

*Construction Defects:*

*How To Train a Contractor*

In Which of the  
Following Photos  
Is The Contractor?





# You are a Contractor if:

1. Your dog rides in your truck more than your wife.
2. You wear specific hats to tool sales, equipment auctions, customer appreciation suppers, and vacations.
3. You have ever had to wash off in the backyard with a garden hose before your wife would let you in the house.
4. You've never thrown away a 5-gallon bucket.
5. You can remember the square footage, pounds of nails required, crew labor rates and permit delays on a house you built 10 years ago, but cannot recall your wife's birthday.

# You are a Contractor if:

6. You have used a velvet leaf plant as toilet paper.
7. You have driven off the road while checking out the new housing development in your neighborhood.
8. You have “borrowed” gravel from the county road to fill potholes in your driveway.
9. You have buried a dog and cried like a baby.
10. You’ve used the same knife to exterminate vermin and peel apples.

*Contractor:* a person who contracts to supply certain materials or do certain work for a stipulated sum, especially one who does so in any of the building trades.

*Webster's College Dictionary, Fourth Edition (1999)*

*Developer:* a person who develops real estate on a speculative basis.

*Webster's College Dictionary, Fourth Edition (1999)*

Jean-Baptiste Say, a French economist, is believed to have coined the word "entrepreneur" in the 19th century - he defined an entrepreneur as “one who undertakes an enterprise, *especially a contractor*, acting as intermediary between capital and labour.” (emphasis added)

*Wikipedia.2011.*

*Entrepreneur:* a person who organizes and manages a business undertaking, assuming the risk for the sake of the profit.

*Webster's College Dictionary, Fourth Edition (1999)*

# Qualifications to be a Contractor / Developer

- Prominent Developer: “Sadly, it is lowest entry level of any profession – lower than a real estate agent.” (paraphrased)
- Gun rack and a level
- Can do attitude
- Willing to take risk
- In sum, a person with a sense of adventure – an entrepreneur, an explorer, a viking



- Movie clip: Introduction to the Community

Why Build In Berk If It  
Is Such A Challenging  
Place to Build?

Movie clip – tame seas

Never seen a flood plain,  
fault line, steep hillside, old  
landslide, or lake bottom  
that could not be built on

**GEOLOGIC HAZARDS AND ADVERSE  
CONSTRUCTION CONDITIONS**

**ST. GEORGE–HURRICANE METROPOLITAN  
AREA, WASHINGTON COUNTY, UTAH**

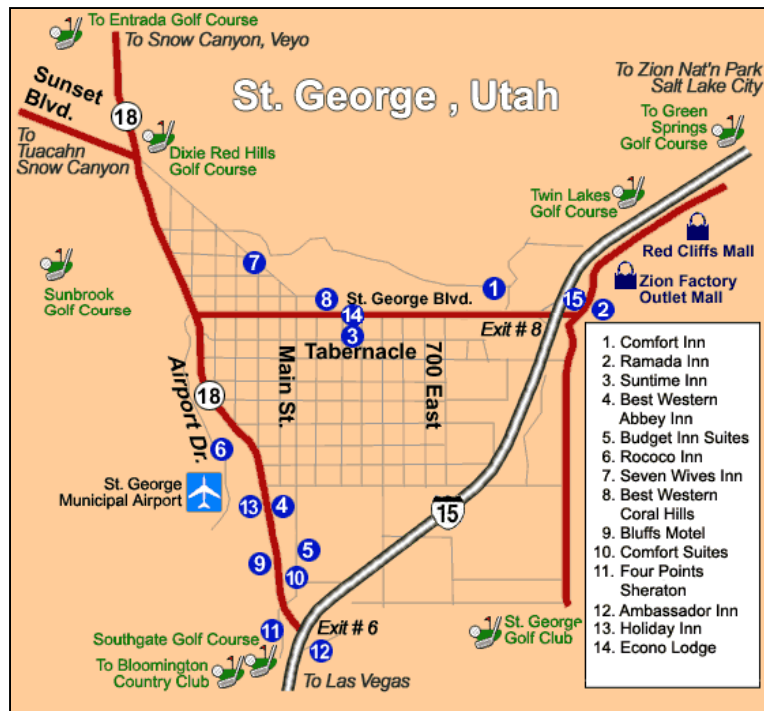
by William R. Lund, Tyler R. Knudsen, Garrett S. Vice, and Lucas M. Shaw



SPECIAL STUDY 127  
UTAH GEOLOGICAL SURVEY  
*a division of*  
UTAH DEPARTMENT OF NATURAL RESOURCES  
2008

# Geo Report with Damages

# What does a map and instruction manual have to do with contracting and developing?



# SINGER

82387 No. 66

Singer Sewing Machine  
No. 66

Oscillating Hook, For Family Use



## INSTRUCTION MANUAL

Like any good husband,  
a contractor and  
developer \_\_\_\_\_ ignore  
the map and the  
instruction manual.

- Movie Clip – Dragon instruction manual

- Your job as a defense attorney --
- Destroy the enemy before they destroy us.

- Movie clip: Find the nest and destroy them

Are the following really your best defenses?

- Lack of Standing
- Real Party in Interest
- Economic Loss Rule
- Privity of Contract
- Right to Mitigate -- contractual or statutory
- Statutes of Limitation and Repose
- Causation

Is there another way?

- Movie Clip of Hiccup downing a night fury
- Can't kill the dragon
- Reaches out to the dragon

# Task Force

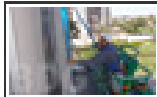
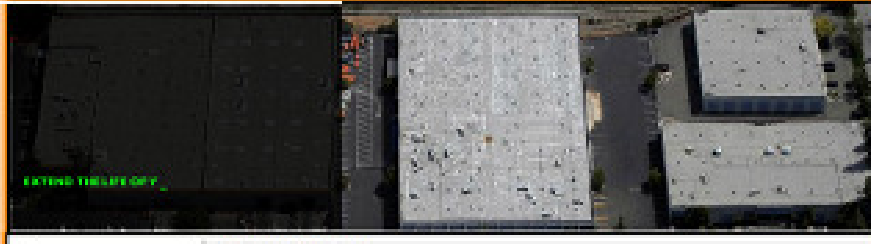
- Utah League of Cities and Towns
- Property Rights Coalition
- Realtors
- Contractors
- And now, for the first time CAI - LAC

- Movie Clip: Battle of big dragon

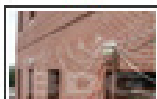
- Town of Berk revisited

# What is a Construction Defect?

- Previously undefined and difficult to define
- Davencourt:
  1. The purchase of a new residence from a builder-vendor/developer-vendor
  2. The residence retained a latent defect
  3. The defect manifested itself after purchase; an
  4. The defect created:
    - A. a question of safety , or
    - B. made the house unfit for human habitation.
  5. “misrepresentation”



**IRTM & LIDAR Surveys**



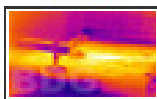
**Concrete Wall Cracks**



**Interior Building Surveys**



**Construction Defect Investigations**



**Commercial Roof Surveys**



### Exterior Cladding Surveys

Discover with the absolute integrity of your present building assets with our infrared thermography for exterior cladding systems in the most beneficial scenarios for long measurement times. Our team can quickly locate a building's exterior wall system for water intrusion that may have damaged the exterior cladding or structural components.



Infrared thermography can detect the location of the exterior cladding systems by measuring areas of moisture intrusion and deterioration due to environmental stress. Exterior cladding surveys are non-invasive and efficient, as we can perform through a 1/2 inch wide survey on large areas in as little as 10 minutes. That's why we are capable of performing IR in IR for most apartment buildings in just a few days on-site. This service will allow clients easily hidden damage or voids around the exterior. Our experience in this specialized service is second to none! And unlike sounding and other cladding methods, surveys are all done by non-destructive and non-invasive building assessments.

Robert Belcher, President of BDI, presented and published a white paper at the 2010 10th National Conference on Infrared Thermography for Exterior Cladding Systems. The paper was written and based on a mission performed in the Jacksonville, FL area during the investigation on four over \$1.5 million dollars in hidden cladding damage in 20 of 78 multi-family apartment buildings. Visual inspections reported by the owners average over \$200,000. BDI had just recently undergone an extensive exterior wall and water penetration. This made the building assessment very timely. Getting accurate infrared data helped the owner. Our final report gave the client the ability to successfully negotiate the repairs before the start of the summer. Visual inspections were done through the building walls for many long measurement times.

Infrared thermography can be used for many different cladding systems. From a range of glass systems, to Belcher Insulation Panel Systems (BIPS), to using infrared thermography and infrared infrared infrared infrared. Many times this service will identify the first signs of a problem or larger problem areas can be detected from the exterior can take years to show up on the interior. By identifying all the exterior damage in time, the owner can take action on the interior. For more information about our BDI services, visit [www.bldgdiagsgroup.com](http://www.bldgdiagsgroup.com).

A 2005 survey by Quality Built, a construction consulting firm, found the cost of corrected defects in multifamily housing and mixed-use commercial construction averaged \$4,556 per unit.

*www.constructionexec.com.Process Control Payoff: Fewer Defects, Better Reputation.2011.*

An Ounce of  
Prevention Is Worth A  
Pound Of Cure.

# Process control should cover three phases:

- 1. Preconstruction.** A company must have a process in place for managing requests for information and change orders, assessing and responding to bid packages, pre-qualifying and selecting subcontractors, and training employees, including supervisors and managers. Once a specific project is being considered, a preconstruction survey report can assess the site for soil conditions, adjacent structures, water issues, nearby utilities and other potential issues. Schedules of work and critical paths must be developed for each project, not only to avoid sequencing problems, but also to ensure adequate time is allocated for each task. An overly aggressive schedule can lead to construction defects.

*www.constructionexec.com.Process Control Payoff: Fewer Defects, Better Reputation.2011.*

# Process control should cover three phases cont.

2. **Construction.** The startup package should include all necessary drawings and plans, signed and date stamped. Quality control meetings should occur on a regular basis and should focus on working above and beyond the minimum requirements of building codes. Clear communication among all parties - owner to contractor, design professionals to contractor, contractor to workers – is critical. Materials should be inspected for quality and stored appropriately so they do not become damaged while awaiting installation. Work in progress should be monitored continuously for quality.
  
3. **Post-Construction.** Many defect claims and lawsuits arise because contractors do not follow through after a site has been turned over to the owner. The punch list must be completed, with each item documented and addressed. The warranty period must be considered as part of the process. Contractors that provide operations and maintenance training to new owners are less likely to get into disputes.

*www.constructionexec.com.Process Control Payoff: Fewer Defects, Better Reputation.2011.*

# **Developer's Duties to the Community**

Until the developer relinquishes control of the association to the members, the developer owes the following duties to the association and its members:

1. To use reasonable care and prudence in managing and maintaining the common property;
2. To establish a sound fiscal basis for the association by imposing and collecting assessments and establishing reserves for the maintenance and replacement of common property;

## **Developer's Duties to the Community Cont.**

3. To disclose the amount by which the developer is providing or subsidizing services that the association is or will be obligated to provide;
4. To maintain records and to account for the financial affairs of the association from its inception;
5. To comply with and enforce the terms of the governing documents, including design controls, land-use restrictions, and the payment of assessments;

## **Developer's Duties to the Community Cont.**

6. To disclose all material facts and circumstances affecting the condition of the property that the association is responsible for maintaining; and
7. To disclose all material facts and circumstances affecting the financial condition of the association, including the interest of the developer and the developer's affiliates in any contract, lease, or other agreement entered into by the association.

**“WE HAVE MET  
THE ENEMY AND  
HE IS US.”**

*Walt Kelly, Pogo Cartoon, Wiki.Answers.2011.*