

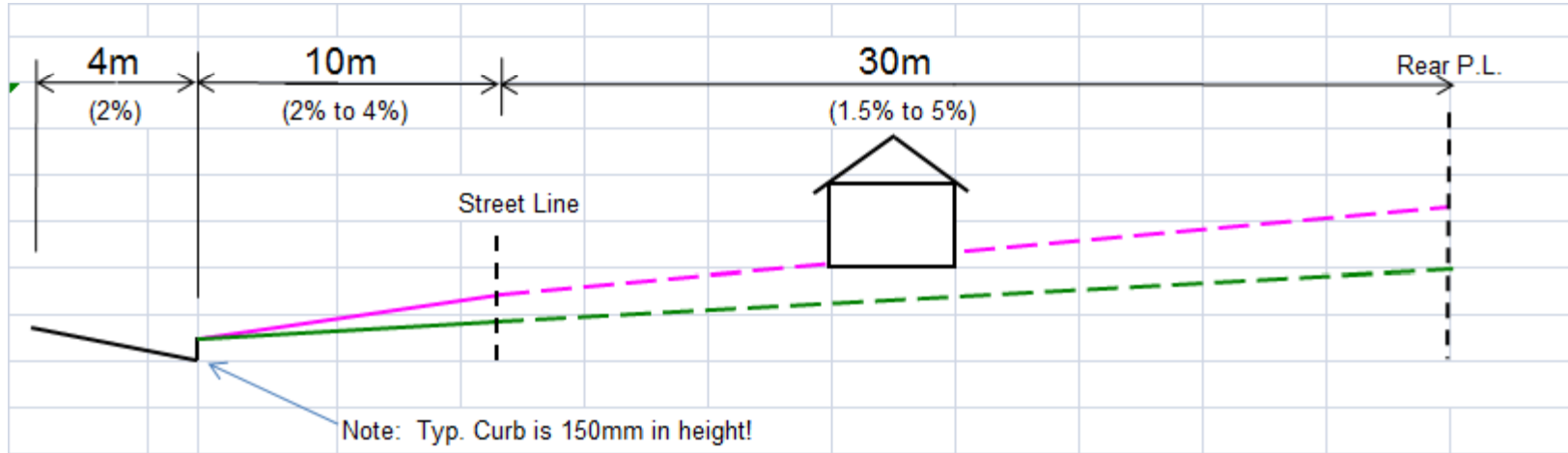
Grading

- Any type of grading (Lot Grading, Site Grading, or Sub-Division grading) must be designed to convey storm flow safely to public ROW without inundating structures or damaging property.
- Typically, we can not drain onto neighbors property
- Must continue to accept neighbor's drainage (if pre-existing condition)
- Both MINOR and MAJOR storm events must be considered and conveyed
- Minor storms (typically 2-year) are conveyed through storm sewers
- Major storms (up to 100-year) are conveyed via OFR (Overland Flow Release)
- (3) Types of Lot Grading
 - Type A: Front Lot Drainage
 - Type B: Split Lot Drainage
 - Type C: Rear Lot Drainage (not common)

Typical Grading Plan

- North arrow
- Title block (include name of subdivision or development)
- Refer all elevations to a geodetic benchmark
- Existing contour elevations and existing spot grade elevations
- Existing and proposed lot numbers / block numbers
- Existing utilities and sewers (dashed / screened)
- Proposed utilities and sewers (solid / darker); be sure to show length, size, type of material, slope.
- Label proposed sewers (if no Plan and Profile drawing);
(ie: 30m-375mm PVC STM. @ 0.50%)
- Label catchbasins, manholes
- Proposed Grading / Building Finished Floor Elevations
- Show proposed cut / fill slopes with appropriate notations (3:1, 4:1)

“Typical” Slopes for Lot Grading



<u>Surface</u>	<u>Min.</u>	<u>Max.</u>
Concrete	0.50-0.70%	4 – 5%
Asphalt	1.00-1.50%	4 – 5%
Grass*	1.00-2.00%	3:1

*Consider using a sub-drain under grassed swales less than 1.5%

“Typical” Slopes for Parking Lots

Surface	Min.	Max.
Concrete	0.50-0.70%	4 – 5%
Asphalt	1.00-1.50%	4 – 5%
Grass*	1.00-2.00%	3:1

*Consider using a sub-drain under grassed swales less than 1.5%

Need to consider:

- Car door dings (due to steep slope)
- Truck movements (difficult to maneuver steep cross slopes)

