Organizatori

SVEUČILIŠTE U ZAGREBU
GRAĐEVINSKI FAKULTET
UNIVERSITY OF ZAGREB
FACULTY OF CIVIL ENGINEERING

SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

Hrvatska komora inženjera građevinarstva

WEBINAR

"SAVJETOVANJE 4: OBNOVA ZAGREBA NAKON POTRESA – ZAGREBU OD SPLITA"

Glavni pokrovitelj

Wienerberger

PRIMJERI POSLJEDICA DJELOVANJA POTRESA NA OBJEKTE KULTURNE BAŠTINE

Prof. dr. sc. Blaž Gotovac
Dr.sc. Nives Brajčić Kurbaša
Katedra za tehničku mehaniku,
Sveučilište u Splitu, FGAG
Split, Hrvatska

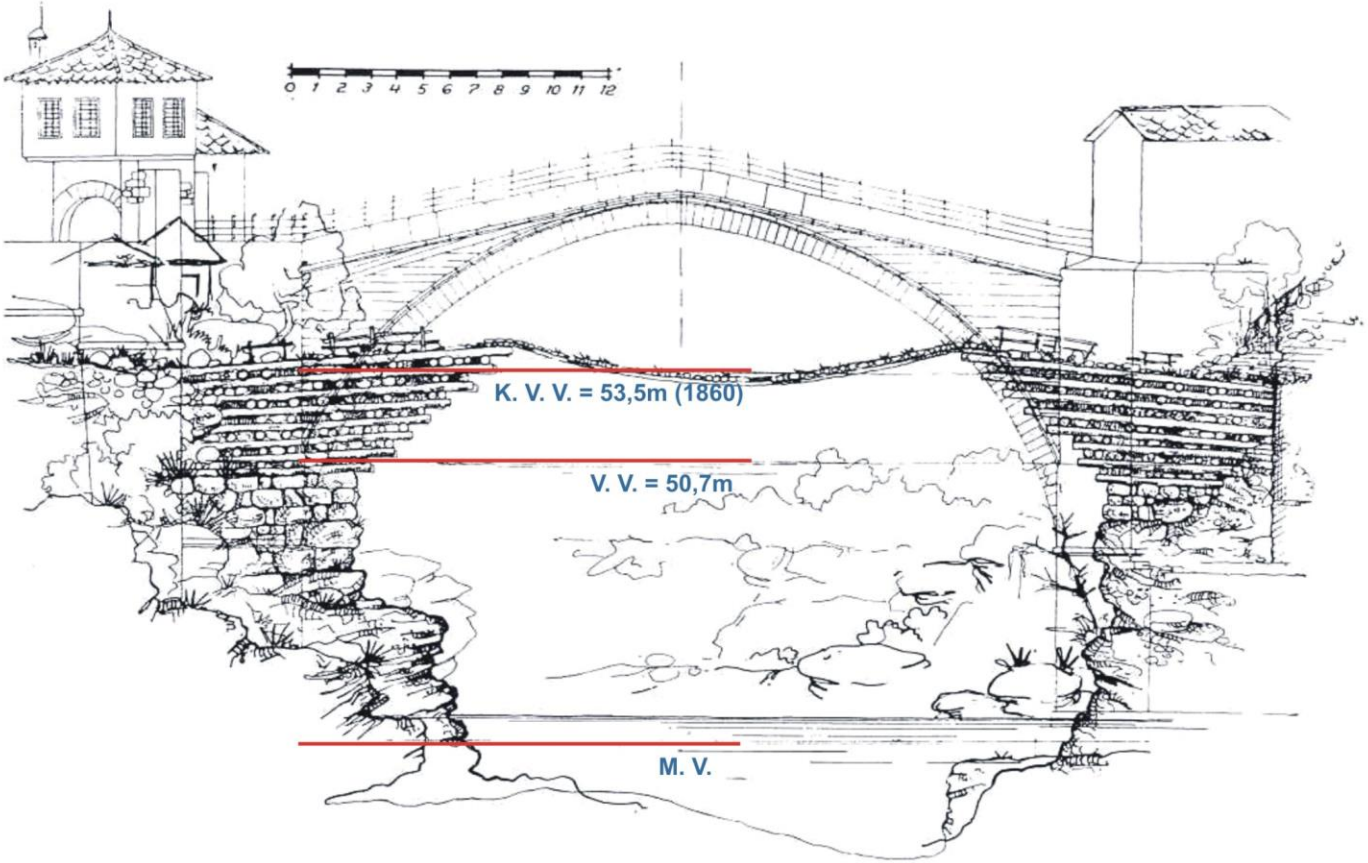
SADRŽAJ

- NOVOIZGRAĐENI STARI MOST U MOSTARU

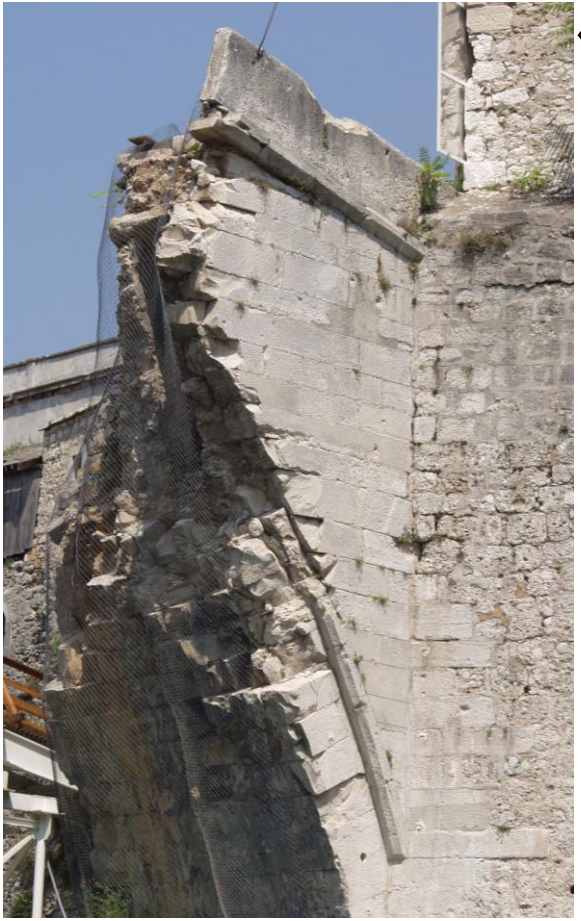
- ATRIJ KNEŽEVA DVORA U DUBROVNIKU

- KAŠTEL KAMERLENGO I TVRĐAVA SV. MARKA U TROGIRU

Novoizgrađeni Stari most u Mostaru

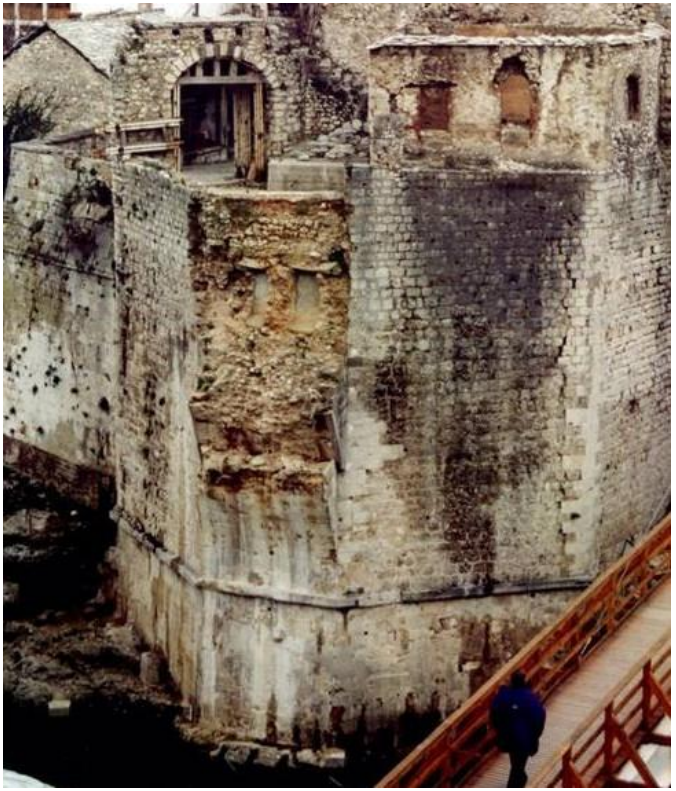


Skica Prof. Milana Gojkovića: konstrukcija mosta

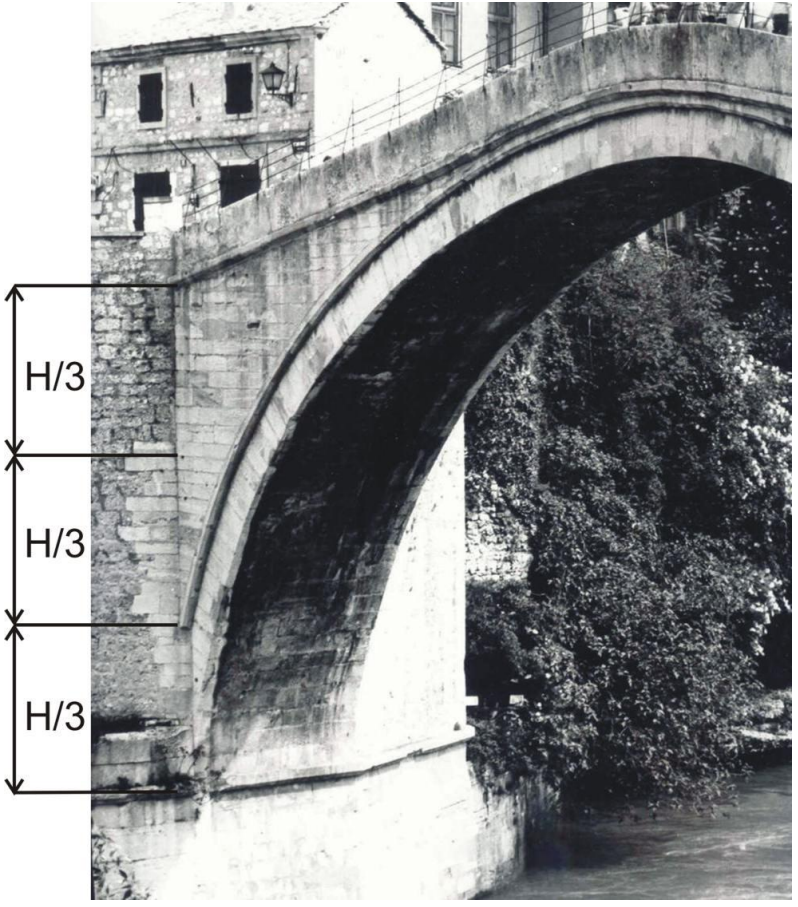


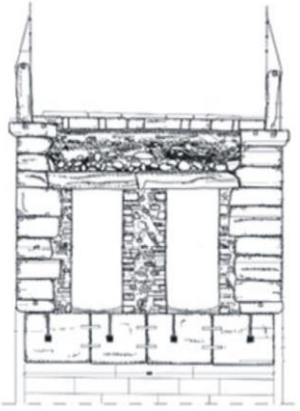
Lijeva obala

Desna obala

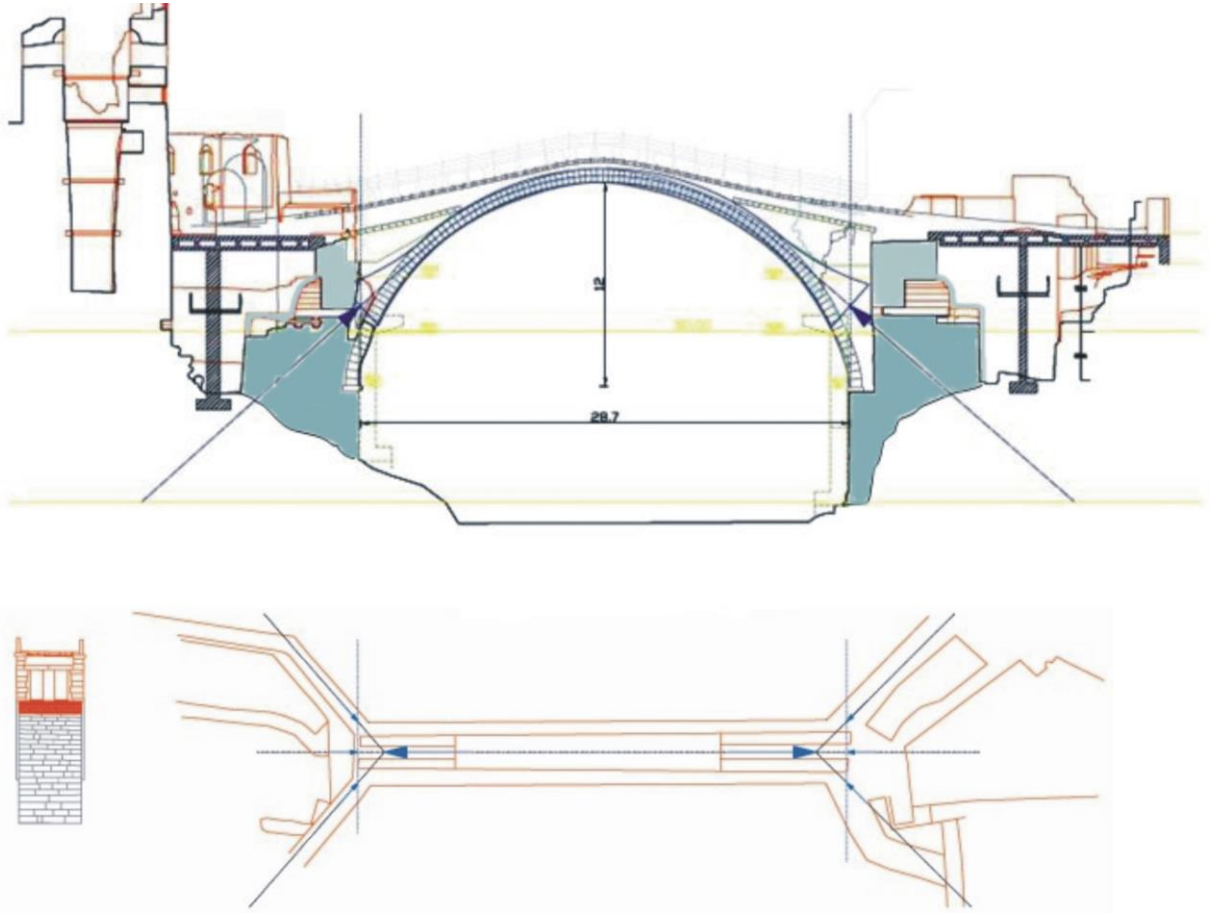


Zatečeno stanje: lijevi i desni obalni zid

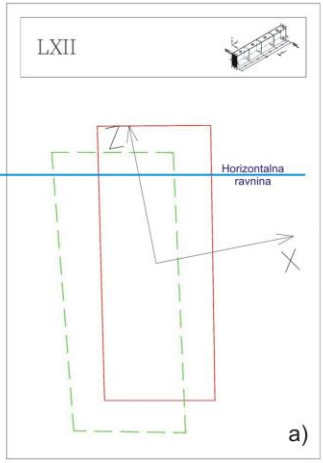




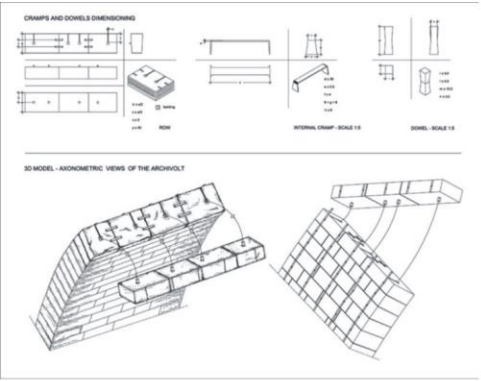
Oslonac luka Starog mosta na lijevoj obali

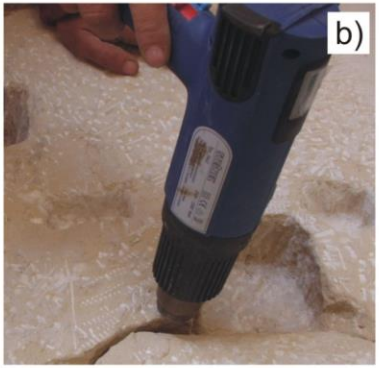


Statička shema konstrukcije Mosta



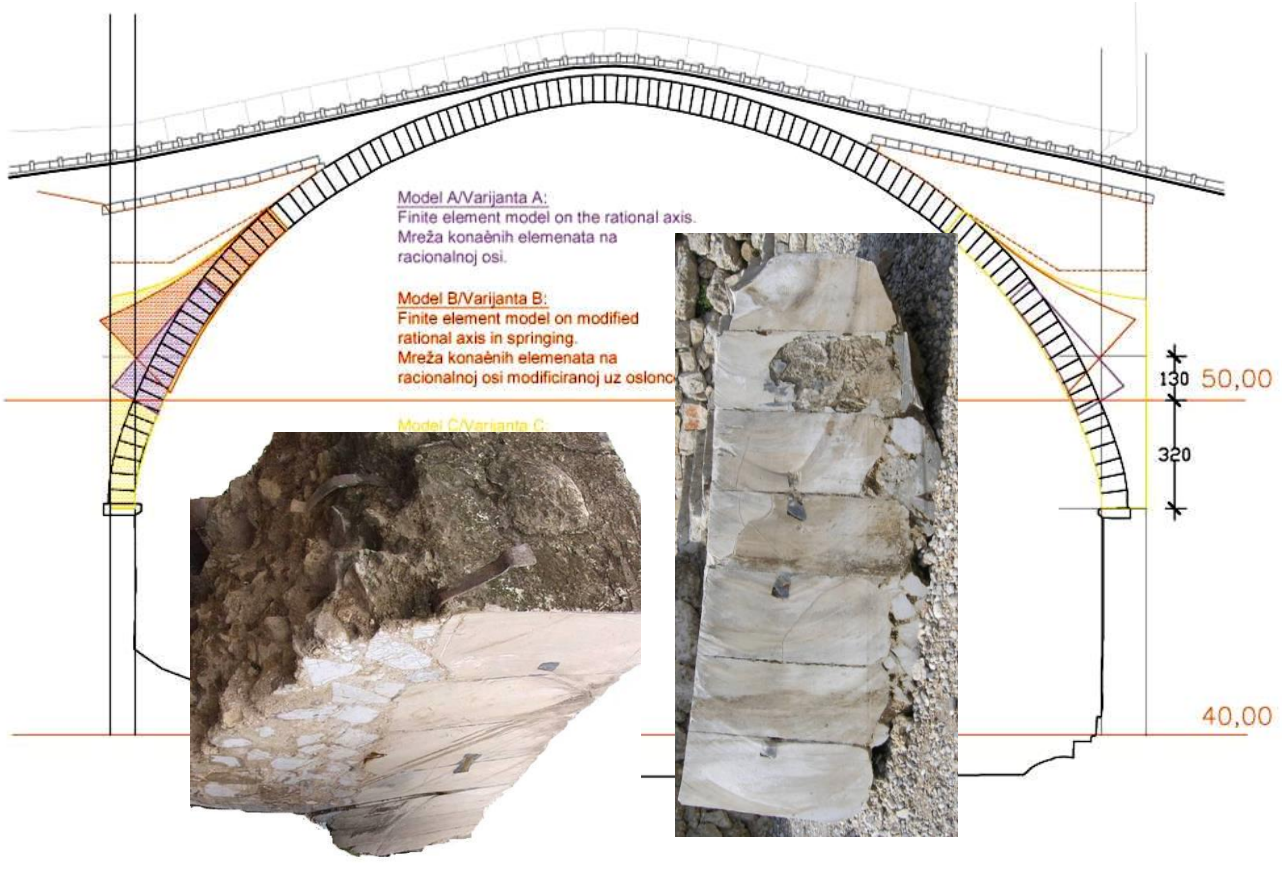
Klesanje kamenih blokova



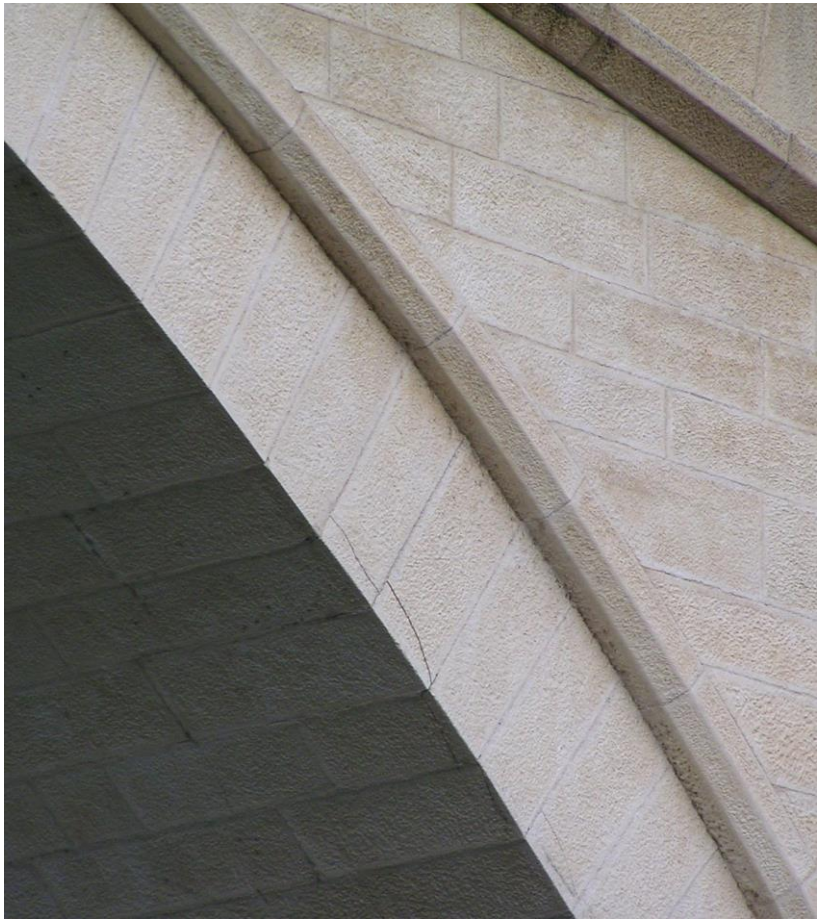


Oprema za pripremu i ugradnju olova

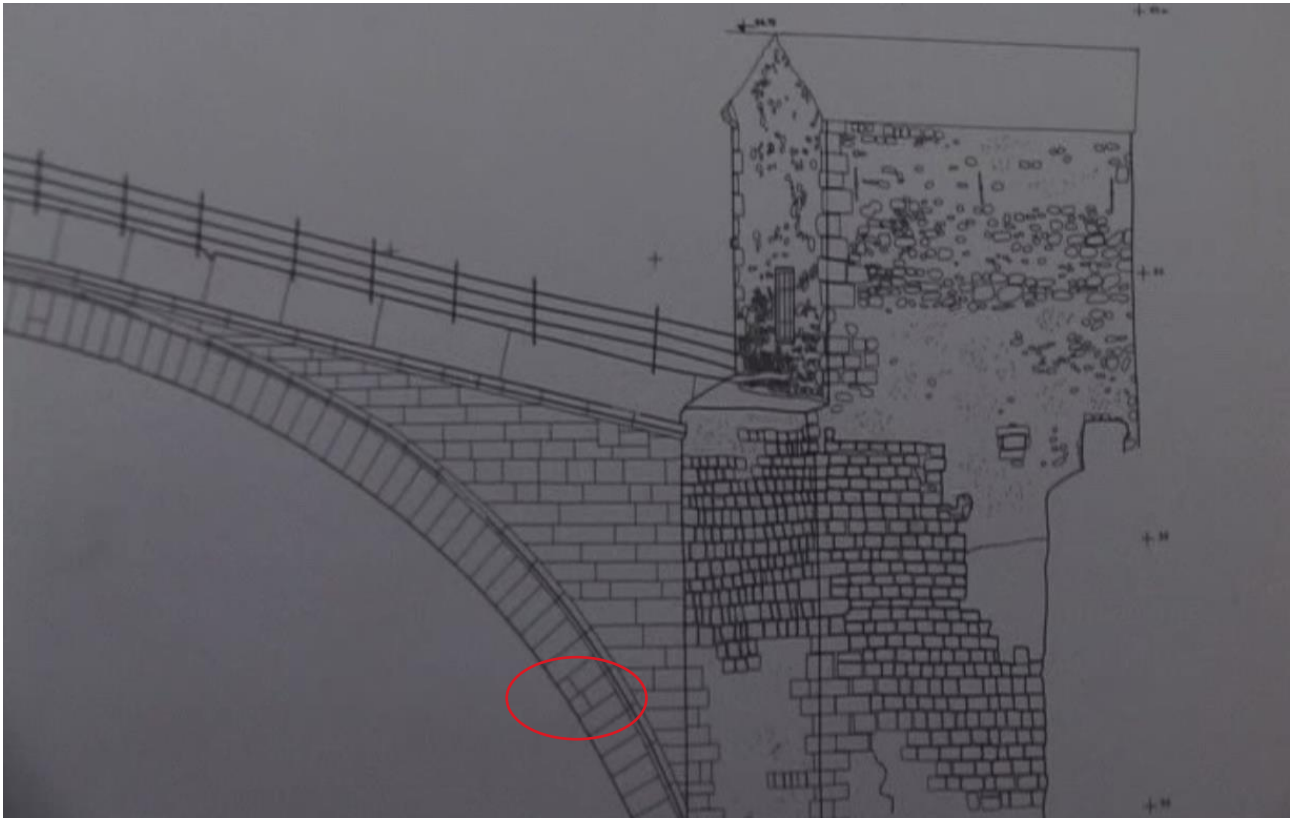
Ugradnja zaglavnog reda u luku Mosta



Numerička simulacija ravninskog modela svoda

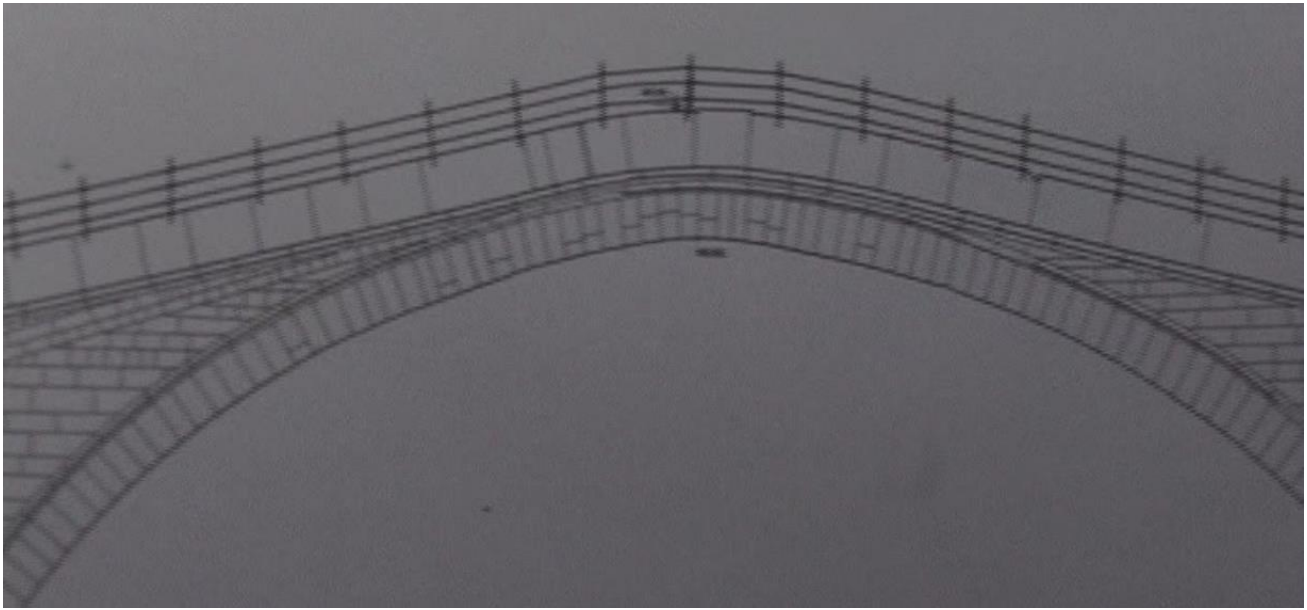


Pukotina na lijevoj obali novoizgrađenog Starog mosta

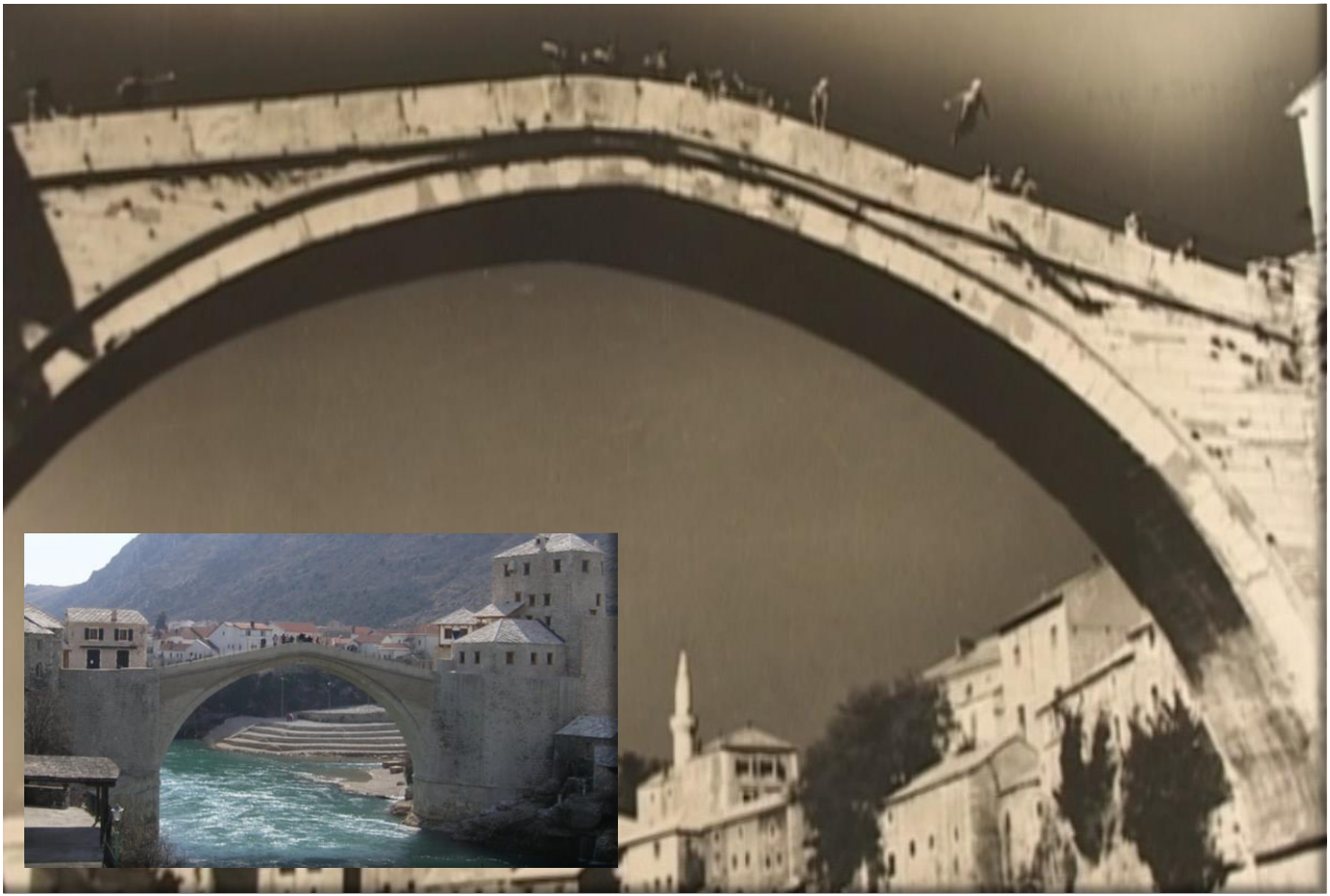


Fotogrametrijska snimka Starog mosta (Geodetski fakultet u Zagrebu): pukotine na lijevoj peti luka

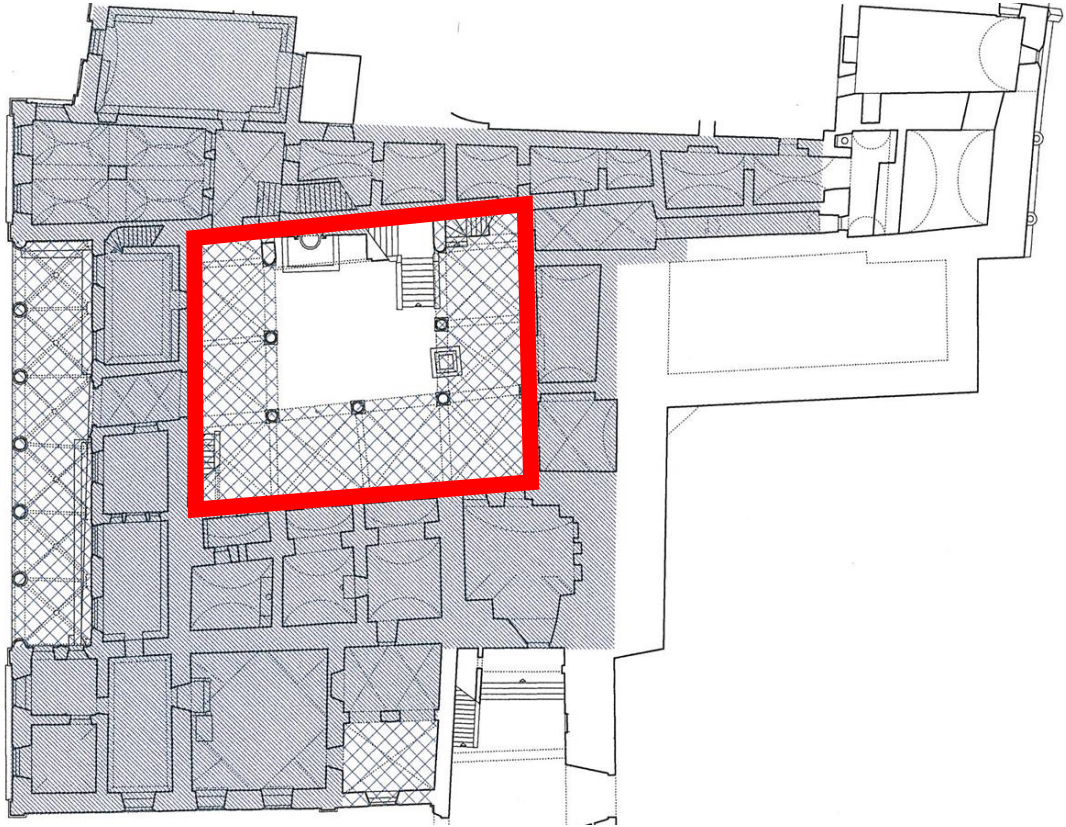
Pukotina na desnoj obali novoizgrađenog Starog mosta



Fotogrametrijska snimka Starog mosta (Geodetski fakultet u Zagrebu): pukotine u tjemenu luka

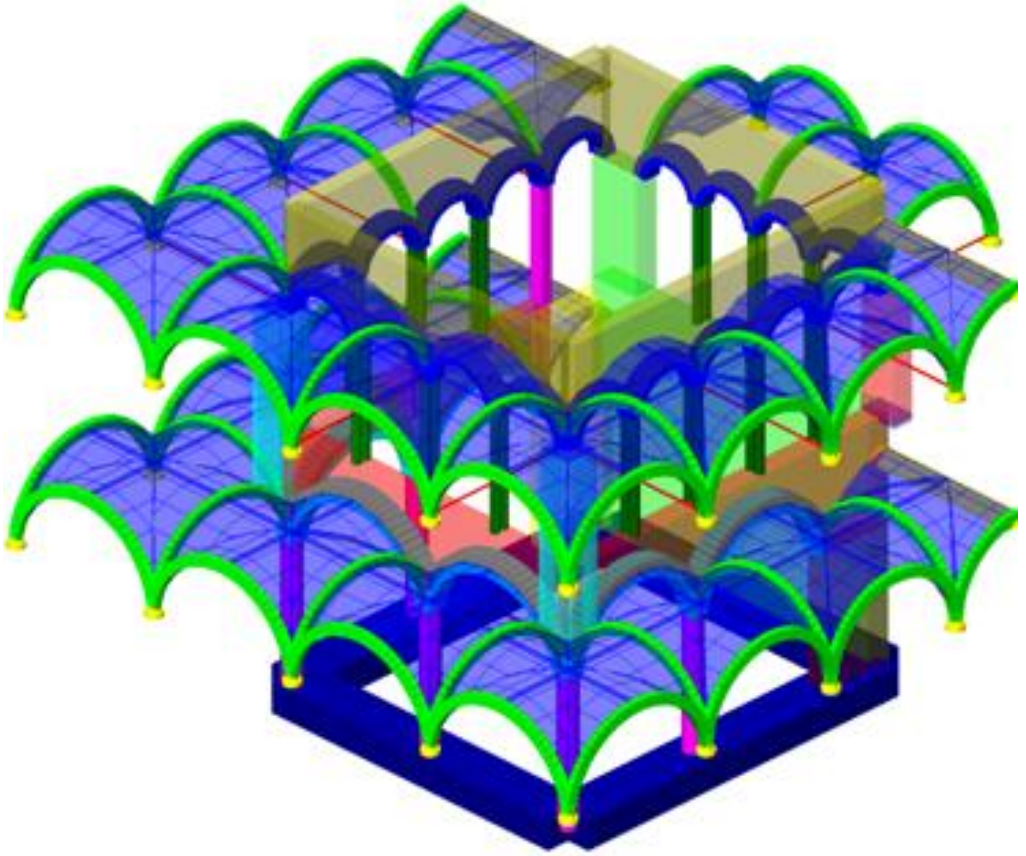


Knežev dvor u Dubrovniku

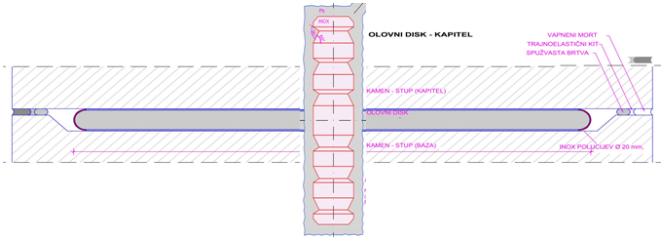


Opterećenje konstrukcije atrija Kneževa dvora

Konstrukcijska sanacija atrija Kneževa dvora

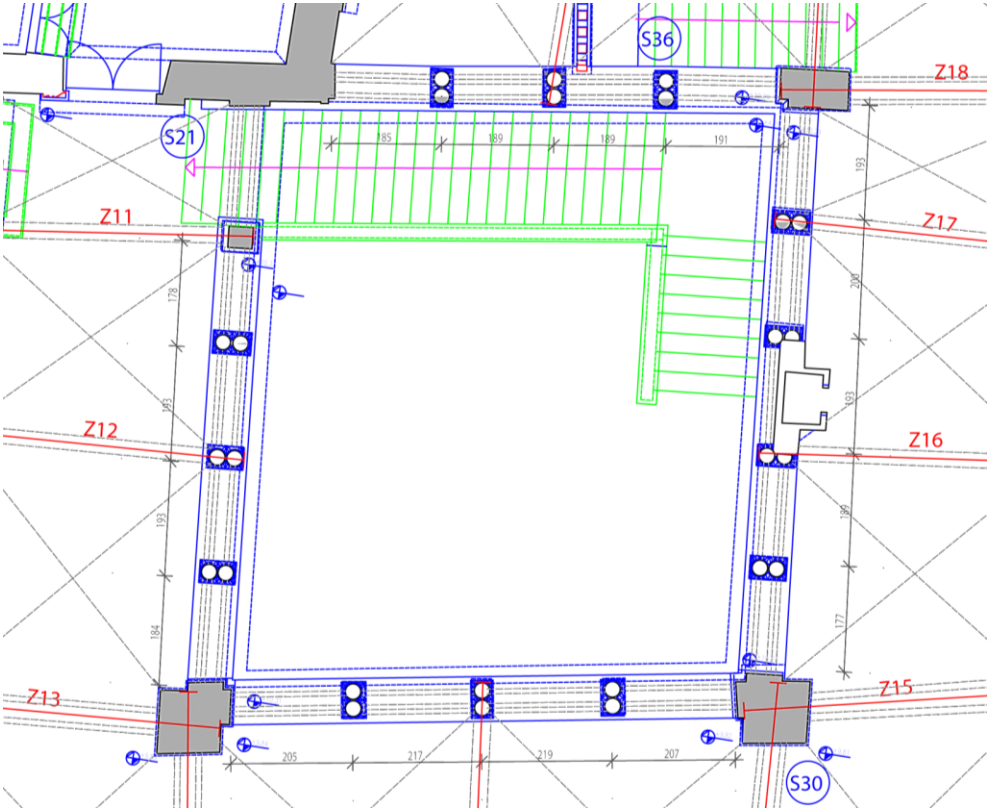


3D Proračunski model konstrukcije atrija

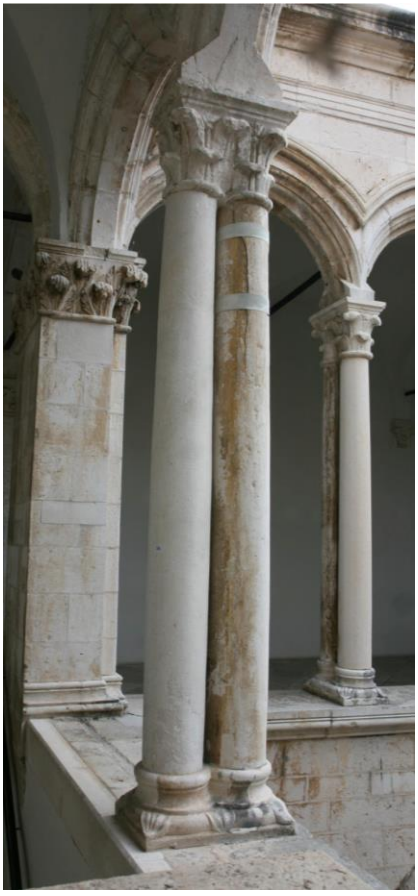


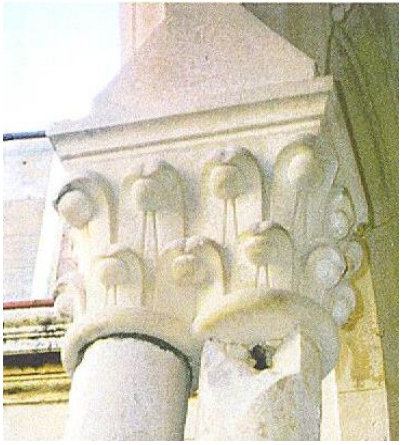
Baza stupa: stanje nakon demontaže (lijevo), stanje prije ugradnje (desno)

Kapitel stupa: stanje prije završne faze sanacije

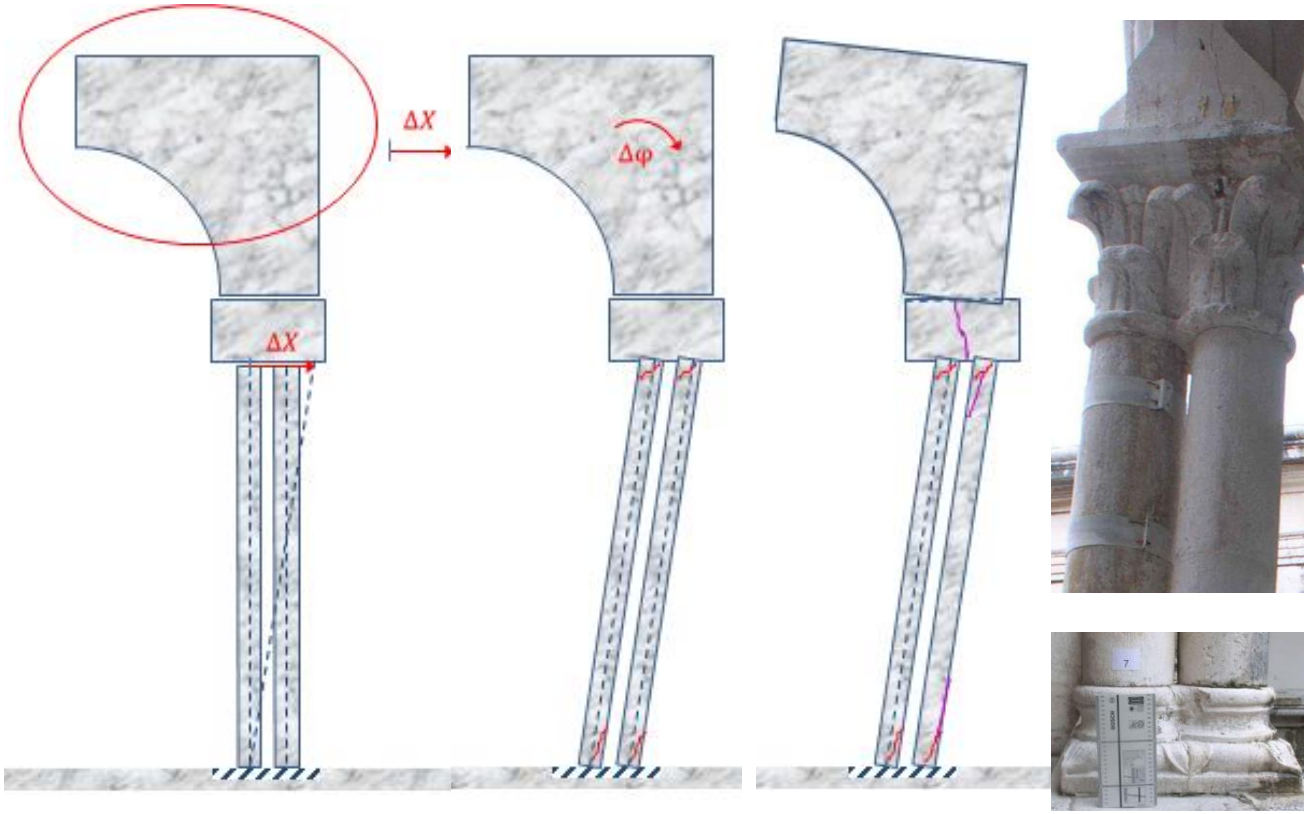


Parovi stupova na katu

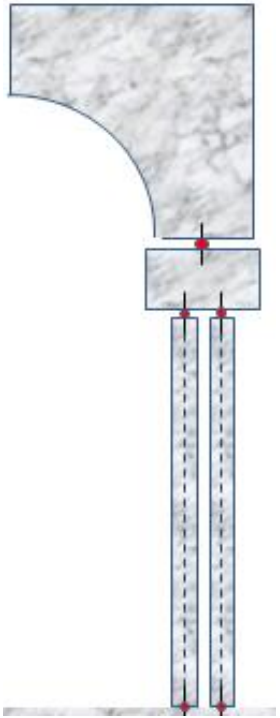


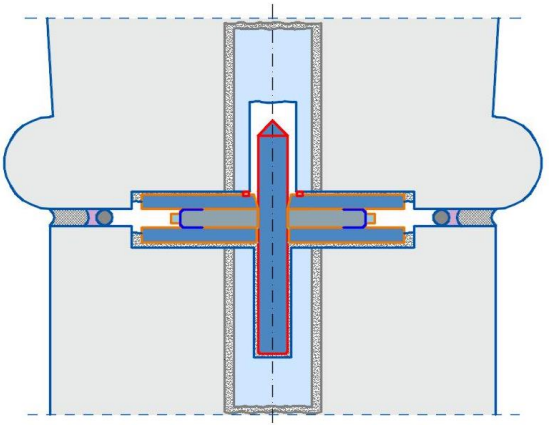


Oštećenja stupova na katu



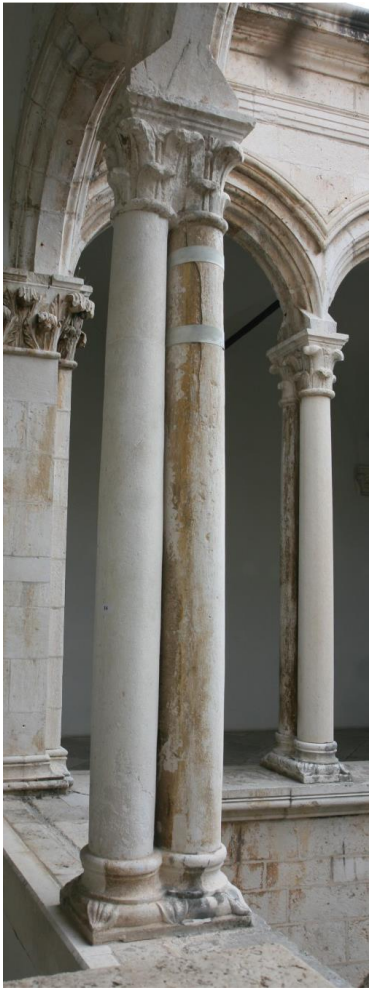
Prikaz faza pomaka stupova

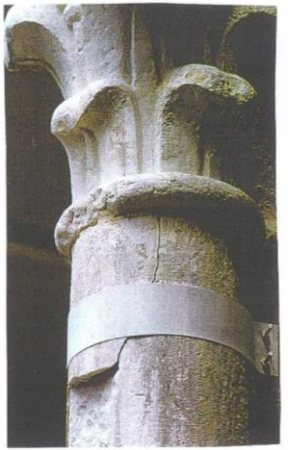




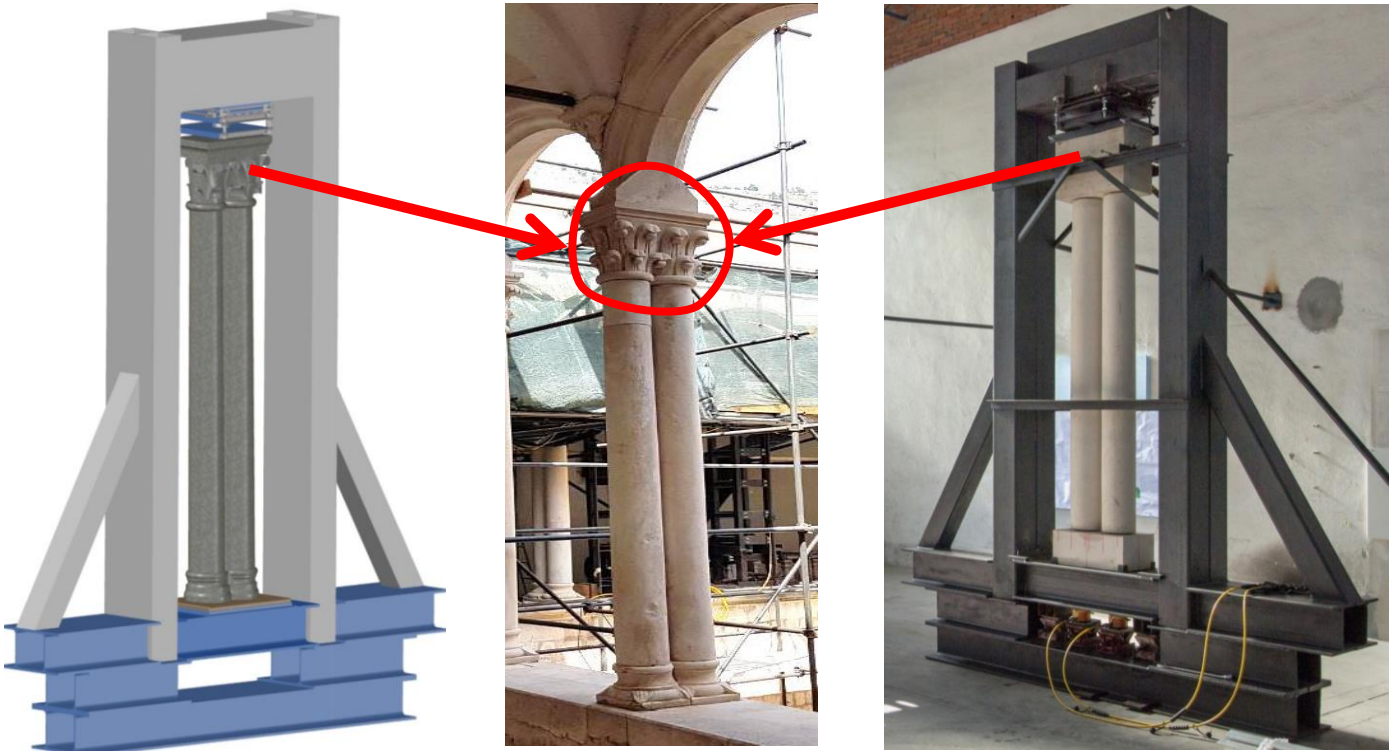
Prostorni zglobni ležajevi – veza stupova s bazom i kapitelom, linijski zglobni ležaj između kapitela i čvorišta lukova

Modelsko ispitivanje stupova prizemlja i kata

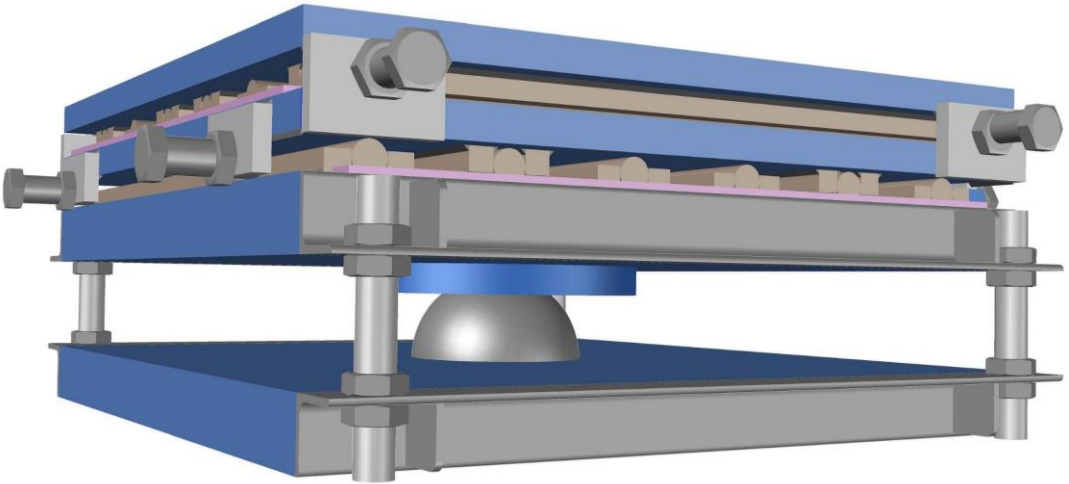




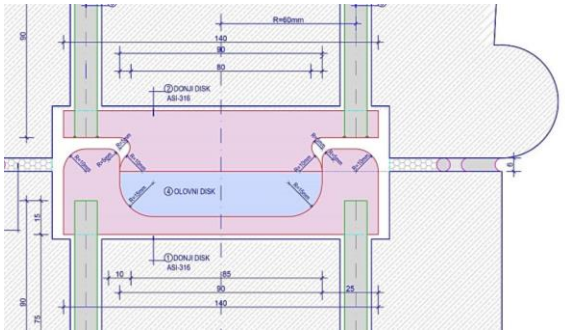
Parovi stupova na pročeljima prvog kata

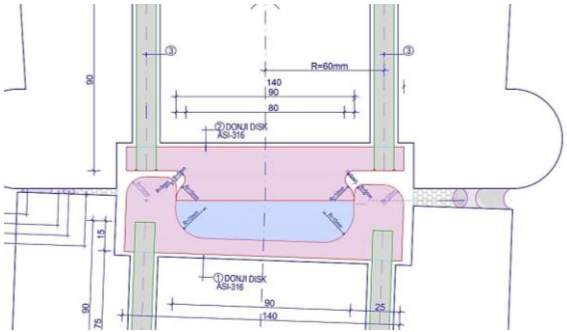


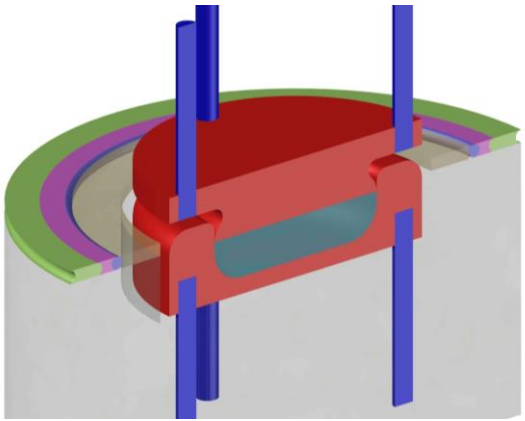
Parovi stupova na pročeljima prvog kata: digitalni (lijevo), originalni (sredina) i fizikalni (desno) model



Generator pomaka



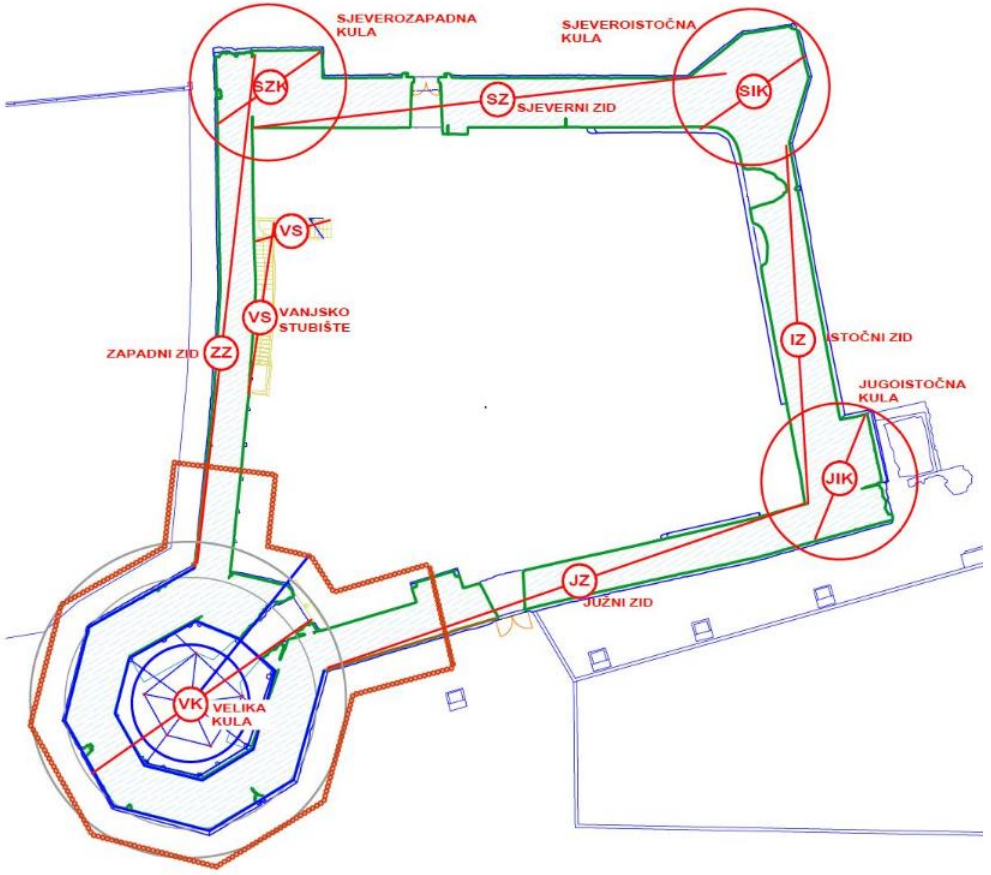




Prostorni zglobni oslonac

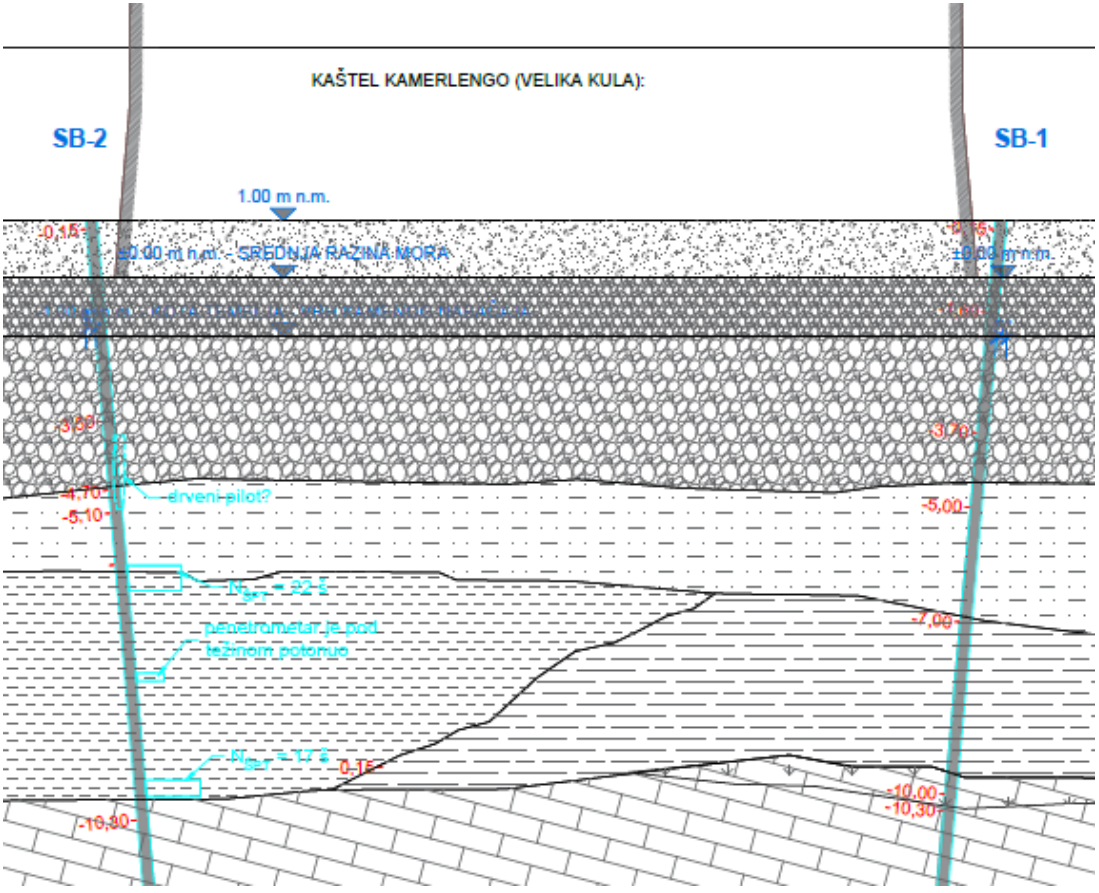
Kaštel Kamerlengo – Trogir

Panoramski prikaz kompleksa kaštela Kamerlengo

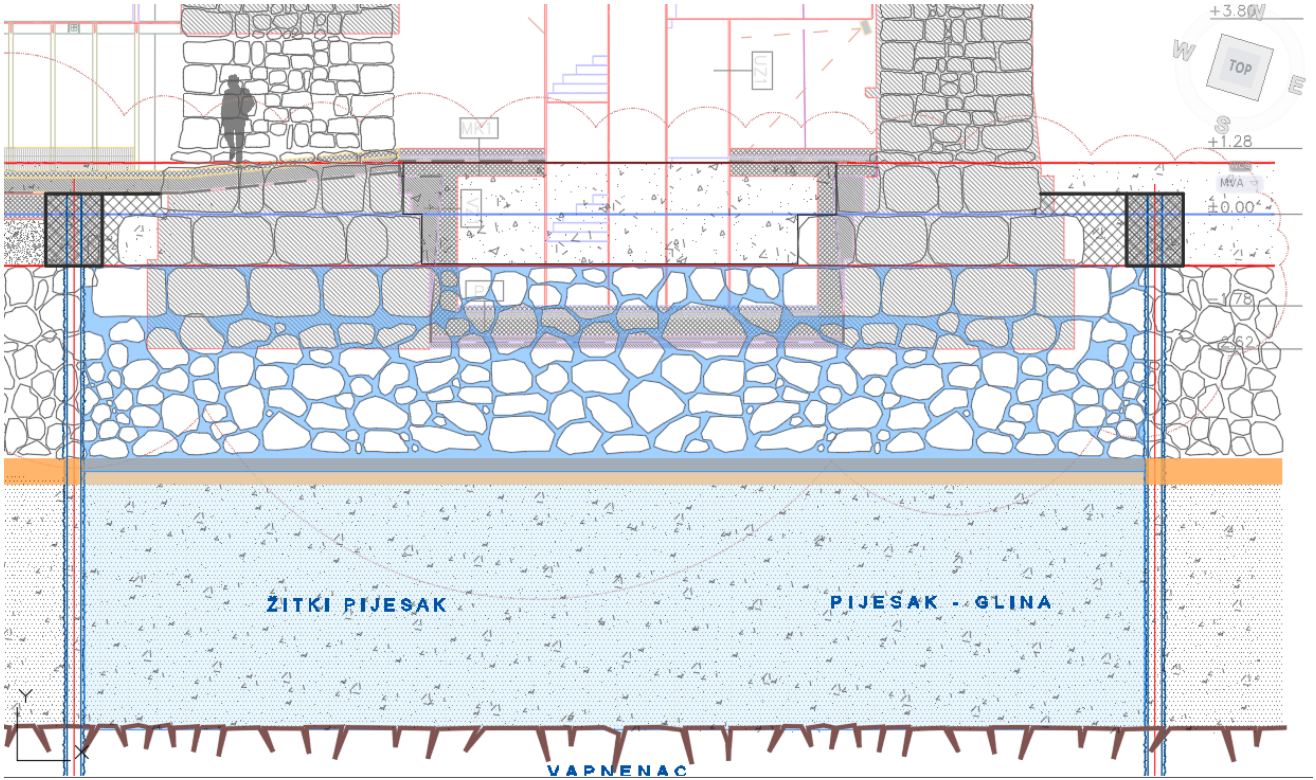


Plan statičkih pozicija konstrukcije objekta kaštela Kamerlengo

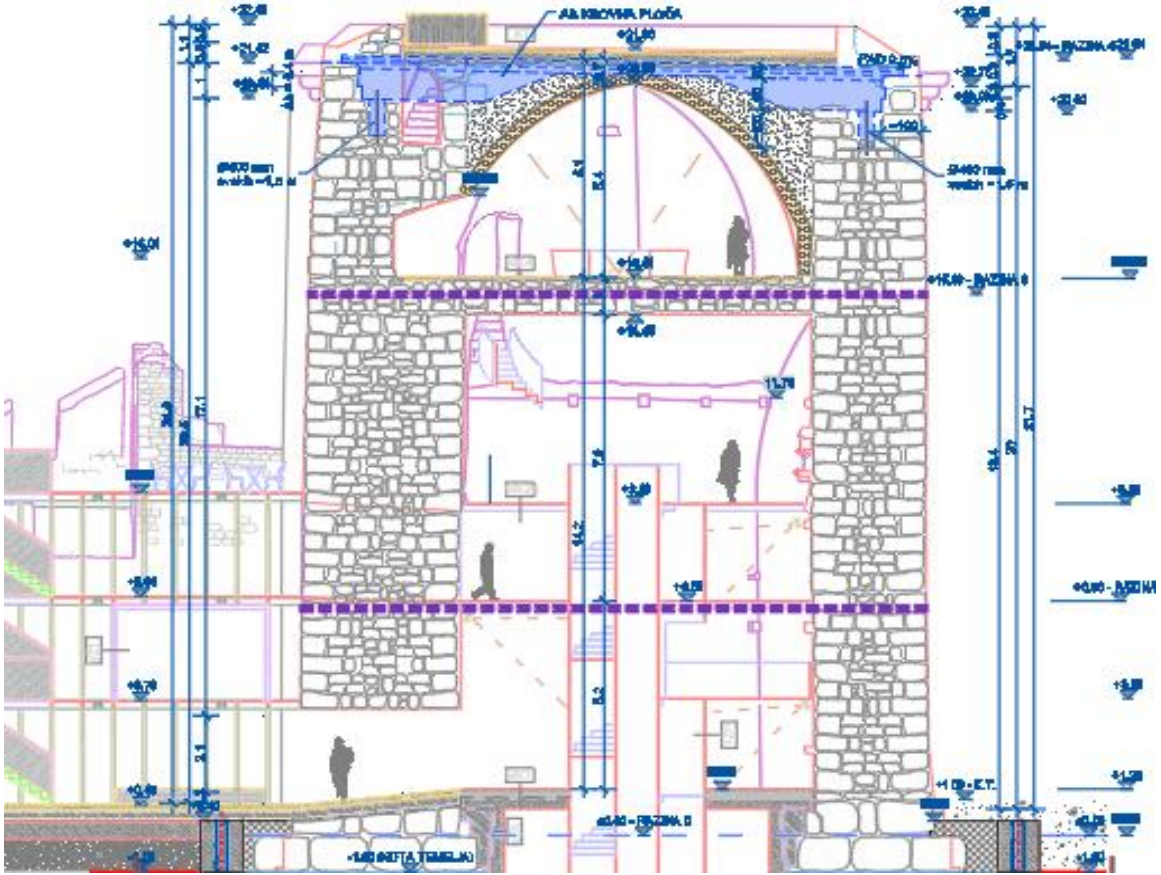
Zatečeno stanje južnog dijela velike kule



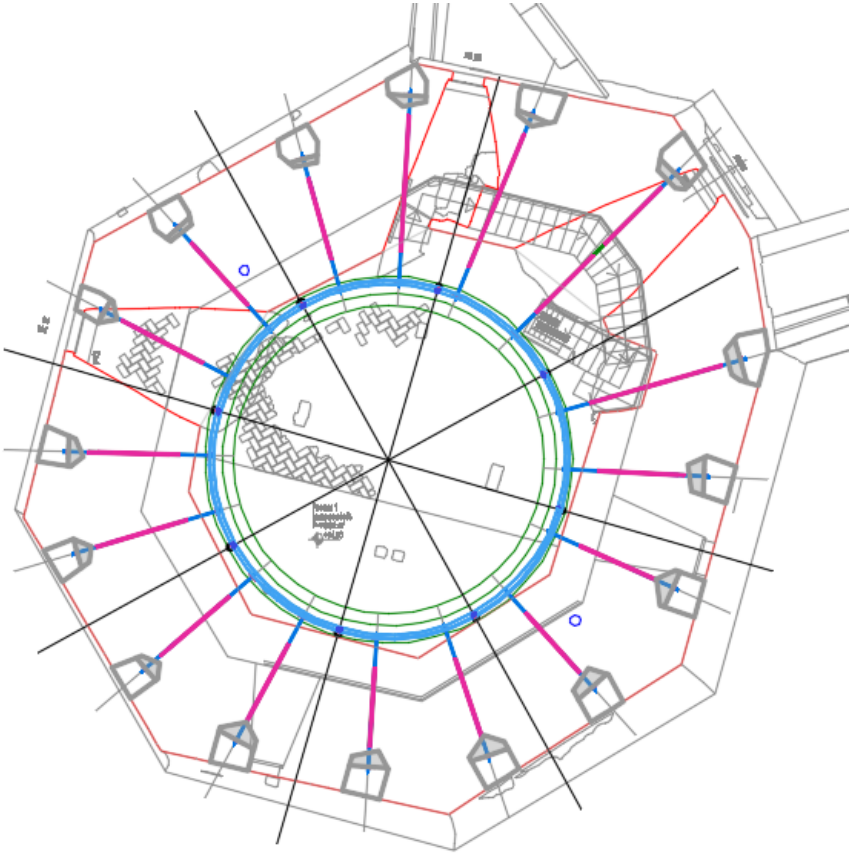
Geotehnički profil ispod velike kule



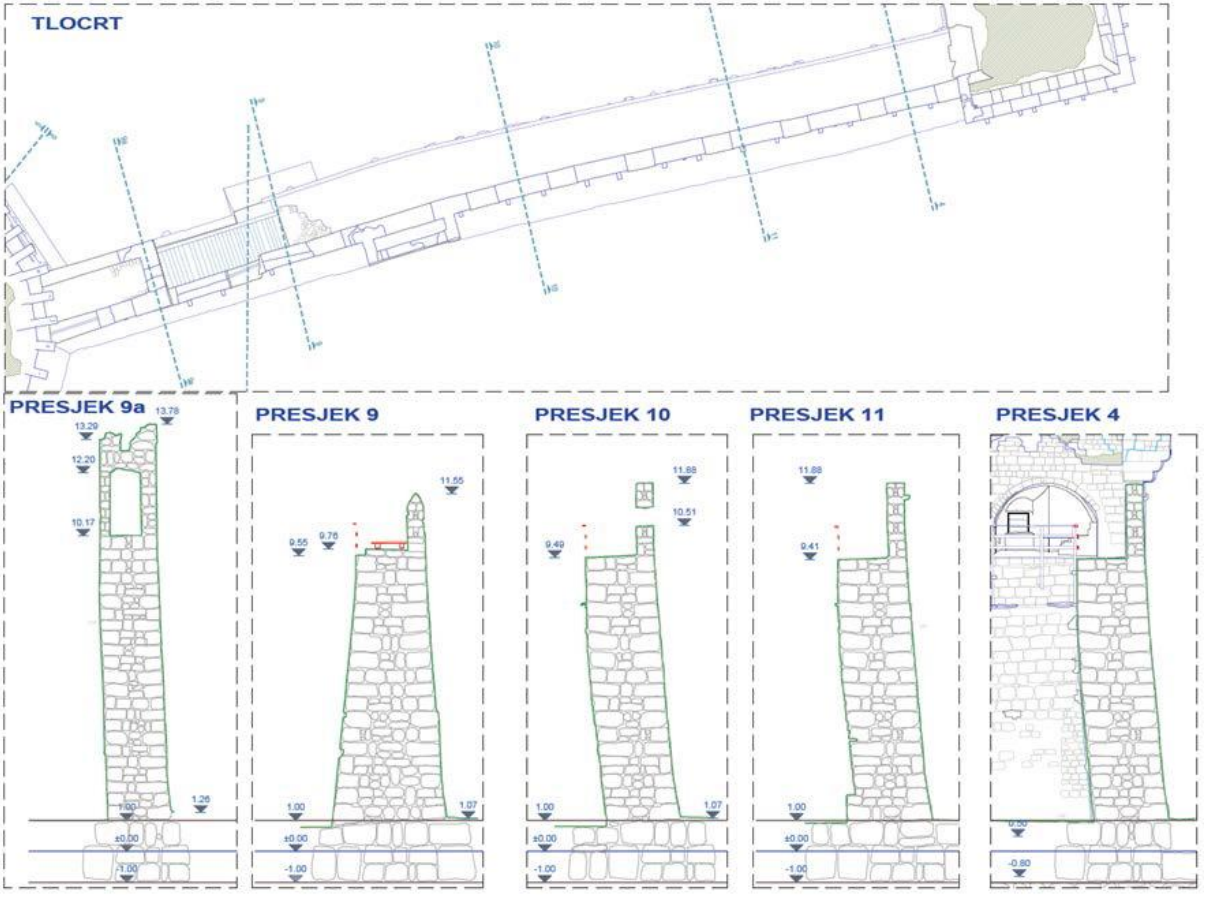
Koncepcija sanacije temeljnog tla ispod velike kule



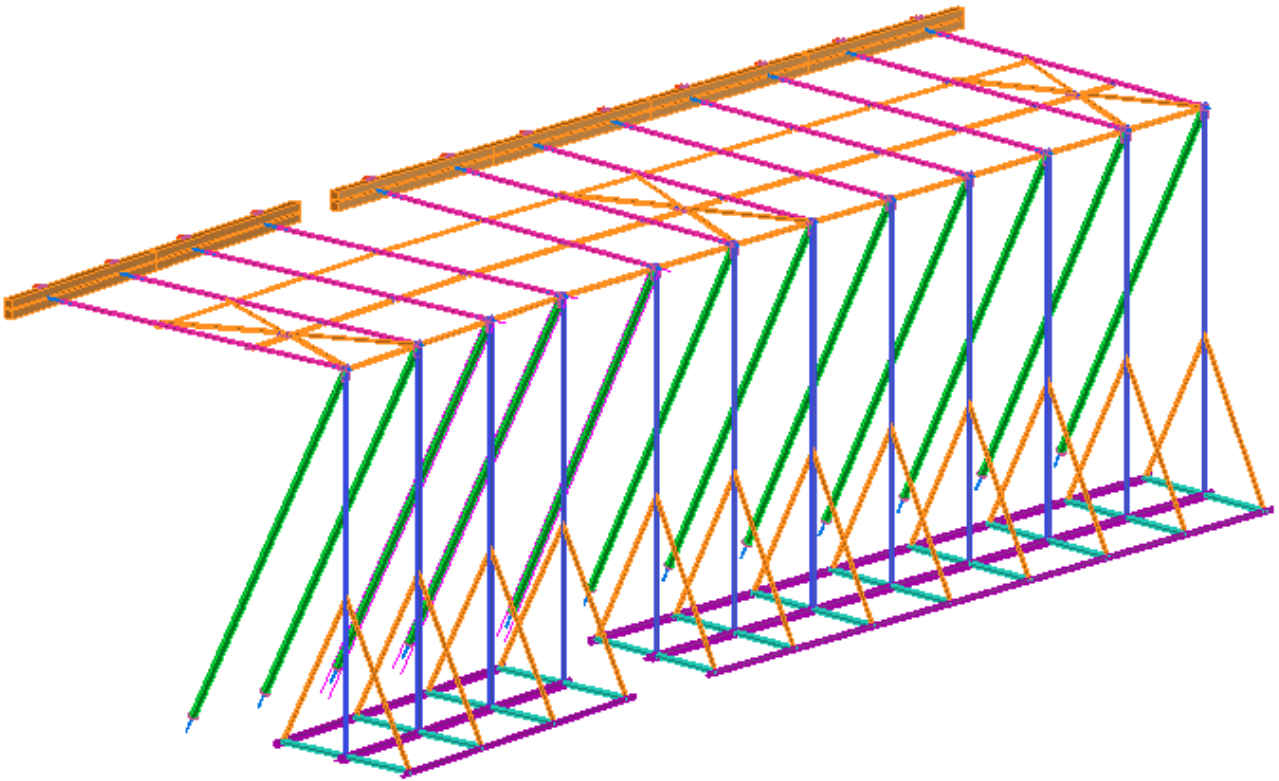
Koncepcija sanacije kontrukcije velike kule



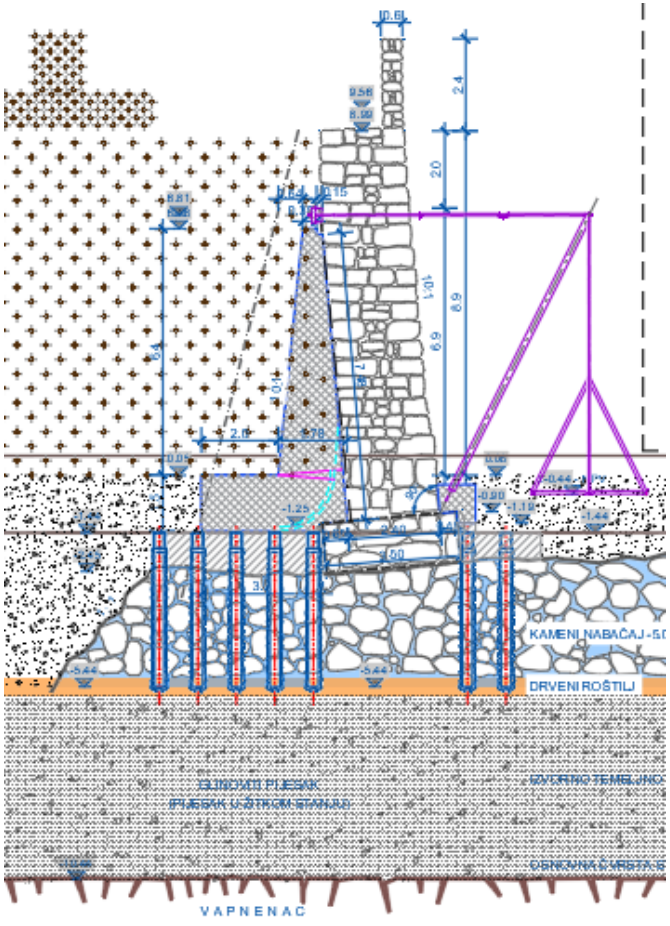
Tlocrtna dispozicija čeličnog prstena i sidrenih mjesta na vanjskom pročelju kule



Karakteristični presjeci južnog zida

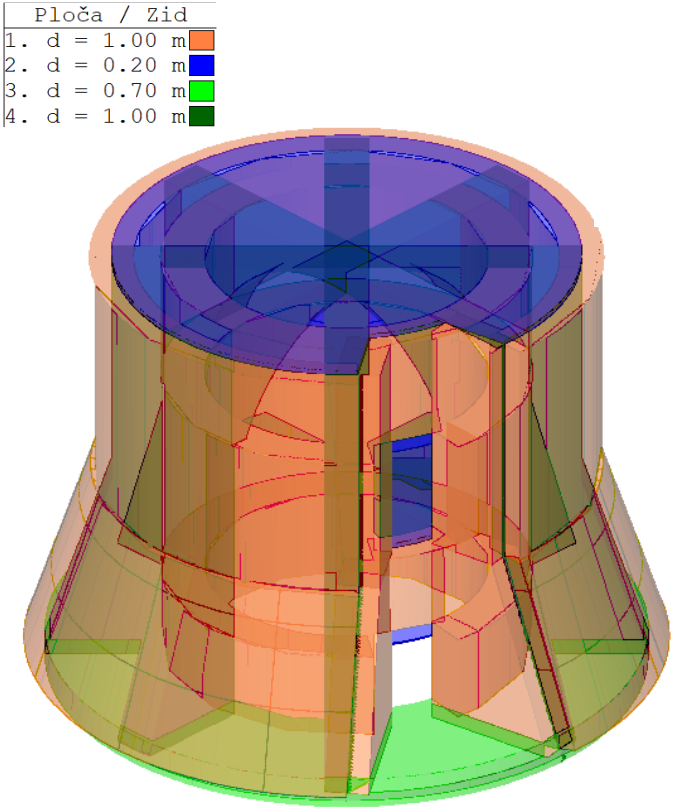


Aksonometrijski prikaz čelične konstrukcije za privremeno osiguranje stabilnosti južnog zida



Prikaz načina sanacije južnog zida

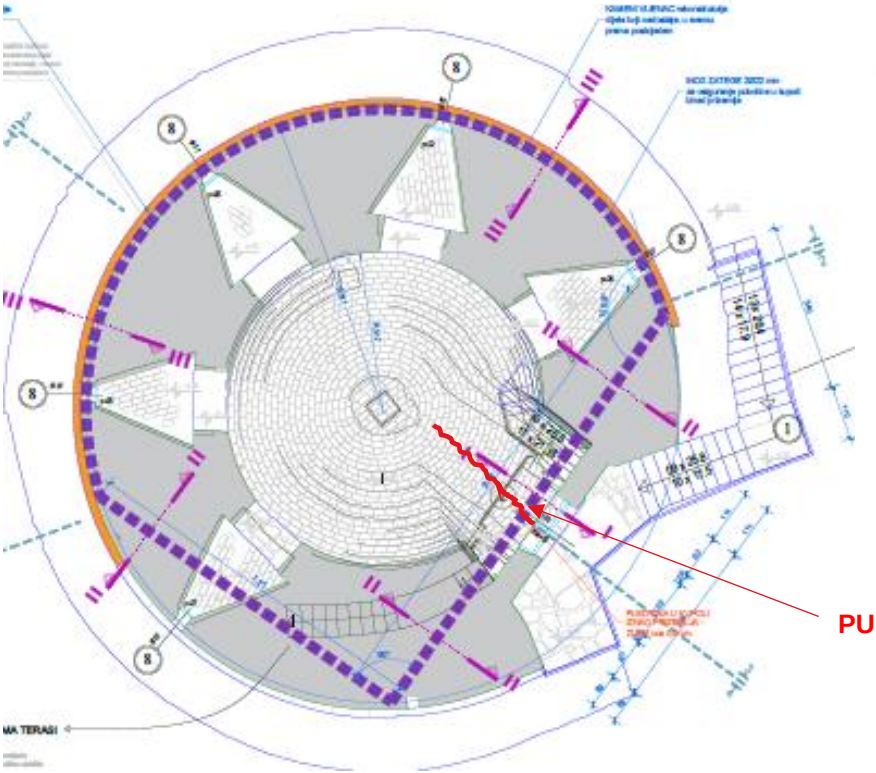
Istočni (lijevo) i sjeverni (desno) dio pročelja kule Sv. Marko



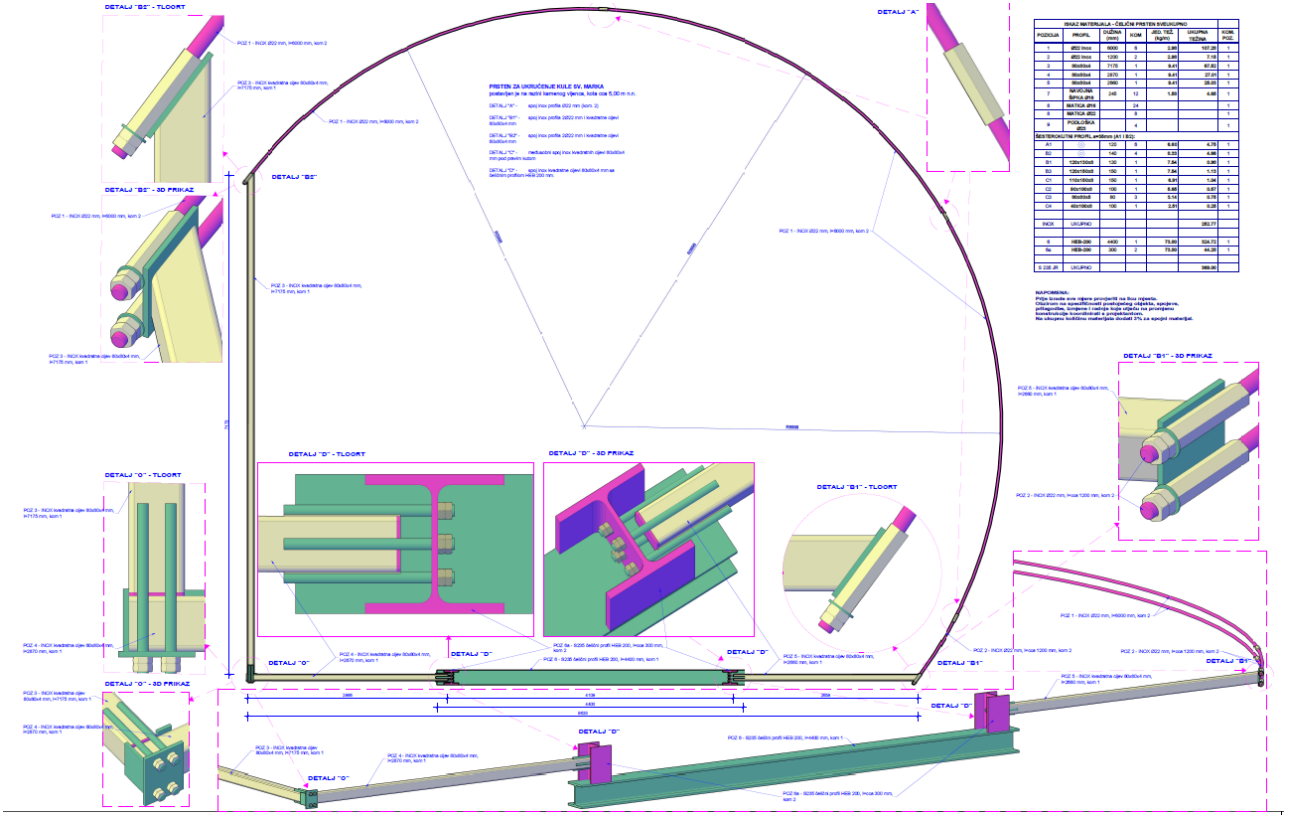
Modalna analiza

Periodi osciliranja konstrukcije		
No	T [s]	f [Hz]
1	0.0282	35.4360
2	0.0265	37.6832
3	0.0177	56.5724

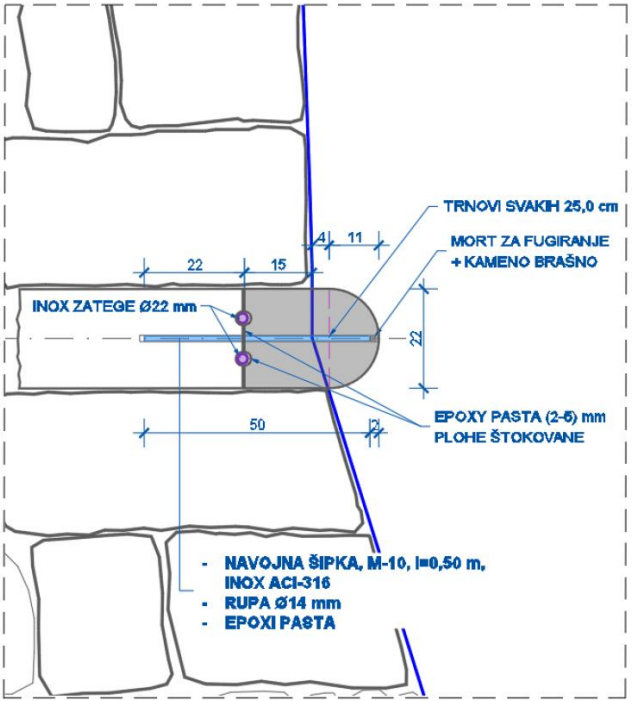
Numerički 3D model konstrukcije kule Sv. Marka



Čelični prsten na razini poda prvog kata



Detalji čeličnog prstena



Princip ugradnje čeličnih prstenova u području kamenog vijenca i novi dio vijenca



HVALA NA POZORNOSTI