

	Scheme:	Fox Covert Farm, Congerstone
	Client:	WN
	Job Ref:	PN/437/25/26
	Date:	19/12/2025
	Calcs By:	ML

Visibility to the south (towards north bound traffic)

v t d a	13.10	Speed in m/s	Dry ATC 85th %ile Speed	29.3	mph
	1.5	Reaction time (seconds)	Wet ATC 85th %ile Speed	29.3	mph
	4.41	Deceleration rate (m/s²)	Heavy veh % flow	0.0	%
	0.0	Longitudinal gradient (%)	Gradient		%

SSD= vt + v2/2(d+0.1a) From Manual For Streets 2

vt	19.643				
v2	171.491				
2(d-0.1a)	8.820	Downhill approach visibility length (m)	41.59	m	
2(d+0.1a)	8.820	Uphill approach visibility length (m)	41.59	m	

Visibility to the north (towards south bound traffic)

v t d a	13.54	Speed in m/s	Dry ATC 85th %ile Speed	30.3	mph
	1.5	Reaction time (seconds)	Wet ATC 85th %ile Speed	30.3	mph
	4.41	Deceleration rate (m/s²)	Heavy veh % flow	0.0	%
	0.0	Longitudinal gradient (%)	Gradient	0.0	%

SSD= vt + v2/2(d+0.1a) From Manual For Streets 2

vt	20.314				
v2	183.397				
2(d-0.1a)	8.820	Downhill approach visibility length (m)	43.61	m	
2(d+0.1a)	8.820	Uphill approach visibility length (m)	43.61	m	

Design Speed	Vehicle Type	Reaction Time	Decel. Rate (where g=9.81m/s²)
60 kph and below	Light vehicles	1.5s	4.41 m/s²
	HGV's	1.5s	3.68 m/s²
	Buses	1.5s	3.68 m/s²
Above 60kph	All	2.0s	3.68 m/s² (Absolute min SSD)
	All	2.0s	2.45 m/s² (Desirable min SSD)

DMRB design standards dictate that for All-Purpose Single Carriageway roads, 85th%ile wet weather speeds can be obtained by deducting 4kph (2.5mph) from dry weather speeds. Lennon Transport Planning have not deducted any speed in this instance.