CHAPTER 12
COMPLETING A RESIDENTIAL PROPERTY INSPECTION
BACKGROUND

The prior chapters have examined in considerable detail how to inventory and classify building attributes and also how to identify and evaluate functional and physical defects or shortcomings. This chapter will step back from these more technical concerns and instead consider the actions and requirements of the person doing the inspection.

For many readers, this inspection will be part of a residential property appraisal. Therefore, this chapter will focus on appraisal requirements – how to gather the necessary detail to support your valuation conclusions (in one single visit), and also how to avoid common pitfalls and stay out of trouble. However, these tips and suggestions are mostly generalizable to people in any area of real estate, whether sales, property management, finance, or other. If you need to review the quality and condition of residential real estate, then this chapter should provide you with some useful assistance.

A residential appraisal is often described as having four main steps:

1. Research
2. Inspection
3. Reporting
4. Evaluation

This chapter will examine the first two steps in considerable detail – these are the preliminary steps necessary for gathering the data that will be analyzed in the evaluation step. We will also briefly touch on reporting – how to optimally present inspection findings. However, we will leave discussion of the evaluation step to other courses in the program where residential appraisal techniques are fully covered.

PROPERTY RESEARCH

Prior to performing a field inspection, research should be conducted to gain as much detail about the property as possible. First, the subject property must be identified by the client and a legal survey must be obtained. The survey typically shows the dimensions and shape of the property, the exterior dimensions of the structure, and the required setbacks from the property lines.

The property should be located on a large scale map in order to specify its district or neighbourhood. The review of the immediate area will assist in evaluating the relevance and proximity of comparables to the subject property.

Other types of maps that can be used to locate and describe the property include:

- **Zoning map**: illustrates the existing local and district zoning as well as the location of adjacent neighbourhoods. This information is helpful in estimating potential growth in these areas.
- **School district boundary map**: locates the subject property relative to school districts. These boundaries are subject to change and could affect property taxes, as well as school busing and enrolment levels.
- **Topographical map**: shows slope configurations, drainage patterns, adjacent hills, ravines, etc. These can indicate steep access streets that may be inaccessible in winter ice conditions or natural drainage routes that may be prone to backup during heavy precipitation. They can also highlight constraints with developable area for the lots.
- **District engineering map**: shows the location of adjacent services, which can be used to determine the availability of services – e.g., water, sanitary sewer, storm sewer, gas, and telephone. This map can also be
used to determine the location of catchbasins for street run-off and indicate where possible sanitary sewer backup might occur during heavy precipitation.

- **Soil survey map:** shows possible areas of clays or silts that may be subject to movement under changing environmental conditions.

- **Flood plain map:** shows possible areas of flooding based on a 100-year “worst case scenario” level.

- **Geological map:** show the underlying bedrock or hard pan configurations and perhaps underground water courses; these maps can be used to indicate solid surfaces that are suitable for foundations, as well as the causes of possible soil movement.

- **Tax roll map:** used to note the location of boundaries that may change, which could affect municipal taxes.

Map information is especially relevant to the Site Description and Analysis portion of an appraisal report.

A preliminary group of comparable sales should be chosen from information files in the appraiser’s office or from an electronic property registry database, if available. The most recent sales will be the most obvious to select as comparables. However, older sales based on a wider range of houses should not be discounted, particularly if they are proximate, similar in size and appearance, and have a similar complement of rooms and other amenities. The comparables should be noted on all of the different maps used, similar to the subject property. This may assist the appraiser in determining which comparables are not appropriate.

The next research step is to examine each of the remaining comparables based on the criteria expressed in earlier chapters such as:

- configuration of the unit, one storey, two storey, etc.;
- gross square footage;
- age of the unit and whether or not it has been renovated;
- lot size;
- quality of appearance, as perceived by purchasers;
- general construction quality;
- interior room layout; and
- additional amenities such as fireplace, garage, pool, extra bath.

Ideally this process will result in at least three good comparables. If fewer than three comparables remain, the appraiser should review the research to determine if additional information might cause a previously discarded comparable to be included. The appraiser should bring a copy of the information on the comparables when carrying out the subject property inspection. This will help to visually reference each property within its neighbourhood context.
PLANNING THE PROPERTY INSPECTION

The primary purpose of the inspection is to familiarize the appraiser with the physical characteristics of the site and the dwelling. A good quality inspection not only provides the appraiser with vital data for the evaluation process, but also provides evidence of due diligence in the event of future litigation. Should litigation occur, complete, accurate, and detailed notes are essential.

It is extremely important for the appraiser to approach the inspection in a professional manner. In many cases, the appraiser is meeting the resident and/or client for the first (and often only) time. As first impressions are lasting ones, it is important for the appraiser to be on time and to conduct the inspection objectively, competently, and professionally. Communication is particularly important during the inspection. Inform your client of anything discovered that is unusual and make it abundantly clear what the inspection does, and does not, entail. Keep notes on all conversations.

Inspection Field Kit

Before beginning the inspection, the appraiser should assemble an appropriate field kit. At a minimum the field kit will include:

- camera;
- measuring devices;
- flashlight;
- hand-held voice recorder;
- checklist, clipboard, and note paper; and
- additional items appropriate for specific buildings or weather conditions.

Camera

Photographs are extremely important in a property inspection because they can allow a subsequent visual review of the property long after the inspection has occurred. There should be photographs of all of the property’s exterior elevations, the street and the immediate neighbourhood (include the subject property for context), plus any potential problem areas in the exterior and interior. While in the neighbourhood, it is good practice to also photograph the comparables to provide a visual reference in the appraisal report.

Camera types may include:

- Digital: are easy to use, wide angle and zoom features for capturing details, and allow the integration of images into an appraisal report. Film cameras are now very uncommon.
- Video: expands all possibilities by capturing images from many angles as well as integrating the video with a running audio component. Digital video cameras now easily permit “frame grabs” where photographs are needed.

**Geo-Tagging Photos: Location, Location, Location**

We all know how critical location is to the value of a property. But how important or useful could it be to know the precise location of that photo you just took? If you are looking to add precision to your inspections, to digitize more of your data collection, and to use advanced tools to describe your subject, its neighbourhood and comparable sales, geo-tagging is the solution. For more information, see the article “Geo-tagging Photos Allows Certainty and Can Streamline a Report” by Jeff Godfrey, AACI, on the Online Readings webpage.

**Measuring Devices**

Metal tapes with lengths of approximately 30m (100’) and 5m (16’) are required – cloth tapes are not satisfactory as they can stretch under tension and age. The tape measure allows the appraiser to confirm exterior dimensions, check room sizes and heights, and determine wall thicknesses, which will give clues as to wall construction.

Laser measuring devices may be useful in many situations. They allow precise measurements horizontally, vertically, or at an angle. They can also record measurements and calculate areas, volume, and slope, in multiple segments.

**Flashlight**

A small flashlight will assist the appraiser when viewing crawlspaces, attics, sump pits, and other areas that do not have adequate lighting. It will also help to improve the existing lighting to better examine possible problem areas.

**Voice Recorder**

A hand-held voice recorder allows the appraiser to concentrate on the inspection rather than on note taking. Continually stopping to write notes often results in information that is difficult to decipher afterwards. This is particularly true if the weather is inclement or if the field terrain is rugged. Thus, a voice recorder not only contributes to the quality, but also to the quantity of information recorded. People are generally able to convey more information (and more detailed information) by speaking than by handwriting, particularly in difficult conditions.

Inspection notes should always be made in the field no matter how familiar the appraiser already is with the property. These notes must be filed and stored for future uses, particularly for litigious references.

**Inspection Checklist**

Standard residential appraisal report forms outline a number of inspection items that can be checked off or noted. However, the more detailed the property inspection checklist, the better the inspection report. By consistently adhering to a checklist format, the appraiser is less likely to omit or improperly describe the features or problems of the property. In addition, the appraiser will be able to maintain consistency in all reports, which not only makes referencing easier, but presents a professional image. Sample checklists are included for your reference in the last section of this manual.
Notepaper with gridlines (graph paper) can be used to sketch floor plans and elevations. These sketches are particularly useful as an inspection document, since they allow the appraiser to note the locations of various problems that can later be referenced in the property photographs.

By obtaining a legal survey drawing beforehand, an outline of the floor plan can be sketched to scale prior to the inspection, thus reducing the on-site requirements.

**Miscellaneous Field Kit Items**

Other items that could be included in a field kit, depending on the building type and condition, might include the following:

- a pocket knife to check for rotten wood – e.g., dry rot in crawlspace joists, termite damage, rotten or soft wood window frames or exterior trim;
- a compass to confirm north if no legal survey is available;
- a marble to check for level floors;
- a plumb bob (a length of string or line with a weight on the end) to check for vertical walls or columns;
- a pair of binoculars to visually review details of roof problems, e.g., flashings at tops of chimneys;
- matches or a cigarette lighter to check for single, double, or triple pane windows – hold the flame near the glass and count the reflections. Laser/infrared measuring devices are also available to do this more accurately;
- a smoke pencil to check for drafts at windows, doors, and electrical outlets; and
- safety equipment: local building regulations may require safety-rated boots and hardhats for inspecting dwellings under construction; in an extreme situation, a building with mould issues may require hazardous materials protection.

For those that enter buildings with mould or a grow-op building, a hazmat suit may be appropriate.

**Home Inspection Technology**

Residential inspections are aided by an array of sophisticated measuring and instrumentation devices. There are infrared and laser technologies that measure distance, thickness of glass and space between glass panels, percentage of moisture, lighting levels, and pressure differentials. Smartphones can measure whether a horizontal surface is level or not. Tablets allow simple layout drawings that can be integrated into reports on-site.

**Pre-Inspection Considerations**

The appraiser and client should agree on a scheduled time for the inspection. The appraiser should estimate the time needed for the inspection, based on the complexity of the property, and inform the resident in advance. Typically the entire process, from making the appointment to driving out to the property, doing the inspection, and getting back to write the report is about three hours.

- When booking the appointment, ask if they have a current tax bill or assessment record for review, plus yearly service bills (e.g., electricity, water, gas).
- If it is a newer home, ask if there is a floor plan or construction drawings for review. You can take down the necessary information or take a picture of the documents for the file.
• Ask if the property has been listed in the last three years and if so, if there were any written offers. You may also ask them what they think their home is worth and if they have any sales or listings that helped them to arrive at that value. You may ask if the houses on either side of them have sold recently.

If the client is not the resident, it is the client’s responsibility to arrange the time of the inspection with the resident. If an area of the house is tenanted, explain that the owner must accompany you through the tenanted area. The tenant must provide signed consent for taking photos – and if the tenant is not home, then no pictures should be taken in that area.¹

Communicating with the Owner/Resident in an Appraisal Inspection

When you enter the property identify yourself with a business card, state who you are and ask permission to enter their home.

• Explain to the owner or the person who provided you access what you are there to do and tell them what is going to happen; e.g., “I am required to see each room of the house, and while going through I am making notes on the types and condition of the floor coverings, the types and quality of the kitchen and bathroom cabinets. I will start at the first floor, go up to the second floor if there is one, and finish in the basement.”

• Ask if anyone is sleeping and ensure anyone else in the house knows why you are there, to avoid startling anyone or an embarrassing situation for all parties concerned

• Offer to let them accompany you if they wish – it is their home, so it is their choice.

• If the lender requires pictures, explain this and ask permission.

• Explain that after the inspection you would like to sit down for a couple of minutes and go over where major improvements have been made.

• Explain that after that you will be going outside to inspect and measure the exterior of the home.

• Then ask if they have any questions. A large majority will want to know the value after the inspection and at that time you can explain what is still required to arrive at that final estimate. Most are unaware of all the research time that is required along with the time that is required to write each report. But no value or hint of value should be provided at this time. Then mention again that you will be outside for 5-15 minutes measuring the house and inspecting the exterior of the house and garage.

PERFORMING THE INSPECTION

While there can never be a perfect inspection procedure that is equally appropriate in all situations, the appraiser must develop a plan for inspecting a given property and adhere to it. One approach might be to follow the order outlined so far in this book: first, an analysis of the neighbourhood or district; second, an exterior analysis of the site and building; third, an interior analysis of the basement; and finally, an interior analysis of the upper levels and attic.

Neighbourhood/District Analysis

The appraiser should conduct a drive-by visual survey of the district and particularly the neighbourhood in which the subject property is located. The appraiser should note the general appearance of the area, the location and extent of vacant land available for future development, the number and type of projects under construction, any For Sale and For Lease signs, and the location of hazardous industries upstream or upwind of the subject property.

¹ Court ruling on photographing of tenant’s apartments without consent, and Personal Information Protection and Electronic Documents Act (PIPEDA). Office of the Privacy Commissioner of Canada, priv.gc.ca/cf-dc/2006/348_20060824_e.asp
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The drive-by survey should spiral in towards the subject property. The appraiser should also conduct a walking tour of the immediate one or two block area. The walking tour may reveal additional aspects of the neighbourhood, particularly if one talks to local residents who can offer information as to the reputation of the area, its stage of development, the demographics of its residents (e.g., age, occupation, income levels), and possible past uses that may have been hazardous. While in the field, the appraiser should record impressions of the neighbourhood, the subject property, and its visual appearance with respect to the street as a whole.

The physical, social, political, demographic, and economic characteristics of a neighbourhood/district can have great influence on the value of a property. A property inspection that investigates and rationalizes these factors can significantly improve the final appraisal report. During this neighbourhood review, the comparables that were specified earlier should be examined to reconfirm that they are appropriate. Notes should be made of any obvious discrepancies in the suitability of the comparables, for later review.

**Site and Building Analysis**

A general overview of the property includes a description of the house type, its appearance, style, design, and relationship to the site, its landscaping, and its proximity to neighbours.

The gross square footage of the house can be confirmed by accurately measuring the perimeter and comparing these measurements to the surveyor’s site plan. As many lawsuits arise from inaccurately reported dimensions, double-checking measurements is strongly recommended.

Before conducting a detailed examination of the site and building, you should check the building for level and plumb. If a preliminary visual inspection shows problems, you may use a plumb bob to check the walls, chimney(s), porches, carport columns, etc., to ensure they are straight and vertical. At the same time check horizontal elements such as brick coursing, eave and roof peak lines, and where the foundation meets grade, etc. This should give you a reasonable indication of the overall condition and stability of the structure.

**Inspection Tips: Arriving at the Property**

- Upon arriving at the property, first double-check that you have the correct address.
- Make some notes from the car – it is a good practice to date your notes and number the pages.
- Note curb appeal or lack thereof.
- Note whether the roof shingles are in good shape or not. If the roof shingles are not visible, e.g., the roof is snow covered or the pitch of the roof is such that only small portions of the roof are visible, then note that as well.
- In measuring the property, make a sketch showing each entry and note where the measurements were made or walls not able to be measured – e.g., if one wall is measured off the ground due to mature bushes, note that. If counting bricks for one section of a wall, measure one of the bricks to double-check accuracy in both widths and height. When you get back to your car, review the sketch to make sure that you didn’t miss any measurements – a five minute check at the curb can save you a return visit.
- In walking the exterior, note the landscaping, condition of the garage doors, windows and sills, eaves and soffits, fence, slope of the land, decks, rear yard utility, etc. Note what is behind the subject: similar homes, inferior homes, superior homes, or a vacant parcel of land.
- Take two photos of the front and rear from different sides of the lot, to get both side walls if possible (and just in case one picture doesn’t turn out – save a return visit).
Site/Lot Inspection

Chapter 3 discussed the factors that can be evaluated in the site design of a house. Some of these factors are discussed briefly below:

- **Landscaping**: note the condition, size, and appropriateness to the house and site. In particular, note any large trees that are located close to the main house or outbuildings. These could be toppled by wind onto the structures or overhead wires, or could have root systems that suck water from the soil causing settlement and cracked foundations.

- **Grading**: ensure that the site's grade slopes away from the house, allowing proper drainage.

- **Fences**: note the quality and condition of fencing – e.g., check for rotten wood and plumbness of posts. Check the location of the fence with respect to the property line and determine who owns the fence and who is responsible for its maintenance.

- **Driveway, sidewalks, retaining walls**: note whether they are level and their general condition.

- **Decks and patios**: note whether they are level and their general condition – check wood for rot and concrete footings or stairs for frost damage.

- **Outbuildings**: inspect the interior and exterior of garages, sheds, storage areas, and any other outbuildings.

- **Environmental contamination**: note any specific features that could indicate environmental contamination – streams, ditches, signs of excavations, dying plant material, etc. See the section later in this chapter for more information.

House Exterior Inspection

Chapter 9 discussed issues associated with exterior identification and analysis. Some of these issues will be discussed further here.

The exterior inspection should be conducted by moving around the entire house, one elevation at a time. If discernible from the exterior, identify the:

- foundation structure and envelope components;
- wall structural system and envelope components;
- window and door type; and
- roof structure and envelope components.
Components of the service system that are observable on the house's exterior should also be noted:

- electrical service inlet: above grade or underground;
- gas service inlet and meter location;
- water cisterns, holding tanks;
- septic tank vents and septic field area;
- exterior air conditioners, heat pumps, or heat/cool units; and
- placement of exterior lighting.

During this stage of the inspection, the appraiser should also note the following potential problem areas:

- Minor problems in the envelope system or in structural assemblies that may require potentially expensive repairs.
- Major problems in the envelope system or in structural assemblies that require further investigation by an engineer or other building specialist.
- Differences between the subject and the comparables in the structure or envelope systems that might have implications for value – e.g., higher quality windows, 2×6” construction.

### Environmental Concerns

In the recent past, the major environmental concerns have been asbestos (e.g., sprayed insulation, piping insulation, vinyl asbestos tile) and urea formaldehyde or UFFI (wall insulation). These materials are no longer used in construction and if found in current uses are generally recommended to be removed. In terms of property appraisal, their presence significantly detracts from the value of the real estate asset.

Radon is an ongoing concern. This tasteless, odourless, invisible gas is naturally given off by uranium content in earth materials and is possibly carcinogenic. Sealing the house from the soil and ventilating interior spaces are the required preventative measures.

The following list consists of chemical compounds that are commonly utilized residential materials or systems and which may have negative effects on health:

- plywood, particle board, chip board: formaldehyde vapours;
- carpet, underlays, upholstery: formaldehyde vapours and other chemicals;
- paints, varnishes: volatile organic compounds (VOCs);
- adhesives: formaldehyde and VOC vapours;
- plastics (upholstery foam, floor and wall tiles, wall paper imitation panelling): VOCs, phenols, and fire hazard;
- gas heaters, furnaces, oil and wood stoves, heaters: carbon monoxide and other gases;
- water pipes: lead pipe and lead solder;
- refrigerators: chlorofluorocarbons (CFCs);
- fluorescent lighting: PCBs on old ballasts; and
- electricity: low level electromagnetic radiation from the earth, from electric devices, or from high tension lines.

The list of potentially hazardous materials continues to grow, as the harmful effects of new materials are continually being discovered. As scientific knowledge continues to advance and public awareness increases, it is very possible that the government could ban or restrict the use of these products or systems. Therefore, houses containing or utilizing these items will have to be noted.

Another environmental consideration is the “green-ness” or sustainability of the house. Energy conservation and waste reduction are extremely “hot” issues in many Canadian communities and these considerations are reflected in housing by the continual improvements in the efficiency of building envelope and mechanical systems. In the near future, these green issues may have increasing impacts on property value.
Basement/Crawlspase Inspection

Chapter 10 described the identification and analysis of components observed in the basement or crawlspace of a house. Some of these issues will be discussed further here.

All walls should be examined to identify or verify the structural, envelope, and service system components. If the walls are generally finished, look for any unfinished areas to verify the following features:

- foundation: structure and envelope components;
- floor or underside of crawlspace: structure and envelope systems;
- interior structural systems; and
- main floor structural system and framing type (if applicable, can be seen at header area).

Aspects of the service systems that are observable in the basement or crawlspace should also be noted:

- electrical: capacity, panel type, wiring type, and condition;
- water: supply piping material and condition, hot water tank capacity and type, drain piping system;
- heating: type and capacity; and
- automatic sprinklers: this is quite common for newer houses where this is mandatory by local building bylaws.

The basement or crawlspace inspection is of paramount importance because this is where many of the potentially serious building problems may exhibit their symptoms. Special attention should be paid to:

- structural movement, which can be observed in main beams and/or in walls;
- dampness, water/moisture leakage, and condensation, usually at the location of cold water pipes, or at top of foundation walls;
- very old or deteriorated wiring, piping, or heat sources; and
- asbestos in any form – blow-in “fluffy” insulation, sprayed on fireproofing or pipe insulation.

Inspection Tips: Basement

- Walk around the perimeter and note any leaks or repairs that have been done, especially if an unfinished basement.
- Measure ceiling height with a tape measure or estimate the height by reaching up.
- Note the type of plumbing or if plumbing is roughed-in and whether there is a cold cellar
- Note the type and quality/condition of the furnace and hot water tank. Ask the homeowner ask whether the furnace, hot water tank, and water softener (if present), are on a rent-to-own plan or owned outright.
- If there is a crawlspace, enter if possible or if not, try to take a photo for your files. Remember to state in your report what you did and didn’t do – if unable to inspect the crawlspace, state that and an accompanying extraordinary assumption.
- If the basement has clutter on the floors and against the perimeter walls, note that in the report; e.g., “Personal belongings covered over 50% of the floor and wall space, thereby reducing the areas that could be inspected”, plus an extraordinary assumption.
- Take a photo of the electrical panel and the area around it. Consider this appraiser’s story: “I appraised a house in which the lender subsequently discovered a grow-op, and questioned my value conclusion. I returned to the house and took a second photo of the electrical panel, and showed the lender a drill hole that the residents used to hijack the electricity. My original picture on file showed this had not yet been drilled out when I did my initial inspection”.

Take a photo of the electrical panel and area around it
**Upper Levels/Attic Inspection**

Chapter 11 described the identification and analysis of components observed in the upper levels and attic of a house. Some of these issues will be discussed further here.

All rooms should be examined in order to identify or verify:

- wall and roof/attic structural and envelope systems;
- the type and quality of all fitments such as stairs and cabinetry;
- minor problems that may require potentially expensive repairs;
- major problems that may require further investigation by an engineer or other building specialist; and
- differences between the subject property and the comparables that might have implications for value.

While the basement is the most significant area for determining building problems, the attic is a close second for finding envelope and structural problems. Components to take note of include:

- condition of roof penetrations;
- adequate ventilation;
- condition of roof framing;
- evidence of moisture; and
- evidence of pests such as insects, rodents, and bats.

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**Inspection Tips: Main and Second Floor**

- As you make your way through the first floor, make notes on the flow of the floor plan, whether the kitchen has been updated or whether the kitchen has an eating area. Note if there are any built-in appliances and look at the kitchen triangle to see if the kitchen has any functional problems.

- Make notes on the type and quality of floor coverings, baseboards, trim around the windows, etc.

- Check the ceiling for any patches or leaks. Note if there is an interior access to the garage, any side or rear doors.

- On the second floor, note the size of the bedrooms and whether each bedroom has a closet or not.

- Look out of the windows to view any portions of the roof that are visible. For example, if there is a flat roof over the garage that is visible from one of the bedrooms, take a picture of this for your files. If there is curl noticed or shingles missing, document this with pictures as well.

- In the bathrooms note the size, if there are any updates, and if the bathroom has a window.

- As on the main floor check the same areas, floor coverings, baseboards, trim work, and ceilings. Take the appropriate pictures that are required by the various lenders or clients.
Summary of Housing Defects

Deficiencies in housing may be categorized as design, visible, or invisible defects. These may result from improper care and maintenance or from the design and construction of the original structure or succeeding additions.

Design Defects

Design defects are uncommon in new homes because of contemporary building technology; however, what is acceptable today may be considered a design defect in the future.

Some examples of items currently considered as design defects are:

- main entrance directly through a bedroom or utility room;
- main bathroom directly off living room providing a view of the toilet when the door is open;
- bathroom access through bedrooms only;
- room area exceptionally small;
- doors that interfere when opened;
- head room clearance in stairwells and basements that are too low;
- entrance doors that are too small;
- odd window placement and windows that are too small;
- inadequate lighting; and
- inadequate electrical or plumbing systems.

Visible Defects

Most design defects are visible, but there are also other types of defects that fit into the visible category. Defects of these types usually result from the following:

1. Defects from improper installation, for example:
   - cracks in the foundation from footings installed on non-compacted fill
   - space between window frames and sills, sides, and top surfacing materials
2. Defects from installation of low quality products, for example:
   - cabinets have loose drawers that do not slide in and out smoothly
   - peeling wallpaper or paint
3. Defects from improper use and treatment, for example:
   - use of asphalt or tar roofing materials as a deck surface
   - smoke damage from installing the wrong metal chimney on a wood stove
4. Defects from lack of adequate maintenance, for example:
   - a sagging porch, decaying as a result of not regularly repainting the porch structure
   - foul odours and grey water in ditches near the septic field as a result of not periodically removing sludge

UFFI

In the 1980s, presence of urea formaldehyde foam insulation was considered a potential health risk and its presence had to be noted on sales contracts and in residential appraisal reports. Research since has shown UFFI is not a significant health concern and as a result it is no longer specified as a legally required condition for sales contracts in most jurisdictions. AIC has also removed UFFI from its residential appraisal form. The appraiser has no obligation to investigate hidden or unobservable items that are beyond his/her competence. Where an appraiser does observe UFFI, they have an obligation to disclose this in the report, but this is limited only to describing their observations. The appraiser should not make any assessment of environmental issues unless they have the competence to do so. The onus is on the intended users to further investigate and satisfy themselves of any noted impairments.
**Invisible Defects**

Having studied the components of a building, it is easy to imagine how many defects may be hidden behind those attractive wall and floor surfaces in a home. Defects of this type usually fall into the following categories:

1. **Defects of omission; for example:**
   - lack of moisture barrier
   - lack of insulation
   - lack of sufficient electrical circuits
   - lack of proper roof ventilation

2. **Defects of improper installation; for example:**
   - non-continuous vapour barrier
   - electrical or plumbing defects
   - inadequate foundations for patio, porch, sidewalks
   - warped or wrinkled aluminum or vinyl siding

3. **Defects of improper materials; for example:**
   - utility rather than construction grade structural lumber
   - use of materials not allowed by code
   - improper concrete mix

4. **Defects due to improper maintenance; for example:**
   - plugged drain or vent resulting in excess moisture content in wood structure that may produce decay
   - insect attack on wood structural elements

Most invisible defects are covered by building, electrical, or plumbing codes. As noted earlier, codes were adopted to provide some guidelines as to quality in terms of standards of material selection and installation. The permit and inspection service of municipal and regional jurisdictions is intended to ensure a uniform and minimum application of the various codes.

**PARTIALLY COMPLETED HOUSES**

Appraisers are sometimes asked to conduct a progress inspection or a valuation of a house under construction. For example, a lender may be considering making a mortgage loan on an as-yet completed property or may be requesting assistance on making progress payments to the construction contractor. Financing institutions will typically not be prepared to release funds to a value exceeding the value of materials and installation actually in place. The appraisal approach therefore warrants caution and should err on the conservative side.

Appraisers must exercise extreme caution to avoid significantly over-valuing the property's current, incomplete state. Simply applying the percentage complete to the total estimated construction cost may provide a value that is significantly greater than the actual market value of the property in its existing “as is” condition.

The appraiser must review all documentation including contracts, drawings, and specifications in order to understand the scope of the construction project and the standard of finish expected. If it is possible to obtain, a schedule or breakdown of the construction trades and divisions would be useful, although this should be read with caution as these can sometimes be manipulated by the general contractor and could include for example, “front end loading”, with values weighted more heavily on components being installed in the beginning of the project. If there is a quantity surveyor retained by the owner, it may be possible to request cost information through the owner. As experience is developed in this field of practice, the appraiser...
will want to maintain for themselves a well-organized database of construction costs per unit, or rates, to use as an ongoing handy reference. Some quantity surveyors issue annual newsletters or publications commenting on current construction costs and ongoing unit rates.

The appraiser should not include comments on code compliance or comments regarding the quality of the work in the appraisal report, as these deficiencies are typically remedied during the final phases of construction.

In the appraiser’s review, a detailed photographic record should be maintained so that a visual inventory exists of on-site materials. The disappearance of construction materials is not uncommon on a stalled construction project.

Additional factors that may influence the value of a partially completed building:
- contractor’s liens registered against the title;
- construction hold-backs;
- municipal or other assessments; or
- statements of claim.

When completing progress inspections, an appraiser should limit the valuation to an estimate of the percentage complete and should not provide an “as is” dollar value. An “as is” value estimate must determine what the incomplete property could potentially be sold for in its existing state. This is a challenging appraisal problem that likely goes beyond the scope of a typical progress report assignment. It would be inappropriate to determine an “as is” market value simply by applying the “percentage complete” to total estimated construction costs – this likely over-estimates the “as is” value, in not considering the risk purchasers are undertaking in a liquidation value scenario.

At times, an appraiser may be requested to provide a “cost to complete” figure. It is essential that this report state very clearly that the cost to complete assumes continuity of the construction activity and is based on contracts and documents that currently exist. Again, it should be made clear that simply subtracting the cost to complete from the “value as complete” will not provide a useful “as is” value. For more information on this topic, please refer to Appendix 12.1 at the end of this chapter.

CONDOMINIUM/STRATA PROPERTY INSPECTION

The inspection of condominium/strata properties is similar in many respects to inspecting detached single-family properties. However, because the units usually share some space with adjacent units, there are some complicating factors. In multi-unit buildings, the inspection may be more similar to that for a commercial real estate apartment building than for a simple house. As well, there are considerations in strata ownership that go beyond what is involved for fee simple properties.

For preliminary research, do an Internet search for the building’s address, its name (if available), and the corporation number. There is often helpful background information available, such as problems with the strata council with respect to deferred maintenance, lawsuits, or other issues. For example, a web search for one building discovered it was in arrears for $250,000 on the hydro bill and that the hydro was going to be shut off shortly. Some agents specializing in condos will keep an online record of buildings with regards to year built, number of floors, number of units, amenities, and whether or not the building is pet friendly.

The inspection time for a typical unit is about 15 minutes. The time you save on the inspection should be spent doing more research on the building.

When you arrive at the building, walk around it and take front and rear photos, plus photos of the common amenities.
In the main lobby you will generally find the mail room – this is where you can count how many units there are in the building. The noticeboard for residents can provide invaluable information. For example, in one building, the notice that the management company was seeking quotes for the cockroach and rodent problem was very useful. Take a photo of the notices in the mail room, the management office numbers if displayed, and any information relating to the Board that operates the condo/strata corporation.

Seek out the management office and speak to whoever is on duty. Sometimes you will find they are very helpful, providing a floor plan and maybe even knowing the building inside and out. This is where you can get the breakdown of units with regards to how many 1 or 2 or 3 bedroom units and which units have the same floor plan. Ask if there is any special assessment or any major projects that the complex is considering. Ask about the heating system(s) in the building. Ask if this building was once a rental building that has been converted into strata ownership.

While riding up in the elevator, count the number of floors and note whether the building you are in has a 13th floor, as many do not.

When you enter the unit, walk through all areas and be sure to take a photo of the views. Ask the owner which direction you are facing if you are not certain. View and building orientation are very important factors – for example, in one second floor unit, the inspection happened to fall on garbage day, and with the bins directly below the balcony on a hot summer day, it was clear why this unit had sold for less money than another unit on the other side of the building.

Note any recent improvements in the unit and ask the owner if permits were required or if permission was required or granted from the board for each improvement. A simple water leak in a unit can cause damage a few floors down.

Ask what the monthly fee is and what is included. Ask if there are any special assessments or if they have received any notices for future work that may have to be done.

Enquire about how many parking spaces are registered with the unit and whether there is a storage locker. Ask if there are any parking spaces for sale, as this may help if an adjustment for the parking amenity is needed.

If you have a floor plan, note if the unit areas are stated; if not, you will need to measure. Alternatively, you may ask the homeowner for their assessment information – in Ontario, the unit size is provided.

After leaving the unit you should always make a floor plate diagram – alternatively, the Land Titles or Registry office may be able to provide the floor plate for each floor in the building. On the floor plate diagram, note the location of each unit, stairwells, elevators, and garbage area, and mark the directions that each unit faces.

If you have time and the owner agrees, ask them to take you to the common areas so you can see the amenities. Take photos of the amenities if possible. Getting to understand the amenity package in each building will help in evaluating comparable sales from other buildings if necessary.

After inspecting a few similar condo units, you will be able to determine if one side of the building is superior and has a value premium. Are the views superior on one side? Do units near the elevator and garbage chute sell for less money due to noise disturbances? Is there a premium paid for height within the building, does the top floor sell for a premium?

When appraising individual units in a multi-unit building, each inspection will give you a chance to gather and save more information about the building. The more time you spend gathering information on each visit, the easier each report becomes. You will want to keep separate files for each
building. Each time you return to the building, you can add to your file. You will never get all of the information on your first visit, but the goal is to continually build on it.

**RURAL PROPERTIES**

This section discusses rural residential properties, 1 to 10 acres in size. These inspections take more time due to the driving and distances involved, as well as extra research in finding comparable sales and evaluating local/regional attributes.

For preliminary research, you can use online mapping websites to search the address, to see how far the property is from your starting point and to identify the location and surrounding uses. You should zoom out, examining a few concessions in each direction as this will help you determine if there are any positive or negative features that are in close proximity to the subject property.

When booking the appointment, ask for a description of the property, including any outbuildings or unique characteristics. Use this information to carry out a quick review of potential comparables, so that you can drive by these at the same time as the subject inspection. Plot the properties on a map to plan your drive in the country. You may be able see some of the comparables on the way to the appointment and the rest on the return drive. This also helps determine the mileage required and the fee to charge your client. You may want to build a car wash into your fee as well!

The inspection of a typical rural home, not a large country estate, should take about an hour on site.

Further considerations for rural residential inspections:

- Ask the owner or agent the location of the septic field well. Find out if the well is drilled or bored, is there a cistern on site, does the property have low water levels in the well? You should ask if there are any old wells that have been filled in. There is legislation in many areas where only a licensed well technician can fill in a well.
- You will need to contact the Municipality of Town for zoning. Ask if there are any Conservation Authority guidelines that apply to the property. Is the property located in an Agricultural Land Reserve that restricts development?
- If there is a stream that traverses the property or runs along one of the lot lines, see if this property has riparian rights into the river bed. Is there a Fisheries Department that has authority over the stream, river bed, and banks?
- If there is standing timber of the land, what controls are in place and can the forest be harvested? Is there value associated with the timber? This requires specialized knowledge beyond the capabilities of most appraisers, in identifying the species of trees, the condition of the forest, the quantity, the age, and the stumpage rate.
- If the property is on a major arterial roadway, find out about future road widening and about snow removal in winter.
- Are there any gravel/aggregate companies in the area or are there applications in place for a future quarry? This leads to increased truck traffic and possible water problems with wells.
- Find out if there are any agricultural operations in the area with large numbers of livestock. This may impact the enjoyment of a property due to the smell (manure) that is stored or it may have a negative impact of the area’s well water and ground water – consider Walkerton Ontario, where bacteria from cattle manure got into the water supply and killed six people.
• Are there any easements associated with the property, such as neighbouring farmers with a right-of-way to get to their fields or snowmobile paths?
• Is there a landfill site in the area? If so, are there leachates seeping out? Are there programs in place to reduce the amount of seagulls, flies, and litter associated with landfill sites?
• Are there any oil tanks on site and have any been buried? If this is a hobby farm, are there any gas pumps on site?
• Is the property on First Nations Land? Or are there any heritage or archaeological implications such as shell middens or burial sites?

These are just some of the issues you may have to deal with for rural properties.

**Reporting Inspection Results: Standard of Care and Professional Liability**

New real estate professionals are often concerned about the depth of inspection required – specifically how deep are you expected to dig to uncover hidden items? The scope of work for any given area of practice will vary depending on the scope of the assignment – this scope of work, or the depth of due diligence expected, should be discussed with the client and expressed upfront in the letter of engagement or service contract. It is important to recognize that the level of depth of an inspection performed by an appraiser will be different than that performed by, for example, a home inspector, consulting engineer, or salesperson/broker. The scope of an appraiser’s inspection is set out in the Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP) and in the terms of reference for the assignment. Ultimately, the “reasonable appraiser test” guides an appraiser’s practice, in that the work must be completed with a reasonable level of skills, knowledge, and expertise – and “reasonable” here means your work is measured against the standard of what would be seen as acceptable to a group of similarly qualified professionals doing similar work.

Limiting conditions and extraordinary assumptions can be stated in a report to limit the appraiser’s liability for specific issues, such as engineering or environmental issues that may impact the property and its value. See the text box below for sample disclaimers used in appraisal reports. However, note that disclaimers cannot be used to waive away the liability for gross negligence on the part of the appraiser in delivering the service. It is the

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**Appraisers can use disclaimers to limit the scope of their liability. They cannot waive their professional obligations to their client, or negligence in providing their service.**
appraiser’s professional obligation to provide credible, duly-founded conclusions. There is an implication in this that an appraiser is being hired for their expertise and must do a proper job – an appraiser cannot use a disclaimer to excuse themselves from meeting these minimum professional obligations.

For example, although an appraiser is not a structural engineer, obvious signs of serious foundation issues, such as massive cracks in the foundation must be noted and accounted for. The appraiser can include a limiting condition that their professional qualifications do not include those of a professional engineer and also an assumption that the foundation is structurally sound; however, the appraiser must report on obvious evidence of the building’s condition that would likely impact its value. If apparent significant problems were not reported, the appraiser might be held liable for negligence in not fulfilling their professional obligations, not meeting standard of care expected for appraisers in this role.

**Sample Disclaimers in Appraisal Reports**

The AIC’s residential appraisal report provides the following in the “Assumptions and Limiting Conditions” section, to protect its members by limiting the duty of care owed and thus the potential for liability.

7.11 Unless otherwise stated in this report, the appraiser has no knowledge of any hidden or unapparent conditions of the property (including, but not limited to, its soils, physical structure, mechanical or other operating systems, its foundation, etc.) or adverse environmental conditions (on it or a neighbouring property, including the presence of hazardous wastes, toxic substances, etc.) that would make the property more or less valuable. It has been assumed that there are no such conditions unless they were observed at the time of inspection or became apparent during the normal research involved in completing the appraisal. This report should not be construed as an environmental audit or detailed property condition report, as such reporting is beyond the scope of this report and/or the qualifications of the appraiser. The author makes no guarantees or warranties, express or implied, regarding the condition of the property, and will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. The bearing capacity of the soil is assumed to be adequate.

**EVALUATION**

Once the inspection is complete, the evaluation phase can begin. The appraiser should view the subject property on the basis that it meets the typically accepted standards for that area and price bracket, and then identify deficiencies or problems that will be costly to rectify and will therefore decrease the value of the house. Alternatively, the appraiser should note “better than average” situations where additional or higher quality materials/workmanship/equipment exist that may increase the value of the house.

A similar inspection procedure should be used in the review of the comparable sales. To make an objective comparison, the appraiser should attempt to be as familiar with the comparables as he/she is with the subject property.

A comprehensive research and inspection provides the appraiser with a foundation for a valid and reliable estimate of value. Failure to properly research or inspect the property may contribute to erroneous valuation conclusions. However, keep in mind that some property issues can be highly complex and extend far beyond the knowledge or capabilities of appraisers. It is the appraiser’s responsibility to recognize where more specialized consultants may be necessary. Two important rules to follow when reporting the results of property inspections:

1. Do not state what you do not know first-hand.
2. Do state only what you do know first-hand.
In evaluating the value impact of problems with the subject property, keep in mind many of these items are highly subjective, so the economic weight given to them will vary from situation to situation. A professional attitude, with its associated objectivity, must be maintained in order to justify any stated conclusions.

The details of the appraisal analysis, using either the direct comparison approach or the cost approach, will be left to other courses in the UBC Real Estate Division’s program of study.

**Common Reasons Why a Real Estate Appraiser can be Involved in Court Cases**
(Derived from “The Appraiser’s Corner”)

The following are some common reasons where real estate appraisers can get themselves in legal trouble:

- **Failure to discover and declare enhancement and site flaws.** The appraiser may be able to obtain a copy of the “Seller’s Disclosure Statement”, if the seller is required to make such a statement in support of a property transaction. The appraiser may even offer the evaluator’s own form with questions for the seller to answer and sign. When inspecting the subject property, make sure that you ask the seller if there are problems such as mould, evidence of external settling, etc. Ask about former uses of the subject property ...horror stories abound regarding former “grow-ops” and the massive associated clean-up costs.

- **Wrong estimation of the living area.** The appraiser must not simply rely on information from a former appraiser or the real estate broker, data taken from the multiple listing system, public records, or plans from the architect. The construction plans and dimensions of the living area should be verified. If the seller has something to add to the living area, such as an enclosed garage/carport or veranda, this should always be separated in the sketch and in the report, even though the area still has equal contributory value. All changes to the living area, even if the computed area remains the same, should be noted separately in the report and on a separate sketch.

- **Not indicating** in the report that there's leakage of the roof, basements that are wet, cracks in the foundation, infestation by insects or vermin, and minor or major mechanical defects.

- **Reaching a decision in which the property is overvalued or undervalued.** The appraiser is likely to deceive if they do not have the needed skill. Errors and omission [or liability] insurance may not protect the appraiser if found guilty. A study stated that approximately fifteen percent of all fraud cases deal with appraisers who have little or no experience.

- **The appraiser is valuing the wrong estate.** Problem definition is key!

- **The appraiser did not confirm items** included in a residential form report, such as utility hookups, zoning, dimensions of the lot, municipal assessment and taxes, the right owner of record, subject’s history (both listing and sales), etc. Verification should be the chief duty when doing an appraisal.

- **Defamation.** A review appraiser can be sued if he or she insults the appraiser instead of the report.

**SUMMARY**

This chapter has outlined how residential building inspection fits into the appraisal process. In order to determine a property’s market value, the appraiser must first determine its attributes, both positive and negative. The chapter detailed tools and techniques for completing these inspections, including limitations on the depth of due diligence expected in these inspections. Considerations were outlined for detached single-family properties, condominium/strata properties, and rural properties. Also provided were tips for the evaluation of partially completed projects. Finally, the chapter outlined reporting requirements for residential inspections, in particular the scope of work, the need for disclosure, and the use of limiting conditions and disclaimers. Although the level of inspection by the different real estate professionals may differ, there is a standard of care expected of every professional to the client.
APPENDIX 12.1: ESTIMATING THE VALUE OF PARTIALLY COMPLETED BUILDINGS

Professional Practice Bulletin [PP-01-E]
September 1990

Estimating the Value of Partially-Completed Buildings

From time to time an appraiser is requested to prepare either a progress inspection or a valuation of a building under construction.

Obviously, great care has to be taken when estimating the value of partial improvements, but difficulties can arise when a 'percentage complete' estimate is used to derive an “as is” value. In almost all cases, the simple application of the percentage complete applied to the overall estimated construction cost will significantly overvalue the property in its then “as is” condition.

In addition, it has to be recognized that structures under construction are subject to contractors' liens, construction holdbacks or other assessments which would likely be unknown to the appraiser, and which could be misleading if not taken into account.

There are many reasons why construction activity could cease on a building under construction, and many of these could severely impact on the value “as is.” Hence, it would be inappropriate for the appraiser to estimate an ‘as is’ value based simply on the percentage complete.

It is strongly recommended that, when completing progress inspections, the appraiser limit comments to an estimate of percentage complete, and not provide a dollar value “as is.” If the client requests an “as is” value, then this would require a fully-documented appraisal report. It would be desirable, but rarely possible, that such a report should utilize similar partially-completed buildings.

It is also strongly recommended that an adequate photographic record be retained of the premises as inspected. Partially completed buildings seem to rapidly lose all that is remotely portable, and much that is not, when construction activity ceases. Without a photographic record, it would be difficult for the appraiser to justify the percentage complete figure in such circumstances.

It is also extremely important that the appraiser receive adequate written instructions as to what is expected to be the standard of finish on completion. Such items as parking facilities, landscaping, fencing and appliances can all cause difficulty for the appraiser.
The appraiser should also take rare not to give the impression that the premises are in compliance with all building code requirements unless the appraiser has the expertise to provide such assurances, or unless separate professional expertise has been obtained in this regard.

Similarly, the appraiser is unlikely to be in a position to judge the quality of the work, the materials used or, indeed, whether such is in compliance with the original specifications, where the work has been covered up by subsequent construction activity.

Such concerns should be addressed specifically in the assumptions and limiting conditions accompanying the report.

At times, the appraiser will be requested to provide a “cost to complete” figure, either separate from or in conjunction with a full appraisal. It is essential that the report state very clearly that the cost to complete assumes continuity of construction activity, as additional costs would be incurred if a contractor had to be replaced or construction activity stalled, for reasons such as indelment weather, labour disputes, etc.

It is also very important that the report make clear that mere subtraction of the cost to complete from the “value as complete” will not provide an “as is” value.

Adherence to these suggestions will significantly reduce the risk an appraiser faces when valuing partially-complete buildings.

CUSPAP References

Hypothetical Conditions

Appraisal Standard

6.2.11 In the report the appraiser must identify any hypothetical conditions (including proposed improvements); [see 7.12]

Appraisal Standard Comment

7.12.1 May be used when they are required for legal purposes, for purposes of reasonable analysis, or for purposes of comparison. Common hypothetical conditions include proposed improvements and prospective appraisals. When appraising proposed improvements, examine and have available for future examination:

7.12.1.i. plans, specifications, or other documents sufficient to identify the scope and character of
7.12.1.ii. the proposed improvements;
7.12.1.iii. evidence indicating the probable time of completion of the proposed improvements; and
7.12.1.iv. reasonably clear and appropriate evidence supporting development costs, anticipated earnings, occupancy projections, and the anticipated competition at the time of completion.

7.12.1.v. a recertification of value does not change the effective date of the appraisal. [see 12.12]

**Practice Notes**

12.12.1 A progress report, prepared to portray percentage complete without reference to value, is considered to be an extension of the original report. It is misleading to state a value for a partially completed improvement by simply deducting the cost to complete (or percentage) from the value as though complete.

12.31.1.ii. Extraordinary Assumptions (Hypothetical Conditions):

- repairs or improvements have been completed;
- execution of pending lease;
- rezoning has been achieved;
- an expropriation scheme is disregarded;
- a prospective appraisal; [see 6.2.5]
- municipal sanitary sewer when none is available;
- aggregate (retail) or bulk (wholesale) marketing of units.

**Canadian Property Valuation Magazine Reference**


http://viewer.zmags.com/showmag.php?mid=wrsqf&q#/page42/

**Canadian Appraiser Magazine Reference**


http://www.aicanada.ca/images/content/file/Can_App_Vol_49_Bk_3_03.pdf


http://www.aicanada.ca/images/content/file/Can_App_Vol_49_Bk_4_01.pdf

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