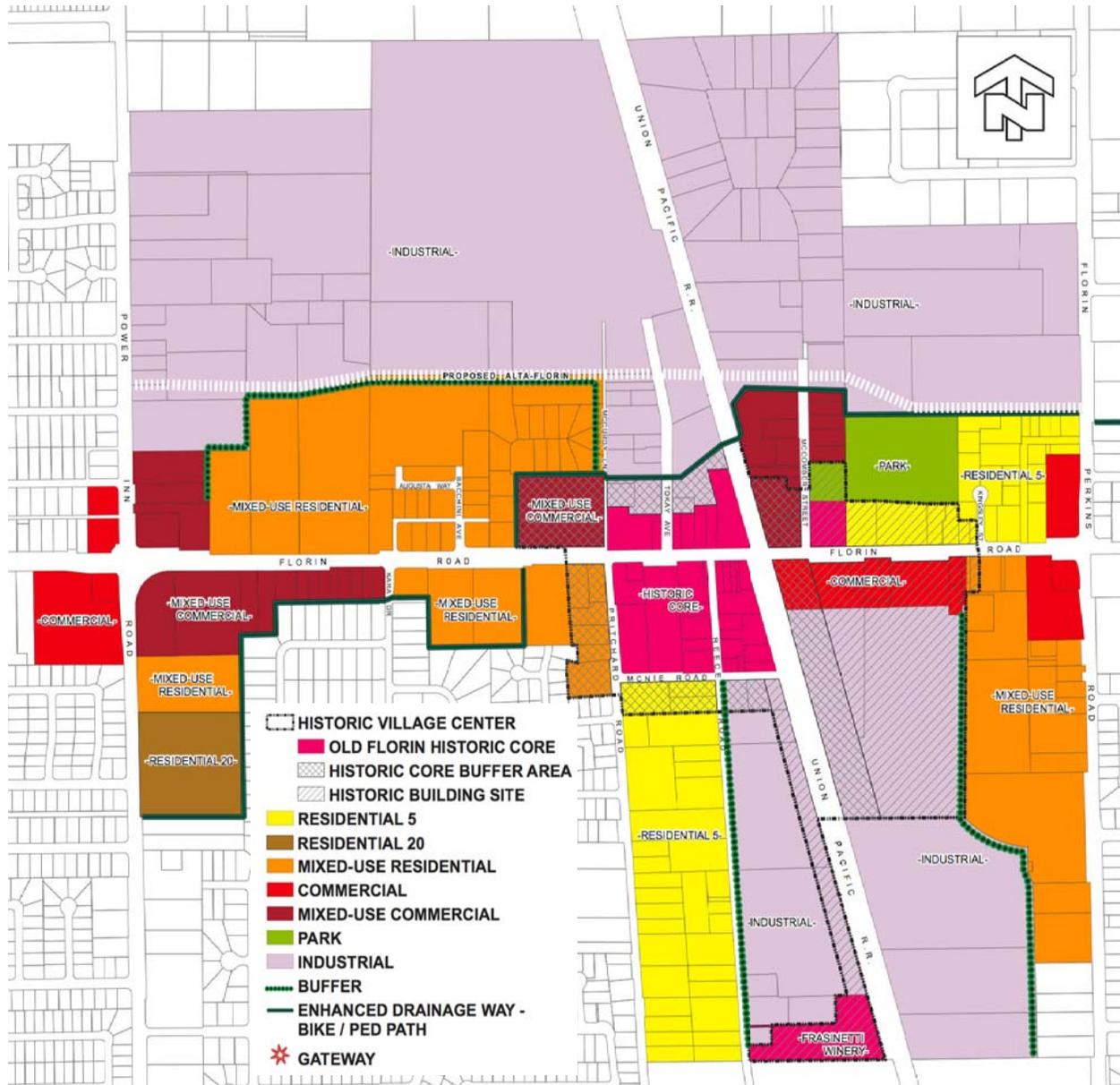


1 OLD FLORIN TOWN SPA OPERATIONAL AIR QUALITY MITIGATION PLAN



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EXECUTIVE SUMMARY

The approximately 440 acre Old Florin Town project area is located in central Sacramento County, just south of the city of Sacramento and east of Highway 99. The proposed project site is located along Florin Road between Power Inn Road and Florin Perkins/French Road. Implementation of the proposed project would result in a Special Planning Area (SPA) that would guide the redevelopment of the project site with predominately industrial as well as residential and commercial mixed-uses which is indented both revitalize and preserve the Old Florin Town area.

This document describes mitigation measures that would be implemented to reduce project-generated operational emissions of the ozone precursors (reactive organic gases [ROG] and oxides of nitrogen [NOX]) by 15% in accordance with policies of the Sacramento County General Plan Air Quality Element (General Plan) requiring “a 15 percent reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current Institute of Transportation Engineers (ITE) Trip Generation Handbook”(Sacramento County1993) and as recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD). This plan also meets the requirements of the California Environmental Quality Act (CEQA) that mitigation be implemented to the extent feasible in order to reduce significant adverse environmental impacts. SMAQMD has determined that a 15% reduction in operational emissions of ozone precursors constitutes feasible mitigation.

Mitigation measures found in this document are from the SMAQMD “Recommended Guidance for Land Use Emission Reductions” (SMAQMD 2007). Mitigation measures along with point values being applied to the Old Florin Town SPA can be found in Table AQ-1. Not all measures found in the SMAQMD guidance document are applicable to the project. Only those measures which are to be used are discussed in the following sections of the Operational Air Quality Mitigation Plan (AQMP).

Table AQ-1: Proposed Operational Air Quality Mitigation Plan Summary		
Category/ Measure	Description	Point Value
Bicycle/Pedestrian/Transit Measures		
1. Bicycle parking	Non-residential projects provide plentiful short-term and long-term bicycle parking facilities to meet peak season maximum demand	0.58
5. Pedestrian network	The project provides a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site	1
9. Traffic calming	Project design includes pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements. Roadways are designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips by featuring traffic calming features.	1

Table AQ-1: Proposed Operational Air Quality Mitigation Plan Summary		
Category/ Measure	Description	Point Value
Mixed-use Measures		
23. Suburban mixed-use	Have at least three of the following on site and/or offsite within ¼ mile: Residential Development, Retail Development, Park, Open Space, or Office	3
31. Non-roof surfaces	Provide shade (within 5 years) and/or use light-colored/high-albedo materials (reflectance of at least 0.3) and/or open grid pavement for at least 30% of the site's non-roof impervious surfaces, including parking lots, walkways, plazas, etc.; OR place a minimum of 50% of parking spaces underground or covered by structured parking; OR use an open-grid pavement system (less than 50% impervious) for a minimum of 50% of the parking lot area. Unshaded parking lot areas, driveways, fire lanes, and other paved areas have a minimum albedo of .3 or greater	1
Other Measures		
99A. Parking reduction requirement	The parking standards of the Old Florin Town SPA shall allow for greater flexibility in the provision of parking and reduce the negative impacts of excessive parking	3
99B. Community parking lots	Project proposes community parking areas to the rear of buildings strategically interspersed throughout the project site. These "Pocket Lots" will be shaded and have pedestrian connectivity to structures in the vicinity and be apart of the pedestrian network proposed for the project.	4
99C. Excluding high VOC emitting trees	All new development or redevelopment shall exclude the highest VOC emitting trees (goldenrain trees and California live oak trees) from all landscape and mitigation tree planting plans within the project area.	0.5
99D. Strategic planting of trees	Project proposes landscaping that maximizes shade in the summer and maximizes solar access to walls and windows in the winter.	1
Total Credit		15.08
Emissions Reduction Target		15.00
Source: SMAQMD 2007. Data compiled by DERA 2009.		

The Old Florin Town SPA focuses primarily on the redevelopment of an existing developed, aging area with mixed-use, commercial and industrial development. The project includes several smart growth strategies which include providing a mix of transportation options including walkable paths and bike lanes; providing for mixed-use development with multiple uses in one building or a blend of multiple uses throughout a development rather than grouping similar uses; directing development toward existing communities by building on infill land and urban brown fields; creating a sense of place and creating a distinctive and attractive community while preserving open space. These and other smart growth strategies inherently lend to improved air quality.

The ultimate purpose of smart growth is sustainable communities, and is a reaction in part to the recognized health impacts of urban sprawl and vehicle-centric development strategies. Various studies have demonstrated that smart growth development significantly reduces impacts to air quality, water quality, open space/biological resources, and public health. A 2005 Seattle study found that residents of neighborhoods where land uses were mixed and streets are better connected, making non-auto travel easier and more convenient, traveled 26 percent fewer vehicle miles than residents of neighborhoods that were more dispersed and less connected (Lawrence Frank and Company). It has also been demonstrated that the greenhouse gas emission reductions incorporated within California's Executive Order S-3-05 are unlikely to be achieved just through vehicle efficiency and development of low-carbon fuels – significant vehicle trip reductions will also be required (Yang, et. al.) and can be fostered through smart growth land use policies.

The Old Florin Town SPA includes the smart growth elements noted above and is expected to have an overall benefit to air quality. In addition, the measures noted in the table above are intended to reduce air quality impacts by further supporting smart growth principles by increasing pedestrian mobility throughout the plan area and the surrounding communities, decreasing the number of vehicle trips to and within the project area, increasing pedestrian safety and comfort and providing a mix of uses in one area to meet community needs.

INTRODUCTION

The Sacramento County Planning and Community Development Department is proposing to adopt the Old Florin Town SPA. Sacramento County prepared this SPA to help protect and preserve the charm and history of the Old Florin Town area along Florin Road between Power Inn Road and Florin Perkins Road. The SPA is intended to accomplish this by focusing on the preservation of the Historic Village Center, re-designating land for housing opportunities and creating a theme for the area with specific development standards and design guidelines.

The purpose of this document is to identify recommended measures to mitigate the operational pollutant (ozone precursors ROG and NOx) emissions associated with the proposed land uses that could occur in the Old Florin Town Plan area by at least 15%. This document has been prepared in accordance with SMAQMD's recommendations and with Policy AQ-15 of the Sacramento County General Plan Air Quality Element:

- AQ-15: All new major indirect sources of emissions shall be reviewed and modified or conditioned to achieve a reduction in emissions. This indirect source review program will be developed in coordination with SACOG and SMAQMD, and include the following features;
- A 15% reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current ITE Trip Generation Handbook.

The following sections of this document detail the proposed project's existing and planned transportation setting and the proposed Land Use Emission Reduction mitigation measures for the project as directed by the SMAQMD's Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007). The emission reduction measures are organized into the following categories:

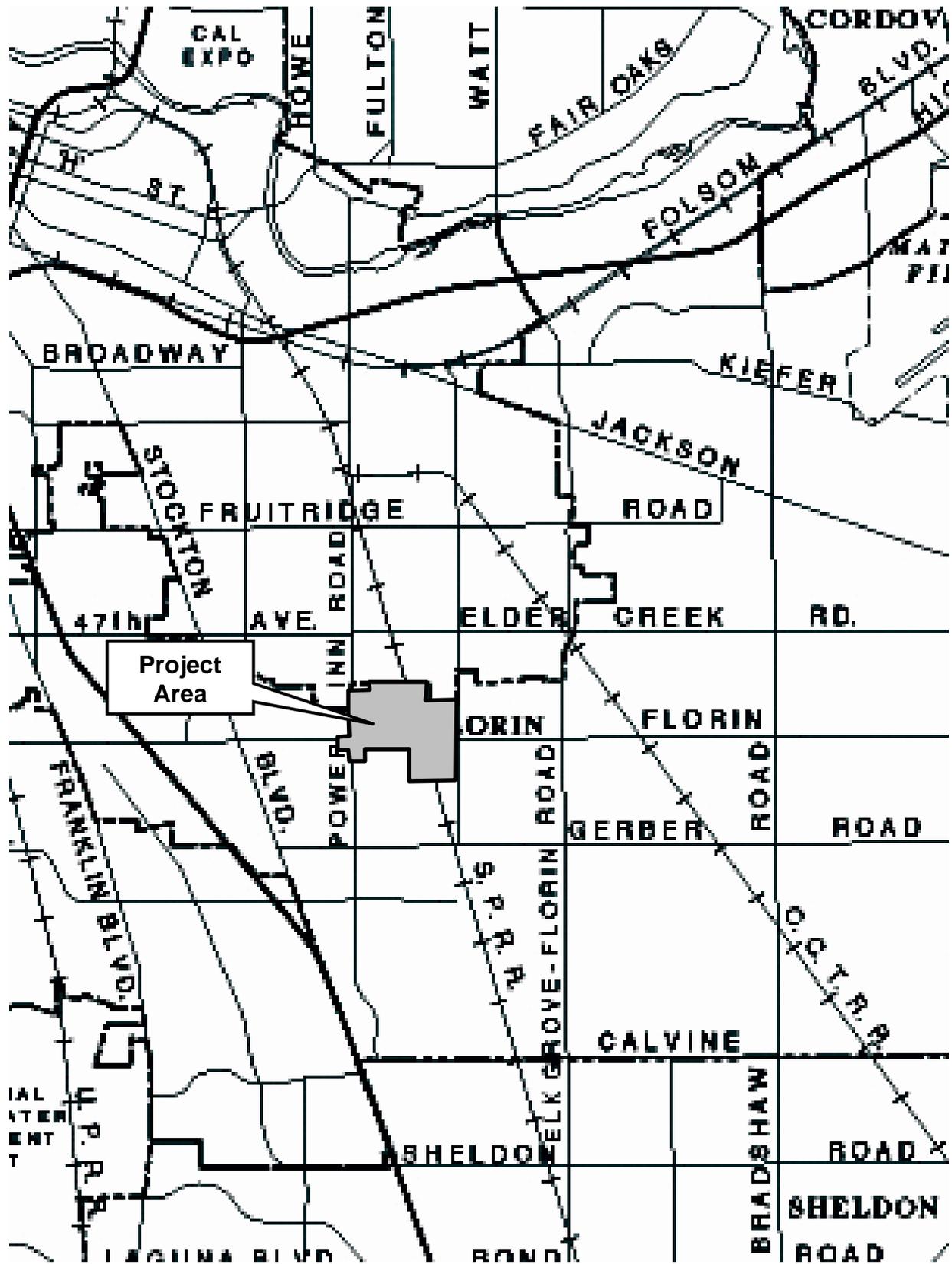
- Bicycle/Pedestrian/Transit Measures;
- Mixed Use Measures;
- Other Measures

PROJECT DESCRIPTION AND SETTING

The Old Florin Town SPA site is located in the South Sacramento community along Florin Road generally between Power Inn and Florin Perkins/ French Roads (refer to Plate AQ-1). The purpose of the proposed plan is to guide the revitalization and enhancement of the Old Florin Town area by preserving the historic nature of the site and providing flexibility for applicants during the development process while simultaneously providing specific guidelines and standards for future development that will result in new development that reflects the historic character of the community (refer to Table AQ-2 for land use summaries).

Table AQ-2: Land Use Summary and Scale Factors						
General Land Use Categories	Acres	Residential	Commercial	Industrial	Open Space/ Park	Mixed-Use
Low Density Residential	23.0	100%	0%	0%	0%	0%
Mixed Use Residential	87.3	80%	20%	0%	0%	100%
Mixed Use Commercial	62.3	40%	60%	0%	0%	100%
Intensive Industrial	260.2	0%	0%	100%	0%	0%
Recreation	7.30	0%	0%	0%	100%	0%
Total Acreage	440.1	117.76	54.84	260.20	7.30	149.60
% of project (total)		26.72%	12.46%	59.12%	1.65%	33.99%
% of Project (Developed for Urban Purposes)	432.80	27.20%	12.67%	60.12%	0%	100% (Suburban)
Total non-residential only and non-recreation uses	409.7 (93.09%)					
<p>Notes: The Recommended Guidance for Land Use Reductions document explains as a footnote on the bottom of page 8 that the total net area of a project site should exclude land designated for undeveloped open space. The Scale Factor utilized in determining mitigation measure values were computed assuming that only 432.80 acres are developed for urban purposes (netting out the recreation portion of the project, which would have minimum associated trip generation and operational emissions). Source: SMAQMD 2007</p>						

Plate AQ-1: Project Location Map



ACCESS CHARACTERISTICS

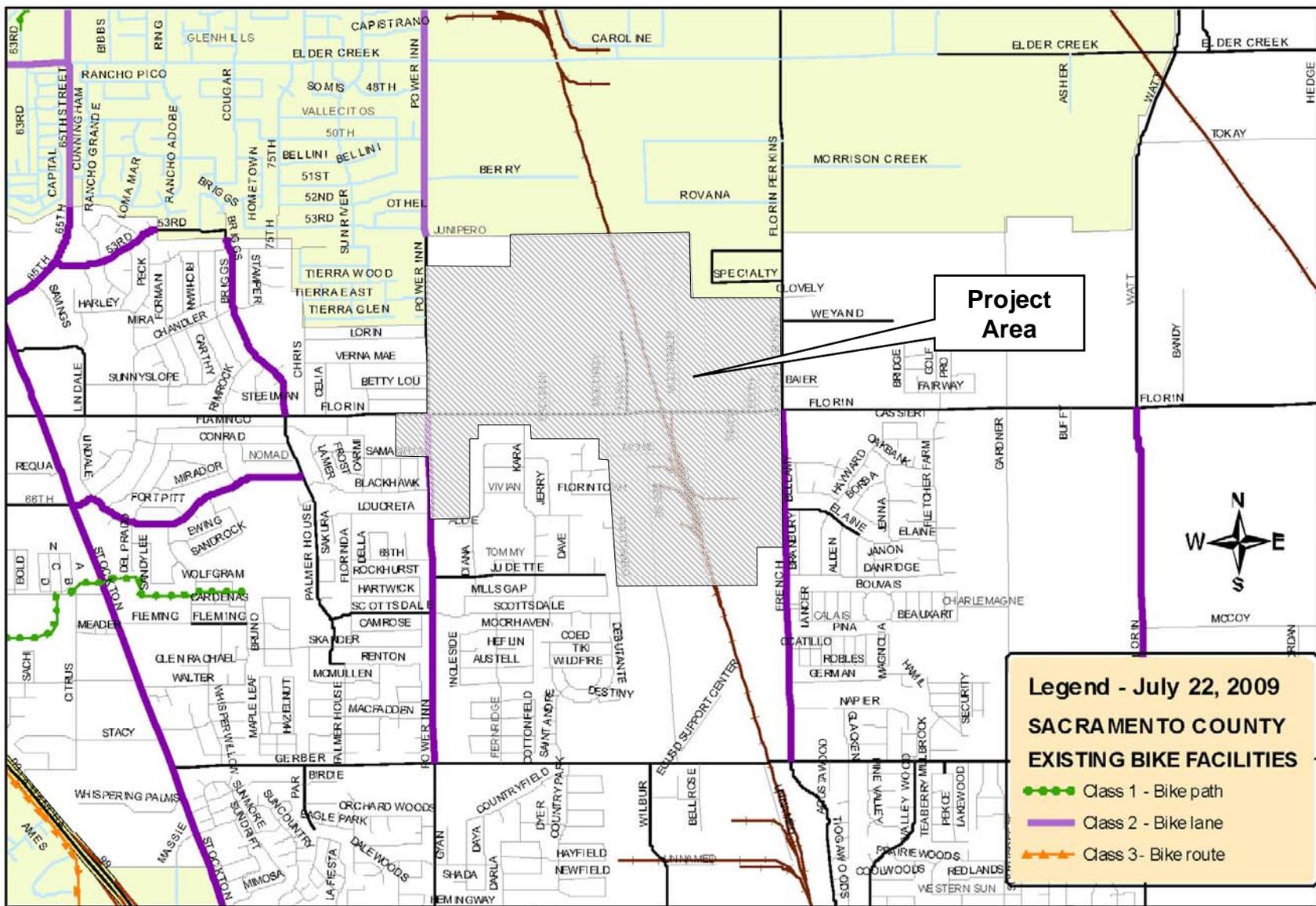
The Old Florin Town area is located along Florin Road which is a major roadway in Sacramento County. Florin Road bisects the plan area and provides access to the site from the east and west. In addition to this roadway Power Inn Road and Florin Perkins/ French Road provide access to the site from the north and south. Power Inn Road is located adjacent to the west side of the project area and provides access directly to Florin Road as well as a number of other smaller roadways in the project area. Florin Perkins/ French Road is adjacent to the east side of the project area, provides direct access to Florin Road and also provides access to a number of smaller roadways in the project area. In addition to these more major roadways, many other smaller roadways extend into the plan area or near the plan area from the adjacent communities that surround the site. Most notably, Kara Drive, Prichard Road, Reese Road and Danridge Drive extend into the site or near the site boundaries from the surrounding development.

BICYCLE FACILITIES

EXISTING BICYCLE SYSTEM/ PEDESTRIAN NETWORK

The Old Florin Town SPA area is located directly between two Class II bike lanes which extend into the existing communities to the south. Currently Class II bike lanes are located south of Florin Road along Power Inn Road along the west side of the project site and along French Road to the east. These bike lanes have direct contact with the SPA area and allow for pedestrian connectivity to Gerber Road. In addition to these lanes that have direct connectivity to the project area, several additional bicycle lanes are within one half mile of the project site. Class II bike lanes are located along Power Inn Road just northwest of the project site which extend to within the City of Sacramento. Class II bike lanes are also located along Briggs Drive which extend from Florin Road to 53rd Street. Lastly, the Florin Creek Bike Trail, which contains a Class I bike path, is located just west of the project site beginning at Palmer House Drive. The bike trail, as it heads west, connects with Stockton Boulevard, which has Class II bike lanes running along its length, and ends at Sheldon Park near Highway 99 (refer to Plate AQ-2).

Plate AQ-2: Existing Bicycle Facilities



PROPOSED BICYCLE AND PEDESTRIAN NETWORK

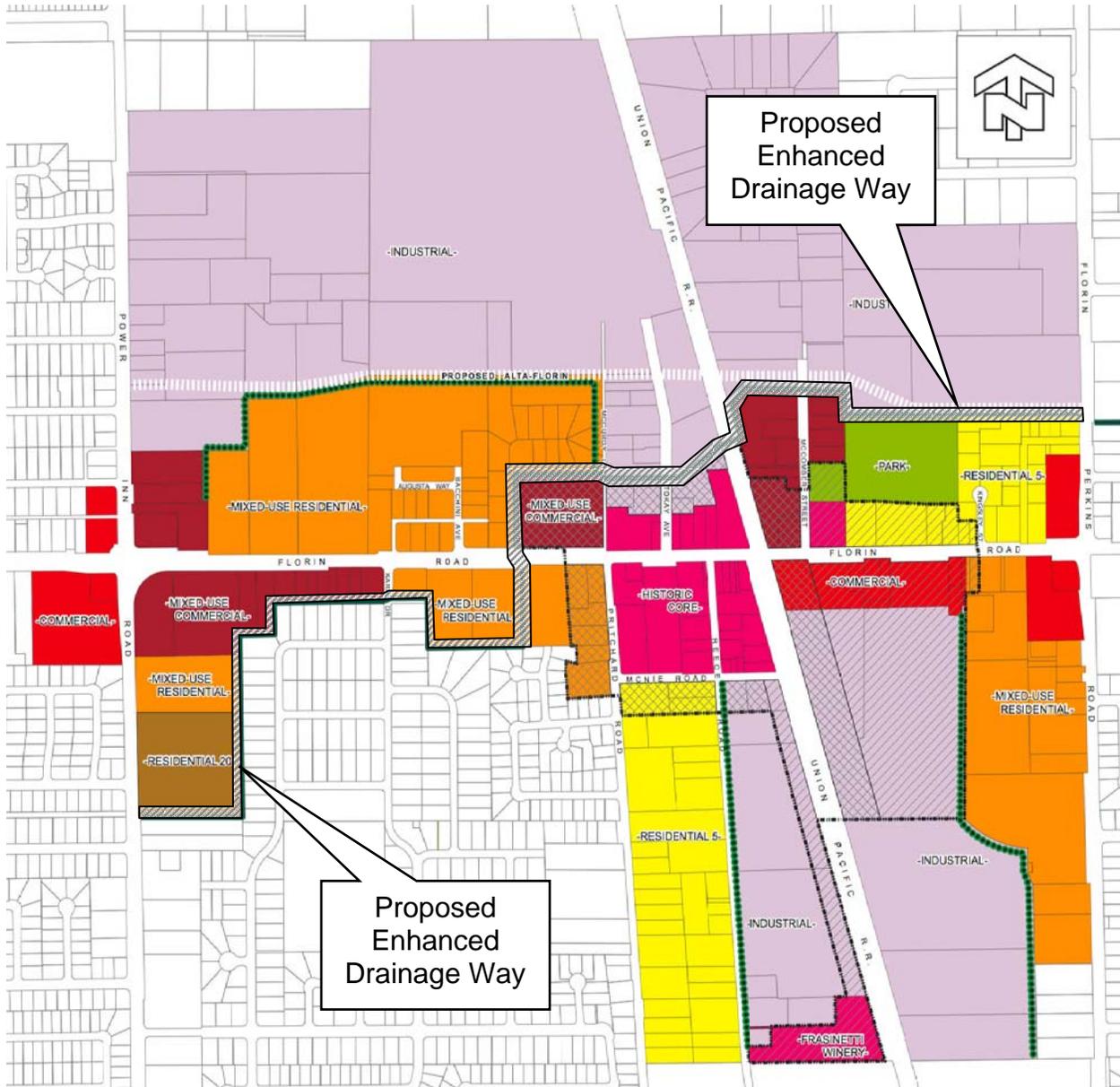
As stated in the Old Florin Town SPA Plan, pedestrian facilities within the plan area are expected to be developed as the site builds out. The plan states, in Section 505-619d, that all industrial projects in the SPA with property boundaries contiguous to a road or street shall provide sidewalks in accordance to Sacramento County standards.

In addition to the site being located immediately adjacent to two bike lanes and being within one half mile of several others, the Plan includes an enhanced drainage way which is to be located along Florin Creek. The enhanced drainage way is planned to extend through the project site from Power Inn Road to the west to Florin Perkins/French Road to the east and will cross Florin Road just west of Prichard Road and provide pedestrian access through the site. The parcels along the drainage way are required to provide a 20 foot wide setback and easement to allow for a pedestrian and bicycle pathway that will be located within the drainage way. Approximately 50 parcels within the plan area are located adjacent to this proposed drainage way and the drainage way connects with the primary roadways in the SPA area and crosses a number of others (Refer to Plate AQ-3).

Aside from pedestrian improvements related to the OFT SPA, the Florin area adjacent to and within the project site is planned to contain other pedestrian amenities that are to be developed through other projects. One of these endeavors is the Old Florin Town Streetscape Master Plan.

The purpose of this Streetscape Master Plan is to provide a basis for decisions and actions that will lead to improved aesthetics and pedestrian safety along Florin Road between Stockton Boulevard to Elk Grove-Florin Road. The primary intent of this Master Plan is to provide guidelines in the areas of landscape improvements to medians and frontages, sidewalks, pavement (including crosswalks), decorative street lighting, bikeways, and other accessibility enhancements to aid in the revitalization and renovation of existing residences and business as well as new development along Florin Road. The Master Plan emphasizes pedestrian friendly development along Florin Road, including the portion of Florin Road within the project area, and includes strategies to install six foot wide separated sidewalks, develop Class II bike lanes, utilize traffic calming measures and require street trees and landscape plantings among others.

Plate AQ-3: Enhanced Drainage Way



PROPOSED MEASURES

The following supporting text and exhibit references detail mitigation measures that would reduce air pollutant emissions from development related land uses. The text describes how measures would be implemented in accordance with the information available at this time. Additional information may be available when redevelopment occurs.

BICYCLE/ PEDESTRIAN/ TRANSIT MEASURES

MEASURE 1: BIKE PARKING

Unscaled SMAQMD emissions reduction = 0.625

Scale factor = .93 (commercial and mixed-use)

Scaled mitigation value = 0.58

All new and redeveloped commercial, industrial and mixed use projects in the plan area shall provide secure, easily accessible, bicycle racks or lockers adjacent to facility entryways. Short term bicycle parking facilities shall be provided at a minimum ratio of one bicycle space per 20 vehicle spaces. Long term facilities shall be provided at a minimum ratio of one long term bicycle space per 20 employee parking spaces.

MEASURE 5: PEDESTRIAN NETWORK

Unscaled SMAQMD emissions reduction = 1.00

Scale factor = 1 (entire project)

Scaled mitigation value = 1.00

The project proposes an enhanced drainage way that extends through the project site from Power Inn Road to Florin Perkins/French Road and crosses Florin Road just west of Prichard Road (refer to Plate AQ-3). The parcels along the drainage way are required to provide a 20 foot wide setback and easement to allow for a pedestrian and bicycle pathway throughout the site. The pedestrian pathway will have connectivity with Power Inn Road where an existing Class II bikeway is located and is located within ½ mile of a number of other Class II bike lanes in the area (refer to Plate AQ-2). In addition the proposed pathway will connect with Florin Perkins Road which is planned to have Class II bike lanes according to the 2010 bikeway master plan.

All new development or redevelopment in the plan area shall include shaded and lighted pedestrian access routes connecting from the development to either Florin Road, Power Inn Road, Florin Perkins/French Road, the proposed enhanced drainage way or other existing pedestrian access route that already connects to the above mentioned routes, creating a network of interconnected pedestrian paths throughout the plan area.

MEASURE 9: TRAFFIC CALMING

Unscaled SMAQMD emissions reduction = 0.25- 1.0

Scale factor = 1 (entire project)

Scaled mitigation value = 1

All sidewalks internal and adjacent to the project site shall be a minimum of five feet wide and have vertical curbs and all intersections shall meet at right angles. All intersections internal and adjacent to the project site shall include at least one of the following features: marked crosswalks, count-down signal timers, speed tables, raised crosswalks or raised intersections.

MIXED-USE MEASURES

MEASURE 23: SUBURBAN MIXED-USE

Unscaled SMAQMD emissions reduction = 3.0

Scale factor = 1 (entire project)

Scaled mitigation value = 3.00

The Plan proposes mixed use residential, mixed use commercial as well as park, commercial and residential uses all within the plan area. One of the primary focuses of the SPA is re-designating land to provide for additional housing opportunities.

The Plan calls for the development of greater densities in the plan area over what is currently allowed effectively situating more residences alongside mixed use, commercial and industrial uses. Overall, the Plan will allow for approximately 740 new residences within the plan area which can provide the opportunity for people to be living near employment opportunities.

MEASURE 31: NON-ROOF SURFACE

Unscaled SMAQMD emissions reduction = 1.0

Scale factor = 1 (entire project)

Scaled mitigation value = 1.00

In order to reduce the heat island effect that can be produced from developed areas, all new development or redevelopment shall provide one or any combination of the following strategies: Provide shade for 50% of the site hardscape within 15 years. Utilize paving materials with a solar reflective index of at least 29 for 50% of site hardscape. Utilize an open grid pavement system of 50% of site hardscape.

OTHER MEASURES

MEASURE 99A: PARKING REDUCTION REQUIREMENT

Unscaled SMAQMD emissions reduction = 3.0

Scale factor = 1 (entire project)

Scaled mitigation value = 3.0

The project plan indicates that individual projects will be allowed to provide parking to a lesser standard than what is currently allowed by the zoning code.

The parking standards of the Old Florin Town SPA shall allow for greater flexibility in the provision of parking and reduce the negative impacts of excessive parking. The plan shall limit parking for all new development and redevelopment to no more than the minimum required by code as calculated at the time development projects are proposed. In addition, the plan shall allow for 50% of all parking generated by new development or redevelopment to be accommodated through a shared parking strategy.

MEASURE 99B: COMMUNITY PARKING LOTS

Unscaled SMAQMD emissions reduction = 4.0

Scale factor = 1 (entire project)

Scaled mitigation value = 4.0

In addition to requiring that parking be provided at reduced levels, the plan also calls for the creation of “Pocket Lots” which are small (30 spaces or less) community parking areas that are to be strategically interspersed throughout the plan area. The Pocket Lots shall be developed with perimeter sidewalks and shade trees in order to help create a pedestrian friendly environment and to aid pedestrian access throughout the plan area. The perimeter sidewalks shall be apart of the plan area pedestrian network to facilitate pedestrian mobility throughout the site.

The small community parking areas, which will be no larger than 30 spaces each, shall be developed throughout the plan area to accommodate the spaces needed for the shared parking strategy noted above. In all, the community parking areas shall be developed to accommodate 50% all parking generated by new development or redevelopment.

MEASURE 99C: EXCLUDING HIGH VOC EMITTING TREES

Unscaled SMAQMD emissions reduction = 0.5

Scale factor = 1 (entire project)

Scaled mitigation value = .05

All new development or redevelopment shall exclude the highest VOC emitting trees (goldenrain trees and California live oak trees) from all landscape and mitigation tree planting plans within the project area.

MEASURE 99D: STRATEGIC PLANTING OF TREES

Unscaled SMAQMD emissions reduction = 1.0

Scale factor = 1 (entire project)

Scaled mitigation value = 1.00

Landscaping for newly developed or redeveloped properties shall include plantings of trees or other landscaping features which are sited in such a way as to maximize shade in the summer and maximize solar access to walls and windows in the winter.

REFERENCES

County of Sacramento, Department of Planning & Community Development. "Old Florin Town Special Planning Area" May, 22, 2007 (draft).

"How Land Use and Transportation Systems Impact Public Health: A Literature Review of the Relationship Between Physical Activity and Built Form" Lawrence D. Frank. PhD and Mr. Peter Engelke. City and Regional Planning Program College of Architecture Georgia Institute of Technology

"Identifying Options for Deep Reductions in Greenhouse Gas Emissions from California Transportation: Meeting an 80% Reduction Goal in 2050 Full Report including Policymaker Summary and Appendix" Christopher Yang, David McCollum, Ryan McCarthy, Wayne Leighty. University of California at Davis, One Shields Avenue • Davis, California.

Klinker, Dan. "Old Florin Town Existing Bikeways." E-mail to Kevin Messerschmitt. 22 July. 2009.

Sacramento Metropolitan Air Quality Management District, "Recommended Guidance for Land Use Emissions Reductions, Version 2.4" August 15, 2007.