

**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Analysis of Alternative Design Concepts**

<b>TECHNICAL CRITERIA</b>	<b>Do Nothing</b>	<b>Road A</b>	<b>Road B1</b>	<b>Road B2</b>	<b>Road C1</b>	<b>Road C2</b>	<b>Road D</b>	<b>Road E1</b>	<b>Road E2</b>
<b>Natural Environment</b>									
<b>Provincially Significant Wetlands (PSW)</b>	No impact.	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex.	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex.  Requires a bridge to span the full TRCA flood line (approx. 130m - 170 m buffer around PSW).	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex.  Requires a bridge to span the full TRCA flood line (approx. 130m - 170 m buffer around PSW).	Within 120m of the PSW. Potential impact to a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex.	Directly adjacent to the PSW. Potential impact and loss of habitat associated with the Bruce and Berczy Creek Provincially Significant Wetland complex.	Directly adjacent to the PSW. Potential impact and loss of habitat associated with the Bruce and Berczy Creek Provincially Significant Wetland complex.	No impact anticipated.	No impact anticipated.
<b>Watercourses / Aquatic Habitat</b>	No impact.	No impact.	Enclosing a section of Berczy Creek creating a reduction of riparian and aquatic habitat. Increase in disturbance regimes and contaminant source from road run-off. Potential impacts to local fish populations.	Enclosing a section of Berczy Creek creating a reduction of riparian and aquatic habitat. Increase in disturbance regimes and contaminant source from road run-off. Potential impacts to local fish populations.	No impact anticipated.	Within 30 m of the Berczy Creek watercourse. Potential impacts to aquatic habitat quality and local fish populations.	Within 30 m of the Berczy Creek watercourse. Potential impacts to aquatic habitat quality and local fish populations.	No impact anticipated.	No impact anticipated.
<b>Terrestrial Features</b>	No impact.	Terrestrial lands (agricultural fields) will be impacted.	Terrestrial lands (agricultural fields) will be impacted.	Terrestrial lands (agricultural fields) will be impacted.	Terrestrial lands (agricultural fields and some adjacent trees on commercial / industrial lands) will be impacted.	Terrestrial lands (agricultural fields) will be impacted.	Terrestrial lands including agricultural fields and naturalized hedgerows will be impacted.	Terrestrial lands including agricultural fields, naturalized meadows, naturalized hedgerows, forested lands, and shoreline of Storm Water Management Pond will be impacted.	Terrestrial lands including agricultural fields, naturalized meadows, naturalized hedgerows and forested lands will be impacted.
<b>Stormwater Management</b>	No impact.	Stormwater management for individual parcels to be the responsibility of developers.							

**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Analysis of Alternative Design Concepts**






TECHNICAL CRITERIA	Do Nothing	Road A	Road B1	Road B2	Road C1	Road C2	Road D	Road E1	Road E2
<b>Social</b>									
<b>Ability to Accommodate Future Development</b>	Development parcels remain large with access only permitted on Honda Boulevard. Low level of ability to accommodate future development as access is only permitted on Honda Boulevard.	Allows for small and large parcel development north of 19 <sup>th</sup> Avenue with access onto Road A.	Allows for small and large parcel development north of 19 <sup>th</sup> Avenue with access onto Road B1.	Allows for small and large parcel development north of 19 <sup>th</sup> Avenue with access onto Road B2.	Allows for small and large parcel development east and west of Road C1.	Allows for small and large parcel development east and west of Road C2. Horizontal curvature of road segments one parcel into a nonlinear area.	Allows for small and large parcel development north of the existing Honda Boulevard with access onto Road D.	Allows for large and small parcel development in the south end of the study area with access onto Road E1. Segments the existing large parcels of land. Maintains a smaller parcel on the west side for development.	Allows for large and small parcel development in the south end of the study area with access onto Road E2. Maintains a larger parcel on the west side for development.
<b>Accessibility to Future Development Blocks</b>	Does not provide improved access to the developable lands in the Planning District.	Provides access to development parcels north of 19th Avenue and east of Berczy Creek from both Woodbine Avenue and 19th Avenue.	Provides access to development parcels north of 19th Avenue from both Woodbine Avenue and 19th Avenue.	Provides access to development parcels north of 19th Avenue from both Woodbine Avenue and 19th Avenue.	Provides access to development parcels east and west of Road C1.	Provides access to development parcels east and west of Road C2.	Provides access to development parcels north of the existing Honda Boulevard.	Provides an alternative access point (rather than Honda Boulevard) for parcels in the south end of the study area.	Provides an alternative access point (rather than Honda Boulevard) for parcels in the south end of the study area.
<b>Archaeological and Cultural Heritage</b>	No impact.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.
<b>Air Quality</b>	No impact.	No significant negative impacts on local air quality anticipated.	No significant negative impacts on local air quality anticipated.	No significant negative impacts on local air quality anticipated.	No significant negative impacts on local air quality anticipated.	No significant negative impacts on local air quality anticipated.	No significant negative impacts on local air quality anticipated.	No significant negative impacts on local air quality anticipated.	No significant negative impacts on local air quality anticipated.
<b>Climate Change</b>									
<b>Climate Change Mitigation</b>	No opportunities for climate change mitigation.	The proposed collector roads will help to reduce idling that is currently experienced in the study area. Thus, the project will not materially contribute towards climate change.							
<b>Climate Change Adaptation</b>	No opportunities to consider climate change adaptation.	Opportunity to consider future flood conditions in the sizing of the proposed stormwater facilities (by developers).							

**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Analysis of Alternative Design Concepts**





























<b>TECHNICAL CRITERIA</b>	<b>Do Nothing</b>	<b>Road A</b>	<b>Road B1</b>	<b>Road B2</b>	<b>Road C1</b>	<b>Road C2</b>	<b>Road D</b>	<b>Road E1</b>	<b>Road E2</b>
<b>Technical</b>									
<b>Network Connectivity/ Efficiency</b>	No internal road network provided.	Does not provide a continuous north-south connection between 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south.	Provides a continuous north-south route with the potential to connect to Road C1 or C2 if implemented, connecting 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south.	Provides a continuous north-south route with the potential to connect to Road C1 or C2 if implemented, connecting 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south.	Provides a continuous north-south route connecting 19th Avenue to Woodbine Avenue in the south.  Aligns with Road B1 or B2, if implemented.	Provides a continuous north-south route connecting 19th Avenue to Woodbine Avenue in the south.  Does not directly align with Road B1 or B2, if implemented.	Provides a new east-west route from Woodbine Avenue to Honda Boulevard.	Provides an alternative north-south connection from Road D (if implemented) to Woodbine Avenue.	Provides an alternative north-south connection from Road D (if implemented) to Woodbine Avenue.
<b>Distance to Future 19<sup>th</sup> Avenue Interchange</b>	N/A	630 m	370 m	370 m	370 m	440 m	N/A	N/A	N/A
<b>Distance to Other Proposed Collector Roads</b>	N/A	260 m to Road B1/B2 and C1.	260 m to Road A.	260 m to Road A.	260 m to Road A.	190 m to Road A.	N/A	N/A	N/A

**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Analysis of Alternative Design Concepts**































<b>TECHNICAL CRITERIA</b>	<b>Do Nothing</b>	<b>Road A</b>	<b>Road B1</b>	<b>Road B2</b>	<b>Road C1</b>	<b>Road C2</b>	<b>Road D</b>	<b>Road E1</b>	<b>Road E2</b>
<b>Ability to Align with Future Urban Area (FUA) Plans</b>	No impact to FUA plans.	No impact to FUA plans.	No impact to FUA plans.	No impact to FUA plans.	No impact to FUA plans.	No impact to FUA plans.	Maintain provision for future connection to FUA.	No impact to FUA plans.	No impact to FUA plans.
<b>Constructability</b>	No impact.	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated.	Land for the collector road is currently undeveloped. Impact at the creek crossing can be mitigated. Minimal construction disturbance anticipated.	Land for the collector road is currently undeveloped. Impact at the creek crossing can be mitigated. Minimal construction disturbance anticipated.	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated.	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated.	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated.	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated.	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated.
<b>Compliance with Design Standards</b>	No impact.	Compliant with City of Markham design standards.	Compliant with City of Markham design standards.	Compliant with City of Markham design standards.	Compliant with City of Markham design standards.	Compliant with City of Markham design standards.	Compliant with City of Markham design standards.	Compliant with City of Markham design standards.	Compliant with City of Markham design standards.
<b>Utilities and Municipal Infrastructure</b>	No impact.	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers.	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers.	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers.	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers.	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers.	Coordination with Hydro One and Enbridge required. Servicing to be arranged by developers.	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers.	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers.

				
<b>Highest Benefit</b>	<b>Fairly High Benefit</b>	<b>Moderate Benefit</b>	<b>Fairly Low Benefit</b>	<b>Least Benefit</b>



























**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Evaluation of Alternative Design Concepts A, B1 and B2**

TECHNICAL CRITERIA	Do Nothing	Road A	Road B1	Road B2
<b>Natural Environment</b>				
<b>Provincially Significant Wetlands (PSW)</b>	No impact. 	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex. 	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex. Requires a bridge to span the full TRCA flood line (approx. 130m - 170 m buffer around PSW). 	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex. Requires a bridge to span the full TRCA flood line (approx. 130m - 170 m buffer around PSW). 
<b>Watercourses / aquatic habitat</b>	No impact. 	No impact. Minor infringement to flood line (can be mitigated). 	Enclosing a section of Berczy Creek creating a reduction of riparian and aquatic habitat. Increase in disturbance regimes and contaminant source from road run-off. Potential impacts to local fish populations. 	Enclosing a section of Berczy Creek creating a reduction of riparian and aquatic habitat. Increase in disturbance regimes and contaminant source from road run-off. Potential impacts to local fish populations. 
<b>Terrestrial features</b>	No impact. 	Terrestrial lands (agricultural fields) will be impacted (less than B1 or B2). No significant features impacted. 	Terrestrial lands (agricultural fields) will be impacted. No significant features impacted. 	Terrestrial lands (agricultural fields) will be impacted. No significant features impacted. 
<b>Stormwater Management</b>	No impact. 	Stormwater management for individual parcels to be the responsibility of developers. 		
<b>Social</b>				
<b>Ability to Accommodate Future Development</b>	Development parcels remain large with access only permitted on Honda Boulevard. Low level of ability to accommodate future development as access is only permitted on Honda Boulevard. 	Allows for small and large parcel development north of 19 <sup>th</sup> Avenue with access onto Road A. 	Allows for small and large parcel development north of 19 <sup>th</sup> Avenue with access onto Road B1. 	Allows for small and large parcel development north of 19 <sup>th</sup> Avenue with access onto Road B2. 
<b>Accessibility to Future Development Blocks</b>	Does not provide improved access to the developable lands in the Planning District. 	Provides partial access to development parcels north of 19th Avenue and east of Berczy Creek from both Woodbine Avenue and 19th Avenue. 	Provides access to development parcels north of 19th Avenue from both Woodbine Avenue and 19th Avenue. 	Provides access to development parcels north of 19th Avenue from both Woodbine Avenue and 19th Avenue. 
<b>Archaeological and Cultural Heritage</b>	No impact.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.
<b>Air Quality</b>	No impact. 	Air quality effects will be similar for all alternatives as significant sources exist as Highway 404 and Woodbine Avenue. 		
<b>Climate Change</b>				
<b>Climate Change Mitigation</b>	No opportunities for climate change mitigation. 	The proposed collector roads will help to reduce idling that is currently experienced in the study area. Thus, the project will not materially contribute towards climate change. 		
<b>Climate Change Adaptation</b>	No opportunities to consider climate change adaptation. 	Opportunity to consider future flood conditions in the sizing of the proposed stormwater facilities (by developers). 		



















**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Evaluation of Alternative Design Concepts A, B1 and B2**

TECHNICAL CRITERIA	Do Nothing	Road A	Road B1	Road B2
<b>Technical</b>				
<b>Network Connectivity/ Efficiency</b>	No internal road network provided. 	Does not provide a continuous north-south connection between 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south. 	Provides a continuous north-south route with the potential to connect to Road C1 or C2 if implemented, connecting 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south. 	Provides a continuous north-south route with the potential to connect to Road C1 or C2 if implemented, connecting 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south. 
<b>Distance to Future 19<sup>th</sup> Avenue Interchange</b>	N/A	630 m 	370 m 	370 m 
<b>Distance to Other Proposed Collector Roads</b>	N/A	260 m to Road B1/B2 and C1. 	260 m to Road A. 	260 m to Road A. 
<b>Ability to Align with Future Urban Area (FUA) Plans</b>	No impact to FUA plans. 	No impact to FUA plans. 	No impact to FUA plans. 	No impact to FUA plans. 
<b>Constructability</b>	No impact. 	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated. 	Land for the collector road is currently undeveloped. Impact at the creek crossing can be mitigated. Minimal construction disturbance anticipated. 	Land for the collector road is currently undeveloped. Impact at the creek crossing can be mitigated. Minimal construction disturbance anticipated. 
<b>Cost</b>	No impact. 	Moderate cost to cross portion of PSW at Woodbine intersection. 	Significant cost to cross Berczy creek. 	Significant cost to cross Berczy creek. 
<b>Compliance with Design Standards</b>	No impact. 	Compliant with City of Markham design standards. 	Compliant with City of Markham design standards. 	Compliant with City of Markham design standards. 
<b>Utilities and Municipal Infrastructure</b>	No impact. 	No utilities or municipal infrastructure impacted. Servicing to be completed by developers. 	No utilities or municipal infrastructure impacted. Servicing to be completed by developers. 	No utilities or municipal infrastructure impacted. Servicing to be completed by developers. 
<b>Recommendation</b>				
<b>Summary</b>	Development parcels remain large with access only permitted from 19th Avenue or Woodbine Avenue.  Low level of ability to accommodate future development without collector roads.  Does not provide improved access to the developable lands in the Planning district.	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex. However, no crossing structure required.  No impact to watercourses or aquatic habitat.  Does not provide a continuous north-south connection between 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south.	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex. Significant crossing structure required.  Potential impact to watercourses or aquatic habitat.  Significant cost premium to provide crossing of Berczy Creek tributary.  Provides a continuous north-south connection between 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south.	Impact and permanent loss of a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex. Significant crossing structure required.  Potential impact to watercourses or aquatic habitat.  Significant cost premium to provide crossing of Berczy Creek tributary.  Provides a continuous north-south connection between 19th Avenue and Woodbine Avenue in the north to Woodbine Avenue in the south.
<b>Recommendation</b>	Not recommended	<b>Recommended</b>	Not recommended	Not recommended

**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Evaluation of Alternative Design Concepts C1 and C2**

TECHNICAL CRITERIA	Do Nothing	Road C1	Road C2
<b>Natural Environment</b>			
Provincially Significant Wetlands (PSW)	No impact. 	Within 120m of the PSW. Potential impact to a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex. 	Directly adjacent to the PSW. Potential impact and loss of habitat associated with the Bruce and Berczy Creek Provincially Significant Wetland complex. 
Watercourses / Aquatic Habitat	No impact. 	No impact anticipated. 	Within 30 m of the Berczy Creek watercourse. Potential impacts to aquatic habitat quality and local fish populations. 
Terrestrial features	No impact. 	Terrestrial lands (agricultural fields and some adjacent trees on commercial / industrial lands) will be impacted. No significant features affected. 	Terrestrial lands (agricultural fields) will be impacted. No significant features affected. 
Stormwater Management	No impact. 	Stormwater management for individual parcels to be the responsibility of developers. 	
<b>Social</b>			
Ability to Accommodate Future Development	Development parcels remain large with access only permitted on Honda Boulevard. Low level of ability to accommodate future development as access is only permitted on Honda Boulevard. 	Allows for small and large parcel development east and west of Road C1. 	Allows for small and large parcel development east and west of Road C2. 
Accessibility to Future Development Blocks	Does not provide improved access to the developable lands in the Planning District. 	Provides access to development parcels east and west of Road C1. 	Provides access to development parcels east and west of Road C2. 
Archaeological and Cultural Heritage	No impact.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.
Air Quality	No impact. 	Air quality effects will be similar for all alternatives as significant sources exist as Highway 404 and Woodbine Avenue. 	
<b>Climate Change</b>			
Climate Change Mitigation	No opportunities for climate change mitigation. 	The proposed collector roads will help to reduce idling that is currently experienced in the study area. Thus, the project will not materially contribute towards climate change. 	
Climate Change Adaptation	No opportunities to consider climate change adaptation. 	Opportunity to consider future flood conditions in the sizing of the proposed stormwater facilities (by developers). 	
<b>Technical</b>			
Network Connectivity/ Efficiency	No internal road network provided. 	Provides a continuous north-south route connecting 19th Avenue to Woodbine Avenue in the south. Aligns with Road B1 or B2, if implemented. 	Provides a continuous north-south route connecting 19th Avenue to Woodbine Avenue in the south. Does not directly align with Road B1 or B2, if implemented. 

**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Evaluation of Alternative Design Concepts C1 and C2**













TECHNICAL CRITERIA	Do Nothing	Road C1	Road C2
Distance to Future 19 <sup>th</sup> Avenue Interchange	N/A	370 m 	440 m 
Distance to Other Proposed Collector Roads	N/A	260 m to Road A. 	190 m to Road A. 
Ability to Align with Future Urban Area (FUA) Plans	No impact to FUA plans.	No impact to FUA plans. 	No impact to FUA plans. 
Constructability	No impact. 	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated. 	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated. 
Cost	No impact. 	Similar construction costs for C1 and C2. 	Similar construction costs for C1 and C2. 
Compliance with Design Standards	No impact. 	Compliant with City of Markham design standards. 	Compliant with City of Markham design standards. 
Utilities and Municipal Infrastructure	No impact. 	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers. 	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers. 
<b>Recommendation</b>			
<b>Summary</b>	Development parcels remain large with access only permitted on Honda Boulevard. Low level of ability to accommodate future development as access is only permitted on Honda Boulevard.  Does not provide improved access to the developable lands in the Planning district.	Within 120m of the PSW. Potential impact to a portion of the Bruce and Berczy Creek Provincially Significant Wetland complex.  No impact to Berczy Creek watercourse anticipated.  Allows for small and large parcel development east and west of Road C1.  Allows for small and large parcel development east and west of Road C1.	Directly adjacent to the PSW. Potential impact and loss of habitat associated with the Bruce and Berczy Creek Provincially Significant Wetland complex.  Within 30 m of the Berczy Creek watercourse. Potential impacts to aquatic habitat quality and local fish populations.  Allows for small and large parcel development east and west of Road C2.  Horizontal curvature of road segments one parcel into a nonlinear area (City of Markham property).  Provides a continuous north-south route connecting 19th Avenue to Woodbine Avenue in the south.  Does not directly align with Road B1 or B2, if implemented.
<b>Recommendation</b>	Not recommended	<b>Recommended</b>	Not recommended



**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Evaluation of Alternative Design Concepts E1 and E2**

TECHNICAL CRITERIA	Do Nothing	Road E1	Road E2
<b>Natural Environment</b>			
Provincially Significant Wetlands (PSW)	No impact. ●	No impact anticipated. ●	No impact anticipated. ●
Watercourses / Aquatic Habitat	No impact. ●	No impact anticipated. ●	No impact anticipated. ●
Terrestrial features	No impact. ●	Terrestrial lands including agricultural fields, naturalized meadows, naturalized hedgerows, forested lands, and shoreline of Storm Water Management Pond will be impacted. ○	Terrestrial lands including agricultural fields, naturalized meadows, naturalized hedgerows and forested lands will be impacted. ○
Stormwater Management	No impact. ●	Stormwater management for individual parcels to be the responsibility of developers. ●	
<b>Social</b>			
Ability to Accommodate Future Development	Development parcels remain large with access only permitted on Honda Boulevard. Low level of ability to accommodate future development as access is only permitted on Honda Boulevard. ○	Allows for large and small parcel development in the south end of the study area with access onto Road E1. Segments the existing large parcels of land.  Provides for a larger development block on west side. ●	Allows for large and small parcel development in the south end of the study area with access onto Road E2. Segments the existing large parcels of land.  Provides for a smaller development block on west side. ●
Accessibility to Future Development Blocks	Does not provide improved access to the developable lands in the Planning District. ○	Provides an alternative access point (rather than Honda Boulevard) for parcels in the south end of the study area. ●	Provides an alternative access point (rather than Honda Boulevard) for parcels in the south end of the study area. ●
Archaeological and Cultural Heritage	No impact.	No direct impact to archaeological or cultural heritage features.	No direct impact to archaeological or cultural heritage features.
Air Quality	No impact. ●	Air quality effects will be similar for all alternatives as significant sources exist as Highway 404 and Woodbine Avenue. ●	
<b>Climate Change</b>			
Climate Change Mitigation	No opportunities for climate change mitigation. ○	The proposed collector roads will help to reduce idling that is currently experienced in the study area. Thus, the project will not materially contribute towards climate change. ●	
Climate Change Adaptation	No opportunities to consider climate change adaptation. ○	Opportunity to consider future flood conditions in the sizing of the proposed stormwater facilities (by developers). ●	
<b>Technical</b>			
Network Connectivity/ Efficiency	No internal road network provided. ○	Provides an alternative north-south connection from Road D (if implemented) to Woodbine Avenue. ●	Provides an alternative north-south connection from Road D (if implemented) to Woodbine Avenue. ●
Distance to Future 19 <sup>th</sup> Avenue Interchange	N/A	N/A	N/A
Distance to Other Proposed Collector Roads	N/A	N/A	N/A
Ability to Align with Future Urban Area (FUA) Plans	No impact to FUA plans. ●	No impact to FUA plans. ●	No impact to FUA plans. ●

**City of Markham Highway 404 North Collector Roads Municipal Class EA  
Evaluation of Alternative Design Concepts E1 and E2**

TECHNICAL CRITERIA	Do Nothing	Road E1	Road E2
<b>Constructability</b>	No impact. 	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated. 	Land for the collector road is currently undeveloped. Minimal construction disturbance anticipated. 
<b>Cost</b>	No impact. 	Similar costs for E1 and E2. 	Similar costs for E1 and E2. 
<b>Compliance with Design Standards</b>	No impact. 	Compliant with City of Markham design standards. 	Compliant with City of Markham design standards. 
<b>Utilities and Municipal Infrastructure</b>	No impact. 	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers. 	No utilities or municipal infrastructure impacted. Servicing to be arranged by developers. 
<b>Recommendation</b>			
<b>Summary</b>	Development parcels remain large with access only permitted on Honda Boulevard. Low level of ability to accommodate future development as access is only permitted on Honda Boulevard.  Does not provide improved access to the developable lands in the Planning district.	Allows for large and small parcel development in the south end of the study area with access onto Road E1. Segments the existing large parcels of land.  Provides for a larger development block on west side.  Provides an alternative access point (rather than Honda Boulevard) for parcels in the south end of the study area.	Allows for large and small parcel development in the south end of the study area with access onto Road E2. Segments the existing large parcels of land.  Provides for a smaller development block on west side.  Provides an alternative access point (rather than Honda Boulevard) for parcels in the south end of the study area.
<b>Recommendation</b>	Not recommended	Recommended	Not recommended