



G&P Associates Experience 2005-present

Bridges:

1. Benicia-Marinez Segmental Bridge (Benicia, California): (Const. Value: \$700 million)
 - 3d-modeling of pier caps and backspans
 - 3d-modeling of concrete formwork
 - 2d-fabrication drawings for construction
2. Pitt River Cable-stayed Bridge (Vancouver, British Columbia): (Const. Value: \$100 million)
 - 3d-modeling of concrete, cable anchorages, and rebar for towers
 - 3d-modeling of proposed steel falsework for tower construction
 - 3d-modeling of Pier E2 abutment at tie-in between mainspan and approach roadway.
 - Construction sequencing for trades.
3. Verrazano Bridge Structural Improvements (NYC, New York): (Const. Value: \$60 million)
 - Laser scanning of steel towers, anchorage houses, and mainspan
 - 3d-model and 2d-plans of anchorage houses
 - 2d-plans of approximately 24,000 bolts and rivets
4. Whitestone Bridge Structural Improvements (NYC, New York): (Const. Value: \$45 million)
 - Laser scanning of anchorage house and mainspan
 - 3d-modeling of anchorage houses and mainspan cables
 - Table dimensions for mainspan cable fabrication
5. Throgsneck Bridge Structural Improvements (NYC, New York): (Const. Value: \$45 million)
 - Laser scanning of anchorage house and mainspan
 - 3d-modeling of anchorage houses and mainspan cables
 - Table dimensions for mainspan cable fabrication
6. Willis Avenue Bridge Repairs (NYC, New York):
 - Laser scanning of bridge approach underside
 - 3d-model and 2d-plan of bridge approach underside
7. George Washington Bridge (NYC, New York)
 - Laser scanning of above ground anchorage and light-poles
 - 3d-modeling of anchorage, cables, and fences
 - Table dimensions for mainspan cable fabrication
 - Created table of curved light-pole dimensions
8. RFK/Triboro Bridge (NYC, New York):
 - Laser scanning of anchorage house, towers, and cables
 - 3d-modeling of anchorage houses and mainspan cables
 - 2d-plans of rivets on towers and bents.
9. Port Mann Cable-stayed Bridge (Vancouver, British Columbia):
 - 3d-modeling of concrete, cable anchorages, and rebar for towers
10. Huey P. Long Bridge (Jefferson, Louisiana):
 - 3d-modeling of concrete and rebar from drilled shafts to roadway level.
11. Sharaj Bridge (Mideast)
 - 3d-model of bridge from scan data.



Subway Stations:

1. Far Rockaways Subway Stations (9 total): (Queens, New York)
 - Laser scanning of 9 elevated subway stations from roadway to platform
 - 2d-plans, tables, cross-sections for roadway, mezzanine, and platform levels. Plans included all visible utilities.
 - Complete 3d-model of 1 subway station
2. Willets Avenue/ Shea Stadium Subway Station (Queens, New York)
 - Laser scanning of complete roadway, underside steel, mezzanines, platforms and tracks.
 - 2d-plans, tables, cross sections of roadway, underside steel, stairways, mezzanines, platforms and tracks. Plans included all visible utilities.
3. 45th Road/ Court Square (Queens, New York)
 - Laser scanning of complete roadway, underside steel, mezzanines, platforms and tracks.
 - 2d-plans, tables, cross sections of roadway, underside steel, stairways, mezzanines, platforms and tracks. Plans included all visible utilities.
4. South Ferry Terminal Subway Station (NYC, New York) (Const. Value: \$1.0 billion)
 - Laser scanning of track level, mezzanine level and misc. rooms
 - Register of scans and preliminary drawings of concrete cracks

Subway Tunnels:

1. Jeraloman Tube Tunnel: (Const. Value: \$18 million)
 - Laser scanning of 3200 feet of subway tunnel
 - Cross sections for tunnel
 - 3d-model of a portion of tunnel
2. Queens Plaza Tunnel (Queens, New York)
 - Laser scanning of 3600 feet of tunnel
 - Registration and track alignments
3. 71st/Continental Subway Tunnel (Queens, New York)
 - Laser scanning of 1000 feet of tunnel under live conditions
 - 3d-model of entire tunnel including tracks, signals, overhead beams, etc.
 - 2d-plans of entire tunnel including tracks, columns, ceiling plans etc.
4. 75th Street Tunnel (Queens, New York)
 - Laser scanning of 1000 feet of tunnel under live conditions
 - 2d-plans of entire tunnel including tracks, columns, signals, ceilings, etc.

Electric Substations:

- 10th Street Electrical Substation (Brooklyn, New York)
 - Laser scanning of complete substation including roof.
 - 3d-modeling of entire structure including piping, equipment, roof, surfaces etc.
 - Model created for first NYMTA Building Information Project (BIM).



- Electrical Substation (NH)
 - 3d-model of entire interior of electrical substation from scan data.
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Architecture&Buildings:

1. United Nations Buildings Project (Manhattan, New York)
 - Produced architectural exterior drawings for five buildings on campus. Extracted drawings from laser scans.
 - Produced contour maps of exterior building facades for 6 buildings on campus.
2. Tin Building (Manhattan, New York)
 - 2d-planworks, elevation drawings, and cross sections of entire structure using scanned data.
3. 21 Club (Manhattan, New York)
 - Laser scanned entire 6 story structure including exterior building elevations
 - Created 2d plans of floors, ceilings, exterior, and miscellaneous cross sections.
4. Lincoln Center (Manhattan, New York)
 - Created 3d-CAD model of entire parking garage using laser scan data.
5. NYC Hall (Manhattan, New York)
 - Created Building Information Model (BIM) of exterior using scan data and existing plans.
 - 3d-Laser scanning of east and west attics.
 - Complete 3d-model of west attic structure.
6. SUNY Science Center (Binghamton, New York)
 - Created Building Information Model (BIM) of entire structure using contract drawings.
 - 3d-Laser scanning of entire basement plaza area
 - 3d-modeling of entire basement plaza

Roadways/Interchanges/Dams:

1. Bruckner Expressway (Bronx, New York):
 - Created complete 2d-plan and surface model of interchange.
2. Crocker Pond Dam (Massachusetts)
 - Laser scanned and produced profiles of spillway area.
3. West Side Drive (Manhattan, New York):
 - Created complete 2d-plan and surface model of interchange.
4. Fall River I-95 Multi-Level (Fall River, Massachusetts):
 - Combined construction drawings and scans to produce 3d-model of complex major interchange.