



Canora – Mont-Royal neighbourhood committee

Minutes – Meeting 4

Date: May 28, 2019 from 6:30 p.m. to 9:30 p.m.

Location: Annunciation Parish, 71 Roosevelt Avenue, Mount Royal

Committee members	
M. Trudeau	Rivers
L. Debout	Resident
C. Lacasse	Rivers
D. Asselin	Resident
D. Noiseux	Resident, Owner of Pizzaiolle
I. Tardif	City of Mount Royal, Director of Technical Services
J. Leduc	Côte-des-Neiges-Notre-Dame-de-Grâce Borough, Division of Public Works
C. Delisle	City of Montréal, REM Project Manager
M.E. Vlad-Sabie	Mount Royal high school, Assistant Principal
M. Bisson	Marguerite-Bourgeoys school board, Health/Safety Coordinator
JP. Pelletier	REM, Assistant Director of Coordination
É. Boivin	REM, Assistant Director of Environment
M. Vallière	REM, Advisor, Community Relations
D. Barrett	NouvLR, Manager, Community and Stakeholder Engagement
G. Cipolla	NouvLR, Segment Director



M. Leblanc	NouvLR, Canora and Mont-Royal Site Manager
P. Guillot-Hurtubise	Facilitator

About fifteen citizens from the area, other than those on the neighbourhood committee, were present.

Agenda

- Welcome and presentation of the agenda
- Report on the situation since the last meeting
- Global project schedule
- Status of ongoing and upcoming work
- Question & answer period
- Conclusion

1- Welcome and presentation of the agenda

Pierre Guillot-Hurtubise, Committee Chairman

As facilitator of the proceedings, Mr. Guillot-Hurtubise reminded those present that this was a meeting of the neighbourhood committee and not a public information session. The purpose of this committee is to discuss the work taking place, its impacts and mitigation measures, and to follow up on the main complaints. It will also try to understand and respond to residents' concerns. Presentations will be given by REM and NouvLR representatives at these committee meetings.

Mr. Hurtubise stated that the meetings would be held in French and that there would be a discussion period after the presentation (a courtesy translation of the presentation is available in English), first with members of the committee, and then with observers from the public. Outstanding questions will be addressed at the next meeting.

Mr. Hurtubise mentioned that today's meeting would differ from the norm in three aspects:

1. Jean-Philippe Pelletier would be giving an introductory message;
2. The presentation would be a little longer than usual, to provide residents with a broader overview of the project. It would also address many of the residents' outstanding concerns.
3. Before the question and answer period, citizen representatives would also give a presentation following REM and NouvLR's general presentation.

Mr. Hurtubise asked all committee members to take turns introducing themselves and then presented the agenda.

2- Report on the situation since the last meeting (slides 3 to 14)

Jean-Philippe Pelletier, REM; Myriam Vallière, REM; David Barrett, NouvLR

Mr. Pelletier mentioned that many issues were raised at the last neighbourhood committee meeting. Following that meeting, the REM team spent a great deal of time reflecting on how to best address the situation. Mr. Pelletier also mentioned that the type of discussions that took place often facilitate change.

He ended his introduction by thanking the citizens for taking the time to come to the neighbourhood committee meeting and sharing their concerns.

Ms. Myriam Vallière presented the 29 complaints received since the last committee meeting; complaints were divided into seven main themes: work schedule and noise, pedestrian safety, cleanliness, trucking and truck route, trucking and truck speed, behaviour and parking.

Mr. David Barrett presented feedback regarding the various activities that took place at night since the last committee meeting, as well as the measures implemented when those took place, including noise enclosures set up around heating and pumping equipment, and re-arranging of work schedules during the day.

He also re-iterated the improvements made regarding cleanliness near the logistics zones: dust protection canvas, extension of the noise barrier, street cleaning by the borough, volunteer clean-up event with NouvLR/REM/GPMM, more frequent cleaning of the logistics zone to decrease dust, maintenance of the pedestrian path by NouvLR, and maintenance of the sidewalk near the dog park by the City of Mount Royal.

Mr. Barrett also presented the mechanisms set up with regards to trucking and parking on the streets near the construction zone in the Canora sector: an alternative parking lot was set up to accommodate approximately 20 vehicles, a parking ban applicable to workers was established and clear instructions were given to employees and subcontractors regarding respecting the number of available spaces on public property, truck waiting zones were set up under Highway 40M. Mr. Barrett also specified that when trucks arrive on the construction site, flaggers take over directing them, GPS data programming is validated with the contractors, and a map with instructions regarding the trucking route is given to them, to prevent confusion.

Mr. Barrett also mentioned that the REM and NouvLR took allegations regarding worker behaviour very seriously. The policy regarding workplace violence and harassment was presented to everyone who works on the construction sites.

Ms. Vallière announced that a working committee on the integration of the REM in operation was set up. The first meeting took place on May 21 when the working committee was created. The first committee workshop is scheduled to take place before summer, and a status report on this committee will be given at subsequent neighbourhood committee meetings.

3- Status of ongoing and upcoming work (slides 15 to 108)

Giovanni Cipolla; Mathieu Leblanc; David Barrett

This section is divided into five major themes: work schedule, construction site footprint, mitigation measures, work sequence and bridge foundations and structures.

1. Work schedule (slides 16 to 32)

Mr. Cipolla presented the schedule of major work stages: past, present and future.

- **Summer 2018:** Electrical power supply (catenary) transfer and insulation.
- **Fall/winter 2018:** Construction work on the stations' concrete structure.
- **Spring 2019:** Work continued on the stations' concrete structures for the west track (on weekends, since the train still runs on weekdays), and construction on the stations' concrete structures for the east track.

- **Early 2020 through spring 2020:** Suspension of service on the Deux-Montagnes line between the Du Ruisseau Station and Gare Centrale; reconstruction of the Jean-Talon and Cornwall bridges, and construction of the stations' metal structures.
- **2021:** Dismantling and reconstruction of tracks.
- **2022:** Commissioning of the REM on the Deux-Montagnes line.

2. Work footprint (slides 33 to 39)

Mr. Leblanc presented the footprints of the construction sites at the Canora and Mont-Royal Stations.

He mentioned that on May 21, 2019, a new work phase began on the east side of the track. Subsequent to this new phase, the logistics zones will need to be adjusted to provide access to the work site. He then presented the site configurations and hindrances that will be implemented at both stations by November 2019, and maintained after that date, to allow work to take place.

3. Mitigation measures

Mr. Barrett presented the new noise measurement station locations, moved as a result of the change in work phase. He emphasized the importance of this relocation, to ensure measurements would be taken closer to the sensitive areas, i.e. the residents' properties in the vicinity.

Mr. Barrett presented several typical noise mitigation measures, as well as the two planned scenarios for setting up a noise barrier to reduce noise pollution for Canora Road residents. He underlined the fact that the recommended scenario proposes installing a wall opposite exo's fence, at the top of the slope. :

4. Work sequence (slides 45 to 86)

Canora and Mont-Royal Stations

Mr. Cipolla presented the work, which actually consists in repeating the phases completed on the west side. This work will continue until suspension of train service on the Deux-Montagnes line in 2020:

- Removal of rails in place;
- Removal of catenaries;
- Vibratory driving of piles to minimize impact of vibration and noise;
- Once the piles are in place, the slopes will be excavated and existing structures (low walls, platform, etc.) demolished;
- Work on station drainage and installation of piles to support the future station;

- Concrete;
- Installation of electrical conduit beneath the station;
- Construction of station beams and slab;
- Station structures will be finalized (2020).

5. Bridge foundations and structures (slides 87 to 105)

Work to be done on the Jean-Talon and Cornwall bridges will begin once train service on the Deux-Montagnes line has been suspended in early 2020.

Jean-Talon bridge: Traffic will be maintained during the work.

Work will be separated into two phases to allow vehicular traffic to be maintained. Work will be spread out over a two-year period (work on the north side in 2020 and work on the south side in 2021).

Cornwall bridge: The bridge will be completely closed during work, since it will be demolished and rebuilt. Vehicular traffic will be redirected to the Graham bridge, which will allow traffic in both directions.

Lazard pedestrian bridge (slide 107)

Mr. Cipolla mentioned that construction on the Lazard pedestrian bridge will begin this year. Currently, it is a grade-level crossing. With arrival of the REM, this type of structure cannot be maintained. Mr. Cipolla presented the design, which will allow pedestrians to cross from one side of the railway tracks to the other. The design showed a universally accessible pedestrian bridge.

4- Question & answer period

One citizen who was a member of the committee took the floor to present videos illustrating the impacts that the REM work has on the surrounding residents. He mentioned that he has noticed improvements since the last committee meeting, but that there is still room to improve other issues.

Pierre Hurtubise, Facilitator

Mr. Guillot-Hurtubise took questions from the committee, and then from the floor.

Question(s) from citizens	Answers
We are worried about the REM integration. Is the Lazard pedestrian bridge, as it was presented today, really the best solution for replacing the pedestrian cross-walk? We need to think about the	REM – Currently, there is a grade-level crossing that allows pedestrians to cross the railway tracks. Since the REM has to have its own right-of-way, grade-level crossings have to be eliminated. Just as with the other

<p>future – this is going to be our reality for generations to come.</p>	<p>pedestrian bridges, the idea is to build a universally accessible bridge, which requires slopes that are properly suited to people with reduced mobility.</p> <p>Follow-up: REM will transmit the comment regarding the pedestrian bridge's integration to the design team.</p>
<p>This building will be in our direct line of sight. We would like to know how high it will be.</p>	<p>REM – We don't have an architectural rendering of the station yet, but we did present the square footages at the last meeting. There is still a lot of work still under development. We understand your impatience; we will be able to provide the visual renderings once they are available.</p> <p>The REM in operation work group will also provide a more in-depth opportunity for this type of discussion.</p>
<p>Would it be possible to forward a message to engineering, to ask them to re-think the Lazard pedestrian bridge?</p>	<p>REM – The comment will be shared with the design team.</p>
<p>Is the work schedule still from 7 a.m. to 7 p.m.?</p>	<p>NouvLR – Our work schedule is indeed from 7 a.m. to 7 p.m., including weekends. However, since we need to optimize that time frame, some mobilization activities may take place outside those hours, so we can make the most of our 12 hours. During the summer, the tasks required to heat the tracks, which required installation of equipment on the tracks at night, will no longer be necessary.</p>
<p>From your presentation, we understand that segments of Canora Street will be closed during construction. Where will the detours be? There is already quite a bit of traffic in the area.</p>	<p>NouvLR – I can't answer that today. We have a mobility management team who works to ensure impact on area residents is minimized as much as practicable. We are currently discussing this with municipal authorities.</p> <p>Follow-up: Once the detour routes have been established, share the information with the residents.</p>
<p>Where will the logistics zones in downtown Mount Royal be moved? Will you have to close down sidewalks?</p>	<p>NouvLR – Certain changes had to be made to the construction zones to make room for more parking space for area businesses. We are reviewing our options regarding where to set up the other trailers. Pedestrians will be redirected to the side opposite where work is taking place.</p>

<p>At the last meeting, we asked if it would be possible to have someone in a trailer that we could speak with, thus accelerating the complaint process. What is the status of that request?</p>	<p>REM – We are currently investigating the feasibility of this request. The summer season also allows more of our team members to be present in your area.</p>
<p>Could you present the architectural charter?</p>	<p>REM – At the last committee meeting, we presented the charter and guidelines (link to meeting minutes): https://rem.info/sites/default/files/2019-04/CR_Comite%20bon%20voisinage_CA_VMR_20190227_v2.pdf)</p> <p>These guidelines were developed in conjunction with the cities. Our goal is to ensure local integration while including elements specific to the REM. It is a 67-km network that has to integrate with every landscape through which it runs.</p>
<p>Regarding construction on the Jean-Talon bridge, do you intend to make it wider, to allow for a bus landing?</p>	<p>REM – The Jean-Talon bridge belongs to the City of Montreal, and we are carrying out work according to its specifications. The City wants to take advantage of the Deux-Montagnes line closure to carry out this work. The bridge will be slightly wider, to accommodate a bicycle path.</p> <p>City of Montréal – We have already submitted criteria to the REM. We are currently conducting a mobility study in the area. We will then see whether we can adjust according to NouvLR's schedule. We are still ironing out these details at this time.</p> <p>Follow-up: City of Montréal – present the final design for the Jean-Talon bridge at the next neighbourhood committee meeting.</p>
<p>At the last committee meeting, we asked a question about noise. We would like to know what rules apply to the REM?</p>	<p>REM – The project is subject to an environmental decree, a provincial standard from the Ministère de l'Environnement, and the Ministère des Transports du Québec's standards. We are subject to provincial standards, and not municipal standards.</p> <p>Links to sheets on our website</p> <p>Noise levels during the REM construction (French only):</p>

	<p>https://rem.info/sites/default/files/document/Fiche%20th%C3%A9matique%204%20Bruit%20construction%2018-10-04_0.pdf</p> <p>Noise levels during the REM construction (French only):</p> <p>https://rem.info/sites/default/files/document/Fiche%20th%C3%A9matique%202%20Bruit%20exploitation%2018-10-04.pdf</p>
It would be nice for you to add coloured banners around your construction sites, like they have downtown.	<p>REM – We will note your comment and get back to you at the next committee meeting.</p> <p>Follow-up: Possibility of putting up coloured banners near REM construction sites.</p>
The pavement on Jean-Talon Street has deteriorated significantly since the start of the REM construction. Are the two connected?	NouvLR – We will note your comment, but we haven't performed any work on that street, and it isn't part of our truck route either.
You spoke of noise targets, but I don't see how you can possibly stay within them when you drill at night. When are you going to give us a break?	NouvLR – Building a project of this magnitude in such a short time frame is a huge challenge. We understand that it has an impact on you. We also have to think about the fact that we are going to shut down the Deux-Montagnes line, which will have an enormous impact on thousands of users. Time is of the essence, and we are also dependent on weather; however we are trying to maximize every work shift.
It is going to be very difficult to harmonize the Lazard pedestrian bridge into the urban landscape. Would it be possible to have the dimensions?	NouvLR – The pedestrian bridge is 10 m high by 40 m wide. The other pedestrian bridges will stay the same.
Closing Canora will cause a lot of traffic jams, but I think that will be temporary since the Waze app will redirect citizens to routes where traffic flows more fluidly.	
What is the City of Montréal's vision for the areas surrounding the future stations, during construction? For example, what will happen with sidewalks on neighbouring streets, including	City of Montréal – The REM is responsible for building the network and station surroundings. We will pass along the comments received from citizens to the REM. A mobility study is currently in progress, and is

Canora Road, which currently doesn't have any sidewalks at all?	<p>scheduled for completion by fall 2019. We will see what we can do about a sidewalk on Canora Road.</p> <p>Follow-up: City of Montréal – evaluate the possibility of creating a sidewalk on Canora Road and present the findings to the neighbourhood committee.</p>
Will accesses be suited for people with reduced mobility?	REM – Yes, the stations and REM cars will be universally accessible.
I'm trying to understand how long the Cornwall bridge will be closed.	NouvLR – Beginning in January 2020, for about ten months.
Have you thought about what the view will be for area residents after the Lazare pedestrian bridge is built?	REM – We are currently working on the pedestrian bridge's urban integration. The difficulty lies in ensuring that the bridge is universally accessible, which generates constraints regarding slopes, which in turn affects the size of the structure. We also have to keep in mind that we're working with a network of catenaries, which requires the structure to be quite high.
We would like to know how many complaints the City of Montréal has received regarding the REM?	<p>City of Montréal – We checked that figure before this meeting: we have received three complaints regarding work on the REM, primarily concerning noise.</p> <p>REM – We hold regular meetings with the boroughs to follow up on various issues, including complaints regarding the REM.</p>
Why is it that sometimes, work begins very early in the morning – waking us up – only to finish very early in the evening? Wouldn't it be possible to plan work schedules to minimize disruptions?	NouvLR – To maximize the work we can get done between 7 a.m. and 7 p.m., work will begin before 7 a.m. to prepare the site. At the end of the shift, we have to demobilize equipment.
What are you going to do about the dust?	NouvLR – Our air quality measuring instruments have not indicated that targeted dust levels have been exceeded. We will check those anyway, just to be

	<p>sure. Follow-up: Verify the status of air quality in the area.</p>
<p>Would it be possible to find out what time workers take their lunch break?</p>	<p>NouvLR – Depending on the complexity of the tasks carried out, lunch breaks will be staggered, to maximize the amount of work getting done.</p>
<p>Would it be possible to be reimbursed for nights at a hotel, when work at night takes place, in order to minimize sleep disruptions?</p>	<p>REM – We have not made provisions for this type of measure; we are working with NouvLR to ensure noise standards are met during work.</p> <p>NouvLR – We have not made provisions for this.</p> <p>Follow-up: Report on the possibility of paying for nights at a hotel during the work.</p>
<p>We saw the video regarding universal access, but I still am having a hard time figuring out how a disabled person will be able to access this pedestrian bridge.</p> <p>Did you consult with appropriate organizations?</p> <p>The obvious solution would be to dig a tunnel, which I think would be possible if you were determined to do it.</p>	<p>REM – As you heard in the video, we consulted various organizations regarding universal accessibility for the REM cars. There were no specific consultations for the Lazard pedestrian bridge, but rather for the project as a whole. However, there are many universal accessibility standards and the current plan for the Lazard pedestrian bridge meets them.</p> <p>Building a tunnel would bring a whole new set of technical issues with it. It is not, at this time, planned for the REM project.</p>
<p>We can't get any rest. We never opposed the project, but you are still subject to Article 976 of the Civil Code of Québec, regarding neighbourhood disturbances. Take, for example, the case of Cimenterie Saint-Laurent. Do we need to take you to court to get our point across? Something has to change – it can't keep going this way. What measures are you going to put in place to protect the residents surrounding the construction site?</p>	<p>NouvLR – We will consult with the REM on this subject and get back to you before the next neighbourhood committee meeting.</p> <p>Follow-up: Send the response directly to all of the committee members and report on it during the next committee meeting.</p>
<p>The REM is not subject to municipal regulations. If the law can't be changed, why isn't it at least complied with?</p>	<p>REM – The REM is a mandatary of the State; we are therefore subject to provincial standards. The environmental decree pertaining to the REM subsequent to the BAPE provided a framework to comply with for construction.</p> <p>Link to the sheet</p>

	<p>Noise levels during the REM construction (French only):</p> <p>https://rem.info/sites/default/files/document/Fiche%20th%C3%A9matique%204_Bruit%20construction_2018-10-04_0.pdf</p> <p>Follow-up: Put the environmental decree applicable to the REM on our website.</p>
Are you subject to the Civil Code of Québec?	REM – In fact, yes, we are subject to provincial standards and laws.
Have you ever been woken up at 7 a.m. by a jackhammer? We have been, and we need a break.	<p>NouvLR – We will consult with the REM on this subject and get back to you before the next neighbourhood committee meeting.</p> <p>Follow-up: Send the response directly to all of the committee members and report on it during the next committee meeting.</p>
You built a temporary station between Mont-Royal and Canora. Why can't you just build a single station for the REM?	REM – The original goal was to reconvert the Deux-Montagnes line, adding connections. We don't want to decrease transit service, we want to increase it. For the moment, the temporary station allows us to get the work done. There are also technical requirements that justify having two stations.
Your slides have not given me a very clear idea of what is being built behind my house.	NouvLR – The images are just diagrams and not to scale.
Have you thought about putting elevators at the Lazard pedestrian bridge, and enclosing it with glass?	REM – We worked with the same principles as the pedestrian bridges already in place, but adding universal accessibility.

4. Conclusion

The next meeting is scheduled for the end of August. The exact date will be established in the coming weeks. Committee members will have an online survey (Doodle) to complete in this regard.

6. Appendices

List of follow-ups

- REM will transmit the comment regarding the pedestrian bridge's integration to the design team – **(REM)**;
- Once the detour routes have been established, share the information with the residents – **(NouvLR)**;
- Possibility of putting up coloured banners near REM construction sites – **(REM)**;
- Report on the possibility of creating a sidewalk on Canora Road in preparation for its closure for REM construction – **(City of Montréal)**;
- Verify the air quality status in the area – **(NouvLR)**;
- Report on the possibility of paying for nights at a hotel during the work – **(REM and NouvLR)**;
- Evaluate the possibility of a break in the work for residents and send response directly to all committee members. Also report on this at the next committee meeting – **(REM and NouvLR)**;
- Put the environmental decree applicable to the REM on our website – **(REM)**.

Presentation – Canora and Mont-Royal neighbourhood committee meeting, May 28, 2019 (see next page)



Neighbourhood Committee

Canora and Mont-Royal

May 28, 2019



Agenda

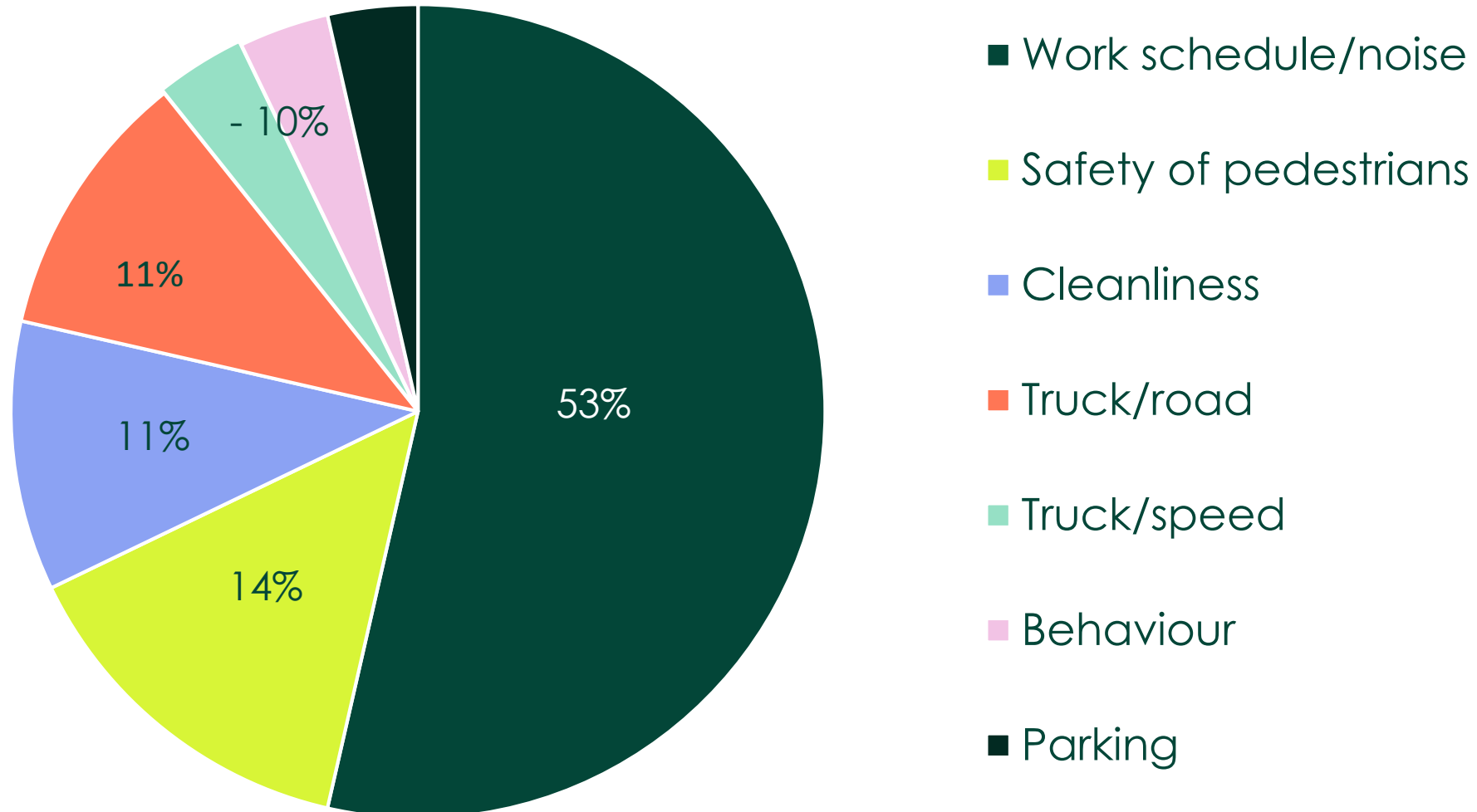
- Welcome and presentation of the agenda
- Status report since the last neighbourhood committee meeting
- Overall project timeline
- Status of ongoing and upcoming work
- Question & answer period
- Conclusion



Status report since the last neighbourhood committee meeting



29 complaints filed in the last 3 months



Feedback on night-time operations

- **March and April:** Heating and pumping equipment over several nights
 - Acoustic enclosures where possible
- **April 16 and 25:** Night work on the Jean-Talon bridge
 - completion of the work during daytime to reduce nuisance
- **May 21:** Activities of a subcontractor early in the morning despite instructions
 - Change of subcontractor

Ambient noise measurements taken at the site demonstrate compliance with standards in the vast majority of cases

Feedback on night-time operations

Commissioning of the westbound track

- **May 4 and 5:** Work blitz starting at 6 a.m. at Canora
- **Night of May 7 to 8 :** Night work between 1h15 a.m. and 4h30 a.m. at Canora and Mont-Royal
- **May 14 to 17:** Evening work

Cleanliness around logistics zone

- Installation of a geotextile membrane and extension of the acoustic wall to cut down on the dust from the logistics zone
- Cleaning of the street by the borough
- Volunteer NouvLR/REM/GPMM clean-up bee (park, path and around the logistics zone)
- More frequent cleaning of the logistics zone to help keep dust from spreading
- Maintenance of the pedestrian path by NouvLR
- Sidewalk maintenance near the dog park by Ville Mont-Royal

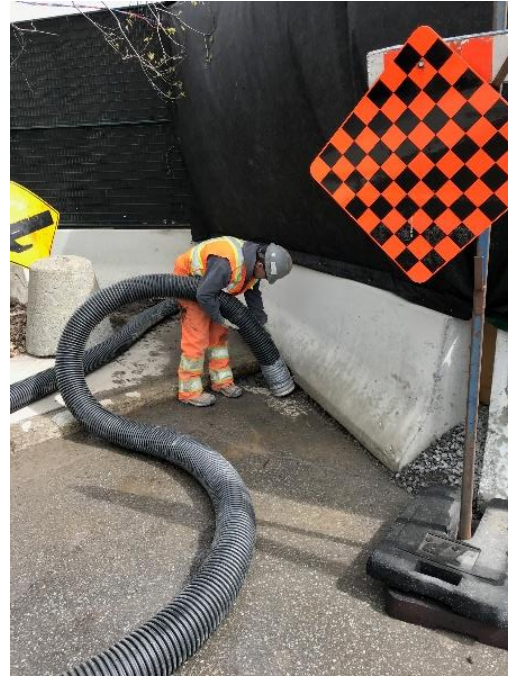
Cleanliness around logistics zone



Sealed joints
between jerseys



Maintenance of
pedestrian path



Maintenance around
jerseys



Geotextiles on
fences

Extension of the acoustic wall



Corner Kirkfield avenue



Corner Glencoe avenue

Parking

- Creation of a parking lot for at Canora for approximately 20 vehicles
- Panels « no parking »
- Notice communicated to employees and sub-contractors to respect the guidelines regarding available parking space



Truck roads

- Despite clear instructions given to contractors, there have been situations of non-respect of trucking roads
 - Waiting area for trucks under Highway 40 to prevent residential streets from becoming waiting areas
 - Truck management by flagmen upon arrival at the site
 - Validation with the contractors that GPS data is adequately programmed and production of a map with instruction of the trucking roads to avoid any confusion.



Dump trucks waiting under the highway 40

Workers behavior

- Allegations are taken very seriously by REM and NouvLR
- Policy on Violence and Harassment in the Workplace presented to each person assigned to the work site

Pedestrians security

- Reorientation of lighting on the pedestrian pathway



Other update

Revisit the possibility of having an independent body report on complaints

- Complaints are diligently managed by the REM and NouvLR and reports are regularly made to the boroughs/cities and to citizens through the neighbourhood committee.

Discussions with the community

Work group on integration of the REM in operation

- Group formation meeting on May 21
- First workshop before summer
- A status report of the work of the committee will be done during meetings of the Good Neighbor Committee



Status of ongoing and upcoming work



WORK
SCHEDULE

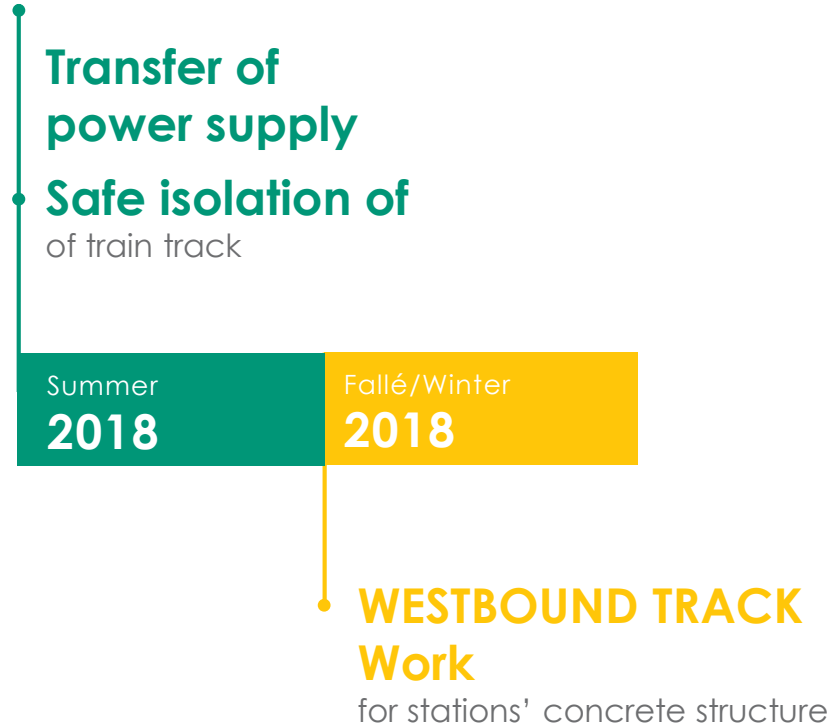
WORK SCHEDULE

• **Transfer of
power supply**

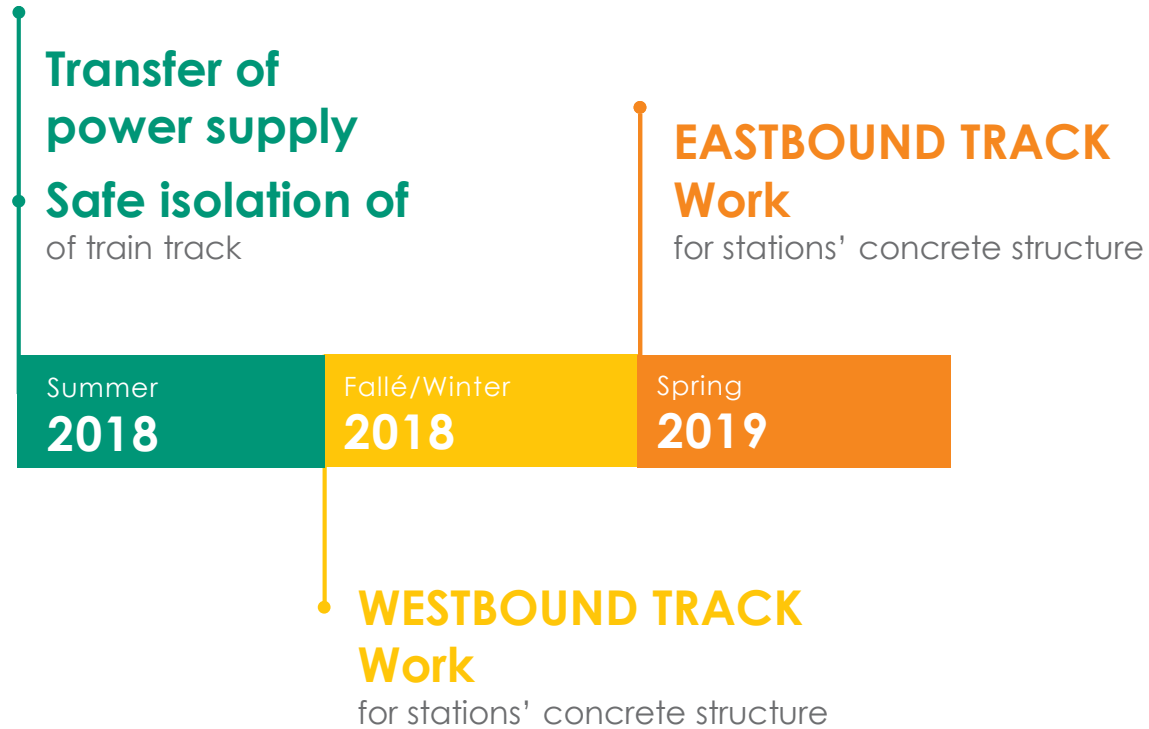
• **Safe isolation of**
of train track

Summer
2018

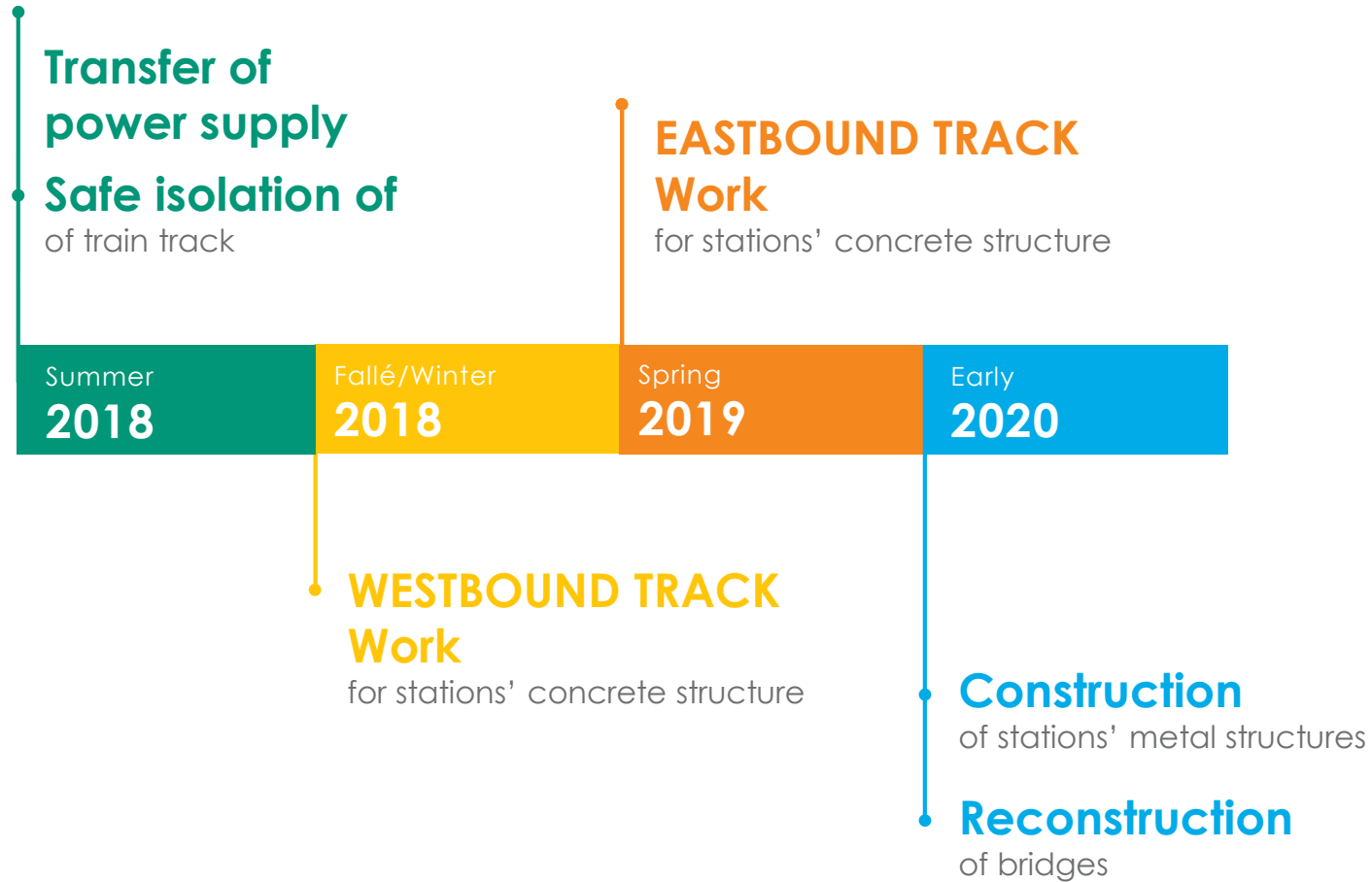
WORK SCHEDULE



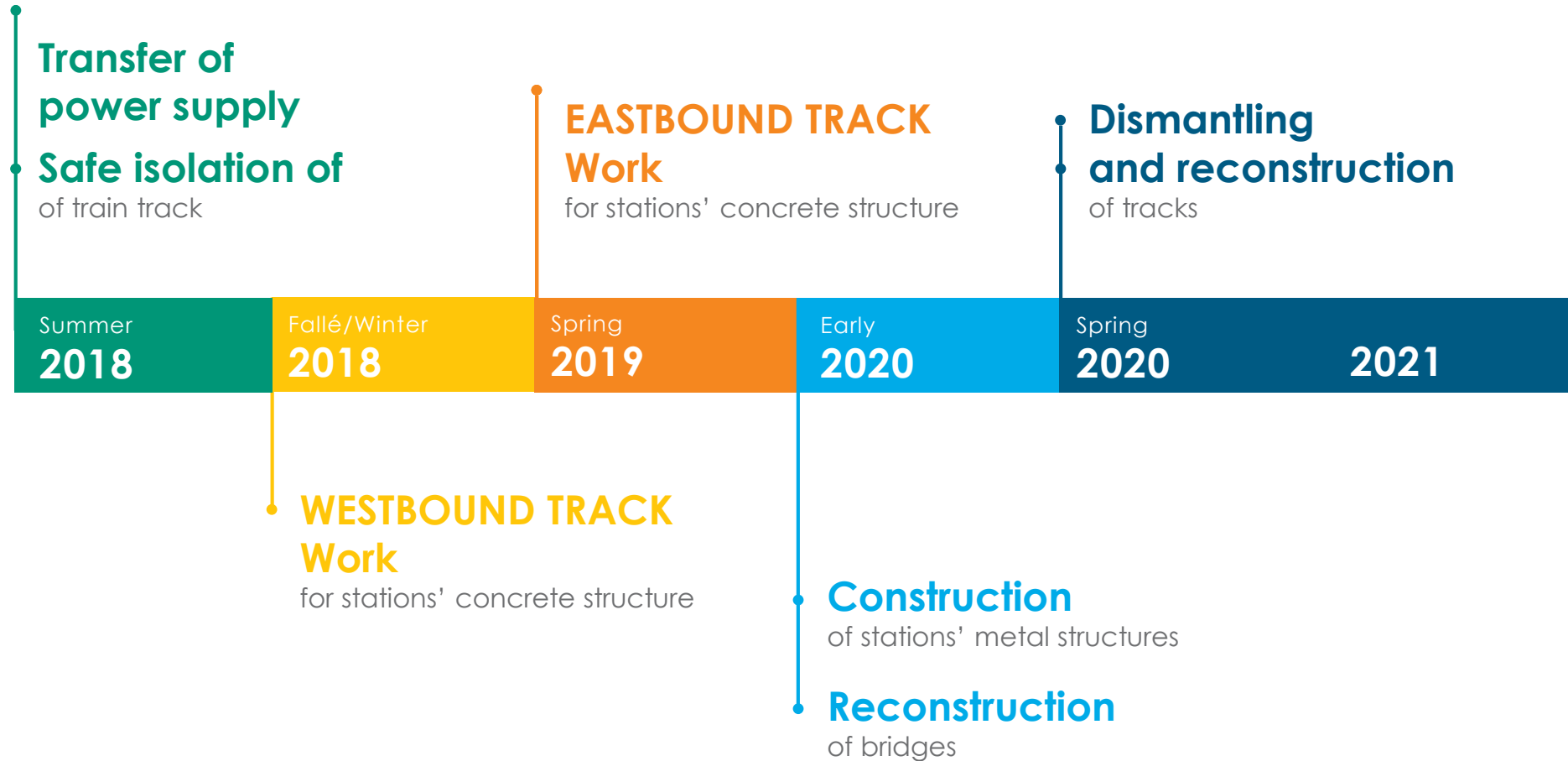
WORK SCHEDULE



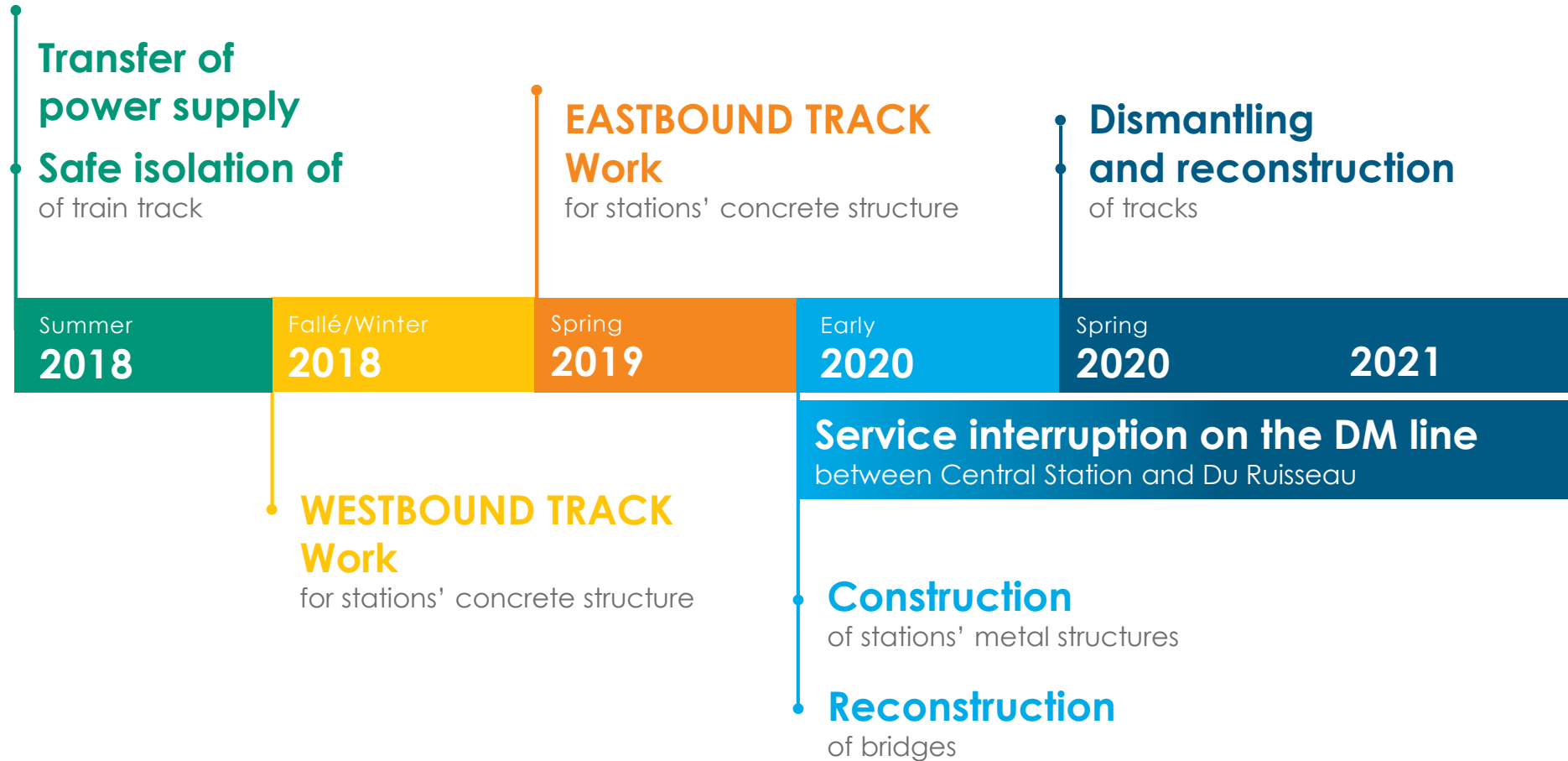
WORK SCHEDULE



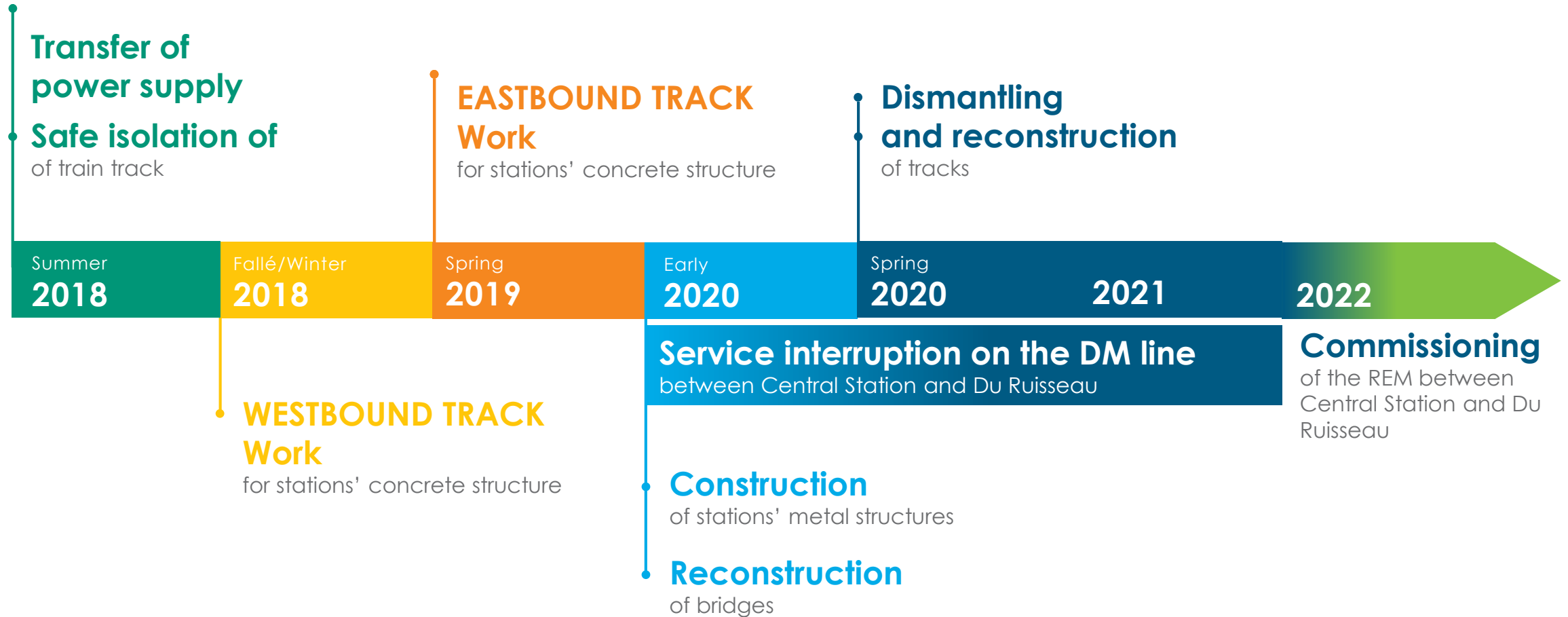
WORK SCHEDULE



WORK SCHEDULE

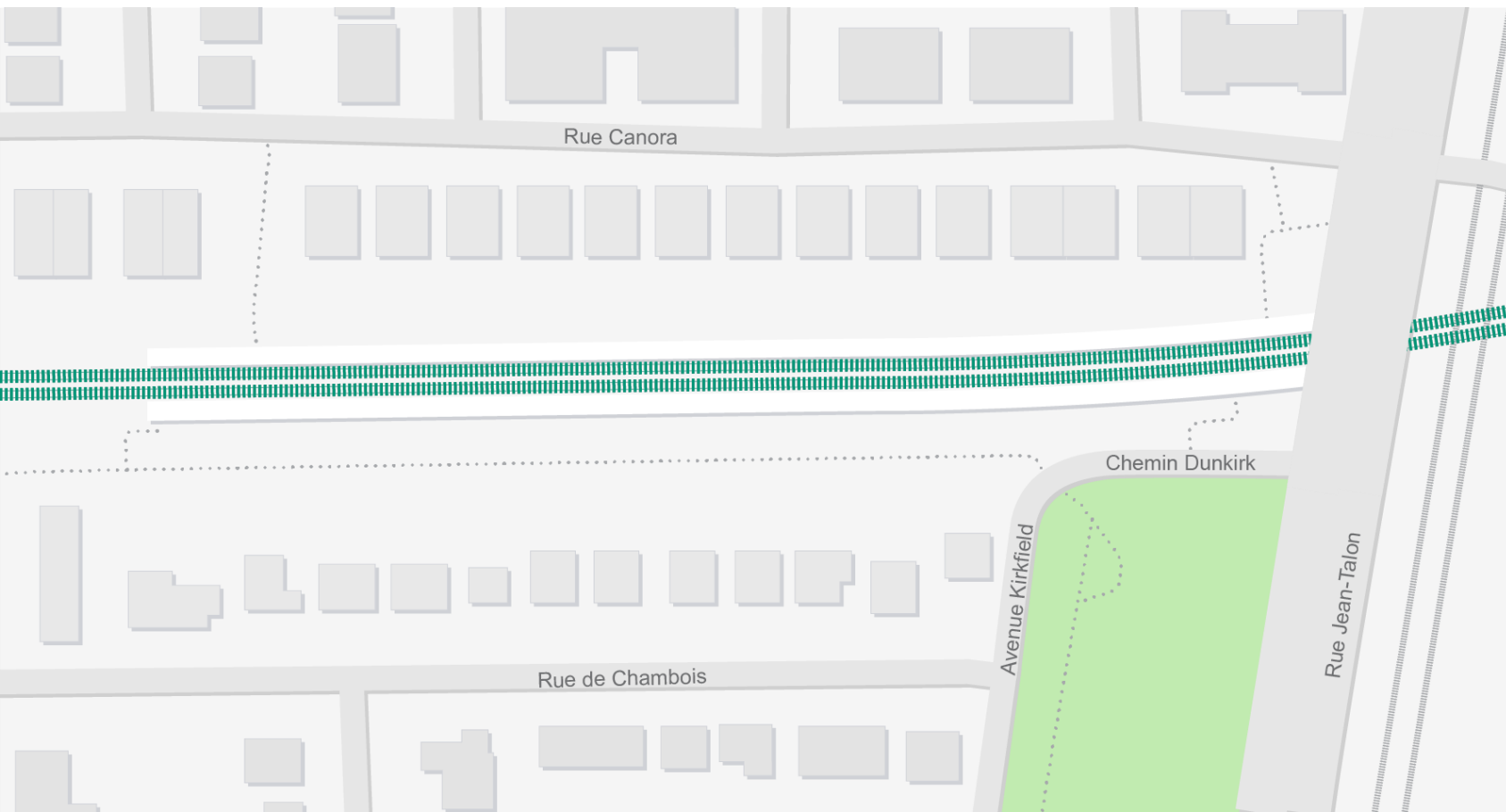


WORK SCHEDULE



WORK PREPARATION

Summer
2018



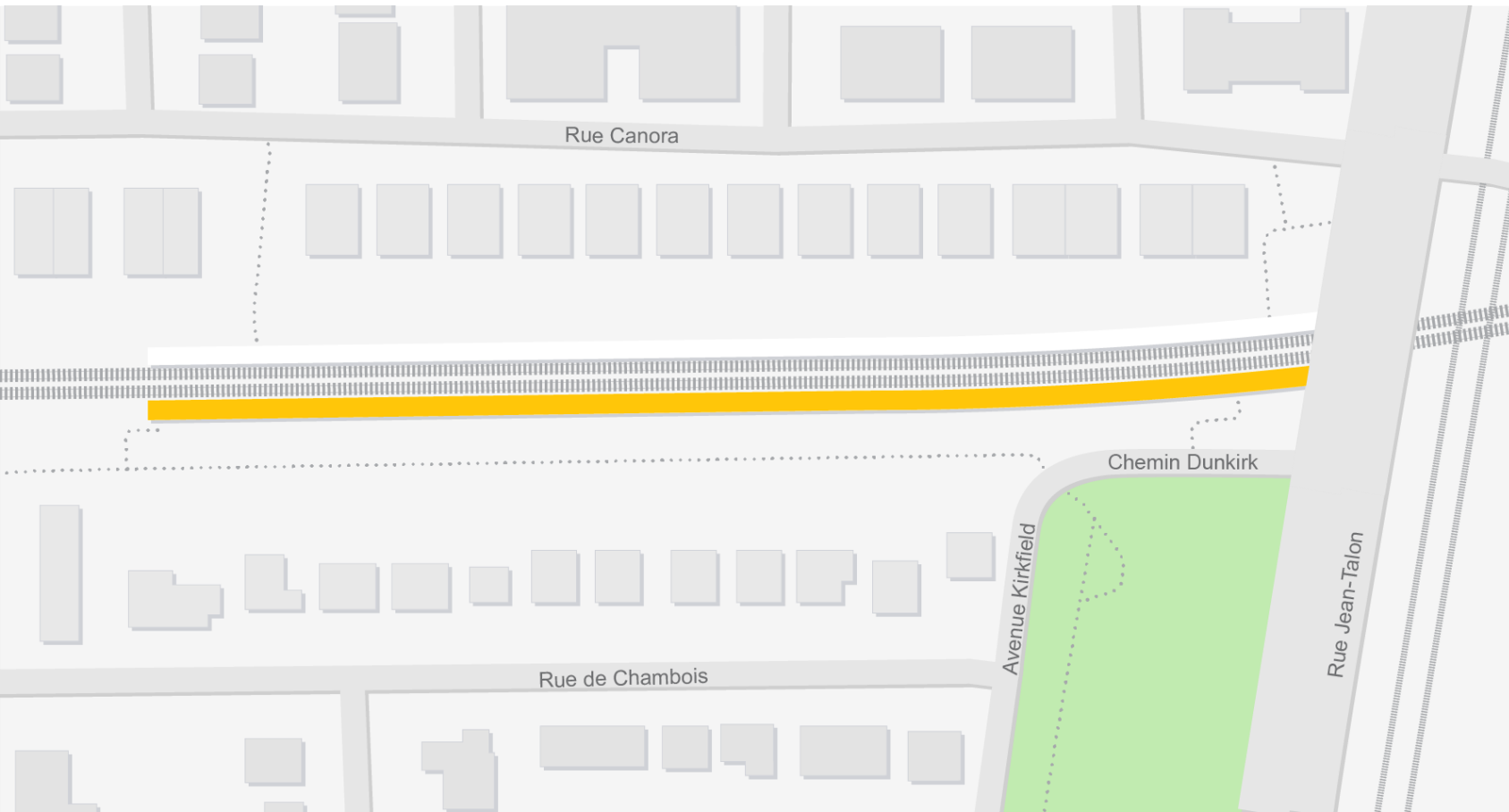
TRANSFER OF POWER SUPPLY

SAFE ISOLATION
of train track

STRUCTURE – WESTBOUND TRACK

Summer
2018

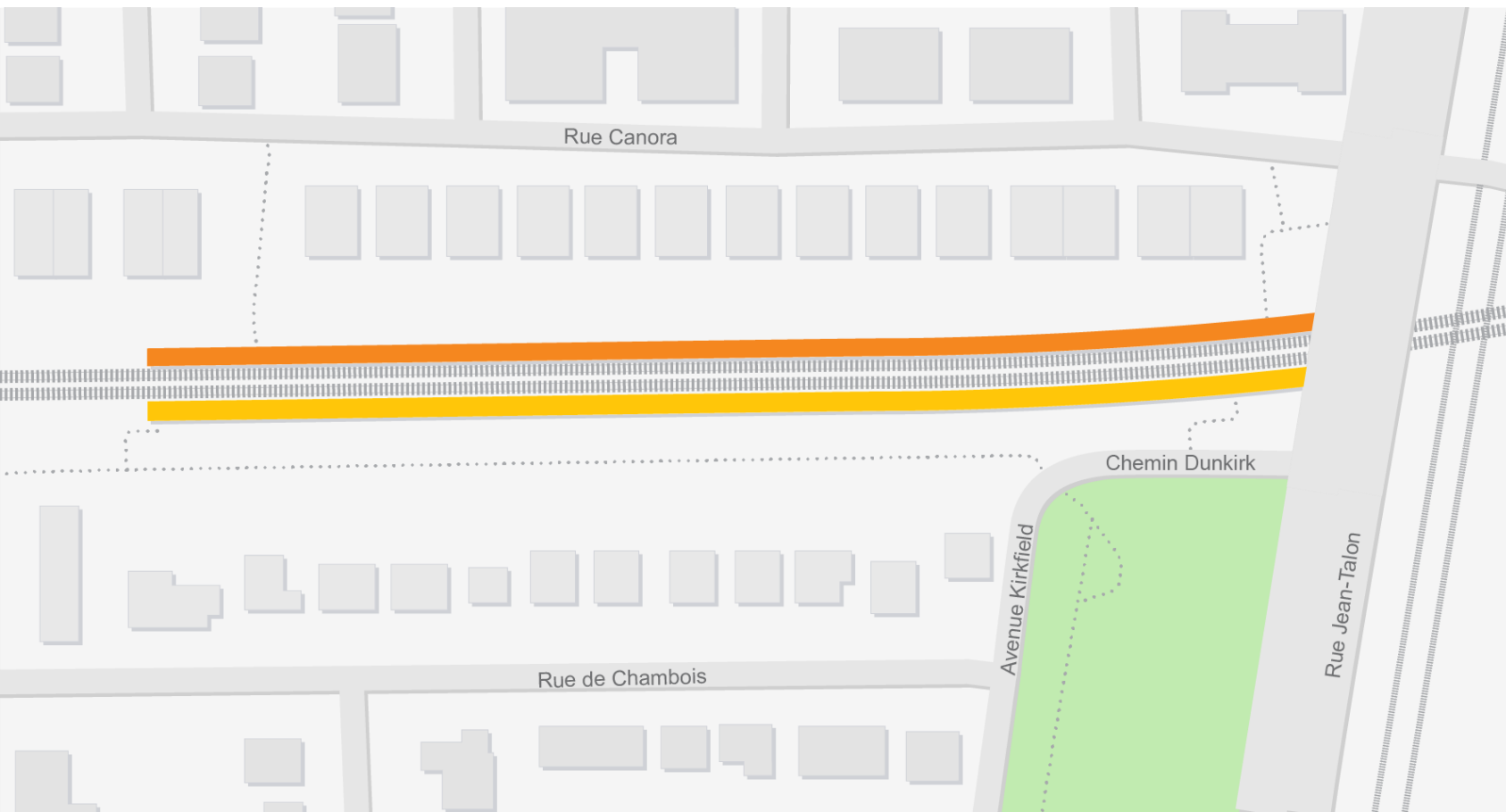
Fall/winter
2018



WORK

for stations' concrete structure

STRUCTURE – EASTBOUND TRACK



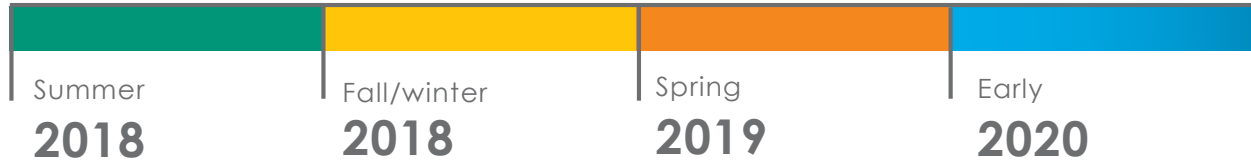
CONTINUATION OF WORK

of WESTbound track
stations' concrete structure

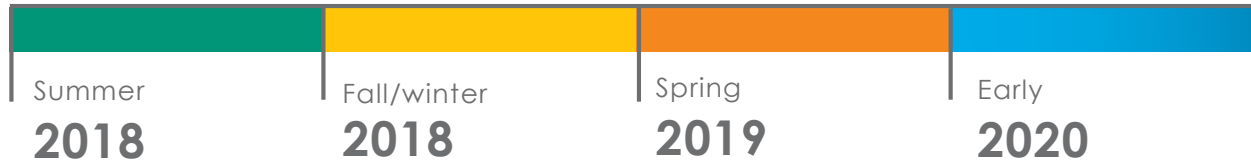
WORK

of EASTbound track
stations' concrete structure

BRIDGES AND STATIONS



BRIDGES AND STATIONS



RECONSTRUCTION

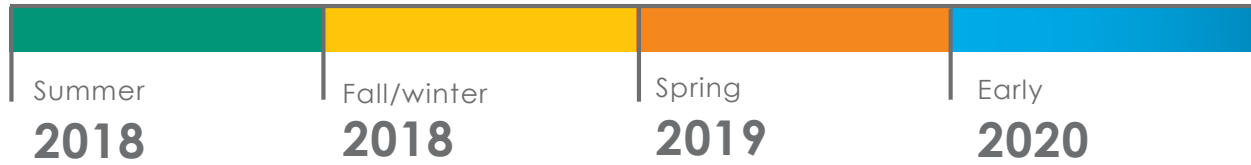
of Jean-Talon (phase 1

SERVICE INTERRUPTION

on the Deux-Montagnes line



BRIDGES AND STATIONS



RECONSTRUCTION

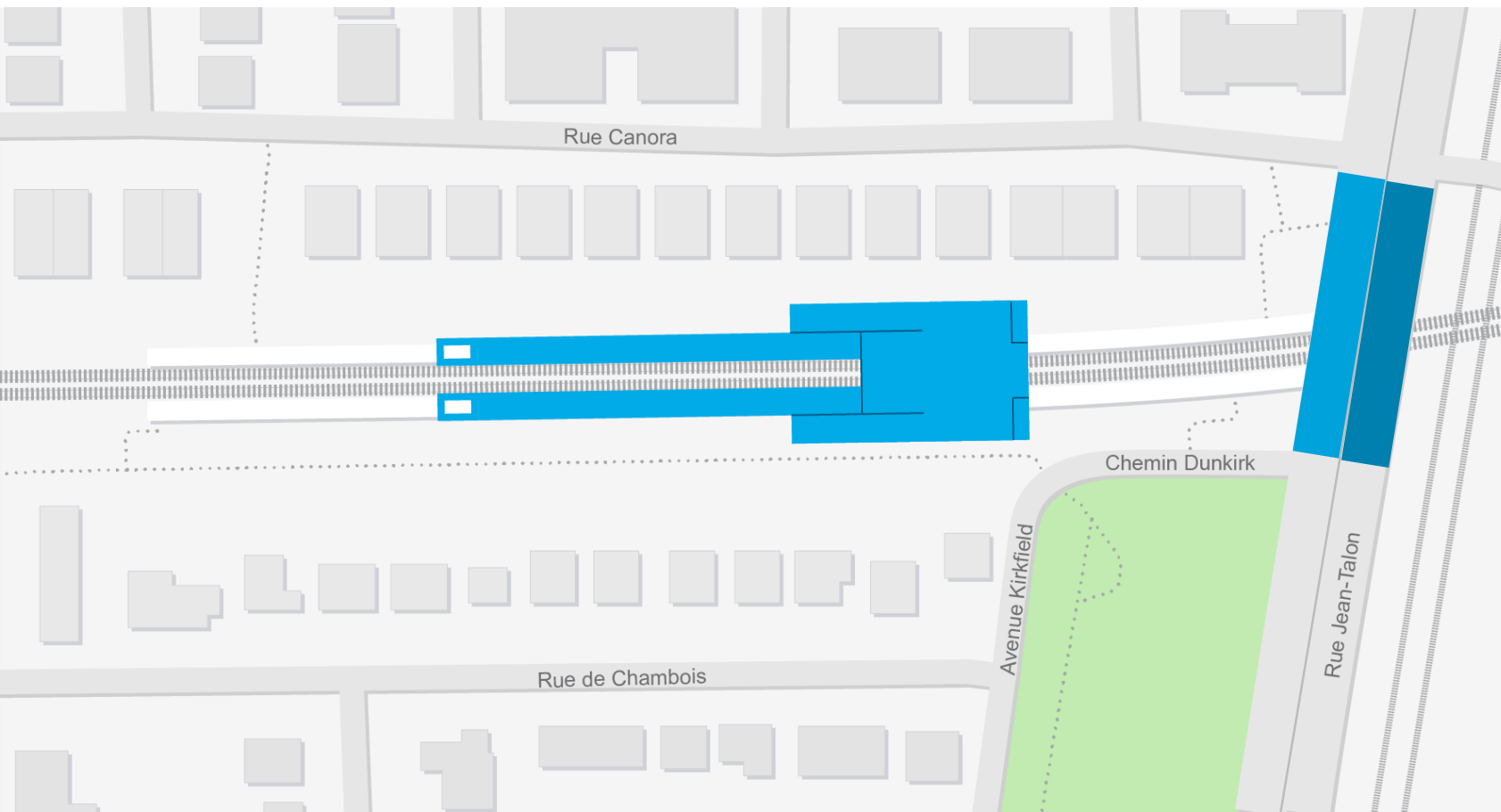
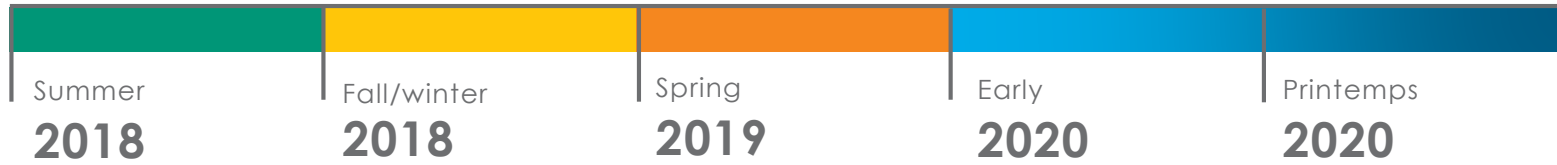
of Jean-Talon (■ phase 1 and ■ phase 2)

SERVICE INTERRUPTION

on the Deux-Montagnes line



BRIDGES AND STATIONS



RECONSTRUCTION

of Jean-Talon (■ phase 1 and ■ phase 2)

CONSTRUCTION

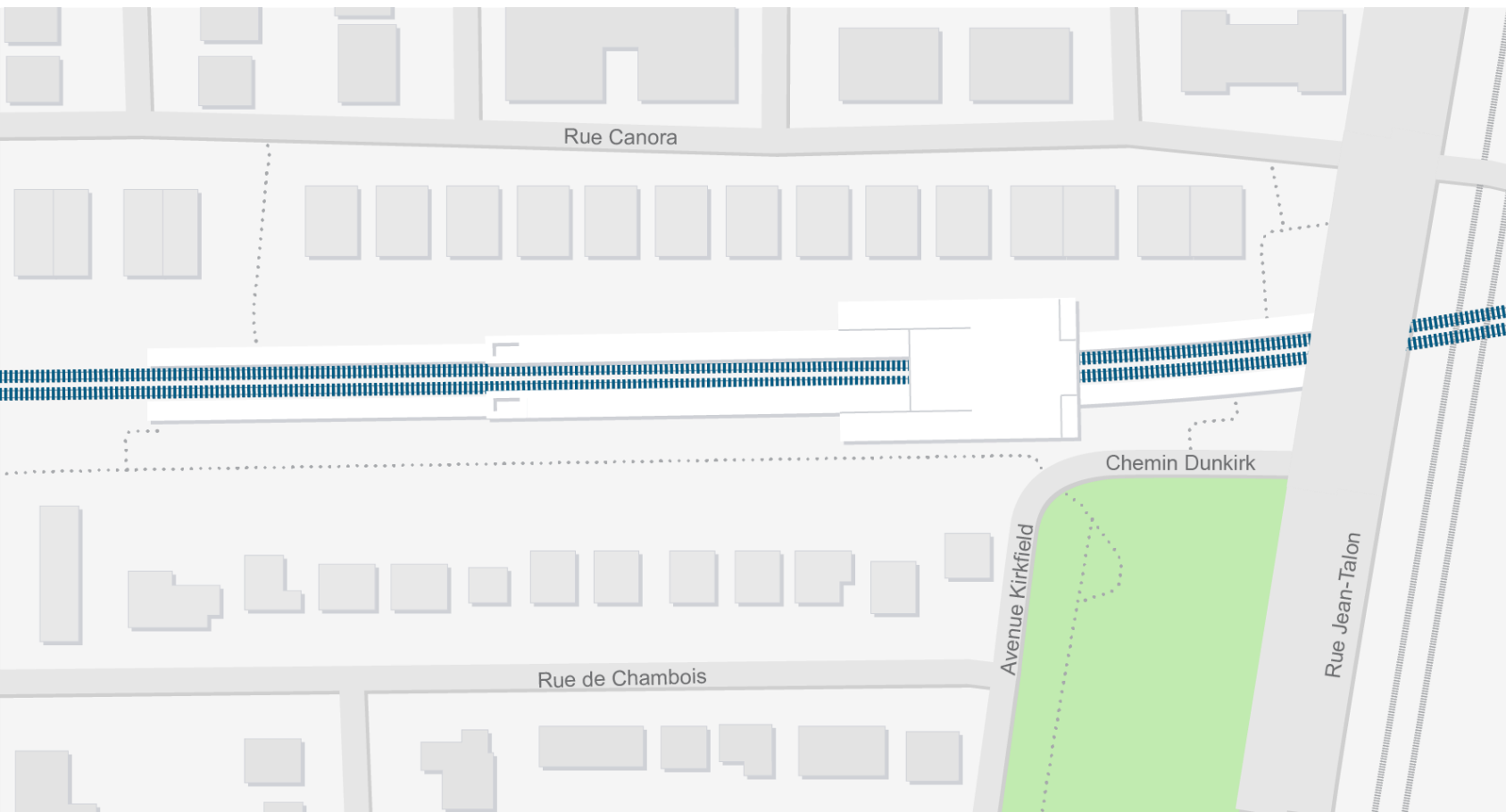
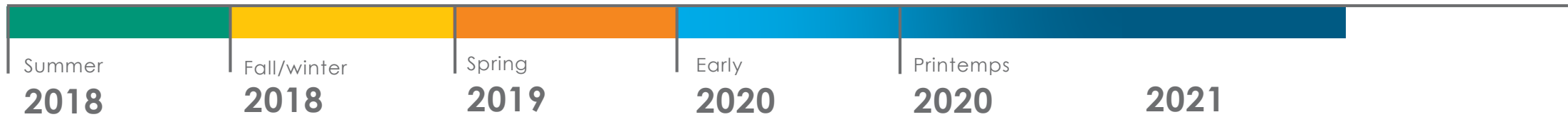
des structures métalliques des stations

SERVICE INTERRUPTION

on the Deux-Montagnes line



NEW TRACKS



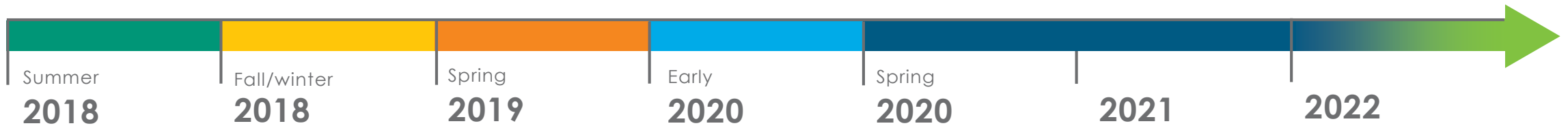
**DISMANTLING AND
RECONSTRUCTION**
of tracks

SERVICE INTERRUPTION

on the Deux-Montagnes line



END OF WORK



COMMISSIONING OF REM on Deux-Montagnes line



CONSTRUCTION
FOOTPRINT

CANORA STATION

UNTIL NOVEMBER 2019



CANORA STATION

UNTIL NOVEMBER 2019

TOTAL FOOTPRINT



CIVIL WORK



TRUCK ENTRIES AND EXITS



STATION FOUNDATION



ACCESS RAMP



CANORA STATION

STARTING NOVEMBER 2019

TOTAL FOOTPRINT



CIVIL WORK



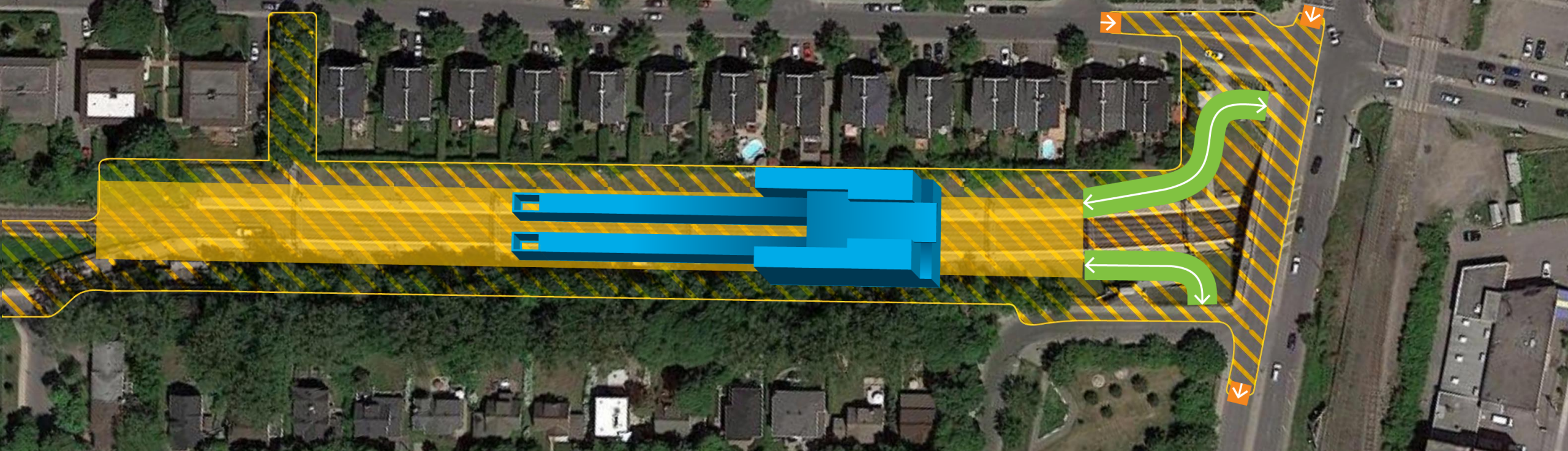
TRUCK ENTRIES AND EXITS



STATION

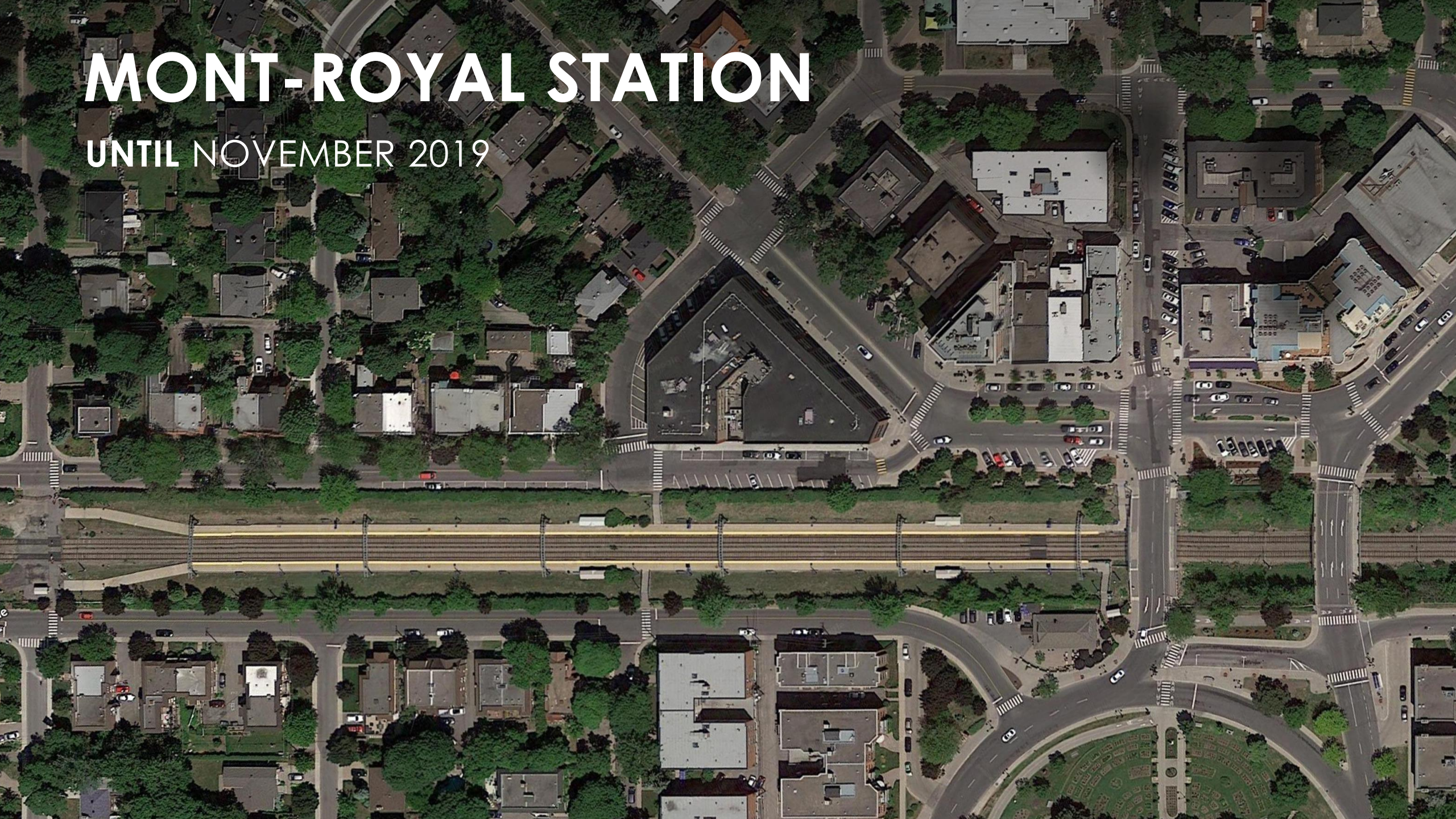


ACCESS RAMP



MONT-ROYAL STATION

UNTIL NOVEMBER 2019



MONT-ROYAL STATION

UNTIL NOVEMBER 2019

TOTAL FOOTPRINT



CIVIL WORK



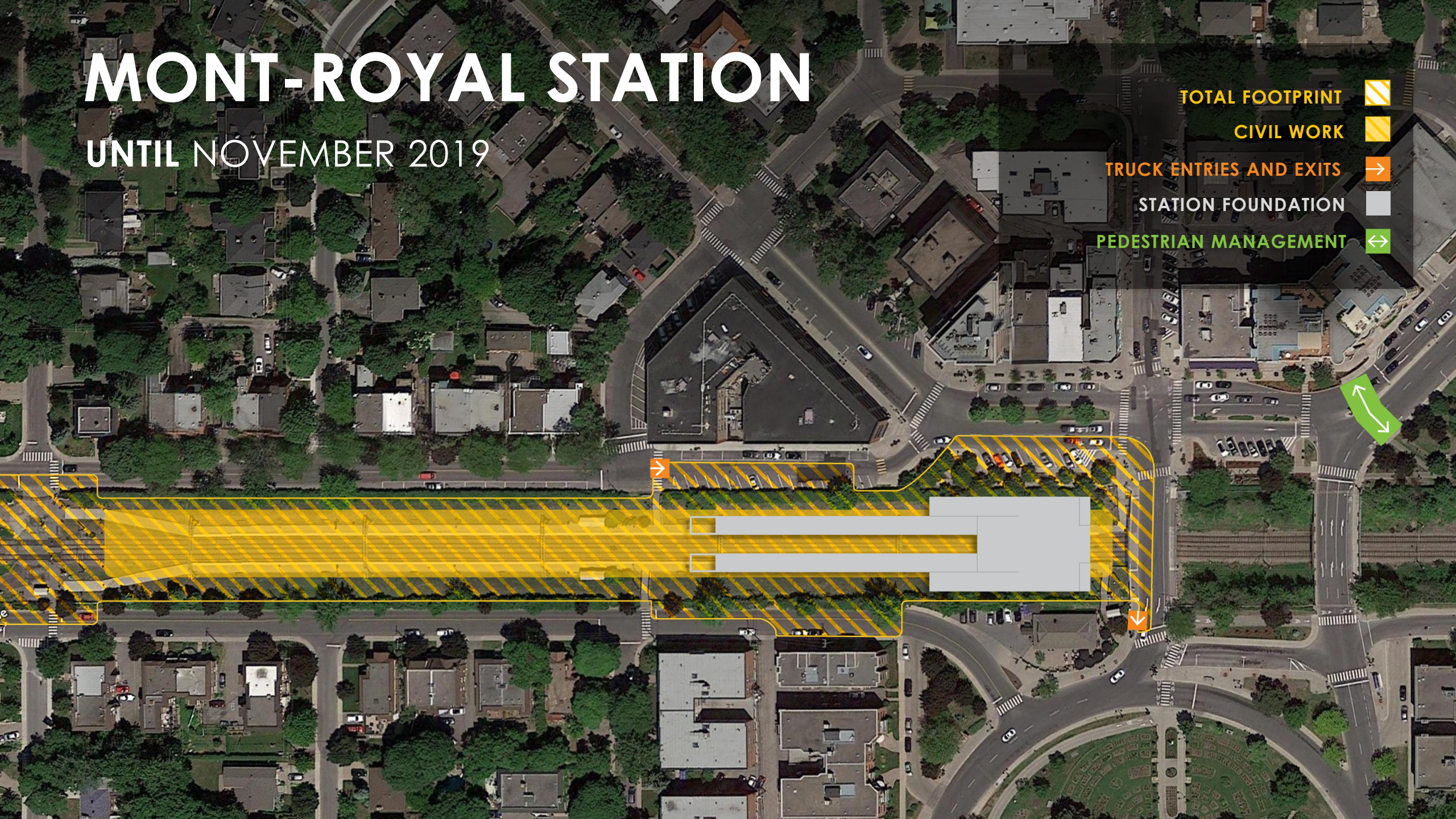
TRUCK ENTRIES AND EXITS



STATION FOUNDATION



PEDESTRIAN MANAGEMENT



STATION MONT-ROYAL

STARTING NOVEMBRE 2019

TOTAL FOOTPRINT



CIVIL WORK



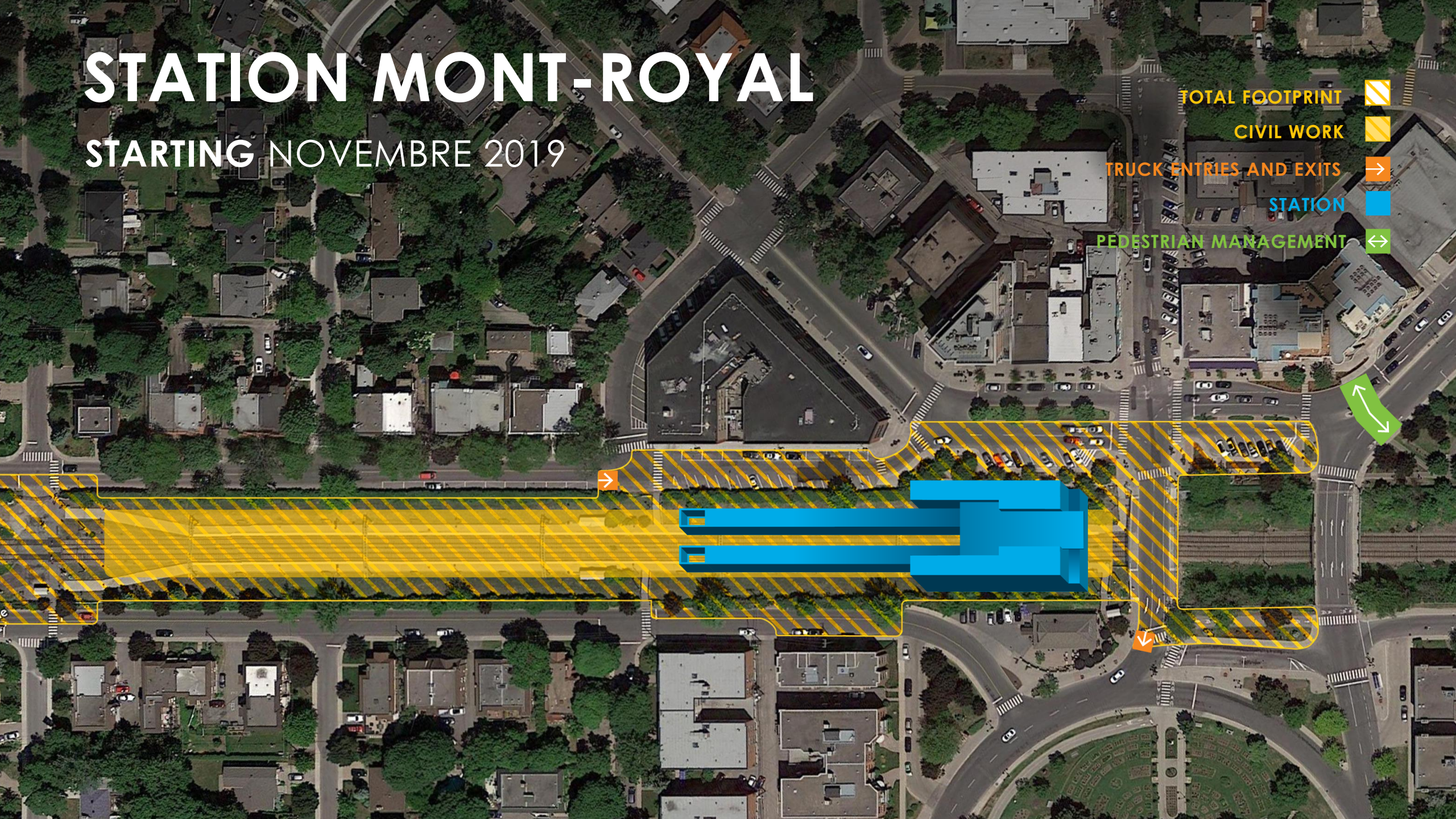
TRUCK ENTRIES AND EXITS



STATION



PEDESTRIAN MANAGEMENT



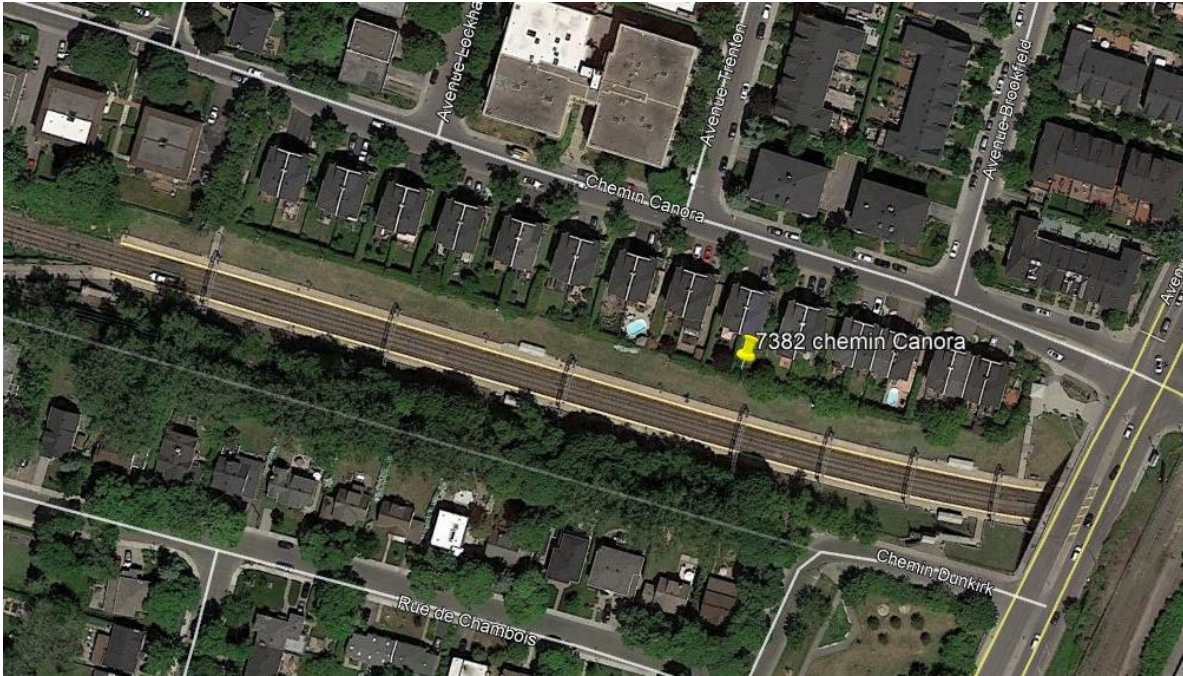
MITIGATION

MEASURES

NOISE MEASUREMENT STATIONS

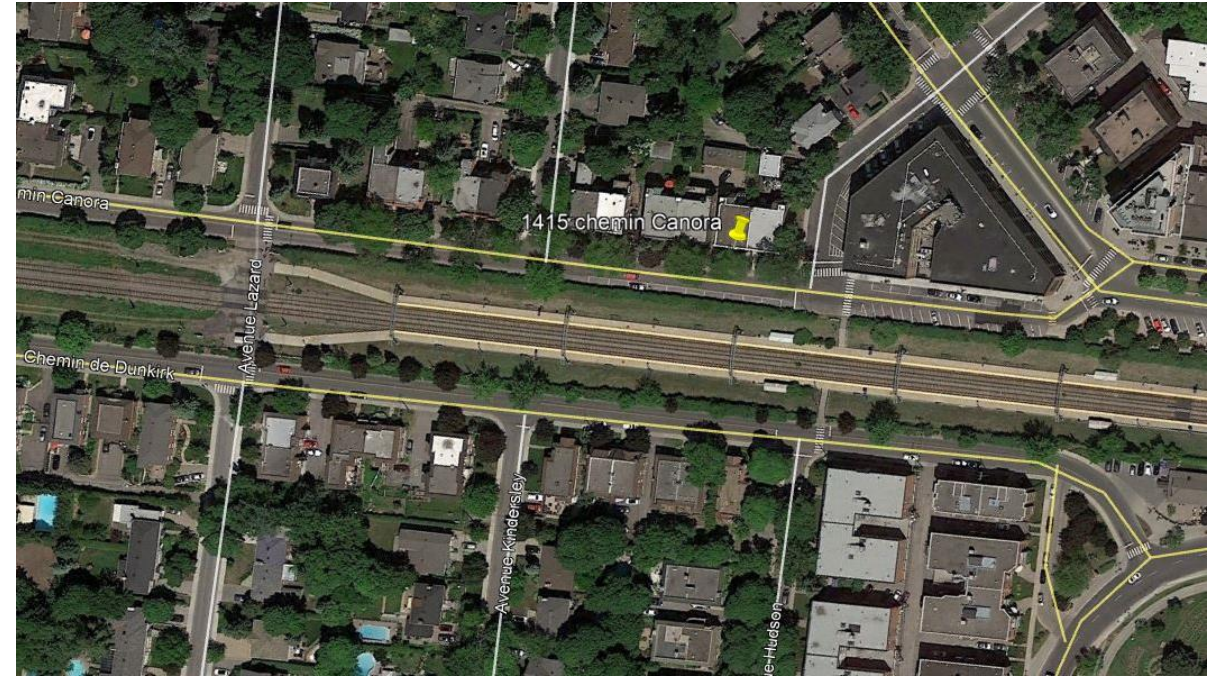
Canora

7382, Canora Road



Mont-Royal

1415, Canora Road



NOISE - GLOBAL CONTEXT

Period	Noise criteria at Canora (east)	Noise criteria at Mont Royal (east)
Day (7am to 7pm) Average over a 12-hour period	Ambient noise prior to work (58 dBA)	Ambient noise prior to work (63 dBA)
Evening (7pm to 10pm) Average over a 3-hour period	Ambient noise prior to work (54 dBA)	Ambient noise prior to work (59 dBA)
Night (10pm to 7am) Average over a 1-hour period	Ambient noise prior to work (48 dBA)	Ambient noise prior to work (54 dBA)

Criteria derived from MDDELCC recommendations and adapted to each site based on the initial context

MITIGATION MEASURES - NOISE



Acoustic box
installed around a
compressor



Acoustic box
around hammer du
virbo-sinking of piles



Installation of acoustic
mattresses around
equipment and short term
activities

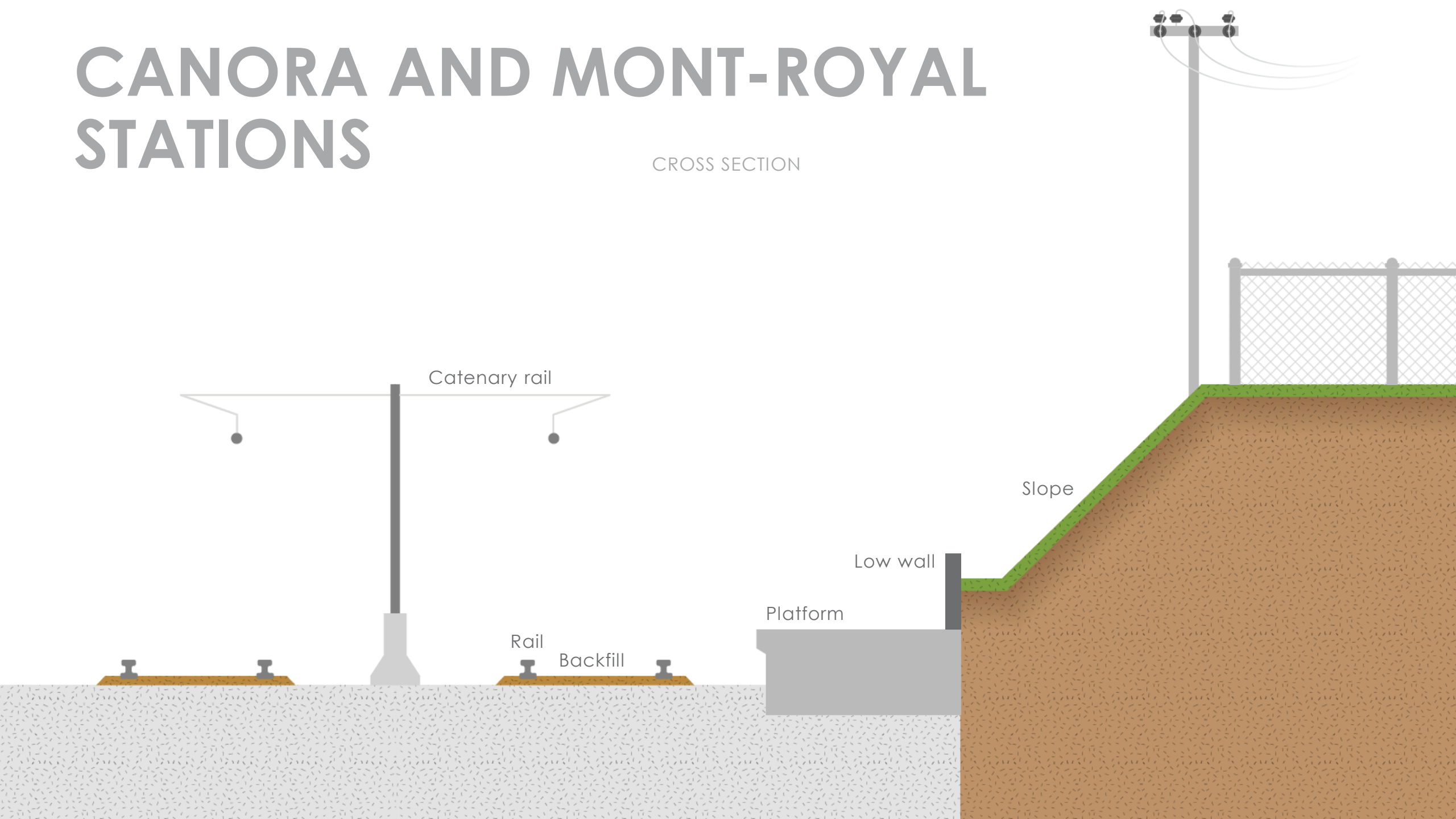
ACOUSTIC WALL – CANORA ROAD



WORK SEQUENCE

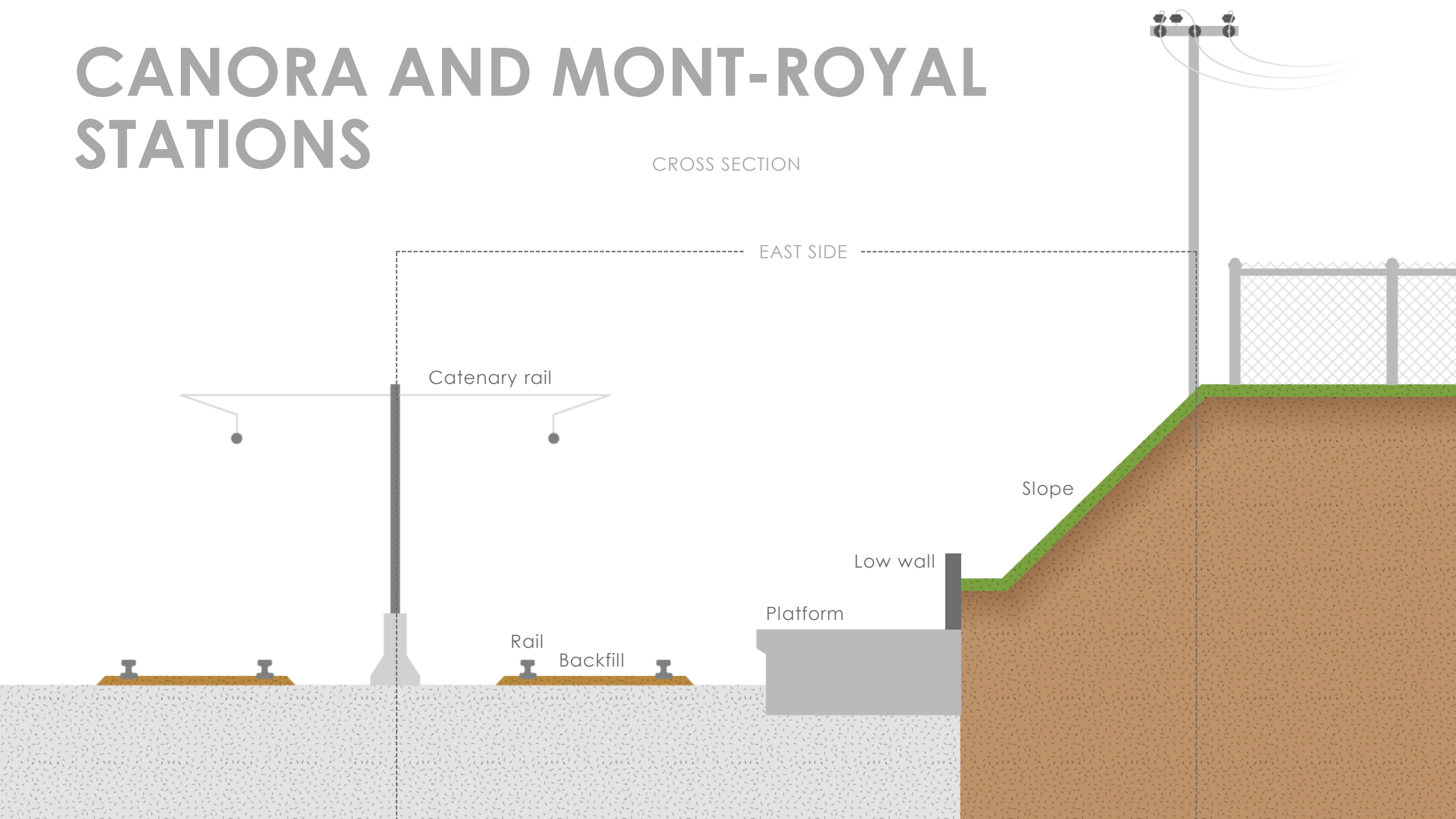
CANORA AND MONT-ROYAL STATIONS

CROSS SECTION



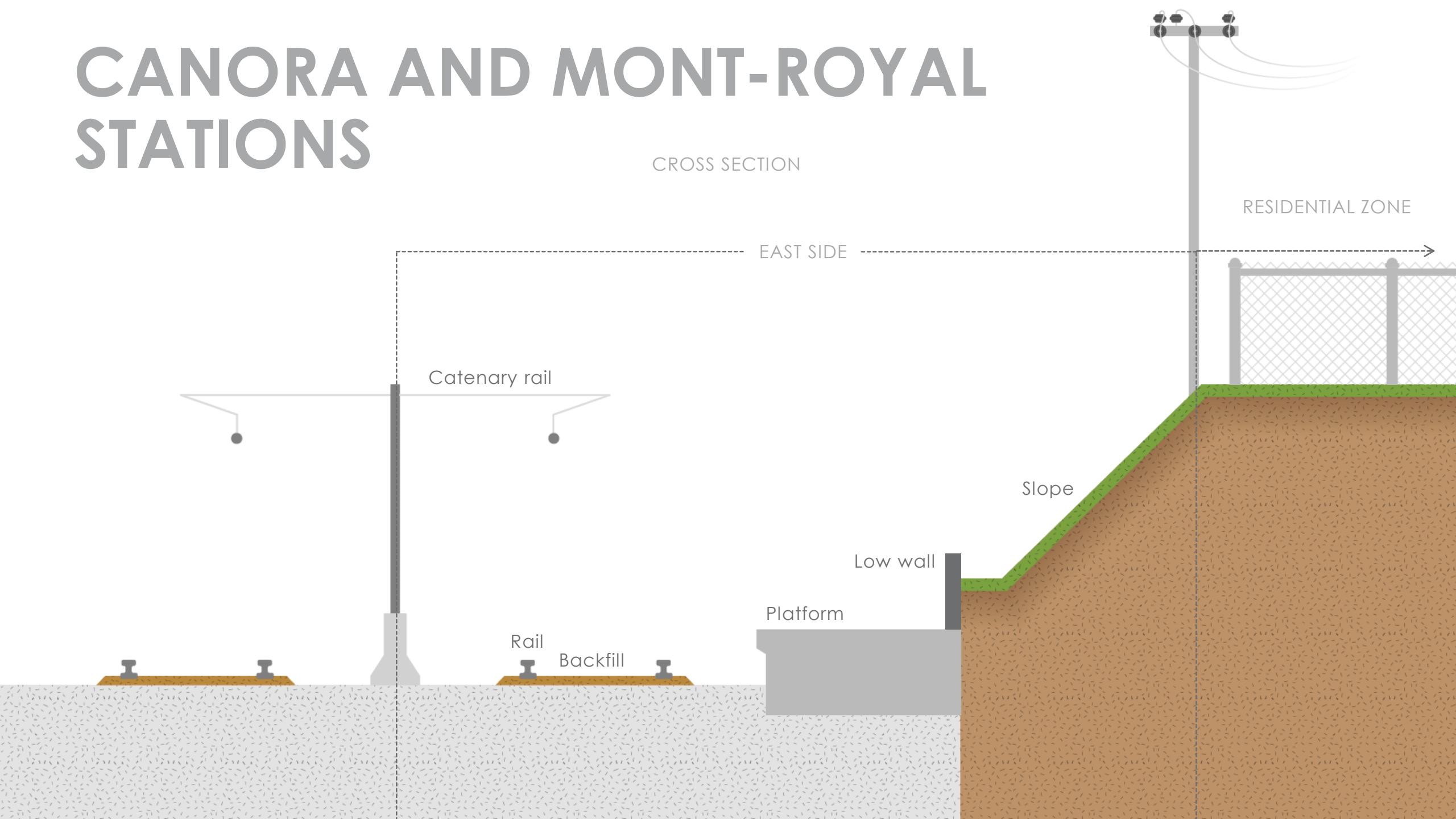
CANORA AND MONT-ROYAL STATIONS

CROSS SECTION



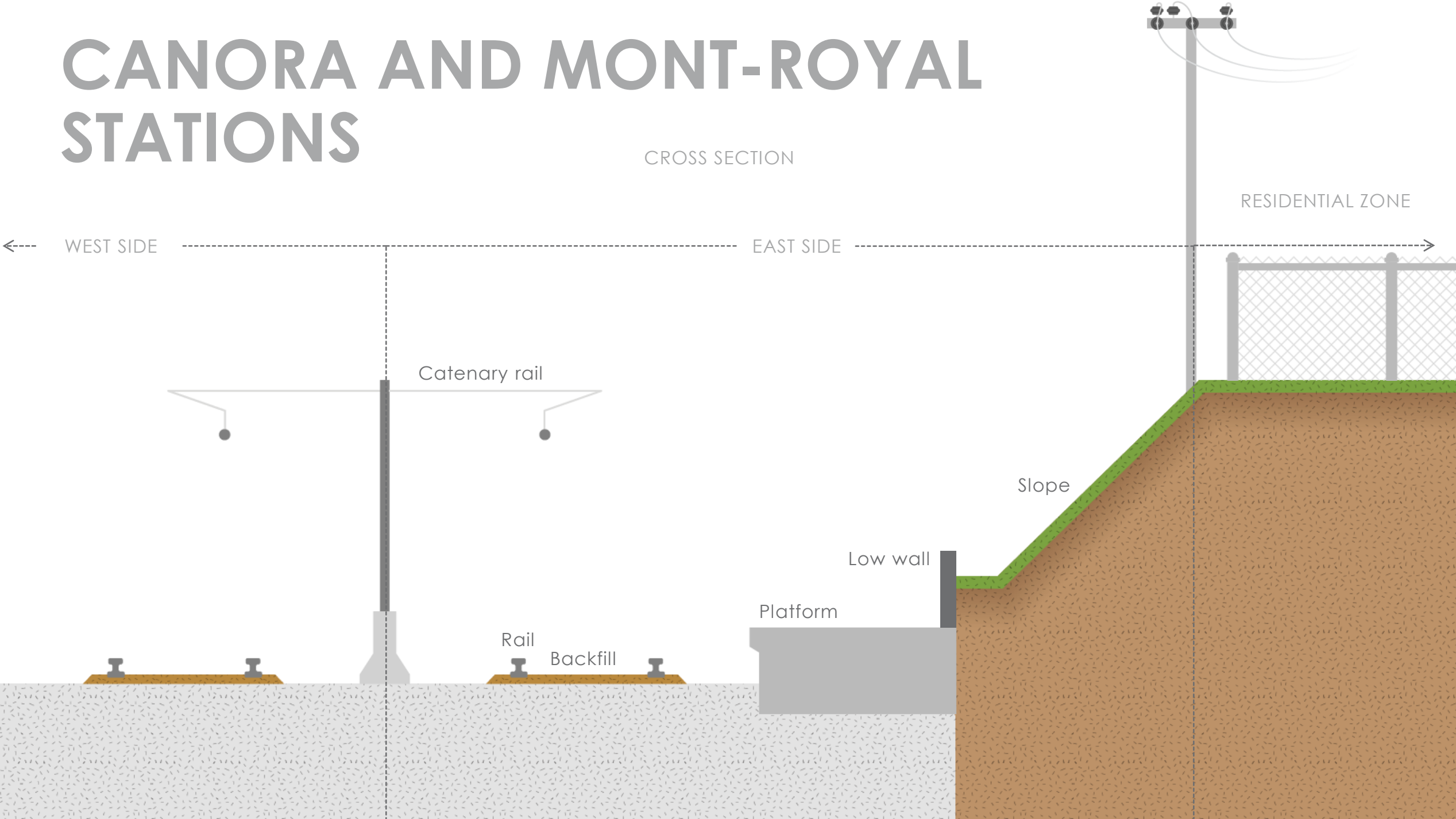
CANORA AND MONT-ROYAL STATIONS

CROSS SECTION



CANORA AND MONT-ROYAL STATIONS

CROSS SECTION



1

2

3

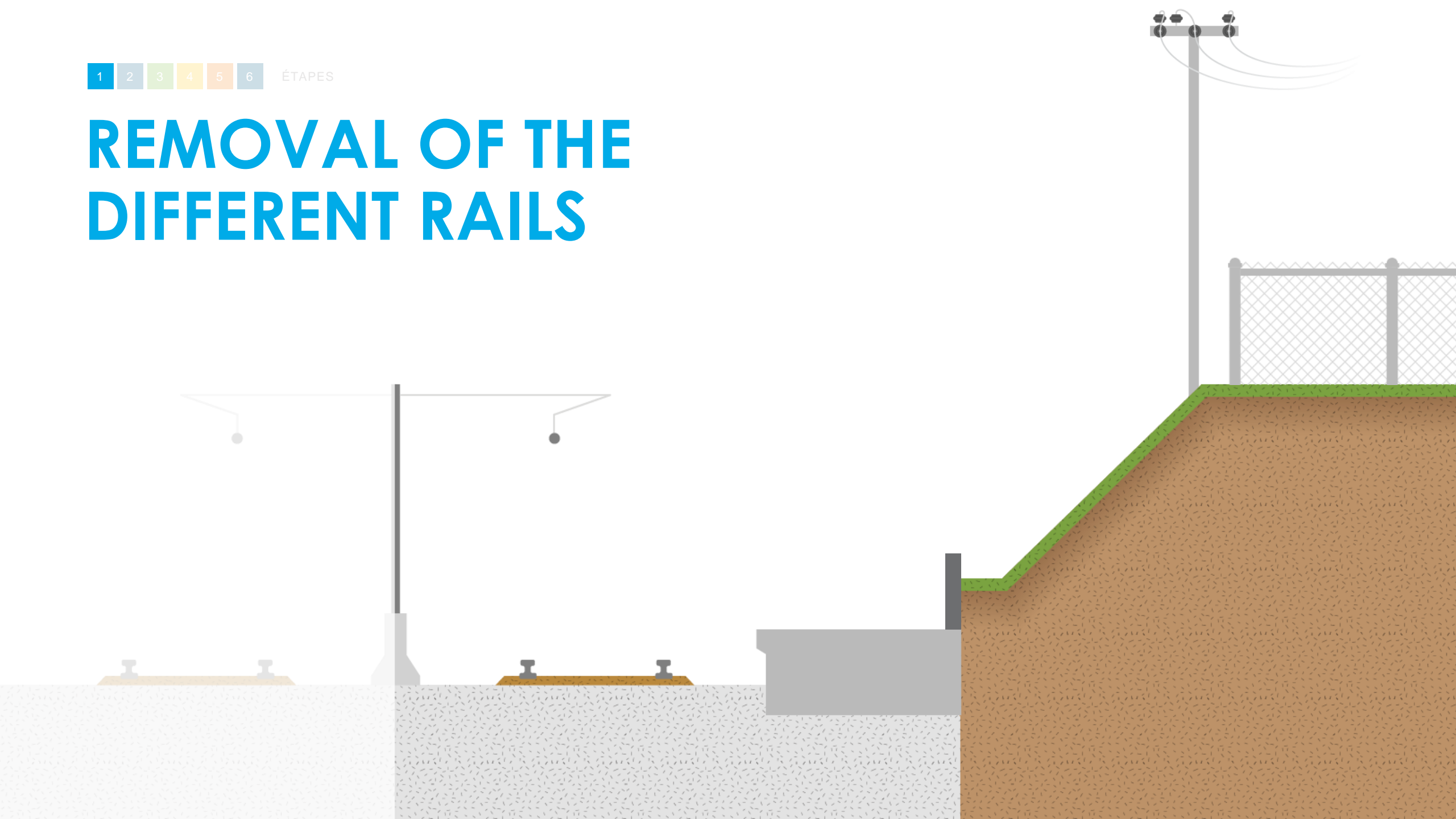
4

5

6

ÉTAPES

REMOVAL OF THE DIFFERENT RAILS



1

2

3

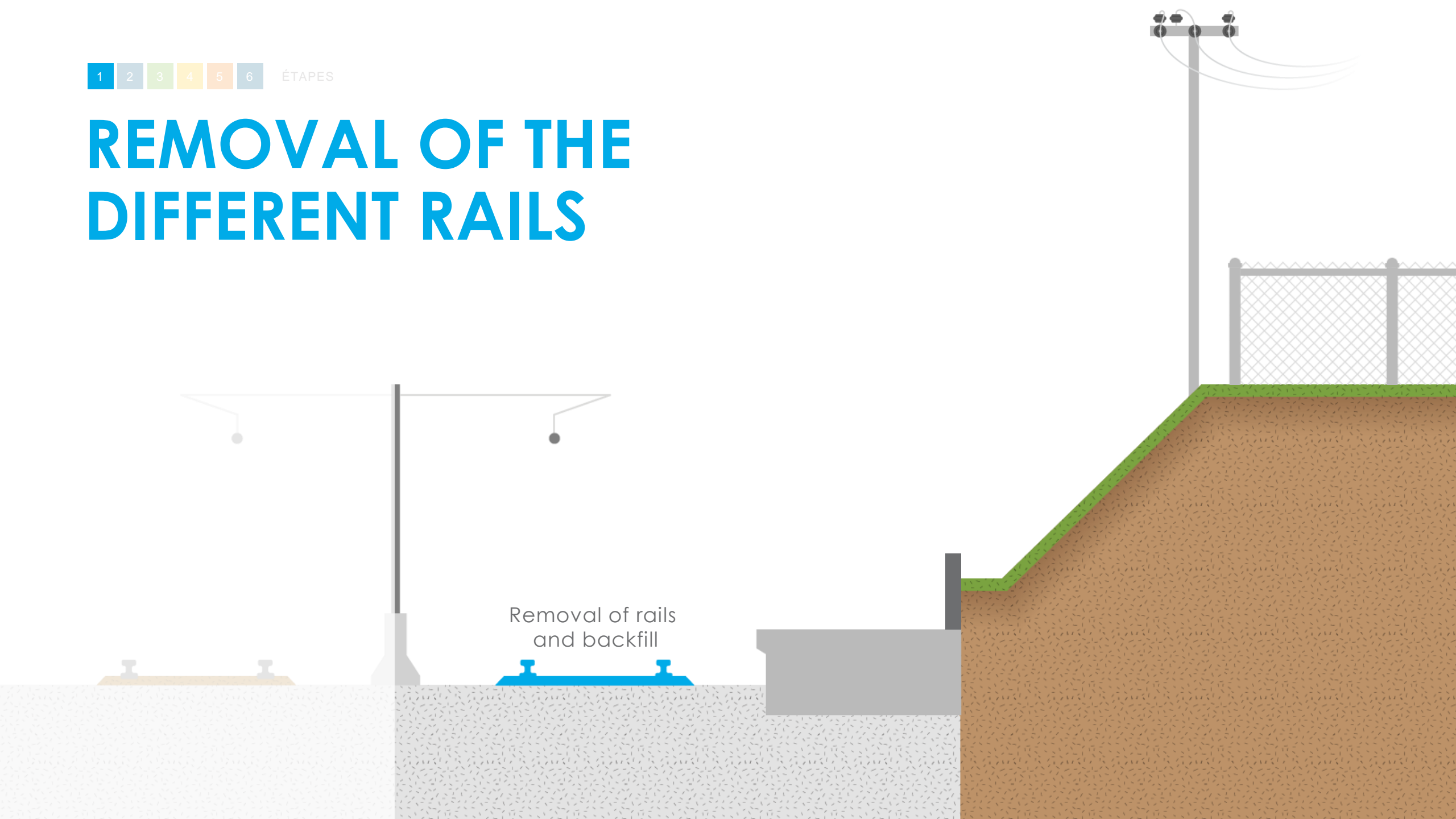
4

5

6

ÉTAPES

REMOVAL OF THE DIFFERENT RAILS



1

2

3

4

5

6

ÉTAPES

REMOVAL OF THE DIFFERENT RAILS



Removal of
catenaries' overhead contact line

The diagram illustrates the removal of an overhead contact line. A vertical support pole is shown on a concrete base. A horizontal line, representing the contact wire, extends from the pole to the right. A blue line indicates the removal of this contact wire, with a blue dot at the end of the line. To the left of the pole, there is a small structure with two vertical supports, possibly a signal or a small bridge. The ground is shown in cross-section, with a concrete base and a brown soil layer. A fence is visible in the background on the right.

1

2

3

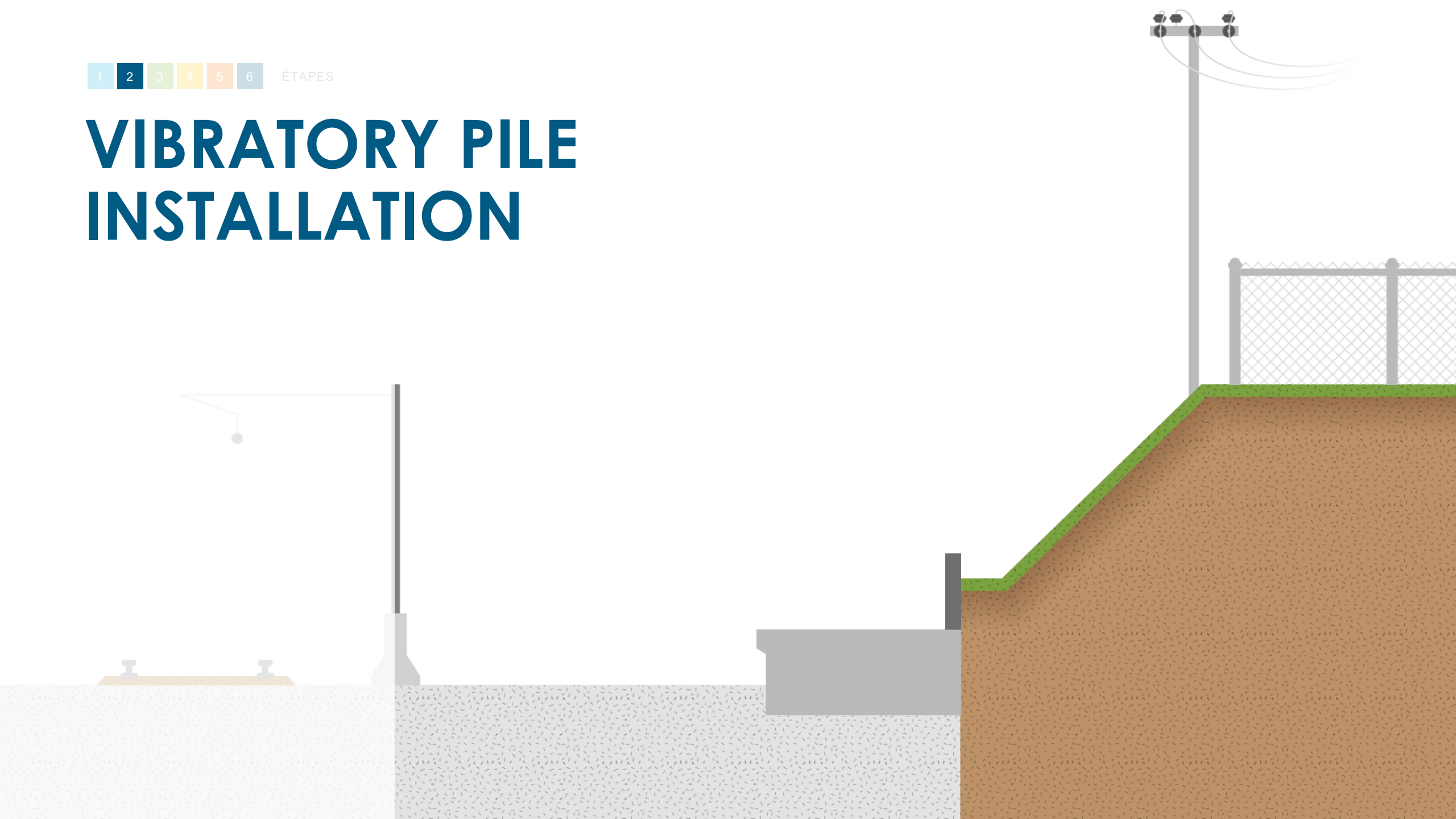
4

5

6

ÉTAPES

VIBRATORY PILE INSTALLATION



1

2

3

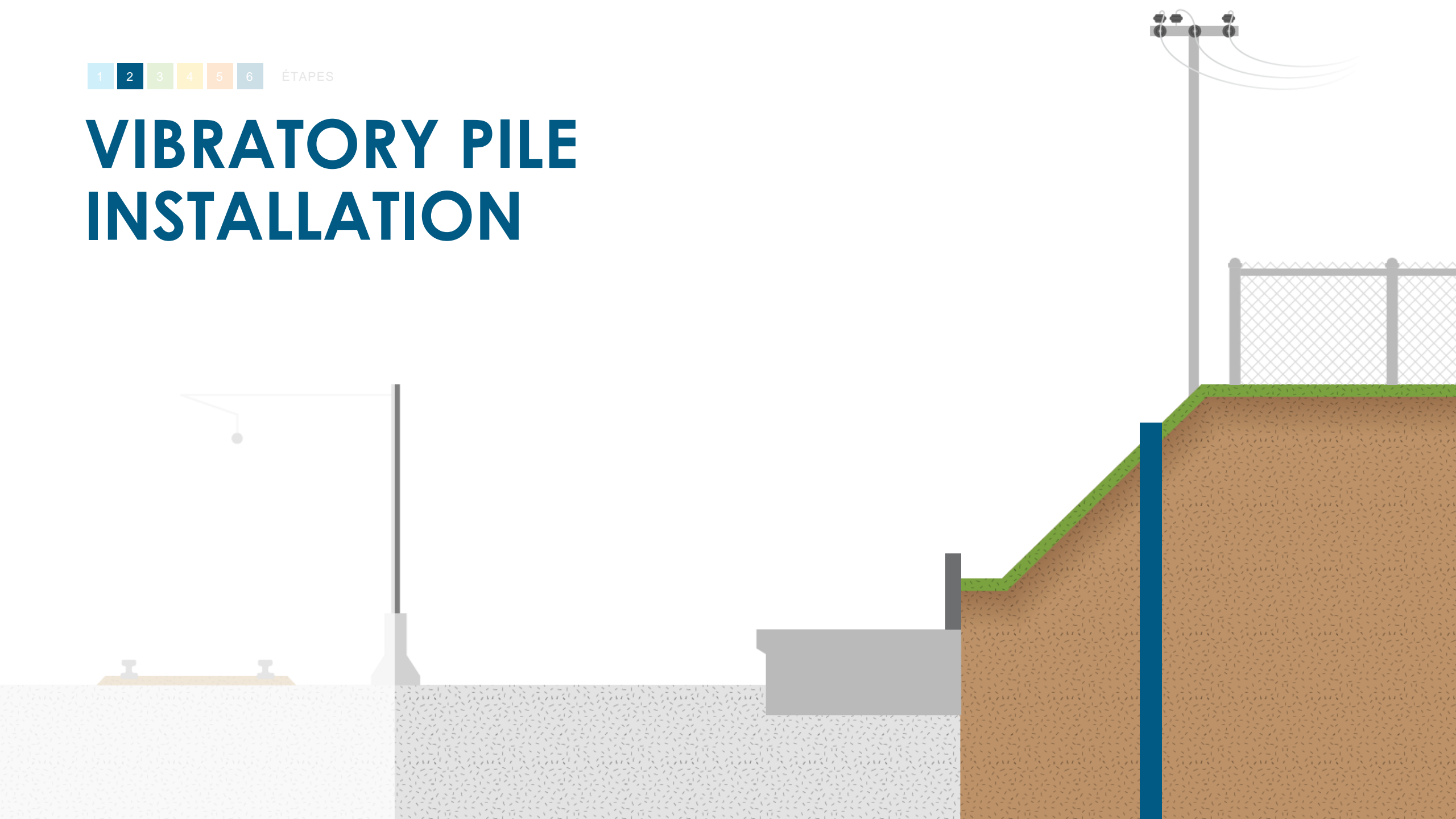
4

5

6

ÉTAPES

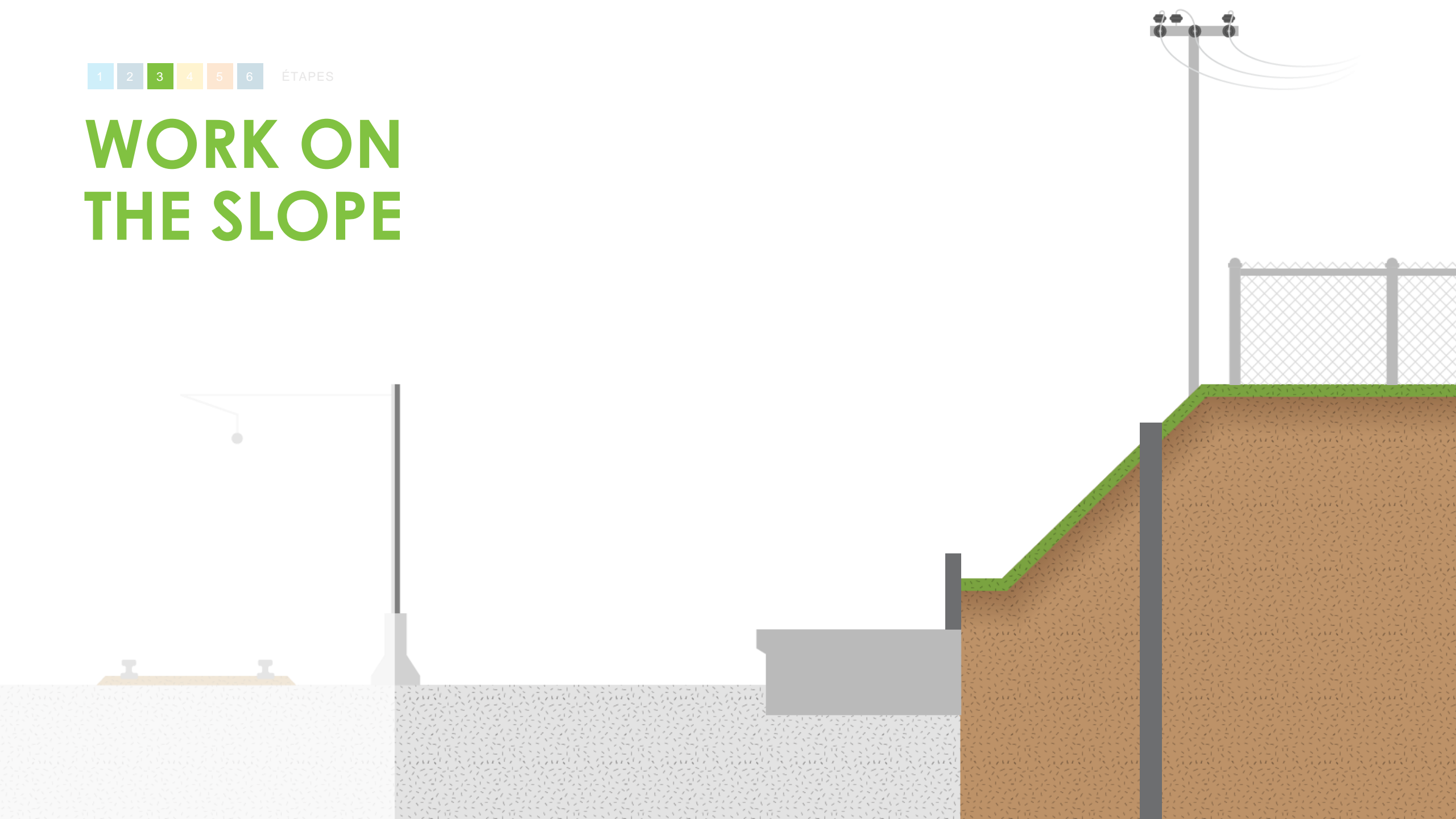
VIBRATORY PILE INSTALLATION



- 1
- 2
- 3
- 4
- 5
- 6

ÉTAPES

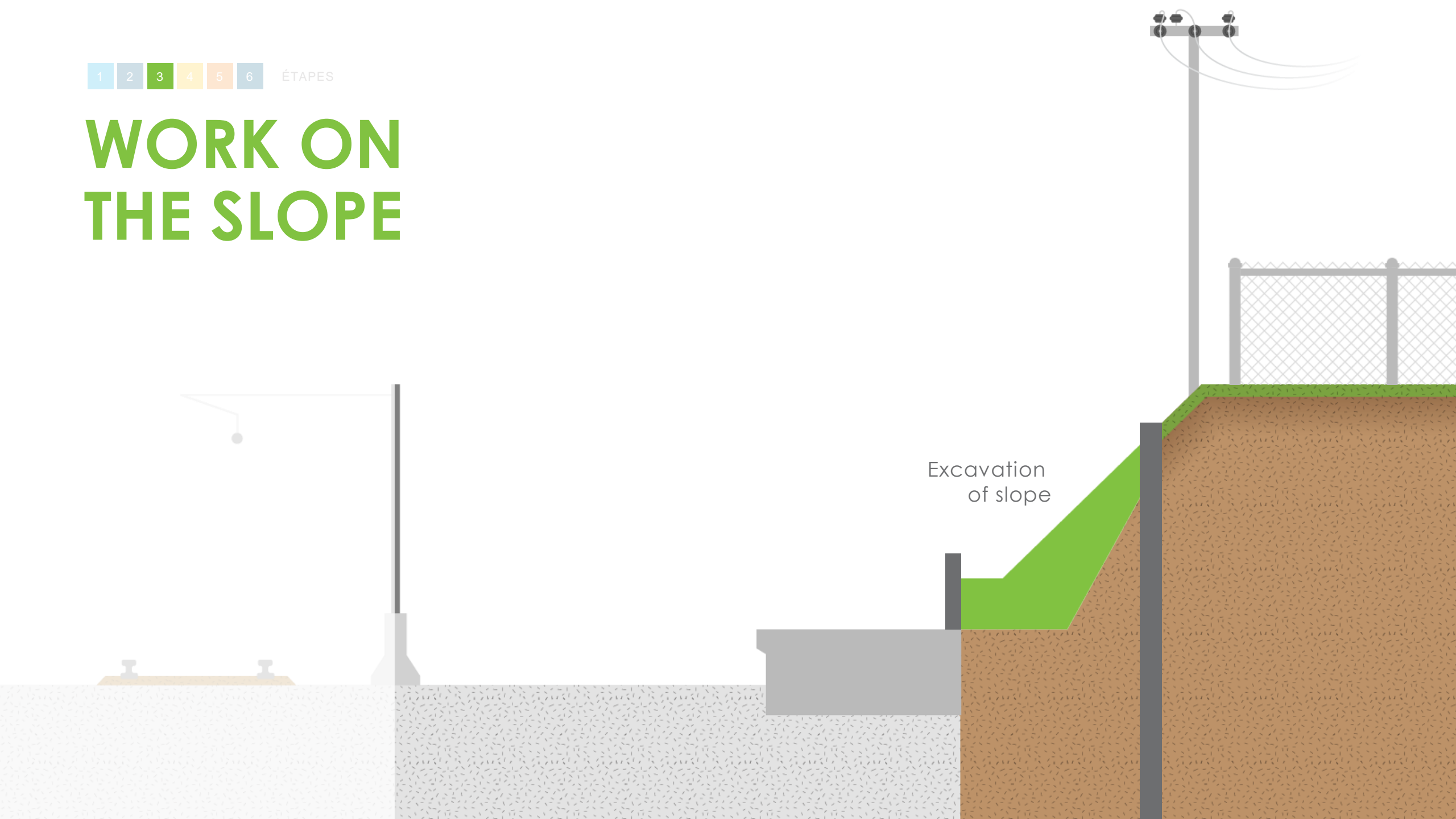
WORK ON THE SLOPE



- 1
- 2
- 3
- 4
- 5
- 6

ÉTAPES

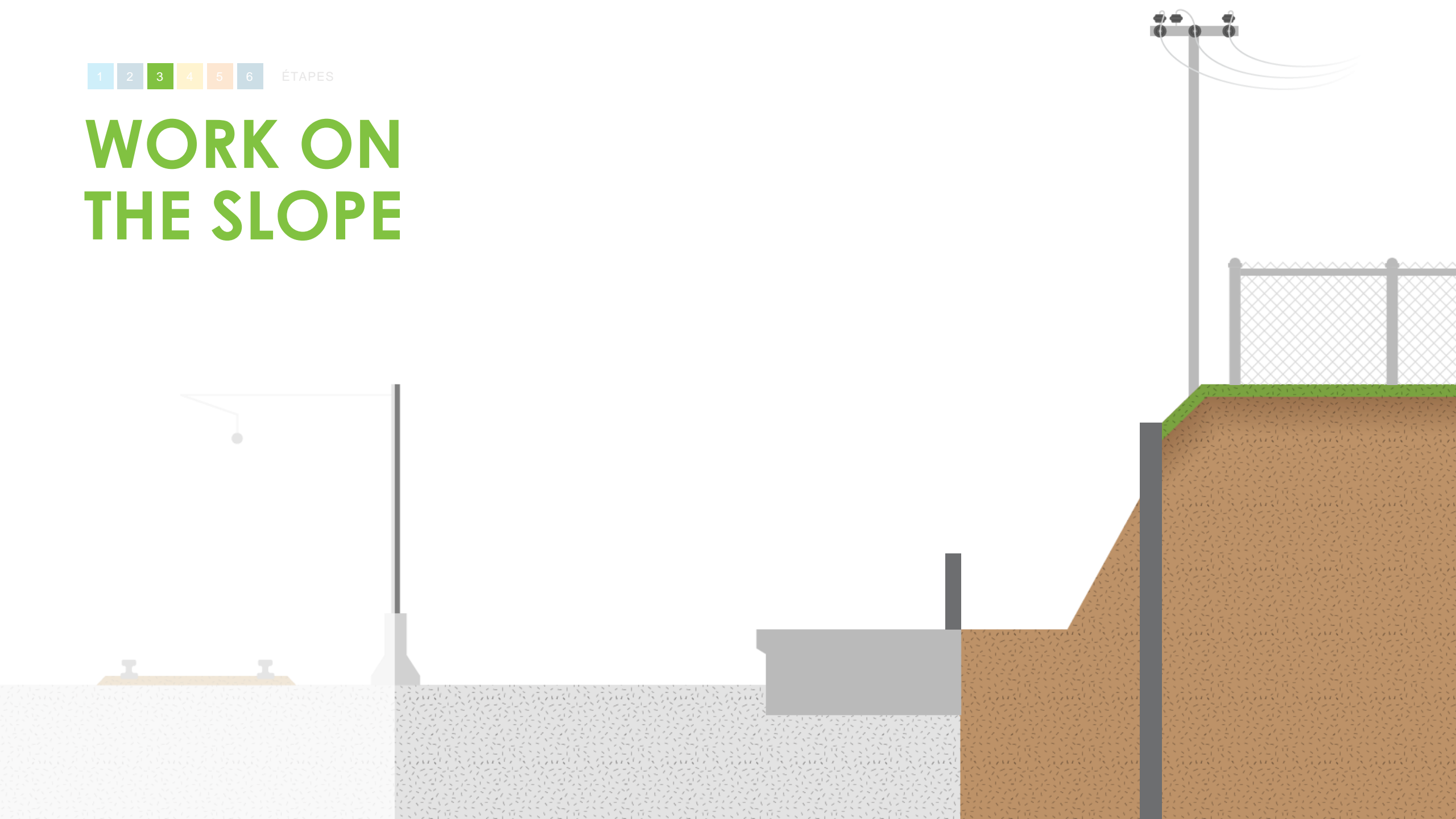
WORK ON THE SLOPE



- 1
- 2
- 3
- 4
- 5
- 6

ÉTAPES

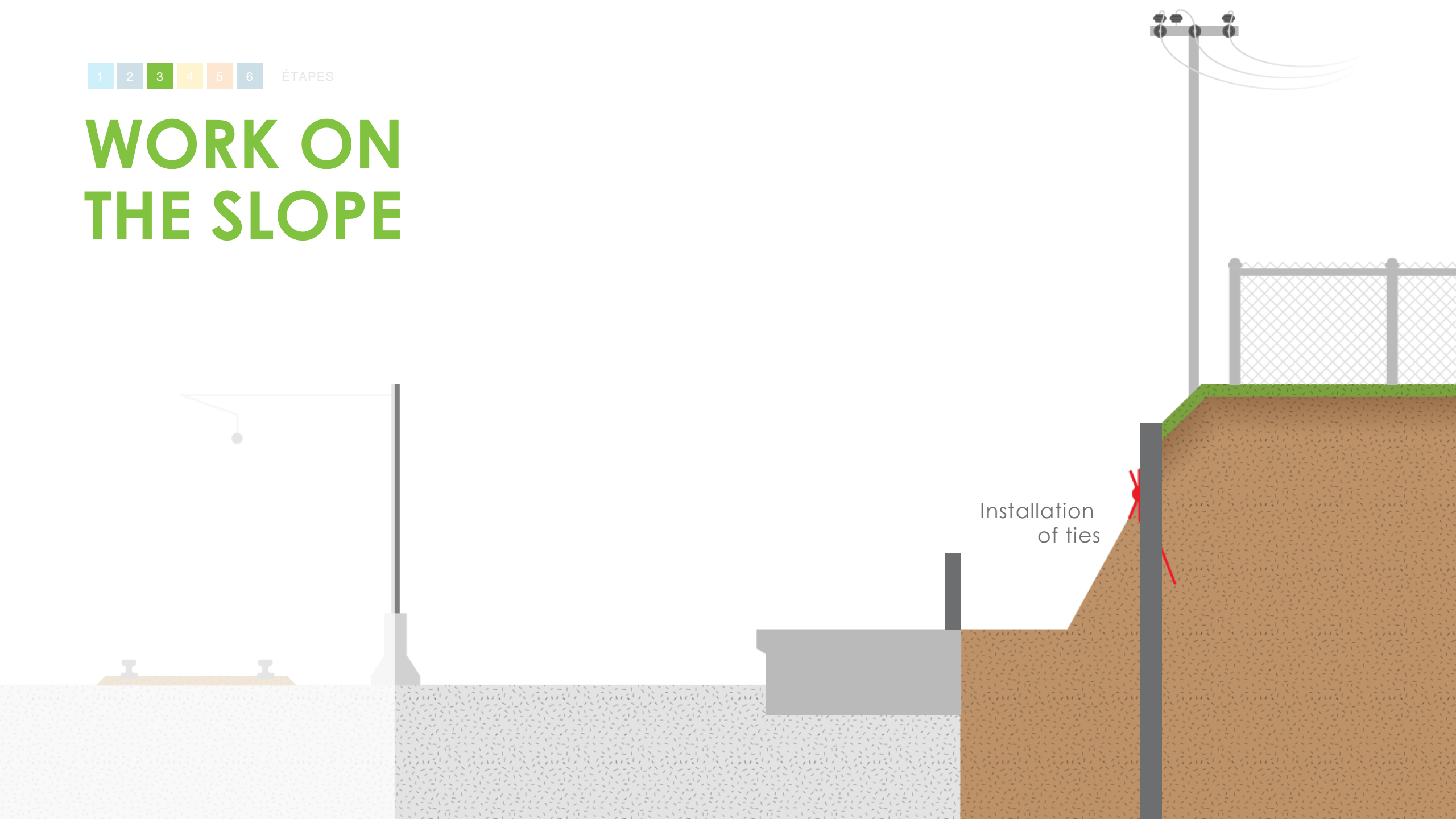
WORK ON THE SLOPE



- 1
- 2
- 3
- 4
- 5
- 6

ÉTAPES

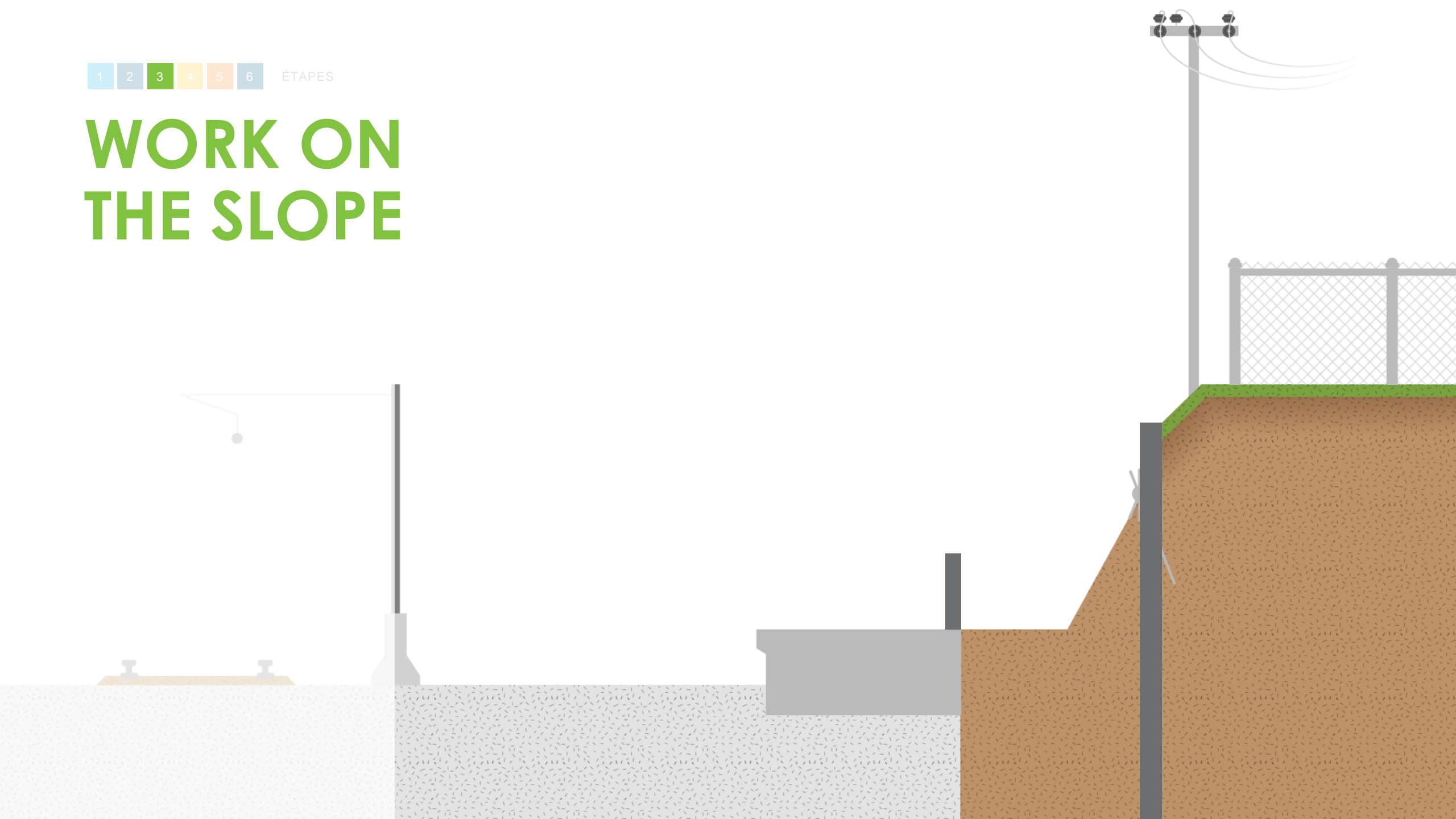
WORK ON THE SLOPE



- 1
- 2
- 3
- 4
- 5
- 6

ÉTAPES

WORK ON THE SLOPE



1

2

3

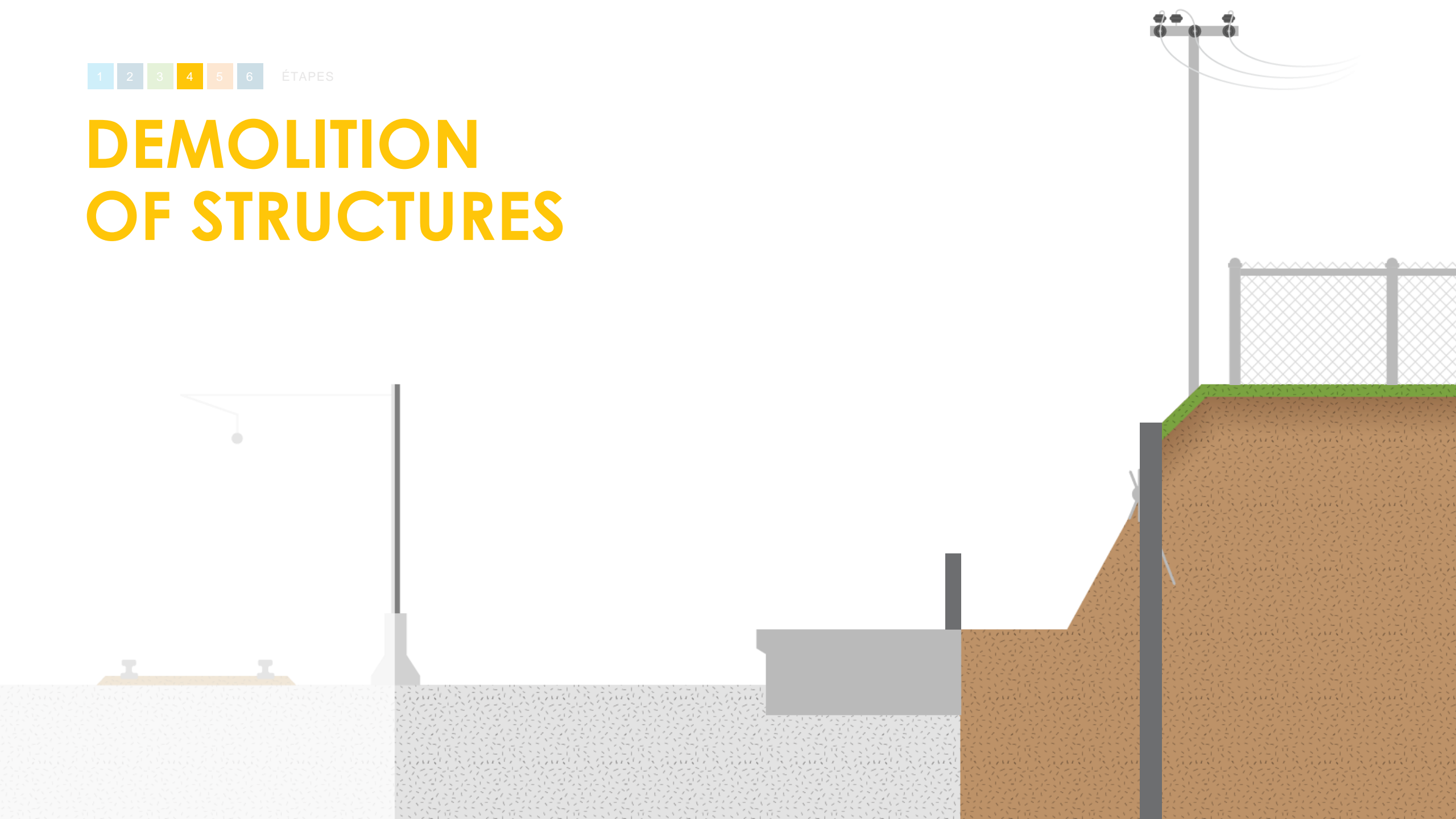
4

5

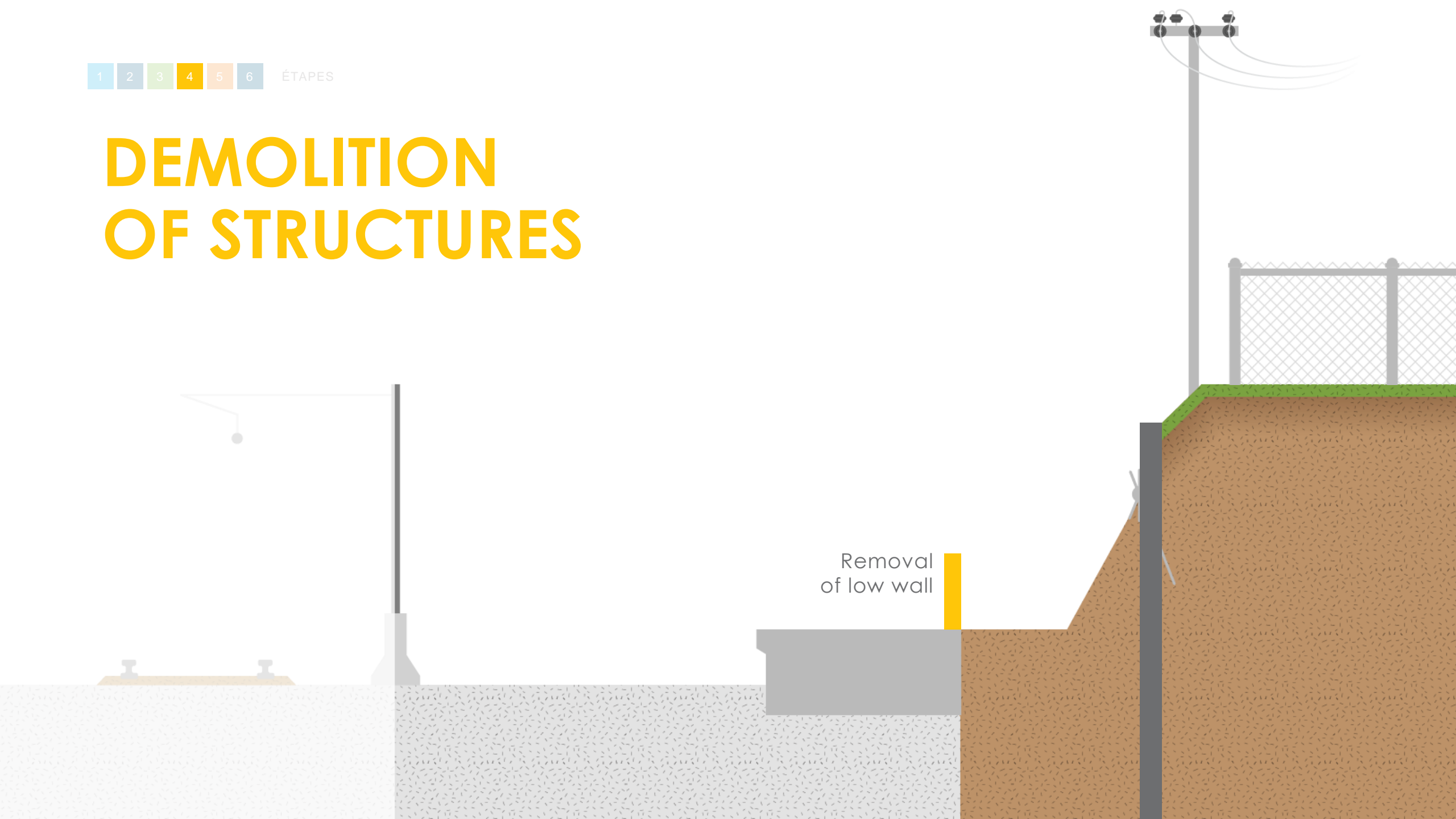
6

ÉTAPES

DEMOLITION OF STRUCTURES

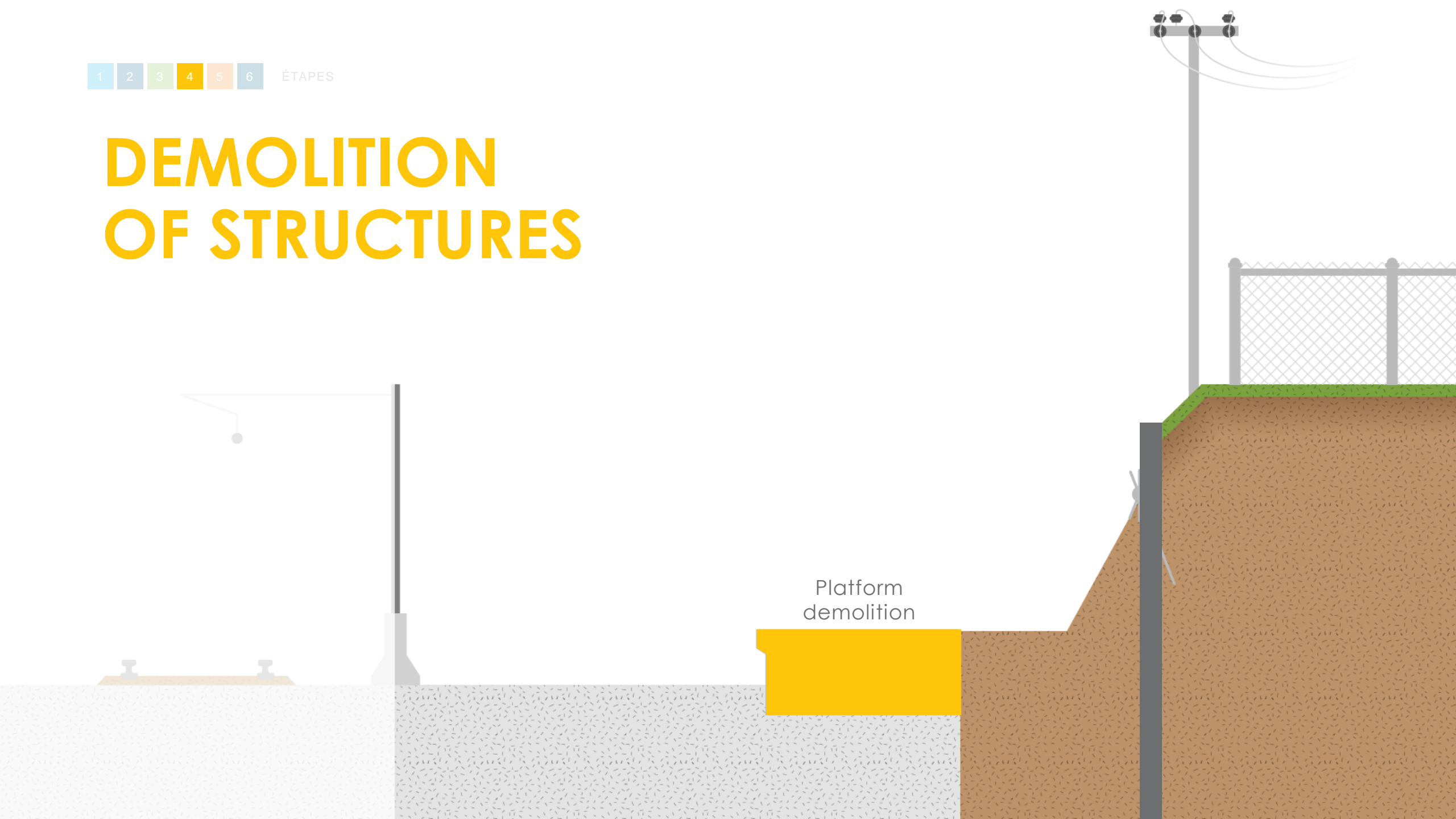


DEMOLITION OF STRUCTURES



DEMOLITION OF STRUCTURES

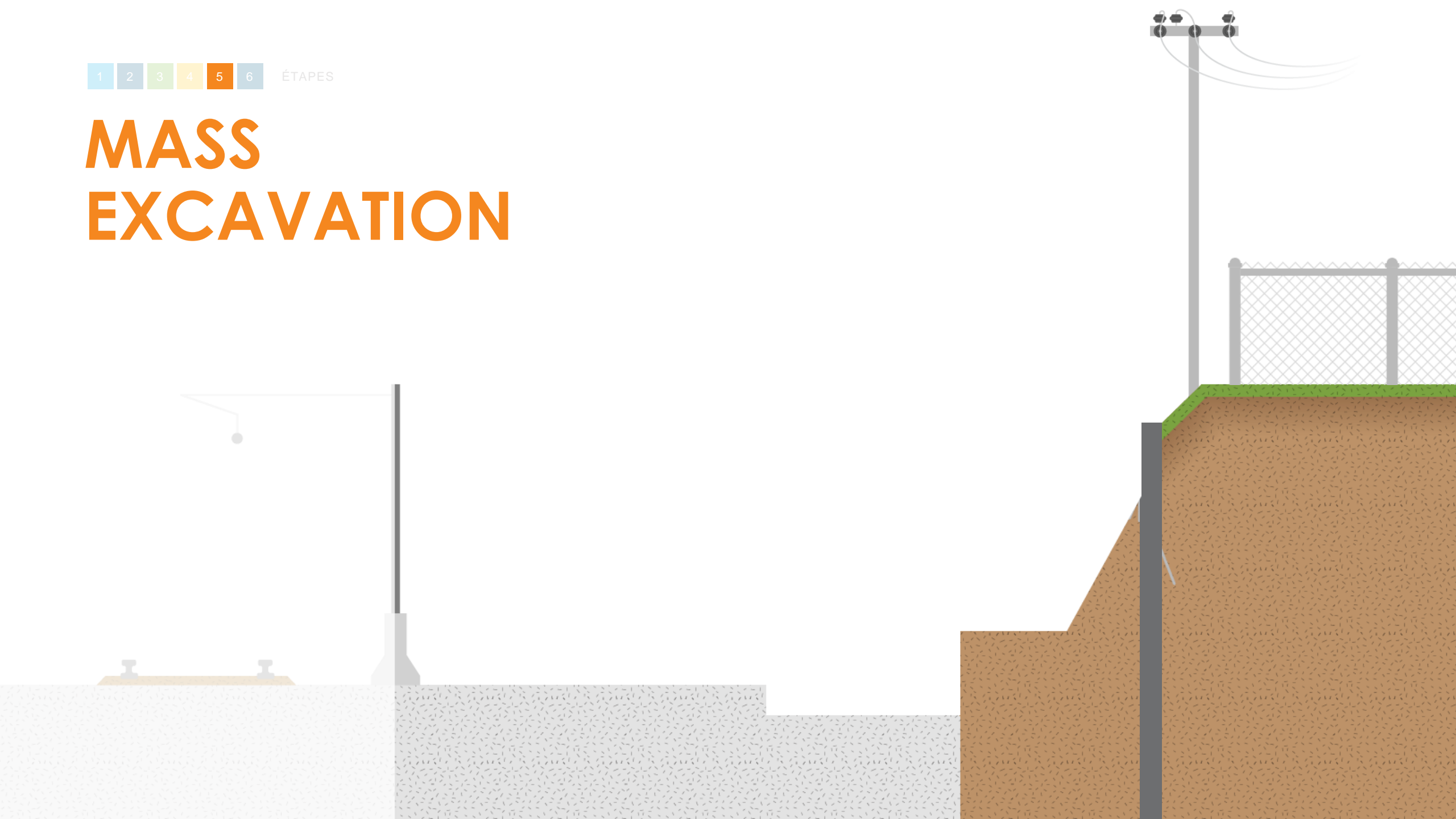
Platform
demolition



1 2 3 4 5 6

ÉTAPES

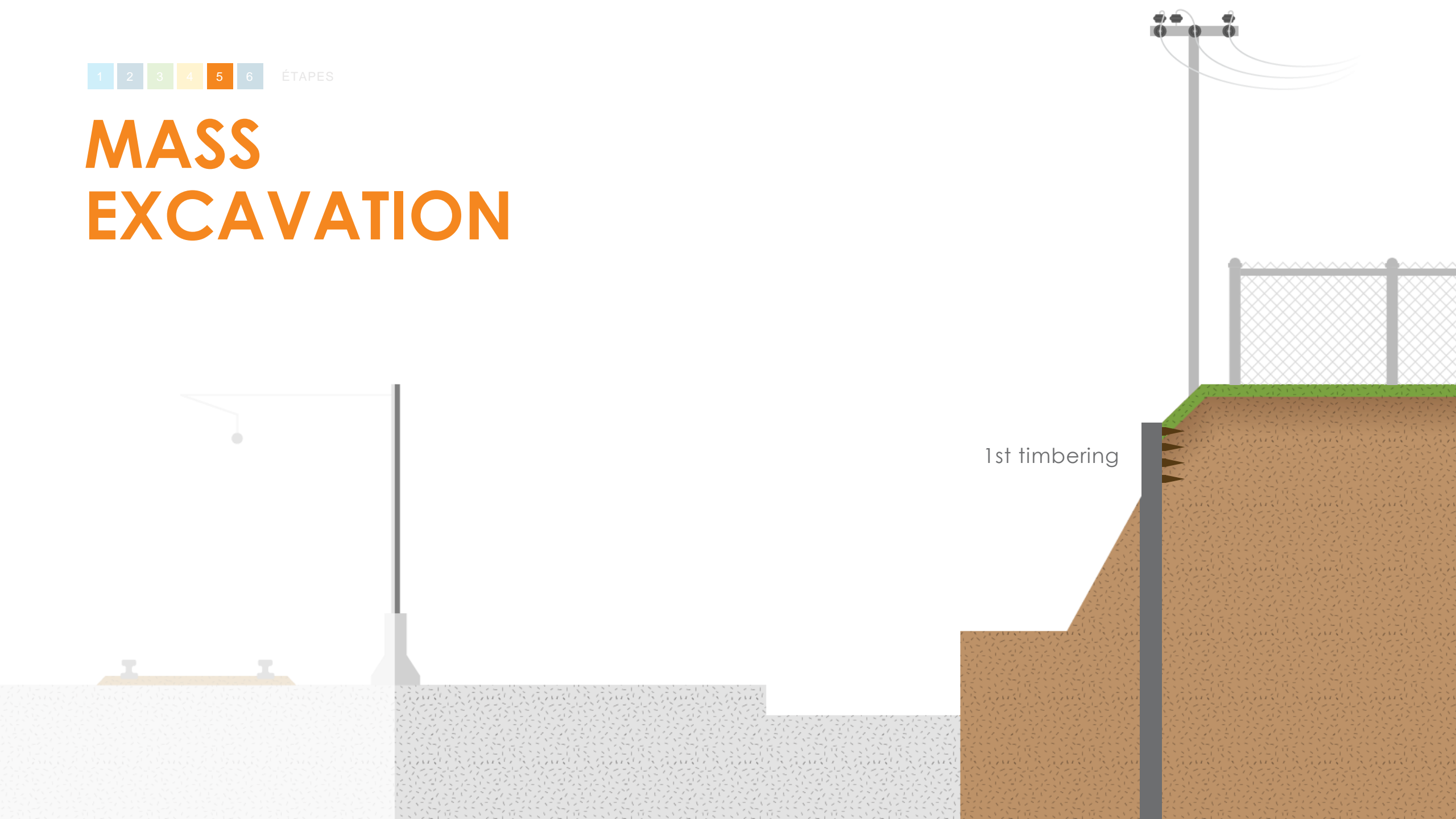
MASS EXCAVATION





ÉTAPES

MASS EXCAVATION

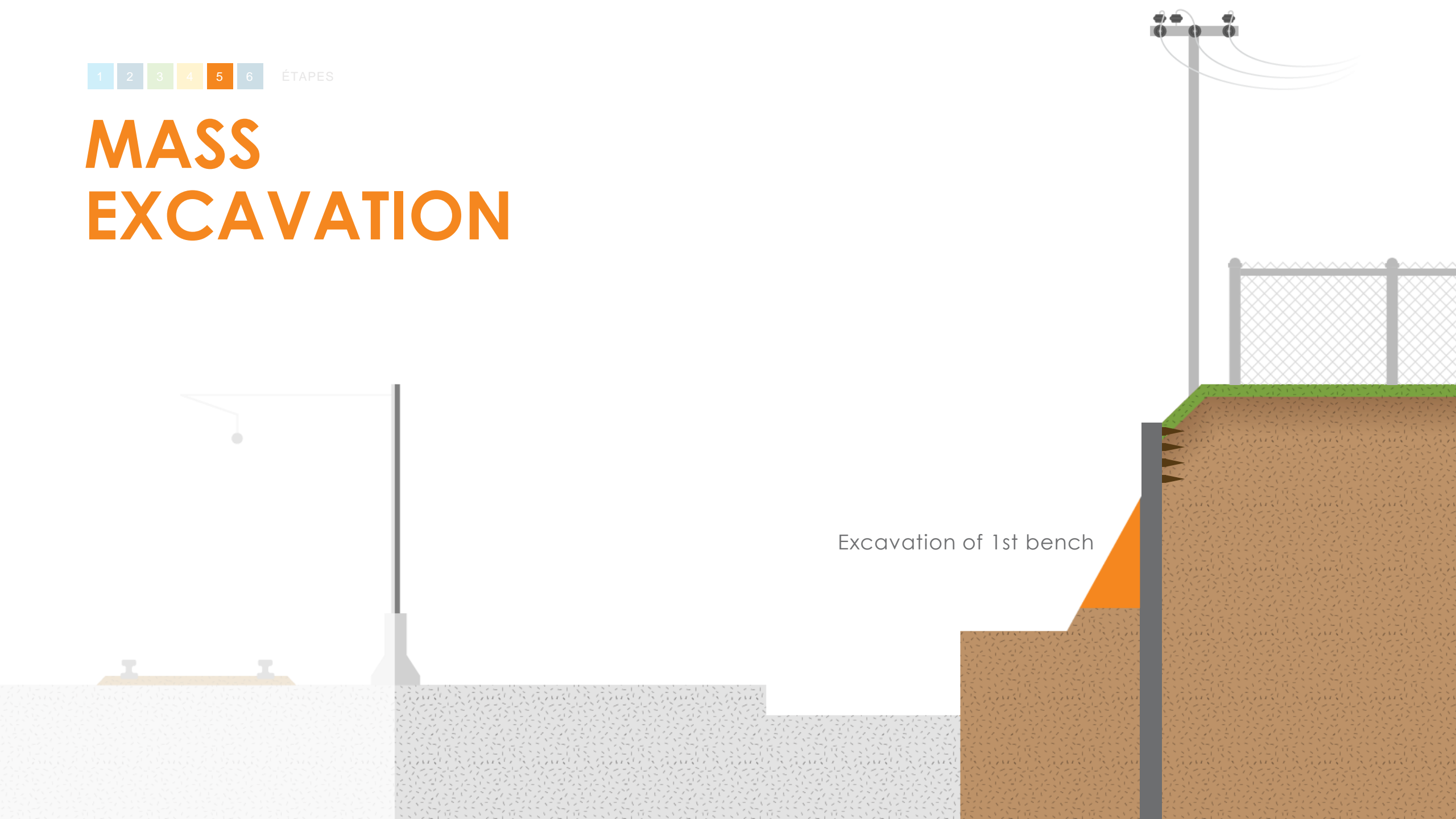


1 2 3 4 5 6

ÉTAPES

MASS EXCAVATION

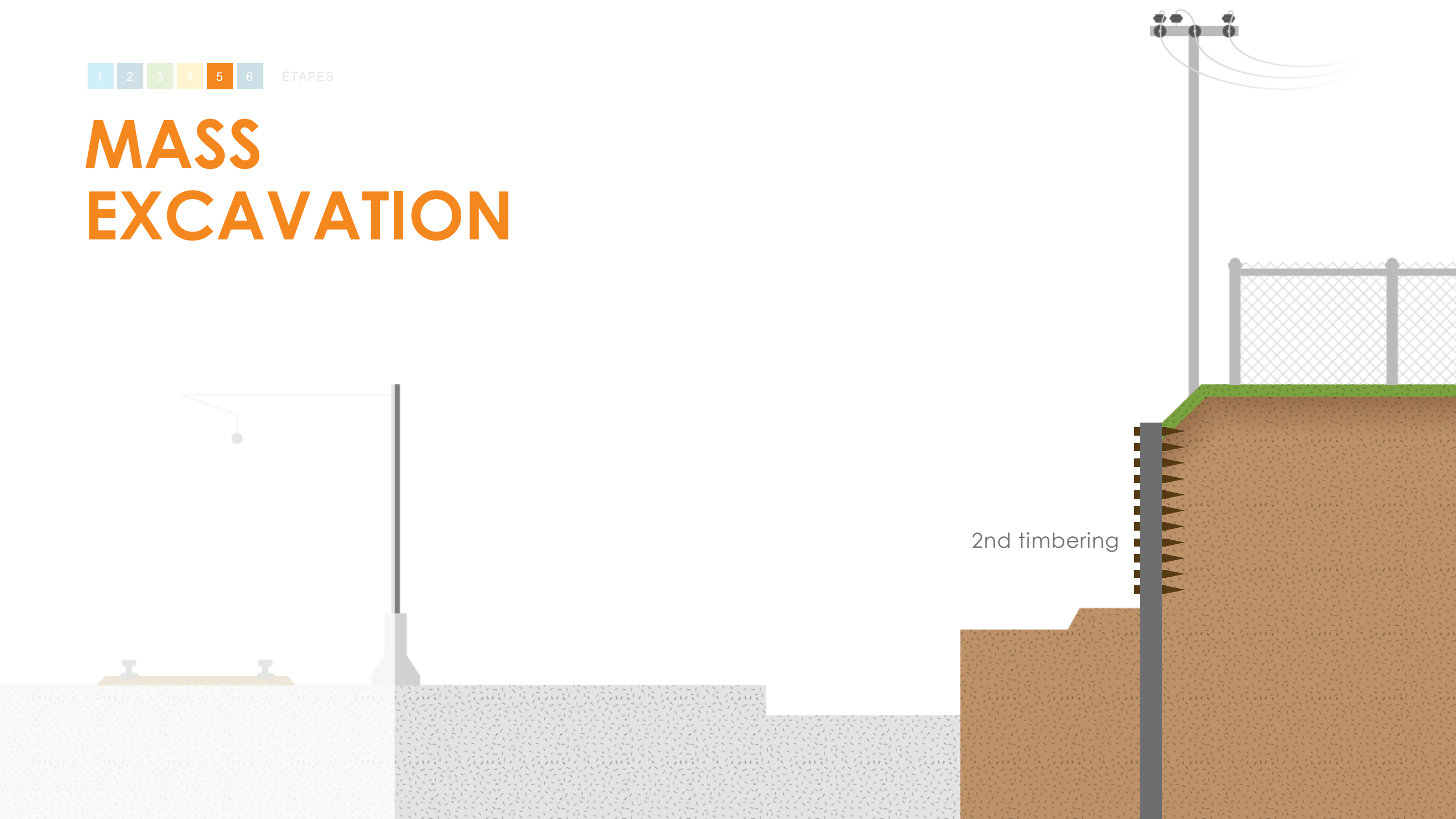
Excavation of 1st bench





ÉTAPES

MASS EXCAVATION

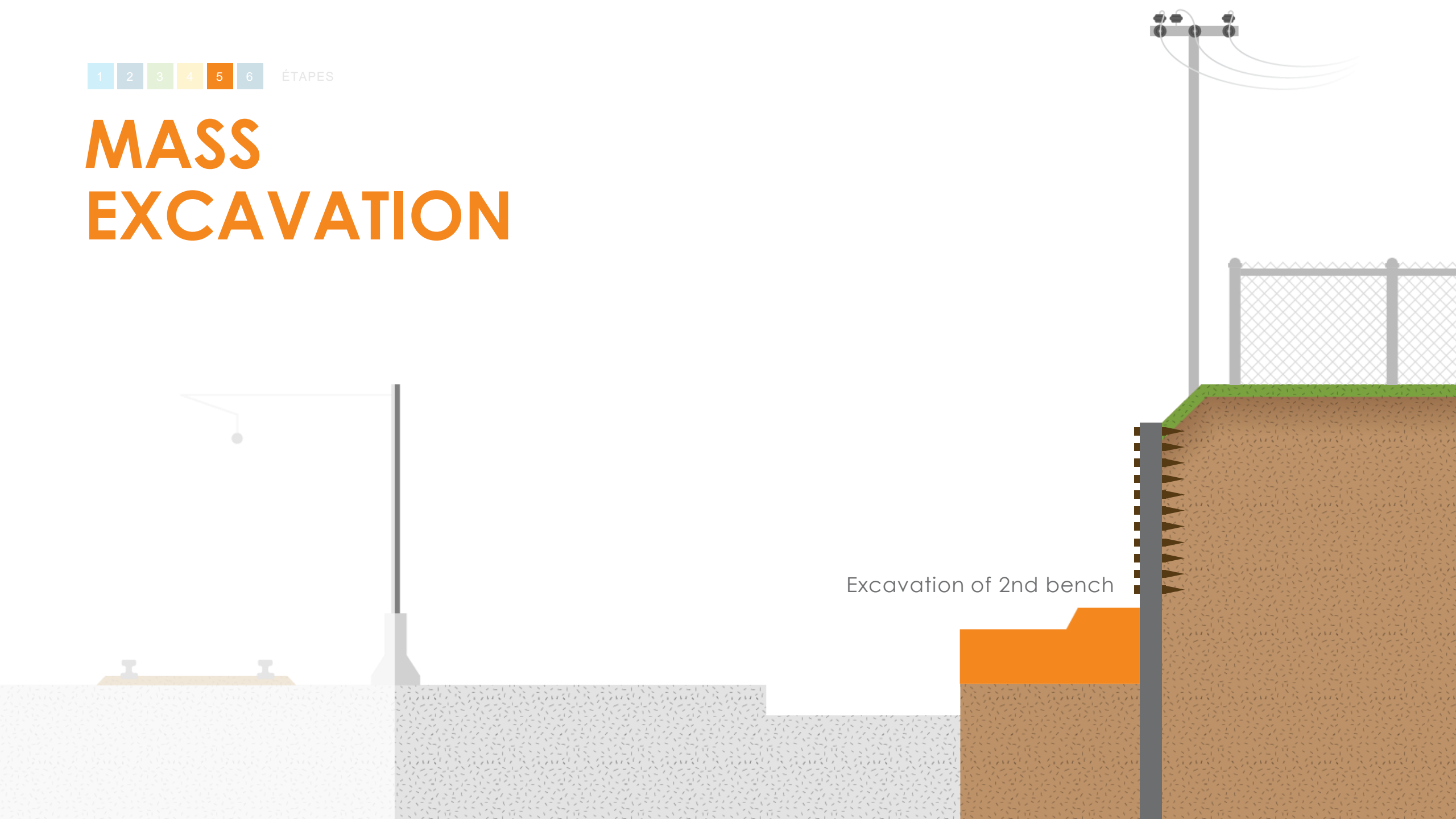


2nd timbering

1 2 3 4 5 6

ÉTAPES

MASS EXCAVATION

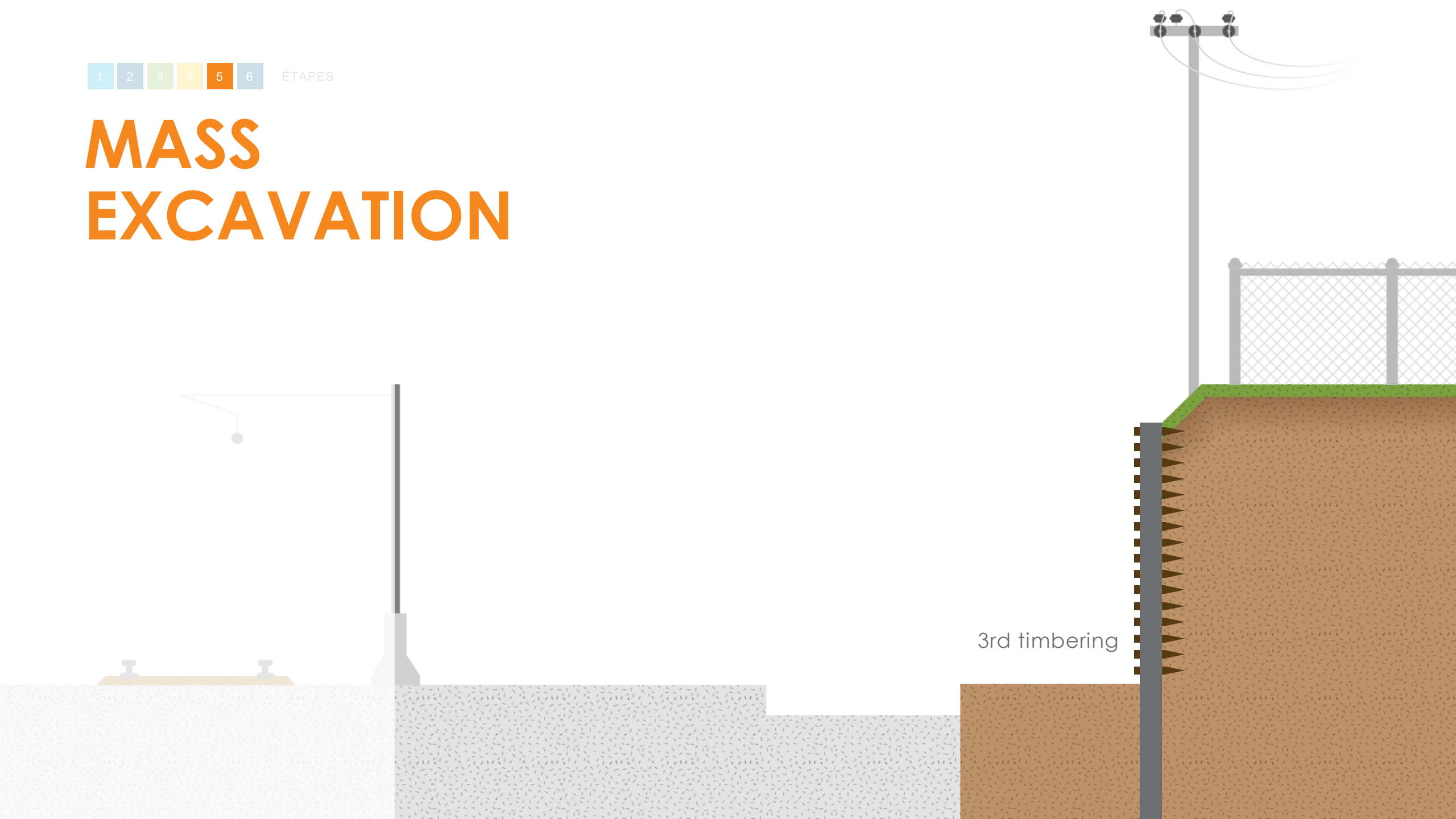


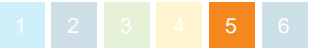
Excavation of 2nd bench

1 2 3 4 5 6

ÉTAPES

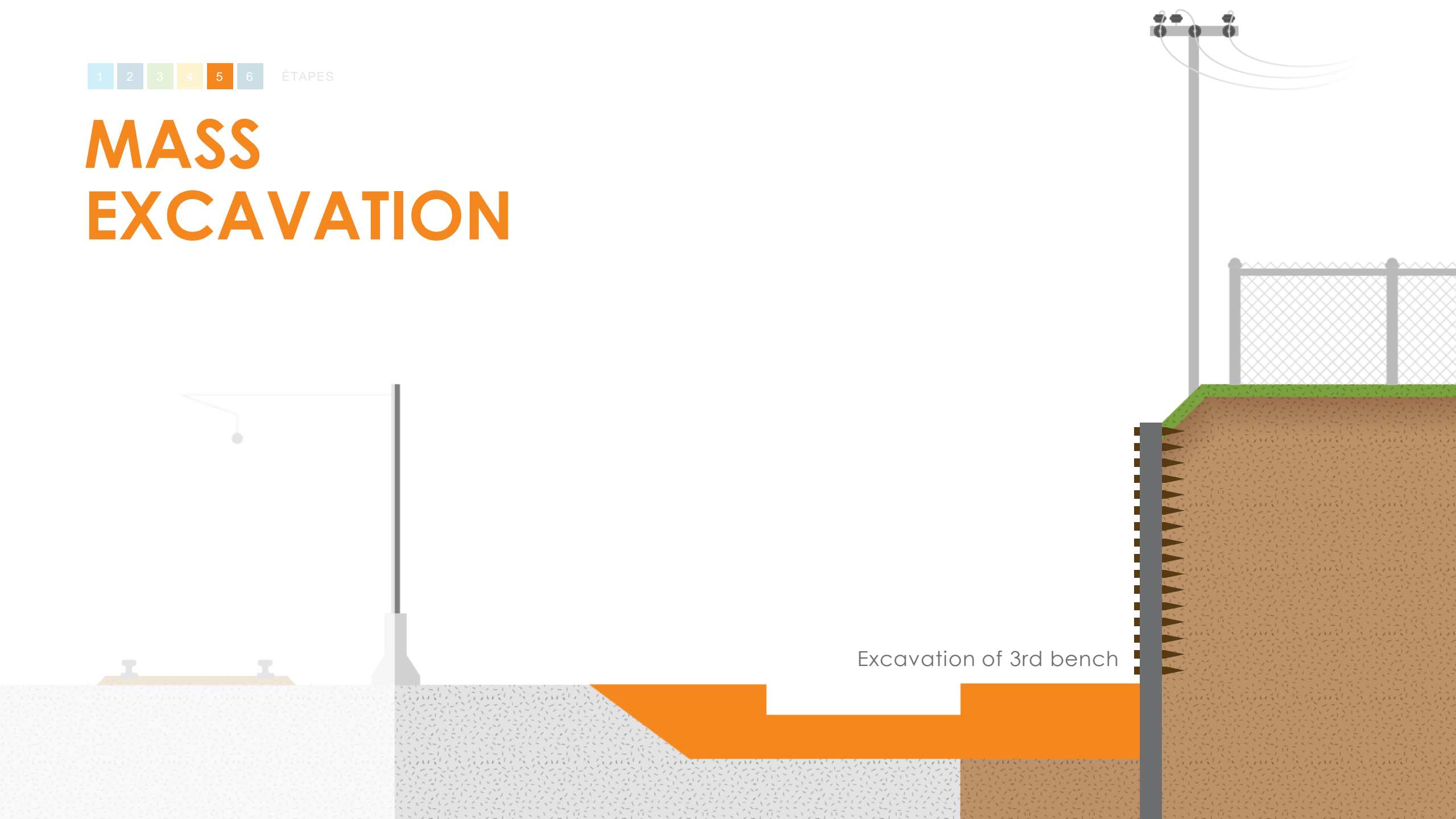
MASS EXCAVATION





ÉTAPES

MASS EXCAVATION

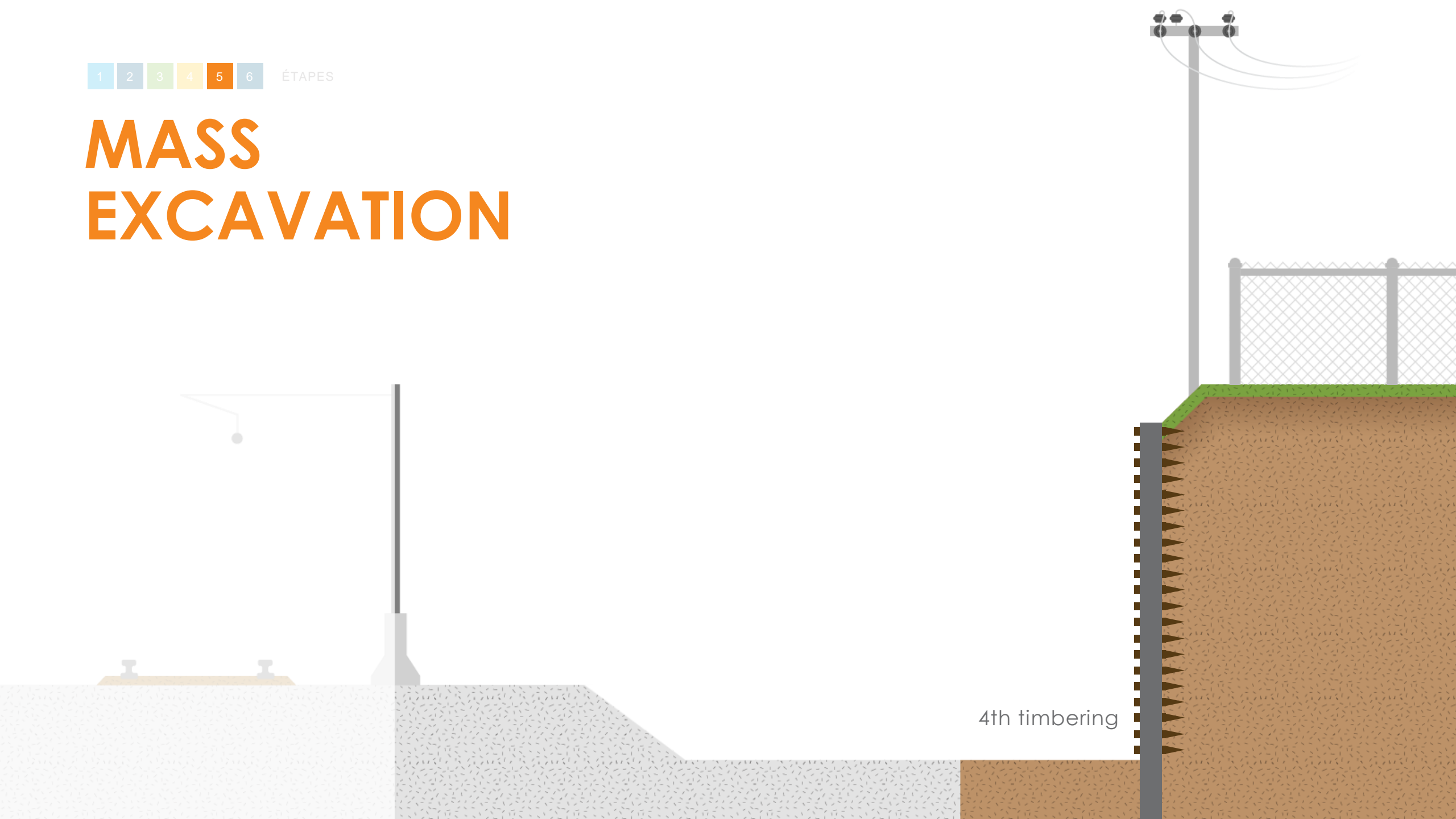


Excavation of 3rd bench

1 2 3 4 5 6

ÉTAPES

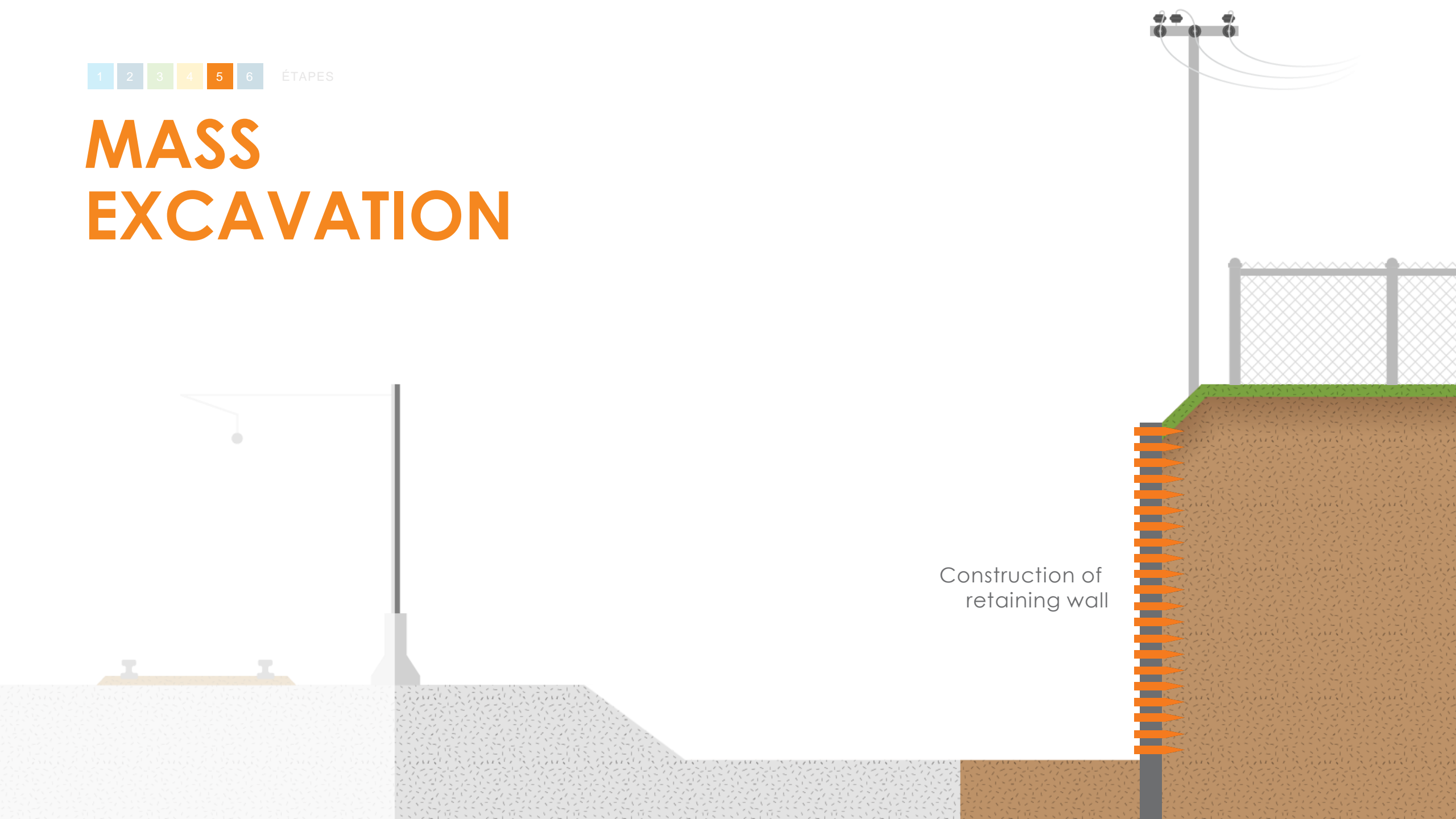
MASS EXCAVATION



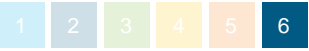
1 2 3 4 5 6

ÉTAPES

MASS EXCAVATION

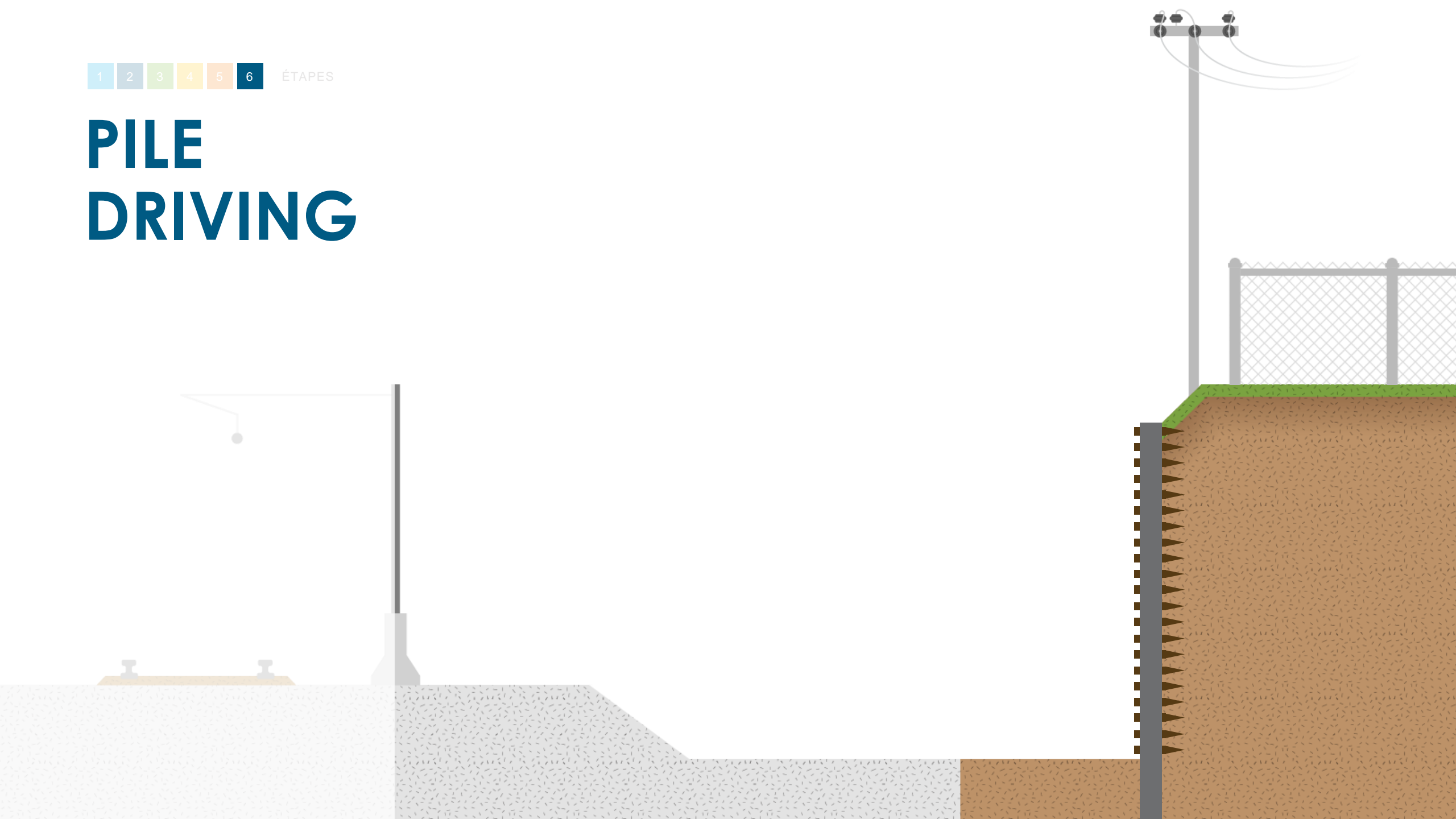


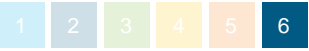
Construction of
retaining wall



ÉTAPES

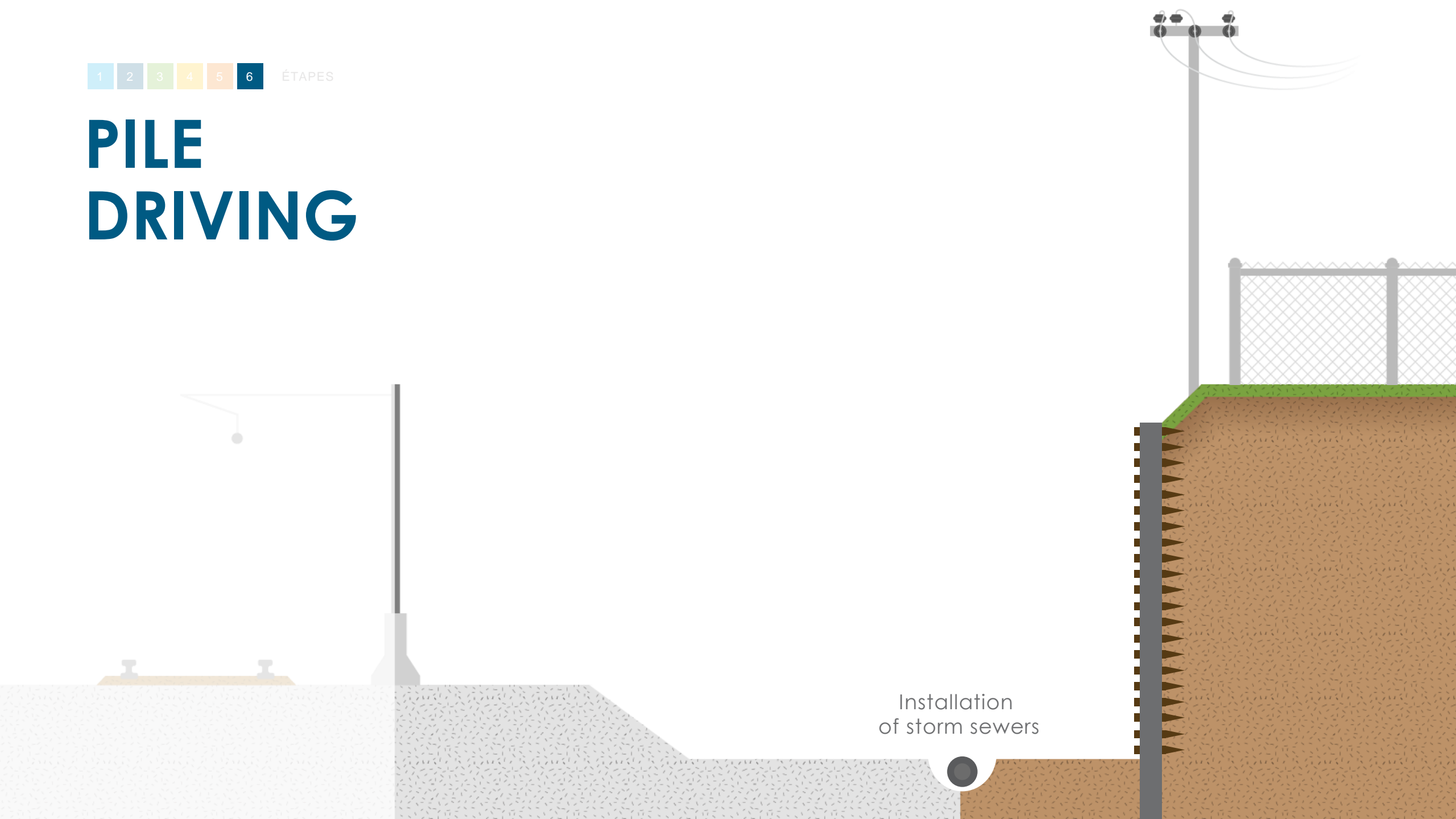
PILE DRIVING





ÉTAPES

PILE DRIVING

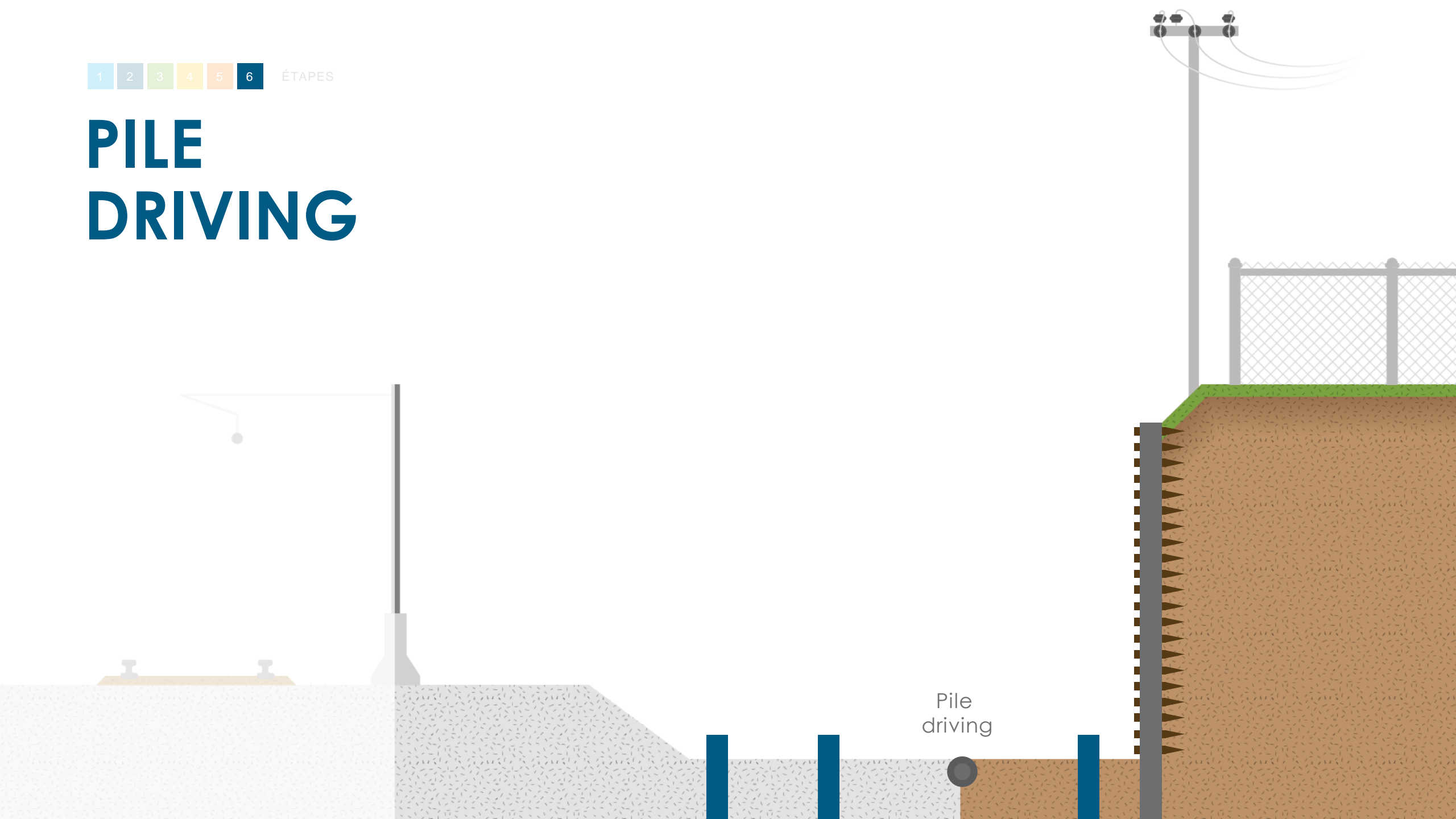


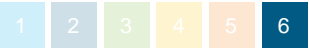
Installation
of storm sewers

- 1
- 2
- 3
- 4
- 5
- 6

ÉTAPES

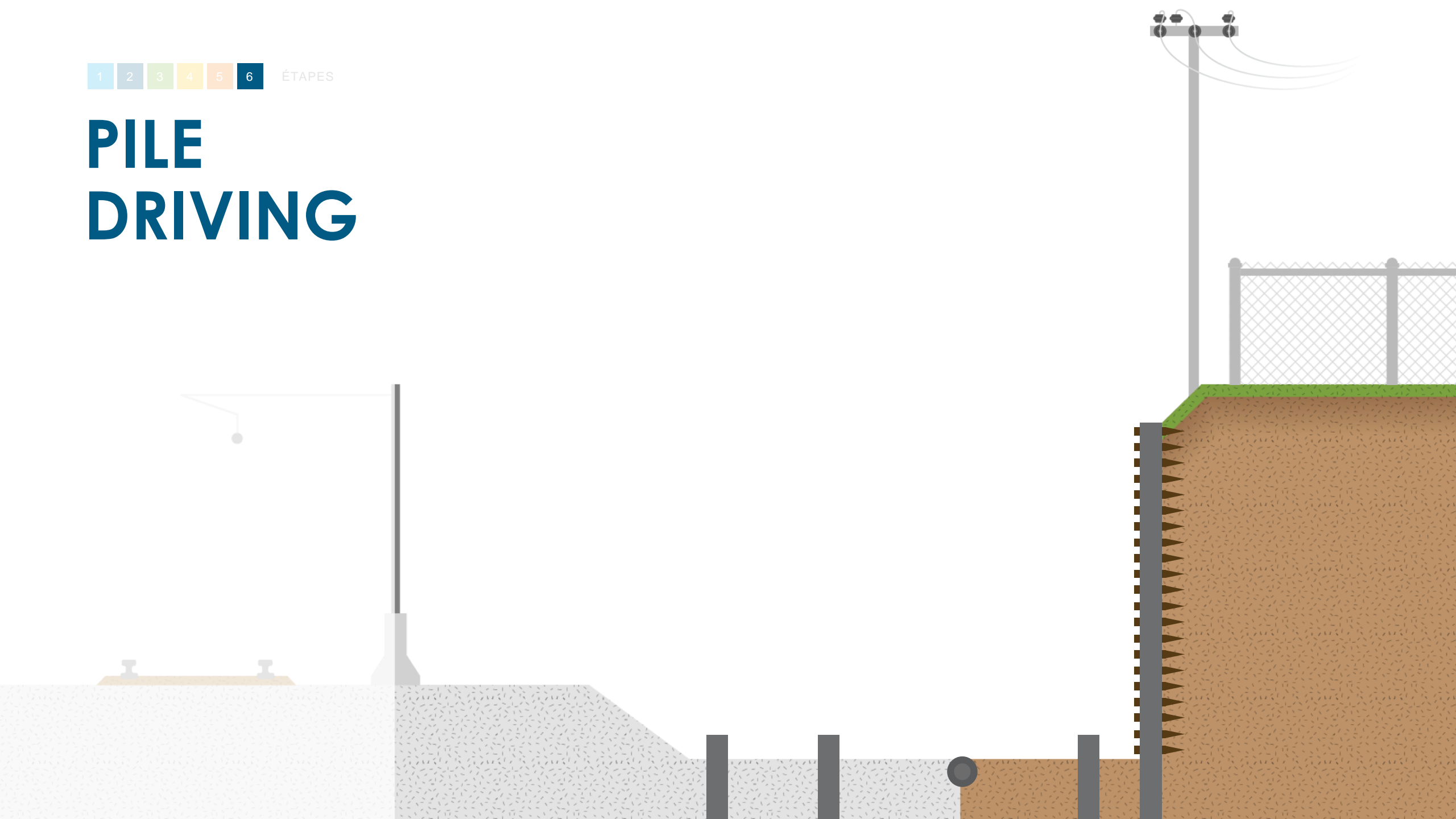
PILE DRIVING





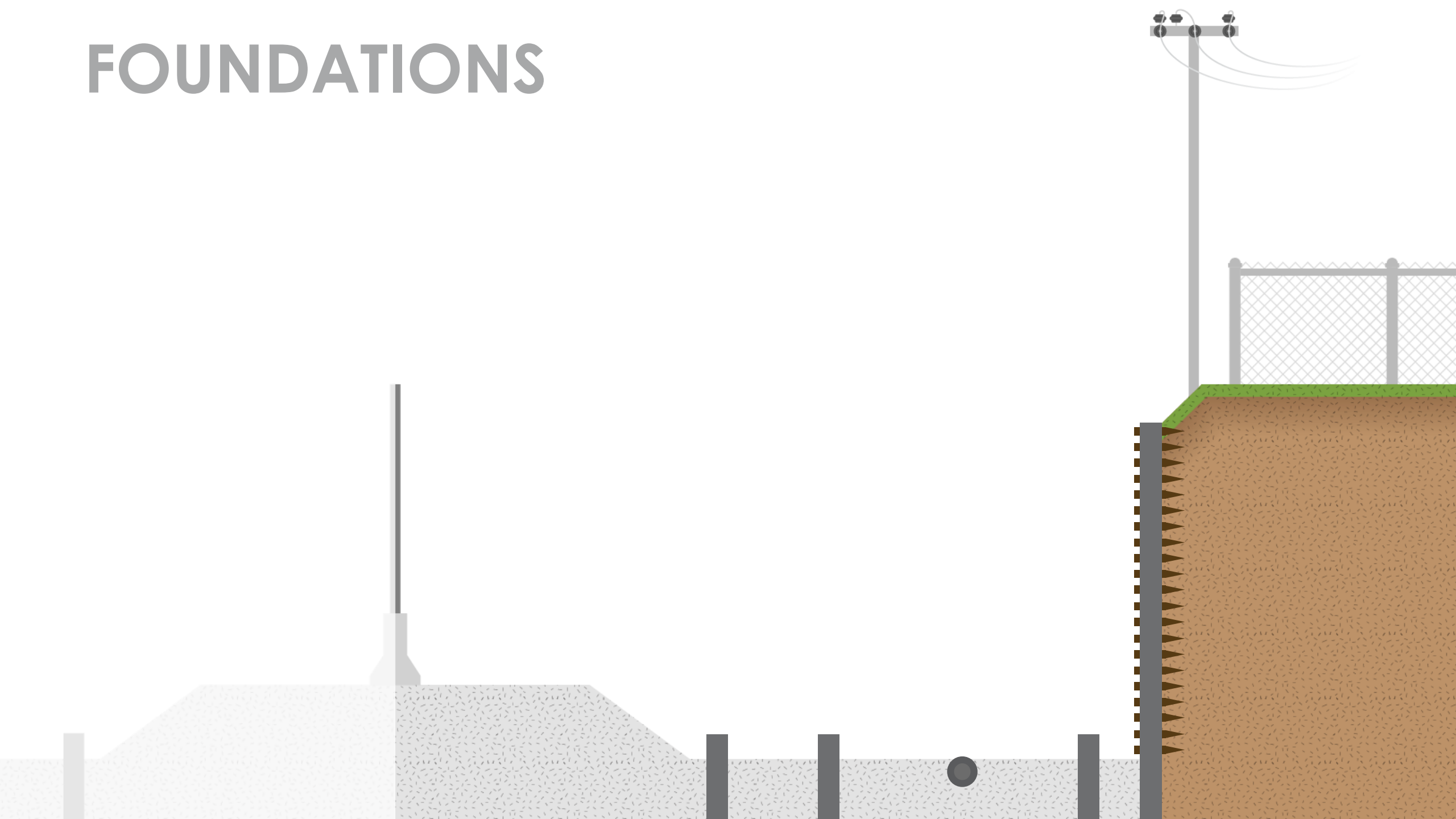
ÉTAPES

PILE DRIVING

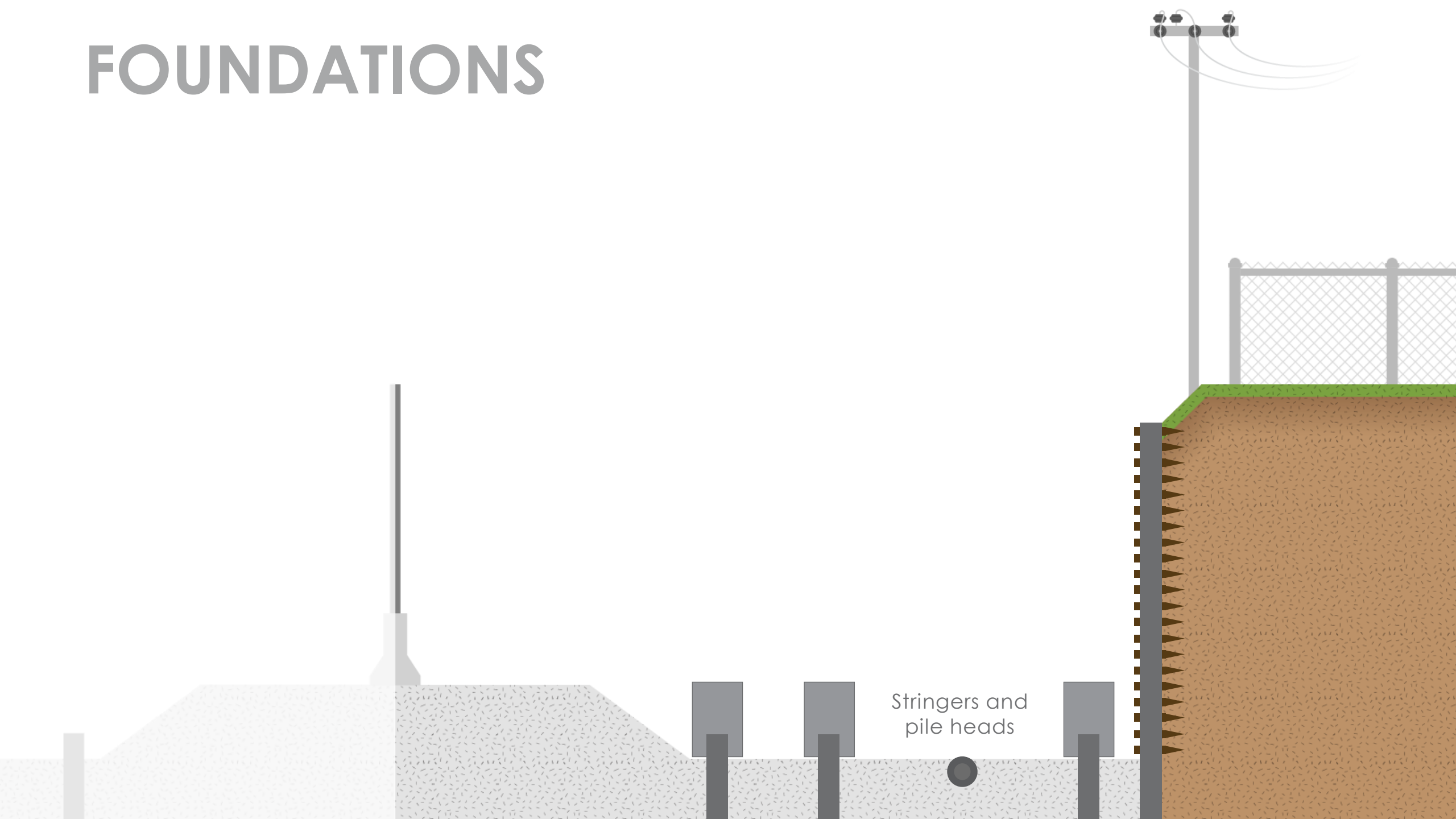


FOUNDATIONS AND STRUCTURES

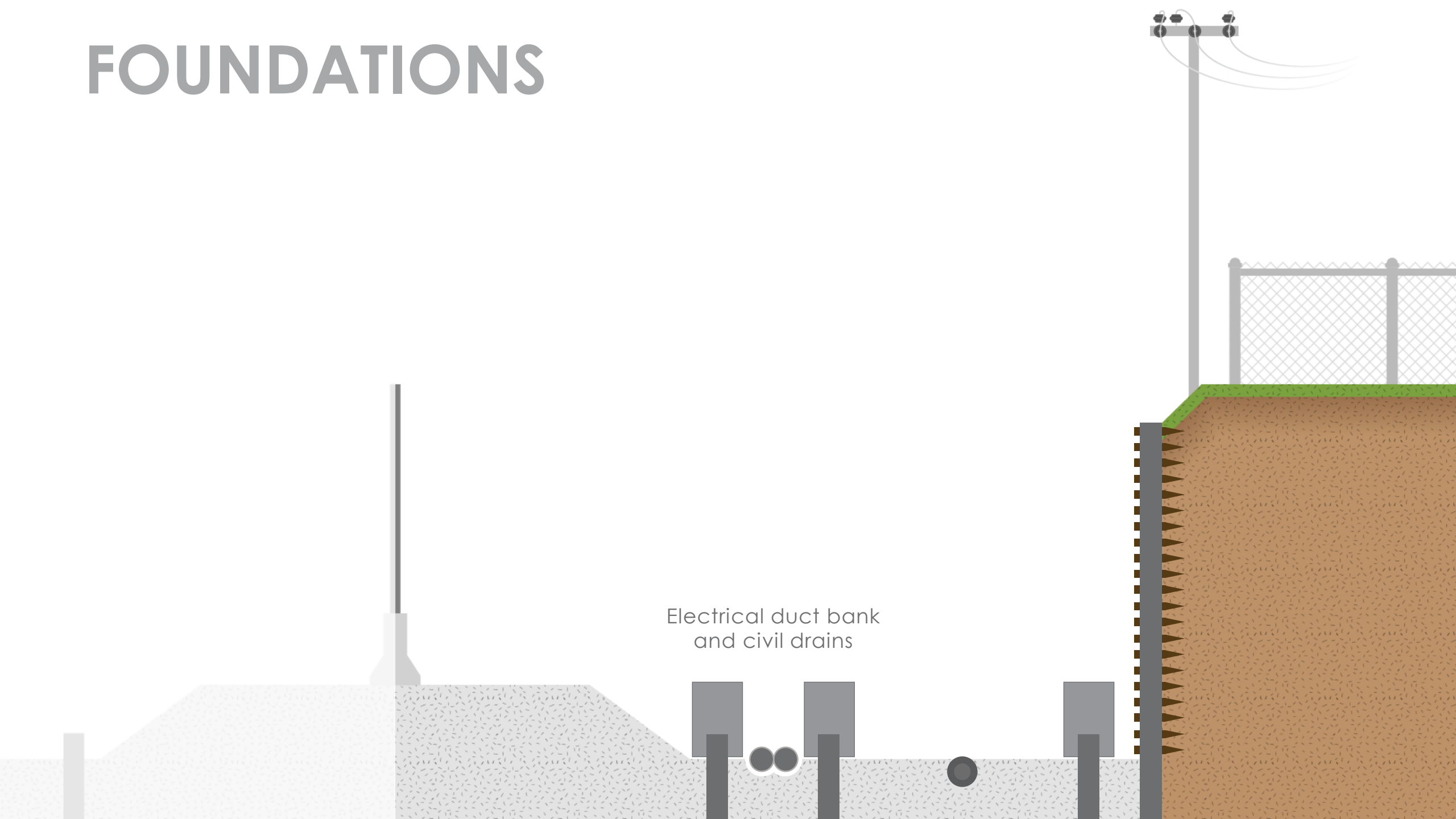
FOUNDATIONS



FOUNDATIONS

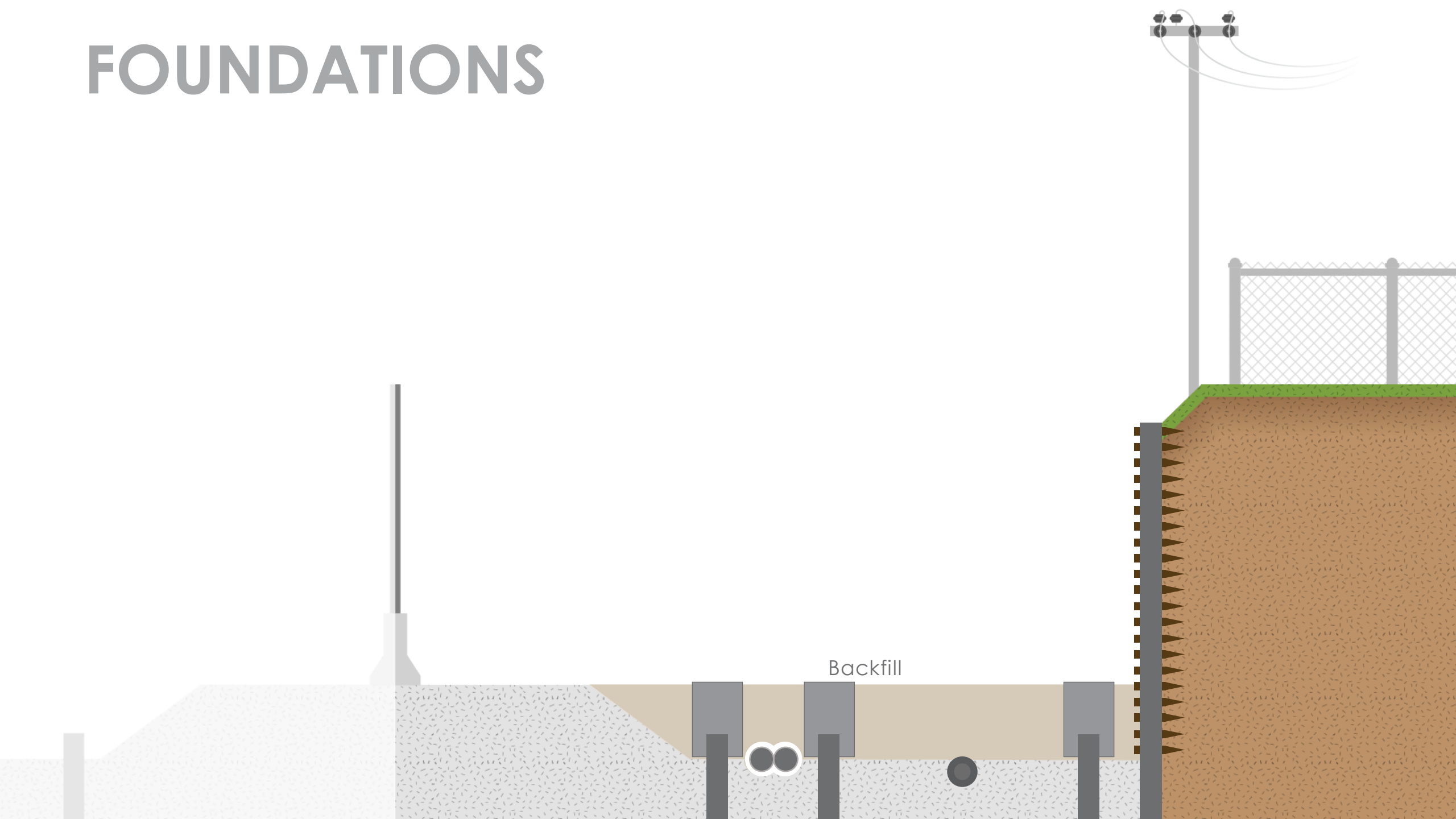


FOUNDATIONS

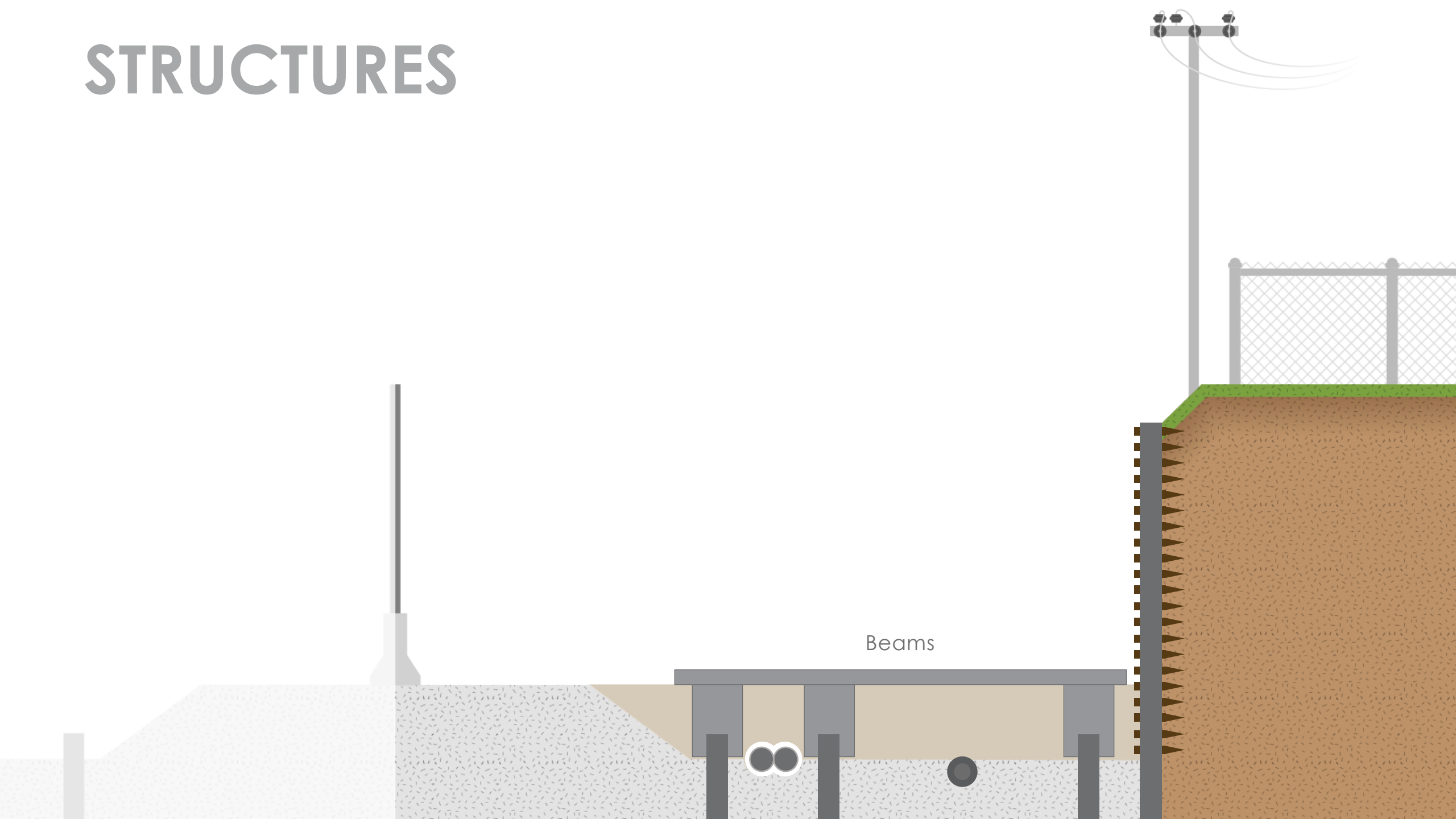


Electrical duct bank
and civil drains

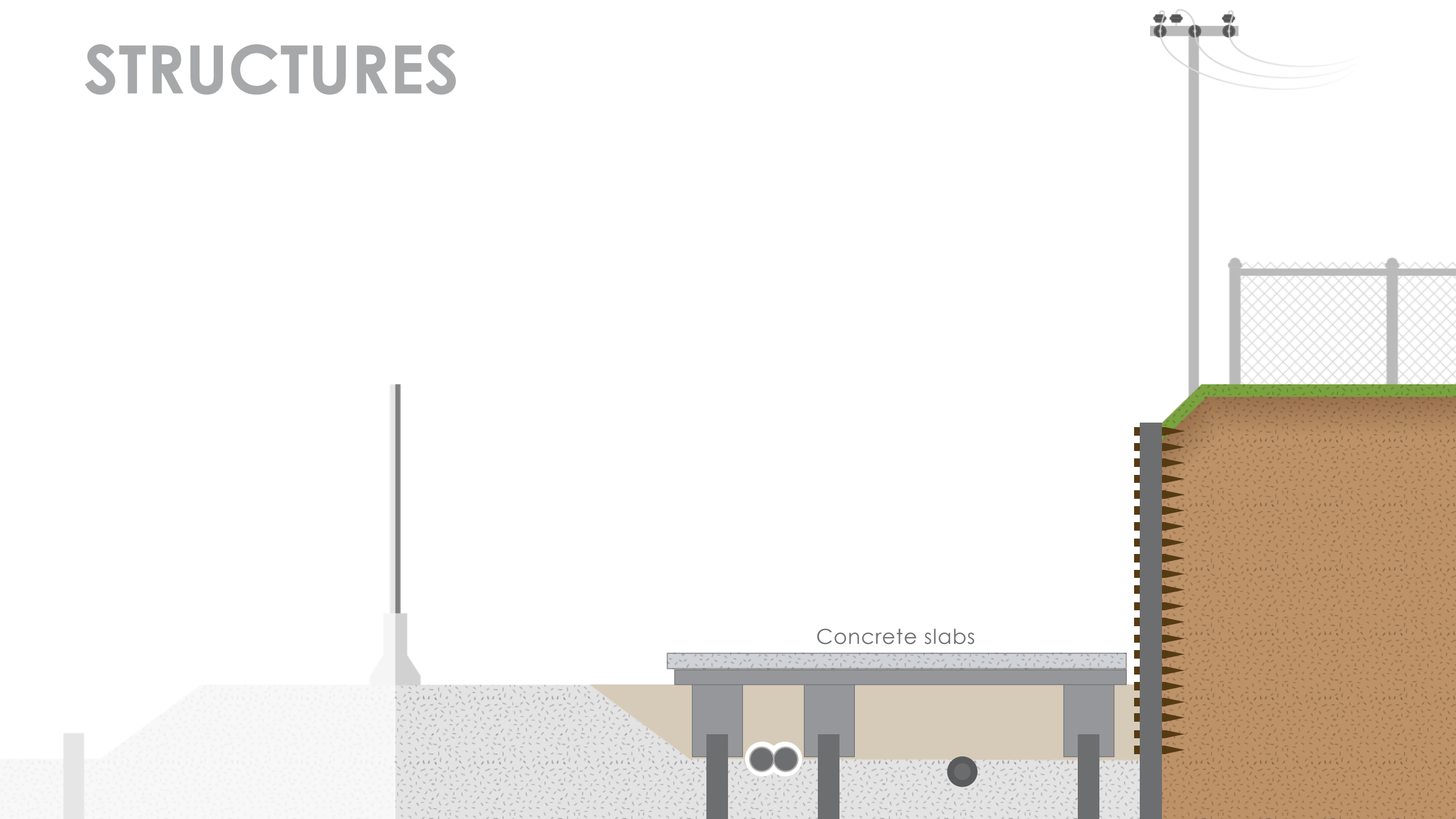
FOUNDATIONS



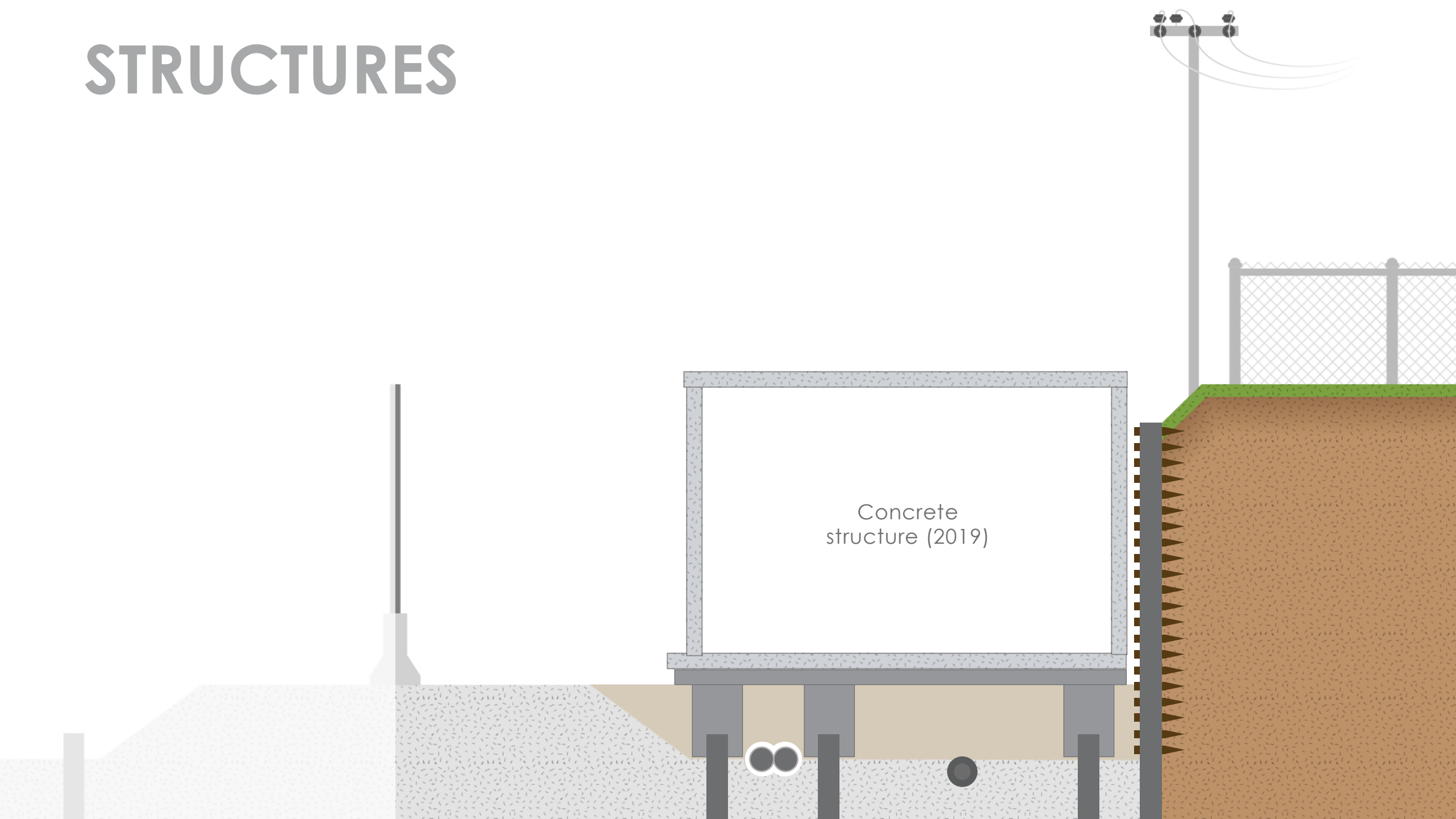
STRUCTURES



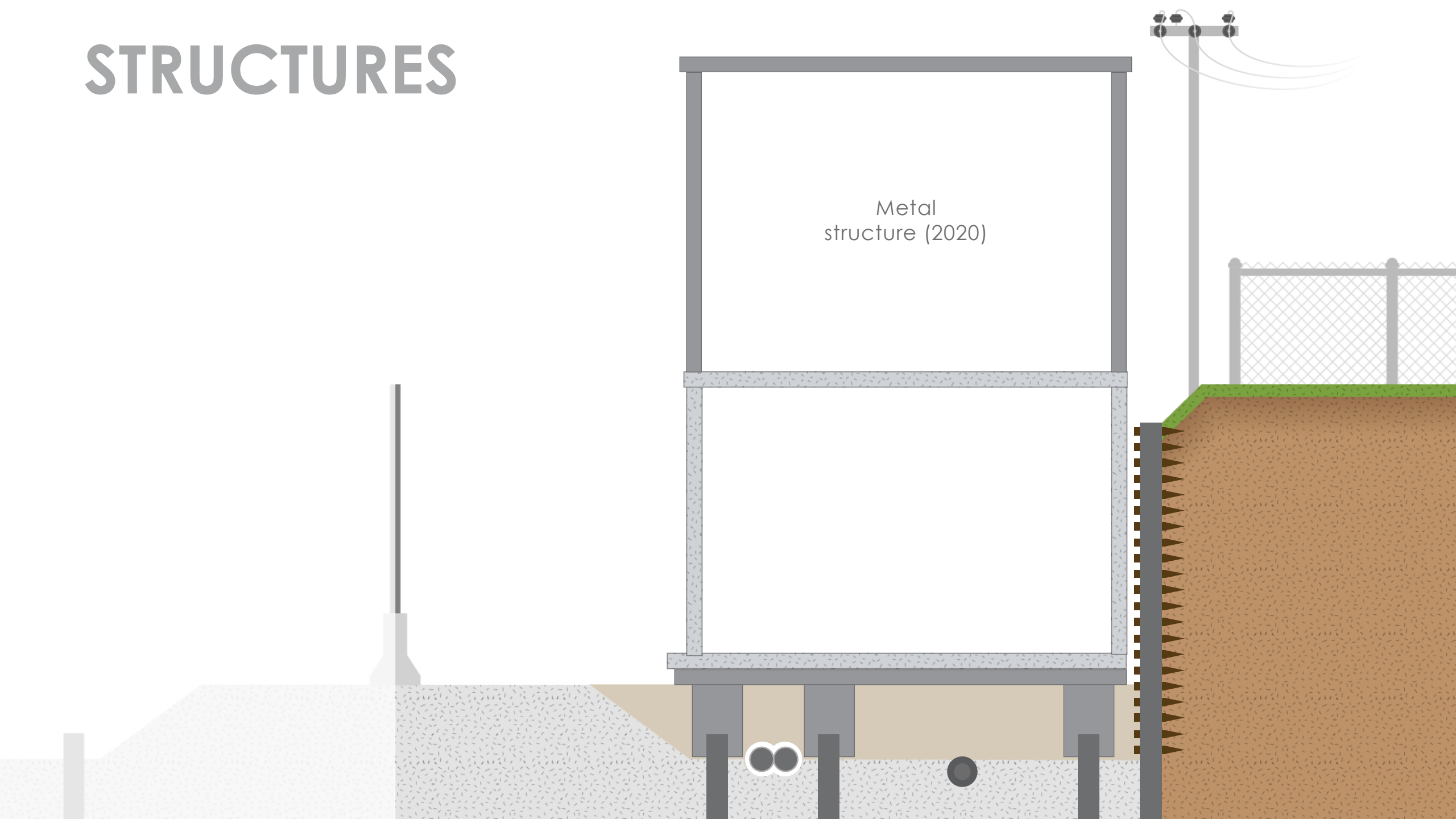
STRUCTURES



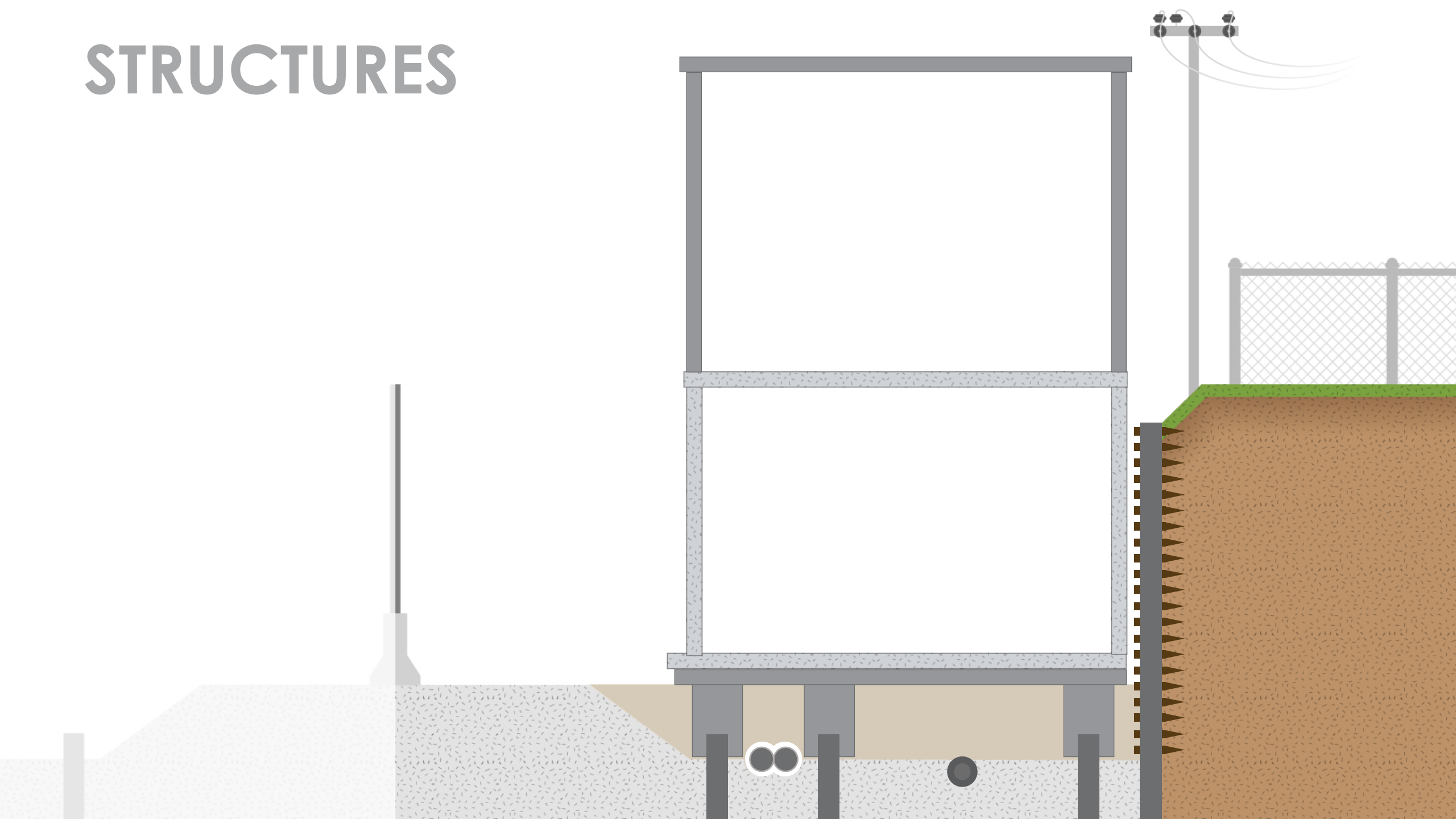
STRUCTURES



STRUCTURES



STRUCTURES



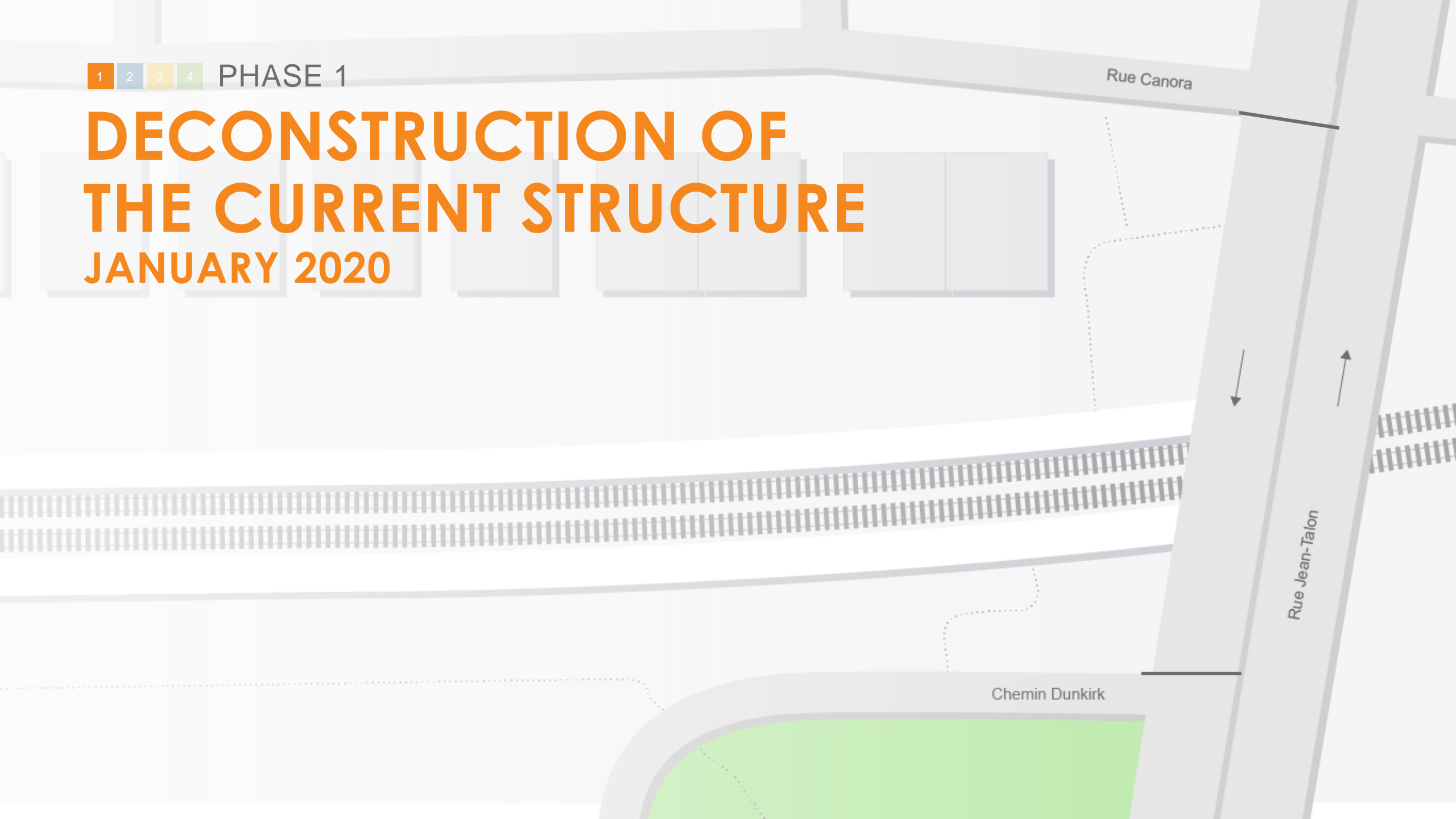
BRIDGE

FOUNDATIONS
AND STRUCTURES

1 2 3 4 PHASE 1

DECONSTRUCTION OF THE CURRENT STRUCTURE

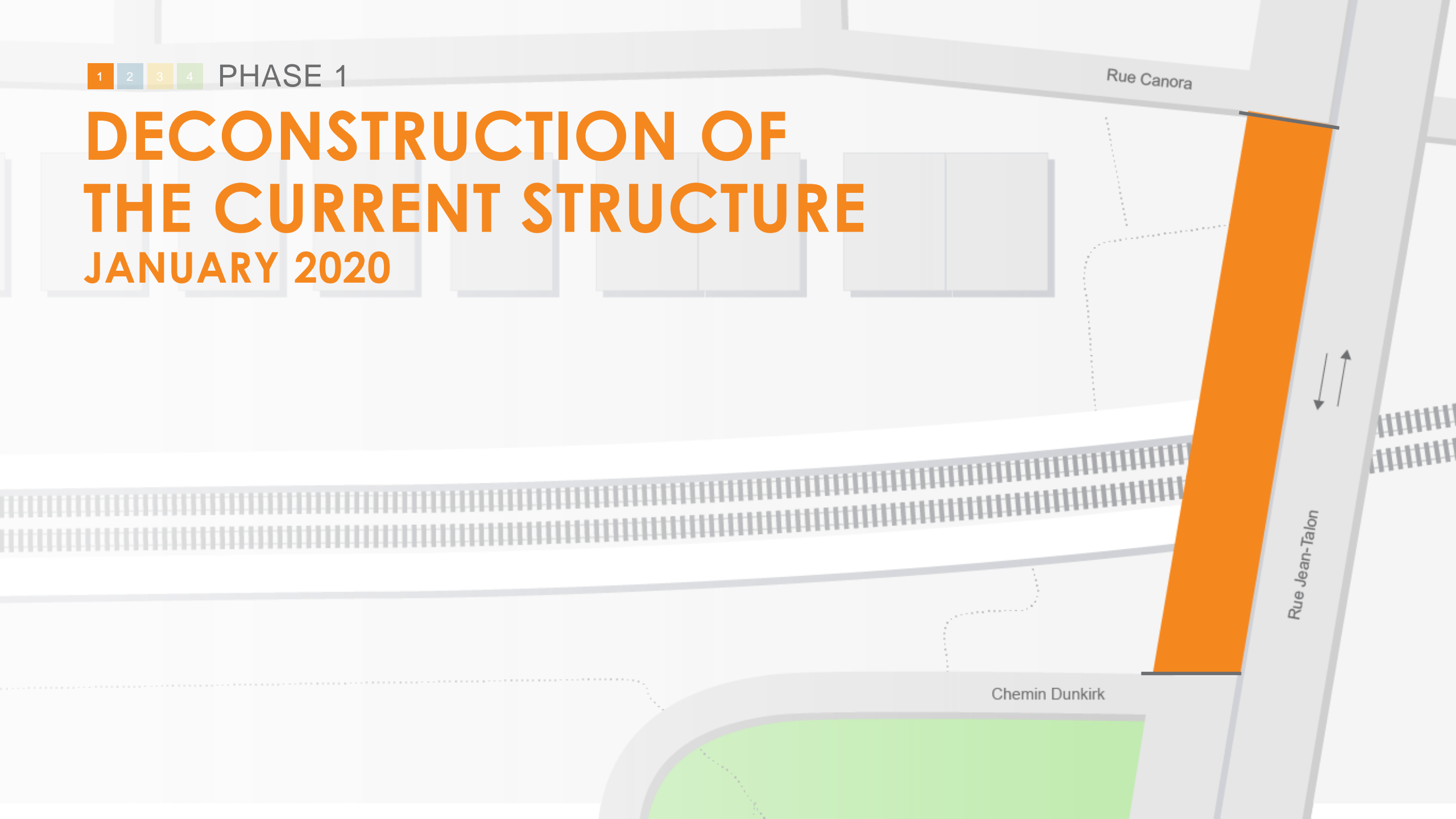
JANUARY 2020



1 2 3 4 PHASE 1

DECONSTRUCTION OF THE CURRENT STRUCTURE

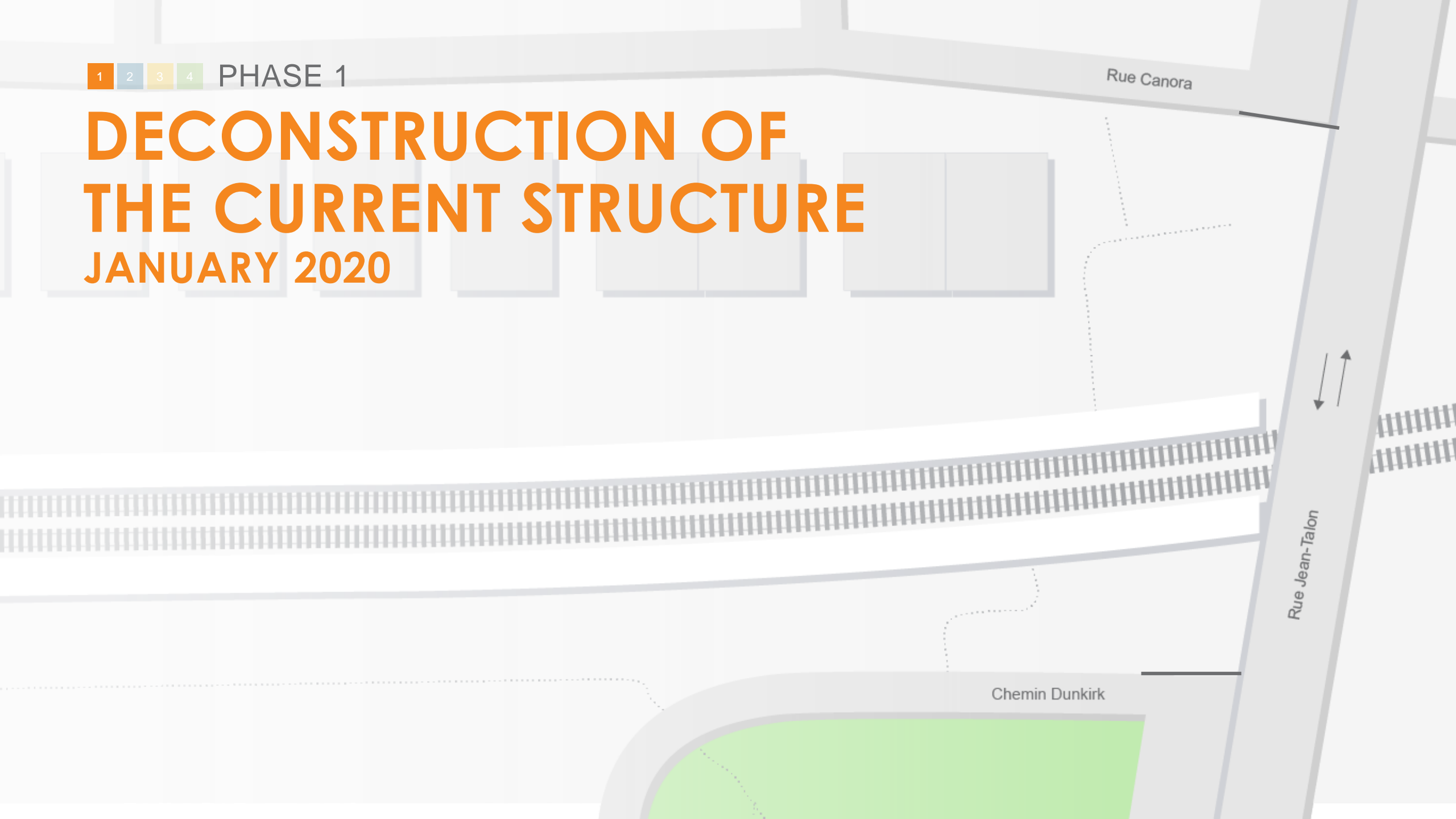
JANUARY 2020



1 2 3 4 PHASE 1

DECONSTRUCTION OF THE CURRENT STRUCTURE

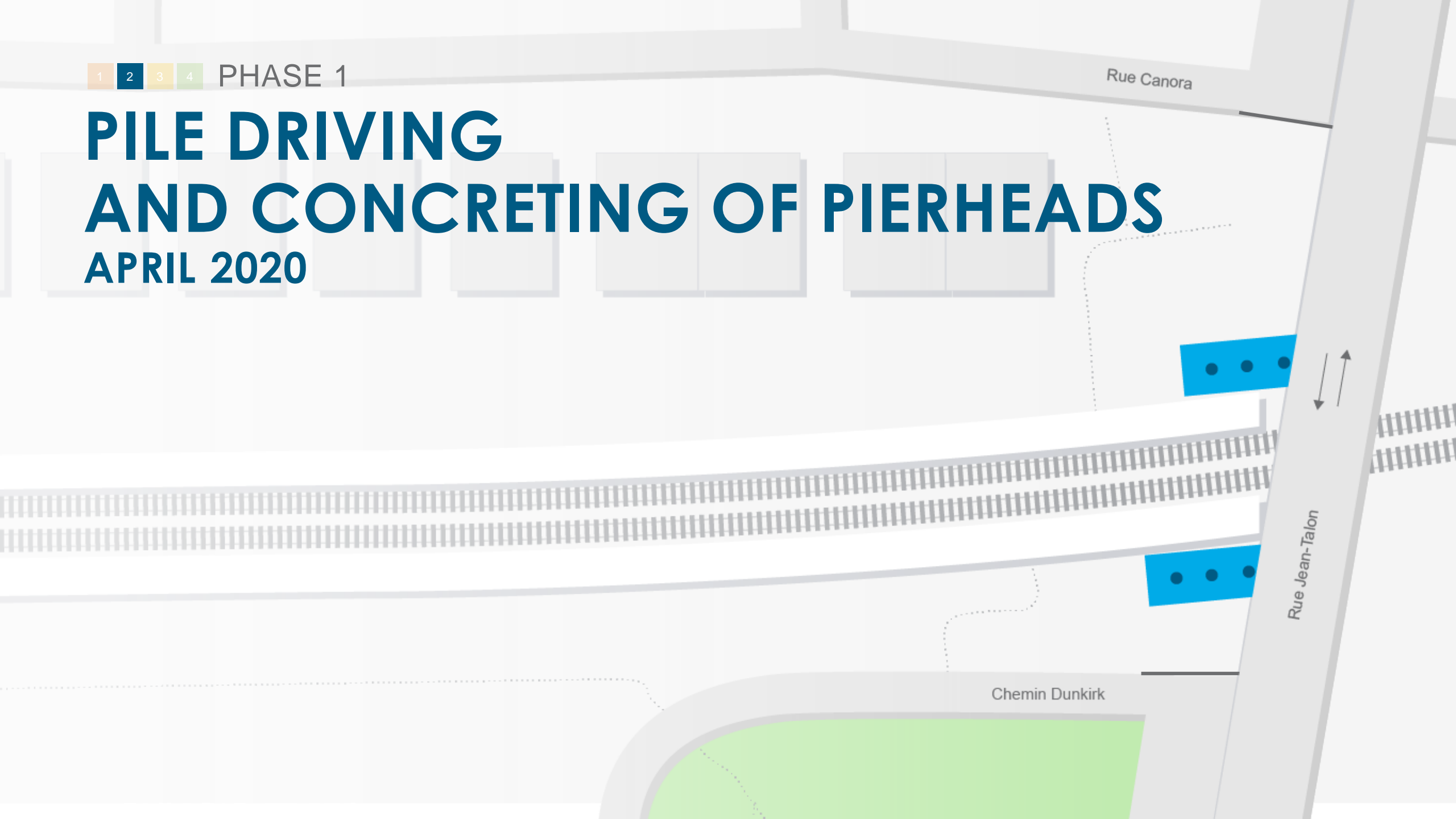
JANUARY 2020



1 2 3 4 PHASE 1

PILE DRIVING AND CONCRETING OF PIERHEADS

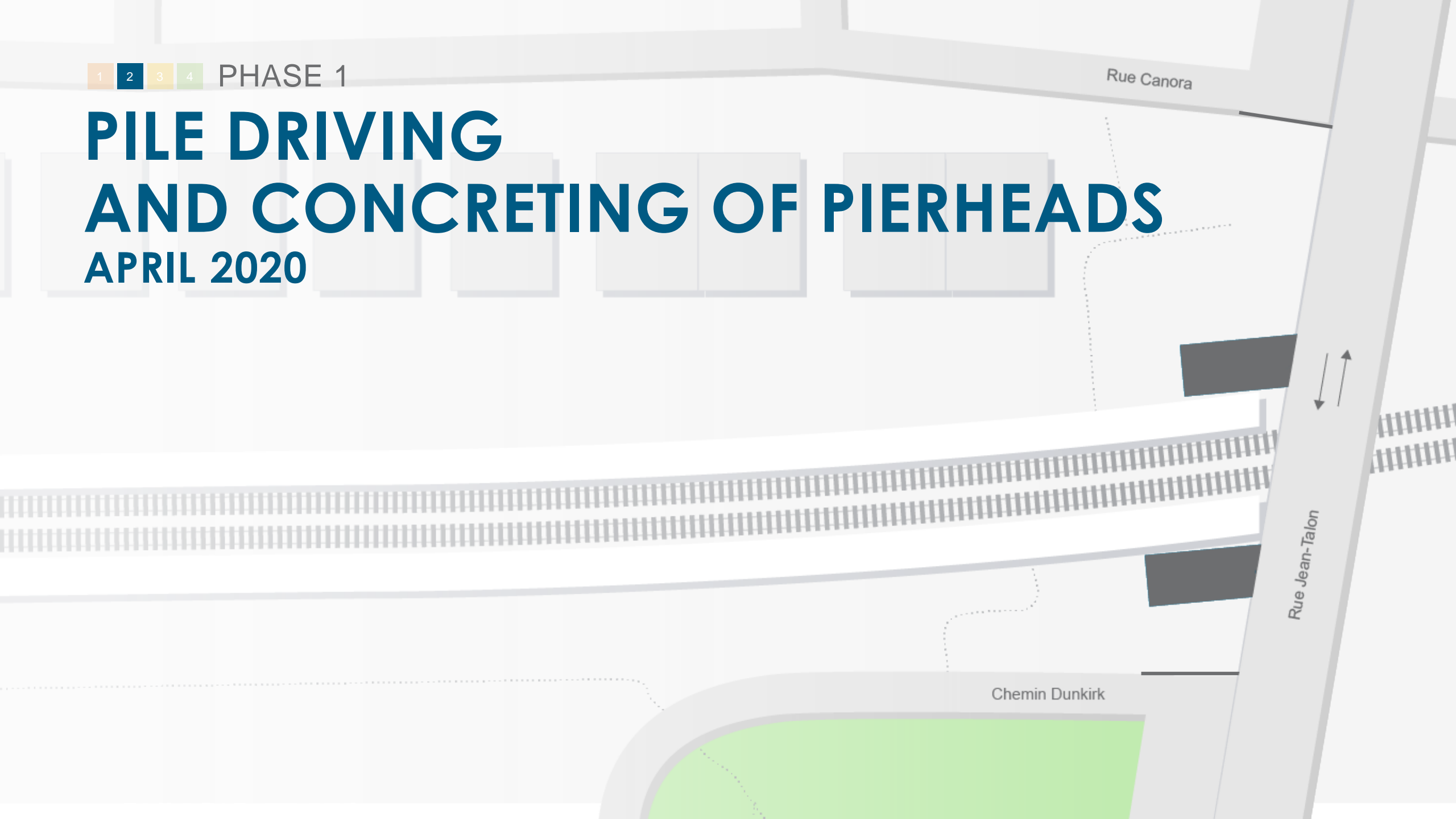
APRIL 2020



1 2 3 4 PHASE 1

PILE DRIVING AND CONCRETING OF PIERHEADS

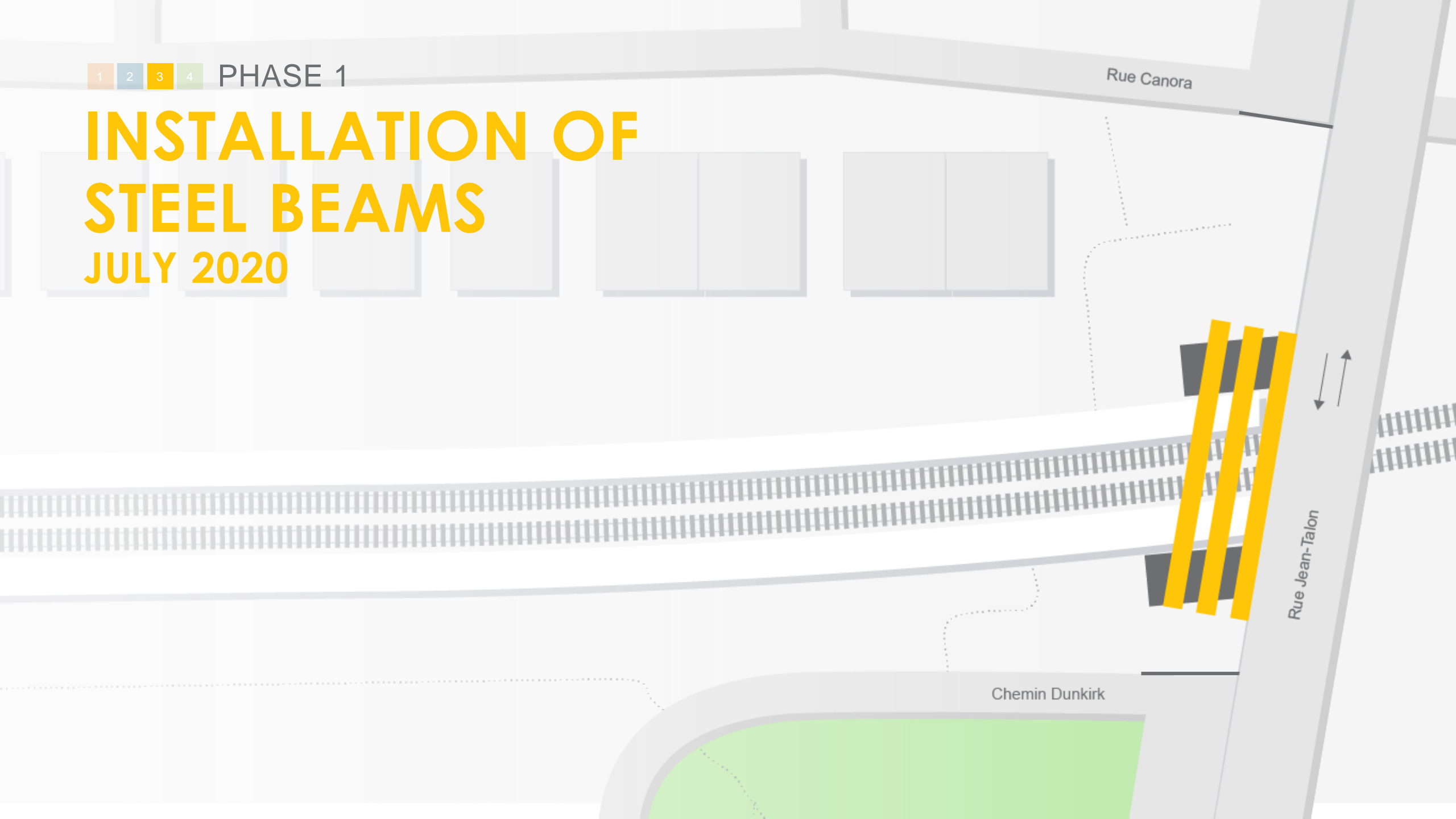
APRIL 2020



1 2 3 4 PHASE 1

INSTALLATION OF STEEL BEAMS

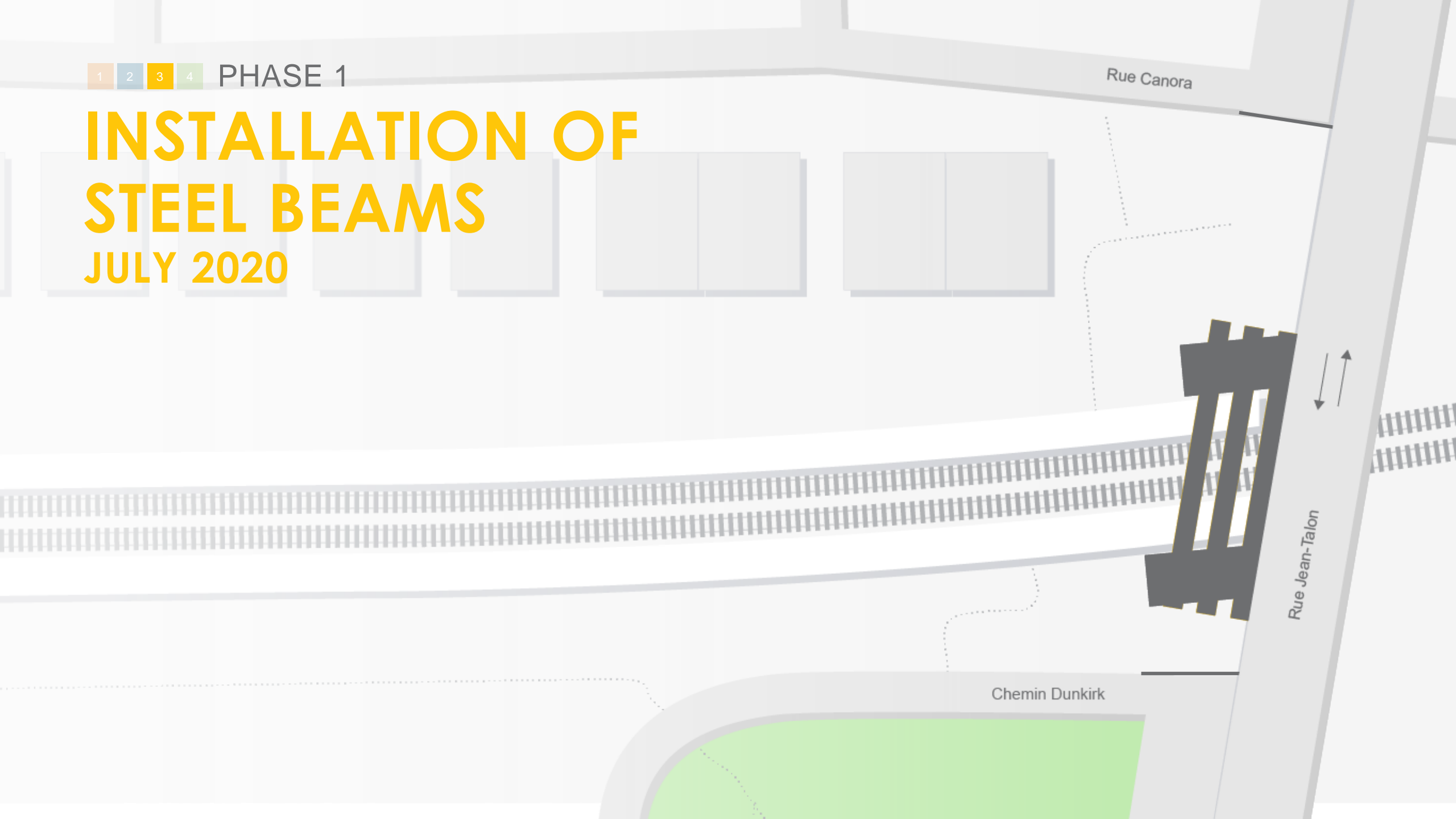
JULY 2020



1 2 3 4 PHASE 1

INSTALLATION OF STEEL BEAMS

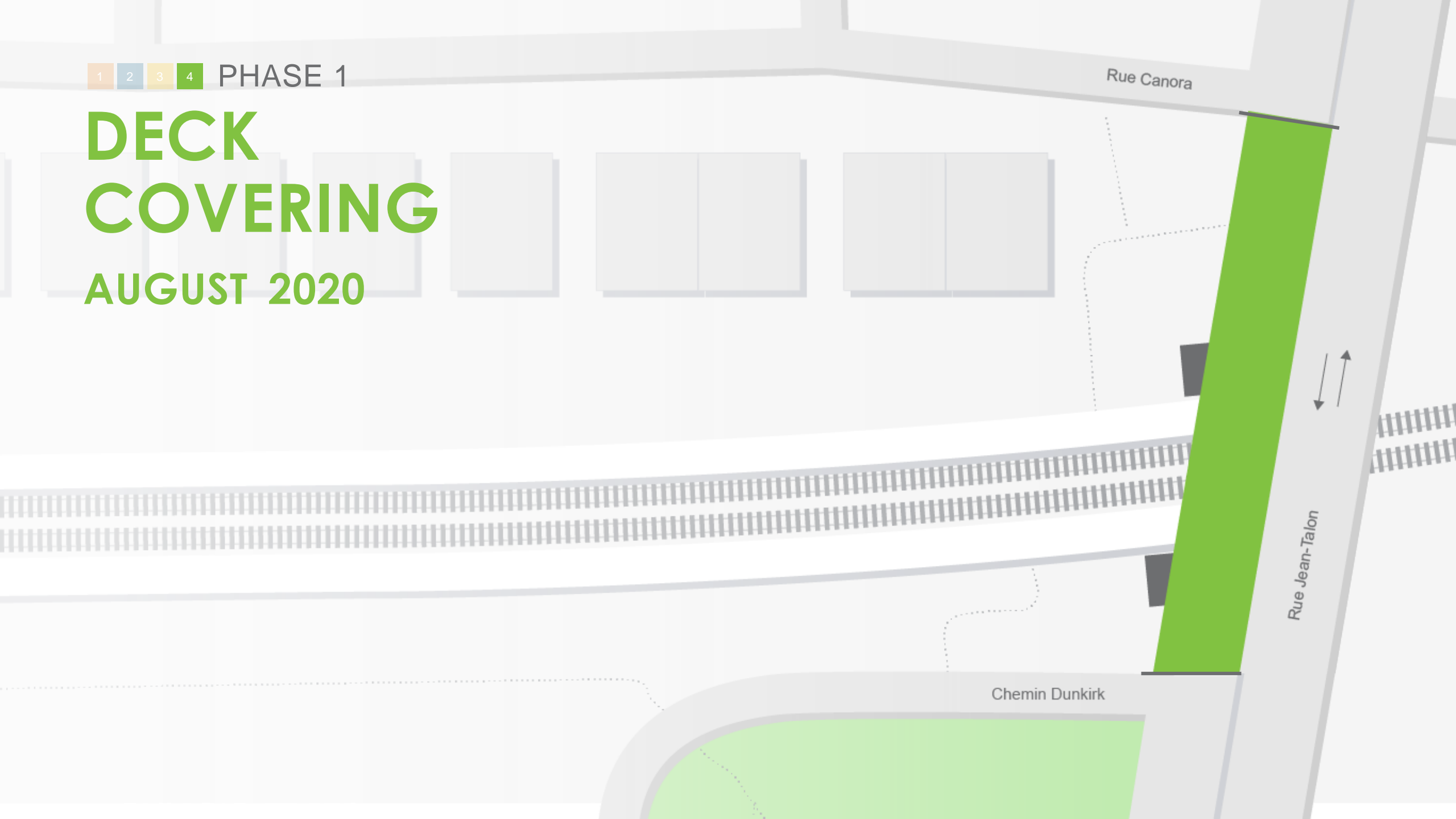
JULY 2020



1 2 3 4 PHASE 1

DECK COVERING

AUGUST 2020



1 2 3 4 PHASE 1

DECK COVERING

AUGUST 2020



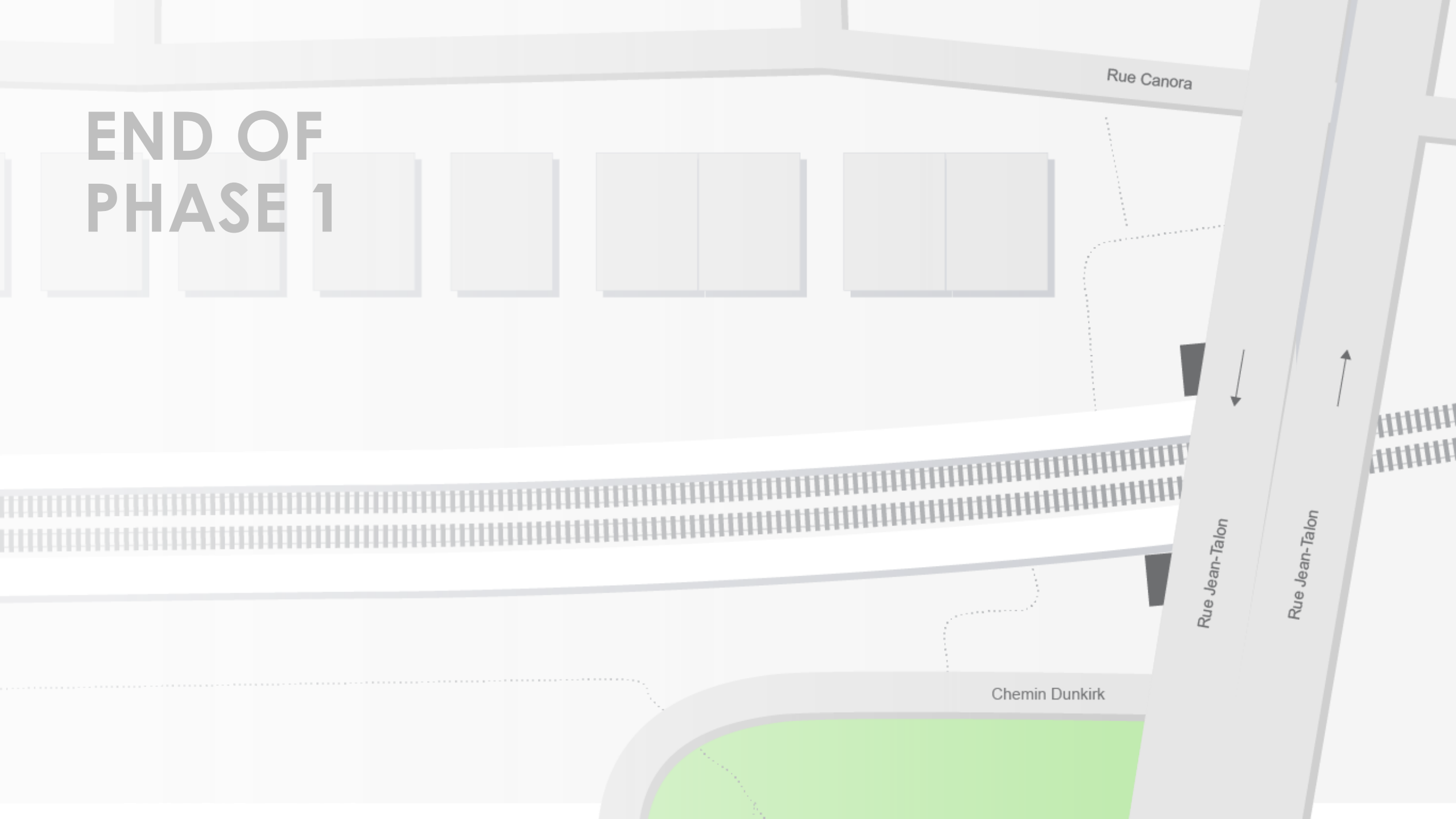
END OF PHASE 1

Rue Canora

Rue Jean-Talon

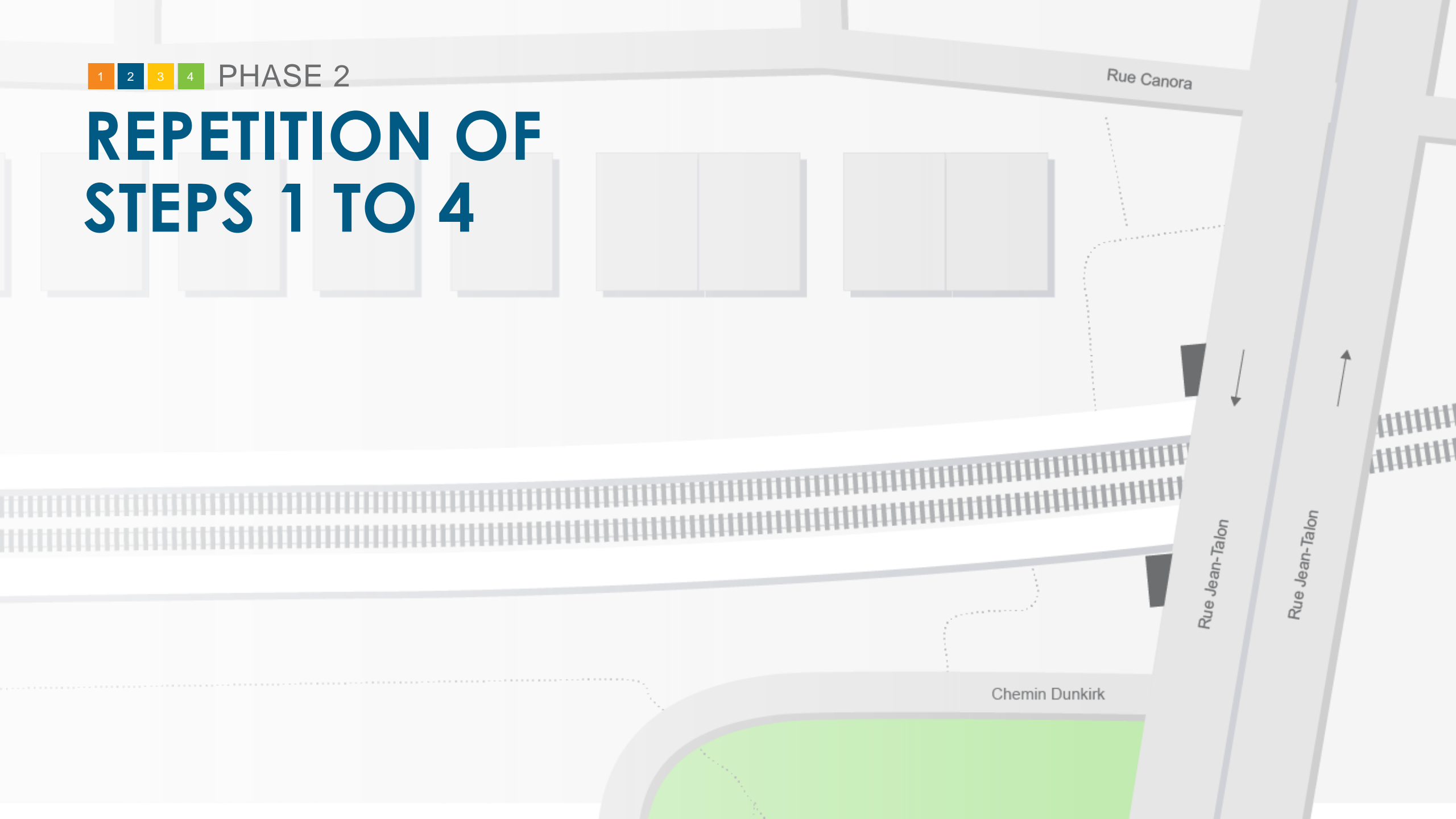
Rue Jean-Talon

Chemin Dunkirk



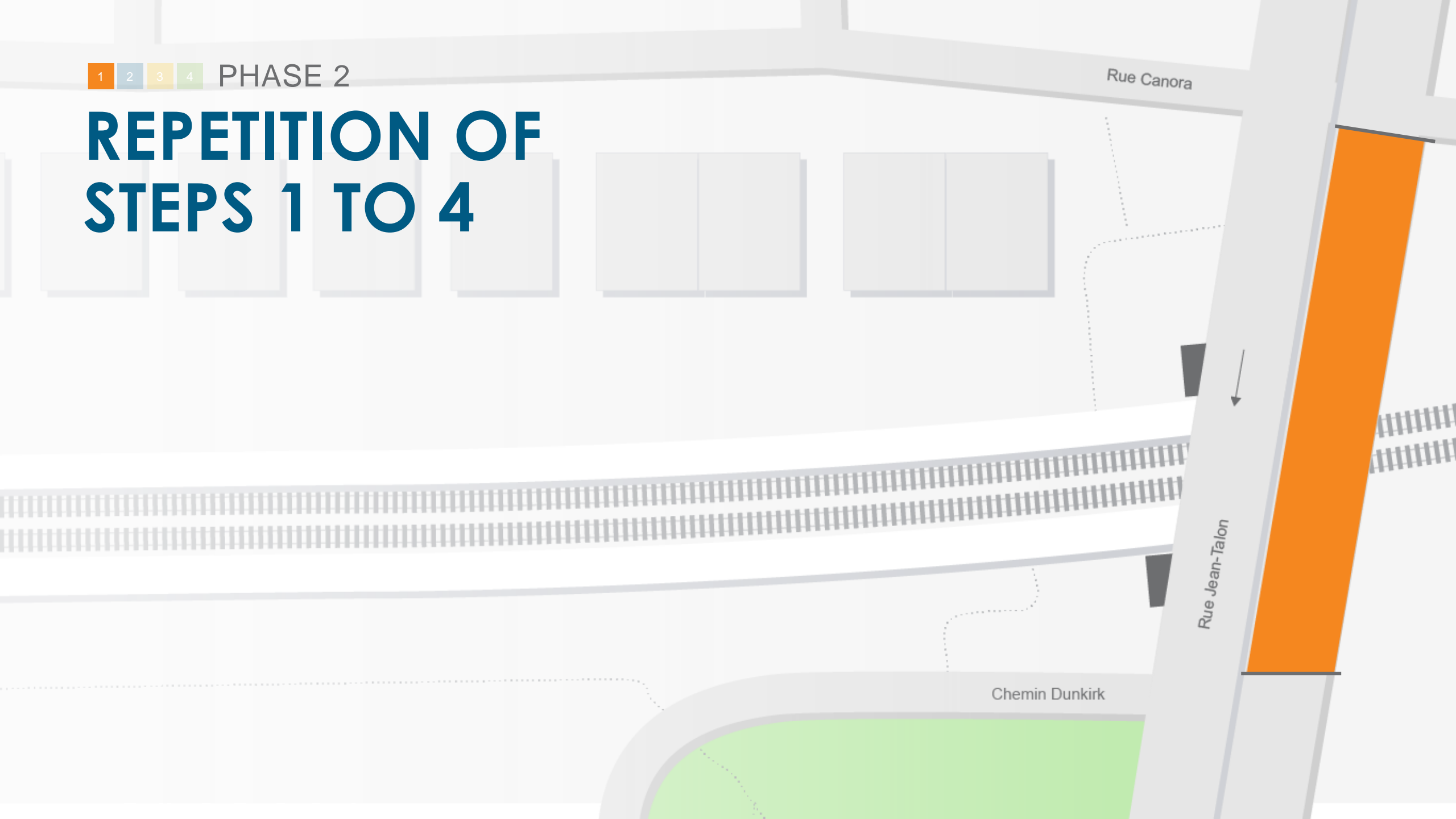
1 2 3 4 PHASE 2

REPETITION OF STEPS 1 TO 4



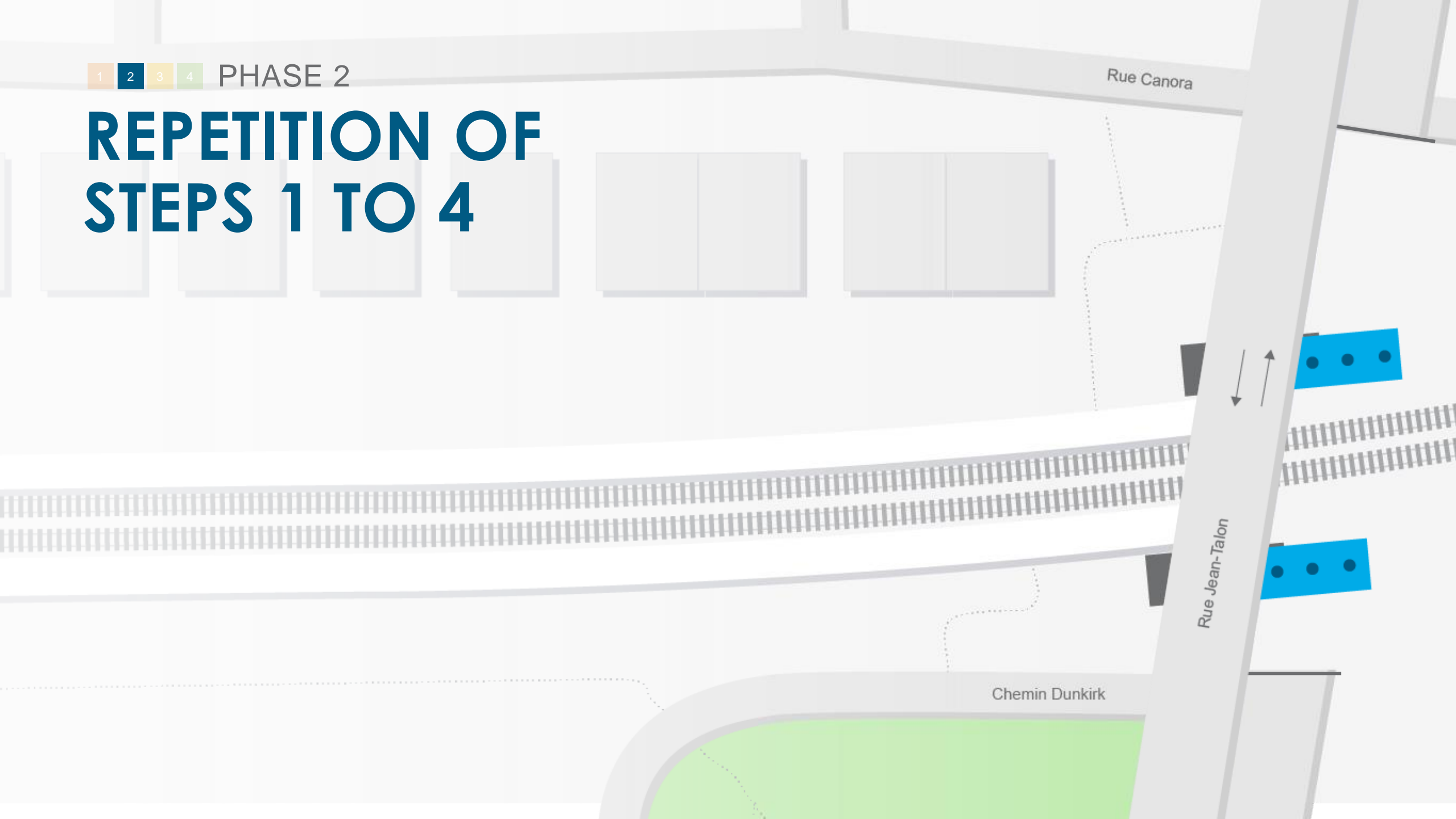
1 2 3 4 PHASE 2

REPETITION OF STEPS 1 TO 4



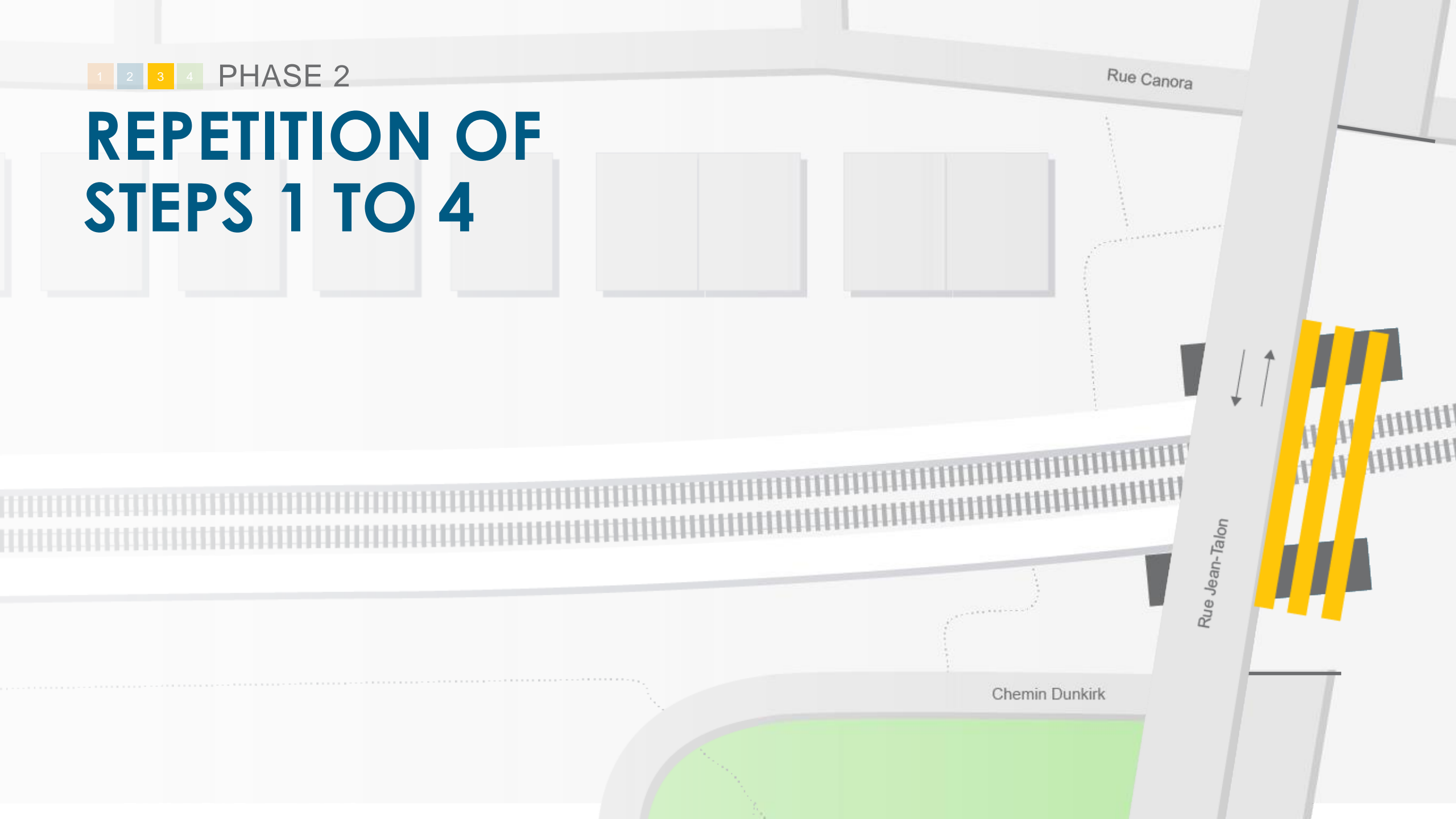
1 2 3 4 PHASE 2

REPETITION OF STEPS 1 TO 4



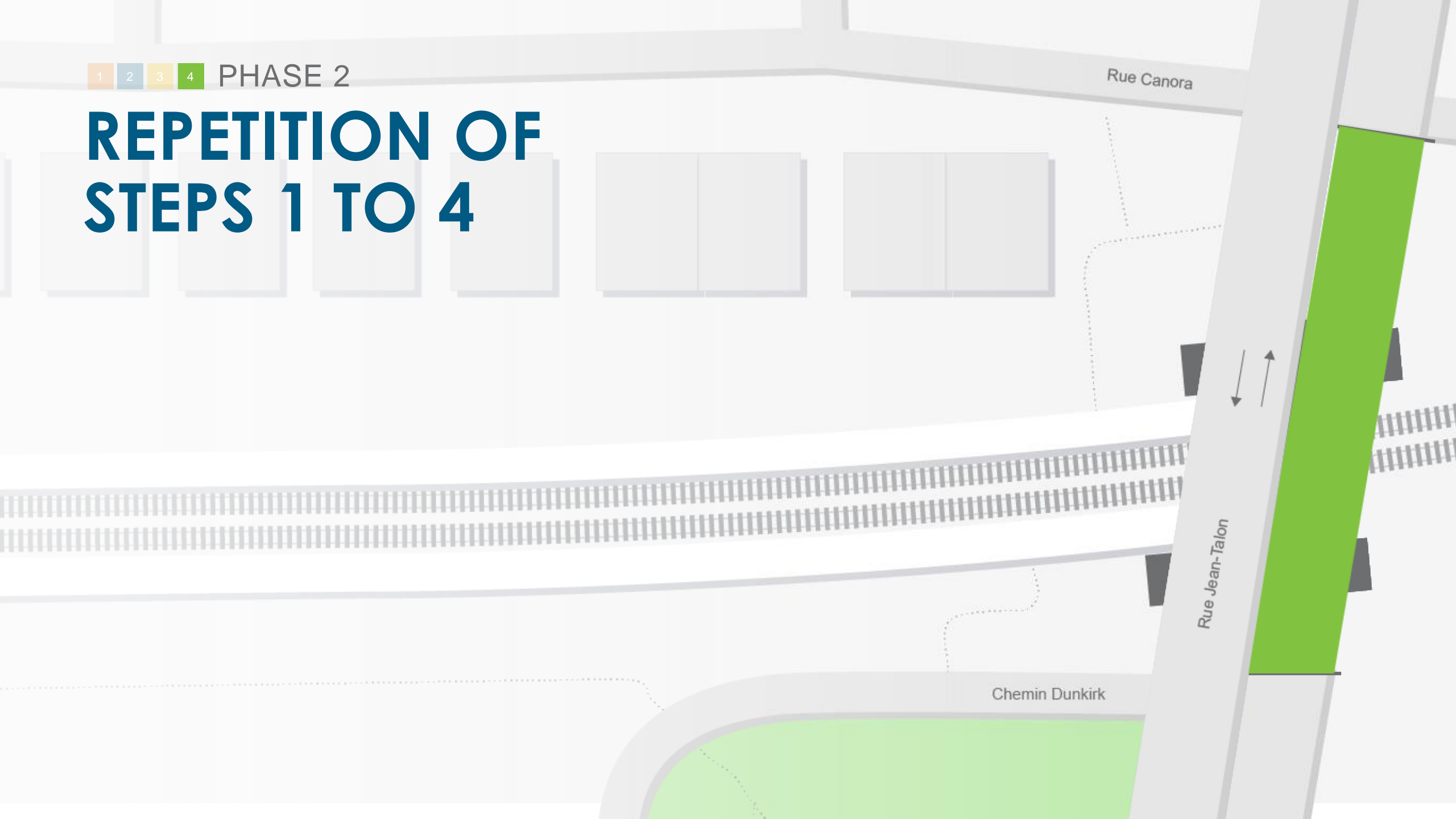
1 2 3 4 PHASE 2

REPETITION OF STEPS 1 TO 4



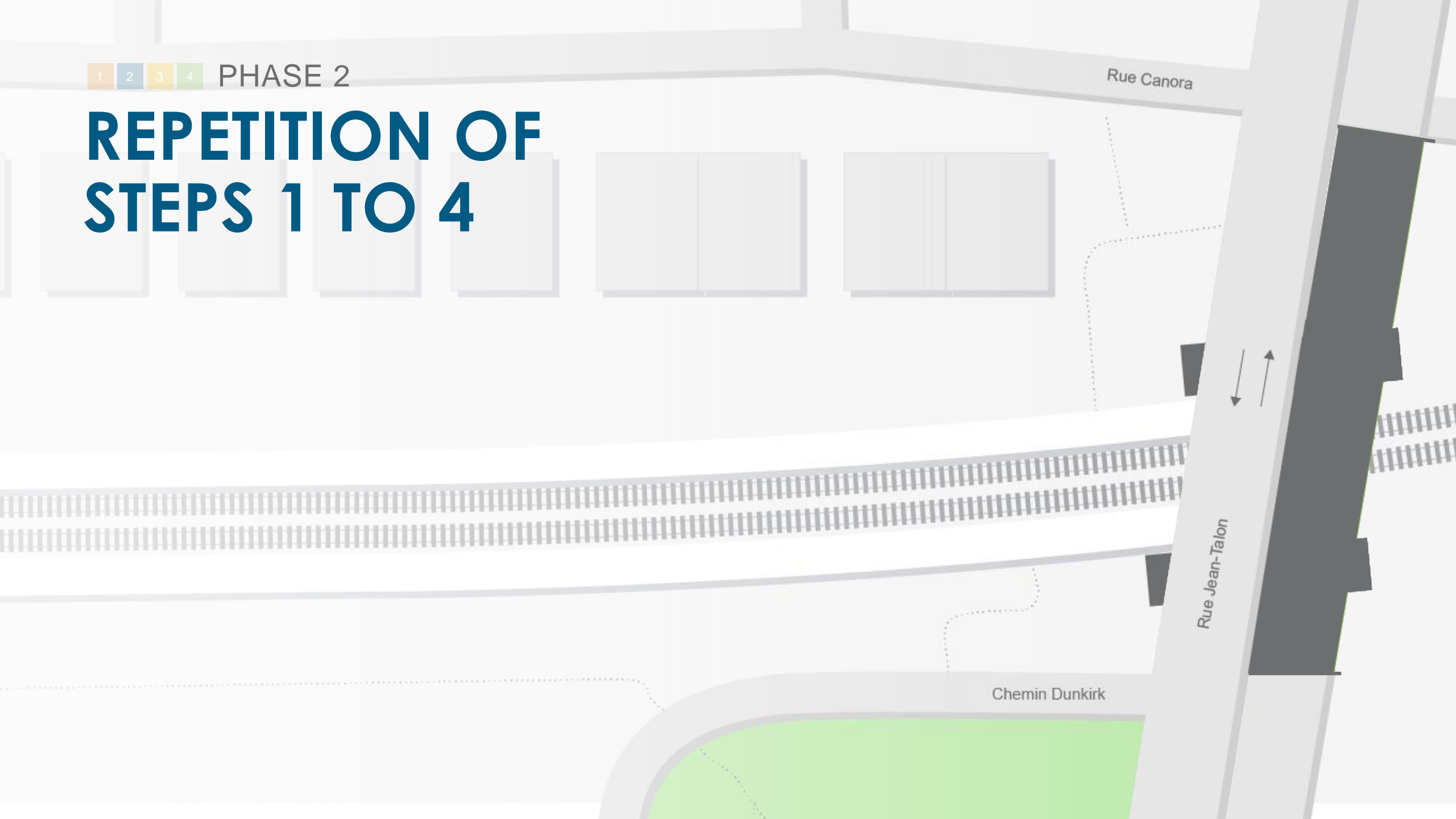
1 2 3 4 PHASE 2

REPETITION OF STEPS 1 TO 4



1 2 3 4 PHASE 2

REPETITION OF STEPS 1 TO 4



END OF
WORK

Rue Canora

Rue Jean-Talon

Rue Jean-Talon

Chemin Dunkirk

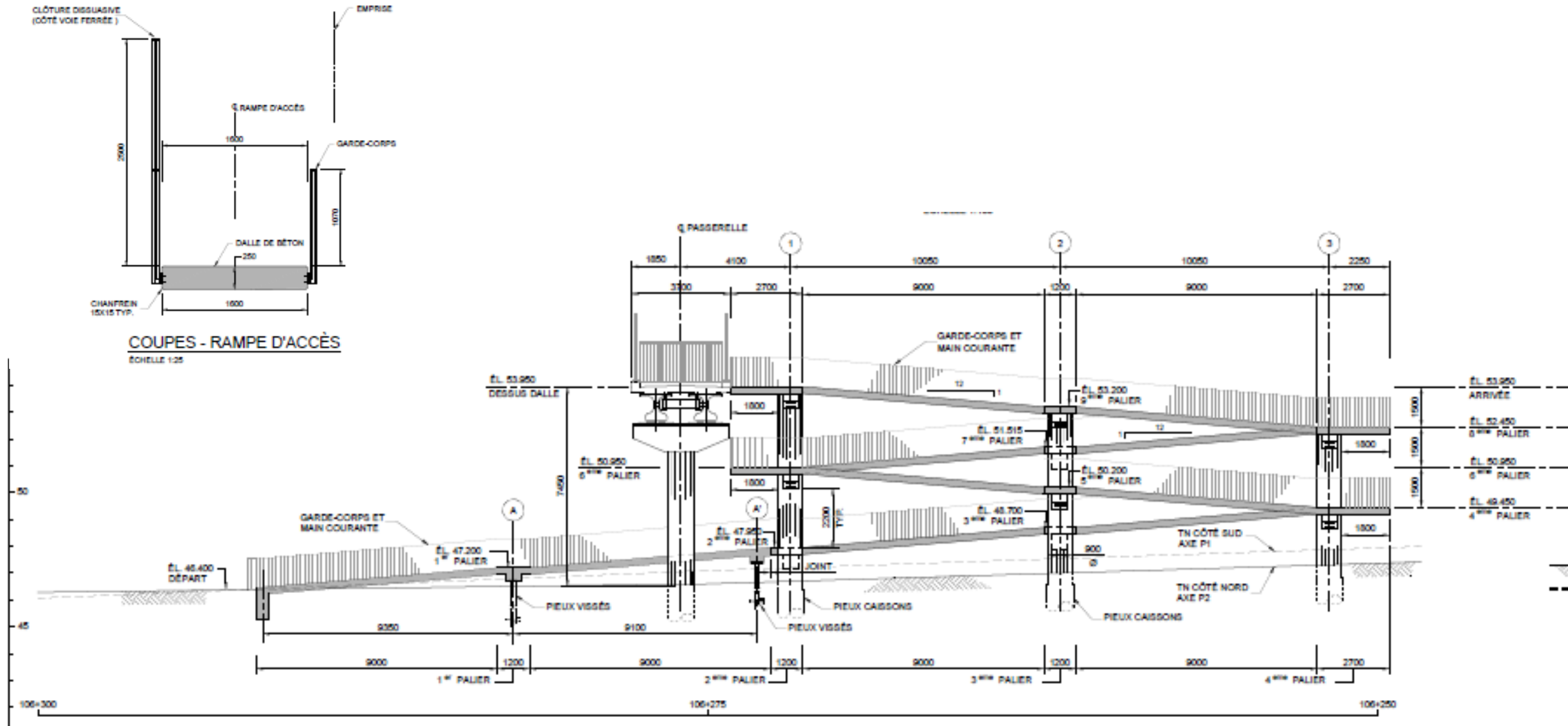
CORNWALL BRIDGE

Same work sequence
Single phase
Circulation on Laird Boul.

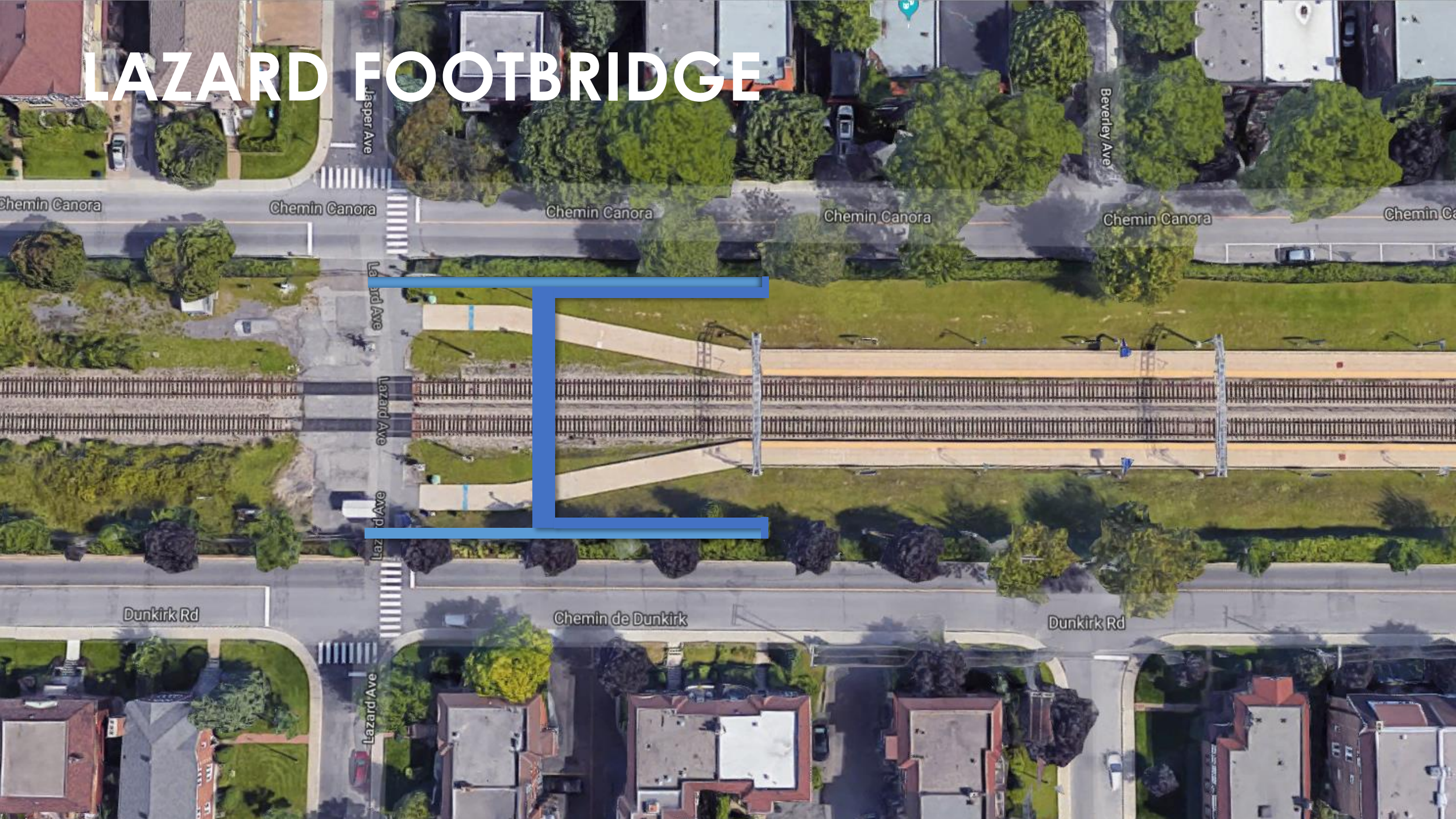


**LAZARD
FOOTBRIDGE**

LAZARD FOOTBRIDGE



LAZARD FOOTBRIDGE





Question & answer period



Thank you!

Next meeting:

**End of August – date to
be confirmed (Doodle)**

Annunciation Parish

