



Unlocking Hidden Value: How Stakeholder Engagement Transforms Real Estate Development Decisions

A VM Case Study from Land Development

Dr. Amin Sarang & Saman Davari
Oct 20, 2026



Who we are?



Amin Sarang

Founder & CEO | Devnex

Dr. Sarang is the Founder and CEO of DEVNEX Solutions Inc., a development management firm based in Ontario, and has been a board member of Value Analysis Canada since 2018. He is a civil engineer, real estate development professional, and business leader with experience across the Middle East and Canada. His work involves planning, development, and delivery of residential, commercial, and mixed-use projects, ranging from small-scale infill developments to large, multi-phase urban projects. He holds a PhD in Civil Engineering from Sharif University of Technology and Executive MBA at the Rotman School of Management. He has trained over a thousand public and private sector professionals in value engineering and development practices to improve project outcomes. He has taught at the university level for over a decade, supervised graduate students, and contributed to research in engineering and value optimization.



Saman Davari

Project Manager | Devnex Solutions

Saman is a project manager and executive director who brings together property development expertise and technology leadership. His experience spans residential, recreational, and commercial projects across North America, the Middle East, and Europe, with a background in architectural engineering and construction engineering. He has led development management and BIM implementation on real estate projects of varying scales, integrating sustainable practices, technology, and modern construction methods. He has also directed and grown proptech startups from concept to market, combining business development skills with a data-driven approach to improving how projects are planned, approved, and delivered.

Real Estate Development As Value Creation

The Transformation Process

Real estate development is the comprehensive process of transforming raw or underutilized land into profitable, functional assets that serve community needs.

- Combines strategic planning with creative design
- Requires complex financing and construction coordination
- Integrates business objectives with policy requirements

Building Value, Not Just Buildings

Financial Value

Generates attractive returns on investment through strategic planning and execution.



Social Value

Creates housing opportunities, amenities, and employment for local communities.

Community Value

Enhances urban form, promotes sustainability, and improves quality of life.

Successful development balances private profit with meaningful public benefit, creating win-win outcomes for all stakeholders.

The Paradox

We urgently need housing. Yet projects stall, or simply don't add up financially.



58%

of Ontario's 2025 housing target was met
86,760 homes built vs. a 150,000 target

25 mo.

average approval timeline in Toronto
Markham 22.6 mo. · national avg. 11.2 mo.

~\$195K

municipal charges & fees per new low-rise home
Toronto · Markham ~\$187K

Sources: Global News (Sept 2026), Ontario housing target progress; CHBA Municipal Benchmarking Study, 3rd ed. (2024), Altus Group.

Costs from every direction

Time is money

Rules keep changing

= Approved projects that never break ground

Too Many Voices, No Conductor

Everyone reviews their piece. No one owns the whole.

01 Sequential reviews

Submit, wait months, resubmit. Repeat.

02 Conflicting comments

Engineering wants a wider road; Planning wants less pavement; Fire wants bigger radii.

03 Siloed consultants

Each optimizes their own discipline, and designs conservatively.

04 Misaligned partners

Speed vs. yield vs. risk, with no shared decision criteria.

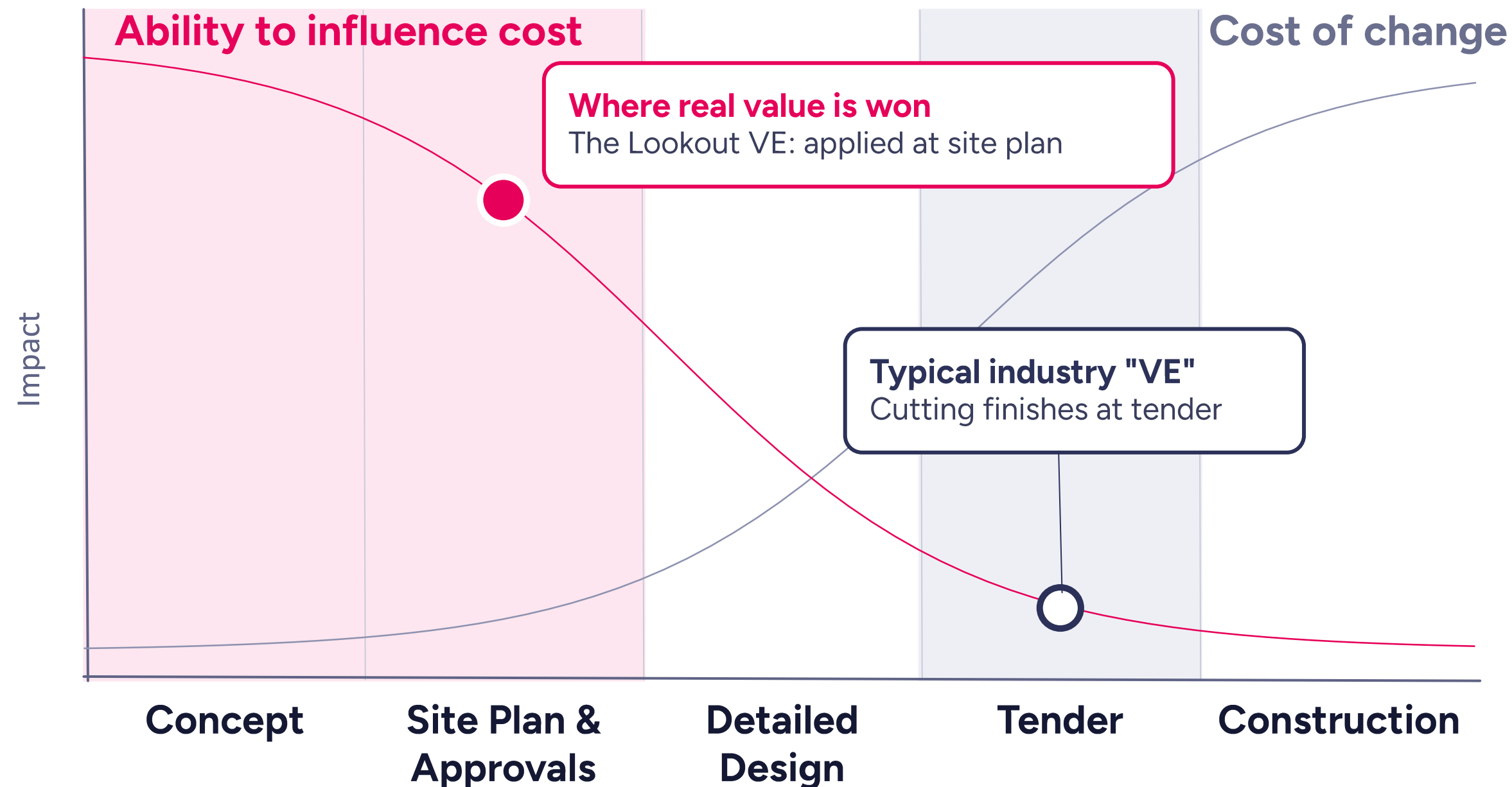
05 No single source of truth

Email chains, PDFs and outdated drawing sets.



A Process Built for Compliance, Not Value

The system rewards meeting the standard, not finding the best answer.



Standard rules, non-standard sites

Greenfield standards applied to sloped, constrained infill.

Risk-averse reviews

"Use the standard" is safe. A better, unfamiliar alternative is a risk.

Hidden cost drivers

Roads, retaining walls, grading and servicing, all fixed at site plan.

"VE" arrives too late

Treated as cost-cutting at tender, after most cost is fixed.

Why Value Engineering Fits

VE provides the structure development is missing.

DEVELOPMENT PROBLEM

WHAT VE BRINGS

Fragmented stakeholders



One multidisciplinary workshop, everyone in the room

Regulators engaged late



Town and Fire at the table from day one

Sequential comment cycles



Problems and alternatives solved together, in parallel

Siloed consultants



Function analysis (FAST): what the project must do, not each discipline's fix

Misaligned partners

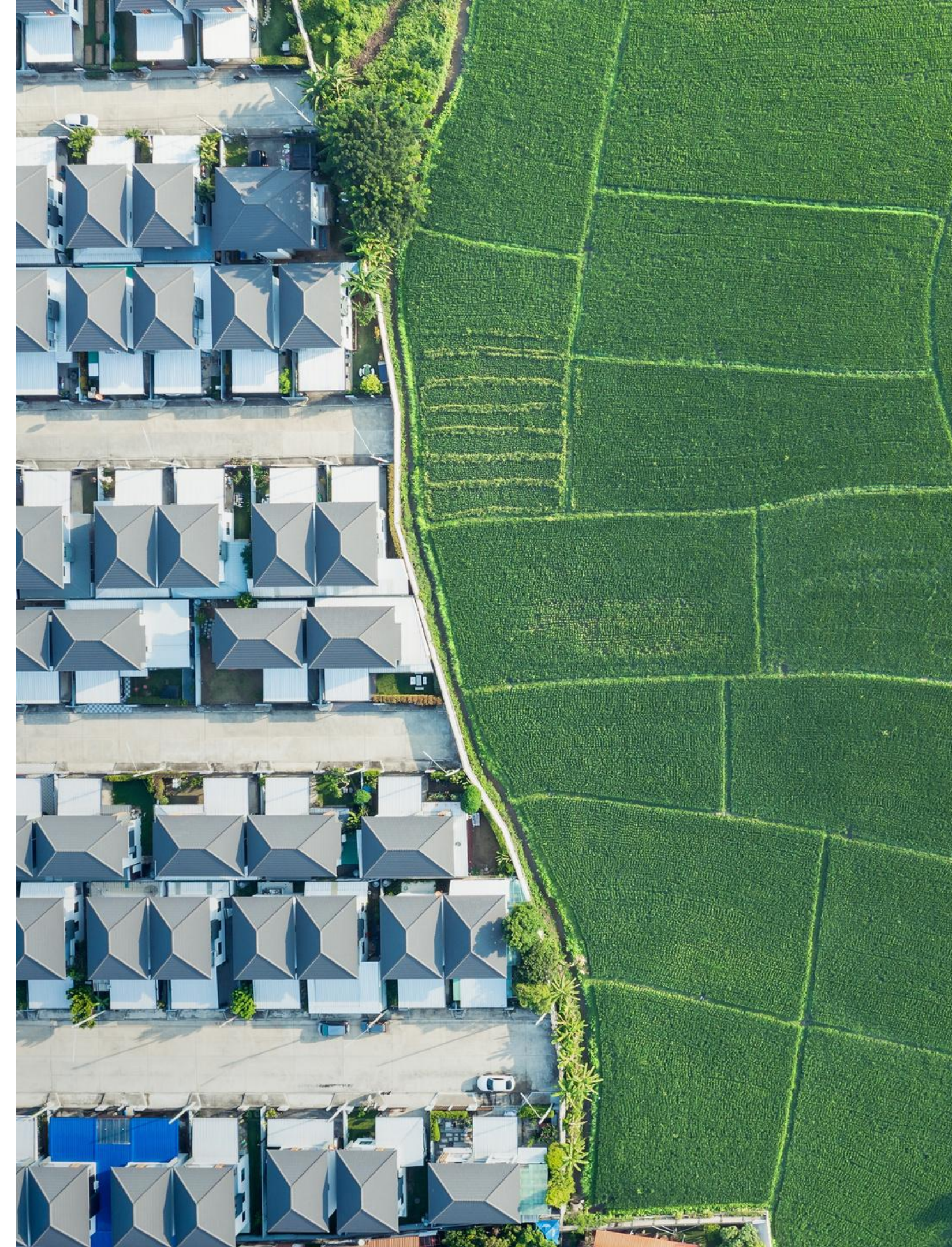


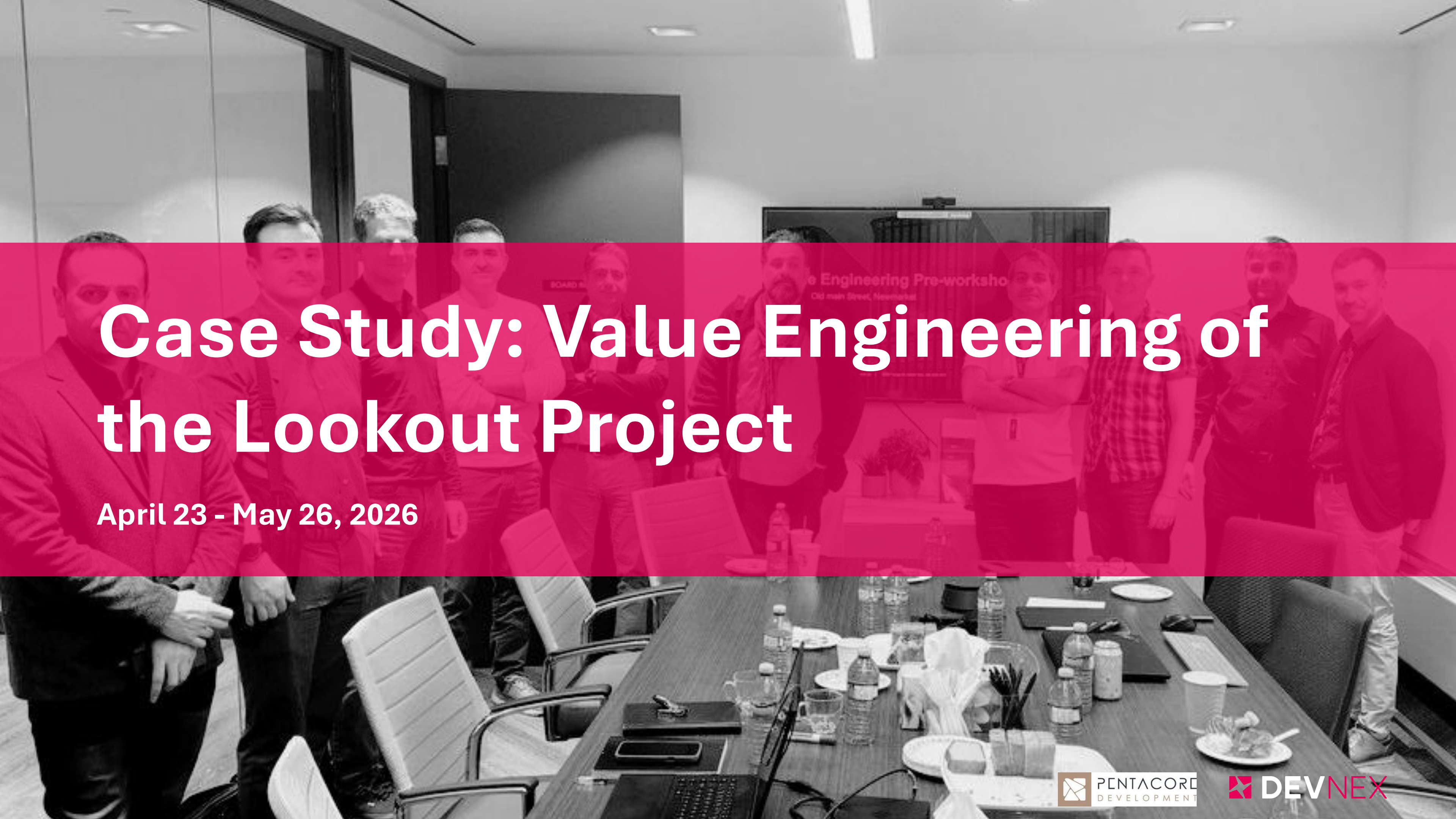
Shared, weighted criteria and transparent scoring

Cost-cutting too late



Applied at site plan, where influence is highest

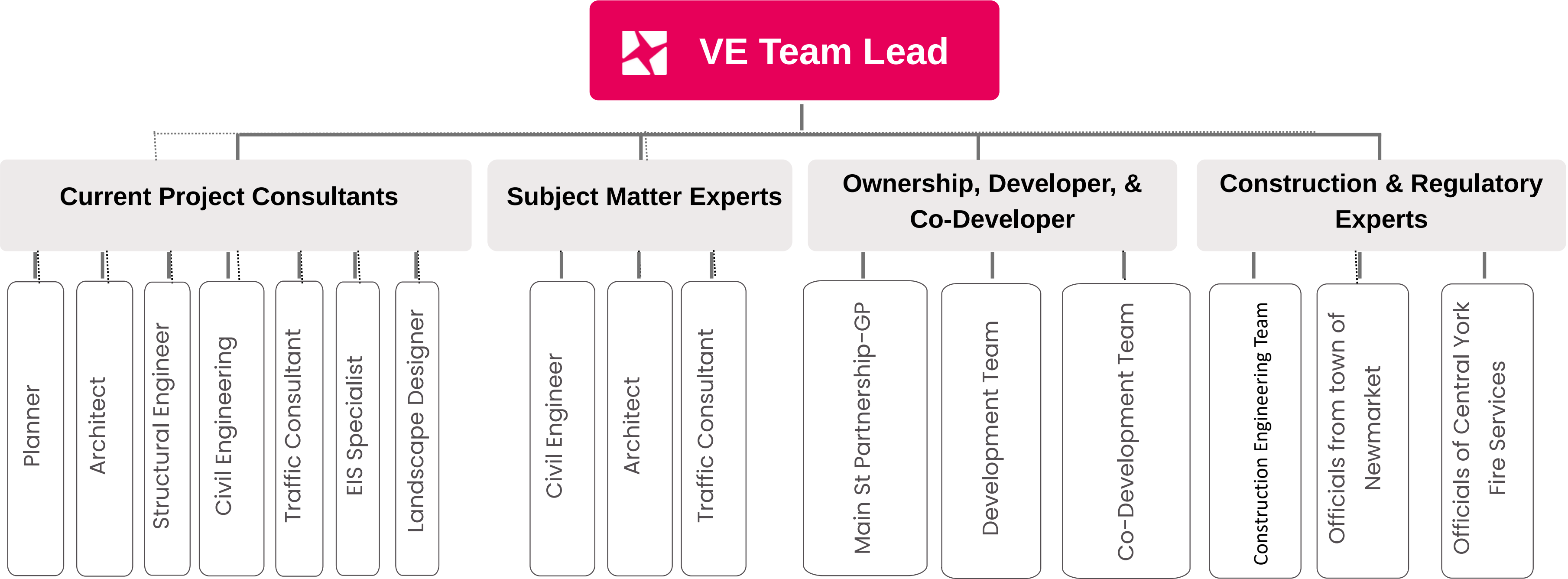




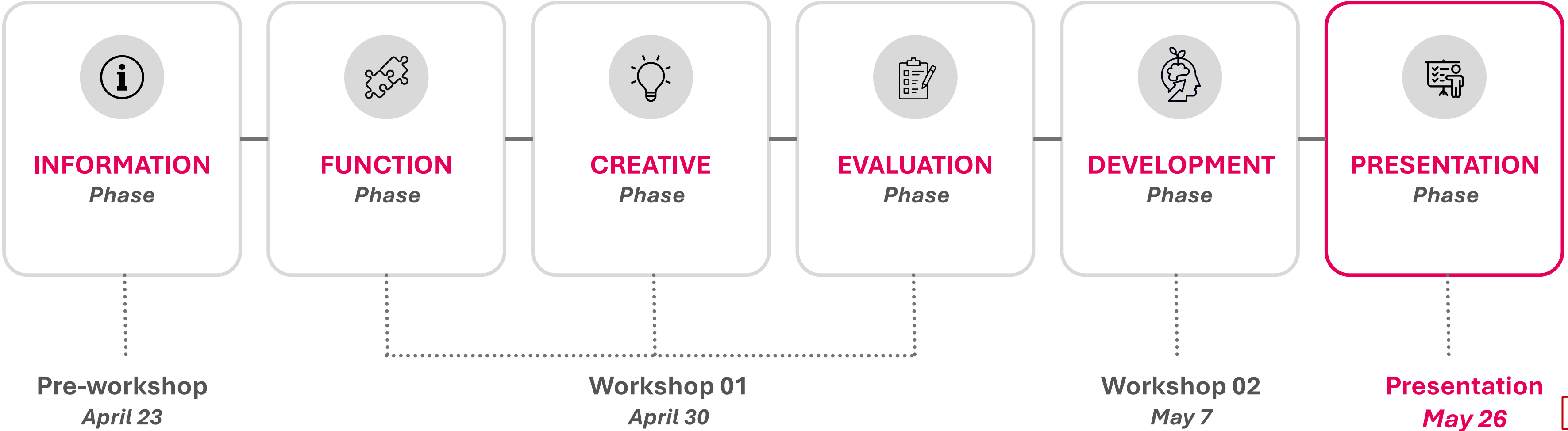
Case Study: Value Engineering of the Lookout Project

April 23 - May 26, 2026

Value Engineering Team Structure



VE Study Phases

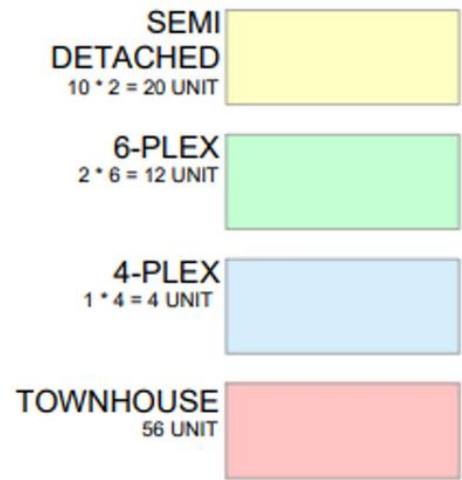


An aerial photograph of a city, likely Chicago, showing a dense urban area with many trees and buildings. A large red semi-transparent rectangle is overlaid on the middle of the image, containing the text.

Information Phase

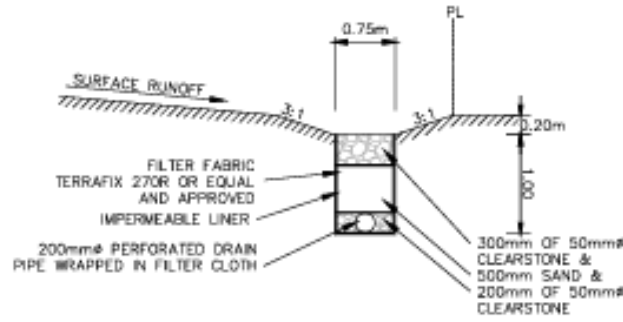
April 23 - From 12 p.m. to 5 p.m.

Base Site Plan - OPA 2025-86, Plan of Subdivision PLN-OPZS-2025-005 AND ZBA 2025-87



Retaining Walls

ENHANCED SWALE DETAIL
SCALE N.T.S.

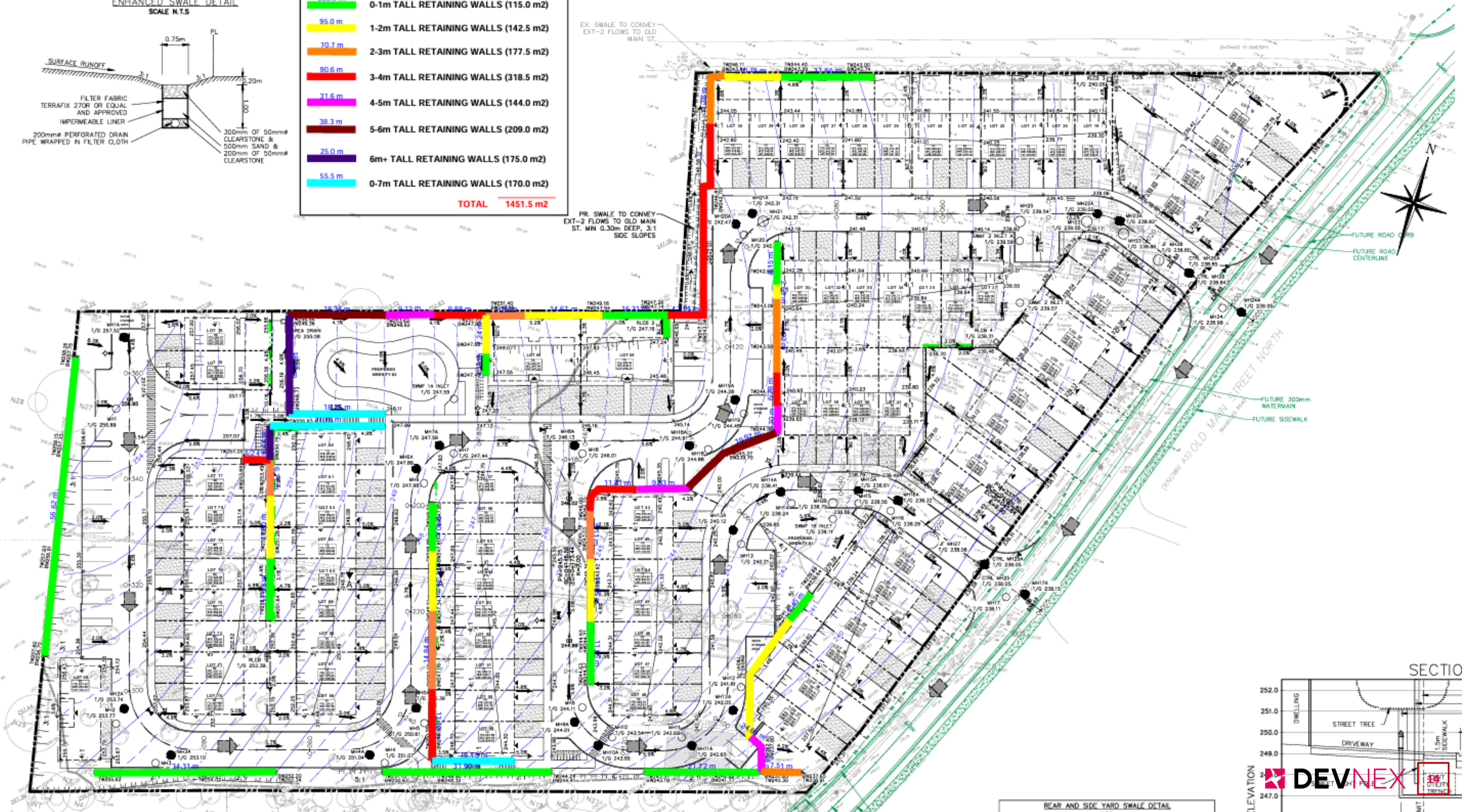


LEGEND

229.9 m	0-1m TALL RETAINING WALLS (115.0 m ²)
95.0 m	1-2m TALL RETAINING WALLS (142.5 m ²)
70.7 m	2-3m TALL RETAINING WALLS (177.5 m ²)
90.6 m	3-4m TALL RETAINING WALLS (318.5 m ²)
31.6 m	4-5m TALL RETAINING WALLS (144.0 m ²)
38.3 m	5-6m TALL RETAINING WALLS (209.0 m ²)
25.0 m	6m+ TALL RETAINING WALLS (175.0 m ²)
55.5 m	0-7m TALL RETAINING WALLS (170.0 m ²)
TOTAL 1451.5 m²	

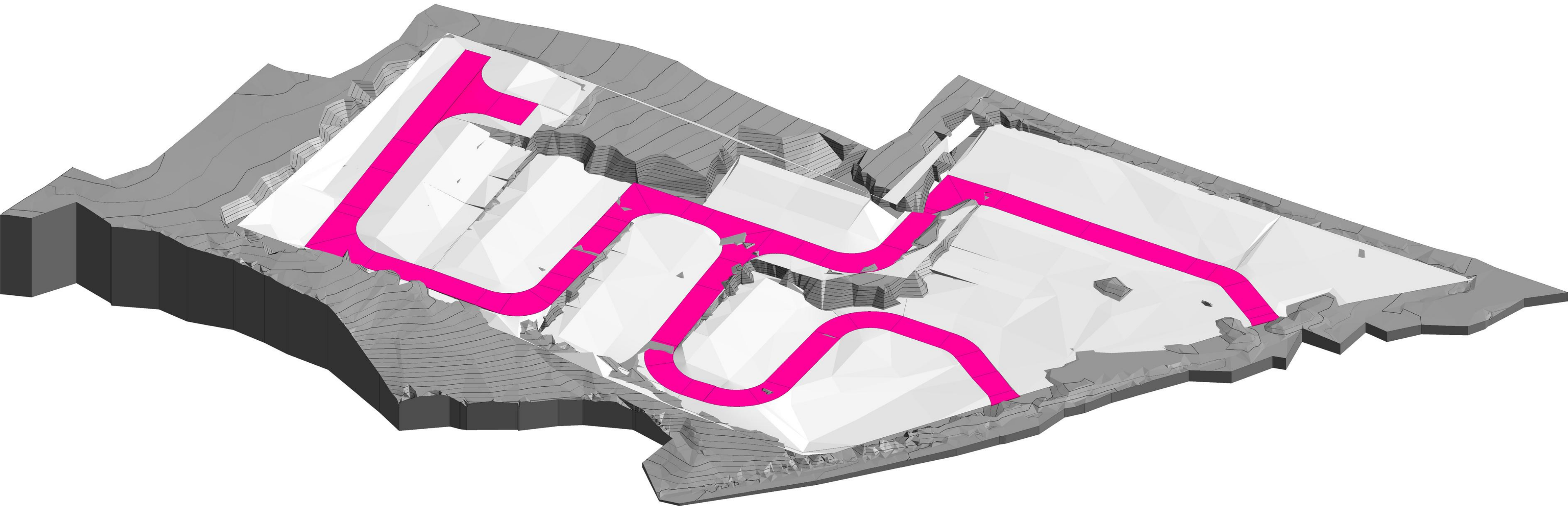
EX. SWALE TO CONVEY
EXT-2 FLOWS TO OLD
MAIN ST.

PR. SWALE TO CONVEY
EXT-2 FLOWS TO OLD MAIN
ST. MIN 0.30m DEEP, 3:1
SIDE SLOPES



Main Road

Road Length: 560 m



Key Objectives of Value Analysis

- Review site plan feasibility & optimization
- Improve access, circulation, and servicing
- Test practical design alternatives
- Balance density, infrastructure, and marketability
- Align owner, consultant, and municipal goals

Key Strategic Focus

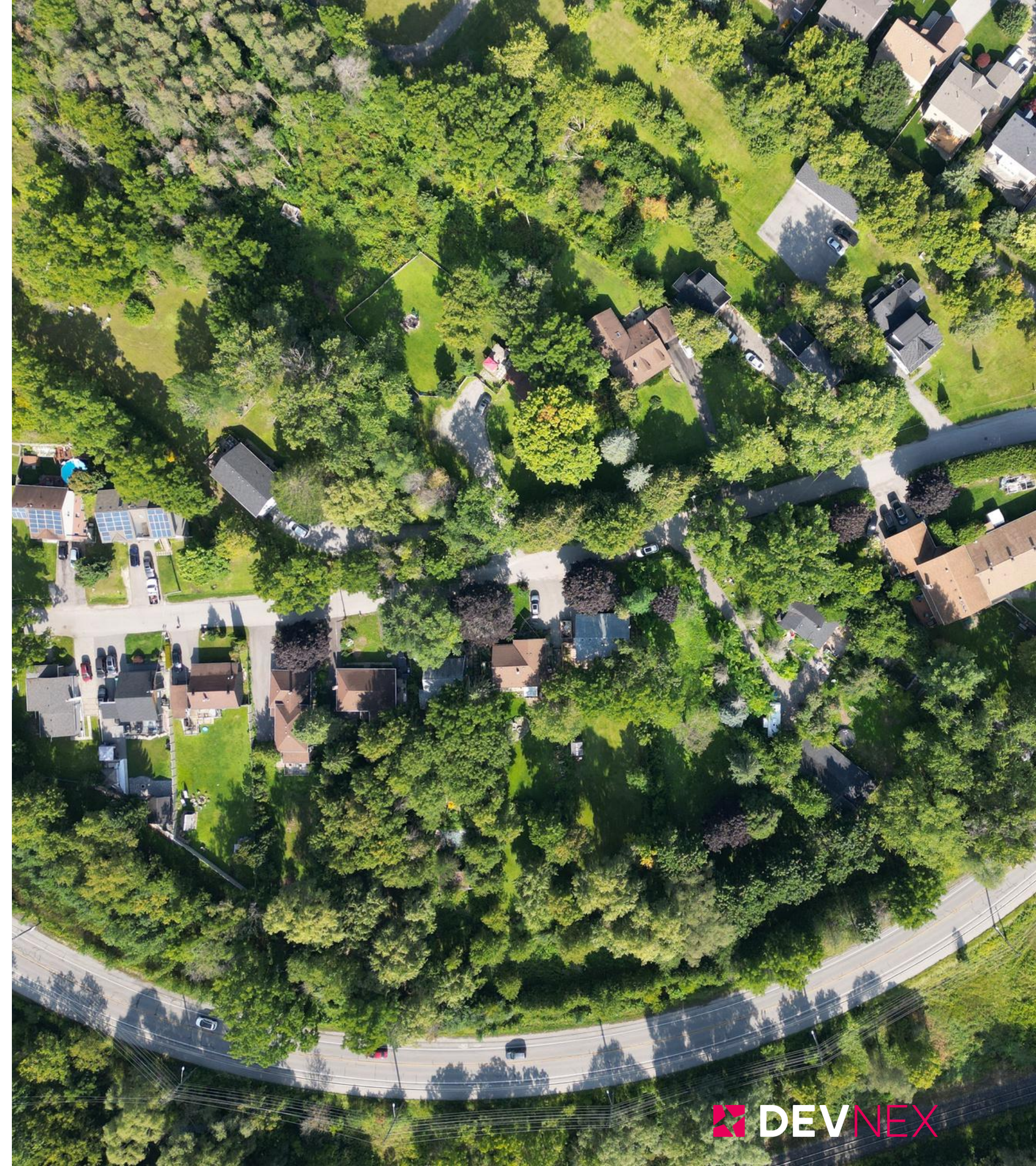
A more feasible, coordinated, and community-fit site plan.



Key Constraints Identified

Major Site Constraints

- **Dual access points** creating circulation and grading challenges
- **Entire site allocated for development**, limiting layout flexibility
- **Decentralized park and amenity areas** reducing functional open-space efficiency



An aerial view of a city skyline, likely New York City, with numerous skyscrapers. A semi-transparent red band is overlaid across the middle of the image, serving as a background for the text.

Function Phase

April 30 - From 12 p.m. to 5 p.m.

Function Analysis Matrix of The Lookout Project

High Cost · High Potential · High Risk

#	Project Element	Basic Function	Secondary Function	HC	HP	HR	Priority Flag
1	Retaining Walls ↑	Grade Support	Erosion control	✓	—	✓	HC · HR
2	Site Grading / Cut & Fill ↑	Surface Drainage	Level building pads	✓	✓	✓	HC · HP · HR
3	Stormwater Pond / Swale ↑	Runoff Control	Landscape feature	✓	✓	✓	HC · HP · HR
4	Stormwater Tanks	Water Storage	Flow attenuation	✓	—	✓	HC · HR
5	Storm Sewers	Water Conveyance	Flood prevention	✓	—	✓	HC · HR
6	Emergency Access Road ↑	Emergency Access	Fire route	✓	—	✓	HC · HR
7	Fire Hydrants	Fire Protection	Emergency response	—	—	✓	HR
8	Watermain Pipes	Water Supply	Fire servicing	✓	—	✓	HC · HR
9	Permanent Roads	Vehicle Access	Traffic circulation	✓	—	—	HC
10	Drive Aisles	Internal Movement	Service access	✓	—	—	HC
11	Turning Circle / Hammerhead	Vehicle Turning	Service maneuvering	✓	—	✓	HC · HR
12	Building Blocks / Units ↑	Residential Occupancy	Revenue generation	✓	✓	—	HC · HP
13	6-Plex Units ↑	Higher Density	Land optimization	✓	✓	—	HC · HP
14	4-Plex Units ↑	Medium Density	Housing efficiency	✓	✓	—	HC · HP
15	Townhouse Blocks	Stacked Housing	Density yield	✓	✓	—	HC · HP
16	Semi-Detached Units	Family Housing	Market diversity	✓	✓	—	HC · HP
17	Hydro Infrastructure	Power Supply	Lighting support	✓	—	—	HC
18	Transformer / Utility Kiosk	Power Distribution	Service reliability	✓	—	—	HC
19	Sanitary Sewers	Waste Removal	Health protection	✓	—	—	HC
20	Utility Easements	Service Corridor	Maintenance access	—	✓	—	HP

Function Analysis Matrix of The Lookout Project

High Cost · High Potential · High Risk

#	Project Element	Basic Function	Secondary Function	HC	HP	HR	Priority Flag
21	Buffer Setbacks	Spatial Separation	Planning compliance	—	✓	—	HP
22	Site Boundaries	Land Definition	Control limits	—	✓	—	HP
23	Parking Spaces	Vehicle Storage	Visitor convenience	✓	✓	—	HC · HP
24	Accessible Parking	Barrier Access	Code compliance	—	—	✓	HR
25	Sidewalks / Walkways	Pedestrian Access	Safety movement	—	—	✓	HR
26	Noise Barriers	Noise Control	Resident comfort	✓	—	—	HC
27	Privacy Fencing	Boundary Separation	Noise reduction	—	—	—	—
28	Landscaping Areas	Visual Amenity	Buffer screening	—	✓	—	HP
29	Parks / Open Space	Recreation Space	Community value	—	✓	—	HP
30	Playground / Amenity Area	Resident Recreation	Social gathering	✓	✓	—	HC · HP
31	Trees	Shade Provision	Environmental benefit	—	✓	—	HP
32	Street Lighting	Night Lighting	Security enhancement	—	—	✓	HR
33	Entrance Feature / Signage	Site Identity	Wayfinding support	—	✓	—	HP
34	Loading / Service Area	Service Delivery	Waste collection	—	—	✓	HR
35	Waste Enclosure	Waste Storage	Visual screening	—	—	—	—
36	Snow Storage Area	Snow Storage	Winter operations	—	—	—	—
37	Visitor Drop-off Area	Short Stopping	Guest access	—	—	—	—
38	Noise Barriers	Noise Control	Resident comfort	✓	—	—	HC

Top priority Functions

1

Site Grading / Cut & Fill

HC · HP · HR

Surface Drainage › Level Building Pads

WHY:

Largest civil cost driver on sloped sites. Earthworks volume and retaining system design directly sets project budget and schedule.

VE ACTION:

Optimize cut/fill balance · Reduce retaining wall heights · Explore split-level building pads

2

Stormwater Pond / Swale

HC · HP · HR

Runoff Control › Landscape Feature

WHY:

High capital cost AND stormwater failure creates regulatory and liability risk. Redesign can also unlock land area for additional units.

VE ACTION:

Right-size detention volume · Integrate with landscape amenity · Explore underground alternatives

3

Retaining Walls

HC · HR

Grade Support › Erosion Control

WHY:

Structural retaining systems are among the highest cost-per-lineal-metre elements. Failure risk affects safety and insurance.

VE ACTION:

Reduce wall heights via grading redesign · Evaluate geosynthetic vs concrete · Review surcharge loading

4

Emergency Access Road

HC · HR

Emergency Access › Fire Route

WHY:

Fire route geometry is a regulatory red line — non-compliance forces redesign. Dual-access roads carry significant cost.

VE ACTION:

Confirm minimum fire route width requirements · Explore shared-use lanes · Coordinate with fire authority early

5

4-Plex / 6-Plex Units

HC · HP

Medium / Higher Density › Land Optimization

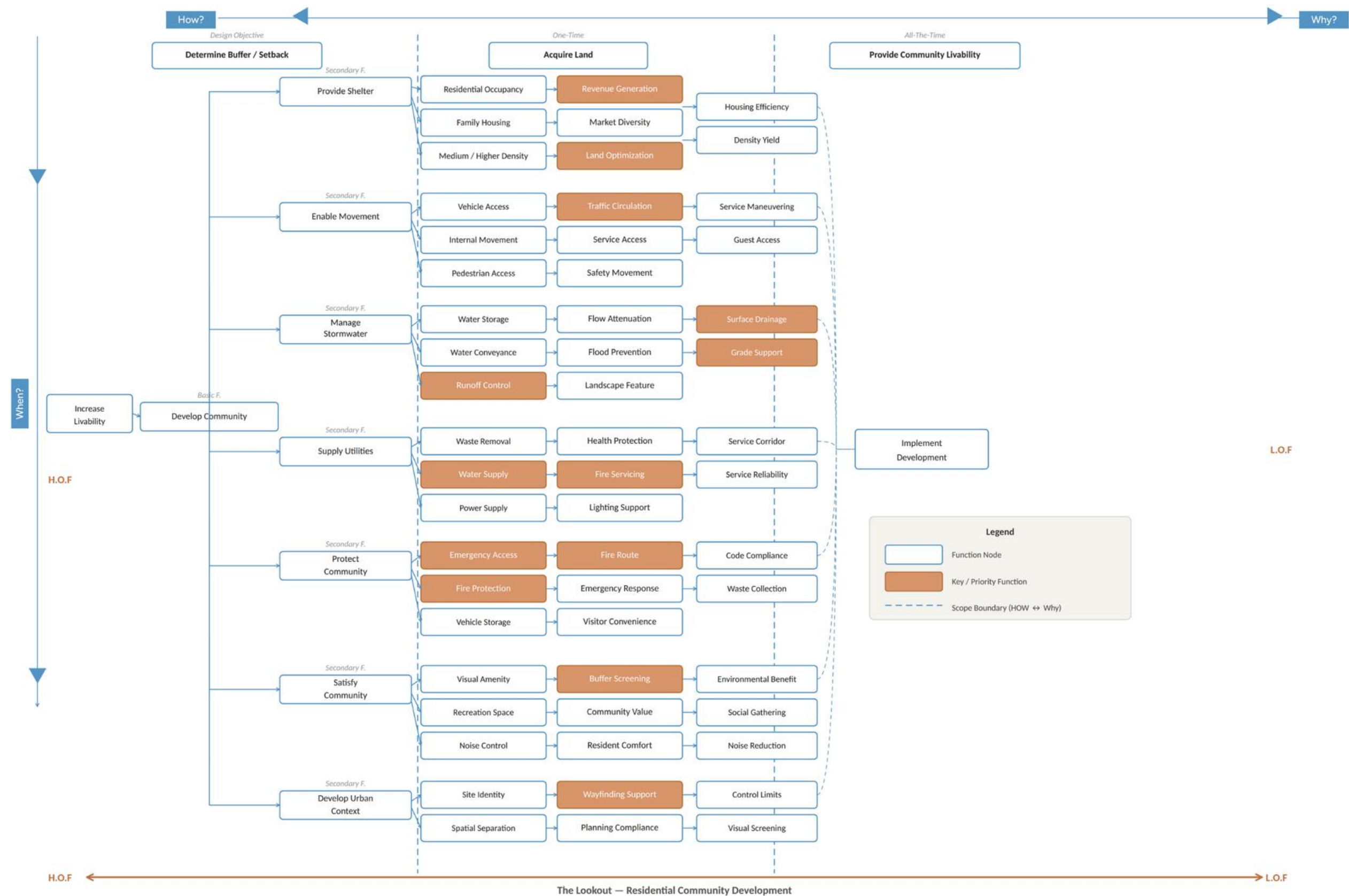
WHY:

Unit mix and count is the primary revenue lever. Increasing 6-plex yield by even 2 units can offset significant civil cost.

VE ACTION:

Test 6-plex vs townhouse unit mix scenarios · Optimize floor plate efficiency · Review parking ratios

Value Engineering – FAST Diagram of The Lookout Project



An aerial photograph of a residential development featuring rows of townhouses and houses. A large, semi-transparent red rectangle is overlaid on the center of the image, serving as a background for the text.

Creative Phase

April 30 - From 12 p.m. to 5 p.m.

Traffic & Transportation

Code	Idea	Reason
MC01	Allow steeper road grades using heated partial pavement (below 10%) – follow natural slope	Current slope limits constrain layout
MC02	One main access + one emergency-only access (Western Rd as emergency, Eastern as main)	Multiple accesses increase cost
MC03	Replace hammerhead with loop road	Hammerhead uses land inefficiently
MC04	Relocate main entrance to central frontage (East access as secondary)	Existing location may be inefficient
MC05	Use sprinklers to negotiate reduced fire route standards	Fire constraints driving design cost
MC06	Review future fire station response times	Improved response may affect standards
MC07	Keep two accesses to avoid AODA constraints with pedestrian path on 8% slope	Fire Dept may not accept one access; AODA restrictions may increase ramp width
MC08	One combined underground parking garage, no road access (Partially)	Eliminates road, allows shared condo corp parking with minimal retaining walls
MC09	Narrow secondary emergency access at 8% grade, ~3.75m wide with flare for fire truck turns	Reduce roadway construction; steeper slope on less-used road
MC10	NFPA requirements suggest 1 access for 0–100 units	Pushback on CYFS requirement for 2 accesses

KEY HIGHLIGHTS

Road design & access optimization is central theme

Fire code negotiation (sprinklers, NFPA, AODA) could reduce road costs

Underground parking can eliminate surface road infrastructure

 24

Architecture

Code	Idea	Reason
MA01	Townhouses above slab / podium parking	Surface parking consumes land
MA02	Recalculate all retaining wall quantities	Current estimates may be inaccurate
MA03	Two access routes each under travel threshold	Fire travel distance issue
MA04	Lower rear grades / move visitor parking	Rear geometry is inefficient
MA05	Compare condo structures	Ownership structure impacts cost/value
MA06	Two independent internal roads	Current network may be inefficient
MA07	Efficient road system with two-side access (western area has 4 rows and 4 roads)	Reduce road redundancy in western portion
MA08	Untie from west end elevation limit	Caused unnecessary retaining walls and raised the site
MA09	No 3-point turn arrangement at west end for fire truck	Simplify fire access geometry
MA10	Relocating park/amenity area from west to centre	Better site distribution
MA11	Loop for fire access with several <90m dead-end accesses	Compliance with fire travel distances
MA12	Partial basement instead of tall retaining wall separating back yards	Alternative to costly retaining walls
MA13	Geo grid or surface treatment to allow steeper slope	Opportunity for steeper grades
MA14	Combination of Alternative 6 with a loop instead of hammerhead	Hybrid layout efficiency

KEY HIGHLIGHTS

Focuses on road layout efficiency & fire access compliance

Retaining wall cost reduction via basement or geo grid alternatives

Amenity & parking restructuring to maximize land use

DEVNEX

25

Development & Ownership

Code	Idea	Reason
PY01	Remove western upper road	Road adds major cost
PY02	Move parking under townhouses	Surface parking consumes land
PY03	Relocate park to natural slope area (top of walking trail, behind semi – kids pad)	Prime land may be underused
PY04	Move southern access to site end as emergency route	Existing route is costly
PY05	Relocate proposed 6-plex and move internal road to rear of existing plexes along cemetery. Maintain ~50% of road at natural grade. Place proposed units along intersecting roads to improve street relationship.	Reduce road alignments and retaining walls; better site-street relationship
PY01	Remove western upper road	Road adds major cost
PY02	Move parking under townhouses	Surface parking consumes land

KEY HIGHLIGHTS

Western upper road removal is a significant cost saving opportunity

Underground parking & park relocation free up prime developable land

Internal road realignment to cemetery edge reduces retaining wall impact

DEVNEX

26

Evaluation Phase

May 7 - From 12 p.m. to 5 p.m.

Evaluation of VE Ideas

Mark Crockford						
Code	Idea	1 Low Priority / Limited Benefit	2 Challenging / Approval Dep.	3 Requires Further Study	4 Moderate Potential	5 High Potential
MC01	Allow steeper road grades using heated partial pavement (below 10%) – follow natural slope	1	—	—	1	5
MC02	One main access + one emergency-only access (Western Rd as emergency, Eastern Rd as main)	1	—	1	4	—
MC03	Replace hammerhead with loop road	—	2	2	—	—
MC04	Relocate main entrance to central frontage (East access as secondary)	—	—	—	4	—
MC05	Use sprinklers to negotiate reduced fire route standards	1				
MC06	Review future fire station response times	1				
MC07	Keep two accesses to avoid AODA constraints with pedestrian path on 8% slope	—				
MC08	One combined underground parking garage, no road access – Partially	—				
MC09	Narrow secondary emergency access with no units along it, 8% grade, ~3.75m wide	1				
MC10	NFPA requirements suggest 1 access is appropriate for 0–100 units	1				
1 – Low Priority / Limited Benefit		2 – Challenging / Approval Dependent		3 – Requires Further Study		4 – Moderate Potential

Pascal Monat						
Code	Idea	1 Low Priority / Limited Benefit	2 Challenging / Approval Dep.	3 Requires Further Study	4 Moderate Potential	5 High Potential
PM01	Reconfigure site plan for efficiency	—	—	2	2	4
PM02	Phase Old Main Street units first	3			1	4
PM03	Confirm applicable fire code authority					
PM04	Contribute to SWM pond upsizing					
PM05	Need a hydrant flow test as soon as possible					
PM06	Can you buy the road from the cemetery to provide access (Alternative 8)					
PM07	Provide the condo road wider with three lanes and access (Alternative 7)					

Amir Abbasi / Ali Asadinik						
Code	Idea	1 Low Priority / Limited Benefit	2 Challenging / Approval Dep.	3 Requires Further Study	4 Moderate Potential	5 High Potential
AA01	Request relaxed road slope criteria	3	—	1	1	3
AA02	Reorganize layout to shorten roads	1	—	2	—	5
AA03	Shorter sewer / service routing	—	1	1	3	3
AA04	Reduce retaining road bank lengths	1	—	3	4	—
AA05	Explore alternative wall systems – segmental gravity retaining wall	—	2	1	—	5
AA06	Increase separation between roads at different elevations – break up the wall	1	1	1	1	4
AA07	Reconsider building design on slope for more efficient earth work	2	—	2	2	2
AA08	Involve marketing team in VE sessions to revisit design from marketing perspective	1	—	1	3	3
AA09	Increasing the slope within the curves – entire site	1	—	3	1	3
AA10	Alternative 1 – Site plan (removing park from west, removing all visitor parking)	—	1	2	3	2
AA11	Alternative 2 – Alt 1 + second access as emergency	1	1	2	1	4
1 – Low Priority / Limited Benefit		2 – Challenging / Approval Dependent		3 – Requires Further Study		4 – Moderate Potential
						5 – High Potential

Mehdy Ajvand						
Code	Idea	1 Low Priority / Limited Benefit	2 Challenging / Approval Dep.	3 Requires Further Study	4 Moderate Potential	5 High Potential
MA01	Townhouses above slab / podium parking	1	—	—	4	2
MA02	Recalculate all retaining wall quantities	2	1	2	1	1
MA03	Two access routes each under travel threshold	3	1	1	2	5
MA04	Lower rear grades / move visitor parking	1	1	1	3	2
MA05	Compare condo structures – ownership structure impacts cost/value	1	1	—	3	2
MA06	Two independent internal roads	3	—	2	—	2
MA07	Efficient road system with two side access (4 rows of buildings / 4 roads in western portion)	1	1	1	1	3
MA08	Untie from the west end elevation limit	—	—	—	2	4
MA09	No 3-point turn arrangement at the west end for fire truck	2	1	1	2	—
MA10	Relocating park/amenity area from west to centre	1	—	3	—	3
MA11	Have loop for fire and several less than 90m dead end access	1	1	—	1	3
MA12	Partial basement instead of tall retaining wall separating back yards	1	—	3	4	1
MA13	Using geo grid or other surface treatment for opportunity of having steeper slope	2	1	—	2	2
MA14	Combination of Alternative 6 with loop instead of hammerhead	1	—	1	1	4
1 – Low Priority / Limited Benefit		2 – Challenging / Approval Dependent		3 – Requires Further Study		4 – Moderate Potential
						5 – High Potential

Top 15 Ideas — Ranked by Normalized Score

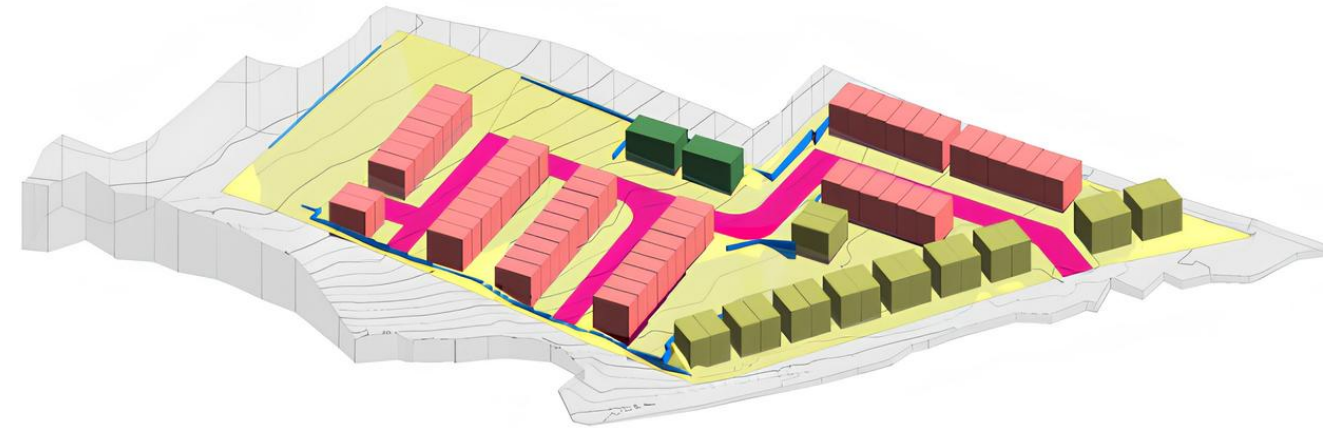
Rank	Code	SME	Idea	Total Points	# Votes	Norm. Score
#1	PSS02	Payam	Top west portion eliminated; middle townhouse row revised; emergency based on existing Sadjad route; eliminate park at top	330	7	47.1
#2	MA08	Mehdy	Untie from the west end elevation limit	280	6	46.7
#3	BL02	Brent	Remove unnecessary stair systems	400	9	44.4
#4	GR01	Greg	Revisit lot layout around property limits to allow for excavation and installation of segmental block systems	350	8	43.8
#5	BL06	Brent	Reduce amenity area if excessive	390	9	43.3
#6	MC01	Mark	Allow steeper road grades using heated partial pavement (below 10%) – follow natural slope	300	7	42.9
#7	AM02	Amanda	Redesign amenity space into tiered approach	300	7	42.9
#8	MC07	Mark	Keep two accesses to avoid AODA constraints with pedestrian path on 8% slope	340	8	42.5
#9	PM01	Pascal	Reconfigure site plan for efficiency	340	8	42.5
#10	MC06	Mark	Review future fire station response times	320	8	40
#11	AA02	Amir	Reorganize layout to shorten roads	320	8	40
#12	AA03	Amir	Shorter sewer / service routing	320	8	40
#13	AA05	Amir	Explore alternative wall systems – segmental gravity retaining wall	320	8	40
#14	PSSA08	Payam	Alternative 9 – removing parks, visitor parking; keeping partial woodland; losing too much semi-detached	320	8	40
#15	PM07	Pascal	Provide the condo road wider with three lanes instead of two, remove one access (Alt 7)	280	7	40

Development Phase

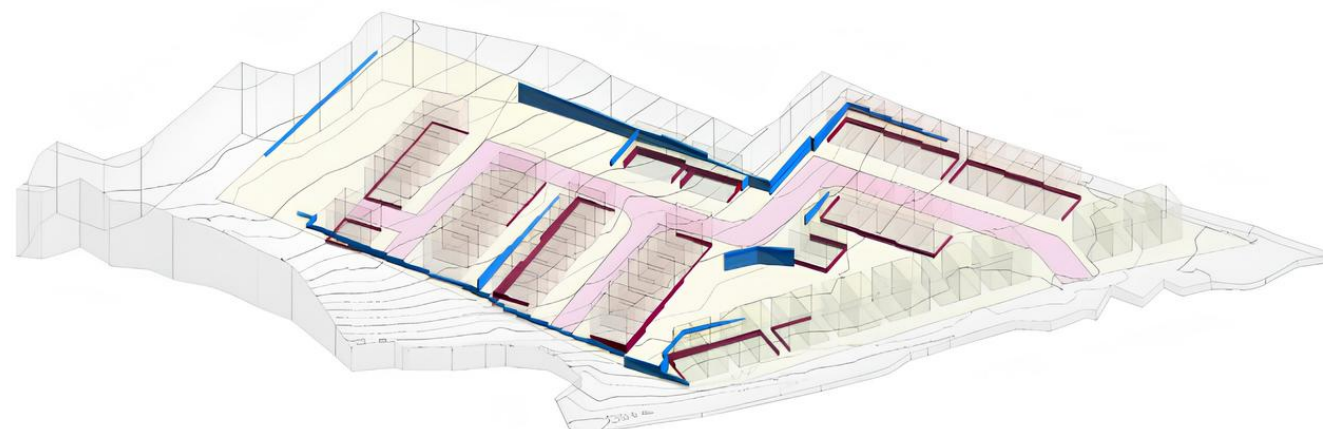
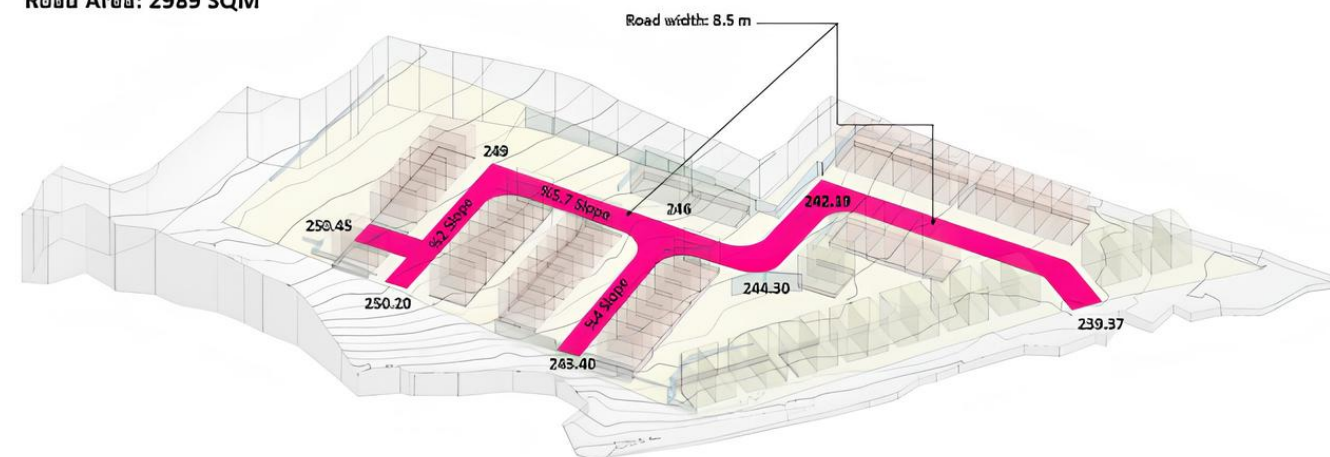
May 7 - From 12 p.m. to 5 p.m.

Alternative Development

- **Alt.1**



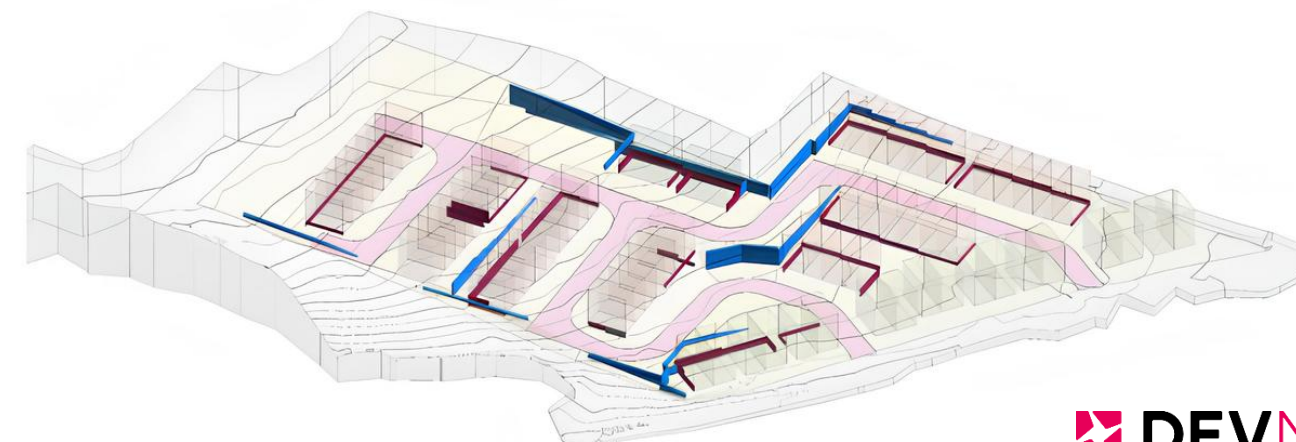
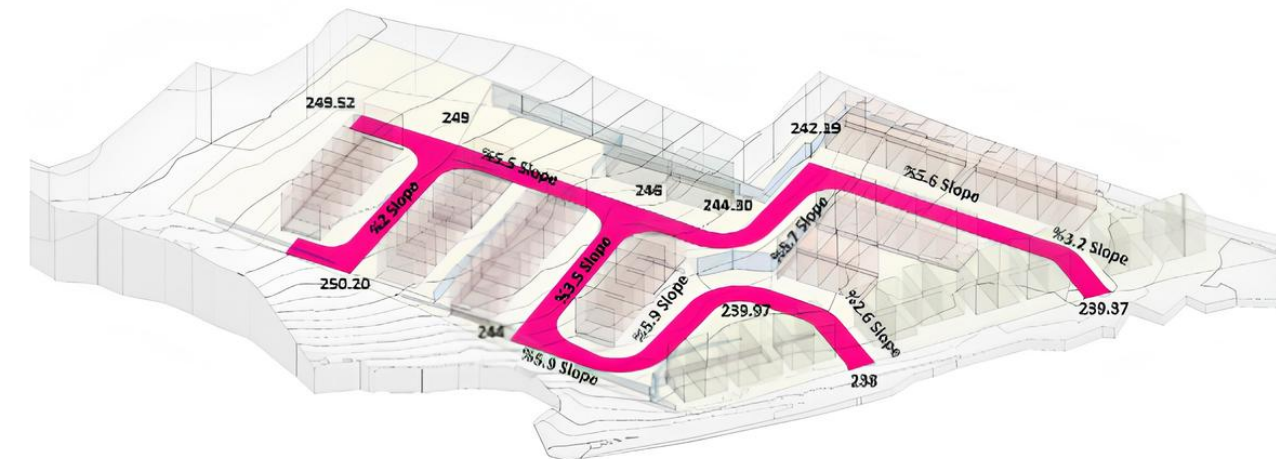
Road Length: 339 M
Road Area: 2989 SQM



- **Alt.2**

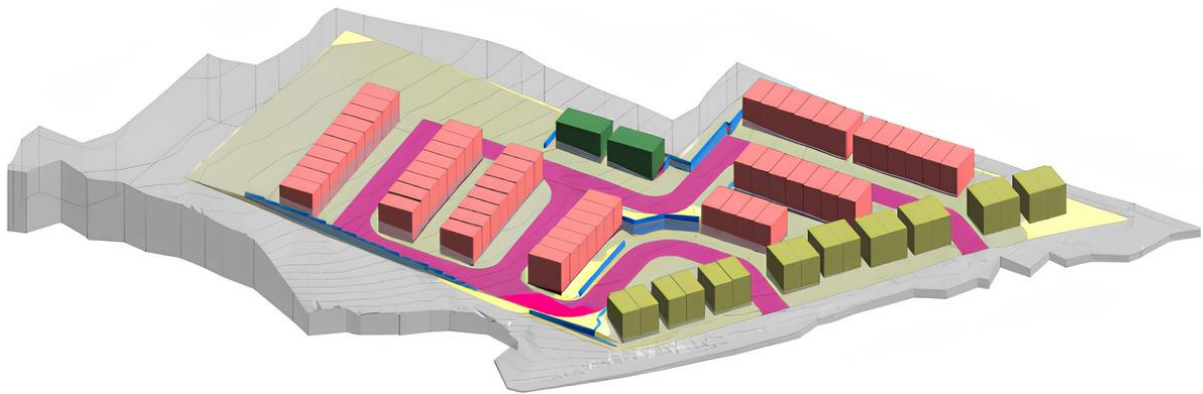


length: 478.5vm
Area: 3411.8 SQM

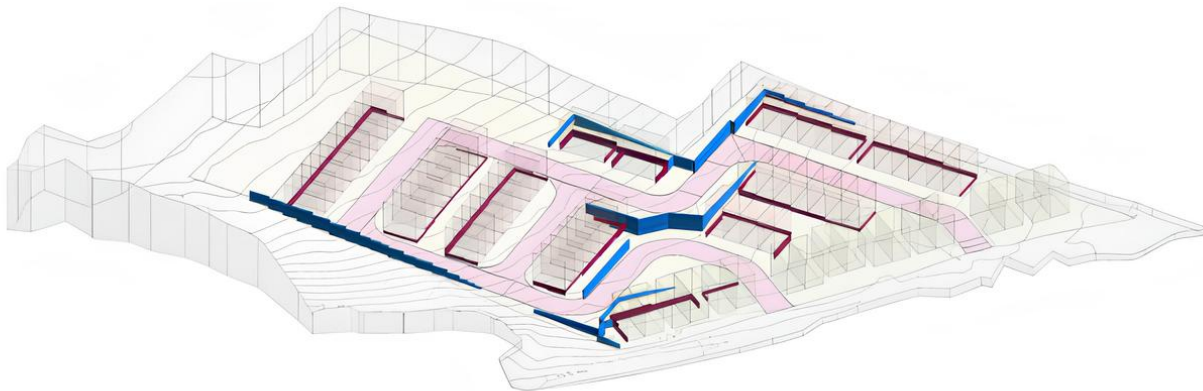
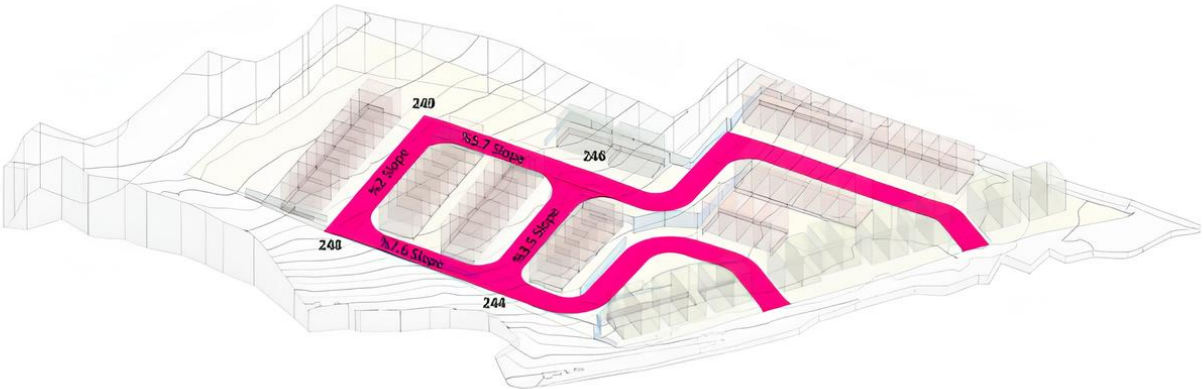


Alternative Development

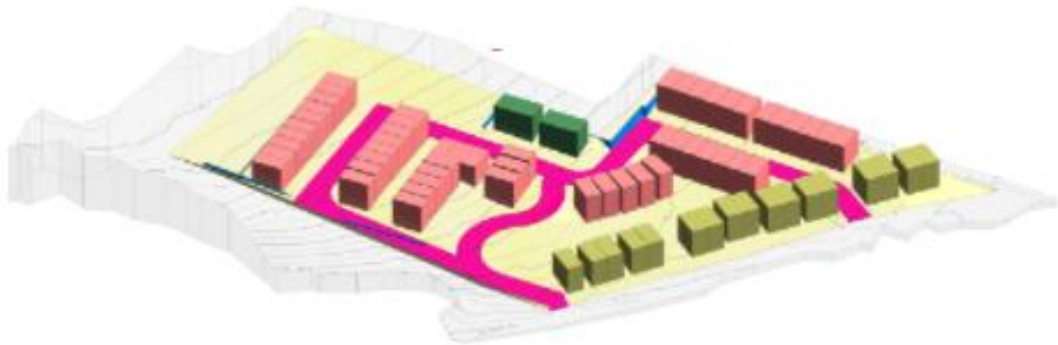
- Alt.3



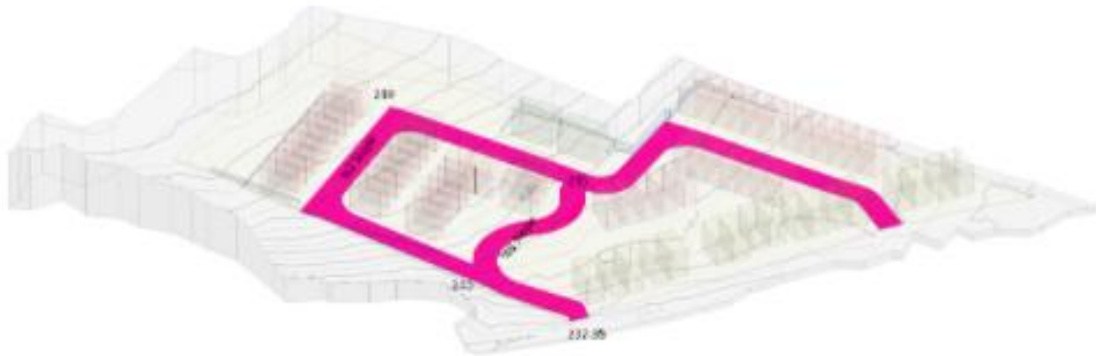
Road Length: 501 m
Road Area: 3530 SQM



- Alt.4 Previous alt by the Dev

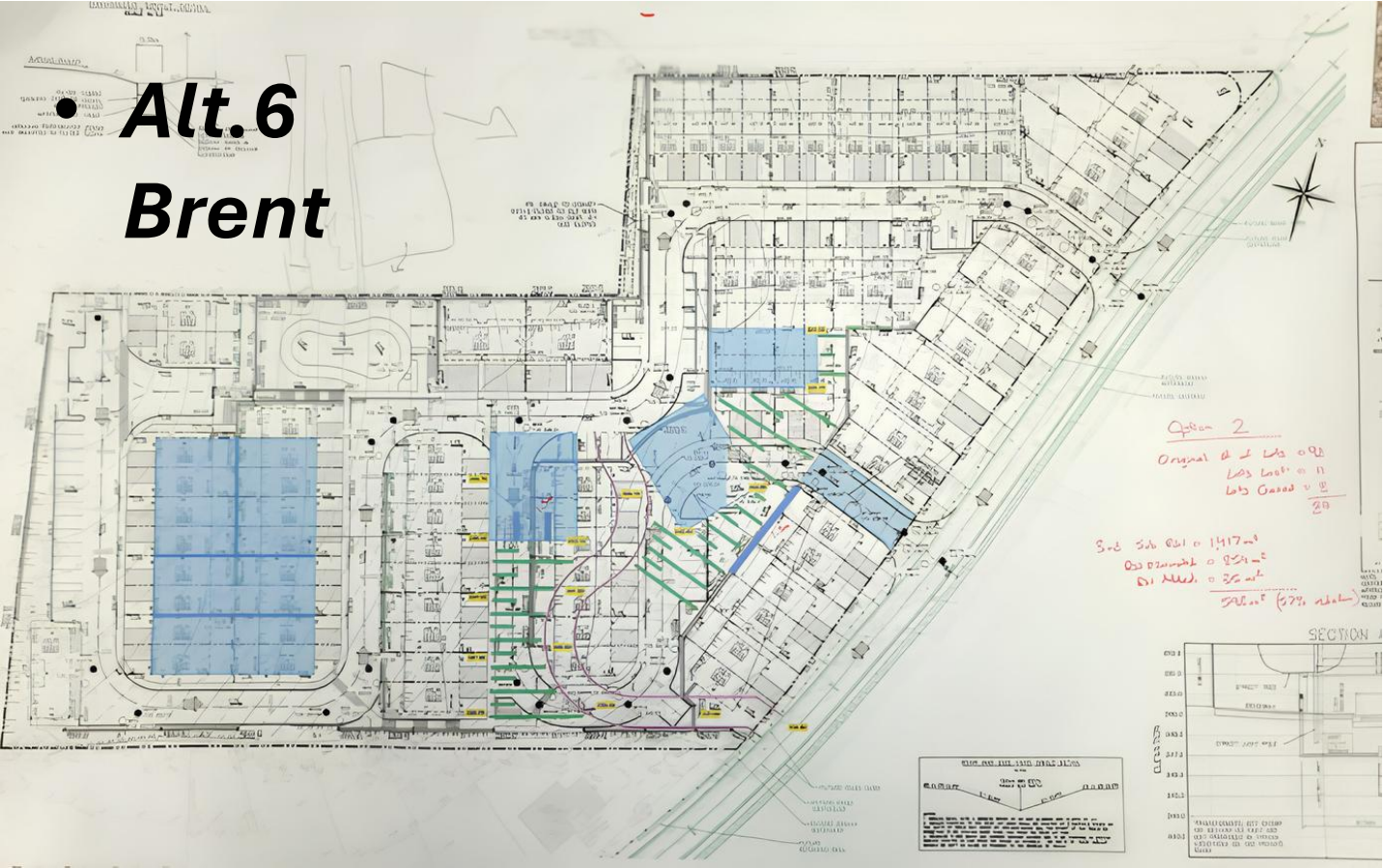
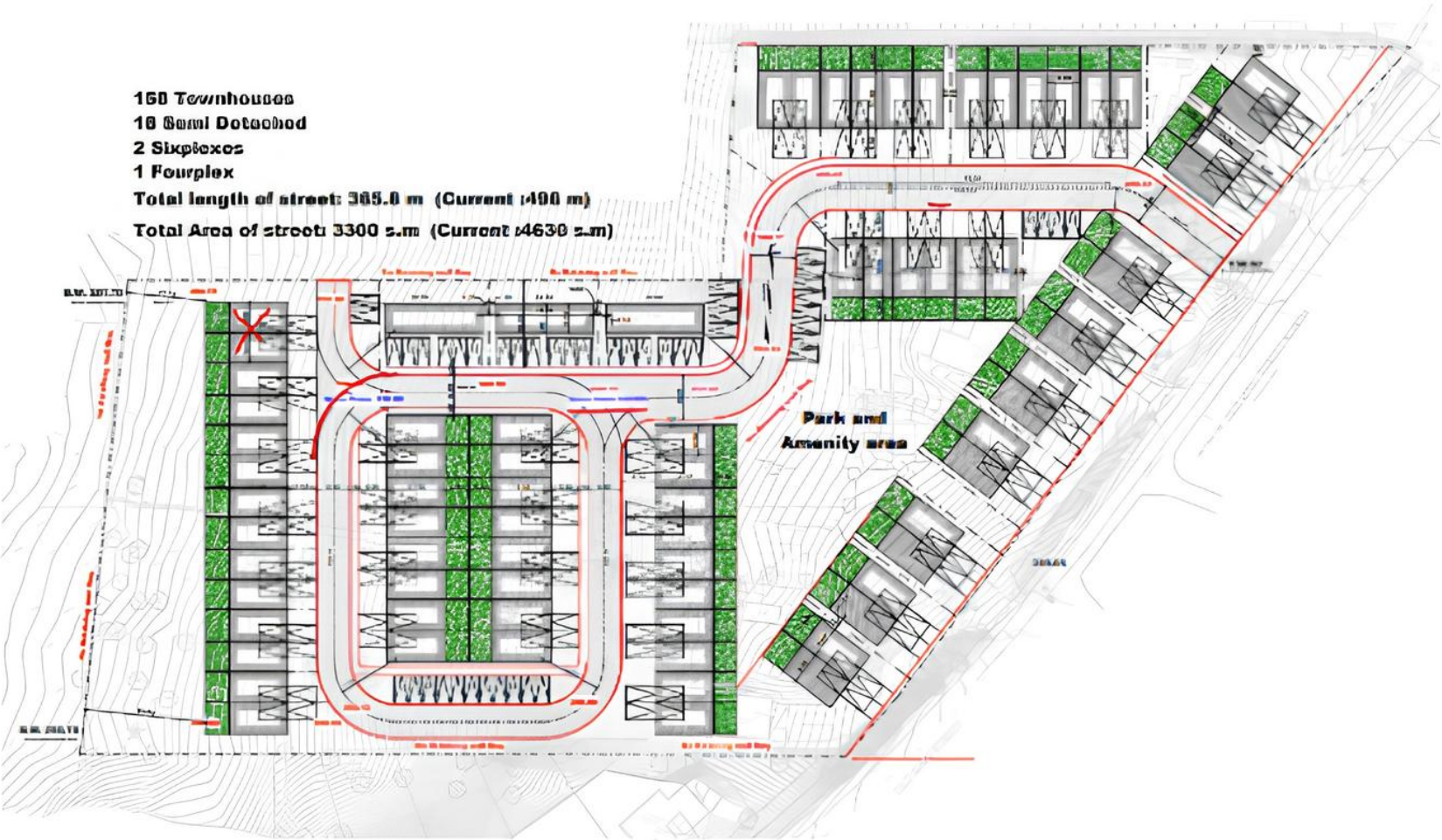


Road Length: 364 m
Road Area: 3680 SQM

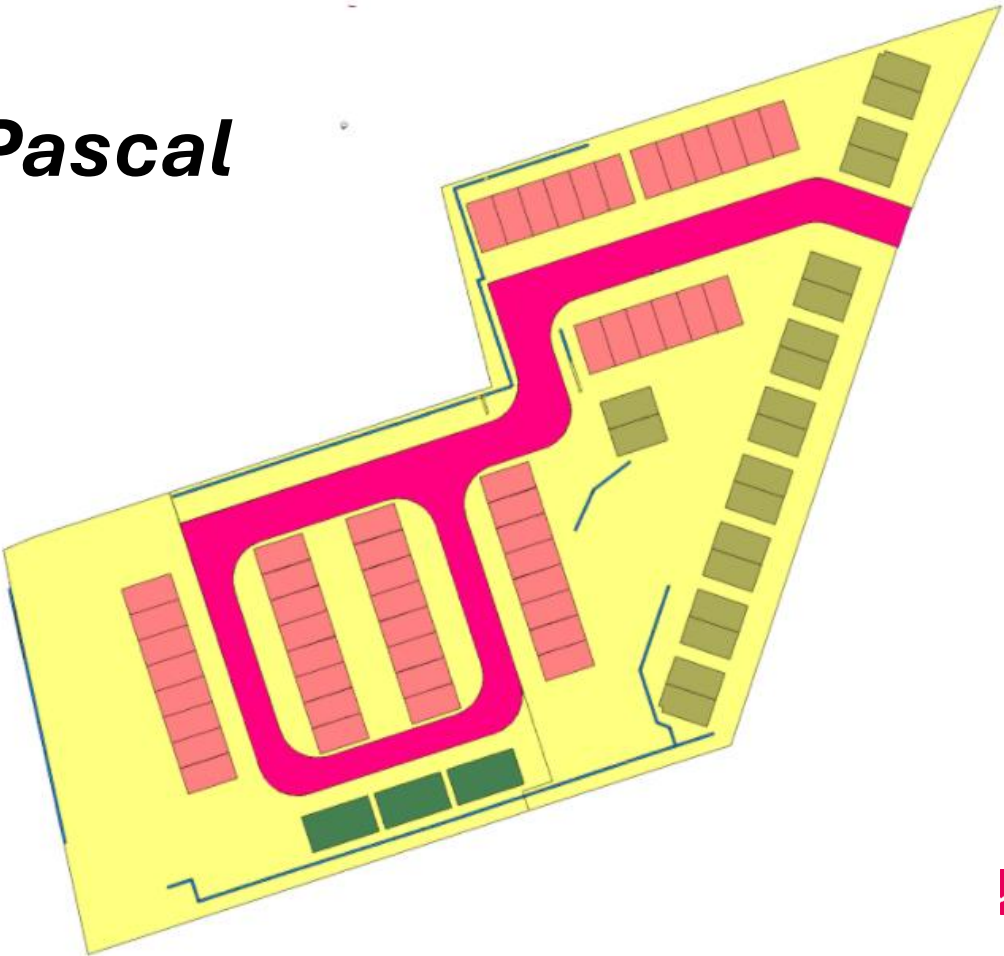


Alternative Development

• *Alt.5*

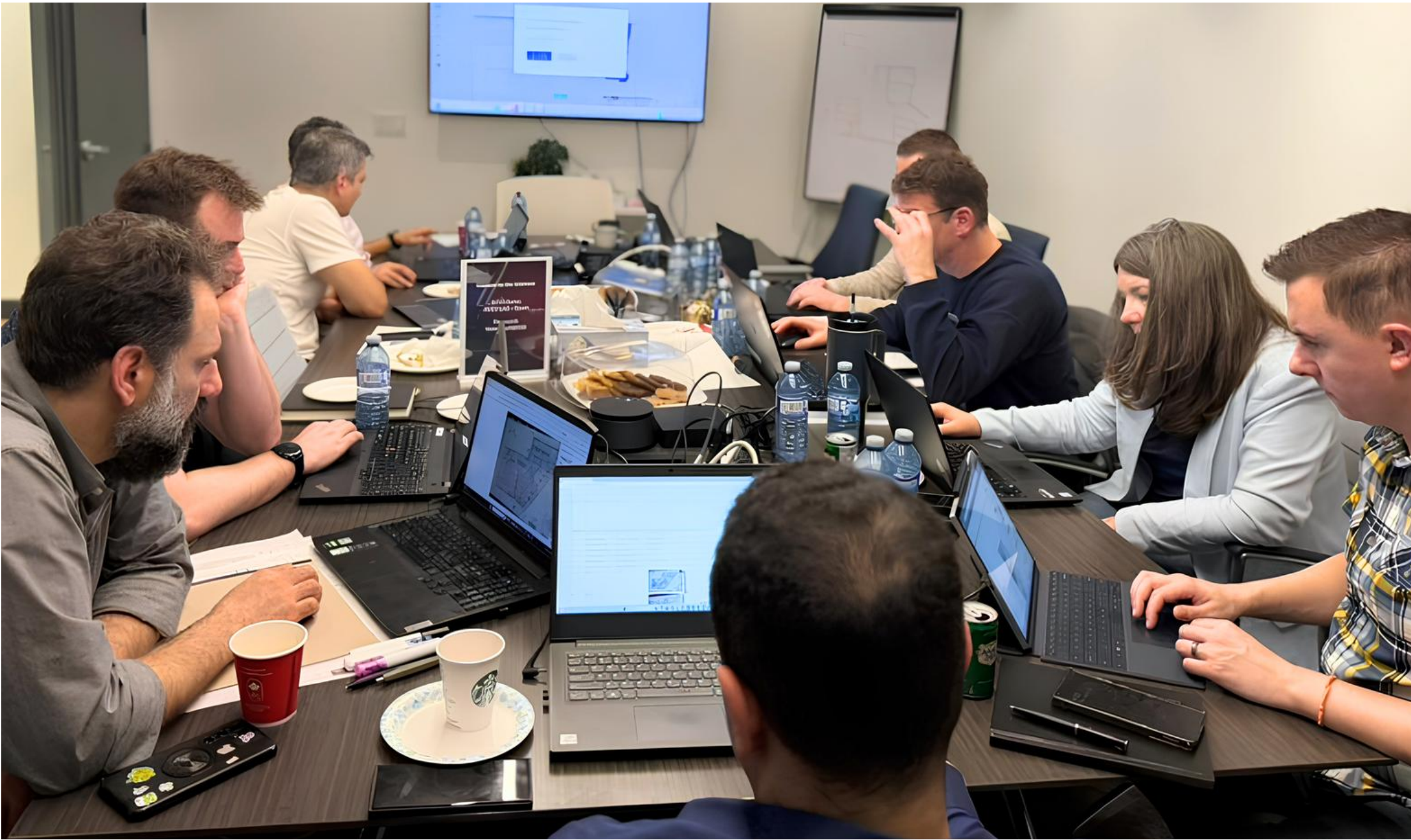


• *Alt.7 Pascal B*

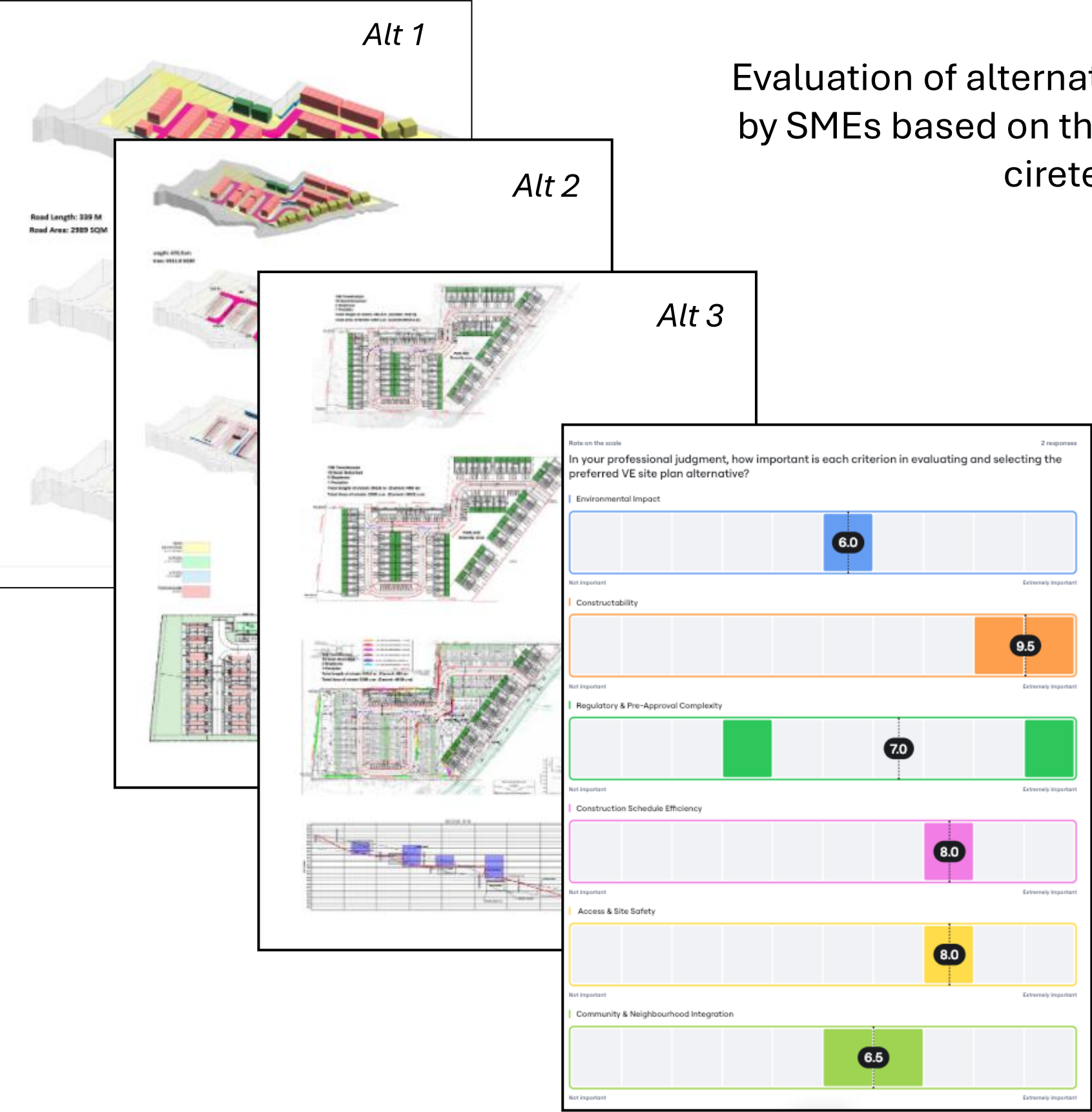


Site Plan Evaluation Without Criteria

Alternative	Point
ALt. 1	69
Alt. 2	66
Alt 3.	47
Alt.4	28
Alt 5.	64
Alt 6.	25
Alt 7.	49



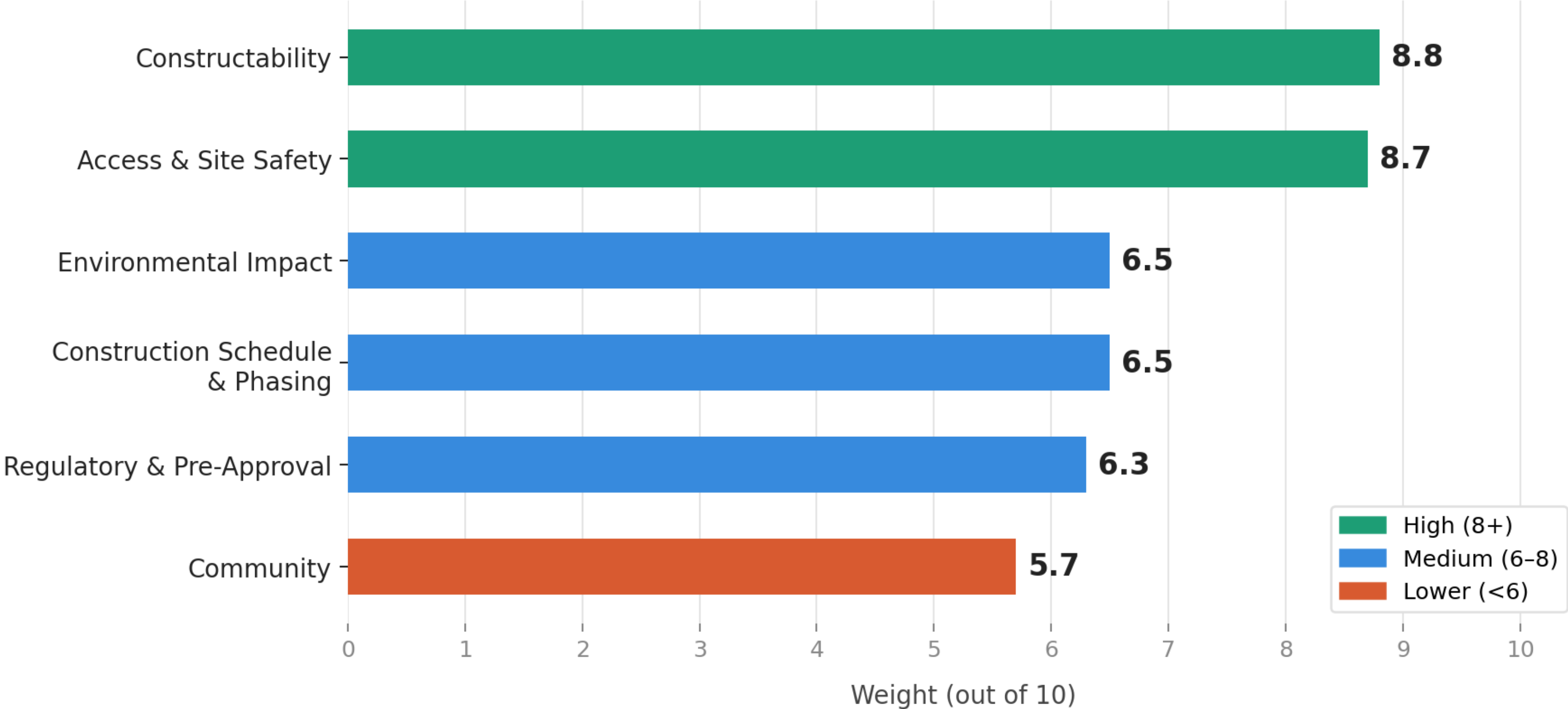
Site Plan Alternative Evaluations



Evaluation of alternatives
by SMEs based on the VE
criterion

#	Criterion	Description
1	Environmental Impact	Measures the extent to which the site plan disturbs or preserves natural site conditions — including the number of trees removed, degree of soil disturbance, management of existing topography, and protection of natural drainage and habitat features.
2	Constructability	Evaluates the ease and efficiency of construction execution — including reliance on standard equipment and methods, availability of common materials, reduced need for specialized trades or heavy machinery, and overall buildability given typical contractor resources.
3	Regulatory & Pre-Approval Complexity	Assesses the number and complexity of prerequisite regulatory approvals required prior to or concurrent with the primary permitting process — including conditions tied to Official Plan Amendments (OPA), Zoning By-law Amendments (ZBA), Site Plan Approval (SPA), servicing approvals, and building permits.
4	Construction Schedule Efficiency	Estimates the overall duration required to complete construction from mobilization to occupancy — considering site sequencing, phasing potential, complexity of civil works, and the extent to which the plan allows for efficient scheduling and minimal delays.
5	Access & Site Safety	Evaluates how effectively the site plan supports emergency response and resident safety — including adequacy of fire access routes, responsiveness to evacuation and emergency service requirements, and the plan's ability to mitigate hazards affecting occupant health and safety.
6	Community & Neighbourhood friendly	Assesses the degree to which the site plan positively contributes to the surrounding community — including provision of publicly accessible amenities (parks, open space, pathways), noise reduction through thoughtful access and road placement, and minimizing adverse impacts on adjacent residents.

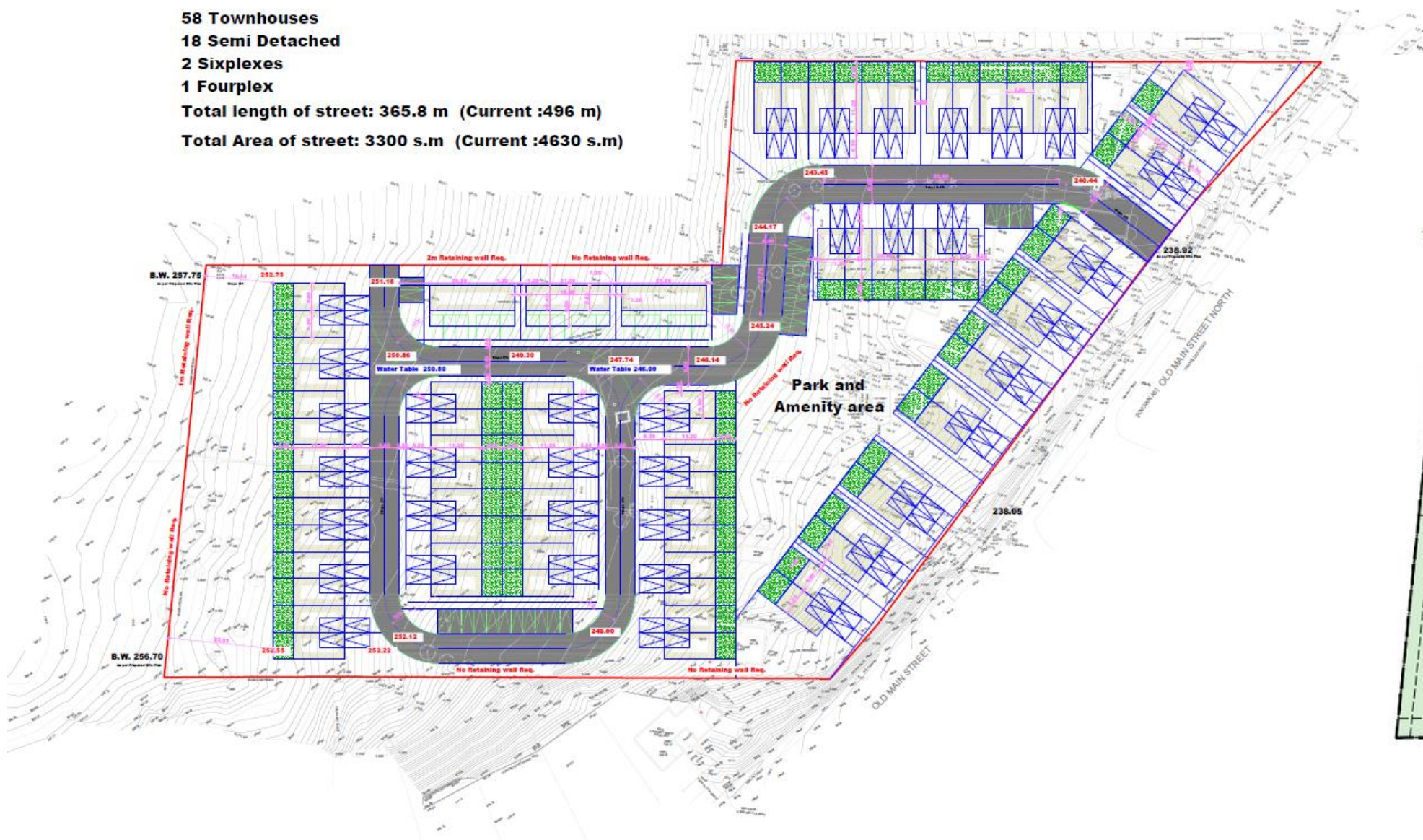
VE Criterion Weights



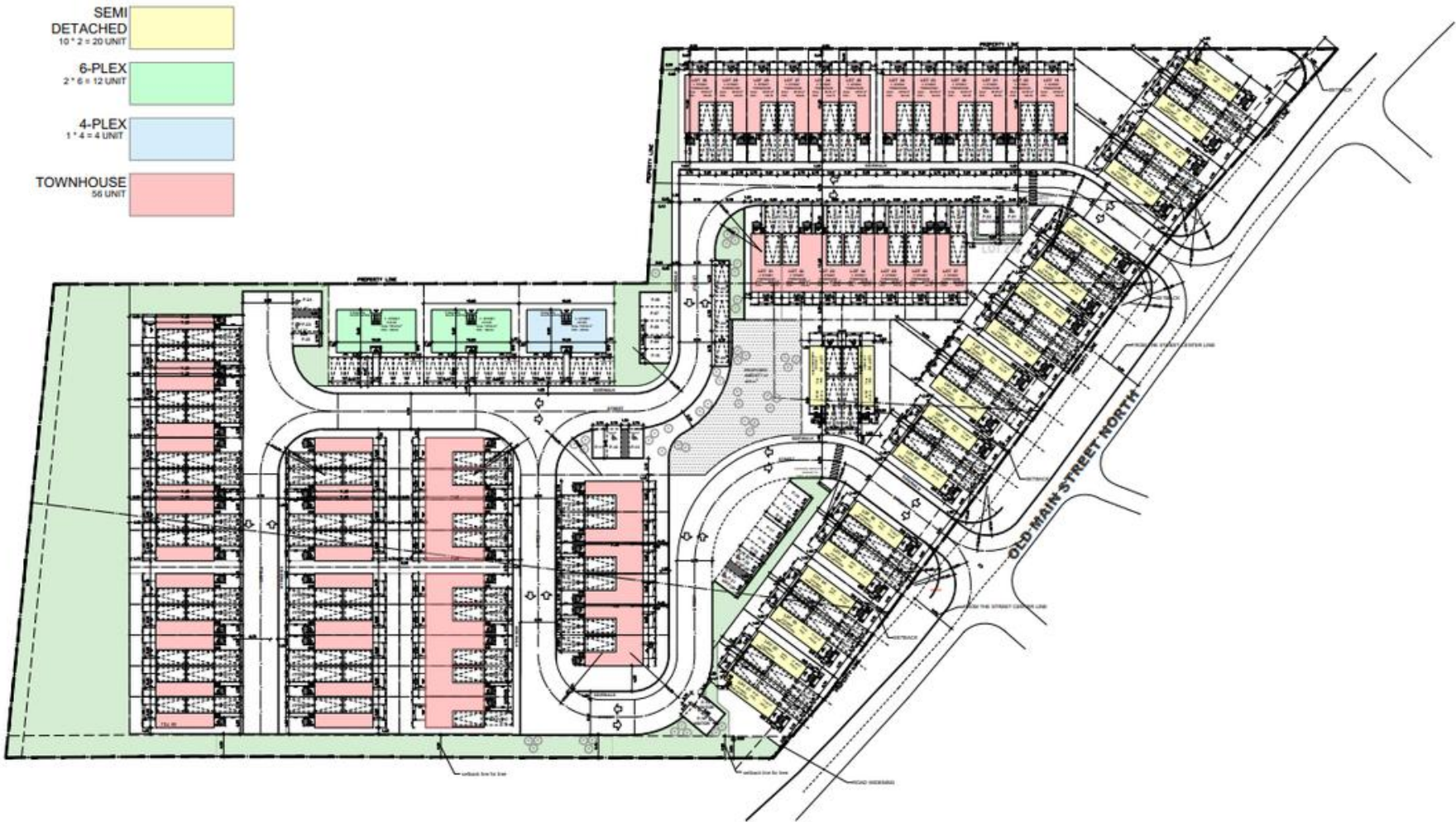
Comparison Table

Criteria	Weight	Alt.1 Pascal	Alt.2 Amir/Ali	Alt.3 Sadjad	Alt.4 Dev Team	Alt.5 Mehdy	Alt.6 Brent	Alt.7 Pascal B
Environmental Impact	6.5	4.7 30.6	3.9 25.3	3.9 25.3	2.8 18.2	4.5 29.3	3.1 20.2	4.2 27.3
Constructability	8.8	6.9 60.7	5.9 51.9	5.9 51.9	4 35.2	6.9 60.7	5 44	6.3 55.4
Regulatory & Pre-Approval	6.3	2.8 17.6	3.3 20.8	3.5 22.1	2.4 15.1	3.5 22.1	2.5 15.8	3.5 22.1
Construction Schedule & Phasing	6.5	4.2 27.3	3.9 25.3	3.9 25.3	2.8 18.2	4.5 29.3	2.9 18.8	4.1 26.6
Access & Site Safety	8.7	4.5 39.1	5 43.5	4.8 41.8	3.5 30.4	5.4 47	3.7 32.2	5 43.5
Community	5.7	3.6 20.5	3.3 18.8	3.3 18.8	2.4 13.7	3.9 22.2	2.6 14.8	3.5 19.9
TOTAL		195.8	185.6	185.2	130.8	210.6	145.8	194.8

Top Alternative Analysis



Integration of Alt 1,5, and 7
Alternative A - Merit 210.6

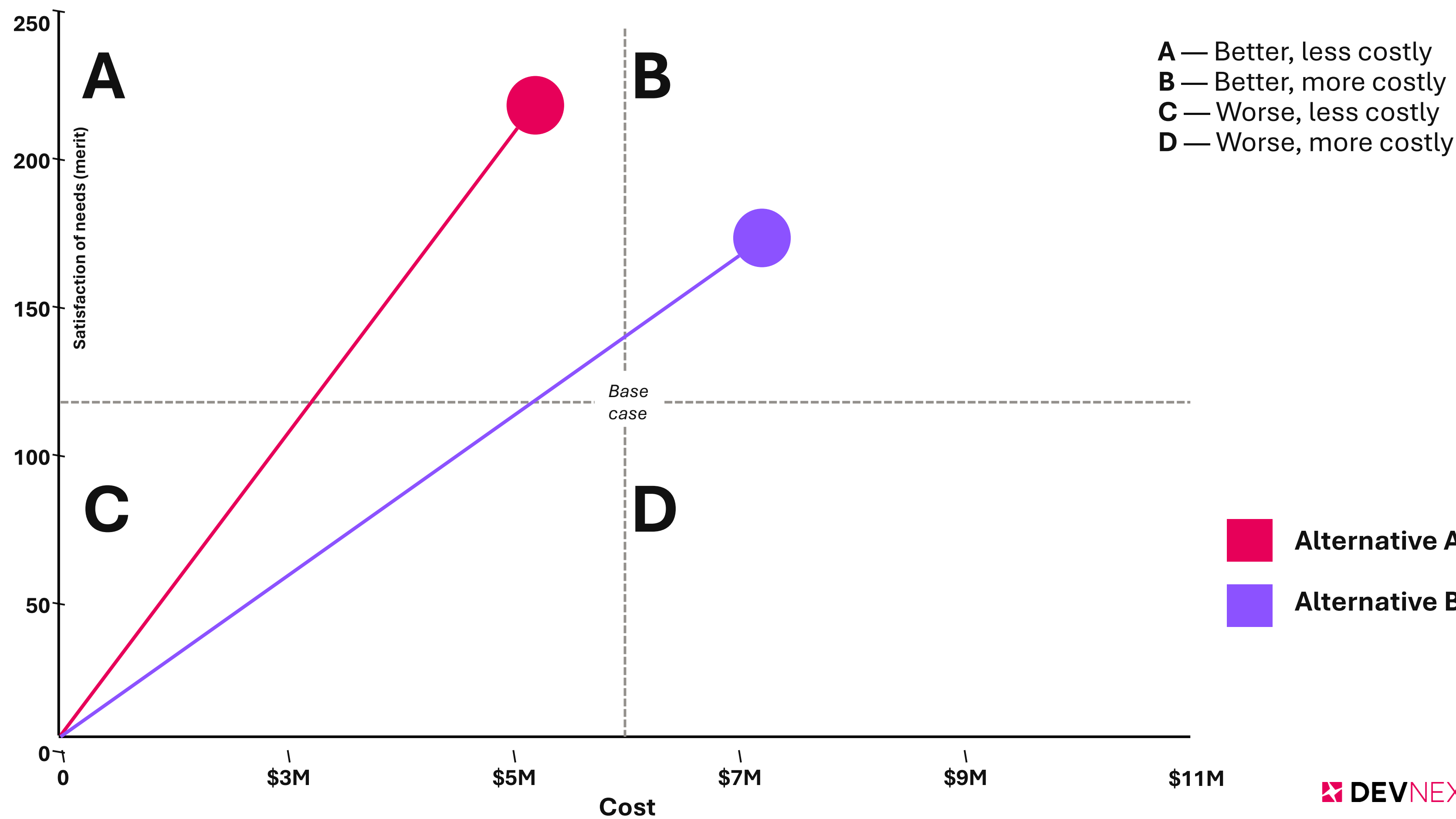


Alt 2
Alternative B - Merit 185.6

Presentation Phase

May 23 - From 2 p.m. to 3 p.m.

Value Graph



\$7.94M

Baseline Civil Cost

Retaining walls +
earthworks + roads

~\$2.4M+

Projected Savings

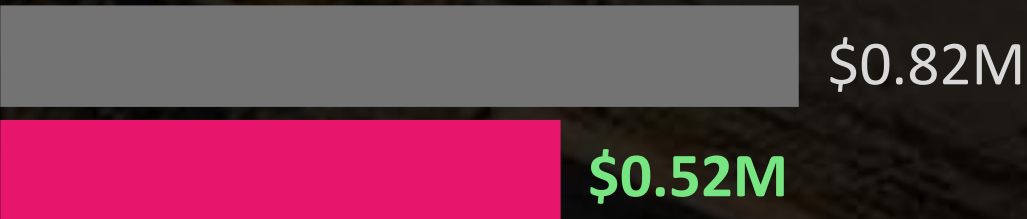
Through VE design proposals

COST BREAKDOWN BASE VS. VE

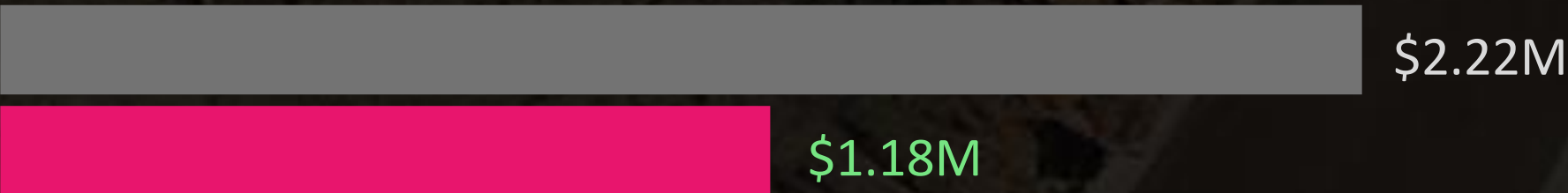
Retaining Walls



Foundation Walls



Excavation



Road Works



VE Proposal Base Case



Engagement with Town of Newmarket

May 25, 2026

Meeting with Town of Newmarket - May 25, 2026 | Alternative Discussions

Single Access Point

One access from Old Main @ 8.5 m width (widened from 6 m), max 6% slope

Semi-Detached Units

Retained along Old Main streetfront

Western Tree Buffer

Increased buffer to cemetery allows retention of existing trees

Visitor Parking

Redistributed across site for balanced accessibility

Outdoor Amenity

Consolidated at central rear location behind semi-units

Reduced Sidewalk Grade

Reduced from ±6% down to ±2–3% for improved accessibility



CYFS

- 100 m laneway policy → secondary access; may shift to 100-home trigger
- Laneway grade key concern — prefer below code max
- Sprinklers required; new station locations under review
- ✓ Preferred alternative is best option seen

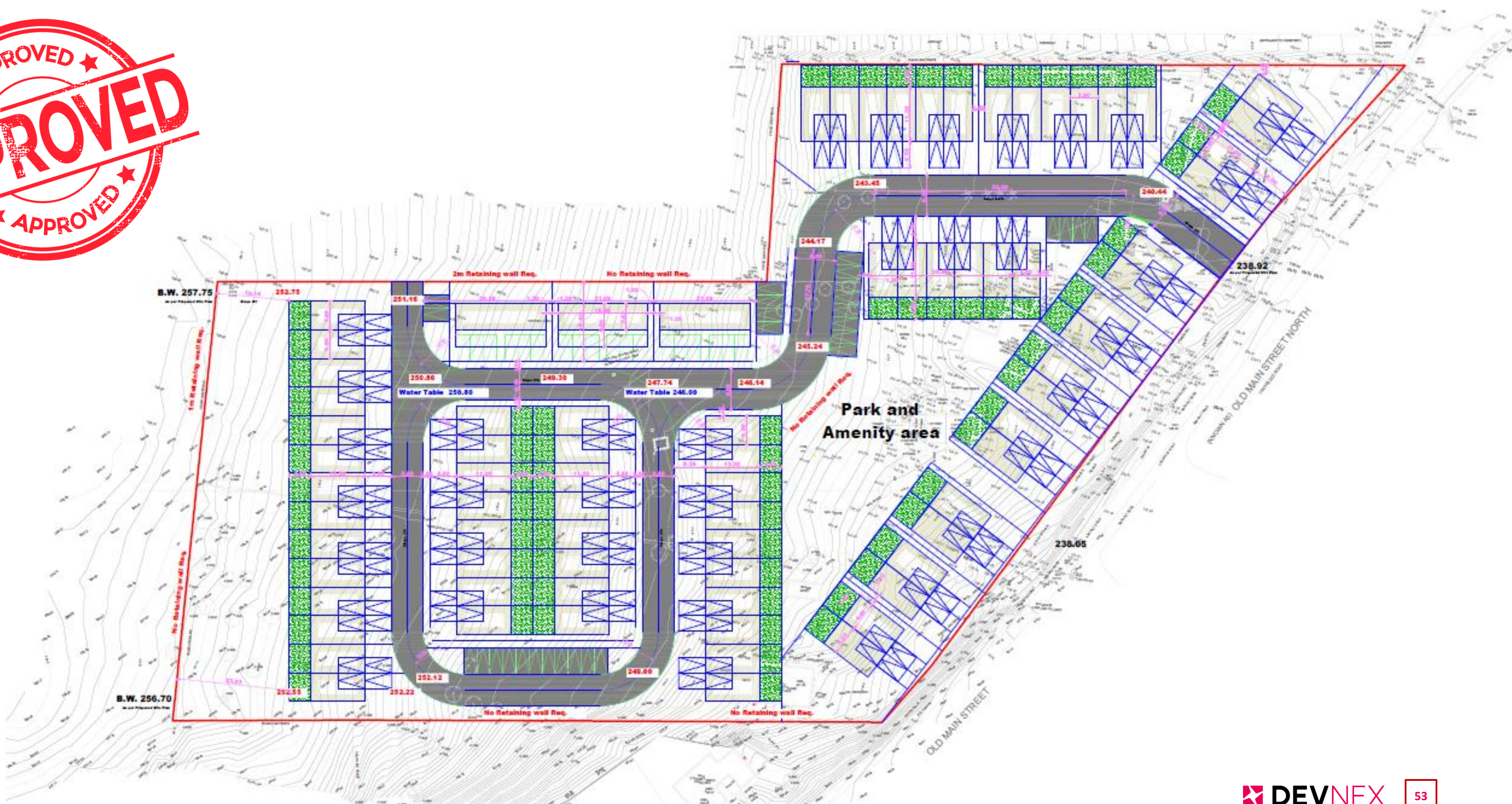
Engineering

- Supportive of preferred option
- Old Main EA at 100% design
- Town to provide watermain modelling for sprinkler support

Planning

- Preferred option best seen so far
- Retain multiplex units; condo road = local road standard
- Amenity area not yet POPS-acceptable — staff to define min. frontage
- ✓ Proceed with formal SPA resubmission

Meeting with Town of Newmarket | Alternative Presentation





The Success Behind VE

A Successful VE Process

- Engagement of external SMEs
- Focused VE effort over a one-month intensive term
- Technically driven analysis
- Collaboration with key stakeholders, including the Town of Newmarket, York Region, and CYFS
- Technology-enabled workshop sessions
- BIM-driven modelling and calculations
- Collaboration of Pentacore & Devnex





Devnex with Lucie martin-parrot, President of Value Analysis Canada



Thank you!

