

Big Sky Acoustics, LLC

PROJECT PROFILE: **CALL CENTER**



PROJECT: Billings 911 Call Center *Billings, Montana*

For the new 911 Call Center, the City of Billings wanted to control noise levels, increase productivity, and reduce stress within the facility. Big Sky Acoustics was hired to provide the Acoustical Design for the Project to ensure the City's vision was met.

BSA's SERVICES AND SOLUTIONS:

- Developed Room Acoustics design options to control reverberant noise, reduce overall noise levels, and improve speech intelligibility in the Dispatch, Training and Conference rooms.
- Developed computer models to predict the reverberation times, analyzed the acoustical characteristics of the room finishes, and determine the location, type and quantity of acoustical treatments required for each space.
- Provided Sound Isolation design services to reduce airborne noise transmission between noise-sensitive spaces, including offices and the Sleep, Conference, and Training rooms.

- Evaluated the proposed STC-rated wall constructions and verified they met the design goals. Also provided the door specifications to acoustically isolate the spaces.
- Used ASHRAE design guidelines and the AIM software to calculate the noise levels of the proposed mechanical equipment and systems.
- Because the acoustical design goals were predicted to be exceeded throughout most of the facility, developed noise control design options for the Mechanical Engineer.
- Provided recommendations for the VAV boxes, vibration isolators, duct liner and flexible ductwork. Seismic isolation concerns were also addressed.
- Analyzed the noise of the roof-top air-cooled chillers for comparison to the City of Billings noise ordinance, and provided recommendations to quiet the four units.

Good acoustics is important for safety and efficiency. BSA's services gave the City a peace of mind that noise will not be a distraction for this critical public service.