

## ACI SUBCOMMITTEE 318F – FOUNDATIONS

ACI 2019 Fall Convention  
Duke Energy Convention Center  
Cincinnati, OH

Tuesday, October 22, 2019      8:00 AM – 12:30 PM      C-203

### AGENDA

1. Call to Order
2. Self-Introductions
3. Announcements
  - a. No audio, photo or video recording
  - b. Confidentiality of ACI technical committee work in progress
  - c. Attendance
  - d. CVs to ACI
4. Subcommittee 318F Vision and Goals for 2019-2025 Code Cycle (Ospina)
5. Overview of Chapter 13 of ACI 318-19 (Ospina, Schaeffer)
6. Action Items
  - a. Impact of ACI 318-19 shear design provisions on design of concrete foundation members (318E and 318F Task group) (See Attachment 1 from Dolan)
  - b. New Business items linked to comments received during public review of ACI 318-19 (See Attachment 2 from Zeisler):
    1. General: Status of discussions/coordination between ACI and ICC following migration of concrete deep foundation design provisions from IBC to ACI 318-19 (See Attachment 3 from McFarlane)
    2. Design of cast-in-place concrete deep foundation members in SDC A and B
    3. Coordination of deep foundation element definitions in ACI 318, ASCE 7 and IBC 2018
    4. Contribution from metal or steel casing, pipe or tube to determine maximum allowable compressive strength of metal-cased concrete piles, concrete-filled pipe piles and micropiles
    5. “Raymond” pile language in 13.4.2.3, including 16 in. as maximum nominal diameter of metal cased cast-in-place concrete deep foundation element less
    6. Tie requirements for deep foundation members

7. Inconsistency in  $\phi$  factor evaluation for columns and deep foundation members for axial load only versus axial load and moment (See Tables 13.4.3.2 and 21.2.1)
8. Minimum cover for cast-in-place concrete deep foundation members
- c. Additional Action Items (No particular order or priority)
  1. Treatment of size effect on shear strength of grade beams (See Attachment 4 (email) from Nalawi)
  2. Consistency between ACI 318 and PCI provisions for precast prestressed concrete pile design (See Attachment 5 from Seguirant)
  3. Minimum transverse reinforcement size for precast concrete piles in SDC A and B (13.4.5.6) (See Attachment 6 (email) from Seguirant via Zeisler)
  4. Shear strength of spread footings and foundation mats (refer to CF009 in previous code cycle)
    - a. Size (depth) effect
    - b. Minimum amount of shear reinforcement (stirrups or headed shear studs) to mitigate size effect
  5. Review of slenderness design provisions for precast prestressed concrete piles
  6. Shear design of pile caps
  7. Seismic design philosophy for foundation elements including connections (Coordination with 318H)
    - a. Force-based versus displacement-based: When? How?
    - b. Treatment of R
    - c. Capacity protection concepts
- d. Other Action Items
7. Liaison with ACI 543, DFI, ICC/IBC, ASCE 7, ASCE 41, ASCE/COPRI 61 and others
8. Timeline
  - a. ACI 318 Schedule
  - b. Subcommittee Ballots
  - c. Main Committee Ballots
9. Other New Business
  - b. TBD
  - c. TBD
  - d. TBD
10. Adjournment
11. Next Meeting: Chicago, IL, Tuesday, March 31, 2020