

## 1. PRELIMINARIES NOTES

### 1.1 NAMING CONVENTIONS

Fabricator - the bidder.

Exhibition Designer - Atelier Brückner (ATB).

Client – Norwegian Printing Museum (MUST)

### 1.2 ROLE

The Fabricator is bidding for the role of Fit Out Construction and Installation Partner also including graphic production and installation. As such the Fabricator procures all materials hardware and accessories, executes all off site fabrication and performs all in on site installation for all areas described. The Fabricator is to work closely with Exhibition Designer during all phases of the project.

The Fabricator is expected to coordinate with the AV company to make sure that the AV can be installed properly into the different structures and the intended functionality of the exhibits will be achieved maintaining the highest level of physical design quality and detailing. The Fabricator is also expected to coordinate with the architects and construction company to make sure that all exhibits properly integrated into the building. Furthermore the Fabricator is to coordinate with the electrician, light designer and other relevant parties.

Bidder's subcontractors

Should the bidder intend to assign performances in kind or personnel performances in its specifications to subcontractors, the companies as well as the scope of their performance should be cited when submitting the tender.

### 1.3 SERVICES, FABRICATION, ALL IN INSTALLATION

All items always contain delivery, manufacture, assembly and ready-for-operation start-up, including all incidental services and materials required for the services. The Fabricator is responsible for the lifting gear required for transportation. This must be included in the unit pricing. All construction equipment must be included in the unit pricing. This includes delivering all required machinery, equipment, lifts and scaffolding required for the service scope, including provision over the entire construction period and after completion of all work, dismantling and transportation away from the site. Manufacturing, delivery and assembly of services require close coordination with construction management.

The detailed construction process must be coordinated with all participants. Services are also required as preliminary services for other Fabricators or connecting services to services from other Fabricators. It is therefore not possible to require continuity of work. All required equipment (e.g. lifts, scaffolding) must be provided on site until approval. In this context also personnel to handle the equipment must be on site until final approval of the whole Exhibit.

Upon request from the ordering party, assembly drawings must be provided for checking and approval by Exhibition Designer and Client.

Samples of individual components must be provided upon request for free. The binding dimensions must be determined through surveys of the construction site. This service must be included in the unit pricing. Required assembly tolerances must be taken into account. Possible deviations from the plans must be clarified in a timely manner with the construction management and Exhibition Designer.

The Fabricator is expected to provide all in installation including:

- Transport and shipping incl. insurance and disposal of packaging materials.
- Incidental expenses, extras etc. shall be included in the price.
- On site installation including coordination with other trades.
- On site insurance.
- Commissioning documentation in English.

These items are to be included in the price, also when they are not stated explicitly in the Bill of quantities.

The planned lifespan of the exhibition is minimum 10 years. The quality of the deliverables has to comply with this life-span under the assumption that the exhibition will attract an audience of up to 100.000 per year. All installations and furnitures shall be suited for respective heavy wear and tear.

## 1.4 PRICING

The drawings, schematics, and the tender document text are central to pricing. All dimensions specified in the item texts and drawings are approximate. Any additional measures that the Fabricator considers necessary to perform work appropriately must be named when the offer is submitted and assigned their own unit prices where the work cannot be included in existing unit pricing. Only new and unused materials can be installed. The Fabricator is required to comply with applicable safety and accident protection regulations.

## 1.5 PLANS AND DOCUMENTS

The Fabricator must check all dimensions and specifications in the plans on site during the project period. If there are any inconsistencies in the dimensions or technical functions, the exhibition designer must be informed of these immediately. Any concerns regarding the construction and inconsistencies between different trades identified by the Fabricator must be brought to the attention of exhibition designer immediately. Any claims arising from concerns that are raised too late will not be recognized. This also applies to incorrectly determined dimensions.

The current plans are approximate as are the placement of the components. It will be the responsibility of the Fabricator to come up the detailed solutions for fixation, mounting and detailing of the fit out.

## 1.6 STANDARDS AND REGULATIONS

All valid and current standards and regulations relevant to order completion apply, even if they are not specifically named. Compliance with all regulations is required, even if they are not described in the list of services. The work to be performed must be in accordance with Norwegian rules and regulations and European Norms.

Related norms and regulations are particularly from:

DIN 4102 - Fire Behaviour of Building Materials and Components

NBN 1055 - Assumed Loadings for Structures

DIN 18360 - Metal work

DIN 18363 - Painting and decorating work

DIN 6164-1 - RAL colour palette

DIN 6173 - Colour samples

DIN 18355 - Joinery work

DIN18357 - Hardware

DIN 18168 - Lightweight ceiling claddings and ceilings

All similar hardware to be of one supplier unless specified otherwise.

Installed products, materials and hardware shall comply with applicable fire and building codes and requirements of local authorities having jurisdiction over those items.

## 1.7 INTERNAL CABLE ROUTING AND FIXTURES

All conduits visible on the walls should be done with rectangular plastic trunking and painted in the RAL colour of the wall. Conduits running above the suspended ceiling shall be done with round plastic tubing. Cable fixtures inside the installations may be done with cable tubing, cable clips or similar, provided that the chosen solution presents a tidy result that is easy to maintain and service. The Fabricator is to liaise with AV company and electrician to enable internal cabling

## 1.8 FLOORS, WALLS, CEILINGS

Before drilling through any floors/walls/ceiling the Fabricator is expected to take necessary measures (including ferro scanning) in order not to damage the steel reinforcements or internal installations such as water-piping of floor-heating or sprinkler systems. Fabricator is to coordinate with architects/construction company to ensure proper installation method.

Ceiling mounted installation are to be carried out in accordance with the ceiling plans taking into account the necessary built in parts such as lights, sprinklers, smoke detectors, emergency signage and speakers and the like, and in accordance with the pipe installation plans of ventilation systems.

Load bearing capacity of the floor is 500kg/sqm (5kN/sqm)

## 1.9 POWER

230V will be provided by the building according the connection point diagrams. The power will be provided either as permanent power (always on) or switch power (only turned on for opening hours).

## 1.10 CONSERVATION REQUIREMENTS

The Fabricator is to respect and execute all conservational requirements as defined in the bill of quantities and related documents.

## 1.11 DOCUMENTATION

All commissioning documentation must be provided in English and shall include as build construction plans, cable lists, equipment list, maintenance plan, data sheets, and manuals. Documentation shall be delivered in editable formats. Thus lists should be delivered as Excel and schematics in DWG.

## 1.12 DELIVERY

The offer should include the delivery of the associated prefabricated elements, materials and accessories, including unloading and storage, unless otherwise stipulated in the specifications. Storage spaces are only available to a very limited extent. It cannot be assumed that it is possible to provide the Fabricator with private, lockable premises on the building site. All items delivered should be clearly labeled according to the exhibition structure with the respective plan numbers and associated specification numbers in order to ensure a smooth procedure. The number of deliveries needs to be aligned with the construction schedule.

Before installation the material is to be stored at room temperature.

Boards are not to be stored standing; this applies particularly by intermediate storage for adjustment to room humidity and temperature.

## 1.13 CLEANLINES

The building site should be kept clean. Any contaminants on the building site should be immediately removed by the Fabricator. Packaging waste, residual material, etc. will remain the property of the Fabricator and regular professional disposal is mandatory. Should larger quantities of waste and refuse materials be encountered, which are removed at the request of the site management, the client will commission a waste disposal company and allocate the costs to the waste producer.

## 1.14 ON-SITE WORK

A detailed construction schedule plan is part of the project materials. For pricing purposes expect that the majority of on site installation work can be performed during normal work hours (7-17). It is essential that the Fabricator informs itself about the local conditions before beginning the work.

A contact person with the required specialist knowledge should be named during the on-site assembly. The client and the contract planners should be informed of the contact data of the contact person.

Welding on site is to be avoided and will only be permitted after prior approval of the site supervision; within the security standards and protecting the surrounding.

In the event of welding work in the vicinity of building components of class B2 or B3 as DIN 4102 Part 1 or worse, suitable fire protection measures are to be undertaken by

the Contractor. This also applies for finished surfaces of components of other material classes, in particular for lustrous, lacquered and glazed surfaces.

## 1.15 GLASS WORKS

The tenderer is to determine glass thicknesses corresponding to the loads to be expected and the regulations of the glass manufacturer. All glass thicknesses given are to be understood as being the basis for calculation. All types of glass are to be low iron glass (for instance "optiwhite"). All glass edges are to be smoothed and mounted. Included in the price are any static or structural calculations necessary.

LOADS Glass doors and separating elements to have a load impact capacity of 150kg/m (1,5kN/m) in 1,2m height.

## 1.16 ASSEMBLY / LOCATION

Every contracting company on the building site is obligated to ensure the provision of the necessary climbing, scaffolding or hoisting equipment on its own authority. This includes works to be executed on heights of over 8 meters (approx. maximum height: 14 meters).

Furthermore it is required to provide preliminary cover and protection for areas where works are interrupted and are scheduled to be completed at a later date.

Construction routes and locations for storage are to be assigned by the client.

Construction routes are to be secured against damage by the Fabricator.

It is essential that the local site management is consulted when using assembling aids, such as rolling scaffolds / hoisting platforms. Compliance with the relevant guidelines is also required.

## 1.17 SITE ACCEPTANCE / APPROVAL

The result is subject to approval by the client and the exhibition designer. Only upon approval the work will be considered completed.

## 2. SCOPE OF WORK

### 2.1 SCOPE OF WORK

Scope of work is defined as per Bill of quantities, plans and colour and material list.

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