



Corner Gas – Streamlined Solutions for a Common Problem

Redevelopment Framework for Former Service Stations



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Presentation Outline



- Stakeholder Need
- Development Process
- Objective and Outcomes
- Components (Steps, Guiding Principles, Tools)
- Next steps



What Is It?



◆ Redevelopment Framework

- Developed as a guide and resource for Ontario municipalities and other stakeholders to assist them with the redevelopment of former service stations located in their communities



Redevelopment
Framework
for
Former Service Stations
in Ontario



Why Former Service Stations?



- ◆ Most common type of brownfield site in Canada
- ◆ Highly visible
- ◆ Often lower value sites that aren't worth the risk





Why a Framework?



- ◆ Standardized approach
- ◆ Common language tool
- ◆ Clear, transparent, and streamlined
- ◆ Stakeholder input through consultations
- ◆ Guiding principles
- ◆ Best practices
- ◆ User-friendly





How Was It Developed?



- ◆ Identified common practices, existing tools, resources, and programs

- ◆ Framework should:
 - Include site characterization in accordance with jurisdictional requirements
 - Clarify process through decision trees, flowcharts and matrices
 - Be written in non-technical terms
 - Emphasize the importance of risk based protection and management
 - Highlight proven technologies
 - Reflect the existing regulatory regime
 - Be flexible

Partners

about
REMIATION





Phase 2 - Development



- ◆ Coordinated a multi-stakeholder interdisciplinary team
 - Leveraged stakeholder expertise
 - Key experts (public and private sector)



about
REMEDICATION



Typical Sites that Fit the Framework



- ◆ General Characteristics
 - Contaminant source
 - Main COCs
 - Site size
 - Location
 - Soil Conditions
 - Other COCs

- ◆ Situations not considered typical

- ◆ How many are typical?





Framework Components



- ◆ **4 steps:**
 1. Setting the Stage
 2. Evaluation and Planning
 3. Implementation
 4. Management

- ◆ **Guiding Principles** (Key Elements and Best Practices)

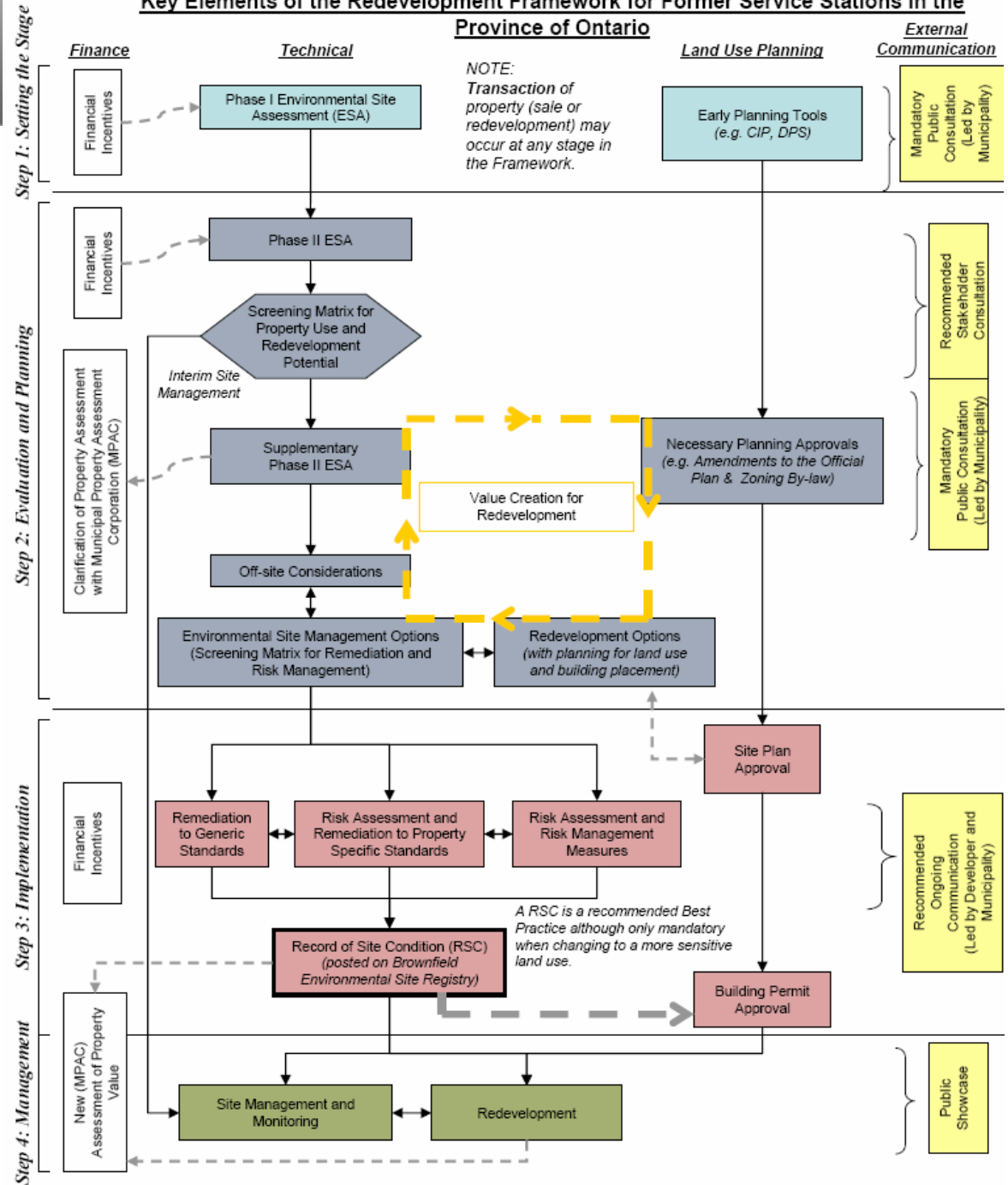
- ◆ **5 Tools** (Flow Diagram and Screening Matrices)
 1. Framework Diagram
 2. Property Use & Redevelopment Potential
 3. Selection of Remediation Technologies and Risk Management
 4. Implementing Remediation and Risk Management
 5. Glossary and Abbreviations
 6. Examples, Templates, and Case Studies



Framework Diagram



Key Elements of the Redevelopment Framework for Former Service Stations in the Province of Ontario





Outcomes - Stakeholders



- ◆ Provides an accessible online resource
- ◆ Provides a set of **Guiding Principles**
- ◆ Highlights the importance of early and ongoing communication between stakeholders
- ◆ Provides guidance on **Finance, Technical Issues, Land Use Planning**, and **External Communication** at each stage of the redevelopment process



Outcomes - Municipalities



- ◆ Highlights the importance of a predictable and timely approvals process
- ◆ Provides guidance on:
 - Streamlining the municipal approvals process using specific Planning Tools
 - Offering effective incentives
 - Improving development potential of a site
 - And, where no immediate redevelopment potential exists -> implementing **interim site uses** with help of property owner
- ◆ Illustrates how municipal planning and technical decisions interact at different stages of redevelopment



Outcomes – Property Owners and Developers



- ◆ Provides a streamlined approach for working with municipalities
- ◆ Reduces approval delays
 - Addresses common misunderstandings between developers and municipalities
- ◆ Identifies financial incentives available at each stage of redevelopment
- ◆ Illustrates role of Property Specific Standards to improve site development potential
- ◆ Clarifies when a record of site condition can be requested by a municipality
- ◆ Clarifies provincial approval processes for:
 - Remediation to generic standards
 - Remediation to property specific standards (risk assessment)
 - Use of risk management measures



Outcomes - Province



- ◆ Develops a streamlined process that works within the existing regulatory framework
- ◆ Improves communication!
 - Between municipalities, property owners, developers, provincial staff, and surrounding communities
 - ... thereby, addressing a number of regulatory barriers
- ◆ Helped identify:
 - Major issues
 - Current practices
 - Gaps



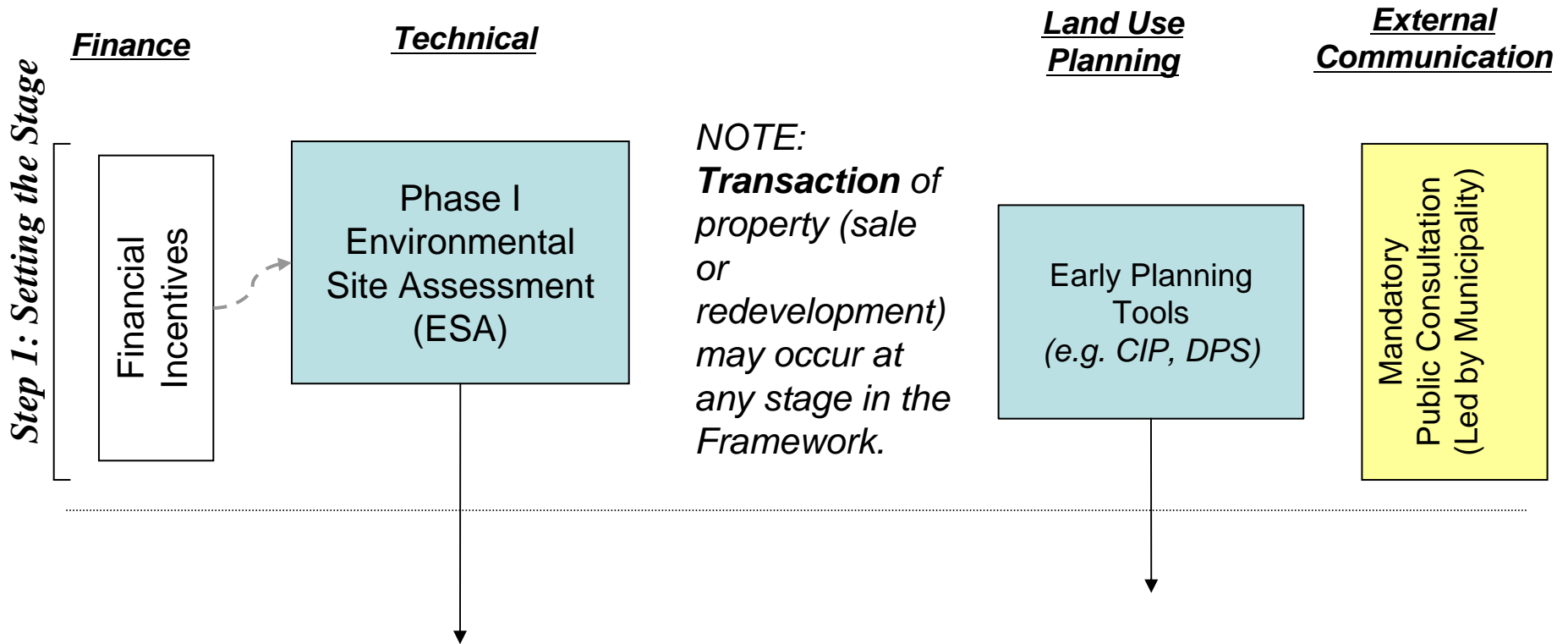
Overview of 4 Key Steps



Perspectives Steps	Finance	Technical	Land use planning	External Communication
Step 1: Setting the Stage	◆ Assessing the opportunity for specific brownfield sites to be a catalyst for community revitalization			
Step 2: Evaluation and Planning	◆ Opportunities for redevelopment value creation			
Step 3: Implementation	◆ Multiple remediation strategies exist with equally protective outcomes			
Step 4: Management	◆ Recognizing relationship between on-going site management and redevelopment options			

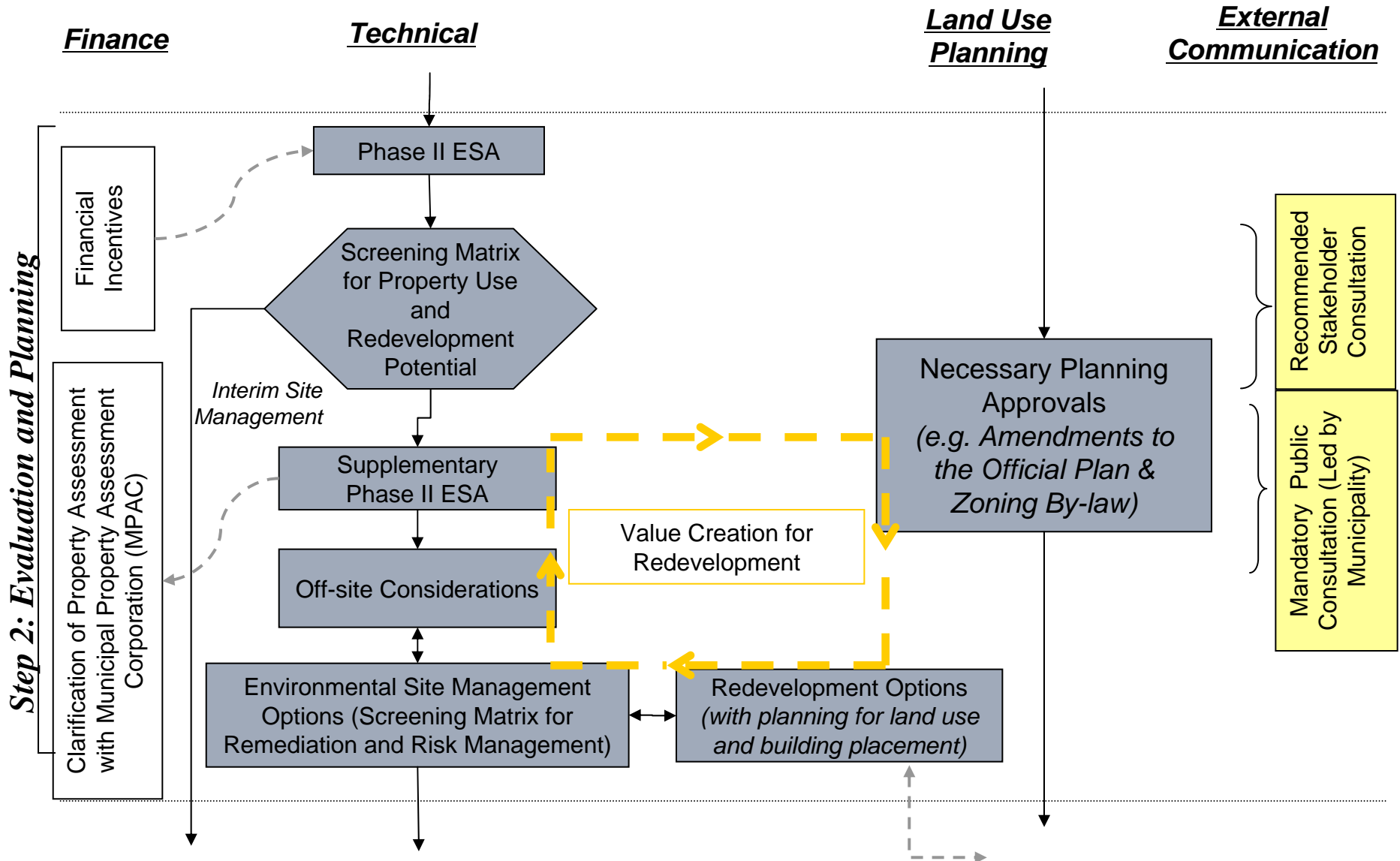


Step 1: Setting the Stage



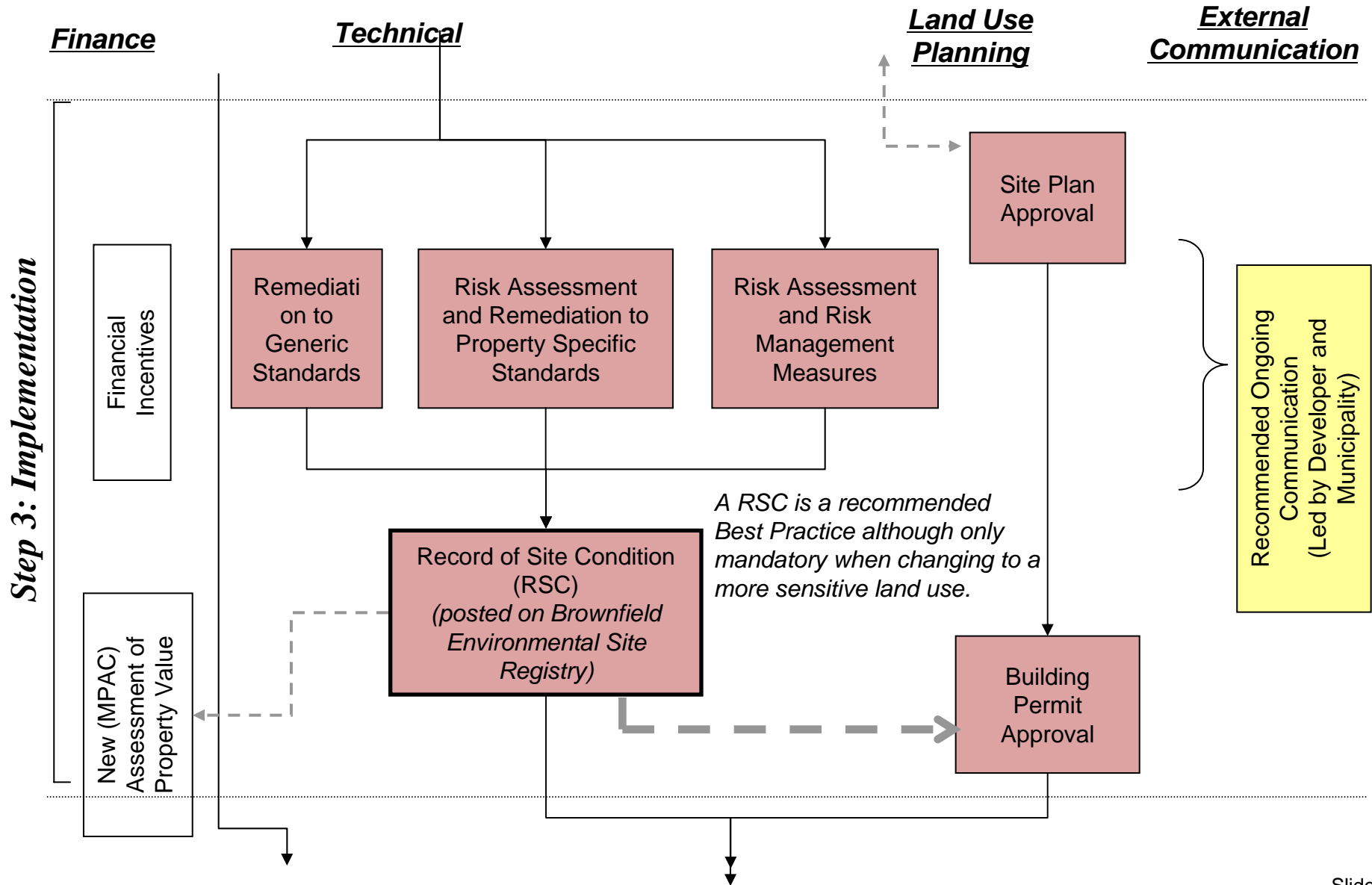


Step 2: Evaluation and Planning





Step 3: Implementation





Step 4: Management

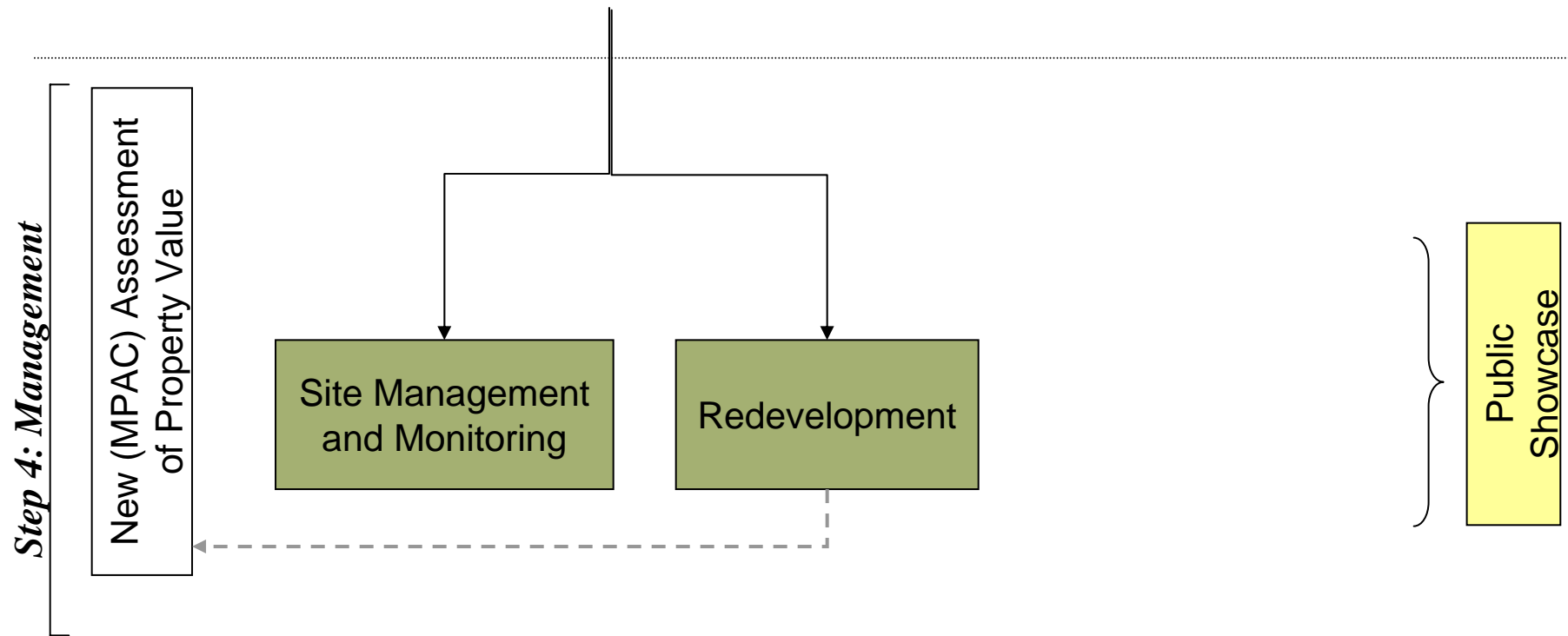


Finance

Technical

Land Use
Planning

External
Communication





Screening Matrix: Selection of Remediation Technologies and Risk Management



Remediation Type	Examples	Relative Chance of Success	Time (approx.)	Cost (approx.)	Ontario Regulations	Other Considerations
A: To Generic Standards <ul style="list-style-type: none">• soil• ground water						
B: To Property Specific Standards						
C: Risk Management						



Example of Remediation Technologies



Remediation Type	Examples	Relative Chance of Success	Time (mos.)	Cost (\$K)	Ontario Regulations	Other Considerations
A. REMEDIATION TO GENERIC STANDARDS						
A1. SOIL						
Excavation and Off-site Disposal	<ul style="list-style-type: none"> • Dig and haul to landfill for garbage cover ("dig and dump") • Dig and treat for surface land spreading 	Higher	2-4	100 - 300	Licensed hauler, licensed disposal facility (May require PTTW and/or CofA (Sewage) if dewatering required)	<ul style="list-style-type: none"> ○ Problem removed from site ○ Relatively simple to design and implement ○ Shipping costs may be high depending on location of off-site disposal. Landfill tipping fees vary - market driven ○ May not be feasible for deep or difficult to access contamination ○ Fugitive emissions may be a problem
Ex-Situ On-site treatment	<ul style="list-style-type: none"> • Bioremediation • Allu Bucket • Composting • Thermal desorption 	Medium to Higher	4-36	100 - 200	CofA (Waste), CofA (Air) (May require PTTW and/or CofA (Sewage) if dewatering required)	<ul style="list-style-type: none"> ○ Requires space to operate treatment facility ○ Generally most effective for organic compounds ○ May not be feasible for deep or difficult to access contamination ○ Effectiveness may be limited by concentrations ○ Time varies depending on technology; biopile may take up to 2-3 years. Allu bucket may take only 4 months ○ Fugitive emissions may be a problem



Guide to Regulatory Process: Implementing Remediation and Risk Management

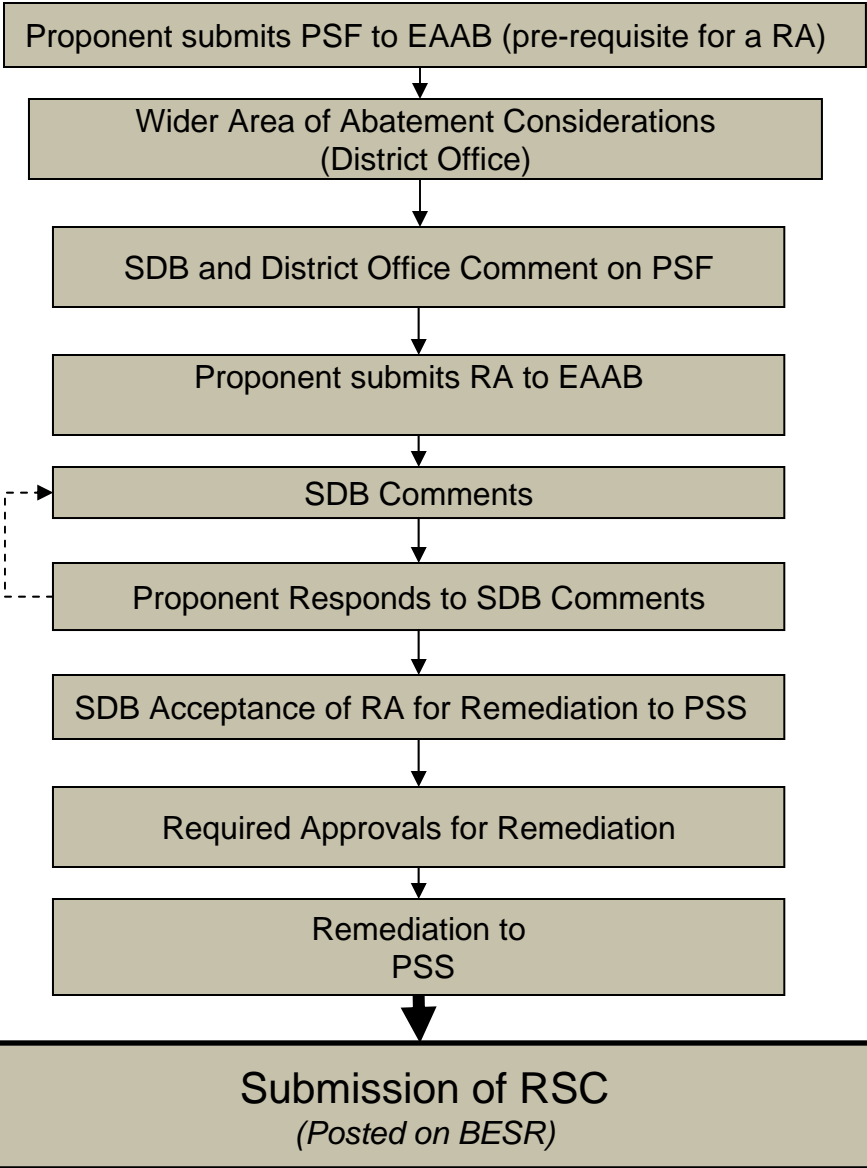


Remediation Type			Timeline
A: To Generic Standards	B: To Property Specific Standards (No risk management)	C: To Property Specific Standards (With risk management)	

↓ ↓ ↓
Submit Record of Site Condition
to Registry



Remediation to Property Specific Standards without Risk Management



Timeline

30 days (target) for MOE to review PSF

30 days for public comment once posted on EBR

8-22 weeks for MOE to respond per submission or revision



Redevelopment Potential



- ◆ Sites that Don't Fit the Model
 - Sweet Spots and Not So Sweet Spots
 - The Redevelopment Potential Matrix
 - Interim Property Use

- ◆ Next Steps



Redevelopment Potential



Municipal Site Considerations	Net Site Value (= final property value - cost of remediation and/or risk management) ¹		
	Site has Negative Net Value	Site has Marginal Net Value	Site has Positive Net Value
Site is located within a Municipal CIP or revitalization strategy area	Redevelopment Potential Fair	Redevelopment Potential Good	Redevelopment Potential Very Good
Site is located in an area with redevelopment focus but no firm plans (e.g. CIP) in place for the area	Redevelopment Potential Poor	Redevelopment Potential Fair	Redevelopment Potential Good
Site is located in an area with no plans or redevelopment focus	Redevelopment Potential Very Poor	Redevelopment Potential Poor	Redevelopment Potential Fair



Redevelopment Potential



Municipal Site Considerations	Net Site Value (= final property value - cost of remediation and/or risk management) ¹		
	Site has Negative Net Value	Site has Marginal Net Value	Site has Positive Net Value
Site is located within a Municipal CIP or revitalization strategy area	Redevelopment Potential = Fair Steps: 1. Engage owner and developer early. 2. Follow framework when project economics support moving forward. 3. Improve project economics. Consider entire zone economics, developer incentives, site-specific remediation, etc.	Redevelopment Potential = Good Steps: 1. Engage owner and developer early. 2. Follow Framework to redevelop. 3. Improve project economics through shortened development time, developer incentives, CIP funding, flexible land uses/exit strategies, etc.	
	Redevelopment Potential = Poor Steps: 1. Engage owner, consultant, regulator and developer early. 2. Jointly identify redevelopment options and timeframe. Consider less sensitive interim use and options to improve project economics. 3. Follow framework when feasible end use plan is developed.	Redevelopment Potential = Fair Steps: 1. Engage owner, consultant, regulator and developer early. 2. Jointly identify economically feasible redevelopment options. 3. Improve project economics through shortened development time, developer incentives, CIP funding, flexible land uses/exit strategies, etc.	

IMPROVING REDEVELOPMENT POTENTIAL

A site may shift to the right side of the matrix if either the property value increases or the cost of remediation decreases. A Risk Assessment may reduce the cost through remediation to Property Specific Standards and/or the use of Risk Management

IMPROVING REDEVELOPMENT POTENTIAL

A site may shift up the matrix if the municipality implements policies, protocols, or incentives



Redevelopment Potential



Redevelopment Potential = Very Good

Steps:

1. Engage Owner and developer early
2. Follow Framework to redevelop

Municipal Site Considerations	Net Site Value (= final property value) - Site has Negative Net Value	
	Site has Negative Net Value	Site has Positive Net Value
Site is located within a Municipal CIP or revitalization strategy area	Redevelopment Potential Fair	Redevelopment Potential Good
Site is located in an area with	Redevelopment Potential Poor	Redevelopment Potential Fair

Redevelopment Potential = Very Poor

Steps:

1. Framework is NOT applicable
2. If desired, develop aesthetics or surface use agreement with owner, including interim site management obligations

Redevelopment Potential Poor

Redevelopment Potential Fair



Redevelopment Potential



Birth

Old Age



Redevelopment Potential



Birth

Old Age



Redevelopment Potential



Birth

Sweet Spot

Old Age



Redevelopment Potential



Sweet Spot



Not So Sweet Spot



Sweet Spot



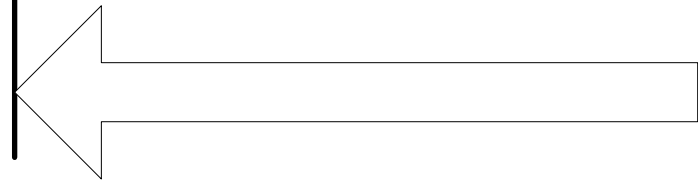
Redevelopment Potential



Sweet Spot

Not So Sweet Spot

Sweet Spot



- ✓ Policy (Liability, Etc.)
- ✓ Efficient Approvals
- ✓ Capability Development



Redevelopment Potential



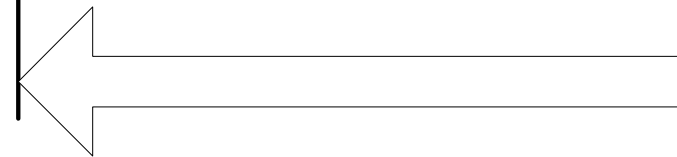
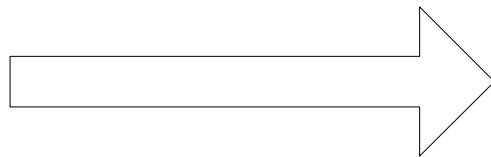
Sweet Spot



Not So Sweet Spot



Sweet Spot



- ✓ Technology
- ✓ Intensification

- ✓ Policy (Liability, etc)
- ✓ Efficient Approvals
- ✓ Capability Development



Interim Site Uses



◆ Interim uses:

- First step in the gradual development of these sites
- Interim to full redevelopment (“highest and best uses”)

◆ Considerations:

- Possible interim uses are limited only by the needs and abilities of the community
- Markets work well in determining the value of a property. If the market value and creative project development options do not support a full redevelopment, scale back expectations to an affordable interim use that meets the communities needs.
- Work collaboratively with all participants – owners, local residents and municipal planners and find creative uses that meet the local needs economically. Ensure each constituent’s positions are considered.
- Consider interim use as just what it is – economic and safe re use of a property until such time as a full scale redevelopment can be justified.



Interim Site Uses



◆ Examples:

- Temporary commercial structures, parking lots, parks, gardens, farmers markets, and other short-term uses of sites

◆ Chicago's City Farm

- Mobile farm located on contaminated sites
- Produce is grown on raised beds of soil that can be loaded onto a trailer
- When development begins on the site, City Farm works with the City to find another location
(city guarantees entire growing season)
- Produce is sold to local restaurants
- Close collaboration with the city





Interim Site Uses





Redevelopment Potential



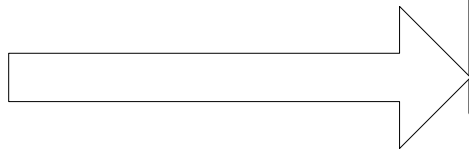
Sweet Spot



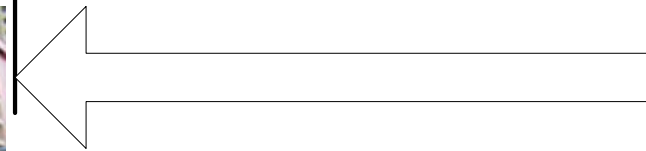
Almost Sweet Spot



Sweet Spot



Technology Intensification



Policy (Liability, etc)
Efficient Approvals
Capability
Development





What's Next?



◆ Implement the Framework

- Testing the Framework with Ontario municipalities (Webinar, Survey and Launch the Online Framework on www.aboutremediation.com)

◆ Provide Training and Matchmaking

- Opportunities for Municipalities and Property Owners

◆ Expand the Framework beyond the Ontario Pilot

- Other jurisdictions
- Other types of brownfield sites such as dry cleaners



Summary



- ◆ Developed an effective guidance framework (online www.aboutremediation.com)
- ◆ Streamlined the approval process
- ◆ Facilitated matchmaking opportunities to encourage redevelopment considerations
- ◆ Created a product with potential application in other jurisdictions and for other types of brownfield sites

Welcome to the



Redevelopment Framework for Former Service Stations in the Province of Ontario



Supported by:



The **Redevelopment Framework for Former Service Station in the Province of Ontario (version 1.1)** has been developed as a guide and resource to assist Ontario stakeholders with the redevelopment of former service station sites in their communities.



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Questions

