

GENERAL BUSINESS ITEMS

2. CHANGES TO DISADVANTAGED BUSINESS ENTERPRISE PROGRAM (Mr. Alyea)

(Proposed changes shown highlighted gray)

103-C-XXX DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

(Adopted 06-04-15)

103.01 Disadvantaged Business Enterprise Program

This requirement will apply only to a federal aid contract.

(a) General Requirements

Failure to carry out the requirements set forth in 49 CFR 26, as outlined in the Department's DBE Program Manual, shall constitute a breach of contract and, after notification, may result in such contract sanctions as the Department or the Federal Highway Administration may determine to be appropriate, including, but not limited to: (a) withholding of payments to the Contractor under the contract until the Contractor complies, and/or (b) cancellation, termination or suspension of the contract, in whole or in part.

The above referenced CFR section requires the following policy and disadvantaged business enterprise obligation to be included in all subsequent agreements between the Contractor and all subcontractors as follows:

1. It will be the policy of the Department to create a level playing field on which DBE's can compete fairly for federally funded contracts. Consequently, the disadvantaged business enterprise requirements of 49 CFR Part 26, as outlined in the Department's DBE Program Manual, apply to this contract.
2. The Contractor shall not discriminate on the basis of race, color, national origin, *religion, or sex, sexual orientation or gender identity* in the award and performance of this contract. The Contractor shall carry out the applicable DBE requirements in the award and administration of federally funded contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or such other remedy as the Department or the Federal Highway Administration deems appropriate. The Contractor shall include language prohibiting discrimination on the basis of race, color, national origin, *religion, or sex, sexual orientation or gender identity* in the performance of this contract in all subcontracts.

GENERAL BUSINESS ITEMS

3. 107-C-245 WAIVER OF LEGAL RIGHTS

(Mr. Miller)

107-C-245 WAIVER OF LEGAL RIGHTS

(Adopted 06-02-15)

The Standard Specifications are revised as follows:

SECTION 107, BEGIN LINE 733, DELETE AS FOLLOWS:

107.23 Waiver of Legal Rights

Upon completion of the work, the Department will expeditiously make final inspection and notification of acceptance. Such final acceptance, however, shall not preclude or estop the Department from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Department be precluded or estopped from recovering from the Contractor or its surety, or both, such overpayment as it may sustain by failure on the part of the Contractor to fulfill its obligations under the contract. A waiver on the part of the Department of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Department for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the rights of the Department under any warranty or guaranty. ~~All costs and charges incurred by the Department, including, but not limited to, attorneys' fees and litigation expenses incurred by the Department with regard to the Contractor's and/or Surety's performance under the contract or performance bond, or related to the work to be provided under the contract, together with the cost of remedying the work under the contract to the extent and in the manner decided by the Department, will be deducted from any monies due or which may become due. If there are no monies or insufficient monies still due from the Department to the Contractor, the Contractor and/or Surety shall be liable to the Department for any such costs and charges.~~

SECTION 108, BEGIN LINE 715, DELETE AS FOLLOWS:

~~All costs and charges incurred by the Department, including, but not limited to, attorneys' fees and litigation expenses incurred by the Department with regard to the Contractor's and/or Surety's performance under the contract or performance bond, or related to the work to be provided under the contract, together with the cost of completing the work under the contract, will be deducted from any monies due or which may become due. If such expense exceeds the sum which would have been payable under the contract, the Contractor and the surety shall be liable and shall pay to the Department the amount of such excess.~~

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS
REVISION TO SPECIAL PROVISIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The RSP for accessible pedestrian signals (APS) is unclear as to whether the raised arrow must be over the actuator for the push button assembly. Also one of the main APS manufacturers uses a zinc alloy for the housing.

PROPOSED SOLUTION: Revise the RSP to clarify that the raised arrow can be separate from the actuator provided that it is on the assembly, as well as to allow cast zinc alloys as an acceptable material for the push button housing.

APPLICABLE STANDARD SPECIFICATIONS: 805, 922.04

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: 502-3.04(05)

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISIONS: 805-T-201

PAY ITEMS AFFECTED: 805-11817 Pedestrian Push Button, APS (Each)

APPLICABLE SUB-COMMITTEE ENDORSEMENT:

IMPACT ANALYSIS (attach report): Yes, attached.

Submitted By: Elizabeth Phillips

Title: Manager, Office of Standards & Policy

Organization: INDOT

Phone Number: (317) 232-6775

Date: 6/8/15

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS
REVISION TO SPECIAL PROVISIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No

Will approval of this item affect the Approved Materials List? No

Will this proposal improve:

Construction costs? Yes

Construction time? Yes

Customer satisfaction? Yes

Congestion/travel time? No

Ride quality? No

Will this proposal reduce operational costs or maintenance effort? Yes

Will this item improve safety:

For motorists? No

For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? No

Design process? Yes

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? Yes (MUTCD)

AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: N/A

REVISION TO SPECIAL PROVISIONS
805-T-201 ACCESSIBLE PEDESTRIAN SIGNALS

(Proposed changes shown highlighted gray)

805-T-201 ACCESSIBLE PEDESTRIAN SIGNALS

(Revised XX-XX-XX)

The Standard Specifications are revised as follows:

SECTION 805, AFTER LINE 30, INSERT AS FOLLOWS:

Pedestrian push buttons shall be the type designated in the contract documents, APS or Non-APS.

SECTION 805, AFTER LINE 216, INSERT AS FOLLOWS:

When installing push buttons with accessible pedestrian signal, APS, features the Contractor shall verify that the audible tone is discernible from the mid-point of the crosswalk.

SECTION 805, BEGIN LINE 735, DELETE AS FOLLOWS:

The cost of the push button, pedestrian actuated signal sign, any accessible pedestrian signal components ~~as shown on the plans~~, and all hardware required to complete the installation shall be included in the cost of pedestrian push button.

SECTION 922, BEGIN LINE 816, DELETE AND INSERT AS FOLLOWS:

(b) Pedestrian Push-Button

Pedestrian push-button assemblies shall ~~be ADA compliant~~ *meet the standards of the MUTCD and Americans with Disabilities Act, ADA. Pedestrian push-button assemblies shall be vandal and weather resistant, be pressure activated with minimal movement, and cannot be stuck in a closed or constant call position. A red latching LED and audible tone shall be provided for confirmation of an actuation call.*

A type D certification in accordance with 916 shall be provided. Such certification shall contain the contract number, manufacturer's name, model name, supplier's name, location or intersection name, and for a type APS pedestrian push button, the sound level measurement of the audible features of the device.

1. Housing

The pedestrian push-button housing shall be constructed of cast aluminum, *cast zinc alloy*, or stainless steel and powder coated yellow, and furnished with suitable mounting hardware.

2. Latching LED

The normal state of the LED shall be off. When the push-button is pressure activated, the LED shall be lighted and remain on until the beginning of the walk phase. The latching relay shall be mounted in the signal cabinet, controlling two pedestrian phases.

3. Actuator

REVISION TO SPECIAL PROVISIONS
805-T-201 ACCESSIBLE PEDESTRIAN SIGNALS

The actuator shall be stainless steel *or aluminum* with a *minimum diameter of 2 in. and a solid state electronic Piezo switch rated for a minimum of 20 million cycles with no moving plunger or moving electrical contacts. The operating voltage shall be 12-24V AC/DC. The actuator's nominal operating force shall be approximately ± not exceed 5 lb.*

4. Sign

The pedestrian ~~information~~ sign shall be ~~according to the R10-3e in accordance with the MUTCD, unless a different MUTCD sign code is indicated on the plans. The legend on the sign shall either be all words or a combination of words and symbol to match the pedestrian signal.~~ The sign base shall be sheet aluminum in accordance with 919.01(b).

5. Accessible Pedestrian Push Buttons

When accessible pedestrian signals, APS, are specified the push-button shall have audible and tactile features. The push-button shall activate both the Walk interval and the APS. The color of the actuator shall contrast visually with the housing or mounting. A standard manufacturer's warranty shall be provided.

a. Audible Features

The pedestrian push-button assembly shall include an audible indication of the Walk interval by either tone or voice and shall be audible from the near side of the associated crosswalk. If the tone for the Walk interval is the same as the locator tone of the push-button it shall have a faster repetition rate than the associated locator tone. The volume of the audible features shall have automatic volume adjustment based on the ambient noise levels. Audible features shall be at least 2 dB but no more than 5 dB louder than ambient sound up to a maximum volume of 89 dB measured at 36 in. from the device. Audible features may be integral to the pedestrian push-button assembly or through a separate speaker housing.

When push buttons are separated by 10 ft or more, the audible indication shall be a tone.

When push buttons are separated by less than 10 ft, the indication shall be a voice message. When voice messages are used, they shall include a clear message that the walk interval is in effect and shall indicate to which crossing it applies.

The pedestrian push button shall have an audible locator tone feature. The locator tone shall have a duration of 0.15 seconds or less and shall repeat at 1 second intervals.

b. Tactile Features

The push button assembly shall incorporate a raised arrow. The arrow shall be raised 0.03125 in. minimum and shall be 1.5 in. minimum in length. The arrow color shall contrast with the background. The ~~push button~~ raised arrow shall vibrate to indicate that the walk interval is in effect.

BACKUP 01.

DESIGN MEMORANDUM NO. XX (DRAFT)



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. xx-__ Technical Advisory

June XX, 2015

DESIGN MEMORANDUM No. xx-__ TECHNICAL ADVISORY

TO: All Design, Operations, and District Personnel, and Consultants

FROM: _____
David Boruff
Manager, Office of Traffic Administration
Traffic Engineering Division

SUBJECT: Accessible Pedestrian Signals (APS)

REVISE: Indiana Design Manual Section 502-3.04(05)

EFFECTIVE: Immediately

Recurring special provision 805-T-201 regarding accessible pedestrian signals (APS) has been revised regarding the material specifications and the acceptable locations for the raised arrow on the pedestrian pushbutton assembly. In addition to stainless steel, aluminum and zinc alloys are acceptable materials for the pedestrian push button housing. Either stainless steel or aluminum may be used for the push button actuator. The revision also clarifies that the raised arrow may be placed over the actuator or it may be located on the front face of the pedestrian push button assembly. In either location, the raised arrow must vibrate to indicate that the walk interval is in effect.

Indiana Design Manual Section 502-3.04(05) also states that the use of APS at a location will be based on an APS study conducted by the designer or the district traffic engineer. Attached is the standard form for the APS Study Report.

BACKUP 02.

ACCESSIBLE PEDESTRIAN SIGNALS STUDY REPORT FORM (DRAFT)



Accessible Pedestrian Signals (APS) Study Report Form

Intersection:		
*Field Study Date:	*Time:	*Day of Week:
*Weather Conditions During Study:		
Investigator(s):		
Specific Needs of Requesting Party:		
<p>A. First Tier Criteria (check all that apply)</p> <input type="checkbox"/> 1. Sidewalks not present or would not be installed concurrently with APS <input type="checkbox"/> 2. Pedestrian crosswalks are in an area with ambient noise above 100 dB <input type="checkbox"/> 3. Installation of APS requires upgrade to controller cabinet and a larger controller cabinet would be infeasible due to right of way constraints		
<p>If any of the boxes in Section A above are selected, the APS Study is complete and APS should not be used at the subject intersection.</p>		
<p>B. Second Tier Criteria (check all that apply)</p> <input type="checkbox"/> 1. Traffic generators within 2 blocks of the intersection that serve the visually impaired Traffic generator(s): _____ <input type="checkbox"/> 2. Exclusive pedestrian phase, leading pedestrian interval, or pedestrian phase not concurrent with parallel through movement <input type="checkbox"/> 3. Visually impaired pedestrian users either present or anticipated if APS is provided <input type="checkbox"/> 4. Intersection is in a city or town that uses or will use APS at all pedestrian signals		
<p>If any of the boxes in Section B above are selected, the APS Study is complete and APS should be used at the subject intersection.</p>		
<p>C. Third Tier Criteria (check all that apply)</p> <input type="checkbox"/> 1. Presence of at least one traffic generator within 2 blocks with use by the visually impaired confirmed by an appropriate source (use additional sheets if necessary): Traffic generator: _____ Demand Confirmed: <input type="checkbox"/> Traffic generator: _____ Demand Confirmed: <input type="checkbox"/> Traffic generator: _____ Demand Confirmed: <input type="checkbox"/> Traffic generator: _____ Demand Confirmed: <input type="checkbox"/> <input type="checkbox"/> 2. Previous request(s) for APS that is still current Previous requestor(s): _____ Date(s): _____ Previous requestor(s) still reside in vicinity <input type="checkbox"/> <input type="checkbox"/> 3(a). Daytime hourly volume on minor street less than 120 vehicles per hour for any hour during the day <input type="checkbox"/> 3(b). Right turn on red volumes exceed 90 vehicles for any approach for any hour <input type="checkbox"/> 4. Split phasing or protected left turn phasing <input type="checkbox"/> 5(a). Crosswalk lengths (check if any length is more than 40 ft) North Leg _____ East Leg _____ South Leg _____ West Leg _____ <input type="checkbox"/> 5(b). Skewed crossing? (attach aerial photo of intersection with study)		

* Applicable only when field work is performed

BACKUP 02.

ACCESSIBLE PEDESTRIAN SIGNALS STUDY REPORT FORM (DRAFT)

(continued)

Accessible Pedestrian Signals (APS) Study Report Form

<p>C. Third Tier Criteria (continued):</p> <p><input type="checkbox"/> 5(c). Curb ramp radius > 25 ft: for any ramp at the location</p> <p><input type="checkbox"/> 5(d). Curb ramp not aligned with crosswalk direction</p> <p><input type="checkbox"/> 5(e). Median greater than 4 ft wide Median width: _____</p> <p><input type="checkbox"/> 5(f). Crosswalk transverse slope greater than 5% Crosswalk transverse slope: _____</p> <p><input type="checkbox"/> 5(g). Speed limit greater than 40 mph on any approach North Leg _____ East Leg _____ South Leg _____ West Leg _____</p> <p><input type="checkbox"/> 6. Bike lanes, shared use path, etc., present</p> <p><input type="checkbox"/> 7. APS Present at Adjacent Intersections</p> <p><input type="checkbox"/> 8. Other relevant factors (pedestrian crashes, channelized right-turn lane with yield control, etc):</p> <p>Please describe: _____</p> <p>_____</p>
<p>For Section C, if study is being performed at the request of the public and any of the other criteria (items 3 through 8) are satisfied then APS should be used at the subject intersection. For studies performed as part of construction project planning if either box 1 or box 2 are selected and any one of boxes 3 through 8 are selected, APS should be used. APS may be used if any one box in line C is selected.</p>
<p>D. Additional Comments:</p>
<p>E. Recommendations:</p> <p><input type="checkbox"/> APS Recommended <input type="checkbox"/> APS Not Recommended</p>
<p>F. Signatures:</p> <p>_____</p> <p style="text-align: right;">Date</p> <p>Title: _____ (typically designer or district investigations engineer)</p> <p>_____</p> <p style="text-align: right;">Date</p> <p>Title: _____ (typically project manager or district traffic engineer)</p>

COMMENTS AND ACTION

805-T-201 ACCESSIBLE PEDESTRIAN SIGNALS

DISCUSSION:

Motion: Second: Ayes: Nays: FHWA Approval:	Action: ____ Passed as Submitted ____ Passed as Revised ____ Withdrawn
Standard Specifications Sections referenced and/or affected: 805 pg 782 and pg 797; 922 pg 1050 and 1051.	____ 2016 Standard Specifications ____ Revise Pay Items List
Recurring Special Provision affected: 805-T-201 ACCESSIBLE PEDESTRIAN SIGNALS	____ Create RSP (No.____) Effective ____ Letting RSP Sunset Date:
Standard Drawing affected: NONE	____ Revise RSP (No.____) Effective ____ Letting RSP Sunset Date:
Design Manual Sections affected: 502-3.04 (05)	____ Standard Drawing Effective ____ Create RPD (No.____) Effective ____ Letting
GIFE Sections cross-references: NONE	____ GIFE Update