F. EXAMPLE PROJECTS	20. EXAMPLE PROJECT KEY NUMBER				
QUALIFI	0				
(Present as many projects as r			9		
Complete one Section F for each project.)					
21. TITLE AND LOCATION (City and State)		22. YEAR COMPLETED			
Ghatghar Hydroelectric Project		PROFESSIONAL SERVICES	CONSTRUCTION	CONSTRUCTION (If applicable)	
•		2002	On-	On-going	
State of Maharashtra, India				66	
23. PROJECT OWNER'S INFORMATION					
a. PROJECT OWNER	c. POINT OF CONTACT NAME		c. POINT OF CONTACT	TELEPHONE NUMBER	
Government of Maharashtra	V.V. Gaikwad		011-9120-6121844		

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost.)

## PROJECT DESCRIPTION

The Ghatghar Hydroelectric project, located east of Mumbai, consist of the first three RCC dams to be built in India. The upper and saddle dams for this pumped storage project are quite low at 14.5 and 11.5 m (48 and 38 ft) high, respectively. However, the main lower dam will be 84 m (276 ft) high and requires an RCC volume of 600,000 m<sup>3</sup> (785,000 cy). Grout-enriched RCC (GERCC) faces have or will be used for all three dams.

## SERVICES PROVIDED

A number of engineering services were provided to the contractor, Patel Engineering, during two visits to India by Ken Hansen. They included a review of RCC mixture proportioning studies using a poor quality locally available fly ash, aiding with on-site quality control procedures, a review of constructability, and providing cost-saving suggestions, including use of grout-enriched RCC faces (GERCC).

## **PROJECT HIGHLIGHTS**

- India's first three RCC dams, including one 84 m (276 ft) high
- Use of locally available poor quality fly ash in RCC
- GERCC upstream and downstream faces

## **PROJECT COSTS**

• Firm's Amount: \$47,400 (fee)



RCC Test Section – Cut Block



RCC Test Section - GERCC

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT					
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE		
a.	Kenneth D. Hansen, P.E.	Greenwood Village, Colorado	Independent RCC expert consultant		