

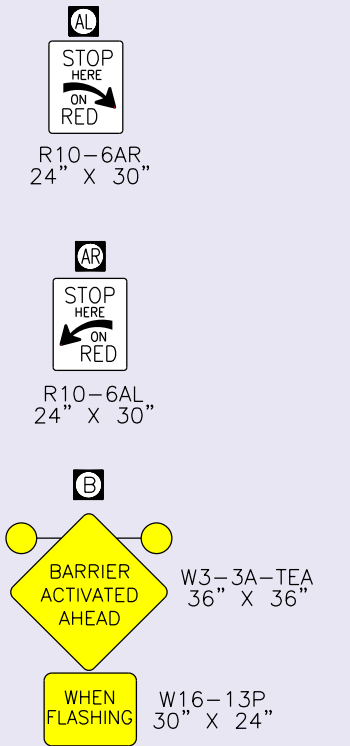
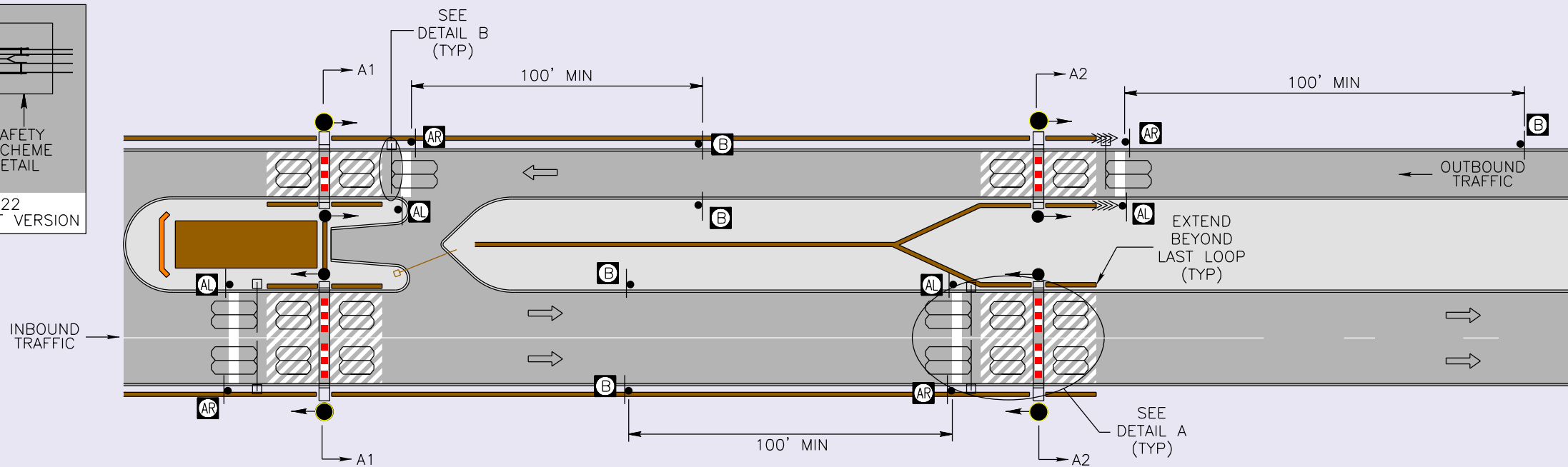
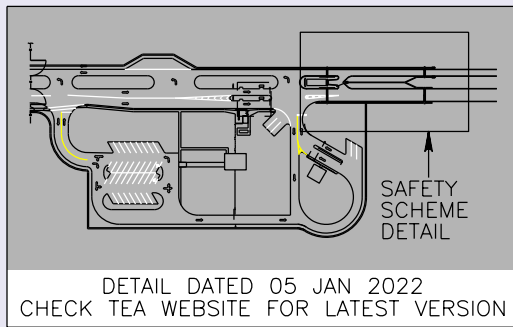
TEA AVB SAFETY SCHEMES

REVISED - 05 JAN 2022

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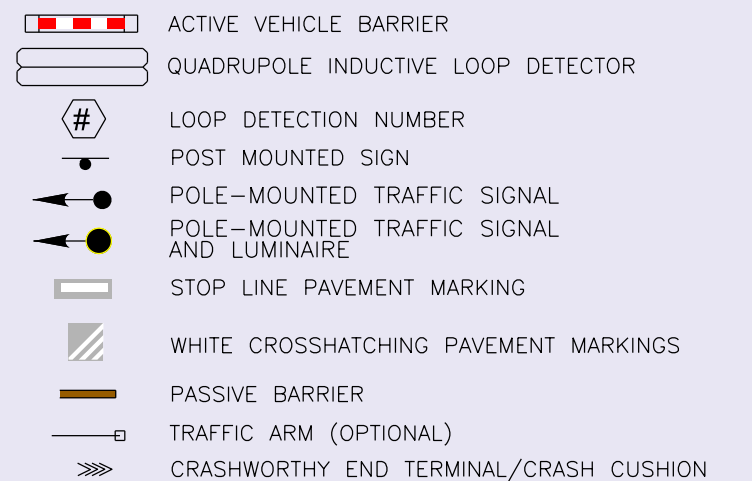
Click Here For The Most Current Set Of Drawings---> [TEA Traffic Engineering Website](#)



NOTES

1. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
2. SCHEME NOT INTENDED FOR USE WHERE INBOUND OR OUTBOUND TRAFFIC VOLUME EXCEEDS 150-200 VEHICLES PER HOUR PER LANE IN THE PEAK HOUR. ACTUAL CAPACITY WILL DEPEND UPON ID CHECK PROCESSING RATES AND THE DISTANCE BETWEEN THE ENTRY AND EXIT AVBs
3. DETAIL ASSUMES 200-300 FEET BETWEEN AVBs. THE WARNING SIGNS (SIGN B), BETWEEN THE AVBs, MAY BE OMITTED WHEN AVBs ARE SPACED 150 FEET OR LESS APART.
4. MIRRORS ARE RECOMMENDED TO DISPLAY AVBs TO DRIVER AT STOP LINE TO VERIFY AVB IS FULLY RETRACTED.
5. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS IS REQUIRED FOR INSTALLING PASSIVE BARRIER AND EQUIPMENT.
6. THREE VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 - TRAFFIC ARM LOOP, LOOP 2 - ENTRY SAFETY LOOP, LOOP 3 - EXIT SAFETY LOOP.
7. INFRARED CAMERAS OR RADAR MAY BE USED IN LIEU OF LOOP DETECTORS.
8. SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55-15, AND LOCAL REGULATIONS.
9. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
10. ALL SIGNALS SHALL BE LED AND USE 12-INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.
11. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
12. FOR MULTILANE SECTIONS, UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.
13. FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
14. A TYPE 3 OBJECT MARKER IS REQUIRED ON NORMALLY EXPOSED ACTIVE VEHICLE BARRIER EQUIPMENT AND OTHER ROADSIDE OBSTACLES WHEN LOCATED IN THE CLEAR ZONE.
15. ALL TRAFFIC CONTROL DEVICES AND POLES INSTALLED WITHIN THE ROADWAY CLEAR ZONE SHALL UTILIZE BREAKAWAY SUPPORTS.
16. UNDER EFO CONDITION, WHEN MULTIPLE AVBs ARE USED, THEY SHALL BE DESIGNED TO OPERATE INDEPENDENTLY.
17. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
18. ADHERE TO APPLICABLE STATE DOT OR LOCAL STANDARDS FOR DESIGN, MATERIAL TYPE, AND CONSTRUCTION OF TRAFFIC CONTROL AND RELATED EQUIPMENT.
19. SCHEMATIC PROVIDES GENERAL ROADWAY LAYOUT AND MAY BE ADJUSTED TO MEET SITE CONDITIONS. ALTERATIONS IN TRAFFIC CONTROL (TRAFFIC ARM, SIGNALS, BEACONS, SIGNING MARKINGS, AND DETECTION LOOPS) REQUIRE TEA APPROVAL.
20. EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.

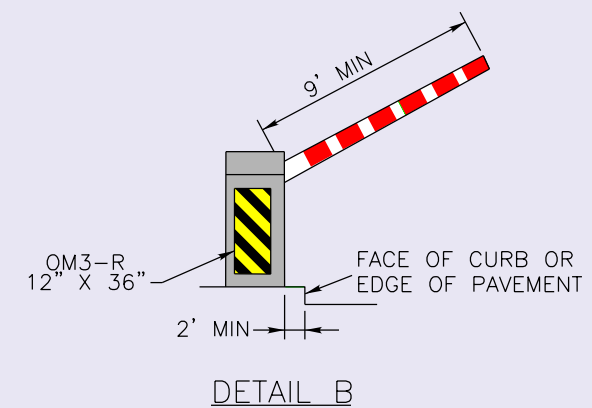
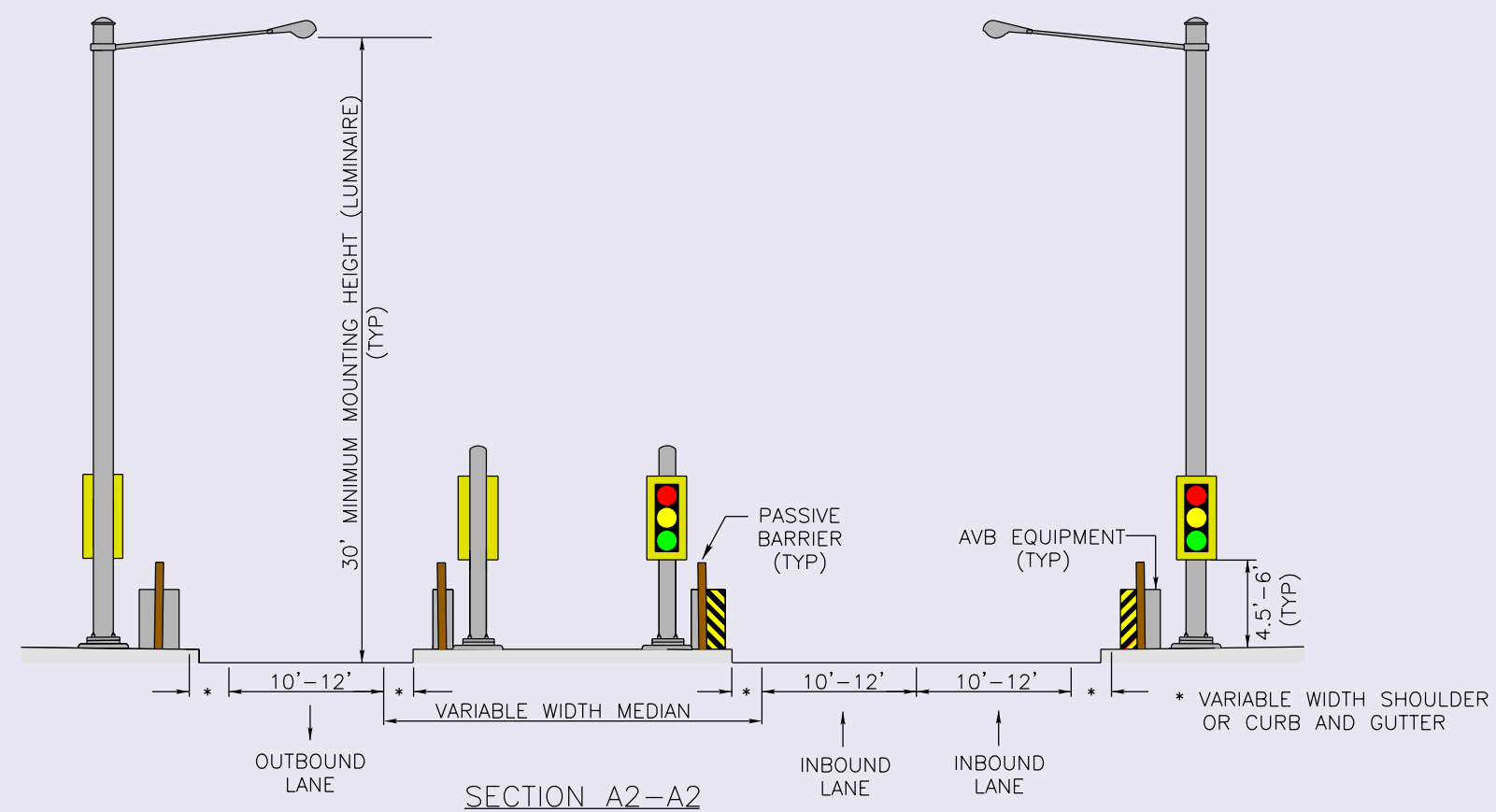
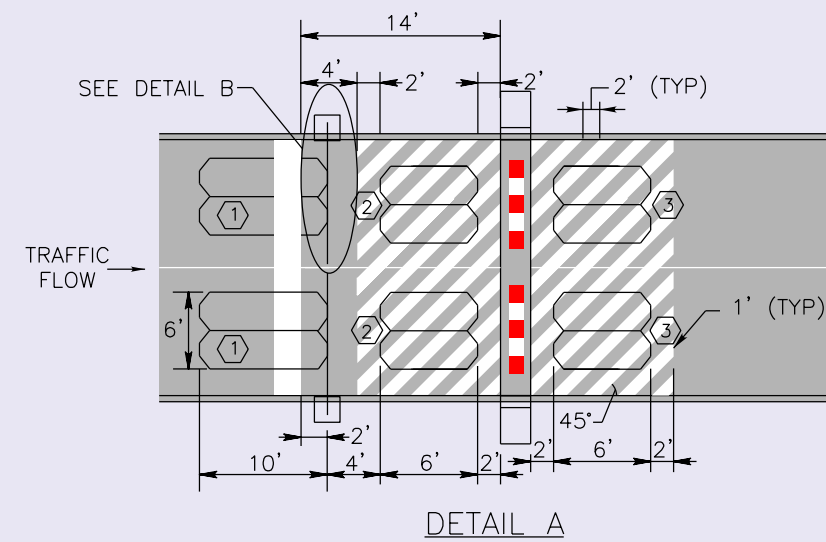
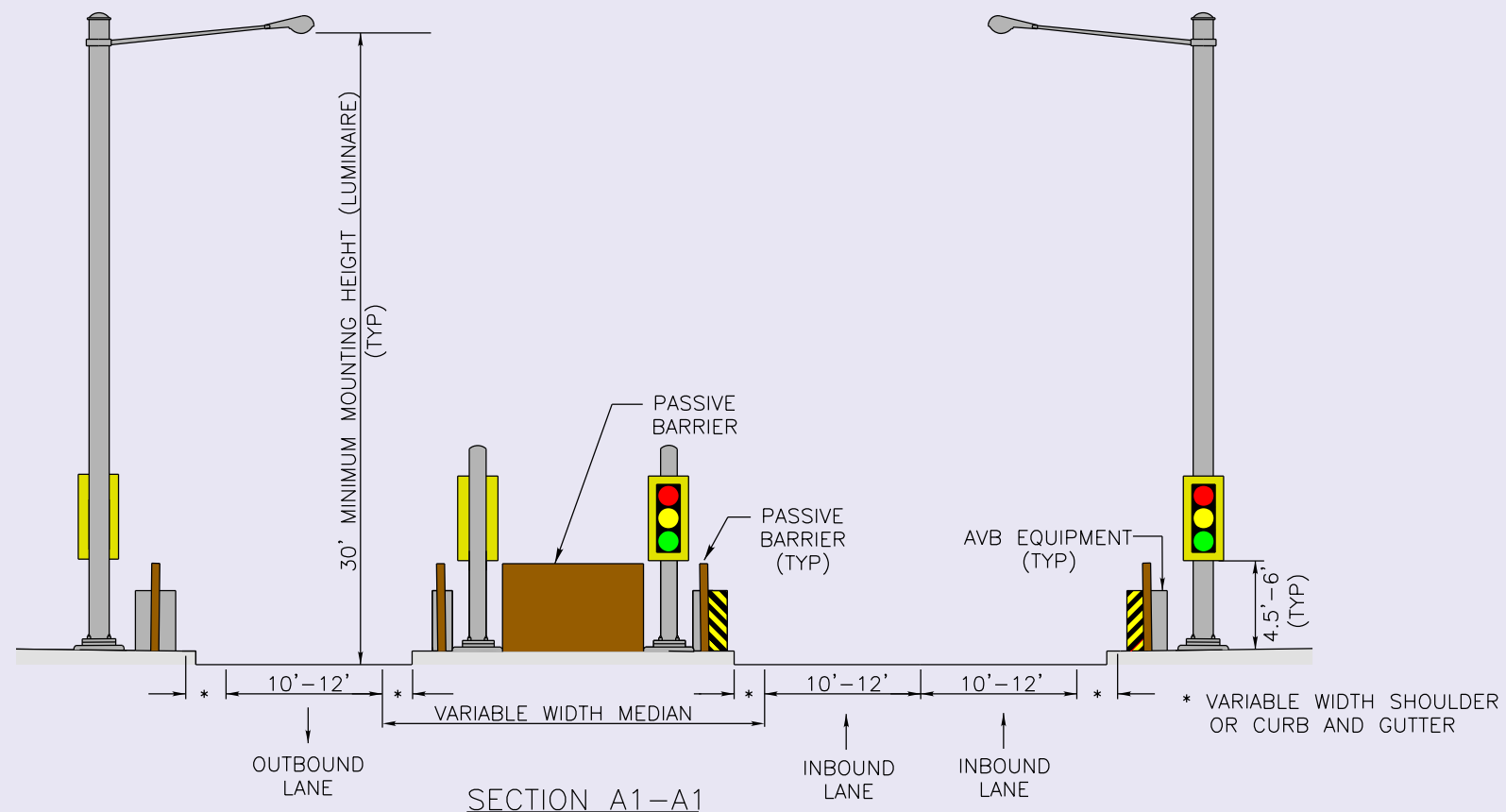
LEGEND



NOT TO SCALE

1

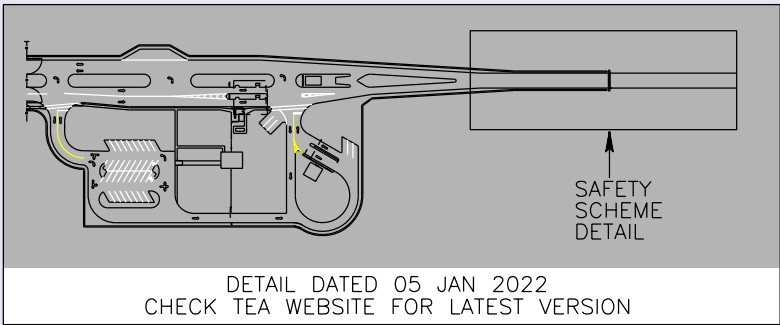
0-SEC
FULL CONTAINMENT
AVB SAFETY SCHEME
SHEET 1 OF 2



NOT TO SCALE

2

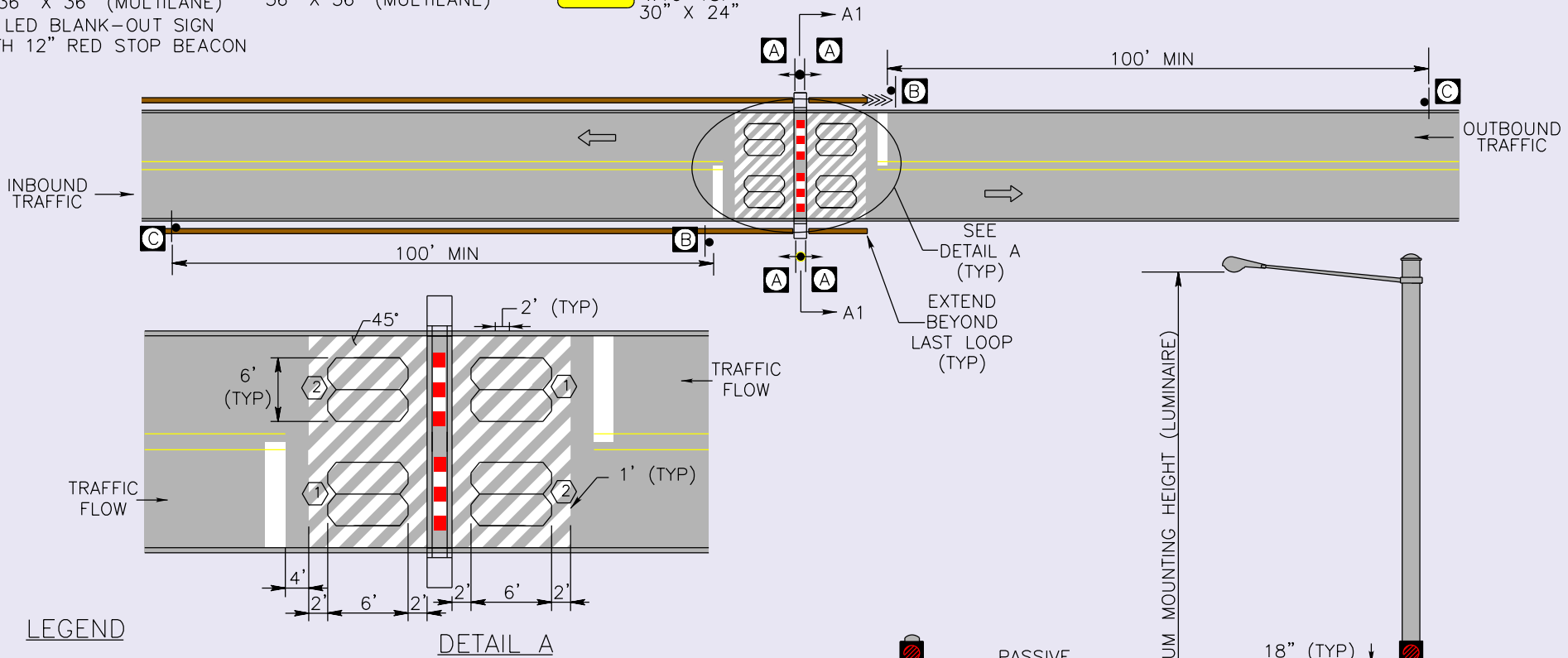
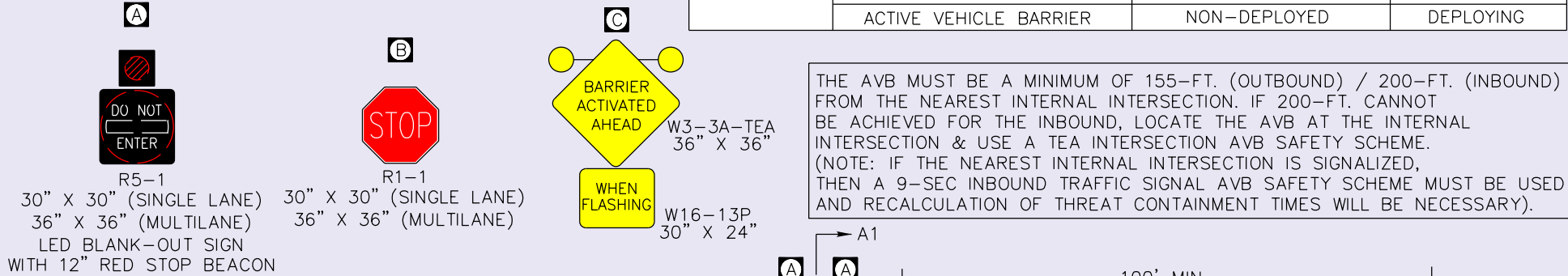
0-SEC
FULL CONTAINMENT
AVB SAFETY SCHEME
SHEET 2 OF 2



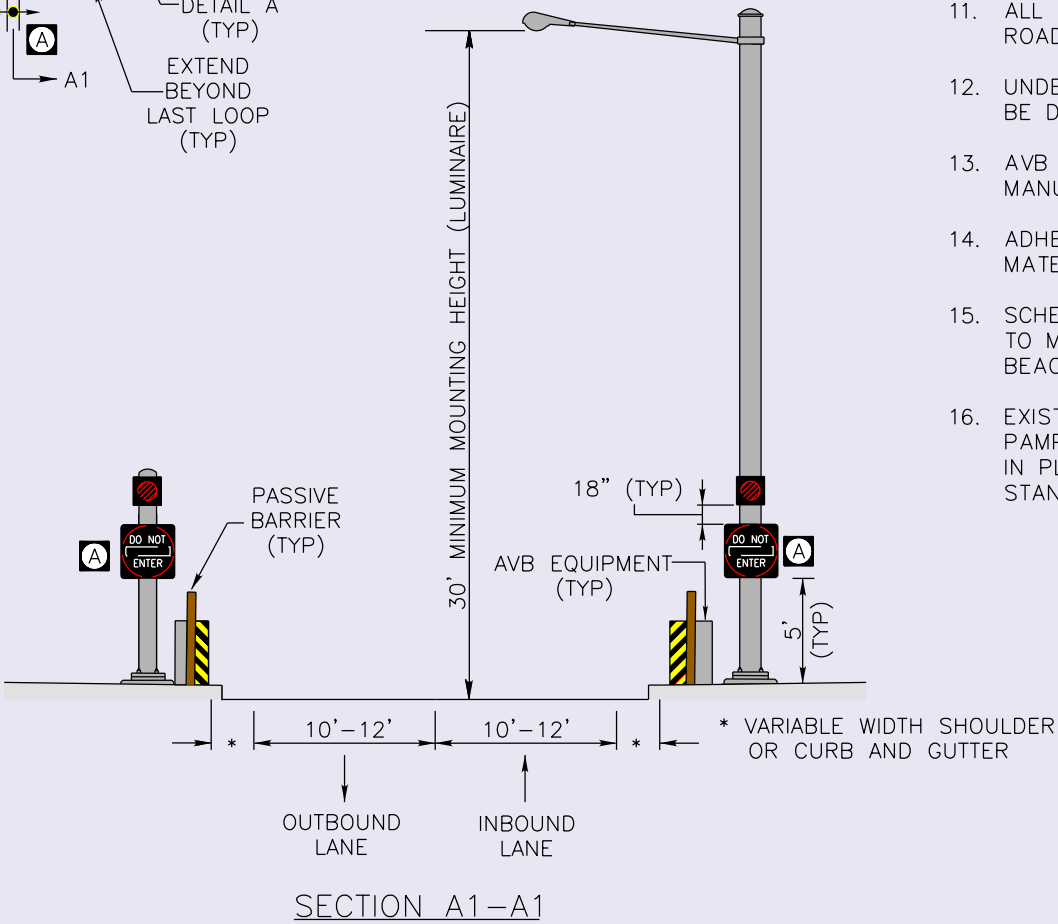
5-SEC STOP CONTROL AVB SAFETY SCHEME	TRAFFIC CONTROL	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION				
		GUARD REACTION			BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5
	W3-3A-TEA WARNING SIGN WITH BEACONS	BEACONS DARK			ALTERNATING FLASHING YELLOW	
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED	
	STOP BEACON	DARK			FLASHING RED	
	100dB HORN	SILENT			ACTIVATED	
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED			DEPLOYING	

NOTES

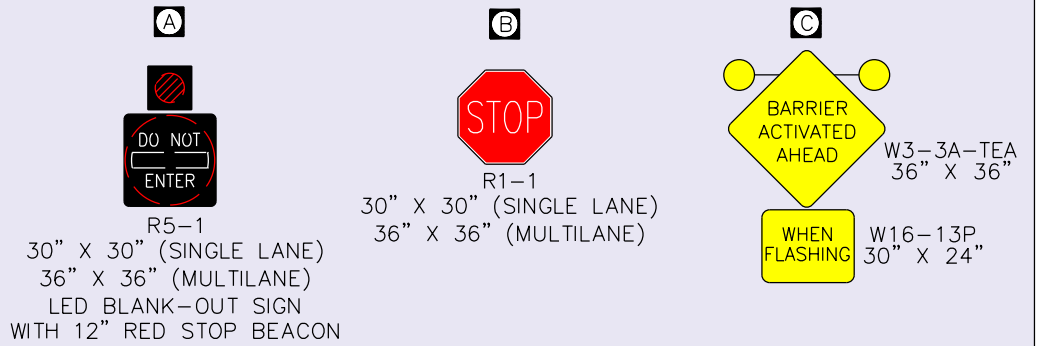
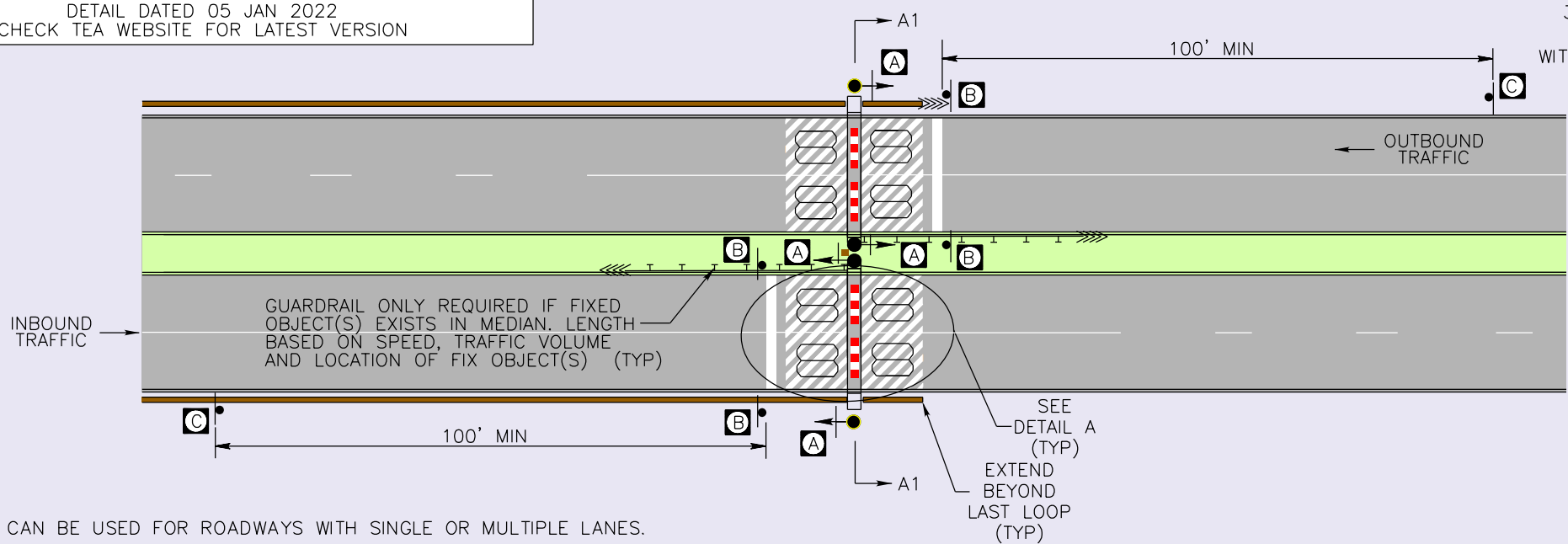
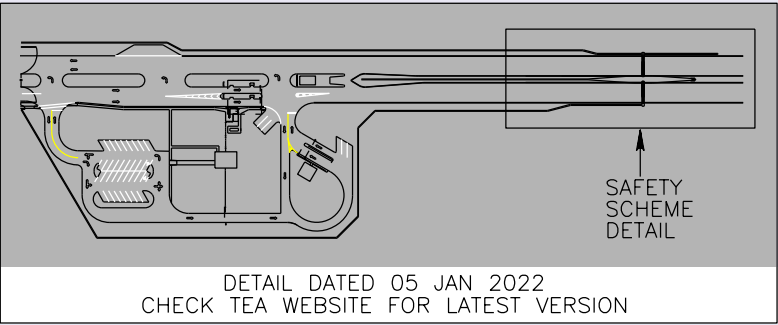
1. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
2. SCHEME NOT INTENDED FOR USE WHERE INBOUND OR OUTBOUND TRAFFIC VOLUME EXCEEDS 800 VEHICLES PER HOUR PER LANE IN THE PEAK HOUR.
3. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – ENTRY SAFETY LOOP, LOOP 2 – EXIT SAFETY LOOP.
4. INFRARED CAMERAS OR RADAR MAY BE USED IN LIEU OF LOOP DETECTORS.
5. SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55-15, AND LOCAL REGULATIONS.
6. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
7. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
8. FOR MULTILANE SECTIONS, UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.
9. UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
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13. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
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- LEGEND**
- ACTIVE VEHICLE BARRIER
 - QUADRUPOLE INDUCTIVE LOOP DETECTOR
 - LOOP DETECTION NUMBER
 - POST MOUNTED SIGN
 - POLE-MOUNTED SIGN WITH BEACON
 - POLE-MOUNTED SIGN WITH BEACON AND LUMINAIRE
 - STOP LINE PAVEMENT MARKING
 - WHITE CROSSHATCHING PAVEMENT MARKINGS
 - PASSIVE BARRIER
 - CRASHWORTHY END TERMINAL/CRASH CUSHION



NOT TO SCALE

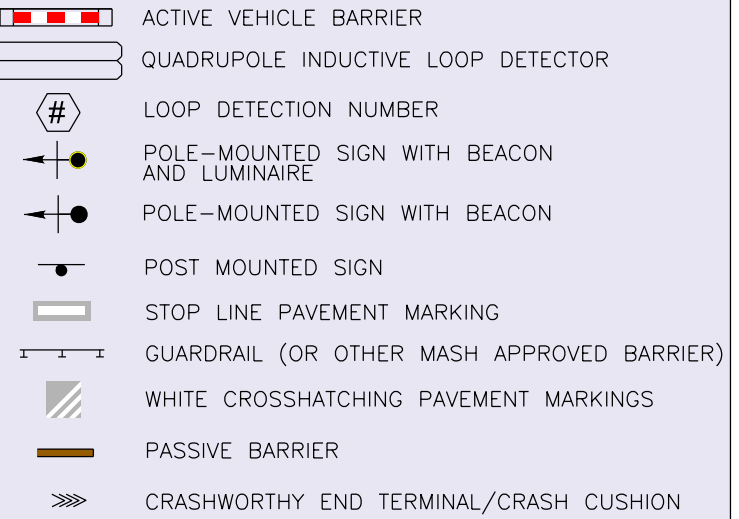


THE AVBs MUST BE A MINIMUM OF 155-FT. (OUTBOUND) / 200-FT. (INBOUND) FROM THE NEAREST INTERNAL INTERSECTION. IF 200-FT. CANNOT BE ACHIEVED FOR THE INBOUND, LOCATE THE AVB AT THE INTERNAL INTERSECTION & USE A TEA INTERSECTION AVB SAFETY SCHEME. (NOTE: IF THE NEAREST INTERNAL INTERSECTION IS SIGNALIZED, THEN A 9-SEC INBOUND TRAFFIC SIGNAL AVB SAFETY SCHEME MUST BE USED AND RECALCULATION OF THREAT CONTAINMENT TIMES WILL BE NECESSARY).

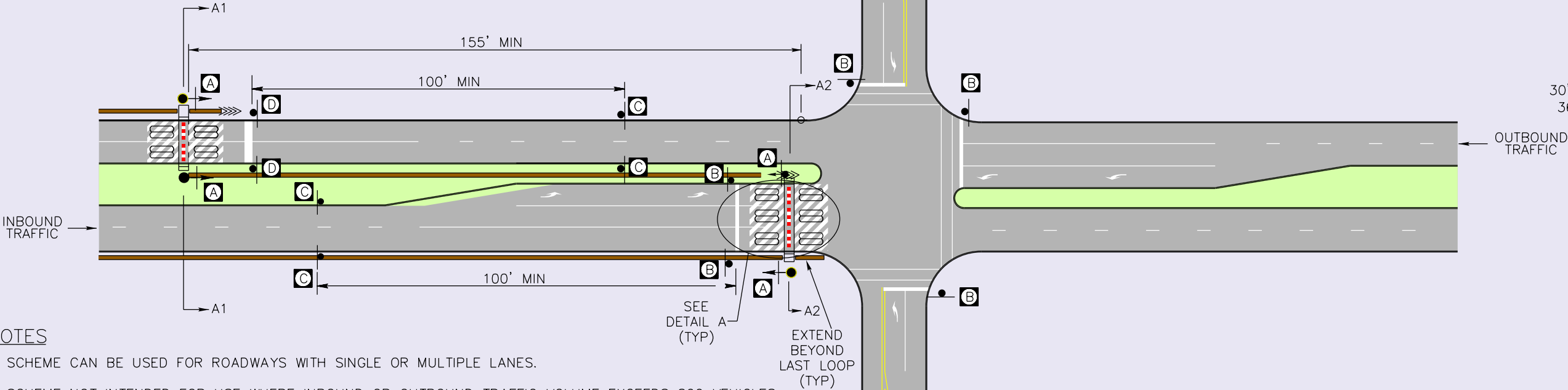
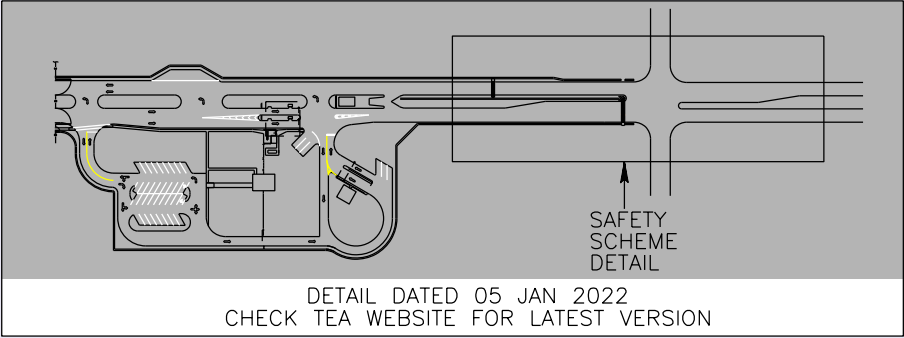
NOTES

1. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
2. SCHEME NOT INTENDED FOR USE WHERE INBOUND OR OUTBOUND TRAFFIC VOLUME EXCEEDS 800 VEHICLES PER HOUR PER LANE IN THE PEAK HOUR.
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LEGEND



NOT TO SCALE



NOTES

1. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
2. SCHEME NOT INTENDED FOR USE WHERE INBOUND OR OUTBOUND TRAFFIC VOLUME EXCEEDS 800 VEHICLES PER HOUR PER LANE IN THE PEAK HOUR.
3. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS IS REQUIRED FOR INSTALLING PASSIVE BARRIER AND EQUIPMENT.
4. SCHEMATIC SHOWS THE DEFAULT INTERSECTION TRAFFIC CONTROL AS ALL-WAY STOP CONTROL. A TRAFFIC STUDY MUST BE PERFORMED TO VALIDATE THAT THE INTERSECTION WILL OPERATE AT AN ACCEPTABLE LEVEL OF SERVICE UNDER THESE CONDITIONS.
5. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – ENTRY SAFETY LOOP, LOOP 2 – EXIT SAFETY LOOP.
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NOTES CONTINUED ON FOLLOWING PAGE

A

R5-1

30" X 30" (SINGLE LANE)
36" X 36" (MULTILANE)
LED BLANK-OUT SIGN
WITH 12" RED STOP BEACON

B

R1-1

30" X 30" (SINGLE LANE)
36" X 36" (MULTILANE)
SEE NOTES REGARDING
ALL-WAY STOP CONTROL

C

W3-3A-TEA

36" X 36"

D

R1-1

30" X 30" (SINGLE LANE)
36" X 36" (MULTILANE)

LEGEND

- ACTIVE VEHICLE BARRIER
- QUADRUPOLE INDUCTIVE LOOP DETECTOR
- LOOP DETECTION NUMBER
- POST MOUNTED SIGN
- POLE-MOUNTED SIGN WITH BEACON AND LUMINAIRE
- POLE-MOUNTED SIGN WITH BEACON
- STOP LINE PAVEMENT MARKING
- WHITE CROSSHATCHING PAVEMENT MARKINGS
- PASSIVE BARRIER
- CRASHWORTHY END TERMINAL/CRASH CUSHION

5-SEC INTERSECTION
STOP CONTROL
AVB SAFETY SCHEME
SHEET 1 OF 2

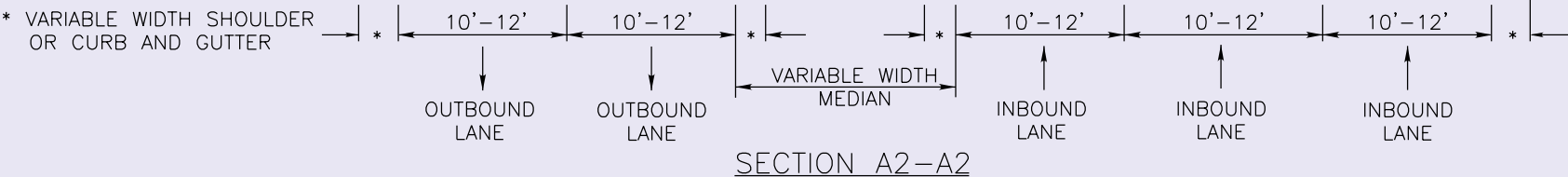
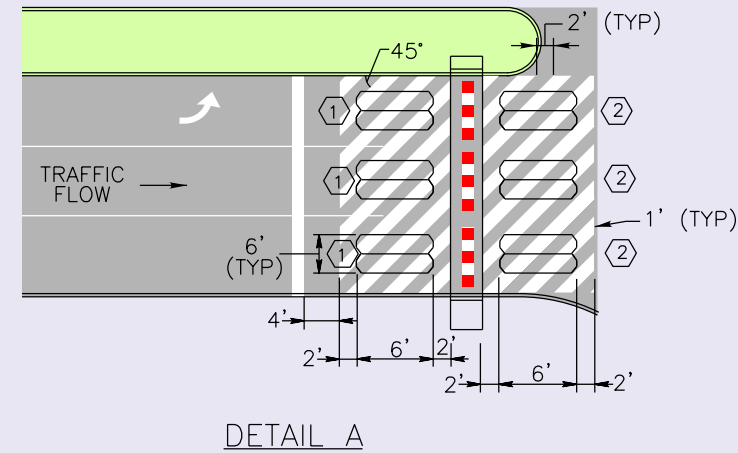
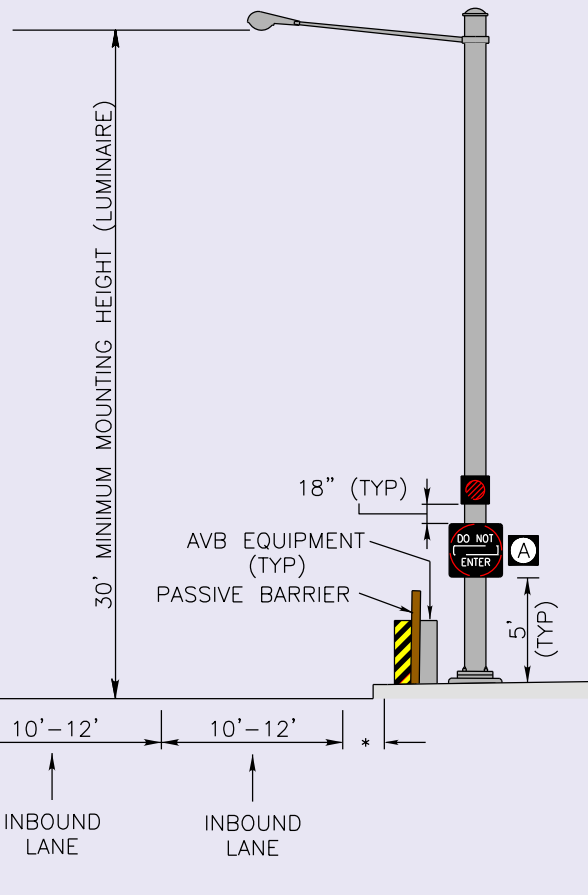
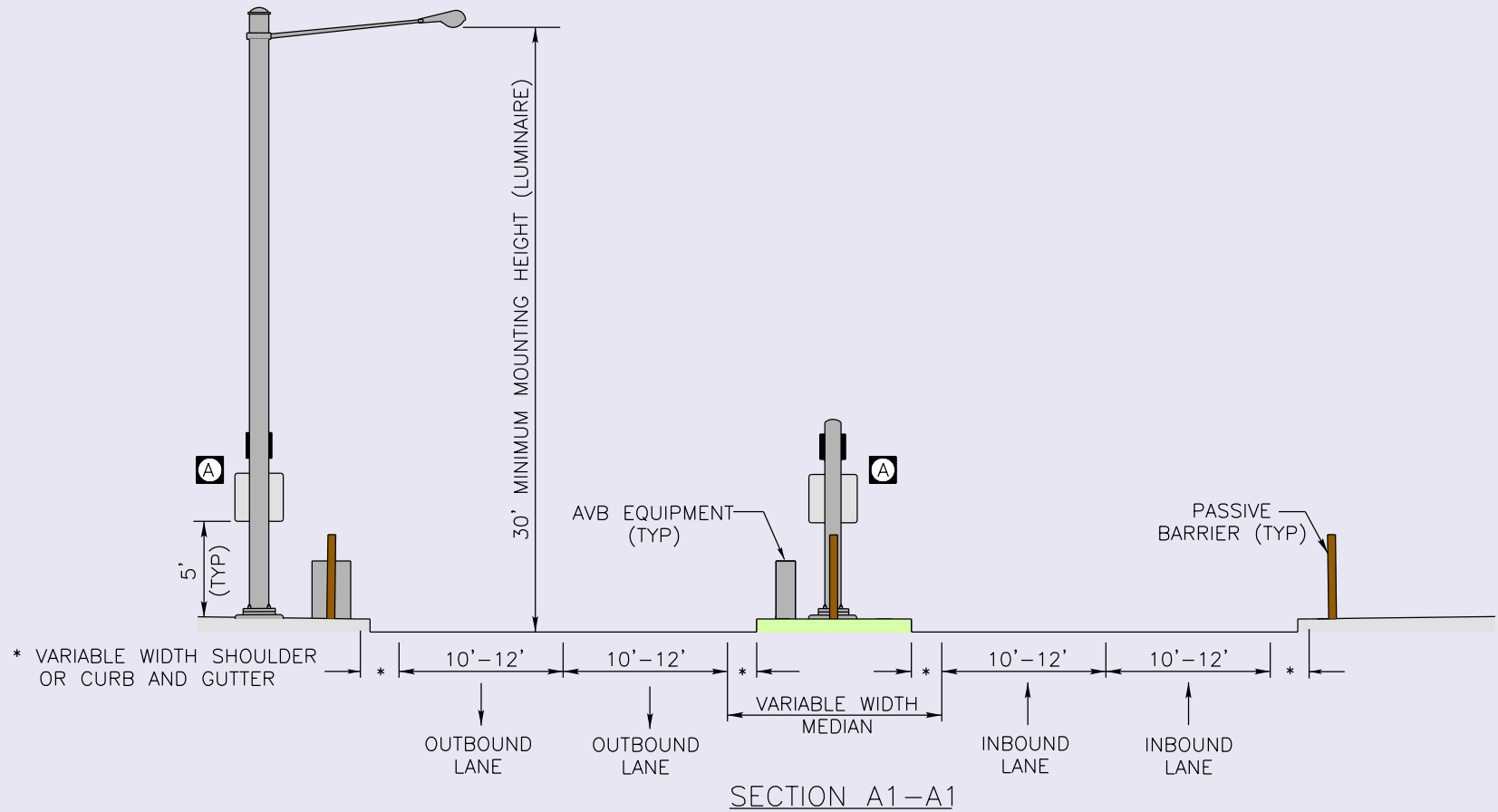
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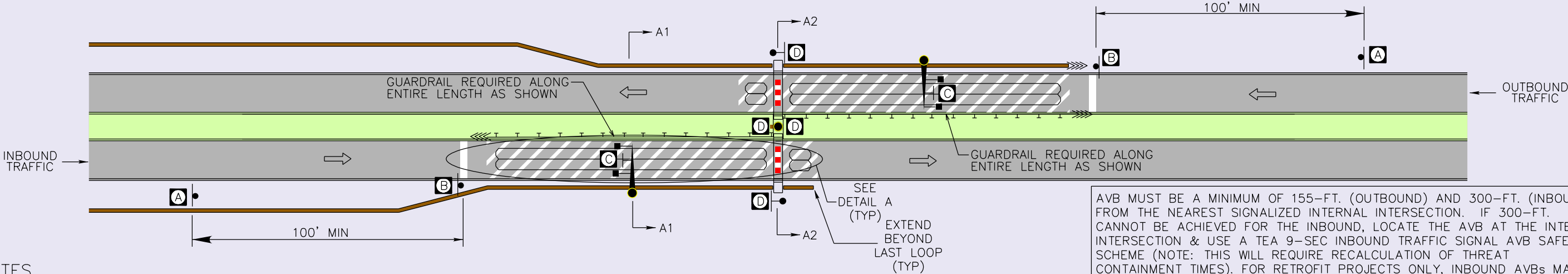
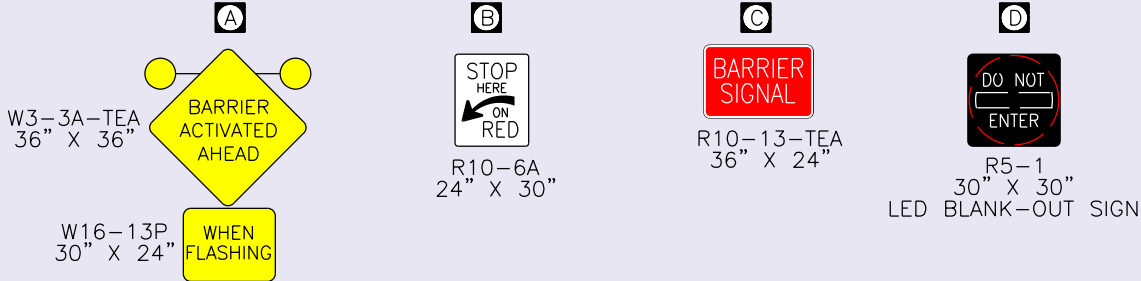
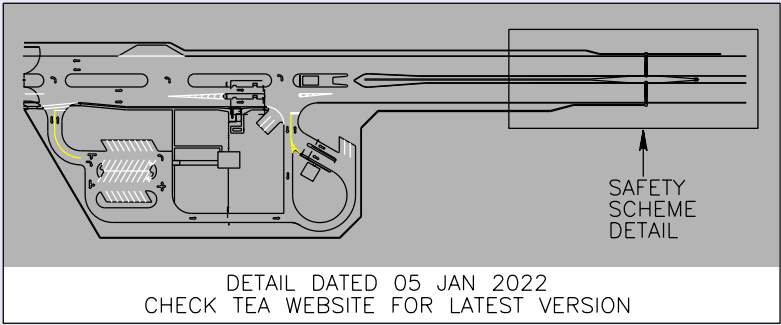
5-SEC STOP CONTROL AVB SAFETY SCHEME		OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION				
	TRAFFIC CONTROL	GUARD REACTION			BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5
	W3-3A-TEA WARNING SIGN WITH BEACONS	BEACONS DARK			ALTERNATING FLASHING YELLOW	
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED	
	STOP BEACON	DARK			FLASHING RED	
	100dB HORN	SILENT			ACTIVATED	
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED			DEPLOYING	

NOTES (CONTINUED)

12. UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
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19. EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.



NOT TO SCALE



NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS IS REQUIRED FOR INSTALLING GUARDRAIL.
3. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – ENTRY SAFETY LOOP, LOOP 2 – EXIT SAFETY LOOP.
4. INFRARED CAMERAS AND RADAR MAY BE USED IN LIEU OF LOOP DETECTORS. A SERIES OF SHORTER CONTINUOUS DETECTION LOOPS MAY BE USED IN PLACE OF THE 76 FT LOOP
5. SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55–15, AND LOCAL REGULATIONS.
6. ALL SIGNALS SHALL BE LED AND USE 12–INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.
7. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN–ROADWAY OR ON–BARRIER FLASHING LIGHTS ARE REQUIRED.
8. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
9. FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
10. UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
11. A TYPE 3 OBJECT MARKER IS REQUIRED ON NORMALLY EXPOSED ACTIVE VEHICLE BARRIER EQUIPMENT AND OTHER ROADSIDE OBSTACLES WHEN LOCATED IN THE CLEAR ZONE.
12. ALL TRAFFIC CONTROL DEVICES AND POLES INSTALLED WITHIN THE ROADWAY CLEAR ZONE SHALL UTILIZE BREAKAWAY SUPPORTS.
13. UNDER EFO CONDITION, WHEN MULTIPLE AVBs ARE USED, THEY SHALL BE DESIGNED TO OPERATE INDEPENDENTLY.
14. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
15. ADHERE TO APPLICABLE STATE DOT OR LOCAL STANDARDS FOR DESIGN, MATERIAL TYPE, AND CONSTRUCTION OF TRAFFIC CONTROL AND RELATED EQUIPMENT.
16. SCHEMATIC PROVIDES GENERAL ROADWAY LAYOUT AND MAY BE ADJUSTED TO MEET SITE CONDITIONS. ALTERATIONS IN TRAFFIC CONTROL (SIGNALS, BEACONS, SIGNING, MARKINGS, AND DETECTION LOOPS) REQUIRE TEA APPROVAL.
17. EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55–15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.

NOT TO SCALE

8

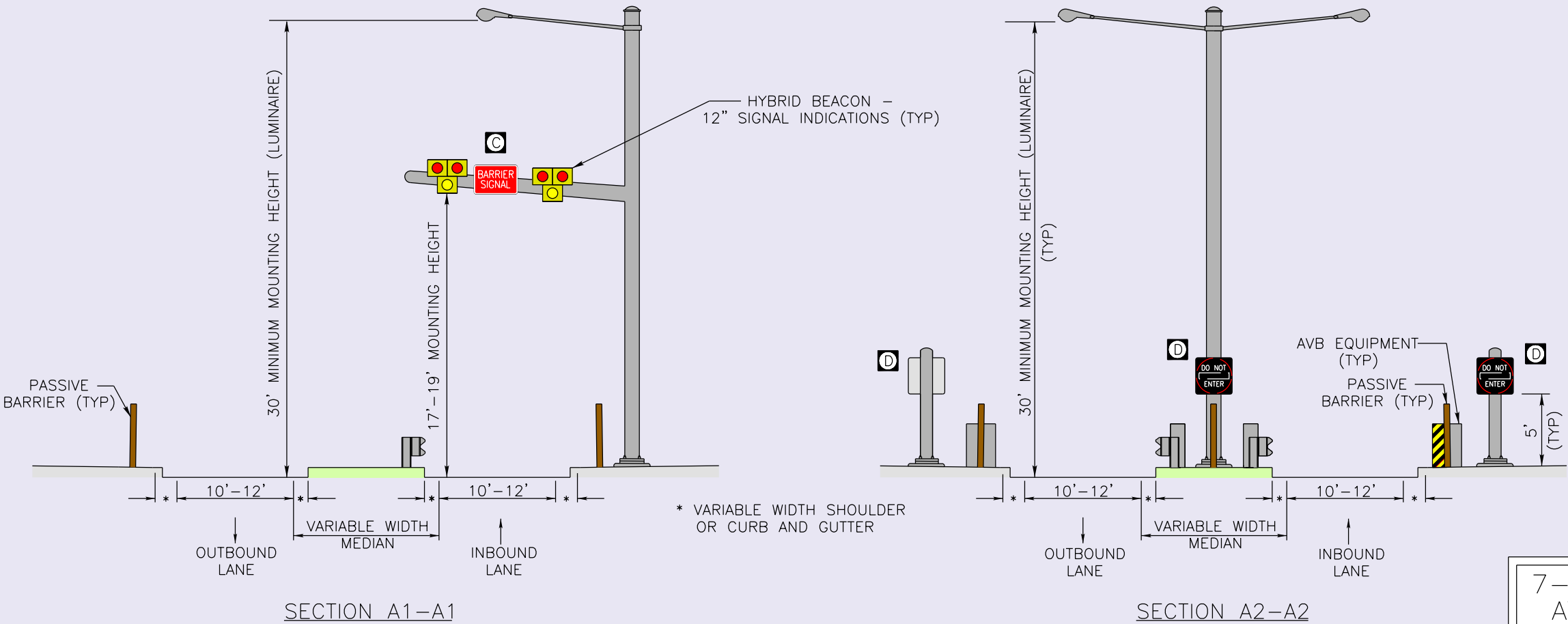
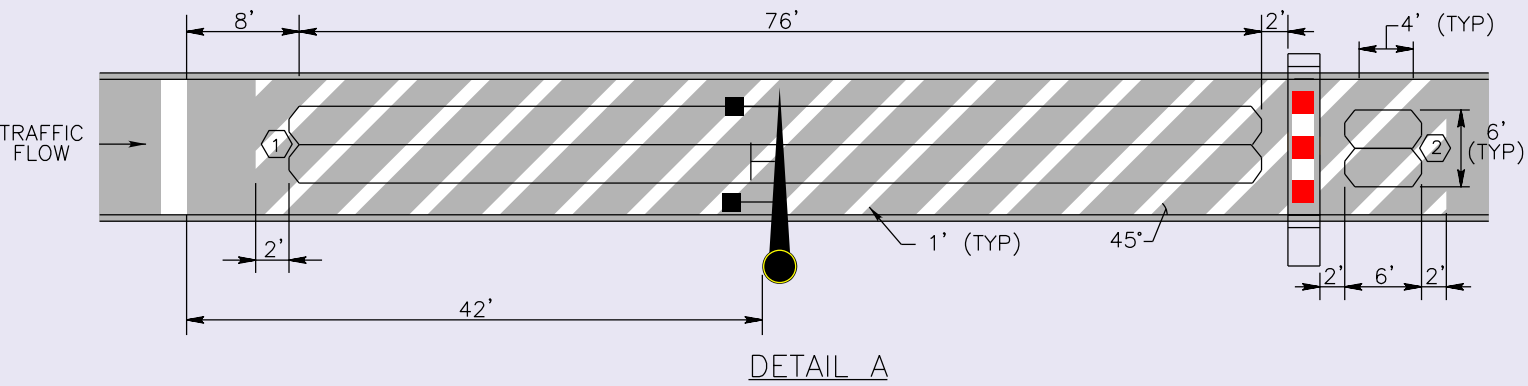
7–SEC HYBRID BEACON
AVB SAFETY SCHEME
SINGLE LANE
SHEET 1 OF 2

LEGEND

- ACTIVE VEHICLE BARRIER
- QUADRUPOLE INDUCTIVE LOOP DETECTOR
- LOOP DETECTION NUMBER
- POLE–MOUNTED SIGN AND LUMINAIRE
- POLE–MOUNTED SIGN
- POST MOUNTED SIGN
- HYBRID BEACON
- OVERHEAD MOUNTED SIGN
- POLE WITH MAST ARM AND LUMINAIRE
- STOP LINE PAVEMENT MARKING
- GUARDRAIL (OR OTHER MASH APPROVED BARRIER)
- WHITE CROSSHATCHING PAVEMENT MARKINGS
- PASSIVE BARRIER
- CRASHWORTHY END TERMINAL/CRASH CUSHION

7-SEC HYBRID BEACON SAFETY SCHEME	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION						
	TRAFFIC CONTROL	GUARD REACTION			SAFETY INTERVAL		BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5	6	7
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK			ALTERNATING FLASHING YELLOW			
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED			
	HYBRID BEACON	DARK			* SOLID YELLOW		ALTERNATING FLASHING RED	
	100dB HORN	SILENT			ACTIVATED			
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED					DEPLOYING	

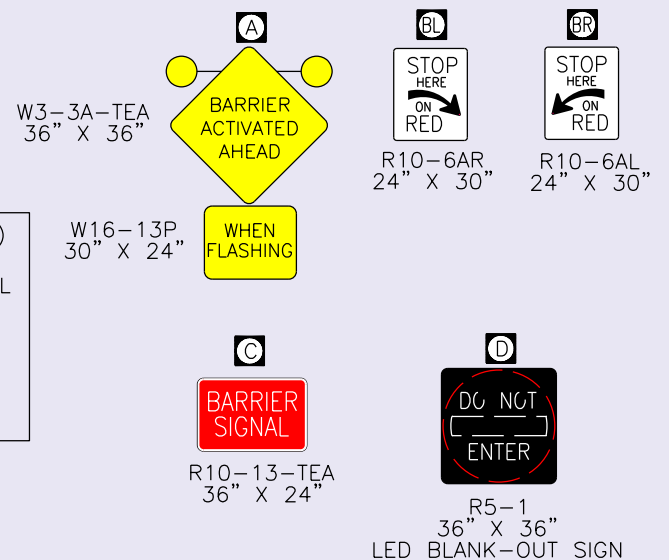
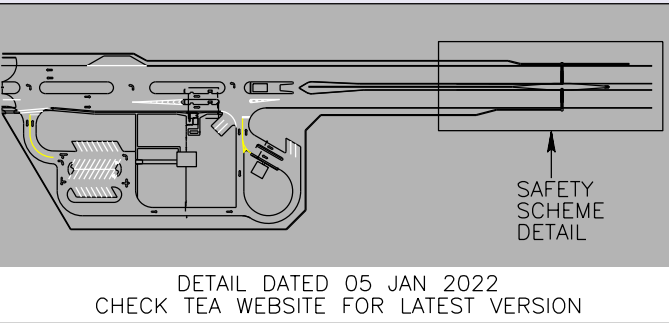
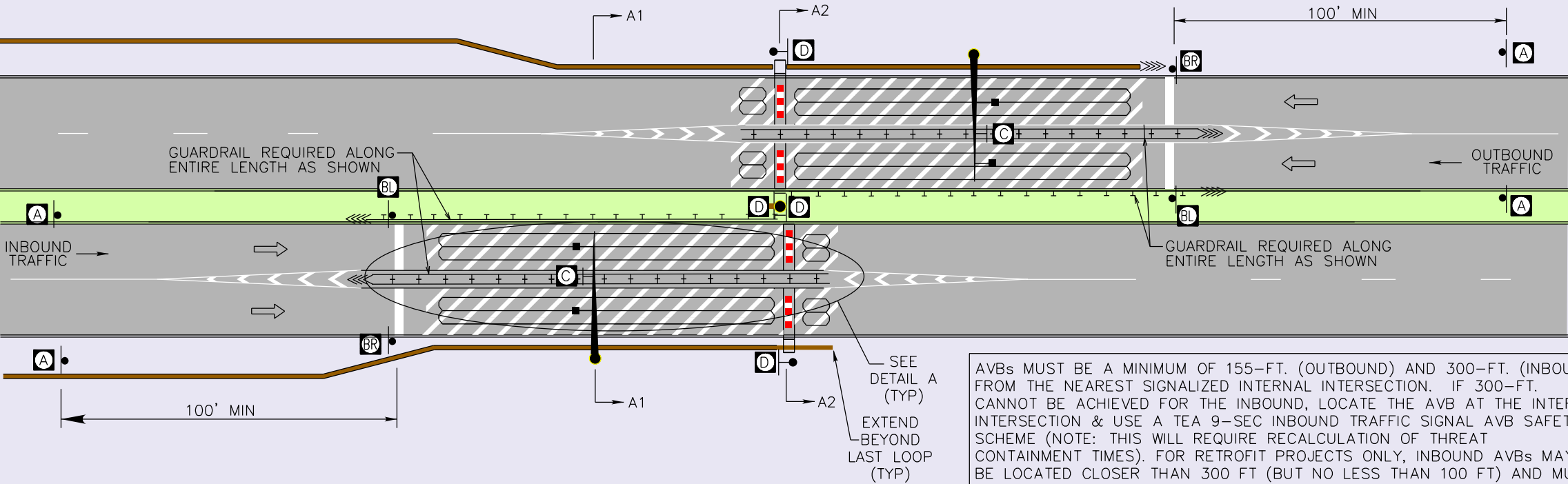
* TIMING SEQUENCE SAFETY INTERVAL, AS SHOWN ABOVE, IS CALCULATED FOR ROADWAYS POSTED AT 25 MPH OR LESS. CONSULT TEA FOR ROADWAYS POSTED GREATER THAN 25 MPH.



NOT TO SCALE

9

7-SEC HYBRID BEACON
AVB SAFETY SCHEME
SINGLE LANE
SHEET 2 OF 2



NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS AND SAME DIRECTIONAL LANES IS REQUIRED FOR INSTALLING GUARDRAIL.
3. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – ENTRY SAFETY LOOP, LOOP 2 – EXIT SAFETY LOOP.
4. INFRARED CAMERAS AND RADAR MAY BE USED IN LIEU OF LOOP DETECTORS. A SERIES OF SHORTER CONTINUOUS DETECTION LOOPS MAY BE USED IN PLACE OF THE 76 FT LOOP.
5. SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55-15, AND LOCAL REGULATIONS.
6. ALL SIGNALS SHALL BE LED AND USE 12-INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.
7. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
8. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
9. FOR MULTILANE SECTIONS, UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.
10. FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
11. UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
12. A TYPE 3 OBJECT MARKER IS REQUIRED ON NORMALLY EXPOSED ACTIVE VEHICLE BARRIER EQUIPMENT AND OTHER ROADSIDE OBSTACLES WHEN LOCATED IN THE CLEAR ZONE.
13. ALL TRAFFIC CONTROL DEVICES AND POLES INSTALLED WITHIN THE ROADWAY CLEAR ZONE SHALL UTILIZE BREAKAWAY SUPPORTS.
14. UNDER EFO CONDITION, WHEN MULTIPLE AVBs ARE USED, THEY SHALL BE DESIGNED TO OPERATE INDEPENDENTLY.
15. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
16. ADHERE TO APPLICABLE STATE DOT OR LOCAL STANDARDS FOR DESIGN, MATERIAL TYPE, AND CONSTRUCTION OF TRAFFIC CONTROL AND RELATED EQUIPMENT.
17. SCHEMATIC PROVIDES GENERAL ROADWAY LAYOUT AND MAY BE ADJUSTED TO MEET SITE CONDITIONS. ALTERATIONS IN TRAFFIC CONTROL (SIGNALS, BEACONS, SIGNING, MARKINGS, AND DETECTION LOOPS) REQUIRE TEA APPROVAL.
18. EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.

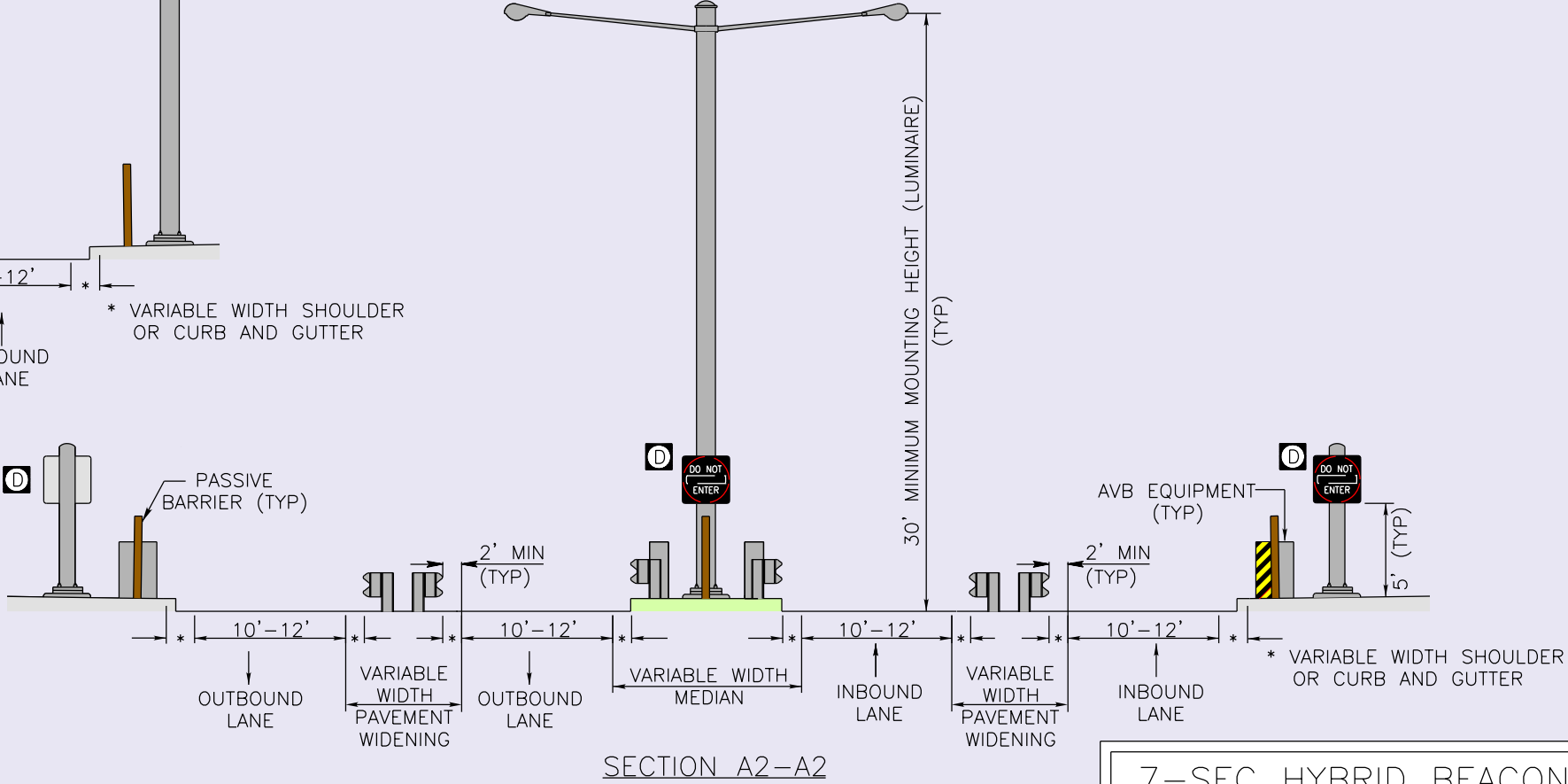
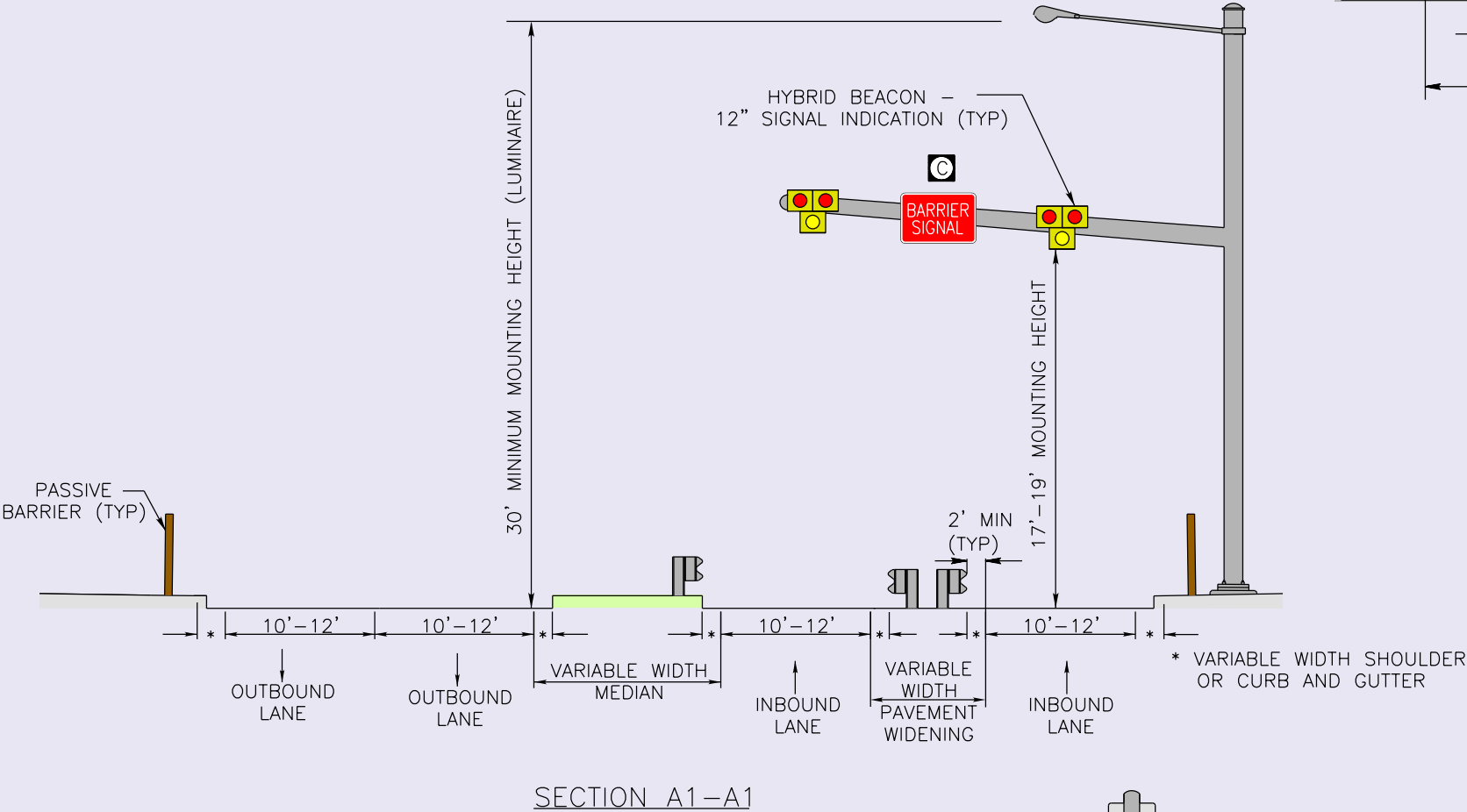
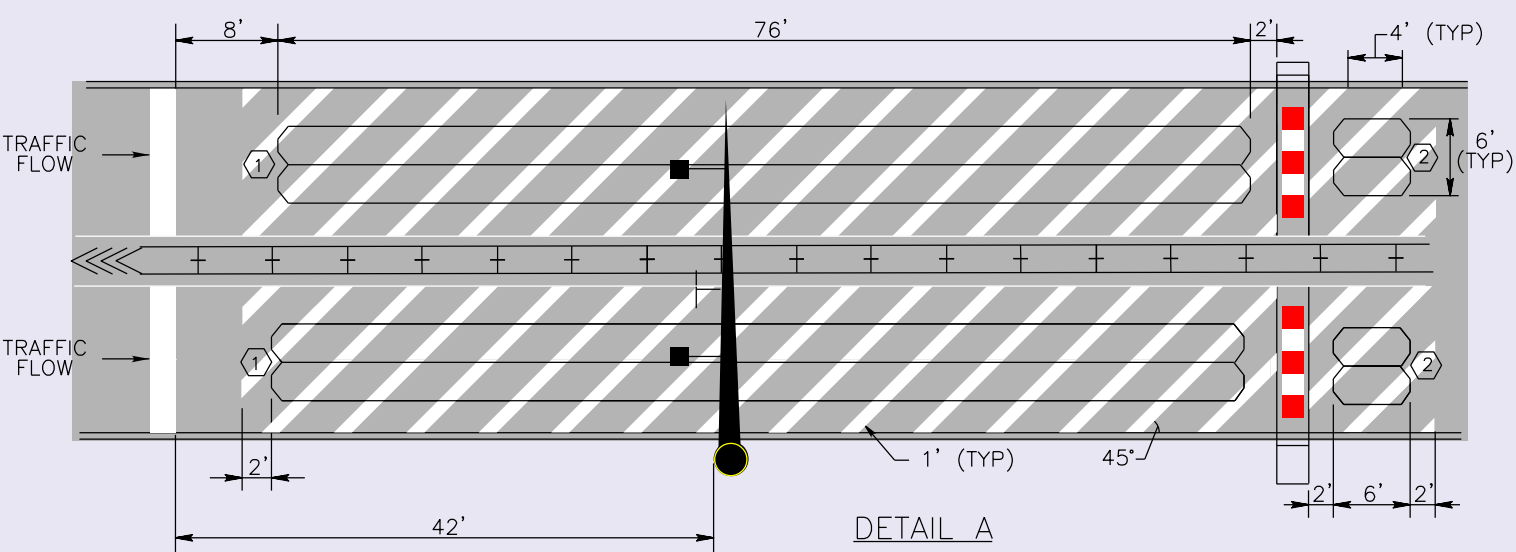
LEGEND

- ACTIVE VEHICLE BARRIER
- QUADRUPOLE INDUCTIVE LOOP DETECTOR
- LOOP DETECTION NUMBER
- POLE-MOUNTED SIGN AND LUMINAIRE
- POLE-MOUNTED SIGN
- POST MOUNTED SIGN
- HYBRID BEACON
- OVERHEAD MOUNTED SIGN
- POLE WITH MAST ARM AND LUMINAIRE
- STOP LINE PAVEMENT MARKING
- DOUBLE FACED GUARDRAIL (OR OTHER MASH APPROVED BARRIER)
- GUARDRAIL (OR OTHER MASH APPROVED BARRIER)
- WHITE CROSSHATCHING PAVEMENT MARKINGS
- PASSIVE BARRIER
- CRASHWORTHY END TERMINAL/CRASH CUSHION

NOT TO SCALE

7-SEC HYBRID BEACON SAFETY SCHEME	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION						
	TRAFFIC CONTROL	GUARD REACTION			SAFETY INTERVAL		BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5	6	7
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK			ALTERNATING FLASHING YELLOW			
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED			
	HYBRID BEACON	DARK			* SOLID YELLOW		ALTERNATING FLASHING RED	
	100dB HORN	SILENT			ACTIVATED			
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED					DEPLOYING	

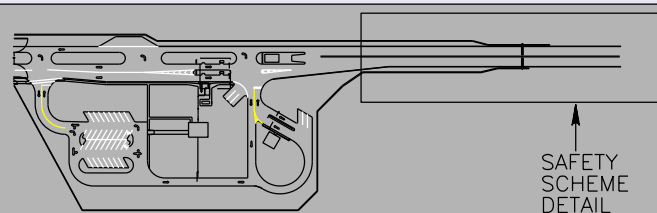
* TIMING SEQUENCE SAFETY INTERVAL, AS SHOWN ABOVE, IS CALCULATED FOR ROADWAYS POSTED AT 25 MPH OR LESS. CONSULT TEA FOR ROADWAYS POSTED GREATER THAN 25 MPH.



NOT TO SCALE

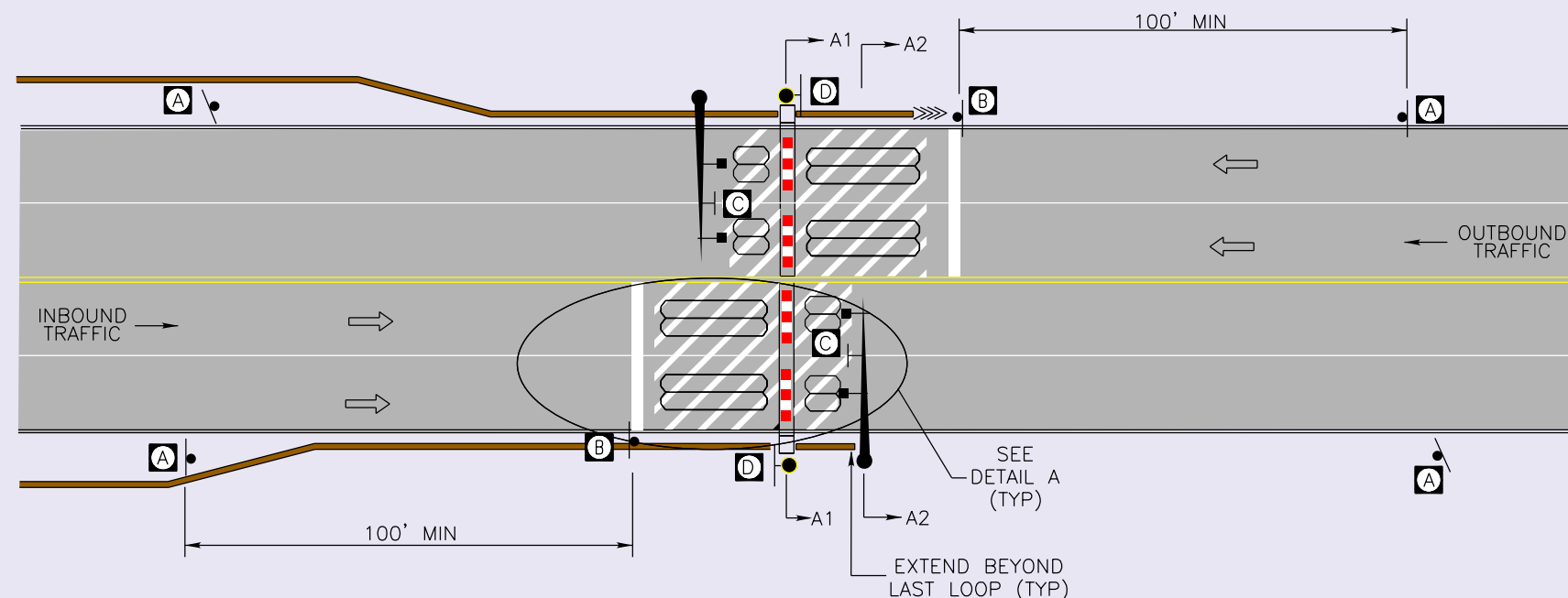
11

7-SEC HYBRID BEACON
AVB SAFETY SCHEME
MULTILANE
SHEET 2 OF 2



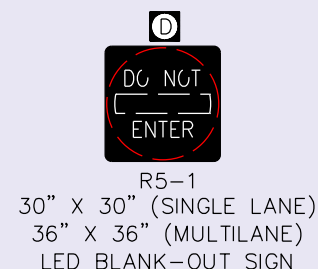
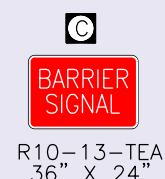
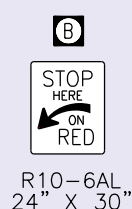
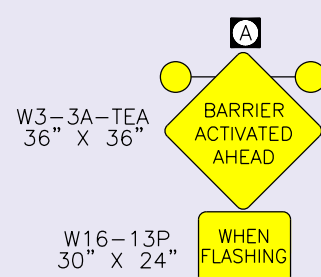
DETAIL DATED 05 JAN 2022
CHECK TEA WEBSITE FOR LATEST VERSION

AVB MUST BE A MINIMUM OF 155-FT. (OUTBOUND) AND 300-FT. (INBOUND) FROM THE NEAREST SIGNALIZED INTERNAL INTERSECTION. IF 300-FT. CANNOT BE ACHIEVED FOR THE INBOUND, LOCATE THE AVB AT THE INTERNAL INTERSECTION & USE A 9-SEC INBOUND TRAFFIC SIGNAL AVB SAFETY SCHEME. FOR RETROFIT PROJECTS ONLY, INBOUND AVBs MAY BE LOCATED CLOSER THAN 300 FT (BUT NO LESS THAN 200 FT) AND MUST BE COORDINATED WITH INTERSECTION TRAFFIC SIGNAL.



LEGEND

- ACTIVE VEHICLE BARRIER
- QUADRUPOLE INDUCTIVE LOOP DETECTOR
- LOOP DETECTION NUMBER
- POLE-MOUNTED SIGN AND LUMINAIRE
- POST MOUNTED SIGN
- HYBRID BEACON
- OVERHEAD MOUNTED SIGN
- POLE WITH MAST ARM
- STOP LINE PAVEMENT MARKING
- GUARDRAIL (OR OTHER MASH APPROVED BARRIER)
- WHITE CROSSHATCHING PAVEMENT MARKINGS
- PASSIVE BARRIER
- CRASHWORTHY END TERMINAL/CRASH CUSHION



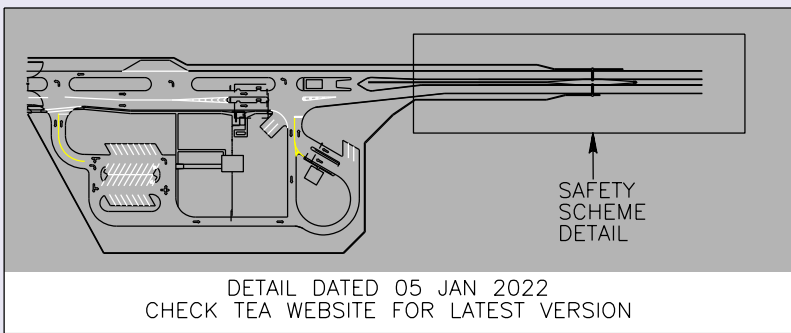
NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
3. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – ENTRY SAFETY LOOP, LOOP 2 – EXIT SAFETY LOOP.
4. INFRARED CAMERAS OR RADAR MAY BE USED IN LIEU OF LOOP DETECTORS.
5. SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55-15, AND LOCAL REGULATIONS.
6. ALL SIGNALS SHALL BE LED AND USE 12-INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.
7. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
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9. FOR MULTILANE SECTIONS, UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.
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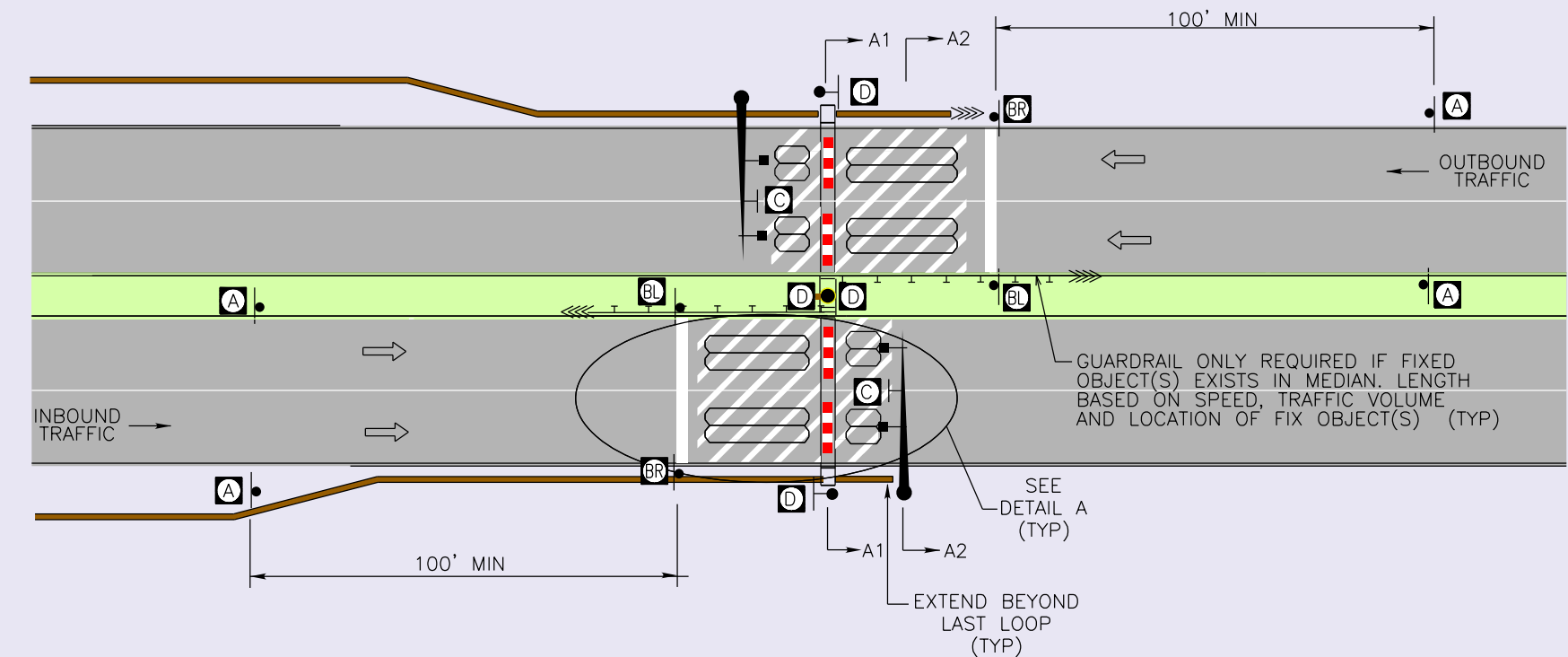
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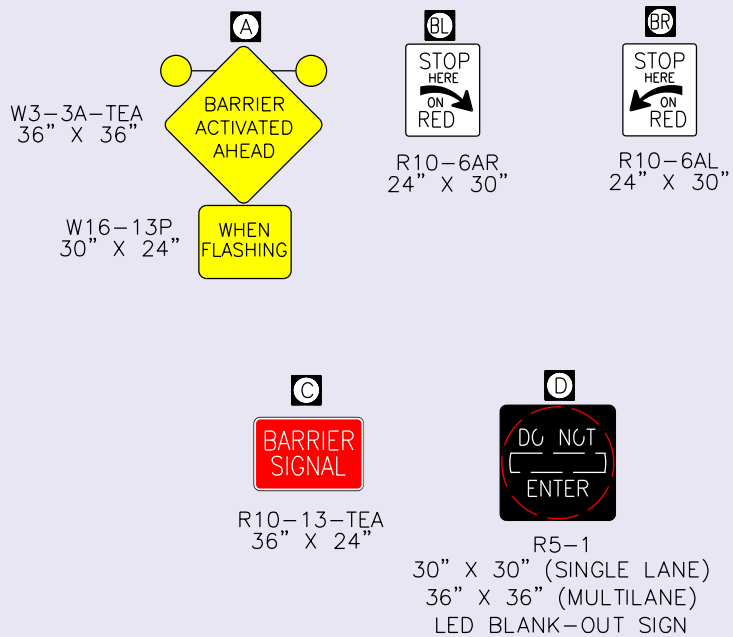
9-SEC HYBRID BEACON
AVB SAFETY SCHEME
ROADWAY WITHOUT MEDIAN
SHEET 1 OF 2



AVB MUST BE A MINIMUM OF 155-FT. (OUTBOUND) AND 300-FT. (INBOUND) FROM THE NEAREST SIGNALIZED INTERNAL INTERSECTION. IF 300-FT. CANNOT BE ACHIEVED FOR THE INBOUND, LOCATE THE AVB AT THE INTERNAL INTERSECTION & USE A 9-SEC INBOUND TRAFFIC SIGNAL AVB SAFETY SCHEME. FOR RETROFIT PROJECTS ONLY, INBOUND AVBs MAY BE LOCATED CLOSER THAN 300 FT (BUT NO LESS THAN 200 FT) AND MUST BE COORDINATED WITH INTERSECTION TRAFFIC SIGNAL.



- ### LEGEND
- ACTIVE VEHICLE BARRIER
 - QUADRUPOLE INDUCTIVE LOOP DETECTOR
 - LOOP DETECTION NUMBER
 - POLE-MOUNTED SIGN AND LUMINAIRE
 - POLE-MOUNTED SIGN
 - POST MOUNTED SIGN
 - HYBRID BEACON
 - OVERHEAD MOUNTED SIGN
 - POLE WITH MAST ARM
 - STOP LINE PAVEMENT MARKING
 - GUARDRAIL (OR OTHER MASH APPROVED BARRIER)
 - WHITE CROSSHATCHING PAVEMENT MARKINGS
 - PASSIVE BARRIER
 - CRASHWORTHY END TERMINAL/CRASH CUSHION



NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
3. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS MAY BE NECESSARY FOR INSTALLING GUARDRAIL AND EQUIPMENT.
4. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – ENTRY SAFETY LOOP, LOOP 2 – EXIT SAFETY LOOP.
5. INFRARED CAMERAS OR RADAR MAY BE USED IN LIEU OF LOOP DETECTORS.
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9. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
10. FOR MULTILANE SECTIONS, UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.
11. FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
12. UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
13. A TYPE 3 OBJECT MARKER IS REQUIRED ON NORMALLY EXPOSED ACTIVE VEHICLE BARRIER EQUIPMENT AND OTHER ROADSIDE OBSTACLES WHEN LOCATED IN THE CLEAR ZONE AREA.
14. ALL TRAFFIC CONTROL DEVICES AND POLES INSTALLED WITHIN THE ROADWAY CLEAR ZONE SHALL UTILIZE BREAKAWAY SUPPORTS.
15. UNDER EFO CONDITION, WHEN MULTIPLE AVBs ARE USED, THEY SHALL BE DESIGNED TO OPERATE INDEPENDENTLY.
16. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
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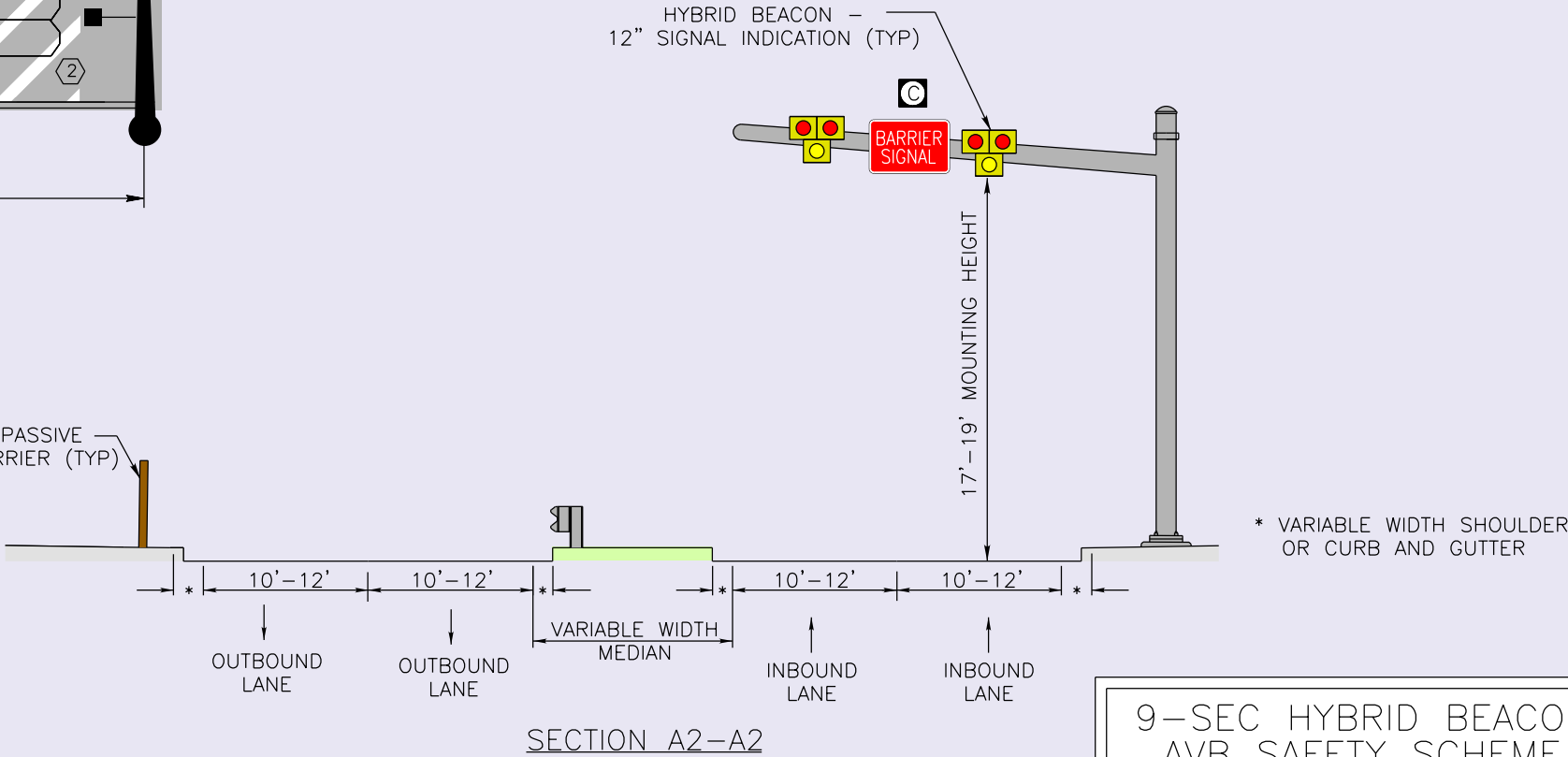
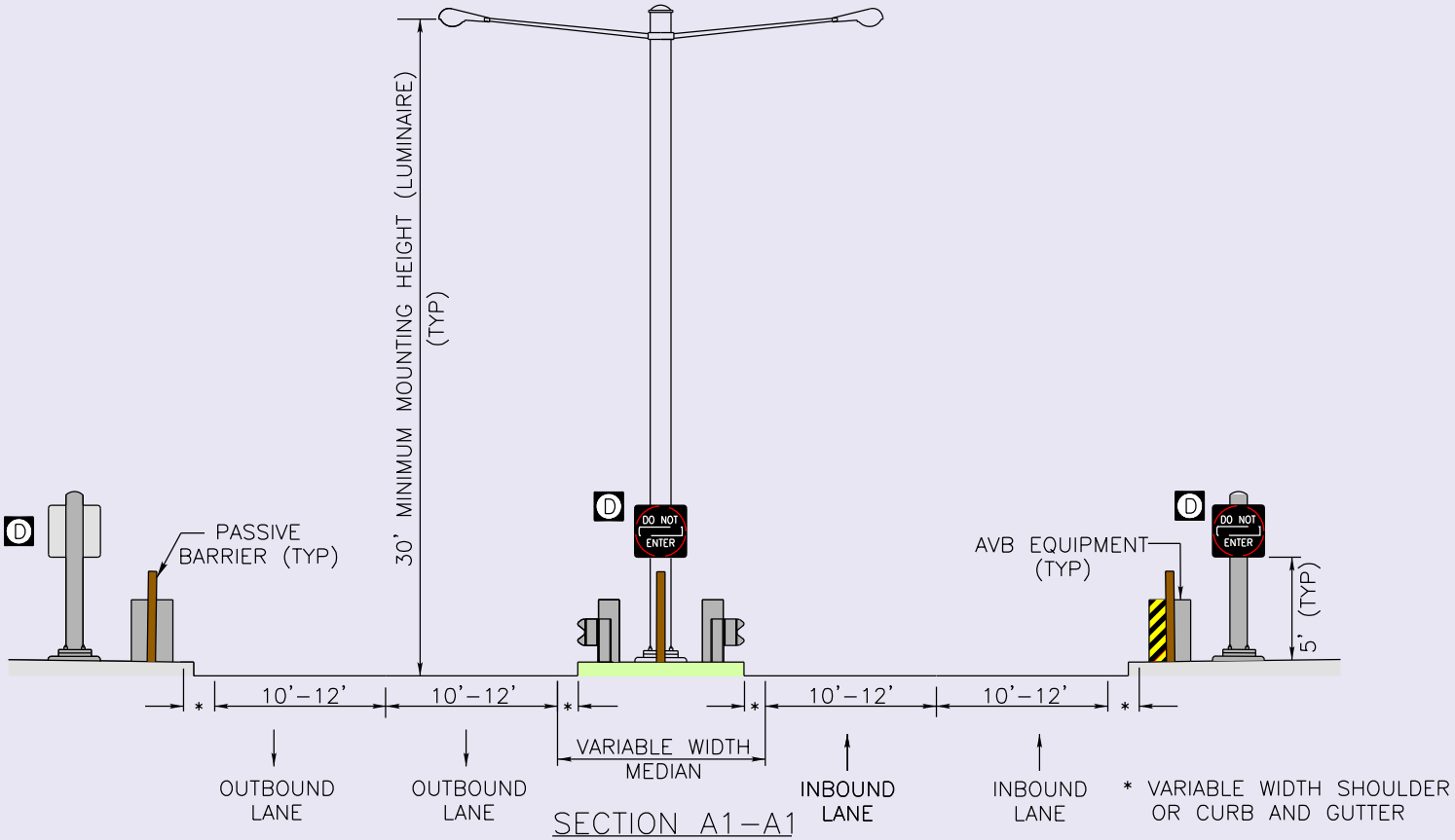
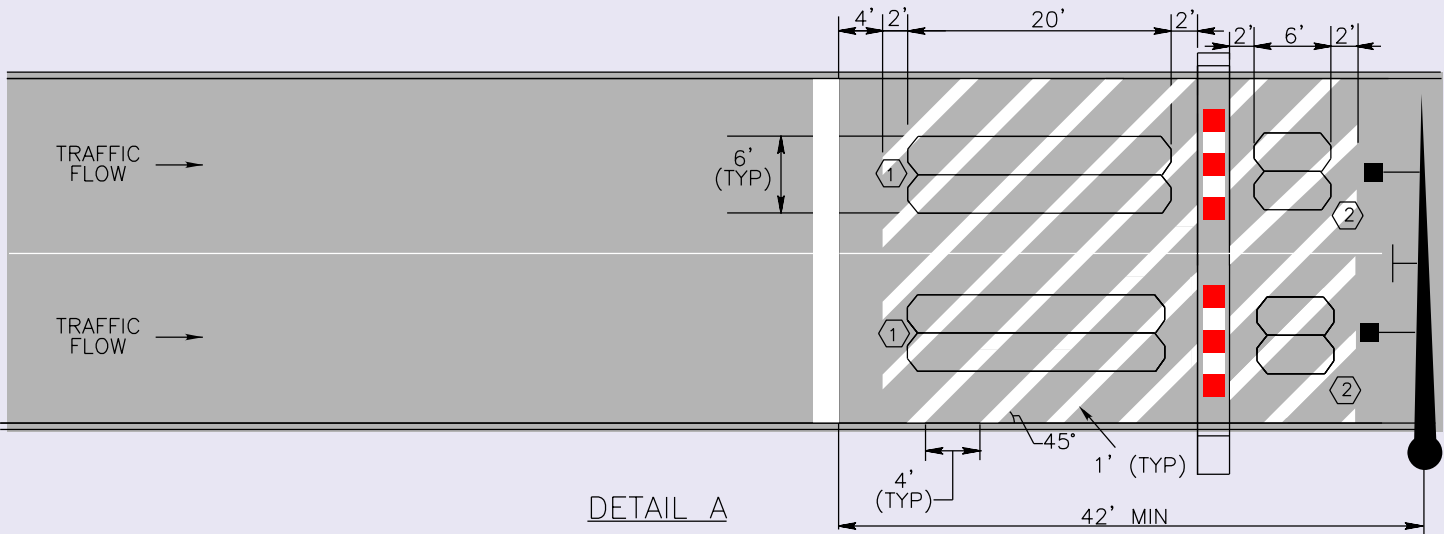
NOT TO SCALE

14

9-SEC HYBRID BEACON
AVB SAFETY SCHEME
ROADWAY WITH MEDIAN
SHEET 1 OF 2

9-SEC HYBRID BEACON SAFETY SCHEME	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION								
	TRAFFIC CONTROL	GUARD REACTION			SAFETY INTERVAL				BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5	6	7	8	9
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK			ALTERNATING FLASHING YELLOW					
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED					
	HYBRID BEACON	DARK			* SOLID YELLOW			ALTERNATING FLASHING RED		
	100dB HORN	SILENT			ACTIVATED					
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED							DEPLOYING	

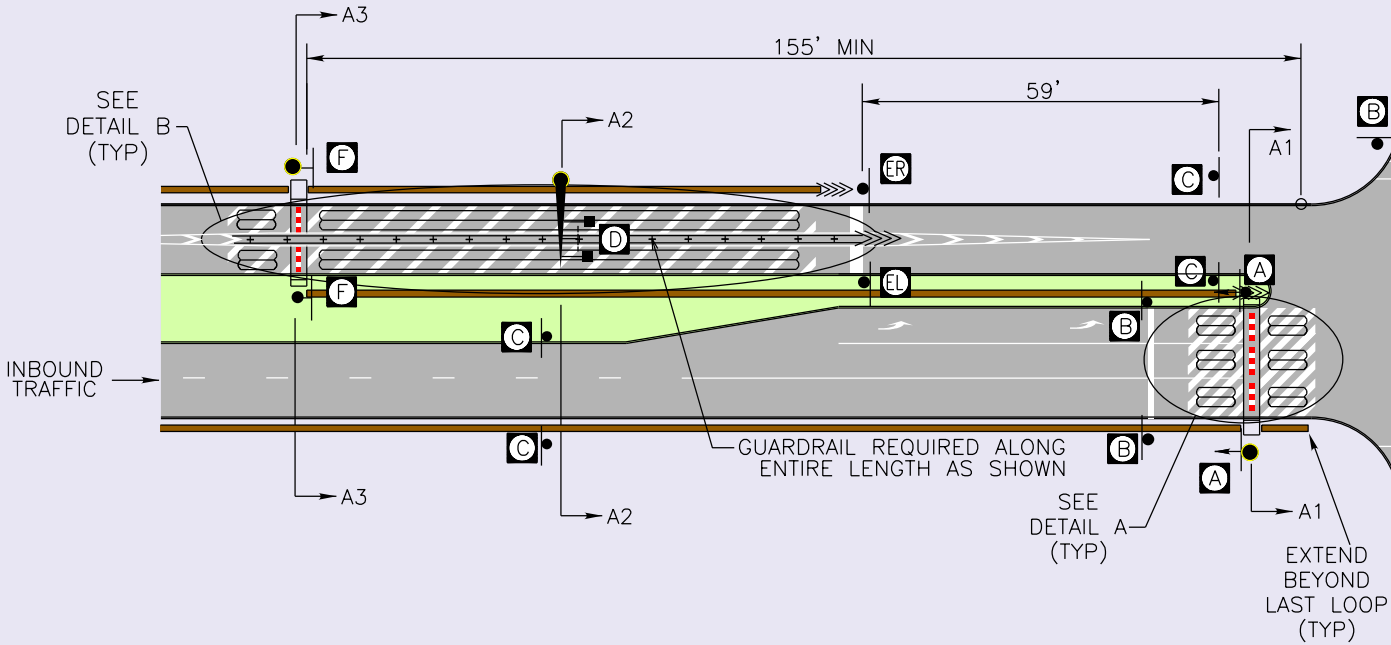
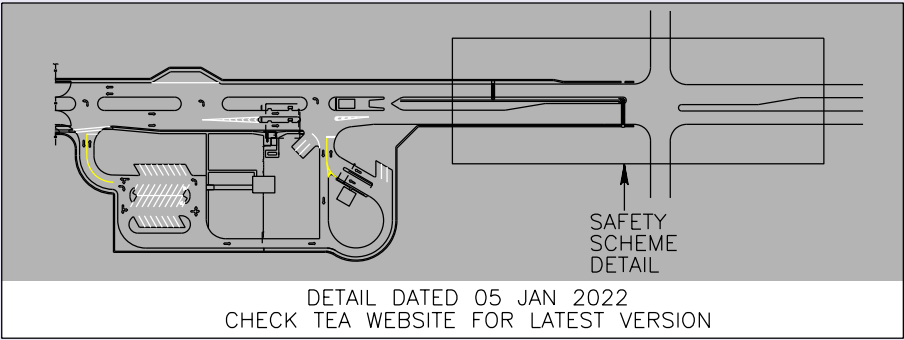
* TIMING SEQUENCE SAFETY INTERVAL, AS SHOWN ABOVE, IS CALCULATED FOR ROADWAYS POSTED AT 25 MPH OR LESS. CONSULT TEA FOR ROADWAYS POSTED GREATER THAN 25 MPH.



NOT TO SCALE

15

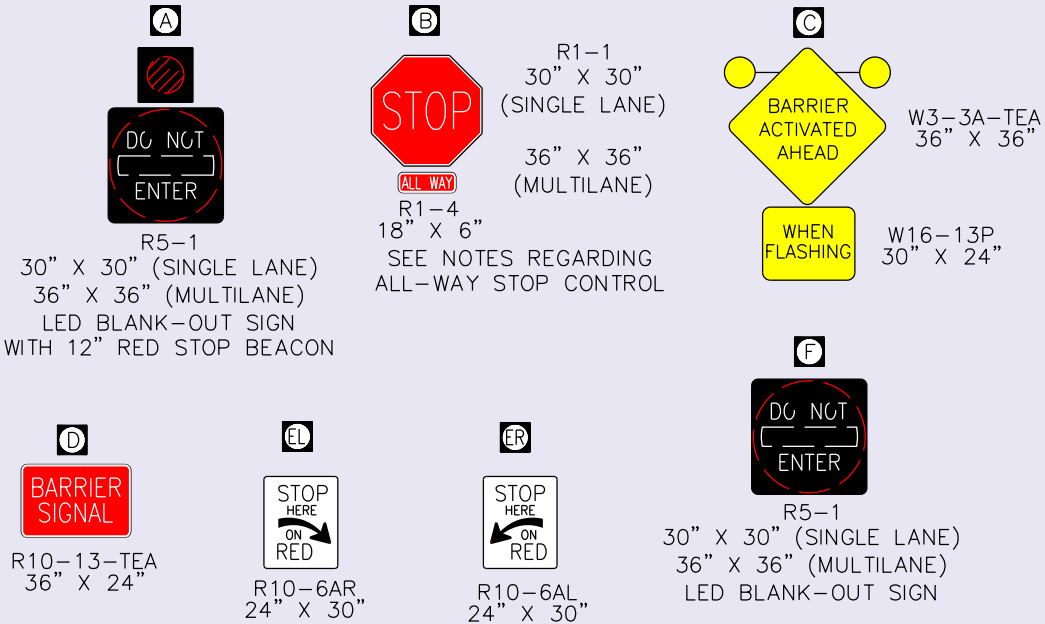
9-SEC HYBRID BEACON
AVB SAFETY SCHEME
ROADWAY WITH MEDIAN
SHEET 2 OF 2



NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
3. SCHEME NOT INTENDED FOR USE WHERE INBOUND TRAFFIC VOLUME EXCEEDS 800 VEHICLES PER HOUR PER LANE IN THE PEAK HOUR.
4. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS IS REQUIRED FOR INSTALLING EQUIPMENT.
5. SCHEMATIC SHOWS THE DEFAULT INTERSECTION TRAFFIC CONTROL AS ALL-WAY STOP CONTROL. A TRAFFIC STUDY MUST BE PERFORMED TO VALIDATE THAT THE INTERSECTION WILL OPERATE AT AN ACCEPTABLE LEVEL OF SERVICE UNDER THESE CONDITIONS.
6. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – ENTRY SAFETY LOOP, LOOP 2 – EXIT SAFETY LOOP.
7. INFRARED CAMERAS AND RADAR MAY BE USED IN LIEU OF LOOP DETECTORS. A SERIES OF SHORTER CONTINUOUS DETECTION LOOPS MAY BE USED IN PLACE OF THE 76 FT LOOP.
8. SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55-15, AND LOCAL REGULATIONS.
9. ALL SIGNALS SHALL BE LED AND USE 12-INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.

NOTES CONTINUED ON FOLLOWING PAGE



LEGEND

- ACTIVE VEHICLE BARRIER
- QUADRUPOLE INDUCTIVE LOOP DETECTOR
- LOOP DETECTION NUMBER
- POLE-MOUNTED SIGN AND LUMINAIRE
- POLE-MOUNTED SIGN WITH BEACON AND LUMINAIRE
- POLE-MOUNTED SIGN WITH BEACON
- POLE-MOUNTED SIGN
- POST MOUNTED SIGN
- HYBRID BEACON
- OVERHEAD MOUNTED SIGN
- SIGNAL POLE WITH MAST ARM AND LUMINAIRE
- STOP LINE PAVEMENT MARKING
- WHITE CROSSHATCHING PAVEMENT MARKINGS
- PASSIVE BARRIER
- CRASHWORTHY END TERMINAL/CRASH CUSHION
- DOUBLE FACED GUARDRAIL (OR OTHER MASH APPROVED BARRIER)

NOT TO SCALE

INTERSECTION COMBINATION
5-SEC STOP CONTROL/
7-SEC HYBRID BEACON
AVB SAFETY SCHEME
SHEET 1 OF 3

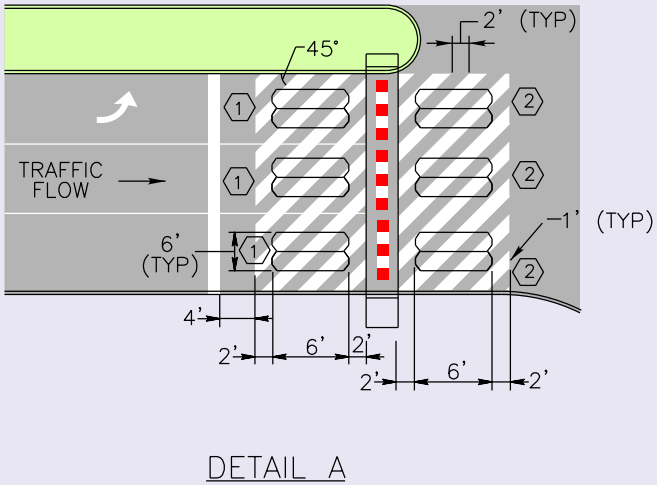
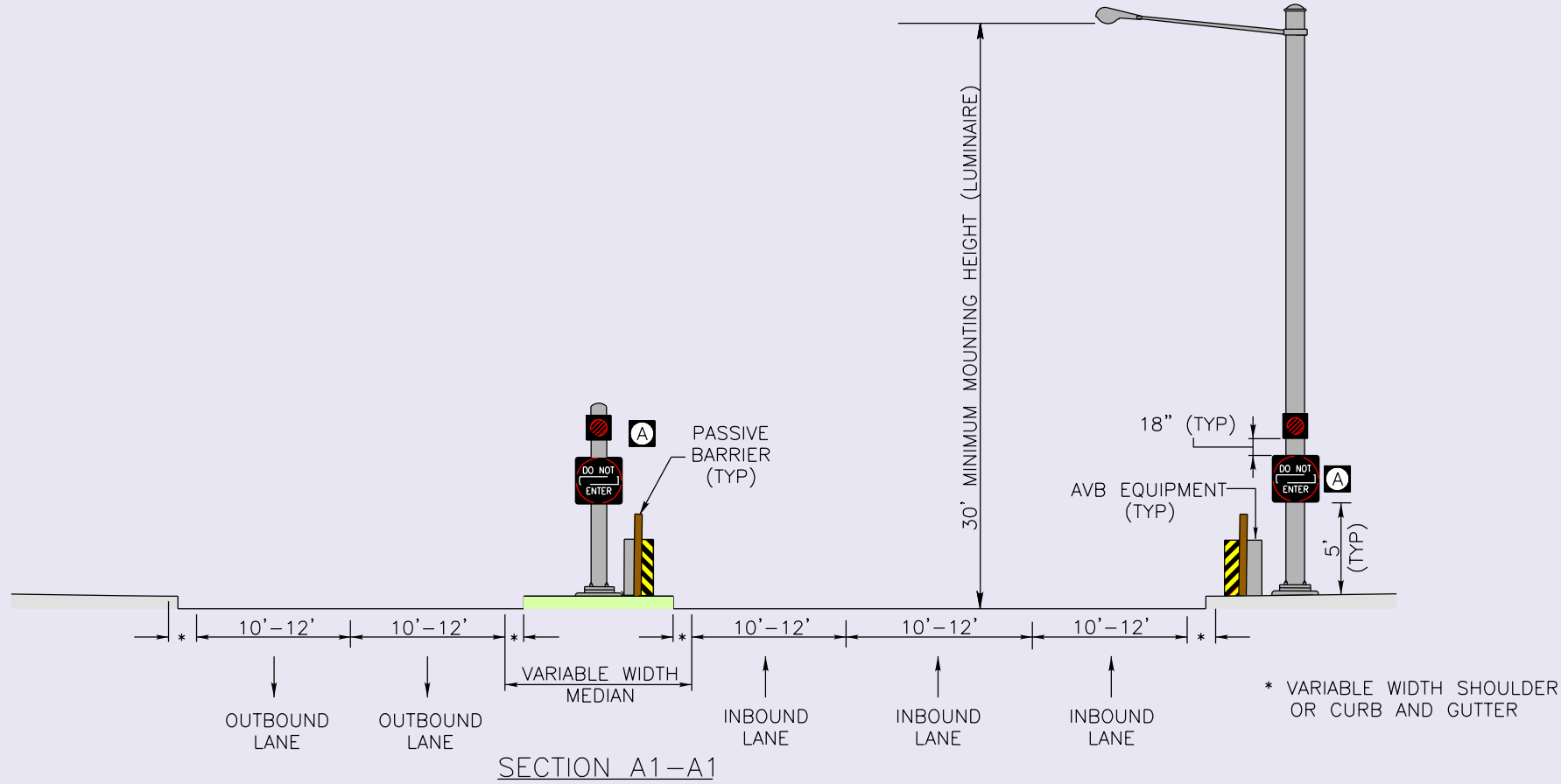
5-SEC STOP CONTROL AVB SAFETY SCHEME (INBOUND)		OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION				
	TRAFFIC CONTROL	GUARD REACTION			BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5
	W3-3A-TEA WARNING SIGN WITH BEACONS	BEACONS DARK			ALTERNATING FLASHING YELLOW	
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED	
	STOP BEACON	DARK			FLASHING RED	
	100dB HORN	SILENT			ACTIVATED	
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED			DEPLOYING	

7-SEC HYBRID BEACON SAFETY SCHEME (OUTBOUND)	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION						
	TRAFFIC CONTROL	GUARD REACTION			SAFETY INTERVAL		BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5	6	7
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK			ALTERNATING FLASHING YELLOW			
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED			
	HYBRID BEACON	DARK			* SOLID YELLOW		ALTERNATING FLASHING RED	
	100dB HORN	SILENT			ACTIVATED			
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED					DEPLOYING	

* TIMING SEQUENCE SAFETY INTERVAL, AS SHOWN ABOVE, IS CALCULATED FOR ROADWAYS POSTED AT 25 MPH OR LESS. CONSULT TEA FOR ROADWAYS POSTED GREATER THAN 25 MPH.

NOTES (CONTINUED)

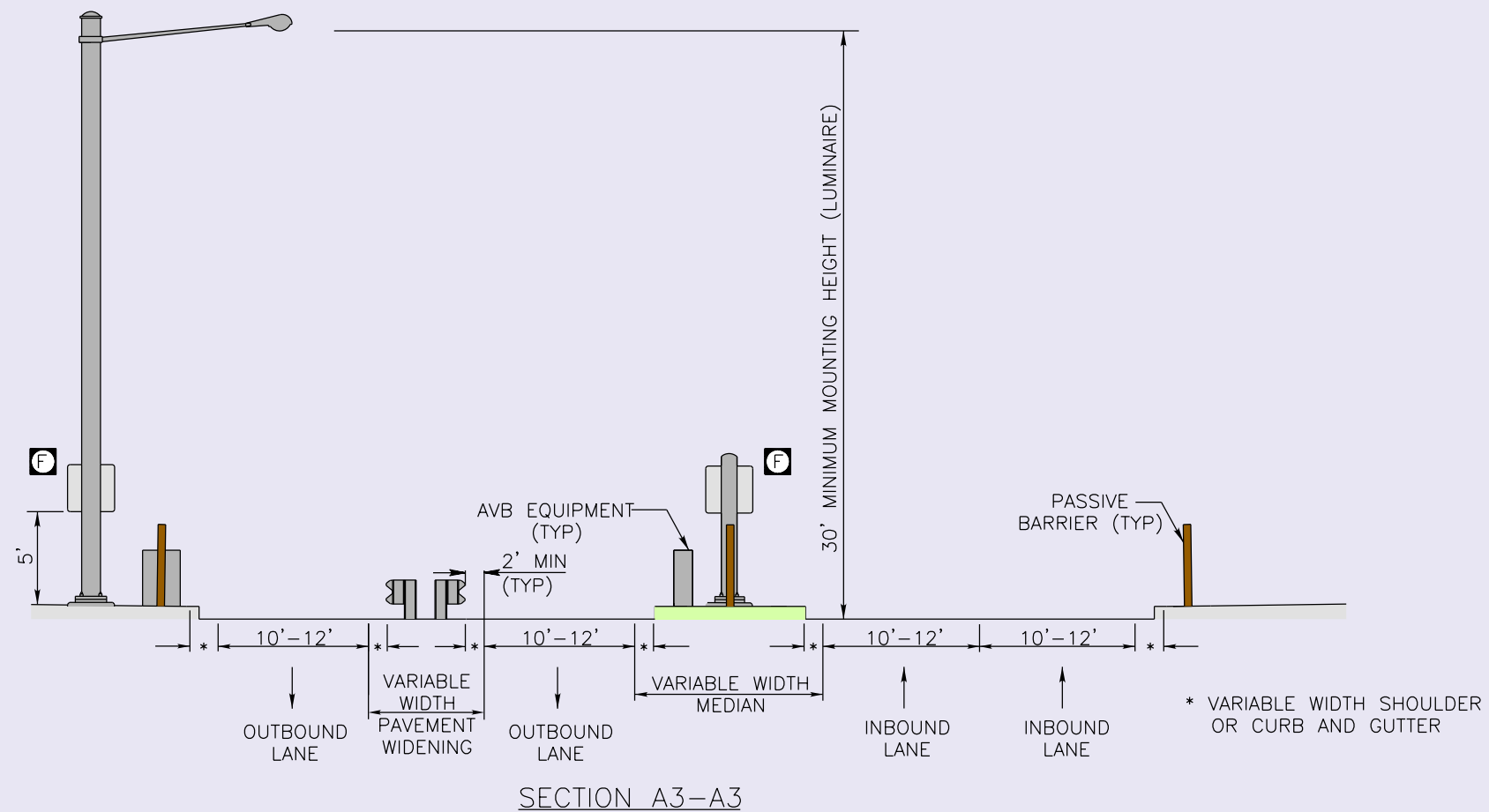
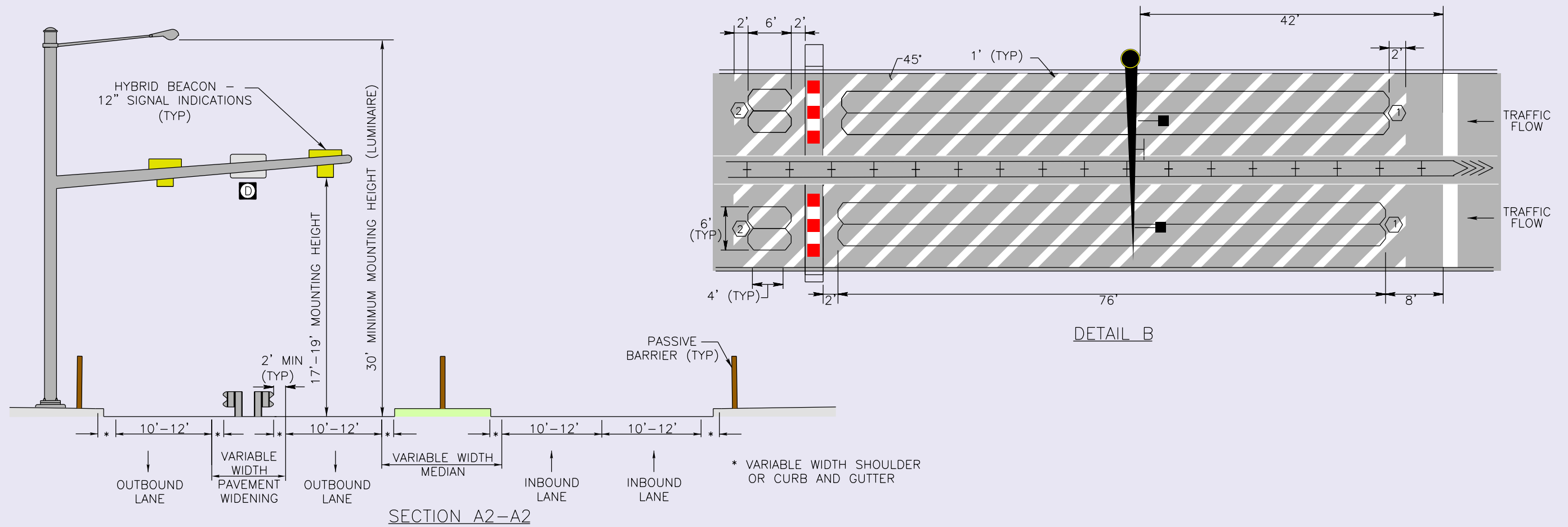
10. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
11. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
12. FOR MULTILANE SECTIONS, UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.
13. FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
14. UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
15. A TYPE 3 OBJECT MARKER IS REQUIRED ON NORMALLY EXPOSED ACTIVE VEHICLE BARRIER EQUIPMENT AND OTHER ROADSIDE OBSTACLES WHEN LOCATED IN THE CLEAR ZONE.
16. ALL TRAFFIC CONTROL DEVICES AND POLES INSTALLED WITHIN THE ROADWAY CLEAR ZONE SHALL UTILIZE BREAKAWAY SUPPORTS.
17. UNDER EFO CONDITION, WHEN MULTIPLE AVBs ARE USED, THEY SHALL BE DESIGNED TO OPERATE INDEPENDENTLY.
18. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
19. ADHERE TO APPLICABLE STATE DOT OR LOCAL STANDARDS FOR DESIGN, MATERIAL TYPE, AND CONSTRUCTION OF TRAFFIC CONTROL AND RELATED EQUIPMENT.
20. SCHEMATIC PROVIDES GENERAL ROADWAY LAYOUT AND MAY BE ADJUSTED TO MEET SITE CONDITIONS. ALTERATIONS IN TRAFFIC CONTROL (SIGNALS, BEACONS, SIGNING, MARKINGS, AND DETECTION LOOPS) REQUIRE TEA APPROVAL.
21. EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.



NOT TO SCALE

17

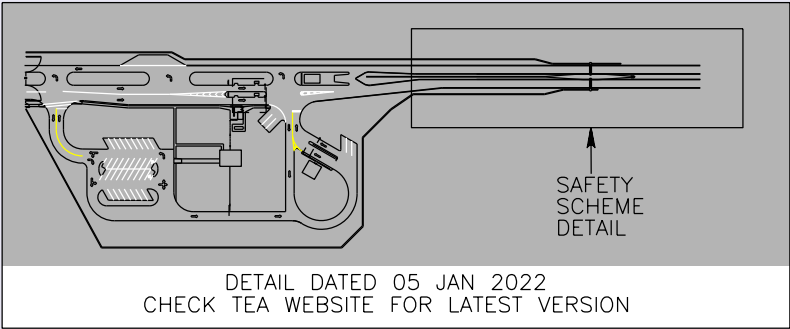
INTERSECTION COMBINATION
5-SEC STOP CONTROL/
7-SEC HYBRID BEACON
AVB SAFETY SCHEME
SHEET 2 OF 3



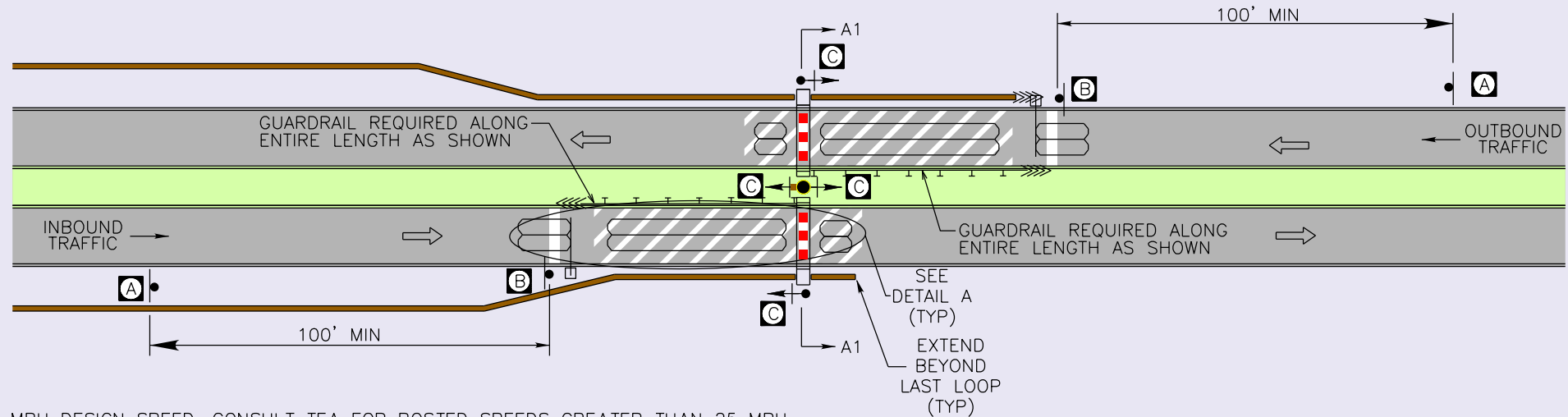
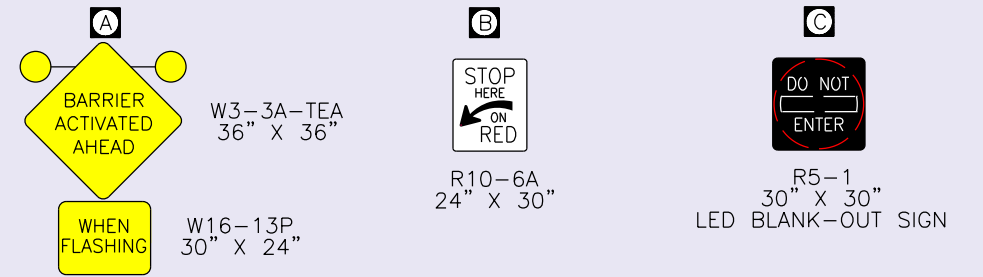
NOT TO SCALE

18

INTERSECTION COMBINATION
5-SEC STOP CONTROL/
7-SEC HYBRID BEACON
AVB SAFETY SCHEME
SHEET 3 OF 3



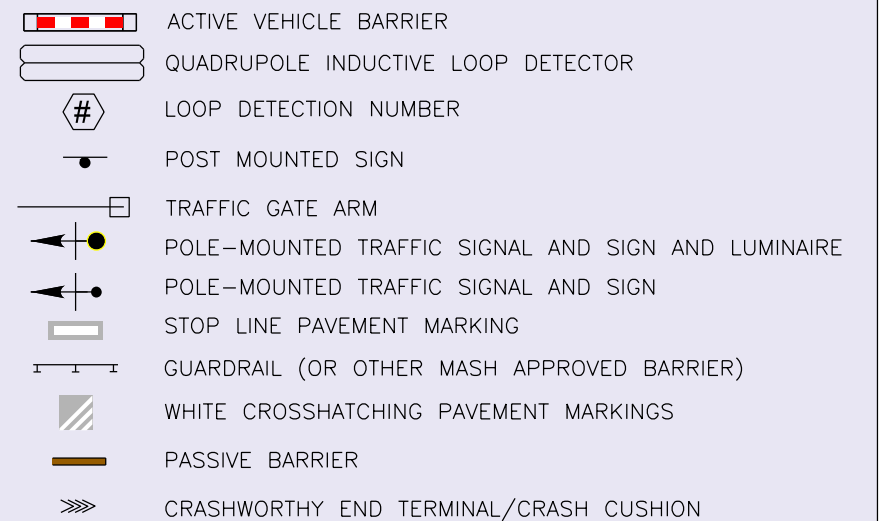
AVB MUST BE A MINIMUM OF 155-FT. (OUTBOUND) AND 300-FT. (INBOUND) FROM THE NEAREST SIGNALIZED INTERNAL INTERSECTION. IF 300-FT. CANNOT BE ACHIEVED FOR THE INBOUND, LOCATE THE AVB AT THE INTERNAL INTERSECTION & USE A 9-SEC INBOUND TRAFFIC SIGNAL AVB SAFETY SCHEME. (NOTE: THIS WILL REQUIRE RECALCULATION OF THREAT CONTAINMENT TIMES).



NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS IS REQUIRED FOR INSTALLING GUARDRAIL AND EQUIPMENT.
3. THREE VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB. LOOP 1 – TRAFFIC ARM LOOP, LOOP 2 – ENTRY SAFETY LOOP, LOOP 3 – EXIT SAFETY LOOP.
4. INFRARED CAMERAS OR RADAR MAY BE USED IN LIEU OF LOOP DETECTORS.
5. SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55-15, AND LOCAL REGULATIONS.
6. ALL SIGNALS SHALL BE LED AND USE 12-INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.
7. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
8. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
9. FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
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14. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
15. ADHERE TO APPLICABLE STATE DOT OR LOCAL STANDARDS FOR DESIGN, MATERIAL TYPE, AND CONSTRUCTION OF TRAFFIC CONTROL AND RELATED EQUIPMENT.
16. SCHEMATIC PROVIDES GENERAL ROADWAY LAYOUT AND MAY BE ADJUSTED TO MEET SITE CONDITIONS. ALTERATIONS IN TRAFFIC CONTROL (TRAFFIC ARM, SIGNALS, BEACONS, SIGNING, MARKINGS, AND DETECTION LOOPS) REQUIRE TEA APPROVAL.
17. EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.

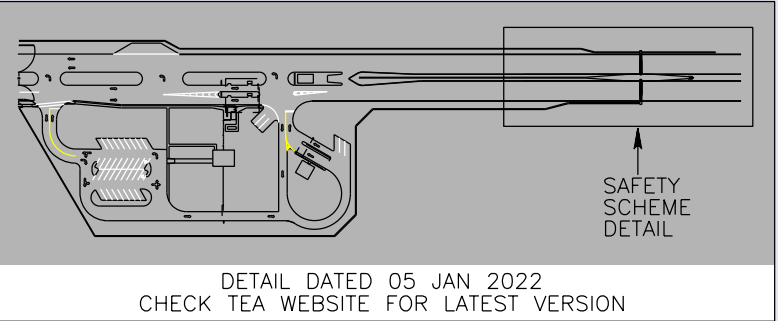
LEGEND



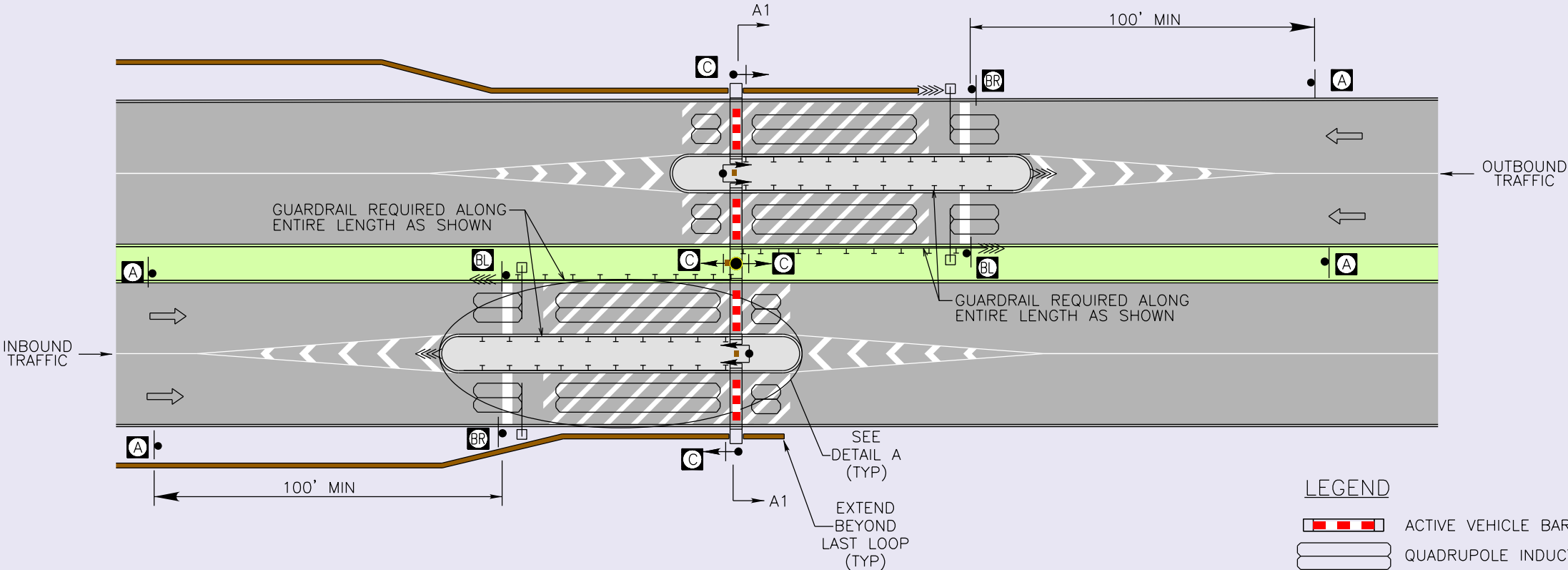
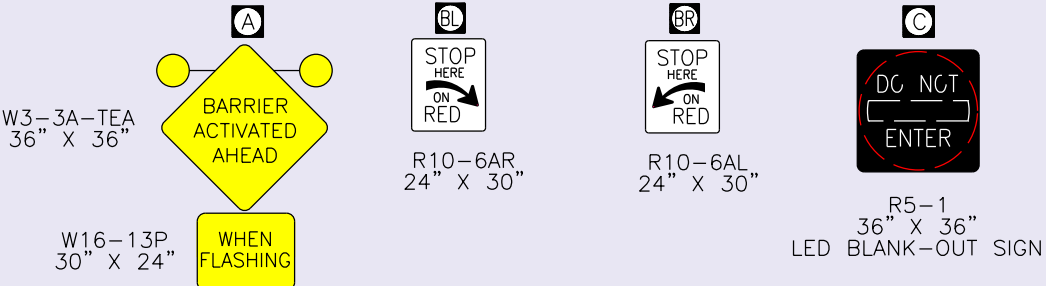
NOT TO SCALE

19

7-SEC
HIGH EFFICIENCY PRESENCE
DETECTION AVB SAFETY SCHEME
SINGLE LANE
SHEET 1 OF 2



AVBs MUST BE A MINIMUM OF 155-FT. (OUTBOUND) AND 300-FT. (INBOUND) FROM THE NEAREST SIGNALIZED INTERNAL INTERSECTION. IF 300-FT. CANNOT BE ACHIEVED FOR THE INBOUND, LOCATE THE AVB AT THE INTERNAL INTERSECTION & USE A 9-SEC INBOUND TRAFFIC SIGNAL AVB SAFETY SCHEME. (NOTE: THIS WILL REQUIRE RECALCULATION OF THREAT CONTAINMENT TIMES).



NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS IS REQUIRED FOR INSTALLING GUARDRAIL AND EQUIPMENT.
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7. ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
8. ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
9. FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
10. UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.

LEGEND

- ACTIVE VEHICLE BARRIER
- QUADRUPOLE INDUCTIVE LOOP DETECTOR
- LOOP DETECTION NUMBER
- POST MOUNTED SIGN
- TRAFFIC GATE ARM
- POLE-MOUNTED TRAFFIC SIGNAL AND SIGN AND LUMINAIRE
- POLE-MOUNTED TRAFFIC SIGNAL AND SIGN
- POLE-MOUNTED TRAFFIC SIGNAL(S)
- STOP LINE PAVEMENT MARKING
- GUARDRAIL (OR OTHER MASH APPROVED BARRIER)
- WHITE CROSSHATCHING PAVEMENT MARKINGS
- PASSIVE BARRIER
- CRASHWORTHY END TERMINAL/CRASH CUSHION

NOTES CONTINUED ON FOLLOWING PAGE

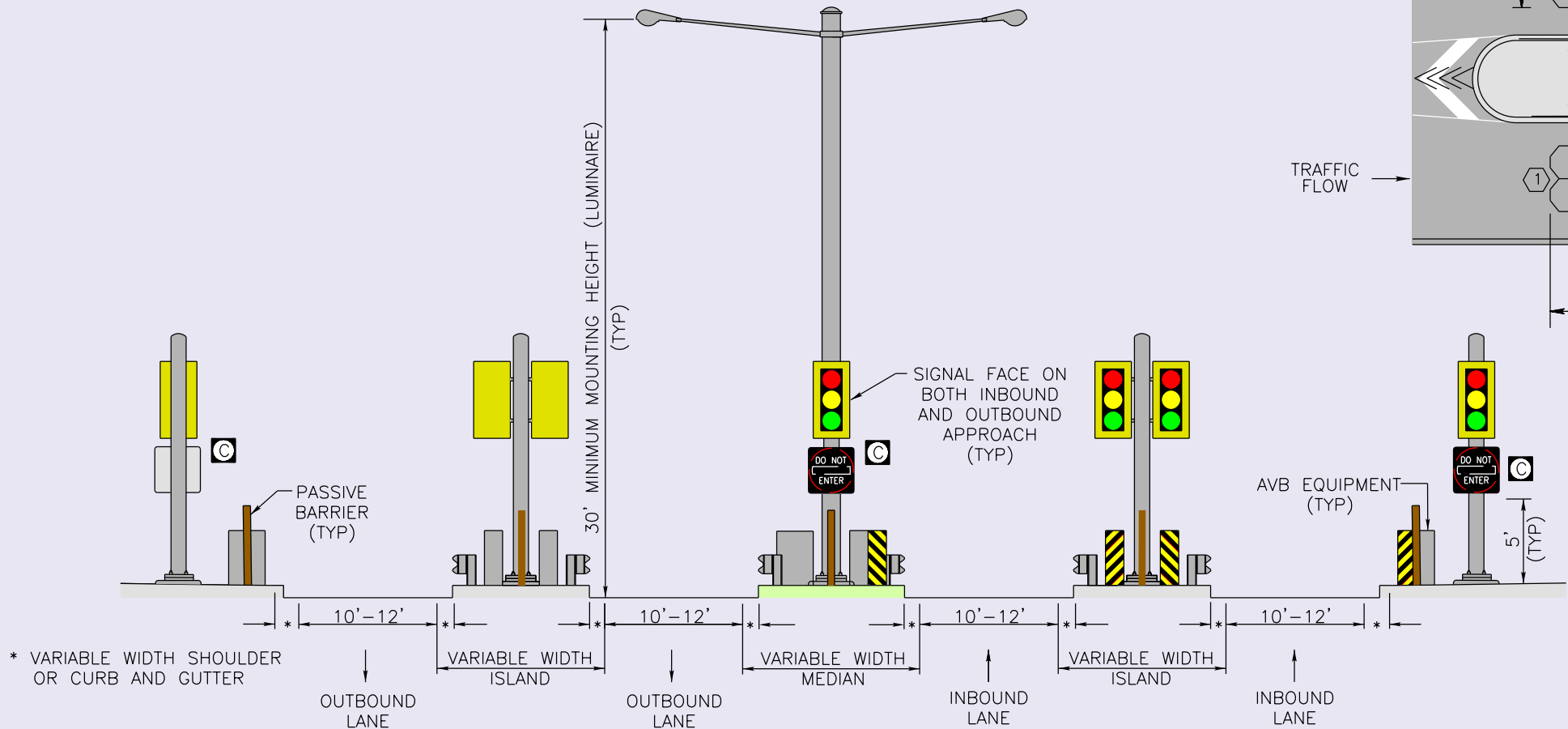
NOT TO SCALE

7-SEC HIGH EFFICIENCY PRESENCE DETECTION SAFETY SCHEME	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION						
	TRAFFIC CONTROL	GUARD REACTION			* SAFETY INTERVAL		BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5	6	7
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK			ALTERNATING FLASHING YELLOW			
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED			
	TRAFFIC SIGNALS	NORMAL OPERATIONS			* YELLOW		RED	
	100dB HORN	SILENT			ACTIVATED			
	TRAFFIC ARM (WITH TRAFFIC IN SYSTEM)	NORMAL OPERATIONS			DEPLOYING		DEPLOYED	
	ACTIVE VEHICLE BARRIER (WITH TRAFFIC IN SYSTEM)	NON-DEPLOYED					DEPLOYING	
	TRAFFIC ARM (WITH NO TRAFFIC IN SYSTEM)	DEPLOYED						
	ACTIVE VEHICLE BARRIER (WITH NO TRAFFIC IN SYSTEM)	DEPLOYED						

* THE TRAFFIC SIGNAL SAFETY TIME SHALL INCLUDE A MINIMUM OF 3 SECONDS OF YELLOW DURING NORMAL OPERATIONS.

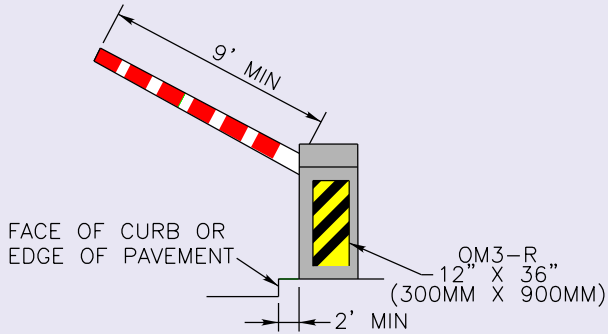
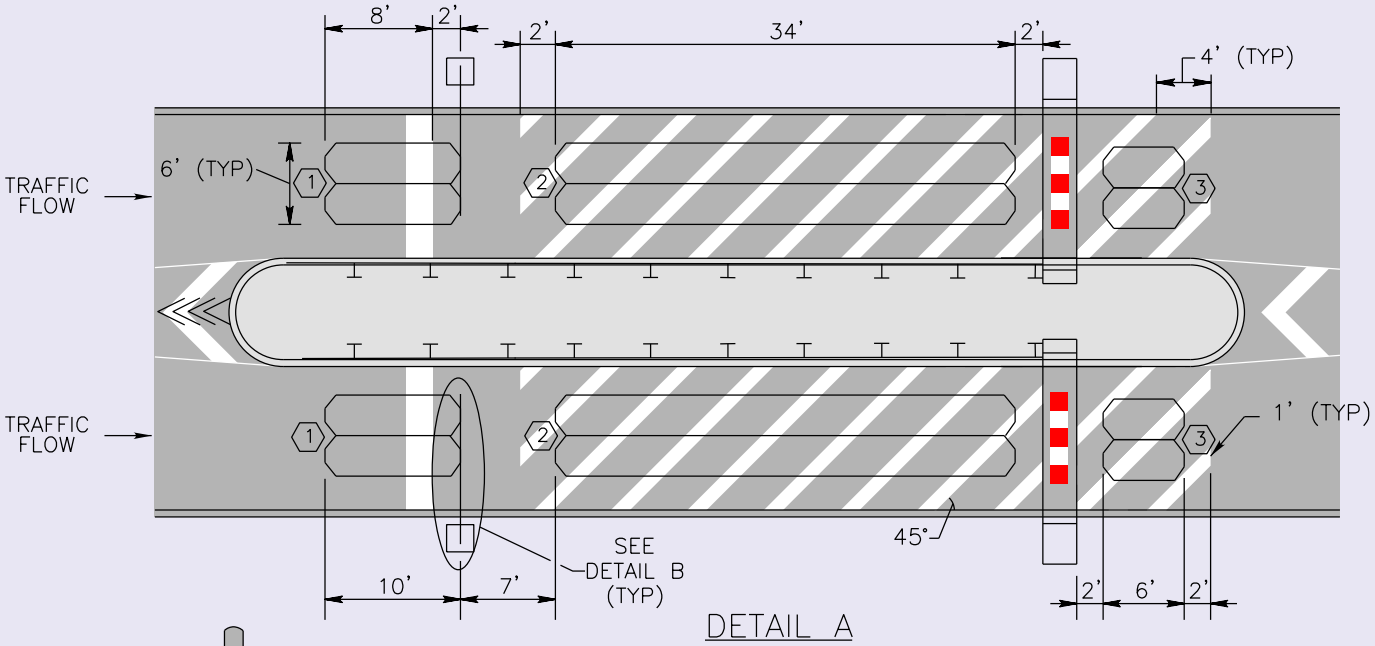
NOTES (CONTINUED)

11. UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
12. A TYPE 3 OBJECT MARKER IS REQUIRED ON NORMALLY EXPOSED ACTIVE VEHICLE BARRIER EQUIPMENT AND OTHER ROADSIDE OBSTACLES WHEN LOCATED IN THE CLEAR ZONE.
13. ALL TRAFFIC CONTROL DEVICES AND POLES INSTALLED WITHIN THE ROADWAY CLEAR ZONE SHALL UTILIZE BREAKAWAY SUPPORTS.
14. UNDER EFO CONDITION, WHEN MULTIPLE AVBs ARE USED, THEY SHALL BE DESIGNED TO OPERATE INDEPENDENTLY.
15. AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
16. ADHERE TO APPLICABLE STATE DOT OR LOCAL STANDARDS FOR DESIGN, MATERIAL TYPE, AND CONSTRUCTION OF TRAFFIC CONTROL AND RELATED EQUIPMENT.
17. SCHEMATIC PROVIDES GENERAL ROADWAY LAYOUT AND MAY BE ADJUSTED TO MEET SITE CONDITIONS. ALTERATIONS IN TRAFFIC CONTROL (TRAFFIC ARM, SIGNALS BEACONS, SIGNING, MARKINGS, AND DETECTION LOOPS) REQUIRE TEA APPROVAL.
18. EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.



* VARIABLE WIDTH SHOULDER OR CURB AND GUTTER

SECTION A1-A1



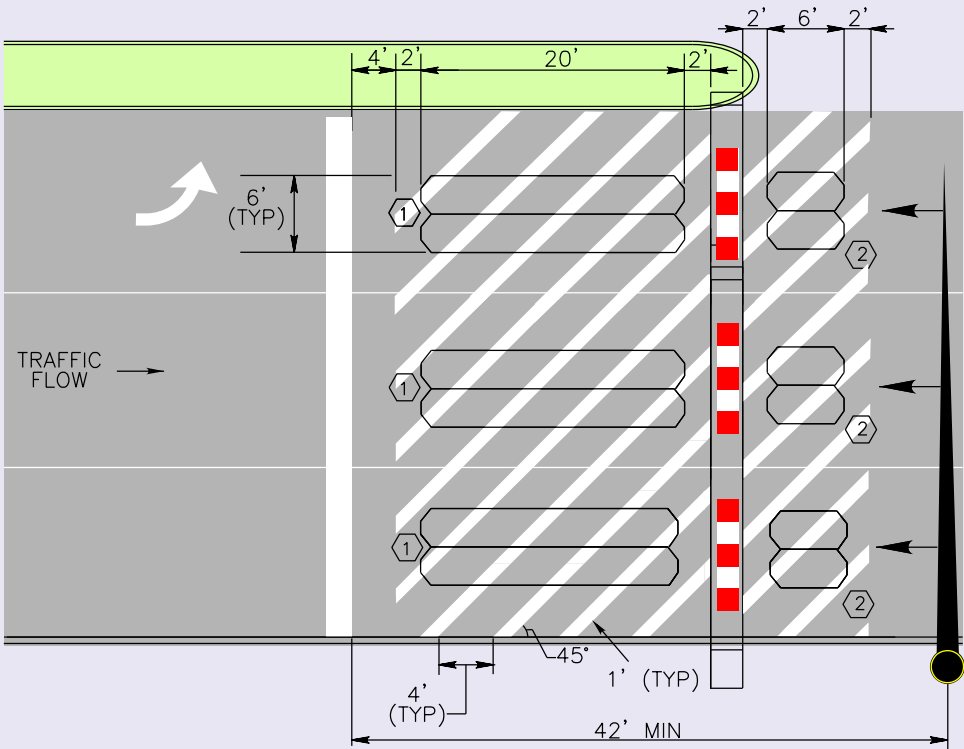
NOT TO SCALE

9-SEC INTERSECTION TRAFFIC SIGNAL SAFETY SCHEME INBOUND	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION									
	TRAFFIC CONTROL	NORMAL OPS	GUARD REACTION			SAFETY INTERVAL				BARRIER DEPLOYMENT	
	TIMELINE (SEC)	—	1	2	3	4	5	6	7	8	9
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK				ALTERNATING FLASHING YELLOW					
	TRAFFIC SIGNAL	GREEN				* YELLOW			RED		
	100dB HORN	SILENT				ACTIVATED					
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED								DEPLOYING	
	NO RIGHT TURN LED BLANKOUT (POLE 1)	DARK							R3-1 ILLUMINATED		

* TIMING SEQUENCE SAFETY INTERVAL, AS SHOWN ABOVE, IS CALCULATED FOR ROADWAYS POSTED AT 25 MPH OR LESS. CONSULT TEA FOR ROADWAYS POSTED GREATER THAN 25 MPH.

12-SEC INTERSECTION TRAFFIC SIGNAL SAFETY SCHEME OUTBOUND	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION													
	TRAFFIC CONTROL	NORMAL OPS	GUARD REACTION			SAFETY INTERVAL								BARRIER DEPLOYMENT	
	TIMELINE (SEC)	—	1	2	3	4	5	6	7	8	9	10	11	12	
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK				ALTERNATING FLASHING YELLOW									
	TRAFFIC SIGNAL	GREEN				YELLOW			** RED						
	100dB HORN	SILENT				ACTIVATED									
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED											DEPLOYING		
	NO RIGHT TURN LED BLANKOUT (POLE 5)	DARK						R3-1 ILLUMINATED							

** FOR EFO OPERATIONS, THE RED CLEARANCE TIME (4 SECONDS) FOR THE OUTBOUND LANE IS BASED ON A VEHICLE TRAVELING AT 25 MPH AND CLEARING A 140 FT WIDE INTERSECTION (STOP LINE TO AVB). SITE SPECIFIC CONDITIONS MAY REQUIRE MORE OR LESS RED CLEARANCE TIME WHICH WILL REDUCE OR INCREASE YOUR TOTAL THREAT CONTAINMENT TIME REQUIREMENT.

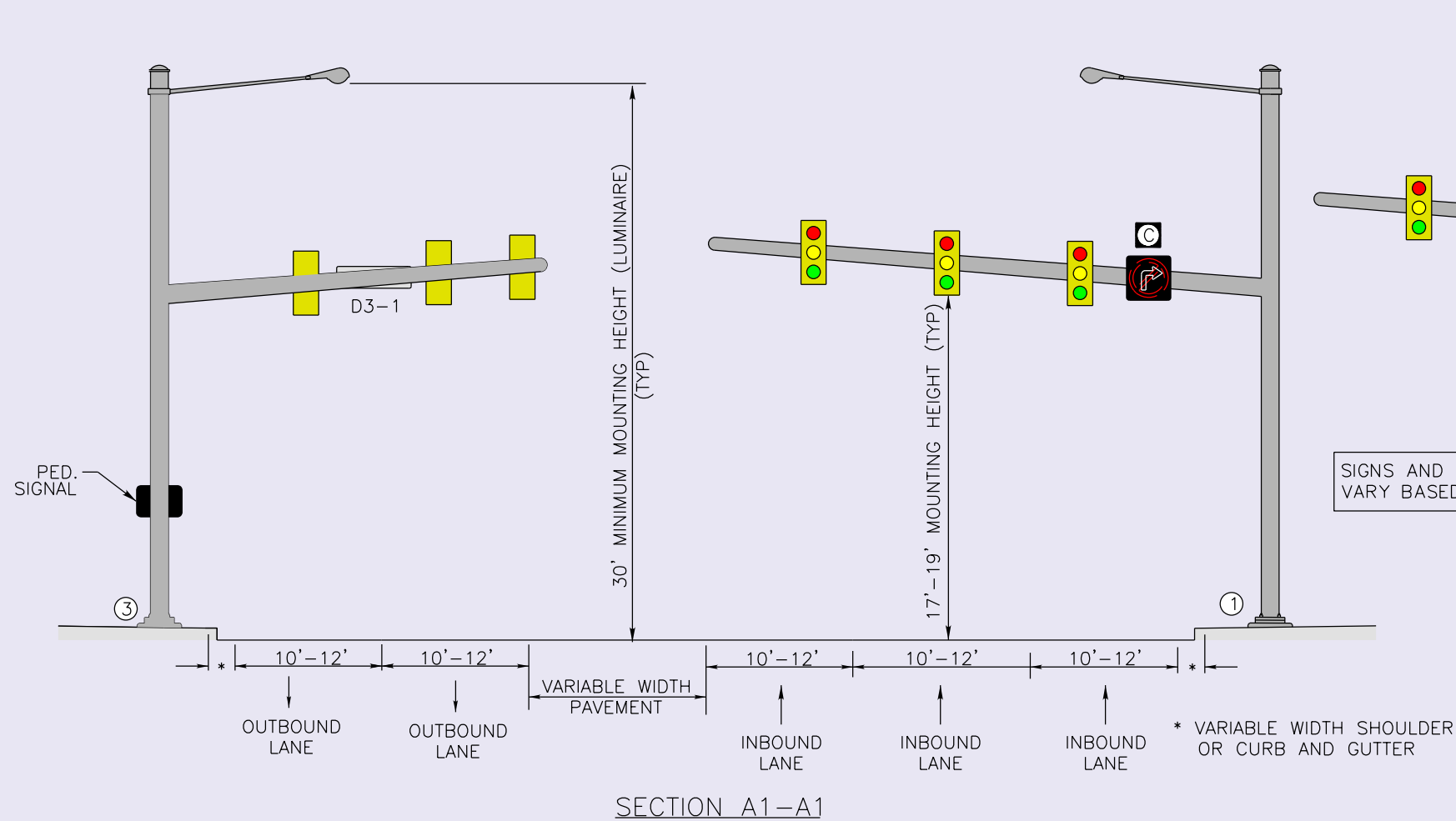


DETAIL A

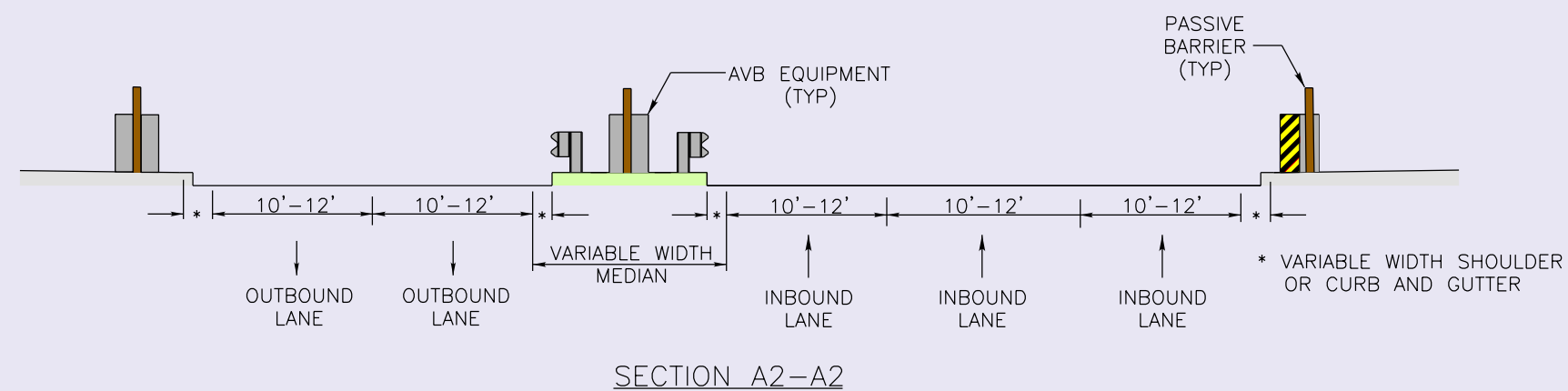
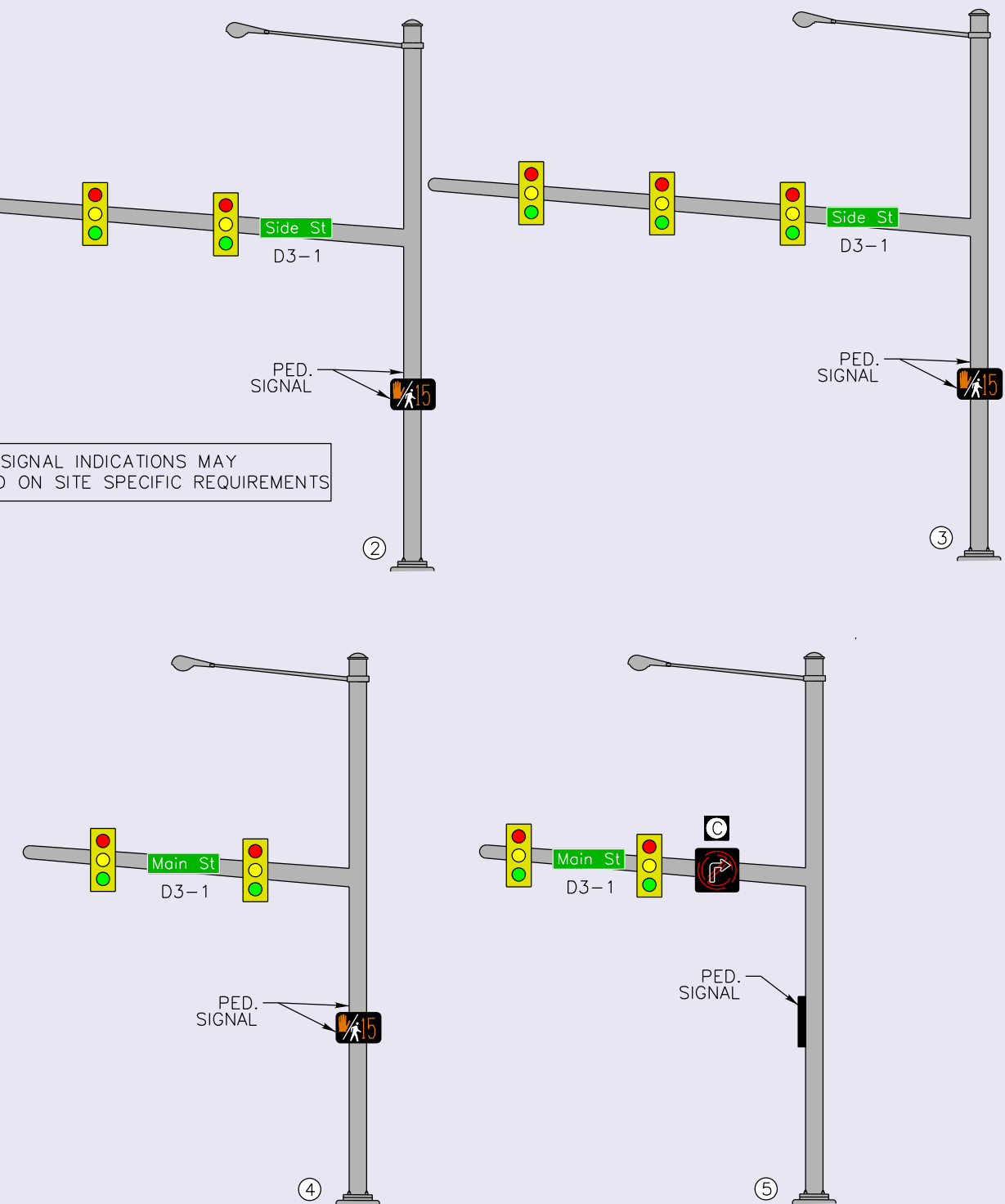
NOTES (CONTINUED)

- ALL SIGNALS SHALL BE LED AND USE 12-INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.
- ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
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- EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.

NOT TO SCALE



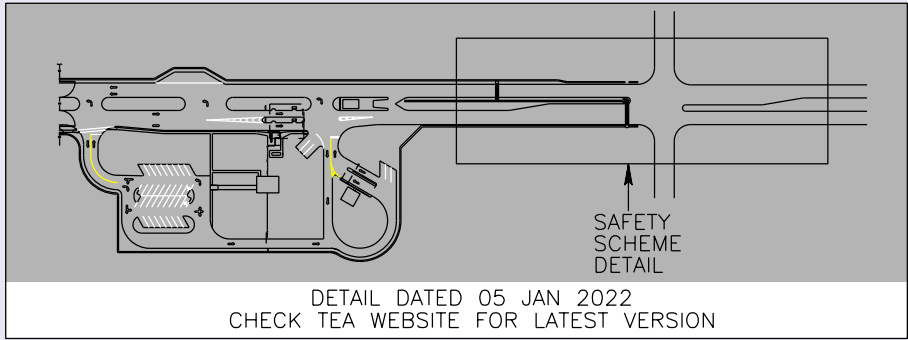
SIGNS AND SIGNAL INDICATIONS MAY VARY BASED ON SITE SPECIFIC REQUIREMENTS



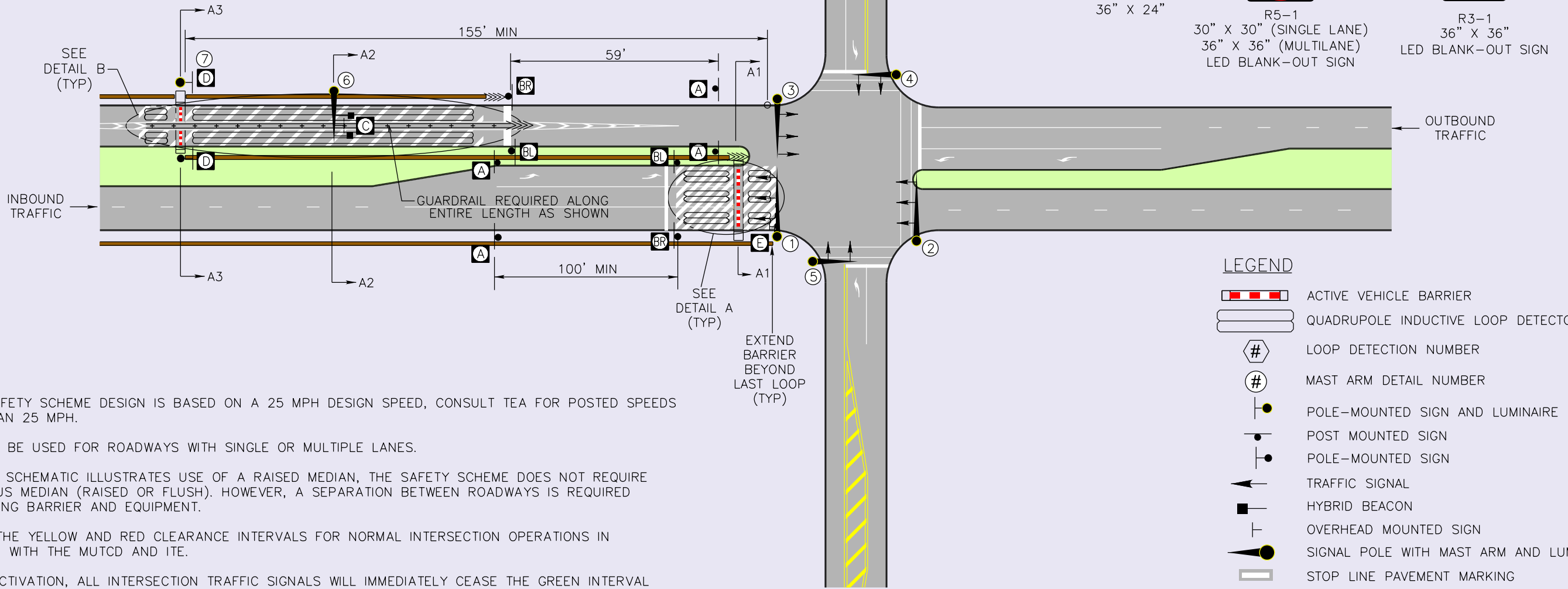
NOT TO SCALE

25

9-SEC/12-SEC
INTERSECTION TRAFFIC
SIGNAL AVB SAFETY SCHEME
SHEET 3 OF 3



DETAIL DATED 05 JAN 2022
CHECK TEA WEBSITE FOR LATEST VERSION



A

W3-3A-TEA
36" X 36"

WHEN FLASHING

W16-13P
30" X 24"

BL

R10-6AR
24" X 30"

BR

R10-6AL
24" X 30"

C

R10-13-TEA
36" X 24"

D

R5-1
30" X 30" (SINGLE LANE)
36" X 36" (MULTILANE)
LED BLANK-OUT SIGN

E

R3-1
36" X 36"
LED BLANK-OUT SIGN

NOTES

1. THIS AVB SAFETY SCHEME DESIGN IS BASED ON A 25 MPH DESIGN SPEED, CONSULT TEA FOR POSTED SPEEDS GREATER THAN 25 MPH.
2. SCHEME CAN BE USED FOR ROADWAYS WITH SINGLE OR MULTIPLE LANES.
3. THOUGH THE SCHEMATIC ILLUSTRATES USE OF A RAISED MEDIAN, THE SAFETY SCHEME DOES NOT REQUIRE A CONTINUOUS MEDIAN (RAISED OR FLUSH). HOWEVER, A SEPARATION BETWEEN ROADWAYS IS REQUIRED FOR INSTALLING BARRIER AND EQUIPMENT.
4. CALCULATE THE YELLOW AND RED CLEARANCE INTERVALS FOR NORMAL INTERSECTION OPERATIONS IN ACCORDANCE WITH THE MUTCD AND ITE.
5. UPON EFO ACTIVATION, ALL INTERSECTION TRAFFIC SIGNALS WILL IMMEDIATELY CEASE THE GREEN INTERVAL AND TRANSITION TO YELLOW AND THEN RED.
6. UPON EFO ACTIVATION, ALL "WALK" INDICATIONS SHALL IMMEDIATELY TRANSITION TO THE "FLASHING DON'T WALK" INTERVAL.
7. TWO VEHICLE DETECTION LOOPS, AS SHOWN IN DETAIL A, ARE TO BE PROVIDED AT EACH AVB.
LOOP 1 - ENTRY SAFETY LOOP, LOOP 2 - EXIT SAFETY LOOP.
8. INFRARED CAMERAS AND RADAR MAY BE USED IN LIEU OF LOOP DETECTORS. A SERIES OF SHORTER CONTINUOUS DETECTION LOOPS MAY BE USED IN PLACE OF THE 76 FT LOOP.

LEGEND

ACTIVE VEHICLE BARRIER

QUADRUPOLE INDUCTIVE LOOP DETECTOR

LOOP DETECTION NUMBER

MAST ARM DETAIL NUMBER

POLE-MOUNTED SIGN AND LUMINAIRE

POST MOUNTED SIGN

POLE-MOUNTED SIGN

TRAFFIC SIGNAL

HYBRID BEACON

OVERHEAD MOUNTED SIGN

SIGNAL POLE WITH MAST ARM AND LUMINAIRE

STOP LINE PAVEMENT MARKING

WHITE CROSSHATCHING PAVEMENT MARKINGS

PASSIVE BARRIER

CRASHWORTHY END TERMINAL/CRASH CUSHION

DOUBLE FACED GUARDRAIL
(OR OTHER MASH APPROVED BARRIER)

NOTES CONTINUED ON FOLLOWING PAGE

NOT TO SCALE

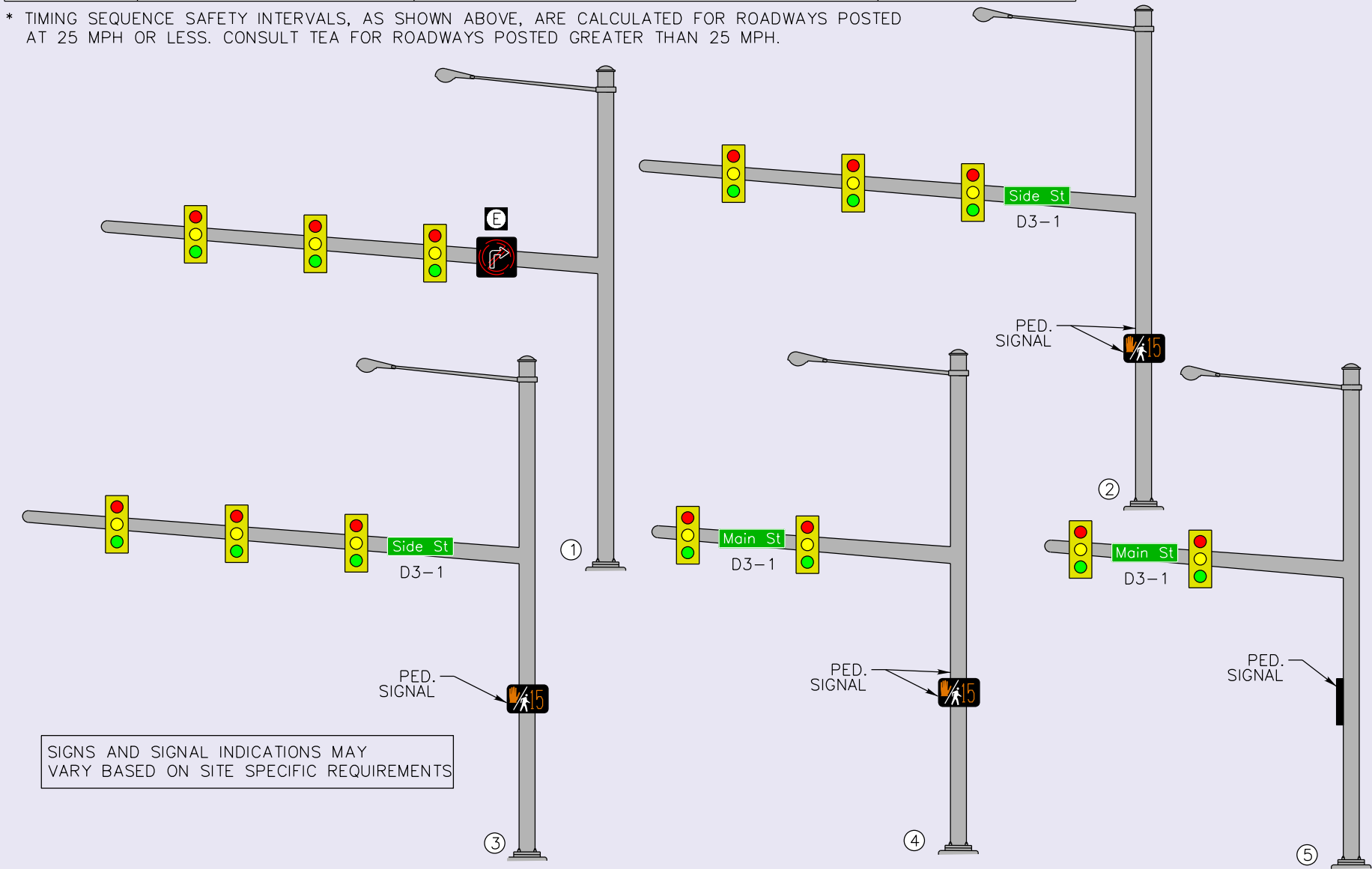
26

INTERSECTION COMBINATION
9-SEC TRAFFIC SIGNAL/
7-SEC HYBRID BEACON
AVB SAFETY SCHEME
SHEET 1 OF 3

7-SEC HYBRID BEACON SAFETY SCHEME (OUTBOUND)	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION						
	TRAFFIC CONTROL	GUARD REACTION			SAFETY INTERVAL		BARRIER DEPLOYMENT	
	TIMELINE (SEC)	1	2	3	4	5	6	7
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK			ALTERNATING FLASHING YELLOW			
	DO NOT ENTER LED BLANK-OUT SIGN	DARK			"DO NOT ENTER" ILLUMINATED			
	HYBRID BEACON	DARK			* SOLID YELLOW		ALTERNATING FLASHING RED	
	100dB HORN	SILENT			ACTIVATED			
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED					DEPLOYING	

9-SEC INTERSECTION TRAFFIC SIGNAL SAFETY SCHEME (INBOUND)	DESIGN SPEED = 25 MPH	OPERATIONAL SEQUENCING FOR EMERGENCY FAST OPERATION									
	TRAFFIC CONTROL	NORMAL OPS	GUARD REACTION			SAFETY INTERVAL				BARRIER DEPLOYMENT	
	TIMELINE (SEC)	—	1	2	3	4	5	6	7	8	9
	W3-3A-TEA WARNING SIGN WITH BEACONS	DARK				ALTERNATING FLASHING YELLOW					
	TRAFFIC SIGNAL	GREEN				* YELLOW			RED		
	100dB HORN	SILENT				ACTIVATED					
	ACTIVE VEHICLE BARRIER	NON-DEPLOYED								DEPLOYING	
	NO RIGHT TURN LED BLANKOUT (POLE 1)	DARK							R3-1 ILLUMINATED		

* TIMING SEQUENCE SAFETY INTERVALS, AS SHOWN ABOVE, ARE CALCULATED FOR ROADWAYS POSTED AT 25 MPH OR LESS. CONSULT TEA FOR ROADWAYS POSTED GREATER THAN 25 MPH.



NOTES (CONTINUED)

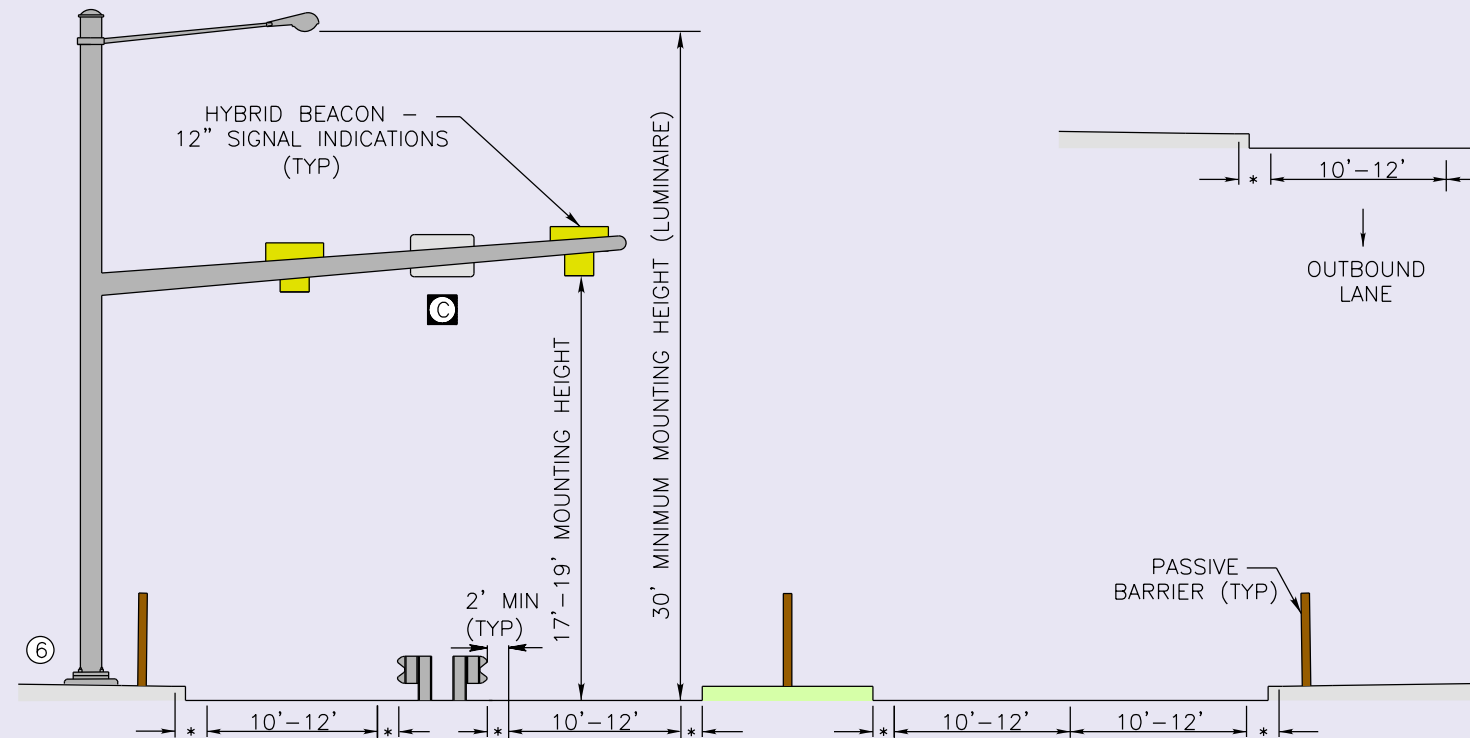
- SIGNS, SIGNALS, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, DOD SUPPLEMENT TO THE MUTCD, TEA PAMPHLET 55-15, AND LOCAL REGULATIONS.
- ALL SIGNALS SHALL BE LED AND USE 12-INCH LENSES. EQUIP ALL SIGNAL FACES WITH FULL CIRCLE TUNNEL VISORS AND PROVIDE BACKPLATES WITH A YELLOW RETROREFLECTIVE STRIP AROUND THE BORDER.
- ALTERNATING RED AND WHITE RETROREFLECTIVE MARKING REQUIRED ON AVBs (1152 SQUARE INCHES MINIMUM). IF AVB DESIGN DOES NOT ACCOMMODATE THE MINIMUM REQUIRED AREA OF RETROREFLECTIVE MARKING, THEN SUPPLEMENTAL IN-ROADWAY OR ON-BARRIER FLASHING LIGHTS ARE REQUIRED.
- ALL AVB AND SURROUNDING CROSSHATCHED PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE AND DESIGNED TO ENHANCE TRACTION.
- FOR MULTILANE SECTIONS, UTILIZE A SOLID WHITE PAVEMENT MARKING LINE BETWEEN SAME DIRECTIONAL LANES TO DISCOURAGE AND PROHIBIT LANE CHANGING.
- FOR A ROADWAY SECTION WITH NO MEDIAN, A DOUBLE YELLOW PAVEMENT MARKING LINE SEPARATING OPPOSING TRAFFIC SHALL EXTEND FROM THE ID CHECK AREA TO 300 FEET BEYOND THE AVB.
- UPON EFO ACTIVATION, A 100 dB AUDIBLE ALARM LOCATED AT THE AVB (ONE INBOUND AND ONE OUTBOUND FOR A TOTAL OF TWO ALARMS) SHALL BE DIRECTED TOWARDS APPROACHING TRAFFIC AND SHALL SOUND FOR AT LEAST 10 SECONDS.
- A TYPE 3 OBJECT MARKER IS REQUIRED ON NORMALLY EXPOSED ACTIVE VEHICLE BARRIER EQUIPMENT AND OTHER ROADSIDE OBSTACLES WHEN LOCATED IN THE CLEAR ZONE.
- ALL TRAFFIC CONTROL DEVICES AND POLES INSTALLED WITHIN THE ROADWAY CLEAR ZONE SHALL UTILIZE BREAKAWAY SUPPORTS.
- UNDER EFO CONDITION, WHEN MULTIPLE AVBs ARE USED, THEY SHALL BE DESIGNED TO OPERATE INDEPENDENTLY.
- AVB AND AVB EQUIPMENT DIMENSIONS VARY BY AVB TYPE, MODEL, AND MANUFACTURER. PLAN VIEW AND SECTION CUTS ARE FOR ILLUSTRATION ONLY.
- ADHERE TO APPLICABLE STATE DOT OR LOCAL STANDARDS FOR DESIGN, MATERIAL TYPE, AND CONSTRUCTION OF TRAFFIC CONTROL AND RELATED EQUIPMENT.
- SCHEMATIC PROVIDES GENERAL ROADWAY LAYOUT AND MAY BE ADJUSTED TO MEET SITE CONDITIONS. ALTERATIONS IN TRAFFIC CONTROL (SIGNALS, BEACONS, SIGNING, MARKINGS, AND DETECTION LOOPS) REQUIRE TEA APPROVAL.
- EXISTING TRAFFIC CONTROL CONFORMING TO EARLIER VERSIONS OF TEA PAMPHLET 55-15 ARE CONSIDERED TO BE GRANDFATHERED IN AND MAY REMAIN IN PLACE UNTIL THE END OF THEIR USEFUL SERVICE LIFE. REPLACE WITH CURRENT STANDARD AT THAT TIME.

SIGNS AND SIGNAL INDICATIONS MAY VARY BASED ON SITE SPECIFIC REQUIREMENTS

NOT TO SCALE

27

INTERSECTION COMBINATION
9-SEC TRAFFIC SIGNAL/
7-SEC HYBRID BEACON
AVB SAFETY SCHEME
SHEET 2 OF 3



* VARIABLE WIDTH SHOULDER OR CURB AND GUTTER

OUTBOUND LANE
VARIABLE WIDTH PAVEMENT WIDENING

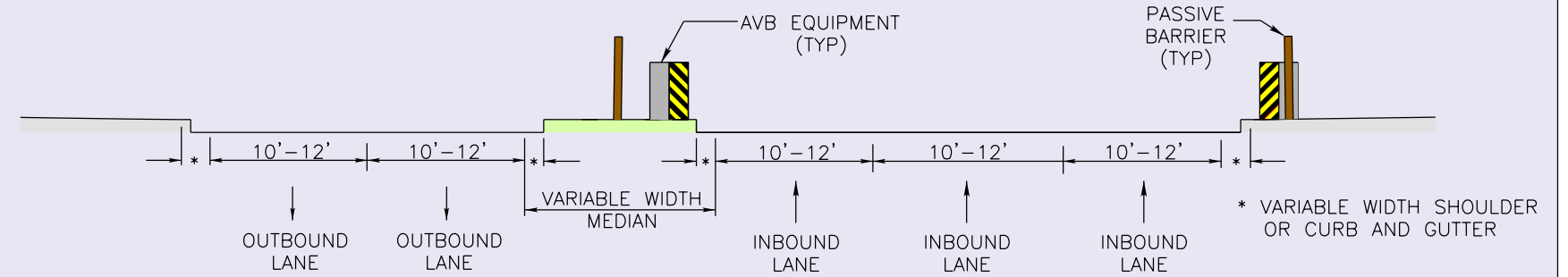
OUTBOUND LANE

VARIABLE WIDTH MEDIAN

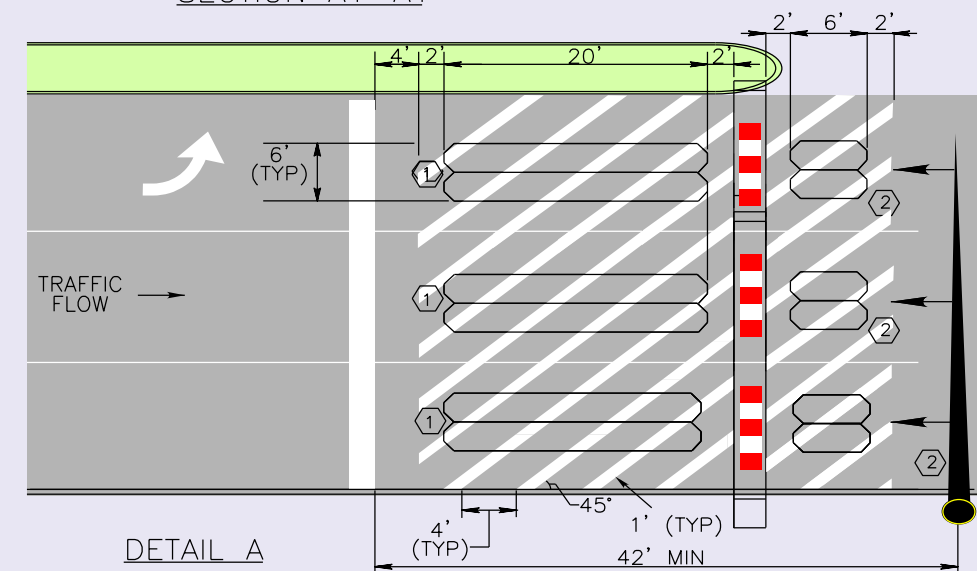
INBOUND LANE

INBOUND LANE

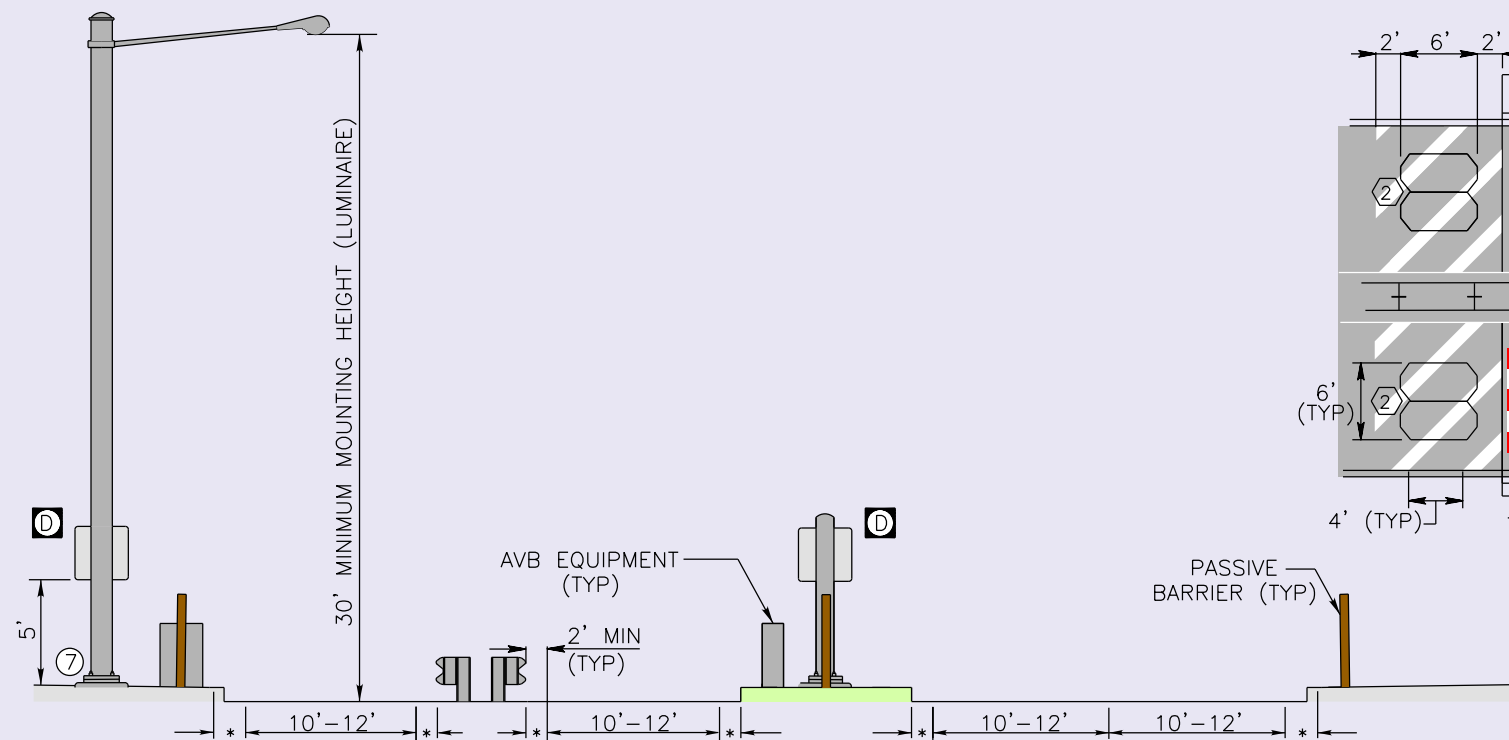
SECTION A2-A2



SECTION A1-A1



DETAIL A



* VARIABLE WIDTH SHOULDER OR CURB AND GUTTER

OUTBOUND LANE
VARIABLE WIDTH PAVEMENT WIDENING

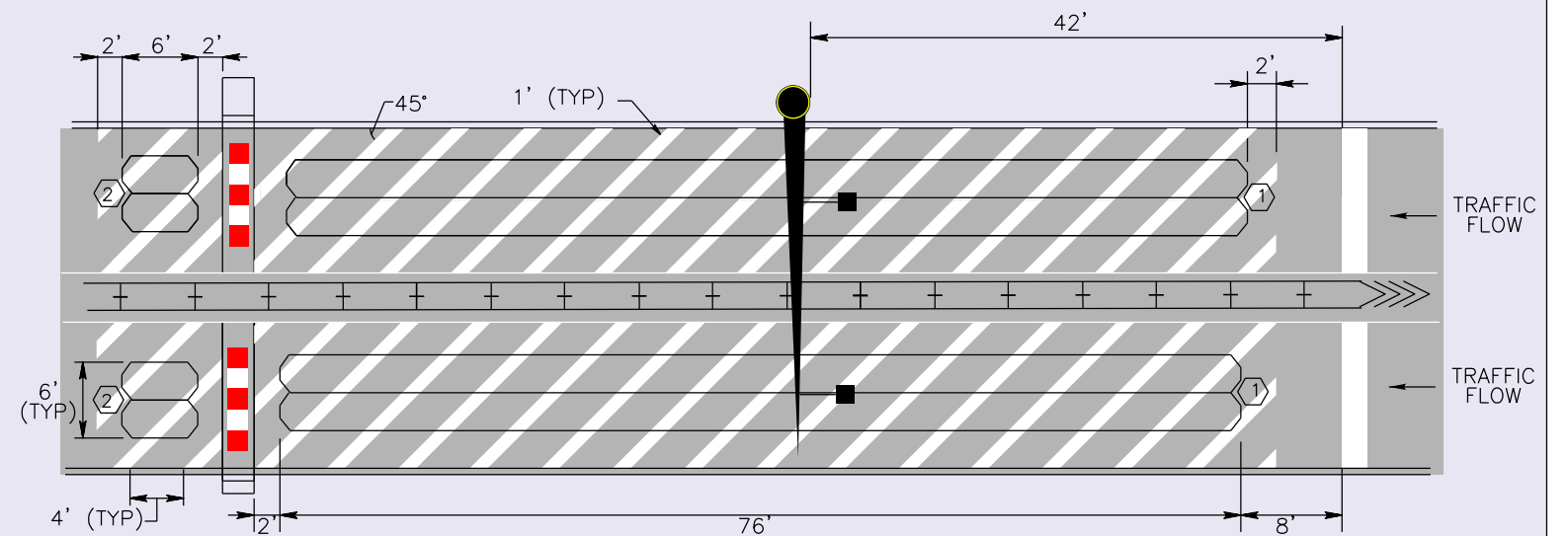
OUTBOUND LANE

VARIABLE WIDTH MEDIAN

INBOUND LANE

INBOUND LANE

SECTION A3-A3

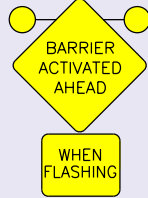















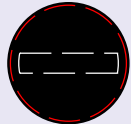
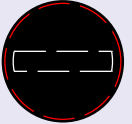


























DETAIL B

NOT TO SCALE

28

INTERSECTION COMBINATION
9-SEC TRAFFIC SIGNAL/
7-SEC HYBRID BEACON
AVB SAFETY SCHEME
SHEET 3 OF 3

	UNITED STATES	EUROPE	JAPAN	KOREA
SIGNING	 <p>W3-3A-TEA 36" X 36" (900MM X 900MM)</p> <p>W16-13P 30" X 24" (750MM X 600MM)</p>			
	 <p>R10-6AL 24" X 30" (600MM X 750MM)</p>  <p>R10-6AR 24" X 30" (600MM X 750MM)</p>	 <p>STOP HERE ON RED</p>  <p>STOP HERE ON RED</p> <p>HOST NATION TRANS-LATION</p>		 <p>STOP HERE ON RED</p>  <p>STOP HERE ON RED</p> <p>HOST NATION TRANS-LATION</p>
	 <p>R1-1 30" X 30" (750MM X 750MM)</p>			
	 <p>R5-1 30" X 30" (750MM X 750MM) LED BLANK-OUT SIGN</p>			
	 <p>R10-13-TEA 36" X 24" (900MM X 600MM)</p>	 <p>BARRIER SIGNAL</p>  <p>HOST NATION TRANSLATION</p>	 <p>BARRIER SIGNAL</p>  <p>HOST NATION TRANSLATION</p>	 <p>BARRIER SIGNAL</p>  <p>HOST NATION TRANSLATION</p>
	 <p>W16-6L 30" X 24" (750MM X 600MM)</p>			
	 <p>R3-1 36" X 36" (900MM X 900MM) LED BLANK-OUT SIGN</p>			
MARKINGS	<p>DELINEATION FOR IN-ROADWAY OBSTACLES (I.E., AVBs, TRAFFIC ARMS)</p> 			
	<p>DELINEATION FOR ROADSIDE OBSTACLES (I.E. BOLLARDS, AVB EQUIPMENT, POSTS)</p>  <p>QM3-R 12" X 36" (300MM X 900MM)</p>			
	<p>CENTERLINE PAVEMENT MARKINGS (BETWEEN OPPOSING LANES)</p> <p>YELLOW</p>	<p>WHITE OR YELLOW (CHECK YOUR SPECIFIC HOST NATION'S STANDARDS)</p>	<p>WHITE</p>	<p>YELLOW</p>
	<p>EDGE LINE AND LANE LINE PAVEMENT MARKINGS (OUTSIDE EDGE OR BETWEEN SAME DIRECTIONAL LANES)</p> <p>WHITE</p>	<p>WHITE</p>	<p>WHITE</p>	<p>WHITE</p>

NOTES

NOTES ON THE AVB SAFETY SCHEMES ARE APPLICABLE TO OCONUS INSTALLATIONS EXCEPT THE REQUIREMENT TO ADHERE TO THE MUTCD AND DOD SUPPLEMENT TO THE MUTCD. HOST NATION SIGN, MARKING AND SIGNAL STANDARDS SHALL APPLY. IF NO HOST STANDARDS EXIST, THEN THE MUTCD SHALL APPLY.