

Case Study

Channel Drains

DURA SLOPE CHANNEL DRAIN AND GRATES WEATHER STORM REGULATIONS FOR POPULAR HISTORIC DISTRICT IN NEW ORLEANS' FRENCH QUARTER

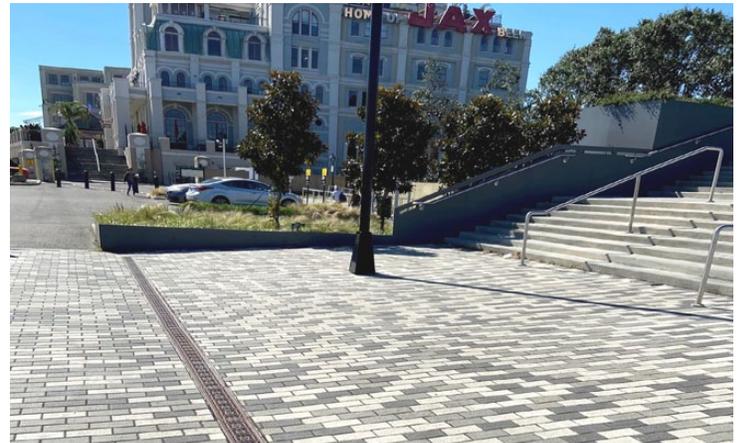
A revitalization project in Jackson Square, New Orleans, set out to create a more welcoming space for the public and tourists near the historic French Quarter, across from the St. Louis Cathedral and along the Mississippi river front. As part of the initiative, the architect needed to move a high volume of water away from the area to allow for continued foot traffic during and after a large rainstorm. It was also important to prevent water from pooling so the area's streetcar could continue to pass without disruption.

The NDS DesignWorx team identified two key challenges they needed to overcome when designing flow requirements. The first was meeting the management of a 100-year rain event as New Orleans has very high regulatory criteria, reaching almost 10 inches per hour for much of the city. The second was ensuring the final solution could be installed to match the on-site aesthetics. Since the area is part of a historic district, the channel drain grates needed to duplicate the weathered look of the site originally built in the 1800's.

PRODUCT SOLUTION EXCEEDS STORMWATER REQUIREMENTS BY 25%

The project team went to great lengths to provide a solution that would allow for busy pedestrian traffic and streetcar activity while meeting the high flow requirements set forth by the city. Dura Slope channel drains were ultimately selected as the system was able to exceed drainage requirements by 25%.

Approximately 150 feet of channel drains were placed between two large concrete stairways to manage a large volume of sheet flow, in an area that receives water from both the upper river platform and the connecting plaza. This allowed for ongoing foot and streetcar traffic during and after rain events and the prevention of water from ponding.



GRATES MEET LOAD CLASS RATINGS WHILE MATCHING STRINGENT DESIGN CRITERIA

The designer appreciated that Dura Slope came with multiple grate options to choose from since the project is located in a sensitive historic district in New Orleans. Options range from heavy-duty cast iron or stainless steel to galvanized steel and plastic grates in a number of different colors and decorative styles. This offers designers and specifiers more flexibility and versatility when choosing the final product.

The project team was particularly focused on the ADA/Heelproof capabilities of the grates while finding a decorative style that matched perfectly – raw, ductile iron for a rustic weathered look – in addition to meeting load class C, capable of being driven on by vehicles in emergency situations.

PROJECT SUMMARY

PROJECT TYPE

Capture & Convey

PROPERTY

Municipality

STAKEHOLDERS

Perez APC-Lead Architect
Brandon Adams Landscape Architecture-Landscape Architect

NDS PRODUCTS USED

150 linear ft. of DS-090N through DS-107 Dura Slope channel drains with decorative iron Tile grate DS-603