



RTA CANAL STREET FERRY TERMINAL PROGRAM

Project No. 2015-19

Location: New Orleans, LA

Contract Value: \$2,100,000

Completion Date: Ongoing

Owner/POC:

New Orleans
Regional Transit Authority
Justin Augustine / 504.827.8302

Project Specific Disciplines

- Civil Engineering
- Design Management
- Architectural Services
- Traffic Engineering
- Environmental & Permitting Services
- Project Management
- Construction Management
- Master Planning
- Naval Architecture
- Pedestrian Modeling

Since 1983, the New Orleans Regional Transit Authority (RTA) has embarked on a clear mission to enhance the access and coverage of the City's Public Transportation infrastructure in a consolidated and efficient way. Inspired by a strong appreciation of history and keen eye for urban planning, several signature projects have reconnected the City in new ways that continue to generate increases in both local and tourist movement throughout the City.

With the upcoming Ferry Terminal project at the "confluence" of Canal Street and the Mississippi River, the RTA will be adding a 4th dimension to its system that will generate more public access to the river and a new level of marine-based public transportation. The new Ferry Terminal will harness the advantages of a centralized position in a very public space that enjoys continued improvement and restoration from both public and private sources.

The project features all-new, high-speed "catamaran" style ferry boats, designed for transporting over 140 passengers each. The pedestrian-only ferries are 72 feet long and 25 feet wide and will dock against an all-new Ferry Terminal to be constructed at the foot of Canal Street. A new wharf, designed to provide "connectivity" between the Audubon Aquarium of the

Americas and Spanish Plaza, the new dock and Terminal will provide ADA compliant boarding by way of articulated gangways to accommodate the seasonal river stages that often range from 0 to 17 feet in elevation. Service will be enhanced by this state of the art facility for handicapped pedestrians, commuters, tourists, bicyclists, and powered scooters.

Elements of the Canal Street Ferry Terminal:

- 10,000 SF Terminal Building with an iconic open-canopy element
- 200 feet long "repurposed" Floating Dock to receive two (2) new highspeed catamaran-style pedestrian ferry boats
- 10,000 SF of all-new Wharf constructed between the Aquarium of the Americas and the World Trade Center
- 3 acres of all new hardscape and landscape
- 1 new quarter-round Streetcar connection
- 1 new canopied Bus Station for 2 buses

Royal is providing the Project Management / Construction Management (PMCM) oversight for this project. Scheduled to be complete in 2018 for the Tri-Centennial celebrations planned for New Orleans, the project is rapidly progressing through Master Planning and Programming, Preliminary Engineering & Design, and Permit Applica-



Existing



New

New "Catamaran" Style Pedestrian Ferry Boats will replace 1970s era boats



Existing



New

As shown in the before and after images here, the existing floating dock will be refurbished and enlarged with dual berths, dual platforms and gangways, and canopy.

As shown in the before and after images here, the new terminal building will feature an iconic canopy element to emphasize the connectivity between Canal Street and the Riverfront.

tions.

In this initial phase, Royal acts as both the Project and Design Manager on behalf of the RTA, overseeing Preliminary Project Development, Permitting and AE services provided by the On-Call Pool of the RTA. This delivery approach was recommended to afford the project the fastest possible path to construction completion, given the local capacity and applicable skills sets already available in the RTA's 2015 OnCall Pool of AE Service Providers.

Day-to-day efforts include coordinating and monitoring of the Master Planning, Programming and Due Diligence of the team, as well as the resulting Preliminary, Engineering and Design required to prepare all the necessary permits needed from all agencies.

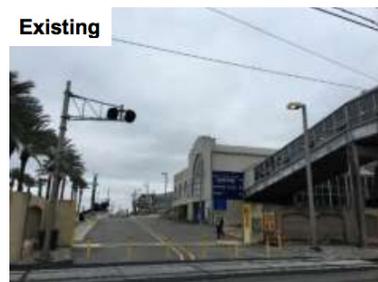
Specific tasks include OnCall Pool Optimization of the AE service providers (survey, geotech, engineering, and architecture), such as capacity and continued "gap" analysis to ensure prompt delivery and reduced risk to cost and schedule using a team approach and broad reach-back within the RTA's OnCall pool. Elements of the Risk Management Plan can be seen in the use of non-traditional technologies, such as ground-penetrating and side-scan sonar, as well as Subsurface Utility Engineering (Levels A, B, C, and D).

Appropriate professional services were evaluated and incorporated quickly, such as Naval Architecture and Pedestrian Egress Modelling, to insure continued progression of planning and design moving "across" many interconnected project features, complex site conditions, and often conflicting codes.

Stakeholder engagements included early communications with United States Army Corp of Engineers (USACE), United States Coast Guard (USCG), Coastal Protection and Restoration Authority (CPRA), Federal Transit Authority (FTA), Federal Department Of Transportation (FDOT), Orleans Levee District (OLD), State Historic Preservation Office (SHPO), Tribal Historic Preservation Office (THPO), Port of New Orleans, and the City of New Orleans, each informed and kept informed at the earliest possible stages. Vision Alignment Meetings informed and connected the current design to existing and future expectations of stakeholders and neighbors, including the ongoing World Trade Center project.

With its site located at the foot of historic Canal Street, this is one of the first projects in the state to follow the THPO process, bringing the interests of each tribe known to inhabit the area under one point of contact. Geotechnical explorations were recently modified to provide additional soil-borings to the Chitimacha tribe, whose ancestors were known to have inhabited the banks of the Mississippi River.

At the highest level, the Risk Management Plan focuses on continuous communications, teamwork and options development to ensure the RTA is getting the very best assessment of cost and schedule. Conversely, the Plan also focuses AE planning and design attention on what is "Permit-able" in the shortest amount of time, given the proximity to the USACE Floodwall, Flood Gates, and the Mississippi River itself, a "navigable waterway of the U.S." subject to 404/Section 10 and 408 regulations. With historic high-water events triggering stop-work orders up and down the river last spring and again this winter, even geotechnical efforts must be carefully timed to narrow windows.



Existing



New

The historic site also means a complex array of subsurface utilities are in play serving critical facilities up and down the adjacent wharf. Beyond locating unmarked or abandoned utilities, using GPR and magnetometers, the SUE element of the Risk Management Plan has fleshed out other utilities not often found until construction, such as a live submarine power cable serving the drainage pumping station on the other side of the river, and several submarine telephone cables, now known to be abandoned.

Cost and scheduling of the entire program on a monthly basis was made a routine part of the Plan, to ensure budgeting was not just an afterthought. With in-house experience and expertise in construction management and general contracting, as well as outreach to local and national heavy-civil-marine contractors, to-date the Risk Management Plan has resulted in a very feasible, constructible, and "Permit-able" project before the 30% Design level is complete. The detailed cost and schedule estimates informed by every element of the team, now have the project \$10 million below the \$40 million dollar original estimate.

With annual Federal funding opportunities based on competitiveness, readiness, and environmental clearances, such as the FTA's TIGER grant, all scope and cost details, trends and changes are "debated", documented and monitored with "snapshots" taken once a month to maximize scope and funding potential. Currently Royal is evaluating alternative procurement possibilities afforded by this progress and recent legislation to determine if additional benefits may still be accrued to the cost and schedule.

Royal's Task:

Task 1 – Project Management, Phase 0

1. Project Development

- a. On-Call Program Delivery Model & Optimization
- b. Risk Management Plan
- c. Land and Marine-based surveys
- d. Permitting
- e. Procurement Analysis
- f. Design Management Team
- g. Master Planning / Programming

2. Permitting

3. On-Call Pool Optimization

- a. Royal Engineers and Consultants/Mino Marine (PM/CM/Naval Architecture)
- b. GOTECH Consulting Engineers/Cardno (Survey/Non-Traditional Site Investigations/SUE)
- c. Kenall (Geotechnical Investigations)
- d. Manning Architects/Spackman, Mossop & Michaels/Jensen (Original Concept/Architectural Services/Landscaping/Pedestrian Modeling)
- e. Infinity Engineering Consultants (Structural, Land and Marine, MEP)

4. Preliminary Design Management

Task 2 – Master Plan and Due Diligence Oversight, Phase 1

Task 3 – Construction Management, Demolition Phase 2