Pre-construction Resource Needs

Budget planning and Human Resource

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Background

Government's Organization for Studying ILC

- Academic Expert Committee
  - Particle & Nuclear Physics working group
  - TDR Verification working group

- MEXT demand the realistic total Project Cost

  Including
  - Total Construction cost & Land Acquisition cost
  - Total Operating cost including Human Resource
  - Preparation cost required at the pre-construction stage

➢ MEXT: Ministry of Education, Culture, Sports, Science and Technology
➢ MEXT have jurisdiction of the ILC project at a present stage.

Contents in this session

- Human Resource Planning
- Budget for the Investigation & Design Works

Additional Report by Y. Nishimoto (J-power)

- Reference Example in Japanese UD Project
  - Organization & the Human Resource in the similar project

Main points for this discussion

- Manpower Planning at the preparation period
  - Organization for the Project Management
  - Human Resource of the organization
- Outsourcing at the preparation period
  - Investigation: Environmental Assessment, Geology
  - Design works: Basic design, Detailed Design

Resource Needs at the Pre-construction Period

Human Resource for the Construction Management			
Organization (Construction Management)	Management Sec.	PM & CM + assistant M.	-In house -Outsource
	Administration Sec.	General Officers	
	Engineering Sec.	Technical Staffs (C,A,E,M)	

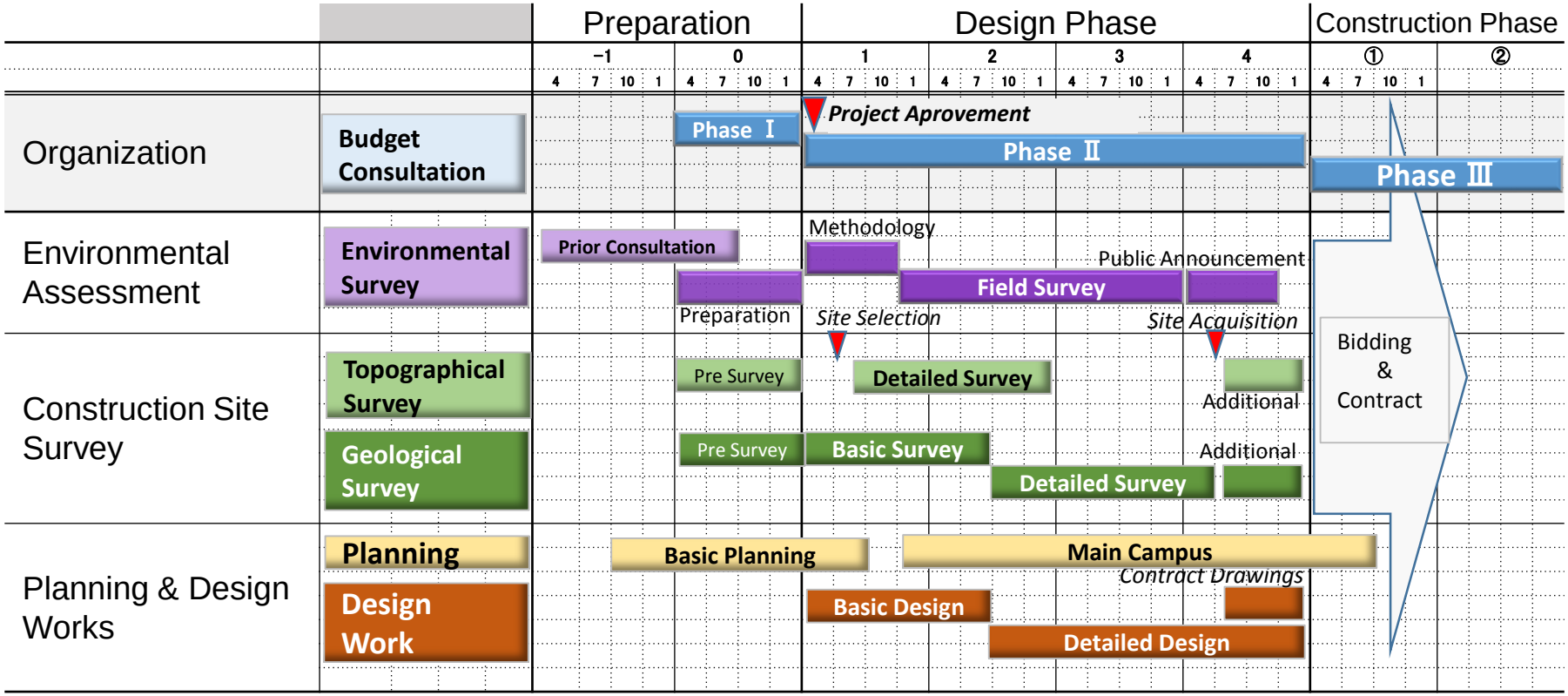
Outsourcing Contract for the Investigation & Design Works			
Outsourcing Contract	Investigation	Environmental Assessment	-Outsource
		Geology & Topography	
	Planning & Design Works	Civil Design	-Outsource
		Architectural design	
		Electrical design	
		Mechanical design	

Budgets related to the site acquisition	
Public Relations	Land Acquisition, Site Development, Infrastructure, etc.

Human Resource

Draft Plan

Pre-Construction Schedule & Human Resource

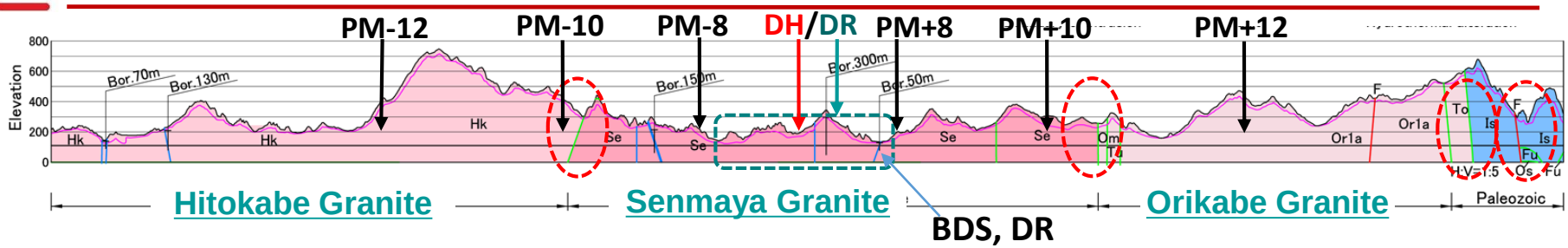


		−1	0	1	2	3	4	①	②
In-house	Management	−	1	1	1	1	1		
	Administration Dep.	−	1	1	4	4	4		
	Engineering Dep.	−	1	2	5	5	5		
Outsource	Management	−	0	0	2	2	2		
	Administration Dep.	−	1	1	9	9	5		
	Engineering Dep.	−	1	6	17	17	17		
Total	Total	−	5	11	38	38	38		

Geological Investigation

at the pre-construction period

Geological Investigation

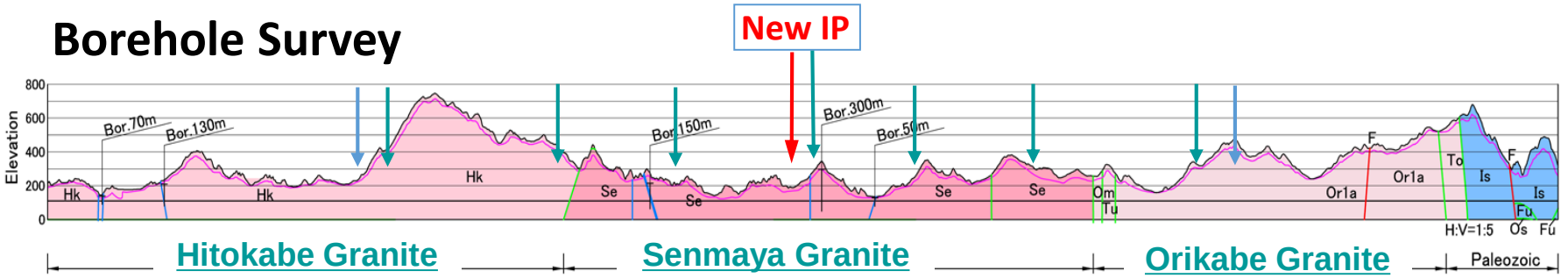


Survey Item		Survey Area									
		PM−12	PM−10	PM−8	DH	DR	PM+8	PM+10	PM+12	Others	Total
Surface Survey		○	○	○	○	○	○	○	○	○	-
	Q(Km2)	2	2	2	2	2	2	2	2	30	48
Geophysical Investigation		○	○	○	○	○	○	○	○	○	-
	Seismic Exploration	3	2	2	2	2	2	2	3	20	38
	Electro Magnetic Ex.	○	○	△	△	○	○	△	○	○	-
	Electric Prospecting	△	△	△	△	△	△	△	△	△	-
Boring Survey		○	○	○	○	○	○	○	○	○	-
	Vertical Boring No.	2	2	2	2	3	2	2	2	5	22
	Length (m)	300	350	150	150	200	100	200	350	200	-
	Quantity (m)	600	700	300	300	600	200	400	700	1,000	4,800
	Horizontal Boring	100	50	50	100	-	50	50	100	-	500
	Rock Examination	○	○	○	○	○	○	○	○	○	-

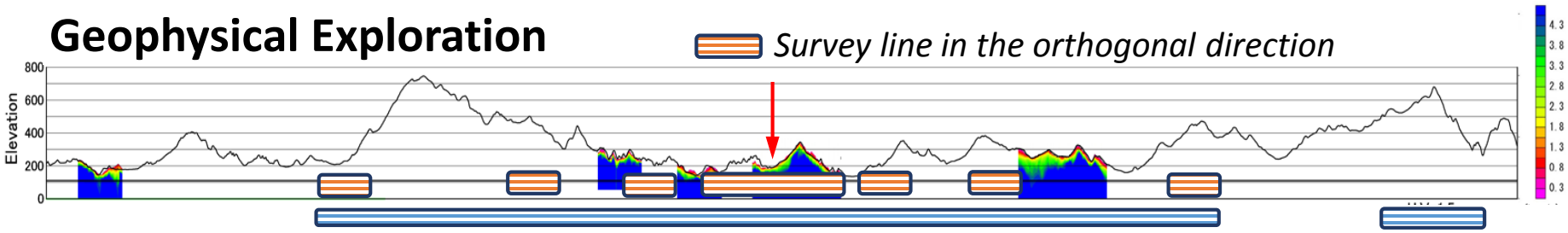
Geological Investigation

☐ Profiles of Geological Surveys along the project

Borehole Survey



Geophysical Exploration



Geological Survey plan at the pre-construction stage

	Preliminary study	Basic Design	Detailed Design
Borehole Survey	- 1 p IP area	- 8 p along the BL	- 13 p along the BL
Seismic exploration	- 2 km	- 18 km	- 18 km

Thank you !