POLICIES AND STANDARDS PERTAINING TO
IMPROVEMENT PLANS FOR CONSTRUCTION, INSPECTION, AND FINAL APPROVAL

Background and Purposes

County policy and regulations require improvement plans and/or grading plans for all land development pursuant to County Ordinances. The primary County purposes of engineered plans are to:

- Coordinate the planning and implementation requirements of many different agencies that may be involved in any given project.
- Assess the proposed development and implement the minimum design and environmental standards of all affected agencies.
- Control the on-site and off-site improvement work for conformance with the concepts approved for the development by the County.
- Protect the public interest by providing a basis for construction and inspection to help ensure that the work will be completed in accordance with approved design.

The policies and standards for preparation and approval of plans and other construction-related matters are described below.

Improvement Plans – General Policies

- Plans must be prepared by licensed civil engineers, retained by the applicants, and based on adopted minimum standards of the affected agencies. The standards and format for the plans are described below under the heading, “Plan Content, Format and Standards.”
- The plans must properly reflect the conditions of approval for the particular project issued by the County. Imaginative and creative design which is equal to or better than the adopted minimum standards is encouraged.
- The Grading Official is responsible for the coordination of the review of the plans by various agencies, the final approval of the plans and the enforcement of land development and grading agreements. A checklist is furnished to engineers that is intended to cover all of the standard items on a typical set of plans.
- Plans must be based on sufficient field data and reflect true field conditions. Plan and profile sheets drawn at appropriate scale are required for roads, driveways and pipelines. Standard notes and certificates also are required as described at the end of this section:
- Plans must conform to the adopted minimum standards of the various agencies (Roads & Airports, Santa Clara Valley Water District, sanitation districts and the Grading Official). Any proposed deviations from these standards must be handled by direct communication between the private engineer and the agency involved.
- It is standard practice for most agencies to require that alternatives to adopted standards be presented by the engineer on an equal or better basis with appropriate written justification, as well as documentation, when needed, such as laboratory tests of soils, geologic reports, etc. In all situations involving a lesser design than the adopted County standard, the matter may be referred to the Board of Supervisors. Such deviations (as well as those of other affected regulatory agencies) should be made known by the engineer during the tentative map stage or preliminary grading plan for resolution of issues at that time.
- All types of public improvements and on-site development work should be included in one set of plans to better coordinate the construction, bonding, final plan approval and inspection requirements. This may include such items as sanitary sewers, water systems and improvements to flood control facilities.
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• Earthwork must conform to the standards of the grading ordinance or any higher standards adopted by the affected public agencies.

Final Approval

• Improvement plans are submitted to the Grading Official through the Central Permit Office for review and approval. Information on the number of copies and the process is available from the Central Permit Office and departmental web site. Copies are referred to all affected agencies.

• At the time check prints are submitted for County review, they must be accompanied by the engineer’s cost estimate. A detailed estimate by bid items with current unit prices is required, including such items as equipment move-on, clearing and grubbing. Unit prices should properly reflect the location of the work and site conditions.

• All conditions of approval applicable at the time of final plan approval must be completed before they are signed by the Grading Official.

• Copies of signed plans and permit must be retained on the job site at all times and the work performed in accordance with these plans. Any significant field changes must be shown on the plans and approved by the County before construction.

• After completion of the construction work, as-built plans are prepared the engineer of record, or any private engineer who is authorized by the Grading Official to perform the inspection work. These plans are retained by the County as a public record.

Agreements

At the time of signing the plans, the developer and the Grading Official, or his authorized representative, both sign an agreement which specifies the time period and other requirements for satisfactory completion of the work where a bond is required. For major subdivisions, the agreement, bond, tract map and pertinent papers are sent to the Board of Supervisors for signing and final approval. It normally requires a minimum of three weeks for the preparation and agenizing of this report. It is the policy of the Grading Official not to sign the plans for a major subdivision until the Board of Supervisors approves the final map and agreement. The principal provisions of the typical agreement are:

• All work is to be completed in accordance with approved plans prior to occupancy of any new buildings or building additions, but not later than one year.

• The Grading Official may, upon written request and submission of satisfactory evidence that the specified time limits are not appropriate or practical, give written authorization of an extension of time and modify the requirements for occupancy.

• The work includes (whether stated on the plans or not) the setting of construction stakes, monument boxes and survey monuments.

• The work may be completed by the County if the developer fails to perform. (NOTE: It is County policy to first sue the developer, if necessary, for specific performance.)

• The developer guarantees all work for a period of one year (except single sites and grading) from the date of completion and construction acceptance by County.

• In the event the work is not to be maintained by a public agency, the developer agrees to notify any purchaser regarding the property owner’s responsibility for continued maintenance of the improvements in a manner consistent with the purposes of the County approval.
The developer agrees to indemnify and hold the County harmless from any liabilities, claims, damages or suits for reason of death or injury arising out of the work performed, except for liabilities or claims arising out of the sole negligence of the County.

The developer must maintain public liability and property damage insurance in the minimum amounts of $300,000 for bodily injury, $50,000 for property damage, single occurrence, and an aggregate limit of $200,000. Evidence of such insurance may be required at any time.

Upon annexation into any city, the developer agrees to fulfill all the terms of this agreement upon demand by such city as though he had contracted with such city originally. Any annexing city has the rights of a third-party beneficiary.

Special provision pertaining to bonds and insurance as described below.

Bonds – General

Bonds are for the purpose of assuring completion of the work in the event of failure of the developer to perform. Performance bonds are required for subdivision and may be required for hazardous grading improvements on a parcel. A Labor and Materialmen’s bond is required to ensure the payment of contractors for the construction of the subdivision improvements. Bond values are established by the Grading Official prior to the issuance of subdivision or grading improvement permits.

Typically, grading permits do not require performance bonds. Grading permits may require performance bonds should the Grading Official find the work to cause a potentially “hazardous condition,” pursuant to the definition in the Grading Ordinance.

All parties providing bonds shall be parties in the development agreement.

At the Grading Official’s discretion, in order to more effectively get work associated with an “Emergency Grading Permit” (as described in Section C12-415 of the Grading Ordinance) constructed, no performance bond is required for permit issuance.

Bonds – Subdivision

Performance and Labor and Materials bonds in the full amount of the estimated cost of the work are required for subdivision projects. Bond amounts are determined by the Grading Official using the RS Means cost estimation guides. Ten percent contingency factors are added to the cost estimate prepared by the Grading Official. Bonds must include the cost of any structural items shown on the plans that require a building permit, such as water tanks and retaining walls. The bonds also must include all items of work that are required by other affected agencies to comply with conditions of approval or the agency’s standards, such as drainage outfall improvements in the Santa Clara Valley Water District’s channels. County bonds are not required for items of work that are installed or guaranteed to the County by public utilities and special districts, electric distribution lines and sanitary sewers. The agencies responsible for those improvements require either a bond or full payment by developer prior to issuance of a clearance letter to the Grading Official.

The Permittee has a choice of bond types that includes cash, certificates of deposit, letters of credit and surety company bonds. The County furnishes standard forms which must be used in all cases.

Performance bonds can be released by the Grading Official in increments of 25 percent of the total scope as the work progresses. The final 25 percent increment cannot be released until final completion and acceptance of the work. If a form of cash is posted and the project requires a
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labor and materialmen’s bond, the maximum incremental release is 50 percent because the remaining 50 percent is the minimum labor and materialmen’s bond required by State law.

- Labor and materialmen’s bonds must be retained for a period of ninety days after completion of the work and claims, if any, have been settled.
- The developer must request release of the bond upon completion of the work. The County Inspector initiates the administrative procedures for bond release upon request and final approval. It normally takes about ten days for the return of bonds. Bonds cannot be released until those portions of the work to be done under a building permit, such as tanks and retaining walls, or work required by outside agencies which was included in the bond furnished to the County has been fully completed and approved.
- In the event a maintenance period is required for plantings and erosion control facilities, a separate maintenance bond must be posted, or the original bond retained for the prescribed period of time. The bond amount must be sufficient to cover both the potential remedial work and the normal maintenance.

Bond Pre-emption Policy (Report approved by Board of Supervisors, 6/2/80)

- State and County regulations do not preclude a developer from constructing subdivision improvements (except grading) before the recording of the map and posting of bonds. He does run the risk, however, of not receiving final County approval—even with County inspection during construction. To help avoid some of the potential problems, a report was sent to the Board of Supervisors on June 2, 1980 (and approved) recommending certain policy guidelines to be followed in situations where developers request County approval to commence construction prior to the signing of the subdivision map or the posting of a full performance bond. The approved guidelines are:
  - If the project is a major subdivision, the developer should make his request directly to the Board of Supervisors. If the project is a minor land division, the request is to be handled by the Grading Official. (See note below.)
  - If the request is approved, the plans must be fully completed and signed by the Grading Official. Concurrently, a modified land development agreement approved by the County Counsel covering the work and ancillary items is to be signed by the developer and the Grading Official.
  - All subdivision conditions of approval must be met prior to approval of the plans, except ones that are obviously inappropriate at that time. The requirements to be met in these cases typically would include (but not be limited to) payment of fees, posting of appropriate bond (not less than ten percent of the estimated cost of the advance work), signing an agreement and clearance letters from all affected County departments and outside agencies.
  - Any work in the County right-of-way requires a separate full value performance bond. Any exceptions to this requirement are to be approved by the Roads & Airports or the Board of Supervisors.
  - Written acknowledgment by the developer that any advance construction work will not be a consideration with respect to future proceedings or final approval of the subdivision map.

NOTE: At the time of this report, County Counsel recommended that the conditions of approval for future subdivisions include basic requirements to be met prior to County approval of any construction work to be done in advance of final approval of the subdivision map. In the absence of such conditions being included when the Board of Supervisors approves the tentative map of a
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minor subdivision, the request for advance construction will be referred to the Board of
Supervisors.

Permits

- Permits for the work are issued immediately after the plans and agreement are signed. The
  permits specify the responsibilities of the permittee for the conduct of the work, the time period (or
  restricted times, if any) and other significant matters not covered in the plan specifications or the
  agreement

- Permits are transferable if:
  a. New Agreements are entered into, as required
  b. Reposting of the bonds, as required
  c. Outstanding Fees have been reconciled

- For subdivision plans, the responsibility for the construction of the improvements can only be
  transferred as an entire project. Further phasing of the construction improvements is not allowed
  without appropriate map and administrative corrections. The Permittee’s responsibility for
  completion of the work cannot be assigned to third parties (lot buyers, etc.).

- Building permits are required for structures, such as retaining walls and bridges, when they are
  located outside the right of way of a County maintained road, or road to be County maintained
  immediately after construction.

- The permit must be retained at the work site whenever work is in progress. In the event the work
  is not being performed in accordance with the permit (or plans), the permit may be suspended or
  revoked by the Grading Official or his authorized representative.

- When the time limits expire without the work being completed, the Permittee must request an
  extension of time. Time limit expirations in no way lessen the Permittee’s obligations to complete
  the required work. The Grading Official may specify new requirements to be met when issuing an
  extension of time. In the event the Permittee fails to complete the work in a satisfactory manner
  after due notice, (or time extension), the matter is reported to the Board of Supervisors for legal
  action.

Plan Check and Inspection Fees (Move before inspection)

- Plan check and inspection fees are set by Board resolution.

- A deposit against the plan check fees (non-refundable) must be paid at the time of initial submittal
  for plan check. The deposit is determined on the basis of the private engineer’s estimated cost of
  the work shown on the plans.

- After the plan check is completed, the plan check fee and the minimum inspection fee are
  computed by the County. The unpaid balance for the plan check fee, and the calculated
  inspection fee, must be paid prior to approval of the plans. If the deposit for the plan check fee
  exceeds the final plan check fee, the balance is applied to the inspection fee.

- These fees also include a provision to collect additional billable time beyond that which the
  standard fee was intended to cover.

- If a private engineer is authorized to inspect the work, only the plan check fee is paid to the
  County. It is the Developer’s/Permittee’s responsibility to make all necessary financial
  arrangements with the private engineer that he retains to do the work and to pay the costs of
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tests and reports. (NOTE: County inspection fees include routine tests of material and compaction of fills. Any special tests and investigations, or retesting necessitated by failure of the original tests to comply with requirements, are paid by the developer/Permittee.)

- In situations where the plans show improvements that require a building permit (retaining walls, tanks, etc.), the amount of the Building Inspector’s fee is deducted from the improvement plan and inspection fees.

Inspection

- All construction work must be inspected by the County. Private engineers may do the inspection for the County when authorized in writing by the Grading Official. A standard three-part form (permittee/private engineer/Grading Official) is used for this purpose.

- When private inspection is authorized by the Grading Official, the applicant must obtain and pay for the services of a licensed private engineer or engineering firm (satisfactory to the Grading Official) other than the one who prepared the plans.

- Inspectors require a notice of 2 business days prior to commencement of work. A Pre-construction meeting may be required.

- Any significant changes in the work during construction must be shown as modifications on the original plans and reviewed and approved by the County prior to construction. If the inspector finds the work is not being done in accordance with the approved plans or the permit, he may order the work to be discontinued. Pursuant to Section C12-482 and 499 and Article 7 of the Grading Ordinance, any unapproved modification of the scope of work associated with approved permit may be subject to civil and criminal prosecution.

- Laboratory tests of certain materials may be required. Compaction tests of fills must be done in the manner and number described in the ordinance, or in the plans and specifications. Soils and/or geologic investigations and reports also may be required while the work is in progress or prior to acceptance.

- If a soils report is required for the development of the improvement plans, a construction observation letter, prepared by the geotechnical engineer or geologist, verifying that the work was completed in accordance with the recommendations of the report shall be required prior to final acceptance of the improvements.

- As-built plans are required for public record upon completion of the project.

- A field walk-through of the project is held with the inspectors, the developer and/or contractor, and a representative of any affected agencies near the end of the work schedule.

- For tract subdivisions, upon satisfactory completion of the work, and request from the developer has been received by the County inspector, the County inspector initiates the final acceptance and bond release by the Board of Supervisors. For all other work, the County inspector accepts the final improvements. Any unpaid County charges must be paid prior to final acceptance and/or release of the bond.

- When the plans include a private water system, or separate fire protection facilities, they must be tested and approved in accordance with the methods and standards of the affected agencies—generally Environmental Health Services and Fire Protection districts.

- An electronic copy of the as-built plans shall be submitted to the Grading Official after construction and prior to final acceptance of the improvements. The county inspector or the private engineer authorized by the Grading Official to perform the inspection work shall sign the
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as-built statement on the improvement plans confirming that the plans reflect all minor field
changes and revisions, if any.

Plan Content, Format and Standards

For clarity, storage and reproduction purposes, the County has adopted the following policies regarding
the content, materials and format for improvement plans and grading plans:

1. Use of high quality materials in sheets size 24” X 36” capable of producing good quality prints and
electronic copies.

2. Improvement Plans shall be legible for printing and scanning. Small lettering will not provide
readable electronic scans and cannot be accepted.

3. The improvement plans shall include the County’s current published standard cover sheet and
erosion control and Best Management Practices sheets. An AutoCAD version of the County’s
standard cover sheet and PDF versions of the Best Management Practices sheets are available
at the Planning and Development Services Office’s web site.

4. Improvement Plans shall include: –

   (1) Plan and profile sheet (s) showing the road center line, curb lines, ditch lines, etc., and
       any underground pipes, wires, manholes, etc.

   (2) Details as needed for construction and design evaluation.

   (3) Cross sections of roads and channels sufficient for the computation of earthwork volumes
       with reasonable accuracy and for determining the suitability of the design with respect to
       property lines, structures and other improvements. Ground profile lines must extend an
       adequate distance beyond cut-and-fill lines to indicate the correlation with existing terrain
       features or constraints, such as property lines.

   (4) Cross sections of all significant graded areas showing maximum cuts and fills and the
       silhouettes of major structures, such as tanks.