

Section 3.12

Transportation and Circulation

This section examines the potential effects of the proposed project on local transportation. The analysis focuses on effects during construction, the period when local roadways would be most affected by the project. Potential effects on local roadways during future project operations also are described.

Environmental Setting

Existing Traffic Conditions

Regional circulation in the project area and vicinity consists of Interstates 80 and 680. State Highways 4, 12, 113, and 160 connect to the project area. The Solano County Board of Supervisors has designated portion of Interstates 80 and 680 and State Highways 12 and 113 as scenic roadways (Solano County 1977).

The local circulation system consists of Shiloh Road, Collinsville Road, Birds Landing Road, Montezuma Hills Road, Little Honker Bay Road, Olsen Road, and Talbert Lane.

Access to the project site by construction workforce and delivery vehicles from San Francisco and Sacramento would be via I-80. Vehicles from Contra Costa County would travel via I-680 to I-80 or via Highway 4 to Highway 160. Highway 113 would provide access from Dixon and I-80. Primary access to the project area from the freeway network would be from Highway 12. Existing public roadways would provide local access to the project area. Project vehicles would travel from Highway 12 to Shiloh Road and Little Honker Bay Road, which would provide access to Collinsville Road, Birds Landing Road, and Olsen Road. From Birds Landing Road, vehicles would travel to Montezuma Hills Road. From Collinsville Road, vehicles would also have access to Talbert Lane.

Direct access to the pipeline and facility sites would be from existing roadways, except for one short section of new access road to the metering station off of an existing access road (adjacent to Birds Landing Road), as described in Chapter 2 “Project Description” and shown in Figure 2-4c in Appendix A.

Regulatory Setting

California Department of Transportation

The California Department of Transportation (Caltrans) has jurisdiction over State highways and sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. Caltrans requires that a traffic analysis be conducted if a project generates:

- Greater than 100 peak-hour trips per day to Highway 12,
- Between 50 and 100 peak-hour trips to Highway 12 and level of service (LOS) C or D conditions (LOS is a qualitative evaluation of traffic flow conditions, ranging from ideal [LOS A] to breakdown [LOS F] (see Table 3.12-1),
- One to 49 peak-hour trips to Highway 12 and LOS E or F conditions.

Local roadways in the project area have extremely low volumes and generally operate at LOS A.

Solano County

Local traffic is subject to the policies and regulations of the Solano County Public Works Agency. Solano County transportation policies and standards for roadways are discussed in the Land Use and Circulation Element of the General Plan. The Solano County Road Improvement Standards and Land Development and Subdivision Requirements have set specific guidelines for the construction of public road improvements and private roads, including design standards addressing slopes, widths, connection to county roads, and other features (Solano County Transportation Department 2001).

As part of their oil and gas well drilling permit and encroachment permit process, Solano County requires posting of a security bond to ensure that damage does not occur to County-maintained roads.

Table 3.12-1. Level of Service Descriptions

Level of Service	Conditions	Description	Intersections	
			Signalized Delay (seconds/vehicle)	Unsignalized ^a Delay (seconds/vehicle)
A	Free flow	Users experience very low delay; progression is favorable and most vehicles do not stop at all	≤10.0	≤10.0
B	Stable operation	Vehicles travel with good progression; some vehicles stop, causing slight delay	10.1 to 20.0	10.1 to 15.0
C	Stable operation	Higher delays result from fair progression; a significant number of vehicles stop, although many continue to pass through the intersection without stopping	20.1 to 35.0	15.1 to 25.0
D	Approaching unstable	Congestion is noticeable; progression is unfavorable, with more vehicles stopping rather than passing through the intersection	35.1 to 55.0	25.1 to 35.0
E	Unstable operation	Traffic volumes are at capacity; users experience poor progression and long delays	55.1 to 80.0	35.1 to 50.0
F	Forced flow	Intersection's capacity is oversaturated, causing poor progression and unusually long delays	>80.0	>50.0

^a Unsignalized intersections include two-way stop sign-controlled and all-way stop-controlled.

Source: Transportation Research Board 2000.

Impact Analysis

The transportation and circulation analysis was based on project siting and design information provided by Lodi Gas Storage. The proposed project includes a BMP to avoid causing traffic impacts, including adopting and implementing a plan to minimize peak-hour traffic and traffic congestion during the construction phase. These BMPs are described under "Construction Traffic Safety Measures" in Chapter 2 "Project Description."

Significance Criteria

Criteria for determining the significance of transportation and circulation impacts were developed based on questions contained in the environmental checklist form in Appendix G of the State CEQA Guidelines and professional judgment.

Based on the checklist questions, a project may have a significant effect on the environment if it would result in:

- An increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system;
- The exceedance, either individually or cumulatively, of a level-of-service standard established by Solano County for any designated roads or highways; or
- Inadequate emergency access.

Impacts

IMPACT 3.12-1: TEMPORARY INCREASE IN TRAFFIC IN THE PROJECT AREA DURING CONSTRUCTION

During peak periods of construction, approximately 90 people would be working in the project area. This number includes workers associated with all aspects of project construction (i.e., pipeline construction and construction of related facilities). In addition, construction of the proposed project would entail the delivery of raw materials to the various sites. As many as 27 daily truck trips during the peak of construction would be required for material delivery and removal at the project site.

Combining construction employee traffic volumes with delivery and haul truck trips, project construction would entail approximately 120 vehicle trips per day during the peak of construction. This traffic would have a negligible effect on traffic volumes on Highway 12. Construction-related traffic would, however, represent a large increase in traffic volumes on local roadways during peak commute hours (approximately 95 trips per morning and afternoon peak periods). As discussed above, local roadways in the project area have extremely low volumes and generally operate at LOS A. No alteration of LOS is expected from construction-related traffic. Because construction traffic would not substantially increase traffic loads on roadways in the project area, such that the existing LOS would be altered, this impact is considered less than significant, and no mitigation is required.

IMPACT 3.12-2: TEMPORARY DISRUPTION OF CIRCULATION FROM FACILITY CONSTRUCTION

Construction traffic on local roadways during construction of proposed facilities may inconvenience residents and adjacent agricultural operations. Because some construction activities will occur within public road rights of way (along Shiloh Road and across Olsen Road), Lodi Gas Storage has committed to implementing construction traffic control measures, as described in Chapter 2 “Project Description,” to ensure that construction traffic and construction activities within and adjacent to road rights-of-way will not disrupt routine agricultural operations

and will result in minimal inconvenience to residents. This impact therefore is considered less than significant, and no mitigation is required.

IMPACT 3.12-3: MINIMAL INCREASE IN TRAFFIC DURING FACILITY OPERATION

During the operational phase of the proposed facility, a staff of approximately two to four local employees would operate and maintain the facilities and pipeline, and would be onsite during the day shift—5 days per week. The metering station and the well pads would not be occupied during normal day-to-day operations. During normal operations, the well pads and pipeline route would be visited twice daily. Traffic associated with the supply of materials and equipment to the compressor location during operation is estimated at one delivery van or truck per day. During peak operations, as many as 10 vehicle trips would occur daily. These additional trips would result in a negligible effect on the surrounding roadway network. Therefore, this impact is considered less than significant, and no mitigation is necessary.

IMPACT 3.12-4: POTENTIAL FOR INTERFERENCE WITH EMERGENCY RESPONSE ROUTES

Construction-related activities within and adjacent to public road rights-of-way and increased truck and vehicle traffic along project access routes could temporarily increase response times for emergency response providers along affected roadways. However, with the construction traffic safety measures that have been incorporated into the project design (described under the BMPs in Chapter 2 “Project Description”), the potential for such disruptions to emergency response routes would be minimal. Therefore, this impact is considered less than significant, and no mitigation is required.

Mitigation Measures

Lodi Gas Storage will implement BMPs (described in Chapter 2, “Project Description”) as part of the proposed project to avoid and minimize potentially significant impacts on transportation-related issues. Therefore, no mitigation is required.

