3.2 PATHWAY COMPONENTS

"Everglades has no single feature, no prominent point of interest now or ever. It is a mosaic of many things seen, smelled, heard and endured."

– *Daniel Beard, first superintendent of Everglades National Park, 1950*

Introduction

A path as complex and long as ROGG is made up of hundreds of individual components, each specially designed to meet a need, constraint or opportunity. For this feasibility study and master plan, these components have been developed through broad public involvement and input from public agencies with direct ownership and/or land management responsibilities within the ROGG Study Area.

Typical components are grouped by either location within the cross-section of the U.S. 41 ROW or by function of the component, i.e. trailheads, hubs and wayfinding. This section does not evaluate the feasibility of the individual component, however, most concepts were refined based on input provided by stakeholders and public agency review. The follow is a summary of pathway components documented in this section:

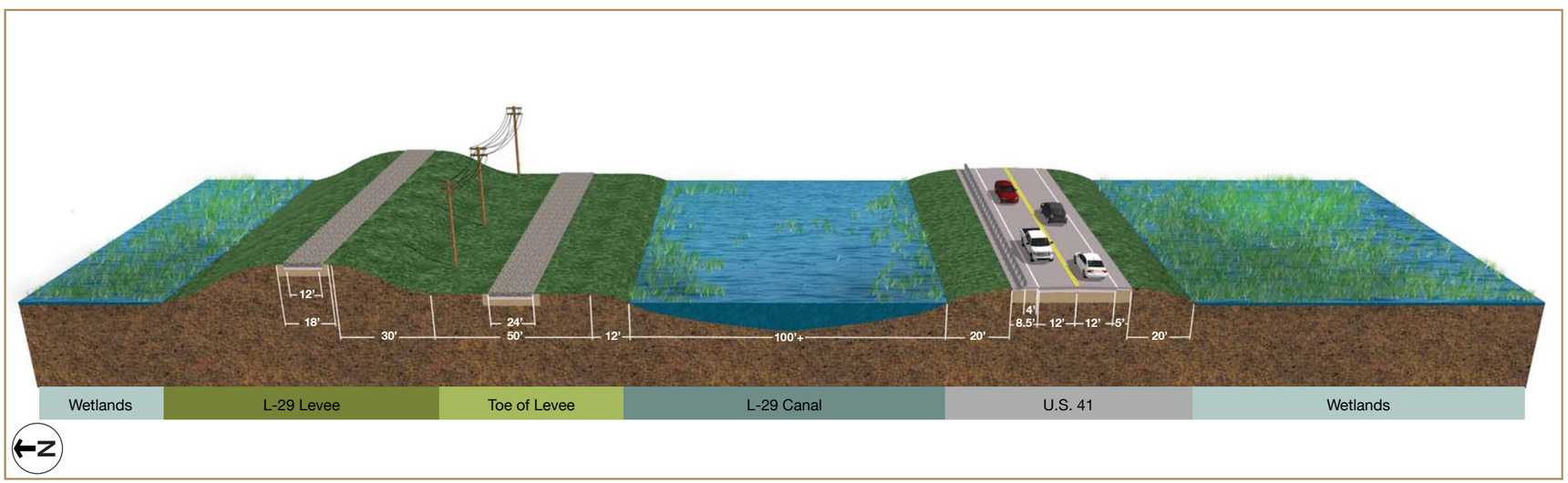
- **Typical Cross-Sections** – This section includes typical cross-sections of existing conditions found throughout the ROGG Study Area as well as 25 various concepts for locating ROGG within or parallel to U.S. 41 ROW.
- **Crossings** – This section provides typical plans of highway or driveway crossings applicable to conditions throughout the ROGG Study Area.
- **Trailheads** – This section provides typical plans for a hierarchy of trailheads that rely on existing or proposed facilities along U.S. 41.
- **Hubs and Gateways** – This section provides plans for typical hubs, multimodal hubs and gateways for conditions present along U.S. 41.
- **Wayfinding** – This section provides examples of pathway wayfinding per adopted standards for Miami-Dade County.

3.2.1 Existing Cross-Sections

Due to the complexity of the ROGG Study Area, cross-sections are the best tool to illustrate the unique existing conditions found in each segment of the study area with proposed concepts. Two primary categories of cross-sections are identified in this chapter: existing conditions, and conceptual.

Through wide variations of ROW width, existence of canal(s) and water flow restoration efforts, existing conditions throughout the 75-mile ROGG Study Area are vast and ever-changing. In order to summarize existing conditions, the planning team identified seven cross-sections that represent typical conditions found through the study area.

ROGG East - Existing Levee/ Canal Condition

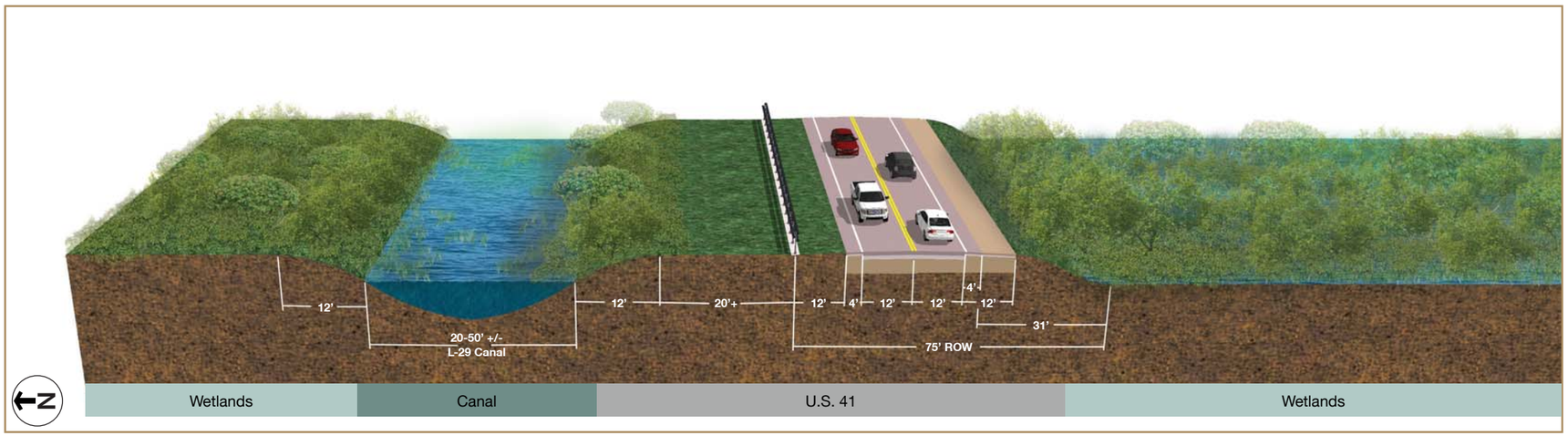


Existing Conditions Description

Represents typical conditions for approximately 11 miles of the eastern end of the ROGG Study Area, between Spillway S333/ ValuJet Flight 592 Memorial and L-30 Canal. The existing Levee/ Canal cross-section identifies the following elements:

- Constrained highway embankment of approximately 78 feet,
- Two 12' travel lanes with 5' shoulder on south side and 8.5' on north side with guardrail barrier,
- Designated wetland directly south of U.S. 41 embankment,
- 100'+ width canal directly north of the highway embankment,
- Toe of levee with a width of approximately 60'+ with a 24'+ wide publicly accessible gravel maintenance road and utility line directly south of levee,
- A levee (L-29) is located north of the utility line and has a 12' gravel road on top with public access.

ROGG East - Existing Canal/ Cable Barrier Condition



Existing Conditions Description

Represents typical conditions for approximately 6 miles of the ROGG Study Area between Shark Valley Entrance at Everglades National Park and Spillway S333/ ValuJet Flight 592 Memorial. The existing Canal/ Cable Barrier cross-section identifies the following elements:

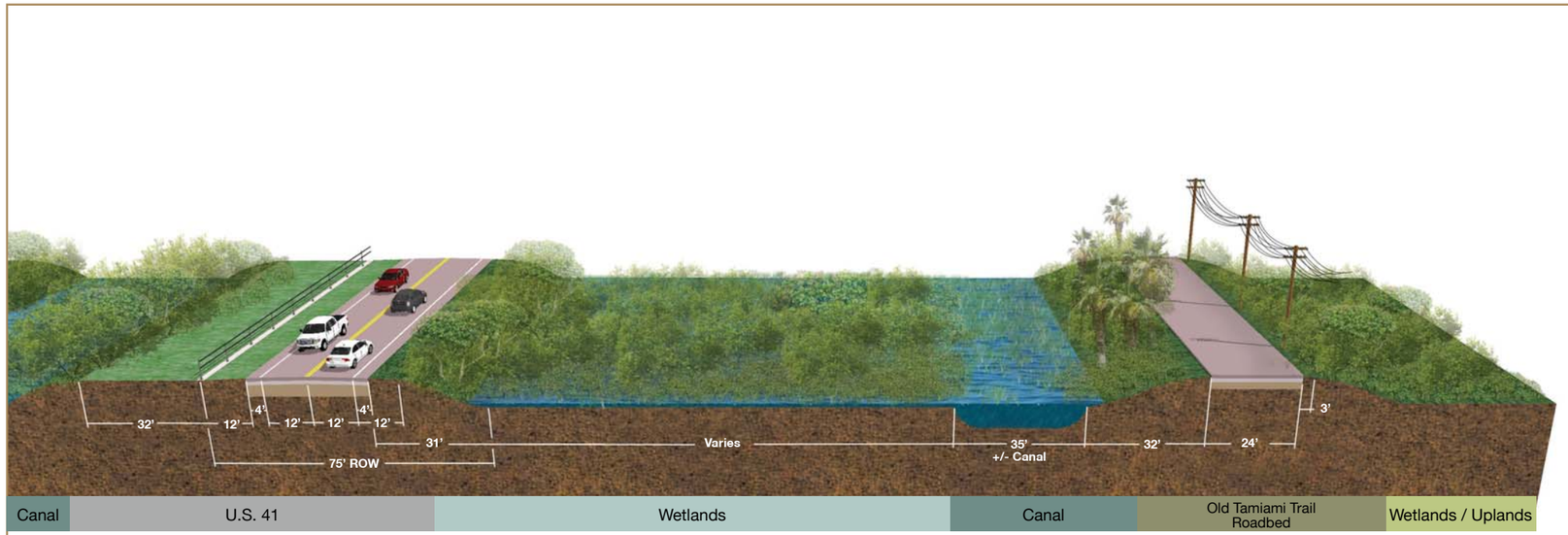
- Constrained U.S. 41 ROW of approximately 75 feet,
- Designated wetland directly south of U.S. 41 embankment,
- Two 12' travel lanes with paved 4' shoulders on north and south side,
- Stabilized gravel shoulder on south side used for informal parking near destinations,
- 50'+ width canal directly north of the highway embankment,
- 20' + wide maintained area between cable barrier and canal bank, north of U.S. 41 ROW.

ROGG East - Old Tamiami Trail Condition

Existing Conditions Description

Represents typical conditions for approximately 6.3 miles of the ROGG Study Area between Spillway S12B and Spillway S333/ ValuJet Flight 592 Memorial. The existing Old Tamiami Trail cross-section identifies the following elements:

- Separation from U.S. 41 and Old Tamiami Trail of approximately 350' with a mix of invasive and vegetative overgrowth,
- 24' + wide unmaintained Old Tamiami Trail roadbed,
- Utility line on south side of Old Tamiami Trail,
- Invasive and vegetative overgrowth along Old Tamiami Trail roadbed,
- 35'+ canal on north side of Old Tamiami Trail.

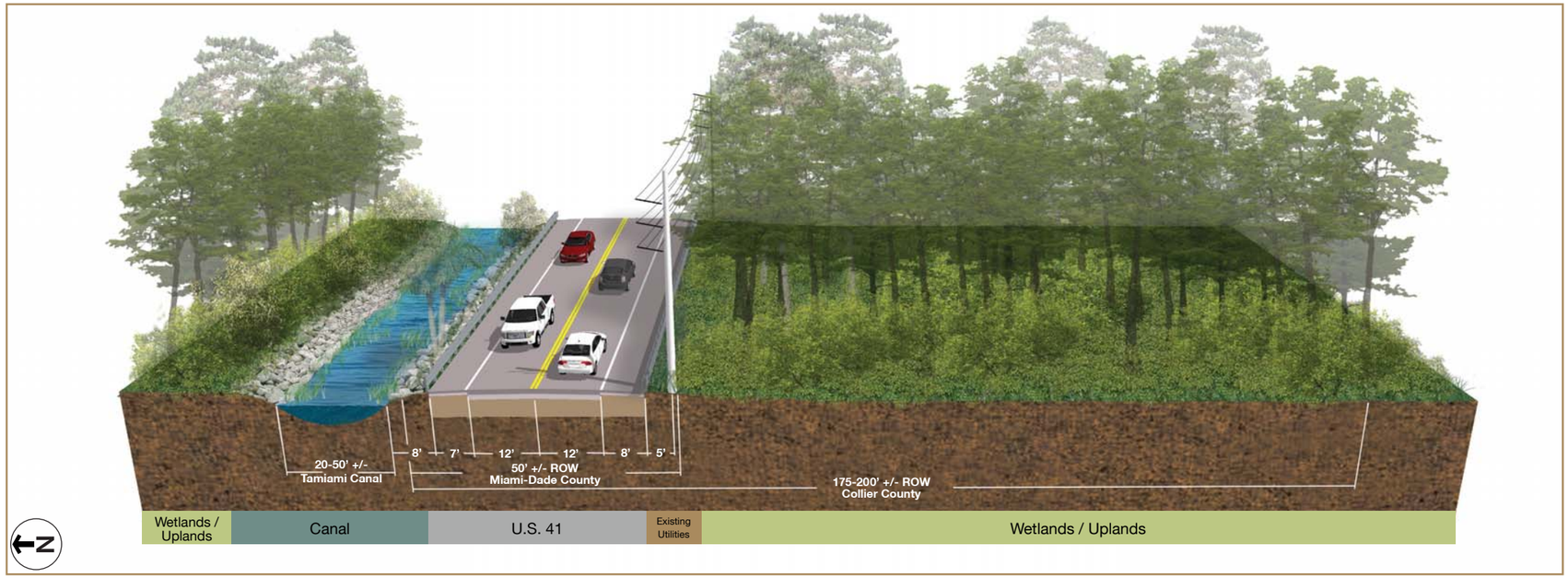


ROGG East and Central - Forty Mile Bend to BICY Oasis Visitor Center Condition

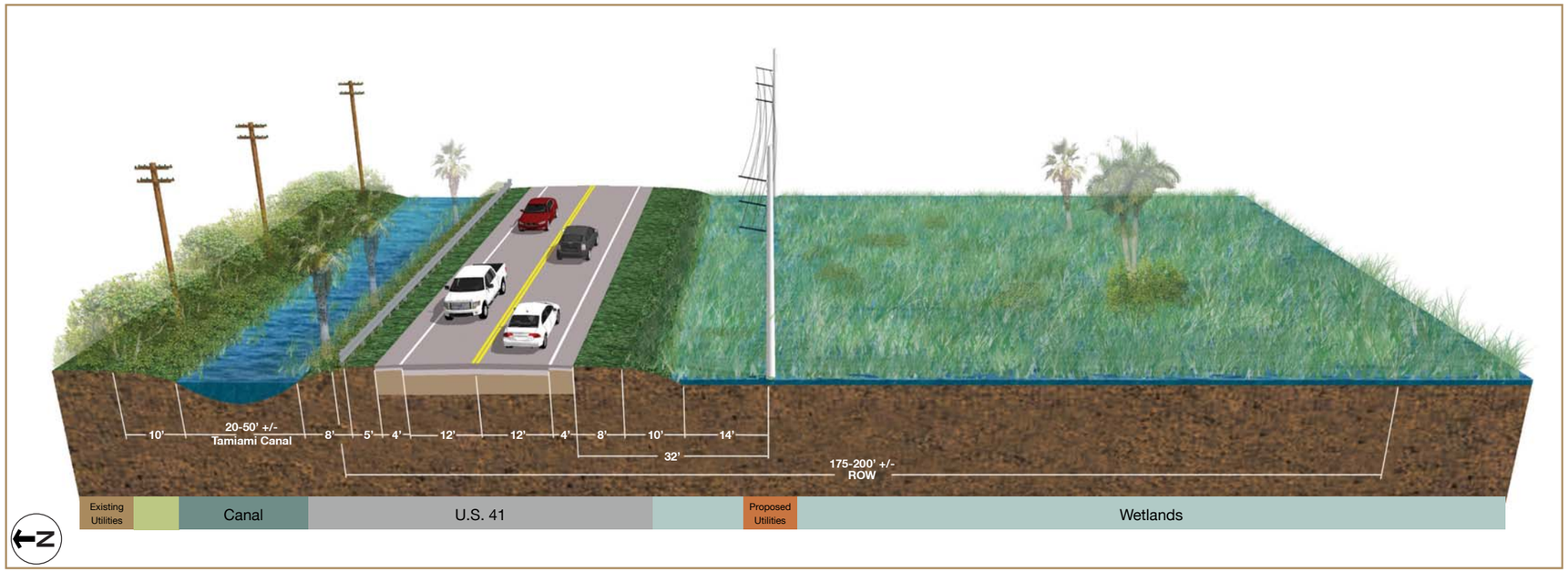
Existing Conditions Description

Represents typical conditions for approximately 15 miles of the ROGG Study Area between Forty Mile Bend and BICY Oasis Visitor Center with some additional conditions through cypress strands in ROGG Central and West. The existing Forty Mile Bend to BICY Oasis Visitor Center cross-section identifies the following elements:

- Constrained U.S. 41 ROW of approximately 50' in Miami-Dade County, expanding to 175'+ in Collier County,
- Two 12' travel lanes with 7-8' paved shoulders and guardrail barriers within Miami-Dade County and four foot shoulders and guardrail on canal side of U.S. 41 in Collier County.
- Utility line on south side of U.S. 41 ROW in Miami-Dade County,
- Approximate 8' foot canal bank between canal side guardrail and Tamiami Canal,
- 20'+ canal on north side of U.S. 41 ROW.



ROGG Central and West - Existing Canal and Marsh Condition

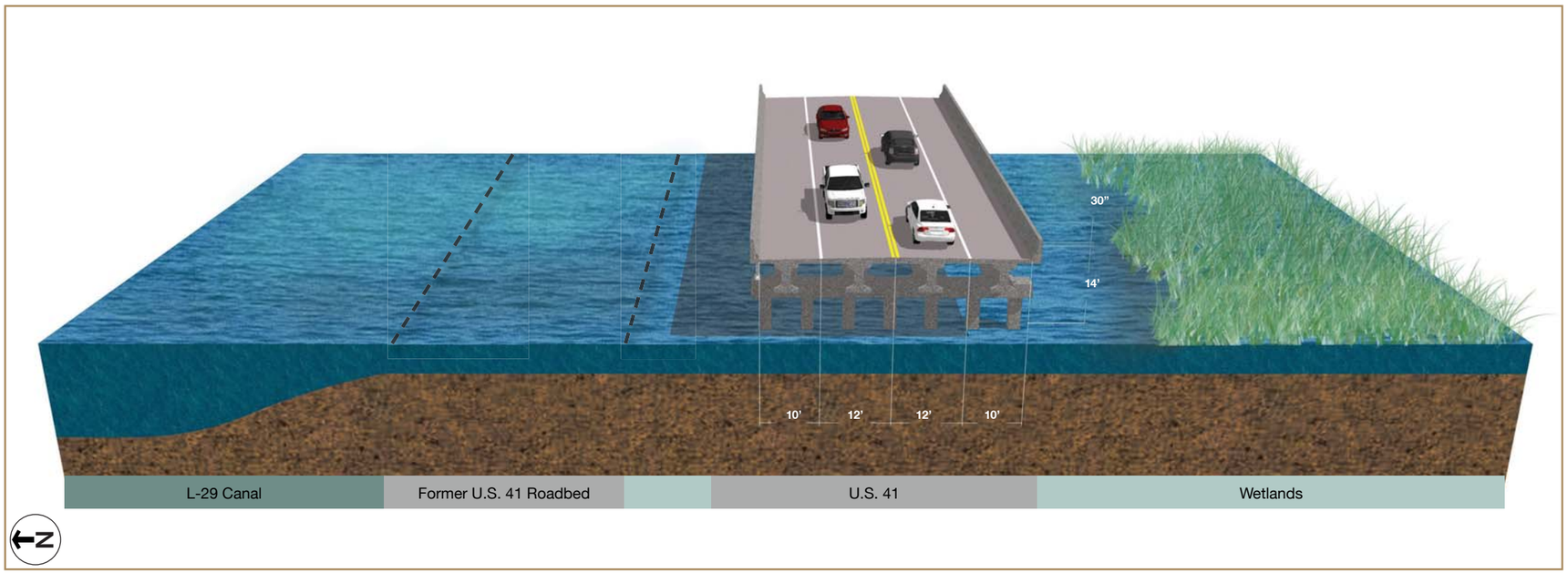


Existing Conditions Description

Represents typical conditions for approximately 35.5 miles of the ROGG Study Area between BICY Oasis Visitor Center to Corey Billie's Airboat Rides in ROGG West. This condition is typical mixed with the Forty Mile Bend to BICY Oasis Visitor Center conditions. The existing Canal and Marsh cross-section identifies the following elements:

- 175-200'+/- U.S. 41 ROW throughout Collier County,
- Two 12' travel lanes with 4' shoulders and guardrail on canal side of U.S. 41,
- Utility line on north side of Tamiami Canal from ROGG West to Eleven Mile Road, proposed to be removed,
- Proposed utility line on south from S.R. 29 to Eleven Mile Road, 32' maximum from edge of U.S. 41,
- Approximate 8' canal bank between canal side guardrail and Tamiami Canal,
- 20'+/- canal on north side of U.S. 41 ROW.

ROGG East - Existing 1.1 Mile Bridge Condition



Existing Conditions Description

Represents typical conditions for approximately 1.1 miles at the location of the existing 1.1 Mile Bridge. The existing 1.1 Mile Bridge cross-section identifies the following elements:

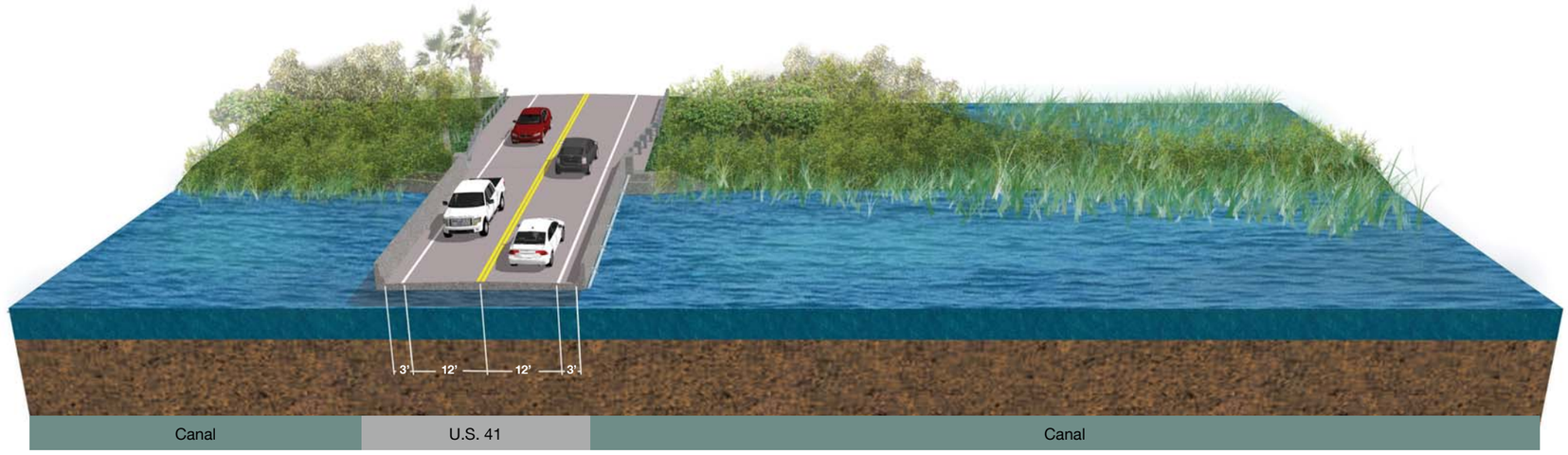
- Current conditions for 1.1 mile bridge of the Mod Waters Project,
- Two 12' travel lanes with ten foot shoulders,
- Located directly south of former U.S. 41 roadbed,
- L-29 Canal adjacent to former U.S. 41 roadbed.

ROGG Central and West - Existing Bridge Condition

Description

Represents typical conditions for approximately 72 bridges and culverts throughout ROGG Central and West as well as similar conditions for 4 water control structures (S12) in the ROGG East area. The existing Bridge cross-section identifies the following elements:

- Narrowest existing conditions for entire Study Area,
- Two 12' travel lanes with three foot shoulders,
- Bridges are typically located in northern 1/4 of U.S. 41 ROW,
- Bridges in ROGG Central recently renovated with new curbs and guardrails on edges,
- Bridges cannot support cantilevered path due to construction type,
- Bridges are typically 50-100' in length.



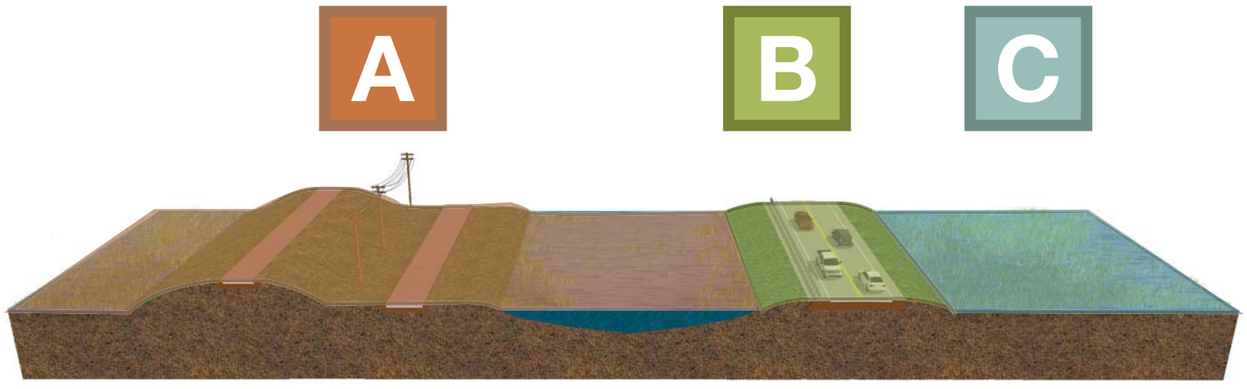
3.2.2 Conceptual Cross-Sections

As in the existing conditions, the conceptual cross-sections are not intended to be applied as one type of path development across the entire 75 miles, but instead applied to a specific condition and location. To this end, the conceptual cross-sections are presented in three categories, shown below; A) Levee and Canal, B) Highway and Shoulders, C) Separated Path.

All conceptual cross-sections are analyzed for feasibility in Section 3.3 of this study.

Location of Path Alternatives

A. Levee and Canal
B. Highway and Shoulders
C. Separated Path



Existing Conditions with Locations of Trail Alternatives

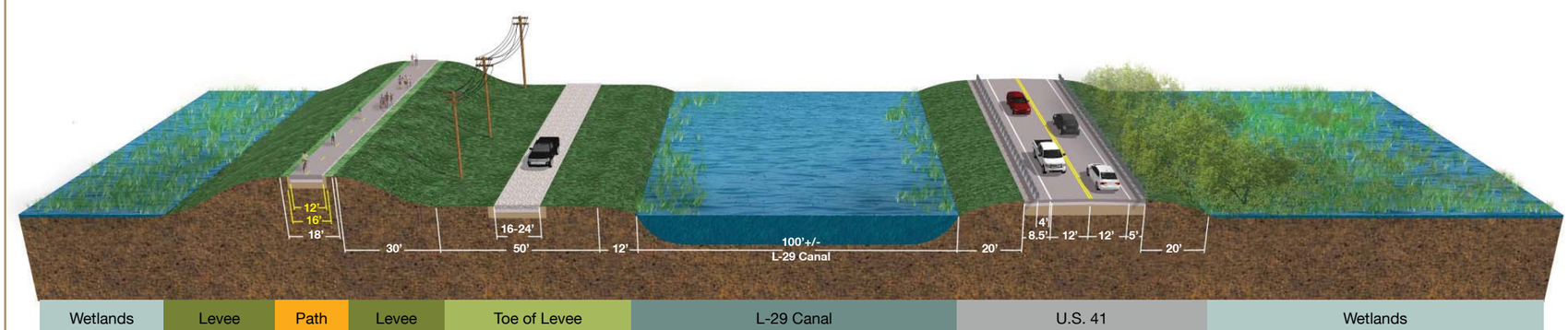
Conceptual Cross-Sections

A Levee and Canal Typical Cross-Sections

Type 'A' typical cross-sections focus on concepts involving the L-29 or Tamiami Canals and areas north of the canal.

Path on Top of Levee

A1



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

The 'Path on Top of Levee' concept is applicable primarily in the ROGG East area and includes the following elements:

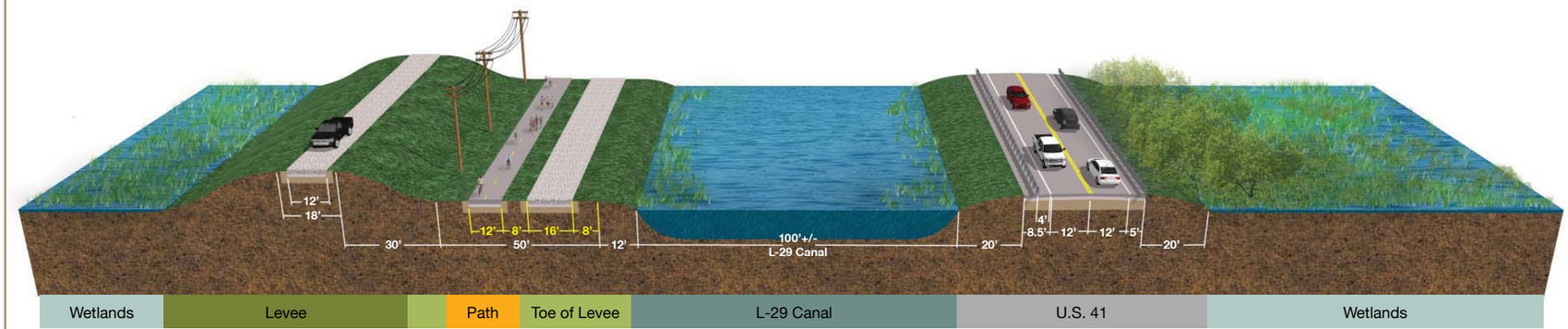
- 12' hard-surfaced shared-use path located on top of existing levee,
- 2' stabilized sholders on either side of path,
- Separation of primary public motorized-vehicle traffic to toe-of-levee maintenance road,
- Typically provides unobstructed views of the surrounding landscape and provides maximum separation of pathway users from traffic on U.S. 41.

Feasibility Notes:

- SFWMD generally does not approve hard-surface pavement for levee top paths/trails due to increased maintenance needs,
- Few connection points between levee and U.S. 41,
- Public motorized vehicles may prefer to drive on path.

Path on Toe of Levee

A2



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

The 'Path on Toe of Levee' concept is applicable primarily in the ROGG East area and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path located at toe of existing levee,
- 2' stabilized shoulders on either side of path,
- Separation of primary public motorized-vehicle traffic to top-of-levee maintenance road and adjacent 16' gravel maintenance road,
- 8' spatial separation between path and adjacent maintenance road,
- Provides a high-level of separation from U.S. 41 traffic.

Feasibility Notes:

- Few connection points between levee and U.S. 41,
- Public motorized vehicles may prefer to drive on path as paved surface is smoother than gravel maintenance road.

Path on North Side of Canal

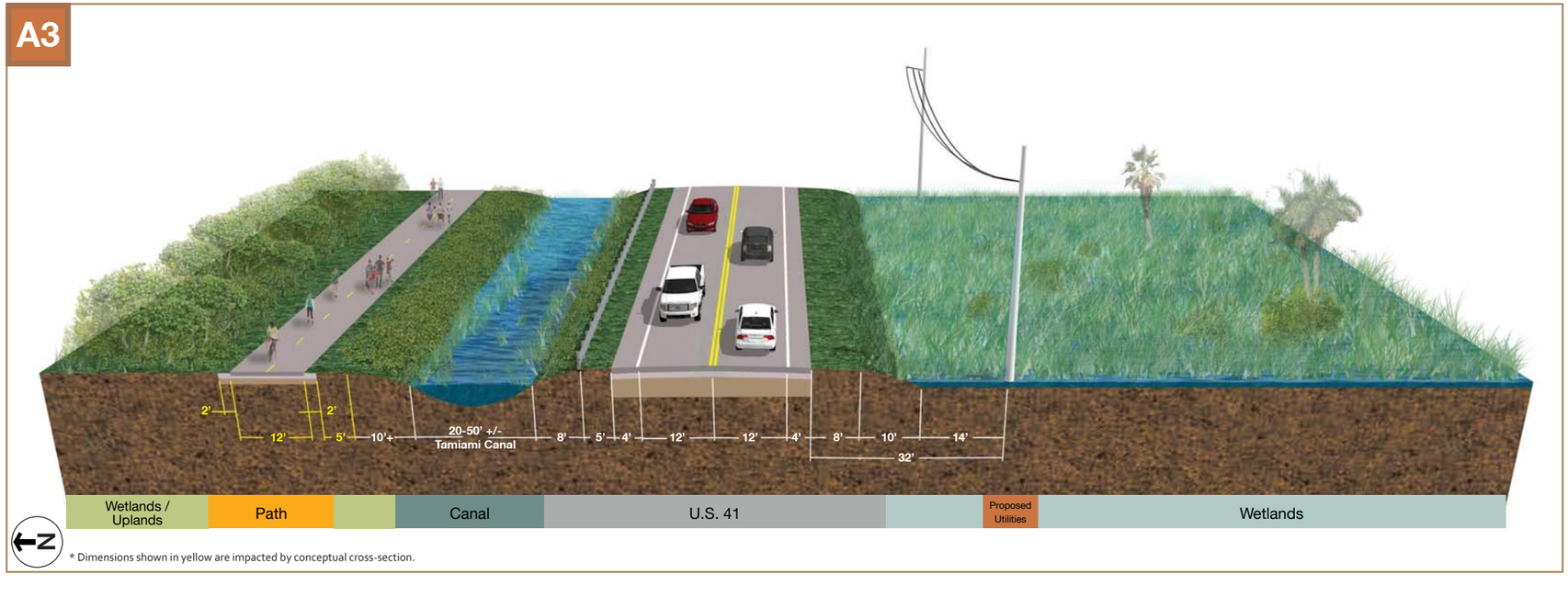
Description

The 'Path on North Side of Canal' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path located on north side of existing Tamiami Canal,
- 2' stabilized shoulders on either side of path,
- Minimum 15 foot spatial separation between path and Tamiami Canal,
- Potential for a high-level experience for users due to proximity to Tamiami Canal,
- Provides a high-level of separation from U.S. 41 traffic.

Feasibility Notes:

- Few connection points between path and U.S. 41,
- Existing utility lines run in approximate route,
- Extensive invasive and vegetation overgrowth exists,
- May have significant impact on designated wetlands were new fill or berming is required.



Floating Boardwalk Path

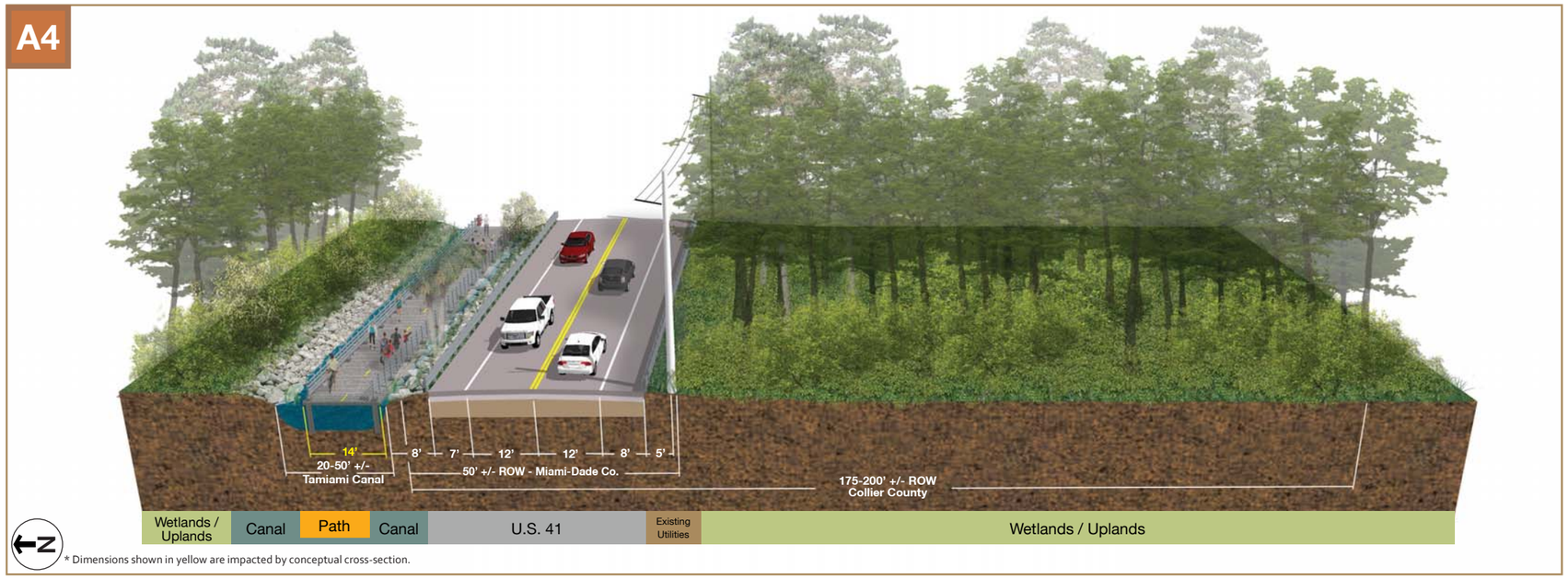
Description

The 'Floating Boardwalk Path' concept is potentially applicable in select areas and includes the following elements:

- 14' hard-surfaced non-motorized shared-use floating path located on existing Tamiami Canal,
- 2' shy-zone on canal side of path,
- Floating boardwalk would raise and lower depending upon seasonal and tidal flow of Tamiami Canal,
- Provides a high-level of separation from U.S. 41 traffic.

Feasibility Notes:

- Few connection points between path and U.S. 41,
- Extensive invasive and vegetation overgrowth exists,
- Seasonal and/or tidal water levels and driveway crossings may present significant design challenges,
- May have significant impact on canal conditions due to shadowing effect of boardwalk,
- Construction, though minimized due to boardwalk design, may have significant impact on canal and would require use of railing on both sides of path.

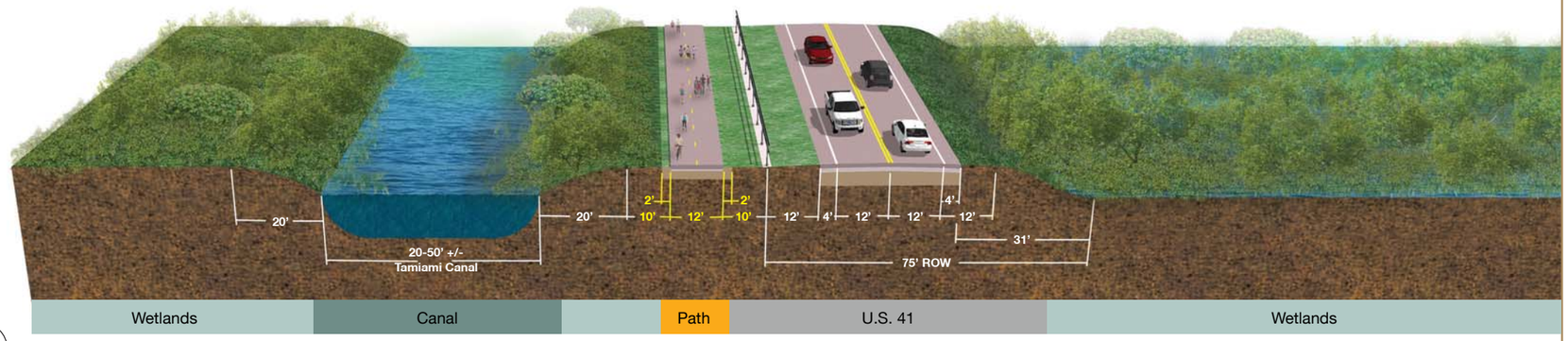


B Highway and Shoulder Typical Cross-Sections

Type 'B' typical cross-sections focus on concepts involving the U.S.41 embankment and bridges.

Path Between Cable Barrier and Canal

B1



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

The 'Path Between Cable Barrier and Canal' concept is potentially applicable in ROGG East and includes the following elements:

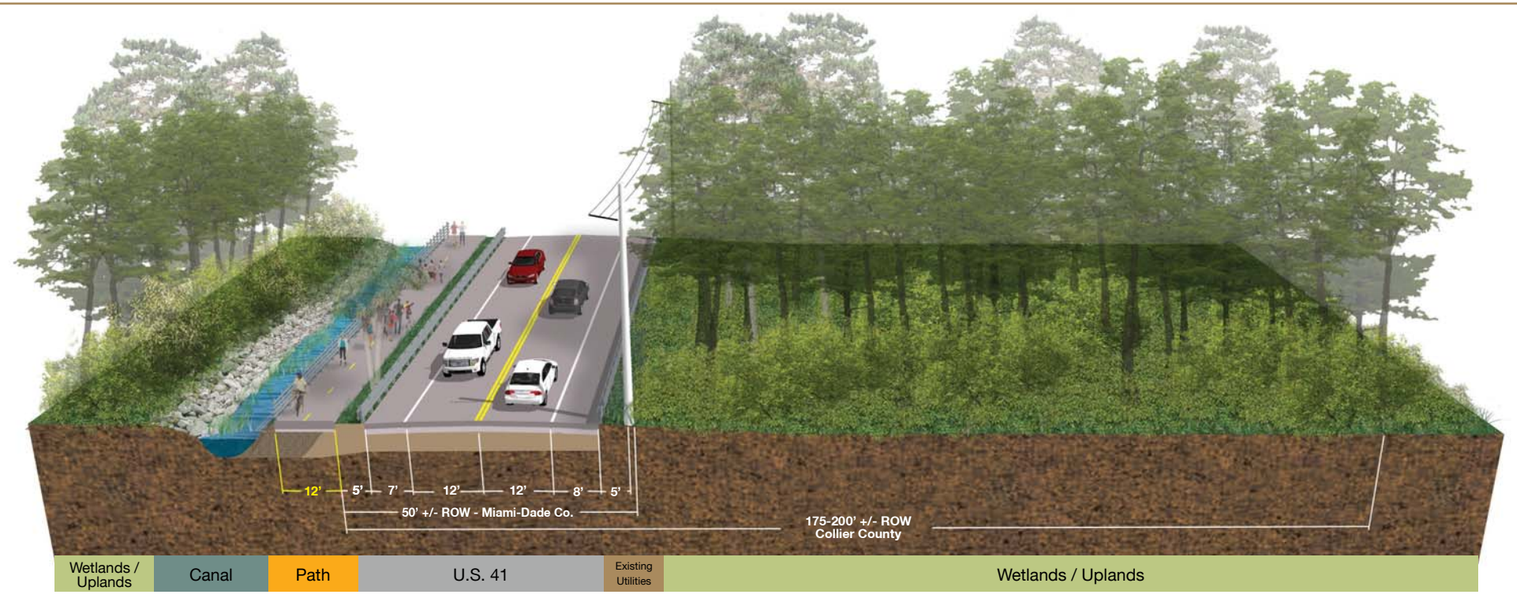
- 12' hard-surfaced non-motorized shared-use path between existing cable barrier and Tamiami Canal,
- 2' stabilized shoulders on either side of path,
- Spatial allowance for minimum meandering of pathway,
- Provides a medium-level of separation with spatial and physical barrier from U.S. 41 traffic.

Feasibility Notes:

- Few connection points between path and U.S. 41,
- Few opportunities for new trailhead or rest areas/stops without impact to cable barrier,
- Design challenges for private properties, mostly airboat vendors primarily west of the Shark Valley Entrance at Everglades National Park.

Path on Partially Filled Canal

B2



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

The 'Path on Partially Filled Canal' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path on partial fill within Tamiami Canal,
- Provides a high-level experience for users with opportunities for up-close observation of Tamiami Canal,
- Provides a medium-level of separation with physical barrier from U.S. 41 traffic.

Feasibility Notes:

- Few connection points between path and U.S. 41,
- Few opportunities for new trailhead or rest areas/stops,
- Requires use of railing when adjacent to open water or drops greater than 30" in height,
- Potentially high cost of fill, railing and mitigation requirements due to impacts to Tamiami Canal,
- Design challenges for driveway and highway crossings connections.

Path on Sheet Pile Wall Adjacent to Canal

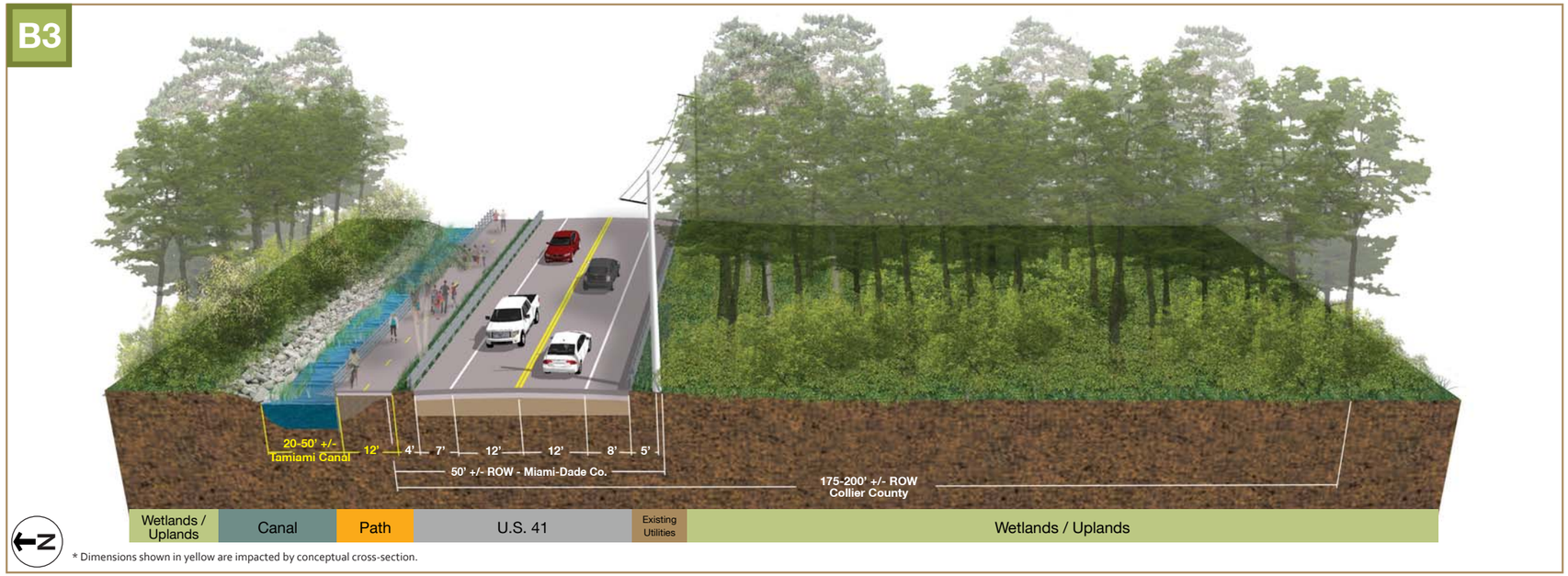
Description

The 'Path on Sheet Pile Wall Adjacent to Canal' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path on partial fill with sheet-pile wall within Tamiami Canal,
- Provides a high-level experience for users with opportunities for up-close observation of Tamiami Canal,
- Provides a medium-level of separation with physical barrier from U.S. 41 traffic.

Feasibility Notes:

- Few connection points between path and U.S. 41,
- Few opportunities for new trailhead or rest areas/stops,
- Requires use of railing when adjacent to open water or drops greater than 30" in height,
- Potentially high cost of fill, railing and mitigation requirements due to impacts to Tamiami Canal,
- Design challenges for driveway and highway crossings connections.



* Dimensions shown in yellow are impacted by conceptual cross-section.

Path Cantilevered on Sheet Pile Wall Adjacent to Canal

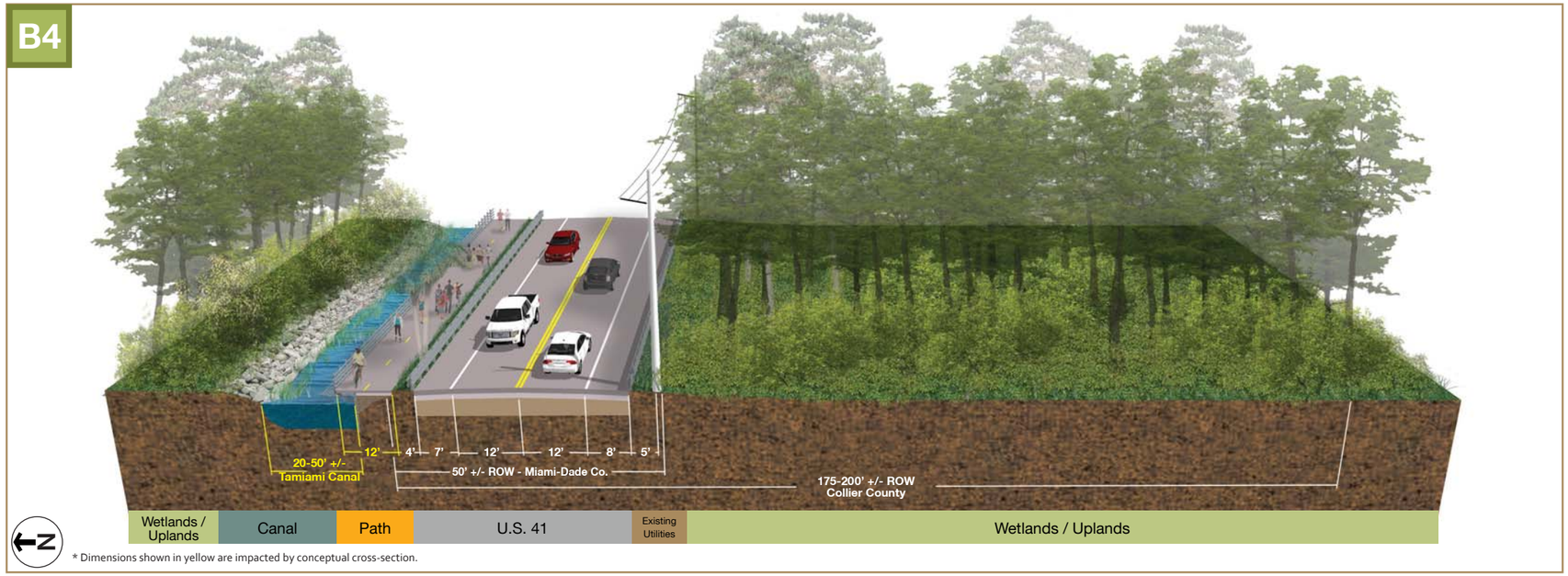
Description

The 'Path Cantilevered on Sheet Pile Wall Adjacent to Canal' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path cantilevered with sheet-pile wall within Tamiami Canal,
- Provides a high-level experience for users with opportunities for up-close observation of Tamiami Canal,
- Provides a medium-level of separation with physical barrier from U.S. 41 traffic.

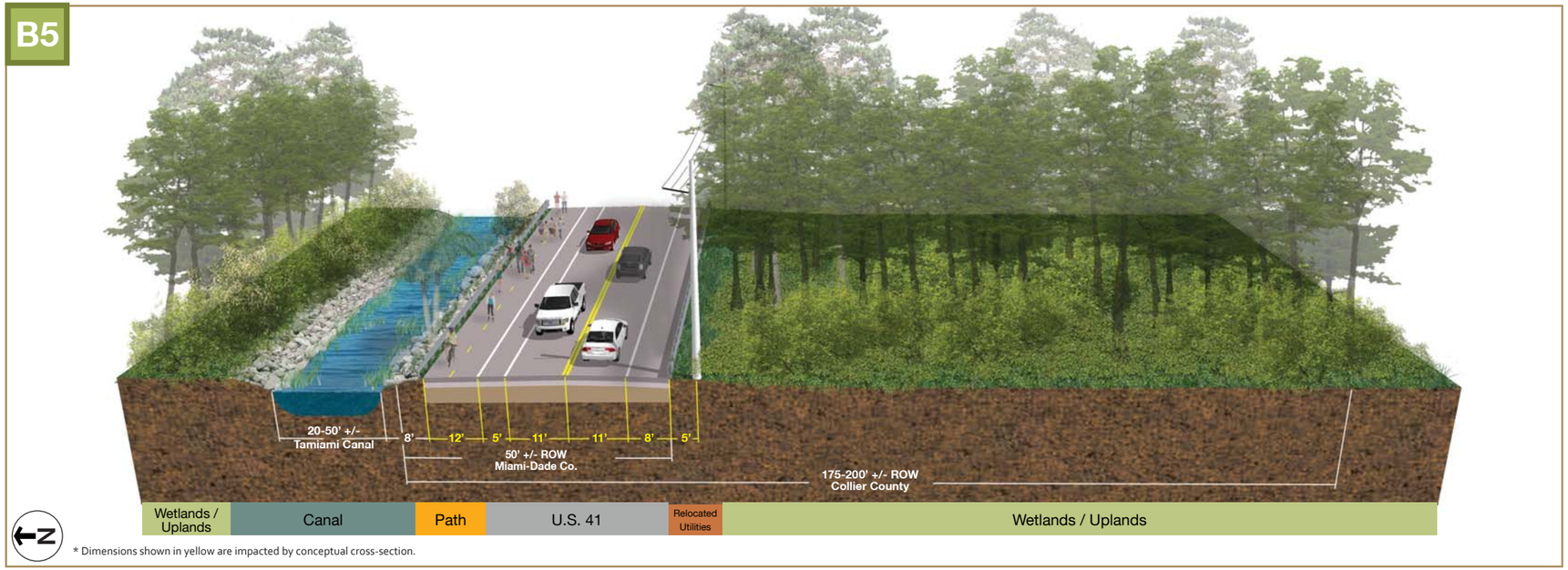
Feasibility Notes:

- Few connection points between path and U.S. 41,
- Few opportunities for new trailhead or rest areas/stops,
- Requires use of railing when adjacent to open water or drops greater than 30" in height,
- Potentially high cost of sheet pile , cantilevered trail and mitigation requirements due to impacts to Tamiami Canal,
- Design challenges for driveway and highway crossings connections.



* Dimensions shown in yellow are impacted by conceptual cross-section.

Path on North-side of Highway/ Lanes Shift



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

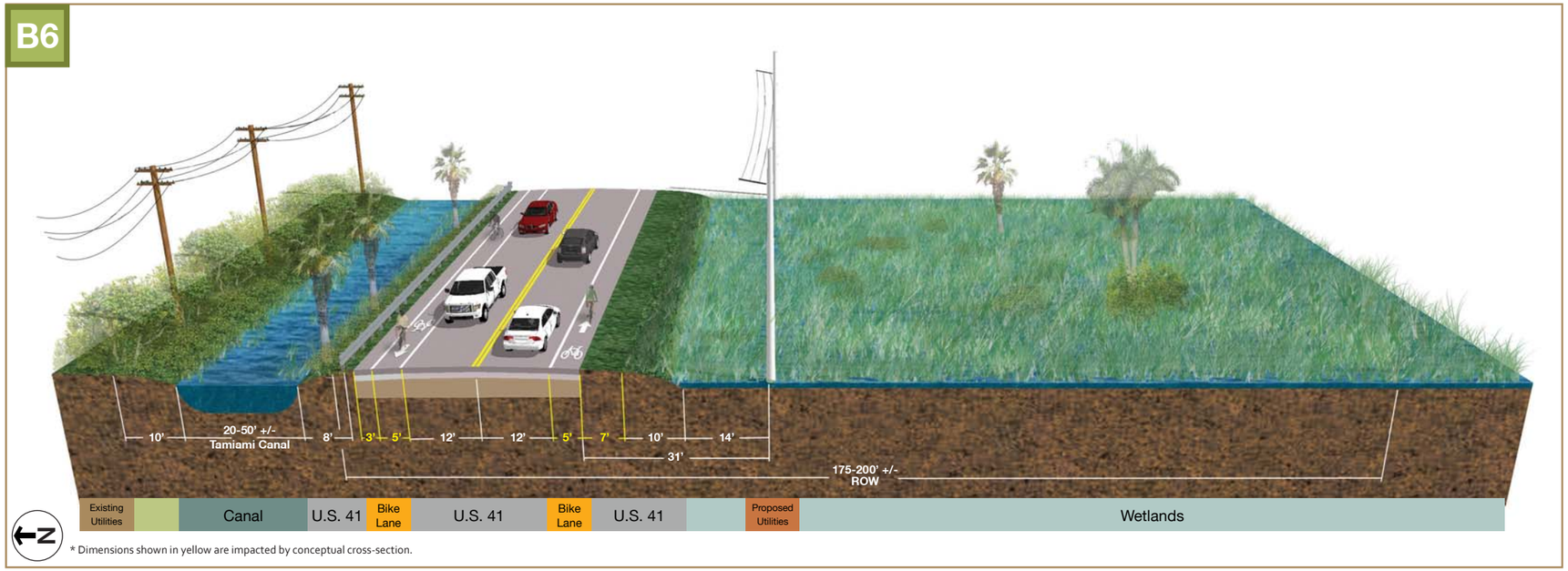
The 'Path on North-side of Highway/ Lanes Shift' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path on U.S. 41 located on north-side of highway,
- Provides a low-level experience for users highlighted by opportunities for close-up observation of the Tamiami Canal,
- Provides a low-level of separation with minimally required spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Requires variance approval from FDOT due to violation of PPM Section 8.6.10,
- Potentially high cost of expanding U.S. 41 roadbed by eight feet to the south-side and relocating existing utilities,
- Lack of ability to treat stormwater run-off from pathway and highway prior to entry into Tamiami Canal,
- Design challenges for driveway and highway crossings connections.,
- Creates additional width for wildlife to cross travel lanes adjacent to guardrail.

On-Road Bike Lanes



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

The 'On-Road Bike Lanes' concept is potentially applicable in select areas and includes the following elements:

- Minimum bike lanes located on U.S. 41,
- Provides a low-level experience for cyclist,
- Provides a low-level of separation with minimally required 5' bike lanes.

Feasibility Notes:

- Lacks pedestrian facilities,
- Bike lanes may be blocked by vehicles parking on shoulder of U.S. 41.
- Potential low cost of implementation for vast stretches of ROGG Study Area with one-foot expansion of existing paved shoulders,
- Significant constraints at existing bridges due to three-foot shoulders on bridges with a potentially high-cost of widening bridges.

Path on South-side of Highway/ Lanes Shifted

Description

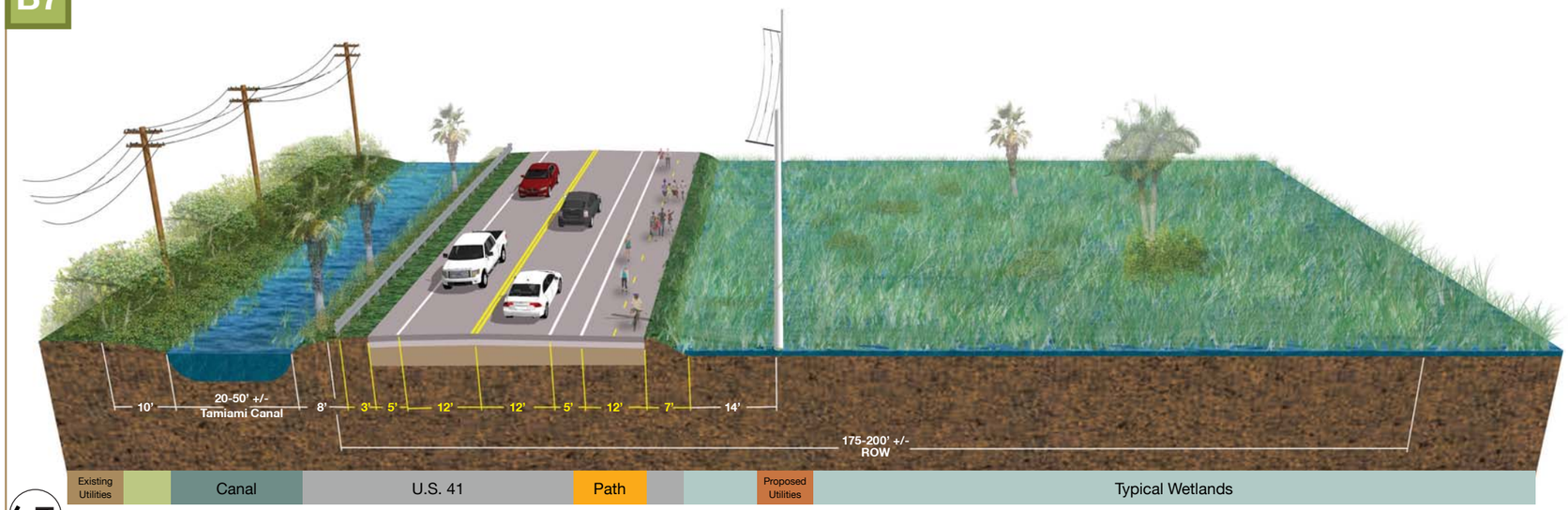
The 'Path on South-side of Highway/ Lanes Shift' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path on U.S. 41 located on south-side of highway,
- Provides a low-level experience for users highlighted by opportunities to observe open views to the south of highway,
- Provides opportunity to locate proposed new utility lines further from U.S. 41,
- Provides a low-level of separation with minimally required spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Requires variance approval from FDOT due to violation of PPM Section 8.6.10,
- Path may be partially blocked by vehicles parking on shoulder of U.S. 41, and impacts current practice of parking on shoulder of highway,
- Potentially low to medium cost of expanding U.S. 41 roadbed by eight feet to the south-side and relocating existing utilities,
- Design challenges for driveway and highway crossings connections.

B7



* Dimensions shown in yellow are impacted by conceptual cross-section.

Path on Steep Fill within Maintained ROW

Description

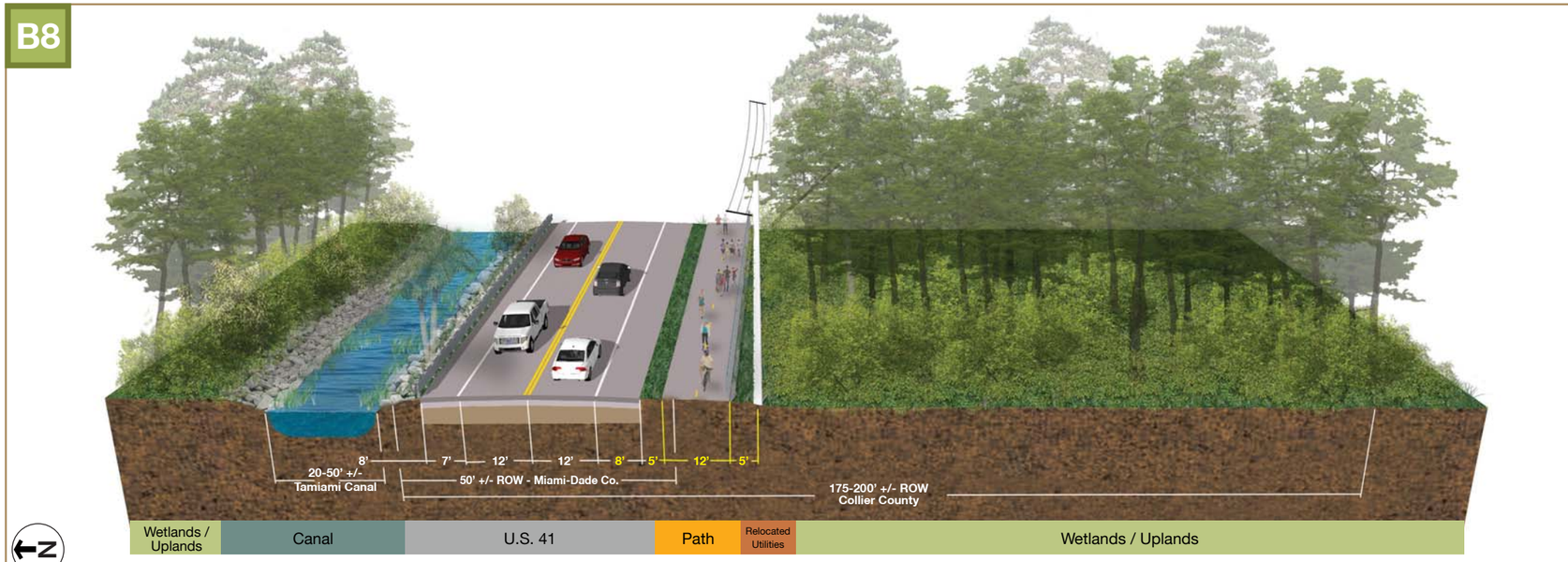
The 'Path on Steep Fill within Maintained ROW' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path on U.S. 41 located on south-side of highway,
- Provides a low to medium-level experience for users highlighted by opportunities to observe views to the south of highway,
- Provides a medium-level of separation with physical barrier separation from U.S. 41 traffic.

Feasibility Notes:

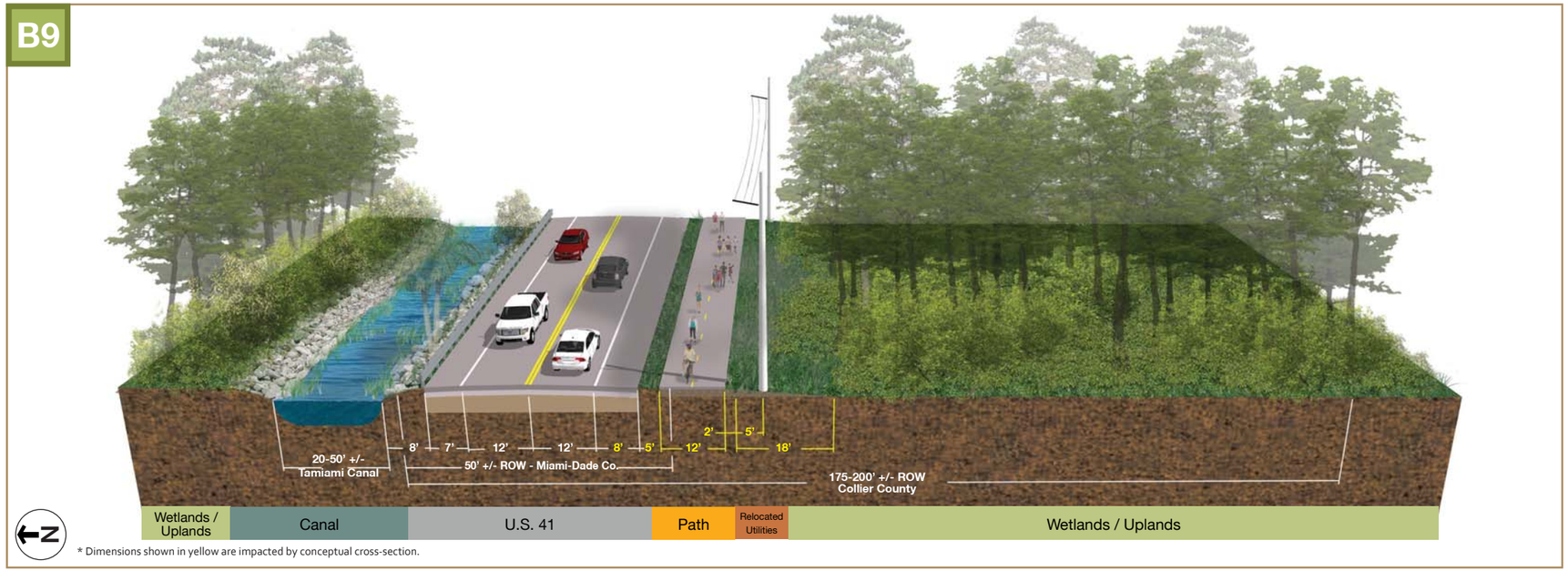
- Potential medium cost of relocating existing utilities
- Retaining wall and railing may be required if height from trail surface to existing grade exceed 30",
- Impacts current practice of parking on shoulder of highway,
- Maintenance impact of narrow grass strip,
- Design challenges for driveway and highway crossings connections.

B8



* Dimensions shown in yellow are impacted by conceptual cross-section.

Path on Expanded Shoulder



Description

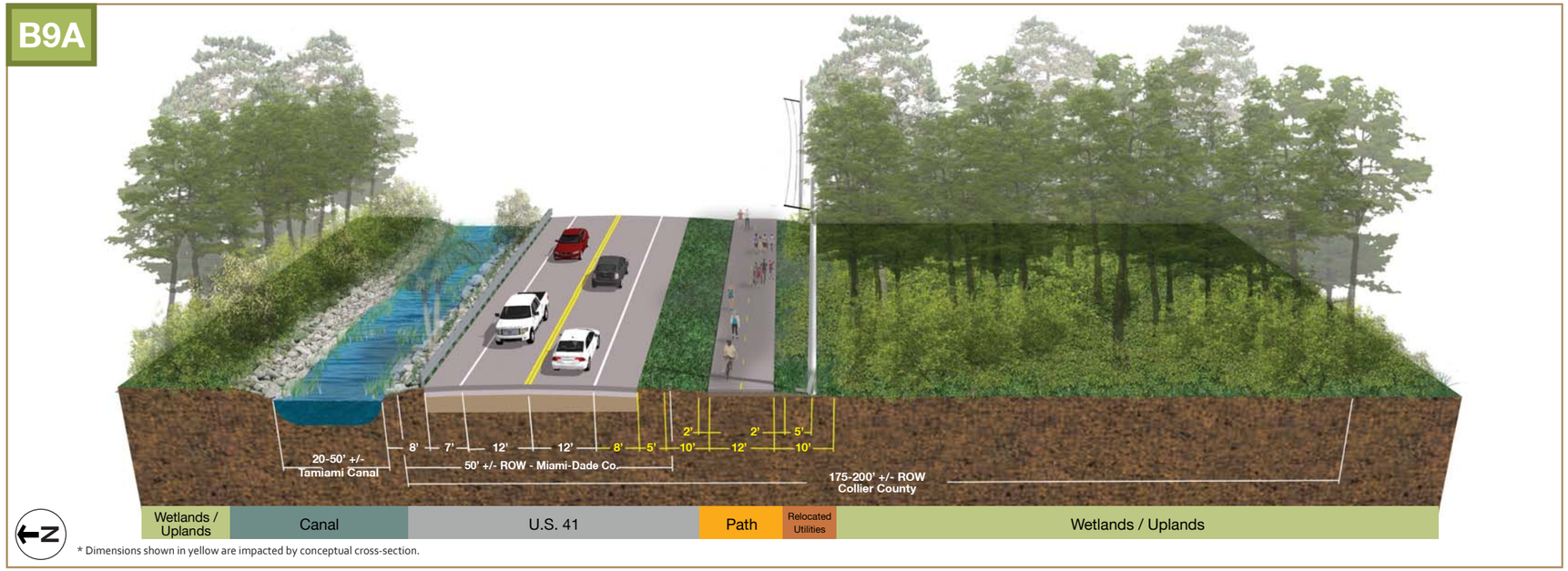
The 'Path on Expanded Shoulder' concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surface pathway on U.S. 41 located on south-side of highway,
- Provides a low to medium-level experience for users highlighted by opportunities to observe open views to the south of highway,
- Provides a medium-level of separation with spatial barrier separation from U.S. 41 traffic.

Feasibility Notes:

- Potentially medium to high cost of relocating existing utilities,
- Impacts current practice of parking on shoulder of highway,
- Maintenance impact of narrow grass strip,
- Additional fill and grading and mitigation may be needed,
- Railing may be required if height from trail surface to existing grading exceed 30".

Path on Expanded Shoulder with Parking Maintained



Description

The 'Path on Expanded Shoulder with Parking Maintained' is an alternative to B9 for locations where maintenance of existing parking is critical. This concept is potentially applicable in select areas and includes the following elements:

- 12' hard-surface pathway on U.S. 41 located on south-side of highway,
- Provides a low to medium-level experience for users highlighted by opportunities to observe open views to the south of highway,
- Provides a medium-level of separation with spatial barrier separation from U.S. 41 traffic.

Feasibility Notes:

- Potentially medium to high cost of relocating existing utilities,
- Additional fill and grading and mitigation would be required,
- Railing may be required if height from trail surface to existing grading exceed 30",
- Maintenance opportunities for existing practice of parking on side of highway with provided space outside of clear zones.

Path on Proposed Bridge

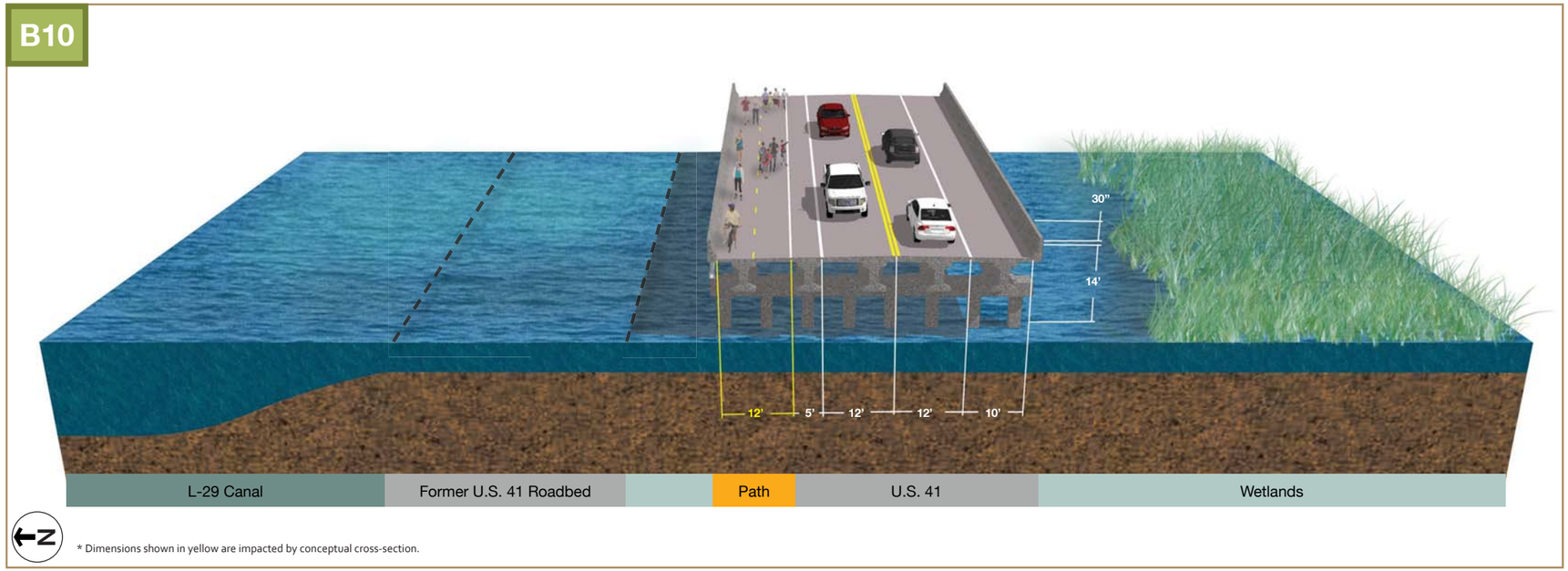
Description

The 'Path on Proposed Bridge' concept is potentially applicable in select areas in ROGG East and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path on proposed U.S. 41 bridges,
- Provides a low to medium-level experience for users highlighted by opportunities to observe views from the bridge to the north,
- Provides a low-level of separation with minimum spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Requires variance approval from FDOT due to violation of PPM Section 8.6.10,
- Potentially high-level of cost due to construction methods of expanding the highway bridge to accommodate 7' additional width,
- Path may be partially blocked by vehicles parking on shoulder of U.S. 41,
- Additional bridge width may require additional mitigation.



Path Next to Existing or Proposed Bridge/ Separate Facility

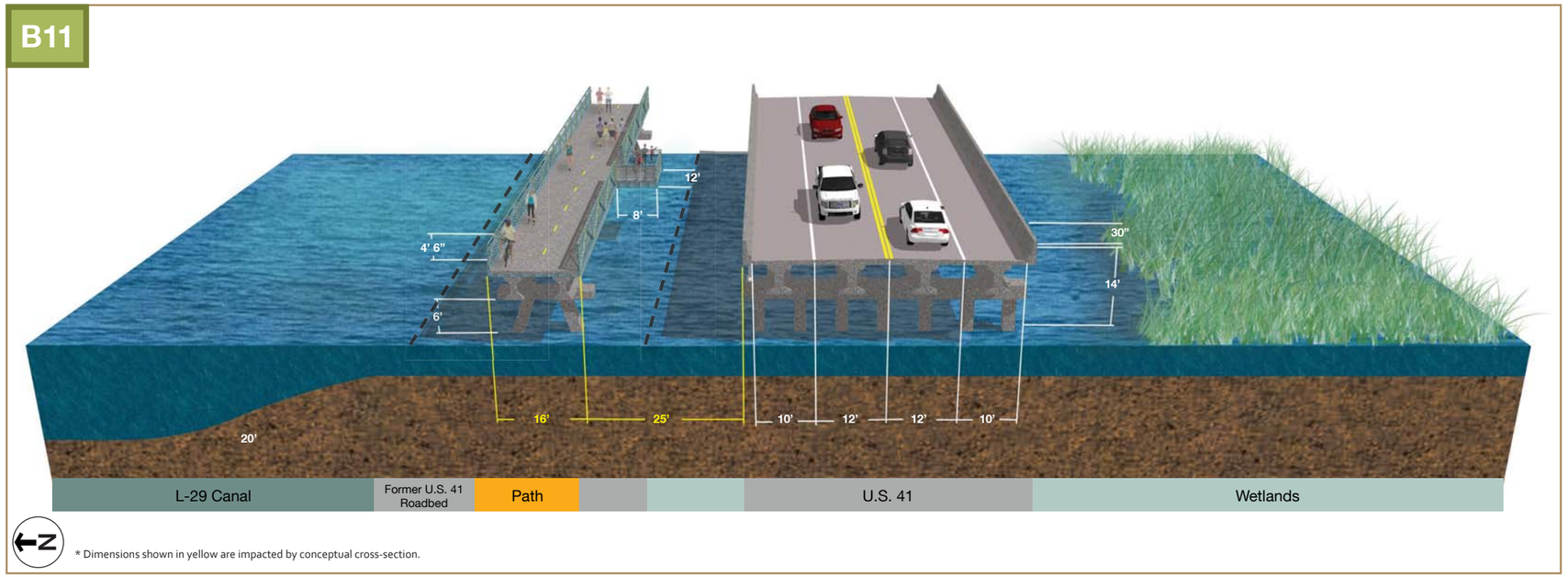
Description

The 'Path Next to Existing or Proposed Bridge/ Separate Facility' concept is potentially applicable in select areas in ROGG East and includes the following elements:

- 16' hard-surface shared-use bridge next to proposed or existing U.S. 41 bridges,
- 2' shy-zones on both sides of boardwalk,
- Provides a medium to high-level experience for users highlighted by opportunities to observe views from the bridge to the north,
- Opportunity to include projecting fishing platforms from boardwalk,
- Provides a medium to high-level of separation with physical separation from U.S. 41 traffic.

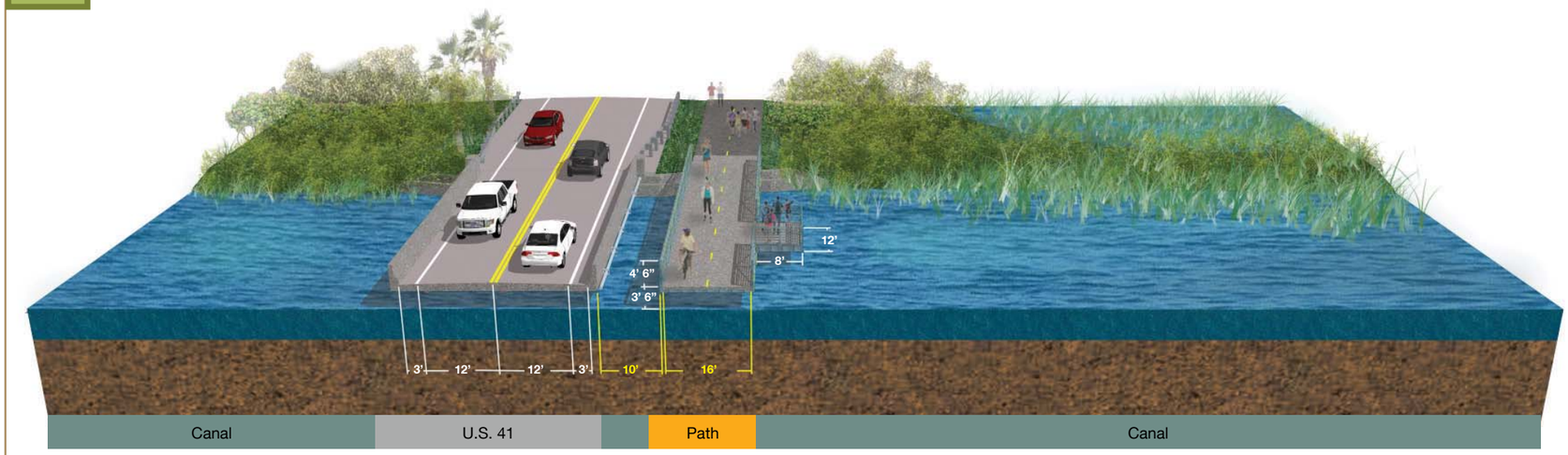
Feasibility Notes:

- Potentially high-level of cost due to construction costs for separate shared-use bridge facilities,
- Bridge would have to designed to coordinate with ongoing CEPP restoration efforts and proposed projects.



Path Next to Existing Bridge/ Separate Facility

B12



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

The 'Path Next to Existing Bridge/ Separate Facility' concept is potentially applicable where existing bridges and spillways are located and includes the following elements:

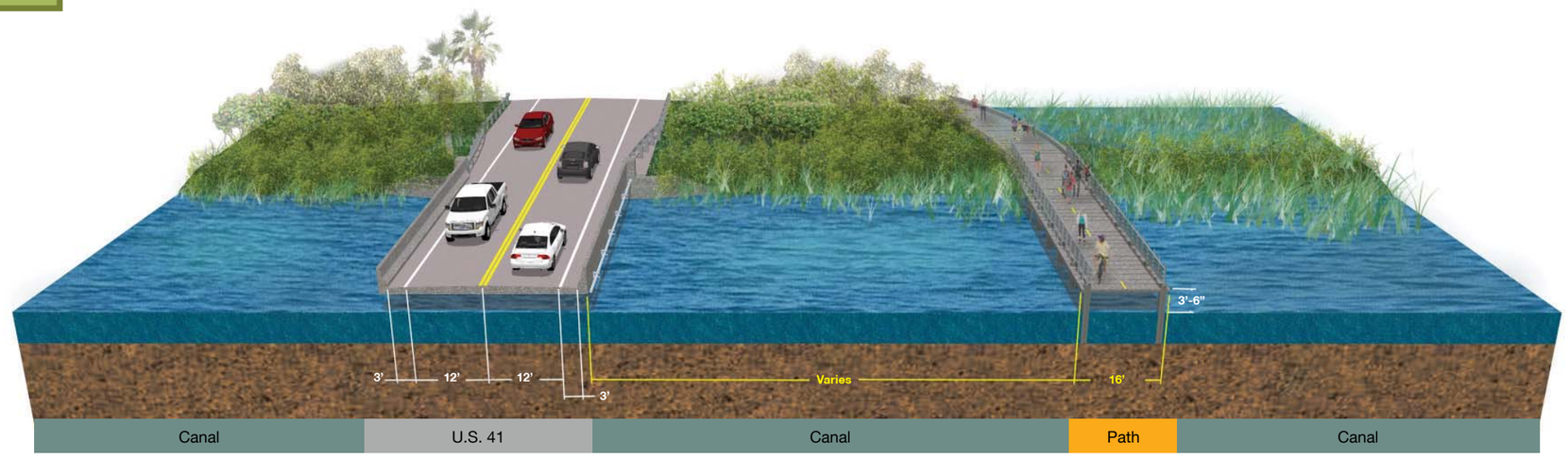
- 16' hard-surface shared-use bridge next to existing U.S. 41 bridges,
- 2' shy-zones on both sides of shared-use path,
- Provides a medium to high-level experience for users highlighted by opportunities to observe open views from the bridge to the south,
- Opportunity to include projecting fishing platforms from bridge,
- Provides a medium to high-level of separation with physical separation from U.S. 41 traffic.

Feasibility Notes:

- Potentially high-level of cost due to construction costs for separate bridge facilities,
- Mitigation impact from extending existing bridge headwalls, shadowing of canal and construction.

Path on Separate Boardwalk Facility Next to Existing Bridge

B13



* Dimensions shown in yellow are impacted by conceptual cross-section.

Description

The 'Path Next to Existing Bridge/ Separate Facility' concept is potentially applicable where existing bridges and spillways are located and includes the following elements:

- 16' hard-surfaced non-motorized shared-use boardwalk path near existing U.S. 41 bridges,
- Two foot shy-zones on both sides of boardwalk,
- Provides a medium to high-level experience for users highlighted by opportunities to observe open views from the bridge to the north and south,
- Opportunity to include projecting fishing platforms from boardwalk,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Potentially medium-level of cost due to construction costs for separate boardwalk facilities,
- Mitigation impact from shadowing of canal and construction.
- Flexibility to avoid routing through highly sensitive resources.

Path on Separate Boardwalk Facility Adjacent to Existing Bridge

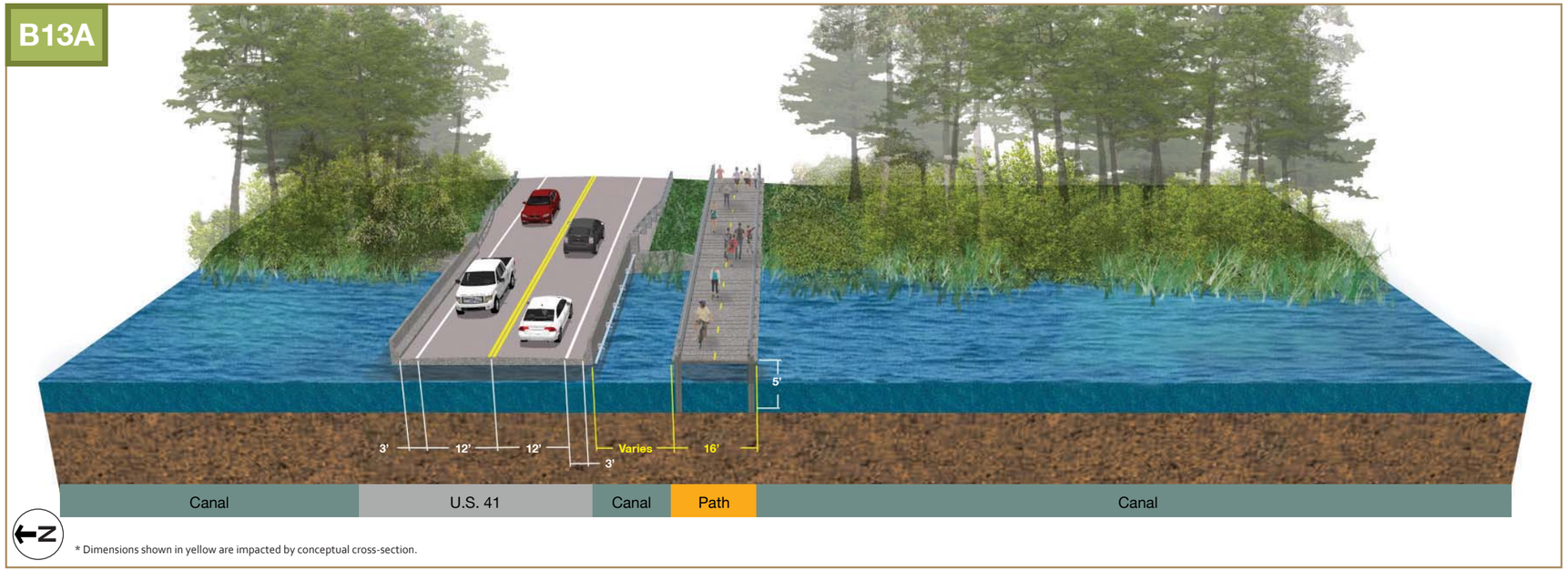
Description

The 'Path on Seperate Boardwalk Facility Adjacent to Existing Bridge' concept is potentially applicable where existing bridges and spillways are located and includes the following elements:

- 16' hard-surfaced non-motorized shared-use boardwalk path near existing U.S. 41 bridges,
- Two foot shy-zones on both sides of boardwalk,
- Provides a medium to high-level experience for users highlighted by opportunities to observe open views from the bridge to the north and south,
- Opportunity to include projecting fishing platforms from boardwalk,
- Provides a medum-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Potentially medium-level of cost due to construction costs for separate boardwalk facilities,
- Mitigation impact from shadowing of canal and construction.
- Flexibility to avoid routing through highly sensitive resources.



Path on Widened Bridge

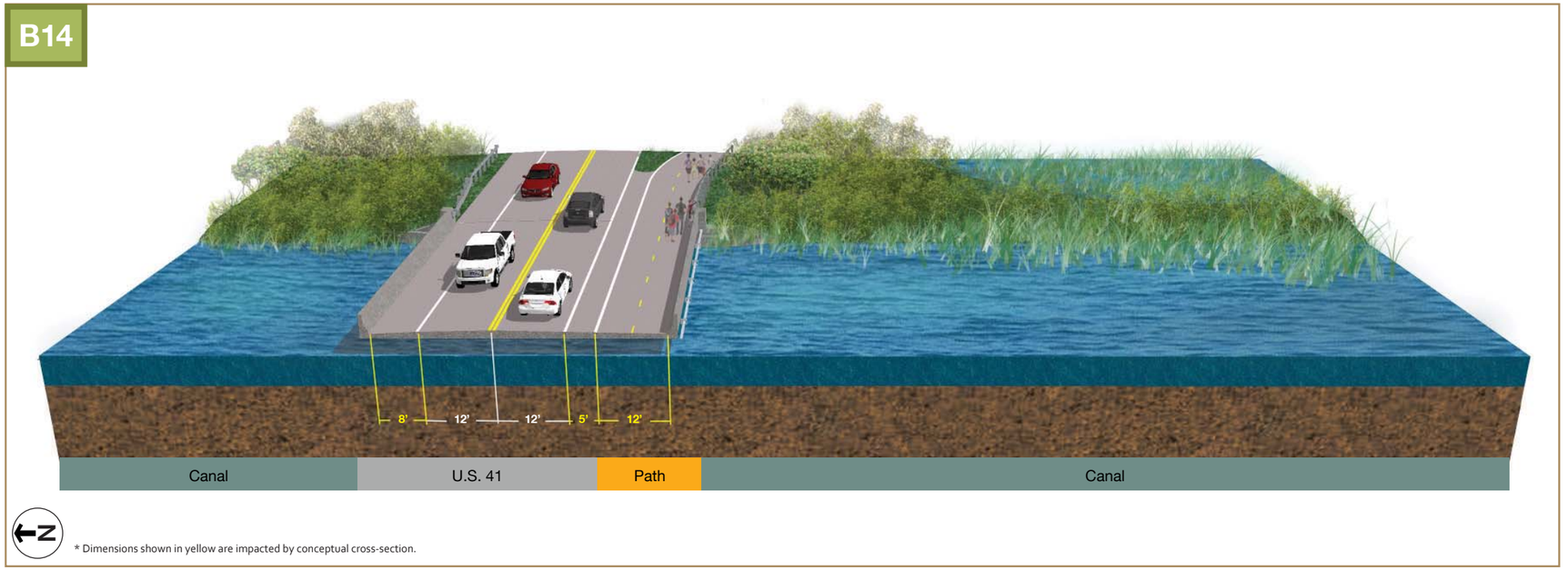
Description

The 'Path on Widened Bridge' concept is potentially applicable when existing bridges are replaced or improved and includes the following elements:

- 12' hard-surfaced shared-use path on widened or expanded existing or new bridges,
- 5' spatial separation from U.S. 41 travel lanes,
- Provides a low-level experience for users highlighted by opportunities to observe views from the bridge to the south,
- Provides a low-level of separation with minimum spatial separation from U.S. 41 traffic.

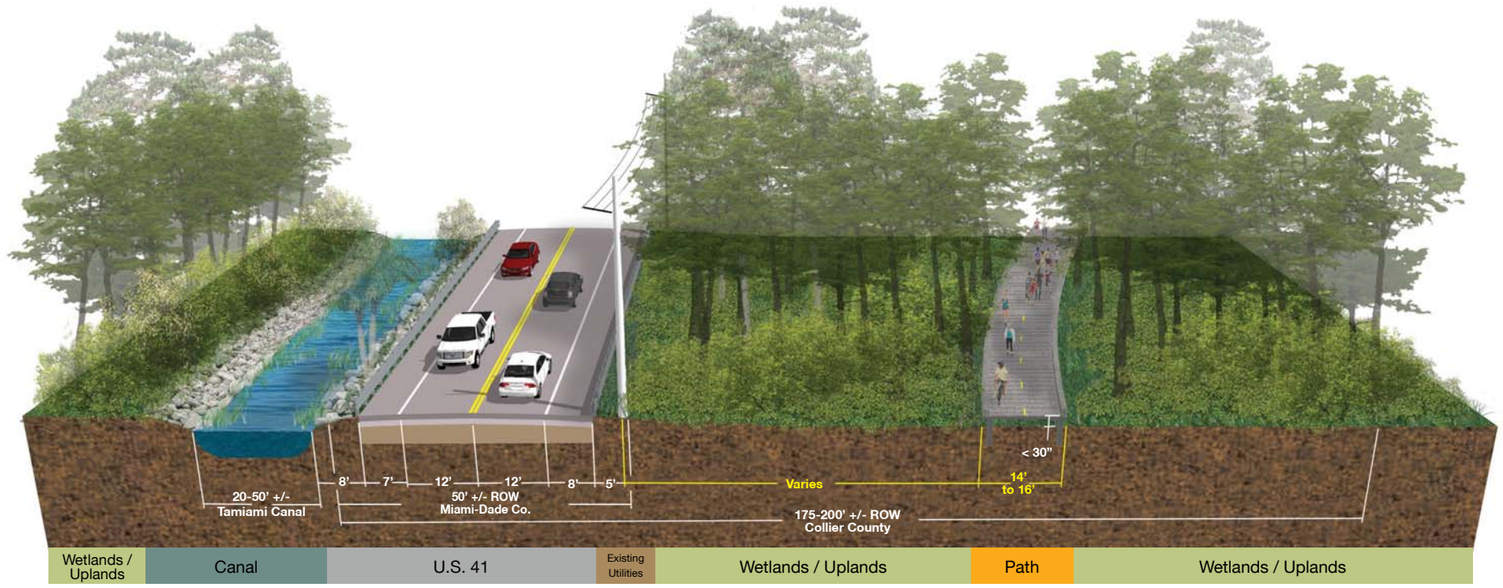
Feasibility Notes:

- Requires variance approval from FDOT due to violation of PPM Section 8.6.10,
- Potentially high-level of cost due to construction costs for widened or new bridge facilities,
- Mitigation impact from expansion of existing bridge headwalls, shadowing of canal and construction.



Path on Low Boardwalk Facility

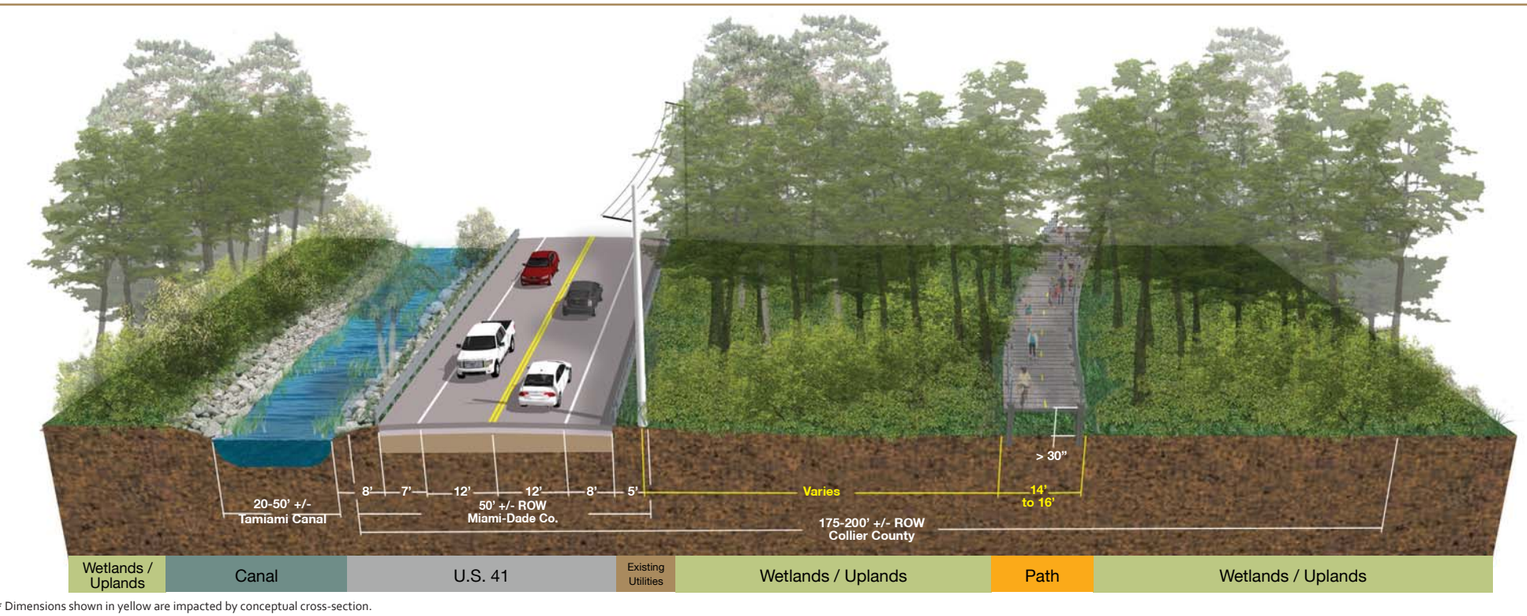
C1



* Dimensions shown in yellow are impacted by conceptual cross-section.

Path on High Boardwalk Facility

C2



* Dimensions shown in yellow are impacted by conceptual cross-section.

C Separated Path and Old Tamiami Trail

Type 'C' typical cross-sections focus on concepts involving separated paths south of U.S. 41.

Description

The 'Path on Low Boardwalk Facility' concept is potentially applicable in select areas in ROGG Central and West and includes the following elements:

- 14-16' hard-surfaced shared-use boardwalk path,
- 2' shy-zones on both sides of shared-use path,
- Provides a high-level experience for users highlighted by opportunities to observe open views from the boardwalks to the north and south,
- Flexibility to respond to environmental constraints easily,
- In areas with a height less than 30" from path surface to existing grade, railing is not required,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Potentially medium-level of cost due to construction costs for separate boardwalk facilities and lack of railing,
- Mitigation impact from shadowing of ground and minimum construction.

Description

The 'Path on High Boardwalk Facility' concept is potentially applicable in select areas in ROGG Central and West and includes the following elements:

- 14-16' hard-surfaced shared-use boardwalk path,
- 2' shy-zones on both sides of shared-use path,
- Provides a high-level experience for users highlighted by opportunities to observe open views from the boardwalk to the north and south,
- Flexibility to respond to environmental constraints easily,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Potentially medium to high-level of cost due to construction costs for separate boardwalk facilities,
- Less mitigation needed for impact from shadowing of ground due to higher height of path surface.

Path on New Earth Fill Berm

Description

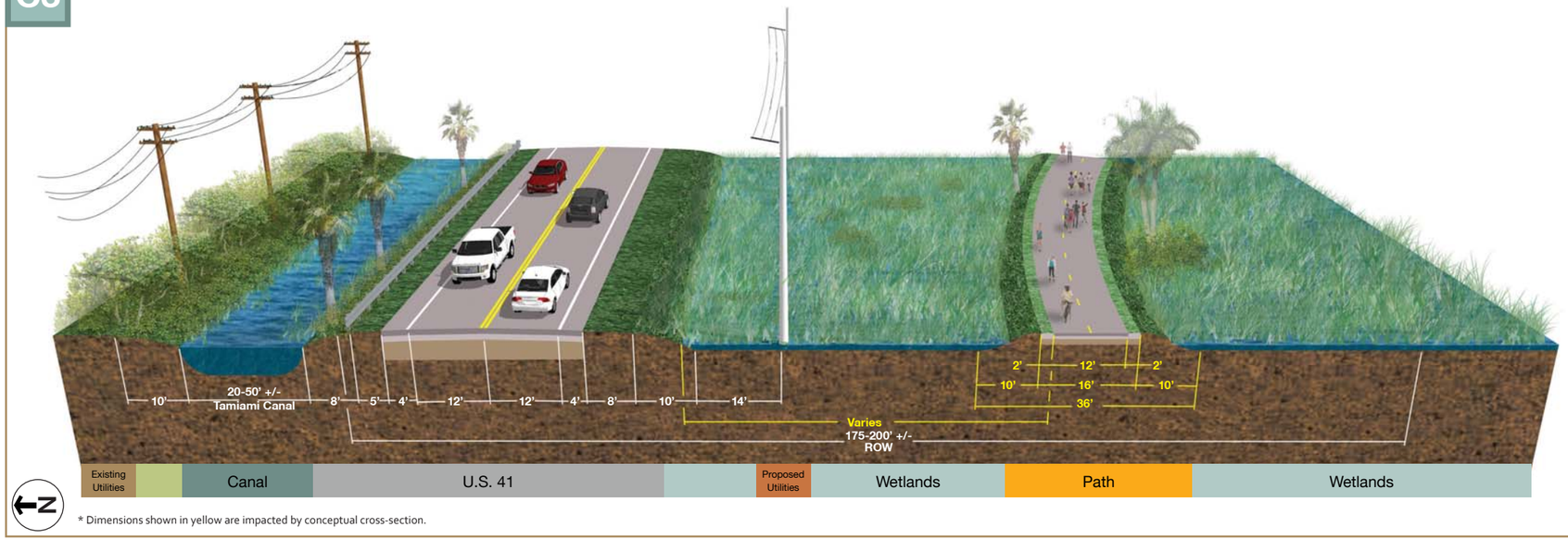
The 'Path on New Earth Fill Berm' concept is potentially applicable in select areas in ROGG Central and West and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path,
- 2' shy-zones on both sides of path,
- Provides a high-level experience for users highlighted by opportunities to observe open views to the north and south,
- Route can response to environmental constraints easily,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

- May be used in conditions where protecting or enhancing waterflow is not needed,
- May have potential impact on water flow if applied to significant lengths without culverts,
- Potentially medium to high-level of cost due to construction costs for separate path facilities, required fill and mitigation needs,
- Mitigation impact from new berm and construction.

C3



* Dimensions shown in yellow are impacted by conceptual cross-section.

Path on New Earth Fill Berm with Culverts

Description

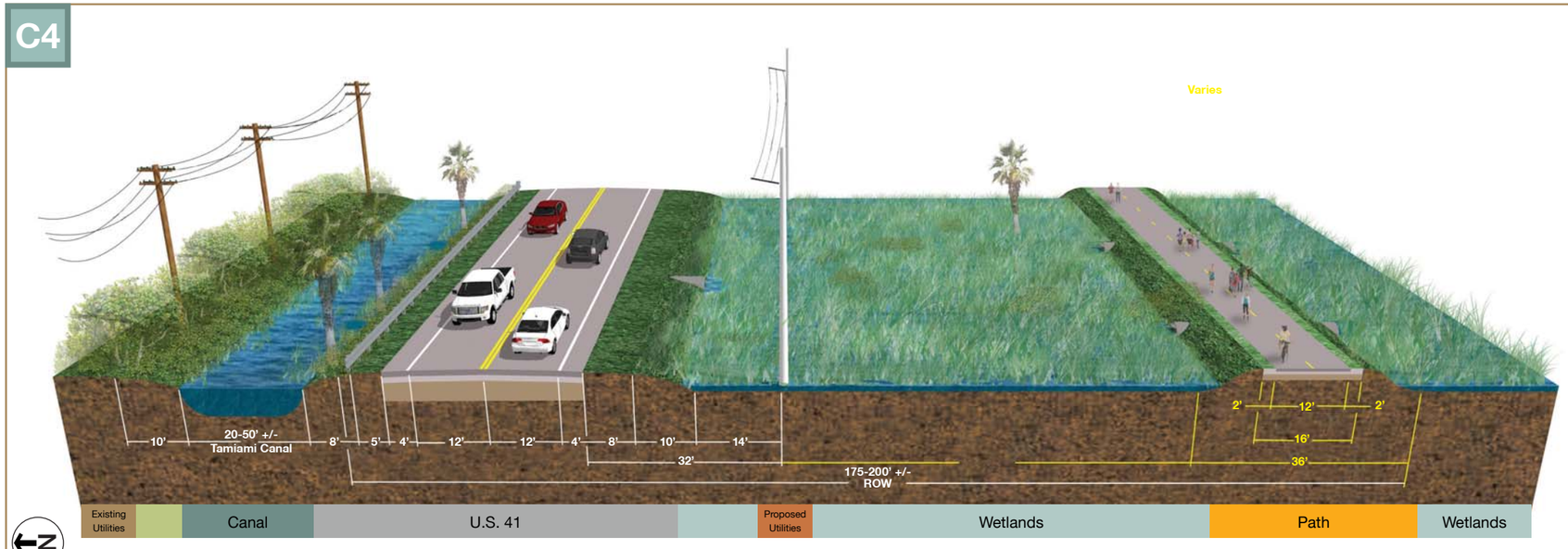
The 'Path on New Earth Fill Berm with Culverts' concept is potentially applicable in select areas in ROGG Central and West and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path,
- 2' shy-zones on both sides of path,
- Provides a high-level experience for users highlighted by opportunities to observe open views to the north and south,
- Route can have limited response to environmental constraints,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

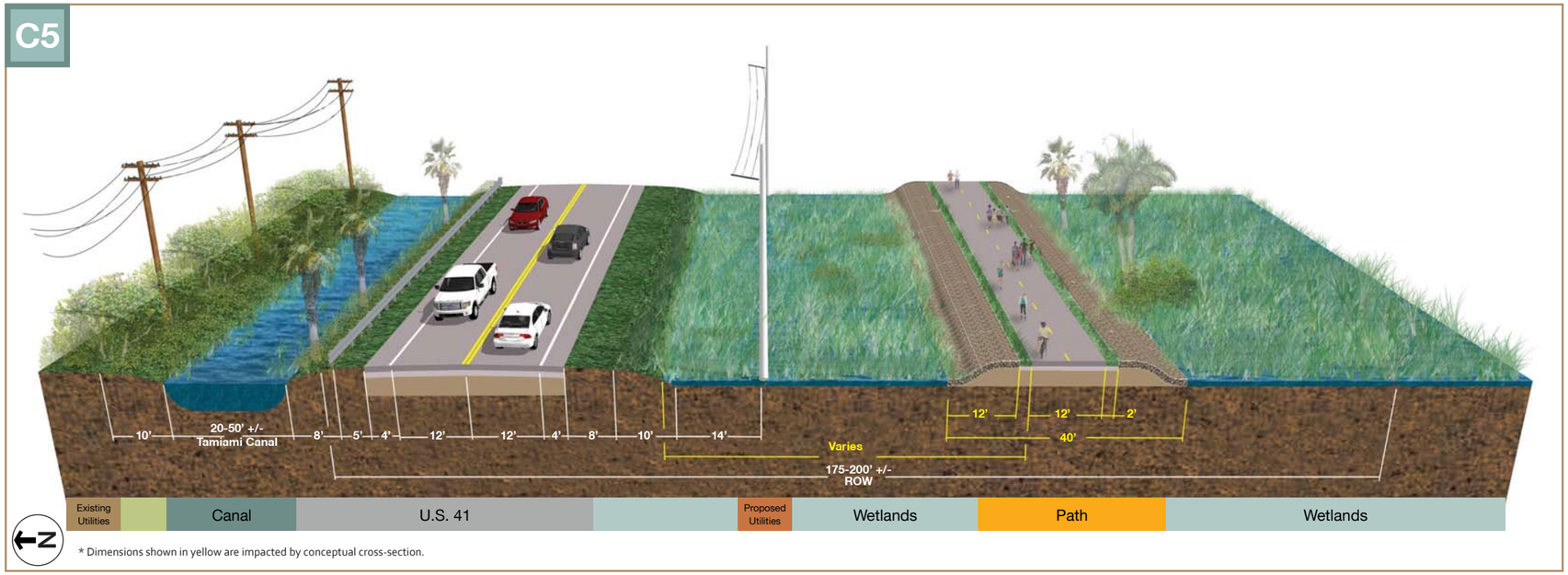
- Additional culverts may serve as a spreader for existing water flow, having a net benefit in select areas,
- Potentially medium to high-level of cost due to construction costs for separate path facilities, required fill , and culvert and mitigation needs,
- Mitigation impact from new berm and construction.

C4



* Dimensions shown in yellow are impacted by conceptual cross-section.

Path on New Earth Fill Berm with Gabion Walls



Description

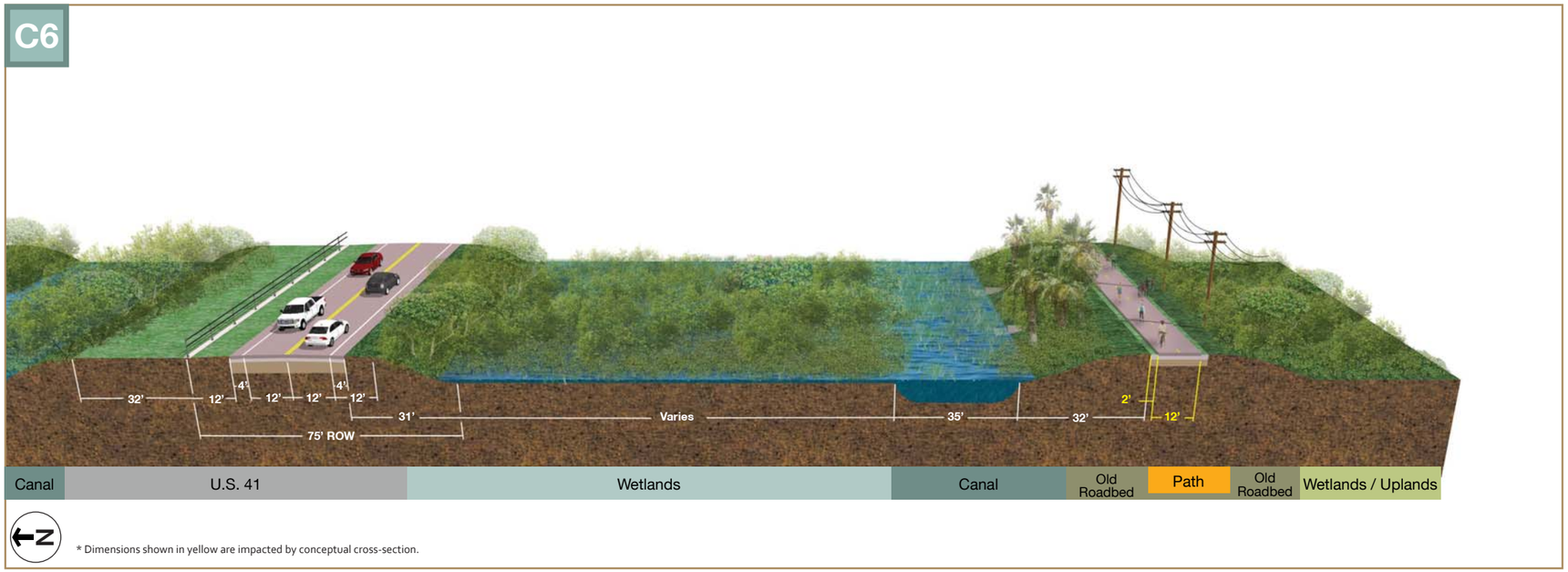
The 'Path on New Earth Fill Berm with Gabion Walls' concept is potentially applicable in select areas in ROGG Central and West and includes the following elements:

- 12' hard-surfaced non-motorized shared-use path,
- 2' shy-zones on both sides of path,
- Provides a high-level experience for users highlighted by opportunities to observe open views to the north and south,
- Route can have limited response to environmental constraints,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Water can flow through gabion walls and serve as a spreader in select areas while further filtering water quality,
- Potentially high-level of cost due to construction costs for separate path facilities, required fill, gabion walls and mitigation needs,
- Mitigation impact from new berm and construction, reduced by steeper sides from gabion walls.

Path on Re-purposed Old Tamiami Road



Description

The 'Path on Re-purposed Old Tamiami Road' concept is potentially applicable in ROGG East and includes the following elements:

- 12' hard-surfaced shared-use path on restored Old Tamiami Trail,
- 2' shy-zones on both sides of path,
- Provides a high-level experience for users highlighted by opportunities to observe open views to the north and south,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic.

Feasibility Notes:

- Addition of new culverts may increase water flow, meeting the intent of CEPP,
- Provides improved access to existing utilities,
- Potentially low-level of cost due to existing Old Tamiami Trail roadbed,
- Removal of existing invasive and vegetative overgrowth,
- Old Tamiami Trail is included in proposed CEPP projects for removal from L-67 Ext. Canal to S12D,
- Removal is unfunded and unscheduled.

Path on Loop Road

Description

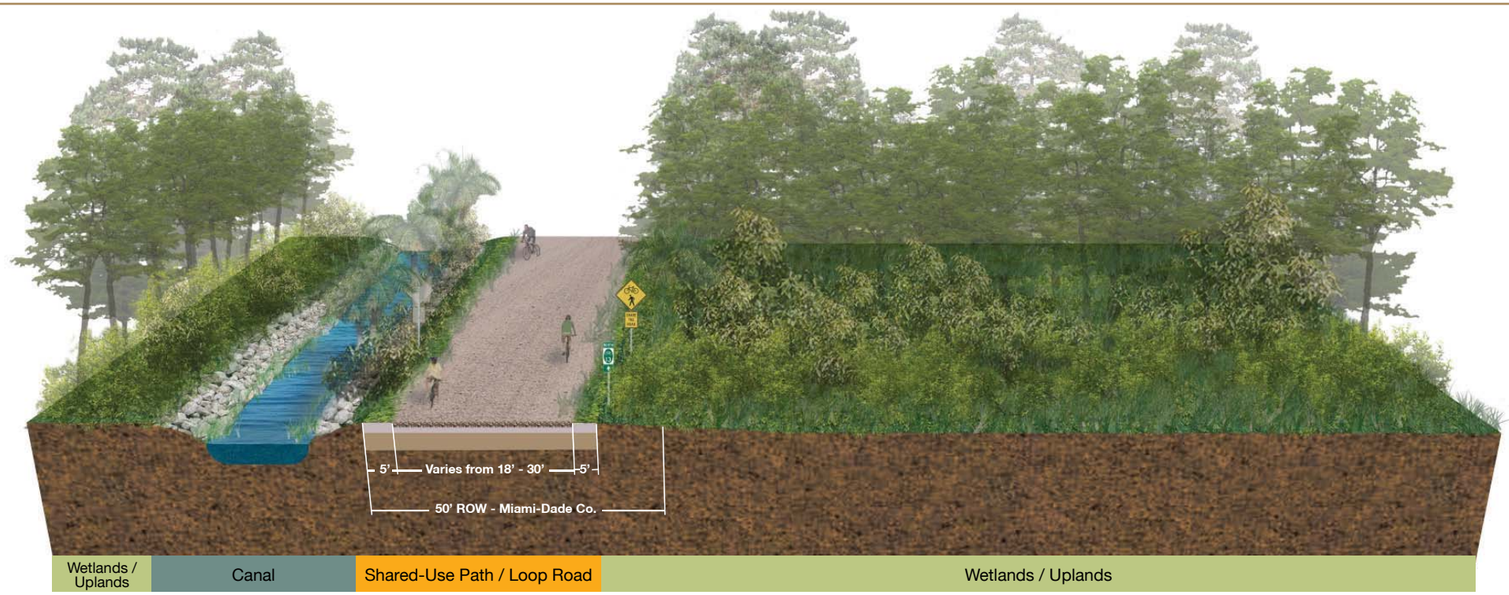
The 'Path on Loop Path' concept is potentially applicable in ROGG Central and East and includes the following elements:

- On-road facility with existing motorized vehicle traffic,
- Utilizes current limerock surface,
- Provides a shared experience for users highlighted by opportunities to observe open views to the north and south,
- Provides a high-level of separation with physical and spatial separation from U.S. 41 traffic, but shares on-road facilities with Loop Road motorized vehicular traffic.

Feasibility Notes:

- Facilities for limited bike use, primarily mountain bikes, and lacks pedestrian facilities,
- Potentially low-level of cost due to need to install route and Share the Road signage and designate route as a bike route,
- Removal of existing invasive and vegetative overgrowth
- Limited opportunities for new trailheads and rest stops, however, new ORV trailheads provide minimum trail amenities,
- Lack of hard-surface for path for most of length of Loop Road.

C7



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