



Land Development Checklist





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This checklist outlines the typical process developers should go through, from looking at a property prior to purchase to evaluating the site potential, obtaining development approvals, and preparing finished lots for sale to builders. Land development today involves a rigorous, comprehensive set of evaluations and approvals involving multiple parties in both the private and public sectors. This resource will help both developers and public officials better understand the many steps in the land development process, the timeline, likely costs, and required due diligence associated with residential development.



Photo Credit: United Landmark Associates

SITE CONSTRAINTS AND OPPORTUNITIES

I found a property for sale, now what do I do?

- What is the reason for interest in this piece of land?
- What governmental entities have jurisdiction over this property?
- Has the property been recently surveyed?
- What is the gross and net size of the property (developable area)?
- What is the price of the property and requirements of the transaction?
- Are there any physical improvements? What is the condition and approximate value?
- What is the zoning for this property?
- What is the zoning/land use of the surrounding properties?
- Are there any physical encroachments from neighboring properties?
- Are there existing easements or covenants on this property?
- Has the owner put any other conditions on the land?
- Will there be right-of-way dedication required?
- Are there power lines or transmission lines crossing the property?
- Are utilities available from government entities?
- Do utilities serve the property or do they need to be extended?
- How would you rate the location for the intended market segment?
- What is the highest and best use of the property?
- Is the land owner willing to sign an option agreement?

SITE CONSTRAINTS AND OPPORTUNITIES (CONTINUED)

Still interested in the property? Continue your research....

- Perform American Land Title Association (ALTA) land title survey
- Walk the property and take site photos
- Consider the following:
 - Rock outcroppings
 - Low areas
 - Slopes
 - Floodplains
 - Wetlands
 - Water elements
 - High points and ridgelines
 - Land forms/unique natural features
 - Views and vistas
 - Sounds and smells
 - Cultural and historic resources
- Is the land characterized by or exposed to:
 - Poor soils
 - Soil erosion
 - Subsidence
 - Geologic hazards
 - Unusual noise, vibration or smells
 - Ingress and egress limitations
 - Poor surface drainage
 - High water table
 - Proximity to industrial facilities
 - Unsightly views
 - Upstream dam
 - Railroad tracks
 - Heavy air traffic
 - Heavy vehicular traffic
 - Any other actual or apparent safety concerns?
 - Are special consultants needed?
- Inventory natural resources
 - Topography
 - Forest cover
 - Natural or man-made bodies of water
 - Wetlands delineation
 - Floodplains
 - Wildlife
 - Soils and rock
 - Steep slopes
 - Plant communities and species



Additional Investigations

- Are there any waters of the U.S. on the site or running through the site?
- Have soil borings been conducted to determine depth?
- What are the potential access points or routes?
- What is the frontage and depth relative to the roads?
- Are there adequate stormwater outfalls?
- Has an Environmental Phase I Assessment been conducted?
- Are there any hazardous materials that will require clean-up/disposal?
- Have preliminary perc tests been conducted?
- Is there utility capacity available to serve the property?
- Will utility relocation be required?
- Are there wells on the land? Well depth?
- Will the property require septic? Will a community septic tank work on the site?
- Police and fire services provided?
- Trash pick-up?
- Are there any special local environmental regulations (ex: critical area, water quality protection area)?
- Is the property subject to Fish and Game regulations?
- Are there any threatened or endangered species on the site?
- Has any portion of the site been classified as historically or archeologically significant?

Development requirements come in many forms and can be imposed on this process by governments at different levels. At the local level, jurisdictions may charge permit, utility hook-up, and impact fees and establish development and construction standards that either directly increase costs on builders and developers or cause delays that translate to higher costs.

Source: Paul Emrath, Ph.D. "How Government Regulation Affects the Price of a New Home." *Housing Economics*, 2011.

GOVERNMENT CONSTRAINTS AND OPPORTUNITIES

What can be done on this property?

- What are the development review and approval procedures in this community?
- What is the local attitude towards new development?
- Is there a Comprehensive Plan? Master Plan? Growth Management Plan? Neighborhood Plan? What is the future community vision for this area?
- Have we obtained all of the relevant codes and ordinances (subdivision, zoning, energy, building)?
- What is the existing zoning for this property? Does the existing zoning align with the comprehensive plan?
- Is there an overlay district over this property?
- What is the time table for subdivision approval?
- Will the municipality require a donation of land or fee-in-lieu for open space, parks, schools, etc?
- Does the municipality have inclusionary zoning or other special requirements?
- Will an Archeological study be required?
- Will a Threatened and Endangered Species study be required?
- Will a traffic capacity or impact study need to be conducted?
- Are there natural or historic protected areas?
- Considering the net buildable area, how many units can I build on this property? Can I still make a profit?

PROJECT FINANCING

Will this project pencil out?

- Run a cash flow for the intended use
- Assess lot sales prices and pace, total development cost and timing, other project costs, soft costs, and fees and determine land prices
- Calculate the loan-to-value ratios
- Know the various lending guidelines and parameters
- Gather thorough documentation to prove financial capacity and project feasibility
- Is AD&C financing available? Gap financing? Permanent mortgage loans?
- Does the municipality require performance guarantees? Bond? Cash? Letter of credit? Escrow?
- What municipal financing options are available in this community (ex: TIFs)?
- Has a market analysis been conducted?
- Has a feasibility study been conducted?



Types of Costs Incurred During Development

- Pure cost of delays in process
- Cost of applying for zoning/subdivision approval
- Costs incurred after approval/before construction (impact fees, environmental mitigation, etc.)
- Value of land dedicated/left unbuilt
- Costs of complying with changes in development standards (setbacks, road widths, etc.)

Types of Costs Incurred During Construction

- Pure cost of delays in process
- Added cost due to changes in construction codes and standards over the past 10 years
- Permit, hook-up, impact, or other fees paid by builder

Source: Paul Emrath, Ph.D. "How Government Regulation Affects the Price of a New Home." *Housing Economics*, 2011.

**DESIGN
CONCEPT**

TYPICAL DEVELOPMENT APPROVAL PROCESS

STEP 1

STEP 2

**DO YOU REQUIRE
FEDERAL PERMITS?**

NO

YES

Federal Environmental Review

Environmental Impact Statement

Federal Permits

APPROVALS

Rezoning, Variance,
or Special Exception Required?

YES

NO

Adequate Public Facilities Ordinance Applies?

← YES

NO

Is Subdivision Involved?

YES

Subdivision Sketch Plan

Staff Review

Submit Preliminary Subdivision Plan

Planning Commission Hearing

Submit Final Subdivision Plan

Planning Commission Approval

*Although the development approval process is typically local, there are an increasing number of federal permits that may need to be obtained.

The development approval process varies greatly from one place to another, and many require several layers of local, state, and federal permits and approvals. This flow chart includes steps that are common to the development approval process in many jurisdictions. The time needed to obtain all of the approvals and permits necessary to begin development ranges from several months to many years.

STEP 3

PERMITTING AND FEES

Submit Conventional or Alternative Concept

Planning and Zoning Commission Hearings

Submit Site Development Plan

Planning Commission Approval

Post Construction Bonds

Impact Fee Ordinance?

YES

Independent Impact Fee Determination
(Optional)

Pay Impact and Other Fees

Obtain Grading and Other Permits

Obtain Building Permits

Sell Lots or Build Homes

Sell/Lease Homes

NO



SUBDIVISION COSTS WORKSHEET

Engineering and surveying	\$ _____	Landscaping	\$ _____
Soil tests	\$ _____	Trees	\$ _____
Rock removal	\$ _____	Walls or fences	\$ _____
Structure and debris removal	\$ _____	Trails and bike paths	\$ _____
Movement of water lines	\$ _____	Park dedication	\$ _____
Removal of hazardous, expansive, and otherwise defective soil	\$ _____	• Land/cash equivalent	\$ _____
Hard soil removal	\$ _____	• Park improvements	\$ _____
Soil import/export	\$ _____	Electricity	\$ _____
Grading	\$ _____	Phone/cable/internet	\$ _____
Drainage lines	\$ _____	Undergrounding utilities	\$ _____
Slope control	\$ _____	Gas	\$ _____
Retaining walls	\$ _____	Water connection fees	\$ _____
Structures (bridges, culverts, etc.)	\$ _____	Sewer	\$ _____
Curbs and gutters	\$ _____	Sewer connection fees	\$ _____
Pavings	\$ _____	Sewer treatment fees	\$ _____
Sidewalks	\$ _____	Septic tanks	\$ _____
Driveways	\$ _____	Pumping plants	\$ _____
Median islands	\$ _____	Sanitation district	\$ _____
Street lights	\$ _____	Storm drain	\$ _____
Street signs	\$ _____	Storm drain fees	\$ _____
Traffic signals	\$ _____	Off-tract costs – water	\$ _____
Water meters	\$ _____	Off-tract costs – sewer	\$ _____
Fire hydrants	\$ _____	Off-tract costs – other	\$ _____
		Permits and plan checks	\$ _____

Inspection fees \$ _____
 Growth management \$ _____
 School fees \$ _____
 Capital facilities fees \$ _____
 Environmental assessments \$ _____
 Development taxes \$ _____
 Other fees \$ _____
 Bond premium \$ _____
 Property taxes \$ _____
 Home Owners Association (HOA) fees \$ _____
 Interest \$ _____
 Overhead \$ _____
 Miscellaneous \$ _____
 Total subdivision costs \$ _____
 • Less projected refund advances \$ _____
 • Cost benefiting other land or later units \$ _____
 Actual subdivision costs \$ _____

Total raw land cost \$ _____
 Estimated number of lots _____
 Raw lot costs (total raw land cost divided by estimated number of lots) \$ _____
 Total land and subdivision costs \$ _____
 Estimated number of lots _____
 Finished lot cost (total land and subdivision cost divided by estimated number of lots) \$ _____
 Estimated retail value of finished lot \$ _____

Re-run project cash flow based on subdivision cost worksheet

SITE PLAN

I have decided to purchase the property. Now what?

- Know the rules but be creative and innovative
- Will the site design require a zoning change? Special exception? Variance?
- Does the design need to be reviewed by a design or architectural review board in addition to the planning board? Fire District? Public Works?
- Create conceptual layouts
 - What is the vision and overall design concept?
 - Product types?
 - Lot sizes?
 - Amenities?
 - Green space requirements?
 - Considering National Green Building Standard Certification for land development?
 - Have I contacted the local planning department for early meetings?
 - What is my public outreach plan? What are the notification requirements?
 - Have I engaged and met with:
 - Civic associations, neighborhood groups
 - Surrounding home owners associations
 - Adjacent property owners
 - Outline benefits but understand local issues and concerns





Photo Credit: Lessard Design, Inc.

On average, regulations imposed by government at all levels account for 25 percent of the final price of a new single-family home built for sale. Nearly two-thirds of this—16.4 percent of the final house price—results from regulations imposed during the lot’s development. On average, regulation accounts for a little over 57 percent of the price of a developed lot sold to a builder. A little more than one-third—8.6 percent of the final house price—is the result of costs incurred by the builder after purchasing the finished lot.

Source: Paul Emrath, Ph.D. "How Government Regulation Affects the Price of a New Home." *Housing Economics*, 2011.

CONSTRUCTION SEQUENCING

Once your plan is approved make sure to pull the appropriate permits

- Land use, zoning and subdivision
- Wetlands
- Demolition
- Grading
- Right-of-Way (ROW) grading and sediment control
- Stormwater management
- National Pollutant Discharge Elimination System (NPDES)
- Storm drain and paving
- Tree removal and protection
- Sanitary sewer main construction
- Maintenance of traffic – construction in ROW
- Construction and sales trailer
- Model homes
- Driveway
- Temporary construction access
- Signage and marketing
- Install construction entrances
- Sediment control installation
- Clearing and demolition
- Topsoil removal
- Utility relocation and offsite water and sewer extension
- Earthwork operations – cut and fill
- Interim grading for future roads and lots
- Sanitary sewer install
- Storm drain install
- Water system install
- Curb and gutter
- Installation of streets, parking and sidewalks
- Dry utilities
- Street lights
- Trees and landscaping

Ready to sell finished lots!



If selling lots to a builder:

- ❑ Sign Letter of Intent and contract for sale before construction of project starts
- ❑ Create contract clause obligating builder to protect existing subdivision infrastructure improvements, tree conservation areas and stormwater Best Management Practices (BMP) from damage during house construction
- ❑ Review architectural guidelines with the Builder
- ❑ Transfer liability for governmental and regulatory obligations
- ❑ Transfer Use of Developers Grading and Sediment Control Permits
- ❑ Performance Guarantees:
 - Perform a site inspection and obtain partial or final release of the performance guarantee from the municipality
 - Obtain a replacement bond or Letter of Credit for builder related items
- ❑ Transfer NPDES, DNR and EPA Land Disturbance permits only after all lots are developed
- ❑ Provide homeowner or HOA transition and education documents





CONTACT INFORMATION

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The National Association of Home Builders is a Washington-based trade association representing more than 140,000 members involved in remodeling, home building, multifamily construction, property management, subcontracting, design, housing finance, building product manufacturing and other aspects of residential and light commercial construction. NAHB is affiliated with 800 state and local home builders associations around the country. NAHB's builder members will construct about 80 percent of the new housing units projected for this year.