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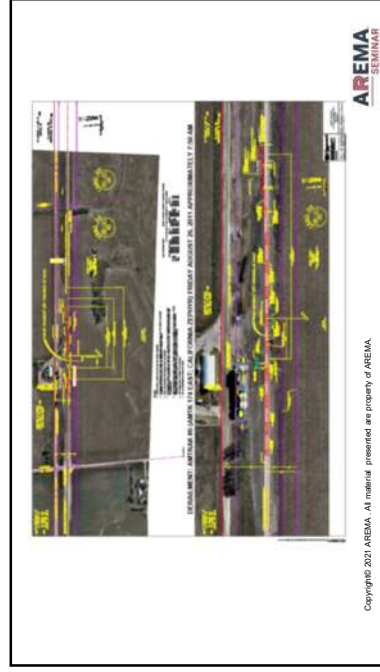
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**Additional Issues**

**Survey, Subdivision & Development Issues Affecting Surveyors**

- Drainage (AREMA C-1) ...the value of railroad profile maps
- Railroad Industrial Development
  - Bad design in industrial parks/plats lead to future grief
    - Almost all the Class 1's have design specs/standards on the web (Shortlines may adopt Class 1 Standards as spin-offs)
- Fencing & gates (AREMA C-1) & Wisconsin State Statute 192.33
- Pipeline & wireline crossings (AREMA C-1, C-28, C-26)
- Bridge basics & abbreviations (AREMA C-18, C-4 and others)
- Cross section (cut & fill typical example)

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CATENARY = WIRE SYSTEM

INTERURBAN vs COMMON CARRIER INTERPRETATION

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### Lease & Contact (AREMA C-1)

- Control & Risk
- Railroad Specifications
- Easements run with the land/leases-contracts-permits **do not!** Railroads want accountability! Easements won't provide that

Please beware of the trend by some railroad operating departments to delegate these duties to outside railroad contractors. **POST IS CALUING YOU! OF THIS!**

- AREMA C-1, B-1, B-2, B-3, B-4, B-5, B-6, B-7, B-8, B-9, B-10, B-11, B-12, B-13, B-14, B-15, B-16, B-17, B-18, B-19, B-20, B-21, B-22, B-23, B-24, B-25, B-26, B-27, B-28, B-29, B-30, B-31, B-32, B-33, B-34, B-35, B-36, B-37, B-38, B-39, B-40, B-41, B-42, B-43, B-44, B-45, B-46, B-47, B-48, B-49, B-50, B-51, B-52, B-53, B-54, B-55, B-56, B-57, B-58, B-59, B-60, B-61, B-62, B-63, B-64, B-65, B-66, B-67, B-68, B-69, B-70, B-71, B-72, B-73, B-74, B-75, B-76, B-77, B-78, B-79, B-80, B-81, B-82, B-83, B-84, B-85, B-86, B-87, B-88, B-89, B-90, B-91, B-92, B-93, B-94, B-95, B-96, B-97, B-98, B-99, B-100
- WATCO uses IMGONLINE and others
- RAMS used by multiple shortlines

Contract documents & forms commonly now show up on the web. **Lots of problems encountered with owner/developers waiting for the last minute to submit these documents for approvals. Submit these documents as early and as complete as possible! Double check the details.**

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### RAILROAD CONTRACTS

- Almost all railroad lease & contract documents will **not** be found at the county clerk & recorder's office.
- The private surveyor's challenge is to find copies of these documents, usually from the land-owner.
- Most railroads will only release copies of their contract documents unless there is a request from the licensee. (Privacy and confidentiality issues) ...Those railroad contract numbers found in research are often "gold".
- Title lawyers and real estate people/ landmen are famous for overlooking having contracts assigned.

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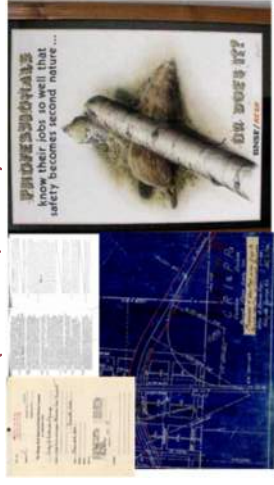
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## PERMITTING (Jim Goff/ BNSF)



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## PERMITTING / LEASE/LICENSE/CONTRACT

MAJOR STUMBLING BLOCK FOR UTILITIES & PIPELINES

- INSURANCE FAILURES
- LAST MINUTE CHANGES
- FAILURE TO INCLUDE 45-90 DAY PROCESSING TIME
- RAILROADS ARE **NOT** GOING TO RUBBER STAMP THE PROCESS AT THE LAST MINUTE
- FAILURE TO HEED RAILROAD DESIGN STANDARDS
- CONTRACTORS ARE PART OF THE PROCESS
- EASEMENTS ARE HIGHLY UNLIKELY, YET PIPELINE AND OTHER UTILITIES CONTINUE TO ASK FOR THEM
- MUNICIPAL AND COUNTY FAILS (CHARTERS AND ORDINANCES MAY NOT APPLY TO RAILROAD R/W)

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## PLEASE REMEMBER

- (1) Right-of-Way on a railroad means "the property" (Easement, Fee, Ordinance, Charter, Grant, etc.) ... see the differences in Black's Law Dictionary or in Wattles
- (2) CONTRACTS RUN WITH THE INDIVIDUAL, EASEMENTS RUN WITH THE LAND.

**\***

DO NOT CONFUSE EASEMENT WITH ANY OTHER COLOR OF TITLE ON RAILROAD R/W. "EASEMENT" IS A HORRIBLY ABUSED TERM, ESPECIALLY BY TITLE ATTORNEYS, ENGINEERS AND LANDMEN (ALL SHOULD KNOW BETTER) IN TERMS OF GRANT R/W.

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### Plainfield, IL 6-30-17 (CN-WC) NW Chicago Area



CN vs NICOR (20" Gas Line)  
-unauthorized jack & bore  
-40 car crude oil derailment



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### Survey Operations

Topographic Mapping and Plan Sets to Communicate with Railroad Engineers

#### MODULE 11

- What the railroads want to see (simplicity, eliminate the clutter)
- Use graphical symbols railroads use in graphical presentations
- Level of detail

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### Field Surveying Operations

Field Construction Layout Staking

#### MODULE 13

- Safety Considerations
- Intervals (especially curves (Tampers Points) and turnouts
- Gradelines and key points to identify
- Setting stakes a track foreman can identify and actually use
- AREMA C-24 and Practical Guide

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## The Abandonment Issue and ICC/STB

### Abandonment

#### MODULE 14

- Abandonment vs. Embargo vs. Out-of-service
- Who is the final arbiter?
- NITU/ Rails to Trails / Rail banking
- Adverse abandonment
- Abuses of the system that affect surveyors
- What happened between 1980 and 1983 with the ICC that affects railroad mapping data as sought by surveyors

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## The Abandonment Issue

- Is it abandoned, embargoed or out of service?
- 49 USC 10903.....Abandonment Regulations
- 49 USC 10502.....Prior Approval Conditions For Abandonment
- National Trails Systems Act 16 USC 1247 (Rails to Trails)
- Principal of Adverse Abandonment (STB Creede & Yakima Valley cases)
- The ICC/STB Dockets For Abandonment (AB- & FD- Prefixes)
- 1996 to Present on-line, on the WEB [www.stb.dot.gov](http://www.stb.dot.gov)
- 1975-1996 at the STB/ICC Library in Washington
- Pre-1975 (1873-1975) Filed At National Archives, Rockville MD
- PLSC and the Trinidad Railway Abandonment Case (AB-573 O X)

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## THE POWER OF THE ICC/STB

- THE ABANDONMENT ISSUE
- POWER OF AN ADMINISTRATIVE LAW JUDGE
- CONTROL OF ALL MERGERS, LINE SALES
- CONTROL OF LEASES, TRACKAGE RIGHTS
- ALSO CONTROL REGULATED WATER TRANSPORTATION, INTERCITY BUS LINES AND OTHER COMMON CARRIER TRANSPORTATION

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## FEDERAL REGULATION / PRE-EMPTION

### The Cautiously Guarded Railroad Trump Card

(b) The jurisdiction of the Board over--  
 (1) transportation by rail carriers, and the remedies provided in this part with respect to rates, classifications, rules governing service, and other operating rules; and  
 (2) the construction, acquisition, operation, abandonment, or discontinuance of spur, industrial, team, switching, or other tracks, facilities, yards, or other tracks, located, situated, or used thereon.

**IS EXCLUSIVE:** Except as otherwise provided in this part, the remedies provided in this part with respect to regulation of rail transportation are preemptive and preempt the remedies provided under Federal or State law.

49 USC 10501

-in essence, *no local or state law supersedes the authority of the Surface Transportation Board (formerly the Interstate Commerce Commission)*

-Federal Rule

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## STB/ICC TERMS TO RECKON WITH:

- ABANDONMENT (AB & FD Dockets)
- EMBARGO
- DISCONTINUANCE OF SERVICE
- NITU/RAILBANKING (Notice of Interim Trail Use)
- ADVERSE ABANDONMENT
- OFA/ OFFER FOR ASSISTANCE
- SDM/ System Diagram Map
- EP/ Ex Parte (Rulemaking/Review/Hearing process)
- DIRECTED SERVICE ORDER

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## Abandonments

- AB = Abandonment Docket (Post 1976)
- FD = Finance Docket (Mergers, Sales, New Construction, Abandonments (1887-1976)
- NOR = Notice of Rulemaking/ Regulation
- EP=Ex Parte Hearing
- SDM=System Diagram Map (identifies potential abandonment candidates, Classes 1-5)
- OFA = Offer For Assistance

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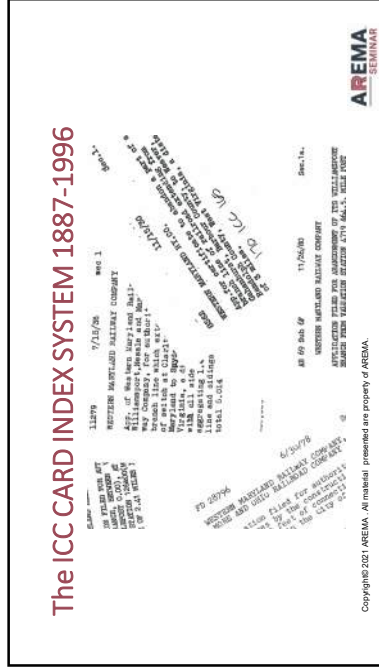
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### ASKING ABANDONMENT INFO FROM THE SURFACE TRANSPORTATION BOARD

- Please, if at all possible, include the key elements of Railroad, State, County, Milepost, Timetable Stations and approximate date of abandonment.

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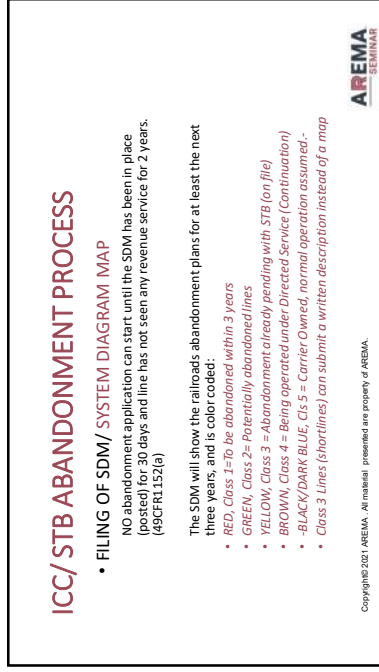
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### ICC/STB ABANDONMENT PROCESS

- **FLING OF SDM/ SYSTEM DIAGRAM MAP**  
NO abandonment application can start until the SDM has been in place (on shelf) for 30 days and line has not seen any revenue service for 2 years. (49CFR 1152.6)
- The SDM will show the railroads abandonment plans for at least the next three years, and is color coded:
  - RED, Class 1-to be abandoned within 3 years
  - GREEN, Class 2= Potentially abandoned lines
  - YELLOW, Class 3 = Abandonment already pending with STB (on file)
  - BROWN, Class 4 = Being operated under Directed Service (Continuation)
  - BLACK/DARK BLUE, Class 5 = Carrier Owned, normal operation assumed.
  - Class 3 Lines (shortlines) can submit a written description instead of a map

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### ICC/STB ABANDONMENT PROCESS (2)

Filing the AB-Docket (FD-Docket prior to 1976)

- DAY "0" – Abandonment Petition Filed With STB
- Day 10 = Due date for oral hearing requests
- DAY 20 = STB Review of Initial Application Due, Federal Record published
- DAY 45 = Due date for protests & comments, NITU requests
- DAY 110 = Due date for service of Decision on the merits
- DAY 120 = Due date for OFAs (or 10 days after granting application)
- STB Then follows evaluations and procedure set out by 49 CFR 1152 and 49USC10502.

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### THE RAILS TO TRAILS NIGHTMARE *Abuse of the National Interim Trail Use (NITU) Process*

- Know the NITU rules, hold trails people accountable, don't get buffalored by those who want the benefits, but not the responsibility.
- <http://www.stb.dot.gov/stb/docs/abandonments%20and%20alternatives1.pdf>
- The horribly vague language of the 1976 bill.
- Do not get left holding the liability so others can play.
- Challenge & Document trail rights at Day 1
  - Phillips v. US Case (2009)
- Reference: National Trails System Act 16 USC 1247(d)
  - [http://www.stb.dot.gov/stb/public/resources\\_railtrails.html](http://www.stb.dot.gov/stb/public/resources_railtrails.html)
  - 49 CFR 1152.29

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### IF THE RAIL-TRAIL IS LEGITIMATE:

- (1) THERE WILL BE AN STB **AB- or FD- DOCKET**
- (2) THE **ABANDONMENT WILL HAVE HAPPENED AFTER 1983**
- (3) THERE WILL BE AN **NITU OR CITU** ISSUED BY STB
  - NITU/CITU IS A **LEGAL BINDING AGREEMENT**
- (4) THERE WILL BE A **DEED AND BARGAIN & SALE DOCUMENT** AT THE COUNTY LEVEL
- (5) THERE WILL BE A **RESPONSIBLE PARTY OF RECORD** IDENTIFIED TO THE STB (ANY CHANGE IN TRAIL OWNER OR RESPONSIBLE PARTY WITHOUT NOTICE TO STB **AUTOMATICALLY VOIDS THE NITU/CITU AGREEMENT (SUSPENDED REVERSIONARY CLAUSES CAN KICK-IN)**)

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**PLEASE – ON YOUR PLATS (In The Notes)**

- IF IT'S ABANDONED, DOCUMENT HOW IN THE NOTES (ie – Prove it!)
- IF it's an operating railroad – DOCUMENT IT (How)
  - Local GIS and Assessors get it wrong all the time. Title Companies frequently avoid working to get the answer.
- IF it's now a rail trail – DOCUMENT IT! (NITU/CITU and the Abandonment and Finance Docket Number)
  - Rampant Fraud & False Claims Out There Compounded by administrative blunders by well intentioned local agencies with no clue about the ICC/STB rules.

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**SINCE 1983 – YOU MUST HAVE ONE OF THESE TO BE LEGITIMATE – OTHERWISE YOU HAVE SOMETHING ELSE OR A PROBABLY A POST-ABANDONMENT FRAUDULENT CLAIM**

**NITU**  
**CITU**

NOTICE OF INTERIM TRAIL USE

**CERTIFICATE OF INTERIM TRAIL USE**  
(IN NEGOTIATION, NITU AGREEMENT MUST HAPPEN IN 12 MONTHS OR LINE ABANDONS WITH NO RAIL TRAIL **AREMA SEMINAR**)

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**NITU/CITU RAIL-TRAILS CAN REVERT/ RETURN TO BEING ACTIVE RAIL LINES AGAIN (RARE, BUT IT HAPPENS (DOCUMENTED AT LEAST 16 TIMES (NONE CURRENTLY IN ILLINOIS)**

**NITU/CITU RAIL TRAILS CAN BE REVOKED – USUALLY BY TRAIL OWNER NEGLIGENCE THROUGH SEVERANCE OR CHANGE OF OWNERSHIP OR FAILURE TO NOTIFY STB OF CHANGE OF DESIGNATED OPERATOR**

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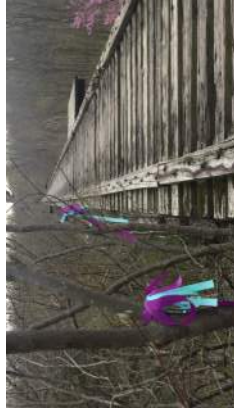
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(1) MONON HIGH BRIDGE / DELPHI, INDIANA MURDERS .....AB55\_401 2/13/2017



Ex - CSX MONON MAIN - Frankfort to Delphi, IN ... Originally abandoned 1-3-1992  
INITIAL ABANDONMENT FILING FROM 2012 for NITU  
CSX SOLD THE BRIDGE AND GRANTED EASEMENT UNDER BRIDGE CIRCA 2015 (NOT THE APPROACHES FROM PUBLIC ROADS)  
CITU W/ RESTRICTIONS 9/24/15, MODIFIED 11/23/16  
NITU GRANTED 12/17/2017

NOT SUPPOSED TO BE AN ACTIVE TRAIL UNTIL NITU GRANTED

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(2) HEARTLAND TRAIL CISCO TO MONTICELLO, IL AB43-134(x)

Because the lines in the AB-43 (Sub-No. 134 and 112X) cases were fully abandoned prior to Heartland's late-filed Trails Use requests, we have no jurisdiction to act on them and the appeal is denied. See *Hoyfield, supra*.

On July 20, 1987, at 5. Issuance of the requested CITU and NITU in these circumstances would be wholly at odds with the basic interrelationship between trails use and abandonment. A CITU or NITU permits the carrier to discontinue service, cancel tariffs and salvage track but the carrier is specifically precluded from abandoning until either the conclusion of the period for the parties to negotiate a trail use agreement or the termination of trails use. Thus, the CITU and NITU substitute for an abandonment certificate and effective exemption decision of notice of exemption, respectively, and prevent reversionary interests from vesting. Docket No.

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(3) EDWARDSVILLE QUERCUS GROVE / MONARCH VALLEY TRAIL SYSTEM (NOT THE MADISON COUNTY NICKEL-PLATE TRAIL THAT CONNECTS WITH THEM)

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(4) THE TRAIL THAT WASN'T - EGYPTIAN LINE TRAIL Oliver/ Marshall to West Union, IL  
AB-228\_1(F) and FD-29875(F); FD-29979(F) FD-30219F (Prairie Central Ry /Burrough's Estate Mess 1981-84)

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(5) The CSX/B&O Salem Discontinuance of Service

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### CITY AND COUNTY SURVEYORS

- DO YOU KNOW WHAT RAILROAD CONTRACTS – LICENSE AGREEMENTS – PERMITS ARE IN EFFECT IN YOUR JURISDICTION.
- GATHER THEM UP AND GET THEM IN ONE PLACE ( INFORMATION THAT CAN SAVE \$\$\$)
- APPROACHING THE CLASS 1 SECRETARIES ...
- Why railroads do not want contracts recorded in the clerk's office (those dirty easements again)
- STB/ICC ABANDONMENT DOCKETS & FILINGS

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### Relevant ILLINOIS & Regional Cases

- **FD-34893** Chicago, Lake Shore & South Bend RR (NS - near Notre Dame University)
- **AB-865 D X** Honey Creek Railroad vs. Roberts Construction (Henry County, New Castle, IN...What happens when local opinion clashes with federal rule + NITJ) **FD-34869?**
- **EP-647 D** Class Exemption for expedited abandonment procedure for Class II and Class III Railroads (friction between ACSM and AAR)
- **AB-878 D** Adverse Discontinuance - City of Peoria, IL (Peoria Heights Railroad) \* **Discussion/ Time permitting**
- **FD-34783** Indiana Railroad - Acquisition of CP-Soo Line Latta Subdivision (Milwaukee Road, CH&E Evansville Line, Fayette to Bedford + Trackage Rights
- **FD-36231** Iowa & Middletown Railroad (November 15, 2018 ...About to take over Iowa Ordinance Depot - Delayed by Govt. Shutdown (STB closed)
- **FD-36275** ILLINOIS STATE TOLL HIGHWAY AUTHORITY—Benseville (CP vs IL-DOT over I-294 Access/ Line Change and condemnation/ Elgin O'Hare Western Access Project)

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### Relevant STB / ICC Cases

- **AB-55 579X** CSX Railroad, Abandonment in Parke & Vermillion Counties (OFA), former C&W line over Wabash River...
- **AB-556 2X** Railroad Ventures Case (Youngstown, OH, Land swindle
- **FD-34527** Maumee & Western RR/RMW Ventures vs. CSX (rail crossing at Defiance, OH)...senior rights case
- **AB-477 3 X** Grayville & Poseyville Railroad (Owensville Terminal RR)...railbanked line comes back to life and out of the weeds (Gibson & Posey counties)
- **FD-34536** RailAmerica (Indiana & Ohio) - Creation of Chicago Ft. Wayne & Eastern RR from CSX, former CR/P/PRR main line
- **AB-55 631 X** Terminal Warehouse vs/ CSX (Cleveland, OH abandonment determination)

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### Relevant STB / ICC Cases



- **FD-33988 100** Conrail vs. Norfolk Southern (NS) & CSX (Control, Leaseup & Shared Assets)
- **AB- 448 2X** SFSB L. Railway/ A&K Materials (Sale of west end of TP&W Railway, Scam & Abuse of STB Regulations by a salvage and real estate company abusing OFA rules)
- Enter Keokuk Junction Ry as new owner (OFA)

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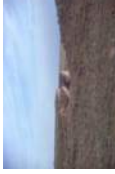
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### Retracement Tips Abandoned R/W



- Scavenging and detective work pays big dividends
- Gather as many R/W maps as possible (bias)
- If you find standard plans: JACKPOT!
- Old photos, sketches, ICC/PUC/ RRC files, road viewer reports
- Know your local historians and their resources
- History and evidence have value
- ILLINOIS statutes/ Railroad Commission archived files
- ILLINOIS State Archives
- ILLINOIS Freight RR Section



If the railroad was there in 1920 or later, there probably is a map to cover the line.

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### Retracement Tips Abandoned R/W



- Locate old fixed objects on R/W
- R/W Posts
- Poleline cut-offs
- Bridge Piling Cutoffs (Match To Standard Plans)
- Old culverts and/or headwalls
- Locate limits of cuts & fills, especially on long tangents
- Fixed ties with spike holes still present

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### Retracement Tips Abandoned R/W



- Road crossings with ties, tie plates or rail abandoned in place
- Locate limits of ballast & split
- Signal foundations and or signal appliances
- Terrain analysis basics
- Dig for culverts and boxes with covered ends
- Closeout notes, bridge & building records, contracts

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### Researchmanship

- MAPPING, RECORDS, STANDARDS AND CONTRACTS.....
- ICC Federal Mandate, Tax Basis
- GLO/BLM Filing Maps
- R/W & Track Maps, Track Charts
- Additional RR Cadastral Mapping
- Land Schedules



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### Researchmanship

- Track charts (schematics)
- Pipeline/water/wells/fueling facility diagrams and handwritten records
- Lease & Contract/ License Agreements
- Permits/ File Records Folders (UPRR)
- Location Engineer's Profile Maps
- Fence/Crossing/Sidetrack/ Clearance

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### Researchmanship

- Bridge Records Elkins Act Contracts
- Building Records
- Closeouts (AFE's AFR's)
- Secretary's Office (deed & contract)
- STANDARD PLANS
- Chief Engineer's Standard Instructions
- AREMA MANUAL



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## Railroad Measurement Science

### MODULE 20

- Track geometry cars (49CFR213) (AREMA C-2)



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## Railroad Measurement Science

- Railroad GIS (AREMA C-16)... UP example "Do Maps"
- Track Charts (AREMA C-16)



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## GIS & The Railroad Industry



All things GIS. From the science of spatial analysis to the application of GIS in the field, this seminar is designed to provide you with the knowledge and skills you need to succeed in the GIS industry.



Figure 1: Track Geometry

Map data is used to create maps and track charts. The data is used to create maps and track charts. The data is used to create maps and track charts.

The data is used to create maps and track charts. The data is used to create maps and track charts. The data is used to create maps and track charts.

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## Contact Sheet(s) ... Region-Specific

Copy attached to your handout and also in your electronic files....



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## Contact Sheet for ILLINOIS RR's

- List is current as of January 18, 2022 (About to change again!)
- NEW LIST AS OF 1/15/22 (PSR & Covid-19 has forced Changes)
- Please plan to contacts railroads EARLY and OFTEN (60-90 days)....Latecomers expecting railroads and management companies to jump through hoops because of a lack of planning on the parts of surveyors, engineers and developers are doomed to fail! Hardiness is hardly an excuse. *(Avoid a project killer!)*
- Almost all companies listed are private.
- ISPLS WELCOME TO POST ON WEBSITE
- Communication is good business & good policy.
- Beware of the EagleOne vetting issue (especially BNSF & UP)



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## Reference Material & Where to Find Supporting Documents

- The Railroads (Current Data & CADD updates)
- The Courthouse (Amazing Stories of what is on hand without their knowledge!, *Coreless map storage*)
- ILLINOIS COMMERCE COMMISSION (ICC) – Springfield & Chicago
- Wisconsin DOT / Railroad Freight Section Rich Keizer
  - <https://www.wisconsin.gov/about/dot/about-us/briefing-materials> (State owned lines mostly)
- Illinois State Archives - Springfield
- NARA... National Archives & Records Administration Rockville, MD **RIP-91** Copies to be reprinted 2/222... (Author David Pfeiffer / NARA Retired)
  - Also be aware of RIP-114 (GLO/Parents) and RIP-116 (Railroad Cartographic Maps other than Vexillation Maps) There are potential railroad maps sources that can pay big benefits for different projects
- Mid Continent Railway Historical Society - North Freedom, WI <http://www.midcontinent.org> Don Ginter
- Union Pacific: Historical Archives & Museum – at Council Bluffs, IA (Union Pacific Collection Here!)
- The Class 1's (BNSF, CP, CN-C, UP) –Beware the EagleOne Resources issue currently in play, (sadly, making life difficult for surveyors gathering evidence)



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## THE EAGLE ONE RESOURCES SCAM

### WHAT BNSF AND UP WILL ASK AS PART OF THE VETTING PROCESS

BECAUSE OF THE INTERFERENCE, MONEY WRENCHING, NUISANCE LAWSUITS, ETC. THE RAILBOARDS ARE NOW DOUBLE CHECKING ALL OUTSIDE REQUESTS FOR AMPS AND RELATED DATA, PLUS THE LICENSE/CONTRACT APPROVAL AND PROCESSING SYSTEM HAS BECOME "80% THE BUCKY" AND LESS FORGIVING IN SPECIAL CASES. (THE RAILBOARDS' STAFF AND CONTRACTORS HAVE LESS ROOM FOR MISTAKES, COMPARED WITH RESOURCES' SUPPLEMENTAL CALLS / PRACTICAL RELIEF)

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## THE EAGLEONE RESOURCES SCAM

### UPRR VETTING PROCESS (BNSF SIMILAR)

1. A description of what you are requesting and what you will be using the requesting for.
2. City, state, zip and county, name of the work being requested.
3. All the inventories you may wish you may have it.
4. The railroad subdivision name if you have it.
5. Street names that encompass the work you're requesting.
6. A Google map that shows an aerial or an elevation map or a line of any kind, over a 300m range of the area.
7. The official railroad cross street name, whether it's a grade crossing or a grade-separated crossing.
8. Direction, range, and sections, if you have it. (\*\*\*\*that applicable for state of Texas, for Texas, please include the survey name and district number.)
9. Your company name, address, city, state, zip code, phone number, and your email address.
10. Name of UPRR contacts if working on this particular project with UPRR.
11. Name of Government agency if working on project with one that is a subordinate(s).

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## Websites

- [www.AREMA.org](http://www.AREMA.org) (American Railway Engineering & Maintenance Association; successor to AREMA)
- [www.ipogo.net/spiral.html](http://www.ipogo.net/spiral.html) (10-Chord Spiral help, "Spirals for Dummies")
- [www.archives.gov](http://www.archives.gov) (National Archives, NARA-Rockville, MD)
- [www.rrb.gov/cov\\_index2.html](http://www.rrb.gov/cov_index2.html) (Index to active railroads, RRB lists)
- [www.aar.com/arts/index.htm](http://www.aar.com/arts/index.htm) (AAR Emergency Response Training Center at Pueblo Test Track, "Rattlesnake Junction Training Facility")
- [www.contractororientation.com](http://www.contractororientation.com) (ARCFER214 awareness trainer for BNSF, Union Pacific and others, need certification for R/OE)
- [www.wyoarchives.state.wy.us](http://www.wyoarchives.state.wy.us) (Wyoming State Archives)
- [uprrmuseum@uprr.com](mailto:uprrmuseum@uprr.com) (UPRR Museum/ Durham Collection-Council Bluffs IA...Curator Don Spoddy, Uncle Pete's article)
- More websites linked to your state contact sheet, railroad & museum specific

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### Websites To Be Aware Of:

- [www.aar.org](http://www.aar.org) (Association of American Railroads)
- [www.bnsf.com](http://www.bnsf.com) (BNSF Railroad, links to JLL/B&W & Map Requests)
- [www.uprr.com/raus/](http://www.uprr.com/raus/) (Union Pacific Real Estate)
- [www.comnitra.com](http://www.comnitra.com) (Colorado Based Shortline r/ holding company)
- [www.watco.com](http://www.watco.com) (owner of 48 shortline railroads\* and 2 in Australia)
- [www.stb.dot.gov](http://www.stb.dot.gov) (Surface Transportation Board, successor to ICC)
- [www.crrm.org](http://www.crrm.org) (Colorado Railroad Museum - Golden)
- [www.calliper.com/magnitude/ra/ra.html](http://www.calliper.com/magnitude/ra/ra.html) (FRA Crossing Locator)
- <http://memory.loc.gov/ammem/gmdhtml/rhnm/rhhome.html> (Library of Congress, links to old railroad route maps, historical documents)
- [https://www.labelmodels.com/railroad\\_valuation\\_genealogies-c-30-34.html?set=50577&am=603&cm=07](https://www.labelmodels.com/railroad_valuation_genealogies-c-30-34.html?set=50577&am=603&cm=07) - "Clean" access to ICC Valuation Subject Corporate Histories (GO-20 - Now railroads were assembled)

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### More Websites

- [www.arena.org](http://www.arena.org) American Railway Engineering & Maintenance Association (successor to AREA)
- [www.ipogo.net/spiral.html](http://www.ipogo.net/spiral.html) (10-Chord Spiral help, "Spirals for Dummies" - remember, right-of-way curves are simple/ chord curves)
- [www.archives.gov](http://www.archives.gov) (National Archives; NARA-Rockville, MD)
- [www.rtrb.gov/con\\_index2.html](http://www.rtrb.gov/con_index2.html) (Index to active railroads, RRB lists)
- [www.aar.com/erc/index.html](http://www.aar.com/erc/index.html) (AAR Emergency Response Training Center at Pueblo Test Track... "Rattlesnake Junction Training Facility")
- [www.contrackorientation.com](http://www.contrackorientation.com) 49CR2214 awareness trainer for BNSF, Union Pacific and others, need certification for N/O/E
- [https://www.mpi.org/archives/milwaukee\\_joad\\_archives.php](https://www.mpi.org/archives/milwaukee_joad_archives.php)
- [upmuseum@up.com](mailto:upmuseum@up.com) (UPRR Museum/ Durham Collection-Council Bluffs IA...Curator: Patricia Labounty ....Uncle Pete's attic!)
- <https://www.cnhws.org> CNW Historical Society (IL & IA Archives)

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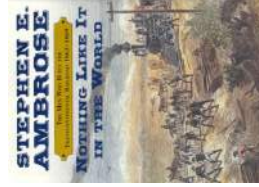
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### Required Reading

- Steven Ambrose's *"Nothing Like It In The World"* (New York: Simon & Schuster; 2000)
- Edward Gillette's *"Locating the Iron Trail"* (Boston: The Christopher Publishing House; 1925)



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**OPERATION LIFESAVER**

• **WWW.OLI.ORG**

• In Illinois: <https://www.icc.illinois.gov/rail-safety/illinois-operation-lifesaver>

Chip Pew  
State Coordinator  
Illinois Operation Lifesaver  
Illinois Commerce Commission  
380 Vine Avenue  
Highland Park, Illinois 60035  
Chip.Pew@illinois.gov






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**The OLI Three E's:**

- **EDUCATION**
- **ENGINEERING**
- **ENFORCEMENT**

• These folks generate 45 minutes to 2 hours safety presentations free to the public. OLI is volunteer driven.




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**Farnsworth Group Contact Information**

- [www.f-w.com](http://www.f-w.com)
- In Colorado:
  - Charlie Tucker, LSI**
  - 5613 DTC PARKWAY SUITE 1100
  - GREENWOOD VILLAGE, CO 80111
  - 303-407-6716
  - 303-692-0470 (fax)
  - 303-475-7200 (cell)
  - email: [ctucker@f-w.com](mailto:ctucker@f-w.com) or [rsurveyor1@comcast.net](mailto:rsurveyor1@comcast.net)

Big thanks to Jim Gaff (BNSF retired '19) & Alex Nagel + Thomas Davis (CP/300) for their assistance



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### AREMA National Program



- Request for Feedback
- [ctucker@f-w.com](mailto:ctucker@f-w.com) / [frsurvevor1@comcast.net](mailto:frsurvevor1@comcast.net)
- [dknight@arema.org](mailto:dknight@arema.org) (Atrn: Committee 1)

After 20 years of presenting RRS-101, AREMA Committee 1 (Roadway) is preparing to hand this program off to a new generation of volunteers. We would be interested in hearing what the surveying community thinks about this the topic and what the profession would like to hear more about. Planning for the RRS-102 (practical application & case studies using the basic ide as presented here) is being developed, building off RRS-101 basics.

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### QUESTIONS?



[www.f-w.com](http://www.f-w.com)



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### A Tip Of The Hardhat To:

- Kelle Williams & Nathan Busch – Pioneer/ Patriot Lines (Denver & Peoria)
- Leo Kreisel – RailPros (Jacksonville FL)
- Chip Pew – Illinois Corporation Commission (and Operation Lifesaver)
- Thomas Davis – Canadian Pacific (Now with METRA)
- Brett Gaurdino – CSX (Chicago CREATE Engineering Coordinator)
- Jim Goff PE-LS – BNSF (Ret.)
- Brad Hart, PLS – Norfolk Southern (Atlanta)
- Rick Friesen & Gary Voogd – Union Pacific (Omaha)

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**PLEASE VISIT [WWW.AREMA.ORG](http://WWW.AREMA.ORG)**

FOR:

- PRACTICAL GUIDE TO RAILWAY ENGINEERING (PGRE)
- PORTIONS (BY CHAPTER) OF THE AREMA MANUAL FOR RAILWAY ENGINEERING (MRE)
- MORE INFORMATION ON AREMA INCLUDING PGRE SEMINARS FOR CIVIL ENGINEERS, WEBINARS, ETC.

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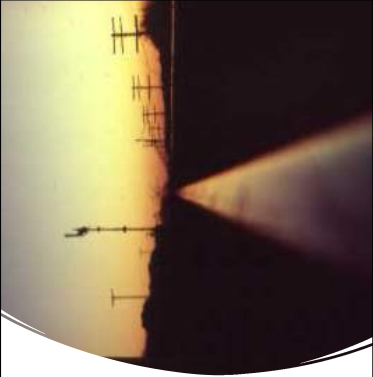
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*Thank you!*



- T-2 SUNSET AT THE COLORADO-KANSAS BORDER EAST OF HOLLY, COLORADO

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