

Location:
Virtual

Time:
10:00 AM to 11:30 AM

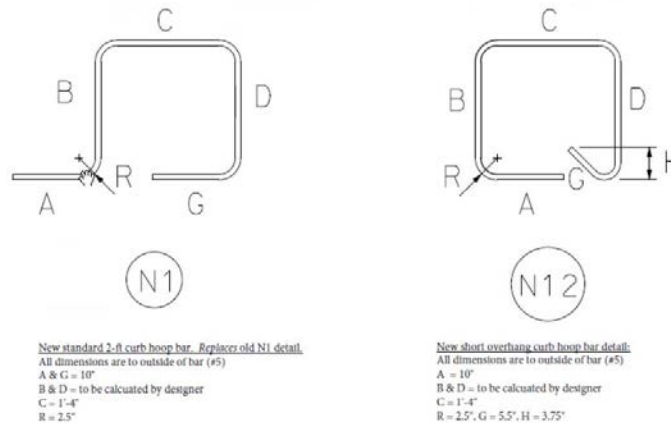
Purpose of Meeting: Third Quarter Meeting 2021

Invitees:

- | | |
|--|---|
| <input type="checkbox"/> Loretta Girard Doughty, NHDOT | <input type="checkbox"/> Dan O'Connor, Collins |
| <input type="checkbox"/> Angela Hubbard, NHDOT (Co-Chair) | <input type="checkbox"/> Kim Smith, H&H |
| <input type="checkbox"/> David Scott, NHDOT | <input type="checkbox"/> Chris Cucco, AECOM |
| <input type="checkbox"/> Tony Weatherbee, NHDOT | <input type="checkbox"/> Adam Stockin, WSP (Co-Chair) |
| <input type="checkbox"/> Robert Juliano, NHDOT (not present) | <input type="checkbox"/> Tom Levins, GM2 |
| <input type="checkbox"/> Philip Brogan, NHDOT (not present) | <input type="checkbox"/> Jaime French, F & O (note taker) |
| <input type="checkbox"/> Steve Johnson, NHDOT (not present) | <input type="checkbox"/> John Byatt, BETA |
| <input type="checkbox"/> Jennifer Reczek, NHDOT | <input type="checkbox"/> Daniel Taylor, Stantec |

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- **FRP Tub Girders - AIT Presentation** – Tim Kenerson and Greagory Nadeau made a presentation on FRP Tub Girders. Tim can be contacted at Tim@aitcomposites.com for additional information.
 - **Department staff changes (promotions, new-hires, retirements, etc.)**
 - a. Staffing discussion
 - John Stockton started in Bridge Design 4 weeks ago (CE IV)
 - New CE IVs, Emily Ahearn starting in October
 - Will be interviewing soon for the last CE IV position
 - Some staff are working remote 1 day a week
 - Chris Waszczuk retired in May. Andre Briere is the new Deputy Commissioner
 - Mike Mozer is the new head of Utilities Section/PM
 - **Summary of In-House Design Section staff meetings**
 - No meetings since February 2021
 - **NHDOT Information for Consultants**
 - a. NHDOT Bridge Manual Update
 - No revisions to the BDM or Details have been made
 - b. Expansion joint detailing –
 - For preservation projects with expansion joint replacements, the designer needs to review the location of joint phase vs. barrier placement.
 - Sufficient time needs to be spent reviewing the construction phases to ensure all work can be completed.
 - For joints that are modified to extend over the backwall, additional rebar length needs to be added as the existing reinforcing remains in place.
 - The expansion joint sheets need to be modified to meet the specific project's needs; the rebar layout needs to be closely reviewed for conflicts.
 - Reinforcing layout needs to be reviewed so the reinforcing clears the temporary bracket that is welded to the top of the beam and the joint anchorage.

- c. Deck curb hoop bar details –
- New bar bends for fascia hoop bars have been developed for use with and without precast panels.
 - A new bend was also developed for short overhang widths.
 - Bars N1 and N12 should be used, see detail below and detail at the end of the meeting notes.
 - The new bar marks and diagram are on the CADD cell library.
 - Everyone is to use the standard dimension shown for the bar mark N1 and N12.
 - Do not use bar mark **S5** since this is a strirrup bar bend which has smaller radii for the bends. We call out a larger radius (2.5") for the hoop bar bend.



- d. Finger joints and bike traffic –
- There are concerns with bicycle tires falling into the space in a finger joint depending on the skew. If the skew of the fingers line up with the travel way direction, this can create a large opening up to 1-ft long for the tire to fall in.
 - Bicycles can use all roads except for interstates (limited access highway) and should be considered during design.
 - Potential solution is to replace a section of the finger plates in the shoulder area with a flat sliding plate.
 - The BDM states that if a finger joint is used, the designer is to speak with the NHDOT Design Chief for provision for bikes. Coordinate with Bridge Design to see if the flat plate should be used and a detail of the flat plate.
- e. Bridge Mounted Sign Support –
- New sheets have been developed for sign supports. Changes were made to include back wind and member sizes were increased.
- f. Bridge and Bridge Approach Railing –
- The steel bridge and approach railing were computer simulated for MASH crash test. T2 & T4 passed crash level TL-3. T3 passes TL-4 level.
 - The distance from the last bridge post to the first approach rail post can be increase to 5.5 feet for T3, if needed; this configuration was computer simulated tested for MASH TL-4 criteria and passed.
 - The Bridge Detail Sheets will be revised and a notice will be sent out.

- g. Galvanic Anodes –
 - o Used in bridge rehabilitation when black bar is present.
 - o Provides protection to approximately 2 feet area of the existing black reinforcing that it is connected to and other black reinforcing that along the same current.
 - o The intent is to prevent a halo effect of the existing deck.
 - o A note needs to be added to the details that the anode shall be tied to existing black steel to provide a continuous connectivity of the existing black bars that extend from the existing deck joint.
- h. Partial Depth Precast Panels –
 - o Contractors use partial depth precast panels on majority of the projects. It has been decided to show the panels on all projects unless they don't meet the design criteria.
 - o Plans should show the partial depth panels; it clarifies the reinforcing layout.
 - o Including the panels on the plans will reduce questions during construction and produce the final product we want to see in the field.
 - o Item 538.5 should be used for panels, and they will not be an option anymore.
 - o Coordinate with NHDOT Design Chief to see if panels should be used at the start of a project.
 - o All pertinent details should depict the panels, i.e., end detail, rebar, fascia, etc.
 - o A Contractor can ask to use cast-in-place if he chooses.
 - o A notice will be sent out on the criteria on when the panels can be used and details.
- o **Technical Topics**
 - a. Cost Estimating Update -Tabled
 - b. Open Roads Implementation - Tabled
 - c. UHPC/PPC (Polyester Polymer Concrete) Overlays
 - Kim to provide update on PPC - Tabled
 - UHPC Specification – There is a specification available from NJ. Adam is also using UHPC for a VT project and will provide the specification from that project.
- o **Business Topics**
 - a. AISC Canam Bridges Fabrication Shop Tour
 - o Located in Claremont, NH
 - o Friday, September 24, 2021 Noon – 3:00 pm
 - o Register at:
https://steelday.aisc.org/EventDetails.aspx?eid=2995&_zs=rKNrj1&_zl=Bp2s7
 - b. Update for online shared reviews - Tabled
 - c. Opportunities to streamline project deliveries - Tabled
 - o Rehab section will include streamline deliveries

- d. NHDOT evaluating Sharepoint implementation in the future - Tabled
 - o Modify project delivery
 - o Modify interaction with consultants

- o **Potential NHDOT and Consultant bridge training opportunities**
 - a. NHI Drilled Shaft LRFD Design at NHDOT next Tuesday-Thursday. Not sure if open to consultants. - Angela followed up subsequent to the meeting, and this training is not open to consultants.
 - b. NHI FHWA Bridge Preservation
 - c. NHI Strut and Tie Training – cancelled
 - d. Bentley – Open Roads Training
 - e. Other conferences – NHDOT has no other classes scheduled at this time.

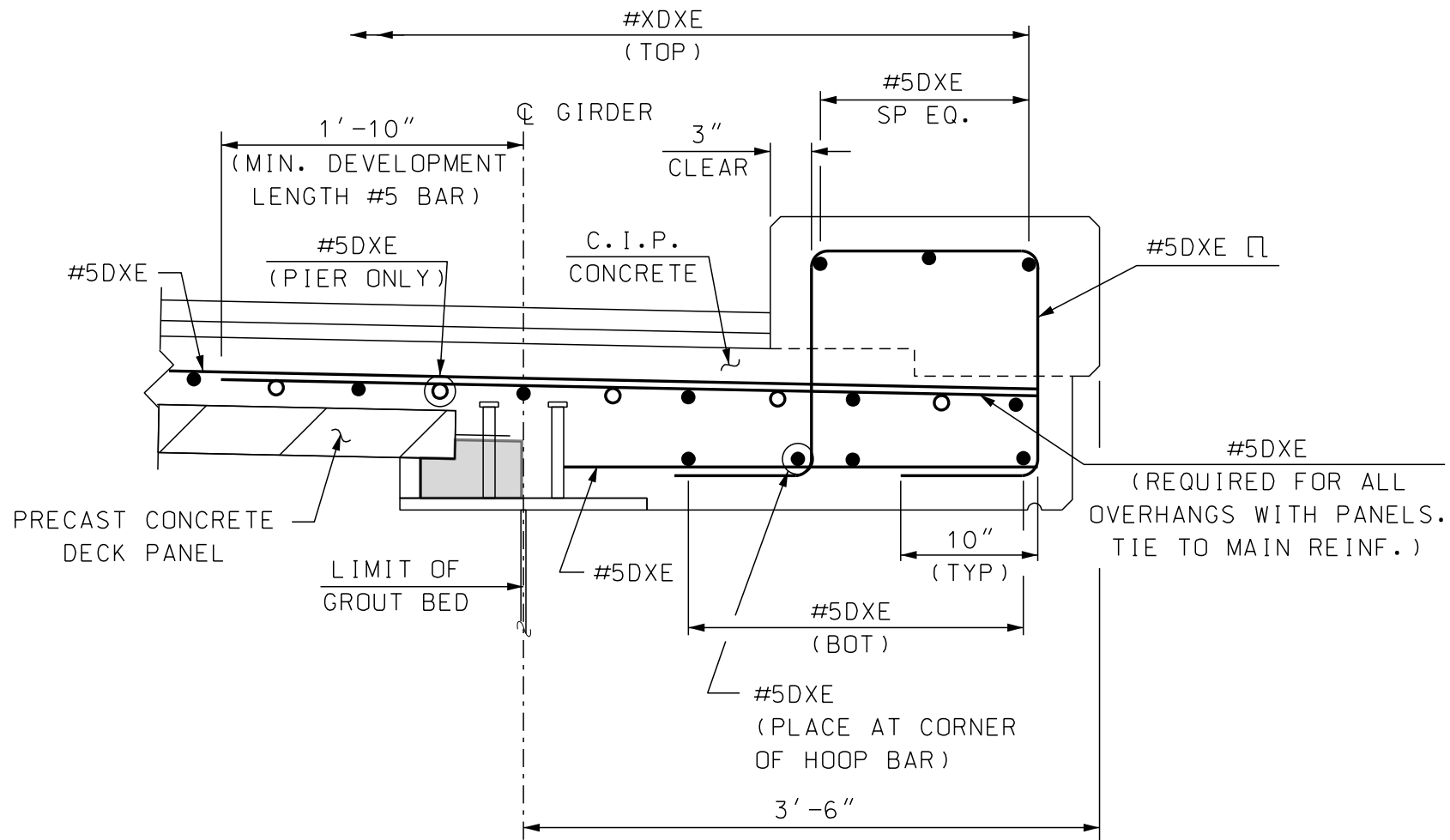
- o **Bridge Bureau workload and anticipated consultant support needs**
 - a. Possible Action Projects
 - b. Additional Federal Funding Plan - \$130 million in additional bridge funding will be available. DOT is working on a plan to determine where the funding will go and how to process that amount of work. Will likely need help from consultants to get projects completed.
 - c. Future funding/project issues
 - d. Updating Bridge Red List
 - e. R&R ranking in progress and recommendations for 10-year plan

- o **Subcommittee membership rotation / new members**

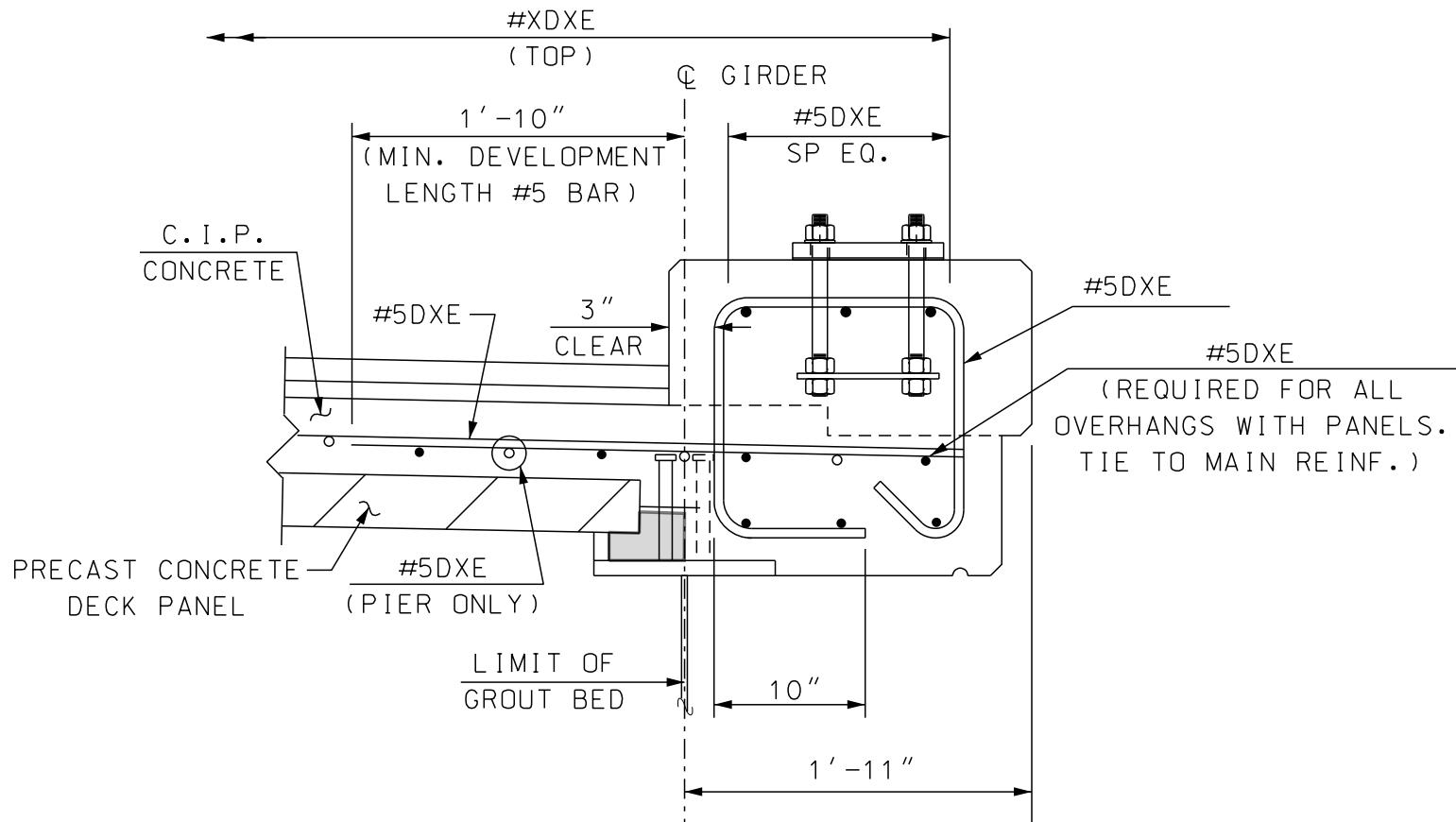
Kim Smith, Dan O'Connor, Bob Juliano	Sept. 2019 to Sept 2022
Chris Cucco, Jaime French	Sept. 2020 to Sept 2023
John Byatt, Daniel Taylor	Sept. 2021 to Sept 2024

 - o Last meeting for Adam, Tom, David, and Tony
 - o John Byatt and Daniel Taylor have been confirmed for the next cycle.
 - o Kim Smith to be the new co-chair
 - o New DOT members have not yet been selected

- o **Upcoming meetings - scheduled Fridays from 10:00 to 11:30 AM**
 - a. 2021 meeting dates (calendar invites will be sent out):
 December 10, 2021 – Will be a virtual meeting

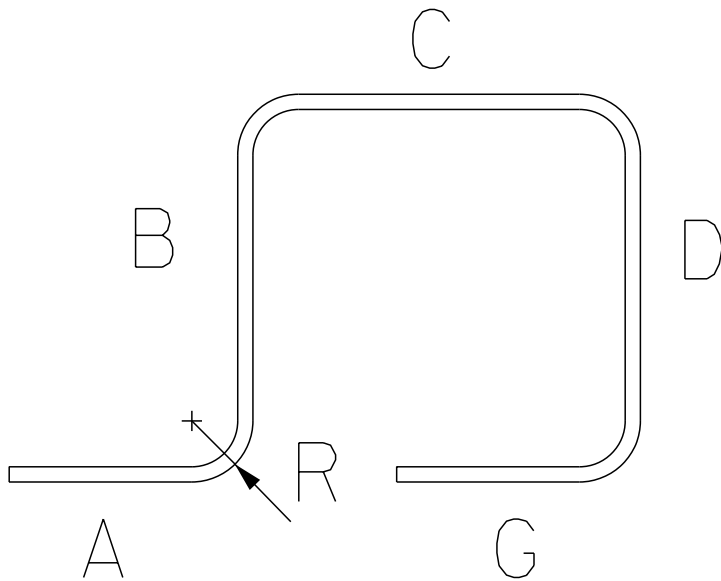


DECK OVERHANG DETAIL
(PRECAST DECK PANEL)



Standard Hook & Stirrup Details ($3\frac{3}{4}$ " ϕ , 10" Tail $2\frac{1}{2}$ " ϕ , $3\frac{3}{4}$ " Tail)

SCALE: 1" = 1'-0"



N1

New standard 2-ft curb hoop bar. Replaces old N1 detail.

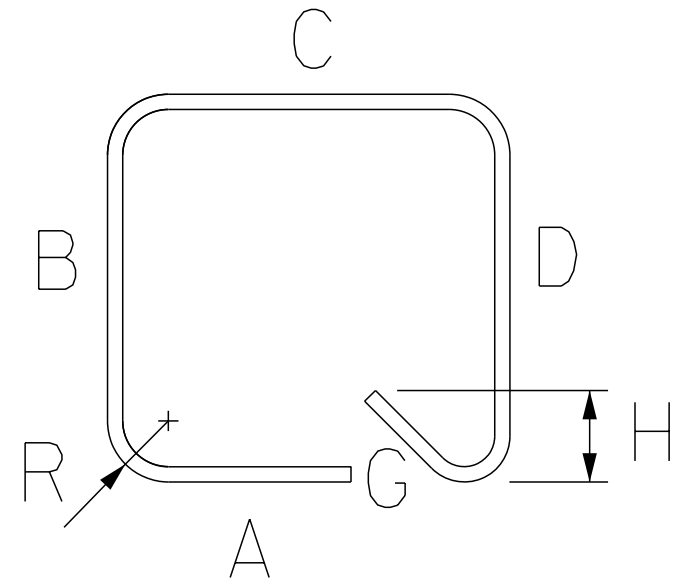
All dimensions are to outside of bar (#5)

A & G = 10"

B & D = to be calculated by designer

C = 1'-4"

R = 2.5"



N12

New short overhang curb hoop bar detail:

All dimensions are to outside of bar (#5)

A = 10"

B & D = to be calculated by designer

C = 1'-4"

R = 2.5", G = 5.5", H = 3.75"