



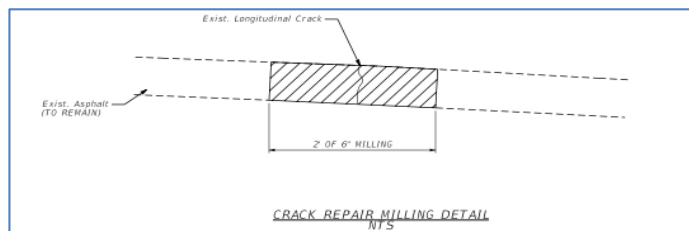
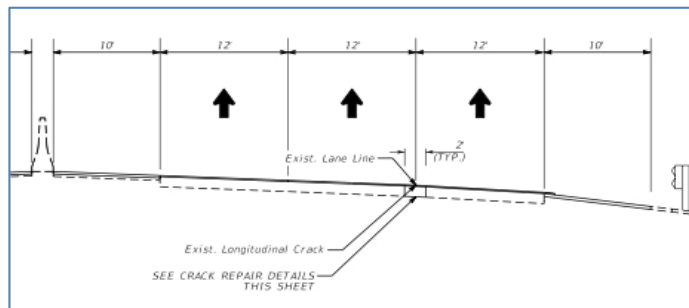
<p>FLORIDA'S TURNPIKE ENTERPRISE (FTE) Construction Engineer: Pete Nissen, P.E. Assistant Construction Engineer: Bill Sears, P.E. FDOT Design Project Manager: William Sloup, P.E. GEC Design Project Manager: Terry Miller, P.E. Construction Project Manager: Ken Hudson</p> <p>CCEI NEW MILLENNIUM ENGINEERING, INC. (NME) Sr. Project Engineer: Gus Quesada, P.E. Project Administrator: Sergio Ambros</p> <p>CONTRACTOR COMMUNITY ASPHALT CORPORATION (CAC) Project Manager: Vernon Walker Project Manager: Aryail M. Gomez</p> <p>ENGINEER OF RECORD MOFFATT & NICHOL (M&N) EOR: Richard Rocktoff, P.E. Project Manager: Jeff Messenger, P.E.</p>	<p>PERFORMANCE MEASURES:</p> <p>Notice to Proceed Date: 06/06/13 Construction Start Date: 07/08/13 Completion Date: 05/19/14 Original Contract Time: 270 days <u>Approved Time Extensions:</u> Weather/Holidays: 46 days Supplemental Agreements: 0 days Final Contract Time: 316 days % Overrun Orig. Contract Time: 0%</p> <p>Original Contract Amount: \$6,589,153.50 Final Contract Amount: \$6,665,935.50 % Overrun Contract Amount 1.17%</p> <p>Final CPPR: 91</p>
<p>PROJECT DESCRIPTION: The Improvements under this Contract consist of milling and resurfacing with design criteria upgrades on the Turnpike Mainline (SR 91) from Glades Road to south of the Atlantic Avenue interchange in Palm Beach County. Scope of work included the repair of existing longitudinal asphalt cracks, bridge joint replacements, and other safety improvements to roadway features such as guard rail, barrier wall, and glare screens.</p>	

Lessons Learned:

Pay Item: 334-1-4 SP Trench Repair – The trench repair detail called for a 2' wide trench; however, to achieve density requirements and based on the contractor's available equipment, the trench width was too small. It was determined to increase the trench width to 27+/-" to allow the contractor's equipment to access the trench and properly achieve density.

Production Rate	
Total Tons =	3452.36Tn
Total Time =	19 days
Total SY =	10,966.70 SY
Yield =	629.61 #/SY
Production Rate =	2,277 lf/day

Summary and Recommendation: Although CAC performed this work at no additional cost to FTE, we feel this may have been a potential claim because another contractor may have tried to achieve density with a smaller piece of equipment which would not have yielded the favorable results CAC achieved. The industry has compactors that are exactly 24" in width, but they are not readily available and need to be ordered, the typical ones are 26". Density could have also been achieved by using smaller lift thickness, but the operation would have taken longer, which is a greater impact to the motorist. This repair procedure proved successful and we highly recommend its use in other areas; to avoid potential claims, we recommend increasing the trench width to 27".

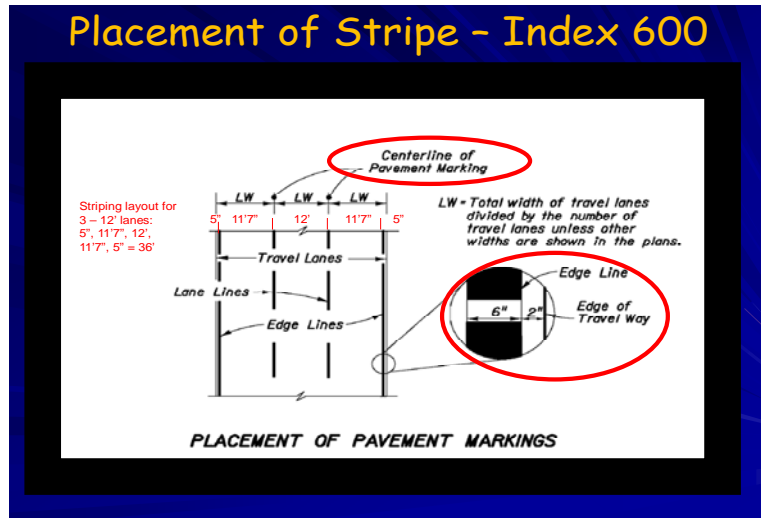


PAY ITEM NOTE:
 334-1-4 SUPERPAVE ASPHALTIC CONCRETE (TRAFFIC D) INCLUDES 1608.1 TN OF SP UTILIZED AS SACRIFICIAL PAVEMENT IN TRENCH REPAIR. THE TOP 3" OF TRENCH REPAIR WILL BE REMOVED IN THE NORMAL MILLING & RESURFACING OPERATION.

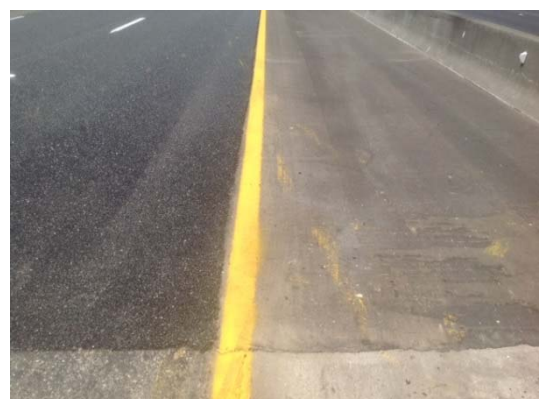


211 Painted Pavement Markings –

The shoulder width throughout the project varied from 10' standard (+/-) 0"-8", which made it difficult to maintain the standard detail. This was even more of a challenge when we approached the bridges as you can see from the illustrations below as well as the beginning and ending of the project limits.

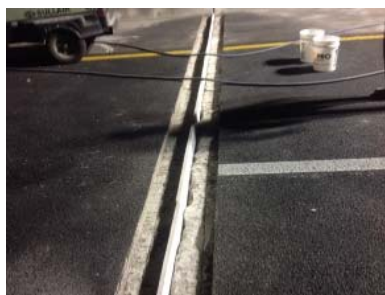
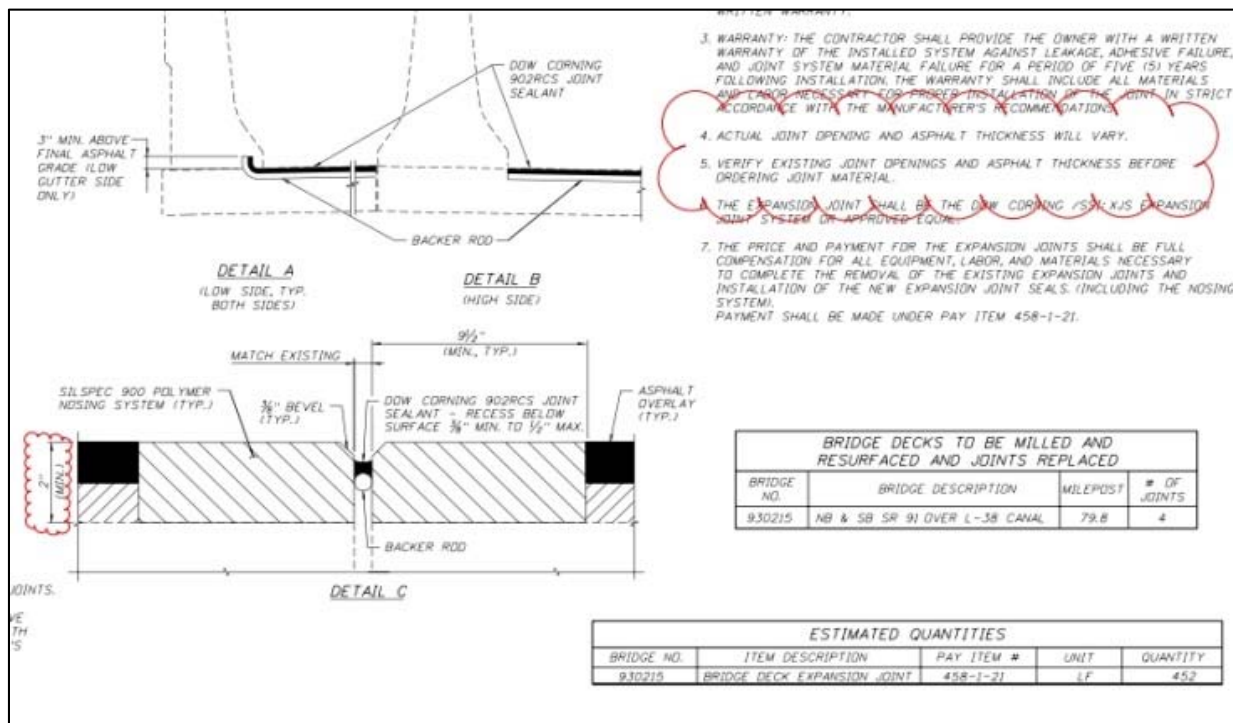


Summary and Recommendation: for the bridge approaches we recommend to create a typical detail that tapers the FC to meet the existing bridge edge line configuration. This way we keep the edge line completely on the FC and maintain compliance with the index requirements. This issue was not as prevalent on the main line; however, there are cases where the edge line does not have the prescribed 2" clearances from the EOP.

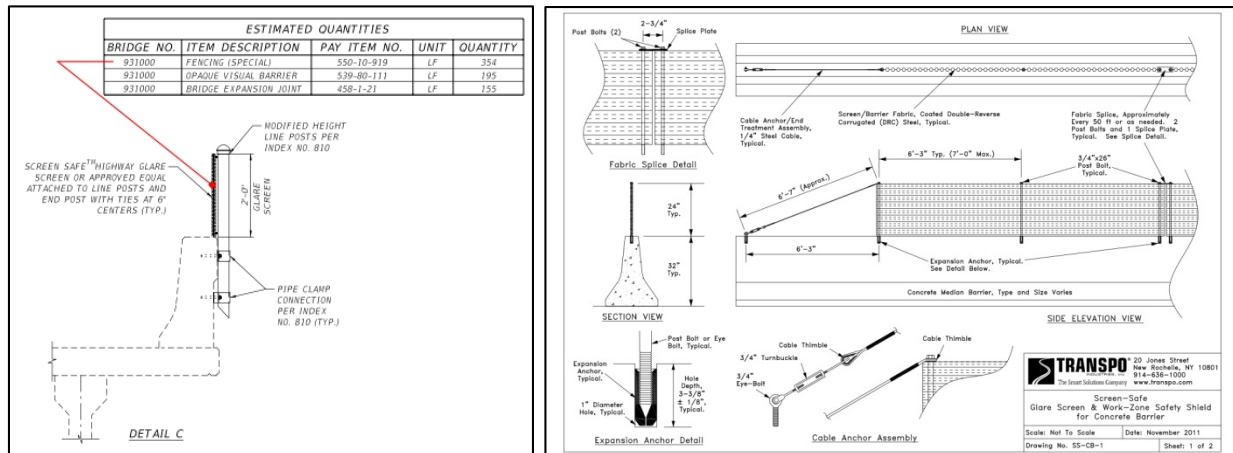


Pay Item: 458-1-21 Bridge Deck Expansion Joint (Plan Quantity) – The joint installer is claiming unforeseen conditions based on the significant difference between the theoretical joint thicknesses to that of the actual field condition. Although the plan sheet requires that the contractor verify the thickness prior to initiating the operation, it does not provide for compensation if there is an overrun based on thickness. The contractor assumed a theoretical thickness of 2" and applied 1.5" overbuild after milling, 3/4" FC, and deduced that the final thickness would be 2.75"; however, the actual thickness for the joint was between 3.5" – 4".

Summary and Recommendation: NME has discussed this issue with several bridge design engineers and it's a common occurrence on rehabilitation projects; that the bridge design engineers place the 2" (min) on the detail simply to address the design criteria, not to be used as a threshold for estimating labor/materials needed. The notes on the plan do not address estimating for costing the item, they are more to the operation's logistics so that the contractor doesn't start the work without having the proper materials on hand. We recommend that several cores be taken during the design phase and the results provided on the plans for estimating purposes.



Pay Item: 550-10-919 Fencing (Special) – We encountered an issue where the glare screen installer did not properly interpret the intent of the plan detail (Detail C, left) and assumed that the manufacturer’s recommended anchoring detail (right) would supersede the Plan detail. This was cause for delays and it is currently a pending claim where the subcontractor feels that the anchoring should be the manufacturer recommended rather than the one prescribed by the plan detail.



Summary and Recommendation: Although we feel that the Detail “C” is clear in relating the intent of the EOR, the fact that we are veering from a manufacturer’s recommended installation detail is not good practice. We recommend that if sole sourcing a product, the EOR should investigate all aspects of the product’s working criteria and include them as part of either a pay item note or TSP. The final product required some creative thinking on the part of the subcontractor, which yielded an acceptable product.

