

Session 6

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University of Florida

Disputes Review Board & Project Disputes

Topic Description

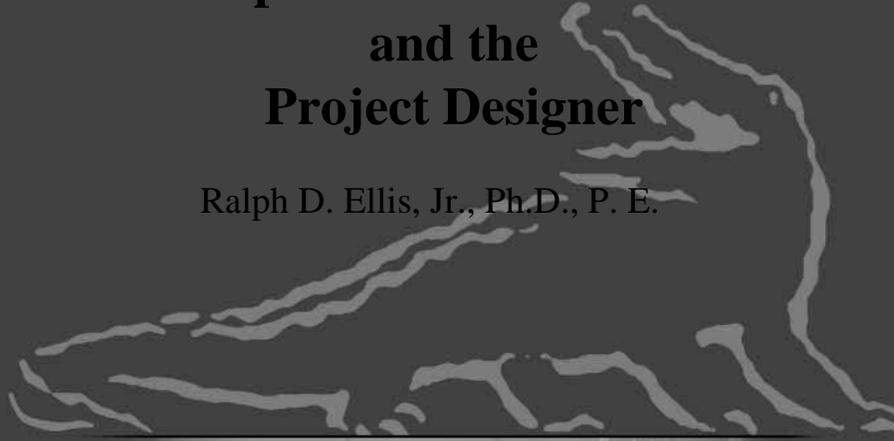
Analysis of DRB hearing records provides insight into the most common types of project disputes. What are the root causes of these disputes? What can designers do to help avoid project disputes?

Speaker Biography

Dr. Ralph Ellis is currently Associate Professor in the Department of Civil and Coastal Engineering at the University of Florida where he teaches Construction Engineering. Dr Ellis brings to his university position 15 years of industry experience as a projects manager and company president. He is a registered Professional Engineer. He is an active researcher and has performed many transportation related studies for the FDOT. Dr. Ellis also serves our profession through the following positions: Member of Board of Directors of the Construction Institute of the American Society of Civil Engineers, Member of the Independent Advisory Panel of the Overseas Building Operations Bureau of the U.S. Department of State, Vice President Dispute Review Board Foundation of Florida.

Disputes Review Boards and the Project Designer

Ralph D. Ellis, Jr., Ph.D., P. E.



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Presentation Agenda

- A little background on the FDOT DRB process
- Analysis of DRB Hearings (Root Causes of Disputes)
- Lessons to be Learned

DRB Core Principals

1. Panel of three, experience, respected impartial reviewers
2. Board formed before construction begins
3. Board meets periodically at the project site and keeps abreast of progress and issues
4. Hearings may be requested by either party
5. Hearings are held promptly and are informal
6. Board recommendations are not binding, but may be considered by arbitration boards and trial courts

FDOT's DRB Use

- Began with DRBs in 1994 and added regional DRBs in 2002
- Now
 - Standard practice on major projects
 - All Districts have access to a standing regional DRB available to all projects

FDOT DRB Results

- More than 500 Projects with DRBs
- There have been more than 124 different DRB members on above DRBs
- Project Value of over \$10,000,000,000
- More than 220 disputes heard and all but 5 settled with 3 beginning litigation and 2 have gone to the State Arbitration Board, a 97.7% success rate
- The largest claim settled was over \$6,000,000
- The FDOT has a slight edge in favorable recommendations, 54% for the FDOT and 46% going for the Contractor

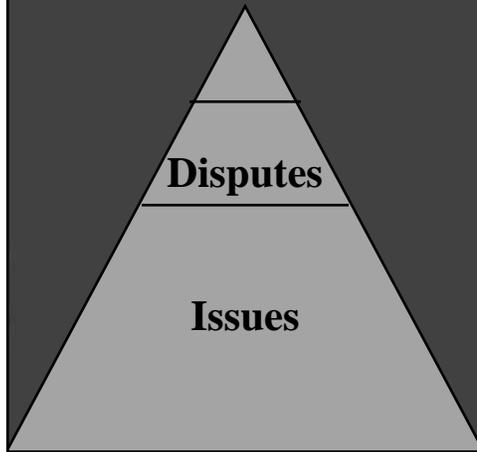
FDOT DRB Recommendations are Posted on the FDOT Construction Office Website

<http://www.dot.state.fl.us/construction/CONSTADM/drb/drbrecom.htm#D3>

Typical DRB Recommendation Format

- Contractor's Position
- FDOT Position
- DRB Findings (Facts and Applicable Contract Provisions)
- Recommendation

DRB Hearings

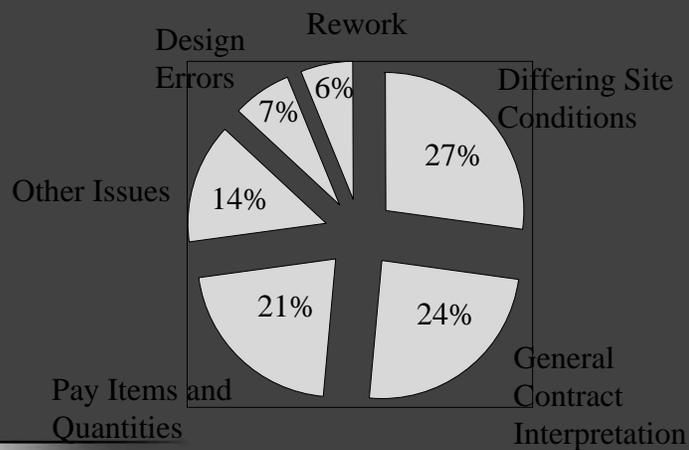


- Most Issues are resolved before they become Disputes
- Most Disputes are Settled without need for a DRB hearing

Typical Project Issues

- Unsuitable material at Sans Paniel – CEI to write Work Order (waiting on approval of CSA)
- Kernan Intersection revision – Designer revising plans, Contractor to submit price after receiving plans
- 30" ID reclaimed watermain at Kernan – JEA to make decision on pipe size
- Storm drainage shift (S-307) at Publix – FSA to be provided

DRB Hearing Disputes by Category 1996 - 2006



Differing Site Conditions

- Utility Conflicts
- Different Subsurface Conditions
- Different Project Environment

Differing Site Condition Existing Gravity Walls

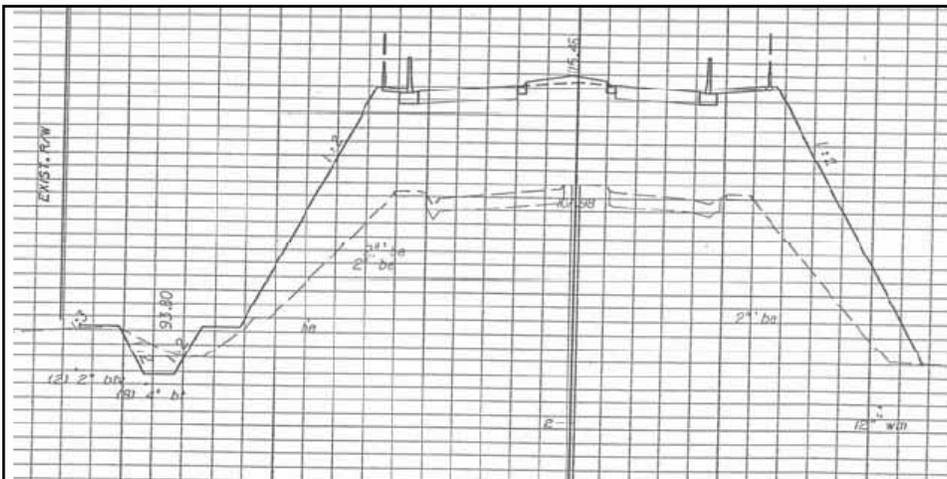
- Plans do not show existing gravity wall and do not call for removal
- Walls are mostly underground, from the road they appeared to be a thickened sidewalk edge
- Contractor did not notice the walls during the pre-bid site visit
- Contractor request compensation for removing the walls

EOR :

We generally we don't call out items to be removed such as curb, sidewalks, etc. The intent is to have the contractor perform a site visit before submitting a bid as required by the specifications.

Specification 2-4

Examine the contract documents and the site of the proposed work carefully before submitting a proposal for the work contemplated.



Cross sections did not show gravity wall.

Chapter 10

Roadway Plan and Roadway Plan-Profile

10.2 Roadway Plan Portion

10.2.3 Existing Topography

All existing topography shall be shown. Existing roads, streets, drives, buildings, underground and overhead utilities, **walls**, curbs, pavements, fences, railroads, bridges, drainage structures and similar items **shall be plotted** and labeled. Streams, ponds, lakes, wooded areas, ditches, and all other physical features shall be shown

10.2.7 Plan Layout

4. Curb, curb and gutter, traffic separators, sidewalk, curb ramps, **retaining walls**, etc. **shall be shown**. Driveways shall be shown as required by Volume I, Section 1.8.

Chapter 18

Roadway Cross Sections

18.1 General

Cross sections depict the existing ground conditions, including **all manmade features**, as sections perpendicular to the respective stations along a survey baseline or construction centerline. The proposed cross-sectional outline of the new facility with its functional elements is also shown on cross sections.

Contractors also read the PPM.



Differing Site Condition Existing Shoulder Thickness

- Plan cross sections do not indicate shoulder composition
- Existing paved shoulders found to constructed with asphalt base 13 to 17 inches thick
- Contractor contends that the expected thickness should not have exceeded 3 inches
- Contractor requests compensation for additional cost



Existing Paved Shoulder Thickness 13 to 17 inches



Differing Site Condition Coquina Boulders

- Contractor encountered coquina boulders while excavating a utility trench
- Contractor request compensation for additional cost

Coquina Boulders



The description of Stratum No. 3 on Sheet 75 of the plans indicates:

<i>Tests (Sieve)</i>	14
<i>AASHTO Group</i>	A-3, A-1-b
<i>Description</i>	Yellow-brown to gray-brown fine sand to fine sand with silt, trace to some shell, trace to some cemented sand and shell.

The description of Stratum No. 9 on Sheet 75 of the plans indicates:

<i>Tests (Sieve)</i>	3
<i>AASHTO Group</i>	A-3, A-1-b
<i>Description</i>	Yellow to orange fine sand and shell, cemented sand and shell.

Note 9 on that same sheet states:

Strata 3 and 9 contain cemented sand and shell and may be difficult to dewater, excavate and/or penetrate and may require special equipment and/or procedures to facilitate dewatering, excavation and/or penetration.

Note 4 on sheet U3 states:

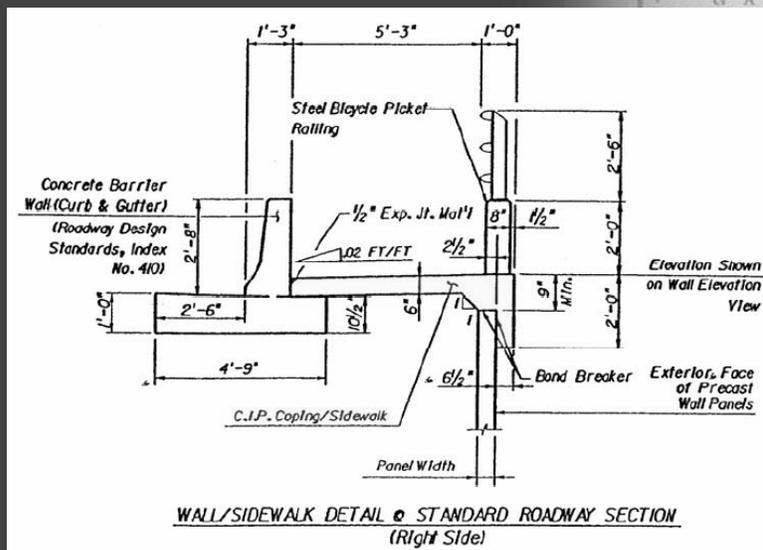
CONTRACTOR ATTENTION IS DIRECTED TO THE LIKLIHOOD THAT THE UTILITY EXCAVATION ON THIS PROJECT MAY ENCOUNTER COQUINA ROCK.

Differing Site Conditions Environmental Issues

- Noise ordinances and permitting
- No night work ordinances
- Security procedures

Pay Item Dispute Sidewalk

- Project design called for an MSE wall with pre-cast coping and sidewalk
- Contractor submitted a pre-cast coping with a cast-in-place sidewalk
- Contractor requested payment for the sidewalk as separate item (522-2 Sidewalk Concrete 6")



Detail included in plans

GATOR Engineering

TYPE "CP24K_" PRECAST COPING/PARAPET
WITH SIDEWALK STEEL

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Contractor's Submittal Shop Drawings

GATOR Engineering

- Roadway Standard Index 5000 contains Note 2:
 2. Retaining Walls and all cast-in-place appurtenances, i.e., coping, traffic railing barriers, sidewalk parapets, light pilasters, Integral sign foundations, etc., shall be paid for at the contract unit price per square feet of retaining wall under, Retaining Wall System (Permanent), Retaining Wall System (Temporary). Payment shall be based on plan quantities.

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Pay Item Dispute Optional Base

- Contract contained a bid item 285-712 for Optional Base
- Contractor bid Optional Base as 285-712-441 Base Group 12 (Limerock)
- Plan notes also indicated that Item 285-712-447 Black Base would be required for a portion of the road
- Contractor ask that an additional bid item be added for the Asphalt Base

- b. Interpretation of contract documents must be based on what is said in those documents without consideration of the intent of the designer. A bidder has no way of knowing the intent of the designer. Even if consideration is given to the September 27, 1993, memorandum from the State Pavement Design Engineer, it should be apparent that the purpose of that memorandum is to provide a mechanism within the computerized DOT contract Reporting System to handle the situation where a specific type of base is desired for portion of the base covered by a certain Base Group. The instructions contained in the memorandum were not followed in designing this project.

From the DRB recommendation

Contract Interpretation Dispute Time Extensions

- Design-Build contract with A+B bid and I/D provisions
- Contractor believes that weather time extensions are applicable to Liquidated Damages and Disincentives

SP 39. COMPUTATION OF CONTRACT TIME

SUBARTICLE 8-7.1 (Pages 63-65) is deleted and the following substituted:

8-7.1 General: Perform all work in accordance with the Contract Documents, within the number of Calendar Days submitted in the proposal or as may be extended in accordance with the provisions herein below.

SUBARTICLE 8-7.3 (Pages 63-65) is deleted.

SP 41. CONDITIONS UNDER WHICH LIQUIDATED DAMAGES ARE IMPOSED.

SUBARTICLE 8-10.4 (Page 68) is expanded by the following:

Liquidated damages will be based on the Allowable Contract Time. The term "Allowable Contract Time" as used in this Subarticle shall mean the Original Contract Time plus adjustments pursuant to 8-7.3 or for authorized suspensions of Contract Time.

Rework

- We have had several substantial disputes involving replacement of concrete structures due to cracking
- These are serious issues because of the time and cost
- **They are avoidable**

Lessons to Be Learned

1. Site investigation is critical
2. Pay items must be given extra attention
3. Special Provisions must be reviewed for conflicts
4. We need education on concrete cracking with all participants (Contractor, CEI and FDOT)
5. Construction project teams often need assistance from designers
6. DRB hearing issues are indicators of areas that may need management attention. We need a way to make better use of the information

Questions?