd Lvl	66.0	0.0	80	-8.0
Receiver 100 D to J	159	-	0.0	66.0	99	66.0	10	Snd Lvl	66.0	0.0	80	-8.0
Receiver 101 D to J	160	-	0.0	66.0	99	66.0	10	Snd Lvl	66.0	0.0	80	-8.0
Receiver 102 D to J	161	4	0.0	63.9	99	63.9	10	I	63.9	0.0	80	-8.0
Receiver 103 D to J	162	<del>.</del>	0.0	64.5	99	64.5	10	I	64.5	0.0	80	-8.0
Receiver 104 D to J	163	F	0.0	65.3	66	65.3	10	I	65.3	0.0	8	-8.0
Receiver 105 D to J	164	-	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	80	-8.0
Receiver 106 D to J	165	-	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	80	-8.0
Receiver 107 D to J	166	-	0.0	68.3	99	68.3	10	Snd Lvl	68.3	0.0	80	-8.0
Receiver 108 D to J	167	t.	0.0	73.7	66	73.7	10	Snd Lvl	73.7	0.0	80	-8.0
Receiver 109 D to J	168	-	0.0	69.8	66	69.8	10	Snd Lvl	69.8	0.0	80	-8.0
Receiver 110 D to J	169	-	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	80	-8.0
Receiver 111 D to J	170	-	0.0	66.6	99	66.6	10	Snd Lvl	66.6	0.0	80	-8.0
Receiver 112 D to J	171	-	0.0	65.2	66	65.2	10	1	65.2	0.0	00	-8.0
Receiver 113 D to J	172	-	0.0	64.3	99	64.3	10	1	64.3	0.0	80	-8.0
Receiver 114 D to J	173	-	0.0	72.7	66	72.7	10	Snd Lvl	72.7	0.0	80	-8.0
Receiver 115 D to J	174	-	0.0	71.9	99	71.9	10	Snd Lvl	71.9	0.0	80	-8.0
Receiver 116 D to J	175	+	0.0	72.3	66	72.3	10	Snd Lvl	72.3	0.0	80	-8.0
Receiver 117 D to J	176	1	0.0	72.2	66	72.2	10	Snd Lvl	72.2	0.0	80	-8.0
Receiver 118 D to J	177	-	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	80	-8.0
Receiver 119 D to J	178	-	0.0	72.1	99	72.1	10	Snd Lvl	72.1	0.0	80	-8.0
Receiver 120 D to J	179	-	0.0	72.0	66	72.0	10	Snd Lvl	72.0	0.0	8	-8.0
Receiver 121 D to J	180	-	0.0	72.0	66	72.0	10	Snd Lvl	72.0	0.0	80	-8.0
Receiver 122 D to J	181	e	0.0	71.8	99	71.8	10	Snd Lvl	71.8	0.0	80	-8.0
Receiver 123 D to J	182	2	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0	80	-8.0
Receiver 124 D to J	183	2	0.0	72.2	66	72.2	10	Snd Lvl	72.2	0.0	80	-8.0
Receiver 125 D to J	184	-	0.0	65.1	99	65.1	10	1	65.1	0.0	80	-8.0
Receiver 126 D to J	185	2	0.0	65.1	66	65.1	10	1	65.1	0.0	80	-8.0
Receiver 127 D to J	186	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 128 D to J	187	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	œ	0.0
Receiver 129 D to J	188	-	0.0	0.0	66	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 130 D to J	189	-	0.0	0.0	66	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 131 D to J	190	+	0.0	0.0	66	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 132 D to J	191	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 133 D to J	192	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	00	0.0
Receiver 134 D to J	193	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	00	0.0
Receiver 135 D to J	194	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 136 D to J	195	1	0.0	0.0	66	0.0	10	invalid	0.0	0.0	8	0.0
								Concernance				

Dessiner 420 11+ C	407			0 10	000		1	Cond Lad	010		0	
Keceiver 130 J to C	1AL	_	0.0	7.10	99	7.10	DL	Shd LVI	7.10	0.0	œ	Ω.0
Receiver 139 J to C	198	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 140 J to C	199	-	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	00	-8.0
Receiver 141 J to C	200	-	0.0	74.3	99	74.3	10	Snd Lvl	74.3	0.0	80	-8.0
Receiver 142 J to C	201	-	0.0	76.1	99	76.1	10	Snd Lvl	76.1	0.0	80	-8.0
Receiver 143 J to C	202	2	0.0	74.0	99	74.0	10	Snd Lvl	74.0	0.0	80	-8.0
Receiver 144 J to C	203	÷	0.0	72.5	99	72.5	10	Snd Lvl	72.5	0.0	80	-8.0
Receiver 145 J to C	204	-	0.0	76.3	99	76.3	10	Snd Lvl	76.3	0.0	80	-8.0
Receiver 146 J to C	205	2	0.0	76.9	99	76.9	10	Snd Lvl	76.9	0.0	80	-8.0
Receiver 147 J to C	206	-	0.0	76.9	99	76.9	10	Snd Lvl	76.9	0.0	80	-8.0
Receiver 148 J to C	207	-	0.0	76.7	99	76.7	10	Snd Lvl	76.7	0.0	80	-8.0
Receiver 149 J to C	208	2	0.0	76.4	99	76.4	10	Snd Lvl	76.4	0.0	80	-8.0
Receiver 150 J to C	209	-	0.0	65.9	99	65.9	10	1	65.9	0.0	80	-8.0
Receiver 151 J to C	210	-	0.0	68.5	99	68.5	10	Snd Lvl	68.5	0.0	80	-8.0
Receiver 152 J to C	211	۰	0.0	66.3	99	66.3	10	Snd Lvl	66.3	0.0	80	-8.0
Receiver 153 J to C	212	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	60	0.0
Receiver 154 J to C	213	1	0.0	71.2	99	71.2	10	Snd Lvl	71.2	0.0	80	-8.0
Receiver 155 J to C	214	÷	0.0	69.4	99	69.4	10	Snd Lvl	69.4	0.0	80	-8.0
Receiver 156 J to C	215	1	0.0	68.4	99	68.4	10	Snd Lvl	68.4	0.0	80	-8.0
Receiver 157 J to C	216	-	0.0	67.3	99	67.3	10	Snd Lvl	67.3	0.0	80	-8.0
Receiver 158 J to C	217	-	0.0	66.2	99	66.2	10	Snd Lvl	66.2	0.0	80	-8.0
Receiver 159 J to C	218	-	0.0	65.4	99	65.4	10	1	65.4	0.0	80	-8.0
Receiver 160 J to C	219	-	0.0	73.5	99	73.5	10	Snd Lvl	73.5	0.0	80	-8.0
Receiver 161 J to C	220	-	0.0	71.9	99	71.9	10	Snd Lvl	71.9	0.0	80	-8.0
Receiver 162 J to C	221	-	0.0	70.5	99	70.5	10	Snd Lvl	70.5	0.0	80	-8.0
Receiver 163 J to C	222	-	0.0	69.2	99	69.2	10	Snd Lvl	69.2	0.0	80	-8.0
Receiver 164 J to C	223	÷	0.0	68.1	99	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
Receiver 165 J to C	224	-	0.0	60.9	99	66.9	10	Snd Lvl	6.99	0.0	8	-8.0
Receiver 166 J to C	225	٢	0.0	66.2	99	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
Receiver 167 J to C	226	-	0.0	65.4	66	65.4	10	1	65.4	0.0	8	-8.0
Receiver 168 J to C	227	1	0.0	71.3	99	71.3	10	Snd Lvl	71.3	0.0	80	-8.0
Receiver 169 J to C	228	Ţ	0.0	69.69	99	69.69	10	Snd Lvl	69.6	0.0	80	-8.0
Receiver 170 J to C	229	-	0.0	66.3	99	66.3	10	Snd Lvl	66.3	0.0	80	-8.0
Receiver 171 J to C	230	÷	0.0	71.2	99	71.2	10	Snd Lvl	71.2	0.0	80	-8.0
Receiver 172 J to C	231	t-	0.0	67.7	99	67.7	10	Snd Lvl	67.7	0.0	80	-8.0
Receiver 173 J to C	232	÷	0.0	66.8	99	66.8	10	Snd Lvl	66.8	0.0	80	-8.0
Receiver 174 J to C	233	-	0.0	66.1	99	66.1	10	Snd Lvl	66.1	0.0	œ	-8.0
Receiver 175 J to C	234	-	0.0	65.2	99	65.2	10	I	65.2	0.0	80	-8.0
Receiver 176 J to C	235	-	0.0	74.6	99	74.6	10	Snd Lvl	74.6	0.0	80	-8.0
Receiver 177 J to C	236	-	0.0	70.4	99	70.4	10	Snd Lvl	70.4	0.0	80	-8.0
Receiver 178 J to C	237	÷	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	80	-8.0

RESULTS: SOUND LEVELS						3600						
Receiver 179 J to C	238		0.0	67.9	66	67.9	10	Snd Lvi	67.9	0.0	8	-8.0
Receiver 180 J to C	239	-	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	80	-8.0
Receiver 181 J to C	240	۰-	0.0	65.9	66	65.9	10		65.9	0.0	8	-8.0
Receiver 182 J to C	241	-	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	80	-8.0
Receiver 183 J to C	242	۰	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	80	-8.0
Receiver 184 J to C	243	+	0.0	66.5	99	66.5	10	Snd Lvl	66.5	0.0	80	-8.0
Dwelling Units	1#	# DUs Noise	e Reduction	E								
		Min	Avg	Max	~							
		dB	dB	dB								
All Selected		285	0.0	0.0	0.0							
All Impacted		232	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

I:\Projects\3600\Noise\TNM\I-75 Existing

15 August 2007

INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group T Stone

12 August 2007 TNM 2.5

3600

Run:         Base Year No Action           Roodway         Points         Mone	INPUT: TRAFFIC FOR LAeq1h Volumes PROJECT/CONTRACT:	/olumes 3600											
easy         Points         Name         No         Segment         Anticipant         Busics         Anticipant         Anticipant	RUN:	Base Year	No Action	0.25									
Name         No.         Segment         MTLocks         Buses         Motorcycles           Autos $\overline{Autos}$ $\overline{MTLocks}$ $\overline{Mta}$ <	Roadway	Points											
Autor         Mature         Mature<	Name	Name	No.	Segmer	it								
vertific         kmin         vertif				Autos V	U.	MTruck	s u	HTrucks		Buses	U	Motorc	ycles
point271         293         2103         97         132         97         422         97         1         97         1           point196         300         2109         97         132         97         422         97         1         97         1           point196         300         2109         97         132         97         422         97         1         97         1           point199         302         21482         97         124         97         446         97         1         97         1           point201         303         2482         97         124         97         446         97         1         97         1           point201         305         2482         97         124         97         446         97         1         97         1           point201         307         2482         97         124         97         446         97         1         97         1           point201         306         2482         97         124         97         446         97         1         97         1           point201         306				veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h
300         2103         97         132         97         422         97         1         97         1           301         2103         97         132         97         422         97         1         97         1           301         2103         97         132         97         422         97         1         97         1           302         2103         97         124         97         496         97         1         97         1           303         2482         97         124         97         496         97         1         97         1           305         2482         97         124         97         496         97         1         97         1           306         2482         97         124         97         496         97         1         97         1           307         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           948         2482	I-75 - NB	point271	299							-	197		1
301         2103         97         132         97         422         97         1         97         1           302         2103         97         132         97         422         97         1         97         1           303         2482         97         124         97         496         97         1         97         1           303         2482         97         124         97         496         97         1         97         1           304         2482         97         124         97         496         97         1         97         1           305         2482         97         124         97         496         97         1         97         1           306         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           910         2482         97         124         97         496         97         1         97         1           911         2482		point198	300								1 97	2	1
302         2109         97         132         97         422         97         1         97         1           303         2482         97         124         97         496         97         1         97         1           303         2482         97         124         97         496         97         1         97         1           304         2482         97         124         97         496         97         1         97         1           305         2482         97         124         97         496         97         1         97         1           306         2482         97         124         97         496         97         1         97         1           946         2482         97         124         97         496         97         1         97         1           905         2482         97         124         97         496         97         1         97         1           917         2482         97         124         97         496         97         1         97         1           918         2482		point270	301										
303         2482         97         124         97         496         97         1         97         1           304         2482         97         124         97         496         97         1         97         1           305         2482         97         124         97         496         97         1         97         1           305         2482         97         124         97         496         97         1         97         1           306         2482         97         124         97         496         97         1         97         1           307         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           946         2482         97         124         97         496         97         1         97         1           948         2482		point199	302								16	3	
304         2482         97         124         97         496         97         1         97         1           305         2482         97         124         97         496         97         1         97         1           305         2482         97         124         97         496         97         1         97         1           306         2482         97         124         97         496         97         1         97         1           307         2482         97         124         97         496         97         1         97         1           946         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           941         2482         97         124         97         496         97         1         97         1           311         2482		point268	303							-	1 97		
305         2482         97         124         97         496         97         1         97         1           306         2482         97         124         97         496         97         1         97         1           306         2482         97         124         97         496         97         1         97         1           946         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           313         2482		point999	304			2					1 97	114.m	
306         2482         97         124         97         496         97         1         97         1           307         2482         97         124         97         496         97         1         97         1           946         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           313         2482		point200	305								1 97		5
307         2482         97         124         97         496         97         1         97         1           946         2482         97         124         97         496         97         1         97         1           946         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           312         2482         97         124         97         496         97         1         97         1           313         2482		point222	306								16		1
946         2482         97         124         97         496         97         1         97         1           308         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           905         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           928         2322		point201	307								97		
308         2482         97         124         97         496         97         1         97         1           945         2482         97         124         97         496         97         1         97         1           905         2482         97         124         97         496         97         1         97         1           905         2482         97         124         97         496         97         1         97         1           914         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         446         97         1         97         1           313         2482         97         116         97         464         97         1         97         1           928         2322		point998	946								16	- H	
945         2482         97         124         97         496         97         1         97         1           905         2482         97         124         97         496         97         1         97         1           905         2482         97         124         97         496         97         1         97         1           911         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           913         2482         97         116         97         464         97         1         97         1           914         2322         97         116         97         464         97         1         97         1           914         2322         97         116         97         464         97         1         97         1           914         2322		point202	308							-	16	220	
905         2482         97         124         97         496         97         1         97         1           948         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           913         2482         97         124         97         466         97         1         97         1           928         2322         97         116         97         464         97         1         97         1           949         2322         97         116         97         464         97         1         97         1           949         2322         97         116         97         464         97         1         97         1           1315         232		point945	945							<b>1</b> -	97		
948         2482         97         124         97         496         97         1         97         1           311         2482         97         124         97         496         97         1         97         1           312         2482         97         124         97         496         97         1         97         1           312         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         466         97         1         97         1           928         2322         97         116         97         464         97         1         97         1           314         2322         97         116         97         464         97         1         97         1           499         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           316         2322		point905	905								16		-
311         2482         97         124         97         496         97         1         97         1           312         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           928         2322         97         116         97         464         97         1         97         1           314         2322         97         116         97         464         97         1         97         1           949         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1           316         2322		point948	948								1 97	210	-
312         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           313         2482         97         124         97         496         97         1         97         1           928         2322         97         116         97         464         97         1         97         1           314         2322         97         116         97         464         97         1         97         1           949         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1           316         2322		point223	311							-	16		
313         2482         97         124         97         496         97         1         97         1           928         2322         97         116         97         464         97         1         97         1           314         2322         97         116         97         464         97         1         97         1           949         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1		point205	312							1-	16		1
928         2322         97         116         97         464         97         1         97         1           314         2322         97         116         97         464         97         1         97         1           949         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1		point206	313							-	97		
314         2322         97         116         97         464         97         1         97         1           949         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1		point928	928							-	1 97		
949         2322         97         116         97         464         97         1         97         1           315         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1		point207	314							***	97		
315         2322         97         116         97         464         97         1         97         1           316         2322         97         116         97         464         97         1         97         1		point949	949								97		-
316 2322 97 116 97 464 97 1 97 1		point208	315								97		-
		point209	316						30	-	16	1	

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	point210	317	2322	97	116	97	464	97	-	97	-	97
	point950	950	2322	26	116	97	464	97	-	97	~	97
	point211	318	2322	97	116	97	464	97	-	97	-	97
	point212	319	2685	16	107	97	537	97	-	97	~	97
	point213	320	2685	97	107	97	537	97	-	97	-	97
	point214	321	2685	97	107	97	537	97	*	97	-	97
	point215	322										
I-75 - SB	point942	942	4595	16	230	97	919	97	-	97	-	97
	point232	338	4595	97	230	97	919	97	+	97	-	97
	point233	339	4486	97	224	97	897	97	-	97	-	97
	175.5	980	4486	97	224	97	897	97	-	97	-	97
	point234	340	4486	97	224	97	897	97		97	-	97
	point235	341	4486	97	224	97	897	97	-	97	-	97
	point496	342	4486	97	224	97	897	97	-	97	-	97
	point260	343	4486	97	224	97	897	97	-	97	-	97
	point261	344	4486	97	224	97	897	97	-	97	~	97
	point236	345	4486	97	224	97	897	97	***	97	-	97
	point237	346	4486	97	224	97	897	26	-	97	~	97
	point238	347	4486	97	224	97	897	97	-	97	-	97
	point239	348	4766	97	238	97	953	97	-	97	-	97
	point262	349	4766	97	238	97	953	97	-	97	-	97
	point263	351	4766	97	238	97	953	97	-	97	~	97
	point947	947	4766	97	238	97	953	16	~	97	~	97
	point264	353	4766	97	238	97	953	97	4	97	-	97
	point944	944	4766	97	238	97	953	97	-	97	-	97
	point265	355	4766	97	238	97	953	97	-	97	-	97
	point243	356	4526	97	226	97	905	97	-	97	-	97
	point266	357	4526	97	226	97	905	16	<del></del>	97	-	97
	point244	358	4526	97	226	97	905	97	۲-	97	٢	97
	point245	359	4526	97	226	97	905	97	-	97	-	97
	point267	360	4526	97	226	97	305	97	-	97	-	97
	point246	361	4526	97	226	97	305	97	-	97	~	97
	point247	362										
N I-75/Springwells Off-Ramp	point345	438	158	40	¢	40	12	40	*	UV	*	40

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	point353	446	158	40	9	40	12	40	*	40	-	40
	point359	452	158	40	9	40	12	40	~	40	-	40
	point360	453										
N I-75 Service Drive - 1	point361	454	482	40	28	40	57	40	٢	40	-	40
	point367	460	482	40	28	40	57	40	-	40	-	40
	point368	461										
Springwells/N I-75 On-Ramp	point369	462	397	97	23	97	47	97	-	97	-	97
	point372	465										
N I-75 Service Drive - 2	point373	466	80	40	5	40	15	40	<del>،</del>	40	-	40
	point377	470	80	40	5	40	15	40	-	40	-	40
	point379	472	80	40	S	40	15	40	-	40	-	40
	point382	475	80	40	ŝ	40	15	40	-	40	-	40
	point386	480	80	40	S	40	15	40	-	40	-	40
	point393	487	80	40	5	40	15	40	-	40	-	40
	point397	491	80	40	5	40	15	40	-	40	-	40
	point633	492	80	40	S	40	15	40	-	40	-	40
	point401	496	80	40	ŝ	40	15	40	-	40	-	40
	point403	498	80	40	ŝ	40	15	40	-	40	-	40
	point405	500	80	40	S	40	15	40	-	40	-	40
	point406	501										
N I-75/Livernois Off-Ramp	point407	502	160	40	10	40	30	40	<del></del>	40	-	40
	point409	504	160	40	10	40	30	40	*	40	~	40
	point413	508										
Dragoon/N I-75 On-Ramp	point414	509	362	97	23	97	72	97	٢	97	-	97
	point416	511	362	97	23	97	72	97	۳.	97	-	97
	point418	513	362	97	23	97	72	97		97	-	97
	point965	965	362	97	23	97	72	97	-	97	-	97
	point419	514										
N I-75 Service Drive - 4	point420	515	160	40	10	40	30	40	-	40	~	40
	point421	516	160	40	10	40	30	40	~	40	~	40
	point426	521	160	40	10	40	30	40	<del>~</del>	40	~	40
	point430	525	160	40	10	40	30	40	-	40	-	40
	point431	526	160	40	10	40	30	40	-	40	-	40
	CV JUICT	507	007	0	0	~	CC		*	01		0.

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	point435	531	160	40	10	40	30	40	-	40	-	40
	point443	539	160	40	10	40	30	40		40	~	40
	point445	541										
N I-75 Service Drive - 3	point446	542	160	40	10	40	30	40	-	40	-	40
	point447	543	160	40	10	40	30	40	-	40	-	40
	point449	545	160	40	10	40	30	40	-	40	-	40
	point450	546										
N I-75/Clark Off-Ramp	point451	547	560	40	35	40	105	40	-	40	~	40
	point452	548	560	40	35	40	105	40	-	40	-	40
	point454	549	560	40	35	40	105	40	-	40	~	40
	point453	550										
N I-75 Service Drive - 5	point455	551	720	40	45	40	135	40	-	40	-	40
	point456	552	720	40	45	40	135	40	+	40	-	40
	point650	553	720	40	45	40	135	40	-	40	~	40
	point457	554										
Clark/N I-75 On-Ramp	point458	555	720	40	45	40	135	40		40	-	40
	point460	557										
S I-75/Clark Off-Ramp	point461	558	424	40	20	40	56	40	-	40	~	40
	point463	560	424	40	20	40	56	40	<del>, -</del>	40	-	40
	point465	562										
S I-75 Service Drive - 1	point466	563	440	40	32	40	184	40	<del>~</del>	40	-	40
	point651	567										
Clark/S I-75 On-Ramp	point471	571	440	97	32	97	184	97	-	97	~	97
	point472	572	440	97	32	97	184	97	٢	97	-	97
	point473	573	440	97	32	97	184	97	-	97	~	97
	point474	574										
S I-75 Service Drive - 2	point475	575	90	56	50	56	5	56	***	56	-	56
	point476	576	90	56	50	56	5	56	~	56	~	56
	point644	577										
S I-75/Dragoon Off-Ramp	point481	585	120	56	2	56	5	56	-	56	~	56
	point483	587	120	56	5	56	5	56	-	56	-	56
	point484	588	120	56	5	56	5	56	-	56	~	56
	point485	589										
S I-75 Service Drive - 4	point638	594	300	48	15	48	15	48	-	48	*	48

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	point489	595	300	48	15	48	15	48	-	48	-	48
	point490	596	300	48	15	48	15	48	-	48	-	48
	point491	597										
Livernois/ S I-75 On-Ramp	point497	600	270	97	15	97	40	97	-	97	-	97
	point498	601	270	97	15	97	40	97	-	97	~	97
	point500	603	270	97	15	97	40	97	-	97	~	97
	point501	604	270	97	15	97	40	97	~	97	-	97
	point503	606										
S I-75 Service Drive - 5	point491	971	370	56	20	56	45	56	2	56	2	56
	point504	607	100	56	5	56	5	56	-	56	-	56
	point505	608	100	56	5	56	5	56	-	56	-	56
	point975	975	100	56	2	56	5	56	-	56	-	56
	point507	610										
S I-75 Service Drive - 8	point530	637	360	40	15	40	20	40	-	40	-	40
	point531	638	450	40	30	40	80	40	-	40	-	40
	point532	639										
Springwells/S I-75 On-Ramp	point533	640	420	26	25	97	75	97	-	97	-	97
	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	-	40	-	40
	point685	685	700	30	40	30	160	30	-	30	-	30
	point687	687	700	30	40	30	160	30	÷	30	~	30
	point943	943	700	30	40	30	160	30	4	30	-	30
	point688	688	700	40	40	40	160	40	1	40	-	40
	point690	690	700	40	40	40	160	40	-	40	-	40
	point691	691	700	40	40	40	160	40	-	40	-	40
	point692	692										
Green - N&SB	point727	727	85	48	5	48	10	48	-	48	-	48
	point939	939	85	48	5	48	10	48	-	48	-	48
	point959	959	85	48	5	48	10	48	-	48	-	48
	point960	960	85	48	5	48	10	48	<del>،</del>	48	~	48
	point729	729	85	48	2	48	10	48	-	48	-	48
	point730	730	85	48	2	48	10	48	-	48	-	48
	point731	731										
Waterman - N&SB	point761	761	85	56	5	56	15	56		56	-	56

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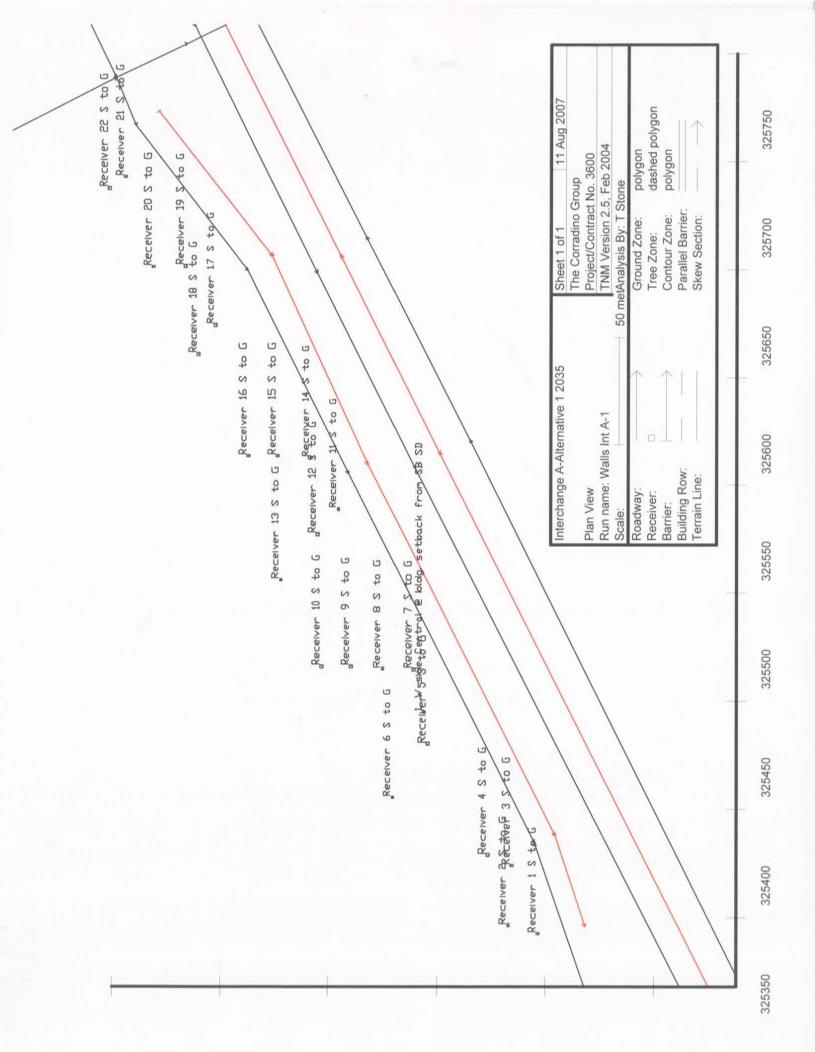
5

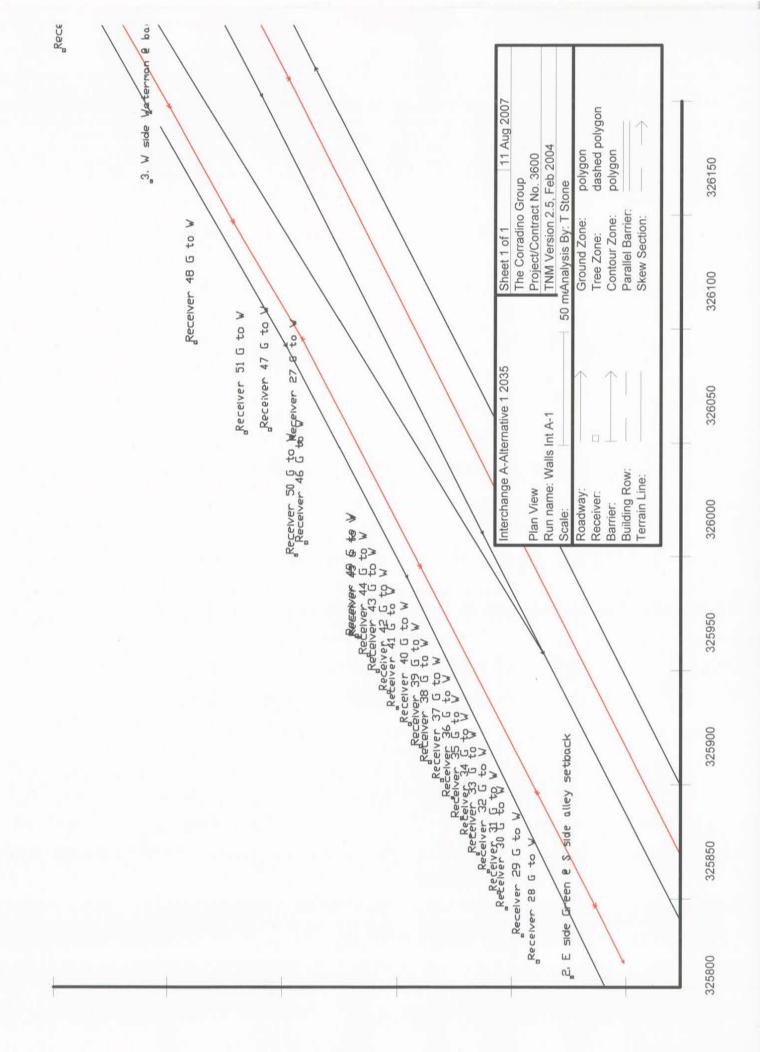
ч

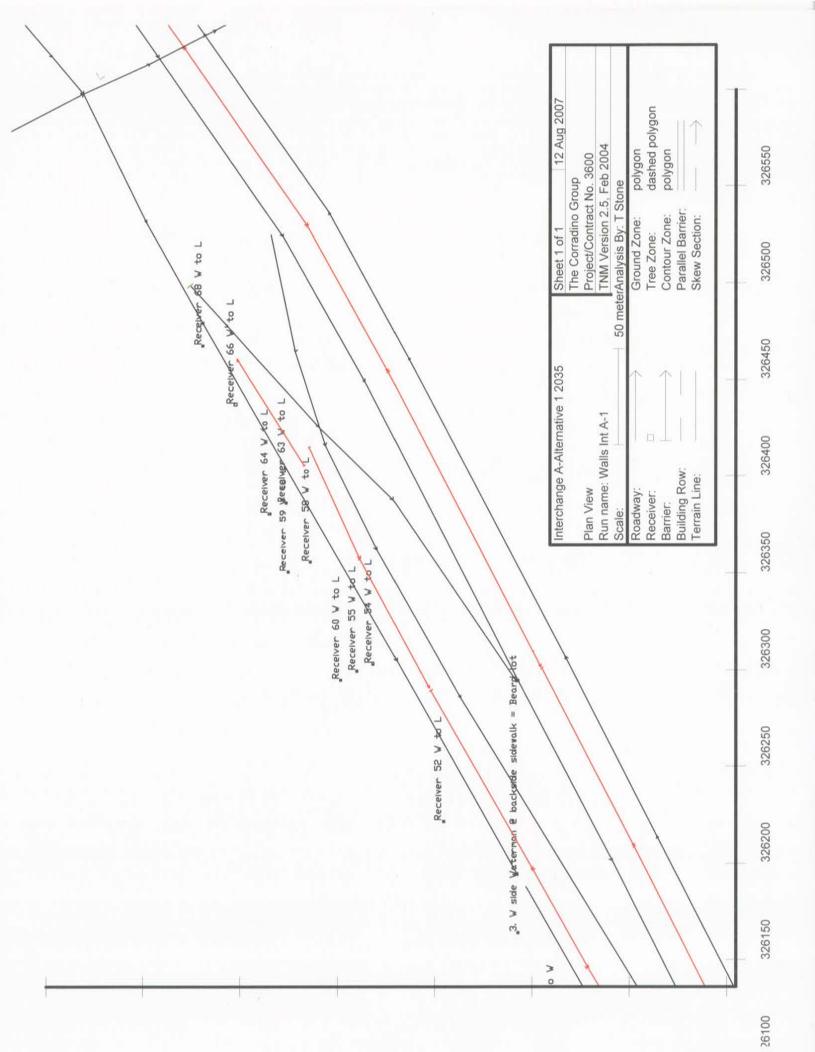
	CJC+uium											
	pullin oz	762	85	48	5	48	15	48	1	48	Ţ	48
	point957	957	85	48	Q	48	15	48	٢	48	-	48
	point958	958	85	48	5	48	15	48	-	48	-	48
	point764	764	85	56	5	56	15	56	-	56	~	56
	point765	765	85	56	5	56	15	56	-	56	÷	56
	point769	769										
Junction - N&SB	point801	801	125	48	5	48	20	48	1	48	~	48
	point802	802	125	48	5	48	20	48	-	48	-	48
	point951	951	125	48	5	48	20	48	٢	48	~	48
	point952	952	125	48	5	48	20	48	-	48	~	48
	point803	803	85	56	2	56	15	56	1	56	-	56
	point804	804	85	56	5	56	15	56	-	56	-	56
	point805	805										
Clark - NB	point812	812	80	40	5	40	25	40	~	40	-	40
	point813	813	100	25	20	25	300	25	<del>.</del>	25	-	25
	point814	814	80	25	15	25	180	25	-	25	-	25
	point963	963	80	25	15	25	180	25	-	25	~	25
	point964	964	80	25	15	25	180	25	*	25	~	25
	point815	815	84	40	80	40	4	40	***	40	~	40
	point816	816										
Clark - SB	point818	818	120	40	4	40	12	40	-	40	-	40
	point819	819	120	40	4	40	25	40	<u>-</u>	40	-	40
	point961	961	120	40	4	40	25	40	~	40	-	40
	point962	962	120	40	4	40	25	40	*	40	~	40
	point820	820	120	40	4	40	25	40	~	40	~	40
	point821	821	120	40	4	40	25	40	-	40	~	40
	point822	822										
Dragoon	Fort WB	911	162	56	12	56	30	56	4	56	-	56
	NB SD	913	162	56	12	56	30	56	4	56	-	56
	point941	941	162	56	12	56	30	56	4	56	-	56
	point955	955	162	56	12	56	30	56	4	56	-	56
	point956	956	162	56	12	56	30	56	4	56		56
	SB SD	914	162	56	12	56	30	56	4	56	*	56
	point919	919	324	56	24	56	60	56	4	56	-	56

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Interchange A – Alternative 1 – 2035







Present 13 1 0 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	326850 326900 326950 327000 327050 327100 327150
4 D to J 133 D to J 133 D to J 85 D to J 85 D to J 85 D to J 132 Ectever 79 D to J 15 J 15 J 16 J 16 J 16 J	326800
Receiver 134 D to J Receiver 133 D to J Receiver 132 DRamedwer 85 D to J Receiver 131 Receiver 83 D to J Receiver 130 D to J Receiver 130 D to J Receiver 130 D to J Receiver 75 D to J Receiver 75 D to J Receiver 73 D to J Receiver 73 D to J	326750
	326700

Receiver 181 J to C     Receiver 181 J to C       Receiver 181 J to C     Receiver 182 J to C       Receiver 182 J to C     Receiver 182 J to C       Receiver 173 J to C     Receiver 173 J to C       Receiver 173 J to C     Receiver 173 J to C       Receiver 173 J to C     Receiver 173 J to C       Receiver 173 J to C     Receiver 173 J to C       Receiver 173 J to C     Receiver 173 J to C       Receiver 173 J to C     Receiver 173 J to C       Receiver 173 J to C     Receiver 173 J to C       Receiver 163 J to C     Receiver 173 J to C       Receiver 163 J to C     Receiver 173 J to C       Receiver 163 J to C     Receiver 173 J to C       Receiver 163 J to C     Receiver 173 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 153 J to C     Receiver 163 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 163 J to C     Receiver 163 J to C       Receiver 164 J to C     Receiver 164 J to C       Receiver 164 J to C     Receiver 164 J to C       Rece	low: Tree Zone: Contour Zone: Contour Zone: Parallel Barrier: Rew Section: Skew Section: 327550 327550 327600
Receiver 157 J to C Receiver 158 J to C Receiver 159 Receiver 166 J to C Receiver 159 Receiver 164 J to C Receiver 157 Receiver 161 J to C Receiver 155 Betelver 161 J to C Receiver 155 Betelver 161 J to C Receiver 154 J to C	327400
Receive	327350
Receiver 153 J to C Receiver 152 J to C Receiver 150 J Receiver 151 J to C Receiver 130 J to C Receiver 130 J to C Receiver 130 J to C	327300
Receiver 153 J to C Receiver 150 JRG5RtVer 151 Receiver 150 JRG5RtVer 151 Receiver 130 J to C Receiver 140 J RecEiver Receiver 139 J to C Receiver 139 J to C	327250
	327200

Tage         Is Agait 201           Tit 2.5           Tit 2.5           Tit 2.5           Tit 2.5           Tit 2.5           Tit 2.5           Colspan="2">Tit 2.5           Colspan="2">Tit 2.5           Colspan="2">Tit 2.5           Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"           Colspan="2">Colspan="2"           Colspan="2">Colspan="2"           Colspan="2">Colspan="2"           Colspan="2"           Colspan="2" <t< th=""><th>RESULTS: SOUND LEVELS</th><th></th><th></th><th></th><th></th><th></th><th></th><th>3600</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	RESULTS: SOUND LEVELS							3600						
Another Man Trial and Another Trian and Another A	The Corradino Group T Stone							15 Augu TNM 2.5	st 2007					
State         State         Anomaly         An	REGILITS: SOLIND LEVELS							Calculat	ed with T	NM 2.5				
Interchange Anternative 1303         Anternative 1303           SPHERICS:         Victor Heinore 1303           SPHERICS:         Automation 1303           SPHERICS:         Clade Colving Anternative 1303           SPHERICS:         Clade Colving Molecular Section 100           SPHERICS:         Clade Colving Molecular Section 100           Clade Colving Molecular Section 100         Mith Barrier           Clade Colving Molecular Section 100         Clade Colving Molecular Section 100           Mith Barrier         Clade Colving Molecular Section 100           Mith Barrier         Mith Barrier           Clade Colvin 100         Clade Colvin 100           Clade Colvin 100         Mith Barrier     <	PROJECT/CONTRACT:	3600												
HERCE:         Code         Existing in the process of FMA.         Increases over existing in the process of FMA.           A model         Forting in the process of FMA.         Forting in the process of FMA.         Increases over existing in the process of FMA.           A model         A model         A model         A model         A model           A model         A model         A model         A model         A model         A model           A model         A model         A model         A model         A model         A model         A model         A model           Controlled (B model/or electronic (B model/or elect	RUN: BARRIER DESIGN:	Inter	change JT HEIG	A-Alterna HTS	tive 1 2035				Averag	e pavement ty	pe shall b	e used unles	0	
No.FUISExistingNo.No.Mith BarrierLooptinLooptinLooptinIncrease over restringTypeCalculatedNoise ReductionLooptinLooptinLooptinLooptinIncrease over restringTypeCalculatedNoise ReductionLooptinLooptinLooptinCalculatedCritinInpectLooptinCalculatedCalculatedNoise ReductionCalculatedCalculatedCalculatedCritinInpectLooptinCalculatedCalculatedCalculatedNoise ReductionCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculatedCalculated <td< th=""><th>ATMOSPHERICS:</th><th>20 d</th><th>eg C, 50</th><th>% RH</th><th></th><th></th><th></th><th></th><th>of a di</th><th>ferent type wit</th><th>th approva</th><th>I of FHWA.</th><th>a</th><th></th></td<>	ATMOSPHERICS:	20 d	eg C, 50	% RH					of a di	ferent type wit	th approva	I of FHWA.	a	
No.         Existing Increase over striking And in Land in Sectional Marketing         No.         Math. Earching Increase over striking Sectional Marketing         Mith. Earching Increase over striking Sectional Sectional Marketing         Mith. Earching Increase over striking Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectional Sectinal Sectinal Sectional Sectinal Sectional Sectional Sectinal Sec	Receiver													
Image:					Barrier					With Barrie	ar			
Albert         Albert         Sublition         Albert         Albe			LAed		ha	Critin	Increase or Calculated	ver existing Crit'n				Reduction	Calci	lated
Add         Add <td></td> <td></td> <td></td> <td>5</td> <td></td> <td></td> <td>Carculator</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>minu</td> <td>s</td>				5			Carculator						minu	s
(1, 1) $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$ $(1, 2)$			VOP			VOP	ą	9		VDP	ą	ą	Goal	
32         1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.1         0.0         7.2.0         0.0         7.2.0         0.0         7.2.0         0.0         0.0         7.2.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <th< td=""><td>the the of the o</td><td>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</td><td>Yan ,</td><td></td><td>L CL</td><td>YOR</td><td>g</td><td></td><td>10</td><td>YON</td><td></td><td></td><td></td><td>76</td></th<>	the the of the o	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Yan ,		L CL	YOR	g		10	YON				76
36         1         0.0         72.9         66         72.9         10         SndLvi         69.3         3.6         8           40         1         0.0         72.0         66         72.0         10         SndLvi         66.4         0.1         8           58         1         0.0         72.0         66         72.0         10         SndLvi         66.5         57         8           58         1         0.0         72.3         66         72.3         10         SndLvi         66.5         57         8           61         4         0.0         72.3         66         72.3         10         SndLvi         66.5         57         8           61         1         0.0         72.3         66         72.3         10         SndLvi         66.5         57         8           65         1         0.0         0.0         66         72.3         66         72.3         66         73.7         9         8         73         8         8           65         1         0.0         0.0         72.4         10         SndLvi         66.5         54         8         8 </td <td>8. Allev E of Ferdinand @ backside sidews</td> <td>34</td> <td></td> <td>0.0</td> <td>78.0</td> <td></td> <td></td> <td>8.0</td> <td></td> <td></td> <td>0</td> <td>9.1</td> <td>0 00</td> <td>1.1</td>	8. Allev E of Ferdinand @ backside sidews	34		0.0	78.0			8.0			0	9.1	0 00	1.1
40         1         0.0         72.0         66         72.0         10         72.0         0.0         86.4         0.1         8           58         1         0.0         66.5         66         72.2         10         SndLvi         66.4         0.1         8           58         1         0.0         72.3         66         72.3         10         SndLvi         66.5         5.7         8           61         4         0.0         72.3         66         72.3         10         SndLvi         66.5         7.3         8           61         1         0.0         72.3         66         72.3         10         SndLvi         66.4         7.3         8           62         1         0.0         66         73.7         10         SndLvi         66.4         7.3         8           63         1         0.0         66         74.2         10         Invalid         69.3         3.1         8           64         1         0.0         74.4         66         7.4         10         10.0         10.0         10         10         10         10.1         10.1         10.1	7. E side Campbell @ house setback fr SC	36	-	0.0	72.9			2.9	0.00		.3	3.6	00	-4.4
46         1         0.0         66.5         66.5         10         Snd Lvi         66.4         0.1         8           58         1         0.0         72.2         66         73.7         10         Snd Lvi         66.5         5.7         8           60         2         0.0         72.3         66         73.7         10         Snd Lvi         66.5         5.7         8           61         4         0.0         73.7         66         73.7         10         Snd Lvi         66.5         5.7         8           63         1         0.0         73.7         66         73.7         10         Snd Lvi         66.5         7.3         8           64         1         0.0         73.7         66         7.4         10         10         10         10         10         10         8         8           65         1         0.0         74.2         66         74.2         10         Snd Lvi         66.3         31         1         8         8         8         8         8         8         1         1         1         1         10         10         10         10	6. Alley E of Calvary @ backside sidewalk	40	F	0.0	72.0			2.0			0	0.0	œ	-8.0
W vide Waterman @ backside sidewalk         58         1         0.0         72.2         66         72.2         10         Smd Lvi         66.5         5.7         8           E side Green @ S side alley setback         60         2         0.0         72.3         66         72.3         10         Smd Lvi         66.4         7.3         8           W vide Certral @ bldy. setback         61         2         0.0         73.7         66         73.7         10         Smd Lvi         66.4         7.3         8           W vide Certral @ bldy. setback from St         61         1         0.0         73.7         10         Smd Lvi         66.4         7.3         8           W vide Certral @ bldy. setback from St         61         1         0.0         74.2         66         74.2         10         Smd Lvi         66.4         7.3         8           Certor S Sto G         7         1         0.0         74.2         66         72.4         10         Smd Lvi         66.3         31         8           Certor S Sto G         7         1         0.0         74.2         66         72.4         10         Smd Lvi         66.3         71.4         8	5. NE Corner Dragoon & Lafyette @ backs	46	-	0.0	66.5			6.5	100		5.4	0.1	80	-7.9
E side Green @ S side alley setback         60         2         0.0         72.3         66         72.3         10         Snd Lvl         69.8         2.5         8           W side Central @ bldg, setback from SE         61         4         0.0         73.7         10         Snd Lvl         66.4         7.3         8           w side Central @ bldg, setback from SE         61         1         0.0         73.7         66         73.7         10         Snd Lvl         66.4         7.3         8           oriever 1 S to G         63         1         0.0         66         74.2         66         70.0         66         73.7         8           ceiver 3 S to G         65         1         0.0         74.2         66         74.2         10         8nd Lvl         66.2         54         8           ceiver 3 S to G         65         1         0.0         71.6         66         71.1         10         8nd Lvl         66.3         74         8           ceiver 5 S to G         6         1         0.0         71.6         66         71.6         66.3         74         8           ceiver 6 S to G         70         10         Snd Lvl	3. W side Waterman @ backside sidewalk	58	-	0.0	72.2			2.2			5.5	5.7	80	-2.3
Diddy setback from St         61         4         0.0         73.7         66         73.7         10         Snd Lv         66.4         7.3         8           62         1         0.0         0.0         66         0.0         10         invalid         0.0         8           63         1         0.0         0.0         66         74.2         10         Snd Lvl         68.0         0.0         8         8         8           64         1         0.0         74.2         66         74.2         10         Snd Lvl         68.0         6         74.2         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8<	2. E side Green @ S side alley setback	60	2	0.0	72.3			2.3			9.8	2.5	œ	-5.5
62         1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8 $63$ 1         0.0         0.0         66         74.2         66         74.2         10         invalid         0.0         0.0         8 $64$ 1         0.0         74.2         66         74.2         10         Sind Lyl         63.0         6.2         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	1. W side Central @ bldg. setback from SE	61	4	0.0	73.7			3.7			5.4	7.3	80	-0.7
63 $1$ $0.0$ $0.0$ $66$ $0.0$ $10$ $10$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$	Receiver 1 S to G	62	-	0.0	0.0			0.0			0.0	0.0	80	0.0
641 $0.0$ $74.2$ $66$ $74.2$ $10$ $SndLyl$ $68.0$ $6.2$ $8$ $65$ 1 $0.0$ $72.4$ $66$ $72.4$ $10$ $SndLyl$ $69.3$ $3.1$ $8$ $66$ 1 $0.0$ $71.6$ $66$ $71.6$ $10$ $SndLyl$ $66.2$ $5.4$ $8$ $68$ 1 $0.0$ $0.0$ $66$ $73.7$ $10$ $SndLyl$ $66.2$ $5.4$ $8$ $70$ 1 $0.0$ $71.1$ $66$ $71.1$ $10$ $SndLyl$ $66.2$ $7.4$ $8$ $71$ 1 $0.0$ $71.1$ $66$ $71.1$ $10$ $SndLyl$ $66.2$ $7.4$ $8$ $71$ 1 $0.0$ $69.3$ $74$ $86$ $71.1$ $10$ $SndLyl$ $66.2$ $74.2$ $8$ $71$ 1 $0.0$ $69.3$ $71.1$ $10$ $SndLyl$ $66.2$ $74.4$ $8$ $71$ 1 $0.0$ $69.3$ $66$ $69.3$ $74.4$ $4.9$ $8$ $72$ 2 $0.0$ $71.1$ $66$ $74.3$ $10$ $SndLyl$ $66.6$ $77.4$ $8$ $74$ 1 $0.0$ $74.3$ $66$ $74.3$ $10$ $SndLyl$ $66.6$ $77.4$ $8$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$ $74$	Receiver 2 S to G	63	-	0.0	0.0			0.0			0.0	0.0	80	0.0
65 $1$ $0.0$ $72.4$ $66$ $72.4$ $10$ $5ndLvl$ $69.3$ $3.1$ $8$ $66$ $1$ $0.0$ $71.6$ $66$ $71.6$ $10$ $5ndLvl$ $66.2$ $5.4$ $8$ $68$ $1$ $0.0$ $0.0$ $66$ $73.7$ $10$ $5ndLvl$ $66.2$ $5.4$ $8$ $70$ $1$ $0.0$ $71.6$ $66$ $73.7$ $10$ $5ndLvl$ $66.2$ $5.4$ $8$ $70$ $1$ $0.0$ $71.1$ $66$ $73.7$ $10$ $5ndLvl$ $66.3$ $7.4$ $8$ $71$ $1$ $0.0$ $69.3$ $66$ $71.1$ $10$ $5ndLvl$ $66.3$ $7.4$ $8$ $71$ $1$ $0.0$ $69.3$ $66$ $71.1$ $10$ $5ndLvl$ $66.3$ $7.4$ $8$ $72$ $2$ $0.0$ $0.0$ $69.3$ $66$ $71.1$ $10$ $5ndLvl$ $66.3$ $7.7$ $8.9$ $73$ $1$ $0.0$ $71.1$ $66$ $74.3$ $66$ $74.3$ $66.6$ $7.7$ $7.7$ $8.7$ $74$ $1$ $0.0$ $71.1$ $66$ $74.3$ $74$ $70.7$ $66.6$ $7.7$ $7.7$ $8.7$ $74$ $1$ $0.0$ $71.1$ $10$ $5ndLvl$ $66.6$ $7.7$ $7.7$ $8.7$ $74$ $1$ $0.0$ $71.1$ $10$ $5ndLvl$ $66.6$ $7.7$ $7.7$ $8.7$ $75$ $1$ $0.0$ $73.9$ $66$ <td< td=""><td>Receiver 3 S to G</td><td>64</td><td>+</td><td>0.0</td><td>74.2</td><td></td><td></td><td>4.2</td><td></td><td></td><td>0.0</td><td>6.2</td><td>80</td><td>-1.8</td></td<>	Receiver 3 S to G	64	+	0.0	74.2			4.2			0.0	6.2	80	-1.8
6610.071.66671.610Snd Lvl66.25.486810.00.0660.010invalid0.00.086910.073.76673.710Snd Lvl66.37.487010.071.16671.110Snd Lvl66.37.487110.071.16671.110Snd Lvl66.37.487110.069.36669.310Snd Lvl66.37.487220.00.069.36674.310Snd Lvl66.67.787310.074.36674.310Snd Lvl66.67.787410.074.36674.310Snd Lvl66.67.787410.068.274.310Snd Lvl66.67.787520.068.26674.310Snd Lvl66.67.787610.073.96673.910Snd Lvl66.77.787710.073.96673.910Snd Lvl66.47.587710.070.76673.910Snd Lvl66.77.587710.070.766	Receiver 4 S to G	65	Ļ	0.0	72.4			2.4	5.5		9.3	3.1	80	4.9
6810.00.0660.010invalid0.00.086910.073.76673.710 $\operatorname{SndLvl}$ 66.37.487110.071.16671.110 $\operatorname{SndLvl}$ 66.37.487110.069.371.110 $\operatorname{SndLvl}$ 66.44.987220.00.06674.36669.310 $\operatorname{SndLvl}$ 66.687310.074.36674.310 $\operatorname{SndLvl}$ 66.67.787410.071.16674.310 $\operatorname{SndLvl}$ 66.67.787520.071.16668.271.110 $\operatorname{SndLvl}$ 66.67.787510.073.96673.910 $\operatorname{SndLvl}$ 66.67.787610.073.96673.910 $\operatorname{SndLvl}$ 66.47.787610.070.76673.910 $\operatorname{SndLvl}$ 66.47.787710.070.76670.710 $\operatorname{SndLvl}$ 66.47.587710.070.76670.7667.76087710.070.76670.7607.7608	Receiver 5 S to G	99	-	0.0	71.6			1.6	15.5		5.2	5.4	80	-2.6
6910.0 $73.7$ 66 $73.7$ 10Snd Lvl66.3 $7.4$ 87010.071.16671.110Snd Lvl65.16.087110.069.36669.310Snd Lvl65.16.087220.00.06674.310Snd Lvl66.6777310.074.36674.310Snd Lvl66.67.787410.071.16671.110Snd Lvl66.67.787520.068.26671.110Snd Lvl65.67.787610.073.96673.910Snd Lvl65.75.587710.070.76673.910Snd Lvl66.47.587710.070.76670.710Snd Lvl66.47.58	Receiver 6 S to G	68		0.0	0.0			0.0			0.0	0.0	80	0.0
7010.071.16671.110Snd Lvl65.16.087110.069.36669.310Snd Lvl64.44.987220.00.0660.010invalid0.00.087310.074.36674.310Snd Lvl66.67.787410.071.16671.110Snd Lvl66.67.787520.068.26671.110Snd Lvl65.67.787610.073.96673.910Snd Lvl65.47.587710.070.76673.910Snd Lvl66.47.58	Receiver 7 S to G	69	-	0.0	73.7			3.7	1		5.3	7.4	80	-0.6
7110.0 $69.3$ $66$ $69.3$ $10$ $\operatorname{Ind}$ $64.4$ $4.9$ $8$ 7220.00.0 $66$ 0.010 $\operatorname{invalid}$ 0.00.087310.074.3 $66$ 74.310 $\operatorname{Snd}$ 66.67.787410.071.1 $66$ 74.310 $\operatorname{Snd}$ 64.86.387520.068.2 $66$ 71.110 $\operatorname{Snd}$ 65.67.787610.073.9 $66$ 73.910 $\operatorname{Snd}$ 65.47.587710.070.7 $66$ 73.910 $\operatorname{Snd}$ 66.47.587710.070.7 $66$ 70.710 $\operatorname{Snd}$ 65.47.58	Receiver 8 S to G	70	F	0.0	71.1			1.1	1963		5.1	6.0	80	-2.0
72         2         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8           73         1         0.0         74.3         66         74.3         10         Snd Lvi         66.6         7.7         8           74         1         0.0         71.1         66         71.1         10         Snd Lvi         66.6         7.7         8           75         2         0.0         68.2         66         68.2         10         Snd Lvi         65.4         6.3         8           76         1         0.0         73.9         66         73.9         10         Snd Lvi         65.4         7.5         8           77         1         0.0         70.7         66         70.7         10         Snd Lvi         66.4         7.5         8	Receiver 9 S to G	71	-	0.0	69.3			9.3	10		4.4	4.9	80	-3.1
73         1         0.0         74.3         66         74.3         10         Snd Lvl         66.6         7.7         8           74         1         0.0         71.1         66         71.1         10         Snd Lvl         64.8         6.3         8           75         2         0.0         68.2         66         68.2         10         Snd Lvl         65.7         5.5         8           76         1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8           77         1         0.0         70.7         66         70.7         10         Snd Lvl         66.4         7.5         8	Receiver 10 S to G	72	2	0.0	0.0			0.0			0.0	0.0	80	0.0
74         1         0.0         71.1         66         71.1         10         5nd Lvl         64.8         6.3         8           75         2         0.0         68.2         66         68.2         10         Snd Lvl         62.7         5.5         8           76         1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8           77         1         0.0         70.7         66         70.7         10         Snd Lvl         66.4         7.5         8	Receiver 11 S to G	73	Ţ	0.0	74.3			4.3	17.7		6.6	7.7	00	-0.3
75         2         0.0         68.2         66         68.2         10         Snd Lvl         62.7         5.5         8           76         1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8           77         1         0.0         70.7         66         70.7         10         Snd Lvl         64.7         6.0         8	Receiver 12 S to G	74	<del>،</del>	0.0	71.1			1.1	35		8.1	6.3	00	-1.7
76 1 0.0 73.9 66 73.9 10 Snd Lvl 66.4 7.5 8 77 1 0.0 70.7 66 70.7 10 Snd Lvl 64.7 6.0 8	Receiver 13 S to G	75	2	0.0	68.2			8.2	100		7.7	5.5	80	-2.5
77 1 0.0 70.7 66 70.7 10 Snd Lvl 64.7 6.0 8	Receiver 14 S to G	76	÷	0.0	73.9			3.9	860		5.4	7.5	60	-0.5
	Receiver 15 S to G	77	-	0.0	7.07			7.0			1.7	6.0	60	-2.0

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1         0.0         69.3         66         69.3         10         Snd           1         0.0         69.1         66         70.3         60         70.3         60         Snd           1         0.0         69.1         66         69.1         10         Snd           1         0.0         69.1         66         69.1         10         Snd           1         0.0         67.5         66         67.5         10         Snd           1         0.0         67.5         66         67.5         10         Snd           2         0.0         73.0         66         67.5         10         Snd           2         0.0         67.4         66         67.2         10         Snd           2         0.0         67.4         66         67.4         10         Snd           2	Receiver 16 S to G Receiver 17 S to G Perminer 18 S to G						2000		20 55 55	1000			
70         2         0.0         7.03         66         7.03         10         54.5         5.5         5.5           81         1         0.0         69.7         66         7.03         10         50.11/4         63.5         5.5         5.5         5.5           83         1         0.0         67.7         66         67.7         10         50.11/4         63.6         5.1         3           83         1         0.0         67.7         66         67.7         10         50.11/4         64.6         5.1         3           83         1         0.0         67.7         66         67.7         10         50.11/4         64.6         5.1         3           93         2         0.0         77.3         66         77.3         10         50.11/4         64.6         7.3         3           93         2         0.0         77.3         66         77.3         10         50.11/4         64.3         7.3         51.4           93         2         0.0         77.3         66         77.3         67.4         67.3         67.4         67.3         67.4         67.4	S to	78	-	0.0	69.3	66	69.3	10	Snd Lvl	63.5		œ	-2.2
80         1         0.0         687         66         687         1         0.504         63.5         5.2         8           81         1         0.0         687         66         73         10         54.4         51.7         5           82         1         0.0         67.9         66         73.0         10         54.4         51.7         5           83         1         0.0         67.3         66         73.0         10         54.4         51.7         5           96         2         0.0         73.0         66         73.0         10         544.4         51.7         5           97         2         0.0         71.4         66         73.4         66         73.4         50         54.4         51.4         55.4         55         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4         55.4	C +0	19	2	0.0	70.3	66	70.3	10		64.5		80	-2.2
1         0.0         69.7         0.0         69.7         0.0         69.7         0.0         64.6         5.1         8           82         1         0.0         69.7         66         67.3         10         54.6         5.1         8           82         1         0.0         67.3         66         7.3         10         54.6         5.1         8           83         1         0.0         67.3         10         54.0         7.3         3         8         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3	2	80	-	0.0	68.7	66	68.7	10		63.5		8	-2.8
2         1         0.0         69.1         66.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         69.1         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10 </td <td>Receiver 19 S to G</td> <td>81</td> <td>-</td> <td>0.0</td> <td>69.7</td> <td>99</td> <td>69.7</td> <td>10</td> <td></td> <td>64.6</td> <td>5.1</td> <td>80</td> <td>-2.9</td>	Receiver 19 S to G	81	-	0.0	69.7	99	69.7	10		64.6	5.1	80	-2.9
1         100         67/3         66         67/3         10         64/3         31         8           96         2         00         73/3         66         73/3         10         86/4         31         8           96         2         00         73/3         66         73/3         10         86/4         31         8           97         2         00         67/3         66         67/3         10         86/4         31         2           97         1         00         67/3         66         67/3         10         86/4         31         31         8           97         1         00         67/3         66         67/3         10         86/4         31         31         31         8           101         1         00         67/3         66         67/3         10         86/4         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31         31 <t< td=""><td>S to</td><td>82</td><td>-</td><td>0.0</td><td>68.1</td><td>99</td><td>68.1</td><td>10</td><td></td><td>63.4</td><td>4.7</td><td>80</td><td>-3.3</td></t<>	S to	82	-	0.0	68.1	99	68.1	10		63.4	4.7	80	-3.3
81         1         0.0         67.5         65         67.5         10         56dLivi         64.0         7.5         8           95         4         0.0         67.3         0.6         7.3         0.6         7.3         0.6         7.4         0.5         7.4         0.5           96         4         0.0         67.3         66         67.3         10         56dLivi         64.0         7.4         8           97         2         0.0         67.3         66         67.3         10         56dLivi         64.0         7.4         8           96         7         0.0         67.3         66         67.3         10         56dLivi         64.0         7.4         8           101         1         0.0         67.3         66         67.3         10         56dLivi         64.0         7.4         8           101         2         0.0         67.3         66         67.3         10         56dLivi         64.0         7.4         8           102         2         0.0         67.3         67.3         10         56dLivi         67.3         7.4         8	S to	83	-	0.0		99	67.9	10		64.8	3.1	80	4.9
96         2         0.0         730         66         730         10         5nd LM         66.6         7.4         8           97         2         0.0         67.4         66         6.0         10         5nd LM         66.6         7.3         2         0.0         7.4         8           97         2         0.0         67.4         66         67.2         10         5nd LM         64.3         2.3         2         8           100         1         0.0         67.4         66         67.2         10         5nd LM         64.3         2.3         2         2         2         2         2         0.0         67.4         66         67.2         10         5nd LM         64.3         2.3         2         2         2         2         2         2         0.0         67.4         66         67.3         10         5nd LM         64.3         2.3         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         <	S to	89	۲	0.0		99	67.5	10	Snd Lvl	64.0		80	4.5
96         4         0.0         0.0         66         0.0         10         100         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Receiver 27 G to W	95	2	0.0	73.0	66	73.0	10	Snd Lvi	65.6	7.4	80	9.0-
97         2         0.0         662         662         10         Smulu         52.8         2.4         8           97         1         0.0         67.3         66         67.4         10         Smulu         64.3         23         24         8           99         1         0.0         67.3         66         67.2         10         Smulu         64.3         23         23         8           101         1         0.0         67.3         66         67.3         10         Smulu         64.3         23         23         8           102         2         0.0         67.3         66         67.3         10         Smulu         64.3         23         24         8           102         2         0.0         67.3         66         67.3         10         Smulu         64.3         24         8           103         2         0.0         67.3         66         67.3         10         Smulu         64.3         24         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8 </td <td>C</td> <td>96</td> <td>4</td> <td>0.0</td> <td>0.0</td> <td>99</td> <td>0.0</td> <td>10</td> <td>invalid</td> <td>0.0</td> <td></td> <td>80</td> <td>0.0</td>	C	96	4	0.0	0.0	99	0.0	10	invalid	0.0		80	0.0
98         2         0.0         67.4         66         67.4         10         56.4         32         32         8           100         1         0.0         67.2         66         67.2         10         54.0         32         3         3           101         1         0.0         67.2         66         67.4         10         54.0         33         3         3           102         2         0.0         67.4         66         67.4         10         54.0         33         3         3         3           103         2         0.0         67.4         66         67.4         10         54.0         33         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3 <td>Receiver 29 G to W</td> <td>26</td> <td>2</td> <td>0.0</td> <td>66.2</td> <td>99</td> <td>66.2</td> <td>10</td> <td>Snd Lvl</td> <td>63.8</td> <td></td> <td>80</td> <td>-5.6</td>	Receiver 29 G to W	26	2	0.0	66.2	99	66.2	10	Snd Lvl	63.8		80	-5.6
96         1         0.0         67.2         66         67.2         10         54.0         52.9         8           100         1         0.0         67.2         66         67.0         10         53.9         23         2           101         1         0.0         67.4         66         67.4         10         50.4         33         2         3         2         3         2         3         2         3         2         3         2         3         2         3         3         2         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3 <t< td=""><td>Receiver 30 G to W</td><td>98</td><td>2</td><td>0.0</td><td>67.4</td><td>99</td><td>67.4</td><td>10</td><td>Snd Lvl</td><td>64.2</td><td></td><td>80</td><td>4.8</td></t<>	Receiver 30 G to W	98	2	0.0	67.4	99	67.4	10	Snd Lvl	64.2		80	4.8
	31 G	66	-	0.0	67.2	99	67.2	10	Snd Lvi	64.3		80	-5.1
	Receiver 32 G to W	100	-	0.0	67.0	99	67.0	10	Snd Lvl	64.0		80	-5.0
	Receiver 33 G to W	101	-	0.0	67.2	99	67.2	10	Snd Lvl	63.9	3.3	8	-4.7
	C	102	2	0.0	67.4	99	67.4	10	Snd Lvl	64.0		80	4.6
	Receiver 35 G to W	103	2	0.0		66	67.9	10	Snd Lvl	64.0		80	4.1
	Receiver 36 G to W	104	2	0.0	68.0	99	68.0	10	Snd Lvl	64.0		80	4.0
	0	105	2	0.0	68.3	99	68.3	10	Snd Lvl	64.0		80	-3.7
107         1         0.0         68.6         66.0         68.6         10         Snd LM         63.3         4.8         8           108         2         0.0         68.0         66.0         69.0         10         Snd LM         63.3         5.1         8           109         1         0.0         68.3         66         69.3         10         Snd LM         63.3         5.1         8           111         1         0.0         69.3         66         69.3         10         Snd LM         63.3         5.1         8           113         2         0.0         69.3         66         69.3         10         Snd LM         63.7         5.6         8           113         2         0.0         69.3         66         69.3         10         Snd LM         63.7         5.6         8           116         1         0.0         69.3         66         69.3         10         Snd LM         63.7         5.1         8           116         1         0.0         69.3         66         69.3         10         Snd LM         63.7         5.1         8           116 <t< td=""><td>Receiver 38 G to W</td><td>106</td><td>-</td><td>0.0</td><td>68.4</td><td>66</td><td>68.4</td><td>10</td><td>Snd Lvl</td><td>63.9</td><td></td><td>80</td><td>-3.5</td></t<>	Receiver 38 G to W	106	-	0.0	68.4	66	68.4	10	Snd Lvl	63.9		80	-3.5
	Receiver 39 G to W	107	F	0.0	68.6	66	68.6	10	Snd Lvl	63.8		80	-3.2
	C	108	2	0.0	69.0	66	69.0	10	Snd Lvl	63.9	5.1	80	-2.9
	Receiver 41 G to W	109	-	0.0	68.8	66	68.8	10	Snd Lvl	63.7	5.1	80	-2.9
	Receiver 42 G to W	110	2	0.0	69.1	66	69.1	10	Snd Lvl	63.7	5.4	8	-2.6
	C	111	-	0.0	69.3	66	69.3	10	Snd Lvl	63.7		80	-2.4
		112	-	0.0	69.3	66	69.3	10	Snd Lvl	63.7		80	-2.4
115         2         0.0         69.8         66         69.8         10         SmdLvi         6.1         8           116         1         0.0         71.1         66         71.1         10         SmdLvi         64.5         6.6         8         8           116         1         0.0         71.1         66         71.1         10         SmdLvi         63.3         6.6         8         8           120         2         0.0         69.4         66         69.4         10         SmdLvi         63.3         6.1         8           121         2         0.0         69.4         66         69.4         10         SmdLvi         63.3         6.1         8           124         1         0.0         69.5         66         69.4         10         SmdLvi         63.4         6.0         8           139         1         0.0         69.5         66         69.5         10         SmdLvi         66.6         3.9         8           140         1         0.0         69.7         66         69.6         10         SmdLvi         66.6         8         8           144	Receiver 45 G to W	113	2	0.0	69.4	66	69.4	10	Snd Lvl	63.7	5.7	80	-2.3
	Receiver 46 G to W	115	2	0.0	69.8	66	69.8	10	Snd Lvl	63.7	6.1	80	-1.9
	Receiver 47 G to W	116	-	0.0	71.1	66	71.1	10	Snd Lvl	64.5	6.6	80	-1.4
120         2         0.0         70.0         66         70.0         10         Sindlyl         63.9         6.1         8           121         2         0.0         69.4         66         69.4         10         Sindlyl         63.9         6.1         8           124         1         0.0         69.5         66         69.5         10         Sindlyl         63.7         5.8         8           125         10         0.0         70.0         66         70.0         10         Sindlyl         65.4         5.8         8           139         1         0.0         70.5         66         70.5         10         Sindlyl         66.4         3.6         8           140         1         0.0         68.7         66         69.5         10         Sindlyl         66.4         3.6         8           144         1         0.0         68.7         66         67.6         67.6         66         67.6         66.4         3.5         8           144         1         0.0         67.6         66         67.6         10         61.4         65.3         2.5         8 <t< td=""><td></td><td>119</td><td>2</td><td>0.0</td><td>69.4</td><td>99</td><td>69.4</td><td>10</td><td>Snd Lvl</td><td>63.8</td><td>5.6</td><td>80</td><td>-2.4</td></t<>		119	2	0.0	69.4	99	69.4	10	Snd Lvl	63.8	5.6	80	-2.4
1         121         2         0.0         69.4         66         69.4         10         SndLyl         63.4         6.0         8           124         1         0.0         69.5         66         69.5         10         SndLyl         63.7         5.8         8           125         10         0.0         70.0         66         70.0         10         SndLyl         66.4         3.6         8           139         1         0.0         70.5         66         70.5         10         SndLyl         66.6         3.9         8           140         1         0.0         69.7         66         69.6         10         SndLyl         66.6         3.9         8           144         1         0.0         67.6         66         67.6         10         SndLyl         66.4         3.2         8           145         1         0.0         67.6         66         67.6         10         SndLyl         66.4         3.2         8           144         1         0.0         67.8         66         67.6         10         SndLyl         66.7         2.8         8           148	Receiver 49 G to W	120	2	0.0	70.0	99	70.0	10	Snd Lvl	63.9	6.1	8	-1.9
124         1         0.0         69.5         66         69.5         10         Snd Lvl         63.7         5.8         8           125         10         0.0         70.0         66         70.0         10         Snd Lvl         66.4         3.6         8           139         1         0.0         70.0         66         70.0         10         Snd Lvl         66.6         3.9         8           140         1         0.0         68.7         66         68.7         10         Snd Lvl         66.6         3.9         8           143         2         0.0         69.6         66.6         67.6         10         Snd Lvl         66.6         3.9         8           143         1         0.0         67.6         66         67.6         10         Snd Lvl         66.6         3.2         8           145         1         0.0         67.8         66         67.6         10         Snd Lvl         65.3         2.5         8           148         1         0.0         71.5         10         Snd Lvl         65.6         3.0         8           149         1         0.0	Receiver 50 G to W	121	2	0.0	69.4	99	69.4	10		63.4	6.0	80	-2.0
12510 $0.0$ 70.0 $66$ 70.010 $nd lvl$ $66.4$ $3.6$ $8$ 1391 $0.0$ 70.5 $66$ $70.5$ $10$ $nd lvl$ $66.6$ $3.9$ $8$ 1401 $0.0$ $68.7$ $66$ $68.7$ $10$ $nd lvl$ $66.6$ $3.9$ $8$ 1432 $0.0$ $69.6$ $66.6$ $68.7$ $10$ $nd lvl$ $66.4$ $3.5$ $8$ 1441 $0.0$ $67.6$ $66$ $67.6$ $10$ $nd lvl$ $66.4$ $3.2$ $8$ 1451 $0.0$ $67.8$ $66$ $67.8$ $10$ $nd lvl$ $66.4$ $2.8$ $8$ 1481 $0.0$ $67.6$ $66$ $71.5$ $10$ $nd lvl$ $65.3$ $2.7$ $8$ 1491 $0.0$ $69.4$ $66$ $69.4$ $10$ $nd lvl$ $65.6$ $3.0$ $8$ 1511 $0.0$ $69.4$ $66$ $67.8$ $10$ $nd lvl$ $65.6$ $3.0$ $8$ 1511 $0.0$ $71.5$ $66$ $71.5$ $10$ $nd lvl$ $65.6$ $3.0$ $8$	Receiver 51 G to W	124	-	0.0	69.5	66	69.5	10	Snd Lvl	63.7	5.8	80	-2.2
139       1       0.0       70.5       66       70.5       10       Snd Lvl       66.6       3.9       8         140       1       0.0       68.7       66       68.7       10       Snd Lvl       66.6       3.9       8         143       2       0.0       69.6       66       69.6       10       Snd Lvl       66.4       3.2       8         144       1       0.0       67.6       66       67.6       10       Snd Lvl       66.4       3.2       8         145       1       0.0       67.6       66       67.8       10       Snd Lvl       66.4       3.2       8         148       1       0.0       67.8       66       71.5       10       Snd Lvl       65.3       2.5       8         149       1       0.0       69.4       66       69.4       10       67.5       4.0       8         151       1       0.0       69.4       66       69.4       10       67.5       4.0       8         149       1       0.0       69.4       66       69.4       10       66.6       57       53       8         151 <td>Receiver 52 W to L</td> <td>125</td> <td>10</td> <td>0.0</td> <td>70.0</td> <td>66</td> <td>70.0</td> <td>10</td> <td></td> <td>66.4</td> <td>3.6</td> <td>80</td> <td>4.4</td>	Receiver 52 W to L	125	10	0.0	70.0	66	70.0	10		66.4	3.6	80	4.4
140       1       0.0       68.7       66       68.7       10       Snd Lvl       65.2       3.5       8         143       2       0.0       69.6       66       67.6       10       Snd Lvl       66.4       3.2       8         144       1       0.0       67.6       66       67.6       10       Snd Lvl       64.8       2.8       8         145       1       0.0       67.8       66       67.8       10       Snd Lvl       65.3       2.8       8         148       1       0.0       67.8       66       67.8       10       Snd Lvl       65.3       2.5       8         149       1       0.0       69.4       66       69.4       10       Snd Lvl       65.6       3.8       8         151       1       0.0       69.4       66       69.4       10       67.5       4.0       8         151       1       0.0       70.0       66.4       70       70.7       5.3       8	Receiver 54 W to L	139	L	0.0	70.5	66	70.5	10		66.6		80	4.1
143       2       0.0       69.6       66       69.6       10       Snd Lvl       66.4       3.2       8         144       1       0.0       67.6       66       67.6       10       Snd Lvl       64.8       2.8       8         145       1       0.0       67.8       66       67.8       10       Snd Lvl       64.8       2.8       8         148       1       0.0       71.5       66       71.5       10       Snd Lvl       67.5       4.0       8         149       1       0.0       69.4       10       Snd Lvl       67.5       4.0       8         151       1       0.0       70.0       66.4       71.5       10       Snd Lvl       67.5       4.0       8         149       1       0.0       69.4       10       Snd Lvl       65.6       3.8       8         151       1       0.0       76.0       66       76.0       10       70.7       5.3       8	Receiver 55 W to L	140	t	0.0	68.7	99	68.7	10		65.2		80	
144       1       0.0       67.6       66       67.6       10       Snd Lvl       64.8       2.8       8         145       1       0.0       67.8       66       67.8       10       Snd Lvl       65.3       2.5       8         148       1       0.0       71.5       66       71.5       10       Snd Lvl       67.5       4.0       8         149       1       0.0       69.4       10       Snd Lvl       65.6       3.8       8         151       1       0.0       76.0       66       76.0       10       Snd Lvl       65.6       3.8       8	Receiver 58 W to L	143	2	0.0	69.69	99	69.69	10	Snd Lvl	66.4	3.2	8	4.8
145     1     0.0     67.8     66     67.8     10     Snd Lvl     65.3     2.5     8       148     1     0.0     71.5     66     71.5     10     Snd Lvl     67.5     4.0     8       149     1     0.0     69.4     66     69.4     10     Snd Lvl     65.6     3.8     8       151     1     0.0     76.0     66     76.0     10     Snd Lvl     65.6     3.8     8	Receiver 59 W to L	144	-	0.0		99	67.6	10		64.8	2.8	80	-5.2
148         1         0.0         71.5         66         71.5         10         Snd Lvl         67.5         4.0         8           149         1         0.0         69.4         66         69.4         10         Snd Lvl         65.6         3.8         8           151         1         0.0         76.0         66         76.0         10         Snd Lvl         65.6         3.8         8	Receiver 60 W to L	145	t-	0.0	67.8	99	67.8	10		65.3	2.5	00	
149 1 0.0 69.4 66 69.4 10 Snd Lvl 65.6 3.8 8 151 1 0.0 76.0 66 76.0 10 Snd Lvl 70.7 5.3 8	Receiver 63 W to L	148	F	0.0	71.5	99	71.5	10	Snd Lvl	67.5	4.0	80	
151 1 0.0 76.0 66 76.0 10 Snd Lvl 70.7 5.3 8	Receiver 64 W to L	149	-	0.0	69.4	99	69.4	10	Snd Lvl	65.6	3.8	80	-4.2
	Receiver 66 W to L	151	+	0.0	76.0	99	76.0	10	Snd Lvl	70.7	5.3	00	-2.7

Receiver 74 Dio J         TSJ         1         0.0         7/3         66         7/3         0           Receiver 74 Dio J         Receiver 74 Dio J         159         10         0.0         7/3         66         7/3         10           Receiver 75 Dio J         159         10         0.0         67.3         66         7/3         10           Receiver 75 Dio J         163         10         0.0         67.3         66         7/3         10           Receiver 78 Dio J         163         10         0.0         67.3         66         67.3         10           Receiver 78 Dio J         165         1         0.0         68.7         66         68.7         10           Receiver 80 Dio J         166         1         0.0         68.7         66         68.7         10           Receiver 80 Dio J         166         1         0.0         67.0         66         68.7         10           Receiver 80 Dio J         166         1         0.0         67.0         66         66.5         10           Receiver 80 Dio J         177         1         0.0         67.1         66         66.5         10         10	10       Sind Lvl         11       Sind Lvl         12       Sind Lvl         13       Sind Lvl         14       Sind Lvl         15       Sind Lvl         16       Sind Lvl         17       Sind Lvl         18       Sind Lvl         19	/6.3         0.5           72.7         0.0           72.8         0.1           67.2         0.1           657.2         0.1           657.2         0.1           657.2         0.1           657.2         0.1           661.1         0.1           68.9         0.1           68.9         0.1           65.9         0.1           65.3         0.1           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.2           65.3         0.3           65.3         0.3           65.3         0.3           65.3         0.3           65.3         0.3           65.3         0.3	$\infty$	6.7- 0.8- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7
158         6         0.0 $72.7$ 66 $72.7$ 159         10         0.0 $72.9$ $66.7$ $72.9$ 161         1         0.0 $67.9$ $66.7$ $67.3$ 162         1         0.0 $67.9$ $66.6$ $67.3$ 163         10         0.0 $67.3$ $66.6$ $67.3$ 166         2         0.0 $68.7$ $66.6$ $68.3$ 167         2         0.0 $68.7$ $66.6$ $68.3$ 167         2         0.0 $68.7$ $66.6$ $68.3$ 167         1         0.0 $68.7$ $66.6$ $68.3$ 177         1         0.0 $66.7$ $66.6$ $66.7$ 177         1         0.0 $66.7$ $66.7$ $66.7$ 177         1         0.0 $66.7$ $66.6$ $66.7$ 177         1         0.0 $66.7$ $66.6$ $66.7$ 177         1         0.0			$\infty$	0.8- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7
159         10         0.0         72.9         66         72.9           161         1         0.0         67.9         66         67.3           163         1         0.0         67.3         66         67.3           163         10         0.0         67.3         66         66.7           163         10         0.0         68.3         66         68.3           165         3         0.0         68.3         66         68.3           166         2         0.0         68.3         66         68.3           168         2         0.0         68.3         66         68.3           170         1         0.0         68.3         66         68.3           171         1         0.0         65.4         66         65.4           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177			$\infty$	0.8- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7- 0.7
160         2         0.0         67.9         66         67.9           161         1         0.0         67.3         66         67.3           165         1         0.0         68.3         66         68.3           165         3         0.0         68.3         66         68.3           165         3         0.0         68.3         66         68.3           165         2         0.0         68.3         66         68.3           166         2         0.0         68.3         66         68.3           170         1         0.0         68.3         66         68.3           171         1         0.0         68.4         68.3         66.4           172         1         0.0         66.1         66.3         66.1           172         1         0.0         66.1         66.1         66.1           173         1         0.0         66.1         66.1         66.1           174         1         0.0         66.1         66.1         66.1           174         1         0.0         66.1         66.1         66.1				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
161         1         0.0         67.3         66         67.3           162         1         0.0         66.2         66.2         66.3           163         10         0.0         68.3         66         66.3           164         1         0.0         68.3         66         68.3           165         2         0.0         68.3         66         68.3           166         2         0.0         68.3         66         68.3           166         1         0.0         69.3         66         69.3           177         1         0.0         69.3         66         69.3           177         1         0.0         69.3         66         67.0           177         1         0.0         65.5         66         66.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           178         1         0.0         65.1         66         65.1           178<				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
162         1         0.0         66.2         66.2         66.2           163         10         0.0         68.3         66         68.3           164         1         0.0         68.3         66         68.3           165         3         0.0         68.3         66         68.3           166         2         0.0         69.0         66         69.0           167         2         0.0         69.3         66         69.3           170         1         0.0         69.3         66         69.3           171         1         0.0         69.3         66         69.3           177         1         0.0         69.1         66         69.1           177         1         0.0         65.5         66         67.1           177         1         0.0         65.1         66         67.1           177         1         0.0         65.1         66         67.1           177         1         0.0         65.1         66         67.1           178         1         0.0         65.1         66         65.1           177<				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
163         10         0.0         68.3         66         68.3           164         1         0.0         68.7         66         68.7           165         3         0.0         69.0         66.9         68.7           166         2         0.0         69.2         66.9         69.3           166         2         0.0         69.3         66         69.3           170         1         0.0         65.5         66         66.1           170         1         0.0         65.1         66         66.1           170         1         0.0         65.1         66         65.1           173         1         0.0         65.1         66         65.1           174         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           17				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
164         1         0.0         68.7         66         68.7           165         3         0.0         69.0         66         69.0           166         2         0.0         69.3         66         69.0           166         2         0.0         69.3         66         69.3           168         1         0.0         69.3         66         69.3           170         1         0.0         65.5         66         66.1           171         1         0.0         65.1         66         66.1           173         1         0.0         65.1         66         65.5           175         1         0.0         65.1         66         65.1           176         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         67.1         66           177         1         0.0         65.1         67.1         67.1           177         1         0.0         65.1         67.6         65.1           177				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
165         3         0.0         69.0         69.0         69.0           166         2         0.0         69.2         66         69.3           167         2         0.0         69.3         66         69.3           168         1         0.0         66.1         66.3         66.3           170         1         0.0         66.1         66.         67.3           171         1         0.0         66.1         66.1         66.1           173         1         0.0         65.5         66         67.3           173         1         0.0         65.1         66         67.1           175         1         0.0         65.1         66         67.1           175         1         0.0         65.1         66         67.1           176         1         0.0         65.1         66         67.1           177         1         0.0         65.1         66         67.1           178         4         0.0         65.1         66         65.1           179         1         0.0         65.1         66         65.1				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
166         2         0.0         69.2         66         69.3           167         2         0.0         69.3         66         69.3           168         1         0.0         66.3         66         69.3           170         1         0.0         66.1         66         66.1           170         1         0.0         65.5         66         65.5           173         1         0.0         65.1         66         67.1           173         1         0.0         65.1         66         67.1           175         1         0.0         65.1         66         67.1           175         1         0.0         65.1         66         67.1           176         1         0.0         65.1         66         67.1           176         1         0.0         65.1         66         67.1           177         1         0.0         65.1         66         67.1           178         1         0.0         65.1         66         67.1           179         1         0.0         71.8         66         71.8           190 <td></td> <td></td> <td></td> <td>9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-</td>				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
167         2         0.0         69.3         66         69.3           168         1         0.0         66.1         66         66.1           170         1         0.0         66.1         66         66.1           171         1         0.0         65.5         66         65.5           171         1         0.0         65.1         66         65.1           172         1         0.0         67.1         66         67.1           173         1         0.0         67.1         66         67.1           175         1         0.0         67.1         66         67.1           175         1         0.0         67.1         66         67.1           176         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         67.1           178         1         0.0         67.1         66         67.1           179         1         0.0         67.4         67         67.1           190 <td></td> <td></td> <td></td> <td>9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-</td>				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7-
16         1         0.0         66.9         66.9         66.9           170         1         0.0         66.1         66.         66.1           171         1         0.0         65.5         66         65.5           171         1         0.0         65.1         66         65.1           172         1         0.0         67.1         66         67.0           173         1         0.0         67.1         66         67.1           175         1         0.0         67.1         66         67.1           176         1         0.0         67.1         66         67.1           176         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         67.1           178         4         0.0         67.1         66         67.1           178         1         0.0         67.1         66         67.1           178         1         1         0.0         67.1         67         71.8           179         1         0.0         71.8         66         71.8 <t< td=""><td></td><td></td><td></td><td>9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 7.7- 7</td></t<>				9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 9.7- 7.7- 7
163         1         0.0         66.1         66.1           170         1         0.0         65.5         66         65.5           171         1         0.0         65.5         66         65.5           172         1         0.0         65.1         66         65.1           173         1         0.0         67.0         66         67.0           174         1         0.0         67.1         66         67.1           175         1         0.0         67.1         66         67.1           176         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         65.1           178         4         0.0         67.1         66         65.1           178         1         0.0         71.8         66         71.8           180         1         1         0.0         71.8         66         72.1           191				7.8 7.7 8.7- 7.7 9.7- 7.7- 7.7- 7.7- 7.7-
170         1         0.0         65.5         66         65.5           171         1         0.0         67.8         66         67.0           172         1         0.0         67.0         66         67.0           173         1         0.0         67.1         66         67.0           174         1         0.0         66.1         66         67.1           175         1         0.0         66.1         66         67.1           176         1         0.0         67.1         66         67.1           176         1         0.0         66.1         66         67.1           177         1         0.0         67.1         66         67.1           177         1         0.0         65.1         66         67.1           178         1         0.0         65.1         66         65.1           178         1         0.0         65.1         66         65.1           178         1         0.0         71.8         66         65.1           180         1         0.0         71.8         66         71.8           191 <td></td> <td></td> <td></td> <td>7.7. 9.7- 9.7- 9.7- 7.7- 7.7- 7.7-</td>				7.7. 9.7- 9.7- 9.7- 7.7- 7.7- 7.7-
171         1         0.0         67.8         66         67.8           172         1         0.0         67.0         66         67.0           173         1         0.0         66.1         66         67.0           174         1         0.0         66.1         66         67.1           175         1         0.0         67.1         66         66.1           175         1         0.0         67.1         66         67.1           176         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         65.1           177         1         0.0         65.1         66         65.1           178         1         0.0         65.1         66         65.1           179         1         0.0         71.8         66         71.8           191         1         0.0         71.8         66         65.0           192         1         0.0         72.3         66         72.3           193 <td></td> <td></td> <td>ထထထထထေ</td> <td>9.7- 8.7- 9.7- 7.7- 7.7- 9.7-</td>			ထထထထထေ	9.7- 8.7- 9.7- 7.7- 7.7- 9.7-
172         1         0.0         67.0         66         67.0           173         1         0.0         66.1         66         66.1           174         1         0.0         66.1         66         66.1           175         1         0.0         67.1         66         67.1           175         1         0.0         67.1         66         67.1           176         1         0.0         67.1         66         67.1           177         1         0.0         67.1         66         67.1           178         1         0.0         67.1         66         65.1           179         1         0.0         67.1         66         65.1           180         1         0.0         71.8         66         71.8           191         1         0.0         71.8         66         72.3           191         1         0.0         65.9         66         65.9           193         1         0.0         65.3         66         65.9           193         1         0.0         65.3         66         65.8           195 <td></td> <td></td> <td>ထထထထထ</td> <td>8.7- 7.7. 7.7. 7.7. 7.7.</td>			ထထထထထ	8.7- 7.7. 7.7. 7.7. 7.7.
173         1         0.0         66.1         66         66.1           174         1         0.0         68.6         66         68.6           175         1         0.0         67.1         66         68.6           176         1         0.0         67.1         66         67.1           176         1         0.0         65.1         66         65.6           177         1         0.0         65.1         66         65.1           179         1         0.0         65.1         66         65.1           180         1         0.0         71.8         66         71.8           180         1         0.0         71.8         66         72.1           190         1         0.0         71.8         66         72.3           191         1         0.0         72.3         66         72.3           193         1         0.0         65.9         66.0         65.9           193         1         0.0         65.3         66         65.9           193         1         0.0         65.3         66         65.9           193 </td <td></td> <td></td> <td>∞ ∞ ∞ ∞ ∞</td> <td>-7.8 -7.9 -7.7 -7.7 -7.5 -7.5</td>			∞ ∞ ∞ ∞ ∞	-7.8 -7.9 -7.7 -7.7 -7.5 -7.5
174         1         0.0         68.6         66.6         63.6           175         1         0.0         67.1         66         67.1           176         1         0.0         65.6         66         65.6           177         1         0.0         65.1         66         65.6           177         1         0.0         65.1         66         65.1           178         4         0.0         64.4         66         64.4           179         1         0.0         71.8         66         71.8           180         1         0.0         71.8         66         71.8           180         1         0.0         72.1         66         72.1           190         1         0.0         72.3         66         72.3           191         1         0.0         65.0         66.0         65.3           192         1         0.0         65.3         66         65.3           193         1         0.0         65.3         66         65.3           195         1         0.0         65.3         66         65.3           195			ထထထတ	9.7. 7.7. 7.6. 6.7.
175         1         0.0         67.1         66         67.1           176         1         0.0         65.6         66         65.6           177         1         0.0         65.1         66         65.1           177         1         0.0         65.1         66         65.1           178         4         0.0         64.4         66         64.4           179         1         0.0         71.8         66         71.8           180         1         0.0         71.8         66         71.8           180         1         0.0         71.8         66         71.8           190         1         0.0         71.8         66         72.3           191         1         0.0         72.3         66         72.3           193         1         0.0         65.9         66         65.8           195         1         0.0         65.3         66         65.8           195         1         0.0         65.8         66         65.8           195         1         0.0         65.8         66         65.8           197 <td></td> <td></td> <td>∞ ∞ ∞ ¢</td> <td>7.7- 7.7- 7.5-</td>			∞ ∞ ∞ ¢	7.7- 7.7- 7.5-
176       1       0.0       65.6       66       65.6         177       1       0.0       65.1       66       65.1         178       4       0.0       65.1       66       65.1         179       1       0.0       64.4       66       65.1         179       1       0.0       71.8       66       71.8         180       1       0.0       71.8       66       71.8         190       1       0.0       72.1       66       72.3         191       1       0.0       65.9       66       65.9         193       1       0.0       65.8       66       65.8         194       1       0.0       65.8       66       65.8         195       1       0.0       65.3       66       65.8         196       1       0.0       65.3       66       65.8         197       1       0.0       65.3       66       65.8         197       1       0.0       65.2       66       65.3         199       1       0.0       65.7       66       65.7         199       1 <td< td=""><td>10</td><td></td><td>∞ ∞ 0</td><td>7.7- 7.6 7.2</td></td<>	10		∞ ∞ 0	7.7- 7.6 7.2
177     1     0.0     65.1     66     65.1       178     4     0.0     64.4     66     64.4       179     1     0.0     71.8     66     71.8       180     1     0.0     71.8     66     71.8       180     1     0.0     71.8     66     71.8       190     1     0.0     72.1     66     72.1       191     1     0.0     65.9     66     65.9       193     1     0.0     65.8     66     65.8       194     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       196     1     0.0     65.8     66     65.8       197     1     0.0     64.5     66     65.3       199     1     0.0     64.5     66     65.2       201     1     0.0     65.7     66     65.2       201     1     0.0     65.7     66     65.7       201     1     0.0     65.7 <td>10</td> <td></td> <td>80 0</td> <td>-7.6</td>	10		80 0	-7.6
178     4     0.0     64.4     66     64.4       179     1     0.0     71.8     66     71.8       180     1     0.0     71.8     66     71.8       180     1     0.0     71.8     66     71.8       180     1     0.0     71.8     66     72.1       190     1     0.0     72.3     66     72.3       191     1     0.0     65.9     66     65.9       193     1     0.0     65.8     66     65.8       194     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       197     1     0.0     65.8     66     65.8       197     1     0.0     63.3     66     65.8       197     1     0.0     64.5     66     65.8       201     1     0.0     65.7     66     65.2       201     1     0.0     65.7     66     65.7       201     1     0.0     65.7     66     65.7			•	7 2
179       1       0.0       71.8       66       71.8         180       1       0.0       71.8       66       71.8         180       1       0.0       71.8       66       72.1         180       1       0.0       72.1       66       72.3         190       1       0.0       72.3       66       72.3         191       1       0.0       65.9       66       65.9         193       1       0.0       65.8       66       65.8         194       1       0.0       65.8       66       65.8         195       1       0.0       65.8       66       65.8         195       1       0.0       65.8       66       65.8         197       1       0.0       65.8       66       65.8         197       1       0.0       63.8       66       65.8         197       1       0.0       64.5       66       65.3         201       1       0.0       65.7       66       65.7         201       1       0.0       65.7       66       65.7         202       1 <td< td=""><td>10</td><td>b3./ U./</td><td>8</td><td>0.1-</td></td<>	10	b3./ U./	8	0.1-
180     1     0.0     71.8     66     71.8       189     1     0.0     72.1     66     72.1       190     1     0.0     72.3     66     72.3       191     1     0.0     65.9     66     65.9       193     1     0.0     65.9     66     65.8       194     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       197     1     0.0     65.8     66     65.8       197     1     0.0     65.1     66     65.8       197     1     0.0     65.2     66     65.2       201     1     0.0     65.7     66     65.7       201     1     0.0     65.7     66     65.7       202     1     0.0     65.7     66     65.7	10 Snd Lvl	71.6 0.2	8	-7.8
189     1     0.0     72.1     66     72.1       190     1     0.0     72.3     66     72.3       191     1     0.0     66.0     66.0     66.0       193     1     0.0     65.9     66     65.9       194     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       196     4     0.0     63.8     66     65.8       197     1     0.0     64.5     66     63.8       197     1     0.0     65.2     66     65.2       201     1     0.0     65.7     66     65.2       201     1     0.0     65.7     66     65.2       201     1     0.0     65.7     66     65.7       201     1     0.0     65.7     66     65.7	10 Snd Lvl	71.6 0.2	80	-7.8
190       1       0.0       72.3       66       72.3         191       1       0.0       66.0       66.0       66.0         193       1       0.0       65.9       66       65.9         194       1       0.0       65.8       66       65.8         194       1       0.0       65.8       66       65.8         195       1       0.0       65.8       66       65.8         196       4       0.0       65.8       66       65.8         197       1       0.0       64.5       66       63.8         201       1       0.0       65.2       66       65.2         201       1       0.0       65.7       66       65.2         201       1       0.0       65.7       66       65.7         201       1       0.0       65.7       66       65.7	10 Snd Lvl	71.1 1.0	80	-7.0
191     1     0.0     66.0     66.0       193     1     0.0     65.9     66     65.9       194     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       197     1     0.0     63.3     66     63.8       197     1     0.0     64.5     66     64.5       199     1     0.0     65.2     66     65.2       201     1     0.0     65.7     66     65.7       202     1     0.0     65.7     66     65.7	10 Snd Lvl	70.8 1.5	œ	-6.5
193       1       0.0       65.9       66       65.9         194       1       0.0       65.8       66       65.8         195       1       0.0       65.8       66       65.8         195       1       0.0       65.8       66       65.8         197       1       0.0       63.8       66       65.8         197       1       0.0       64.5       66       63.8         199       1       0.0       64.5       66       65.2         201       1       0.0       65.7       66       65.7         201       1       0.0       65.7       66       65.7         202       1       0.0       65.7       66       65.7	10 Snd Lvl	65.5 0.5	80	-7.5
194     1     0.0     65.8     66     65.8       195     1     0.0     65.8     66     65.8       196     4     0.0     63.8     66     65.8       197     1     0.0     64.5     66     64.5       199     1     0.0     64.5     66     64.5       201     1     0.0     65.2     66     65.2       201     1     0.0     65.7     66     65.2       202     1     0.0     65.7     66     65.7	10	65.3 0.6	80	-7.4
195     1     0.0     65.8     66     65.8       196     4     0.0     63.8     66     63.8       197     1     0.0     64.5     66     64.5       199     1     0.0     65.2     66     65.2       201     1     0.0     65.7     66     65.7       202     1     0.0     65.7     66     65.7	10	65.0 0.8	80	-7.2
196     4     0.0     63.8     66     63.8       197     1     0.0     64.5     66     64.5       199     1     0.0     65.2     66     65.2       201     1     0.0     65.7     66     65.7       202     1     0.0     66.7     66     66.7	10	64.9 0.9	80	-7.1
J     197     1     0.0     64.5     66     64.5       J     199     1     0.0     65.2     66     65.2       J     201     1     0.0     65.7     66     65.7       J     202     1     0.0     65.7     66     65.7	10	62.0 1.8	80	-6.2
J 199 1 0.0 65.2 66 65.2 1 J 201 1 0.0 65.7 66 65.7 1 J 202 1 0.0 66.7 66 66.7 1	10	62.7 1.8	80	-6.2
J 201 1 0.0 65.7 66 65.7 1 J 202 1 0.0 66.7 66 66.7 1	10	63.4 1.8	80	-6.2
1 202 1 0.0 667 66	10	64.0 1.7	00	-6.3
	10 Snd Lvl	65.2 1.5	80	-6.5
Receiver 107 D to J 203 1 0.0 68.1 66 68.1 10	10 Snd Lvi	65.9 2.2	00	-5.8
0 69.6 66 69.6	10 Snd Lvl	66.6 3.0	00	-5.0
0 67.7 66 67.7 '	10 Snd Lvl	65.3 2.4	80	-5.6
Receiver 111 D to J 207 1 0.0 66.1 66 66.1 10	10 Snd Lvl	64.3 1.8	80	-6.2
Receiver 112 D to J 208 1 0.0 65.1 66 65.1 10	10	63.3 1.8	80	-6.2
Receiver 113 D to J 209 1 0.0 64.3 66 64.3 10	10	62.3 2.0	80	-6.0

219       2       0.0       72.1         220       2       0.0       64.7         221       1       0.0       64.7         222       2       0.0       64.9         223       1       0.0       64.9         225       1       0.0       65.0         224       1       0.0       65.0         225       1       0.0       65.0         223       1       0.0       65.0         223       1       0.0       65.1         223       1       0.0       65.1         233       1       0.0       65.1         233       1       0.0       65.1         233       1       0.0       65.1         233       1       0.0       65.1         233       1       0.0       65.1         233       1       0.0       65.1         234       2       0.0       76.0         235       1       0.0       76.1         240       1       0.0       76.1         244       1       0.0       76.1         245       2       0.0 </th <th>72.1 72.3 64.7 64.9 65.0 65.0 65.0 64.7 63.1 64.4 63.1 64.4 63.1 63.4 63.4 63.4 63.4 63.4 63.4 63.4 63.4</th> <th>10         Snd Lwl           10         Snd Lwl           10         Snd Lwl           10            10            10            10            10            10            10            10            10            10            10            10            10            10            10         Snd Lwl           10         Snd Lwl</th> <th>72.0 72.3 63.5 63.5 64.5 64.1 64.1 64.1 64.1 64.1 64.1 64.1 64.1</th> <th>0.1 1.5 1.6 1.5 1.5 0.2 0.2 0.2 0.2 3.9 0.2 3.9 0.2 3.9 0.2 3.9 4.7</th> <th></th> <th>-7.9 -8.0 -6.5 -6.5 -6.4 -6.5 -6.4 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8</th>	72.1 72.3 64.7 64.9 65.0 65.0 65.0 64.7 63.1 64.4 63.1 64.4 63.1 63.4 63.4 63.4 63.4 63.4 63.4 63.4 63.4	10         Snd Lwl           10         Snd Lwl           10         Snd Lwl           10            10            10            10            10            10            10            10            10            10            10            10            10            10            10         Snd Lwl           10         Snd Lwl	72.0 72.3 63.5 63.5 64.5 64.1 64.1 64.1 64.1 64.1 64.1 64.1 64.1	0.1 1.5 1.6 1.5 1.5 0.2 0.2 0.2 0.2 3.9 0.2 3.9 0.2 3.9 0.2 3.9 4.7		-7.9 -8.0 -6.5 -6.5 -6.4 -6.5 -6.4 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8
220 $2$ $0.0$ $72.3$ $221$ $1$ $0.0$ $64.7$ $222$ $2$ $0.0$ $64.9$ $223$ $1$ $0.0$ $64.9$ $224$ $1$ $0.0$ $65.0$ $223$ $1$ $0.0$ $65.0$ $223$ $1$ $0.0$ $65.0$ $223$ $1$ $0.0$ $65.0$ $223$ $1$ $0.0$ $65.0$ $223$ $1$ $0.0$ $64.7$ $223$ $1$ $0.0$ $65.0$ $223$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $76.4$	72.3 64.7 64.9 65.0 65.0 65.0 64.7 63.4 64.4 63.4 63.4 63.4 63.4 63.4 63.5 63.4 63.5 63.4 63.6 63.4 63.4 63.6 77.1 76.0 76.0		72.3 63.2 63.5 63.5 64.5 64.9 64.9 64.9 64.9 64.9 64.9 64.9 66.1 68.3	0.0 1.5 1.5 1.5 1.5 0.2 0.2 0.2 3.9 0.2 3.9 3.9 4.7		-8.0 -6.5 -6.5 -6.4 -6.5 -6.4 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	64.7 64.9 65.0 65.0 65.0 65.0 63.4 63.4 63.4 63.4 63.4 63.4 63.4 63.4		63.2 63.5 63.5 63.5 64.5 64.0 64.1 64.1 64.1 66.1 66.1 66.1		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	-6.5 -6.4 -6.5 -6.4 -6.5 -6.5 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.1 -1.0 -1.0 -1.0 -1.0 -1.3 -1.0 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3
1     222     2     0.0     64.9       2     1     0.0     65.0       224     1     0.0     65.0       225     1     0.0     65.0       226     1     0.0     65.0       228     1     0.0     65.0       228     1     0.0     65.0       229     1     0.0     63.4       230     1     0.0     64.7       233     1     0.0     63.4       233     1     0.0     64.4       233     1     0.0     64.4       233     1     0.0     64.4       233     1     0.0     64.4       234     1     0.0     64.4       235     1     0.0     64.4       236     1     0.0     64.4       233     1     0.0     64.4       234     1     0.0     64.4       235     1     0.0     64.4       236     1     0.0     64.4       236     1     0.0     64.4       236     2     1     0.0     76.1       236     2     1     0.0     76.1       240     1	64.9 65.0 65.0 65.0 65.0 64.7 63.4 63.4 63.4 63.4 63.4 63.4 63.4 63.4		63.3 63.5 63.5 63.5 64.0 64.0 64.1 64.1 64.1 68.1 68.1 68.1 68.3		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	-6.4 -6.5 -6.5 -6.5 -7.8 -7.8 -7.8 -7.8 -7.7 -7.7 -1.0 -1.0 -1.0 -1.0 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3
1 $223$ $1$ $0.0$ $65.0$ $224$ $1$ $0.0$ $65.0$ $226$ $1$ $0.0$ $65.0$ $226$ $1$ $0.0$ $65.0$ $228$ $1$ $0.0$ $65.0$ $228$ $1$ $0.0$ $65.0$ $223$ $1$ $0.0$ $64.7$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $76.2$ $234$ $1$ $0.0$ $76.1$ $244$ $1$ $0.0$	65.0 65.0 65.0 64.7 64.2 63.0 64.4 65.1 65.1 65.1 65.1 75.1 70.8 70.8 76.0 76.0		63.5 63.5 64.5 64.5 64.0 64.1 64.1 68.1 68.1 68.1 68.3			6.5 -6.4 -6.5 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.7 -7.7
224       1 $0.0$ $65.0$ $225$ 1 $0.0$ $65.0$ $226$ 1 $0.0$ $65.0$ $228$ 1 $0.0$ $65.0$ $228$ 1 $0.0$ $65.0$ $223$ 1 $0.0$ $63.4$ $233$ 1 $0.0$ $64.2$ $233$ 1 $0.0$ $63.4$ $233$ 1 $0.0$ $63.4$ $233$ 1 $0.0$ $64.4$ $233$ 1 $0.0$ $64.4$ $233$ 1 $0.0$ $63.6$ $233$ 1 $0.0$ $68.5$ $234$ 1 $0.0$ $75.1$ $234$ 1 $0.0$ $76.2$ $234$ 1 $0.0$ $76.2$ $242$ 2 $0.0$ $76.2$ $234$ 1 $0.0$ $76.2$ $244$ 1 $0.0$ $76.2$ $245$ 2 $0.0$ $76.2$ $246$	65.0 64.7 64.7 64.7 63.8 63.0 63.4 65.1 65.1 65.1 65.1 65.1 63.5 63.6 63.5 70.8 76.0 76.0		63.4 64.5 64.5 64.0 64.1 64.1 64.1 68.1 68.1 68.1 66.1			-6.4 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8
1     225     1     0.0     65.0       2     1     0.0     65.0       2     1     0.0     64.7       2     1     0.0     63.8       2     1     0.0     64.7       2     1     0.0     63.4       2     1     0.0     63.4       2     23     1     0.0     64.2       2     23     1     0.0     63.4       2     23     1     0.0     63.4       2     23     1     0.0     64.2       233     1     0.0     63.4       233     1     0.0     64.4       233     1     0.0     64.4       234     1     0.0     64.4       233     1     0.0     64.4       234     1     0.0     64.4       235     1     0.0     64.4       236     1     0.0     64.4       233     1     0.0     64.4       234     1     0.0     64.4       235     1     0.0     76.4       236     2     0.0     76.4       240     1     0.0     76.4       24	65.0 64.7 63.8 63.0 63.4 64.4 65.1 65.1 65.1 63.5 68.5 69.6 69.6 70.8 70.8 76.0 76.0		63.5 64.5 64.6 64.9 64.9 64.9 68.1 66.1 66.1			-6.5 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8
1 $226$ $1$ $0.0$ $64.7$ $227$ $1$ $0.0$ $63.0$ $228$ $1$ $0.0$ $63.4$ $223$ $1$ $0.0$ $63.4$ $233$ $1$ $0.0$ $63.4$ $231$ $1$ $0.0$ $63.4$ $232$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $76.4$ $234$ $1$ $0.0$ $76.4$ $244$ $1$ $0.0$	64.7 63.8 63.8 64.2 64.4 65.1 65.1 65.1 65.1 63.5 69.6 69.6 69.6 70.8 70.8 76.0		64.5 63.6 62.8 64.0 64.9 64.1 68.1 66.1 66.1			-7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8
1 $227$ $1$ $0.0$ $63.8$ $1$ $228$ $1$ $0.0$ $63.30$ $223$ $1$ $0.0$ $63.4$ $231$ $1$ $0.0$ $64.2$ $231$ $1$ $0.0$ $64.4$ $232$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $64.6$ $234$ $1$ $0.0$ $75.1$ $234$ $1$ $0.0$ $76.2$ $234$ $1$ $0.0$ $76.2$ $244$ $1$ $0.0$ $76.2$ $246$ $1$ $0.0$ $76.3$ $246$ $1$ $0.0$ $76.3$ $246$ $1$ <	63.8 63.0 64.2 64.4 65.1 65.1 75.1 75.1 75.1 75.1 75.1 75.1 76.0 78.4 76.0		63.6 62.8 64.0 64.1 64.1 64.6 64.1 64.6 64.1 66.1 66.1		• • • • • • • • • • • • • • • • • • •	-7.8 -7.8 -7.8 -7.8 -7.7 -1.0 -1.0 -4.1 -4.1 -4.1 -4.2 -0.3 -0.3 -0.3
1 $228$ $1$ $0.0$ $63.0$ $1$ $229$ $1$ $0.0$ $64.2$ $231$ $1$ $0.0$ $64.4$ $232$ $1$ $0.0$ $65.1$ $233$ $1$ $0.0$ $65.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $233$ $1$ $0.0$ $64.4$ $234$ $1$ $0.0$ $75.1$ $234$ $1$ $0.0$ $76.0$ $234$ $1$ $0.0$ $76.2$ $240$ $1$ $0.0$ $76.2$ $244$ $1$ $0.0$ $78.1$ $246$ $1$ $0.0$ $76.2$ $246$ $1$ $0.0$ $76.2$ $246$ $1$ $0.0$ $76.3$ $246$ $1$ <t< td=""><td>63.0 64.2 63.4 65.1 65.1 75.1 68.5 69.6 69.6 70.8 76.0 78.4 76.2</td><td></td><td>62.8 64.0 64.1 64.1 64.1 64.1 66.1 66.1 66.1</td><td></td><td></td><td>-7.8 -7.8 -7.8 -7.7 -1.0 -4.1 -4.1 -4.1 -0.3 -0.3 -0.3</td></t<>	63.0 64.2 63.4 65.1 65.1 75.1 68.5 69.6 69.6 70.8 76.0 78.4 76.2		62.8 64.0 64.1 64.1 64.1 64.1 66.1 66.1 66.1			-7.8 -7.8 -7.8 -7.7 -1.0 -4.1 -4.1 -4.1 -0.3 -0.3 -0.3
J     229     1     0.0     64.2       J     230     1     0.0     64.2       J     231     1     0.0     63.4       J     233     1     0.0     64.4       233     1     0.0     64.4       233     1     0.0     64.4       233     1     0.0     64.4       233     1     0.0     64.4       234     1     0.0     64.4       235     1     0.0     64.4       236     1     0.0     64.4       235     1     0.0     64.4       236     1     0.0     75.1       237     1     0.0     76.0       238     1     0.0     76.0       239     2     0.0     76.1       240     1     0.0     76.1       241     1     0.0     76.2       244     1     0.0     76.1       246     1     0.0     76.3       246     1     0.0     76.3       246     1     0.0     66.3       247     1     0.0     66.3       247     1     0.0     66.3       2	64.2 63.4 65.1 65.1 75.1 69.6 69.6 70.8 76.0 76.0		64.0 64.1 64.1 64.1 64.6 64.6 65.8 66.1 66.1			-7.8 -7.8 -7.7 -7.7 -1.0 -1.0 -4.1 -4.1 -4.2 -0.3 -0.3
J       230       1       0.0 $63.4$ $J$ 231       1       0.0 $65.1$ $Z$ 232       1       0.0 $65.1$ $Z$ 233       1       0.0 $64.4$ $Z$ 233       1       0.0 $64.4$ $Z$ 234       1       0.0 $64.4$ $Z$ 235       1       0.0 $64.4$ $Z$ 236       1       0.0 $69.6$ $Z$ 236       1       0.0 $76.2$ $Z$ 238       1       0.0 $76.6$ $Z$ 238       1       0.0 $76.1$ $Z$ 238       1       0.0 $76.1$ $Z$ 238       1       0.0 $76.2$ $Z$ 238       1       0.0 $76.2$ $Z$ 240       1       0.0 $76.2$ $Z$ 242       2       0.0 $77.3$ $Z$ 246       1       0.0 $76.3$ $Z$ 246       1       0.0<	63.4 65.1 64.4 75.1 68.5 69.6 70.8 76.0 76.0 76.2		63.2 64.1 64.1 64.1 68.1 66.1 68.3			-7.8 -7.8 -7.7 -1.0 -1.0 -1.0 -1.0 -1.3 -3.3 -0.3 -1.3
J     231     1     0.0     65.1       J     232     1     0.0     65.4       C     233     1     0.0     64.4       C     233     1     0.0     64.4       C     233     1     0.0     69.6       C     235     1     0.0     69.6       C     236     1     0.0     76.1       C     237     1     0.0     76.0       238     1     0.0     76.0       239     2     0.0     76.0       239     2     0.0     76.1       239     2     0.0     76.1       231     1     0.0     76.1       232     2     0.0     76.1       233     1     0.0     76.1       240     1     0.0     78.1       241     1     0.0     76.5       245     2     0.0     76.5       246     1     0.0     66.9       247     1     0.0     66.3       247     1     0.0     66.3       246     1     0.0     66.3       247     1     0.0     66.3       246     1	65.1 64.4 75.1 68.5 69.6 70.8 76.0 76.0 76.2		64.9 64.1 64.1 64.6 65.8 66.1 68.3		ထထထထထ	-7.8 -7.7 -1.0 -1.0 -1.0 -1.0 -1.3 -0.3
J $232$ 1 $0.0$ $64.4$ $233$ 1 $0.0$ $75.1$ $234$ 1 $0.0$ $68.5$ $235$ 1 $0.0$ $68.5$ $236$ 1 $0.0$ $68.5$ $236$ 1 $0.0$ $68.5$ $237$ 1 $0.0$ $76.0$ $238$ 1 $0.0$ $76.0$ $238$ 1 $0.0$ $76.0$ $239$ 2 $0.0$ $78.4$ $239$ 2 $0.0$ $78.4$ $240$ 1 $0.0$ $78.1$ $241$ 1 $0.0$ $78.1$ $242$ 2 $0.0$ $78.1$ $244$ 1 $0.0$ $78.1$ $245$ 2 $0.0$ $78.1$ $246$ 1 $0.0$ $76.5$ $246$ 1 $0.0$ $76.3$ $247$ 1 $0.0$ $75.3$ $247$ 1 $0.0$ $66.9$ $247$ 1 $0.0$ $66.9$	64.4 75.1 68.5 69.6 70.8 76.0 78.4 76.2		64.1 68.1 64.6 65.8 66.1 68.3			-7.7 -1.0 -4.1 -4.2 -3.3 -0.3 1.3
233     1     0.0     75.1       234     1     0.0     68.5       235     1     0.0     68.5       236     1     0.0     69.6       237     1     0.0     76.0       238     1     0.0     76.0       239     2     0.0     76.0       239     2     0.0     76.0       239     2     0.0     76.1       239     2     0.0     76.1       234     1     0.0     76.2       241     1     0.0     78.1       243     1     0.0     78.1       244     1     0.0     78.1       245     2     0.0     76.5       246     1     0.0     76.5       247     1     0.0     66.9       247     1     0.0     66.3       247     1     0.0     66.3	75.1 68.5 69.6 70.8 76.0 76.2 76.2		68.1 64.6 65.8 66.1 68.3		ထထထထ	-1.0 -4.1 -0.3 -0.3 1.3
234     1     0.0     68.5       235     1     0.0     69.6       236     1     0.0     69.6       237     1     0.0     70.8       237     1     0.0     76.0       238     1     0.0     76.0       239     2     0.0     76.0       239     2     0.0     76.1       239     2     0.0     76.1       241     1     0.0     76.1       241     1     0.0     76.1       243     1     0.0     78.1       243     1     0.0     78.1       244     1     0.0     76.5       245     2     0.0     76.5       246     1     0.0     66.9       247     1     0.0     66.9       247     1     0.0     66.3	68.5 69.6 70.8 76.0 76.2 76.2		64.6 65.8 66.1 68.3		<u>∞</u> ∞ ∞ σ	4.1 4.2 -0.3 1.3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	69.6 70.8 76.0 76.2 74.1		65.8 66.1 68.3		80 80 G	4.2 -3.3 -0.3 1.3
236     1     0.0     70.8       237     1     0.0     76.0       238     1     0.0     76.0       239     2     0.0     76.1       239     2     0.0     76.2       240     1     0.0     76.2       241     1     0.0     76.2       242     2     0.0     78.1       243     1     0.0     78.1       243     1     0.0     78.1       244     1     0.0     76.5       245     2     0.0     76.5       245     1     0.0     76.5       247     1     0.0     66.9       247     1     0.0     66.3	70.8 76.0 78.4 76.2		66.1 68.3	4.7	co o	-3.3 -0.3 1.3
237     1     0.0     76.0       238     1     0.0     78.4       239     2     0.0     76.4       240     1     0.0     76.2       241     1     0.0     76.2       241     1     0.0     76.2       241     1     0.0     76.2       243     1     0.0     78.1       243     1     0.0     78.1       243     1     0.0     76.5       245     2     0.0     76.5       245     1     0.0     76.5       247     1     0.0     66.9       247     1     0.0     69.3	76.0 78.4 76.2		68.3		0	-0.3 1.3
238     1     0.0     78.4       239     2     0.0     76.2       240     1     0.0     74.1       241     1     0.0     74.1       241     1     0.0     78.1       241     1     0.0     74.1       242     2     0.0     78.1       243     1     0.0     78.1       244     1     0.0     76.5       245     2     0.0     76.5       246     1     0.0     66.9       247     1     0.0     69.3	78.4 76.2 74.1		+ 00	7.7	0	1.3
239     2     0.0     76.2       240     1     0.0     74.1       241     1     0.0     74.1       241     1     0.0     78.2       243     1     0.0     78.1       243     1     0.0     78.1       244     1     0.0     77.3       245     2     0.0     76.5       246     1     0.0     66.9       247     1     0.0     69.3	74.1		69.1	9.3	80	
240     1     0.0     74.1       241     1     0.0     78.2       242     2     0.0     78.1       243     1     0.0     78.1       243     1     0.0     77.3       244     1     0.0     76.5       245     2     0.0     75.3       246     1     0.0     66.9       247     1     0.0     69.3	74.1	10 Snd Lvl	67.6	8.6	80	0.6
241     1     0.0     78.2       242     2     0.0     78.1       243     1     0.0     77.3       244     1     0.0     76.5       245     2     0.0     76.5       245     1     0.0     76.5       245     1     0.0     66.9       247     1     0.0     69.3	1.11	10 Snd Lvl	66.4	7.7	80	-0.3
242     2     0.0     78.1       243     1     0.0     77.3       244     1     0.0     76.5       245     2     0.0     76.5       245     1     0.0     66.9       247     1     0.0     69.3	78.2	10 Snd Lvl	69.0	9.2	8	1.2
243     1     0.0     77.3       244     1     0.0     76.5       245     2     0.0     75.3       246     1     0.0     66.9       247     1     0.0     69.3	78.1	10 Snd Lvl	69.2	8.9	8	0.9
244     1     0.0     76.5       245     2     0.0     75.3       246     1     0.0     66.9       247     1     0.0     69.3	77.3	10 Snd Lvl	68.5	8.8	8	0.8
245     2     0.0     75.3       246     1     0.0     66.9       247     1     0.0     69.3	76.5	10 Snd Lvl	68.4	8.1	8	0.1
246 1 0.0 66.9 247 1 0.0 69.3 248 4 0.0 69.3	75.3	10 Snd Lvl	68.6	6.7	80	-1.3
247 1 0.0 69.3	6.99	10 Snd Lvl	63.3	3.6	80	4.4
030 00 1 010	69.3	10 Snd Lvl	64.8	4.5	80	-3.5
Receiver 152 J to C 248 1 0.0 bb.8 bb	66.8	10 Snd Lvl	62.8	4.0	80	4.0
Receiver 153 J to C 249 1 0.0 64.2 66	64.2	10	60.7	3.5	80	4.5
Receiver 154 J to C 250 1 0.0 71.4 66	71.4	10 Snd Lvl	65.7	5.7	80	-2.3
Receiver 155 J to C 251 1 0.0 69.5 66	69.5	10 Snd Lvl	64.4	5.1	80	-2.9
Receiver 156 J to C 252 1 0.0 68.6 66	68.6	10 Snd Lvl	63.7	4.9	80	-3.1
Receiver 157 J to C 253 1 0.0 67.5 66	67.5	10 Snd Lvl	62.8	4.7	00	-3.3
Receiver 158 J to C 254 1 0.0 66.5 66	66.5	10 Snd Lvl	61.9	4.6	80	-3.4
Receiver 159 J to C 255 1 0.0 65.7 66	65.7	10	61.3	4.4	80	-3.6
Receiver 160 J to C 256 1 0.0 75.3 66	75.3	10 Snd Lvl	67.3	8.0	80	0.0
Receiver 161 J to C 257 1 0.0 72.1 66	72.1	10 Snd Lvl	66.1	6.0	80	-2.0
Receiver 162 J to C 258 1 0.0 70.7 66	70.7	10 Snd Lvl	65.1	5.6	80	-2.4

<b>RESULTS: SOUND LEVELS</b>						3600						
Receiver 163 J to C	259	5	0.0	69.3	66	69.3	10	Snd Lvl	64.1	5.2	8	-2.8
Receiver 164 J to C	260	÷	0.0	68.3	99	68.3	10	Snd Lvl	63.4	4.9	80	-3.1
Receiver 165 J to C	261	Ţ	0.0	67.2	66	67.2	10	Snd Lvl	62.4	4.8	80	-3.2
Receiver 166 J to C	262	÷	0.0	66.5	66	66.5	10	Snd Lvl	61.8	4.7	80	-3.3
Receiver 167 J to C	263	÷	0.0	65.8	66	65.8	10	I	61.2	4.6	80	-3.4
Receiver 168 J to C	264	-	0.0	71.7	99	7.1.7	10	Snd Lvl	65.6	6.1	80	-1.9
Receiver 169 J to C	265	-	0.0	70.1	99	70.1	10	Snd Lvl	64.6	5.5	80	-2.5
Receiver 170 J to C	266	-	0.0	66.7	99	66.7	10	Snd Lvl	61.9	4.8	80	-3.2
Receiver 171 J to C	267	٢	0.0	71.6	99	71.6	10	Snd Lvl	66.8	4.8	80	-3.2
Receiver 172 J to C	268	۲	0.0	68.0	66	68.0	10	Snd Lvl	62.9	5.1	8	-2.9
Receiver 173 J to C	269	-	0.0	67.1	99	67.1	10	Snd Lvl	62.2	4.9	80	-3.1
Receiver 174 J to C	270	F	0.0	66.4	99	66.4	10	Snd Lvl	61.8	4.6	80	-3.4
Receiver 175 J to C	271	٢	0.0	65.6	66	65.6	10	1	61.2	4.4	80	-3.6
Receiver 176 J to C	272	-	0.0	75.1	66	75.1	10	Snd Lvl	66.9	8.2	8	0.2
Receiver 177 J to C	273	1	0.0	70.3	66	70.3	10	Snd Lvl	65.5	4.8	80	-3.2
Receiver 178 J to C	274	-	0.0	69.2	66	69.2	10	Snd Lvl	63.9	5.3	80	-2.7
Receiver 179 J to C	275	-	0.0	68.0	66	68.0	10	Snd Lvl	63.4	4.6	8	-3.4
Receiver 180 J to C	276	Ļ	0.0	67.0	99	67.0	10	Snd Lvl	62.4	4.6	80	-3.4
Receiver 181 J to C	277	-	0.0	66.1	99	66.1	10	Snd Lvl	61.8	4.3	80	-3.7
Receiver 182 J to C	278	-	0.0	68.2	66	68.2	10	Snd Lvl	63.5	4.7	8	-3.3
Receiver 183 J to C	279	-	0.0	67.3	66	67.3	10	Snd Lvl	63.1	4.2	80	-3.8
Receiver 184 J to C	280	-	0.0	66.2	99	66.2	10	Snd Lvl	62.4	3.8	80	4.2
Dwelling Units	# DUS	Us Noise	e Reduction	E								
		Min	Avg	Max								
		dB	dB	dB								
All Selected		244	0.0	3.5	9.3							
All Impacted		199	0.0	4.1	9.3							
All that meet NR Goal		11	8.0	8.7	9.3							

INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group T Stone

12 August 2007 TNM 2.5

INPUT: TRAFFIC FOR LAeg1h Volumes

PROJECT/CONTRACT:	Interchance	A Altown	CUC 1 00.140	L									
KUN:	Interchange A-Alternative 1 2035	A-Altern	ative 1 203	2									
Roadway	Points												
Name	Name	No.	Segment										
			utos		MTrucks		HTrucks	s	Buses		Motorcycles	cycle	es
			V S veh/hr kn	ų/u	V veh/hr	s km/h	V veh/hr	s km/h	V veh/hr	s km/h	V veh/hr		S km/h
I-75 - NB	point271	299	2109	N	132	97	422	2 97		1 97		-	97
	point198	300	2109	97	132	97	422	2 97		1 97	2	~	97
	point270	301	2109	97	132	97	422	2 97		1 97	7	-	97
	point199	302	2109	97	132	97	422	2 97		1 97	2	<del></del>	97
	point268	303	2482	16	124	97	496	5 97		1 97	2	-	97
	point999	304	2482	97	124	97	496	5 97		1 97	2	-	97
	point200	305	2482	97	124	67	496	5 97		1 97	7	-	97
	point222	306	2482	97	124	97	496	5 97		1 97	7	~	97
	point201	307	2482	97	124	97	496	76 . 37		1 97	7	-	97
	point998	946	2482	97	124	97	496	5 97		1 97	2	-	97
	point202	308	2482	97	124	97	496	5 97		1 97	7	-	97
	point945	945	2482	16	124	97	496	3 97		1 97	7	-	97
	point905	905	2482	97	124	97	496	5 97		1 97	2	-	97
	point948	948	2482	97	124	97	496	5 97		1 97	7	-	97
	point223	311	2482	16	124	97	496	5 97		1 97	2	-	97
	point205	312	2482	97	124	16	496	5 97		1 97	2	-	97
	point206	313	2482	97	124	97	496	3 97		1 97	2	-	97
	point928	928	2322	16	116	97	464	1 97		1 97	7	-	97
	point207	314	2322	97	116	16	464	1 97		1 97	7	-	97
	point949	949	2322	97	116	67	464	1 97		1 97	7	-	97
	point208	315	2322	97	116	16	464	1 97		1 97	2	-	97
	point209	316	2322	26	116	97	464	1 97		1 97	2	<del></del>	97

	point210	317	2322	97	116	97	464	97	-	97	-	
	point950	950	2322	97	116	97	464	97	-	97	+	
	point211	318	2322	97	116	97	464	97	-	97	-	
	point212	319	2685	97	107	97	537	97	+	97	-	-
	point213	320	2685	97	107	97	537	97	-	97	-	
	point214	321	2685	97	107	97	537	97	-	97	-	-
	point215	322										
I-75 - SB	point942	942	4595	97	230	97	919	97	-	97	-	
	point232	338	4595	97	230	97	919	97	-	97	-	
	point233	339	4486	97	224	97	897	16	-	97	-	
	175.5	980	4486	97	224	97	897	97	-	97	-	
	point234	340	4486	97	224	97	897	97	-	97	-	
	point235	341	4486	97	224	97	897	97	4	97	4	
	point496	342	4486	97	224	97	897	97	*-	97	-	
	point260	343	4486	97	224	97	897	97	-	97	~	
	point261	344	4486	97	224	97	897	97	-	97	-	
	point236	345	4486	97	224	97	897	97	-	97	-	
	point237	346	4486	97	224	97	897	97	-	97	-	
	point238	347	4486	97	224	97	897	97	-	97	-	-
	point239	348	4766	97	238	97	953	97	-	97	-	
	point262	349	4766	97	238	97	953	97	-	97	-	
	point263	351	4766	97	238	97	953	97	~	97	-	
	point947	947	4766	97	238	97	953	26	-	97	-	
	point264	353	4766	97	238	97	953	97	-	97	-	
	point944	944	4766	97	238	97	953	97	<del>ب</del>	97	-	
	point265	355	4766	97	238	97	953	97	-	97	-	
	point243	356	4526	97	226	26	905	97	~	97	-	
	point266	357	4526	97	226	97	905	97	-	97	-	
	point244	358	4526	97	226	97	905	97	-	97	-	
	point245	359	4526	97	226	97	905	97	-	97	-	
	point267	360	4526	97	226	97	905	97	***	97	-	
	point246	361	4526	97	226	97	905	97	-	97	-	
	point247	362										
N I-75/Livernois Off-Ramp	point407	502	274	40	0	40	21	40	*	40	1	

	noint1054	1054	P1C	AD	c	40	10	VV		UV	*	OV
	noint409	504	774	40	1 0	40	24	40		40		AD AD
	Charling Charles		t j	P	J	P	1	P	-	2	-	ŕ
	point413	onc	-									
S I-75/Clark Off-Ramp	point461	558	424	40	20	40	56	40	-	40	-	40
	point463	560	424	40	20	40	56	40	-	40	~	40
	point465	562										
S I-75 Service Drive - 1	point466	563	440	40	32	40	184	40	<del>~~</del>	40	~	40
	point651	567										
S I-75 Service Drive - 2	point475	575	300	56	ŝ	56	27	56	-	56	-	56
	point476	576	300	56	ŝ	56	27	56	~	56	-	56
	point1056	1056	300	56	e	56	27	56	*	56	~	56
	point644	577										
S I-75/Dragoon Off-Ramp	point481	585	274	56	2	56	21	56	-	56	÷	56
	point483	587	274	56	2	56	21	56	-	56	~	56
	point484	588	274	56	2	56	21	56	+	56	-	56
	point485	589									ļ	
S I-75 Service Drive - 4	point638	594	574	48	5	48	48	48	-	48	-	48
	point489	595	574	48	5	48	48	48	*	48	~	48
	point490	596	574	48	5	48	48	48	-	48	~	48
	point491	597										
Livernois/ S I-75 On-Ramp	point497	600	1399	97	9	97	56	97	~	97	-	97
	point498	601	1399	97	9	97	56	97	*	97	~	97
	point500	603	1399	97	9	97	56	97	***	97	~	97
	point501	604	1399	97	9	97	56	97	-	97	~	97
	point503	606										
S I-75 Service Drive - 5	point491	971	200	56	e	56	27	56	-	56	-	56
	point504	607	200	56	n	56	27	56	-	56	-	56
	point505	608	200	56	3	56	27	56	-	56	~	56
	point975	975	200	56	e	56	27	56	-	56	-	56
	point507	610										
S I-75 Service Drive - 8	point530	637	360	40	15	40	20	40	-	40	-	40
	point531	638	450	40	30	40	80	40	-	40	-	40
	point532	639										
Springwells/S I-75 On-Ramp	noint533	640	UCV	07	25	07	75	07	*	10	7	07

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	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	+	40	~	40
	point685	685	700	40	40	40	60	40	*	40	~	40
	point687	687	700	40	40	40	60	40	~	40	-	40
	point943	943	700	40	40	40	60	40	-	40	-	40
	point688	688	700	40	40	40	60	40	٢	40	4	40
	point690	690	700	40	40	40	60	40	-	40	۲	40
	point691	691	700	40	40	40	60	40	*	40	-	40
	point692	692										
Green - N&SB	point727	727	85	48	5	48	10	48	-	48	~	48
	point939	939	85	48	5	48	10	48	-	48	-	48
	point959	959	85	48	5	48	10	48	-	48	-	48
	point960	960	85	48	5	48	10	48	-	48	-	48
	point729	729	85	48	5	48	10	48	-	48	-	48
	point730	730	85	48	5	48	10	48	-	48	~	48
	point731	731										
Clark - NB	point812	812	80	40	5	40	25	40	-	40	-	40
	point813	813	100	25	20	25	300	25	~	25	<del>.</del>	25
	point814	814	80	25	15	25	180	25	***	25	~	25
	point963	963	80	25	15	25	180	25	-	25	~	25
	point964	964	80	25	15	25	180	25	-	25	÷	25
	point815	815	84	40	00	40	4	40	~	40	~	40
	point816	816					-					
Clark - SB	point818	818	120	40	4	40	12	40	-	40	~	40
	point819	819	120	40	4	40	12	40	-	40	-	40
	point961	961	120	40	4	40	12	40	-	40	~	40
	point962	962	120	40	4	40	12	40	-	40	-	40
	point820	820	120	40	4	40	12	40	-	40	-	40
	point821	821	120	40	4	40	12	40	-	40	-	40
	point822	822										
Livernois	Lafayette	929	324	56	35	- 56	60	56	~	56	~	56
	SB SD	930	162	56	12	56	30	56	٢	56	~	56
	point953	953	162	56	12	56	30	56	<del>7</del>	56	-	56
	nointOE A	0CM	100	C L	0	CL	00	CL		01		CL

	NB SD	933	162	56	12	56	30	56	4	56	-	56
	WB Fort	934	162	56	12	56	30	56	+	56	-	56
	EB Fort	935										
S I-75 Service Drive - 3	point645	579	574	56	S	56	48	56	-	56	-	56
	point478	581	574	56	5	56	48	56	-	56	-	56
	point494	583	574	56	5	56	48	56	-	56	-	56
	point480	584	574	56	5	56	48	56	-	56	~	56
	point495	968	574	56	5	56	48	56	-	56	~	56
	point488	696										
S I-75 Service Drive - 6	point631	612	200	56	ę	56	27	56	+	56	~	56
	point509	613	200	56	с	56	27	56	-	56	-	56
	point510	614	200	56	e	56	27	56		56	-	56
	point629	619										
S I-75 Service Drive - 7	point977	977	200	56	e	56	27	- 56	-	56	-	56
	point514	620	200	56	n	56	27	56	+	56	-	56
	point515	621	200	56	e	56	27	56	-	56	-	56
	point516	622	200	56	3	56	27	56	<del>،</del>	56	-	56
	point518	624	200	56	c	56	27	56	-	56	~	56
	point525	978	200	56	ŝ	56	27	56	-	56	-	56
	point527	979										
Outbound to SB I-75	point1005	1005	225	74	27	74	238	74	-	74	-	74
	point1058	1058	225	74	27	74	238	74	<b>-</b>	74	-	74
	point1006	1006	225	76	27	76	238	76	۰-	76	-	76
	point1007	1007	225	78	27	78	238	78	-	78	-	78
	point1008	1008	225	89	27	89	238	89	÷	89	-	89
	point1010	1010										
Inbound from SB I-75	point1012	1012	792	89	15	89	131	89	~	89	-	89
	point1013	1013	792	85	15	85	131	85	-	85	-	85
	point1014	1014	792	83	15	83	131	83	-	83	~	83
	point1015	1015	792	81	15	81	131	81	-	81	-	81
	point1016	1016										
Dragoon/N I-75 On-Ramp	point1063	1063	274	97	0	97	21	97	-	97	~	97
	point1064	1064	274	97	0	97	21	97	-	97	-	97
	noint1065	1065	274	76	0	79	21	76	*	97	۲	97

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common and house to rout more to a						))))						
	point1066	1066	274	97	2	97	21	97	*	97	~	97
	point1067	1067	274	97	2	97	21	97		97	~	97
	point1068	1068		1								

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**RESULTS: BARRIER DESCRIPTIONS** 

The Corradino Group T Stone

15 August 2007 **TNM 2.5** 

S	3600	Interchange A-Alternative 1 2035	INPUT HEIGHTS
RESULTS: BARRIER DESCRIPTION	PROJECT/CONTRACT:	RUN:	BARRIER DESIGN:

BARRIER DESIGN Barriers RUN:

Name

Green to Waterman to Casgrain Springwells to Green Barrier from SB I-75 Dragoon to Junction Barrier to SB I-75 Junction to Clark Barrier15 Barrier11

Barrier10

Barrier9

Barrier2 Barrier5 Livernois ramp to SB I-75

Type		Heights along Barrier	Barrier		Length		If Wall	If Berm
	Min	Avg		Max		A	Area	Volume
	E	E	2	E	E	Ū,	m ps	cu m
$\geq$		1.10	1.10	1.10		466	512	
$\geq$		1.10	1.10	1.10		267	293	
$\geq$		1.10	1.10	1.10		539	592	
$\geq$		1.10	1.10	1.10		525	578	
$\geq$		1.10	1.10	1.10		225	248	
$\geq$		1.10	1.10			1373	1510	
≥		2.70	2.70	2.70		139	374	
$\geq$		2.70	2.85	3.70		159	454	
$\geq$		3.70	3.70	3.70		115	424	
$\geq$		3.70	3.70	3.70		532	1967	
≥		3.70	3.70	3.70		428	1584	
8		3.70	3.70	3.70		529	1957	
N		3 70	3 70	370		65	141	

214496 252909

0 0 0 0 0 0

Cost

Run:Rise

\$

m:m

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Width Top

965189 777488

208072

118046

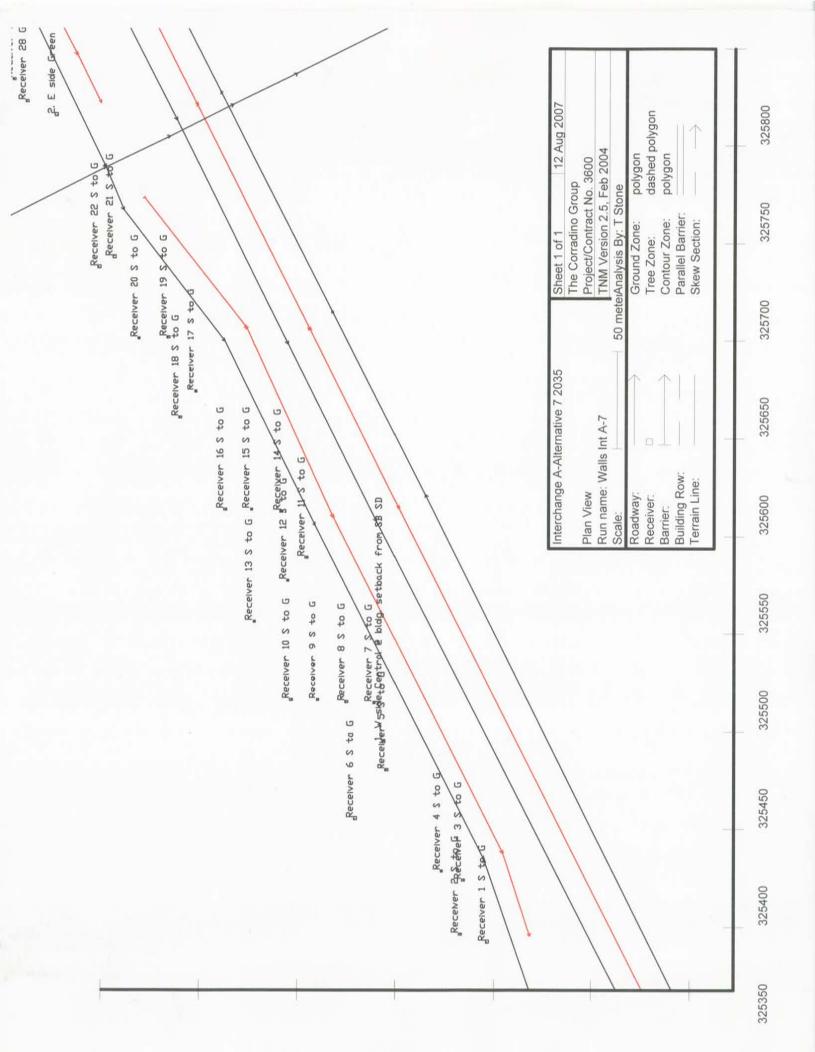
3496591

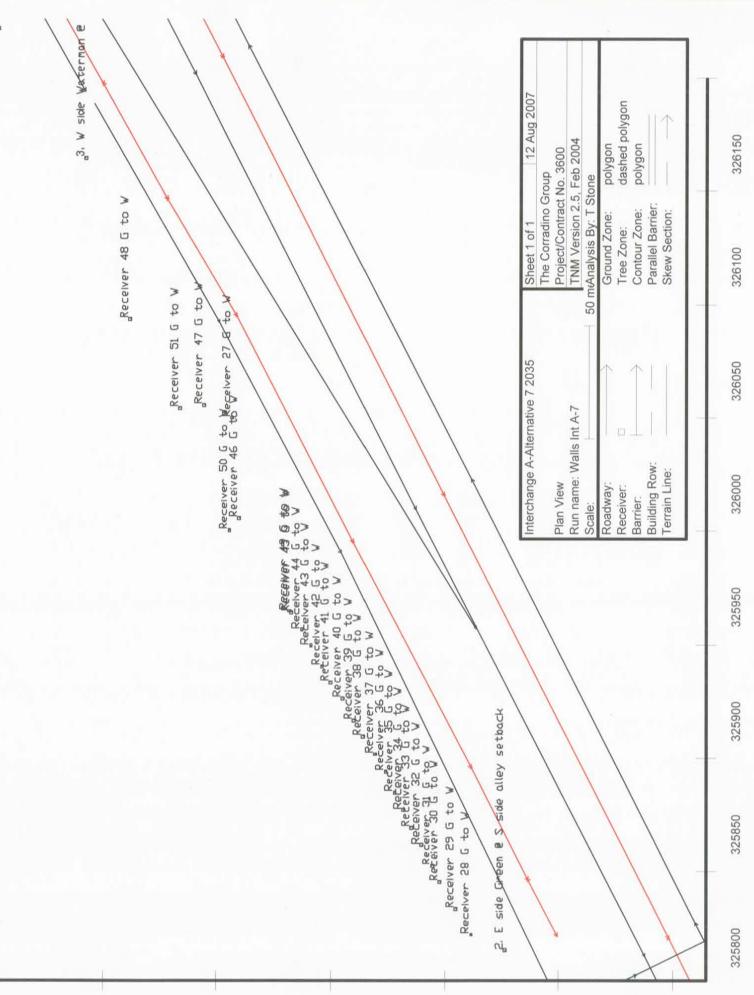
Total Cost:

960389

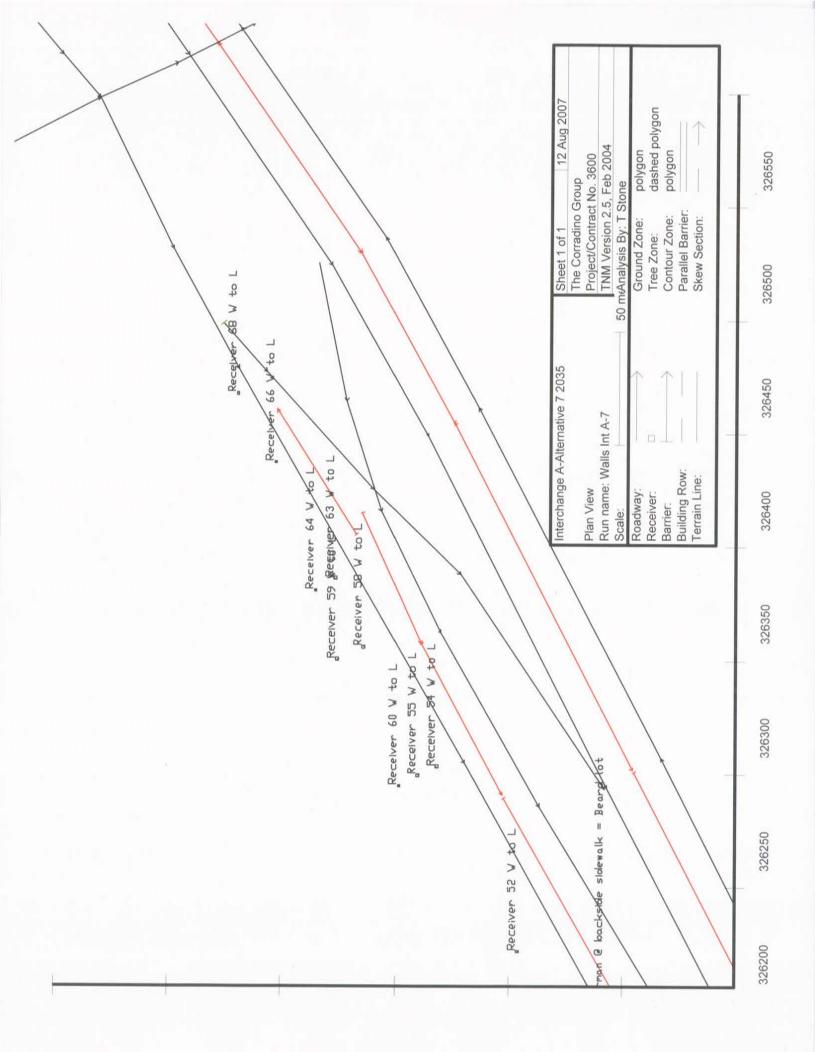
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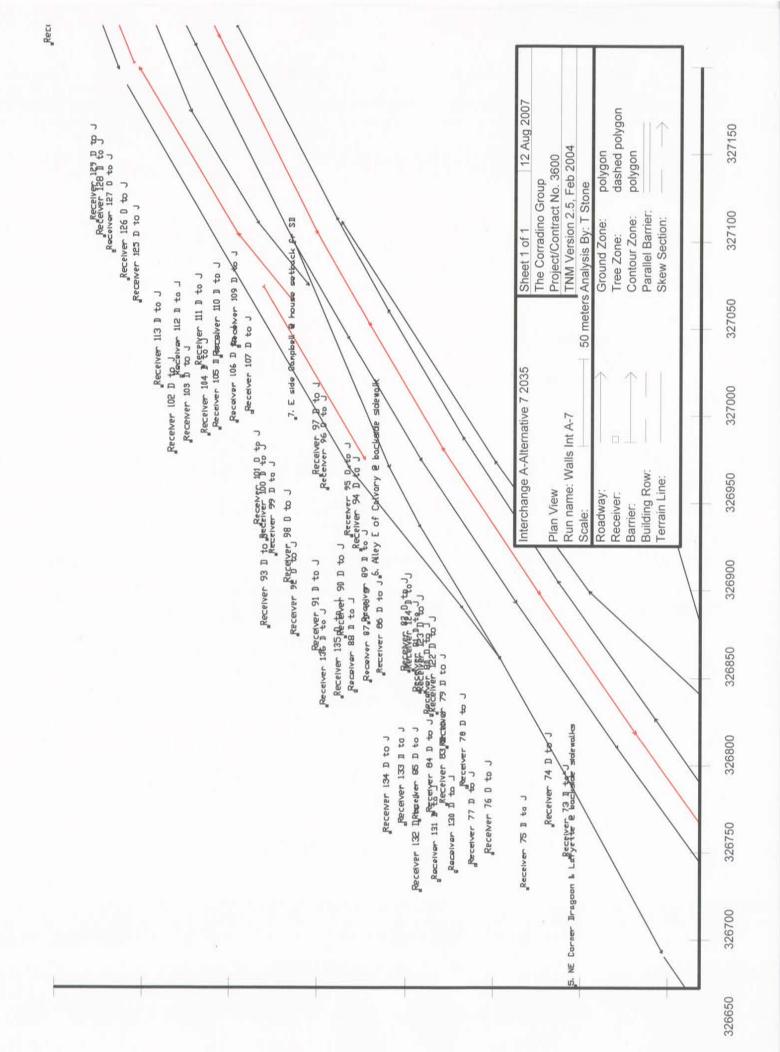
Interchange A – Alternative 7 – 2035





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C RECEIVER 149 JTD C		12 Aug 2007 oup No. 3600 Feb 2004 one polygon polygon	327650
Receiver 184 J ta C Receiver 181 Ja Receiver 183 J to C Receiver 180 J to C Receiver 179 J to C Receiver 177 J to C Receiver 177 J to C Receiver 175 J to C Receiver 175 J to C Receiver 175 J to C Receiver 175 J to C	C C C C C C C C C C C C C C C C C C C	Sheet 1 of 1 The Corradino Group Project/Contract No. 3600 TNM Version 2.5, Feb 2004 50 meters Analysis By: T Stone Ground Zone: polygon Tree Zone: dashed p Contour Zone: polygon Parallel Barrier: Skew Section:	327550 327600
Recei Recei Receiver 175 J to C Receiver 174 J to C Receiver 173 J to C Receiver 170 J to C Receiver 171 J to C	Receiver 167 J to C Receiver 166 J to C Receiver 166 J to C Receiver 168 J to C Ver 158 Returner 164 J to C Ver 158 Returner 164 J to C Receiver 143 J to C Receiver 143 J to C Receiver 153 Jec C Receiver 154 J to C Receiver 156 Receiver 160 J to C Receiver 154 J to C Receiver 154 J to C	-Alternative 7 2035	327500 327
	Receiver 167 J to C Receiver 166 J to C Receiver 153 J to C Receiver 153 J to C Receiver 157 J Receiver 164 J to C Receiver 157 J Receiver 162 J to C Receiver 155 J Receiver 162 J to C Receiver 154 J to C Receiver 154 J to C Receiver 154 J to C	Interchange A Plan View Run name: W Scale: Roadway: Receiver: Barrier: Building Row: Terrain Line:	327400 327450
	Receive Receive Receive Receive		327350
	Receiver 153 J ta C Receiver 150 Jiffectiver 152 J ta C Receiver 130 J ta C Receiver 138 J ta C Receiver 141 J figeCtiver 141 L to C Receiver 137 J ta C		50 327300
	Receiver 153 Receiver 151 J. Receiver Receiver 130 J to Receiver 139 J to E Receiver 137		327200 327250
			0

Increase over       Critin     Increase over       dBA     dB       dBA     dB       dB     72.0       66     72.0       66     72.0       66     71.3       66     71.3       66     71.3       66     71.3       66     71.3       66     73.7       66     74.2       66     73.7       66     74.2       66     74.2       66     74.2       66     74.2       66     74.2       66     74.2       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66     74.3       66	BA 66	15 August 2007 TNM 2.5 Calculated with a Sta of a c	15 August 2007 TNM 2.5 Calculated with TNM 2.5				
ITS: SOUND LEVELS.         SOONTRACT:: 3600         Interchange A-Alternative 7 2035         Interchange A-Alternative 7 2035         Interchange A-Alternative 7 2035         SPHERICS:         SPHERICS: <th>BA 66</th> <th>Calculated</th> <th>I with TNM 2</th> <th>4</th> <th></th> <th></th> <th></th>	BA 66	Calculated	I with TNM 2	4			
ER DESIGN:         Interchange A-Miternative 7 2035           INPUT HEIGHTS         Interchange A-Miternative 7 2035           SPHERICS:         20 deg C, 50% RH           Early and a contract of	BA 66			2			
SPHERICS:         20 deg C, 50% RH           er         No.         #DUs         Existing         No.         #DUs         Existing         No.           er         No.         #DUs         Existing         No.         #DUs         Existing         No.           er         LAeq1h         LAeq1h         Increase over         Calculated         Calculated           de Clark N of SB SD - Clark Park         32         1         0.0         72.1         66         72.9           de Cambell@ house setback fr SI         36         1         0.0         71.3         66         72.3           de Cambell@ house setback fr SI         36         1         0.0         71.3         66         72.3           de Canvery @ backside sidewalk         58         1         0.0         71.3         66         72.3           de Green @ S side alley setback         60         2         0.0         71.3         66         73.3           de Green @ S side alley setback from Sf         61         1         0.0         71.3         66         72.3           de Green @ S side alley setback from Sf         61         1         0.0         71.3         66         72.3           er 1 S to G </td <td>Crit'n dBA 7 66</td> <td></td> <td>Average pa</td> <td>vement type sha</td> <td>Average pavement type shall be used unless</td> <td></td> <td></td>	Crit'n dBA 7 66		Average pa	vement type sha	Average pavement type shall be used unless		
Interase of the control of t	Criťn dBA 7 66		a state nigr of a differer	a state nignway agency substantiates the of a different type with approval of FHWA.	a state nignway agency substantiates the use of a different type with approval of FHWA.	a	
No.#DUsExistingNo BarrierIde Clark N of SB SD - Clark ParkLAeq1hIncrease overide Clark N of SB SD - Clark Park $ABA$ $ABA$ $ABA$ ide Clark N of SB SD - Clark Park $32$ 1 $0.0$ $72.7$ y E of Ferdinand @ backside sidewid $34$ 1 $0.0$ $72.7$ y E of Calvany @ backside sidewid $34$ 1 $0.0$ $72.7$ y E of Calvany @ backside sidewid $40$ 1 $0.0$ $72.7$ y E of Calvany @ backside sidewid $40$ 1 $0.0$ $72.7$ de Campbell @ house setback fr SC $36$ 1 $0.0$ de Campbell @ house setback fr SC $60$ $71.3$ $66$ $71.3$ de Green @ Side alley setback fr SC $60$ $72.7$ $66$ $73.7$ de Green @ Side alley setback fr SC $60$ $72.7$ $66$ $73.7$ de Green @ Side alley setback from SE $61$ $1$ $0.0$ $73.7$ de Green @ Side alley setback from SE $61$ $1$ $0.0$ $73.7$ de Green @ Side alley setback from SE $61$ $1$ $0.0$ $74.2$ de Green @ Side alley setback from SE $61$ $1$ $0.0$ $66$ $73.7$ de Green @ Side alley setback from SE $61$ $1$ $0.0$ $66$ $73.7$ de Green @ Side alley setback from SE $61$ $1$ $0.0$ $66$ $73.7$ de for Side alley setback from SE $61$ $0.0$ $66$ $74.2$ de for Side G $1$ $0.0$	Criťn dBA 7 66						
Laeq1h         Laeq1h         Increase over           Calculated         Crit'n         Calculated           32         1         0.0         72.7         66         72.7           34         1         0.0         72.9         66         72.7           36         1         0.0         72.9         66         72.7           36         1         0.0         77.9         66         72.9           46         1         0.0         72.0         66         72.9           58         1         0.0         71.3         66         72.9           60         2         0.0         71.3         66         72.9           61         4         0.0         71.3         66         72.1           62         1         0.0         71.3         66         72.1           63         1         0.0         74.2         66         72.4           64         1         0.0         74.2         66         72.4           65         1         0.0         74.2         66         74.2           68         1         0.0         74.2         66         77.4 <td>Crit'n dBA 7 66</td> <td></td> <td></td> <td>10</td> <td></td> <td></td> <td></td>	Crit'n dBA 7 66			10			
dBA         dBA         dBA         dBA         dB           32         1         0.0         72.7         66         72.7           34         1         0.0         77.9         66         77.9           36         1         0.0         72.9         66         72.9           46         1         0.0         72.9         66         72.9           46         1         0.0         72.9         66         72.9           46         1         0.0         72.9         66         72.9           58         1         0.0         71.3         66         71.3           58         1         0.0         71.3         66         72.2           61         2         0.0         71.3         66         72.2           62         1         0.0         74.2         66         72.4           63         1         0.0         74.2         66         74.2           64         1         0.0         74.2         66         74.2           65         1         0.0         74.2         66         74.2           66         1         1<	dBA 7 66	e over existing ted Crit'n	Type 0 Impact L	Calculated Noi LAeq1h Cal	Noise Reduction Calculated Goal	Calculated	pa
dBA         dBA         dBA         dBA         dB         72.1         32.1         1         0.0         72.1         66         77.9         66         77.9         56         77.9         56         77.9         56         77.9         56         77.9         56         77.9         56         77.9         56         77.9         56         77.9         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         56         77.3         76         77.3         76         77.4         76         77.4         76         77.4         76         77.4         76         77.4         76         77.4         77.4         77.4         77.4         77.4         77.4         77.4         77.4         77.4         <	dBA 66					minus Goal	
32         1         0.0         72.7         66           34         1         0.0         77.9         66           36         1         0.0         77.9         66           46         1         0.0         72.9         66           58         1         0.0         72.9         66           58         1         0.0         72.0         66           60         2         0.0         71.3         66           61         4         0.0         71.3         66           63         1         0.0         73.7         66           63         1         0.0         73.7         66           65         1         0.0         73.7         66           65         1         0.0         74.2         66           66         71.6         74.2         66           67         1         0.0         74.2         66           68         1         0.0         74.2         66           69         1         0.0         74.4         66           70         1         0.0         74.4         66      <		dB	0	dBA dB	dB	dB	
34         1         0.0         77.9         66           36         1         0.0         72.9         66           40         1         0.0         72.9         66           46         1         0.0         72.9         66           58         1         0.0         66.4         66           60         2         0.0         71.3         66           61         4         0.0         73.7         66           63         1         0.0         73.7         66           63         1         0.0         73.7         66           63         1         0.0         73.7         66           64         1         0.0         74.2         66           65         1         0.0         74.2         66           66         1         0.0         71.6         66           67         1         0.0         71.6         66           68         1         0.0         71.1         66           70         1         0.0         71.1         66           73         1         0.0         66         66		72.7 10	Snd Lvl	72.3	0.4	80	-7.6
36       1       0.0       72.9       66         40       1       0.0       72.0       66         58       1       0.0       66.4       66         58       1       0.0       71.3       66         60       2       0.0       71.3       66         61       4       0.0       71.3       66         62       1       0.0       73.7       66         63       1       0.0       74.2       66         64       1       0.0       74.2       66         65       1       0.0       74.2       66         68       1       0.0       74.2       66         68       1       0.0       74.2       66         69       1       0.0       74.2       66         70       1       0.0       74.3       66         71       1       0.0       74.3       66         73       1       0.0       74.3       66         73       1       0.0       66       66         73       1       0.0       66       66         73       1 </td <td></td> <td>77.9 10</td> <td>Snd Lvl</td> <td>68.9</td> <td>9.0</td> <td>00</td> <td>1.0</td>		77.9 10	Snd Lvl	68.9	9.0	00	1.0
40       1       0.0       72.0       66         58       1       0.0       66.4       66         58       1       0.0       66.4       66         60       2       0.0       71.3       66         63       1       0.0       72.2       66         63       1       0.0       72.2       66         63       1       0.0       72.2       66         63       1       0.0       72.4       66         64       1       0.0       74.2       66         65       1       0.0       74.2       66         68       1       0.0       74.2       66         68       1       0.0       71.6       66         69       1       0.0       71.1       66         70       1       0.0       71.1       66         71       1       0.0       69.3       66         73       1       0.0       71.1       66         73       1       0.0       69.3       66         73       1       0.0       66       66         71       1		72.9 10	Snd Lvl	69.3	3.6	00	4.4
NE Corner Dragoon & Lafyette @ backs         46         1         0.0         66.4         66           W side Waterman @ backside sidewalk         58         1         0.0         71.3         66           E side Green @ S side alley setback         60         2         0.0         73.7         66           W side Central @ bldg. setback from SE         61         4         0.0         73.7         66           W side Central @ bldg. setback from SE         61         4         0.0         73.7         66           W side Central @ bldg. setback from SE         63         1         0.0         73.7         66           Eceiver 1 S to G         63         1         0.0         74.2         66           Ceriver 5 S to G         65         1         0.0         71.6         66           Sceiver 5 S to G         66         1         0.0         71.6         66           Sceiver 5 S to G         66         1         0.0         73.7         66           Sceiver 5 S to G         66         1         0.0         71.6         66           Sceiver 7 S to G         67         1         0.0         71.1         66           Sceiver 7 S to G         71 <td></td> <td>72.0 10</td> <td>Snd Lvl</td> <td>72.0</td> <td>0.0</td> <td>80</td> <td>-8.0</td>		72.0 10	Snd Lvl	72.0	0.0	80	-8.0
58         1         0.0         71.3         66           60         2         0.0         72.2         66           61         4         0.0         73.7         66           63         1         0.0         73.7         66           63         1         0.0         73.7         66           63         1         0.0         73.7         66           63         1         0.0         74.2         66           65         1         0.0         74.2         66           66         1         0.0         74.2         66           68         1         0.0         74.4         66           68         1         0.0         74.6         66           69         1         0.0         71.6         66           70         1         0.0         71.1         66           71         1         0.0         63.3         66           73         1         0.0         63.3         66           73         1         0.0         67         67           73         1         0.0         69         66		66.4 10	Snd Lvl	66.4	0.0	80	-8.0
60         2         0.0         72.2         66           61         4         0.0         73.7         66           62         1         0.0         73.7         66           63         1         0.0         66         66           63         1         0.0         74.2         66           65         1         0.0         74.2         66           66         1         0.0         74.2         66           63         1         0.0         74.2         66           63         1         0.0         71.6         66           63         1         0.0         71.1         66           70         1         0.0         71.1         66           71         1         0.0         71.1         66           71         1         0.0         71.1         66           73         1         0.0         63.3         66           73         1         0.0         74.3         66		71.3 10	Snd Lvl	65.9	5.4	00	-2.6
Ø bldg. setback from SE     61     4     0.0     73.7     66       62     1     0.0     0.0     66       63     1     0.0     0.0     66       63     1     0.0     74.2     66       65     1     0.0     74.2     66       65     1     0.0     74.2     66       66     1     0.0     71.6     66       68     1     0.0     71.6     66       70     1     0.0     71.1     66       71     1     0.0     69.3     66       71     1     0.0     69.3     66       71     1     0.0     69.3     66       73     1     0.0     74.3     66       73     1     0.0     74.3     66		72.2 10	Snd Lvl	69.8	2.4	80	-5.6
62       1       0.0       0.0       66         63       1       0.0       0.0       66         64       1       0.0       74.2       66         65       1       0.0       74.2       66         66       1       0.0       74.2       66         68       1       0.0       71.6       66         68       1       0.0       71.6       66         69       1       0.0       73.7       66         70       1       0.0       71.1       66         71       1       0.0       69.3       66         71       1       0.0       69.3       66         73       1       0.0       74.3       66         73       1       0.0       74.3       66         73       1       0.0       74.3       66         74       1       0.0       74.3       66		73.7 10	Snd Lvl	66.4	7.3	60	-0.7
63       1       0.0       0.0       66         64       1       0.0       74.2       66         65       1       0.0       74.2       66         65       1       0.0       74.2       66         65       1       0.0       74.2       66         66       1       0.0       71.6       66         68       1       0.0       71.6       66         69       1       0.0       73.7       66         70       1       0.0       71.1       66         71       1       0.0       69.3       66         73       1       0.0       69.3       66         73       1       0.0       74.3       66         73       1       0.0       74.3       66         74       1       0.0       74.3       66		0.0 10	invalid	0.0	0.0	00	0.0
64       1       0.0       74.2       66         65       1       0.0       72.4       66         66       1       0.0       71.6       66         68       1       0.0       71.6       66         68       1       0.0       71.6       66         69       1       0.0       73.7       66         70       1       0.0       73.7       66         71       1       0.0       63.3       66         73       1       0.0       69.3       66         73       1       0.0       69.3       66         73       1       0.0       69.3       66         73       1       0.0       74.3       66         74       1       0.0       74.3       66         74       1       0.0       74.3       66		0.0 10	invalid	0.0	0.0	00	0.0
65     1     0.0     72.4     66       66     1     0.0     71.6     66       68     1     0.0     0.0     66       68     1     0.0     71.6     66       69     1     0.0     73.7     66       70     1     0.0     71.1     66       71     1     0.0     71.1     66       71     1     0.0     69.3     66       73     1     0.0     69.3     66       73     1     0.0     74.3     66       74     1     0.0     74.3     66		74.2 10	Snd Lvl	68.0	6.2	00	-1.8
66     1     0.0     71.6     66       68     1     0.0     0.0     66       69     1     0.0     73.7     66       70     1     0.0     71.1     66       71     1     0.0     71.1     66       71     1     0.0     71.1     66       71     1     0.0     69.3     66       72     2     0.0     0.0     66       73     1     0.0     74.3     66       74     1     0.0     74.3     66		72.4 10	Snd Lvl	69.3	3.1	80	4.9
68     1     0.0     0.0     66       69     1     0.0     73.7     66       70     1     0.0     71.1     66       71     1     0.0     69.3     66       72     2     0.0     0.0     66       73     1     0.0     74.3     66       74     1     0.0     74.3     66		71.6 10	Snd Lvl	66.2	5.4	80	-2.6
69     1     0.0     73.7     66       70     1     0.0     71.1     66       71     1     0.0     69.3     66       72     2     0.0     0.0     66       73     1     0.0     74.3     66       74     4     0.0     74.3     66		0.0 10	invalid	0.0	0.0	80	0.0
70     1     0.0     71.1     66       71     1     0.0     69.3     66       72     2     0.0     0.0     66       73     1     0.0     74.3     66       74     4     0.0     74.3     66		73.7 10	Snd Lvl	66.3	7.4	80	-0.6
71     1     0.0     69.3     66       72     2     0.0     0.0     66       73     1     0.0     74.3     66       74     1     0.0     71.4     66		71.1 10	Snd Lvl	65.1	6.0	80	-2.0
72 2 0.0 0.0 66 73 1 0.0 74.3 66 74 1 0.0 71 66		69.3 10	Snd Lvl	64.4	4.9	80	-3.1
73 1 0.0 74.3 66 74 1 0.0 711 66		0.0 10	invalid	0.0	0.0	80	0.0
74 1 0.0 711 66		74.3 10	Snd Lvl	66.6	7.7	80	-0.3
14 1 0.0 /1.1 00	71.1 66	71.1 10	Snd Lvl	64.8	6.3	80	-1.7
Receiver 13 S to G 75 2 0.0 68.2 66 68.2		68.2 10	Snd Lvl	62.7	5.5	60	-2.5
Receiver 14 S to G 76 1 0.0 73.9 66 73.9		73.9 10	Snd Lvl	66.4	7.5	80	-0.5
Receiver 15 S to G 77 1 0.0 70.7 66 70.7		70.7 10	Snd Lvl	64.7	6.0	80	-2.0

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	78	1 0.0	69.3	99	69.3	10	Snd Lvl	63.5	5.8	œ	-2.2
Receiver 17 S to G	62	2 0.0	70.3	99	70.3	10 5	Snd Lvl	64.5	5.8	80	-2.2
Receiver 18 S to G	80	1 0.0	68.7	66	68.7	10 5	Snd Lvl	63.5	5.2	80	-2.8
Receiver 19 S to G	81	1 0.0	69.7	66	69.7	10 \$	Snd Lvl	64.5	5.2	80	-2.8
Receiver 20 S to G	82	1 0.0	68.1	66	68.1	10 5	Snd Lvl	63.4	4.7	80	-3.3
Receiver 21 S to G	83	1 0.0	67.9	99	67.9	10 5	Snd Lvl	64.8	3.1	80	4.9
Receiver 22 S to G	89	1 0.0	67.5	99	67.5	10 5	Snd Lvl	64.0	3.5	60	4.5
Receiver 27 G to W	95	2 0.0	72.6	66	72.6	10 5	Snd Lvl	65.4	7.2	80	-0.8
Receiver 28 G to W	96	4 0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 29 G to W	26	2 0.0	66.2	99	66.2	10 5	Snd Lvl	63.8	2.4	80	-5.6
Receiver 30 G to W	98	2 0.0	67.4	99	67.4	10 5	Snd Lvi	64.2	3.2	80	4.8
Receiver 31 G to W	66	1 0.0	67.2	99	67.2	10 5	Snd Lvl	64.2	3.0	80	-5.0
Receiver 32 G to W	100	1 0.0	6.99	99	6.99	10 5	Snd Lvl	64.0	2.9	80	-5.1
Receiver 33 G to W	101	1 0.0	67.1	99	67.1	10 5	Snd Lvl	63.9	3.2	80	4.8
Receiver 34 G to W	102	2 0.0	67.3	66	67.3	10 5	Snd Lvl	64.0	3.3	80	4.7
Receiver 35 G to W	103	2 0.0	67.8	99	67.8	10 5	Snd Lvl	63.9	3.9	80	4
Receiver 36 G to W	104	2 0.0	67.9	66	67.9	10 5	Snd Lvl	64.0	3.9	80	4
Receiver 37 G to W	105	2 0.0	68.2	66	68.2	10 \$	Snd Lvl	63.9	4.3	80	-3.7
Receiver 38 G to W	106	1 0.0	68.3	66	68.3	10 5	Snd Lvl	63.8	4.5	00	-3.5
Receiver 39 G to W	107	1 0.0	68.4	99	68.4	10 5	Snd Lvl	63.8	4.6	80	-3.4
Receiver 40 G to W	108	2 0.0	68.8	66	68.8	10 9	Snd Lvl	63.8	5.0	80	-3.0
Receiver 41 G to W	109	1 0.0	0 68.7	66	68.7	10 5	Snd Lvl	63.6	5.1	60	-2.9
Receiver 42 G to W	110	2 0.0	0.69.0	66	69.0	10 5	Snd Lvl	63.6	5.4	80	-2.6
Receiver 43 G to W	111	1 0.0	0 69.1	99	69.1	10 5	Snd Lvl	63.6	5.5	80	-2.5
Receiver 44 G to W	112	1 0.0	0.69.0	99	69.0	10 5	Snd Lvl	63.6	5.4	80	-2.6
Receiver 45 G to W	113	2 0.0	69.2	99	69.2	10 5	Snd Lvl	63.6	5.6	80	-2.4
Receiver 46 G to W	115	2 0.0	0 69.5	99	69.5	10 5	Snd Lvl	63.5	6.0	80	-2.0
Receiver 47 G to W	116	1 0.0		99	70.6	10 5	Snd Lvl	64.3	6.3	80	-1.7
Receiver 48 G to W	119	2 0.0	68.6	99	68.6	10 5	Snd Lvl	63.4	5.2	80	-2.8
Receiver 49 G to W	120	2 0.0	69.8	66	69.8	10 5	Snd Lvl	63.8	6.0	80	-2.0
Receiver 50 G to W	121	2 0.0	69.1	99	69.1	10 5	Snd Lvl	63.2	5.9	80	-2.1
Receiver 51 G to W	124	1 0.0	0.69.0	99	69.0	10 5	Snd Lvl	63.4	5.6	80	-2.4
Receiver 52 W to L	125	10 0.0	0 68.7	99	68.7	10	Snd Lvl	65.4	3.3	80	4.7
Receiver 54 W to L	139	1 0.0	0 69.6	99	69.69	10	Snd Lvl	66.2	3.4	80	4.6
Receiver 55 W to L	140	1 0.0	67.8	99	67.8	10	Snd Lvl	64.7	3.1	80	4.9
Receiver 58 W to L	143	2 0.0	69.1	99	69.1	10 5	Snd Lvl	66.2	2.9	80	-5.1
Receiver 59 W to L	144	1 0.0	0 67.0	99	67.0	10	Snd Lvl	64.5	2.5	80	-5.5
Receiver 60 W to L	145	1 0.0	0 66.8	66	66.8	10 5	Snd Lvl	64.6	2.2	80	-5.8
Receiver 63 W to L	148	1 0.0	71.2	99	71.2	10 5	Snd Lvl	67.3	3.9	80	4.1
Receiver 64 W to L	149	1 0.0	0 69.0	99	69.0	10 5	Snd Lvl	65.4		œ	4.4
Receiver 66 W to L	151	1 0.0	75.9	99	75.9	10	Snd Lvl	70.6	5.3	00	-2.7

Receiver 68 W to L	153	-	0.0	76.8	99	76.8	10	Snd Lvl	76.3	0.5	80	-7.5
Receiver 73 D to J	158	9	0.0	72.7	99	72.7	10	Snd Lvl	72.7	0.0	80	-8.0
Receiver 74 D to J	159	10	0.0	72.9	99	72.9	10	Snd Lvl	72.9	0.0	80	-8.0
Receiver 75 D to J	160	2	0.0	67.9	99	67.9	10	Snd Lvi	67.8	0.1	80	-7.9
Receiver 76 D to J	161	-	0.0	67.3	99	67.3	10	Snd Lvl	67.2	0.1	80	-7.9
Receiver 77 D to J	162	-	0.0	66.2	99	66.2	10	Snd Lvl	66.1	0.1	80	-7.9
Receiver 78 D to J	163	10	0.0	68.3	99	68.3	10	Snd Lvl	68.2	0.1	80	-7.9
Receiver 79 D to J	164	-	0.0	68.6	99	68.6	10	Snd Lvl	68.6	0.0	80	-8.0
Receiver 80 D to J	165	ი	0.0	69.0	99	69.0	10	Snd Lvl	68.9	0.1	80	-7.9
Receiver 81 D to J	166	2	0.0	69.2	99	69.2	10	Snd Lvl	69.1	0.1	80	-7.9
Receiver 82 D to J	167	2	0.0	69.3	99	69.3	10	Snd Lvl	69.2	0.1	80	-7.9
Receiver 83 D to J	168	÷	0.0	699	99	6.99	10	Snd Lvl	66.8	0.1	80	-7.9
Receiver 84 D to J	169	-	0.0	66.1	99	66.1	10	Snd Lvl	65.9	0.2	80	-7.8
Receiver 85 D to J	170	Ļ	0.0	65.5	99	65.5	10	1	65.3	0.2	80	-7.8
Receiver 86 D to J	171	-	0.0	67.8	99	67.8	10	Snd Lvl	67.7	0.1	80	-7.9
Receiver 87 D to J	172	-	0.0	67.0	99	67.0	10	Snd Lvl	66.8	0.2	8	-7.8
Receiver 88 D to J	173	Ļ	0.0	66.1	99	66.1	10	Snd Lvl	65.9	0.2	80	-7.8
Receiver 89 D to J	174	÷	0.0	68.6	99	68.6	10	Snd Lvl	68.5	0.1	80	-7.9
Receiver 90 D to J	175	-	0.0	67.1	66	67.1	10	Snd Lvl	66.8	0.3	80	-7.7
Receiver 91 D to J	176	-	0.0	65.6	99	65.6	10	1	65.3	0.3	80	7.7-
Receiver 92 D to J	177	-	0.0	65.1	99	65.1	10	l	64.7	0.4	80	-7.6
Receiver 93 D to J	178	4	0.0	64.4	99	64.4	10	1	63.7	0.7	80	-7.3
Receiver 94 D to J	179	-	0.0	71.8	99	71.8	10	Snd Lvl	71.6	0.2	00	-7.8
Receiver 95 D to J	180	÷	0.0	71.8	99	71.8	10	Snd Lvl	71.6	0.2	80	-7.8
Receiver 96 D to J	189	-	0.0	72.1	99	72.1	10	Snd Lvl	71.1	1.0	80	-7.0
Receiver 97 D to J	190	÷	0.0	72.3	99	72.3	10	Snd Lvl	70.8	1.5	80	-6.5
Receiver 98 D to J	191	÷	0.0	66.0	99	66.0	10	Snd Lvl	65.5	0.5	80	-7.5
Receiver 99 D to J	193	-	0.0	65.9	99	65.9	10	1	65.3	0.6	80	-7.4
Receiver 100 D to J	194	-	0.0	65.7	99	65.7	10	I	65.0	0.7	80	-7.3
Receiver 101 D to J	195	-	0.0	65.7	99	65.7	10	I	64.9	0.8	80	-7.2
Receiver 102 D to J	196	4	0.0	63.8	99	63.8	10	1	62.0	1.8	80	-6.2
Receiver 103 D to J	197	-	0.0	64.5	99	64.5	10	1	62.7	1.8	80	-6.2
Receiver 104 D to J	199	-	0.0	65.2	99	65.2	10	I	63.4	1.8	80	-6.2
Receiver 105 D to J	201	-	0.0	65.6	99	65.6	10	1	64.0	1.6	80	-6.4
Receiver 106 D to J	202	-	0.0	66.7	99	66.7	10	Snd Lvl	65.2	1.5	80	-6.5
Receiver 107 D to J	203	-	0.0	68.1	99	68.1	10	Snd Lvl	65.9	2.2	80	-5.8
Receiver 109 D to J	205	-	0.0	69.6	99	69.6	10	Snd Lvl	66.6	3.0	80	-5.0
Receiver 110 D to J	206	-	0.0	67.7	99	67.7	10	Snd Lvl	65.3	2.4	80	-5.6
Receiver 111 D to J	207	-	0.0	66.1	99	66.1	10	Snd Lvl	64.3	1.8	80	-6.2
Receiver 112 D to J	208	-		65.1	99	65.1	10	1		1.8	80	-6.2
Receiver 113 D to . I	DUC	•	00	64.2	22	EN 2	01	-	60.0	00	0	6 0

	о о с о с с с с с с с о о	0.0	72.0 72.1 72.3	66 66	72.0	10	Snd Lvl Snd Lvl	71.9 72.0	0.1 0.1	∞ ∞	-7.9 -7.9
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		72.1	99	72.1	10	Snd Lvl	72.0	0.1	00	-7.9
	N F N F F F F F F		202							>	
	- 0		14.3	66	72.3	10	Snd Lvl	72.3	0.0	00	-8.0
<b>, , , , , , , , , , , , , , , , , , , </b>	N F F F F F F F	0.0	64.7	66	64.7	10	-	63.2	1.5	80	-6.5
		0.0	64.9	99	64.9	10	1	63.3	1.6	80	-6.4
			65.0	99	65.0	10	I	63.5	1.5	80	-6.5
		0.0	65.0	66	65.0	10	I	63.4	1.6	80	-6.4
		0.0	65.0	99	65.0	10	1	63.4	1.6	80	-6.4
		0.0	64.6	99	64.6	10	1	64.5	0.1	80	-7.9
		0.0	63.8	99	63.8	10	1	63.6	0.2	80	-7.8
-, -, -, -		0.0	63.0	99	63.0	10	1	62.8	0.2	80	-7.8
	-	0.0	64.2	99	64.2	10	1	64.0	0.2	80	-7.8
	-	0.0	63.4	99	63.4	10	-	63.2	0.2	00	-7.8
	٢	0.0	65.1	99	65.1	10	1	64.9	0.2	80	-7.8
Kecelver 130 D 10 J	-	0.0	64.4	99	64.4	10	1	64.1	0.3	80	7.7-
Receiver 137 J to C 233	-	0.0	75.0	99	75.0	10	Snd Lvl	68.1	6.9	80	-1.1
Receiver 138 J to C 234	-	0.0	68.4	99	68.4	10	Snd Lvl	64.6	3.8	80	-4.2
Receiver 139 J to C 235	+	0.0	69.5	99	69.5	10	Snd Lvl	65.8	3.7	80	4.3
Receiver 140 J to C 236	۴	0.0	70.8	99	70.8	10	Snd Lvl	66.1	4.7	80	-3.3
Receiver 141 J to C 237	+	0.0	75.8	99	75.8	10	Snd Lvl	68.2	7.6	80	-0.4
Receiver 142 J to C 238	÷	0.0	78.3	99	78.3	10	Snd Lvl	69.1	9.2	80	1.2
Receiver 143 J to C 239	2	0.0	76.2	99	76.2	10	Snd Lvl	67.6	8.6	80	0.6
Receiver 144 J to C 240	-	0.0	74.1	99	74.1	10	Snd Lvl	66.4	7.7	80	-0.3
Receiver 145 J to C 241	+	0.0	78.2	99	78.2	10	Snd Lvl	69.0	9.2	80	1.2
Receiver 146 J to C 242	2	0.0	78.0	99	78.0	10	Snd Lvl	69.2	8.8	80	0.8
Receiver 147 J to C 243	+	0.0	77.3	99	77.3	10	Snd Lvl	68.5	8.8	60	0.8
Receiver 148 J to C 244	-	0.0	76.5	99	76.5	10	Snd Lvl	68.4	8.1	00	0.1
Receiver 149 J to C 245	2	0.0	75.3	99	75.3	10	Snd Lvl	68.6	6.7	80	-1.3
Receiver 150 J to C 246	-	0.0	69.9	66	66.9	10	Snd Lvl	63.3	3.6	80	-4.4
Receiver 151 J to C 247	-	0.0	69.2	99	69.2	10	Snd Lvl	64.7	4.5	80	-3.5
Receiver 152 J to C 248	-	0.0	66.7	66	66.7	10	Snd Lvl	62.7	4.0	80	4.0
Receiver 153 J to C 249	t	0.0	64.1	99	64.1	10		60.7	3.4	8	4.6
Receiver 154 J to C 250	-	0.0	71.3	66	71.3	10	Snd Lvl	65.6	5.7	80	-2.3
Receiver 155 J to C 251	٢	0.0	69.5	66	69.5	10	Snd Lvl	64.4	5.1	80	-2.9
Receiver 156 J to C 252	-	0.0	68.5	99	68.5	10	Snd Lvl	63.7	4.8	60	-3.2
Receiver 157 J to C 253	-	0.0	67.4	99	67.4	10	Snd Lvl	62.7	4.7	60	-3.3
Receiver 158 J to C 254	-	0.0	66.4	66	66.4	10	Snd Lvl	61.8	4.6	80	-3.4
Receiver 159 J to C 255	F	0.0	65.6	66	65.6	10	I	61.2	4.4	80	-3.6
Receiver 160 J to C 256	Ļ	0.0	75.3	99	75.3	10	Snd Lvl	67.3	8.0	80	0.0
Receiver 161 J to C 257	Ļ	0.0	72.1	66	72.1	10	Snd Lvl	66.0	6.1	80	-1.9
Receiver 162 J to C 258	-	0.0	70.7	66	70.7	10	Snd Lvl	65.1	5.6	80	-2.4

Date 400 Lto C											
RECEIVED 10 U 10 U	259 1	0.0	69.3	66	69.3	10	Snd Lvl	64.1	5.2	œ	-2.8
Receiver 164 J to C	260 1	0.0	68.3	66	68.3	10	Snd Lvl	63.3	5.0	80	-3.0
Receiver 165 J to C	261 1	0.0	67.2	99	67.2	10	Snd Lvl	62.4	4.8	80	-3.2
Receiver 166 J to C	262 1	0.0	66.4	66	66.4	10	Snd Lvl	61.8	4.6	80	-3.4
Receiver 167 J to C	263 1	0.0	65.7	99	65.7	10		61.2	4.5	80	-3.5
Receiver 168 J to C	264 1	0.0	71.7	66	7.17	10	Snd Lvl	65.6	6.1	80	-1.9
Receiver 169 J to C	265 1	0.0	70.1	99	70.1	10	Snd Lvl	64.5	5.6	80	-2.4
Receiver 170 J to C	266 1	0.0	66.6	66	66.6	10	Snd Lvl	61.9	4.7	80	-3.3
Receiver 171 J to C	267 1	0.0	71.6	99	71.6	10	Snd Lvl	66.8	4.8	80	-3.2
Receiver 172 J to C	268 1	0.0	68.0	99	68.0	10	Snd Lvl	62.9	5.1	8	-2.9
Receiver 173 J to C	269 1	0.0	67.1	66	67.1	10	Snd Lvl	62.2	4.9	80	-3.1
Receiver 174 J to C	270 1	0.0	66.4	99	66.4	10	Snd Lvl	61.8	4.6	80	-3.4
Receiver 175 J to C	271 1	0.0	65.5	99	65.5	10	1	61.1	4.4	80	-3.6
Receiver 176 J to C	272 1	0.0	75.1	99	75.1	10	Snd Lvl	66.9	8.2	80	0.2
Receiver 177 J to C	273 1	0.0	70.3	99	70.3	10	Snd Lvl	65.5	4.8	80	-3.2
Receiver 178 J to C	274 1	0.0	69.2	66	69.2	10	Snd Lvl	63.9	5.3	œ	-2.7
Receiver 179 J to C	275 1	0.0	68.0	66	68.0	10	Snd Lvl	63.4	4.6	80	-3.4
Receiver 180 J to C	276 1	0.0	67.0	66	67.0	10	Snd Lvl	62.4	4.6	80	-3.4
Receiver 181 J to C	277 1	0.0	66.1	66	66.1	10	Snd Lvl	61.8	4.3	80	-3.7
Receiver 182 J to C	278 1	0.0	68.2	99	68.2	10	Snd Lvl	63.5	4.7	8	-3.3
Receiver 183 J to C	279 1	0.0	67.3	66	67.3	10	Snd Lvl	63.1	4.2	80	-3.8
Receiver 184 J to C	280 1	0.0	66.2	99	66.2	10	Snd Lvl	62.4	3.8	80	-4.2
Dwelling Units	# DUs I	Noise Reduction	uo								
	-	Min Avg	Max								
	0	dB dB									
All Selected	244	0.0	3.4	9.2							
All Impacted	199	0.0	4.0	9.2							
All that meet NR Goal	11	8.0	8.7	9.2							

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15 August 200

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INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group T Stone

12 August 2007 TNM 2.5

PROJECT/CONTRACT:	es 3600											
RUN:	Interchange A-Alternative 7 2035	A-Altern	ative 7 2	035								
Roadway	Points											
Name	Name	No.	Segment	t								
			Autos V	s	MTrucks V	S	HTrucks V	, s	Buses V	s	Motorcycles V S	/cles S
			veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h
I-75 - NB	point271	299	2109	67	132	16	422	16	-	97	*	97
	point198	300	2109	67	132	16	422	16	Ţ	97	~	97
	point270	301	2109	67	132	26	422	97	-	67	-	97
	point199	302	2109	97	132	16	422	97	~	97	-	67
	point268	303	2482	67	124	97	496	97	-	97	-	97
	point999	304	2482	97	124	16	496	97		97	-	97
	point200	305	2482	26	124	26	496	97	5	97	~	97
	point222	306	2482	97	124	97	496	97	1	97	-	67
	point201	307	2482	67	124	97	496	97	-	97	<b>F</b>	97
	point998	946	2482	67	124	16	496	97		97	1	67
	point202	308	2482	67	124	97	496	97	÷	97	-	97
	point945	945	2482	67	124	16	496	97	2	97	-	67
	point905	905	2482	67	124	97	496	97	1	67		97
	point948	948	2482	97	124	97	496	97	<b>1</b>	97	~	97
	point223	311	2482	67	124	97	496	97		97	-	97
	point205	312	2482	67	124	16	496	97	÷.	97	£	67
	point206	313	2482	67	124	97	496	97	~	97	-	97
	point928	928	2322	97	116	97	464	97	Ļ	67	-	67
	point207	314	2322	97	116	97	464	97	<i>~</i>	67	~	97
	point949	949	2322	97	116	97	464	97	-	97	-	97
	point208	315	2322	67	116	97	464	97	-	16		97
	noint200	316	2223	07	412	07	AGA	07	<u>۲</u>	10	*	97

	point210	317	2322	97	116	97	464	97	*	97	~	97
	point950	950	2322	97	116	97	464	97	-	97	-	97
	point211	318	2322	97	116	97	464	97	-	97	-	97
	point212	319	2685	97	107	97	537	97	-	97	~	97
	point213	320	2685	97	107	97	537	97		97	-	97
	point214	321	2685	97	107	97	537	97		97	-	97
	point215	322										
I-75 - SB	point942	942	4595	97	230	97	919	97	-	97	-	97
	point232	338	4595	97	230	97	919	97	~	97	-	97
	point233	339	4486	97	224	97	897	97	-	97	-	97
	175.5	980	4486	97	224	97	897	97	-	97	~	97
	point234	340	4486	97	224	97	897	26	t.	97	-	97
	point235	341	4486	97	224	97	897	97	-	97	-	97
	point496	342	4486	97	224	97	897	97	+	97	~	97
	point260	343	4486	97	224	97	897	97		97	-	97
	point261	344	4486	97	224	97	897	97	~	97	~	97
	point236	345	4486	97	224	97	897	97	-	97	~	97
	point237	346	4486	97	224	97	897	97	-	97	~	97
	point238	347	4486	97	224	97	897	97	-	97	~	97
	point239	348	4766	97	238	97	953	97	-	97	-	97
	point262	349	4766	97	238	97	953	97	-	97	~	97
	point263	351	4766	97	238	57	953	97	*	97	<u> </u>	97
	point947	947	4766	97	238	97	953	97	-	97	-	97
	point264	353	4766	97	238	97	953	97	-	97	~	97
	point944	944	4766	97	238	97	953	97	-	97	-	97
	point265	355	4766	97	238	97	953	97	<del></del>	97	~	97
	point243	356	4526	97	226	97	905	97	-	97	-	97
	point266	357	4526	97	226	97	905	97	-	97	-	97
	point244	358	4526	97	226	97	905	97	+	97	-	97
	point245	359	4526	97	226	97	905	97	-	97	-	97
	point267	360	4526	97	226	97	905	97	~	26	-	97
	point246	361	4526	97	226	97	905	97	1	97	-	97
	point247	362										
N I-75/Livernois Off-Ramp	point407	502	274	40	2	40	21	40	1	40	*	40

	point1054	1054	274	40	2	40	21	40	-	40	-	40
	point409	504	274	40	2	40	21	40	~	40	~	40
	point413	508										
S I-75/Clark Off-Ramp	point461	558	424	40	20	40	56	40	~	40	-	40
	point463	560	424	40	20	40	56	40	-	40	-	40
	point465	562										
S I-75 Service Drive - 1	point466	563	440	40	32	40	184	40		40	-	40
	point651	567										
S I-75 Service Drive - 2	point475	575	300	56	e	56	27	56	-	56	-	56
	point476	576	300	56	e	56	27	56	<del>~</del>	56	~	56
	point1056	1056	300	56	e	56	27	56	*	56	~	56
	point644	577										
S I-75/Dragoon Off-Ramp	point481	585	274	56	2	56	21	56	~	56	-	56
	point483	587	274	56	2	56	21	56	-	56	~	56
	point484	588	274	56	2	56	21	56	4	56	~	56
	point485	589										
S I-75 Service Drive - 4	point638	594	574	48	S	48	48	48	-	48	-	48
	point489	595	574	48	ŝ	48	48	48	*	48	-	48
	point490	596	574	48	ŝ	48	48	48	-	48	-	48
	point491	265										
Livernois/ S I-75 On-Ramp	point497	600	1399	97	9	97	56	97	-	97	-	97
	point498	601	1399	97	9	97	56	97	-	97	-	97
	point500	603	1399	97	9	97	56	97	*	97	-	97
	point501	604	1399	97	9	97	56	16	~	97	-	97
	point503	606										
S I-75 Service Drive - 5	point491	971	200	56	e	56	27	56	-	56	<del></del>	56
	point504	607	200	56	c	56	27	56	~	56	-	56
	point505	608	200	56	e	56	27	56	*	56	-	56
	point975	975	200	56	n	56	27	56	-	56	-	56
	point507	610										
S I-75 Service Drive - 8	point530	637	360	40	15	40	20	40	-	40	-	40
	point531	638	450	40	30	40	80	40	-	40	-	40
	point532	639										
Springwells/S I-75 On-Ramp	noint533	840	UCV	107	30	10	70	10	*	10	3	07

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	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	-	40	-	40
	point685	685	700	40	40	40	60	40	4	40	-	40
	point687	687	700	40	40	40	60	40	4	40	-	40
	point943	943	700	40	40	40	60	40	<del></del>	40	~	40
	point688	688	700	40	40	40	60	40	~	40	~	40
	point690	690	700	40	40	40	60	40	-	40	-	40
	point691	691	700	40	40	40	60	40	-	40	-	40
	point692	692										
Green - N&SB	point727	727	85	48	5	48	10	48		48	-	48
	point939	939	85	48	5	48	10	48	· ·	48	-	48
	point959	959	85	48	5	48	10	48	1	48	-	48
	point960	960	85	48	5	48	10	48	-	48	-	48
	point729	729	85	48	5	48	10	48	~	48	-	48
	point730	730	85	48	5	48	10	48	-	48	~	48
	point731	731										
Clark - NB	point812	812	80	40	2	40	25	40	~	40	-	40
	point813	813	100	25	20	25	300	25	-	25	-	25
	point814	814	80	25	15	25	180	25	۲-	25	-	25
	point963	963	80	25	15	25	180	25	-	25	-	25
	point964	964	80	25	15	25	180	25	-	25	~	25
	point815	815	84	40	00	40	4	40	-	40	-	40
	point816	816										
Clark - SB	point818	818	120	40	4	40	12	40	4	40	-	40
	point819	819	120	40	4	40	12	40	÷	40	-	40
	point961	961	120	40	4	40	12	40	-	40	-	40
	point962	962	120	40	4	40	12	40	~	40	<u>.</u>	40
	point820	820	120	40	4	40	12	40	~	40	-	40
	point821	821	120	40	4	40	12	40	4	40	-	40
	point822	822										
Livernois	Lafayette	929	324	56	35	56	60	56	-	56	-	56
	SB SD	930	162	56	12	56	30	56	-	56	-	56
	point953	953	162	56	12	56	30	56	۳	56	-	56
	animt0E4	0EA	001	C L	C *	C L	00	00	۲	C L	4	E C

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	NB SD	933	162	56	12	56	30	56	-	56	-	
	WB Fort	934	162	56	12	56	30	56	۲	56	-	
	EB Fort	935										
S I-75 Service Drive - 3	point645	579	574	56	5	56	48	56	+	56	-	
	point478	581	574	56	5	56	48	56	1	56	~	
	point494	583	574	56	5	56	48	56	-	56	-	
	point480	584	574	56	5	56	48	56	1	56	-	
	point495	968	574	56	5	56	48	56	-	56	-	
	point488	696										
S I-75 Service Drive - 6	point631	612	200	56	e	56	27	56	~	56	-	
	point509	613	200	56	e	56	27	56	-	56	-	
	point510	614	200	56	e	56	27	56	-	56	-	
	point629	619										
S I-75 Service Drive - 7	point977	977	200	56	e	56	27	56	-	56	-	
	point514	620	200	56	3	56	27	56	-	56	-	
	point515	621	200	56	e	56	27	56	-	56	-	
	point516	622	200	56	e	56	27	56	-	56	-	
	point518	624	200	56	n	56	27	56	1	56	-	
	point525	978	200	56	ç	56	27	56	-	56	-	
	point527	979										
Outbound to SB I-75	point1005	1005	204	74	20	74	180	74	-	74	-	
	point1058	1058	204	74	20	74	180	74	-	74	-	
	point1006	1006	204	74	20	74	180	74	1	74	~	
	point1007	1007	204	74	20	74	180	74	4	74	-	
	point1008	1008	204	74	20	74	180	74	-	74	-	
	point1010	1010										
Inbound from SB I-75	point1012	1012	559	89	00	89	48	89	-	89	-	
	point1013	1013	792	85	15	85	131	85	1	85	~	
	point1014	1014	792	83	15	83	131	83	-	83	-	
	point1015	1015	792	81	15	81	131	81	-	81	-	
	point1016	1016										
Dragoon/N I-75 On-Ramp	point1063	1063	274	97	2	97	21	97	~	97	-	
	point1064	1064	274	97	2	97	21	97	-	97	-	
	point1065	1065	274	97	2	97	21	97	-	97	-	

INPUT: TRAFFIC FOR LAeq1h Volumes

Some and the second and a second seco						2000						
	point1066	1066	274	97	2	97	21	97	*	97	-	97
	point1067	1067	274	26	2	97	21	97	-	97	-	67
	point1068	1068										

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**RESULTS: BARRIER DESCRIPTIONS** 

The Corradino Group T Stone

15 August 2007 TNM 2.5

**RESULTS: BARRIER DESCRIPTIONS** 

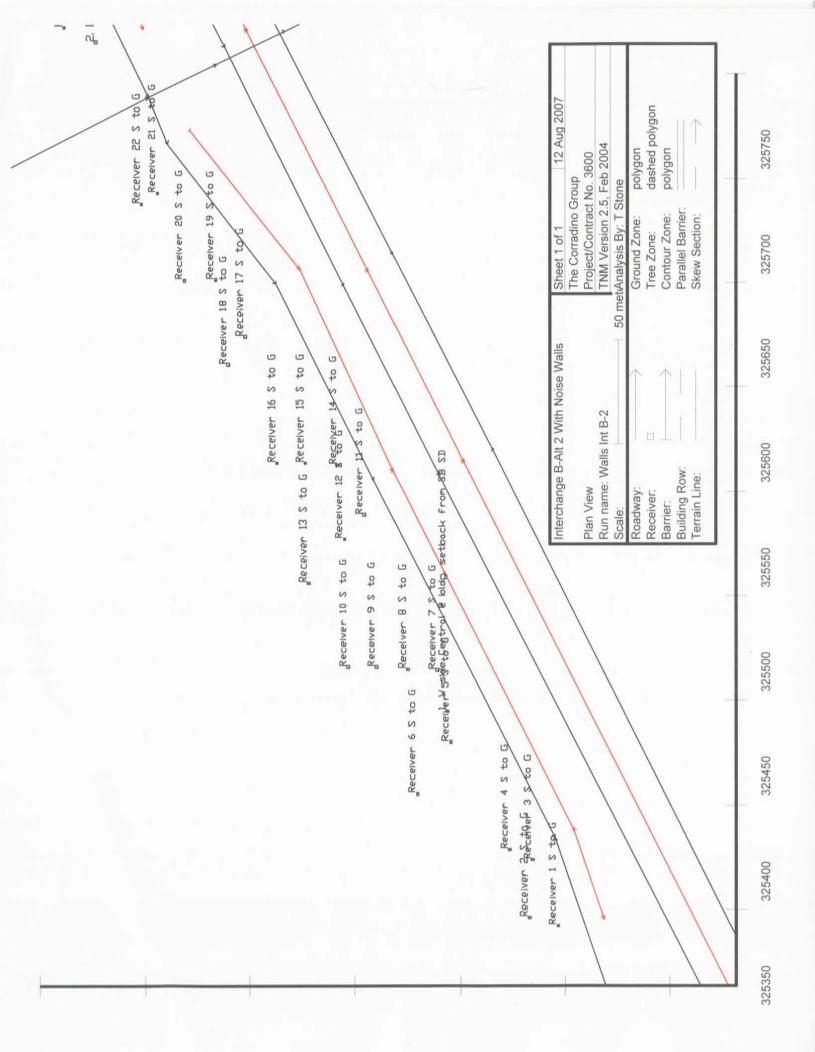
PROJECT/CONTRACT:

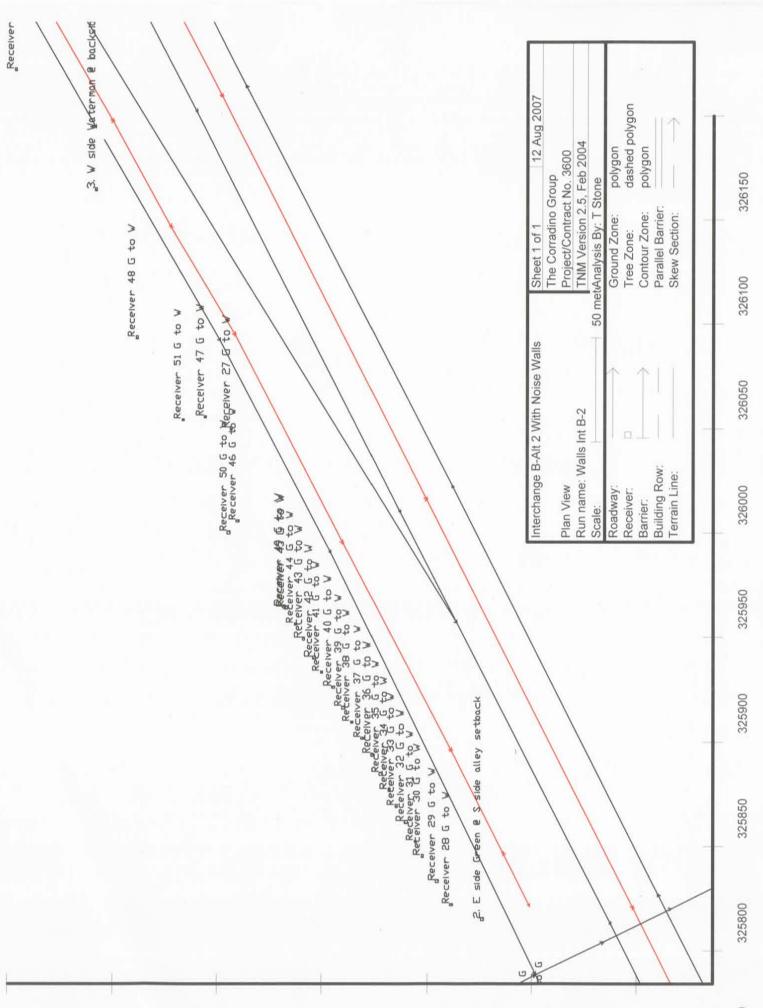
	-Alternativ	
3600		

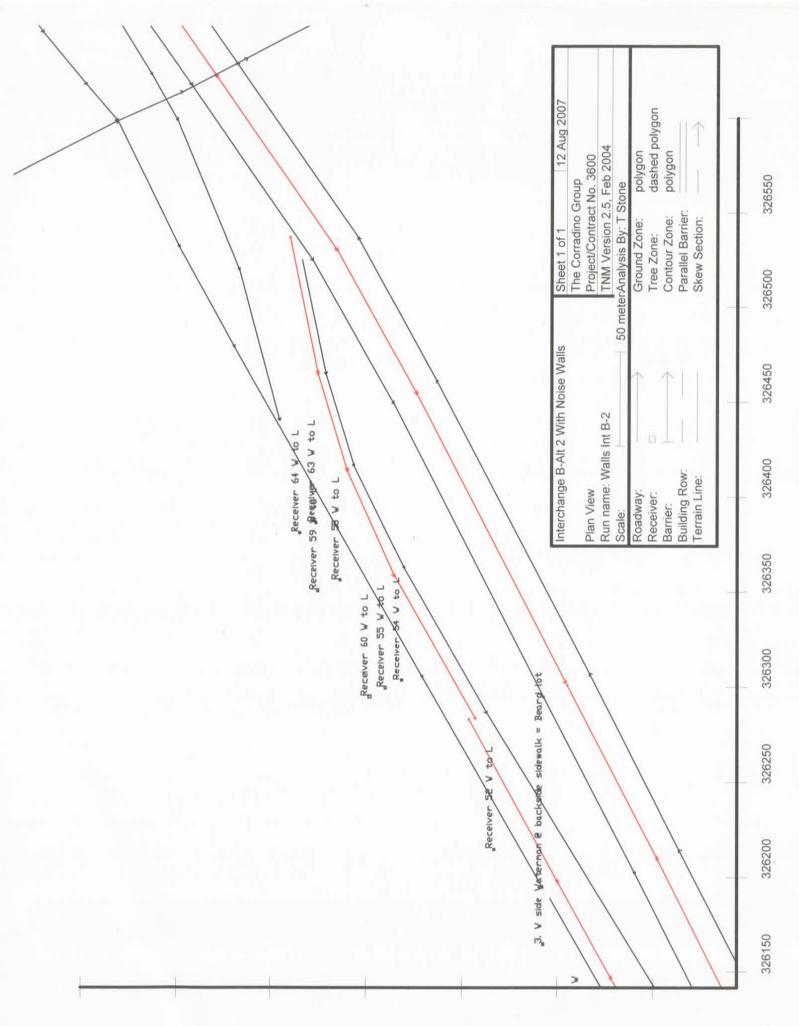
RUN:	Interc	Interchange A-Alternative 7 2035	Alternativ	e 7 2035								
<b>BARRIER DESIGN:</b>	INPU	INPUT HEIGHTS	S									
Barriers												
Name	Type	Type Heights along Barrier	Iong Bai	rrier	Ľ	Length	If Wall	If Berm			Cost	
		Min	Avg	Мах			Area	Volume	Top Width	Run:Rise		
		E	E	E	E		m ps	cu m	E	m:m	Ь	
Barrier2	M	1.1		.10	1.10	466		12				0
Barrier5	M	1.10		1.10	1.10	267		293				0
Barrier9	M	1.1		.10	1.10	539		92				0
Barrier10	M	1.1		.10	1.10	525		78				0
Barrier11	M	1.1		.10	1.10	225		48				0
Barrier15	M	1.1		.10	1.10	1373		10				0
Barrier to SB I-75	M	2.7		.70	2.70	139		74				214496
Barrier from SB I-75	M	2.7		.85	3.70	159		54				252909
Dragoon to Junction	M	3.7		.70	3.70	115		24				208072
Green to Waterman to Casgrain	M	3.7		.70	3.70	532		37				965189
Springwells to Green	M	3.7		.70	3.70	428		1584				777488
Junction to Clark	M	3.7		.70	3.70	529		1957				960389
Livernois ramp to SB I-75	N	3.7		.70	3.70	65		241				118046
										Total Cost:		3496591

I:\Projects\3600\Noise\TNM\Noise Walls\Walls Int A-7

**Interchange B – Alternative 2 – 2035** 







Recover 181 J 16 C     Recover 181 J 16 C       Recover 181 J 16 C     Recover 181 J 16 C       Recover 181 J 16 C     Recover 181 J 16 C       Recover 181 J 16 C     Recover 181 J 16 C       Recover 181 J 16 C     Recover 181 J 16 C       Recover 173 J 16 C     Recover 173 J 16 C       Recover 173 J 16 C     Recover 173 J 16 C       Recover 173 J 16 C     Recover 173 J 16 C       Recover 173 J 16 C     Recover 173 J 16 C       Recover 183 J 16 C     Recover 173 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 183 J 16 C     Recover 183 J 16 C       Recover 184 J 16 C     Recover 183 J 16 C       Recover 184 J 16 C     Recover 184 J 16 C       Recover 184 J 16 C     Recover 184 J 16 C       Recover 184 J 16 C     Recover 184 J 16 C       Recover 184 J 16 C     Recover 184 J 16 C       Recover 184 J 16 C     Recover 184 J 16 C       Recover 184 J 16 C     Recover 184 J 16 C       Recover 184 R 16 F     Recover 184 R 16 F <th>327450 327500 327550 327600 327650</th>	327450 327500 327550 327600 327650
Receiver 167 J to C Receiver 159 Receiver 165 J to C Receiver 155 Rotervor 163 J to C Receiver 155 Rotervor 163 J to C Receiver 155 Rotervor 161 J to C Receiver 155 Rotervor 161 J to C Receiver 154 J to C Receiver 155 Rotervor 161 J to C Receiver 155 Rotervor 161 J to C Receiver 156 J to C Receiver 156 Rotervor 161 J to C Receiver 156 J to C Receiver 156 Rotervor 161 J to C	327350 327400
	327300
Receiver 153 J to 0 Receiver 150 J.Receiver 151 J & C Receiver 130 J to C Receiver 131 J to C Receiver 137 J to C	327200 327250

The Corradino Groun							4	15 August 2007	+ 2007						
T Stone								SC MNT	1004						
								Calculated with TNM 2.5	d with TN	4M 2.5					
RESULTS: SOUND LEVELS															
PROJECT/CONTRACT:	3600	0													
RUN: BARRIER DESIGN:	Inte INF	nterchange B-/ INPUT HEIGHT	B-Alt	Interchange B-Alt 2 With Noise Walls INPUT HEIGHTS	ise Walls				Average	e paveme	int type	shall be	Average pavement type shall be used unless	0	
ATMOSPHERICS:	20	20 deg C, 50%	0% RH						of a diff	erent typ	e with a	pproval	a state mignway agency substantiates the tr of a different type with approval of FHWA.	0	
Receiver															
Name No.	sud#		Existing	No Barrier	F					With E	With Barrier				
		LAeq1h		LAeq1h			ver	existing	Type	Calculated		Noise Reduction	duction		
				Calculated	d Crit'n		Calculated	Crit'n Sub'l Inc	Impact	LAeq1h		Calculated	ed Goal	Calcula	Calculated
														Goal	
		dBA		dBA	dBA	dB		dB		dBA		dB	dB	dB	
9. W side Clark N of SB SD - Clark Park	32	٣	0.0	7	72.7	66	72.7	10	) Snd Lvl	4	72.4		0.3	œ	7.7-
8. Alley E of Ferdinand @ backside sidews	34	-	0.0	2	78.1	66	78.1	10	D Snd Lvl	IN	69.8		8.3	80	0.3
. E side Campbell @ house setback fr SC	36	F	0.0	7	73.7	99	73.7	10	) Snd Lvl	N	68.6		5.1	80	-2.9
6. Alley E of Calvary @ backside sidewalk	40	-	0.0	2	70.9	99	70.9	10	) Snd Lvl	4	67.3		3.6	80	4.4
5. NE Corner Dragoon & Lafyette @ backs	46	F	0.0	2	71.3	99	71.3	10	) Snd Lvl	~	71.2		0.1	80	-7.9
3. W side Waterman @ backside sidewalk	55	-	0.0	2	71.2	99	71.2	10	) Snd Lvl	N	65.3		5.9	80	-2.1
2. E side Green @ S side alley setback	58	2	0.0	7	71.9	99	71.9	10	) Snd Lvl	N	69.2		2.7	80	-5.3
1. W side Central @ bldg. setback from SE	60	4	0.0	7	73.7	99	73.7	10	) Snd Lvl	N	66.0		7.7	80	-0.3
Receiver 1 S to G	61	۲	0.0		0.0	99	0.0	10	) inactive	e	0.0		0.0	œ	0.0
Receiver 2 S to G	62	-	0.0		0.0	99	0.0	10	) inactive	e	0.0		0.0	œ	0.0
Receiver 3 S to G	63	-	0.0	2	74.1	99	74.1	10	D Snd Lvl	vI	67.6		6.5	8	-1.5
Receiver 4 S to G	64		0.0	2	72.3	99	72.3	10	) Snd Lvl	~	69.2		3.1	80	4.9
Receiver 5 S to G	65	t-	0.0	2	71.6	99	71.6	10	D Snd Lvl	N	62.9		5.7	80	-2.3
Receiver 6 S to G	66	-	0.0		0.0	99	0.0	10	) inactive	Ð	0.0		0.0	80	0.0
Receiver 7 S to G	68	t	0.0	2	73.7	99	73.7	10	D Snd Lvl	N	65.7		8.0	80	0.0
Receiver 8 S to G	69	+	0.0	7	71.0	99	71.0	10	D Snd Lvl	N	64.7		6.3	80	-1.7
Receiver 9 S to G	70	F	0.0		0.0	99	0.0	10	) inactive	Ð	0.0		0.0	60	0.0
Receiver 10 S to G	71	2	0.0		0.0	99	0.0	10	0 inactive	e	0.0		0.0	8	0.0
Receiver 11 S to G	72	F	0.0	2	74.2	66	74.2	10	D Snd Lvl	vi	62.9		8.3	80	0.3
Receiver 12 S to G	73	-	0.0	7	71.0	99	71.0	10	D Snd Lvl	N	64.4		6.6	œ	-1.4
Receiver 13 S to G	74	2	0.0		0.0	99	0.0	10	) inactive	e	0.0		0.0	80	0.0
Receiver 14 S to G	75	-	0.0	2	73.8	99	73.8	10	D Snd Lvl	~I	65.7		8.1	œ	0.1
Receiver 15 S to G	76	Ļ	0.0	2	70.6	99	70.6	10	D Snd Lvl	N	64.2		6.4	00	-1.6

15 August 200

Receiver 16 S to G	11	1 0.0	69.2	66	69.2	10	Snd Lvl	63.2	6.0	80	-2.0
Receiver 17 S to G	78	2 0.0	70.2	66	70.2	10	Snd Lvl	64.0	6.2	8	-1.8
Receiver 18 S to G	79	1 0.0	68.6	66	68.6	10	Snd Lvl	63.1	5.5	80	-2.5
Receiver 19 S to G	80	1 0.0	69.69	66	69.6	10	Snd Lvl	64.0	5.6	80	-2.4
Receiver 20 S to G	81	1 0.0	67.9	66	67.9	10	Snd Lvl	63.0	4.9	80	-3.1
Receiver 21 S to G	82	1 0.0	0.0	66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 22 S to G	83	1 0.0	0.0	66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 27 G to W	89	2 0.0	72.5	66	72.5	10	Snd Lvl	64.2	8.3	80	0.3
Receiver 28 G to W	06	4 0.0	0.0	66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 29 G to W	92	2 0.0	65.6	66	65.6	10		62.6	3.0	80	-5.0
Receiver 30 G to W	93	2 0.0	6.99	66	6.99	10	Snd Lvl	63.2	3.7	80	4.3
Receiver 31 G to W	94	1 0.0	66.7	66	66.7	10	Snd Lvl	63.3	3.4	80	4.6
Receiver 32 G to W	96	1 0.0	66.4	66	66.4	10	Snd Lvl	62.9	3.5	80	4.5
Receiver 33 G to W	26	1 0.0	66.6	66	66.6	10	Snd Lvl	62.8	3.8	80	4.2
Receiver 34 G to W	98	2 0.0	6.99	66	6.99	10	Snd Lvl	62.9	4.0	80	4.0
Receiver 35 G to W	66	2 0.0	67.4	66	67.4	10	Snd Lvl	62.9	4.5	60	-3.5
Receiver 36 G to W	100	2 0.0	67.6	99	67.6	10	Snd Lvl	62.9	4.7	80	-3.3
Receiver 37 G to W	101	2 0.0	67.8	66	67.8	10	Snd Lvl	62.9	4.9	80	-3.1
Receiver 38 G to W	102	1 0.0	68.0	99	68.0	10	Snd Lvl	62.8	5.2	80	-2.8
Receiver 39 G to W	103	1 0.0	68.2	66	68.2	10	Snd Lvl	62.8	5.4	8	-2.6
Receiver 40 G to W	104	2 0.0	68.6	99	68.6	10	Snd Lvl	62.8	5.8	80	-2.2
Receiver 41 G to W	105	1 0.0	68.5	99	68.5	10	Snd Lvl	62.7	5.8	80	-2.2
Receiver 42 G to W	106	2 0.0	68.8	99	68.8	10	Snd Lvl	62.7	6.1	80	-1.9
Receiver 43 G to W	107	1 0.0	69.0	99	69.0	10	Snd Lvl	62.7	6.3	80	-1.7
Receiver 44 G to W	108	1 0.0	68.9	66	68.9	10	Snd Lvl	62.8	6.1	80	-1.9
Receiver 45 G to W	109	2 0.0	69.1	99	69.1	10	Snd Lvl	62.8	6.3	00	-1.7
Receiver 46 G to W	110	2 0.0	69.4	99	69.4	10	Snd Lvl	62.7	6.7	80	-1.3
Receiver 47 G to W	111	1 0.0	70.6	99	70.6	10	Snd Lvl	63.4	7.2	80	-0.8
Receiver 48 G to W	112	2 0.0	68.7	99	68.7	10	Snd Lvl	62.7	6.0	80	-2.0
Receiver 49 G to W	113	2 0.0	69.7	66	69.7	10	Snd Lvl	63.1	6.6	80	-1.4
Receiver 50 G to W	114	2 0.0	69.0	66	69.0	10	Snd Lvl	62.6	6.4	80	-1.6
Receiver 51 G to W	115	1 0.0	68.9	99	68.9	10	Snd Lvl	62.6	6.3	80	-1.7
Receiver 52 W to L	116	10 0.0	71.0	66	71.0	10	Snd Lvl	66.7	4.3	80	-3.7
Receiver 54 W to L	118	1 0.0	69.8	99	69.8	10	Snd Lvl	68.0	1.8	80	-6.2
Receiver 55 W to L	119	1 0.0	67.7	66	67.7	10	Snd Lvl	66.7	1.0	00	-7.0
Receiver 58 W to L	122	2 0.0	70.2	99	70.2	10	Snd Lvl	69.2	1.0	œ	-7.0
Receiver 59 W to L	123	1 0.0	68.2	99	68.2	10	Snd Lvl	67.8	0.4	80	-7.6
Receiver 60 W to L	124	1 0.0	66.3	99	66.3	10	Snd Lvl	65.2	1.1	80	-6.9
Receiver 63 W to L	128	1 0.0	72.7	99	72.7	10	Snd Lvl	72.0	0.7	80	-7.3
Receiver 64 W to L	130	1 0.0	71.0	99	71.0	10	Snd Lvl	70.7	0.3	80	T.T-
Receiver 73 D to J	140	6 0 0	72.8	99 99	728	10	Snd I vl	7 0 7	01	0	70

Receiver 75 D to J			12.31	3	6.71	2	Sha LVI	0.21	0.1	0	P. 1-
	150	2 0.0	0.0	99	0.0	10	inactive	0.0	0.0	00	0.0
Receiver 76 D to J	151	1 0.0	0.0 0.0	66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 77 D to J	152	1 0.0	0.0	66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 78 D to J	153	10 0.0	68.4	99	68.4	10	Snd Lvl	68.1	0.3	80	-7.7
Receiver 79 D to J	154	1 0.0	68.7	66	68.7	10	Snd Lvl	68.3	0.4	80	-7.6
Receiver 80 D to J	155	3 0.0	69.1	99	69.1	10	Snd Lvl	68.4	0.7	80	-7.3
Receiver 81 D to J	156	2 0.0	0 69.2	66	69.2	10	Snd Lvl	68.3	0.9	80	-7.1
Receiver 82 D to J	157	2 0.0	69.3	99	69.3	10	Snd Lvl	68.1	1.2	80	-6.8
Receiver 83 D to J	158	1 0.0		66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 84 D to J	159	1 0.0	0.0	66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 85 D to J	160	1 0.0	0.0	66	0.0	10	inactive	0.0	0.0	80	0.0
Receiver 86 D to J	161	1 0.0	68.0	66	68.0	10	Snd Lvl	66.5	1.5	80	-6.5
Receiver 87 D to J	162	1 0.0	67.1	66	67.1	10	Snd Lvl	65.7	1.4	80	-6.6
Receiver 88 D to J	163	1 0.0	66.3	99	66.3	10	Snd Lvl	65.0	1.3	80	-6.7
Receiver 89 D to J	164	1 0.0	68.3	66	68.3	10	Snd Lvl	66.4	1.9	80	-6.1
Receiver 90 D to J	165	1 0.0	6.99	99	6.99	10	Snd Lvl	65.2	1.7	80	-6.3
Receiver 91 D to J	166	1 0.0	65.5	66	65.5	10	I	64.0	1.5	80	-6.5
Receiver 92 D to J	167	1 0.0	65.2	66	65.2	10		63.4	1.8	8	-6.2
Receiver 93 D to J	168	4 0.0	64.3	99	64.3	10	1	62.4	1.9	80	-6.1
Receiver 94 D to J	169	1 0.0	71.0	66	71.0	10	Snd Lvl	6.99	4.1	80	-3.9
Receiver 95 D to J	170	1 0.0	71.1	99	71.1	10	Snd Lvl	66.8	4.3	8	-3.7
Receiver 96 D to J	171	1 0.0	71.8	66	71.8	10	Snd Lvl	67.3	4.5	8	-3.5
Receiver 97 D to J	172	1 0.0	72.0	99	72.0	10	Snd Lvl	67.4	4.6	80	-3.4
Receiver 98 D to J	173	1 0.0	0.99 00	66	66.0	10	Snd Lvl	63.7	2.3	80	-5.7
Receiver 99 D to J	174	1 0.0	0.99 00.0	99	66.0	10	Snd Lvl	63.6	2.4	80	-5.6
Receiver 100 D to J	175	1 0.0	65.9	66	65.9	10		63.5	2.4	80	-5.6
Receiver 101 D to J	176	1 0.0	66.2	66	66.2	10	Snd Lvl	63.5	2.7	80	-5.3
Receiver 102 D to J	177	4 0.0	64.8	66	64.8	10	1	62.4	2.4	80	-5.6
Receiver 103 D to J	178	1 0.0	0 65.5	66	65.5	10	1	63.1	2.4	80	-5.6
Receiver 104 D to J	179	1 0.0	0 66.3	66	66.3	10	Snd Lvl	63.8	2.5	80	-5.5
Receiver 105 D to J	180	1 0.0	0 67.0	66	67.0	10	Snd Lvl	64.4	2.6	80	-5.4
Receiver 106 D to J	181	1 0.0	68.0	99	68.0	10	Snd Lvl	65.3	2.7	80	-5.3
Receiver 107 D to J	182	1 0.0	69.3	99	69.3	10	Snd Lvl	66.0	3.3	80	-4.7
Receiver 109 D to J	184	1 0.0	7.1.7	66	71.7	10	Snd Lvi	68.7	3.0	00	-5.0
Receiver 110 D to J	185	1 0.0	0 69.5	66	69.5	10	Snd Lvl	67.2	2.3	80	-5.7
Receiver 111 D to J	186	1 0.0	68.0	99	68.0	10	Snd Lvl	66.0	2.0	80	-6.0
Receiver 112 D to J	187	1 0.0	0 66.7	99	66.7	10	Snd Lvl	64.7	2.0	80	-6.0
Receiver 113 D to J	188	1 0.0	0 65.8	66	65.8	10	1	63.7	2.1	80	-5.9
Receiver 122 D to J	197	3 0.0	0 71.7	99	71.7	10	Snd Lvl	71.0	0.7	80	-7.3
Receiver 123 D to J	198	2 0.0	71.8	99	71.8	10	Snd Lvl	70.7	1.1	80	-6.9

200         1         0.0         67.2         10         67.3         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         67.4         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10	Receiver 124 D to J	199	2	0.0	71.9	99	71.9	10	Snd Lvi	70.5	14	00	-6.6
201         2         0.0         67.3         66         67.3         10         Sould         66.0         11.4         87           202         1         0.0         67.4         0.6         0.14         66.0         11.4         86           203         1         0.0         67.5         66         67.5         10         Sould         66.0         11.4         86           204         1         0.0         67.5         66         77.5         10         Sould         66.0         11.4         86           206         1         0.0         0.0         66         0.0         10         mathem         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Receiver 125 D to J	200	-			99	67.2	10	Snd Lvl	65.8	1.4	80	
	Receiver 126 D to J	201	2		67.3	66	67.3	10		65.9	1.4	8	
	Receiver 127 D to J	202	÷		67.4	99	67.4	10		66.0	1.4	80	-6.6
204         1         0.0         67.5         66         67.5         10         66.0         15         8           206         1         0.0         0.0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Receiver 128 D to J	203	-		67.5	99	67.5	10	Snd Lvl	66.0	1.5	80	-6.5
		204	-		67.5	66	67.5	10	Snd Lvl	66.0	1.5	80	-6.5
	Receiver 130 D to J	205	-	0.0	0.0	99	0.0	10	inactive	0.0		80	0.0
	Receiver 131 D to J	206	-	0.0	0.0	99	0.0	10	inactive	0.0		80	0.0
	Receiver 132 D to J	207	-	0.0	0.0	99	0.0	10	inactive	0.0		80	0.0
	Receiver 133 D to J	208	-	0.0	0.0	99	0.0	10	inactive	0.0		80	0.0
	Receiver 134 D to J	209	-	0.0	0.0	99	0.0	10	inactive	0.0		80	0.0
	Receiver 135 D to J	210	-	0.0	0.0	99	0.0	10	inactive	0.0		80	0.0
212         1         0.0 $751$ 66 $761$ 10 $761$ 66 $761$ 10 $801$ $802$ $693$ $317$ $892$ $317$ $892$ $216$ 1         0.0 $713$ $66$ $713$ $10$ $8014$ $692$ $317$ $8$ $216$ 1         0.0 $765$ $66$ $765$ $10$ $8014$ $693$ $774$ $43$ $2$ $216$ 1         0.0 $765$ $66$ $763$ $10$ $8014$ $693$ $73$ $8$ $210$ 1         0.0 $742$ $66$ $763$ $10$ $8014$ $693$ $73$ $8$ $210$ 1         0.0 $742$ $66$ $773$ $10$ $8014$ $693$ $73$ $8$ $210$ $8014$ $10$ $8014$ $693$ $73$ $8$ $8$ $2210$ $10$ $712$ $10$ <td>Receiver 136 D to J</td> <td>211</td> <td>-</td> <td>0.0</td> <td>0.0</td> <td>66</td> <td>0.0</td> <td>10</td> <td>inactive</td> <td>0.0</td> <td></td> <td>80</td> <td>0.0</td>	Receiver 136 D to J	211	-	0.0	0.0	66	0.0	10	inactive	0.0		80	0.0
213         1         0.0         69.3         66         63.3         10         SndLyl         65.6         3.7         8           214         1         0.0         71.3         66         71.3         10         SndLyl         68.2         3.1         8           216         1         0.0         71.3         66         71.3         10         SndLyl         69.0         75         3         8           216         1         0.0         73.7         66         75.5         10         SndLyl         69.0         75         8           217         1         0.0         78.3         66         76.3         10         SndLyl         69.0         73         8           220         1         0.0         78.3         66         76.3         10         SndLyl         69.0         73         8           222         1         0.0         73.3         66         77.3         10         SndLyl         69.0         73         8         8         2         2         2         2         2         2         2         2         2         2         2         2         2         2	Receiver 137 J to C	212	F	0.0	76.1	66	76.1	10	Snd Lvl	69.2		80	-1.1
214         1         0.0         71.3         66         71.3         10         SmdLyl         68.2         31.4         8           215         1         0.0         71.7         66         71.7         10         SmdLyl         69.3         61.4         43.3         8           217         1         0.0         71.7         66         76.3         10         SmdLyl         69.9         68         8         8         8         8           219         1         0.0         76.3         66         76.3         10         SmdLyl         69.9         8.6         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	Receiver 138 J to C	213	t.	0.0	69.3	66	69.3	10	Snd Lvl	65.6	3.7	80	4.3
215         1         0.0 $71.7$ 66 $71.7$ 10         SndLM         69.0 $7.5$ 8 $216$ 1         0.0 $78.7$ 66 $76.5$ 10         SndLM         69.0 $7.5$ 8 $217$ 1         0.0 $78.7$ 66 $76.5$ 10         SndLM         69.0 $7.5$ 8 $219$ 1         0.0 $78.7$ 66 $74.2$ 10         SndLM         69.0 $7.3$ 8 $220$ 1         0.0 $78.7$ 66 $77.3$ 10         SndLM         69.0 $7.3$ 8 $2221$ 1         0.0 $77.3$ 66 $77.4$ 10         SndLM         69.0 $7.3$ 8 $2221$ 1         0.0 $77.3$ 66 $77.4$ 10         SndLM         69.0 $7.3$ 8 $2231$ 1         0.0 $77.4$ 10         SndLM         69.0 $7.4$ 10 $224$ <	Receiver 139 J to C	214	Ļ	0.0	71.3	99	71.3	10	Snd Lvl	68.2	3.1	80	4.9
216         1         0.0         76.5         66         76.5         10         Snd Lvi         69.0         7.5         8           217         1         0.0         78.7         66         78.7         10         Snd Lvi         69.0         7.3         8           218         1         0.0         76.3         66         76.3         10         Snd Lvi         69.0         7.3         8           218         2         0.0         78.1         66         78.1         10         Snd Lvi         69.0         7.3         8           220         1         0.0         78.1         66         78.1         10         Snd Lvi         69.0         8.5         8         8           223         1         0.0         75.4         66         77.3         10         Snd Lvi         69.1         7.5         8           2235         1         0.0         75.4         66         77.3         10         Snd Lvi         69.1         7.5         8           2235         1         0.0         75.4         66         77.3         10         Snd Lvi         67.4         21         2         2	Receiver 140 J to C	215	-	0.0	7.17	66	7.1.7	10	Snd Lvl	67.4	4.3	80	-3.7
217         1         0.0         78.7         66         78.7         10         Sind Lvi         69.9         8.8         8         8           218         2         0.0         76.3         66         76.3         10         Sind Lvi         66.9         7.3         8           219         1         0.0         78.3         66         76.3         10         Sind Lvi         66.9         7.3         8           220         1         0.0         78.1         66         78.1         10         Sind Lvi         66.9         7.3         8           221         2         0.0         77.3         66         77.3         10         Sind Lvi         69.9         7.3         8           2223         1         0.0         67.7         66         77.3         10         Sind Lvi         69.1         67.3         6         77.3         6         77.3         6         77.3         6         77.3         6         77.3         6         77.3         6         77.3         6         77.3         6         77.3         7         7         8         7         7         7         7         7         7	Receiver 141 J to C	216	-	0.0	76.5	66	76.5	10	Snd Lvl	69.0	7.5	80	-0.5
	Receiver 142 J to C	217	-	0.0	78.7	99	78.7	10	Snd Lvl	63.9		80	0.8
219         1         0.0 $74.2$ 66 $74.2$ 10         Sind Lvi         66.9 $7.3$ 8           220         1         0.0 $78.1$ 66 $78.1$ 10         Sind Lvi         69.6         85.6         8           221         2         0.0 $78.1$ 66 $77.3$ 10         Sind Lvi         69.6         85.6         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	Receiver 143 J to C	218	2	0.0	76.3	66	76.3	10	Snd Lvl	0.69	7.3	80	-0.7
220         1         0.0         78.2         66         78.2         10         Sind Lyl         69.6         85         8         8         8         8           221         2         0.0         78.1         66         78.1         10         Sind Lyl         69.6         85         8         8         8         8         8           222         1         0.0         77.3         66         77.4         10         Sind Lyl         69.1         7.7         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	Receiver 144 J to C	219	-	0.0	74.2	66	74.2	10	Snd Lvl	6.99	7.3	80	-0.7
221 $2$ $0.0$ $78.1$ $66$ $78.1$ $10$ $80.6$ $85.$ $85$ $85$ $85$ $85$ $81$ $222$ $1$ $0.0$ $77.3$ $66$ $77.3$ $10$ $80.1$ $69.2$ $81.7$ $8$ $224$ $2$ $0.0$ $75.4$ $66$ $77.7$ $10$ $80.1$ $75$ $8$ $226$ $1$ $0.0$ $67.7$ $66$ $67.7$ $10$ $80.1$ $75$ $8$ $226$ $1$ $0.0$ $67.7$ $66$ $67.7$ $10$ $80.1$ $65.7$ $81.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ $82.7$ <td< td=""><td>Receiver 145 J to C</td><td>220</td><td>-</td><td>0.0</td><td>78.2</td><td>66</td><td>78.2</td><td>10</td><td>Snd Lvl</td><td>69.69</td><td></td><td>80</td><td>0.6</td></td<>	Receiver 145 J to C	220	-	0.0	78.2	66	78.2	10	Snd Lvl	69.69		80	0.6
222         1         0.0 $77.3$ 66 $77.3$ 10         SindLyi         69.1 $75$ 8           223         1         0.0 $75.4$ 66 $75.4$ 10         SindLyi         69.1 $75$ 8           224         2         0.0 $75.4$ 66 $77.4$ 10         SindLyi         69.1 $75$ 8           225         1         0.0 $67.7$ 66 $67.7$ 10         SindLyi         65.6         44.2         8           226         1         0.0 $67.3$ 66 $67.7$ 10         SindLyi         65.6         44.2         8           229         1         0.0 $67.3$ 66 $67.7$ 10         SindLyi         65.6         44         8           230         1         0.0 $67.7$ 66 $67.7$ 10         SindLyi $65.6$ 44         8           231         1         0.0 $67.7$ 66 $67.7$ 10         SindLyi $67.3$ 44         8 <td>Receiver 146 J to C</td> <td>221</td> <td>2</td> <td>0.0</td> <td>78.1</td> <td>99</td> <td>78.1</td> <td>10</td> <td>Snd Lvl</td> <td>69.6</td> <td></td> <td>80</td> <td>0.5</td>	Receiver 146 J to C	221	2	0.0	78.1	99	78.1	10	Snd Lvl	69.6		80	0.5
223         1         0.0         76.6         66         76.6         10         Sindly         69.1         7.5         8           224         2         0.0         75.4         66         75.4         10         Sindly         69.1         6.3         8           225         1         0.0         67.7         66         67.7         10         Sindly         66.1         6.3         3.4         8           225         1         0.0         67.3         66         67.3         10         Sindly         65.6         4.2         8           227         1         0.0         67.3         66         67.3         10         Sindly         65.6         4.2         8           229         1         0.0         61.7         66         64.3         10         Sindly         65.5         65         65         8         8           230         1         0.0         61.7         66         64.3         10         Sindly         65.5         65.5         8         8           231         1         0.0         61.7         66         64.3         10         Sindly         66.5         65.	Receiver 147 J to C	222	-		77.3	99	77.3	10	Snd Lvl	69.2	8.1	80	0.1
224         2         0.0         75.4         66         75.4         10         SindLyi         69.1         6.3         8           225         1         0.0         67.7         66         67.7         10         SindLyi         66.3         3.4         8           226         1         0.0         67.7         66         67.3         10         SindLyi         65.6         4.2         8           227         1         0.0         67.3         66         67.3         10         SindLyi         65.6         4.2         8           228         1         0.0         67.3         66         67.3         10         SindLyi         65.6         4.2         8           229         1         0.0         64.8         66         64.8         10         SindLyi         66.2         67.3         14         8           231         1         0.0         64.3         66         64.3         14         6         8           233         1         0.0         66.7         66         66.7         10         66.7         4.4         8           234         1         0.0         66.7 <td>Receiver 148 J to C</td> <td>223</td> <td>-</td> <td></td> <td>76.6</td> <td>99</td> <td>76.6</td> <td>10</td> <td>Snd Lvl</td> <td>69.1</td> <td>7.5</td> <td>80</td> <td>-0.5</td>	Receiver 148 J to C	223	-		76.6	99	76.6	10	Snd Lvl	69.1	7.5	80	-0.5
225         1         0.0         67.7         66         67.7         10         SmdLvl         64.3         3.4         8           226         1         0.0         69.8         66         69.8         10         SmdLvl         65.6         4.2         8           227         1         0.0         69.8         66         69.8         10         SmdLvl         65.6         4.2         8           228         1         0.0         64.8         66         64.8         10         SmdLvl         65.6         4.2         8           229         1         0.0         64.8         66         64.8         10         SmdLvl         66.2         5.5         8           230         1         0.0         64.8         66         64.8         10         SmdLvl         66.2         5.5         8           231         1         0.0         68.9         66         67.7         10         SmdLvl         66.2         5.5         8         8           233         1         0.0         66.7         66         67.7         10         SmdLvl         67.9         7.4         8           233<	Receiver 149 J to C	224	2		75.4	99	75.4	10	Snd Lvl	69.1	6.3	8	-1.7
226         1         0.0         69.8         66         69.8         10         SindLyl         65.6         4.2         8           227         1         0.0         67.3         66         67.3         10         SindLyl         65.6         4.2         8           228         1         0.0         67.3         66         64.8         10          61.4         3.4         8           229         1         0.0         64.8         66         64.8         10         SindLyl         66.2         3.8         8           230         1         0.0         64.8         66         69.8         10         SindLyl         66.2         5.5         8           231         1         0.0         68.9         66         68.9         10         SindLyl         66.2         4.4         8           233         1         0.0         66.7         66         66.7         10         SindLyl         66.3         64.6         66.7         66.7         66         66.7         66.7         66         66.7         66.7         66.7         66.7         66.7         66.7         66.7         66         66.7<	Receiver 150 J to C	225	-	0.0	67.7	99	67.7	10	Snd Lvl	64.3	3.4	80	4.6
227         1         0.0 $67.3$ $66$ $67.3$ $10$ $mdl$ $63.5$ $3.8$ $8$ $228$ 1         0.0 $64.8$ $66$ $64.8$ $71.7$ $66$ $64.8$ $71.7$ $61.4$ $3.4$ $8$ $229$ 1         0.0 $71.7$ $66$ $64.8$ $71.7$ $66$ $64.8$ $71.7$ $61.7$ $61.7$ $3.4$ $8$ $230$ 1         0.0 $63.8$ $66$ $68.9$ $10$ $8ndl$ $66.7$ $68.9$ $66.7$ $68.3$ $4.6$ $8.8$ $8$ $231$ 1         0.0 $68.7$ $66$ $68.7$ $10$ $8ndl$ $66.3$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.3$ $66.3$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$		226	-	0.0	69.8	99	69.8	10	Snd Lvl	65.6		80	-3.8
228         1         0.0 $64.8$ $66$ $64.8$ 10 $$ $61.4$ $3.4$ $8$ 229         1         0.0 $71.7$ $66$ $71.7$ $10$ $51.0$ $4.8$ $8$ 230         1         0.0 $69.8$ $66.$ $69.8$ $10$ $51.0$ $4.8$ $8$ 231         1         0.0 $68.9$ $66.$ $68.9$ $10$ $5ndLn$ $66.3$ $4.6$ $8$ 231         1         0.0 $67.7$ $66$ $68.9$ $10$ $5ndLn$ $64.3$ $4.4$ $8$ 233         1         0.0 $66.7$ $66$ $66.0$ $10$ $5ndLn$ $67.3$ $4.4$ $8$ 234         1 $0.0$ $75.5$ $66$ $75.5$ $10$ $5ndLn$ $67.3$ $76$ $8$ 235         1 $0.0$ $75.5$ $66$ $75.5$ $10$ $51.0$ $67.3$ $74.4$	Receiver 152 J to C	227	-		67.3	66	67.3	10	Snd Lvl	63.5		80	4.2
229         1         0.0         71.7         66         71.7         10         Snd Lyl         66.2         5.5         8           230         1         0.0         69.8         66         69.8         10         Snd Lyl         65.0         4.8         8           231         1         0.0         69.8         66         69.8         10         Snd Lyl         65.0         4.8         8           231         1         0.0         67.7         66         68.9         10         Snd Lyl         65.0         4.8         8           233         1         0.0         67.7         66         66.7         10         Snd Lyl         63.3         4.4         8           233         1         0.0         66.7         66         66.7         10         Snd Lyl         63.3         4.4         8           234         1         0.0         66.7         66         66.7         10         Snd Lyl         67.9         7.6         8           235         1         0.0         71.0         66         75.5         10         86.5         7.6         8 <trtr>         236         1         <t< td=""><td>Receiver 153 J to C</td><td>228</td><td>-</td><td></td><td>64.8</td><td>99</td><td>64.8</td><td>10</td><td>I</td><td>61.4</td><td></td><td>80</td><td>4.6</td></t<></trtr>	Receiver 153 J to C	228	-		64.8	99	64.8	10	I	61.4		80	4.6
230         1         0.0         69.8         66         69.8         10         SndLyl         65.0         4.8         8           231         1         0.0         68.9         66         68.9         10         SndLyl         65.0         4.8         8           231         1         0.0         68.9         66         68.9         10         SndLyl         65.3         4.6         8           232         1         0.0         66.7         66         66.7         10         SndLyl         63.3         4.4         8           233         1         0.0         66.7         66         66.0         10         SndLyl         67.3         4.4         8           234         1         0.0         66.0         66.0         10         SndLyl         67.3         4.4         8           235         1         0.0         75.5         66         75.5         10         SndLyl         67.9         7.6         8           236         1         0.0         71.0         66         72.4         10         SndLyl         65.6         5.4         8           238         1         0.0	Receiver 154 J to C	229	-		71.7	99	71.7	10	Snd Lvl	66.2		8	-2.5
231       1       0.0       68.9       66       68.9       10       SndLvl       64.3       4.6       8         232       1       0.0       67.7       66       67.7       10       SndLvl       63.3       4.6       8         233       1       0.0       66.7       66       66.7       10       SndLvl       63.3       4.4       8         233       1       0.0       66.0       66       66.0       10       SndLvl       62.3       4.4       8         234       1       0.0       75.5       66       75.5       10       SndLvl       67.9       7.6       8         235       1       0.0       72.4       66       75.5       10       SndLvl       67.9       7.6       8         236       1       0.0       71.0       66       75.4       10       66.5       5.9       8         237       1       0.0       61.6       66       71.0       10       66.5       5.9       8         238       1       0.0       69.5       66       69.5       10       61.6       64.6       64.6       65.4       8 <tr< td=""><td>Receiver 155 J to C</td><td>230</td><td>-</td><td></td><td>69.8</td><td>99</td><td>69.8</td><td>10</td><td>Snd Lvl</td><td>65.0</td><td></td><td>80</td><td>-3.2</td></tr<>	Receiver 155 J to C	230	-		69.8	99	69.8	10	Snd Lvl	65.0		80	-3.2
232       1       0.0       67.7       66       67.7       10       Snd Lvl       63.3       4.4       8         233       1       0.0       66.7       66       66.7       10       Snd Lvl       63.3       4.4       8         234       1       0.0       66.0       66       66.0       10       Snd Lvl       61.7       4.3       8         234       1       0.0       75.5       66       75.5       10       Snd Lvl       67.9       7.6       8         235       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         236       1       0.0       71.0       66       71.0       10       86.5       5.9       8         237       1       0.0       71.0       66       71.0       10       86.5       5.4       8         238       1       0.0       69.5       66       69.5       10       80.6       64.6       4.9       8         237       1       0.0       69.5       66       69.5       10       80.6       64.6       64.9       8         238 </td <td>Receiver 156 J to C</td> <td>231</td> <td>-</td> <td></td> <td>68.9</td> <td>99</td> <td>68.9</td> <td>10</td> <td>Snd Lvl</td> <td>64.3</td> <td></td> <td>80</td> <td>-3.4</td>	Receiver 156 J to C	231	-		68.9	99	68.9	10	Snd Lvl	64.3		80	-3.4
233       1       0.0       66.7       66       66.7       10       Snd Lvl       62.3       4.4       8         234       1       0.0       66.0       66       66.0       10       Snd Lvl       61.7       4.3       8         235       1       0.0       75.5       66       75.5       10       Snd Lvl       67.9       7.6       8         236       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         237       1       0.0       71.0       66       71.0       10       Snd Lvl       66.5       5.4       8         238       1       0.0       69.5       66       69.5       10       Snd Lvl       65.6       5.4       8         239       1       0.0       68.5       66       68.5       10       Snd Lvl       63.8       4.7       8	Receiver 157 J to C	232	t.		67.7	99	67.7	10	Snd Lvl	63.3	4.4	8	-3.6
234       1       0.0       66.0       66       66.0       10       Snd Lvl       61.7       4.3       8         235       1       0.0       75.5       66       75.5       10       Snd Lvl       67.9       7.6       8         236       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         237       1       0.0       71.0       66       71.0       10       Snd Lvl       66.5       5.4       8         238       1       0.0       69.5       66       69.5       10       Snd Lvl       65.6       5.4       8         238       1       0.0       68.5       66       68.5       10       Snd Lvl       63.6       8         239       1       0.0       68.5       66       68.5       10       Snd Lvl       63.8       4.7       8		233	t.		66.7	99	66.7	10	Snd Lvl	62.3	1.104	8	-3.6
235       1       0.0       75.5       66       75.5       10       Snd Lvl       67.9       7.6       8         236       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         237       1       0.0       71.0       66       71.0       10       Snd Lvl       66.5       5.9       8         238       1       0.0       69.5       66       69.5       10       Snd Lvl       65.6       5.4       8         239       1       0.0       68.5       66       68.5       10       Snd Lvl       63.8       4.7       8	Receiver 159 J to C	234	F		66.0	99	66.0	10	Snd Lvl	61.7		80	-3.7
236     1     0.0     72.4     66     72.4     10     51     65.5     5.9     8       237     1     0.0     71.0     66     71.0     10     5nd Lvl     65.6     5.4     8       238     1     0.0     69.5     66     69.5     10     5nd Lvl     64.6     4.9     8       239     1     0.0     68.5     66     68.5     10     5nd Lvl     63.8     4.7     8	Receiver 160 J to C	235	-		75.5	99	75.5	10	Snd Lvl	67.9	7.6	00	-0.4
237     1     0.0     71.0     66     71.0     10     56.6     5.4     8       238     1     0.0     69.5     66     69.5     10     54.6     8       239     1     0.0     68.5     66     68.5     10     53.8     4.9     8	Receiver 161 J to C	236	-		72.4	99	72.4	10	Snd Lvl	66.5	100	80	-2.1
238 1 0.0 69.5 66 69.5 10 Snd Lvl 64.6 4.9 8 239 1 0.0 68.5 66 68.5 10 Snd Lvl 63.8 4.7 8	Receiver 162 J to C	237	-		71.0	99	71.0	10	Snd Lvl	65.6	1.1	80	-2.6
239 1 0.0 68.5 66 68.5 10 Snd Lvl 63.8 4.7 8	Receiver 163 J to C	238	F		69.5	99	69.5	10	Snd Lvl	64.6		80	-3.1
	Receiver 164 J to C	239	-		68.5	99	68.5	10	Snd Lvl	63.8	4.7	80	-3.3

240         1         0.0         67.4         66         67.4         10         50.4         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         16         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5         84.5	RESULTS: SOUND LEVELS						3600						
	Receiver 165 J to C	240	-	0.0	67.4	99	67.4	10	Snd Lvl	62.8	4.6	80	-3.4
242         1         0.0         66.0         66         61.0         51.4         8           244         1         0.0         71.9         66         71.9         10         51.0         52         8           244         1         0.0         71.9         66         71.9         10         501         53         5         2         8           246         1         0.0         71.8         66         71.9         10         501         53         55         5         5         5         5         5         5         5         5         5         6         65.1         10         51.1         5         8         5         5         5         5         6         65.1         10         5         6         5         5         5         5         6         6         6         7         10         5         6         6         6         7         10         5         10         7         7         7         8         2         10         5         10         5         10         5         10         5         10         5         10         5         10         5<	Receiver 166 J to C	241	-	0.0	66.7	99	66.7	10	Snd Lvl	62.2	4.5	80	-3.5
243       1       0.0       719       66       719       10       801       631       53       8         244       1       0.0       702       66       702       10       801       65       52       8         245       1       0.0       681       66       702       10       801       65       52       8         246       1       0.0       681       66       681       10       801       65       52       8         246       1       0.0       661       66       681       10       801       65       6       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66       66	Receiver 167 J to C	242	÷-	0.0	66.0	99	66.0	10	Snd Lvl	61.6	4.4	80	-3.6
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Receiver 168 J to C	243	-	0.0	71.9	66	71.9	10	Snd Lvl	66.1	5.8	80	-2.2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Receiver 169 J to C	244	-	0.0	70.2	99	70.2	10	Snd Lvl	65.0	5.2	80	-2.8
246       1       0.0       71.8       66       71.8       10       50.1       5.8       8         247       1       0.0       68.1       66       68.1       10       50.1       65.3       4.8       8         248       1       0.0       68.1       66       68.1       10       50.1       4.8       8         249       1       0.0       65.5       66       65.5       10       50.1       4.8       8         250       1       0.0       65.6       66       65.1       10       50.1       4.5       8         251       1       0.0       69.1       66       69.3       10       50.1       4.5       8         252       1       0.0       69.1       66       69.3       10       50.1       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4 <td< td=""><td>Receiver 170 J to C</td><td>245</td><td>-</td><td>0.0</td><td>66.8</td><td>66</td><td>66.8</td><td>10</td><td>Snd Lvl</td><td>62.3</td><td>4.5</td><td>60</td><td>-3.5</td></td<>	Receiver 170 J to C	245	-	0.0	66.8	66	66.8	10	Snd Lvl	62.3	4.5	60	-3.5
247       1       0.0       68.1       66       68.1       10       SndLyl       63.3       48       8         248       1       0.0       67.1       66       67.1       10       SndLyl       62.6       45       8         249       1       0.0       65.5       66       65.5       10       SndLyl       62.6       45       8         250       1       0.0       55.5       66       65.5       10       SndLyl       67.5       17       17       8         251       1       0.0       75.2       66       55.5       10       SndLyl       67.5       17       17       17       17       17       17       17       17       16       17       17       10       17       10       11       10       11       10       11       10       11       10       11       11       11       11       11       11       11       10       11       10       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       11       <	Receiver 171 J to C	246	-	0.0	71.8	99	71.8	10	Snd Lvl	66.0	5.8	80	-2.2
248       1       0.0       67.1       66       67.1       10       SndLvi       62.6       4.5       8         249       1       0.0       66.5       66       66.5       10       SndLvi       62.6       4.5       8         250       1       0.0       65.6       66       65.5       10       SndLvi       62.0       4.5       8         251       1       0.0       75.2       66       75.2       10       SndLvi       66.1       4.5       8         253       1       0.0       61.1       10       SndLvi       66.1       4.5       8         255       1       0.0       61.1       66       68.1       10       SndLvi       66.1       4.5       8         255       1       0.0       67.1       66       68.3       10       SndLvi       65.1       8       8         256       1       0.0       65.1       66       66.3       10       SndLvi       65.1       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8	Receiver 172 J to C	247	-	0.0	68.1	66	68.1	10	Snd Lvl	63.3	4.8	80	-3.2
249       1       0.0       66.5       66       66.5       10       50       4.5       8         250       1       0.0       65.6       66       65.6       10       51.4       4.2       8         251       1       0.0       75.2       66       75.2       10       50.14       67.5       7.7       8         253       1       0.0       70.5       66       70.5       10       50.14       66.1       4.4       8         253       1       0.0       69.3       66       70.5       10       50.14       66.1       4.5       8         254       1       0.0       69.1       66.1       10       50.14       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3       66.3	Receiver 173 J to C	248	+	0.0	67.1	99	67.1	10	Snd Lvl	62.6	4.5	80	-3.5
250       1       0.0       65.6       66       65.6       10        61.4       4.2       8         251       1       0.0       75.2       66       75.2       10       SndLvi       67.5       7.7       8         252       1       0.0       75.2       66       75.5       10       SndLvi       66.1       4.4       8         253       1       0.0       69.3       66       68.1       10       SndLvi       66.1       4.4       8         255       1       0.0       68.1       66       68.1       10       SndLvi       63.6       8         255       1       0.0       66.1       66       66.1       10       8.3       60       8         255       1       0.0       67.4       66       66.1       10       SndLvi       62.1       4.5       8         255       1       0.0       67.3       66       66.3       10       SndLvi       63.3       4.5       8         255       1       0.0       67.4       10       80.4       65.3       4.5       8         255       1       0.0	Receiver 174 J to C	249	-	0.0	66.5	99	66.5	10	Snd Lvl	62.0	4.5	80	-3.5
	Receiver 175 J to C	250	-	0.0	65.6	99	65.6	10	I	61.4	4.2	8	-3.8
252       1       0.0       70.5       66       70.5       10       8ndLyl       66.1       4.4       8         253       1       0.0       69.3       66       69.3       10       8ndLyl       66.1       4.4       8         254       1       0.0       68.1       66       68.1       10       8ndLyl       66.3       50       8         255       1       0.0       67.0       66       68.1       10       8ndLyl       63.6       4.5       8         256       1       0.0       67.4       66       68.3       10       8ndLyl       62.7       4.5       8         256       1       0.0       67.4       66       68.3       10       8ndLyl       62.7       4.5       8         259       1       0.0       67.4       66       66.3       10       8ndLyl       63.6       3.7       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8	Receiver 176 J to C	251	-	0.0	75.2	66	75.2	10	Snd Lvl	67.5	L.T	80	-0.3
253       1       0.0       69.3       66       69.3       10       SndLvi       64.3       5.0       8         254       1       0.0       68.1       66       68.1       10       SndLvi       63.6       4.5       8         255       1       0.0       67.0       66       68.1       10       SndLvi       63.6       4.5       8         256       1       0.0       66.1       66       66.1       10       SndLvi       63.6       4.5       8         256       1       0.0       66.1       66       66.1       10       SndLvi       63.6       8       8         257       1       0.0       66.1       66.3       10       SndLvi       63.6       8       8         259       1       0.0       67.4       66       66.3       10       SndLvi       63.6       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8       8<	Receiver 177 J to C	252	F	0.0	70.5	99	70.5	10	Snd Lvl	66.1	4.4	80	-3.6
	Receiver 178 J to C	253	۲	0.0	69.3	66	69.3	10	Snd Lvl	64.3	5.0	80	-3.0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 179 J to C	254	+	0.0	68.1	66	68.1	10	Snd Lvl	63.6	4.5	80	-3.5
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 180 J to C	255	-	0.0	67.0	99	67.0	10	Snd Lvl	62.7	4.3	80	-3.7
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 181 J to C	256	-	0.0	66.1	66	66.1	10	Snd Lvi	62.1	4.0	80	4.0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 182 J to C	257	۲	0.0	68.3	66	68.3	10	Snd Lvl	63.8	4.5	8	-3.5
259 1 0.0 66.3 66 66.3 10 Snd Lvl # DUs Noise Reduction Min Avg Max dB dB dB 242 0.0 3.6 8.8 197 0.1 4.3 8.8 11 80 83 88	Receiver 183 J to C	258	٢	0.0	67.4	66	67.4	10	Snd Lvl	63.3	4.1	8	-3.9
# DUs     Noise Reduction       Min     Avg     Max       dB     dB     dB       242     0.0     3.6     8       197     0.1     4.3     8	Receiver 184 J to C	259	-	0.0	66.3	99	66.3	10	Snd Lvl	62.6	3.7	80	4.3
Min         Avg         Max           dB         dB         dB         dB           242         0.0         3.6         8           197         0.1         4.3         8	Dwelling Units	#		1.221	u								
dB dB dB dB 8 242 0.0 3.6 8 197 0.1 4.3 8 11 80 83 8			Min		Ma	×							
242 0.0 3.6 8 197 0.1 4.3 8 11 80 83 8			dB	dB	dB								
197 0.1 4.3 8 11 8.0 8.3 8	All Selected		242	0.0	3.6	8.8							
11 80 83 8	All Impacted		197	0.1	4.3								
	All that meet NR Goal		11	8.0	8.3	8.8							

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INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group

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	PROJECT/CONTRACT: 3600												
RUN:	Interchange B-Alt 2 With Noise Walls	B-Alt 2 V	Vith Nois	e Walls	6								
Roadway	Points												
Name	Name	No.	Segment	t									
			Autos V	Ś	MTrucks	s) s	HTrucks	s o	Buses	U.	Motorcycles V S	sycle	s
			eh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	) ră	km/h
I-75 - NB	point271	299	2109	67	132	2 97	7 422	2 97		1 97		-	97
	point198	300	2109	97	132	2 97	7 422	2 97		1 97		-	97
	point270	301	2109	97	132	2 97	7 422	2 97		1 97		-	97
	point199	302	2109	97	132	2 97	7 422	2 97		1 97		-	97
	point268	303	2482	67	124	4 97	7 496	5 97		1 97		-	97
	point999	304	2482	67	124	4 97	7 496	5 97		1 97		-	97
	point200	305	2482	97	124	4 97	7 496	5 97		1 97		-	97
	point222	306	2482	97	124	4 97	7 496	5 97		1 97		-	97
	point201	307	2482	97	124	4 97	7 496	5 97		1 97		-	97
	point998	946	2482	67	124	4 97	7 496	5 97		1 97			97
	point202	308	2482	67	124	4 97	7 496	3 97		1 97		-	97
	point945	945	2482	67	124	4 97	7 496	5 97		1 97		-	97
	point905	305	2482	67	124	4 97	7 496	3 97		1 97		-	97
	point948	948	2482	67	124	4 97	7 496	3 97	0	1 97		-	97
	point223	311	2482	97	124	4 97	7 496	5 97		1 97		x	97
	point205	312	2482	67	124	4 97	7 496	3 97	0	1 97		-	97
	point206	313	2482	67	124	4 97	7 496	3 97		1 97		-	97
	point928	928	2482	67	124	4 97	7 496	3 97	9	1 97		~	97
	point207	314	2482	97	124	4 97	7 496	3 97		1 97		-	97
	point949	949	2322	97	116	6 97	7 464	t 97	77	1 97			97
	point208	315	2322	97	116	6 97	7 464	t 97	-	1 97		-	97
	point209	316	2322	67	116	5 97	7 464	1 97	-	1 97		-	97

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	point210	317	2322	97	116	97	464	97	<del>.</del>	97	
	point950	950	2322	97	116	97	464	97	-	97	
	point211	318	2322	26	116	97	464	97		97	
	point212	319	2685	97	107	97	537	97	-	97	
	point213	320	2685	97	107	97	537	97	-	97	
	point214	321	2685	97	107	97	537	97	+	97	
	point215	322									
I-75 - SB	point942	942	4595	97	230	97	919	97	-	97	
	point232	338	4486	97	224	97	897	97	-	97	
	point233	339	4486	97	224	97	897	97	-	97	
	175.5	980	4486	97	224	97	897	97	-	97	
	point234	340	4486	97	224	97	897	97	-	97	
	point235	341	4486	97	224	97	897	97	۲-	97	
	point496	342	4486	97	224	97	897	97		97	
	point260	343	4486	97	224	97	897	97	-	97	
	point261	344	4486	97	224	97	897	97	-	97	
	point236	345	4486	97	224	97	897	97	-	97	
	point237	346	4486	97	224	97	897	97	-	97	
	point238	347	4486	97	224	97	897	97	-	97	
	point239	348	4766	97	238	97	953	97	٢	97	
	point262	349	4766	97	238	97	953	97	-	97	
	point263	351	4766	97	238	97	953	97	-	97	
	point947	947	4766	97	238	97	953	97	-	97	
	point264	353	4766	97	238	26	953	97	-	97	
	point944	944	4766	97	238	97	953	97	÷	57	
	point265	355	4766	97	238	26	953	97	-	97	
	point243	356	4526	97	226	97	905	97	-	97	
	point266	357	4526	97	226	97	905	97	-	97	
	point244	358	4526	97	226	97	905	97	-	97	
	point245	359	4526	97	226	26	905	97	-	97	
	point267	360	4526	97	226	97	905	97	-	97	
	point246	361	4526	97	226	97	905	97	4	97	
	point247	362									
S I-75/Clark Off-Ramp	point461	558	424	40	20	40	99	40	۲	UV.	

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	point463	560	424	40	20	40	56	40	-	40	-	40
	point465	562										
S I-75 Service Drive - 1	point466	563	440	40	32	40	184	40	-	40	-	40
	point651	567										
S I-75 Service Drive - 2	point475	575	749	56	ŝ	56	30	56	-	56	-	56
	point476	576	749	56	ŝ	56	30	56		56	~	56
	point1056	1056	749	56	3	56	30	56	-	56	-	56
	point644	577							1			
S I-75 Service Drive - 4	point638	594	749	48	e	48	30	48	~	48	-	48
	point489	595	749	48	e	48	30	48	-	48	-	48
	point490	596	749	48	c	48	30	48	-	48	-	48
	point491	597										
S I-75 Service Drive - 5	point491	971	482	56	e	56	32	56	F	56	~	56
	point504	607	482	56	e	56	32	56		56	-	56
	point505	608	482	56	ŝ	56	32	56	-	56	-	56
	point975	975	482	56	c	56	32	56	-	56	-	56
	point507	610										
S I-75 Service Drive - 8	point530	637	360	40	15	40	20	40	*	40	-	40
	point531	638	450	40	30	40	80	40	-	40	-	40
	point532	639										
Springwells/S I-75 On-Ramp	point533	640	420	97	25	97	75	97	-	97	~	97
	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	1	40	-	40
	point685	685	700	30	40	30	60	30	-	30	-	30
	point687	687	700	30	40	30	60	30	۲	30	-	30
	point943	943	700	30	40	30	60	30	-	30	-	30
	point688	688	700	40	40	40	60	40	-	40	-	40
	point690	690	700	40	40	40	60	40	٢	40	-	40
	point691	691	700	40	40	40	60	40	-	40	-	40
	point692	692										
Green - N&SB	point727	727	85	48	5	48	10	48	-	48	~	48
	point939	939	85	48	5	48	10	48	*	48	-	48
	point959	959	85	48	5	48	10	48	۲	48	-	48
	UUUTTET	000	LC	07	1					01		0.

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	point729	729	85	48	5	48	10	48	-	48	-	48
	point730	730	85	48	5	48	10	48	-	48	-	48
	point731	731										
Clark - NB	point812	812	80	40	5	40	25	40	-	40	-	40
	point813	813	100	25	20	25	300	25	-	25	-	25
	point814	814	80	25	15	25	180	25	1	25	-	25
	point963	963	80	25	15	25	180	25	-	25	-	25
	point964	964	80	25	15	25	180	25	-	25	-	25
	point815	815	84	40	8	40	4	40	-	40	~	40
	point816	816										
Clark - SB	point818	818	120	40	4	40	25	40	+	40	-	40
	point819	819	120	40	4	40	25	40	٢	40	-	40
	point961	961	120	40	4	40	25	40	-	40	-	40
	point962	962	120	40	4	40	25	40	-	40	-	40
	point820	820	120	40	4	40	25	40	٢	40	-	40
	point821	821	120	40	4	40	25	40	4	40	-	40
	point822	822										
Livernois	Lafayette	929	324	56	24	56	60	56	-	56	-	56
	SB SD	930	162	56	12	56	30	56	-	56	*	56
	point953	953	162	56	12	56	30	56	÷	56	-	56
	point954	954	162	56	12	56	30	56	Ţ.,	56	~	56
	NB SD	933	162	56	12	56	30	56	-	56	-	56
	WB Fort	934										
S I-75 Service Drive - 3	point645	579	749	56	С	56	30	56	-	56	~	56
	point478	581	749	56	e	56	30	56	Ţ	56	~	56
	point494	583	749	56	c	56	30	56	-	56	-	56
	point480	584	749	56	c	56	30	56	~	56	-	56
	point495	968	749	56	e	56	30	56	-	56	~	56
	point488	696										
S I-75 Service Drive - 6	point631	612	140	56	<u>.</u>	56	4	56	-	56	-	56
	point509	613	140	56	-	56	4	56	-	56	~	56
	point510	614	140	56	-	56	4	56	÷	56	~	56
	point629	619										
S I-75 Service Drive - 7	noint977	977	269	2 U	*	0	C	U L	Ŧ	01		U

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	point514	620	269	56	1	56	6	56	<del>.</del>	56	-	56
	point515	621	269	56	~	56	6	56	-	56	-	56
	point516	622	269	56	-	56	6	56	~	56	-	56
	point518	624	269	56	-	56	6	56	-	56	-	56
	point525	978	269	56	-	56	6	56	-	56	-	56
	point527	979										
Outbound to SB I-75	point1005	1005	225	74	27	74	238	74	-	74	-	74
	point1058	1058	225	74	27	74	238	74	-	74	-	74
	point1006	1006	225	74	27	74	238	74	-	74	-	74
	point1007	1007	225	74	27	74	238	74	~	74	-	74
	point1008	1008	225	74	27	74	238	74	-	74	4	74
	point1010	1010										
Inbound from SB I-75	point1012	1012	792	89	15	89	131	89	-	89	-	89
	point1013	1013	792	89	15	89	131	89	-	89	-	89
	point1014	1014	792	89	15	89	131	89	-	89	-	89
	point1015	1015	792	89	15	89	131	89	-	89	-	89
	point1016	1016										
Dragoon	Fort WB	1059	240	56	18	56	45	56	9	56	2	56
	NB SD	1060	240	56	18	56	45	56	9	56	2	56
	point941	1061	240	56	18	56	45	56	9	56	2	56
	point955	1062	240	56	18	56	45	56	9	56	2	56
	point956	1063	240	56	18	56	45	56	9	56	2	56
	SB SD	1064	240	56	18	56	45	56	9	56	2	56
	point919	1065	486	56	36	56	90	56	9	56	2	56
	N end Dragoo	1066										
S I-75 Auxiliary Lane	point1068	1068	405	64	23	64	60	64	2	64	2	64
	point1069	1069	904	72	4	72	34	72	-	72	-	72
	point1070	1070	904	80	4	80	34	80	~	80	-	80
	point1071	1071	904	88	4	88	34	88	-	88	-	88
	point1072	1072	453	88	e	88	27	88	-	88	-	88
	point1073	1073	453	86	С	86	27	86	-	86	-	86
	point1074	1074	453	75	e	75	27	75	-	75	-	75
	point1075	1075	453	64	С	64	27	64	-	64	-	64
	noint1076	1076										

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RESULTS: BARRIER DESCRIPTIONS

The Corradino Group T Stone **RESULTS: BARRIER DESCRIPTIONS** 

PROJECT/CONTRACT:

BARRIER DESIGN:

RUN:

15 August 2007 TNM 2.5

3600

Interchange B-Alt 2 With Noise Walls INPUT HEIGHTS

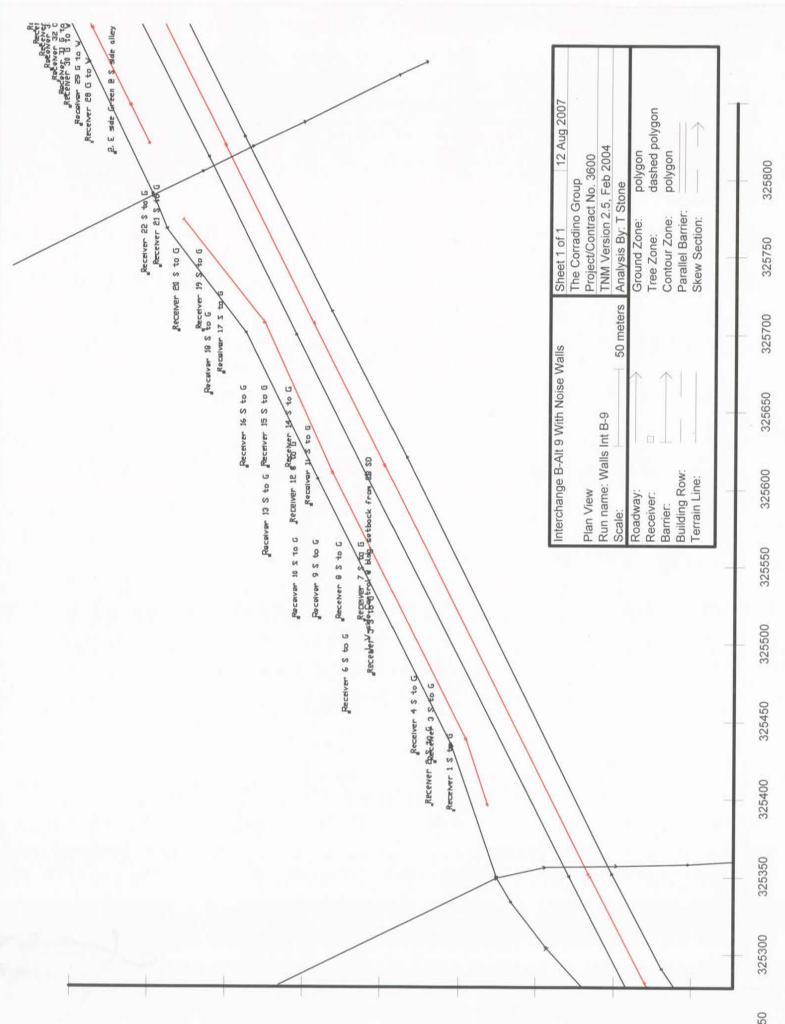
Barriers												
Name	Type	Height	Type Heights along Barrier	Sarrier	Length		If Wall	If Berm			Cost	
		Min	Avg	Мах		A	rea	Volume	Top Width	Run:Rise		
		E	E	E	E	S	m ps	cu m	E	m:m	ŝ	
Barrier2	Μ		.10	1.10	1.10	466	512					0
Barrier5	M		.10	1.10	1.10	267	293					0
Barrier9	M		.10	1.10	1.10	539	265					0
Barrier10	M		.10	1.10	1.10	525	578					0
Barrier11	M		.10	1.10	1.10	225	248					0
Barrier15	M		1.10	1.10	1.10	1373	1510					0
Barrier to SB I-75	M		02.70	2.70	2.70	274	740					424131
Barrier from SB I-75	M		6.70	3.70	3.70	166	615					301695
Springwells to Green	M		8.70	3.70	3.70	428	1584					777488
Green to east of Waterman	M		6.70	3.70	3.70	523	1935					949491
Calvary to Campbell	M		6.70	3.70	3.70	210	776					380895
Junction to Clark	M		6.70	3.70	3.70	529	1957					960554

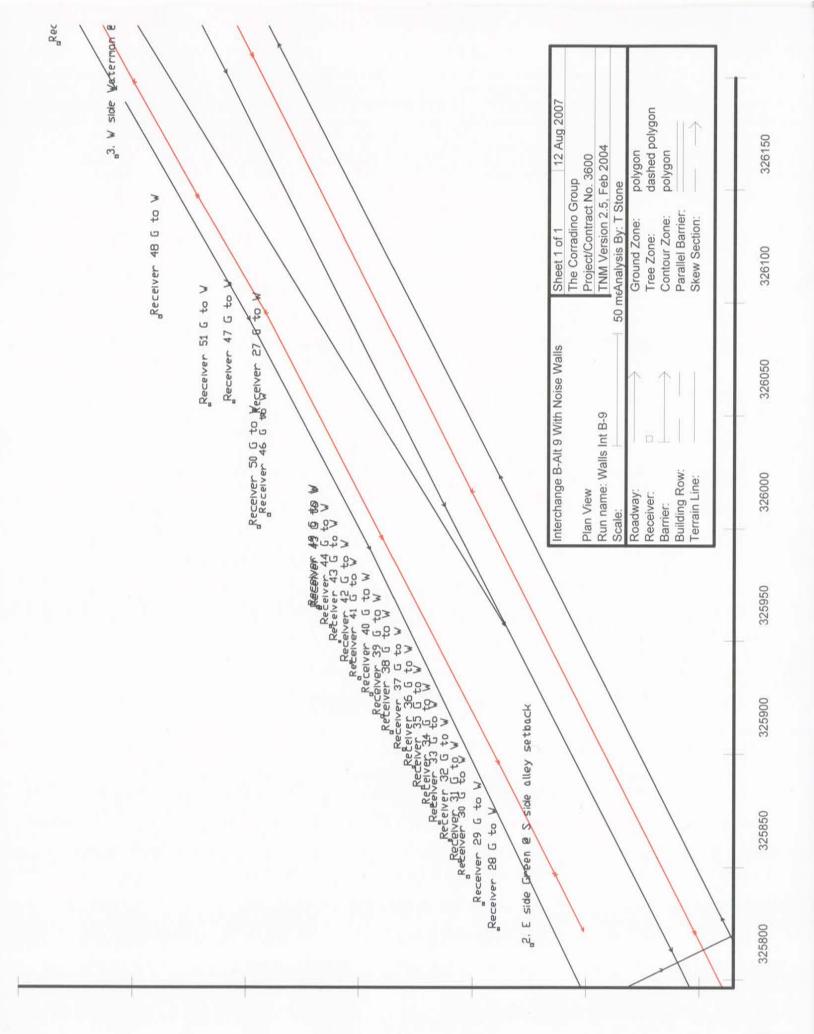
3794256

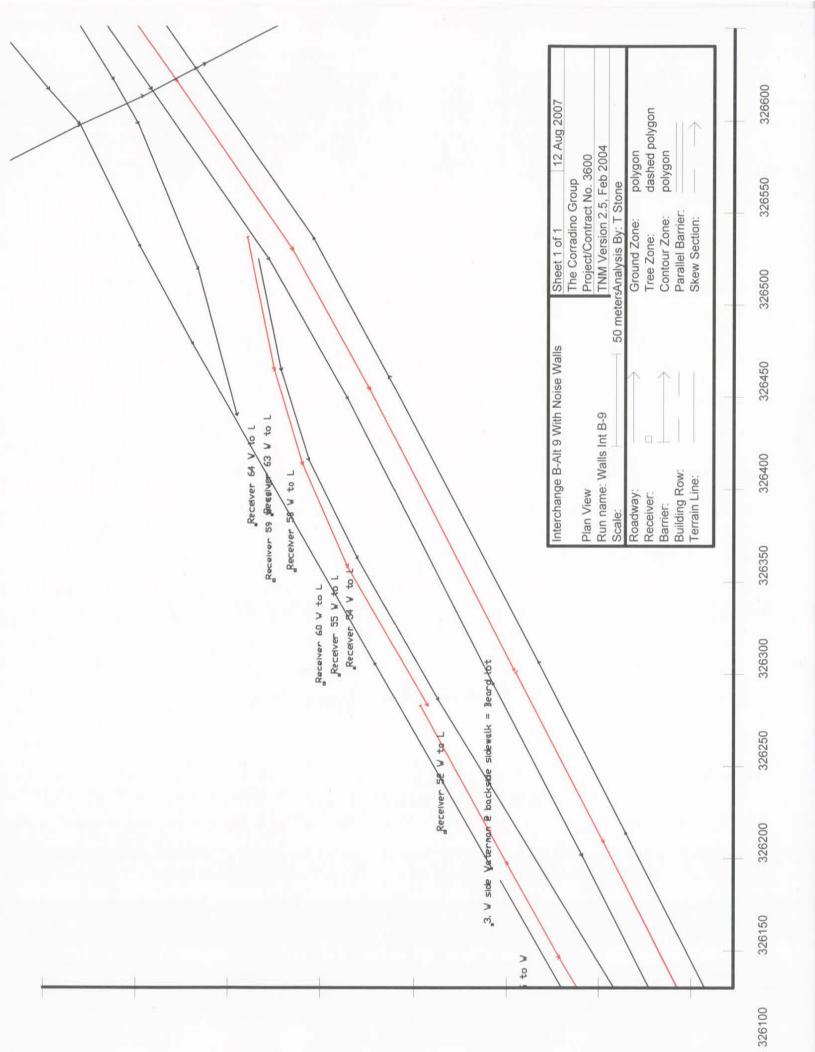
Total Cost:

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Interchange B – Alternative 9 – 2035







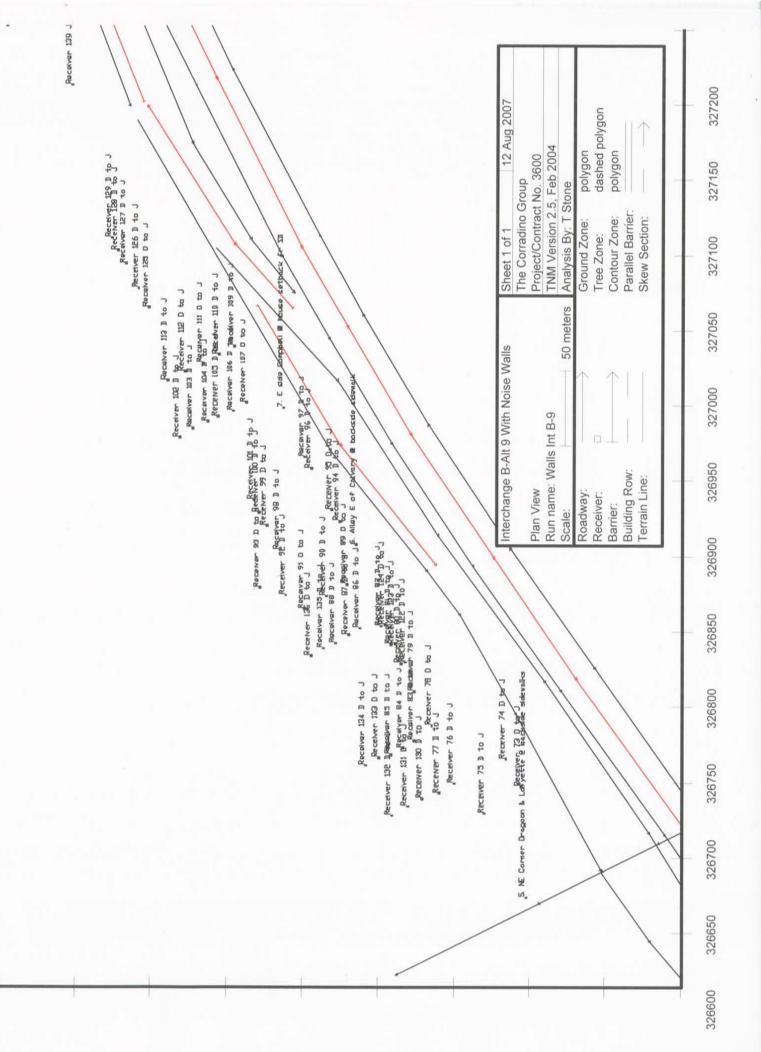


Image: Second Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       Receiver Bit J to C     Receiver Bit J to C       A J to C     Receiver Bit J to C       Bettor Bit A Loc C     Receiver Bit J to C       Bettor Bit A Loc C     Receiver Bit J to C       Bettor Bit A Receiver Bit J to C     Receiver Bit J to C       Bettor Bit A Receiver Bit J to C     Receiver Bit J to C       Bettor Bit A Receiver Bit J to C     Receiver Bit J to C       Bettor Bit A Receiver Bit J to C     Receiver Bit J to C       Bettor Bit A Receiver Bit J to C     Receiver Bit J to C       Bettor Bit A Receiver Bit J to C     Receiver Bit J to C       Bit D Receiver J to C     Receiver Bit J to C       Bit D Receiver J to C     Receiver Bit J to C       Bit D Receiver J to C     Receiver Bit J to C       Bit D Rec	0 327550 327600 327650
Receiver 167 J to C Receiver 167 J to C Receiver 165 J to C Receiver 158 Receiver 158 Receiver 158 Receiver 158 Receiver 158 Receiver 158 Receiver 154 Receiver 155 Receiver 154 Receiver 1	327350 327400 327450 327500
second is 1 to C Receiver 153 J to C Receiver 138 J to C Receiver 138 J to C Receiver 138 J to C	327250 327300
Receiver 139 J	327200 327
	327150

The Corradino Group							15 A	15 August 2007	2007					
I Stone							Calc	I NM 2.5 Calculated	INM 2.5 Calculated with TNM 2.5	12.5				
RESULTS: SOUND LEVELS	0000													
PROJECT/CONTRACT: RUN: BARRIER DESIGN:	3600 Interc INPU	3600 Interchange B-Alt 9 With Noise Walls INPUT HEIGHTS	B-Alt 9 W HTS	ith Noise	Walls				Average I	pavement typ	be shall b	Average pavement type shall be used unless	10	
ATMOSPHERICS:	20 0	20 deg C, 50%	% RH						a State hi of a differ	a State highway agency substantiates the of a different type with approval of FHWA	cy substa h approva	a State highway agency substantiates the use of a different type with approval of FHWA.	se	
Receiver														
Name No.	. #DUs	s Existing		No Barrier						With Barrier	r.			
		LAeq1h		LAeq1h Calculated	Crit'n	Increase or Calculated	Increase over existing		Type	Calculated		Noise Reduction	Calci	Calculated
			3					nc	-				minus	s
													Goal	
		dBA	dBA	4	dBA	đB	dB			dBA	dB	dB	dВ	
9. W side Clark N of SB SD - Clark Park	32	+	0.0	72.7	-	66	72.7	10	Snd Lvl	72.	4	0.3	80	Ľ L-
8. Alley E of Ferdinand @ backside sidews	34	1	0.0	78.0	0	66	78.0	10	Snd Lvl	69.7	L	8.3	00	0.3
7. E side Campbell @ house setback fr SC	36	-	0.0	73.7		66	73.7	10	Snd Lvl	68.6	9	5.1	80	-2.9
6. Alley E of Calvary @ backside sidewalk	40	-	0.0	70.9	0	66	70.9	10	Snd Lvl	67.3	3	3.6	60	4.4
5. NE Corner Dragoon & Lafyette @ backs	46	-	0.0	71.3	~	66	71.3	10	Snd Lvl	71.2	2	0.1	80	-7.9
3. W side Waterman @ backside sidewalk	55	-	0.0	70.9	6	66	70.9	10	Snd Lvl	65.0	0	5.9	80	-2.1
2. E side Green @ S side alley setback	58	2	0.0	71.9		66	71.9	10	Snd Lvl	69.1	F.	2.8	00	-5.2
1. W side Central @ bldg. setback from SE	60	4	0.0	73.7	-	66	73.7	10	Snd Lvl	66.0	0	7.7	80	-0.3
Receiver 1 S to G	61	-	0.0	0.0	0	66	0.0	10	invalid	0.0	0	0.0	80	0.0
Receiver 2 S to G	62	+	0.0	0.0	0	66	0.0	10	invalid	0	0.0	0.0	00	0.0
Receiver 3 S to G	63	٢	0.0	74.1	-	66	74.1	10	Snd Lvl	67.6	9	6.5	80	-1.5
Receiver 4 S to G	64	-	0.0	72.3	0	66	72.3	10	Snd Lvl	69.2	2	3.1	60	4.9
Receiver 5 S to G	65	-	0.0	71.6	6	66	71.6	10	Snd Lvl	65.8	80	5.8	80	-2.2
Receiver 6 S to G	99	-	0.0	0.0	0	66	0.0	10	invalid	0	0.0	0.0	60	0.0
Receiver 7 S to G	68	-	0.0	73.7	2	66	73.7	10	Snd Lvl	65.7	7	8.0	80	0.0
Receiver 8 S to G	69	-	0.0	71.0	0	66	71.0	10	Snd Lvl	64.7	1	6.3	80	-1.7
Receiver 9 S to G	70	-	0.0	0.0	0	66	0.0	10	invalid	0	0.0	0.0	80	0.0
Receiver 10 S to G	71	2	0.0	0.0	0	66	0.0	10	invalid	0	0.0	0.0	80	0.0
Receiver 11 S to G	72	-	0.0	74.2	0	66	74.2	10	Snd Lvl	65.9	<b>Б</b>	8.3	80	0.3
Receiver 12 S to G	73	-	0.0	71.0	0	66	71.0	10	Snd Lvl	64.4	4	6.6	œ	-1.4
Receiver 13 S to G	74	2	0.0	68.1	-	66	68.1	10	Snd Lvl	62.4	4	5.7	80	-2.3
Receiver 14 S to G	75	+	0.0	73.8	8	66	73.8	10	Snd Lvl	65.7	1	8.1	8	0.1
Receiver 15 S to G	76		0.0	70.6	0	66	70.6	10	Snd Lvl	64.2	2	6.4	00	-1.6

15 August 200

Receiver 17 S to G         78           Receiver 18 S to G         79           Receiver 19 S to G         80           Receiver 19 S to G         80           Receiver 20 S to G         81           Receiver 21 S to G         82           Receiver 22 S to G         83           Receiver 22 S to G         83           Receiver 23 G to W         80           Receiver 28 G to W         90           Receiver 29 G to W         93           Receiver 30 G to W         93           Receiver 31 G to W         93	0 + + +				2.50		OUD LVI	4.00	2	>	
		0.0	70.2	66	70.2	10	Snd Lvl	64.0	6.2	80	-1.8
		0.0	68.6	66	68.6	10	Snd Lvl	63.1	5.5	80	-2.5
	5	0.0	69.69	66	69.69	10	Snd Lvl	64.0	5.6	00	-2.4
		0.0	67.9	99	67.9	10	Snd Lvl	63.0	4.9	80	-3.1
	-	0.0	0.0	66	0.0	10	invalid	0.0	0.0	00	0.0
	۲	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
	2	0.0	72.3	99	72.3	10	Snd Lvl	64.1	8.2	80	0.2
	4	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
	2	0.0	65.5	99	65.5	10	I	62.6	2.9	80	-5.1
	2	0.0	6.99	99	6.99	10	Snd Lvl	63.2	3.7	80	4.3
	-	0.0	66.7	99	66.7	10	Snd Lvl	63.2	3.5	80	4.5
	٢	0.0	66.4	99	66.4	10	Snd Lvl	62.9	3.5	8	-4.5
Receiver 33 G to W 97	-	0.0	66.6	99	66.6	10	Snd Lvl	62.8	3.8	80	-4.2
Receiver 34 G to W 98	2	0.0	66.9	99	66.9	10	Snd Lvl	62.9	4.0	80	-4.0
Receiver 35 G to W 99	2	0.0	67.4	99	67.4	10	Snd Lvl	62.9	4.5	80	-3.5
Receiver 36 G to W 100	2	0.0	67.5	99	67.5	10	Snd Lvl	62.9	4.6	80	-3.4
Receiver 37 G to W 101	2	0.0	67.8	99	67.8	10	Snd Lvl	62.9	4.9	00	-3.1
Receiver 38 G to W 102	-	0.0	67.9	99	67.9	10	Snd Lvl	62.8	5.1	80	-2.9
Receiver 39 G to W 103	۲	0.0	68.1	99	68.1	10	Snd Lvl	62.7	5.4	80	-2.6
Receiver 40 G to W 104	2	0.0	68.5	99	68.5	10	Snd Lvl	62.8	5.7	80	-2.3
Receiver 41 G to W 105	1	0.0	68.4	99	68.4	10	Snd Lvl	62.6	5.8	80	-2.2
Receiver 42 G to W 106	2	0.0	68.7	99	68.7	10	Snd Lvl	62.6	6.1	80	-1.9
Receiver 43 G to W 107	+	0.0	68.9	66	68.9	10	Snd Lvl	62.7	6.2	80	-1.8
Receiver 44 G to W 108	-	0.0	68.8	66	68.8	10	Snd Lvl	62.7	6.1	80	-1.9
Receiver 45 G to W 109	2	0.0	68.9	66	68.9	10	Snd Lvl	62.7	6.2	80	-1.8
Receiver 46 G to W 110	2	0.0	69.3	99	69.3	10	Snd Lvl	62.6	6.7	80	-1.3
Receiver 47 G to W 111	-	0.0	70.4	99	70.4	10	Snd Lvl	63.3	7.1	80	6.0-
Receiver 48 G to W 112	2	0.0	68.4	99	68.4	10	Snd Lvl	62.5	5.9	80	-2.1
Receiver 49 G to W 113	2	0.0	69.6	66	69.6	10	Snd Lvl	63.1	6.5	80	-1.5
Receiver 50 G to W 114	2	0.0	68.9	66	68.9	10	Snd Lvl	62.5	6.4	80	-1.6
Receiver 51 G to W 115	-	0.0	68.7	99	68.7	10	Snd Lvl	62.5	6.2	80	-1.8
Receiver 52 W to L 116	10	0.0	70.5	99	70.5	10	Snd Lvl	66.6	3.9	8	4.1
Receiver 54 W to L 118	+	0.0	69.4	99	69.4	10	Snd Lvl	67.9	1.5	80	-6.5
Receiver 55 W to L 119	1	0.0	67.3	99	67.3	10	Snd Lvl	66.4	0.9	80	-7.1
Receiver 58 W to L 122	2	0.0	63.9	99	69.9	10	Snd Lvl	69.1	0.8	80	-7.2
Receiver 59 W to L 123	+	0.0	67.9	99	67.9	10	Snd Lvl	67.6	0.3	8	1.7-
Receiver 60 W to L 124	+	0.0	65.9	99	65.9	10	1	64.9	1.0	80	-7.0
Receiver 63 W to L 128	1	0.0	72.5	99	72.5	10	Snd Lvl	72.0	0.5	80	-7.5
Receiver 64 W to L 130	4	0.0	70.8	99	70.8	10	Snd Lvl	70.6	0.2	80	-7.8
Receiver 73 D to J 148	9	0.0	72.7	66	72.7	10	Snd Lvl	72.6	0.1	60	-7.9

Receiver 74 D to J Receiver 75 D to J Receiver 76 D to J Receiver 77 D to J Receiver 79 D to J Receiver 80 D to J Receiver 81 D to J	149	10							10.0		ſ	
Receiver 75 D to J Receiver 76 D to J Receiver 77 D to J Receiver 78 D to J Receiver 80 D to J Receiver 81 D to J	2	2	0.0	72.9	99	72.9	10	Snd Lvl	12.8	0.1	00	6.7-
Receiver 76 D to J Receiver 77 D to J Receiver 78 D to J Receiver 79 D to J Receiver 80 D to J Receiver 81 D to J	150	2	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 77 D to J Receiver 78 D to J Receiver 79 D to J Receiver 80 D to J Receiver 81 D to J	151	4	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 78 D to J Receiver 79 D to J Receiver 80 D to J Receiver 81 D to J	152	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	00	0.0
Receiver 79 D to J Receiver 80 D to J Receiver 81 D to J	153	10	0.0	68.4	99	68.4	10	Snd Lvl	68.0	0.4	80	-7.6
Receiver 80 D to J Receiver 81 D to J	154	-	0.0	68.7	66	68.7	10	Snd Lvl	68.3	0.4	00	-7.6
	155	3	0.0	69.0	99	69.0	10	Snd Lvl	68.4	0.6	80	-7.4
	156	2	0.0	69.2	99	69.2	10	Snd Lvl	68.3	0.9	80	-7.1
Receiver 82 D to J	157	2	0.0	69.3	99	69.3	10	Snd Lvl	68.1	1.2	80	-6.8
Receiver 83 D to J	158	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 84 D to J	159	+	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 85 D to J	160	+	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 86 D to J	161	-	0.0	67.9	99	67.9	10	Snd Lvi	66.5	1.4	80	-6.6
Receiver 87 D to J	162	٢	0.0	67.1	99	67.1	10	Snd Lví	65.7	1.4	80	-6.6
Receiver 88 D to J	163	-	0.0	66.3	99	66.3	10	Snd Lvi	64.9	1.4	80	-6.6
Receiver 89 D to J	164	-	0.0	68.3	99	68.3	10	Snd Lvl	66.4	1.9	80	-6.1
Receiver 90 D to J	165	-	0.0	699	99	6.99	10	Snd Lvl	65.2	1.7	80	-6.3
Receiver 91 D to J	166	-	0.0	65.5	99	65.5	10	1	64.0	1.5	80	-6.5
Receiver 92 D to J	167	-	0.0	65.1	99	65.1	10	-	63.4	1.7	80	-6.3
Receiver 93 D to J	168	4	0.0	64.3	99	64.3	10	I	62.4	1.9	80	-6.1
Receiver 94 D to J	169	-	0.0	71.0	99	71.0	10	Snd Lvl	6.99	4.1	80	-3.9
Receiver 95 D to J	170		0.0	71.0	99	71.0	10	Snd Lvl	66.8	4.2	80	-3.8
Receiver 96 D to J	171		0.0	71.8	99	71.8	10	Snd Lvl	67.3	4.5	80	-3.5
Receiver 97 D to J	172	-	0.0	72.0	99	72.0	10	Snd Lvl	67.4	4.6	80	-3.4
Receiver 98 D to J	173	-	0.0	66.0	99	66.0	10	Snd Lvl	63.7	2.3	80	-5.7
Receiver 99 D to J	174	۰-	0.0	65.9	66	65.9	10	1	63.5	2.4	80	-5.6
Receiver 100 D to J	175	-	0.0	65.8	99	65.8	10	I	63.5	2.3	80	-5.7
Receiver 101 D to J	176	-	0.0	66.1	66	66.1	10	Snd Lvl	63.5	2.6	80	-5.4
Receiver 102 D to J	177	4	0.0	64.6	99	64.6	10	1	62.4	2.2	80	-5.8
Receiver 103 D to J	178	-	0.0	65.3	99	65.3	10	1	63.0	2.3	80	-5.7
Receiver 104 D to J	179	-	0.0	66.1	99	66.1	10	Snd Lvl	63.7	2.4	80	-5.6
Receiver 105 D to J	180	-	0.0	66.9	99	66.9	10	Snd Lvl	64.4	2.5	80	-5.5
Receiver 106 D to J	181	<del>, -</del>	0.0	67.9	99	67.9	10	Snd Lvl	65.3	2.6	80	-5.4
Receiver 107 D to J	182	÷-	0.0	69.2	99	69.2	10	Snd Lvl	66.0	3.2	00	-4.8
Receiver 109 D to J	184	-	0.0	71.5	66	71.5	10	Snd Lvl	68.7	2.8	80	-5.2
Receiver 110 D to J	185	-	0.0	69.3	99	69.3	10	Snd Lvl	67.2	2.1	80	-5.9
Receiver 111 D to J	186	-	0.0	67.8	99	67.8	10	Snd Lvl	66.0	1.8	80	-6.2
Receiver 112 D to J	187	-		66.5	99	66.5	10	Snd Lvl	64.7	1.8	80	-6.2
Receiver 113 D to J	188	-	0.0	65.5	99	65.5	10	I	63.6	1.9	80	-6.1
Receiver 122 D to J	197	3	0.0	71.7	99	71.7	10	Snd Lvl	71.0	0.7	80	-7.3
Receiver 123 D to J	198	2	0.0	71.8	99	71.8	10	Snd Lvl	70.7	1.1	80	-6.9
I:\Projects\3600\Noise\TNM\Noise Walls\Walls Int B-9	s/Walls Int B	6-					e				#	15 August 200

	Receiver 124 D to 1	100	0	00	710	an An	710	10	Snd I vi	70.5	1.1	α	u u
$ \begin{array}{llllllllllllllllllllllllllllllllllll$		000	4 .	0.0	0.1.1	3		2 9		2.21	<u>t</u> :	0	
J         Z01         Z         00         669         669         10         563         11         8           J         Z02         1         00         669         669         10         669         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         66         11         11         66         11         11         66         11         11         66         11         11         66         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         1	Keceiver 125 U to J	200	-	0.0	66.8	66	66.8	10		65.7	1.1	œ	6.9
202         1         0.00         66.50         66.5         70.0         66.5         71.0         66.5         71.0         66.5         71.0         66.5         71.0         66.5         71.0         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         66.5         71.1         67.1         71.2         67.1         71.2         67.1         71.2         67.1         71.2         67.1         71.2         67.1         71.2         67.1         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71.2         71	Receiver 126 D to J	201	2	0.0	66.9	99		10		65.8	1.1	80	-6.9
	Receiver 127 D to J	202	1	0.0	66.9	99	6.99	10	Snd Lvl	65.9	1.0	80	-7.0
204         1         0.0         67.0         65         67.0         10         66.9         11         8           206         1         0.0         0.0         0.0         10         maid         0.0         0.0         0.0           207         1         0.0         0.0         0.0         0.0         10         maid         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <t< td=""><td>Receiver 128 D to J</td><td>203</td><td>1 (</td><td>0.0</td><td>67.0</td><td>99</td><td>67.0</td><td>10</td><td>Snd Lvl</td><td>65.9</td><td>1.1</td><td>80</td><td>-6.9</td></t<>	Receiver 128 D to J	203	1 (	0.0	67.0	99	67.0	10	Snd Lvl	65.9	1.1	80	-6.9
206         1         0.0         0.0         66         0.0         10         mail         0.0         0.0         0.0           207         1         0.0         0.0         66         0.0         10         maild         0.0         0.0         1           207         1         0.0         0.0         66         0.0         10         maild         0.0         0.0         10           210         1         0.0         0.0         66         0.0         10         maild         0.0         0.0         10           211         1         0.0         0.0         66         0.0         10         maild         0.0         0.0         0.0         10           211         1         0.0         70.3         66         70.3         10         maild         0.0         0.0         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10 <t< td=""><td>Receiver 129 D to J</td><td>204</td><td>1</td><td>0.0</td><td>67.0</td><td>99</td><td>67.0</td><td>10</td><td>Snd Lvl</td><td>65.9</td><td>1.1</td><td>80</td><td>-6.9</td></t<>	Receiver 129 D to J	204	1	0.0	67.0	99	67.0	10	Snd Lvl	65.9	1.1	80	-6.9
206         1         0.0         0.0         66         0.0         10         meal         0.0         0.0         0.0         0.0           208         1         0.0         0.0         66         0.0         10         meald         0.0         0.0         0.0           208         1         0.0         0.0         66         0.0         10         meald         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         <	Receiver 130 D to J	205	1 (	0.0	0.0	66	0.0	10	invalid	0.0	0.0	80	0.0
207         1         0.0         0.0         0.6         0.0         10         meaid         0.0         0.0         10           210         1         0.0         0.0         0.0         0.0         10         meaid         0.0         0.0         1           210         1         0.0         0.0         0.0         0.0         10         meaid         0.0         0.0         0.0         10           211         1         0.0         0.0         0.0         0.0         10         meaid         0.0         0.0         0.0         0.0         0.0         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10	Receiver 131 D to J	206	1 (	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
	Receiver 132 D to J	207	1	0.0	0.0	66	0.0	10	invalid	0.0	0.0	8	0.0
200         1         0.0         0.0         10         Invalid         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <td>Receiver 133 D to J</td> <td>208</td> <td>1 (</td> <td>0.0</td> <td>0.0</td> <td>99</td> <td>0.0</td> <td>10</td> <td>invalid</td> <td>0.0</td> <td>0.0</td> <td>-</td> <td>0.0</td>	Receiver 133 D to J	208	1 (	0.0	0.0	99	0.0	10	invalid	0.0	0.0	-	0.0
210         1         0.0         0.0         0.6         0.0         0.0         0.0         0.0           211         1         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Receiver 134 D to J	209	1 (	0.0	0.0	99	0.0	10	invalid	0.0		80	0.0
211         1         0.0         0.0         0.6         0.0         0.0         0.0         0.0         0.0           212         1         0.0         75.8         66         75.8         10         56.3         35.9         35         35           214         1         0.0         73.8         66         73.7         10         5ndLyd         67.9         2.8         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         35         37         35         37         35         37         35         37         35         37         35         37         37         35         37         37         37	Receiver 135 D to J	210	1	0.0	0.0	66	0.0	10	invalid	0.0		60	0.0
212         1         0.0         758         0.6         758         10         5nd Lvi         683         10         5nd Lvi         653         25         8           213         1         0.0         738         66         707         10         5nd Lvi         653         25         8           214         1         0.0         733         66         707         10         5nd Lvi         663         74         8         8         74         8         8           216         1         0.0         763         66         762         10         5nd Lvi         693         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8         8         74         8	Receiver 136 D to J	211	1	0.0	0.0	66	0.0	10	invalid	0.0	0.0	80	0.0
213         1         0.0         6.8         6.6         6.8         10         Sind Lyl         6.5         3.5         3.5         3.5           214         1         0.0         713         66         70.1         66         70.3         10         Sind Lyl         67.3         2.8         2         8         2         2         8         7.4         8         2         2         8         2         2         8         7.4         8         2         2         8         7         3         10         Sind Lyl         667         7.4         8         7         2         8         7         4         8         7         3         10         Sind Lyl         603         7.4         8         7         2         10         7         3         8         7         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501         10         501	Receiver 137 J to C	212	1	0.0	75.8	99	75.8	10	Snd Lvl	68.9		80	-1.1
214         1         0.0         70.7         66         70.7         10         SndLM         67.9         2.8         8           215         1         0.0         71.3         66         71.3         10         SndLM         67.1         42         8           217         1         0.0         76.2         66         76.2         10         SndLM         69.8         8         8         8         8           217         1         0.0         76.2         66         76.2         10         SndLM         69.8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	Receiver 138 J to C	213	1	0.0	68.8	99	68.8	10	Snd Lvl	65.3		60	4.5
215         1         0.0 $71.3$ 66 $71.3$ 10         SndLyl         688 $7.4$ 8 $217$ 1         0.0 $762$ 66 $762$ 10         SndLyl         698 $77.4$ 8 $217$ 1         0.0 $762$ 66 $762$ 10         SndLyl         698 $77.4$ 8 $219$ 1         0.0 $762$ 66 $762$ 10         SndLyl         669 $722$ 8 $220$ 1         0.0 $781$ 66 $78.1$ 10         SndLyl         669 $722$ 8 $2221$ 1         0.0 $781$ 66 $78.4$ 10         SndLyl         669         75         8 $223$ 1         0.0 $77.4$ 66 $77.4$ 10         SndLyl         669         75         8 $223$ 1         0.0 $76.4$ 10         SndLyl         669         76         8 $223$ 1	Receiver 139 J to C	214	1	0.0	70.7	99	70.7	10	Snd Lvi	67.9		80	-5.2
216         1         0.0         76.2         66         76.2         10         SndLyl         688         7.4         8           217         1         0.0         78.6         66         76.2         10         SndLyl         698         7.4         8           218         2         0.0         78.5         66         76.5         10         SndLyl         690         7.2         8           219         1         0.0         78.1         66         78.1         10         SndLyl         690         7.2         8           220         1         0.0         78.1         66         77.3         10         SndLyl         696         8.5         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8 <td< td=""><td>Receiver 140 J to C</td><td>215</td><td>1</td><td>0.0</td><td>71.3</td><td>99</td><td>71.3</td><td>10</td><td>Snd Lvl</td><td>67.1</td><td>4.2</td><td>80</td><td>-3.8</td></td<>	Receiver 140 J to C	215	1	0.0	71.3	99	71.3	10	Snd Lvl	67.1	4.2	80	-3.8
217         1         0.0         78.6         66         76.2         10         80.4         83.8         83.8         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83         83	Receiver 141 J to C	216	1 (	0.0	76.2	99	76.2	10	Snd Lvl	68.8	7.4	80	-0.6
218         2         0.0         76.2         66         76.2         10         SndLvi         65.0         7.2         8           219         1         0.0         74.1         66         74.1         10         SndLvi         66.9         7.2         8           210         1         0.0         74.1         66         74.1         10         SndLvi         66.9         7.2         8           220         1         0.0         77.3         66         78.1         10         SndLvi         69.6         86.7         8         8         8           222         1         0.0         75.4         66         75.4         10         SndLvi         69.0         7.6         8           222         1         0.0         67.2         66         75.4         10         SndLvi         69.0         7.7         8           222         1         0.0         67.2         66         64.4         10         SndLvi         66.0         7.6         8           222         1         0.0         66.0         66.7         7.5         10         SndLvi         66.7         8         8         8 <td>Receiver 142 J to C</td> <td>217</td> <td>1 (</td> <td>0.0</td> <td>78.6</td> <td>66</td> <td>78.6</td> <td>10</td> <td>Snd Lvl</td> <td>69.8</td> <td>8.8</td> <td>80</td> <td>0.8</td>	Receiver 142 J to C	217	1 (	0.0	78.6	66	78.6	10	Snd Lvl	69.8	8.8	80	0.8
219         1         0.0 $74.1$ 66 $74.1$ 10         SndLvi         66.9 $7.2$ 8 $220$ 1         0.0 $78.2$ 66 $78.1$ 10         SndLvi         69.6         85         8 $221$ 2         0.0 $77.3$ 66 $77.3$ 10         SndLvi         69.0         85         8 $223$ 1         0.0 $75.4$ 66 $75.4$ 10         SndLvi         69.0         76         8 $225$ 1         0.0 $67.4$ 66 $75.4$ 10         SndLvi         69.1         63         8 $227$ 1         0.0 $66.9$ $66.7$ $66.5$ $67.4$ 10         SndLvi         63.1         6.1         6.3         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8<	Receiver 143 J to C	218	2 (	0.0	76.2	99	76.2	10	Snd Lvl	69.0	7.2	80	-0.8
220         1         0.0         78.2         66         73.2         10         Sind Lyl         69.6         8.5         8.5         8           221         2         0.0         78.1         66         73.3         10         Sind Lyl         69.6         8.5         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         <	Receiver 144 J to C	219	1 (	0.0	74.1	99	74.1	10	Snd Lvl	66.9	- 7.2	80	-0.8
221 $2$ $0.0$ $78.1$ $66$ $78.1$ $66$ $77.3$ $10$ $50.1$ $69.6$ $8.5$ $8$ $222$ 1 $0.0$ $77.3$ $66$ $77.3$ $10$ $50.0$ $76$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ $81$ <td>Receiver 145 J to C</td> <td>220</td> <td>1</td> <td>0.0</td> <td>78.2</td> <td>66</td> <td>78.2</td> <td>10</td> <td>Snd Lvl</td> <td>69.6</td> <td></td> <td>80</td> <td>0.6</td>	Receiver 145 J to C	220	1	0.0	78.2	66	78.2	10	Snd Lvl	69.6		80	0.6
222         1         0.0 $77.3$ 66 $77.3$ 10         SndLyl         69.2         8.1         8           223         1         0.0 $76.6$ $66$ $75.4$ 10         SndLyl         69.1 $6.3$ 8         8           224         2         0.0 $75.4$ $66$ $75.4$ $10$ SndLyl $69.1$ $6.3$ 8         8           226         1         0.0 $67.2$ $66$ $64.4$ $10$ SndLyl $65.3$ $41$ 8           228         1         0.0 $64.4$ $66$ $64.4$ $10$ SndLyl $65.3$ $41$ $8$ 229         1         0.0 $64.4$ $66$ $64.4$ $10$ SndLyl $66.1$ $66.5$ $66$ $66.5$ $10$ SndLyl $66.1$ $66.5$ $66$ $66.5$ $10$ SndLyl $66.1$ $66.5$ $66.5$ $66.5$ $66.5$ $10$ SndLyl $66.1$ $66.5$ $66.5$	Receiver 146 J to C	221	2	0.0	78.1	99	78.1	10	Snd Lvl	69.6		80	0.5
223         1         0.0         76.6         66         76.5         10         Snd Lvi         69.0         7.6         8           224         2         0.0         75.4         66         75.4         10         Snd Lvi         69.1         6.3         8           225         1         0.0         67.2         66         67.2         10         Snd Lvi         69.1         6.3         8           226         1         0.0         69.4         66         64.4         10         Snd Lvi         65.3         4.1         8           227         1         0.0         69.4         66         64.4         10         Snd Lvi         65.3         4.1         8           223         1         0.0         64.4         66         64.4         10 $$ 61.1         3.3         8           233         1         0.0         64.7         66         64.7         10         Snd Lvi         64.2         4.5         8           233         1         0.0         64.7         10         Snd Lvi         64.2         4.5         8           233         1         0.0         <	Receiver 147 J to C	222	1	0.0	77.3	99	77.3	10	Snd Lvl	69.2	8.1	80	0.1
224         2         0.0         75.4         66         75.4         10         SindLyi         69.1         6.3         8           225         1         0.0         67.2         66         67.2         10         SindLyi         64.0         3.2         8           226         1         0.0         67.2         66         67.4         10         SindLyi         65.3         4.1         8           227         1         0.0         66.9         66.9         10         SindLyi         65.3         4.1         8           228         1         0.0         64.4         66         64.4         10         SindLyi         65.3         3.7         8           229         1         0.0         64.7         66         64.7         10         SindLyi         66.1         64.9         54         8           230         1         0.0         68.7         66         68.7         10         SindLyi         64.9         45         8           233         1         0.0         68.7         66         65.8         10         SindLyi         65.4         41         8           233	Receiver 148 J to C	223	1 (	0.0	76.6	66	76.6	10	Snd Lvl	69.0		80	-0.4
225         1         0.0 $67.2$ $66$ $67.2$ $66$ $67.2$ $10$ $8nd$ with $64.0$ $3.2$ $8$ 226         1         0.0 $69.4$ $66$ $69.4$ $10$ $8nd$ with $65.3$ $4.1$ $8$ 227         1         0.0 $69.4$ $66$ $64.4$ $10$ $61.1$ $3.3$ $8$ 228         1         0.0 $64.4$ $66$ $64.4$ $10$ $61.1$ $3.3$ $8$ 230         1         0.0 $69.7$ $66$ $69.7$ $10$ $8nd$ with $66.1$ $64.9$ $66.1$ $64.9$ $8.6$ 231         1         0.0 $69.7$ $66$ $69.7$ $10$ $8nd$ with $64.9$ $66.1$ $67.6$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.7$ $66.$	Receiver 149 J to C	224	2 (	0.0	75.4	99	75.4	10	Snd Lvl	69.1	6.3	œ	-1.7
226         1         0.0         69.4         66         69.4         10         SndLyl         65.3         4.1         8           227         1         0.0         66.9         66.9         10         SndLyl         65.3         4.1         8           228         1         0.0         64.4         66         64.4         10          61.1         3.3         8           229         1         0.0         64.4         66         64.4         10          61.1         3.3         8           230         1         0.0         68.7         66         69.7         10         SndLyl         66.1         54.9         8           231         1         0.0         68.7         66         69.7         10         SndLyl         64.9         45         8           232         1         0.0         65.5         66         65.6         10         SndLyl         64.9         45         8           233         1         0.0         65.8         66         65.8         10         SndLyl         64.9         65         8           234         1         0.0	Receiver 150 J to C	225	1 (	0.0	67.2	99	67.2	10	Snd Lvl	64.0	3.2	80	4.8
227         1         0.0         66.9         66.9         66.0         66.1         63.2         3.7         8 $228$ 1         0.0         64.4         66         64.4         10          61.1         3.3         8 $229$ 1         0.0         64.4         66         64.4         10          61.1         3.3         8 $229$ 1         0.0         69.7         66         68.7         10         Snd Lvi         64.9         4.8         8 $231$ 1         0.0         68.7         66         68.7         10         Snd Lvi         64.9         4.8         8 $231$ 1         0.0         68.7         66         68.7         10         Snd Lvi         64.9         4.8         8 $233$ 1         0.0         65.5         66         65.8         10         Snd Lvi         64.9         6.3         8 $233$ 1         0.0         75.4         66         65.8         10         Snd Lvi         67.6         8 $234$ 1         0.0 <td>Receiver 151 J to C</td> <td>226</td> <td>1</td> <td>0.0</td> <td>69.4</td> <td>99</td> <td>69.4</td> <td>10</td> <td>Snd Lvl</td> <td>65.3</td> <td>4.1</td> <td>80</td> <td>-3.9</td>	Receiver 151 J to C	226	1	0.0	69.4	99	69.4	10	Snd Lvl	65.3	4.1	80	-3.9
228         1         0.0         64.4         66         64.4         10          61.1         3.3         8           229         1         0.0         71.5         66         71.5         10         SndLvi         66.1         5.4         8           230         1         0.0         69.7         66         69.7         10         SndLvi         66.1         5.4         8           231         1         0.0         69.7         66         69.7         10         SndLvi         64.2         4.5         8           231         1         0.0         67.5         66         67.5         10         SndLvi         63.1         4.4         8           233         1         0.0         67.5         66         65.8         10         SndLvi         67.2         4.5         8           234         1         0.0         65.8         66         65.8         10         SndLvi         67.6         4.3         8           235         1         0.0         65.4         10         SndLvi         67.6         8         8           235         1         0.0         65.4	Receiver 152 J to C	227	1	0.0	66.9	99	66.9	10	Snd Lvl	63.2	3.7	80	-4.3
22910.071.56671.510SndLvl66.15.4823010.069.76669.710SndLvl64.94.8823110.068.76668.710SndLvl64.24.5823210.067.56666.510SndLvl64.24.5823310.067.56666.510SndLvl67.24.3823410.065.86665.810SndLvl67.64.3823510.065.86665.810SndLvl67.87.6823610.075.46672.410SndLvl66.55.9823710.072.46672.410SndLvl66.55.9823810.069.56669.510SndLvl65.55.4823810.069.56672.410SndLvl65.55.4823910.069.56669.510SndLvl65.55.4823910.069.56669.510SndLvl65.55.4823910.069.56669.510SndLvl67.64.7823910.069.566<	Receiver 153 J to C	228	1	0.0	64.4	99	64.4	10	-	61.1	3.3	80	-4.7
230       1       0.0       69.7       66       69.7       10       SndLvl       64.9       4.8       8         231       1       0.0       68.7       66       68.7       10       SndLvl       64.9       4.8       8         232       1       0.0       68.7       66       66.5       10       SndLvl       63.1       4.4       8         233       1       0.0       66.5       66       66.5       10       SndLvl       63.1       4.4       8         233       1       0.0       65.8       66       65.8       10       SndLvl       61.6       4.2       8         234       1       0.0       65.8       66       65.8       10       SndLvl       61.6       4.2       8         235       1       0.0       75.4       66       75.4       10       SndLvl       67.6       8         236       1       0.0       72.4       66       72.4       10       SndLvl       66.5       5.9       8         237       1       0.0       70.9       66       72.4       10       SndLvl       65.5       5.4       8	Receiver 154 J to C	229	1	0.0	71.5	99	71.5	10	Snd Lvl	66.1	5.4	80	-2.6
231       1       0.0       68.7       66       68.7       10       SndLvl       64.2       4.5       8         232       1       0.0       67.5       66       67.5       10       SndLvl       63.1       4.4       8         233       1       0.0       66.5       66       66.5       10       SndLvl       62.2       4.3       8         234       1       0.0       65.8       66       65.8       10       SndLvl       67.2       4.3       8         235       1       0.0       75.4       66       75.4       10       SndLvl       67.8       7.6       8         235       1       0.0       72.4       66       75.4       10       SndLvl       67.8       7.6       8         236       1       0.0       72.4       10       SndLvl       66.5       5.9       8         237       1       0.0       70.9       66       70.9       10       SndLvl       65.5       5.4       8         238       1       0.0       69.5       66       69.5       10       SndLvl       65.6       5.4       8         2	Receiver 155 J to C	230	1	0.0	69.7	99	69.7	10	Snd Lvl	64.9	4.8	80	-3.2
232       1       0.0       67.5       66       67.5       10       Snd Lvl       63.1       4.4       8         233       1       0.0       66.5       66       66.5       10       Snd Lvl       62.2       4.3       8         234       1       0.0       65.8       66       65.8       10       Snd Lvl       62.2       4.3       8         234       1       0.0       75.4       66       65.8       10       Snd Lvl       67.6       8       7.6       8         235       1       0.0       72.4       66       75.4       10       Snd Lvl       66.5       5.9       8         237       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         233       1       0.0       69.5       66       69.5       10       Snd Lvl       66.5       5.4       8         233       1       0.0       69.5       66       69.5       10       Snd Lvl       64.6       4.9       8         233       1       0.0       69.5       66       69.5       10       8.9       6.9       <	Receiver 156 J to C	231	1	0.0	68.7	99	68.7	10	Snd Lvl	64.2	4.5	80	-3.5
233       1       0.0       66.5       66.5       10       Snd Lvl       62.2       4.3       8         234       1       0.0       65.8       66       65.8       10        61.6       4.2       8         235       1       0.0       75.4       66       75.4       10       Snd Lvl       67.8       7.6       8         236       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         237       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         237       1       0.0       69.5       66       69.5       10       Snd Lvl       66.5       5.4       8         238       1       0.0       69.5       66       69.5       10       Snd Lvl       64.6       4.9       8         239       1       0.0       68.4       66       68.4       10       Snd Lvl       63.7       4.7       8	Receiver 157 J to C	232	1 (	0.0	67.5	99	67.5	10	Snd Lvl	63.1	4.4	80	-3.6
234       1       0.0       65.8       66       65.8       10        61.6       4.2       8         235       1       0.0       75.4       66       75.4       10       SndLvl       67.8       7.6       8         236       1       0.0       72.4       66       72.4       10       SndLvl       66.5       5.9       8         237       1       0.0       70.9       66       72.4       10       SndLvl       66.5       5.9       8         237       1       0.0       69.5       66       70.9       10       SndLvl       65.5       5.4       8         238       1       0.0       69.5       66       69.5       10       SndLvl       64.6       4.9       8         239       1       0.0       68.4       66       68.4       10       SndLvl       63.7       4.7       8	Receiver 158 J to C	233	1	0.0	66.5	99	66.5	10	Snd Lvl	62.2	4.3	80	-3.7
235       1       0.0       75.4       66       75.4       10       Snd Lvl       67.8       7.6       8         236       1       0.0       72.4       66       72.4       10       Snd Lvl       66.5       5.9       8         237       1       0.0       70.9       66       70.9       10       Snd Lvl       65.5       5.4       8         238       1       0.0       69.5       66       69.5       10       Snd Lvl       65.6       7.9       8         239       1       0.0       68.4       66       68.4       10       Snd Lvl       63.7       4.7       8	Receiver 159 J to C	234	1	0.0	65.8	99	65.8	10	l	61.6	4.2	8	-3.8
236     1     0.0     72.4     66     72.4     10     5.9     8       237     1     0.0     70.9     66     70.9     10     5.4     8       238     1     0.0     69.5     66     69.5     10     5.4     8       239     1     0.0     68.4     66     68.4     10     5.0     8	Receiver 160 J to C	235	1	0.0	75.4	99	75.4	10	Snd Lvl	67.8	7.6	8	-0.4
237     1     0.0     70.9     66     70.9     10     5.4     8       238     1     0.0     69.5     66     69.5     10     54.6     8       239     1     0.0     68.4     66     68.4     10     54.6     4.9     8	Receiver 161 J to C	236	+	0.0	72.4	99	72.4	10	Snd Lvl	66.5	5.9	œ	-2.1
238 1 0.0 69.5 66 69.5 10 Snd Lvl 64.6 4.9 8 239 1 0.0 68.4 66 68.4 10 Snd Lvl 63.7 4.7 8	Receiver 162 J to C	237	1	0.0	70.9	99	70.9	10	Snd Lvl	65.5	5.4	8	
239 1 0.0 68.4 66 68.4 10 Snd Lvi 63.7 4.7 8	Receiver 163 J to C	238	1	0.0	69.5	99		10	Snd Lvl		4.9	80	-3.1
	Receiver 164 J to C	239	1	0.0		66		10	Snd Lvl		4.7	00	-3.3

<b>RESULTS: SOUND LEVELS</b>						3600						
Receiver 165 J to C	240	-	0.0	67.3	66	67.3	10	Snd Lvl	62.7	4.6	80	-3.4
Receiver 166 J to C	241	-	0.0	66.6	66	66.6	10	Snd Lvl	62.1	4.5	80	-3.5
Receiver 167 J to C	242	۲	0.0	62.9	99	65.9	10	-	61.5	4.4	80	-3.6
Receiver 168 J to C	243	÷	0.0	71.9	66	71.9	10	Snd Lvl	66.0	5.9	8	-2.1
Receiver 169 J to C	244	-	0.0	70.2	66	70.2	10	Snd Lvl	64.9	5.3	80	-2.7
Receiver 170 J to C	245	-	0.0	66.7	66	66.7	10	Snd Lvl	62.2	4.5	80	-3.5
Receiver 171 J to C	246	-	0.0	71.7	66	71.7	10	Snd Lvl	65.9	5.8	80	-2.2
Receiver 172 J to C	247	÷	0.0	68.0	66	68.0	10	Snd Lvl	63.2	4.8	80	-3.2
Receiver 173 J to C	248	-	0.0	67.1	99	67.1	10	Snd Lvl	62.5	4.6	80	-3.4
Receiver 174 J to C	249	۲	0.0	66.4	66	66.4	10	Snd Lvl	62.0	4.4	80	-3.6
Receiver 175 J to C	250	÷	0.0	65.6	66	65.6	10	1	61.4	4.2	80	-3.8
Receiver 176 J to C	251	-	0.0	75.2	99	75.2	10	Snd Lvl	67.4	7.8	80	-0.2
Receiver 177 J to C	252	÷	0.0	70.4	99	70.4	10	Snd Lvl	66.1	4.3	80	-3.7
Receiver 178 J to C	253	-	0.0	69.3	99	69.3	10	Snd Lvl	64.3	5.0	80	-3.0
Receiver 179 J to C	254	-	0.0	68.0	99	68.0	10	Snd Lvl	63.6	4.4	80	-3.6
Receiver 180 J to C	255	Ţ	0.0	67.0	99	67.0	10	Snd Lvl	62.6	4.4	60	-3.6
Receiver 181 J to C	256	÷	0.0	66.1	99	66.1	10	Snd Lvl	62.1	4.0	80	4.0
Receiver 182 J to C	257	÷	0.0	68.3	99	68.3	10	Snd Lvl	63.8	4.5	80	-3.5
Receiver 183 J to C	258	۲	0.0	67.4	99	67.4	10	Snd Lvl	63.3	4.1	80	-3.9
Receiver 184 J to C	259	٢	0.0	66.3	99	66.3	10	Snd Lvl	62.6	3.7	8	4.3
Dwelling Units	]#	# DUs Noise	se Reduction	-								
		Min	Åvg	Max								
		dB	dB	dB								
All Selected		242	0.0	3.6	8.8							
All Impacted		195	0.1	4.3	8.8							
All that meet NR Goal		11	8.0	8.3	8.8							

I:\Projects\3600\Noise\TNM\Noise Walls\Walls Int B-9

15 August 200

INPUT: TRAFFIC FOR LAeq1h Volumes

3600

The Corradino Group

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12 August 2007 TNM 2.5

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RUN:	Jouu Interchange B-Alt 9 With Noise Walls	B-Alt 9 V	/ith Nois	e Walls								
Roadway	Points											
Name	Name	No.	Segment	t								
			Autos		MTrucks	s	HTrucks	(0	Buses		Motorcycles	/cles
			>	s	>	s	>	s	>	s	>	s
			veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h
I-75 - NB	point271	299	2109	26	132	97	422	97	*	97		
	point198	300	2109	67	132	97	422	97	***	97		
	point270	301	2109	67	132	97	422	16	~	97		-
	point199	302	2109	97	132	97	422	97	-	97		
	point268	303	2482	97	124	97	496	97	-	97		
	point999	304	2482	97	124	- 10	496	97	~	97		
	point200	305	2482	97	124	97	496	97	-	97	- Second	
	point222	306	2482	97	124	97	496	97	t	97	5	
	point201	307	2482	97	124	97	496	97	+	26	÷	
	point998	946	2482	97	124	- 61	496	97	~	97		
	point202	308	2482	97	124	97	496	67	-	97	-	
	point945	945	2482	97	124	97	496	97	-	97		
	point905	905	2482	97	124	97	496	97	-	67	-	
	point948	948	2482	97	124	97	496	97	1	97	-	16
	point223	311	2482	97	124	97	496	97	-	97		
	point205	312	2482	97	124	97	496	97	-	97	-	
	point206	313	2482	97	124	97	496	97	-	97	-	97
	point928	928	2482	97	124	16	496	97	1	97	*	97
	point207	314	2482	97	124	16	496	97	1	97	-	97
	point949	949	2322	97	116	97	464	97	-	97	L	67
	point208	315	2322	97	116	97	464	97	-	97	-	97
	point209	316	2322	97	116	26	464	97	*	26	~	97

	point210	317	2322	97	116	97	464	97	-	97	-	
	point950	950	2322	97	116	97	464	97	-	97	~	
	point211	318	2322	97	116	97	464	97	-	97	~	
	point212	319	2685	97	107	97	537	97	-	97	-	
	point213	320	2685	97	107	97	537	97	٢	97	-	
	point214	321	2685	97	107	97	537	97		97	-	
	point215	322										
I-75 - SB	point942	942	4595	97	230	97	919	97	-	97	-	
	point232	338	4486	97	224	97	897	97	-	97	-	
	point233	339	4486	97	224	97	897	97	-	97	-	
	175.5	980	4486	97	224	26	897	97		97	-	
	point234	340	4486	97	224	97	897	97	-	97	-	
	point235	341	4486	97	224	97	897	26	-	97	~	
	point496	342	4486	97	224	97	897	97	-	97	-	
	point260	343	4486	97	224	97	897	97	-	97	-	
	point261	344	4486	97	224	97	897	97		97	-	
	point236	345	4486	97	224	97	897	97	+	97	-	
	point237	346	4486	97	224	97	897	97	-	97	-	
	point238	347	4486	97	224	97	897	97	-	97	-	
	point239	348	4766	97	238	97	953	97	-	97	-	
	point262	349	4766	97	238	97	953	97	-	97	-	
	point263	351	4766	97	238	97	953	97	-	97	-	
	point947	947	4766	97	238	26	953	97	1	97	-	
	point264	353	4766	97	238	97	953	97	-	97	-	
	point944	944	4766	97	238	97	953	97	<del>.</del>	97	-	
	point265	355	4766	97	238	97	953	97	~	97	~	
	point243	356	4526	97	226	97	905	97	-	97	~	
	point266	357	4526	97	226	97	905	97	+	97	-	
	point244	358	4526	97	226	97	905	97	٢	97	-	
	point245	359	4526	97	226	97	905	97	-	97	-	
	point267	360	4526	97	226	97	905	97	-	97	~	
	point246	361	4526	97	226	97	905	97	~	97	-	
	point247	362										
S I-75/Clark Off-Ramp	point461	558	424	40	20	40	56	40	*	40	~	

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	point463	560	424	40	20	40	56	40	-	40	-	40
	point465	562										
S I-75 Service Drive - 1	point466	563	440	40	32	40	184	40	-	40	-	40
	point651	567										
S I-75 Service Drive - 2	point475	575	749	56	e	56	30	56	-	56	-	56
	point476	576	749	56	e	56	30	56	-	56	~	56
	point1056	1056	749	56	co	56	30	56	-	56	-	56
	point644	577										
S I-75 Service Drive - 4	point638	594	749	48	ę	48	30	48	*-	48	-	48
	point489	595	749	48	c	48	30	48	-	48	-	48
	point490	596	749	48	e	48	30	48	-	48	-	48
	point491	597										
S I-75 Service Drive - 5	point491	971	482	56	e	56	32	56	-	56	~	56
	point504	607	482	56	n	56	32	56		56	-	56
	point505	608	482	56	e	56	32	56	-	56	-	56
	point975	975	482	56	3	56	32	56	-	56	-	56
	point507	610										
S I-75 Service Drive - 8	point530	637	360	40	15	40	20	40	-	40	-	40
	point531	638	450	40	30	40	80	40	-	40	-	40
	point532	639										
Springwells/S I-75 On-Ramp	point533	640	420	97	25	97	75	97	t	97	-	97
	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	-	40	-	40
	point685	685	700	30	40	30	60	30	-	30	-	30
	point687	687	700	30	40	30	60	30	۲	30	-	30
	point943	943	700	30	40	30	60	30	. <del>4</del>	30	-	30
	point688	688	700	40	40	40	60	40	-	40	~	40
	point690	069	700	40	40	40	60	40	-	40	-	40
	point691	691	700	40	40	40	60	40	4	40	-	40
	point692	692										
Green - N&SB	point727	727	85	48	5	48	10	48	-	48	-	48
	point939	939	85	48	5	48	10	48	-	48	-	48
	point959	959	85	48	5	48	10	48	-	48	-	48
	noint000	000	L		L	07	2					0

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	point729	729	85	48	5	48	10	48	~	48	-	48
	point730	730	85	48	5	48	10	48	~	48	-	48
	point731	731										
Clark - NB	point812	812	80	40	5	40	25	40		40	~	40
	point813	813	100	25	20	25	300	25		25	~	25
	point814	814	80	25	15	25	180	25	~	25	~	25
	point963	963	80	25	15	25	180	25	-	25	-	25
	point964	964	80	25	15	25	180	25	-	25	~	25
	point815	815	84	40	00	40	4	40	-	40	~	40
	point816	816										
Clark - SB	point818	818	120	40	4	40	25	40	-	40	~	40
	point819	819	120	40	4	40	25	40	-	40	-	40
	point961	961	120	40	4	40	25	40	Ļ	40	~	40
	point962	962	120	40	4	40	25	40	*	40	~	40
	point820	820	120	40	4	40	25	40		40	~	40
	point821	821	120	40	4	40	25	40	-	40	-	40
	point822	822										
Livernois	Lafayette	929	324	56	24	56	60	56		56	~	56
	SB SD	930	162	56	12	56	30	56	-	56	~	56
	point953	953	162	56	12	56	30	56	-	56	-	56
	point954	954	162	56	12	56	30	56	-	56	-	56
	NB SD	933	162	56	12	56	30	56	-	56	-	56
	WB Fort	934										
S I-75 Service Drive - 3	point645	579	749	56	c	56	30	- 56		56	-	56
	point478	581	749	56	e	56	30	56	-	56	-	56
	point494	583	749	56	S	56	30	56	***	56	-	56
	point480	584	749	56	e	56	30	56	-	56	-	56
	point495	968	749	56	e	56	30	56	-	56	-	56
	point488	696										
S I-75 Service Drive - 6	point631	612	140	56	-	56	4	56	-	56	~	56
	point509	613	140	56	۲	56	4	56	-	56	~	56
	point510	614	140	56	-	56	4	56	4	56	-	56
	point629	619										
S I-75 Service Drive - 7	noint977	977	260	22	*	22	C	2C	*	0	*	50

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	point514	620	269	56	-	56	<b>б</b>	56	~	56	-	
	point515	621	269	56	-	56	6	56	-	56	2	
	point516	622	269	56	-	56	6	56	-	56	~	
	point518	624	269	56	-	56	6	56	-	56	~	
	point525	978	269	56	-	56	6	56	~	56	~	
	point527	979										
Outbound to SB I-75	point1005	1005	205	74	20	74	180	74	*	74	-	
	point1058	1058	205	74	20	74	180	74	-	74	-	
	point1006	1006	205	74	20	74	180	74	-	74	-	
	point1007	1007	205	74	20	74	180	74	~	74	~	
	point1008	1008	205	74	20	74	180	74	-	74	~	
	point1010	1010										
Inbound from SB I-75	point1012	1012	559	89	5	89	48	89	~	89	-	
	point1013	1013	559	89	2	89	48	89	-	89	~	
	point1014	1014	559	89	5	89	48	89	~	89	-	
	point1015	1015	559	89	5	89	48	89	-	89	-	
	point1016	1016										
Dragoon	Fort WB	1059	240	56	18	56	45	56	9	56	2	
	NB SD	1060	240	56	18	56	45	56	9	56	2	
	point941	1061	240	56	18	56	45	56	9	56	2	
	point955	1062	240	56	18	56	45	56	9	56	2	
	point956	1063	240	56	18	56	45	56	9	56	2	
	SB SD	1064	240	56	18	56	45	56	9	56	2	
	point919	1065	486	56	36	56	90	56	9	56	2	
	N end Dragoo	0 1066										
S I-75 Auxiliary Lane	point1068	1068	405	64	23	64	60	64	2	64	2	
	point1069	1069	904	72	4	72	34	72	-	72	-	
	point1070	1070	904	80	4	80	34	80	-	80	-	
	point1071	1071	904	88	4	88	34	88	*	88	-	
	point1072	1072	453	88	c	88	27	88	-	88	~	
	point1073	1073	453	86	e	86	27	86	-	86	-	
	point1074	1074	453	75	С	75	27	75	۰	75	-	
	point1075	1075	453	64	e	64	27	64	-	64	-	
	point1076	1076										

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RESULTS: BARRIER DESCRIPTIONS

The Corradino Group T Stone

15 August 2007 **TNM 2.5** 

3600

	3600	Interchange B-Alt 9 With Noise Walls	INPUT HEIGHTS
<b>RESULTS: BARRIER DESCRIPTIONS</b>	PROJECT/CONTRACT:	RUN:	BARRIER DESIGN:

Barriers

Name

Barrier2
Barrier5
Barrier9
Barrier10
Barrier11
Barrier15
Barrier to SB I-75
Barrier from SB I-75
Springwells to Green
Green to east of Waterman
Calvary to Campbell
Junction to Clark

Type		Heights along Barrier	g Barri	er	_	Length	If Wall	If Berm			Cos
	Min	Avg	D	Max			Area	Volume	Top Width	Run:Rise	
	E	E		E	E	E	sq m	cu m	ε	m:m	ω
N		1.10	1.1(	0	1.10			2			
Μ		1.10	1.1(	0	1.10			3			
N		1.10	1.1(	0	1.10			2			
Μ		1.10	1.1(	0	1.10			8			
$\geq$		1.10	1.10	0	1.10	225	248	3			
M		1.10	1.1(	0	1.10			C			
$\geq$		2.70	2.7(	0	2.70			0			
M		3.70	3.7(	0	3.70			2			
$\geq$		3.70	3.7(	0	3.70		5	4			
M		3.70	3.7(	0	3.70			2			
$\mathbb{N}$		3.70	3.7(	0	3.70			0			
×		3.70	3.7(	0	3.70			1			

0 0 0 0 0 0

Cost

949491 380895

960554

3794256

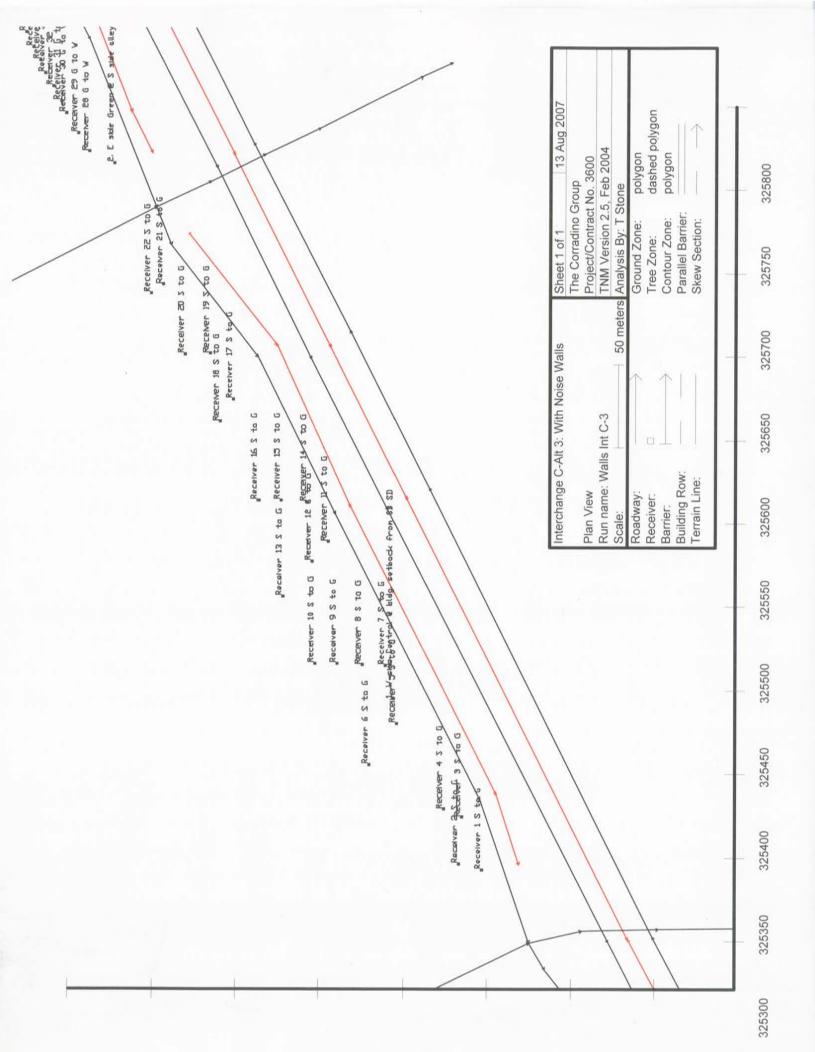
Total Cost:

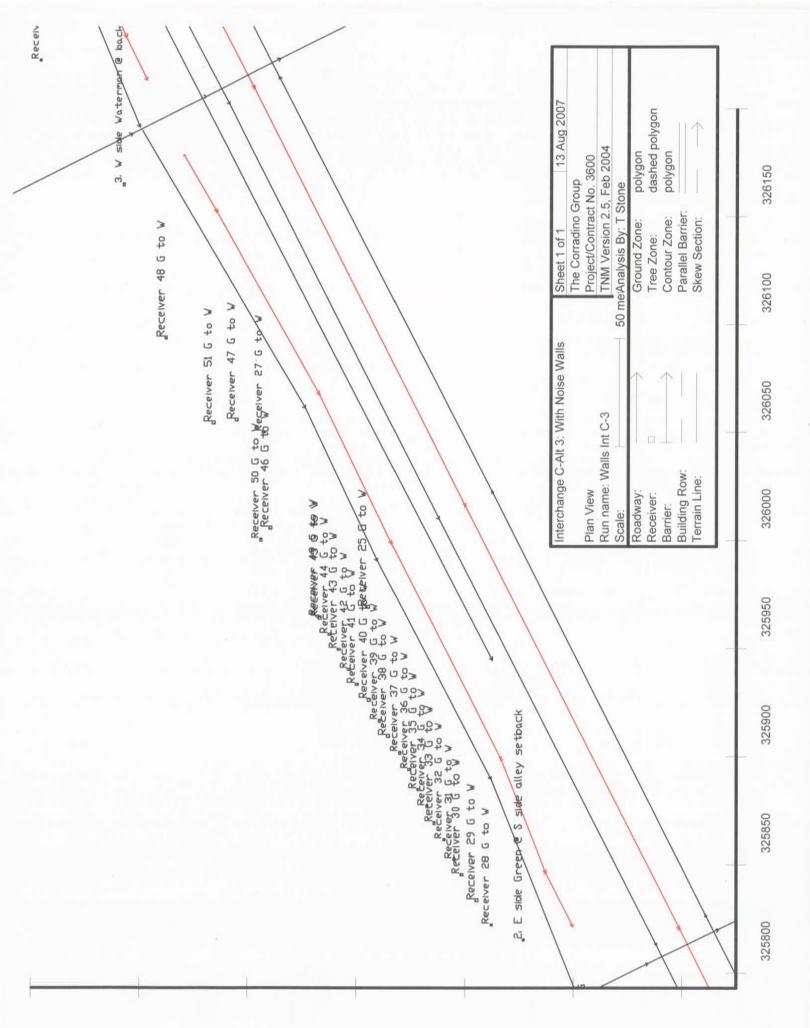
301695 777488

424131

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Interchange C – Alternative 3 – 2035

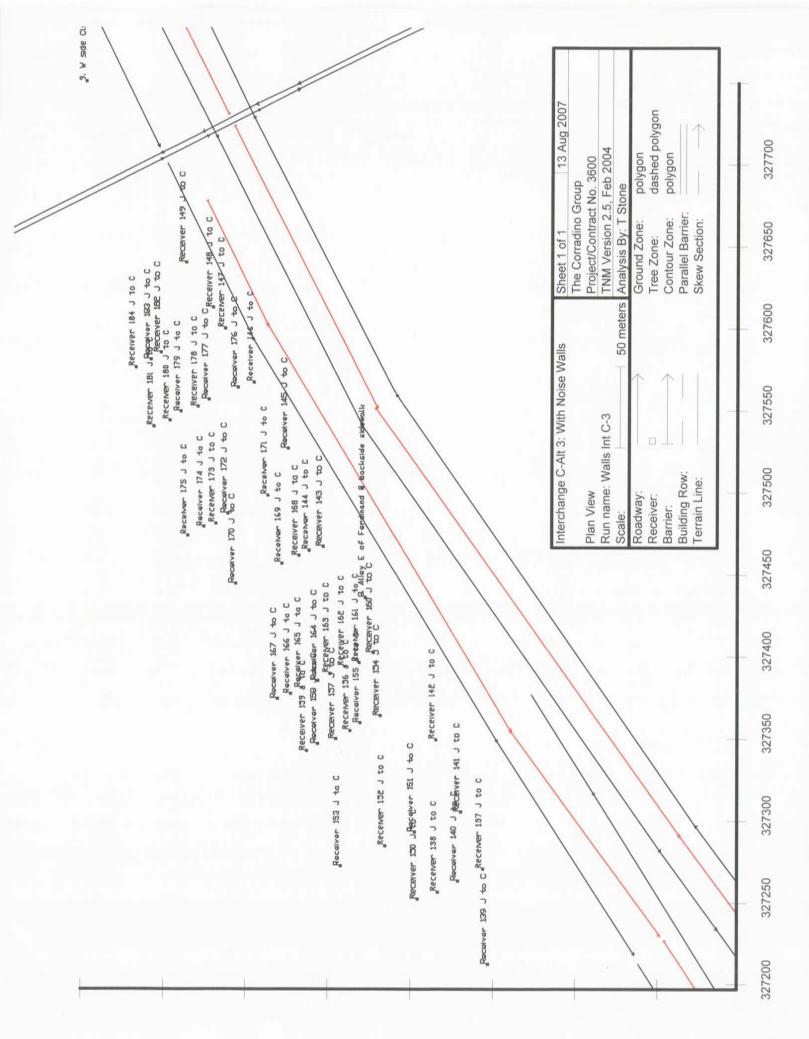




326700 13 Aug 2007 dashed polygon TNM Version 2.5, Feb 2004 polygon polygon Project/Contract No. 3600 326650 The Corradino Group 50 meters Analysis By: T Stone Parallel Barrier: Contour Zone: Skew Section: Ground Zone: Sheet 1 of 1 Tree Zone: 326600 326550 Interchange C-Alt 3: With Noise Walls RECEIVER 67 V 20 L Receiver 68 V to L Run name: Walls Int C-3 326500 RECEIVER 65 W Jerl RECEIVER 66 W to L Building Row: Terrain Line: RECEIVER 34 Ye LE L ptter Rader Capegran @ backerder sidewalk. Receiver 53 V tor L Plan View Roadway: Receiver: 326450 Barrier: Scale: Receiver 58 % to L to Receiver 59 geeaver 63 W to L RECEIVER 64 V to L 326400 RECEIVER 37 W Jor 326350 Receiver 55 V to L Receiver 60 V to L 326300 W side Waterroom & Dacksoo side valk - Bearg 401 Receiver 32 W to L 326250 326200 326150

Receiver to J 32	Precever 133 1 to J Receiver 143 1 to J Receiver 144 1 to D Receiver	50     32690     32690     32700     32700     32700     32700     32700     32710     32710     32710     327200
	Receit Rec	address of the Jacobian addres
	are ce ₽aeceiver 132 IJR	Receiver 131 B Receiver 130 Receiver 75 D 4 Receiver 80 Receiver 32 80 Receiver 33 Receiver 34 Receiver 34 Receiver 35 Receiver 35 Receive
Receiver 134 1 to J Receiver 131 1 ta J Receiver 131 1 ta J Receiver 131 1 fa J Receiver 131 1 fa J Receiver 131 1 fa J Receiver 131 1 fa J Receiver 130 1 to J Receiver 75 1 to J		Econer Brag

"Re



The Corradino Group T Stone									15 August 2007 TNM 2.5 Calculated with TNM 2.5	st 200	Tum:	4				
RESULTS: SOUND LEVELS PROJECT/CONTRACT: RUN: BARRIER DESIGN:	- <u>-</u> 3	3600 Interch: INPUT	3600 Interchange C-Alt 3: With Noise Walls INPUT HEIGHTS	Alt 3: Wif	th Noise	Walls				Ave	rage pa	vement ty	pe shall	Average pavement type shall be used unless	less	
ATMOSPHERICS:		20 deg	20 deg C, 50%	RH						aS	tate hig i differe	hway age nt type wi	ncy subs th approv	a State highway agency substantiates the use of a different type with approval of FHWA.	ne use A.	
Receiver																
Name	No. #	#DUs	Existing		No Barrier						-	With Barrier	er			
			LAeq1h		LAeq1h Calculated	Crit'n	Calc	Increase over existing	existing Crit'n	Type	+	Calculated		Noise Reduction Calculated Goal		Calculated
				200	none		200		Sub'l Inc			iii baca	2000		i	minus
																Goal
			dBA	dBA		dBA	qв		dB			dBA	dB	dB		đB
9. W side Clark N of SB SD - Clark Park	32	-		0.0	72.7		99	72.7			Snd Lvl	1	72.5	0.2	00 (	-7.8
8. Alley E of Ferdinand @ backside sidews	34	-		0.0	72.5		99	72.5			Snd Lvl	0	66.7	5.8	00 (	-2.2
<ol> <li>E side Campbell @ house setback fr SL</li> <li>Alley E of Calvary @ hackside sidewalk</li> </ol>	36		_	0.0	64.9		66 66	64.9 64.5		10		ά ἀ	64.1 64.1	0.8	00 00	-7.6
5. NE Corner Dragoon & Lafvette @ backs	46			0.0	63.3		66	63.3		10	1	.9	63.1	0.2	00	-7.8
4. Alley btw Rade& Casgrain @ backside :	53	-		0.0	76.2		66	76.2			Snd Lvl	7	71.8	4.4	00	-3.6
3. W side Waterman @ backside sidewalk	55	5		0.0	72.2		66	72.2		10 SI	Snd Lvl	66	69.8	2.4	00	-5.6
2. E side Green @ S side alley setback	58	2	1	0.0	71.3		66	71.3		10 SI	Snd Lvl	99	69.3	2.0	00	-6.0
1. W side Central @ bldg. setback from SE	60	4	-	0.0	0.0		66	0.0		10 ir	invalid	2	0.0	0.0	00	0.0
Receiver 1 S to G	61	-	1	0.0	0.0		66	0.0		10 ir	invalid	)	0.0	0.0	00	0.0
Receiver 2 S to G	62	-		0.0	0.0		66	0.0		10 ir	invalid	-	0.0	0.0	00	0.0
Receiver 3 S to G	63	-		0.0	0.0		66	0.0		10 ir	invalid	-	0.0	0.0	80	0.0
Receiver 4 S to G	64	-	1	0.0	0.0		66	0.0		10 ir	invalid	1	0.0	0.0	00	0.0
Receiver 5 S to G	65	-		0.0	71.6		66	71.6		10 SI	Snd Lvl	6	66.2	5.4	80	-2.6
Receiver 6 S to G	99	-		0.0	0.0		66	0.0		10 ir	invalid	-	0.0	0.0	00	0.0
Receiver 7 S to G	68	-		0.0	73.7		66	73.7		10 SI	Snd Lvl	6	66.3	7.4	80	-0.6
Receiver 8 S to G	69	-		0.0	71.1		66	71.1		10 S	Snd Lvl	6	65.1	6.0	00	-2.0
Receiver 9 S to G	20	-		0.0	0.0		66	0.0		10 ir	invalid		0.0	0.0	00	0.0
Receiver 10 S to G	71	14	-	0.0	0.0	3	66	0.0		10 ir	invalid	-	0.0	0.0	80	0.0
Receiver 11 S to G	72	-		0.0	74.3		66	74.3		10 SI	Snd Lvl	9	66.6	7.7	80	-0.3
Receiver 12 S to G	73	2	1	0.0	71.0		66	71.0		10 SI	Snd Lvl	õ	64.8	6.2	80	-1.8
Receiver 13 S to G	74	CU		0.0	0.0		66	0.0		10 ir	invalid	-	0.0	0.0	80	0.0
Receiver 14 S to G	75	-	-	0.0	73.9	11	66	73.9		10 SI	Snd Lvl	9	66.4	7.5	80	-0.5

15 August 200

S to G S to G S to G S to G S to G G to W G to W G to W G to W	- 9 6	0.0	60.2	~~							
	0 0	00	7.00	99	69.2	10	Snd Lvl	63.5	5.7	80	-2.3
8 to G 8 to G 8 to G 8 to G 6 to W 6 to W 6 to W 6 to W 6 to W		2.5	70.3	66	70.3	10	Snd Lvl	64.5	5.8	80	-2.2
StoG StoG StoG StoG GtoW GtoW GtoW GtoW		0.0	68.7	66	68.7	10	Snd Lvl	63.5	5.2	80	-2.8
S to G S to G G to W G to W G to W G to W	0	0.0	69.7	66	69.7	10	Snd Lvl	64.6	5.1	80	-2.9
S to G S to G G to W G to W G to W G to W	0	0.0	68.1	66	68.1	10	Snd Lvl	63.4	4.7	80	-3.3
S to G G to W G to W G to W G to W G to W	F F 0	0.0	67.9	66	67.9	10	Snd Lvl	64.8	3.1	80	4.9
G to W G to W G to W G to W G to W	- 0	0.0	67.4	66	67.4	10	Snd Lvl	63.9	3.5	80	4.5
G to W G to W G to W G to W G to W	5	0.0	71.1	66	71.1	10	Snd Lvl	65.5	5.6	80	-2.4
G to W G to W G to W G to W		0.0	6.69	99	63.9	10	Snd Lvl	64.7	5.2	80	-2.8
G to W G to W G to W	4	0.0	65.9	99	65.9	10	I	64.0	1.9	00	-6.1
G to W G to W	2	0.0	66.3	66	66.3	10	Snd Lvl	63.5	2.8	00	-5.2
G to W	2	0.0	66.3	99	66.3	10	Snd Lvl	64.0	2.3	00	-5.7
	٢	0.0	66.2	66	66.2	10	Snd Lvl	63.7	2.5	80	-5.5
Receiver 32 G to W 92	٢	0.0	66.2	66	66.2	10	Snd Lvl	63.7	2.5	80	-5.5
Receiver 33 G to W 93	-	0.0	66.4	99	66.4	10	Snd Lvl	63.6	2.8	00	-5.2
Receiver 34 G to W 94	2	0.0	66.6	99	66.6	10	Snd Lvl	63.6	3.0	80	-5.0
Receiver 35 G to W 96	2	0.0	66.6	99	66.6	10	Snd Lvl	63.5	3.1	80	4.9
Receiver 36 G to W 97	2	0.0	66.8	66	66.8	10	Snd Lvl	63.5	3.3	80	4.7
Receiver 37 G to W 98	2	0.0	66.8	99	66.8	10	Snd Lvl	63.4	3.4	80	4.6
Receiver 38 G to W 99	-	0.0	67.1	66	67.1	10	Snd Lvl	63.3	3.8	00	4.2
Receiver 39 G to W 100	Ļ	0.0	67.1	66	67.1	10	Snd Lvl	63.3	3.8	80	4.2
Receiver 40 G to W 101	2	0.0	6.99	66	66.9	10	Snd Lvl	63.3	3.6	8	4.4
Receiver 41 G to W 102	-	0.0	66.9	66	6.99	10	Snd Lvl	63.2	3.7	00	4.3
Receiver 42 G to W 103	2	0.0	699	66	6.99	10	Snd Lvl	63.2	3.7	80	4.3
Receiver 43 G to W 104	Ţ	0.0	67.2	99	67.2	10	Snd Lvl	63.2	4.0	80	4.0
Receiver 44 G to W 105	-	0.0	67.2	66	67.2	10	Snd Lvl	63.2	4.0	80	4.0
Receiver 45 G to W 106	2	0.0	67.2	66	67.2	10	Snd Lvl	63.2	4.0	80	4.0
Receiver 46 G to W 107	2	0.0	67.4	66	67.4	10	Snd Lvl	63.1	4.3	80	-3.7
Receiver 47 G to W 108	-	0.0	68.3	99	68.3	10	Snd Lvl	63.9	4.4	80	-3.6
Receiver 48 G to W 109	2	0.0	66.7	99	66.7	10	Snd Lvl	63.5	3.2	80	4.8
Receiver 49 G to W 110	2	0.0	68.1	66	68.1	10	Snd Lvl	63.4	4.7	00	-3.3
Receiver 50 G to W 111	2	0.0	67.6	99	67.6	10	Snd Lvl	62.8	4.8	80	-3.2
Receiver 51 G to W 112	<del>.</del>	0.0	67.1	99	67.1	10	Snd Lvl	63.1	4.0	80	4.0
Receiver 52 W to L 113	10	0.0	70.9	99	70.9	10	Snd Lvl	67.9	3.0	80	-5.0
Receiver 53 W to L 114	-	0.0	73.7	99	73.7	10	Snd Lvl	68.5	5.2	80	-2.8
Receiver 54 W to L 115	÷	0.0	71.5	99	71.5	10	Snd Lvl	67.0	4.5	80	-3.5
Receiver 55 W to L 116	-	0.0	70.4	99	70.4	10	Snd Lvl	67.4	3.0	80	-5.0
Receiver 57 W to L 117	2	0.0	73.2	99	73.2	10	Snd Lvl	69.4	3.8	80	-4.2
Receiver 58 W to L 118	2	0.0	71.5	66	71.5	10	Snd Lvl	67.8	3.7	80	-4.3
Receiver 59 W to L 119	-	0.0	69.7	66	69.7	10	Snd Lvl	66.0	3.7	80	-4.3

Receiver 60 W to L	120	Ţ	0.0	68.9	99	68.9	10	Snd Lvl	64.8	4.1	8	-3.9
Receiver 62 W to L	121	÷	0.0	73.6	99	73.6	10	Snd Lvl	69.4	4.2	80	-3.8
Receiver 63 W to L	122	-	0.0	71.8	99	71.8	10	Snd Lvl	68.0	3.8	80	-4.2
Receiver 64 W to L	123	-	0.0	70.3	66	70.3	10	Snd Lvl	66.8	3.5	80	4.5
Receiver 65 W to L	124	-	0.0	72.1	99	72.1	10	Snd Lvl	68.6	3.5	80	-4.5
Receiver 66 W to L	125	-	0.0	70.5	99	70.5	10	Snd Lvl	67.6	2.9	60	-5.1
Receiver 67 W to L	126	-	0.0	70.8	99	70.8	10	Snd Lvl	68.9	1.9	60	-6.1
Receiver 68 W to L	128	-	0.0	69.0	99	69.0	10	Snd Lvl	67.3	1.7	80	-6.3
Receiver 73 D to J	144	9	0.0	66.5	66	66.5	10	Snd Lvl	66.4	0.1	80	-7.9
Receiver 74 D to J	145	10	0.0	66.4	66	66.4	10	Snd Lvl	66.3	0.1	80	-7.9
Receiver 75 D to J	146	2	0.0	64.2	99	64.2	10	I	64.1	0.1	80	-7.9
Receiver 76 D to J	147	-	0.0	63.7	99	63.7	10	I	63.5	0.2	80	-7.8
Receiver 77 D to J	148	-	0.0	63.0	99	63.0	10	1	62.8	0.2	80	-7.8
Receiver 78 D to J	149	10	0.0	64.1	99	64.1	10	1	63.9	0.2	80	-7.8
Receiver 79 D to J	150	-	0.0	63.9	99	63.9	10	1	63.7	0.2	80	-7.8
Receiver 80 D to J	151	б	0.0	64.0	99	64.0	10	I	63.8	0.2	80	-7.8
Receiver 81 D to J	152	2	0.0	64.0	99	64.0	10	1	63.7	0.3	80	L.T.
Receiver 82 D to J	153	2	0.0	63.8	99	63.8	10	I	63.5	0.3	80	7.7-
Receiver 83 D to J	154	Ļ	0.0	63.1	99	63.1	10	1	62.9	0.2	80	-7.8
Receiver 84 D to J	155	-	0.0	62.7	99	62.7	10	1	62.4	0.3	80	1.7-
Receiver 85 D to J	156	-	0.0	62.3	99	62.3	10	1	62.0	0.3	80	1.7-
Receiver 86 D to J	157	÷	0.0	63.1	99	63.1	10	1	62.8	0.3	80	7.7-
Receiver 87 D to J	158	-	0.0	62.7	99	62.7	10	1	62.4	0.3	80	-7.7
Receiver 88 D to J	159	<del></del>	0.0	62.3	99	62.3	10	I	61.9	0.4	80	-7.6
Receiver 89 D to J	160	÷	0.0	63.5	99	63.5	10	1	63.1	0.4	8	-7.6
Receiver 90 D to J	161	1	0.0	62.8	99	62.8	10	1	62.3	0.5	8	-7.5
Receiver 91 D to J	162	÷	0.0	61.9	99	61.9	10	I	61.5	0.4	80	-7.6
Receiver 92 D to J	163	٢	0.0	61.5	99	61.5	10	I	61.1	0.4	80	-7.6
Receiver 93 D to J	164	4	0.0	61.1	99	61.1	10	I	60.6	0.5	80	-7.5
Receiver 94 D to J	165	-	0.0	64.4	99	64.4	10	l	64.0	0.4	80	-7.6
Receiver 95 D to J	166	-	0.0	64.4	99	64.4	10	I	63.9	0.5	80	-7.5
Receiver 96 D to J	167	-	0.0	64.5	99	64.5	10	I	64.0	0.5	œ	-7.5
Receiver 97 D to J	168	-	0.0	64.5	99	64.5	10		63.9	0.6	80	-7.4
Receiver 98 D to J	169	-	0.0	62.0	99	62.0	10	I	61.6	0.4	00	-7.6
Receiver 99 D to J	170	t-	0.0	62.1	99	62.1	10	1	61.6	0.5	80	-7.5
Receiver 100 D to J	171	+	0.0	62.1	99	62.1	10	I	61.6	0.5	œ	-7.5
Receiver 101 D to J	172	-		62.2	99	62.2	10	1	61.6	0.6	œ	-7.4
Receiver 102 D to J	173	4	0.0	61.4	99	61.4	10	I	60.4	1.0	œ	-7.0
Receiver 103 D to J	174	-	0.0	62.0	99	62.0	10	I	61.0	1.0	œ	-7.0
Receiver 104 D to J	175	÷	0.0		99	62.3	10	I		1.0	80	-7.0
Receiver 105 D to .1	17F	•	0.0	62 G	66	62.6	10		618	0.8	α	C L-

177         1         0.0         63.0         65.0         63.0         10            173         1         0.0         63.3         66         63.3         10            173         1         0.0         65.3         66         63.3         10            173         1         0.0         65.3         66         65.3         10            183         1         0.0         65.3         66         65.3         10            184         1         0.0         65.1         66         65.1         10            186         1         0.0         65.1         66         65.7         10            189         1         0.0         65.7         66         65.7         10            190         1         0.0         65.7         66         65.7         10            191         1         0.0         65.7         66         65.7         10            192         2         0.0         65.7         66         65.7         10	RESULTS: SOUND LEVELS						3600						
D10.1         T/3         1         0.0         635         65         615         10          62.8         0.03         8           D10.1         113         1         0.0         63.3         66         61.3         10          63.3         10          63.3         10          63.3         11         10          63.3         11          63.3         11         11         10          63.3         11          63.3         11          63.3         11         11          63.3         11          63.3         11          63.3         11         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11          63.3         11	Receiver 106 D to J	177	-	0.0	63.0	99	63.0	10	I	62.2	0.8	œ	-7.2
Dibol         179         1         0.0         651         0.0         651         0.0         641         1.0         8           Dibol         111         110         110         110         110         111         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         110         111         110         111         110         111         110         111         110         111         110         111         111         111         111         111         111         111         111         111         111         111         111         111	Receiver 107 D to J	178	-	0.0	63.6	99	63.6	10		62.8	0.8	80	-7.2
	Receiver 108 D to J	179	÷	0.0	65.1	99	65.1	10	-	64.1	1.0	80	-7.0
	Receiver 109 D to J	180	۲	0.0	64.3	99	64.3	10	-	63.3	1.0	80	-7.0
D10         112         1         0.0         6.32         66         63.2         10          62.0         112         8           D10         1         1         0.0         62.1         66         63.1         10          63.1         13         8           D10         1         1         0.0         65.1         66         65.1         10          63.3         13         8           D10         1         1         0.0         65.1         66         65.1         10          63.3         13         8           D10         1         1         0.0         65.1         66         65.1         10          63.3         13         8           D10         1         1         0.0         65.3         66         65.4         10          63.3         13         8           D10         1         1         0.0         65.4         66         65.4         10          63.3         13         8           D10         1         1         0.0         65.4         10          63.3	Receiver 110 D to J	181	۲	0.0	63.8	66	63.8	10	-	62.6	1.2	80	-6.8
D101         133         1         0.0         62.6         62.6         10          61.3         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13	Receiver 111 D to J	182	-	0.0	63.2	99	63.2	10	I	62.0	1.2	80	-6.8
$ \begin{array}{ ccccccccccccccccccccccccccccccccccc$	Receiver 112 D to J	183	-	0.0	62.6	99	62.6	10	1	61.3	1.3	80	-6.7
D10         15         1         0.0         651         650         651         10          633         15         8           D10         117         1         0.0         651         66         650         10          633         15         8           D10         117         1         0.0         651         66         653         10          633         15         8           D10         117         1         0.0         651         66         653         10          633         15         8           D10         117         1         0.0         651         66         653         10          633         13         13         13         13         13         13         13         14         1         0.0         651         66         653         10          633         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13		184	F	0.0	62.1	99	62.1	10	-	60.7	1.4	8	-6.6
D10         11         0.0         65.0         65.0         10          63.3         11         8           D10         11         1         0.0         65.1         66         65.2         10          63.3         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13 <td>Receiver 114 D to J</td> <td>185</td> <td>F</td> <td>0.0</td> <td>65.1</td> <td>99</td> <td>65.1</td> <td>10</td> <td>-</td> <td>63.6</td> <td>1.5</td> <td>8</td> <td>-6.5</td>	Receiver 114 D to J	185	F	0.0	65.1	99	65.1	10	-	63.6	1.5	8	-6.5
$ \begin{array}{ ccccccccccccccccccccccccccccccccccc$	Receiver 115 D to J	186	٣	0.0	65.0	99	65.0	10	1	63.3	1.7	80	-6.3
		187	<b>F</b>	0.0	65.1	66	65.1	10	I	63.3	1.8	80	-6.2
Diol         189         1         0.0         55.2         65         10         65.2         10         65.3         10         65.3         10         65.3         10         65.3         20         8           Diol         191         1         0.0         65.4         66         65.7         10         65.1         22         2         2         2           Diol         193         3         0.0         65.7         66         65.7         10         65.1         22         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2		188	٣	0.0	65.2	66	65.2	10	1	63.3	1.9	80	-6.1
		189	٣	0.0	65.2	99	65.2	10	I	63.2	2.0	80	-6.0
DioJ         11         1         0.0         65.4         66.4         10          63.1         2.3         8           DioJ         112         1         0.0         65.7         66         65.7         10          63.1         2.3         2         0           DioJ         113         2         0.0         67.1         66         67.1         10          63.1         2.3         2.5         9           DioJ         197         2         0.0         67.1         66         67.1         10          63.1         2.5         8           DioJ         197         1         0.0         62.5         66         62.5         10          60.7         11         8           DioJ         198         1         0.0         62.5         66         62.5         10          60.7         118         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 <th1< th=""></th1<>	Receiver 119 D to J	190	-	0.0	65.4	99	65.4	10	1	63.2	2.2	80	-5.8
D(b)         132         1         0.0         65.7         66         65.7         10          63.2         2.5         8           D(b)         133         2         0.0         67.1         66         67.1         10         87.0         0.2         8           D(b)         136         2         0.0         67.1         66         67.1         10         87.0         0.2         8           D(b)         136         2         0.0         67.1         66         67.1         10         87.0         0.2         8           D(b)         136         2         0.0         67.1         66         67.5         10          60.2         17         10         8         17         10         17         10         17         10         17         10         17         10         17         10         17         10         17         11         10         11         10         11         10         11         10         11         10         11         11         10         11         11         11         11         11         11         11         11         11	Receiver 120 D to J	191	-	0.0	65.4	99	65.4	10	1	63.1	2.3	80	-5.7
	Receiver 121 D to J	192		0.0	65.7	99	65.7	10	I	63.2		80	-5.5
	Receiver 122 D to J	193	С	0.0	67.2	99	67.2	10	Snd Lvl	67.0	0.2	80	-7.8
DioJ         195         2         0.0         67.1         66         67.1         10         SmdLyl         66.9         0.2         8           DioJ         197         2         0.0         62.5         10          60.9         17         8           DioJ         197         2         0.0         62.5         66         62.5         10          60.3         17         8           DioJ         199         1         0.0         62.5         66         62.5         10          60.3         17         8           DioJ         199         1         0.0         62.5         66         62.5         10          60.3         17         8           DioJ         200         1         0.0         62.5         66         62.5         10          60.7         18         7         8           DioJ         200         1         0.0         61.5         66         61.5         10          60.7         18         8           DioJ         203         1         0.0         61.5         66         61.5         10 <td< td=""><td>Receiver 123 D to J</td><td>194</td><td>2</td><td>0.0</td><td>67.1</td><td>99</td><td>67.1</td><td>10</td><td>Snd Lvl</td><td>67.0</td><td>0.1</td><td>80</td><td>-7.9</td></td<>	Receiver 123 D to J	194	2	0.0	67.1	99	67.1	10	Snd Lvl	67.0	0.1	80	-7.9
		195	2	0.0	67.1	99	67.1	10	Snd Lvl	6.99	0.2	8	-7.8
	Receiver 125 D to J	196	-	0.0	62.5	99	62.5	10	1	60.9	1.6	80	-6.4
198         1         0.0         62.5         66         62.5         10          60.7         1.8         8           199         1         0.0         62.6         66         62.6         10          60.6         2.0         8           200         1         0.0         61.5         66         61.5         10          60.6         2.0         8           201         1         0.0         61.5         66         61.1         10          61.2         0.3         8           202         1         0.0         61.5         66         61.5         10          61.2         0.3         8           202         1         0.0         60.5         66         60.5         10          61.2         0.3         8           205         1         0.0         60.5         66         60.5         10          60.1         0.3         8         8           206         1         0.0         60.5         66         60.5         10          60.1         0.4         8         8         8         8	Receiver 126 D to J	197	2	0.0	62.5	99	62.5	10	-	60.8	1.7	80	-6.3
190         1         0.0         62.6         65.6         62.6         10 $$ 60.6         2.0         8           200         1         0.0         61.5         66         61.5         10 $$ 60.6         2.3         8           201         1         0.0         61.5         66         61.5         10 $$ 60.6         2.3         8           202         1         0.0         61.1         66         61.5         10 $$ 60.6         0.3         8           203         1         0.0         60.5         66         60.5         10 $$ 60.6         0.3         8           205         1         0.0         60.5         66         60.5         10 $$ 60.1         0.4         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	Receiver 127 D to J	198	-	0.0	62.5	66	62.5	10		60.7	1.8	80	-6.2
200         1         0.0         62.8         66         62.8         10          60.5         2.3         8           201         1         0.0         61.5         66         61.5         10          61.2         0.3         8           201         1         0.0         61.1         66         61.1         10          61.2         0.3         8           202         1         0.0         61.1         66         61.1         10          60.3         0.3         8           203         1         0.0         60.5         66         60.3         10          60.6         0.3         8           204         1         0.0         60.5         66         60.5         10          60.6         0.3         8           205         1         0.0         60.5         66         60.5         10          60.6         0.3         8         8           206         1         0.0         60.5         66         60.5         10          60.5         0.4         8         8         8         8	Receiver 128 D to J	199	-	0.0	62.6	66	62.6	10	1	60.6	2.0	80	-6.0
	Receiver 129 D to J	200	5	0.0	62.8	99	62.8	10	1	60.5	2.3	80	-5.7
	Receiver 130 D to J	201	-	0.0	61.5	66	61.5	10	1	61.2	0.3	80	-7.7
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 131 D to J	202	-	0.0	61.1	66	61.1	10	1	60.8	0.3	80	-7.7
204         1         0.0         60.9         66         60.9         10          60.6         0.3         8           205         1         0.0         60.5         66         60.9         10          60.1         0.4         8           206         1         0.0         60.5         66         60.9         10          60.1         0.4         8           207         1         0.0         60.5         66         60.5         10          60.1         0.4         8           208         1         0.0         64.9         66         64.9         10          60.1         0.4         8           210         1         0.0         64.7         66         64.7         10          60.9         4.1         8           211         1         0.0         64.7         66         64.7         10          60.9         3.8         8           213         1         0.0         65.8         66         64.9         10          60.9         4.1         8           214         2         1	Receiver 132 D to J	203	٣	0.0	60.5	66	60.5	10	1	60.0	0.5	8	-7.5
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 133 D to J	204	۲	0.0	60.9	66	60.9	10	1	60.6	0.3	80	-7.7
206         1         0.0         60.9         66         60.9         10          60.5         0.4         8           207         1         0.0         60.5         66         60.5         10          60.1         0.4         8           208         1         0.0         60.5         66         66.5         10          60.1         0.4         8           208         1         0.0         64.9         66         64.7         10          60.1         0.4         8           209         1         0.0         64.7         66         64.7         10          60.9         3.3         8           210         1         0.0         64.7         66         64.7         10          60.9         3.3         8           211         1         0.0         66.0         66.6         64.7         10         60.1         61.9         41         8           213         1         0.0         66.0         70.8         66         70.8         10         61.9         41         8           214         2         0.0 </td <td>Receiver 134 D to J</td> <td>205</td> <td>٢</td> <td>0.0</td> <td>60.5</td> <td>66</td> <td>60.5</td> <td>10</td> <td>1</td> <td>60.1</td> <td>0.4</td> <td>80</td> <td>-7.6</td>	Receiver 134 D to J	205	٢	0.0	60.5	66	60.5	10	1	60.1	0.4	80	-7.6
207         1         0.0         60.5         66         60.5         10          60.1         0.4         8           208         1         0.0         67.6         66         67.6         10          60.1         0.4         8           208         1         0.0         67.6         66         64.9         10          60.1         0.4         8           209         1         0.0         64.7         66         64.7         10          60.9         3.8         8           210         1         0.0         64.7         66         64.7         10          60.9         3.8         8           211         1         0.0         68.8         66         68.8         10         81.9         4.1         8           213         1         0.0         68.8         66         68.8         10         81.4         64.3         45         8           214         2         0.0         70.8         66         70.8         10         81.4         66.4         53         8           216         1         0.0         70.3 <td>Receiver 135 D to J</td> <td>206</td> <td>-</td> <td>0.0</td> <td>60.9</td> <td>66</td> <td>60.9</td> <td>10</td> <td> </td> <td>60.5</td> <td>0.4</td> <td>80</td> <td>-7.6</td>	Receiver 135 D to J	206	-	0.0	60.9	66	60.9	10		60.5	0.4	80	-7.6
208         1         0.0         67.6         66         67.6         10         Node with state         63.5         4.1         8           209         1         0.0         64.9         66         64.9         10          60.8         4.1         8           210         1         0.0         64.9         66         64.9         10          60.9         3.8         8           211         1         0.0         66.0         66         66.0         10          60.9         3.8         8           211         1         0.0         68.8         66         68.8         10         SndLyl         61.9         4.1         8           213         1         0.0         68.8         66         68.8         10         SndLyl         65.5         5.3         8           214         2         0.0         70.8         66         70.8         10         SndLyl         66.4         5.9         8           216         1         0.0         70.3         66         72.3         10         SndLyl         65.5         5.3         8           216         1<	Receiver 136 D to J	207	-	0.0	60.5	66	60.5	10	1	60.1	0.4	80	-7.6
209       1       0.0       64.9       66       64.9       10        60.8       4.1       8         210       1       0.0       64.7       66       64.7       10        60.8       4.1       8         211       1       0.0       64.7       66       64.7       10        60.9       3.8       8         211       1       0.0       66.0       66       66.0       10       SndLvi       61.9       4.1       8         212       1       0.0       68.8       66       68.8       10       SndLvi       64.3       4.5       8         213       1       0.0       70.8       66       70.8       10       SndLvi       65.5       5.3       8         214       2       0.0       71.1       66       72.3       10       SndLvi       65.5       5.3       8         216       1       0.0       71.1       66       71.1       10       66.4       5.9       8         215       1       0.0       71.1       66       76.0       10       66.4       7.9       8         215       <	Receiver 137 J to C	208	۲	0.0	67.6	99	67.6	10	Snd Lvl	63.5	4.1	80	-3.9
210       1       0.0       64.7       66       64.7       10        60.9       3.8       8         211       1       0.0       66.0       66       66.0       10       Snd Lvi       61.9       3.8       8         212       1       0.0       68.8       66       68.8       10       Snd Lvi       61.9       4.1       8         213       1       0.0       68.8       66       68.8       10       Snd Lvi       64.3       4.5       8         214       2       0.0       72.3       66       72.3       10       Snd Lvi       65.5       5.3       8         215       1       0.0       71.1       66       72.3       10       Snd Lvi       65.3       5.8       8         216       1       0.0       71.1       66       76.0       10       71.1       7.9       8         217       2       0.0       76.0       66       76.0       10       5nd Lvi       66.1       77       8	Receiver 138 J to C	209	Ŧ	0.0	64.9	99	64.9	10	1	60.8	4.1	80	-3.9
211       1       0.0       66.0       66       66.0       10       SndLvl       61.9       4.1       8         212       1       0.0       68.8       66       68.8       10       SndLvl       64.3       4.5       8         213       1       0.0       70.8       66       70.8       10       SndLvl       65.5       5.3       8         214       2       0.0       72.3       66       72.3       10       SndLvl       65.5       5.3       8         215       1       0.0       71.1       66       71.1       10       5.1       8         216       1       0.0       71.1       66       76.0       10       5.1       7.9       8         217       2       0.0       76.0       66       76.0       10       7.1       7.9       8	Receiver 139 J to C	210	-	0.0	64.7	99	64.7	10	-	60.9	3.8	80	4.2
212       1       0.0       68.8       66       68.8       10       5nd Lvl       64.3       4.5       8         213       1       0.0       70.8       66       70.8       10       5nd Lvl       65.5       5.3       8         214       2       0.0       72.3       66       72.3       10       5nd Lvl       66.4       5.9       8         215       1       0.0       71.1       66       71.1       10       5.0       8         216       1       0.0       76.0       66       76.0       10       5.0       8         217       2       0.0       76.0       66       76.0       10       5nd Lvl       68.1       7.9       8	Receiver 140 J to C	211	-	0.0	66.0	99	66.0	10	Snd Lvl	61.9	4.1	œ	-3.9
213       1       0.0       70.8       66       70.8       10       5.5       5.3       8         214       2       0.0       72.3       66       72.3       10       5.0       66       7         215       1       0.0       71.1       66       71.1       10       5.9       8         216       1       0.0       76.0       66       76.0       10       5.0       8         217       2       0.0       76.7       66       76.7       10       50.0       7.9       8	Receiver 141 J to C	212	F	0.0	68.8	99	68.8	10	Snd Lvl	64.3	4.5	80	-3.5
214     2     0.0     72.3     66     72.3     10     56.4     5.9     8       215     1     0.0     71.1     66     71.1     10     56.4     5.9     8       216     1     0.0     76.0     66     71.1     10     56.3     5.8     8       216     1     0.0     76.0     66     76.0     10     56.1     7.9     8       217     2     0.0     76.7     66     76.7     10     5nd Lvi     69.0     7.7     8	Receiver 142 J to C	213	Ļ.	0.0	70.8	99	70.8	10	Snd Lvl	65.5	5.3	80	-2.7
215     1     0.0     71.1     66     71.1     10     53.3     5.8     8       216     1     0.0     76.0     66     76.0     10     50.1     7.9     8       217     2     0.0     76.7     66     76.7     10     50.0     7.7     8	Receiver 143 J to C	214	2	0.0	72.3	99	72.3	10	Snd Lvl	66.4	5.9	80	-2.1
216 1 0.0 76.0 66 76.0 10 Snd Lvl 68.1 7.9 8 217 2 0.0 767 66 76.7 10 Snd Lvl 69.0 7.7 8	Receiver 144 J to C	215	-	0.0	71.1	99	71.1	10	Snd Lvl	65.3	5.8	80	-2.2
217 2 0.0 767 66 767 10 Sud Lvi 69.0 7.7 8	Receiver 145 J to C	216	-	0.0	76.0	99	76.0	10	Snd Lvl	68.1	7.9	00	-0.1
	Receiver 146 J to C	217	2	0.0	76.7	99	76.7	10	Snd I vI	69 D	77	00	-03

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Receiver 14/ J to C	218		0.0	/6.3	99	/6.3	10	Shd Lvl	69.2	1.1	×	-0.9
Receiver 148 J to C	219	+-	0.0	75.9	99	75.9	10	Snd Lvl	69.2	6.7	80	-1.3
Receiver 149 J to C	220	2	0.0	75.1	99	75.1	10	Snd Lvl	69.9	5.2	80	-2.8
Receiver 150 J to C	221	-	0.0	64.3	99	64.3	10	1	60.0	4.3	80	-3.7
Receiver 151 J to C	222	t	0.0	65.8	99	65.8	10	I	61.5	4.3	80	-3.7
Receiver 152 J to C	223	÷	0.0	64.6	99	64.6	10	I	60.1	4.5	80	-3.5
Receiver 153 J to C	224	۲	0.0	62.9	99	62.9	10	I	58.7	4.2	80	-3.8
Receiver 154 J to C	225	÷	0.0	68.3	99	68.3	10	Snd Lvl	63.5	4.8	80	-3.2
Receiver 155 J to C	226	t	0.0	67.0	99	67.0	10	Snd Lvl	62.3	4.7	80	-3.3
Receiver 156 J to C	227	÷	0.0	66.2	99	66.2	10	Snd Lvl	61.6	4.6	80	-3.4
Receiver 157 J to C	228	-	0.0	65.5	99	65.5	10	I	60.8	4.7	80	-3.3
Receiver 158 J to C	229	-	0.0	64.9	99	64.9	10	I	60.2	4.7	8	-3.3
Receiver 159 J to C	230	-	0.0	64.4	66	64.4	10	I	59.7	4.7	80	-3.3
Receiver 160 J to C	232	-	0.0	70.5	99	70.5	10	Snd Lvl	65.3	5.2	80	-2.8
Receiver 161 J to C	233	-	0.0	69.3	99	69.3	10	Snd Lvl	64.2	5.1	80	-2.9
Receiver 162 J to C	234	÷	0.0	68.3	99	68.3	10	Snd Lvl	63.3	5.0	00	-3.0
Receiver 163 J to C	235	+	0.0	67.3	99	67.3	10	Snd Lvl	62.4	4.9	80	-3.1
Receiver 164 J to C	236	-	0.0	66.5	99	66.5	10	Snd Lvl	61.6	4.9	80	-3.1
Receiver 165 J to C	237	٣	0.0	65.7	99	65.7	10	1	60.8	4.9	80	-3.1
Receiver 166 J to C	238	-	0.0	65.3	99	65.3	10	Î	60.4	4.9	00	-3.1
Receiver 167 J to C	239	-	0.0	64.8	99	64.8	10	1	59.9	4.9	80	-3.1
Receiver 168 J to C	240	-	0.0	70.1	99	70.1	10	Snd Lvl	64.6	5.5	00	-2.5
Receiver 169 J to C	241	-	0.0	68.9	99	68.9	10	Snd Lvl	63.4	5.5	80	-2.5
Receiver 170 J to C	242	-	0.0	66.1	99	66.1	10	Snd Lvl	61.1	5.0	80	-3.0
Receiver 171 J to C	243	-	0.0	70.7	99	70.7	10	Snd Lvl	65.0	5.7	80	-2.3
Receiver 172 J to C	244	<del>-</del>	0.0	67.6	99	67.6	10	Snd Lvl	62.4	5.2	80	-2.8
Receiver 173 J to C	245	-	0.0	66.8	99	66.8	10	Snd Lvl	61.7	5.1	80	-2.9
Receiver 174 J to C	246	-	0.0	66.3	99	66.3	10	Snd Lvl	61.2	5.1	80	-2.9
Receiver 175 J to C	247	-	0.0	65.5	99	65.5	10	1	60.7	4.8	80	-3.2
Receiver 176 J to C	248	-	0.0	73.0	66	73.0	10	Snd Lvl	67.2	5.8	80	-2.2
Receiver 177 J to C	249	-	0.0	70.2	99	70.2	10	Snd Lvl	64.9	5.3	80	-2.7
Receiver 178 J to C	250	-	0.0	69.2	66	69.2	10	Snd Lvl	64.0	5.2	80	-2.8
Receiver 179 J to C	251	-	0.0	68.1	66	68.1	10	Snd Lvl	63.4	4.7	80	-3.3
Receiver 180 J to C	252	+	0.0	67.3	66	67.3	10	Snd Lvl	62.4	4.9	8	-3.1
Receiver 181 J to C	253	-	0.0	66.5	66	66.5	10	Snd Lvl	61.8	4.7	80	-3.3
Receiver 182 J to C	254	-	0.0	68.4	66	68.4	10	Snd Lvl	63.9	4.5	80	-3.5
Receiver 183 J to C	255	£	0.0	67.8	66	67.8	10	Snd Lvl	63.3	4.5	80	-3.5
Receiver 184 J to C	256	-	0.0	6.99	99	66.9	10	Snd Lvl	62.6	4.3	80	-3.7
Dwelling Units	0#	# DUs No	Noise Reduction	on								

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## 15 August 200

**RESULTS: SOUND LEVELS** 

3600

	dB	dB	dB	
All Selected	261	0.0		7.9
All Impacted	147	0.1	4.3	7.9
All that meet NR Goal	0	0.0	0.0	0.0

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INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group T Stone

13 A TNN

13 August 2007 TNM 2.5

PROJECT/CONTRACT: RUN:	3600 Interchange C-Alt 3: With Noise Walls	C-Alt 3:	With Noi	se Wall	s							
Roadway	Points											
Name	Name	No.	Segment	nt								
			Autos		MTrucks		HTrucks	10	Buses		Motorcycles	/cles
			V veh/hr	s km/h								
I-75 - NB	point271	299	2109	97	132	97	422	97	-			
	point198	300	2109	67	132	97	422	97				
	point270	301	2109	16	132	26 3	422	97	~	67	-	97
	point199	302	2109	16	132	16 3	422	97		67	-	97
	point268	303	2482	97	124	1 97	496	97		67	-	97
	point999	304	2482	97	124	1 97	496	97	÷	67	+	97
	point200	305	2482	16	124	1 97	496	97	-	97		97
	point222	306	2482	97	124	1 97	496	97		67	-	97
	point201	307	2482	16	124	16 1	496	97		67	-	97
	point998	946	2482	16	124	16 1	496	67	Ţ	67	1	97
	point202	308	2482	97	124	1 97	496	97	-	67	-	97
	point945	945	2482	97	124	97	496	97	-	97	-	97
	point905	905	2482	97	124	. 97	496	97	-	97		97
	point948	948	2482	97	124	16	496	67	-	67	-	97
	point223	311	2482	97	124	97	496	97	-	67	-	97
	point205	312	2482	97	124	97	496	97	1	67	-	97
	point206	313	2482	97	124	- 97	496	97	L	97	-	97
	point928	928	2322	97	116	16	464	97	1	97	-	97
	point207	314	2322	97	116	16	464	97		97	-	97
	point949	949	2322	97	116	16	464	16	-	97	-	97
	point208	315	2322	97	116	97	464	97	2	67	t	67
	point209	316	2322	97	116	67	464	97	*	97	*	79

	point210	317	2322	26	116	97	464	97	-	97	~	97
	point950	950	2322	97	116	97	464	97	-	97	-	97
	point211	318	2322	97	116	97	464	97		97	<u>.</u>	97
	point212	319	2685	97	107	97	537	97	t	97	-	97
	point213	320	2685	97	107	97	537	97	۲	97	-	97
	point214	321	2685	97	107	97	537	97	-	97	~	97
	point215	322				1						
I-75 - SB	point942	942	4595	97	230	97	919	97	*-	97	~	97
	point232	338	4595	97	230	97	919	97	t	97	~	6
	point233	339	4486	97	224	97	897	97	+	97	~	97
	175.5	980	4486	97	224	97	897	57	-	97	~	97
	point234	340	4486	97	224	97	897	97	-	97	~	97
	point235	341	4486	97	224	97	897	97	-	97	~	97
	point496	342	4486	97	224	97	897	97	+	97	~	97
	point260	343	4486	97	224	97	897	97	+	97	~	97
	point261	344	4486	97	224	97	897	97	~	97	~	97
	point236	345	4486	97	224	97	897	97	-	97	-	97
	point237	346	4486	97	224	97	897	97	~	97	-	97
	point238	347	4486	97	224	97	897	97	-	97	~	97
	point239	348	4766	97	238	97	953	97	4	97	-	97
	point262	349	4766	97	238	97	953	97	-	97	-	97
	point263	351	4766	97	238	97	953	97	-	97	-	97
	point947	947	4766	97	238	97	953	97	-	97	-	97
	point264	353	4766	97	238	97	953	97	t	97	-	97
	point944	944	4766	97	238	97	953	97	+	97	-	97
	point265	355	4766	97	238	97	953	97	~	97	-	97
	point243	356	4526	97	226	97	905	97	4	97	-	97
	point266	357	4526	97	226	97	905	97	+	97	-	97
	point244	358	4526	97	226	97	905	97	+	97	-	97
	point245	359	4526	97	226	97	905	97	-	97	-	97
	point267	360	4526	97	226	97	905	97	-	97	-	97
	point246	361	4526	97	226	97	905	97	-	97	~	97
	point247	362										
S I-75/Clark Off-Ramp	point461	558	424	40	20	40	56	40	1	40	*	40

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	point463	560	424	40	20	40	56	40	-	40	-	40
	point465	562										
S I-75 Service Drive - 1	point466	563	440	40	32	40	184	40	-	40	~	40
	point651	567							(a)			
S I-75 Service Drive - 2	point475	575	749	56	3	56	30	56	-	56	~	56
	point476	576	749	56	n	56	30	56	-	56	-	56
	point1056	1056	749	56	3	56	30	56	-	56	-	
	point644	577										
S I-75 Service Drive - 4	point638	594	749	48	3	48	30	48	-	48	-	
	point489	595	749	48	ç	48	30	48	-	48	-	
	point490	596	749	48	e	48	30	48	+	48	-	
	point491	597										
S I-75 Service Drive - 5	point491	971	1004	56	14	56	39	56	-	56	-	
	point504	607	1004	56	14	56	39	56	-	56	-	
	point505	608	1004	56	14	56	39	56	~	56	~	
	point975	975	1004	56	14	56	39	56	÷	56	-	
	point1077	1077	1004	56	14	56	39	56	~	56	-	
	point507	610										
S I-75 Service Drive - 8	point530	637	200	40	S	40	27	40	۲	40	~	
	point531	638	200	40	n	40	27	40	-	40	-	
	point532	639										
Springwells/S I-75 On-Ramp	point533	640	420	97	25	97	75	97	<u><u> </u></u>	97	~	
	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	-	40	~	
	point685	685	700	40	40	40	60	40	-	40	~	
	point687	687	700	40	40	40	60	40	~	40	-	
	point943	943	700	40	40	40	60	40	<del>،</del>	40	~	
	point688	688	700	40	40	40	60	40	<del>،</del>	40	-	
	point690	690	200	40	40	40	60	40	Ţ	40	-	
	point691	691	700	40	40	40	60	40	-	40	~	
	point692	692										
Green - N&SB	point727	727	85	48	5	48	10	48	÷-	48		
	point939	939	85	48	2	48	10	48	-	48	~	48
	noint050	950	85	AR	ч	40	10	40	T	40	-	

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	point960	096	85	48	2	48	10	48	-	48	-	48
	point729	729	85	48	2	48	10	48	~	48		48
	point730	730	85	48	2	48	10	48	~	48	-	48
	point731	731										
Clark - NB	point812	812	80	40	5	40	25	40	-	40	-	40
	point813	813	100	25	20	25	300	25	<del>.</del>	25	-	25
	point814	814	80	25	15	25	180	25	<del></del>	25	-	25
	point963	963	80	25	15	25	180	25	4	25	~	25
	point964	964	80	25	15	25	180	25	~	25	-	25
	point815	815	84	40	8	40	4	40	-	40	-	40
	point816	816										
Clark - SB	point818	818	120	40	4	40	25	40	-	40	-	40
	point819	819	120	40	4	40	25	40	~	40	*	40
	point961	961	120	40	4	40	25	40	-	40	-	40
	point962	962	120	40	4	40	25	40	<del>ب</del>	40	-	40
	point820	820	120	40	4	40	25	40	-	40	-	40
	point821	821	120	40	4	40	25	40	<del>،</del>	40	-	40
	point822	822										
S I-75 Service Drive - 3	point645	579	749	56	ო	56	30	56	~	56	-	56
	point478	581	180	56	10	56	Q	56	~	56	-	56
	point494	583	180	56	10	56	5	56	-	56	-	56
	point480	584	180	56	10	56	Ω.	56	~	56	-	56
	point495	968	1004	56	14	56	39	56	٣	56	-	56
	point488	969										
S I-75 Service Drive - 6	point631	612	200	56	c	56	27	56	~	56	-	56
	point509	613	200	56	ო	56	27	56	-	56	-	56
	point510	614	200	56	e	56	27	56	*	56	-	56
	point1078	1078	200	56	e	56	27	56	~	56	*	56
	point629	619										
S I-75 Service Drive - 7	point977	977	200	56	e	56	27	56	~	56	-	56
	point514	620	200	56	c	56	27	56	-	56	~	56
	point515	621	200	56	ç	56	27	56	-	56	-	56
	point516	622	200	56	e	56	27	56	<u></u>	56		56
	noint518	624	000	56	c	2 2 2	70	U U U	*	U U	7	RG RG

	point525	978	200	56	ŝ	56	27	56	-	56	-	56
	point527	979										
Outbound to SB I-75	point1005	1005	225	74	27	74	238	74	~	74	-	74
	point1058	1058	225	74	27	74	238	74	1	74	-	74
	point1006	1006	225	76	27	76	238	76	-	76	-	76
	point1007	1007	225	78	27	78	238	78	~	78	~	78
	point1008	1008	225	89	27	89	238	89	~	89	-	89
	point1010	1010										
Inbound from SB I-75	point1012	1012	791	89	15	89	131	89	-	89	-	89
	point1013	1013	791	85	15	85	131	85	~	85	-	85
	point1014	1014	791	83	15	83	131	83	~	83	~	83
	point1015	1015	791	81	15	81	131	81	-	81	-	81
	point1016	1016										
S I-75/Dragoon On-Ramp	point1068	1068	1000	97	5	97	45	97	<del>.</del>	97	-	97
	point1069	1069	1000	97	5	97	45	97	-	97	-	97
	point1070	1070	1000	97	5	97	45	97	~	97	-	97
	point1071	1071	1000	97	5	16	45	97	~	97	-	97
	point1072	1072	1000	97	5	97	45	97	*	16		97
	point1073	1073	1000	97	5	97	45	97	Ţ	26	-	97
	point1074	1074	1000	97	5	97	45	97	~	97	-	97
	point1075	1075										
Waterman N&SB	point761	1079	85	56	5	56	15	56	~	56	-	56
	point762	1080	128	48	80	48	23	48	2	48	2	48
	point957	1081	128	48	80	48	23	48	2	48	2	48
	point958	1082	128	48	00	48	23	48	2	48	2	48
	point764	1083	128	56	00	56	23	56	2	56	2	56
	point765	1084	128	56	00	56	23	56	2	56	2	56
	point769	1085										
S I-75/Dragoon Off-Ramp	point481	1092	904	56	4	56	34	56	~	56	-	56
	point483	1093	904	56	4	56	34	56	~	56	-	56
	point484	1094	904	56	4	56	34	56	~	56	-	56
	point1096	1096	904	56	4	56	34	56	~	56	~	56
	noint485	1095										

**RESULTS: BARRIER DESCRIPTIONS** 

The Corradino Group T Stone

15 August 2007 TNM 2.5

3600

3600 **RESULTS: BARRIER DESCRIPTIONS** 

PROJECT/CONTRACT:

BARRIER DESIGN:

RUN:

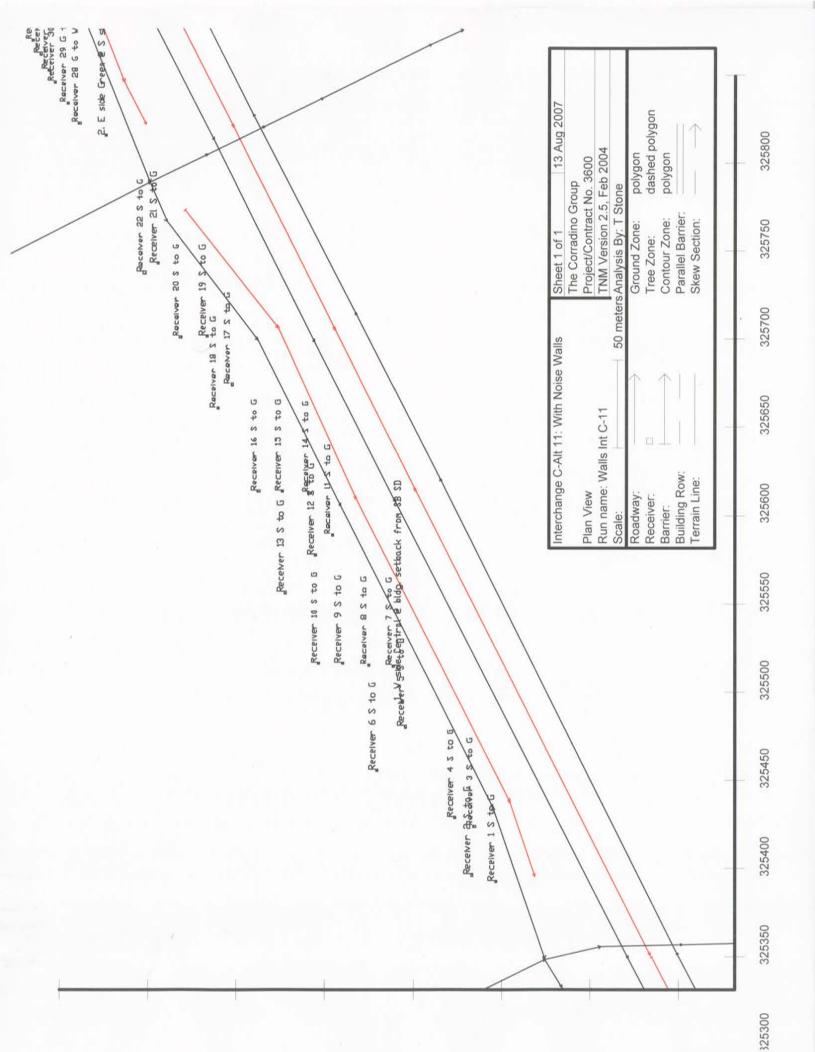
Interchange C-Alt 3: With Noise Walls INPUT HEIGHTS

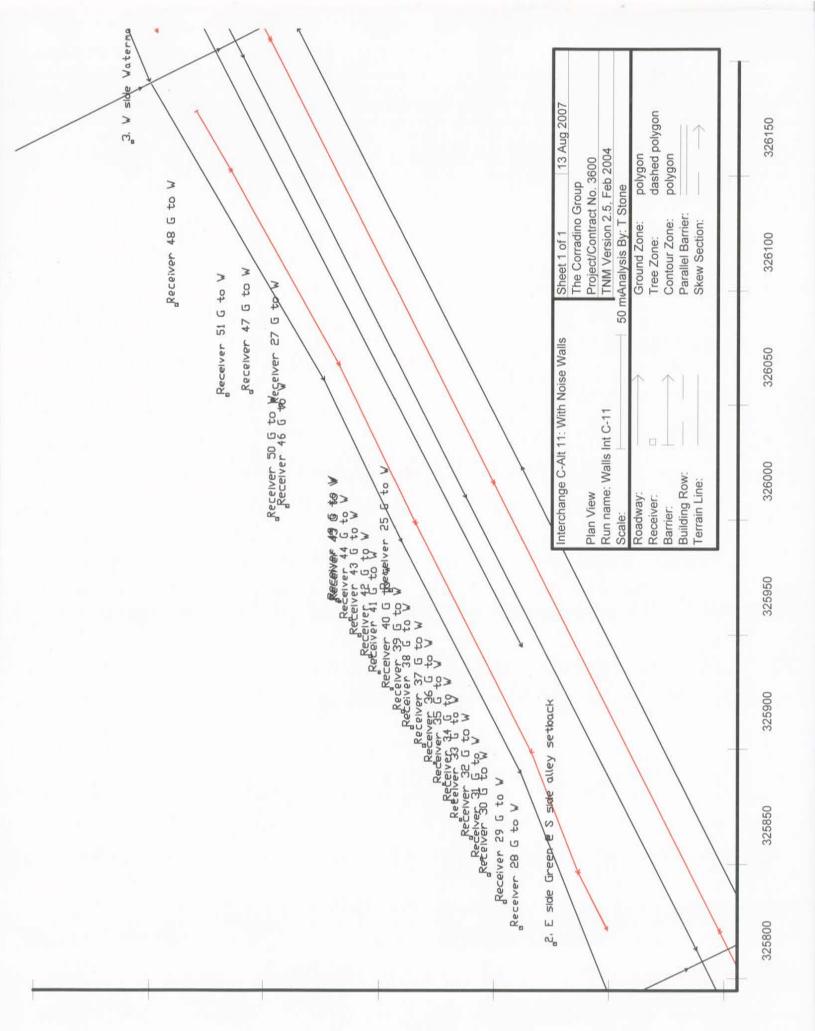
Barriers												
Name	Type	Heights	Type Heights along Barrier	arrier	Length		_	lf Berm			Cost	
		Min	Avg	Max		A	Area Vo	/olume	Top Width	Run:Rise		
		E	ε	ε	Ε	sq	sq m cu	cu m	E	m:m	в	
Barrier2	M	1.	10	1.10	1.10	466	512					
Barrier5	M	٦.	10	1.10	1.10	193	212					
Barrier9	M	÷.	10	1.10	1.10	539	592					
Barrier10	M	1.	10	1.10	1.10	525	578					8
Barrier11	M	1.	10	1.10	1.10	225	248					0
Barrier15	M	1.	10	1.10	1.10	1448	1593					2
Barrier to SB I-75	M	2.	70	2.70	2.70	225	607					347808
Junction to Clark	M	ъ.	20	3.70	3.70	527	1948					95620
Springwells to Green	M	З.	3.70	3.70	3.70	428	1584					777488
Waterman to Casgrain	M		20	3.70	3.70	160	590					289808
Green to Waterman	M	З.	20	3.70	3.70	399	1477					724909
Barrier from SB I-75	M		20	3.70	3.70	202	749					367502

3463717

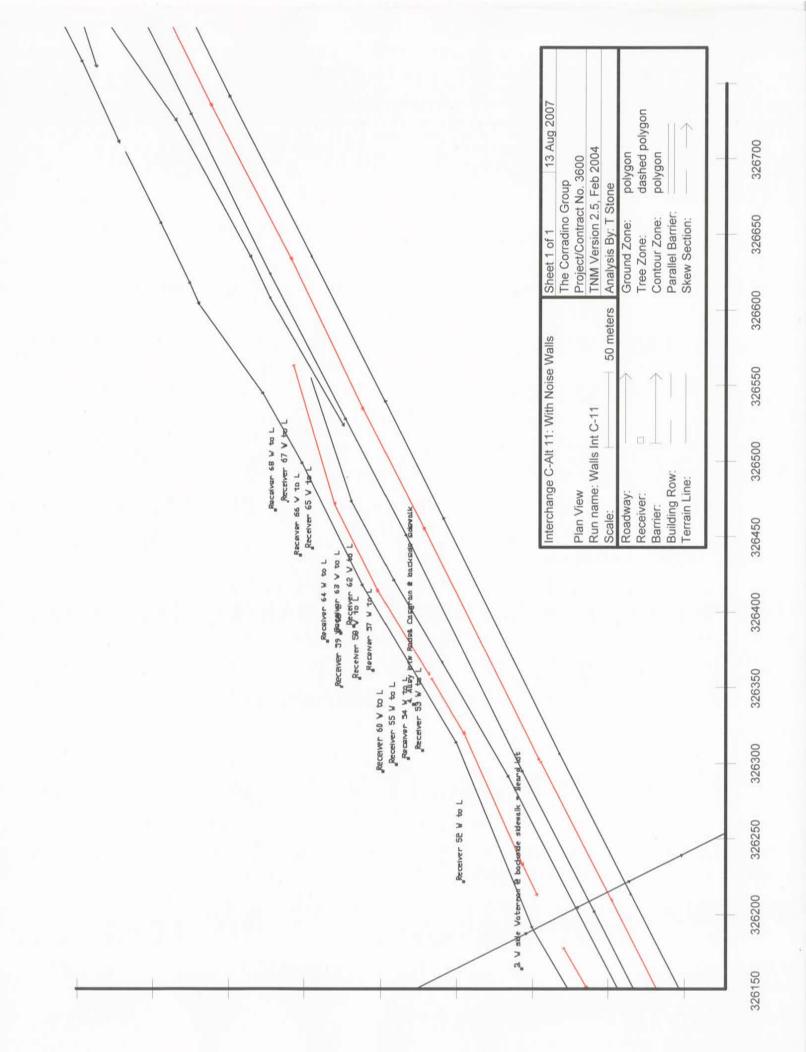
Total Cost:

Interchange C – Alternative 11 – 2035

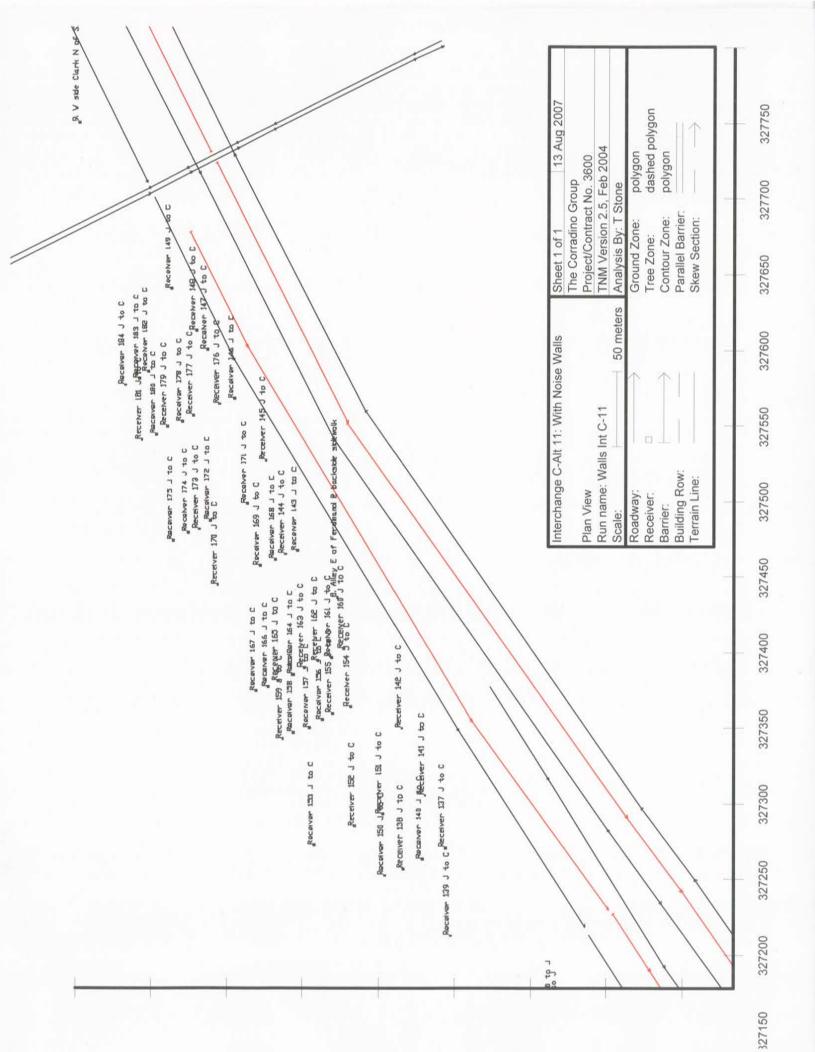




,50



	Receiver 138 J to Receiver 139 J to L Receiver 129 J to L Receiver 127 J to J Receiver 127 J to J	Receiver 102 D Receiver 113 D to J Receiver 102 D Receiver 113 D to J Receiver 102 D Receiver 112 D to J Receiver 102 D Receiver 112 D to J Receiver 103 D to J Receiver 104 PREGVER 111 D to Receiver 113 D to J Receiver 104 PREGVER 111 D to Receiver 113 D to J Receiver 105 D Receiver 110 D to Receiver 113 D to J Receiver 109 D to J Receiver 98 0 to J Receiver 98 D to J Receiver 98 D to J Receiver 98 D to J Receiver 109 D to J Receiver 109 D to J	Receiver 126 Service 126 To build and so that a forence 126 Service 128 D build are so that a forence 128 D	Interchange C-Alt 11: With Noise Walls     Sheet 1 of 1     13 Aug 2007       Plan View     The Corradino Group       Plan View     The Corradino Group       Project/Contract No. 3600     Run name: Walls Int C-11       Scale:     50 meters       Roadway:     50 meters       Barrier:     6round Zone:       Pariling Row:     Contour Zone:       Parallel Barrier:     Parallel Barrier:       Skew Section:     Skew Section:	326700 326750 326800 326850 326900 326950 327000 327050 327100 327150 327200 327250
3266	+		S. NE Corner		326650 32670



The Curration Group T shows         Is Angust 2017 T MU SI RESULT: Source Links         Is Angust 2017 T MU SI RESULT: Source Links         Is Angust 2017 T MU SI RESULT: Source Links           RESULT: Source Links         Sea (1)         Sea (1)         Sea (1)         Sea (1)           RESULT: Source Links         Sea (1)         Sea (1)         Sea (1)         Sea (1)           RESULT: Source Links         Sea (1)         Mental manual sea (1)         Sea (1)         Sea (1)           RESULT: Source Links         Jac (1)         Mental manual sea (1)         Mental manual sea (1)         Sea (1)           RESULT: Source Links         Jac (2)         Sea (2)         Sea (2)         Sea (2)         Sea (2)           Result: Result (1)         Mental manual sea (1)         Mental manual sea (1)         Mental manual sea (1)         Sea (1)         Sea (1)           Result (2)         Sea (2)         Sea (2)         Sea (2)         Sea (2)         Sea (2)         Sea (2)           Result (2)         Sea (2)         Mental manual sea (2)         Sea (2)         Sea (2)         Sea (2)         Sea (2)           Result (2)         Sea (2)         Mental manual sea (2)         Mental manual sea (2)	I SAUGATION TATA	RESULTS: SOUND LEVELS							3600								
TS: SOUD LFUE:           CICCONTRACT:           CICCONTRACT:           InterConder           InterConder           InterConder           CICCONTRACT:           InterConder           InterConder           SPHERICS:           CICCONTRACT:           InterConder           InterConder           InterConder           SPHERICS:           Colspan="6">Antime Mains           SPHERICS:           Antime Mains           Antime Mains           Antime Mains           SPHERICS:           Antime Mains           Antime Maint Apotoler <th colspan<="" td=""><td>Calculated with TMM 25           Calculated with TMM 25           Calculated with Approval of FHWA.           Cols SW, RH           Cols SW, RH           Cols SW, RH           Colspan="2"&gt;Colspan="2"&gt;Colspan="2"&gt;Colspan="2"&gt;Colspan="2"&gt;Colspan="2"           Colspan="2"&gt;Colspan="2"           Colspan="2"&gt;Colspan="2"           Colspan="2"&gt;Colspan="2"           Colspan="2"           Colspan= 2"</td><td>The Corradino Group T Stone</td><td></td><td></td><td></td><td></td><td></td><td></td><td>15 AI TNM</td><td>ugust 2.5</td><td>2007</td><td></td><td></td><td></td><td></td><td></td></th>	<td>Calculated with TMM 25           Calculated with TMM 25           Calculated with Approval of FHWA.           Cols SW, RH           Cols SW, RH           Cols SW, RH           Colspan="2"&gt;Colspan="2"&gt;Colspan="2"&gt;Colspan="2"&gt;Colspan="2"&gt;Colspan="2"           Colspan="2"&gt;Colspan="2"           Colspan="2"&gt;Colspan="2"           Colspan="2"&gt;Colspan="2"           Colspan="2"           Colspan= 2"</td> <td>The Corradino Group T Stone</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15 AI TNM</td> <td>ugust 2.5</td> <td>2007</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Calculated with TMM 25           Calculated with TMM 25           Calculated with Approval of FHWA.           Cols SW, RH           Cols SW, RH           Cols SW, RH           Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"           Colspan="2">Colspan="2"           Colspan="2">Colspan="2"           Colspan="2">Colspan="2"           Colspan="2"           Colspan= 2"	The Corradino Group T Stone							15 AI TNM	ugust 2.5	2007					
Shericity is a constrained of the constrained o	a state highway agency substantiates the use of a different type with approval of FHWA.           Kristing Addrift         Note stating Addrift	RESULTS: SOUND LEVELS PROJECT/CONTRACT: RUN: BARRIER DESIGN:	е <u>–</u> –	600 htercha	inge C-A HEIGHT	It 11: With N	oise Wall	ß	Calc	ulated	with I.N.N.	1.2.5 avement type	shall be u	sed unless			
No.         FOUS         Existing Length	International control of contro	ATMOSPHERICS:		20 deg	C, 50% I	H					a State hi of a differ	ghway agenc ent type with	y substant approval o	iates the us of FHWA.	e		
No.Existing I calculated and Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting Lacting <td>Existing         Notification         Number interval interva</td> <td>Receiver</td> <td></td>	Existing         Notification         Number interval interva	Receiver															
Identify         Lendity         Lendity         Lendity         Calculated         Critical         Critical         Critical         Critical         Critical         Critical         Culuated         Critical         Calculated         Colu         Calculated         Calcula	Lender In calculatedLengthIncrease over existing sublineTypeCalculatedNoise ReductiondBAdBAdBAdBAdBdBdBfequilatedcoincoindBAdBAdBAdBdBdBdBdBdBdBdBdBdB007216672410Sincluted66.65.8mod10007216672.410Sinclut66.55.8mod11007216672.410Sinclut66.55.88120072.06672.410Sinclut66.65.88130064.16672.010Sinclut66.65.88140064.16672.010Sinclut66.65.88150071.36671.310Sinclut66.62.481671.36671.37.666.67.788170071.36671.37.67.687.38180071.36671.37.67.687.38190071.4667.17.67.687.38100071.4667.17.67.687.78110071.67.17.17.6 <td></td> <td></td> <td></td> <td>Existing</td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>With Barrier</td> <td></td> <td></td> <td></td> <td></td>				Existing	_						With Barrier					
Ability           Ability         Ability           Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability           Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability         Ability <th colsp<="" th=""><th>Ability in the second of the second o</th><th></th><th></th><th></th><th>LAeq1h</th><th></th><th></th><th></th><th>ed Crit'r</th><th></th><th>Type</th><th>Calculated LAed1h</th><th>Noise Rec Calculate</th><th>duction d Goal</th><th>Calc</th><th>ulated</th></th>	<th>Ability in the second of the second o</th> <th></th> <th></th> <th></th> <th>LAeq1h</th> <th></th> <th></th> <th></th> <th>ed Crit'r</th> <th></th> <th>Type</th> <th>Calculated LAed1h</th> <th>Noise Rec Calculate</th> <th>duction d Goal</th> <th>Calc</th> <th>ulated</th>	Ability in the second of the second o				LAeq1h				ed Crit'r		Type	Calculated LAed1h	Noise Rec Calculate	duction d Goal	Calc	ulated
Image: lige condition (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	dBA         dBA <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>nc</td> <td></td> <td></td> <td></td> <td></td> <td>mint</td> <td>IS</td>									nc					mint	IS	
dBA         dBA <td>dBA         dBA         dBA<td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Goal</td><td></td></td>	dBA         dBA <td></td> <td>Goal</td> <td></td>														Goal		
32         1         0.0         72.7         66         72.7         10         72.5         0.2         8           34         1         0.0         72.4         66         72.4         10          64.1         0.0         58         8           36         1         0.0         64.4         66         64.7         10          64.1         0.3         8         8           40         1         0.0         64.4         66         63.3         10          64.1         0.3         8         8           55         1         0.0         76.0         66         73.7         10         SmdLw         716         64.7         8         8           56         71.3         66         73.7         10         SmdLw         66.4         7.3         8         8         8         8         8         8         8         8         8         8         8         8         8         7.3         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	00         72.7         66         72.7         10         SindLyl         72.5         0.2         8           000         72.4         66         72.4         10         SindLyl         66.6         5.8         8           1         0.0         64.7         66         72.4         10         SindLyl         66.6         5.8         8           1         0.0         64.4         66         64.3         10          64.1         0.6         8           1         0.0         66         73.0         10          63.1         0.2         8           1         0.0         71.3         66         71.3         10         SindLyl         66.3         2.4         8           0.0         73.7         66         73.7         10         SindLyl         66.3         2.4         8           0.0         73.7         66         73.7         10         SindLyl         66.3         2.4         8           0.0         71.3         66         73.7         10         SindLyl         66.3         2.4         8           0.0         74.2         66         73.7				dBA	dBA	dBA	dB	đB			dBA	dB	qв	Вb		
34         1         0.0         72.4         66         72.4         10         56.6         5.8         5.8         5           36         1         0.0         64.7         66         64.7         10          64.1         0.6         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	0.0         72.4         66         72.4         10         SindLyl         66.6         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.8         5.	9. W side Clark N of SB SD - Clark Park	32	-	0		2.7	66	72.7	10	Snd Lvl	72.5		0.2	80	-7.8	
36         1         0.0         64.7         66         64.7         10          64.1         0.6         8           40         1         0.0         64.4         66         64.4         10          64.1         0.3         8           55         1         0.0         63.3         66         63.3         10          63.1         0.3         8           55         1         0.0         73.3         66         73.7         10         SndLvl         69.6         2.4         8           56         2         0.0         71.3         66         73.7         10         SndLvl         69.6         2.4         8           61         1         0.0         71.3         66         71.3         10         SndLvl         69.6         2.4         8           61         1         0.0         0.0         66         71.3         10         SndLvl         69.3         3.1         8           61         1         0.0         0.0         66         71.3         10         SndLvl         69.3         3.1         8           61         1         0.0	0.0         64.7         66         64.7         10          64.1         0.6         84.1         0.6         84.1         0.6         84.1         0.6         84.1         0.6         64.1         0.6         64.1         0.3         66         64.4         0.5         64.4         0.5         64.4         0.5         64.1         0.5         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3         64.1         0.3 <td>8. Alley E of Ferdinand @ backside sidews</td> <td>34</td> <td>-</td> <td>0</td> <td></td> <td>2.4</td> <td>66</td> <td>72.4</td> <td>10</td> <td>Snd Lvl</td> <td>66.6</td> <td></td> <td>5.8</td> <td>œ</td> <td>-2.2</td>	8. Alley E of Ferdinand @ backside sidews	34	-	0		2.4	66	72.4	10	Snd Lvl	66.6		5.8	œ	-2.2	
40         1         0.0         64.4         66.4         10          64.1         0.3         8           5         1         0.0         63.3         66         63.3         10          63.1         0.2         8           5         1         0.0         75.0         66         73.0         10          63.1         0.2         8           55         1         0.0         71.3         66         71.3         10         50.4         7.4         8           61         1         0.0         71.3         66         71.3         10         50.4         7.4         8           61         1         0.0         71.3         66         71.3         10         50.4         7.3         8           61         1         0.0         66         73.7         10         50.4         7.3         8           61         1         0.0         66         74.2         66         74.2         66         7.4         8           63         1         0.0         74.2         66         7.4         10         50.1         67         67 <t< td=""><td>0.0         64.4         66         64.4         10          64.1         0.3         8           1         0.0         63.3         66         63.3         10          63.1         0.2         8           1         0.0         76.0         66         75.0         10          63.1         0.2         8           1         0.0         72.0         66         73.7         10         SmdLvi         69.6         2.4         8           1         0.0         71.3         66         71.3         10         SmdLvi         69.6         2.4         8           1         0.0         71.3         66         73.7         10         SmdLvi         69.6         7.3         8           1         0.0         71.4         66         7.4         7.3         8         8           1         0.0         7.4         66         7.4         66         7.4         66         7.3         8           1         0.0         7.4         66         7.4         66         7.4         8         8           1         0.0         7.4         66</td><td>7. E side Campbell @ house setback fr SC</td><td>36</td><td>-</td><td>0</td><td></td><td>4.7</td><td>66</td><td>64.7</td><td>10</td><td>1</td><td>64.1</td><td></td><td>0.6</td><td>00</td><td>-7.4</td></t<>	0.0         64.4         66         64.4         10          64.1         0.3         8           1         0.0         63.3         66         63.3         10          63.1         0.2         8           1         0.0         76.0         66         75.0         10          63.1         0.2         8           1         0.0         72.0         66         73.7         10         SmdLvi         69.6         2.4         8           1         0.0         71.3         66         71.3         10         SmdLvi         69.6         2.4         8           1         0.0         71.3         66         73.7         10         SmdLvi         69.6         7.3         8           1         0.0         71.4         66         7.4         7.3         8         8           1         0.0         7.4         66         7.4         66         7.4         66         7.3         8           1         0.0         7.4         66         7.4         66         7.4         8         8           1         0.0         7.4         66	7. E side Campbell @ house setback fr SC	36	-	0		4.7	66	64.7	10	1	64.1		0.6	00	-7.4	
46         1         0.0         63.3         66         63.3         10          63.1         0.2         8           53         1         0.0         75.0         66         75.0         10         SndLvi         71.6         4.4         8           55         1         0.0         75.0         66         73.0         10         SndLvi         69.6         2.4         8           56         1         3         66         71.3         66         73.7         10         SndLvi         69.3         2.4         8           61         1         0.0         71.3         66         73.7         10         SndLvi         69.3         2.4         8           61         1         0.0         73.7         66         73.7         10         SndLvi         66.3         7.3         8           63         1         0.0         74.2         66         74.2         10         SndLvi         66.3         7.3         8           64         1         0.0         74.2         10         SndLvi         66.3         7.4         8           65         1         0.0         <	1         0.0         63.3         66         63.3         10          63.1         0.2         8           1         0.0         76.0         66         76.0         10         Snd Lyl         71.6         4.4         8           1         0.0         71.3         66         73.7         10         Snd Lyl         69.6         2.4         8           2         0.0         71.3         66         71.3         10         Snd Lyl         69.3         2.4         8           2         0.0         71.3         66         7.1.3         10         Snd Lyl         69.3         2.0         8           4         0.0         71.3         66         7.3.7         10         Snd Lyl         66.4         7.3         8           1         0.0         74.2         66         7.4.2         10         10         9.3         8         8           1         0.0         71.6         66         7.4.2         66         7.4.2         6         8         1         8         1         8         1         1         1         1         1         1         1         1         1	6. Alley E of Calvary @ backside sidewalk	40	-	0		4.4	66	64.4	10	I	64.1		0.3	œ	-7.7	
53         1         0.0         76.0         66         76.0         16         76.0         16         76.0         16         76.0         16         76.0         16         76.0         16         71.6         4.4         8           56         1         0.0         71.3         66         71.3         10         Sid LM         69.6         2.4         8           58         2         0.0         71.3         66         73.7         10         Sind LM         69.3         2.4         8           61         1         0.0         73.7         66         73.7         10         Sind LM         69.3         2.4         8           61         1         0.0         73.7         66         74.2         10         Sind LM         66.3         3.1         8           63         1         0.0         74.2         66         74.2         10         Sind LM         66.3         3.1         8           64         1         0.0         74.2         66         74.2         10         Sind LM         66.3         3.1         8           65         1         0.0         71.4         10	0.0         76.0         66         76.0         10         SindLyi         71.6         4.4         8           1         0.0         72.0         66         72.0         10         SindLyi         69.6         2.4         8           2         0.0         71.3         66         7.1.3         10         SindLyi         69.6         2.4         8           4         0.0         73.7         66         7.1.3         10         SindLyi         69.6         2.4         8           1         0.0         73.7         66         7.1.3         10         SindLyi         66.4         7.3         8           1         0.0         0.0         66         7.4.2         10         SindLyi         66.4         7.3         8           1         0.0         71.6         66         7.4.2         10         SindLyi         66.2         7.4         8           1         0.0         71.6         74.2         10         SindLyi         66.2         7.4         8           1         0.0         71.6         74.2         10         SindLyi         66.2         7.4         8           1	5. NE Corner Dragoon & Lafyette @ backs	46	-	0		3.3	66	63.3	10		63.1		0.2	œ	-7.8	
an @ backkide sidewalk         55         1         0.0         72.0         66         71.3         10         Sind LM         69.6         2.4         8           () Side alley setback         58         2         0.0         71.3         66         73.7         10         Sind LM         69.3         2.0         8           () Side alley setback         60         4         0.0         73.7         66         73.7         10         Sind LM         69.3         2.0         8           () Side alley setback from SE         60         71.3         66         71.3         10         Sind LM         69.3         2.0         8           () Side alley setback from SE         60         71.3         66         74.2         10         Sind LM         66.4         7.3         8           () Side alley setback from SE         1         0.0         74.2         66         74.2         10         Sind LM         66.3         3.1         8           () Side alley setback from SE         1         0.0         74.2         66         74.2         10         Sind LM         66.3         3.1         8           () Side alley setback from SE         1         0.0	0.0         72.0         66         72.0         66         73.7         69.6         74.3         69.6         74.3         6         74.3         6         74.3         6         74.3         6         74.3         6         74.3         6         74.3         6         6         74.3         10         SndLw         69.3         2.0         8         8         8         8         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         7         8         8         8         7         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         7         8         8         8         8         8         8         8         8         8         9         8         9         9         9         9         9         9	4. Alley btw Rade& Casgrain @ backside :	53	-	0		6.0	66	76.0	10	Snd Lvl	71.6		4.4	œ	-3.6	
(5)         2         0.0         71.3         66         71.3         10         Sinklukt         69.3         2.0         8           (2)         bldg.setback from Sf         60         4         0.0         73.7         66         73.7         10         Sinklukt         66.4         7.3         8           (2)         1         0.0         73.7         66         73.7         10         Sinklukt         66.4         7.3         8           (3)         1         0.0         73.7         66         73.7         10         Sinklukt         66.4         7.3         8           (5)         1         0.0         7.4         66         7.4.2         10         Sinklukt         66.3         3.1         90.0         90.0         8           (6)         1         0.0         7.4         66         7.2.4         10         Sinklukt         66.2         5.4         8         8           (6)         1         0.0         7.1.6         66         7.2.4         10         Sinklukt         66.2         7.3         8           (6)         1         0.0         7.1         10         Sinklukt         66.2 <td>0         71.3         66         71.3         10         Snd Lvl         66.3         2.0         8           4         0.0         73.7         66         73.7         10         Snd Lvl         66.4         7.3         8           1         0.0         73.7         66         73.7         10         Snd Lvl         66.4         7.3         8           1         0.0         66         0.0         10         invalid         0.0         0.0         8           1         0.0         74.2         10         Snd Lvl         68.0         6.2         8         8           1         0.0         74.2         10         Snd Lvl         68.0         6.2         8           1         0.0         74.2         10         Snd Lvl         68.0         6.2         8           1         0.0         7.3         66         7.16         10         9.3         8         8           1         0.0         7.3         66         7.1         10         Snd Lvl         66.2         7.4         8           1         0.0         7.3         10         Snd Lvl         66.2         7.4</td> <td>3. W side Waterman @ backside sidewalk</td> <td>55</td> <td>-</td> <td>0</td> <td></td> <td>2.0</td> <td>66</td> <td>72.0</td> <td>10</td> <td>Snd Lvl</td> <td>69.6</td> <td></td> <td>2.4</td> <td>80</td> <td>-5.6</td>	0         71.3         66         71.3         10         Snd Lvl         66.3         2.0         8           4         0.0         73.7         66         73.7         10         Snd Lvl         66.4         7.3         8           1         0.0         73.7         66         73.7         10         Snd Lvl         66.4         7.3         8           1         0.0         66         0.0         10         invalid         0.0         0.0         8           1         0.0         74.2         10         Snd Lvl         68.0         6.2         8         8           1         0.0         74.2         10         Snd Lvl         68.0         6.2         8           1         0.0         74.2         10         Snd Lvl         68.0         6.2         8           1         0.0         7.3         66         7.16         10         9.3         8         8           1         0.0         7.3         66         7.1         10         Snd Lvl         66.2         7.4         8           1         0.0         7.3         10         Snd Lvl         66.2         7.4	3. W side Waterman @ backside sidewalk	55	-	0		2.0	66	72.0	10	Snd Lvl	69.6		2.4	80	-5.6	
Didd. setback from SE         6         73.7         10         Snd Lvi         66.4         7.3         8           61         1         0.0         0.0         66         0.0         10         invalid         0.0         0         8           62         1         0.0         0.0         66         0.0         10         invalid         0.0         0         8         8           63         1         0.0         74.2         66         74.2         10         Sind Lvi         66.0         0.0         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8         8	4         0.0         73.7         66         73.7         10         Snd Lvl         66.4         7.3         8           1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8         8           1         0.0         0.0         66         0.0         10         invalid         0.0         8         8           1         0.0         74.2         66         74.2         10         Snd Lvl         68.0         6.2         8         8           1         0.0         74.2         66         74.2         10         Snd Lvl         68.0         6.2         8         8           1         0.0         74.1         66         74.1         10         Snd Lvl         66.2         5.4         8           1         0.0         71.1         66         71.1         60         7.5         8         8           1         0.0         71.1         10         Snd Lvl         66.2         7.5         8         8           1         0.0         71.1         10         Snd Lvl         66.2         7.5         8         8	2. E side Green @ S side alley setback	58	2	0		1.3	66	71.3	10	Snd Lvl	69.3		2.0	œ	-6.0	
61 $1$ $0.0$ $0.0$ $66$ $0.0$ $10$ invalid $0.0$ $0.0$ $0.0$ $6$ $62$ $1$ $0.0$ $66$ $742$ $66$ $742$ $10$ $sindid$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$	1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <td>1. W side Central @ bldg. setback from SE</td> <td>60</td> <td>4</td> <td>0</td> <td></td> <td>3.7</td> <td>66</td> <td>73.7</td> <td>10</td> <td>Snd Lvl</td> <td>66.4</td> <td></td> <td>7.3</td> <td>80</td> <td>-0.7</td>	1. W side Central @ bldg. setback from SE	60	4	0		3.7	66	73.7	10	Snd Lvl	66.4		7.3	80	-0.7	
62         1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8 $63$ 1         0.0         74.2         66         74.2         10         Snd Lyl         68.0         6.2         8 $64$ 1         0.0         72.4         66         74.2         10         Snd Lyl         68.0         6.2         8 $65$ 1         0.0         71.6         66         71.6         10         Snd Lyl         69.3         3.1         8 $65$ 1         0.0         0.0         66         73.7         10         Snd Lyl         66.2         7.4         8 $66$ 1         0.0         0.0         66         73.7         10         Snd Lyl         66.2         7.4         8 $66$ 1         0.0         0.0         66         7.4         8         8 $710$ 1         0.0         7.1         10         Snd Lyl         66.2         7.5         8 $711$ 2         0.0         0.0         10         8         1	1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         68.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         6.2         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.1         88.0         87.2         88.0         87.1 <t< td=""><td>Receiver 1 S to G</td><td>61</td><td>-</td><td>0</td><td></td><td>0.0</td><td>66</td><td>0.0</td><td>10</td><td>invalid</td><td>0.0</td><td></td><td>0.0</td><td>œ</td><td>0.0</td></t<>	Receiver 1 S to G	61	-	0		0.0	66	0.0	10	invalid	0.0		0.0	œ	0.0	
63 $1$ $0.0$ $74.2$ $66$ $74.2$ $10$ $SndLyl$ $68.0$ $6.2$ $8$ $64$ $1$ $0.0$ $72.4$ $66$ $72.4$ $10$ $SndLyl$ $69.3$ $3.1$ $8$ $65$ $1$ $0.0$ $71.6$ $66$ $71.6$ $10$ $SndLyl$ $66.2$ $5.4$ $8$ $66$ $1$ $0.0$ $71.6$ $66$ $73.7$ $10$ $SndLyl$ $66.2$ $7.5$ $8$ $68$ $1$ $0.0$ $73.7$ $66$ $73.7$ $10$ $SndLyl$ $66.2$ $7.5$ $8$ $69$ $1$ $0.0$ $73.7$ $66$ $71.1$ $10$ $SndLyl$ $66.2$ $7.5$ $8$ $70$ $1$ $0.0$ $71.1$ $66$ $71.1$ $10$ $SndLyl$ $66.2$ $7.5$ $8$ $71$ $2$ $0.0$ $71.1$ $66$ $71.1$ $10$ $SndLyl$ $66.2$ $7.5$ $8$ $71$ $2$ $0.0$ $10$ $10$ $10$ $10$ $10$ $0.0$ $0.0$ $0.0$ $71$ $2$ $0.0$ $74.3$ $66$ $74.3$ $10$ $SndLyl$ $66.6$ $7.7$ $8$ $73$ $1$ $0.0$ $74.3$ $66$ $74.3$ $10$ $SndLyl$ $66.6$ $7.7$ $8$ $73$ $1$ $0.0$ $74.3$ $66$ $74.3$ $10$ $SndLyl$ $66.6$ $7.7$ $8$ $73$ $1$ $0.0$ $70$ $70$ $70$ $70$	1         0.0         74.2         66         74.2         10         SndLvi         68.0         6.2         8           1         0.0         72.4         66         72.4         10         SndLvi         69.3         3.1         8           1         0.0         71.6         66         71.6         10         SndLvi         66.2         5.4         8           1         0.0         71.6         66         71.6         10         SndLvi         66.2         5.4         8           1         0.0         73.7         66         73.7         10         SndLvi         66.2         8         8           1         0.0         73.7         66         74.1         10         SndLvi         66.2         7         8           1         0.0         71.1         66         74.1         10         86.2         7         8           1         0.0         0.0         66         74.3         10         86.2         7         8           1         0.0         0.0         66         74.3         10         86.4         7         8           1         0.0         74.3 </td <td>Receiver 2 S to G</td> <td>62</td> <td>-</td> <td>0</td> <td></td> <td>0.0</td> <td>66</td> <td>0.0</td> <td>10</td> <td>invalid</td> <td>0.0</td> <td></td> <td>0.0</td> <td>8</td> <td>0.0</td>	Receiver 2 S to G	62	-	0		0.0	66	0.0	10	invalid	0.0		0.0	8	0.0	
641 $0.0$ $72.4$ $66$ $72.4$ $10$ $SndLvl$ $69.3$ $3.1$ $8$ $65$ 1 $0.0$ $71.6$ $66$ $71.6$ $10$ $SndLvl$ $66.2$ $5.4$ $8$ $66$ 1 $0.0$ $0.0$ $66$ $73.7$ $10$ $SndLvl$ $66.2$ $7.5$ $8$ $68$ 1 $0.0$ $73.7$ $66$ $73.7$ $10$ $SndLvl$ $66.2$ $7.5$ $8$ $69$ 1 $0.0$ $71.1$ $66$ $73.7$ $10$ $SndLvl$ $66.2$ $7.5$ $8$ $70$ 1 $0.0$ $71.1$ $66$ $71.1$ $10$ $SndLvl$ $66.2$ $7.5$ $8$ $71$ 2 $0.0$ $71.1$ $66$ $71.1$ $10$ $SndLvl$ $66.2$ $7.5$ $8$ $71$ 2 $0.0$ $0.0$ $71.1$ $10$ $SndLvl$ $66.2$ $7.5$ $8$ $71$ 2 $0.0$ $74.3$ $66$ $71.1$ $10$ $SndLvl$ $66.2$ $7.7$ $8$ $72$ 1 $0.0$ $74.3$ $66$ $74.3$ $10$ $SndLvl$ $66.6$ $7.7$ $8$ $74$ 2 $0.0$ $71.0$ $66$ $71.0$ $10$ $SndLvl$ $66.6$ $7.7$ $8$ $71$ 2 $0.0$ $71.0$ $66$ $71.0$ $10$ $80.4$ $6.2$ $8$ $74$ 2 $0.0$ $71.0$ $70$ $10$ $10$ $10$ $10$ $10$ $10$ </td <td>1         0.0         72.4         66         72.4         10         Shd Lvl         69.3         3.1         8           1         0.0         71.6         66         71.6         10         Shd Lvl         66.2         5.4         8           1         0.0         71.6         66         73.7         10         Shd Lvl         66.2         5.4         8           1         0.0         73.7         66         73.7         10         Shd Lvl         66.2         7.5         8           1         0.0         71.1         66         71.1         10         Shd Lvl         66.2         7.5         8           1         0.0         71.1         66         71.1         66         7         8           1         0.0         0.0         66         0.0         10         Invalid         0.0         00         8           1         0.0         74.3         66         74.3         10         Shd Lvl         66.6         7         8           1         0.0         74.3         10         Invalid         0.0         0.0         0         8         8           1</td> <td>Receiver 3 S to G</td> <td>63</td> <td>-</td> <td>0</td> <td></td> <td>4.2</td> <td>66</td> <td>74.2</td> <td>10</td> <td>Snd Lvl</td> <td>68.0</td> <td></td> <td>6.2</td> <td>80</td> <td>-1.8</td>	1         0.0         72.4         66         72.4         10         Shd Lvl         69.3         3.1         8           1         0.0         71.6         66         71.6         10         Shd Lvl         66.2         5.4         8           1         0.0         71.6         66         73.7         10         Shd Lvl         66.2         5.4         8           1         0.0         73.7         66         73.7         10         Shd Lvl         66.2         7.5         8           1         0.0         71.1         66         71.1         10         Shd Lvl         66.2         7.5         8           1         0.0         71.1         66         71.1         66         7         8           1         0.0         0.0         66         0.0         10         Invalid         0.0         00         8           1         0.0         74.3         66         74.3         10         Shd Lvl         66.6         7         8           1         0.0         74.3         10         Invalid         0.0         0.0         0         8         8           1	Receiver 3 S to G	63	-	0		4.2	66	74.2	10	Snd Lvl	68.0		6.2	80	-1.8	
6510.071.66671.610Snd Lvl66.25.486610.00.0660.010invalid0.00.086810.071.16673.710Snd Lvl66.27.586910.071.16671.110Snd Lvl66.27.587010.071.16671.110Snd Lvl66.27.587120.071.1660.010invalid0.00.087120.00.06674.310Snd Lvl66.67.787310.074.36674.310Snd Lvl66.67.787310.071.06671.010Snd Lvl66.67.787420.071.06671.010Snd Lvl66.67.787510.073.96673.310Snd Lvl66.47.787510.073.96673.310Snd Lvl66.47.787510.073.96673.910Null66.47.78	1         0.0         71.6         66         71.6         66         71.6         66         71.6         66         71.6         66         71.6         66         71.6         66         71.6         66         71.6         66         71.6         71.6         71.6         71.6         71.1         71.1         71.1         71.1         71.1         71.1         71.1         71.1         71.1         71.1         71.0         71.1         71.0         71.1         71.0         71.1         71.0         71.1         71.0         71.1         71.0         71.1         71.0         71.1         71.0         71.1         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0         71.0 <th< td=""><td>Receiver 4 S to G</td><td>64</td><td>-</td><td>0</td><td></td><td>2.4</td><td>66</td><td>72.4</td><td>10</td><td>Snd Lvl</td><td>69.3</td><td></td><td>3.1</td><td>80</td><td>4.9</td></th<>	Receiver 4 S to G	64	-	0		2.4	66	72.4	10	Snd Lvl	69.3		3.1	80	4.9	
661 $0.0$ $0.0$ $66$ $0.0$ $10$ $1nvalid$ $0.0$ $0.0$ $8$ $68$ 1 $0.0$ 73.7 $66$ 73.7 $10$ $Snd Lvl$ $66.2$ 7.5 $8$ $69$ 1 $0.0$ 71.1 $66$ 71.1 $10$ $Snd Lvl$ $66.2$ 7.5 $8$ $70$ 1 $0.0$ $0.0$ $66$ $71.1$ $10$ $Snd Lvl$ $65.1$ $6.0$ $8$ $71$ 2 $0.0$ $0.0$ $66$ $0.0$ $10$ $1nvalid$ $0.0$ $0.0$ $8$ $71$ 2 $0.0$ $74.3$ $66$ $74.3$ $10$ $Snd Lvl$ $66.6$ $7.7$ $8$ $73$ 1 $0.0$ $71.0$ $66$ $74.3$ $10$ $Snd Lvl$ $66.6$ $7.7$ $8$ $74$ 2 $0.0$ $71.0$ $66$ $71.0$ $10$ $Snd Lvl$ $66.6$ $7.7$ $8$ $74$ 2 $0.0$ $71.0$ $66$ $71.0$ $10$ $Snd Lvl$ $66.6$ $7.7$ $8$ $75$ 1 $0.0$ $73.9$ $66$ $73.9$ $70$ $10$ $0.0$ $0.0$ $90$ $90$ $90$ $75$ 1 $0.0$ $73.9$ $66$ $73.9$ $70$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $90$ $75$ $10$ $73.9$ $10$ $70$ $10$ $90$ $90$ $90$ $90$ $90$ $90$	1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8           1         0.0         73.7         66         73.7         10         Snd Lvl         66.2         7.5         8           1         0.0         71.1         66         73.7         10         Snd Lvl         66.2         7.5         8           1         0.0         71.1         10         Snd Lvl         65.1         6.0         8           2         0.0         66         0.0         10         invalid         0.0         0.0         8           2         0.0         74.3         66         0.0         10         Snd Lvl         66.6         7.7         8           1         0.0         74.3         66         74.3         10         Snd Lvl         66.6         7.7         8           2         0.0         0.0         66         74.3         10         Snd Lvl         66.4         7.7         8           1         0.0         71.0         66         7.1         6.0         8         8           2         0.0         71.0         71	Receiver 5 S to G	65	-	0		1.6	66	71.6	10	Snd Lvl	66.2	SEN	5.4	80	-2.6	
68         1         0.0         73.7         66         73.7         10         Snd Lvl         66.2         7.5         8           69         1         0.0         71.1         66         71.1         10         Snd Lvl         65.1         6.0         8           70         1         0.0         71.1         66         71.1         10         Snd Lvl         65.1         6.0         8           71         2         0.0         0.0         66         71.1         10         invalid         0.0         0.0         8           72         1         0.0         74.3         66         74.3         10         Snd Lvl         66.6         7.7         8           73         1         0.0         71.0         66         71.0         10         64.8         6.2         8           74         2         0.0         0.0         66         71.0         10         60.0         60         8           75         1         0.0         73.9         66         71.0         10         64.8         6.2         8           75         1         0.0         70         10         10	1         0.0         73.7         66         73.7         10         Snd Lvl         66.2         7.5         8           1         0.0         71.1         66         71.1         10         Snd Lvl         65.1         6.0         8           1         0.0         71.1         66         71.1         10         Snd Lvl         65.1         6.0         8           2         0.0         66         0.0         10         invalid         0.0         0.0         8           1         0.0         74.3         66         74.3         10         Snd Lvl         66.6         7.7         8           1         0.0         74.3         66         71.0         66.6         7.7         8           2         0.0         71.0         66         71.0         71         66.6         7.7         8           2         0.0         0.0         66         73.9         70         86         8           1         0.0         73.9         66         73.9         70         8         8           2         0.0         73.9         70         80         7         8         8 <td>Receiver 6 S to G</td> <td>99</td> <td>-</td> <td>0</td> <td></td> <td>0.0</td> <td>66</td> <td>0.0</td> <td>10</td> <td>invalid</td> <td>0.0</td> <td></td> <td>0.0</td> <td>80</td> <td>0.0</td>	Receiver 6 S to G	99	-	0		0.0	66	0.0	10	invalid	0.0		0.0	80	0.0	
691 $0.0$ $71.1$ $66$ $71.1$ $10$ $Snd Lvl$ $65.1$ $6.0$ $8$ 701 $0.0$ $0.0$ $66$ $0.0$ $10$ $invalid$ $0.0$ $0.0$ $8$ 712 $0.0$ $0.0$ $66$ $74.3$ $10$ $invalid$ $0.0$ $0.0$ $8$ 721 $0.0$ $74.3$ $66$ $74.3$ $10$ $Snd Lvl$ $66.6$ $7.7$ $8$ 731 $0.0$ $0.0$ $66$ $71.0$ $10$ $Snd Lvl$ $64.8$ $6.2$ $8$ 742 $0.0$ $0.0$ $66$ $71.0$ $10$ $Snd Lvl$ $66.6$ $7.7$ $8$ 751 $0.0$ $73.9$ $66$ $73.9$ $10$ $Snd Lvl$ $66.4$ $7.5$ $8$	1         0.0         71.1         66         71.1         10         Snd Lvl         65.1         6.0         8           1         0.0         0.0         66         0.0         10         invalid         0.0         8           2         0.0         0.0         66         0.0         10         invalid         0.0         8           1         0.0         74.3         10         Snd Lvl         66.6         7.7         8           1         0.0         74.3         10         Snd Lvl         66.6         7.7         8           1         0.0         71.0         66         0.0         10         Snd Lvl         66.6         7.7         8           2         0.0         56         71.0         10         Snd Lvl         66.4         7.7         8           2         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8           1         0.0         73.9         56         73.9         10         86.4         7.5         8	Receiver 7 S to G	68	-	0		3.7	66	73.7	10	Snd Lvl	66.2		7.5	80	-0.5	
70         1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8           71         2         0.0         0.0         66         0.0         10         invalid         0.0         8           72         1         0.0         74.3         66         74.3         10         Snd Lvi         66.6         7.7         8           73         1         0.0         71.0         66         71.0         10         Snd Lvi         64.8         6.2         8           74         2         0.0         0.0         66         73.0         10         Snd Lvi         64.8         6.2         8           75         1         0.0         73.9         66         73.9         10         Snd Lvi         66.4         7.5         8	1         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8           2         0.0         0.0         66         0.0         10         invalid         0.0         8         8           1         0.0         74.3         10         Snd Lvi         66.6         7.7         8           1         0.0         71.0         66         71.0         10         Snd Lvi         66.6         7.7         8           2         0.0         0.0         66         71.0         10         Snd Lvi         66.4         7.7         8           2         0.0         73.9         66         73.9         10         Snd Lvi         66.4         7.5         8           1         0.0         73.9         66         73.9         10         Snd Lvi         66.4         7.5         8	Receiver 8 S to G	69	-	0		1.1	66	71.1	10	Snd Lvl	65.1		6.0	8	-2.0	
71         2         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8           72         1         0.0         74.3         66         74.3         10         Snd Lvi         66.6         7.7         8           73         1         0.0         71.0         66         71.0         10         Snd Lvi         64.8         6.2         8           74         2         0.0         0.0         66         0.0         10         invalid         0.0         8           75         1         0.0         73.9         66         73.9         10         Snd Lvi         66.4         7.5         8	2         0.0         0.0         66         0.0         10         invalid         0.0         0.0         8           1         0.0         74.3         10         Snd Lvl         66.6         7.7         8           1         0.0         71.0         66         71.0         10         Snd Lvl         66.6         7.7         8           1         0.0         71.0         66         71.0         10         Snd Lvl         64.8         6.2         8           2         0.0         0.0         66         73.9         10         invalid         0.0         0.0         8           1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8	Receiver 9 S to G	70	-	0		0.0	66	0.0	10	invalid	0.0		0.0	œ	0.0	
72         1         0.0         74.3         66         74.3         10         Snd Lvl         66.6         7.7         8           73         1         0.0         71.0         66         71.0         10         Snd Lvl         64.8         6.2         8           74         2         0.0         0.0         66         0.0         10         invalid         0.0         6.2         8           75         1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8	1         0.0         74.3         66         74.3         10         Snd Lvl         66.6         7.7         8           1         0.0         71.0         66         71.0         10         Snd Lvl         64.8         6.2         8           2         0.0         0.0         66         0.0         10         invalid         0.0         8           1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8	Receiver 10 S to G	71	2	0		0.0	66	0.0	10	invalid	0.0		0.0	00	0.0	
73         1         0.0         71.0         66         71.0         10         Snd Lvl         64.8         6.2         8           74         2         0.0         0.0         66         0.0         10         invalid         0.0         8           75         1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8	1         0.0         71.0         66         71.0         10         Snd Lvl         64.8         6.2         8           2         0.0         0.0         66         0.0         10         invalid         0.0         8           1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8	Receiver 11 S to G	72	-	0		4.3	66	74.3	10	Snd Lvl	66.6		7.7	œ	-0.3	
74         2         0.0         66         0.0         10         invalid         0.0         8           75         1         0.0         73.9         66         73.9         10         Snd Lvl         66.4         7.5         8	2 0.0 0.0 66 0.0 10 invalid 0.0 8 1 0.0 73.9 66 73.9 10 Snd Lvl 66.4 7.5 8 1	Receiver 12 S to G	73	~	0		1.0	66	71.0	10	Snd Lvl	64.8		6.2	80	-1.8	
75 1 0.0 73.9 66 73.9 10 Snd Lvl 66.4 7.5 8	1 0.0 73.9 66 73.9 10 Snd Lvl 66.4 7.5 8	Receiver 13 S to G	74	2	0		0.0	66	0.0	10	invalid	0.0		0.0	00	0.0	
		Receiver 14 S to G	75	+	0		3.9	66	73.9	10	Snd Lvl	66.4	-	7.5	80	-0.5	

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Receiver 15 S to G         76         1           Receiver 16 S to G         77         1           Receiver 18 S to G         78         2           Receiver 18 S to G         79         1           Receiver 18 S to G         79         1           Receiver 19 S to G         80         1           Receiver 20 S to G         81         1           Receiver 21 S to G         82         1           Receiver 22 S to G         83         1           Receiver 23 G to W         84         1           Receiver 28 G to W         86         2           Receiver 28 G to W         87         2           Receiver 30 G to W         89         2           Receiver 33 G to W         90         1           Receiver 34 G to W         93         1           Receiver 35 G to W         93         2           Receiver 35 G to W         94         2           Receiver 35 G to W         93	0.0         70.7           0.0         69.2           0.0         69.2           0.0         69.7           0.0         69.7           0.0         68.7           0.0         68.7           0.0         68.7           0.0         68.7           0.0         68.7           0.0         69.7           0.0         67.9           0.0         67.9           0.0         67.9           0.0         67.1           0.0         69.7           0.0         69.7           0.0         66.3           0.0         66.3           0.0         66.1           0.0         66.4           0.0         66.5           0.0         66.5           0.0         66.5	0.7 66 59.2 66 70.3 66 58.7 66 58.0 66 537.9 66 537.9 66 11.0 66 11.0 66 58.2 66 56.2 66	70.7 69.2 70.3 68.7 68.0	10 Snd	d Lvi		6.1	ø	-1.9
to G to G to G to W to W to W to W to W to W			69.2 70.3 68.7 69.7 68.0	170	11.4				
to G to G to G to W to W to W to W to W to W to W			70.3 68.7 69.7 68.0	51 27	d LVI	63.5	5.7	80	-2.3
to G to G to G to W to W to W to W to W to W to W			68.7 69.7 68.0	10 Snd	d Lvi	64.5	5.8	80	-2.2
to G to G to W to W to W to W to W to W to W			69.7 68.0	10 Snd	d Lvi	63.5	5.2	8	-2.8
S to G S to G S to G G to W G to W G to W G to W G to W G to W G to W			68.0	10 Sn	Snd Lvl	64.6	5.1	8	-2.9
S to G S to G G to W G to W G to W G to W G to W G to W G to W				10 Sn	Snd Lvl	63.4	4.6	80	-3.4
S to G G to W G to W			67.9	10 Sn	Snd Lvl	64.8	3.1	8	-4.9
G to W G to W			0.0	10 inv	invalid	0.0	0.0	80	0.0
G to W G to W			71.0	10 Sn	Snd Lvl	65.4	5.6	80	-2.4
G to W G to W			69.7	10 Sn	Snd Lvl	64.6	5.1	80	-2.9
to W to W to W to W to W to W			0.0	10 in	invalid	0.0	0.0	80	0.0
to W to W to W to W to W to W		3	66.2	10 Sn	Snd Lvi	63.5	2.7	80	-5.3
to W to W to W to W to W			66.3	10 Sn	Snd Lvl	64.0	2.3	80	-5.7
to W to W to W to W to W		.1 66	66.1	10 Sn	Snd Lvl	63.6	2.5	8	-5.5
to W to W to W to W		.1 66	66.1	10 Sn	Snd Lvl	63.6	2.5	80	-5.5
to W to W to W		.4 66	66.4	10 Sn	Snd Lvl	63.5	2.9	80	-5.1
to W to W to W		.5 66	66.5	10 Snd	d Lvi	63.6	2.9	80	-5.1
G to W G to W		.5 66	66.5	10 Sn	Snd Lvl	63.5	3.0	80	-5.0
G to W	0.0 66.7	.7 66	66.7	10 Sn	Snd Lvl	63.5	3.2	80	4.8
	0.0 66.	.8 66	66.8	10 Snd I	d Lvl	63.4	3.4	80	4.6
Receiver 38 G to W 99 1	0.0 67.0	.0 66	67.0	10 Snd	d Lvl	63.3	3.7	8	4.3
Receiver 39 G to W 100 1	0.0 67.0	.0 66	67.0	10 Snd	d Lvl	63.3	3.7	80	4.3
Receiver 40 G to W 101 2	0.0 66.8	.8 66	66.8	10 Snd	d Lvl	63.3	3.5	80	-4.5
Receiver 41 G to W 102 1	0.0 66.7	.7 66	66.7	10 Snd I	d Lvl	63.1	3.6	80	4.4
Receiver 42 G to W 103 2	0.0 66.8	.8 66	66.8	10 Sn	Snd Lvl	63.1	3.7	80	4.3
Receiver 43 G to W 104 1	0.0 67.0	.0 66	67.0	10 Sn	Snd Lvl	63.1	3.9	80	4
Receiver 44 G to W 105 1	0.0 67.1	.1 66	67.1	10 Snd	d Lvl	63.1	4.0	8	4.0
Receiver 45 G to W 106 2	0.0 67.1		67.1	10 Snd	d Lvl	63.1	4.0	80	4.0
Receiver 46 G to W 107 2	0.0 67.2	.2 66	67.2	10 Snd	d Lvl	63.1	4.1	80	-3.9
Receiver 47 G to W 108 1	0.0 68.1	.1 66	68.1	10 Snd	d Lvl	63.8	4.3	80	-3.7
Receiver 48 G to W 109 2	0.0 66.5	.5 66	66.5	10 Snd	d Lvl	63.3	3.2	8	4.8
Receiver 49 G to W 110 2	0.0 68.0	.0 66	68.0	10 Snd	d Lvl	63.3	4.7	80	-3.3
Receiver 50 G to W 111 2	0.0 67.	.4 66	67.4	10 Snd	Id Lvl	62.7	4.7	80	-3.3
Receiver 51 G to W 112 1	0.0 66.	.9 66	6.99	10 Snd	Id Lvl	63.0	3.9	80	4.1
Receiver 52 W to L 113 10	0.0 70.7	.7 66	70.7	10 Snd	Id Lvl	67.8	2.9	80	-5.1
Receiver 53 W to L 114 1	0.0 73.	.5 66	73.5	10 Snd	Id Lvl	68.4	5.1	80	-2.9
Receiver 54 W to L 115 1	0.0 71.3	.3 66	71.3	10 Snd	Id Lvl	66.9	4.4	80	-3.6
Receiver 55 W to L 116 1	0.0 70.2		70.2	10 Snd	Id Lvl	67.3	2.9	80	-5.1
Receiver 57 W to L 117 2	0.0 73.0	.0 66	73.0	10 Snd	id Lvi	69.2	3.8	œ	-4.2
Receiver 58 W to L 118 2	0.0 71.	3	71.3	10 Snd	Id Lvl	67.5	3.8	80	-4.2
Receiver 59 W to L 119 1	0.0 69.	.4 66	69.4	10 Snd	id Lvi	65.7	3.7	80	4.3

Receiver 60 W to L Receiver 62 W to L Receiver 63 W to L					2000						
Receiver 62 W to L Receiver 63 W to L	120	1 0.0		66	68.7	10	Snd Lvl	64.6	4.1	80	-3.9
Receiver 63 W to L	121	1 0.0	73.3	66	73.3	10	Snd Lvl	69.2	4.1	80	-3.9
	122	1 0.0		66	71.6	10	Snd Lvl	67.7	3.9	80	4.1
Receiver 64 W to L	123	1 0.0	70.1	66	70.1	10	Snd Lvl	66.5	3.6	80	4.4
Receiver 65 W to L	124	1 0.0	71.9	66	71.9	10	Snd Lvl	68.5	3.4	80	-4.6
Receiver 66 W to L	125	1 0.0	70.3	66	70.3	10	Snd Lvl	67.3	3.0	œ	-5.0
Receiver 67 W to L	126	1 0.0	70.6	66	70.6	10	Snd Lvl	68.8	1.8	80	-6.2
Receiver 68 W to L	128	1 0.0	68.8	66	68.8	10	Snd Lvl	67.1	1.7	80	-6.3
Receiver 73 D to J	144	6 0.0	66.5	99	66.5	10	Snd Lvl	66.4	0.1	80	-7.9
Receiver 74 D to J	145	10 0.0	66.4	99	66.4	10	Snd Lvl	66.3	0.1	80	-7.9
Receiver 75 D to J	146	2 0.0	64.2	99	64.2	10	1	64.1	0.1	80	-7.9
Receiver 76 D to J	147	1 0.0	63.7	99	63.7	10	Ì	63.5	0.2	80	-7.8
Receiver 77 D to J	148	1 0.0	63.0	99	63.0	10	1	62.8	0.2	80	-7.8
Receiver 78 D to J	149	10 0.0	64.1	99	64.1	10	I	63.9	0.2	80	-7.8
Receiver 79 D to J	150	1 0.0	63.9	99	63.9	10	I	63.7	0.2	80	-7.8
Receiver 80 D to J	151	3 0.0	63.9	66	63.9	10	I	63.7	0.2	80	-7.8
Receiver 81 D to J	152	2 0.0	63.9	66	63.9	10	1	63.7	0.2	80	-7.8
Receiver 82 D to J	153	2 0.0	63.7	66	63.7	10	1	63.5	0.2	80	-7.8
Receiver 83 D to J	154	1 0.0	63.1	66	63.1	10	I	62.9	0.2	80	-7.8
Receiver 84 D to J	155	1 0.0	62.7	66	62.7	10	I	62.4	0.3	80	1.7-
Receiver 85 D to J	156	1 0.0	62.2	99	62.2	10	I	62.0	0.2	80	-7.8
Receiver 86 D to J	157	1 0.0	63.0	99	63.0	10	1	62.8	0.2	80	-7.8
Receiver 87 D to J	158	1 0.0	62.7	66	62.7	10	I	62.4	0.3	80	-7.7
Receiver 88 D to J	159	1 0.0	62.2	66	62.2	10		61.9	0.3	80	7.7-
Receiver 89 D to J	160	1 0.0	63.4	66	63.4	10		63.1	0.3	80	-7.7
Receiver 90 D to J	161	1 0.0	62.7	99	62.7	10		62.3	0.4	80	-7.6
Receiver 91 D to J	162	1 0.0	61.8	99	61.8	10	1	61.5		80	1.7-
Receiver 92 D to J	163	1 0.0	61.4	99	61.4	10	1	61.1	0.3	80	1.7-
Receiver 93 D to J	164	4 0.0	60.9	66	60.9	10		60.6	0.3	80	7.7-
Receiver 94 D to J	165	1 0.0	64.3	99	64.3	10	1	64.0	0.3	80	1.7-
Receiver 95 D to J	166	1 0.0	64.2	66	64.2	10	1	63.9	0.3	80	-7.7
Receiver 96 D to J	167	1 0.0	64.3	99	64.3	10	1	63.9	0.4	80	-7.6
Receiver 97 D to J	168	1 0.0	64.3	99	64.3	10	I	63.9	0.4	80	-7.6
Receiver 98 D to J	169	1 0.0	61.9	99	61.9	10	1	61.5	0.4	80	-7.6
Receiver 99 D to J	170	1 0.0	62.0	66	62.0	10	I	61.6	0.4	80	-7.6
Receiver 100 D to J	171	1 0.0	62.0	99	62.0	10	١	61.5	0.5	80	-7.5
Receiver 101 D to J	172	1 0.0	62.0	99	62.0	10	I	61.6	0.4	00	-7.6
Receiver 102 D to J	173	4 0.0	61.1	99	61.1	10	1	60.4	0.7	80	-7.3
Receiver 103 D to J	174	1 0.0	61.7	99	61.7	10	1	60.9	0.8	80	-7.2
Receiver 104 D to J	175	1 0.0	62.1	66	62.1	10	I	61.3	0.8	80	-7.2
Receiver 105 D to J	176	1 0.0	62.4	66	62.4	10	I	61.7	0.7	80	-7.3

	Receiver 106 D to J	177	1 0	0	62.8	99	62.8	10	I	62.2	0.6	œ	-7.4
	Receiver 107 D to J	178	1	0.	63.3	66	63.3	10	I	62.8	0.5	80	-7.5
	Receiver 108 D to J	179	1	0.	64.7	66	64.7	10	I	64.1	0.6	80	-7.4
	Receiver 109 D to J	180	1 0	0.	64.0	66	64.0	10	I	63.3	0.7	80	-7.3
	Receiver 110 D to J	181	1	0.0	63.5	99	63.5	10	I	62.6		80	-7.1
	Receiver 111 D to J	182	1 0	0.0	62.9	66	62.9	10	I	61.9	1.0	80	-7.0
	Receiver 112 D to J	183	1 0	0.0	62.3	66	62.3	10	I	61.2	1.1	80	-6.9
	Receiver 113 D to J	184	1 0	0	61.8	66	61.8	10	I	60.6	1.2	80	-6.8
	Receiver 114 D to J	185	1 0	0.0	64.7	99	64.7	10		63.5	1.2	80	-6.8
	Receiver 115 D to J	186	1	0.0	64.5	66	64.5	10	1	63.2	1.3	80	-6.7
	Receiver 116 D to J	187	1	0.0	64.6	66	64.6	10	I	63.2	1.4	80	-6.6
	Receiver 117 D to J	188	1 0	0.0	64.6	99	64.6	10	I	63.2	1.4	80	-6.6
190         1         0.0         64.8         66         64.8         10          63.0         1.8           191         1         0.0         64.8         66         64.8         10          63.0         1.8           193         3         0.0         67.2         66         67.3         10         50.1         11.9           194         2         0.0         67.1         66         67.1         10         50.0         13.8           195         2         0.0         67.1         66         67.1         10         50.0         13.8           196         1         0.0         67.1         66         67.1         10         50.0         13.8           197         1         0.0         67.1         66         67.1         10         50.0         13.8           198         1         0.0         67.1         66         67.1         10         50.0         13.8           198         1         0.0         67.1         10         50.0         67.1         14         13.8           198         1         0.0         67.1         10         50.0<	Receiver 118 D to J	189	1 0	0.0	64.6	99	64.6	10	1	63.1	1.5	80	-6.5
	Receiver 119 D to J	190	1 0	0.0	64.8	66	64.8	10	I	63.0	1.8	80	-6.2
12         1         0.0         65.0         66         65.0         10 $m_{\rm eff}$ 63.1         1.9           193         3         0.0 $67.1$ 66 $67.2$ 10         Snd LM         66.9         0.2           194         2         0.0 $67.1$ 66 $67.1$ 10         Snd LM         66.9         0.2           195         1         0.0 $67.1$ 66 $67.1$ 10         Snd LM         66.9         0.2           196         1         0.0 $67.1$ 66 $62.1$ 10 $m_{\rm eff}$ 0.2           197         2         0.0 $67.1$ 66 $62.1$ 10 $m_{\rm eff}$ 60.7         14           198         1         0.0 $67.1$ 66 $62.1$ 10 $m_{\rm eff}$ 60.7         14           200         1         0.0 $67.1$ 10 $m_{\rm eff}$ 60.7         14           201         1         0.0 $67.1$ 10 $m_{\rm eff}$ 60.7         14	Receiver 120 D to J	191	1	0.0	64.8	66	64.8	10	I	63.0	1.8	80	-6.2
	Receiver 121 D to J	192	1 0	0.0	65.0	66	65.0	10	I	63.1	1.9	80	6.1
	Receiver 122 D to J	193	3 0	0.0	67.2	66	67.2	10	Snd Lvl	67.0	0.2	80	-7.8
195         2         0.0 $67.1$ 66 $67.1$ 10 $66.9$ 0.2           196         1         0.0 $62.1$ 66 $62.1$ 10 $$ 60.8         1.3           197         2         0.0 $62.1$ 66 $62.1$ 10 $$ 60.8         1.3           198         1         0.0 $62.1$ 66 $62.1$ 10 $$ 60.6         1.5           200         1         0.0 $61.5$ 66 $61.5$ 10 $$ 60.6         1.5           201         1         0.0 $61.5$ $66$ $61.5$ $10$ $$ $60.7$ $03$ 201         1         0.0 $61.6$ $66.7$ $10$ $$ $60.6$ $03.7$ 201         1         0.0 $61.6$ $61.6$ $10$ $$ $60.6$ $03.7$ 202         1         0.0 $61.6$ $61.6$ $10$ $$ $60.6$ $03.7$	Receiver 123 D to J	194	2 0	0.0	67.1	99	67.1	10	Snd Lvl	699	0.2	80	-7.8
196         1         0.0         62.1         66         62.1         10          60.8         13           197         2         0.0         62.1         66         62.1         10          60.8         15           198         1         0.0         62.1         66         62.1         10          60.7         14           198         1         0.0         62.1         66         62.1         10          60.6         15           200         1         0.0         61.5         66         62.1         10          60.7         14           201         1         0.0         61.5         66         62.1         10          60.7         15           202         1         0.0         61.5         66         60.4         10          60.7         0.3           203         1         0.0         60.4         66         60.4         10          60.7         0.3           204         1         0.0         60.4         66         60.4         10          60.7         0.3 <td>Receiver 124 D to J</td> <td>195</td> <td>2 0</td> <td>0.0</td> <td>67.1</td> <td>66</td> <td>67.1</td> <td>10</td> <td>Snd Lvl</td> <td>66.9</td> <td>0.2</td> <td>80</td> <td>-7.8</td>	Receiver 124 D to J	195	2 0	0.0	67.1	66	67.1	10	Snd Lvl	66.9	0.2	80	-7.8
197         2         0.0         62.1         66         62.1         10 $$ 60.7         14           198         1         0.0         62.1         66         62.1         10 $$ 60.6         15           190         1         0.0         62.1         66         62.1         10 $$ 60.6         15           200         1         0.0         61.5         66         61.5         10 $$ 60.6         13           201         1         0.0         61.5         66         61.5         10 $$ 60.7         13           203         1         0.0         61.5         66         61.4         10 $$ 60.7         0.3           204         1         0.0         60.4         66         60.4         10 $$ 60.7         0.3           205         1         0.0         60.4         66         60.4         10 $$ 60.6         0.3           204         1         0.0         60.4         10 $$ 60.6         0.3 <td< td=""><td>Receiver 125 D to J</td><td>196</td><td>1</td><td>0.0</td><td>62.1</td><td>66</td><td>62.1</td><td>10</td><td>1</td><td>60.8</td><td>1.3</td><td>80</td><td>-6.7</td></td<>	Receiver 125 D to J	196	1	0.0	62.1	66	62.1	10	1	60.8	1.3	80	-6.7
198         1         0.0 $62.1$ $66$ $62.1$ 10 $60.6$ $15$ 199         1         0.0 $62.1$ $66$ $62.1$ $10$ $60.5$ $16$ 200         1         0.0 $61.5$ $66$ $61.5$ $10$ $60.5$ $16$ 201         1         0.0 $61.5$ $66$ $61.5$ $10$ $60.7$ $0.3$ 203         1         0.0 $61.6$ $66.5$ $60.9$ $10$ $60.7$ $0.3$ 204         1         0.0 $60.9$ $66$ $60.9$ $10$ $60.7$ $0.3$ 204         1         0.0 $60.9$ $66$ $60.9$ $10$ $60.7$ $0.3$ 204         1         0.0 $60.9$ $66$ $60.9$ $10$ $60.6$ $0.3$ 204         1         0.0 $60.7$ $60.3$	Receiver 126 D to J	197	2 0	0.0	62.1	66	62.1	10		60.7	1.4	80	-6.6
199         1         0.0 $62.1$ $66$ $62.1$ $10$ $$ $60.5$ $1.6$ 200         1         0.0 $61.5$ $66$ $62.3$ $10$ $$ $60.4$ $1.9$ 201         1         0.0 $61.5$ $66$ $62.3$ $10$ $$ $61.2$ $0.3$ 203         1         0.0 $61.0$ $66.6$ $60.4$ $10$ $$ $60.7$ $0.3$ 203         1         0.0 $61.0$ $60.4$ $10$ $$ $60.7$ $0.3$ 204         1         0.0 $60.4$ $66$ $60.6$ $0.3$ $0.3$ 205         1         0.0 $60.4$ $10$ $$ $60.6$ $0.3$ 206         1         0.0 $66.4$ $66.6$ $60.6$ $0.3$ $0.3$ 207         1         0.0 $66.4$ $66.6$ $0.6$ $0.6$ $0.3$ $0.3$ 208         1	Receiver 127 D to J	198	1	0.0	62.1	66	62.1	10		9.09	1.5	80	-6.5
	Receiver 128 D to J	199	1	0.0	62.1	66	62.1	10	1	60.5	1.6	80	-6.4
	Receiver 129 D to J	200	1	0.0	62.3	66	62.3	10	1	60.4	1.9	80	-6.1
202         1         0.0 $61.0$ $66.1$ $66.1$ $61.0$ $60.7$ $0.3$ 203         1         0.0 $60.4$ $66.$ $60.4$ $10$ $$ $60.0$ $0.4$ 204         1         0.0 $60.3$ $66$ $60.3$ $10$ $$ $60.0$ $0.4$ 205         1         0.0 $60.3$ $66$ $60.3$ $10$ $$ $60.1$ $0.4$ 206         1         0.0 $60.4$ $66$ $60.4$ $10$ $$ $60.1$ $0.4$ 207         1         0.0 $60.4$ $66$ $67.2$ $10$ $$ $60.6$ $0.3$ 208         1         0.0 $61.4$ $66$ $61.4$ $10$ $$ $60.6$ $0.3$ 203         1         0.0 $61.4$ $66$ $61.4$ $10$ $$ $60.6$ $0.3$ 211         1         0.0 $61.4$ $66$ <	Receiver 130 D to J	201	1	0.0	61.5	66	61.5	10	1	61.2	0.3	80	7.7-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 131 D to J	202	1	0'0	61.0	66	61.0	10	1	60.7	0.3	80	7.7-
	Receiver 132 D to J	203	1	0.0	60.4	66	60.4	10	1	60.0	0.4	80	-7.6
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 133 D to J	204	1	0.0	60.9	66	60.9	10	1	60.6	0.3	80	7.7-
206         1         0.0 $60.8$ $66$ $60.8$ $10$ $$ $60.5$ $0.3$ 207         1         0.0 $60.4$ $66$ $60.4$ $10$ $$ $60.0$ $0.4$ 208         1         0.0 $67.2$ $66$ $67.2$ $10$ $$ $60.0$ $0.4$ 209         1         0.0 $67.2$ $66$ $64.6$ $10$ $$ $60.6$ $4.0$ 210         1         0.0 $64.6$ $66.6$ $64.6$ $61.6$ $4.0$ 211         1         0.0 $64.2$ $66$ $65.6$ $10$ $$ $61.6$ $4.0$ 212         1         0.0 $68.5$ $66$ $68.5$ $10$ $$ $61.6$ $64.6$ $66.6$ $64.6$ $66.0$ $61.6$ $62.6$ $60.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$	Receiver 134 D to J	205	1	0.0	60.5	66	60.5	10		60.1	0.4	80	-7.6
$207$ 1         0.0 $60.4$ $66$ $60.4$ $10$ $\dots$ $60.0$ $0.4$ $208$ 1         0.0 $67.2$ $66$ $67.2$ $10$ $\dots$ $60.0$ $0.4$ $209$ 1         0.0 $67.2$ $66$ $64.6$ $10$ $\dots$ $60.6$ $4.0$ $210$ 1         0.0 $64.2$ $66$ $64.2$ $10$ $\dots$ $60.6$ $4.0$ $211$ 1         0.0 $65.6$ $66$ $65.6$ $10$ $\dots$ $61.6$ $4.0$ $211$ 1         0.0 $68.5$ $66$ $68.5$ $10$ $10$ $10.6$ $61.6$ $4.0$ $213$ 1         0.0 $68.5$ $66$ $68.5$ $10$ $10$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ $61.6$ </td <td>Receiver 135 D to J</td> <td>206</td> <td>1</td> <td>0.0</td> <td>60.8</td> <td>66</td> <td>60.8</td> <td>10</td> <td>1</td> <td>60.5</td> <td>0.3</td> <td>80</td> <td>7.7-</td>	Receiver 135 D to J	206	1	0.0	60.8	66	60.8	10	1	60.5	0.3	80	7.7-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Receiver 136 D to J	207	1	0.0	60.4	66	60.4	10	1	60.0	0.4	80	-7.6
209       1       0.0       64.6       66       64.6       10        60.6       4.0         210       1       0.0       64.2       66       64.2       10        60.6       4.0         211       1       0.0       64.2       66       64.2       10        60.6       3.6         212       1       0.0       65.6       10        61.6       4.0         213       1       0.0       68.5       66       68.5       10       64.1       4.4         213       1       0.0       70.6       66       73.3       10       5nd Lvi       65.4       5.2         214       2       0.0       72.3       66       72.3       10       5nd Lvi       66.3       5.8         216       1       0.0       71.1       66       71.1       10       5nd Lvi       65.3       5.8         215       1       0.0       75.1       66       76.0       10       5nd Lvi       66.3       5.8         215       1       0.0       71.1       10       5nd Lvi       66.0       5.8         217	Receiver 137 J to C	208	1	0.0	67.2	99	67.2	10	Snd Lvi	63.3	3.9	80	4.1
210       1       0.0       64.2       66       64.2       10        60.6       3.6         211       1       0.0       65.6       66       65.6       10        61.6       4.0         212       1       0.0       68.5       66       65.6       10        61.6       4.0         213       1       0.0       68.5       66       68.5       10       Snd Lvi       65.4       5.2         213       1       0.0       70.6       66       72.3       10       Snd Lvi       65.4       5.2         214       2       0.0       72.3       66       72.3       10       Snd Lvi       66.3       6.0         215       1       0.0       71.1       66       71.1       10       Snd Lvi       65.3       5.8         216       1       0.0       76.0       66       76.0       10       5.1       7.9         215       2       0.0       76.1       66       76.0       10       5.1       7.9         216       1       0.0       76.0       66       76.0       10       5.1       7.9 <td>Receiver 138 J to C</td> <td>209</td> <td>1</td> <td></td> <td>64.6</td> <td>99</td> <td>64.6</td> <td>10</td> <td>1</td> <td>60.6</td> <td>4.0</td> <td>80</td> <td>4.0</td>	Receiver 138 J to C	209	1		64.6	99	64.6	10	1	60.6	4.0	80	4.0
211       1       0.0       65.6       66       65.6       10        61.6       4.0         212       1       0.0       68.5       66       68.5       10       Snd Lvi       64.1       4.4         213       1       0.0       68.5       66       68.5       10       Snd Lvi       65.4       5.2         213       1       0.0       70.6       66       70.6       10       Snd Lvi       65.4       5.2         214       2       0.0       72.3       66       72.3       10       Snd Lvi       66.3       6.0         215       1       0.0       71.1       66       71.1       10       Snd Lvi       66.3       5.8         216       1       0.0       76.0       66       76.0       10       5nd Lvi       68.1       7.9         215       2       0.0       76.7       66       76.0       10       5nd Lvi       68.1       7.9         217       2       0.0       75.7       66       76.7       10       5nd Lvi       69.0       7.7	Receiver 139 J to C	210	1		64.2	66	64.2	10	I	60.6	3.6	80	4.4
212       1       0.0       68.5       66       68.5       10       Snd Lvi       64.1       4.4         213       1       0.0       70.6       66       70.6       10       Snd Lvi       65.4       5.2         214       2       0.0       72.3       66       72.3       10       Snd Lvi       66.3       5.2         215       1       0.0       71.1       66       71.1       10       Snd Lvi       66.3       5.2         216       1       0.0       71.1       66       71.1       10       Snd Lvi       66.3       5.8         216       1       0.0       76.0       66       76.0       10       5nd Lvi       68.1       7.9         217       2       0.0       76.7       66       76.7       10       5nd Lvi       69.0       77	Receiver 140 J to C	211	1		65.6	66	65.6	10		61.6	4.0	80	4.0
213       1       0.0       70.6       66       70.6       10       Snd Lvi       65.4       5.2         214       2       0.0       72.3       66       72.3       10       Snd Lvi       66.3       6.0         215       1       0.0       71.1       66       71.1       10       Snd Lvi       66.3       6.0         216       1       0.0       76.0       66       76.0       10       Snd Lvi       68.1       7.9         217       2       0.0       76.7       66       76.0       10       5nd Lvi       68.1       7.9		212	1		68.5	66	68.5	10	Snd Lvl	64.1	4.4	80	-3.6
214     2     0.0     72.3     66     72.3     10     5nd Lvi     66.3     6.0       215     1     0.0     71.1     66     71.1     10     5nd Lvi     65.3     5.8       216     1     0.0     76.0     66     71.1     10     5nd Lvi     65.3     5.8       216     1     0.0     76.0     66     76.0     10     5nd Lvi     68.1     7.9       217     2     0.0     76.7     66     76.7     10     5nd Lvi     69.0     77	Receiver 142 J to C	213	1		70.6	99	70.6	10	Snd Lvl	65.4	5.2	80	-2.8
215 1 0.0 71.1 66 71.1 10 Snd Lvl 65.3 5.8 216 1 0.0 76.0 66 76.0 10 Snd Lvl 68.1 7.9 217 2 0.0 76.7 66 76.7 10 Snd Lvl 69.0 77		214	2 0		72.3	99	72.3	10	Snd Lvl	66.3	6.0	œ	-2.0
216 1 0.0 76.0 66 76.0 10 Snd Lvl 68.1 7.9 0 217 2 0.0 76.7 66 76.7 10 Snd Lvl 69.0 77	Receiver 144 J to C	215	1 0		71.1	66	71.1	10	Snd Lvl	65.3	5.8	80	-2.2
217 2 0.0 76.7 66 76.7 10 Sud Vi 69.0 7.7	Receiver 145 J to C	216	1		76.0	99	76.0	10	Snd Lvl	68.1	7.9	80	-0.1
	Receiver 146 J to C	217	2 0		76.7	66	76.7	10	Snd Lvl	69.0	7.7	80	-0.3

RESULTS: SOUND LEVELS					3600						
Receiver 147 J to C	218 1	0.0	76.3	99	76.3	10	Snd Lvl	69.2	7.1	80	-0.9
Receiver 148 J to C	219 1	0.0	75.9	66	75.9	10	Snd Lvl	69.2	6.7	60	-1.3
Receiver 149 J to C	220 2	0.0	75.1	66	75.1	10	Snd Lvl	6.69	5.2	80	-2.8
Receiver 150 J to C	221 1	0.0	64.0	99	64.0	10	I	59.8	4.2	8	-3.8
Receiver 151 J to C	222 1	0.0	65.6	99	65.6	10	I	61.3	4.3	80	-3.7
Receiver 152 J to C	223 1	0.0	64.4	66	64.4	10	I	59.9	4.5	80	-3.5
Receiver 153 J to C	224 1	0.0	62.7	66	62.7	10	I	58.5	4.2	80	-3.8
Receiver 154 J to C	225 1	0.0	68.1	66	68.1	10	Snd Lvl	63.4	4.7	80	-3.3
Receiver 155 J to C	226 1	0.0	66.8	99	66.8	10	Snd Lvl	62.2	4.6	80	-3.4
Receiver 156 J to C	227 1	0.0	66.1	99	66.1	10	Snd Lvl	61.5	4.6	80	-3.4
Receiver 157 J to C	228 1	0.0	65.3	99	65.3	10	I	60.7	4.6	80	-3.4
Receiver 158 J to C	229 1	0.0	64.7	66	64.7	10	l	60.0	4.7	80	-3.3
Receiver 159 J to C	230 1	0.0	64.3	66	64.3	10	I	59.6	4.7	80	-3.3
Receiver 160 J to C	232 1	0.0	70.5	66	70.5	10	Snd Lvl	65.2	5.3	80	-2.7
Receiver 161 J to C	233 1	0.0	69.3	66	69.3	10	Snd Lvl	64.2	5.1	80	-2.9
Receiver 162 J to C	234 1	0.0	68.3	99	68.3	10	Snd Lvl	63.2	5.1	8	-2.9
Receiver 163 J to C	235 1	0.0	67.2	99	67.2	10	Snd Lvl	62.3	4.9	80	-3.1
Receiver 164 J to C	236 1	0.0	66.4	66	66.4	10	Snd Lvl	61.5	4.9	8	-3.1
Receiver 165 J to C	237 1	0.0	65.7	66	65.7	10	1	60.7	5.0	8	-3.0
Receiver 166 J to C	238 1	0.0	65.2	99	65.2	10	I	60.3	4.9	80	-3.1
Receiver 167 J to C	239 1	0.0	64.7	66	64.7	10	1	59.8	4.9	80	-3.1
Receiver 168 J to C	240 1	0.0	70.1	66	70.1	10	Snd Lvl	64.6	5.5	80	-2.5
Receiver 169 J to C	241 1	0.0	68.9	66	68.9	10	Snd Lvl	63.4	5.5	80	-2.5
Receiver 170 J to C	242 1	0.0	66.1	99	66.1	10	Snd Lvl	61.0	5.1	80	-2.9
Receiver 171 J to C	243	0.0	70.7	66	70.7	10	Snd Lvl	65.0	5.7	80	-2.3
Receiver 172 J to C	244 1	0.0	67.6	66	67.6	10	Snd Lvl	62.3	5.3	80	-2.7
Receiver 173 J to C	245	0.0	66.8	66	66.8	10	Snd Lvl	61.7	5.1	80	-2.9
Receiver 174 J to C	246 1	0.0	66.3	66	66.3	10	Snd Lvl	61.2	5.1	8	-2.9
Receiver 175 J to C	247 1	0.0	65.5	66	65.5	10	1	60.7	4.8	8	-3.2
Receiver 176 J to C	248	0.0	73.0	66	73.0	10	Snd Lvl	67.2	5.8	8	-2.2
Receiver 177 J to C	249	0.0	70.2	99	70.2	10	Snd Lvl	64.9	5.3	80	-2.7
Receiver 178 J to C	250	0.0	69.1	66	69.1	10	Snd Lvl	64.0	5.1	80	-2.9
Receiver 179 J to C	251 1	0.0	68.0	99	68.0	10	Snd Lvl	63.4	4.6	8	-3.4
Receiver 180 J to C	252	0.0	67.2	66	67.2	10	Snd Lvl	62.4	4.8	80	-3.2
Receiver 181 J to C	253	0.0	66.4	99	66.4	10	Snd Lvl	61.8	4.6	80	-3.4
Receiver 182 J to C	254	0.0	68.4	66	68.4	10	Snd Lvl	63.8	4.6	80	-3.4
Receiver 183 J to C	255 1	0.0	67.8	66	67.8	10	Snd Lvl	63.3	4.5	80	-3.5
Receiver 184 J to C	256 1	0.0	66.8	66	66.8	10	Snd Lvl	62.6	4.2	80	-3.8
Dwelling Units	# DUs	Noise	Reduction								
		Min	Avg N	Max							
				-							

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## 15 August 200

RESULTS: SOUND LEVELS

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3600

9

INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group T Stone

13 August 2007 TNM 2.5

PROJECT/CONTRACT: RUN:	3600 Interchange C-Alt 11: With Noise Walls	C-Alt 11:	With No	ise Wa	s							
Roadway	Points											
Name	Name	No.	Segment	ŧ								
			Autos v	U	MTrucks	s u	HTrucks	s	Buses	U	Motorcycles v s	ycles
			veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	v veh/hr	km/h	veh/hr	km/h
I-75 - NB	point271	299	2109	97	132	97	422	2 97		97	2	-
	point198	300	2109	67	132	97	422	2 97		97	2	-
	point270	301	2109	97	132	97	422	2 97	-	97	2	-
	point199	302	2109	97	132	97	422	2 97		97	2	-
	point268	303	2482	67	124	97	496	5 97	4-	97	2	-
	point999	304	2482	97	124	- 97	496	5 97	-	97	7	-
	point200	305	2482	67	124	97	496	5 97		97	2	-
	point222	306	2482	67	124	97	496	5 97	2	97	2	-
	point201	307	2482	67	124	97	496	5 97		97	2	-
	point998	946	2482	97	124	97	496	5 97	Ţ	97	2	-
	point202	308	2482	97	124	97	496	5 97	2	97	7	-
	point945	945	2482	97	124	97	496	5 97		97	2	-
	point905	902	2482	97	124	97	496	5 97		97	2	-
	point948	948	2482	97	124	97	496	5 97		97	2	1
	point223	311	2482	97	124	97	496	3 97		97	1	-
	point205	312	2482	67	124	97	496	3 97		97	7	-
	point206	313	2482	67	124	97	496	5 97	-	97	2	1 97
	point928	928	2322	97	116	97	464	t 97		97	2	-
	point207	314	2322	97	116	97	464	t 97	7	97	2	-
	point949	949	2322	97	116	97	464	t 97	-	97	2	1 97
	point208	315	2322	67	116	97	464	t 97	-	97	2	1 97
	noint209	316	2322	97	116	79	464	1 97	5	97	2	-

	point210	317	2322	97	116	97	464	97	-	97	·	97
	point950	950	2322	97	116	97	464	97	-	97	-	97
	point211	318	2322	97	116	97	464	97	-	97	-	97
	point212	319	2685	97	107	26	537	67	1	97	-	97
	point213	320	2685	97	107	97	537	97	-	97	-	97
	point214	321	2685	97	107	97	537	97	-	97	-	
	point215	322										
I-75 - SB	point942	942	4595	97	230	97	919	97	-	97	-	
	point232	338	4595	97	230	67	919	97	-	97	~	
	point233	339	4486	97	224	97	897	97	-	97	-	
	175.5	980	4486	97	224	97	897	97	-	97	-	
	point234	340	4486	97	224	97	897	97	-	97	-	
	point235	341	4486	97	224	97	897	97	-	97	-	
	point496	342	4486	97	224	97	897	97	-	97	+	
	point260	343	4486	97	224	16	897	97	-	97	-	
	point261	344	4486	97	224	97	897	97	-	97	-	
	point236	345	4486	97	224	97	897	97	-	97	-	
	point237	346	4486	97	224	97	897	97	-	97	-	97
	point238	347	4486	97	224	16	897	97	-	97	-	
	point239	348	4766	97	238	97	953	97	~	97	-	
	point262	349	4766	97	238	97	953	97	-	97	-	
	point263	351	4766	97	238	97	953	97	÷	97		
	point947	947	4766	97	238	97	953	97	~	97	*	
	point264	353	4766	97	238	97	953	97	-	97	-	
	point944	944	4766	97	238	97	953	97	~	97	-	
	point265	355	4766	97	238	97	953	97	Ţ	97	-	
	point243	356	4526	97	226	97	905	97	~	97	<del></del>	
	point266	357	4526	97	226	97	905	97	~	97	-	
	point244	358	4526	97	226	97	905	97	-	97	-	
	point245	359	4526	97	226	97	905	97	-	97	-	
	point267	360	4526	97	226	97	905	97	~	97	~	
	point246	361	4526	97	226	97	905	97	-	97	-	
	point247	362										
S I-75/Clark Off-Ramp	point461	558	424	40	20	40	56	40	~	40	~	40

2

	point463	560	424	40	20	40	56	40	-	40	-	40
	point465	562										
S I-75 Service Drive - 1	point466	563	440	40	32	40	184	40	-	40	-	40
	point651	567										
S I-75 Service Drive - 2	point475	575	749	56	ŝ	56	30	56	-	56	-	56
	point476	576	749	56	c	56	30	56	-	56	-	56
	point1056	1056	749	56	e	56	30	56	-	56	-	56
	point644	577										
S I-75 Service Drive - 4	point638	594	749	48	ę	48	30	48	-	48	-	48
	point489	595	749	48	e	48	30	48	-	48	-	48
	point490	596	749	48	ŝ	48	30	48	-	48	-	48
	point491	597										
S I-75 Service Drive - 5	point491	971	1004	56	14	56	39	56	-	56	~	56
	point504	607	1004	56	14	56	39	56	-	56	-	56
	point505	608	1004	56	14	56	39	56	-	56	-	56
	point975	975	1004	56	14	56	39	56	-	56	-	56
	point1077	1077	1004	56	14	56	39	56	-	56	-	56
	point507	610										
S I-75 Service Drive - 8	point530	637	200	40	e	40	27	40	-	40	-	40
	point531	638	200	40	e	40	27	40	~	40	-	40
	point532	639										
Springwells/S I-75 On-Ramp	point533	640	420	97	25	97	75	97	~	97	-	97
	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	-	40	-	40
	point685	685	700	40	40	40	60	40	~	40	-	40
	point687	687	700	40	40	40	60	40	~	40	~	40
	point943	943	700	40	40	40	60	40	-	40	-	40
	point688	688	700	40	40	40	60	40	~	40	-	40
	point690	690	700	40	40	40	60	40	-	40	-	40
	point691	691	700	40	40	40	60	40	-	40	-	40
	point692	692										
Green - N&SB	point727	727	85	48	5	48	10	48	~	48	-	48
	point939	939	85	48	5	48	10	48	5	48	-	48
	nointaga	626	85	48	Ľ	48	10	48	Ţ	40	3	48

	point960	960	85	48	5	48	10	48	-	48	-	48
	point729	729	85	48	5	48	10	48	-	48	~	48
	point730	730	85	48	5	48	10	48	<del></del>	48	-	48
	point731	731										
Clark - NB	point812	812	80	40	5	40	25	40	-	40	-	40
	point813	813	100	25	20	25	300	25	-	25	-	25
	point814	814	80	25	15	25	180	25	-	25	-	25
	point963	963	80	25	15	25	180	25	-	25	~	25
	point964	964	80	25	15	25	180	25	-	25	-	25
	point815	815	84	40	00	40	4	40	-	40	-	40
	point816	816										
Clark - SB	point818	818	120	40	4	40	25	40	-	40	*	40
	point819	819	120	40	4	40	25	40	-	40	*	40
	point961	961	120	40	4	40	25	40	~	40	-	40
	point962	962	120	40	4	40	25	40	~	40	~	40
	point820	820	120	40	4	40	25	40	-	40	-	40
	point821	821	120	40	4	40	25	40	-	40	-	40
	point822	822										
S I-75 Service Drive - 3	point645	579	749	56	e	56	30	56	-	56	-	56
	point478	581	180	56	10	56	2	56	+	56	-	56
	point494	583	180	56	10	56	5	56	-	56	-	56
	point480	584	180	56	10	56	2	56	-	56	~	56
	point495	968	1004	56	14	56	39	56	Ļ	56	-	56
	point488	696										
S I-75 Service Drive - 6	point631	612	200	56	e	56	27	56	-	56	-	56
	point509	613	200	56	e	56	27	56	-	56	-	56
	point510	614	200	56	e	56	27	56	<u> </u>	56	-	56
	point1078	1078	200	56	n	56	27	56	٢	56	-	56
	point629	619										
S I-75 Service Drive - 7	point977	977	200	56	e	56	27	56	~	56	-	56
	point514	620	200	56	С	56	27	56	٢	56	t	56
	point515	621	200	56	3	56	27	56	-	56	-	56
	point516	622	200	56	e	56	27	56	-	56		56
	:-E40			0	•	0		4	1			

	point525	978	200	56	e	56	27	56	-	56	<del>7</del>	56
	point527	979										
Outbound to SB I-75	point1005	1005	205	74	20	74	180	74	-	74	4	74
	point1058	1058	205	74	20	74	180	74	-	74	-	74
	point1006	1006	205	74	20	74	180	74	~	74	-	74
	point1007	1007	205	74	20	74	180	74	*	74	-	74
	point1008	1008	205	74	20	74	180	74	-	74	-	74
	point1010	1010										
Inbound from SB I-75	point1012	1012	559	89	5	89	48	89	۲	89	-	89
	point1013	1013	559	89	5	89	48	89	~	89	*	89
	point1014	1014	559	89	5	89	48	89	-	89	-	89
	point1015	1015	559	89	5	89	48	89	-	89	-	89
	point1016	1016										
S I-75/Dragoon On-Ramp	point1068	1068	1000	97	5	97	45	97	-	97	-	97
	point1069	1069	1000	97	5	97	45	97	-	26	-	97
	point1070	1070	1000	97	5	97	45	97	۲	97	۲	97
	point1071	1071	1000	97	5	97	45	97	-	97	-	97
	point1072	1072	1000	97	5	16	45	97	~	97	-	97
	point1073	1073	1000	97	5	97	45	97	~	97	~	97
	point1074	1074	1000	97	2J	97	45	97	-	97	-	97
	point1075	1075										
Waterman N&SB	point761	1079	85	56	5	56	15	56	~	56	-	56
	point762	1080	128	48	00	48	23	48	2	48	2	48
	point957	1081	128	48	80	48	23	48	2	48	2	48
	point958	1082	128	48	80	48	23	48	2	48	2	48
	point764	1083	128	56	80	56	23	56	2	56	0	56
	point765	1084	128	56	00	56	23	56	2	56	2	56
	point769	1085										
S I-75/Dragoon Off-Ramp	point481	1092	904	56	4	56	34	56	-	56	-	56
	point483	1093	904	56	4	56	34	56	-	56	-	56
	point484	1094	904	56	4	56	34	56	-	56	-	56
	point1096	1096	904	56	4	56	34	56	-	56	-	56
	point485	1095										

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**RESULTS: BARRIER DESCRIPTIONS** 

The Corradino Group T Stone

13 August 2007 **TNM 2.5** 

> RESULTS: BARRIER DESCRIPTIONS 1

PROJECT/CONTRACT:	3600
RUN:	Interchar
BARRIER DESIGN:	INPUT H

nge C-Alt 11: With Noise Walls **EIGHTS** 

Barriers

000000000000 0 Cost 69 Run:Rise m:m Width Top ε Volume If Berm cu m 578 248 512 212 592 1593 1948 607 1584 590 749 1477 If Wall Area m ps 525 225 1448 466 193 539 225 428 527 160 399 Length Ε 1.10 1.10 1.10 1.10 1.10 1.10 2.70 3.70 3.70 3.70 3.70 3.70 Max Ε Type Heights along Barrier 1.10 1.10 1.10 1.10 1.10 1.10 2.70 3.70 3.70 3.70 3.70 3.70 Avg Ε 1.10 1.10 1.10 1.10 1.10 1.10 2.70 3.70 3.70 3.70 3.70 3.70 Min Ε ≥  $\geq$  $\geq$  $\geq$  $\geq$  $\geq$  $\geq$  $\geq$  $\geq$  $\geq$ 33 Waterman to Livernois Springwells to Green Green to Waterman Barrier from SB I-75 Barrier to SB I-75 Junction to Clark Barrier10 Barrier15 Barrier11 **Barrier5** Barrier2 Barrier9 Name

Total Cost:

**RESULTS: BARRIER DESCRIPTIONS** 

The Corradino Group T Stone

**RESULTS: BARRIER DESCRIPTIONS** PROJECT/CONTRACT:

3600

BARRIER DESIGN: RUN:

Barriers Name

Waterman to Livernois Springwells to Green Barrier to SB I-75 Junction to Clark Barrier15 Barrier10 Barrier11 Barrier9 Barrier2 **Barrier5** 

Barrier from SB I-75 Green to Waterman

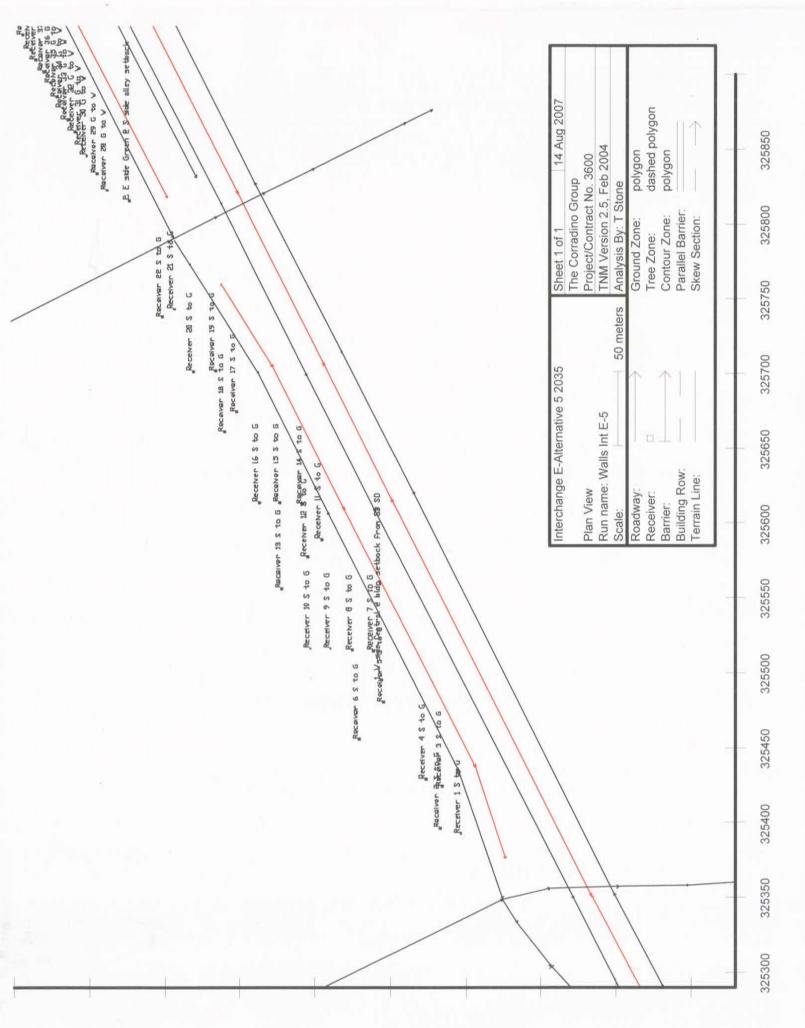
15 August 2007

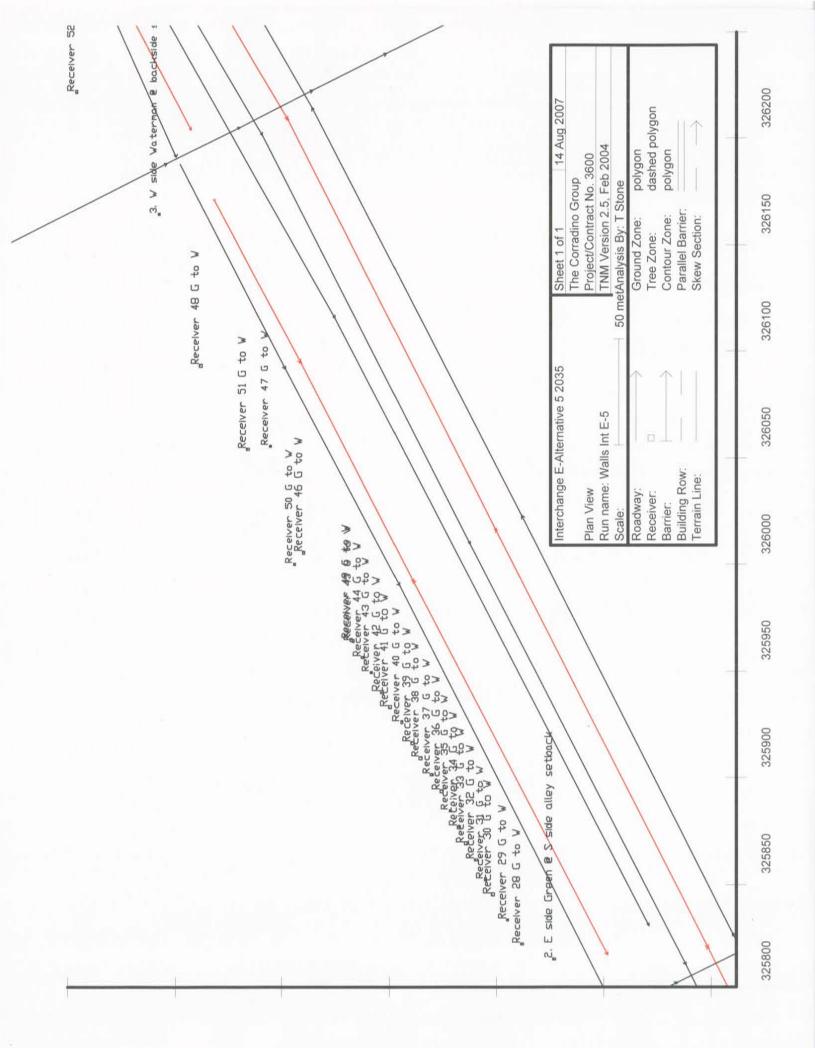
3600

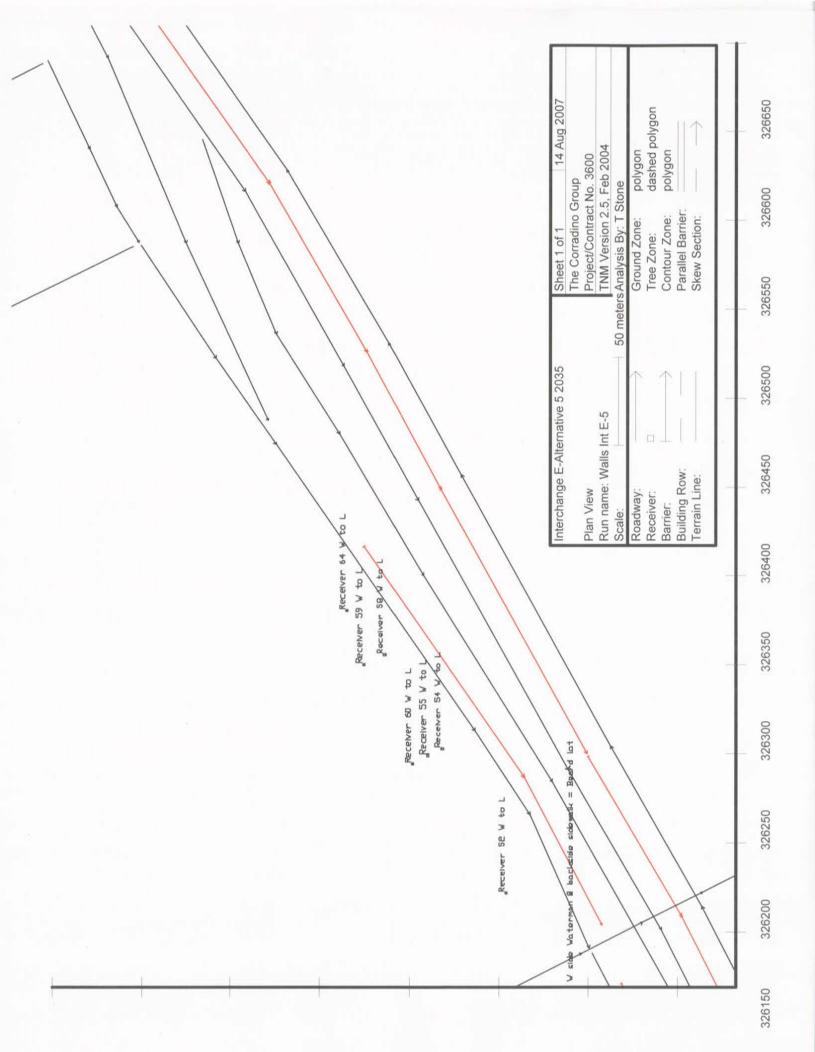
**TNM 2.5** 

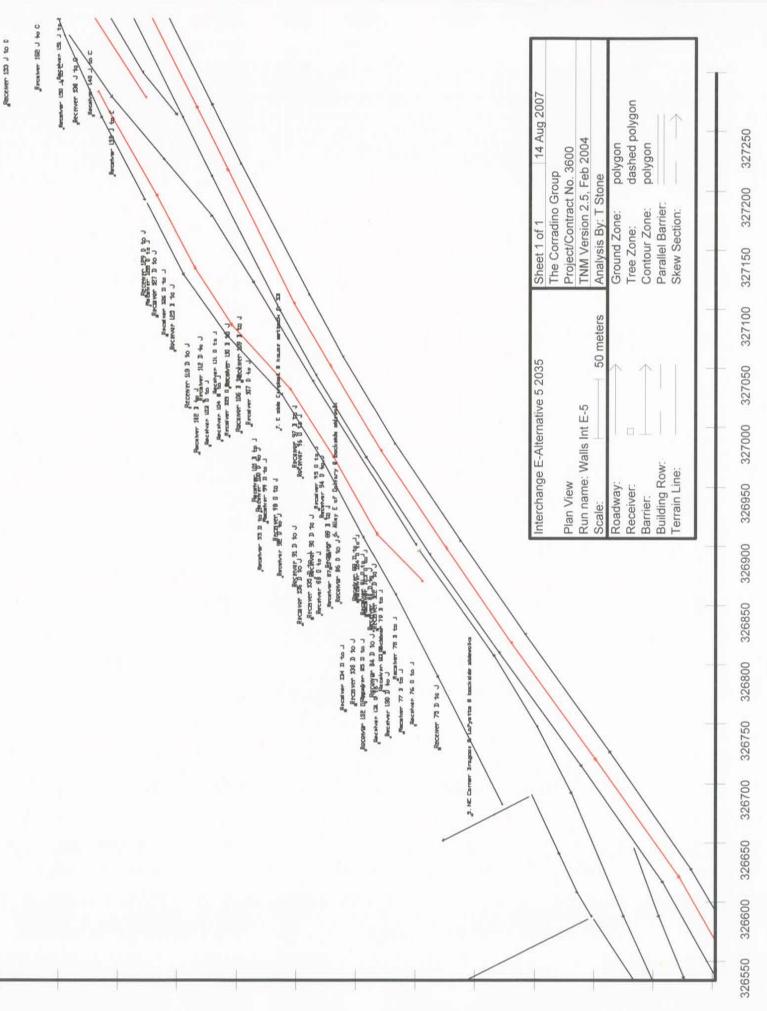
ype	Height	Type Heights along Barrier	arrier		Length	If Wall	If Berm			Cost	
	Min	Avg	Max			Area	Volume	Top Width	Run:Rise		
	E	E	ε		E	m ps	cu m	E	m:m	69	
$\geq$	-	.10	1.10	1.10	466		12				0
$\geq$	L	1.10	1.10	1.10	193	3 212	12				0
$\geq$	-	.10	1.10	1.10	530		32				0
$\geq$	-	.10	1.10	1.10	525		578				0
$\geq$	-	.10	1.10	1.10	22		18				0
$\geq$	-	.10	1.10	1.10	144	8 1593	33				0
$\geq$	2	2.70	2.70	2.70	225	5 607	17				347808
$\geq$	(7)	02.3	3.70	3.70	52	7 1948	8				956202
$\geq$	(7)	0.70	3.70	3.70	42(	8 1584	34				777488
$\geq$	(7)	02.0	3.70	3.70	16(	0 590	06				289808
$\geq$	(*)	02.0	3.70	3.70	399	9 1477	7				724909
$\geq$	(7)	3.70	3.70	3.70	202	2 749	61				367502

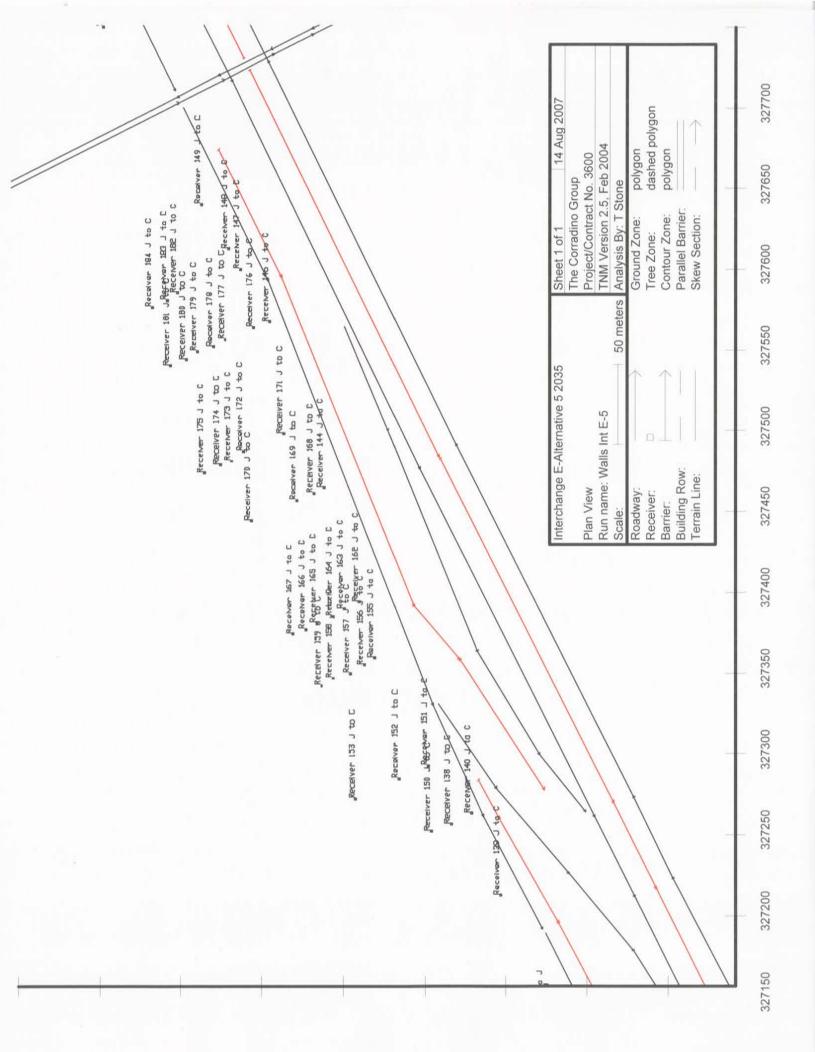
**Interchange E – Alternative 5 – 2035** 











The Corradino Group T Stone RESULTS: SOUND LEVELS PROJECT/CONTRACT: RUN: BARRIER DESIGN:												
RESULTS: SOUND LEVELS PROJECT/CONTRACT: RUN: BARRIER DESIGN:						15 August 2007 TNM 2.5 Calculated with	15 August 2007 TNM 2.5 Calculated with TNM 2.5	IM 2.5				
	3600 Interch INPUT	3600 nterchange E-A INPUT HEIGHT9	3600 Interchange E-Alternative 5 2035 INPUT HEIGHTS	35			Average	Average pavement type shall be used unless	e shall be u	ed unless		
ATMOSPHERICS:	20 deç	20 deg C, 50% F	RH				a state of a diff	a state nignway agency substantiates the use of a different type with approval of FHWA.	cy substanti approval of	FHWA.	ø	
er								With Barrior				
Name	snn#	LAeq1h	J No Barrier LAeq1h Calculated	Crit'n	Increase or Calculated	Increase over existing Calculated Crit'n	Type Impact	Calculated LAeq1h	Noise Reduction Calculated Goa	uction Goal	Calculated	ated
						Sub'l Inc	0				minus	
		dBA	dBA	dBA	đB	dB		dBA	dB	dВ	dB B	
9. W side Clark N of SB SD - Clark Park 32		1 0	0.0 71.9	6	66 7	71.9 1	10 Snd Lvl	vi 71.6		0.3	80	L.T.
7. E side Campbell @ house setback fr SC 40	1	1 0	0.0 70.9	0	66 7	70.9 1	10 Snd Lvl	vl 65.5		5.4	80	-2.6
6. Alley E of Calvary @ backside sidewalk 46		1 0	0.0 71.1	+	66 7		10 Snd Lvl			3.3	8	4.7
5. NE Corner Dragoon & Lafyette @ backs 53		1 0	0.0 69.4	4	66 6		10 Snd Lvl	vl 69.3		0.1	80	-7.9
3. W side Waterman @ backside sidewalk 58		1 0	0.0 71.9	6	66 7		10 Snd Lvl	vl 69.7		2.2	80	-5.8
2. E side Green @ S side alley setback 60		2 C	0.0 71.3	3	66 7		10 Snd Lvl	vi 68.2		3.1	80	4.9
@ bldg. setback from SE		4		3			-			8.5	00	0.5
		1		4	-		10 Snd Lvl	9		6.4	8	-1.6
		1		0						0.0	00	0.0
		1 0		4			224			<i>L.L</i>	00	-0.3
	10	1 0	2	2			50	9		7.5	00	-0.5
	10	1 0		0	66					0.0	00	0.0
Receiver 6 S to G 68		1 0	0.0 0.0	0	66	0.0	10 invalid	0.0		0.0	80	0.0
Receiver 7 S to G 69		1 0	0.0 74.8	00	66 7	74.8 1	10 Snd Lvl	vl 66.1		8.7	80	0.7
Receiver 8 S to G 70		1 0	0.0 73.0	0	66 7	73.0 1	10 Snd Lvl	vl 64.8		8.2	00	0.2
Receiver 9 S to G 71		1 0	0.0 71.5	5	66 7	71.5 1	10 Snd Lvl	vl 63.3		8.2	80	0.2
Receiver 10 S to G 72		2 0	0.0 0.0	0	66	0.0	10 invalid	0.0 b		0.0	80	0.0
Receiver 11 S to G 73	~	1 0	0.0 75.6	9	66 7	75.6 1	10 Snd Lvl	vl 66.5		9.1	80	1.1
Receiver 12 S to G 74		1 (	0.0 73.1	-	66 7	73.1 1	10 Snd Lvl	vl 64.9		8.2	80	0.2
Receiver 13 S to G 75	10	2 (	0.0 70.5	2	66 7	70.5	10 Snd Lvl	vl 62.2		8.3	8	0.3
Receiver 14 S to G 76	6	1 0	0.0 75.5	5	66 7	75.5 1	10 Snd Lvl	vl 66.5		9.0	8	1.0
Receiver 15 S to G 77	-	1 (	0.0 73.0	0	66 7	73.0	10 Snd Lvl	vl 64.9		8.1	8	0.1
Receiver 16 S to G 78	~	1 (	0.0 71.6	9	66 7	71.6 1	10 Snd Lvl	vl 63.5		8.1	80	0.1

15 August 200

	2	7.0	0.71	00	0.71	2	Shd LVI	64.6	8.0	o	0.0
Receiver 18 S to G	80	1 0.0		66	71.1	10	Snd Lvl	63.6	7.5	80	-0.5
Receiver 19 S to G	81	1 0.0		66	72.0	10	Snd Lvl	65.0	7.0	80	-1.0
Receiver 20 S to G	82	1 0.0		66	70.4	10	Snd Lvl	64.0	6.4	80	-1.6
Receiver 21 S to G	83	1 0.0		66	70.3	10	Snd Lvl	66.5	3.8	80	-4.2
Receiver 22 S to G	84	1 0.0	69.3	66	69.3	10	Snd Lvl	65.2	4.1	00	-3.9
Receiver 28 G to W	92	4 0.0	66.4	66	66.4	10	Snd Lvl	64.1	2.3	80	-5.7
Receiver 29 G to W	93	2 0.0	66.3	66	66.3	10	Snd Lvl	63.4	2.9	80	-5.1
Receiver 30 G to W	94	2 0.0	0 66.2	66	66.2	10	Snd Lvl	63.6	2.6	80	-5.4
Receiver 31 G to W	95	1 0.0	0 66.2	66	66.2	10	Snd Lvl	63.5	2.7	œ	-5.3
Receiver 32 G to W	96	1 0.0	0 66.4	66	66.4	10	Snd Lvl	63.4	3.0	80	-5.0
Receiver 33 G to W	26	1 0.0	66.6	66	66.6	10	Snd Lvl	63.5	3.1	00	4.9
Receiver 34 G to W	98	2 0.0	6.99	99	60.9	10	Snd Lvl	63.5	3.4	80	-4.6
Receiver 35 G to W	66	2 0.0		99	6.99	10	Snd Lvl	63.4	3.5	80	-4.5
Receiver 36 G to W	100	2 0.0	67.4	66	67.4	10	Snd Lvl	63.5	3.9	80	4.1
Receiver 37 G to W	101	2 0.0	67.5	99	67.5	10	Snd Lvl	63.5	4.0	80	-4.0
Receiver 38 G to W	102	1 0.0	0 67.8	66	67.8	10	Snd Lvl	63.4	4.4	œ	-3.6
Receiver 39 G to W	103	1 0.0	0 67.8	99	67.8	10	Snd Lvl	63.4	4.4	80	-3.6
Receiver 40 G to W	104	2 0.0	0 68.2	99	68.2	10	Snd Lvl	63.4	4.8	80	-3.2
Receiver 41 G to W	105	1 0.0	0 68.1	66	68.1	10	Snd Lvi	63.3	4.8	80	-3.2
Receiver 42 G to W	106	2 0.0	0 68.3	66	68.3	10	Snd Lvl	63.3	5.0	80	-3.0
Receiver 43 G to W	107	1 0.0	0 68.6	66	68.6	10	Snd Lvl	63.4	5.2	80	-2.8
Receiver 44 G to W	108	1 0.0	0 68.5	66	68.5	10	Snd Lvl	63.3	5.2	80	-2.8
Receiver 45 G to W	109	2 0.0		66	68.5	10	Snd Lvl	63.3	5.2	80	-2.8
Receiver 46 G to W	110	2 0.0	0 68.1	66	68.1	10	Snd Lvl	63.3	4.8	80	-3.2
Receiver 47 G to W	111	1 0.0		99	68.6	10	Snd Lvl	63.9		80	-3.3
Receiver 48 G to W	112	2 0.0		66	67.3	10	Snd Lvl	63.4	3.9	8	4.1
Receiver 49 G to W	113	2 0.0		99	69.1	10	Snd Lvl	63.5	5.6	80	-2.4
Receiver 50 G to W	114	2 0.0		66	68.1	10	Snd Lvl	63.0	5.1	8	-2.9
Receiver 51 G to W	115	1 0.0	10770	66	67.2	10	Snd Lvl	63.3		80	4.1
Receiver 52 W to L	116	10 0.0		66	71.1	10	Snd Lvl	67.2	3.9	8	4.1
Receiver 54 W to L	119	1 0.0		66	73.9	10	Snd Lvl	68.0	5.9	80	-2.1
Receiver 55 W to L	120	1 0.0		66	71.9	10	Snd Lvl	66.7	5.2	80	-2.8
Receiver 58 W to L	123	2 0.0	0 75.5	66	75.5	10	Snd Lvl	68.7	6.8	80	-1.2
Receiver 59 W to L	124	1 0.0		66	71.8	10	Snd Lvl	67.0	4.8	8	-3.2
Receiver 60 W to L	125	1 0.(	0 69.8	66	69.8	10	Snd Lvl	65.6	4.2	ω	-3.8
Receiver 64 W to L	132	1 0.0	0 74.6	99	74.6	10	Snd Lvl	68.9	5.7	8	-2.3
Receiver 75 D to J	147	2 0.0	0 69.2	66	69.2	10	Snd Lvl	69.0	0.2	80	-7.8
Receiver 76 D to J	148	1 0.(	0 67.9	66	67.9	10	Snd Lvl	68.0	-0.1	80	-8.1
Receiver 77 D to J	149	1 0.0	0 66.3	66	66.3	10	Snd Lvl	66.0	0.3	80	T.T-
Receiver 78 D to J	150	10 0.0	0.69.0	99	69.0	10	Snd I vl	68.7	0.3	80	7.7-

RESULTS: SOUND LEVELS						3600						
Receiver 79 D to J	151	+	0.0	69.3	99	69.3	10	Snd Lvl	68.6	0.7	80	-7.3
Receiver 80 D to J	152	ო	0.0	69.4	99	69.4	10	Snd Lvl	68.2	1.2	80	-6.8
Receiver 81 D to J	153	2	0.0	69.5	99	69.5	10	Snd Lvl	67.8	1.7	80	-6.3
Receiver 82 D to J	154	2	0.0	69.4	99	69.4	10	Snd Lvl	67.1	2.3	00	-5.7
Receiver 83 D to J	155	۲	0.0	66.7	99	66.7	10	Snd Lvl	66.2	0.5	60	-7.5
Receiver 84 D to J	156	-	0.0	65.6	99	65.6	10	I	65.0	0.6	60	-7.4
Receiver 85 D to J	157	+	0.0	64.8	99	64.8	10	-	64.0	0.8	œ	-7.2
Receiver 86 D to J	158	-	0.0	67.5	99	67.5	10	Snd Lvl	65.2	2.3	80	-5.7
Receiver 87 D to J	159	+	0.0	66.5	99	66.5	10	Snd Lvl	64.2	2.3	80	-5.7
Receiver 88 D to J	160	+	0.0	65.5	99	65.5	10	Î	63.1	2.4	80	-5.6
Receiver 89 D to J	161	÷	0.0	68.2	99	68.2	10	Snd Lvl	64.9	3.3	60	4.7
Receiver 90 D to J	162	۴	0.0	66.3	99	66.3	10	Snd Lvl	63.3	3.0	œ	-5.0
Receiver 91 D to J	163	-	0.0	65.0	99	65.0	10	-	62.1	2.9	80	-5.1
Receiver 92 D to J	164	۴	0.0	64.3	66	64.3	10	Î	61.5	2.8	80	-5.2
Receiver 93 D to J	165	4	0.0	63.4	99	63.4	10	I	64.1	-0.7	80	-8.7
Receiver 94 D to J	166	-	0.0	70.4	99	70.4	10	Snd Lvl	66.1	4.3	80	-3.7
Receiver 95 D to J	167	-	0.0	70.2	99	70.2	10	Snd Lvl	65.8	4.4	80	-3.6
Receiver 96 D to J	168		0.0	70.2	66	70.2	10	Snd Lvl	65.8	4.4	80	-3.6
Receiver 97 D to J	169	-	0.0	70.1	99	70.1	10	Snd Lvl	65.6	4.5	80	-3.5
Receiver 98 D to J	170	۰.	0.0	64.7	99	64.7	10	-	61.6	3.1	80	4.9
Receiver 99 D to J	171		0.0	64.8	99	64.8	10	Ì	61.4	3.4	80	4.6
Receiver 100 D to J	172	-	0.0	64.7	99	64.7	10	-	61.3	3.4	80	4.6
Receiver 101 D to J	173	۳	0.0	64.8	99	64.8	10	1	61.3	3.5	80	4.5
Receiver 102 D to J	174	4	0.0	63.6	99	63.6	10		59.8	3.8	80	4.2
Receiver 103 D to J	175	÷	0.0	64.2	66	64.2	10		60.4	3.8	80	-4.2
Receiver 104 D to J	176	-	0.0	65.0	66	65.0	10	1	61.0	4.0	80	4.0
Receiver 105 D to J	177	÷	0.0	65.4	66	65.4	10	1	61.7	3.7	80	4.3
Receiver 106 D to J	178	-	0.0	66.1	99	66.1	10	Snd Lvl	62.5	3.6	80	4.4
Receiver 107 D to J	179	7	0.0	66.6	99	66.6	10	Snd Lvl	63.5	3.1	80	4.9
Receiver 109 D to J	181	-	0.0	70.0	99	70.0	10	Snd Lvl	64.6	5.4	80	-2.6
Receiver 110 D to J	182	-	0.0	66.9	66	6.99	10	Snd Lvl	63.4	3.5	80	-4.5
Receiver 111 D to J	183	-	0.0	65.7	66	65.7	10	1	62.5	3.2	80	4.8
Receiver 112 D to J	184	-	0.0	65.2	66	65.2	10	1	61.4	3.8	80	4.2
Receiver 113 D to J	185	۲	0.0	64.3	66	64.3	10	1	60.4	3.9	80	4.1
Receiver 122 D to J	194	e	0.0	73.4	66	73.4	10	Snd Lvl	72.5	0.9	80	-7.1
Receiver 123 D to J	195	2	0.0	73.0	99	73.0	10	Snd Lvl	71.6	1.4	80	-6.6
Receiver 124 D to J	196	2	0.0	72.9	99	72.9	10	Snd Lvl	71.0	1.9	œ	-6.1
Receiver 125 D to J	197	-	0.0	65.7	66	65.7	10	1	61.6	4.1	80	-3.9
Receiver 126 D to J	198	2	0.0	65.8	99	65.8	10	1	61.5	4.3	80	-3.7
Receiver 127 D to J	199	-	0.0	66.0	99	66.0	10	Snd Lvl		4.4	80	-3.6
Receiver 128 D to J	200	-	0.0	66.1	99	66.1	10	Snd Lvl	61.5	4.6	80	-3.4
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Receiver 129 D to J	201	-	0.0	66.2	99	66.2	10	Snd Lvl	61.5	4.7	00	-3.3
Receiver 130 D to J	202	-	0.0	65.0	99	65.0	10	1	64.5	0.5	8	-7.5
Receiver 131 D to J	203	+	0.0	63.9	99	63.9	10	I	63.2	0.7	80	-7.3
Receiver 132 D to J	204	Ļ	0.0	62.9	99	62.9	10	I	62.1	0.8	80	-7.2
Receiver 133 D to J	205	t	0.0	64.1	99	64.1	10	I	63.1	1.0	80	-7.0
Receiver 134 D to J	206	Ŧ	0.0	63.4	99	63.4	10	I	62.3	1.1	60	-6.9
Receiver 135 D to J	207	t	0.0	65.0	99	65.0	10	I	62.6	2.4	80	-5.6
Receiver 136 D to J	208	+	0.0	64.2	99	64.2	10	I	61.8	2.4	80	-5.6
Receiver 138 J to C	210	+	0.0	69.3	99	69.3	10	Snd Lvl	64.8	4.5	00	-3.5
Receiver 139 J to C	211	t	0.0	70.9	99	70.9	10	Snd Lvl	6.99	4.0	00	4.0
Receiver 140 J to C	137	÷	0.0	70.1	99	70.1	10	Snd Lvl	65.8	4.3	00	-3.7
Receiver 144 J to C	215	+	0.0	75.4	99	75.4	10	Snd Lvl	68.8	6.6	80	-1.4
Receiver 146 J to C	217	2	0.0	78.1	99	78.1	10	Snd Lvl	70.5	7.6	00	-0.4
Receiver 147 J to C	218	F	0.0	76.8	66	76.8	10	Snd Lvl	69.5	7.3	00	-0.7
Receiver 148 J to C	219	-	0.0	76.3	99	76.3	10	Snd Lvl	69.4	6.9	80	-1.1
Receiver 149 J to C	220	2	0.0	75.2	99	75.2	10	Snd Lvl	70.0	5.2	00	-2.8
Receiver 150 J to C	221	۲	0.0	67.0	99	67.0	10	Snd Lvl	63.3	3.7	00	4.3
Receiver 151 J to C	222	٢	0.0	70.1	99	70.1	10	Snd Lvl	65.9	4.2	00	-3.8
Receiver 152 J to C	223	٢	0.0	67.3	99	67.3	10	Snd Lvl	63.4	3.9	80	4.1
Receiver 153 J to C	224	۲	0.0	64.7	99	64.7	10	1	60.9	3.8	60	-4.2
Receiver 155 J to C	226	٢	0.0	70.9	99	70.9	10	Snd Lvl	67.0	3.9	80	4.1
Receiver 156 J to C	227	٢	0.0	6.69	99	6.69	10	Snd Lvl	65.7	4.2	80	-3.8
Receiver 157 J to C	228	٢	0.0	68.8	99	68.8	10	Snd Lvl	64.5	4.3	80	-3.7
Receiver 158 J to C	229	۲	0.0	67.5	99	67.5	10	Snd Lvl	63.4	4.1	80	-3.9
Receiver 159 J to C	230	Ŧ	0.0	66.6	99	66.6	10	Snd Lvl	62.6	4.0	80	4.0
Receiver 162 J to C	233	÷	0:0	72.1	99	72.1	10	Snd Lvl	68.0	4.1	80	-3.9
Receiver 163 J to C	234	i.	0.0	70.6	99	70.6	10	Snd Lvl	66.4	4.2	80	-3.8
Receiver 164 J to C	235	1	0.0	69.7	99	69.7	10	Snd Lvl	65.4	4.3	80	-3.7
Receiver 165 J to C	236	٢	0.0	68.5	99	68.5	10	Snd Lvl	64.2	4.3	80	-3.7
Receiver 166 J to C	237	۲	0.0	67.6	99	67.6	10	Snd Lvl	63.4	4.2	60	-3.8
Receiver 167 J to C	238	-	0.0	66.8	99	66.8	10	Snd Lvl	62.7	4.1	80	-3.9
Receiver 168 J to C	239	÷	0.0	72.8	99	72.8	10	Snd Lvl	67.7	5.1	80	-2.9
Receiver 169 J to C	240	+	0.0	71.2	66	71.2	10	Snd Lvl	66.5	4.7	80	-3.3
Receiver 170 J to C	241	-	0.0	67.7	66	67.7	10	Snd Lvl	63.3	4.4	60	-3.6
Receiver 171 J to C	242	-	0.0	72.6	66	72.6	10	Snd Lvl	67.3	5.3	80	-2.7
Receiver 172 J to C	243	÷	0.0	69.1	66	69.1	10	Snd Lvl	64.5	4.6	60	-3.4
Receiver 173 J to C	244	F	0.0	67.9	99	67.9	10	Snd Lvl	63.5	4.4	80	-3.6
Receiver 174 J to C	245	t-	0.0	67.2	66	67.2	10	Snd Lvl	62.9	4.3	00	-3.7
Receiver 175 J to C	246	-	0.0	66.3	99	66.3	10	Snd Lvl	62.1	4.2	80	-3.8
Receiver 176 J to C	247	-	0.0	75.3	99	75.3	10	Snd Lvl	68.0	7.3	00	-0.7
Receiver 177 J to C	248	-	0.0	70.7	99	70.7	10	Snd Lvl	65.9	4.8	80	-3.2
I:\Projects\3600\Noise\TNM\Noise Walls\Walls Int E-5	Walls/Walls Int F	22					4	-			-	15 August 200

RESULTS: SOUND LEVELS						3600						
Receiver 178 J to C	249	-	0.0	69.8	66	69.8	10		65.1	4.7	8	-3.3
Receiver 179 J to C	250	-	0.0	68.5	66	68.5	10		64.3	4.2	80	-3.8
Receiver 180 J to C	251	+	0.0	67.6	66	67.6	10		63.4	4.2	80	-3.8
Receiver 181 J to C	252	-	0.0	66.7	66	66.7	10	Snd Lvl	62.6	4.1	80	-3.9
Receiver 182 J to C	253	+	0.0	68.4	99	68.4	10		64.4	4.0	80	4.0
Receiver 183 J to C	254	+	0.0	67.7	99	67.7	10		63.9	3.8	80	4.2
Receiver 184 J to C	255	-	0.0	66.6	99	66.6	10		63.2	3.4	80	4.6
Dwelling Units	U #	# DUS No	Noise Reduction	u								
		Min		Ma	×							
		dB	dB	Вb								
All Selected		213	-0.7	4.0	9.1							
All Impacted		174	-0.1	4.4	9.1							
All that meet NR Goal		16	8.0	8.4	9.1							

15 August 200

INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group T Stone

14 August 2007 TNM 2.5

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<b>VFFIC FC</b>	ONTRAC
T: TRAI	ILU:
INPU.	DDO IE

	2000												
RUN:	Interchange E-Alternative 5 2035	E-Altern	ative 5 20	35									
Roadway	Points												
Name	Name	No.	Segment	t									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	sycles	w
					>	s .	>	s .	>	s .	>	s.	
			veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	ų
I-75 - NB	point271	299	2109	97	132	67	422	2 97		1 97		-	97
	point198	300	2109	97	132	97	422	2 97		1 97	~	-	97
	point270	301	2109	97	132	67	422	2 97		1 97	~	-	97
	point199	302	2109	97	132	97	422	2 97	Ì	1 97	2	~	97
	point268	303	2482	97	124	67	496	3 97		1 97	~	~	97
	point999	304	2482	97	124	97	496	3 97		1 97	•	-	97
	point200	305	2482	97	124	67	496	3 97		1 97	~	-	97
	point222	306	2482	97	124	67	496	3 97		1 97	~	-	97
	point201	307	2482	97	124	97	496	3 97		1 97	-	~	97
	point998	946	2482	97	124	97	496	3 97		1 97	2	-	97
	point202	308	2482	97	124	97	496	3 97		1 97		-	97
	point945	945	2482	97	124	97	496	3 97		1 97	2	-	97
	point905	902	2482	97	124	67	496	3 97		1 97	N	-	97
	point948	948	2482	97	124	97	496	3 97		1 97	2	~	97
	point223	311	2482	97	124	97	496	3 97		1 97	~	-	97
	point205	312	2482	97	124	97	496	3 97		1 97		-	97
	point206	313	2482	97	124	67	496	3 97		1 97	2	-	97
	point928	928	2322	97	116	97	464	1 97		1 97	~	-	97
	point207	314	2322	97	116	97	464	1 97		1 97	2	~	97
	point949	949	2322	97	116	97	464	1 97		1 97	~	-	97
	point208	315	2322	97	116	97	464	1 97		1 97	2	~	97
	point209	316	2322	97	116	97	464	1 97		1 97	•	-	97

	point210	317	2322	97	116	97	464	67		97	-	97
	point950	950	2322	97	116	97	464	97	-	97	-	97
	point211	318	2322	97	116	97	464	97	1	97	-	97
	point212	319	2685	97	107	97	537	97	٢	97	~	97
	point213	320	2685	97	107	97	537	97	-	97	-	97
	point214	321	2685	97	107	97	537	97	۲	97	~	97
	point215	322										
I-75 - SB	point942	942	4595	97	230	97	919	97	-	97	-	
	point232	338	4595	97	230	97	919	97	-	97	-	
	point233	339	4486	57	224	97	897	97	-	97	-	
	175.5	980	4486	97	224	97	897	97	~	97	~	
	point234	340	4486	97	224	97	897	97	-	97	-	
	point235	341	4486	97	224	97	897	97	-	97	-	
	point496	342	4486	97	224	97	897	97	-	97	~	
	point260	343	4486	97	224	97	897	97	۰-	97	-	
	point261	344	4486	97	224	97	897	97	*	97	-	
	point236	345	4486	97	224	97	897	97	<del></del>	97	-	
	point237	346	4486	97	224	97	897	97	-	97	-	
	point238	347	4486	97	224	97	897	97	-	97	-	
	point239	348	4766	97	238	97	953	97	-	97	-	
	point262	349	4766	97	238	97	953	97	~	97	-	
	point263	351	4766	97	238	97	953	97	-	97	-	
	point947	947	4766	97	238	97	953	97	-	97		
	point264	353	4766	97	238	97	953	97	-	97	-	
	point944	944	4766	97	238	97	953	97	<del>ر</del>	97	-	
	point265	355	4766	97	238	97	953	97	*	97	-	
	point243	356	4526	97	226	97	905	97	-	97	-	
	point266	357	4526	97	226	97	905	97	-	97	-	
	point244	358	4526	97	226	97	905	97	-	97		
	point245	359	4526	97	226	97	905	97	-	97	۰.	
	point267	360	4526	97	226	97	905	97	*	97	-	
	point246	361	4526	97	226	97	905	97	~	97	-	
	point247	362										
S I-75/Clark Off-Ramp	point461	558	158	40	9	40	12	40	~	40	~	

	point463	560	200	40	10	40	10	40	*	40	~	40
	point465	562										
S I-75 Service Drive - 1	point466	563	200	40	10	40	10	40	-	40	-	40
	point651	567										
S I-75 Service Drive - 2	point475	575	849	56	10	56	35	56	٢	56	-	56
	point476	576	849	56	10	56	35	56	~	56	-	56
	point1056	1056	80	56	2	56	2	56	-	56	~	56
	point1061	1061	849	56	10	56	35	56	4	56	-	56
	point644	577										
S I-75/Junction On-Ramp	point481	585	771	64	5	64	34	64	-	64	-	64
	point1068	1068	771	64	5	64	34	64	-	64	-	64
	point483	587	771	64	5	64	34	64	-	64	-	64
	point484	588	771	64	5	64	34	64	-	64	-	64
	point1067	1067	771	64	5	64	34	64	-	64	-	64
	point1066	1066	771	64	5	64	34	64	-	64	-	64
	point485	589										
S I-75 Service Drive - 4	point638	594	80	48	5	48	5	48	-	48	-	48
	point489	595	450	48	23	48	23	48	2	48	2	48
	point490	596	450	48	23	48	23	48	2	48	2	48
	point491	265										
Livernois/ S I-75 Off-Ramp	point497	600	465	88	23	88	27	88	~	88	-	88
	point498	601	465	88	23	88	27	88	*	88	-	88
	point500	603	465	88	23	88	27	88	-	88	~	88
	point501	604	465	88	23	88	27	88	-	88	-	88
	point1069	1069	465	88	23	88	27	88	-	88	~	88
	point503	606										
S I-75 Service Drive - 5	point491	971	692	56	30	56	50	56	<del></del>	56	-	56
	point504	607	692	56	30	56	50	56	-	56	-	56
	point505	608	692	56	30	56	50	56	-	56	-	56
	point975	975	692	56	30	56	50	56	-	56	~	56
	point1065	1065	692	56	30	56	50	56	-	56	-	56
	point507	610										
S I-75 Service Drive - 8	point530	637	540	40	23	40	30	40	2	40	2	40
	POJT-10-	000	110	C R	40	01	001	0	0	~	•	0

	point532	639										
Springwells/S I-75 On-Ramp	point533	640	630	97	38	97	113	97	2	97	2	97
	point538	645										
Westend - N&SB	point682	682	700	40	40	40	60	40	-	40	-	40
	point685	685	700	40	40	40	60	40	-	40	-	40
	point687	687	700	40	40	40	60	40	-	40	~	40
	point943	943	700	40	40	40	60	40		40	-	40
	point688	688	700	40	40	40	60	40	-	40	-	40
	point690	069	700	40	40	40	60	40	-	40	-	40
	point691	691	700	40	40	40	60	40	-	40	~	40
	point692	692										
Green - N&SB	point727	727	128	48	80	48	15	48	2	48	2	48
	point939	939	128	48	00	48	15	48	2	48	2	48
	point959	959	128	48	00	48	15	48	2	48	2	48
	point960	960	128	48	80	48	15	48	2	48	2	48
	point729	729	128	48	00	48	15	48	2	48	2	48
	point730	730	128	48	80	48	15	48	2	48	2	48
	point731	731							Ŷ			
Clark - NB	point812	812	120	40	00	40	38	40	2	40	2	40
	point813	813	150	25	30	25	450	25	2	25	2	25
	point814	814	120	25	23	25	270	25	2	25	2	25
	point963	963	120	25	23	25	270	25	2	25	2	25
	point964	964	120	25	23	25	270	25	2	25	2	25
	point815	815	126	40	12	40	9	40	2	40	2	40
	point816	816										
Clark - SB	point818	818	180	40	9	40	38	40	2	40	2	40
	point819	819	180	40	9	40	38	40	2	40	2	40
	point961	961	180	40	9	40	38	40	2	40	2	40
	point962	962	180	40	9	40	38	40	2	40	2	40
	point820	820	180	40	9	40	38	40	2	40	2	40
	point821	821	180	40	9	40	38	40	2	40	2	40
	point822	822										
S I-75 Service Drive - 3	point645	579	80	56	2	56	5	56	-	56	~	56
	noint1063	1063	270	2U	4	2 U	α	20	c	2C	c	2C

	point1062	1062	270	56	15	56	80	56	2	56	2	
	point1064	1064	270	56	15	56	8	56	2	56	2	
	point478	581	135	56	75	56	80	56	2	56	2	
	point494	583	135	56	75	56	80	56	2	56	2	
	point480	584	135	56	75	56	80	56	2	56	2	
	point495	968	135	56	75	56	00	56	2	56	2	
	point488	696										
S I-75 Service Drive - 6	point631	612	237	56	80	56	80	56	-	56	-	
	point509	613	237	56	0	56	80	56	-	56	~	
	point510	614	237	56	00	56	80	56	-	56	-	
	point629	619										
S I-75 Service Drive - 7	point977	977	231	56	10	56	12	56	٢	56	-	
	point514	620	231	56	10	56	12	56	-	56	-	
	point515	621	231	56	10	56	12	56	-	56	~	
	point516	622	231	56	10	56	12	56	+	56	-	
	point518	624	231	56	10	56	12	56	-	56	-	
	point525	978	231	56	10	56	12	56	٢	56	~	
	point527	979						ī				
Outbound to SB I-75	point1005	1005	220	64	30	64	200	64	-	64	-	
	point1058	1058	220	64	30	64	200	64	-	64	~	
	point1006	1006	220	64	30	64	200	64	4	64	-	
	point1007	1007	220	64	30	64	200	64	-	64	~	
	point1008	1008	220	64	30	64	200	64	-	64		
	point1060	1060	220	64	30	64	200	64	-	64	-	
	point1059	1059	220	64	30	64	200	64	<del>،</del>	64	<u>.</u>	
	point1010	1010										
Inbound from SB I-75	point1012	1012	836	88	47	88	140	88	-	88	~	
	point1013	1013	836	83	47	83	140	83	~	83	~	
	point1014	1014	836	77	47	77	140	27	-	77	-	
	point1015	1015	836	64	47	64	140	64	<del>.</del>	64	-	
	point1016	1016										
Waterman - N&SB	point761	1070	128	56	80	56	23	56	2	56	2	
	point762	1071	128	48	00	48	23	48	2	48	2	
	point957	1072	128	48	00	48	23	48	2	48	0	

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NPUT: TRAFFIC FOR LAeq1h Volumes						3600						
	point958	1073	128	48	00	48	23	48	2	48	2	48
	point764	1074	128	56	00	56	23	56	2	56	2	56
	point765	1075	128	56	00	56	23	56	2	56	2	56
	point769	1076										
Dragoon	point1077	1077	135	56	75	56	00	56	2	56	2	56
	point1078	1078	135	56	75	56	8	56	2	56	2	56
	point1079	1079						2				
Livernois	point1080	1080	135	56	75	56	00	56	0	56	2	56
	point1081	1081										

**RESULTS: BARRIER DESCRIPTIONS** 

The Corradino Group T Stone **RESULTS: BARRIER DESCRIPTIONS** 

PROJECT/CONTRACT:

BARRIER DESIGN:

RUN:

15 August 2007 **TNM 2.5** 

3600

Interchange E-Alternative 5 2035 INPUT HEIGHTS

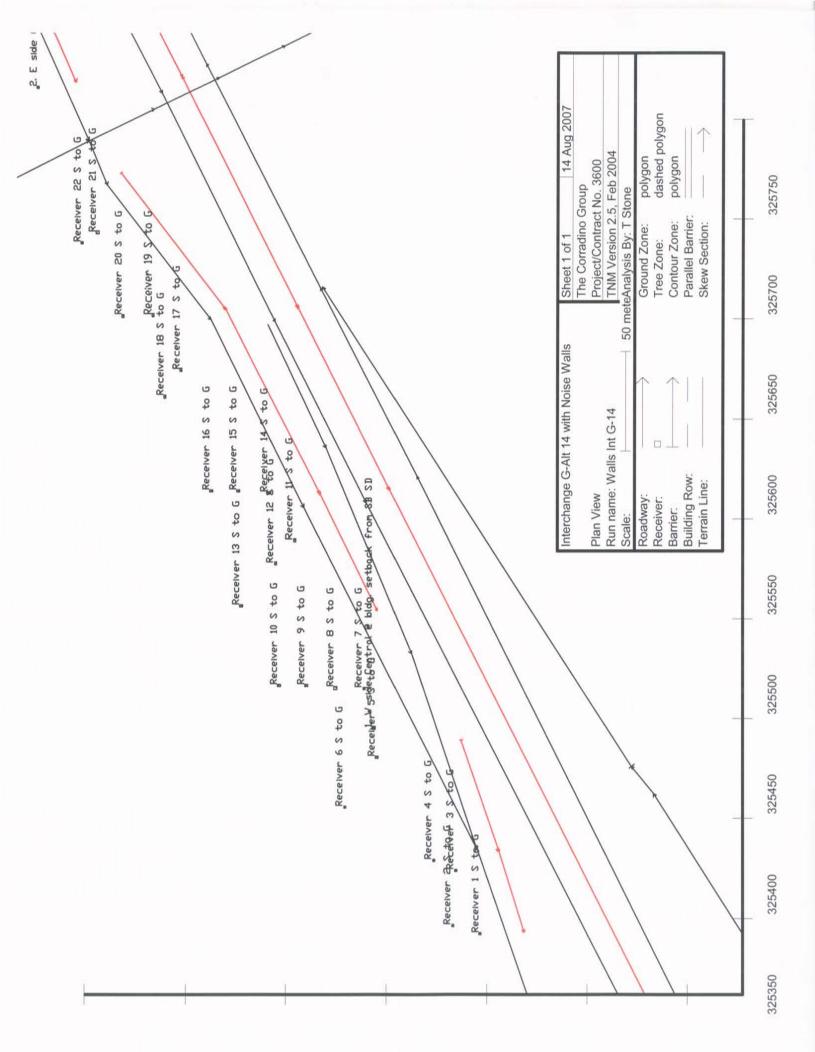
DANNEN DESIGN.			2									
Barriers												
Name	Type	Height	Type Heights along Barrier	arrier	Ler	Length	If Wall	If Berm			Cost	
		Min	Avg	Max			Area	Volume	Top Width	Run:Rise		
		E	E	ε	ε		m ps	cu m	E	m:m	в	
Barrier2	Ν	-	.10	1.10	1.10	466		2				0
Barrier5	M	-	.10	1.10	1.10	267		3				0
Barrier9	M	-	.10	1.10	1.10	539		3				0
Barrier10	M	-	.10	1.10	1.10	525		8				0
Barrier11	M	-	1.10	1.10	1.10	225	248	8				0
Barrier15	M	-	.10	1.10	1.10	1371		8				0
Morell to Clark	M	e	.70	3.70	3.70	447		2				810837
Calvary to Morell	M	e	.70	3.70	3.70	498		4				905216
Waterman to Crawford	M	e	.70	3.70	3.70	252		1				456916
Green to Waterman	M	e	.70	3.70	3.70	399		5				723855
Springwells to Green	M	e	.70	3.70	3.70	428		4				777554

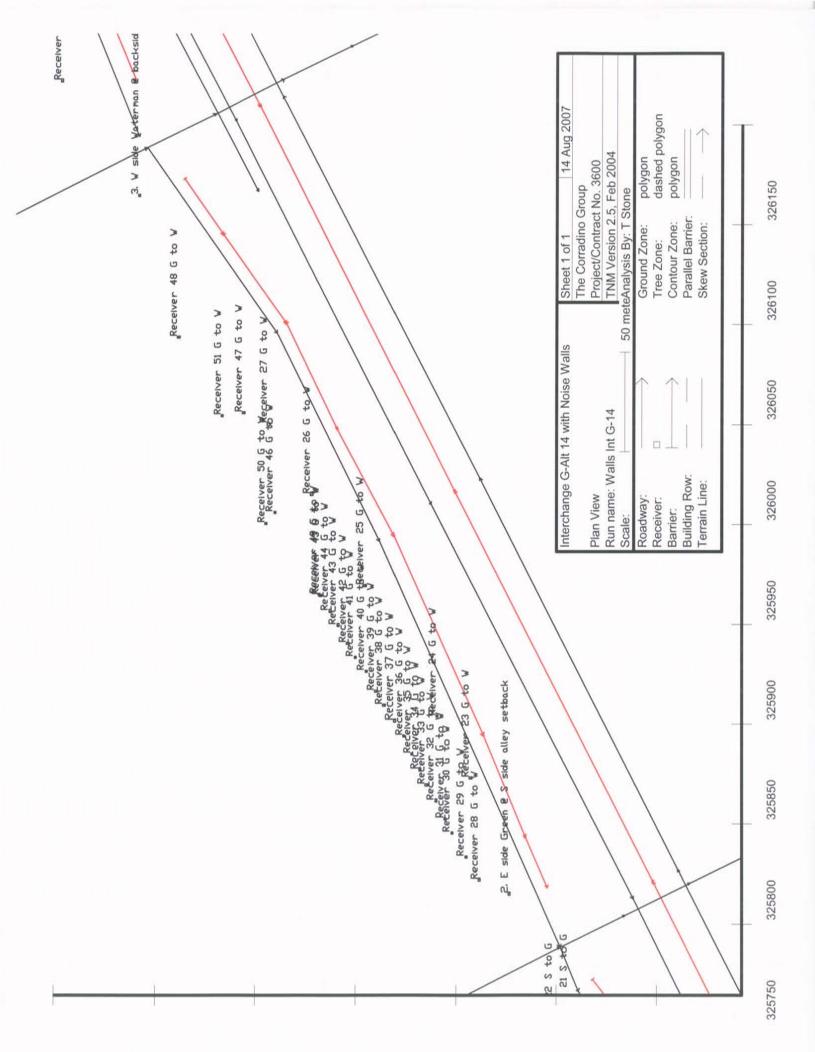
3674378

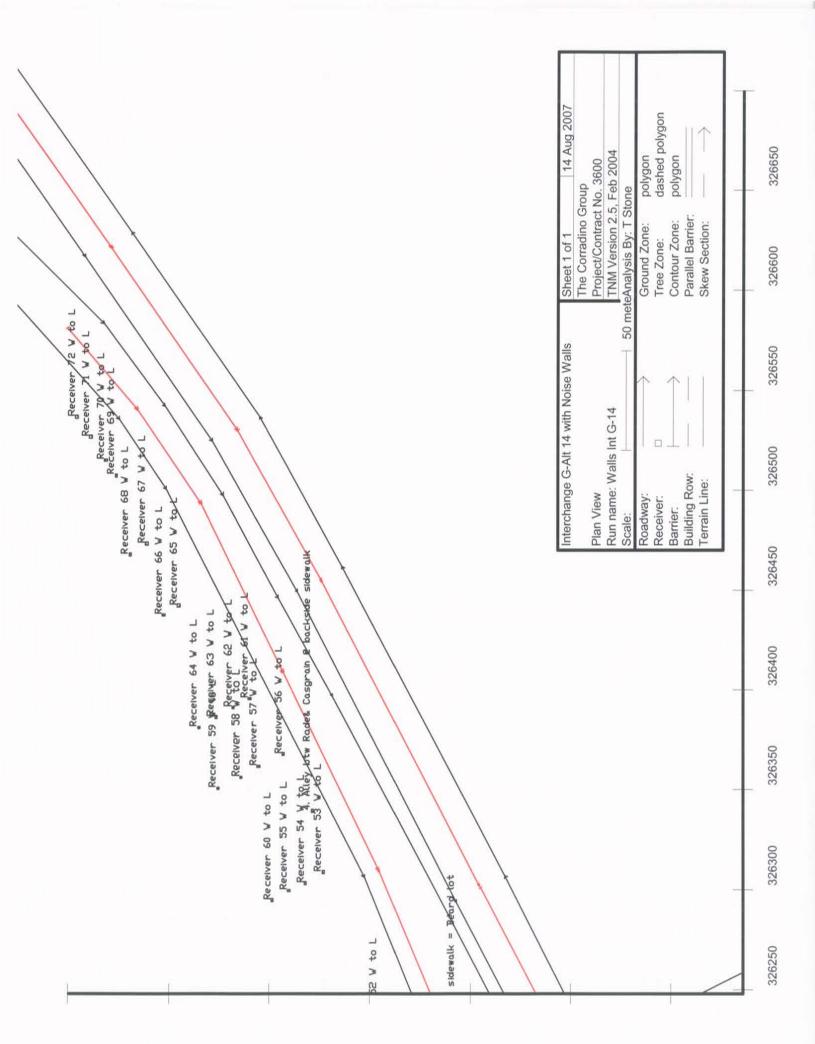
Total Cost:

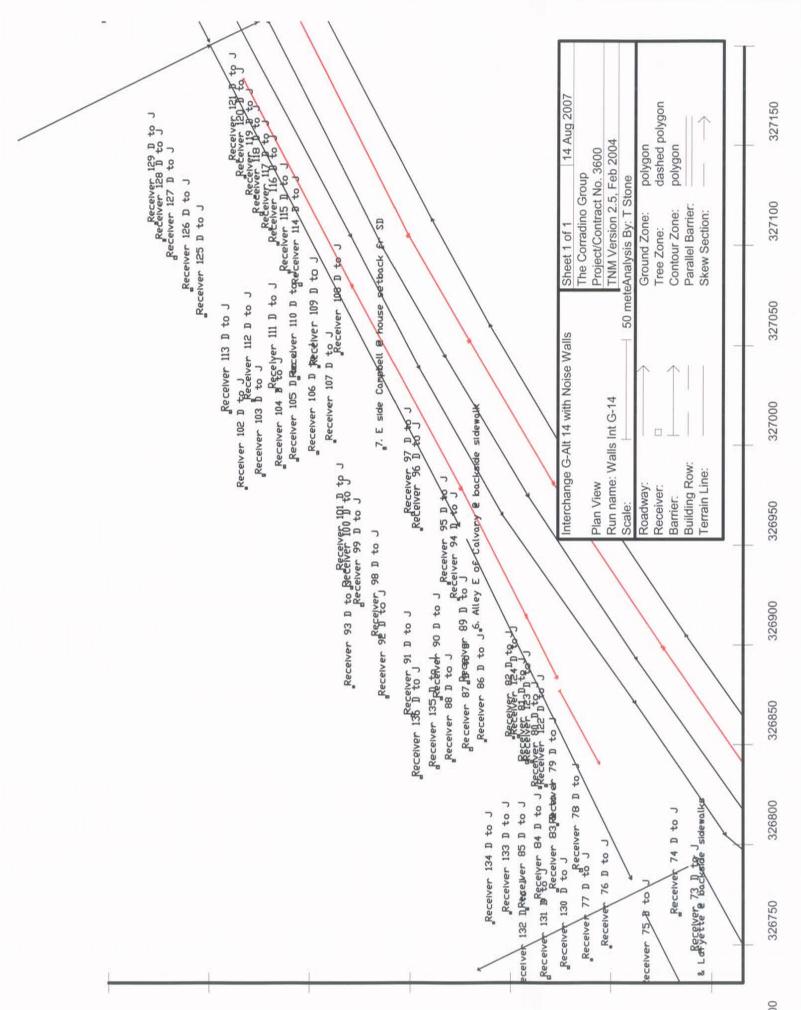
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**Interchange G – Alternative 14 – 2035** 









Recover 13J 16 C Recover 13 Recover 13 Recov	Receiver 137 J to C     Receiver 137 J to C     Interchange G-Alt 14 with Noise Walls     Sheet 1 of 1     14 Aug 2007       Plan View     Reconation Group     Plan View     Recontract No. 3600       Run name: Walls Int G-14     TNM Version 25, Feb 2004       Roadway:     A     Fee Zone:       Barrier:     Barrier:     Barrier:       Duilding Row:     Contour Zone:     polygon       Barrier:     Parallel Barrier:     Parallel Barrier:       237350     327400     327500     327500	
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The Corradino Group								15 August 2007	st 2007						
T Stone								<b>TNM 2.5</b>							
								Calculated with TNM 2.5	ed with	TNM 2.5	15				
RESULIS: SOUND LEVELS	3600														
RUN: BARRIER DESIGN:	Inte	nterchange G-/	G-Alt 1 SHTS	Interchange G-Alt 14 with Noise Walls INPUT HEIGHTS	ise Wall	s			Avera	ge pave	ment type	shall be	Average pavement type shall be used unless	ŝ	
	0	0							a Stat	e highw	ray agenc	y substar	a State highway agency substantiates the use	ISe	
ATMOSPHERICS:	20	20 deg C, 50%	0% RH						ofad	ifferent	of a different type with approval of FHWA	approval	of FHWA.		
Receiver															
Name No.	. #DUs		Existing <b>N</b>	No Barrier	-					W	With Barrier				
		LAeq1h		LAeq1h			Increase over existing	r existing	Type	Ca	Calculated	Noise R	2		
			0	Calculated	d Crit'n		Calculated	Crit'n	Impact		LAeq1h	Calculated	ed Goal	Cal	Calculated
								Sub'l Inc						minus	sn
										!		1	ġ	Goal	-
		dBA		dBA	dBA	Вb		qB		dBA	A	dB	dB	dB	
9. W side Clark N of SB SD - Clark Park	32	-	0.0	7	71.9	99	71.9		10 Snd Lv	Lvi	71.6		0.3	80	-7.7
8. Alley E of Ferdinand @ backside sidews	34	٢	0.0	7	6.77	99	77.9		10 Snd Lvl	Lvi	67.6		10.3	80	2.3
7. E side Campbell @ house setback fr SC	36	+	0.0	7	72.1	99	72.1		10 Snd Lvl	Lvi	64.9		7.2	80	-0.8
6. Alley E of Calvary @ backside sidewalk	40	-	0.0	1	72.0	99	72.0		10 Snd Lvl	Lvi	65.1		6.9	ω	-1.1
5. NE Corner Dragoon & Lafyette @ backs	46	F	0.0	9	66.4	99	66.4		10 Snd Lvl	LvI	66.0		0.4	60	-7.6
4. Alley btw Rade& Casgrain @ backside s	53	57	0.0	7	77.5	99	77.5		10 Snd Lvl	LvI	6.99		10.6	œ	2.6
3. W side Waterman @ backside sidewalk	55	-	0.0	7	72.6	99	72.6		10 Snd Lvl	LvI	6.69		2.7	80	-5.3
2. E side Green @ S side alley setback	58	2	0.0	7	72.8	99	72.8		10 Snd Lvl	LvI	68.8		4.0	80	4.0
1. W side Central @ bldg. setback from SE	60	4	0.0	2	74.5	99	74.5		10 Snd Lvl	LvI	73.2	2.5	1.3	80	-6.7
Receiver 1 S to G	61	۲	0.0		0.0	99	0.0		10 invalid	bile	0.0		0.0	80	0.0
Receiver 2 S to G	62	-	0.0		0.0	99	0.0		10 invalid	bile	0.0	-	0.0	80	0.0
Receiver 3 S to G	63	۲	0.0	2	74.5	99	74.5		10 Snd Lvl	LvI	69.8		4.7	œ	-3.3
Receiver 4 S to G	64	t-	0.0	2	73.0	99	73.0		10 Snd Lvl	LvI	68.9		4.1	80	-3.9
Receiver 5 S to G	65	-	0.0	2	72.8	99	72.8		10 Snd Lvl	Lvi	71.1		1.7	80	-6.3
Receiver 6 S to G	66	-	0.0	9	69.4	99	69.4		10 Snd Lvl	LvI	67.7		1.7	8	-6.3
Receiver 7 S to G	68	-	0.0	7	74.9	99	74.9		10 Snd Lvl	LvI	73.8		1.1	80	-6.9
Receiver 8 S to G	69	+	0.0	1	72.4	99	72.4		10 Snd Lvl	Lvi	70.9		1.5	80	-6.5
Receiver 9 S to G	70	t-	0.0	7	70.4	99	70.4		10 Snd Lvl	LvI	68.7		1.7	8	-6.3
Receiver 10 S to G	71	2	0.0	9	69.1	99	69.1		10 Snd Lvl	Lvl	6.99		2.2	00	-5.8
Receiver 11 S to G	72	÷	0.0	1	74.5	99	74.5		10 Snd Lvl	LvI	67.3		7.2	80	-0.8
Receiver 12 S to G	73	٢	0.0	1	7.1.7	99	71.7		10 Snd Lvl	Lvi	66.5	10	5.2	80	-2.8
Receiver 13 S to G	74	2	0.0	9	68.9	99	68.9		10 Snd	Snd Lvl	65.1		3.8	8	4.2
Receiver 14 S to G	75	Ļ	0.0	2	73.9	99	73.9		10 Snd Lvl	Lvl	66.0		7.9	80	-0.1

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Receiver 15 S to G Receiver 16 S to G Receiver 17 S to G Receiver 18 S to G	20											
S to S to	٥/	-	0.0	71.2	66	71.2	10	Snd Lvl	64.9	6.3	80	-1.7
S to S to	17	Ļ	0.0	69.7	99	69.7	10	Snd Lvl	64.1	5.6	8	-2.4
S to	78	2	0.0	70.3	99	70.3	10	Snd Lvl	64.4	5.9	80	-2.1
	79	-	0.0	68.9	99	68.9	10	Snd Lvl	63.5	5.4	80	-2.6
Receiver 19 S to G	80	-	0.0	69.6	66	69.69	10	Snd Lvl	64.3	5.3	8	-2.7
Receiver 20 S to G	81	-	0.0	67.9	99	67.9	10	Snd Lvl	63.4	4.5	80	-3.5
Receiver 21 S to G	82	<del>.</del>	0.0	68.2	99	68.2	10	Snd Lvl	64.4	3.8	80	4.2
Receiver 22 S to G	83	Ţ	0.0	67.2	99	67.2	10	Snd Lvl	63.4	3.8	80	4.2
Receiver 23 G to W	84	÷	0.0	70.3	99	70.3	10	Snd Lvl	65.0	5.3	80	-2.7
Receiver 24 G to W	85	-	0.0	69.8	99	69.8	10	Snd Lvl	64.1	5.7	80	-2.3
Receiver 25 G to W	86	<b>.</b>	0.0	66.69	99	63.9	10	Snd Lvl	63.9	6.0	00	-2.0
Receiver 26 G to W	87	16	0.0	71.0	99	71.0	10	Snd Lvl	63.7	7.3	80	-0.7
Receiver 27 G to W	89	2	0.0	70.6	99	70.6	10	Snd Lvl	63.5	7.1	80	-0.9
Receiver 28 G to W	06	4	0.0	65.5	99	65.5	10	I	63.2	2.3	80	-5.7
Receiver 29 G to W	92	2	0.0	65.5	99	65.5	10	I	62.8	2.7	80	-5.3
Receiver 30 G to W	93	2	0.0	65.7	99	65.7	10	Î	63.0	2.7	80	-5.3
Receiver 31 G to W	94	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 32 G to W	95	-	0.0	66.2	99	66.2	10	Snd Lvl	63.0	3.2	80	4.8
Receiver 33 G to W	96	÷	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 34 G to W	97	2	0.0	66.2	99	66.2	10	Snd Lvl	62.9	3.3	80	4.7
Receiver 35 G to W	98	2	0.0	66.4	99	66.4	10	Snd Lvl	62.8	3.6	80	-4.4
Receiver 36 G to W	66	2	0.0	66.5	99	66.5	10	Snd Lvl	62.8	3.7	80	-4.3
Receiver 37 G to W	100	2	0.0	66.4	99	66.4	10	Snd Lvl	62.7	3.7	80	4.3
Receiver 38 G to W	101	-	0.0	66.7	66	66.7	10	Snd Lvl	62.6	4.1	8	-3.9
Receiver 39 G to W	102	-	0.0	66.5	66	66.5	10	Snd Lvl	62.5	4.0	80	4.0
Receiver 40 G to W	103	2	0.0	66.5	66	66.5	10	Snd Lvl	62.5	4.0	80	4.0
Receiver 41 G to W	104	-	0.0	66.4	66	66.4	10	Snd Lvl	62.4	4.0	80	-4.0
Receiver 42 G to W	105	2	0.0	66.6	99	66.6	10	Snd Lvl	62.5	4.1	8	-3.9
Receiver 43 G to W	106	-	0.0	66.7	99	66.7	10	Snd Lvl	62.5	4.2	80	-3.8
Receiver 44 G to W	107	-	0.0	66.9	99	66.9	10	Snd Lvl	62.5	4.4	80	-3.6
Receiver 45 G to W	108	2	0.0	66.9	99	66.9	10	Snd Lvl	62.5	4.4	80	-3.6
Receiver 46 G to W	109	2	0.0	67.9	99	67.9	10	Snd Lvl	62.3	5.6	80	-2.4
Receiver 47 G to W	110	-	0.0	69.2	99	69.2	10	Snd Lvl	63.1	6.1	80	-1.9
Receiver 48 G to W	111	2	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 49 G to W	112	2	0.0	67.6	99	67.6	10	Snd Lvl	62.6	5.0	80	-3.0
Receiver 50 G to W	113	2	0.0	67.8	99	67.8	10	Snd Lvl	62.2	5.6	80	-2.4
Receiver 51 G to W	114	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 52 W to L	115	10	0.0	0.0	99	0.0	10	invalid	0.0	0.0	œ	0.0
Receiver 53 W to L	116	-	0.0	73.7	99	73.7	10	Snd Lvl	65.7	8.0	80	0.0
Receiver 54 W to L	117	-	0.0	71.4	99	71.4	10	Snd Lvl	65.0	6.4	œ	-1.6
Receiver 55 W to L	118	-	0.0	69.8	66	69.8	10	Snd Lvl	64.1	5.7	80	-2.3

Receiver 57 W to L Receiver 58 W to L	110		0.11	3						X	5
Receiver 58 W to L	001		002	00	0.04	2	Cod Lul	0.10	5.01	0	0.4
Receiver 58 W to L	120		12.9	99	12.9	10	Shd LVI	7.00	1-1	×	-0.3
	121	2 0.0	71.1	66	71.1	10	Snd Lvl	64.4	6.7	80	-1.3
Receiver 59 W to L	122	1 0.0	69.2	66	69.2	10	Snd Lvl	63.4	5.8	80	-2.2
Receiver 60 W to L	123	1 0.0	68.4	- 66	68.4	10	Snd Lvl	63.4	5.0	80	-3.0
Receiver 61 W to L	124	1 0.0	77.1	66	77.1	10	Snd Lvl	66.7	10.4	8	2.4
Receiver 62 W to L	125	1 0.0	73.2	66	73.2	10	Snd Lvl	65.3	7.9	80	-0.1
Receiver 63 W to L	126	1 0.0	71.7	66	7.1.7	10	Snd Lvl	64.5	7.2	80	-0.8
Receiver 64 W to L	128	1 0.0	70.1	66	70.1	10	Snd Lvl	63.7	6.4	80	-1.6
Receiver 65 W to L	130	1 0.0	73.1	66	73.1	10	Snd Lvl	65.2	7.9	80	-0.1
Receiver 66 W to L	132	1 0.0	71.6	99	71.6	10	Snd Lvl	64.4	7.2	8	-0.8
Receiver 67 W to L	135	1 0.0	72.9	66	72.9	10	Snd Lvl	65.1	7.8	80	-0.2
Receiver 68 W to L	138	1 0.0	71.3	99	71.3	10	Snd Lvl	64.3	7.0	80	-1.0
Receiver 69 W to L	140	1 0.0	72.8	99	72.8	10	Snd Lvl	65.1	7.7	80	-0.3
Receiver 70 W to L	141	1 0.0	72.5	66	72.5	10	Snd Lvl	65.0	7.5	80	-0.5
Receiver 71 W to L	142	1 0.0	72.0	66	72.0	10	Snd Lvl	65.1	6.9	80	1.1-
Receiver 72 W to L	144	1 0.0	71.5	66	71.5	10	Snd Lvl	65.4	6.1	80	-1.9
Receiver 73 D to J	145	6 0.0	70.9	99	70.9	10	Snd Lvl	70.9	0.0	80	-8.0
Receiver 74 D to J	146	10 0.0	71.6	66	71.6	10	Snd Lvl	71.6	0.0	80	-8.0
Receiver 75 D to J	147	2 0.0	66.8	66	66.8	10	Snd Lvl	66.3	0.5	80	-7.5
Receiver 76 D to J	148	1 0.0	66.5	99	66.5	10	Snd Lvl	65.9	9.0	60	-7.4
Receiver 77 D to J	149	1 0.0	65.4	66	65.4	10		64.6	0.8	80	-7.2
Receiver 78 D to J	150	10 0.0	67.9	99	67.9	10	Snd Lvl	67.3	9.0	80	-7.4
Receiver 79 D to J	151	1 0.0	68.3	66	68.3	10	Snd Lvl	67.0	1.3	80	-6.7
Receiver 80 D to J	152	3 0.0	68.8	66	68.8	10	Snd Lvl	65.9	2.9	80	-5.1
Receiver 81 D to J	153	2 0.0	69.3	66	69.3	10	Snd Lvl	65.3	4.0	80	4.0
Receiver 82 D to J	154	2 0.0	69.4	66	69.4	10	Snd Lvl	65.0	4.4	80	-3.6
Receiver 83 D to J	155	1 0.0	66.2	66	66.2	10	Snd Lvl	65.4	0.8	80	-7.2
Receiver 84 D to J	156	1 0.0	65.3	66	65.3	10	1	64.4	0.9	60	-7.1
Receiver 85 D to J	157	1 0.0	64.7	66	64.7	10	1	63.7	1.0	60	-7.0
Receiver 86 D to J	158	1 0.0	67.4	66	67.4	10	Snd Lvl	63.6	3.8	80	4.2
Receiver 87 D to J	159	1 0.0	66.4	66	66.4	10	Snd Lvl	62.9	3.5	80	4.5
Receiver 88 D to J	160	1 0.0	65.5	66	65.5	10	1	62.2	3.3	80	4.7
Receiver 89 D to J	161	1 0.0	68.6	66	68.6	10	Snd Lvl	63.9	4.7	80	-3.3
Receiver 90 D to J	162	1 0.0	66.8	66	66.8	10	Snd Lvl	62.7	4.1	00	-3.9
Receiver 91 D to J	163	1 0.0	65.2	66	65.2	10		61.7	3.5	œ	4.5
Receiver 92 D to J	164	1 0.0	64.8	66	64.8	10	1	61.2	3.6	80	4.4
Receiver 93 D to J	165	4 0.0	63.9	66	63.9	10		60.2	3.7	80	4.3
Receiver 94 D to J	166	1 0.0	71.6	66	71.6	10	Snd Lvl	64.8	6.8	00	-1.2
Receiver 95 D to J	167	1 0.0	71.6	66	71.6	10	Snd Lvl	64.9	6.7	80	-1.3
Receiver 96 D to J	168	1 0.0	71.5	66	71.5	10	Snd Lvl	64.5	7.0	00	-1.0

Receiver 100 D to J         170         1         0.0         65.4         66           Receiver 100 D to J         171         1         0.0         65.4         66           Receiver 101 D to J         173         1         0.0         65.3         66           Receiver 102 D to J         173         1         0.0         65.3         66           Receiver 102 D to J         175         1         0.0         65.3         66           Receiver 102 D to J         177         1         0.0         65.3         66           Receiver 102 D to J         177         1         0.0         65.3         66           Receiver 102 D to J         177         1         0.0         65.3         66           Receiver 102 D to J         177         1         0.0         65.3         66           Receiver 102 D to J         177         1         0.0         67.7         66           Receiver 102 D to J         177         1         0.0         65.4         66           Receiver 110 D to J         181         1         0.0         67.7         66           Receiver 113 D to J         183         1         0.0         67.1	65.4 65.6 65.3 65.3 65.3 65.3 65.3 65.3 65.2 65.2 65.2 65.4 65.2 65.4 65.4 65.4 65.4 65.2 65.4 65.1 65.1 65.1 65.2 65.1 67.0 65.1 71.1 71.1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	61.5 61.5 61.3 61.1 61.1 59.4 62.1 62.1 62.8 63.8 63.8 63.8 63.8 63.8 63.8 66.0	3, 2, 2, 2, 2, 2, 3, 3, 3, 4, 4, 4, 5, 3, 3, 5, 5, 4, 4, 4, 5, 5, 4, 4, 5, 5, 7, 4, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 5, 7, 7, 5, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,		4 4 6 6 7 4 4 4 7 6 6 7 7 7 7 7 7 7 7 7
0     170     1     0.0     65.6       0     172     1     0.0     65.6       0     173     1     0.0     65.6       0     175     1     0.0     65.6       0     176     1     0.0     65.3       0     176     1     0.0     65.3       177     1     0.0     65.3       178     1     0.0     65.3       179     178     1     0.0     65.3       179     178     1     0.0     65.3       179     178     1     0.0     65.3       179     180     1     0.0     65.4       0     181     1     0.0     65.4       0     188     1     0.0     65.4       0     188     1     0.0     73.4       0     188     1     0.0     71.4       0     190     1     0.0     71.4       0     190     1     0.0     71.4       0     1     1     0.0     71.4       0     1     1     0.0     71.4       0     1     1     0.0     71.4       0     1 <td>65.4 65.6 65.3 65.3 65.3 65.3 65.3 65.4 65.2 65.4 65.4 65.4 65.4 65.4 65.4 65.4 65.4</td> <td></td> <td>61.2 61.2 61.3 61.1 59.4 61.2 62.8 62.8 63.8 63.8 61.7 61.7 61.7 60.7 66.0</td> <td>9.4.4.4.5.9.9.4.4.4.7.9.9.9.9.9.9.9.9.9.9.9.9.9.9</td> <td></td> <td>4 9.0 9.0 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4</td>	65.4 65.6 65.3 65.3 65.3 65.3 65.3 65.4 65.2 65.4 65.4 65.4 65.4 65.4 65.4 65.4 65.4		61.2 61.2 61.3 61.1 59.4 61.2 62.8 62.8 63.8 63.8 61.7 61.7 61.7 60.7 66.0	9.4.4.4.5.9.9.4.4.4.7.9.9.9.9.9.9.9.9.9.9.9.9.9.9		4 9.0 9.0 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	65.4 65.3 65.3 63.5 64.4 65.2 66.3 65.4 67.7 65.4 65.4 65.4 65.4 65.4 65.4 65.4 71.1 71.1 71.3		61.3 61.1 61.1 59.4 60.6 62.1 62.8 63.8 63.8 63.8 61.7 60.7 60.7 66.0	4.1 3.5 3.5 4.0 4.2 7.7 7.7 7.5 7.7 7 5 7		2.0 2.0 2.4 4.4 4.4 4.5 4.4 4.5 7.3 3.8 4.2 5.3 3.8 4.2 5.3 4.4 5.3 4.4 5.3 4.4 5.3 4.4 5.3 4.4 5.3 4.4 5.3 4.5 6.5 7.4 4.5 7.4 4.5 7.8 7.4 4.5 7.4 4.5 7.4 4.5 7.4 4.5 7.6 7.4 4.5 7.6 7.4 7.4 7.4 7.6 7.4 7.4 7.6 7.4 7.6 7.4 7.4 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	65.3 62.9 63.5 64.4 65.2 65.2 65.4 65.4 65.4 63.1 71.1 71.1 71.3 71.4		61.1 59.4 59.4 60.6 61.2 62.1 62.8 63.8 63.8 61.7 61.7 60.7 60.7 66.0	4.2 3.5 3.5 3.6 4.0 4.2 7.7 7.7 7 5.7 7 5.7 7 5.7		8. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.
174 $4$ $0.0$ $62.9$ $175$ $1$ $0.0$ $63.5$ $176$ $1$ $0.0$ $63.5$ $177$ $1$ $0.0$ $63.5$ $177$ $1$ $0.0$ $65.2$ $177$ $1$ $0.0$ $65.2$ $178$ $1$ $0.0$ $65.2$ $180$ $1$ $0.0$ $65.2$ $180$ $1$ $0.0$ $65.3$ $181$ $1$ $0.0$ $65.3$ $182$ $1$ $0.0$ $67.7$ $182$ $1$ $0.0$ $67.3$ $188$ $1$ $0.0$ $67.3$ $188$ $1$ $0.0$ $71.4$ $190$ $190$ $71.4$ $190$ $11$ $0.0$ $71.4$ $190$ $11$ $0.0$ $71.4$ $190$ $11$ $0.0$ $71.4$ $190$ $11$ $0.0$ $71.4$ $190$ $11$ $0.0$ $71.4$ <tr< td=""><td>62.9 63.5 64.4 65.2 65.2 65.2 65.4 65.4 65.4 65.4 65.4 65.4 63.1 71.4 71.1 71.3</td><td></td><td>59.4 59.9 60.6 61.2 62.1 63.8 63.8 61.7 61.7 60.7 66.0</td><td>3.5 3.6 3.8 3.8 4.0 7.7 7.7 7.7 3.7</td><td></td><td>4.5 4.4 4.2 4.0 4.0 1.0 3.1 4.0 2.3 4.4 2.3 3.4 4.5 4.5 4.5 4.5 8 4.5 8 4.5 8 4.5 8 4.5 8 4.5 8 4.6 8 4.6 8 7 8 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8</td></tr<>	62.9 63.5 64.4 65.2 65.2 65.2 65.4 65.4 65.4 65.4 65.4 65.4 63.1 71.4 71.1 71.3		59.4 59.9 60.6 61.2 62.1 63.8 63.8 61.7 61.7 60.7 66.0	3.5 3.6 3.8 3.8 4.0 7.7 7.7 7.7 3.7		4.5 4.4 4.2 4.0 4.0 1.0 3.1 4.0 2.3 4.4 2.3 3.4 4.5 4.5 4.5 4.5 8 4.5 8 4.5 8 4.5 8 4.5 8 4.5 8 4.6 8 4.6 8 7 8 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8
Dto J         175         1         0.0         63.5           Dto J         1776         1         0.0         63.5           Dto J         1776         1         0.0         64.4           Dto J         177         1         0.0         65.2           Dto J         177         1         0.0         65.2           Dto J         179         1         0.0         67.7           Dto J         181         1         0.0         67.7           Dto J         181         1         0.0         67.0           Dto J         183         1         0.0         67.0           Dto J         183         1         0.0         67.1           Dto J         183         1         0.0         63.1           Dto J         188         1         0.0         71.4           Dto J         188         1         0.0         71.4           Dto J         190         1         0.0         71.4           Dto J         11         0.0         71.4         11.4           Dto J         11         0.0         71.4         11.4           Dto J	63.5 64.4 65.2 65.3 66.3 66.3 63.4 63.1 63.1 63.1 71.4 71.4 71.4 71.3		59.9 60.6 61.2 62.1 62.1 63.8 63.8 61.7 61.7 60.7 60.7 66.0	3.6 3.8 4.0 4.2 7.7 5.7 3.7 3.7		4.4 4.2 4.0 4.0 3.3 4.0 3.1 4.2 3.2 3.4 4.5 4.5 4.5 8 4.5 8 4.5 8 4.6 8 4.6 8 4.6 8 1 8 8 4 8 1 8 8 1 8 1 8 1 8 1 8 1 8 1
Dto J         176         1         0.0         64.4           Dto J         177         1         0.0         65.2           Dto J         178         1         0.0         65.2           Dto J         179         1         0.0         65.2           Dto J         179         1         0.0         65.4           Dto J         181         1         0.0         67.7           Dto J         183         1         0.0         67.0           Dto J         183         1         0.0         67.0           Dto J         183         1         0.0         67.4           Dto J         183         1         0.0         67.4           Dto J         188         1         0.0         63.1           Dto J         188         1         0.0         71.4           Dto J         188         1         0.0         71.4           Dto J         190         1         0.0         71.4           Dto J         190         1         0.0         71.4           Dto J         190         1         0.0         71.4           Dto J	64.4 65.2 66.3 67.7 67.7 69.5 67.0 65.4 63.1 71.4 71.4 71.4 71.3		60.6 61.2 62.1 62.8 63.8 63.8 61.7 60.7 60.7 66.0	3.8 4.0 4.2 7.7 4.3 37 37		4.2 4.0 3.3 4.0 7.2 3.7 4.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4
DtoJ         177         1         0.0         65.2           DtoJ         178         1         0.0         65.3           DtoJ         178         1         0.0         65.3           DtoJ         180         1         0.0         65.3           DtoJ         181         1         0.0         67.7           DtoJ         181         1         0.0         67.0           DtoJ         183         1         0.0         67.0           DtoJ         182         1         0.0         67.0           DtoJ         183         1         0.0         67.0           DtoJ         184         1         0.0         67.1           DtoJ         186         1         0.0         63.1           DtoJ         188         1         0.0         71.4           DtoJ         188         1         0.0         71.4           DtoJ         188         1         0.0         71.4           DtoJ         190         1         0.0         71.4           DtoJ         11         1         0.0         71.4           DtoJ         190         <	65.2 66.3 67.7 67.7 69.5 67.0 64.2 63.1 71.4 71.4 71.4 71.3		61.2 62.1 62.8 65.7 63.8 63.8 61.7 60.7 60.7 66.0	4.0 4.9 7.7 3.7 3.7	ထထထထထထ	4.0 3.8 5.3 4.0 4.3 4.3 4.3 4.3 4.5 4.5 4.5 1.8 4.5 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8
DtoJ         178         1         0.0         66.3           DtoJ         179         1         0.0         67.7           DtoJ         180         1         0.0         67.7           DtoJ         181         1         0.0         67.7           DtoJ         181         1         0.0         67.0           DtoJ         183         1         0.0         67.0           DtoJ         182         1         0.0         67.0           DtoJ         183         1         0.0         67.0           DtoJ         185         1         0.0         67.1           DtoJ         186         1         0.0         67.1           DtoJ         186         1         0.0         67.1           DtoJ         186         1         0.0         71.1           DtoJ         188         1         0.0         71.1           DtoJ         188         1         0.0         71.3           DtoJ         1190         1         0.0         71.1           DtoJ         11         1         0.0         71.1      DtoJ         100         71	66.3 67.7 67.7 69.5 69.5 63.1 63.1 71.4 71.4 71.3 71.3		62.1 62.8 65.7 65.7 63.8 61.7 60.7 59.9 66.0	4.2 4.9 7.7 5.7 3.7 3.7	ထထထထထ	3.8 3.1 5.2 4.5 4.5 8 4.5 8 4.5 8 4.5 8 4.5 8 1 8 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1
DtoJ         179         1         0.0         67.7           DtoJ         180         1         0.0         67.7           DtoJ         181         1         0.0         67.7           DtoJ         181         1         0.0         67.0           DtoJ         182         1         0.0         67.0           DtoJ         182         1         0.0         67.0           DtoJ         185         1         0.0         67.0           DtoJ         185         1         0.0         67.1           DtoJ         185         1         0.0         67.1           DtoJ         186         1         0.0         67.1           DtoJ         186         1         0.0         67.1           DtoJ         186         1         0.0         71.1           DtoJ         186         1         0.0         71.3           DtoJ         188         1         0.0         71.3           DtoJ         190         1         0.0         71.3           DtoJ         190         1         0.0         71.1      DtoJ         190         71	67.7 73.4 69.5 67.0 67.0 63.1 63.1 71.1 71.4 71.4 71.3 71.3		62.8 65.7 63.8 63.8 61.7 60.7 59.9 66.0	4.9 7.7 5.7 4.3 3.7	ထထထထ	
DioJ         180         1         0.0         73.4           DioJ         181         1         0.0         69.5           DioJ         182         1         0.0         67.0           DioJ         182         1         0.0         67.0           DioJ         183         1         0.0         67.0           DioJ         186         1         0.0         67.2           DioJ         186         1         0.0         67.1           DioJ         186         1         0.0         67.2           DioJ         186         1         0.0         63.1           DioJ         186         1         0.0         71.4           DioJ         188         1         0.0         71.4           DioJ         190         1         0.0         71.4           DioJ         191         19         0.0         71.1      DioJ         191         10	73.4 69.5 67.0 67.0 63.1 63.1 72.2 71.1 71.4 71.3 71.3		65.7 63.8 62.7 61.7 60.7 59.9 66.0	7.7 5.7 4.3 3.7	ထထထထ	-0.3 -2.23 -2.4 -4.5 -4.5 -4.5 -4.5 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8 -1.8
D to J     181     1     0.0     69.5       D to J     182     1     0.0     67.0       D to J     182     1     0.0     67.0       D to J     183     1     0.0     67.0       D to J     185     1     0.0     65.4       D to J     185     1     0.0     63.1       D to J     186     1     0.0     63.1       D to J     186     1     0.0     71.1       D to J     188     1     0.0     71.4       D to J     188     1     0.0     71.4       D to J     188     1     0.0     71.4       D to J     189     1     0.0     71.4       D to J     190     1     0.0     71.1       D to J     191     191     190     71.1       D to J     193     1     0.0     71.1       D to J     194     3     0.0     73.4       D to J     195     2     0.0     73.4       D to J     195     2     0.0     73.4	69.5 67.0 65.4 65.4 63.1 71.1 71.1 71.3 71.3		63.8 62.7 61.7 60.7 59.9 66.0	5.7 4.3 3.7	ထထထ	-2.3 -3.7 -4.5 -4.8 -4.8
D loJ     182     1     0.0     67.0       D loJ     183     1     0.0     65.4       D loJ     183     1     0.0     65.4       D loJ     185     1     0.0     65.4       D loJ     185     1     0.0     64.2       D loJ     186     1     0.0     71.1       D loJ     186     1     0.0     71.1       D loJ     188     1     0.0     71.1       D loJ     188     1     0.0     71.4       D loJ     189     1     0.0     71.4       D loJ     190     1     0.0     71.4       D loJ     190     1     0.0     71.1       D loJ     190     1     0.0     71.1       D loJ     193     1     0.0     71.1       D loJ     194     3     0.0     73.4       D loJ     195     2     0.0     73.4	67.0 65.4 64.2 64.2 63.1 72.2 71.1 71.1 71.3		62.7 61.7 60.7 59.9 66.0	4.3 3.7	ω ω	-3.7 4.3 4.5 18
D loJ     183     1     0.0     65.4       D loJ     184     1     0.0     64.2       D loJ     185     1     0.0     63.1       D loJ     186     1     0.0     63.1       D loJ     186     1     0.0     71.1       D loJ     187     1     0.0     71.1       D loJ     188     1     0.0     71.1       D loJ     188     1     0.0     71.1       D loJ     188     1     0.0     71.3       D loJ     190     1     0.0     71.3       D loJ     190     1     0.0     71.1       D loJ     190     1     0.0     71.1       D loJ     192     1     0.0     71.1       D loJ     193     1     0.0     71.0       D loJ     194     3     0.0     73.4       D loJ     195     2     0.0     73.4	65.4 64.2 63.1 72.2 71.4 71.3 71.3		61.7 60.7 59.9 66.0	3.7	80	4.4 6.5 8.4 8
J     184     1     0.0     64.2       J     185     1     0.0     63.1       J     186     1     0.0     63.1       J     186     1     0.0     71.1       J     187     1     0.0     71.1       J     188     1     0.0     71.1       J     188     1     0.0     71.1       J     189     1     0.0     71.3       J     190     1     0.0     71.3       J     191     1     0.0     71.1       J     192     1     0.0     71.1       J     193     1     0.0     71.1       J     195     2     0.0     73.4       J     196     2     0.0     73.4	64.2 63.1 72.2 71.4 71.4 71.3		60.7 59.9 66.0			4.4.1.
J     185     1     0.0     63.1       J     186     1     0.0     72.2       J     187     1     0.0     71.1       J     188     1     0.0     71.1       J     188     1     0.0     71.1       J     188     1     0.0     71.1       J     189     1     0.0     71.3       J     190     1     0.0     71.3       J     191     1     0.0     71.1       J     192     1     0.0     71.1       J     193     1     0.0     71.0       J     193     1     0.0     73.4       J     196     2     0.0     73.4       J     196     2     0.0     73.4	63.1 72.2 71.1 71.4 71.3 70.8		59.9 66.0	3.5	80	4.8
J     186     1     0.0     72.2       J     187     1     0.0     71.1       J     188     1     0.0     71.4       J     188     1     0.0     71.4       J     189     1     0.0     71.4       J     189     1     0.0     71.3       J     190     1     0.0     71.3       J     191     1     0.0     71.1       J     192     1     0.0     71.1       J     192     1     0.0     71.1       J     193     1     0.0     71.0       J     195     2     0.0     73.4       J     196     2     0.0     73.4	72.2 71.1 71.4 71.3 70.8	ALCON PROFESSION	66.0	3.2	80	100
J     187     1     0.0     71.1       J     188     1     0.0     71.4       J     189     1     0.0     71.3       J     190     1     0.0     71.3       J     190     1     0.0     71.3       J     190     1     0.0     71.1       J     192     1     0.0     71.1       J     192     1     0.0     71.0       J     193     1     0.0     72.9       J     196     2     0.0     73.4       J     196     2     0.0     73.4	71.1 71.4 71.3 70.8			6.2	80	
J     188     1     0.0     71.4       J     189     1     0.0     71.3       J     190     1     0.0     71.3       J     190     1     0.0     71.3       J     191     1     0.0     71.1       J     192     1     0.0     71.1       J     192     1     0.0     71.0       J     193     1     0.0     72.9       J     195     2     0.0     73.4       J     196     2     0.0     73.8	71.4 71.3 70.8		65.8	5.3	80	-2.7
J     189     1     0.0     71.3       J     190     1     0.0     71.3       J     191     1     0.0     70.8       J     192     1     0.0     71.1       J     192     1     0.0     71.1       J     192     1     0.0     71.0       J     193     1     0.0     72.9       J     195     2     0.0     73.4       J     196     2     0.0     73.4	70.8		66.1	5.3	80	-2.7
J     190     1     0.0     70.8       J     191     1     0.0     71.1       J     192     1     0.0     71.1       J     192     1     0.0     71.0       J     193     1     0.0     71.0       J     193     1     0.0     73.9       J     195     2     0.0     73.4       J     196     2     0.0     73.8	70.8	10 Snd Lvl	66.1	5.2	80	-2.8
D to J         191         1         0.0         71.1           D to J         192         1         0.0         71.0           D to J         193         1         0.0         71.0           D to J         193         1         0.0         71.0           D to J         194         3         0.0         72.9           D to J         195         2         0.0         73.4           D to J         196         2         0.0         73.8	The second se	10 Snd Lvl	65.8	5.0	8	-3.0
D to J         192         1         0.0         71.0           D to J         193         1         0.0         71.0           D to J         193         1         0.0         0.0           D to J         195         2         0.0         73.4           D to J         196         2         0.0         73.8	71.1	10 Snd Lvl	66.4	4.7	8	-3.3
D to J 193 1 0.0 0.0 D to J D to J 194 3 0.0 72.9 D to J 195 2 0.0 73.4 D to J 196 2 0.0 73.8 D to J	71.0	10 Snd Lvl	66.7	4.3	8	-3.7
D to J 194 3 0.0 72.9 D to J 195 2 0.0 73.4 D to J 73.8	0.0	10 invalid	0.0	0.0	80	0.0
D to J 195 2 0.0 73.4 D to J 196 2 0.0 73.8	72.9	10 Snd Lvl	68.7	4.2	8	-3.8
D to.1 196 2 0.0 73.8	73.4	10 Snd Lvl	68.0	5.4	8	-2.6
	73.8	10 Snd Lvl	67.9	5.9	80	-2.1
Receiver 125 D to J 197 1 0.0 63.5 66	63.5	10	60.8	2.7	80	-5.3
Receiver 126 D to J 198 2 0.0 63.6 66	63.6	10	60.9	2.7	80	-5.3
Receiver 127 D to J 199 1 0.0 63.8 66	63.8	10	61.1	2.7	80	-5.3
Receiver 128 D to J 200 1 0.0 63.9 66	63.9	10	61.2	2.7	80	-5.3
Receiver 129 D to J 201 1 0.0 64.0 66	64.0	10	61.3	2.7	80	-5.3
Receiver 130 D to J 202 1 0.0 65.4 66	65.4	10	64.4	1.0	80	-7.0
Receiver 131 D to J 203 1 0.0 64.7 66	64.7	10	63.7	1.0	80	-7.0
Receiver 132 D to J 204 1 0.0 64.0 66	64.0	10	62.8	1.2	80	-6.8
Receiver 133 D to J 205 1 0.0 64.9 66	64.9	10	63.6	1.3	8	-6.7
Receiver 134 D to J 206 1 0.0 64.3 66	64.3	10	62.7	1.6	8	-6.4
Receiver 135 D to J 207 1 0.0 65.6 66	65.6	10	62.0	3.6	80	-4.4
Receiver 136 D to J 208 1 0.0 64.8 66	64.8	10	61.4	3.4	80	-4.6
Receiver 137 J to C 209 1 0.0 66	0.0	10 invalid	0.0	0.0	80	0.0

Receiver 139 J to C         211           Receiver 140 J to C         212           Receiver 141 J to C         213           Receiver 142 J to C         214           Receiver 142 J to C         215           Receiver 143 J to C         216           Receiver 144 J to C         216           Receiver 145 J to C         218           Receiver 145 J to C         218           Receiver 148 J to C         218           Receiver 148 J to C         218           Receiver 148 J to C         218           Receiver 147 J to C         218           Receiver 147 J to C         220           Receiver 145 J to C         220           Receiver 147 J to C         220           Receiver 147 J to C         220           Receiver 145 J to C         220		0.0	0.0	66					00		
		0.0			0.0	10	invalid	0.0	0.0	8	0.0
000000000000	0 -	0.0	70.1	66	70.1	10	Snd Lvl	63.9	6.2	8	-1.8
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- 0 -	0.0	75.2	99	75.2	10	Snd Lvl	66.2	9.0	80	1.0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 +	0.0	T.77	99	T.TT	10	Snd Lvl	67.4	10.3	00	2.3
00000000	+	0.0	76.1	99	76.1	10	Snd Lvl	66.5	9.6	00	1.6
0000000	-	0.0	73.4	99	73.4	10	Snd Lvl	65.4	8.0	60	0.0
00000	-	0.0	78.1	99	78.1	10	Snd Lvl	67.7	10.4	00	2.4
00000	2	0.0	77.5	99	77.5	10	Snd Lvl	67.5	10.0	80	2.0
0000	-	0.0	76.0	66	76.0	10	Snd Lvl	67.0	9.0	80	1.0
000	F	0.0	75.6	99	75.6	10	Snd Lvl	67.1	8.5	80	0.5
0 0	2	0.0	74.5	99	74.5	10	Snd Lvl	69.8	4.7	80	-3.3
0	÷	0.0	67.1	99	67.1	10	Snd Lvl	61.7	5.4	80	-2.6
1	-	0.0	69.1	99	69.1	10	Snd Lvl	62.9	6.2	80	-1.8
Receiver 152 J to C 224	F	0.0	67.1	99	67.1	10	Snd Lvl	61.3	5.8	80	-2.2
Receiver 153 J to C 225	-	0.0	0.0	99	0.0	10	invalid	0.0	0.0	80	0.0
Receiver 154 J to C 226	-	0.0	71.3	99	71.3	10	Snd Lvl	64.4	6.9	80	-1.1
Receiver 155 J to C 227	-	0.0	69.69	99	69.6	10	Snd Lvl	63.1	6.5	80	-1.5
Receiver 156 J to C 228	-	0.0	68.7	99	68.7	10	Snd Lvl	62.4	6.3	80	-1.7
Receiver 157 J to C 229	-	0.0	67.7	99	67.7	10	Snd Lvl	61.6	6.1	80	-1.9
Receiver 158 J to C 230	-	0.0	66.7	99	66.7	10	Snd Lvl	60.9	5.8	80	-2.2
Receiver 159 J to C 231	F	0.0	66.0	99	66.0	10	Snd Lvl	60.4	5.6	80	-2.4
Receiver 160 J to C 232	F	0.0	75.0	99	75.0	10	Snd Lvl	66.1	8.9	80	0.9
Receiver 161 J to C 233	-	0.0	72.1	99	72.1	10	Snd Lvl	64.9	7.2	80	-0.8
Receiver 162 J to C 234	-	0.0	70.7	99	70.7	10	Snd Lvl	64.0	6.7	80	-1.3
Receiver 163 J to C 235	-	0.0	69.3	99	69.3	10	Snd Lvl	63.1	6.2	80	-1.8
Receiver 164 J to C 236	-	0.0	68.4	99	68.4	10	Snd Lvl	62.3	6.1	œ	-1.9
Receiver 165 J to C 237	-	0.0	67.3	99	67.3	10	Snd Lvl	61.5	5.8	80	-2.2
Receiver 166 J to C 238	+	0.0	66.7	99	66.7	10	Snd Lvl	60.9	5.8	80	-2.2
Receiver 167 J to C 239	-	0.0	66.0	99	66.0	10	Snd Lvl	60.3	5.7	80	-2.3
Receiver 168 J to C 240	٢	0.0	71.6	99	71.6	10	Snd Lvl	64.7	6.9	80	-1.1
Receiver 169 J to C 241	t.	0.0	70.0	99	70.0	10	Snd Lvl	63.6	6.4	80	-1.6
Receiver 170 J to C 242	-	0.0	66.7	99	66.7	10	Snd Lvl	61.3	5.4	80	-2.6
Receiver 171 J to C 243	+	0.0	71.5	99	71.5	10	Snd Lvl	64.7	6.8	80	-1.2
Receiver 172 J to C 244	t	0.0	68.0	99	68.0	10	Snd Lvl	62.2	5.8	80	-2.2
Receiver 173 J to C 245	-	0.0	67.1	66	67.1	10	Snd Lvl	61.6	5.5	80	-2.5
Receiver 174 J to C 246	-	0.0	66.4	99	66.4	10	Snd Lvl	61.1	5.3	80	-2.7
Receiver 175 J to C 247	-	0.0	65.5	99	65.5	10	1	60.4	5.1	80	-2.9
Receiver 176 J to C 248	-	0.0	74.9	99	74.9	10	Snd Lvl	66.0	8.9	80	0.9
Receiver 177 J to C 249	٢	0.0	70.3	99	70.3	10	Snd Lvl	63.9	6.4	80	-1.6
Receiver 178 J to C 250	÷	0.0	69.0	66	69.0	10	Snd Lvl	63.2	5.8	80	-2.2

RESULTS: SOUND LEVELS						3600						
Receiver 179 J to C	251	-	0.0	67.8	99	67.8	10	Snd Lvl	62.8	5.0	80	-3.0
Receiver 180 J to C	252	٢	0.0	66.8	99	66.8	10	Snd Lvl	61.8	5.0	00	-3.0
Receiver 181 J to C	253	-	0.0	65.7	99	65.7	10		61.2	4.5	80	-3.5
Receiver 182 J to C	254	Ļ	0.0	67.7	99	67.7	10	Snd Lvl	62.9	4.8	00	-3.2
Receiver 183 J to C	255	t.	0.0	699	99	699	10	Snd Lvl	62.5	4.4	80	-3.6
Receiver 184 J to C	256	-	0.0	65.8	99	65.8	10	I	61.8	4.0	00	4.0
Dwelling Units	#	# DUs Noise R	se Reduction	F								
		Min	Avg	Max	×							
		dB	dB	dB								
All Selected		285	0.0	4.7	10.6							
All Impacted		216	0.0	5.4	10.6							
All that meet NR Goal		17	8.0	9.5	10.6							

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INPUT: TRAFFIC FOR LAeq1h Volumes

The Corradino Group T Stone

14 August 2007 TNM 2.5

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PROJECT/CONTRACT:	3600												
RUN:	Interchange G-Alt 14 with Noise Walls	G-Alt 14	with Nois	se Walls									
Roadway	Points												
Name	Name	No.	Segment										
			Autos		MTrucks		HTrucks		Buses		Motorcycles	cycles	6
			>		>	s	~	s	>	s	>	S	
			veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	veh/hr	km/h	,h
I-75 - NB	point271	299	2109	97	132	67	422	97		1	97	-	97
	point198	300	2109	97	132	67	422	67		1	97	-	97
	point270	301		97	132	67	422	67		1	97	-	97
	point199	302	2109	16	132	26	422	67		1	97	-	97
	point268	303		97	124	67	496	67		1	97	-	97
	point999	304		97	124	97	496	67		1	97	-	97
	point200	305	5 2482	16	124	97	496	67		1	97	-	97
	point222	306	3 2482	97	124	67	496	67		1	97	-	97
	point201	307	2482	97	124	67	496	67		1	97	-	97
	point998	946	3 2482	97	124	67	496	67		1	97	-	97
	point202	308	3 2482	97	124	97	496	97		1	97	-	97
	point945	945	5 2482	16	124	67	496	67		1	97	-	97
	point905	905	5 2482	97	124	67	496	67		1	97	-	97
	point948	948		16	124	67	496	67		1	67	-	97
	point223	311		67	124	67	496	97		1	97	-	97
	point205	312	2482	16	124	97	496	97		1	1	-	97
	point206	313	3 2482	97	124	67	496	97		4	97	-	97
	point928	928	3 2322	97	116	97	464	67		1	97	-	97
	point207	314	t 2322	97	116	67	464	67		1	97	-	97
	point949	949	3 2322	97	116	16	464	67		1	67	-	97
	point208	315	5 2322	97	116	97	464	67		1	97	-	97
	point209	316	3 2322	97	116	97	464	67		1	97	-	97
A DESCRIPTION OF A DESC	AND A DATE OF A DATE OF A DATE												

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	point210	317	2322	97		97	8	97	-	67	-	6
	point950	950	2322	97		97		97	-	97	~	97
	point211	318	2322	97		97		97	-	97	-	97
	point212	319	2685	67	107	57	537	97	۲	97	-	97
	point213	320	2685	97		97		97	+	26	-	97
	point214	321	2685	97		16		97	~	97	-	97
	point215	322										
I-75 - SB	point942	942	4595	97	230	97	919	97	-	97		97
	point232	338	4595	97	230	97	919	97	٢	97	-	67
	point233	339	4486	97	224	16	897	97	-	97	-	97
	175.5	980	4486	97	224	16	897	97	-	97	-	97
	point234	340	4486	97	224	97	897	97	-	97	Ţ	6
	point235	341	4486	97	224	57	897	97	۲	97	-	97
	point496	342	4486	97	224	67	897	97	+	97	-	97
	point260	343	4486	97	224	97	897	97	٢	97	-	97
	point261	344	4486	97	224	67	897	97	٢	97		6
	point236	345	4486	97	224	97	897	97	٢	97		6
	point237	346	4486	97	224	97	897	97	-	97		16
	point238	347	4486	97	224	16	897	97	4	97		16
	point239	348	4766	97	238	26	953	97	4	97	-	16
	point262	349	4766	97	238	97	953	97	-	97	-	16
	point263	351	4766	97	238	97	953	97	٢	97		97
	point947	947	4766	97	238	16	953	97	۲	97	-	6
	point264	353	4766	97	238	97	953	97	۲	97	~	6
	point944	944	4766	97	238	67	953	97	t	97	-	6
	point265	355	4766	97	238	97	953	97	۲	97	-	6
	point243	356	4526	97	226	67	905	97	-	97	-	6
	point266	357	4526	97	226	67	905	97	-	97	-	6
	point244	358	4526	97	226	97	905	97	٢	97	-	6
	point245	359	4526	26	226	97	905	97	۲	97	-	6
	point267	360	4526	67	226	97	905	97	٢	97	-	6
	point246	361	4526	97	226	97	905	97	-	97	-	97
	point247	362										
N I-75/Springwells Off-Ramp	point345	438	158	40	9	40	12	40	٢	40	-	40

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INPUT: TRAFFIC FOR LAeq1h Volumes						3600						
	point353	446	158	40	9	40	12	40	-	40	-	40
	point359	452	158	40	9	40	12	40	-	40	-	40
	point360	453										
N I-75 Service Drive - 1	point361	454	723	40	42	40	86	40	2	40	2	40
	point367	460	723	40	42	40	86	40	2	40	2	40
	point368	461										
Springwells/N I-75 On-Ramp	point369	462	596	97	35	97	71	97	2	97	2	97
	point372	465										
S I-75/Clark Off-Ramp	point461	558	500	40	30	40	30	40	٢	40	+	40
	point463	560	636	40	30	40	84	40	2	40	2	40
	point465	562										
S I-75 Service Drive - 1	point466	563	500	40	30	40	30	40	٢	40	+	40
	point651	567										
S I-75 Service Drive - 2	point475	575	180	56	10	56	5	56	-	56	٢	56
	point476	576	180	56	10	56	5	56	۲	56	4-	56
	point644	577										
S I-75 Service Drive - 4	point638	594	100	48	5	48	5	48	٢	48	-	48
	point489	595	100	48	5	48	5	48	۲	48	-	48
	point490	596	100	48	5	48	5	48	۲	48	-	48
	point491	597										
S I-75 Service Drive - 5	point491	971	100	56	5	56	5	56	٢	56	-	56
	point504	607	100	56	5	56	5	56	٢	56	-	56
	point505	608	100	56	5	56	5	56	۲	56	-	56
	point975	975	100	56	5	56	5	56	۲	56	۴	56
	point507	610										
S I-75/Springwells Off-Ramp	point519	625	600	56	20	56	40	56	-	56	<del></del>	56
	point520	626	600	48	20	48	40	48	-	48	-	48
	point1096	1096	600	48	20	48	40	48	۲	48	-	48
	point524	630										
S I-75 Service Drive - 8	point530	637	630	40	38	40	113	40	2	40	2	40
	point531	638	630	40	38	40	113	40	2	40	2	40
	point532	639										
Springwells/S I-75 On-Ramp	point533	640	630	97	38	26	113	67	2	97	2	97
	point538	645										

Metend - M&SB         point65         682         840         40         72         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40													
Dint         End         Ro	Westend - N&SB	point682	682	840	40	48	40	72	40	2	40	2	40
pointB37         687         840         40         72         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40 <th2< th="">         40         <th2< th=""> <th2< th=""></th2<></th2<></th2<>		point685	685	840	40	48	40	72	40	2	40	2	40
Dointides         B43         40         72         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2 <td></td> <td>point687</td> <td>687</td> <td>840</td> <td>40</td> <td>48</td> <td>40</td> <td>72</td> <td>40</td> <td>2</td> <td>40</td> <td>2</td> <td>40</td>		point687	687	840	40	48	40	72	40	2	40	2	40
Drintesion         688         840         40         72         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40		point943	943	840	40	48	40	72	40	2	40	2	40
Dimension         680         840         40         72         40         2         40         2           point691         6831         840         40         48         40         72         40         2         40         2           point632         633         95         48         7         48         12         48         2         48         2           point730         730         95         48         7         48         12         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48		point688	688	840	40	48	40	72	40	2	40	2	40
Dimension         691         840         40         72         40         2         40         2           point632         692		point690	069	840	40	48	40	72	40	2	40	2	40
point692         682         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         882         883         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         893         89		point691	691	840	40	48	40	72	40	2	40	2	40
point/27         727         95         48         7         48         12         48         2         48         2           point/39         959         95         48         7         48         12         48         2         48         2           point/39         959         95         48         7         48         12         48         2         48         2           point/31         730         95         48         7         48         12         48         2         48         2           point/31         731         7         48         7         48         12         48         2         48         2           point/31         812         120         40         8         40         2         48         2           point/31         814         120         40         8         40         2         40         2           point/31         814         120         40         8         40         2         40         2           point/31         816         120         40         8         40         2         40         2		point692	692										
point630         939         95         48         7         48         12         48         2         48         2           point650         950         955         48         7         48         12         48         2         48         2           point731         730         950         48         7         48         12         48         2         48         2           point731         731         7         48         7         48         12         48         2         48         2           point812         813         731         7         48         7         48         12         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         49         2         49         2	Green - N&SB	point727	727	95	48	7	48	12	48	2	48	2	48
point/35         95         48         7         48         12         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         49         2         49         2		point939	939	95	48	7	48	12	48	2	48	2	48
point960         960         95         48         7         48         12         48         2         48         2           point731         730         95         48         7         48         12         48         2         48         2           point731         731         73         95         48         7         48         12         48         2         48         2         48         2           point811         813         120         40         8         40         38         40         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         40         2         40         2         40         2         40         2		point959	959	95	48	7	48	12	48	2	48	2	48
point73         729         95         48         7         48         12         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         48         2         49         2         49         2         49         2         49         2         49         2         49         2         49         2         49         2         49         2         49         2         49         2         49         2         49         2         49 <td></td> <td>point960</td> <td>960</td> <td>95</td> <td>48</td> <td>7</td> <td>48</td> <td>12</td> <td>48</td> <td>2</td> <td>48</td> <td>2</td> <td>48</td>		point960	960	95	48	7	48	12	48	2	48	2	48
point/30         730         95         48         7         48         12         48         2         48         2           point/31         731         731         7         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<		point729	729	95	48	7	48	12	48	2	48	2	48
point/31         731         731           point812         812         120         40         8         40         2         40         2           point813         813         120         40         8         40         2         40         2           point814         814         120         40         8         40         2         40         2           point814         814         120         40         8         40         2         40         2           point814         814         120         40         8         40         2         40         2           point815         815         120         40         8         40         2         40         2           point816         816         120         40         8         40         2         40         2           point816         816         120         40         8         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40		point730	730	92	48	7	48	12	48	2	48	2	48
point812         812         120         40         8         40         38         40         2         40         2           point813         813         120         40         8         40         38         40         2         40         2           point814         814         120         40         8         40         38         40         2         40         2           point963         963         120         40         8         40         38         40         2         40         2           point964         964         120         40         8         40         38         40         2         40         2           point815         815         120         40         8         40         38         40         2         40         2           point816         816         120         40         8         40         38         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2<		point731	731										
point813         813         120         40         88         40         88         40         2         40         2           point814         814         120         40         8         40         38         40         2         40         2           point864         964         120         40         8         40         38         40         2         40         2           point815         815         120         40         8         40         38         40         2         40         2           point816         816         120         40         8         40         38         40         2         40         2           point816         816         120         40         8         40         38         40         2         40         2           point816         816         180         40         6         40         38         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2	Clark - NB	point812	812	120	40	80	40	38	40	2	40	2	40
point814         814         120         40         8         40         38         40         2         40         2           point963         963         120         40         8         40         38         40         2         40         2           point964         964         120         40         8         40         38         40         2         40         2           point816         815         120         40         8         40         38         40         2         40         2           point816         816         120         40         8         40         38         40         2         40         2           point816         818         180         40         8         40         38         40         2         40         2           point81         819         180         40         6         40         38         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2 </td <td></td> <td>point813</td> <td>813</td> <td>120</td> <td>40</td> <td>80</td> <td>40</td> <td>38</td> <td>40</td> <td>2</td> <td>40</td> <td>2</td> <td>40</td>		point813	813	120	40	80	40	38	40	2	40	2	40
point963         963         120         40         8         40         38         40         2         40         2           point964         964         120         40         8         40         38         40         2         40         2           point915         815         120         40         8         40         38         40         2         40         2           point816         816         120         40         8         40         38         40         2         40         2           point816         816         120         40         8         40         38         40         2         40         2           point819         818         180         40         6         40         38         40         2         40         2           point810         818         180         40         6         40         38         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2<		point814	814	120	40	80	40	38	40	2	40	2	40
point964         964         120         40         88         40         38         40         2         40         2           point815         815         120         40         8         40         38         40         2         40         2           point816         816         120         40         8         40         38         40         2         40         2           point816         818         180         40         8         40         38         40         2         40         2           point819         818         180         40         6         40         38         40         2         40         2           point810         818         180         40         6         40         38         40         2         40         2           point810         810         180         40         6         40         38         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2		point963	963	120	40	80	40	38	40	2	40	2	40
point815         815         120         40         8         40         38         40         2         40         2           point816         816         1         816         1         816         1         8         1         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40		point964	964	120	40	80	40	38	40	2	40	2	40
point816         816		point815	815	120	40	80	40	38	40	2	40	2	40
point818         818         180         40         5         40         2         40         2           point819         819         180         40         6         40         38         40         2         40         2           point819         961         180         40         6         40         38         40         2         40         2           point961         961         180         40         6         40         38         40         2         40         2           point821         820         180         40         6         40         38         40         2         40         2           point821         821         180         40         6         40         38         40         2         40         2           vice Drive -3         point821         821         180         40         5         40         2         40         2           vice Drive -6         point645         581         180         56         10         5         40         2         40         2         40         2         40         2         40         2         40		point816	816										
point6198191804064038402402point9619611804064038402402point9629621804064038402402point9629621804064038402402point8208201804064038402402point8218211804064038402402point8228221304064038402402point6328231805610565561561point631612100565565561561point509613100565565561561point510614100565556156156point510614100565561561561	Clark - SB	point818	818	180	40	9	40	38	40	2	40	2	40
point9619611804064038402402point9629621804064038402402point9629621804064038402402point8208201804064038402402point8218211804064038402402point8228221304056105615612point8238221805610565615612point4785831180561056556151point51061310056556561561point510613100565556156151point5106141005655561561		point819	819	180	40	9	40	38	40	2	40	2	40
point962         962         180         40         58         40         2         40         2           point820         820         180         40         6         40         38         40         2         40         2           point821         821         180         40         6         40         38         40         2         40         2           point821         821         180         40         5         40         2         40         2           point822         822         1         6         40         56         56         1         56         56         1         2         40         2           point645         583         180         56         56         5         56         1         5         56         1         5         5         6         1         7         1         1         1         5         5         5         5         5         5         5         1         1         5         5         5         5         5         1         1         5         5         5         5         5         5         1         1		point961	961	180	40	9	40	38	40	2	40	2	40
point820         820         180         40         58         40         2         40         2           point821         821         180         40         6         40         38         40         2         40         2           point821         821         180         40         5         56         1         5         56         1         2         40         2           point645         581         180         56         10         56         5         56         1         5         56         1         5         5         1         5         5         5         1         5         5         5         1         5         5         5         1         5         5         5         1         5         5         5         1         5         5         5         1         5         5         5         1         5         5         5         1         5         5         5         1         5         5         5         5         5         5         1         5         5         5         5         5         5         5         5         5         5 <td></td> <td>point962</td> <td>962</td> <td>180</td> <td>40</td> <td>9</td> <td>40</td> <td>38</td> <td>40</td> <td>2</td> <td>40</td> <td>2</td> <td>40</td>		point962	962	180	40	9	40	38	40	2	40	2	40
point821         821         180         40         58         40         2         40         2           point822         822         822         82         1         1         1         1         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         2         40         40         40         40         40         40         40         40		point820	820	180	40	9	40	38	40	2	40	2	40
point822         822         822         822         822         822         82         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1		point821	821	180	40	9	40	38	40	2	40	2	40
point645         581         180         56         10         56         5         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56 </td <td></td> <td>point822</td> <td>822</td> <td></td>		point822	822										
point478     583       point631     612     100     56     5     56     1     56     1       point509     613     100     56     5     56     5     56     1     56     1       point510     614     100     56     5     56     5     56     1     56     1	S I-75 Service Drive - 3	point645	581	180	56	10	56	5	56	-	56	-	56
point631         612         100         56         5         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56         1         56 <td></td> <td>point478</td> <td>583</td> <td></td>		point478	583										
613         100         56         5         56         5         56         1         56         1           614         100         56         5         56         5         56         1         56         1	S I-75 Service Drive - 6	point631	612	100	56	5	56	5	56	~	56	-	56
614 100 56 5 56 5 56 1 56 1		point509	613	100	56	5	56	2	56	-	56	-	56
		point510	614	100	56	5	56	2	56	۲	56	-	56

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INPUI: IKAFFIC FOK LAG91h Volumes		010				3600						
	pointoza	סות										
S I-75 Service Drive - 7	point977	977	100	56	5	56	5	56	-	56	-	56
	point514	620	100	56	5	56	5	56	-	56	-	56
	point515	621	100	56	5	56	5	56	٢	56	-	56
	point516	622	100	56	5	56	5	56	-	56	-	56
	point518	624	100	56	5	56	5	56	-	56	۲	56
	point525	978	100	56	5	56	5	56	٢	56	-	56
	point527	619										
Outbound to SB I-75	point1005	1005	225	56	35	56	230	56	٢	56	-	56
	point1058	1058	225	56	35	56	230	56	۲	56	۲	56
	point1006	1006	225	64	35	64	230	64	۲	64	-	64
	point1007	1007	225	88	35	88	230	88	-	88	-	88
	point1098	1098	225	88	35	88	230	88	-	88	-	88
	point1008	1008	225	88	35	88	230	88	-	88	-	88
	point1068	1068	225	88	35	88	230	88	-	88	1	88
	point1067	1067	225	88	35	88	230	88	۲	88		88
	point1066	1066	225	88	35	88	230	88	-	88	-	88
	point1010	1010										
Inbound from SB I-75	point1012	1012	792	88	15	88	133	88	٢	88	-	88
	point1013	1013	792	88	15	88	133	88	-	88	-	88
	point1014	1014	792	83	15	83	133	83	٢	83	-	83
	point1015	1015	792	81	15	81	133	81	-	81	-	81
	point1070	1070	792	81	15	81	133	81	-	81	-	81
	point1072	1072	792	70	15	70	133	70	-	20	-	70
	point1073	1073	792	56	15	56	133	56	-	56	-	56
	point1071	1071	792	56	15	56	133	56	۲	56	-	56
	point1016	1016										
Waterman - N&SB	point761	1059	102	56	7	56	17	56	2	56	2	56
	point762	1060	102	56	7	56	17	56	2	56	2	56
	point957	1061	102	56	7	56	17	56	2	56	2	56
	point958	1062	102	56	7	56	17	56	2	56	2	56
	point764	1063	102	56	7	56	17	56	2	56	2	56
	point765	1064	102	56	7	56	17	56	2	56	0	56
	point769	1065										

INPUT: TRAFFIC FOR LAeq1h Volumes						3600						
Junction - N&SB	point801	1074	150	48	7	48		48	2	48	2	48
	point802	1075	150	48	7	48	22	48	2	48	2	48
	point951	1076	150	48	7	48	22	48	2	48	2	48
	point952	1077	150	48	7	48	22	48	2	48	2	48
	point803	1078	150	48	7	48	22	48	2	48	2	48
	point804	1079	150	48	7	48	22	48	2	48	2	48
	point805	1080										
Lafayette E of Dragoon	point1087	1087	100	56	5	56	5	56	۲	56	-	56
	point1088	1088										
Dragoon	point1089	1089	100	56	5	56	5	56	-	56	-	56
	point1090	1090										
Lafayette E of Livernois	point1092	1092	100	56	5	56	5	56	٢	56	-	56
	point1093	1093										
Livernois	point1094	1094	100	56	2	56	2	56	-	56	-	56
	point1095	1095										
S I-75 Service Drive - 3-2	point495	1069	180	56	10	56	5	56	-	56	-	56
	point488	696										

**RESULTS: BARRIER DESCRIPTIONS** 

The Corradino Group T Stone

15 August 2007 **TNM 2.5** 

Interchange G-Alt 14 with Noise Walls

3600

INPUT HEIGHTS

<b>ULTS: BARRIER DESCRIPTIONS</b>	JECT/CONTRACT:
RESULT	PROJEC

BARRIER DESIGN: RUN:

Barriers Name

Barrier10 Barrier11 Barrier9 Barrier5 Barrier Junctic Dragor

E of Sp Green Waterr Centra

Militar

er15	N	1.10	1.10	
tion to Clark	M	3.70	3.70	
oon to Junction	M	3.70	3.70	
n to Waterman	M	3.70	3.70	
ral to Green	M	3.70	3.70	
Springwells btw I-75 and ramp	M	3.70	3.70	
rman to Crawford	M	3.70	3.70	
ry Ave Church Community Bldg.	M	5.00	5.00	

614920 724828

884579

1510

1802 1253

487

578 248

592

539 525 225 1373

1.10

1.10 1.10

33 ≥

1.10 1.10 1.10 3.70 3.70 3.70 3.70 3.70 3.70 5.00

1.10 1.10

33

293

267

1.10

0 0 0 0 0 0

Cost

Run:Rise

Volume If Berm

If Wall Area

Length

Type Heights along Barrier

Max

Avg

Min

69

m:m

Ε

cu m

sq m

Ε

Ε

ε

Ε

512

466

1.10

1.10 1.10 1.10 1.10 1.10

Barrier2

Width Top

183575 745300

374 1519

101

210

42

410

942

1477

399 255

339

0 3615614

Total Cost:

462410

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## **Interchange I – Alternative 16 – 2035**

No Alternative #16 data sheets are presented in this section. Alternative #16 is a composite of Alternatives #2 and #14. Alternative #16 mirrors Alternative #2 between Springwells Street and Green Street and is comparable to Alternative #14 for the portion of the alternative between Green and Clark Streets.