

CITY OF LINCOLN
NEBRASKA
MAYOR COLLEEN J. SENG
www.lincoln.ne.us


Engineering Services
Public Works and Utilities Department
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CADD Standards

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ISSUES

<u>WITHOUT STANDARDS</u>	<u>WITH STANDARDS</u>
• Multiple Versions	• Single Version
• No Unification between departments	• Complete Standards
• No consistency	• Department Unification
• Slows Review time	• Accuracy
	• Consistency
	• Efficiency

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WHEN???

- Testing
- Maintenance Release
- New Standard Specifications = New Pay Items = New CADD Levels
- WHEN

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CURRENTLY AVAILABLE For MicroStation v8.5

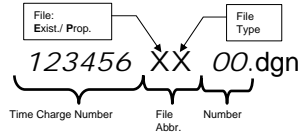
- Standard Files
- Sample Plans
- Seed Files
- Fonts and Linestyle
- Colortable
- Borders
- Print
- Survey
- Section Manager

www.ci.lincoln.ne.us/city/pworks/engine/dconst/standard/cadd/index.htm

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FILE NAMING



Standard Naming for Base files and Sheet files.

Standard Logical Naming for base file referencing.

DIRECTORY STRUCTURE

- Includes DGN base files, Sheet DGN files, GEOPAK data, Survey Data, Project Specific Resource files, Correspondence, Milestone transfer,
- Keeps location of data consistent.
- Uniform workspace



STANDARD SHEET SCALE

Standard scales for every sheet, still allowing for modification with prior approval from the City.

Plans sheets : 1"=40' horz.

Plan & Profile: 1"=40' horz., 1"=10' vert.

Cross Sections: 1"=20' horz., 1"=20' vert.

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SAMPLE PLANS

- Currently, the Sample Plans will only be available as a PDF file
- Each file is formatted for a Greyscale, 11x17 paper and will print to scale
- These will be available online and updated as necessary

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SAMPLE PLANS

APPROVED LOCATION FOR
CONCRETE FOOT AND
FIRING


1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
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10	10	10
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99	99	99
100	100	100

CITY OF LINCOLN, NE (2003)
84TH ST. FROM MONTELLO RD TO KATHY LN.
& PIONEERS BLVD. FROM PAGODA LN. TO 86TH ST.
WIDENING PROJECT #700000




PROJECT CONTACT

DESIGNED BY:	COL. PHILIP PLATT	DATE:	08/11/03
DRAWN BY:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
CHECKED BY:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
APPROVED BY:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT NO.:	700000	DATE:	08/11/03
PROJECT NAME:	84TH ST. FROM MONTELLO RD TO KATHY LN. & PIONEERS BLVD. FROM PAGODA LN. TO 86TH ST. WIDENING PROJECT #700000	DATE:	08/11/03
PROJECT LOCATION:	84TH ST. FROM MONTELLO RD TO KATHY LN. & PIONEERS BLVD. FROM PAGODA LN. TO 86TH ST.	DATE:	08/11/03
PROJECT OWNER:	CITY OF LINCOLN	DATE:	08/11/03
PROJECT MANAGER:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT ENGINEER:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT ARCHITECT:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT CONTRACTOR:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT SUBCONTRACTOR:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT CONSULTANT:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT SPECIALIST:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT DESIGNER:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT DRAFTER:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT CHECKER:	ATY/LOUIS WITKOSKI	DATE:	08/11/03
PROJECT APPROVER:	ATY/LOUIS WITKOSKI	DATE:	08/11/03




APPROVED FOR CONSTRUCTION



APPROVED FOR CONSTRUCTION


BY: [Signature] DATE: [Date]



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COVER




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Seed Files

Working Units:

- Master Units = Feet, Label = FT
- Sub-Units = Inches, Label = HD
- Resolution = 1000 per foot



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Fonts and Linestyles

- CityFonts.rsc
- CityLinestyles.rsc

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Borders

- Border_V8.cel
- Lincoln Border.dgnlib
- BorderPlan.dgn
- BorderPNP.dgn
- BorderPpGbk.dgn
- BorderXSC.dgn

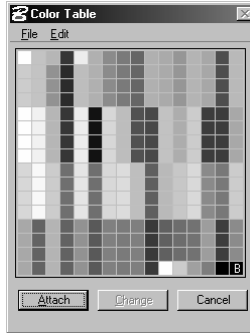
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Colortable

- Colortable.tbl



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Printing / Plotting

- Printer.plt
- PDF B&W.plt
- BW_Pentable.tbl

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Survey

- LincolnEB.dgnlib
- LincolnER.dgnlib
- Survey_V8.cel
- Lincoln.smd

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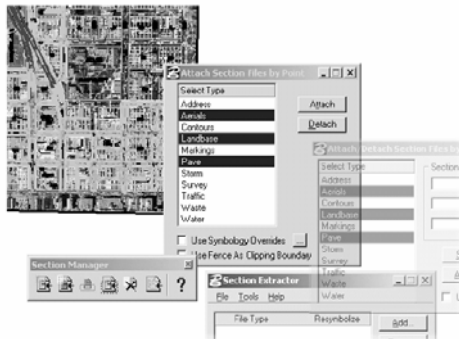
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SECTION MANAGER

City of Lincoln Section Manager



City of Lincoln production documentation for new utilities designed to replace existing FileScan, One Call, and DGS.

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DOCUMENTATION

- CADD Standard Manual
- Website interface - Tutorials



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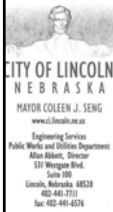
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Plan Review – PDF

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Current Issues

- Numerous Documents
- Courier to transport between external departments
- Collection of these documents in a timely manner
- Lost documents
- Distinguishing who made comment
- Interpolating the comment
- Pencil comments
- Redundant comments
- Contradictory comments
- Organizing all comments
- Storage of Plan Sets

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QA / QC Committee

- Standardizing Plan Review Process
- Policy / Procedures
- Review Checklist
- Check In / Check Out to track Plan Sets
- Plan Review Summary Sheet
- Rating Sheet
- Four Reviews per Project:
 - 1st Submittal
 - 2nd Submittal
 - Draft PS&E Submittal
 - PS&E Submittal
- This will quadruple all previous issues.

There Must Be an Alternative...


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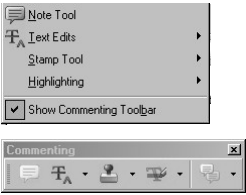


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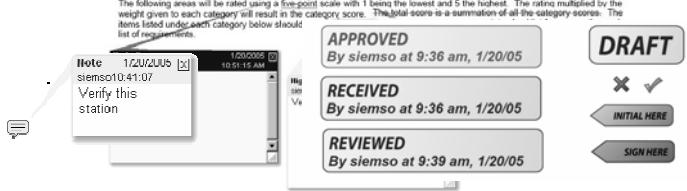



Adobe Acrobat Standard Commenting



- Note Tool
- Text Edit
- Stamp Tools
- Highlighting Tools


The following areas will be rated using a five-point scale with 1 being the lowest and 5 the highest. The ratings multiplied by the weight given to each category will result in the category score. The total score is a summation of all the category scores. The items listed under each category below should list of requirements.






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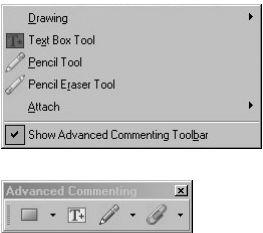


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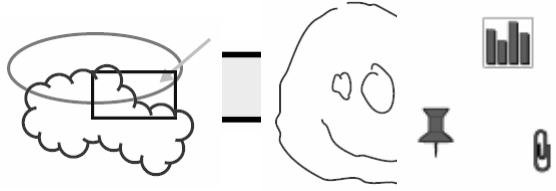
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Adobe Acrobat Advance Commenting




- Drawing
- Text Box Tool
- Pencil Tool
- Pencil Eraser Tool
- Attach






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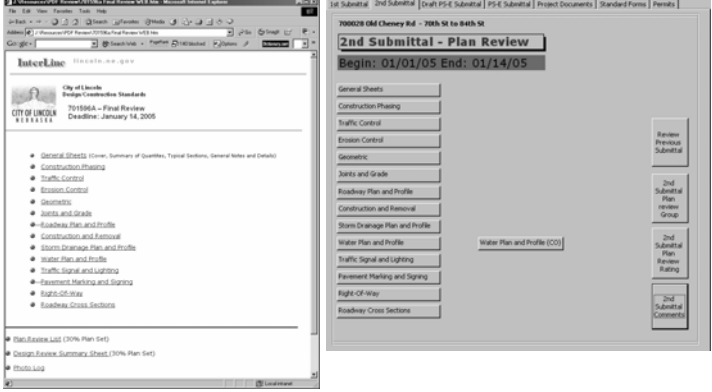



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Adobe Acrobat GUI Interface







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MicroStation v8 Bentley / Adobe Partnership



- MicroStation PDF drivers
- Batch Plot Support
- PDF Composer
- v8.5 – 3D Animation



- View Levels
- Bookmarks
- Searchable Text
- Password Protection
- 7.0 – 3D Animation



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Benefits

- Cut Time
 - One Week for production of plans
 - Speed up Review Process
 - Collection of documents
 - Organize comments
 - More time for design
- Reduce Paper Waste
 - Four Reviews = Quadruple Paper waste / storage
- Archival
 - Exact Snap-shot
 - Document Management
 - Added Intelligence; Searchable Text, Hyperlinks
- Transportable
 - Send to Consultant: CD - FPT - Website
- Password Protection
 - Restrict unwanted viewers
- Control Permissions
 - Restrict PDF documents from Printing, Coping or Changing

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Future Possibilities

- Standard Forms
- Standard Photo Log
- Standard Archival
- Fully Printable
- Transportable
- Bid Document

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COMMENTS/SUGGESTIONS

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www.ci.lincoln.ne.us/city/pworks/engine/standard/cadd/
<ftp://gisftp.ci.lincoln.ne.us/download/gis/>



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QUESTION/ANSWER



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