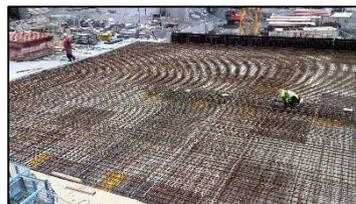
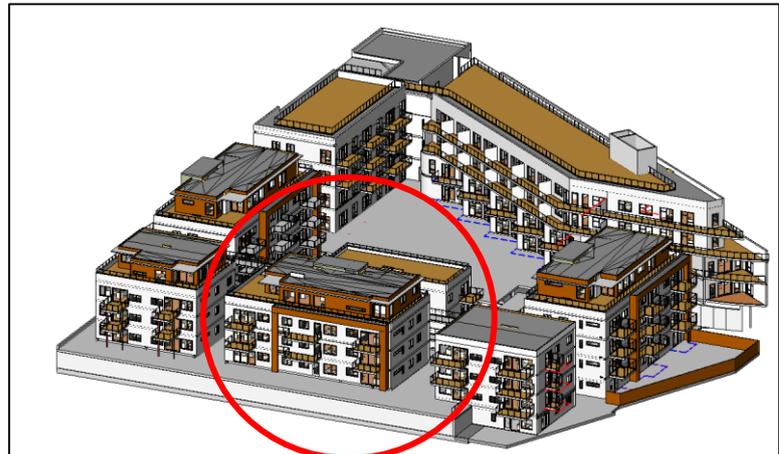


# Description of project for 7. Semester

## Project Søreideparken

The construction project are located in Søreide outside the city of Bergen, Norway. Søreideparken is a project consisting of eight multi-storey buildings built on top of a concrete garage. It will consist of 93 apartments form 67 - 120 m<sup>2</sup>, which totals 7595 m<sup>2</sup>, commercial area about 1879 m<sup>2</sup>, and a 4.516 m<sup>2</sup> p-garage containing parking spots, sheds and technical rooms. Energy labelling: Preliminary energy calculations show orange C energy label.

Owner/developer is Bergen Properties AS with Montasje Kompaniet as a turnkey contractor.



Tor Egil Strandenes

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## 1. Why I have chosen this project

I have decided to use a project that's under construction. This will make me able to attend actual meetings at site, follow up problems as they arise, and perform QA work as the project get constructed. Block E as I will use in my project, is identical as block A that is already finished with external walls and balconies; exempting the cladding, windows and internal works. This will give me the opportunity to use block E for planning and coordination, and block A for QA controls and work performance follow up. It will give me the opportunity to see how my plans for coordination, delivery, production and storage on site actually would work in real life and give me an opportunity for a quality check of my work.

This should give me a greater ability to evolve as a student compared to just look at old drawings and descriptions and develop a hypothetical "minutes of a meeting" and QA/HSE works. I can attend discussion with the foremen's at the site and the structural engineers for possible solutions as issues develops or problems arises. In addition, getting paid and getting more work experience in a real-life situation is a welcomed possibility.

### 1.1 My part of the project

For the bachelor project I will take on block E and F. Block E has ten apartments including the penthouse apartment, and block F has six apartments plus a roof terrace open for all residents at Søreideparken. Block E and F share the elevator and staircase, and the access area. Since the buildings are located on top of the parking garage, I will also take on the slab on top of the p-garage, with supporting columns and necessary groundwork.



## 2 Description of the selected construction tasks

The works is performed in accordance with NS 3420 tolerance class C (3), and otherwise in accordance with normal practice for good workmanship in the construction industry. The project has received general permission and shall be built according to. TEK10. Montasje Kompagniet AS keeps eating / changing / washing facilities

Montasje Kompagniet as the turnkey contractor will take responsibilities for the engineering of concrete and carpentry, as part of the main concrete. All technical trades does its own engineering in accordance to Norsk Standard.

This description applies before the attached drawings.

### 2.1 Own production

Selected trades and work description for own production is concrete, carpentry and groundwork; exempting sewer which is part up the plumbing subcontracts.

#### 2.1.1 Concrete

According to the orientation and description from Montasje Kompaniet that was handed out after the pre-project, the concrete works can be either prefabricated or casted on site. Concrete works consist of columns, beams, slabs, walls and a concrete staircase. Balconies may be cast with concrete. Measures needs to be taken to avoid thermal bridges. The installation of the prefabricated bath cabinets will be part of the concrete contract; exempting the pluming works.

#### 2.1.2 Carpentry

Kahrs Oak Nice Parquet or equivalent flooring in hallway / living room / kitchen / bedroom / internal storage.

Wooden walls with insulation, 13mm plasterboard internally, 9mm GU drywall exterior battings and timber cladding / profiled sheet metal exterior, with possible elements of the plan plating, - pre-painted in the colour selected by the architect.

Windows and balcony doors are supplied in exterior finish with either with required aluminium or pvc. Windows with interior mouldings factory painted, exposed nail holes in interior mouldings. Sun visors may reduce instances of dew and heating, but this is not included in the delivery. Blinds may be necessary. Ordered, installed and paid by buyers after the takeover. Colour selected by the architect.

Main Entrance doors with steel or aluminium fields acc. drawing from the architect. Entrance doors to apartments: Painted wood doors with smooth finish with peepholes. Colour by Architect. The doors have fire and acoustic demands.

Fire doors: steel doors painted in the colour selected by the architect.

Interior light walls: wood or steel with 13mm plasterboard on each side.

Internal doors: Type plain white with white frames. Factory painted.

Inside mouldings: Type factory painted white mouldings 12 \* 58mm, visible nail holes on the window / doors and painted oak floor mouldings.

Ceiling: Sparkled and painted concrete and gypsum suspended ceiling in sunken rooms (bathroom and hallway). The transition between wall and ceiling filled and painted without mouldings.

Kitchen Delivery / wardrobe Kitchen acc. drawing, with countertop laminate finish, height cabinets / kitchen is 206cm. Type Sigdal Uno with plain white front, or equivalent. Appliances are not included. 1m wardrobe per sleeping place, white with swing doors, height 206m

Storage room walls in garage: Walls of netting

Roof terrace: It will establish communal roof terraces in building F. There are wood floors on the roof terraces, and some flower / flower boxes

### 2.1.3 Groundwork:

For the groundwork its specified mass-replacement down to loadbearing ground. Blasting may be needed to get down to the necessary level.

## 2.2 Subcontractors

### 2.2.1 Masonry

Common interior stairs (insteps) and landings tiled. Type and colour selected by the architect.

### 2.2.2 Steelworks

Steel columns to support the concrete slabs in at the facades of the apartments. Bracing cross intersections of steel to take up horizontal forces. Additional support columns may be needed. All steelworks need to be welded and fireproofed.

### 2.2.3 Painting

Walls: Painted plaster / concrete.

Ceiling: Painted plaster / concrete.

### 2.2.4 Ventilation

Ventilation works: Balanced ventilation with heat recovery unit with cabinet in each apartment. For extraction of the kitchen comes extractor hood, type volume hood with light. Supply in living room and bedrooms. Exhaust fan is associated channels for exhaust from a bathroom / WC and utility room. Bad supplied as prefabricated bathroom cabin. Ventilation Contractor takes to connect the exhaust duct to valve supplied by the bath cabin manufacturer.

### 2.2.5 Electricity

El. system: Fuse box with circuit breakers installed in the apartments. Flow meters for apartments are united in the common intake and measures cabinets.

Port Phone, 1 outlet for cable TV items. Connections / subscriptions. Conduits for one piece. Broadband with TV aerial socket included. Installation of electrical outlets, lights and switches in flats, installation for ventilation in the storage room and the fan in the kitchen. There shall be a separate plug for stove and oven. Under kitchen cupboard taken with 1. Luminaire with el. outlet. The balconies are taken with a w. point for outdoor light / socket. The bedrooms are taken with separate socket for future electric radiator under the window. Electrician brings fibre tubing between the apartments and the energy centre in p-floor of each apartment for the future use of remote reading of energy.

For bath taken with courses and proposals for prefabricated bathing cabin for lights and outlets for washer and plug for hairdryers etc.

#### 2.2.6 Plumbing

Environmentally friendly water based heating which heats water to drinking water, radiators or fan convectors via central water heat pump.

It is used radiators. Type Ludvig Compact, Integra (integrated valve) and the dressing. Heating pipes from the floor and up into the radiator should be encapsulated in a white plastic channel. Maximum flow temperature in the plant at -10 degrees C should be = 45 degrees.

Hot water is fed from the common heating plant to combined distribution cabinet for heat and water in each apartment and commercial premises. Plumbing include heating cable or circulation line on hot water pipes.

Bath supplied as prefabricated bathroom with ceramic tile flooring and wall. Plumbing shall present and connect water and sewer for bathing attendants and kitchen.

A lever kitchen mixer, water disposal / plumbing for washing machine, a fire hose. The apartments will have installed sprinkler, also garage sprinkles acc. Fire Concept.

#### 2.2.7 Elevator

The elevator are supplied acc. building codes. Make and type is determined by the subcontractor. The elevator needs to go from the parking garage to the fourth floor.

### 3 Subjects that are given special emphasis

I will take a special emphasis on the actual execution of the construction project, as a construction manager. I will focus on the preparation of the construction start-up phase, the construction phase, and the handover phase with review of shortcomings and defects.

My role in the company will be as a construction manager, and with added responsibility as a foreman and quality supervisor for the concrete production. I will take a hands-on approach to all concrete production on the site.

- I will be on-site as a worker with special emphasis on the coordination planning, and quality control for the concrete works.
- I will perform the receiving control on the construction site for the selected trades for own production.
- I will have responsibility for the HSE system and be participating at the biweekly HSE meetings and safety rounds
- I will be participating at the biweekly coordination meetings
- I will be performing quality assurance inspections and controls, and follow up the QA system on site

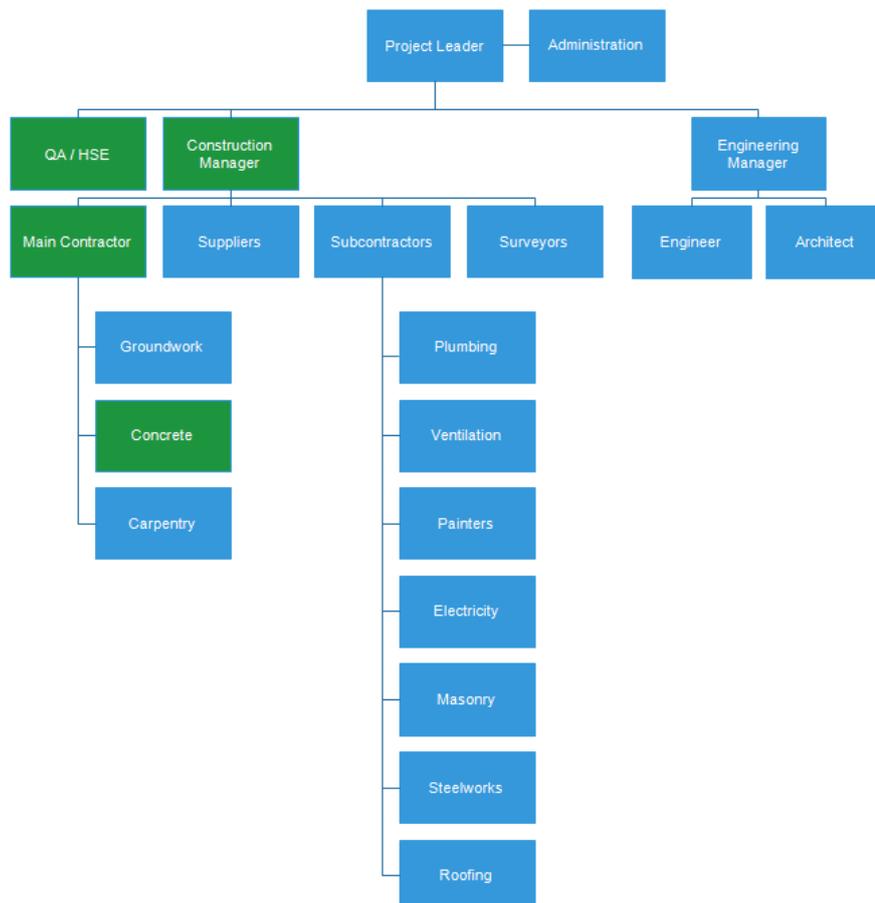
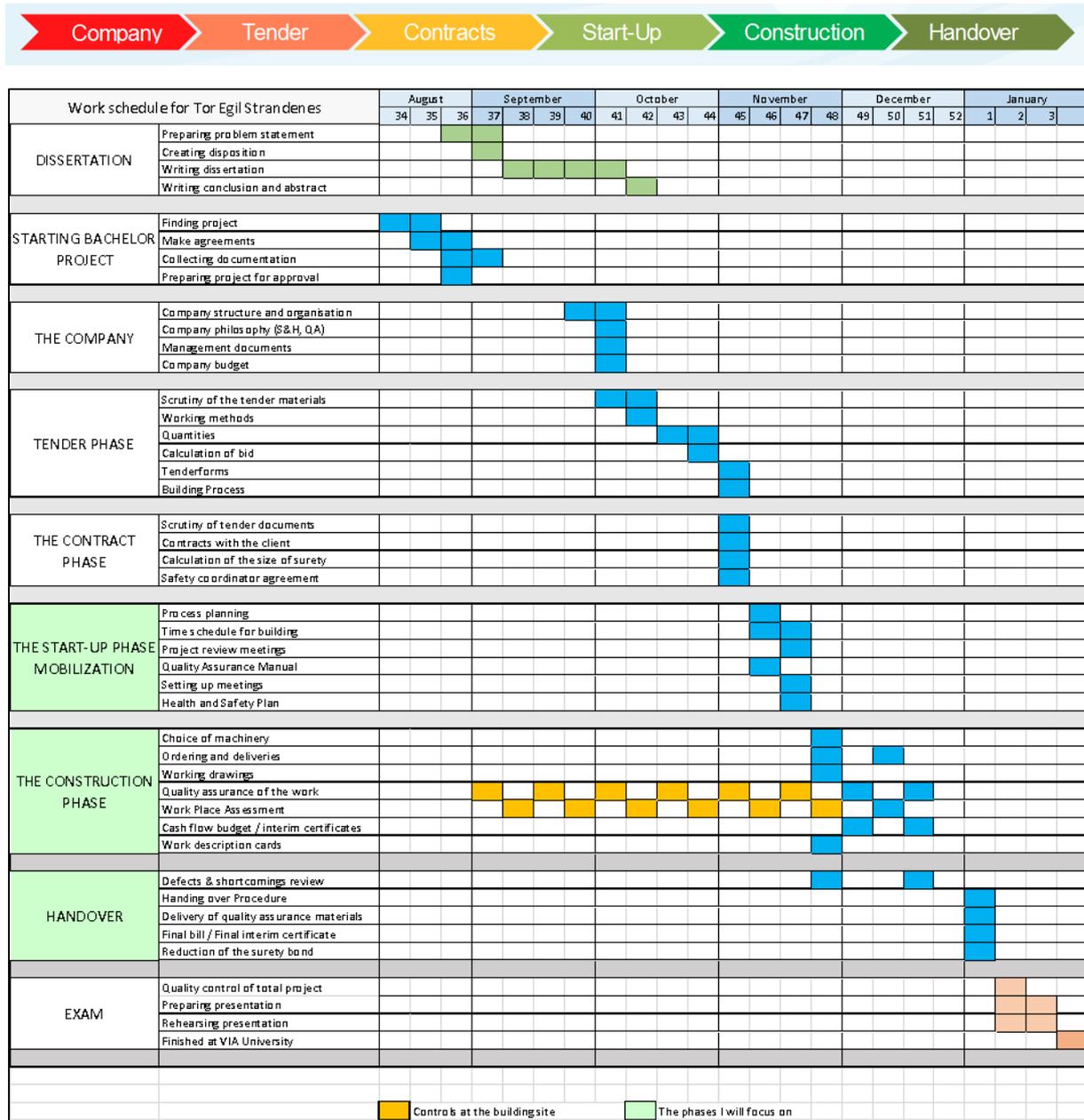


Figure 1: Organisation for the project with focus areas in green

## 4 Estimated allocation of time



### 5 Drawings

