Specification Despatch CBRM Project

Introduction/Scope

The National Institute for Biological Standards and Control (NIBSC)

Activity Schedule of Contractor's Work

The activity schedule described later in this document is to be provided by the Contractor showing their detailed activities.
When returning your tender please detail how you expect to carry out the works. Specify how each task will be completed. How timings will affect the installation. List any critical downtime which would be expected for installation to take place.
All design works must be agreed with the Project manager and designated team. The cost of any design must be built into the task price.
During the works the dispatch team will still need to work in and around the area. They will also need to gain entrance to the nearby cold room. The area will need to have a light weigh hardboard or similar hoarding to prevent dust etc getting into the dispatch office area. A contractor passage will need to be formed to segregate the two sets of workers. There will of course be some common ground, and this will need to be planned prior to starting.

A detailed schedule will be required showing all critical items and timings.
The existing and proposed room layouts are shown in the attachments.

Deliveries and Collection

The Principal Contractor must aid with drivers of delivery/collection vehicles manoeuvring on the access roads.
The Principal Contractor must provide all necessary signage and personnel to assist/direct drivers of delivery and collection vehicles and to direct other traffic and pedestrians when adjacent roads or footpaths are obstructed.
The Principal Contractor must include in his initial Construction Phase Plan his proposals for managing delivery of materials, plant and equipment and removal of demolition materials and general rubbish.
Roadways or footpaths will not be used for stacking materials and goods for use in the works and will be kept clean and free of rubbish.

Proposed construction

Contractors are to use correct PPE for the tasks to be undertaken. The floor must be protected from the work area to outside using Cordex or hardboard.

This project is to carry out a minor refurbishment of the dispatch area in CBRM. This will to remove stud walling, electrics, flooring, remove blockwork wall, data cabling, painting and decorating. New doors and benching, access control. Those contractors that are selected to tender will be asked to show examples of their works on similar related projects that they have previously undertaken and is to include a site visit by key members of the NIBSC project team.

Tower scaffolding is to be provided by the contractor as required. A tower with outriggers will need to be allowed for whilst constructing the outside lean to above the waste storage area.

Any holes through walls will need to be sealed, and where any joists pass through walls will also need to be sealed to prevent smoke/fire penetrating the adjacent labs.

Energy conservation

All proposed lighting throughout are to be T8 LED tubes or higher wattage to match the existing fittings around the site. All lighting will have manual overriding switches.

Site

The site for the works is in the existing CBRM building at NIBSC.

Access to this area is via the single back door near dispatch. At NO point must the building be left un-secured. A plan to keep access must be agreed prior to work.
The existing fire escape route must always be kept clear. Signage/barriers must make NIBSC staff completely clear which route to take in order to get to safety.
A skip can be in the near vicinity.

Site Survey

All tenderers will be expected to carry out full site survey to verify actual site dimensions, prior to further design work and the subsequent construction phase. This is mandatory for all contractors tendering as non-compliance will result in tender disqualification. Welfare facilities, power and water will be provided with the Project Engineers permission. Please allow for a full-time foreman or site Engineer to be on site throughout the duration of all the works.

Removal Works

This project will involve the removal of a non-load bearing block wall. There are also stud partition walls that will need to be taken down to form the area we are looking to improve. Benching and other fixed items. The existing floor in the outer dispatch area will also need pulling up. All items will be discussed during the site visit.

Strip out

The rooms will be stripped of lighting, power sockets, all cables that are surface mounted or embedded in the dividing walls and surface mounted alarms. All benching including cupboards and shelves, suspended ceilings. The pass-through hatch will be removed. Doors and frames.

Some fixings will need to be kept and replaced in a new location near the end of the project. These items will be shown during the site visit.

A contractor's skip can be located in the local area but must be maintained so no rubbish is left around it or be blown around by the wind. "Contractors engaging in refurbishment or new works on MHRA sites are required by law to control their waste arising's. If waste skips are being brought onsite these should, where possible, be controlled by the site service provider; ensuring that a 'duty of care' is maintained. When a contractor brings his own skip onsite, they should provide details and waste licenses/permits of the waste contractor and site where the waste will be disposed of as described above."

All disposed waste from NIBSC, must have a certificate stating that the waste items have been transferred to an authorised waste handler, and disposed of accordingly.

Vinyl floor prep & laying

All vinyl, nosing's, skirting's, floor edging's, inserts and coving to be removed from highlighted area.

Care shall be taken to ensure that the screed does not lift with the Vinyl, to allow for the possibility of recycling the vinyl. Where the screed has lifted, the contractor will make good before laying the self-leveller and vinyl. During removal any damage to the walls needs to be made good, plastering any holes where necessary. The contractor shall be responsible for the recycling of all removed vinyl flooring, floor edging, skirting's, nosing's, coving and inserts. It is likely that the removed and new vinyl will require a DPM to be laid prior to laying. Please allow to provide this within your return.

Floor: 2 mm Polyvinyl flooring **(Colour to match existing)** with hospital coving some 100mm up each wall using minimum 40 mm radius supporting infill. All joints are to be welded and sealed.

Where there has been removal of the partition walls, these areas of vinyl will need to be spliced in and welded. The floor in the area where the wall was removed will require full preparation prior to laying the vinyl.

O2 Sensor monitoring (CO2 Ax60+ Carbon Dioxide Safety Monitor)

The Oxygen depletion monitor in dispatch 2.07 is to be carefully removed. Please provide a new CO2 monitor which will need to be sited near the dry ice bulk tank and set up. The alarm from the central interface will need to connect to the Trend BMS so that it links to NIBSC emergency response team. (DDE (Trend)). Our trusted contractor is Scientific Laboratory Supplies.

Electrical

All new electrical work shall be carried out in accordance with *IEE Wiring Regulations Eighteenth Edition and relevant current revisions.*
*Isolations will be carried out in accordance with SOP 6373 "*Control of Electrical Isolation"
CPC' (circuit protective conductors) shall either be an incorporated core or a separate cable, for SWA's the armour is for mechanical protection only.

All lab/office lighting refurbishments would require the addition of a double pole switch to enable future local isolation maintenance procedures, to be inserted into every circuit to isolate live and neutral within the Lab/office lighting circuits.

Cable trays shall be perforated and supplied in nominal 2,400mm lengths manufactured from galvanised mild steel complying with BS 1499 (Classification CR4/GP). Cable tray accessories shall be supplied by the Cable Tray Manufacturer; only where these are inadequate to meet special conditions can site-fabricated accessories be accepted with the approval of the Supervising Officer.
Holes cut in cable trays for the passage of cable shall be drilled and suitably bushed
Fixing of cable trays shall unless otherwise stated be at intervals not exceeding 1,200mm and at 200mm from bends of intersections. Fixing shall be either by brackets made by the Cable Tray Manufacturer of brackets made from "Unistrut" and/or "Unirax" sections whichever are preferred.

Trays up to but not including 150mm wide shall be 20 SWG thick: all cable trays shall be of the return flange-type. There should be 25% spare capacity for all cable tray installed.
Unless otherwise required wiring, tray and accessories shall be finished in hot dip galvanised after manufacture and sections of wiring trays shall be jointed together with 6mm diameter mushroom headed safety bolts and nuts to comply with BS 1494, Part 1. Adequate copper earthing strips shall be fitted at every joint. A minimum clear space of 25mm shall be left behind all cable trays.

Earth Bonding

The bonding of the electrical installation is to be carried out to the requirements to the current IEE Regulations and the Electricity Boards recommendations, special attention to be paid to the bonding of extraneous metalwork.

Power Distribution and Containment Trunking

Marco Elite 60 dado trunking to be utilised for Lab power outlets. This trunking accommodates the Class F_A (Cat 7_A data coms cable too and meets the I.T standard for data cable bends and terminations).
Site standard MK accessories (white two gang switched outlets).
Power to MK outlets to be a minimum of 4mm Cross Sectional Area, (CSA) and a minimum of two circuits per room.

RCD's are to be installed within the trunking within the office/lab current site specification is a Legrand (40 amp I-thermal) and 30mA trip rating to BS EN61008-1

Luminaires

Emergency lighting will be a non-maintained bulkhead installed to an agreed position usually at the exit area within the Lab. Battery life must be 3 hours minimum. (RS stock number 483-8837)

Provide new warm white flush fit LED lighting, 600mm x 600mm, within the dispatch like existing. Lux levels need to be proved @ 500 lux @ bench level, switched. Agreed lights are to be on the emergency lighting circuit. Our in-house electricians will advise.

The existing bulkhead light outside is to be removed and two new bulkhead lights to be located on the louvers on the East side building.

In the new storage area, please provide 2 x 1500mm high level LED light fittings, with separate two way switching, one positioned by the active leaf as you enter, close to the proximity reader on the active door, the other to be just inside the curtains on the wall.

Please provide a power supply to link to the consumer unit in the two outside containers. This will only be required to run the internal lights.

Blow air heater

The blow air device located by the sink will need to be repositioned onto the back wall along with towel dispenser.

JCI fire Alarms and Smoke Heads

The contractor shall contact ADT/JCI Fire for all required works around the Fire alarm sensors or removals and relocations. Updates may be required on our fire alarm systems and graphics in reception.

Power sockets

Please provide 11 twin sockets which are to be installed in room. These sockets will be mounted in Marco elite 60 trunking. Please see drawing.

Data Sockets

There are 2 double outlets already installed in the existing room (77 & 78, 79 & 80) it is possible that we can use these if the cable is long enough, but please allow to install 5 points, as indicated on the layout drawing. The data cable will be Class F_A (Cat 7_A). (See Data Specification). The nominated data specialist contractor (ICS) who shall ensure the newly installed data points are fully tested and labelled. All the drawings associated with the data network shall be updated. The installed cables must be Nexans approved.

Data Cabinet Switch & Panel

Although there is a data cabinet in the area, it doesn't have enough spare ways left in order to run new cables. Please provide new network switch, patch panel and associated links.

Labels

All items of equipment and sockets, data outlets etc. shall be fully identified with a label showing which distribution board or cabinet they are fed from.

Mechanical Services

Remove and cap radiators in the lobby area. L8 regulations apply.

The air handling grilles are to be kept and reinstated into the new ceiling. The grilles are on a flexible ducting and will need to be supported prior to the ceiling being replaced.

Insulation and stud wall installation:

Within the area where the wall was removed, new stud partition walls will need to be formed. The external louver clad will need to be fully boarded on the inside and insulated, prior to having a 18mm ply skin to which 12.5 plasterboard will be fitted, taped and jointed. This stud walling will encapsulate the steel RSJ's presently on show. The wall will come in front of the inner face of the RSJ, (please see drawing). The fire call point will need to be repositioned next to the two new double doors in dispatch.
Where bare bricks are visible this is to have taped and jointed 12.5 plasterboard.

Painting and Decorating

The whole area is to be fully prepared ready to be decorated in the same colour. Colour will be determined prior to start, but the contractor is to allow a minimum of two coats from the Dulux diamond range.

Card Swipe Access Control

All new external doors are to have access control via a Mag-lock to prevent unauthorised access. The access control will be via swipe / Pin Identity cards that are compatible with the rest of the Institute, i.e. Card Reader Model 1 D48 Card and Pin code magnetic stripe reader for external doors 2 L48 Card only magnetic strip reader for internal doors.

- Proximity Swipe Card.
- On the inside a Break Glass Exit to be installed in case of emergencies.
- On the inside a Release To Exit push button

- A Dead bolt manual key lock is to be installed.
- The mag locks must release in the event of a fire as per NIBSC fire evacuation procedure. (Tyco are our trusted and preferred contractor).

Pass Through Transfer hatch to External Double Door set

The existing transfer hatch in the side of the building is to be removed and replaced with a double WHITE doors. These doors are to be fitted so that no drafts can be felt, and that small critters cannot access from outside.

Door requirements: 2000mm height approx. x 1000mm width approx., each leaf.
UPVC wrapped, Double rebated doors & frame are to be installed, leading into the main dispatch area. The doors are to open inwards. The threshold must be level with the floor, so pallet trucks don't become snagged. The doors are to have half glazed viewing panels approximately 800mm High by 600mm wide @ approximately 1000mm FFL to the bottom of the vision panel. D handles and push pads on both doors. Both doors are to have door closures that can hold the door open, then release by being pulled closed. Doors to have mag locks with access control (Tyco). Doors will have security sensors (Tyco-JCI) linked back to NIBSC security team. Door will also have a suited manual dead locking mechanism. Our head of security will advise what type of lock is required.
On the passive door a slide lever action bolt is to be fitted to both the top and bottom of the door. With dust cover to the bottom fixing.
Outer half bottom of doors is to have stainless steel bump sheets fitted.
Please see card swipe access control for further details on the access operation.

External Stable Door:

This door is to have the furniture/ signage removed and blocked up. On the outside is to have a framed, 18mm ply panel finished to the colour of the brickwork. The inside will be insulated, 18mm ply, and plaster boarded ready to accept decoration. Security contacts will need to be removed by Tyco-JCI.
The fire call point is to be removed as this will no longer be required. All signage and extinguisher will need to be moved to the new double doors. ADT-JCI.

Benching:

Generally, cantilever bench framing (epoxy-coated steel; RAL colour Black, 30% gloss) with solid grade laminate work surfaces (Trespa 'Athlon' colour TBA) to peninsular or wall benching arrangements as indicated on layout. All exposed edges radiused (40mm) as crescent profile.
Fixed benching is to be 1000mm FFL benching and 800mm deep, with 40mm upstand at the rear. Please check that bench legs do not impede where the under-bench unit go. Mobile benching is to be 750mm FFL (See drawing). Where the corridor pass-through is, please provide fixed bench. The height will be at the same level as the threshold of the shutter, and approximately 500mm deep. There is to be 4 x mobile benches. The size of each is 1400mm x 800mm. with radiused corners. A full width and length low level shelf is to be fixed at the bottom. No perimeter upstands. The castors are to be lockable 75mm castors.

Our trusted contractor is ALS.

Shelving

Please provide 2 x layers of Trespa shelving on twin slot spur adjustable brackets. The shelves are to be 300mm deep and go the full length above the fixed benching. All exposed edges radiused (40mm) as crescent profile.

Racking

Please provide approx. 2400mm long x 650 mm wide by floor to ceiling height adjustable racking. There are to be 4 shelves. The racking is to be securely fixed. Each shelf must be able to safely load 100kg each.

Suspended ceiling:

Please allow to replace the entire ceiling grid and tiles. (please see drawing) The ceiling heights differ across the area, and once the walls are removed, NIBSC does not want formed bulk heads. Grid to be white, with white smooth finish 600 x 600 tiles.

Louver Cladding: Outside Waste/Storage area

Louver cladding is to be provided to enclose the waste storage area and must match closely with the existing cladding. Colour to match existing (Grey).
The North facing front opening, is to have PVC strip curtains across the width of the opening and approximately 2.5m high. The East facing wall is also to be louver clad. Within the East wall is to be two single glazed fixed windows, approximately 1000mm W x 800mm H. Two LED strip lights are to be located with manual two-way switches, On the corners to the opening is to have bump protection at approximately floor level to 1200mm high.
The existing bulkhead light is to be removed and two new bulkhead lights to be located on the louvers on the East side.

Roof: Outside Waste/Storage area

The sheet roofing material is to match if possible, existing metal clad profile sheeting. The weatherproof skin is to be light grey as existing and be able to sustain all weathers and snow weight. Provide round the open sides a square profile guttering that can connect into the existing RWP on the corner of the existing building.

Ground: Outside Waste/Storage area

The existing ground is hot rolled asphalt. This is to be removed and replaced with concrete. The concrete may need to be brought in with the internal floor to keep the level. The finished floor should be smooth but not slippery. Where the concrete meets the asphalt is to be a seamless transition. Please see drawing for area.

Flag Stoned paved path (Fire Exit)

The flag stone path that runs halfway down the side of the building on the east side will need extending all the way to the road. The flag stones must be laid true and level, with all the usual compacted hard core's and sand bases. The curb stones can be removed to an appropriate natural

cut off point. Between the newly formed lean to building and the flag stone path, this should be filled with a pea shingle to suit existing.

Concrete piers for containers

NIBSC have two rented Bell containers. These will need to be craned from their existing location (please see drawing) to their new location in the courtyard between the Portakabin and the road by CBRM.
In order to place these level, 9 concrete piers need to be formed to stand the containers on. Some of the ground may need to be drawn off.
Please provide a paving flag pathway up to the front doors of each container. These are to match the fire escape route path.
A site survey will double check if these containers can stand where proposed as we cannot block camera 44 from being able to see the fire escape spiral staircase and the emergency exit at the bottom of North block. Please see drawing. The containers are to be set back as practical so as not to block the fire escape route when the doors are open.
The location where the containers came from will need to be cleared of the wooden walkway flooring, and the whole of the area grass seeded. Our in-house grounds man will advise.

Curb stones by cold rooms

Please cut back section of road and refill with concrete flush to the curb stone so that cage trollies can traverse without bumping up the curb. This will be shown during the site visit.

Brick repair

Above the dispatch single door to outside a crack has appeared. Please allow to make good.

Maintenance

Electronic O and M manuals will be provided at the end of the works, showing as installed drawings, routine service parts and the frequency of maintenance. Electrical certificates along with information etc. also manufacturer's literature must also be included.

Signage

Please provide 2 signs. One saying "CBRM Collection point" on a weatherproof sign, approximately 750mm x 500mm. This is to be mounted on the North facing wall adjacent to the storage area curtains. The second sign is to say "Ring for attention" which is to be mounted next to the doorbell within the storage area. Exact locations will be agreed on the day.

Others

Coat hooks (X 6) to be installed on a backing board and mounted on the sub wall in main dispatch room. See drawing.

Please provide a Wall Sign Holder Pre-Drilled Portrait A4 Clear. This is to be screwed to the wall next to the doorbell in the storage area. Exact location will be advised on the day.

Please provide 7 lockable lockers. 4 half and half lockers and 3 full height. 300mm W x 450mm D x 1800mm H.

The external handrail on the North side of the building is to be carefully removed.

Please provide battery operated wireless doorbell. This will be fitted by and for the new double doors.

Please proved a lockable key cabinet approximately 300mm x 240mm. This will be fixed to the wall, TBA.

Please provide a 40 inch, 1000mm Monitor. The monitor must have the usual HDMI, DVI and digital Ports. It is to be mounted on a suitable tilt and turn mount and be fitted as per drawing. Example link.
https://www.amazon.co.uk/Philips-BDM4350UC

Gantt Chart

Please provide your schedule of works (Gantt Chart)