

**IRNetworking**  
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**CALENDAR (Click on Links for more information)**

January 25, [Environmental Business Council of New England C&D Summit](#), Westboro, MA  
February 2, [GoingGreen Boston](#), Boston, MA  
March 08, National Association of Student Affairs Administrators, [NASPA 2008 Conference](#),  
Boston, MA  
March 11, Northeast Sustainable Energy Assn, [BuildingEnergy 2008](#), Boston, MA  
March 18, MA Assn of School Business Officials, [Mass School Purchasers Exhibition](#),  
Randolph, MA  
March 19, [New England Facilities Expo](#), Boston, MA  
March 20, Northern New England APPA, [NNECERAPPA Annual Conference](#), Burlington, VT  
March 21, New England Hospital Engineers Society, [NEHES Spring Seminar](#), Leominster, MA

**GENERAL IRN NEWS****Furnishings, Mattresses Still Needed for Hurricane Dean & Felix Relief**

In August, Hurricane Dean tore a path of destruction across the central Caribbean and into Mexico. Just a couple of weeks later, Hurricane Felix pummeled Nicaragua and Honduras, and brought devastating rains to Guatemala and El Salvador. It was the first time in over 130 years that two Category 5 hurricanes made landfall in the same season.

The damage was overwhelming. In Jamaica, which took a nearly direct hit from Hurricane Dean, tens of thousands of residents were left homeless, hundreds of schools and businesses were destroyed, and the public health infrastructure was pounded into immobility. Damage from Hurricane Felix was just as bad.

In response, one of IRN's relief partners, Food for the Poor, put out an urgent request for relief supplies. FFTP is the largest international relief organization working in the Caribbean basin, with a presence in nearly two dozen countries, including those hardest hit by Hurricanes Dean and Felix. FFTP staff were on the ground when Dean struck, and quickly mobilized in Central America to deal with the aftermath of Felix. FFTP took the lead cataloging the supplies most needed to rebuild the homes, businesses, and communities damaged or destroyed by the storms. Among FFTP's highest priorities were residential furniture (including mattresses), office furniture, and school furniture and supplies.

This was out of cycle for most residential life and classroom cleanouts. But we also knew that many schools have large quantities of dormitory, administrative, and classroom furnishings sitting in storage. With students settled and classes under way, IRN hoped that many schools would be able to evaluate what they had in storage, and make some quantity available for hurricane relief.

This turned out to be true. With members' help and generosity, IRN was able to provide close to 20 containers of furnishings that were sent directly from client sites to relief efforts in the Caribbean and Central America. An additional 20+ containers have been sent from IRN's warehouses in Everett and Holyoke, Massachusetts, where we collect furnishings that are donated in less-than-truckload quantities.

Even now, three months later, the need is urgent, and no quantity is too large or too small to be of value. Christmas and winter break are also a time when many schools have mid-year furniture replacements, or a bit of breathing time to clean out stored surplus. IRN can coordinate the loading and shipment of large quantities directly from any campus, hospital, or corporation in the country, and can handle less-than-truckload quantities throughout New England. Please get in touch with Mark Berry (866 229-1962) or Stacey Clark (603 568-5300) or email the IRN ([mberry@ir-network.com](mailto:mberry@ir-network.com)) for more information or to schedule a pickup.

**Please Welcome Tracy Andosca, aka Bill, Junior**

We're pleased to let you know that Tracy Andosca has joined the IRN staff to help Bill in the transportation department (and fill a dozen other roles, as she's quickly found out).

Many of you have already spoken with Tracy on the phone, and know that she's taken to the IRN like a duck to water. You also know that she's level-headed, patient, and very, very competent.

Tracy's principal role will be to help handle the increasing number and complexity of transactions that are coming through the Network. As we've expanded our surplus property program and seen more and more projects in construction/demolition – in addition to growth in our core programs – Bill's workload has rocketed. Although we've made large strides in streamlining our transaction management (see below), it was clear that Bill needed an extra hand.

Tracy is a New Hampshire native with a strong background in client service and support, work order management, shipping/receiving, and record management. She's even been a dispatcher, a rare skill, and has already developed great working relationships with IRN's haulers and end markets.

So please say hello to Tracy when you get her on the phone. And don't forget to welcome her with a few "It's Friday afternoon and I need a pickup yesterday" hand grenades, to let her know what life at the IRN is really like.

### **And Eric Tiner in the Truck and Warehouse**

Also, keep a lookout and say hi to Eric Tiner when you see him with Jesus on the IRN truck, out picking up electronics, Universals, surplus, and whatever. Eric will be strong back number two on the truck, and will also be working to streamline our warehouse operation in Everett.

Eric comes to IRN from Sterling movers, one of our biggest logistics partners throughout New England. Eric was a crew chief at Sterling, so he's got experience in site and personnel management and warehousing, in addition to driving, project planning, and loading. The best thing is that we've already worked with Eric as a Sterling crew leader on several projects. We know him well, and know that he's a person we can trust with the oddball situations we'll throw at him. And he knows IRN our programs, and our project management style, so he's hit the ground running.

### **And Rick Roberts in Southern Connecticut**

Members in southern and central Connecticut will be hearing from Rick Roberts early in the New Year. Rick has had a career-long involvement in sustainability. Two decades before it became a household word, Rick was in San Francisco setting up the first organization of Businesses for Social Responsibility. He's an experienced facilities manager with a strong background in construction management. Based in New Haven, he'll be an IRN generalist: managing construction and demolition recycling projects, planning and managing surplus cleanouts, and introducing IRN services to additional institutions along Connecticut's coast and inland to Hartford.

### **Improved Transaction and Transportation Management**

Most of you don't know Lynne Raleigh or the huge contribution she's made to the IRN in the past two years. Lynn is a database specialist who moved to Concord in 2005. When she looked for part-time work that would let her apply her skills and experience, we were lucky enough to snare her

As we've grown, Bill "Yellow Pencil" Yorkell was bogging down with his 16<sup>th</sup> Century technology. So we asked Lynn to take on the challenge of creating a database/management system for all of the transactions that come through the IRN, involving dozens of commodities, close to 200 IRN members, and complex pickups where we handle multiple materials from several members in the same truckload.

Over the past 18 months, working quietly behind the scenes, Lynn has created a system that allows us to plan, follow and report all IRN transactions by commodity, generator, hauler, and/or end market. The system also generates and sends (electronically) transportation orders, and generates the shipping manifests and bills of lading that we use to confirm that transactions have

been completed as requested. This information feeds directly into our accounting system, where it allows us to be more prompt with payment, invoicing, and reporting.

This has been a huge step forward for the IRN, and especially for Mr. Yorkell, who still keeps a yellow No. 2 pencil taped to his computer. Thanks to Lynne, we have a tracking and management system that's as flexible and accurate as any out there, and we're well positioned to manage the further growth that we're seeing every day.

### **IRN Enhances Reporting Capabilities**

Enhanced reporting capabilities are another feature of our new transaction management software. This is critical to many IRN members, especially as they're asked to fully document their contribution to organizational sustainability and other measures of environmental performance.

Lynne Raleigh has programmed new reporting functions that allow us to take weight and financial information from our accounting department and generate regular or special-request reports on the composition and quantities of all the materials we recycle for you. The program produces both tabular and graphic reports, sorted by material type and date, for any range of dates the user requests, including transaction-by-transaction documentation as well as summary information.

We tested and debugged the system over the summer and fall, and have set up procedures to produce a quarterly report for each IRN member, documenting (by material type and quantity) all transactions that have come through the Network. Upon your request, we'll also produce an annual report at the end of each fiscal or calendar year, and we can also produce special reports as you need them – for example, a particular commodity, a single construction project, an individual school term, RecycleMania reporting period, or other special focus.

[Katrina](#) and [Tracy](#) are taking the lead working with the new reporting system, so please contact them with any questions or requests. We've developed these new capabilities in response to your own suggestions, and we'll continue to look to you, our members, to help make this function as useful as possible.

### **IRN's Fleet: Honda Insights Going Strong at 130,000 Miles**

IRN lives with a contradiction. On one hand, we exist to help members reduce environmental impacts and improve their sustainability performance. On the other hand, active as we are in seven states, we drive tens of thousands of miles every year.

To minimize the impact of our driving, we have the most fuel-efficient fleet we could assemble.

Matt and John, our construction/demolition recyclers, drive more miles than anyone else in the IRN. Four years ago we bought them a pair of Honda Insights, the highest mileage hybrids on the road. 130,000 miles later, the Insights are still going strong, delivering 45-50 miles a gallon, month-in, month-out. Matt and JG still get a lot of stares when they pull onto a construction site between the F250s and Silverados. But as gas prices have gone up the stares are more like "Where do I get one" than "What the heck is that?" (We should also say that the hybrids have been incredibly reliable – nothing more than scheduled maintenance in 4.5 years.)

Our surplus staff need to transport tarps, tools, signs, traffic cones, and other bulky stuff, so something like the Insight doesn't work for them. So Stacey Clark tools around in a Toyota Matrix, which has huge carrying capacity and 35+ miles per gallon.

Mark L also needed carrying and passenger capacity, and found it in a diesel VW Jetta station wagon. Another car with lots of carrying capacity in a small package, and a small but turbocharged engine that delivers close to 45 miles a gallon.

So we try. We can't provide the service you expect without putting in the miles, but we try to do so as efficiently as we can. Don't hesitate to take a look inside or under the hood when you see IRN-2, -4, -5, or -6 in your parking lot, or ask any of our crew about their experience with their high-mileage chariots.

### **IRN Helps Stonyfield Farm and IKEA to Improve Waste Management and Recycling**

Earlier this year IRN expanded its reach to include environmentally conscious companies that could benefit from IRN's cooperative business model. One of the first we worked with is Stonyfield Farm, which most of you know for their pro-active environmental and social activities, as well as their yogurt and smoothies.

As they planned to expand their Londonderry, NH, manufacturing plant, Stonyfield took the opportunity to re-evaluate their waste and recycling practices, and asked for IRN's help. As you'd expect, Stonyfield already had extensive recycling that recovered more than a half-dozen materials, but there were some problematic commodities that had evaded their best efforts. These included large volumes of yogurt that were already packaged but for various reasons (e.g., fruit or flavor switchover) couldn't be sold or offered to food banks, as well as plastics, cardboard, and other packaging materials.

Working with Stonyfield's Lisa Drake and Jenna Bourne, IRN carried out a thorough waste management assessment, and came up with recycling solutions for even the most troublesome waste streams. Using a combination of high volume material movement and depackaging technologies, and taking advantage of IRN's marketing experience, IRN and Stonyfield have worked up plans that will double or triple Stonyfield's already good recycling rate. Stonyfield is currently permitting its expanded production plant, with "design to recycle" an important part of their plans. When the facility comes on line next year, Stonyfield will continue to set standards for environmental performance even as production ramps up to new levels.

IRN also got a call from IKEA's New Haven, CT store, put in touch by Yale's C.J. May. IKEA has a massive throughput of materials, and was having trouble integrating recycling into its operations. Dana took the lead on the project. He replaced a compactor with two balers, argued successfully for a dock door, and worked closely with North Shore Recycled Fibers (our principal fiber market) to set up recycling to capture cardboard and other fibers, plastic banding, plastic film, and excess furniture. The program is set to be fully implemented by mid-January, and IKEA's national headquarters is looking at New Haven as a model for recycling operations that can be adopted nationwide.

### **Rhode Island Shrink Wrap Wraps Up Third Year of Expansion**

With the New England boating season wrapped up, IRN also wrapped up its third year recycling the plastic shrink wrap that's used to cover boats over the winter.

The program has proven tremendously popular. Since its pilot year in 2005, the program has expanded from 20 to nearly 45 marinas, and in 2007 recycled over 110,000 pounds of shrink wrap, up from about 60,000 in 2006.

This is the largest and most successful program of its kind in the country. We sell large clear plastic bags to the marinas, they stuff in as much wrap as they can (about 25 pounds per bag),

and we pick up the bags of wrap on a regular route – bi-weekly in the spring, less frequently at other times of the year. We also pick up and recycle clear and colored poly sheeting.

Based on the program's success, the Rhode Island Marine Trades Association wants to expand recycling to more materials, focusing first on one-gallon HDPE anti-freeze jugs. A single powerboat, they tell us, needs about 25 gallons of anti-freeze, and even a sailboat uses about 16 gallons. After considering several options, we've requested funding for a granulator that we can mount in the back of a truck, so that we can densify the material on a collection route, getting it into a form that we can take directly to market. We can also use the granulator for other plastics, like the soda, water, and liquor bottles that are disposed by the hundreds of thousands by marina patrons. If funding is approved, this program will kick off in 2008.

## **SURPLUS PROPERTY PROGRAM NEWS**

### **2007 Surplus Totals: 100+ Organizations, 387 Containers, 5.2 Million Pounds**

In 2007 IRN and its members shipped over five million pounds of surplus furniture, equipment and supplies – 387 container- and trailer-loads – to relief and development projects in twelve countries and eight U.S. states. Speaking for the thousands of residents, business owners, medical workers and schoolchildren on four continents who will benefit from these goods, we would like to thank IRN members, corporate and other contributors whose concern and generosity made these results possible.

About 60% of the surplus, some 225 container loads from 36 organizations, has come from larger cleanouts of one or more full containers. These have ranged from one- or two-load projects to as many as 21 from Princeton, 25 from a Hannaford Brothers redevelopment project (Cony High School, Augusta, ME), and 35 containers from several projects at the University of Massachusetts in Amherst.

The balance of the surplus has been shipped from our warehouses in Everett and Holyoke, MA. In 2007 we have greatly expanded use of the warehouses, where we consolidate "Less Than Truckload" pickups of surplus from generators who don't want to throw usable items into the dumpster, but don't have enough space to accumulate a full trailer-load. We shipped about 150 loads (as many as six a week) from the warehouses, over two million pounds.

We'd like to emphasize the need for classroom furniture. Although they didn't reach the United States, much of the Caribbean and Central America were devastated by three major hurricanes in 2007, while parts of Mexico suffered severe flooding in October and November. And there's still need here in the U.S. for school furnishings as part of the long-term recovery from Hurricanes Rita and Katrina. We hope that any school with excess classroom furniture will give us a call, even if the furniture won't be available until the end of the school year.

### **IRN Expands National Presence**

IRN is expanding its surplus program to assist institutions in California and across the United States. Three years ago we got a call from Harvey Mudd College in Claremont, CA asking if we could facilitate the reuse of furniture from a large dorm cleanout. As most of you know, we have a hard time saying "No" to a recycling challenge, so we got (Dana) on an airplane, confirmed the inventory, found a user, lined up the mover and the containers, flew out again to manage the project, and got the job done.

Harvey Mudd called again the next year, and lined up a several more schools along with them. Since then, we've done over half a dozen California projects with four different schools, and have several more on the books for the next six months. With this nucleus, we are able to handle projects anywhere in Southern California, and we hope that this extended network will continue to grow.

Meanwhile, we've also gotten calls and done projects for the University of North Carolina (classroom and administrative), Ohio University (mattresses, residential life), the Lake Travis School System (classroom) and IKEA (residential furniture) in Texas, the Emma Willard School and Russell Sage College in New York (residential life), and Princeton University (residential life, classroom, administrative), in addition to projects from all corners of New England, from Yale and Eastern Connecticut in the south to Middlebury, UVM, and across to Plymouth State (NH) and Bowdoin up north.

With this experience, we're ready and able to handle surplus projects just about anywhere in the country. Our network of nonprofits, our alliance with movers, and our logistics capabilities now extend nationwide, and we'd like to hope that any school, anywhere in the country, with surplus that can be reused for disaster relief and development will give us a call.

### **Time to Plan for Winter and Spring Projects**

Please take some time to poke into storage areas and review upcoming construction or renovation plans to identify surplus that can be moved out in between-term or winter projects. IRN's education members typically see a brief active spell at this season, taking advantage of a few quiet weeks to clean out or address special needs, or else finishing up delayed summer projects.

Health care organizations and others are more flexible in project scheduling, and winter is often an active cleanup/cleanout period as larger construction projects quiet down.

Also, if you foresee a project coming up after the end of the school year, or anytime in May through August, please let us know as soon as you can. This is when we see the bulk of our surplus activity, so the more lead time we have to organize, identify recipients for your surplus, line up movers, and plan our own time, the better we can serve you. We are not looking for a binding commitment, just an idea of what we should expect on our calendar.

On IRN's side the need for surplus among our nonprofit partners doesn't go away in the fall, winter, or anytime. As noted above, the Caribbean, Central America, and parts of Mexico are trying to bounce back from a horrendous hurricane season, even as they're still repairing long-term damage from a string of hurricanes in 2004 and 2005. Almost any surplus – residential, office, classroom, or medical – can be absorbed by these continuing relief efforts.

So please take a look and let us know if you have surplus that needs to go away, be it a few pieces for a One-Stop or milk run pickup, or hundreds of stored or other offline items for a container-load project.

### **IRN Expands Network of Nonprofit Partnerships**

IRN's surplus program has expanded rapidly, from 200 containers in 2005 to nearly 400 in 2007. At the same time we have expanded our network of nonprofit relief and development partnerships. In 2005 we shipped materials through four partners. In 2007 we had a network of eighteen partners working in the U.S. and on every continent except Antarctica and Australia.

Very few of our partners take surplus into warehouses. Most match full trailer- or container-loads with specific relief or development projects. To meet this need, IRN spends a lot of time and effort to document, photograph, and prepare inventories that we distribute to our network of partners, who then request the materials that match their needs. Sometimes this will be one or two containers, sometimes two or three dozen containers from a major cleanout. Those of you who have used IRN for a large project have seen this process at work.

Different of our partners also have different priorities. Some focus on medical equipment and furnishings to establish or modernize hospitals and clinics. Others focus on education and are most interested in classroom furnishings (student and teacher desks, tablet armchairs, blackboards, etc.). Several focus specifically on helping build the economies of former Soviet republics; others focus on poverty relief efforts in specific regions of Africa, Asia, or the Americas, including areas affected by local or international conflict. Those whose specialty is disaster relief request a wide variety of materials to rebuild shattered villages and local economies – residential furnishings, mattresses, and office furniture (as well as medical and educational surplus). These disaster relief agencies are also the organizations that sometimes take material into their own warehouses, so they can be prepared to respond immediately in the wake of a hurricane or other disaster. With this variety, another of IRN's functions is to get to know each of our partners and their particular areas of interest, so we don't waste time and energy on mismatched priorities.

We've also learned that different partners have very different annual cycles. Some have their greatest need for surplus early in the fiscal year, when budgets are fresh and untapped. Others tend to look for surplus toward the end of their fiscal year, when they have unused funds in their budgets. Fiscal years can end in June, September, or December. Agencies that rely on government funding have different requirements and funding cycles than those who don't. All of our partners have been affected by the runup in fuel prices, which have put a big dent in shipping budgets.

So when you schedule a project and Bill's trucks show up, load up, and disappear down the highway, know that a lot of work has gone on behind the scenes to make it happen.

Looking forward to 2008 we will continue to build this network of partners. Sadly there's no end in sight to the natural and human tragedies that generate desperate need for usable surplus. But at the same time, there are many, many organizations whose mission is to meet this need. As long as IRN members come to us with surplus materials, of almost any kind, our own mission is to make sure that they find the best use possible.

## **CONSTRUCTION AND DEMOLITION RECYCLING UPDATE**

### **Hannaford Brothers Uxbridge (MA) Store Renovation – Night Runs & Backhauls**

IRN has managed a couple of "different" projects in the past few months. One of the most unique is at a Hannaford Brothers supermarket in Uxbridge, Mass.

Hannaford has made a company-wide commitment to sustainability, and a big part of that initiative is construction/demolition recycling. But recycling in the supermarket environment is a real challenge.

Hannaford (and other supermarkets) renovates their stores on a regular basis. But there's a problem: you can't close a store while you renovate, because customers will go somewhere else and won't come back. So the store has to remain open, fully functional, even attractive while it's being gutted and refitted with new shelves, coolers, freezers, deli, meat, and bakery counters, food prep areas, check-out lanes, and offices. It's a tough assignment.

Hannaford's solution is to do the work at night, in small chunks that can be isolated so they don't interfere with store operations. That's a recycler's nightmare, because wastes are generated slowly, in small quantities, with varied composition, on a site with no extra space where materials can be sorted and stockpiled. Achieving Hannaford's goal of a 75% recycling rate has been a learning experience.

For most of the waste materials, with cooperation from the contractor, we've achieved good recycling results using a combination of containers that are scheduled and sized for specific materials and phases of the project, coupled with greater than usual reliance on recycling mixed debris.

But one waste stream, the biggest, was a real stumper. These were the hundreds of coolers, freezers, shelves, and counters that Hannaford was replacing. Most were mixed materials – for example, steel cabinets with plastic liners and glass doors – so they had limited recycling value. They were bulky, so there was no financially practical way to put them into a recycling container and haul them to markets. But all were working and in good condition, giving us the opportunity to line up almost every piece for reuse. *If* we could get them off site. That was a big *if*. There was no way to pick them up with an IRN truck in the middle of the night. The store couldn't free up a loading dock, so it was impossible to leave and fill a trailer as the units were dismantled. There was no space inside the store where we could accumulate a truckload. We couldn't stockpile on the ground outside. They were a head-scratcher.

But talking to Hannaford, we learned that their procedure was to replace just a few pieces every night, using a skilled moving crew. The items being replaced were tossed into a dumpster. The truck that brought the new equipment went home empty.

To Bill Yorkell, an empty truck is like a blank canvas to a painter. Bill figured that the installation guys could fill the truck with the items they were taking out and then drop them at our Everett warehouse. They had to drive within a few miles of Everett anyway, and they could make a few extra bucks on their trip home to Maine. Bill called the installers, and that's what happened. So far, about 300 pieces of equipment have gone through the warehouse, most to be reused through our nonprofit partners, the rest recycled for metal content. Hannaford Brothers has saved tens of thousands of dollars in disposal costs, at the price of a few extra dollars per trip to their installation company.

Challenging problem. Unusual but straightforward solution. Happy campers all around. That's the kind of kind of situation and outcome we like best.

### **Harvard Business School McCollum Hall: Small Quantities, Big Recycling Rate**

Harvard Business School had a very different problem in one of their classroom buildings. McCollum Hall was a small project, just a few thousand square feet, but it was a complete gut and renovation, so there were lots of different wastes. And because it was a few rooms in a larger building, the project didn't really have a "site"; construction materials were delivered inside the building, and wastes were allotted the footprint of a single 30 yard rolloff.

The "logical" thing to do was recycle everything as mixed debris, but that didn't match up with HBS's goal to maximize waste diversion (working with the IRN, 95% recycling has become the expectation at Harvard). And there were a lot of wastes that either delivered revenue back (metals, cardboard) or had very low recycling costs (aggregate, clean wood, wallboard), so it made sense to separate rather than recycle mixed debris. And because wastes had to be carried from the building anyway, it was easy to keep them separated. So it wasn't really so "logical" to pay more and recover less by recycling mixed debris. But at the same time there was that one-

rolloff footprint; it just wasn't possible to have containers on site for each waste, or to accumulate enough of each material for live pickups. Another head scratcher.

This time it was an equally "different" solution: recycle construction debris in the IRN box truck. On the jobsite, the Richard White Sons crew (PM Joe Griceffa and Super Joe Macedo) put each material in a separate hamper and wheeled the Hampers out to the loading area. This made their lives easier, because they didn't have to hand carry wastes, and didn't have to empty the Hampers into a rolloff. Every day or two we came by with the IRN van, picked up the full Hampers, left empties, and took the recyclables to their markets. All of the markets were in the Boston-Cambridge area, so there wasn't a lot of driving – less, in fact, than if we'd used a mixed debris recycler.

The result was a 96% percent recycling rate, at least 15 points higher than if we'd recycled mixed debris, and good for a LEED innovation credit. There was an extra cost to do near-daily pickups, but this was offset by savings and revenues from the disposition of materials. The net to HBS was a huge recycling rate in an "it can't be done" situation, minimal additional cost, and a clean, safe worksite. No one complained at that combination.

### **IRN Offers C&D Training Curriculum**

IRN has developed a training curriculum for construction project managers and planners. The training was developed at the request of several national construction firms who sought IRN's expertise on job sites outside of our core service area in the Northeast. Rather than establish a jobsite presence at remote locations, IRN developed a training program that transfers IRN's site experience and expertise directly to those professionals overseeing waste management activity. Training can be planned in a half-day or full-day session, with possible spillover to a second day to take trainees to an active jobsite. The training package also provides extensive written materials, and can include identification and assessment of local/regional recycling markets.

### **New Projects: New Haven to Mount Desert Island**

In the past few months IRN has been asked to manage recycling at over a dozen new jobsites: from small renovations to major new construction and everything in between. If nothing else, they're keeping Matt and John out of trouble:

**Yale School of Medicine.** IRN is active on three jobsites at YSM, which has made a commitment to recycle on all projects. These are all interior renovations with limited or no exterior work. So they're tough recycling jobs, because there's literally no "footprint", and minimal space outside the buildings for waste containers. On the other hand, because the buildings remain occupied and in use while renovations proceed, there's great emphasis on jobsite safety and cleanliness, and recycling contributes to both. Contractors Taulman and Babbidge had little prior experience in recycling, so John Gundling has been shuttling to New Haven to make sure these projects flow smoothly.

**Yale University Stoeckel Hall.** Another JG project with contractor Daniel O'Connell's Sons, this LEED renovation and addition to a historic structure has a little bit of everything to recycle, from 80 year-old terra cotta decorative work and a slate roof to wallboard, ceiling tiles, and molding from a new steel and glass addition. Heavy work begins in December.

**Jackson Laboratories, Mount Desert Island, Maine.** This keeps Matt chasing up and down the Maine moose corridor. Recycling would be straightforward on this project (greenfield construction of a state-of-the-art biological laboratory), except for the small consideration that it's on the far

end of Mount Desert Island, not known for its recycling markets. Even so, with the project well more than halfway complete, we're tracking for a 95% recycling rate.

***Cony High School Demolition and New Construction, Augusta, ME.*** Hannaford Brothers purchased a decommissioned high school for redevelopment into a supermarket and other retail space. This is one of the first LEED-Retail pilot projects in the country. As such it's getting a lot of scrutiny, with emphasis on reuse and recycling that calls on all of IRN's capabilities. First was surplus property: removing and finding new uses for over 4,000 items of classroom and office furniture. We worked with Hannaford to distribute many of these items in Maine communities, while the rest were shipped for relief efforts in Guyana, Jamaica, and Nicaragua. Second up was fixed assets: hundreds of doors, windows, cabinets, and other fixed furnishings also removed for reuse locally and internationally. The project is now moving into demolition of the high school, and recycling of aggregates, metals, roofing, materials, wood, and mixed debris, taking advantage of Maine's robust markets for these materials. Finally, commencing next spring, will be recycling from the new construction phase of the project.

***Smith College Science Center, Northampton, MA.*** This is one of the largest construction projects that Smith has undertaken, and the first with reuse/recycling as a major element. The most challenging aspect of the project was deconstruction and reuse. Smith purchased and removed a number of commercial and residential structures to create space for the science center, and asked IRN to plan and manage deconstruction of these properties to maximize reuse of building materials and fixed assets, and recycle what could not be reused. Drawing on Matt McKinney's expertise as a pioneer in deconstruction, IRN achieved a nearly 100% reuse-recycling rate in removing the condemned structures, and is currently recycling materials from new construction – a sixteen month project in itself.

***DMP 40/60, Norwalk, CT.*** Another first for IRN (and demonstrating how quickly LEED is reaching into private development), this is a LEED-CS (Core and Shell) project for two new spec-built office buildings. The owner and contractor are seeking LEED certification just for the exterior structure (frame, skin, roof) and minimal interior finish (elevator cores, stairwells, central plumbing and baths, limited interior partitions). As interior space is leased, the leased areas will also be built out to LEED standards, shifting from LEED-CS to LEED-CI (Commercial Interiors) for each leased area.

***Aircuity, Inc., Waltham, MA.*** This is one of the first LEED-CI (Commercial Interiors) projects to go for LEED platinum certification, and recycling was a challenge. This is a relatively small project (25,000 square feet), with a real mix of spaces – office, laboratory, and manufacturing, plus the usual addenda of bathrooms, kitchen, and lounge areas. Project Manager John Gundling pulled rabbits from his hat to reach a 95% interim recycling rate to date, including storing wastes onsite to build up marketable quantities, using a variety of small container types, and careful scheduling of waste pickups to match phases of the job.