### Lee County MPO Rail Feasibility Study Contract 2012-001



## **Technical Report**

# **Inventory of Existing Seminole Gulf Railway Corridor**

July 29, 2013

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#### 1. Report Summary

David Douglas Associates, Inc. (DDAI) performed services pertaining to the collection of data for existing physical inventory, rail corridor width and rail bed, as well as existing utilities within the Seminole Gulf Railway Rights-of-Way. DDAI's research included coordinating with the President of Seminole Gulf Railway (SGLR), field inspections at all major traffic crossings at major streets, and participating in a Hi-Rail trip to view the entire rail corridor.

Plan exhibits were prepared for the entire corridor identifying the above. Rights-of-Way (ROW) data were compiled from the Lee County Property Appraisers GIS data files and the Seminole Gulf Railway (SGLR) Valuation (Val) maps. Key elements, such as, drainage, utilities, crossings, rail spurs and additional miscellaneous items were noted and included on the exhibits for reference during the collection of data. The exhibits are in a separate,  $11'' \times 17''$  plan sheet set labeled "Rail Feasibility Study – Aerial Maps for Lee County MPO from Collier County to Charlotte County" dated July 29, 2013.

Also, the variation in rail ROW width is illustrated on a two-page map exhibit at the end of this report.

#### 2. Collection of Existing Physical Inventory Data

This report presents the findings and conclusions identifying the existing physical inventory for the Seminole Gulf Railway (SGLR), as part of the Lee County MPO Rail Feasibility Study. DDAI performed field inspections of the rail Rights-of-Way (ROW) for the collection of existing physical inventory data, rail corridor width, existing rail bed and utilities. The data collected was represented on plan exhibits, which are not intended to be survey accurate. The ROW data collected and represented in the plan sheet exhibits have been obtained from the Lee County Property Appraisers GIS inventory and Valuation (Val) Maps supplied by SGLR.

- The study area, as represented in the aerial plan exhibits, included the rail ROW from the northern Lee County line to approximately 1.5 miles south of the Lee County line in northern Collier County.
- DDAI also obtained the Valuation (Val) Maps from SGLR to help ensure the completeness of the rail ROW data.
- DDAI performed a visual inspection of the entire rail corridor on November 27, 2012 through a Hi-Rail trip with representatives of SGLR and HDR Engineering that viewed the entire rail corridor from south to north. The rail inspector for SGLR provided historic information as it pertained to the existing rail corridor.

#### 3. Rail Corridor Width

Based on information obtained from the Lee County Property Appraisers GIS and the SGLR Valuation (Val maps), the Rights-of Way (ROW) for SGLR vary in width throughout the corridor. As shown in the two-page map at the end of this report, the ROW width varies from 40' to approximately 200'.

- South Lee County and Northern Collier County The ROW in this area is fairly consistent averaging 130'.
  - This area typically provides adequate distance on either side of the rail bed to provide for a 24 foot, two-lane, two-way roadway with associated shoulders and swales for drainage. However, this portion of the rail is heavily wooded in some areas and provides for linear drainage infrastructure requiring clearing and/or relocation of the drainage conveyance systems. Additionally, the Imperial River is located within this area. A bridge structure would be required as well.
  - This portion of the SGLR mainline (approximately 2,000 linear feet (If) south of Old US 41 to the south side of Estero Parkway) also provides adequate distance on either side (east or west) for a 24 foot, two-lane, two-way roadway with associated shoulders and swales for drainage. Again, due to the rural nature of this area, both the east and west side of the rail bed will need to be cleared for development of a transit system.
- Middle portion of Lee County Throughout the middle portion of Lee County, mainly the industrial areas, the ROW varies between 97' and 159'.
  - North of Estero Parkway, the ROW reduces to approximately 130 lf. While this provides adequate distance for a 24 foot, two-lane, two-way roadway, the center line of the rail bed appears to be offset to the east, therefore providing for the west side of the ROW to be utilized. Within this area are several minor roadway crossings including golf cart crossings at Estero Country Club at the Vines. Also a creek crossing is within the Vines Country Club and will need to be addressed on either the east or west side. Additionally, this area is heavily vegetated and will require clearing for constructing a transit system.
  - North of Alico Road, the ROW is between 183 If and 199 If for approximately 2,000 If. This area offers the best opportunity for infrastructure on the west side of the ROW. East of the rail bed is limited to approximately 40 If in width, is wooded and would require a canal/ditch crossing. North of this area, the ROW reduces back down to a fairly consistent width of 97 If to 159 If, widening to approximately 199 If south of Daniels Parkway. This stretch of the rail ROW is again heavily wooded and has several canal crossings.
  - North of Daniels Parkway, the ROW is approximately 167 lf, but quickly drops to 140 lf north of Crystal Drive, and then to less than 100 lf. This area typically consists of industrial development with several spurs located along the east side.
  - North of Landing View Drive, the ROW is 100 lf. The main SGLR yard is located north of this road on the east side. The ROW from this area north is consistently 100 lf and cleared. However, there are many spurs providing rail service to the adjacent heavy industrial developments. It should be noted that the ROW increases in width north of Hanson Street to 130 lf. In this area, the rail bed is off center and located to the west, which would not allow the development of transit infrastructure, including a one-way roadway, paved shoulder and drainage swales. This area is considered heavy industrial and includes many crossings for both access to storage yards and city roadways. Finally, the rail

ROW is immediately adjacent to Evans Avenue on the east side of this one-way, northbound only road and has very minimal ROW.

- North of Dr. Martin Luther King Jr. Boulevard, the ROW curves to the east north of Palm Beach Boulevard (SR 80), extends easterly to Royal Palm Park Road, and then turns north to the Caloosahatchee River. The ROW in this area is very limited. Distances range from 40 If to 101 If at Michigan Avenue. East of Michigan Avenue the ROW is inconsistent. The ROW ranges from approximately 101 If to 75 If to 94 If west of Prospect Avenue. The ROW is typically cleared on both sides of the rail bed. The ROW in this area is bordered by residential structures and is considered East Fort Myers.
- Northern Portion of Lee County This ROW is fairly consistent with the average width being between 80' to 120'.
  - The Northern Portion of the rail system (for purposes of this report) begins on the south side of the Caloosahatchee River. The rail crosses the river through a series of bridges and upland rail on the islands. North of the Caloosahatchee River, the ROW ranges from 101 If along Tressel Road to south of Bayshore Road where the ROW is approximately 118 If. The ROW is basically cleared and consists of several spurs north and south of Bayshore Road providing service to the Bayshore Industrial Park.
  - North of Bayshore Road and Bayshore Industrial Park, the rail ROW continues north through undeveloped land. Most of the land is state owned. This area is heavily vegetated along the east and west side. Finally, there are several water crossings for offsite drainage flows, presumably from the I-75 drainage system, allowing drainage flows to the west.

#### 4. Existing Inventory

Throughout the entire corridor, Wyes and turnouts have been identified and superimposed on the aerial plan exhibits per Rail Mile Post references and data obtained from SGLR inspection reports. These reports were used for inspecting the rail corridor in conjunction with the Hi-Rail inspection. The Wyes and turnouts are specifically identified per the inspection reports to remain consistent throughout the report.

Within the corridor there are three (3) spurs that are of particular importance.

- Alico Road (Baker Spur) This spur once extended easterly along the northern ROW of Alico Road to the dirt and rock mines east of I-75. At that time, the Baker Spur provided services to many industrial sites along the north and south ROW of Alico Road. This spur now ends west of Lee Road and has been abandoned further east.
- South of Hanson Street (House Track Spur) The House Track Spur extends easterly into Central Fort Myers. It is anticipated that the Lee County Intermodal Transfer Terminal may be located at the end of this spur near the Hanson Street/Veronica Shoemaker Boulevard intersection.

• South of Dr. Martin Luther King Jr. Boulevard (West Stem / News-Press Spur) – The spur, located south of the intersection of Dr. Martin Luther King Jr. Boulevard, extends to the west along the south side of Dr. Martin Luther King Jr. Boulevard to the News-Press facility. Previously, the spur delivered supplies to the News-Press for printing.

It should be noted that these spurs were not included in the referenced Hi-Rail trip.

DDAI also performed field inspections and observations at all intersection crossings within the corridor to identify the type of rail crossing. The types of crossings were referenced to the Florida Department of Transportation Railroad Grade Crossings, Design Standards. Additionally, they have been identified on the aerial plan exhibits and typical design sheets.

#### 5. Existing Rail Bed

DDAI performed field inspections to obtain the general location of the rail bed in relation to the ROW. In general, the location of the rail bed is typically in the center of the rail ROW when the width is fairly consistent. In areas where the ROW varies a substantial amount, the location may be offset to some degree. The location of the rail bed has been validated based on field observations, Val Maps and the Lee County Property Appraisers GIS.

A typical section exhibit is included with the aerial plan sheets in the separate report titled "Rail Feasibility Study – Aerial Maps for Lee County MPO from Collier County to Charlotte County."

#### 6. Utilities

DDAI conducted research to obtain existing utility information from Seminole Gulf Railway (SGLR). SGLR identified that there is a Fiber Optic Cable (FOC) within their corridor throughout the majority of Lee County. Unfortunately, As-Built plans were not available to confirm line size and type information. DDAI performed a field visit and measured the location based on the rail and identification markers for the FOC. It should be noted that the FOC is located approximately 10 feet from the western edge of the rail track. This information was later confirmed through the Hi-Rail trip and verbal confirmation with the SGLR representative.

Additionally, based on field observations and review of Lee County and City of Fort Myers Electronic As-Built information, the majority of the intersection crossings (mostly east – west corridors) had typical infrastructure located within the ROW (i.e. Water, Sewer, Electric, Drainage, Communications). However, it should be noted that these utilities were within Florida Department of Transportation, Lee County and the City of Fort Myers ROW.

Also, it should be noted that, in the southern portion of the SGLR ROW, open drainage conveyance swales exist along the east and west sides. While the majority of these drainage systems directed offsite drainage flows to the north and south, there were several east-west conveyance systems to ultimately direct flow to drainage basins within Lee County. These crossings are noted on the plan. In the middle section of the rail corridor, the drainage conveyance systems consisted of a mix of open and closed systems. The closed drainage systems were associated with the more developed areas. Lastly, drainage in the northern portion of the rail corridor was noted to be general swales and ditches, which ultimately drain into the adjacent undeveloped properties.

Finally, based on field observations and the Hi-Rail Trip, there are some electric aerial crossings within Lee County. These are basically located within the developed areas.



