

R. BAKER & SON PRECON: Detailed Planning, Precise Scheduling, Accurate Budgeting

Pre-construction services, or precon, is the detailed planning of a project from scheduling and budgeting, to layout and execution. It is used to determine project costs, feasibility, and timelines when budgeting for a project. A quality preconstruction effort that results in maximum accuracy and project success entails delving into and planning the fine details of each project phase.

Precon plays an integral part in all R. Baker & Son projects. All demolition and selective demolition procedures are thoroughly evaluated and outlined in detail to meet client's needs. Rigging and routing plans specify how, when, and where to move equipment, taking into account sizes, weights, and separation points. Mobilization and demobilization plans are developed to determine the costs and logistics of moving cranes, lulls and other heavy equipment.

Debris separation and removal are also included in precon. Hazardous materials are identified, and clean demolition and remediation plans are developed to meet all requirements. Dust, noise and vibration planning is addressed in detail. Equipment delivery and storage locations are determined. All available LEED rating points are identified.

R. Baker & Son has accumulated over 75 years of project experience. This enables us to plan, support, and meet our clients' needs on each and every project with the highest level of accuracy and execution available in our industry.



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CONSTRUCTION SAFETY SIGNS

Construction safety signs are critical to guarding the health and well being of workers and others in close proximity to a jobsite. OSHA and ANSI specify standards and requirements for safety signs that include types, background colors, lettering colors and sizes, and how and where they should be posted.

Danger signs must be used where an immediate hazard exists that can result in death or serious injury. These signs feature an explicit, universal "Danger" legend, which is red and white on a black background. Caution signs should be posted to warn against potential hazards for minor to moderate or to caution against unsafe practices. The background is yellow, with black lettering for messages such as "eye protection required" or "watch for construction vehicles". Warning signs are used to represent a hazard level somewhere between "caution" and danger. These signs feature black text on an orange background. Exit signs must display red lettering that is six or more inches high on a white background. Safety instruction signs have a green upper panel with white lettering for the principal message and are on the bottom panel are white with black lettering.

OSHA also provides specifications for directional and traffic signs, as well as accident prevention tags. Durable construction safety signs can be purchased from suppliers in a multitude of standard messages or can be customized, but free printable PDF signs are readily available online for download. These are especially ideal in situations where a new hazard develops and requires an immediate warning.

R. Baker & Son: Project Photos

Space Capsule Relocated on Intrepid -

R. Baker & Son crew steers a skid carrying a Russian Soyuz TMA-6 spacecraft to a new location aboard NYC's Intrepid Sea, Air and Space Museum. Workers used a gantry and a 3-ton chain fall to rig the capsule from its stand onto the skid, carefully skated it to an elevator, and moved it onto the flight deck to its new display.

Queens Refinery Demolition -

R. Baker & Son excavators remove debris from a refinery and bulk oil storage facility demolition site in Queens, New York. The project included demolition of numerous steel tanks, dike walls, pile tops, bunker tanks, crib walls, foundations, buildings, sheds, and rack structures. The project was completed safely, on time, and on budget.





INDUSTRIAL SITE RECOVERY ACT, ISRA

For the past several years there has been a strong trend toward plant relocation, consolidation, downsizing, closure, demolition, and property transfer across the U.S. Each time an owner or operator closes operations or transfers ownership in the state of New Jersey, the NJDEP must be notified and the Industrial Site Recovery Act, or ISRA, comes into play.

In years past, many New Jersey manufacturers left behind severe contamination when sites were vacated. In response to growing awareness of the risks to public health and the environment, the State enacted legislation, the Environmental Cleanup Responsibility Act (ECRA) in 1983 to ensure that proper cleanup of the site occurred. Though well meaning, it proved difficult to administer and imposed immense costs and delays on business owners. As a result, ECRA was amended to streamline the process, renamed ISRA, and signed into law in 1993.

ISRA's primary goal is to ensure that industrial sites have been efficiently and properly remediated to acceptable condition on a timely basis before being closed or transferred. **Specific criteria are used to determine whether a facility is subject to ISRA, the main one being the use or presence of hazardous substances or wastes.** If ISRA is warranted, and contamination is found to be present, a cleanup plan must be developed and submitted to the NJDEP for approval, and a funding source must be established. But regardless of whether the site is found to be contaminated, authorization must be obtained from NJDEP, or the transaction must be delayed.

R. Baker & Son is expert in ISRA and its application, with staff Environmental Engineers and consultants who can perform an in-depth analysis to determine an individual's facility's needs and come up with a plan to make the property marketable. For more information about ISRA and how R. Baker & Son can guide you through the process, or if you have any questions, please contact Art Sferlazzo at 732-222-3553.





Helicoptor Rigging

When the use of perimeter cranes is not feasible for moving heavy materials and equipment due to to inaccessibility or economic concerns, helicopter rigging can be an effective alternative. Aerial lifts require highly-trained and experienced personnel, thorough rigging and flights plans, and extremely careful preparation. It is critical to determine the load's precise weight, size, shape, and orientation. Risk assessments must be performed to identify hazards such as power lines, structures and cranes, and loose materials and structures in the landing or staging area. Flight permissions must be obtained from the FAA and other authorities.

Different helicopters are designed for different payload sizes, and the Erickson S-64 Aircrane, with a maximum hook weight of 25,000 lbs, has the largest capacity. The S-64 has a unique design that features an aft-facing pilot station, allowing full control of the aircraft while giving the aft pilot an unobstructed view and load placement to within millimeter tolerances. An antirotation rigging system prevents external loads from twisting or swinging from rotor wash. In addition to heavy-lift construction, uses for the S-64 include firefighting, disaster response, and timber harvesting.