AUTORIDAD
METROPOLITANA DE
AUTOBUSES

SUBASTA FORMAL NÚM. 45-2223-003

REMODELACIÓN Y ROTULACIÓN DE PARADAS

PLANOS RUTA 21

37 Ave. De Diego, Urb. San Francisco, Río Piedras / Box 195349, San Juan, PR 00919-5349
Teléfono 787-294-0500 / Fax 787-751-0527

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOPS

SCHEDULE OF DRAWING

SHEET NO.	DRAWING NO.	DESCRIPTION
1	TI-1	TITLE SHEET
2	GR-1.01	INDEX SHEET: ROUTE 21 | BUS STOPS
3	MOT-1.01	MAINTENACE OF TRAFFIC: NOTES AND DETAILS
4	MOT-1.02	MAINTENACE OF TRAFFIC DETAILS
5	MOT-1.03	MAINTENACE OF TRAFFIC DETAILS
6	MOT-1.04	MAINTENACE OF TRAFFIC DETAILS
ROUTE 21 | FROM SAN JUAN TERMINAL TO SAGRADO CORAZON STATION		
7 - 34	TS-1.01 TO TS-1.28: ROUTE 21 | BUS STOPS	
ROUTE 21 | FROM SAGRADO CORAZON STATION TO SAN JUAN TERMINAL		
35 - 61	TS-2.01 TO TS-2.36: ROUTE 21 | BUS STOPS	
62 - 77	TS-3.01 TO TS-3.16: TRAFFIC SIGNS DETAILS	

MUNICIPALITIES OF SAN JUAN AND SAN JUAN
LOCALIZACION 1:20,000

AUTORIDAD
METROPOLITANA DE
AUTOBUSES

FROM SAGRADO CORAZÓN TO SAN JUAN
PR-25, PR-37, ASHFORD AVENUE & DEL TREN ST.
MUNICIPALITY OF SAN JUAN

NOTE:
ALL WORK ON THIS PROJECT SHALL BE PERFORMED AND ALL MATERIALS SHALL BE IN SUBSTANTIAL CONFORMITY WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND GENERAL PROVISIONS APPROVED BY THE PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY IN 2011

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

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OWNER:

DRAWING TYPE: TI-1

SHEET: 1 OF 77

ROUTE 21 | BUS STOPS

ROUTE 21: FROM SAN JUAN TERMINAL TO SAGRAGO CORAZON STATION

NUMBER	SHEET	BUS STOP	BUS STOP LOCATION	MUNICIPALITY
			SAN JUAN TERMINAL	
7	TS-1.01	1	ONLY LANE EL TREN OPPOSITE SIDE OF VALDEZ ST.	SAN JUAN
8	TS-1.02	2	ONLY LANE EL TREN INT. PELAYO ST.	SAN JUAN
9	TS-1.03	3	ONLY LANE EL TREN INT. TADEO RIVERA ST.	SAN JUAN
10	TS-1.04	4	ONLY LANE EL TREN INT. MATÍAS LEDESMA ST.	SAN JUAN
11	TS-1.05	5	ONLY LANE EL TREN INT. SAN JUAN BAUTISTA ST.	SAN JUAN
12	TS-1.06	6	ONLY LANE EL TREN INT. RAMÓN POWER ST.	SAN JUAN
13	TS-1.07	7	ONLY LANE EL TREN INT 5 ST.	SAN JUAN
14	TS-1.08	8	ONLY LANE EL TREN BEFORE JUAN PONCE DE LEÓN AVE.	SAN JUAN
15	TS-1.09	9	ASHFORD AVENUE AFTER DOS HERMANOS BRIDGE	SAN JUAN
16	TS-1.10	10	ASHFORD AVENUE FRONT CASA LOLA REST (ABANDONED PLACE)	SAN JUAN
17	TS-1.11	11	ASHFORD AVENUE BEFORE BARRANQUITAS ST.	
18	TS-1.12	12	ASHFORD AVENUE BEFORE MARIANO RAMÍREZ BAGES ST.	SAN JUAN
19	TS-1.13	13	MAGDALENA AVENUE BEFORE LUISA ST.	SAN JUAN
20	TS-1.14	14	MAGDALENA AVENUE INT. CONDADO ST.	SAN JUAN
21	TS-1.15	15	MAGDALENA AVENUE INT. CERVANTES ST.	SAN JUAN
22	TS-1.16	16	MAGDALENA AVENUE BEFORE MANUEL RODRÍGUEZ SERRA	SAN JUAN
23	TS-1.17	17	ASHFORD AVENUE BEFORE OPPOSITE SIDE OF NAIN ST.	SAN JUAN
24	TS-1.18	18	DE DIEGO AVENUE OPPOSITE SIDE OF MARIBEL ST.	SAN JUAN
25	TS-1.19	19	DE DIEGO AVENUE AFTER OPPOSITE SIDE OF LAS MARÍAS ST.	SAN JUAN
26	TS-1.20	20	DE DIEGO AVENUE INT. ESTRELLA ST.	SAN JUAN
27	TS-1.21	21	DE DIEGO AVENUE INT. SANTA FE ST. (MINILLAS GOVERNMENT CENTER)	SAN JUAN
28	TS-1.22	22	DE DIEGO AVENUE BEFORE JUAN PONCE DE LEÓN AVE.	SAN JUAN
29	TS-1.23	23	ONLY LANE JUAN PONCE DE LEÓN AVE. BEFORE REVERENDO ORENGO ST.	SAN JUAN
30	TS-1.24	24	ONLY LANE JUAN PONCE DE LEÓN AVE. AFTER DEL PARQUE ST.	SAN JUAN
31	TS-1.25	25	ONLY LANE JUAN PONCE DE LEÓN AVE. INT. FIDALGO DÍAZ ST.	SAN JUAN
32	TS-1.26	26	ONLY LANE JUAN PONCE DE LEÓN AVE. BEFORE MAYOL ST.	SAN JUAN
33	TS-1.27	27	ONLY LANE JUAN PONCE DE LEÓN AVE. BEFORE OPPOSITE SIDE OF BOURET ST.	SAN JUAN
34	TS-1.28	28	ONLY LANE JUAN PONCE DE LEÓN AVE. AFTER OPPOSITE SIDE OF HAYDEÉ REXACH AVE.	SAN JUAN
			SAGRAGO CORAZON STATION	

ROUTE 21: FROM SAGRAGO CORAZON STATION TO SAN JUAN TERMINAL

NUMBER	SHEET	BUS STOP	BUS STOP LOCATION	MUNICIPALITY
			SAGRAGO CORAZON STATION	
35	TS-2.01	1	ONLY LANE LUIS MUÑOZ RIVERA AVE. BEFORE HAYDEÉ REXACH ST.	SAN JUAN
36	TS-2.02	2	JUAN PONCE DE LEÓN AVE. BEFORE ROSALES ST.	SAN JUAN
37	TS-2.03	3	JUAN PONCE DE LEÓN AVE. AFTER RIERA ST. (FRONT LA INMACULADA ELDERLY CENTER)	SAN JUAN
38	TS-2.04	4	JUAN PONCE DE LEÓN AVE. BEFORE FIDALGO DÍAZ ST.	SAN JUAN
39	TS-2.05	5	JUAN PONCE DE LEÓN AVE. FRONT COBIAN PLAZA BUILDING	SAN JUAN
40	TS-2.06	6	JUAN PONCE DE LEÓN AVE. BEFORE DE DIEGO AVE.	SAN JUAN
41	TS-2.07	7	DE DIEGO AVENUE BEFORE ANTONSANTI ST.	SAN JUAN
42	TS-2.08	8	DE DIEGO AVENUE BEFORE BALDORIOTY DE CASTRO EXPRESSWAY	SAN JUAN
43	TS-2.09	9	DE DIEGO AVENUE AFTER OPPOSITE SIDE OF ESTRELLA ST.	SAN JUAN
44	TS-2.10	10	DE DIEGO AVENUE BEFORE LAS MARÍAS ST.	SAN JUAN
45	TS-2.11	11	DE DIEGO AVENUE BEFORE ASHFORD AVENUE	SAN JUAN
46	TS-2.12	12	ASHFORD AVENUE INT. WASHINGTON ST.	SAN JUAN
47	TS-2.13	13	ASHFORD AVENUE BEFORE CERVANTES ST.	SAN JUAN
48	TS-2.14	14	ASHFORD AVENUE BEFORE CONDADO ST.	SAN JUAN
49	TS-2.15	15	ASHFORD AVENUE OPPOSITE SIDE OF MAGDALENA AVE.	SAN JUAN
50	TS-2.16	16	ASHFORD AVENUE OPPOSITE SIDE OF BARRANQUITAS ST.	SAN JUAN
51	TS-2.17	17	ASHFORD AVENUE FRONT PARKING	SAN JUAN
52	TS-2.18	18	ASHFORD AVENUE BEFORE DOS HERMANOS BRIDGE	SAN JUAN
53	TS-2.19	19	ONLY LANE EL TREN AFTER FERNÁNDEZ JUNCOS AVENUE	SAN JUAN
54	TS-2.20	20	ONLY LANE EL TREN INT. 5 ST.	SAN JUAN
55	TS-2.21	21	ONLY LANE EL TREN AFTER RAMÓN POWER ST.	SAN JUAN
56	TS-2.22	22	ONLY LANE EL TREN INT. SAN JUAN BAUTISTA ST.	SAN JUAN
57	TS-2.23	23	ONLY LANE EL TREN AFTER MATÍAS LEDESMA ST.	SAN JUAN
58	TS-2.24	24	ONLY LANE EL TREN INT. TADEO RIVERA ST.	SAN JUAN
59	TS-2.25	25	ONLY LANE EL TREN BEFORE PELAYO ST.	SAN JUAN
60	TS-2.26	26	ONLY LANE EL TREN INT. VALDEZ ST.	SAN JUAN
61	TS-2.27	27	ONLY LANE EL TREN FRONT VETERAN PUERTO RICAN'S PARKING	SAN JUAN
			SAN JUAN TERMINAL	

Yo, Hernan E. López Báez, ingeniero licencia 18134, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. Tambien, certifico que el diseño que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamentos y Código de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia de mi parte, de mis agentes o empleados, o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial y/o multa por la OGPe.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
INDEX SHEET: ROUTE 21 | BUS STOPS

FROM SAN JUAN TERMINAL TO SAGRADO CORAZON STATION
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: GR-1.01	SHEET NO. 2 OF 77

ROUTE 21 | BUS STOPS

GENERAL NOTES:

1. NO WORK OTHER THAN MOBILIZATION, TRAFFIC CONTROL, AND PROJECT FIELD OFFICE, SHALL BE PERFORMED UNTIL THE PROGRESS SCHEDULE IS APPROVED BY THE ENGINEER.

2. ALL TEMPORARY CONTROL DEVICES SHALL COMPLY WITH THE SUPPLEMENTAL SPECIFICATION NUMBER 638 - "MAINTENANCE AND PROTECTION OF TRAFFIC" OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2005 EDITION.

3. EQUIPMENT, MATERIALS AND OTHER DEVICES USED FOR CONSTRUCTION SHALL BE REMOVED FROM THE ROADWAY AFTER WORK HOURS AND SHALL BE STAGED A MINIMUM OF 10 METERS FROM THE TRAVEL WAY.

4. THE DRUM SPACING SHALL BE 5 METERS.

5. ANY ALTERATION TO THE SCHEDULE THAT MAY IMPROVE TRAFFIC OPERATIONS WITHIN THE CONSTRUCTION AREA, IN ACCORDANCE WITH THE CURRENT MUTCD AND WITH NO ADDITIONAL COST TO THE AUTHORITY, SHALL BE SUBMITTED TO THE ENGINEER AT LEAST TWENTY ONE (21) CALENDAR DAYS IN ADVANCE TO THE PROPOSED DATE OF IMPLEMENTATION FOR REVIEW. IF THE PROPOSED ALTERATION IS APPROVED IT SHALL BE IMPLEMENTED AS DIRECTED BY THE ENGINEER.

6. THE CONTRACTOR CAN PERFORM, WITH THE APPROVAL OF THE ENGINEER, SEVERAL SIMULTANEOUS ACTIVITIES WITHIN A STAGE, AND AS PERMITTED BY THE CONTRACT PROPOSAL QUANTITIES ON THE TRAFFIC CONTROL ITEMS.

7. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER THE INSTALLATION OF TEMPORARY TRAFFIC CONTROL DEVICES FOR EACH PHASE AT LEAST FOURTEEN (14) CALENDAR DAYS IN ADVANCE FOR THE RELEASE OF PUBLIC NOTICE. THE CONTRACTOR SHALL NOT COMMENCE ANY OF THE CONSTRUCTION PHASES WITHOUT A PUBLIC NOTICE IS ISSUED OR WITHOUT DIRECT CONSENT FROM THE ENGINEER.

9. THE CONTRACTOR SHALL FURNISH TEMPORARY TRAFFIC CONTROL DEVICES THAT MEET NCHRP 350 CRITERIA FOR THE APPLICABLE CRASHWORTHINESS STANDARD.

10. ALL TRAFFIC CONTROL SIGNS DETERMINED BY THE ENGINEER TO BE UNNECESSARY FOR THE APPLICABLE CONSTRUCTION OPERATION SHALL BE IMMEDIATELY COVERED IN ITS ENTIRETY WITH NON ABRASIVE MATERIAL AND SHALL BE INSPECTED DURING DAY AND NIGHT TIME TO ENSURE THAT THE SIGN IS NOT READABLE. THIS WORK IS A SUBSIDIARY OBLIGATION OF THE CONTRACT UNDER EXISTING PAY ITEMS.

11. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL TAKE ALL THE NECESSARY PRECAUTIONS AND MEASURES TO AVOID FALLING DEBRIS, TOOLS, EQUIPMENT OR ANY OTHER MATERIALS INTERFERE OR IMPACT THE MOTORING PUBLIC IN THE ROADWAY. ALL THE MATERIALS, LABOR EQUIPMENT, AND WORK NECESSARY FOR IMPLEMENTING THIS REQUIREMENT IS SUBSIDIARY OBLIGATION OF THE CONTRACT UNDER EXISTING PAY ITEMS.

12. THE CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES TO ADJACENT PROPERTIES DURING CONSTRUCTION. THIS WORK WILL REQUIRE COORDINATION WITH BUSINESSES AND PRIVATE OWNERS. ALL THE MATERIALS, LABOR, EQUIPMENT, AND WORK NECESSARY FOR IMPLEMENTING THIS REQUIREMENT IS SUBSIDIARY OBLIGATION OF THE CONTRACT UNDER EXISTING PAY ITEMS.

13. TEMPORARY CONCRETE BARRIER SHOULD HAVE AN OFF-SET END SECTION AS APPROVED BY THE ENGINEER.

14. NO EXCAVATION AND/OR PAVEMENT DROP-OFF SHAL REMAIN OPEN WITHIN THE TRAVELED WAY WHEN THE CONTRACTOR OR ITS PERSONNEL IS NOT WORKING AND PHYSICALLY PRESENT AT THE WORK SITE.

CONSTRUCTION SCHEDULE:

FOR THE CONSTRUCTION OPERATIONS FOR THE IMPROVEMENTS AND SIGNAGE AT THE BUS-STOPS OF THE PRMBA FROM COVADONGA TERMINAL TO SAGRADO CORAZON STATION, INCLUDING HIGHWAY PR-37, PR-35, AVE. ASHFORD, AVE. MAGDALENA AND DEL TREN STREET IN THE MUNICIPALITY SAN JUAN. THE FOLLOWING CONSTRUCTION SCHEDULE AND BASIC SAFETY PRINCIPLES SHALL BE FOLLOWED IN ORDER TO MAINTAIN TRAFFIC FLOW WITH THE LEAST POSSIBLE INTERFERENCE FROM THE WORK. ANY ALTERATIONS TO THIS SCHEDULE, SHALL BE SUBMITTED IN WRITING TO THE EXECUTIVE DIRECTOR FOR FINAL APPROVAL PRIOR TO EXECUTION.

TYPICAL DETAILS ARE SUBMITTED FOR THE TEMPORARY TRAFFIC CONTROL ACTIVITIES FOR A VARIETY OF SITUATIONS COMMONLY ENCOUNTERED. IT IS REQUIRED FROM THE ENGINEER TO ADJUST THESE GUIDELINES TO FIELD CONDITIONS. ALSO A MAINTENANCE OF TRAFFIC IS INCLUDED FOR EACH ONE OF THE RAMPS THAT REQUIRE A PARCIAL CLOSURE DURING THE PAVEMENT AND BRIDGE DECK REHABILITATION.

TRAFFIC FLOW:

1. THE TRAFFIC FLOW WILL BE FLOWING AS INDICATED ON THE TYPICAL DETAIL USED FOR THE CONSTRUCTION AREA.

2. ALL WORKS FOR THIS PROJECT, EXCEPT THE ACTIVITIES THAT REQUIRE THE FULL DEPTH EXCAVATION FOR THE REMOVAL OF THE FOUNDATION OF THE TRAFFIC SIGNS OR PARTIAL REMOVAL OF THE FOUNDATION OF THE TRAFFIC SIGNS OR THE CLOSURE OF A TRAFFIC LANE FOR AT LEAST ONE DAY, SHALL BE PERFORMED DURING THE NIGHT, FROM MONDAY TO THURSDAY BETWEEN 8:30 PM TILL 4:30 AM. ALL TRAVELED LANES SHALL BE OPENED TO THE TRAFFIC DURING NON-WORKING HOUR.

3. ALL WORKS FOR THIS PROJECT, EXCEPT THE ACTIVITIES THAT REQUIRE THE FULL DEPTH EXCAVATION FOR THE REMOVAL OF THE FOUNDATION OF THE TRAFFIC SIGNS OR PARTIAL REMOVAL OF THE FOUNDATION OF THE TRAFFIC SIGNS OR THE CLOSURE OF A TRAFFIC LANE FOR MORE THAN ONE DAY, SHALL BE PERFORMED DURING WEEKENDS. FROM FRIDAY AT 9:30 PM TO MONDAY AT 4:30 AM.

5. ALL PROPOSED ACTIVITIES FOR THE PROJECT, WHICH AFFECTS THE NORMAL FLOW OF THE BUSES OWN BY THE PRMBA, SHALL BE COORDINATE WITH THE PRMBA PERSONNEL.

6. ALL CONSTRUCTION SIGNS SHALL BE REMOVED AFTER CONSTRUCTION DAY ENDS.

PHASES:

1. INSTALL TEMPORARY SAFETY DEVICES AND CONSTRUCTION SIGNS AS INDICATED ON PLANS.
2. THE INSTALLATION OPERATIONS SHALL BE PERFORMED WITHOUT THE MINIMUM INTERFERENCE TO TRAFFIC FLOW.
3. TRAFFIC MOVEMENT ON EXISTING ROADWAY.
4. REMOVAL OF EXISTING SIGNS AND POSTS IN THE BUS-STOPS.
5. INSTALL THE BUS-STOPS SIGNS, POSTS AND SITE IMPROVMENTS.
6. REMOVE ALL THE CONSTRUCTION SIGNS AND SAFETY DEVICES AT THE COMPLETION OF THE WORK DAYS.

SIGNS COLORS		
SIGN CODE:	BACKGROUND	LEGEND/BORDER
W21-4, G20-2(a), W20-7A, W-20-8	FLUORESCENT ORANGE	NON REFLECTIVE BLACK
R1-1	REFLECTIVE RED	REFLECTIVE WHITE

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18 [illegible] certifico que soy el profesional que certificó, diseñó y/o preparó estos planos y las especificaciones, cumplen con los Reglamentos y Códigos de Construcción Aprobados de los Agencias, Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. No incurro por cualquier omisión total o falsificación de los hechos que se haya producido por desconocimiento, por negligencia grave por mí, mis agentes o empleados o por otras personas por mí consideradas en hacer responsable de cualquier acción, falsedad y dolo ante la OGPe.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18 [illegible]

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
MAINTENACE OF TRAFFIC: NOTES AND DETAILS

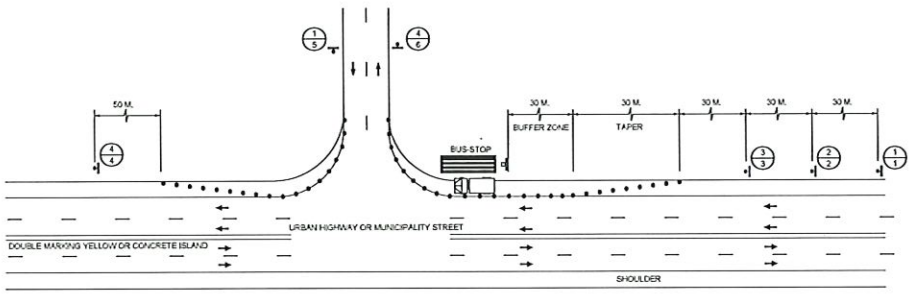
FROM COVADONGA TERMINAL TO SAGRADO CORAZON STATION
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

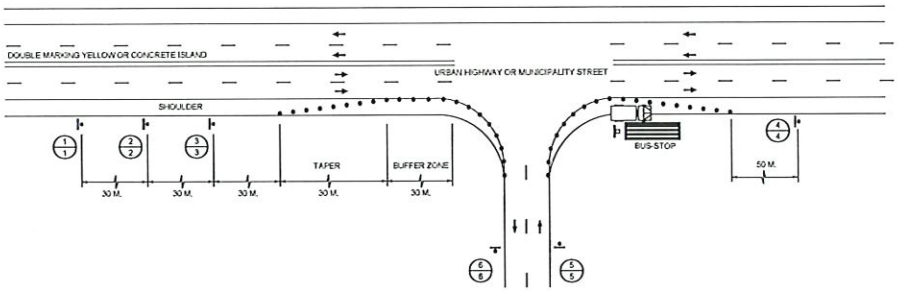
REVISION
DATE: JUNE 2022
CHECKED BY: BEV / DRAW BY: ABZ
DWG. TYPE: MOT-1.01 / SHEET NO. 3 OF 77

ROUTE 21 | BUS STOPS

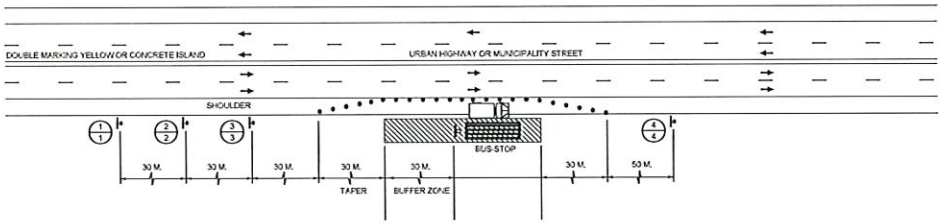


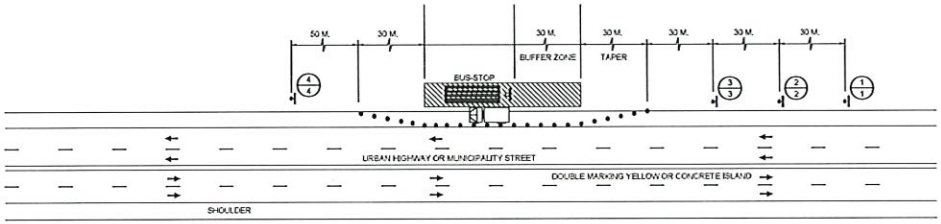
DETAIL - A

DETAIL - B



DETAIL - D





DETAIL - C

LEGEND:

- TRAFFIC FLOW
- TEMPORARY TRAFFIC SIGN (MOUNTED ON WOOD PORTABLE SUPPORT)
- TEMPORARY SIGN IDENTIFICATION
  X = CODE NUMBER
  Y = LOCATION NUMBER
- RETROREFLECTIVE PLASTIC DRUMS (3.00 MTS. SPACING) SEE MPT 1, FHWA STANDARD DRAWINGS
- WORKING TRUCK

Yo, Hernan E. Lopez Baez, ingeniero licencia 18154, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. También certifico que enfatiz que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier desviación falsa o falsificación que se haya producido por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la ECPA.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
MAINTENACE OF TRAFFIC DETAILS

FROM COVADONGA TERMINAL TO SAGRADO CORAZON STATION
MUNICIPALITY OF SAN JUAN

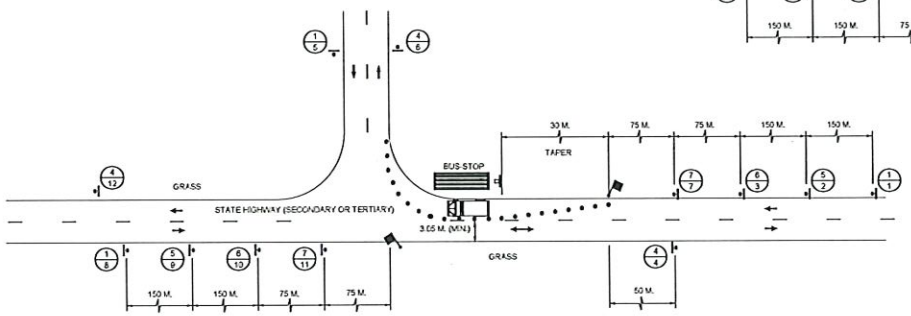
AUTORIDAD METROPOLITANA DE AUTOBUSES
METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: MOT-1.02	SHEET NO. 4 OF 77

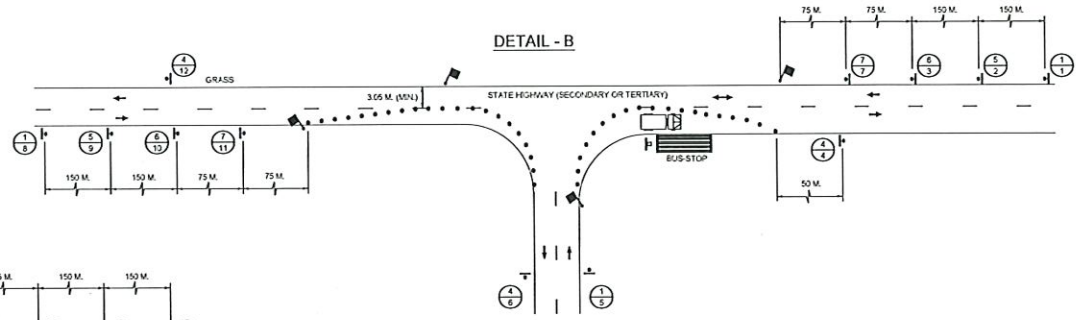
ROUTE 21 | BUS STOPS

LEGEND:

- TRAFFIC FLOW
- TEMPORARY TRAFFIC SIGN (MOUNTED ON WOOD PORTABLE SUPPORT)
- TEMPORARY SIGN IDENTIFICATION
  X = CODE NUMBER
  Y = LOCATION NUMBER
- RETROREFLECTIVE PLASTIC DRUMS (3.00 MTS. SPACING) SEE MPT 1, PRHTA STANDARD DRAWINGS
- WORKING TRUCK
- FLAG PERSON WITH RADIO COMMUNICATION SYSTEM SEE MUTCD SECTION 6E.07: FLAGGER PROCEDURES

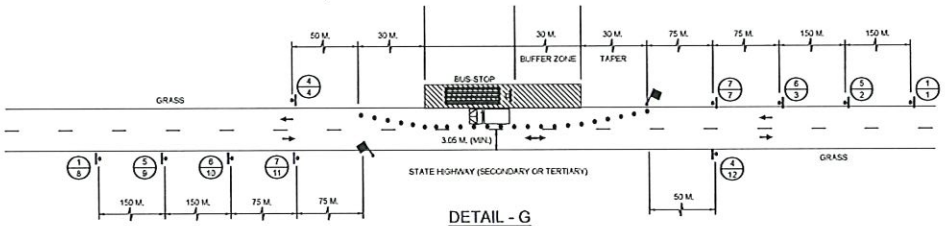


DETAIL - E



DETAIL - B

DETAIL - F



DETAIL - G

Yo, Hernan E. Lopez Baez, ingeniero licencia 18154, certifico que soy el profesional que certificamos, diseña y o prepara estos planos y las especificaciones compleementarias. También certifico que enforcado que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Codigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Publicas con jurisdicción. Renuncio que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia yo sea por mi, mis agentes o empleados, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la DOPs.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154FE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
MAINTENACE OF TRAFFIC DETAILS

FROM COVADONGA TERMINAL TO SAGRADO CORAZON STATION
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

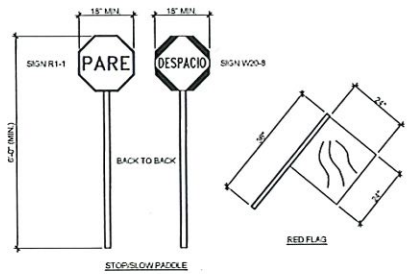
METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE JUNE 2022	
CHECKED BY. BEV	DRAW BY. ABZ
DWG. TYPE. MOT-1.03	SHEET NO. 5 OF 77

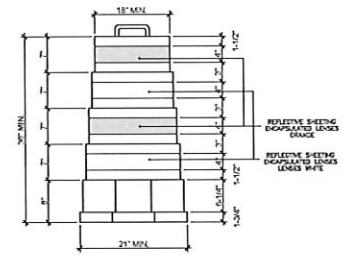
ROUTE 21 | BUS STOPS

TEMPORARY SIGN DATA

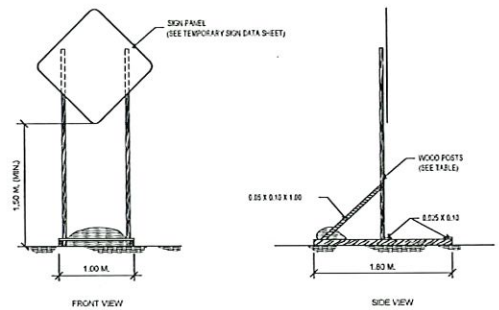
CODE NUMBER	LOCATION NUMBER	SIGN CODE	LEGEND	SIZE OF SIGN PANELS	OVERHEAD STRUCTURE TYPE	REFERENCE MANUAL	TOTAL ITEM
1	1, 5	W21-4	TRABAJO EN CARRETERA ADELANTE	36" X 36"	N/A	SEE MUTCD 2009 EDITION	1
2	2	W21-4	TRABAJO EN CARRETERA 80 M.	36" x 36"	N/A	SEE MUTCD 2009 EDITION	1
3	3	W21-4	TRABAJO EN CARRETERA 30 M.	36" x 36"	N/A	SEE MUTCD 2009 EDITION	1
4	4, 6	G5-2(a)	TERMINA TRABAJO EN CARRETERA	36" x 24"	N/A	SEE MUTCD 2009 EDITION	2
5	2, 9	W21-4	TRABAJO EN CARRETERA 300 M.	36" x 36"	N/A	SEE MUTCD 2009 EDITION	2
6	3, 10	W21-4	TRABAJO EN CARRETERA 150 M.	36" x 36"	N/A	SEE MUTCD 2009 EDITION	2
7	7, 11	W20-7A		30" x 30"	N/A	SEE MUTCD 2009 EDITION	1
8	STOP/SLOW PADDLE	R1-1 W20-8	PARE • DESPACIO BACK TO BACK	18" x 18"	N/A	LIGHT WEIGHT PADDLE	1



HAND-SIGNALING DEVICES BY FLAGGERS
NOT TO SCALE



REFLECTORIZED PLASTIC DRUM



TEMPORARY WOOD PORTABLE SUPPORT
FOR CONSTRUCTION SIGNS
NOT TO SCALE

TEMPORARY WOOD PORTABLE SUPPORT TABLE

WOOD POST SIZES		MAXIMUM SIGN PANEL AREA (SQUARE METERS)	
MT. X MT.	IN. X IN.	1 POST	2 POSTS
0.10 X 0.10	4 X 4	1.00	2.00
0.10 X 0.15	4 X 6	N/A	3.00
0.15 X 0.15	6 X 6	N/A	4.50
0.15 X 0.20	6 X 8	N/A	8.00

Yo, Hernan E. Lopez Baez, ingeniero licencia 18154, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones sometidas mediante este sello. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia, yo soy por mí, mis agentes o empleados, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OPA.

ENZO Engineering, psc.
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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
MAINTENACE OF TRAFFIC DETAILS

FROM COVADONGA TERMINAL TO SAGRADO CORAZON STATION
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

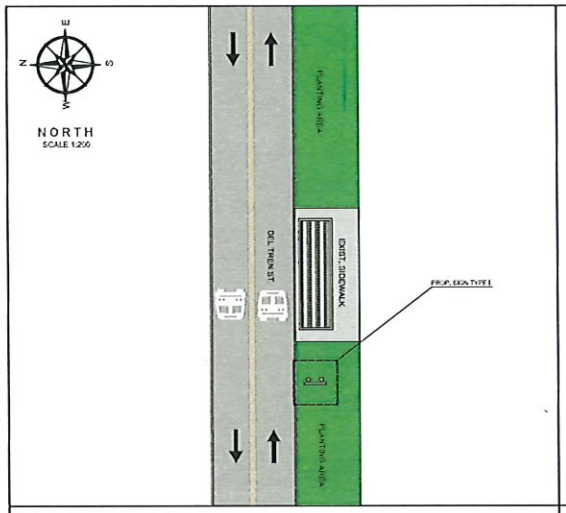
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: MOT-1.04	SHEET NO. 6 OF 77

ROUTE 21 | BUS STOP #1

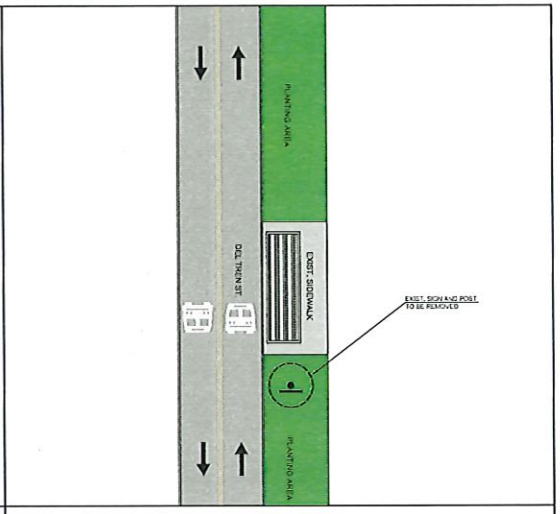
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

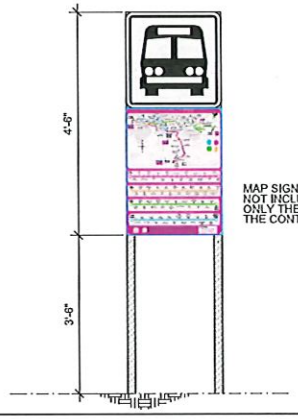


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#1



EXIST. CONDITIONS - ROUTE 21 | B.S.#1

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

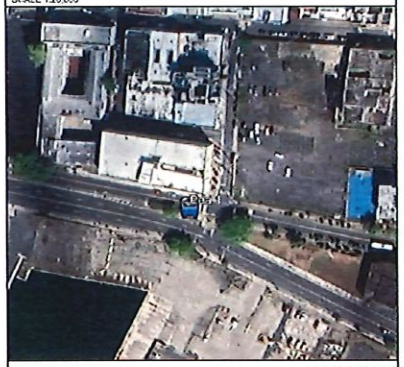
- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FIRES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVE THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL CUT TREE BRANCHES, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 6.0 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA IN FRONT OF THE CONCRETE POLE AND TREE. REFER TO PHOTO #3.

LOCATION PLAN
SCALE 1:20,000

18°27'52.28"N , 66° 6'12.40"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18314, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones completas y notas. También certifico que el diseño de estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción Vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia, falta o falsificación de los hechos que se haya producido por desconocimiento o por negligencia, que por mí, mis agentes o empleados, o por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y de daños por 10 años.

ENZO Engineering, psc.
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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18314

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #1

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN OPPOSITE SIDE OF VALDEZ ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.01	SHEET NO. 7 OF 77

ROUTE 21 | BUS STOP #2

PHOTO - 1

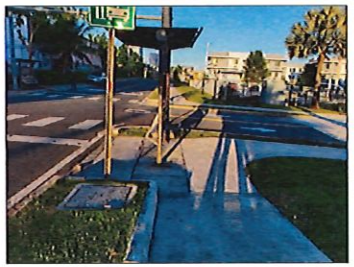
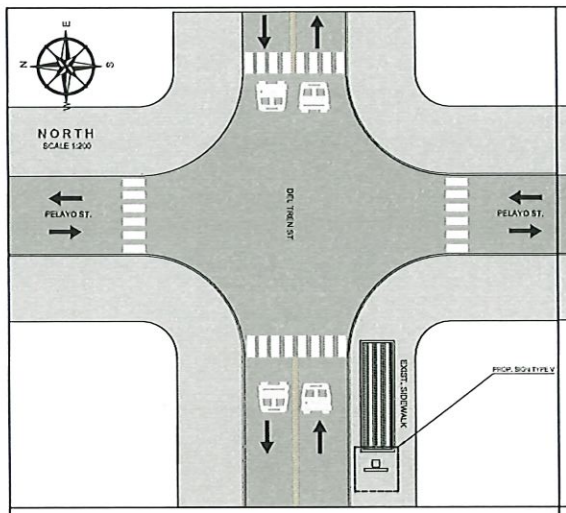
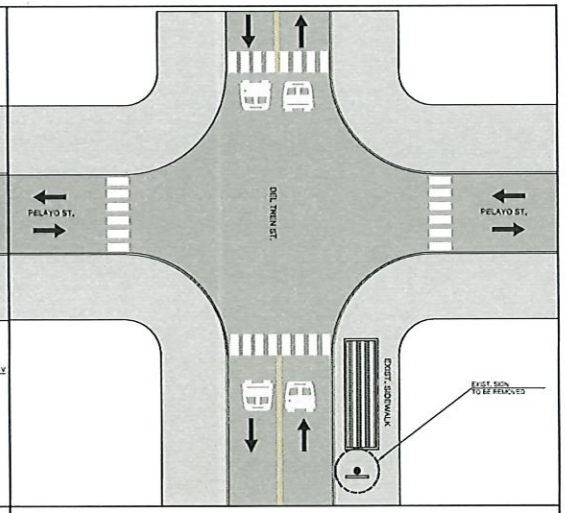


PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

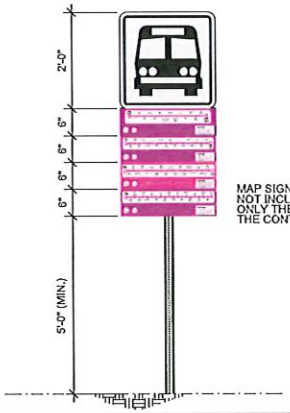


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#2



EXIST. CONDITIONS - ROUTE 21 | B.S.#2

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE V

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE V
- EXIST. SIGN
- PRIMA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN.
4. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

LOCATION PLAN
SCALE 1:20,000

18°27'50.44"N , 66° 5'59.26"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez Ingeniero licencia 18341 certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. Tambien, certifico que el diseño de estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se han producido por desconocimiento o por negligencia grave por mi, mis agentes o empleados, o por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y multa de hasta un 50%.

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HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18341PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #2

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN INT. PELAYO ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.02	SHEET NO. 8 OF 77

ROUTE 21 | BUS STOP #3

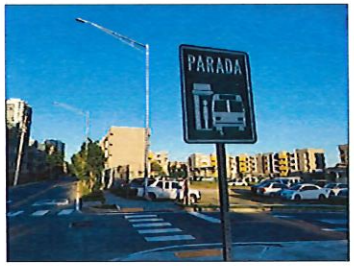


PHOTO - 1

PHOTO - 2

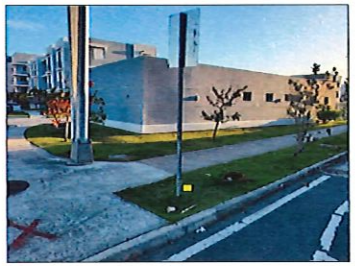
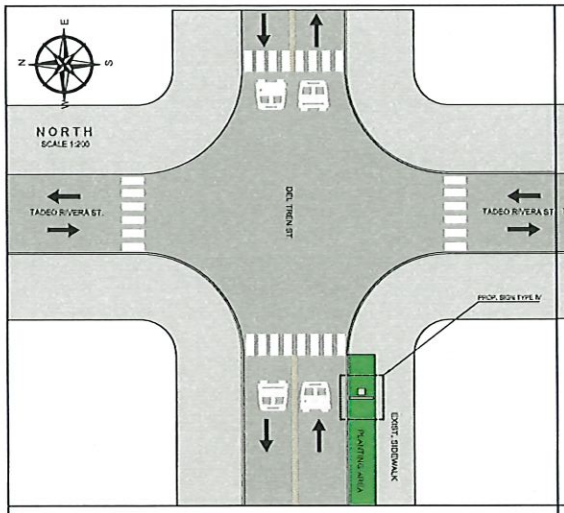
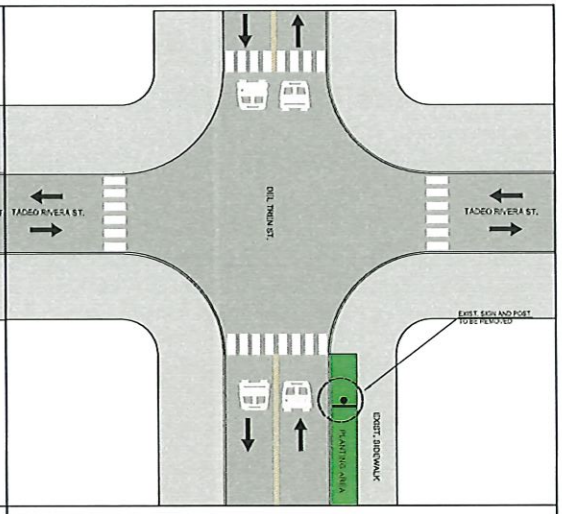


PHOTO - 3: PROPOSED SIGN LOCATION

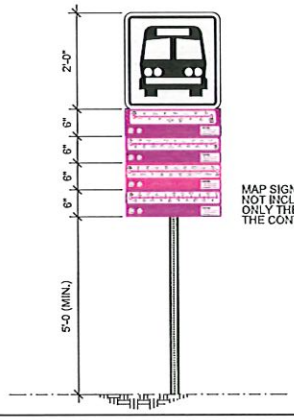


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#3



EXIST. CONDITIONS - ROUTE 21 | B.S.#3

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK BETWEEN THE PROJECT.
2. THE CONTRACTOR SHALL COORDINATE THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

LOCATION PLAN
SCALE 1:20,000
18°27'50.30"N , 66° 5'54.64"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero licencia 18134 certifico que soy el profesional que confeccionó diseñó y/o preparó estos planos y las especificaciones similares o similares funciones certifico que en el diseño de estas obras y especificaciones se cumplió con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a los Reglamentos y Codigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia falta o falsificación de los hechos que se hayan producido por descuido, dolo o por negligencia que pueda por mí, mis agentes o empleados o por otras personas por el consentidos me hacen responsable de cualquier acción judicial y de multa de hasta 500%.

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GURABO, PR 00778
TEL. (787) 649-5200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #3

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN INT. TADEO RIVERA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.03	SHEET NO. 9 OF 77

ROUTE 21 | BUS STOP #4

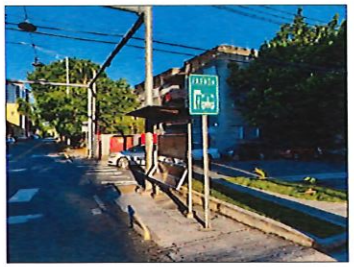
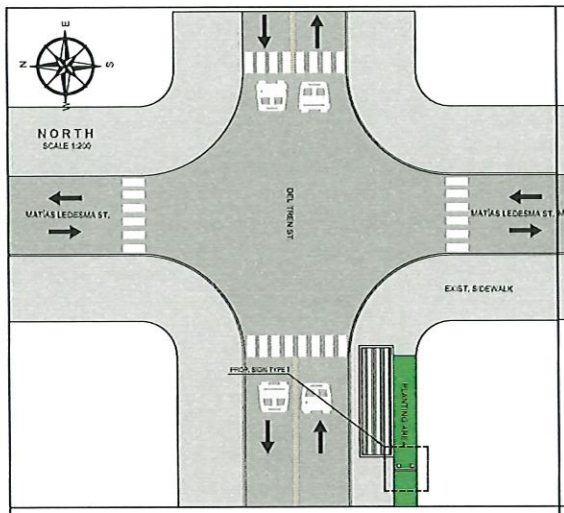


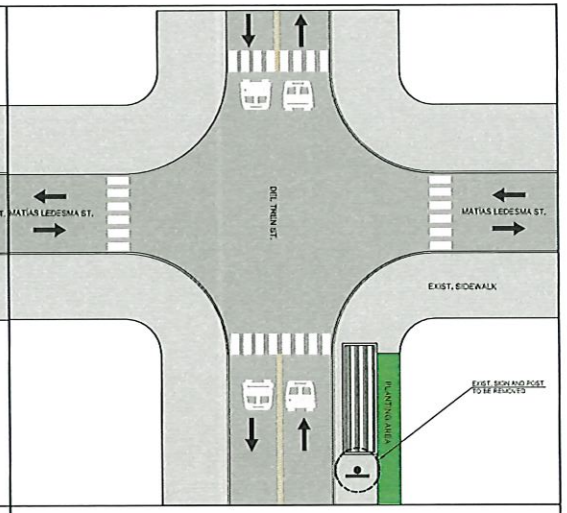
PHOTO - 1

PHOTO - 2

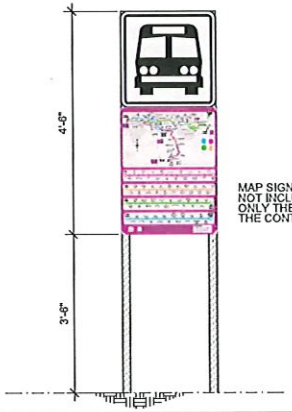
PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#4



EXIST. CONDITIONS - ROUTE 21 | B.S.#4



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRIMA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRIMA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA. REFER TO PHOTO #3.

LOCATION PLAN
SCALE 1:20,000
18°27'49.99"N , 66° 5'49.83"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez Ingeniero licencia 18154 certifico que soy el profesional que contruyó, diseñó y/o preparó estos planos y las especificaciones cumpliendo con la ley Número 173 de los Artículos Generales y especificaciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia grave por mí, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción jurídica y daños a la parte de DOPM.

ENZO Engineering, psc.
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Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #4

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN INT. MATÍAS LEDESMA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.04	SHEET NO. 10 OF 77

ROUTE 21 | BUS STOP #5

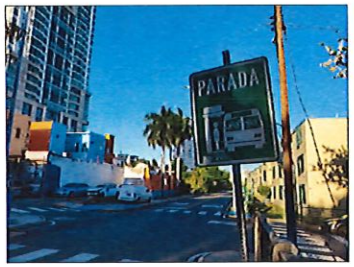


PHOTO - 1

PHOTO - 2

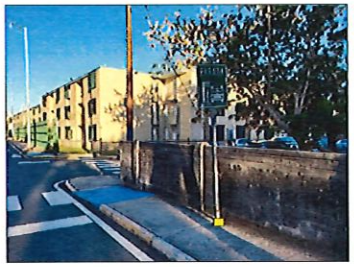
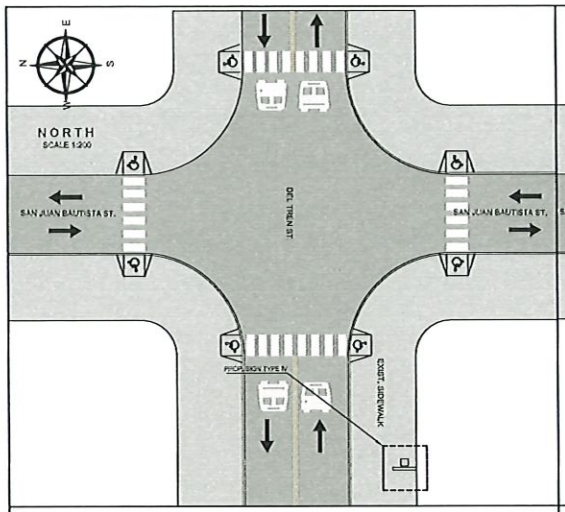
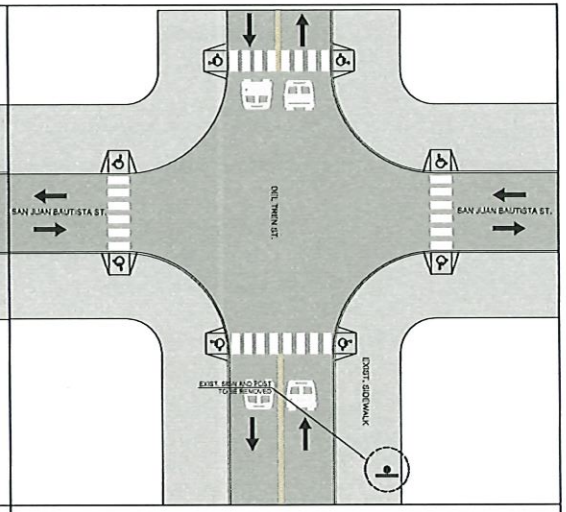


PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#5

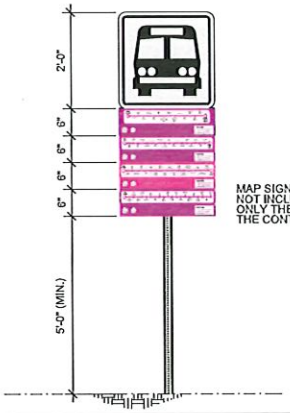


EXIST. CONDITIONS - ROUTE 21 | B.S.#5

2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000
18°27'49.59"N , 66° 5'45.02"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN SIDEWALK, NEXT TO WALL, REFER TO PHOTO #3.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18351, certifico que soy el profesional con certificación, diseño y/o preparé estos planos y las especificaciones cumpliendo con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Codigos de Construcción vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia, falta o falsificación de los hechos que en los planos por mi diseñados o por negligencia, que por mi, mis agentes o empleados, o por otras personas con el procedimiento me hacer responsable de cualquier acción jurídica y disciplinaria por 5 años.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18351PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #5

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN INT. SAN JUAN BAUTISTA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.05	SHEET NO. 11 OF 77

ROUTE 21 | BUS STOP #6

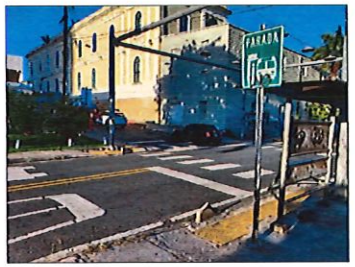
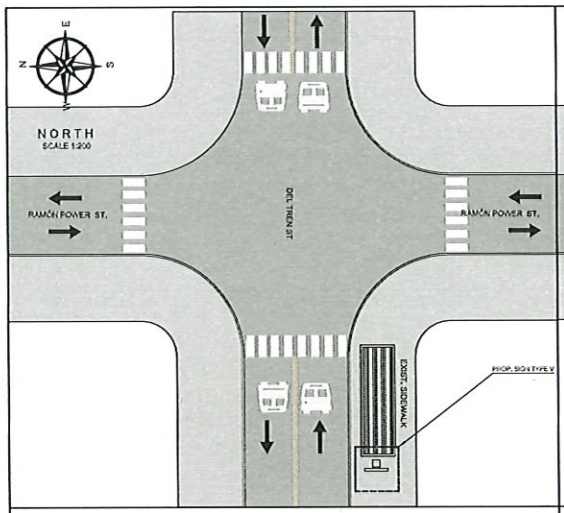


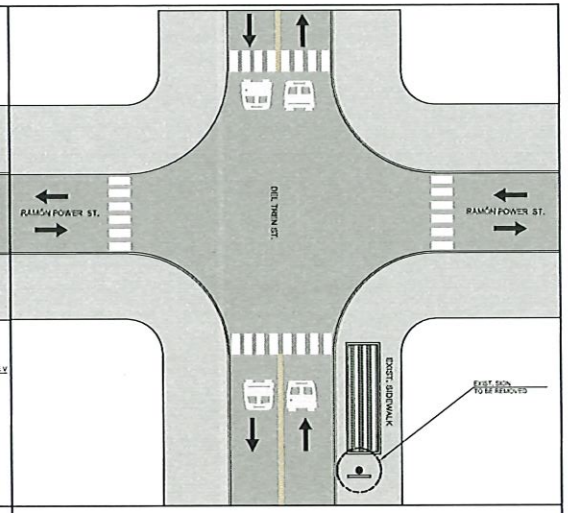
PHOTO - 1

PHOTO - 2

PHOTO - 3: INSTALL THE PROPOSED SIGN LOCATION IN THE EXISTING POST

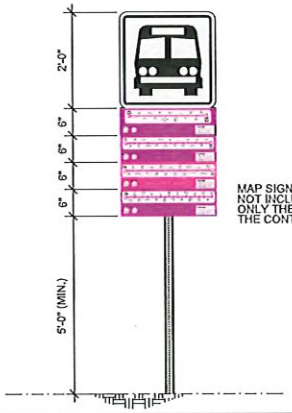


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#6



EXIST. CONDITIONS - ROUTE 21 | B.S.#6

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN PANEL TYPE V

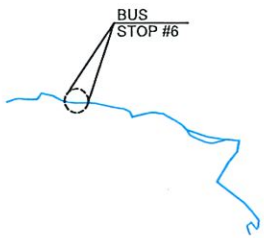
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE V
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL COORDINATE THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 6" M.



C:\Users\hernan\Dropbox\Cuadrangulos\SANJ

LOCATION PLAN
SCALE 1:20,000

18°27'43.16"N , 66° 5'35.50"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8642 PRO

Yo, Hernan E. Lopez Baez, Ingeniero licencia 18354 certifico que soy el profesional que certificó, diseñó y preparó estos planos y las especificaciones completas aquí. Tambien certifico que el diseño de estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se me ha proporcionado por desconocimiento o por negligencia grave por mi, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción jurídica y daños a la parte de DOPR.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guraabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18354PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #6

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN INT. RAMÓN POWER ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.06	SHEET NO. 12 OF 77

ROUTE 21 | BUS STOP #7

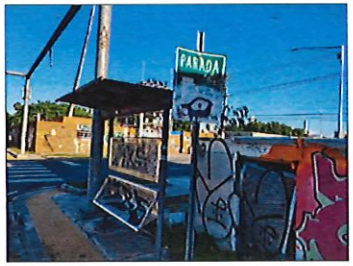


PHOTO - 1

PHOTO - 2

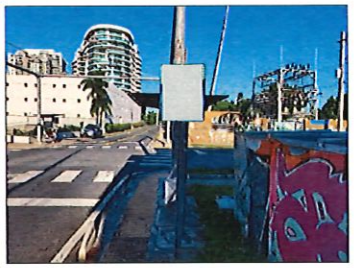
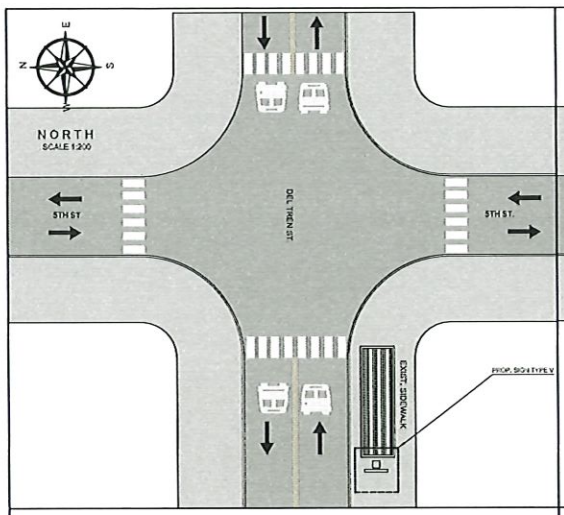
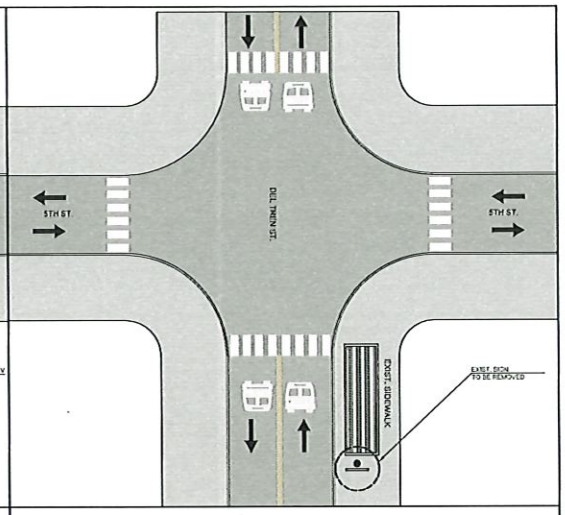


PHOTO - 3: PROPOSED SIGN LOCATION IN THE EXISTING POST



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#7



EXIST. CONDITIONS - ROUTE 21 | B.S.#7

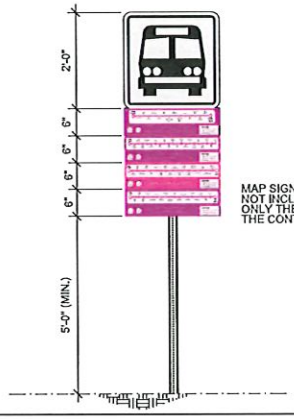
2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000

18°27'44.35"N , 66° 5'25.71"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE V

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE V
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
6. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE EXISTING POST. REFER TO PHOTO #3.

Yo, Hernan E. Lopez Baez Ingeniero licencia 18341 certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones cumpliendo estas. Tambien certifico que entiendo que estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia grave por mi, mis agentes o empleados, o por otras personas por mi responsables me hacen responsable de cualquier acción judicial y de la pérdida por el DOPR.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18341PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #7

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN INT 5 ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

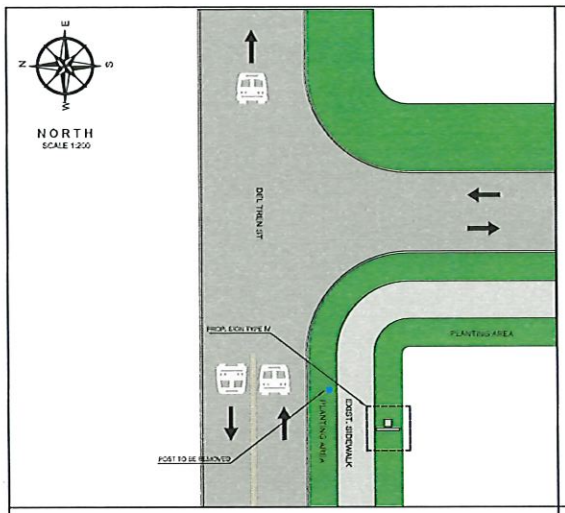
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.07	SHEET NO. 13 OF 77

ROUTE 21 | BUS STOP #8

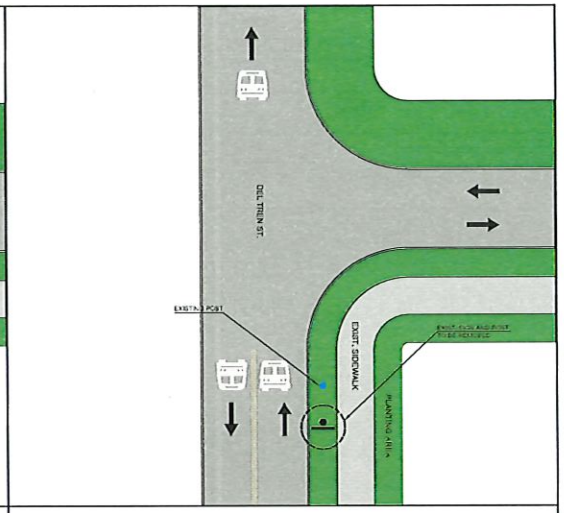
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

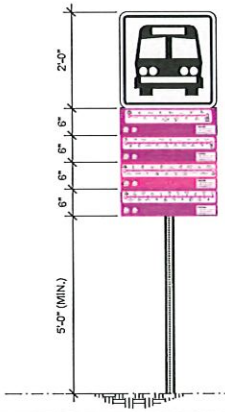


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#8



EXIST. CONDITIONS - ROUTE 21 | B.S.#8

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

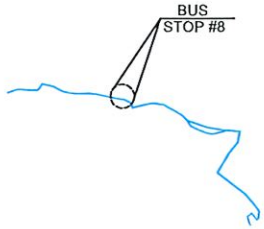
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND TREE PERMITS FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH CONSTRUCTION SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL REMOVE THE OTHER EXISTING GROUND POST WITHOUT SIGN, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 6.00 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE RIGHT PLANTING AREA, REFER TO PHOTO #3.



C:\Users\hernan\Dropbox\Clients\Cuadrangulos\SANJ

LOCATION PLAN
SCALE 1:20,000

18°27'42.40"N , 66° 5'18.96"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero licencia 19184 certifico que soy el profesional con competencia diseñe y preparé estos planos y las especificaciones complementarias. Asimismo, certifico que el diseño que aparece en los planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamento y Código de Construcción Vigente de la Agencia Junta Reglamentadora y Corporaciones Públicas con jurisdicción. Reconozco la calidad de la mano de obra y de los materiales a ser usados por desconocimiento o por negligencia que sea por mí, mis agentes o empleados o por otras personas por el desconocidas, me hacen responsable de cualquier acción judicial y de difícil de por 100%.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraso, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19184PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #8

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE EL TREN BEFORE JUAN PONCE DE LEÓN AVE.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

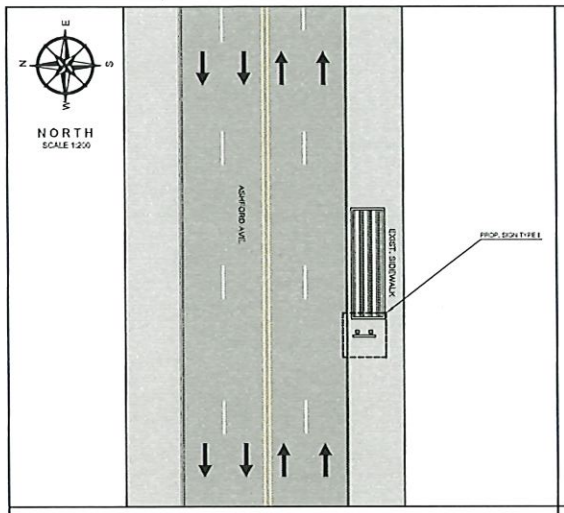
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.03	SHEET NO. 14 OF 77

ROUTE 21 | BUS STOP #9

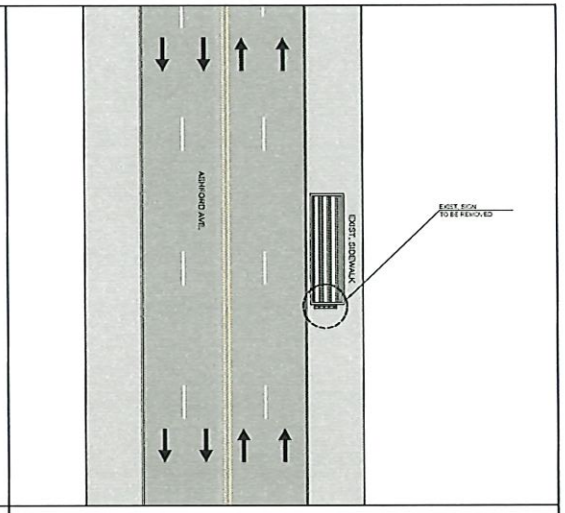
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#9



EXIST. CONDITIONS - ROUTE 21 | B.S.#9

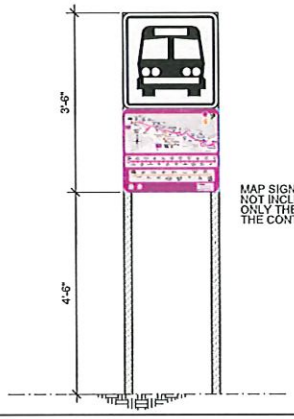
2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000

18°27'33.51"N , 66° 4'55.20"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND TIFES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN SIDEWALK. REFER TO PHOTO #3.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo, Hernan E. Lopez Baez, Ingeniero Licencia 18154 certifico que soy responsable de la confección, diseño y/o preparó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier decisión sobre falta o falsificación de los hechos que se haya producido por desconocimiento o por negligencia grave por mi, mis agentes o empleados o por otras personas con el conocimiento mío hacer responsable de cualquier acción judicial y daños de hasta el 100%.

ENZO Engineering, psc.
PO BOX 3040, PMB 427
GURABO, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # 18154

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #9

FROM SAN JUAN TO SAGRADO CORAZÓN
ASHFORD AVENUE AFTER DOS HERMANOS BRIDGE
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

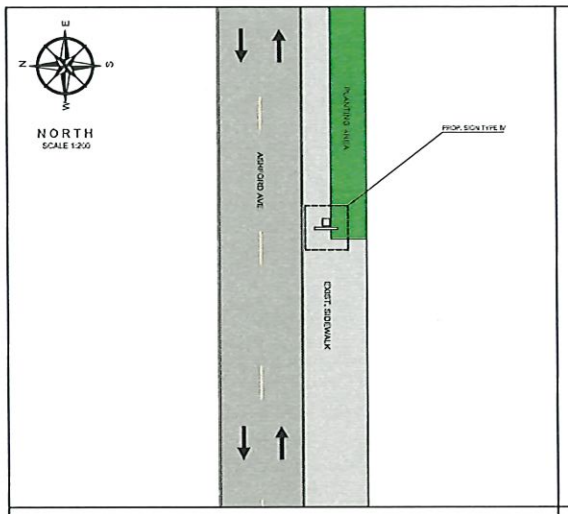
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.09	SHEET NO. 15 OF 77

ROUTE 21 | BUS STOP #10

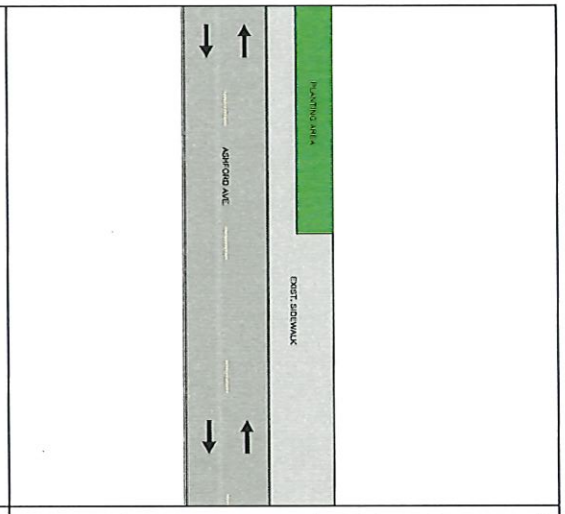
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

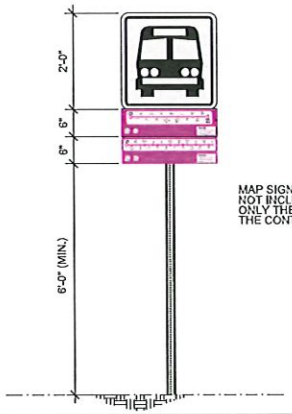


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#10



EXIST. CONDITIONS - ROUTE 21 | B.S.#10

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FREE PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
4. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

LOCATION PLAN
SCALE 1:20,000

18°27'33.81"N , 66° 4'40.64"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18.934, certifico que soy responsable de la confección, diseño y preparación de estos planos y las especificaciones cumplen con las Normas, Certificaciones aplicables a los Códigos y especificaciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamentación y Código de Construcción Vigente de las Agencias, Junta Reglamentadora o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia falta o falsificación de la misma que se haya producido por desconocimiento o por negligencia de mi parte, no me exonera o implicará que otras personas con el conocimiento no hacer responsable de cualquier acción judicial y de daños que pueda ocurrir.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18 SPE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #10

FROM SAN JUAN TO SAGRADO CORAZÓN
ASHFORD AVENUE FRONT CASA LOLA REST (ABANDONED PLACE)
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION

DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.10	SHEET NO. 16 OF 77

ROUTE 21 | BUS STOP #11

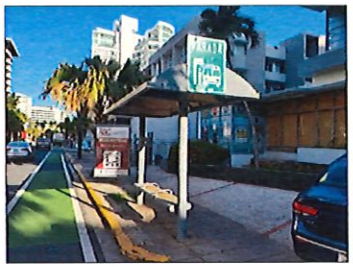
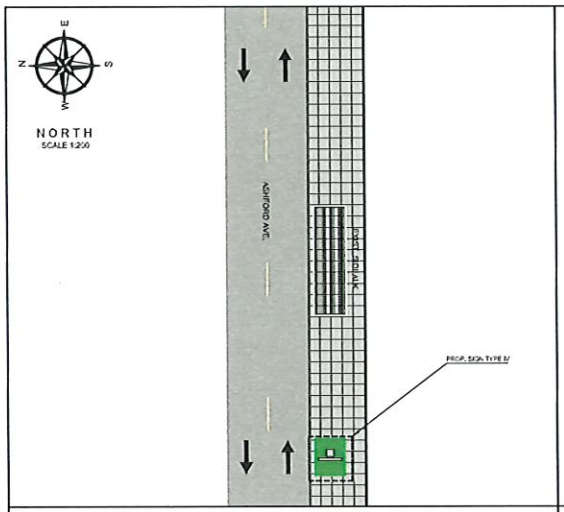


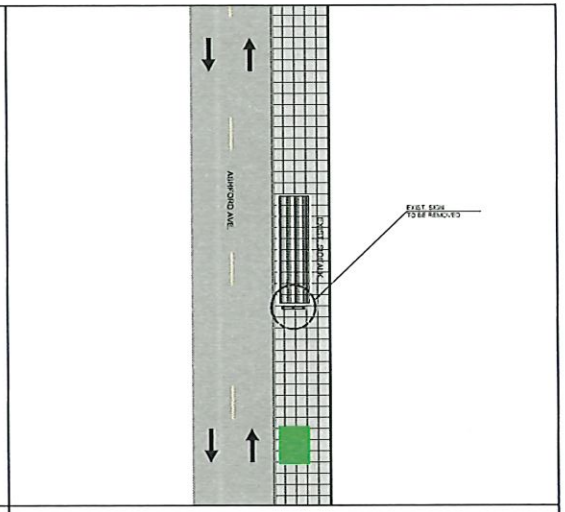
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

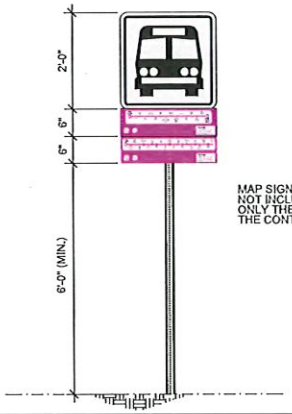


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#11



EXIST. CONDITIONS - ROUTE 21 | B.S.#11

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRVSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRVSA PERSONNEL.
4. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, IN FRONT OF THE FIRST PALM FROM FUENTE DOS HERMANOS TO MADDALENA ST., REFER TO PHOTO #3.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.

LOCATION PLAN
SCALE 1:20,000
18°27'31.63"N , 66° 4'36.56"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero licencia 18134, certifico que soy el profesional que certificó, diseñó y/o preparó estos planos y las especificaciones complementarias. Tambien, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias Antes Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que he sido producido por desconocimiento o por negligencia grave por mi, mis agentes o empleados, o por otras personas con el procedimiento me hacer responsable de cualquier acción jurídica y/o multa de hasta 500%.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #11

FROM SAN JUAN TO SAGRADO CORAZÓN
ASHFORD AVENUE BEFORE BARRANQUITAS ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

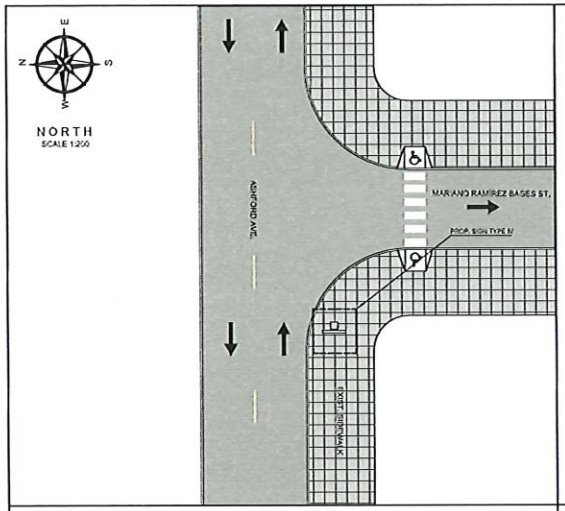
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.11	SHEET NO. 17 OF 77

ROUTE 21 | BUS STOP #12

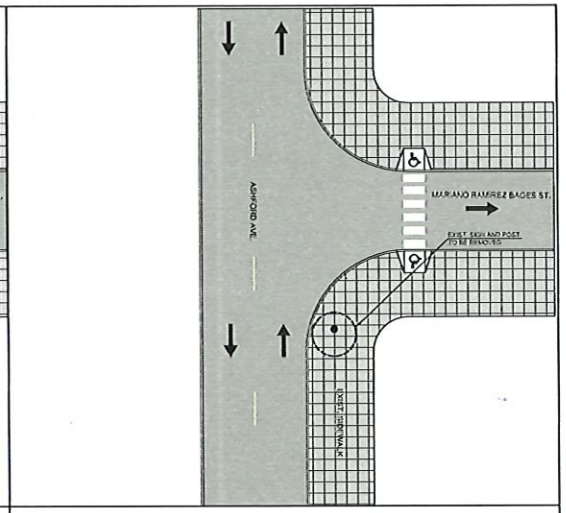
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

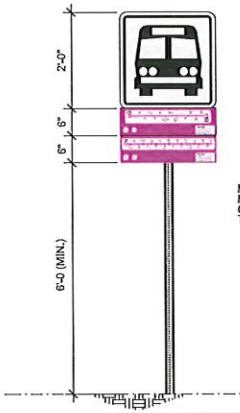


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#12



EXIST. CONDITIONS - ROUTE 21 | B.S.#2

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

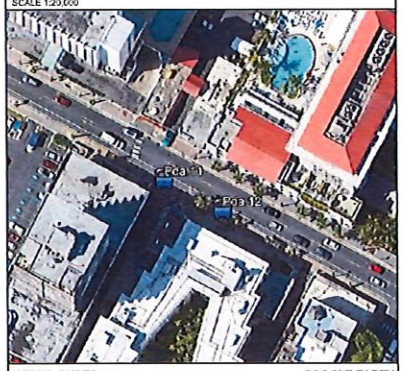
- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRIMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL COORDINATE THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRIMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL SIGN IN TILE, THE CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH PMO OF THE MUNICIPALITY OF SAN JUAN ABOUT THE SAME TILES TO INSTALL, BUT THESE TILES REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

LOCATION PLAN
SCALE 1:20,000

18°27'31.64"N , 66° 4'35.71"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18134, certifico bajo juramento profesional que certificaré, diseñé y/o preparé estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia falsa o falsificación de los hechos que en los mismos se produzcan por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados o por otras personas con el propósito de hacer responsable de cualquier acción judicial y disciplinaria por la OCPR.

ENZO Engineering, psc.
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GUAYNABO, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #12

FROM SAN JUAN TO SAGRADO CORAZÓN
ASHFORD AVENUE BEFORE MARIANO RAMÍREZ BAGES ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.12	SHEET NO. 18 OF 77

ROUTE 21 | BUS STOP #13

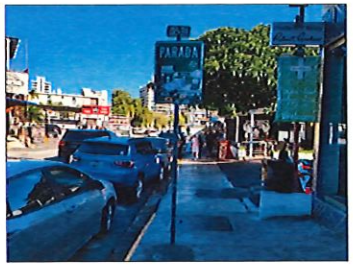


PHOTO - 1

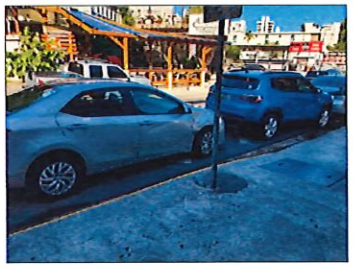


PHOTO - 2

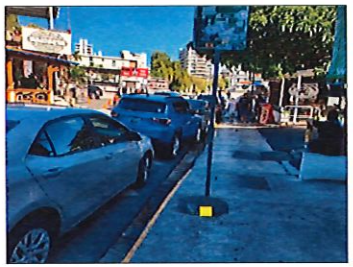
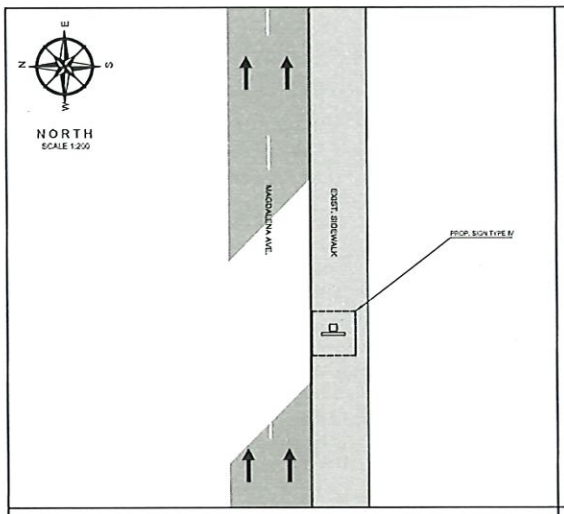
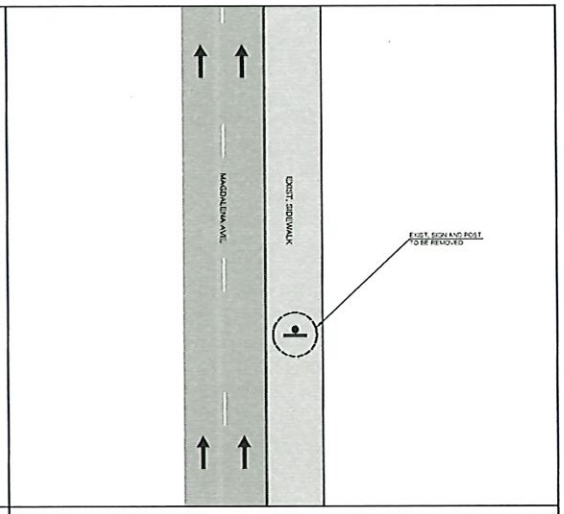


PHOTO - 3: PROPOSED SIGN LOCATION

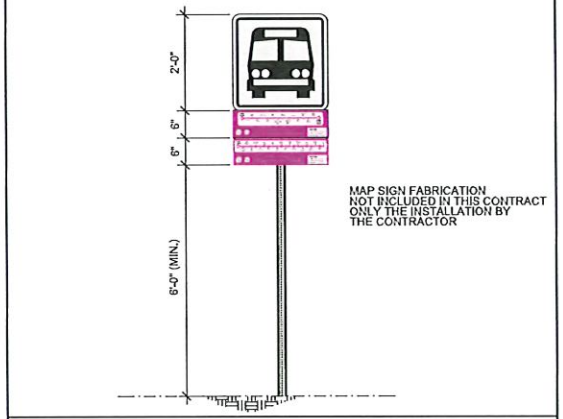


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#13



EXIST. CONDITIONS - ROUTE 21 | B.S.#13

2.5 0 5 15
SCALE 1:200



PROPOSED SIGN TYPE IV

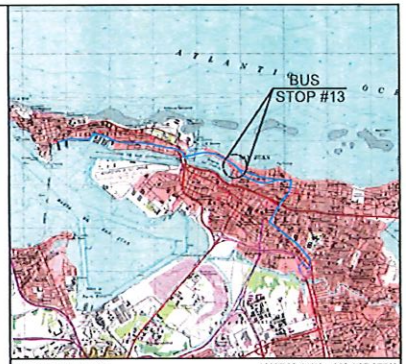
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

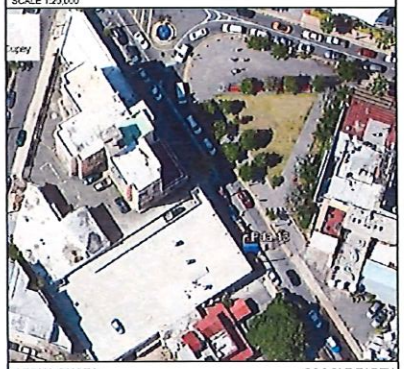
NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVES THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PLOT PLAN.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.



LOCATION PLAN
SCALE 1:20,000

18°27'23.11"N , 66° 4'27.67"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18134, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. Tambien certifico que el diseño de los dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamentación y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas por jurisdicción. Reconozco que cualquier omisión falsa o falsificación de los hechos aquí aseverados por desconocimiento o por negligencia, ya sea por mí o de agentes o empleados o por otras personas por el consultante me hacen responsable de cualquier acción judicial y/o delito de la ley 00-75.

ENZO Engineering, psc.
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Guaynabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #13

FROM SAN JUAN TO SAGRADO CORAZÓN
MAGDALENA AVENUE BEFORE LUISA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

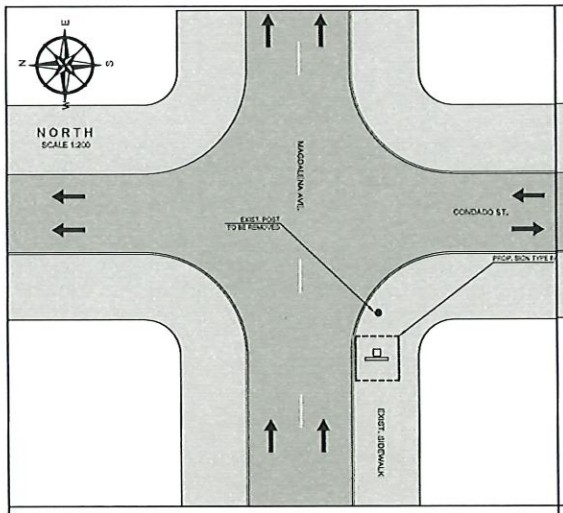
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.13	SHEET NO. 19 OF 77

ROUTE 21 | BUS STOP #14

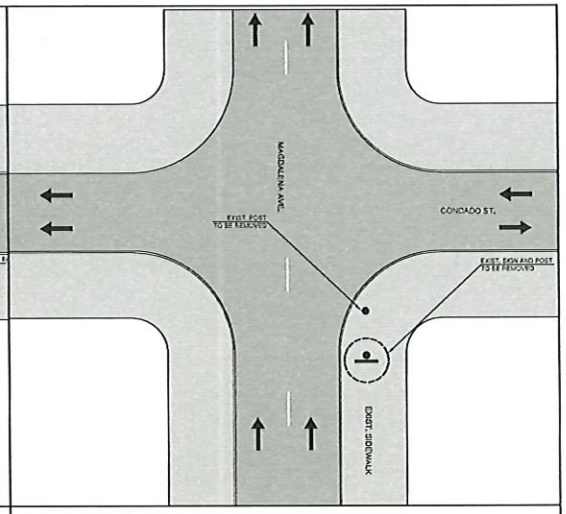
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



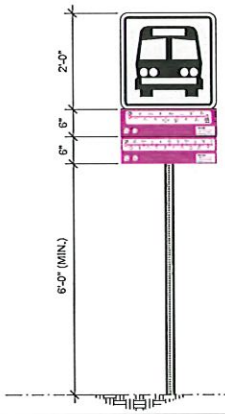
PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#14



EXIST. CONDITIONS - ROUTE 21 | B.S.#14

2.5 0 5 15

SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

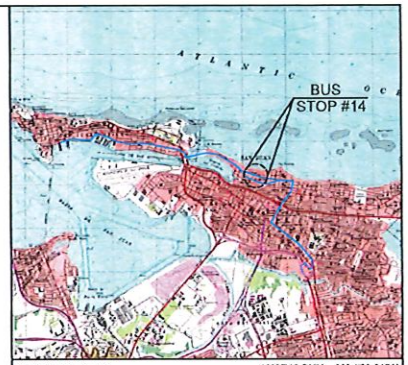
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRIMA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE PRIMA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 1.83 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA IN FRONT OF THE CONCRETE POLE. THE CONTRACTOR SHALL REMOVE THE OTHER EXISTING POST WITHOUT SIGN. REFER TO PHOTO #3.



LOCATION PLAN 18°27'18.59"N , 66° 4'20.81"W

SCALE 1:20,000

AERIAL PHOTO GOOGLE EARTH

SCALE 1:1,000 VERSION: 7.3.4.8542 PRO

Yo Hernan E. Lopez Baez Ingeniero Licencia 18834 certifico que soy responsable por la confección, diseño y/o preparación de estas planas y las especificaciones complementarias. También certifico que entiendo que dichas planas y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamento y Código de Construcción Vigente de la Agencia Junta Reglamentadora de Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia en uso por mí de agencias o empleados o por otras personas por mí consideradas me hacen responsable de cualquier acción judicial y/o delito de perjurio. 0.0%.

ENZO Engineering, psc.

PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18834

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #14

FROM SAN JUAN TO SAGRADO CORAZÓN
MAGDALENA AVENUE INT. CONDADO ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

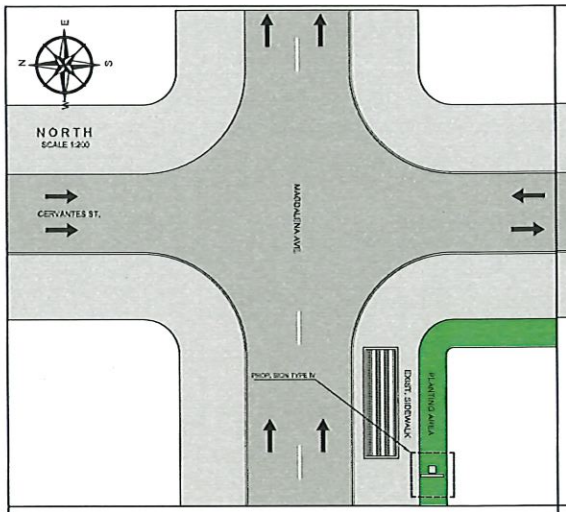
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.14	SHEET NO. 20 OF 77

ROUTE 21 | BUS STOP #15

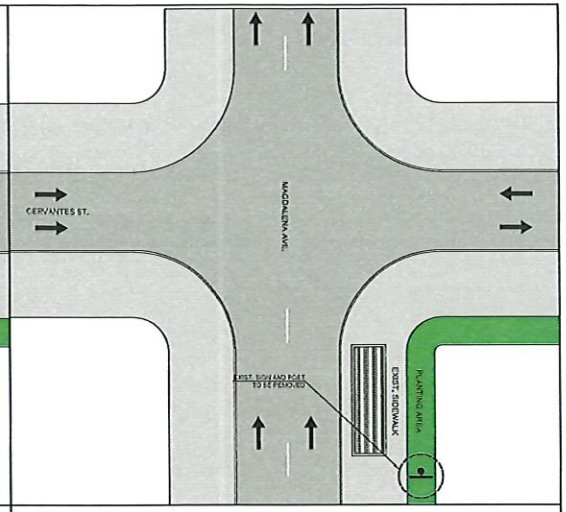
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

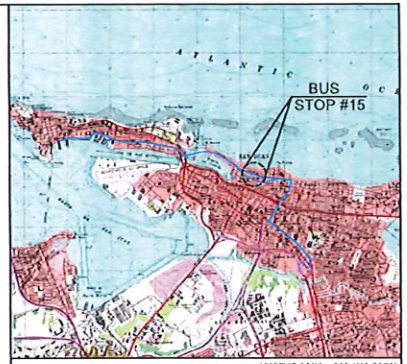


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#15



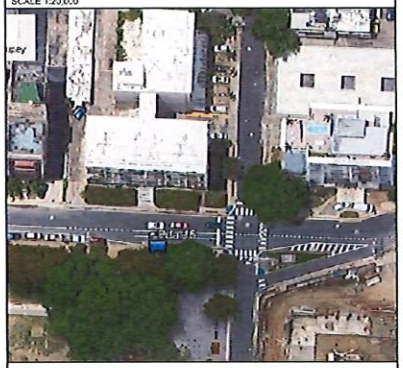
EXIST. CONDITIONS - ROUTE 21 | B.S.#15

2.5 0 5 15
SCALE 1:200



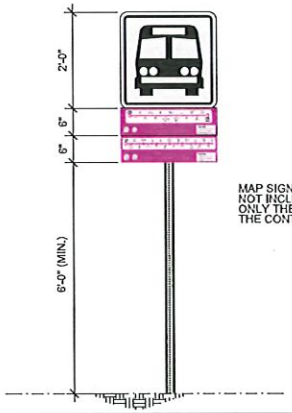
LOCATION PLAN
SCALE 1:20,000

18°27'15.03"N , 66° 4'10.20"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FREE PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURES SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PLOT PLAN.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo, Hernan E. Lopez Baez Ingeniero, licencia 18-34, certifico que soy el profesional que confeccionó diseñó y/o preparó estos planos y las especificaciones, cumplen en todo, formato, sellos, que en diseño que fueron diseñados y especificados en cumplir con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a los Reglamentos y Códigos de Construcción Vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia que me por mi o de agentes o empleados o de otras personas con el procedimiento me hacer responsable de cualquier acción jurídica y de pleito por 0.00%.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18-34PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #15

FROM SAN JUAN TO SAGRADO CORAZÓN
MAGDALENA AVENUE INT. CERVANTES ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.15	SHEET NO. 21 OF 77

ROUTE 21 | BUS STOP #16

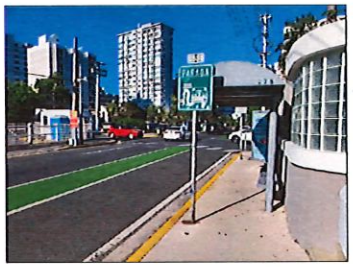


PHOTO - 1

PHOTO - 2

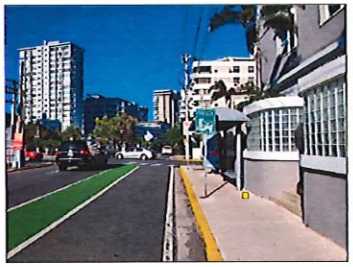
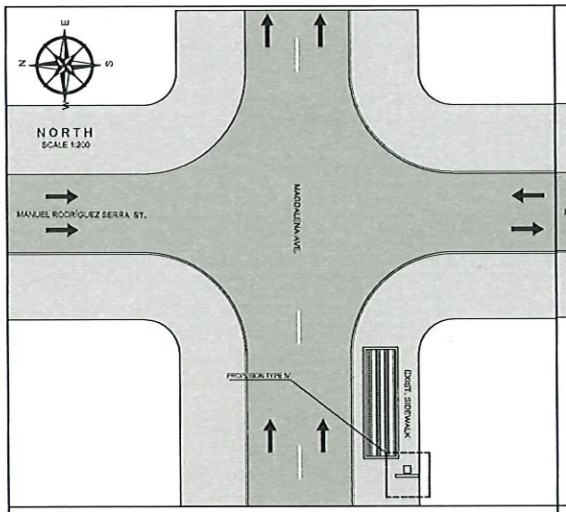
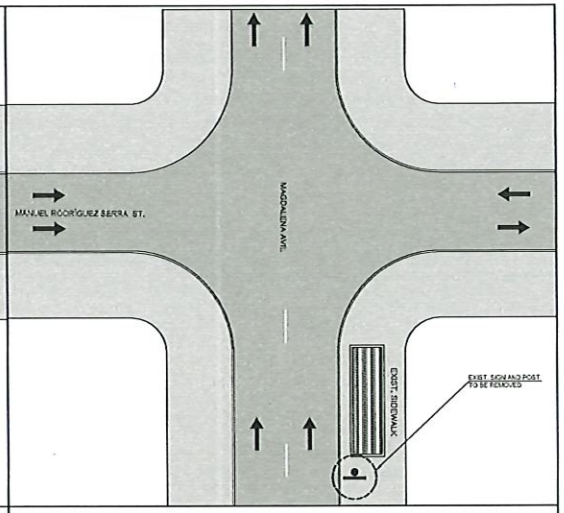


PHOTO - 3: PROPOSED SIGN LOCATION

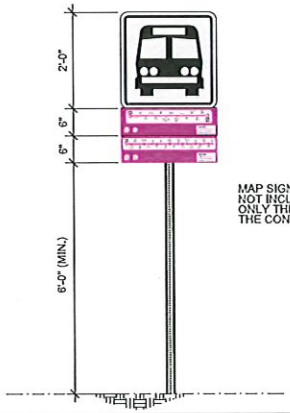


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#16



EXIST. CONDITIONS - ROUTE 21 | B.S.#16

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

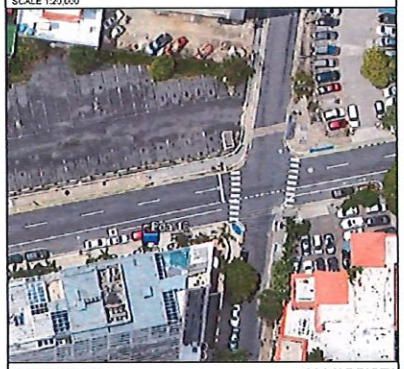
- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FREE PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, NEXT TO THE WALL PROPERTY. REFER TO PHOTO #3.

LOCATION PLAN
SCALE 1:20,000

18°27'15.83"N , 66° 4'2.96"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8642 PRO

Yo, Hernan E. Lopez Baez, Ingeniero licencia 19.341 certifico que soy el profesional que confeccionó diseñó y preparó estos planos y las especificaciones complementarias. Tambien certifico que el diseño de los Altos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamentos y Codigos de Construcción vigentes de las Agencias Junta Reglamentadora y Corporaciones Publicas con jurisdicción. Reconozco que cualquier desviación fuera de las normas que se hayan producido por descuido delito o por negligencia que no por mi de agentes o empleados o de otras personas por el considerados no hacer responsable de cualquier acción jurídica y de delitos por 50%.

ENZO Engineering, psc.
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Guaraso, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19 SPE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #16

FROM SAN JUAN TO SAGRADO CORAZÓN
MAGDALENA AVENUE BEFORE MANUEL RODRÍGUEZ SERRA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

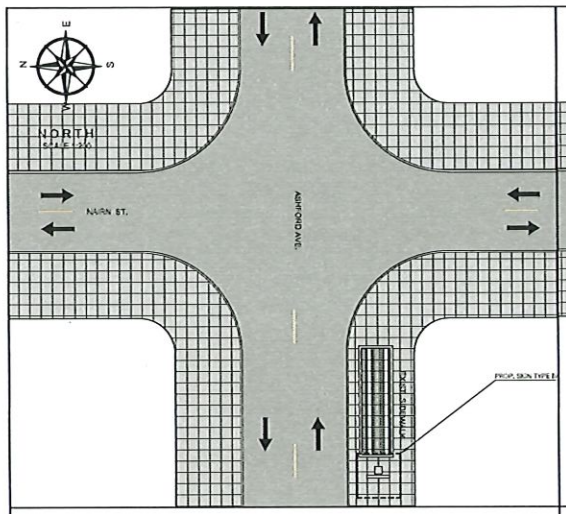
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.16	SHEET NO. 22 OF 77

ROUTE 21 | BUS STOP #17

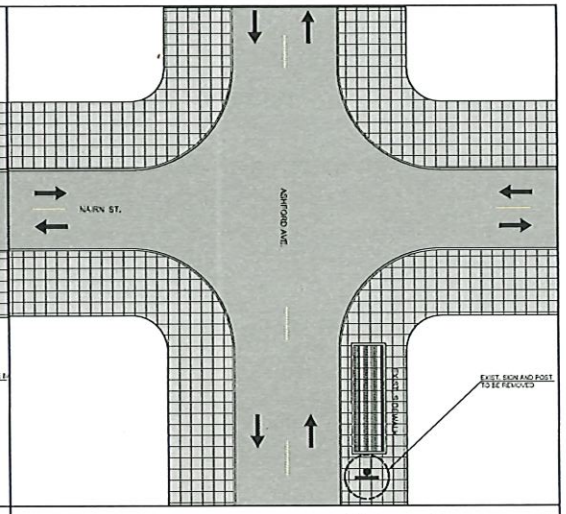
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

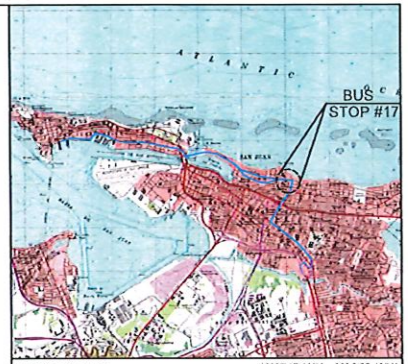


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#17



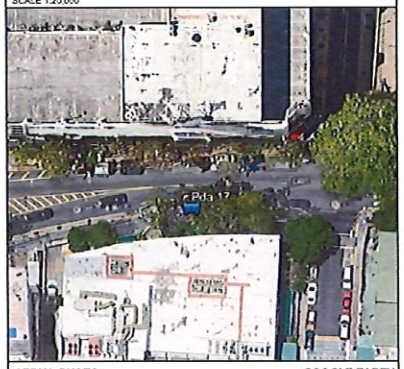
EXIST. CONDITIONS - ROUTE 21 | B.S.#17

2.5 0 5 15
SCALE 1:200



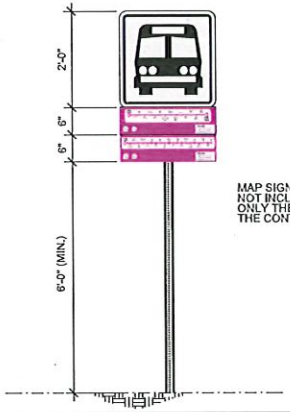
LOCATION PLAN
SCALE 1:20,000

18°27'17.10"N , 66° 3'55.43"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND TREE PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURES SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
7. THE CONTRACTOR SHALL THE PREPOSED SIGN IN TILES. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH PRO OF THE MUNICIPALITY OF SAN JUAN, ABOUT THE SAME TILES TO INSTALL. FOR THREE TILES, REFER TO PHOTO #3.
8. THE CONTRACTOR SHALL CUT TREE BRANCHES.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 19.341 certifico que soy responsable por la confección de estos planos y que el mismo cumple con las especificaciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamentación y Código de Construcción vigentes de la Agencia Junta Reglamentadora de Corporaciones Públicas por lo tanto, Reconozco que asumo la responsabilidad de la veracidad de los hechos aquí plasmados por documento fidedigno y por negligencia o por omisión mía, agencias o empleados o por otras personas con el consentimiento, me hacer responsable de cualquier acción jurídica y/o delito de ley. DOS.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # 19-PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #17

FROM SAN JUAN TO SAGRADO CORAZÓN
ASHFORD AVENUE BEFORE OPPOSITE SIDE OF NAIN ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.17	SHEET NO. 23 OF 77

ROUTE 21 | BUS STOP #18

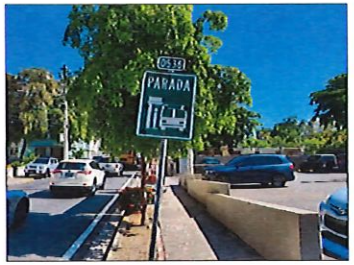
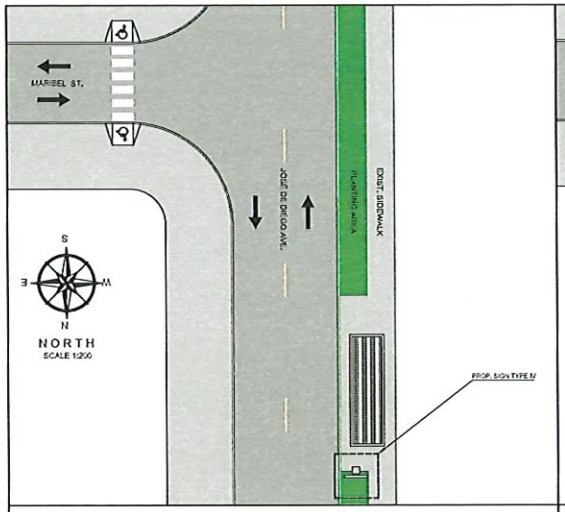


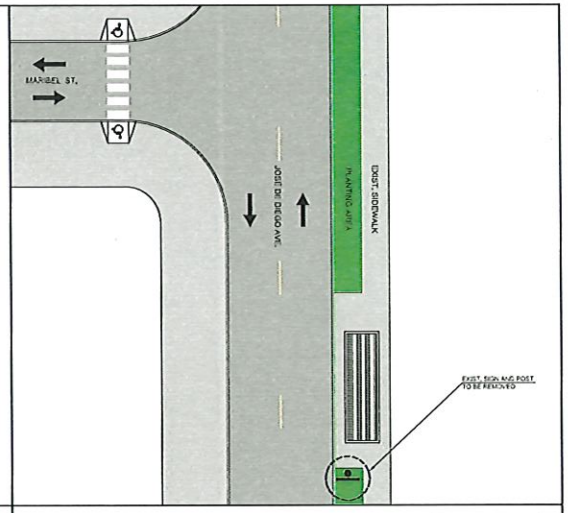
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

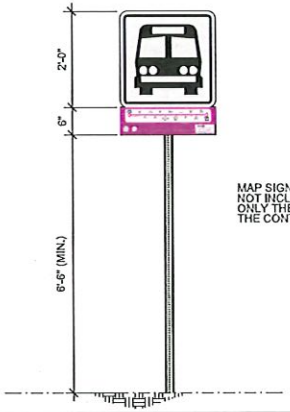


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#18



EXIST. CONDITIONS - ROUTE 21 | B.S.#18

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

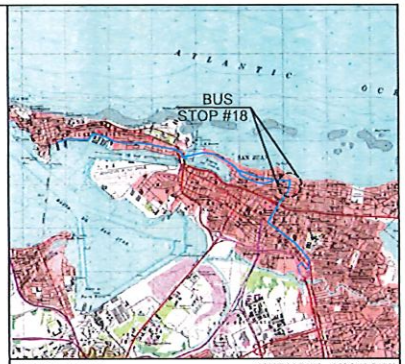
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

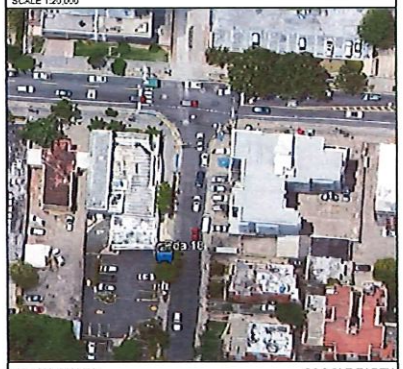
NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, 2'-0" IN FRONT THE TREE. REFER TO PHOTO #3.



LOCATION PLAN
SCALE 1:20,000

18°27'14.74"N , 65° 3'49.51"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero licencia 18.04 certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. También certifico que en el diseño de las Obras planas y especificaciones cumplir con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia falta o falsificación de los hechos que se hayan producido por desconocimiento o por negligencia yo soy por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacer responsable de cualquier acción judicial y deslindo de por lo 100%.

ENZO Engineering, psc.
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Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # 18-PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #18

FROM SAN JUAN TO SAGRADO CORAZÓN
DE DIEGO AVENUE OPPOSITE SIDE OF MARIBEL ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.18	SHEET NO. 24 OF 77

ROUTE 21 | BUS STOP #19

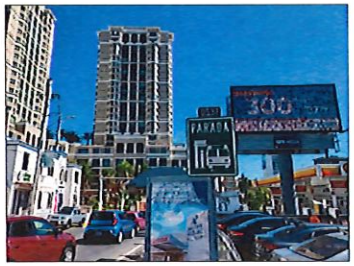


PHOTO - 1

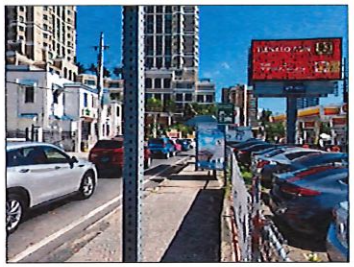
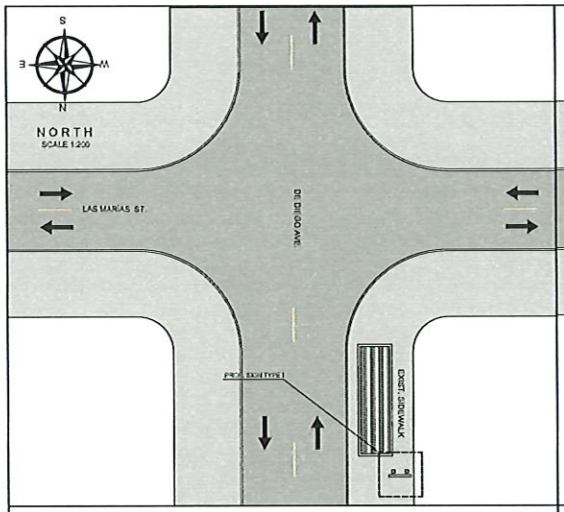
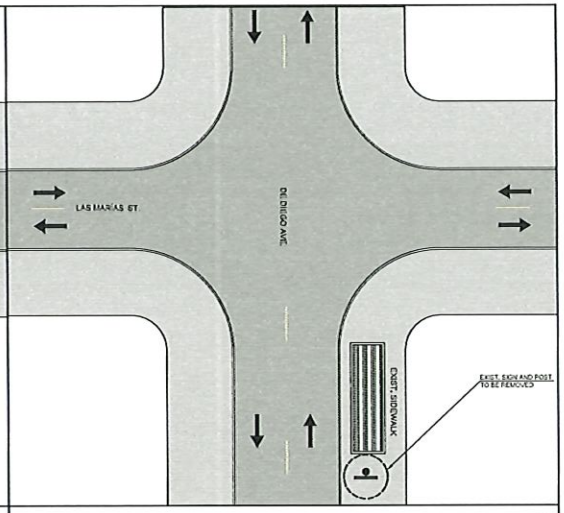


PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



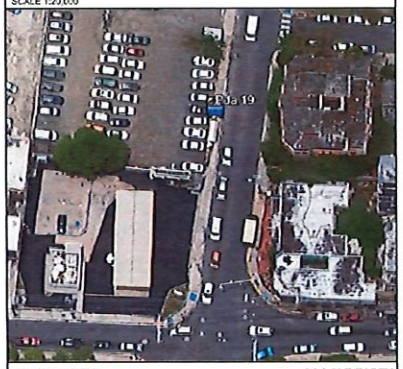
PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#19



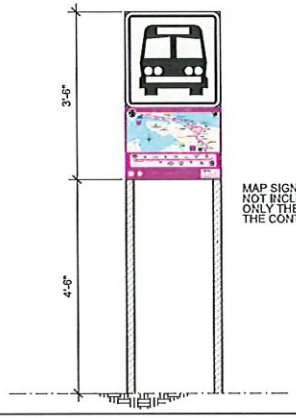
EXIST. CONDITIONS - ROUTE 21 | B.S.#19

2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000
18°27'8.99"N , 66° 3'49.77"W



AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND TAPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE FRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PLOTS #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo, Hernan E. Lopez Baez, Ingeniero licencia 18.341 certifico que soy el profesional que confeccionó diseñó y/o preparó estos planos y las especificaciones completas aquí contenidas, y que he tomado las medidas que estimo pertinentes para que dichos planos y especificaciones cumplan con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de los Municipios Autónomos Reglamentos o Ordenanzas Locales con jurisdicción. Reconozco que cualquier deficiencia o falsificación de los hechos que en los productos por diseñados/diseñados o por negligencia que por mi, mi agencia o empleados o por otras personas con el procedimiento me hacen responsable de cualquier acción judicial y de multas por $ 500.00.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraso, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # 9/PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #19

FROM SAN JUAN TO SAGRADO CORAZÓN
DE DIEGO AVENUE AFTER OPPOSITE SIDE OF WILSON AVE.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.19	SHEET NO. 25 OF 77

ROUTE 21 | BUS STOP #20

PHOTO - 1

PHOTO - 2

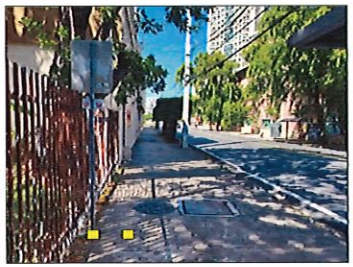
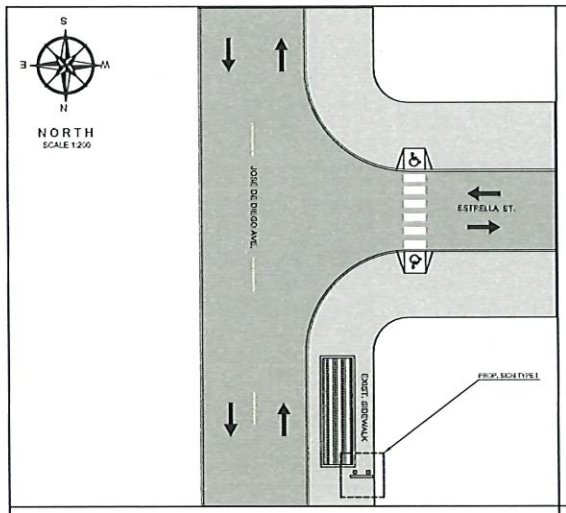
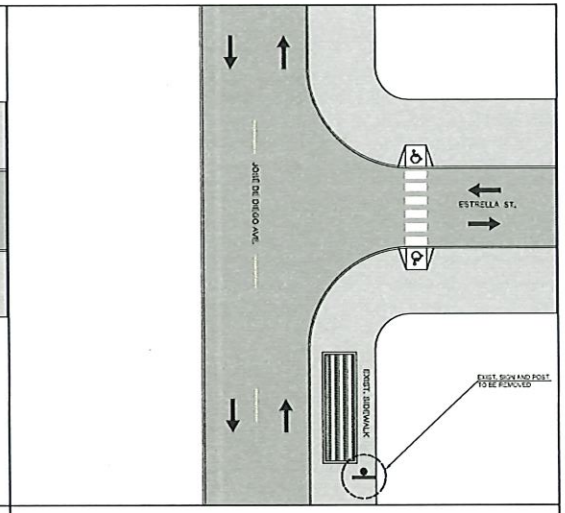


PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#20

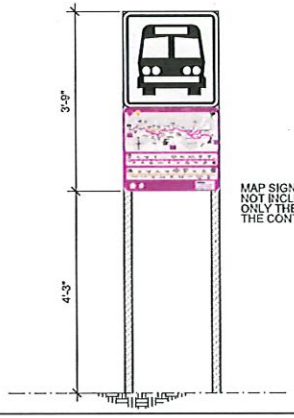


EXIST. CONDITIONS - ROUTE 21 | B.S.#20

2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000
18°27'3.39"N , 66° 3'54.30"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVES THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE FRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PHOTO #3.

Yo, Hernan E. Lopez Baez Ingeniero licencia 18134 certifico que soy el profesional que confeccionó diseñó y/o preparó estas planos y las especificaciones cumplen el Código Eléctrico, Sanitario, Sísmico, de Vivienda y las especificaciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamentación y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras y Corporaciones Públicas con jurisdicción. Reconozco que poseo la capacidad de la misma que se hace producido por desconocimiento o por negligencia que me por mi mis agentes o empleados o por otras personas por mi conocimiento, me hacen responsable de cualquier acción jurídica y de índole de por lo menos 50%.

ENZO Engineering, psc.
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HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18 SIPE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #20

FROM SAN JUAN TO SAGRADO CORAZÓN
DE DIEGO AVENUE INT. ESTRELLA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

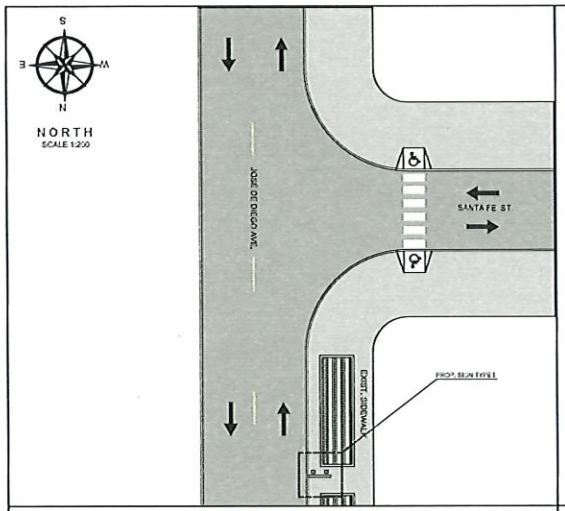
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.20	SHEET NO. 26 OF 77

ROUTE 21 | BUS STOP #21

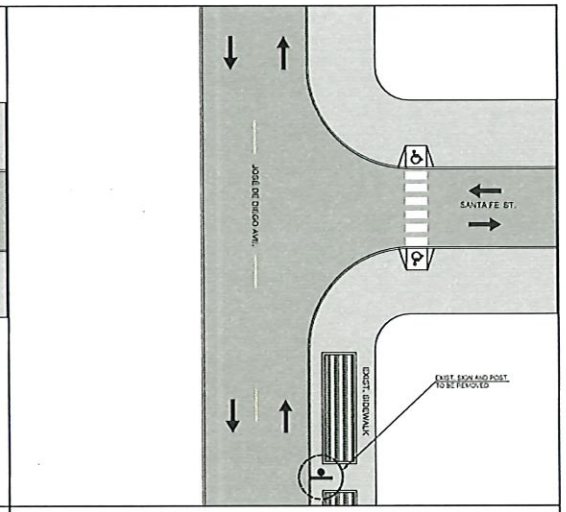
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

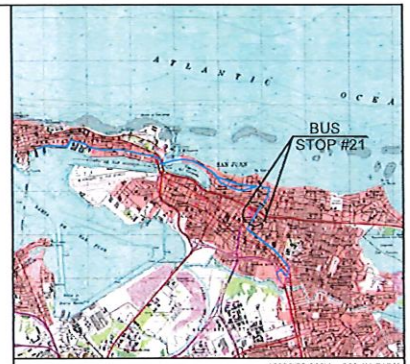


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#21

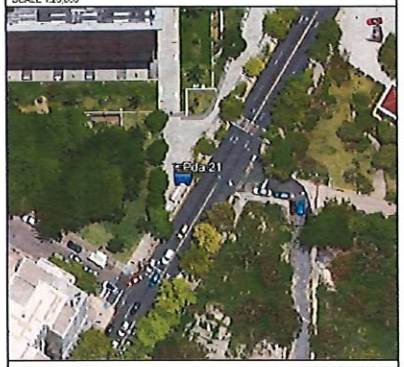


EXIST. CONDITIONS - ROUTE 21 | B.S.#21

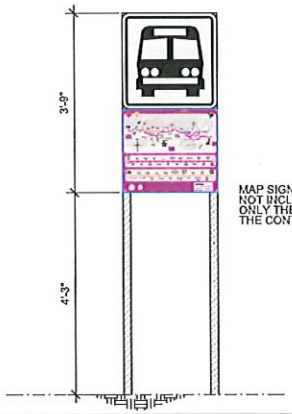
2.5 0 5 15
SCALE 1:200



LOCATION PLAN
SCALE 1:20,000
18°26'53.09"N , 66° 4'1.71"W



AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRIMA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURES SHALL BE DELIVER TO THE PRIMA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, BETWEEN THE SHELTERS. REFER TO PHOTO #3.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18154, certifico que soy el profesional que participó del diseño y preparó estos planos y las especificaciones, cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a los Reglamentos y Código de Construcción Vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos o de los productos por diseño defectuoso o por negligencia, ya sea por mí, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción jurídica y daños incurridos por la OATA.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraso, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #21

FROM SAN JUAN TO SAGRADO CORAZÓN
DE DIEGO AVENUE INT. SANTA FE ST. (MINILLAS GOVERNMENT CENTER)
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.21	SHEET NO. 27 OF 77

ROUTE 21 | BUS STOP #22

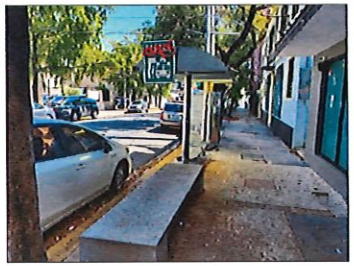


PHOTO - 1

PHOTO - 2

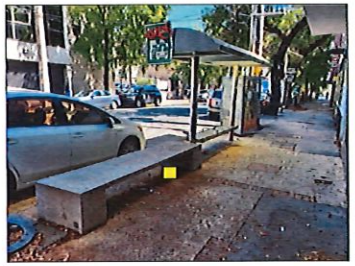
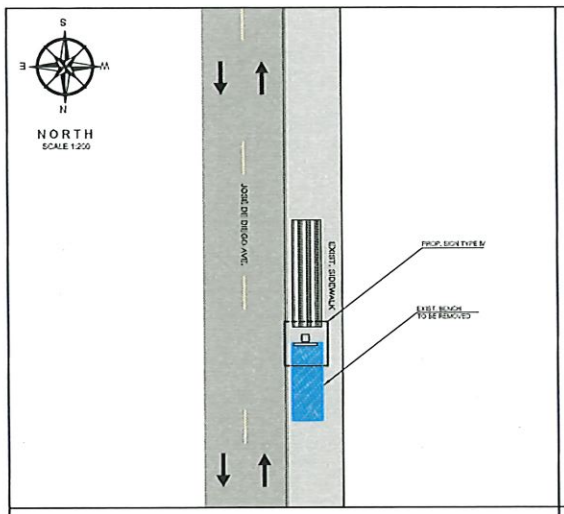
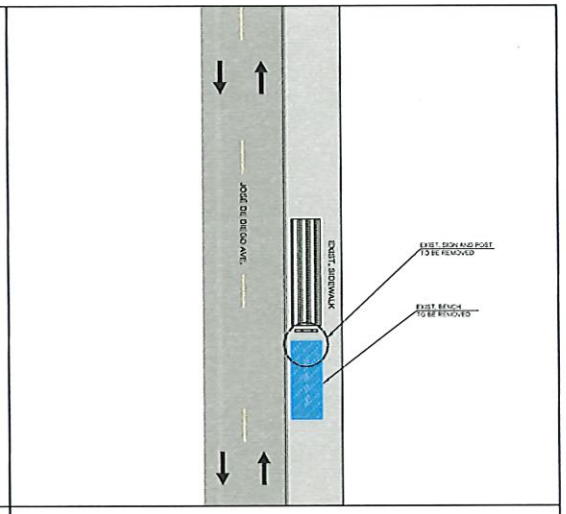


PHOTO - 3: PROPOSED SIGN LOCATION



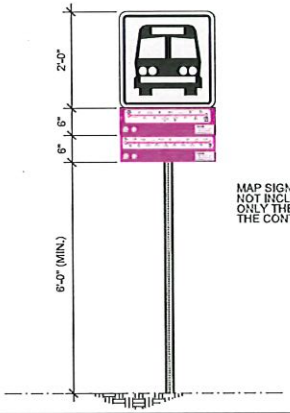
PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#22



EXIST. CONDITIONS - ROUTE 21 | B.S.#22

2.5 0 5 15

SCALE 1:200



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE EXISTING BENCH WILL BE COORDINATES WITH MUNICIPALITY OF SAN JUAN TO BE REMOVED.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
6. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, WHERE THE BENCH WAS INSTALLED, REFER TO PHOTO #1.

LOCATION PLAN
SCALE 1:20,000

18°26'48.40"N , 66° 4'4.65"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 19134, certifico que soy el profesional con jurisdicción, diseño y preparé estos planos y las especificaciones, cumplen en todos formales, sellos que contienen de los dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamentación y Código de Construcción Vigente de la Agencia Junta Reglamentadora y Corporación Pública con Jurisdicción. Reconozco la posibilidad de error, falsificación de los hechos y de los productos por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados o por otras personas con el consentimiento, no hacer responsable de cualquier acción judicial y daños a la parte por 50%.

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HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #22

FROM SAN JUAN TO SAGRADO CORAZÓN
DE DIEGO AVENUE BEFORE JUAN PONCE DE LEÓN AVE.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

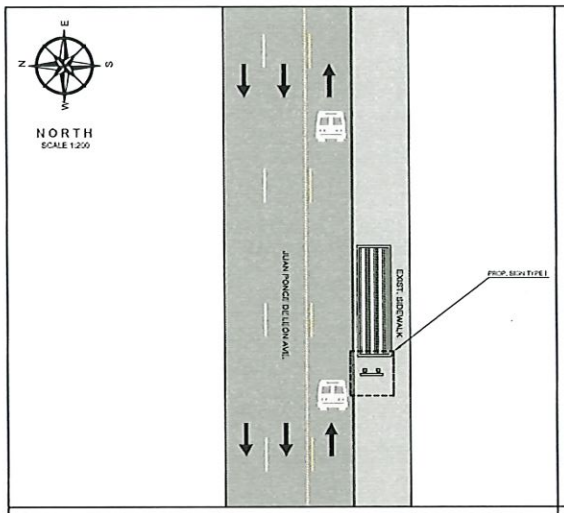
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.22	SHEET NO. 28 OF 77

ROUTE 21 | BUS STOP #23

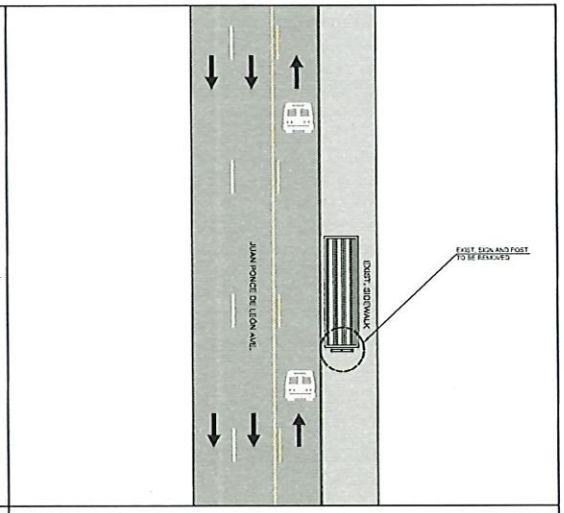
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

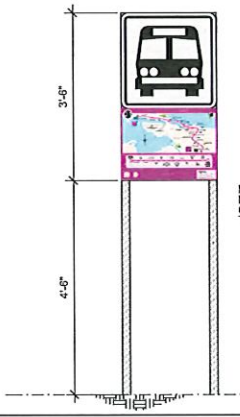


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#23



EXIST. CONDITIONS - ROUTE 21 | B.S.#23

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK BEFORE DURING THE PROJECT.
2. THE CONTRACTOR SHALL COORDINATE THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE FRMBA PERSONNEL.
4. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
6. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN TIES. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH PMO OF THE MUNICIPALITY OF SAN JUAN. ADJUST THE BASE TILES TO INSTALL, BUY THREE TILES. REFER TO PHOTO #3.

LOCATION PLAN
SCALE 1:20,000
18°26'44.44"N , 66° 4'4.27"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18 [illegible] certifico que soy el profesional que confeccionó diseñó y preparó estos planos y las especificaciones conforme a estas. Tambien certifico que el diseño que aparece en estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto, las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se han producido por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y daños de parte del DOPR.

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HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18 SAPE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #23

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE JUAN PONCE DE LEÓN AVE.
BEFORE REVERENDO ORENGO ST. MUNICIPALITY OF SAN JUAN

AUTORIDAD
METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

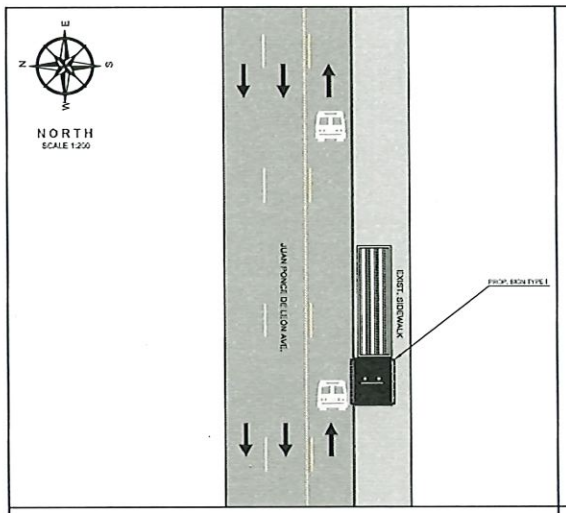
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.23	SHEET NO. 29 OF 77

ROUTE 21 | BUS STOP #24

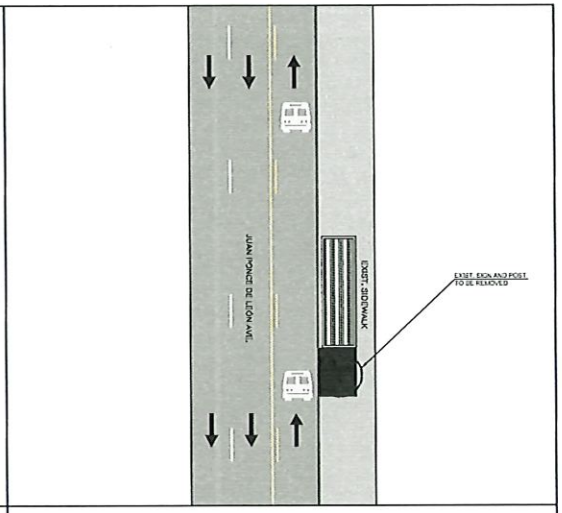
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

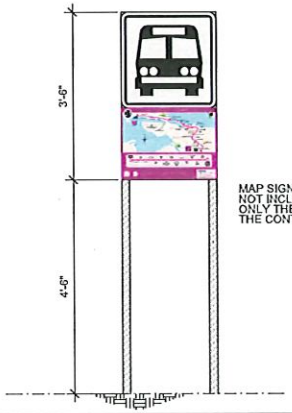


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#24



EXIST. CONDITIONS - ROUTE 21 | B.S.#24

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

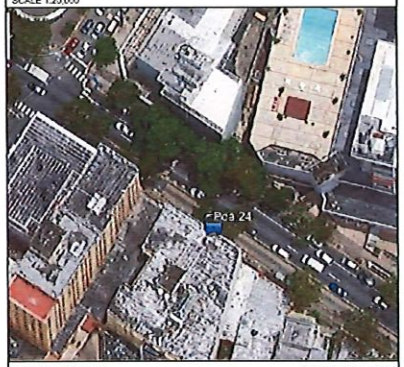
LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 6.0'.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PHOTO #3.

LOCATION PLAN
SCALE 1:20,000
18°26'39.71"N , 66° 3'58.09"W



AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18134, certifico que soy el profesional que certificó, diseñó y/o preparó estos planos y las especificaciones, cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamento y Código de Construcción vigentes de las Agencias Unas Reglamentarias y Compañías Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hayan producido por desconocimiento o por negligencia de una por mi o de agentes o empleados o por otras personas con el conocimiento me hacer responsable de cualquier acción jurídica y de multa de parte de DOTA.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraba, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134 PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #24

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE JUAN PONCE DE LEÓN AVE.
AFTER DEL PARQUE ST. MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195343
SAN JUAN, PR 00919-5343

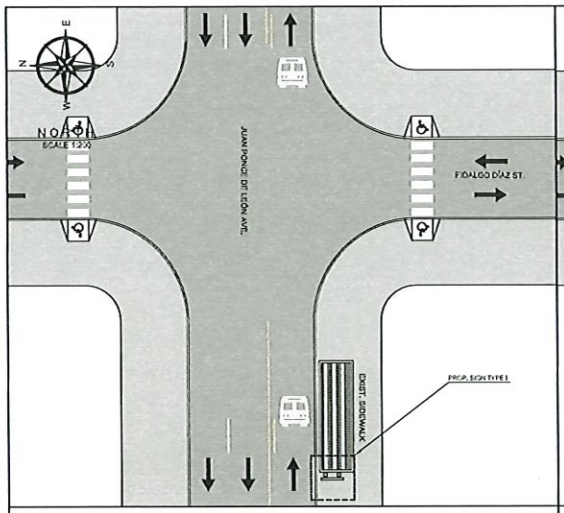
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.24	SHEET NO. 30 OF 77

ROUTE 21 | BUS STOP #25

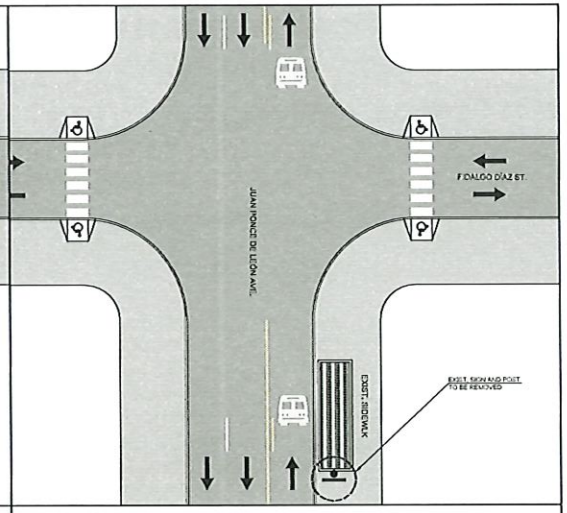
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

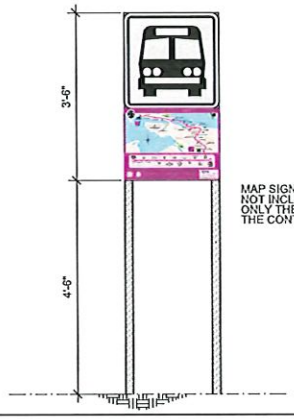


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#25



EXIST. CONDITIONS - ROUTE 21 | B.S.#25

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.

LOCATION PLAN
SCALE 1:20,000

18°26'35.80"N , 66° 3'53.01"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18134 certifico que soy responsable de la confección, diseño y/o preparación de los planos y las especificaciones completas y/o finales, certifico que he diseñado las obras civiles y especificaciones en cumplir con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco la posible aplicación total o substancial de las leyes que se hayan producido por documento finito o por negligencia que sea por mí, mis agentes o empleados o por otras personas con mi consentimiento no hacer responsable de cualquier acción judicial y daños de parte de ONN.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #25

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE JUAN PONCE DE LEÓN AVE. INT. FIDALGO DÍAZ ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.25	SHEET NO. 31 OF 77

ROUTE 21 | BUS STOP #26

PHOTO - 1

PHOTO - 2

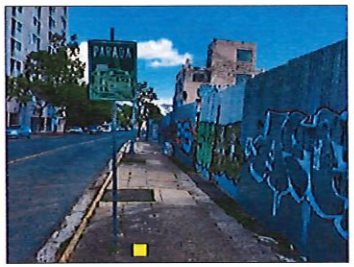
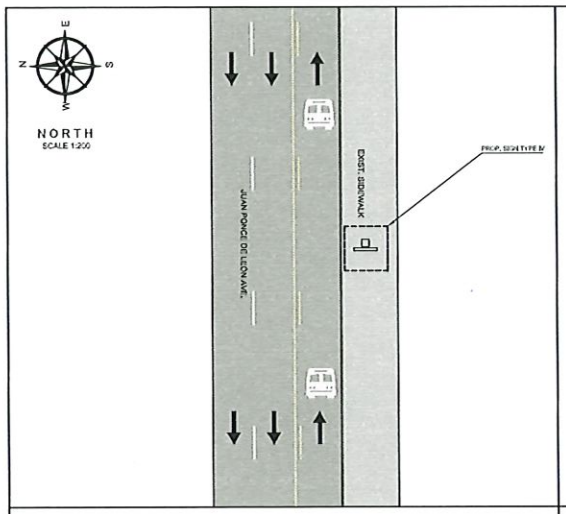
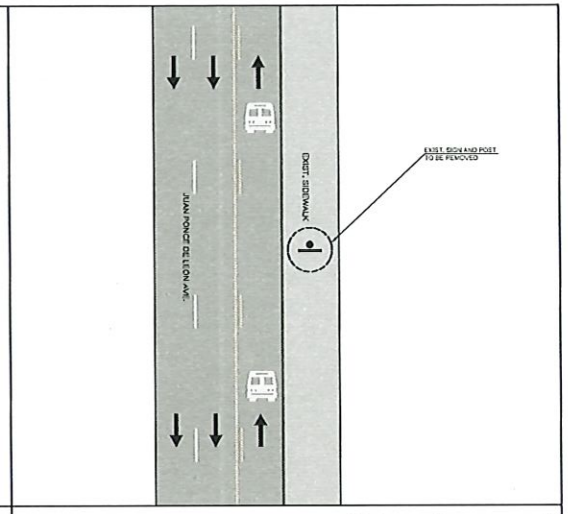


PHOTO - 3: PROPOSED SIGN LOCATION

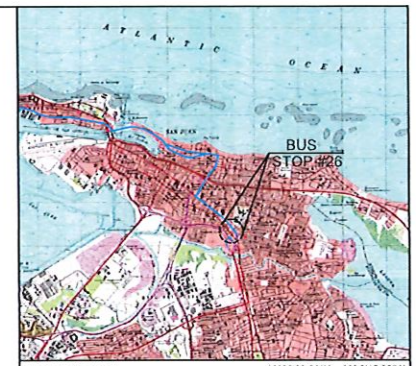


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#26

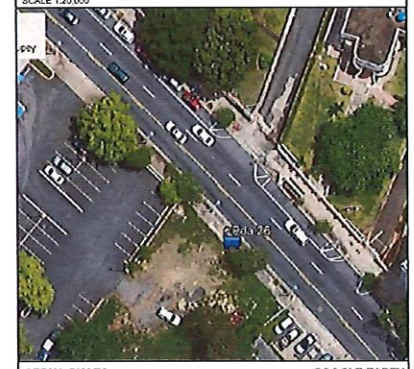


EXIST. CONDITIONS - ROUTE 21 | B.S.#26

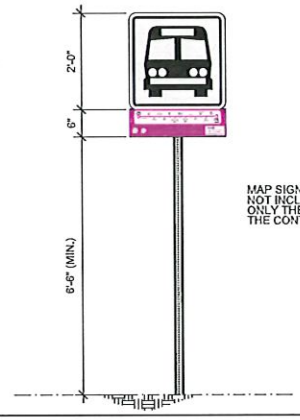
2.5 0 5 15
SCALE 1:200



LOCATION PLAN
SCALE 1:20,000
18°26'29.26"N , 66° 3'45.25"W



AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8642 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURES SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 1.83 M.

Yo, Hernan E. Lopez Baez, Ingeniero licencia 19.351 certifico que soy responsable de la confección, diseño y preparó estos planos y las especificaciones completas y finales. Certifico que el diseño de estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. Reconozco que cualquier desviación falsa o falsificación de los hechos aquí establecidos por desconocimiento o por negligencia, por omisión o mala fe, me hará responsable de cualquier acción judicial y/o civil de parte de DOTA.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraso, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19351PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #26

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE JUAN PONCE DE LEÓN AVE. BEFORE MAYOL ST.
MUNICIPALITY OF SAN JUAN

AUTOPIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

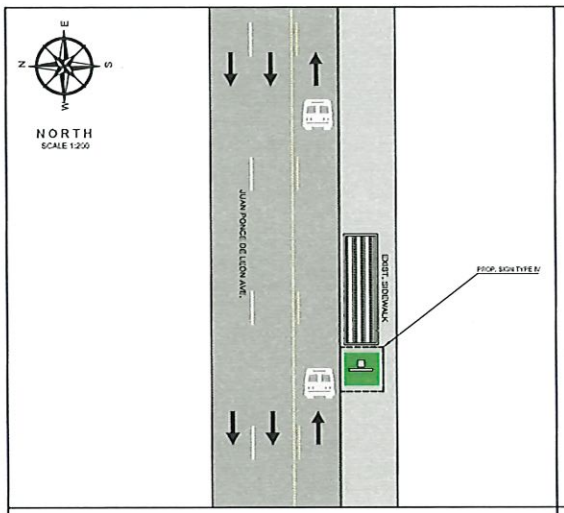
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.26	SHEET NO. 32 OF 77

ROUTE 21 | BUS STOP #27

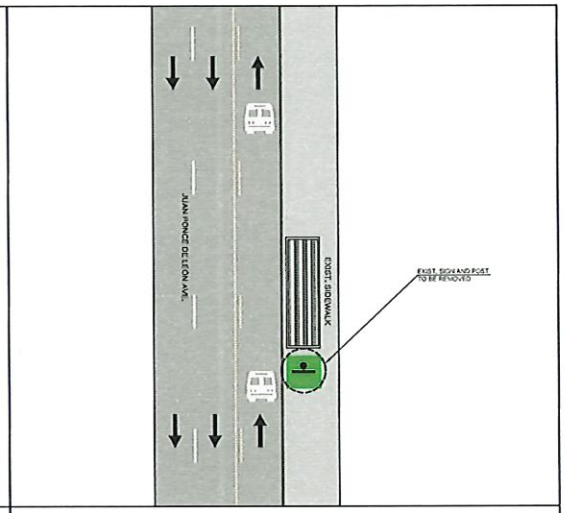
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

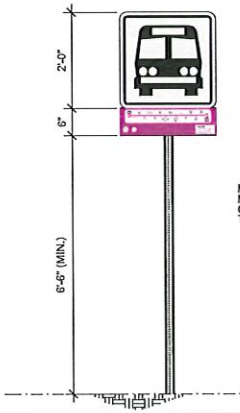


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#27



EXIST. CONDITIONS - ROUTE 21 | B.S.#27

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 2.0'.

LOCATION PLAN
SCALE 1:20,000

18°26'23.80"N , 66° 3'40.29"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo Hernan E. Lopez Baez Ingeniero Licencia 19154 certifico que soy el profesional que certificó diseñó y preparó estos planos y las especificaciones cumplen con las Disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamentos y Código de Construcción Vigente de las Agencias Juntas Reguladoras o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos o en los productos por desconocimiento o por negligencia que sea por mi más agencias o empleados o por otras personas por mi consideradas me hacen responsable de cualquier acción judicial y daños de la parte del DOTA.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraño, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19154 PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #27

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE JUAN PONCE DE LEÓN AVE. BEFORE
OPPOSITE SIDE OF BOURET ST. MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

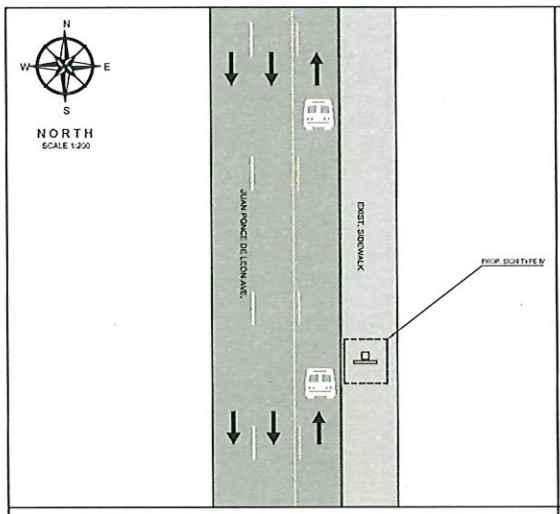
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.27	SHEET NO. 33 OF 77

ROUTE 21 | BUS STOP #28

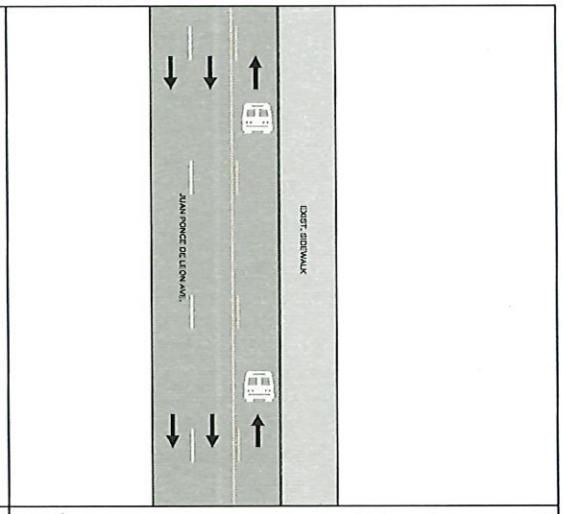
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#28



EXIST. CONDITIONS - ROUTE 21 | B.S.#28

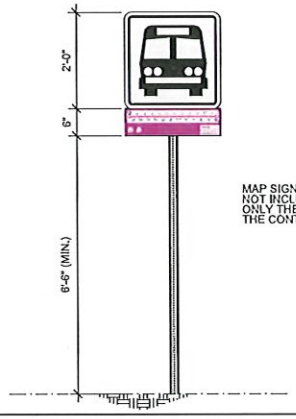
2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000

18°26'8.69"N , 66° 3'33.67"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.6542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK SECTION REFER TO PHOTO #3.
4. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.

Yo, Hernan E. Lopez Baez, Ingeniero licencia 18354 certifico que soy responsable de la confección, diseño y cálculo de estas planas y las especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. Reconozco que cualquier desviación falsa o falsificación de los hechos que se hayan producido por desconocimiento o por negligencia, pueden ser de mi exclusiva responsabilidad y por otras personas con el consentimiento me hacen responsable de cualquier acción judicial y de daños por la OGPe.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
LIC. # 18354

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # 18354

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #28

FROM SAN JUAN TO SAGRADO CORAZÓN
EXCLUSIVE LANE JUAN PONCE DE LEÓN AVE. AFTER OPPOSITE SIDE OF HAYDEÉ REXACH AVE.. MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

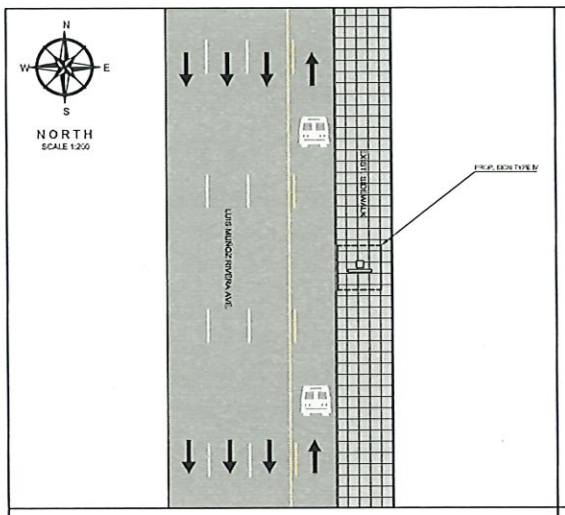
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-1.28	SHEET NO. 34 OF 77

ROUTE 21 | BUS STOP #1

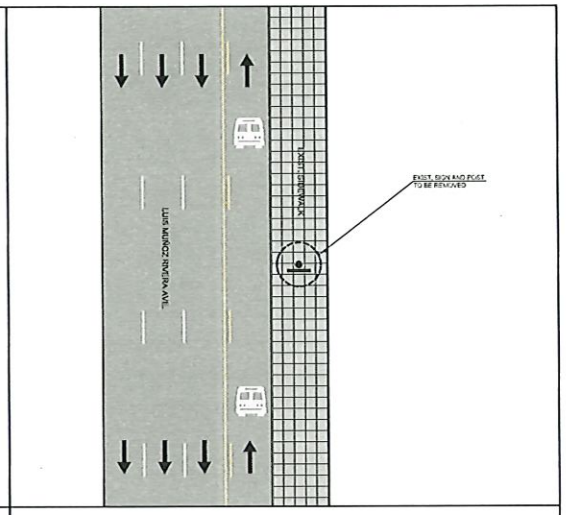
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

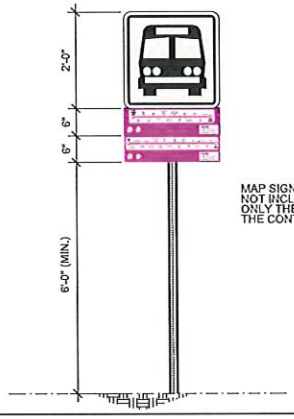


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#1



EXIST. CONDITIONS - ROUTE 21 | B.S.#1

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PLOTS #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo, Hernan E. Lopez Baez, Ingeniero Licencia 19-54, certifico que soy el profesional con competencia diseño y/o preparé estos planos y las especificaciones cumplen en todos. Tambien, certifico que en el diseño de los diferentes y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a los Reglamentos y Código de Construcción vigentes de los Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia que sea por mí, mis agentes o empleados o por otras personas con el conocimiento me hacen responsable de cualquier acción judicial y delito establecido por la OGPE.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guraabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

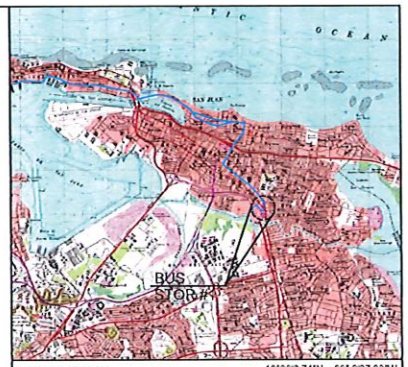
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19-54 PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #1

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE LUIS MUÑÓZ RIVERA AVE. BEFORE HAYDEE REXACH ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349



LOCATION PLAN
SCALE 1:20,000
18°26'8.74"N , 66° 3'37.33"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

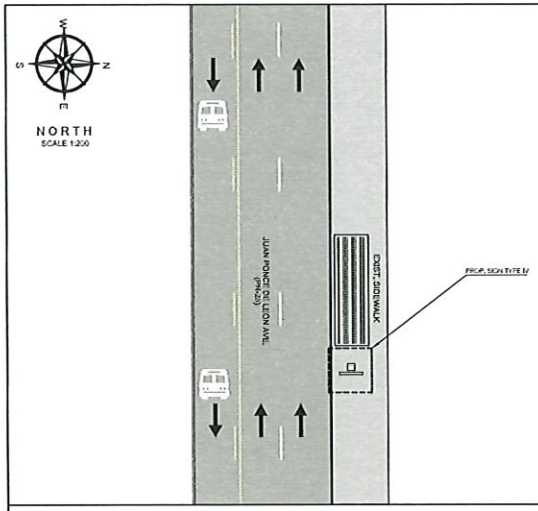
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.01	SHEET NO. 35 OF 77

ROUTE 21 | BUS STOP #2

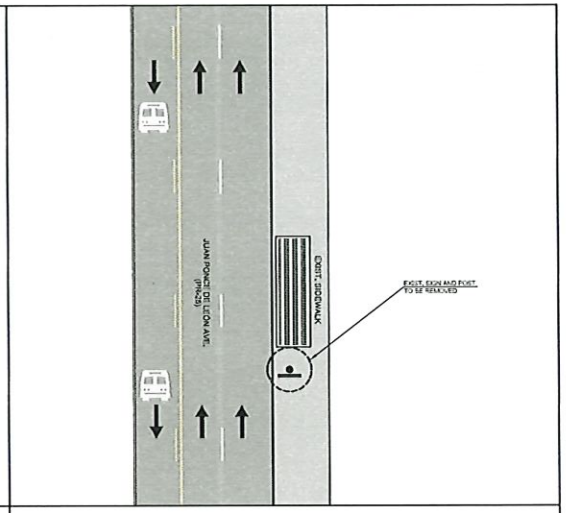
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

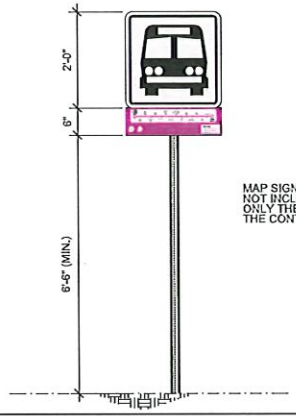


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#2



EXIST. CONDITIONS - ROUTE 21 | B.S.#2

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

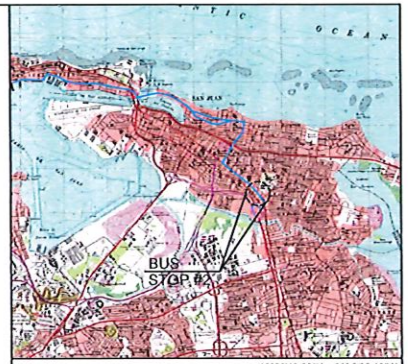
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMIT PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PLOT 03.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.6 M.



LOCATION PLAN
SCALE 1:20,000
18°26'19.83"N , 66° 3'36.16"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18134, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. Asimismo, certifico que he tenido que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamentación y Código de Construcción Vigente de la Agencia Junta Reglamentadora y Cooperativas Públicas con la Salud Pública. Reconozco que cualquier declaración falsa o falsificación de los hechos o en los productos por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

ENZO Engineering, psc.
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TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #2

FROM SAGRADO CORAZÓN TO SAN JUAN
JUAN PONCE DE LEÓN AVE. BEFORE ROSALES ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.02	SHEET NO. 36 OF 77

ROUTE 21 | BUS STOP #3

PHOTO - 1

PHOTO - 2

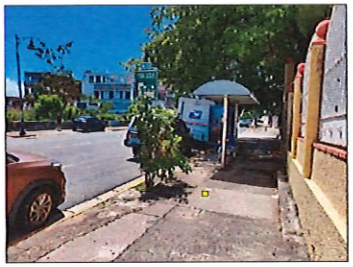
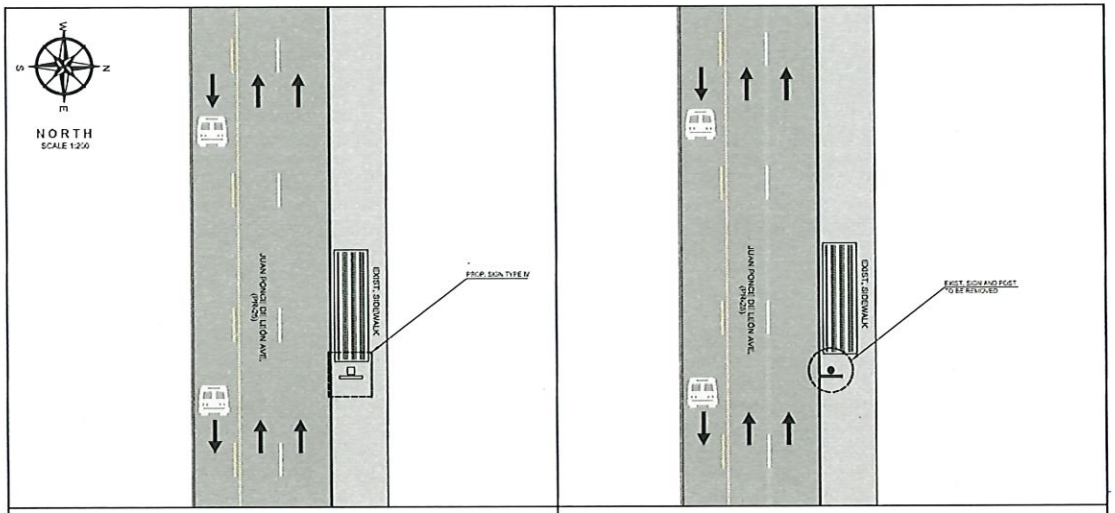
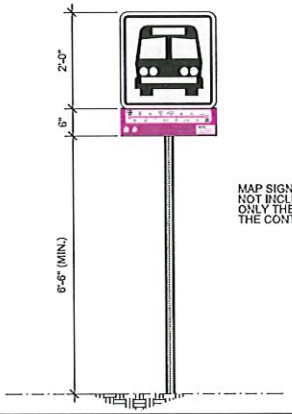


PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#3

EXIST. CONDITIONS - ROUTE 21 | B.S.#3



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 5.85 M.

LOCATION PLAN
SCALE 1:20,000
18°26'27.17"N , 66° 3'42.52"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado 18134, certifico que soy el profesional que confeccionó diseñó y preparó estos planos y las especificaciones complementarias. Tambien certifico que en el diseño que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras y Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hayan producido por desconocimiento o por negligencia que sea por mí, mis agentes o empleados o por otras personas con el conocimiento me hacen responsable de cualquier acción jurídica y daños de mi parte de OGPR.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraño, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #3

FROM SAGRADO CORAZÓN TO SAN JUAN
JUAN PONCE DE LEÓN AVE. AFTER RIERA ST.
(FRONT LA INMACULADA ELDERLY CENTER) MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195343
SAN JUAN, PR 00919-5343

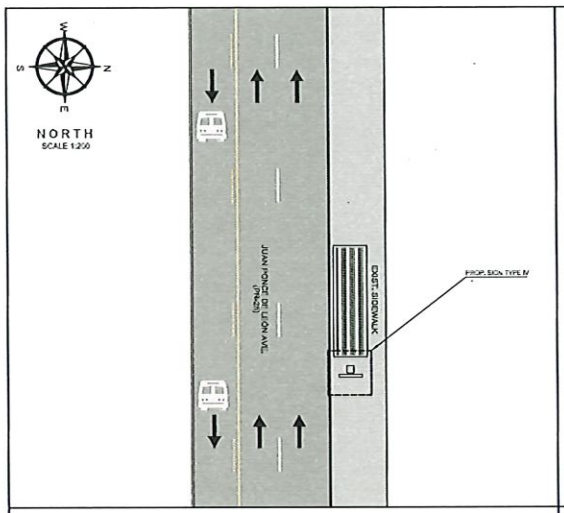
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.03	SHEET NO. 37 OF 77

ROUTE 21 | BUS STOP #4

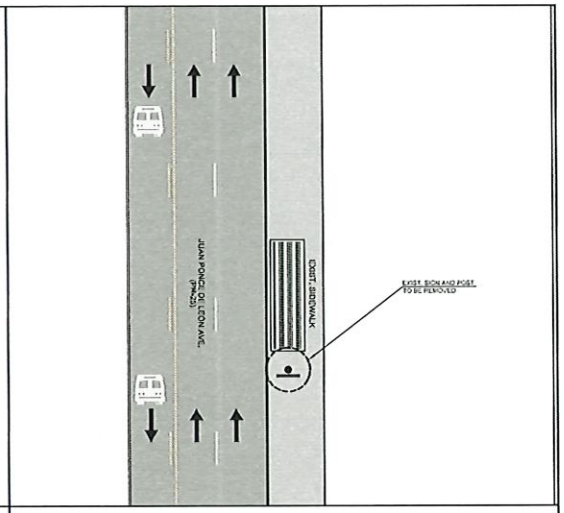
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

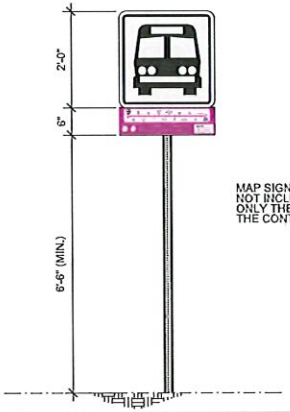


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#4



EXIST. CONDITIONS - ROUTE 21 | B.S.#4

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL DETAIL THE EXCAVATION, DEMOLITION AND TIRES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE FRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN SIDEWALK AREA, IN FRONT THE SHELTER'S POST, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.

LOCATION PLAN
SCALE 1:20,000

18°26'33.52"N , 65° 3'49.40"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado 18154, certifico que soy el proyectista que confeccionó diseñó y preparó estos planos y las especificaciones complementarias. Tambien certifico que he tenido que dichos diseños y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamento y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras y Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se han producido por desconocimiento o por negligencia que sea por mí, mis agentes o empleados o por otras personas por el consultadas, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

ENZO Engineering, psc.
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Guaynabo, PR 00778
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HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #4

FROM SAGRADO CORAZÓN TO SAN JUAN
JUAN PONCE DE LEÓN AVE. BEFORE FIDALGO DÍAZ ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

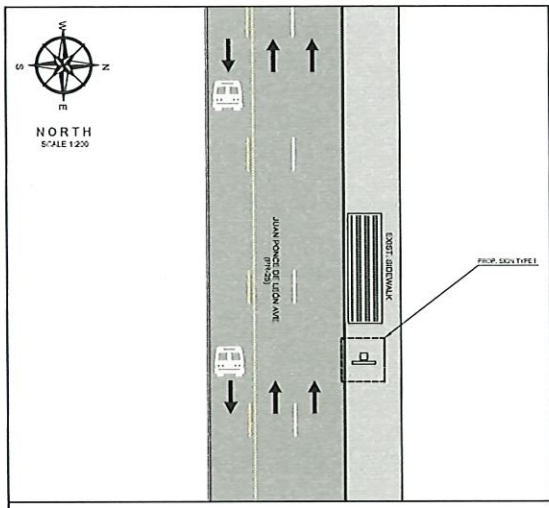
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.04	SHEET NO. 38 OF 77

ROUTE 21 | BUS STOP #5

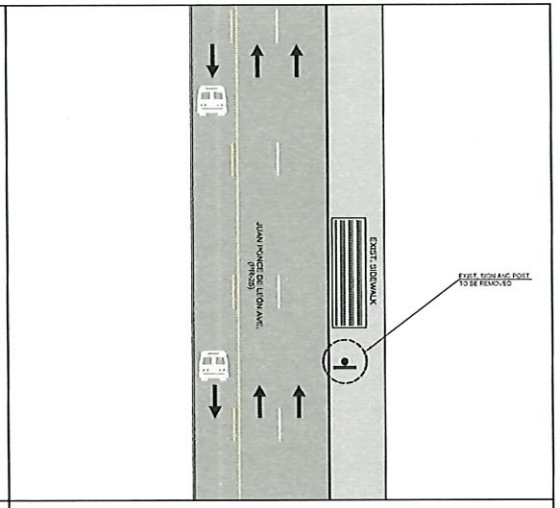
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

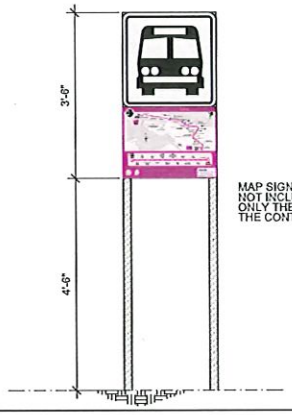


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#5



EXIST. CONDITIONS - ROUTE 21 | B.S.#5

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE FRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. FIRST THE CONTRACTOR SHALL REMOVE THE EXISTING SHELTER AND SHALL DELIVER TO THE MUNICIPALITY OF SAN JUAN. SECOND THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN SIDEWALK IN FRONT THE TREE. IN THIS LOCATION, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 2.0 M.

LOCATION PLAN
SCALE 1:20,000

18°26'39.23"N , 66° 3'55.66"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18154, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. También certifico que el diseño, los dibujos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier modificación falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados o por otra persona con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #5

FROM SAGRADO CORAZÓN TO SAN JUAN
JUAN PONCE DE LEÓN AVE. FRONT COBIAN PLAZA BUILDING
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

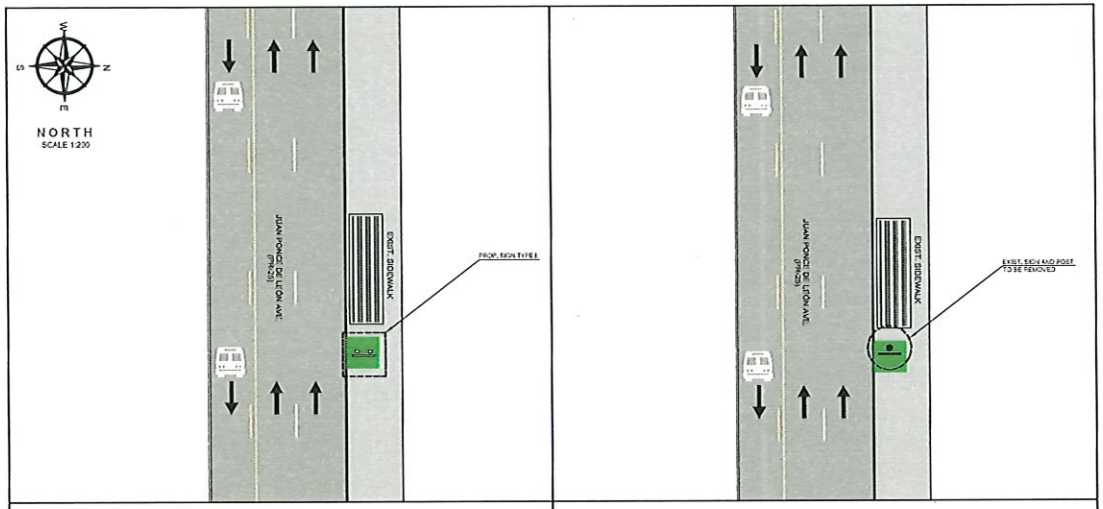
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.05	SHEET NO. 39 OF 77

ROUTE 21 | BUS STOP #6

PHOTO - 1

PHOTO - 2

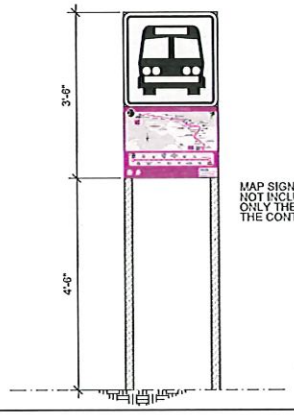
PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#6

EXIST. CONDITIONS - ROUTE 21 | B.S.#6

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRIMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FEES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE FRIMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PI-DT3.03.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 2.62 M.

LOCATION PLAN
SCALE 1:20,000

18°26'44.32"N , 66° 4'3.30"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18181, certifico que soy responsable por la confección, diseño y preparación de estos planos y las especificaciones complementarias. También certifico que el diseño de dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de las Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier omisión falsa o falificación de los hechos que se hayan producido por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados o por otras personas con mi consentimiento, me hacer responsable de cualquier acción judicial y disciplinaria por la OGPe.

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Guaraño, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18181

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #6

FROM SAGRADO CORAZÓN TO SAN JUAN
JUAN PONCE DE LEÓN AVE. BEFORE DE DIEGO AVE.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

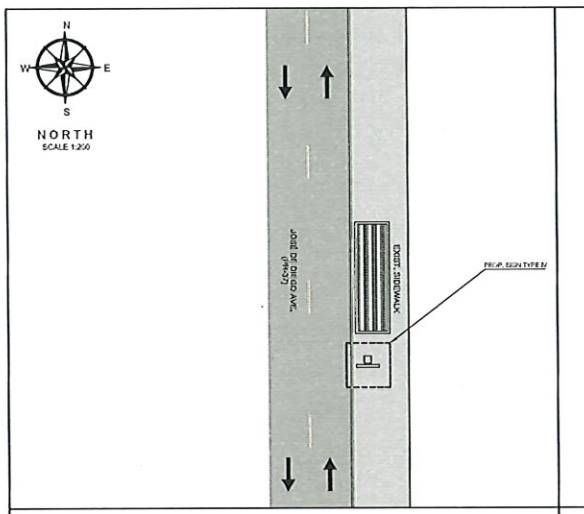
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.06	SHEET NO. 40 OF 77

ROUTE 21 | BUS STOP #7

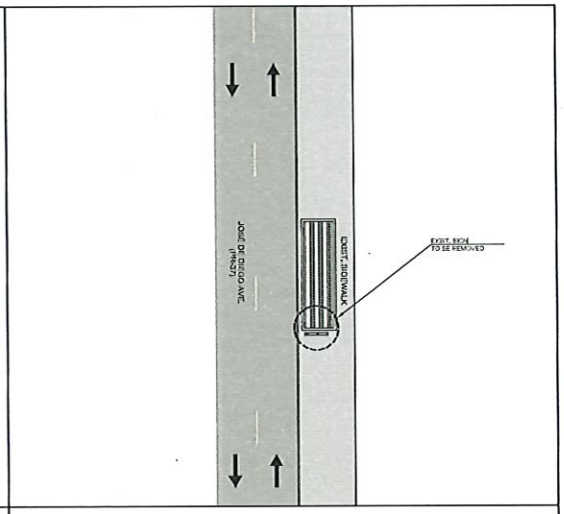
PHOTO - 1

PHOTO - 2

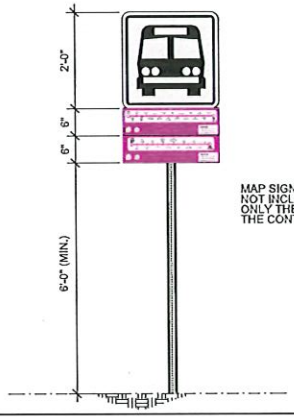
PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#7



EXIST. CONDITIONS - ROUTE 21 | B.S.#7



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

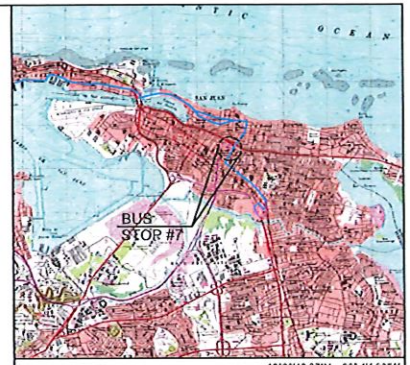
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMIT PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES. REFER TO PHOTO #3.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.6 M.
6. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA. REFER TO PHOTO #1.



LOCATION PLAN
SCALE 1:20,000
18°26'48.37"N , 66° 4'4.08"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18134 certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones, simples o amplias, formales o verbales que se refieren a los dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hacen producidos por desconocimiento o por negligencia o una parte mía, mis agentes o empleados o por otras personas con mi consentimiento me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraba, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #7

FROM SAGRADO CORAZÓN TO SAN JUAN
DE DIEGO AVENUE BEFORE ANTONSANTI ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.07	SHEET NO. 41 OF 77

ROUTE 21 | BUS STOP #8

PHOTO - 1

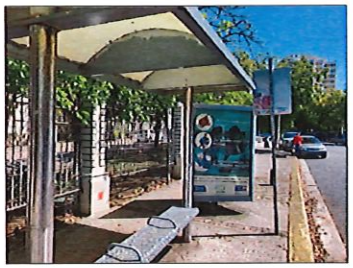


PHOTO - 2

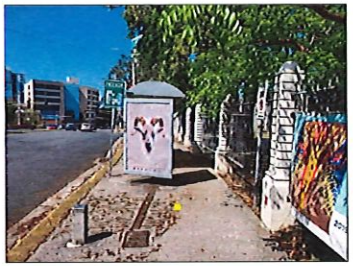
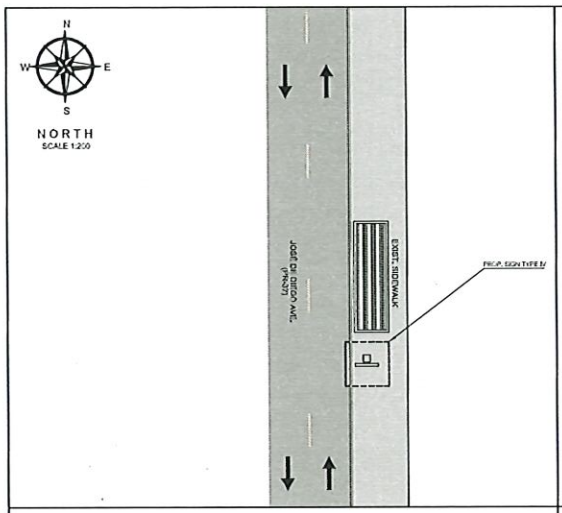
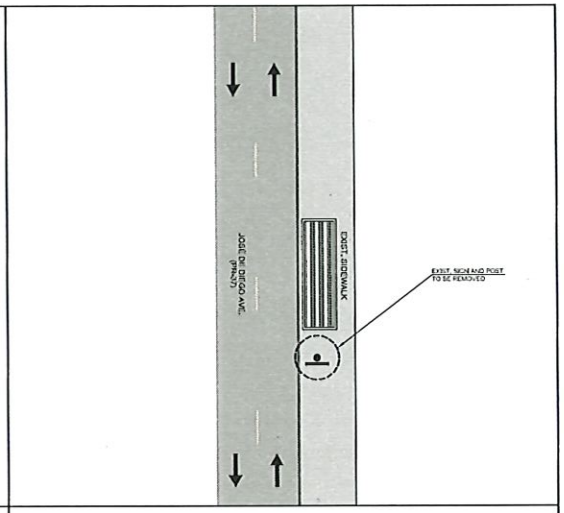


PHOTO - 3: PROPOSED SIGN LOCATION

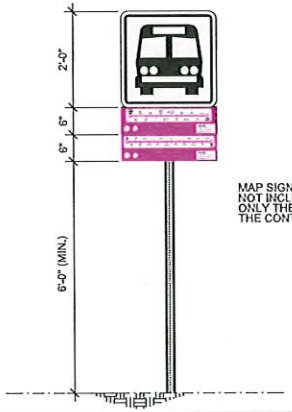


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#8



EXIST. CONDITIONS - ROUTE 21 | B.S.#8

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMIT PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK, 2'-0" TO THE FRONT OF THE SIGN (LETTER ADVERTISEMENT, REFER TO PHOTO #3).
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

LOCATION PLAN
SCALE 1:20,000
18°26'56.41"N , 65° 3'59.87"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez Ingeniero Licencia 18154 certifico que soy el profesional que confeccionó diseñó y preparó estos planos y las especificaciones cumplen en todo. Tambien certifico que en el diseño de estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamento y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras y Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que aquí he sido producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados o por otra persona con el procedimiento me hacer responsable de cualquier acción judicial y civil que le sea de lugar.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraba, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #8

FROM SAGRADO CORAZÓN TO SAN JUAN
DE DIEGO AVENUE INT. BEFORE BALDORIOTY DE CASTRO EXPRESSWAY
(MINILLAS GOVERNMENT CENTER) MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.03	SHEET NO. 42 OF 77

ROUTE 21 | BUS STOP #9

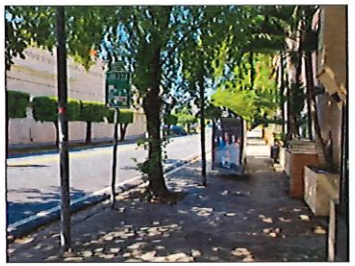
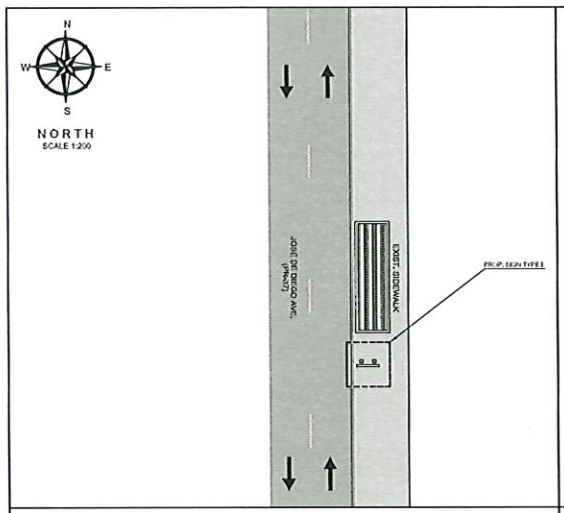


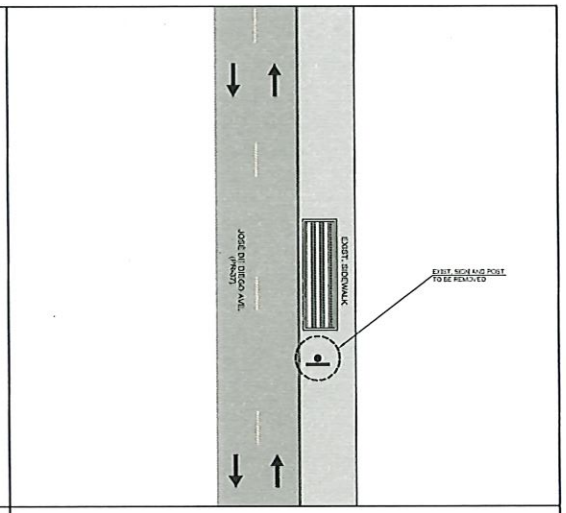
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



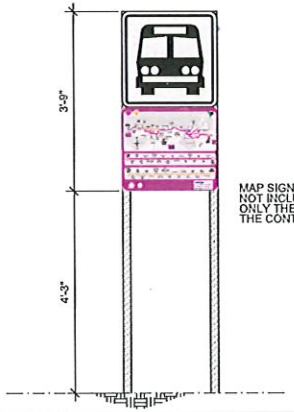
PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#9



EXIST. CONDITIONS - ROUTE 21 | B.S.#9

2.5 0 5 15

SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRIMA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

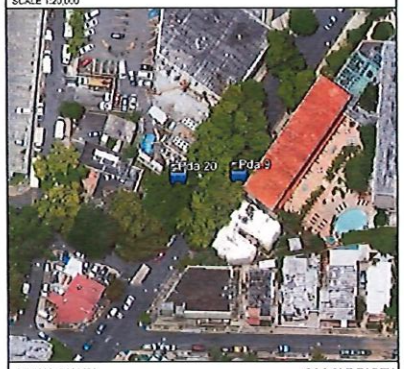
NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRIMA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, REFER TO PLOTO B.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

LOCATION PLAN

SCALE 1:20,000

18°27'3.32"N , 66° 3'53.63"W



AERIAL PHOTO

SCALE 1:1,000

GOOGLE EARTH

VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, Licencia 19104, certifico que soy el profesional de la ingeniería de diseño y proyectos estos planos y las especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamento y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hace protestas por desconocimiento o por negligencia que sea por mi, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y multa impuesta por la OGPe.

ENZO Engineering, psc.

PO Box 3040, PMB 427
Guaynabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19104

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #9

FROM SAGRADO CORAZÓN TO SAN JUAN
DE DIEGO AVENUE AFTER OPPOSITE SIDE OF ESTRELLA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

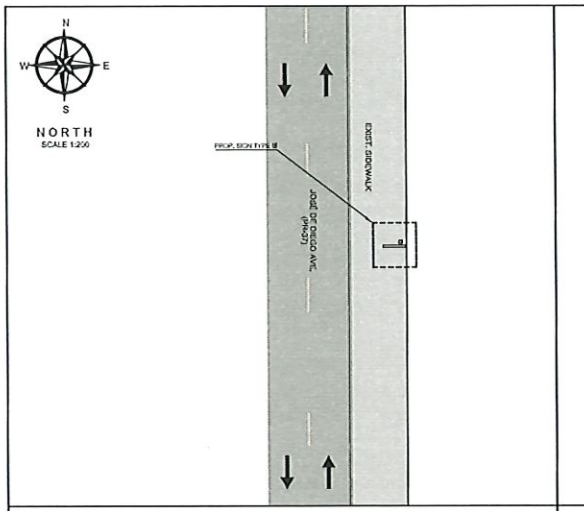
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.09	SHEET NO. 43 OF 77

ROUTE 21 | BUS STOP #10

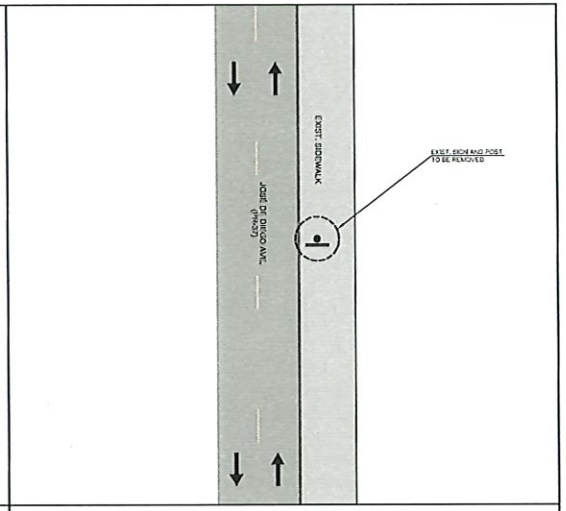
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



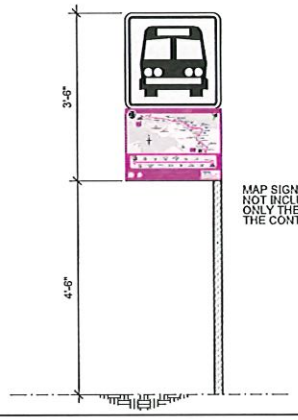
PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#10



EXIST. CONDITIONS - ROUTE 21 | B.S.#10

2.5 0 5 15

SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE III

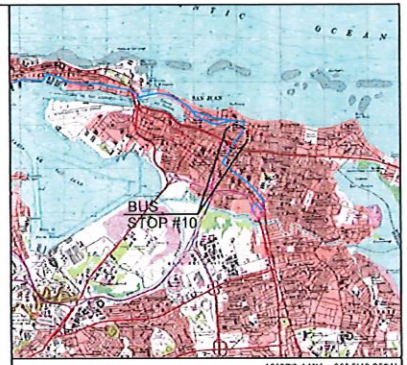
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

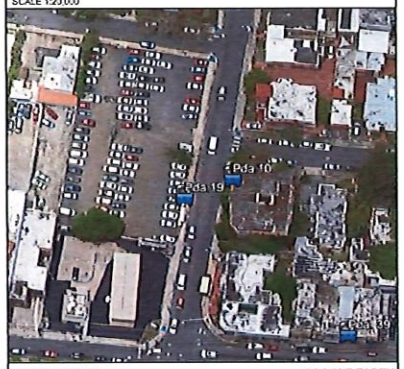
NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED CANTILEVER SIGN IN THE SIDEWALK AREA, NEXT TO WALL PROPERTY, WITHOUT OBSTRUCTING THE ENTRANCE, REFER TO PHOTO #3.



LOCATION PLAN 18°27'9.14"N , 66° 3'49.25"W

SCALE 1:20,000



AERIAL PHOTO GOOGLE EARTH

SCALE 1:1,000 VERSION: 7.3.4.8642 PRO

Yo, Hernan E. Lopez Baez Ingeniero licencia 18184 certifico que soy el profesional con certificado diseño y preparé estos planos y las especificaciones complementarias. Tambien certifico que he tenido que ajustar planos y especificaciones cumplir con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a los Reglamentos y Codigos de Construcción Vigentes de las Agencias Juntas Reglamentadoras y Corporaciones Publicas por jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia en mi parte, me expone a empleados o por otras personas por el procedimiento, me hacen responsable de cualquier acción jurídica y disciplinaria por la OGPe.

ENZO Engineering, psc.

PO Box 3040, PMB 427
Guraabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18184PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #10

FROM SAGRADO CORAZÓN TO SAN JUAN
DE DIEGO AVENUE BEFORE LAS MARÍAS ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

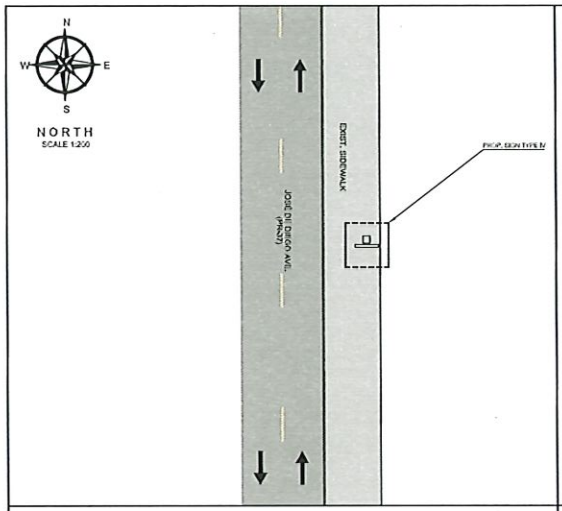
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.10	SHEET NO. 44 OF 77

ROUTE 21 | BUS STOP #11

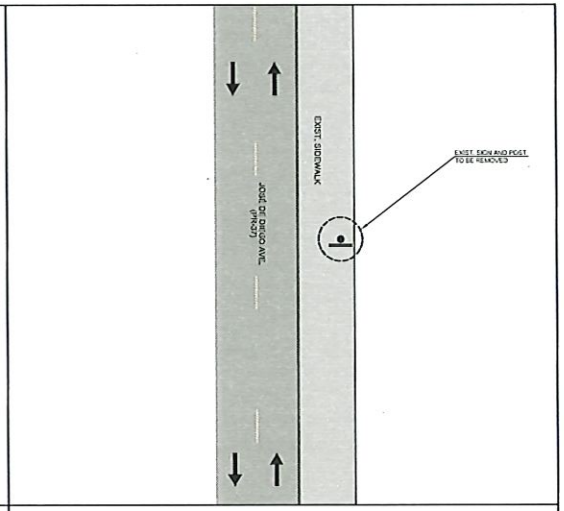
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

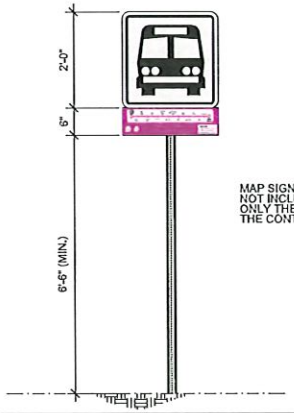


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#11



EXIST. CONDITIONS - ROUTE 21 | B.S.#11

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

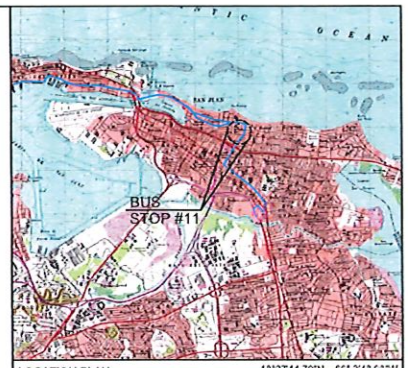
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.



LOCATION PLAN
SCALE 1:20,000
18°27'14.79"N , 66° 3'48.68"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8642 PRO

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado 18134 certifico que soy el profesional de certificación, diseño y proyecto estas obras y las especificaciones complementarias. Tambien certifico que el diseño de estas obras y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamentos y Código de Construcción vigente de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que aquí se hace pretendo por desconocimiento o por negligencia que sea por mi falta o omisión o cualquier otra persona, con el consentimiento mio hacer responsable de cualquier acción judicial y disciplinaria por la OGPe.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guraboo, PR 00778
TEL. (787) 649-5200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134-PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #11

FROM SAGRADO CORAZÓN TO SAN JUAN
DE DIEGO AVENUE BEFORE ASHFORD AVENUE
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

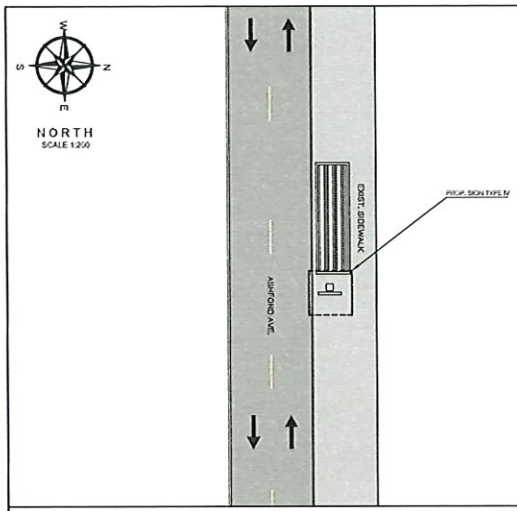
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.11	SHEET NO. 45 OF 77

ROUTE 21 | BUS STOP #12

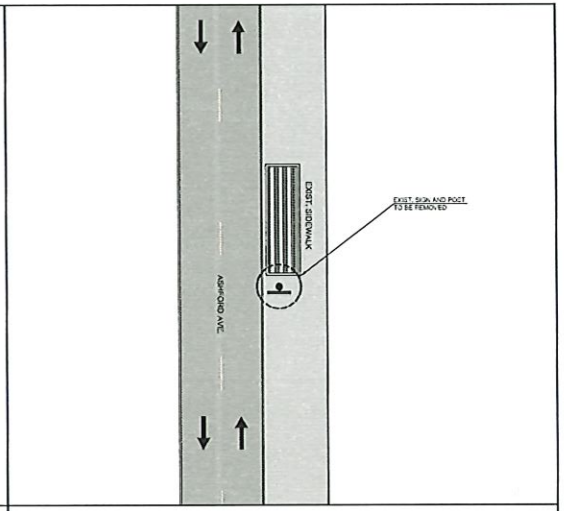
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

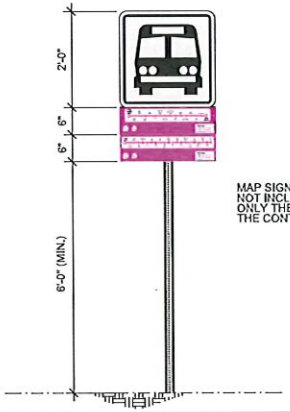


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#12



EXIST. CONDITIONS - ROUTE 21 | B.S.#12

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

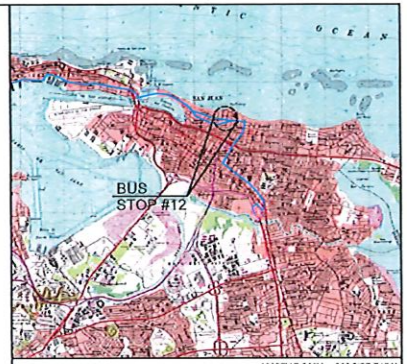
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FREE PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURES SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN TILES. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH PWD OF THE MUNICIPALITY OF SAN JUAN ABOUT THE SAME TILE TO INSTALL SIX THREE TILES (3). REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.



LOCATION PLAN
SCALE 1:20,000
18°27'17.63"N , 65° 3'57.74"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, licencia 9134 certifico que soy el profesional con jurisdicción diseño y preparé estos planos y las especificaciones cumpliendo estas funciones, también que he verificado que estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamentación y Código de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia, falta o falsificación de los hechos que he sido producido por descuido, fraude o por negligencia grave por mí o mi agente o empleado o por otras personas con el procedimiento me hacer responsable de cualquier acción jurídica y disciplinaria por la OGPe.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraso, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #12

FROM SAGRADO CORAZÓN TO SAN JUAN
ASHFORD AVENUE INT. WASHINGTON ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

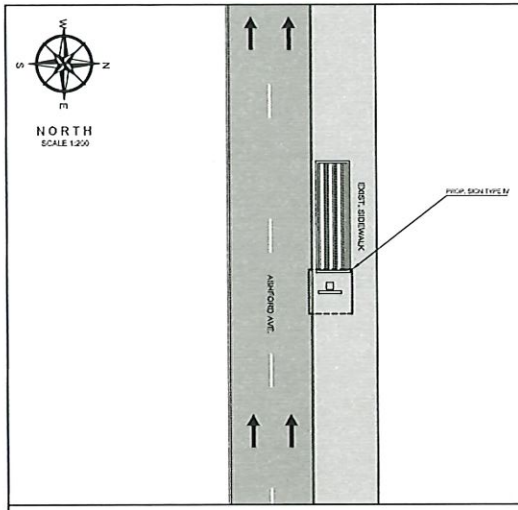
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.12	SHEET NO. 46 OF 77

ROUTE 21 | BUS STOP #13

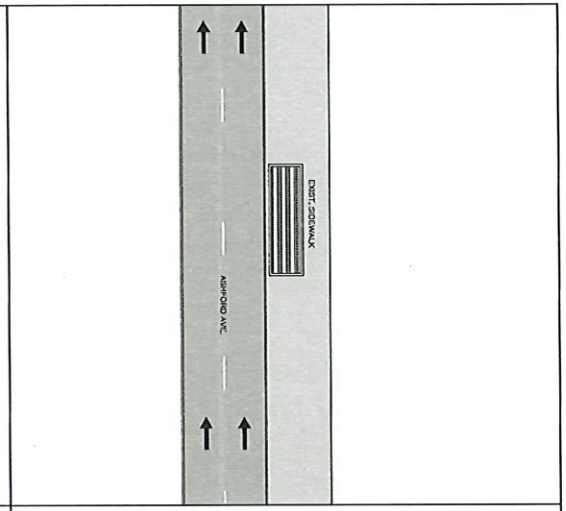
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

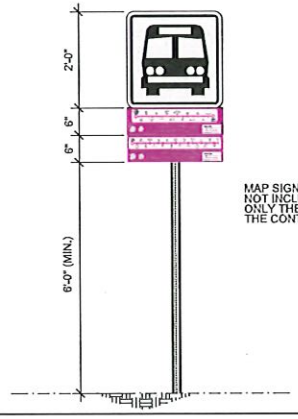


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#13



EXIST. CONDITIONS - ROUTE 21 | B.S.#13

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

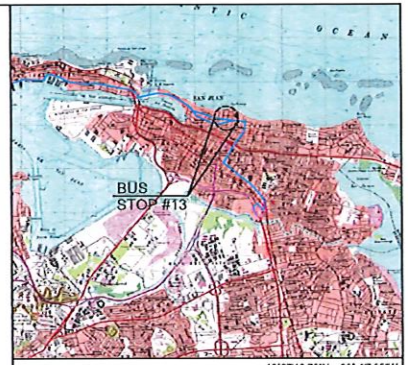
NOT TO SCALE

LEGEND:

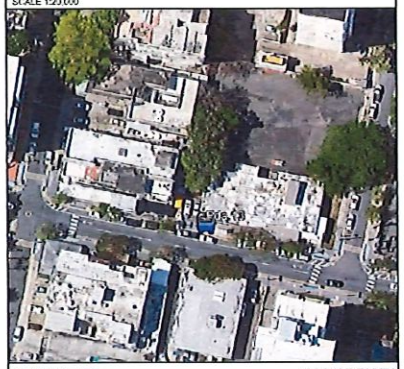
- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN ON TREE NEXT TO THE RED CONECTA SAN JUAN SIGN. THE CONTRACTOR SHAL COORDINATE THE INSTALLATION WITH PMO OF THE MUNICIPALITY OF SAN JUAN ABOUT THE SAME TREE TO INSTALL BUS FOUR TIES.
4. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.
5. THE CONTRACTOR SHALL TRIM THE TREE BRANCHES. REFER TO PHOTO #3.



LOCATION PLAN
SCALE 1:20,000
18°27'18.73"N , 66° 47.05"W



AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 19134 certifico que soy el profesional que certificó, diseñó y preparó estos planos y las especificaciones completas y notas. Asimismo certifico que el diseño de los dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias, Juntas Reglamentadoras y Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que he sido probados por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y daños que pueda ocurrir.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraso, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19134-PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #13

FROM SAGRADO CORAZÓN TO SAN JUAN
ASHFORD AVENUE BEFORE CERVANTES ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

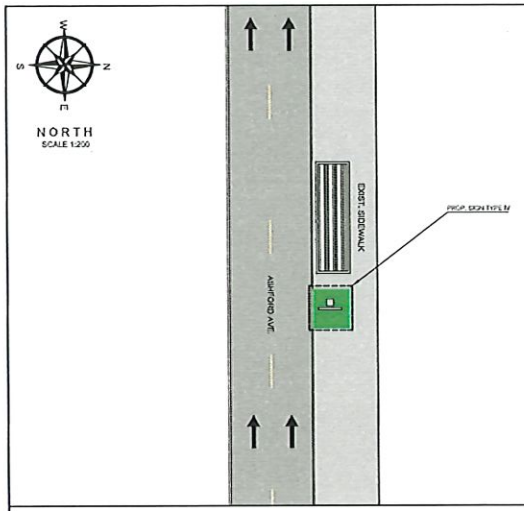
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.13	SHEET NO. 47 OF 77

ROUTE 21 | BUS STOP #14

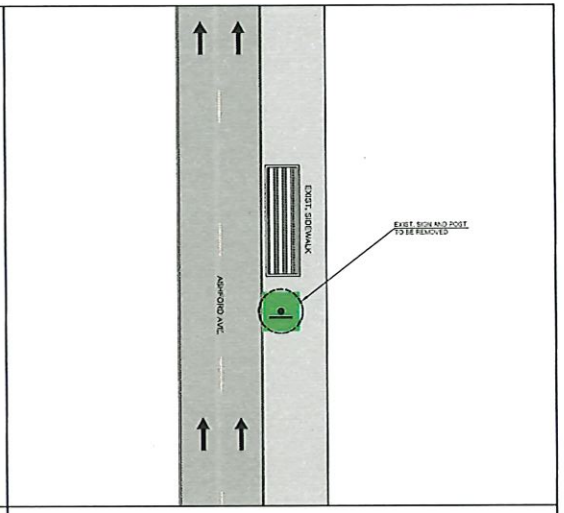
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

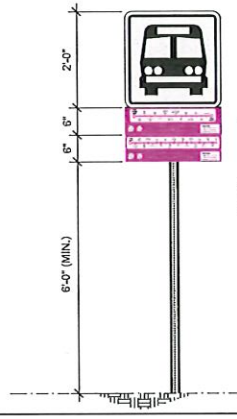


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#14



EXIST. CONDITIONS - ROUTE 21 | B.S.#14

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

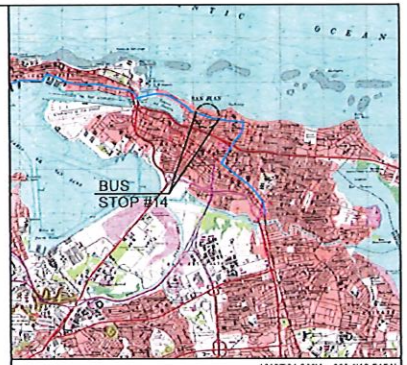
NOT TO SCALE

LEGEND:

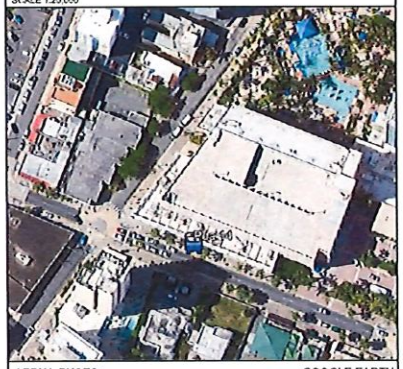
- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURES SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, IN FRONT OF THE FACIL REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 6.0' M.



LOCATION PLAN
SCALE 1:20,000
18°27'21.39"N , 65° 4'16.51"W



AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez Ingeniero licencia 18134 certifico que soy responsable de la confiabilidad de los datos, diseños y especificaciones de este plano y las especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción Vigentes de los Agencias Juntas Reglamentadoras y Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hayan producido por descuidos, fraude o por negligencia ya sea por mí, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción jurídica y de toda la responsabilidad por DAÑOS.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Guaraba, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134-PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #14

FROM SAGRADO CORAZÓN TO SAN JUAN
ASHFORD AVENUE BEFORE CONDADO ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.14	SHEET NO. 48 OF 77

ROUTE 21 | BUS STOP #15

PHOTO - 1

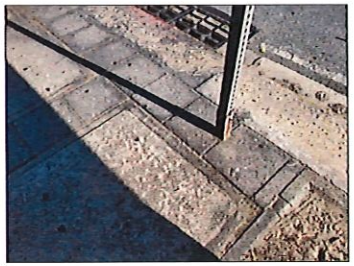
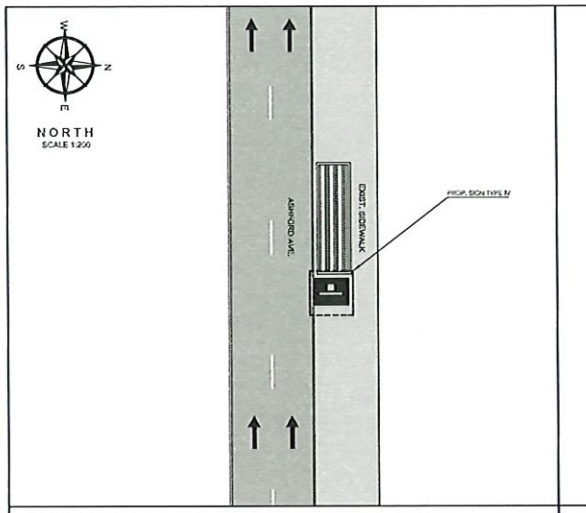
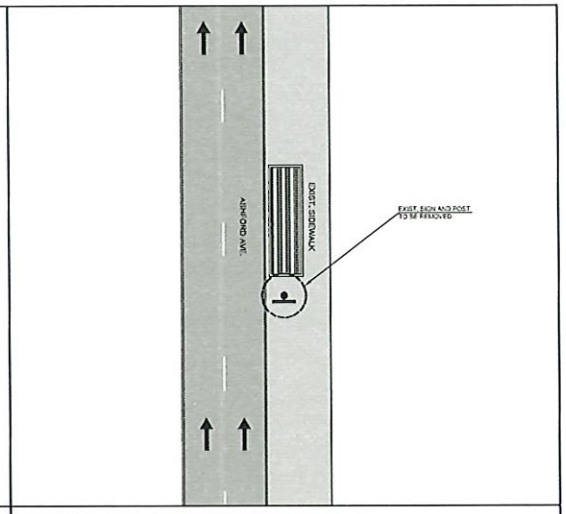


PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

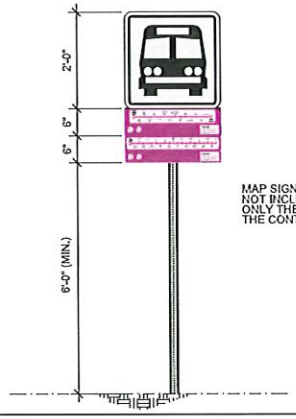


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#15



EXIST. CONDITIONS - ROUTE 21 | B.S.#15

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

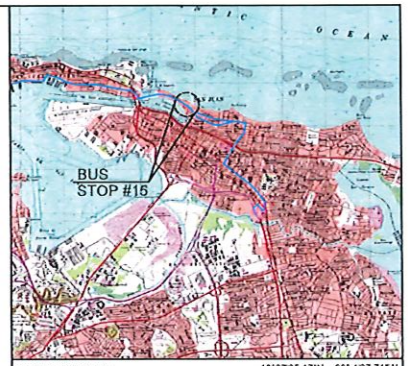
NOT TO SCALE

LEGEND:

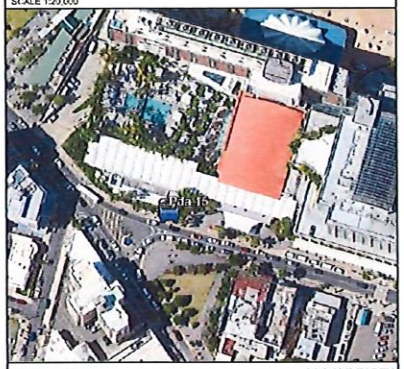
- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PAPER PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL COORDINATE THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE FRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA IN FRONT OF THE FACIL REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.



LOCATION PLAN
SCALE 1:20,000
18°27'25.17"N , 66° 4'27.71"W



AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18.041 certifico que soy responsable de la confección, diseño y preparación estos planos y las especificaciones complementarias. Tambien certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Codigos de Construcción vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Publicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hace prohibido por disposición federal o por negligencia, ya sea por mi o de agentes o empleados o por otras personas con el procedimiento me hacer responsable de cualquier acción jurídica, civil o de otra índole.

ENZO Engineering, psc.
PO BOX 3040, PMB 427
GURABO, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # 18-041

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #15

FROM SAGRADO CORAZÓN TO SAN JUAN
ASHFORD AVENUE OPPOSITE SIDE OF MAGDALENA AVE.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

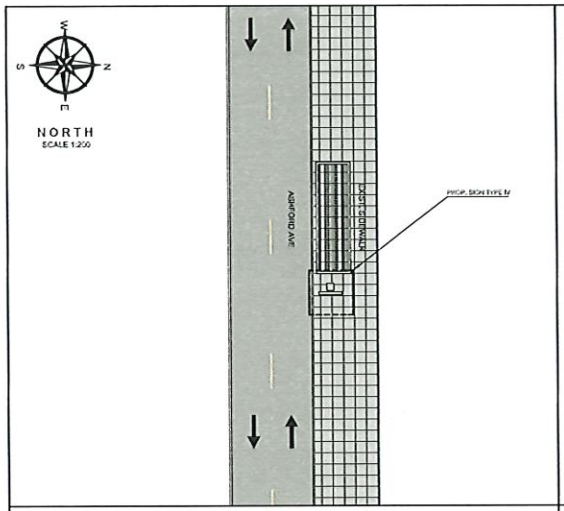
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.15	SHEET NO. 49 OF 77

ROUTE 21 | BUS STOP #16

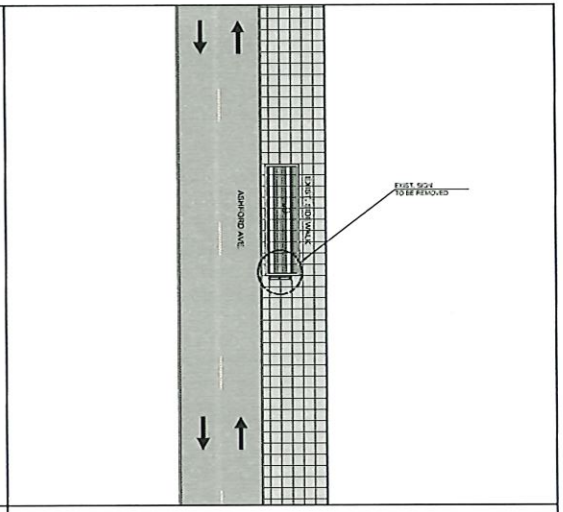
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

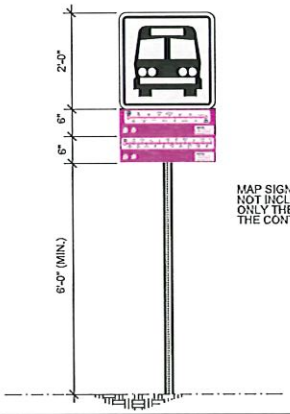


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#16



EXIST. CONDITIONS - ROUTE 21 | B.S.#16

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE IV

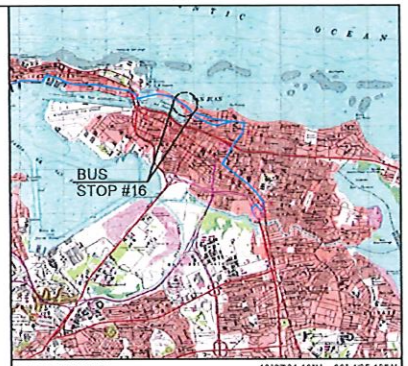
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

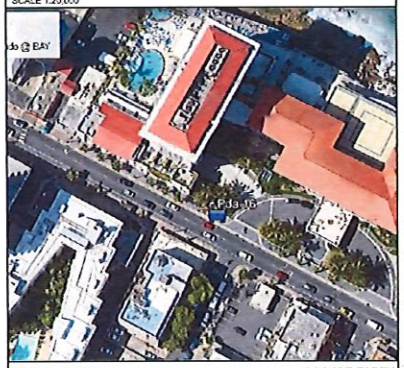
NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL INSTALL SIGN IN TILES. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH PRD OF THE MUNICIPALITY OF CAROLINA, ABOUT THE SIMILTIE TO INSTALL SIGN FOUR TILES.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.



LOCATION PLAN
SCALE 1:20,000

18°27'31.16"N , 66° 4'35.13"W



AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8642 PRO

Yo Hernan E. Lopez Baez, Ingeniero, licencia 18.341 certifico que soy el profesional que certificó diseño y preparó estos planos y las especificaciones, cumplen con las disposiciones aplicables del Reglamento Conjunto, las disposiciones aplicables a la Reglamentación y Código de Construcción Vigente de los Ignacio Juntas Reglamentadoras y Corporaciones Públicas con jurisdicción. Reconozco que cualquier desviación de las normas aquí establecidas por desconocimiento o por negligencia, que por mi relación agencia o empleados o por otra persona, me convierte en responsable de cualquier acción jurídica y civil de la ley. 06/06.

ENZO Engineering, psc.
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TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO LICENCIADO
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18341PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #16

FROM SAGRADO CORAZÓN TO SAN JUAN
ASHFORD AVENUE OPPOSITE SIDE OF BARRANQUITAS ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.16	SHEET NO. 50 OF 77

ROUTE 21 | BUS STOP #17

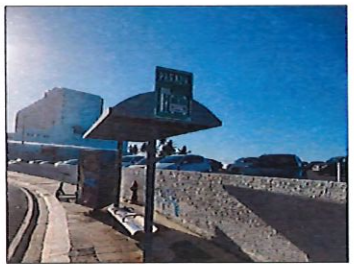
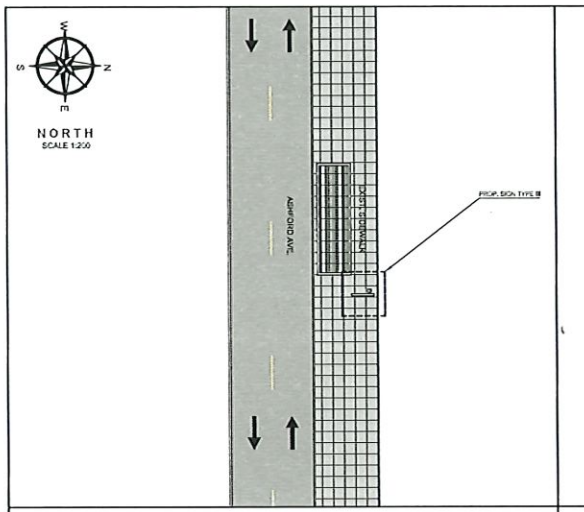


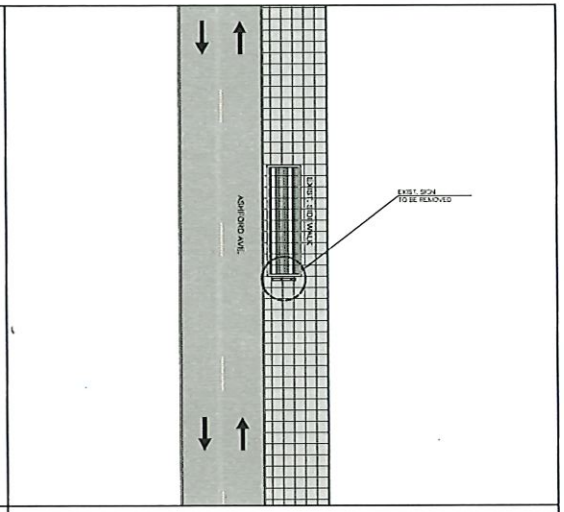
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

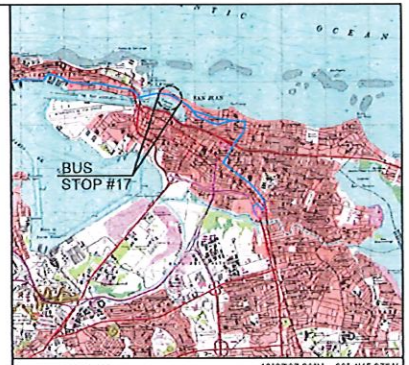


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#17



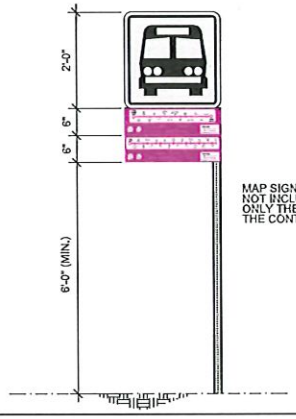
EXIST. CONDITIONS - ROUTE 21 | B.S.#17

2.5 0 5 15
SCALE 1:200



LOCATION PLAN 18°27'37.28"N , 65° 4'45.97"W
SCALE 1:20,000

AERIAL PHOTO GOOGLE EARTH
SCALE 1:1,000 VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE III NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRYSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRYSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED CANTILEVER SIGN ON TILES NEXT TO THE WALL PROPERTY, REFER TO PHOTO #3. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH PRO OF THE MUNICIPALITY OF SAN JUAN ABOUT THE SAME TILE TO INSTALL SUN FOUR TILES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.61 M.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18 041 certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones, cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hayan producido por descuido, delito o por negligencia, ya sea por mí, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción jurídica y disciplinaria por la OGPe.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18-SPE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #17

FROM SAGRADO CORAZÓN TO SAN JUAN
ASHFORD AVENUE FRONT PARKING
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.17	SHEET NO. 51 OF 77

ROUTE 21 | BUS STOP #18

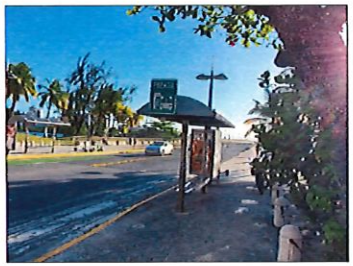


PHOTO - 1

PHOTO - 2

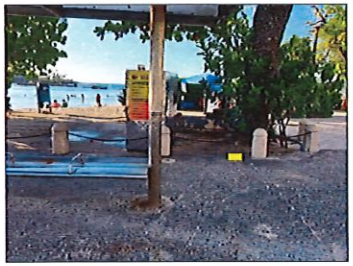
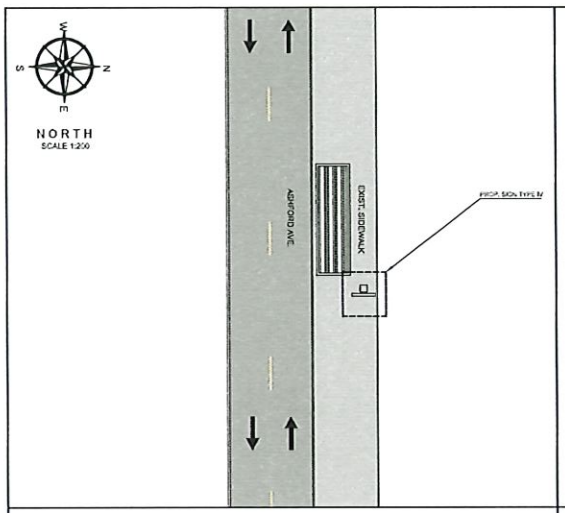
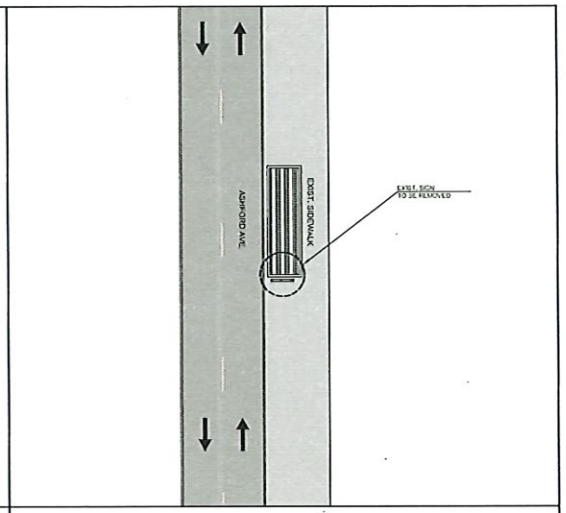


PHOTO - 3: PROPOSED SIGN LOCATION

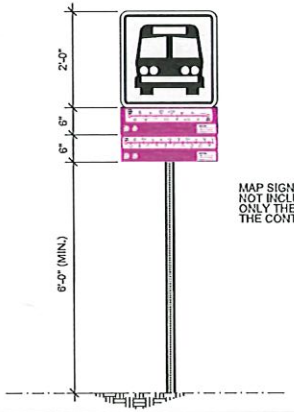


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#18



EXIST. CONDITIONS - ROUTE 21 | B.S.#18

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

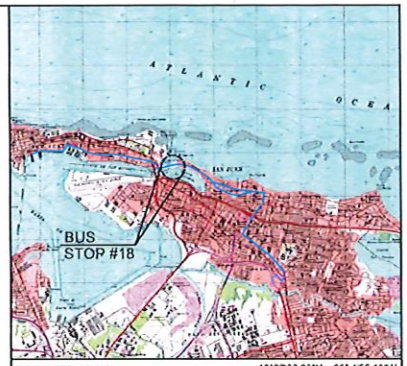
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITS PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL THE PROPOSED SIGN ON SIDEWALK AREA, BETWEEN BOLLARDS. REFER TO PHOTO #3.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 1.50'.



LOCATION PLAN
SCALE 1:20,000

18°27'38.93"N , 66° 4'55.18"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero Licencia 18341 certifico que soy el profesional con competencia, diseño y/o preparé estos planos y las especificaciones complementarias. Tambien certifico que el diseño que aparece en los planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Codigos de Construcción Vigentes de las Agencias, Junta Reglamentadora o Corporaciones Publicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hace protestando por desconocimiento o por negligencia que sea parte de algunos complicados o por otras personas con el procedimiento, me hacen responsable de cualquier acción jurídica y disciplinaria por la OGPe.

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Gurabo, PR 00778
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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18341PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #18

FROM SAGRADO CORAZÓN TO SAN JUAN
ASHFORD AVENUE BEFORE DOS HERMANOS BRIDGE
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.18	SHEET NO. 52 OF 77

ROUTE 21 | BUS STOP #19

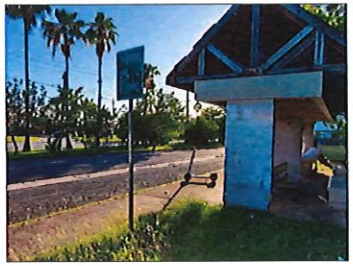


PHOTO - 1

PHOTO - 2

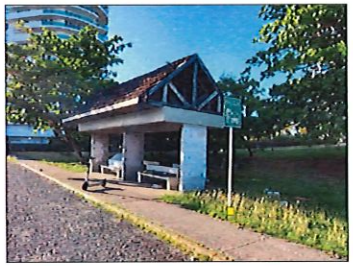
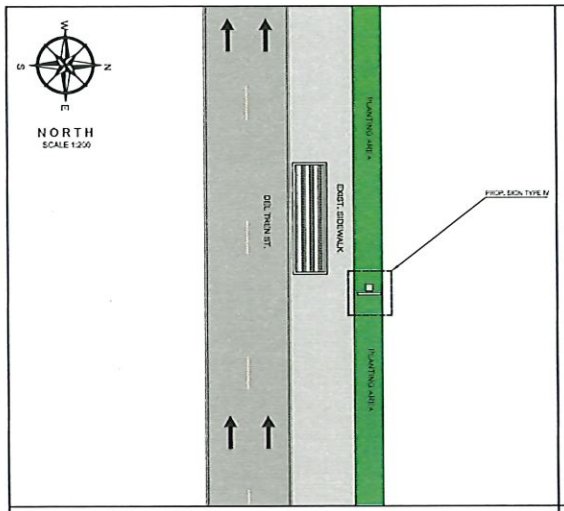
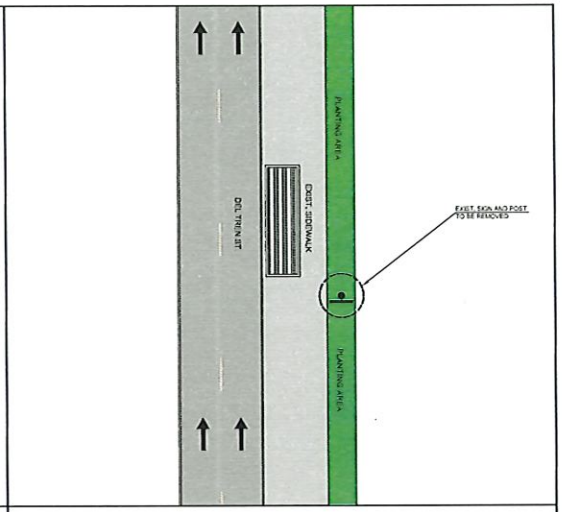


PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#19



EXIST. CONDITIONS - ROUTE 21 | B.S.#19

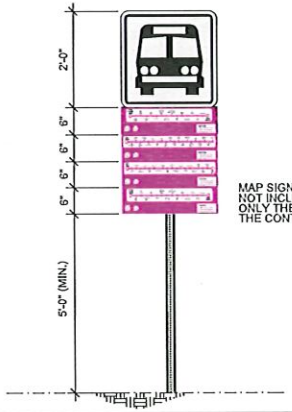
2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000

18°27'41.72"N , 66° 5'16.64"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PAVES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo, Hernan E. Lopez Baez, Ingeniero licenciado 19.04 certifico que soy el profesional que certifico el diseño y preparé estos planos y las especificaciones cumpliendo con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia propia por mí, mis agentes o empleados o por otras personas con el procedimiento me hacen responsable de cualquier acción jurídica y disciplinaria por la OCPA.

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Guaraba, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 19.04 PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #19

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN AFTER FERNÁNDEZ JUNCOS AVENUE
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.19	SHEET NO. 53 OF 77

ROUTE 21 | BUS STOP #20

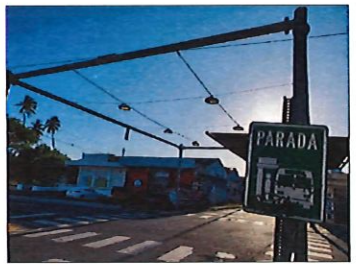
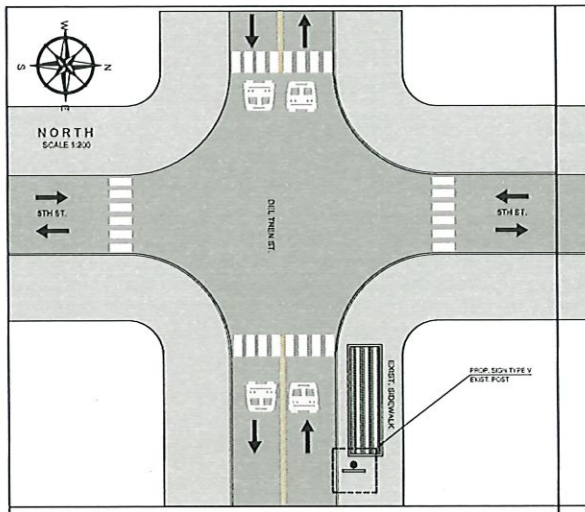


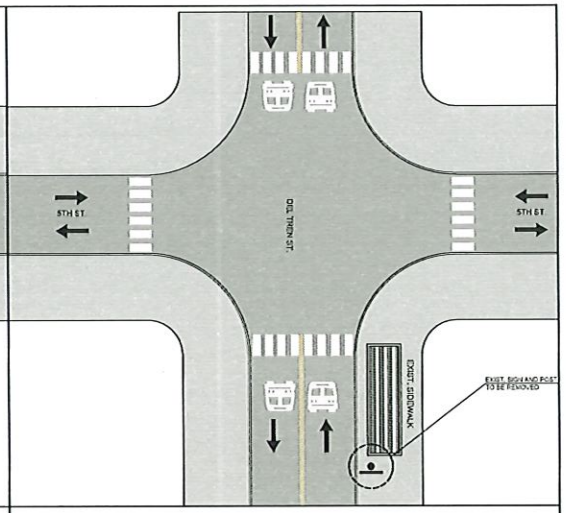
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#20



EXIST. CONDITIONS - ROUTE 21 | B.S.#20

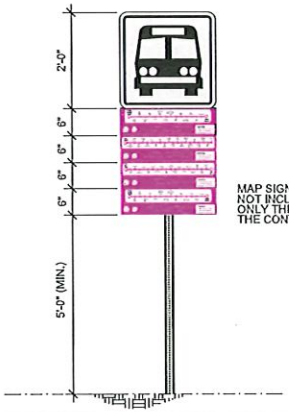
2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000

18°27'44.35"N , 66° 5'24.71"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSIONE 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION
- PROP. SIGN TYPE V

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE FRMSA PERSONNEL.
4. THE CONTRACTOR SHALL INSTALL THE PROPOSED PANEL SIGNS IN THE EXISTING POST. REFER TO PHOTO #3.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18184, certifico que soy el profesional que certificó, diseñó y preparó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de los Agencias, Junta Reglamentadora o Corporación Pública con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se me haya producido por desconocimiento o por negligencia grave por mi, más agentes o empleados o por otras personas con mi consentimiento, me hacer responsable de cualquier acción jurídica y de daños de hasta el 100%.

ENZO Engineering, psc.
PO Box 3040, PMB 427
Gurabo, PR 00778
TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG

HERNAN E. LOPEZ BAEZ
INGENIERO
LICENCIADO
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # 18184

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #20

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN INT. 5 ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.20	SHEET NO. 54 OF 77

ROUTE 21 | BUS STOP #21

PHOTO - 1

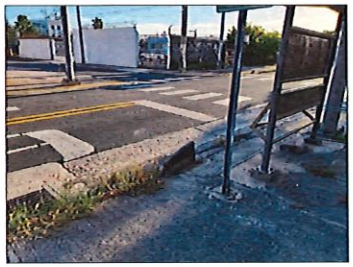
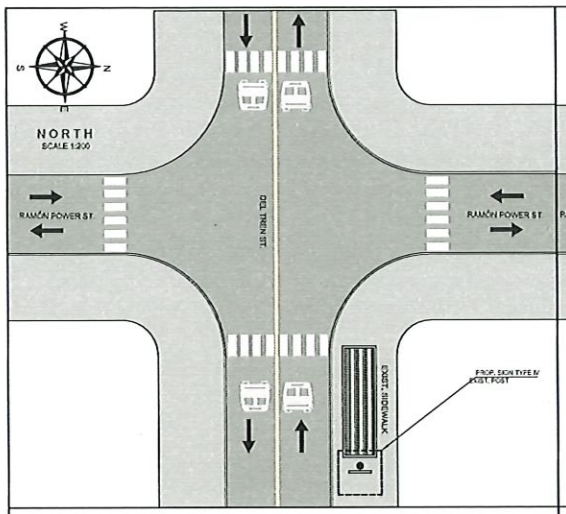
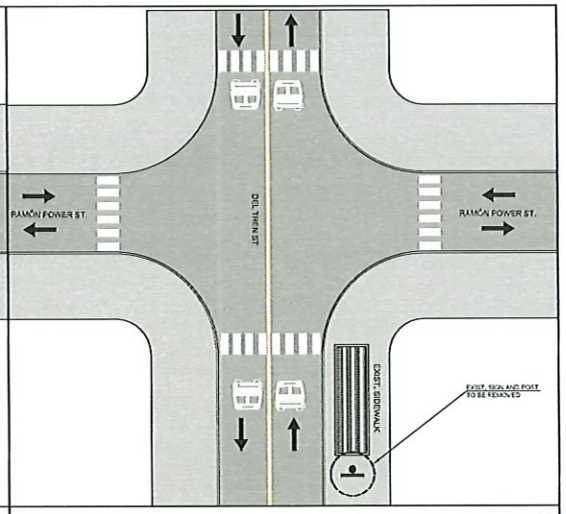


PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#21

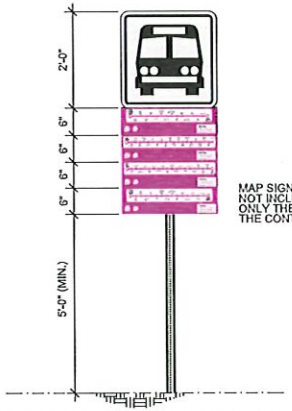


EXIST. CONDITIONS - ROUTE 21 | B.S.#21

2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000
18°27'48.18"N , 65° 5'34.51"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION
- PROP. SIGN TYPE V

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED PANEL SIGNS IN THE EXISTING POST, REFER TO PHOTO #3.

Yo Hernan E. Lopez Baez, Ingeniero, licencia 18-24 certifico que soy el profesional de certificar diseño y preparé estos planos y las especificaciones cumplen con las Disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamento y Código de Construcción Vigente de la Agencia. Junta Reglamentadora y Corporación Pública por Jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia propia o por el mal agente o empleado o por otra persona por mi predilección me hacer responsable de cualquier acción judicial y disciplinaria por la OCPI.

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INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18-24PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #21

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN AFTER RAMÓN POWER ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.21	SHEET NO. 55 OF 77

ROUTE 21 | BUS STOP #22

PHOTO - 1

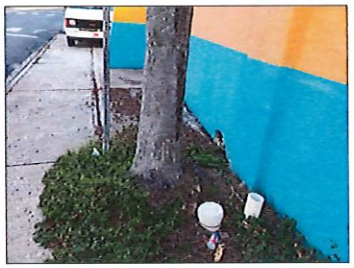
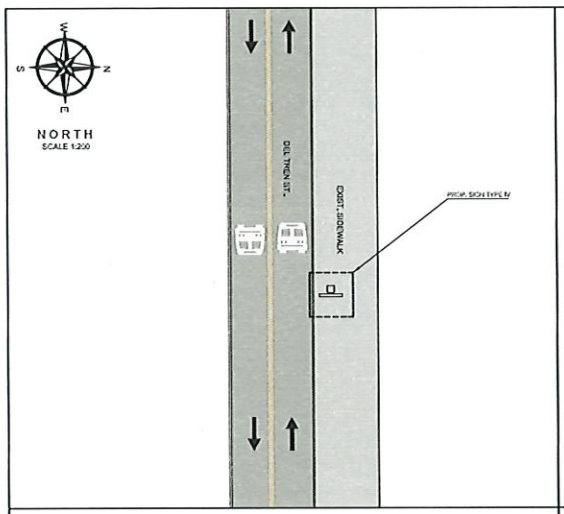
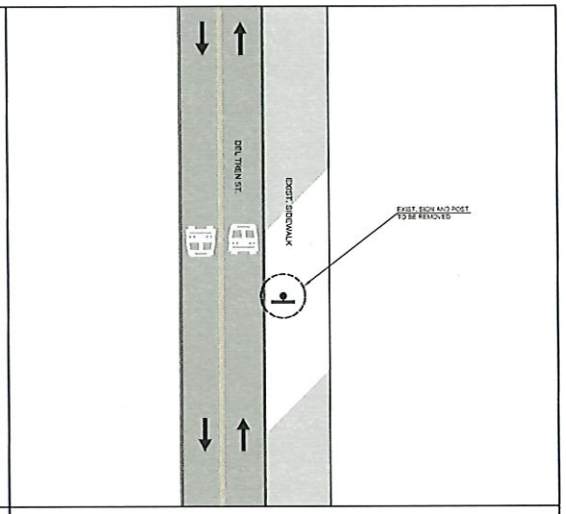


PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

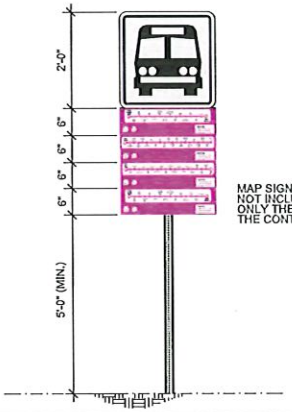


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#22



EXIST. CONDITIONS - ROUTE 21 | B.S.#22

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FIRES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK AREA, AWAY FROM PAS. REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 1.85 M.

LOCATION PLAN
SCALE 1:20,000
18°27'49.85"N , 66° 5'44.16"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18 584, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. Asimismo, certifico que he tenido que dar fiel cumplimiento a las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se me haya producido por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y daños a la parte OCPR.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18584PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #22

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN INT. SAN JUAN BAUTISTA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195343
SAN JUAN, PR 00919-5343

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.22	SHEET NO. 56 OF 77

ROUTE 21 | BUS STOP #23

PHOTO - 1

PHOTO - 2

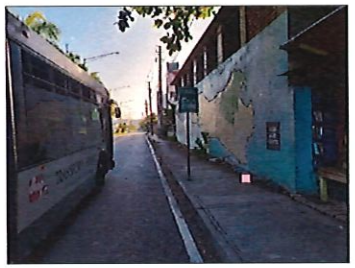
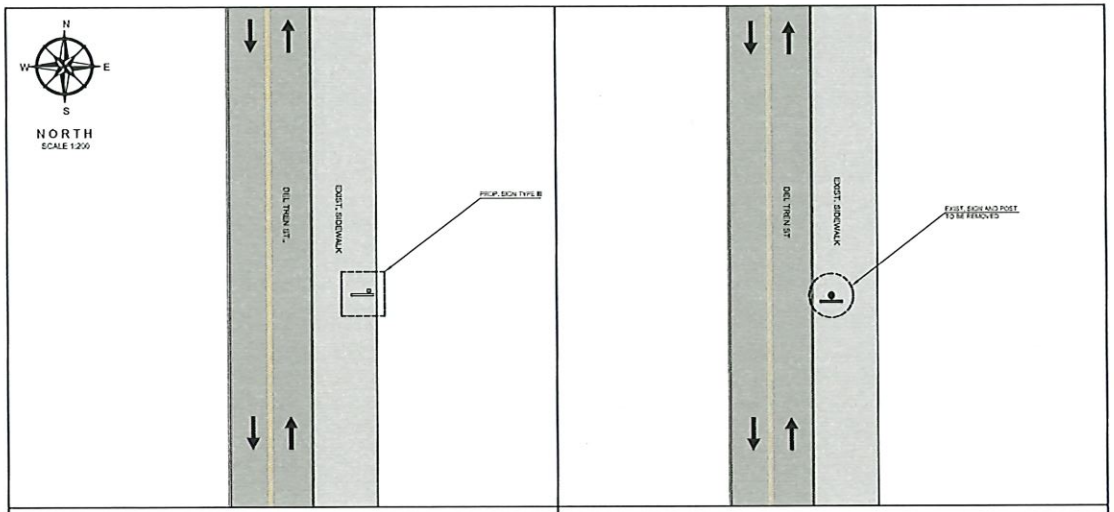
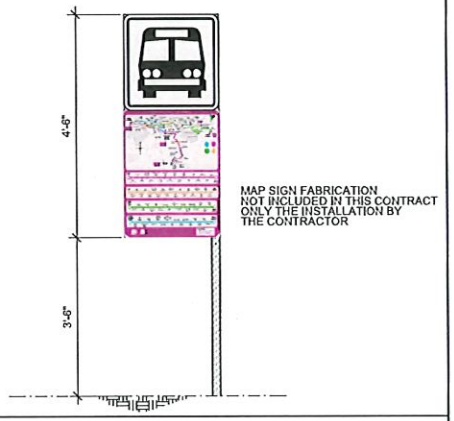


PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#23

EXIST. CONDITIONS - ROUTE 21 | B.S.#23



PROPOSED SIGN TYPE III

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FIBER PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST, THESE STRUCTURES SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED CANTILEVER SIGN IN THE SIDEWALK NEXT TO THE WALL PROPERTY, REFER TO PLAN OF B.S.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 1.83 M.

LOCATION PLAN
SCALE 1:20,000
18°27'50.21"N , 66° 5'48.66"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez Ingeniero, licencia 18181, certifico que soy el profesional que certificó, diseñó y preparó estos planos y las especificaciones complementarias. Tambien certifico que he tomado por dichos planos y especificaciones cumplir con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamentación y Código de Construcción vigentes de las Agencias Juntas Reglamentadoras y Corporaciones Públicas por jurisdicción. Reconozco que cualquier omisión falsa o falsificación de los hechos que se hayan producido por desconocimiento o por negligencia ya sea por mi, mis agentes o empleados o por otras personas por mi consideradas me hacen responsable de cualquier acción jurídica y disciplinaria por la OGPe.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18181PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #23

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN AFTER MATÍAS LEDESMA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

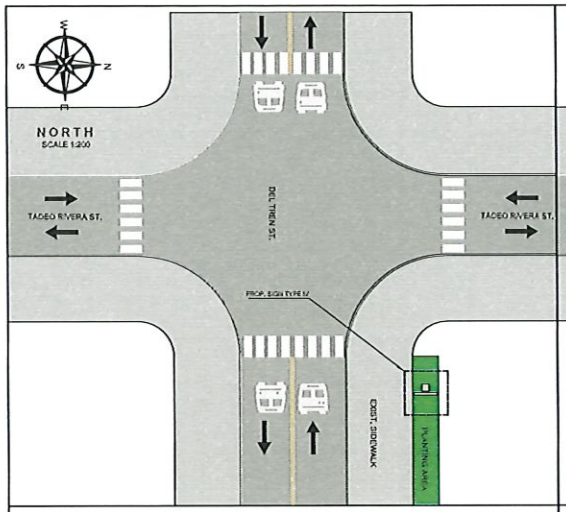
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.23	SHEET NO. 57 OF 77

ROUTE 21 | BUS STOP #24

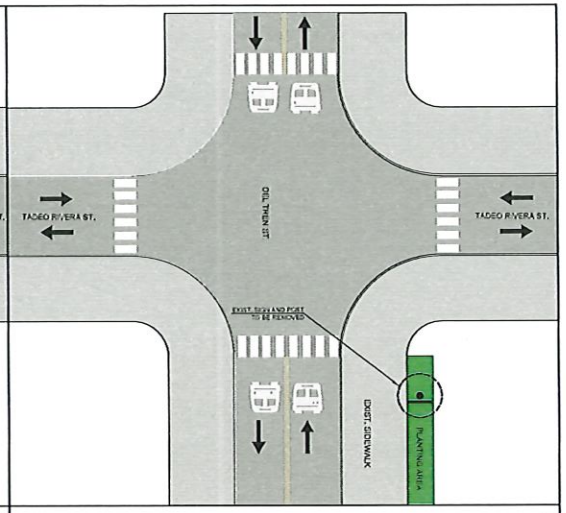
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#24

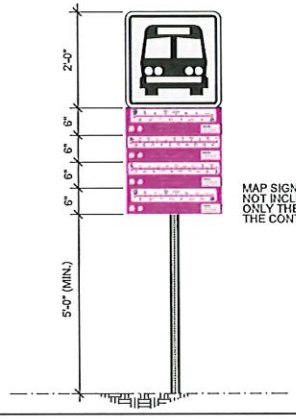


EXIST. CONDITIONS - ROUTE 21 | B.S.#24

2.5 0 5 15
SCALE 1:200

LOCATION PLAN 18°27'50.68"N , 66° 5'53.81"W
SCALE 1:20,000

AERIAL PHOTO GOOGLE EARTH
SCALE 1:1,000 VERSION: 7.3.4.8642 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- FRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND TREE PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURES SHALL BE DELIVER TO THE FRMSA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo Hernan E. Lopez Baez, Ingeniero licencia 18 [illegible] certifico que soy el profesional con certificación de diseño y preparé estos planos y las especificaciones cumpliendo todas, tomando en cuenta y en [illegible] que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se me hayan producido por desconocimiento o por negligencia pueden por mí o mis agentes o empleados o por otras personas con el procedimiento me hacer responsable de cualquier acción jurídica [illegible] por la OGPe.

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INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #24

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN INT. TADEO RIVERA ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION

DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.24	SHEET NO. 58 OF 77

ROUTE 21 | BUS STOP #25

PHOTO - 1

PHOTO - 2

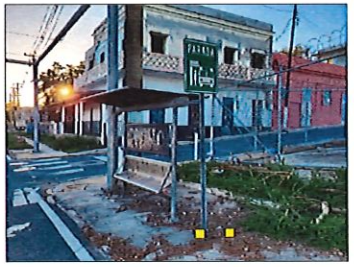
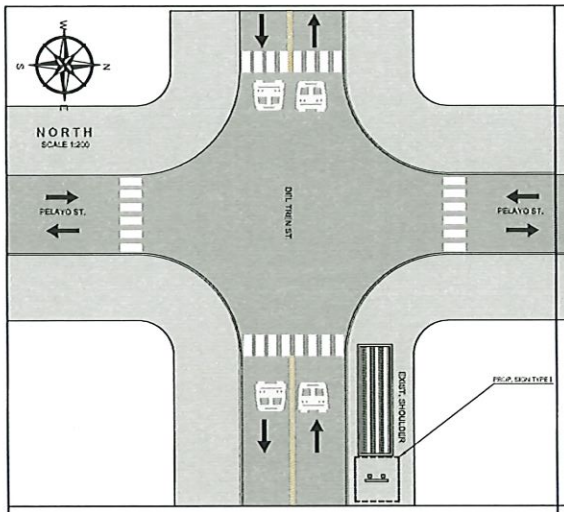
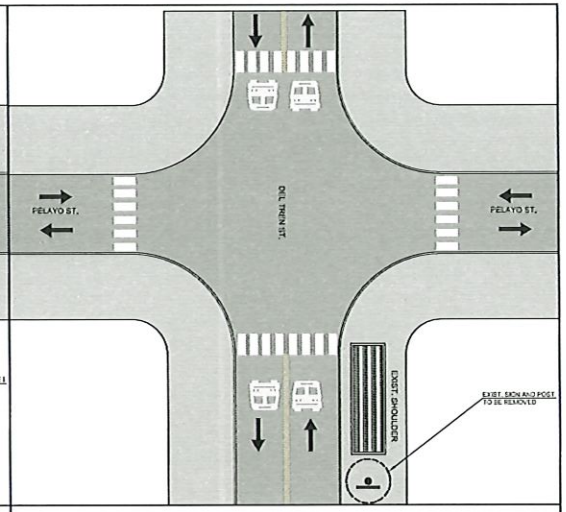


PHOTO - 3: PROPOSED SIGN LOCATION

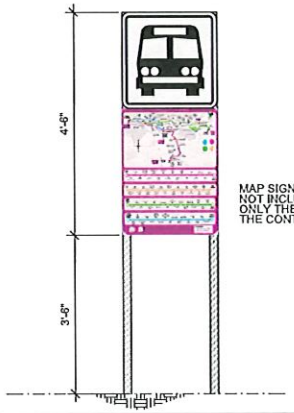


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#25



EXIST. CONDITIONS - ROUTE 21 | B.S.#25

2.5 0 5 15
SCALE 1:200



MAP SIGN FABRICATION
NOT INCLUDED IN THIS CONTRACT
ONLY THE INSTALLATION BY
THE CONTRACTOR

PROPOSED SIGN TYPE I

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMBA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND FIBER PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND TRAFFIC POST. THESE STRUCTURE SHALL BE DELIVER TO THE PRMBA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE LEVEL OF THE EXISTING AERIAL UTILITIES IN THE AREA BEFORE THE WORK PROCEDURES.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 1.83 M.
7. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE SIDEWALK, REFER TO PHOTO #3.

LOCATION PLAN
SCALE 1:20,000
18°27'51.02"N , 66° 6'0.51"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado 18154, certifico que soy el profesional de certificación, diseño y preparé estos planos y las especificaciones complementarias. Tambien certifico que en el diseño de estos planos y especificaciones se cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Codigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Publicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia que sea por mi, mis agentes o empleados, o por otras personas con el procedimiento me hacer responsable de cualquier acción jurídica y disciplinaria por la OGPe.

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Gurabo, PR 00778
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INGENIERO LICENCIADO
PUERTO RICO
HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #25

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN BEFORE PELAYO ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.25	SHEET NO. 59 OF 77

ROUTE 21 | BUS STOP #26

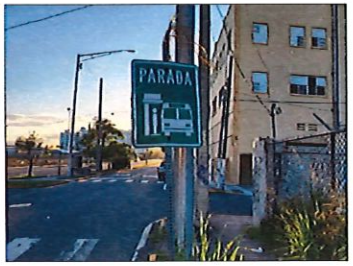


PHOTO - 1

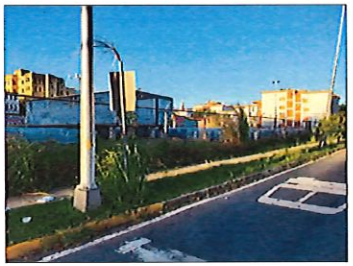
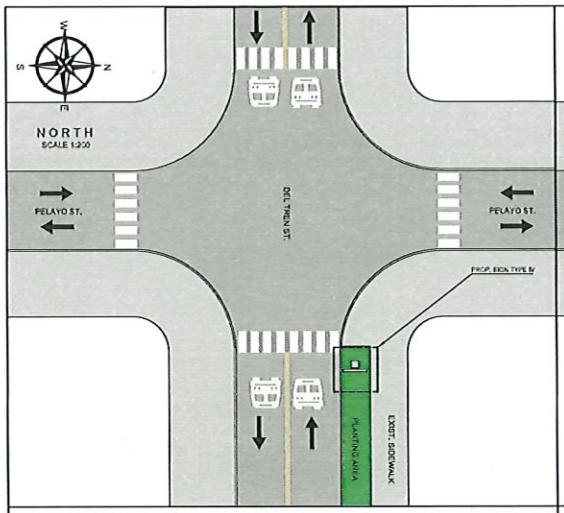
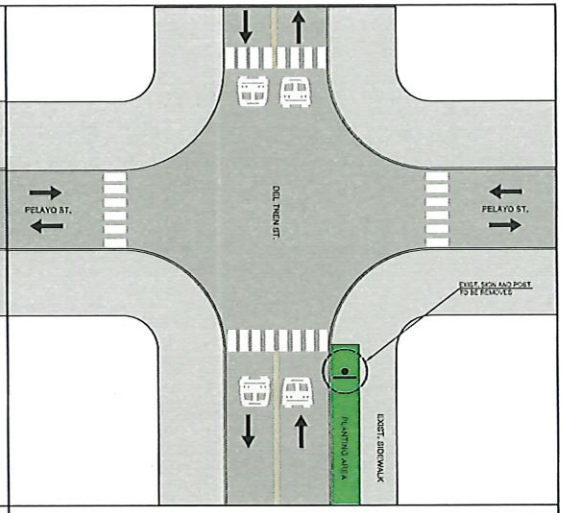


PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION



PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#26

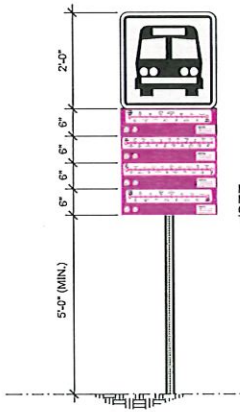


EXIST. CONDITIONS - ROUTE 21 | B.S.#26

2.5 0 5 15
SCALE 1:200

LOCATION PLAN
SCALE 1:20,000
18°27'52.46"N , 66° 6'11.35"W

AERIAL PHOTO
SCALE 1:1,000
GOOGLE EARTH
VERSION: 7.3.4.8642 PRO



MAP SIGN FABRICATION NOT INCLUDED IN THIS CONTRACT ONLY THE INSTALLATION BY THE CONTRACTOR

PROPOSED SIGN TYPE IV

NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRIMA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN AND THATIC POST, THESE STRUCTURE SHALL BE DELIVER TO THE PRIMA PERSONNEL.
4. THE CONTRACTOR SHALL REMOVE THE EXISTING POST FOUNDATION.
5. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN THE PLANTING AREA, REFER TO PHOTO #3.
6. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.60 M.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18 [illegible] certifico que soy el profesional con certificación de diseño y preparé estos planos y las especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables a la Reglamento y Código de Construcción vigentes de las Agencias, Juntas, Reglamentos Internos o Corporaciones Públicas por jurisdicción. Reconozco que cualquier error o falta o omisión de los hechos o de los datos provistos por desconocimiento o por negligencia que sea por mí, mis agentes o empleados o por otras personas con el consentimiento mío hacen responsable de cualquier acción judicial y daños que la OCPR.

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HERNAN E. LOPEZ BAEZ
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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. # [illegible]

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #26

FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN INT. VALDÉS ST.
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195343
SAN JUAN, PR 00919-5343

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.26	SHEET NO. 60 OF 77

ROUTE 21 | BUS STOP #27

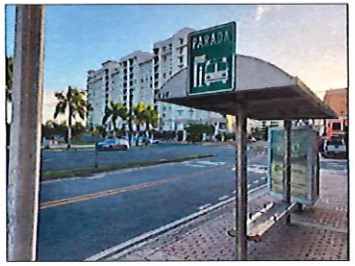
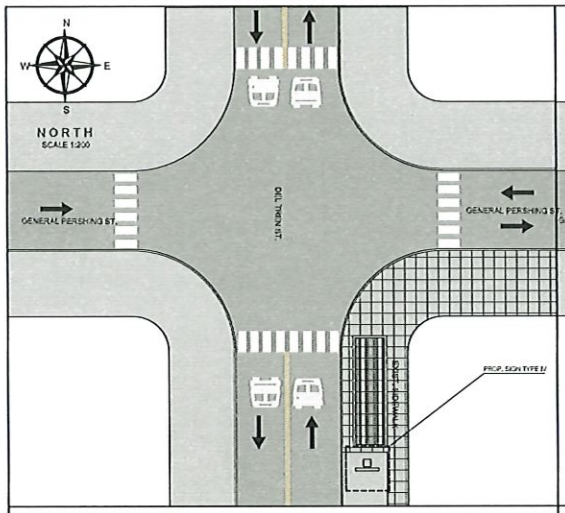


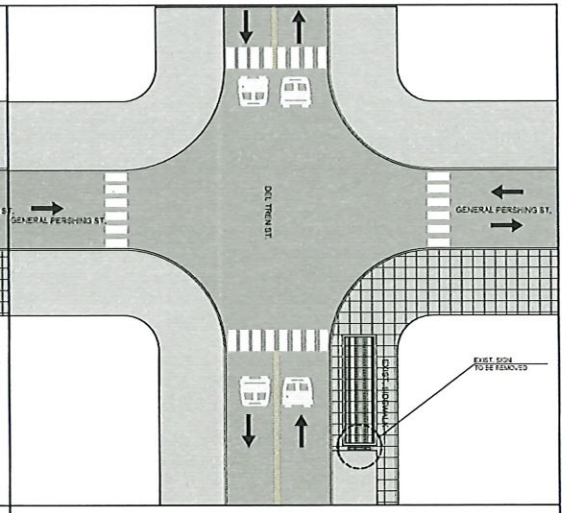
PHOTO - 1

PHOTO - 2

PHOTO - 3: PROPOSED SIGN LOCATION

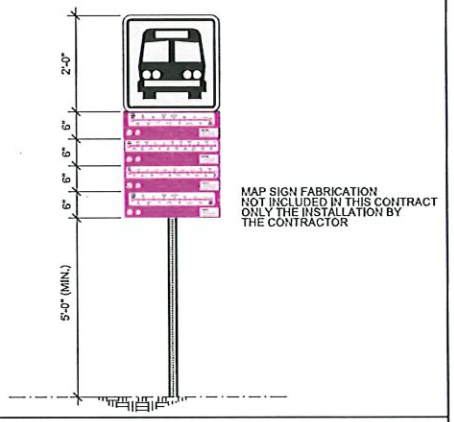


PROPOSED IMPROVEMENTS - ROUTE 21 | B.S.#27



EXIST. CONDITIONS - ROUTE 21 | B.S.#27

2.5 0 5 15
SCALE 1:200



PROPOSED SIGN TYPE IV

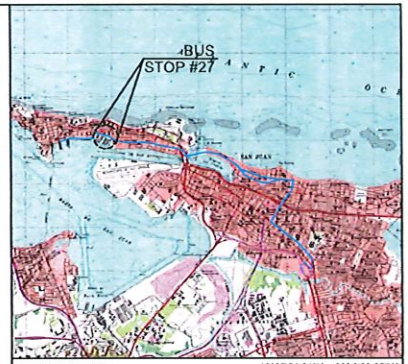
NOT TO SCALE

LEGEND:

- PROP. SIGN TYPE I
- PROP. SIGN TYPE II
- PROP. SIGN TYPE III
- PROP. SIGN TYPE IV
- EXIST. SIGN
- PRMSA EXCLUSIVE LANE (AMA LANE)
- TRAFFIC DIRECTION

NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE EXCAVATION, DEMOLITION AND PIPES PERMITTING FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PRIOR THE BEGINNING OF EACH WORK SITE DURING THE PROJECT.
2. THE CONTRACTOR SHALL CONSULT THE PROJECT ENGINEER BEFORE THE INSTALLATION OF EACH STRUCTURE.
3. THE CONTRACTOR SHALL REMOVED THE EXISTING SIGN. THESE STRUCTURE SHALL BE DELIVER TO THE PRMSA PERSONNEL.
4. THE CONTRACTOR SHALL INSTALL THE PROPOSED SIGN IN SIDEWALK SECTION, REFER TO PHOTO #3.
5. THE MINIMUM DISTANCE OF THE LATERAL LOCATION OF THE EDGE OF THE SIGN TO THE EXISTING ROAD CURB SHALL BE 0.50 M.



LOCATION PLAN
SCALE 1:20,000

18°27'54.81"N , 65° 6'20.27"W

AERIAL PHOTO
SCALE 1:1,000

GOOGLE EARTH
VERSION: 7.3.4.8542 PRO

Yo Hernan E. Lopez Baez, Ingeniero, licencia 18124, certifico que soy el profesional con jurisdicción, diseño y preparé estos planos y las especificaciones cumpliendo con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Código de Construcción Vigentes de los Agencias, Juntas, Reglamentadoras o Corporaciones Públicas con jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se hayan producido por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados o por otras personas con el consentimiento, me hacen responsable de cualquier acción jurídica y daños que la OCPR.

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BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21 | BUS STOP #27

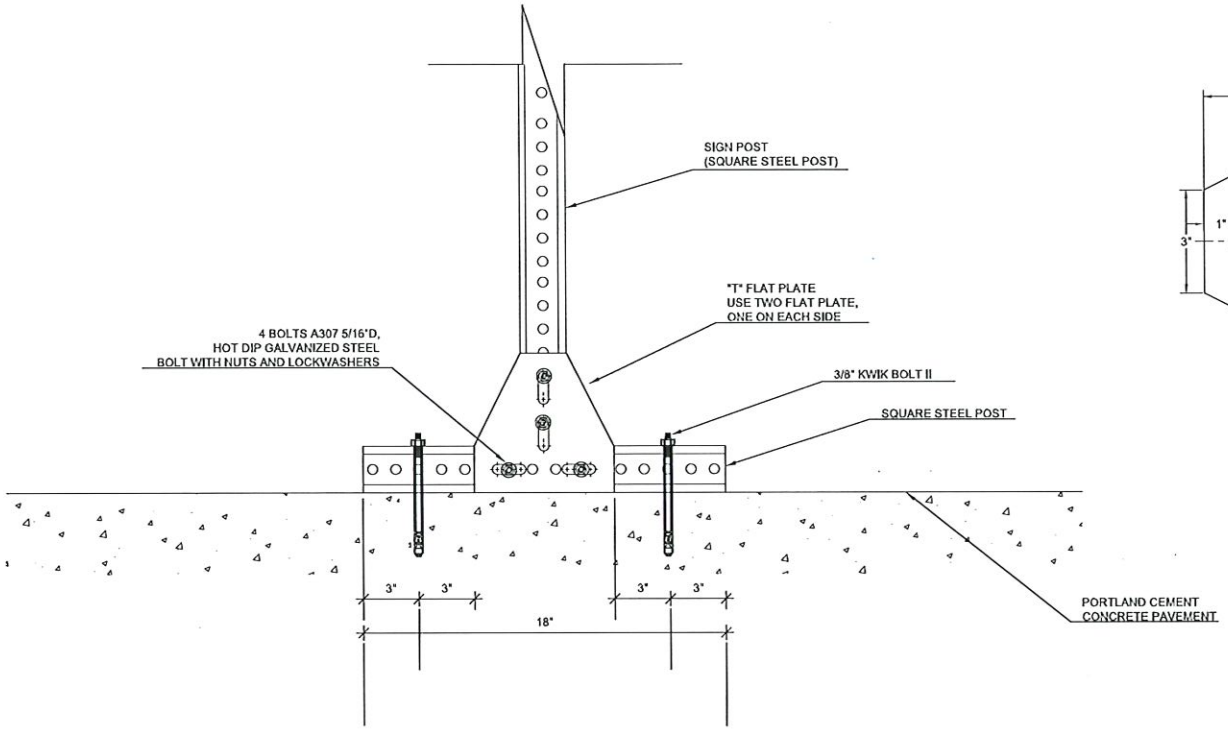
FROM SAGRADO CORAZÓN TO SAN JUAN
EXCLUSIVE LANE EL TREN FRONT VETERAN PUERTO RICAN'S PARKING
MUNICIPALITY OF SAN JUAN

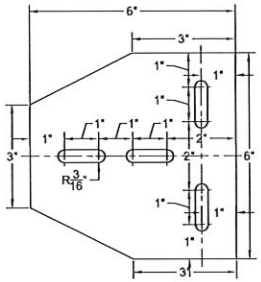
AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

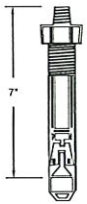
REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-2.27	SHEET NO. 61 OF 77

ROUTE 21 | BUS STOPS





"T" FLAT PLATE



3/8" KWIK BOLT II AS
MANUFACTURED BY HILTI

GENERAL NOTES:

1. THE STEEL FLAT PLATE SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A570 GRADE 33 OR ASTM A36.
2. AFTER ALL PUNCHING, DRILLING, STAMPING AND WELDING IS COMPLETE, THE STEEL FLAT PLATE SHALL BE ZINC-COATED BY THE HOT-DIP PROCESS ACCORDING TO AASHTO M111 (ASTM A123).
3. STEEL FLAT PLATE THICKNESS SHALL BE 1/8".
4. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST CONNECTIONS AS A SUBSIDIARY OBLIGATION.

Yo, Hernan E. Lopez Baez, Ingeniero Licencia # 18 54, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de los Agencias, Juntas Reglamentarias o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia de mi parte, más algunas o verificadas, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la ley.

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LIC. 18-54PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - INSTALATION TO CONCRETE SLAB

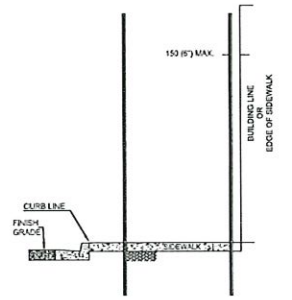
FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

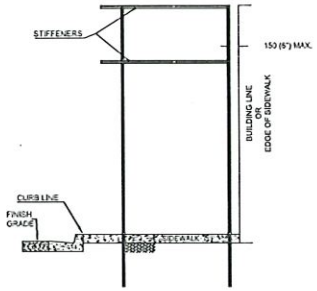
AUTORIDAD
METROPOLITANA DE AUTOBUSES

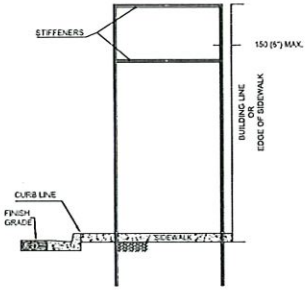
METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-3.01	SHEET NO. 61 OF 77

ROUTE 21 | BUS STOPS

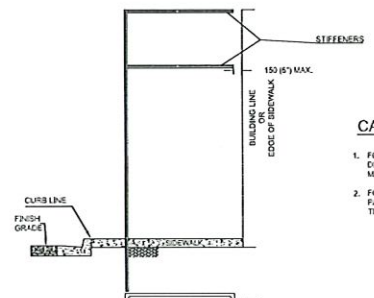


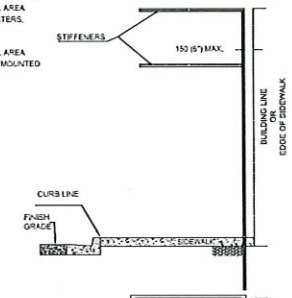




H SUPPORT MOUNTING

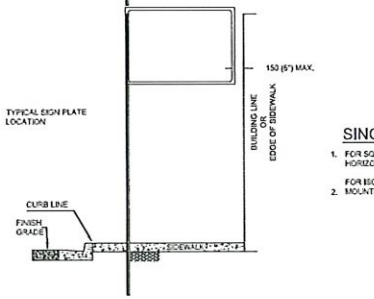
1. FOR SIGN PANELS WITH A SIGN PANEL AREA EQUAL OR LESS THAN 2.6 SQUARE METERS, 28 SQUARE FEET.
2. FOR SIGN PANELS WITH A SIGN PANEL AREA GREATER THAN 28 SQF USE GROUND MOUNTED BREAK-AWAY INSTALLATION.

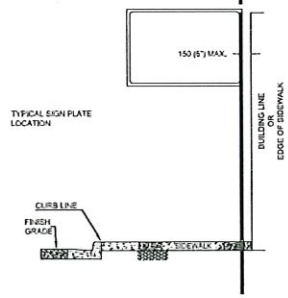




CANTILEVER SUPPORT MOUNTING

1. FOR SQUARE, RECTANGULAR, PENTAGONAL, OCTAGONAL, DIAMOND AND EQUILATERAL TRIANGLE SIGN PANEL WITH A MAXIMUM HORIZONTAL WIDTH GREATER THAN 600 (24").
2. FOR OCTAGONAL, DIAMOND, TOURISTIC AND CIRCULAR SIGN PANEL WITH A MAXIMUM HORIZONTAL WIDTH EQUAL OR LESS THAN 600 (24").



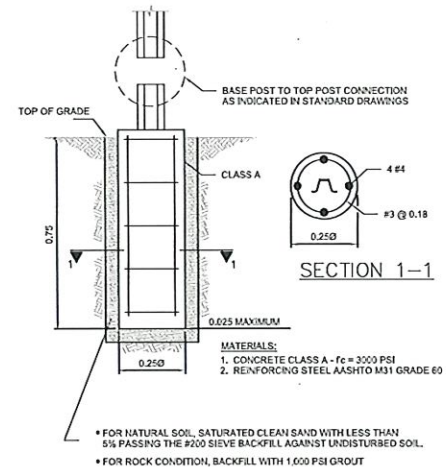


SINGLE SUPPORT MOUNTING

1. FOR SQUARE AND RECTANGULAR SIGN PANEL WITH A MAXIMUM HORIZONTAL WIDTH EQUAL OR LESS THAN 600 (24").
2. FOR ISOSCELES TRIANGLE SIGN PANEL USE SINGLE SUPPORT MOUNTING.

GENERAL NOTES:

1. VERTICAL CLEARANCE TO BOTTOM OF LOWEST SIGN PANEL SHALL BE 2.130 (7'-0") TO 2.300 (7'-6") FROM SIDEWALK GRADE.
2. THE CONTRACTOR MAY USE STEEL FLANGED CHANNEL POST OR SQUARE STEEL POST.
3. THE FOUNDATIONS SHALL BE AS INDICATED FOR STEEL FLANGED CHANNEL AND SQUARE STEEL POST FOUNDATION DETAILS FOR SIDEWALK OR CONCRETE PAVED AREA STANDARD DRAWING.
   TOP POST TO BASE POST CONNECTION SHALL BE AS INDICATED FOR STEEL FLANGED CHANNEL AND SQUARE STEEL POST CONNECTION DETAILS STANDARD DRAWING.
4. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENERS CONNECTION.
5. ALL VERTICAL POSTS SHALL BE CONTINUOS IN LENGTH.
6. THE MAXIMUM AREA PERMITTED FOR SINGLE AND CANTILEVER SUPPORT MOUNTING SHALL BE 6 SQUARE FEET.
7. STIFFENERS SHALL BE SQUARE POST, STEEL FLANGED CHANNEL OR ALTERNATE STIFFENER.
8. MINIMUM OFFSET FROM CURB LINE TO SIGN PANEL SHALL BE 600 (24") MIN.
9. THE CONTRACTOR SHALL LOCATE POST AND STIFFENERS AS PER TYPICAL POST LOCATION FOR MOUNTING ON SIDEWALK AREAS WITH OR WITHOUT PLANTING STRIP STANDARD DRAWINGS



NOTE:
ALL DIMENSIONS SHOW ARE IN METERS UNLESS OTHERWISE SPECIFIED.

Yo, Hernan E. Lopez Baez, Ingeniero licencia 18-54, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. También certifico que el diseño que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. Reconozco que cualquier desviación taxativa o modificación de los mismos que se haya producido por desconocimiento o por negligencia de mi parte, o de agentes o empleados, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la CEPR.

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LIC. 18-54PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - INSTALATION TO CONCRETE SLAB
STEEL FLANGED CHANNEL

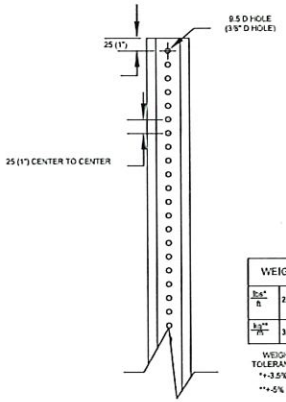
FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

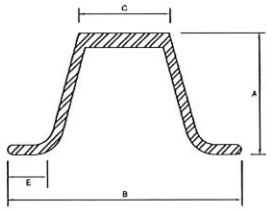
AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-3.02	SHEET NO. 62 OF 77

ROUTE 21 | BUS STOPS





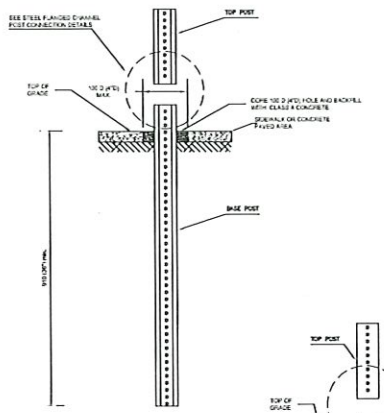
WEIGHT			NOMINAL DIMENSIONS			
			"A"	"B"	"C"	"E"
lbs/ft* ft	2.00	IN	1.45 TO 1.55	3.00 TO 3.15	1.25 TO 1.30	0.62 TO 0.67
kg/m** m	3.00	MM	37 TO 38.5	77.5 TO 79.5	31.75 TO 32.5	15.8 TO 17.0

WEIGHT TOLERANCES
*+-3.5%
**+-5%

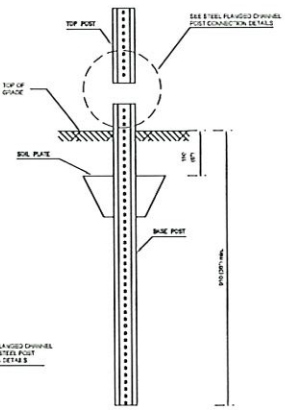
GENERAL NOTES:

1. STEEL POST SHALL CONFORM TO THE REQUIREMENTS OF ASTM A499, GRADE 60 OR MARION STEEL COMPANY GRADE SP-80.
2. AFTER FABRICATION, POST SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
3. THE BASE POST MAY HAVE SLOTTED HOLE 9.5 X 13 FOR THE FIRST AND FIFTH HOLE.

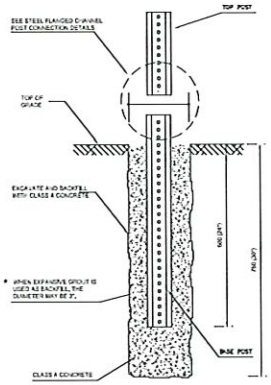
STEEL FLANGED CHANNEL
TOP OR BASE POST



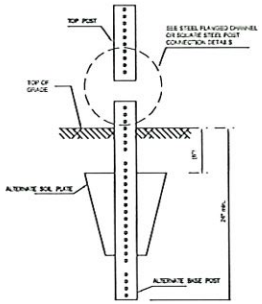
SIDEWALK OR CONCRETE
PAVED AREA



NATURAL SOIL
USE SOIL PLATE



ROCK CONDITION



NATURAL SOIL
ALTERNATE BASE POST AND SOIL PLATE

GENERAL NOTES:

1. THE CONTRACTOR SHALL USE APPROPRIATE SIZE DRIVE CAP TO DRIVE POSTS.
2. FOR SIDEWALK OR CONCRETE PAVED AREA, THE CONTRACTOR SHALL CORE SIDEWALK (3.5 KSI) AND BACKFILL WITH CLASS A CONCRETE AS A SUBSIDIARY OBLIGATION.
3. FOR ROCK CONDITION, THE CONTRACTOR SHALL EXCAVATE (6" DIAMETER HOLE) AND BACKFILL WITH CLASS A CONCRETE OR EXCAVATE (3" DIAMETER HOLE) AND BACKFILL WITH EXPANSIVE GROUT AS A SUBSIDIARY OBLIGATION.

NOTE APPLICABLE TO ALL SMALL TRAFFIC SIGNS DRAWINGS:

1. ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
   DIMENSIONS GIVEN IN METERS SHALL BE INDICATED WITH: M
   DIMENSIONS GIVEN IN INCHES SHALL BE INDICATED WITH: "
   DIMENSIONS GIVEN IN FEET SHALL BE INDICATED WITH: '
2. SYSTEMS IN ENGLISH UNITS ARE ACCEPTABLE.
3. DIAMETER SHALL BE INDICATED WITH "D"
4. REFLECTIVE SHEETING USED ON ALL SIGNS SHALL CONFORM TO ASTM D4956, TYPE III. THE BACKING SHALL BE CLASS 1 OR 2.

NOTE APPLICABLE TO ALL BASE TO TOP POST CONNECTION DETAILS:

1. CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS WHO WISH TO INCLUDE THEIR PRODUCTS INTO THE APPROVED LISTING OF COUPLINGS BETWEEN THE BASE AND TOP POST MUST SUBMIT THE FOLLOWING INFORMATION FOR CONSIDERATION BY THE AUTHORITY: COPY OF FHWA LETTER OF ACCEPTANCE THAT THE DEVICE COMPLIES WITH THE NCHRP REPORT 350 REQUIREMENTS, FULL DESCRIPTION AND DRAWINGS OF THE COUPLER INCLUDING DIMENSIONS OF ALL COMPONENTS AND COMPLETE MATERIAL DESCRIPTION OF THE BASE METAL, GALVANIZING, FASTENERS AND OTHER PERTINENT INFORMATION.

Yo, Hernán E. López Báez Ingeniero Número 18154, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones correspondientes. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia que me sea por mí o de agentes o empleados, y por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y deslindo de ella por la OGPe.

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Licensed
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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL DETAILS AND FOUNDATIONS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

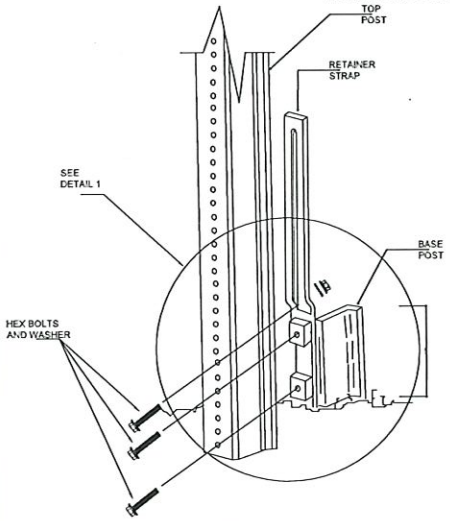
AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

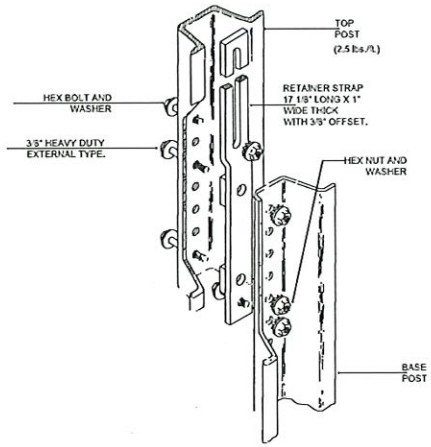
REVISION
DATE: JUNE 2022
CHECKED BY: BEV / DRAW BY: ABZ
DWG. TYPE: TS-3.03 / SHEET NO. 63 OF 77

EZE-ERECT SYSTEM

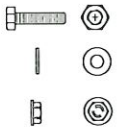
AS MANUFACTURED BY FRANKLIN INDUSTRIES



EZE-ERECT CONNECTION DETAIL

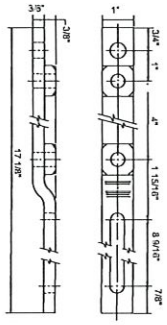


DETAIL 1



CLASS 12.9 HEX BOLT, WASHER AND NUT

AS SPECIFIED BY FRANKLIN INDUSTRIES



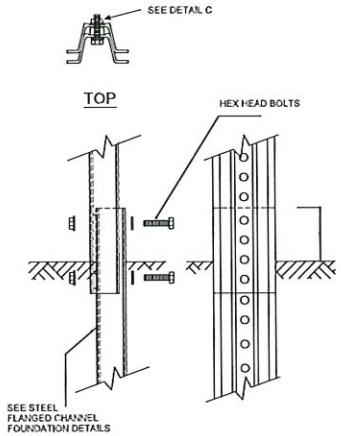
RETAINER-SPACER STRAP

GENERAL NOTES FOR EZE-ERECT SIGN SUPPORT SYSTEM

1. THE RETAINER STRAP SHALL BE GALVANIZED BY THE HOT DIP PROCESS CONFORMING TO ASTM A123.
2. HEX BOLT SHALL BE MANUFACTURED ACCORDING TO THE GEOMETRIC SPECIFICATIONS INCLUDED IN ANSI B18.2.3.5M THREADS SHALL CONFORM TO ANSI B1.13M FOR CLASS 6g THREADS.
3. MATERIALS FOR BOLTS SHALL CONFORM TO ASTM F568 FOR CLASS 12.9 (1220 MPA TENSILE STRENGTH AND 1100 MPA YIELD STRENGTH). BOLT HEAD SHALL BE MARKED AS SPECIFIED IN ASTM F568 SECTION 9 WITH THE MANUFACTURER'S IDENTIFICATION SYMBOL AND THE SYMBOL "12.5".
4. NUTS SHALL BE MANUFACTURED ACCORDING TO THE DIMENSIONS AND TOLERANCES IN ANSI B18.2.4.4M FOR METRIC HEX FLANGE NUTS. THE M8x1.25 THREADS SHALL CONFORM TO ANSI B1.13M FOR CLASS 6H.
5. NUTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M291M FOR CLASS 12 NUTS. PLAIN ROUND STEEL WASHERS SHALL BE MANUFACTURED ACCORDING TO THE DIMENSIONAL AND TOLERANCES IN ANSI B18.22M FOR REGULAR SERIES WASHERS.
6. BOLTS, NUTS AND WASHER SHALL BE ZINC COATED ACCORDING TO AASHTO M232.
7. THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER INSTALLATION INSTRUCTIONS.

LAP SPLICE BREAKAWAY SYSTEM

AS MANUFACTURED BY MARION STEEL COMPANY

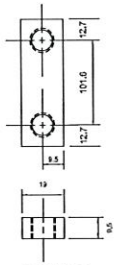


DETAIL A

SPLICE CONNECTION

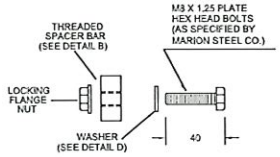
DETAIL D

PLAIN ROUND STEEL WASHER



DETAIL B

LAP SPLICE SPACER BAR (PROPRIETARY)



DETAIL C

CONNECTORS (PROPRIETARY)

GENERAL NOTES FOR LAP SPLICE BREAKAWAY SYSTEM

1. THE SPACER BAR SHALL BE FABRICATED FROM HOT ROLLED CARBON STEEL BARS CONFORMING TO AASHTO M183M.
2. SPACER BAR SHALL BE DRILLED AND TAPPED WITH M 8 X 1.25 THREADS AS SPECIFIED IN ANSI B1.13M FOR CLASS G THREADS.
3. SPACER BAR SHALL BE SILVER COLORED AS PER MARION STEEL.
4. SPLICE HARDWARE SHALL BE ZINC PLATED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM B633.
5. HEX BOLT SHALL BE IDENTIFIED BY HEAD MARKINGS OF "M185" AS WELL AS A RED FINISH.
6. PLAIN ROUND STEEL WASHERS SHALL BE MANUFACTURED ACCORDING TO THE DIMENSIONS AND TOLERANCES IN ANSI B18.22M FOR REGULAR SERIES WASHER.
7. PLAIN ROUND STEEL WASHER SHALL BE ZINC-COATED ACCORDING TO AASHTO M232 FOR CLASS D.

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado #18514, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. También, certifico que el diseño que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Junta Reglamentadora y Corporaciones Públicas con Jurisdicción. Asimismo que cualquier deficiencia, falta o ilustración de las normas que se hayan producido por desconocimiento o por negligencia que no sea mía, me exonera y emplazados a por otras personas con el conocimiento, no tomar responsabilidad de cualquier acción judicial y/o delictiva por el 100%.

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HERNAN E. LOPEZ BAEZ, PE/MEM
LIC. 18-54PE

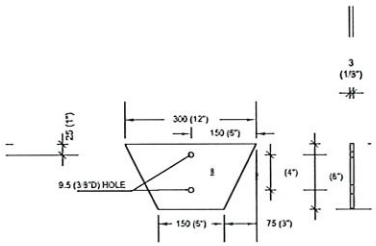
BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL DETAILS AND FOUNDATIONS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

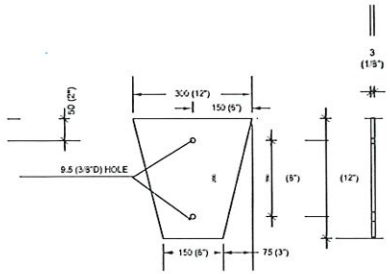
AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

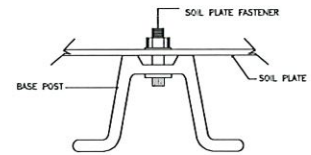
REVISION
DATE: JUNE 2022
CHECKED BY: BEV / DRAW BY: ABZ
DWG. TYPE: TS-3.04 / SHEET NO. 64 OF 77



SOIL PLATE

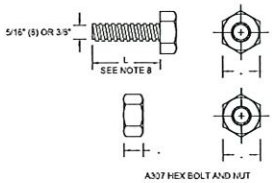


ALTERNATE SOIL PLATE



FLANGED CHANNEL POST

METHOD OF ATTACHING SOIL PLATE TO POST



SOIL PLATE FASTENER

GENERAL NOTES:

1. SOIL PLATE SHALL BE MANUFACTURED ACCORDING TO AASHTO M183.
2. AFTER ALL PUNCHING, DRILLING, STAMPING AND WELDING IS COMPLETE, THE SOIL PLATE SHALL BE ZINC-COATED BY THE HOT-DIP PROCESS ACCORDING TO AASHTO M111 (ASTM A 123), THICKNESS GRADE 65.
3. THE CONTRACTOR SHALL ADJUST THE LENGTH OF BOLT. THE BOLT SHALL PENETRATE THE ENTIRE THICKNESS OF THE NUT.
4. THE CONTRACTOR SHALL USE TWO (2) SOIL PLATE FASTENERS FOR ATTACHING SOIL PLATE TO BASE POST.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia # 18154, certifico que soy el profesional que contribuyó, diseñó y/o preparó estos planos y las especificaciones complementarias. También certifico que estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier desviación leve o falsificación de los hechos que se han provisto por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por lo menos.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL
SOIL PLATE DETAILS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
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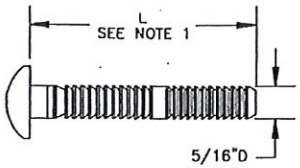
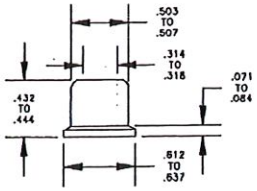


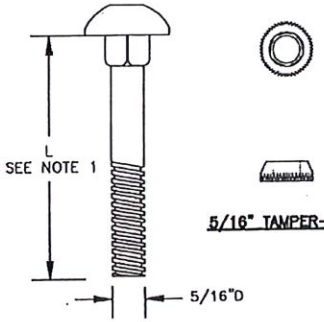
MAGNA GRIP FASTENER
AS MANUFACTURED BY HUCK
PART NUMBER IDENTIFICATION: MGPB-E 5/16" - 22 G



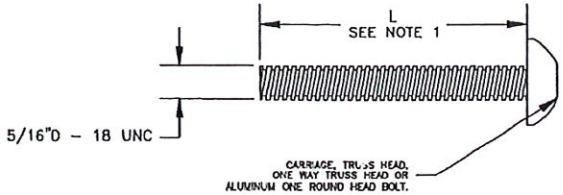
MAGNA GRIP COLLAR
AS MANUFACTURED BY HUCK
PART NUMBER IDENTIFICATION: MGC-F 5/16" G

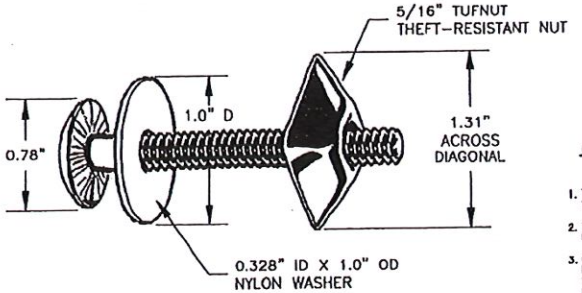
ACCEPTABLE FEATURES: SUBSTANTIALLY FLUSH WITH END
FOR MAGNA GRIP FASTENER

UNACCEPTABLE FEATURES
FOR MAGNA GRIP FASTENER



5/16" TAMPER-NUT





TUFBOLT SYSTEM - TBS 25
AS MANUFACTURED BY THE TUFNUT WORKS
A DIVISION OF SANTA FE SYSTEMS, INC.

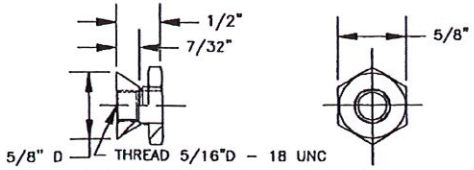
ALUMINUM VANDAL RESISTANT
GENERAL NOTES

1. THE CONTRACTOR SHALL ADJUST THE LENGTH OF BOLT ACCORDING TO THE POST TYPE. THE BOLT SHALL PENETRATE THE ENTIRE THICKNESS OF THE NUT.
2. THE CONTRACTOR SHALL USE A NYLON, NEOPRENE OR FIBER WASHER BETWEEN REFLECTIVE SHEATHING SIGN FACE AND THE BOLT HEAD.
3. CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS WHO WISH TO INCLUDE THEIR PRODUCTS INTO THE APPROVED LISTING OF FASTENERS FOR SIGN PLATES MUST SUBMIT THE FOLLOWING INFORMATION FOR CONSIDERATION BY THE AUTHORITY: FULL DESCRIPTION AND DRAWINGS OF THE FASTENERS AND COMPLETE MATERIAL DESCRIPTION, GALVANIZING AND OTHER PERTINENT INFORMATION.
4. FASTENER DETAILS ARE FOR ILLUSTRATIVE PURPOSE ONLY.

CARRIAGE BOLT

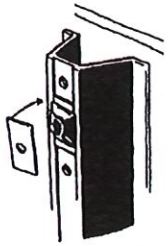
TRUSS HEAD BOLT

ONE WAY TRUSS HEAD BOLT
OR ALUMINUM ONE WAY ROUND HEAD



ALUMINUM STD THREAD VANDLGARD-NUT
VCN 138-5

AS MANUFACTURED BY SIMI FASTENING



TUFNUT MARION
POST WASHERS

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado 18154, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. Además, certifico que el diseño de estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier deficiencia o falta o falsificación de los hechos que se hace constar por desconocimiento o por negligencia es una por mí, mis agentes o empleados, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y delictiva por lo menos.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL
FOR ATTACHING SIGN PLATES TO TOP POST

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
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SAN JUAN, PR 00919-5349

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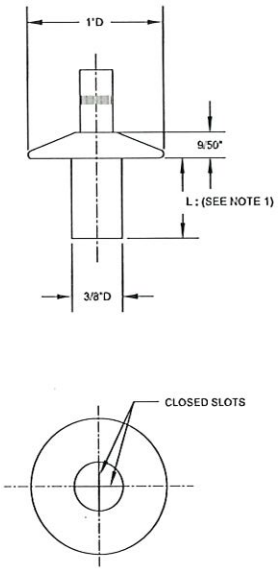
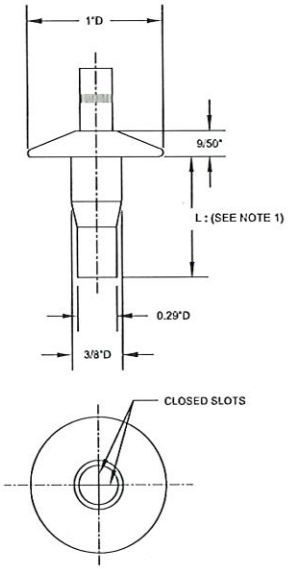


ALUMINUM SIGN RIVET - JUMBO HEAD

VCR 221
AS MANUFACTURED BY SMI FASTENING



MODIFIED ALUMINUM DRIVE RIVET

(RIVET = 2117 ALUMINUM NATURAL, PIN = 7075 ALUMINUM NATURAL)
AS MANUFACTURED BY SOUTHCO

GENERAL NOTES

1. THE CONTRACTOR SHALL ADJUST THE LENGTH OF BOLT ACCORDING TO THE POST TYPE. THE BOLT SHALL PENETRATE THE ENTIRE THICKNESS OF THE NUT.
2. THE CONTRACTOR SHALL USE A NYLON, NEOPRENE OR FIBER WASHER BETWEEN REFLECTIVE SHEATHING SIGNFACE AND THE BOLT HEAD.
3. CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS WHO WISH TO INCLUDE THEIR PRODUCTS INTO THE APPROVED LISTING OF FASTENERS FOR SIGN PLATES MUST SUBMIT THE FOLLOWING INFORMATION FOR CONSIDERATION BY THE AUTHORITY: FULL DESCRIPTION AND DRAWINGS OF THE FASTENERS AND COMPLETE MATERIAL DESCRIPTION, GALVANIZING AND OTHER PERTINENT INFORMATION.
4. FASTENER DETAILS ARE FOR ILLUSTRATIVE PURPOSE ONLY.

Yo, Hernan E. Lopez Baez Ingeniero Licenciado (#18154), certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier deficiencia, falta o infracción de las normas que se haya pretendido por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados, o por otra persona con el consentimiento, me tener responsable de cualquier acción judicial y doctrinal por la CCPR.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL
SOIL PLATE FASTENERS DETAILS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
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DATE: JUNE 2022	
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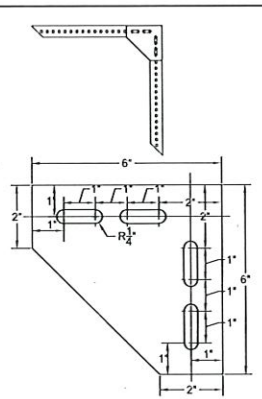
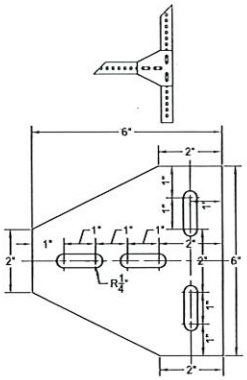
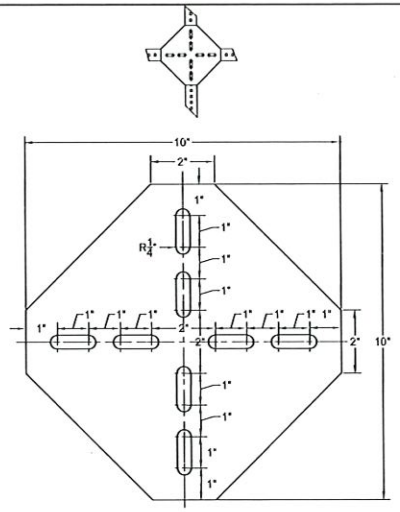


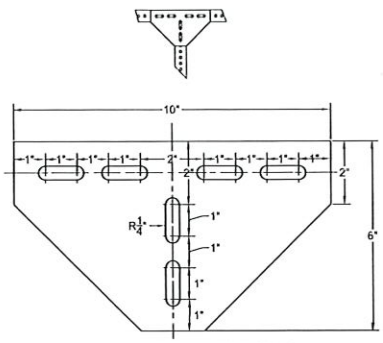
"L" FLAT PLATE



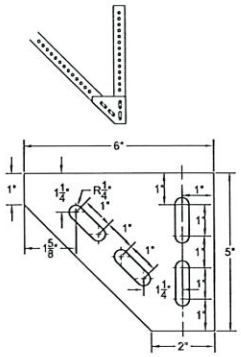
"T" FLAT PLATE



"+" FLAT PLATE

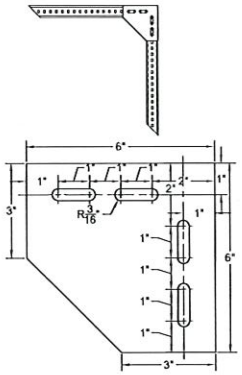


ALTERNATE "T" FLAT PLATE

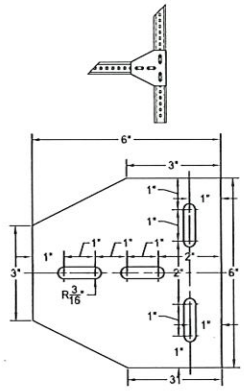


45° FLAT PLATE

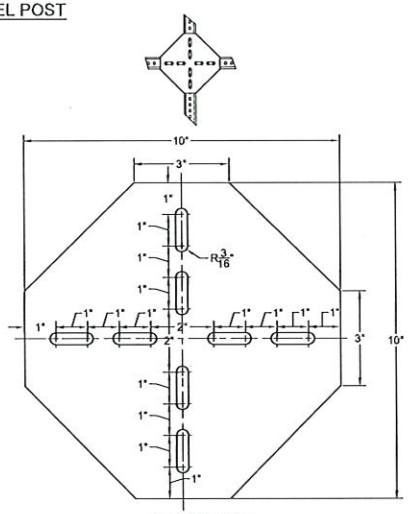
FLAT PLATE FOR SQUARE STEEL POST OR STEEL FLANGED CHANNEL POST



"L" FLAT PLATE



"T" FLAT PLATE



"+" FLAT PLATE

FLAT PLATE FOR STEEL FLANGED CHANNEL POST

GENERAL NOTES:

1. THE STEEL FLAT PLATE SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A570 GRADE 33 OR ASTM A36.
2. THE CONTRACTOR MAY USE ALUMINUM FLAT PLATE AS AN ALTERNATE. ALTERNATE FLAT PLATE SHALL CONFORM TO ASTM B-209, ALLOY 5052 H-32. THE CONTRACTOR SHALL DRILL NECESSARY HOLES TO COMPLETE INSTALLATION AS A SUBSIDIARY OBLIGATION.
3. AFTER ALL PUNCHING, DRILLING, STAMPING AND WELDING IS COMPLETE, THE STEEL FLAT PLATE SHALL BE ZINC-COATED BY THE HOT-DIP PROCESS ACCORDING TO AASHTO M111 (ASTM A123).
4. ALUMINUM OR STEEL FLAT PLATE THICKNESS SHALL BE 1/8".
5. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST AND STIFFENER CONNECTIONS AS A SUBSIDIARY OBLIGATION.
6. THE CONTRACTOR SHALL PLACE AT LEAST TWO 5/16" ALUMINUM FLAT HEAD MACHINE SCREWS WITH NUTS AND LOCK WASHER PER EACH POST.

Yo, Hernan E. Lopez Baez, Ingeniero Licencia 18134, certifico que soy el profesional que contribuyó, diseñó y preparó estos planos y las especificaciones, cumpliendo estas funciones como ingeniero que ofrece planos y especificaciones cumpliendo con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de la Reglamento y Código de Construcción Vigente de las Agencias, Juntas Reglamentarias y Corporaciones Públicas por Jurisdicción. Reconozco que cualquier deficiencia falta o ilustración de los mismos que se haya producido por desconocimiento o por negligencia, que por ello agencias o jurisdicciones, o por otras personas con reclamaciones, me hacen responsable de cualquier acción judicial y daños de ello por el 100%.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL
"L","T","+" AND"45° FLAT PLATES

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
CHECKED BY: BEV	DRAW BY: ABZ
DWG. TYPE: TS-3.08	SHEET NO. 68 OF 77

GENERAL NOTES APPLICABLE TO ALL SMALL TRAFFIC SIGNS STANDARD DRAWINGS

1. NO SPLICES IN SIGN PLATES SHALL BE PERMITTED WHEN SIGN DIMENSIONS ARE 1200 (4') X 1200 (4') MILLIMETERS OR LESS.

2. NO SPLICES IN THE REFLECTIVE SHEETING WILL BE PERMITTED WHEN THE SIGN HEIGHT IS 1200 MILLIMETERS (4') OR LESS. NO REFLECTIVE SHEETING SPLICES WILL BE PERMITTED IN DIAMOND SIGNS WITH DIMENSIONS OF 1200 MILLIMETERS (4') OR LESS. ON SIGNS WITH HEIGHTS IN EXCESS OF 1200 MILLIMETERS (4'), A SINGLE HORIZONTAL SPLICE WILL BE PERMITTED. THE SPLICE UPPER PANEL SHALL OVERLAP 3/8" MAX. THE LOWER PANEL.

3. SIGN PLATES SHALL CONFORM TO ASTM B-209, ALLOYS 5052 H-32, 5052 H-36, 5052 H-38, 5086 H-34, 5154 H-36 OR 6061 T-6.

4. ALL TOP POSTS AND BASE POSTS SHALL BE CONTINUOS IN LENGTH.

5. THE SIGN BACKGROUND, LEGEND AND BORDER SHALL BE APPLIED BY THE SILK SCREEN PROCESS, BY DIRECT APPLICATION OF CUT OUT CHARACTERS, OR BY THE APPLICATION OF ELECTRONIC CUTTABLE FILM, SERIES 1170, AS MANUFACTURED BY 3M OR ELECTRONIC CUTTABLE TRANSPARENT OVERLAY FILM, SERIES 4800, AS MANUFACTURED BY STIMSONITE. REGARDLESS OF THE METHOD OF FABRICATION, THE BACKGROUND, LEGEND AND BORDER SHALL MEET THE REFLECTIVITY STANDARDS OF ASTM D4956, TYPE III.

6. SIGN PLATES THICKNESS SHALL BE AS FOLLOWS:

MINIMUM PLATE THICKNESS IN (MM)	PLATE AREA SQF (SQM)
1/16" (1.5)	UP TO 10.8 (UP TO 1.00)
1/8" (3.175)	10.85 TO 53.8 (1.01 TO 5.00)

7. THE CONTRACTOR SHALL DRILL ALL ADDITIONAL HOLES, AS A SUBSIDIARY OBLIGATION, AS NECESSARY TO ACCOMMODATE MOUNTING REQUIREMENTS. THE HOLE DIAMETER SHALL NOT EXCEED 1/16" THE BOLT DIAMETER.

8. THE CONTRACTOR SHALL USE ON ALL BOLTS WHICH CONTACT THE REFLECTIVE SHEETING, A NYLON, NEOPRENE OR FIBER WASHER BETWEEN THE REFLECTIVE SHEETING SIGN FACE AND THE BOLT HEAD.

9. ALL BOLTS IDENTIFIED AS A307 SHALL CONFORM WITH ASTM A307 REQUIREMENTS AND BE PROVIDED WITH CORRESPONDING NUT AND WASHER. BOLTS A307 SHALL BE EITHER GRADE A OR B AND SHALL BE HOT-DIP GALVANIZED. UNLESS OTHERWISE SPECIFIED, BOLT HEAD MAY BE EITHER HEX OR CARRIAGE.

10. REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN PANEL. SIGN PANELS FABRICATED WITH REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN SUPPORT.

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado 18 54, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. Además, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia, falta o violación de los mismos que se haya generado por desconocimiento o por negligencia, ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y doy fe de ello por mi firma.

ENZO Engineering, psc.
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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18 54PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL
GENERAL NOTES

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

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DATE: JUNE 2022	
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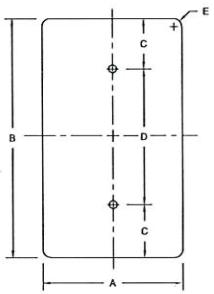
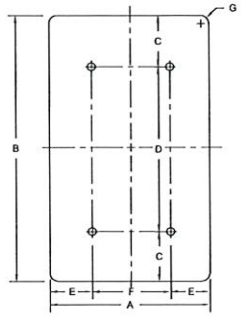


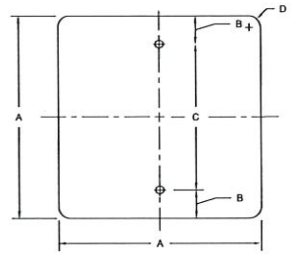
VERTICAL RECTANGLE

A	B	C	D	E
300	450	35	380	35
450	600	75	450	35
600	750	75	600	35
750	900	75	750	45



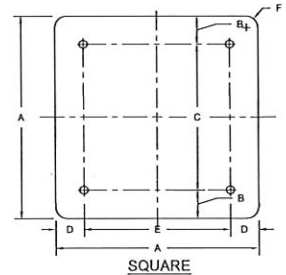
VERTICAL RECTANGLE

A	B	C	D	E	F	G
900	1200	150	900	150	600	55
1200	1500	150	1200	225	750	75



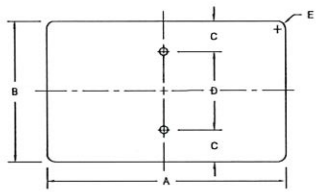
SQUARE

A	B	C	D
450	75	300	35
600	75	450	35
750	75	600	45



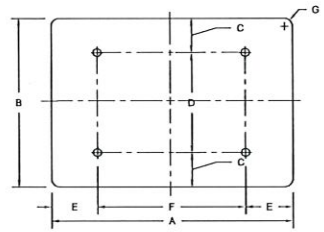
SQUARE

A	B	C	D	E	F
900	150	600	150	600	55
1200	150	900	225	750	75



HORIZONTAL RECTANGLE

A	B	C	D	E
525	375	35	305	35
600	300	70	230	35
600	450	75	300	35
750	375	70	305	35
750	600	75	450	35
900	300	70	230	35



HORIZONTAL RECTANGLE

A	B	C	D	E	F	G
900	600	75	450	150	600	35
1200	600	75	450	225	750	45
1200	900	150	600	225	750	55
1500	600	75	450	300	900	35
1500	900	300	600	600	900	55

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18134, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Junta Reglamentadora y Corporaciones Públicas con Jurisdicción. Asumo que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia que sea por mí, mi agente o empleado, o por otra persona con mi consentimiento, me hacen responsable de cualquier acción judicial y daños a ella por la OCPR.

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LIC. 18134PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL
BLANK PLATE STANDARDS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

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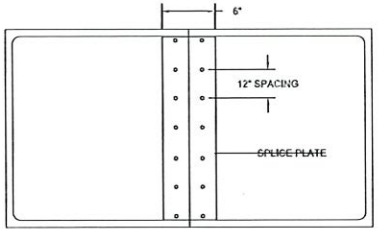

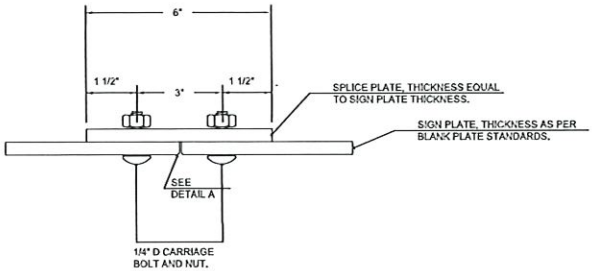

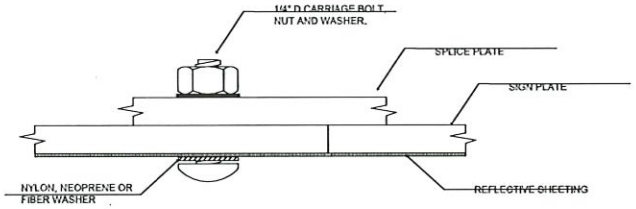

DETAIL A

SIGN PLATE SPLICES

GENERAL NOTES:

1. NO SPLICES IN SIGN PLATES SHALL BE PERMITTED WHEN SIGN DIMENSIONS ARE 1200 (4') X 1200 (4') OR LESS.
2. THE CONTRACTOR SHALL ADJUST THE LENGTH OF CARRIAGE BOLT. THE BOLT SHALL PENETRATE THE ENTIRE THICKNESS OF THE NUT.

Yo, Hernan E. Lopez Baez Ingeniero Licencia 18154, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones correspondientes. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes en las Agencias, Juntas Reglamentadoras y Corporaciones Públicas con Jurisdicción. Reconozco que cualquier deficiencia, falta o infracción de las normas que se haya producido por desconocimiento o por negligencia, pueden por sí sólo generar sanciones y por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y/o administrativa por ello.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL
SIGN PANEL SPLICES

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
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SAN JUAN, PR 00919-5349

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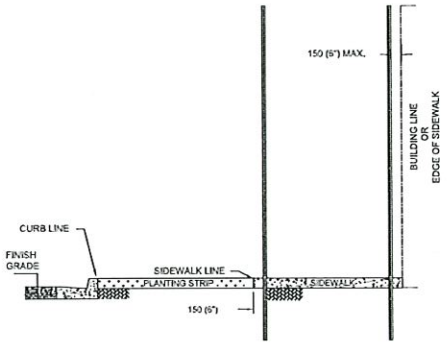
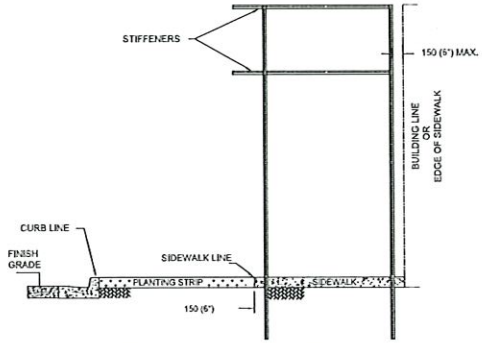
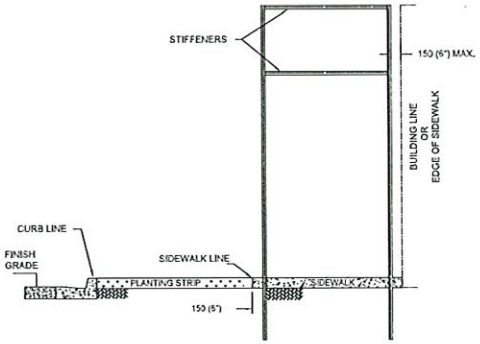
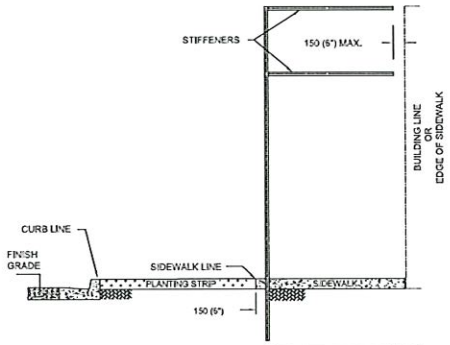






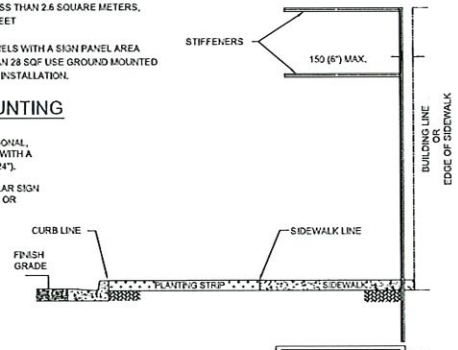
H SUPPORT MOUNTING

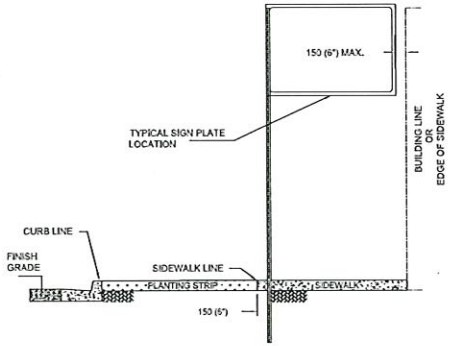
1. FOR SIGN PANELS WITH A SIGN PANEL AREA EQUAL OR LESS THAN 2.6 SQUARE METERS, 28 SQUARE FEET
2. FOR SIGN PANELS WITH A SIGN PANEL AREA GREATER THAN 28 SQF USE GROUND MOUNTED BREAK-AWAY INSTALLATION.



CANTILEVER SUPPORT MOUNTING

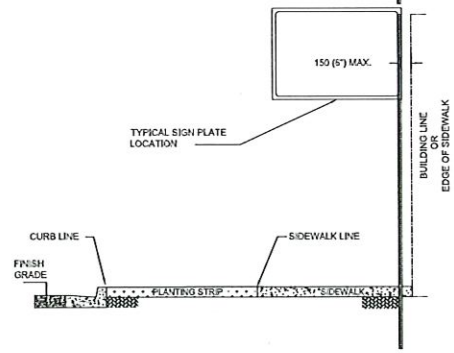
1. FOR SQUARE, RECTANGULAR, PENTAGONAL, OCTAGONAL, DIAMOND AND EQUILATERAL TRIANGLE SIGN PANEL WITH A MAXIMUM HORIZONTAL WIDTH GREATER THAN 600 (24").
2. FOR OCTAGONAL, DIAMOND, TOURISTIC AND CIRCULAR SIGN PANEL WITH A MAXIMUM HORIZONTAL WIDTH EQUAL OR LESS THAN 600 (24").





SINGLE SUPPORT MOUNTING

1. FOR SQUARE AND RECTANGULAR SIGN PANEL WITH A MAXIMUM HORIZONTAL WIDTH EQUAL OR LESS THAN 600 (24").
2. FOR ISOSCELES TRIANGLE SIGN PANEL USE SINGLE SUPPORT MOUNTING.



GENERAL NOTES:

1. VERTICAL CLEARANCE TO BOTTOM OF LOWEST SIGN PANEL SHALL BE 2,130 (7'-0") TO 2,300 (7'-6") FROM SIDEWALK GRADE.
2. THE CONTRACTOR MAY USE STEEL FLANGED CHANNEL POST OR SQUARE STEEL POST.
3. THE FOUNDATIONS SHALL BE AS INDICATED FOR STEEL FLANGED CHANNEL AND SQUARE STEEL POST FOUNDATION DETAILS STANDARD DRAWING. TOP POST TO BASE POST CONNECTION SHALL BE AS INDICATED FOR STEEL FLANGED CHANNEL AND SQUARE STEEL POST CONNECTION DETAILS STANDARD DRAWING.
4. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENERS CONNECTION.
5. ALL TOP POSTS AND BASE POSTS SHALL BE CONTINUOS IN LENGTH.
6. THE MAXIMUM AREA PERMITTED FOR SINGLE AND CANTILEVER SUPPORT MOUNTING SHALL BE 6 SQUARE FEET.
7. STIFFENERS SHALL BE SQUARE POST, STEEL FLANGED CHANNEL OR ALTERNATE STIFFENER.
8. MINIMUM OFFSET FROM CURB LINE TO SIGN PANEL SHALL BE 600 (24") MIN.
9. THE CONTRACTOR SHALL LOCATE POST AND STIFFENERS AS PER TYPICAL POST LOCATION FOR MOUNTING ON SIDEWALK AREAS WITH OR WITHOUT PLANTING STRIP STANDARD DRAWINGS.

Yo, Hernan E. Lopez Baez, Ingeniero, licencia 18154, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. Además, certifico que estos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Juntas Reglamentadoras y Corporaciones Públicas con Jurisdicción. Reconozco que cualquier declaración falsa o omisión de los hechos que se haya provisto por desconocimiento o por negligencia, ya sea por mí o de aquellas personas, o por otras personas en mi representación, me hacen responsable de cualquier acción judicial y/o delito en virtud de la ley.

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HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18154

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - STEEL FLANGED CHANNEL MOUNTING ON SIDEWALK AND PLANTING AREAS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD METROPOLITANA DE AUTOBUSES

METROPOLITAN BUS AUTHORITY
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SAN JUAN, PR 00919-5349

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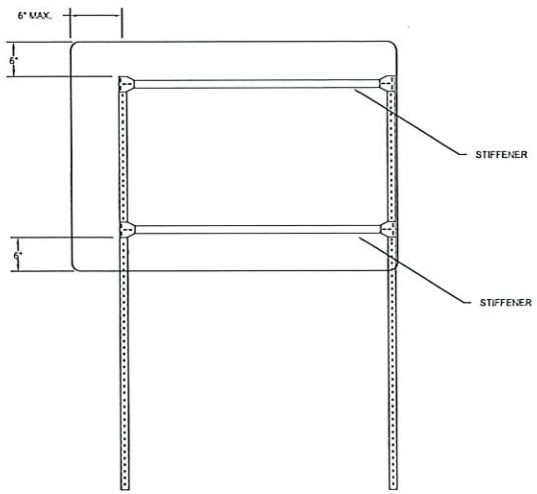
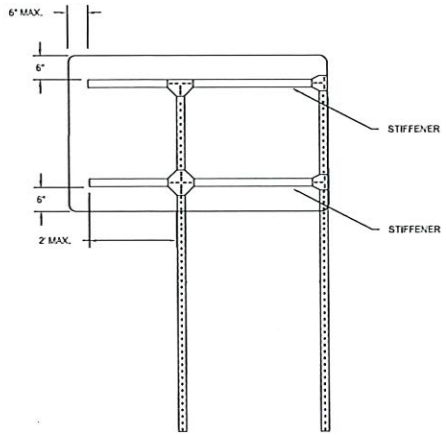
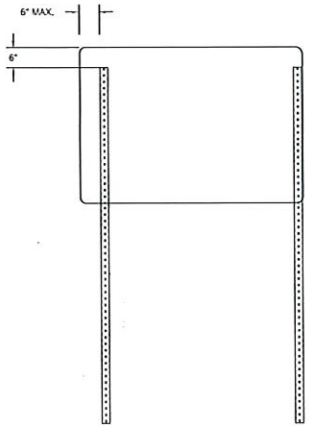
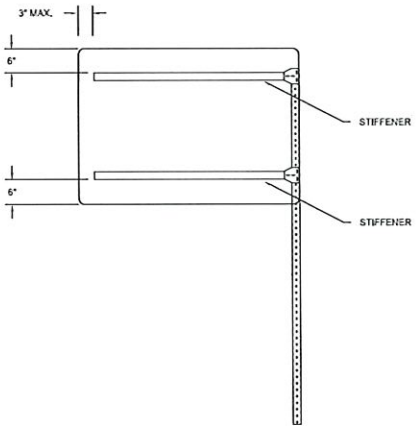






TYPICAL POST LOCATION FOR H SUPPORT MOUNTING



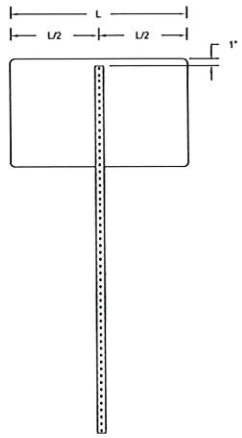
TYPICAL POST LOCATION FOR CANTILEVER SUPPORT MOUNTING

GENERAL NOTES:

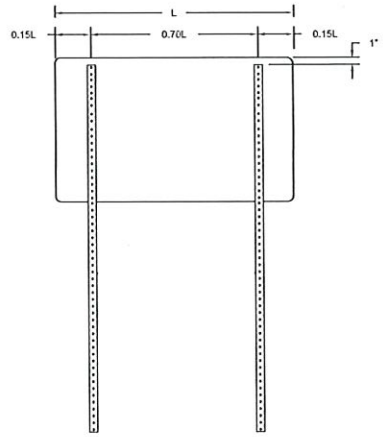
1. TO DETERMINE THE APPLICATION FOR CANTILEVER OR SUPPORT MOUNTING SEE MOUNTING ON SIDEWALK AREAS WITH OR WITHOUT PLANTING STRIP STANDARD DRAWINGS.

Yo, Hernan E. Lopez Baez Ingeniero Licencia 18154, certifico que soy el profesional que confeccionó, diseñó y preparó estos planos y las especificaciones complementarias. También certifico que evaluamos que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier decisión tomada o Multimedio de las normas que se hayan probado por desconocimiento o por negligencia que no por sí, sí de agencias o entidades, o por otras personas con el consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OCPA.

ENZO Engineering, psc. PO Box 3040, PMB 427 Guraabo, PR 00778 TEL. (787) 649-6200 | LOPEZBAEZ@ENZOGROUPLLC.ORG	HERNAN E. LOPEZ BAEZ INGENIERO LICENCIADO LIC. 18154 PUERTO RICO HERNAN E. LOPEZ BAEZ, PE MEM LIC. 18154PE	BUS STOP SIGNAGE PROJECT - PHASE 1 ROUTE 21 STEEL POST - TYPICAL POST LOCATION FOR MOUNTING ON SIDEWALK AREAS WITH OR WITHOUT PLANTING STRIP FROM SAGRADO CORAZON TO SAN JUAN MUNICIPALITY OF SAN JUAN	AUTORIDAD METROPOLITANA DE AUTOBUSES METROPOLITAN BUS AUTHORITY BOX 195349 SAN JUAN, PR 00919-5349	REVISION DATE: JUNE 2022 CHECKED BY: BEV DRAW BY: ABZ DWG. TYPE: TS-3.13 SHEET NO. 74 OF 77



1 POST



2 POSTS

NOTE:

1. TO DETERMINE THE NUMBER OF POSTS, SEE NOTES ON STEEL FLANGED CHANNEL AND SQUARE STEEL POST..
2. STIFFENERS SHALL BE SQUARE POST, STEEL FLANGED CHANNEL OR ALTERNATE STIFFENER.
3. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENERS CONNECTION.
4. MAXIMUM DEVIATION FROM VERTICAL FOR ANY COMPONENT, IN ANY DIRECTION, SHALL BE 1/8 INCH PER FOOT.
5. MAXIMUM DEVIATION FROM HORIZONTAL FOR ANY COMPONENT, IN ANY DIRECTION, SHALL BE 1/8 INCH PER FOOT.

Yo, Hernan E. Lopez Baez, Ingeniero Licencia 18 54, certifico que soy el profesional que contribuyó, diseñó y/o preparó estos planos y las especificaciones, completos y/o parciales. También, certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción Vigentes de las Agencias, Juntas Reglamentarias o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier declaración falsa o falsificación de la misma así se haya probado por descuido, error o por negligencia, no así por mi, no agentes o empleados, o por otra persona con mi consentimiento, me hacen responsable de cualquier acción judicial y daños de mi parte en 100%.

EN · Z · O.
Engineering, psc.

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LIC. 18 54
PUERTO RICO

HERNAN E. LOPEZ BAEZ, PE MEM
LIC. 18 54PE

BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - TYPICAL POST LOCATION
FOR MOUNTING STANDARDS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

AUTORIDAD
METROPOLITANA DE
AUTOBUSES

METROPOLITAN BUS AUTHORITY
BOX 195349
SAN JUAN, PR 00919-5349

REVISION	
DATE: JUNE 2022	
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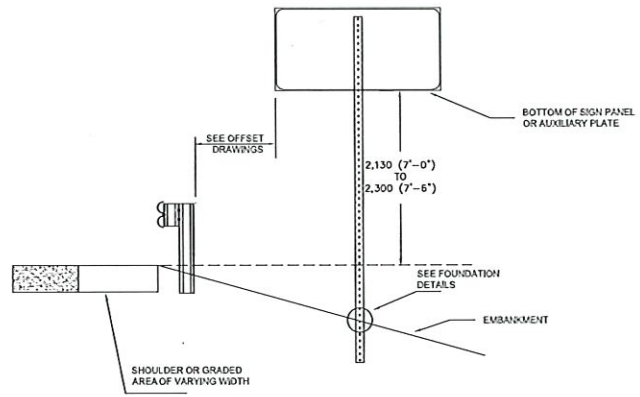
DWG. TYPE: TS-3.14	SHEET NO. 75 OF 77

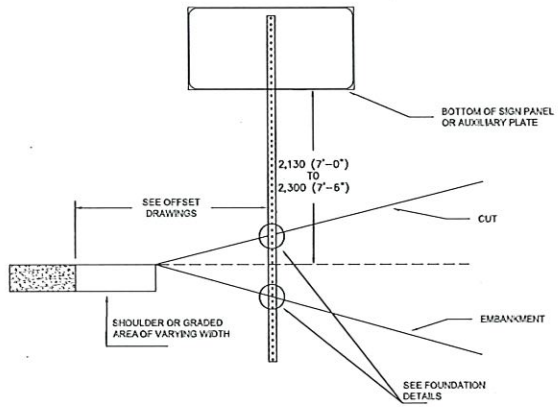
GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INCREASING OR DECREASING THE LENGTH OF POST TO ACHIEVE THE MOUNTING HEIGHT ABOVE FINISH GRADE OF THE NEAREST LANE.
2. THE CONTRACTOR MAY USE STEEL FLANGED CHANNEL POST OR SQUARE STEEL POST.
3. FOUNDATION SHALL BE AS STEEL FLANGED CHANNEL AND SQUARE STEEL POST FOUNDATION DETAILS STANDARD DRAWINGS.
4. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENER CONNECTION.
5. ALL TOP POSTS AND BASE POSTS SHALL BE CONTINUOS IN LENGTH.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE NUMBER OF POSTS BASED UPON THE SIGN PANEL AREA, IN CONFORMANCE WITH THE FOLLOWING TABULATION:

NUMBER OF POSTS	MAXIMUM SIGN AREA (SQUARE FEET)	MAXIMUM SIGN AREA (SQUARE METER)
1	4	0.37
2	16	1.50
3	25	2.32
4	36	3.35

7. THE CONTRACTOR SHALL LOCATE POSTS AS PER TYPICAL POST LOCATION STANDARD DRAWING.
8. VERTICAL CLEARANCE TO BOTTOM OF LOWEST SIGN PANEL SHALL BE 2,130 (7'-0") TO 2,300 (7'-6") FROM THE FINISH GRADE OF THE NEAREST LANE.





Yo, Hernan E. Lopez Baez Ingeniero Licenciado 18134, certifico bajo mi propio juicio que conocimiento, diseño y/o supervisé estos planos y las especificaciones, cumplen con las Normas, Reglas, y/o Leyes que aplican a dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Junta Reglamentadora y Corporaciones Públicas con Jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya prestado por desconocimiento o por negligencia, ya sea por mí o de aquellas a mi cargo, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

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BUS STOP SIGNAGE PROJECT - PHASE 1
ROUTE 21
STEEL POST - TYPICAL POST LOCATION
FOR GRASS MOUNTING STANDARDS

FROM SAGRADO CORAZON TO SAN JUAN
MUNICIPALITY OF SAN JUAN

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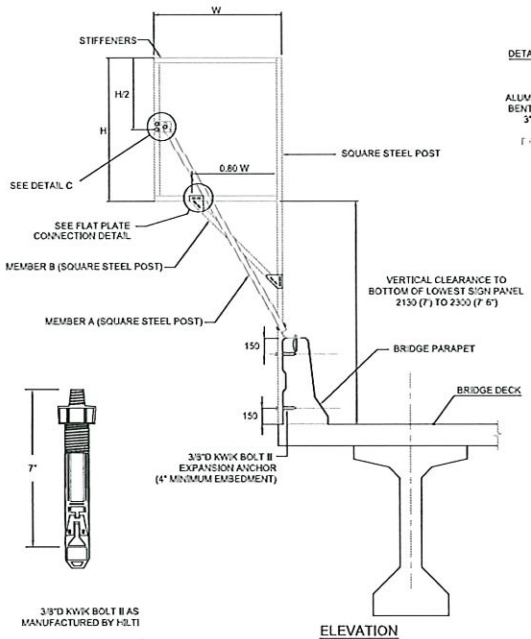
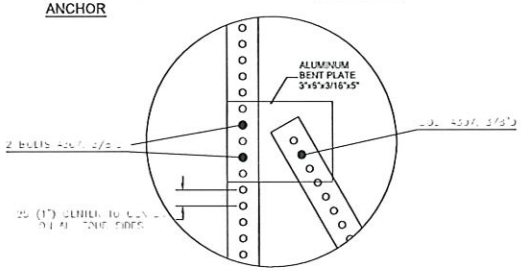


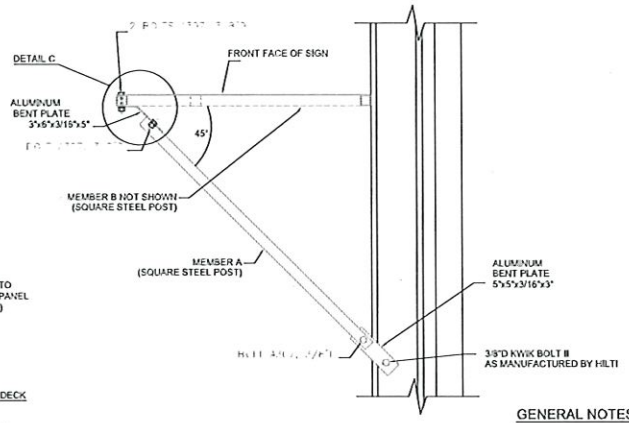
ELEVATION

3/8"D KWIK BOLT II AS MANUFACTURED BY HILTI

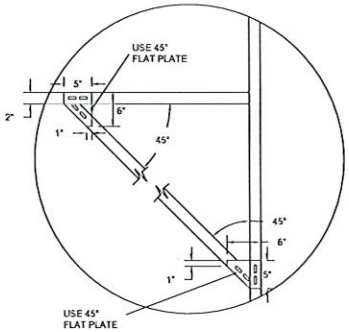
ANCHOR



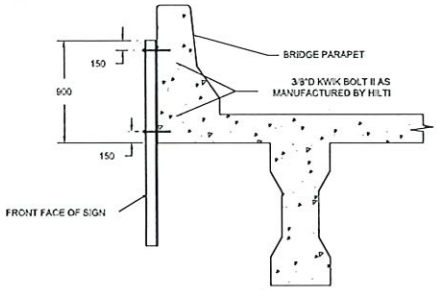
DETAIL C



PLAN



FLAT PLATE CONNECTION DETAIL



OVERHEAD MOUNTING

USE ONE STEEL FLANGED CHANNEL POST OR ONE SQUARE STEEL POST FOR SIGNS W12-2 600 (2') X 600 (2'), 750 (2'-6") X 750 2'-6"), AND 900 (3') X 900 (3').

USE TWO STEEL FLANGED CHANNEL POST OR TWO SQUARE STEEL POST FOR SIGNS W12-2 1200 (4') X 1200 (4') AND 1500 (5') X 1500 (5') OR GREATER, OR ANY OTHER SIGNS INDICATED IN THE CONSTRUCTION PLANS.

GENERAL NOTES:

1. FOR CANTILEVER SUPPORT MOUNTING ONLY SQUARE STEEL POST SHALL BE USED.
2. CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS WHO WISH TO INCLUDE THEIR PRODUCTS INTO THE APPROVED LISTING OF ANCHORS MUST SUBMIT THE FOLLOWING INFORMATION FOR CONSIDERATION BY THE AUTHORITY: FULL DESCRIPTION AND DRAWINGS OF THE ANCHOR INCLUDING DIMENSION OF ALL COMPONENTS AND COMPLETE MATERIAL DESCRIPTION, GALVANIZING AND OTHER PERTINENT INFORMATION.

   KWIK BOLT SHALL BE ZINC PLATED IN ACCORDANCE WITH ASTM B633, TYPE III FE/ZN 5.
3. THE CONTRACTOR SHALL FOLLOW HILTI INSTRUCTIONS FOR 3/8" KWIK BOLT II INSTALLATION.
4. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENERS CONNECTION AS A SUBSIDIARY OBLIGATION.
5. ALL POSTS SHALL BE CONTINUOS IN LENGTH.
6. FOR OVERHEAD MOUNTING, THE SIGN SHALL BE INSTALLED WITHOUT REDUCTION IN THE EXISTING BRIDGE CLEARANCE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST THE LENGTH OF STIFFENERS ACCORDING TO THE PANEL SHAPE.
8. THE CONTRACTOR SHALL USE THREE VANDAL RESISTANT FASTENERS TO ATTACH THE SIGN PANEL TO EACH STIFFENER. THE FASTENERS
9. SHALL BE LOCATED ONE IN EACH EXTREME AND ONE IN THE CENTER OF STIFFENER.

   THE CONTRACTOR SHALL ADJUST THE LENGTH OF BOLT TO PENETRATE THE ENTIRE THICKNESS OF THE NUT.
10. ALL ALUMINUM BENT PLATES SHALL CONFORM TO ASTM B-209, ALLOYS 5052 H-32, 5052 H-38,
11. 5052 H-38, 5086 H-34, 5154 H-36 OR 6061 T-6.

CANTILEVER SUPPORT MOUNTING

1. FOR SIGN PANELS WITH A SIGN PANEL AREA EQUAL OR LESS THAN 18 SQUARE FEET AND WIDTH EQUAL OR LESS THAN 1,200 (48").
2. FOR OCTAGONAL, DIAMOND, TOURISTIC AND CIRCULAR SIGN PANEL WITH A MAXIMUM HORIZONTAL WIDTH EQUAL OR LESS THAN 600 (24").

Yo, Hernan E. Lopez Baez, Ingeniero Licenciado 18134, certifico que soy el profesional que confeccionó, diseñó y/o preparó estos planos y las especificaciones complementarias. También certifico que el diseño planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de Construcción vigentes de las Agencias, Junta Reglamentadora o Corporaciones Públicas con jurisdicción. Reconozco que cualquier deficiencia falta o deficiencia de los mismos que se haya producido por desconocimiento o por negligencia que no por mi, mis agentes o empleados, o por otras personas con mi consentimiento, me hacen responsable de cualquier acción judicial y disciplinaria por el 100%.

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ROUTE 21
STEEL POST - TYPICAL POST LOCATION
FOR MOUNTING STANDARDS

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