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Successful Deployment of
Surveillance Systems for Atomic Minerals Directorate for Exploration and Research (AMD) in Hyderabad and Bangalore

About the Project:

Brihaspathi Technologies undertook the deployment of CCTV surveillance system for the Atomic Minerals Directorate for Exploration and Research (AMD) across their facilities in Hyderabad and Bangalore. The project involved the installation of both outdoor and indoor CCTV cameras for maximum security and monitoring capabilities.

Deployment of CCTV Cameras:

In Hyderabad:

A total of 57 high-tech cameras now vigilantly oversees the premises:

- 4MP 40m IR Dome 32 units strategically placed for wide-area monitoring.

- 4MP 60m IR Bullet: 20 units enhancing security with extended IR range.

- 4MP 90m IR Bullet: 3 units providing long-distance clarity.

- 150m IR PTZ: 2 units offering dynamic and comprehensive coverage.

Network Cameras

In Bangalore:

51 cameras have been installed to ensure impeccable surveillance:

- 4MP Fixed Dome Cameras: 28 units delivering consistent indoor monitoring.

- 4MP 40m Fixed Bullet Cameras: 3 units positioned for critical entry points.

- 4MP 90m Fixed Bullet Cameras: 12 units securing vast operational areas.

- 2MP PTZ Cameras: 8 units equipped with pan, tilt, and zoom capabilities for versatile coverage.

Challenges and The Approach:

1. Placement for Maximum Coverage:

Challenge: Strategically placing cameras to cover critical areas like inside the block, perimeter wall, and operational zones as per customer requirements.

Solution: Successfully tackled the challenge by precisely digging around 95 meters along the perimeter walls. This meticulous execution Verified maximum coverage without causing any damage to AMD's properties.

2. Distance and Signal Loss:

Challenge: Signal integrity over long distances.

Solution: Utilized appropriate cable types, including fiber optics, to minimize signal loss and maintain high-quality video transmission.

3. Access and Permissions:

Challenge: Navigating bureaucratic processes to obtain necessary access and permissions.

Solution: Coordinated closely with AMD officers to plan and schedule work efficiently, minimizing disruptions.

4. Soil Conditions:

Challenge: Digging through various soil conditions such as rocky, sandy, or clay.

Solution: Deployed heavy machinery for rocky soils and adapted digging techniques as per soil types.

5. Identifying and Avoiding Existing Underground Utilities:

Challenge: Preventing damage to existing underground utilities like water pipes, electrical cables, and telecommunications lines.

Solution: Conducted thorough underground surveys to identify utility locations and planned alternative routes where necessary.

6. Disruption to Operations:

Challenge: Minimizing disruptions to AMD's daily operations during installation.

Solution: Scheduled work during non-peak hours and coordinated closely with AMD staff.

7. Remove Pavement, Backfilling, and Re-laying Pavement:

Challenge: Managing pavement removal, backfilling trenches, and re-laying pavement without compromising structural integrity.

Solution: Removed cut pavement pieces carefully, backfilled trenches with excavated soil, and re-laid pavement meticulously.

9. Cable Path Design and Management:

Challenge: Designing efficient cable paths and managing them to avoid clutter.

Solution: Used cable ties, Velcro straps, and clips to secure cables neatly.

10. Pole Strength, Foundation, and Clearance:

Challenge: Ensuring poles are strong, properly founded, and have sufficient clearance.

Solution: Used structurally sound poles and ensured proper foundation and clearance.

Results:

The successful deployment of 108 cameras across both locations has significantly resulted the security infrastructure of AMD. The strategically placed cameras provided coverage, continuous monitoring, improved safety and security for both indoor and outdoor areas.