VIA University College CONSTRUCTING ARCHITECT EDUCATION

5th SEMESTER PRO INT

Extract of brief

J.M. Mørks Gade 9, Aarhus Proposal for the renovation project with energy-efficient and sustainable initiatives.

The overall background to this proposal is to provide a new bathroom and kitchen for each apartment, as well as to install an elevator in the building, as shown on the attached outline proposals of ground floor and floor plans.

The proposal has been prepared on the basis of registration of the existing conditions as well as discussion with the owner regarding the furnishing arrangement. At the same time, it is requested that residents have an internal access opportunity to go to

both the basement and the courtyard without going outside. A preliminary registration

report has been made, which is prepared by an external consultant. The client want to benefit from the process following public supported building activity.

In this connection, the client requests an economic calculation of any initiatives to achieve low energy class 2015 in BR10 or renovation class 1 and 2 in BR15.

Furthermore the client also requests a statement of sustainable initiatives beyond BR requirements, for example, the environmental impact by the bulding materials and a statement of the indoor climate.

The proposal gives a description of the maintenance work in roofs, facades, staircase, surfaces, etc. and a description of the improvement work through the establishing of new bathrooms, new kitchens, interior of the basement, fire proofing, insulation works.

Steel Extension

Towards the backyard a new steel extension towards the backyard is to be designed. The extension consists of a steel construction with a lightweight insulated wall.

The roof construction is to be assembled with the rafters from the existing roof in a statically safe way.

In connection with the extension new foundations and other enabling works are to be carried out. Due to the existing building already having consolidated over the years some differential settlements between old and new foundations must be expected. If not handled properly this can cause cracks in the assemblings between the old and new construction members.

Regarding interior layout and the extent of the extension, see floor plan in the attached proposal.

VIA VIA University College CONSTRUCTING ARCHITECT EDUCATION

5th SEMESTER PRO INT

1. Roof construction

The existing roof cladding is replaced with new roof tile. Near ceilings, sloping walls and eaves void existing surfaces are demolished, and these renewed with plasterboard. Electricity etc. and dormers are renovated. Gutter is replaced. All visible woodworks are cleaned and painted.

The roof construction is changed, and new roof toward courtyard side is established since establishment of extension for new kitchen / bathroom - see section 9 and 10.

2. Basement

In connection with the establishment of the extension, it is desired that the existing back stairs are closed down and the existing front stairs lead to the basement via an

airlock (see section 6). The access is desired from basement to the courtyard. Furthermore the basement is desired to arrange a new laundry room with space for washing machines and dryers and possibly an adequate drying room. New technical room and storage room for each apartment are placed. Moreover a room for various activities is wanted, if adequate space is found.

All walls and ceilings get surface treatment.

Existing light wall is renovated. Toward the street, new glass block is placed on pavement level, where the window is under pavement level. At higher fitting windows, grating by hot-dip galvanizing steel is placed in the level with the pavement.

3. Facade

On the street facade a total repainting and general renovation of registered damages are implemented. Brick lintels are examined and repainted. Defective brick lintels over large windows are taken out, and steel beams are replaced and new brick lintels are made. Window sills with cracks are replaced. Other window sills are renovated. Plastered decorations are cleaned, renovated and painted with breathable paint. Plinth rendering is renovated and painted with breathable paint. Cables and wires are attempted to be removed by changing to intern leading. Old iron hooks and suchlike are removed.

Courtyard facade undergoes significant changes in the context of extension - see section 9 and 10. Additionally minor repairing of bricks and a total repainting are done. The above will be reconsidered, if outside post-insulation is done.

4. Windows

The aim is that the windows are replaced to Dannebrog type windows with the same breakdown as the existing ones.

5. Exterior doors

Existing main door is dismounted at the construction start and replaced by construction site door. The original main door is examined, polished, surface treated and remounted with new fittings and locks.

VIA University College CONSTRUCTING ARCHITECT EDUCATION

5th SEMESTER PRO INT

6. Stairs

Existing back stairs are removed.

The reverberation time in the main staircase is improved to contemporary level. The main stairs go to the basement via airlock. Main stairs are fire insulated. New entrance doors are put in. All rules which are found in "Guidelines for the abolition of back stairs" from Aarhus municipality, must be observed. See also paragraph 2 basement.

7. Gates

There is no gate in the property.

8. Floor partition

Radical procedures will be taken when establishing new kitchen / bathroom / elevator etc. See paragraph 9, 10 and 18.

9. WC / bathroom

See the following section.

10. Kitchens

New kitchen and bathroom are established for each dwelling. See attached plans.

This procedure requires the following main works:

- Establishing of new, external way down to the basement on courtyard side.

- Toward courtyard side, the demolition of the old back stairs, toilets, kitchens, floor partitions and various light and heavy walls are carried out.

- The new bathrooms are established as floor tile cladding with wet treatment on steel decks. On the walls, tile are put with wet treatment. Everything is done in accordance with current directions to ensure a secure tight construction. If necessary, suspended ceiling is set up. Washbasin, toilet, shower, everything as fixed furniture are installed, as well as total new installation of drains, water, heating, ventilation and electricity are aslo installed.

- The new kitchens are adapted with new kitchen equipment as well as a small dining

area. New wall surfaces as well as any suspended ceiling are established. Linoleum or boards are placed on the floor. New appliances are set up, and installations for drainage, heating, ventilation and electricity are established.

- New installations are assembled in the installation areas on each floor.

- Total paint works in the kitchen and bathrooms are completed.

11. Heating system

Improvement of the control of heating system is expected.

In addition, radiators are installed in every kitchen and bathroom - See paragraph 9 and 10.

VIA University College CONSTRUCTING ARCHITECT EDUCATION

5th SEMESTER PRO INT

12. Drainage

Existing outside kitchen drains on the courtyard facade are removed. New drain is established, which is necessary for the establishment of new kitchens and bathrooms as well as laundry facilities in the basement.

13. Sewer

Sewer is replaced to the extent, which is necessary to carry through the conversion. In addition to this, existing sewage pipes are expected to be recycled.

14. Water installations

New water installations are established in connection with establishing of new kitchens and bathrooms as well as laundry facilities in the basement. Pipeworks are carried out in the installation area. Here individual meters are mounted for cold and hot water. If there is available water pressure, it is allowed to use water-saving mixing valves.

15. Gas installation

Remaining gas pipes are removed in connection with the demolishing.

16. Ventilation

Mechanical ventilation system with heat recovery is established in all dwelling corresponding to minimum requirements of building regulations. It is established to improve natural or mechanical ventilation in the basement.

17. Electricity installations, etc

New electrical installations are implemented everywhere. Phone connector and common antenna for TV / radio are fitted to each dwelling.

18. Other conversion work

In connection with post-insulation of sloping walls and eaves void, new claddings of these walls are implemented on the 4th floor. These walls are surface treated. New elevator is installed in the front staircase of the property. The elevator serves all floors including the basement. Hereby the direct access from front staircase to the basement is achieved.

As a result of conversion work, new plasterboard ceiling and fully paint treatment of ceilings, walls and woodwork are carried out in all entrance halls. In all other rooms,

VIA VIA University College CONSTRUCTING ARCHITECT EDUCATION

5th SEMESTER PRO INT

it is completed to paint ceilings and walls and woodwork as needed. The floor is surface treated.

The building is already furnished with an existing waste system with underground waste containers close to the street area. There are containers for glass, batteries and paper as well as containers for refuse from households. This existing waste system is retained.

Proposal to improve the acoustic condition expecially impact sound in the apartment is required.

19. Construction site

Expenses on a totally tarpaulin-covered scaffolding must be expected for works on the facades both towards the street and towards the courtyard.

Arrangement of the construction site includes site hut, etc., electric power, heating, water and depositing tax.