

July 20, 2016

SUBJECT: PRE-BID MEETING MINUTES/ADDENDUM 1 FOR DE00161 – B-5940,  
46485.3.1, Rehabilitate Bridges #84 and #91 on Glenwood Ave. (US 70) over  
Crabtree Creek in Wake County

MEMORANDUM TO PROSPECTIVE BIDDERS AND MEETING ATTENDEES

A **mandatory** Pre-Bid Conference was held at 2:00 p.m. on Wednesday, July 18, 2016 at the Division Five Office, 2612 N. Duke Street, Durham N.C. 27704. The sign in sheet is attached showing people in attendance.

The meeting opened with introductions and a review of the proposal. Special attention was drawn to the following items:

Electronic bidding is acceptable in Division 5 as shown on page 7. A division electronic id is required that is separate from central letting id.

Contract time and liquidated damages – pages 9. Note that lane closure restrictions are different depending on day of the week but that night work is required for this project. Note ICT 1, Holiday Closure 6, has extended restrictions for Thanksgiving, Christmas and New Years from November to January.

Page 14 MBE goal = 0 % WBE goal = 0 %.

Page 26 Erosion and Sediment Control/Stormwater Certification requires a Level II Erosion Control Supervisor. *After the meeting it was determined that this is NOT required for this project because there are no land disturbing activities. Please strike through the Erosion and Sediment Control/Stormwater Certification provision found on Page 26 of the proposal. In addition, it was determined that Concrete Washout Structures will be required for this project. The Concrete Washout special provision and detail drawing as well as revised bid sheets have been attached for use in bidding this project.*

Page 33 has information on Contractor prequalification for division bidding. Bid, Payment and Performance bonds are required on this project per the Bond Requirements special provision.

The group then discussed the Control of Noise special provision included in the proposal. This provision is a result of commitments made to the neighbors and businesses in the area of this project. A public group meeting will be held to present information to them. Third party monitoring will be provided by the Department. Violations of the noise limits will result in work suspensions. After suspension, work will not be able to resume without a plan in place for further noise reduction. Please review the requirements for an acoustical engineer and the noise plan. Minimizing back up alarm noises should not be done at the expense of safety.





At the bottom of page BP-3 in the structures special provision there is a statement requiring equipment to operate at a noise level of less than 90 decibels at a distance of 50 feet. The controlling noise requirement for this project is found within the Control of Noise provision and states that the exterior noise level resulting from the work shall not exceed 80 decibals, measured at the highway right of way line closest to each occupied residential property (apartments, condominiums, hotels, motels, etc.) at a height of five feet from the ground.

Structures special provision, Sheet BP-7 gives the option of using Class AA high early structural concrete or latex modified concrete for full depth repair. The reference to Class AA concrete should be removed and very early latex modified concrete shall be used if full depth repair is required.

Special attention was drawn to surface cleaning on BP-8. Prior to pouring the Contractor shall vacuum the deck to prevent bonding issues. All slurry shall be removed from the deck to prevent future delamination problems.

BP-9, Managing Hydro-Demolition Water, requires a slurry management plan. Land wasting is not an option for this project.

Location of construction joints shall not fall within the wheel path. Place construction joints at the centerline or adjacent to striping locations.

The TMP was discussed in general terms. The TMP is set up for individual lanes and does not have the typical order of operations built into the plan. This was done to allow the Contractor flexibility in order of operations. It may also allow some accommodations to be made with local businesses as far as what areas are best worked on at certain nights. This would depend on any feedback received at the public meeting to discuss noise with stakeholders.

The Department does not have a plan showing right of way lines for this project. Close approximation can be made with GIS mapping.

There is a greenway trail that runs underneath both bridges. The Contractor needs to be prepared to control pedestrian traffic on the greenway during overhead demo. Please see the "Notes" on TMP-3 pertaining to the use of flaggers under the bridge to protect pedestrians from overhead construction.

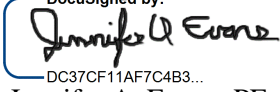
*Existing ambient noise readings have been provided by the Department. The readings were not taken at the right of way line. The map and readings from this study are attached for bidders informational purposes.*

**Please note that a new bid sheet and .ebs amendment file have been provided with the revised quantity. Please strike through the original bid sheets provided in the proposal and use the revision for bidding. This information will also be posted electronically on our website. If you are submitting a paper bid please indicate receipt and acknowledgment of this document by signing receipt of Addendum #1 on the ADDENDUM(S) form. This form is found toward the back of the bid proposal.**



If you have additional questions prior to bid opening, feel free to call me at (919) 220-4600.

Sincerely,

DocuSigned by:  


DC37CF11AF7C4B3...  
Jennifer A. Evans, PE  
Division Proposals Engineer



## Sign Up Sheet for Prebid Meeting

## Project

B-5940

Date 7/18/2016

[illegible]



County : Wake

| Line #               | Item Number  | Sec # | Description  | Quantity    | Unit Cost | Amount |
|----------------------|--------------|-------|--|-------------|-----------|--------|
| <b>ROADWAY ITEMS</b> |              |       |  |             |           |        |
| 0001                 | 0000100000-N | 800   | MOBILIZATION   | Lump Sum    | L.S.      |        |
| 0002                 | 0000950000-E | SP    | GENERIC MISCELLANEOUS ITEM<br>(ACOUSTICAL BARRIER ENCLOSURE)         | 400<br>SF   |           |        |
| 0003                 | 0000950000-E | SP    | GENERIC MISCELLANEOUS ITEM<br>(NOISE CONTROL CURTAIN)                | 550<br>SF   |           |        |
| 0004                 | 0000950000-E | SP    | GENERIC MISCELLANEOUS ITEM<br>(TEMPORARY NOISE BARRIER)              | 550<br>SF   |           |        |
| 0005                 | 4400000000-E | 1110  | WORK ZONE SIGNS (STATIONARY)   | 328<br>SF   |           |        |
| 0006                 | 4405000000-E | 1110  | WORK ZONE SIGNS (PORTABLE)   | 720<br>SF   |           |        |
| 0007                 | 4410000000-E | 1110  | WORK ZONE SIGNS (BARRICADE<br>MOUNTED)                               | 132<br>SF   |           |        |
| 0008                 | 4415000000-N | 1115  | FLASHING ARROW BOARD   | 3<br>EA     |           |        |
| 0009                 | 4420000000-N | 1120  | PORTABLE CHANGEABLE MESSAGE<br>SIGN                                  | 2<br>EA     |           |        |
| 0010                 | 4430000000-N | 1130  | DRUMS  | 275<br>EA   |           |        |
| 0011                 | 4445000000-E | 1145  | BARRICADES (TYPE III)  | 130<br>LF   |           |        |
| 0012                 | 4450000000-N | 1150  | FLAGGER  | 450<br>HR   |           |        |
| 0013                 | 4480000000-N | 1165  | TMA  | 2<br>EA     |           |        |
| 0014                 | 4510000000-N | SP    | LAW ENFORCEMENT  | 240<br>HR   |           |        |
| 0015                 | 4770000000-E | 1205  | COLD APPLIED PLASTIC PAVEMENT<br>MARKING LINES, TYPE ** (4")<br>(II) | 2,588<br>LF |           |        |
| 0016                 | 4810000000-E | 1205  | PAINT PAVEMENT MARKING LINES<br>(4")                                 | 3,300<br>LF |           |        |
| 0017                 | 4900000000-N | 1251  | PERMANENT RAISED PAVEMENT<br>MARKERS                                 | 74<br>EA    |           |        |
| 0018                 | 5255000000-N | 1413  | PORTABLE LIGHTING  | Lump Sum    | L.S.      |        |



County : Wake

| Line # | Item Number  | Sec # | Description  | Quantity     | Unit Cost | Amount |
|--------|--------------|-------|--|--------------|-----------|--------|
| 0019   | 8161000000-E | 420   | GROOVING BRIDGE FLOORS   | 24,334<br>SF |           |        |
| 0020   | 8559000000-E | SP    | CLASS II, SURFACE PREPARATION  | 8<br>SY      |           |        |
| 0021   | 8566000000-E | SP    | CLASS III, SURFACE PREPARATION   | 8<br>SY      |           |        |
| 0022   | 8860000000-N | SP    | GENERIC STRUCTURE ITEM<br>(FOAM JOINT SEALS)   | Lump Sum     | L.S.      |        |
| 0023   | 8860000000-N | SP    | GENERIC STRUCTURE ITEM<br>(VOLUMETRIC MIXER)   | Lump Sum     | L.S.      |        |
| 0024   | 8881000000-E | SP    | GENERIC STRUCTURE ITEM<br>(LATEX MODIFIED CONCRETE<br>OVERLAY - VES)                           | 140<br>CY    |           |        |
| 0025   | 8882000000-E | SP    | GENERIC STRUCTURE ITEM<br>(CONCRETE FOR DECK REPAIR)   | 103<br>CF    |           |        |
| 0026   | 8882000000-E | SP    | GENERIC STRUCTURE ITEM<br>(ELASTOMERIC CONCRETE)   | 103<br>CF    |           |        |
| 0027   | 8892000000-E | SP    | GENERIC STRUCTURE ITEM<br>(BRIDGE JOINT DEMOLITION)  | 413<br>SF    |           |        |
| 0028   | 8893000000-E | SP    | GENERIC STRUCTURE ITEM<br>(HYDRO-DEMOLITION OF BRIDGE<br>DECK)                                 | 2,855<br>SY  |           |        |
| 0029   | 8893000000-E | SP    | GENERIC STRUCTURE ITEM<br>(PLACING & FINISHING OF LATEX<br>MODIFIED<br>CONCRETE OVERLAY - VES) | 2,855<br>SY  |           |        |
| 0030   | 8893000000-E | SP    | GENERIC STRUCTURE ITEM<br>(SCARIFYING BRIDGE DECK)   | 2,855<br>SY  |           |        |
| 0031   | 6000000000-E | 1605  | TEMPORARY SILT FENCE   | 80<br>LF     |           |        |
| 0032   | 6132000000-N | SP    | GENERIC EROSION CONTROL ITEM<br>(CONCRETE WASHOUT STRUCTURE)                                   | 2<br>EA      |           |        |



## **CONCRETE WASHOUT STRUCTURE:**

(1-19-16)

### **Description**

Concrete washout structures are enclosures above or below grade to contain concrete waste water and associated concrete mix from washing out ready-mix trucks, drums, pumps, or other equipment. Concrete washouts must collect and retain all the concrete washout water and solids, so that this material does not migrate to surface waters or into the ground water. These enclosures are not intended for concrete waste not associated with wash out operations.

The concrete washout structure may include constructed devices above or below ground and or commercially available devices designed specifically to capture concrete waste water.

### **Materials**

#### **Item**

Temporary Silt Fence

*Safety Fence* shall meet the specifications as provided elsewhere in this contract.

#### **Section**

1605

Geomembrane basin liner shall meet the following minimum physical properties for low permeability; it shall consist of a polypropylene or polyethylene 10 mil thick geomembrane. If the minimum setback dimensions can be achieved the liner is not required. (5 feet above groundwater, 50 feet from top of bank of perennial stream, other surface water body, or wetland.)

### **Construction Methods**

Build an enclosed earthen berm or excavate to form an enclosure in accordance with the details and as directed.

Install temporary silt fence around the perimeter of the enclosure in accordance with the details and as directed if structure is not located in an area where existing erosion and sedimentation control devices are capable to containing any loss of sediment.

Post a sign with the words "Concrete Washout" in close proximity of the concrete washout area, so it is clearly visible to site personnel.

The construction details for the above grade and below grade concrete washout structures can be found on the following web page link:

[http://www.ncdot.gov/doh/operations/dp\\_chief\\_eng/roadside/soil\\_water/details/](http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/soil_water/details/)

[Alternate details for accommodating concrete washout may be submitted for review and approval.](#)

[The alternate details shall include the method used to retain and dispose of the concrete waste water within the project limits and in accordance with the minimum setback requirements.](#) (5 feet above groundwater, 50 feet from top of bank of perennial stream, other surface water body, or wetland.)

### **Maintenance and Removal**



Maintain the concrete washout structure(s) to provide adequate holding capacity plus a minimum freeboard of 12 inches. Remove and dispose of hardened concrete and return the structure to a functional condition after reaching 75% capacity.

Inspect concrete washout structures for damage and maintain for effectiveness.

Remove the concrete washout structures and sign upon project completion. Grade the earth material to match the existing contours and permanently seed and mulch area.

### **Measurement and Payment**

*Concrete Washout Structure* will be paid for per each enclosure installed in accordance with the details. If alternate details are approved then those details will also be paid for per each approved and installed device.

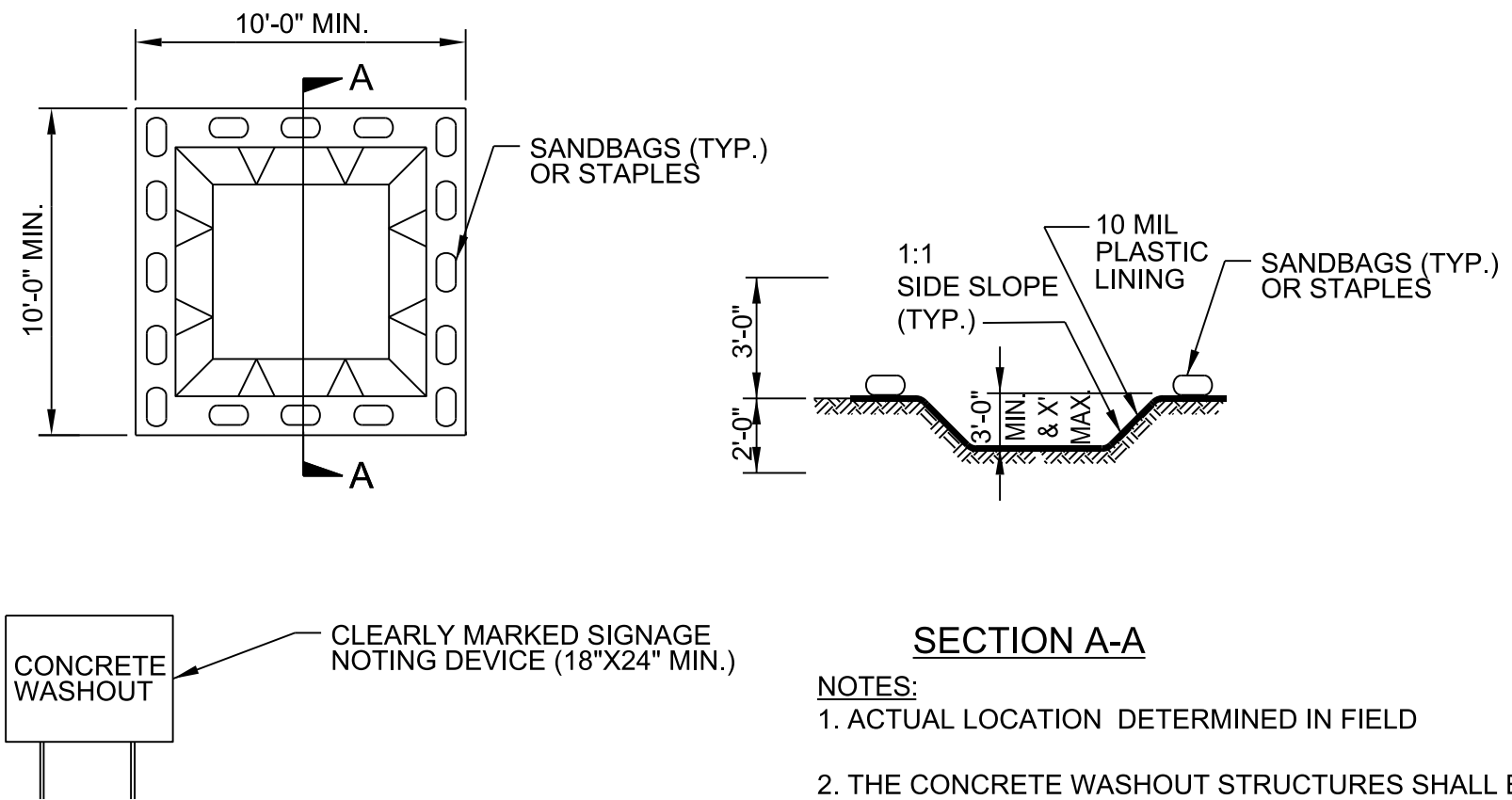
*Temporary Silt Fence* will be measured and paid for in accordance with Article 1605-5 of the *Standard Specifications*.

No measurement will be made for other items or for over excavation or stockpiling.



# WITH LINER, NO GRAVEL APPROACH

## ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



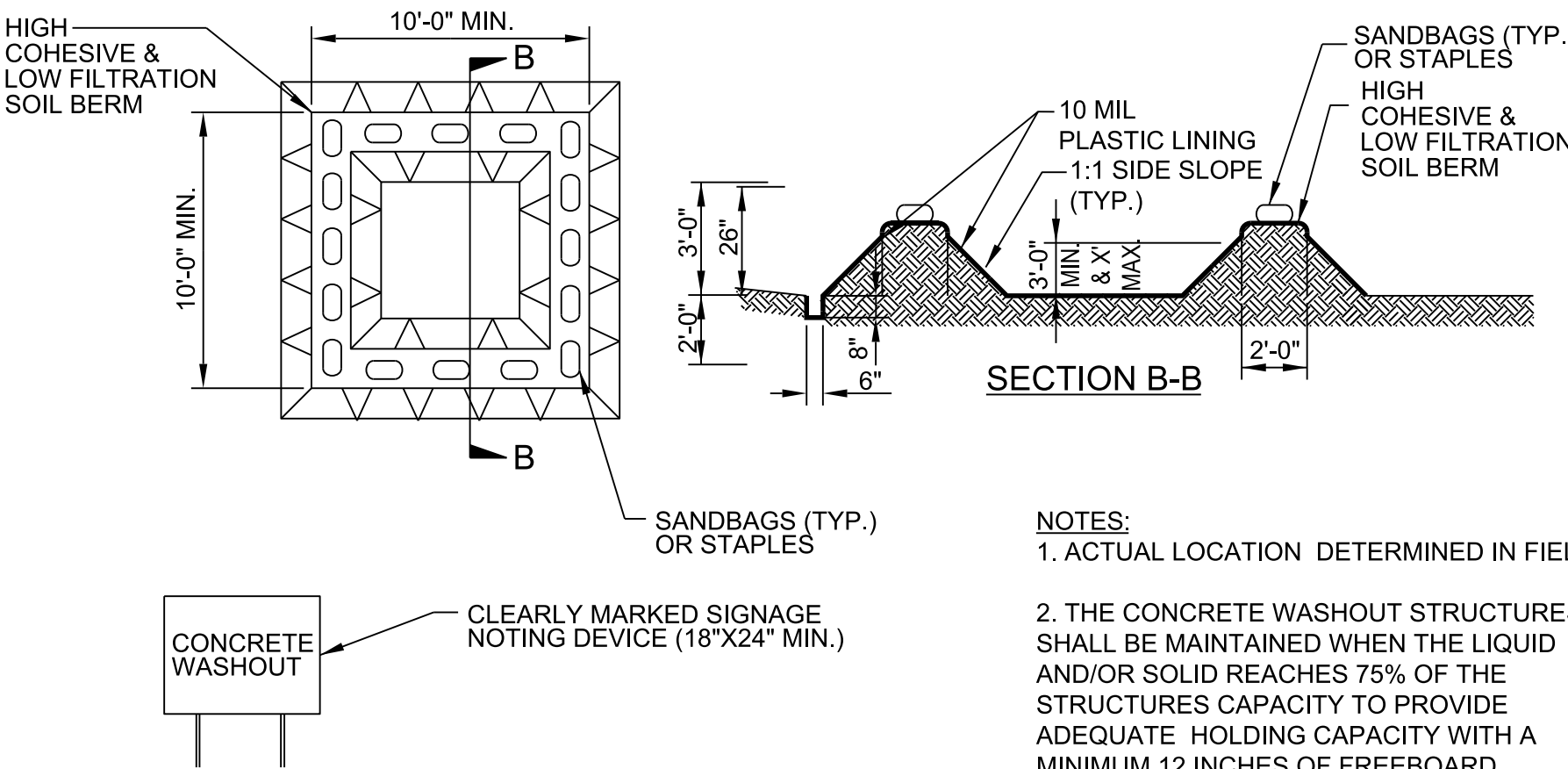
PLAN

### SECTION A-A

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
  2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
  3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

## BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



PLAN

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
  2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
  3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

## ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION







**EVENING 6PM-10PM**

All decibel readings in dBC(A)  
Leq

**Site 1 (Northampton Apartments)**

6/29/16-(6PM-10PM) – 65.0

6/30/16-(6PM-10PM) – 64.2

7/1/16-(6PM-10PM) – 63.9

**Site 2 (Brickettwood Apartments)**

6/29/16-(6PM-10PM) – 62.0

6/30/16-(6PM-10PM) – 54.8

7/1/16-(6PM-10PM) – 54.8

**Site 3 (Holiday Inn)**

6/29/16-(6PM-10PM) – 65.9

6/30/16-7/1/16(6PM-10PM) – 64.9

7/1/16-7/2/16(6PM-10PM) – 65.4

**Site 4 (Hampton Inn & Suites)**

6/29/16-(6PM-10PM) – 70.5

6/30/16-7/1/16(6PM-10PM) – 69.5

7/1/16-7/2/16(6PM-10PM) – 69.4



**NIGHTTIME 10PM-7AM**

All decibel readings in dB(A)  
Leq

**Site 1 (Northampton Apartments)**

6/29/16-6/30/16 (10PM-7AM) – 57.3

6/30/16-7/1/16(10PM-7AM) – 60.6

7/1/16-7/2/16(10PM-7AM) – 62.4

**Site 2 (Brickettwood Apartments)**

6/29/16-6/30/16 (10PM-7AM) – 52.9

6/30/16-7/1/16(10PM-6:52AM) – 52.4

7/1/16-7/2/16(10PM-7AM) – 54.7

← Partial Reading  
(Meter Battery Died)

**Site 3 (Holiday Inn)**

6/29/16-6/30/16(10PM-7AM) – 59.9

6/30/16-7/1/16(10PM-7AM) – 61.6

7/1/16-7/2/16(10PM-7AM) – 63.0

**Site 4 (Hampton Inn & Suites)**

6/29/16-6/30/16(10PM-7AM) – 63.1

6/30/16-7/1/16(10PM-7AM) – 66.2

7/1/16-7/2/16(10PM-7AM) – 66.1



8:00 pm - 9:00 am

All decibel readings in dBA

Leq

**Site 1 (Northampton Apartments)**

6/29/16-6/30/16 (8PM-9AM) - 60.5

6/30/16-7/1/16(8PM-9AM) - 63.4

7/1/16-7/2/16(8PM-9AM) - 62.6

**Site 2 (Brickettwood Apartments)**

6/29/16-6/30/16 (8PM-9AM) - 57.9

6/30/16-7/1/16(8PM-6:52AM) - 53.1

← Partial Reading  
(Meter Battery Died)

7/1/16-7/2/16(8PM-9AM) - 54.6

**Site 3 (Holiday Inn)**

6/30/16-7/1/16(8PM-9AM) - 63.3

7/1/16-7/2/16(8PM-9AM) - 63.6

**Site 4 (Hampton Inn & Suites)**

6/30/16-7/1/16(8PM-9AM) - 68.0

7/1/16-7/2/16(8PM-9AM) - 67.2