



V E R S A I L L E S H O T E L

B A S E M E N T C O N S T R U C T I O N

&

S L A B R E P L A M E N T

S E Q U E N C I N G

OKO & 3425 Collins Developers has assembled an experienced team of engineers to study and develop a construction sequence to ensure the integrity of the Versailles Hotel structure during construction of the basement & the building's slab replacement, the team consists of:

DeSimone Structural Engineers- structural

NV5 – soils engineer

Youssef Hachem, Ph.D – shoring engineer

Keller – Soil & pile contractor

Civic / Ant Yapi – general contractor

The team has surveyed & conducted testing of the existing structure and surrounding grounds to help formulate the sequencing.

STEP 1.

Confirm previously permitted 2016 concrete restoration repairs of columns, beams, and cupola structure that are schedule to remain have been completed. Any area found not complete to be completed. Complete any additional concrete repair needed due to exposure of the building over the past 5 years.

STEP 2.

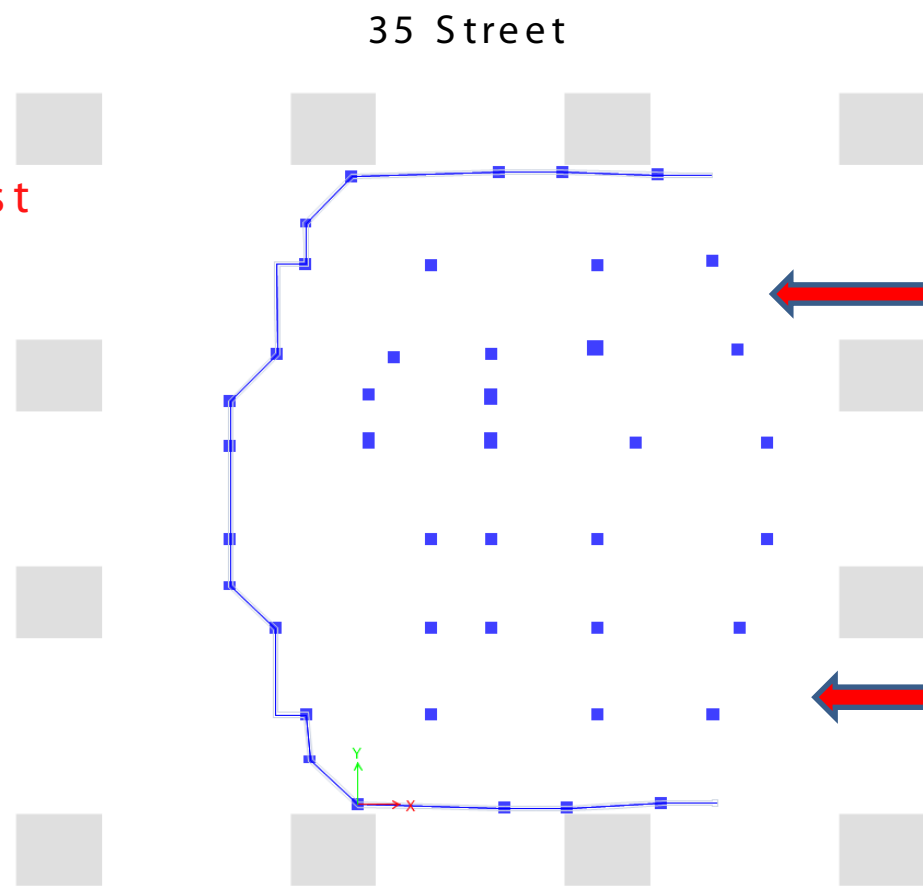
Applicant will install vibration monitoring devices around the perimeter of the building – This system will send alerts to the onsite team and the EOR (simultaneously) if vibrations levels approach levels which may affect the existing structure. The General Contractor and the related subcontractor will be able to review, analyze and advise if the work should be stopped and/or modified based on such readings.

STEP 3

Improve the soil via a combination of jet grout and deep soil mixing around the perimeter of the building- these procedures have low impact on the existing structure and will be performed by Keller Industries

Shoring Towers are placed west of existing porch entrance

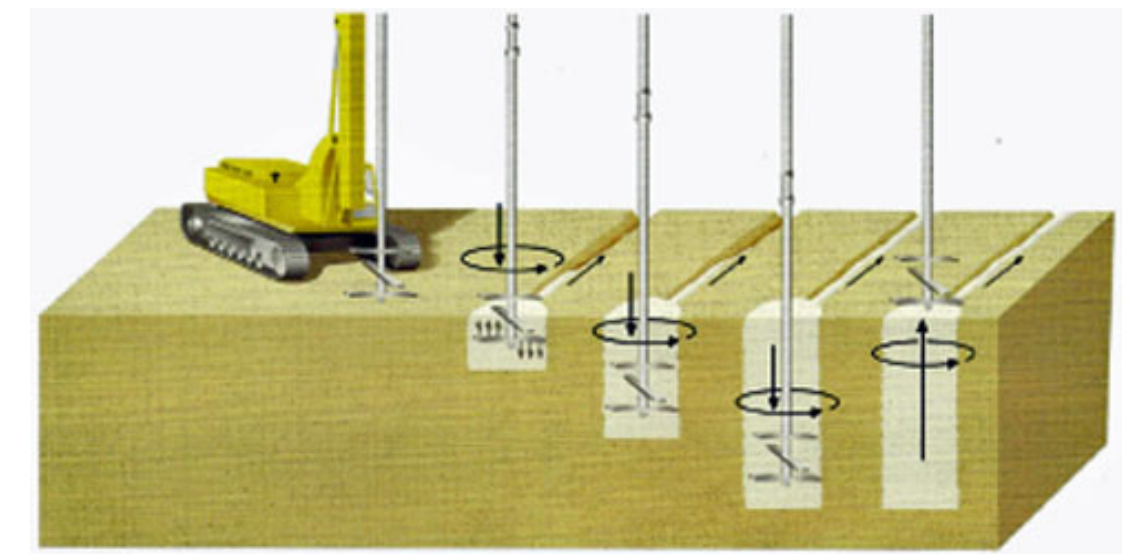
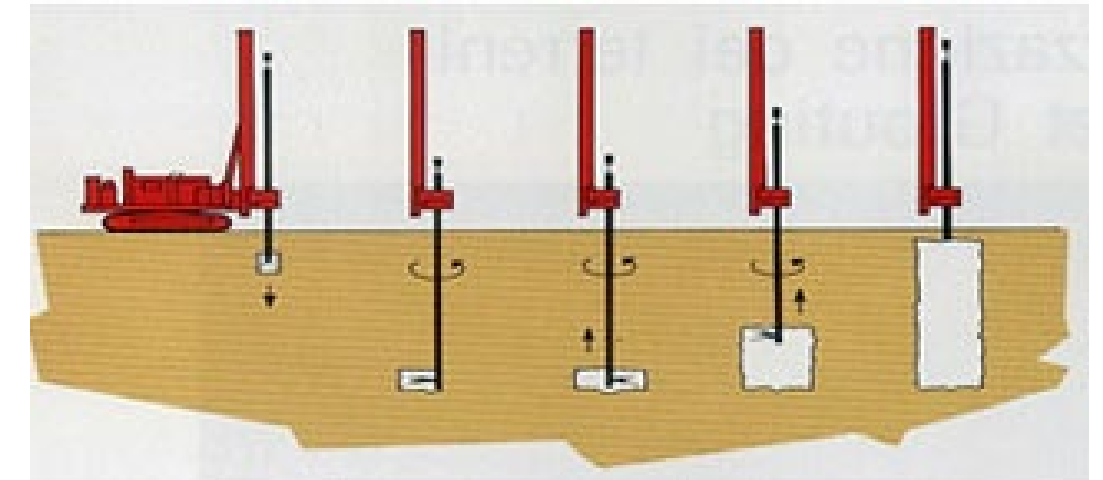
Collins Avenue



Shoring Towers

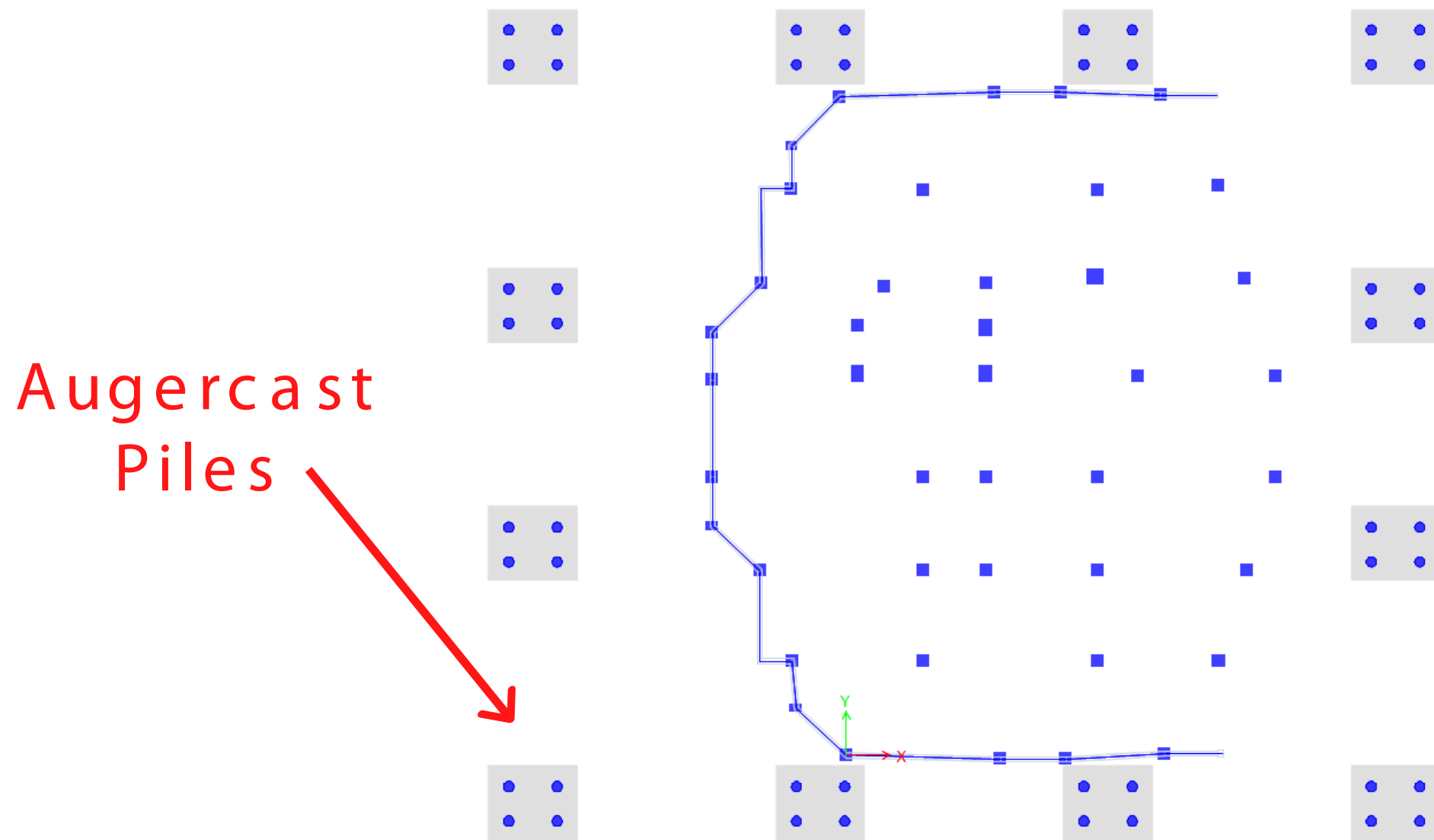
Jet Grouting at tight areas

Deep Soil Mixing at the open areas, around perimeter of The building

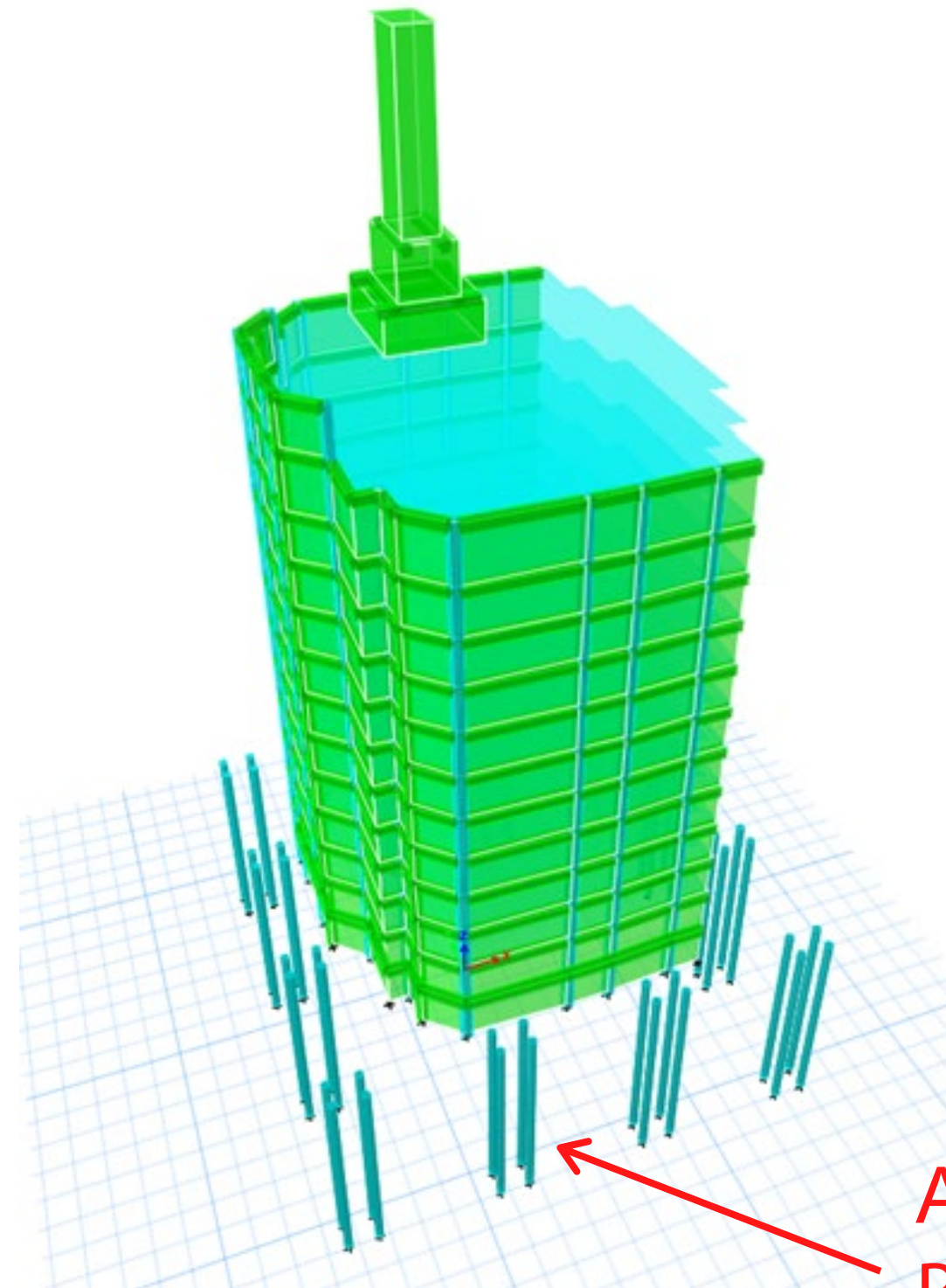


STEP 4

Install Augercast concrete piles to support proposed shoring towers (12 locations at perimeter of existing structure)



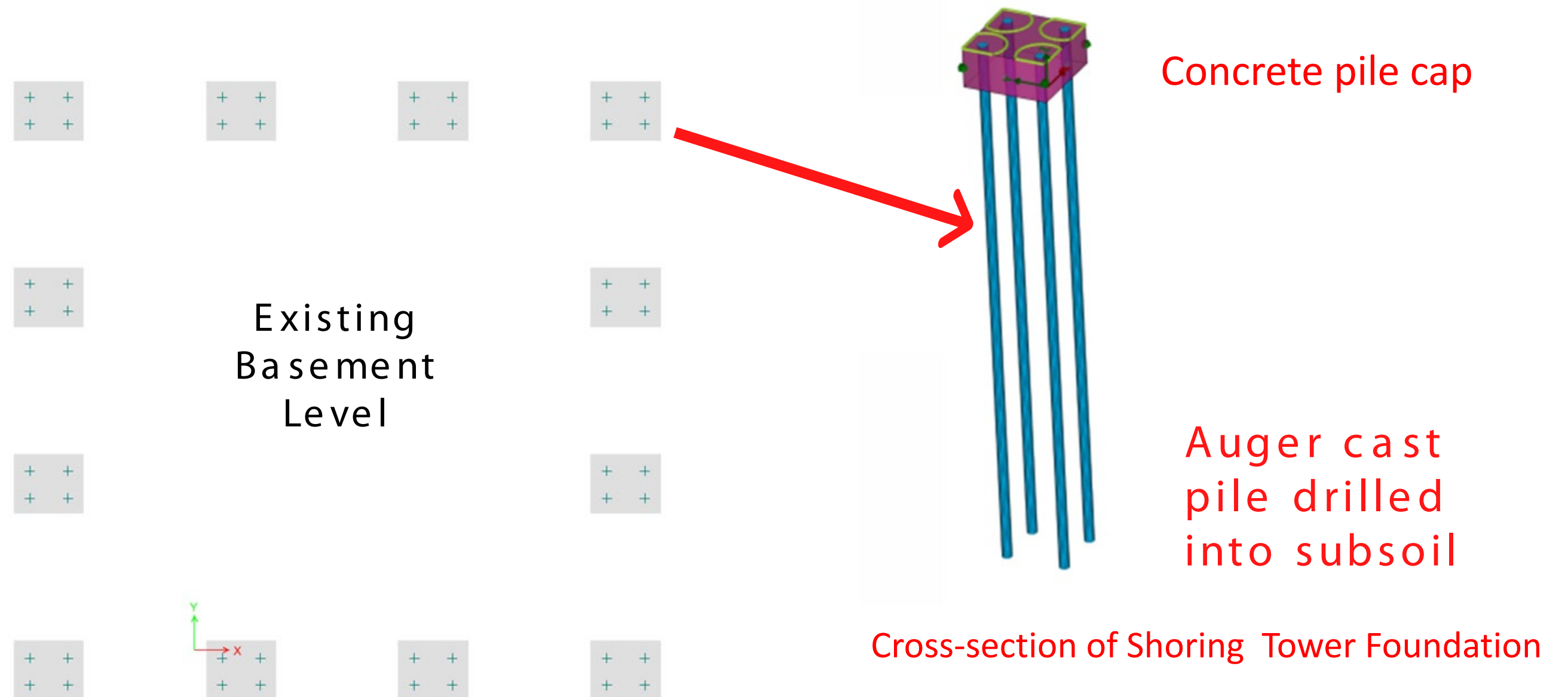
Augercast
Piles



Augercast
Piles

STEP 5

Construct concert pile caps which support the shoring towers



VERSAILLES HOTEL

CONSTRUCTION SEQUENCING

STEP 6

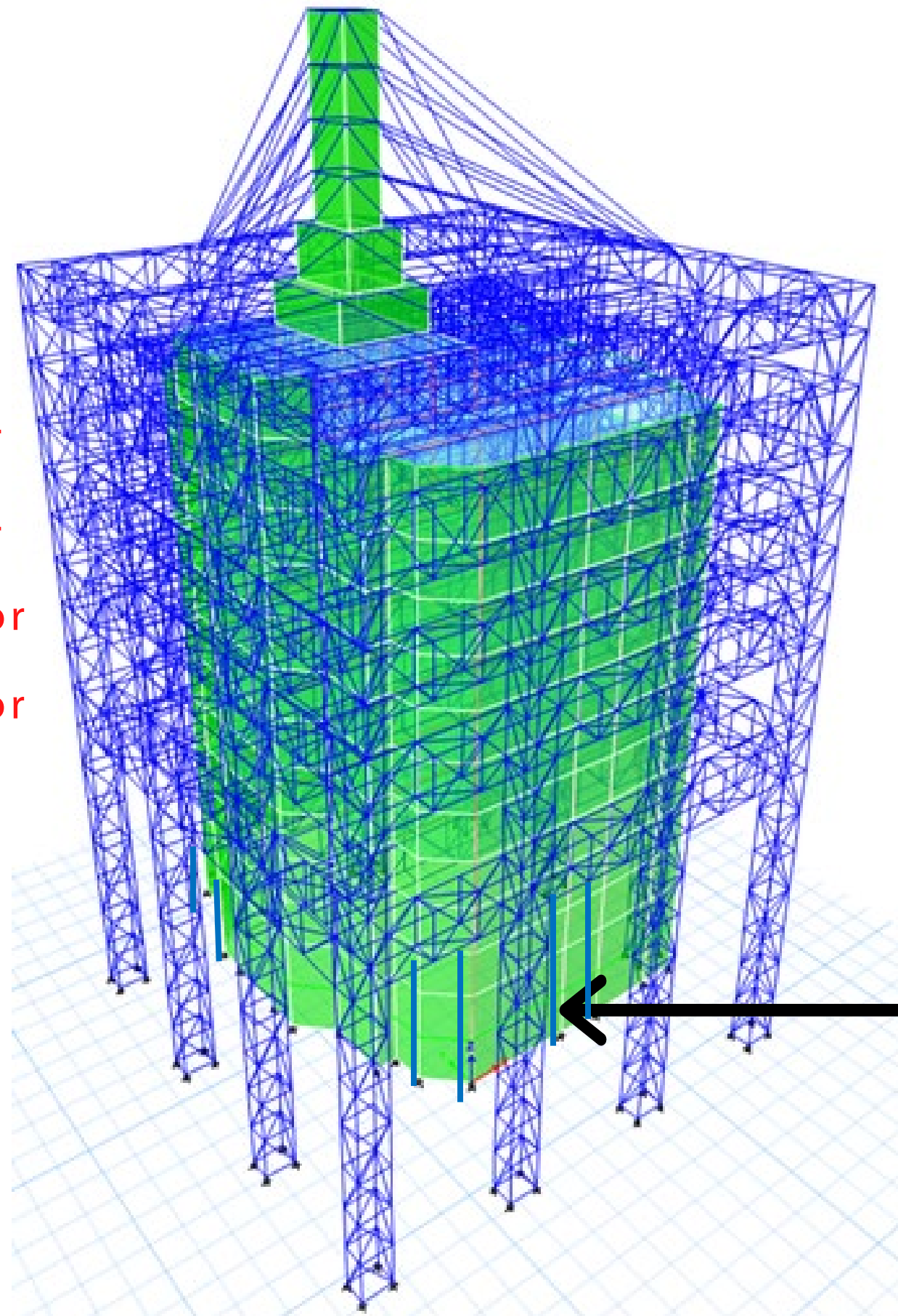
Erect shoring towers

Install shoring platforms under the 4th floor, 6th floor, 8th floor & 10th floor- Refer to step 7 for placement

Shoring platforms span between shoring towers & will be connected to existing perimeter columns

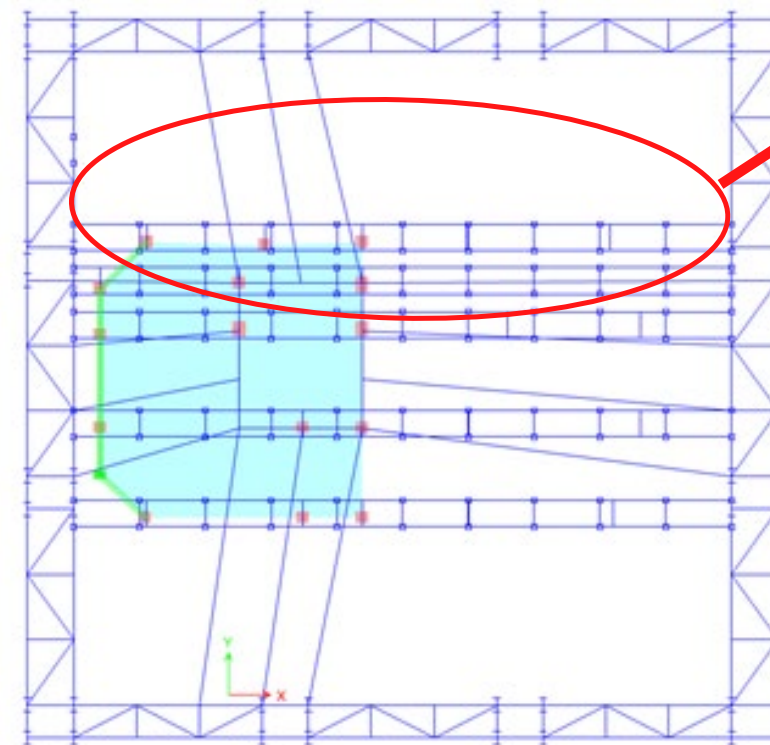
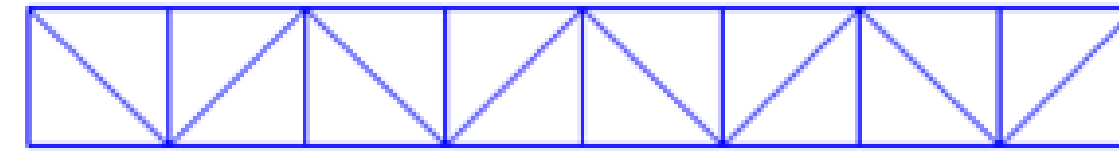
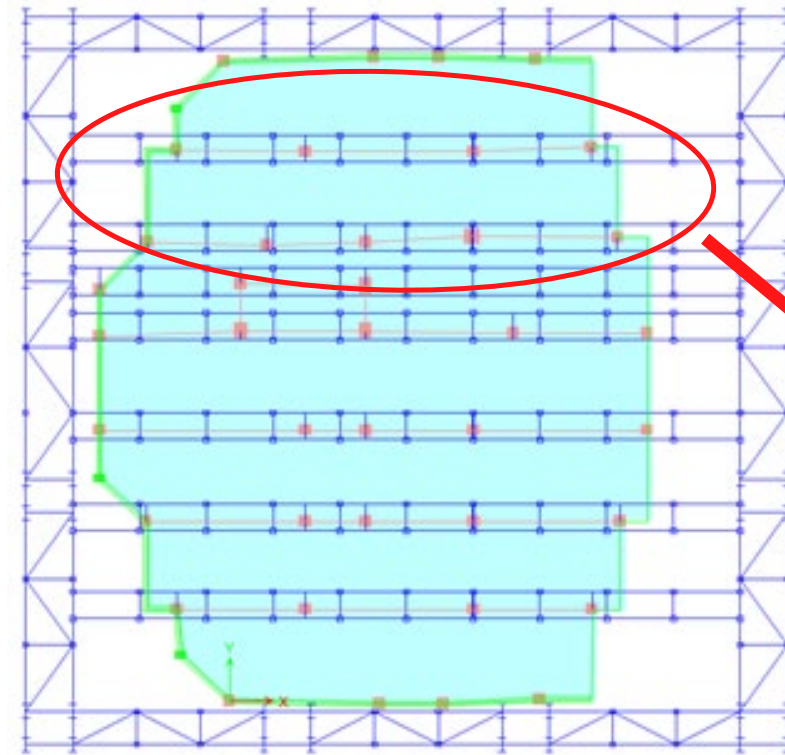
New Steel columns connected to the truss platform above and anchored to the existing columns under 4th floor to support the existing columns

Cupola Base
10th Floor
8th Floor
6th Floor
4th Floor



STEP 7

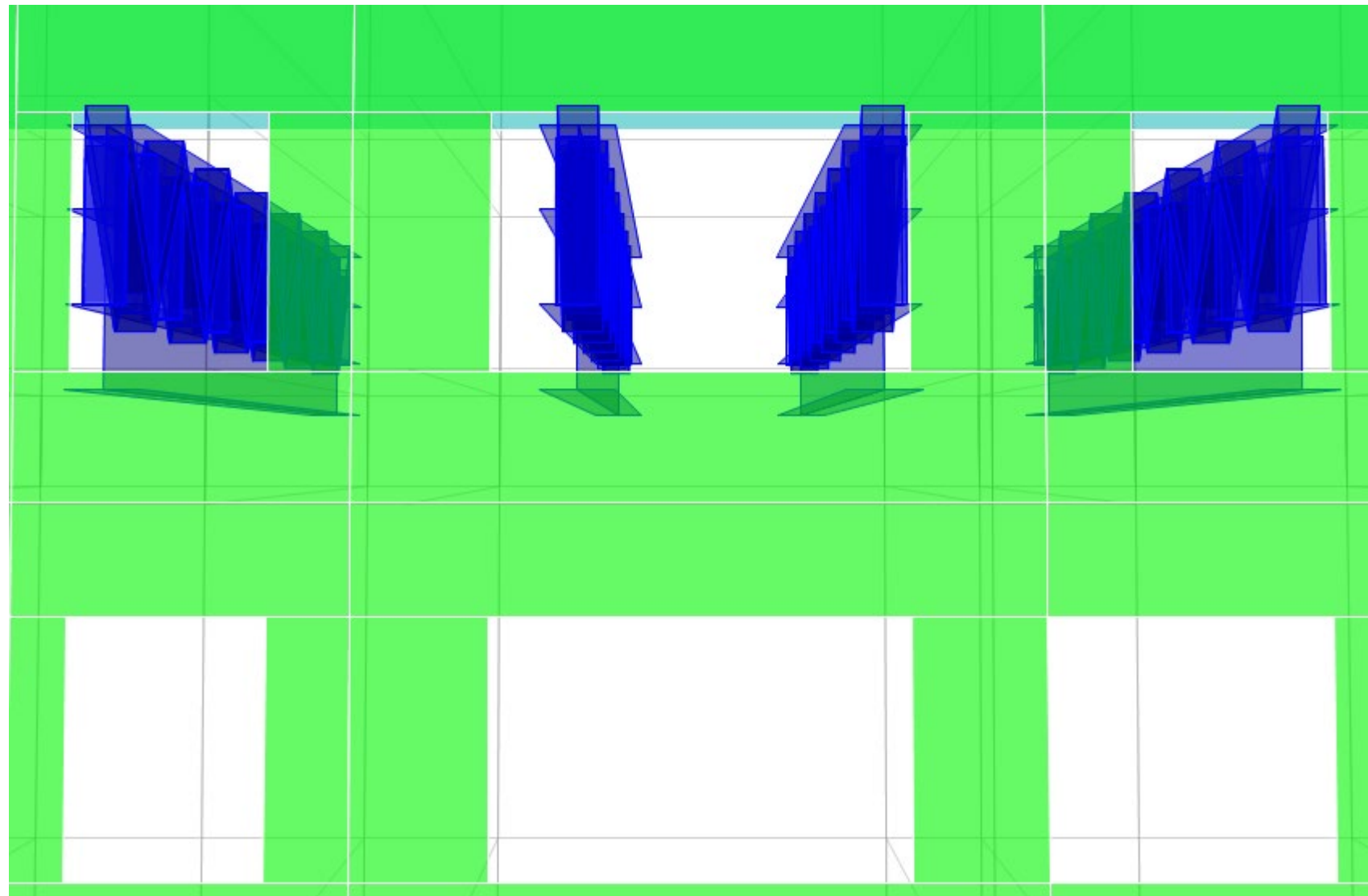
Install shoring platform underpinning the
6th floor, 8th floor, 10th floors



Shoring Platform
underpinning cupola base

STEP 7A.

Install shoring platform underpinning the
6th floor, 8th floor, 10th floor



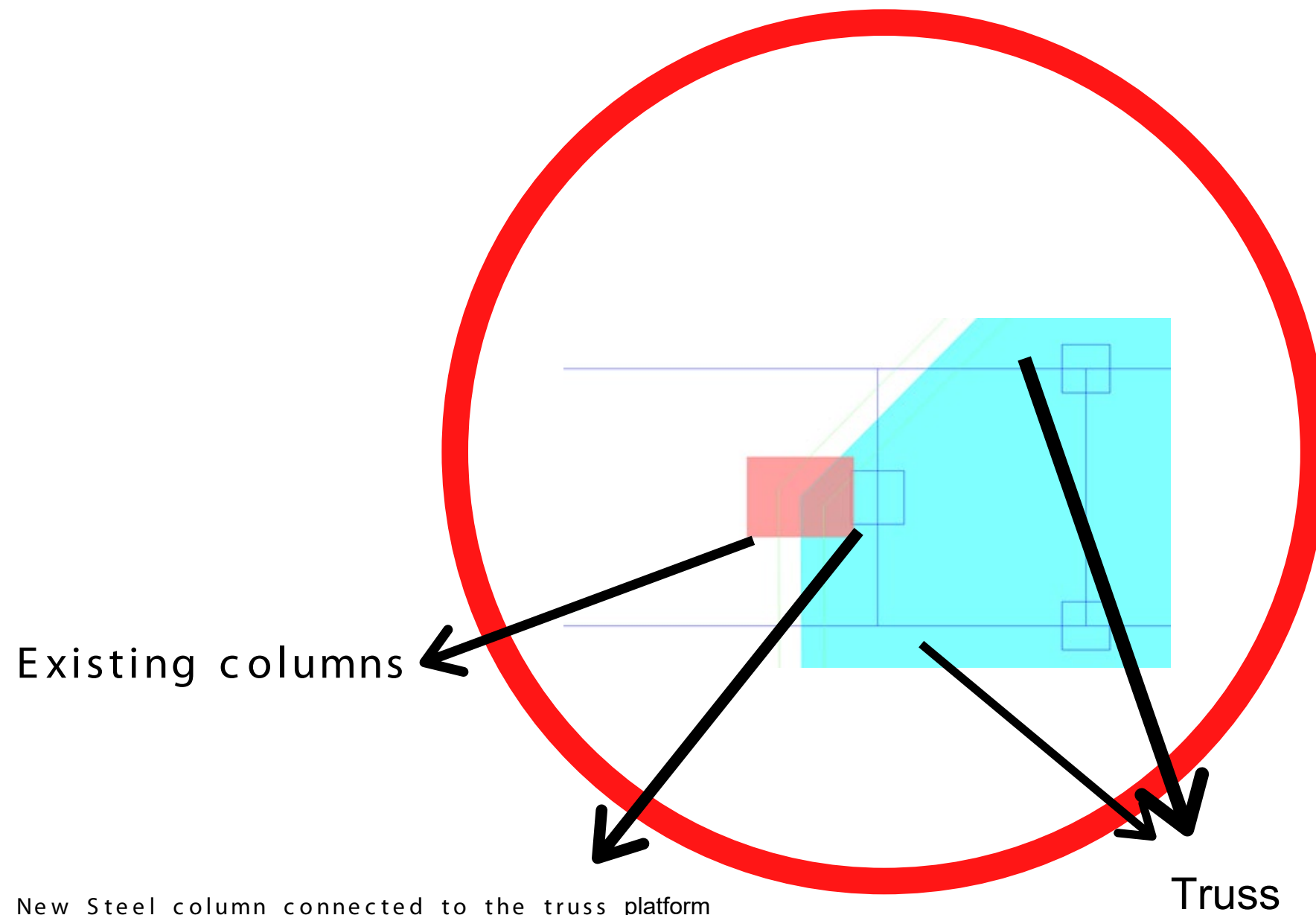
Building opening (West Elevation)

The shoring beams will run through
the existing window openings of
the south, north and west walls.

STEP 7B

Install shoring platform underpinning the 4th floor.

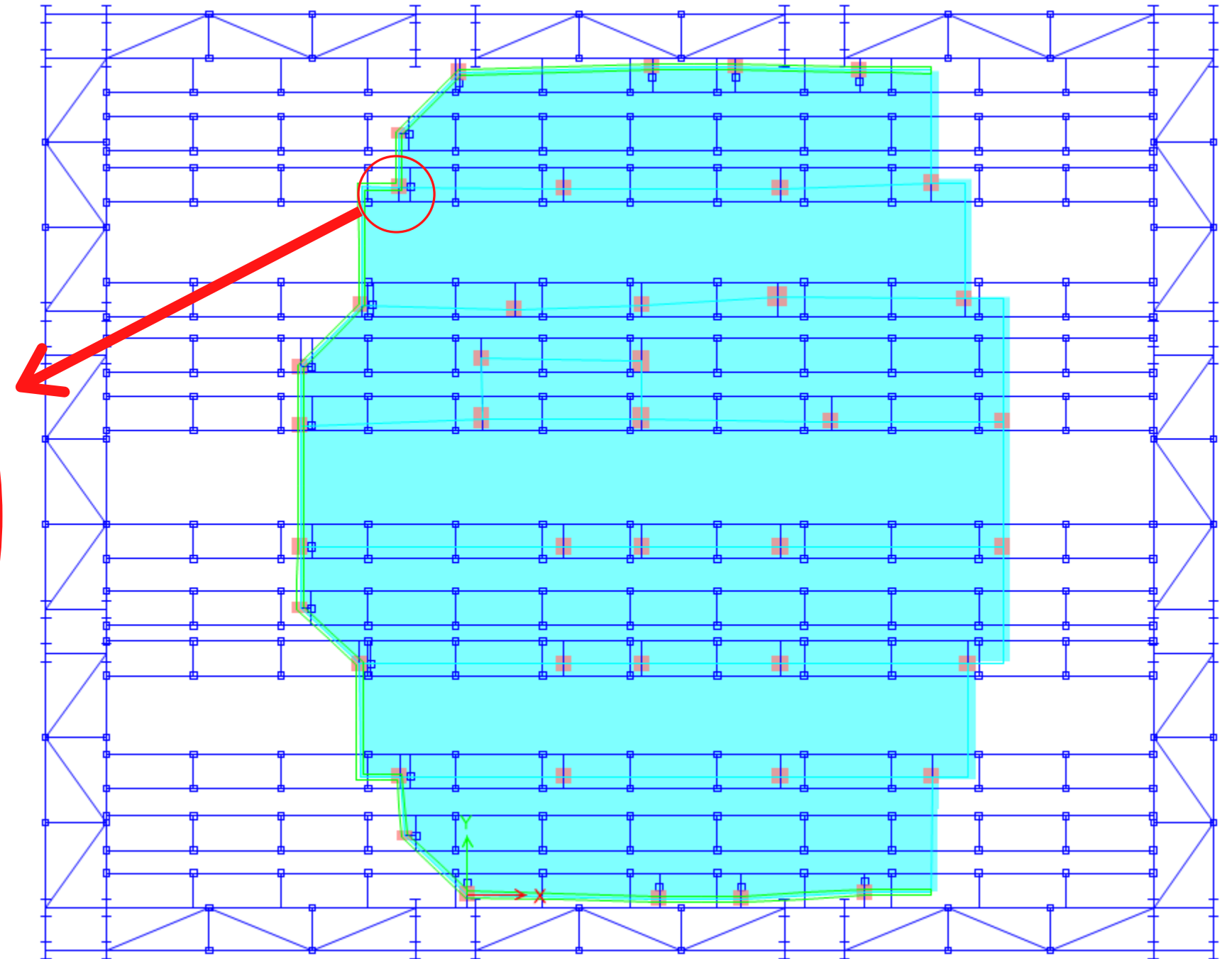
Additional Trusses to support the exterior column



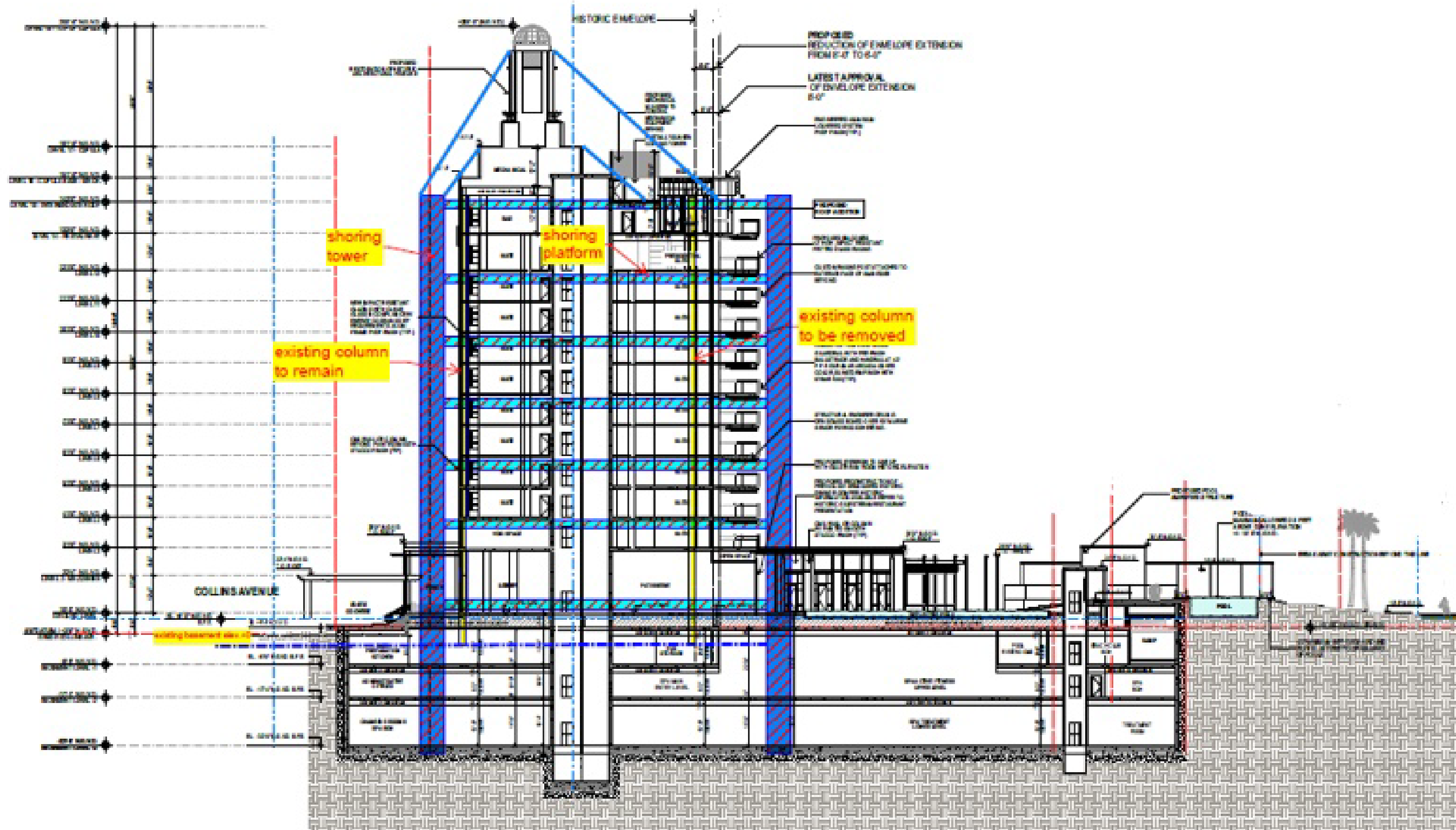
New Steel column connected to the truss platform above and anchored to the existing columns under 4th floor to support the existing columns

VERSAILLES HOTEL

CONSTRUCTION SEQUENCING



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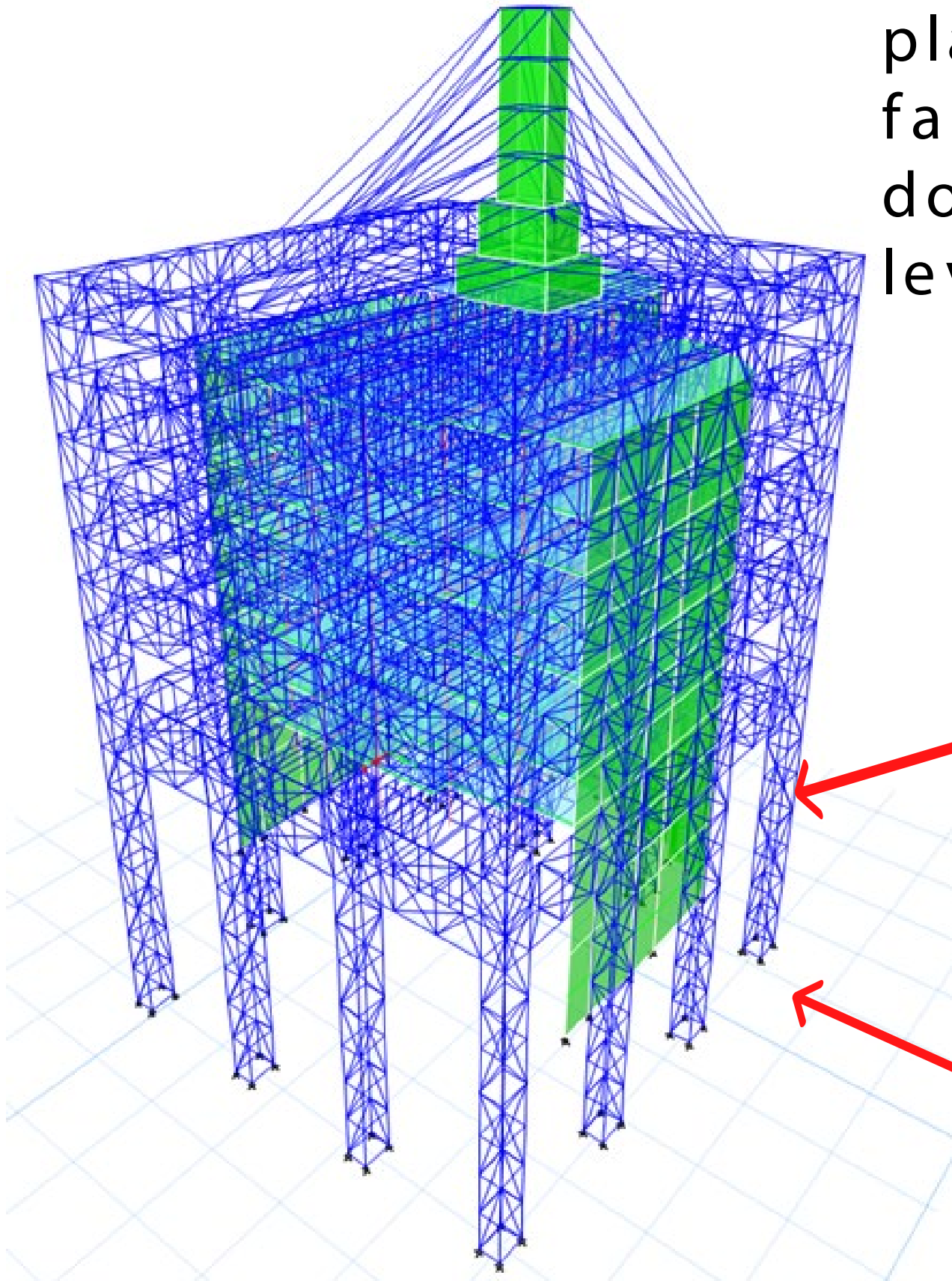


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CONSTRUCTION SEQUENCING

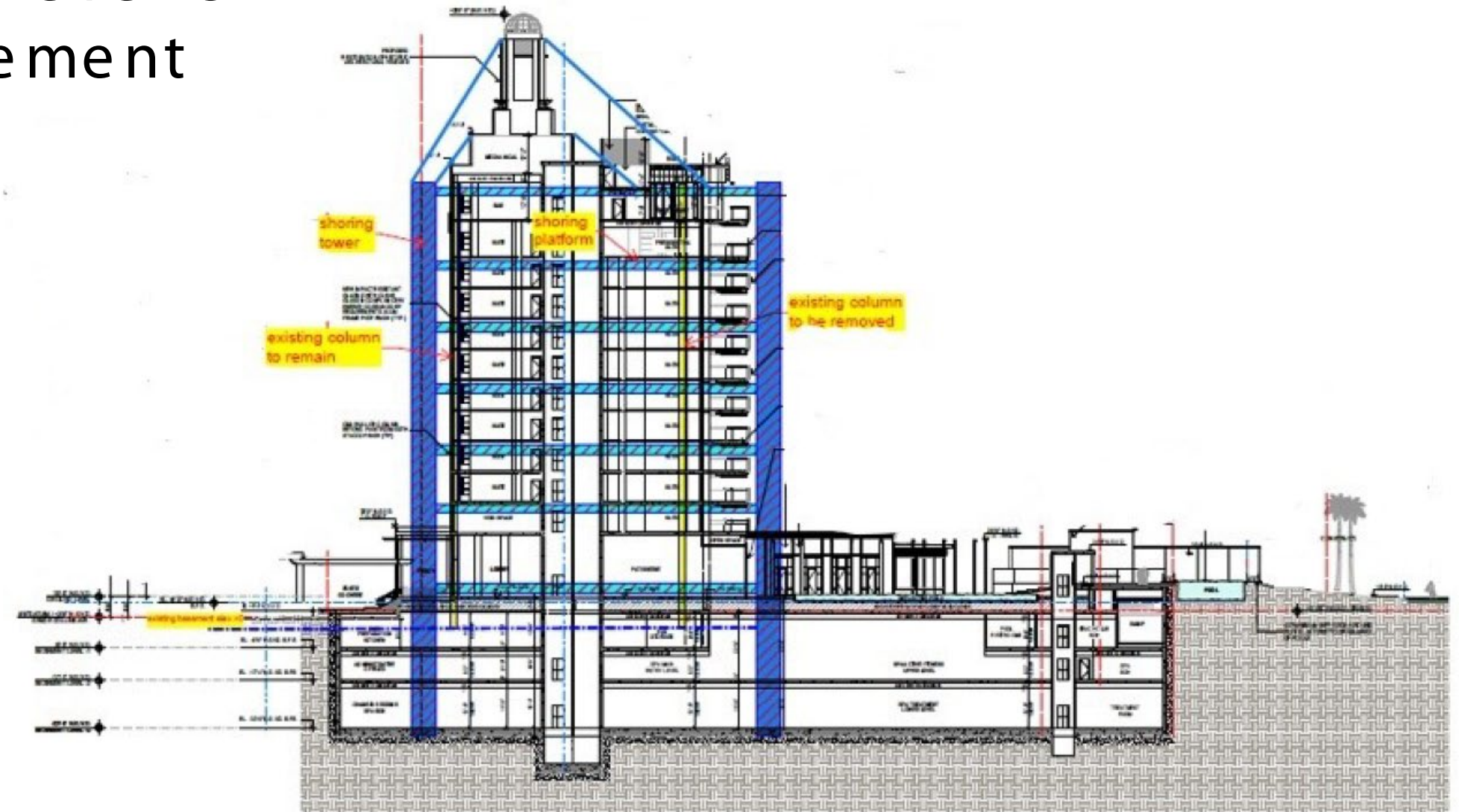
STEP 8

Remove the floor plates & east façade from level 3 down to basement level



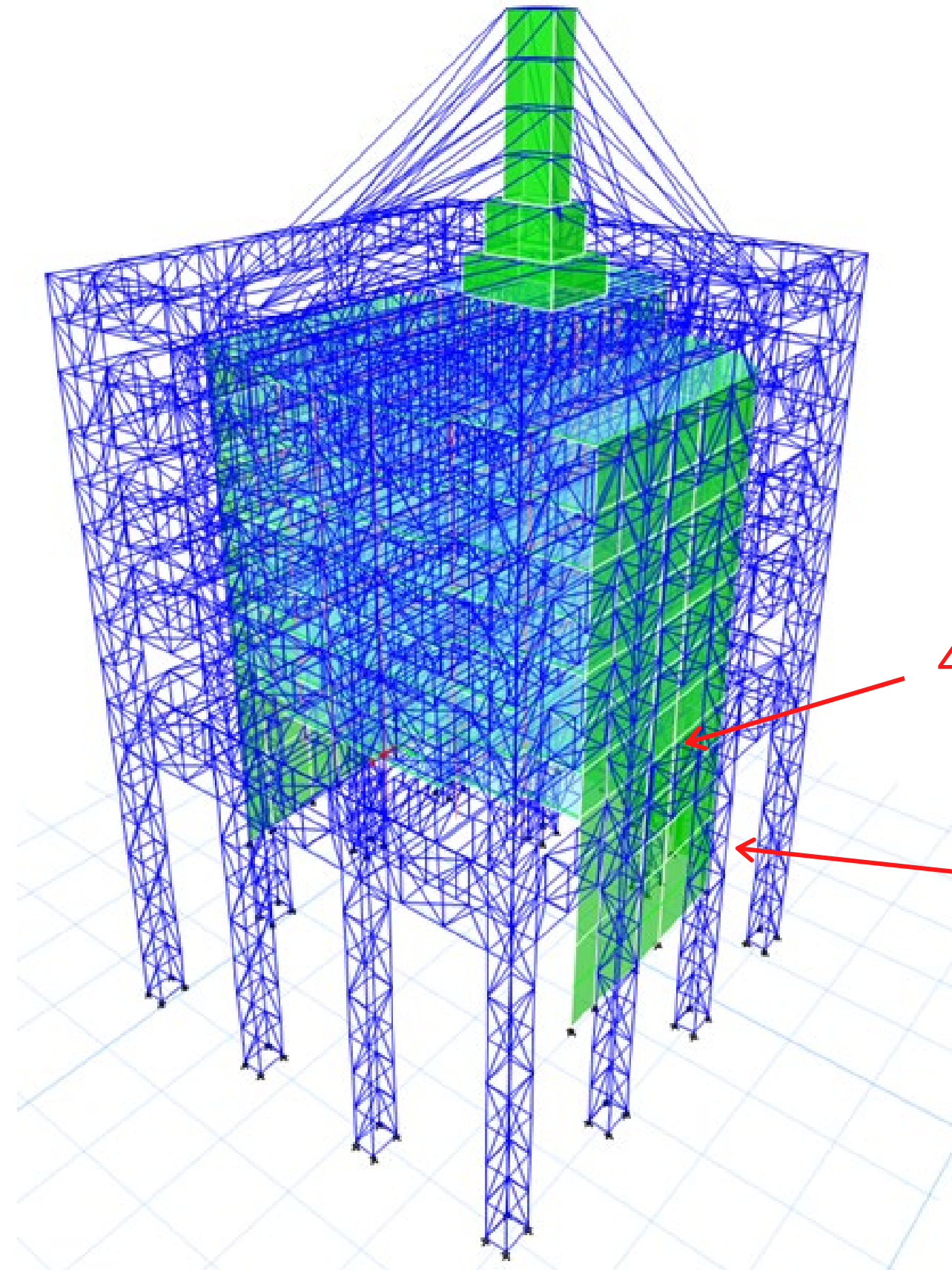
4th Floor

With shoring in place – level 3 to basement can be removed



STEP 8

Remove the floor plates from level 3
down to basement level

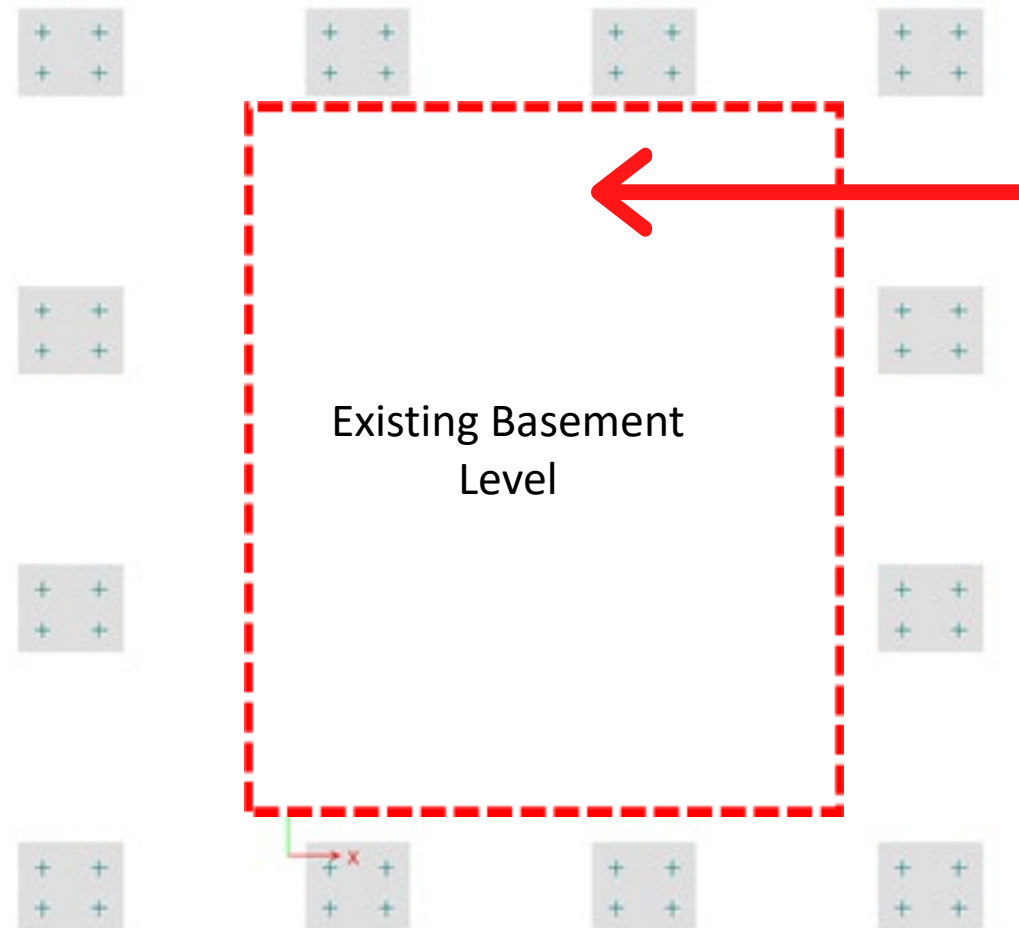


4th Floor

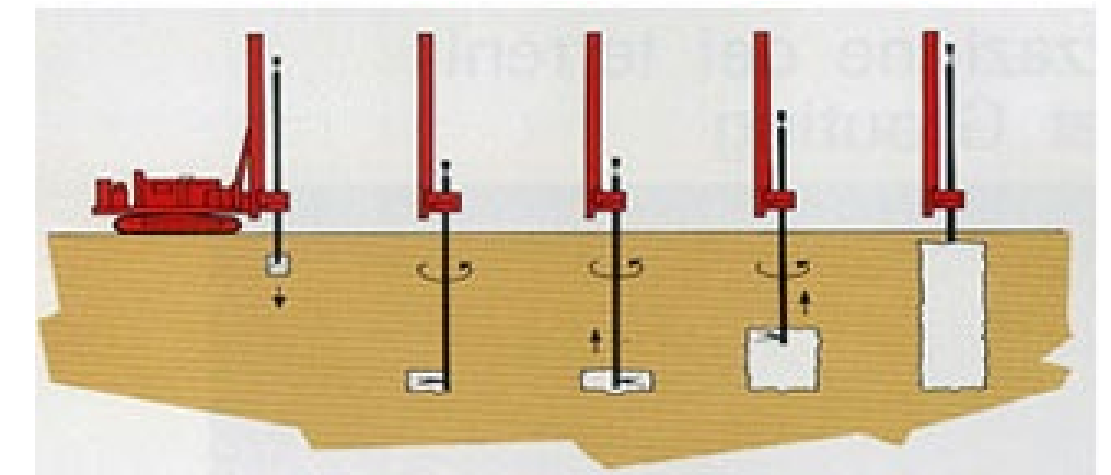
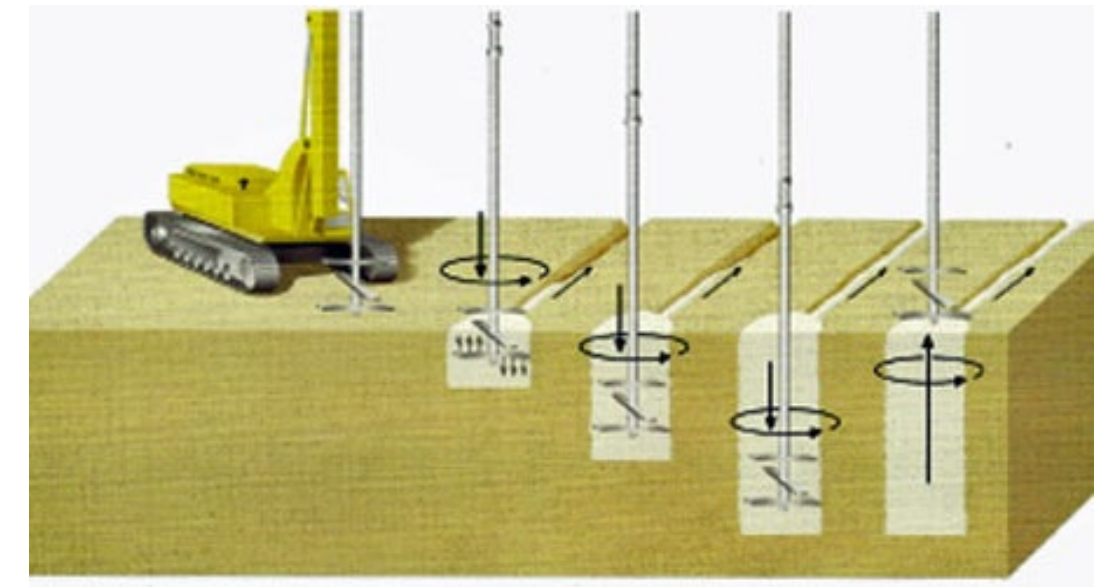
With shoring in place – level 3
to basement can be removed

STEP 9

Improve the soil inside the building via jet grout or deep soil mixing



Deep Soil Mixing combined with Jet grouting

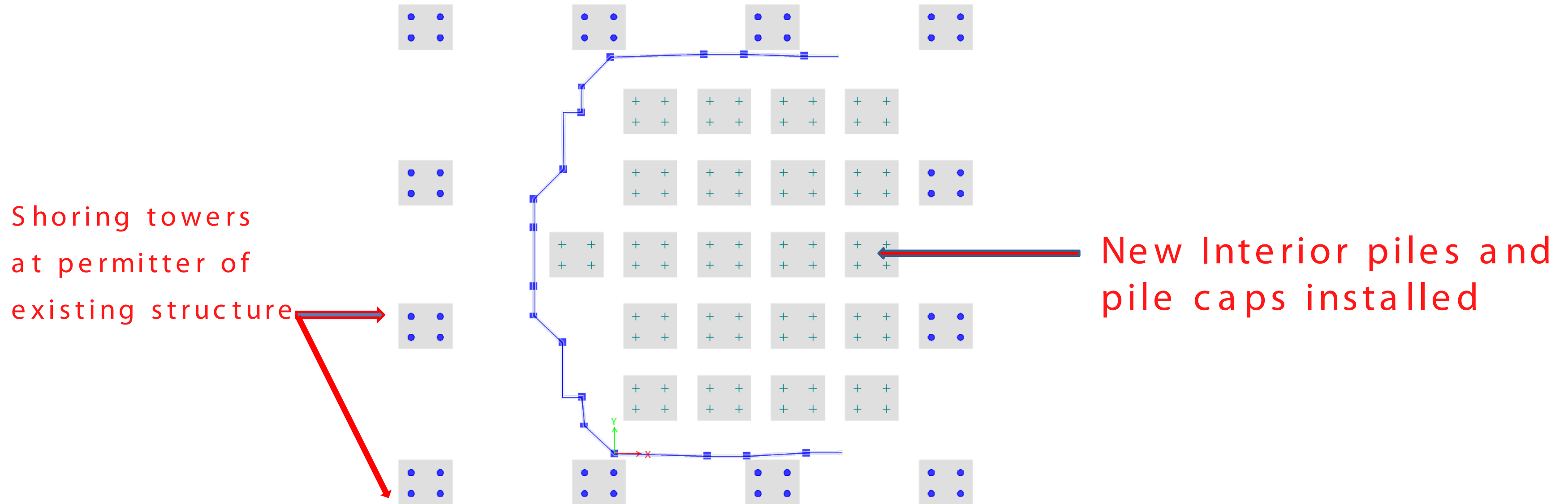


STEP 10

Secure the areas of the shoring towers for excavation

STEP 11

Install auger cast piles inside the building for the basement & the hotel's new vertical structure



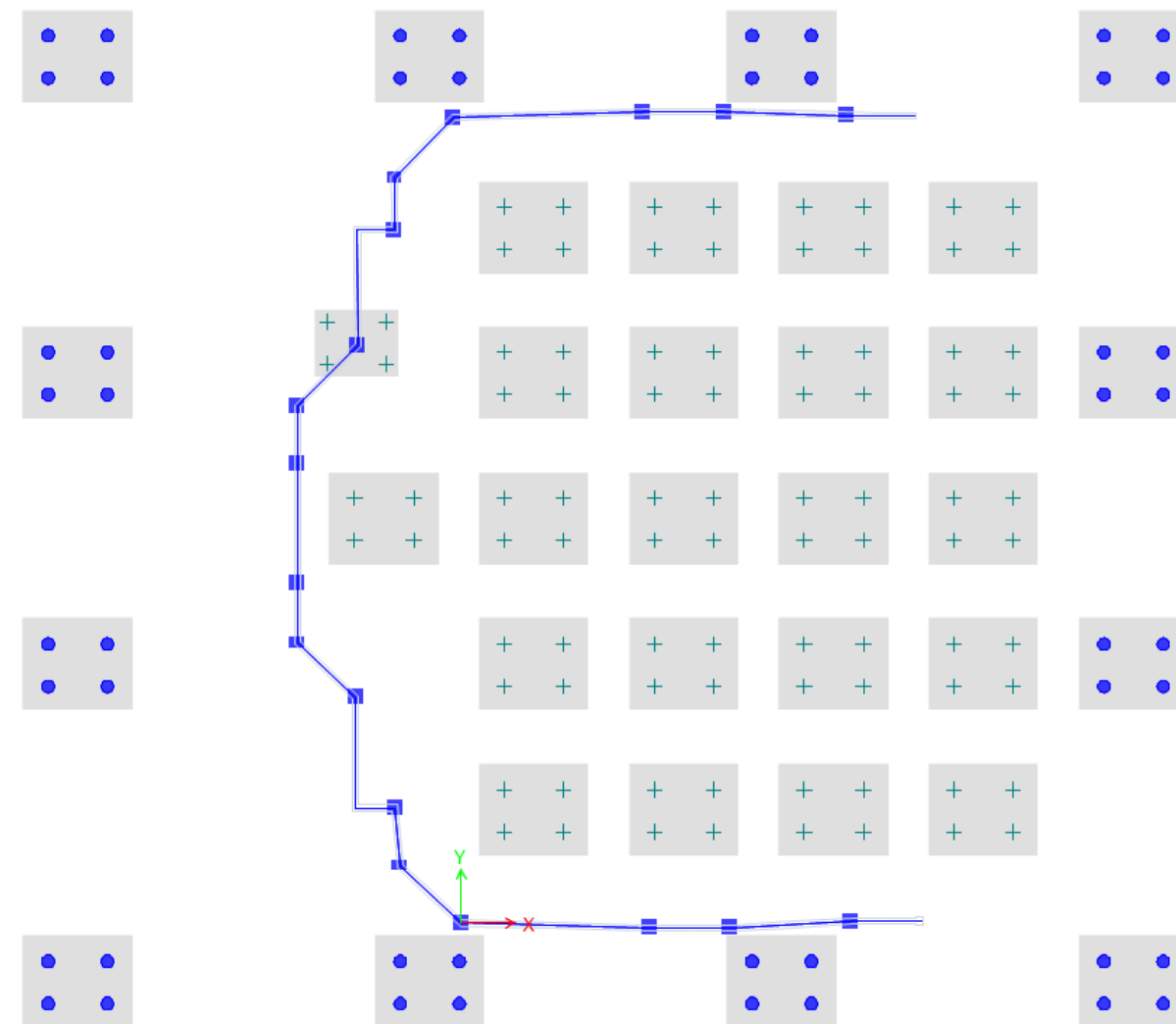
STEP 12

Excavate existing basement below the bottom slab elevation of the proposed future basement

STEP 13

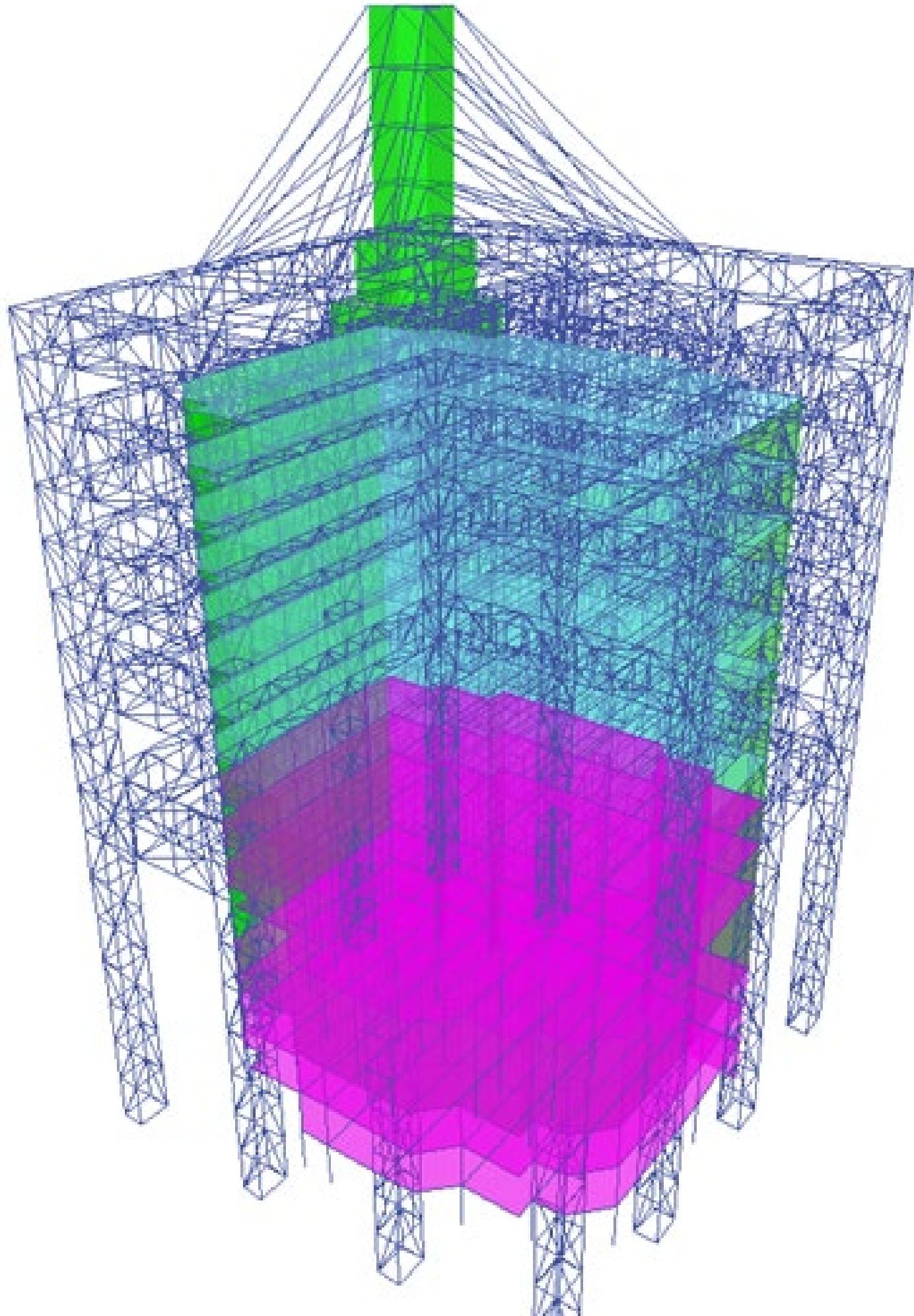
Column by column, excavate under the column and construct the pile cap and column support

Excavate Exterior Columns one by one to complete the pile and pile cap constructions under the North, South, and West Walls



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CONSTRUCTION SEQUENCING



STEP 14

When all columns are completed,
finish the construction of the basement

STEP 15

Start re-construction the building
floor by floor up to 2nd floor

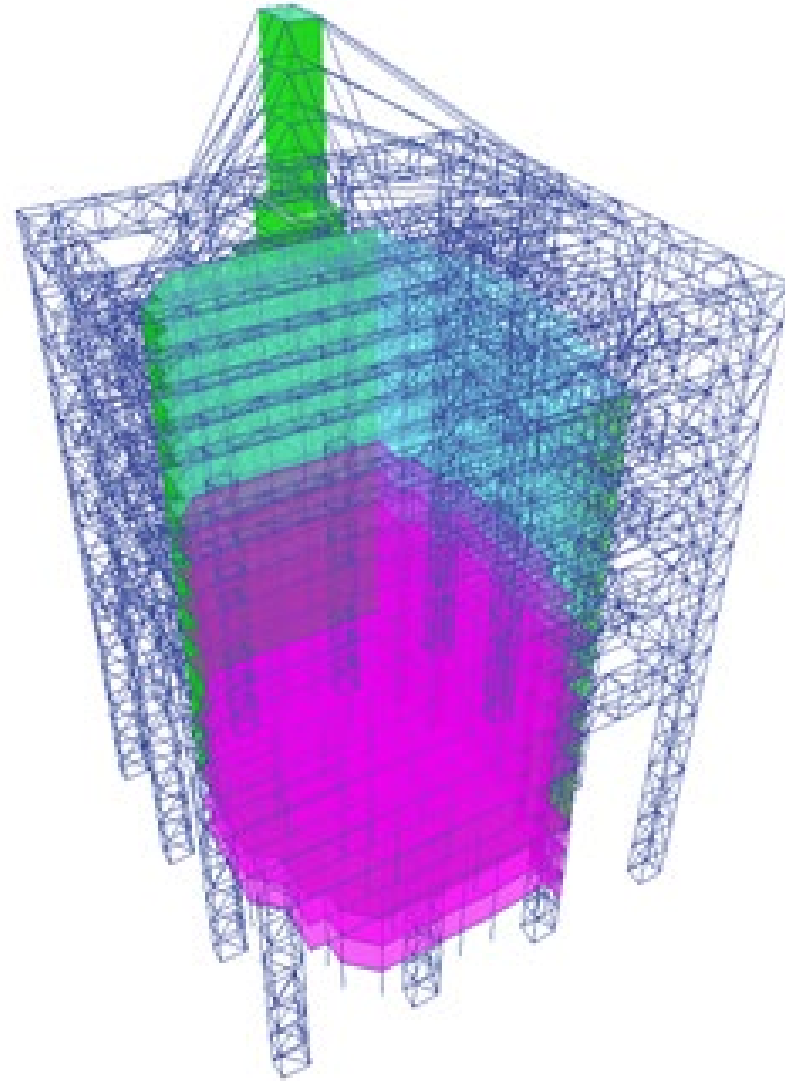
- New Floors
- Existing Building

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CONSTRUCTION SEQUENCING

STEP 16.

Remove 4th and 5th floors
and east façade

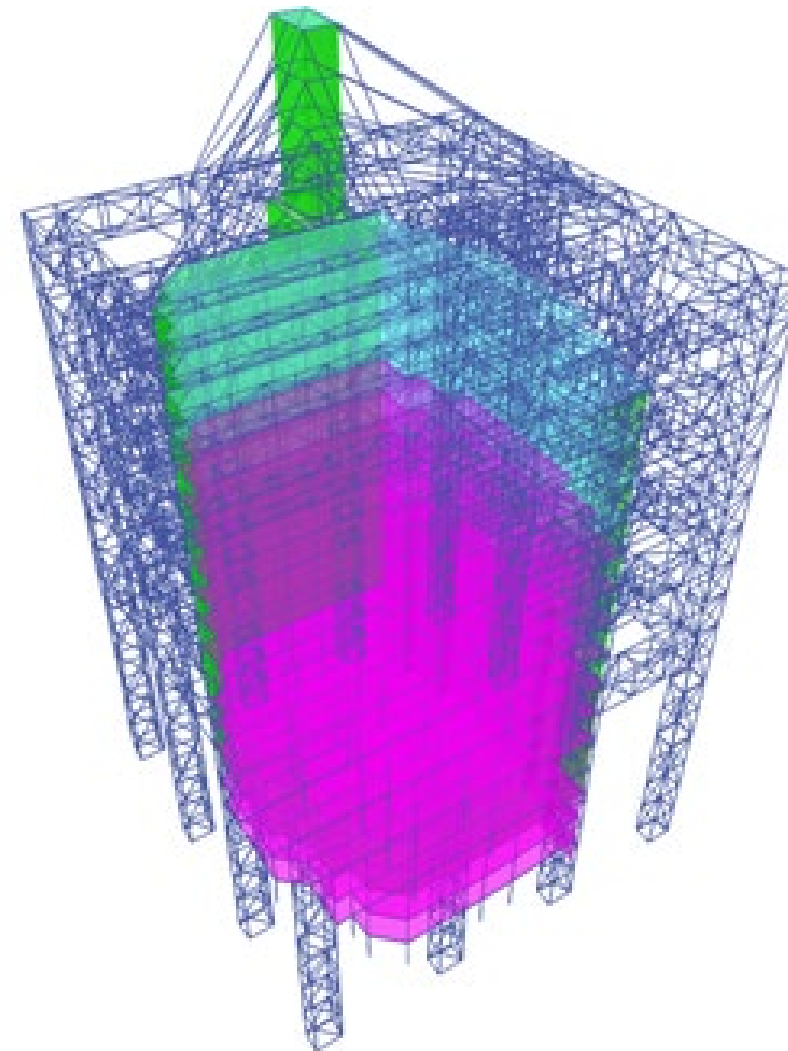


STEP 17.

Construct new 3rd & 4th floors

STEP 18.

Remove 6th and 7th floors
and east facade



STEP 19.

Construct new 5th & 6th floor

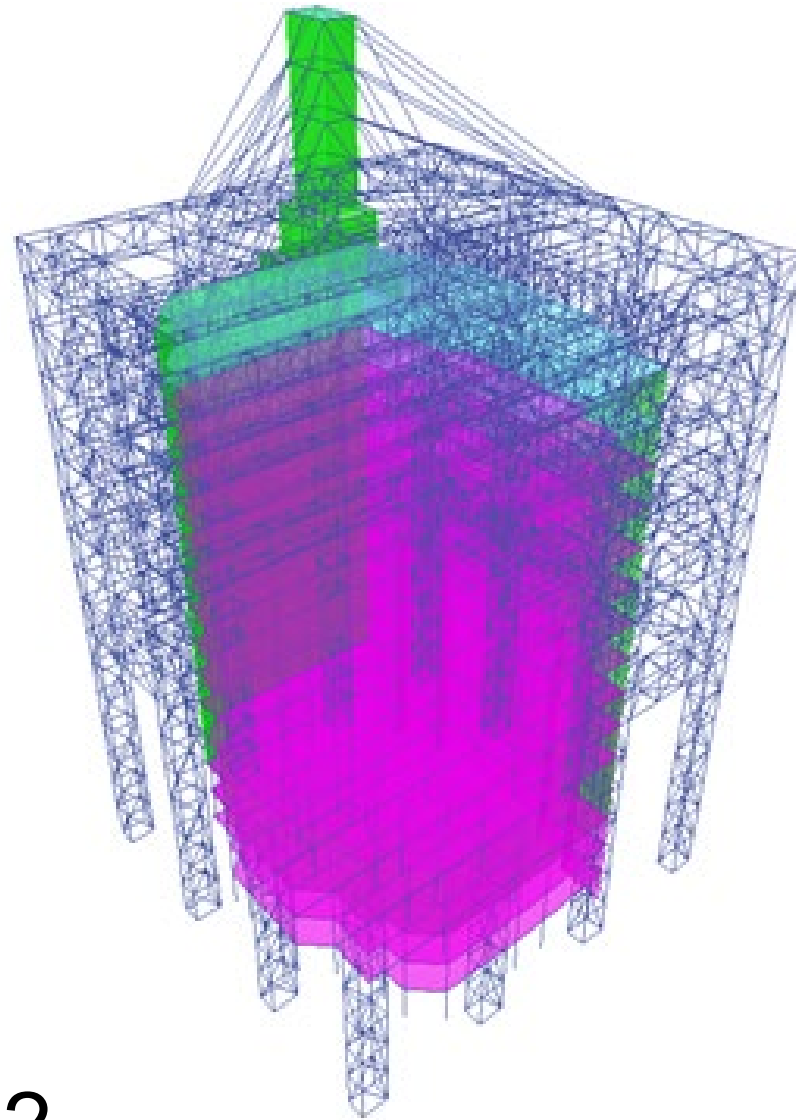
- New Floors
- Existing Building

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CONSTRUCTION SEQUENCING

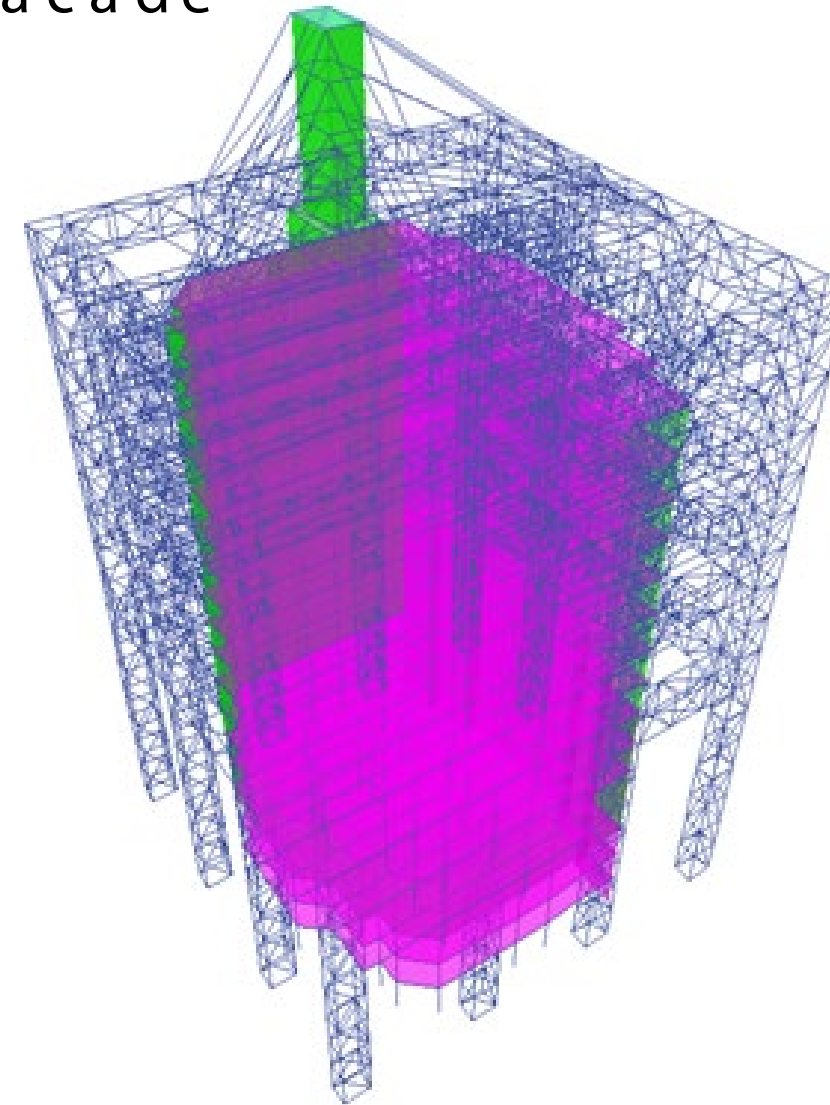
STEP 20.

Remove 8th and 9th floors
And east facade



STEP 21.

Demolish 10th and 11th floors
and east facade



- New Floors
- Existing Building

STEP 22.

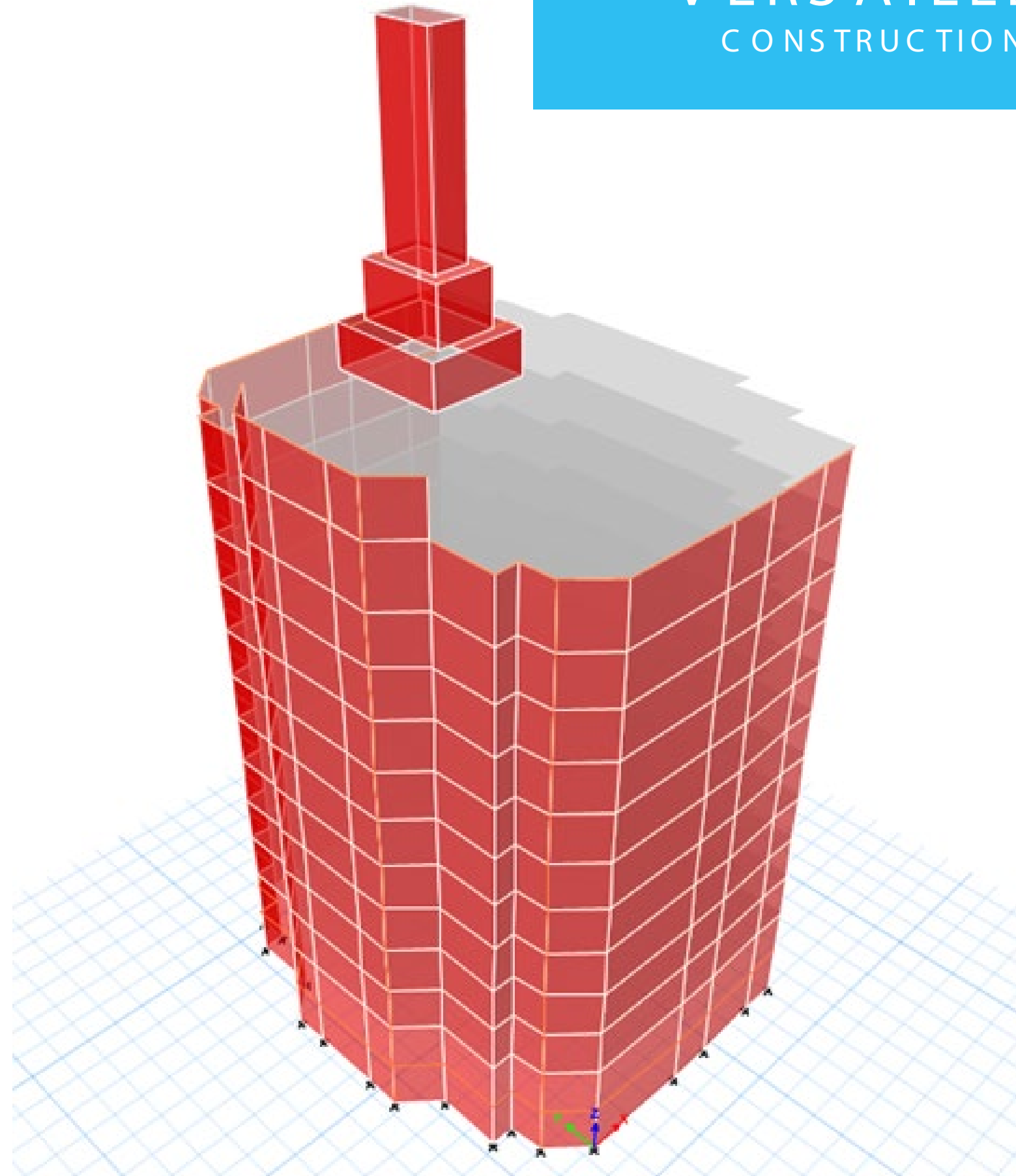
Construct new 7th & 8th floors

STEP 23.

Construct new 9th and 10th & 11 floors & roof

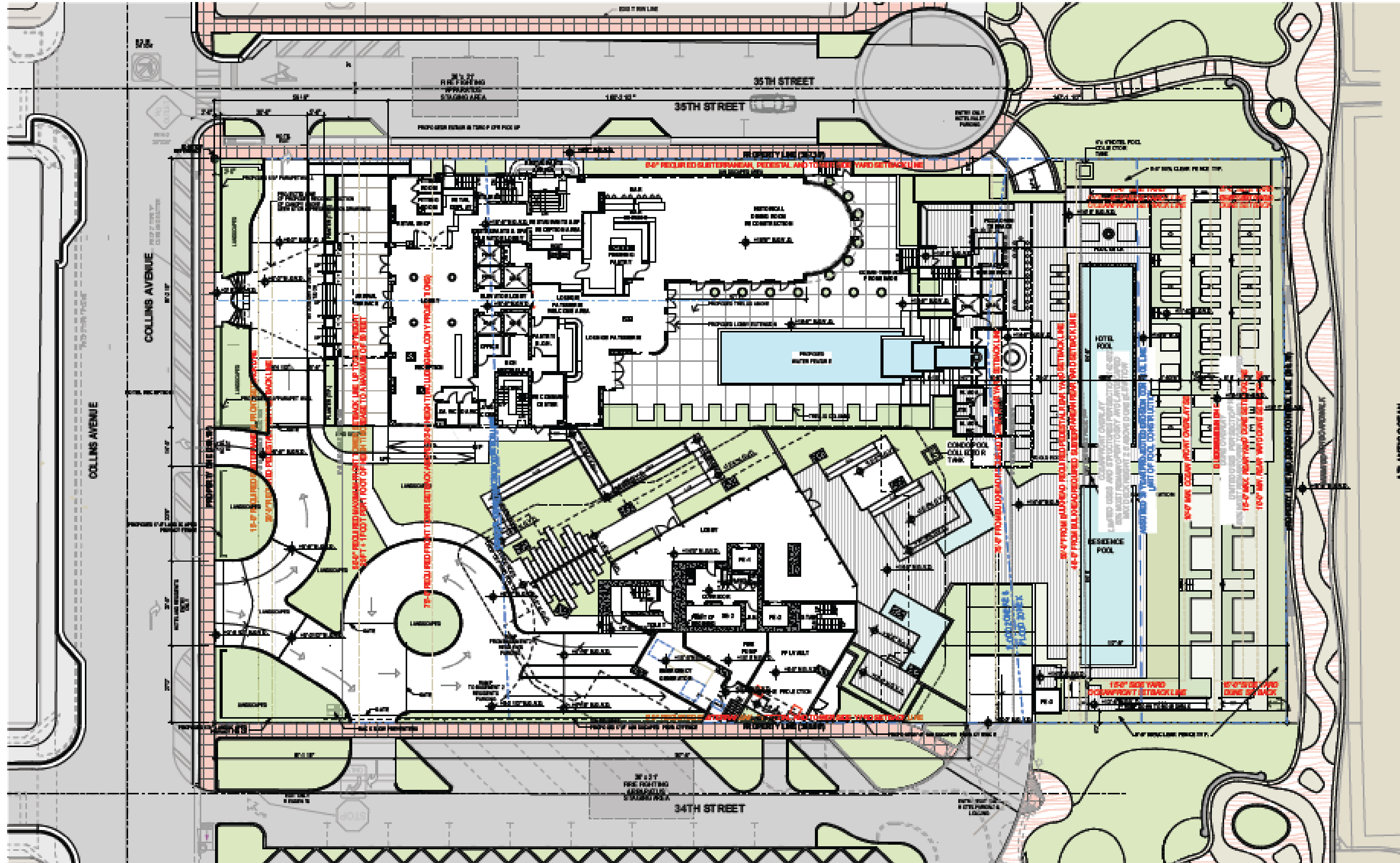
STEP 24.

With all new floor slabs & vertical construction complete the shoring is removed exposing a rebuilt structure design to Comply with current wind speeds as required by the Florida building code

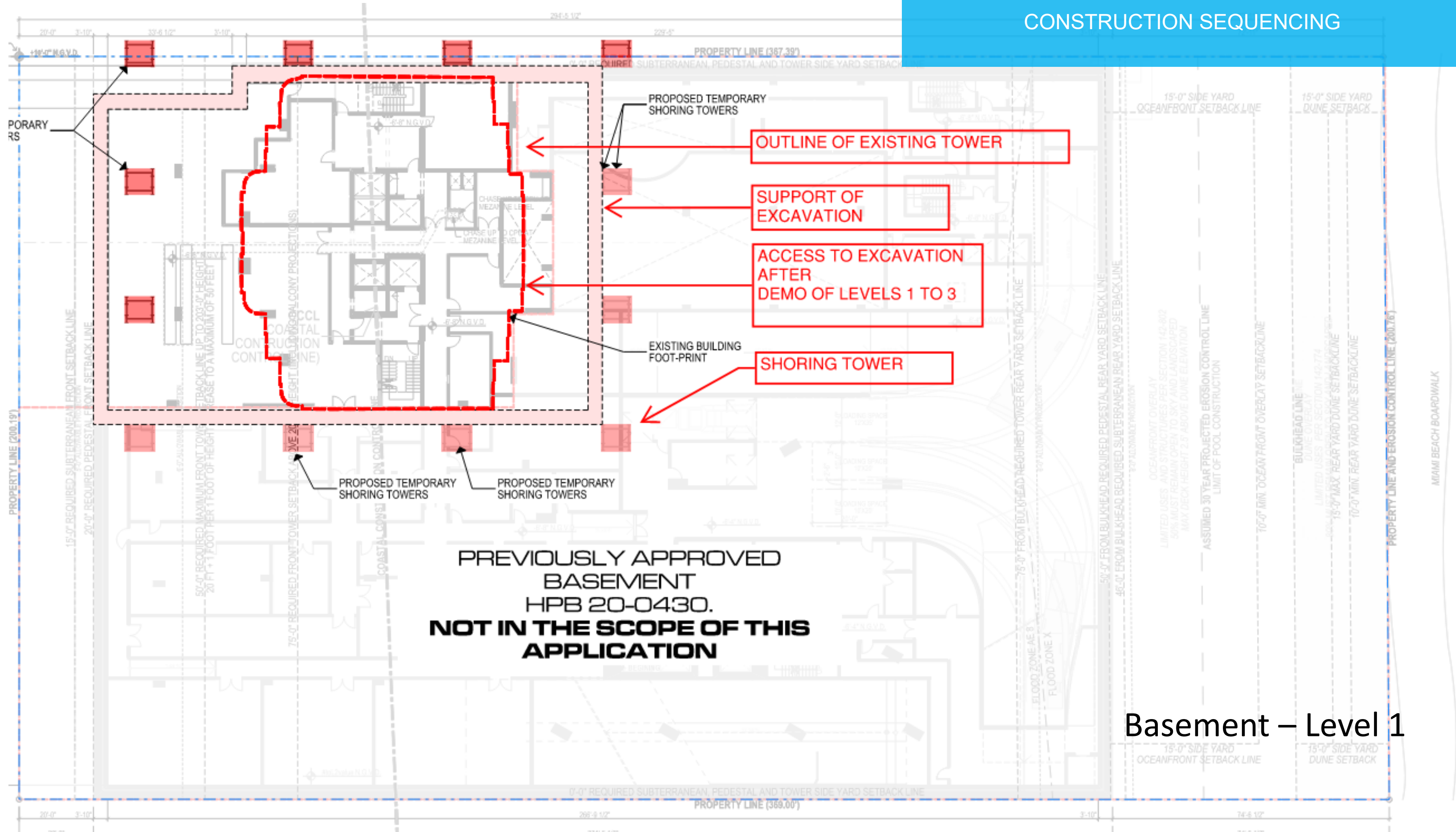


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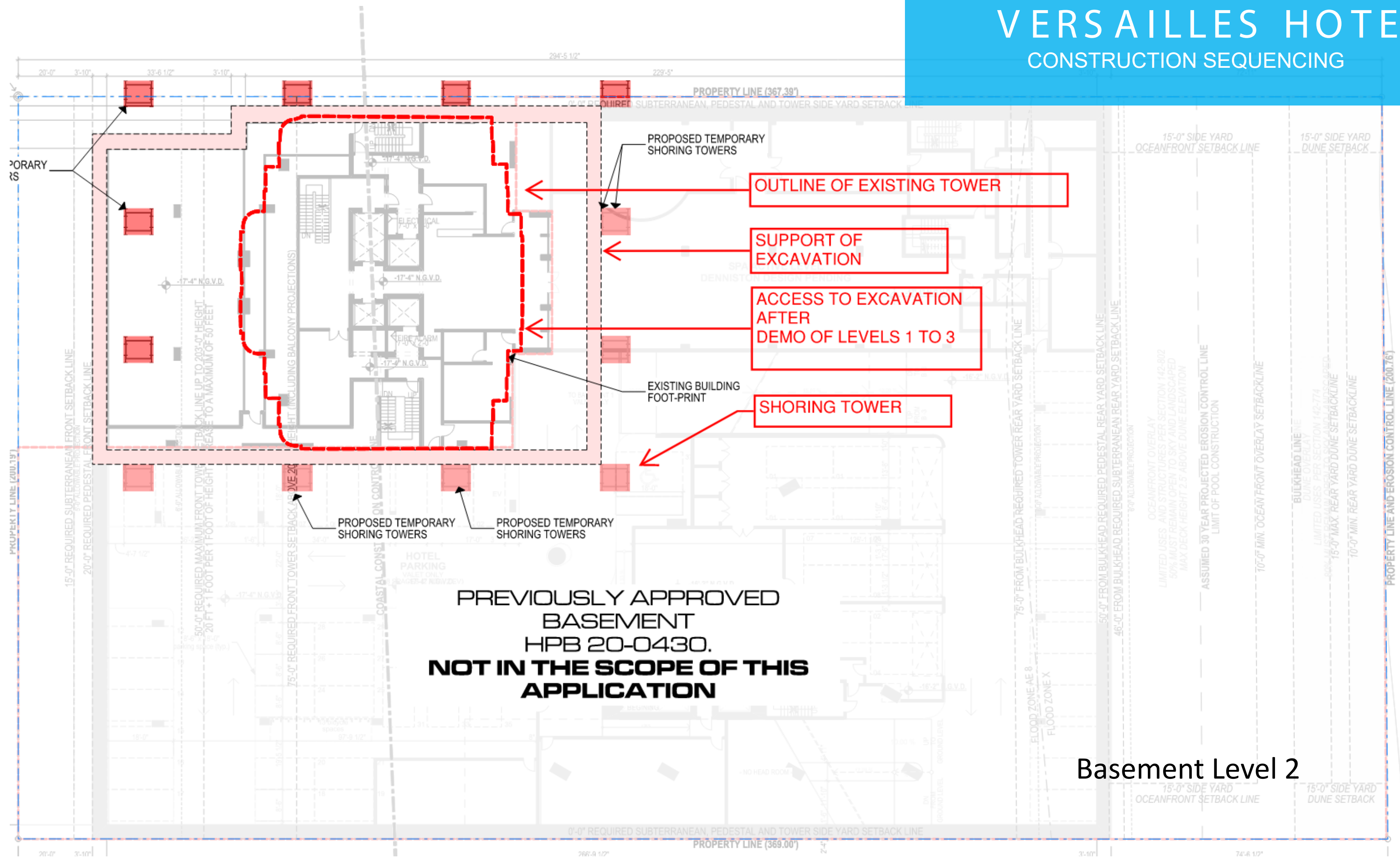
CONSTRUCTION SEQUENCING



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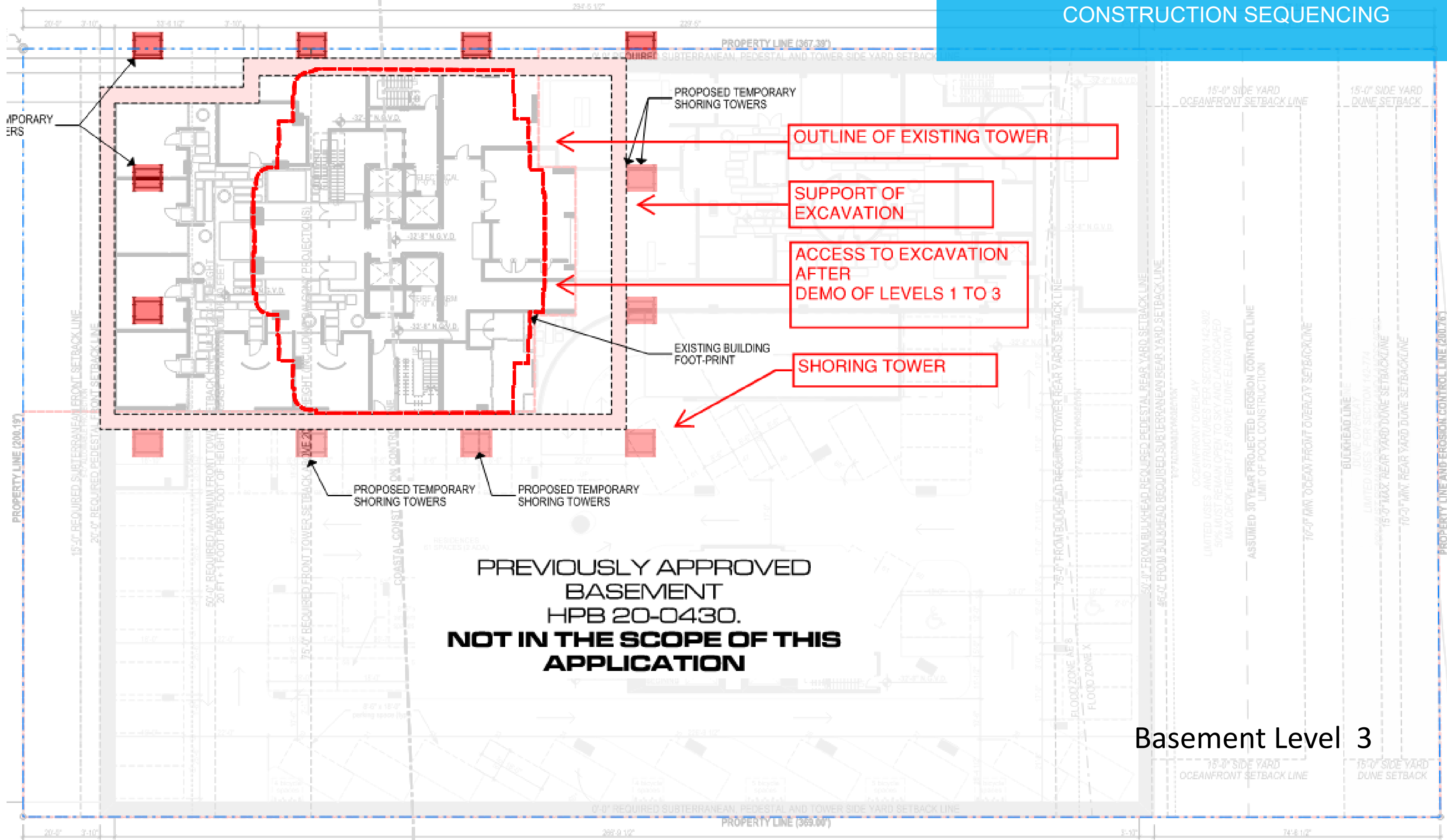
VERSAILLES HOTEL CONSTRUCTION SEQUENCING



Basement Level 2

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CONSTRUCTION SEQUENCING

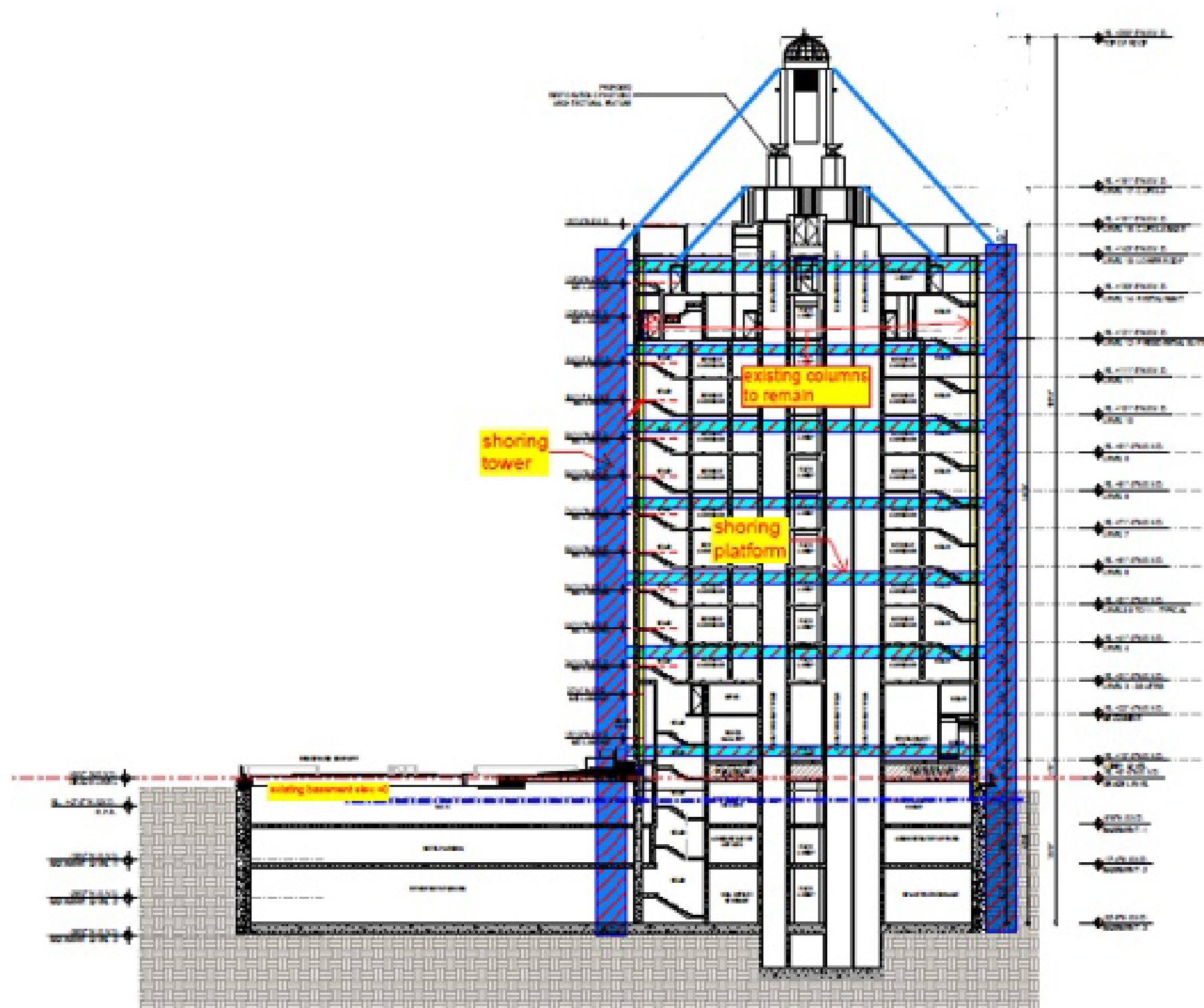


**PREVIOUSLY APPROVED
BASEMENT
HPB 20-0430.
NOT IN THE SCOPE OF THIS
APPLICATION**

Basement Level 3

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CONSTRUCTION SEQUENCING



South-North Cross-Section looking West