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Technical Memorandum

Loomis Town Center Implementation Program

Subject: Infrastructure Analysis of Preferred Implementation Program Concept

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INTRODUCTION

The Town of Loomis is proposing the development of its acquired surplus railroad right-of-way along the easterly side of the railroad tracks near downtown (Project area) as part of phase one of the implementation program for the Loomis Town Center Master Plan.

The Project has two separate areas, the property south of the existing Depot building and the property surrounding the Blue Goose building. Additionally, the implementation program includes streetscape concepts for Taylor Road (from Sierra College Blvd. to King Road) and Horseshoe Bar Road (from Taylor Road to Interstate-80).

This technical memorandum provides the infrastructure analysis of the Preferred Implementation Program Concept (Preferred Program) prepared by MIG and provided to TLA on November 3, 2009. TLA analyzed the following infrastructure items:

- Sanitary sewer connections
- Domestic water connections
- Irrigation water connections
- Storm water runoff conveyance and water quality treatment
- Dry utility connections (gas, electric, telephone and cable)
- Streetscape improvements

TLA's infrastructure analysis is founded on our Existing Conditions Analysis Report for the Project, dated January 27, 2010.

SANITARY SEWER CONNECTIONS

The Preferred Program will require two sanitary sewer services, one to the future retail building and one to the restrooms south of the existing Depot Building. The sanitary sewer services will connect to the existing sanitary sewer trunk line located within the Project area. The existing sanitary sewer trunk line runs behind the Nelthorpe's, Wells Fargo and Christensen's buildings from Horseshoe Bar Road to Walnut Street.

DOMESTIC WATER CONNECTIONS

South of the Depot

The Preferred Program will require domestic water service for the restrooms and water play feature. Due to the restroom's and water play feature's proximity to the existing Depot building, TLA recommends exploring the opportunity to provide water service from the Depot building's water system. This would eliminate the need for a separate water connection and meter from the Placer County Water Agency.

If connection into the existing Depot building's water system is not possible, a new water connection can be made to the existing 12-inch water main at the west end of Horseshoe Bar Road, in front of the Wild Chicken coffee shop.

The future retail building will require an independent domestic water service and meter. TLA recommends deferring the installation of the water service until the building is constructed. To allow for the future water service connection, TLA recommends extending a 12-inch water main in Walnut Street from Taylor Road and installing a fire hydrant near the future retail building.

The fire hydrant will improve fire protection for the Project area and help satisfy building code requirements for the future retail building. The domestic water service for the future retail building will connect into the extended 12-inch water main and avoid damages to the Preferred Program improvements.

Blue Goose area

The Preferred Program currently does not require domestic water service for the Blue Goose area. If a minor water use element is added to the Program in the future, service may be provided from the existing Blue Goose building.

IRRIGATION WATER CONNECTIONS

South of the Depot

The Preferred Program will require an irrigation water connection for the proposed landscaping and strolling gardens. The Project area south of the Depot building and the area surrounding the Blue Goose building will need separate irrigation water connections. Landscaping for Taylor Road and Horseshoe Bar Road will require multiple irrigation water connections.

For the Project area south of the Depot, TLA recommends connecting the irrigation service, meter and back flow device to the extended 12-inch water main at the west end of Walnut Street. The west end of Walnut Street is somewhat central to the Project area south of the Depot which will reduce pressure loss in the irrigation system.

Blue Goose area

Irrigation for the proposed landscaping around the Blue Goose should be connected into the building's existing system.

Taylor Road and Horseshoe Bar Road

Taylor Road and Horseshoe Bar Road have existing water mains within the right-of-way which will allow for multiple irrigation water connections. The number of connections will depend on the phasing of the streetscape improvements and the limitation of pressure loss over long distances.

STORM WATER RUNOFF CONVEYANCE AND WATER QUALITY TREATMENT

South of the Depot

The Project area south of the Depot currently drains overland towards the railroad tracks and then south beyond High Hand Nursery, there are no underground drainage facilities. For the Preferred Program, TLA recommends maintaining surface flow for conveying storm water runoff.

Storm water runoff from paved parking areas and drives will flow overland and discharge into lawn areas or meandering drainage swales. Lawn areas and drainage swales will serve as water quality treatment for the runoff. Surface flow conveyance will require the use of valley gutters, sidewalk underdrains, and culverts at trail crossings. Paved areas may include pervious pavers, porous concrete or traditional asphalt concrete pavement.

Blue Goose area

The Project area around the Blue Goose currently drains to an underground system that flows to a storage basin under the building. The Loomis Drainage Master Plan indicates that the storage basin under the building drains to the west under the railroad tracks. The Master Plan calls for a future storm drain system in Taylor Road from King Road to just south of Circle Drive to eliminate the storage basin under the Blue Goose as well as improve drainage through downtown.

TLA recommends continuing to use the existing underground drainage system at the Blue Goose building for the Preferred Program improvements. Storm water runoff from the proposed parking area and drive south of the Blue Goose will flow to new drain inlets and then underground pipes to tie into the existing drain inlet in front of the building.

Taylor Road and Horseshoe Bar Road

See the "Streetscape Improvements" section on the next page for Taylor Road and Horseshoe Bar Road's storm water runoff conveyance.

DRY UTILITY CONNECTIONS (GAS, ELECTRIC, TELEPHONE AND CABLE)

South of the Depot

The Preferred Program will require service connections for gas and electric from PG&E, telephone from AT&T and cable from Wave Broadband for the future retail building, restrooms, multi-use performance space and lighting.

Gas mains exist at the west end of Walnut Street and Horseshoe Bar Road. Connection to the gas main can be deferred until the future retail building is constructed.

Electric, telephone and cable connections are available at the existing PG&E transformer and AT&T telephone vault at the west end of Horseshoe Bar Road, in front of the Wild Chicken coffee shop. These facilities were installed with the Depot project and can be tied into to serve the restrooms, amphitheater and lighting.

Blue Goose area

The proposed improvement around the Blue Goose building should only require electrical connection for area lighting. There is an existing PG&E transformer near the Blue Goose building that can be tied into to serve the lighting.

STREETSCAPE IMPROVEMENTS

The Preferred Program includes streetscape concepts for Taylor Road and Horseshoe Bar Road. In general, the streetscape concepts involve the incorporation of a ten-foot wide multi-use trail framed by landscaping on either side of the road and landscaped median islands.

The streetscape concepts will consider access accommodations for existing business and residents. Medians will be located and configured to allow left-turn movements for vehicles entering and exiting the roads at cross streets and driveways. Traffic lane transition lengths will allow for safe lateral movement of vehicles at changes in the street cross sections.

Taylor Road's storm water runoff will be conveyed in road side swales integrated into the shoulder landscaping and traditional curb and gutter. In general, Taylor Road south of Circle Drive will utilize road side swales and the downtown area will have curb and gutter. Drain inlets will be spaced along the road side swales and curb and gutter with drain laterals to the proposed storm drain truck line identified in the Loomis Drainage Master Plan.

Horseshoe Bar Road's storm water runoff will be conveyed similar to Taylor Road's with the combination of road side swales and curb and gutter. The swales and gutters will tie into the existing storm drain systems along the road.

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