

B. CRC update summaries in meeting minutes

- 1) Please include a meeting summary at the top of each set of meeting minutes to include date of meeting, focus points, and the next meeting date
- 2) This summary should be presented at the ensuing CRC meeting

CRC Update Summary for: GPTQ Bridge Sub-committee

Date of Meeting: April 20, 2022

- **Focus Points:**
 - **Open Bridge**
 - **Discussion of workspace issues**
 - **Discussed several topics including:**
 - **GDOT Bridge Detailing Manual**
 - **Uplift in footings**
 - **Use of wall Piers**

Next Meeting Date: June 1, 2022

GPTQ - April Meeting Notes

Wednesday, April 20, 2022

10:07 AM

Meeting Agenda

GPTQ Bridge Sub-committee Agends

April 20, 2022 at 10:00 am– 12:00 pm in MS Teams **Committee**

Members:

X	Donn Digamon - GDOT (GDOT Co-Chairman)	X	Arunava (Arun) Saha – WSP USA
X	Greg Grant – RS&H (Co-Chairman)	X	James Aitken – CHA Consulting
X	Joshua Orton – Brasfield & Gorrie	X	Jennifer Napier, VHB
☐	George Manning - Michael Baker	☐	Steve Gaston – GDOT
X	Brian Adams - Heath & Lineback (HL)	X	Lyn Clements – GDOT
☐	Doug Franks		

Opening

Task Force Updates:

CONSPAN Task Force – Jin Liu, GSP (Lead): Kevin Schwartz, GDOT

- **Donn to set a date for completion of the Manual;** Task force to be dissolved

RCPIER Task Force – George Manning, Michael Baker (Lead): Jennifer Tait, GDOT

- No progress on publishing the manual, Task force to be dissolved
 - Pile footing reactions in RCpier are significantly higher than what comes out of spreadsheets. Live load reactions at the bearings have a big impact. Using the higher load (RC Pier)
 - Have not discussed with Bentley yet.
 - Will share files with committee; check the load distribution.
 - Continue to allow consultants to use RCPier loading –
 - Josh has been able to replicate on single column piers w/ hand calc
 - LL distribution has been worked out, centroid of truck moved around.
 - Still working on running the scenarios to get match of loads between MC Pier and RC pier

ABC Task Force – Tim Dow, GSP (Lead): Dexter Whaley, GDOT: Raj Anand, HL

- Documents sent to the committee this morning 10/6/21 for review and comment, sent out again today 4/20/22
- Please provide comments by 6/1/2022
 - User Cost questions - Limitation of max user cost per day.
 - Meetings with Donn to discuss CHA projects (Bundle 11)
 - Jim will have M. Culmo @ CHA review tool , and user cost.
 - Brian Adams- H&L using tool for projects.
- Donn - Looking for a Bridge Slide Opportunity

New Business

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- **Open Bridge**
 - GDOT: How does open bridge help with doing our job?
 - Michael Baker looking at **All Plan** as a platform
 - RS&H looking at All Plan
 - GDOT is talking with All Plan , sticking point is Bentley Contract
 - All new projects will be ORD - Open Bridge will be implemented as well.
 - CONSPAN will not support 9th addition LRFD – will need to use Open Bridge
 - Issues with ORD/ Open Bridge learning curve, production, printing
 - Greg – Steve Tissler OBD guru.
 - Workspace issues
 - WSP has OBM experience
 - Difficult to draw rebar in 3-D
 - Uses the pro rebar program to draw in the rebar in 2-d.
 - 3-D model to 2-D drawings is the GDOT focus
 - Challenge is delivery, OBM still has challenges to making this work
 - GDOT is requesting a "GDOT" button for setting up plans.
 - Superstructure is ok, Sub structure is still a challenge.
 - Other software
 - Midas (Complex Bridges)
 - PG Super is being used
 - V-Bent for substructures
 - GDOT Bridge is working on pilot projects
 - Goal is 3-D models with ability to print PDF.
- **GDOT Bridge Detailing Manual**
 - Manual needs to be updated
 - **Please review and comment by 6/1/2022**
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- Lock Down Plans on bridges
 - Changes made after lockdown ,
 - Evaluation of plans vs permits not being done.
 - Jennifer- plans are being rushed to get through FFPR

- More focus needs to be put on these plans,
 - Changes to ROW
 - Changes to RipRap
 - Stream limits
 - Access changes
- Update to Bridge Environmental Guidance document
- Final bridge plans need to be approved before lockdown.
 - Risk of change need to be evaluated, but typical schedule would have bridge complete before lockdown, so little risk.
 - Schedules are not being met so changes are happening after LDP.
 - More coordination with bridge and enviro in final design
 - Additional constructability mtg before LDP
 - 2nd constructability meeting Being used as review before FFPR & LDP
- Does the LDP issue need to be taken up by another committee?
 - Environmental?
 - **Greg/ Jennifer to discuss with Env. Committee to discuss LDP and impacts to bridge.**
- Early Coordination needed with OMAT and Bridge to get pile loads correct.
 - Too much back and forth.
 - Approved WFI/ BFI and comments from bridge if there are questions about constructability or discrepancies in design.
 - Need more data to get the design right and meet schedules.
 - Efficiencies
 - Pile loading design charts?
 - More Borings?
 - More discussion with bridge and Geotech early in the project to determine the foundations.
 - Initiate coordination with the Geotech committee on this issue.
 - **Joint meeting? Donn working to set up**
 - Issues with approved loads and drivability of piles

Discuss issue with other engineers with other states-

Jim/ Greg: Formulate a question to be sent to committee for discussion with other states.

Topics provided for Discussion

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George Manning

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- Guidance on how to mitigate uplift in footings?
 - Note: AASHTO 10th ed is proposing changing temperature Load Factor from 0.5 to 1.0 for strength LC .

- This will make uplift issue worse!
- Uplift is not allowed so we make the footing bigger.
 - At what point do you start dropping the footing to reduce the footing size? At what point do you stop?
 - Practicality question.. Max drop of 'x' feet ?
 - FDOT manual may have guidance .
 - Doug- Manual guidance would be meant to encourage early coordination with bridge if you run into this situation.
 - Perhaps put in guidance tied to footing width versus column spacing? For example, if footing is less than 1.5 times the column spacing then drop the footing.
 - One possibility to use rectangular columns with width along the cap smaller than typical to increase flexibility.
- Wall piers are listed as a viable option and there is now good guidance on dimensions and reinforcement.
 - At what point do we start looking at wall piers?
 - What is the cutoff or what is the guidance on when to use this type of pier?
 - On most projects this is not realized until near the end and it is tough to make major substructure changes at the 11th hour. Receiving the final plans comment “investigate using wall piers” is not helpful at the very end of the project without guidance on what we are trying to achieve.
 - UPDATE TO MANUAL in June- trigger guidance being added to consider a wall pier
- Word of caution to the group, please be sure to check to make sure that your bridge is or is not on a bike path during the concept phase. This could be achieved by going to the bike route map. We have run into a couple of projects where this was missed in the concept report and had to make last minute changes to the bridge geometry.

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- Discussed the Max Haunch –

- Donn, early coordination needed with Bridge Office for those cases when 6" is exceeded.

Pile Encasement discussion.

Future items

Post-Tensioning

- Not much guidance in the manual -
- MMIP Contractors will be bringing a lot of different ideas and requirements.

- Straddle bents
- Box girders

Next meeting is June 1, 2022