

**EXPLANATION OF CONSENT AGENDA ITEM E.1.c.(18) – April 15, 2015**

**ITEM:**

Consideration of approving an increase to P14455 to TranSystems to conduct a supplemental bald eagle nest survey of the alternate rail routes to coincide with the EIS for the KSC/CPA Rail Extension project in an amount not to exceed \$18,000.

**EXPLANATION:**

Background: TranSystems will conduct a supplemental bald eagle nest survey of the potential alternative alignments for the rail extension to the Port of Canaveral that was not covered by the recent bald eagle nest survey conducted by the Kennedy Space Center (KSC) on the center property and the Merritt Island National Wildlife Refuge (MINWR). For the land based alignments outside of the KSC/MINWR boundaries along with a 0.5 mile buffer, an aerial bald eagle nest survey will be conducted pursuant to the protocols used by the Florida Fish and Wildlife Conservation Commission [(FWC) Use of Aerial Surveys to Evaluate Bald Eagle Nesting in Florida, Nesbitt et al., 1990], and the U.S. Fish and Wildlife Service [(FWS) Raptor Survey Techniques, Chapter 4., Fuller and Mosher].

TranSystems will author press releases to ensure timely and accurate information is shared through multiple media outlets. A report of the survey results will be prepared TranSystems to include flight path of plane over the area searched, nest locations, and nest observations obtained during the aerial survey. To be billed on a time and material basis not to exceed \$18,000.

**Funding Review by Finance (Pat Poston):** The total NTE amount of \$18,000 is included in the FY15 Capital Budget and no increase is required.  
[Budget item 2235-Rail Connectivity]

**Staff Recommends Approval  
Prepared by Jim Dubea**

## **PORT CANAVERAL RAIL EXTENSION Project**

### **Supplemental Bald Eagle Nest Survey Methodology**

Environmental Services, Inc. (ESI) will conduct a supplemental bald eagle nest survey of the potential alternative alignments for the rail extension to the Port of Canaveral that was not covered by the recent bald eagle nest survey conducted by the Kennedy Space Center (KSC) on the center property and the Merritt Island National Wildlife Refuge (MINWR). For the land based alignments outside of the KSC/MINWR boundaries along with a 0.5 mile buffer, an aerial bald eagle nest survey will be conducted pursuant to the protocols used by the Florida Fish and Wildlife Conservation Commission [(FWC) Use of Aerial Surveys to Evaluate Bald Eagle Nesting in Florida, Nesbitt et al., 1990], and the U.S. Fish and Wildlife Service [(FWS) Raptor Survey Techniques, Chapter 4., Fuller and Mosher]. The specific methodology for this survey is described below.

In order to obtain complete coverage of the survey area, the aerial survey will be conducted in a fixed-wing aircraft (Cessna 182) searching in 800 meter wide strips to systematically cover the complete search area. Two ESI biologists (Gary Howalt, 37 years of experience, and Shannon Julien, 21 years of experience) will be responsible to scan a 400 meter wide strip on either side of the plane for signs of nests in trees and birds in the air. The pilot's responsibility is to help plot the survey route (see attached flight path) and fly the plane. A third party observer from ICF International will also accompany the ESI survey team on the aircraft for the survey. The width of the search strip may be reduced during the survey if field conditions dictate such to ensure that the observers are confident in the accuracy of the survey results.

The aerial survey will be conducted between 2 hours after sunrise and 2 hours before sunset to optimize visibility and avoid shadows and low light intensity. The airspeed for the survey will be 60-80 knots at an altitude of 1000 feet (300 meters). The flight path over the survey area will be recorded by GPS. If nests are spotted by the observers, the nest positions will be located by the "X Marks the Spot" system developed by Dr. Paul Kubilis of FWC. The "X Marks the Spot" system consists of flying over the nest from separate directions at an angle of greater than 60 degrees and marking a waypoint over the nest on the GPS with each pass.

Once a nest is observed and located, the altitude of the plane will be reduced to 300-500 feet (90-150 meters) to circle the nest in order to obtain data on each nest. The circling plane will maintain a distance of 1000 feet or greater from the nest in order to avoid disturbing the nest. The data obtained for each nest will include:

1. date,
2. observer,
3. nest number,
4. latitude and longitude,
5. status of nest (active, inactive, destroyed, etc.),
6. species of nest tree,
7. condition of nest tree (alive, dead, damaged, etc.), and
8. observations of bird activity (presence of adults, incubation, etc.).

A report of the survey results will be prepared by ESI to include flight path of plane over the area searched, nest locations, and nest observations obtained during the aerial survey.

**ESI cost is \$18,000 maximum, to be billed on a time and materials basis.**