



200 W. Oak Street, 3rd Floor
Fort Collins, CO 80521
(970) 498-7683 / larimer.org/planning

FINAL PLATS

Conservation Developments, Planned Land Divisions & Subdivisions

PLEASE NOTE: A PRE-APPLICATION CONFERENCE IS REQUIRED PRIOR TO SUBMITTING THIS APPLICATION.

GENERAL:

1. All applications for Subdivision, Conservation Development and Planned Land Divisions require Final Plat review by the Board of County Commissioners.
2. The Planning Department will not accept an application for Final Plat until the Board of County Commissioners have approved or conditionally approved a Preliminary Plat.
3. A Subdivision application for 6 or fewer lots may combine Preliminary Plat and Final Plat review by the Board of County Commissioners.

BUILDING PERMITS – PLEASE NOTE:

- A. A building permit will not be accepted on property that has a valid application pending for review of a Variance, Special Exception, Special Review, Site Plan, Rezoning, Subdivision, Conservation Development, Planned Land Division, Minor Land Division or Amended Plat.
- B. The Building Department may accept applications for building permits after the Final Plat is recorded or the Site Plan is approved and may issue permits as follows:
 1. Footing and foundation permits for new construction will be issued only after the following have occurred:
 - a. Over lot grading is complete and the County Engineer has inspected and approved the grading;
 - b. Final grading of drainage easements and the installation of storm water drainage system is complete and the County Engineer has inspected and approved the grading and installation; and
 - c. Construction of the roadway sub-grade and installation of the aggregate base course, or other all-weather surface, for the roadway serving the project is completed and inspected and approved by the County Engineer and acceptable density tests for the sub-grade and utility trenches have been submitted to and approved by the County Engineer.
 - d. Street signs are properly installed at all intersections and have been inspected and approved by the County Engineer.
 2. Full building permits for new construction will be issued only after the following have occurred:
 - a. Roadway surfacing at least through aggregate base course or plant mix bituminous base application is complete; the county Engineer has inspected and approved the surfacing; and density tests for the applied material have been submitted to and approved by the County Engineer;

- b. Public water and sewer systems are completely constructed and evidence of acceptance by the appropriate water, sewer, and fire protection providers has been submitted to the County Planning Department; and
 - c. Driveway culverts have been installed and the County Engineer has inspected and approved the culverts.
 - C. No structure can be occupied until a Certificate of Occupancy is issued by the Building Department.
 - D. All new homes built within subdivision, with approved Subdivision Drainage and Grading Plans, must have a Site Grading and Drainage Compliance Certification Form filed with the Larimer County Building Department **prior** to the issuance of a Certificate of Occupancy. Such form must be signed by the builder of the structure and notarized. The form will certify that the grading and drainage scheme for the individual lot is in compliance with the overall **approved** Subdivision Grading and Drainage Plan.
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SUBMITTAL INSTRUCTIONS:

- A Pre-Application Conference is required prior to submitting this application.
- The quantities of any required submittal items shall be as determined at the Pre-Application Conference.
- Applications may be submitted on any working day. All applications must be complete. Any application, which is not complete, will not be accepted, processed, or scheduled for review. If **all** of the items required to be submitted (as determined at the Pre-Application Conference) are not included in the application, you will be informed to pick up your application materials and re-submit at a later date.

SUBMITTAL REQUIREMENTS for FINAL PLATS

for Conservation Developments, Planned Land Divisions and Subdivisions

The applicant and their consultant(s) are responsible for assuring that the project meets the requirements and standards of the Land Use Code and the County Zoning District(s) for the subject property.

All submitted documents must include the project name, the date it was prepared and by whom.

Incomplete submittals will be returned to the applicant and processing will not start until a complete application is received.

Please Note: Based upon the Planning Staff's understanding of the proposal during the Pre-Application Conference, some of the following submittal information may not be required or the level of detail reduced. Some deviations from the submittal requirements may be required at a later date if requested by a referral department or agency.

I. FINAL PLAT REQUIREMENTS:

1. The final plat shall conform with the approved preliminary plat.
2. The final plat must be prepared by a Colorado licensed land surveyor.
3. The name of the development must be the same as the approved preliminary plat.
4. Prior to recording the final plat, all prior year taxes must be paid.

II. SUBMITTAL REQUIREMENTS: One Electronic Set Of All Submittal Materials (Flash/Jump Drive or CD)

1. _____ **Application Form** completed and signed by the property owner(s) and the applicant.
2. _____ **Project Description:** A complete, detailed written description stating how the project conforms with the conditions of approval (findings and resolution). Project review can be delayed if County staff and reviewing agencies are unable to determine what is being requested and how specific standards will be met
3. _____ **Review Criteria:** Provide a written explanation detailing how the application meets all of the review criteria as stated in the Land Use Code for this application.
4. _____ **Final Plat Contents:**
 1. The plat shall conform to all the requirements of C. R. S. 1973 38-51-106 (Land Survey Plats). A workmanlike execution of the plat shall be made in every detail. A poorly drawn or illegible plat is sufficient cause for its rejection.
 2. The first submittal of the final plat shall be a blueline copy in the following size: twenty-four (24) inches by thirty-six (36) inches. The final submittal of the final plat shall be delineated in drawing ink on mylar, or other acceptable material, in the following size: twenty-four (24) inches by thirty-six (36) inches. No portion of the final plat shall have "stick on" type material. A photo mylar with original signatures is acceptable.
 3. The bearings, distances and curve data of all perimeter boundary lines shall be indicated outside the boundary line. When the property is bounded by an irregular

shore line or body of water, the bearings and distances of a closing meander traverse shall be given and notation made that the plat includes all land to the water's edge or otherwise.

4. All blocks and all lots within each block shall be numbered consecutively and shown on the plat.
5. On curved boundaries and all curves on the plat, sufficient data shall be given to enable the re-establishment of the curves on the ground. This curve data shall include the following for circular curves:
 - a. Radius of curve.
 - b. Central angle.
 - c. Arc length.
 - d. Chord length and bearing.
 - e. Notation of non-tangent curves with radial bearings shown to all points of non-tangency.
6. Excepted parcels shall be marked "not included in this subdivision" and the boundary completely indicated by bearings and distances.
7. Naming of Lots, Outlots, Open Space Tracts and other Parcels shall be labeled as follows:
 - **Outlots:** All parcels that are to be used only for drainage easements, rights of way or other uses that do not need any buildings must be labeled "Outlot" followed by consecutive letter designations beginning with "A".
 - **Residual Lots:** All parcels in Conservation Developments and Rural Land Plans that are considered to be Residual Land must be labeled "Residual Lot" followed by consecutive letter designations beginning with "A". Residual lots must be further identified by one of the following applicable designations that must be placed in parentheses after the residual lot label:
 1. Buildable/Residence(s) for those residual lots that may be occupied by a single family dwelling;
 2. Buildable/Support Buildings Only for those residual lots that may be occupied by buildings that are accessory to the use of the residual lot; or
 3. Non-Buildable for those residual lots that are not intended to be occupied by any buildings.
 - **Common Area Lots:** All parcels in Subdivisions, Conservation Developments, Rural Land Plans, Planned Land Divisions and Minor Land Divisions that are common open space for the development must be labeled "Common Area Lot" followed by a letter designation beginning with "A". Common Area Lots must be further identified by one of the following applicable designations that must be placed in parentheses after the common area lot label:
 1. Buildable/Support Buildings Only for those common area lots that may be occupied by buildings or structures that are intended for use by the lot owners in the development; or
 2. Non-Buildable for those common area lots that are not intended to be occupied by any buildings or structures.
 - **Residential, Commercial, Industrial or Multi-family Lots:** All parcels in

Subdivisions, Conservation Developments, Planned Land Divisions and Minor Land Divisions that are for residential, commercial, industrial or multi-family purposes must be labeled "Lot" followed by a number designation beginning with 1.

8. All streets, walkways and alleys shall be designated as such and streets shall be named as follows with bearings and distances given:
 - A. Standards for naming roads and streets are intended to standardize terminology and avoid duplications to improve emergency service response to all parts of the County.
 - B. Directions can not be part of any street or road name (for example, Westover Road or Fossil Creek Drive North are not acceptable). North, South, East and West are intended to be directional features of the addressing system and lead to confusing addresses if included as part of the name. Directions must be placed ahead of the name (for example, East Smith Street).
 - C. Names that are numbers must be expressed numerically (for example, 2nd Street, not Second Street).
 - D. Road names must be unique and not repeated in the County. Alternate spelling, homonyms (dear and deer) and corporate or trade names are not acceptable. All road names must use the common spelling as found in a standard dictionary. Road names must not contain any punctuation or symbols. Only letters of the alphabet, numbers from 0 to 9 and blank spaces may be included in road names.
 - E. County Roads that are numbered: North-South County roads are given odd numbers starting at the east County line. East-West County roads are given even numbers starting with '2' at the south County line. County road numbers followed by a letter indicate a County road is not on a section line. For each tenth of a mile west or north of a section line, the letter designation increases (for example, County Road 38E indicates a County road that is five-tenths of a mile north of County Road 38). Numbered County roads outside designated Growth Management Areas must not be named. Inside Growth Management Areas, County roads will be named using the applicable city's street names.
 - F. State and federal highways are numbered. These highways are not named.
 - G. The following road name suffixes must be used in the naming of new roads and streets: Boulevard or Parkway for a collector or arterial street with a raised median; Court or Place for a permanently dead-end street ending in a cul-de-sac; Lane or Way for a curving, minor street; Avenue or Road for a continuous thoroughfare; Drive for a curving, continuous street; and Street as the common or default suffix. Any roads or streets that make a directional change of approximately 90 degrees must have a unique name after each directional change.
 - H. Abbreviations of the main title of the street or road name can not be used (for example, Mount Shasta Drive, not Mt. Shasta Drive). Street or road designations such as drive or lane may be abbreviated according to a list of standard abbreviations available from the County Building Department.
 - I. Street and road names can not change at intersections. Continuations of existing streets or roads must use the existing name.
 - J. All addresses will be assigned by the County Building Department. Lots in new

developments will be assigned addresses when the Final Plat is approved.

Addresses for unplatted lots or parcels will be assigned when a building permit is issued on that lot or parcel.

9. All easements shall be designated as to type and adequate bearings and dimensions shall be shown to develop their position in the field.
10. All dimensions of irregularly shaped lots shall be indicated on each lot.
11. Bearings and lengths shall be given for all lot lines, except that bearings and lengths need not be given for interior lot lines where the bearings and lengths are the same as those of both end lot lines.
12. Parcels not contiguous shall not be included in one plat, nor shall more than one plat be made on the same sheet. Contiguous parcels owned by different parties may be embraced on one plat, provided that all owners join in the dedication and acknowledgement.
13. Lengths shall be shown to hundredths of a foot, and angles and bearings shall be shown to seconds of arc.
14. The information on the plat shall include, in addition to the requirements of C. R. S., 1973, 38-51-106, the following:
 - a. Name of subdivision and date of preparation. **The plat must be titled properly and must include the Planning Department's file number (for example, XYZ Conservation Development File #02-S0000).**
 - b. The drawing shall be made at a scale of 1"=100', or less. Where lot size is greater than 2.5 acres, a scale of 1"=200' may be used.
 - c. Square footage of each lot and/or tract (acreage to the nearest one hundredth acre may be substituted for square footage when the lot exceeds one acre in size).
 - d. It is encouraged that the surveyor show all conflicting boundary evidence (ie. fences, monuments, physical features, etc.), to comply with Colorado Revised Statute 38-51- 106 (k).
15. **Notations and Recordation:** Developer shall note on the final subdivision plat, as a plat note, and in a disclosure statement the existence of the Development Agreement as recorded by the Larimer County Clerk and Recorder. Developer shall note on the final subdivision plat and in the disclosure notice the entity/person(s) responsible for maintenance of the improvements, landscaping, common areas and Residual Land. Developer shall file for recording with the Larimer County Clerk and Recorder, the Development Agreement and any deeds and/or other documents required as part of the final plat approval of this development by the Board of County Commissioners.

APPROVAL STATEMENTS: The plat shall contain the following statements:

1. RECORDATION INFORMATION:

Lots in this development are subject to the conditions and requirements of a Development Agreement. The Developer and Larimer County executed this agreement in consideration of the approval of this Development. This Agreement is recorded in the Larimer County Clerk's and Recorder's office immediately after this

plat. All purchasers should obtain and read the Development Agreement.

2. APPROVAL OF SURVEY PLAT:

This plat has been reviewed and is hereby approved as to form as complying with all current survey requirements of Larimer County and of State law pertaining to platting and monumentation. This approval constitutes neither a warranty by Larimer County concerning such compliance, nor a release or indemnity of the subdivided and his surveyor concerning any noncompliance of this plat with current survey requirements.

Date: _____

_____, Colorado P.L.S. No. _____
(Signature)

_____, Larimer County Engineering Department
(Printed Name)

3. CERTIFICATION OF OWNERSHIP AND DEDICATION:

Know all men by these presents that _____, being the owner(s) of that part of the (described quarter-section, section, township, range), Larimer County, Colorado, being more particularly described as follows, to wit: Beginning at (complete legal description); containing (to nearest one-hundredth) acres more or less; have by these presents caused the same to be surveyed and subdivided into lots (and blocks as appropriate) to be known as the plat of _____ (Subdivision name), and do hereby dedicate and convey to and for public use forever hereafter the streets as are laid out and designated on this plat, and do also reserve perpetual easements for the installation and maintenance of utilities and for irrigation and drainage facilities as are laid out and designated on this plat, witness our hands and seals this _____ day of _____, 20____.

Owner(s)

The signature(s) shall be notarized as follows:

State of _____)
_____) SS
County of _____)

The foregoing dedication was acknowledged before me this _____ day of _____, 20____, by _____.

SEAL _____
Notary Public

My commission expires _____

NOTES:

(A) Where a mortgage or lienholder are involved, the dedication and signature block must be modified accordingly.

(B) Where private streets are allowed, the dedication must be modified accordingly.

4. SURVEYOR'S CERTIFICATE:

I, (surveyor's name), a duly registered land surveyor in the State of Colorado, do hereby certify that this plat of (subdivision name) truly and correctly represents the results of a survey made by me or under my direct supervision.

Surveyor

/Seal

5. BOARD OF COUNTY COMMISSIONERS APPROVAL:

Approved by the Larimer County Board of County Commissioners this _____ day of _____, 20____. All dedications are hereby accepted on behalf of the public. This approval does not constitute acceptance of responsibility by the County for construction, repair, or maintenance of any streets, highways, alleys, bridges, rights-of-way or other improvements designated on this plat.

Chairman

ATTEST:

Clerk of the Board

6. LARIMER COUNTY HEALTH AUTHORITY APPROVAL:

By the Larimer County Health Authority this _____ day of _____, 20____. All construction on this subdivision, or any lot therein, including the development of domestic water, and the provision of sewage treatment, shall be done in a manner which will meet all of the requirements of the Colorado Department of Health, and the Larimer County Public Health Department, and the officers authorized to enforce such requirements.

Larimer County Health Authority

7. TDU ADMINISTRATOR (only if the parcel is in a TDU receiving area) Approved by the Larimer County TDU Administrator this _____ day of _____, 20____

5. _____ **Closure Data:** One hard copy computer printout of plat boundary data (perimeter bearings, distances, closure and acreage information).

6. _____ **Monuments:** For subdivision or resubdivision, in regard to the survey, compliance with all the rules and regulations as set forth in Articles 51 and 53, Title 38, Colorado Revised Statutes, 1973 shall be required. The monumentation required shall be completed before final plat approval is given. In addition, the following shall be required:

1. A copy of each monument record the surveyor has filed with the State Board of

Registration for Professional Land Surveyors, or if the surveyor has used an existing monument record, and the description of the monument and it's accessories substantially matches that of the one indicated on the plat, a copy thereof is acceptable.

2. Any plat to be filed shall reference at least two (2) public land survey monuments in the section in which it is located.
3. All final plats shall be reviewed by the Larimer County Public Works Department for compliance with the survey requirements of Larimer County and of state law pertaining to platting and monumentation.
7. _____ **Final Construction Plans** (See Chapter 3 of the Larimer County Road Manual)
8. _____ **Completed Public Improvements Opinion of Costs Sheet** – see attached.
9. _____ **Final Stormwater Construction Plans and Report** – see attached handout
10. _____ **Final Erosion Control Plan** – see the Larimer County Stormwater Management Manual
11. _____ **Final Landscape Plan** – see Landscape Plans procedural guide.
12. _____ **Final Irrigation Plan** (See Section 8.8)
13. _____ **Letters of Commitment from utility providers for service**
14. _____ **Final Use Plan** (See Section 8.10)
15. _____ **Final Wetland Mitigation Report**
16. _____ **Final Wildlife Conservation Plan**
17. _____ **Final Wildfire Mitigation Report**
18. _____ **Final Geologic Hazard Mitigation Plan**
19. _____ **Final Sign Plan** - an 8 ½ x 11 plan detailing elevations, including height, width, area and method of illumination of any proposed signs on the property.
20. _____ **Preliminary Property Owners Documents**
21. _____ **Preliminary Disclosure Notice**
22. _____ **New Road Dedications**, easements, or special use permit documents if necessary.
23. _____ **If in a TDU Receiving Area**, please provide documentation of TDU's.
24. _____ **Signed and Completed Code Compliance Records Review Certificate** – you will need to contact the Code Compliance Department at least one week before the submittal deadline to obtain a signed and completed Records Review Certificate.
25. _____ **Application Fee** - see the current Fee Schedule in the Planning Department for the amount (Make checks payable to Larimer County Planning).
26. _____ **Pre-Application Conference Form and submittal checklist** by the Planning Department.
27. _____ **Other information** as determined necessary by the Planning Director.

***** PLEASE SEE NEXT PAGE FOR ADDITIONAL SUBMITTAL REQUIREMENTS**

FINAL SUBMITTAL OF THE PLAT:

Once the above information has been submitted and reviewed, the applicant will need to submit the following information **before the plat can be recorded** (the applicant will need to communicate with the assigned planner as to when this information is needed). **The plat will not be recorded until all of the following information has been submitted and determined to be complete.**

1. ____ **One (1) mylar copy of the plat (24"x36" in size) with all owners/lienholders signatures.**
Must have original signatures.
2. ____ **Final signed construction plans**
3. ____ **One (1) digital submittal of the final plat as it will be recorded in a pdf or jpg format—**
either e-mailed to (lcplngbldg@larimer.org) OR put on a CD.
4. ____ **Final Landscape Plan**
5. ____ **Ownership and Encumbrance** – contact a Title Company for this information.
6. ____ **Final Development Agreement with all required signatures**
7. ____ **Final form of collateral (letter of credit, escrow agreement, cash depositor development loan agreement)**
8. ____ **Final Property Owners Documents**
9. ____ **Final Disclosure Notice with all signatures**
10. ____ **Executed Consent of Lienholder and Subordination of Lien Form (as applicable) – see attached**
11. ____ **Quit Claim Deeds** from the developer to the HOA for common tracts (as applicable).
12. ____ **Signed Annexation Agreement (if applicable)**
13. ____ **State Access Permit.**
14. ____ **Recording Fees**
15. ____ **Property Taxes** - Pursuant to state law, no subdivision plat can be recorded until proof has been provided that all prior year taxes have been paid. Please make sure that all prior year property taxes have been paid on all parcels before submitting the final mylars.

Prior to the plat being signed by the Board of County Commissioners, the Larimer County Planning Department will verify with the Larimer County Treasurer Department that all prior year taxes have been paid on all parcels on the final plat.

If the taxes have not been paid, the applicant will be notified of such by the Larimer County Planning Department. The final plat may not proceed to the Board of County Commissioners for signature until proof has been submitted to the Larimer County Planning Department that all prior year taxes have been paid.

Public Improvements Opinion of Costs

Project Name: _____

Please note: Separate costs are needed for on-site and off-site improvements

	Public Improvement Item	Units	Unit Cost	Est. Qty.	Item Cost
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20.2.1 Erosion Control

Stockpile Topsoil	CY				\$0.00
Straw Bales	EA				\$0.00
Inlet Protection	EA				\$0.00
Silt Fence	LF				\$0.00
Sediment Trap	EA				\$0.00
Vehicle Tracking Pad	EA				\$0.00

Subtotal 20.2.1 Erosion Control

\$0.00

20.2.2 Street Improvements

Clearing and Grubbing Lump Sum	LS				\$0.00
Removal of Structures and Obstructions	EA				\$0.00
Subgrade Preparation	SY				\$0.00
Excavation	CY				\$0.00
Borrow	CY				\$0.00
Fill	CY				\$0.00
Rock Excavation	CY				\$0.00
Filter Material	CY				\$0.00
Lime Treatment	SY				\$0.00
Asphalt Patching	TONS				\$0.00
Asphalt Pavement	TONS				\$0.00
Base Course	TONS				\$0.00
Concrete Pavement	SY-IN				\$0.00
Geotextile	SY				\$0.00
Riprap	CY				\$0.00
Survey Monuments	EA				\$0.00
Adjust Manholes	EA				\$0.00
Adjust Valves	EA				\$0.00
Adjust Monuments	EA				\$0.00
Median Cover Material (Concrete)	SY				\$0.00

Subtotal 20.2.2 Street Improvements

\$0.00

20.2.3 Structures

Bridge Structure	EA				\$0.00
Culverts	EA				\$0.00
Guardrail	LF				\$0.00
Railing (Pedestrian)	LF				\$0.00
Railing (Traffic)	LF				\$0.00
Headwalls	EA				\$0.00

Subtotal 20.2.3 Structures

\$0.00

20.2.4 Pedestrian and Bikeway Facilities

Sidewalk Grading	SY				\$0.00
4-inch Thick Sidewalk	SY				\$0.00
6-inch Thick Sidewalk	SY				\$0.00
Directional Curb Ramp	SY				\$0.00
Corner Curb Ramp	SY				\$0.00
Mid Block Ramp	SY				\$0.00
Concrete Bikeway	SY				\$0.00
Sidewalk Chase	EA				\$0.00
Curb and Gutter Grading	LF				\$0.00
Curb and Gutter – Type II	LF				\$0.00
Curb and Gutter – Type I	LF				\$0.00
Glue-down Curb	LF				\$0.00

Subtotal 20.2.4 Pedestrian and Bikeway Facilities

\$0.00

Opinion of Costs

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LCPP-137 February 27, 2003

Public Improvements Opinion of Costs

Project Name: _____

Please note: Separate costs are needed for on-site and off-site improvements

	Public Improvement Item	Units	Unit Cost	Est. Qty.	Item Cost
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20.2.5 Street Lighting

Standard Pedestrian Light	EA				\$0.00
Standard Street Light	EA				\$0.00

Subtotal 20.2.5 Street Lighting \$0.00

20.2.6 Traffic Signals, Signing and Striping

Standard Street Signs	EA				\$0.00
Standard Sign Posts	EA				\$0.00
Standard Regulatory Signs	EA				\$0.00
Standard Speed Limit Signs	EA				\$0.00
Latex Paint (4 inches)	LF				\$0.00
Latex Paint (8 inches)	LF				\$0.00
Latex Paint (12 inches)	LF				\$0.00
Latex Paint (18 inches)	LF				\$0.00
Latex Paint (24 inches)	LF				\$0.00
Epoxy Pavement Marking (4 inches)	LF				\$0.00
Epoxy Pavement Marking (8 inches)	LF				\$0.00
Epoxy Pavement Marking (12 inches)	LF				\$0.00
Epoxy Pavement Marking (18 inches)	LF				\$0.00
Epoxy Pavement Marking (24 inches)	LF				\$0.00
Preformed Tape for Symbols & Crosswalks	LF				\$0.00
Preformed Thermoplastic	SF				\$0.00
Traffic Signals	EA				\$0.00

Subtotal 20.2.6 Traffic Signals, Signing and Striping \$0.00

20.2.7 Work Zone Traffic Control

Traffic Control	LS				\$0.00
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Subtotal 20.2.7 Work Zone Traffic Control \$0.00

20.2.8 Storm Drainage Facilities

Grading	SY				\$0.00
Inlets	EA				\$0.00
Manholes	EA				\$0.00
Pipe (Material Type - Size)	LF				\$0.00
Trickle Channel (width)	LF				\$0.00
Outlet Structure (orifice plate)	EA				\$0.00

Subtotal 20.2.8 Storm Drainage Facilities \$0.00

20.2.9 Removals and Repair

Asphalt Patching	SY				\$0.00
Concrete Sidewalk R & R	SY				\$0.00
Concrete Curbwalk R & R	LF				\$0.00
Milling	SY				\$0.00
Asphalt Removal	SY				\$0.00

Subtotal 20.2.9 Removals and Repair \$0.00

20.2.10 Construction Surveying/Staking

				\$0.00
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Subtotal 20.2.10 Construction Surveying/Staking \$0.00

20.2.11 Material Testing

				\$0.00
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Subtotal 20.2.11 Material Testing \$0.00

20.2.12 Record Drawings

				\$0.00
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Subtotal 20.2.12 Record Drawings \$0.00

Public Improvements Opinion of Costs

Project Name: _____

Please note: Separate costs are needed for on-site and off-site improvements

	Public Improvement Item	Units	Unit Cost	Est. Qty.	Item Cost
20.2.13	Construction Management				\$0.00
	<i>Subtotal 20.2.13 Construction Management</i>				\$0.00

Water Line Construction

Water Mains				\$0.00
On-Site Water Supply Service				\$0.00
Fire Hydrants				\$0.00
	<i>Subtotal Water Line Construction</i>			\$0.00

Sewer Line Construction

Trunk Lines				\$0.00
Mains				\$0.00
Laterals or House Connections				\$0.00
On-Site Sewage Facilities				\$0.00
	<i>Subtotal Sewer Line Construction</i>			\$0.00

Other

			\$0.00
	<i>Subtotal Other</i>		\$0.00

Landscape Improvements:

Plant Materials				\$0.00
Irrigation System				\$0.00
Paving / Surfacing				\$0.00
Structural Elements (Gazebo's, Benches, Fountains, etc.)				\$0.00
Mulch / Weed Barrier Materials				\$0.00
Edging / Tree Staking Materials				\$0.00

SUBTOTAL OF LANDSCAPE IMPROVEMENTS: \$0.00

Additional % required by the Dev. Agreement \$0.00

GRAND TOTAL OF LANDSCAPE IMPROVEMENTS: \$0.00

ATTEST:	BOARD OF COUNTY COMMISSIONERS LARIMER COUNTY
	Chairman
PROFESSIONAL ENGINEER (Signature/Stamp) (Required if project in GMA)	DEVELOPER

(Space above this line used for Recording Data)

CONSENT OF LIENHOLDER AND
SUBORDINATION OF LIEN

THE UNDERSIGNED, being the holder of an evidence of debt which is secured by a deed of trust, mortgage deed, or other lien (recorded in the Larimer County records at Reception No. _____, (LIEN) against the property described on Exhibit "A" (PROPERTY), hereby consents, agrees to, and subordinates the priority of its LIEN and its interest in the **PROPERTY** to all the terms, conditions, and provisions contained in the Development Agreement recorded in the Larimer County records on _____ at Reception No. _____

Dated this _____ day of _____, 20____

Bank:

By: _____

Title: _____

COUNTY OF LARIMER) STATE
OF COLORADO) SS.

The foregoing instrument was acknowledged before me this _____ Day of _____
20____, by _____

Witness my hand and official seal.

NOTARY PUBLIC
My commission expires _____

Final Stormwater Construction Drawings and Report

Final Stormwater Construction Drawings and Report will normally be submitted at the time of submittal of final construction plans for the overall project. All plans and drawings not in 8 ½ inch report format shall be on 24" x 36" paper. All stormwater plans, drawings, and reports will be checked for conformance with the design criteria set forth in the Land Use Code and the Stormwater Management Manual. Written approval of final plans must be obtained before any construction begins.

The Final Stormwater Construction Drawings and Report shall be submitted to the Larimer County Planning Department as required by the Larimer County Land Use Code. The final Stormwater Plans shall be sufficiently detailed to serve as the basis for construction of stormwater facilities to serve all aspects of the project. The final stormwater plans may be submitted along with other utility and street construction plans. The final plans shall include at least the following items:

1. **Overall Stormwater Facilities Map.** A map of the overall project shall be submitted which shows all onsite stormwater basins within the project area. The map must also show the routing of onsite stormwater through the site, and routing of stormwater generated offsite for which conveyance must be supplied through the site. The map must show the location of all proposed stormwater facilities in addition to natural channels needed to adequately serve the needs of the development.
2. **Final Stormwater Report.** The Final Stormwater Report shall present results of a hydrologic study to determine the peak rates of flow for the 2, 10, 50 and 100 year flows for each watershed that is tributary or within the proposed development. The Final Report shall document any changes in the hydrologic analysis since preparation of the Preliminary Report, and the reasons for such changes. The Report must also present results of a hydraulic study or studies as necessary to determine the sizing of the needed facilities.
3. **Final Stormwater Construction Drawings.** Construction drawings shall be presented on 24" by 36" sheets. The sheets shall include title block, name of engineer and engineering firm, north arrow, scale, and name of project and dates and notes concerning revisions. Each set of drawings shall have a title page, which shall include an index of sheets, an approval block, name of project, name of engineering firm, and a vicinity map. The term "Final Construction Drawings" shall refer to all plans, specifications, and drawings as necessary to fully and completely describe construction of the project in accord with Larimer County standards and requirements. Stormwater conveyance facilities shall be represented on the construction drawings by a plan view drawing and a vertical elevation profile precisely defining the alignment and grade of the improvements at all locations. The profile shall show the invert or flowline of the facility as well as the original ground surface including grade of top of channel bank and finished ground surface over pipes. The profile must also show the hydraulic grade line at all locations along stormwater conveyance elements. The plan drawings must show existing and proposed property boundaries, topographic contours, utility and drainage easement locations, and existing water features. The drawings shall be placed on topographic mapping of the project which shows existing and proposed structures. The plans shall also include typical sections of conveyance facilities as well as a detail sheet giving details of manholes, inlets, headwalls and so forth. The plans must also show typical sections of the streets and provisions for street subgrade drainage. Detention pond plans

must display areal extent of ponding, and the maximum water surface elevation for each pond shall be clearly identified on the drawings. An elevation-storage and elevation• discharge relationship shall be tabulated for each detention pond. The final construction plans must contain details of both temporary and permanent erosion control measures to be taken for the site, and specifications for the erosion control measures. Construction and erosion control information provided must be sufficient to act as stand-alone plans to provide all necessary information for full construction of the facilities.

4. **Overlot Grading Plan.** An overlot grading plan shall be included as part of the construction drawings for all projects having an average lot size of 1.00 acres or less, or for larger average lot sizes at the discretion of the County Engineer, on any project where further definition of interlot grades is required. This plan view drawing will provide all necessary grading information for the development. The overlot grading plan is intended to serve as a guideline for grading and drainage of individual lots, and it therefore must provide all necessary information for the implementation of building permit requirements for individual lots. At a minimum, the plan must show existing ground contours, proposed ground contours, first floor levels, and lowest floor levels for structures on all lots relative to project benchmarks, detention pond emergency spillway elevations, high water elevations, open channel flowline information, and natural channel flowline elevation. Detention ponds shall be shown with shading to indicate the area of maximum ponding, and the maximum water surface elevation shall be clearly identified on the drawings.
5. **Driveway Access Plan.** A driveway access plan will be required for all developments proposing roadside ditch type stormwater conveyance facilities. The plan must provide details as to geometry, materials and construction of driveway culverts.
6. **As-Built Drawings.** Where required by the terms of the Land Use Code or the Uniform Building Code, as-built drawings shall be submitted, along with certification of a registered professional engineer that the project was built in substantial compliance with the approved plans therefore. Each page of the as-built drawings shall be labeled "as-built drawing", dated and be separately signed by a registered professional engineer.

Certification of Engineer. Plans and reports submitted must be accompanied by a certification that they were prepared under the direct supervision of a registered professional engineer in the State of Colorado using the following language:

I hereby certify that this report (plan) for the _____ of _____ was prepared by me (or under my direct supervision) for the owners thereof and meet or exceed the criteria in the Larimer County Storm-Water Management Manual.

Registered Professional Engineer
State of Colorado No. _____
(Seal)

Requirements for Submitting Hydraulic and Hydrologic Modeling Reports to Larimer County

These guidelines are to be used to assist in the design and review of hydraulic and hydrologic modeling reports. The County wishes to streamline the review process and give consultants a framework of expectations to be met to gain approval of a drainage plan.

An initial meeting between the consultant and development review staff of the Larimer County Engineering Department **is mandatory** prior to beginning either a hydrologic or hydraulic modeling effort. This provides an opportunity for the consultant and County staff members to discuss the project and the planned modeling effort. It also provides an opportunity for the consultant and staff members to agree on assumptions and parameters that are appropriate for the particular modeling effort.

Hydraulic Modeling Reports

Hydraulic Modeling Reports will be required in the following circumstances:

- There is a need to document no-rise conditions in a **designated floodway**
- A development falls within a floodplain that has a **no-rise criteria**
- A development falls within a known hazard area that has **not** been **previously mapped**.
- There is a **CLOMR or LOMR** submittal.
- Other **unique special hazard projects** in flood prone areas such as channel restoration following a flood, at the direction of the County Engineer

Hydraulic Modeling Report Submittal Requirements:

1. **Narrative Report.** The following information must be included in a narrative report to accompany a hydraulic modeling report:
 - Summary of previous studies
 - Project Area Description (may be deleted if submitted with or as part of a preliminary drainage report)
 - Floodplain - name, description, FIS Panel No., date of FIRM map
 - A summary of methods and approach
 - Name of adopted basin master plan
 - Location - nearby intersecting streets
 - Characteristics of Study Area
 - Summary of modeling results including a narrative discussion and unedited computer printouts.

3. Project Area Description

- Describe the purpose of the hydraulic study
- Describe the intended land use for the area of the study
- Describe and document any changes in the basin since earlier studies such as basin development, road construction, or stormwater diversions which would affect basin hydrology.

4. Changes in Modeling Parameters - The modeling report must include a discussion of any changes in hydrologic parameters and an explanation of why they were changed. Parameters to be addressed shall at least include initial storage and abstraction, antecedent moisture conditions, infiltration rate, channel n-values and conditions, rainfall durations and intensities

5. Methods and approach to hydrologic modeling

The following information must be included in a narrative report to accompany the hydraulic modeling report:

- Describe what hydrologic model was used - state the model version, date of model, developed flow or existing flow model
- Duplicate effective - describe and use the exact parameters that are included in the existing model
- Incorporate any changes in basin hydrologic conditions since the previous study
- Corrected effective - describe how the documented changes in the floodplain were modeled to accurately reflect the changed conditions
- Describe any changes in the proposed project that were made as a result of the modeling

6. Discharges and Modeled Frequencies - Provide a table showing the discharges used for the computations and the frequencies represented by the discharges. Provide a narrative discussion of the results as they apply to property in the basin. Provide unedited computer printouts of both input data and output data as well as

Groundwater Modeling reports

Groundwater Modeling Reports will be required in the following circumstances:

- There is a need to document no influence on surrounding groundwater conditions
- A development proposes to incorporate subsurface facilities either to drain away groundwater or to inhibit the natural flow of groundwater
- At the direction of the County Engineer when other **unique, special groundwater conditions** such as unique wetlands habitat are thought or known to exist.

errors in original modeling. If a corrected effective model is not done, then the (water surface elevation) WSEL for the new cross section for the effective condition can be interpolated. There should be a WSEL for all cross sections for both the effective or corrected effective condition and proposed project condition unless the project prohibits determining a WSEL at a particular cross section. Discuss methods and include all WSELs (modeled or interpolated) in the results.

7. **Modeling Results** - Submit unedited computer input and output forms for the modeling effort, including the duplicate effective and corrected effective models. For HEC-2 or HEC-RAS modeling, the submittal must also include the data input and output files on PC-compatible 3.5-inch disk.

Hydrologic Modeling Reports

A hydrologic modeling report will be required in the following circumstances:

- The area of the tributary basin or any subbasin **exceeds 70 acres**. In this case, the engineering concern is the complexity of the basin being modeled, and the validity of assumptions implicit in rational formula computations. The rational formula assumes a uniform velocity of flow of runoff through the basin, and it does not differentiate between different basin shapes or varying slopes or varying infiltration rates.
- A development falls within a basin for which **no master plan** or accepted hydrologic modeling report exists
- There is a **diversion of stormwater** from one subbasin to another which might affect downstream properties or which was not modeled in the original basin study.

1. **Narrative Report.** The following information must be included in a narrative report to accompany a hydraulic modeling report:

- **Summary** of previous hydrologic studies
- **Project Area Description** - Location - nearby intersecting streets- hydrologic basin-name, description, FIS Panel No., date of FIS and documentation of changes in hydrologic conditions
- **Changes in modeling parameters** proposed to reflect changed conditions
- **A summary of methods and approach** to hydrologic modeling
- **Summary of Frequencies and Discharges** and narrative report on modeling results

2. **Summary of Previous Hydrologic Studies**

- Previous adopted master plans, master plan updates, flood insurance studies
- Map Revisions
- Other pertinent reports

2. A Summary of Previous Hydraulic Studies

- Previous adopted master plans, master plan updates, flood insurance studies
- Map Revisions
- Other pertinent reports

3. A Project Description (may be deleted if submitted with or as part of a preliminary drainage report)

- Describe the purpose of the hydraulic study
- Describe the intended land use for the area of the study
- Describe any changes which may have occurred since earlier studies such as gravel mining, or road construction

4. Compensatory Storage - In non-conveyance zones and storage areas for floodplains, compensatory storage must be computed. Modelers will be expected to demonstrate that floodwater displaced by the project is offset by storage at another location so as to not impact neighboring properties.

5. Discharges and Modeled Frequencies - Provide a table showing the discharges used for the computations and the frequencies represented by the discharges.

6. A Summary of Methods and Approach - The following information must be included in a narrative report to accompany hydraulic modeling report:

- Describe what model was used - state the model version, date of model, developed flow or existing flow model
- Duplicate effective - describe and use the exact parameters that are included in the existing model
- Document any changes in the floodplain or basin hydraulic conditions since the previous study. Changes in hydraulic conditions might be the result of street or bridge construction, channel improvements or changes in land use. Documentation might consist of as-built plans, surveyed cross sections, or pictures of new land uses
- Corrected effective- describe how the documented changes in the floodplain were modeled to effectively represent the changed conditions
- Describe any changes in the proposed project that came about as a result of the modeling
- Describe how changes in the floodplain represented by the proposed project were incorporated into the corrected effective model, and any changes in the proposed activity proposed to accommodate
- Discuss any changes in modeling parameters and explain why they were changed. Parameters to be addressed include n-values, expansion - contraction coefficients, and encroachments.
- If the proposed project is between cross sections, then cross sections will need to be added to accurately reflect the proposed project (i.e., new buildings or bridge, etc). New cross sections must be added to the corrected effective model if a corrected effective model is created for other reasons, such as better topographic mapping or correcting

Groundwater Modeling Report Submittal Requirements

1. **Narrative Report.** The following information must be included in a narrative report to accompany a hydraulic modeling report:
 - **Summary** of any previous groundwater studies or summary of baseline studies
 - **Project Area Description** - Location - nearby intersecting streets- hydrologic basin - name, description of project area, existing geohydrologic conditions, and proposed changes in geohydrologic conditions
 - **Changes in modeling parameters** proposed to reflect changed geohydrologic conditions
 - **A summary of methods and approach** to groundwater modeling
 - **Summary of existing and predicted** groundwater conditions
2. **Summary of previous groundwater studies and baseline conditions.** A narrative report on baseline conditions existing at the time of the modeling study. The baseline condition study must contain sufficient data points to enable contour mapping of the piezometric surface. It must be conducted over a sufficient duration as to reflect seasonal variation of the groundwater surface.

LARIMER COUNTY SUBDIVISION PLAT SURVEY REVIEW

The Survey Section of the Larimer County Engineering Department provides a public service of reviewing all final subdivision plat submittals.

This service provides a level of assurance to the public that the platting conforms with the minimum requirements of Colorado State Law and Larimer County regulations pertaining to land surveying.

The plat from a land survey perspective is a professional land surveyor's report of how the property is configured, divided, the location of easements and rights of way and what survey monumentation exists in the field at the time of recordation.

This review process is a cooperative effort between the county and the land surveyor to provide the best possible product for the public and owners of the platted property.

The review process includes:

- A cursory review of the boundary and division lines, easements and rights of ways for survey data to comply with the "Larimer County Land Use Code" and sufficiency for their field development. This review does not involve a detailed check for the accuracy of all mathematical or geometric data. The professional land surveyor who prepared the plat is responsible for this aspect.
- A comparison of the property description against the survey data provided around the perimeter of the platted lands.
- A detailed review for compliance with all applicable Colorado State Laws and County Regulations pertaining to land surveying and platting.

Plats are reviewed on an individual basis and the review comments are tailored for each specific submittal.

The following provide the Survey Section with basic guidelines for final plat review.

- All Colorado Revised Statutes (C.R.S.) pertaining to Land Surveying. In particular, C.R.S. TITLE 38, ARTICLES 51 AND 53 (pertinent excerpts attached).
- The Colorado State Board of Licensure for Architects, for Professional Engineers and Professional Land Surveyors "Bylaws and Rules" (pertinent excerpts attached).
- Interpretations and clarifications by the Colorado State Board of Licensure.
- Larimer County Land Use Code requirements pertaining to the Final Plat.

Note: A Boundary Line Adjustment plat does not fall under the Colorado Statutory requirements for a platted subdivision, but does fall under the Colorado Statutory requirements for a Land Survey.

C. R. S. TITLE 38, ARTICLE 51 MINIMUM STANDARDS FOR LAND SURVEYS AND PLATS

38-51-101. Applicability - state - county - local - persons.

The provisions of this article shall apply to all agencies of state, county, and local government as well as to individuals, corporations, and partnerships engaged in the private practice of land surveying. This article shall not apply to the location or relocation of mining claims pursuant to article 43 of title 34, C.R.S.

38-51-102. Definitions.

As used in this article, unless the context otherwise requires:

(1) "Accessory" means any physical evidence in the vicinity of a survey monument, the relative location of which is of public record and which is used to help perpetuate the location of the monument.

Accessories shall be construed to include the accessories recorded in the original survey notes and additional reference points and dimensions furnished by subsequent land surveyors or attested to in writing by persons having personal knowledge of the original location of the monument.

(2) "Aliquot corner" means any section corner or quarter section corner and any other corner in the public land survey system created by subdividing land according to the rules of procedure set forth in section 38-51-103.

(3) "Bench mark" means any relatively immovable point on the earth whose elevation above or below an adopted datum is known.

(4) "Block" means a parcel of land within a platted subdivision bounded on all sides by streets or avenues, other physical boundaries such as a body of water, or the exterior boundary of a platted subdivision.

(5) "Board" means the state board of licensure for architects, for professional engineers and professional land surveyors, created in section 12-25-106, C.R.S.

(6) "Control corner" means any land survey corner the position of which controls the location of the boundaries of a tract or parcel of land.

(6.3) "Corner" means a point of reference determined by the surveying process.

(7) "Exemption plat" or "subdivision exemption plat" means a subdivision plat which includes all of the information required by section 38-51-106 and which depicts a division of land or the creation of an interest in property for which the board of county commissioners has granted an exemption from subdivision regulations pursuant to section 30-28-101 (10) (d)

(11) "Land survey" means a series of observations and measurements made pursuant to sections 38-51-103, 38-51-104, and 38-51-105 for the purpose of locating or restoring any real property boundary.

(12) "Land survey plat" means a plat which shows the information developed by a monumented land survey or shows one or more set monuments pursuant to sections 38-51-104 and 38-51-105 and includes all information required by section 38-51-106.

(12.3) "Monument" means the object or physical structure that marks the corner point.

(13) "Monumented land survey" means a land survey in which monuments are either found or set pursuant to sections 38-51-103, 38-51-104, and 38-51-105 to mark the boundaries of a specified parcel of land.

(14) "Monument record" means a written and illustrated document describing the physical appearance of a bench mark or survey monument and its accessories.

(15) "Platted subdivision" means a group of lots, tracts, or parcels of land created by recording a map which meets the requirements of section 38-51-106 and which shows the boundaries of such lots, tracts, or parcels and the original parcel from which they were created.

(16) "Professional land surveyor" means a person licensed pursuant to part 2 of article 25 of title 12, (16.1) "Professional land surveyor of record" means the professional land surveyor whose signature and seal appear on an original subdivision plat, land survey plat, or parcel description currently recorded in the office of the clerk and recorder in which the subdivision plat, land survey plat, or parcel description is situated.

(17) "Property description" means a written, narrative description, of a parcel of real property or an easement for the purpose of perpetuating location of title.

(18) "Public land survey monument" means any land boundary monument established on the ground by a cadastral survey of the United States government and any mineral survey monument established by a United States mineral surveyor and made a part of the United States public land records.

(19) "Responsible charge" means control and direction of surveying work.

(20) "Subdivision plat" means a map of a platted subdivision recorded for the purpose of creating land parcels which can be identified uniquely by reference to such map.

(21) "Surveyor's affidavit of correction" means an affidavit prepared and executed by a professional land surveyor of record in accordance with section 38-51-111.

38-51-103. Procedure for subdividing section.

(1) Whenever a professional land surveyor conducts a survey for the purpose of locating a parcel of land which is described in terms of the nomenclature of the public land survey system, such professional land surveyor shall proceed according to the applicable rules contained in the current "Manual of Instructions for the Survey of the Public Lands of the United States" published by the United States government printing office; except that all monumentation shall conform to section 38-51-104.

(2) (a) A section may be subdivided by:

(I) Surveying all necessary aliquot lines in the field; or

(II) Computing the location of the required aliquot corners after making a field survey which includes all required control corners of the section.

(b) Any section subdivided pursuant to paragraph (a) of this subsection (2) shall include all control corners that were originally monumented by the United States government, which must either be found or restored in the field according to the standards set forth in section 38-51-104.

(c) Monument records shall be filed pursuant to section 38-53-104, describing each such corner.

(d) For any section subdivided pursuant to this subsection (2) the location of original aliquot corners of, and procedures used in, the governing official United States government survey, where applicable, shall take precedence.

38-51-104. Monumentation of land surveys.

(1)(a) The corners of lots, tracts, other parcels of land, aliquot corners not described in subsection (4) of this section, and any line points or reference points which are set to perpetuate the location of any land boundary or easement shall, when established on the ground by a land survey, be marked by reasonably permanent markers solidly embedded in the ground.

(b) A durable cap bearing the registration number of the professional land surveyor responsible for the establishment of the monument shall be affixed securely to the top of each such monument embedded pursuant to this subsection (1).

(2) If the points designated in subsection (1) of this section fall on solid bedrock, concrete, stone curbs, gutters, or walks, a durable metal disk or cap shall be securely anchored in the rock or concrete and stamped with the survey point and the registration number of the professional land surveyor responsible for the establishment of the monument or marker.

(3)(a) If the monuments or markers required by subsection (1) of this section cannot practicably be set because of steep terrain, water, marsh, or existing structures, or if they would be lost as a result of proposed street, road, or other construction, one or more reference monuments shall be set.

- (b)(I) The letters "RM" or "WC" and the surveyor's registration number shall be affixed to the monument.
- (II) For purposes of this paragraph (b), "RM" means reference monument and "WC" means witness corner.
- (c) Reference monuments shall be set as close as practicable to the true corner and shall meet the same physical standards required to set the true corner.
- (d) If only one reference monument is used, such reference monument shall be set on the actual boundary line or a prolongation thereof, otherwise at least two reference monuments shall be set.
- (4) For any monument required by this section that marks the location of a section corner, quarter section corner, or sixteenth section corner, such monument shall meet the physical standards specified by rule and regulation promulgated by the board pursuant to section 24-4-103, C.R.S.
- (5)(a) The top of the monument for any corner required by this section which is within the traffic area of a publicly named dedicated or deeded street, road, or highway shall be placed one-half foot below the roadway surface.
- (b) If the roadway surface is pavement two inches thick or greater, the monument shall include a monument box the top of which shall be set flush with the surface of the pavement.
- (6) No marker required by this section shall bear the license number of more than one professional land surveyor but may bear the name of an individual surveyor or surveying firm in addition to the required license number.

38-51-105. Monumentation of subdivisions.

- (1)(a) Prior to recording a plat, the external boundaries of any platted subdivisions shall be monumented on the ground by reasonably permanent monuments solidly embedded in the ground.
- (b) A durable cap bearing the license number of the professional land surveyor responsible for the establishment of the monument shall be affixed securely to the top of each such monument embedded pursuant to this subsection (1).
- (c) Monuments shall be set no more than fourteen hundred feet apart along any straight boundary line, at all angle points, at the beginning, end, and points of change of direction or change of radius of any curved boundaries defined by circular arcs, and at the beginning and end of any spiral curve.
- (2) The professional land surveyor who prepares the original subdivision plat, exemption plat, or subdivision exemption plat shall provide external boundary monuments as required in subsection (1) of this section.
- (3)(a) Before a sales contract for any lot, tract, or parcel within a subdivision is executed, all boundaries of the block within which such lot, tract, or parcel is located shall be marked with monuments in accordance with subsection (1) of this section.
- (b) The seller of the lot, section, or parcel shall provide for the services of a professional land surveyor to establish block monumentation and lot markers as required pursuant to subsection (4) of this section.
- (4)(a) Block monumentation may be set on the center lines of streets or on offset lines from such streets as designated on the recorded plat.
- (b) The corners of any lot, tract, or parcel sold separately shall be marked within one year of the effective date of the sales contract.
- (c) For any structure to be built on a lot, tract, or parcel before the corners have been marked pursuant to this section, the seller of such lot, tract, or parcel shall retain a professional land surveyor to establish control lines on the ground as necessary to assure the proper location of the structure.
- (5) For any complete block sold as a unit, it shall become the responsibility of the subsequent seller of any separate lot, tract, or parcel within such block to retain a professional land surveyor to establish lot markers as required pursuant to subsection (4) of this section.

- (6) For any points designated in subsection (1), (2), or (3) of this section which fall on solid bedrock, concrete, stone curbs, gutters, or walks, a durable metal disk or cap shall be securely anchored in the rock or concrete and stamped with the survey point and the license number of the professional land surveyor responsible for the establishment of the monument or marker.
- (7) (a) If any monuments or markers required by subsection (1), (2), or (3) of this section cannot practicably be set because of steep terrain, water, marsh, or existing structures, or if they would be lost as a result of proposed street, road, or other construction, one or more reference monuments shall be set.
- (b) (I) The letters "RM" or "WC" shall be affixed to the monument in addition to the surveyor's registration number.
- (II) For purposes of this paragraph (b), "RM" means reference monument and "WC" means witness corner.
- (c) Reference monuments shall be set as close as practicable to the true corner and shall meet the same physical standards required to set the true corner.
- (d) If only one reference monument is used, such reference monument shall be set on the actual boundary line or a prolongation thereof, otherwise at least two reference monuments shall be set.
- (8) For any monument required by this section which marks the location of a section corner, quarter section corner, or sixteenth section corner, such monument shall meet the physical standards specified by rule and regulation promulgated by the board pursuant to section 24-4-103, C.R.S.
- (9)(a) The top of the monument for any corner required by this section which is within the traffic area of a publicly named dedicated or deeded street, road, or highway shall be placed one-half foot below the roadway surface.
- (b) If the roadway surface is pavement two inches thick or greater, the monument shall include a monument box the top of which shall be set flush with the surface of the pavement.
- (10) No marker required by this section shall bear the license number of more than one professional land surveyor but may bear the name of an individual surveyor or surveying firm in addition to the required license number.

38-51-106. Land survey plats.

- (1) All land survey plats shall include but shall not be limited to the following:
- (a) A scale drawing of the boundaries of the land parcel;
- (b)(I) All recorded and apparent rights-of-way and easements, and, if research for recorded rights-of-way and easements is done by someone other than the professional land surveyor who prepares the plat, the source from which such recorded rights-of-way and easements were obtained; or
- (II) If the client wishes not to show rights-of-way and easements on the land survey plat, a statement that such client did not want rights-of-way and easements shown;
- (c) All field-measured dimensions necessary to establish the boundaries on the ground and all dimensions for newly created parcels necessary to establish the boundaries on the ground;
- (d) A statement by the professional land surveyor that the survey was performed by such surveyor or under such surveyor's responsible charge;
- (e) A statement by the professional land surveyor explaining how bearings, if used, were determined;

- (f) A description of all monuments, both found and set, which mark the boundaries of the property and of all control monuments used in conducting the survey. If any such boundary monument or control monument marks the location of a lost or obliterated public land survey monument that was restored as a part of the survey on which the plat is based, the professional land surveyor shall briefly describe the evidence and the procedure used for such restoration. If any such boundary monument or control monument marks the location of a quarter section corner or sixteenth section corner that was established as a part of the survey, the professional land surveyor shall briefly describe the evidence and procedure used for such establishment, unless the corner location was established by the mathematical procedure as outlined in section 38-51-103.
- (g) A statement of the scale or representative fraction of the drawing, and a bar-type or graphical scale;
- (h) A north arrow;
- (i) A written property description, which shall include but shall not be limited to a reference to the county and state together with the section, township, range, and principal meridian or established subdivision, block and lot number, or any other method of describing the land as established by the general land office or bureau of land management;
- (j) The signature and seal of the professional land surveyor; and
- (k) Any conflicting boundary evidence.
- (l) A statement defining the lineal units used including but not limited to meters, chains, feet, and U.S. survey feet. If it is necessary to define conversion factors, the factors shall be a function of the meter as defined by the United States department of commerce, national institute of standards and technology.

C. R. S. TITLE 38, ARTICLE 53 PERPETUATION OF LAND SURVEY MONUMENTS

38-53-101. Legislative declaration. It is hereby declared to be a public policy of this state to encourage the establishment and preservation of accurate land boundaries, including durable monuments and complete public records, and to minimize the occurrence of land boundary disputes and discrepancies.

38-53-104. Filing of monument record required. (1) (a) If a professional land surveyor conducts a survey which uses any public land survey monument or any United States geological survey or United States coast and geodetic survey (also known as the national ocean service/national geodetic survey) monument as a control corner, such professional land surveyor shall file a monument record describing such monument with the board if the monument and its accessories are not substantially described in an existing monument record previously filed pursuant to this section or its predecessor.

(b) If a professional land surveyor establishes, restores, or rehabilitates any public land survey monument or section corner, quarter section corner, or sixteenth section corner as defined by the nomenclature of the United States public land survey system, such professional land surveyor shall file a monument record.

(c) Any monument record filed pursuant to this section shall describe at least two accessories or reference points.

(2) Monument records shall be filed within six months of the date on which the monument was used as control or was established, restored, or rehabilitated.

38-53-105. Professional land surveyor must rehabilitate monuments. For any monument record of a public land survey corner which is required to be filed pursuant to this article, the professional land surveyor shall restore or rehabilitate the corner monument so it is readily identifiable and reasonably durable, if field conditions require it.

COLORADO STATE BOARD BYLAWS AND RULES

6.0 Rules of Professional Land Surveying Practice

6.4 Physical Standards for Public Land Survey System Monuments

6.4.1 Physical Standards for Establishing New Monuments or Upgrading Existing Monuments

6.4.1.1 Requirements for Monumenting.

Whenever a professional land surveyor monuments any section corner, quarter section corner, one-sixteenth section corner, General Land Office/Bureau of Land Management (government) lot corner, or any corner established by a Public Land Survey Monument (PLSM), as defined in Section 38-53-103(18), C.R.S., the corner shall be monumented with a metallic pipe or rod possessing a magnetic field and having a minimum outside diameter of 3/4 inch, a minimum length of 30 inches, and a two-inch minimum diameter durable metallic cap.

6.4.1.2 When an Existing Monument Must Be Upgraded.

Whenever a professional land surveyor uses as a control corner, as defined in Section 38-53-103(6), C.R.S., any existing monument that represents any of the corners described in Rule 6.4.1.1 and said existing monument is smaller than 5/8 inch diameter, the monument must be upgraded to the monument size described in Rule 6.4.1.1.

6.4.2 Exceptions to the Physical Standards for Establishing New Monuments or Upgrading Existing Monuments

6.4.2.1 Original Monuments That Do Not Have to be Upgraded.

If the PLSM still exists in its originally set location and said monument is readily identifiable and reasonably durable, it does not have to be upgraded.

6.4.2.2 Existing Monuments That Do Not Have to be Upgraded.

Existing monuments having a minimum outside diameter of 5/8 inch do not have to be verified as to length or upgraded so long as they are readily identifiable and reasonably durable.

6.4.2.3 Existing Monuments That Must be Upgraded.

A properly stamped, two-inch minimum diameter, durable metallic cap must be attached if the found monument has any of the following qualities:

- (a) The monument has no cap.
- (b) The monument has a cap other than a durable metallic cap.
- (c) The monument has a cap with a diameter less than 1 1/2 inches.

6.4.2.4 Monumenting in Rock Outcroppings, Concrete and Concrete Posts.

A durable metallic disk not less than two inches in diameter, on a stem not less than three inches long, is suitable for placing in rock outcroppings, concrete, and for embedding in concrete posts (monuments).

6.4.2.5 Monumenting in Adverse Terrain.

In the event corners described in Rule 6.4.1.1 cannot practically be set because of steep terrain, water, marsh, or existing structures, or if they would be lost as a result of a proposed street, road, or other construction, one or more reference monuments shall be set. The reference monuments shall be set according to Sections 38-51-104(3)(b)(I), 38-51-104(3)(b)(II), 38-51-104(3)(c) and 38-51-104(3)(d), C.R.S.

6.4.3 Physical Standards for Cap Markings.

All caps shall be marked as set forth in the "United States Department of the Interior, 2009 Manual of Surveying Instructions: For the Survey of the Public Lands of the United States" and shall conform with Section 38-51-104, C.R.S. Incorporation of this material does not include any later amendments or editions. A copy of the "United States Department of the Interior, 2009 Manual of Surveying Instructions: For the Survey of the Public Lands of the United States" and applicable supplements, is available for public inspection. For information regarding how this material can be obtained or examined, contact the Board's program director, at 1560 Broadway, Suite 1350, Denver, Colorado, 80202. This material is also available from the U.S. Department of the Interior, Bureau of Land Management, in partnership with the American Congress on Surveying and Mapping (ACSM), at ACSM, 6 Montgomery Village Avenue, Suite 403, Gaithersburg, Maryland 20879 or www.blmsurveymanual.org.

6.5.4.1 Monumentation of Natural Water Boundaries.

A stream, creek, river, or shoreline is itself a natural monument. The surveyor must conduct research to determine if the stream, or any part thereof, is the intended boundary line. The acceptance of the stream, creek, river, or shoreline as a natural monument complies with Section 38-51-104 (1) (a), and Section 38-51-105 (1) (a), C.R.S. Where a riparian boundary is described as the thread of a non-navigable stream or to some water boundary, no further artificial monumentation is required.

6.8 Basis of Bearing Statements.

Section 38-51-106(1)(e), C.R.S., requires professional land surveyors to include an explanatory statement concerning the basis of bearings, if used, on their land survey plats.

6.8.1 Purpose.

The purpose of a basis of bearing statement on a land survey plat is to enable other surveyors to retrace all or part of that survey. Any basis of bearing statement that does not facilitate a retracement is inadequate.

6.8.2 Composition.

The basis of bearing statement shall state the method used to derive the bearing (i.e., assumed, astronomic, geodetic, grid, reference to recorded or deposited survey, etc.) and the bearing between fully described monuments (i.e., monument material, diameter, length (if set), cap size and material, cap markings/stampings, etc.) at each end of a single line. When the monuments at each end of the reference line are fully described on the plat, they need only be referenced in the "Basis of Bearings" statement. A land survey plat shall show the graphic and mathematical relationship between the basis of bearing and the survey.

6.8.3 Methods.

When bearings are used, there are four generally accepted methods of stating a basis of bearing on a land survey plat: "astronomic or geodetic," "reference to recorded or deposited survey plat," "grid," and "assumed." Examples of the basis of bearing statement are as follows, but are not limited to:

6.8.3.1 Astronomic or Geodetic.

This is normally an observation of the Sun or Polaris or Global Positioning System (GPS) observations. Examples are as follows:

(a) Astronomic Example – "Bearings determined by Polaris observations while occupying the Southwest Corner of Section 8. The astronomic bearing from the Southwest Corner of Section 8 to the West One-Quarter Corner of Section 8 is N00°10'45"W. The monuments are fully described on the plat."

(b) Geodetic Example – "The basis of bearing is a geodetic bearing of Line 1-2 of the Mother Lode claim (monuments fully described hereon) as determined by static GPS observations collected simultaneously at both corners. The geodetic bearing from Corner No. 1 to Corner No. 2 is S01°00'54"E."

6.8.3.2 Reference to Recorded or Deposited Survey Plat.

This usually involves a subdivision plat, a land survey plat or Bureau of Land Management/Government Land Office plat. Examples are as follows:

(a) "Bearings based on west line of Lot 7, Block 10, Sunshine Subdivision, Filing 2, Book 13, Page 69, County of Douglas (N 04° 10' 30" E); southwesterly corner is No. 5 rebar with a 1" diameter aluminum cap stamped RLS 0001; northwesterly corner is 2" diameter brass cap in concrete marked with punch mark and L.S. 1980."

(b) "Bearings based on north line of deposited land survey plat of Jackson Parcel (Map Book 17, Plat 4, La Plata County) as N 00° 10' 12" E. Both ends of said line are found No. 4 rebars in mounds of stone."

(c) "Bearings are based on the G.L.O. Dependent Resurvey of T. 5 S., R. 75 W. of the 6TH PM, dated June 30, 1909, record of N 89° 30' E along the north line of the NW 1/4 of Section 8 (monuments described on plat)."

6.8.3.3 Grid.

An example is, "All bearings are grid bearings of the Colorado State Plane Coordinate System, Central Zone, North American Datum 1983. The bearing of the line between triangulation stations "Double" (a USC&GS standard disk cemented in a boulder that is 10 inches above ground) and "Black" (a NGS standard disk cemented in a drill hole in outcropping bedrock) is "S 57° 51' 07" W."

6.8.3.4 Assumed.

An example is, "Bearings are based on the assumption that the east line of the Southwest 1/4 of Section 17, bears N 00°00'00" E. South 1/4 corner is B.L.M. brass cap on 2 1/2" diameter pipe, Center 1/4 corner is a 3 1/4" aluminum cap on a 1 1/4" diameter axle on west side of 8" x 8" fence post."

6.8.3.5 Unacceptable Statements.

Following are examples of two unacceptable statements:

(a) "Basis of bearings from plat of adjoining Sunrise Knolls."

This is unacceptable because monuments are not described nor is the basis of bearing line identified.

(b) "Bearings based on north line of NW 1/4, Section 10 as being N 89° 30' E."

This is unacceptable because monuments are not described.

6.10 Depiction of Easements and Rights-of-Way on Subdivision Plats.

The purpose of this rule is to provide clarification regarding the requirements of Section 38-51-106(1)(b), C.R.S., as it pertains to "platted subdivisions." The generally accepted standard of practice with respect to the preparation of land survey plats for platted subdivisions is to depict on all such plats all recorded and apparent rights-of-way and easements, regardless of clients' wishes.

6.13 Description of Monuments.

Section 38-51-106 (f), C.R.S., requires professional land surveyors to provide "a description of all monuments, both found or set, that mark the boundaries of the property and of all control monuments used in conducting a survey."

6.13.1 Purpose.

The purpose of this statute is to identify the physical attributes of the monuments and caps set or found during the original survey and subsequent retracement surveys.

6.13.2 Acceptable description of monuments.

Description of monuments found or set should include, but not be limited to the physical attributes and size of the monument, and the physical attributes and size of the cap. Examples would be:

(a) Found 4"x 8"x 18" stone, projecting 12" above ground, scribed with one slash on the east face and five slashes on the west face.

(b) Set #5 rebar, 24" long, with a 1.5" aluminum cap, stamped "A Survey Co. PLS 99999", projecting 0.2' above ground.

(c) Found #4 rebar, with a 1" yellow plastic, marked "A Survey Co. PLS 99999", flush with ground.

6.13.3 Unacceptable description of monuments.

(a) Set Pin & Cap.

(b) Found stone appropriately marked.

(c) Found rebar.

(d) Fnd. #5 rebar, 24" long, with a 1.5" AC, stamped "A Survey Co. PLS 99999", projecting 0.2' above ground. This is unacceptable, unless the abbreviations are defined in a legend.



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larimer.org/planning

Development Review Process

- ☐ General Development Plan
- ☐ Conservation Development
- ☐ Planned Land Division
- ☐ Subdivision

Application Phase

- ☐ Sketch Plan Review
- ☐ Public Hearing
- ☐ Final Plat



Land Use Application

All applications must be complete. To be complete, the application must include all items identified on the submittal requirement checklist. Any application which is not complete will not be accepted, processed, or scheduled for review.

REQUIRED INFORMATION

Property Owner

Name: _____
Mailing Address: _____
City/State/Zip: _____
Phone: _____
Email (required): _____

Property Owner

Name: _____
Mailing Address: _____
City/State/Zip: _____
Phone: _____
Email (required): _____

Applicant Company (if applicable)

Name: _____
General Company Email (required): _____

Applicant Contact Info

Name: _____
Mailing Address: _____
City/State/Zip: _____
Phone: _____
Email (required): _____

Engineer/Surveyor

Name: _____
Mailing Address: _____
City/State/Zip: _____
Phone: _____
Email (required): _____

PROJECT IDENTIFICATION (list all parcel #'s that pertain to the project)

Signatures required by **ALL** Property Owners and the Applicant

I hereby certify that I am the lawful owner of the parcel(s) of land that this application concerns and consent to the action. I hereby permit county officials to enter upon the property for the purposes of inspection relating to the application. Building Permits **will not be accepted** while this application is in process.

Property Owner(s) Printed Name

Date: _____

Property Owner(s) Signature

Date: _____

Property Owner(s) Signature

Date: _____

Property Owner(s) Printed Name

Date: _____

Property Owner(s) Signature

In submitting the application materials and signing this application agreement, I acknowledge and agree that the application is subject to the applicable processing and public hearing requirements set forth in the Larimer County Land Use Code (which can be viewed at larimer.org)

Applicant Signature

Date: _____

→ **THIS SECTION IS TO BE COMPLETED BY THE APPLICANT** ←

**PROJECT INFORMATION FOR
PLANNED LAND DIVISIONS AND SUBDIVISIONS**

Total Project Area (Acres):	Number of Outlots:
Number of Residential Lots:	Total Outlot Acres:
Number of Residential Units:	
Total Residential Acres:	Number of Common Area Lots:
Number of Commercial/Industrial Lots:	Total of Common Area Acres:
Total Commercial/Industrial Acres:	

PROJECT INFORMATION FOR CONSERVATION DEVELOPMENTS
***TO DETERMINE THE INFORMATION BELOW REFER TO ATTACHED CONSERVATION
DEVELOPMENT CALCULATION WORKSHEET***

Total Project Area:	Enter Item #1 from Worksheet:	
Total acres of developed land:	Enter Item #10 from Worksheet:	
Total % of developable area that is developed:	Enter Item #11 from Worksheet:	
Total residual land acres:	Enter Item #12 from Worksheet:	
Total % of developable area in residual land:	Enter Item #13 from Worksheet:	
Number of residential lots (including existing):	Enter Item #C from Worksheet:	
Number of residential units:	Enter Item #D from Worksheet:	
Is the land protected by a Conservation Easement?	Is the land protected by a Covenant?	
If so, number of years protected?	Perpetuity (yes or no)?	

→ **THIS SECTION IS FOR PLANNING STAFF TO COMPLETE AT** ←
THE PRE-APPLICATION CONFERENCE

PROJECT SITE INFORMATION

Project Case Number: _____

Project Address (if available): _____

Assessor's Parcel Numbers (list all parcels that pertain to the project): _____

Pre-Application Conference Date: _____ Planner: _____

Pre-Application Conference attended by: _____

Proposed Request: _____

Plan Area (if applicable): _____

Lot Size(s): _____

Related Files: _____

Setback Information:

Zoning Setbacks: _____

Highway or County Road Setback(s): _____

Streams, Creeks or Rivers Setback(s): _____

Other Setbacks: _____

Building Envelope? _____

Utilities: Water: _____ Sewer: _____ Fire: _____

Current Zoning: _____

Any Additional Information: _____

Received By: _____ Date: _____ Sign Given: _____ Paid \$: _____ Check #: _____

Conservation Development Calculation Worksheet		
STEP (ITEM)	DATA ENTRY OR CALCULATION METHOD	RESULT OF CALCULATION
SECTION I – BASIC DATA		
A (Total lots - #)	Enter total # of lots shown on plat. Exclude outlots.	
B (Residual lots - #)	Enter # of residual lots shown on plat.	
C (Residential lots - #)	Subtract B from A. Enter total.	
D (Residential units – total #)	If duplexes, apartments or condos are allowed in the zoning district, add additional units to Item C. Enter total (include existing).	
E (Intended % residual land)	Enter 80% or 50%.	
1 (Project size - # ac.)	Enter total # project ac.	
2 (Non-developable land – # ac.) ¹	Enter # of ac. (if any) in Floodway Zoning District or below the high water mark of existing bodies of water.	
3 (Developable land - # ac.)	Subtract item #2 from item #1.	
4 (Residual land - intended # of ac.)	Enter # ac. of residual land as shown on submitted plat.	
SECTION II – DEVELOPED AREA		
5 (Internal streets - # ac.)	If proposing a 50:50 CD, enter # ac. of internal street right-of-way. If 80:20 CD, enter zero.	
6 (Outlots and drainage areas ² - # ac.)	Enter # ac. of outlots or areas required to handle drainage due to the increase in developed area.	
7 (Residual lot building envelopes - # ac.)	Enter # ac. in building envelope(s) located in residual lot(s).	
8 (SUBTOTAL) (# ac. excluded from residual land)	Add #6, #7 and #8. Enter result.	
9 (Single-family dwelling lots - # ac.)	Enter # ac. in residential lots (exclude acres shown in #8)	

¹ Include rivers, streams, ponds, lakes & reservoirs. Do not include irrigation ditches.

² Detention & retention ponds required to meet Section 8.1.3 of LCLUC cannot be counted as residual land unless those areas also serve another purpose. Exclude drainage swales along internal street rights-of-way in an 80:20 CD.

SECTION III – DEVELOPED AREA COMPUTATIONS		
10 (Total developed land - total # acres)	Add #8 and #9. Enter result.	
11 (% acres of developable acres that would be developed)	Divide #10 by #3 and multiply the result by 100. Enter result.	
SECTION IV – RESIDUAL LAND CALCULATIONS		
12 (actual # ac. residual land)	Subtract #10 from #3. Enter result.	
13 (actual % residual land)	Divide # 12 by #3 and multiply the result by 100.	
SECTION IV – CROSS CHECKS:		
The following mathematical relationships must be true or some of Items A-E or #1-13 are incorrect. These kinds of errors may have major implications and result in major plan revisions or project redesign.		
E = Item #13. ³		
Item #10 + Item #12 = Item #3.		
Item #11 + Item #13 = 100%.		

³ Depending on type of CD, a **minimum** of either 80% or 50% residual land is required. See Section 5.3.6.A.3 & 4 for rules concerning 50% allocation CDs. If applying for a bonus under Sections 5.3.6.A.5 or 5.3.6.A.6, provide an explanation in the Project Description, **not on this form**. Note: residual land allocations greater than the minimum are encouraged.