8 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) for the MCSP describes mitigation measures in the EIR, and presents the schedule, method, and responsible parties for implementation consistent with the CEQA Guidelines Section 15097. In general, Project Applicants or the Town of Moraga is responsible for implementing and monitoring the measures identified below. In some cases, responsible federal, state, or local agencies will be required to ensure implementation. It is anticipated that additional mitigation measures will be developed during review of individual projects, and will be identified, conditioned, and incorporated into individual project monitoring programs. Table 8-1 summarizes the MMRP. A detailed description of the mitigation measures follows the table.

Table 8-1

Mitigation Monitoring and Reporting Program Summary

Mitigation Measure	Impact Mitigated	Responsibility	Timing
4.A LAND USE			
4.A-1: Eliminate inconsistency with the Moraga General Plan (Proposed Project and Alternatives 3 and 4)	Inconsistency between the General Plan and the MCSP	Town of Moraga	Prior to MCSP adoption
4.B POPULATION, EMPLOYMENT AND HOUSING			
4.B-3: Identify alternative sites to meet housing goals (Alternatives 1 and 2)	Potential impacts to availability of affordable housing	Town of Moraga	Prior to MCSP adoption
4.C GEOLOGY, SOILS AND SEISMICITY			
4.C-1: Implement Moraga General Plan Measure 4.1-1—Prepare geologic hazard evaluations and incorporate appropriate design measures into each development project (Proposed Project and All Action Alternatives)	Potential exposure of people or structures to major geologic hazards	Project Applicants	Prior to issuance of grading and building permits
4.C-2: Implement Moraga General Plan Measure 4.1-2—Prepare and implement slope stability assessments, site grading plans, and landslide mitigation	Potential damage caused by unstable slope conditions	Project Applicants	Prior to issuance of grading permits, and during grading operations

Table 8-1

Mitigation Monitoring and Reporting Program Summary

Mitigation Measure	Impact Mitigated	Responsibility	Timing
designs (Proposed Project and All Action Alternatives)			
4.C-3a: Prevent moisture variation of expansive soils (Proposed Project and All Action Alternatives)	Potential risk to life or property	Project Applicants	Prior to issuance of grading permits, and during construction
4.C-3b: Construct appropriate foundations for expansive soils (Proposed Project and All Action Alternatives)	Potential risk to life or property	Project Applicants	Prior to issuance of grading permits, and during construction
4.C-3c: Construct appropriate foundations for corrosive soils (Proposed Project and All Action Alternatives)	Potential risk to life or property	Project Applicants	Prior to issuance of grading permits, and during construction
4.D HYDROLOGY, SURFACE WATER AND GROUNDWATER QUALITY			
4.D-1a: Develop and implement a Master Drainage Plan (Proposed Project and All Action Alternatives)	Potential surface or groundwater water quality degradation or violation of water quality standards or waste discharge requirements	Project Applicants	Prior to issuance of grading permits
4.D-1b: Develop and implement Laguna Creek Greenway Protection, Maintenance and Monitoring Plan (Proposed Project and All Action Alternatives)	Potential surface or groundwater water quality degradation or violation of water quality standards or waste discharge requirements; potential flooding, bank erosion, and/or sedimentation	Project Applicants	Prior to issuance of grading permits
4.D-2a: Demonstrate that existing springs and seeps are not dependent on the recharge from the project area (Proposed Project and All Action Alternatives)	Potential depletion of groundwater supplies or interference with groundwater recharge	Project Applicants	During Master Drainage Plan development (Mitigation Measure 4.D-1a)
4.D-2b: Capture and infiltrate runoff (Proposed Project and All Action Alternatives)	Potential depletion of groundwater supplies or interference with groundwater recharge	Project Applicants	During Master Drainage Plan development (Mitigation Measure 4.D-1a)
4.D-3: Determine peak flows due	Potential alteration of	Project Applicants	During Master

Table 8-1

Mitigation Monitoring and Reporting Program Summary

Mitigation Measure	Impact Mitigated	Responsibility	Timing
to development and reduce peak flows to below pre-project conditions (Proposed Project and All Action Alternatives)	existing drainage patterns; potential flooding, bank erosion, and/or sedimentation		Drainage Plan development (Mitigation Measure 4.D-1a)
4.D-8: Implement water quality standards and best management practices (Proposed Project and All Action Alternatives)	Potential degradation of surface water quality	Project Applicants	During Master Drainage Plan development (Mitigation Measure 4.D-1a)
4.E OPEN SPACE, VISUAL RESOURCES AND RECREATION			
4.E-2a: Develop and implement additional MCSP Design Guidelines (Proposed Project and All Action Alternatives)	Potential adverse effect on a scenic vista or damage to scenic resources; potential degradation to existing visual quality	Town of Moraga	Prior to adoption/ implementation of the Specific Plan
4.E-2b: Require internal view corridors (Proposed Project and All Action Alternatives)	Potential adverse effect on a scenic vista or damage to scenic resources; potential degradation to existing visual quality	Town of Moraga	Prior to adoption/ implementation of the Specific Plan
4.E-4: Light and glare minimization (Proposed Project and All Action Alternatives)	Potential creation of light or glare that would adversely affect day or nighttime views	Town of Moraga	Prior to adoption/ implementation of the Specific Plan
4.F TRANSPORTATION, CIRCULATION AND PARKING			
4.F-3: Install a traffic signal with the current lane configuration (Proposed Project and All Action Alternatives)	Potential creation of adverse vehicular impacts for unsignalized intersections in Moraga	Project Applicants	Prior to issuance of a building permit
4.F-4: Enhance transit service in the Lamorinda Area south of SR 24 and reduce Community Center program (Proposed Project and All Action Alternatives)	Potential creation of adverse vehicular impacts for signalized intersections in Lafayette and Orinda	Town of Moraga and Project Applicants	Prior to issuance of a building permit
4.F-5: Install traffic signals at six Lafayette intersections (Proposed Project and All Action Alternatives)	Potential creation of adverse vehicular impacts for unsignalized intersections in Lafayette	Town of Moraga and Project Applicants	Prior to issuance of a building permit
4.F-9: Ensure adequate internal circulation within the MCSP (Proposed Project and All Action	Potential creation of hazards due to design features; unsatisfactory	Project Applicants	Prior to issuance of a building permit

Table 8-1

Mitigation Monitoring and Reporting Program Summary

Mitigation Measure	Impact Mitigated	Responsibility	Timing
Alternatives)	access and/or internal circulation		
4.F-10a: Reduce potential vehicular conflicts with bicycles and pedestrian travel ways (Proposed Project and All Action Alternatives)	Potential creation of adverse impacts on the use of bicycle and/or pedestrian travel ways	Project Applicants	Prior to issuance of a building permit
4.F-10b: Provide an enhanced pedestrian crossing on Moraga Road between the Community Center Site "B" and the Moraga Commons (Community Center Site B)	Potential creation of adverse impacts on the use of bicycle and/or pedestrian travel ways	Town of Moraga	Prior to certificate of occupancy
4.F-11: Provide adequate parking supplies (Proposed Project and All Action Alternatives)	Potential creation of adverse vehicular parking impacts	Project Applicants	Prior to issuance of a building permit
4.F-C2: School Street shall remain open to general vehicle circulation between Moraga Way and Moraga Road at St. Mary's Road (Proposed Project and All Action Alternatives)	Potential creation of adverse vehicular impacts for signalized intersections in Moraga for either the approved or cumulative baselines	Project Applicants	Prior to issuance of a building permit
4.F-C5: Install traffic signal at the Glenside Drive/St. Mary's Road South intersection, and widen St. Mary's Road for a left turn pocket (Proposed Project and All Action Alternatives)	Potential creation of adverse vehicular impacts for unsignalized intersections in Lafayette	Project Applicants	Prior to issuance of a building permit
4.G AIR QUALITY			
4.G-1: Implement measures to reduce dust generation and diesel exhaust during construction periods (Proposed Project and All Action Alternatives)	Potential violation of air quality standards or contribution to an existing or projected air quality violation	Project Applicants	Prior to issuance of a grading permit
4.G-4: Implement Measures to reduce energy consumption from mobile, stationary and area sources (Proposed Project and All Action Alternatives)	Potential net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard	Project Applicants	Prior to issuance of a grading permit

Table 8-1

Mitigation Monitoring and Reporting Program Summary

Mitigation Measure	Impact Mitigated	Responsibility	Timing
4.G-5: Implement Mitigation Measures 4.F-3, 4.F-4, 4.F-5, and 4.F-11 to reduce traffic volumes and vehicle delay (Proposed Project and All Action Alternatives)	Potential impact to local air quality	Project Applicants	Prior to issuance of a certificate of occupancy
4.G-7: Implement the air pollution reduction measures identified in Table 4.G-7 and Mitigation Measure 4.G-4 above (Proposed Project and All Action Alternatives)	Potential greenhouse gas emissions and/or contribution to global warming	Project Applicants	Prior to issuance of a certificate of occupancy
4.H NOISE			
4.H-2: Implement noise control measures during construction phase (Proposed Project and All Action Alternatives)	Potential exposure to high noise levels or ground borne vibrations during construction	Project Applicants	Prior to issuance of a grading permit
4.H-4: Implement noise control measures when reviewing new residential projects (Proposed Project and All Action Alternatives)	Potential traffic noise levels exceeding noise level standards	Project Applicants	Prior to issuance of a grading permit
4.H-5: Implement noise control measures when reviewing new commercial or office projects (Proposed Project and All Action Alternatives)	Potential for development of commercial, retail, and office uses to result in noise sources which impact existing and future noise-sensitive uses	Project Applicants	Prior to issuance of a grading permit
4.I BIOLOGICAL RESOURCES			
4.I-1: Implement General Plan EIR Mitigation 4.H-1: Site specific surveys and consultation with CDFG and USFWS (Proposed Project and All Action Alternatives)	Potential loss of individuals or habitat of endangered, threatened, or rare wildlife species	Project Applicants	Prior to issuance of a grading permit
4.I-1: Implement General Plan EIR Mitigation 4.H-1: Site specific surveys and consultation with CDFG and USFWS (Proposed Project and All Action Alternatives)	Potential loss of rare plant species	Project Applicants	Prior to issuance of a grading permit

Table 8-1

Mitigation Monitoring and Reporting Program Summary

Mitigation Measure	Impact Mitigated	Responsibility	Timing
4.I-3: Implement General Plan EIR Mitigation: 4.H-3: Conduct pre-construction surveys for breeding raptors and migratory birds (Proposed Project and All Action Alternatives)	Potential loss of active raptor nests, migratory bird nests, or native wildlife nursery sites	Project Applicants	Prior to issuance of a grading permit
4.I-3: Implement General Plan EIR Mitigation: 4.H-3: Conduct pre-construction surveys for breeding raptors and migratory birds (Proposed Project and All Action Alternatives)	Potential loss of natural vegetation or habitat for sensitive wildlife species	Project Applicants	Prior to issuance of a grading permit
4.I-10: Implement General Plan EIR Mitigation Measure 4.H-9: Protect wetlands and other waters of the United States (Proposed Project and All Action Alternatives)	Potential net loss of wetlands, streams or other waters of the U.S.	Project Applicants	Prior to issuance of a grading permit
4.K SCHOOLS			
4.K-1a: Implement General Plan EIR Mitigation 4.L-1: Development impact fees (Proposed Project and All Action Alternatives)	Potential increase in demand for schools or libraries to such a degree that accepted service standards are not maintained and new facilities are required	Town of Moraga and Project Applicants	Prior to issuance of a certificate of occupancy
4.K-1b: Pay school impact fee at issuance of building permit and schedule residential development (Proposed Project and All Action Alternatives)	Potential increase in demand for schools or libraries to such a degree that accepted service standards are not maintained and new facilities are required	Town of Moraga and Project Applicants	Prior to issuance of a building permit
4.L PUBLIC SERVICES			
4.L-1a: Fee payment to the Town of Moraga for increased police protection services, and Review of Design Guidelines and Project Plans (Proposed Project and All Action Alternatives)	Potential increase in demand for public services to such a degree that accepted service standards are not maintained and new facilities are required to	Town of Moraga and Project Applicants	Prior to adoption of MCSP (Design Guidelines) and prior to issuance of a certificate of occupancy (fees)

Table 8-1

Mitigation Monitoring and Reporting Program Summary

Mitigation Measure	Impact Mitigated	Responsibility	Timing
	maintain service standards for police protection		
4.L-1b: Development impact fees, a Fire Protection Plan, and review of Design Guidelines and project plans (Proposed MCSP and All Action Alternatives)	Potential increase in demand for public services to such a degree that accepted service standards are not maintained and new facilities are required to maintain service standards for fire protection	Town of Moraga and Project Applicants	Prior to adoption of MCSP (Design Guidelines) and prior to issuance of a grading permit (fees, Fire Protection Plan)
4.M CULTURAL RESOURCES			
4.M-1: Protect potential historic resources (Proposed Project and All Action Alternatives)	Potential adverse change in the significance of a historical resource	Project Applicants	Prior to issuance of a grading permit
4.M-2: Protect potential archaeological resources (Proposed Project and All Action Alternatives)	Potential adverse change in the significance of an archaeological resource	Project Applicants	Prior to issuance of a grading permit
4.M-3: Protect undiscovered paleontological materials (Proposed Project and All Action Alternatives)	Potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	Project Applicants	Prior to issuance of a grading permit

4.A-1: Eliminate Inconsistency with the Moraga General Plan.

Applicability: Proposed MCSP and All Alternatives

Responsibility: Town of Moraga

Timing: Prior to MCSP Adoption

Description:

Although the densities identified in the MCSP are consistent with the General Plan's overall policy of accommodating higher densities at this location, the Town shall first amend the General Plan to add residential land use densities and other amendments as necessary prior to adoption of the Moraga Center Specific Plan. The two new proposed MCSP residential densities are 12 DUA and 24 DUA; and Alternatives 3 and 4 propose 10-12 DUA and 20 DUA. All Action Alternatives include mixed use land use designations: Mixed Retail/Residential (12-20 DUA) and Mixed Office/Residential (12-20 DUA). In addition, permitted land uses in Area 13 Mixed Office/Residential will be revised to include public service facilities, such as police or fire stations.

Action:

1) The Town Council shall amend Moraga General Plan Land Use Policies 3.1 and 3.3 to recognize residential densities consistent with the proposed MCSP and remove conflicts with land use goals and policies;
2) Under IP-B-1 Zoning and Subdivision Ordinances, revise the Town's Zoning Map, Zoning Ordinance, and Subdivision Ordinances as needed to maintain consistency with the proposed MCSP;
3) The Town Council shall revise the MCSP to include public service facilities in Area 13 Mixed Office/Residential to ensure consistency under LU4.6 with existing facilities.

4.B-3: Identify Alternative Sites to Meet Housing Goals.

Applicability: Alternatives 1 (No Project) and 2 (339 units)

Responsibility: Town of Moraga

Timing: Prior to adoption of the MCSP

Description:

If the Town adopts Alternative 1 (No Project) or Alternative 2 (339 units), impacts to housing affordability would have to be mitigated by identifying adequate sites outside of the MCSP area to make appropriate land use designations and zoning to accommodate a sufficient number of affordable housing units. This action requires a General Plan amendment to provide for higher residential densities in areas outside of the MCSP and to provide for affordable housing in other ways (e.g., mandating a greater number of second units in single family developments). The 2002 General Plan EIR states that the Rheem Center Specific Plan may be suitable for meeting some of these housing needs.

Action:

1) If the Town adopts Alternative 1 or 2, under IP-H1 (Regional Housing Need), the Town Council shall amend General Plan land use designations, zoning, and the Housing

Element as necessary to identify a sufficient number of affordable housing units in the ABAG RHNA.

4.C-1. Implement Moraga General Plan EIR Mitigation Measure 4.I-1: Prepare Geologic Hazard Evaluation and Incorporate Appropriate Design Measures into Development Projects.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permits

Description:

Potential geologic hazards in the MCSP area shall be evaluated by professional geologists or geotechnical engineers and disclosed in geotechnical investigation reports prepared in compliance with Mitigation 4.I-1 of the 2002 Moraga General Plan EIR. Potential hazards shall be mitigated by application of appropriate design standards for grading, foundations and structures as outlined in the Moraga Municipal Code. Compliance with the latest UBCs and CBCs for seismic zone 4 and Public Safety Policies mitigates potential hazards to a less than significant level. Buildings designed and constructed in accordance with these requirements, and the recommendations of the geotechnical investigation report, may experience some damage during a major seismic event but are unlikely to collapse or result in the loss of life.

Action:

1) Project Applicants shall retain a qualified California licensed geological, geotechnical, and civil engineering professionals to evaluate geologic hazards in the MCSP area, and develop appropriate design and construction standards such as the most recent UBC and CBC requirements.

    a. The reports shall be submitted to the Town for review with project application materials.

2) Prior to issuance of a grading or building permit, the Town shall review and approve the geologic hazard and geotechnical reports as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.C-2. Implement Moraga General Plan EIR Mitigation Measure 4.I-2: Prepare and Implement Slope Stability Assessments, Site Grading Plans and Landslide Mitigation Designs.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading and building permits, and during grading

Description:

Landslides from strong ground shaking are the primary geotechnical concerns in Moraga. The types of landslides in the MCSP area shall be identified and mapped during geotechnical investigations required for permitting. Landslide mitigation measures will be designed into grading plans and the Master Drainage Plan where development and improvements are planned downslope of potential hazards. The specific location, extent, and depth of the required landslide

mitigation will be outlined on the final grading plans. The MCSP has areas of moderate erosion in the form of surface flow from impervious or compacted surfaces, gullying, and streambank sloughing. The potential for ground rupture is considered low since there are no known active faults in the project area. Development proposed across mapped lineations will be evaluated on a case-by-case basis. The potential for ground shaking is significant due to proximity to active faults. Project-level geotechnical investigations will determine site-specific potential for liquefaction. Landslide mitigations shall be designed in the final grading plan and Master Drainage Plan.

Geotechnical mitigation measures include, but are not limited to:

- Avoiding placement of structures in or downslope of slide areas;
- Removing landslide debris;
- Replacing landslides with engineered fill;
- Providing toe buttresses, keyways, debris benches, deflection berms, debris catchment areas, and setback areas;
- Prohibiting of ponding of stormwater; and
- Installing sub-drains to control surface water flow and spring activity.

Actions:

1) Project Applicants shall retain a qualified California licensed engineering geologist or geotechnical engineer to map and identify landslides, prepare slope stability assessments, site grading plans, and landslide mitigation designs. A slope stability assessment is required for new developments and slope stability design measures for slopes 3:1 or greater. Reports and designs shall be submitted to the Town with project applications materials.
2) Project Applicants shall retain a Geotechnical Engineer or qualified representative to be present during grading operations to observe demolition, site preparation, grading operations, and subdrain placement for compliance with plans.
3) Prior to issuance of a grading or building permit, the Town shall review and approve the geologic hazard and geotechnical reports review and approve the geologic hazard and geotechnical reports as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.C-3a. Prevent Moisture Variation of Expansive Soils.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permits, and during construction

Description:

Measures to prevent moisture variation of expansive soils shall be implemented during the design and construction, and will to be documented by a qualified geotechnical engineer retaiuned by the Project Applicant. These measures may include, but are not limited to:

- Over-excavate cut and fill lots;

- Moisture condition of fills to over optimum;
- Pre-soak slab subgrade areas;
- Provide a layer of non-expansive granular materials beneath slabs-on-grade as a cushion against building slab movement;
- Use aggregate base under exterior flatwork; and,
- Control irrigation and drainage adjacent to the new buildings.

Actions:

1) Project Applicants shall retain a qualified California licensed engineering geologist or geotechnical engineer to develop and incorporate appropriate protective measures to prevent moisture variation in expansive soils into site grading and construction plans. Reports and designs shall be submitted to the Town with project applications materials.
2) Project Applicants shall retain a Geotechnical Engineer or qualified representative to be present during grading operations to observe demolition, site preparation, grading operations, and subdrain placement for compliance with plans.
3) Prior to issuance of a grading or building permit, the Town shall review and approve the geologic hazard and geotechnical reports as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.C-3b. Construct Appropriate Foundations for Expansive Soils.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permits, and during construction

Description:

A Geotechnical Investigation for a project-specific construction area will be required and potential for expansive soils onsite will be determined and disclosed. If expansive soils are present, building foundations will be sufficiently stiff to move as rigid units with minimum differential movements or by deepening the foundations to below the zone of moisture fluctuation. Both structural mat foundations and pier-to-grade beam foundation systems are appropriate. Slab-on-grade construction will be independent of foundations with a minimum thickness of four inches and a thickened edge extending at least six inches into compacted soil to minimize water infiltration.

Actions:

1) Project Applicants shall retain a qualified California licensed engineering geologist or geotechnical engineer to develop and incorporate appropriate protective measures to prevent moisture variation in expansive soils into site grading and construction plans. Reports and designs shall be submitted to the Town with project applications materials.
2) Project Applicants shall retain a Geotechnical Engineer or qualified representative to be present during grading operations to observe demolition, site preparation, grading operations, and subdrain placement for compliance with plans.
3) Prior to issuance of a grading or building permit, the Town shall review and approve the geologic hazard and geotechnical reports review and approve the geologic hazard and

geotechnical reports as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.C-3c. Construct Appropriate Foundations for Corrosive Soils.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: Prior to issuance of grading permits, and during construction

Description:

A Geotechnical Investigation for a project-specific construction area will be required and potential for corrosive soils onsite will be determined and disclosed. If corrosive soils are present, all concrete in contact with the soil shall be designed based on Table 19-A-4 of the UBC. All metals in contact with corrosive soils shall be designed based on the results of the soil corrosivity testing and subsequent recommendations of the manufacturer or engineer.

Actions:

1) Project Applicants shall retain a qualified California licensed engineering geologist or geotechnical engineer to determine if corrosive soils are present and develop and incorporate appropriate measures into construction plans. Reports and designs shall be submitted to the Town with project applications materials.
2) Project Applicants shall retain a Geotechnical Engineer or qualified representative to be present during construction to monitor compliance with plans.
3) Prior to issuance of a grading or building permit, the Town shall review and approve the geologic hazard and geotechnical reports as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.D-1a. Develop and Implement a Master Drainage Plan (MDP).

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: Prior to issuance of grading permits

Description:

Site runoff and drainage control measures for projects are required to be prepared by California licensed engineering professionals and are reviewed and approved by the Town Engineer prior to issuance of grading and building permits. Consistent with Public Safety Policies PS5.1–PS5.7, the Town Engineer implements the Flood Control Ordinance, Streambank Repair Ordinance, and Stream Channel Standards. The following mitigation measures shall be implemented to avoid or minimize potential related water quality, stormwater runoff, and flooding impacts.

Action:

1) Project Applicants shall prepare and implement a Master Drainage Plan (MDP) based on the final development plan (which shall identify impervious surfaces, defined collection systems, retention basins and outlets, and best management practices-BMPs). The MDP shall:

a) Be prepared by a registered Civil Engineer (or appropriate licensed professional) and reviewed and approved by the Town engineer;

b) Install suitable storm drainage control system and permanent landscaping as part of construction and operation of the project to capture and infiltrate runoff;

c) Place drainage courses in common areas or drainage easements to facilitate maintenance in new development areas;

d) Limit and minimize the development footprint and associated disturbance;

e) Establish Joint Maintenance Agreements among the property owners to assure that drainage and runoff detention facilities are maintained after construction;

f) Include runoff detention basins and drainage plans to regulate development peak flows to below pre-project levels;

g) Establish a procedure for development projects to contribute to off-site (downstream) mitigation measures such as creek bank stabilization where erosion, incision, and flooding impacts already exist;

h) Conform to the SFWQCB's general construction and the Contra Costa Clean Water Program NPDES permits for stormwater discharge, including SWPPP and Provision C.3;

i) Include recharge-contaminant interceptors as part of the SWPPP;

j) Include a street cleaning and maintenance program for roads and parking areas; and,

k) Include a storm drain education program that includes labeling, strict limitation of fertilizers and pesticides and prohibits regular washing or maintenance of vehicles in paved areas that drain directly to storm drains.

2) Prior to issuance of a grading or building permit, the Town shall review and approve the Master Drainage Plan as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.D-1b. Develop and Implement Laguna Creek Greenway Protection, Maintenance and Monitoring Program.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: Prior to issuance of grading and building permits

Description:

The design goals of the Laguna Creek Greenway Protection, Maintenance, and Monitoring Program shall address reversal of channel incision, stabilization of eroding banks, removal of artificial rip-rap bank protection and preservation and restoration of native riparian vegetation. Locally native trees, shrubs, and grasses will be planted and maintained for three years until established.

Action:

1) The Project Applicant shall develop and implement a Laguna Creek Greenway Protection, Maintenance, and Monitoring Program, including the following elements:

a) Protect, manage and monitor the 16.8 acres of riparian habitat area along Laguna Creek during MCSP development in proximity of the Creek;

b) Develop and implement a Citizen Education and Monitoring Program, as an extension of the Upper San Leandro Creek Watershed Program;

c) Protection measures for slopes and banks;

d) Establish minimum development setbacks in accordance with Contra Costa County Code 914-14.006 "Open channels--Minimum widths of easements";

e) Remove debris and reconstruct streambanks;

f) Stabilize current encroachment and prohibit new development within the Laguna Creek channel;

g) Design bike and pedestrian trails with designated access points to Laguna Creek to provide for bank protection;

h) Adequately size bridges as to not alter flows for the 100-year and 500-year storm.

2) Prior to issuance of a grading or building permit, the Town shall review and approve the Laguna Creek Greenway Protection, Maintenance, and Monitoring Program as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.D-2a. Demonstrate that Existing Springs and Seeps are not Dependent on the Recharge from the Project Area.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: During MDP development (Mitigation Measure 4.D-1a)

Description:

As part of the MDP (Mitigation Measure 4.D-1a) reviewed and approved by the Town of Moraga, seeps and springs in the project area shall be demonstrated to be independent of rainfall infiltration and local groundwater recharge. If seeps and springs are dependent on recharge, additional mitigation described in Measure 4.D-2b shall be conducted and Town review will be necessary.

Action:

1) Project Applicants shall include determination of seeps and springs in the MDP.

2) Prior to issuance of a grading or building permit, the Town shall review and approve the Master Drainage Plan as consistent with applicable General Plan Goals, Policies, and Implementation Measures, and approve the determination of seeps and springs.

4.D-2b. Capture and Infiltrate Runoff.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: During MDP Development (Mitigation Measure 4.D-1a)

Description:

To mitigate potential impacts to groundwater supplies and recharge, runoff from impervious surfaces shall be captured and infiltrated. Stormwater drainage systems and retention/recharge basins shall be designed as part of the MDP and shall calculate the amount of groundwater recharge and runoff infiltration necessary to support seeps and springs.

Action:

1) The Project Applicant shall include stormwater drainage systems and retention/recharge basins in the MDP (Mitigation Measure 4.D-1a).

2) Prior to issuance of a grading or building permit, the Town shall review and approve the MDP as consistent with applicable General Plan Goals, Policies, and Implementation Measures, and that the MDP adequately captures and allows for infiltration of runoff.

4.D-3. Determine Peak Flows due to Development and Reduce Peak Flows to Below Pre-Project Conditions.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: During MDP Development (Mitigation Measure 4.D-1a)

Description:

The Contra Costa Clean Water Program C.3 provision contains enhanced performance standards to address post-construction and some construction phase impacts from new and redevelopment projects. The C.3 requirements are separate from, and in addition to, requirements for erosion and sediment control and for pollution prevention measures during construction as addressed in the state general construction permit. The C.3 provision outlines the following:

- Project site designs must minimize the area of new roofs and paving and use pervious surfaces where feasible so that runoff can percolate to the underlying soil;
- Capture and treat runoff from impervious surfaces using adequately sized treatment devices prior to discharge into streams;
- Determine net increase to off site peak flow volumes and durations as part of the MDP (Mitigation Measure 4.D-1a) based upon the final development plans. Final development plans shall identify impervious surfaces; define collection systems, detention basins, and outlets; and detail BMPs.
- Determine, detain, and infiltrate runoff so that peak flows and duration match pre-project conditions.
- Project applicants must prepare plans and execute agreements to ensure the stormwater treatment and flow-control facilities are maintained in perpetuity.

Action:

1) The Project Applicant shall include C.3 provisions in the MDP (Mitigation Measure 4.D-1a) and submit the MDP to the Town and CCCFCWCD for review and approval.

2) Prior to the Town issuance of a grading permit, the CCCFCWCD shall review and approve the MDP and consistency with C.3 provisions;

3) Prior to the issuance of a grading permit, the Town shall review and approve the MDP as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.D-8: Implement Water Quality Standards and Best Management Practices (BMPs).

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: During MDP Development (Mitigation Measure 4.D-1a)

Description:

The measures designed as part of Mitigation Measure 4.D-1a (detention basins, drainage controls, slope stabilizers, etc.) serve to retain and control pollutants and particulate matter produced by development. The Town Engineer shall set runoff water quality standards in cooperation with EBMUD, develop standard mitigation measures and BMPs for developments during construction and post-completion, and initiate water quality monitoring at key stream and discharge points to assure compliance.

Action:

1) The Project Applicant shall include water quality standards and BMPs in the MDP and submit to the Town and EBMUD for review and approval.
2) Prior to the Town's issuance of a grading permit, EBMUD shall review and approve the water quality standards, BMPs and monitoring in the MDP.
3) Prior to issuance of a grading permit, the Town shall review and approve the MDP as consistent with applicable General Plan Goals, Policies, and Implementation Measures.

4.E-2a. Develop and Implement Additional MCSP Design Guidelines

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga

Timing: Prior to adoption/ implementation of the Specific Plan

Description:

To ensure that the scenic corridors and quality of the area are not adversely affected, the structures and landscaping need to reflect the existing structural and natural character of the adjacent land uses. Guidelines need to be developed specifically for areas within 500 feet of scenic corrridors. Careful MCSP design that integrates the Town of Moraga Design Guidelines and Scenic Corridor Ordinance will reduce adverse impacts associated with new development and will help the Town meet goals of visual enhancement. The Design Review Board shall approve the final MCSP Design Guidelines prior to MCSP adoption and implementation.

The final MCSP Design Guidelines shall:

- Encourage the use of "semi-rural details" within streetscape and public space design;
- Require that second stories integrate softened architecture and landscaping to decrease their prominence;
- Encourage varying setbacks and rooflines to discourage repetitive, unarticulated building forms;

- Incorporate General Plan Guidelines (Municipal Code 8.132.050 – Scenic Corridors) - including requirements for structural size, setback, positioning, screening, lighting, and overall architectural compatibility;
- Require the retention and integration of existing topography, vegetation, and scenic features, thereby deferring the appearance of manmade structures and promoting the importance of these natural features.
- Include measures requiring structures visible from surrounding areas to have low profiles, and shall include measures regarding contoured grading, dense native landscaping, and blended rooflines to reduce visibility of the structure in favor of the existing natural features.
- Integrate greenbelts between the roadways and developments in scenic corridors, with sizing of these greenebelts both in compliance with the General Plan Design Guidelines and in correlation with proposed structural sizing by use type.
- Establish adequate setbacks for residential and commercial/office areas near the riparian corridor to protect habitat and drainage patterns.

Action:

1) The Town of Moraga shall prepare final Design Guidelines for the MCSP Appendix B and submit to the Design Review Board for review and approval.
2) Prior to adoption of the MCSP, the Town shall incorporate the final Design Guidelines into the MCSP.

4.E-2b. Require Internal View Corridors.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga

Timing: Prior to adoption/ implementation of the Specific Plan

Description:

To protect scenic corridors and maintain views of surrounding ridgelines, the MCSP shall require view corridors through the existing and proposed structures that would retain views of the hills and ridgelines beyond the site. The use of setbacks, alleyways, and other open or landscape areas between structures can accomplish this goal. At key locations near the Moraga Road/St. Mary's Road intersection and along Moraga Way, building design, size, and location shall be limited to ensure that some ridgeline views are retained and structural spacing shall be employed to create viewsheds of scenic vistas within the MCSP area. One-story buildings shall be set back from the two scenic roadways enough to maintain ridgeline views and structural spacing requirements should include at least one minimum 50-foot-wide view corridor between two-story buildings in each block of development to maintain ridgeline visibility. Due to the amount of MCSP land in relation to the volume of structures, there is adequate land available to include these internal view corridors.

Action:

1) The Town of Moraga shall prepare final Design Guidelines for the MCSP Appendix B that require the retention of internal view corridors and submit to the Design Review Board for review and approval.

2) Prior to adoption of the MCSP, the Town shall incorporate internal view corridors into the final Design Guidelines of the MCSP.

4.E-4. Light and Glare Minimization.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga

Timing: Prior to adoption/ implementation of the Specific Plan

Description:

The MCSP Design Guidelines include a Lighting Plan. The plan outlines the extent of illumination projected from outdoor lighting and includes guidelines to increase lighting efficiency while preventing light spillage.

To further minimize light and glare disturbance, the MCSP shall incorporate the following into the Design Guidelines Lighting Plan:

- Utilize lighting that relates to the scale and design of the structure, with intensities just high enough to maintain security.
- Intermix large canopy trees with surface parking areas and lighting to reduce glare.
- Ensure all exterior structural coatings and materials are low reflectance, including roofing materials and commercial coatings.
- Ensure structural façade colors are low reflectance, subtle, neutral or earth tone colors.

Action:

1) The Town of Moraga shall revise the Lighting Plan and submit to the Design Review Board for review and approval for inclusion in the MCSP final Design Guidelines (Appendix B).
2) Prior to adoption of the MCSP, the Town shall incorporate a revised Lighting Plan into the final Design Guidelines of the MCSP.

4.F-3: Install a Traffic Signal with the Current Lane Configuration at the Corliss Drive/Moraga Way Intersection.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicant

Timing: Prior to issuance of building permit

Description:

A traffic signal shall be installed with the current lane configuration at the Corliss Drive/Moraga Way intersection. The full complement of signal warrants shall be investigated prior to signal installation.

This mitigation measure is currently in Moraga's fee program. The Project Applicant is responsible for the fair share contribution to this measure as determined by the fee program in effect at the time permits are issued.

Action:

1) Prior to issuing a building permit, the Town shall require Project Applicant's to investigate the full complement of signal warrants;
2) Prior to issuing a building permit, the Town shall require Project Applicants to pay their proportional fair share of traffic mitigation fees to install a traffic signal at the Corliss Drive/Moraga Way intersection with the following components
   a) Actuated controls;
   b) Signal design shall determine signal phasing and coordination;
   c) Installation shall include the traffic signal equipment with optimized signal phasing/timing plans, coordination with adjacent traffic signals, and ADA compliant features;
   d) The intersection shall be reconstructed as necessary to accommodate the traffic signal installation including consideration for pedestrians and bicyclists;
   e) Signal installation shall meet Contra Costa County design standards and be subject to the review and approval of the Town and County.
3) If the proportional fair share fee is not sufficient to fund construction of the traffic signal when it is needed to mitigate impacts, then the Project Applicant shall fully fund the design and construction of the signal, and shall be reimbursed for the portion that is beyond their fair share contribution, from future available funding sources.

4.F-4. Enhance Transit Service in the Lamorinda Area South of SR 24 and Reduce the Community Center Program.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga, Project Applicants

Timing: Prior to the issuance of building permits

Description:

Moraga's General Plan Adoption Resolution 21-2002 made findings that buildout would cause significant and unavoidable intersection impacts in Lafayette. While no feasible mitigation for intersections in Lafayette is identified, measures could lessen project impacts on the road system to traffic levels at or below the travel levels predicted under General Plan buildout.

Transit Service: Enhanced transit service in the Lamorinda area south of SR 24 is needed to reduce traffic effects of the Proposed Project and Alternative 3 (560 units). County Connection operates buses with 20-minute headways during peak school and commute times, but service is reduced to one hour (or less) during non-peak times. The transit component of the CCTA model was used to estimate bus ridership increases with an enhanced transit service. Bus headways for Route 106 and Route 206 in the CCTA model were reduced to 10 minutes and 20 minutes during the on- and off-peak periods, respectively. With these changes, the CCTA model indicates that daily bus ridership would increase by about 1,130 riders. At an average occupancy of 1.2 people per car, increased ridership would reduce daily automobile traffic by about 950 cars.

Enhanced transit service requires capital and operating costs, beyond what a single land development project could provide. A successful system would require financial support from residents, businesses, and governmental agencies.

Community Center: Programs at the proposed Community Center could be reduced to decrease AM and PM peak hour traffic volumes. The Proposed MCSP and Alternatives 3 and 4 propose a 30,000 square foot Community Center that would attract users from outside the Town of Moraga. This is expected to result in 7 and 30 vehicle trips on Moraga Road through Lafayette during the AM and PM peak hours, respectively. Reducing the Community Center program to a local-focus and the size to about 16,000 square feet would eliminate these peak hour trips, thereby reducing impacts on roads and intersections in Lafayette. With these reductions alone (e.g., without the proposed transit improvements), Alternatives 3 and 4 would be less impacting than Alternative 2 during the critical AM peak hour.

Enhanced transit service or Community Center size and program reductions could limit traffic volumes of Alternatives 3 and 4 to at or below Alternative 2 (General Plan) levels. The Proposed MCSP requires the enhanced transit service to reduce traffic levels to at or below Alternative 2 levels, but could reduce the Community Center program to reduce the new transit required.

Action:

1) Moraga shall establish a transit fee program to support an enhanced CCTA transit service that may include, but is not limited to, the following:
   a) Reduced bus headways to 10 and 20 minutes to peak and off-peak hours, respectively;
   b) Stylized buses that are 30 feet or less in length;
   c) Transit stop amenities;
   d) Real-time bus information;
   e) Reduced headways;
   f) Up to 16 hours of weekday and weekend service;
   g) Reduced fares such as the Eco-Pass Program provided by AC Transit; and
   h) Patron parking at select transit stops.
2) Prior to the issuance of building permits, the Town shall require Project Applicants to:
   a) Pay their proportional fair share of transit enhancement;
   b) If the Proposed MCSP or Alternatives 3 or 4 is adopted, the Town shall limit the Community Center to 16,000 square feet and operate a reduced program during peak traffic hours.
   c) If Alternative 3 (400 units) is adopted, a park and ride lot at the Town-owned portion of the Sign Board Community Center site shall be implemented.
   d) If Alternative 4 (560 units) is adopted, the park and ride lot, and TDM appropriate for the buildout of commercial and office uses in the alternative shall be implemented.
   e) If the proposed MCSP (720 units) is adopted, the park and ride lot, TDM, and provision of expanded shuttle/bus service and necessary facilities within the development to encourage shuttle use shall be implemented.

4.F-5: Install Traffic Signals at Six Lafayette Intersections.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga, Project Applicants

Timing: Prior to issuance of building permits

Description:

This mitigation measure provides for the signalization of six unsignalized intersections in Lafayette. The Lamorinda fee program shall be updated to incorporate this mitigation measure.

Action:

1) Prior to issuance of a building permit, Moraga shall establish a Lamorinda traffic impact fee program to support the six new traffic signals in Lafayette:
   a) Deer Hill Drive/Oak Hill Road (with the current lane configuration);
   b) Glenside Drive/Reliez Station Road (widen Glenside Drive for a left turn pocket);
   c) Glenside Drive/Burton Drive (widen Glenside Drive for a left turn pocket);
   d) Pleasant Hill Road/Olympic Boulevard (with the current lane configuration);
   e) Glenside Drive/Los Palos Drive (except Alternative 3, if adopted, and with the current lane configuration); and
   f) Reliez Station Road/Olympic Boulevard (with the current lane configuration).
2) Prior to issuance of a building permit, the Town shall require Project Applicant's to investigate the full complement of signal warrants;
3) Prior to issuance of a building permit, the Town shall require Project Applicants to pay their proportional fair share of traffic mitigation fees to install traffic signals at impacted unsignalized intersections in Lafayette with the following components
   a) Actuated controls;
   b) Signal design shall determine signal phasing and coordination;
   c) Installation shall include the traffic signal equipment with optimized signal phasing/timing plans, coordination with adjacent traffic signals, and ADA compliant features;
   d) The intersection shall be reconstructed as necessary to accommodate the traffic signal installation including consideration for pedestrians and bicyclists;
   e) Signal installation shall meet Contra Costa County design standards and be subject to the review and approval of the Town and County.
4) If the proportional fair share fee is not sufficient to fund construction of the traffic signal when it is needed to mitigate impacts, then the Project Applicant shall fully fund the design and construction of the signal, and shall be reimbursed for the portion that is beyond their fair share contribution from future available funding sources from the Lamorinda fee program.

4.F-9: Ensure Adequate Internal Circulation in the MCSP.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of building permits

Description:

Develop and internal circulation plan to enure adequate internal circulation in the MCSP.

Action:

1) Project Applicants shall design and submit for review and approval by the Town, MOFD, and MPD an internal circulation plan that meets the following criteria:
   a) Minimize the cul-de-sac streets in both commercial and residential areas;
   b) Where cul-de-sac streets are constructed, provide a pedestrian connection through the street to maximize pedestrian circulation;
   c) Maintain streets for two-way traffic flow;
   d) Allow on-street parking to the greatest extent possible;
   e) Design streets to meet local fire district Codes;
   f) Provide the Laguna Creek crossing, connecting the Village area to the Town Center, when areas west of the creek are developed in order to minimize internal traffic from using Moraga Way;
   g) Provide a second road connection to the Village area from Moraga Way between Laguna Creek and Camino Ricardo to maintain effective emergency circulation;
   h) Provide a connection between the Town Center area and the St. Mary's/Moraga Road intersection when either the Laguna Creek crossing is constructed or the Town Center area east of the creek is developed to maintain safe and efficient traffic flow to and from Moraga Road;
   i) Provide a School Street extension from the St. Mary's/Moraga Road intersection to Moraga Way and maintain this corridor as a through street to minimize cumulative and site-generated traffic impacts on the Moraga Way/Moraga Road intersection.
2) The Town shall review and approve the Project Applicant's internal circulation plan prior to issuing a building permit.

4.F-10a: Reduce Potential Vehicular Conflicts with Bicycles and Pedestrian Travel Ways.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of building permits

Description:

Reduce potential vehicular conflicts wth bicycles and pedstrians travel ways.

Action:

1) Project Applicants shall design and submit for review and approval by the Town, MOFD, MPD, and EBRPD a bicycle and pedestrian travel way plan that meets the following criteria:
   a) Limit the number of driveways (to the extent possible) between intersections, thereby reducing the number of intersecting conflict points for vehicles, bicycles, and pedestrians;
   b) Parallel rather than angle parking on roadways with Class II bike lanes or Class III bike routes;
   c) Bicycle detection and pedestrian countdown signal heads at signalized intersections;

d) Bicycle parking near commercial entrances, transit stops, and/or on sidewalks (in street furniture zone);

e) 12-foot width for designated multi-use trails, i.e., shared bicycle and pedestrian use;

f) Continuous pedestrian walkways on all streets;

g) Minimize corner radii at intersections to the greatest extent possible;

h) ADA-compliant ramps at all intersections with sidewalks and/or paths to maintain continuous accessible paths;

i) 6-foot pedestrian zones along commercial and residential streets;

j) Minimum 4-foot wide ADA compliant pedestrian zone across driveways on streets with sidewalks;

k) Minimize lane width on streets without bike designations to the greatest extent possible while still complying with MOFD requirements;

l) Pedestrian-scale lighting on pedestrian facilities in commercial and residential areas; and

m) The design and locations of portions of, and connections to, the Lafayette-Moraga Trail shall maintain and enhance the safety, usability, and function of the EBRPD trail system.

2) The Town shall review and approve the Project Applicant's bicycle and pedestrian travel way plan prior to issuing a building permit.

4.F-10b: Provide Enhanced Pedestrian Crossing on Moraga Road Between Community Center Site "B" and Moraga Commons.

Applicability: Community Center Site "B"

Responsibility: Town of Moraga

Timing: Prior to certificate of occupancy

Description:

The crossing shall be designed for the prevailing traffic speed on Moraga Road, and incorporated into a pedestrian path system at a logical location for crossing that maximizes pedestrian route directness. The enhanced crossing may include advanced warning signs and flashing beacons, advanced limit lines, high visibility markings, and in-pavement flashers.

Action:

1) The Town of Moraga shall design, review, and approve an enhanced pedestrian crossing between Community Center Site B and the Moraga Commons.

2) The enhanced pedestrian crossing shall be constructed and functioning prior to the certificate of occupancy for the Community Center at Site B.

4.F-11: Provide Adequate Parking Supplies.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of building permits

Description:

Provide a parking management plan that shows the expected parking demands and the required parking supply to meet the expected demands. Consideration should be given to meeting the Town Code unless parking studies approved by the Town support parking supply adjustments.

Action:

1) Prior to the issuance of a building permit, Project Applicants shall submit to the Town a parking management plan that:
   a) Demonstrates that parking supply would meet demand;
   b) Demonstrates compliance with Town Code or evidence to support parking supply adjustments; and
   c) Considers information, analysis, and recommendations in the MTC study: *Parking Best Practices and Strategies for Supporting Transit Oriented Development in the Bay Area.*
2) The Town shall review and approve the Project Applicant's parking management plan prior to issuing a building permit.

4.F-C2: School Street Shall Remain Open to General Vehicle Circulation Between Moraga Way and Moraga Road at St. Mary's Road.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of building permits

Description:

School Street shall remain open to general vehicle circulation between Moraga Way and Moraga Road at St. Mary's Road.

Action:

1) Prior to issuing building permits, the Town shall verify that School Street remains open to general vehicle circulation between Moraga Way and Moraga Road at St. Mary's Road.

4.F-C5: Implement Mitigation Measure 4.F-5 (above), Install a Traffic Signal at the Glenside Drive/St. Mary's Road South Intersection in Lafayette, and Widen St. Mary's Road for a Left Turn Pocket.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of building permits

Description:

Implement Mitigation Measure 4.F-5 (above), install, a traffic signal at the Glenside Drive/St. Mary's Road South intersection in Lafayette, and widen St. Mary's Road for a left turn pocket.

Action:

1) Prior to issuing a building permit resulting in a cumulative impact to unsignalized intersections in the City of Lafayette, the Town shall require the following:

   a) Implement Mitigation Measure 4.F-5 (above);

   b) Install, or pay the proportional fair share fee to install, a traffic signal at the Glenside Drive/St. Mary's Road South unsignalized intersection in Lafayette; and

   c) Widen, or pay the proportional fair share fee to widen, St. Mary's Road for a left turn pocket.

4.G-1: Implement Measures to Reduce Dust Generation and Diesel Exhaust During Construction Periods.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permits

Description:

Project Applicants are responsible for ensuring that contractors reduce PM^{10}, $PM^{2.5}$, ROG, NO_x, and CO emissions by complying with the air pollution control strategies developed by the BAAQMD. Project Applicants and contractors shall develop emission control strategies that implement control measures consistent with BAAQMD guidelines. Potential air quality impacts from toxic air containment emissions from construction equipment and operations will be reduced with compliance with the BAAQMD air pollution control strategies.

Action:

1) Prior to issuance of a grading permit, Project Applicants must submit an emission control strategy the meets BAAQMD guidelines, including, but not limited to, the following criteria:

   a) Dust Control Measures for Construction Sites:

      i) Cover all trucks hauling construction and demolition debris from the Site;

      ii) Water on a continuous as-needed basis all earth surfaces during clearing, grading, earthmoving, and other Site preparation activities;

      iii) Use watering to control dust generation during demolition of structures or break-up of pavement;

      iv) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas;

      v) Sweep daily (with water sweepers) all paved areas and staging areas; and

      vi) Provide daily clean up of mud and dirt carried onto paved streets from the Site;

   b) Renovation, demolition activities, removal or disturbance of any materials that contain asbestos, lead paint or other hazardous pollutants will be conducted in accordance with BAAQMD rules and regulations;

   c) Properly maintain all construction equipment;

   d) For construction sites near sensitive receptors (or if residential development occurs prior to commercial development):

i) Install wheel washers for all existing trucks, or wash off the tires or tracks of trucks and equipment leaving the Site;

ii) Suspend dust-producing activities during periods when instantaneous gusts exceed 25 mph when dust control measures are unable to avoid visible dust plumes;

iii) Limit the area subject to excavation, grading and other construction or demolition activity at any one time;

e) For sites greater than four acres:

i) Apply soil stabilizers to previously graded portions of the site inactive for more than ten days or cover or seed these areas;

ii) Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind;

iii) Limit traffic speeds on unpaved roads to 15 mph; and

iv) Replant vegetation in disturbed areas as quickly as possible.

f) Construction Exhaust Mitigation Measures:

i) Construction shall comply with BAAQMD air pollution control strategies;

ii) Construction firms shall be required to post signs of possible health risk during construction;

iii) Project Applicants shall comply with the BAAQMD rule regarding cutback and emulsified asphalt paving materials;

iv) Contractors shall be required to use newer construction equipment, manufactured during or after 1996, that meet the NO_x emissions standard of 6.9 grams per brake-horsepower hour for work conducted within 200 feet of residences.

2) Prior to issuing a grading permit, the Town shall review and approve the project's construction-related emission control strategices.

4.G-4: Implement Measures to Reduce Energy Consumption from Mobile, Stationary and Area Sources.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of building permits

Description:

Development in the MCSP area shall incorporate measures to reduce energy consumption and air pollutant emissions from travel, heating and cooling, appliances, and lighting. These measures encourage alternative fuel sources, on-site energy production, and reuse of resources, and are in addition to Transportation Control Measures (TCMs) in the General Plan.

Action:

1) Project Applicants shall design measures to reduce energy consumption and air pollution emissions from mobile, stationary, and area sources, including the following:

a) Design measures to reduce vehicle trips and encourage other modes of travel, such as:

i) High density residential, mixed, or retail/commercial uses shall be within ¼-mile of activity centers;

ii) Class I or Class II bike lanes or a comparable bikeway connection to that existing facility (residential, commercial, mixed areas) shall be provided;

iii) Provide pedestrian facilities and improvements such as sidewalks and trails (e.g., 5-foot) (residential, commercial, mixed areas); and

iv) Provide parking lot designs with clearly marked and shaded pedestrian pathways towards building entrances (commercial areas);

b) Include electric vehicle charging facilities within all new homes;

c) Provide the minimal amount of car parking required and increase the amount of bike storage and parking areas at both residential and non-residential projects;

d) Include transportation impact fees to fund public transit service;

e) Orient project locations towards supporting existing regional centers where various types of public transportation needs can be meet; and

f) Only wood-burning devices that comply with US EPA regulations shall be allowed within the project area.

g) Install solar or wind power sources in the MCSP area.

2) Prior to the issuance of building permits, the Town shall review and approve all designs to reduce energy consumption and air pollutant emissions from travel, heating and cooling, appliances, and lighting;

3) Prior to the issuance of certificate of occupancy, the Town shall verify that all required measures to reduce energy consumption and air pollutant emissions from travel, heating and cooling, appliances, and lighting have been installed and are operational.

4.G-5: Implement Transportation Mitigation Measures 4.F-3, 4.F-4, 4.F-5, and 4.F-11 to Reduce Traffic Volumes and Vehicle Delay.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of certificate of occupancy

Description:

Implementation of Mitigation Measures 4.F-3, 4.F-4, 4.F-5, 4.F-11 to reduce traffic volumes and vehicle delay will reduce local air quality impacts by improving traffic flows at intersections and along roadways.

Action:

1) Project Applicants shall demonstrate compliance with the following mitigation measures prior to the Town issuance of a certificate of occupancy:

a) 4.F-3: Install a traffic signal with the current lane configuration at the Corliss Drive/Moraga Way intersection.

b) 4.F-4: Enhance transit service in the Lamorinda Area south of SR 24 and reduce the Community Center program.

c) 4.F-5: Install traffic signals at the following Lafayette intersections:
   i) Deer Hill Drive/Oak Hill Road (with the current lane configuration);
   ii) Glenside Drive/Reliez Station Road (widen Glenside Drive for a left turn pocket);
   iii) Glenside Drive/Burton Drive (widen Glenside Drive for a left turn pocket);
   iv) Pleasant Hill Road/Olympic Boulevard (with the current lane configuration);
   v) Glenside Drive/Los Palos Drive (except Alternative 3, if adopted, and with the current lane configuration); and
   vi) Reliez Station Road/Olympic Boulevard (with the current lane configuration).
d) 4.F-11: Provide adequate parking supplies.

4.G-7: Implement Air Pollution Reduction Measures Identified in Table 4.G-7 and Mitigation Measure 4.G-4.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of a certificate of occupancy

Description:

Implement the Clean Air Plan Transportation Control Measures (TCMs) in the General Plan to reduce vehicle emissions and local air pollution.

Action:

1) Project Applicants shall demonstrate compliance with General Plan Clean Air Plan TCMs identified below in Table 4.G-7 prior to the Town issuance of a certificate of occupancy.

Table 4.G-7

Implementation of Clean Air Plan
Transportation Control Measures in General Plan

TCM	Description	Relevant General Plan Policy
1. Expand Employee Assistance Program	Provide assistance to regional and local ridesharing organizations.	OS4.7: Encourage employers to foster employer-based transportation control measures such as ride-sharing, use of public transportation, bicycling and walking to work. OS4.9: Encourage public education programs that demonstrate the benefits of reduced air pollution.
9. Improve Bicycle Access and Facilities	Establish and maintain bicycle advisory committees in all none Bay Area Counties Develop comprehensive bicycle plans. Encourage	C1.1: Apply standard engineering principles in the design, construction, and maintenance of all roadways to make them safer for all users, including bicyclists, pedestrians, and equestrians. C4.1: Provide a safe, continuous and connected system of

TCM	Description	Relevant General Plan Policy
	employers and developers to provide bicycle access and facilities. Improve and expand bicycle lane system.	pedestrian pathways through the Town, including sidewalks, paths, trails and appropriate crosswalks along all principal streets, to link residential neighborhoods, commercial areas, community facilities such as schools and parks, and other important destinations. Link this network as appropriate with the regional trails system. C4.2: Develop a complete bicycle system with direct linkages between residential and commercial areas, community facilities, commuter corridors, and transit hubs.
15. Local Clean Air Plans, Policies and Programs	Incorporate air quality beneficial policies and programs into local planning and development activities, with a particular focus on subdivision, zoning and site design measures that reduce the number and length of single-occupant automobile trips.	OS4.1: Conserve air quality and minimize direct and indirect emissions of air contaminants through the design and construction of new development. For example, direct emissions may be reduced through energy conserving construction that minimizes space heating, while indirect emissions may be reduced through uses and development patterns that reduce motor vehicle trips generated by the project. OS4.2: Prohibit development projects which, separately or cumulatively with other projects, would cause air quality standards to be exceeded or would have significant adverse air quality effects through direct and/or indirect emissions. Such projects may only be approved if, after consulting with BAAQMD, the Town Council explicitly finds that the project incorporates feasible mitigation measures or that there are overriding reasons for approving the project. OS4.5: Encourage transportation modes that minimize motor vehicle use and the resulting contaminant emissions. Alternate modes to be encouraged include public transit, ride-sharing, combined motor vehicle trips to work, and the use of bicycles and walking. C4.3: Encourage the use of transit to and from the Lamorinda BART stations by providing efficient, comfortable, frequent, and reliable bus service roadways that are properly designed to accommodate bus maneuvering, stopping and parking; adequate, free, convenient all-day parking facilities at major transit stops in the Town (one at Moraga Center and one at Rheem Park); comfortable, safe and attractive amenities at bus stops. C4.4: Encourage development patterns and other strategies that may help reduce traffic trips, especially during the morning and afternoon peak hours. For example: • Encourage home-based occupations and telecommuting; • Encourage mixed use, small office, and live-work developments in centrally located areas of the Town (i.e., in the Specific Plan areas); • Encourage higher density housing near the Town's

TCM	Description	Relevant General Plan Policy
		major bus stops; • Encourage young people to bike or walk to school by providing a safe Town-wide system of pedestrian and bicycle pathways; • Encourage carpooling.
17. Conduct Demonstration Projects	Promote demonstration projects to develop new strategies to reduce motor vehicle emissions. Projects include low emission vehicle fleets and LEV refueling infrastructure.	OS4.6: Encourage use of new transportation technologies such as alternative fuel vehicles that may provide environmental benefits such as reduced air pollution, lower energy consumption, and less noise.
19. Pedestrian Travel	Review/revise general/specific plan policies to promote development patterns that encourage walking and circulation policies that emphasize pedestrian travel and modify zoning ordinances to include pedestrian-friendly design standards. Include pedestrian improvements in capital improvements programs. Designate a staff person as a Pedestrian Program Manager.	C4.1: Provide a safe, continuous and connected system of pedestrian pathways through the Town, including sidewalks, paths, trails and appropriate crosswalks along all principal streets, to link residential neighborhoods, commercial areas, community facilities such as schools and parks, and other important destinations. Link this network as appropriate with the regional trails system. C4.4: Encourage development patterns and other strategies that may help reduce traffic trips, especially during the morning and afternoon peak hours. For example: • Encourage mixed use, small office, and live-work developments in centrally located areas of the Town (i.e., in the Specific Plan areas); • Encourage young people to bike or walk to school by providing a safe Town-wide system of pedestrian and bicycle pathways.
20. Promote Traffic Calming Measures	Include traffic calming strategies in the transportation and land use elements of general and specific plans. Include traffic calming strategies in capital improvement programs.	C1.1: Apply standard engineering principles in the design, construction, and maintenance of all roadways to make them safer for all users, including bicyclists, pedestrians, and equestrians. C1.5: Design new areas of development so that residential areas are properly buffered from collector streets, with adequate distance, landscaping, or other buffer to protect residences from adverse impacts. Also, direct traffic from major new residential developments so that it does not adversely impact existing neighborhoods.

4.H-2: Implement Noise Control Measures During Construction Phase

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Construction in the MCSP area shall utilize the following noise control measures to minimize noise disturbances at sensitive receptors during construction activities:

- Maintain consistency with the Health and Safety Code Section 7.12.090 - Construction of buildings and projects: It is unlawful except in case of emergency work for a person within a residential zone or within a radius of five hundred (500) feet of one to operate equipment or perform outside construction or repair work on a building, structure or project, or to operate a pile driver, power shovel, pneumatic hammer, derrick, power hoist or other construction type device (between the hours of five p.m. of one day and eight a.m. of the next day) in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance.

- Newer construction equipment with improved noise muffling shall be used and all construction equipment items shall have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators intact and operational.

- All construction equipment shall be inspected weekly to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).

- Wherever possible, hydraulic tools shall be used instead of pneumatic impact tools.

- Heavy construction truck trips shall be routed over streets that will cause the least noise disturbance to residences or businesses in the vicinity of the Project site.

- Construction staging areas, maintenance yards, and other construction-oriented operations shall not be located as far as reasonably possible from sensitive receptors.

Action:

1. Project Applicants shall make the above noise impact reduction measures required conditions in grading and construction contracts prior to the Town issuing a grading or construction permit.

4.H-4: Implement Noise Control Measures when Reviewing New Residential Projects.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Project implementation will utilize one or more of the following noise control measures for new residential development in the MCSP area:

1) When tentative maps are available for new residential development adjacent to Canyon Way (south of Moraga Way), Moraga Way (between St. Andrews Drive and School Street), and Moraga Road (between St. Mary's Road and Corliss Drive and Moraga Way to St. Mary's Road) a detailed analysis of noise impacts shall be conducted. A preliminary barrier analysis indicates that barriers ranging between 5- and 6-feet in height are required if outdoor activity areas (patios) are located adjacent to the roadways.

2) Mitigation can also be provided through site design. For instance, having housing fronting toward the major roadways, and shielding back yards or patios with the building façades can be an effective mitigation.

3) Setbacks can also be used as mitigation. The setbacks to the 60 dB Ldn contour range from 128 feet along Moraga Way (from St. Andrews Drive to School Street), to 168 feet along Moraga Road (from Moraga Way to St. Mary's Road).

Action:

1) Project Applicants shall demonstrate to the Town that implementation of one or more of the above noise control measures have been incorporated into the design of new residential developments such that potential noise impacts would be reduced to a less than significant level prior to the Town issuing a grading permit.

4.H-5: Implement Noise Control Measures when Reviewing New Commercial or Office Projects.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Project implementation will utilize one or more of the following noise control measures for new commercial or office development in the MCSP area:

1) Consistent with Municipal Code Sections 8.40 and 8.36, stationary noise sources associated with commercial uses shall not generate noise levels in excess of 55 dBA during daytime hours, or 50 dBA during nighttime hours. These criteria are similar to those contained in the Office of Noise Control Model Noise Control Ordinance, and it is assumed that the criteria are based upon an hourly average or median (Leq/L50) descriptor.

2) During project review, the Town Planning Director shall make a determination as to whether or not the proposed use would likely generate noise levels that could adversely affect the adjacent residential areas. If this review determines that proposed uses could generate excessive noise levels at noise-sensitive uses, Project Applicants shall be required to prepare an acoustical analysis to ensure that all appropriate noise control measures are incorporated into the project design to mitigate any noise impacts. Such noise control measures include, but are not limited to,

   a) Use of noise barriers,

   b) Site-redesign,

c) Silencers, and

d) Partial or complete enclosures of critical equipment.

3) The primary noise sources in commercial uses are parking lot noise, HVAC equipment, and light truck deliveries. In this case, 8-foot tall sound walls typically provide adequate isolation of parking lot and delivery truck activities. HVAC equipment should be located either at ground level or when located on roof-tops, building facades should include parapets for shielding.

4) Where commercial uses abut residential property lines, and loading docks or large truck circulation routes face residential areas, the following mitigation measures shall be included in the project design:

   a) Loading docks shall maintain a minimum distance of 100 feet from residential property lines;

   b) Property line barriers shall be constructed to separate residential and commercial uses and should be 8 feet in height;

   c) Circulation routes for large trucks shall be located a minimum of 50-feet from the residential property lines;

   d) All large heating, cooling, and ventilation equipment shall be located within mechanical rooms where possible;

   e) All heating, cooling and ventilation equipment shall be shielded from view with solid barriers;

   f) Emergency generators shall comply with the local noise criteria

5) Where commercial land uses are separated from residential areas by local streets, all loading activities shall be limited to the opposite sides of the buildings from residential uses.

Action:

1) Project Applicants shall demonstrate to the Town that implementation of one or more of the above noise control measures have been incorporated into the design of new commercial or office developments to effectively reduce potential noise impacts to a less than significant level prior to the Town issuing a grading permit.

4.I-1: Implement General Plan EIR Mitigation 4.H-1: Site specific Surveys and Consultation with CDFG and USFWS.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Site-specific surveys shall be conducted prior to development within the project area to determine the presence or absence of individuals and/or occupied or designated critical habitat of endangered, threatened, or rare wildlife and plant species. Prior to conducting these surveys a current listing of rare, threatened, and endangered species that may occur in the project area will be obtained. This will insure that the sensitive species list is kept current and that the proper species are searched for.

The Town will work in conjunction with CDFG and USFWS to develop measures to prevent the loss of individuals and occupied or designated critical habitat. Mitigation measures may also be developed with these agencies when complete avoidance is not feasible. Examples of potential mitigation measures include protection of habitat by means of restoration, conservation, and permanent protection, and transplantation of plants from development sites to protected areas. All projects that may impact a rare, threatened, or endangered species will be subject to CESA, FESA, and applicable Fish and Game Code.

Action:

1) Project Applicants shall retain qualified biologists to conduct pre-construction surveys for special-status species and consult with the USFWS and CDFG to develop detailed, project specific impact avoidance, minimization, and mitigation measures to be implemented during construction and operation of the project prior to the Town issuing a grading permit.

4.I-3: Implement General Plan Mitigation: 4.H-3: Conduct Pre-Construction Surveys for Breeding Raptors and Migratory Birds.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Conduct pre-construction surveys for breeding raptors and migratory birds within development areas to determine if active nest sites exist on the site. If active nest sites are located, the project proponent shall consult with the CDFG to determine appropriate construction setbacks from the nest sites. No construction activities shall occur within the construction setback during the nesting season of the affected species.

Action:

1) Project Applicants shall initate construction activities and conduct vegetation removal outside of the nesting period of raptors and migratory birds;
2) If construction and vegetation removal is initiated during the nesting season, then Project Applicants shall conduct the following:
    a) Retain qualified biologists to conduct pre-construction surveys to determine if raptors or migratory birds are nesting in the Project Area or vicinity;
        i) If no active nests occur, then no additional mitigation is required;
        ii) If active nests occur, then Project Applicants shall consult with the USFWS and CDFG to develop detailed impact avoidance, minimization, and mitigation measures to be implemented during construction prior to the Town issuing a grading permit.

4.I-10: Implement General Plan EIR Mitigation Measure 4.H-9: Protect Wetlands and Other Waters of the United States.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

The Town shall require surveys to determine if the project will impact a jurisdictional wetland or other water of the U.S. Where impacts are found to occur, Project Applicants will work in conjunction with the USACE under Sec. 404 to establish a means of protecting, restoring, or replacing the wetland or waterway, such that a no net loss of wetland functions or values is achieved.

If required, the Project Applicant will also apply for a Sec. 401 permit with the SFRWQCB and a Sec. 1601 LSAA with CDFG, and work in conjunction with these agencies to establish a means of protecting, restoring, or replacing the wetland or waterway, such that a no net loss of wetland functions or values is achieved.

Action:

1) Project Applicants shall retained qualified scientists to determine if jurisdictional wetlands or other waters of the U.S. would be affected by the project;
    a) If no if jurisdictional wetlands or other waters of the U.S. would be affected by the project, no additional mitigation is required;
    b) If jurisdictional wetlands or other waters occur, then Project Applicants shall demonstrate compliance with Sec. 404, sec. 401, and Sec. 1601 prior to the Town issuing a grading permit.

4.K-1a: Implement General Plan EIR Mitigation 4.L-1: Development Impact Fees.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga; Project Applicants

Timing: Prior to issuance of a certificate of occupancy.

Description:

The Town shall prepare a Development Impact Fee Study to determine the fair share that developers within the MCSP area shall contribute for the operation and expansion of police, fire, and parks in Moraga. At a minimum, the study shall identify funding necessary to maintain services at 2000 levels.

Action:

1) The Town of Moraga shall conduct a Development Impact Fee Study to determine the appropriate proportional fair share fees for new developments to pay for additional police services, fire protection services, and parks in Moraga.
2) Project Applicants shall be required to pay their proportional fair share Development Impact Fee prior to the Town issuing a certificate of occupancy.

4.K-1b: Pay School Impact Fee at Issuance of Building Permit and Schedule Residential Development.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga, Project Applicants

Timing: Prior to issuance of building permit

Description:

Impacts to schools are considered fully mitigated under state law by the payment of state mandated school impact fees (SB 50), and no additional mitigation is required. Table 4.K-5 provides an estimate of school impact fees for the Proposed MCSP and All Action Alternatives at existing rates of $2.05/sf for new residential construction and $0.33/sf for commercial/retail construction. The AUHSD does not collect school impact fees, but currently assesses an annual parcel tax of $189 throughout the district. This assessment is scheduled to expire on June 25, 2011 (Acalanes Union High School District 2007).

The Town has an interest in maintaining the quality of public schools while avoiding potential environmental impacts associated with new school construction. Consequently, prior to the issuance of building permits, the Town shall consult with the MSD to obtain the most recent enrollment projection figures. When necessary to avoid a potential exceedence of existing school capacity, the Town shall request the Project Applicant to voluntarily develop a modified residential construction schedule to avoid or minimize potential overcrowding in the school system.

Action:

1) Prior to issuing building permits, the Town shall consult with the MSD and AUHSD to obtain the most recent enrollment figures to determine if schools are expected to have sufficient residual capacity to accommodate new students generated by the proposed project.

    a) If students generated from proposed developments may exceed school capacity, then the Town shall request that Project Applicants voluntarily modify the proposed development schedule to avoid exceeding residual school capacity.

2) The Town shall require Project Applicants to pay the applicable school impact fees for new residential, commercial and retail construction to the MSD prior to issuing building permits.

Table 4.K-5

Estimated Moraga School District Impact Fees – All Action Alternatives

	Residential Housing Units				Commercial/Retail		
MCSP Alternative	Detached single-family[1]	Other housing[2]	Total new sf	School Impact Fee ($2.02/sf)	Total new sf[3]	School Impact Fee ($0.33/sf)	Total School Impact Fee ($)
Proposed Project (720 units)	20	700	1,130,000	$2,282,600	300,000	$99,000	**$2,381,600**
Alternative 2 (339 units)	339	0	1,356,000	$2,739,120	180,000	$17,280	**$2,756,940**
Alternative 3 (400 units)	50	350	725,000	$1,464,500	195,000	$59,400	**$1,523,900**
Alternative 4 (560 units)	65	495	1,002,500	$2,025,050	180,000	$64,350	**$2,089,400**

Notes:
[1]Low density, detached single-family housing with an average of 4,000 sf/home.
[2]All higher density and multi-family housing, including Saint Mary's College housing, and active senior housing, with an average of 1,500 sf/housing unit.
[3]Includes Project Description for commercial/retail, a total developed area of 1,000 sf/hotel and bed & breakfast accommodation, and 500 sf/unit for assisted living/congregate care unit

4.L-1a: Fee Payment to the Town of Moraga for Increased Police Protection Services and Review of Design Guidelines and Project Plans.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga and Project Applicants

Timing: Prior to MCSP adoption; prior to issuance of certificate of occupancy

Description:

As stated in the MCSP, Project applicants shall be required to provide payment to the Town of Moraga General Fund for increased police protection services. Payment shall be required upon completion of approved projects that will result in an increase in population within the MCSP area. The amount of payment shall be equal to the degree of increased population that would be necessary to maintain the one Police Officer per 1,000 residents ratio for the new development population levels. Fees shall be paid prior occupation of new structures, and shall include the development's proportional fair share to support the full cost of additional police services, including new sworn officers, administration, equipment, vehicles, and facilities.

The MCSP includes provisions requiring the Design Guidelines (Appendix B) to be reviewed by the MPD to ensure building setbacks, access, and visibility, especially in higher density housing and commercial areas, are consistent with public safety goals and the needs of first responders. The Town shall take into consideration MPD comments on the MCSP Design Guidelines and

make final revisions prior to adoption of the MCSP. The MPD shall also be provided proposed project-level plans to review for consistency with design elements related to public safety, emergency access, and evacuation plans.

Action:

1) The Town of Moraga shall incorporate comments from the MPD into final Design Guidelines for the MCSP Appendix B and submit to the Design Review Board for review and approval.
2) Prior to adoption of the MCSP, the Town shall incorporate the final Design Guidelines into the MCSP.
3) Prior to the issuance of a certificate of occupancy, the Town shall require Project Applicants to pay their proportional fair share of impact fees to fund increased police protection services.

4.L-1b: Development Impact Fees, a Fire Protection Plan, and Review of Design Guidelines and Project Plans.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Town of Moraga and Project Applicants

Timing: Prior to MCSP adoption; prior to issuance of grading permit

Description:

Potentially significant impacts to fire protection and emergency services would be reduced to a less than significant level by new developments paying their proporational fair share fees for new staff, equipment, and facilities to maintain the existing level of service in Moraga. The Town would develop an impact fee schedule in coordination with the MOFD.

The MCSP includes provisions requiring the Design Guidelines (Appendix B) to be reviewed by the MOFD to ensure building setbacks, access, visibility, and building heights, especially in higher density housing and commercial areas, are consistent with public safety goals and objectives for fire protection and emergency services. The Town shall take into consideration MOFD comments on the MCSP Design Guidelines and make final revisions prior to adoption of the MCSP. The MOFD shall also be provided proposed project plans to review for consistency with design elements related to public safety, emergency access, and evacuation plans.

Action:

1) The Town of Moraga shall incorporate comments from the MOFD into final Design Guidelines for the MCSP Appendix B and submit to the Design Review Board for review and approval.
2) Prior to adoption of the MCSP, the Town shall incorporate the final Design Guidelines into the MCSP.
3) Prior to the issuance of a grading permit, Project Applicants shall provide to the Town of Moraga and the MOFD for review and approval a Fire Protection Plan that shall include, but is not limited to, the following:
    a) The proposed structures shall be serviced by adequate water supplies to provide adequate flow and pressure for fire suppression;
    b) Fire hydrants shall be installed at the required distances from all commercial and residential structures;

c) The proposed project shall be consistent with the Town of Moraga's emergency evacuation plan and all streets shall be sized to allow for adequate access of emergency vehicles;

d) Demonstrated compliance with relevant General Plan Public Safety Goals and Policies;

e) Fire sprinklers shall be installed in commercial buildings and single family dwellings as required by the MOFD in accordance with Ordinance #02-02; and

f) Emergency vehicle access and evacuation plans, circulation plans, including street designs and building setbacks.

4) Prior to the issuance of a certificate of occupancy, the Town shall require Project Applicants to pay their proportional fair share of impact fees to fund increased fire protection and emergency services that may include, but is not limited to, the following (Meyer 2008):

a) Buildings and/or property to expand staff, equipment, and administration at Station 41 or other identified facility or property to maintain current levels of service and response times as new developments occur in the MCSP area;

b) Ambulance and other equipment; and

c) Aerial ladder fire engine.

4.M-1: Protect Potential Historic Resources.

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Less than five percent of the MCSP has been subjected to intensive pedestrian archaeological survey, and very limited historic architectural survey. It is recommended that a cultural resources survey of the entire MCSP be completed. A cultural resources survey of the MCSP area shall be completed to identify and evaluate any previously recorded and newly recorded historic architectural and archaeological resources for inclusion in the National Register of Historic Places and the California Register of Historic Resources.

Prior to remodeling or demolishing any structure that is 50 or more years old, Project Applicants shall submit an assessment of the structure regarding its eligibility for listing to Town planning staff. If Town staff determine that the structure is potentially eligible for listing, or is a potential historic resource, then a site-specific analysis of the impact and feasible mitigation measures, including avoidance of the resource, shall be prepared as part of project review. The analysis will utilize significance criteria provided in Draft EIR Section 4.M-2, Regulatory Setting, including:

- National Historic Preservation Act of 1966, as amended (36 CFR 60.4);
- National Register Bulletin 15 (1984), How to Apply the National Register Criteria for Evaluation;
- CEQA Guidelines Section 15064.5;
- PRC Sections 5024.1 and 21083.2; and
- Applicable goals and policies in the Town of Moraga General Plan

Action:

1) Prior to the issuance of a grading permit for new development, the Town shall require Project Applicants to retain a qualified cultural resource specialist to conduct a pedestrian archaeological survey and submit a report of finding to Town planning staff.

   a) Previously recorded and newly recorded historic architectural and archaeological resources identified during the survey shall be evaluated for inclusion in the National Register of Historic Places and the California Register of Historic Resources.

2) If Town planning staff determines that a structure is potentially eligible for listing, or is a potential historic resource, then Project Applicants shall retain a qualified cultural resource specialist to complete a site-specific analysis of the impact and develop feasible mitigation measures in consultation with SHPO, including avoidance of the resource.

   a) Impacts and proposed mitigation measures shall be submitted to the Town as part of project review.

4.M-2. Protect Potential Archaeological Resources

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Prior to site development within previously undisturbed areas of the MCSP (e.g., areas that are not currently covered by pavement or existing structures), the developer shall retain a qualified cultural resource specialist to prepare a site survey to look for potential archaeological resources and to evaluate potential archaeological resources uncovered during excavation.

Action:

1) Prior to the Town issuing a grading permit for development in previously undisturbed portions of the MCSP area, Project Applicants shall retain a qualified cultural resource specialist to conduct a site survey to identify potential archaeological resources.

   a) If potential archaeological resources are found in a proposed construction area, then further site-specific analysis shall be required to determine whether a significant impact would occur.

   b) If a potentially significant impact would occur, then the cultural resource specialist shall prepare site-specific mitigation in accordance with PRC Section 21083.2.

2) Project Applicants shall retain a qualified cultural resource to monitor construction activities as needed.

   a) Construction monitoring shall be conducted at any time ground-disturbing activities (greater than 12 inches in depth) are taking place in the immediate vicinity of potentially significant archaeological resource. This includes building foundation demolition and construction, roadway construction, and work within the immediate vicinity of the Laguna Creek riparian habitat.

   b) Should previously unidentified historic or prehistoric archaeological resources be discovered during construction, the construction contractor shall immediately cease work

in the vicinity of the find and the Project Applicant's qualified cultural resource specialist and the Town shall be contacted.

i) The cultural resource specialist shall assess the significance of the find and make mitigation recommendations (e.g., manual excavation of the immediate area), if warranted.

ii) In the event that human skeletal remains are encountered, the construction contractors shall immediately cease work in the vicinity of the find and notify the County Coroner, the cultural resource specialist, and Town planning staff.

iii) If the County Coroner determines that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code and the County Coordinator of Indian affairs. No further disturbance of the site may be made except in compliance with all applicable federal, state, and local laws regarding Native American burials and artifacts. No further disturbance of the artifacts may be made except in compliance with all applicable federal, state, and local laws regarding Native American burials and artifacts.

4.M-3. Protect Undiscovered Paleontological Materials

Applicability: Proposed MCSP and All Action Alternatives

Responsibility: Project Applicants

Timing: Prior to issuance of grading permit

Description:

Unknown paleontological materials uncovered during construction in the MCSP area shall be protected until a qualified professional (paleontologist) can assess the find and develop appropriate mitigation measures.

Action:

1) Project Applicants shall retain a qualified paleontologist to be available to assess fossilized or unfossilized shell or bone discovered during construction.

   a) If fossilized or unfossilized shell or bone is discovered during construction, construction contractors shall immediately cease work in the vicinity of the find and contact the paleontologist and the Town Building Inspector assigned to the project.

   b) The Project Applicant's paleontologist shall visit the site and make recommendations for treatment of the find (including excavation, if warranted), which would be sent to the Town Building Inspection Office and the Town Planning Office.

      i) If a fossil find is confirmed, it will be recorded with the USGS and curated in an appropriate repository.