C.C. MYERS INC.

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September 07, 2005

Document No.: 215-STL.00186

State of California
Department of Transportation
333 Burma Road
Oakland, CA 94607

Temporary Bypass Structure
Contract No. 04-0120R4
CCM Job # 215

Attn: Mr. Lourdes David
Resident Engineer

Re: TBS Deck Drainage

Dear Mr. David,

Please see attached copy of Imbsen and Associates letter # 139, dated September 6, 2005, in which they provide comments to the State's letter # 545 of August 25, 2005, regarding the deck drainage design.

Very Truly Yours,
C. C. Myers, Inc.

Juan C. Gray

Juan Gray
Project Engineer

cc: RW.C
MO
JCG

File: 215-101

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IMBSEN & ASSOCIATES, INC.
Engineering Consultants
A TRC Company

RECEIVED
SEP 7 2005
CC MYERS, INC.
JOB 215 TEMP. BYPASS STRUCTURE
IC: 02404
215-201
RC
JG
✓ Caltrans (JG)

September 6, 2005 #1295-320

IAI Letter #: 139

Mr. Bob Coupe
C.C. Myers, Inc.
3286 Fitzgerald Road
Rancho Cordova, CA 95742

Subject: TBS Deck Drainage

Dear Mr. Coupe:

We are in receipt of State Letter No. 05.03.01-000545, dated August 25, 2005, in which Caltrans has established a new set of parameters and directed IAI to provide additional analysis for the deck drainage system. We have reviewed this letter and have the following questions/comments regarding the parameters:

In response to point a):

> Caltrans statement that "runoff entering from the existing structure was calculated as 50 percent." is not correct. In our calculations we have used 100% of the runoff from the existing structure and assumed that 50% of the drains on the top deck were blocked.

In response to point b):

> Caltrans states that "Drop-throughs (openings through the deck) may be used in conjunction with submitted drainage inlets". (Caltrans references submittals 215-STT.00131- East Tie-In submittal dated December 2, 2004, 215-SUB.00044-02-Viaduct Superstructure submittal dated May 13, 2005, and 215-SUB.00064-01- West Tie-In submittal dated March 3, 2005). Does this mean that Caltrans does not want us to use scuppers along with drainage inlets at five foot spacing as previously directed (Submittal 215-Sub.00082-00)? Additionally, please advice us of what contract documents should we refer to for evaluating drainage characteristics and design of drop-throughs?

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In response to point e):

> As referenced in our NOPC #9, dated June 8, 2005, the incompatibility of the project deck drainage design criteria and the structure and its lane configuration geometry (narrow lanes and shoulders) inherently has created a scenario where the encroachment of design water spread upon the traveled way cannot be avoided. Since drop-throughs apparently have a small interception capacity (Caltrans has stated that the dimensions of drop throughs may not be wider than 50mm), they would not likely cause a significant improvement. Please clarify how drop-throughs would ensure zero encroachment of water onto the traveled way?

In response to point 1):

> Please clarify what is meant by "Location of drop-throughs that can be incorporated in conjunction with the submitted drainage inlets to alleviate water encroachment, without impacting the structure's integrity".

In response to point 2):

> In State Letter No. 05.03.01-000545, Caltrans is requesting for the dimensions of the drop-throughs. In the same letter Caltrans has stated that "The dimension of each drop-through may not be wider than 50mm..." It seems that Caltrans has already established this dimension so please clarify.

In response to point 3):

> Are there any details available for drop-through water deflectors?

In response to point 4):

> Caltrans is requesting "calculation and table showing water spread at five meter increments". From our perspective, showing the water spread at 5 meter increments doesn't make sense. The spread should be calculated at increments that coincide with the drain spacing so that the worst/controlling encroachment is shown. Please clarify.

We find Caltrans latest direction to be very vague and unclear. We would welcome the opportunity to discuss our questions/clarifications at their earliest convenience.

Finally, please be advised that the deck drainage protracted resolution continues to hamper our design efforts. In light of Caltran's recent development of new parameters and directions, we assume that Caltrans has finally agreed that our NOPC #9 has merit and as such IAI will be compensated for all costs, damages and impacts arising out of or resulting from the deck drainage issues.

IAI will incorporate the additional costs and impacts as a part of NOPC #9 which was submitted to C.C. Myers on June 8, 2005.

Please feel free to contact me at (916) 366-0632 should you have any questions.

Sincerely,

Roy A. Imbsen, P.E., D.Engr.
Project Manager

cc: IAI File, EA, MV, JH, RI

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