

13. Consideration of filing a Notice of Intent with the Federal Rail Administration to establish a railroad Quiet Zone.



LEGISLATIVE MEMORANDUM

TO: Honorable Mayor and Members of the City Council

FROM: Suzanne Sherman, City Manager

THRU: Valentino Perez, Public Works Director

DATE: July 18, 2024

RE: Consideration of filing a Notice of Intent with the Federal Rail Administration to establish a railroad Quiet Zone.

SUMMARY:

The City of Palm Bay has three railroad crossings at Hessey Avenue, Palm Bay Road and Port Malabar Blvd. All three railroad crossings were recently upgraded with the Brightline Service to include Supplemental Safety Measures (SSM) with the double tracking of the rail corridor.

1. 272146T Hessey Avenue
2. 272147A Palm Bay Road
3. 272148G Port Malabar Blvd

These SSMs include the installation of added gates and a median island to not allow vehicles to cross the railroad tracks when the gates are down. Brightline has commenced running passenger service with 32 high speed trains daily from Miami to Orlando. In addition to the Brightline trains, FEC continues to run freight trains along the same FEC and Brightline railroad tracks.

Per the Federal Rail Administration (FRA), a local agency can request and establish a quiet zone along a railroad corridor. A Quiet Zone (QZ) is a segment of a railroad corridor where the train operator has the option to not sound its horn. The establishment of a QZ fall under the Federal Railroad Administration (FRA). The requirements for a QZ:

- Zone is at least half mile in distance.
- Update the FRA Inventory and conduct site survey.
- Zone may require upgrades with Supplemental Safety Measures (SSMs) or Alternative Safety Measures (ASMs)
- The QZ qualifies to be "self-established" as the QZRI will be below the Risk Index with Horns (RIWH) because of installed SSMs at crossings (Title 49 CFR Part 222.39(a)(1)).

- Use Quiet Zone Calculator to determine the QZRI.
- Conduct a field review to identify and confirm implemented SSM
- Notice of Establishment (NOE) is the final document with FRA.

In discussions with FRA, the three Palm Bay railroad crossings meet the required SSM and based on the Quiet Zone calculator findings, the crossings meet the Quiet Zone requirements. The initial step for establishing the quiet zone is the filing of a Notice of Intent (NOI). After the filing of the NOI, the city will schedule a field diagnostic of all three crossings with representatives from Brightline, FEC and FRA to ensure all SSM in place. If no additional safety measures are required at the crossings from the field diagnostic review, then allow 60 days from NOI to file the Notice of Establishment (NOE). The QC becomes effective 21 days after the filing the NOE.

It is important to emphasize that the locomotive engineer has the sole judgment to sound the horn for any non-routine reason. A Quiet Zone is not a total silencing of the train horns. Trains will still make train noises, frequently, and at any time of the day or night. A Quiet Zone only ceases the routine sounding of the train horn at grade crossings.

REQUESTING DEPARTMENTS:

Public Works

FISCAL IMPACT:

None.

STAFF RECOMMENDATION:

Motion to approve filing a Notice of Intent with the FRA for a Quiet Zone for the three railroad crossings within the City of Palm Bay.

ATTACHMENTS:

1. Quiet Zone Presentation

City of Palm Bay City Council Meeting Railroad Quiet Zones

July 18, 2024



What is a Quiet Zone?

- A segment of a railroad corridor where the train operator has the option to not sound its horn.
- Pre-rule crossing of October 9, 1996, then Interim Final Rule issued by Federal Rail Administration (FRA) on quiet zone on December 2003
- Jurisdiction of Quiet Zones fall under the Federal Railroad Administration (FRA).



Who applies for a Quiet Zone?

- Local City is the lead agency (Authorized Agency) to file an application.
- Support from the user rail agencies (FEC & Brightline)

QZ - STEP GUIDE

- Public Authority initiates
- Feasibility Assessment – D3 GXIs provide regulation info and preliminary review to determine next step
- Diagnostic: PA, State DOT, Railroad(s), FRA, etc.
- Notice of Intent
 - 60-day comment period
 - Engineering survey
- Notice of Establishment



Establishing a Quiet Zone

- Zone is at least half mile in distance.
- Update the FRA Inventory/Conduct Site Survey.
- Zone may require upgrades with Supplemental Safety Measures (SSMs) or Alternative Safety Measures (ASMs)
- The Quiet Zone Risk Index (QZRI) is below the Risk Index With Horns (RIWH) with established SSM.
- Use **Quiet Zone Calculator** to determine the QZRI
- Conduct field diagnostic to verify the SSMs.
- File the Notice of Establishment

City of Palm Bay

Quiet Zone Rail Corridor

- Brevard County – Total City/County/State = 49 crossings
- Palm Bay has three railroad crossings at the following:
 - Hessey Avenue
 - Palm Bay Road
 - Port Malabar Boulevard

197.30	272146T	Hessey Ave	Palm Bay	City
197.36	272147A	Palmbay Road	Palm Bay	City
198.40	272148G	NE Port Malabar Blvd	Palm Bay	City

Town of Malabar Quiet Zone Rail Corridor

- Malabar has two railroad crossings at the following:
 - Malabar Road - State
 - Jordan Road - Private

199.94	272149N	Malabar Road	Brevard	State
201.50	272150H	Jordan Blvd	Malabar	Private

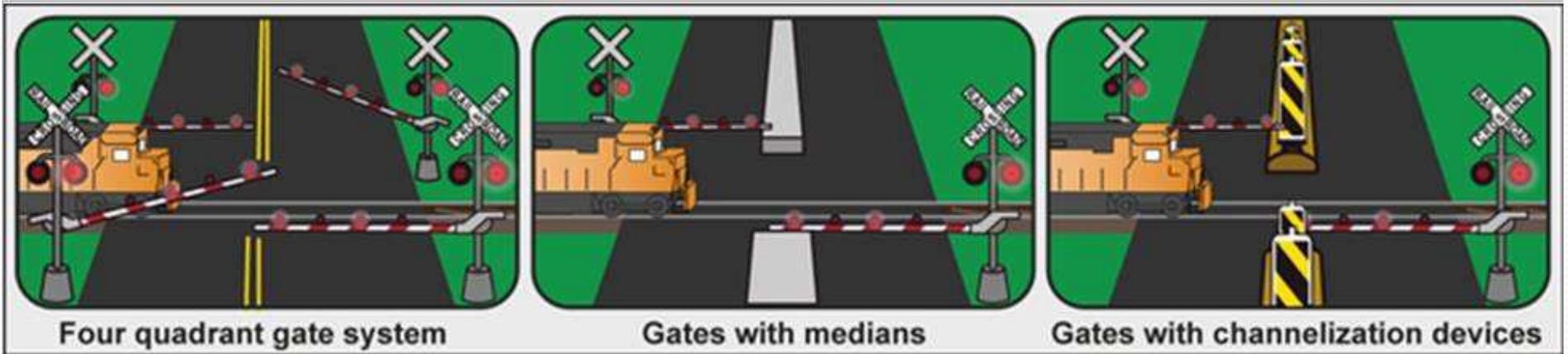
What are Supplemental Safety Measures (SSM) ?



- Four Quadrant Crossing Gates
- Median Islands
- One Way Street
- Street Closures
- Wayside Horns



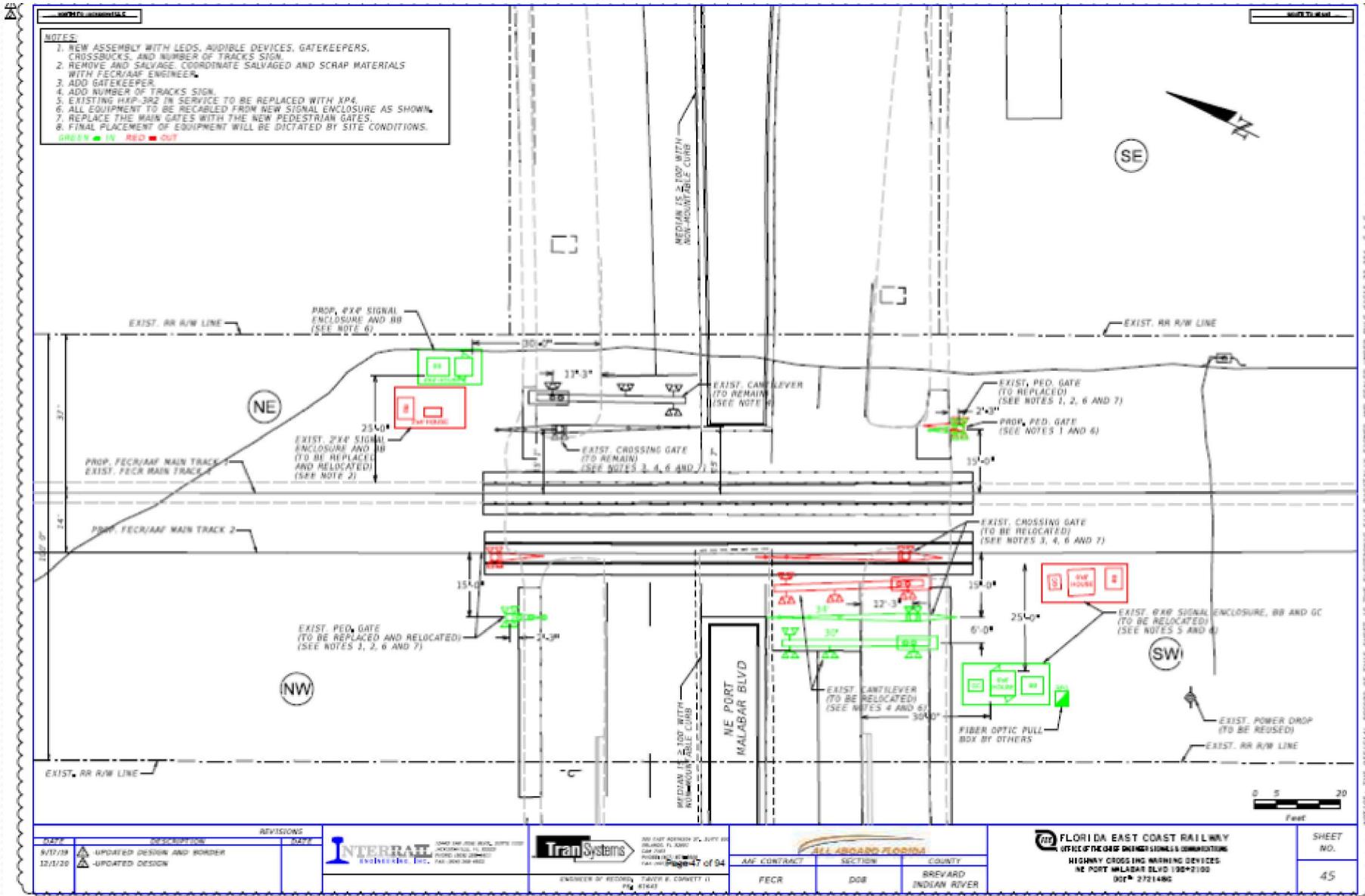
Railroad Quad Gates



Source: GAO. | GAO-18-97



Port Malabar Rail Crossing SSM with two gates and median islands



NO.	DATE	DESCRIPTION
1	8/17/19	UPDATED DESIGN AND BORDER
2	12/1/20	UPDATED DESIGN

INTERRAIT
INCORPORATED, INC.
 1500 AIR FORCE BLVD., SUITE 100
 AUSTIN, TEXAS 78741
 TEL: 512.338.2800 FAX: 512.338.2802

TranSystems
INCORPORATED
 400 EAST ANDERSON ST., SUITE 200
 AUSTIN, TEXAS 78702
 TEL: 512.476.1100 FAX: 512.476.1101

CONTRACT	SECTION	COUNTY
FECR	DOB	BREVARD INDIAN RIVER

FLORIDA EAST COAST RAILWAY
 OFFICE OF THE CHIEF ENGINEER SIGNALS & COMMUNICATIONS
 HIGHWAY CROSSING SIGNALING DEVICES
 NE PORT MALABAR BLVD 100#2100
 DOT# 2721482

SHEET NO.	45
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Crossing Inventory Update

- Update the FRA Inventory for Quiet Zones
- Inventory Record Update includes:
 - Contact FRA agent
 - Increase in trains with 32 Brightline Trains
 - Identify SSM for the three crossings
 - Confirm number of trains at each crossing
 - Provide Average Daily Traffic (ADT) volume:
 - Hessey – 312 vehicles
 - Palm Bay – 9800 vehicles
 - Port Malabar – 11990 vehicle
- Perform a field diagnostic with FRA, FEC and Brightline

Quiet Zone Calculator Risk Index

Crossing	Street	Traffic	Warning Device	Pre-SSM	SSM	Risk	
272146T	NE HESSEY AVE	312	Gates	0	4	23,244.46	<input type="button" value="MODIFY"/>
272147A	NE PALM BAY RD	9800	Gates	0	4	17,001.83	<input type="button" value="MODIFY"/>
272148G	NE PORT MALABAR BLVD	11990	Gates	0	13	22,708.72	<input type="button" value="MODIFY"/>

* Only Public At Grade Crossings are listed.

ALERT: Quiet Zone qualifies because SSM has been applied in each crossing.

Click for [Supplementary Safety Measures \[SSM\]](#).

Click for ASM spreadsheet: * Note: The use of ASMs requires an application to and approval from the FRA.

Summary	
Proposed Quiet Zone:	PALM BAY QZ TEST
Type:	New 24-hour QZ
Scenario:	PALM BAY Q_69859
Estimated Total Cost:	\$215,000.00
Nationwide Significant Risk Threshold:	15488 .00
Risk Index with Horns:	58867.5
Quiet Zone Risk Index:	20985.01
<input type="button" value="Select"/>	

Quiet Zone Notification

Once a public authority has successfully established a quiet zone either through public authority designation or through FRA approval, it must provide written notice to several parties. These parties include the following:

- All railroads operating over the public rail grade crossings within the quiet zone,
- The highway authority, or the law enforcement authority with jurisdiction over motor vehicle traffic at the quiet zone crossings,
- Landowners with control over any private crossings within the quiet zone,
- The State agency responsible for highway and road safety, and
- FRA Administrator.
- All notices must be provided by certified mail, return receipt requested.

Where do we go from here?

1. File the Notice of Intent (NOI) for a Quiet Zone (QZ).
2. Complete the FRA inventory record update for Hesse, Ave, Palm Bay Rd, and Port Malabar Blvd
3. Schedule a field review with Diagnostic Review Team (DRT) to include FRA, FEC and Brightline for all three crossings.
4. Review period of 60 days
5. File the Notice of Establishment (NOE)
6. After 21 days from NOE submittal, the QZ is official.

Any Questions

