Overview of Civil works













Presentation Outline

> Works at IAO, Hanle
> Works at IIA, Bangalore
> Works at CREST
> Works at VBO, Kavalur
> Works at IIA, Kodaikanal

IAO, Hanle

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HAGAR Structure
Caribou Enclosure
Solar Power Plants
Vaccum Coating Plant
Hanle House

Construction of HAGAR Structure

Key Features

- 6 nos. Peripheral Structures and One Central Structure
- Octagonal Shape with 6m Inscribed Dia
- 3.4 m Height
- Designed to Take Telescope Weight of 8 tons
- Space for control station is accommodated inside the structure
- Vibration isolation is considered

Started in May 2005 and to be Completed by August 2006



Birds Eye view of HAGAR Structure



Construction Stages





Completed Structure



Construction of Caribou Enclosure

Key Features

- RCC Framed structure with Ladakhi Brick Infill walls
- Laboratory of size 4.3m x 6.6m
- 650mm Wall thickness sandwiched with Thermocol,

Floor Insulated with Saw dust and Roof with Mud
 Passive Heating Techniques with Trombe wall
 Started in May 2005 and Completed in August 2005



Completed Structure





Trombe Wall

Solar Power Plant





•Well Insulated Battery Room

 Panel Supporting Structure Specially Designed For High Wind Loads of wind speed 55m per sec

Started in May 2005 and Completed in August 2005







Vaccum Coating Plant



Key Features

- RCC Framed structure with Ladakhi Brick Infill walls
- Rectangular Shape of size 10m x 21m, 6.3 m Height
- Workshop at Cellar
- Aluminizing Plant at Ground Floor

Started in May 2002 and Completed in August 2004

Hanle House



Key Features

- RCC Framed structure with Ladakhi Brick Infill walls
- 9 Bed Rooms, Library, Dining Hall, Kitchen
 Started in May 2000 and Completed in August 2002



IIA, Bangalore

"Bhaskara" Science Center Complex (Work Started) Power House Parking Facility Laying of Sanitary LINE Topographic Survey of entire Campus with total station

BHASKARA

Key Features

- Plot Dimension 80 Feet x 120 Feet
- Total Built-up Area 20000 Sqft
- No. of Floors-6, Cellar, Ground, Mezzanine, First, Second and Third Floor

Started in April 2006 and Scheduled to Complete in April 2007

BHASKARA

2.43





BHASKARA





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Laying of Sanitary LINE





Laying of Sanitary LINE





Clogged Sewer with Fibrous Roots

Proposed Hume Pipes in Place of Stoneware Pipes



Topographical Map of IIA, Bangalore Using Total Station



trees, Plants along with levels

CREST, IIA

Prototype HAGAR
Toilet Annexure for Canteen Building
Topographic Survey of entire Campus with total station

Topographical Map of CREST, IIA Using Total Station



ABO'Ksinsilni,

Additional Bed Room for Staff Quarters
 Completed

Topographic Survey of entire Campus with total station

- In Planning Stage
- Septic tank and Drainage works
 - In Planning Stage
 - **Restoration Work at 40 Inch Enclosure**
 - In Planning Stage





V.B.O, KAVLUR STAFF QUARTERS ADDITIONAL BED ROOMS

Kodaikanal Observatory

Tendering Stage and Approval
Topographic Survey of entire Campus with total station
Construction of toilets for Kodai school, Main hall building and Admin. Building
Electrical fencing
Guest house

Proposed Works CREST Campus, IIA

Road and Drainage works

- Design and estimation completed
- In Tendering stage

In Planning Stage

Campus Master Plan
 Instrumentation Center
 Rest House for Observers
 Hostel block

Proposed Works

IIA, Bangalore

- > Road Work at IIA, Bangalore
 - Design and estimation completed
 - In Tendering stage

In Planning Stage

- > Additional Floor at Carpentry Section
- > Additional Floor at Optics Section
- Rain Water Harvesting and Landscaping for Entire campus
- Renovation of Canteen-Kitchen
 - In Tendering stage

Integrated Multistoried Building in Place of Admin.building

Proposed Works IAO, Hanle

> Road Works

- Work Already awarded to Border Roads Organization (BRO)
- Likely to Commence from June-2006

<u>In Planning Stage</u>

 Canteen Staff Dining Complex at Base Camp
 Instrumentation Center including Observers rest room at top of Mount Saraswathi
 Raman Science Center in Leh

THANK YOU

