
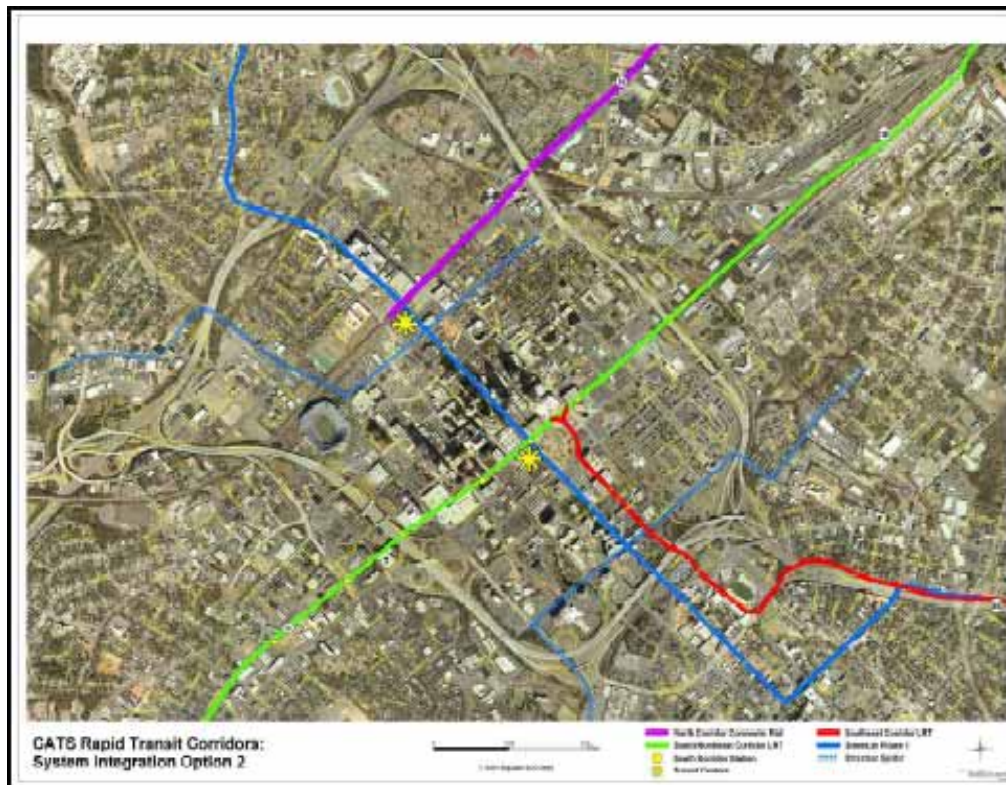


UNC Charlotte Student Transportation Lab Design

NCSITE Student Chapter Meeting
March 28th, 2006
Brian Edwards



Transit Corridors Map



Lab Design Requirements

Location:

Any proposed station site not on the South Corridor

Aspects:

Traffic Impact Analysis

Parking Requirements and Circulation

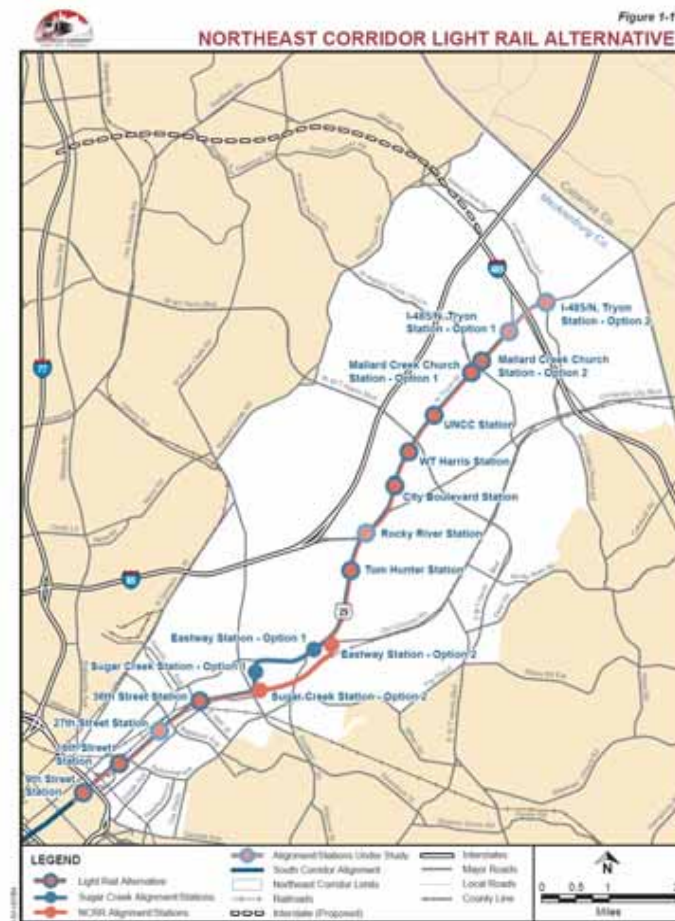
Platform Design

Building size, layout, and function

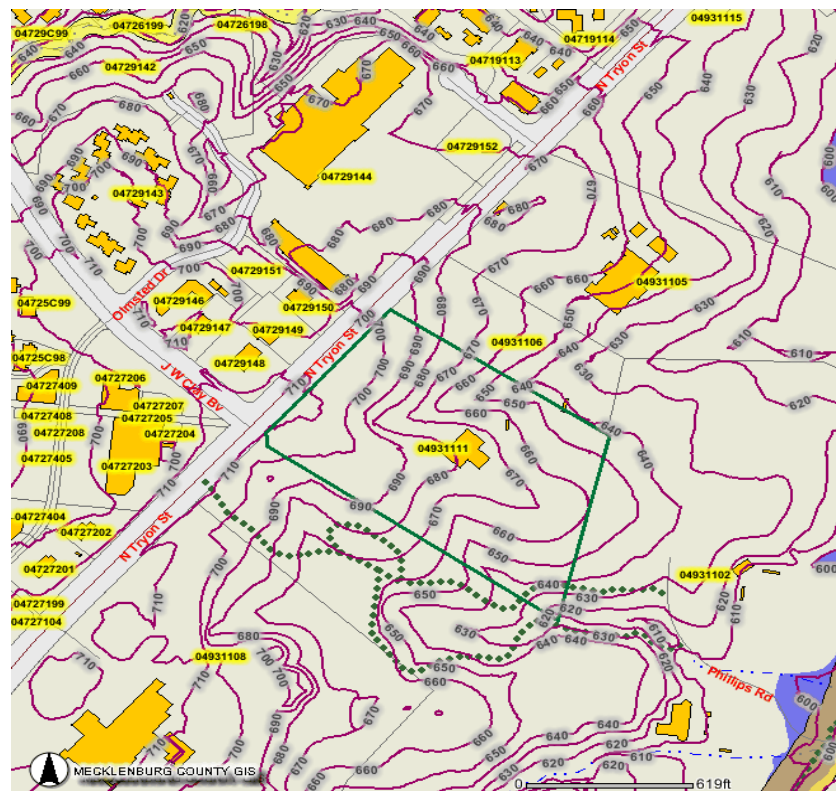
Traffic Control at and near the station for:

- Pedestrian
- Vehicular traffic
- Transit vehicles

Proposed North East Corridor



Contour MAP



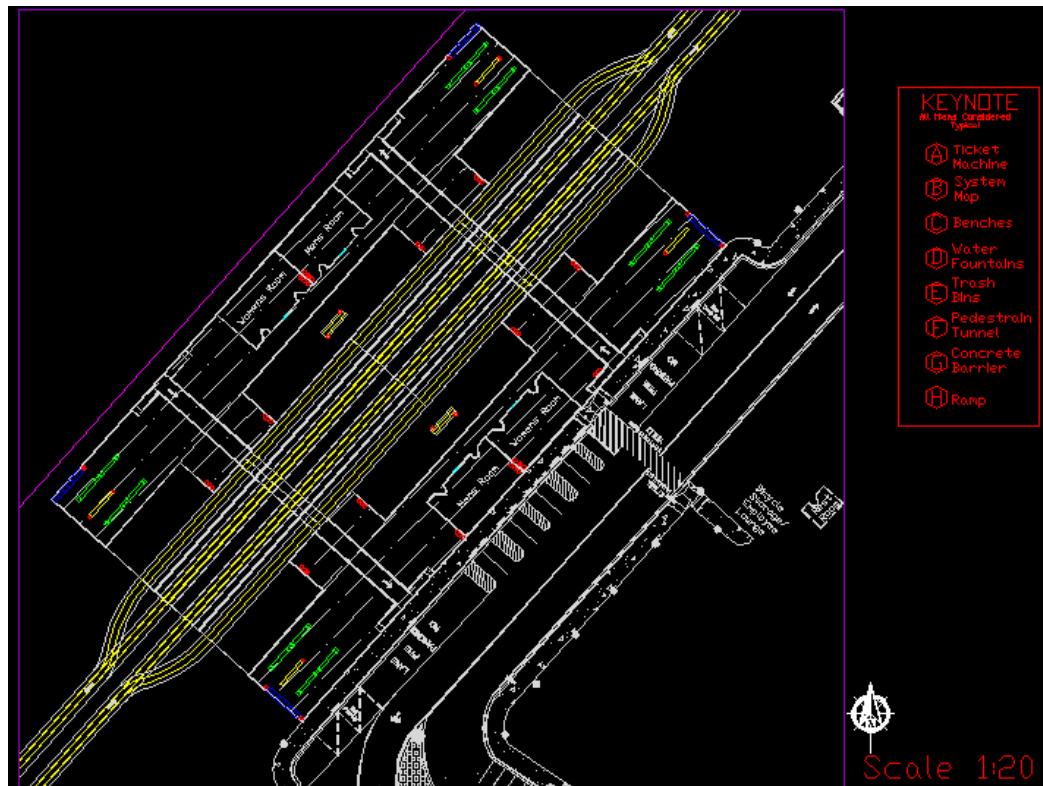
Overall Site Plan



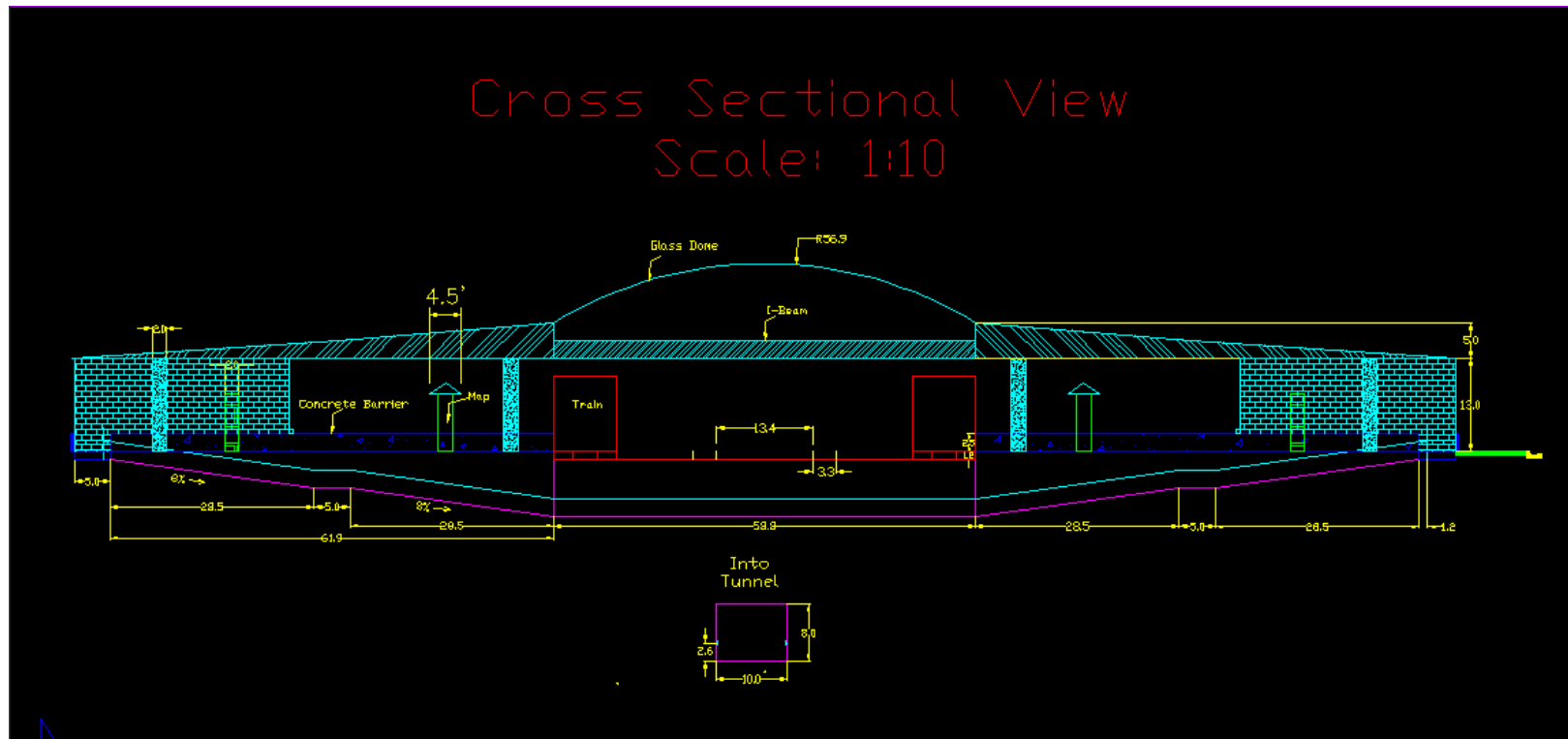
CATS Criteria

- Covered Ticket Vending Machines (TVMs)
- System and Area Maps
- Train and Bus Schedules
- Public Art
- Bicycle Storage
- Water Fountains
- Benches
- Trash and recycling receptacles

Platform Layout



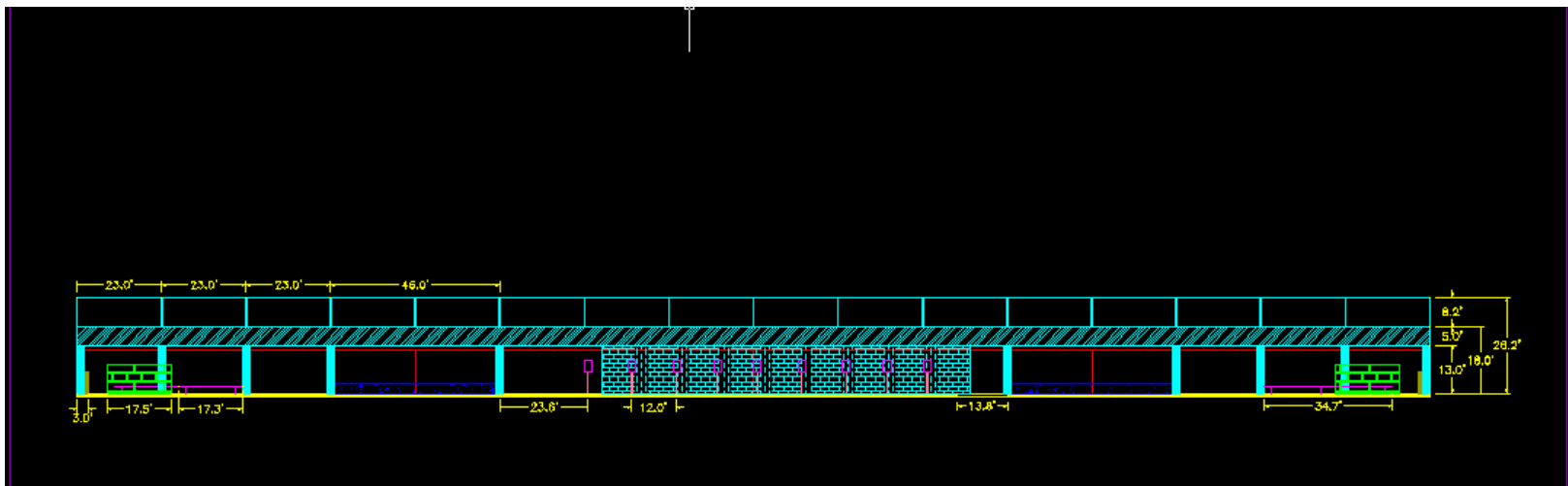
Platform and Tunnel Design



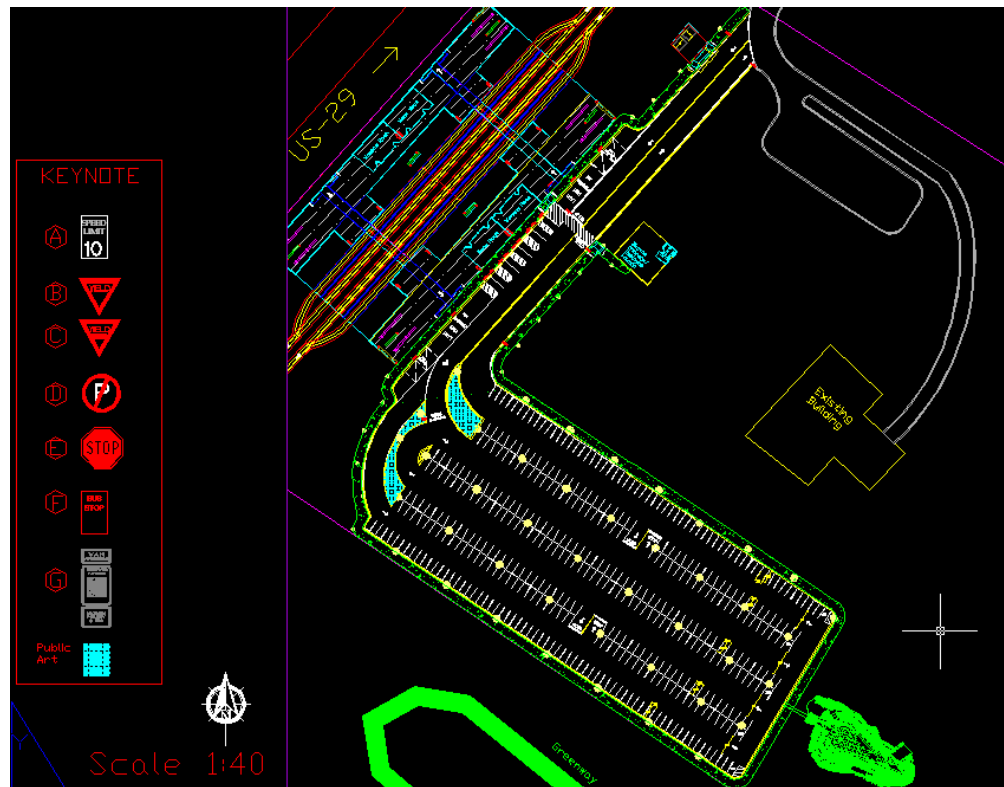
Tunnel Ramp Design Standards taken from British Columbia

- Have a maximum **gradient** of **8%** (1:12).
- Have a **level area** at least **4.9 ft by 4.9 ft** at:
 - * **Top** and **Bottom** of Ramp
 - * **Intervals** of **not more than 29.5 ft** along its length
 - * Where there is an **abrupt change** in the direction of the ramp
- Provide a minimum 2 in high curb on any side of ramp without a solid enclosure or guard.
- Provide **railings** on both sides of ramp at height of **2.6 ft – 3 ft**.
- **Extend handrails** a minimum of **1.0 ft beyond** top and bottom of ramp and return into wall.
- Railing diameter should be 1.7 in – 1.9 in w/ a minimum clearance between rail and wall of 1.5in.

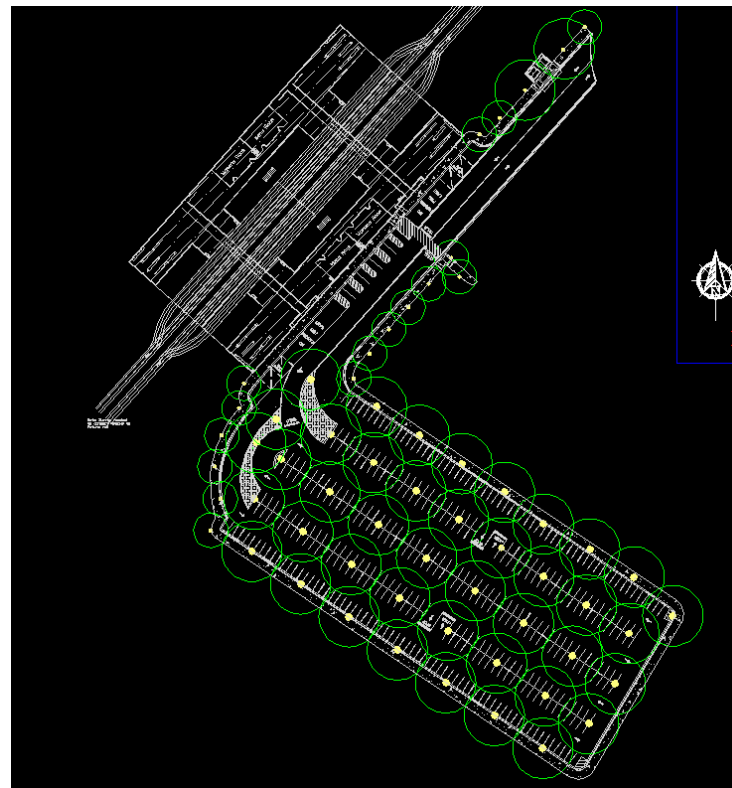
Station Design



Parking



Parking (Lighting)



CMLDSM References

- CMLDSM 10.17A Standard Curb and Gutter
- CMLDSM 10.22 Concrete Sidewalks
- CMLDSM 10.32B Accessible Ramp Section w/out Planting Strip
- CMLDSM 20.31A Best Management Practices Pond
- CMLDSM 50.03 Typical Concrete Control Monument
- CMLDSM 50.04 Typical Handrail
- CMLDSM 50.09 Parking Standards
- CMLDSM 50.10A Accessible Parking and Signage Standard



Questions?

