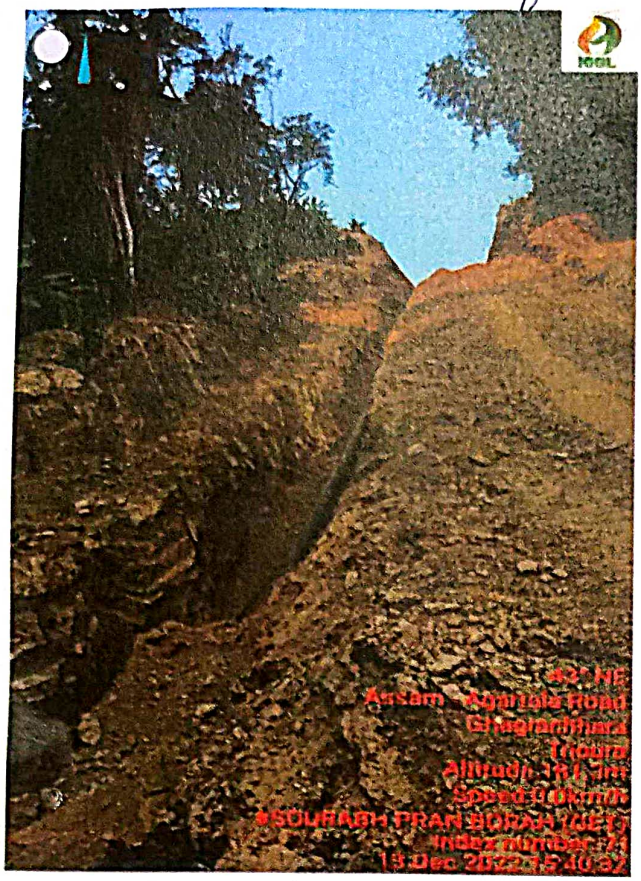
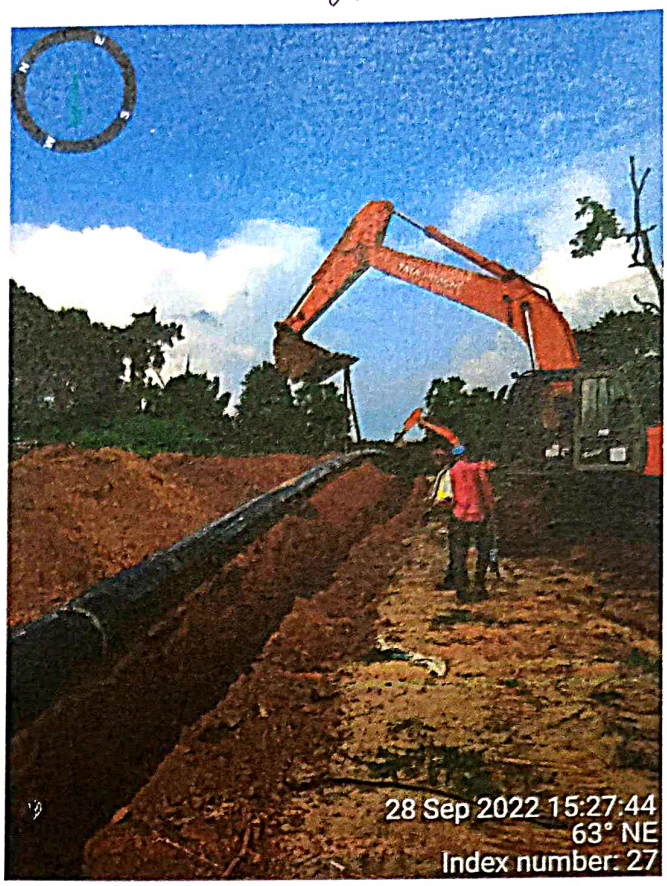
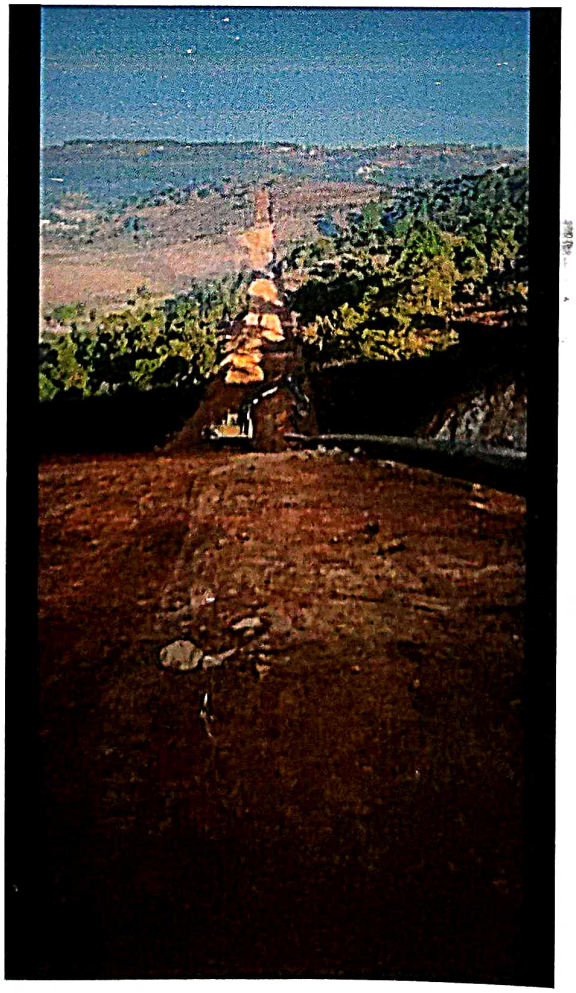
For Reference of IRO Queries Point No. 6.



During Backfilling



During Lowering of pipes



10 m ROU clearing in forest land

TOP SOIL GRADING

Once the Bonds are signed and payments are done, soil grading is done. Here the top soil surface is excavated for easy movement of machineries and laying of pipes along the RoU over the affected land.

Figure: Both the images showing grading of top soil along the RoU

PIPE UNLOADING AND STRINGING

- Soil grading is followed by unloading of pipes on a suitable land on the Right of Use (RoU)

Figure: *Unloading and stacking of pipes*

Figure: *Stringing of pipes along RoU*

FITTING AND WELDING

Once the pipes are laid or stringing is done, pipes are fitted using external pressure clamp and internal pressure clamps.

Fitted pipes are then welded, and are examined for quality assurance using Radiography Testing

Figure: Welding of pipe joins after getting fitted

JOINT COATING/ INSULATION

After the welded joints are passed, they are cleaned and coated with an insulating sleeve to prevent direct exposure to land and conducting particles.

Figure: Joint coating for insulation in the exposed pipe joints

TRENCHING/ EXCAVATION

1. Once the coating of joints are completed, trenches are excavated wherein pipe strings are to be lowered.
2. After excavation, trenches are barricaded properly so as to avoid falling of any animals or humans into the dug trenches.

Figure: Trench excavated along the pipe string on RoU

LOWERING OF PIPES AND BACKFILLING

Pipe strings are lowered into the trenches where the top layer of the pipes are maintained 1.2 meters below the ground level.

Once the pipes are lowered, excavated soil is backfilled into the trench and levelled. Full restoration is done back into its original state.

Figure: Both figures showing lowering of the pipes into its trench