1. Click on the link below, this will open your web browser

http://aucache.autodesk.com/social/visualization.html

2. Use “Extended Display” to project the website on screen if you plan to work on your computer – or use “Duplicate” to display same image on screen and computer.
CM5041-R - NCS goes BIM: Implementation for the National CAD Standards

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Introductions

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Much of the building industry still requires and relies upon CAD-based and sheet-centric project information delivery. The National Building Information Modeling Standard-United States ® (NBIMS-US™) doesn’t define graphical standards, so the United States National CAD Standard ® (NCS) is an indispensable reference standard for the foreseeable future. Several changes have occurred in the NCS and NBIMS-US™ for versions releasing in late 2014/early 2015, respectively.
NCS V6 has added a new Building Information Modeling (BIM) Implementation Section, and there are ongoing efforts to further develop new content. This round table gives attendees an overview of the new section and the opportunity to participate in further development. Attendees will identify common business challenges that the National Standards can alleviate and they will develop a list of effective practices to help make project delivery consistent throughout the building industry.
Key learning objectives

At the end of this class, you will be able to:

- Learn to identify basic BIM guidelines and effective practices that you should implement for your BIM projects
- Understand the content in the NCS V6 BIM implementation section
- Provide input for further development of BIM implementation within the NCS
- Understand why and how to become involved in national standards development

Content developed in this session will be available on AU Online, and will become a basis for ballots in the next standards revision cycle.
NCS Intended Purpose

… foundation for information sharing
… streamlining and simplifying the exchange of building design and construction data

NCS Target Benefits

- Consistent classification, organization and representation of data
- Seamless transfer of information amongst project team members
- Reduced time/effort for file prep or conversion
- Reduced training time
- Streamlined process for checking drawings
- Greater clarity of communication of design intent

Source: http://www.nationalcadstandard.org/ncs6/about.php

Does it hit the target for BIM use?
NCS BIM Implementation Section

- Introduction
- References
- Clarifications
  - Commentary and examples relating to each section of the NCS
  - Basic clarifications with some exclusions
- Basic BIM Guidelines
  - Authoring Content
  - Model Coordination and Delivery
- Summary

Source: http://www.nationalcadstandard.org/ncs6/bim/
NCS BIM Implementation Section

- Introduction
- References
- Clarifications
  - Commentary and examples relating to each section of the NCS
  - Basic clarifications with some exclusions
- Basic BIM Guidelines
  - Authoring Content
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Source: http://www.nationalcadstandard.org/ncs6/bim/

What would you put in here?
NCS BIM Implementation Section: Clarifications - Feedback

- Uniform Drawing System
  - Drawing Set Organization
  - Sheet Organization
  - Schedules
  - Drafting Conventions
  - Terms and Abbreviations
  - Symbols
  - Notations
  - Code Conventions

- AIA CAD Layer Guidelines
  - Plotting Guidelines

Which are problematic for BIM use?
NCS BIM Implementation Section: Clarifications - Feedback

- Sheet information
  - Set
  - Identification
  - Types
  - Sequence
  - Layout
NCS BIM Implementation Section: Clarifications - Feedback

- Layers (import or export)
- Schedules
- Terms and Abbreviations
NCS BIM Implementation Section: Clarifications - Feedback

- Line Widths
- Basic Annotation
NCS BIM Implementation Section

- Introduction
- References
- Clarifications
  - Commentary and examples relating to each section of the NCS
  - Basic clarifications with some exclusions
- Basic BIM Guidelines
  - Authoring Content
  - Model Coordination and Delivery
- Summary

Source: http://www.nationalcadstandard.org/ncs6/bim/

What would you put in here?
NCS BIM Implementation Section: Basic BIM Guidelines - Feedback

- Authoring Content
  Problems with what/how content was created?
- Model Coordination and Delivery
  Problems with sharing files or submittals?
- Other Categories?
  What are we missing?
- Summary Additions?
  What message would you broadcast?
Class Summary

- Conclusions
- Suggestions
- Key takeaways

What did we learn or establish?
Getting Involved

Why?
- Opportunity to affect the industry
- Opportunity to be a part of something bigger than yourself or your business
- Ensure your division of the industry is represented
- Potential increase in marketability

How?
Website Links

National Institute of Building Sciences; buildingSMART alliance™

buildingSMART alliance Member Portal
http://projects.buildingsmartalliance.org

National BIM Standard – United States®
http://www.nationalbimstandard.org/

United States National CAD Standard®
http://www.nationalcadstandard.org
Session Feedback

- Via the Survey Stations, email or mobile device
- AU 2014 passes given out each day!
- Best to do it right after the session
- Instructors see results in real-time