

PROPOSAL TO STANDARDS COMMITTEE

PROBLEMS(S) ENCOUNTERED: Obsolete subgrade treatment types (ID, IV, and IVA) were specified. Additional details are needed for aggregate subgrade compaction and construction. Priming is no longer used on INDOT contracts. The aggregate moisture content up to optimal moisture content is not necessary.

PROPOSED SOLUTION: Delete the obsolete subgrade treatment types (ID, IV, and IVA). Additional details for aggregate compaction and construction were provided, including proofrolling requirements of aggregate subgrade, use of geosynthetics, spreading, and leveling devices. The priming section (301.08) was deleted. The aggregate moisture requirement for compaction was revised from "between 4% and optimal moisture content" to "between 4% and 7%".

APPLICABLE STANDARD SPECIFICATIONS: 301

APPLICABLE STANDARD DRAWINGS: NA

APPLICABLE DESIGN MANUAL SECTION: NA

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: No

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ICA, Subcontractors, Area Engineers, Material Engineers and Geotechnical Engineers.

IMPACT ANALYSIS (attach report): NA

Submitted by: Jim Reilman for Nayyar Siddiki

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-522 9692

Date: 8/1/2024

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS
REVISION TO THE 2024 STANDARD SPECIFICATIONS

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: NA
Construction time: Yes
Customer satisfaction? NA
Congestion/travel time? NA
Ride quality? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? NA
Design process? NA

Will this change provide the contractor more flexibility? NA

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

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

Is this proposal needed for compliance with:

Federal or State regulations: No
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: _____

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 301 – AGGREGATE BASE

(Note: Proposed changes shown highlighted gray.
Previously approved changes by the Standards Committee – orange and are
shown in Recurring Special Provision: [207-R-781](#) SUBGRADE TREATMENT)

The Standard Specifications are revised as follows:

SECTION 301, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 301 – AGGREGATE BASE

301.01 Description

This work shall consist of placing coarse aggregate on a prepared grade in accordance with 105.03.

MATERIALS

301.02 Materials

Materials shall be in accordance with the following:

- Coarse Aggregate, Class D or Higher 904.03
- Geosynthetic Materials..... 918

~~ACBF shall not be used for subgrade treatment Type ID, Type IV, and Type IVA. Recycled concrete pavement processed into coarse aggregate-sized material, No. 53, and ACBF, shall not be used when an underdrain is specified.~~

CONSTRUCTION REQUIREMENTS

301.03 Preparation of Subgrade

Subgrade shall be prepared and proofrolled in accordance with 207.04. ~~When shown on the plans, geosynthetics shall be placed over the prepared subgrade in accordance with 214.03, or as directed.~~ Proofrolling will not be required in trench sections and other areas where proofrolling equipment cannot be used.

301.04 Temperature Limitations

Aggregate shall not be placed when the air temperature is less than 35 °F. ~~Aggregate shall not be placed on a frozen subgrade.~~ Frozen aggregate shall not be placed. ~~Aggregate shall not be placed on frozen subgrade, subbase, or aggregate base.~~

301.05 Spreading

The moisture content of the aggregate shall be between 4% and ~~the optimum moisture content when the aggregate is delivered to the project~~ 7%. ~~If necessary, the Contractor shall adjust the water content to meet this moisture requirement. Unless otherwise directed, water shall not be added to the aggregate on the grade.~~

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 301 – AGGREGATE BASE

Aggregate shall be spread in uniform lifts with a spreading and leveling device approved by the Engineer. The spreading and leveling device shall be capable of placing aggregate to the depth, width, and slope specified. *The material shall be placed with self-propelled spreading equipment, such as a spreader box or paver, capable of placing the material true to line and grade. The material shall be spread such that it minimizes segregation and requires minimal blading or manipulation.* The compacted depth of each lift shall be ~~a minimum of 3 in. and~~ a maximum of 6 in.

Aggregate shall be ~~transported, handled, and transported~~ compacted to minimize segregation and the loss of moisture. ~~In areas inaccessible to mechanical equipment, each lift shall be 3 in. and an approved hand spreading method may be used.~~ *Aggregate shall be spread in uniform lifts with a spreading and leveling device as approved by the Engineer.*

The Contractor may use hand-placing methods, dozers, or graders in small areas, areas of subgrade construction, or where self-propelled spreading equipment is impractical. Small areas include lane widths less than 12 ft or lengths less than 1,000 ft. In small areas, or areas inaccessible to self-propelled spreading equipment, each lift shall be a maximum of 4 in.

The material shall be placed in two or more approximately equal lifts when the specified compacted thickness exceeds the maximum allowed.

301.06 Compacting

Each lift shall be compacted immediately after spreading. Dense graded aggregate shall be compacted to achieve the allowable average deflection as determined with LWD testing in accordance with 203.24(b).

The allowable average deflection *and the maximum deflection* for aggregate over the chemically modified soils, ~~and~~ untreated soils, *and cement stabilized subgrade soils* shall be in accordance with the Tables shown in 203.24(b) *and 219.12, respectively.*

As an alternate *to LWD*, aggregates shall be compacted to a minimum of 100% of the maximum dry densities in accordance with AASHTO T 99. In situ density will be determined in accordance with 203.24(b). Aggregate shall meet the compaction requirements at the time subsequent courses are placed. *Stiffness and density methods will not be used in the same project.*

~~Coarse graded aggregates shall be compacted in accordance with 203.25.~~

In areas inaccessible to compaction equipment, such as private drives and mailbox approaches, the compaction requirements may be accepted by visual inspection.

All displacement or rutting of the aggregate shall be repaired prior to placing subsequent material.

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 301 – AGGREGATE BASE

301.07 Checking and Correcting Base

The top of each aggregate course shall be checked transversely to the cross section and all deviations in excess of 1/2 in. shall be corrected. If additional aggregate is required, the course shall be remixed and re-compacted.

301.08 Priming

~~A prime coat, when required, shall be in accordance with 405.~~

301.0908 Method of Measurement

Compacted aggregate base will be measured by the cubic yard based on the theoretical volume to the neat line as shown on the plans. ~~Geotextiles~~ *Geosynthetics* will be measured in accordance with ~~616.12214.05~~.

301.1009 Basis of Payment

The accepted quantities of compacted aggregate base will be paid for at the contract unit price per cubic yard, complete in place. ~~Geotextiles~~ *Geosynthetics* will be paid for in accordance with ~~616.13214.06~~.

Payment will be made under:

Pay Item	Pay Unit Symbol
Compacted Aggregate, No. 2.....	CYS
Compacted Aggregate, No. 5.....	CYS
Compacted Aggregate, No. 8.....	CYS
Compacted Aggregate, No. 53.....	CYS

The cost of placing, *spreading*, compacting, water, aggregate placed outside neat lines as shown on the plans, and necessary incidentals shall be included in the cost of the pay item.

Payment will not be made for material placed outside of a 1:1 slope from the planned typical section.

Replacement of pavement damaged by the Contractor's operations shall be at no additional payment.

COMMENTS AND ACTION

SECTION 301 – AGGREGATE BASE

DISCUSSION:

<p>Motion: Second: Ayes: Nays: FHWA Approval:</p>	<p>Action: <input type="checkbox"/> Passed as Submitted <input type="checkbox"/> Passed as Revised <input type="checkbox"/> Withdrawn</p>
<p>2024 Standard Specifications Sections: 301 pg. 263 through pg. 265.</p> <p>Recurring Special Provisions or Plan Details: 207-R-781 SUBGRADE TREATMENT 214-R-784 GEOSYNTHETICS (to change references in 2026 SS: 301.09 and 301.10)</p>	<p><input type="checkbox"/> 2026 Standard Specifications Revise Pay Items List <input type="checkbox"/> Notification to Designers if change is <u>not</u> addressed by RSP</p> <p><input type="checkbox"/> Create RSP (No. __) Effective:</p> <p><input type="checkbox"/> Revise RSP (No. __) Effective:</p>
<p>Standard Drawing affected: NONE</p>	<p><input type="checkbox"/> Standard Drawing Effective:</p>
<p>Design Manual Chapter: NONE</p>	<p><input type="checkbox"/> Create RPD (No. __) Effective:</p>
<p>GIFE Section: NONE</p>	<p><input type="checkbox"/> GIFE Update <input type="checkbox"/> Frequency Manual Update <input type="checkbox"/> SiteManager Update</p>

PROPOSAL TO STANDARDS COMMITTEE

PROBLEMS(S) ENCOUNTERED:

Recycled Concrete Aggregate is not currently allowed in aggregate pavement and shoulder and additional details are needed for aggregate pavement and shoulder compaction and construction.

PROPOSED SOLUTION: Allow Recycled Concrete Aggregate to be incorporated into projects. Provide additional details for aggregate compaction and construction, including proofrolling, Add LWD deflection requirements, and address compaction equipment in the inaccessible areas.

APPLICABLE STANDARD SPECIFICATIONS: 303

APPLICABLE STANDARD DRAWINGS: NA

APPLICABLE DESIGN MANUAL SECTION: NA

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: No

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ICA, Subcontractors, Area Engineers, Material Engineers and Geotechnical Engineers.

IMPACT ANALYSIS (attach report): NA

Submitted by: Jim Reilman for Nayyar Siddiki

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-522 9692

Date: 8/1/2024

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: NA
Construction time: Yes
Customer satisfaction? NA
Congestion/travel time? NA
Ride quality? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? NA
Design process? NA

Will this change provide the contractor more flexibility? NA

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

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

Is this proposal needed for compliance with:

Federal or State regulations: No
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: _____

REVISION TO THE 2024 STANDARD SPECIFICATIONS
SECTION 303 – AGGREGATE PAVEMENTS OR SHOULDERS

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 303, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 303 – AGGREGATE PAVEMENTS OR SHOULDERS

303.01 Description

This work shall consist of placing a dense-graded compacted aggregate on prepared subgrade in accordance with 105.03.

MATERIALS

303.02 Materials

Materials shall be in accordance with the following:

Coarse Aggregate, Class D or Higher, Size No. 53 904

Coarse Aggregate, Class D or Higher, Size No. 73* 904

* Surface courses only, when specified.

CONSTRUCTION REQUIREMENTS

303.03 Preparation of Subgrade

Subgrade shall be prepared in accordance with 207.04. *Proofrolling shall be performed in accordance 203.26.* Proofrolling will not be required in trench sections and other areas where proofrolling equipment cannot be used.

303.04 Temperature Limitations

Aggregate shall not be placed when the air temperature is less than 35°F. Aggregate shall not be placed on a frozen subgrade. Frozen aggregate shall not be placed.

303.05 Spreading

Aggregate shall be spread in uniform lifts with a spreading and leveling device approved by the Engineer. The spreading and leveling device shall be capable of placing aggregate to the depth, width, and slope specified. The compacted depth of each lift shall be a minimum of 3 in. and a maximum of 6 in., except where utilized as a shoulder. The compacted depth of a lift for a shoulder shall be a minimum of 3 in. and a maximum of 9 in.

Aggregate shall be handled and transported to minimize segregation and the loss of moisture. In areas inaccessible to mechanical equipment, approved hand spreading methods may be used.

The moisture content of the aggregate shall be between 4% and ~~the optimum~~

REVISION TO THE 2024 STANDARD SPECIFICATIONS
SECTION 303 – AGGREGATE PAVEMENTS OR SHOULDERS

~~moisture content when the aggregate is delivered to the project 7%. If necessary, the Contractor shall adjust the water content to meet this moisture requirement. Water shall not be added to the aggregate on the grade.~~

303.06 Compacting

Compaction shall be in accordance with 301.06.

The allowable average deflection and the maximum deflection for the aggregate over the chemically modified soils and untreated soils, shall be in accordance with the Tables shown in 203.24(b). All displacement or rutting of the compacted aggregate shall be repaired prior to placing subsequent material.

In the areas inaccessible to compaction equipment, such as private drives, compaction requirements may be accepted by visual inspection.

303.07 Checking and Correcting Base and Surface

The top of each aggregate course shall be checked transversely and all deviations in excess of 1/2 in. shall be corrected. If additional aggregate is required, the course shall be remixed and re-compacted.

303.08 Dust Palliative

A dust palliative, if required, shall be in accordance with 407.

303.09 Method of Measurement

Compacted aggregate will be measured by the ton in accordance with 109.01(b) for the type specified.

303.10 Basis of Payment

The accepted quantities of compacted aggregate will be paid for at the contract unit price per ton, for the type specified, complete in place.

Payment will be made under:

Pay Item	Pay Unit Symbol
Compacted Aggregate, No. 53.....	TON
Compacted Aggregate, No. 73.....	TON

The cost of placing, *spreading*, compacting, water, and necessary incidentals shall be included in the costs of the compacted aggregate.

Payment will not be made for material placed outside of a 1:1 slope from the planned typical section.

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 303 – AGGREGATE PAVEMENTS OR SHOULDERS

Replacement or repair of pavement or shoulders damaged by the Contractor's operations shall be at no additional payment.

ADDENDUM 1

COMMENTS AND ACTION

SECTION 303 – AGGREGATE PAVEMENTS OR SHOULDERS

DISCUSSION:

<p>Motion: Second: Ayes: Nays: FHWA Approval:</p>	<p>Action: <input type="checkbox"/> Passed as Submitted <input type="checkbox"/> Passed as Revised <input type="checkbox"/> Withdrawn</p>
<p>2024 Standard Specifications Sections: 303 pg. 267 through pg. 269.</p>	<p><input type="checkbox"/> 2026 Standard Specifications Revise Pay Items List <input type="checkbox"/> Notification to Designers if change is <u>not</u> addressed by RSP</p>
<p>Recurring Special Provisions or Plan Details: NONE</p>	<p><input type="checkbox"/> Create RSP (No. __) Effective:</p>
<p>Standard Drawing affected: NONE</p>	<p><input type="checkbox"/> Revise RSP (No. __) Effective:</p>
<p>Design Manual Chapter: NONE</p>	<p><input type="checkbox"/> Standard Drawing Effective:</p>
<p>GIFE Section: NONE</p>	<p><input type="checkbox"/> Create RPD (No. __) Effective:</p>
	<p><input type="checkbox"/> GIFE Update <input type="checkbox"/> Frequency Manual Update <input type="checkbox"/> SiteManager Update</p>

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS
REVISION TO THE 2024 STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: A previous revision to 203.18 in October 2023 clarified the use of recycled concrete pavement by requiring it to be processed into coarse aggregate-sized material. INDOT Geotechnical Engineering desired additional clarification for use of recycled concrete in embankment.

PROPOSED SOLUTION: Clarify where and what size the recycled concrete pavement must be for use in embankments.

APPLICABLE STANDARD SPECIFICATIONS: none

APPLICABLE STANDARD DRAWINGS: none

APPLICABLE DESIGN MANUAL SECTION: none

APPLICABLE SECTION OF GIFE: none

APPLICABLE RECURRING SPECIAL PROVISIONS: RSP 203-R-786

PAY ITEMS AFFECTED: none

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc: Nayyar Siddiki, Sean Yoon

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: same as existing RSP 203-R-786

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 8/1/24

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS
REVISION TO THE 2024 STANDARD SPECIFICATIONS

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? N/A

Will this proposal improve:

Construction costs? Yes

Construction time? Yes

Customer satisfaction? N/A

Congestion/travel time? N/A

Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? N/A

Will this item improve safety:

For motorists? N/A

For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? N/A

Asset preservation? N/A

Design process? N/A

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? N/A

Is this proposal needed for compliance with:

Federal or State regulations? No

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:

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 203 – EXCAVATION AND EMBANKMENT
203.18 Embankment Construction

(Note: previously approved changes are shown highlighted gray and are in RSP [203-R-786](#).
Basis for Use: Required for all contracts with any 203 pay items.

All newly proposed changes are shown highlighted yellow.)

The Standard Specifications are revised as follows:

SECTION 203, BEGIN LINE 761, DELETE AND INSERT AS FOLLOWS:

203.18 Embankment Construction

Embankment construction shall consist of constructing roadway embankments, including preparation of the areas upon which they are to be placed; the construction of dikes within or outside the right-of-way; the placing and compacting of approved material within roadway areas where unsuitable material has been removed; and the placing and compacting of embankment material in holes, pits, and other depressions within the roadway area. Only approved materials shall be used in the construction of embankment backfill. Recycled concrete pavement *processed into coarse aggregate* shall be from past documented Department projects. RAP shall be the product resulting from the cold milling or crushing of an existing HMA pavement. Rocks, broken concrete, RAP, or other solid materials shall not be placed in embankment areas where piling *is and other foundations are* to be placed or driven.

Recycled concrete pavement ~~processed into coarse aggregate~~ shall meet the gradation requirements of B borrow in accordance with 904.06. Construction requirements shall be in accordance with 203.20(a) or 211.03 measuring 12 in. or less in all directions may be incorporated into the embankment. Reinforcement shall not protrude from the recycled concrete pavement aggregate. Construction of embankment shall be in accordance with 203.20(a). Each layer shall be choked thoroughly with broken concrete aggregates and be compacted to the required stiffness or as directed. The final 30 in. of the embankment just below the subgrade shall be composed of material meeting the gradation requirements of coarse aggregate in accordance with 904.01, or B borrow in accordance with 904.06. Construction requirements shall be in accordance with 211.03.

Only RAP particles measuring 2 in. or less in all directions shall be incorporated into the top ~~52 ft~~ *30 in.* of the embankment. *When an underdrain is specified, the RAP embankment shall be terminated below the bottom of the underdrain and the rest of the embankment shall be constructed with the coarse aggregate.* RAP particles incorporated anywhere in the embankment shall be 5 in. or less. *RAP shall be constructed in accordance with 203.24.*

When two sizes are used for one embankment, materials shall be separated with a layer of geotextile in accordance with 918.02(c), Type 2A. Geotextile used between recycled material lifts shall be included in the cost of the embankment pay item.

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 203 – EXCAVATION AND EMBANKMENT
203.18 Embankment Construction

Recycled concrete pavement *processed into coarse aggregate* and RAP shall not be mixed together or with other materials. When two or more approved materials are allowed for one embankment, materials shall be separated with a layer of geotextile in accordance with 918.02(c), Type 2A. Geotextile used between recycled material lifts shall be included in the cost of the embankment pay item.

Recycled concrete pavement *processed into coarse aggregate* or RAP shall only be used below the elevation of the pavement underdrains. Compacted lift thickness for RAP shall not be greater than 6 in. within the top ~~52 ft~~ *30 in.* of the embankment. Where the depth of the embankment exceeds 5 ft, the compacted lift thickness for RAP shall not be greater than 12 in. Recycled concrete pavement *processed into coarse aggregate* and RAP shall not be used within 2 ft of the water table.

~~Recycled concrete pavement *processed into coarse aggregate* shall be constructed in accordance with 203.20. RAP shall be constructed in accordance with 203.23 or 203.24. Proofrolling in accordance with 203.26 shall be performed to cover the entire grade for every at a maximum thickness of 5 ft of fill recycled concrete or RAP.~~

A geotextile in accordance with 918.02(c), Type 2B shall be placed in accordance with 214 prior to the placement of subgrade treatment Type IC, or Type II, or Type IV in accordance with 207 when recycled concrete pavement *processed into coarse aggregate* or RAP is used for embankment construction. Recycled concrete pavement *processed into coarse aggregate* or RAP shall not be used for embankment construction when subgrade Type I, Type IBC, or Type IBL is specified. Geotextile shall be placed completely covering the top of the embankment. A minimum 24 in. soil encasement shall be constructed concurrently with the recycled concrete pavement *processed into coarse aggregate* or RAP lift. The soil encasement shall be suitable for vegetation growth and shall be constructed in accordance with 203.09.

COMMENTS AND ACTION

203.18 Embankment Construction

DISCUSSION:

<p>Motion: Second: Ayes: Nays: FHWA Approval:</p>	<p><u>Action:</u> <input type="checkbox"/> Passed as Submitted <input type="checkbox"/> Passed as Revised <input type="checkbox"/> Withdrawn</p>
<p>2024 Standard Specifications Sections: 203.18 pg. 168-169</p>	<p><input type="checkbox"/> 2026 Standard Specifications Revise Pay Items List <input type="checkbox"/> Notification to Designers if change is <u>not</u> addressed by RSP</p>
<p>Recurring Special Provisions or Plan Details: 203-R-786 Excavation and Embankment</p>	<p><input type="checkbox"/> Create RSP (No. __) Effective:</p>
<p>Standard Drawing affected: NONE</p>	<p><input type="checkbox"/> Revise RSP (No. __) Effective:</p>
<p>Design Manual Chapter: NONE</p>	<p><input type="checkbox"/> Standard Drawing Effective:</p>
<p>GIFE Section: NONE</p>	<p><input type="checkbox"/> Create RPD (No. __) Effective:</p>
	<p><input type="checkbox"/> GIFE Update <input type="checkbox"/> Frequency Manual Update <input type="checkbox"/> SiteManager Update</p>

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS
REVISION TO THE 2024 STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEMS(S) ENCOUNTERED: It is difficult and costly to take photos of the borehole sidewall for the proof-test holes. It was determined that the cost and time required for sidewall photo do not justify the benefit.

PROPOSED SOLUTION: The requirement of the photos showing the sidewall of the proof-test hole was removed.

APPLICABLE STANDARD SPECIFICATIONS: 206.08

APPLICABLE STANDARD DRAWINGS: NA

APPLICABLE DESIGN MANUAL SECTION: NA

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: No

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ICA, Subcontractors, Area Engineers, and Geotechnical Engineers.

IMPACT ANALYSIS (attach report): NA

Submitted by: Jim Reilman for Nayyar Siddiki

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-522 9692

Date: 8/1/2024

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? NA
Congestion/travel time? NA
Ride quality? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? NA
Design process? NA

Will this change provide the contractor more flexibility? NA

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

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

Is this proposal needed for compliance with:

Federal or State regulations: No
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:

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 206 – STRUCTURE EXCAVATION
206.08 Preparation of Foundation Surfaces

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 206.08, BEGIN LINE 142, DELETE AS FOLLOWS:

206.08 Preparation of Foundation Surfaces

Excavation for foundations on rock without piles shall extend a minimum of 2 ft into solid rock. All rock or other hard material, if to be left in place as a foundation surface, shall be freed of loose material, cleaned, and cut to a firm surface. The final surface shall be level, stepped, or serrated as directed. Seams shall be cleaned and filled with concrete, cement mortar, or grout. These conditions shall prevail when the foundation masonry is placed.

Where the masonry is to rest on a foundation surface other than those described above, the approximate bottom of the excavation shall not be disturbed. The final removal of material to the required grade shall be done carefully just prior to placing the foundation masonry. The final surface shall be left smooth and, unless otherwise designated, be level.

Notification shall be given after final excavation of each foundation is completed. No masonry shall be placed until the depth of the excavation and the character of the foundation material have been approved.

Rock at the bottom of spread footings shall be proof-tested. For state-administered contracts, the Department's Geotechnical Engineering Division shall be contacted prior to proof-testing. For local public agency contracts, the Engineer shall be contacted prior to proof-testing. Proof-testing with a small diameter test hole of a minimum 2 in. inside diameter shall be drilled into the foundation base using rotary or percussive drilling methods. Holes shall be drilled into sound rock to a depth of 5 ft or as directed. Three holes shall be drilled into each foundation base. Observations shall be made at each hole as follows:

1. speed of drilling
2. drill pressure
3. dropping or clogging of drill bit
4. loss of drill water, if used
5. probing of the sides of the holes with a right angled chisel point. The chisel shall be formed from a rod of 3/8 or 1/2 in. diameter
6. continuity of bearing material
7. rock quality designation in accordance with ASTM D6032

REVISION TO THE 2024 STANDARD SPECIFICATIONS

SECTION 206 – STRUCTURE EXCAVATION
206.08 Preparation of Foundation Surfaces

8. ~~photos shall be taken of the rock core and the sidewall of the borehole from which core has been extracted.~~

A professional engineer shall supervise the proof testing work. A report for each hole shall be prepared and submitted to the Engineer for review and approval.

ADDENDUM 1

COMMENTS AND ACTION

206.08 Preparation of Foundation Surfaces

DISCUSSION:

<p>Motion: Second: Ayes: Nays: FHWA Approval:</p>	<p>Action: <input type="checkbox"/> Passed as Submitted <input type="checkbox"/> Passed as Revised <input type="checkbox"/> Withdrawn</p>
<p>2024 Standard Specifications Sections: 206.08 pg. 218 -219.</p>	<p><input type="checkbox"/> 2026 Standard Specifications <input type="checkbox"/> Revise Pay Items List <input type="checkbox"/> Notification to Designers if change is <u>not</u> addressed by RSP</p>
<p>Recurring Special Provisions or Plan Details: NONE</p>	<p><input type="checkbox"/> Create RSP (No. __) Effective:</p>
<p>Standard Drawing affected: NONE</p>	<p><input type="checkbox"/> Revise RSP (No. __) Effective:</p>
<p>Design Manual Chapter: NONE</p>	<p><input type="checkbox"/> Standard Drawing Effective:</p>
<p>GIFE Section: NONE</p>	<p><input type="checkbox"/> Create RPD (No. __) Effective:</p>
	<p><input type="checkbox"/> GIFE Update <input type="checkbox"/> Frequency Manual Update <input type="checkbox"/> SiteManager Update</p>