

Due Diligence
for
Professional Land Surveyors

Presented by:

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Special thanks to Kenneth B. Anderson, PLS and Scott D. Cameron, PLS who have been co-presenters in similar seminars in the past and whose collaboration in preparing these materials is gratefully acknowledged

What does
“Due Diligence”
mean?

Definition:

The attention and care
legally expected or required
of a person
(as a party to a contract)

<http://www.merriam-webster.com/dictionary/diligence>

Definition:

Conscientiousness in paying proper attention to a task;

Giving the degree of care required in a given situation.

Persevering determination to perform a task.

<http://www.websters-online-dictionary.org/definition/diligence>

Why focus on “Due Diligence”?

What are the components of “Due Diligence”?

How do other professions view “Due Diligence”?

Who is responsible for “Due Diligence”?

How does “Due Diligence” apply to Surveying?

Application of Due diligence To Surveying

- Client Success
- Business Success
- Survey Success
- Task Success

Client Success

If someone calls to
"have their land surveyed",
do you have enough information
to do the job?

Due diligence is about providing for all
contingencies.

Client Success

If someone calls to
"have their line staked" do you now have enough
information to do the job?

Due diligence is about understanding what your
clients really need.

Client Success

Does everyone who calls you to have their line staked really want their line staked?

Due diligence is about understanding the implications of what your clients ask for.

Client Success

Is there a point where your client needs to make intermediate decisions?

Due diligence is about providing a process that provides information for intermediate decisions.

Client Success

Are there decisions that your client needs to make that completely alter (kill) the project?

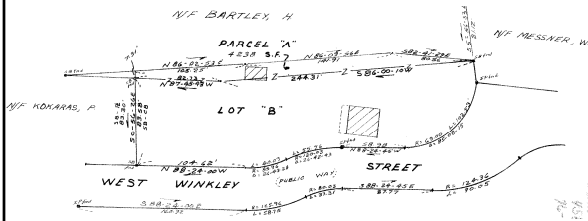
Due diligence is about understanding your client's decision thresholds.

Client Success

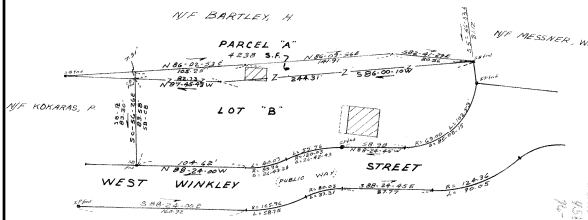
Have your client's goals changed during the project?

Due diligence is about understanding what "success" looks like at any given time and how it may change.

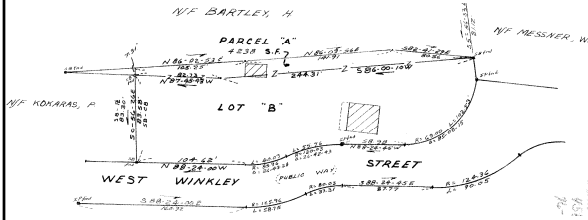
What is included in due diligence if:
Addition to House (north side)



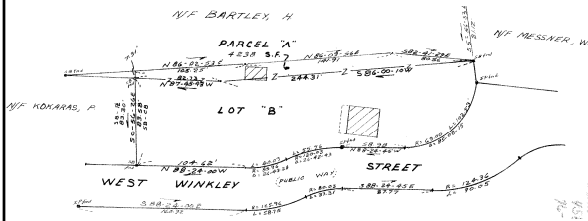
What is included in due diligence if:
Widening the Road?



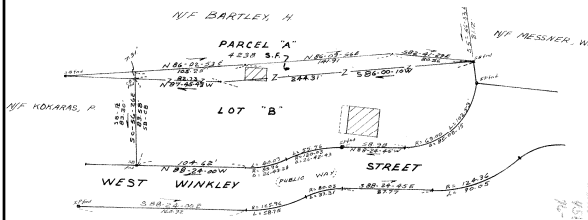
What is included in due diligence if:
Survey for Prospective Owner?



What is included in due diligence if:
Fence along West Boundary?



What is included in due diligence if:
Lot "B" to be purchased for access to
Northerly Land (150,000 SF Store)



Business Success

Do you consider the importance of a particular project?

Due diligence is about understanding the impact of progress, success, failure and/or delay a particular project can have on your business.

Business Success

Do you consider the role of particular clients in your business?

Due diligence is understanding the relationship of specific clients to the health of your business.

Business Success

Do you understand the market you work in?

Due diligence is understanding local economy and those sectors that impact you and your clients.

Business Success

Do you understand how the profession is changing?

Due diligence is about keeping up to date on technological change.

Business Success

Are you relevant in a changing practice environment?

Due diligence is about embracing change rather than fighting change.

Business Success

Do you understand the liability environment in your daily practice?

Due diligence is about assessing and managing your liability.

Business Success

Is cash-flow an issue?

Due diligence is about understanding the factors that effect cash-flow and how cash-flow effects day to day decisions.

INCREASED PROFITABILITY CASE STUDY:

Special thanks to Scott D. Cameron, PLS for his help in putting together this case study, originally presented at the Maine Society of Land Surveyors in 2005.

Certified Plot Plan Cost Estimate

• Research	2 hrs @ \$75	150
• Field Work	1.5 days @ \$1000/day	1500
• Office Calculations and worksheet	8 hrs @ \$95	760
• Drafting	3 hrs /@ \$50	150
• PLS Review	PLS Principle @ \$120	120
• Copies and postage		<u>25</u>
• Subtotal		<u>\$2,705</u>
• Profit of 12%	= 2705 x 12%	= <u>324.60</u>
• Total		<u>3,029.60</u>
	Say - - -	\$3,050

Certified Plot Plan Actual cost

• Research	2 hours	150
• Field Work	1.5 days	1500
• Office calculations and worksheet	6 hours	570
• Drafting	2 hours	100
• PLS Review	½ hour	60
• Copies and postage		15
		\$2395
• Accepted estimate		<u>\$3050</u>
• Clear		\$655

Obvious Profit Killers

- **Sharp Pencil Syndrome**
 - Price Slashing to “Get the Job”
 - Underestimation of time needed to complete tasks
- **Nice Guy Syndrome**
 - Providing free services outside of agreed scope
- **Leaky Dike Syndrome**
 - Poor time accounting
 - Poor billing practices
 - Consumables Management
 - Equipment Maintenance

Insidious Profit Killers

- Bad Projects
- Bad Clients
- Bad Abutters

Bad Projects

- Who took this job in anyway?
- The never ending survey on the finite budget
- When good projects go bad

- Solution:
 - Recognize these situations when they arise
 - See them as BAD, not just another day at the office
 - Develop an exit strategy for each situation

Bad Clients

- Turncoats
- Jekyll & Hyde
- I should have seen this one coming

- Solution:
 - Do not attempt rehabilitation
 - Not every relationship is perfect: maintain awareness
 - Set boundaries
 - Not all Bad Clients are really Bad Clients

Bad Abutters

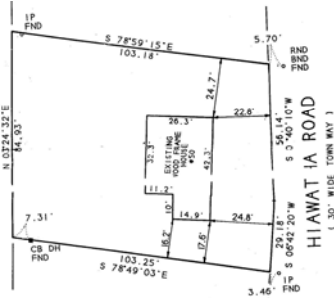
- Bad Abutters
 - You can pick your clients but not your client's neighbors
 - Abutters may have no reason to embrace your opinions

- Solution
 - Determine the true motivation for the dispute
 - Send them to a different professional

Case Study

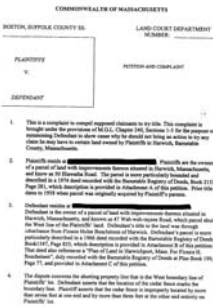
“That was a good job!”

Profit=
\$655



Case Study

“When good projects go bad”



Case Study

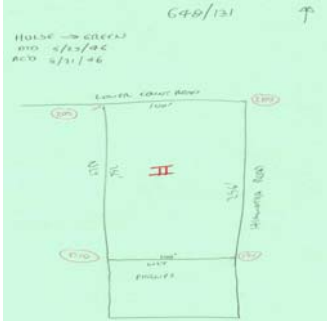
“When bad projects get worse”



Case Study

“...and worse”

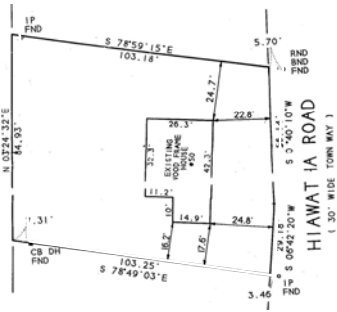
It's dimensions
Fit within 1' to Lower
County Road



Case Study

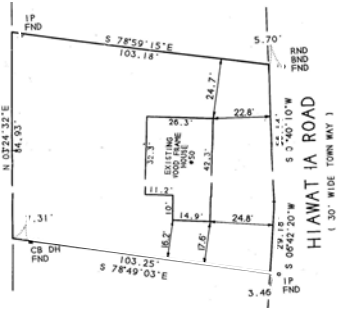
“...and worse”

It's dimensions
hit all other
Monuments,
fences, etc.



Case Study

Now
What?



Remedy for a Bad Project

- Who took this job in anyway?
- The never ending survey on the finite budget
- **When good projects go bad**
- **Solution:**
 - Recognize these situations when they arrive
 - See them as BAD, not just another day at the office
 - **Develop an exit strategy for each situation**

Exit Strategy

- Fix mistake quickly
- Fix mistake completely
- Get Project behind you
 - Fix expends resources and erases profits
 - Fix takes you away from other profitable work
- Quality Control Feedback Loop
 - Find other errors that may be out there
 - Eliminate future similar errors
 - Look at fix costs vs. profit

Certified Plot Plan

Actual cost

• Research	2 hours	150
• Field Work	1.5 days	1500
• Office calculations and worksheet	6 hours	570
• Drafting	2 hours	100
• PLS Review	½ hour	60
• Copies and postage		<u>15</u>
		\$2395
• Accepted estimate		<u>\$3050</u>
• Clear		\$655

Certified Plot Plan Cost of Fix

• Research	4 hours	300
• Field Work	1 days	1000
• Office calculations and worksheet	8 hours (PLS)	960
• Drafting	4 hours	200
• Meetings/Management		960
• Copies and postage		<u>50</u>
		\$3470
• Cleared		<u>\$ 655</u>
• LOSS!		\$2815

Bad Project Case Study Profitability Lessons

- Was the project "avoidable"
- Was there a technical reason for the problem
- NOT the cost of doing business
- NOT inevitable
- NOT uncontrollable

- Is Profitability worth the effort?

Survey Success

Why are you doing this job?

Due diligence is about articulating specific goals and outcomes.

Survey Success

What are the different aspects of a specific project?

Due diligence is about understanding the steps necessary to complete a specific project.

Survey Success

Are some aspects of the project more "important" than others?

Due diligence is about prioritizing tasks and understanding the critical path.

Survey Success

How is new information handled?

Due diligence is about defining a process that acknowledges the dynamic nature of a survey.

Survey Success

How is contrary information handled?

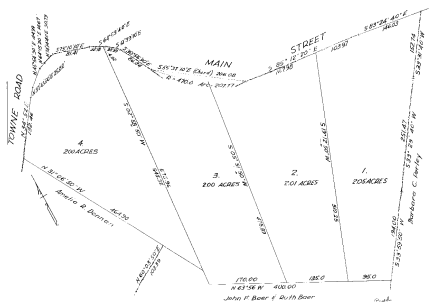
Due diligence is about understanding preponderance of the evidence.

Survey Success

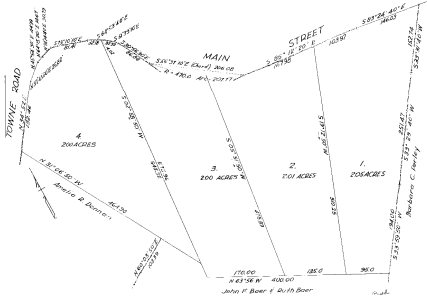
How is missing information handled?

Due diligence is about understanding the normal standard of care.

What is included in due diligence if:
Staking Lot 2 for Perimeter Fence?

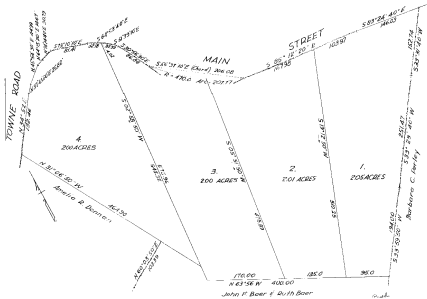


What is included in due diligence if:
Building a House on Lot 2?



What is included in due diligence if:

Owners of Lots 2 & 3 are in litigation because two other surveyors have staked the line and their lines are 5' apart on the ground ?



Task Success

What needs to be done?

Due diligence is about choosing an appropriate technical process.

Task Success

What precision is required?

Due diligence is about choosing the proper tools and techniques.

Task Success

How is necessary precision achieved?

Due diligence is about properly applying the fundamentals.

Task Success

How should a task be done?

Due diligence is about applying the required procedural standards of practice.

Task Success

How do we assess whether a measurement task has been adequately completed?

Due diligence is about understanding the role of redundancy in the measurement process.

Task Success

How do we work most effectively?

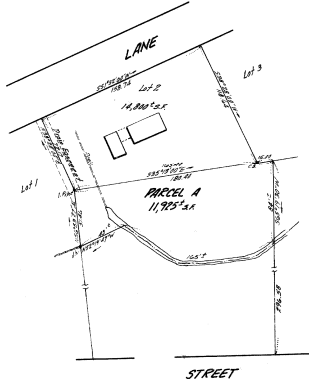
Due diligence is about using your imagination to solve problems.

Task Success

How do we work efficiently?

Due diligence is about a broad understanding of a task and its context.

What is included in "task" due diligence?

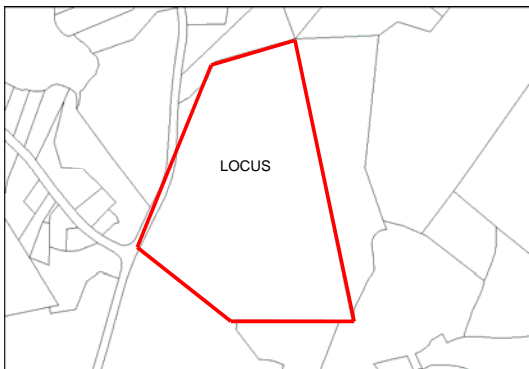


Breakout Session

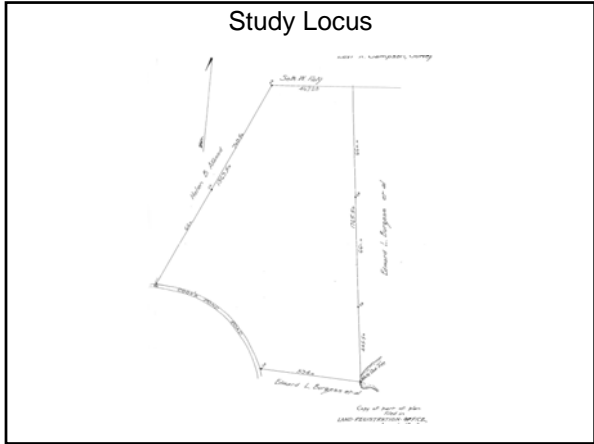
Scenario:

- Client wishes to develop the parcel on next page.
- Develop an outline of what the elements of *Due Diligence* might be for each major topic and why.
 - Relate to previous experiences (positive and negative)
 - Relate to abstract concepts
 - Use of hypotheticals ("What if...")

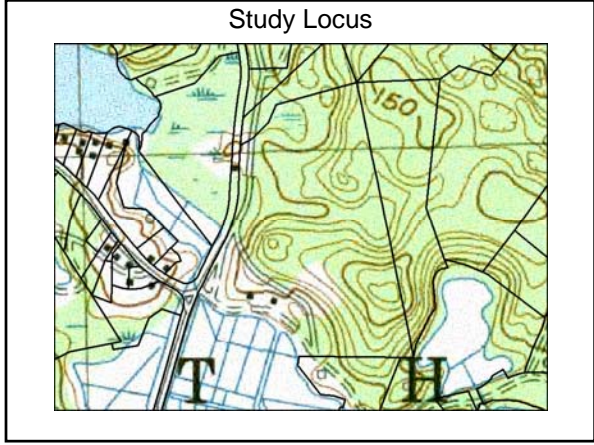
Study Locus



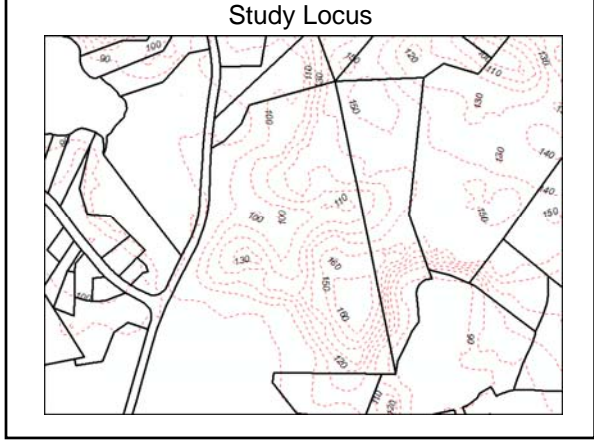
Study Locus

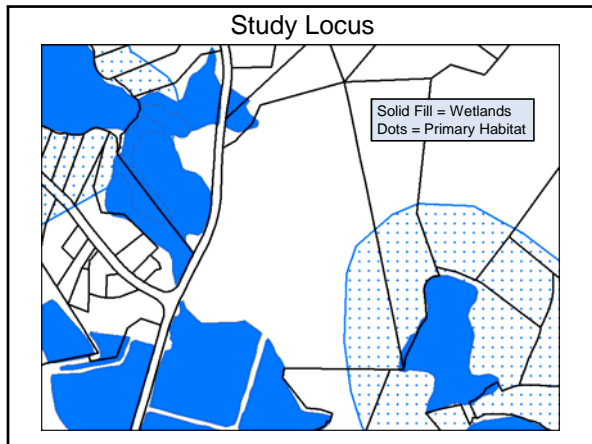


Study Locus



Study Locus





Wrap Up

Study Scenario Review:

- Role of Major Topics
- Role of Experience
- Role of Abstract Concepts
- Role of Hypothetical Situations

Wrap Up

Some final thoughts...

- Due Diligence in Forensic Surveying
- Due Diligence as a framework for looking at problems
- Due Diligence as a stepwise process
- Due Diligence as a learning process
