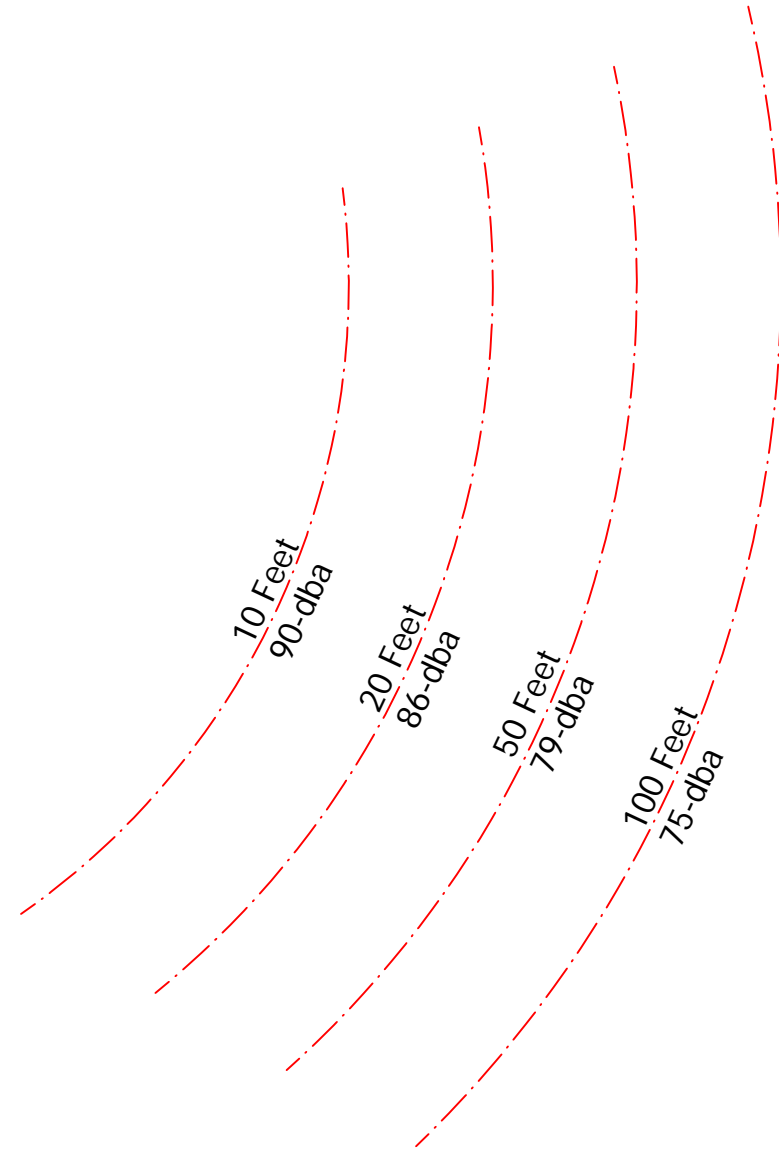
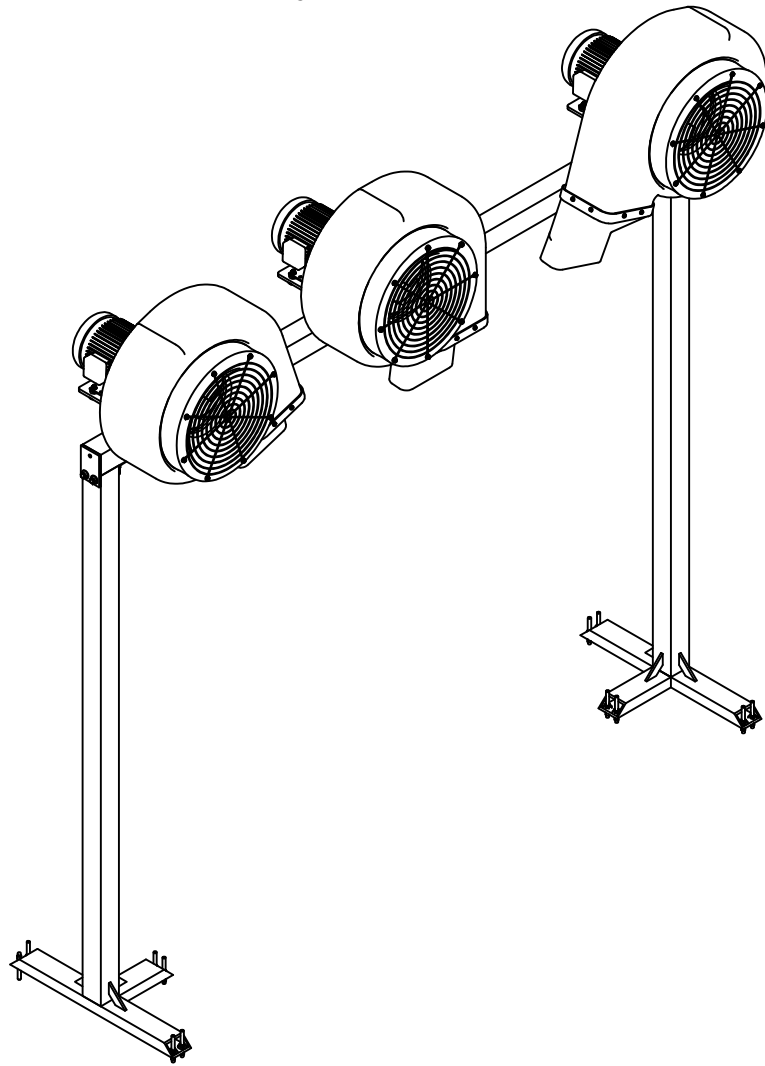




Sound Information

Source	dBA SPL
Produces Pain	120-140
Jet Aircraft During Takeoff (at 20 meters)	130
Snowmobile	120
Tractor Without Cab	
Rock Concert	110
Die Forging Hammer	100-105
Gas Weed-Whacker	
Chain Saw	
Pneumatic Drill	
Home Lawn Mowers	95 to 100 dB
Semi-trailers (at 20 meters)	90
Heavy Traffic	80
Automobile (at 20 meters)	70
Vacuum Cleaner	65
Conversational Speech (at 1 meter)	60
Quiet Business Office	50
Residential Area at Night	40
Whisper, Rustle of Leaves	20
Rustle of Leaves	10
Threshold of Audibility	0

Enviromental Noise with Dryer OFF: 70 dba



THIRD ANGLE PROJECTION

BREAK ALL SHARP CORNERS.
PART TO BE FREE OF BURRS.

UNLESS OTHERWISE SPECIFIED,
ALL DIMENSIONS ARE IN INCHES

**MACHINING
TOLERANCES**
FRACTION ± 1/16"
.XX DECIMAL ± 0.030
.XXX DECIMAL ± 0.005
ANGULARITY ± 2°
FINISH 125

DRAWN LVerdecia	8/26/2011
APPROVED	8/1/2012
CATEGORY BLOWER	
THIS SHEET CONTAINS CONFIDENTIAL INFORMATION, IMAGES AND TRADE SECRETS OF SONNY'S ENTERPRISES, INC. ANY UNAUTHORIZED USE OR DISCLOSURE OF ANY PORTION THEREOF IS STRICTLY PROHIBITED. THIS WORK IS THE EXCLUSIVE PROPERTY OF SONNY'S ENTERPRISES, INC. ALL RIGHTS RESERVED.	

SONNY'S ENTERPRISES THE CARWASH FACTORY		
DESCRIPTION BLOWER ASSEMBLY, ONE ARCH 45HP		
PART NUMBER BL1-45HP-1		
SHEET 2 OF 2	SIZE A	SCALE N.T.S.

MATERIAL



SOUND LEVEL METER READINGS

MODEL: FT-DD-T330HP4 (30HP TURBINE VACUUM PRODUCER)

READING ONE: 69 DB-A, 10 FEET FROM TURBINE @ 45° ANGLE
AND NO BACKGROUND NOISE OR OUTSIDE INTERFERENCE.

READING TWO: 54 DB-A, 20 FEET FROM TURBINE @ 45° ANGLE
AND NO BACKGROUND NOISE OR OUTSIDE INTERFERENCE.

READING THREE: 38 DB-A, 30 FEET FROM TURBINE @ 45° ANGLE
AND NO BACKGROUND NOISE OR OUTSIDE INTERFERENCE.

SOUND LEVEL METER USED:

SIMPSON MODEL #40003 – MSHA APPROVED.
MEETS OSHA & WALSH-HEALY REQUIREMENTS FOR NOISE CONTROL.
CONFORMS TO ANSI S1.4-1983, IEC 651 SPECS FOR METER TYPE.

Vacutech
1350 Hi-Tech Drive, Sheridan WY, 82801
PHONE: (800) 917-9444 FAX: (303) 675-1988
EMAIL: info@vacutechllc
WEB SITE: vacutechllc.com



SOUND LEVEL METER READINGS

MODEL: FT-DD-T330HP4 (30 HP TURBINE VACUUM PRODUCER)

READING ONE: 64 DBA, 3 FEET FROM CORNER OF BUILDING @ 45° ANGLE.

READING TWO: 49 DBA, 5 FEET CORNER OF BUILDING @ 45° ANGLE.

READING THREE: 33 DBA, 10 FEET FROM CORNER OF BUILDING @ 45° ANGLE.

READINGS WERE TAKEN OUTSIDE USING AN 8" CONCRETE BLOCK
EQUIPMENT ROOM ON A CONCRETE SLAB, WITHOUT ROOF

SOUND LEVEL METER USED:

SIMPSON MODEL #40003 – MSHA APPROVED.
MEETS OSHA & WALSH-HEALY REQUIREMENTS FOR NOISE CONTROL.
CONFORMS TO ANSI S1.4-1983, IEC 651 SPECS FOR METER TYPE.

Vacutech
1350 Hi-Tech Drive, Sheridan WY, 82801
PHONE: (800) 917-9444 FAX: (303) 675-1988
EMAIL: info@vacutechllc
WEB SITE: vacutechllc.com



July 8th, 2013

Re: Vacutech Sound Study Projections for SouthCoast Speedwash, Santa Ana, CA.

To: City of Santa Ana / Planning Commission/ Plan Review

Due to the fact that there is no formal data available on vacuum sound projections beyond fifteen feet. I have gathered the following data using the information contained within the Lakewood Carwash Sound Study, performed by Vacutech. This data provided is only able to give a decibel reading at a maximum of 15'.

The chart below shows a cumulative average of that data and is presented in an incremental form based on the worst case scenario of the vacuum hoses being off the hook, so to speak. I took the collective average of the 5 ft. reading through the 15ft. reading and presented the data in the table below.

Vacutech Noise Study Projections	
Average of all ten hoses off	77.24 db
Average @ 25'	74.53 db
Average @ 35'	71.82 db
Average @ 45'	69.11 db
Average @ 55'	66.40 db
Average @ 65'	63.69 db

Refer to attached Vacutech Sound Study for All readings

The data from the Vacutech Sound Study also shows an ambient noise level of 74.4 – 82.3 db which is conclusive with the sound study that was performed by ACS on the existing parcel of the Bristol Speedwash. These numbers are all based on averages but do not appear to be out of line.

Below you will find the Vacutech sound study performed at the Lakewood Carwash. After reviewing the data provided by Vacutech there is no apparent reason that noise from the vacuum system would reach above ambient sound levels at the property line of the proposed project. Any questions or comments please feel free to call.

Ron Akers

ACS/Engineering

Automation Construction & Service 9246 Timberlane Ave. Hesperia, CA 92345

Ph.(760) 490-7846 email – ronakers.acs@gmail.com