

KEYSTONE
ENGINEERING &
CONSULTING, INC.

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OCEANS RITZ PARKING DECK REHABILITATION PROJECT

Project Summary #1
Reporting Period: 4.23.2018 thru 5.4.2018
Daytona Beach Building Permit # C1711-057

Prime Contractor: Flores-Hager & Associates
Superintendent: Dave McDonald

PROJECT LOCATION

2900 North Atlantic Avenue, Daytona Beach, Florida 32176

These project summaries will be published by Keystone Engineering on a bi-weekly frequency until the project achieves Substantial Completion. Photographs will be supplied depicting general work underway, including specific repairs with explanations.

The parking deck project kicked off on April 23, 2018 with a flurry of activity at the initial work area of the south parking deck that was cordoned off with temporary chain link fencing. FHA staffing was four workers assigned during week #1 and eight for week #2 and no time was lost due to inclement weather.

The sub-contractor mobilized a variety of specialized equipment to strip the deck coatings that required five to six personnel to operate the assembly-line process. The first pass was with a ride-on scraper to break the majority of the polyurethane free from the substrate followed by a shotblast using small spheres, grinding with dustless equipment and finally another shotblast to create the Keystone specified concrete surface profile (CSP) of a 3 to 4 as evaluated with the chips from an International Concrete Repair Institute (ICRI) Guideline for optimum adhesion of the waterproofing system. The sub-contractor wrapped up their work on April 30th and demobilized until called back for the north deck.

The engineer sounded the stripped deck at the eastern bay during week #2 and spray-painted boundaries for excavations where spalling existed with the crew immediately attacking with the chipping hammers. The east beam and parking deck curb of the parking deck was excavated until sound concrete and non-bond inhibiting reinforcement was reached to comply with ICRI standards. Keystone provided instruction for epoxy set doweling of new reinforcement at the east beam rather than cleaning the existing steel and inspected the area on May 3, 2018 as a pre-pour evaluation granting approval to cast.

The repairs were mapped on drawings and documented on a Record of Repair submitted to the contractor and association for accountable billing of Unit Rate repairs. During the excavations some locations ended up full depth of the slab that was an average of four-inches deep with the steel placed about one-inch from the bottomside during original construction. Keystone amended the surface repair plan to a full depth excavation at all field areas that will be invoiced at the rate of a surface spall listed in the contract to ensure a durable restoration is accomplished. Plans are to have the initial casting of the field excavations late during week #3 or early week #4 using ready-mix concrete and a concrete pump for placement.



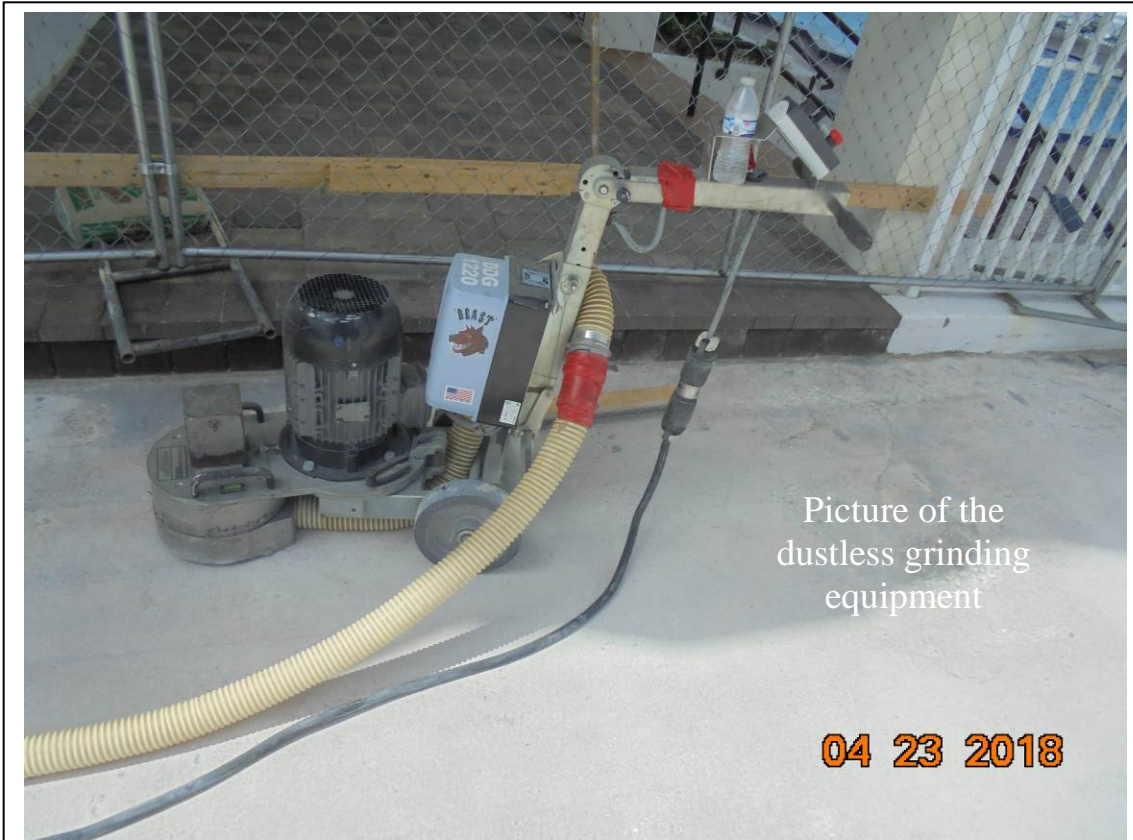
First day of work at
the south parking
deck!!

04 23 2018



First pass with
the bladed
scraper

04 23 2018



Picture of the dustless grinding equipment

04 23 2018



Marking for repairs completed by the engineer on April 25, 2018

04 25 2018





East beam
and curb
excavated as
directed by
engineer

04 27 2018



Note the degree of
corrosion in the
excavated area and the
steel is too close to the
bottom of the slab to
avoid full depth repairs

04 27 2018