DIXIE TIP
CONCEPT REPORT APPLICATION
FY 2015 (Due November 6, 2013)

PROJECT INFORMATION

1) TITLE: **Purgatory Road: Fairgrounds to Hurricane City Annexation Boundary**

2) DESCRIPTION: **Construction of Purgatory Road from Washington County Fairgrounds to the Hurricane/Washington Annexation Boundary. Roadway to consist of 32 feet of pavement with 2 12-foot lanes and 4-foot paved shoulders on each side, with an additional 4-foot gravel shoulder on each side. Functional classification is Major Collector with a 66-foot wide right-of-way.**

3) SPONSOR: **Hurricane City**

4) COST ESTIMATE: **$2,377,000** (use attached tables or equivalent)

5) FUNDS APPLYING FOR (check all that apply):
_X_ St. George Urban STP, ___ SPR
___ FTA 5307, ___5309, ___5310, or ___5311

6) PROJECT MANAGEMENT
a. Contact Person: **Arthur LeBaron**
b. Phone Number: **435-635-2811 x113**
c. Mobile Phone: **435-632-3462**
d. Fax Number: **435-635-4284**
e. E-mail Address: **arthur@cityofhurricane.com**

7) INCLUSION IN LONG-RANGE PLAN (LRP)
a. LRP project number: **Listed in Phase One (2011-2020) in the Long Range Plan under UDOT/RPO Projects of Interest.**
b. Regional Significance: **Purgatory Road is regionally significant as it will connect SR-9 to Washington Dam Road through the Purgatory Valley and across the Virgin River. Existing development in Purgatory, including the Washington County Fairgrounds, Southern Utah Shooting Sports Park, Purgatory Correctional Facility, Fairgrounds Industrial Development, Quail Creek Industrial Development, Washington County and UDOT Maintenance Facilities, and the DMV has only one access point. Developing this Corridor will provide a much-needed second access to Purgatory Valley and connect industrial uses in Hurricane to industrial and residential uses in Washington. The Washington County Fairgrounds generates large volumes of traffic during events that overwhelms the intersection of 5300 West SR-9. Connecting Purgatory Road to Washington Dam Road will help alleviate traffic congestion during**

events.

Recently (2013) the Eastern Washington County Rural Planning Organization (EWCRPO) completed a Corridor Study that analyzed the Purgatory Road corridor along with several other proposed roadway corridors in the EWCRPO. Out of all the projects studied, Purgatory Road rose to the top in terms of overall benefit to cost ratio; the benefit being derived from saved user costs. The construction of Purgatory Road as proposed will eliminate travel time and trips from SR-9 and Telegraph. Based on current DMPO modeling, Purgatory will draw 63.9% of its traffic from Washington City, 25.5% from St. George City, and 8.5% from Hurricane.

RESPOND TO THE FOLLOWING FOR ANY PROJECT:

A. Describe how project is consistent with local plans: **This project as proposed has been a master planned connection on the transportation master plans of both Hurricane City and Washington City for many years. Purgatory Road is included on the COG priority list.**

B. Describe purpose and need of the project: **The purpose and need for the development of Purgatory Road is three-fold: 1. Establish the shortest route possible between SR-9 and Washington Dam Road across the Virgin River to connect similar and complimentary land uses in Hurricane and Washington Cities. 2. Create a second access for the present and future development in Purgatory Valley to ensure health, welfare, and safety of the public, and to mitigate congestion associated with events at the Washington County Fairgrounds. 3. Provide access to raw land to foster economic development.**

Corridor studies conducted by the EWCRPO have shown that the development of this corridor has the highest benefit-to-cost ratio of any of the corridors proposed in the EWCRPO. The benefit is derived from user savings, based on reduced travel time measured by the DMPO traffic model.

C. What are the physical aspects of this project?
(Road: Facility Design, ADT, LOS, Functional Class, Design Speed, Accident Rate)
(Transit: Rolling Stock Specification, Facility Design, etc.)
(Pedestrian./Bicycle/Trail: Facility Design, usage)
(Park & Ride): Facility Design, usage): **Purgatory road is envisioned by Hurricane City as a 2-lane major collector (66-foot R/W) with a design speed of 50 mph. Initial construction would consist of a 32-foot wide paved surface with 4-foot wide gravel shoulders on each side. The paved surface would accommodate one 12-foot wide lane in each direction with a 4-foot wide paved shoulder on each side.**

D. How will facility, system, or equipment be maintained when completed and open for service: **Hurricane City will be responsible for all maintenance required to keep the road serviceable. The Streets Department has the manpower and equipment necessary for general maintenance. Special maintenance will be performed by the City by contract, as necessary.**

E. Is there any right-of-way or real estate purchase required? Any property owner agreements, partnering opportunities, or in-kind service transactions possible: **Most of the right-of-way for the project will need to be acquired. This corridor is included in the Council of Governments' corridor preservation priority list, and is therefore qualified to receive funds for purchasing rights-of-way as they become available. A portion of the proposed alignment would cross BLM land, giving the City an opportunity to partner. It is important to note that the planned alignment is proposed to coincide with a major utility corridor and dirt road where a right-of-way easement already encumbers the land. It is anticipated that the existence of the dirt road and utility corridor will help the cause of further improvements. The City will require road dedications for all property development proposals.**

F. Is there any utility work or impacts? Indicate who will do the work and who will pay for it: **As mentioned above there are existing utilities along the proposed corridor. Any roadway improvements will have to accommodate existing utilities, and any impacts will have to be mitigated by the City (non-DMPO funds).**

G. To what extent will access management be improved by this project: **Purgatory Road as proposed will provide a vital second access in and out of the Purgatory Valley. It will also provide good access to the Southern Parkway to and from the Purgatory Valley for traffic generated by the many existing land uses. This route will provide direct access to Purgatory to and from Washington, which will eliminate many trips on Telegraph Street and SR-9, in turn saving time and increasing safety for road users. As this corridor will be an Arterial street, access to the adjacent undeveloped property will be developed using a local street network with strategic intersection points along Purgatory Road.**

H. To what extent will this project improve transportation system Safety: **As previously discussed, Purgatory Road will provide a vital second access to the Purgatory Valley. Modeling has shown that the development of this corridor will also reduce user-cost which translates into a safer situation for the travelling public.**

I. Please provide plans, sketches, aerials or designs with the concept report to assist in the evaluation of this project. **See attached map.**

J. Is this project New, an Improvement, Expansion, or Rehabilitation to an existing system: **This project is an improvement and expansion of the existing dirt road that runs along the existing utility corridor through Purgatory.**

K. Describe how this project will improve the existing transportation system as it relates to the following:

a. Mobility

Purgatory Road will facilitate economic development by providing safe convenient connectivity between industrial land uses in Washington and Hurricane. The development of this corridor will also open up hundreds of acres of land for development that has otherwise been inaccessible, furthering job creation and economic development. As industrial development continues in the Purgatory Valley there will be a higher traffic demand for commuters. Purgatory Road will create a convenient way for workers who reside in the Washington Fields, and elsewhere to the West, to get to their workplace, and may serve well as a commuter bus route. The facility as proposed will also provide an excellent corridor for cyclists.

b. Inter-connectivity

As shown in the EWCRPO Corridor Study, the inter-connectivity provided by Purgatory Road models significant user savings based on reduced travel time. The DMPO Model forecasts that the corridor will experience daily traffic volumes of 3,000 in the year 2020, 6,000 in 2030, and 10,000 in 2040- high numbers for a 2-lane road. Again, this corridor will provide a critical connection between

communities across the Virgin River, in close proximity to an interchange on the Southern Parkway.

c. Circulation

Currently, regardless of their origin or destination, trips to Purgatory have 5300 W. SR-9 as their only ingress and egress. With the development of Purgatory Road users will be able to arrive at and leave their destination in Purgatory via Washington Dam Road or SR-9. Purgatory Road will also serve as a convenient by-pass for some traffic that would currently use 300 East and Telegraph Street to reach their destination.

d. Facility Usage

There is immediate demand for this corridor of at least 1,000 cars per day. As previously stated, the development of this corridor will generate economic development, thus increasing the travel demand for this corridor above and beyond the background travel demand that will increase with population growth.

e. Level of Service

Purgatory Road will drastically increase the level of service during events at the Washington County Fairgrounds. There are plans for further expansion of event facilities at the Fairgrounds that would require the development of Purgatory road. Anyone who has attended the Washington County Fair on Saturday evening knows how horribly congested traffic gets in the area.

f. Environment

Environmental studies have been conducted along the corridor for other undertakings in the Purgatory Valley. Since the proposed corridor has been developed with utility transmission lines and access road, many environmental impacts have already been addressed and/or mitigated. Further development will not impose a significant impact. Additional environmental work will use the previous work as a springboard to complete the proposed undertaking more efficiently.