

## Location Scouting Audio Report for Heve/Samsung Project

The purpose of this report is to give professional advice regarding any audio issues in regards to the two locations for the Heve/Samsung project. O.C. dialog will be recorded at both locations and we are tasked with previewing any audio issues that may arise during the shoot. We also offer some mitigation solutions. An accompanying folder has dialog examples recorded at each location. Each clip of dialog is presented as an unaltered "raw" example and also with post production noise reduction processing to show what can be achieved in the final mix.

Location One is the "Highline Spur" in Manhattan, NY. located above 30th Street and 10th Avenue intersection. Location Two is the southern tip of Roosevelt Island in the East River. This area is known as the FDR Four Freedoms Park.

Equipment used for the recording was a Sanken COS11 lavalier mic and a Shoeps boom mic with both recording into a digital recorder. At both locations there was a persistent wind. The lavalier mic provided superior signal to noise ratio of dialog to outside noise. The boom mic had an excellent sounding recording but depending on the number of actors and the framing of the shot may not be able to get close enough to the actor to prevent excessive pickup of ambient noise. Especially at the Highline Spur boom mics are usefull only for tightly framed shots of the actors. Boom placement more than 16 inches from the actor picks up too much of the surrounding noise.

### Location One - Highline Spur

As one can imagine any location in Manhattan will be noisy and this location is no exception. The section of the Spur that has the statue in the middle of it's plaza is centered over the intersection of 10th Avenue and 30th Street. The Spur is surrounded by skyscrapers on three of the four sides and the US Post Office on the forth corner which is a 5 story building. There is a constant A/C noise from the surrounding buildings. The good news is that traffic rumble and A/C noise can be suppressed and in many cases eliminated digitally. The surrounding skyscrapers do tend to act as sound reflectors and so many sounds get amplified and presented to the microphone as omnidirectional sounds - meaning that offending sounds bounce between the buildings and seem to come from all around you as opposed to coming from a specific direction. Offending directional sounds can be mitigated somewhat by microphone placement. In this case any offending sounds tend to come from all directions so the only real solution is to eliminate the offending sounds. Regarding those offending sounds:

This intersection has been an active construction zone for about ten years. Fortunately the Lincoln Tunnel entrance construction has completed the street and underground work so the main source of heavy construction is done. The Highline project coordinator, who happened to be on the Spur Monday morning, said that an extension of the street exits will be constructed but that work won't start until after summer.

Street level pedestrian voices were not audible so that should not be an issue. Crowd control will clear the Spur of other pedestrians so I anticipate no voice sound to interrupt recording.

There is a heliport on the Hudson River 2-3 blocks to the west but their sound was not audible. Private helicopters are not permitted to fly over Manhattan so I anticipate no problem from them.

The main US Post Office is on the southeast corner of the Spur and has trucks of all sizes coming and going all day and night. However, their noise was intermittent and not constant but was loud enough to be audible in the recordings. During our three hours at the location I would say that about half a dozen PO trucks made enough noise to interrupt a take. Shooting should be able to work around the PO trucks.

Regarding traffic noise 30th street is an entrance to one of the many Lincoln Tunnel approaches. However, the signage and traffic signals seem to keep the congestion to a minimum. That being said I would recommend against shooting at outgoing rush hour (4PM-7PM) when horn honking may become an issue.

Final thoughts on traffic noise. Most of the traffic noise is a constant rumble which can be mitigated in post. Use of lavalier mics rather than booms will help to increase the signal to noise ratio in relation to dialog vs. traffic noise. In my time at the location there were instances where a large truck would make enough noise, especially when accelerating from the 30th street traffic light directly under the spur. But these were intermittent and crew should be able to manage takes so that cameras not roll during loud traffic.

Of course this is not mentioning the usual NYPD/NYFD sirens or Con Ed emergencies. Those emergency events will have sirens or jack hammers and are a wild card for location shooting.

My greater concern is ongoing construction noise. During the three hours at the Spur there was the constant sound of jack hammers and grinding of facade repair work. I don't know whether today was an aberration but my suspicion is that it is more the norm. Jack hammers were not in the immediate area but were several blocks away and can be heard in the recording examples. There was also construction being done to various building facades up and down 10th Avenue. These kinds of offending sounds may be difficult to eliminate even with the most aggressive post production digital noise suppression software. I did notice that it was quieter at 11:30 which is probably when most crews broke for lunch.

One solution is to schedule the Spur shoot for a Sunday when construction is not happening.

The accompanying folder of audio files gives examples of dialog recorded at the Highline Spur.

Highline Spur-Lavalier Mic-No Processing audio file is recorded in the middle of the Highline Spur plaza. You can hear traffic rumble along with trucks starting up, etc.

Highline Spur-Lavalier Mic-With Processing audio file is the same file with noise reduction processing. You can hear that the constant traffic rumble is almost entirely eliminated. What remains are the random truck or bus start up. Those non-constant sounds are almost impossible to remove.

With the lavalier mic a lot of the construction sound is lowered in volume and with processing the background rumble is mostly removed. As you can hear though - isolated audio events like a truck starting are still present. The challenge is to shoot around those interruptions.

## Location Two - FDR Four Freedoms Park - Roosevelt Island

Four Freedoms Park is located at the southern tip of Roosevelt Island in the East River. Manhattan and the FDR Drive and a heliport is to the west and to the east is Astoria, Queens and a NYC ferry terminal.

This location is considerably quieter than the Highline Spur. This location is much further away from traffic with the FDR Drive being across the river and the 59th St Bridge also quite far away. The promenade location is stone paving stones as a floor and parallel concrete wall that could pose some echo problems with loud percussive sounds. I did not detect any echos with dialog sound.

The main audio interruptions were from the helicopters that use the 39th street heliport. As stated previously since helicopters are not permitted to fly over Manhattan or Queens they are restricted to flying over the East and Hudson Rivers. I found that there was a helicopter flyby about every five minutes both commuter and leisure tours. We were at this location from about noon to 3PM and the helicopters were there throughout the duration of our visit. They are not constantly overhead but come and go on a regular basis. I think that shooting will have to occur around these interruptions. Some of the helicopters take off and head south away from our location. Those are less intrusive but their takeoffs are a bit noisy. But some of the helicopters head north and are a direct and low flyover. Those are quite loud so shooting will have to be paused for those.

There is also a Ferry and pleasure boat presence. Most of the ferries are pretty quiet and I didn't notice the docking or passby noise as they try to maintain a slower speed in the river. Occasionally a ferry would pass right by our location heading north and were a bit loud. That only happened twice during our three our visit so I don't think that will be a constant problem.

There were some pleasure craft that passed by close to the location - some louder than others. Most not noticeable in the recording. Don't think they'll pose a severe problem.

The one caveat about water traffic is jet skis. Both loud and with a higher pitched whine that will be intrusive in dialog recordings. I did not notice any jet skis during our visit however that could be that it was a work day. Not sure if the area is infested with jet skiers on the weekend. I do know that they are all over the Hudson River in the summer. Perhaps they're not allowed in the East River. Not sure of that though so it may be a consideration of when best to shoot at this location.

The other interruptive sounds were sirens on the FDR Drive. We experienced that and it can be heard on the dialog sample with and without noise reduction processing. As in all of NYC there's no telling when a siren will go off. However during the three hours there that only occurred once.

All in all this location was pretty quiet and if shooting occurs between helicopters and any louder boat traffic then we should be good for clean recordings.

The accompanying folder has dialog recorded at this location.

Roosevelt I-Lavalier Mic-No Processing audio file is location dialog recordings at the southern most promenade. Note the siren from the FDR drive. Also it was pretty windy.

Roosevelt I-Lavalier Mic-With Processing audio file is the same clip with noise reduction processing. Aside from the siren it's pretty clean. This recording made with lavalier mic.

In summation, usable dialog can be recorded at both locations with careful attention paid to the audio environment during the record. Also, the style of acting will possibly affect the recording. If it is a scripted piece of one-liners then it will be easier to redo and have multiple takes of dialog should one get ruined by noise. If it is more free flowing unscripted dialog then it will be a bit more difficult to do pickups should an outside noise get into the recording.

The caveat is that there is no guarantee what the audio interruptions may be. After all - it is New York City. Where anything can happen.