Vol. 2, No. 4 Exceeding the Expectations of the Construction Industry Since 1982 December 2004

re:news

DESIGN INSTALLATION SYSTEMS, INC.
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AT DESIGN INSTALLATION SYSTEMS, OUR **REPUTATION** IS IN OUR **WORK**.

DECEMBER FEATURES

PROJECT PROFILES:

- **1430 NORTH ASTOR**
- **ST. CLEMENT CHURCH**
- **1000 WEST WASHINGTON**
- **CHICAGO BOARD OF TRADE**

INTRODUCTION

As winter weather approaches, we review the projects completed this year and plan for projects carrying over to next year. Consistent quality of construction requires review and reevaluation; the end of the construction season gives us the opportunity to do just that. As weather worsens and projects wind down, we find ourselves with time to reflect and learn the lessons from the past year. Design Installation Systems is determined to make each new year better than the last. Without analyzing or critiquing our previous performances there is no way for improvement to begin.

Taking an honest assessment of our most recent work we can be confident that next season we will provide our clients with high quality construction and customer service. From initial staging and setup to final completion and cleanup, we note problems that may have occurred and create ways to avoid repeating any mistakes. At DIS we are constantly adjusting to conditions and making every effort to minimize problems when they occur; the annual winter slowdown gives us an opportunity to study our process from a distance.

To be ready for a new construction season the building owner needs to assess maintenance needs and construction scheduling now. A serious and full accounting of your building's condition and future needs is an essential step in your long-term planning. If work is not in the cards for next year, planning ahead with budgets to limit special assessment might be needed. If work is in your plans for 2005, then now is the time to notify contractors and get bid documents ready. There is no substitute for getting this done early. Taking advantage of the fact that the contractor has time on his hands and may be somewhat unsure about the next year's workload, early bidding provides a competitive edge that will disappear later in the season.

At Design Installation Systems, we are ready to review bid documents now. If no bidding documents exists, our estimators can review existing building conditions and provide an outline of work along with pricing information. Should there be any conditions which might warrant additional review, we can provide building owners with contacts at architectural and engineering offices in the Chicago area.

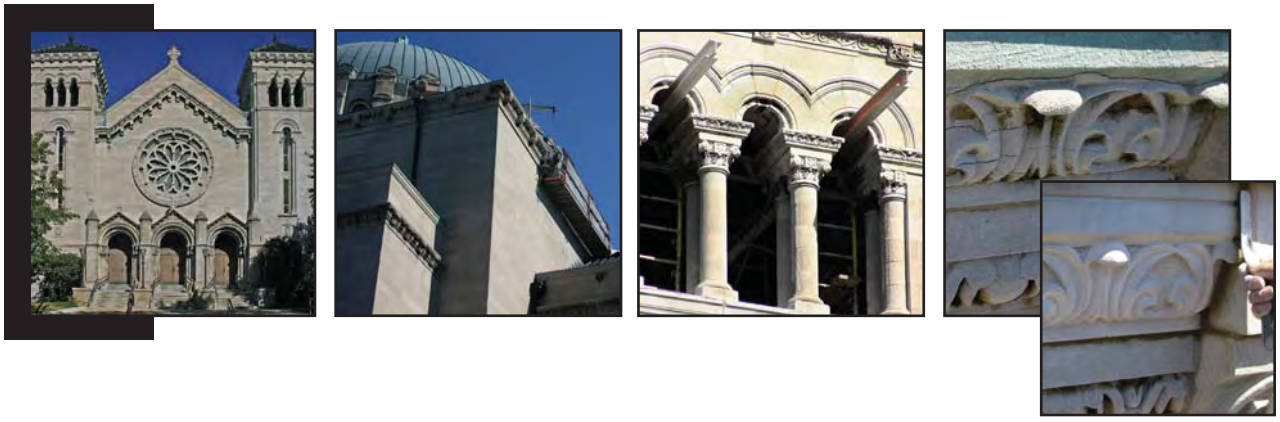
The winter slowdown does not mean shutdown. Over the years materials and procedures have adapted to the cold weather. Even though much of exterior restoration work is considered weather sensitive, most elements of the construction can be accomplished during the winter and with acceptable results.

PROJECT PROFILES

1430 NORTH ASTOR

This north shore condominium building is a single phase repair project with concrete work completed in 2004 and coating work to be completed in the spring 2005. Design Installation Systems was contracted to complete concrete restoration work on the south and east elevations. The work included a good deal of balcony restoration, specifically the inspection and refurbishment of the railing systems, deck preparation, and coating and re-caulking work. Where balcony walls needed work, balcony doors were sealed to prevent exposing unit owners to any unsafe conditions. On decks where slab tops or slab undersides needed repair, balconies were shored to prevent collapse.

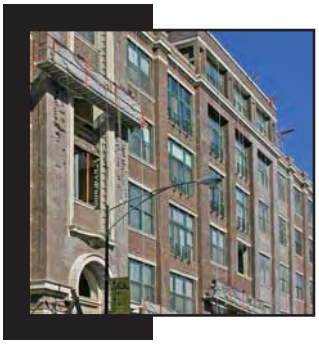
Water resistant coating will be applied to concrete surfaces after completion of the concrete repairs. Coatings of this type are painted on to protect the concrete and patched areas as well as to give the building a uniform appearance. These coatings are available in a wide variety of standard colors and can be custom mixed to almost any color, making it possible to touch up existing coatings. It is recommended that all concrete facades be coated in some way to help protect them against the damaging effects of weather. Coating work must be completed only after repairs have completely cured and moisture tests have been completed.



ST. CLEMENT CHURCH

This is a project that got its start well before the 2004 construction season. Preplanning and early material orders were the only reason this project was completed in one construction season. Some of the intricate stone needed to be hand carved and the long lead times involved required that the orders be placed while the snow was falling in early 2004. The planning and bidding work were completed well before most projects were finalized this year; that allowed Design Installation Systems to hit the ground running in the spring.

Stone replacement and tuckpointing work was the main emphasis of this project. Work also included stone patching and pinning. Hand patching stone is an art form, and as such DIS has craftsman trained and experienced in methods which make patched stone blend in extremely well with adjacent stone. Pinning reinforces stones left in place and is often used in conjunction with the stone patch.



1000 WEST WASHINGTON

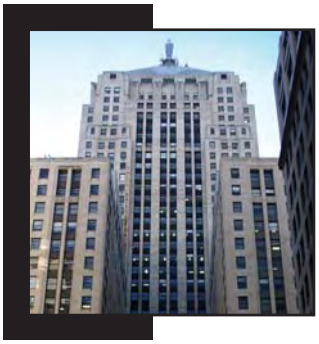
This two year masonry project is slated to be completed this year. Work areas included two condominium and loft conversion buildings. Access to some areas of the building was difficult, requiring Design Installation Systems to mobilize specialized equipment to be used in unusual ways.

Safely rigging some of these areas requires years of experience and working closely with equipment fabricators to assure proper execution.

Masonry repair and replacement was a major portion of the scope; the work also included steel repair and replacement as well as caulking work and limestone replacements.

Masonry replacements included some terra cotta masonry units; this type of replacement almost always requires phasing the project. Providing a new unit for a terra cotta replacement requires that the old unit be removed and pieced together to replicate the original profile, then the sample is sent to the manufacturer. After color and profile drawings are prepared they must be approved by the building owner. After all approvals are made (which sometimes requires more than one submittal), the piece can be ordered. Finally, fabrication and shipping to the job site can take three months or more, making the entire process last six months on average. Due to this long lead time projects including terra cotta replacement require preplanning or consideration of alternate materials.

In some instances an alternate to terra cotta is limestone. Design Installation Systems has used limestone to replace terra cotta in less visible areas. Although these replacement pieces can be made to the same profile as the original piece, the texture and color do not match as they would with a terra cotta replacement. Using limestone replacements in low visibility areas provides for faster repairs and lowers the overall cost of the project.




CHICAGO BOARD OF TRADE

This year, Design Installation Systems began a phased, Multi-year project at the Chicago Board of Trade. The following paragraphs were provided by two key members of the project team. We thank Mr. Phil Renouf and Mr. Bill Benesch of Klein & Hoffman, Inc. for their contribution.

The imposing Chicago Board of Trade Building provides a striking termination at the south end of LaSalle Street in Chicago. Completely clad in Indiana limestone, the building was designed in the late 1920s by the prominent architectural firm of Holabird and Root. Art deco motifs are utilized throughout the building's muscular form to achieve a physical representation of the concepts of strength and permanence. In order to continue to compete in the current tight real estate market, the Owners instituted a comprehensive program of repairs and upgrades to make the facility more attractive to current and new tenants. Klein and Hoffman, Inc. (K&H) was retained to provide consulting engineering services for a large-scale facade restoration that would address the building's deficiencies and comply with stringent guidelines imposed by CBOT's Landmark status.

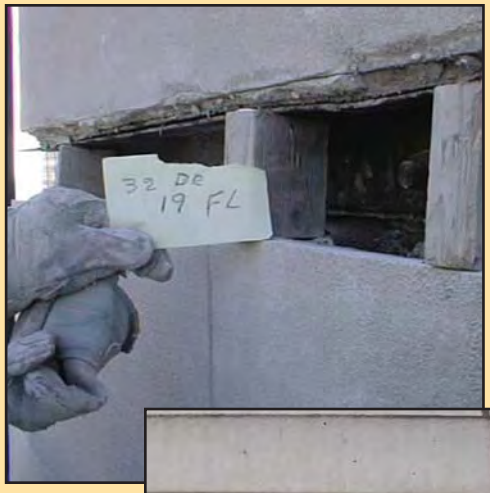
The restoration program, developed by K&H in close collaboration with the owners, was designed to address the continuing problems inherent in limestone clad, steel-framed structures of the early twentieth century. Shelf angles and lateral support steel were degrading at an alarming rate. Seventy-five years of exposure to the severe Chicago climate, as well as the destructive effects of pollutants, has caused corroding steel to damage the limestone veneer throughout the facade. To halt the facade's continuing deterioration, K&H designed and specified a full range of repair including: rebuilding of complete sections of parapet walls; replacement of large corner stones, or quoins; replacement of large quantities of shelf angles; installation of stone dutchman; replacement of whole damaged stones; and extensive tuckpointing. Additionally terra cotta spandrel panels were specified for replacement and repair.

Troublesome landmark issues were confronted and solved by K&H consulting with McClier, the industry leader in historic building preservation. Color matching replacement limestone to the existing masonry was given the highest priority along with craftsmanship. All aspects of masonry restoration are being put to the test including steel replacement, fit and finish and mortar joint duplication. During the pre-bid process, full cleaning of the base building and partial cleaning of the tower were added to revitalize the colors of the stone and terra cotta masonry. The contractor chosen to perform the restoration program had to be eminently qualified in all aspects of limestone rehabilitation with the added expertise in cleaning historic edifices.

Design Installation Systems is proud to be part of this historic restoration project. In upcoming issues we will bring additional updates and ask other members of the project team to contribute.

CONSTRUCTION NOTES

WINTER INSPECTIONS



Inspection work is a very important part of long-term planning and budgeting for building maintenance. Regular inspections of most buildings, six stories or more in height, in the City of Chicago, is mandatory; for other buildings it is not. For a full explanation of inspection requirements visit the City of Chicago website, "cityofchicago.org", a link to the department of buildings is on the homepage.

City of Chicago inspection requirements notwithstanding, all buildings require maintenance, and properly maintaining a building always reduces repair costs. Fixing a minor problem before it becomes a major issue is smart, not only reducing the cost of the repair, but lessening the repairs' impact on building operations. The key is to properly assess the needs of your building before any problems become apparent either to the tenants inside or passersby on the street. The best way to assess conditions is with a thorough, hands-on inspection by a qualified person.

Design Installation Systems has the people and equipment to provide a building's representative that hands-on inspection. This time of year is perfect for inspections; cold weather may hamper some repair efforts, but as long as wind, snow and temperature do not create hazards, inspection work can be done. Having the initial planning work completed soon is essential to being ready for construction in the spring.

After a comprehensive survey of the building is complete, documents outlining any needed work should be provided for bidding. Normally this is a process that takes weeks and needs to be completed before bids can be solicited. The contractors should be given a reasonable amount of time to review the bid documents. Remember that the contractor may not be familiar with your building and its conditions. Bidding includes the contractor looking over all aspects of the building and planning out how to do the work. To provide a responsible bid the contractor must make himself aware of the existing conditions and all aspects of the work that is to be completed. This portion of the process normally takes a couple of weeks. Early inspections provide adequate time to complete the bidding process and to begin the project once the spring arrives.

CONSTRUCTION NOTES

WEATHER RESISTANT MATERIALS

Over the years materials manufacturers and researchers have endeavored to find building materials that are more resistant to temperature extremes than the traditional types. From their perspective, elongation of the construction season means the consumption of more materials and less income variation from season to season. From the contractors perspective it means keeping employees working. This is the main factor in keeping knowledgeable and reliable workers. With this in mind Design Installation Systems has made a serious effort over the years to keep its key people busy during winter months. The success of this philosophy is evident in the fact that many of our workers have seniority… experience keeping quality of construction high.

To that end, we have made ourselves aware of changes and innovations in low temperature methods and materials relating to exterior restoration work. Summertime work has its challenges as well, but higher temperatures in the Midwest are handled mainly with changing techniques and not so greatly by specialized materials. Colder temperatures and the ability to complete outside work year-round require evaluating and reassessing new products and old.

Products specifically designed for low temperature application have proven to be reliable and using them is no longer a threat to the integrity of the repair. Chloride-rich anti-freeze and questionable accelerants have been replaced by time tested and more trustworthy alternatives. A longer construction season means that the building owner has a project completed rather than held over and is happier with the contractor. Being able to finish a construction project late in the year rather than having to remobilize makes the contractor happy as well.

As we push forward at year's end, however, we are mindful of the limits of men and materials. Many weather-proof materials are still weather-sensitive until they have been applied and fully cured. Currently the trend is to modify the materials to allow for application in lower temperatures, but near-term expectations are for continued reduced flexibility during the winter months. Restrictions due to low temperatures are needed for proper performance of most materials. With the help of innovative manufacturing and application we endeavor to minimize the adverse effects posed by low temperatures and provide quality service throughout the year.

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