

# CARNEGIE ROBOTICS RIDC - HEPPENSTALL BUILDING PITTSBURGH, PENNSYLVANIA



RED SWING GROUP WAS RETAINED BY DESMONE & ASSOCIATES ARCHITECTS TO PROVIDE LAND DEVELOPMENT CIVIL ENGINEERING SERVICES FOR THE CONSTRUCTION OF A GRAVEL PARKING LOT FOR CARNEGIE ROBOTICS ADJACENT TO THE RIDC'S HEPPENSTALL BUILDING IN THE CITY OF PITTSBURGH. THE LOT WILL CONSIST OF A 50-SPACE PARKING AREA, GRAVEL ACCESS ROAD, FRONTAGE LANDSCAPING, A TWO-GATE SECURITY FENCE, ASPHALT DRIVEWAY APRON AND LOADING AREA.

#### SPECIFIC SCOPE OF SERVICES INCLUDED:

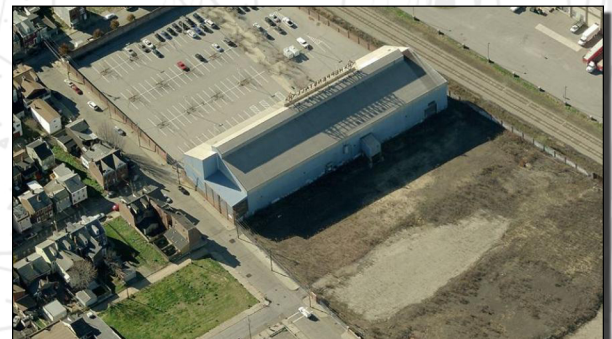
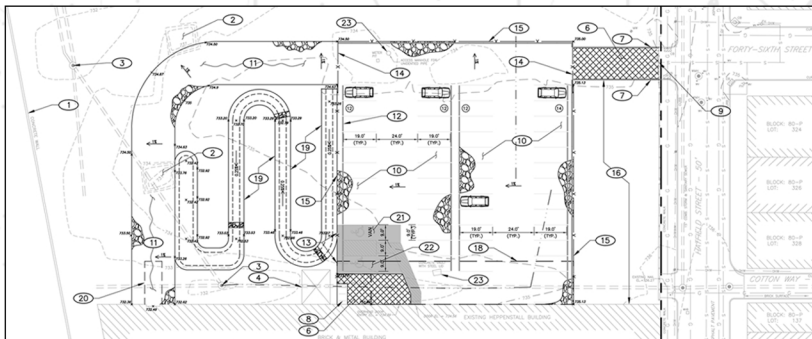
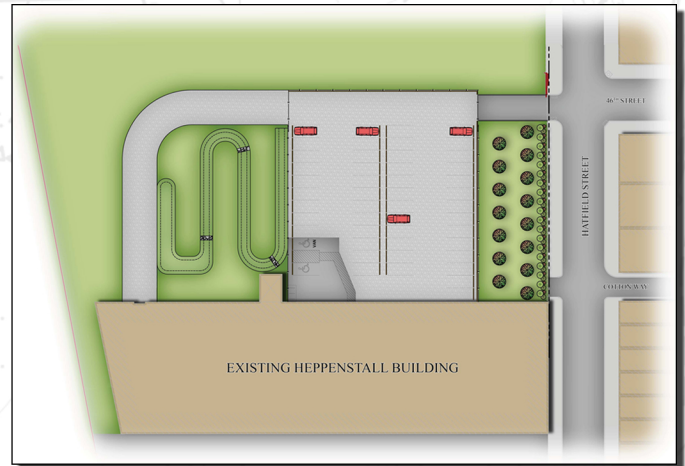
- COORDINATION REGARDING STORMWATER CONVEYANCE AND DISCHARGE WITH SEVERAL PITTSBURGH GOVERNMENTAL AGENCIES, INCLUDING THE PITTSBURGH WATER AND SEWER AUTHORITY (PWSA), ALLEGHENY COUNTY CONSERVATION DISTRICT (ACCD) AND THE CITY OF PITTSBURGH PLANNING AND ZONING DEPARTMENTS.
- LIMITED PROJECT AREA SITE SURVEYING.
- UTILITY REVIEW, PLANNING AND COORDINATION.
- SITE DEVELOPMENT CONSTRUCTION DOCUMENTS.
- EROSION & SEDIMENTATION POLLUTION CONTROL PLAN PREPARATION.

#### SITE CHALLENGES:

- BUDGET CONSTRAINTS REQUIRED INNOVATIVE DESIGN AND CONSTRUCTION TECHNIQUES. RED SWING DESIGNED A LOW-MAINTENANCE GRAVEL LOT THAT MET THE CLIENT'S SHORT-TERM NEEDS, ELIMINATED PWSA PERMITTING AND SAVED SEVERAL THOUSANDS OF DOLLARS OVER A TRADITIONAL ASPHALT LOT.
- MINIMIZED SITE DISTURBANCE. BY DESIGNING THE LOT TO LESS THAN AN ACRE, RED SWING ELIMINATED THE NEED FOR THE OWNER TO PURSUE A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.

#### RED SWING VALUE-ADDS:

- CREATED AN INFILTRATION SWALE THAT ALLOWS STORMWATER TO PERCOLATE INTO THE GROUND VS. BEING CAPTURED IN A TRADITIONAL DETENTION/CONVEYANCE SYSTEM. THIS ELIMINATED A LENGTHY PWSA PERMITTING PROCESS, AS WELL AS THE NEED FOR COSTLY PIPING NETWORKS, INLETS AND MANHOLES; AND SAVED THOUSANDS OF DOLLARS.
- CODE-COMPLIANT DESIGN. RED SWING'S DESIGN MET ALL ZONING CODE REQUIREMENTS DURING THE FIRST ZONING BOARD REVIEW, SAVING MONTHS OF REDESIGN/ADDITIONAL REVIEWS AND ADDITIONAL ENGINEERING FEES.
- INCORPORATED INEXPENSIVE BUILDING MATERIALS. TO MINIMIZE CUT AND ASSOCIATED CONSTRUCTION COSTS, RED SWING INCORPORATED RAILROAD TIES AROUND THE PERIMETER OF THE GRAVEL LOT TO CREATE THE FIRM PARKING LOT BORDER.



#### PROJECT STAFF:

**ROBERT SMITH & ZACH MILANAK**

#### CLIENT:

**DESMONE & ASSOCIATES ARCHITECTS  
(BRAD FRANKHOUSER)**

#### PROJECT DATES:

**MAY 2013 - OCTOBER 2013**

**4154 OLD WILLIAM PENN HIGHWAY, SUITE 300 • MURRYSVILLE, PA 15668**

**P: 724.325.1215 F: 866.295.5226**

**WWW.REDSWINGGROUP.COM**

**CIVIL ENGINEERING • DUE DILIGENCE • SUSTAINABLE & WATER • TELECOMMUNICATIONS • OWNERS**