

7.2 Trees on Public & Private Property

October 29, 2024, Urban Planning Committee

2024 PARKALLEN INFILL CASE STUDY

Pre-Infill



Same Site - Post Infill



PRE-DEVELOPMENT SITE
at 11143 70 Avenue

Mature Site
80% Vegetation
&
Under Built!



VEGETATION COVER

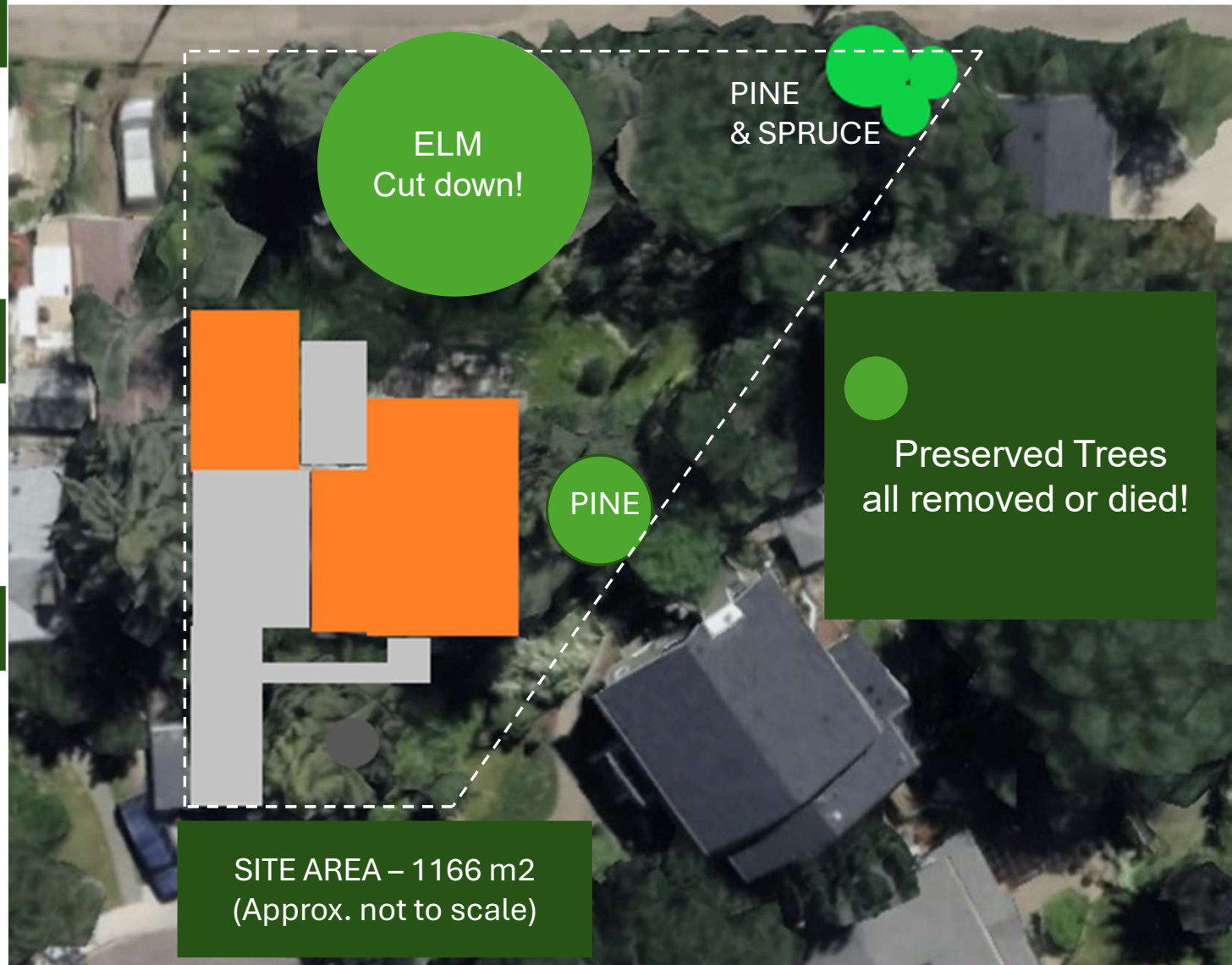
80%
Deep topsoil > 1 m

TREE CANOPY

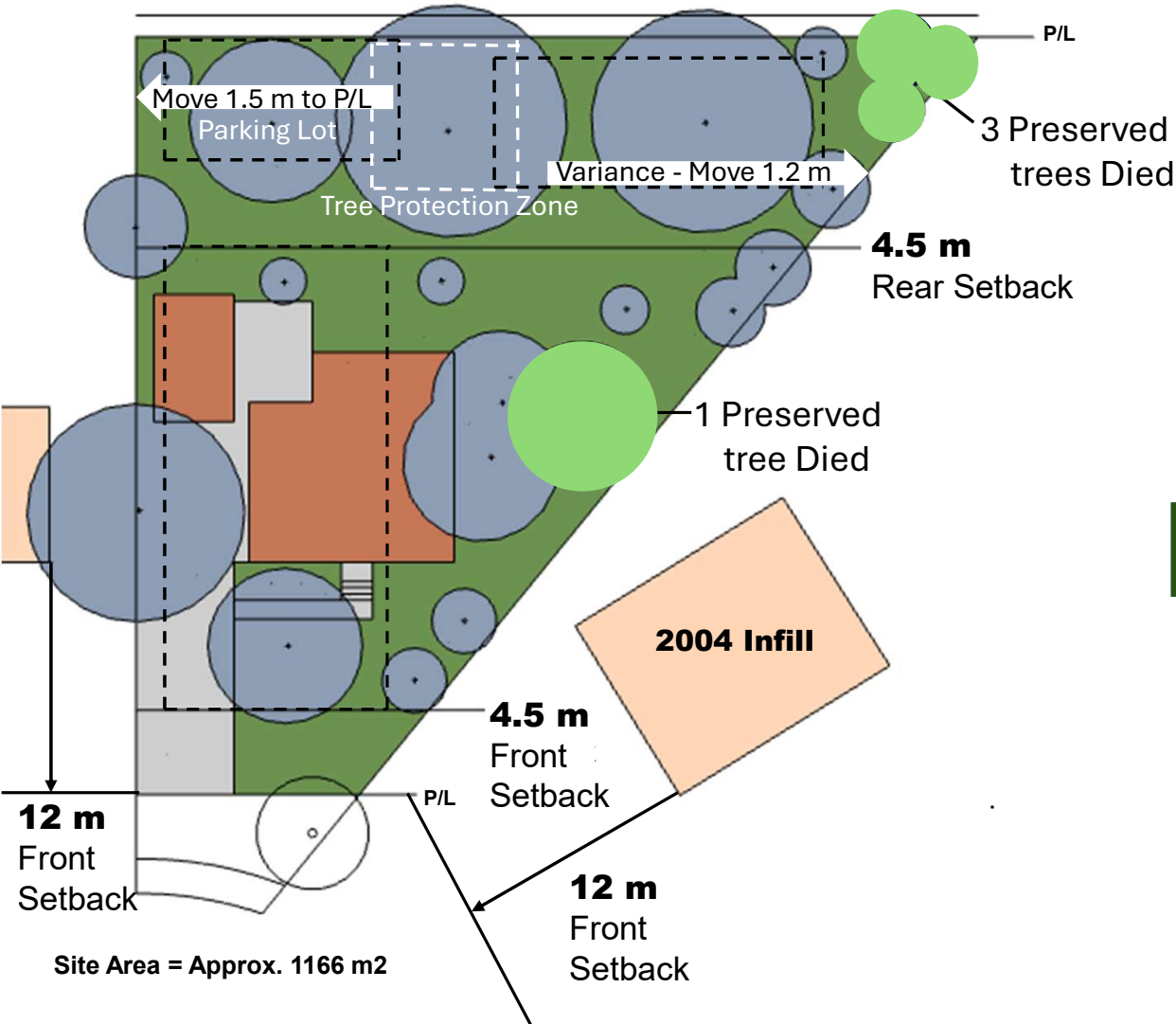
50%
Mature Tree Canopy

IMPERVIOUS COVERAGE

20% Impervious
**Buildings & Hard
Surfaces**



PRE-DEVELOPMENT SITE PLAN



Assets - Nature Based Solutions

1 m Topsoil to 100 to 150 mm Min.

NET LOSS - 85 to 90 mm

Vegetation Cover reduced 80% to 30% SLA
NET LOSS - 50% Vegetation Cover

18 Mature Trees Removed

4 Preserved trees died & later removed

NET LOSS - 22 Trees / 50% Site Area

Assets - Development

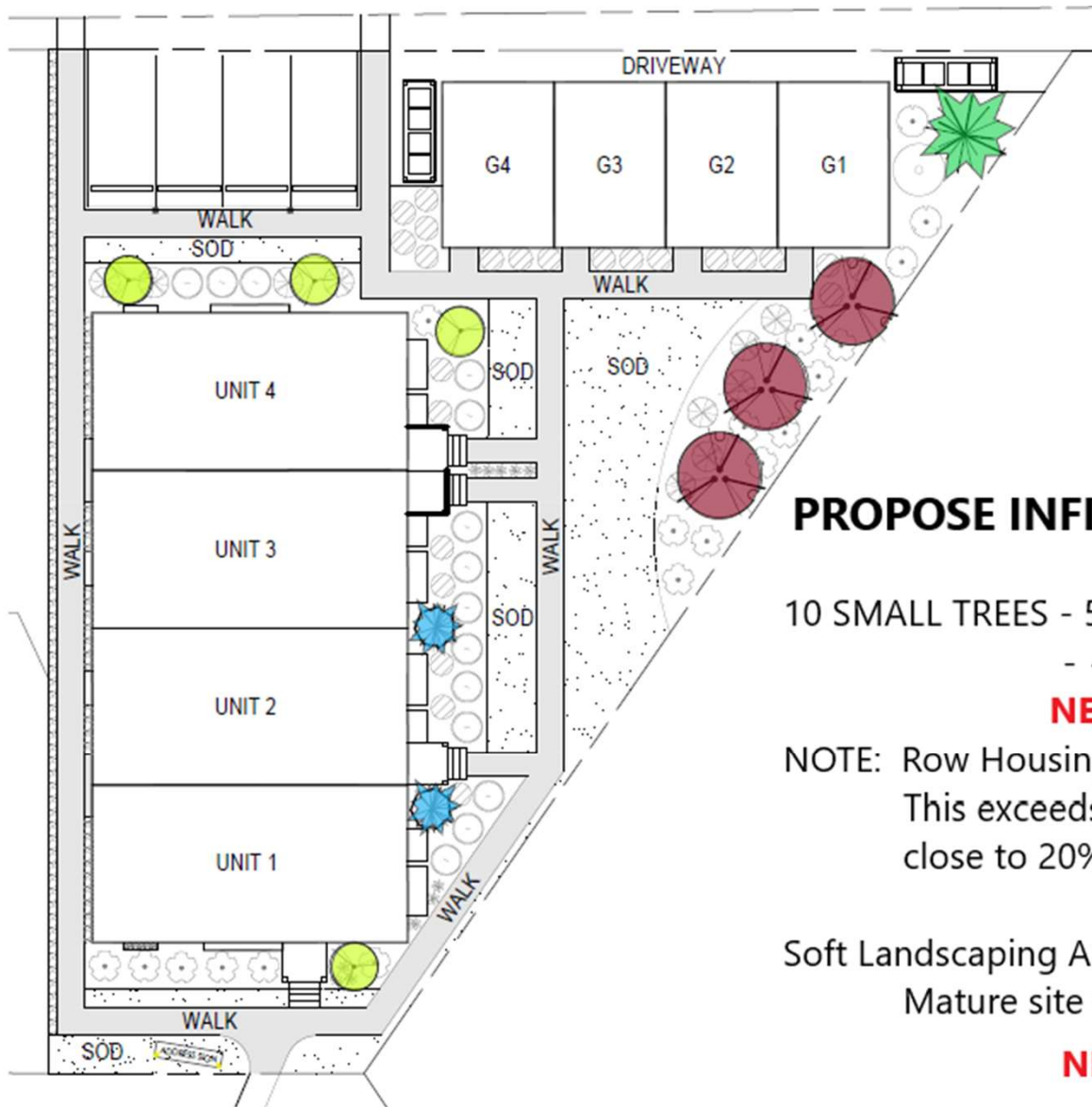
20% Mature Development - 1 Dwelling

45% New Infill Development - 8 Dwellings

NET INCREASE - 225% + 7 Dwellings

4 Outdoor + 4 Indoor Parking Spaces

NET INCREASE in parking



PROPOSE INFILL LANDSCAPE PLAN

10 SMALL TREES - 50 M2 COMBINED MATURE CANOPY
 - < 5% MATURE CANOPY / SITE AREA

NET 90% LOSS PRIVATE TREE CANOPY

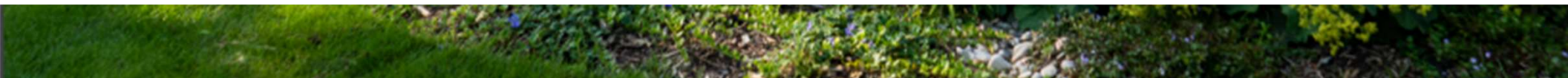
NOTE: Row Housing requires 1 tree / Principal Dwelling
 This exceeds the minimum requirement, but not close to 20% Mature Tree Canopy / Site Area

Soft Landscaping Area Soil Volume @ 100 mm = 35 m³
 Mature site volume @ 1 m deep = 350 m³

NET 90% LOSS SOIL VOLUME



Rain Gardens for Resilience – Designed by Jan Hardstaff for ALIDP, 2017





Erosion of Millcreek Ravine, 2024 that is related to increased development imperviousness and increasing impacts of climate change & extreme rainfall events. Further damage must be mitigated.



Proposal to daylight Millcreek Ravine to restore its ecological function and provide green infrastructure.

Protecting & Restoring the Watershed