Climate adaptive urban design

ISOCARP

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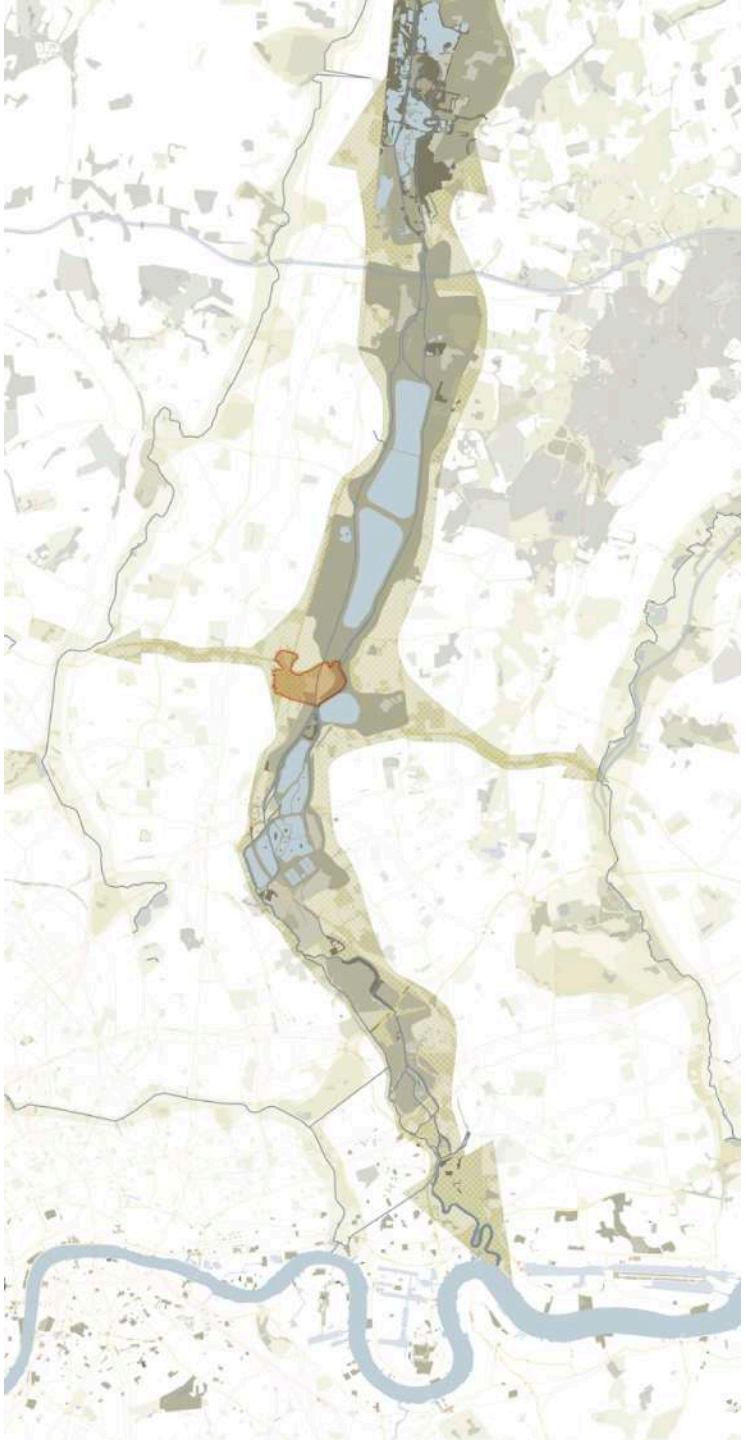
KUSTWERK - KATWIJK

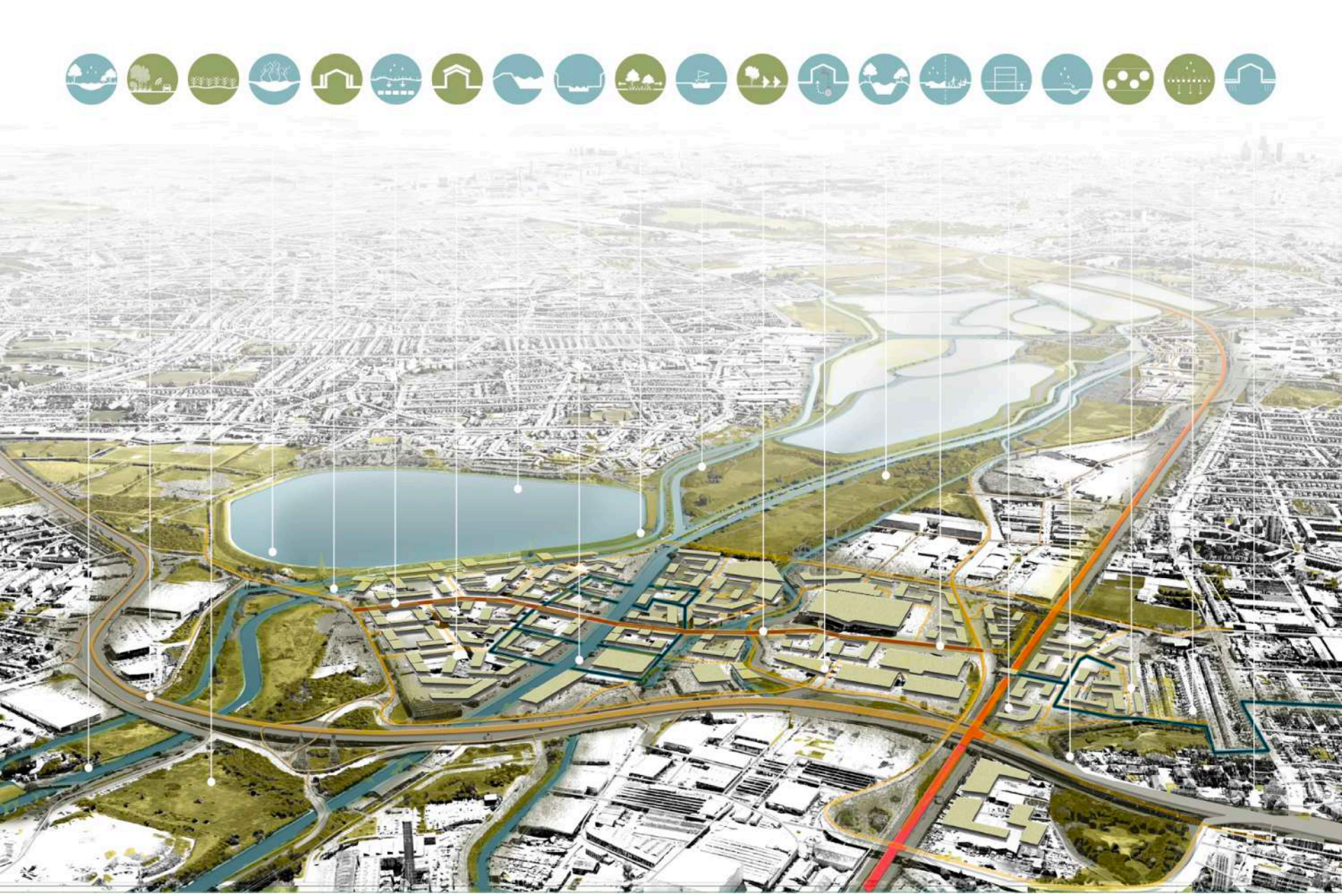
OKRA i.c.w Arcadis, Royal Haskoning DHV (parking garage)

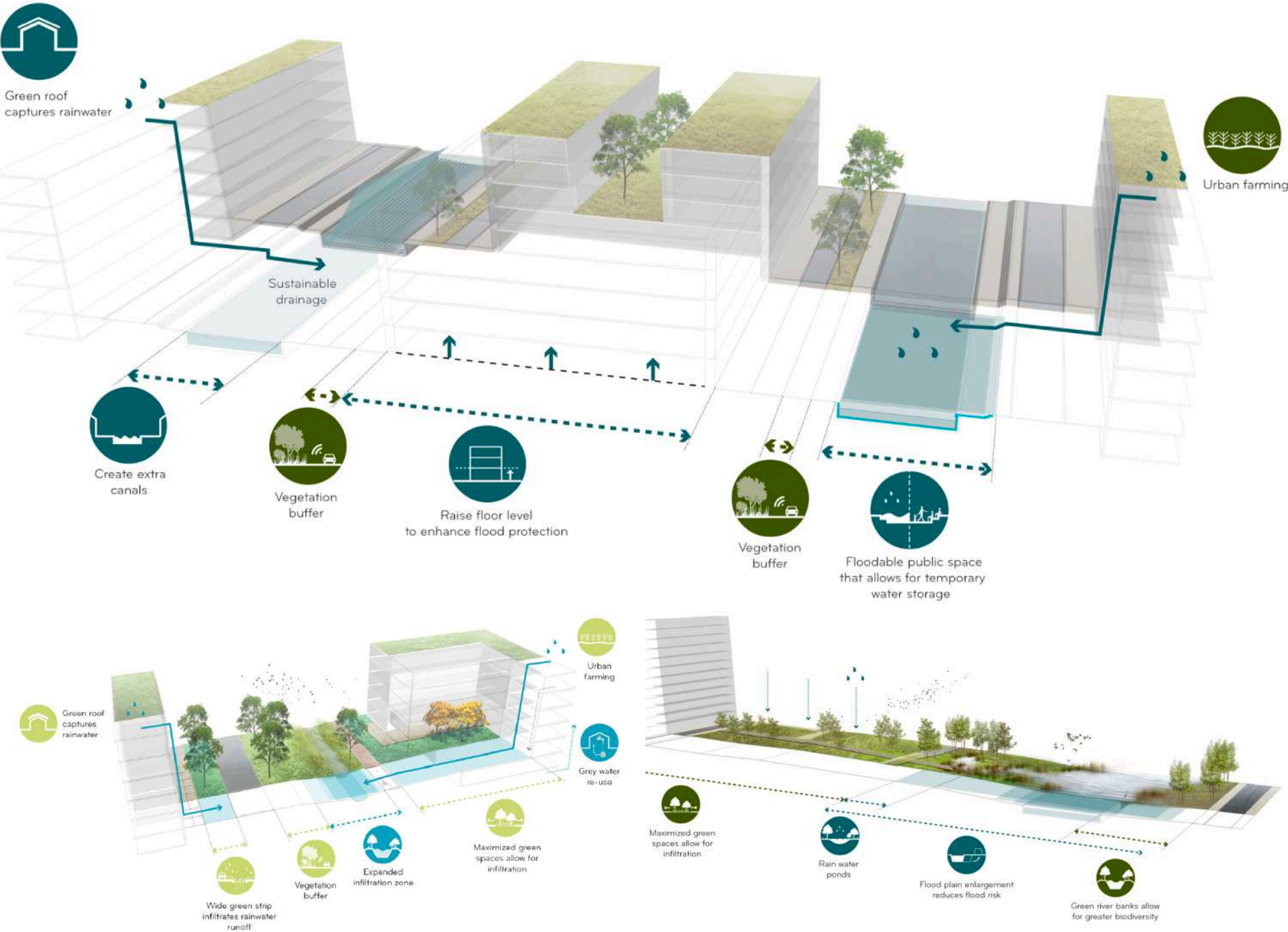
MERIDIAN WATER

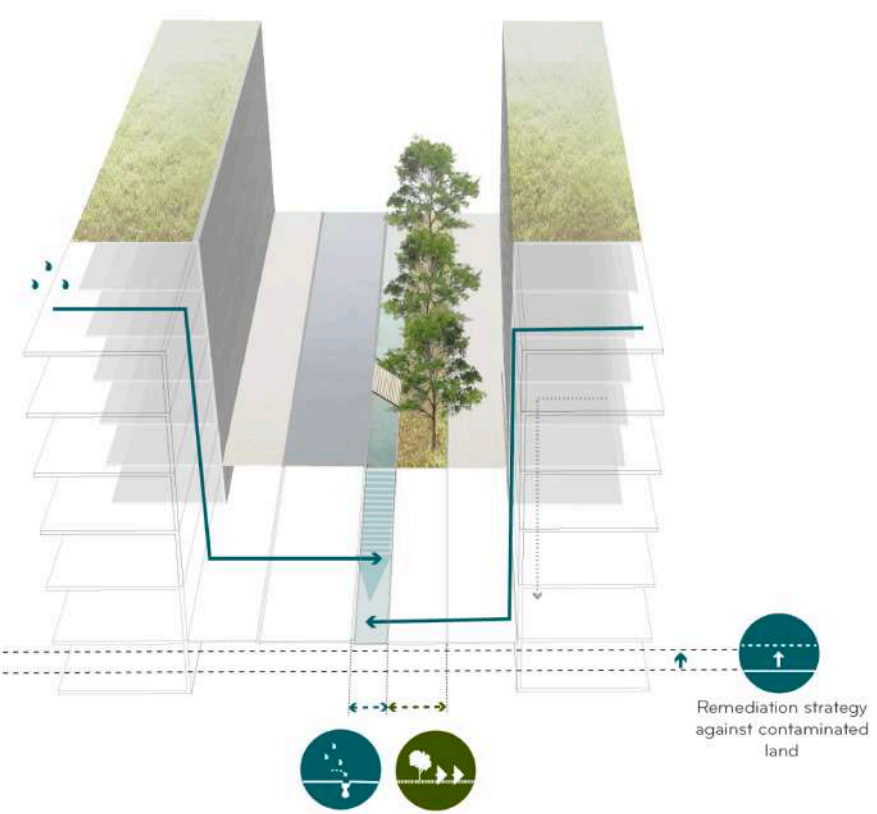
LONDON

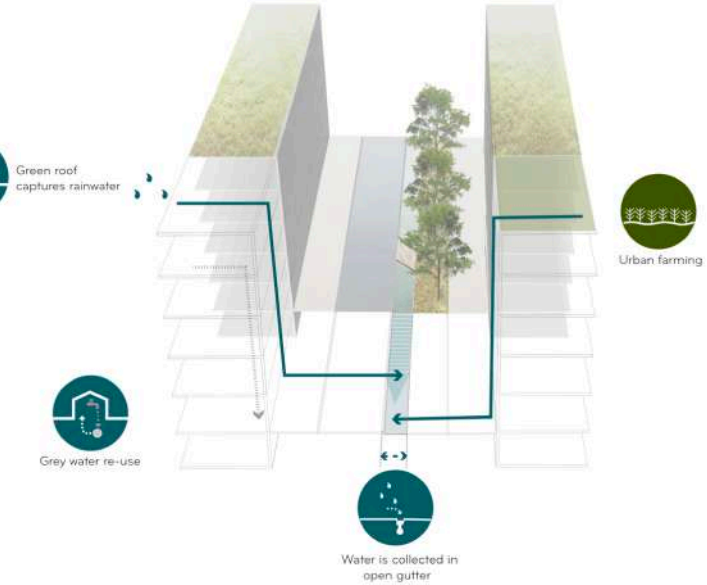
OKRA KCA ARUP





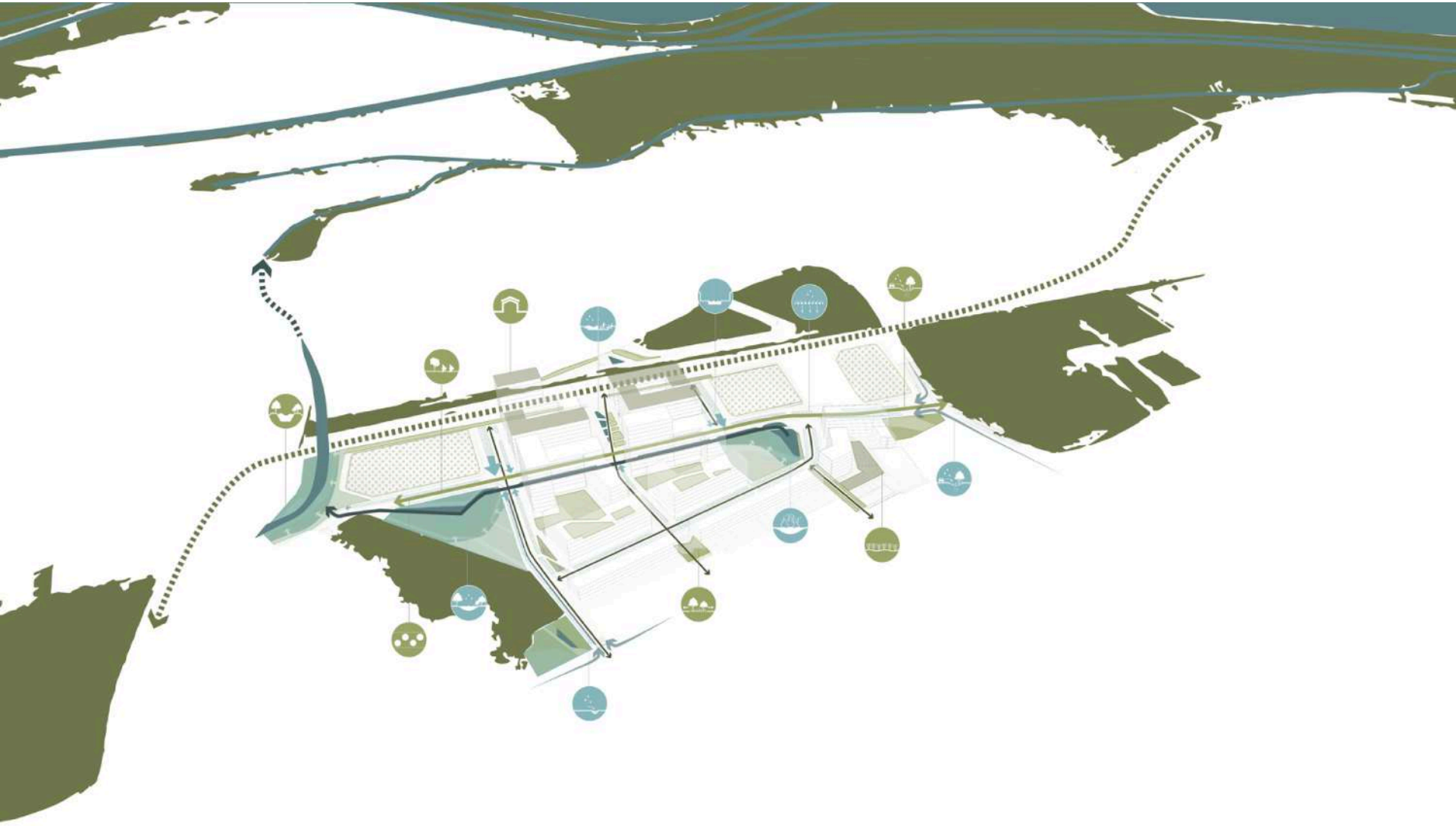

Green roof captures rainwater
Sustainable drainage
Urban farming
Create extra canals
Vegetation buffer
Raise floor level to enhance flood protection
Vegetation buffer
Floodable public space that allows for temporary water storage
Green roof captures rainwater
Urban farming
Grey water re-use
Maximized green spaces allow for infiltration
Wide green strip infiltrates rainwater runoff
Vegetation buffer
Expanded infiltration zone
Maximized green spaces allow for infiltration
Rain water ponds
Flood plain enlargement reduces flood risk
Green river banks allow for greater biodiversity


Remediation strategy against contaminated land

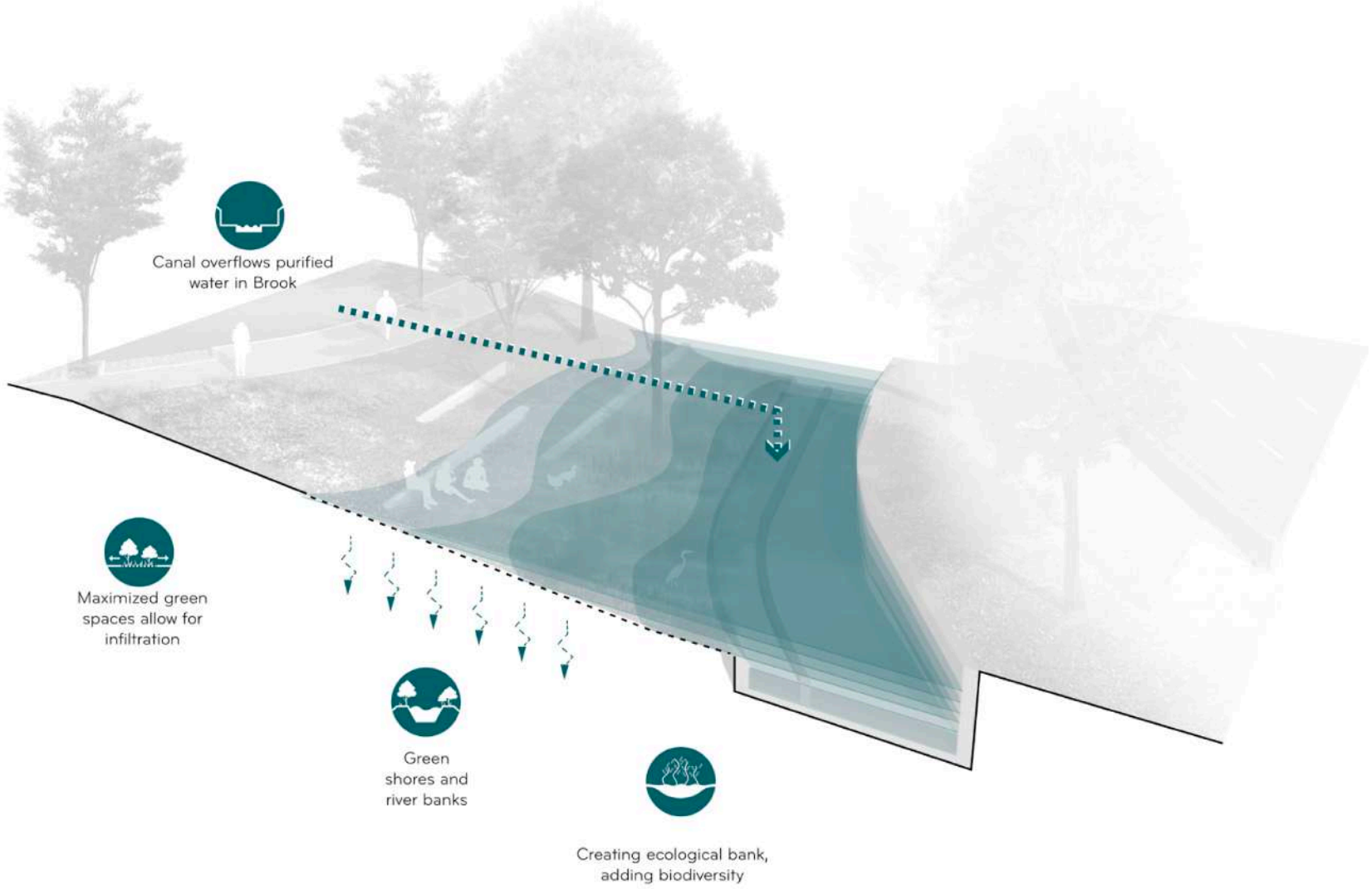

Green roof captures rainwater
Urban farming
Grey water re-use
Water is collected in open gutter

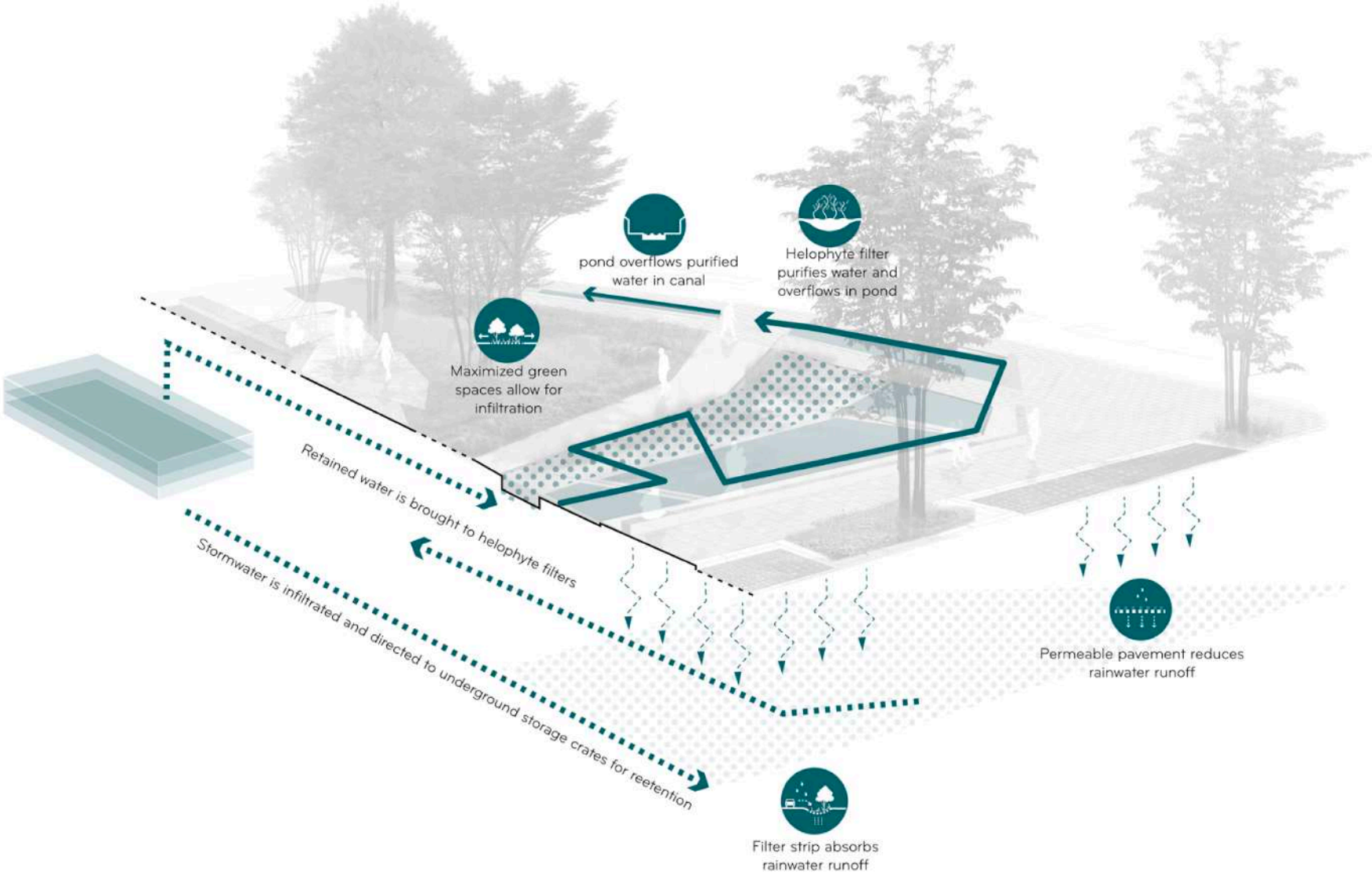
Green roof captures rainwater
Rain water is collected in tanks
Grey water re-use
Extra canals provide sustainable drainage
Row of trees
Permeable pavement reduces rainwater runoff

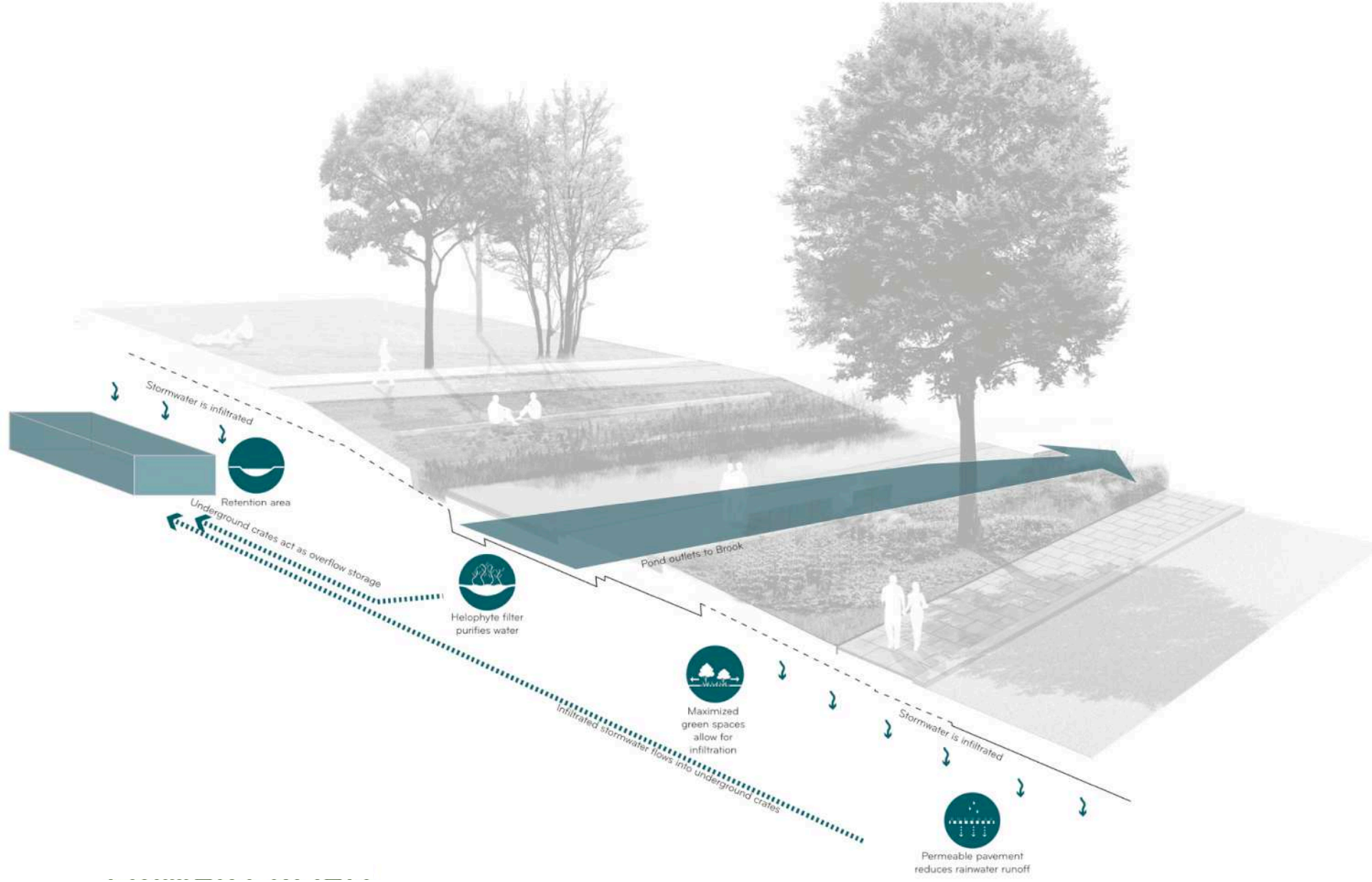
Meridian Angel, zone 1



Water sensitive urban design: application of the toolbox

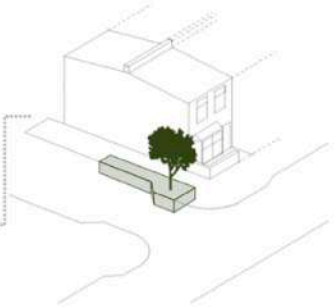

Canal overflows purified water in Brook
Maximized green spaces allow for infiltration
Green shores and river banks
Creating ecological bank, adding biodiversity


pond overflows purified water in canal
Helophyte filter purifies water and overflows in pond
Maximized green spaces allow for infiltration
Retained water is brought to helophyte filters
Stormwater is infiltrated and directed to underground storage crates for reetention
Permeable pavement reduces rainwater runoff
Filter strip absorbs rainwater runoff

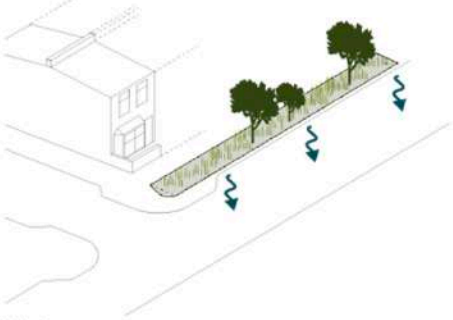

Stormwater is infiltrated
Retention area
Underground crates act as overflow storage
Pond outlets to Brook
Helophyte filter purifies water
Maximized green spaces allow for infiltration
Stormwater is infiltrated
Infiltrated stormwater flows into underground crates
Permeable pavement reduces rainwater runoff

Edmonton Angel

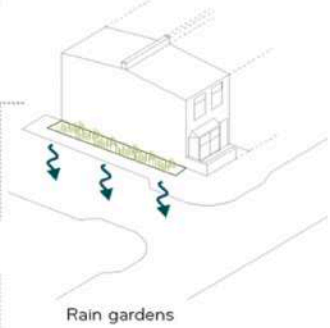
Urban acupuncture: Raingardens and tree planting



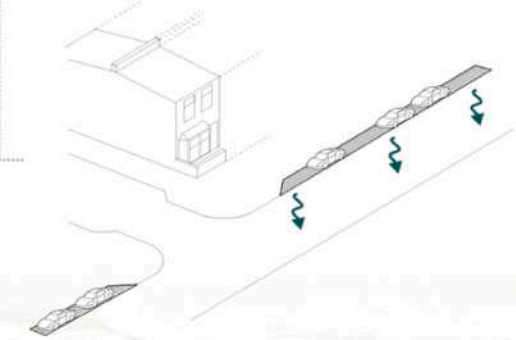
Planting strip



Wadi



Rain gardens



Permeable pavement

PUBLIC/PRIVATE INTERVENTIONS

Dysons Road