



33rd Annual State Construction Conference

March 27th, 2014

The next presentation

SCO NEWS & LATEST INSPECTION DISCOVERIES

will start at 10:30



33rd Annual State Construction Conference

March 27th, 2014

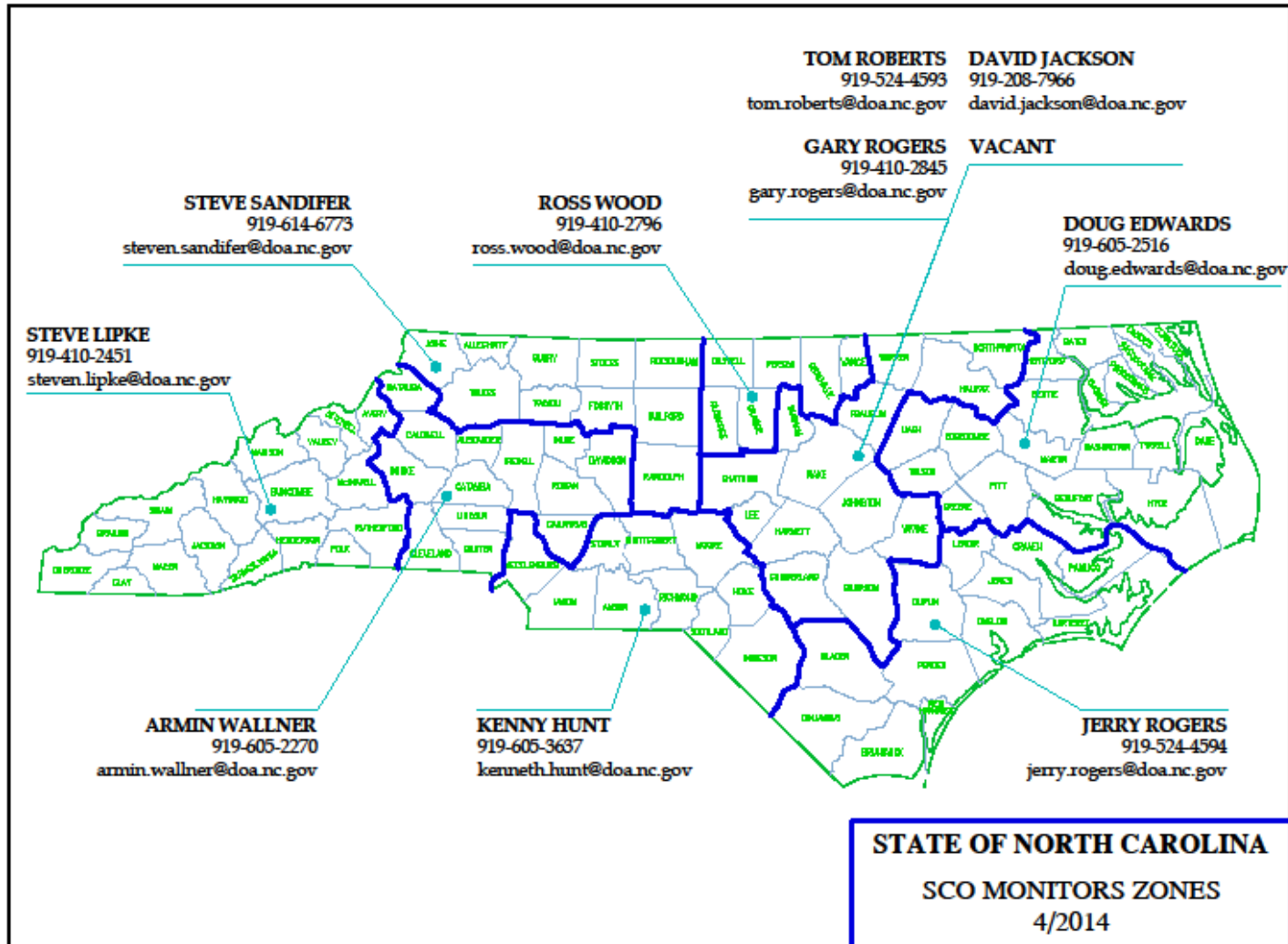
SCO NEWS & LATEST INSPECTION DISCOVERIES

By, Latif Kaid, P.E.

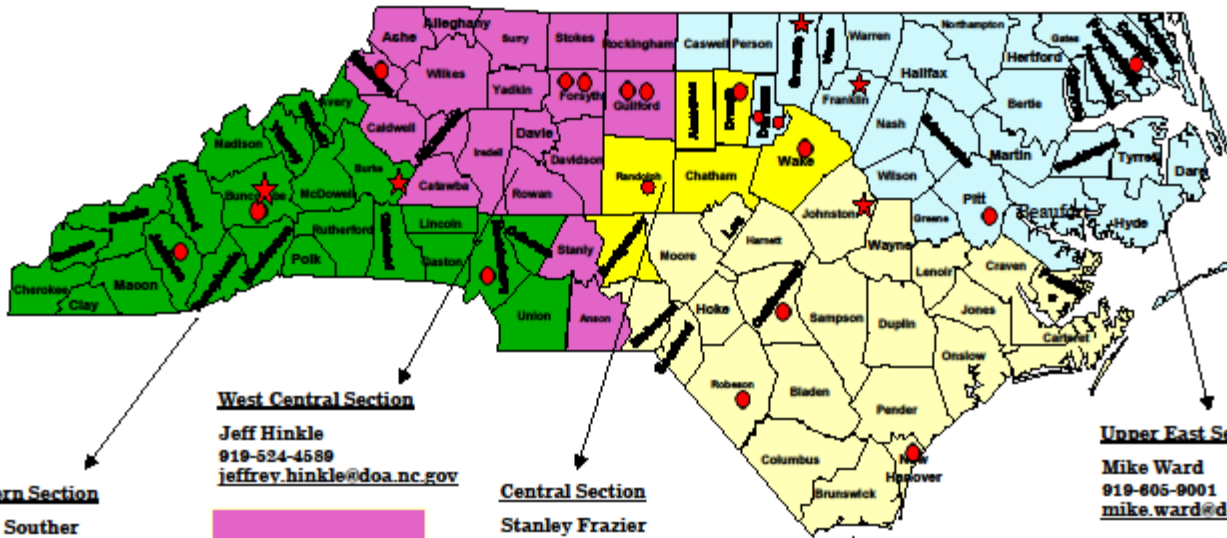
Office News

- New Construction Management Assistant Director:
Victor Stephenson, P.E.
- Re-establishing FCAP Teams
- Project Monitor's Territory Assignment:
 - New Monitors – **Steve Sandifer** and **David Jackson**
 - http://www.nc-sco.com/documents/maps/Monitors%20Map%20March_2011.pdf
- Electrical Inspector's Territory Assignment:
 - http://www.nc-sco.com/documents/maps/Electrical%20Inspector%20Map%20March_2011.pdf

Project Monitor's Territory Assignment:



Electrical Inspector's Territory Assignment:



Western Section
 David Souther
 919-427-8589
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 Western Carolina

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 School of the Arts
 Appalachian State

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 UNC-Chapel Hill
 NC Zoo

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 Fayetteville State
 UNC-Wilmington

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Elizabeth City State
 East Carolina
 North Carolina Central
 NC School of Math & Science
 UNC Hospital
 Eastern Regional Hospital

08/09/12 Territory Plan

SCO Website Changes

New look



State Construction Office



Google™ Custom Search

[SCO Manual](#)

[Services](#)

[State Building Commission](#)

[Interscope](#)

[Resources](#)

[Contact Us](#)

State Construction Office

Recent News

The 33rd Annual State Construction Conference will be held on March 27, 2014 at the McKimmon Center:

- [Click Here to Register Online](#)
- [Click Here View Agenda](#)

[SL 2013-242 Procedural Implementation of Article 8C \(GS 143-135.35-.40\) \(pdf\)](#)

[2013-14 Repair & Renovation Reserve Project List \(pdf\)](#)

[Design Review Status](#) and [Construction Status](#) has been relocated to the Interscope dropdown menu.

[SCO Energy Benchmarking Project](#) (revised 2/20/2014)

We are now accepting nominations for our 2015 Frank B. Turner Award and Certificates of Merit. The deadline is January 9, 2015. Please send nominations or requests for more information to alicia.lopez@doa.nc.gov.

[UPDATED Fire Alarm System Checklist, March 2013](#)

[General Conditions \(OC-15\) 24th Edition, January 2013](#)

[The Division of State Construction: A History](#) by John H. Emerson, P.E.

[SBC Resolution on Design/Build Construction](#)

[Tent or Canopy Permit \(See "Other"\)](#)



Main Office: 919-807-4100
Fax: 919-807-4110

Mailing Address:
1307 Mail Service Center
Raleigh, North Carolina 27699-1307

Physical Location:
New Education Building
301 North Wilmington Street, Suite 450
Raleigh, NC 27601

[Downtown Raleigh Parking Map](#)

Recent News

➤ House Bill 628

- Article 8C of NCGS 143-135.35-.40 : Became effective October 1st 2013

➤ Energy Benchmarking

- Last Update 2/20/2014

➤ House Bill 628

- Section 1: Net Savings
- Section 2: Locally Sourced Materials

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2013

SESSION LAW 2013-242
HOUSE BILL 628

AN ACT TO REQUIRE NET SAVINGS IN ASSOCIATION WITH MAJOR FACILITY CONSTRUCTION AND RENOVATION PROJECTS AND PROTECT USE OF NORTH CAROLINA PRODUCTS IN MAJOR FACILITY CONSTRUCTION AND RENOVATION PROJECTS UNDER THE SUSTAINABLE ENERGY-EFFICIENT BUILDINGS PROGRAM.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 143-135.37 is amended by adding two new subsections to read:
"(a1) Net Savings Required. – The requirements of this section apply to a major facility construction or renovation project only if the Department determines that the application of the requirements to the project will result in an anticipated net savings. There is an anticipated net savings if the cost of construction or renovation in accordance with the requirements of this section plus the estimated operating costs for the first 10 years post-construction would be less than the cost of construction or renovation if the project were not subject to the requirements of this section plus the estimated operating costs for the first 10 years post-construction. All third-party certification costs before and after construction or renovation shall be included in determining construction and operating costs. Renovation projects that will include guaranteed energy savings contracts, as defined by G.S. 143-64.17, and executed in accordance with the provisions of Part 2 of Article 3B of Chapter 143 of the General Statutes, are exempt from the requirements of this subsection.

(1) Locally Sourced Materials. – To achieve sustainable building standards as required by this section, a major facility construction or renovation project may utilize a building rating system so long as the rating system (i) provides certification credits for, (ii) provides a preference to be given to, (iii) does not disadvantage, and (iv) promotes building materials or furnishings, including masonry, concrete, steel, textiles, or wood that are manufactured or produced within the State.

SECTION 2. This act becomes effective October 1, 2013, and applies to construction and renovation projects for which the bidding process is initiated on or after that date.

In the General Assembly read three times and ratified this the 24th day of June, 2013.

s/ Daniel J. Forest
President of the Senate

s/ Thom Tillis
Speaker of the House of Representatives

s/ Pat McCrory
Governor

Approved 10:34 a.m. this 3rd day of July, 2013





North Carolina
Department of Administration

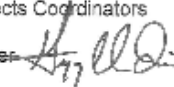
Pat McCrory, Governor
Bill Daughtrice, Jr., Secretary

State Construction Office
Gregory A. Driver, P.E., Director

November 1, 2013

MEMORANDUM

TO: All Capital Projects Coordinators

FROM: Gregory A. Driver 

SUBJECT: Session Law 2013-242
House Bill 628 – Section 1 Paragraph (a1)
Procedural Implementation of Article 8C (GS 143-135.35 - .40) (SB668)
Performance Standards for Sustainable Energy Efficient Public Buildings

Section 1, paragraph (a1) of the above referenced legislation reads as follows:

SECTION 1. G.S. 143-135.37 is amended by adding two new subsections to read:
“(a1) Net Savings Required. – The requirements of this section apply to a major facility construction or renovation project only if the Department determines that the application of the requirements to the project will result in an anticipated net savings. There is an anticipated net savings if the cost of construction or renovation in accordance with the requirements of this section plus the estimated operating costs for the first 10 years post-construction would be less than the cost of construction or renovation if the project were not subject to the requirements of this section plus the estimated operating costs for the first 10 years post-construction. All third-party certification costs before and after construction or renovation shall be included in determining construction and operating costs. Renovation projects that will include guaranteed energy savings contracts, as defined by G.S. 143-64.17, and executed in accordance with the provisions of Part 2 of Article 3B of Chapter 143 of the General Statutes, are exempt from the requirements of this subsection.

To provide clarification in regards to implementation of the above law the following shall apply:

- 1) Designer shall submit 2 project costs analysis with a summary comparison of the two at Advance Planning Phase Submittal to SCO:
 - a. Cost of construction (including design) if Article 8C is complied with, plus operating costs for the first 10 years including 3rd party certification costs before and after construction. (SB668 Bldg)
 - b. Cost of construction (including design) if Article 8C is not complied with, plus operating costs for the first 10 years including 3rd party certification costs before and after construction. (NonSB668 Bldg)
- 2) If (1a) is more than (1b) then owner does not have to comply with the requirements of Article 8C. If (1a) is less than (1b) then owner does have to comply with the requirements of Article 8C.
- 3) The owner may voluntarily incorporate performance standards of Article 8C regardless of cost analysis required by SL 2013-242.

Mailing Address:
1307 Mail Service Center
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Fax (919)907-4110
State Courier #58-02-01

Location:
301 N. Wilmington St. Suite 450
Raleigh, North Carolina 27601

An Equal Opportunity/Affirmative Action Employer

➤ HB 628

Implementation of Section 1:

If LCCA NC Code compliant
building < LCCA of SB 668
building → Compliance not req'd.

“...All 3rd party certification costs
before and after construction or
renovation shall be included in
determining construction and
operating costs...”

Note: Energy Performance
project are exempt.

SCO Website Changes

1. SCO Manual: <http://www.nc-sco.com/scomanual.aspx>



The screenshot shows the homepage of the State Construction Office (SCO) website. The header features the logo for the Department of Transportation and Safety (DOA) and the State Construction Office (SCO) with the text "State Construction Office". In the top right corner, there are social media icons for DOA and Facebook, and a Google Custom Search box. A navigation menu is located below the header, with "SCO Manual" highlighted. The main content area displays a list of manual chapters under the heading "Manual Chapters (Energy Revisions - October 2008*)". To the right of the text is a large circular logo for the State Construction Office, which includes a hard hat, a pencil, and a map of North Carolina.

DOA NC
State Construction Office

DOA f
Google™ Custom Search

SCO Manual Services State Building Commission Interscope Resources Cont

Manual Chapters (Energy Revisions - October 2008*)

- Chapter 100 - Administration and Design Contracts*
- Chapter 200 - Regulatory Review Procedures*
- Chapter 300 - Project Phases*
- Chapter 400 - Bidding and Contracts (January 2006)
- Chapter 500 - Construction Administration*
- Chapter 600 - Record Documents and Final Report* (Rev. July 2009)

SL 2013-242 Procedural Implementation of Article 8C (GS 143-135.35-.40) (pdf)

2013-14 Repair & Renovation Reserve Project List (pdf)



SCO Website Changes

2. Services: <http://www.nc-sco.com/services.aspx>



The screenshot shows the website for the State Construction Office (SCO). At the top left is the DOA NC logo. In the top right corner, there are social media icons for DOA and Facebook, and a Google Custom Search bar. The main header reads "State Construction Office". Below this is a navigation menu with tabs for "SCO Manual", "Services", "State Building Commission", "Interscope", "Resources", and "Con". The "Services" tab is selected. The main content area is divided into two columns. The left column has a "Recent News" section with a link to "The 33rd Annual State Conference at the McKimmon Center" and two sub-links: "Click Here to Register" and "Click Here View Agenda". Below this is a link for "SL 2013-242 Procedural Instructions" and a link for "2013-14 Repair & Renovation Reserve Project List (pdf)". The right column features a "Construction Management" section with links for "FCAP Inspection Request" and "Request for Informal Dispute Resolution (Coming Soon)". Below that is a "Design and Construction" section with links for "Advertisement for Design Services (Email: scoads@doa.nc.gov)", "Electrical Inspection Request (Coming Soon)", "Project Monitor Territory Assignment", and "Electrical Inspection Territory Assignment". On the far right of the page is the official seal of the State Construction Office, which depicts a hard hat, a pencil, and a map of North Carolina within a circular border containing the text "STATE CONSTRUCTION OFFICE".

DOA NC

State Construction Office

SCO Manual **Services** State Building Commission Interscope Resources Con

State Construction Office

Recent News

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SL 2013-242 Procedural Instructions

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Construction Management:

- [FCAP Inspection Request](#)
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Design and Construction:

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- [Electrical Inspection Request \(Coming Soon\)](#)
- [Project Monitor Territory Assignment](#)
- [Electrical Inspection Territory Assignment](#)



SCO Website Changes

3. State Building Commission: <http://www.nc-sco.com/sbcinformation.aspx>



The screenshot shows the website for the State Construction Office (SCO) under the Department of Transportation and Safety (DOA) in North Carolina. The header features the DOA NC logo and the text "State Construction Office". A navigation menu includes "SCO Manual", "Services", "State Building Commission", "Interscope", "Resources", and "Contact". The "State Building Commission" menu item is highlighted, and a dropdown menu is visible with the following items: "SBC Agenda, Minutes and Designer Selections", "State Building Commission Members", and "Certificate of Merit Program".

State Construction Office

- SBC Agenda, Minutes and Designer Selections
- State Building Commission Members
- Certificate of Merit Program

Recent News

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2013-14 Repair & Renovation Reserve Project List (pdf)



SCO Website Changes

4. Interscope: <http://interscope2.doa.state.nc.us:8080/interscope/logon.action?>



The screenshot shows the State Construction Office (SCO) website. The header includes the DOA NC logo and the text "State Construction Office". A navigation menu is visible with the following items: SCO Manual, Services, State Building Commission, Interscope, Resources, and Contact. The "Interscope" menu item is expanded, showing a dropdown menu with the following options: Log In, Design Review Status, and Construction Status. Below the navigation menu, the page content is divided into two main sections. The left section is titled "State Construction Office" and contains a "Recent News" section. The right section is partially obscured by the dropdown menu but shows a circular logo for the State Construction Office, which features a hard hat and a pencil.

DOA NC
State Construction Office

SCO Manual Services State Building Commission **Interscope** Resources Contact

State Construction Office

Log In
Design Review Status
Construction Status

Recent News

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SCO Website Changes

5. Resources: <http://www.nc-sco.com/resources.aspx>



The screenshot shows the website for the State Construction Office (SCO). At the top left is the logo for the Department of Transportation and Community Development (DOA) and the State Construction Office (SCO) in North Carolina (NC). The logo features a stylized yellow and blue arrow pointing upwards and to the right, with the letters 'DOA' in large, bold, black font and 'NC' in a smaller font above it. To the right of the logo is the text 'State Construction Office'. In the top right corner, there are social media icons for DOA, Facebook, Twitter, and YouTube, along with a Google Custom Search box. Below the header is a navigation menu with the following items: SCO Manual, Services, State Building Commission, Interscope, Resources, and Contact Us. The 'Resources' menu is currently expanded, showing a list of links: Forms and Documents, Presentations, Reports, SCO Conference (with a sub-link for Frank B. Turner Award), Vendor Link NC, and Links. On the left side of the page, under the heading 'State Construction Office', there is a 'Recent News' section. The news item states: 'The 33rd Annual State Construction Conference will be held on March 27, 2014 at the McKimmon Center.' Below this text are two bullet points: 'Click Here to Register Online' and 'Click Here View Agenda'. At the bottom of the page, there is a link to 'SL 2013-242 Procedural Implementation of Article 8C (GS 143-135.35-.40) (pdf)'. A partial view of the state seal of North Carolina is visible in the bottom right corner of the website screenshot.

DOA NC
State Construction Office

DOA f t YouTube
Google™ Custom Search

SCO Manual Services State Building Commission Interscope Resources Contact Us

State Construction Office

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Forms and Documents
Presentations
Reports
SCO Conference

- Frank B. Turner Award

Vendor Link NC
Links

SCO Website Changes

6. Contacts: <http://www.nc-sco.com/contactus.aspx>



The screenshot shows the website for the State Construction Office (SCO). The header features the DOA NC logo and the text "State Construction Office". A navigation bar includes links for "SCO Manual", "Services", "State Building Commission", "Interscope", "Resources", and "Contact Us". The main content area is divided into two columns. The left column, titled "State Construction Office", contains a "Recent News" section with several items, including the 33rd Annual State Construction Conference and various project lists. The right column, titled "About the State Construction Office:", provides contact information for the Main Office, including phone, fax, email, and address. It also lists links for "View Additional Contact Information", "SCO Office Staff Listing", "Electrical Inspection Territory Assignment", and "Capital Project Coordinators (CPC) Contacts".

DOA NC
State Construction Office

Navigation: [SCO Manual](#) | [Services](#) | [State Building Commission](#) | [Interscope](#) | [Resources](#) | [Contact Us](#)

State Construction Office

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- UPDATED Fire Alarm System Checklist, March 2013

About the State Construction Office:

- [About Us / Our Mission](#)

Main Office:

Phone: 919-807-4100
Fax: 919-807-4110

Email:

sco@doa.nc.gov

Address:

1307 Mail Service Center
Raleigh, NC 27699-1307
Courier: 56-02-01

View Additional Contact Information

- [SCO Office Staff Listing](#)
- [Electrical Inspection Territory Assignment](#)
- [Capital Project Coordinators \(CPC\) Contacts](#)

Interscope Changes

1. Migration of Interscope from Java to Microsoft platform continues.
2. Modules implemented:
 - Admin (2013): accounts management, alerts, ...
 - FCAP (new): Updated assessment of all state facilities (≥ 3000 ft²).
 - Design Review (new): reviews and approvals.
3. Modules planned: (by fall 2014)
 - Construction Administration: inspections, CO's, scheduling.
 - Close-out: acceptance, final close-out, as-builds
 - Evaluations: Designers, Contractors.

Interscope Changes

4. FCAP Module (not applicable to NCCCS):

- Most recent assessment data will be available for all ≥ 3000 ft² facilities by mid summer.
- Facility assets will be cross-linked with State Property Office assets list.
- Assessments can be accessed from any PC or tablet with web access and Interscope account.
- Request Assessment Inspection.
- Capital Improvement Project Worksheet, OC-25

Interscope Changes

5. Design Review and approvals:

- Paving the road to Electronic Plan Reviews
- Reviews and approvals will be posted on Interscope and issued via alerts (to be accessed by the design team and owners and anyone with access to that project).
- Designer Responses and owner's comments will be uploaded.
- We now have the capability to accept small, 8.5'x11', PDF plan reviews (i.e. AM&M, PCO, informals...) can be uploaded for review. Detail on the start of this process will be posted under "Recent News"

Plan Review?

➤ When is a plan review required?

All State, Community College and University projects which construct, alter, renovate or add to buildings or property, or are affected by any of the North Carolina Building Codes shall be submitted for review and approval prior to the start of construction; except to NCCC projects <\$1/2M.

➤ What kind of reviews are required? (Section 202 SCO Manual):

- Designer agreement
- SCO Review: Depending on type of project
- Owner's Review
- As applicable: DOL, DENR, DCR, DHSR...
- NCDOT no longer reviews state funded projects, but they do review NCCC projects w/ building area of >20,000 Ft².

➤ Who else needs to review a state project?

- Verify Zoning Ordinances w/ Local Municipalities
- DENR has reverted the authority for Storm Water Management to some local Jurisdiction.
- Request a courtesy review from the local FM Office when a sprinkler system is part of the project.

➤ Are permits required?

- No building permits are required. The approval to bid letter issued by our office is the equivalent to the building permit, except for NCCC projects, permits from Local AHJ are required.
- Floodplain permit, obtained from SCO
- On-site waste water permit > 3000gal/day
- CAMA permit
- Others: air/water quality, DOT driveway etc...(see manual)

What type of submittals or review phases are required?

1. Formal Project (\geq \$500,000 in general):

- Designer contract will dictate phases: AP, SD, DD, CD
- Privately funded projects, same protocols apply
- Privately funded on private land: Same protocols apply but on a courtesy basis since locals have AHJ.
- Combined SD and DD: (On request on renovation and small projects).

2. Informal projects: <\$1/2M, one submittal at 100% CD.

3. “Code Review only”: one submittal at 100% CD.

- University projects < \$2M & UNC Hospital system.
- Federally funded projects i.e. Highway Rest Areas, some NC Ports projects.

4. **Emergency Projects:** Contact our office for directives.

5. **Review Exemption, if all the following apply, per Chapter 301.2(C) of SCO manual:**

- No Code issues (NCBC or other codes)
- No Life Safety changes or concerns
- Doesn't involve any structural integrity
- Less than \$300,000
- No Architect or Engineer is required
- And Owner to request exemption

Note: Projects Exempted from reviews are not exempted from field inspections.

6. **Incidental Reviews:** Addendum, VE's, Change orders, AM&M, Shop Drawings.

Answers to most common questions received

1. SCO Manual chapter 300 contains detailed information on the requirements of a project: design phases, review time turnarounds, guidelines...
2. If submitting a project for the first time and you do not have a design contract with SCO a state ID number will be issued once we receive it. Acknowledgement will be via email.
3. By-passing or combining design phases such SD and DD will have to be requested by owners. Most common on renovation projects.
4. Comments are now issued/emailed in PDF format, w/ copy and paste capability.
5. Responses to the comments should be issued under your company letterhead.

Answers to most common questions received

6. The approval to bid or to start construction is valid for six months from date of issue and one year if work has started and then stopped. Otherwise, a code compliance review will be required.
7. In kitchen installations, audio/visual systems or other special systems, if included in the bid set, they need to be sealed by the Designer of Record or by a registered professional licensed to practice in NC.
8. Designer of Record is ultimately responsible for design including delegated designs to contractors or vendors.
9. Only one set of plans and specs is required for review.
10. Hardcopies of plans & specs are still required for review.

NC Building Code interpretation

- Dorm Room Receptacles NEC 2011, Article 210.60(B):
 - Dormitories w/ permanent cooking provisions meet the dwelling definition and must meet 210.52: spacing along walls and Arc-Fault Circuit Interrupter protection.
 - Dormitories w/out cooking provisions must meet 210.60 (B). To accommodate for movable furniture:
 - Provide receptacles protection
 - Recess receptacles in wall
 - Provide arc-fault circuit interrupters

NC Building Code interpretation

- Elevator Shaft openings. NCBC sec 715.4.3.1: smoke & Draft Control:
 - Pressurization of elevator shaft.
 - Create Lobby at each elevator landing.
 - Provide smoke rated curtains.
 - Applies to elevator doors opening into rated corridors only



NC Plumbing Code interpretation

- Yard hydrant: NC Plumbing Code sec 608.7:
 - Use self draining unit (Sanitary Yard Hydrant).
 - Place permanent label: Non potable water.



**CODE
COMPLIANCE**

NC Plumbing Code Clarification

- Non potable water system: NC Plumbing Code sec 608.8.2

608.8.2 Color. The color of the pipe identification shall be discernable and consistent throughout the building. The color purple shall be used to identify reclaimed, rain and gray water distribution systems.

- If entire system is exterior to building, labeling is sufficient.
- If within a building then pipe coloring will be necessary.



Section 1008: High Rise Provision

- High Rise buildings designed prior to 1978 Code, legislation passed a law to allow high rise buildings to comply with a minimum set of life safety requirement in order to allow and continue occupancy.
- NCDOT was tasked to notify all owners of this provision and to issue a 5 year term to upgrade these buildings.
- Class I (60' – 120'; 6 - 11 Stories):
 - NFPA 71/72 Manual Fire Alarm System.
 - Compliance w/ 1978 Code sec 1001-1007.
 - Smoke detectors.
 - Emergency Power.
 - Special Exit Requirements for Class I.
 - Smoke Compartments.
 - Protection of Vertical Shafts.
 - Elevator Signage.

Section 1008: High Rise Provision

- Class II (120' – 250'; 12 - 24 Stories):
 - All of class I.
 - A Voice Communication System.
 - Emergency Elevator Requirements.
 - Central Alarm Facility (Fire Command).

- Class III (over 250'; 25 stories or more):
 - All of Class I and II
 - Area of Refuge (not an accessibility requirement)
 - Smoke Venting
 - Fire protection of Electrical conductors
 - Sprinkler system

Section 1008: High Rise Provision

- What do you do if you have a pre 1978 high rise building and it does not meet the above provision?
 - Provide proof or the lack of the NCDOL notification.
 - Proof can be acquired by searching all the renovation projects this building had undergone from 1978 to 2009 with no mention of this provision during the code reviews conducted by NCDOL.
 - SCO will review this documentation and if found valid a five year term statement will be issued to the owner to bring this high rise building in compliance with this legislation. You do not have to bring this high rise to current code.
- No renovation to take place until the above provision has been implemented.



32nd Annual State Construction Conference

March 28th, 2014

INSPECTION DISCOVERIES

“Where installed recessed in grid type ceilings, the fixtures shall be attached to the main runners of the suspended ceiling at all four corners using sheet metal screws”

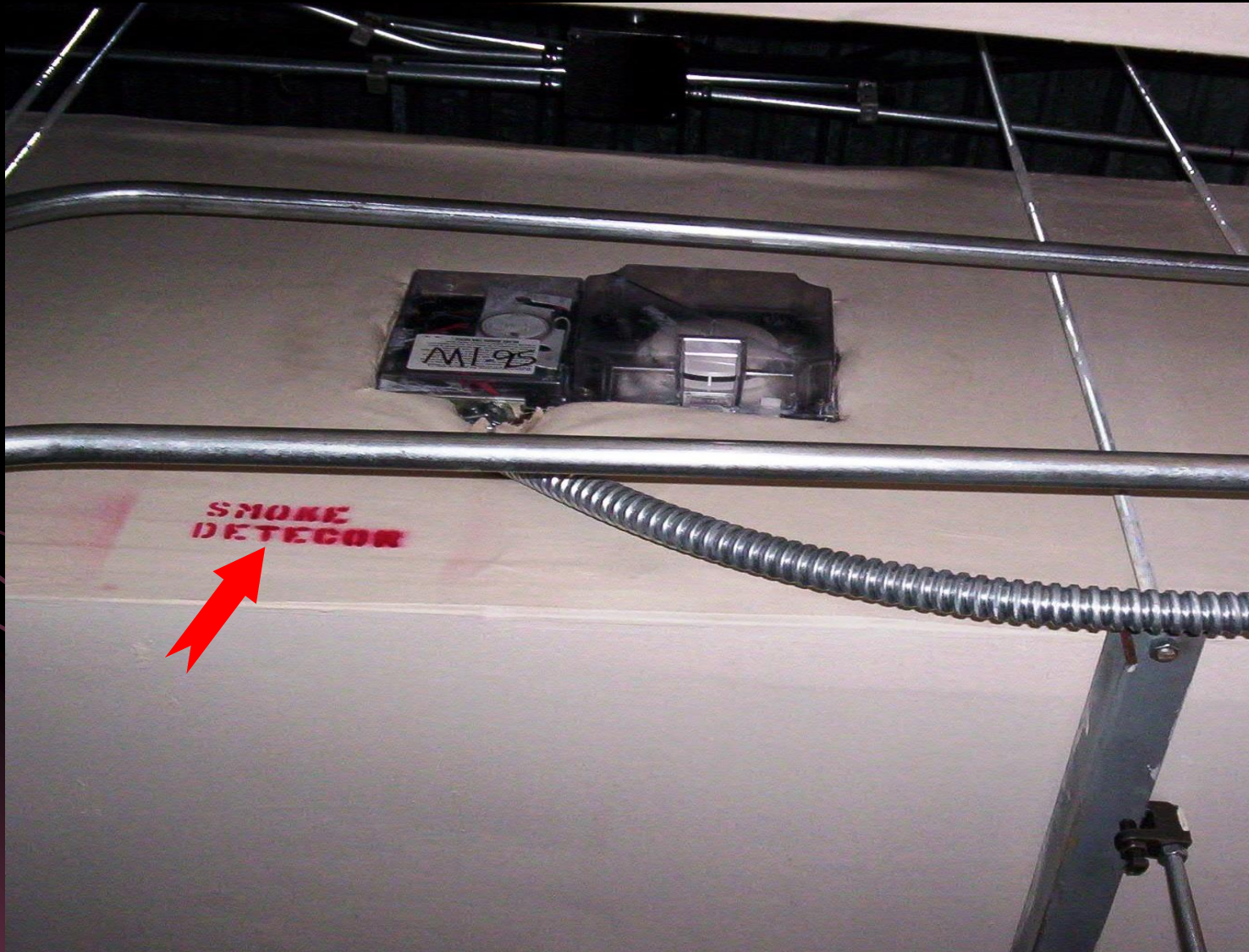
A. Contractor shall verify ceiling or wall type in or on which each fixture is to be mounted, and shall furnish unit with appropriate trim type, mounting hardware, and accessories to fit the construction; and feed through junction boxes as required to maintain proper access to system wiring.

3.2 INSTALLATION

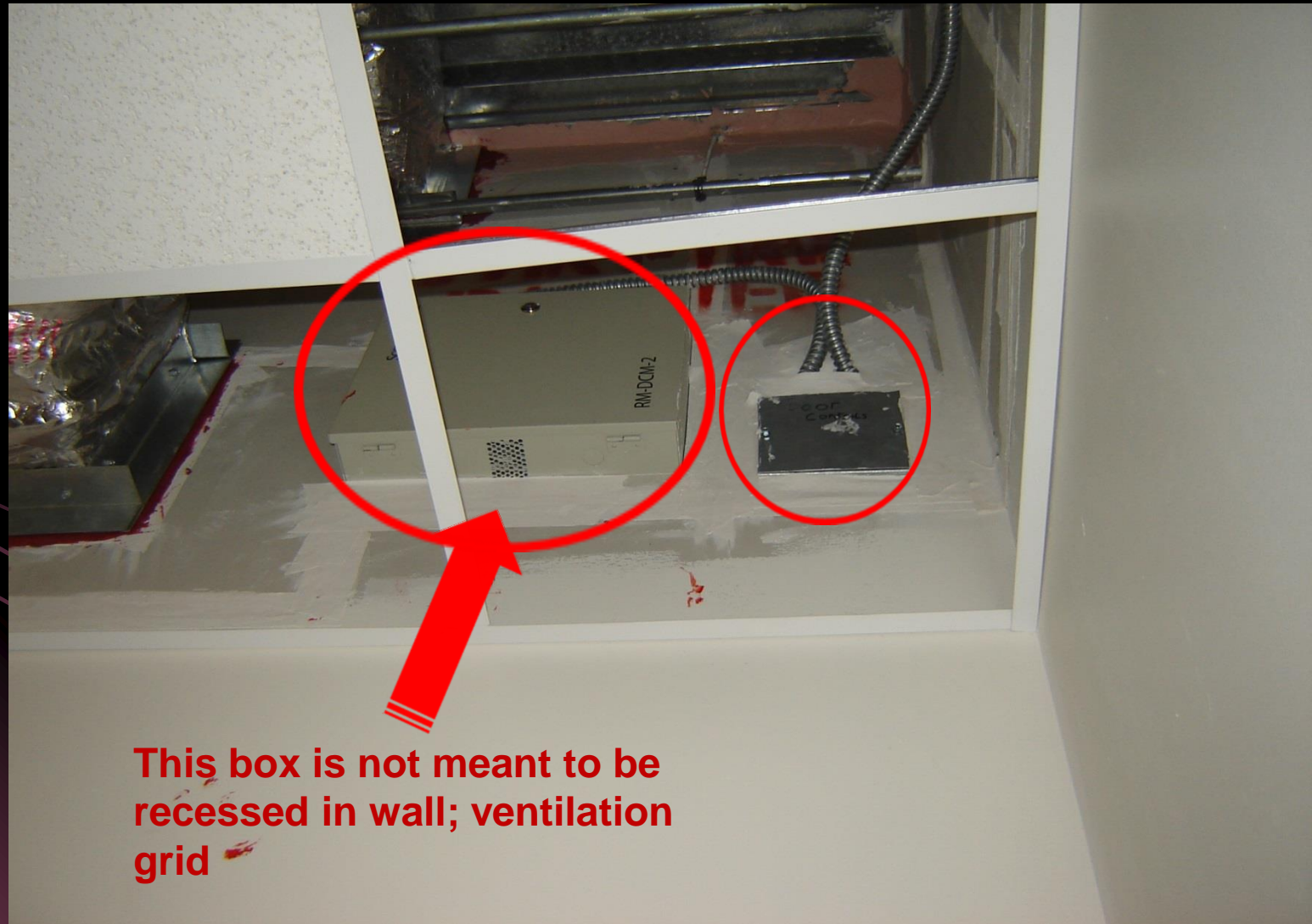
- A. Lighting fixtures shall be installed in accordance with the manufacturer's instructions.
- B. Lighting fixtures shall be supported from the building structure using corrosion resistant steel hardware in compliance with SECTION 261000, BASIC MATERIALS AND METHODS.
- C. A minimum of two No. 12 gauge wire supports attached to the structure shall be provided for each lighting fixture unless otherwise indicated or approved by the Architect/Engineer. The supports shall be located at diagonal corners of rectangular fixtures and angled away from fixture. A minimum of three full twists shall be made at each end to secure wire.
- D. In addition to the supports from the structure, fixtures shall also be secured to suspended ceilings on which they are mounted, or in which they are recessed. Where fixtures are secured to suspended ceilings, the primary supports from the building structure shall be slack.
- E. Where installed recessed in grid type ceilings, the fixtures shall be attached to the main runners of the suspended ceiling at all four corners using sheet metal screws.**
- F. Mount fixtures plumb and square. Keep rows in perfect line.
- G. Where parabolic louver type fluorescent fixtures are to be furnished, the fixture louvers shall remain plastic-wrapped until project is completed.
- H. At time of project completion, fixtures and lamps shall be clean and fully operational.
- I. High Intensity Discharge lamps that fail during the 12 month guarantee period will be considered to have been defective and shall be replaced by the Contractor at no cost to the Owner.
- J. For each tandem wired fluorescent troffer fixture provide "pointer" decal to indicate paired complement fixture. Adhesive decal shall be no less than one inch wide by two inches long and shall be black. Decal shall be affixed to the ballast cover and shall only be visible when the lens or louver door is opened.

END OF SECTION 265000

NCMC sec 607.4: Access & Identification



Fire rating responsibility applies to all trades!

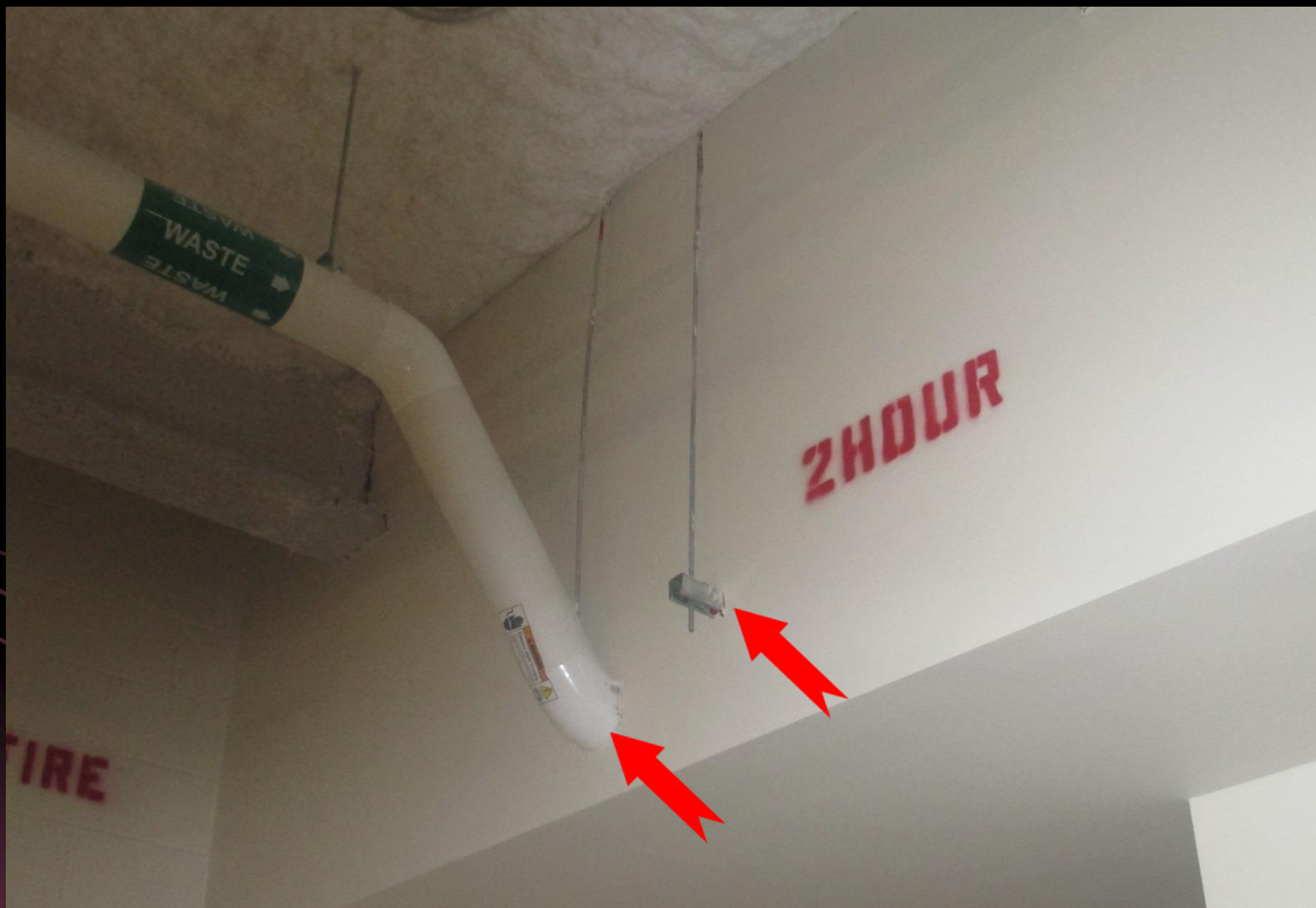


This box is not meant to be recessed in wall; ventilation grid

Typical late installation



Unknown UL



Another unknown UL



MC cable! UL approved detail?



3 attempts at fire proofing?



Poor coordination w/ site contractor!



Preaction w/ no drain for testing



Watch your knuckles when operating this wheel



Watch your knuckles when using these stairs



Results of a Missing splash block



Who has the right of way?



Other uses of a roof vent!



Improper coordination can cause headaches



Poor coordination



Abandoning in place?



Improper application= Latent Defect



Simple but works



How long before a leak will develop?



That's the only size screws I had in the truck!



What happens to the Dirt when it's full?



Normally the grab bar is not used near the controls



Area of Rescue for telepathic!



The pump that never needs servicing?



Dissimilar material



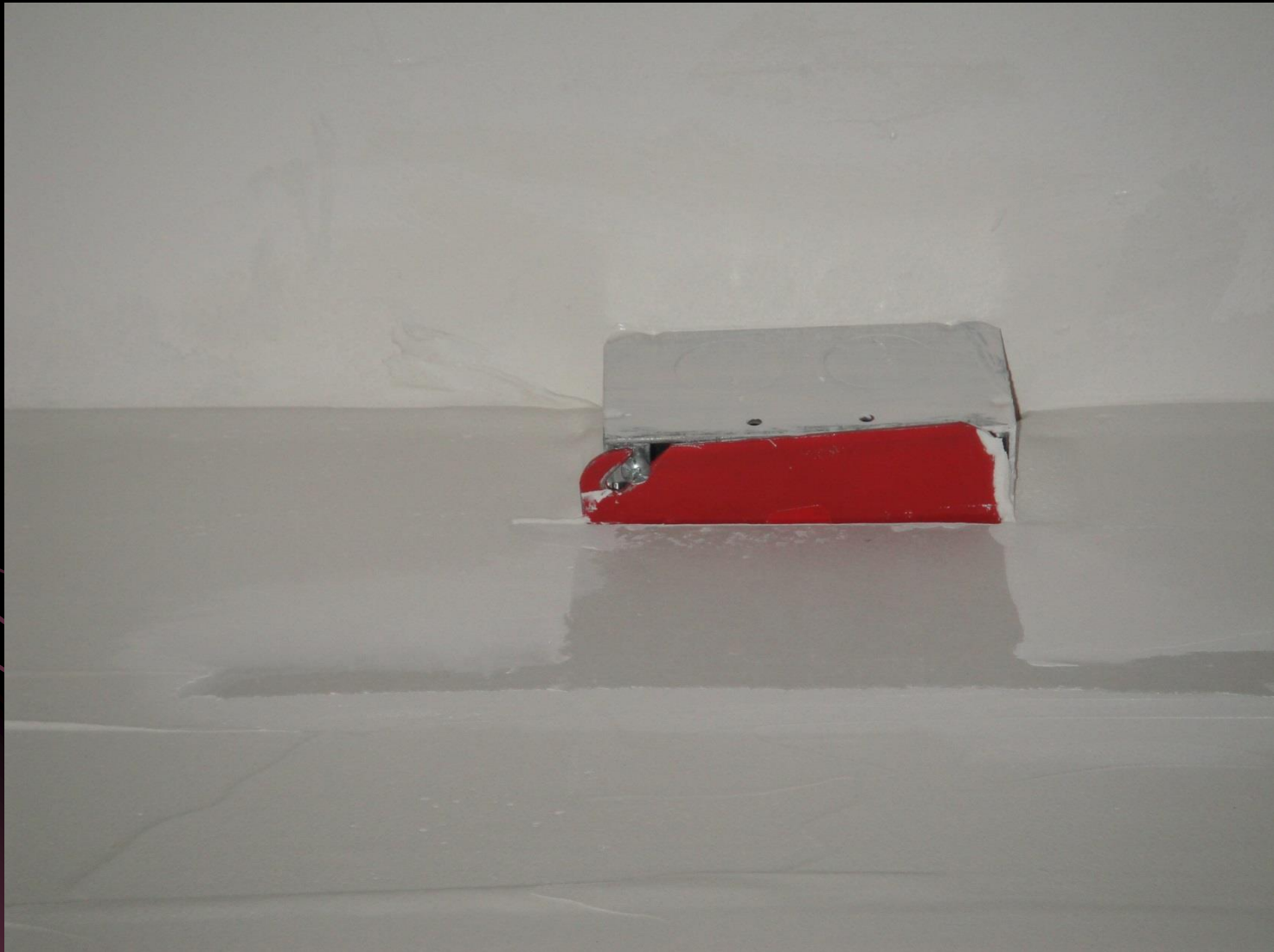
Missing fire proofing material?



Does trash account fo fire proof material?



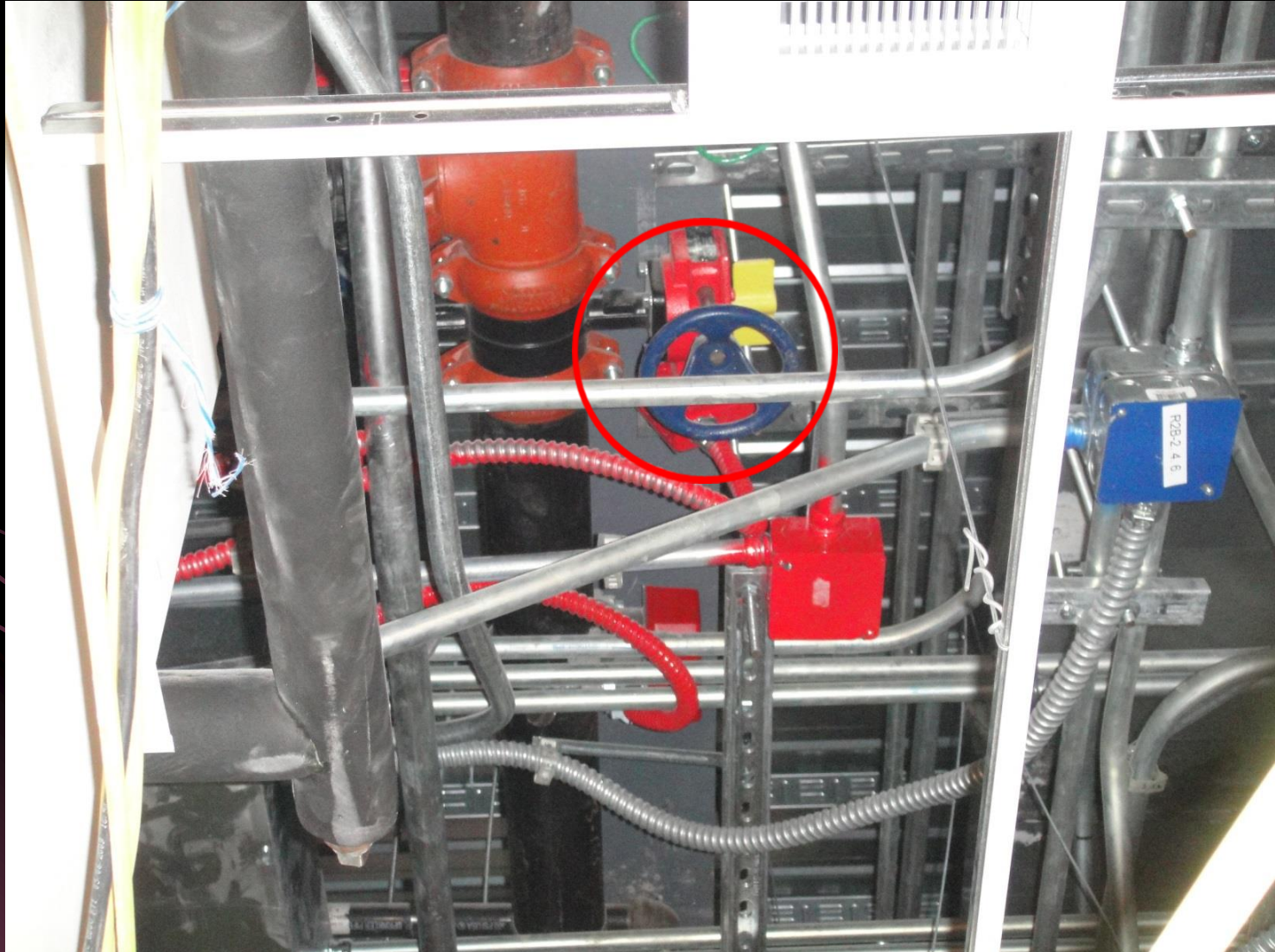
All JB's are to be accessible



JB exposed



Yes it can be reached but...



Common NFPA 13 violation



Another Common NFPA 13 violation



Poor coordination



VAV box Access, it's important



ADA Handrail Violation



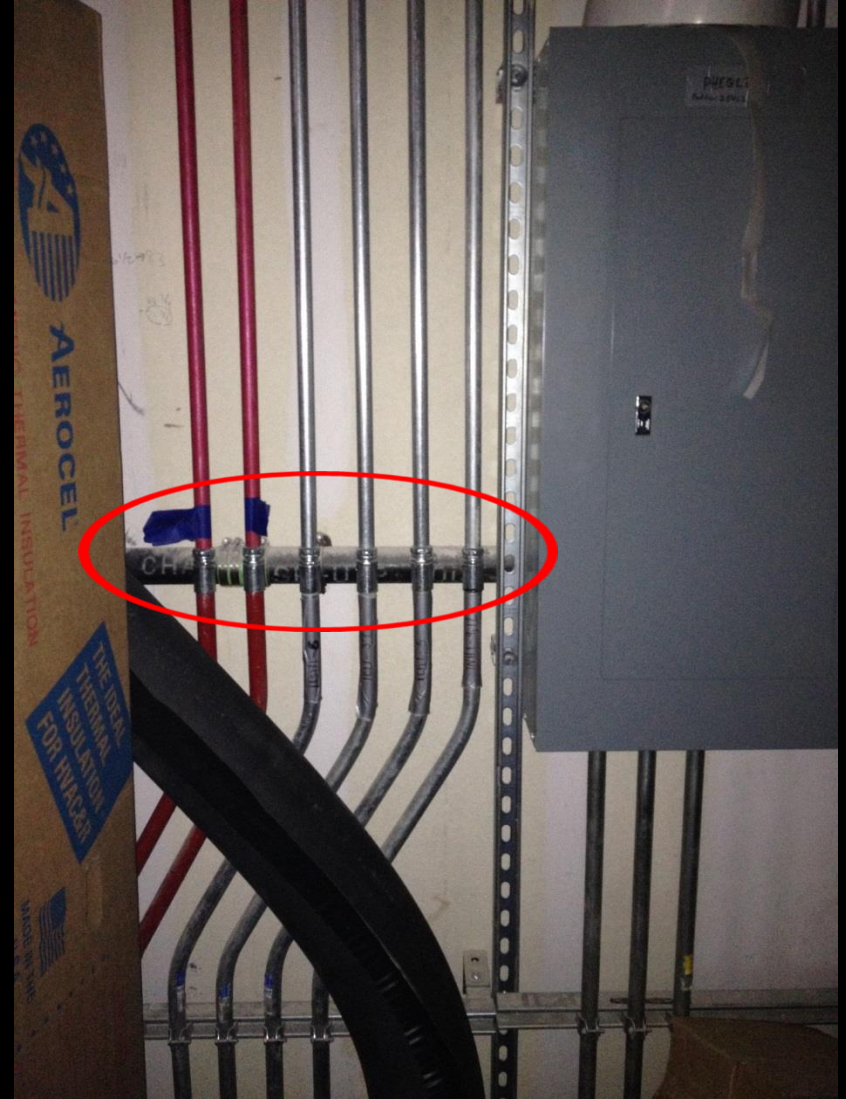
Conduits are to protect not to destroy



Dedicated Space violation!



Poor Coordination & Dedicated Space violation!



How not to add a receptacle in a hurry!



Hand Rails on backorder



Can you find the mop sink?



Never run out of Paper



Fire rated construction?



And for a change



06/15/2013 11:41

This is how it's done!



Example of “easily accessible” fire damper



The hidden world of a Lab Building





32nd Annual State Construction Conference

March 28th, 2014

SCO 2014 Top 10 Best Managed & Administered Projects

UNC Charlotte PORTAL

Designer: Pease Engineering & Architectural PC

Contractors: EDIFICE, INC





WSSU, Student Activities Center

Designer: Woolpert NC

Contractor: JV Samet & SRS Inc.





ECU Smith Williams Center

Designer: Corley Redfoot Architects, Inc.
Contractor: T. A. Loving Company





UNCW Rec Center

Designer: Hastings & Chivetta Architects, Inc.

Contractors: J. M. Thompson Company





NCSU Early College HS

Designer: HH Architecture, P.A.
Contractor: Inland Construction Co.





ECU Dental Clinic

Designer: EYP/BJAC, P.A.
Contractor: Bordeaux Construction Co.





NCDOA Salisbury St. Pedestrian Bridge

Designer: SKA Consulting Engineers

Contractor: Clancy & Theys



**AFTER
BEFORE**



**AFTER
BEFORE**

Randolph CC, North Campus Building E

Designer: Smith Sinnett Architecture

Contractor: Hodgkin Construction Co.





UNCG, Dining Hall Renovation

Designer: Gantt Huberman Architects w/ McCracken & Lopez
and Bulla Smith

Contractor: JV Rogers Hardin & Walter Davis Co,





UNC IRB Marsico Hall

Designer: Perkins & Will and Newcomb & Boyd

Contractor: Choates Construction





Thank you!

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