STM FOV SUPPORT

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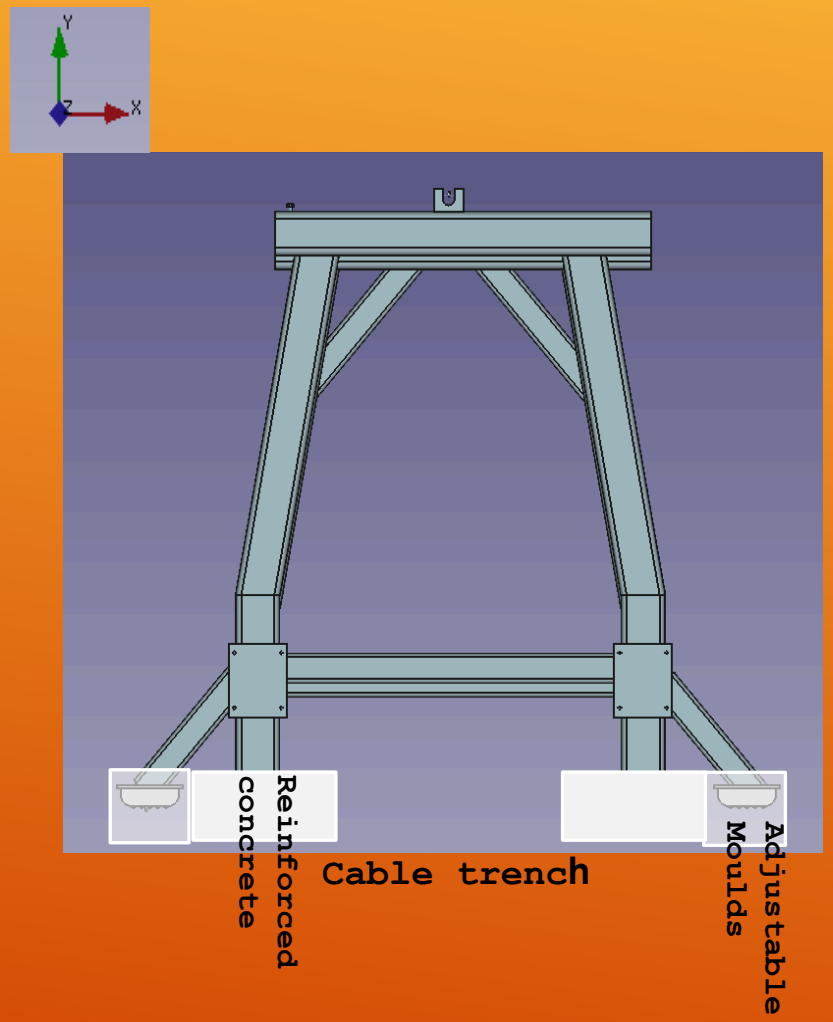
OVERVIEW: BASIC SCHEMATIC



- Material : Steel
- Alignment/Positioning:
  - "Moulds" could be used on outer legs only as cannot drill the moulds into the reinforced concrete.
  - The legs entering the moulds are not adjustable.
  - These ensure repeatability of the alignment as fixed to the frame to guarantee identical placement.
  - Outer feet will penetrate ground while the inner feet stay on top

Very basic outline of what we envisage….

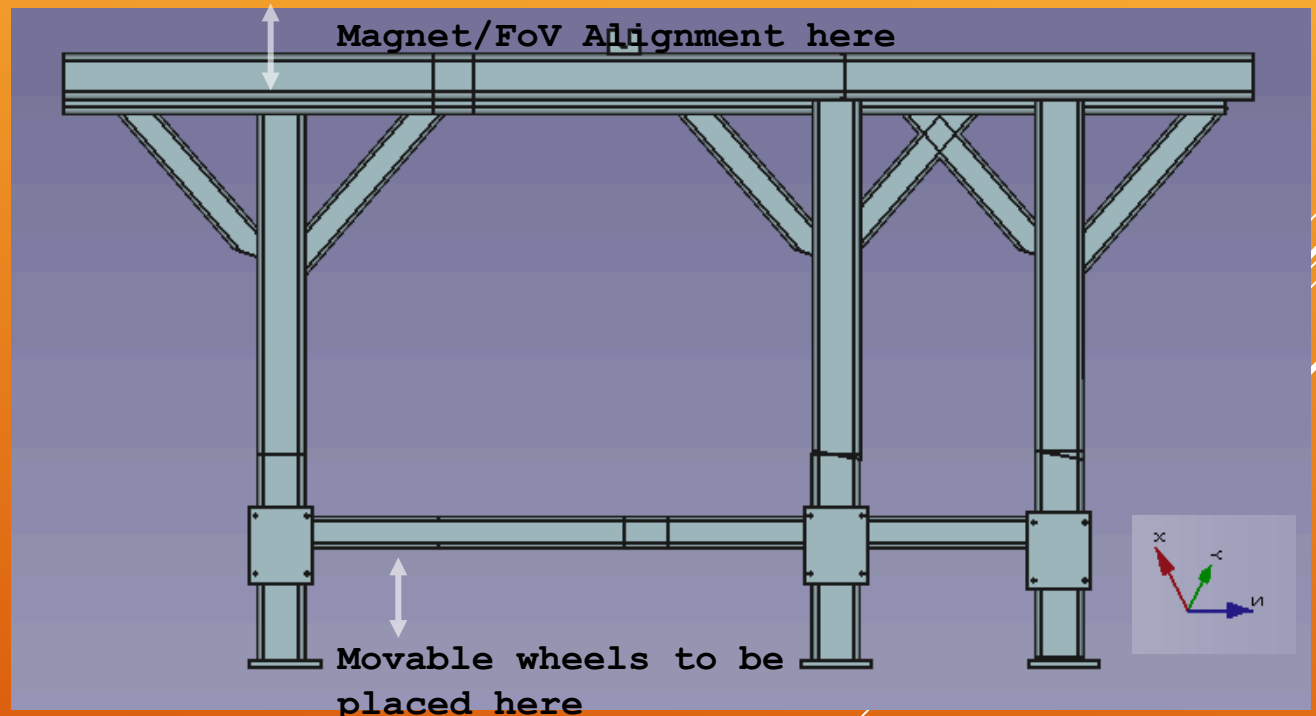
OVERVIEW: BASIC SCHEMATIC

Very basic outline of what we envisage….

- Alignment/Positioning:

Movable wheels allow positioning and location variability.

Positioning elements on top to align collimator and magnet.



WHAT WE STILL NEED TO KNOW:

In order to complete our design with exact specifications we need to understand more about the Sweeper Magnet support/alignment infrastructure:

1. **- How high is this and where does it need to be supported from below?**

2. **- If we can assume assembly at the mm accuracy, what range to we need to be able to move (this is more a question to be answered by the choice of alignment; we need to know this for the collimator)?**

WHAT WE STILL NEED TO KNOW:

3. Where will the magnet will be supported longitudinally?

From a weights point of view going a quarter of the length in from either end ? but from an alignment precision point of view you'd like to be as far to the ends as possible?

The weight needs to be carried down ideally directly where the fixtures are at the top.

4. Forces due to the solenoid's magnetic field? This will obviously define the shape of the stand.

Given the height of the magnet and therefore the stand we expect there will be some torque were the stad meets the floor....direction/magnitude is a design consideration....we await information from sweeper magnet team...