

I. IDENTIFIKAČNÍ ÚDAJE

Název práce:	Design of Chiche Bridge
Jméno autora:	Manolo Mendizabal Melo
Typ práce:	diplomová
Fakulta/ústav:	Fakulta stavební (FSv)
Katedra/ústav:	Katedra betonových a zděných konstrukcí
Vedoucí práce:	Doc. Ing. Marek Foglar, Ph.D.
Pracoviště vedoucího práce:	Katedra betonových a zděných konstrukcí

II. HODNOCENÍ JEDNOTLIVÝCH KRITÉRIÍ

Splnění zadání práce	splněno s menšími výhradami
<i>Posuďte, zda předložená závěrečná práce splňuje zadání. V komentáři případně uveďte body zadání, které nebyly zcela splněny, nebo zda je práce oproti zadání rozšířena.</i>	
Fulfillment of the thesis assignment: fulfilled with minor objections The assignment of the thesis formulated following goals to be fulfilled: state-of-the-art in field of pre-stressed concrete bridges over deep inaccessible valleys, design and static assessment of Chiche bridge including construction stage analysis, basic drawings. The first goal was fulfilled without objections, the static assessment was delivered with minor objections, and the drawings were delivered with major objections.	

Aktivita a samostatnost při zpracování práce	A - výborně
<i>Posuďte, zda byl student během řešení aktivní, zda dodržoval dohodnuté termíny konzultací. Posuďte schopnost studenta samostatně tvůrčí práce.</i>	
Activity and independence of the student during works on the thesis: From the perspective of the supervisor, the system of theses is very confusing for foreign students of the stadium branch D and also is not properly explained to them throughout the curriculum. The demands are not counterbalanced with the level of knowledge or experience (drafting and static software) from their home states/universities and level of explanations and communication from the side of CTU. The proponent did his best to deal with a complex structure, completely new structural software and new task he was not used to. The proponent worked very hard in the diploma seminar and throughout the diploma project. He consulted the progress regularly and worked very hard to deal with the very complex structure. The will and effort has to be definitely judged in a positive way.	

Odborná úroveň	C - dobře
<i>Posuďte úroveň odbornosti závěrečné práce, využití znalostí získaných studiem a z odborné literatury, využití podkladů. Posuďte též schopnost studenta vnímat řešenou problematiku v širších souvislostech a aplikovat inženýrský přístup při řešení.</i>	
Technical level of the thesis: Respecting the obstacles mentioned in the previous paragraph, the technical level of the thesis is below the average of Czech students studying the branch K in their masters. But the static assessment and drawings are way better than the level of a bachelor's thesis. The state-of-the-art part is well written, the proponent tried his best to get familiar with the bridge and the boundary conditions. He designed a similar structure to the existing one but tried to deal with it his own way (the cross-section of the bridge was chosen to be much stiffer which later appeared to be the source of the issues to be dealt with). The static assessment part documents the proponent's struggle with the new software and a very complicated structural arrangement. The chosen arrangement would be challenging for every structural engineer.	

The will to check the outcomes by in-hand calculations are appreciated. The detailed construction sequence is well planned. The thesis presents clearly all the obstacles the proponent had to deal with. The drawings have an inappropriate level for a master's thesis. This is mainly caused by the lacking experience with the use of a drafting software and basic rules for drawings arrangement. Nevertheless, the proponent tied his best and fought bravely. Respecting this for all the parts of the thesis, the overall grade is C – good.

Formální a jazyková úroveň, srozumitelnost práce

C - dobře

Posudte správnost používání formálních zápisů obsažených v práci. Posudte typografickou a jazykovou stránku práce a její celkovou srozumitelnost

Formal and language level, comprehensiveness:

The language level is appropriate considering the fact that English is a foreign language for the student but both the supervisor. Sometimes the use of long sentences has impact on the comprehensiveness.

Výběr zdrojů, korektnost citací

C - dobře

Vyjádřete se k aktivitě studenta při získávání a využívání studijních materiálů k řešení závěrečné práce. Posudte výběr pramenů. Ověřte, zda nedošlo k porušení citační etiky a zda jsou bibliografické citace úplné a v souladu s citačními zvyklostmi.

References:

The usage of references is appropriate for this level of thesis. The reference system denotation system is a bit confusing.

Další komentáře a hodnocení

Further comments:

During the defense of the thesis, the supervisor recommends following questions to be answered:

- 1) The shear assessment is missing. How would you assess the shear resistance of the analyzed structure? Please explain the methodology.
- 2) How did the course of internal forces during the construction sequence influence the design of the pre-stressing?

III. CELKOVÉ HODNOCENÍ A NÁVRH KLASIFIKACE

Shrňte aspekty závěrečné práce, které nejvíce ovlivnily Vaše celkové hodnocení.

Conclusion:

Considering all the facts listed, the supervisor has to acknowledge the effort of the proponent and respect the obstacles he faced dealing with the very challenging structure.

The proponent did his best to deliver the best he could in the time he had.

The proponent dealt with a complex structure, new software, new standards (the proponent is familiar with AASHTO but decided to use EUROCODES) and missing English written literature.

Předloženou závěrečnou práci hodnotím klasifikačním stupněm **C - dobře**.

Datum: 1.2.2018

Podpis:

