FINAL STATEMENT OF REASONS FOR PROPOSED BUILDING STANDARDS OF THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT REGARDING THE 2022 CALIFORNIA BUILDING CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 2 (OSHPD 06/21)

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a Final Statement of Reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

UPDATES TO THE INITIAL STATEMENT OF REASONS:

Government Code Section 11346.9(a)(1) requires an update of the information contained in the Initial Statement of Reasons. If the update identifies any data or any technical, theoretical or empirical study, report, or similar document on which the state agency is relying that was not identified in the Initial Statement of Reasons, the state agency shall comply with Government Code Section 11347.1.

The Department of Health Care Access and Information (HCAI) formerly the Office of Statewide Health Planning and Development (OSHPD) is making the following changes to the Initial Statement of Reasons for the proposed actions associated with this rulemaking as summarized below.

Item 4

CHAPTER 17 SPECIAL INSPECTIONS AND TESTS
SECTION 1705 REQUIRED SPECIAL INSPECTIONS AND TESTS
1705.5.5 Structural glued laminated and cross-laminated timber. [OSHPD 1R, 2B & 5]

The proposed amendment to this section aligned the requirements in this section (the non-A Chapter) with the proposed amendment in the A Chapter. Not all new and strikeout text was appropriately identified in the Initial Express Terms submitted for 45-Day Public Comment. The updated text now correctly shows the new amendments as strikeout or underlined text.

Item 15
CHAPTER 21 MASONRY
SECTION 2105 QUALITY ASSURANCE
2105.2 Compressive Strength, f 'm. [OSHPD 1R, 2B & 5]

A 45-Day Public Comment was received to amend this section. As a result of this comment, the code change language was revised in the Exception to require masonry prism testing in accordance with TMS 602 Article 1.4 B.3 where f'_m exceeds 2000 psi, consistent with the 2019 CBC amendments.

Item 15 CHAPTER 21 MASONRY SECTION 2105 QUALITY ASSURANCE 2105.4 Masonry core testing. [OSHPD 1R, 2B & 5]

A 45-Day Public Comment was received to disapprove this section. As a result of this comment, this code change proposal was withdrawn, with the resulting provision consistent with the 2019 CBC amendment.

Item 16 CHAPTER 21A MASONRY SECTION 2105A QUALITY ASSURANCE 2105A.2 Compressive Strength, f'm.

A 45-Day Public Comment was received to amend this section. As a result of this comment, the code change language was revised in the Exception to require prism testing in accordance with TMS 602 Article 1.4 B.3 where f'_m exceeds 2000 psi consistent with the 2019 CBC amendments.

A 15-Day Public Comment was also received to amend this section. No changes to the code language were made from this comment since sufficient technical substantiation was not provided with regards to masonry testing to change the testing requirements, which are now consistent with the 2019 CBC amendments.

Item 16
CHAPTER 21A MASONRY
SECTION 2105A QUALITY ASSURANCE
2105A.4 Masonry core testing.

A 45-Day Public Comment was received to disapprove this section. As a result of this comment, this code change proposal was withdrawn, with the resulting provision consistent with the 2019 CBC amendment.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s).

OSHPD has determined that the proposed regulatory action WOULD NOT impose a mandate on local agencies or school districts.

OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).

Government Code Section 11346.9(a)(3) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for

making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

The text with proposed code changes was made available to the public for a 45-Day Comment Period from September 3, 2021 until October 18, 2021. There was a subsequent 15-Day Comment Period from November 1, 2021 until November 16, 2021.

OSHPD received four (4) comments from the 45-Day Public Comment Period from John Chrysler, Masonry Institute of America, and Kurt Siggard, Masonry Association of California and Nevada, and one (1) comment from the 15-Day Public Comment Period from Gabriel J. Acero and Cairo Briceno, SEAOSC Seismology Chairs, SEAOC and SEAOSC Seismology Committee as follows:

Item 15 CHAPTER 21 MASONRY SECTION 2105 QUALITY ASSURANCE 2105.2 Compressive Strength, f'm. [OSHPD 1R, 2B & 5]

OSHPD proposes to reduce the minimum specified masonry compressive strength to be consistent with TMS 402 Section 9.1.9.1.1 based upon public comment from the Masonry Institute of America. References to masonry prism and unit strength methods in the previous amendments are deleted and the appropriate sections in TMS 602 are now being referenced. Clarified the exception for testing when higher compressive strengths are used.

Commenter(s) and Recommendation (if applicable):

John Chrysler, Masonry Institute of America, and Kurt Siggard, Masonry Association of California and Nevada, Approve as Amended Section *2105.2 Compressive Strength*. "Industry proposed changing the minimum design threshold from 2,000 psi to 1,500 psi to be consistent with the referenced Material Standard (TMS 402). There is no rationale to change the current testing criteria parameters which would unnecessarily add cost to construction. Maintain current 2,000 psi testing threshold."

Agency Response:

Although prism testing is recommended for all grouted masonry, OSHPD accepts the recommendation and amends the proposed provision to only require masonry prism testing where f'_m exceeds 2000 psi consistent with the 2019 CBC amendments.

Item 15
CHAPTER 21 MASONRY
SECTION 2105 QUALITY ASSURANCE
2105.4 Masonry core testing. [OSHPD 1R, 2B & 5]

OSHPD proposes, for non-bearing non-shear masonry walls, to lower the minimum threshold for masonry compressive strength from 2000 psi to 1500 psi (to be consistent with the revised minimum masonry design strength) where core tests are not required.

Commenter(s) and Recommendation (if applicable):

John Chrysler, Masonry Institute of America, and Kurt Siggard, Masonry Association of California and Nevada, Disapprove Section *2105.4 Masonry core testing*. "Industry proposed changing the minimum design threshold from 2,000 psi to 1,500 psi to be consistent with the referenced Material Standard (TMS 402). There is no rationale to change the current testing criteria parameters which would unnecessarily add cost to construction. Maintain current 2,000 psi testing threshold."

Agency Response:

Although core testing is recommended for all grouted masonry, OSHPD has withdrawn this code change proposal, with the resulting provision consistent with the 2019 CBC amendment.

Item 16 CHAPTER 21A MASONRY SECTION 2105A QUALITY ASSURANCE 2105A.2 Compressive Strength, f'm.

OSHPD proposes to reduce the minimum specified masonry compressive strength to be consistent with TMS 402 Section 9.1.9.1.1 based upon public comment from the Masonry Institute of America. References to masonry prism and unit strength methods in the previous amendments are deleted and the appropriate sections in TMS 602 are now being referenced. Clarified the exception for testing when higher compressive strengths are used.

Commenter(s) and Recommendation (if applicable):

1. John Chrysler, Masonry Institute of America, and Kurt Siggard, Masonry Association of California and Nevada, Approve as Amended Section 2105A.2 Compressive Strength. "Industry proposed changing the minimum design threshold from 2,000 psi to 1,500 psi to be consistent with the referenced Material Standard (TMS 402). There is no rationale to change the current testing criteria parameters which would unnecessarily add cost to construction. Maintain current 2,000 psi testing threshold."

Agency Response:

Although prism testing is recommended for all grouted masonry, OSHPD accepts the recommendation and amends the proposed provision to only require masonry prism testing where f_m exceeds 2000 psi consistent with the 2019 CBC amendments.

Commenter(s) and Recommendation (if applicable):

2. Gabriel J. Acero and Cairo Briceno, SEAOSC Seismology Chairs, SEAOC & SEAOSC Seismology Committee, Approve as Amended Section *2105A.2 Compressive Strength*. The proposed amendment was received in the form as shown below. This proposed change is interpreted to increase the scope of required prism testing to the minimum masonry compressive design strength permitted when used in structures in Seismic Design Categories D, E or F.

"Exception: Subject to the approval of the enforcement agency, h(begin double strikeout) Higher(end double strikeout) (begin double underline)Where higher(end double underline)values of f'm (begin double underline)greater than 2000 psi or any f'm in Seismic Design Categories D, E or F (13.79 MPa) are(end double underline) (begin double strikeout)may be(end double strikeout) used in the design of reinforced grouted multi-wythe masonry and reinforced hollow-unit masonry. The approval shall be (begin double underline)they shall be(end double underline) based on prism test results in accordance with TMS 602 Article 1.4 B.3."

"JUSTIFICATION: Numerical analysis using non-linear material and non linear geometry for Code based axial load ratios demonstrate a significant difference in the post yield response of walls with walls non-tested f'm=1500psi (where the expected compression strength, f'me, may have not increased over time for non tested CMU prisms as observed in past rehabilitation projects with an f'me=1500psi) versus the tested equivalent wall f'm=1500psi with an expected compression strength of f'me=2000psi. The response between the cases shows fast capacity drops for f'me=1500psi higher than 20% at 1.5% drift levels. More detailed information is available upon request at the SEAOC and SEAOSC Seismology Committee."

Agency Response:

OSHPD respectfully declines to amend the proposed regulation. The technical substantiation compared in-plane shear wall analysis results using the same masonry shear wall axial compression loads and wall sizes with different masonry compressive strengths. The lower compressive strength masonry walls will most always show more strength degradation than the higher compressive strength masonry walls of the same size for the same axial load applied. The expected masonry compressive strength increases assumed from the design compressive strengths have not been substantiated by test records. The masonry shear wall evaluations do not correlate methods of testing to the masonry shear wall capacities. As a result, no changes were made to the currently proposed provisions in this CBC section for changing the masonry compressive design strength of 2000 psi to something less for the purposes of requiring prism testing.

Item 16 CHAPTER 21A MASONRY SECTION 2105A QUALITY ASSURANCE 2105A.4 Masonry core testing.

OSHPD proposes, for non-bearing non-shear masonry walls, to lower the minimum threshold for masonry compressive strength from 2000 psi to 1500 psi (to be consistent with the revised minimum masonry design strength), where core tests are not required.

Commenter(s) and Recommendation (if applicable):

John Chrysler, Masonry Institute of America, and Kurt Siggard, Masonry Association of California and Nevada, Disapprove Section *2105A.4 Masonry core testing.* "Industry proposed changing the minimum design threshold from 2,000 psi to 1,500 psi to be consistent with the referenced Material Standard (TMS 402). There is no rationale to

change the current testing criteria parameters which would unnecessarily add cost to construction. Maintain current 2,000 psi testing threshold."

Agency Response:

Although core testing is recommended for all grouted masonry, OSHPD has withdrawn this code change proposal, with the resulting provision consistent with the 2019 CBC amendment.

DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

Government Code Section 11346.9(a)(4) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

OSHPD has determined that no alternative would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected private persons than the adopted regulation. The proposed regulations will not have a cost impact to private persons.

REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:

Government Code Section 11346.9(a)(5) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per 11346.5(a)(3).

OSHPD has determined that the proposed regulations will not have an adverse economic impact on small businesses. The proposed regulations are technical modifications that will provide clarification and consistency within the code.