

2/17/11

120<sup>th</sup> Avenue Connection- Lessons Learned Meeting

Attendees:

CDOT-John Schwab, Jay Hendrickson, Jacob Ojera, Bryan Kalliokoski, Nabil Haddad, Kyle Brooks

EKS-Tim Maloney, Mark Olsen, Kassie Watson, Will Smith

HNTB-Tony Marcello, Robert Manzanares, John Gunther

Geocal-Paul Jordan, David Scott

City and County of Broomfield-Rebecca Baker

#### Procurement and RFP

- RFP Docs were clearly defined, better than most
- Innovation was limited on this job. CDOT Should allow more flexibility in alignments to allow for more innovation and cost savings
- The procurement phase was too long for this size of job. 2 to 3 months is long enough to bid a job of this size.
- Things that CDOT can do to make the procurement process faster-
  - Make a quality manual template- EKS's quality manual for this job was taken from a MNDOT template
  - EKS recommends adopting this quality manual for future projects. Many of the manuals used by other agencies are too full of fluff. This manual was leaned down to contain the things that we actually need
- From Tim Maloney-Design builds need to keep the QA on the design build team because they can best manage the risk.
- Mark Olsen-CDOT's oversight team was properly staff. (2- full time people and part time tester and design assistance as needed). MNDOT doubles up on all QA giving it to the contractor while still have a full oversight staff. This essentially doubles the cost of QA because all functions are performed twice.
- Specialty tests required in the RFP that are typically only done by CDOT are not practical for the DB team to perform
- Project Management Software-CDOT should figure out what they want to use and specify it.
  - Bryan Kalliokoski-I think the software system that we required had a lot more work put into it than the benefit we received from it. We spent a lot of time and money setting up and learning how to use the new software and a lot of time inputting data. In the end we received all the paperwork in the traditional hard copy form and all data on the Quickbase program was converted to excel files. I think this was money that was wasted.
- ARE's need to be close to max budget. In this project, all ARE's were easily attainable and submitted by all teams. Asking for too much in the way of ARE's puts too much strain on the

bidding teams and the industry. If there is a 30 million dollar budget and 45 million dollars of work is asked for, the contractor will investigate and design all 45 million dollars worth of work and then figure out what can be built for the budget.

- Proposal submittals should be split up between price and Technical report. Tech proposals should be submitted 1 week prior to bid prices. Tech proposals should be final scored prior to opening of the bid prices. Then when the bids are opened, the prices are immediately applied to the Tech scores to determine the overall best value. This eliminates the chance of (and appearance of a chance of) fudging tech scores based on the bid prices.
- The week of gap could allow for clarification Q&A's for the tech proposals if the reviewers are unclear of the meaning of the tech proposal.
- If CDOT specifies that 3 teams are shortlisted, but allows more to submit proposals, this puts greater strain on the DB teams. If they have a 1 in 5 chance of getting the job vs a 1 in 3 chance they may not put as much effort into the bids. This also increases the amount of strain on the industry.
- EKS recommends a weekly dialogue for ACC discussions. This way they can weed out the absolute "no's" without spending so much money and time investigating them.
- RFP Book 2- Revisions are scattered throughout the book. All revisions and references to the standard specifications should be consolidated into 1 section.
- Local Agency specifications cannot be blanketed into the RFP. This led to a lot of problems concerning statements such as "At the discretion of the City Engineer" This is impossible to bid and puts far too much risk on the contractor. Any Local Agency specifications need to be revised and incorporated specifically into the RFP as needed.
- Local Agency's need to be trained during the RFP development stage to realize that when they are putting together the RFP documents they are not creating a conceptual design, but a contractor scope of work. Local Agency's should have technical representation during the RFP development to ensure the required specifications and needs are met in the RFP. Many of the CMO's on this job stemmed from the Local Agency not having what they needed in the RFP.

#### Design Development and Plan Review

- Approval vs Acceptance needs to be further clarified and used consistently
- FTP site was very beneficial for plan distribution
  - Plan naming different design packages is confusing for people not involved
  - May be beneficial to have a short text doc in the folders describing each design package
- Co-Housing is very helpful for efficiency.
- Weekly task force meetings were very helpful for the designers. We had good attendance and participation throughout design.
- Finishes and striping packages should be done earlier in the design to avoid conflicts with medians, curbs, etc.
- E-signed docs would provide better quality for the FTP site than wetstamped and scanned pdf's.
  - Laws may be in conflict with digital stamping of plans
  - CDOT is working towards moving to Esigning

- The DB team was very helpful and responsive during the redesign of the Aesthetics concept. By Contract this work should have been a CMO, but the DB team ate the associated costs with the redesign.

#### Construction Quality

- Quality control for Subs proved difficult.
- Quality manual should include more enforcement for “Stop Work” situations requiring a plan to correct the non-conformance and future non conformance prior to allowing work to resume.
- NCR’s should be more widely used or have another tool for documenting non compliance work. On this project NCR’s were mainly used for work that was being covered up. i.e. NCR issued for pouring concrete paving on failing subgrade. Some documentation should be put into place to address the failing subgrade itself prior to the placing of concrete. This style of NCR would essentially stop the paving from taking place until the failing subgrade NCR is closed.
- CDOT needs to develop final documentation requirements specific to design build. The standard final documentation checklist pertains mostly to Pay items, since the DB is lump sum the checklist only has a few lines applicable.
- Many of the CDOT forms used in this project were not totally applicable, but used anyway just because we wanted something similar. Is this acceptable, or should specific DB forms be developed that are 100% relevant.
- EEO, 205’s and Federal Aid provisions should be looked at by CDOT. Form 205’s were not required by the contract to sublet work, yet everyone wanted to see them. Payrolls and EEO interviews were required, but CDOT ended up doing the QA on them. This was basically the reason for requiring the second full time CDOT employee on the job. Without this paperwork Bryan would have been fine out there alone.