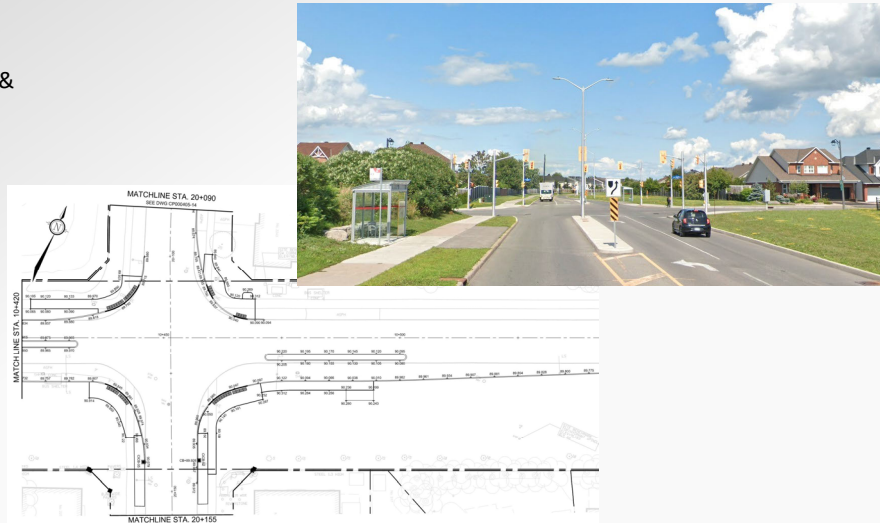


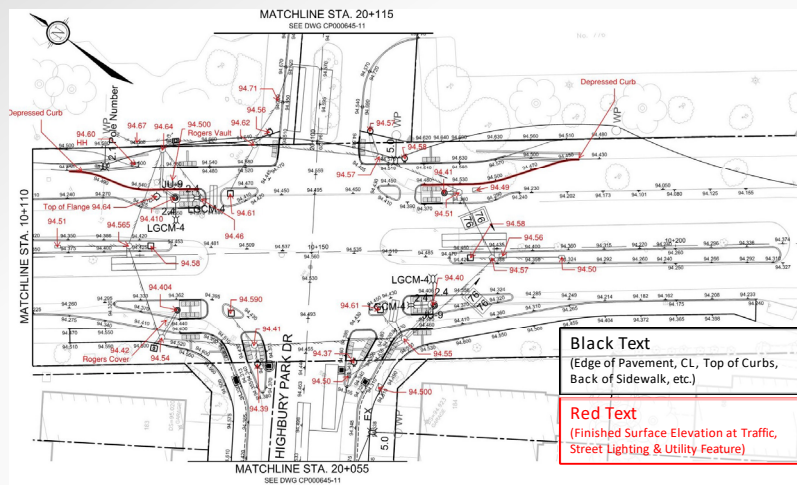
Signalized Intersection – No Cycling/Protected Treatments

- Less Complex Grading & Drainage Designs
- Elevations Generally Provided at Edge of Pavement & Back of Sidewalk
- Some Flexibility in the Field for Placement of Traffic & SL Plant



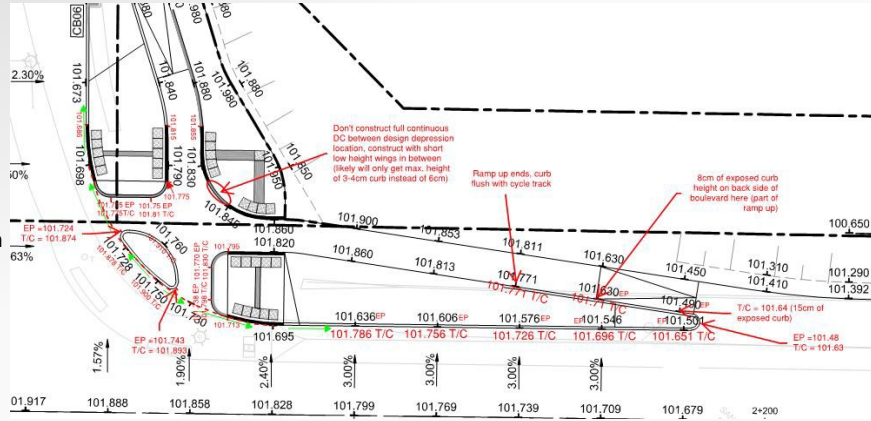
Signalized Intersection – Protected Intersection Design

- More Complex Grading Designs – Not Just Edge of Pavement & Back of Sidewalk to be Thinking About
- Newer Features - Half Height Curbs, Directional TWSIs
- Significantly More Information Needs to be Provided
 - Example – Finished Surface Elevations at Utility Features (MHs, HHs, Poles, etc.)
- Reduced Flexibility to Make Changes in the Field



Signalized Intersection – Protected Intersection Design

- Additional Information & Instruction Required for Contractor During Construction

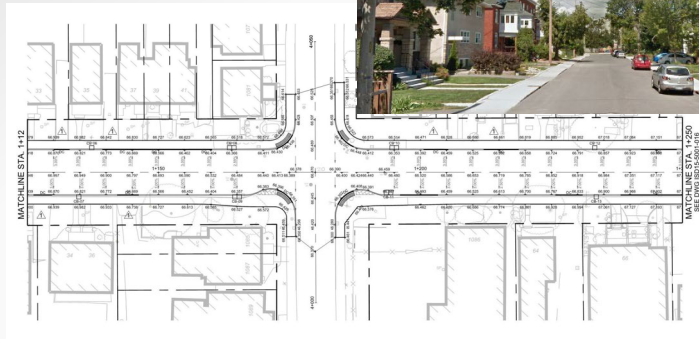
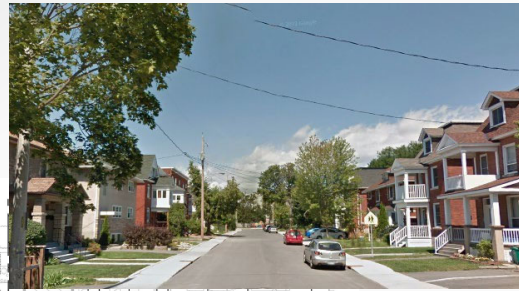


Signalized Intersection – Protected Intersection Design



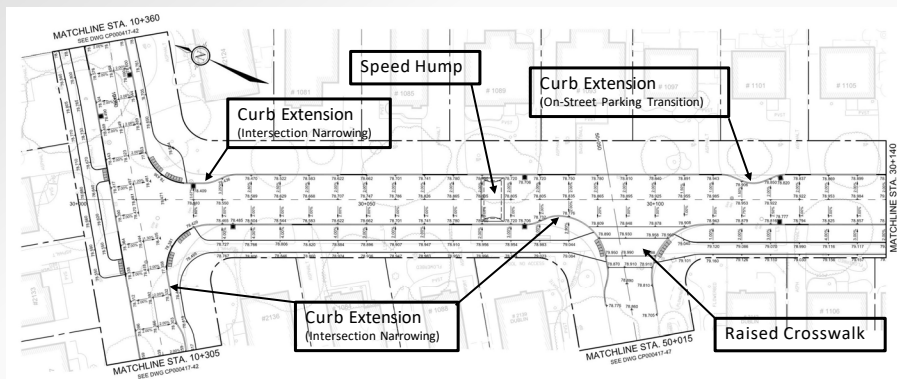
Local Street Reconstruction – 10 Years Ago

- Limited Traffic Calming
- TWSI's were Starting to Replace the Use of Textured Grooves
- 1.8m Wide Sidewalks
- Less Complex Road Geometry & Grading Designs



Local Street Reconstruction – Now

- 30km/hr Design for Local Streets
- Extensive Use of Various Traffic Calming Measures to Achieve Design Objectives
- Measures Required Every 50m-60m to be Effective
- 2m Wide Sidewalks
- Increased Complexity Road Geometry & Grading Designs



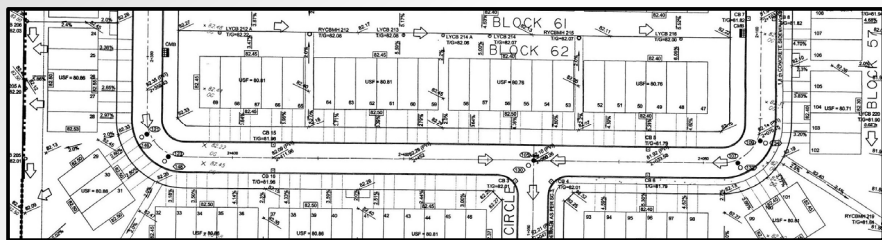
Local Street Reconstruction – Now



Subdivision Road Design Info

10+ Years Ago

- Grading Plan Only
- Provides Centreline Elevations at High Points, Low Points & Other Locations in Between
- No Detailed Pavement Elevation Plans Provided (just Typical Sections)



Now

- Pavement Elevation Plans developed to capture the road design
- Increased Detail Required for Traffic Calming and Active Transportation Infrastructure

