



Town of Moraga

PUBLIC WORKS/ENGINEERING
DEPARTMENT

Land Development Services

If you are applying for a discretionary permit (i.e. Subdivision, Use Permit, etc.), there are many Departments/agencies whose requirements you must satisfy before final approval can be granted. The Public Works Department will review plans for development projects that include street or storm drainage infrastructure improvements, improvements related to subdivisions, and grading. These requirements are reflected in the Conditions of Approval of your development or use permit.

Street and Storm Drainage Infrastructure Improvements

If your Conditions of Approval involve improvements to the street and/or storm drainage system (infrastructure), you will need to submit to the Public Works Department:

- Improvement plans (and associated calculations, if necessary)
- Storm Water Control Plan (if necessary)
- Completed Land Development Permit application
- Improvement Plan Review Checklist and its required items
- Other items as required by the Conditions of Approval
- **Please expect up to 6 weeks for review of your first submittal, up to 4 weeks for review of your second resubmittal, and up to 2 weeks for every review thereafter.**

Subdivisions

If you have received your entitlement or an approved tentative map for a subdivision from the Planning Commission or Town Council, you will need to submit to the Public Works Department:

- Parcel or Final Map
- Completed Land Development Permit application
- Parcel/Final Map Review Checklist and its required items
- **Please expect up to 6 weeks for review of your first submittal, up to 4 weeks for review of your second re-submittal, and up to 2 weeks for every review thereafter.**

Grading

If you have received an approval of your preliminary grading plan from the Design Review Board, Planning Commission or Town Council and your Conditions of Approval require you to obtain a grading permit:

- Submit grading plans for review by the Public Works Department and the Planning Department.

- After review by the Public Works Department and the Planning Department, submit the grading plans to the County Grading Department for grading plan check.
- Upon completion of the grading plan check by the County Grading Department, and approval by the Town, the County Grading Department will issue you a grading permit for construction.
- **Please expect up to 6 weeks for review of your first submittal, up to 4 weeks for review of your second resubmittal, and up to 2 weeks for every review thereafter.**

To obtain a copy of the application materials, or for more information on the Public Works review process, please contact the Public Works Department at **(925) 888-7026**, or by e-mail at **publicworks@moraga.ca.us**.

Other useful publications available to help you through the development process:

- Moraga Subdivision Ordinance Code
- Moraga Grading Ordinance
- C.3 Guidebook (Storm water and clean water facilities)
- Standard Plans (Contra Costa County)
- Standard Plans (Caltrans)



Town of Moraga

PUBLIC WORKS/ENGINEERING
DEPARTMENT

FINAL / PARCEL MAP AND IMPROVEMENT PLANS

Application Submittal Checklist

The following materials are required at a minimum for an engineering review. Additional materials may be required by the Town Engineer depending on the complexity of the project.

THE COMPLETED APPLICATION SHALL INCLUDE:

- Application Form (i.e. Encroachment Permit or Land Development Permit)
- Plan check deposit (\$_____) – see current *Master Fee Schedule*

Provide three (3) copies of each of the following, unless otherwise noted.

- Full size sets of Final/Parcel Map
- Final/Parcel Map calculations and lot closures – Computer traverse sheets of tract boundary, each block, street right-of-way, non-rectangular lots, and monument lines including ties (One copy). Point number sheet may be helpful (hard copy).
- Preliminary title report dated within 6 months of submittal with vesting deed and all title report exceptions (One copy)
- Improvement Plans, including Landscape & Irrigation Plans, Joint Trench Utility Plans, Street Light Plans, Erosion Control Plans, and any necessary specifications (4 full size sets, 2 reduced sets)
- Soils Report
- Hydraulic calculations and hydrology map
- Numeric Sizing Calculations for Stormwater Treatment Measures such as bioswales, bioretention ponds, etc. per C.3 requirements
- Stormwater Control Plan (SWCP), and one (1) copy of the Preliminarily Approved SWCP that accompanied the approved Tentative Map
- Draft O&M Agreement for SWCP
- Photometric exhibit for private street, public street, and common area lighting
- Engineer's Estimate (Note: The estimate shall separate out Public improvements from Private improvements.)
- Copies of easements, rights of entry, etc. for utilities or any construction work affecting adjacent property(s) (One copy)
- Storm Water Pollution Prevention Plan (SWPPP)
- Addressing exhibit
- CC&Rs (if required)
- Annotated Conditions of Approval

Additional Project Specific Information Submitted:

- Other: _____

Plans have been submitted to the following Agencies:

- Central Contra Costa Sanitary District
- EBMUD
- PG&E
- AT&T
- Moraga-Orinda Fire District (MOFD)
- Environmental Agencies (if required): _____

Applicant Acknowledgement and Authorization

I verify that I have submitted all of the required materials for this application. I understand that if any of the required materials listed above are not submitted, an incomplete letter shall be sent to the Applicant and the first plan check will not commence.

The Public Works Department collects deposits for map checking, improvement plan review and inspection based upon a percentage of your Engineer's Cost Estimate and a calculated "average" of staff time required. These deposits are used to cover the costs accrued by our staff and consultants while processing your development. **Your final cost could be more or less than this average.**

I understand that the cost for processing my development's final/parcel map and improvement plans is based on actual time and materials spent by the Town's staff and consultants during the processing and review of my development, and that I am responsible for paying all staff costs prior to any action by the Town Council.

_____ Date: _____
Signature of Applicant

Prior to submittal to Public Works Department, make an appointment with the Senior Civil Engineer to discuss submittal requirements and review process.

Contact Public Works Department at (925) 888-7026 or publicworks@moraga.ca.us.

Appointment scheduled for: _____ at _____
date time

Monday between 9am to 3:30pm closed between 12pm to 1pm



Town of Moraga

Public Works/Engineering Department

LAND DEVELOPMENT APPLICATION

Development No: _____

Deposit Acct # _____

Staff: _____

Date: _____

APPLICATION TYPE

Land Development Plan Review	Stormwater	Other
<input type="checkbox"/> Parcel Map <input type="checkbox"/> Final Map <input type="checkbox"/> Improvement Plan <input type="checkbox"/> Certificate of Correction <input type="checkbox"/> _____	<input type="checkbox"/> Drainage / Stormwater Control Plan <input type="checkbox"/> C.6 SWPPP Monthly Inspection <input type="checkbox"/> <input type="checkbox"/> _____ <input type="checkbox"/> _____	<input type="checkbox"/> COA Compliance Check <input type="checkbox"/> Letter of Map Revision / Amendment/Flood Plain Management <input type="checkbox"/> Easement / Dedication / Vacation <input type="checkbox"/> Lot Line Adjustment (Also see Planning Dept.) <input type="checkbox"/> _____

PROJECT INFORMATION

Site Address		
Final / Parcel Map No.	APN	Special Flood Hazard Area (SFHA)? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, Elevation Certificate required
Site Vacant <input type="checkbox"/> Yes <input type="checkbox"/> No	APN	
Project Description		

STREET ADDRESS WHERE WORK WILL BE DONE

Description of Work		Will improvements include permanent structures in the Right of Way? <input type="checkbox"/> Yes <input type="checkbox"/> No
Location of Work		Will location of work enter into a Moratorium Street: <input type="checkbox"/>
Start Date	End Date	Working Days

PROPERTY OWNER

Name	Phone	Fax
Company		
Address		
Email		
Signature	Date	

- I am the sole owner and hereby authorize the filing of this application.
- I own the project site jointly with one or more persons and am empowered to authorize the filing of this application on behalf of my fellow property owners.
- I own the project site in conjunction with one or more persons who are listed with their acknowledgement and authorization for the filing of this authorization / acknowledgement.

APPLICANT Architect Engineer Tenant Other _____

Name	Phone	Fax
Company		
Address		
Email		
Signature	Date	

In signing this application, I, as applicant, represent to have obtained authorization of the property owner to file this application. I agree to be bound by conditions of approval, subject only to the right to object at the hearing on this application or during the appeal period. If this application has not been signed by the property owner, I have attached separate documentation of full legal capacity to file this application and agreement to conditions of approval, subject only to the right to object at the hearings or during the appeal period.

GENERAL CONDITIONS

SUBDIVISION: SIZE OF DEVELOPMENT AND NUMBER OF LOTS

Total Land Area of Projected Site (in acres)	Total No. of Units
Current number of lots	Total No. of SFR Lots
Proposed subdivision	Total No. of Townhouse Lots
Tentative Map Approval Date	Total No. of Common Lots
Total No. of Proposed Lots	Total No. of Condo Units

BILLING AUTHORIZATION

Person responsible for payment of project charges. I agree that the application fee submitted with this application is a deposit only. If the application is modified, an additional deposit or deposits may be required. The actual charges for the application(s) and any subsequent modifications will be based on staff time required to process the application, including modifications and appeals. Progress billings will be made during the review of the project if charges exceed the deposit. Prompt payments of progress billings will assure continued staff review of the project. I also agree that the denial of the project does not relieve me of the payment of charges for the processing of the application. I acknowledge I will be issued a refund at the completion of the project review if excess funds have been paid. I further agree to pay all fees charged for the processing of this application and any subsequent modification based on the current fee schedule, which is in effect at the time the work, is performed. Additionally, I authorize the Town to offset any shortage in any other accounts I might have with the Town with excess funds from this account. The Town reserves the right to offset any shortage in other accounts.	Name	
	Company	
	Address	
	Phone	Fax
	Email	
	Signature	Date

INDEMNIFICATION

Permittee shall indemnify, hold harmless, and defend the Town (including its elected officials, officers, agents and employees) from and against any and all claims (including all litigation, demands, damages, liabilities, costs, and expenses, and including court costs and attorney's fees) resulting or arising from performance, or failure to perform, under this application (except only for those claims arising from the Town's sole negligence, willful misconduct, or active negligence, as defined by California Civil Code section 2782). This Permit shall inure to the benefit of and be binding upon the Permittee and the Permittee's respective successors and assigns. This Permit shall not be assigned or transferred without the written consent of the Town.

Signature	Date
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STAFF USE ONLY

GENERAL PERMIT FEES

\$ _____ Permit Administrative Fee (\$125)

SITE IMPROVEMENT (PLAN REVIEW)

PUBLIC IMPROVEMENTS

- \$ _____ \$0 - \$250,000 (2.5% or \$2,500 minimum deposit)
 \$ _____ \$250,001 - \$1,000,000 (2.25% deposit)
 \$ _____ \$1,000,000+ (2.5% deposit)

PRIVATE IMPROVEMENTS

\$ _____ All private improvements (1% or \$2,500 minimum deposit)

LANDSCAPE IMPROVEMENTS (Public or Private)

\$ _____ All landscape improvements (2.5% or \$2,500 minimum deposit)

- \$ _____ Hauling Permit Fee (TBD by Engineering Staff)
 \$ _____ Street Storage Fee (\$30 / day)
 \$ _____ Oversize Loads Permit Fee (\$90 / year for each vehicle)
 \$ _____ Other _____

SITE IMPROVEMENT (INSPECTION)

PUBLIC IMPROVEMENTS (Including Public Off-Site Improvements)

- \$ _____ < \$50,000 (8% deposit)
 \$ _____ \$50,001 - \$150,000 (6% deposit)
 \$ _____ \$150,001 - \$300,000 (5% deposit)
 \$ _____ \$300,001 - \$500,000 (4% deposit)
 \$ _____ > \$500,000 (3% deposit)

PRIVATE IMPROVEMENTS

- \$ _____ < \$50,000 (5% deposit)
 \$ _____ \$50,001 - \$150,000 (4% deposit)
 \$ _____ \$150,001 - \$300,000 (3% deposit)
 \$ _____ \$300,001 - \$500,000 (2% deposit)
 \$ _____ > \$500,000 (1% deposit)

LANDSCAPE IMPROVEMENTS (Public or Private)

\$ _____ All landscape improvements (8% deposit)

OTHER

- \$ _____ GIS conversion of maps \$70.50 (\$141 hr. minimum ½ hr.)
 \$ _____ Performance Bond (99% value of engineer's estimate)
 \$ _____ Performance Cash Bond (1% value of engineer's estimate)
 \$ _____ Payment Security Bond (50% value of engineer's estimate)
 \$ _____ Warranty Bond (15% value of engineer's estimate)

MAP CHECKING

- \$ _____ Final Map Review (\$1,500 + \$50 / lot, or \$7,000, whichever is greater, deposit)
 \$ _____ Parcel Map Review (\$3,000 deposit)
 \$ _____ Lot Line Adjustment \$648 (\$162 hr. minimum 4 hrs.)
 \$ _____ County Land Surveyor Services (Cost + 25%)
 \$ _____ Certificate of Correction (\$1,500 deposit)
 \$ _____ Subdivision Monument Checking Fee (\$177 each)
 \$ _____ Base Map Revision (\$50 / lot)

OTHER SERVICES

- \$ _____ Condition of Approval Compliance Review (\$1,000 deposit)
 \$ _____ **Drainage / Stormwater Control Plan Review (\$1,000 deposit)**
 \$ _____ Letter of Map Revision/Amendment (\$1,500 deposit)
 \$ _____ Easements / Dedications / Vacations (\$3,000 deposit)

\$ _____	TOTAL FLAT FEE
\$ _____	TOTAL DEPOSIT
\$ _____	TOTAL



Town of Moraga

PUBLIC WORKS/ENGINEERING DEPARTMENT

SUBDIVISION _____

FINAL OR PARCEL MAP REVIEW CHECK LIST

The map accompanying this checklist has been checked by me or under my direction for completeness and consistency with the items in this check list, and is submitted for your examination and filing.

<p>Engineering Firm _____</p> <p>Contact Person: _____</p> <p>Telephone No.: _____</p> <p>E-mail Address: _____</p> <p>Mailing Address: _____</p> <p>_____</p> <p>Assessor's Parcel No(s): _____</p> <p>Owner Address: _____</p> <p>_____</p> <p>Property Address: _____</p> <p>_____</p> <p>Applicant: _____</p> <p>_____</p> <p>Tentative Map Approval Date: _____</p> <p>Tentative Map Expiration Date: _____</p>	<p style="text-align: center;">FOR OFFICE USE ONLY</p> <p>___ First Check</p> <p>___ Recheck</p> <p>___ Map check fee (see current Master Fee Schedule)</p> <p>___ Title Report</p> <p>___ Closure Calculations</p> <p>___ No. of copies of Map (3 min, 94-4.602)</p> <p>___ Check List filled out AND signed</p> <p>___ Copies of any pertinent maps/deeds/ref. info</p> <p>Assigned to: _____</p>
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Date: _____ Signature: _____

LS or RCE No. _____ Expiration Date: _____

Recording Date: _____ PM/M _____

Authority: State Subdivision Map Act (66434 & 66445 Govt. Code), Town of Moraga Ordinance Codes No. 57, 74, 81, 92, 108 & Moraga Municipal Code.

INSTRUCTIONS: In spaces to left of item number place a ✓ or "x" to indicate you have complied or N/A to indicate that the particular item does not apply. Numbers in parentheses indicate Subdivision Map Act or Contra Costa County Ordinance Code (per Moraga Ordinance Codes No. 57, 74, 81, 92, 108) Section reference.

A. GENERAL

- ___ 1. Agrees with the approved Tentative Map.
- ___ 2. Compliance with conditions of Approval: (i.e. survey dedications-notes).
- ___ 3. Easements and monuments correspond with improvement plans.
- ___ 4. Title Report current (within 6 months) and map represents fee Title ownership. (94-4.602) An updated report may be required prior to approval.
- ___ 5. All Documents must contain assessor's parcel number.

B. DEDICATION, CERTIFICATES & STATEMENTS

- ___ 1. Dedicate Easements as required. (94.4.214) (For roadway purposes, slope purposes, drainage purposes, etc.)
 - ___ 2. Wording on map must match any documents to be recorded with map.
 - ___ 3. WAIVER OF SIGNATURE ON MAP Notification secured from public utilities or public entities. (66436 & 66445 (f)).
-
- ___ 4. Determination of Easement Rights for WAIVER on Planning Commission Agenda.
 - ___ 5. All easements shown on the map for public and private dedication have appropriate wording in the Owners Statement, and purpose indicated on map. (all easements created must be fully dimensioned)
 - ___ 6. Owners Statement (66436) and Acknowledgement
 - ___ 7. Trustee's Statement (66436) and Acknowledgement. (Check signature requirements for corporations, etc.)
 - ___ 8. Surveyor's/Engineer's Statement including signature, seal, number and expiration date (66441 & 66449).
 - ___ 9. Name of person authorizing map. (66436)
 - ___ 10. Planning Commission Statement, Building Inspection Department Statement, Soil Engineer Statement, etc. (66443)(94-4.224)
 - ___ 11. Town Engineer's Statement and Town Surveyor's Statement which includes L.S. number and expiration date. (66442 & 66450)
 - ___ 12. Town Clerk's Statement and Clerk of the Board's Certificate (required for all maps). (66464 & 66440)
 - ___ 13. County Recorder's Statement. (66449b & 66465)
 - ___ 14. All certificates and statements signed and acknowledged with signatures (66436(c)) legible, using BLACK permanent ink. (94-4.210) (Ball point pens, blue ink, unreadable seals are not acceptable).

C. MONUMENTATION

- ___ 1. All "found monuments" tied by survey and described with tag numbers and record reference. (94-4.212)
- ___ 2. "BASIS OF BEARINGS": A record bearing between TWO found monuments of Record, or other acceptable method (approved by Public Works Department) must appear. A statement must be given on each sheet and the "Basis of Bearings" must be labeled on each sheet of the map. (94-4.212 and 66434C)
- ___ 3. Tie to Basis of Bearings. (94-4.212) (P.L.S. 8764) (66434C)
- ___ 4. Tie to adjoining surveys. (66434C)
- ___ 5. Monumentation (912-2.002) (94-4.222) (Adequacy approved by Town Surveyor.)
- ___ 6. Standard street monuments required in existing or proposed Town streets.
- ___ 7. Monument R/W at B.C., E.C. and property line if necessary.
- ___ 8. Minimum 2" nominal diameter I.P. required at all Section, quarter-Section and Rancho corners.
- ___ 9. A monumented line shall be shown on all new subdivision streets with monument ties to right-of-way.

D. MATHEMATICAL ACCURACY & GEOMETRY

- ___ 1. All bearings and distances, and curve information shown to nearest .01' and nearest second (01") (94-4.216)
- ___ 2. Curve data (Δ ,R,L). (94-4.216)
- ___ 3. Radial bearings of non-tangent curves. (94-4.216)
- ___ 4. Sum of increments equals total distance or delta.
- ___ 5. Areas net and gross (as required to nearest 0.01 of acre) (Net is gross area less area dedicated to Town of Moraga for roadway purposes.)
- ___ 6. Street widths, any setback lines, and/or required widening must be shown on map.
- ___ 7. Math closures must be correct to 1 part in 20,000. (94-4.604) The sum of interior distances, curve data (show Δ ,R,L, and radial bearings) equal total (94-4.216). Areas (square feet or acres), must all compute accurately. (94-4.604)

E. MAP BODY

- ___ 1. Discrepancies with recorded data shown. Recording information of record used must be clearly indicated.
- ___ 2. Non-measured record lines in parentheses.
- ___ 3. Show approved legal access to subdivision with recorded book and page number of instrument giving access.
- ___ 4. Privately maintained road note. Place the words "Private Road, Not Town Maintained" under road name on map. (Applies when road is not maintained by Town after current project).
- ___ 5. Map suitable for microfilming. (94-4.226)
- ___ 6. Full map size 18" x 26" (check before submitting) on mylar with 1" border (16"x24") inside border). Should have scale 40', 50' or 60' to 1"; other scales must have Public Works approval. (94-4.212. 94-4.204) (66434,66445)

- ___ 7. Title Block: Placed in upper center or upper right of map title sheet and upper center or upper right or lower right on map sheets; contains assigned subdivision number; subtitle refers to existing maps/general description of land surveyed as denoted in the Title Report; and is below subdivision number. "Town of Moraga, Contra Costa County, California" is placed below subtitle. (94- 4.208) Date, scale (map sheets only) & firm name are shown.
- ___ 8. Legend: Found monument: solid symbol: set monument: open symbol with type, size, tag #.; city limit line; Relinquishment of abutter's rights; record data, etc.; show on each map sheet.
- ___ 9. Legibility of map data-minimum 1/8" letter and symbol size. Any size smaller is not acceptable. Shape and weight of lettering must be readily legible (94.4.226)
- ___ 10. Distinctive border (66445, 66434(e), 94-4.204) and 1/16" solid black boundary line around subdivision. Be sure monuments on boundary line can be seen clearly.
- ___ 11. Adjoining property owners including book and page of official records, and/or recent subdivisions (showing lot/parcel) including recording info. (94-4.218)
- ___ 12. Privately-maintained road easements shown by dashed lines; public-maintained roads by solid lines.
- ___ 13. Show sidelines of all easements of record shall be shown by dashed lines on map, all of which shall be adequately dimensioned with widths, lengths, bearings of record. (94-4.214(5)) Recording information, to whom, and purpose of easements shall also be shown.
- ___ 14. Map tie to next street intersection or a vicinity map.
- ___ 15. Street names, spelling, R/W width, setback lines and/or required widening. (98-4.002)
- ___ 16. New street names approved by the Planning Department. (98-2.016)
- ___ 17. Parcel designation: lots designated by numbers; parcels designated by letters. (94-4.210, 94-4.206).
- ___ 18. Common areas notation or condominium notes.
- ___ 19. City boundaries which cross or join the subdivision must appear on map. (94-4.220)
- ___ 20. Future street lines and original property lines.
- ___ 21. Each lot/parcel must be shown completely on one sheet. (94-4.206) If more than one sheet is required, the first sheet shall contain a small-scale, undimensioned map of the parcels.
- ___ 22. Key or index map showing sheets numbers. (94-4.210) (66445b)
- ___ 23. No stick-on seals or lettering.
- ___ 25. Notice from the Planning Department that planning conditions of approval have been satisfied.

F. FEES, AGREEMENTS & LETTERS

- ___ 1. Checking fee deposit - \$1500 plus \$25 per lot (+25% for consultant services per current Master Fee Schedule).
Amount \$ _____
No. of Lots/Pcls. _____ Date _____
Fees that exceed deposit will be charged at time and materials rate.
- ___ 2. Deferred Improvement Agreement _____
- ___ 3. Grant Deed of Development Rights _____
- ___ 4. Any documents that need to record with map. This could include: Private or Public agreements, Soils Reports, Notification Statements by owners of anything called for by the conditions of approval to be a notification to future owners, CC&Rs, O&M Agreement, etc.

ENGINEER/SURVEYOR'S COMMENTS:



Town of Moraga

PUBLIC WORKS/ENGINEERING DEPARTMENT

Development No.: _____

IMPROVEMENT PLAN REVIEW CHECK LIST

The improvement plans accompanying this check list are submitted for your review. They have been prepared by me or under my direction and checked for conformance with the approved tentative map (or plan), the conditions of approval and the Moraga Municipal Code and Ordinances 57, 74, 81, and 92.

	FOR OFFICE USE ONLY
Name of Engineering Firm _____	<input type="checkbox"/> First Check (4 sets, 96-2.402) <input type="checkbox"/> Recheck <input type="checkbox"/> Sets of Plans <input type="checkbox"/> Hydrology & Hydraulic Calculations <input type="checkbox"/> Stormwater Control Plan and Exhibit
Contact Person: _____	(Preliminary) Bond Estimate \$ _____
Telephone No.: _____	(Section 96-2.402)
E-mail Address: _____	Plan Review Fee \$ _____
Assessor's Parcel No(s): _____	(Section 96-2.402; see Master Fee Schedule)
Tentative Map Approval Date: _____	<input type="checkbox"/> Signing & Striping Plans <input type="checkbox"/> Structure Calculations
Tentative Map Expiration Date: _____	Assigned to: _____

INSTRUCTIONS: Use a ✓ or "x" to indicate you comply or N/A to indicate not applicable next to each item. Any requests for exceptions shall be made in writing and attached herewith.

I. GENERAL

- ___1. Applicable General Notes included (consistent with COAs).
- ___2. 24" X 36" sheet size used, including borders. (96-2.208)
- ___3. Title Block/scale/north arrow shown. (96-2.208)
- ___4. Plans capable of reduced reproductions - minimum 1/8 inch lettering. (96-2.208)
- ___5. Engineers name, number, expiration date and signature included. (96-2.204)
- ___6. Vicinity Map shown (must be reproducible).
- ___7. Sheet Index and key map included for 3 or more sheets. (96-2.204)
- ___8. Limits of Public Works inspection clearly shown on plan, typical section, and bond estimate. (particularly on Use Permits, Single Family Residential development, etc.)
- ___9. Street light locations/legend/PG&E signature shown (if applicable) (96-6.214). If 10 or more street lights are required then the light will be shown on a contiguous plan view of the entire development.
- ___10. Request for annexation to Lighting District _____ submitted. (Accompanied by map and metes and bounds description and annexation fee.). (96-6.602, 96-6.604)
- ___11. Curb grade plans prepared by Engineer for review by Public Works and cross-sections @ 50' max. intervals along road frontage and extending 150' min beyond limits of work. Profile line, centerline, and E.P. shown for 500' beyond subdivision boundary.
- ___12. Signing and striping plan plus existing striping included in improvement plans.
- ___13. Development No. (SUB, MS, etc.) shown on each sheet.
- ___14. Fire District signature shown for access and fire hydrant location. (96-14.004)
- ___15. Verification of land rights for off-tract work (title report, recorded easement, right of entry, etc.)
- ___16. Permits required from other agencies (Fish & Wildlife, Caltrans, Army Corps of Engineers, County Flood Control, etc.)
- ___17. Right of entry submitted for review for all off-tract work. (96-4.204)
- ___18. Plans for landscaping within the public right of way or public park submitted for review.
- ___19. Plans for joint trench and utility facilities submitted for review.
- ___20. Plans for fencing where required submitted for review. (918-2)
- ___21. Water testing required before paving for grades less than 1%.
- ___22. Provide annotated conditions of approval (explaining how each COA has been satisfied).

II. ROADS**A. Typical Sections**

- ___1. Structural sections indicated per R-value. (98-8.204)
- ___2. Curb type indicated (detail provided or Std Plan referenced). (96-2.204)
- ___3. Right of Way and street width dimensions shown.
- ___4. 2:1 max. cut/fill slopes shown beginning @ R/W lines for cohesive soils, 4:1 max for sandy soils - Soils Report verifying exceptions, or max. slopes per approved grading plan.
- ___5. Crown Slope indicated. (98-8.208)
- ___6. Sidewalk shown. (96-8.402)
- ___7. Pedestrian or bicycle facilities shown per Caltrans standards. (96-8.2)
- ___8. Pavement Design Chart shown with T.I. values for review.

B. Plan Views

- ___1. Radius of curvature shown on all curves. (98-6.016)
- ___2. 20' curb return radii shown (96-12.404) (30' for major thoroughfares and industrial streets).
- ___3. 24' min. curb opening for private road intersection.
- ___4. Horizontal curves and sight distance designed per Highway Design Manual.
- ___5. Cul-de-sac radius (35' min.) shown. (96-12.402)
- ___6. Private road turnarounds shown. (96-12.406)
- ___7. R/W and street width dimensions shown.
- ___8. Centerline stationing shown at 100' intervals and at all curves B.C., E.C.
- ___9. Lot/parcel lines and numbers/letters indicated.
- ___10. Valley gutters indicated. Flag flow lines at quarter points on curb returns and valley gutter centerline.
- ___11. Stationing and offsets of all drainage structures shown.
- ___12. T/C elevation at all drain structures w/invert and FL elevations shown. (Invert and FL elevations may be shown on profile if preferred. If profile is not on same sheet as plan view, T/C, invert, and FL elevations must be shown on profile).
- ___13. Drainage easements shown and dimensioned.
- ___14. Location of underground pipes and utilities shown. (96-2.204)
- ___15. Street monuments shown. (96-2.204)
- ___16. Off-tract slope easements shown, with x-sections, topography and offer of dedication for slope easements submitted for review.
- ___17. Pedestrian Paths shown. (96-8.2) Basic grades shown.
- ___18. ADA curb ramps shown at returns per Caltrans Standard Plans.

C. Profiles

- ___1. Vertical curves designed for proper speeds per Highway Design Manual. (98-6.010)
- ___2. Minimum vertical curve lengths observed. (98-6.012)
- ___3. Curb returns and cul-de-sac profiles shown (high and/or low pts. indicated when vertical curve is used).
- ___4. Vertical curve used for grade breaks greater than 2% (3% on sag curves).
- ___5. 6% maximum gradient observed at intersecting streets. (98-6.008)
- ___6. 6% maximum grade observed across intersections. (98-6.006)
- ___7. 2% minimum grade observed on all streets or 1% minimum with curbs. (98-6.004)
- ___8. Maximum street grades per municipal code or COAs. (98-6.002)
- ___9. Underground pipes and utilities shown. (96-2.204)
- ___10. Existing ground on centerline shown. Where topography is steep, existing ground left and right of centerline has been shown. Cross sections may be required.
- ___11. Finish grade profile for centerline and for top of curb shown (left and right) if special grades required.
- ___12. Cul-de-sacs all have 1% to 4% cross slope between gutter lip and high point.
- ___13. Super elevation grades shown where required by Highway Design Manual.
- ___14. Back of curb flow diverters indicated on proposed streets with grades over 5% when no sidewalk installed.
- ___15. Centerline profiles of intersecting streets shown to their point of intersection. (Showing curb return or other profiles in lieu of the centerline profile is not an adequate or correct representation.)
- ___16. Off-tract profile to catch point shown where road is constructed to subdivision boundary.
- ___17. Centerline stations and elevations shown at 100' minimum intervals and at all BVC, EVC, PIVC, and grade breaks.
- ___18. Profile slopes indicated.

III. DRAINAGE**A. Hydrology-Hydraulics Calculations**

- ___1. Contour maps - continue for 100 feet ± beyond property.

- ___2. 100-year water surface calculations completed when natural watercourse or drainage facility flows through or adjacent to subdivision or the property lies within special flood hazard area or flood prone area and water surface shown on plans. (914-2.002)
- ___3. EGL, HGL, FL EL, Q, A, S, V, freeboard at structures, structure losses, tailwater assumptions, super or subcritical flow all indicated.
- ___4. Adequacy of in-tract drainage system verified. (914-2.002)
- ___5. All starting water surface calculations adequately verified. (When computing beginning water surface in natural watercourse and no obvious point of control is available, begin 500' downstream and work up to point in question.)
- ___6. Adequacy of off-tract drainage system verified. (914-2.004)

B. Easements

- ___1. Off-tract drainage improvements (plan and profile) and accompanying easements shown. Off-tract offers of dedication for drainage easement submitted for review.
- ___2. Off-tract work to be done but no easement requirements. Right of entry submitted for review. (96-4.204)
- ___3. Easement widths indicated for:
 - a. Closed conduits. (914-14.004)
 - b. Open channels. (914-14.006)
- ___4. Sufficient cross-sections submitted to verify easement widths and Development rights for open channels.
- ___5. Access and ingress easements shown, graded to be useable. (914-14.008)
- ___6. Minimum 12' ingress easement to public way provided to all access easements. (914-14.008)
- ___7. Minimum 40' centerline radius for access easements shown. (914-14.008)
- ___8. Structure setback line indicated and location verified with cross-sections for unimproved channel. (914-14.012)
- ___9. Fences shown as required where street crosses watercourse or drainage structure. (918-2)
- ___10. Fences shown as required at outside boundaries of open lined channel easements. (918-2)

C. Structures

- ___1. Inlet depths without manhole bases and max. dia. pipes through inlets observed (See Contra Costa County Standard Plans).

Type G	6'	CD 27 (formerly Type "A" Inlet)
Type H	12'	CD 28 (formerly Type "B" Inlet)
Type J	4'	CD 29 (formerly Type "C" Inlet)
Type D	6'	CD 23
Type E	6'	CD 24
Type F	12'	CD 25
- ___2. Max. diameter pipes through manholes observed (See Contra Costa County Standard Plans).

Type I	24"	CD 30, CD 35
Type II	42"	CD 31, CD 35
Type III	60"	CD 32, CD 35
Type V	96"	CD 34, CD 35
- ___3. 1.25' minimum freeboard in inlets and manholes. (914-8.016)
- ___4. H G L shown in all structure profiles.
- ___5. Type J inlet shown with grate unless in pedestrian area, FL elevation of side opening also indicated (CCC Std Plan CD29).
- ___6. Structure type indicated on plan or on structure list on same plan sheet.
- ___7. Type H or E Inlets used on streets with grades 6% or steeper.
- ___8. Steel reinforced copolymer polypropylene plastic steps (or equivalent) provided for structures over 4 feet deep.
- ___9. Gutter apron lengths for G or H inlets specified for profile grades 3% or greater.
- ___10. Indicate internal dimensions of non-standard drainage structures used in private systems.

D. Major Structures

- ___1. Full size plans with adequate rebar/structural details shown.
- ___2. Specifications provided.
- ___3. Soils report with log of test borings and water table elevation included.
- ___4. Structural calculations, wet stamped and signed by the civil/structural engineer.
- ___5. Hydrology/hydraulics provided calculations included for structures influenced by a watercourse.
- ___6. Show proof of regulatory permits acquired.
- ___7. Provide shop drawings and material specifications (for large culverts and modular walls).
- ___8. Include cost estimate and quantity calculations.
- ___9. Independent design check calculations (for bridges only) provided.
- ___10. Provide scour analysis on abutments and walls over/adjacent to a creek or stream.
- ___11. Traffic control plan for replacement structures prepared and approved prior to commencement of construction.
- ___12. Proof that necessary right of way/construction easements have been acquired.

E. Pipe

- ___1. Closed conduit minimum slope of 0.003 observed. (914-8.004)
- ___2. Gauge of corrugated steel or aluminum pipe noted on plans. (914-8.010)
- ___3. Water directed into inlet does not reverse the direction of flow. (914-8.012)

- ___4. Minimum centerline radii of pipe checked. Beveled RCP lengths specified (bevel one or both ends) and stationing of E.C. and B.C. indicated.
- ___5. Outlet protection for closed conduits or lined channels provided. (914-6.210)
- ___6. 2' minimum cover over pipe observed (provided manufacturer specs does not require more) unless special design and calcs. submitted, 3' minimum cover for plastic pipe.
- ___7. Design Q shown on pipe profile.
- ___8. Minimum cleansing velocity of 2 FPS with half design flow observed.
- ___9. 18" minimum pipe size for public system.

F. Channels

- ___1. Maximum velocity in earth channel verified by soils report - minimum velocity 3 fps. (916-6.202, 914-6.204)
- ___2. Improved earth channel side slopes shown to be 2:1 or less steep as specified by soils report. (914-6.206)
- ___3. Lined channel side slopes as specified by soils report. (914-6.210)
- ___4. Areas noted to be cleared of structures, trees, brush, and debris within natural channel and watercourses. (914-4.006)

IV. STREET LIGHT (Public Right of Way)

- ___1. LAFCO request for annexation into Lighting District with map, meets and bounds description and annexation fees. (96-6.602 & 96-6.604)
- ___2. Submit street light plans including photometrics.

DESIGN ENGINEER'S COMMENTS:



Town of Moraga

PUBLIC WORKS/ENGINEERING
DEPARTMENT

Grading Permits

If you have received an approval of your preliminary grading plan from the Design Review Board, Planning Commission or Town Council and your Conditions of Approval require you to obtain a grading permit:

- Submit grading plans for review by the Public Works Department and the Planning Department.
- **Please expect up to 6 weeks for review of your first submittal, up to 4 weeks for review of your second resubmittal, and up to 2 weeks for every review thereafter.**

Preparing for submittal to the County Grading Division:

- After review by the Public Works Department and the Planning Department, you will submit the grading plans to the Contra Costa County Department of Conservation and Development, Grading Division (County Grading Division) for grading plan check.
- Prior to submitting to the County Grading Division, you must have your grading plans stamped by the Town and by the Central Contra Costa Sanitary District (Central San).
- Once your grading plans are stamped by the Town and Central San, you are ready to submit to the County Grading Division:
 - Complete an "Application for Permit,"
 - 3 copies of your stamped grading plans,
 - copy of the soils report, and a
 - plan check fee.
- Upon completion of the grading plan check by the County Grading Division, and approval by the Town, the County Grading Division will issue you a grading permit for construction. An inspection fee will be due at the time of issuance of your permit for construction.

To obtain a copy of the application materials, or for more information on the grading permit review process, please contact the Public Works Department at **(925) 888-7026**, or by e-mail at **publicworks@moraga.ca.us**.

Other useful information to help you through the grading permit process:

- Contra Costa County Department of Conservation and Development
Grading Division
Lamorinda Office
3685 Mt. Diablo Blvd #120
Lafayette, CA 94549
(925) 299-0263
(925) 299-0134 FAX
- **Martinez Office (main)**
30 Muir Road
Martinez, CA 94553
(925) 674-7200
(925) 674-7238 FAX
- Central Contra Costa Sanitary District
5019 Imhoff Place
Martinez, CA 94553
(925) 228-9500
- Moraga Grading Ordinance
- C.3 Guidebook (Storm water and clean water facilities)
- Standard Plans (Contra Costa County)
- Standard Plans (Caltrans)



APPLICATION FOR PERMIT

PERMIT # _____	PARCEL # _____	NTC: Yes <input type="checkbox"/> No <input type="checkbox"/>										
PROJECT LOCATION												
STREET ADDRESS _____ CITY/AREA _____												
APPLICANT NAME _____ MAILING ADDRESS _____ CITY/STATE/ZIP _____ PHONE # _____ EMAIL _____	PROPERTY OWNER <input type="checkbox"/> SAME AS APPLICANT NAME _____ STREET ADDRESS _____ CITY/STATE/ZIP _____ PHONE # _____											
CONTRACTOR NAME _____	LICENSE # _____	PHONE # _____										
MAILING ADDRESS/CITY/STATE/ZIP _____												
LICENSED DESIGN PROFESSIONAL (ARCHITECT OR ENGINEER)												
NAME _____	LICENSE # _____	PHONE # _____										
MAILING ADDRESS/CITY/STATE/ZIP _____												
DETAILED JOB DESCRIPTION _____												
		VALUATION \$										
Information required to be on file: <ul style="list-style-type: none"> • Authorized signature • Workers' compensation insurance • Current California contractor license 		<ul style="list-style-type: none"> • Does this project include any trenching, grading, or fill within the drip line of any tree? Yes <input type="checkbox"/> No <input type="checkbox"/> • Does this project involve any grading? Yes <input type="checkbox"/> No <input type="checkbox"/> • How many cubic yards? _____ 										
Documentation required: <ul style="list-style-type: none"> • Three (3) copies of plot plans • Three (3) sets of construction plans • Energy compliance data on each lot • Health Dept. and/or Sanitary clearance • Drainage fee area • Grading pad cert./soil report • Structural Calculations • School District Receipt Other: _____		OWNER/APPLICANT NAME (print) _____ <hr/> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">SIGNATURE</td> <td style="border: none; width: 50%;"></td> <td style="border: none;">DATE</td> <td style="border: none; width: 20%;"></td> </tr> </table> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">↓ PLANNING DEPARTMENT ↓</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">ZONING</td> <td style="border: none; text-align: center;">GP</td> <td style="border: none;">FLOOD</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;">ZONE</td> </tr> </table>	SIGNATURE		DATE		ZONING	GP	FLOOD			ZONE
SIGNATURE		DATE										
ZONING	GP	FLOOD										
		ZONE										
East County 1191 Central Blvd #C Brentwood, CA 94513 Tel: 925-427-8850 Fax: 925-427-8838		Lamorinda 3685 Mt Diablo Blvd #120 Lafayette, CA 94549 Tel: 925-299-0263 Fax: 925-299-0134										
NAME (print) _____		NAME (print) _____										
SIGNATURE _____		DATE _____										

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class _____ License No. _____

Date _____ Contractor Signature _____

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the reason(s) indicated below by the checkmark(s) I have placed next to the applicable item(s) (Section 7031.5, Business and Professions Code: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).):

I, as owner of the property, or my employees with wages as their sole compensation, will do all of or portions of the work, and the structure is not intended or offered for sale (Section 7044, Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed Contractors to construct the project (Section 7044, Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the projects with a licensed Contractor pursuant to the Contractors' State License Law.)

I am exempt from licensure under the Contractors' State License Law for the following reason:

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following Web site: <http://www.leginfo.ca.gov/calaw.html>.

Date _____ Signature of Property Owner or Authorized Agent _____

WORKERS' COMPENSATION DECLARATION

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. Policy No. _____

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are: Carrier _____ Policy Number _____ Expiration Date _____

Name of Agent _____ Phone # _____

I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date _____ Signature of Applicant _____

DECLARATION REGARDING CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Section 3097, Civil Code).

Lender's Name _____

Lender's Address _____

By my signature below, I certify to each of the following:

I am the property owner or authorized to act on the property owner's behalf. I have read this application and the information I have provided is correct. I agree to comply with all applicable city and county ordinances and state laws relating to building construction. I authorize representatives of this city or county to enter the above-identified property for inspection purposes.

Date _____ Signature of Property Owner or Authorized Agent _____