



**Russell R. McMurry, P.E., Commissioner**  
One Georgia Center  
600 West Peachtree NW  
Atlanta, GA 30308  
(404) 631-1990 Main Office

October 4, 2018

Mr. Moises Marrero  
Division Administrator  
Federal Highway Administration  
Atlanta Federal Center  
61 Forsyth Street, S.W.  
Suite 17 T100  
Atlanta, Georgia 30303-3104

ATTN: Aaron Hernandez

RE: PI#(s): 110610- & 0013545, Gwinnett, Barrow, Jackson Counties, I-85 from I-985 to North of SR 53

Dear Mr. Marrero:

In accordance with 23 CFR 771.129(c), the subject proposed action has been reevaluated with respect to changes to the social, environmental, and economic effects. Enclosed are two copies of this Reevaluation. The proposed action currently is During Construction.

This submittal is provided in response to your comments dated September 27, 2018. Please find your comments numbered below in *italics*, followed by our response.

- 1. Comment 2 - The GDOT response to this comment states that the approximately 5.9 miles of general purpose lane striping was included in the Reevaluation Memo for 110600 that was previously approved by FHWA. If the striping of the general purpose lane is being done under 110600, then this area (between SR 20 and Hamilton Mill Road) should no longer be included in the project description and project figures for 110610. Please make changes to the project description and figures as needed.*

Response: The project limits and supporting figures as described in the approved NEPA document for P.I. 110610-/0013545 are accurate for Phase 1 construction limits for the P.I. No. 110610- NEPA Reevaluation document. Coordination of the scopes of work between P.I. Nos. 110600- and 110610- to construct a third lane under 110600- between I-985 and Hamilton Mill Road prior to notice to proceed for P.I. No. 110610- allowed for an efficient use of federal funds resulting from striping activities of the third general purpose lanes under P.I. No. 110600- that would have been conducted under P.I. No. 110610-. This will benefit the public by allowing a shorter construction period for the completion of project 110610-.

Although the Contractor's scope of work for P.I. No. 110610- includes the physical construction of a new, third general purpose lanes as cleared in the NEPA documentation under project P.I. No. 110610- beginning at Hamilton Mill Road, there are additional required project elements that would be completed under P.I. No. 110610- between Hamilton Mill Road and I-985, including the removal and installation of new signage and

removal of the temporary tapering and OGFC paving and striping at Hamilton Mill Road between the Managed Lanes to the west and the new, third general purpose lanes to the east. The tapering would remain in place until completion of the third general purpose lanes under P.I. No. 110610-.

Finally, an Atlanta Regional Commission FY 2018-2023 TIP Modification was approved in September 2018 that describes the project limits for P.I. No. 110610- between I-985 and SR 53. This TIP Modification addresses previous FHWA comments to the CE Reevaluation relating to clarification of project limits.

The NEPA documentation for both P.I. Nos. 110600- and 110610- remains valid and the construction limits and project limits described therein are recommended to be unchanged.

2. *Comment 4 - Please add a commitment to the project Green Sheet which states that public involvement would be conducted with the community in the vicinity of Noise Barrier 4 (as shown in Figure 6 of the reevaluation). The Green Sheet commitment should also state that this public involvement would be done before any construction activities take place north of SR 53. In addition, please include a summary of the purpose of this additional coordination in Attachment 2 of the reevaluation.*

Response: Commitment E-7 has been added to the Green Sheet stating that public outreach would occur within the residential community adjacent to Noise Barrier 4 as shown on Figure 6 of the reevaluation. This outreach will be completed prior to beginning construction activities north of SR 53. A description of the purpose of this outreach has been added to Attachment 2 of the reevaluation on page 10 of 12.

Based on the enclosed Reevaluation, it has been determined that the approved document remains valid and the proposed action can proceed to the next activity phase. Your concurrence in this determination is requested. Please provide approval or comments no later than Tuesday, October 09, 2018 so that the proposed action can proceed as scheduled. If you need further information, please contact David Borchardt at (404) 631-1184.

Sincerely,



Eric Duff  
State Environmental Administrator

<sup>PB</sup>  
ED/djb/epei-rje

cc: Tim Matthews, GDOT Project Manager (via email)  
PDF for Project File

# ENVIRONMENTAL REEVALUATION

**Project NH-IMO-0085-02(165) &  
NH-IMO-0085-02(166)  
Gwinnett, Barrow, Jackson Counties  
P.I. Nos. 110610- & 0013545**

**I-85 Widening from I-985 to North of SR 53**



Georgia Department of Transportation

**ENVIRONMENTAL COMMITMENTS TABLE**

P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

10/3/18  
 Date Updated: ~~9/25/2018~~ | Stage: Reevaluation  
 Transmittal Date for Plans Reviewed by OES (if applicable): 8/7/2018

**Review**  
 If no commitments,  
 NEPA may  
 approve for all.

The GDOT project manager (PM) asserts that these commitments are feasible.

GDOT PM: Tim Matthews  
 Signature/Date: [Signature] 9/28/18

The engineer of record (EOR) asserts that plans incorporate or will incorporate commitments if applicable.

EOR: Tyler McIntosh  
 Signature/Date: [Signature] 9/25/18

Air/Noise: MK - 8/21/18 Arch: WP - 8/29/18  
 Eco: BD - 8/29/18 Hist: CC 8/9/18  
 NEPA: DB - 10/4/18

**A. Resources to be Delineated on the Plans and/or Listed in the Environmental Resource Impact Table (ERIT)**

Resource Name	P.I.#(s)	Permitted Construction Activity	Refer to	Name and Date of Report or Transmittal	Correctly Shown?	
					Plan Sheet	ERIT
A-1 * Wetland (WL) 49	* 110600	* No activity	-	* ECO-ADDM 04.15.2016	Yes	No
A-2 * Perennial Stream (PS) 50	* 110600	"	"	"	"	"
A-3 * PS 50 Buffer	* 110600	"	"	"	"	"
A-4 * Intermittent Stream (IS) 53	* 110600	"	"	"	"	"
A-5 * IS 53 Buffer	* 110600	"	"	"	"	"
A-6 * WL 53a	* 110600	"	"	"	"	"
A-7 * Ephemeral Channel (EC) 53b	* 110600	"	"	"	"	"
A-8 * PS 54	* 110600	"	"	"	"	"
A-9 * PS 54 Buffer	* 110600	"	"	"	"	"
A-10 * PS 55	* 110600	"	"	"	"	"
A-11 * PS 55 Buffer	* 110600	"	"	"	"	"
A-12 * PS 56	* 110600	"	"	"	"	"
A-13 * PS 56 Buffer	* 110600	"	"	"	"	"
A-14 * PS 57	* 110600	"	"	"	"	"
A-15 * PS 57 Buffer	* 110600	"	"	"	"	"
A-16 * PS 58	* 110600	"	"	"	"	"
A-17 * PS 58 Buffer	* 110600	"	"	"	"	"
A-18 * IS 58a	* 110600	"	"	"	"	"
A-19 * IS 58a Buffer	* 110600	"	"	"	"	"
A-20 * WL 58b	* 110600	"	"	"	"	"
A-21 * WL 62	* 110600	"	"	"	"	"
A-22 * PS 68	* 110600	"	"	"	"	"
A-23 * PS 68 Buffer	* 110600	"	"	"	"	"
A-24 * IS 68a	* 110600	"	"	"	"	"
A-25 * IS 68a Buffer	* 110600	"	"	"	"	"
A-26 * WL 68b	* 110600	"	"	"	"	"
A-27 * IS 68c	* 110600	"	"	"	"	"
A-28 * IS 68c Buffer	* 110600	"	"	"	"	"

\*Represents PI 110600 striping section. Resources must be identified here due to overlapping projects.

Estimated Costs are for planning purpose only, in current dollars as of date updated.

**ENVIRONMENTAL COMMITMENTS TABLE**

P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

Transmittal Date for Plans Reviewed by OES (if applicable): 8/7/2018

A-29	* IS 68e	* 110600	"	"	"	"	"
A-30	* IS 68e Buffer	* 110600	"	"	"	"	"
A-31	* WL 69	* 110600	"	"	"	"	"
A-32	* PS 71	* 110600	"	"	"	"	"
A-33	* PS 71 Buffer	* 110600	"	"	"	"	"
A-34	* IS 74	* 110600	"	"	"	"	"
A-35	* IS 74 Buffer	* 110600	"	"	"	"	"
A-36	* WL 75	* 110600	"	"	"	"	"
A-37	* WL 76	* 110600	"	"	"	"	"
A-38	* IS 76a	* 110600	"	"	"	"	"
A-39	* IS 76a Buffer	* 110600	"	"	"	"	"
A-40	* PS 77	* 110600	"	"	"	"	"
A-41	* PS 77 Buffer	* 110600	"	"	"	"	"
A-42	* IS 77a	* 110600	"	"	"	"	"
A-43	* IS 77a Buffer	* 110600	"	"	"	"	"
A-44	* IS 78	* 110600	"	"	"	"	"
A-45	* IS 78 Buffer	* 110600	"	"	"	"	"
A-46	* PS 79	* 110600	"	"	"	"	"
A-47	* PS 79 Buffer	* 110600	"	"	"	"	"
A-48	* WL 81	* 110600	"	"	"	"	"
A-49	* WL 82	* 110600	"	"	"	"	"
A-50	* WL 83	* 110600	"	"	"	"	"
A-51	* IS 84a	* 110600	"	"	"	"	"
A-52	* IS 84a Buffer	* 110600	"	"	"	"	"
A-53	* PS 85	* 110600	"	"	"	"	"
A-54	* PS 85 Buffer	* 110600	"	"	"	"	"
A-55	* IS 85a	* 110600	"	"	"	"	"
A-56	* IS 85a Buffer	* 110600	"	"	"	"	"
A-57	* IS 85b	* 110600	"	"	"	"	"
A-58	* IS 85b Buffer	* 110600	"	"	"	"	"
A-59	* IS 85c	* 110600	"	"	"	"	"
A-60	* IS 85c Buffer	* 110600	"	"	"	"	"
A-61	* PS 85d	* 110600	"	"	"	"	"
A-62	* PS 85d Buffer	* 110600	"	"	"	"	"
A-63	* PS 86	* 110600	"	"	"	"	"
A-64	* PS 86 Buffer	* 110600	"	"	"	"	"
A-65	* WL 86a	* 110600	"	"	"	"	"
A-66	* WL 88	* 110600	"	"	"	"	"
A-67	* IS 89	* 110600	"	"	"	"	"
A-68	* IS 89 Buffer	* 110600	"	"	"	"	"

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A-69	* WL 90	* 110600	"	"	"	"	"
A-70	* WL 92	* 110600	"	"	"	"	"
A-71	* PS 93	* 110600	"	"	"	"	"
A-72	* PS 93 Buffer	* 110600	"	"	"	"	"
A-73	* IS 93a	* 110600	"	"	"	"	"
A-74	* IS 93a Buffer	* 110600	"	"	"	"	"
A-75	* IS 95	* 110600	"	"	"	"	"
A-76	* IS 95 Buffer	* 110600	"	"	"	"	"
A-77	* PS 96	* 110600	"	"	"	"	"
A-78	* PS 96 Buffer	* 110600	"	"	"	"	"
A-79	* OW 97	* 110600	"	"	"	"	"
A-80	* Open Water (OW) 97 Buffer	* 110600	"	"	"	"	"
A-81	* PS 98	* 110600	"	"	"	"	"
A-82	* PS 98 Buffer	* 110600	"	"	"	"	"
A-83	* PS 99	* 110600	"	"	"	"	"
A-84	* PS 99 Buffer	* 110600	"	"	"	"	"
A-85	* IS 99a	* 110600	"	"	"	"	"
A-86	* IS 99a Buffer	* 110600	"	"	"	"	"
A-87	* OW 100	* 110600	"	"	"	"	"
A-88	* OW 100 Buffer	* 110600	"	"	"	"	"
A-89	* WL 100a	* 110600	"	"	"	"	"
A-90	* IS 100b	* 110600	"	"	"	"	"
A-91	* IS 100b Buffer	* 110600	"	"	"	"	"
A-92	* IS 101	* 110600	"	"	"	"	"
A-93	* IS 101 Buffer	* 110600	"	"	"	"	"
A-94	* PS 102	* 110600	"	"	"	"	"
A-95	* PS 102 Buffer	* 110600	"	"	"	"	"
A-96	* WL 103	* 110600	"	"	"	"	"
A-97	* IS 105	* 110600	"	"	"	"	"
A-98	* IS 105 Buffer	* 110600	"	"	"	"	"
A-99	* WL 106	* 110600	"	"	"	"	"
A-100	* OW 107	* 110600	"	"	"	"	"
A-101	* OW 107 Buffer	* 110600	"	"	"	"	"
A-102	* PS 108	* 110600	"	"	"	"	"
A-103	* PS 108 Buffer	* 110600	"	"	"	"	"
A-104	* IS 109	* 110600	"	"	"	"	"
A-105	* IS 109 Buffer	* 110600	"	"	"	"	"
A-106	IS 1	* 110600	No activity	-	ERS-AOER 4.7.2017	"	"
A-107	IS 1 Buffer	* 110600	25-Foot Stream Buffer; No activity	"	"	"	"

\*Represents PI 110600 striping section. Resources must be identified here due to overlapping projects.

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A-108	PS 2	* 110600	No activity	"	"	"	"
A-109	PS 2 Buffer	* 110600	25-Foot Stream Buffer; No activity	"	"	"	"
A-110	WL 3	* 110600	No activity	"	"	"	"
A-111	OW 4	* 110600	No activity	"	"	"	"
A-112	OW 4 Buffer	* 110600	25-Foot Stream Buffer; No activity	"	"	"	"
A-113	Perennial/Intermittent Stream (PS/IS) 5	* 110600	No activity	"	"	"	"
A-114	PS/IS 5 Buffer	* 110600	25-Foot Stream Buffer; No activity	"	"	"	"
A-115	PS/IS 6	110610-	No activity	-	Ecology Memorandum July 2018	"	"
A-116	PS/IS 6 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-117	PS 7	110610-	No activity	"	"	"	"
A-118	PS 7 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-119	PS 8	110610-	No activity	"	"	"	"
A-120	PS 8 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-121	WL 9	110610-	No activity	"	"	"	"
A-122	IS 10	110610-	No activity	"	"	"	"
A-123	IS 10 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-124	PS 11	110610-	No activity	"	"	"	"
A-125	PS 11 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-126	WL 12	110610-	No activity	"	"	"	"
A-127	WL 13	110610-	No activity	"	"	"	"
A-128	OW 14	110610-	No activity	"	"	"	"
A-129	OW 14 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-130	PS/IS 15	110610-	No activity	"	"	"	"
A-131	PS/IS 15 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-132	PS 16	110610-	No activity	"	"	"	"
A-133	PS 16 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-134	IS 17	110610-	No activity	"	"	"	"
A-135	IS 17 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-136	IS 18	110610-	No activity	"	"	"	"
A-137	IS 18 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-138	WL 19	110610-	No activity	"	"	"	"
A-139	IS 20	110610-	No activity	"	"	"	"
A-140	IS 20 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-141	WL 21	110610-	No activity	"	"	"	"
A-142	PS 22	110610-	No activity	"	"	"	"
A-143	PS 22 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-144	IS 23	110610-	No activity	"	"	"	"
A-145	IS 23 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-146	IS 24	110610-	No activity	"	"	"	"

\*Represents PI 110600 striping section. Resources must be identified here due to overlapping projects.

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Date Updated: 10/2/2018 | Stage: Reevaluation

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A-147	IS 24 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-148	OW 25	110610-	No activity	"	"	"	"
A-149	OW 25 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-150	IS 26	110610-	No activity	"	"	"	"
A-151	IS 26 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-152	IS 27	110610-	No activity	"	"	"	"
A-153	IS 27 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-154	PS 28	110610-	No activity	"	"	"	"
A-155	PS 28 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-156	IS 29	110610-	No activity	"	"	"	"
A-157	IS 29 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-158	IS 30	110610-	No activity	"	"	"	"
A-159	IS 30 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-160	PS 31	110610-	No activity	"	"	"	"
A-161	PS 31 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-162	WL 32	110610-	No activity	"	"	"	"
A-163	WL 33	110610-	No activity	"	"	"	"
A-164	WL 34	110610-	<del>No activity</del> 0.01 acre of clearing and grubbing	"	"	"	"
A-165	PS 35	110610-	No activity	"	"	"	"
A-166	PS 35 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-167	IS 36	110610-	No activity	"	"	"	"
A-168	IS 36 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-169	WL 37	110610-	No activity	"	"	"	"
A-170	IS 38	110610-	No activity	"	"	"	"
A-171	IS 38 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-172	PS 39	110610-	No activity	"	"	"	"
A-173	PS 39 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-174	IS 40	110610-	No activity	"	"	"	"
A-175	IS 40 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-176	WL 41	110610-	No activity	"	"	"	"
A-177	PS 42	110610-	No activity	"	"	"	"
A-178	PS 42 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-179	IS 43	110610-	No activity	"	"	"	"
A-180	IS 43 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-181	PS/IS 44	110610-	No activity	"	"	"	"
A-182	PS/IS 44 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-183	WL 45	110610-	No activity	"	"	"	"
A-184	PS 46	110610-	No activity	"	"	"	"
A-185	PS 46 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"

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A-186	IS 47	110610-	No activity	"	"	"	"
A-187	IS 47 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-188	IS/EC 48	110610-	No activity	"	"	"	"
A-189	IS 48 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-190	PS 49	110610-	No activity	"	"	"	"
A-191	PS 49 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-192	IS 50	110610-	No activity	"	"	"	"
A-193	IS 50 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-194	IS/EC 51	110610-	No activity	"	"	"	"
A-195	IS 51 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-196	WL 52	110610-	No activity	"	"	"	"
A-197	PS 53	110610-	No activity	"	"	"	"
A-198	PS 53 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-199	WL 54	110610-	No activity	"	"	"	"
A-200	EC 55	110610-	No activity	"	"	"	"
A-201	WL 56	110610-	No activity	"	"	"	"
A-202	PS 57	110610-	No activity	"	"	"	"
A-203	PS 57 Buffer	110610-	No activity	"	"	"	"
A-204	EC 58	110610-	No activity	"	"	"	"
A-205	WL 59	110610-	No activity	"	"	"	"
A-206	PS 60	110610-	No activity	"	"	"	"
A-207	PS 60 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-208	WL 61	110610-	No activity	"	"	"	"
A-209	EC 62	110610-	No activity	"	"	"	"
A-210	PS 63	110610-	No activity	"	"	"	"
A-211	PS 63 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-212	PS 64	110610-	No activity	"	"	"	"
A-213	PS 64 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-214	WL 65	110610-	No activity	"	"	"	"
A-215	PS 66	110610-	No activity	"	"	"	"
A-216	PS 66 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-217	EC 67	110610-	No activity	"	"	"	"
A-218	WL 68	110610-	No activity	"	"	"	"
A-219	IS 69	110610-	No activity	"	"	"	"
A-220	IS 69 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-221	PS 70	110610-	No activity	"	"	"	"
A-222	PS 70 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-223	PS 71	110610-	No activity	"	"	"	"
A-224	PS 71 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-225	WL 72	110610-	No activity	"	"	"	"

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A-226	IS 73	110610-	No activity	"	"	"	"
A-227	IS 73 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-228	IS 74	110610-	No activity	"	"	"	"
A-229	IS 74 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-230	EC 75	110610-	No activity	"	"	"	"
A-231	PS/IS/EC 76	110610-	No activity	"	"	"	"
A-232	PS/IS 76 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-233	WL 77	110610-	No activity	"	"	"	"
A-234	IS 78	110610-	No activity	"	"	"	"
A-235	IS 78 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-236	IS 79	110610-	No activity	"	"	"	"
A-237	IS 79 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-238	IS 80	110610-	No activity	"	"	"	"
A-239	IS 80 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-240	IS 81	110610-	No activity	"	"	"	"
A-241	IS 81 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-242	WL 82	110610-	No activity	"	"	"	"
A-243	PS 83	110610-	Temporary stream impacts as a result of de-watering for bridge demolition/bent removal are anticipated 122 linear feet (0.16 acre) of temporary impacts from jetties (Primary Morphological Alteration)	E-6	"	"	"
A-244	PS 83 Buffer	110610-	Exempt buffer impacts anticipated. 100-foot roadway drainage structure exemption.	"	"	"	"
A-245	PS 84	110610-	No activity	"	"	"	"
A-246	PS 84 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-247	WL 85	110610-	No activity	"	"	"	"
A-248	IS 86	110610-	No activity	"	"	"	"
A-249	IS 86 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-250	WL 87	110610-	No activity	"	"	"	"
A-251	EC 88	110610-	No activity	"	"	"	"
A-252	IS 89	110610-	No activity	"	"	"	"
A-253	IS 89 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-254	PS/IS 90	110610-	No activity	"	"	"	"
A-255	PS/IS 90 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-256	IS 91	110610-	No activity	"	"	"	"

\*Represents PI 110600 striping section. Resources must be identified here due to overlapping projects.

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**ENVIRONMENTAL COMMITMENTS TABLE**

P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

Transmittal Date for Plans Reviewed by OES (if applicable): 8/7/2018

A-257	IS 91 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-258	PS 92	110610-	No activity	"	"	"	"
A-259	PS 92 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-260	WL 93	110610-	No activity	"	"	"	"
A-261	IS 93A	110610-	No activity	"	"	"	"
A-262	IS 93A Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-263	EC 94	110610-	No activity	"	"	"	"
A-264	PS 95	110610-	No activity	"	"	"	"
A-265	PS 95 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-266	IS/EC 96	110610-	No activity	"	"	"	"
A-267	IS 96 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-268	PS 97	110610-	No activity	"	"	"	"
A-269	PS 97 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-270	IS 98	110610-	No activity	"	"	"	"
A-271	IS 98 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-272	IS 99	110610-	No activity	"	"	"	"
A-273	IS 99 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-274	IS 100	110610-	No activity	"	"	"	"
A-275	IS 100 Buffer	110610-	25-Foot Stream Buffer; No activity	"	"	"	"
A-276	WL 101	110610-	No activity	"	"	"	"
A-277	PS/IS 102	110610-	No activity 21 linear feet (0.002 acre) of fill	"	"	"	"
A-278	PS/IS 102 Buffer	110610-	Exempt buffer impacts anticipated. 50-foot roadway drainage structure exemption	"	"	"	"
A-279	WL 103	110610-	No activity	"	"	"	"
A-280	WL 104	0013545	No activity	"	"	"	"
A-281	IS 105	0013545	No activity	"	"	"	"
A-282	IS 105 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-283	IS 106	0013545	No activity	"	"	"	"
A-284	IS 106 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-285	WL 107	0013545	No activity	"	"	"	"
A-286	PS 108	0013545	No activity	"	"	"	"
A-287	PS 108 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-288	PS 109	0013545	No activity	"	"	"	"
A-289	PS 109 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-290	WL 110	0013545	No activity	"	"	"	"
A-291	IS 111	0013545	No activity	"	"	"	"
A-292	IS 111 Buffer	0013545	25-Foot Stream Buffer; Non-exempt buffer impacts anticipated	"	"	"	"

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**ENVIRONMENTAL COMMITMENTS TABLE**

P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

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A-293	OW 112	0013545	No activity	"	"	"	"
A-294	OW 112 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-295	PS/IS 113	0013545	No activity	"	"	"	"
A-296	PS/IS 113 Buffer	0013545	25-Foot Stream Buffer; Non-exempt buffer impacts anticipated	"	"	"	"
A-297	IS 114	0013545	No activity	"	"	"	"
A-298	IS 114 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-299	WL 115	0013545	No activity	"	"	"	"
A-300	IS 116	0013545	No activity	"	"	"	"
A-301	IS 116 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-302	PS 117	0013545	No activity	"	"	"	"
A-303	PS 117 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-304	IS 118	0013545	No activity	"	"	"	"
A-305	IS 118 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-306	PS 119	0013545	No activity	"	"	"	"
A-307	PS 119 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-308	PS 120	0013545	No activity	"	"	"	"
A-309	PS 120 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-310	IS 121	0013545	No activity	"	"	"	"
A-311	IS 121 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-312	WL 122	0013545	No activity	"	"	"	"
A-313	EC 123	0013545	No activity	"	"	"	"
A-314	IS/EC 124	0013545	No activity	"	"	"	"
A-315	IS 124 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-316	PS 125	0013545	No activity	"	"	"	"
A-317	PS 125 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-318	WL 126	0013545	No activity	"	"	"	"
A-319	PS 127	0013545	No activity	"	"	"	"
A-320	PS 127 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-321	IS 128	0013545	No activity	"	"	"	"
A-322	IS 128 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-323	WL 129	0013545	No activity	"	"	"	"
A-324	IS 130	0013545	No activity	"	"	"	"
A-325	IS 130 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-326	PS 131	0013545	No activity	"	"	"	"
A-327	PS 131 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-328	IS 132	0013545	No activity	"	"	"	"
A-329	IS 132 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-330	WL 133	0013545	No activity	"	"	"	"
A-331	WL 134	0013545	No activity	"	"	"	"

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**ENVIRONMENTAL COMMITMENTS TABLE**

P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

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A-332	PS 135	0013545	No activity	"	"	"	"
A-333	PS 135 Buffer	0013545	25-Foot Stream Buffer; Non-exempt buffer impacts anticipated	"	"	"	"
A-334	WL 136	0013545	No activity	"	"	"	"
A-335	EC 137	0013545	102.1 lf/0.005 acre of pipe	"	"	"	"
A-336	IS 138	0013545	No activity	"	"	"	"
A-337	IS 138 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-338	WL 139	0013545	No activity	"	"	"	"
A-339	WL 140	0013545	No activity	"	"	"	"
A-340	WL 141	0013545	No activity	"	"	"	"
A-341	PS 142	0013545	Temporary stream impacts as a result of de-watering for bridge demolition/bent removal are anticipated	"	"	"	"
A-342	PS 142 Buffer	0013545	25-Foot Stream Buffer; Exempt buffer impacts anticipated. 100-foot roadway drainage structure exemption.	"	"	"	"
A-343	IS/EC 143	0013545	No activity	"	"	"	"
A-344	IS 143 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-345	WL 144	0013545	No activity	"	"	"	"
A-346	WL 145	0013545	0.416 acre impact by clearing conversion	"	"	"	"
A-347	PS 146	0013545	Temporary stream impacts as a result of de-watering for bridge demolition/bent removal are anticipated	"	"	"	"
A-348	PS 146 Buffer	0013545	25-Foot Stream Buffer; Exempt buffer impacts anticipated. 100-foot roadway drainage structure exemption.	"	"	"	"
A-349	WL 147	0013545	0.006 acre impact by clearing conversion	"	"	"	"
A-350	WL 148	0013545	0.023 acre impact by clearing conversion	"	"	"	"

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P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

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A-351	PS 149	0013545	No activity	"	"	"	"
A-352	PS 149 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-353	IS 150	0013545	No activity	"	"	"	"
A-354	IS 150 Buffer	0013545	25-Foot Stream Buffer; No activity	"	"	"	"
A-355	Listed Species	110610-	Project would be constructed such that harm to listed species would be avoided	B-1	Ecology Addendum July 2018	Not Required	"
A-356	Resource 1	110610-	No Activity	-	Boundary Transmittal 6.26.17	No	"
A-357	Resource 2	110610-	"	"	"	"	"

\*At the southern terminus of proposed project PI# 110610, an adjacent I-85 Express Managed Lanes project (PI# 110600) is currently under construction. There is a 5.9-mile section of overlap between these two projects. Only re-striping work within the existing I-85 pavement footprint would occur under PI# 110610. Impacts to federally jurisdictional waters and state mandated buffers in this 5.9-mile reach are a result of construction under PI# 110600 and were permitted under that project.

**B. Special Provisions (Attach all special provisions with transmittal letters to the commitments table, if available)**

Special Provision	P.I.#(s)	Purpose	Est. Cost	SP's Latest Date
B-1 SP 107.23.H	110610-	For the protection of listed species	Negligible	5/7/18

**C. ERIT Comments and Design Features (Description: For ERIT Comments, provide exact wording for the comments section of the ERIT)**

ERIT Comment or Design Feature	P.I.#(s)	Description	Est. Cost	Correctly Shown?
C-1 ERIT Comment	0013545	The contractor will ensure that no construction-related activities or access occur within the Orange Barrier Fencing protecting this resource. See Section A for applicable resources.	Negligible	No
C-2 ERIT Comment	0013545	<del>The Office of Environmental Services shall be contacted prior to the installation of exclusionary devices for migratory birds.</del> This is now a standard specification.	Negligible	"
C-3 Design Feature	110610-	For noise abatement: A noise barrier (Barrier 4-1) would be constructed along the east side of I-85, beginning approximately 2,750 feet north of Hamilton Mill Road. (See Commitment E-3 for required noise abatement public outreach)	\$521,203	"
C-4 Design Feature	110610-	For noise abatement: A noise barrier (Barrier 4-2) would be constructed along the west side of I-85, beginning approximately 7,230 feet north of Hamilton Mill Road. (See Commitment E-3 for required noise abatement public outreach)	\$1,547,510	"
C-5 Design Feature	110610-	For noise abatement: A noise barrier (Barrier 4-3) would be constructed along the east side of I-85, beginning approximately 1,150 feet north of Spout Springs Road. (See Commitment E-3 for required noise abatement public outreach)	\$2,355,315	"

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P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

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C-6	Design Feature	110610-	For noise abatement: A noise barrier (Barrier 4-4) would be constructed along the west side of I-85, beginning at Spout Spring Road. (See Commitment E-3 for required noise abatement public outreach)	\$2,726,233	“
C-7	Design Feature	110610-	For noise abatement: A noise barrier (Barrier 4-5) would be constructed along the west side of I-85, beginning approximately 30 feet north of Flowery Branch Road. (See Commitment E-3 for required noise abatement public outreach)	\$1,809,733	“
C-8	Design Feature	110610-	For noise abatement: A noise barrier (Barrier 4-6) would be constructed along the east side of I-85, beginning approximately 75 feet north of Flowery Branch Road. (See Commitment E-3 for required noise abatement public outreach)	\$870,893	“
C-9	Design Feature	110610-	For noise abatement: A noise barrier (Barrier 5-1) would be constructed along the east side of I-85, beginning approximately 5,000 feet north of Flowery Branch Road. (See Commitment E-3 for required noise abatement public outreach)	\$994,756	“
C-10	Design Feature	110610-	For noise abatement: A noise barrier (Barrier 3) would be constructed along the east side of I-85, beginning approximately 700 feet north of SR 53 adjacent to the I-85 northbound on ramp. (See Commitment E-3 for required noise abatement public outreach)	\$804,252	“
C-11	Design Feature	0013545	For noise abatement: A noise barrier would be constructed along the west side of I-85, beginning approximately 1,500 feet north of SR 53. (See Commitment E-3 for required noise abatement public outreach)	\$4,698,854	“
C-12	Design Feature	0013545	For noise abatement: A noise barrier would be constructed along the west side of I-85, beginning approximately 2,800 feet north of SR 60. (See Commitment E-3 for required noise abatement public outreach)	\$439,964	“

**D. Necessary Permits, Buffer Variances and Mitigation Credits**

<i>Permit, Variance, etc.</i>		<i>P.I.#(s)</i>	<i>Add'l Info (permit expiration date, number of credits needed, etc...)</i>	<i>Est. Cost</i>	<i>Acquired?</i>
D-1	Notice of Intent (NOI) for NPDES	110610-	The Design-Build Contractor will submit an NOI to the NPDES General Permit to the Georgia Environmental Protection Division (EPD) following award of the contract but prior to construction activities.	Negligible	No
D-2	Section 404 Nationwide Permit 23	110610-	A Nationwide Permit would be required for a total of 143 linear feet (0.162 acre) of stream impacts, and 0.01 acre of wetland impacts	Negligible	“
D-3	Wetland Mitigation Credits	110610-	911 grandfathered stream credits and 0.08 grandfathered wetland credits required	\$29,100 (estimate at \$50,000 per wetland credit and	“

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**ENVIRONMENTAL COMMITMENTS TABLE**

P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

Transmittal Date for Plans Reviewed by OES (if applicable): 8/7/2018

				\$27.50 per stream credit)	
D-4	Buffer Variance	0013545	Non-exempt buffer impacts anticipated at streams: 111, 113, and 135	Negligible	“
D-5	Buffer Mitigation	0013545	It is anticipated that buffer mitigation credits will be required. The number of credits will be determined during the final design phase.	TBD	“

**E. Other Commitments or Requirements (Status: Pre- and Post – Complete or Incomplete; During – Signature Req’d)**

<i>Pre-, During, or Post</i>		<i>P.I.#(s)</i>	<i>Commitment</i>	<i>Responsible party</i>	<i>Est. Cost</i>	<i>Status</i>
E-1	During Construction	110610-, 0013545	The public, local officials, EMS, local schools and churches will be notified of the detours 30 days prior to bridge closure per GDOT guidance. Commitments resulting from coordination with schools, EMS and local officials from Phase I Construction Segments will be updated for future Phase II Construction Segments.	OID and Design-Build Contractor	Negligible	Incomplete
E-2	During Construction	110610-	Detour – The Design-Build Team shall observe the following project specific restrictions:  The Design-Build Team shall coordinate with the Department to make sure that the Spout Springs Road detour period does not conflict with the detour period of the Flowery Branch Road detour.	OID and Design-Build Contractor	Negligible	Incomplete
E-3	Pre-construction	110610-, 0013545	Prior to the Georgia DOT’s final decision on the placement of any noise abatement, Georgia DOT will conduct outreach with the affected individuals after final design to determine community support for abatement. Due the nature of the Design-Build process, determination of when Final Design has been met will be agreed upon by the Design-Build Contractor and the Georgia DOT Project Manager. All NEPA decisions are the responsibility of Georgia DOT and/or FHWA, and will not be made by the Design-Build Contractor. See Section C for potential noise abatement locations.	OID and Design-Build Contractor	Negligible	Complete July 2018

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**ENVIRONMENTAL COMMITMENTS TABLE**

P.I.#s: 110610- & 0013545, Counties: Gwinnett, Barrow, Jackson

Date Updated: 10/2/2018 | Stage: Reevaluation

Transmittal Date for Plans Reviewed by OES (if applicable): 8/7/2018

E-4	Pre-construction	110610-, 0013545	The Design-Build Contractor will retain existing vegetation, where feasible in accordance with GDOT Clearing and Grubbing Right of Way Policy, in all areas of the project where retaining walls and/or noise barriers are not proposed to buffer affected property owners from proposed travel lanes.	OES, OID and Design-Build Contractor	Negligible	“
E-5	Pre-Construction	110610-, 0013545	The Design-Build Contractor will prepare final hydrologic and hydraulic analysis using the most current information available. Should the proposed improvements result in any increase to the base flood elevations, floodway elevations, or floodway widths at Ivy Creek, Wheeler Creek, Middle Oconee River, Mulberry River or Walnut Creek, Federal Emergency Management Agency (FEMA) coordination and Community (Gwinnett, Barrow, and/or Jackson County and cities) coordination shall be conducted by the GDOT, as well as submittal of a Conditional Letter of Map Revision prior to construction and Letter of Map Revision after construction to FEMA.	OID and Design-Build Contractor	Negligible	Complete May 11, 2018; Zone A
E-6	During Construction	110610-	Construction within PS-83/Mulberry River will be started and completed in less than one year.	OID and Design-Build Contractor	Negligible	Incomplete
E-7	During Construction	110610-	Prior to beginning construction activities north of SR 53, public outreach will occur to residents within the Vineyard and Vineyard Gates subdivisions adjacent to Noise Barrier 4, as shown on Figure 6 of the reevaluation.	OID and OES	Negligible	Incomplete

<i>Total Estimated Cost</i>	\$11,658,995
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If Project is Complete or Under Construction, Area or Construction Engineer affirms that all Special Provisions, Plan Notes and During Construction Commitments were or are being adhered to during the project's construction.

Please Print Name and Title: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Please provide an explanation if unable to sign.

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**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**SPECIAL PROVISION**

**PROJECT: NHIMO-0085-02(165) & NHIMO-0085-02(166), Gwinnett,  
Barrow, & Jackson Counties  
P.I. Nos. 110610 & 0013545**

**Section 107 – Legal Regulations and Responsibility to the Public**

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*Add the following to Subsection 107.23:*

**H. Protection of Environmentally Sensitive Species**

The following conditions are intended as a minimum to protect these species and their habitat during any activities that are in close proximity to the known location(s) of these species.

1. All Project personnel employed to work on this project shall be advised about the potential presence and appearance of the state protected Chattahoochee crayfish (*Cambarus howardi*) and the Altamaha shiner (*Cyprinella xaenura*). All personnel shall be advised that there are penalties for killing, capturing, or selling of the Chattahoochee crayfish or the Altamaha shiner under the Georgia Endangered Wildlife Act of 1973. Habitat for the Chattahoochee crayfish is present in streams PS 2, PS 46, PS 70, PS 71, PS 119, PS 125, PS 127, PS 131, and PS 135. Habitat for the Altamaha shiner is present in streams PS 63, PS 83, PS 84, PS 142, and PS 146. Pictures and habitat information will be provided at the preconstruction conference and shall be posted in a conspicuous location in the Project field office until such time that Project construction has been completed and time charges have stopped. Pictures and habitat information will be provided at the preconstruction conference and shall be posted in a conspicuous location in the Project field office until such time that Project construction has been completed and time charges have stopped.
2. At any time, concrete debris, paving materials, litter, or demolition debris shall not be allowed to fall or be placed into PS 2, PS 46, PS 63, PS 70, PS 71, PS 83, PS 84, PS 119, PS 125, PS 127, PS 131, PS 135, PS 142, and PS 146.
3. Equipment staging areas and equipment maintenance areas (particularly for oil changes) shall be located at least 200 feet from the banks of PS 2, PS 46, PS 63, PS 70, PS 71, PS 83, PA 84, PS 119, PS 125, PS 127, PS 131, PS 135, PS 142, and PS 146 to minimize the potential for wash water, petroleum products, or other contaminants from construction equipment entering streams.
4. All stockpiled soils and materials shall be placed at least 200 feet away from the stream banks to prevent rain runoff into PS 2, PS 46, PS 63, PS 70, PS 71, PS 83, PA 84, PS 119, PS 125, PS 127, PS 131, PS 135, PS 142, and PS 146.
5. Pesticides or herbicides shall not be used within 200 feet of the banks of PS 2, PS 46, PS 63, PS 70, PS 71, PS 83, PS 84, PS 119, PS 125, PS 127, PS 131, PS 135, PS 142, and PS 146. Fertilizer shall only be used while grassing graded areas to achieve site stabilization.

**107.23H Protection of Ecological Resources, P.I. Nos. 110610 & 0013545, Gwinnett, Barrow, and Jackson Counties.**

6. The Project Engineer shall be notified immediately in the event of an erosion control failure that allows discharge of sediment into PS 2, PS 46, PS 63, PS 70, PS 71, PS 83, PS 84, PS 119, PS 125, PS 127, PS 131, PS 135, PS 142, and PS 146. The Project Engineer in turn shall notify the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services at [ecology\\_submittals@dot.ga.gov](mailto:ecology_submittals@dot.ga.gov).
7. In the event that any incident occurs that causes harm or injury to the Chattahoochee Crayfish or the Altamaha shiner along the Project corridor, the incident shall immediately be reported to the Project Engineer who in turn will notify the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services at 404-631-1101. All activity, except traffic control and erosion control, shall cease pending consultation by the Department with the U.S. Fish and Wildlife Service and the lead Federal Agency.
8. A log detailing any incidents that cause harm or injury to the Chattahoochee Crayfish or the Altamaha shiner in or adjacent to the Project shall be kept until such time that Project construction has been completed and time charges have stopped. Following Project completion, the log and a report summarizing any incidents that caused harm or injury to these species shall be submitted to the Project Engineer and the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services, 600 West Peachtree Street NW, Atlanta, GA 30308. The GDOT in turn will provide copies of the report to the U.S. Fish and Wildlife Service, the Georgia Department of Natural Resources, and the lead Federal Agency.
9. All costs pertaining to any requirement contained herein shall be included in the overall bid submitted unless such requirement is designated as a separate Pay Item in the Proposal.

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

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## ENVIRONMENTAL REEVALUATION

### I. GENERAL INFORMATION

<b>Project Nos.</b>	NH-IMO-0085-02(165) & NH-IMO-0085-02(166)
<b>P.I. Nos.</b>	110610- & 0013545
<b>County</b>	Gwinnett, Barrow, Jackson
<b>STIP/TIP No.</b>	GW-386, BA-008, GH-110
<b>Funded Years</b>	Right-of-Way: n/a; Construction: FY2019 and FY2020
<b>Funding Codes</b>	Q05, L050, Z001, HB170, RPS9
<b>Project Name</b>	I-85 From I-985 to North of SR 53
<b>Project Limits</b>	South of SR 20/Buford Highway in Gwinnett County to SR 53 in Jackson County, approximately 16.4 miles.

### II. DESCRIPTION OF PROJECT IN ORIGINAL ENVIRONMENTAL DOCUMENT:

#### A. Existing Facility

This project is located in northeastern Gwinnett County and northern Barrow and Jackson Counties. This project consists of two different Project ID's. P.I. No. 110610- begins just south of SR 20/Buford Drive as a restriping project and pavement for that section is being constructed as part of adjacent I-85 Express Lanes Project (P.I. No. 110600-). Pavement construction for P.I. No. 110610- begins at CR 134/Hamilton Mill Road and ends just north of SR 211. P.I. No. 0013545 begins just north of SR 211 and ends at US 129/SR 11. The existing typical section is a four-lane rural highway with grass median.

#### B. Proposed Project

The proposed project P.I. No. 110610- would widen and reconstruct approximately 12.6 miles of I-85 from I-985 just south of SR 20/Buford Drive to just north of SR 211; the proposed project P.I. No. 0013545, to be constructed in conjunction with P.I. No. 110610-, would widen and reconstruct approximately 10.8 miles of I-85 from just north of SR 211 to just north of US 129/SR 11. The existing typical section is a four-lane rural highway with grass median. The typical section is proposed to expand from two general purpose lanes to three general purpose lanes in each direction including 12-foot inside shoulders and variable outside shoulders (14-foot maximum). Existing right-of-way (ROW) varies from 300 to 425 feet. At the western terminus of proposed project P.I. No. 110610-, an adjacent I-85 Express Managed Lanes Project (P.I. No. 110600-) is currently under construction. A 14-foot striped buffer between the general purpose and managed lanes from just south of SR 20/Buford Drive to just south of CR 134/Hamilton Mill Road is being constructed as part of P.I. No. 110600-. In order to provide lane continuity and accommodate the transition to three general purpose lanes, this 14-foot striped buffer between the general purpose and 2 managed lanes would be converted to a general purpose lane in both the southbound and northbound directions as part of P.I. No. 110610-. The total length of the re-striping only section of P.I. No. 110610- is 5.9 miles. As part of this project, eight mainline bridges on I-85 as well as four overpasses will be replaced.

#### C. Changes Documented in Previous Reevaluations

NA

**III. TYPE OF ENVIRONMENTAL DOCUMENT: CE**

<b>Actions Requiring Concurrences Prior to Environmental Document or Reevaluation Approval</b>	<b>YES</b>	<b>N/A</b>	<b>If Yes, Date of Concurrence</b>
Section 106/Assessment of Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Section 106/Memorandum of Agreement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Individual Section 4(f) Evaluation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>De Minimis</i> Acknowledgment/Requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protected Species/No Effect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4/27/17
Protected Species/Section 7 Consultation with USFWS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Protected Species/Section 7 Consultation with NMFS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Essential Fish Habitat Coordination with NMFS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
FWCA/USFWS Coordination for Longitudinal Stream Encroachments, Existing Culvert Extensions (+100 feet), or New Culvert Construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9/18/18
PM <sub>2.5</sub> Interagency Concurrence	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
USCG Navigable Water Determination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**IV. FHWA DOCUMENT APPROVAL DATE:** 10/16/2017

**V. DATE(S) OF PRIOR REEVALUATION(S):** NA

**VI. HAS PROJECT, PROJECT LIMITS, OR ROW/EASEMENTS CHANGED SINCE THE LAST APPROVAL:** Yes

**VII. DESCRIPTION OF PROJECT, PROJECT LIMITS, OR ROW CHANGES AND WHY CHANGES WERE MADE:** Both P.I. 110610- and P.I. 0013545 were combined in the original NEPA document approval. The project will be constructed in two phases. The project limits for P.I. 110610- have been extended to SR 53. Phase 1 construction for P.I. 110610- will begin in FY 2019. Phase 2 construction for P.I. 0013545 will begin at a future date. The purpose of this Reevaluation is for the updates to impacts for natural resources and noise barrier final design included in P.I. 110610-.

This project is being constructed as a variable scope project, meaning the length of roadway that could be constructed under a maximum payment cap was a determination in the selection of the design build team. The DBT reached segment 18, which has an ending mile point equal to station 964+50 of the final plans, or just north of SR 53. Therefore, the previous eastern terminus of P.I. No. 110610- and western terminus of P.I. No. 0013545 has shifted approximately 3 miles east from just north of SR 211 (station 769+50) to just north of SR 53 (station 964+50). To transition from 3 lanes to 2 lanes in the northbound and 2 lanes to 3 lanes in the southbound direction, the travel lanes will include a taper in the area between the on and off exit ramps for the SR 53 interchange. The remainder of the project originally cleared under the October 16, 2017 NEPA document would still be constructed under PI No. 0013545 at a later date. The revised limits are shown in Figure 1 in Attachment 1.

**VIII. HAVE THE ENVIRONMENTAL STUDIES BEEN UPDATED SINCE THE LAST PROJECT APPROVAL, AND IF SO, WHY:** Yes. An Ecology Addendum was prepared to update impacts to Waters of the U.S. and buffered waters, as well as clarify resources within P.I. 110610- and 0013545 based on revised project limits. A Noise Addendum was prepared to discuss validation of revised noise barrier locations based on the contractor’s final plans.

**IX. HAVE THERE BEEN ANY CHANGES TO OR ADDITIONAL RESOURCES IDENTIFIED WITHIN THE AFFECTED ENVIRONMENT:** Yes. See Attachment 1 for Project Change Map, and Attachment 2 for a discussion of the history of changes.

**X. REVIEW OF EFFECTS**  
“**Yes**” or “**No**” denotes whether effects to environmental resources have changed as a result of project changes or changes in the effected environment.

A. SOCIAL ENVIRONMENT	INVOLVEMENT UNDER PREVIOUS APPROVAL?		HAVE EFFECTS CHANGED SINCE LAST REEVALUATION?		REMARKS OR REFERENCE TO ATTACHMENT
	YES	NO	YES	NO	
1. Land Use Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Community Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Relocation Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Churches and Institutions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Parks/Recreation Areas/Wildlife Refuges	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Title VI/E.O. 12898	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Public Controversy Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Public Involvement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Economic Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

B. CULTURAL ENVIRONMENT	INVOLVEMENT UNDER PREVIOUS APPROVAL?		HAVE EFFECTS CHANGED SINCE LAST REEVALUATION?		REMARKS OR REFERENCE TO ATTACHMENT
	YES	NO	YES	NO	
1. Historic Sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Archaeological Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

C. NATURAL ENVIRONMENT	INVOLVEMENT UNDER PREVIOUS APPROVAL?		HAVE EFFECTS CHANGED SINCE LAST REEVALUATION?		REMARKS OR REFERENCE TO ATTACHMENT
	YES	NO	YES	NO	
1. Waters of the U.S./State Waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2,3
2. Water Quality/303(d) List	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Wild and Scenic Rivers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Essential Fish Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Farmland	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,3
7. Protected Species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Invasive Species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Wildlife and Habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

D. PHYSICAL ENVIRONMENT	INVOLVEMENT UNDER PREVIOUS APPROVAL?		HAVE EFFECTS CHANGED SINCE LAST REEVALUATION?		REMARKS OR REFERENCE TO ATTACHMENT
	YES	NO	YES	NO	
1. Noise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,4,5
2. Climate Change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Air	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Energy/Mineral Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Construction/Utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
6. USTs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Hazardous Waste Sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

E. PERMITS/VARIANCES/ COMMITMENTS REQUIRED	INVOLVEMENT UNDER PREVIOUS APPROVAL?		HAVE EFFECTS CHANGED SINCE LAST REEVALUATION?		REMARKS OR REFERENCE TO ATTACHMENT
	YES	NO	YES	NO	
1. U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. CWA Section 404 Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,3
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Other Permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other Commitments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See ECT/Green Sheet

F. SECTION 4(f) APPLICABILITY	INVOLVEMENT UNDER PREVIOUS APPROVAL?		HAVE EFFECTS CHANGED SINCE LAST REEVALUATION?		REMARKS OR REFERENCE TO ATTACHMENT
	YES	NO	YES	NO	
1. <i>De Minimis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Programmatic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Individual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Section 6(f) Applicability	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**XI. NEED FOR PUBLIC INVOLVEMENT:**

- A Public Information Open House was held on December 6 and 8, 2016.
- There have been no changes in the project design or environmental effects that would require a Public Information Open House.

**XII. FINDINGS/CONCLUSIONS**


- Based on the analysis contained in this reevaluation, it has been determined that the changes in project design and/or environmental effects would not significantly alter the conclusions reached in the approved environmental document and/or previous reevaluations.
- There have been no changes in the design/ROW of this project nor have there been changes in project effects or the affected environment. Therefore, the conclusions reached in the approved environmental document and/or previous reevaluations remain valid.

PREPARED BY:

  
\_\_\_\_\_  
Josh Earhart  
NEPA Analyst  
Edwards-Pitman Environmental, Inc.

October 2, 2018  
\_\_\_\_\_  
Date

REVIEWED BY:

  
\_\_\_\_\_  
David Borchardt  
Senior NEPA Planner  
Georgia Department of Transportation


10/4/18  
\_\_\_\_\_  
Date

CONCURRED BY:

  
\_\_\_\_\_  
Eric Duff  
State Environmental Administrator  
Georgia Department of Transportation

10-4-18  
\_\_\_\_\_  
Date

APPROVED BY:

for   
\_\_\_\_\_  
Moises Marrero  
Division Administrator  
Federal Highway Administration

10/9/2018  
\_\_\_\_\_  
Date

Purpose for Reevaluation: Change

Attachments appear in the following order:

1. Project Change Map
2. Effects Evaluation
3. Correspondence
4. Noise Barrier Validation Information
5. Noise Barrier Voting Information





**Projects NH-IMO-0085-02(165) & HN-IMO-0085-02(166)**

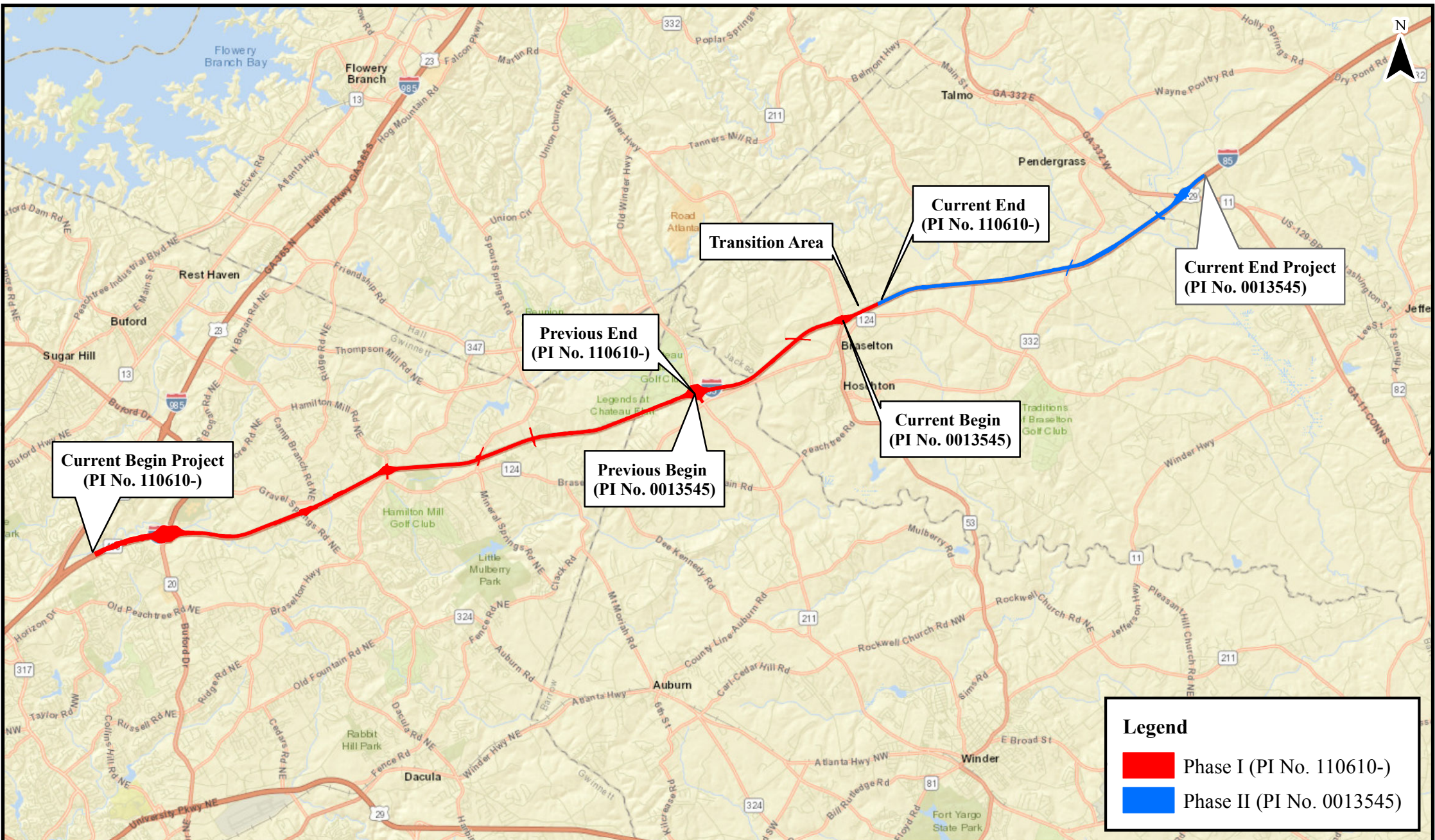
**Gwinnett, Barrow, and Jackson Counties**

**P.I. Nos. 110610- & 0013545**

**Reevaluation**

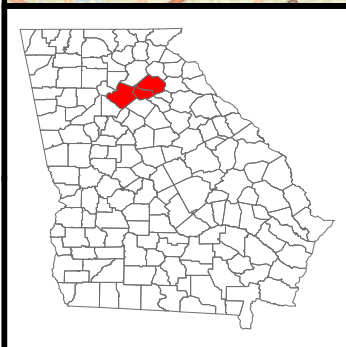
**Attachment 1**

**PROJECT CHANGES MAP**



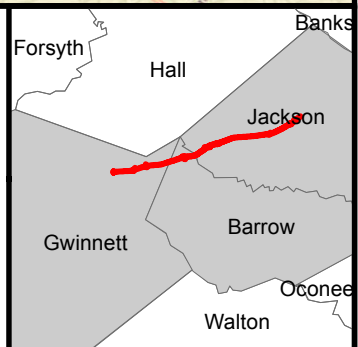
**Legend**

- Phase I (PI No. 110610-)
- Phase II (PI No. 0013545)



**Figure 1 - Project Change Map**  
 I-85 Widening and Improvements  
 P.I.# 110610- & 0013545  
 Gwinnett, Barrow, and Jackson Counties, GA

0 1 2 4  
 Miles



Source: Esri Street Maps



**Projects NH-IMO-0085-02(165) & HN-IMO-0085-02(166)**

**Gwinnett, Barrow, and Jackson Counties**

**P.I. Nos. 110610- & 0013545**

**Reevaluation**

**Attachment 2**

**EFFECTS EVALUATION**

**ENVIRONMENTAL REEVALUATION**  
**ATTACHMENT 2: EFFECTS EVALUATION**  
**PROJECT NOS. NH-IMP-0085-02(165) & NH-IMP-0085-02(166)**  
**GWINNETT, BARROW, AND JACKSON COUNTIES**  
**P.I. NOS. 110610- & 0013545**

**C. NATURAL ENVIRONMENT**

**1. Waters of the U.S./State Waters**

Based on the previous design included in the approved Categorical Exclusion (CE) (approved October 16, 2017), no impacts were anticipated to Waters of the U.S. within P.I. No. 110610-, or in the case of Perennial Stream (PS) 83, Mulberry River, were considered short term/temporary impacts that could not be quantified at the time.

Based on the proposed current design, Wetland (WL) 34, PS 83, and PS/Intermittent Stream (IS) 102 would now be impacted by the project.

The proposed project would change impacts to WL 34 from no impacts reported in the April 2017 Ecology Resource Survey-Assessment of Effects Report (ERS-AOER) to 0.01 acre, as reported in the July 2018 Ecology Memorandum due to clearing and grubbing required for construction of the Flowery Branch Road fill slopes supporting the Interstate 85 (I-85) bridge replacement. Wetland 34 does not provide suitable habitat for state or federally protected species.

Based on the level of design available for the 2017 ERS-AOER quantifiable impacts to PS 83 could not be determined. However, the July 2018 Ecology Memorandum includes impacts to PS 83 of 122 linear feet (0.16 acre) of short term impacts would result from rock jetties required to access and remove existing bents for both I-85 bridges over Mulberry River. Perennial Stream 83 provides suitable habitat for the state protected Altamaha shiner. These impacts would require coordination under the Fish and Wildlife Coordination Act (FWCA). The U.S. Fish and Wildlife Service

(USFWS) concurred with this determination on September 19, 2018. A copy of the coordination and response is included in Attachment 3.

No impacts to PS/IS 102 were identified in the 2017 ERS-AOER based on level of design at that time. Based on the proposed design, approximately 21 linear feet (0.002 acre) of PS/IS 102 would be permanently impacted as a result of placement of bank armor within the channel.

Table 1 below summarizes the changes in impacts to Waters of the U.S. within the limits of P.I. No. 110610-. Figures 2, 3, and 4 show these waters and proposed impacts.

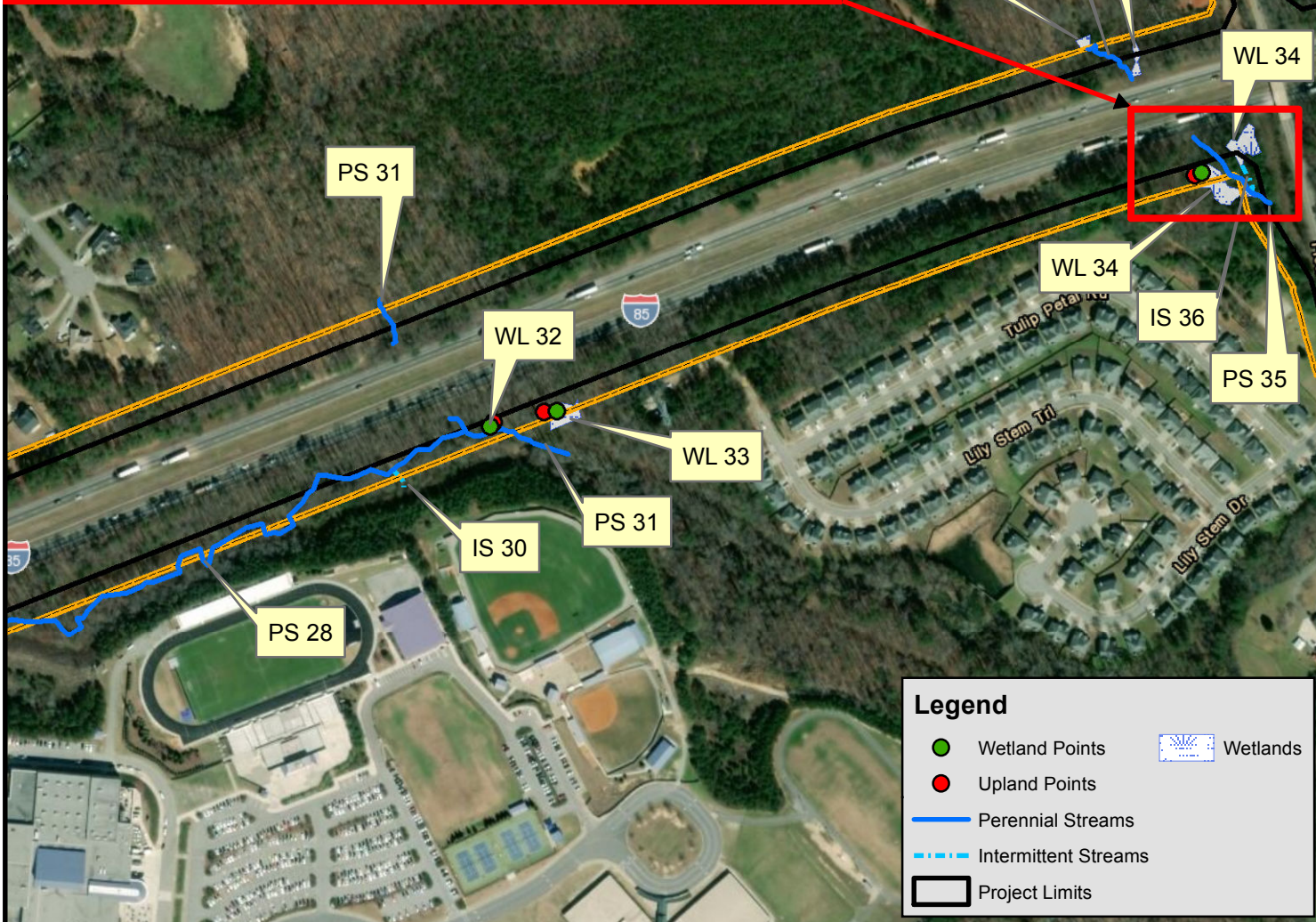
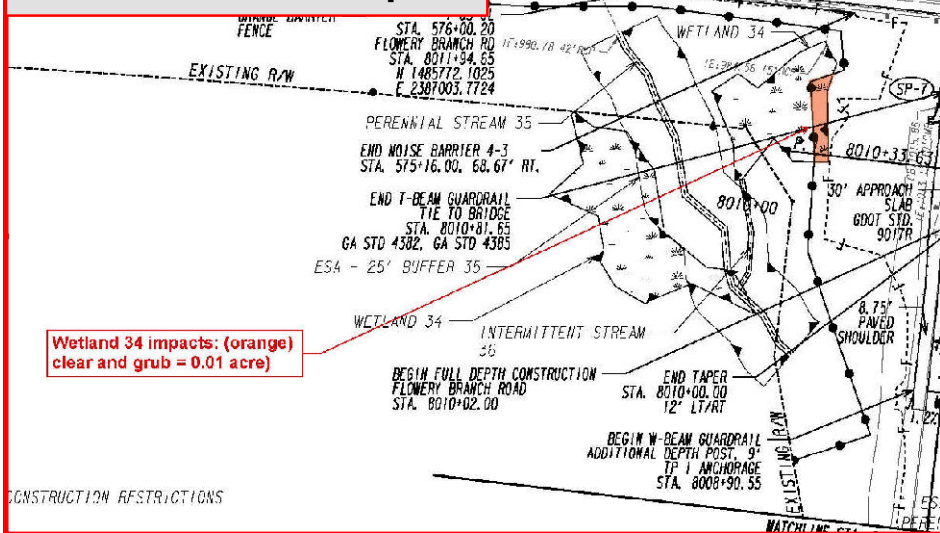
**Table 1: Summary of Impacts to Waters of the U.S.**

Resource Identification	Previous Impacts from 2017 ERS-AOER	Current Impacts from 2018 Ecology Memorandum	
		Temp.	Perm.
WL 34	No Impacts	0.00	0.010 acre
PS 83	Not Determined	122 l.f. / 0.160 acre	0.00
PS/IS 102	No Impacts	0.00	21 l.f. / 0.002 acre
Total		122 l.f. / 0.160 acre	21 l.f. / 0.012 acre

**6. Floodplains**

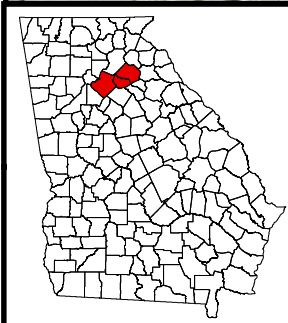
The contractor completed a Hydraulic and Hydrologic Study (H&H Study) on May 11, 2018 for the I-85 crossing of Mulberry River. This crossing is designated as within a Zone A floodplain. The study was used to minimize the increase in Base Flood Elevation (BFE), and would not increase BFE greater than one foot. Therefore, no coordination is required with the Federal Emergency Management Agency or City of Braselton. No further action is required. The certification is included in Attachment 3.

# INSET - WL 34 Impact



**Legend**

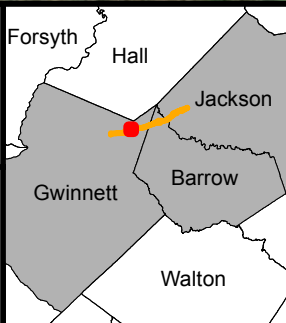
- Wetland Points
- Upland Points
- Perennial Streams
- - - Intermittent Streams
- ▭ Project Limits
- ▭ Wetlands

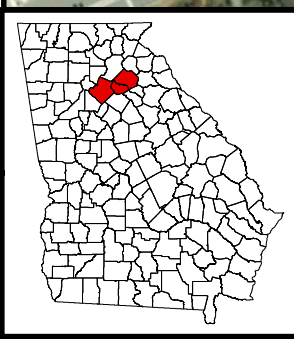
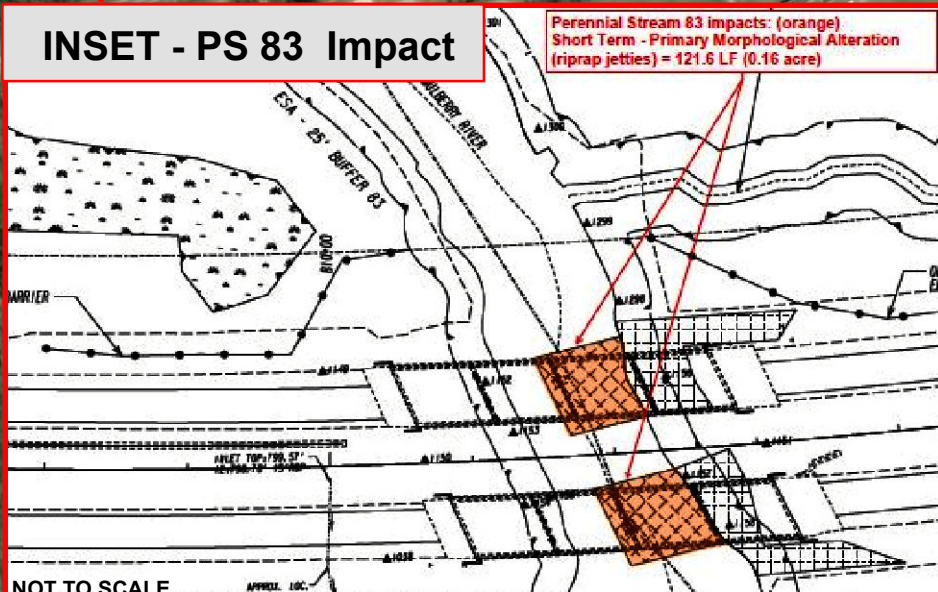
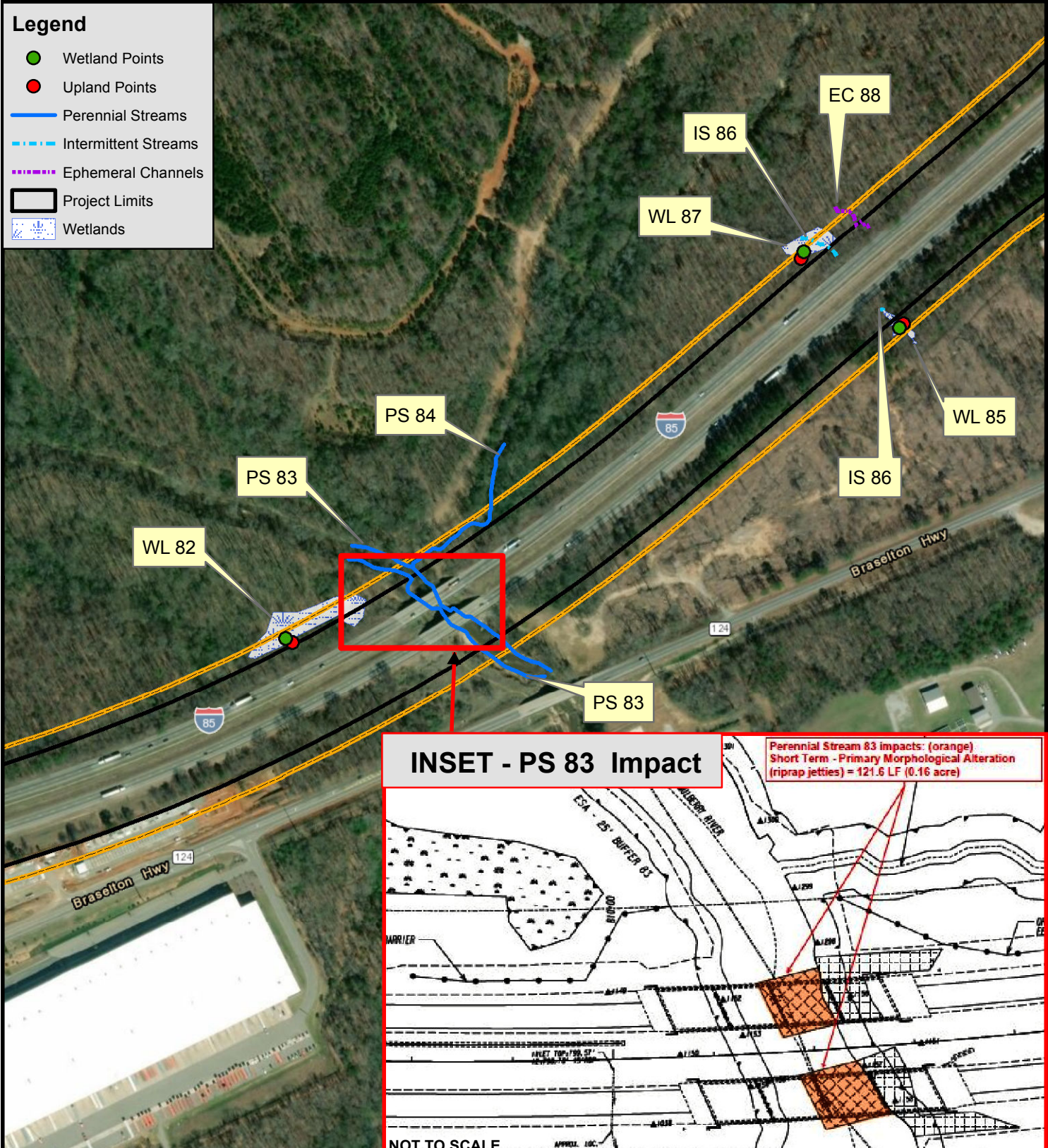


**Figure 2 - Federal and State Waters Map**  
**I-85 from North of CR 134/Hamilton Mill Road to North of SR 53**  
**GDOT Project NHIMO-0085-02(165)**  
**P.I.# 110610-**  
**Gwinnett, Barrow, and Jackson Counties, GA**

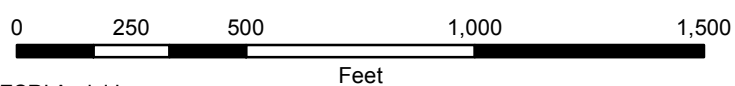
0 250 500 1,000 1,500  
Feet

Source: ESRI Aerial Imagery

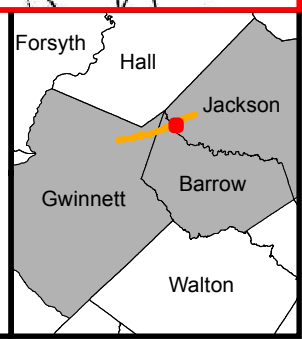


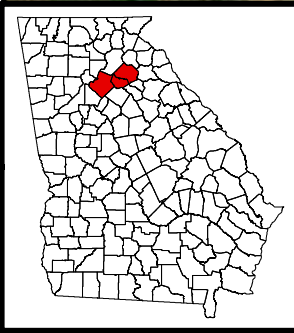
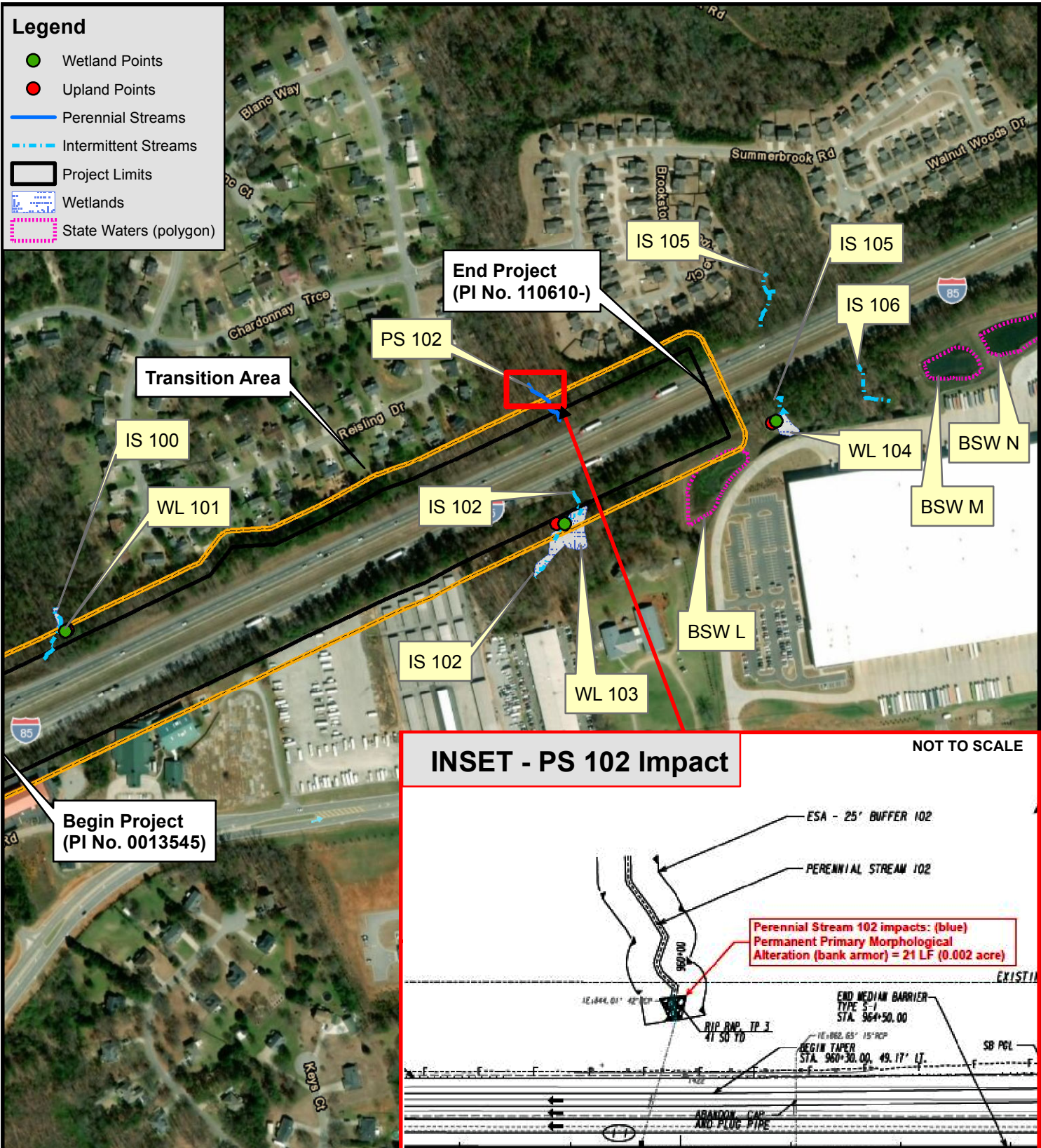


**Figure 3 - Federal and State Waters Map**  
 I-85 from North of CR 134/Hamilton Mill Road to North of SR 53  
 GDOT Project NHIMO-0085-02(165)  
 P.I.# 110610-  
 Gwinnett, Barrow, and Jackson Counties, GA

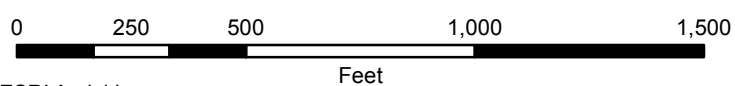


Source: ESRI Aerial Imagery

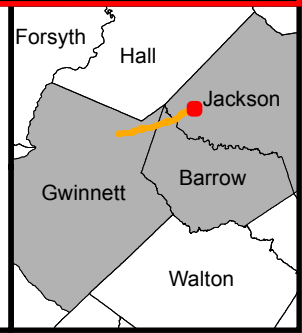




**Figure 4Q - Federal and State Waters Map**  
 I-85 from North of CR 134/Hamilton Mill Road to North of SR 53  
 GDOT Project NHIMO-0085-02(165)  
 P.I.# 110610-  
 Gwinnett, Barrow, and Jackson Counties, GA



Source: ESRI Aerial Imagery





As discussed in the approved CE (October 16, 2017), there is one other floodplain associated with Wheeler Creek that is within the construction limits of P.I. No. 110610-. Wheeler Creek is conveyed under I-85 via a box culvert. No modification or replacements of culverts would occur as part of the proposed construction, and therefore, no H&H study is required.

## **D. PHYSICAL ENVIRONMENT**

### **1. Noise**

#### Noise Barrier Location and Number

The Noise Impact Assessment approved on July 10, 2017 included both P.I. Nos. 110610- and 0013545, with limits that extended from Interstate 985 (I-985) in Gwinnett county to SR 11/US 129 in Jackson county. The limits for the two projects have since changed, and P.I. No. 110610- now ends just past SR 53 (see Figure 1 – Project Change Map in Attachment 1). The noise barrier analysis conducted as part of the Noise Impact Assessment determined that eleven noise barriers would be feasible and would meet noise abatement policy for impacts from these two projects.

As a result of the bidding process for the design build project under P.I. No. 110610-, only eight of the feasible and reasonable noise barriers occur within the project limits of P.I. No. 110610-. These noise barriers include:

- Noise Barrier 4-1
- Noise Barrier 4-2
- Noise Barrier 4-3
- Noise Barrier 4-4
- Noise Barrier 4-5
- Noise Barrier 4-6

- Noise Barrier 5-1
- Noise Barrier 3

Figure 5 in Attachment 4 depicts the approximate locations of these noise barriers.

The remaining three feasible and reasonable noise barriers would be included in a future programmed project under P.I. No. 0013545. Two of the three remaining noise barriers are located within the limits of P.I. No. 0013545, which would begin at SR 53. Proposed Noise Barrier 4 is located east of SR 53 on the north side of I-85. The proposed barrier is approximately 6,385 feet long and would begin north of SR 53 and beyond the limits of the proposed additional northbound lane proposed in P.I. No. 110610-. However, the construction limits of P.I. No. 110610- extend beyond SR 53, in order to accommodate the transition (taper) to the existing I-85 laneage. The widening of I-85 under P.I. No. 110610- immediately north and south of SR 53 would be constructed within the median, but would be striped to prevent use, and only open to traffic with construction of P.I. No. 0013545. Figure 6 in Attachment 4 depicts the location of Noise Barrier 4 in relation to P.I. Nos. 110610- and 0013545.

#### Noise Barrier Modification and Validation

The barrier envelopes (length, height, distance from the road shoulder) of Noise Barriers 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 5-1, and 3 have been modified by the contractor's Design Build Team (DBT) to optimize their effectiveness based on final design, more accurate survey data, consideration of environmental resources such as streams or wetlands to avoid impacts, and storm water features and structures. The locations of these noise barriers in the approved Noise Impact Assessment were selected based on preliminary design plans and land use at the time of the analysis. A comparison of the

previous and proposed noise barrier locations are shown in Figures 7 through 14 in Attachment 4.

The Georgia Department of Transportation (GDOT) conducted a validation analysis of the DBT modified noise barrier design to determine their effectiveness in providing noise abatement compared to noise abatement for impacted and benefited receptors in the approved Noise Impact Assessment. The DBT provided data that GDOT used to reconstruct the modified noise barriers in Traffic Noise Model version 2.5 (TNM 2.5). Noise abatement results from TNM 2.5 based on the noise barriers reconstructed by GDOT were compared to results in the Noise Impact Assessment.

The criteria to determine if the modified DBT noise barrier designs were valid is 1) if the noise barrier provided abatement to impacted and benefitted receptors within +/- 1 A-weighted decibel (dBA) of the noise level in the approved Noise Impact Assessment, 2) the total number of impacted and benefitted receptors in the approved Noise Impact Assessment continued to receive abatement in the DBT modified design, and 3) a preferred goal that impacted receptors that previously met the GDOT design goal of 7 dBA or greater continue to receive 7 dBA or greater reduction, and any benefited, non-impacted receptors that previously received at least a 5 dBA reduction continue to receive 5 dBA or greater reduction.

As a result of GDOT's efforts, all of the DBT modified designs for noise barriers 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 5-1, and 3 met the criteria described above and provide noise abatement consistent with results in the approved Noise Impact Assessment. Tables 1 through 8 in Attachment 4 show a comparison of abatement between the initial and modified noise barriers, and a comparison of the noise wall envelopes, including cost.

### Noise Barrier Outreach

To comply with reasonableness criteria in the GDOT Noise Abatement Policy for Federal Aid Projects (effective February 1, 2016), outreach was conducted to impacted and/or benefitted receptors as determined in the approved Noise Impact Assessment. The outreach was conducted to determine if a majority of respondents voted in favor of construction of a noise barrier.

The outreach consisted of mailing an information package and ballot to each impacted and/or benefitted receptor. The information package consisted of 1) an introduction letter which described the proposed project and reason for the outreach efforts, 2) a graphic depicting a “noise cloud” for the area in which the barrier would be constructed (the DBT modified noise barrier locations were within this “noise cloud” area), and 3) a self-addressed, stamp ballot postcard to be completed with name, address, and voting preference. In addition to the paper ballot, a link was provided in the body of the introduction letter to a SurveyMonkey website that was specific to each noise barrier and could be used to vote on-line. Examples of the information package are provided in Attachment 5.

The survey was considered a valid representation of the impacted and/or benefitted receptors with a 25 percent response of the total ballots distributed for each noise barrier. In accordance with GDOT Noise Policy, the decision to construct a noise barrier is based on a majority vote (50 percent plus 1 vote of responses). As a result of these outreach efforts, at least 25 percent of the total distribution responded for each noise barrier. Based on votes received a majority were in favor of constructing noise barriers within P.I. No. 110610-. The table in Attachment 5 summarizes results of the balloting efforts.

Public outreach will be conducted with residences located within The Vineyard and Vineyard Gate subdivisions, which are parallel and adjacent to the I-85 northbound travel lanes and most likely to observe construction activity that will be conducted under P.I. No. 110610-. These neighborhoods and their proximity to the project limits are shown on Figure 6 of the CE Reevaluation. The purpose of this outreach is to notify these residences that the widening improvements to I-85 in this vicinity are being conducted as part of a two-phase project; the improvements they will soon see as part of P.I. No. 110610-, and a future programmed and planned P.I. No. 0013545 that would continue the widening to the east. The outreach will inform residents that noise impacts from the I-85 improvements under P.I. No. 0013545 will be analyzed, including noise abatement (noise barrier walls), in accordance with Federal Highway Administration (FHWA) regulations and Georgia Department of Transportation (GDOT) Noise Abatement Policy. Contact information for GDOT personnel will be provided for any questions or concerns. This outreach will be completed prior to beginning any construction under P.I. No. 110610- east of SR 53.

## **5. Construction/Utilities**

This project is being constructed as a variable scope project, meaning the length of roadway that could be constructed under a maximum payment cap was a determination in the selection of the design build team. The DBT reached segment 18, which has an ending mile point equal to station 964+50 of the final plans, or just north of SR 53. Therefore, the previous eastern terminus of P.I. No. 110610- and western terminus of P.I. No. 0013545 has shifted approximately 3 miles east from just north of SR 211 (station 769+50) to just north of SR 53 (station 964+50). To transition from 3 lanes to 2 lanes in the northbound and 2 lanes to 3 lanes in the southbound direction, the travel lanes will include a taper in the area between the on and off exit ramps for the

SR 53 interchange. The remainder of the project originally cleared under the October 16, 2017 NEPA document would still be constructed under P.I. No. 0013545 at a later date. The revised limits are shown in Figure 1 in Attachment 1.

## **E. PERMITS/VARIANCES/COMMITMENTS REQUIRED**

### **3. CWA Section 404 Permit**

As a result of design refinements and construction staging requirements, impacts to three jurisdictional Waters of the U.S. within project P.I. No. 110610- have changed since the approved CE.

Total impacts based on proposed design include 143 linear feet (0.162 acre) of stream impact and 0.01 of wetland impacts, requiring a Nationwide Permit 23 and Preconstruction Notification (PCN) from the US Army Corps of Engineers (USACE). The Nationwide Permit 23 and PCN have been submitted to the USACE.

Impacts would require 0.08 grandfathered wetland credits or 0.01 credits for Riverine/Lacustrine Fringe Wetland 2018 wetland credits, and 911 grandfathered stream credits or 14 credits for Perennial Stream < 3 square miles and 62 credits for Perennial Stream > 3 square miles. Credits would be required from a USACE approved mitigation bank serving Hydrological Unit Code 03070101.

### **5. Buffer Variance**

Based on the previous design non-exempt buffer encroachments were anticipated at six streams, and exempt buffer encroachments to one stream. Based on the proposed design and use of Best Management Practices (BMPs), all buffer encroachments have been avoided except for one exempt buffer encroachment at PS 83. Therefore, a stream buffer variance is no longer required for impacts to vegetated buffers within P.I. No. 110610- in accordance with requirements outlined in 391-3-7.05

under the Georgia Department of Natural Resources Environmental Protection Division,  
Erosion and Sedimentation Control Branch.



**Projects NH-IMO-0085-02(165) & HN-IMO-0085-02(166)**

**Gwinnett, Barrow, and Jackson Counties**

**P.I. Nos. 110610- & 0013545**

**Reevaluation**

**Attachment 3**

**CORRESPONDENCE**



**The Atlanta Region's Plan  
FY 2018-2023 Transportation Improvement Program - Sorted by ARC Project Number**

<b>GW-386</b>	<b>I-85 NORTH WIDENING (PROGRAMMING FOR ATLANTA MPO PORTION ONLY)</b>
110610-	FROM I-985 IN GWINNETT COUNTY TO SR 53 IN JACKSON COUNTY
<b>Programmed</b>	

Jurisdiction	Barrow County,Gwinnett County	Existing	Planned	Length (mi.)	Network Year
Sponsor	GDOT	4/5	6/7	16.4	2030
Service Type	Roadway / General Purpose Capacity	Analysis			LCI <input type="checkbox"/>
		In the Region's Air Quality Conformity Analysis			Flex <input type="checkbox"/>

Status	Year	Fund Type	State	Local	Bonds	Total		
PE	AUTH	2001	National Highway System	\$2,791,427	\$697,857	\$0,000	\$0,000	\$3,489,284
PE	AUTH	2016	National Highway System	\$3,028,480	\$757,120	\$0,000	\$0,000	\$3,785,600
PE	AUTH	2017	National Highway Performance Program (NHPP)	\$3,840,000	\$960,000	\$0,000	\$0,000	\$4,800,000
CST	AUTH	2018	Transportation Funding Act (HB 170)	\$0,000	\$21,750,250	\$0,000	\$0,000	\$21,750,250
CST	AUTH	2018	Repurposed Earmark	\$1,799,800	\$449,950	\$0,000	\$0,000	\$2,249,750
CST	AUTH	2019	Transportation Funding Act (HB 170)	\$0,000	\$60,700,000	\$0,000	\$0,000	\$60,700,000
CST		2020	National Highway Performance Program (NHPP)	\$30,480,000	\$7,620,000	\$0,000	\$0,000	\$38,100,000
			<b>\$41,939,707</b>	<b>\$92,935,177</b>	<b>\$0,000</b>	<b>\$0,000</b>	<b>\$134,874,884</b>	

<b>GW-388</b>	<b>I-85 NORTH - NEW INTERCHANGE</b>
0012698	AT SR 324 (GRAVEL SPRINGS ROAD)
<b>Programmed</b>	

Jurisdiction	Gwinnett County	Existing	Planned	Length (mi.)	Network Year
Sponsor	Gwinnett County	N/A	N/A	3.6	2030
Service Type	Roadway / Interchange Capacity	Analysis			LCI <input type="checkbox"/>
		In the Region's Air Quality Conformity Analysis			Flex <input type="checkbox"/>

Status	Year	Fund Type	State	Local	Bonds	Total		
PE	AUTH	2014	Local Jurisdiction/Municipality Funds	\$0,000	\$0,000	\$650,000	\$0,000	\$650,000
PE	AUTH	2015	STP - Statewide Flexible (GDOT)	\$40,000	\$10,000	\$0,000	\$0,000	\$50,000
ROW	AUTH	2017	Repurposed Earmark	\$2,159,760	\$0,000	\$539,940	\$0,000	\$2,699,700
ROW	AUTH	2017	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	\$3,864,240	\$0,000	\$966,060	\$0,000	\$4,830,300
ROW		2018	Georgia Transportation Infrastructure Bank	\$0,000	\$2,000,000	\$0,000	\$0,000	\$2,000,000
UTL		2019	Local Jurisdiction/Municipality Funds	\$0,000	\$0,000	\$82,000	\$0,000	\$82,000
CST		2019	Transportation Funding Act (HB 170)	\$0,000	\$1,300,000	\$0,000	\$0,000	\$1,300,000
CST		2019	National Highway Performance Program (NHPP)	\$9,835,869	\$2,458,967	\$0,000	\$0,000	\$12,294,836
			<b>\$15,899,869</b>	<b>\$5,768,967</b>	<b>\$2,238,000</b>	<b>\$0,000</b>	<b>\$23,906,836</b>	

P.I. # 110610

Bridge Serial Numbers: 013-0022-0 & 013-0023-0

Barrow & Jackson Counties, Georgia

## I-85 (NBL & SBL) over Mulberry River

### Hydraulic and Hydrologic Study

May 2018



FEMA or Community coordination is not required.

**IE** INFRASTRUCTURE  
CONSULTING & ENGINEERING



**Addendum to Ecology Resource Survey and  
Assessment of Effects Report**

**NHIMO-0085-02(165)(166)  
Gwinnett, Barrow, and Jackson Counties  
P.I. Nos. 110610- and 0013545**

**Interstate 85 from North of County Road 134/Hamilton Mill Road  
to North of State Route 53**

Prepared by:

Edwards-Pitman Environmental, Inc.  
1250 Winchester Parkway, Suite 200  
Smyrna, GA 30080

Under Contract with:

Michael Baker International  
420 Technology Parkway, Suite 150  
Norcross, GA 30092

For:

Georgia Department of Transportation  
Office of Environmental Services  
600 W. Peachtree Street NW  
Atlanta, GA 30308

July 2018

Report Author: \_\_\_\_\_



Kevin Thomas, Senior Ecologist

Consultant Reviewer: \_\_\_\_\_



Charlotte Estes, Senior Ecologist

GDOT Reviewer: \_\_\_\_\_

Bradley Daugherty, Ecologist



# United States Department of the Interior



**Fish and Wildlife Service**  
RG Stephens, Jr. Federal Building  
355 East Hancock Avenue, Room 320  
Athens, Georgia 30601

West Georgia Sub Office  
P.O. Box 52560  
Ft. Benning, Georgia 31995-2560

September 19, 2018

Coastal Sub Office  
4980 Wildlife Drive  
Townsend, Georgia 31331

Mr. Moises Marrero  
Division Administrator  
Federal Highway Administration, Georgia Division  
61 Forsyth Street, SW  
Suite 17T100  
Atlanta, Georgia 30303  
ATTN: Mr. Aaron Hernandez

RE: GDOT P.I.s 110610- and 0013545; FWS Log 04EG1000-2018-CPA-1063

Dear Mr. Marrero:

Thank you for your September 14, 2018, electronic mail regarding Georgia Department of Transportation (GDOT) project PIs 110610- and 0013545. We submit the following comments under provisions of the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 *et. seq.*).

According to Georgia Department of Transportation's (GDOT) Addendum dated August 16, 2018, and additional clarification of project activities were provided via email as corrected pages in September 2018. The currently proposed design of PI 110610 would widen Interstate 85 (I-85) from approximately Interstate 985 to just north of State Route (SR) 53 and PI 0013545 would widen I-85 from just north of SR 53 to just north of U.S. Highway (US) 129 in Barrow, Gwinnett, and Jackson counties, Georgia.

### Fish and Wildlife Coordination Act

As described in GDOT's Ecology Addendum, the project would impact 143 linear feet (lf) of perennial stream (temporary and permanent) and 0.01 acres of permanent wetland impacts. Based on final design, it has been determined that the project would impact:

PS 82 / Mulberry R.	- 122 lf -	Temporary fill: rip rap jetties to access existing bridge bents.
PS/IS 102	- 21 lf -	Permanent alteration: bank armoring
WL 34	- 0.01 ac -	Permanent clearing and grubbing, required for construction of the Flowery Branch Road fill slopes supporting the I-85 bridge replacement.

These impacts would require 76 (911 grandfathered) stream and 0.08 (0.01 grandfathered) riverine/lacustrine wetland mitigation credits from an approved mitigation bank. GDOT investigated options to minimize and avoid impacts to the stream resources. Further avoidance of resources was not practicable because of design constraints. We believe impacts have been minimized to the extent reasonable.

If you have any questions or require further information, please contact staff biologist Carrie Straight, at 706-613-9493.

Sincerely,

Donald W. Imm, Ph.D.  
Field Supervisor

cc: GDOT Ecology electronic submittals inbox  
file



**Projects NH-IMO-0085-02(165) & HN-IMO-0085-02(166)**

**Gwinnett, Barrow, and Jackson Counties**

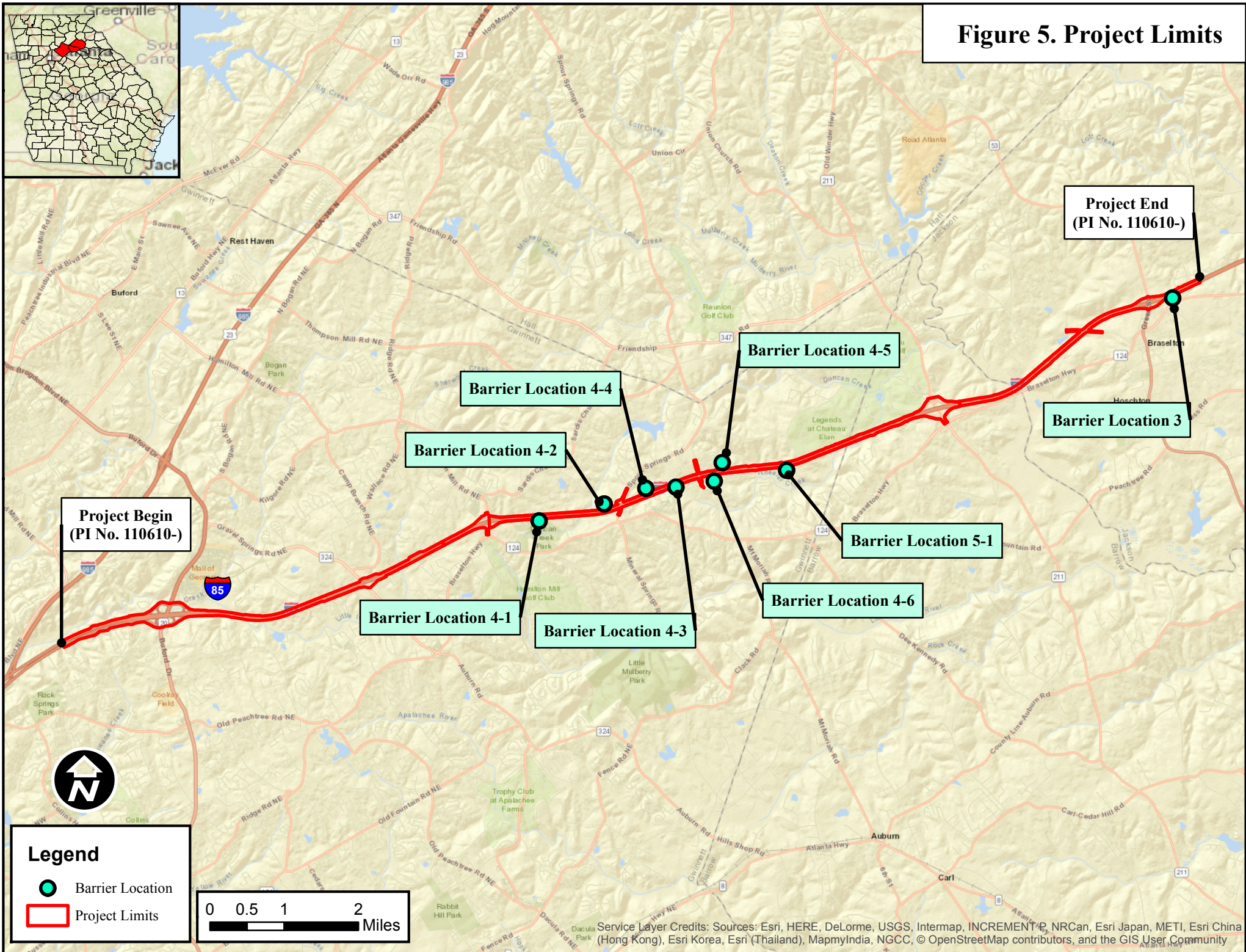
**P.I. Nos. 110610- & 0013545**

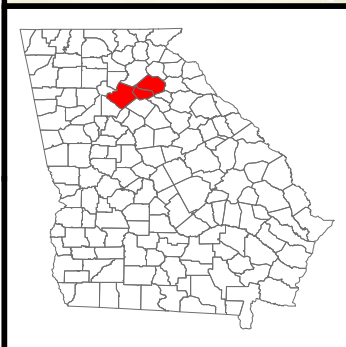
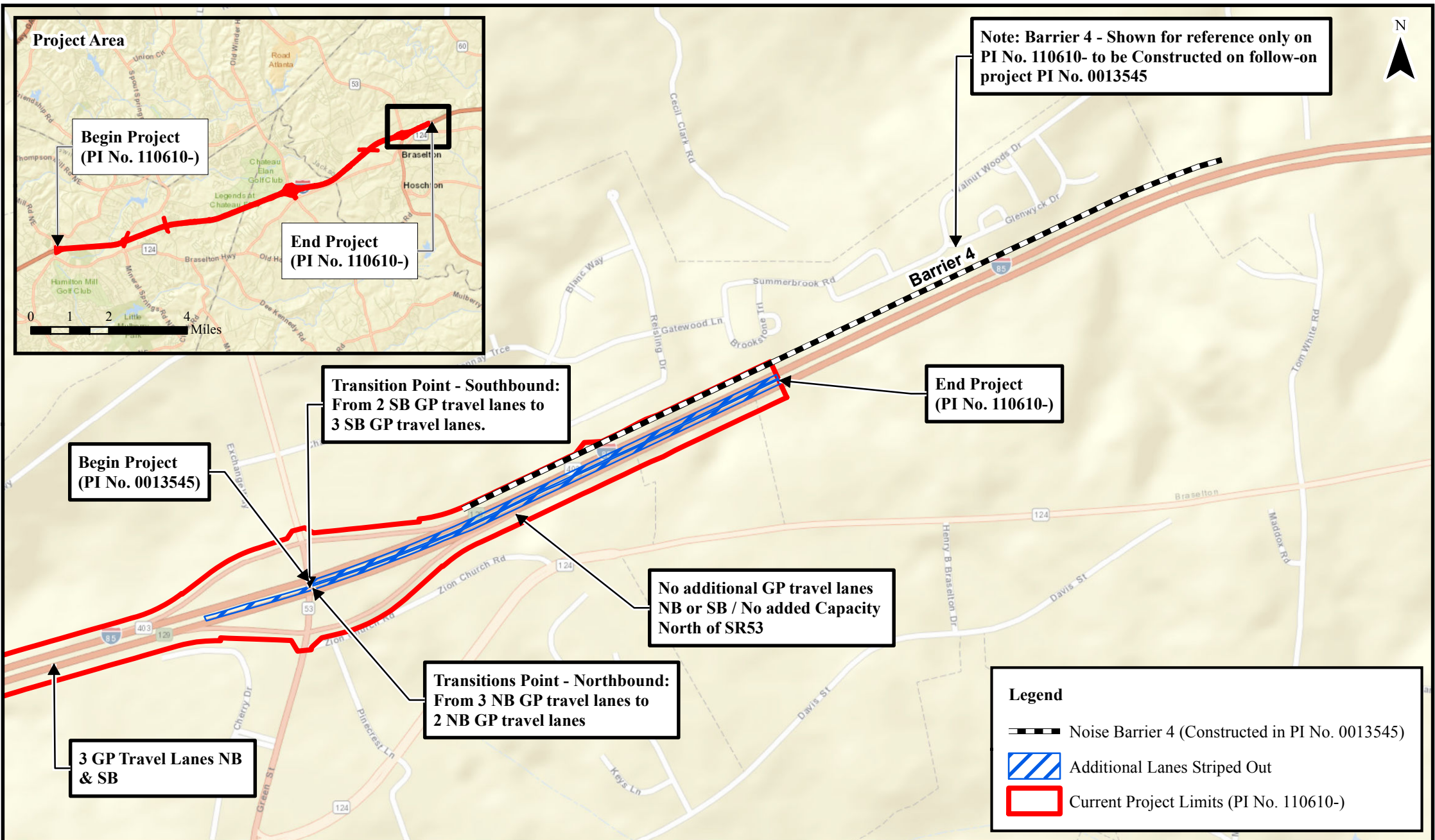
**Reevaluation**

**Attachment 4**

**NOISE BARRIER VALIDATION INFORMATION**

**Figure 5. Project Limits**



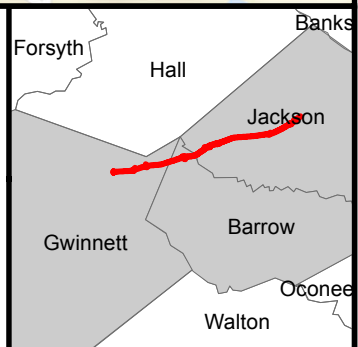


**Figure 6 - Noise Barrier 4**

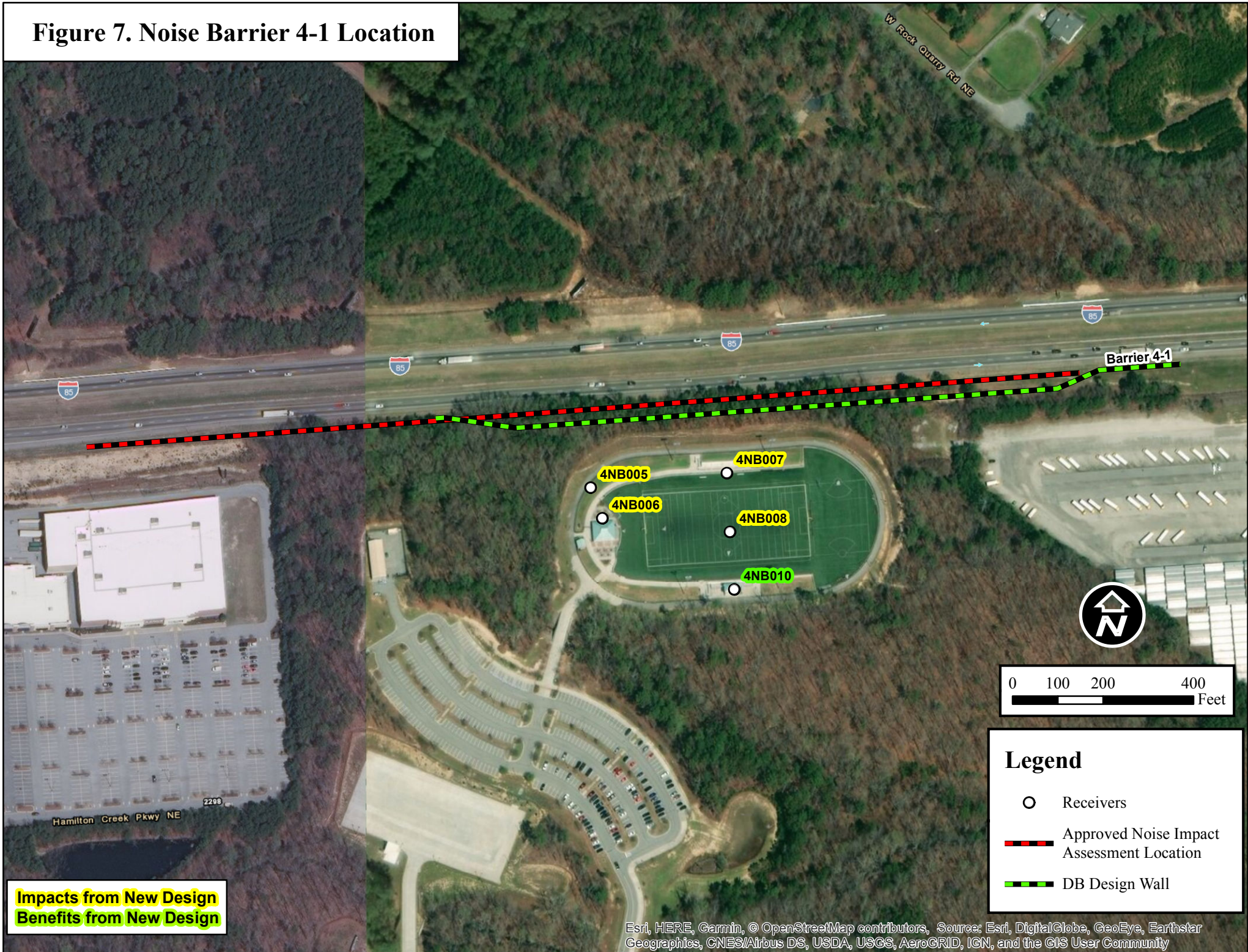
I-85 Widening and Improvements  
 P.I.# 110610- & 0013545  
 Gwinnett, Barrow, and Jackson Counties, GA

0 500 1,000 2,000 Feet

Source: Esri Street Maps



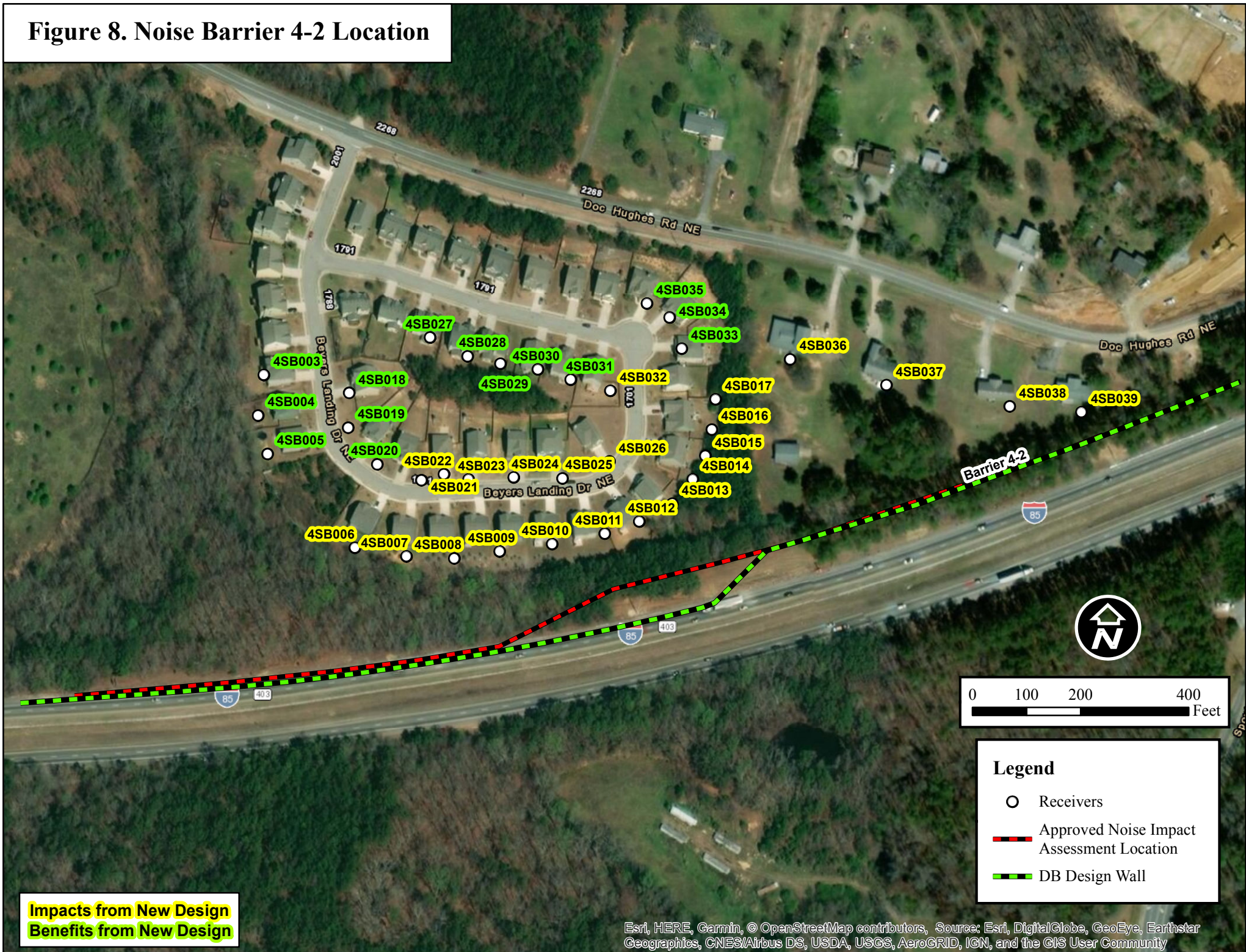
**Figure 7. Noise Barrier 4-1 Location**



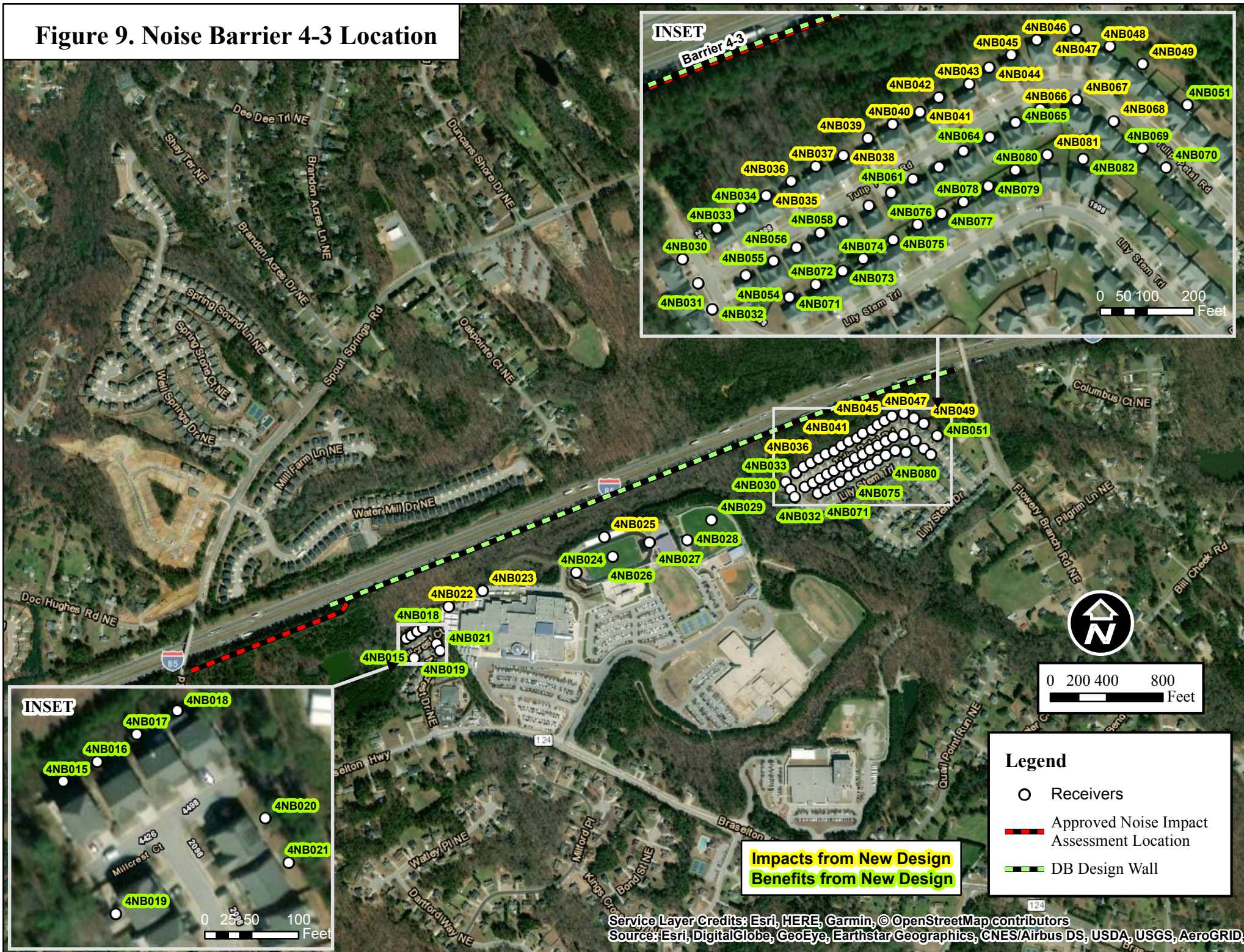
**Impacts from New Design**  
**Benefits from New Design**



Figure 8. Noise Barrier 4-2 Location



**Figure 9. Noise Barrier 4-3 Location**



Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors  
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID,

**Figure 10. Noise Barrier 4-4 Location**

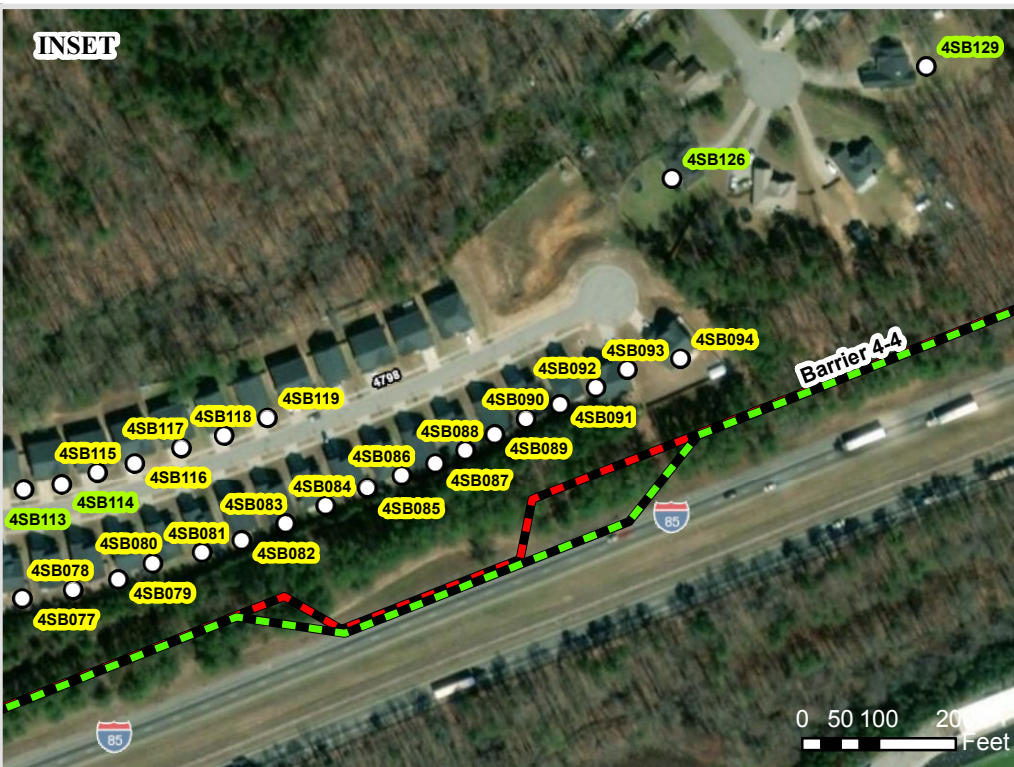
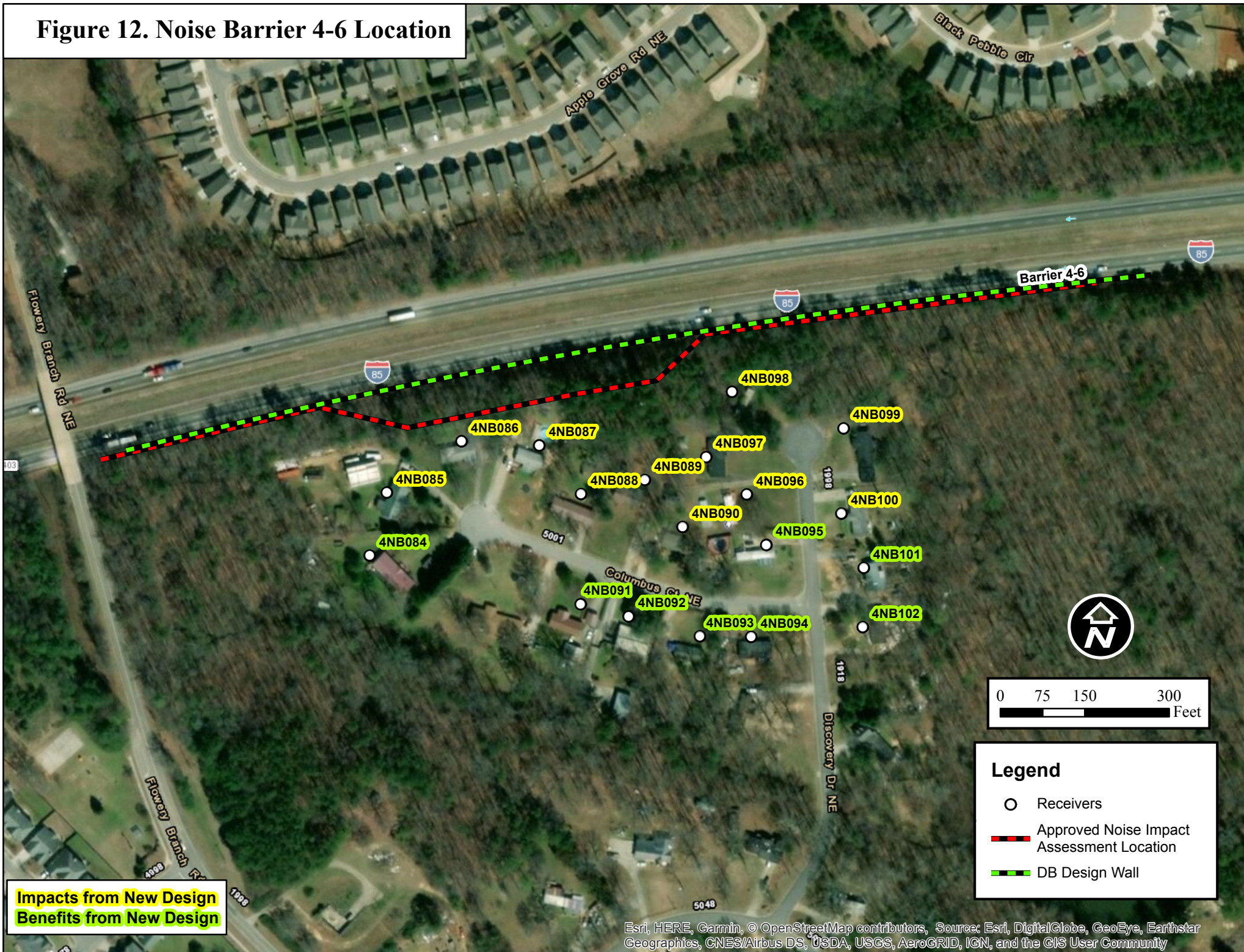


Figure 11. Noise Barrier 4-5 Location



Figure 12. Noise Barrier 4-6 Location



Impacts from New Design  
Benefits from New Design

Figure 13. Noise Barrier 5-1 Location



Impacts from New Design  
Benefits from New Design

Esri, HERE, Garmin, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Figure 14. Noise Barrier 3 Location**



**Impacts from New Design**  
**Benefits from New Design**

**Table 1A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
4-1	Between Hamilton Mill Road and SR 211 (Duncan Creek Park)	4NB005	68.6	60.7	7.9	60.3	8.3	Yes
4-1	Between Hamilton Mill Road and SR 211 (Duncan Creek Park)	4NB006	67.3	60.3	7	60.1	7.2	Yes
4-1	Between Hamilton Mill Road and SR 211 (Duncan Creek Park)	4NB007	69.2	59.9	9.3	60.4	8.8	Yes
4-1	Between Hamilton Mill Road and SR 211 (Duncan Creek Park)	4NB008	66.2	58.3	7.9	58.5	7.7	Yes
4-1	Between Hamilton Mill Road and SR 211 (Duncan Creek Park)	4NB009	66.7	59.9	6.8	60.8	5.9	Yes
4-1	Between Hamilton Mill Road and SR 211 (Duncan Creek Park)	4NB010	63.1	57.5	5.6	57.9	5.2	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 1B - Noise Envelope Comparison**

Noise Barrier 4-1	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	1,700	8 to 30	37,000	5	1	\$924,991
DB Modified Noise Barrier	1,567	10 to 14	20,848	5	1	\$521,203



**Table 2A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB003	61	55.8	5.2	55.2	5.8	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB004	61.6	56.7	4.9	56	5.6	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB005	62.6	57.6	5	56.7	5.9	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB006	66.6	58	8.6	57.3	9.3	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB007	67.6	58.1	9.5	57.5	10.1	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB008	69.5	58.5	11	58	11.5	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB009	72.2	60	12.2	59.2	13	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB010	72.5	60.9	11.6	60	12.5	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB011	72.7	61.5	11.2	60.4	12.3	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB012	72.3	60.8	11.5	60.2	12.1	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB013	71.7	60.4	11.3	60	11.7	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB014	70.8	59.9	10.9	59.5	11.3	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB015	69.7	59.5	10.2	59.2	10.5	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB016	68.3	58.8	9.5	58.4	9.9	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB017	67.2	58.5	8.7	58.2	9	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB018	62.6	56	6.6	55.3	7.3	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB019	63.8	56.4	7.4	55.8	8	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB020	65.7	57.1	8.6	56.5	9.2	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB021	67.7	57.6	10.1	57	10.7	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB022	67.7	57.6	10.1	56.9	10.8	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB023	68.5	57.9	10.6	57.1	11.4	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB024	68.6	58	10.6	57.2	11.4	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB025	69.2	58.4	10.8	57.7	11.5	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB026	68.9	58.5	10.4	57.7	11.2	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB027	61.2	55	6.2	54.6	6.6	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB028	62.1	55.4	6.7	54.8	7.3	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB029	63.1	55.8	7.3	55.2	7.9	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB030	63.6	56.1	7.5	55.5	8.1	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB031	64.5	56.6	7.9	55.9	8.6	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB032	66	57.3	8.7	56.6	9.4	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB033	64.8	57.4	7.4	57	7.8	Yes
4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB034	63.4	57.2	6.2	56.9	6.5	Yes

4-2	Between Hamilton Mill Road and SR 211 (Beyers Landing)	4SB035	62.9	57.2	5.7	56.9	6	Yes
4-2	Between Hamilton Mill Road and SR 211 (On Doc Hughes Road)	4SB036	66.2	59.1	7.1	59.1	7.1	Yes
4-2	Between Hamilton Mill Road and SR 211 (On Doc Hughes Road)	4SB037	67.3	59.8	7.5	60.3	7	Yes
4-2	Between Hamilton Mill Road and SR 211 (On Doc Hughes Road)	4SB038	71.4	61.8	9.6	62.9	8.5	Yes
4-2	Between Hamilton Mill Road and SR 211 (On Doc Hughes Road)	4SB039	74.3	62.9	11.4	63.8	10.5	Yes
4-2	Between Hamilton Mill Road and SR 211 (On Doc Hughes Road)	4SB040	62.8	60.5	2.3	60.7	2.1	Yes
4-2	Between Hamilton Mill Road and SR 211 (On Doc Hughes Road)	4SB041	58.7	58.4	0.3	58.6	0.1	Yes
4-2	Between Hamilton Mill Road and SR 211 (Turnberry)	4SB042	53.4	53.3	0.1	53.3	0.1	Yes
4-2	Between Hamilton Mill Road and SR 211 (Turnberry)	4SB043	55.6	55.7	-0.1	55.6	0	Yes
4-2	Between Hamilton Mill Road and SR 211 (Turnberry)	4SB044	58.4	58.4	0	58.4	0	Yes
4-2	Between Hamilton Mill Road and SR 211 (Turnberry)	4SB045	59.9	59.9	0	59.9	0	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 2B - Noise Envelope Comparison**

Noise Barrier 4-2	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	2,391	12 to 30	64,324	23	13	\$1,608,094
DB Modified Noise Barrier	2,366	12 to 30	61,900	23	14	\$1,547,510

**Table 3A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
4-3	Between Hamilton Mill Road and SR 211 (On Spout Springs Road)	4NB014	67.2	67.1	0.1	67.1	0.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Millcrest Manor)	4NB015	64.1	58	6.1	58.3	5.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Millcrest Manor)	4NB016	64.5	58.1	6.4	58.1	6.4	Yes
4-3	Between Hamilton Mill Road and SR 211 (Millcrest Manor)	4NB017	65	58.4	6.6	58.5	6.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Millcrest Manor)	4NB018	65.2	58.6	6.6	58.4	6.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Millcrest Manor)	4NB019	61.7	56.7	5	56.5	5.2	Yes
4-3	Between Hamilton Mill Road and SR 211 (Millcrest Manor)	4NB020	62.8	57.5	5.3	57.3	5.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Millcrest Manor)	4NB021	61.9	56.9	5	56.7	5.2	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB022	67.3	59.5	7.8	59.2	8.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB023	66.5	58.3	8.2	58.4	8.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB024	64	56.6	7.4	56.8	7.2	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB025	67.2	58.4	8.8	58.6	8.6	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB026	64.9	57.1	7.8	57.3	7.6	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB027	65	56.8	8.2	57	8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB028	63.8	56.4	7.4	56.7	7.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Mill Creek High School)	4NB029	62.8	56	6.8	56.2	6.6	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB030	64.4	55.5	8.9	55.8	8.6	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB031	62.9	55	7.9	55.1	7.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB032	61.4	54.4	7	54.5	6.9	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB033	65.3	56.1	9.2	56.4	8.9	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB034	65.8	56.4	9.4	56.7	9.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB035	66.4	56.6	9.8	56.8	9.6	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB036	67	56.8	10.2	57.1	9.9	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB037	67.4	57	10.4	57.2	10.2	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB038	67.1	56.9	10.2	57.1	10	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB039	67.4	57.1	10.3	57.2	10.2	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB040	67.6	57.1	10.5	57.1	10.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB041	67.3	56.7	10.6	56.7	10.6	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB042	67.3	56.8	10.5	56.8	10.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB043	67.3	57	10.3	56.9	10.4	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB044	69.1	58.4	10.7	58.3	10.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB045	67.1	57.7	9.4	57.6	9.5	Yes

4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB046	72.4	60.6	11.8	60.9	11.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB047	72.4	62.2	10.2	62.2	10.2	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB048	70.3	61.7	8.6	61.7	8.6	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB049	68.5	61.4	7.1	61.4	7.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB050	67	60.7	6.3	60.7	6.3	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB051	65.5	60	5.5	60	5.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB052	63.6	58.9	4.7	58.9	4.7	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB053	63	59.3	3.7	59.3	3.7	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB054	61.2	53.9	7.3	54.1	7.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB055	60.6	53.7	6.9	53.8	6.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB056	61.1	54.1	7	54.1	7	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB057	60.9	53.9	7	54.2	6.7	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB058	61.4	54.3	7.1	54.3	7.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB059	61.6	54.4	7.2	54.3	7.3	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB060	61.9	54.5	7.4	54.5	7.4	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB061	61.5	54	7.5	54	7.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB062	61.2	53.8	7.4	53.8	7.4	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB063	61.7	53.4	8.3	53.4	8.3	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB064	61.5	53.7	7.8	53.6	7.9	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB065	63.1	55.8	7.3	56	7.1	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB066	69.6	57.9	11.7	57.8	11.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB067	69.3	58.4	10.9	58.6	10.7	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB068	67.3	58.5	8.8	58.5	8.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB069	64.5	56.7	7.8	56.6	7.9	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB070	62.3	56.1	6.2	55.9	6.4	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB071	57	50.4	6.6	50.6	6.4	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB072	57	50.2	6.8	50.3	6.7	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB073	57.1	50.3	6.8	50.4	6.7	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB074	57.3	50.4	6.9	50.5	6.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB075	57.3	50.6	6.7	50.5	6.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB076	57.5	50.4	7.1	50.7	6.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB077	57.5	50.6	6.9	51	6.5	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB078	57.5	50.6	6.9	50.6	6.9	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB079	58.1	51.3	6.8	51.3	6.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB080	58.9	52	6.9	52.1	6.8	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB081	66.5	55.6	10.9	55.4	11.1	Yes

4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB082	65.1	55	10.1	55.1	10	Yes
4-3	Between Hamilton Mill Road and SR 211 (Flowery Branch Crossing)	4NB083	64.1	60.9	3.2	60.8	3.3	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 3B- Noise Envelope Comparison**

Noise Barrier 4-3	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	4,763	18 to 24	99,926	22	43	\$2,498,157
DB Modified Noise Barrier	4,751	12 to 24	94,213	22	43	\$2,355,315

**Table 4A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB046	70	60.3	9.7	60.2	9.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB047	68	60	8	59.8	8.2	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB048	67.2	59.6	7.6	59.4	7.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB049	65.7	59.5	6.2	59.3	6.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB050	64.6	59.4	5.2	59.2	5.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB051	63.5	59	4.5	58.8	4.7	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB052	62.8	58.5	4.3	58.3	4.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB053	62.1	58.1	4	58	4.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB054	60.8	56.9	3.9	56.8	4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB055	58.8	55.4	3.4	55.2	3.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB056	66.1	58.1	8	58.1	8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB057	64.3	57.9	6.4	57.7	6.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB058	62.8	57.4	5.4	57.2	5.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB059	61.8	56.8	5	56.9	4.9	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB060	64.2	57.5	6.7	57.6	6.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB061	66.5	58.2	8.3	58.4	8.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB062	66.2	58.3	7.9	58.5	7.7	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB063	66.8	58.5	8.3	58.8	8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB064	67.2	58.5	8.7	58.7	8.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB065	67.8	58.5	9.3	58.9	8.9	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB066	68.1	58.6	9.5	58.9	9.2	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB067	67.8	58.5	9.3	58.8	9	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB068	67.2	58.2	9	58.6	8.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB069	66.8	58.1	8.7	58.4	8.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB070	69.7	58.8	10.9	59.3	10.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB071	64.6	57.2	7.4	57.5	7.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB072	65.7	57.5	8.2	57.9	7.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB073	66.4	57.7	8.7	58.3	8.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB074	66.9	57.9	9	58.5	8.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB075	67.6	58.2	9.4	58.9	8.7	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB076	68.2	58.3	9.9	59.1	9.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB077	68.5	58.3	10.2	59.3	9.2	Yes

4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB078	69.5	58.6	10.9	59.5	10	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB079	70.5	58.8	11.7	59.6	10.9	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB080	71.2	59	12.2	59.8	11.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB081	71.9	59.2	12.7	59.9	12	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB082	71.7	58.7	13	59.4	12.3	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB083	70.5	58.2	12.3	58.8	11.7	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB084	70.9	58.2	12.7	58.9	12	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB085	71.1	58.4	12.7	59	12.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB086	70.2	58.3	11.9	58.8	11.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB087	71	58.5	12.5	59.2	11.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB088	71.4	58.8	12.6	59.4	12	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB089	72	59.3	12.7	60	12	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB090	72.2	59.9	12.3	60.4	11.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB091	72.9	60.8	12.1	61.5	11.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB092	73.2	61.9	11.3	62.8	10.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB093	73.2	62.3	10.9	63.2	10	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB094	73.4	62.1	11.3	63.2	10.2	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB095	59.8	56	3.8	56	3.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB096	59.8	55.9	3.9	56	3.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB097	60.1	56	4.1	56.1	4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB098	60	55.8	4.2	55.9	4.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB099	59.9	55.7	4.2	55.8	4.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB100	60.3	55.8	4.5	55.9	4.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB101	60.2	55.6	4.6	55.7	4.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB102	61.2	55.8	5.4	56	5.2	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB103	60.7	55.7	5	55.8	4.9	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB104	60.7	55.6	5.1	55.6	5.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB105	61.3	55.8	5.5	55.9	5.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB106	61.5	55.8	5.7	55.9	5.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB107	62	56	6	56.2	5.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB108	61.8	55.9	5.9	56.1	5.7	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB109	62.4	56.1	6.3	56.3	6.1	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB110	62.6	56.2	6.4	56.4	6.2	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB111	63.1	56.4	6.7	56.6	6.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB112	63.8	56.7	7.1	57	6.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB113	64.7	57	7.7	57.3	7.4	Yes

4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB114	65.4	57.2	8.2	57.5	7.9	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB115	66	57.4	8.6	57.8	8.2	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB116	66.6	57.6	9	58	8.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB117	67.6	57.9	9.7	58.1	9.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB118	67.5	57.8	9.7	58	9.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB119	67.2	57.6	9.6	57.7	9.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB120	67	57.6	9.4	57.6	9.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB121	67.2	57.9	9.3	57.7	9.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB122	67.4	57.9	9.5	57.8	9.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB123	67.8	58.3	9.5	58.2	9.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Watermill)	4SB124	67.6	58.5	9.1	58.4	9.2	Yes
4-4	Between Hamilton Mill Road and SR 211 (Oakpointe)	4SB125	61.3	56.9	4.4	56.8	4.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Oakpointe)	4SB126	65.1	58.7	6.4	58.7	6.4	Yes
4-4	Between Hamilton Mill Road and SR 211 (Oakpointe)	4SB127	68.2	60.7	7.5	60.6	7.6	Yes
4-4	Between Hamilton Mill Road and SR 211 (Oakpointe)	4SB128	68.3	61.2	7.1	60.8	7.5	Yes
4-4	Between Hamilton Mill Road and SR 211 (Oakpointe)	4SB129	65	59.7	5.3	59.2	5.8	Yes
4-4	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB238	70.2	58.2	12	59	11.2	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 4B - Noise Envelope Comparison**

Noise Barrier 4-4	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	3,998	16 to 30	112,180	49	23	\$2,804,497
DB Modified Noise Barrier	4,053	22 to 30	109,049	49	21*	\$2,726,233

\* 2 benefitted receptors in the approved noise impact assessment received a 5 dBA benefit; these receptors received a 4.9 dBA reduction in the DB design.



**Table 5A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
4-5	Between Hamilton Mill Road and SR 211 (On Flowery Branch Road)	4SB132	70	64	6	64.1	5.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB133	62	57.3	4.7	57.3	4.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB134	62.6	57.2	5.4	57.6	5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB135	63.2	57.4	5.8	57.5	5.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB136	64.1	57.5	6.6	57.7	6.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB137	65.3	57.9	7.4	58.2	7.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB138	66.7	58.5	8.2	58.8	7.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB139	69	59.7	9.3	59.8	9.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB140	70.5	60.4	10.1	60.6	9.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB141	71.7	61	10.7	60.9	10.8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB142	71	60.4	10.6	60.4	10.6	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB143	69.4	60	9.4	60	9.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB144	67.7	59.4	8.3	59.5	8.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB145	66.6	59.2	7.4	59.4	7.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB146	65.7	58.8	6.9	59	6.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB147	64.6	58.4	6.2	58.4	6.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB148	64	58.2	5.8	58.3	5.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB149	64.6	58.2	6.4	58.3	6.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB150	65.1	58.2	6.9	58.2	6.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB151	65.5	58.1	7.4	58.2	7.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB152	65.6	58.1	7.5	58.1	7.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB153	65.7	57.7	8	57.6	8.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB154	65.9	57.5	8.4	57.4	8.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB155	66	57.1	8.9	56.8	9.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB156	65.9	56.7	9.2	56.4	9.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB157	65.9	56.5	9.4	56.6	9.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB158	66.1	56.4	9.7	56.1	10	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB159	66.1	56.3	9.8	55.9	10.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB160	66.1	56	10.1	55.6	10.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB161	65.3	55.6	9.7	55.2	10.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB162	63.6	54.5	9.1	54.3	9.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB163	63.5	54.4	9.1	54.2	9.3	Yes

4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB164	63.8	54.4	9.4	54.3	9.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB165	63.9	54.7	9.2	54.4	9.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB166	63.7	54.8	8.9	54.4	9.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB167	65.4	55.6	9.8	55.3	10.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB168	65.9	56	9.9	55.6	10.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB169	66.8	56.4	10.4	55.9	10.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB170	68.8	57.5	11.3	57.1	11.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB171	69.6	58	11.6	57.3	12.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB172	70.3	58.4	11.9	57.8	12.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB173	70.4	58.5	11.9	58	12.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB174	69.8	58.5	11.3	58	11.8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB175	69.1	58.1	11	58	11.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB176	68.8	57.9	10.9	58.1	10.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB177	68.3	57.8	10.5	58.3	10	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB178	68.6	58.4	10.2	58.7	9.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB179	69.8	59.8	10	60	9.8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB180	69.3	60	9.3	60.1	9.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB181	68.1	59.7	8.4	59.6	8.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB182	66.2	58.4	7.8	58.2	8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB183	65.6	57.8	7.8	57.5	8.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB184	64.8	57.3	7.5	56.9	7.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB185	64.1	56.8	7.3	56.5	7.6	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB186	62.9	55.8	7.1	55.5	7.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB187	62.3	55.5	6.8	55.1	7.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB188	62.1	55.3	6.8	55.1	7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB189	67	57.5	9.5	57.1	9.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB190	66.8	57.2	9.6	56.9	9.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB191	65.9	56.5	9.4	56.5	9.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB192	65.2	56.5	8.7	56.3	8.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB193	64.5	56.2	8.3	56.1	8.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB194	66.8	57.2	9.6	56.7	10.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB195	66	56.8	9.2	56.6	9.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB196	65	56.4	8.6	55.9	9.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB197	63.8	55.6	8.2	55.4	8.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB198	62.8	55.1	7.7	54.9	7.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB199	64.5	55.7	8.8	55.3	9.2	Yes

4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB200	64.1	55.6	8.5	55.2	8.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB201	64.1	55.7	8.4	55.2	8.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB202	64	56	8	55.6	8.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB203	63.7	56.2	7.5	55.9	7.8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB204	63.2	55.6	7.6	55.2	8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB205	66.6	58.9	7.7	59	7.6	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB206	66.4	59.2	7.2	59.2	7.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB207	66	59	7	59	7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB208	65.9	59.2	6.7	59.1	6.8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB209	65.6	58.9	6.7	58.8	6.8	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB210	65.5	58.1	7.4	58	7.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB211	65.7	58	7.7	58	7.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB212	65.7	57.6	8.1	57.6	8.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB213	66.7	58.1	8.6	58	8.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB214	65.6	57	8.6	57.3	8.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB215	65.6	56.8	8.8	56.7	8.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB216	65.4	56.4	9	56.2	9.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB217	64.2	55.5	8.7	55.3	8.9	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB218	64.2	55.2	9	54.9	9.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB219	64.4	55.2	9.2	55.2	9.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB220	64.2	54.8	9.4	54.5	9.7	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB221	63.4	54.3	9.1	53.8	9.6	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB222	63.1	54	9.1	53.6	9.5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB223	64	57.7	6.3	57.8	6.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB224	62.9	57.4	5.5	57.5	5.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB225	62.1	57.8	4.3	57.8	4.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB226	61.8	57.5	4.3	57.4	4.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB227	63.2	58.4	4.8	58.2	5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB228	63.4	58.5	4.9	58.4	5	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB229	63.5	58.4	5.1	58.3	5.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB230	64.2	58.1	6.1	58	6.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB231	64.1	58	6.1	57.9	6.2	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB232	64	57.8	6.2	57.7	6.3	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB233	60.7	55.7	5	55.6	5.1	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB234	59	53.7	5.3	53.6	5.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB235	53.4	52.2	1.2	51.9	1.5	Yes

4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB236	52.9	51.8	1.1	51.5	1.4	Yes
4-5	Between Hamilton Mill Road and SR 211 (Willow Leaf)	4SB237	53.8	52.4	1.4	52.2	1.6	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 5B - Noise Envelope Comparison**

Noise Barrier 4-5	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	2,434	24 to 30	71,926	34	63	\$1,798,154
DB Modified Noise Barrier	2,505	26 to 30	72,389	34	65	\$1,809,733

**Table 6A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB084	65.6	58.9	6.7	59.7	5.9	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB085	68.8	60.3	8.5	60.6	8.2	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB086	72.8	62.9	9.9	63.7	9.1	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB087	70.6	61.9	8.7	62.7	7.9	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB088	66.9	59.1	7.8	59.5	7.4	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB089	69.1	60	9.1	61	8.1	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB090	66.4	58.4	8	58.6	7.8	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB091	62	56.4	5.6	56.3	5.7	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB092	62	56.2	5.8	56.4	5.6	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB093	61.1	55.7	5.4	55.6	5.5	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB094	60.6	55.6	5	55.6	5	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB095	65.4	57.9	7.5	57.9	7.5	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB096	68.7	59.5	9.2	59.8	8.9	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB097	71	60.7	10.3	61.2	9.8	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB098	75.9	62	13.9	62.8	13.1	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB099	68.1	59.5	8.6	59.4	8.7	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB100	67	58.8	8.2	58.9	8.1	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB101	64.2	57.8	6.4	57.6	6.6	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB102	61.8	56.4	5.4	56.2	5.6	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB103	59.5	55.7	3.8	55.3	4.2	Yes
4-6	Between Hamilton Mill Road and SR 211 (Pilgrim Acres)	4NB104	59.1	56.1	3	55.6	3.5	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 6B - Noise Envelope Comparison**

Noise Barrier 4-6	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	1,781	14 to 26	40,876	11	8	\$1,021,905
DB Modified Noise Barrier	1,849	18 to 20	34,836	11	8	\$870,893

**Table 7A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
5-1	Between Hamilton Mill Road and SR 211 (On Bill Cheek Road)	5NB001	61.7	56.7	5	56.7	5	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB002	63	56.1	6.9	56	7	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB003	63.7	56.3	7.4	56	7.7	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB004	63.6	55.1	8.5	55.1	8.5	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB005	65.6	57.1	8.5	56.9	8.7	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB006	66.9	57.1	9.8	58.1	8.8	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB007	65.6	56.5	9.1	57.1	8.5	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB008	64.4	55.9	8.5	56	8.4	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB009	66.5	57	9.5	57.4	9.1	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB010	66.1	57.1	9	57.5	8.6	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB011	64.6	57.2	7.4	57.1	7.5	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB012	64.9	57.7	7.2	57.6	7.3	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB013	66.9	58.4	8.5	58.5	8.4	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB014	67.5	59	8.5	59.2	8.3	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB015	68.1	59.8	8.3	60.1	8	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB016	68.6	60.3	8.3	61.2	7.4	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB017	66.7	59.8	6.9	60	6.7	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB018	65.4	58.7	6.7	58.9	6.5	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB019	64.2	57.9	6.3	58.1	6.1	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB020	63	56.9	6.1	57.1	5.9	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB021	64.6	56	8.6	56	8.6	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB022	66.2	56.4	9.8	56.3	9.9	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB023	67.2	57	10.2	57	10.2	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB024	67.2	57.5	9.7	57.5	9.7	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB025	67	57.5	9.5	57.5	9.5	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB026	67	57.9	9.1	57.8	9.2	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB027	66.5	57.7	8.8	57.6	8.9	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB028	65.7	56.8	8.9	56.8	8.9	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB029	64.3	55.7	8.6	55.9	8.4	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB030	67.3	58.6	8.7	58.6	8.7	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB031	66.7	59.1	7.6	59.3	7.4	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB032	65.7	57.7	8	57.8	7.9	Yes

5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB033	65.7	58.4	7.3	58.8	6.9	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB034	64.3	57	7.3	57.1	7.2	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB035	64.7	58.5	6.2	58.8	5.9	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB036	64	58.5	5.5	58.7	5.3	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB037	64.5	55.8	8.7	55.9	8.6	Yes
5-1	Between Hamilton Mill Road and SR 211 (Retreat at Ashbury)	5NB038	65	56	9	56.5	8.5	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 7B - Noise Envelope Comparison**

Noise Barrier 5-1	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	2,250	14 to 24	43,102	15	22	\$1,077,560
DB Modified Noise Barrier	2,326	12 to 22	39,790	15	22	\$994,756

**Table 8A - Noise Barrier Validation Summary**

Barrier	Property Type	Receiver #	Build Sound Level Noise Assessment (June 2017) (A)	With Barrier Sound Level Noise Assessment (June 2017) (B)	Barrier Decibel Reduction Noise Assessment (June 2017) (C)	With Barrier Sound Level CWM Design (May 2018) (D)	Decibel Reduction (E) = (D) - (A)	Meets Validation Criteria?
3	Restaurant	8	65.5	64.9	0.6	64.9	0.6	Yes
3	Gas Station	9	67.1	66.8	0.3	66.7	0.4	Yes
3	Gas Station	10	64.9	64.4	0.5	64.4	0.5	Yes
3	Landscape Business	11	61.9	61.6	0.3	61.5	0.4	Yes
3	Single-Family Residential	12	64.3	63.6	0.7	63.2	1.1	Yes
3	Single-Family Residential	13	65.3	61.1	4.2	61.6	3.7	Yes
3	Single-Family Residential	14	66.2	59.6	6.6	60.6	5.6	Yes
3	Single-Family Residential	15	67	59.9	7.1	60.8	6.2	Yes
3	Hotel 1st Floor west	16	75.9	64	11.9	64.8	11.1	Yes
3	Hotel 1st Floor East	17	73.6	63.6	10	63.9	9.7	Yes
3	Hotel 2nd Floor West	18	77	67.1	9.9	66.9	10.1	Yes
3	Hotel 2nd Floor East	19	74.5	66.3	8.2	66.1	8.4	Yes
3	Single-Family Residential	20	69.6	62.1	7.5	62	7.6	Yes
3	School	21	72.3	65.6	6.7	65.2	7.1	Yes
3	Cemetery	22	71.1	64.5	6.6	65.5	5.6	Yes
3	Mini Storage	23	68.1	67.4	0.7	67.8	0.3	Yes
3	Business Park	24	68	68.1	-0.1	68.1	-0.1	Yes
3	Pet Lodge	25	67.9	68	-0.1	68	-0.1	Yes
3	Single-Family Residential	26	70.1	70.4	-0.3	70.4	-0.3	Yes

Impacted Receiver from Approved Noise Impact Assessment (2017)

**Table 8B - Noise Envelope Comparison**

Noise Barrier 3	Length (ft)	Height (ft)	Area (sq. ft.)	No. Impacts	No. Benefits	Construction Cost
Noise Impact Assessment	2,092	12 to 28	41,297	6	0	\$1,032,413
DB Modified Noise Barrier	1,926	8 to 18	32,170	6	0	\$804,252





**Projects NH-IMO-0085-02(165) & HN-IMO-0085-02(166)**

**Gwinnett, Barrow, and Jackson Counties**

**P.I. Nos. 110610- & 0013545**

**Reevaluation**

**Attachment 5**

**NOISE BARRIER VOTING INFORMATION**

### I-85 Widening, PI No. 110610 Noise Barrier Voting Summary

Noise Barrier	Total Number of Ballot Recipients	Total Number of Ballot Receptors	Ballot Receptors Minus Vacant or Returned Letters	Receptor Response Needed for 25% for Valid Survey	Total Eligible Receptor Response	Total Response Percentage	25% Goal Met?	Total Yes	Total No	Majority Vote (50% + 1)	Reasonable Outreach Effort Made?
#4-1	1	18	18	5	18	100	Y	18	0	Y	Yes
#4-2	38	38	38	10	23	61	Y	22	1	Y	Yes
#4-3	70	113	112	28	58	52	Y	57	1	Y	Yes
#4-4	76	80	79	20	40	51	Y	40	0	Y	Yes
#4-5	132	133	127	32	37	29	Y	36	1	Y	Yes
#4-6	24	24	24	6	11	46	Y	9	2	Y	Yes
#5-1	10	38	38	10	35	92	Y	35	0	Y	Yes
#3	6	10	10	3	7	70	Y	7	0	Y	Yes



April 16, 2018

## Sample Ballot Information Package

CalAtlantic Homes at Retreat at Ashbury Park  
2004 Woodmarsh Cir  
Auburn, GA 30011

Re: Voting Ballot for Proposed Noise Barrier 5-1  
Georgia Department of Transportation  
PI Number: 110610  
Project Number: NH-IMO-0085-02(165)  
I-85 Widening and Improvements from North of CR 134/Hamilton Mill Road to North of SR 53

Dear CalAtlantic Homes at Retreat at Ashbury Park,

The Georgia Department of Transportation (GDOT) is seeking owner/resident input on its proposal to construct noise barriers for the I-85 Widening and Improvements from north of CR 134/Hamilton Mill Road to north of SR 53. The proposed project PI 110610 would widen and reconstruct approximately 10 miles of I-85.

The typical section is proposed to expand from two to three general purpose lanes in each direction, including 12-foot inside shoulders and variable width outside shoulders. Widening would occur to the center, within the existing I-85 median.

As part of the federal environmental analysis, a Noise Impact Assessment was prepared to analyze the effects of highway traffic noise on communities within the project limits. The area adjacent to your community has been evaluated and the results of the assessment indicated that the construction of a noise barrier is feasible to reduce noise impacts. The approximate location of the proposed noise barrier is shown on the attached figure. The noise barrier would be constructed within the existing I-85 right-of-way.

Your input is very important. Please complete the enclosed voting ballot to document your position in support of, or opposition to, the construction of the proposed noise barrier. Please note your vote can only be applied to the noise barrier that affects your property. GDOT can only count votes that are received and cannot assume support or opposition to noise barrier construction. For your convenience, the ballot has been addressed and stamped for delivery to the Georgia Department of Transportation's consultant. You may also complete the survey online at: <https://www.surveymonkey.com/r/DNMVN6H>. Please respond by May 16, 2018. Voting results will be posted on the [www.dot.ga.gov/85Widening985toSR53](http://www.dot.ga.gov/85Widening985toSR53) within two months following the close of the voting period.

It is important to note because final design is still ongoing, additional noise analysis may be conducted. While a noise barrier is proposed for the areas shown, please be aware that final noise reduction methods may be provided by other methods such as retaining walls, and/or design changes to the roadway. Regardless of the method, the amount of noise reduction that was committed to in the Categorical Exclusion, and/or subsequent federally-approved Noise Technical Reports, will be provided. If, after the voting is conducted, substantial changes affecting the proposed noise barriers are made, additional outreach will be conducted to those owners and tenants behind the affected noise barrier.

Thank you for your participation in this important decision. Should you have further questions, comments, or concerns, please call the GDOT Project Manager Tim Matthews, PE at 404-631-1713 or Air/Noise Manager Soli Shakshuki at 404-631-1093.

Sincerely,



Darryl D. VanMeter, P.E.  
Assistant P3 Division Director /  
State Innovative Delivery Administrator

DVM/EPEI/je

Attachments: Noise Barrier Location Map  
Ballot

  
cc: Timothy W. Matthews, GDOT Project Manager (via email)  
PDF for Project File

**Sample Ballot  
Information  
Package**

# Sample Ballot Information Package



Legends Dr NE

Bill Cheek Rd

Bill Cheek Rd

**Proposed Noise Barrier #5-1**  
I-85 Widening  
GDOT Project #: NHIM0-0085-02(165)  
PI No. 110610





Noise Barrier 5-1 Voting Ballot

My Vote for proposed Noise Barrier

- Yes, I support the noise barrier
- No, I do not support the noise barrier

Please print clearly:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Or – Cast your ballot online at

<https://www.surveymonkey.com/r/DNMVN6H>

Deadline for voting: May 16, 2018



Noise Barrier 5-1 Voting Ballot

My Vote for proposed Noise Barrier

- Yes, I support the noise barrier
- No, I do not support the noise barrier

Please print clearly:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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# Sample Ballot Information Package



Noise Barrier 5-1 Voting Ballot

My Vote for proposed Noise Barrier

- Yes, I support the noise barrier
- No, I do not support the noise barrier

Please print clearly:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Or – Cast your ballot online at

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Deadline for voting: May 16, 2018



Noise Barrier 5-1 Voting Ballot

My Vote for proposed Noise Barrier

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- No, I do not support the noise barrier

Please print clearly:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Or – Cast your ballot online at

<https://www.surveymonkey.com/r/DNMVN6H>

Deadline for voting: May 16, 2018

**I – 85 Widening**  
*Noise Barrier Public Outreach*

Stamp

Edwards-Pitman Environmental, Inc.  
1250 Winchester Parkway SE, #200  
Smyrna, GA 30080

**I – 85 Widening**  
*Noise Barrier Public Outreach*

Stamp

Edwards-Pitman Environmental, Inc.  
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# Sample Ballot Information Package

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