<u>City Of York Zoo - Tunnel Project</u> <u>Fact Pattern</u>

I. THE PROJECT

The City of York (the owner) has contracted with a local general contractor, Building Professional, to excavate and line a tunnel for its local zoo that will allow a children's train to go between two main sections of the Zoo. The train is designed for children and is placed on a miniature railroad track that traverses through the many sections of the Zoo. The railroad tracks already run throughout the Zoo, but with the addition of a brand new African animal exhibit, the Zoo wanted to re-route the existing track through a new tunnel that would be bored through an existing natural rock wall.

Building Professional subcontracted a majority of the work to ABC Contractors, Inc. ("ABC"). ABC's bids price of \$135,000 became the contract price between Building Professional and ABC. Shortly after the work began, it became apparent the site conditions were not as they were represented in the contract drawings. The existing rock wall, through which the proposed tunnel would pass, was not solid granite. The wall instead contained large layers of shale that tended to fracture and crumble during the tunneling process. As a result, ABC was forced to change its methods of construction and spend far more time and money on the project than was planned.

As a result of the problems experienced by ABC, ABC submitted a claim to Building Professional.

II. PROJECT HISTORY

The project went out for bid in March 2003, with the following pertinent information supplied by the City of York and Building Professional:

- The project was to begin on April 24, 2003 and be completed by May 23, 2003, in time for Memorial Day weekend.
- The existing rock wall was solid granite.
- The finished diameter of the tunnel was to be 10 feet.
- The Zoo planned to re-route the railroad tracks, once the tunnel was completed.
- Other data was also specified, including the type of materials to be used.
- ABC was the low bidder and a contract was signed on April 10, 2003.
- Building Professional's plan was to sequence the work as follows. (For simplicity, this job
 only consists of one section so each task is completed before the next begins.)
 - Blast through the wall.
 - Clear the debris by excavation.
 - Install the rock bolts.
 - Place the concrete forms.

- Pour the concrete.
- Remove the concrete forms.

In preparing its bid, ABC relied upon Building Professional's construction schedule. The construction schedule is presented below.

•	Start work	April 24, 2003
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-	Blast Wall	5 days
-	Excavate and clear debris	10 days
-	Install rock bolts	3 days
-	Place concrete forms	1 day
-	Pour concrete	10 days
-	Remove forms	1 day

Complete work
 May 23, 2003

Schedule assumes 1 shift and 7-day workweek.

As ABC began excavating, ABC encountered conditions different from those defined in the original specifications. In particular, behind the solid granite exterior wall were layers of soft unstable shale. As a result, it took the subcontractor considerably longer to excavate and clear debris and stabilize the tunnel walls to install the rock bolts. ABC did not complete the tunnel until July 25, 2003.

ABC filed a claim with Building Professional alleging that the original specifications ABC relied on were defective and submitted a delay claim to Building Professional.

III. ADDITIONAL PROJECT INFORMATION

"As-built schedule" for the project is as follows:

•	Recorded start date	April 27, 2003

-	Blast Wall	April 27 – May 1
-	Excavate and clear debris	May 2 – May 31
-	Install rock bolts	June 1 – June 10
-	Labor strike	June 11 – July 5
-	Place concrete forms	July 6
-	Pour concrete	July 7 – July 24
-	Remove forms	July 25

Completion date
 July 25, 2003

- Late Start (See Building Professional Fax dated 4/28/03)
- Excavate and Clear (See ABC Contractors, Inc. Memorandum dated 6/10/03)

- Install Rock Bolts (See ABC Contractors, Inc. Facsimile dated 6/15/03)
- <u>Placing Forms</u> (See ABC Contractors, Inc. Facsimile dated 7/5/03)
- Pour Concrete (ABC Contractors, Inc. Memorandum dated 7/28/03)

IV. FINANCIAL INFORMATION

- Contract price was set at \$135,000 based on ABC's low bid of \$135,000. The next lowest bid by Smith Bros. was \$175,000.
- ABC's total billings averaged for each quarter of 2003, \$2,500,000.
- Attachment I provides details of ABC's Bid Estimate.
- Attachment II is ABC's Job Cost Report for the Zoo Tunnel Project.
- Attachment III is a schedule of ABC's General and Administrative Expenses.