THE BANKS

PUBLIC INFRASTRUCTURE DEVELOPMENT

LOT 28

B.P. #2 - PARK & GARAGE (ITB #006-22)

DECEMBER 17, 2021

PROJECT TEAM:

Hamilton County
OWNER
County Administration Building, RM. 603
138 East Court Street
Cincinnati, Ohio 45202
Phone: 513-946-4400

THP Limited, Inc.
ARCHITECT/STRUCTURAL ENGINEER
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513-241-3222

Messer Construction/MBJ
CONSTRUCTION MANAGER
643 West Court Street
Cincinnati, Ohio 45203
Phone: 513-242-1541

Michael Mcinturf Architects
DESIGN ARCHITECT
1116 Race Street
Cincinnati, OH 45202
Phone: 513-639-2351

The Kleingers Group
LANDSCAPE ARCHITECT
6219 Centre Park Drive
West Chester, OH 45069
Phone: 513-779-7851

DNK Architects
ARCHITECT/CODE CONSULTANT
2616 Central Parkway
Cincinnati, OH 45214
Phone: 513-948-4146

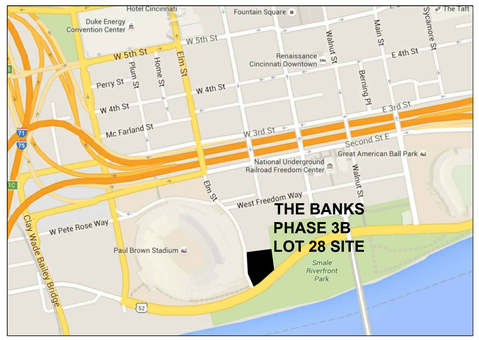
McGill Smith Punshon, Inc.
SURVEYOR
3700 Park 42 Drive, Suite 190B
Cincinnati, OH 45241
Phone: 513-759-0004

Heapy Engineering LLC
MEP & FP ENGINEER
1400 West Dorothy Lane
Dayton, OH 45409
Phone: 937-224-0861

Terracon Consultants, Inc.
GEOTECHNICAL ENGINEER
611 Lunken Park Drive
Cincinnati, OH 45226
Phone: 513-321-5816

Burgess and Niple
CIVIL ENGINEER
525 Vine Street
Cincinnati, OH 45202
Phone: 513-579-0042

THE BANKS
Public Partnership



LOCATION PLAN NORTH

DRAWING INDEX:

TITLE SHEET

SURVEY: (MSP)
TOPOGRAPHIC SURVEY

GENERAL: (THP)
G001 BUILDING CODE NOTES

CIVIL: (THP)
C101 SITE PLAN

CIVIL: (KLEINGERS)
C102 UTILITY PLAN
C102.1 STORM PROFILES
C102.2 STORM DETAILS

C103 GRADING PLAN

EROSION CONTROL: (KLEINGERS)
C104 EROSION CONTROL NOTES AND DETAILS
C104.1 EROSION CONTROL NOTES AND DETAILS

ARCHITECTURAL: (THP/MMA)
A001 GEOMETRIC LAYOUT

A100 SITE PLAN
A101 LOWER LEVEL FLOOR PLAN
A102-S SUBSTRUCTURE LEVEL PLAN
A102 PARK LEVEL FLOOR PLAN, LAYOUT, GRADING, AND COMPONENTS

A200 OVERALL ELEVATIONS
A201 LOT 27 ELEVATIONS AND SECTIONS
A202 ELM ST. STAIR ELEVATIONS AND SECTIONS
A203 ELM ST. ELEVATIONS
A204 ELM ST. WALL SECTIONS
A205 MEHRING WAY ELEVATIONS
A206 MEHRING WAY WALL SECTIONS

A210 BUILDING SECTIONS
A211 BUILDING SECTIONS
A212 BUILDING SECTIONS
A213 BUILDING SECTIONS

A220 ARCHITECTURAL DETAILS

A230 ARCHITECTURAL DETAILS

A240 RAILING DETAILS

A250 ELM STREET STAIR DETAILS

A300 LOT 27/28 PLANTER PLAN & SECTIONS
A301 LOT 27/28 PLANTER DETAILS
A302 LOT 27/28 PLANTER DETAILS

A310 RACE STREET ENTRY MARKER

A320 ELM STREET STAIR ENTRY MARKER

A330 LOT 27 PLANTER PLAN & SECTIONS

A340 UPPER LANDING DISPLAY
A341 UPPER LANDING DISPLAY SECTIONS

A360 MEHRING WAY NORTH ENTRY MARKER
A361 MEHRING WAY NORTH ENTRY MARKER DETAILS

A370 MEHRING WAY SOUTH ENTRY MARKER
A371 MEHRING WAY SOUTH ENTRY MARKER E-W SECTION
A372 MEHRING WAY SOUTH ENTRY MARKER N-S SECTION

A510.1 LOWER LANDING BLEACHER SEATING
A510.2 LOWER LANDING BLEACHER SEATING
A512.1 STEPPED BENCH & PLANTER @ MIDDLE WALK
A513 STEPPED BENCH @ LOWER WALK

A801 GUARDRAIL DETAILS

LANDSCAPE: (TKG)
L100 HARDSCAPE PLAN

L200 LANDSCAPE SOILS PLAN

L300 OVERALL LANDSCAPE PLAN
L301 LANDSCAPE ENLARGEMENT PLAN
L302 LANDSCAPE ENLARGEMENT PLAN
L303 PLANTING DETAILS

L400 DETAILS

IRRIGATION: (TKG)
L500 IRRIGATION ZONE PLAN

STRUCTURAL: (THP)
S001 GENERAL NOTES AND TYPICAL DETAILS
S002 TYPICAL DETAILS
S101 FOUNDATION PLAN
S102 UPPER LEVEL (503) FRAMING PLAN

S201 FOUNDATION DETAILS

S301 PILE CAP AND COLUMN DETAILS

S401 FRAMING DETAILS
S402 FRAMING DETAILS

S501 TYPICAL BEAM DETAILS AND BEAM DIAGRAMS
S502 BEAM DIAGRAMS
S503 BEAM DIAGRAMS

FIRE PROTECTION: (HEAPY)
F101 LOWER LEVEL FS PLAN

PLUMBING: (HEAPY)
P001 LEGEND SCHEDULES & NOTES

P101 LOWER LEVEL PLUMBING PLAN
P101A LOWER LEVEL PLUMBING PLAN (LOT 27)

P102 UPPER TERRACE LEVEL PLUMBING PLAN

HVAC: (HEAPY)
H001 HVAC SYMBOLS, NOTES, LEGENDS

H101 LOWER LEVEL HVAC PLAN (LOT 28)

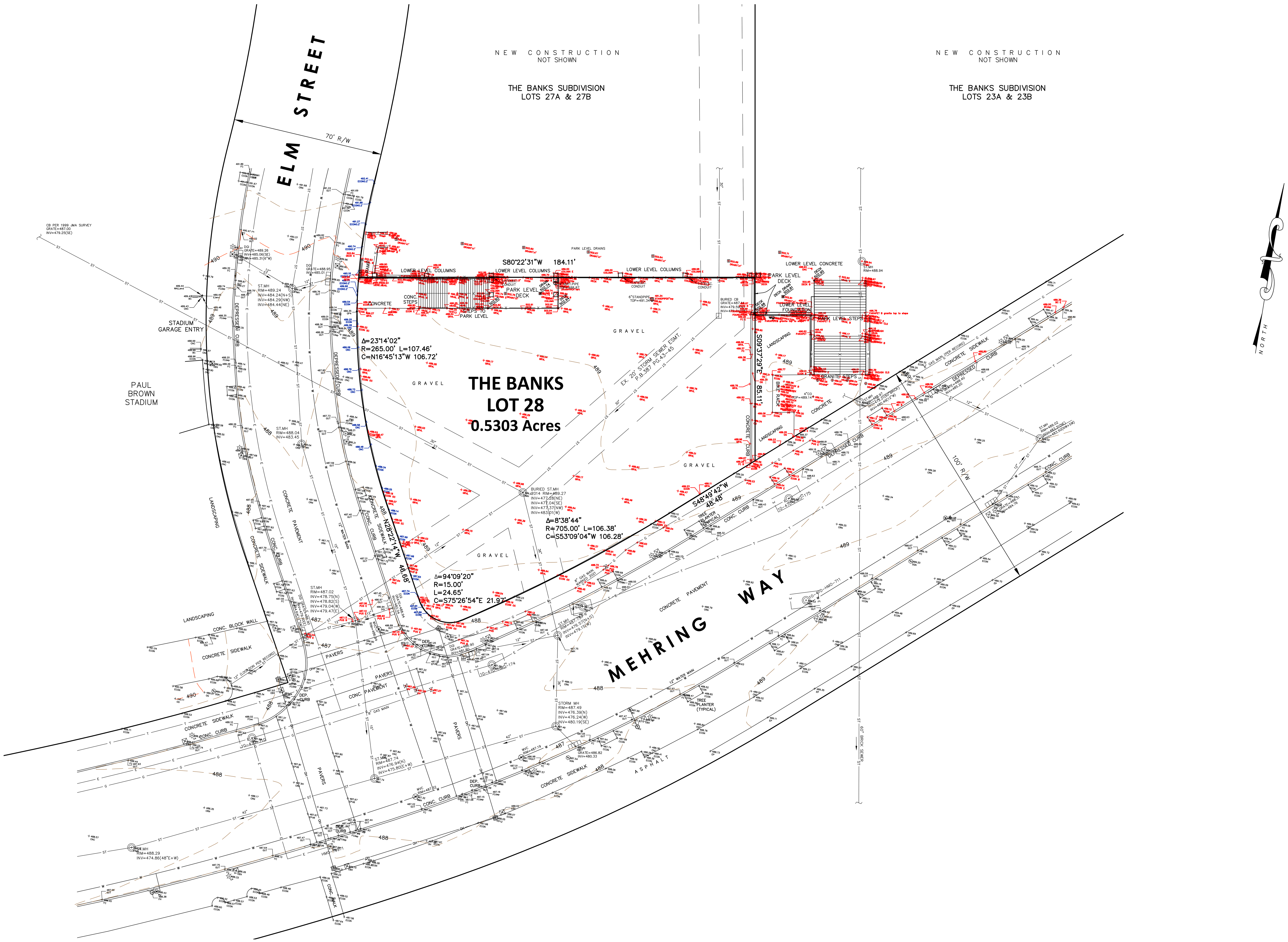
H301 CONTROL SCHEMATIC
H302 CONTROL SCHEMATIC

ELECTRICAL: (HEAPY)
E001 LEGEND AND INDEX
E002 SCHEDULES
E003 PANELBOARDS
E004 SINGLE-LINE
E005 DETAILS

E201 LIGHTING PLANS LOT 28

E301 POWER PLANS LOT 28

WATERPROOFING: (THP)
SW101 PARK LEVEL SUBSURFACE WATERPROOFING PLAN
SW201 WATERPROOFING SECTIONS
SW302 WATERPROOFING DETAILS
SW303 WATERPROOFING DETAILS



SURVEY NOTES:

PROPERTY LINES ARE BASED ON DEEDS AND PLATS OF RECORD.

BEARINGS AND ELEVATIONS ARE BASED ON THE BANKS SUBDIVISION RECORD PLATS, WHICH ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83) AND THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD1929). REFERENCE MONUMENTS ORIGINALLY USED = CITY OF CINCINNATI BENCHMARK No. 6919 & No. 6920.

SURFACE UTILITIES ARE SHOWN PER FIELD SURVEY, UNLESS NOTED AS "PER PLAN" OR "PER RECORD". UNDERGROUND UTILITY LINES SHOWN ARE BASED ON A COMBINATION OF SURFACE EVIDENCE AND AVAILABLE PLANS & RECORDS; THEY HAVE NOT BEEN PHYSICALLY LOCATED. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES ON THE PREMISES, EITHER IN SERVICE OR ABANDONED. NOR IS IT GUARANTEED THAT THEY ARE IN THE EXACT LOCATION INDICATED, ONLY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

LEGEND
EXISTING FEATURES

- MANHOLE
- CATCH BASIN/DRAIN
- GUTTER INLET
- CLEAN OUT
- DOWNSPOUT
- UTILITY POLE
- ELECTRIC BOX
- TELEPHONE BOX
- CABLE TV BOX
- LIGHT POLE/LAMP POST
- TRAFFIC SIGNAL/BOX
- FIRE HYDRANT
- WATER VALVE/METER
- SPRINKLER/VALVE
- GAS VALVE/METER
- SIGN/SIGN POST
- FLAG POLE
- MAIL BOX
- PARKING METER
- GUARD POST
- HANDICAPPED PARKING
- —S— SANITARY SEWER
- —ST— STORM SEWER
- —SS— COMBINED SEWER
- —SM— STEAM LINE
- —W— WATER LINE
- —G— GAS LINE
- —E— ELECTRIC LINE
- —T— TELEPHONE LINE
- —OH— OVERHEAD UTILITY LINE
- —C— COMMUNICATIONS LINE
- —X— FENCE LINE

SCALE IN FEET
0 10 20 40 60

P:\SDSKPROJ\99327\dwg\99327103-TOP-Base LOT28.dwg, SURVEY, 11/8/2021 9:17:30 PM, Renana, 1:1

TOPOGRAPHIC SURVEY

LOT 28
The BANKS Phase X
PLAT BOOK 482, PAGES 81-82

SECTION 17, TOWN 4, FRACTIONAL RANGE 1
CINCINNATI TOWNSHIP, CITY OF CINCINNATI
HAMILTON COUNTY, OHIO

STATE OF OHIO · RENANA GROSS · 8012 · REGISTERED · PROFESSIONAL SURVEYOR
11/8/2021

Date	NOVEMBER 8, 2021
Scale	1" = 20'
Drawn By	RG
Proj. Mgr.	RG
Survey Data Base	99327
DWG	99327103-TOP-Base LOT28
X-Ref(s)	N/A
Project Number	99327.10
File No.	99327
Sheet No.	1 / 1

MSP DESIGN
McGill Smith Punshon
■ Architecture ■ Engineering ■ Landscape Architecture ■ Planning ■ Surveying
3700 Park 42 Drive
Suite 190B
Cincinnati OH 45241
Phone 513.759.0004
www.mspdesign.com

BUILDING CODE NOTES - LOT 28 PARKING GARAGE & PARK

PROJECT LOCATION
- Central Riverfront, Northeast corner of Intersection of Elm Street & Mehring Way (Lot 28), Cincinnati, Ohio 45202.

PROJECT DESCRIPTION
- This project includes a 1-story extension of the Central Riverfront Garage (on the north half of the site) and a park on top of the garage, as well as on grade (fill) on the south half of the site.
- The Garage shall be built of Type IA construction and separated from the park built above by a three-hour rated podium.
- Bid Package #1 includes site preparation, garage foundations, and under-slab MEP.
- Bid Package #2 includes the garage superstructure, garage MEP and finishes, and the park (including fill, landscaping, and finishes).

PROJECT SITE ZONING
- Planned Development District No. 43 (PD-43).

BUILDING DEPARTMENT
- City of Cincinnati and Department Division of Buildings and Inspections.

APPLICABLE CODES
- Cincinnati Building Code - 2017 Edition with 2018 Amendments.
- Cincinnati Fire Prevention Code.
- Ohio Mechanical Code - 2017 Edition with 2018 Amendments.
- Ohio Plumbing Code - 2017 Edition with 2018 Amendments.
- Ohio Elevator Code and Cincinnati Building Code Chapter 1107, 2017 Edition with 2018 Amendments.
- Ohio Electrical Code (NFPA 70-17).
- Accessibility Code: ADA Accessibility Guidelines - updated 2010, and ICC/ANSI A117.1 - 2010.

FLOOD DESIGN REQUIREMENTS
- The 100-year Base Flood Elevation has been established at elevation 498.2' (FEMA Map #39061C0307D, effective date of 5/17/2004).
- The flood hazard area, as designated from the map, is "AE". Design and construction is based on ASCE 24-05 "Flood Resistant Design and Construction".
- Design Flood Elevation is 499.2' (Base Flood Elevation 498.2' plus 1'-0") for occupied spaces (i.e. Electrical Rooms, Water Meter Rooms, etc.).

CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION
- Use Group S-2 Enclosed Parking Garage - low-hazard storage occupancy. In the interim (prior to development of the adjacent Lot 25 (to the north), Level 489 in Lot 28 qualifies as an Open Parking Garage.
- Use Group A-5 Public Park - (Black Musicians Walk of Fame).

CHAPTER 4 - SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY
- Complies with Enclosed Parking Garage requirements per 406.4. In the interim (prior to development of Lot 25), Level 489 in Lot 28 qualifies as an Open Parking Garage.
- Heights and areas comply with 406.6.1. Refer to notes under Chapter 5 below.
- Mechanical ventilation provided per 406.6.2. Exhaust fan system constructed in Phase 2 (Lot 2) was sized to accommodate the Phase 3A and 3B garage build-out to the south (including Lot 28), all the way to Mehring Way.

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS
- Construction Type IA Protected Noncombustible per Table 601.
- Allowable Height: Unlimited per Table 504.3.
- Actual Height: 1 level below grade (podium level grade 503').
- Allowable Area: Unlimited per Table 506.2.
- Actual Area:
  Level 489: Lot 28 @ 8,750 s.f.
- Development above Lot 28 podium is public park.
- Complies with separation requirements per 510.2, between S-2 Enclosed Parking Garage and future overbuild above.
  - Podium level is 3-hour-rated horizontal separation per 510.2 and 710.3.
  - All structural frame elements (columns, girders, framing) supporting the future 3-hour-rated podium: 3 hours.

CHAPTER 6 - TYPES OF CONSTRUCTION
- Type IA Protected Noncombustible per 602.2 and Table 721.1.
- Table 601 Fire-Resistance Rating Requirements For Building Elements:
  - Structural frame: 3 hours.
  - Exterior bearing walls: Refer to Table 602 notes below.
  - Interior bearing walls: 3 hours.
  - Exterior nonbearing walls and partitions: Refer to Table 602 notes below.
  - Interior nonbearing walls and partitions: 0 hour.
  - Floor construction including beams: 2 hours, except the podium slab is 3 hours.
  - Roof construction including girders and framing supporting roof only:
    1½ hours (the podium remains 3-hour-rated).
- Table 602 Fire-Resistance Rating Requirements For Exterior Walls Based on Fire Separation:
  - Type IA, Use Group S-2, (Less than 30 feet): 1 hour (*).
  - Type IA, Use Group S -2 (Equal to or greater than 30 feet): 0 hour.
    (*) The exterior walls have no required fire rating since public streets surround the site and provide greater than 30 foot distance to adjacent building structure or street centerline.

CHAPTER 7 - FIRE-RESISTANCE-RATED CONSTRUCTION
- Exterior walls: 0-hour rating per 704.10 and Table 602 notes.
- Shafts (other than exits): 2 hours per 713.4 where noted; unrated where permissible.
- Exit access corridors: 0 hour with sprinklers, per Table 1020.1.
- Penetrations comply with 714.3.
- Protection of rated structural members complies with 704.

CHAPTER 8 - INTERIOR FINISHES
- Interior wall finishes per Table 803.11, for sprinklered Use Group S:
  - Vertical Exits & Passageways: Class C.
  - Exit Access Corridors: Class C.
  - Room & Enclosed Spaces: Class C.
- Interior floor finishes per 804.4: Vertical Exits, Exit Passageways, and Exit Access Corridors comply with the DOC FF-1 "pill test".

CHAPTER 9 - FIRE PROTECTION SYSTEMS
- Dry-type automatic sprinkler system provided per 903.2.10 and 406.6.3.
- Electrical supervision and central station connection of the sprinkler system provided per 903.4 and 903.4.1.
- Class I dry-type standpipe system provided per 905.3.1, 905.3.5, 905.8, and NFPA 14.
  - Standpipe hose connections typically located in stairways, and where additional hose connections are required, they are located outside of stairways.
  - All areas within 200' of a hose connection.
  - 100 pounds of pressure (within a period of 60 seconds) provided at the hose connections with the help of fire pump.
  - Hose threads and fire department connection locations and types to be reviewed and approved by the Cincinnati Fire Department per 903.3.6 and 912.1.
- Portable fire extinguishers provided per 906.1,International Fire Code, and NFPA 10.

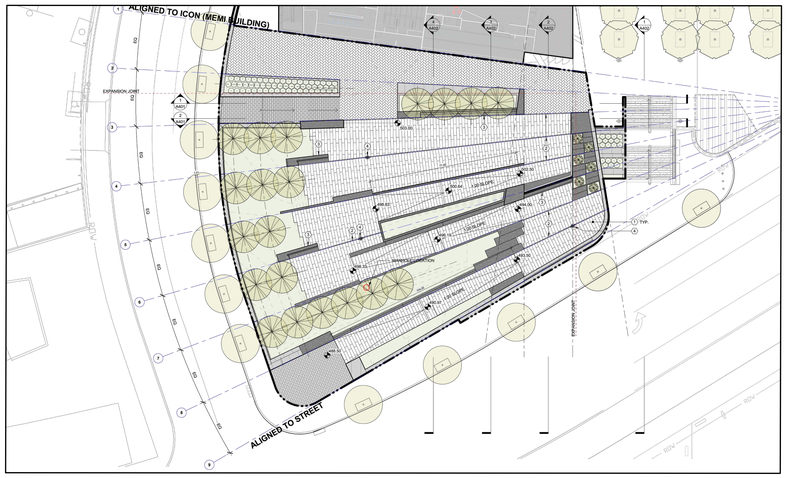
CHAPTER 10 - MEANS OF EGRESS (GARAGE)
- Design occupant load per Table 1004.1.2:
  - Level 489:
    Lot 28: 8,750 SF total public parking / 200 SF per occupant = 44 occupants.
- Guards comply with 1015.
- Remoteness of exits complies with the 1/3 diagonal rule.
- Egress lighting provided per 1008.
- Exit signs provided per 1013.
- Exit travel distances are within the allowable 400' maximum for sprinklered S-2 occupancy, per Table 1017.2.

CHAPTER 10 - MEANS OF EGRESS (PARK)
- Design occupant load per Table 1004.1.2
  - Level 489:
    Lot 28: 23,100 SF total public parking / 5 NET SF per occupant = 4,620 occupants.
- Number of exits complies with Table 1006.3.1: Three sides of park open to public way. Three exits provided.
- Sloped walkway: complies with accessible means of egress per 1009.
- Stairways:
  - Guards comply with 1015
  - Remoteness of exits complies with the1/3 diagonal rule
  - Egress lighting per 1008

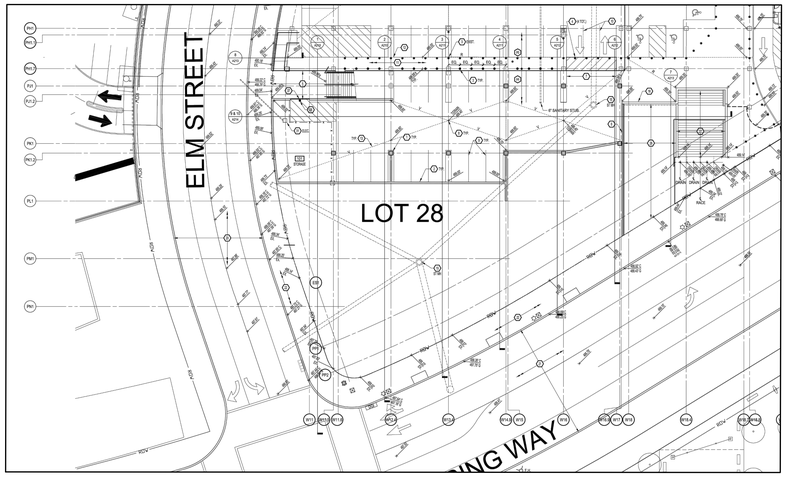
CHAPTER 11 - ACCESSIBILITY
- All entrances, exits, egress ramps, elevators, route through building, and signage shall be accessible. Also refer to additional notes under Chapter 10 above.
- Numbers of accessible car and van spaces comply with Table 1106.1:
  - Parking Spaces:
    Lot 28: 18

    Required Accessible Spaces (per Table 1106.1):
    1 van space will be provided per 1106.5
  - Minimum vertical clearance at van spaces and along accessible route = 8'-2".
  - Park walkway slopes are 5% or less, and do not constitute a ramp by definition.

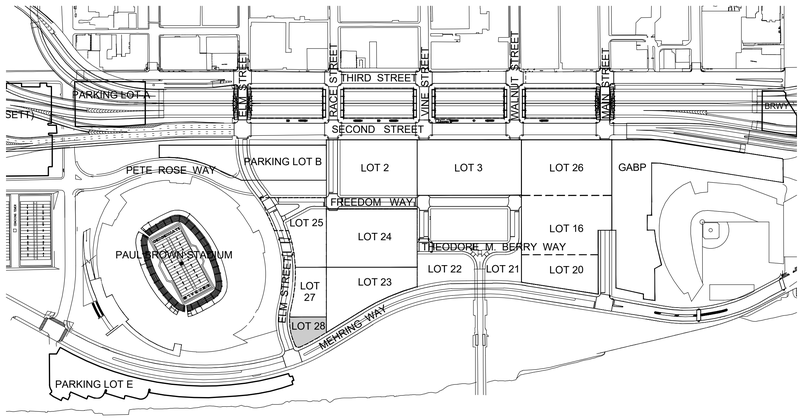
CHAPTER 12 - INTERIOR ENVIRONMENT
- Natural ventilation provided per 1203.4.
- Lighting provided per 1205.2 or 1205.3.
- Emergency egress lighting provided per 1205.5 and 1008.3.



LEVEL TWO



LEVEL ONE



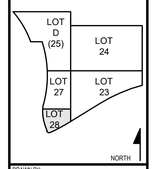
KEY PLAN

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

ISSUES

ISSUES		
1	11/05/2021	BP#1 - GARAGE FOUNDATIONS & SITE PREPERATION
2	11/09/2021	SCHEMATIC DESIGN DOCUMENTS
3	11/12/2021	BP#1 PERMIT SET
4	12/17/2021	BP#2 = PARK & GARAGE



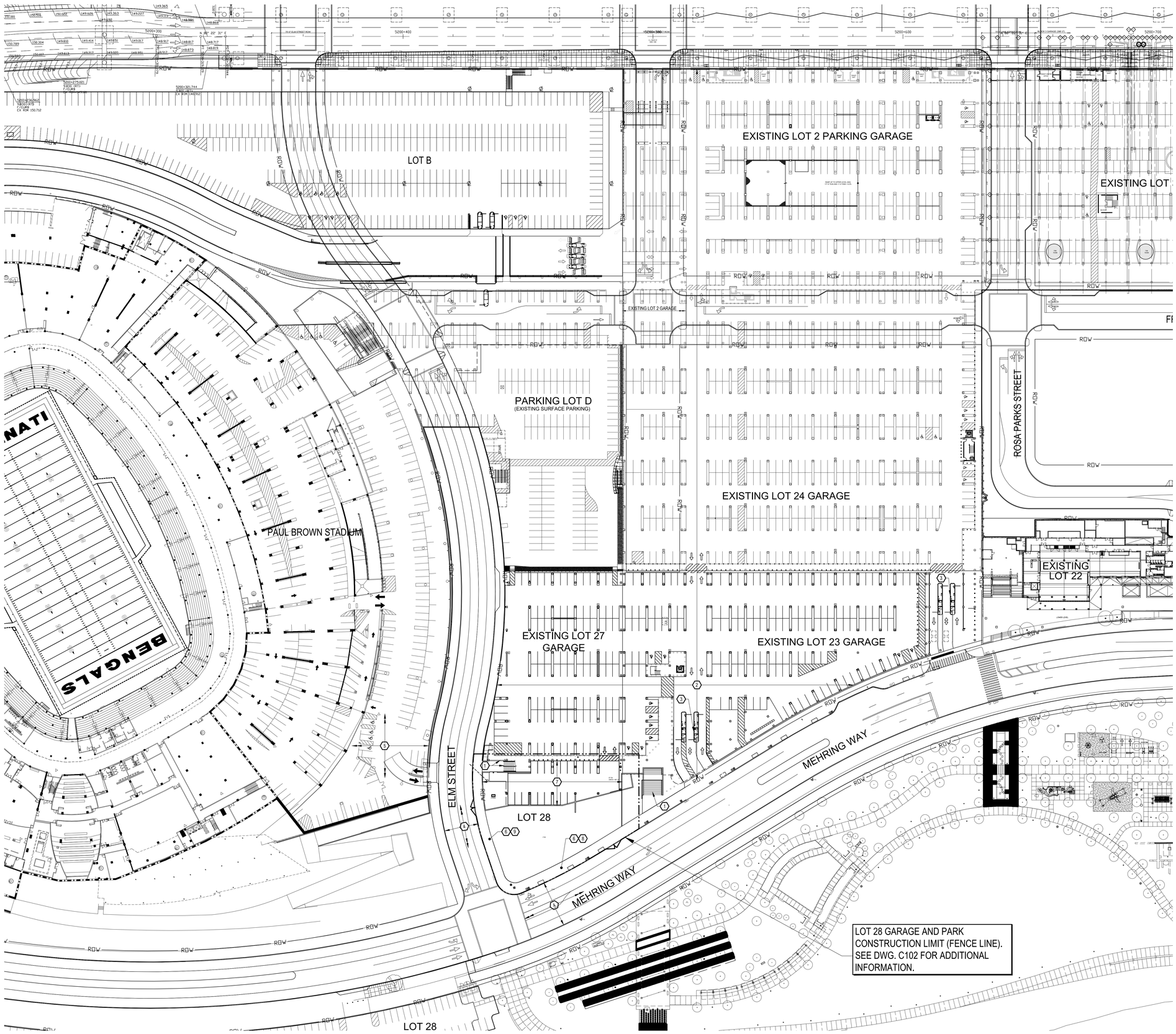
DRAWN BY: P.A.B.
ARCHITECT/ENGINEER: M.S.M.
CHECKED BY: M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
BUILDING CODE NOTES

JOB NUMBER 98090.40
DATE 11/05/2021

DRAWING NUMBER
G001



SITE PLAN
1" = 50'

NORTH

PROJECT GENERAL NOTES:

A. UTILITIES

1. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND PAY ALL REQUIRED FEES RELATED TO UTILITY WORK.
2. CONTRACTOR SHALL INSPECT AND VIDEO CONDITION OF ALL SEWERS TO REMAIN PER MSD & SMU REGULATIONS AND AS DIRECTED BY CONSTRUCTION MANAGER, PRIOR TO START AND AFTER COMPLETION OF CONSTRUCTION. ALL MATERIALS PERTAINING TO COMBINED OR SANITARY SEWERS MUST BE SUBMITTED TO MSD FOR APPROVAL. ALL MATERIAL PERTAINING TO STORM SEWERS MUST BE SUBMITTED TO STORMWATER MANAGEMENT FOR APPROVAL. PRIOR TO STARTING ANY WORK, VERIFY STATUS OF ALL SEWERS AFFECTED BY WORK OF THIS PROJECT WITH CONSTRUCTION MANAGER AND MSD FIELD ENGINEER, AND SMU FIELD ENGINEER. A STORMWATER MANAGEMENT UTILITY (SMU) PERMIT IS REQUIRED FOR WORK ON STORM SEWERS. AS-BUILT DRAWINGS SHALL BE SUBMITTED UPON THE COMPLETION OF ANY SANITARY AND STORM SEWER WORK. SEWERS INDICATED TO BE FILLED, SEALED AND ABANDONED, OR REMOVED SHALL BE DONE SO IN ACCORDANCE WITH ITEM 202 OF THE CITY OF CINCINNATI SUPPLEMENT. MANHOLES, CATCH BASINS, AND INLETS INDICATED TO BE REMOVED OR ABANDONED SHALL BE DONE SO IN ACCORDANCE WITH THE SAME. REFER TO SEWER DRAWINGS AND SPECIFICATIONS.
3. PRIOR TO EXCAVATION AND EARTHWORK, VERIFY LOCATIONS OF UNDERGROUND UTILITIES WITH THE UTILITY COMPANIES AND CONSTRUCTION MANAGER. SURVEY OR CAREFULLY EXCAVATE TO ESTABLISH EXACT UTILITY LOCATIONS. UTILITY LOCATIONS SHOWN ON THE DRAWING ARE ONLY APPROXIMATE AND CANNOT BE USED TO ASSURE THE CONTRACTOR OF ADEQUATE CLEARANCE IN CASE OF CLOSE PROXIMITY. COORDINATE ALL WORK WITH THE UTILITIES TO ASSURE UNINTERRUPTED FUNCTION OF UTILITIES TO REMAIN.
4. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE UNDERGROUND UTILITY PROTECTION SERVICE (OUPS 1-800-362-2764) AND OWNERS OF UNDERGROUND UTILITIES NOT REGISTERED WITH OUPS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION WORK FOR THE PURPOSE OF SECURING A STAKED PATH OF RESPECTIVE UTILITIES AND WITH THE APPROXIMATE DEPTH INDICATED ON STAKES.
5. ACTIVE UTILITIES SHALL BE ADEQUATELY PROTECTED FROM DAMAGE. WHERE ACTIVE UTILITIES ARE ENCOUNTERED BUT NOT SHOWN ON THE DRAWINGS, CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER, ARCHITECT, AND UTILITY OWNER IMMEDIATELY BEFORE PROCEEDING. WORK SHALL BE PROTECTED, SUPPORTED, OR RELOCATED AS DIRECTED, AND THE CONTRACT SUM ADJUSTED ACCORDINGLY, IF APPLICABLE.
6. INACTIVE AND ABANDONED UTILITIES ENCOUNTERED BUT NOT SHOWN ON THE DRAWINGS SHALL ALSO BE REPORTED IMMEDIATELY TO THE CONSTRUCTION MANAGER, ARCHITECT AND UTILITY OWNER. SUCH UTILITIES SHALL THEN BE REMOVED, PLUGGED, OR CAPPED AS DIRECTED. IN THE ABSENCE OF SPECIFIC REQUIREMENTS, PLUG OR CAP SUCH UTILITIES AS REQUIRED BY THE UTILITY OWNER.
7. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES ON THE SITE. DAMAGE TO EXISTING UTILITIES SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. PLUMBING PERMIT AND INSPECTION IS REQUIRED FROM THE CITY OF CINCINNATI PLUMBING DIVISION FOR ALL SANITARY AND STORM PIPING LOCATED ON PRIVATE PROPERTY.
9. PROVIDE MONITORED, CONTROLLED EXCAVATION FOR ALL EXCAVATIONS.
10. THE FOLLOWING IS A LIST OF THE REPRESENTED UTILITY OWNERS ON OR ADJACENT TO THE SITE:

OHIO UTILITIES PROTECTION SERVICE (OUPS)
PO BOX 729
12467 MAHONING AVENUE
NORTH JACKSON, OHIO 44451
(800) 362-2764

CITY OF CINCINNATI - DOTE
CITY HALL RM. 425
801 PLUM STREET
CINCINNATI, OHIO 45202-1979
(513) 352-3465 / (513) 352-3463

DUKE ENERGY CORPORATION (GAS & ELECTRIC)
139 E 4TH ST
CINCINNATI, OH 45202
(513) 544-6900 / 1-800-262-3000

CINCINNATI BELL TELEPHONE
221 E. FOURTH STREET
CINCINNATI, OHIO 45202
(513) 565-2210

METROPOLITAN SEWER DISTRICT (MSD)
1600 GEST STREET
CINCINNATI, OHIO 45204
(513) 352-4900 / (513) 244-1300

CITY OF CINCINNATI
STORMWATER MANAGEMENT UTILITY (SMU)
225 W. GALBRAITH ROAD
CINCINNATI, OHIO 45216
(513) 352-4287

CINCINNATI WATER WORKS (CWW)
4747 SPRING GROVE AVENUE
CINCINNATI, OH 45232
(513) 591-7700

B. EROSION CONTROL (SEE DWGS C110-C112 ALSO)

1. FOR ALL AREAS OF DISTURBED EARTH, THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH ODOT ITEMS 670 & 671 AND ODOT STANDARD DRAWINGS DM-4.3 AND DM-4.4.
2. BEST MANAGEMENT PRACTICES: THE PROJECT'S STORM WATER POLLUTION PREVENTION PLAN WILL BE REQUIRED TO DETAIL THE PROJECT SPECIFIC SOIL EROSION PREVENTION MEASURES. THE CONTRACTOR SHALL FOLLOW BEST MANAGEMENT PRACTICES (BMP'S) FOR SEDIMENT AND EROSION CONTROL DURING CONSTRUCTION AND POST-CONSTRUCTION IN ACCORDANCE WITH THE ODOT CMS SECTION 107.19 AND SUPPLEMENTAL SPECIFICATIONS 832 DATED 5/5/09. ANY IN-PLACE EROSION CONTROL PROVISION THAT IS DAMAGED IS TO BE REPLACED/REPAIRED IMMEDIATELY BY THE CONTRACTOR CAUSING THE DAMAGE.

C. BENCHMARKS

1. PROJECT CONTROL SHALL BE PROVIDED BY CONSTRUCTION MANAGER. THE CONTRACTOR SHALL SET ADDITIONAL BENCHMARKS AS NECESSARY.

D. SAFETY

1. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
2. THE DUTY OF THE ARCHITECT AND ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF ADEQUACY OF CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

DRAWING NOTES:

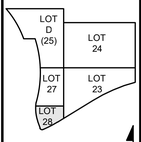
1. EXISTING STAIRS TO REMAIN OPEN THROUGHOUT CONSTRUCTION.
2. EXISTING CENTRAL RIVERFRONT GARAGE TO REMAIN OPEN THROUGHOUT DURATION OF PROJECT.
3. EXISTING BOOTHS AND PARKING EQUIPMENT TO REMAIN OPEN THROUGHOUT DURATION OF PROJECT.
4. EXISTING ROADWAY TO REMAIN OPEN TO TRAFFIC THROUGHOUT DURATION OF PROJECT. COORDINATE WORK TO MAINTAIN VEHICLE TRAFFIC AND PEDESTRIAN ACCESS. PROVIDE SIGNAGE, PAVEMENT MARKINGS AND TRAFFIC CONTROL MEASURES AS REQUIRED. COORDINATE MAINTENANCE OF TRAFFIC MEASURES WITH CONSTRUCTION MANAGER AND OWNER.
5. EXISTING PAUL BROWN STADIUM TO REMAIN OPEN THROUGHOUT DURATION OF PROJECT.
6. EXISTING SIDEWALK TO REMAIN OPEN THROUGHOUT DURATION OF PROJECT.
7. EXTENTS OF NEW PARKING GARAGE STRUCTURE.
8. ALONG MEHRING WAY, REMOVE ENTIRE SIDEWALK TO BACK OF CURB. REFER TO DRAWING NOTE 14 ON DWG. D101 IN B.P.#1 FOR ADDITIONAL INFORMATION.
9. ALONG ELM STREET, REMOVE ENTIRE SIDEWALK TO BACK OF CURB. REFER TO DRAWING NOTE 14 ON DWG. D101 IN B.P. #1 FOR ADDITIONAL INFORMATION.

UNDERGROUND UTILITIES
TWO WORKING DAYS BEFORE YOU DIG
CALL TOLL FREE 800-362-2764
OHIO UTILITIES PROTECTION SERVICE
(NON-MEMBERS MUST BE CALLED DIRECTLY)

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

ISSUES		
1	11/05/2021	BP#1 - GARAGE FOUNDATIONS & SITE PREPARATION
2	11/10/2021	BP#1 CONSTRUCTION DOCUMENTS
3	11/12/2021	BP#1 PERMIT SET
4	12/17/2021	BP#2 - PARK & GARAGE

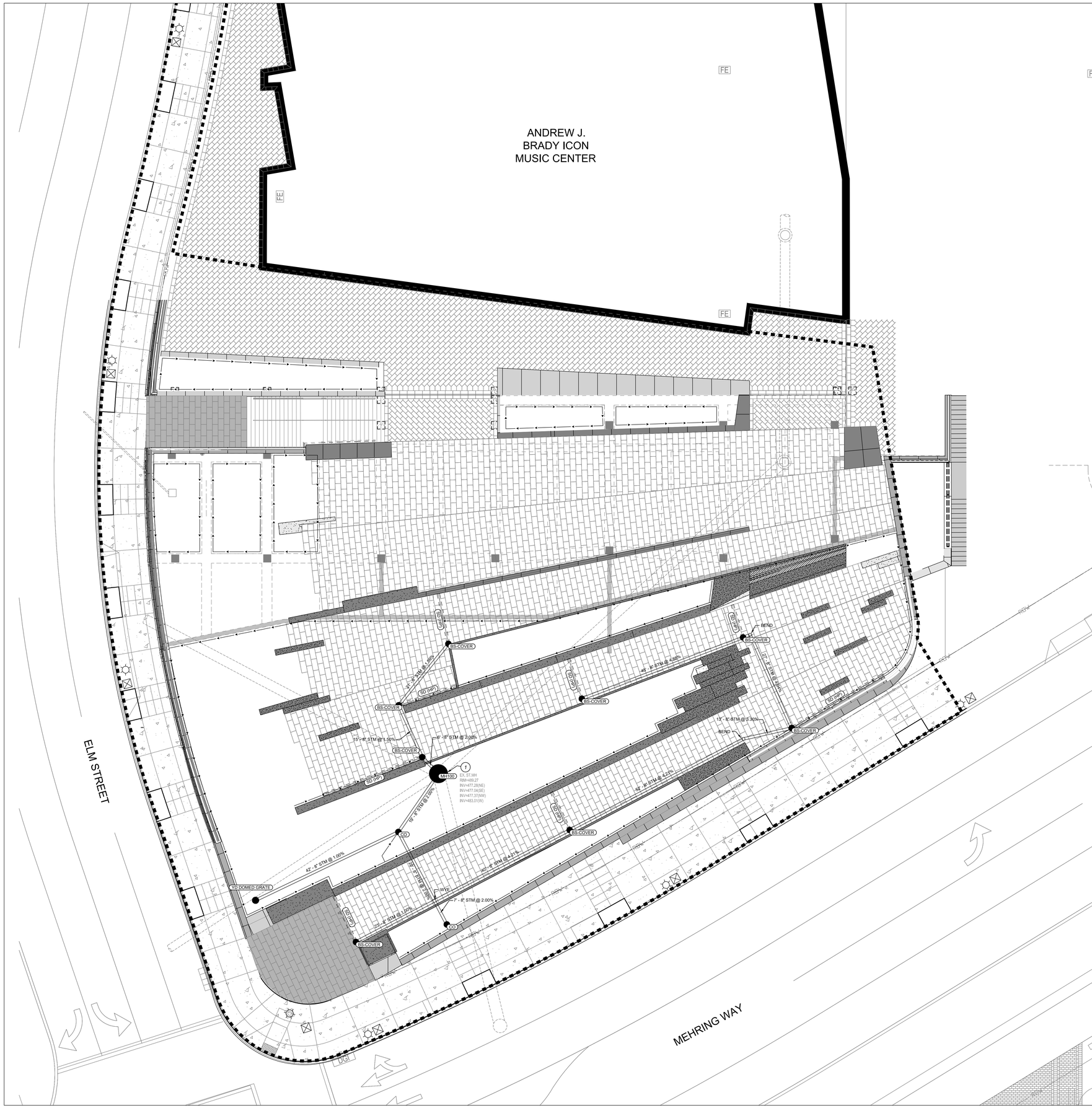


DRAWN BY: P.A.B.
ARCHITECT/ENGINEER: M.S.M.
CHECKED BY: M.S.M.

THE BANKS
Public Partnership

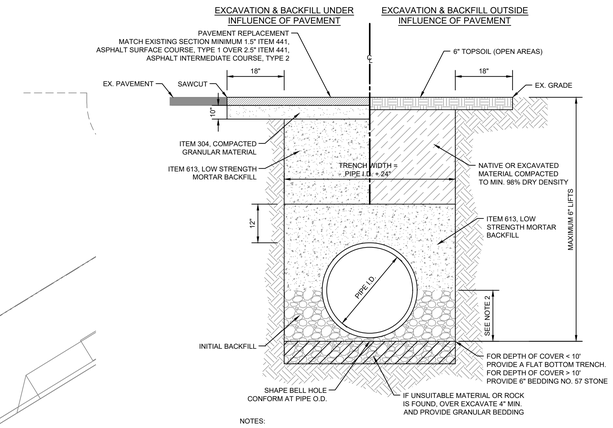
DRAWING TITLE
SITE PLAN

JOB NUMBER 98090.40
DATE 11/05/2021
DRAWING NUMBER C101



UTILITY NOTES

1. ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED OR REMOVED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS EXISTING. THE DRAIN TILE AND/OR STORM SEWER SHALL BE CONNECTED TO THE CURB SUBDRAIN, STORM SEWER SYSTEM OR OUTLETTED INTO THE ROADWAY DITCH AS APPLICABLE. REPLACED DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT SHALL BE DONE AT THE TIME OF THE BACKFILL OPERATION. COST OF THIS WORK TO BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
2. ALL EXISTING UTILITIES KNOWN TO EXIST HAVE BEEN SHOWN ON THESE PLANS IN THEIR APPROXIMATE LOCATION. PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF THE UTILITIES SHOWN. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ANY UTILITIES THAT MAY EXIST AND ARE NOT SHOWN.
3. ADJUST ALL EXISTING CASTINGS AND CLEANOUTS WITHIN PROJECT AREA TO GRADE AS REQUIRED.
4. ALL CATCH BASINS WITH DEPTH GREATER THAN 4.5' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611.
5. ALL STORM AND SANITARY SEWER MANHOLES WITH A DEPTH GREATER THAN 4' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611.
6. DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM AND SANITARY STRUCTURES ARE SHOWN TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
7. ALL PROPOSED STORM SEWERS, SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNER. EROSION CONTROL MEASURES MUST PROVIDE PROTECTION UNTIL COMPLETION OF THE PROJECT AND VEGETATIVE STABILIZATION.
8. ALL STORM STRUCTURES ARE ODOT TYPES UNLESS OTHERWISE INDICATED.
9. STORM SEWER PIPE LABELED "STM" SHALL BE ONE OF THE FOLLOWING: PVC SDR-35 PER ODOT ITEM 707.45, PVC PROFILE PIPE PER ODOT ITEM 707.43, HIGH DENSITY POLYETHYLENE PER ODOT ITEM 707.33, ALUMINIZED CORRUGATED METAL, ODOT ITEM 707.01, 707.02, OR REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. STORM SEWER PIPE LABELED "RCP" SHALL BE REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. ALL STORM IS TO BE INSTALLED PER ODOT ITEM 611. ALL STORM PIPE USED MUST HAVE A MANUFACTURER SPECIFIED FRICTION FACTOR OF 0.013 (N=0.013) OR LESS.
10. ALL YARD DRAINS SHALL BE ONE OF THE FOLLOWING: NYLOPLAST-ADS DRAIN BASIN, NDS DURACAST FABRICATED PVC CATCH BASIN, AGRI-DRAIN CATCH BASIN, OR APPROVED EQUAL.
11. ANY FIELD TILE CUT IN EXCAVATION WHICH DRAINS IN AN OFFSITE AREA MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.
12. THE FLOW IN ALL SEWERS, DRAINS, FIELD TILES AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.



NOTES:

1. REFER TO OSHA REQUIREMENTS FOR MAXIMUM ALLOWABLE TRENCH SLOPES.
2. THIS PORTION OF THE PIPE EMBEDMENT ZONE MUST BE RECOMPACTED TO PROPER DENSITIES AFTER MOVING SUPPORT SYSTEM FORWARD.
3. PROVIDE FILTER FABRIC WHEN VERY FINE OR UNSTABLE MATERIAL IS ENCOUNTERED.
4. APPLY ITEM 407 TACK COAT TO VERTICAL FACE OF SAWCUT PAVEMENT.

UTILITY CONDUIT OPEN CUT DETAIL

1 / C102 — N.T.S.

CODED NOTES

(1) ADJUST RIM TO PROPOSED GRADE. REFER TO GRADING PLAN

PROPOSED LEGEND

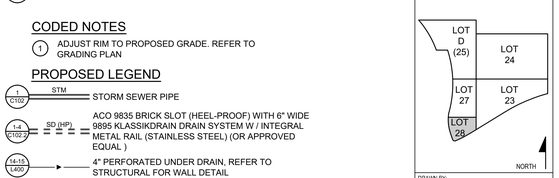
- 1 / C102 — STM — STORM SEWER PIPE
- 1-4 / C102 — SD (HP) — ACO 9835 BRICK SLOT (HEEL-PROOF) WITH 6" WIDE 9895 KLASSIKDRAIN DRAIN SYSTEM W / INTEGRAL METAL RAIL (STAINLESS STEEL) (OR APPROVED EQUAL)
- 14-15 / L400 — 4" PERFORATED UNDER DRAIN, REFER TO STRUCTURAL FOR WALL DETAIL
- 5 / C102 — YD — YARD DRAIN, DOMED GRATE (DUCTILE OR CAST IRON)
- 1-4 / C102 & 5 / L400 — SS — ACO BRICK SLOT COVER WITH CUSTOM PAVER. INSTALLED AT BOTTOM OUTLET FOR ACCESS AND MAINTENANCE.(OR APPROVED EQUAL)
- 5 / C102 & 9 / L400 — CO — CLEAN OUT
- LIMITS OF WORK

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

ISSUES

1	11/05/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE



DRAWN BY: M.K.
ENGINEER: M.K.
CHECKED BY: S.K.

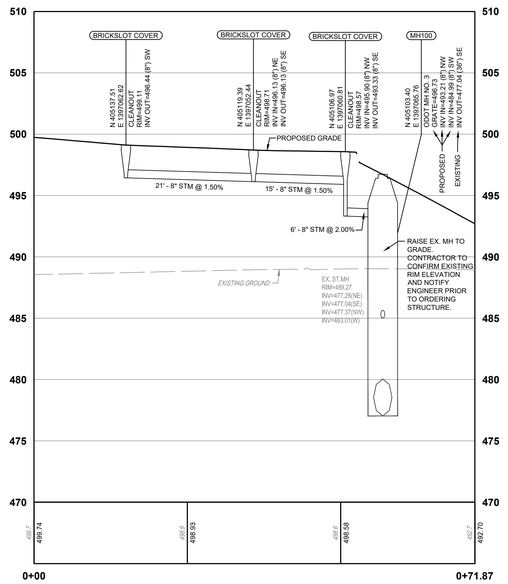
LOT 28 GARAGE AND PARK

DRAWING TITLE
UTILITY PLAN

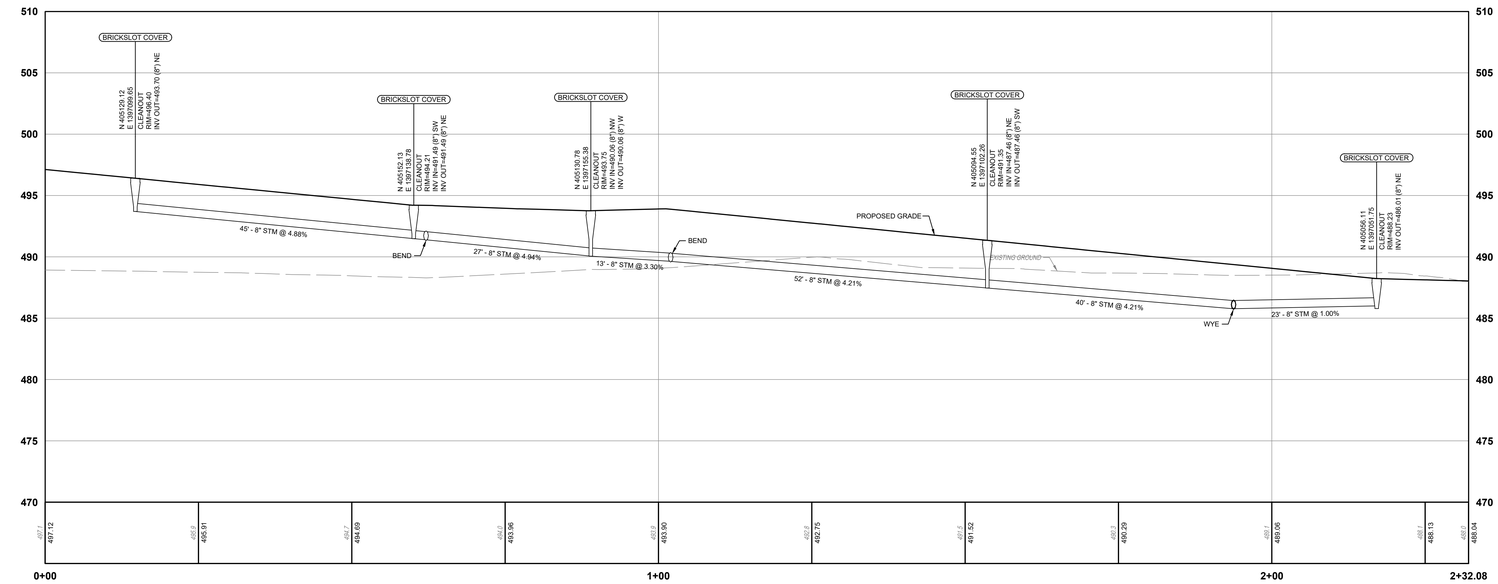
JOB NUMBER 98090.34 DATE 12/17/2021

C102

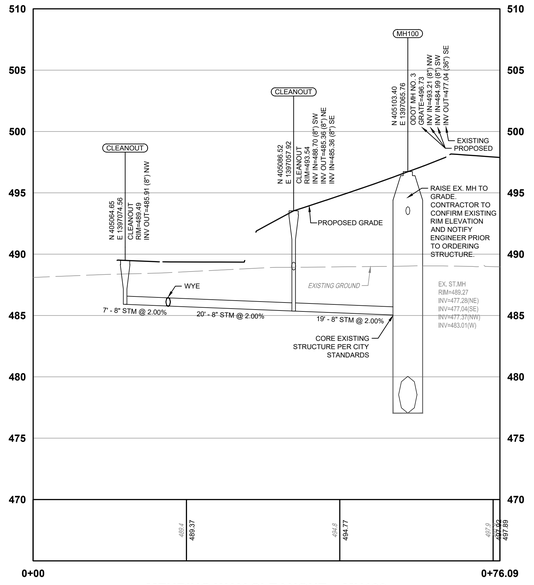
H:\2019\190725\002_DWG_Sheets\190725CUTL002.dwg, 12/17/2021 11:45:43 AM, _DWG To PDF.pc3



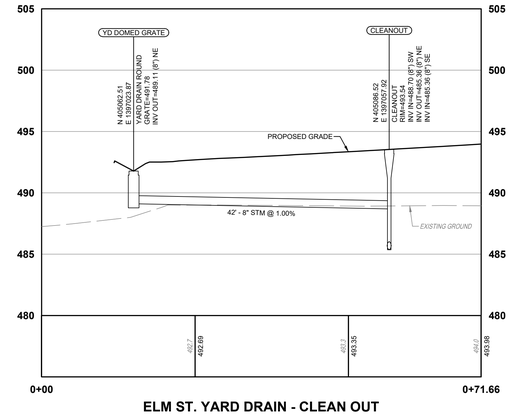
UPPER LEVEL SLOT DRAINS - MH100



LOWER LEVEL SLOT DRAINS



MEHRING WAY CLEANOUT - MH100



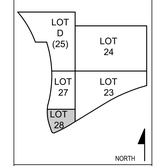
ELM ST. YARD DRAIN - CLEAN OUT

V 0 2.5 5 10
H 0 5 10 20

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

ISSUES		
1	11/09/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	SPEC PANEL & GARAGE



DRAWN BY: M.K.
ENGINEER: M.K.
CHECKED BY: S.K.

LOT 28 GARAGE AND PARK

DRAWING TITLE
STORM PROFILES

JOB NUMBER 98090.34
DATE 12/17/2021

C102.1

H:\2019\190725\002_DWGs_Sheets\190725CUTL002.dwg, 12/17/2021 11:46:33 AM, _DWG To PDF.pc3

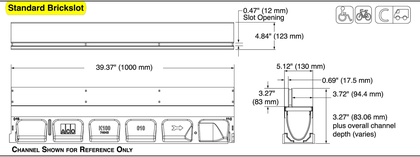
SMITH® JAY R. SMITH MFG. CO.®
MEMBER OF MORRIS GROUP INTERNATIONAL
POST OFFICE BOX 1637
MONTGOMERY, ALABAMA 36106-0337 (USA)
TEL: 334-277-6520 FAX: 334-272-7396 www.jrsmith.com
MEMBER OF: PDCA, ASPE, NAPHCC

LOCATION

9835 BRICKSLOT

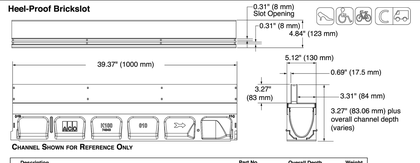
FUNCTION: Discreet drainage solution for use with brick or stone pavers. The slot blends in with the paving joints giving an aesthetic solution.

Standard Brickslot



CHANNEL SHOWN FOR REFERENCE ONLY

Heel-Proof Brickslot



CHANNEL SHOWN FOR REFERENCE ONLY

Description	Part No.	Overall Depth in	mm	Weight lbs.
Standard 1 meter - 39.37" (1m) Galvanized Steel	6138040-86-6	4.06	103	17.6
Standard 1/2 metre - 19.69" (0.5m) Galvanized Steel	6138041-86-6	4.06	103	9.0
Heel-Proof 1 meter - 39.37" (1m) Galvanized Steel	6138050-86-6	4.06	103	18.0
Heel-proof 1/2 meter - 19.69" (0.5m) Galvanized Steel	6138051-86-6	4.06	103	9.2

Notes:
1. For use with 9930 channels, 9935 catch basins, 9895 and 9895SS channels, as well as 9895-901G-CB and 9895-901S-CB catch basins.
2. Brickslot can also be used with 9832, 9836 and 9836SS channels.

REGULARLY FURNISHED:
1 Meter Galvanized Steel Grate Suitable for Loads Up To Load Class C.

VARIATIONS:
- ☐ 1/2 Meter Unit
- ☐ 1/2 Meter Access Unit
- ☐ 1 Meter Heel-proof Unit
- ☐ 1/2 Meter Heel-proof Unit
- ☐ 1/2 Meter Heel-proof Access Unit

OPTIONAL MATERIALS:
- ☒ Type 304 Stainless Steel

SMITH ACO Trench Drain Series

REV.	DATE	DESCRIPTION	BY	CKD. BY
B	6-19-18	Revised and Updated	TBW	MD
A	1-14-10	Revised Cross Section Detail	RN	MD

WEIGHT POUNDS | VOLUME CUBIC FEET | FIGURE NUMBER 9835

DRAWING NUMBER 9835 | SIZE A | SCALE: NONE | DATE: 5-4-06 | APPROVED BY: MD | CHECKED BY: MD | DRAWN BY: RN | FIGURE NUMBER 9835

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

1 C102.2

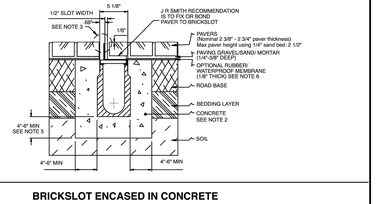
WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SMITH® JAY R. SMITH MFG. CO.®
MEMBER OF MORRIS GROUP INTERNATIONAL
POST OFFICE BOX 1637
MONTGOMERY, ALABAMA 36106-0337 (USA)
TEL: 334-277-6520 FAX: 334-272-7396 www.jrsmith.com
MEMBER OF: PDCA, ASPE, NAPHCC

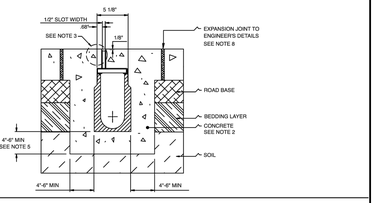
LOCATION

9835 INSTALLATION DETAILS

BRICKSLOT WITH PAVERS



BRICKSLOT ENCASED IN CONCRETE



NOTES:
1. It is necessary to ensure the minimum dimensions shown are suitable for the existing ground conditions. Engineering advice may be required.
2. A minimum concrete strength of 3000 PSI is recommended. The concrete should be vibrated to eliminate air pockets.
3. Pavers to be 1/8" above channel edge. A bead of sealant can be used between the rail & concrete.
4. Refer to J R Smith latest installation instructions for complete details.
5. Concrete base thickness should match slab thickness.
6. Contact J.R Smith for recommendations on draining when using membrane material with Brickslot.
7. Where used with a Suspended Slab, engineering advice must be sought.
8. Expansion joints are recommend to protect the channel and the concrete surround.

SMITH ACO Trench Drain Series

REV.	DATE	DESCRIPTION	BY	CKD. BY
A	6-19-18	Updated Drawing	TBW	PJ

WEIGHT POUNDS | VOLUME CUBIC FEET | FIGURE NUMBER 9835BS

DRAWING NUMBER 9835BS | SIZE A | SCALE: NONE | DATE: 5-4-06 | APPROVED BY: MD | CHECKED BY: MD | DRAWN BY: RN | FIGURE NUMBER 9835BS

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

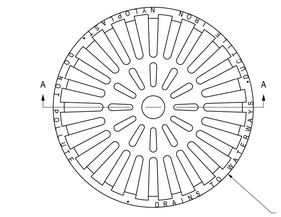
WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

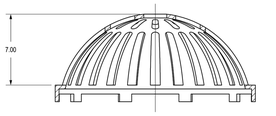
2 C102.2

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

1899CGD

APPROX. DRAIN AREA = 175.59 SQ IN
APPROX. WEIGHT = 32.00 LBS





SECTION A-A

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	3-8-06		
REVISED BY	EBC	PROJECT NO./NAME	
DATE	3-24-11		
DWG SIZE	A	SCALE 1:6	SHEET 1 OF 1

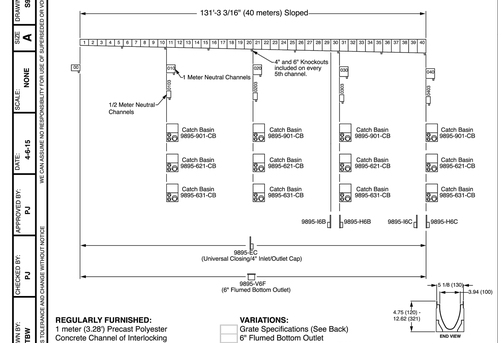
Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplastus.com

TITLE: 18 IN DOME GRATE
DWG NO. 7001-110-215 REV D

1 C102.2

6" WIDE 9895 KLASSIKDRAIN® DRAIN SYSTEM w/INTEGRAL METAL RAIL

FUNCTION: Used in all surface drainage applications. May be assembled in any length utilizing integral metal rails that allow for extra heavy duty hard wheel traffic applications.



REGULARLY FURNISHED:
1 meter (3.28') Precast Polyester Concrete Channel of Interlocking Design with a Built in Slope of .5%. Channel has an Integral Metal Rail, Radiused Bottom and 4" Internal Width. Supplied with Secured Grate as per Specification.

Note: This Trench Drain System is designed for **"On Grade Applications Only"** as There are No Provisions for a Flashing Flange or Flashing Clamp.

Note: Catch Basins come with Polymer Concrete Top, Plastic Bucket, and Plastic Base. 631 Catch Basins come with Plastic Riser as Well. Select a Suitable Grate.

VARIATIONS:
- ☐ Grate Specifications (See Back)
- ☐ 6" Flumed Bottom Outlet
- ☐ Closing/4" Inlet/Outlet Cap -UNV4
- ☐ 9895-901 Catch Basin
- ☐ 9895-621 Catch Basin
- ☐ 9895-631 Catch Basin
- ☐ Foul Air Trap (catch basin only)
- ☐ 6" Horizontal Flumed Outlet Cap
- ☐ 9854 Plastic Dome Bottom Strainer
- ☐ Installation Device
- ☐ Grate Removal Tool

OPTIONAL RAIL MATERIALS:
- ☒ Stainless Steel

SMITH ACO Trench Drain Series

REV.	DATE	DESCRIPTION	BY	CKD. BY
A	10-11-16	Revised Dim. in Cross Section	TBW	MD

WEIGHT POUNDS | VOLUME CUBIC FEET | FIGURE NUMBER 9895

DRAWING NUMBER 9895 | SIZE A | SCALE: NONE | DATE: 4-6-15 | APPROVED BY: PJ | CHECKED BY: PJ | DRAWN BY: TBW | FIGURE NUMBER 9895

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

3 C102.2

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

6" WIDE 9895 KLASSIKDRAIN® DRAIN SYSTEM w/INTEGRAL METAL RAIL

Light Duty DIN 19580/EN 1433 Load Class A: 3500 lbs - 70 psi. For pedestrian, wheelchair and bicycle traffic.

- ☐ **9870-410-GP** - 1/4 dia perforated galv. steel grate (28.30 sq. in.)
- ☐ * **9870-420-G** - 3 1/4 x 3/8 galv. steel grate (30.20 sq. in.)
- ☐ **9870-450-SS** - 3 1/4 x 3/8 slotted stainless steel grate (42.60 sq. in.)
- ☐ **9870-451-SSPA** - 1/4 dia perforated stainless steel grate (28.30 sq. in.)
- ☐ * **9870-494-PADAB** - 1 3/4 x 5/16 longitudinal slot black polypropylene grate (27.40 sq. in.)
- ☐ * **9870-494-PADAG** - 1 3/4 x 5/16 longitudinal slot gray polypropylene grate (27.40 sq. in.)
- ☐ * **9870-691-HPP** - 1 13/16 x 1/4 slotted black polypropylene grate (17.00 sq. in.)

Medium Duty, DIN 19580/EN 1433 Load Class B: 28,100 lbs - 581 psi. For sidewalks and small private parking lots.

- ☐ * **9870-447-SSADA** - 13/16 x 3/16 longitudinal stainless steel slot bar grate (38.40 sq. in.)

Heavy Duty DIN 19580/EN 1433 Load Class C: 56,000 lbs - 1,162 psi. For commercial pneumatic tire traffic patterns, pneumatic tire forklifts and pneumatic tire tractor trailers.

- ☐ * **9870-405-GM** - 13/16 x 1/2 longitudinal galv. steel slot bar grate (121.10 sq. in.)
- ☐ * **9870-411-GPHD** - 1/4 dia perforated galv. steel grate (28.30 sq. in.)
- ☐ * **9870-435-GHD**- 3 1/4 x 3/8 slotted galv. steel grate (35.20 sq. in.)
- ☐ * **9870-435-SSM** - 13/16 x 1/2 longitudinal stainless steel slot bar grate (121.10 sq. in.)
- ☐ * **9870-455-SSHD** - 3 1/4 x 3/8 slotted stainless steel grate (42.60 sq. in.)
- ☐ * **9870-465-SSP**- 1/4 dia perforated stainless steel grate (28.30 sq. in.)
- ☐ * **9870-479-MD** - Mosaic pattern ductile iron grate (19.50 sq. in.)
- ☐ * **9870-481-IW** - Iron Wave pattern ductile iron grate (35.98 sq. in.)
- ☐ * **9870-481-ID** - Iron Decorative pattern ductile iron grate (19.00 sq. in.)
- ☐ * **9870-485-GRE** - 1 1/2 x 13/16 slotted resin composite grate (16.30 sq. in.)

Extra Heavy Duty, DIN 19580/EN 1433 Load Class E: 135,000 lbs - 2,788 psi. For commercial solid tire traffic patterns, forklifts and impacts from steel struts or metal wheels.

- ☐ * **9870-481-M** - 3 15/16 x 3/8 ductile iron slotted grate (21.00 sq. in.)
- ☐ * **9870-490-SSHDE**- 3 1/4 x 3/8 slotted stainless. steel grate (35.20 sq. in.)
- ☐ * **9870-435-GHDE**- 3 1/4 x 3/8 slotted galv. steel grate (35.20 sq. in.)
- ☐ * **9870-478-MADA** - 1 3/4 x 5/16 longitudinal ductile iron slotted grate (14.30 sq.in.) *Available in QuickLok style

DEEP END DEPTHS 9895 SYSTEM

Channel Number	Deep End Invert Inch	mm	Slope	Weight Lbs.
9895-00	3.94	100	0.0%	28.1
9895-1	4.13	105	0.5%	28.1
9895-2	4.33	110	0.5%	28.9
9895-3	4.53	115	0.5%	29.7
9895-4	4.72	120	0.5%	30.5
9895-5	4.92	125	0.5%	31.3
9895-6	5.12	130	0.5%	32.1
9895-7	5.31	135	0.5%	32.9
9895-8	5.51	140	0.5%	33.7
9895-9	5.71	145	0.5%	34.5
9895-10	5.91	150	0.5%	35.3
9895-010	5.91	150	0.0%	35.3
9895-100	5.91	150	0.0%	17.0
9895-11	6.10	155	0.5%	36.1
9895-12	6.30	160	0.5%	36.9
9895-13	6.50	165	0.5%	37.7
9895-14	6.69	170	0.5%	38.5
9895-15	6.89	175	0.5%	39.3
9895-16	7.09	180	0.5%	40.1
9895-17	7.28	185	0.5%	40.9
9895-18	7.48	190	0.5%	41.7
9895-19	7.68	195	0.5%	42.5
9895-20	7.88	200	0.5%	43.4
9895-020	7.88	200	0.0%	43.4
9895-200	7.88	200	0.0%	20.5
9895-21	8.07	205	0.5%	44.2
9895-22	8.27	210	0.5%	45.0
9895-23	8.46	215	0.5%	45.8
9895-24	8.66	220	0.5%	46.8
9895-25	8.86	225	0.5%	47.4
9895-26	9.06	230	0.5%	48.2
9895-27	9.25	235	0.5%	49.0
9895-28	9.45	240	0.5%	49.8
9895-29	9.65	245	0.5%	50.6
9895-30	9.84	250	0.5%	51.4
9895-030	9.84	250	0.0%	51.4
9895-303	9.84	250	0.0%	24.0
9895-31	10.04	255	0.5%	52.2
9895-32	10.24	260	0.5%	53.0
9895-33	10.43	265	0.5%	53.8
9895-34	10.63	270	0.5%	54.6
9895-35	10.83	275	0.5%	55.4
9895-36	11.02	280	0.5%	56.2
9895-37	11.22	285	0.5%	57.0
9895-38	11.42	290	0.5%	57.9
9895-39	11.61	295	0.5%	58.7
9895-40	11.81	300	0.5%	59.5
9895-040	11.81	300	0.0%	59.5
9895-403	11.81	300	0.0%	27.5

Note: For overall depth of channel add .80" to invert depth shown.

SMITH ACO Trench Drain Series

REV.	DATE	DESCRIPTION	BY	CKD. BY
A	4-9-19	Revised Load Class C	MW	PJ

WEIGHT POUNDS | VOLUME CUBIC FEET | FIGURE NUMBER 9895BS

DRAWING NUMBER 9895BS | SIZE A | SCALE: NONE | DATE: 4-6-15 | APPROVED BY: PJ | CHECKED BY: PJ | DRAWN BY: TBW | FIGURE NUMBER 9895BS

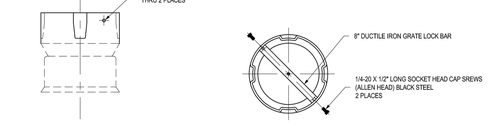
DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

4 C102.2

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

0899CGCL



DRAWN BY	AWA	MATERIAL	
DATE	7-5-00		
REVISED BY	EBC	PROJECT NO./NAME	
DATE	2-20-10		
DWG SIZE	A	SCALE 1:6	SHEET 1 OF 1

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplastus.com

TITLE: 6" SOLID LOCKING COVER ASSEMBLY
DWG NO. 7001-110-636 REV B

5 C102.2

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

ISSUES

1	11/09/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BPMI + PARKS COMMENTS

DRAWN BY: M.K.
ENGINEER: M.K.
CHECKED BY: S.K.

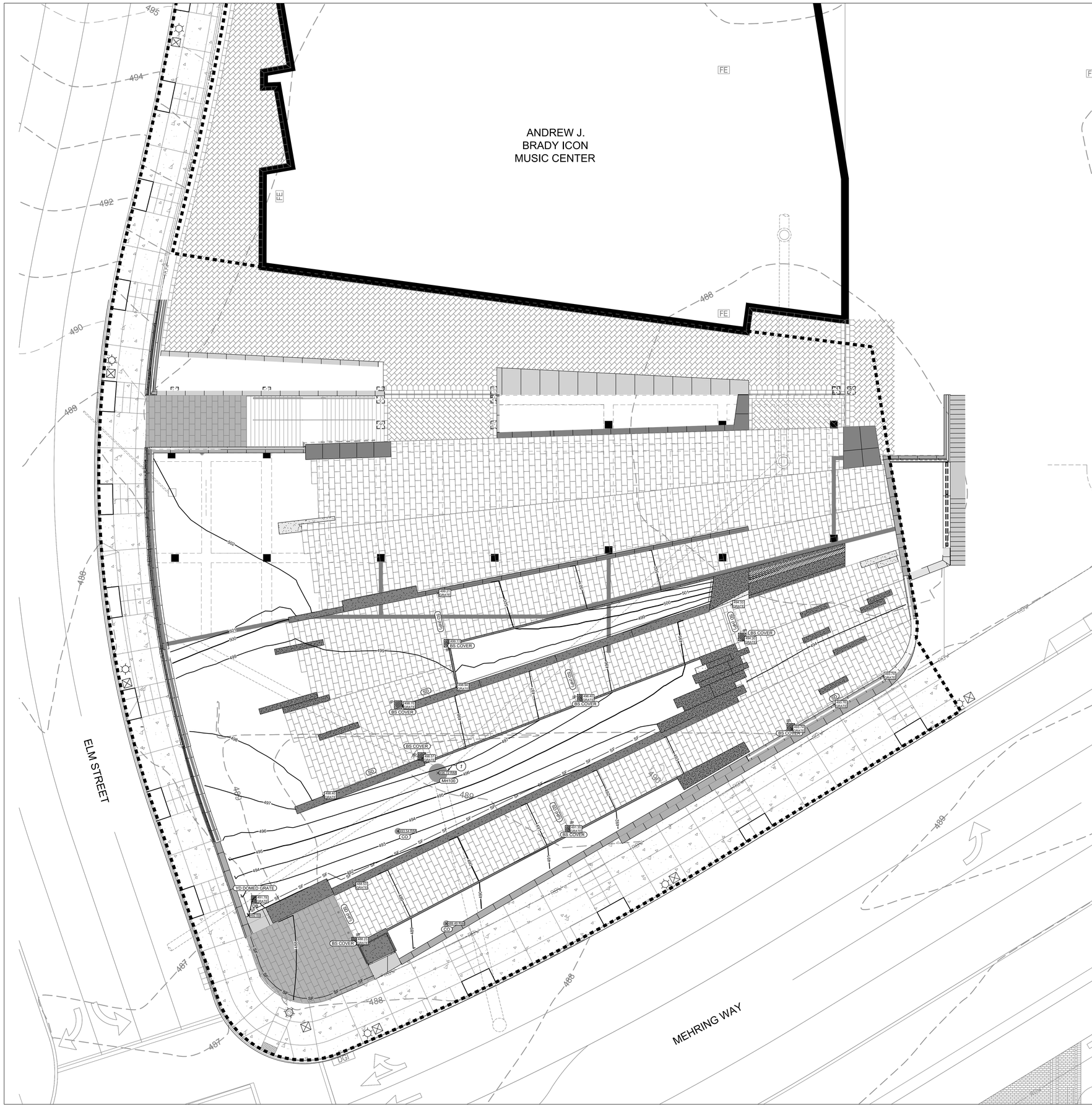
LOT 28 GARAGE AND PARK

DRAWING TITLE
STORM DETAILS

JOB NUMBER 98090.34 DATE 12/17/2021

C102.2

H:\2019\190725\002_DWG_Sheets\190725CUTL002.dwg, 12/17/2021 11:49:13 AM, _DWG To PDF.pc3



GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES WHO ARE NON-MEMBERS OF THE OHIO UTILITIES PROTECTION SERVICE AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.
2. CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS.
3. THE CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FULLY INFORM HIMSELF CONCERNING ALL CONDITIONS AFFECTING THE SCOPE OF THE WORK. FAILURE TO VISIT THE SITE SHALL NOT RELIEVE HIM FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE CONTRACT.

GRADING NOTES

1. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
2. ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
3. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL PRACTICES REQUIRED BY CITY OF CINCINNATI AND THE OHIO EPA.
4. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. IF NO SPECIFICATIONS ARE SUPPLIED, USE ODOT ITEM 659.
5. CONTRACTOR TO LAYOUT BUILDING / STRUCTURE BASED ON ARCHITECTURAL/FOUNDATION PLANS. SITE PLAN IS FOR CONCEPTUAL PURPOSES ONLY.

GENERAL NOTE

REFER TO SHEET A102 FOR DETAILED GRADING

CODED NOTES

(1) ADJUST RIM TO PROPOSED GRADE

GRADING LEGEND

- 1215 — EXISTING MAJOR CONTOUR
- 1216 — EXISTING MINOR CONTOUR
- 1215 — PROPOSED MAJOR CONTOUR
- 1216 — PROPOSED MINOR CONTOUR
- × 1215.00 — PROPOSED SPOT ELEVATION
- LIMITS OF WORK

PROPOSED EROSION CONTROL LEGEND

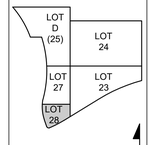
- IP — INLET PROTECTION, USE GRAVEL / SANDBAGS AS NEEDED TO PROTECT DURING CONSTRUCTION AND ERTEC-SLOT GUARD OR APPROVED EQUAL
- 1 C104.1 — DB — DANDY BAG
- 3 C104.1 — SF — SILT FENCE
- 2 C104.1 — CWO — CONCRETE WASHOUT
- 4 C104.1 — CONSTRUCTION ENTRANCE, MAINTAIN AS NECESSARY. INSTALLED IN BID PACKAGE 1

0 5 10 20

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

ISSUES		
1	11/05/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE



DRAWN BY: M.K.
ENGINEER: M.K.
CHECKED BY: S.K.

LOT 28 GARAGE AND PARK

DRAWING TITLE
GRADING PLAN

JOB NUMBER 98090.34
DATE 12/17/2021

C103

H:\2019\190725\002_DWG_Sheets\190725CGRD002.dwg, 12/17/2021 11:49:35 AM, _DWG To PDF.pc3

PROJECT DATA

PROJECT DESCRIPTION
THE BANKS PUBLIC INFRASTRUCTURE DEVELOPMENT - LOT 28 GARAGE & PARK. EXISTING GRAVEL LOT IS TO BE PREPARED FOR A PARKING GARAGE EXTENSION AND PROPOSED HARDSCAPE. FOUNDATION WORK IS TO BE COMPLETED IN THIS PHASE OF CONSTRUCTION.

LATITUDE:	N 39°05'41.01"
LONGITUDE:	W 84°30'49.04"
ESTIMATED CONSTRUCTIONS DATES:	DECEMBER 2021 - SEPTEMBER 2022
TOTAL SITE AREA:	0.65 ACRES
TOTAL DISTURBED AREA:	0.65 ACRES
EXISTING IMPERVIOUS AREA:	0.65 ACRES
PROPOSED IMPERVIOUS AREA:	0.65 ACRES
TOTAL IMPERVIOUS AREA AFTER CONSTRUCTION:	0.65 ACRES
INCREASE IN IMPERVIOUS AREA:	0%
PRE-CONSTRUCTION RUNOFF COEFFICIENT :	C=0.90
POST-CONSTRUCTION RUNOFF COEFFICIENT:	C=0.90
IMMEDIATE RECEIVING WATER/MS4:	MS4
ULTIMATE RECEIVING STREAM:	OHIO RIVER
EXISTING LAND USE:	PARKING LOT
SOILS:	UrO URBAN LAND, 0-12 PERCENT SLOPES, OCCASIONALLY FLOODED, UsUXF
URBAN LAND - UDORTHENTS COMPLEX, SMOOTHED, 0-50 PERCENT SLOPES	

CONSTRUCTION SEQUENCE

TO COMPLETE THE EXCAVATION AND CONSTRUCTION OF THE PROPOSED JOB IMPROVEMENTS, COORDINATION OF THE CONTRACTOR'S WORK CREWS WILL BE REQUIRED. THE EXISTING DITCHES WILL PERFORM TEMPORARY SEDIMENT CONTROL AND STORAGE DURING THE PROPOSED CONSTRUCTION. WORK WILL GENERALLY PROCEED FROM DOWNSTREAM TO UPSTREAM IN THESE WORK AREAS. THE GENERAL CONSTRUCTION SEQUENCE IS AS FOLLOWS:

A) INSTALL EROSION CONTROL ITEMS.
B) STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL THROUGH THE INCREMENTAL WORK AREA.
C) INSTALL TEMPORARY DITCH CHECKS IN DOWNSTREAM END OF EXISTING DITCH WITHIN 24 HOURS FOLLOWING THE STRIPPING OPERATION.
D) IF U/G PIPE IS CALLED FOR IN THIS PORTION OF WORK AREA, PIPE CREW WILL INSTALL PIPE AS WELL AS MANHOLES.
E) AS PIPE INSTALLATION PROGRESSES, REPAIR OF THE ROADWAY WILL PROCEED BEHIND IT.
F) ANY DISTURBED OR EXPOSED AREAS SHALL BE STABILIZED PER OEPA TEMPORARY AND PERMANENT STABILIZATION REGULATIONS INCLUDING:

1. SEEDING
2. DITCH MATTING
3. INLET PROTECTION
4. MULCHING
5. WATERING

EMERGENCY ACTION & SPILL PREVENTION PLAN

THE SCOPE OF WORK COVERED BY THIS PLAN INCLUDES EMERGENCY RESPONSE TO SPILLS, CONTAINMENT OF SPILLED LIQUIDS, EMERGENCY NOTIFICATION NUMBERS, AND SOIL EXCAVATION FOR SPILL CLEAN-UP.

IN THE EVENT OF A SPILL EVENT THE EMPLOYEE SHALL ASSESS THE SPILL AND IMMEDIATELY NOTIFY THE SAFETY OFFICER AND SUPERVISOR IN CHARGE, OR OTHER INDIVIDUALS AS LISTED BELOW.

TITLE	NAME	PHONE NUMBER
SITE SUPERINTENDENT	_____	
PROJECT ENGINEER	_____	

IMMEDIATELY AFTER NOTIFICATION, THE EMPLOYEE WILL BE DIRECTED BY THE SAFETY OFFICER, OR RESPONSIBLE PARTY TO START CONTAINMENT PROCEDURES TO PREVENT THE MATERIAL FROM REACHING THE STORM SEWERS, DRAINAGE DITCH, AND OTHER OUTLETS USING THE FOLLOWING ACTIONS OR ANY OTHER MEANS NECESSARY WITHOUT COMPROMISING WORKER SAFETY:

1) CLEAR PERSONNEL FROM THE SPILL AREA AND ROPE OFF AREA.
2) STOP THE SPILL.
3) USE SORBENT MATERIALS, PLUG PUTTY, OR HOLE PUTTY AS NECESSARY TO CONTROL THE SPILL AT THE SOURCE.
4) CONSTRUCT A TEMPORARY CONTAINMENT DIKE OF SORBENT MATERIALS OR DIRT TO CONTAIN SPILL.

SPILL KITS WILL BE LOCATED ON THE PROJECT AS DESIGNATED ON THE SWPPP PLAN.

UPON COMPLETION OF CONTAINMENT OPERATIONS, PROPER CLEAN-UP PROCEDURES WILL BE IMPLEMENTED IN ACCORDANCE WITH REGULATORY PROCEDURES.

ADDITIONAL EMERGENCY CONTACT NUMBERS:	24 HOUR PHONE NO.:
OHIO EPA	614-728-3898
_____	_____
_____	_____

GENERAL NOTES

THE CONTRACTOR IS HEREBY ADVISED THAT STRICTER POLLUTION CONTROL STANDARDS AND ENFORCEMENT HAVE BEEN IMPOSED BY THE OHIO EPA SINCE MARCH 10, 2003 AND WITH A REVISION IN APRIL 2018. ALSO, MANY PRIVATE CITIZEN ENVIRONMENTAL GROUPS, WHO HAVE BEEN KNOWN TO FILE CIVIL LEGAL ACTIONS, ARE PRESENT IN THE AREA AND OBSERVE ALL CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL INFORM ALL SUBCONTRACTORS OF THE REQUIREMENTS AND RESPONSIBILITIES OF THE SWPPP AND SHALL DOCUMENT ALL SUCH NOTIFICATIONS AND/OR DISCUSSIONS.

THE CONTRACTOR WILL BE REQUIRED TO PARTICIPATE IN SEDIMENT AND EROSION CONTROL INSPECTIONS ON A WEEKLY BASIS AND SIGN AN APPROVED INSPECTION SHEET THAT SHALL BE KEPT ON FILE AT THE JOB SITE.

UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE OEPA "RAINWATER AND LAND DEVELOPMENT" HANDBOOK SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.

THIS PROJECT WILL INVOLVE SEVERAL CONSTRUCTION PHASES AND SEQUENCING THROUGHOUT ITS LIFETIME. IT IS VERY IMPORTANT THAT ALL TEMPORARY SEDIMENT AND EROSION CONTROL (S&EC) FIELD METHODS ALONG WITH THIS PLAN, ARE UPDATED TO REFLECT THE ACTUAL FIELD CONDITIONS, CURRENT WEATHER CONDITIONS AND SITE GRADE CHANGES. THE ENGINEER OR THE OHIO EPA CAN AND WILL MODIFY THIS PLAN AS NECESSARY.

THE CONTRACTOR WILL VOLUNTARILY SELF REPORT ANY POTENTIAL VIOLATIONS OF THE OEPA NPDES PERMIT TO THE ENGINEER AND THE OEPA.

THE CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRUCTION.

CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS.

THE CONTRACTOR WILL BE REQUIRED TO BUILD SEDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND CLEAN WATER TO ACCEPTABLE EPA STANDARDS BEFORE RELEASING THE WATER BACK INTO THE STREAM.

THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN WATER MUST PASS THROUGH A SETTLING POND, FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE.

NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.

ALL PROCESS WASTEWATER (EQUIPMENT WASHING, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND DISPOSED OF AT A PUBLICLY OWNED TREATMENT WORKS.

ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH ALL LOCAL EROSION/SEDIMENT CONTROL, WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.

OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND IMPLEMENTATION OF ADDITIONAL EROSION CONTROL ITEMS, AT THE ENGINEER'S DISCRETION.

NO SOIL, ROCK, DEBRIS OR OTHER MATERIAL SHALL BE DUMPED OR PLACED IN ANY AREAS NOT ADEQUATELY PROTECTED BY EROSION CONTROL INSTALLATIONS.

IT IS PREFERRED TO USE PERMANENT EROSION CONTROL ITEMS AS SHOWN IN THE PLANS TO CONTROL CONSTRUCTION POLLUTION WHEN POSSIBLE. OTHERWISE, THE TEMPORARY POLLUTION PREVENTION ITEMS ARE TO BE USED.

MOST TEMPORARY S&EC METHODS, INCLUDING BUT NOT LIMITED TO, SILT FENCE AND DITCH CHECKS MAY ALL HAVE TO BE PERIODICALLY REMOVED AND REPLACED, OR MOVED FROM THE EXISTING ROAD DITCH OR STRIPPED AREAS AS WORK PROGRESSES. ANY CHANGES SHALL BE NOTED IN THE PLAN BY RED LINE AND DATED ON A CORRECTIVE ACTION LOG.

ALL TEMPORARY SEDIMENT CONTROLS AND STORM WATER QUALITY METHODS WILL BE BUILT/INSTALLED AS THE PROJECT PROGRESSES TO ELIMINATE UNNECESSARY DISTURBANCE AND REDUNDANCY. ALL TEMPORARY CONTROLS SHALL BE IN PLACE AND FUNCTIONING PROPERLY WHEN THREATENING WEATHER IS IMMINENT.

"TEMPORARY STABILIZATION" MEANS THE ESTABLISHMENT OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, PRESERVATION OF EXISTING VEGETATION AND OTHER TECHNIQUES CAPABLE OF QUICKLY ESTABLISHING COVER OVER DISTURBED AREAS TO PROVIDE EROSION CONTROL BETWEEN CONSTRUCTION OPERATIONS.

"PERMANENT STABILIZATION" MEANS THE ESTABLISHMENT OF PERMANENT VEGETATION, DECORATIVE LANDSCAPE MULCHING, MATTING, SOD, RIP RAP AND LANDSCAPING TECHNIQUES TO PROVIDE PERMANENT EROSION CONTROL ON AREAS WHERE CONSTRUCTION OPERATIONS ARE COMPLETE OR WHERE NO FURTHER DISTURBANCE IS EXPECTED FOR AT LEAST A YEAR.

OFF-SITE TRACKING OF SEDIMENTS SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ALL PAVED STREETS ADJACENT TO THE SITE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP.

STABILIZATION PRACTICES

PERMANENT SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000005. (SEE TABLE 1)

TABLE 1: PERMANENT STABILIZATION

AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

TEMPORARY SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000005. (SEE TABLE 2)

TABLE 2: TEMPORARY STABILIZATION

AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREAS WITH 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

ALL TEMPORARY EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WHEN 70% VEGETATION HAS BEEN REACHED.

SEEDING & MULCHING

MULCH AND/OR OTHER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 14 DAYS OR ON AREAS AND PORTIONS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.

MULCH SHALL CONSIST OF UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1000 SQ. FT. (TWO TO THREE BALES). THE STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000-SQ.-FT. SECTIONS AND PLACE TWO 45-LB. BALES OF STRAW IN EACH SECTION.

MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS FOR ANCHORING MULCH:

1) MECHANICAL-USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN 6 IN.
2) MULCH NETTINGS-USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND ANCHORING SUGGESTIONS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE.
3) SYNTHETIC BINDERS-FOR STRAW MULCH, SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. ALL APPLICATIONS OF SYNTHETIC BINDERS MUST BE CONDUCTED IN SUCH A MANNER WHERE THERE IS NO CONTACT WITH WATERS OF THE STATE.
4) WOOD CELLULOSE FIBER - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL. OF WOOD CELLULOSE FIBER.

TEMPORARY SEEDING & MULCHING FOR EROSION CONTROL

SEED TYPE	PER 1,000 SQ FT	PER ACRE
PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 POUND 1 POUND 1 POUND	40 POUNDS 40 POUNDS 40 POUNDS
SMALL GRAIN STRAW	90 POUNDS	2 TONS
FERTILIZER	6 POUNDS OF 10-10-10 OR 12-12-12	250 POUNDS OF 10-10-10 OR 12-12-12

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED

STOCKPILE

SILT FENCING SHALL BE INSTALLED AROUND TEMPORARY SPOIL STOCKPILES. THESE STOCKPILES SHALL BE STRAW MULCHED AND/OR TEMPORARILY SEEDED WITHIN 7 WORKING DAYS IF LEFT DORMANT FOR 14 DAYS OR LONGER.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, CONSTRUCTION ENTRANCE(S) AND SILT FENCE WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED LONGER THAN 14 DAYS AND/OR WITHIN 7 DAYS OF ANY GRUBBING ACTIVITIES. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 2 DAYS OF THE LAST DISTURBANCE IF THE AREA IS WITHIN 50 FEET OF A STREAM, AND WITHIN 7 DAYS OF THE LAST DISTURBANCE IF THE AREA IS MORE THAN 50 FEET AWAY FROM A STREAM. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE BASIN.

STABILIZATION TYPE	J	F	M	A	M	J	J	A	S	O	N	D
PERMANENT SEEDING			●	●	●	*	*	*	●	●		
DORMANT SEEDING	●	●	●							●	●	●
TEMPORARY SEEDING			●	●	●	*	*	*	●	●		
SODDING			**	**	**	**	**	**	**	**		
MULCHING	●	●	●	●	●	●	●	●	●	●	●	●

* IRRIGATION NEEDED

** IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS APPLIED

INSPECTIONS

ALL BMPS ON THIS SITE SHALL BE INSPECTED BY "QUALIFIED INSPECTION PERSONNEL" ASSIGNED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND BY THE END OF THE NEXT CALENDAR DAY, EXCLUDING WEEKENDS AND HOLIDAYS UNLESS WORK IS SCHEDULED, AFTER A RAIN EVENT OF 0.5 INCHES PER 24 HOUR PERIOD. A RECORD OF THESE INSPECTIONS SHALL BE MAINTAINED IN THE CONSTRUCTION OFFICE WITH THE SWPPP FOR PUBLIC VIEWING. ANY VIOLATIONS WILL BE REPORTED THROUGH THE PROJECT PERSONNEL. A RAIN GAUGE WILL BE LOCATED WITHIN THE PROJECT LIMITS.

FOLLOWING EACH INSPECTION, A CHECKLIST MUST BE COMPLETED AND SIGNED BY THE QUALIFIED INSPECTION PERSONNEL REPRESENTATIVE. AT A MINIMUM, THE INSPECTION REPORT SHALL INCLUDE:

1. THE INSPECTION DATE;
2. NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
3. WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY IF THE FIRST INSPECTION) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER ANY DISCHARGES OCCURRED;
4. WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION;
5. LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
6. LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED;
7. LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION;
8. LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND
9. CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO THE SWP3 NECESSARY AND IMPLEMENTATION DATES.

MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES. IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD, LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.27.

ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

DUST CONTROL

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE:

1. VEGETATIVE COVER AND/MULCH - APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
2. WATERING - SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
3. SPRAY-ON ADHESIVES - APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.

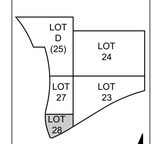
ADHESIVE	WATER DILUTION (ADHESIVE: WATER)	NOZZLE TYPE	APPLICATION RATE (GAL/AC)
LATEX EMULSION	12.5:1	FINE	235
RESIN IN WATER ACRYLIC EMULSION (NO TRAFFIC)	4:1	FINE	300
ACRYLIC EMULSION (NO TRAFFIC)	7:1	COARSE	450
ACRYLIC EMULSION (TRAFFIC)	3.5:1	COARSE	350

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

ISSUES

ISSUES		
1	11/05/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE



DRAWN BY: M.K.
ENGINEER: M.K.
CHECKED BY: S.K.

LOT 28 GARAGE AND PARK

DRAWING TITLE
EROSION CONTROL NOTES & DETAILS

JOB NUMBER 98090.34 DATE 11/12/2021

C104

H:\2019\19072S\002_DWG_Sheets\19072SGEN002-BP2.dwg, 12/17/2021 11:50:20 AM, DWG To PDF.pc3

SPILL PREVENTION

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
2. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
5. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
6. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
7. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS:

1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

1. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
3. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
4. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. SPILLS OF 25 OR MORE GALLONS OF PETROLEUM WASTE MUST BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE SPILL. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS OF THE STATE, MUST BE REPORTED TO THE OHIO EPA'S HOTLINE.
5. SOILS CONTAMINATED BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED/DISPOSED AT AN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY (TSDF).
6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
7. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

PRODUCT SPECIFIC PRACTICES

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FUEL STORAGE TANKS SHALL BE LOCATED AWAY FROM SURFACE WATERS AND STORM SEWER SYSTEM INLETS. FUEL TANKS SHALL BE STORED IN A DIKED AREA CAPABLE OF HOLDING 150% OF THE TANK CAPACITY.

FERTILIZERS

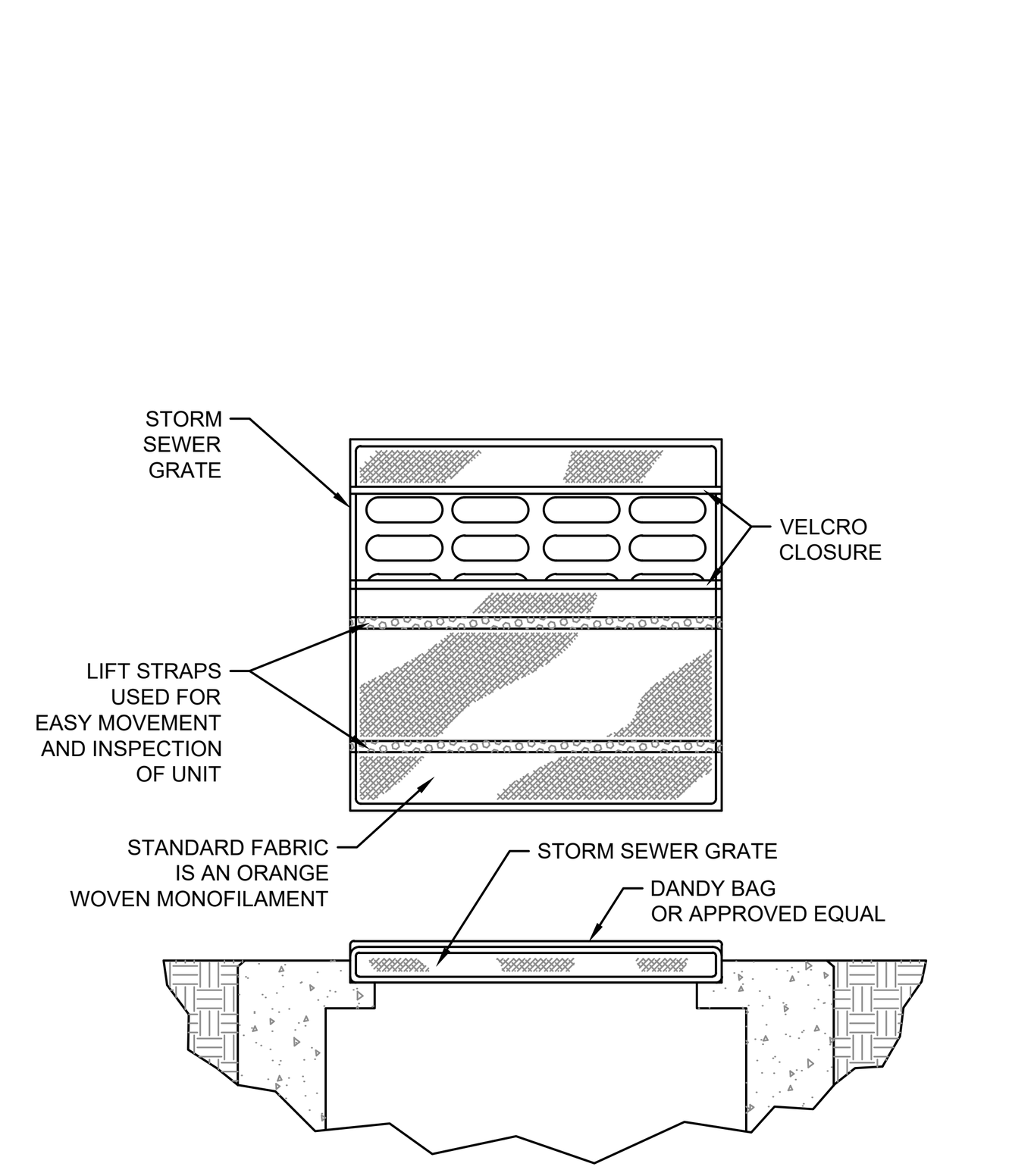
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE WASH WATER/WASH OUTS

CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED ON THE LOT AWAY FROM ANY WATER CONVEYANCES.



SPECIFICATIONS

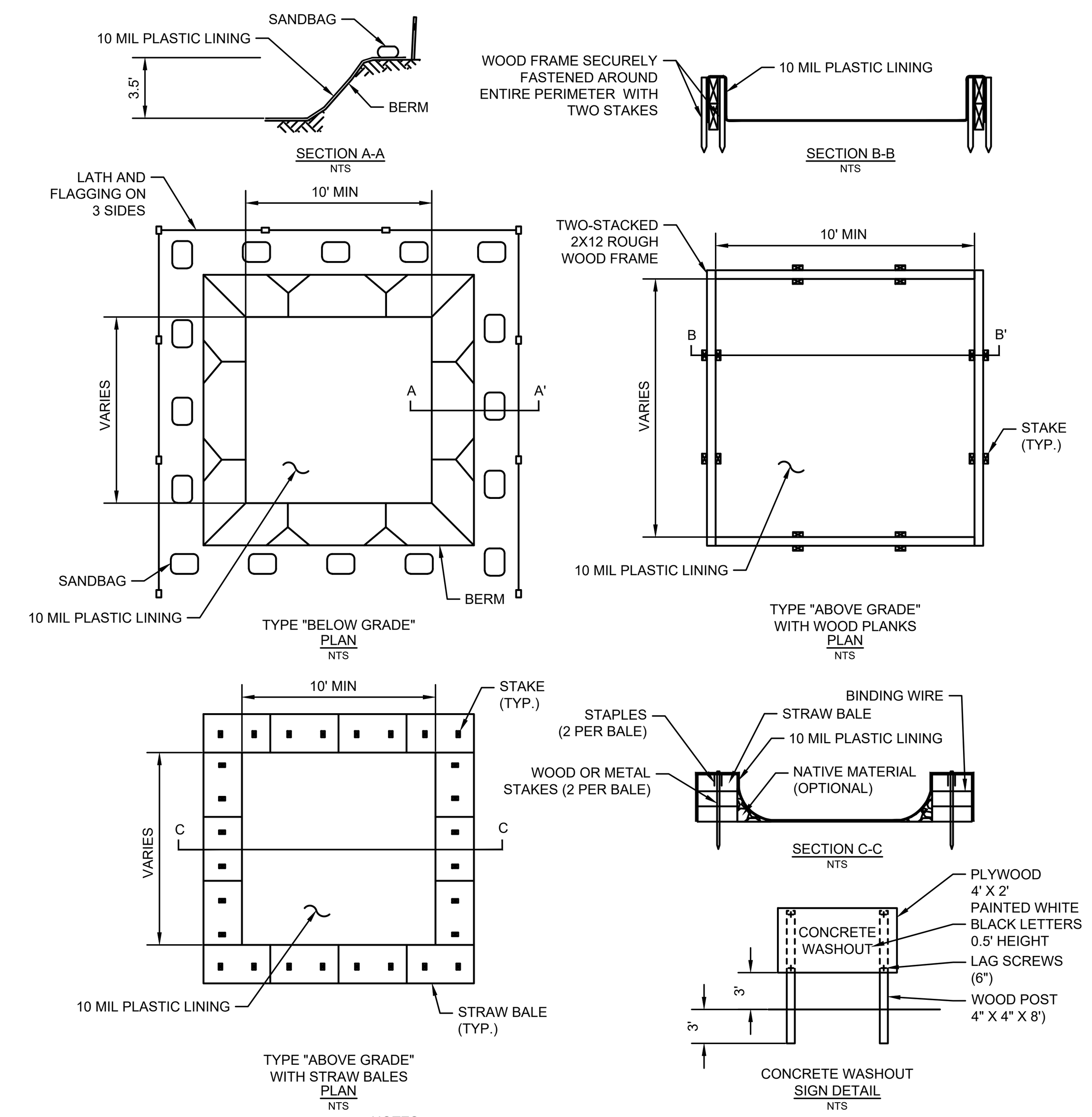
MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	KN (LBS)	1.62 (365) X 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 X 10
PUNCTURE STRENGTH	ASTM D 4833	KN (LBS)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	KPA (PSI)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	KN (LBS)	0.51 (115) X 0.33 (75)
UV RESISTENCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	MM (US STD SIEVE)	0.425 (40)
FLOW RATE	ASTM D 4491	$1/MIN/M^2$ ($GAL/MIN/FT^2$)	5907 (145)
PERMITTIVITY	ASTM D 4491	SEC^{-1}	2.1

INSTALLATION: THE EMPTY DANDY BAG SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END. IF USING OPTIONAL OIL ABSORBENTS: PLACE ABSORBENT PILLOW IN POUCH, ON THE BOTTOM (BELOW-GRADE SIDE) OF THE UNIT. ATTACH ABSORBENT PILLOW TO TETHER LOOP. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE DANDY BAG AS NEEDED. IF USING OPTIONAL OIL ABSORBENTS; REMOVE AND REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

1 / C104.1 DANDY BAG DETAIL

N.T.S.

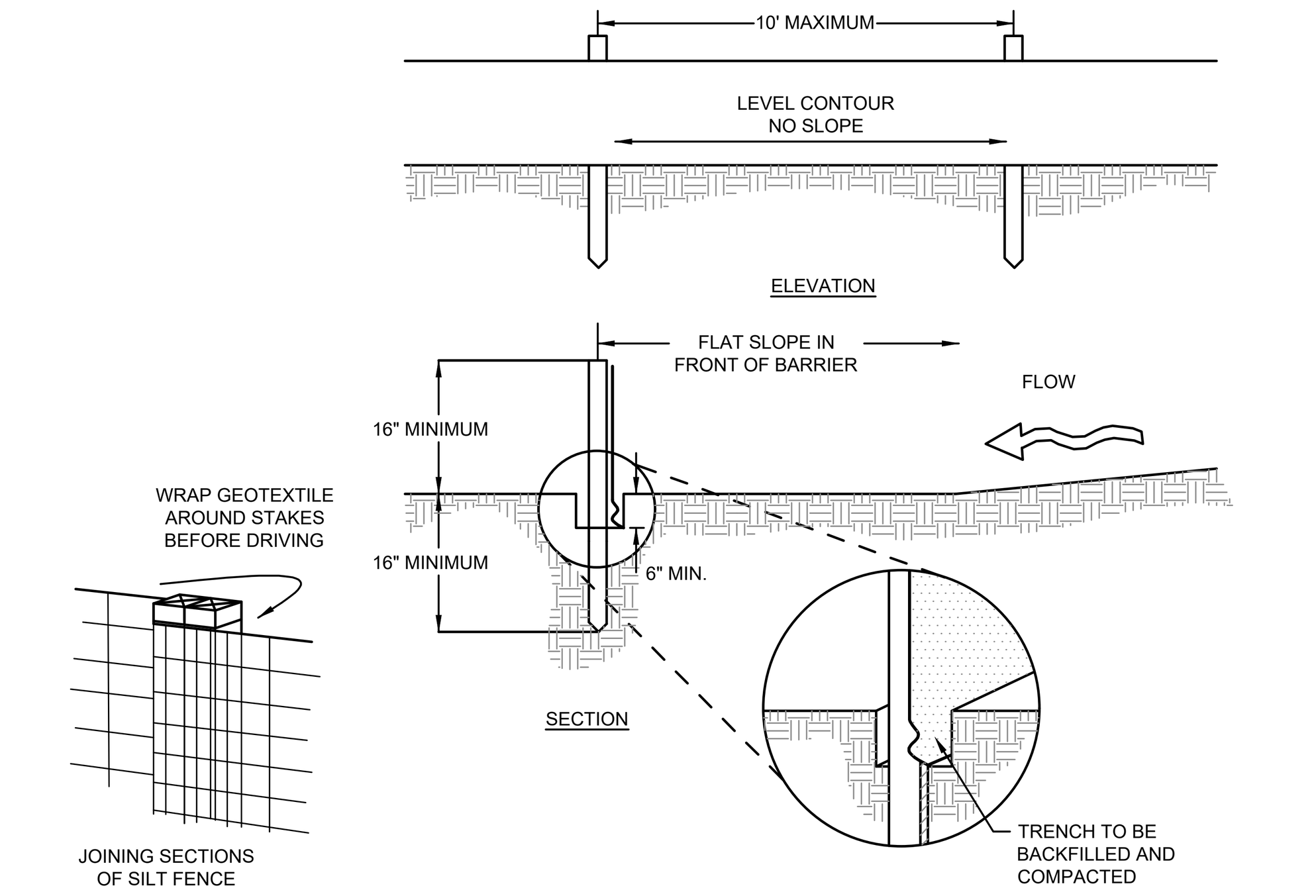


NOTES:

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

2 / C104.1 CONCRETE WASHOUT DETAIL

N.T.S.



NOTES:

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND.
10. MAINTENANCE—SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

    SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE.

    SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

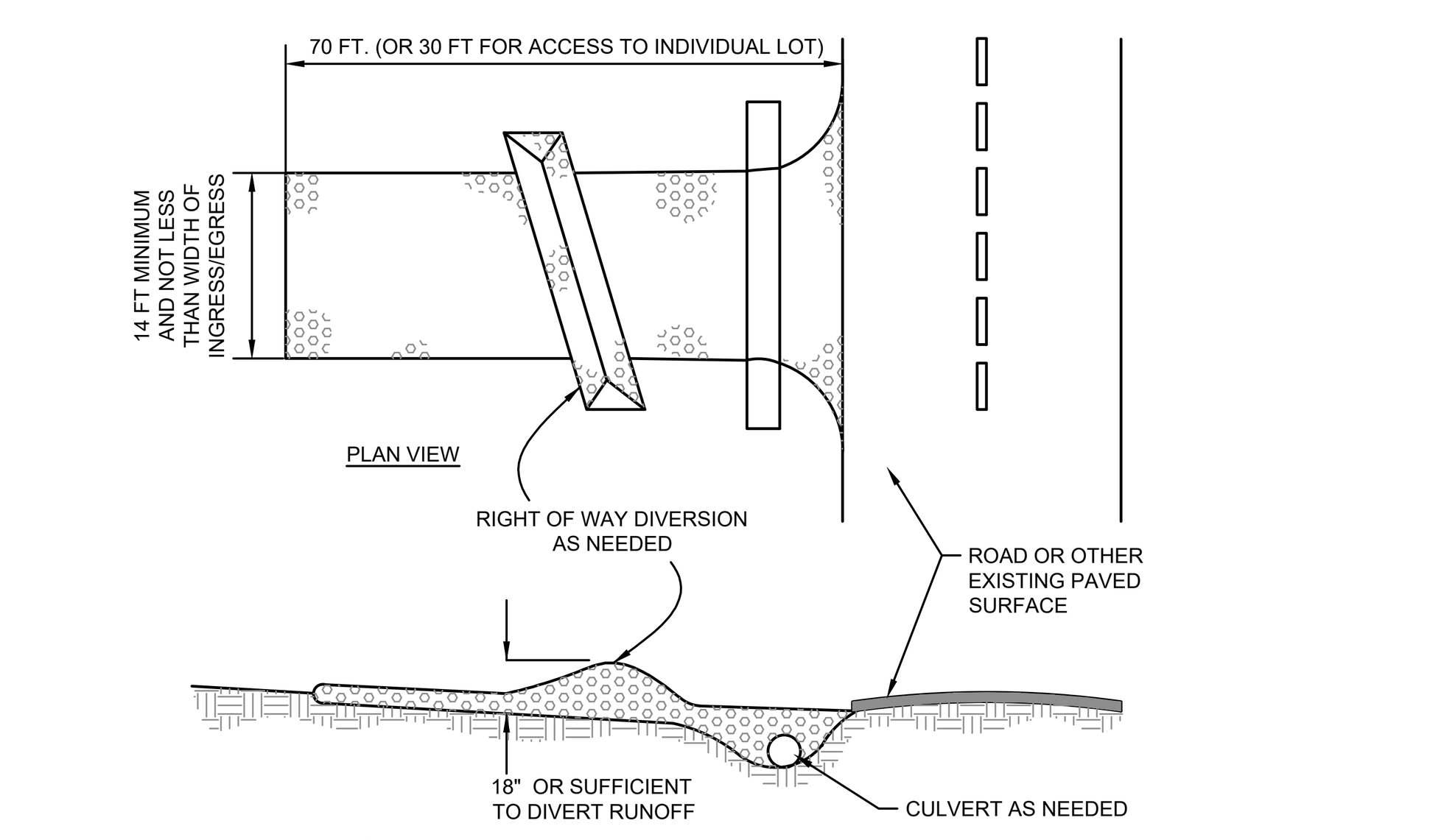
CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POST – THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SILT FENCE FABRIC – SEE CHART BELOW.

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LBS. (535 N)	ASTM D 4632
MAXIMUM ELONGATION AT 60 LBS	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS. (220 N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS. (180 N)	ASTM D 4533
APPARENT OPENING SIZE	<0.84 MM	ASTM D 4751
MINIMUM PERMITTIVITY	1X10-2 SEC-1	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70%	ASTM G 4355

3 / C104.1 SILT FENCE DETAIL

N.T.S.



NOTES

1. STONE SIZE - ODOT #2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS).
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE ARE PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

MINIMUM TENSILE STRENGTH	200 LBS
MINIMUM PUNCTURE STRENGTH	80 LBS
MINIMUM TEAR STRENGTH	50 LBS
MINIMUM BURST STRENGTH	320 PSI
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS< 0.6MM
PERMITTIVITY	$1X10^{-3}$ CM/SEC

6. TIMING - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEED ED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVE IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

4 / C104.1 CONSTRUCTION ENTRANCE DETAIL

N.T.S.

HAMILTON COUNTY STATE OF OHIO

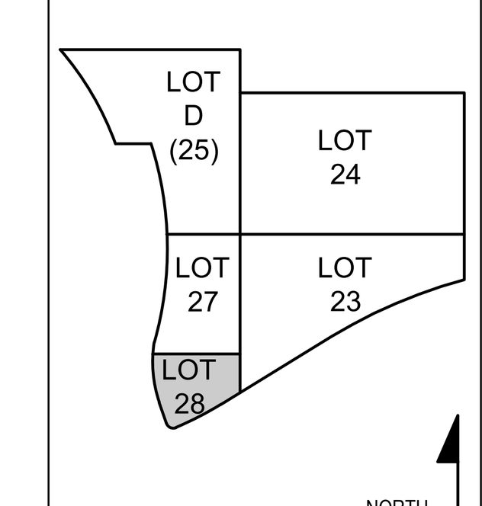
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

ISSUES

ISSUES		
1	11/05/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE



DRAWN BY: M.K.

ENGINEER: M.K.

CHECKED BY: S.K.

LOT 28 GARAGE AND PARK

DRAWING TITLE

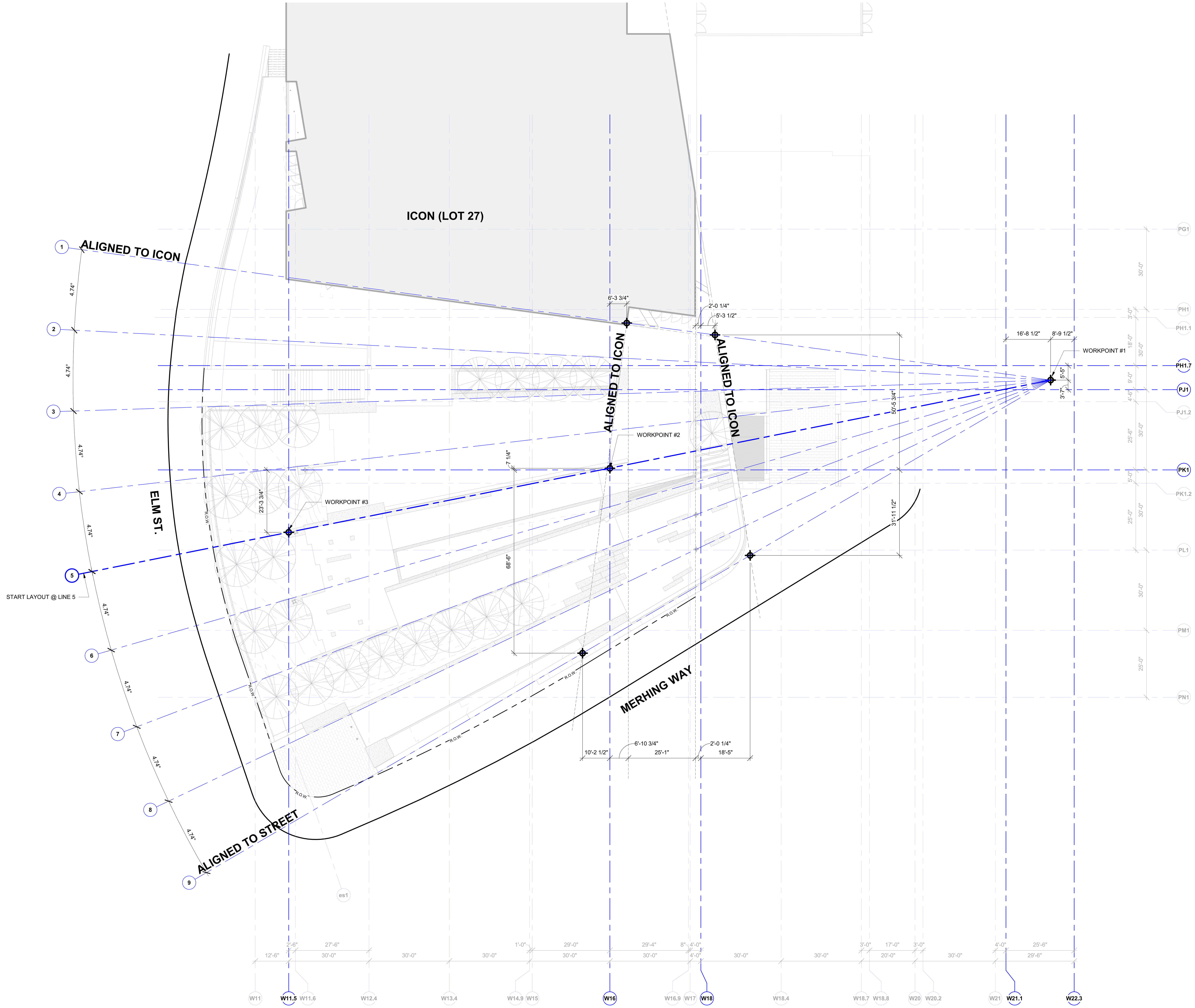
EROSION CONTROL NOTES & DETAILS

JOB NUMBER 98090.34

DATE 11/12/2021

C104.1

H:\2019\190725\002_DWG_Sheets\190725CGEN002-BP2.dwg, 12/17/2021 11:50:22 AM, _DWG To PDF.pc3



1 A001 UPPER LEVEL GEOMETRY PLAN
1/16" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

michael mcinturf architects
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

PRELIMINARY NOT FOR CONSTRUCTION

ISSUES

1	10/01/2021	SCHEMATIC DESIGN
2	12/17/2021	BP#2 - PARK & GARAGE

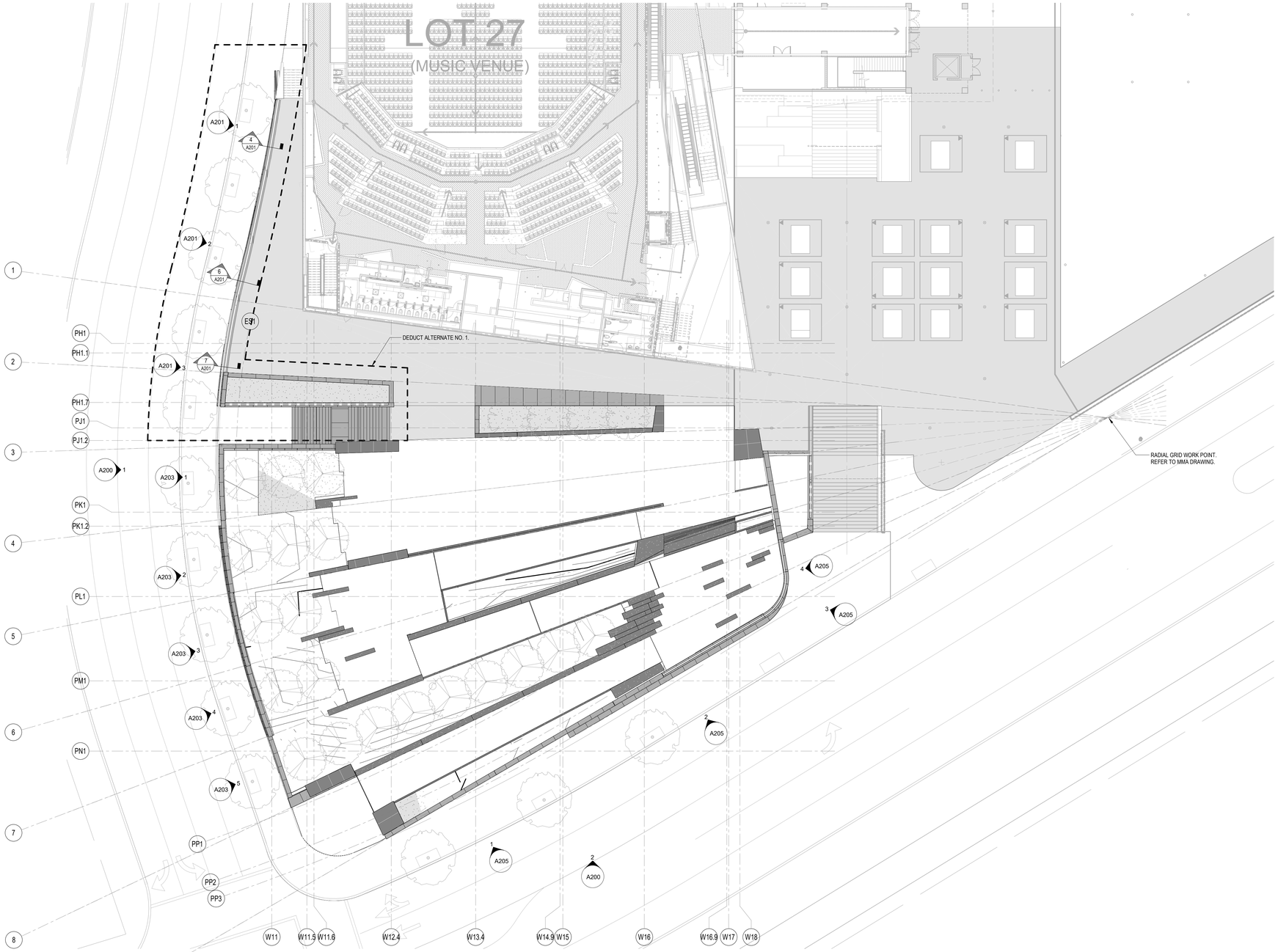
DRAWN BY: Author
ARCHITECT: MM
CHECKED BY: Checker

THE BANKS Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE
GEOMETRIC LAYOUT PLAN

JOB NUMBER 98090.40
DATE 12/17/2021
DRAWING NUMBER A001



1 A100 **SITE PLAN**
1/16" = 1'-0"

NORTH

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)
ISSUES/REVISIONS
1 12/17/2021 BHB2 - PARK & GARAGE

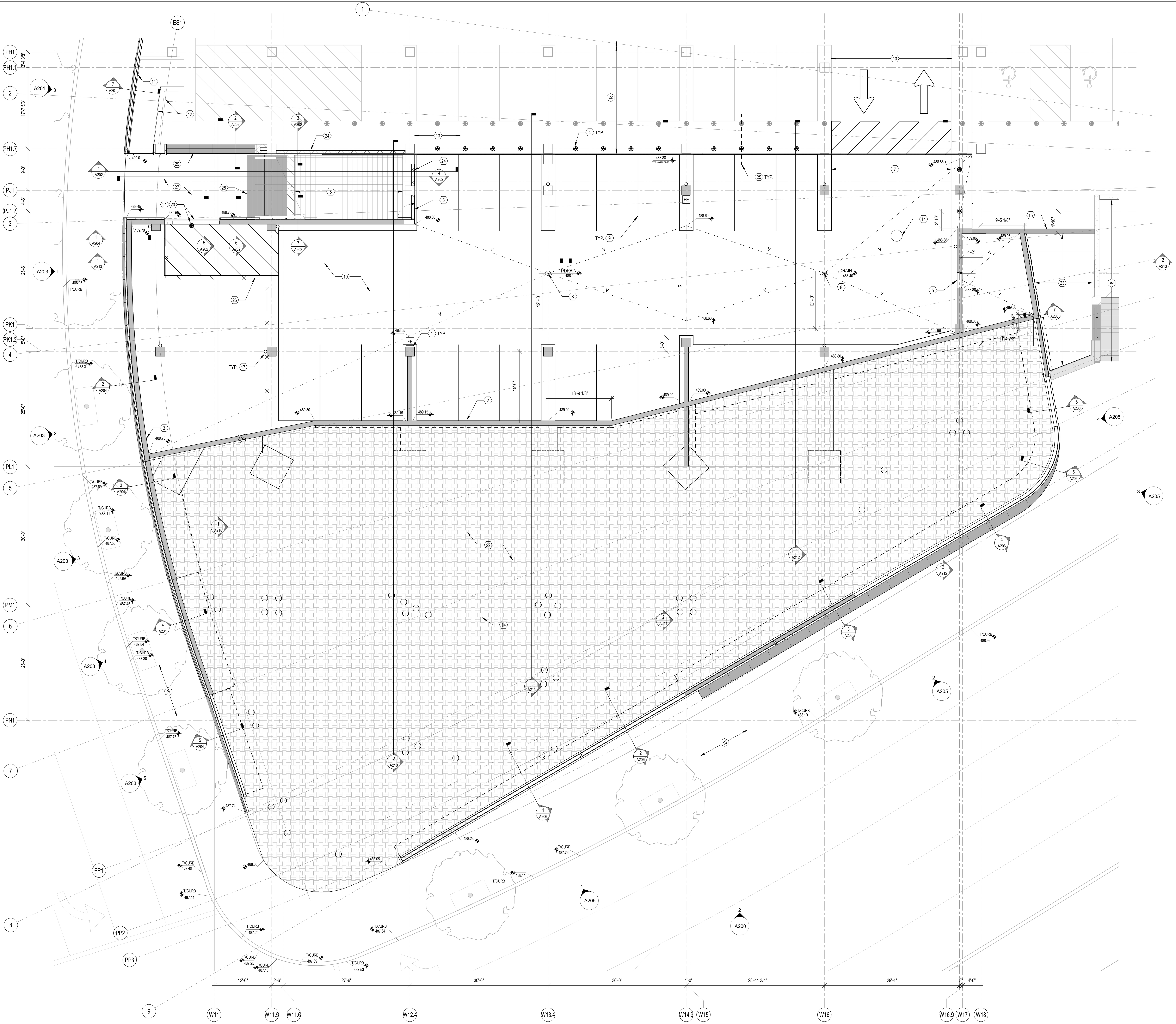
LOT D (25) | LOT 24
LOT 27 | LOT 23
LOT 28

PROJECT ARCHITECT
J.M.H.
PROJECT MANAGER
M.S.M.
PRINCIPAL
J.M.J.
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
SITE PLAN

JOB NUMBER: THP 98090.40
DATE: 12/17/2021
DRAWING NUMBER
A100



1 LOWER LEVEL PLAN
A101
1/8" = 1'-0"
NORTH

LEGEND:

- EXISTING COLUMN/WALL (REFER TO STRUCTURAL DWGS)
- NEW COLUMN/WALL (REFER TO STRUCTURAL DWGS)
- XXX.XX T/STRUCTURAL SLAB SPOT ELEVATIONS (U.N.O.)
- V — VALLEY
- R — RIDGE
- RIGHT OF WAY
- PLUMBING RISER (REFER TO PLUMBING DRAWINGS)
- AREA DRAIN (REFER TO PLUMBING DRAWINGS)
- FE — FIRE EXTINGUISHER.

GENERAL NOTES:

A. SEE STRUCTURAL DRAWINGS FOR TYPICAL CONCRETE STRUCTURE INFORMATION (COLUMNS, WALLS, SLABS, ETC.).
B. AT SUPPORTED SLABS, CREATE DRAINAGE SADDLES BY THICKENING SLAB. CREATE ALL OTHER DRAINAGE SLOPES BY SLOPING SUBGRADE AND FORMWORK.
C. PAINT ALL SOFFITS/CEILINGS, DROPS, BEAM SURFACES, AND ADJACENT ITEMS PER SPECIFICATION SECTION 099100 AND DETIALS ON DRAWING A221.

DRAWING NOTES:

1. CONCRETE COLUMN. REFER TO STRUCTURAL DRAWINGS.
2. CONCRETE RETAINING WALL. REFER TO STRUCTURAL DRAWINGS.
3. BATTERED CONCRETE WALL WITH STONE CLADDING.
4. NEW BOLLARDS. REFER TO DETAIL 1 & 2/A221.
5. HOLLOW METAL DOOR & FRAME.
6. EXISTING PARK STAIR STRUCTURE. MAINTAIN PEDESTRIAN ACCES.
7. GARAGE DRIVE AISLE.
8. FLOOR DRAIN. REFER TO PLUMBING DRAWINGS.
9. PAINTED GARAGE STRIPING. SEE DETAILS 3 & 4/A221.
10. EXISTING PAINT STRIPING WITHIN NEW DRIVE AISLE TO BE REMOVED.
11. EXISTING MSE WALL.
12. EXISTING RAMP AND STAINLESS STEEL RAILING TO REMAIN.
13. PEDESTRIAN WALKWAY.
14. ADJUST TOP OF EXISTING MANHOLE TO NEW SLAB OR SOIL ELEVATION. PROVIDE NEW SOLID CIRCULAR SEALED & GASKETED LID. SEE DWG SW101 ALSO.
15. EXISTING CONCRETE WALL.
16. REFER TO D101 FOR EXTENT OF MEHRING WAY AND ELM ST. SIDEWALK REMOVAL.
17. PLUMBING RISER (REFER TO PLUMBING DRAWINGS).
18. EXISTING LOT 27 PODIUM STRUCTURE.
19. PAINT CEILING OF LOWER LEVEL. REFER TO DETAILS 8-11/A221 & SPECIFICATION SECTION 099100.
20. SLOT DRAIN AT DOORWAY OPENING.
21. REMOVABLE BOLLARD AT DOORWAY OPENING. REFER TO DETAIL XX/XX.
22. ENGINEERED FILL SOUTH OF THE CONCRETE RETAINING WALL.
23. PLANTER BY OTHERS.
24. ALTERNATING 8" SMOOTH AND 4" SPLIT-FACE CMU COURSING (UNPAINTED). SPLIT-FACE ON VISIBLE (EXPOSED TO VIEW) SIDE. GROUT WALL SOLID FULL HEIGHT.
25. ALIGN NEW BOLLARDS WITH EXISTING LOT 27 BOLLARDS.
26. FULL HEIGHT FENCING AT STORAGE WITH GATE.
27. REMOVE SLAB ON GRADE AND INSTALL GRANITE PAVERS.
28. GRANITE TREADS CLAD ON EXISTING ELM ST. STAIR.
29. REMOVE EXISTING STAIRS AT LOT 27 GARAGE ENTRANCE AND INSTALL GRANITE CLAD STAIRS.

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS		ISSUES/REVISIONS (CONTINUED)
1	12/17/2021	BP#2 - PARK & GARAGE

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28

PROJECT ARCHITECT
J.M.H.
PROJECT MANAGER
M.S.M.
PRINCIPAL
J.M.J.
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
LOWER LEVEL PLAN

JOB NUMBER THP 98090.40
DATE 12/17/2021
DRAWING NUMBER
A101

THIS DRAWING SHOWS THE TOP-OF-CONCRETE GEOMETRY AND ELEVATIONS FOR THE CONCRETE PODIUM (STRUCTURAL) SLAB BENEATH THE PARK PAVEMENT/SURFACE.

LEGEND:

- NEW COLUMN/WALL (REFER TO STRUCTURAL DWGS)
- EXISTING GRANITE PAVERS
- XXX.XX T/STRUCTURAL SLAB OR PAVERS SPOT ELEVATIONS (U.N.O.)
- V VALLEY
- R RIDGE
- RIGHT OF WAY
- PLUMBING RISER (REFER TO PLUMBING DRAWINGS)
- TREE PIT/PLANTER DRAIN
- AREA DRAIN (REFER TO PLUMBING DRAWINGS)

GENERAL NOTES:

A. SEE STRUCTURAL DRAWINGS FOR TYPICAL CONCRETE STRUCTURE INFORMATION (COLUMNS, WALLS, SLABS, ETC.).
B. AT SUPPORTED SLABS, CREATE DRAINAGE SADDLES BY THICKENING SLAB. CREATE ALL OTHER DRAINAGE SLOPES BY SLOPING SUBGRADE AND FORMWORK.
C. PAINT ALL SOFFITS/CEILINGS, DROPS, BEAM SURFACES, AND ADJACENT ITEMS PER SPECIFICATION SECTION 099100 AND DETIALS ON DRAWING A221.

DRAWING NOTES:

1. BATTERED CONCRETE WALL.
2. EXISTING PARK STAIR. MAINTAIN PEDESTRIAN ACCESS.
3. AREA DRAIN. REFER TO PLUMBING DRAWINGS.
4. NOT USED.
5. NOT USED.
6. NOT USED.
7. ADJUST TOP OF EXISTING MANHOLE TO NEW SLAB ELEVATION.
8. EXISTING CONCRETE WALL.
9. EXISTING ELM STREET.
10. EXISTING MEHRING WAY.
11. EXISTING LOT 27 PODIUM STRUCTURE.
12. EXISTING LOT 23 PODIUM STRUCTURE.
13. REMOVE PORTION OF EXISTING GRANITE PAVERS AT LOT 27 PLAZA. REFER TO LANDSCAPE DRAWINGS FOR NEW PAVER EDGE PATTERN.
14. REMOVE PORTION OF EXISTING GRANITE PAVERS AT TOP ELM ST. STAIR LANDING. REFER TO LANDSCAPE DRAWINGS FOR NEW PAVER EDGE PATTERN.
15. SLOT DRAIN CHANNEL CAST INTO CONCRETE AT BOTTOM OF WALKWAY.
16. TREE PIT DRAINS TO BE INSTALLED 1'-0" AWAY FROM EDGES OF CONCRETE BEAMS, BOTH DIRECTIONS.

1 / A102-S **PARK LEVEL SUB-STRUCTURE**
1/8" = 1'-0"

NORTH

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)
ISSUES/REVISIONS | BP#2 - PARK & GARAGE
1 | 12/17/2021

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28

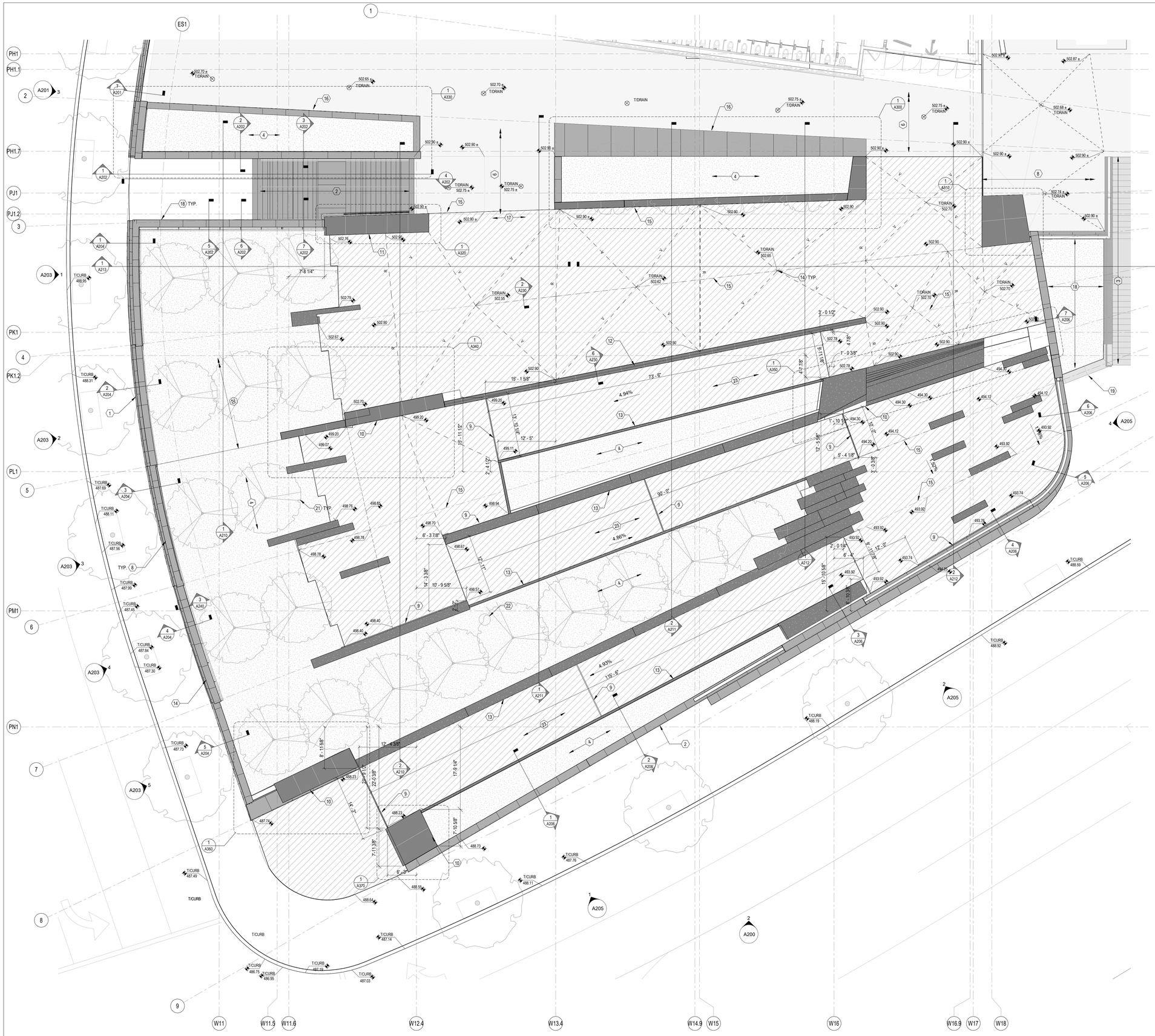
PROJECT ARCHITECT
J.M.H.
PROJECT MANAGER
M.S.M.
PRINCIPAL
J.M.J.
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
PARK LEVEL SUB-STRUCTURE

JOB NUMBER 98090.40 | DATE 12/17/2021

DRAWING NUMBER
A102-S



1 A102 **LEVEL 2BP - PARK LEVEL**

1/8" = 1'-0"

NORTH

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS

1	12/17/2021 BP#2 - PARK & GARAGE

ISSUES/REVISIONS (CONTINUED)

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

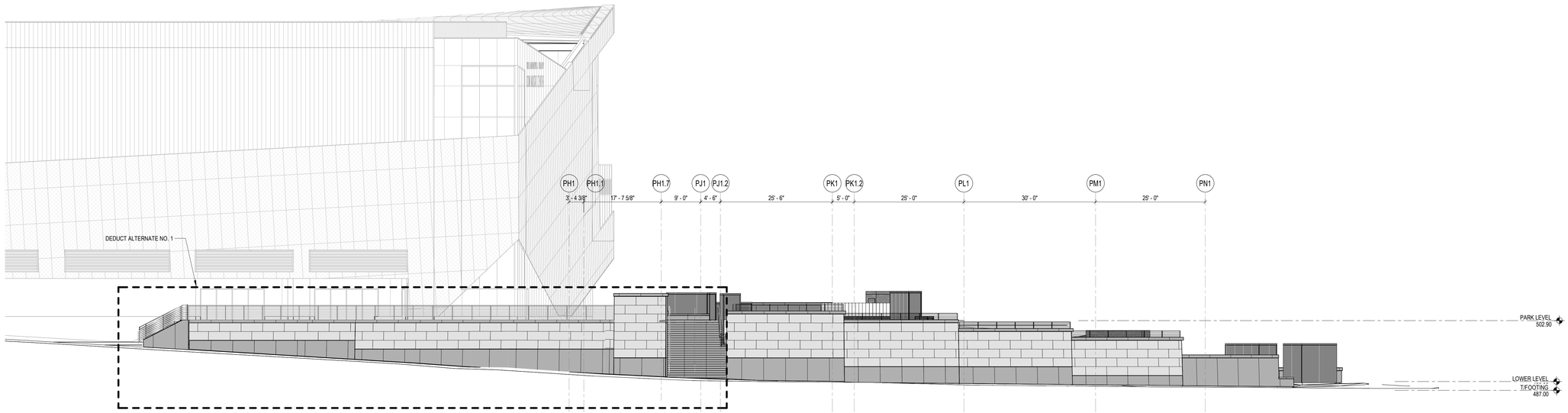
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
PARK LEVEL FLOOR PLAN LAYOUT, GRADING, AND COMPONENTS

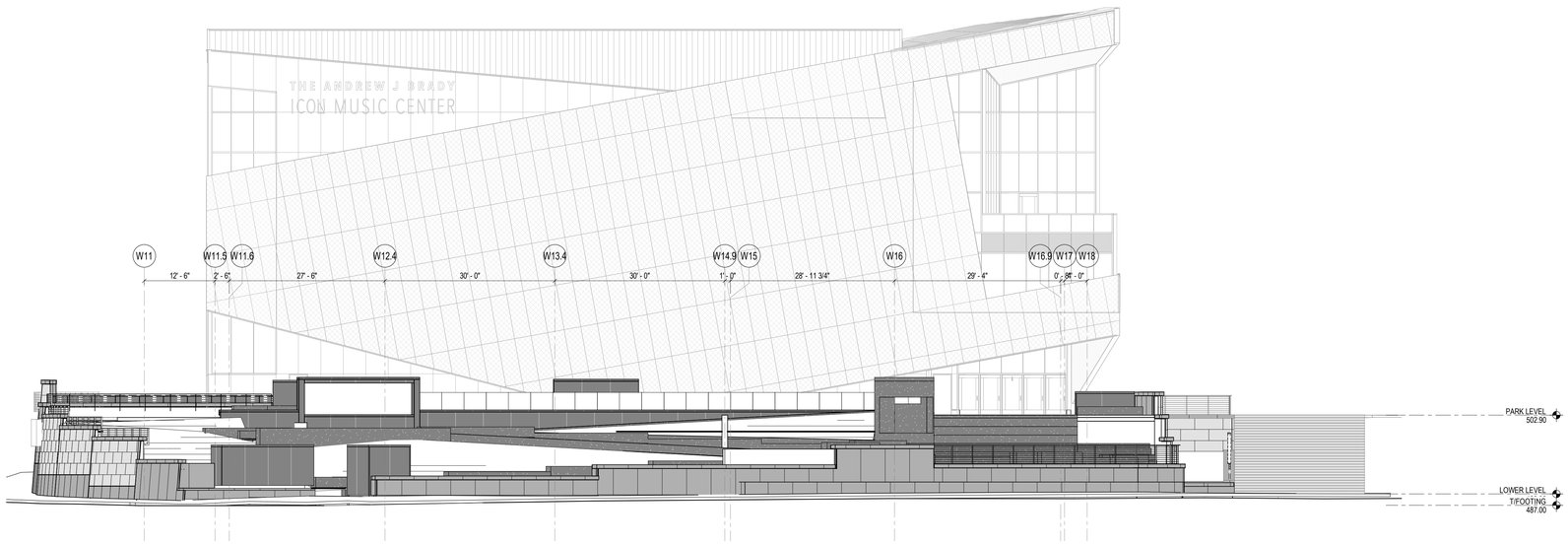
JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A102



1 A200 WEST ELEVATION

3/32" = 1'-0"



2 A200 SOUTH ELEVATION

3/32" = 1'-0"

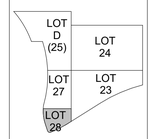
HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

	ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1	12/17/2021	BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE

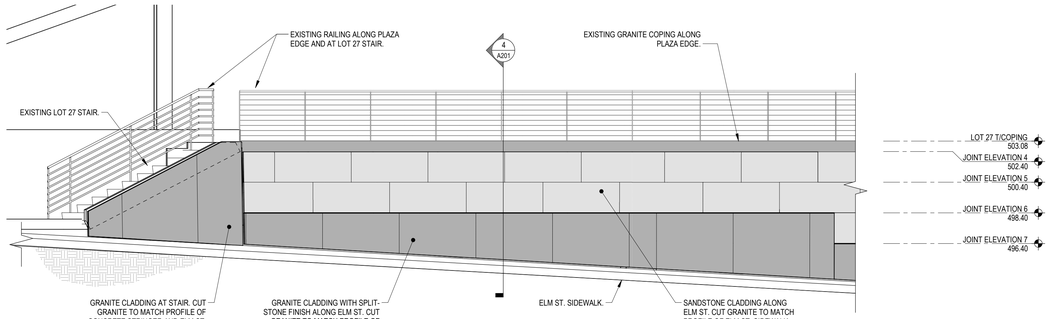
OVERALL ELEVATIONS

JOB NUMBER DATE

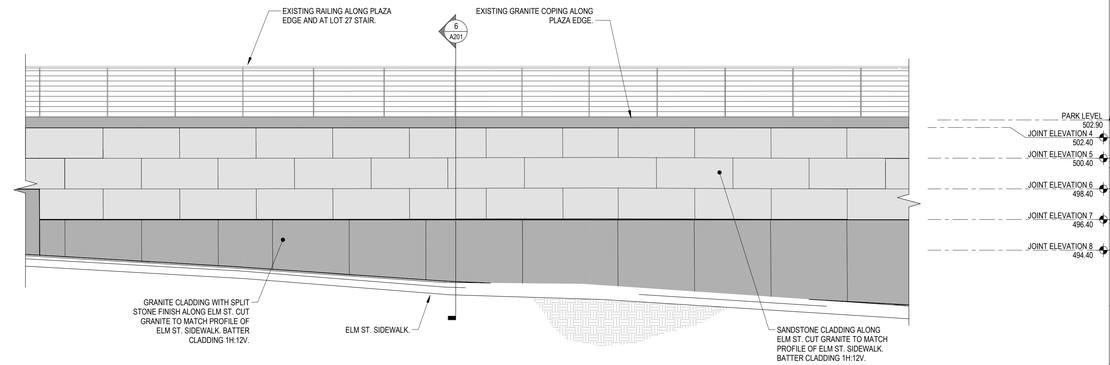
THP 98090.40 12/17/2021

DRAWING NUMBER

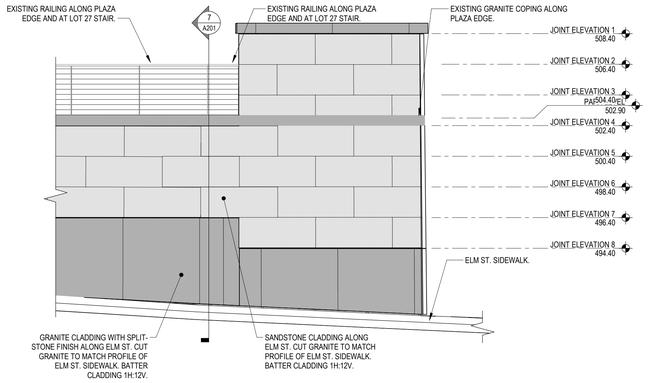
A200



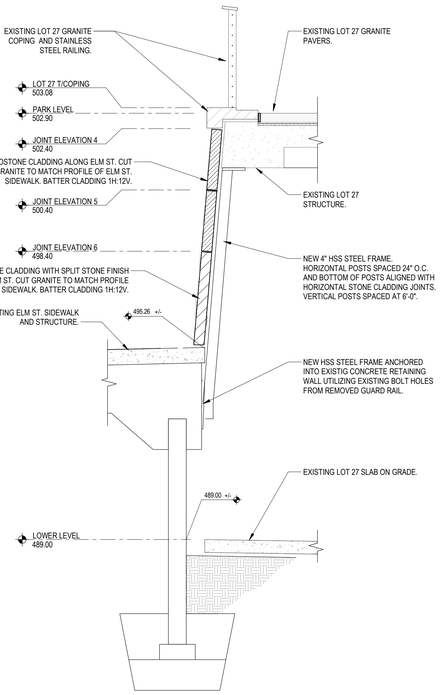
1 A201 — *LOT 27*
WEST ELEVATION
1/4" = 1'-0"



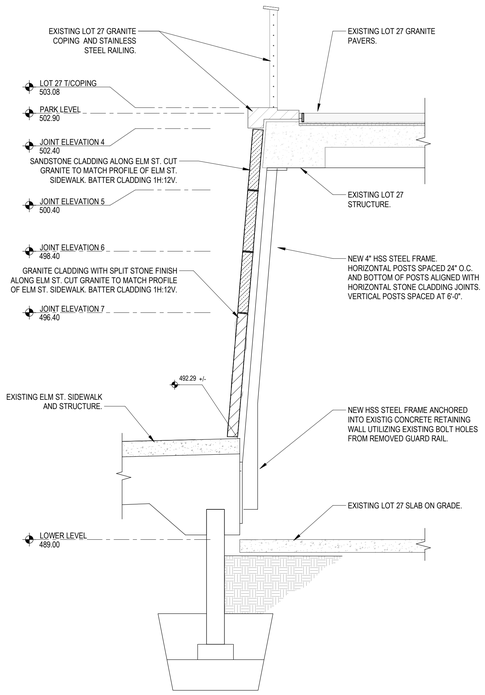
2 A201 — *LOT 27*
WEST ELEVATION
1/4" = 1'-0"



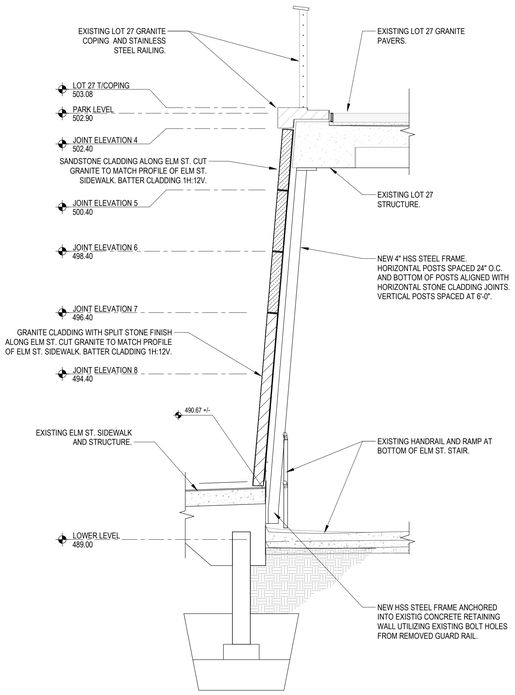
3 A201 — *LOT 27*
WEST ELEVATION
1/4" = 1'-0"



4 A201 — *LOT 27*
WEST WALL SECTION
1/2" = 1'-0"



6 A201 — *LOT 27*
WEST WALL SECTION
1/2" = 1'-0"



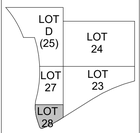
7 A201 — *LOT 27*
WEST WALL SECTION
1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1	12/17/2021 — BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

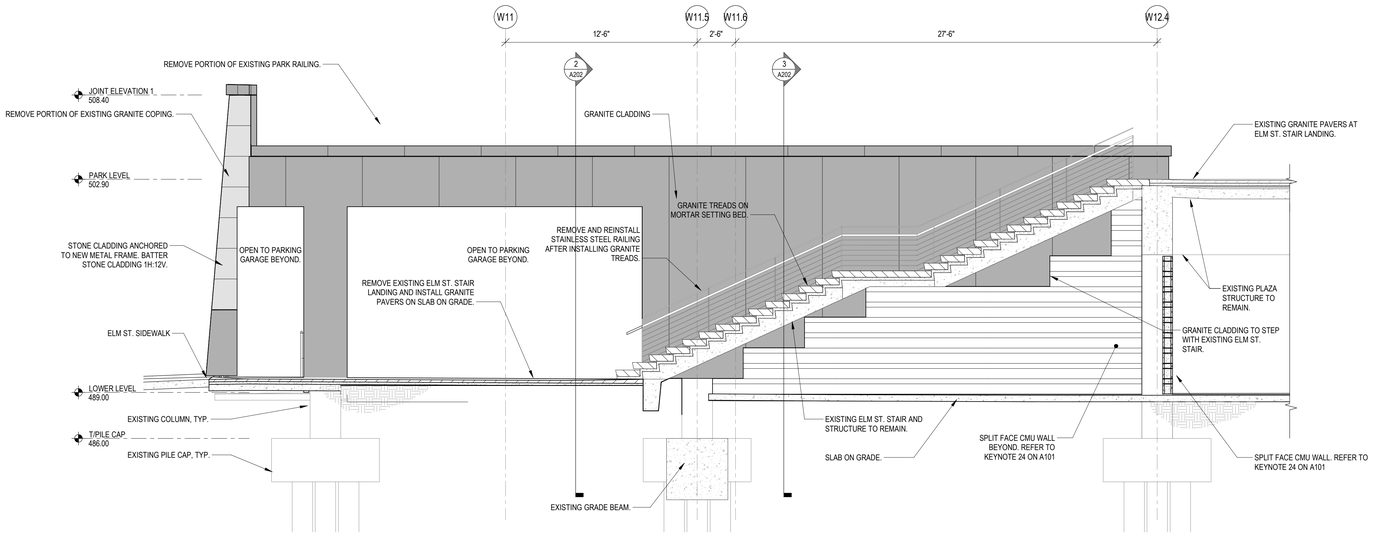
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

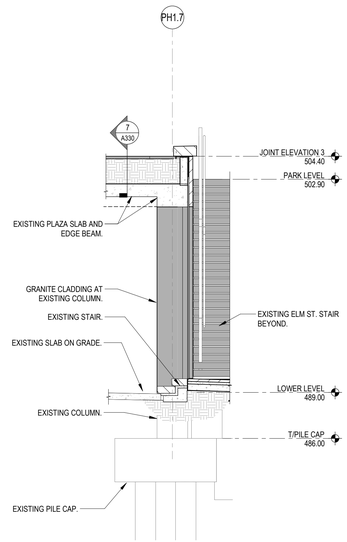
DRAWING TITLE
LOT 27 ELEVATIONS AND SECTIONS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

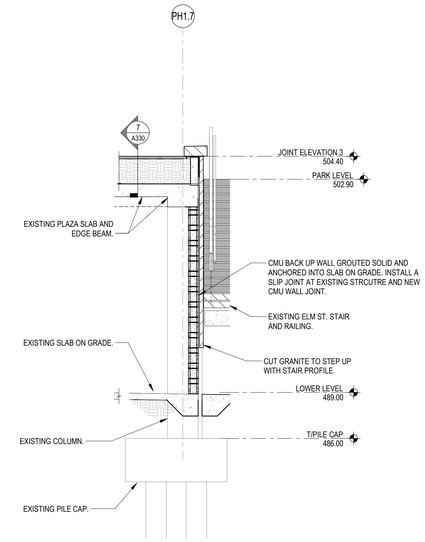
DRAWING NUMBER
A201



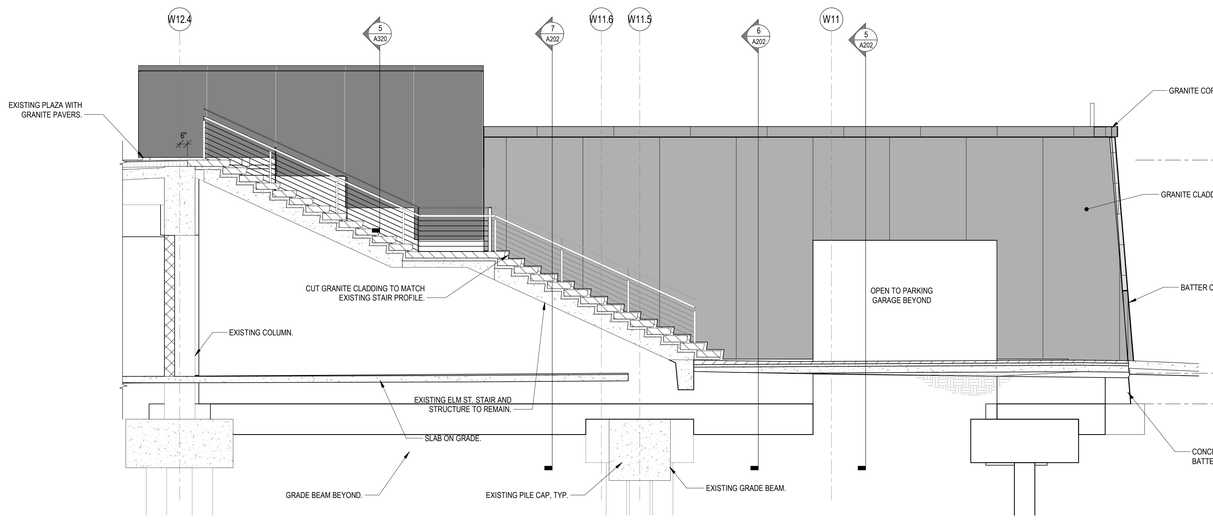
ELM ST. STAIR
1 A202 NORTH ELEVATION
1/4" = 1'-0"



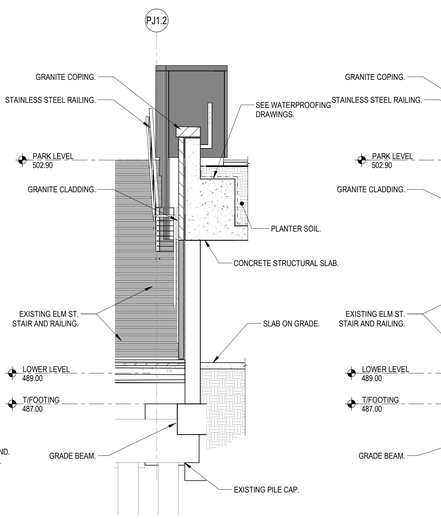
ELM ST. STAIR WALL
2 A202 WALL SECTION
1/4" = 1'-0"



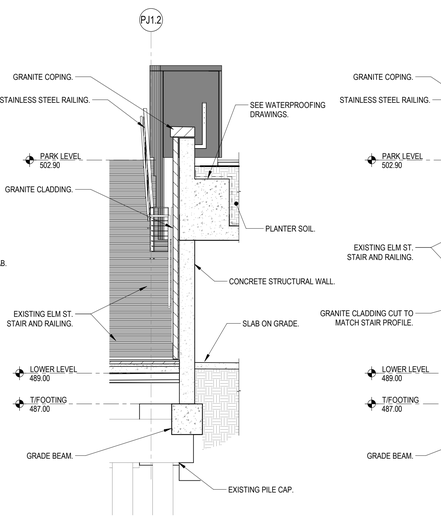
ELM ST. STAIR WALL
3 A202 WALL SECTION
1/4" = 1'-0"



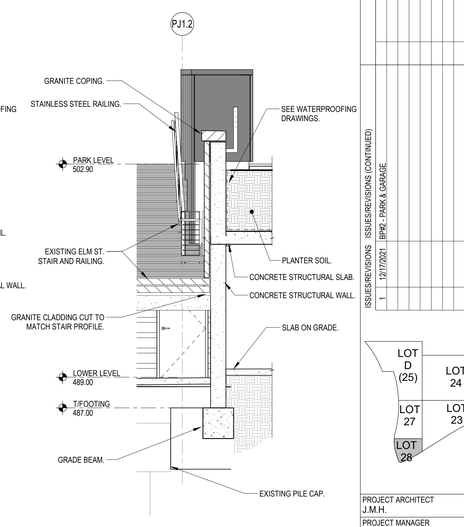
ELM ST. STAIR
4 A202 SOUTH ELEVATION
1/4" = 1'-0"



ELM ST. STAIR WALL
5 A202 WALL SECTION
1/4" = 1'-0"



ELM ST. STAIR WALL
6 A202 WALL SECTION
1/4" = 1'-0"



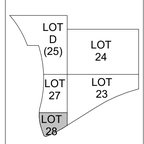
ELM ST. STAIR WALL
7 A202 WALL SECTION
1/4" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1 12/17/2021 BP#2 - PARK & GARAGE	



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

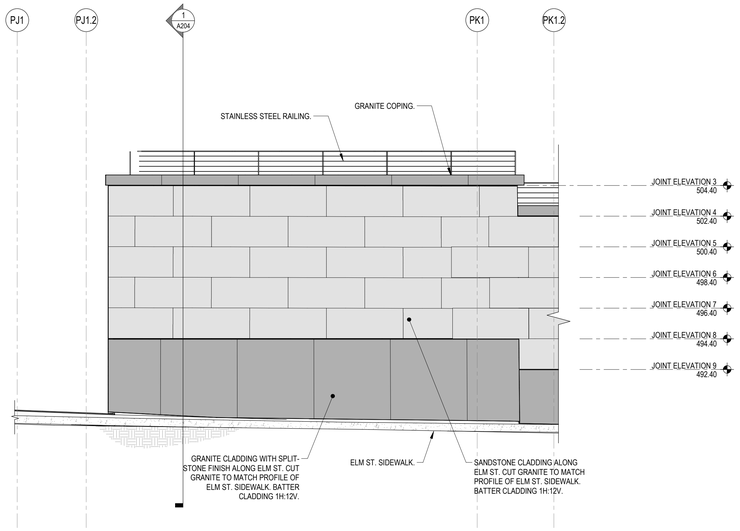
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
ELM ST. STAIR ELEVATIONS & SECTIONS

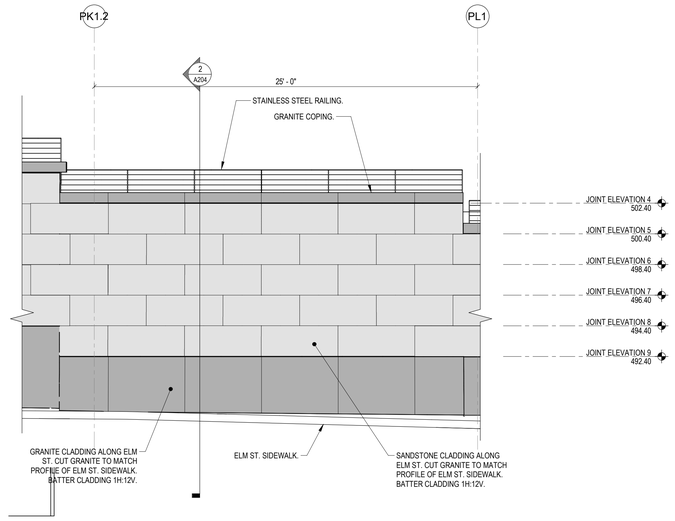
JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A202



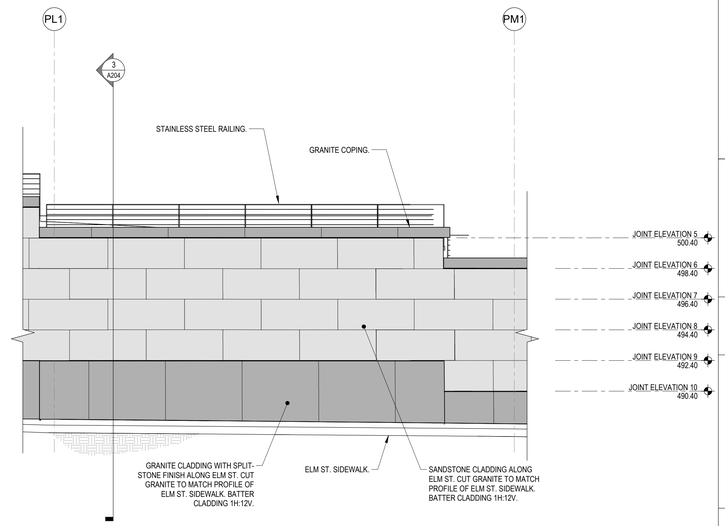
1 A203 **WEST ELEVATION**

1/4" = 1'-0"



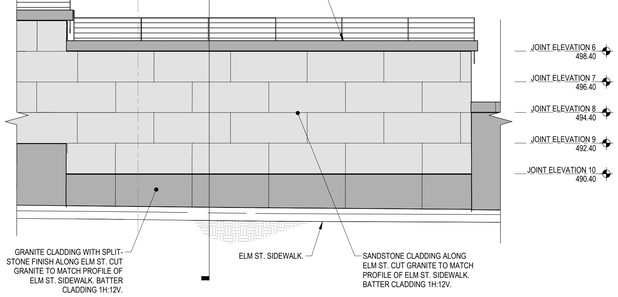
2 A203 **WEST ELEVATION**

1/4" = 1'-0"



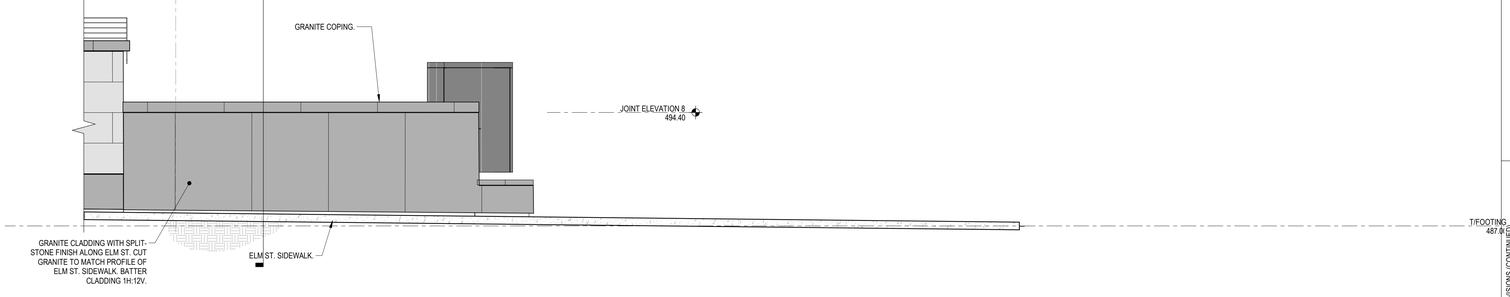
3 A203 **WEST ELEVATION**

1/4" = 1'-0"



4 A203 **WEST ELEVATION**

1/4" = 1'-0"



5 A203 **WEST ELEVATION**

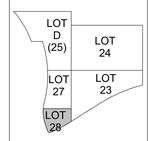
1/4" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS		ISSUES/REVISIONS (CONTINUED)
1	12/17/2021	BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

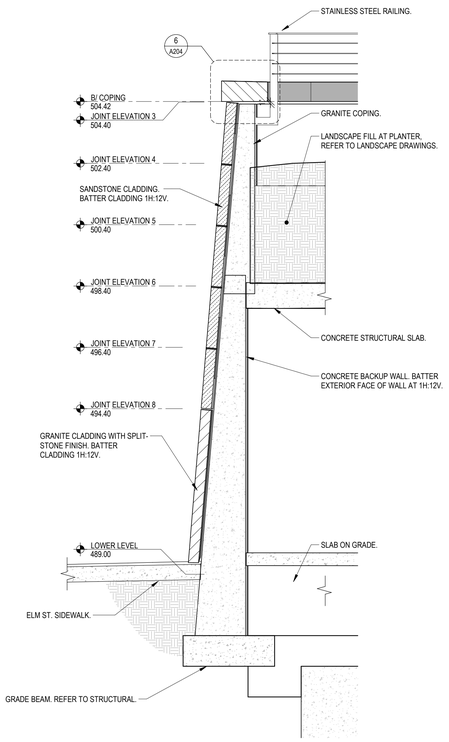
DRAWING TITLE

ELM ST. ELEVATIONS

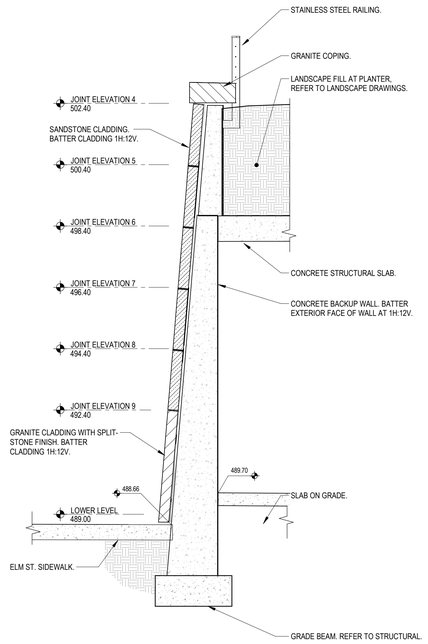
JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

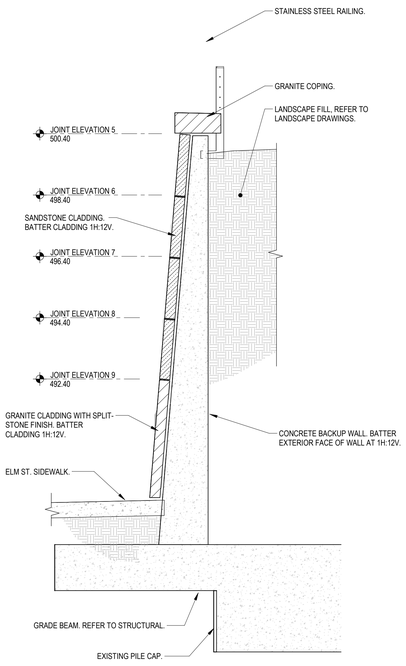
A203



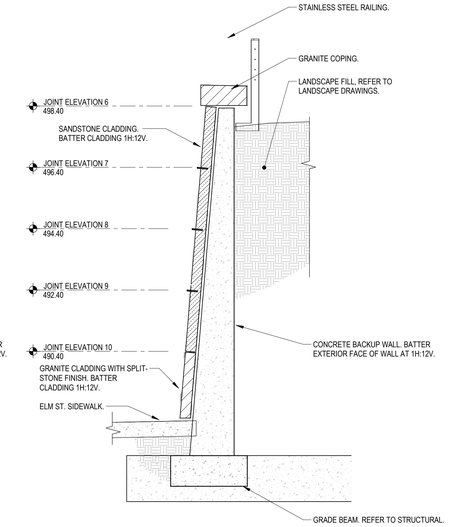
PJ1.2
1 A204 WEST WALL SECTION
1/2" = 1'-0"



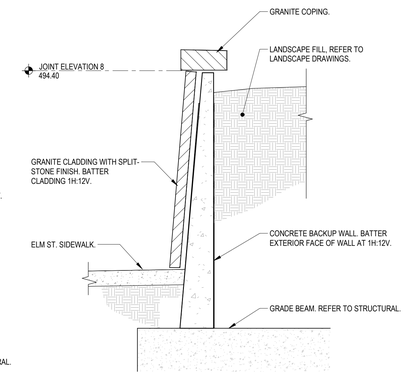
PK1.2
2 A204 WEST WALL SECTION
1/2" = 1'-0"



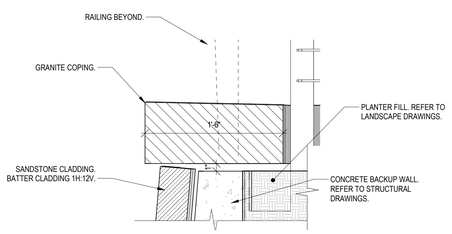
PL1
3 A204 WEST WALL SECTION
1/2" = 1'-0"



PM1
4 A204 WEST WALL SECTION
1/2" = 1'-0"



PN1
5 A204 WEST WALL SECTION
1/2" = 1'-0"



ELM ST. WALL COPING
6 A204 SECTION
1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)		
1	12/17/2021	BP#2 - PARK & GARAGE

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

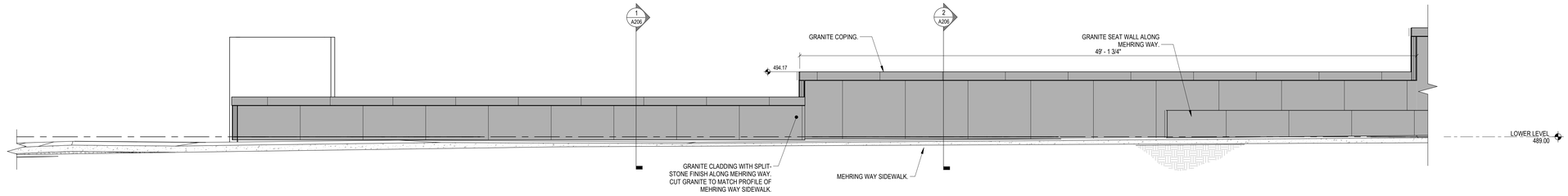
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
ELM ST. WALL SECTIONS

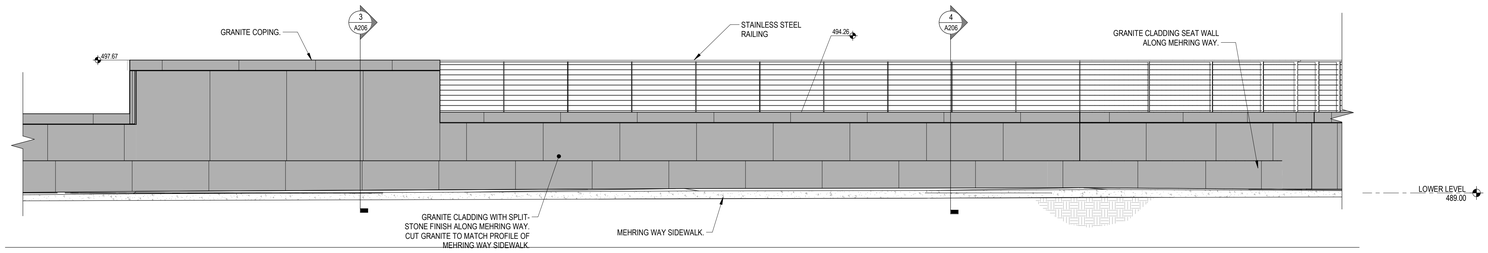
JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A204



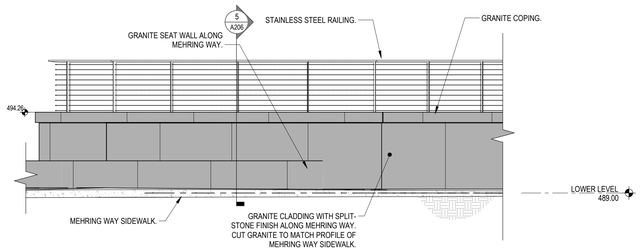
1 A205 MEHRING WAY - SOUTHWEST ELEVATION

1/4" = 1'-0"



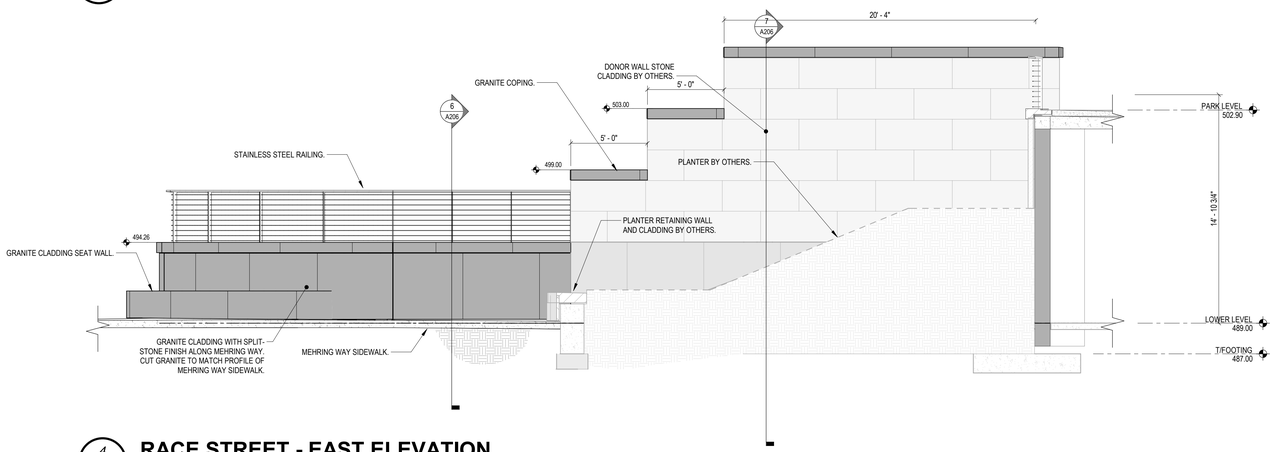
2 A205 MEHRING WAY - SOUTHEAST ELEVATION

1/4" = 1'-0"



3 A205 SOUTHEAST CORNER - ELEVATION

1/4" = 1'-0"



4 A205 RACE STREET - EAST ELEVATION

1/4" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

	ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1	12/17/2021	BP#2 - PARK & GARAGE

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

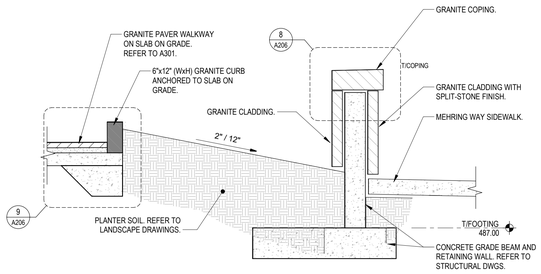
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

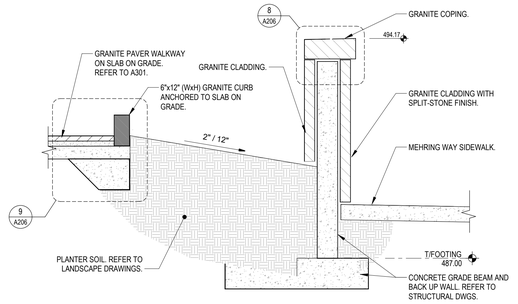
DRAWING TITLE
MEHRING WAY ELEVATIONS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

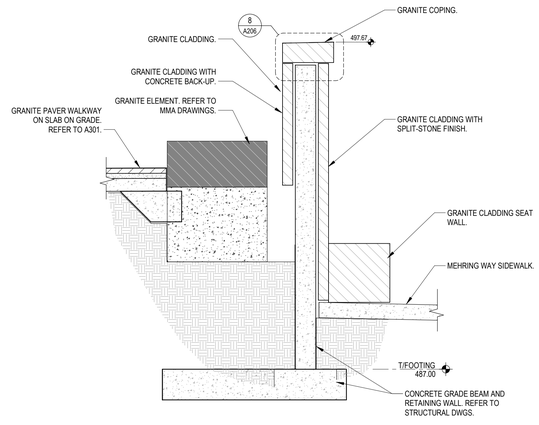
DRAWING NUMBER
A205



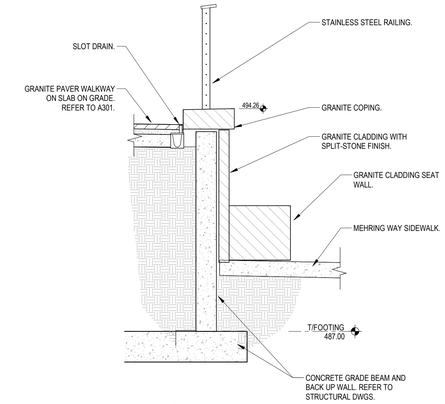
MEHRING WAY WALL
1 A206 SECTION
1/2" = 1'-0"



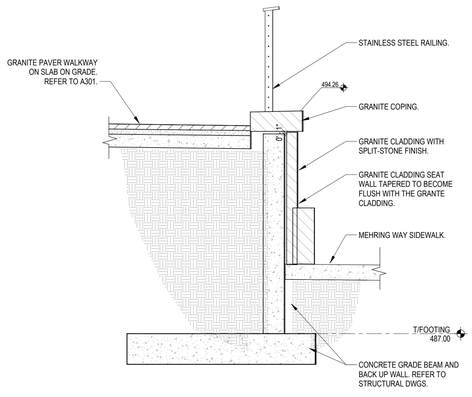
MEHRING WAY WALL
2 A206 SECTION
1/2" = 1'-0"



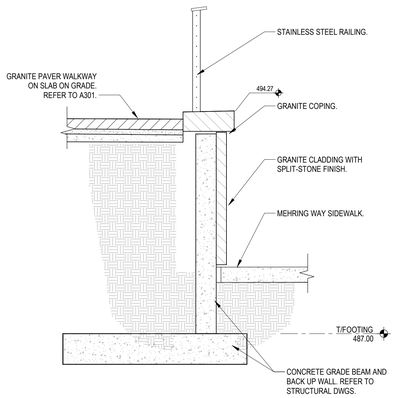
MEHRING WAY WALL
3 A206 SECTION
1/2" = 1'-0"



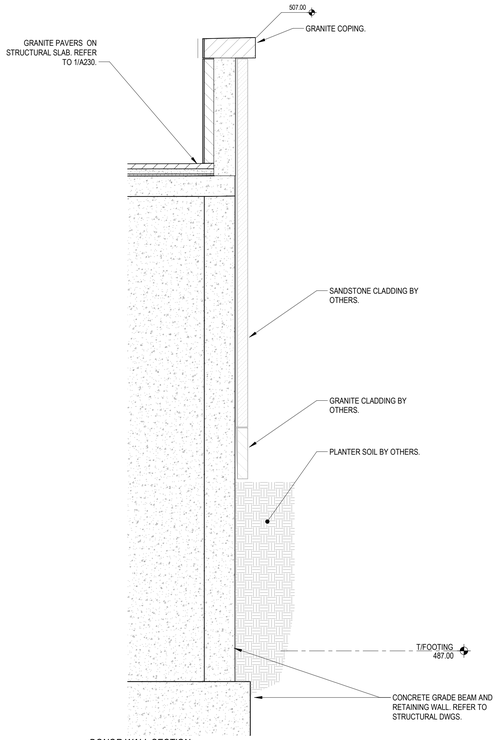
MEHRING WAY WALL
4 A206 SECTION
1/2" = 1'-0"



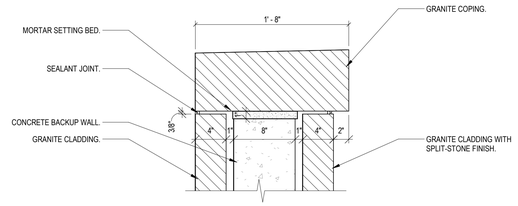
MEHRING WAY WALL
5 A206 SECTION
1/2" = 1'-0"



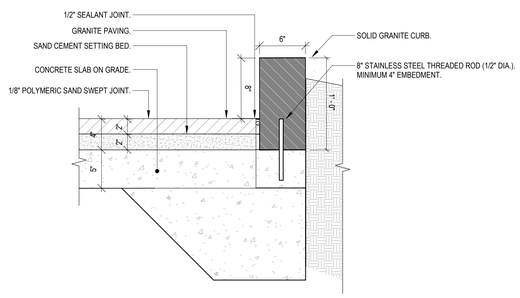
MEHRING WAY WALL
6 A206 SECTION
1/2" = 1'-0"



DONOR WALL SECTION
7 A206 SECTION
1/2" = 1'-0"



MEHRING WAY WALL COPING
8 A206 SECTION
1 1/2" = 1'-0"



LOWER WALKWAY CURB
9 A206 SECTION
1 1/2" = 1'-0"

HAMILTON COUNTY
RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)
ISSUES/REVISIONS
1 12/17/2021 (PHS2 - PARK & GARAGE

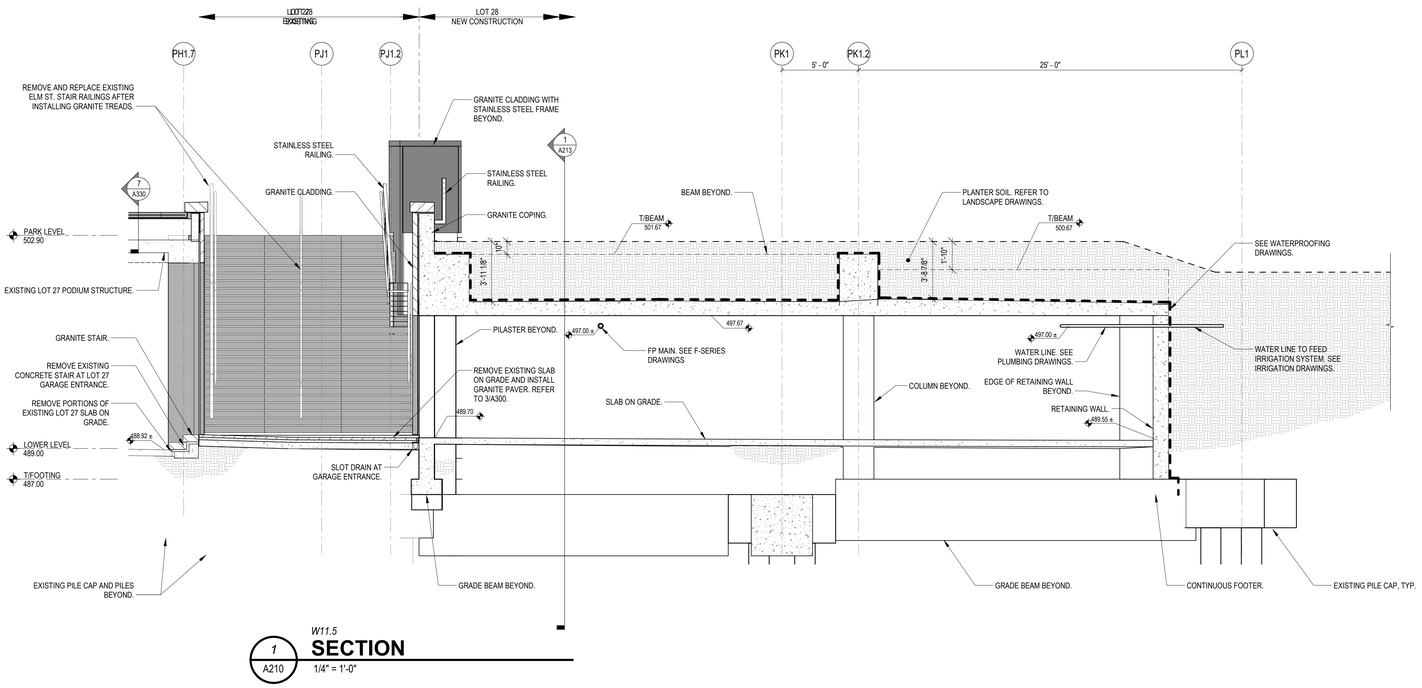
PROJECT ARCHITECT
J.M.H.
PROJECT MANAGER
M.S.M.
PRINCIPAL
J.M.J.
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
MEHRING WAY WALL SECTIONS

JOB NUMBER
THP 98090.40
DATE
12/17/2021

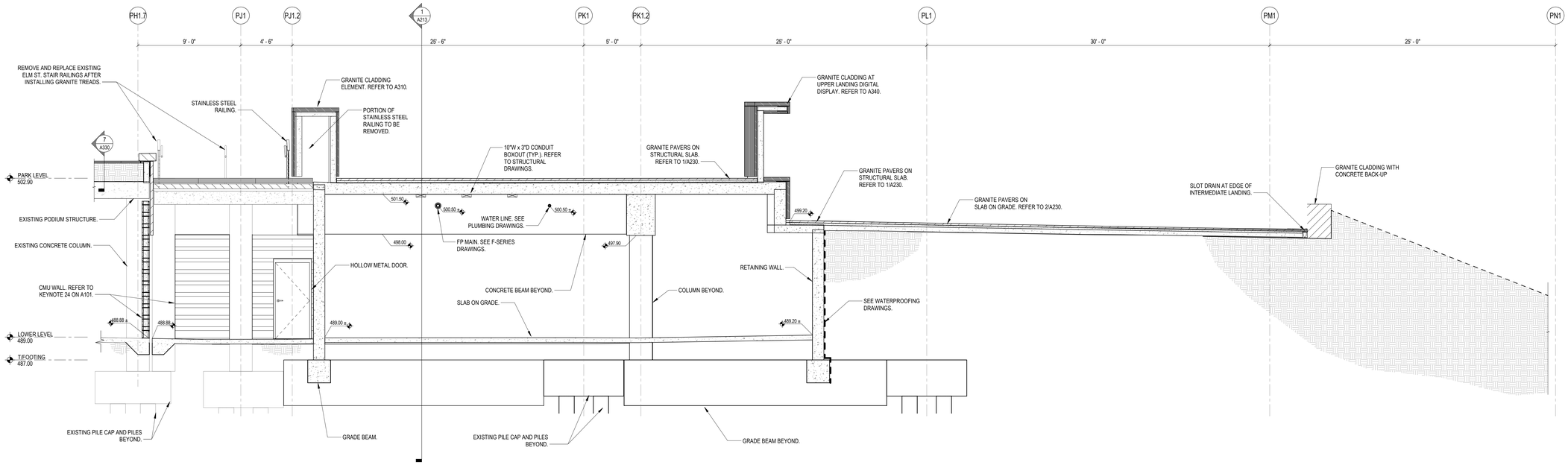
DRAWING NUMBER
A206



W11.5

1 A210 SECTION

1/4" = 1'-0"



W12.4

2 A210 SECTION

1/4" = 1'-0"

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1 12/17/2021	BP#2 - PARK & GARAGE

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

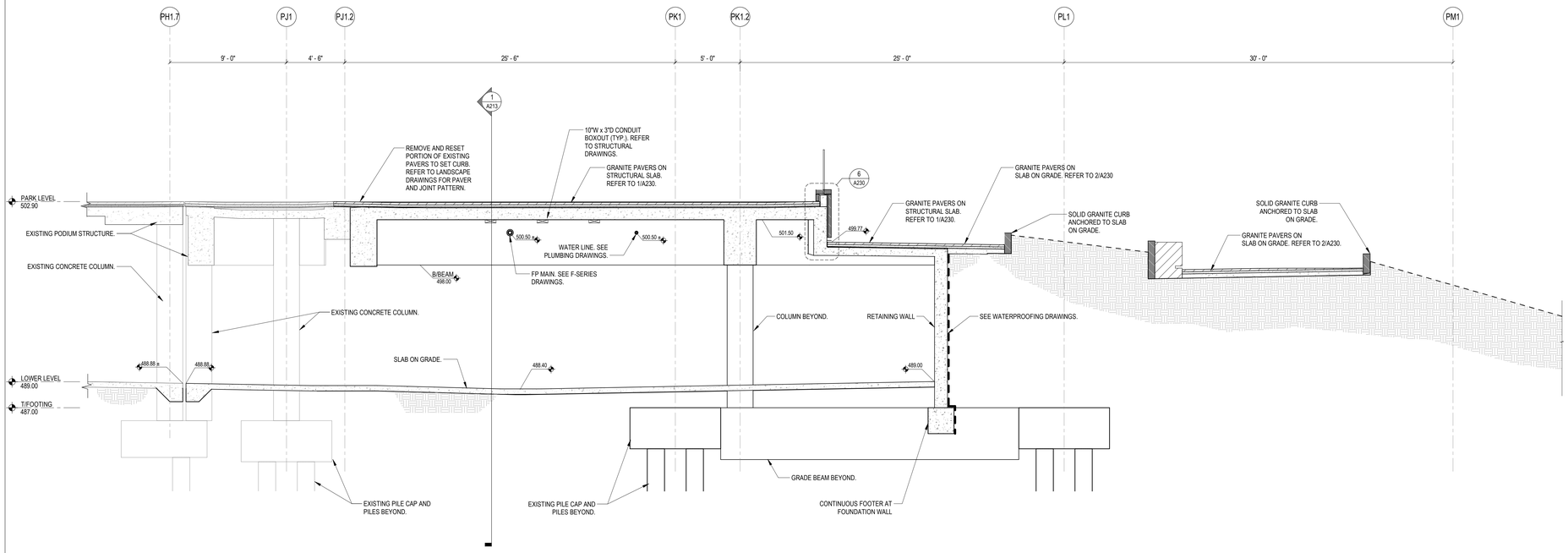
DRAWING TITLE

BUILDING SECTIONS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

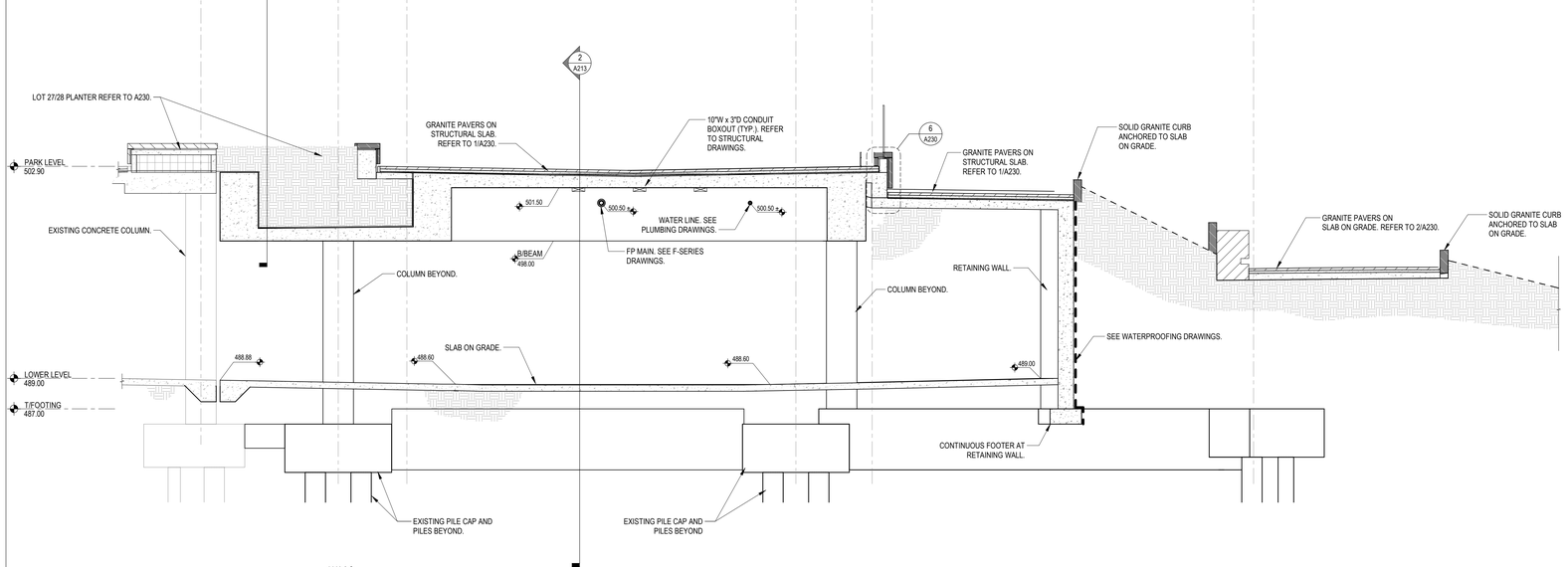
A210



W13.4

1 A211 SECTION

1/4" = 1'-0"



W14.9

2 A211 SECTION

1/4" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

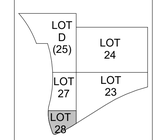
THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

1	12/17/2021	BP#2 - PARK & GARAGE

ISSUES/REVISIONS



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

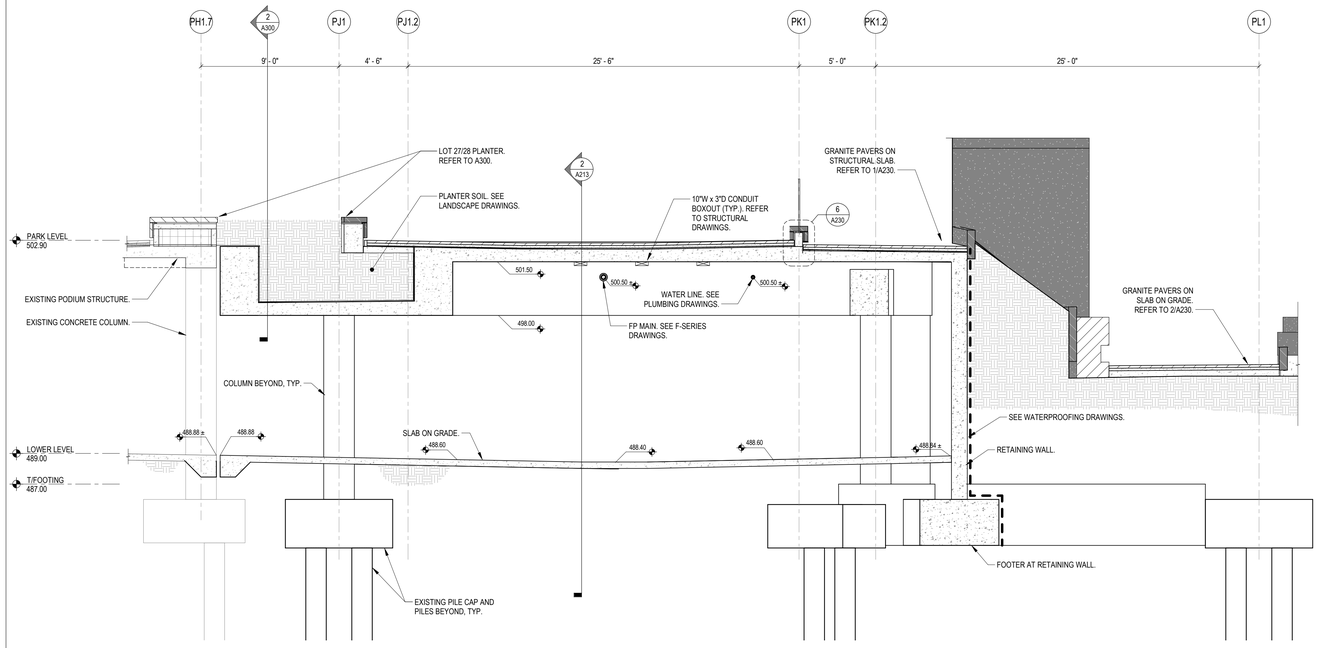
DRAWING TITLE

BUILDING SECTIONS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

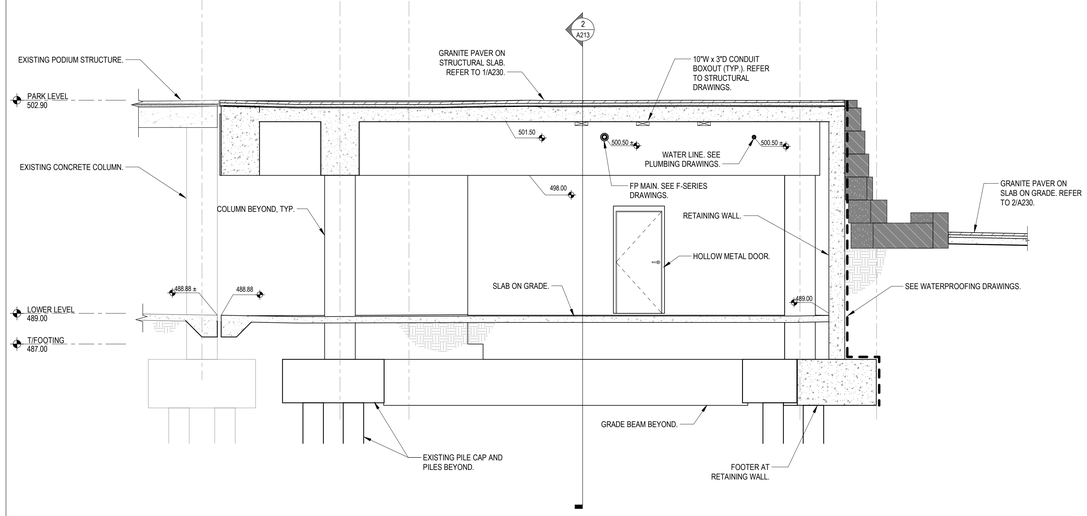
A211



W16

1 A212 SECTION

1/4" = 1'-0"



W16.9

2 A212 SECTION

1/4" = 1'-0"

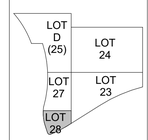
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

1	12/17/2021	BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

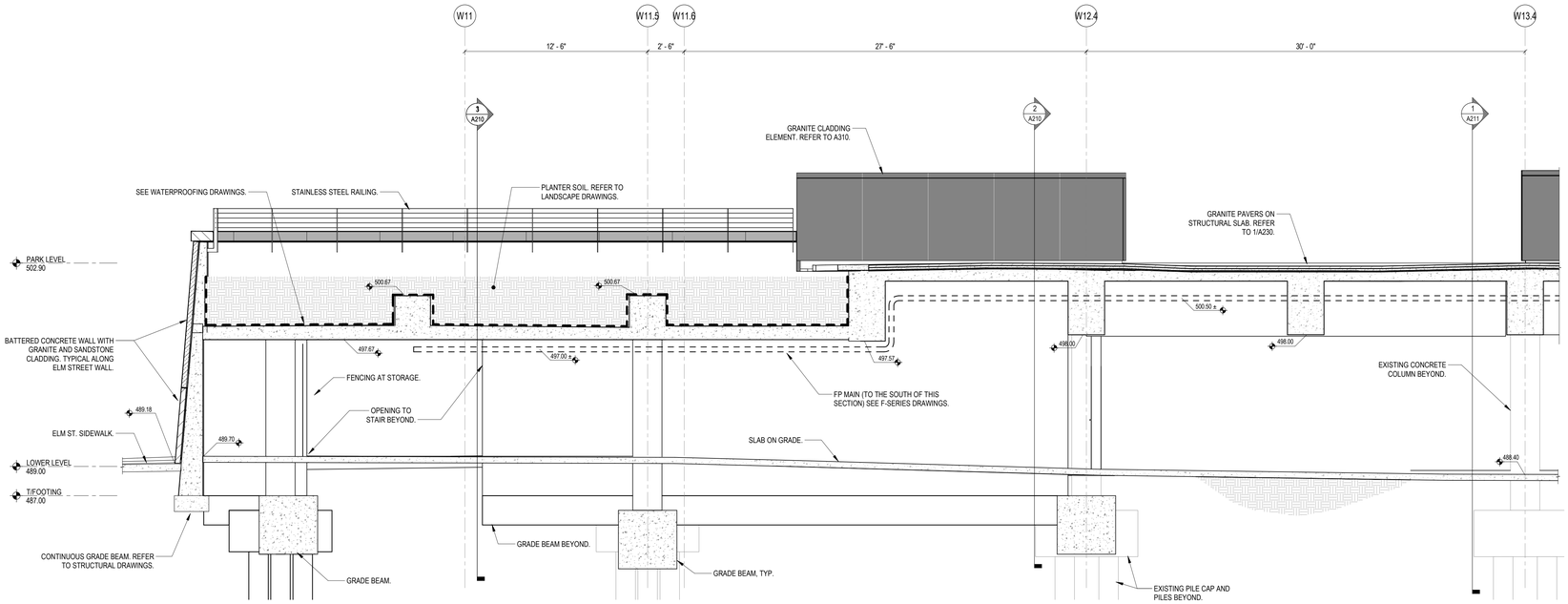
DRAWING TITLE

BUILDING SECTIONS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

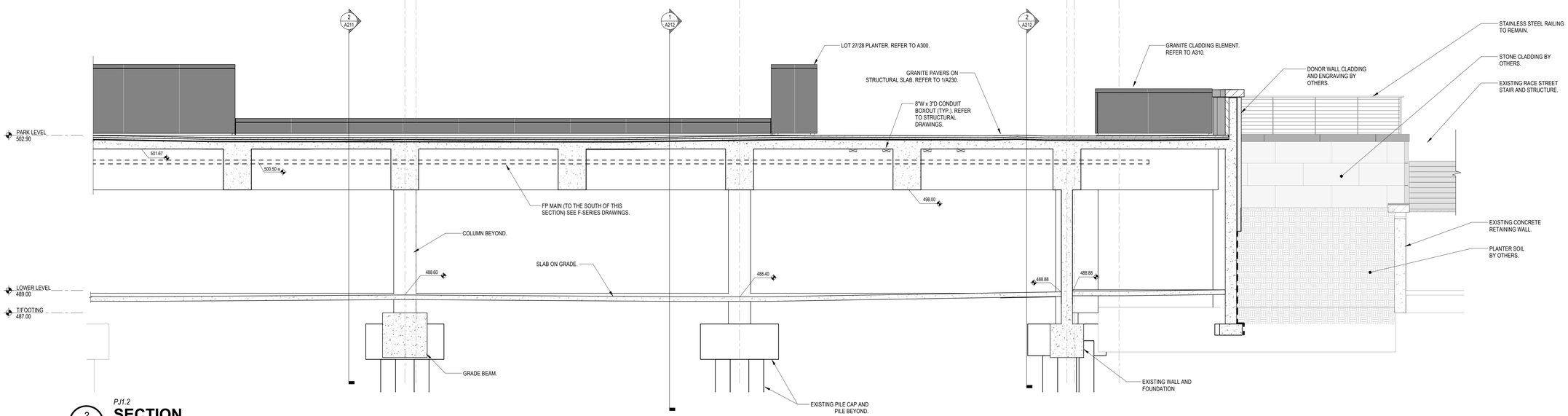
A212



PJ1.2

1 A213 SECTION

1/4" = 1'-0"



PJ1.2

2 A213 SECTION

1/4" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

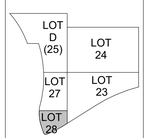
THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

1	12/17/2021	BHB2 - PARK & GARAGE

ISSUES/REVISIONS



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

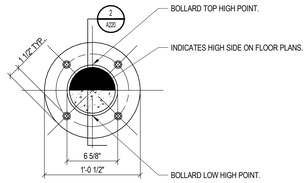
DRAWING TITLE

BUILDING SECTIONS

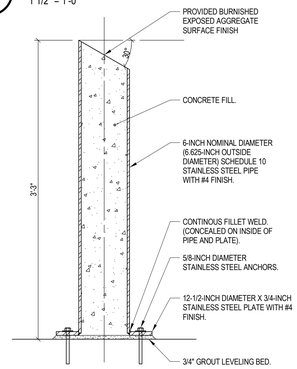
JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

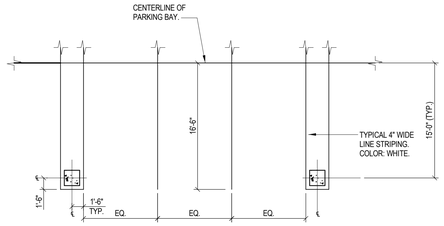
A213



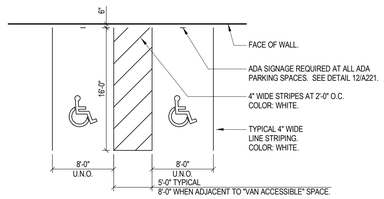
TYPICAL BOLLARD
1 A220 DETAIL
1 1/2" = 1'-0"



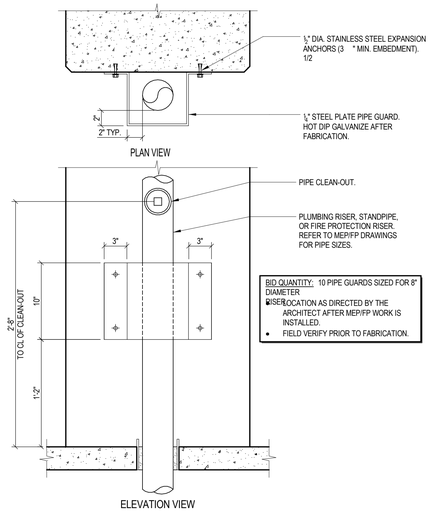
TYPICAL BOLLARD
2 A220 DETAIL
1 1/2" = 1'-0"



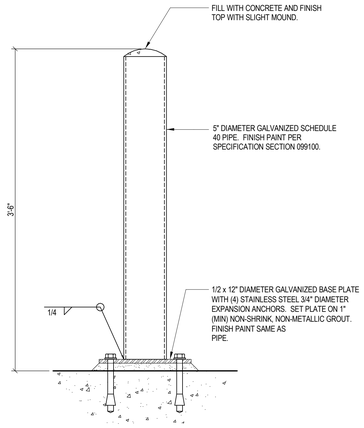
TYPICAL SPACE STRIPING
3 A220 DETAIL
1/4" = 1'-0"



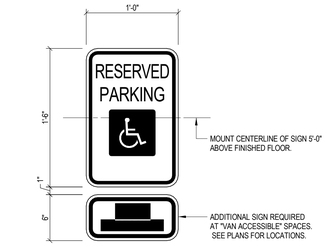
TYPICAL ADA SPACE STRIPING
4 A220 DETAIL
1/4" = 1'-0"



TYPICAL PIPE GUARD
5 A220 DETAIL
1 1/2" = 1'-0"

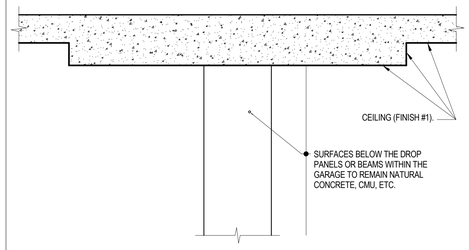


PIPE BOLLARD
6 A220 DETAIL
1 1/2" = 1'-0"

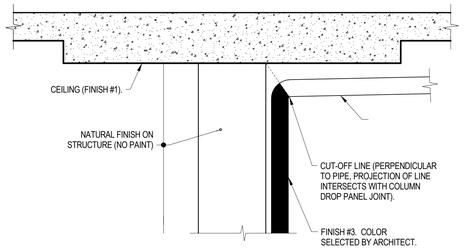


NOTE: SIGN GRAPHICS TO COMPLY WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. MOUNT SIGNS ON CONCRETE WALL OR 1-1/2" DIAMETER GALVANIZED PIPE BOLTED TO SLAB.

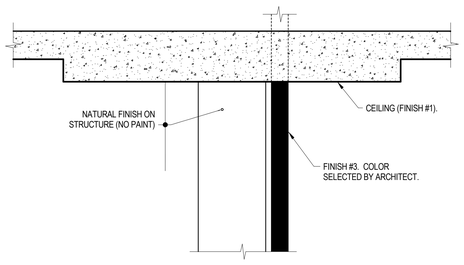
TYPICAL ADA SIGN
7 A220 DETAIL
1 1/2" = 1'-0"



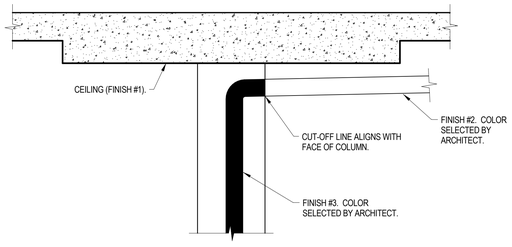
TYPICAL EXTENTS OF CEILING PAINTING
8 A220 DETAIL
1/2" = 1'-0"



PIPE BENDING AWAY FROM COLUMN
9 A220 DETAIL
1/2" = 1'-0"



THRU-SLAB PIPING NEXT TO COLUMN
10 A220 DETAIL
1/2" = 1'-0"



PIPE BENDING TO THE SIDE
11 A220 DETAIL
1/2" = 1'-0"

GENERAL NOTES:

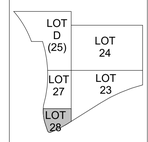
1. NO WALLS OR COLUMNS ARE TO BE PAINTED. PROTECT WALLS, COLUMNS, ETC. DURING CEILING AND MEP LINE PAINTING.
2. REVIEW EACH AREA TO BE PAINTED WITH THE ARCHITECT BEFORE START OF PAINTING.

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1 12/17/2021	BP#2 - PARK & GARAGE



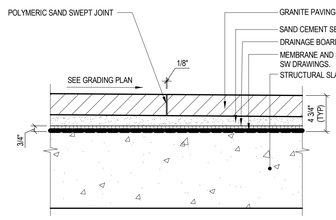
PROJECT ARCHITECT
J.M.H.
PROJECT MANAGER
M.S.M.
PRINCIPAL
J.M.J.
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
ARCHITECTURAL DETAILS

JOB NUMBER THP 98090.40
DATE 12/17/2021

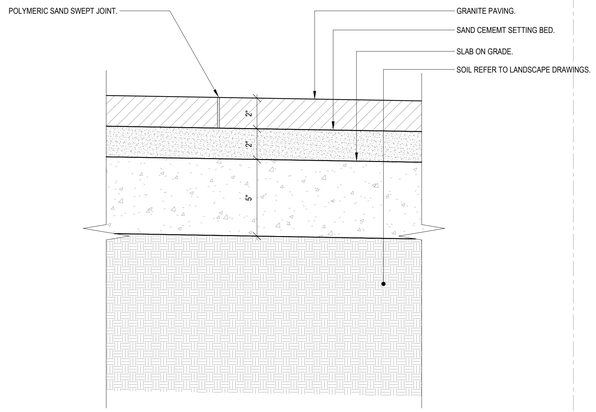
DRAWING NUMBER
A220



GRANITE PAVERS ON STRUCTURAL SLAB

1 / A230 DETAIL

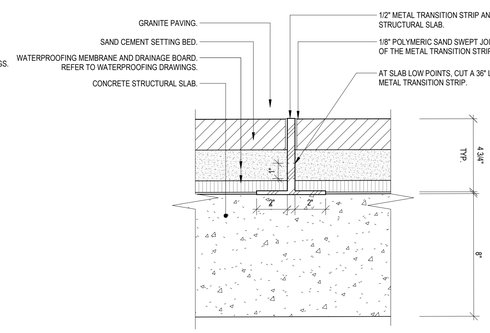
1 1/2" = 1'-0"



GRANITE PAVERS ON SLAB ON GRADE

5 / A230 DETAIL

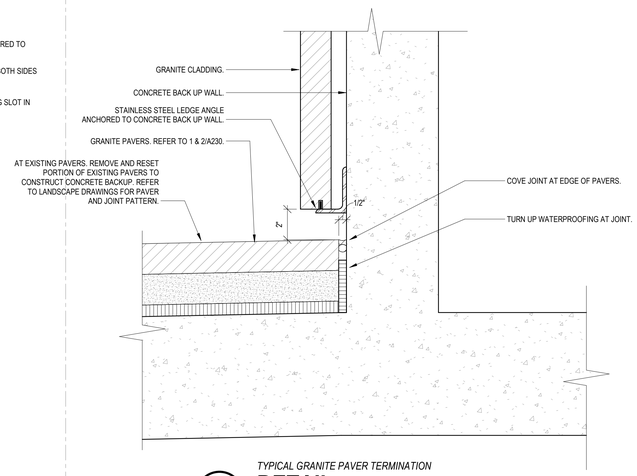
3" = 1'-0"



PAVER TRANSITION STRIP

2 / A230 DETAIL

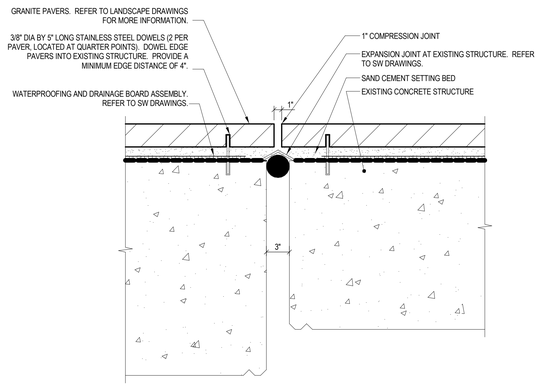
3" = 1'-0"



TYPICAL GRANITE PAVER TERMINATION

4 / A230 DETAIL

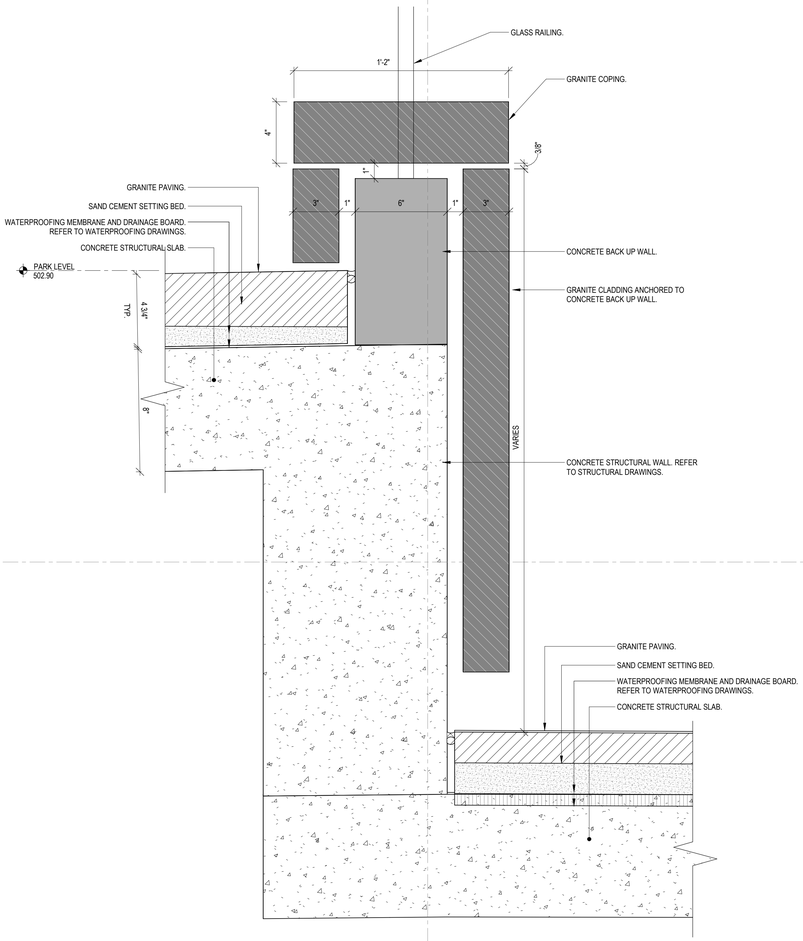
3" = 1'-0"



PAVERS AT EXPANSION JOINT

3 / A230 DETAIL

1 1/2" = 1'-0"



503' PLAZA SOUTH WALL

6 / A230 SECTION

3" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

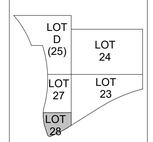
THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS

1	12/17/2021	BP#2 - PARK & GARAGE

ISSUES/REVISIONS (CONTINUED)



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

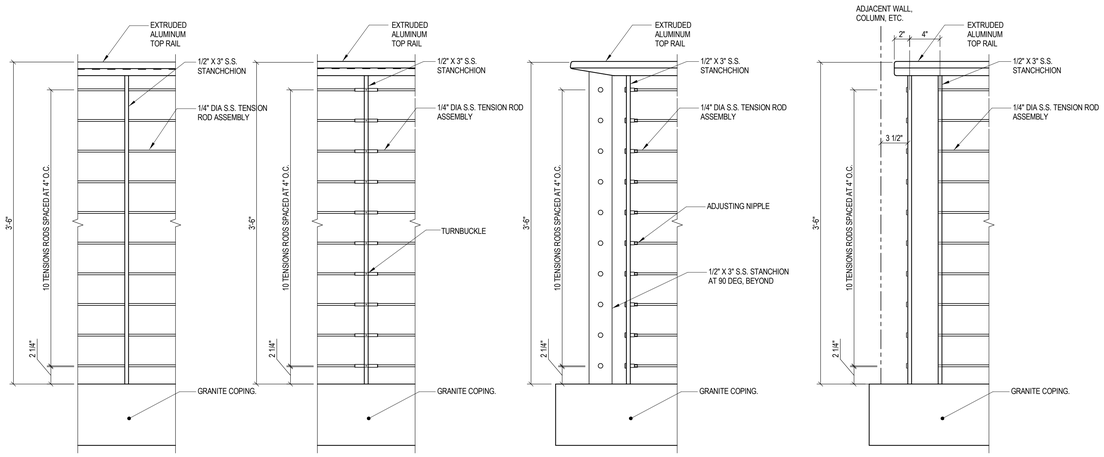
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
PARK DETAILS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A230



TYPICAL ELEVATION | ROD TERMINUS ELEVATION | 90° CORNER ELEVATION | END ELEVATION

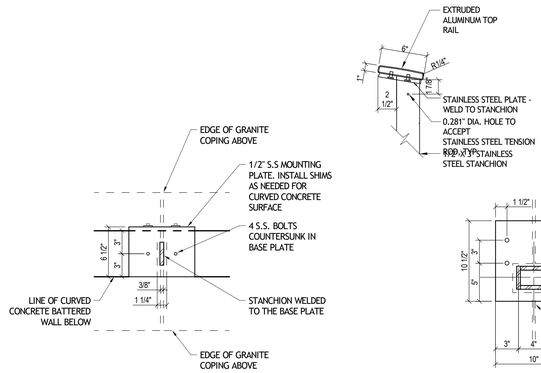
NOTE: STANCHIONS NOT TO EXCEED 5'-0" SPACING. SPACING BETWEEN ALL ELEMENTS NOT TO EXCEED 4".

GUARDRAIL ELEVATION

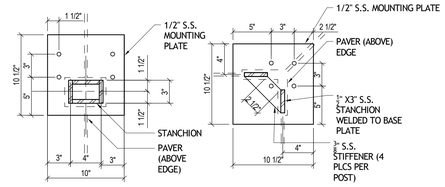
1 / A240

DETAILS

1 1/2" = 1'-0"



TYP. MOUNTING PLATE PLAN



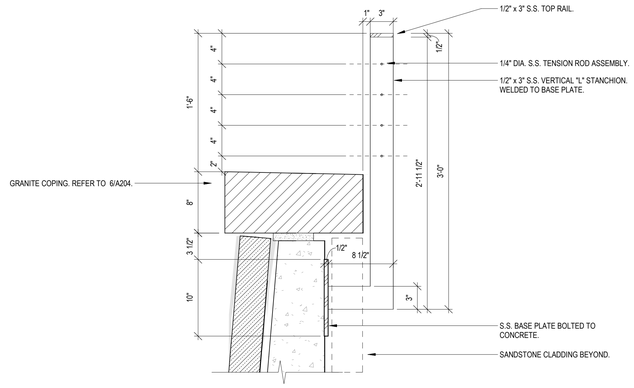
CORNER POST MOUNTING PLATE PLAN

GUARDRAIL TOP AND BASE PLATE

2 / A240

DETAILS

1 1/2" = 1'-0"



ELM ST. RAILING

3 / A240

SECTION

1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

ISSUES/REVISIONS

#	DATE	ISSUES/REVISIONS
1	12/17/2021	BP#2 - PARK & GARAGE

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

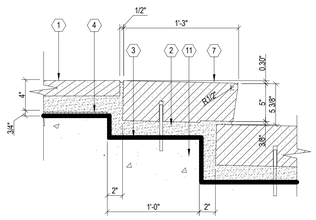
DRAWING TITLE

RAILING DETAILS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

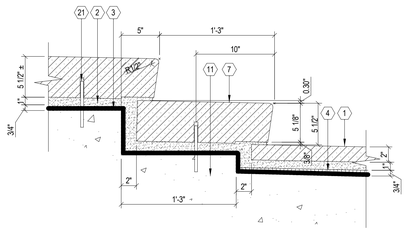
A240



TOP OF ELM STREET STAIR

1 / A250 DETAIL

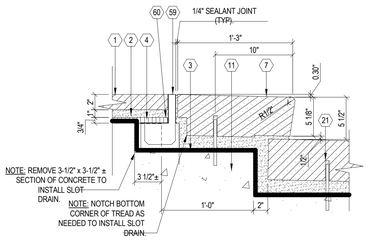
1 1/2" = 1'-0"



TOP OF ELM STREET STAIR LANDING

2 / A250 DETAIL

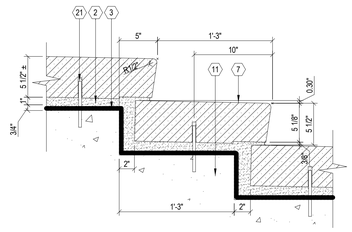
1 1/2" = 1'-0"



BOTTOM OF ELM STREET STAIR LANDING

3 / A250 DETAIL

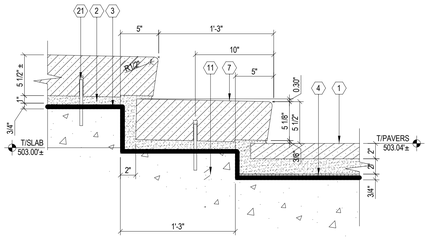
1 1/2" = 1'-0"



ELM STREET STAIR TREAD

4 / A250 DETAIL

1 1/2" = 1'-0"



BOTTOM OF ELM STREET STAIR

5 / A250 DETAIL

1 1/2" = 1'-0"

DRAWING NOTES:

1. GRANITE PAVING.
2. LATEX MODIFIED MORTAR SETTING BED.
3. WATERPROOFING MEMBRANE AND PROTECTION SHEET.
4. DRAINAGE BOARD ASSEMBLY.
5. GRANITE TREAD.
6. STRUCTURAL SLAB.
7. 3/8" x 6" L S.S. DOWELS, TWO PER PIECE LOCATED AT QUARTER POINTS.
8. HEEL RESISTANT SS SLOT DRAIN (1" ± TOTAL WD(TH). SEE PLUMBING DRAWINGS ALSO. PRODUCTS:
   - ACO TYPE 472/473 SS HEEL BRICKSLOT 100.
   - ACO H100KS-8 CHANNEL.
9. DRILL WEEPHOLES IN TO POF SLOT DRAIN AT 6' O.C. TO ALLOW WATER IN DRAINAGE BOARD TO DRAIN INTO SLOT DRAIN.

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

ISSUES/REVISIONS

1	12/17/2021	BP#2 - PARK & GARAGE

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

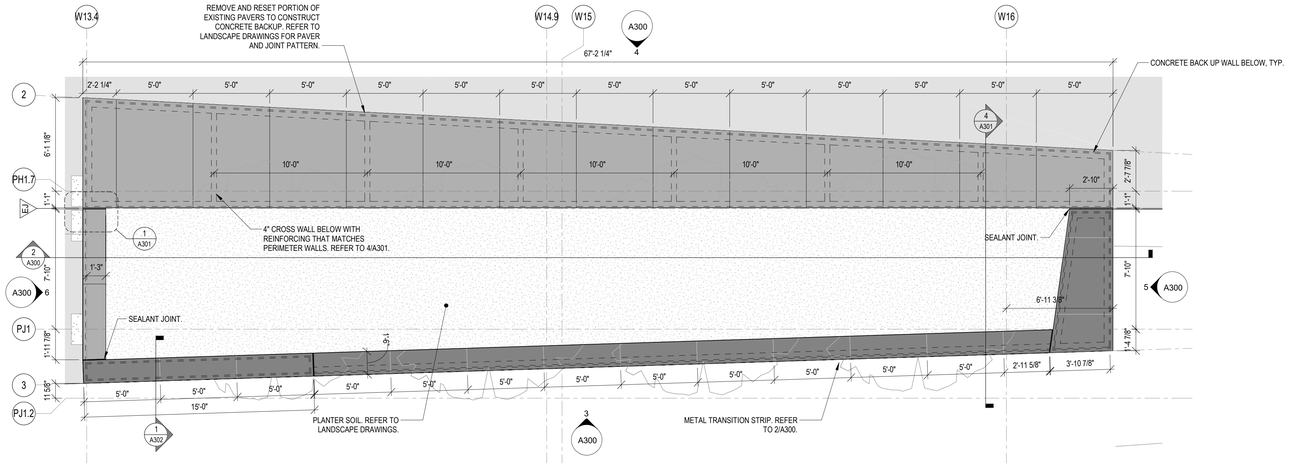
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
ELM STREET STAIR DETAILS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A250

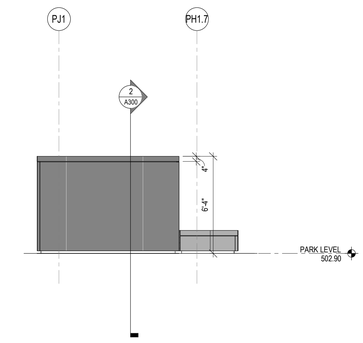


LOT 27/28 PLANTER

1 A300 ENLARGED PLAN

1/4" = 1'-0"

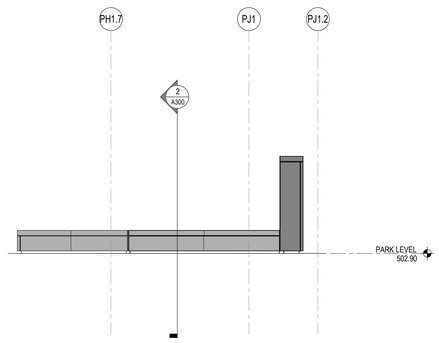
NORTH



LOT 27/28 PLANTER

5 A300 EAST ELEVATION

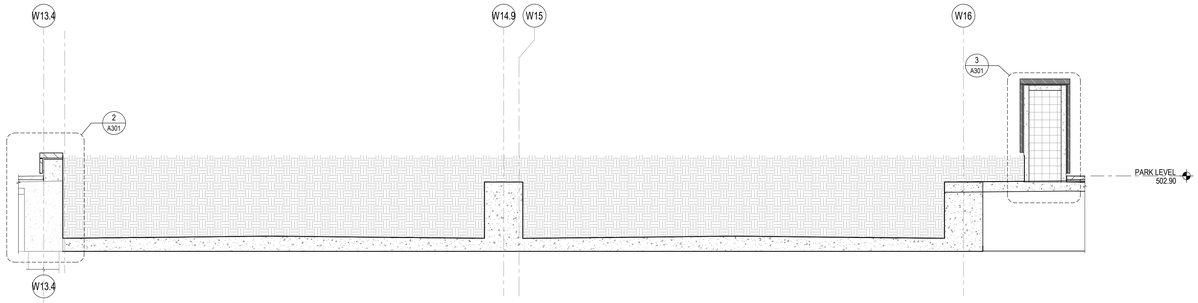
1/4" = 1'-0"



LOT 27/28 PLANTER

6 A300 WEST ELEVATION

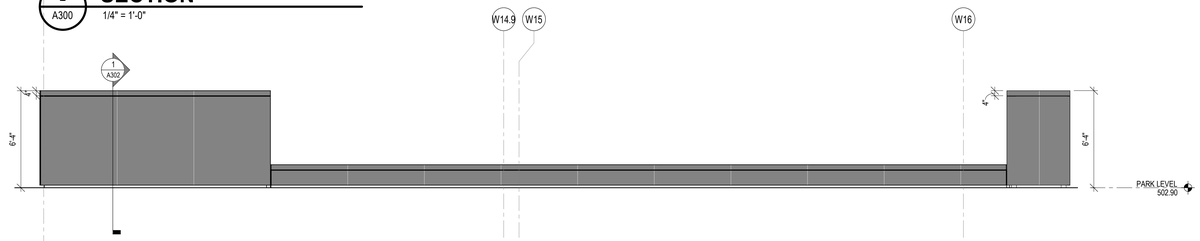
1/4" = 1'-0"



LOT 27/28 PLANTER

2 A300 SECTION

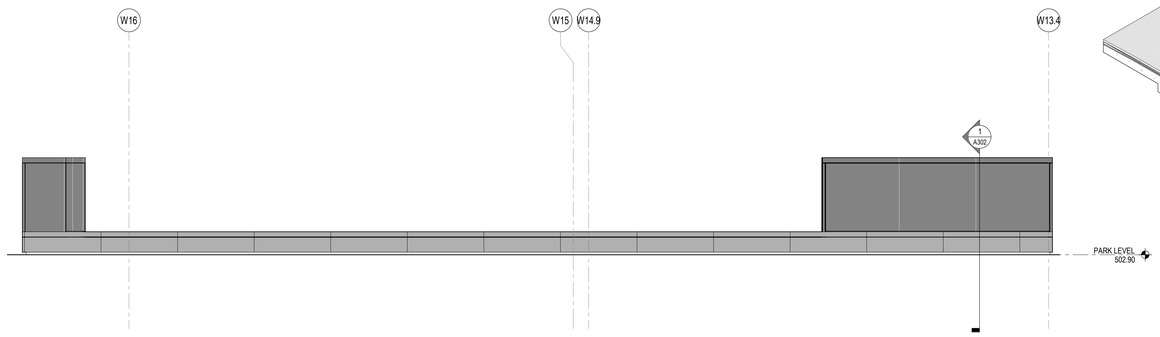
1/4" = 1'-0"



LOT 27/28 PLANTER

3 A300 SOUTH ELEVATION

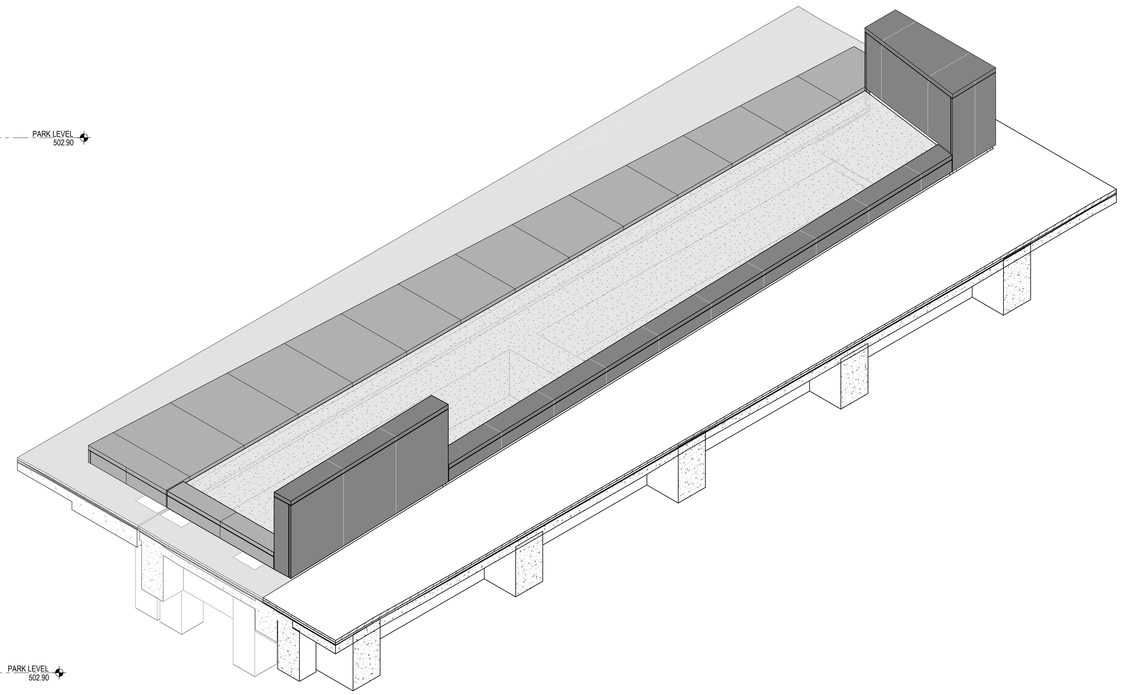
1/4" = 1'-0"



LOT 27/28 PLANTER

4 A300 NORTH ELEVATION

1/4" = 1'-0"



LOT 27/28 PLANTER

7 A300 AXONOMETRIC VIEW

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

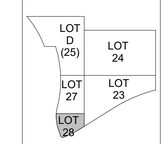
513.241.3222
THPLTD.com

ISSUES/REVISIONS

1	12/17/2021

ISSUES/REVISIONS (CONTINUED)

BP#2 - PARK & GARAGE	



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

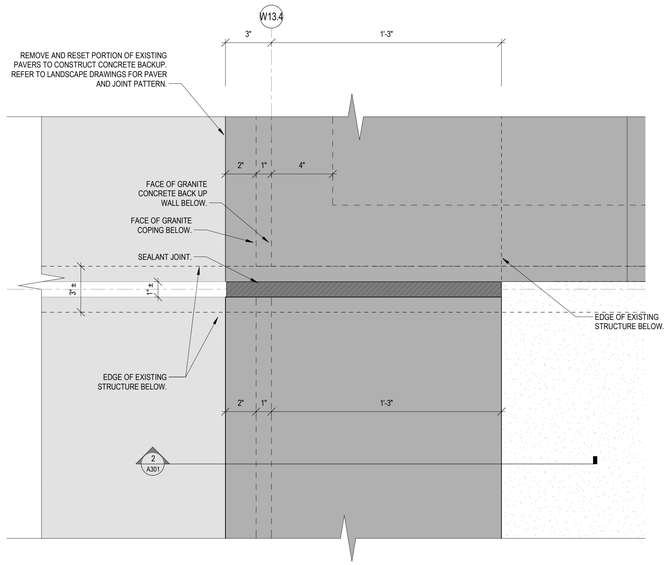
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
LOT 27/28 PLANTER PLAN & SECTIONS

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

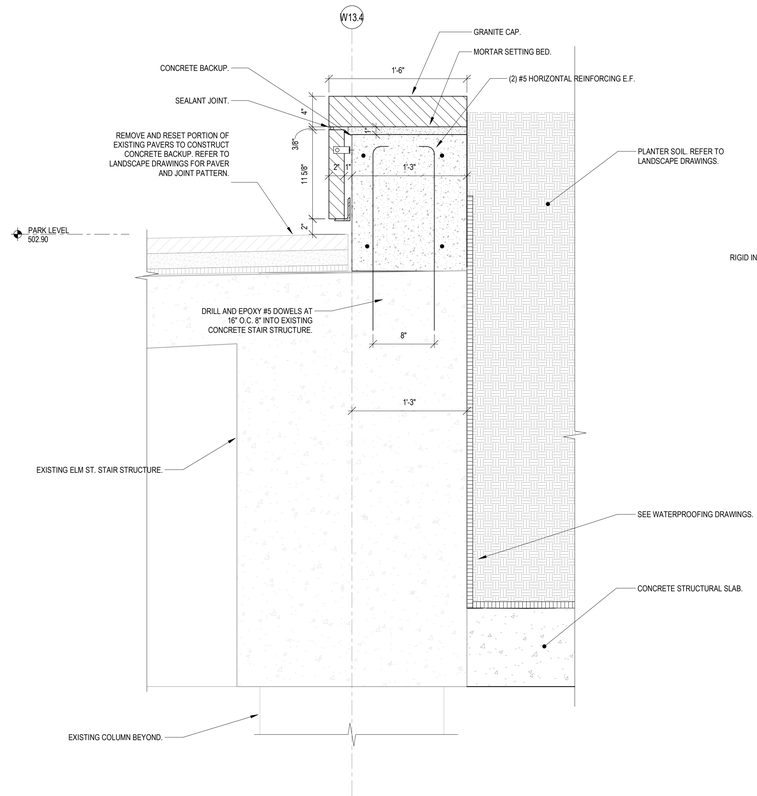
DRAWING NUMBER
A300



LOT 27/28 PLANTER

1 PLAN DETAIL

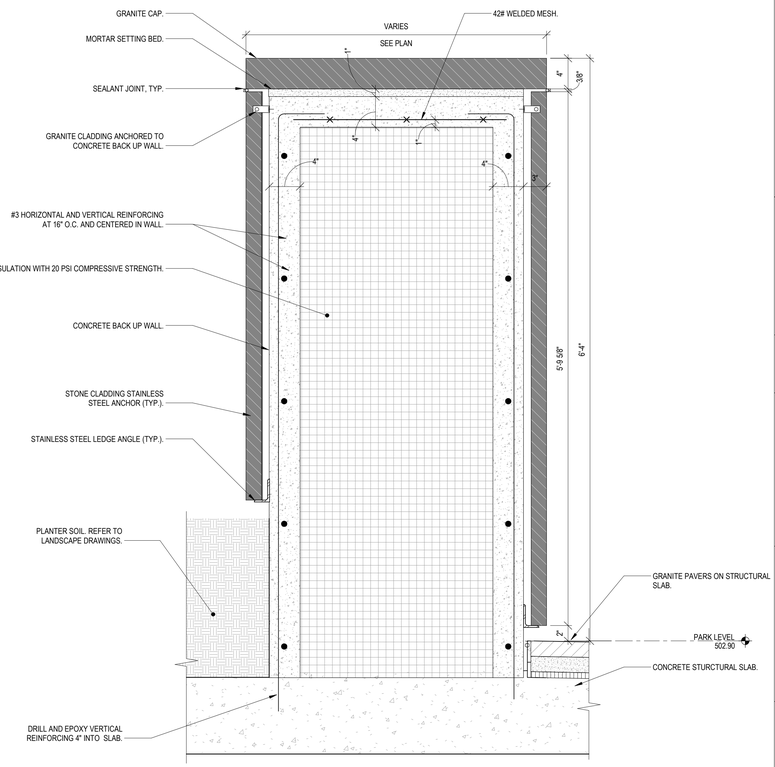
A301 — 3" = 1'-0"



LOT 27/28 PLANTER

2 SECTION DETAIL

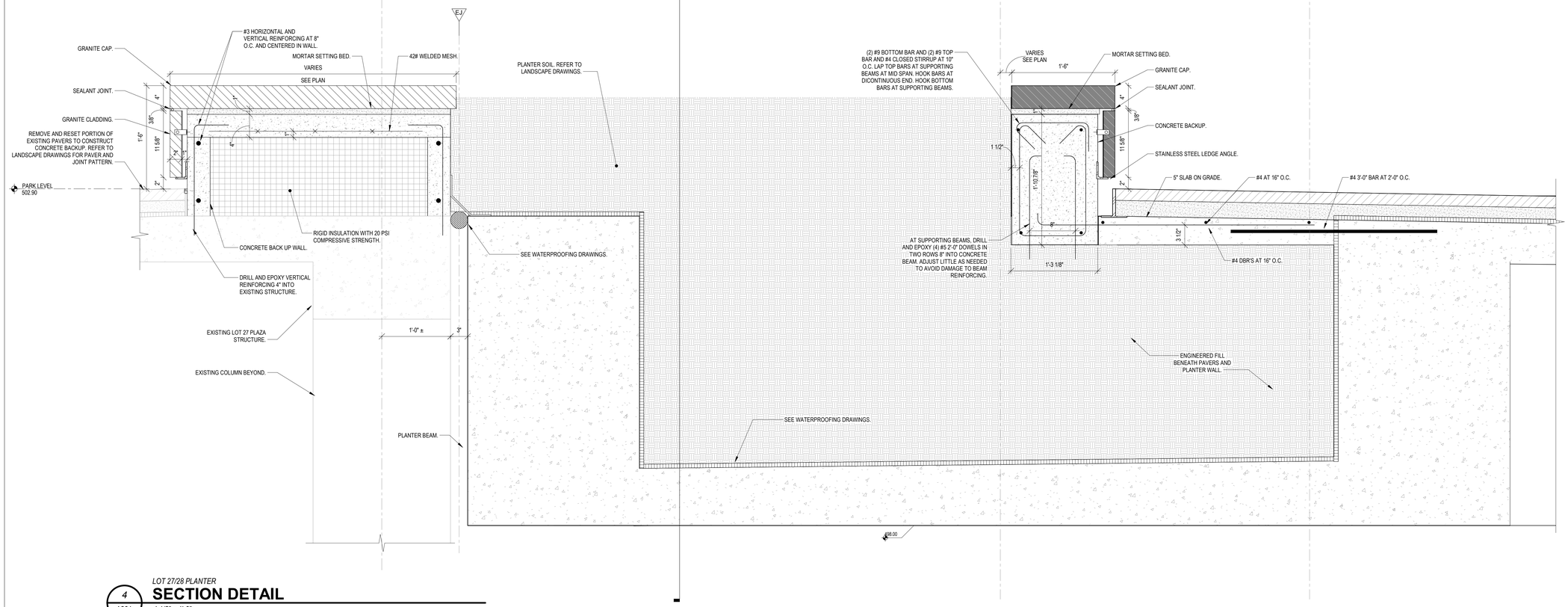
A301 — 1 1/2" = 1'-0"



LOT 27/28 PLANTER

3 SECTION DETAIL

A301 — 1 1/2" = 1'-0"



LOT 27/28 PLANTER

4 SECTION DETAIL

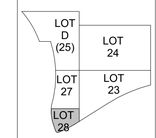
A301 — 1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)	
1	12/17/2021 — BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

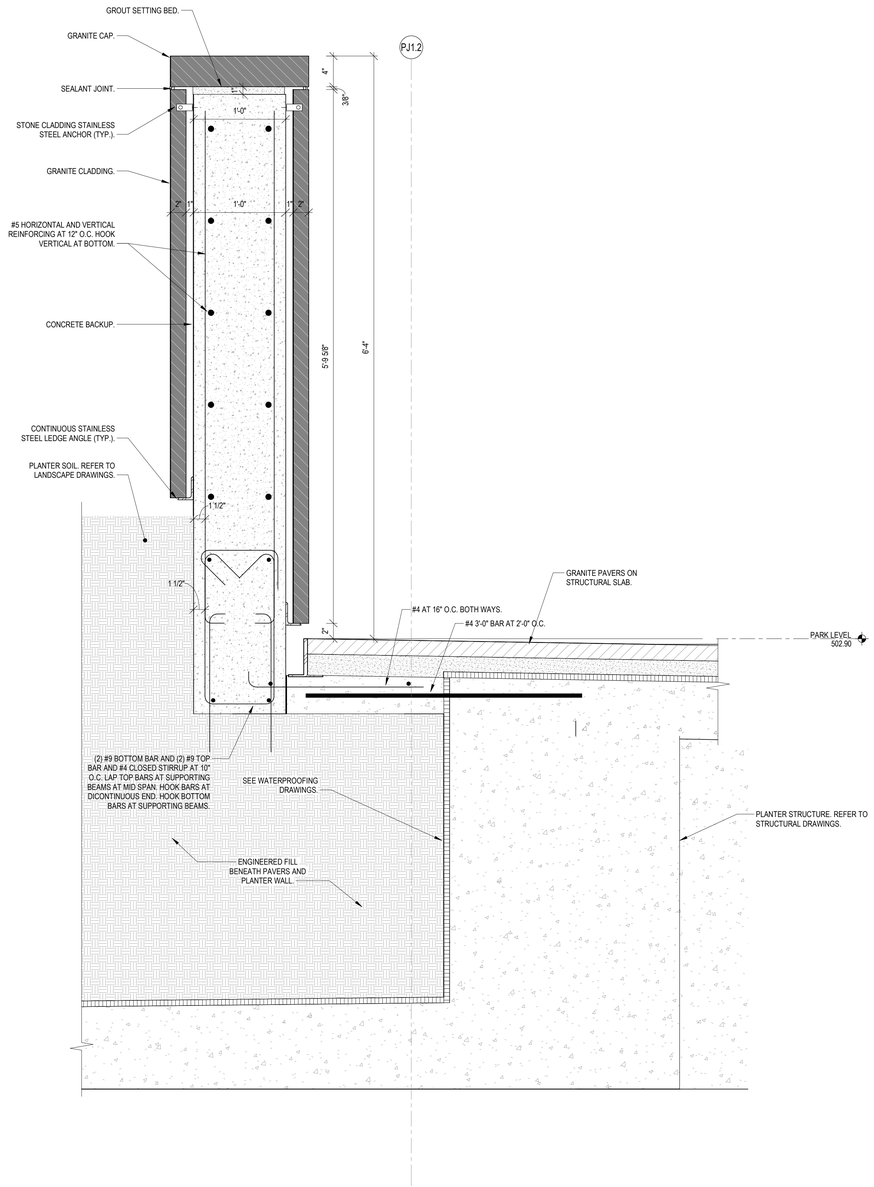
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
LOT 27/28 PLANTER DETAILS

JOB NUMBER — DATE
THP 98090.40 — 12/17/2021

DRAWING NUMBER
A301



LOT 27/28 PLANTER

1 / A302 SECTION DETAIL

1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)
BP#2 - PARK & GARAGE

ISSUES/REVISIONS
1 12/17/2021

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

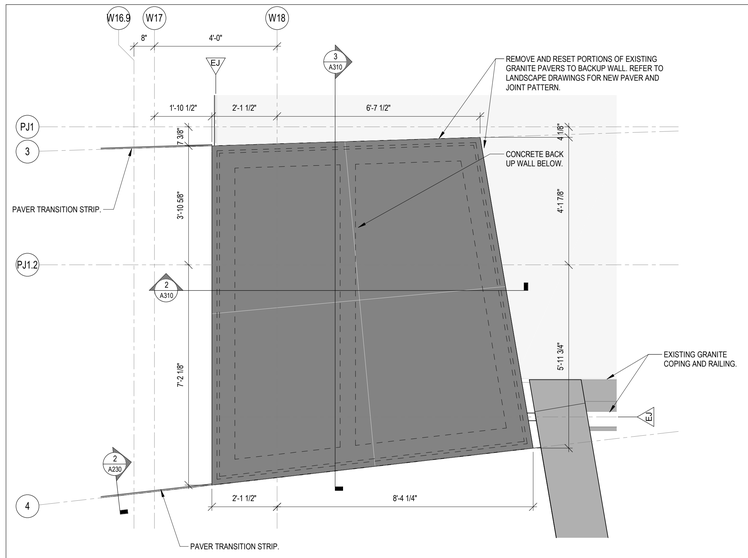
THE BANKS
Public Partnership

DRAWING TITLE
LOT 27/28 PLANTER DETAILS

JOB NUMBER
THP 98090.40

DATE
12/17/2021

DRAWING NUMBER
A302

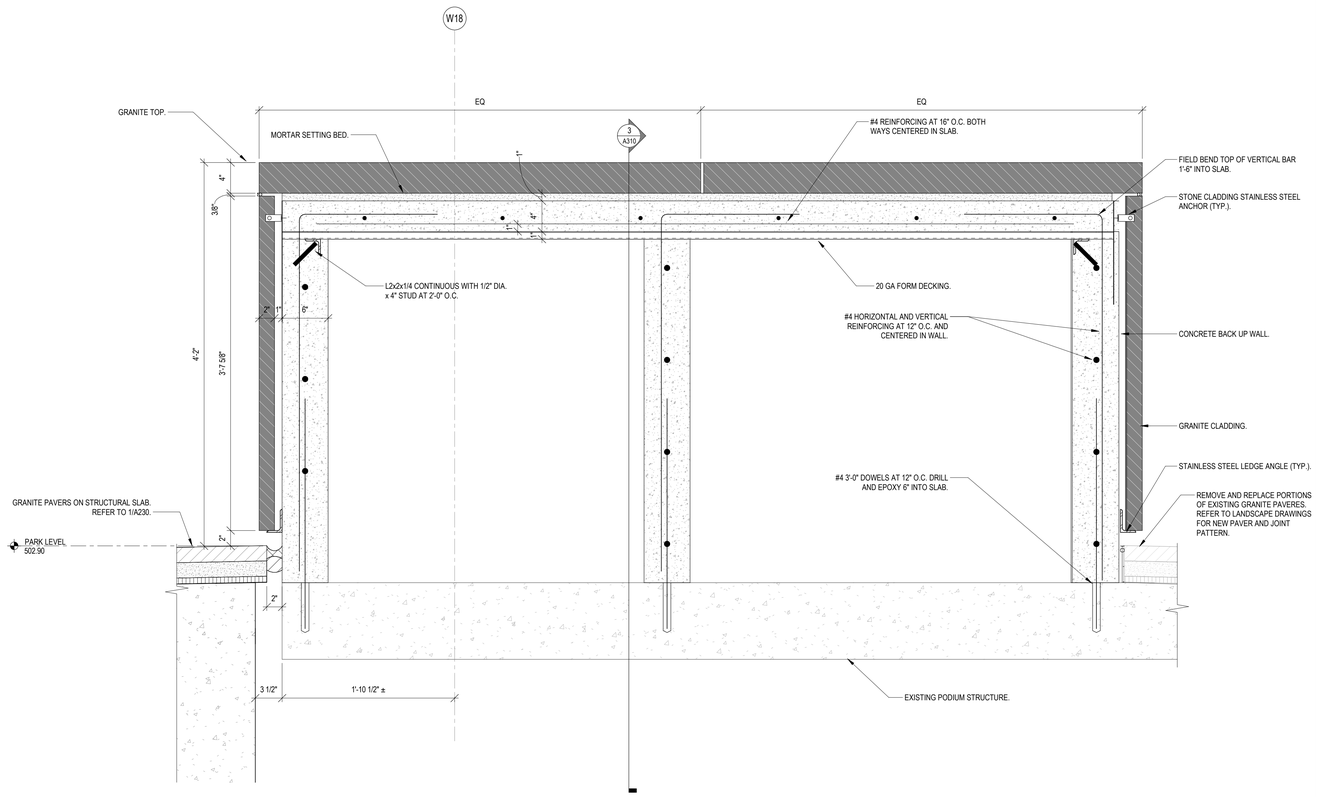


ENTRY MARKER - RACE STREET

1 A310 ENLARGED PLAN

1/2" = 1'-0"

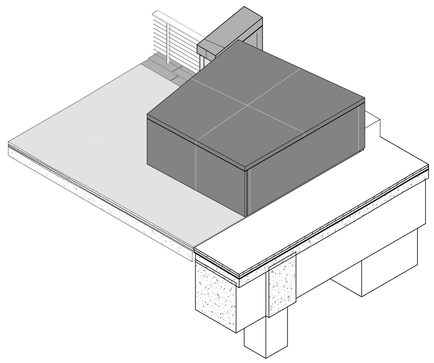
NORTH



ENTRY MARKER - RACE STREET

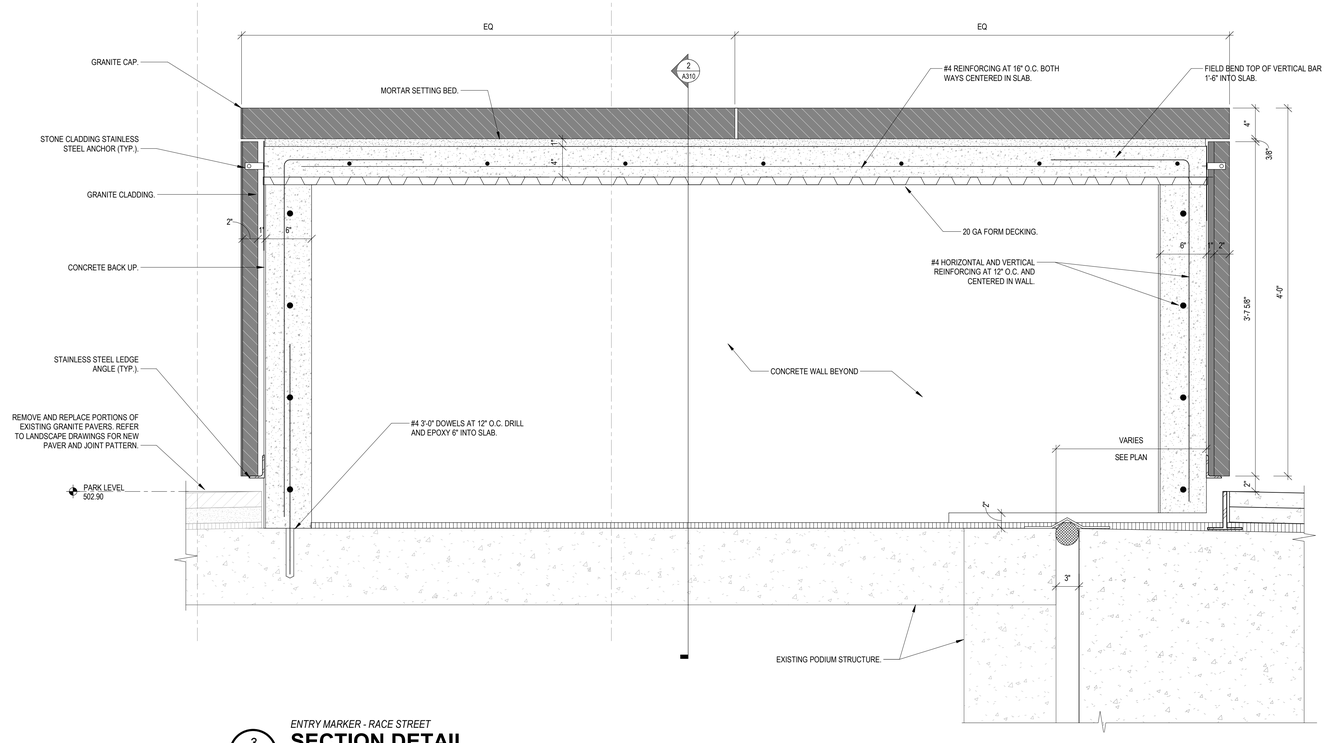
2 A310 SECTION DETAIL

1 1/2" = 1'-0"



LOT 27/28 PLANTER

4 A310 AXONOMETRIC VIEW



ENTRY MARKER - RACE STREET

3 A310 SECTION DETAIL

1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

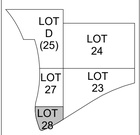
513.241.3222
THPLTD.com

ISSUE/REVISIONS

1	12/17/2021

ISSUE/REVISIONS (CONTINUED)

BP#2	PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

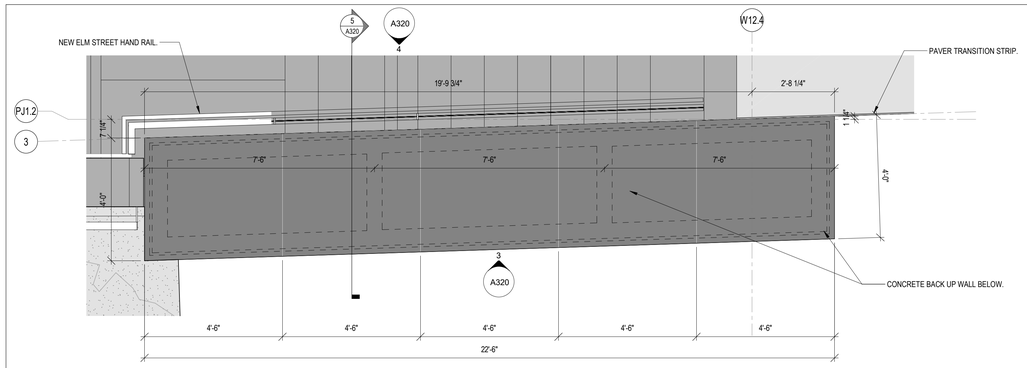
DRAWING TITLE

RACE STREET ENTRY MARKER

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

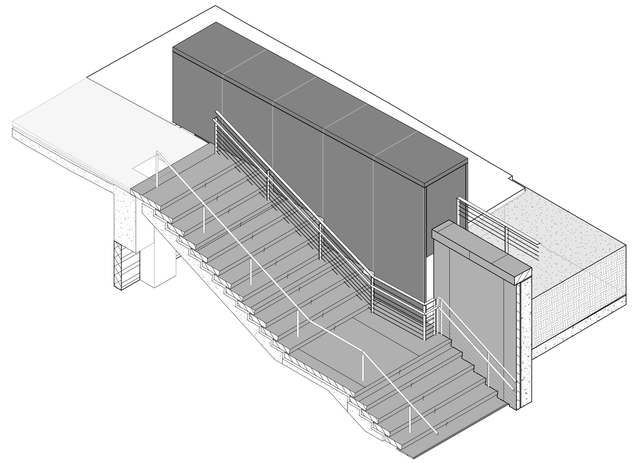
A310



ENTRY MARKER - ELM STREET STAIR

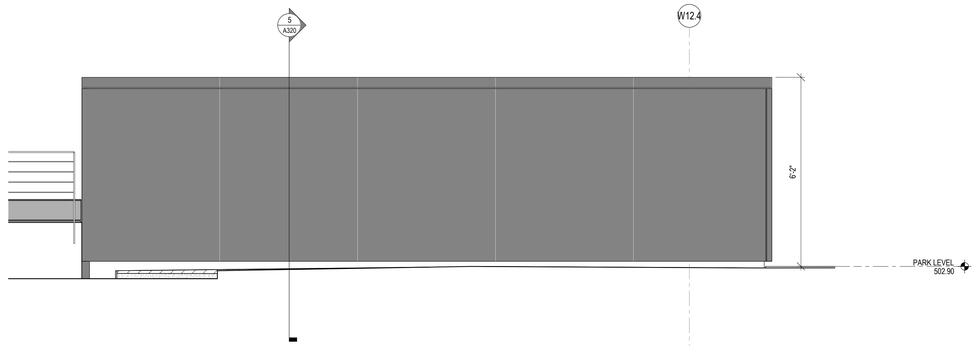
1 A320 ENLARGED PLAN

1/2" = 1'-0"



LOT 27/28 PLANTER

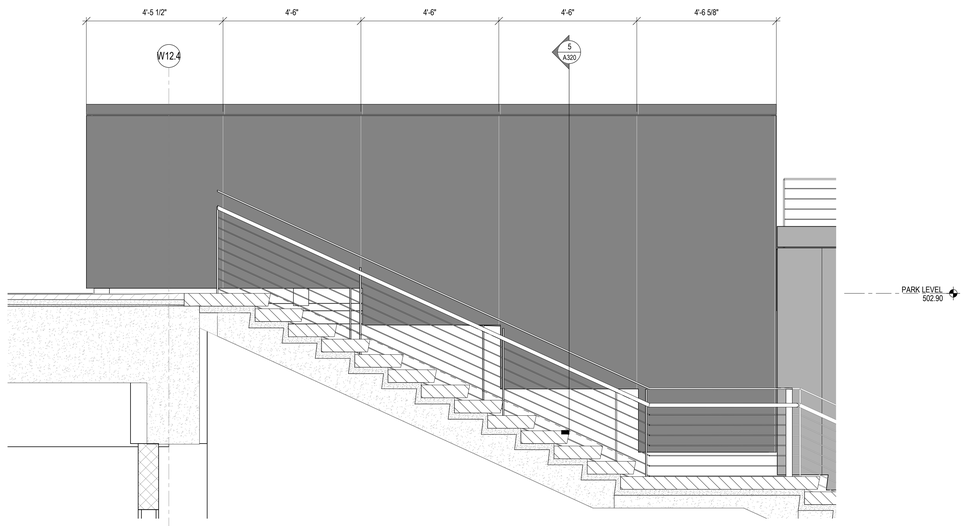
2 A320 AXONOMETRIC VIEW



ENTRY MARKER - ELM STREET STAIR

3 A320 SOUTH ELEVATION

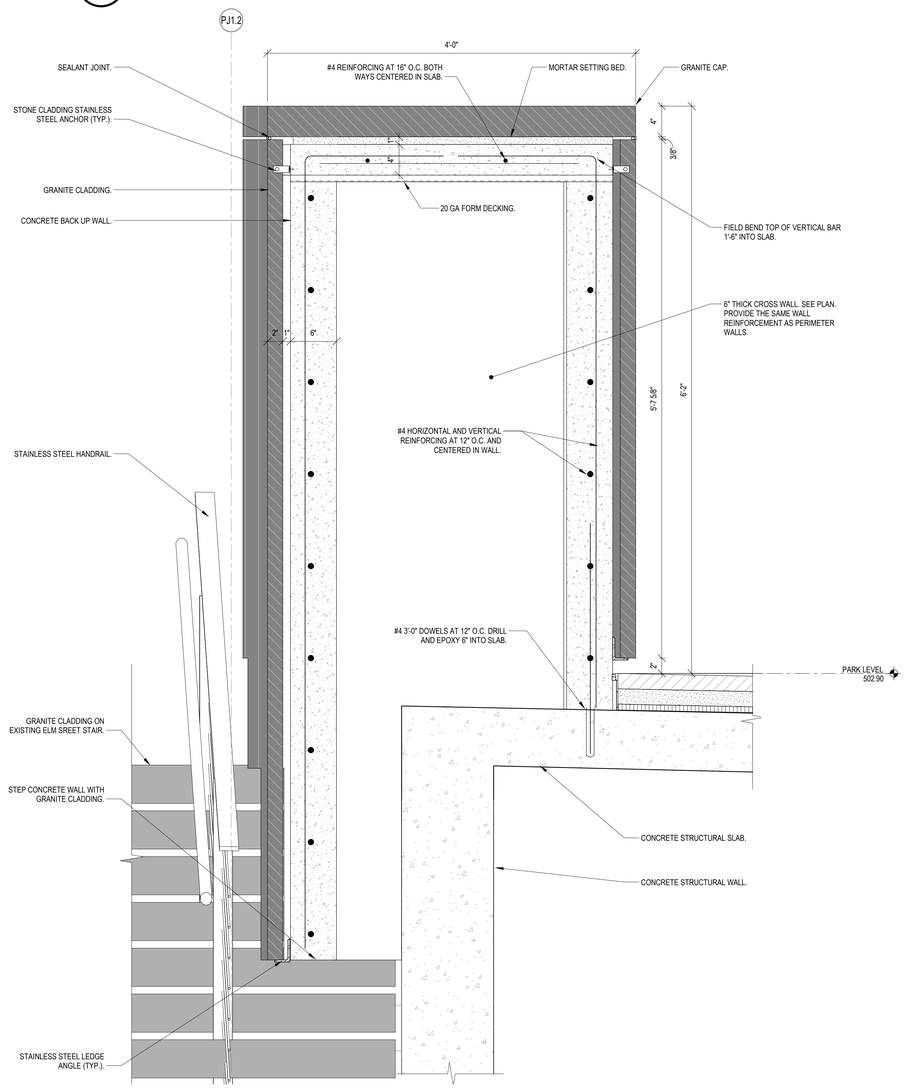
1/2" = 1'-0"



ENTRY MARKER - ELM STREET STAIR

4 A320 ELEVATION

1/2" = 1'-0"



ENTRY MARKER - ELM STREET STAIR

5 A320 SECTION DETAIL

1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

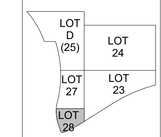
THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS

1	12/17/2021	BP#2 - PARK & GARAGE

ISSUES/REVISIONS (CONTINUED)



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

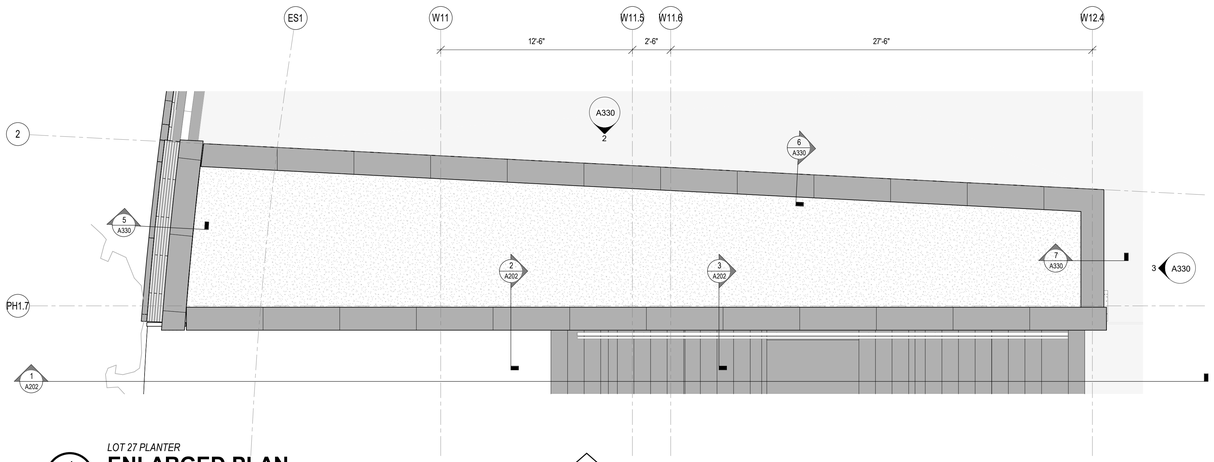
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
ELM STREET STAIR ENTRY MARKER

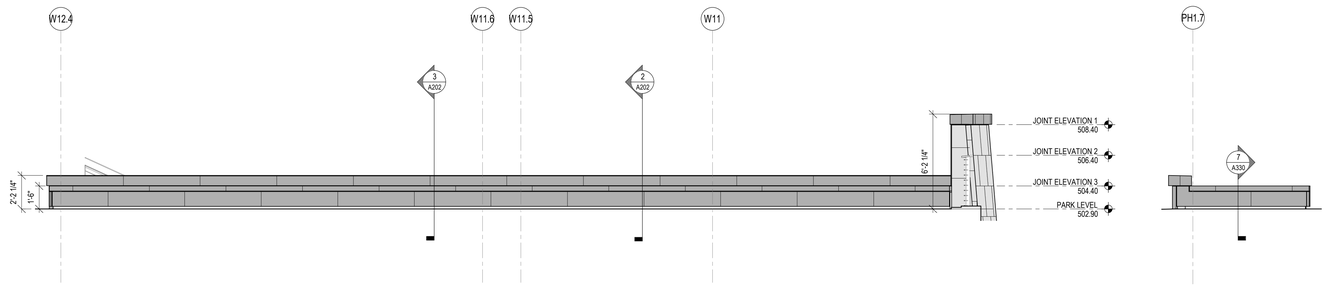
JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A320



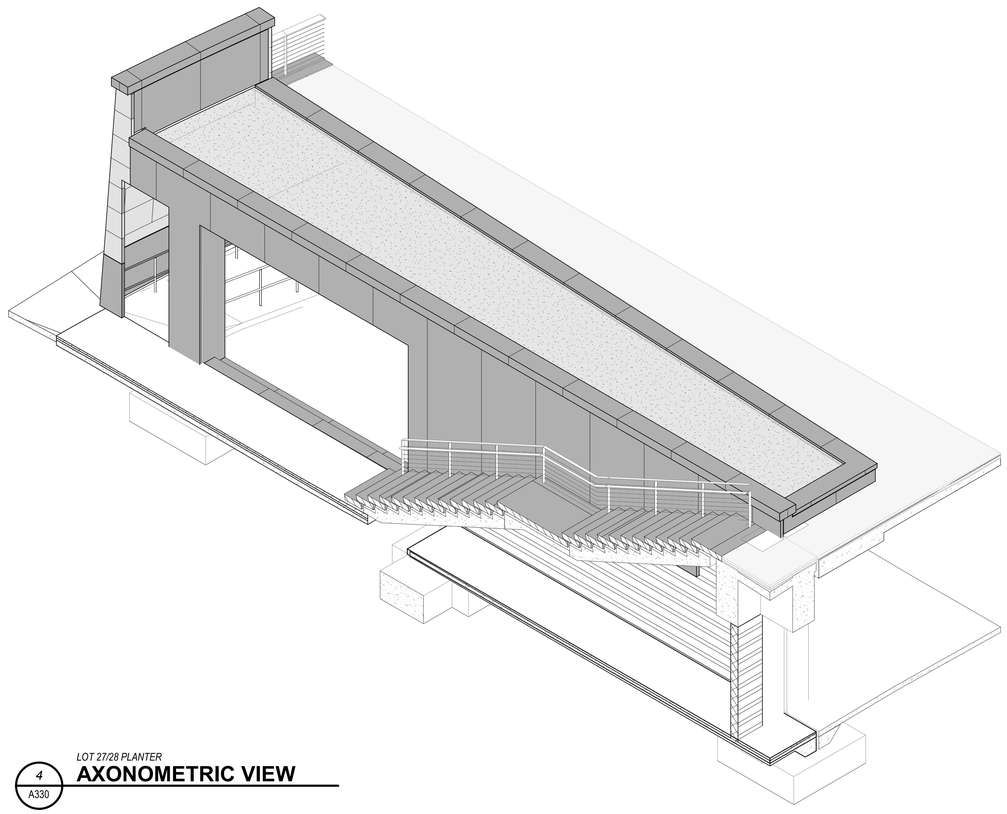
LOT 27 PLANTER
1 A330 ENLARGED PLAN
1/4" = 1'-0"

NORTH

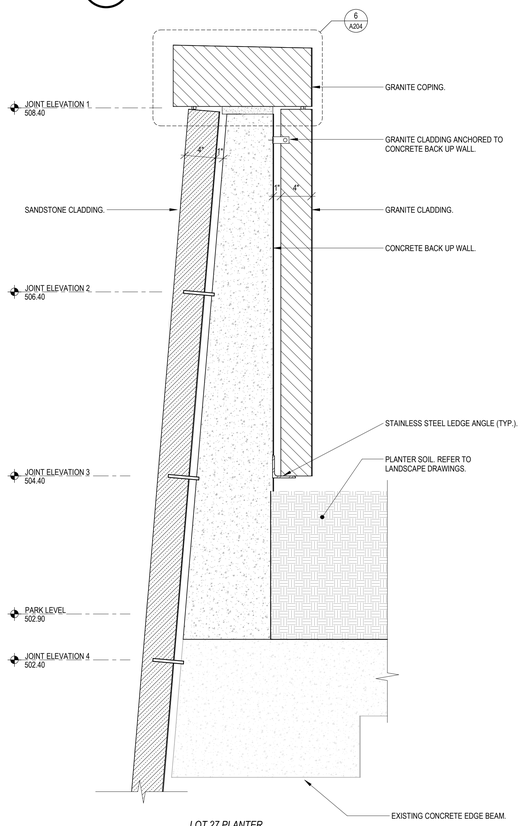


LOT 27 PLANTER
2 A330 NORTH ELEVATION
1/4" = 1'-0"

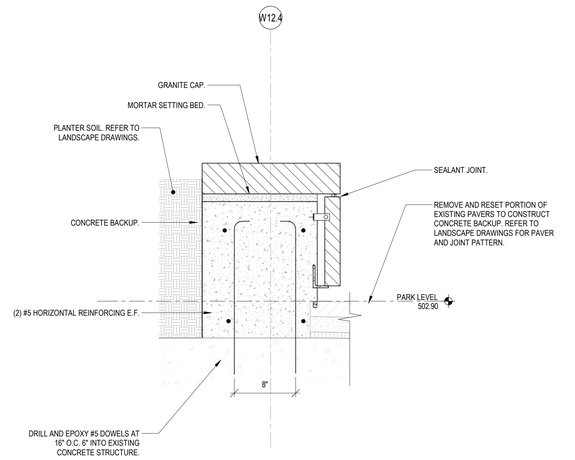
LOT 27 PLANTER
3 A330 EAST ELEVATION
1/4" = 1'-0"



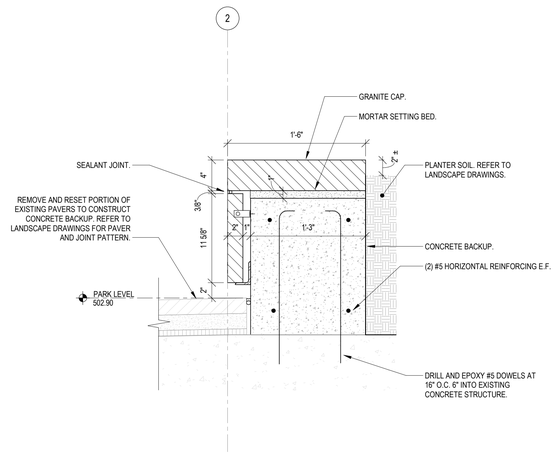
LOT 27/28 PLANTER
4 A330 AXONOMETRIC VIEW



LOT 27 PLANTER
5 A330 SECTION
1 1/2" = 1'-0"



LOT 27 PLANTER
7 A330 SECTION
1 1/2" = 1'-0"



LOT 27 PLANTER
6 A330 SECTION
1 1/2" = 1'-0"

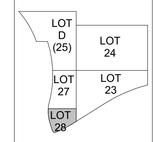
HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

	ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1	12/17/2021	BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

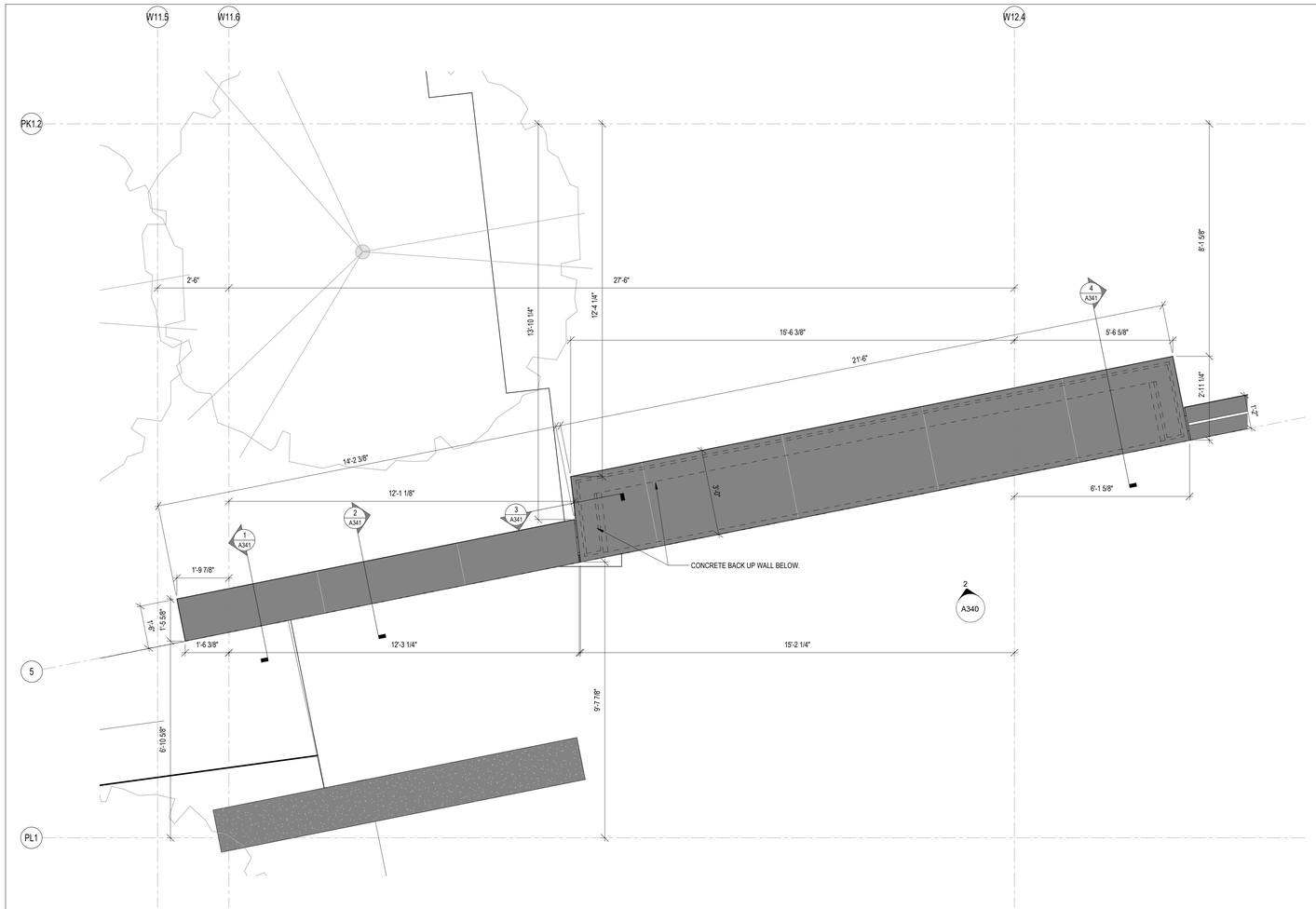
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
LOT 27 PLANTER PLAN & SECTIONS

JOB NUMBER THP 98090.40
DATE 12/17/2021

DRAWING NUMBER
A330

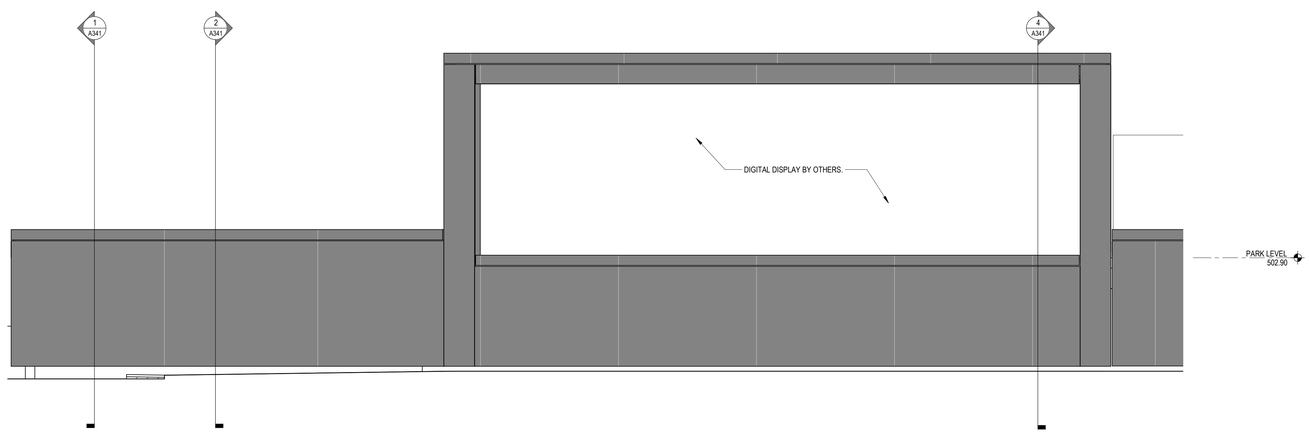


UPPER LANDING DISPLAY

1 / A340 ENLARGED PLAN

1/2" = 1'-0"

NORTH



UPPER LANDING DISPLAY

2 / A340 SOUTH ELEVATION

1/2" = 1'-0"

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

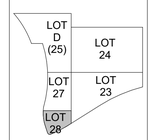
513.241.3222
THPLTD.com

ISSUES/REVISIONS

1	12/17/2021

ISSUES/REVISIONS (CONTINUED)

BHB2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

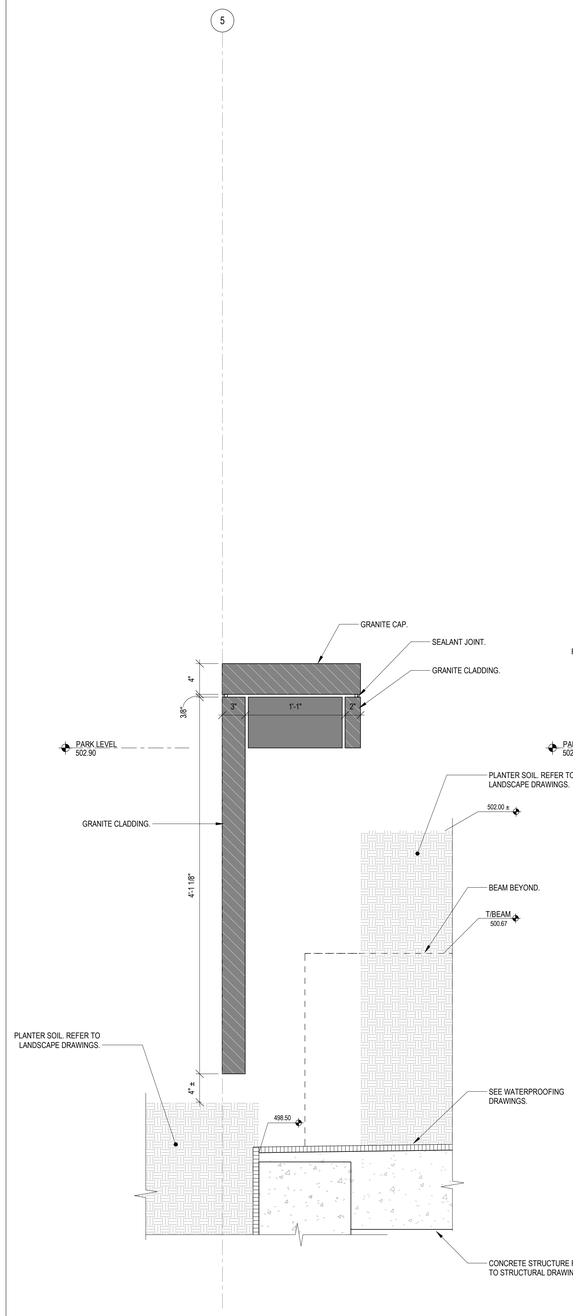
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

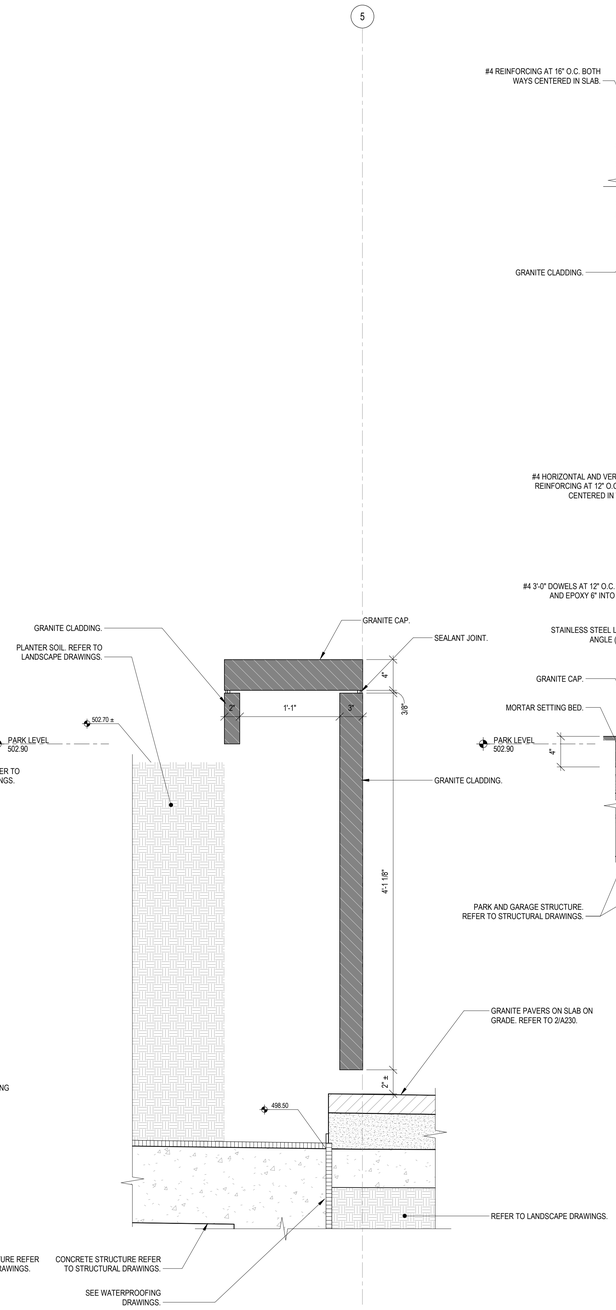
DRAWING TITLE
UPPER LANDING DISPLAY

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

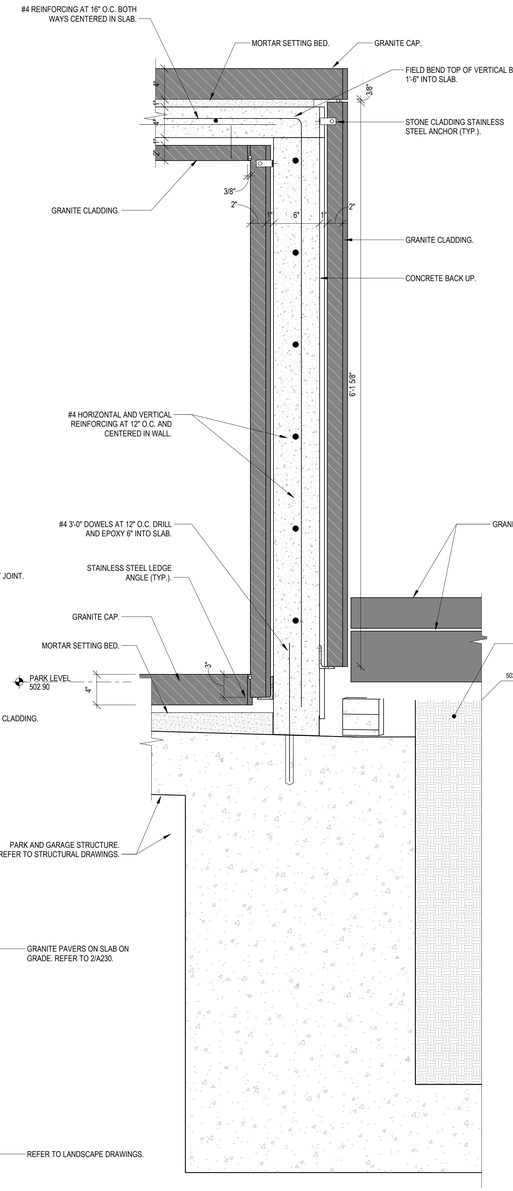
DRAWING NUMBER
A340



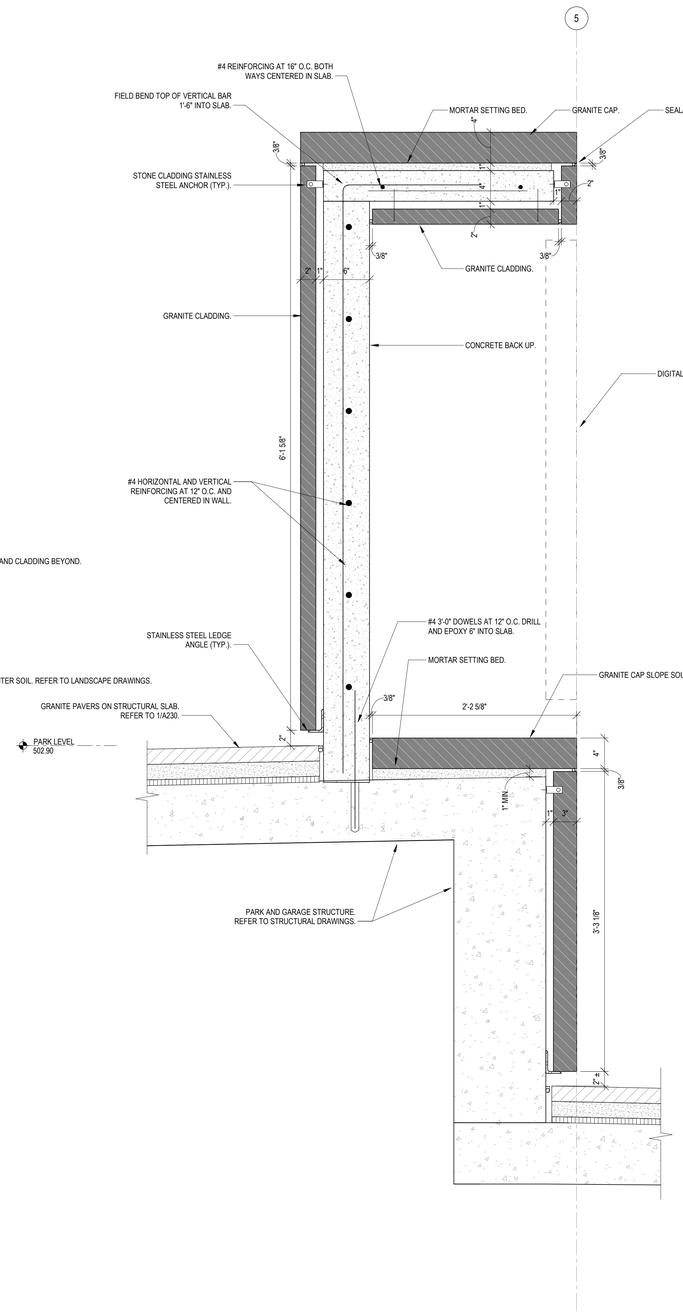
1 A341 — *UPPER LANDING DISPLAY* **SECTION**
1 1/2" = 1'-0"



2 A341 — *UPPER LANDING DISPLAY* **SECTION**
1 1/2" = 1'-0"



3 A341 — *UPPER LANDING DISPLAY* **SECTION**
1 1/2" = 1'-0"



4 A341 — *UPPER LANDING DISPLAY* **SECTION**
1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

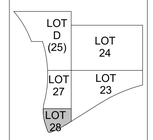
513.241.3222
THPLTD.com

ISSUES/REVISIONS

1	12/17/2021

ISSUES/REVISIONS (CONTINUED)

BP#2 - PARK & GARAGE	



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

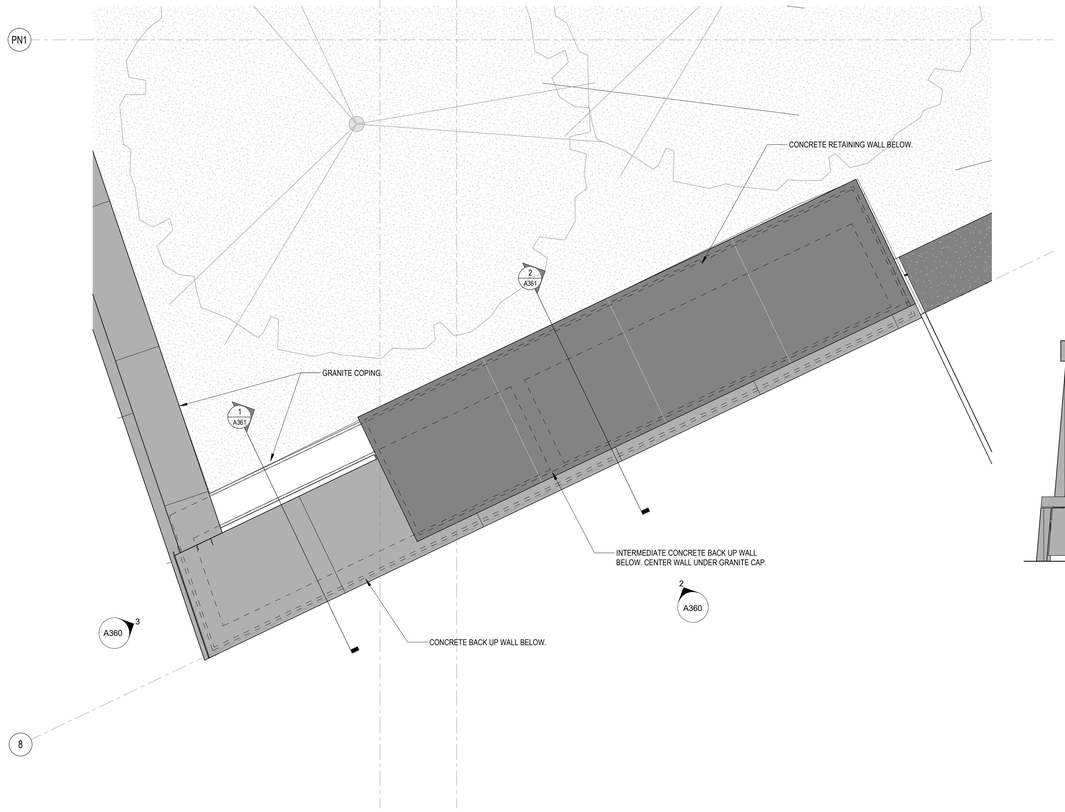
THE BANKS
Public Partnership

DRAWING TITLE
UPPER LANDING DISPLAY SECTIONS

JOB NUMBER
THP 98090.40

DATE
12/17/2021

DRAWING NUMBER
A341

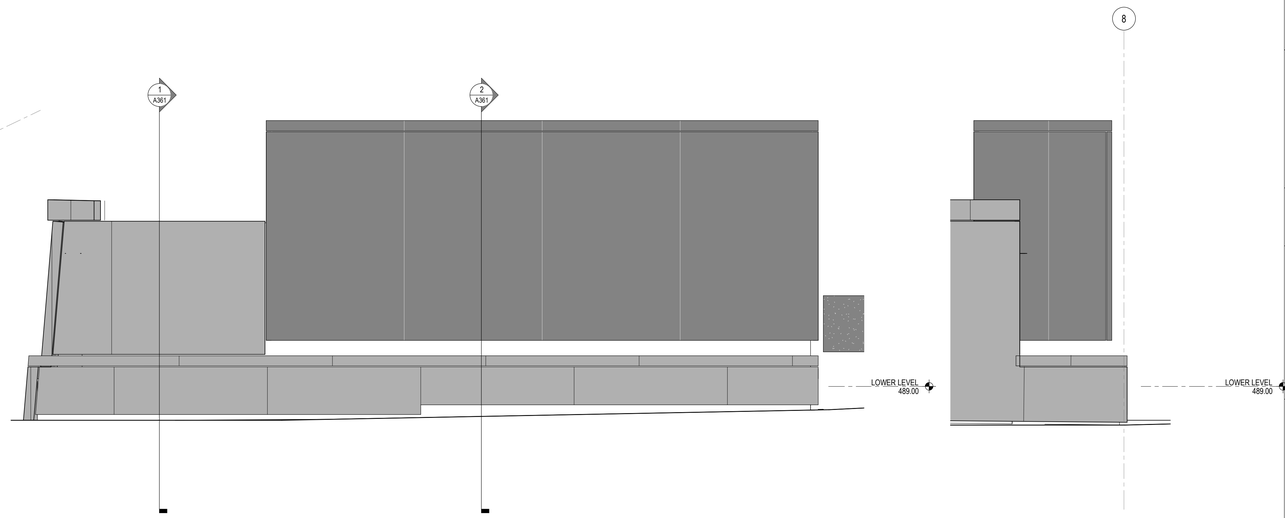


NORTH ENTRY MARKER - MEHRING WAY

1 A360 ENLARGED PLAN

1/2" = 1'-0"

NORTH



NORTH ENTRY MARKER - MEHRING WAY

2 A360 SOUTH ELEVATION

1/2" = 1'-0"

MEHRING WAY ENTRY MARKER

3 A360 EAST ELEVATION

1/2" = 1'-0"

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

ISSUES/REVISIONS

1	12/17/2021	BP#2 - PARK & GARAGE

PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

THE BANKS
Public Partnership

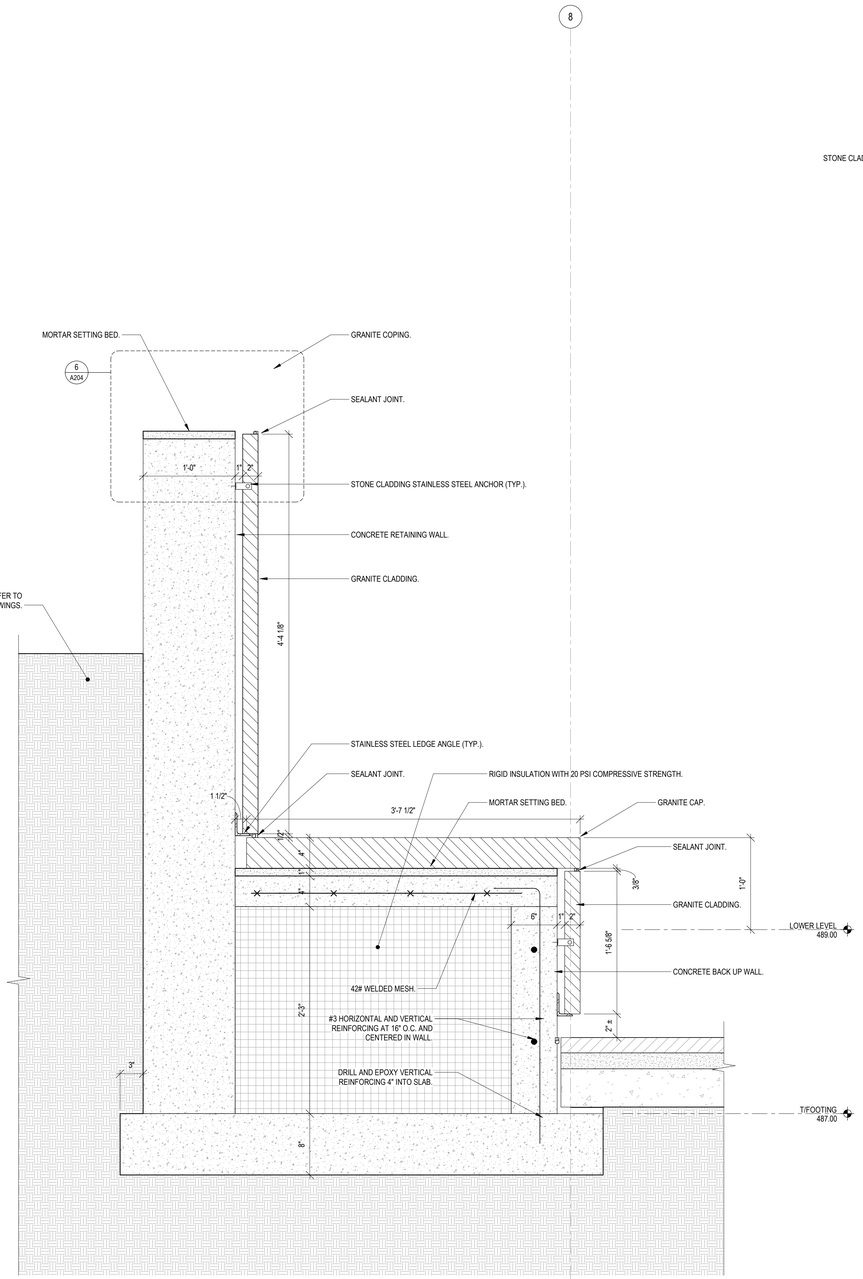
DRAWING TITLE

MEHRING WAY NORTH ENTRY MARKER

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER

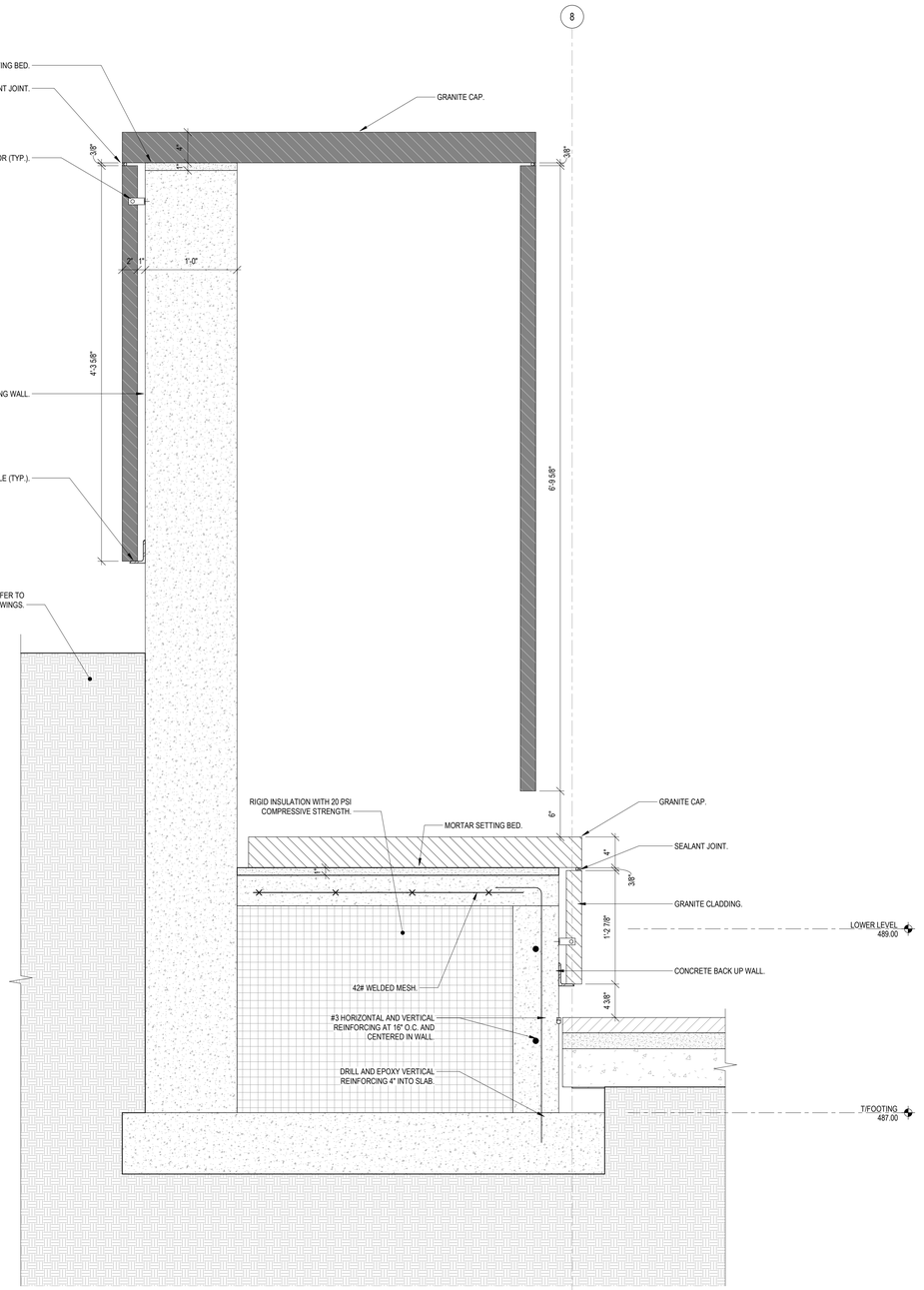
A360



NORTH ENTRY MARKER - MEHRING WAY

1 / A361 SECTION

1 1/2" = 1'-0"



NORTH ENTRY MARKER - MEHRING WAY

2 / A361 SECTION

1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

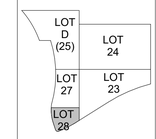
THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS

ISSUES/REVISIONS (CONTINUED)

1	12/17/2021	BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
M.S.M.

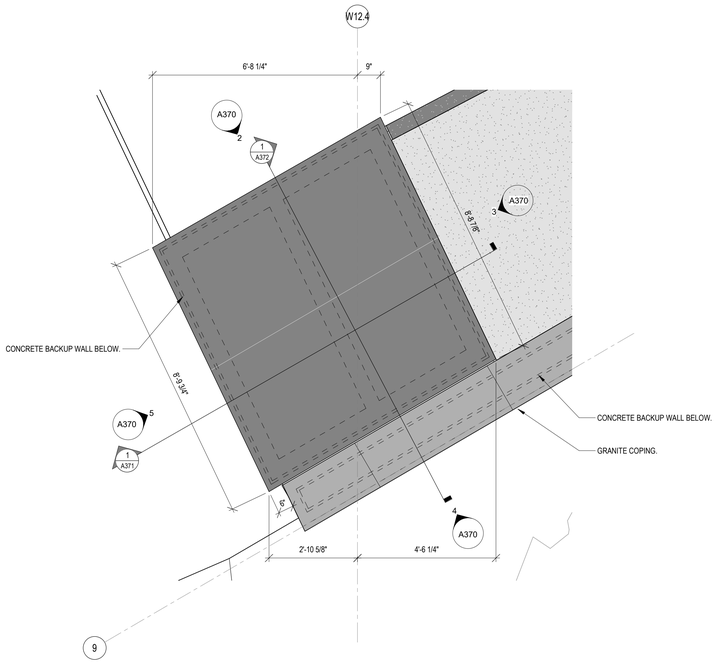
THE BANKS
Public Partnership

DRAWING TITLE
MEHRING WAY NORTH ENTRY MARKER DETAILS

JOB NUMBER
THP 98090.40

DATE
12/17/2021

DRAWING NUMBER
A361

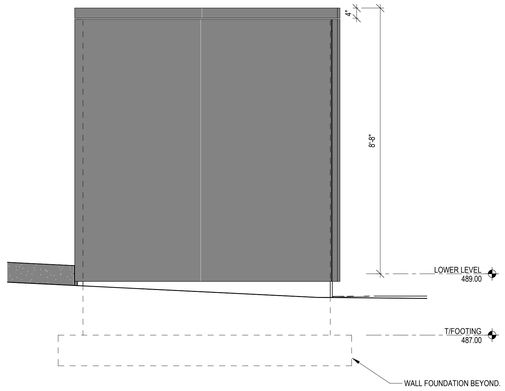


SOUTH ENTRY MARKER - MEHRING WAY

1 A370 ENLARGED PLAN

1/2" = 1'-0"

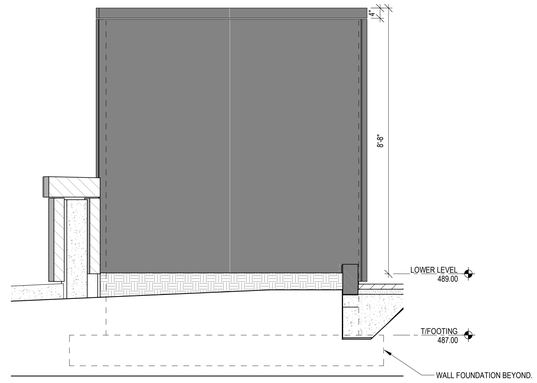
NORTH



SOUTH ENTRY MARKER - MEHRING WAY

2 A370 NORTH ELEVATION

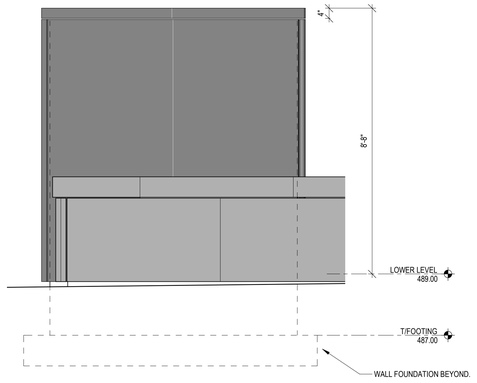
1/2" = 1'-0"



SOUTH ENTRY MARKER - MEHRING WAY

3 A370 EAST ELEVATION

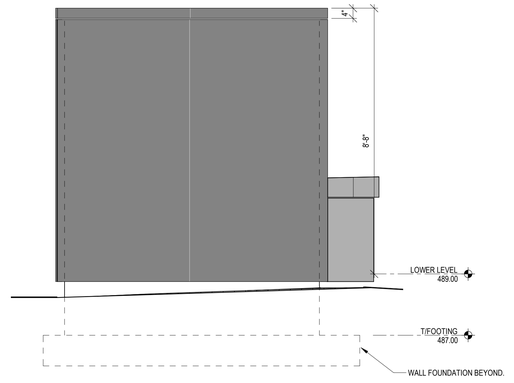
1/2" = 1'-0"



SOUTH ENTRY MARKER - MEHRING WAY

4 A370 SOUTH ELEVATION

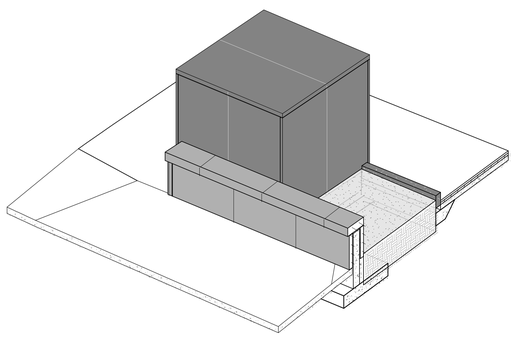
1/2" = 1'-0"



SOUTH ENTRY MARKER - MEHRING WAY

5 A370 WEST ELEVATION

1/2" = 1'-0"



LOT 27/28 PLANTER

6 A370 AXONOMETRIC VIEW

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

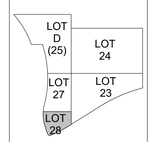
THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

ISSUES/REVISIONS

1	12/17/2021	BP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

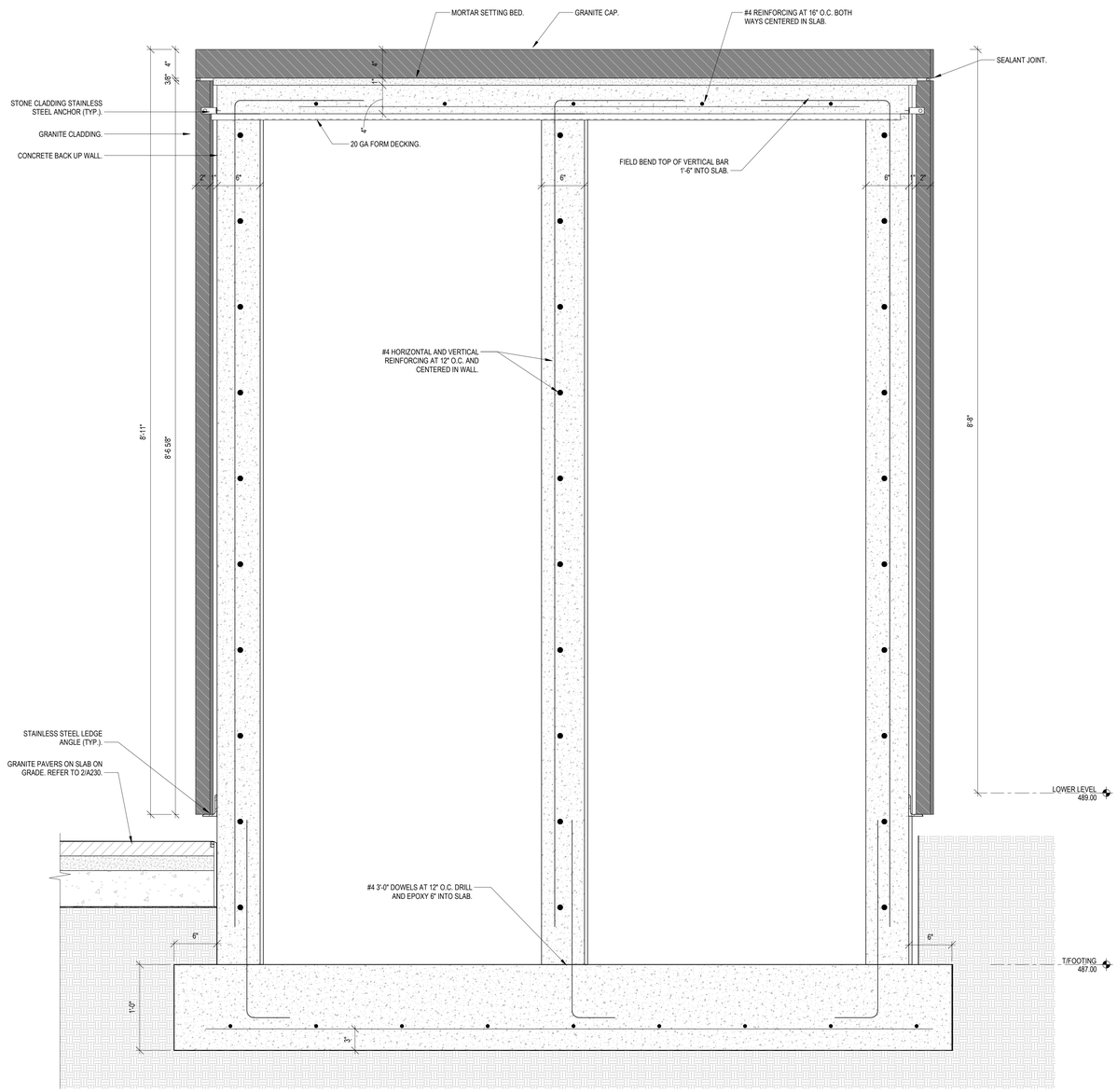
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
MEHRING WAY SOUTH ENTRY MARKER

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A370



SOUTH ENTRY MARKER - MEHRING WAY

SECTION

1 1/2" = 1'-0"

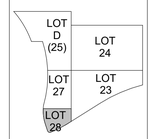
1 / A371

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1 12/17/2021	IBP#2 - PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

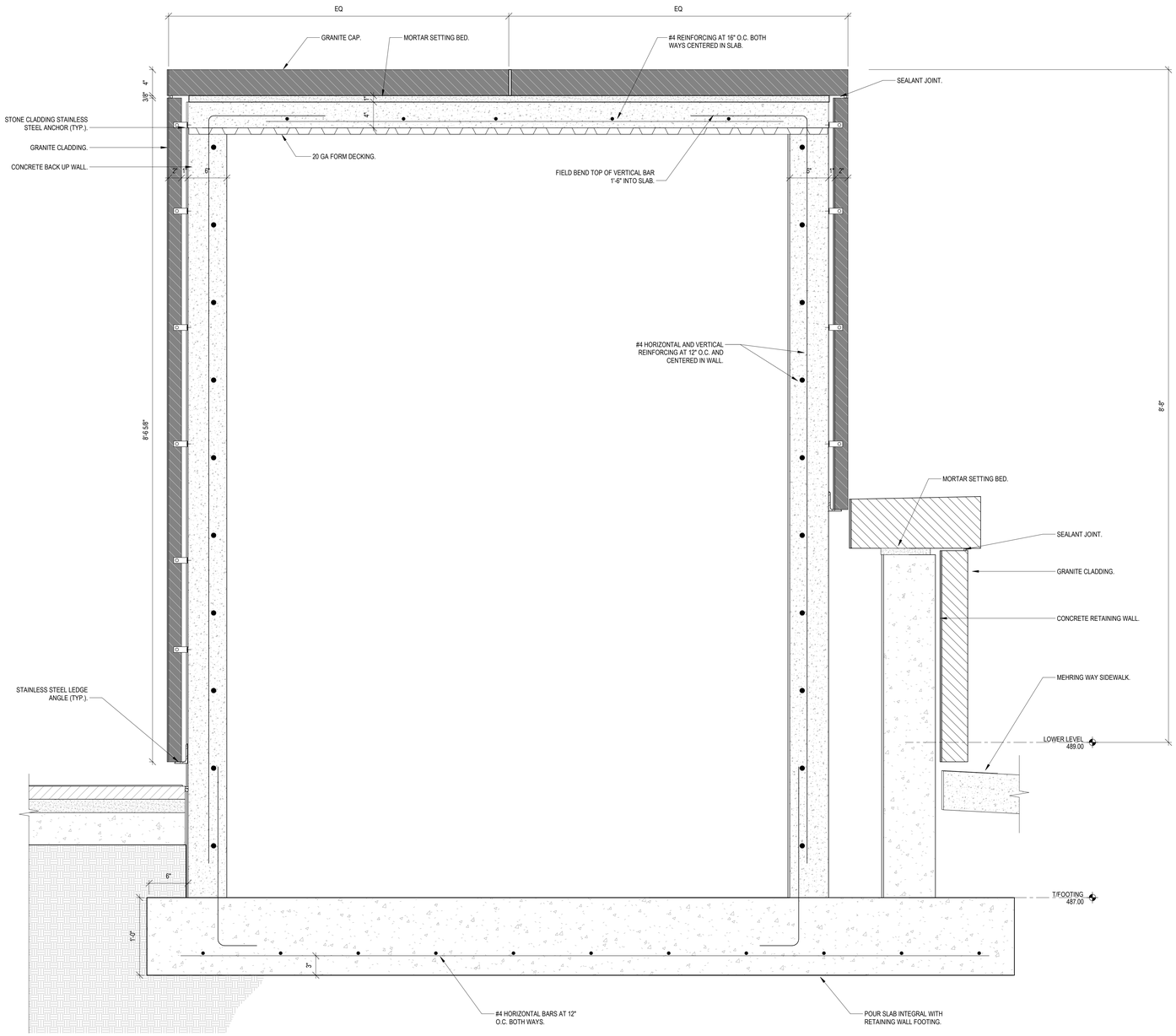
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

DRAWING TITLE
MEHRING WAY SOUTH ENTRY MARKER E-W SECTION

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

DRAWING NUMBER
A371



SOUTH ENTRY MARKER - MEHRING WAY

1 / A372 **SECTION**

1 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

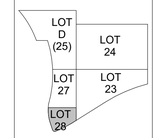
513.241.3222
THPLTD.com

ISSUES/REVISIONS

1	12/17/2021

ISSUES/REVISIONS (CONTINUED)

BPPZ – PARK & GARAGE



PROJECT ARCHITECT
J.M.H.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

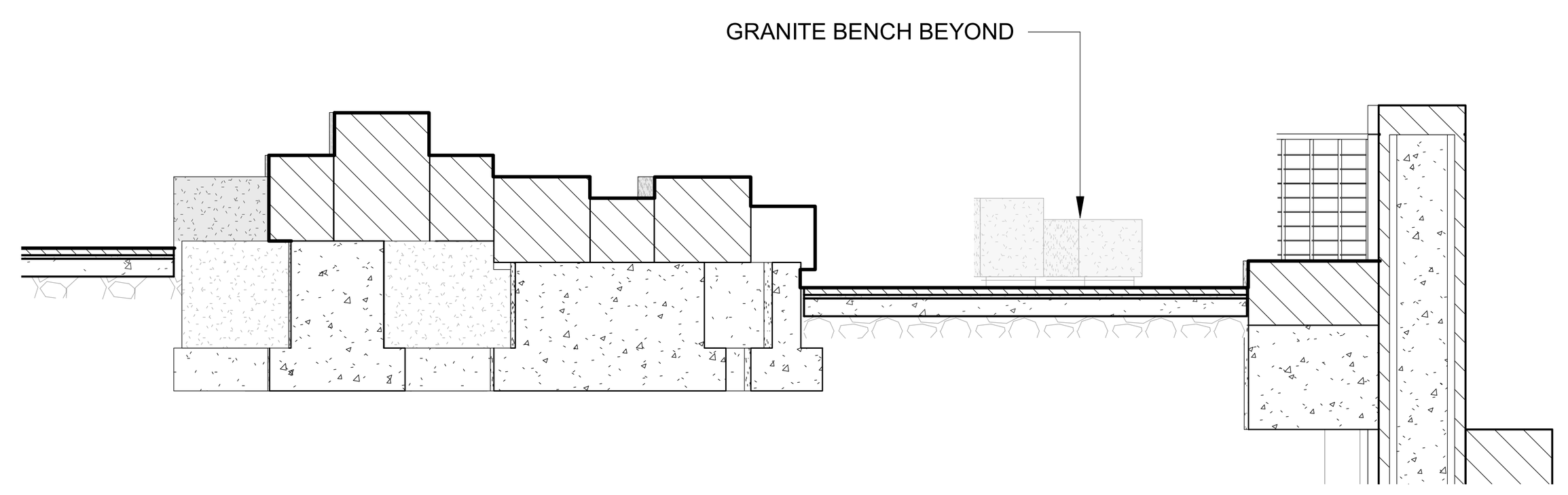
CHECKED BY
M.S.M.

THE BANKS
Public Partnership

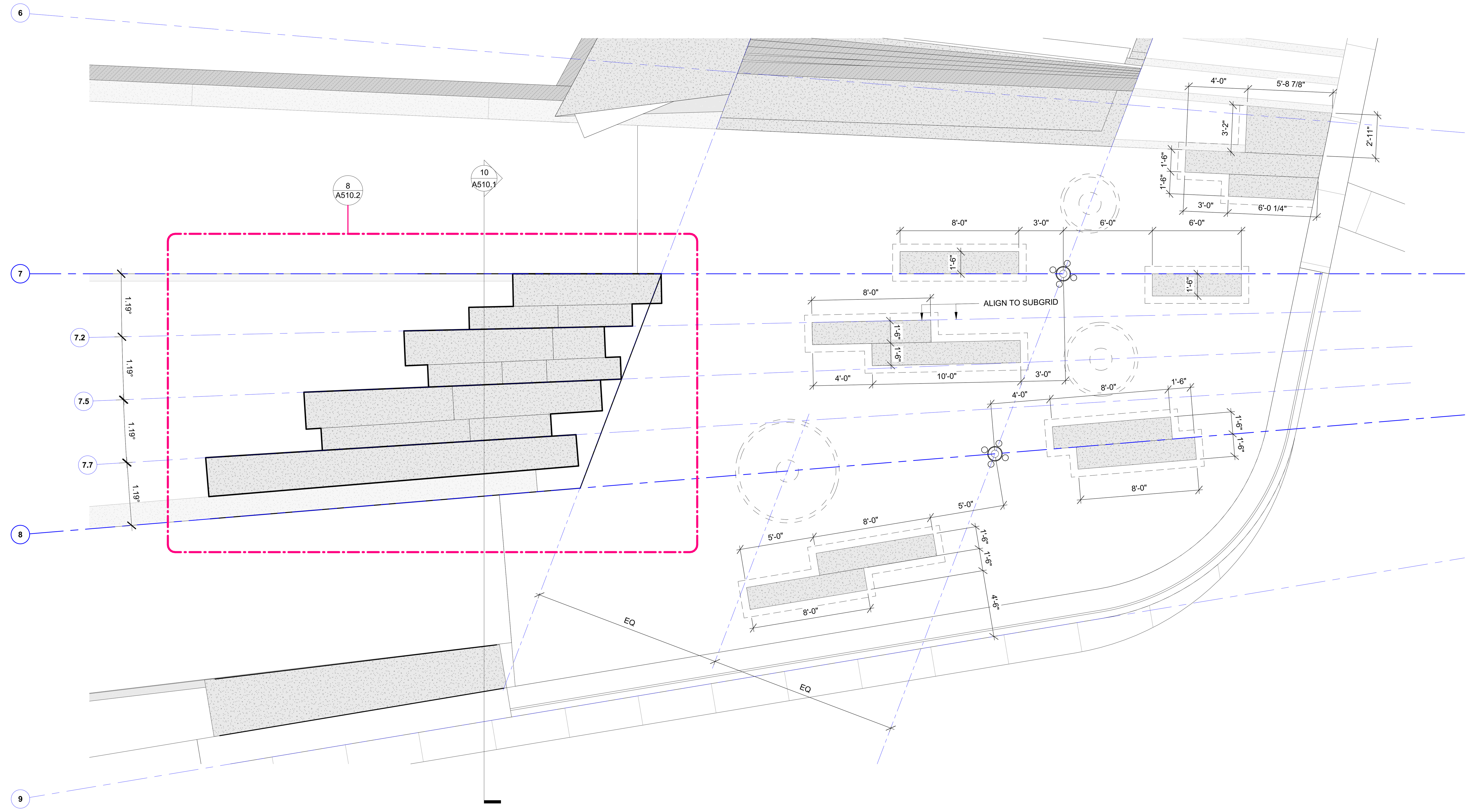
DRAWING TITLE
MEHRING WAY SOUTH ENTRY MARKER N-S SECTION

JOB NUMBER: THP 98090.40
DATE: 12/17/2021

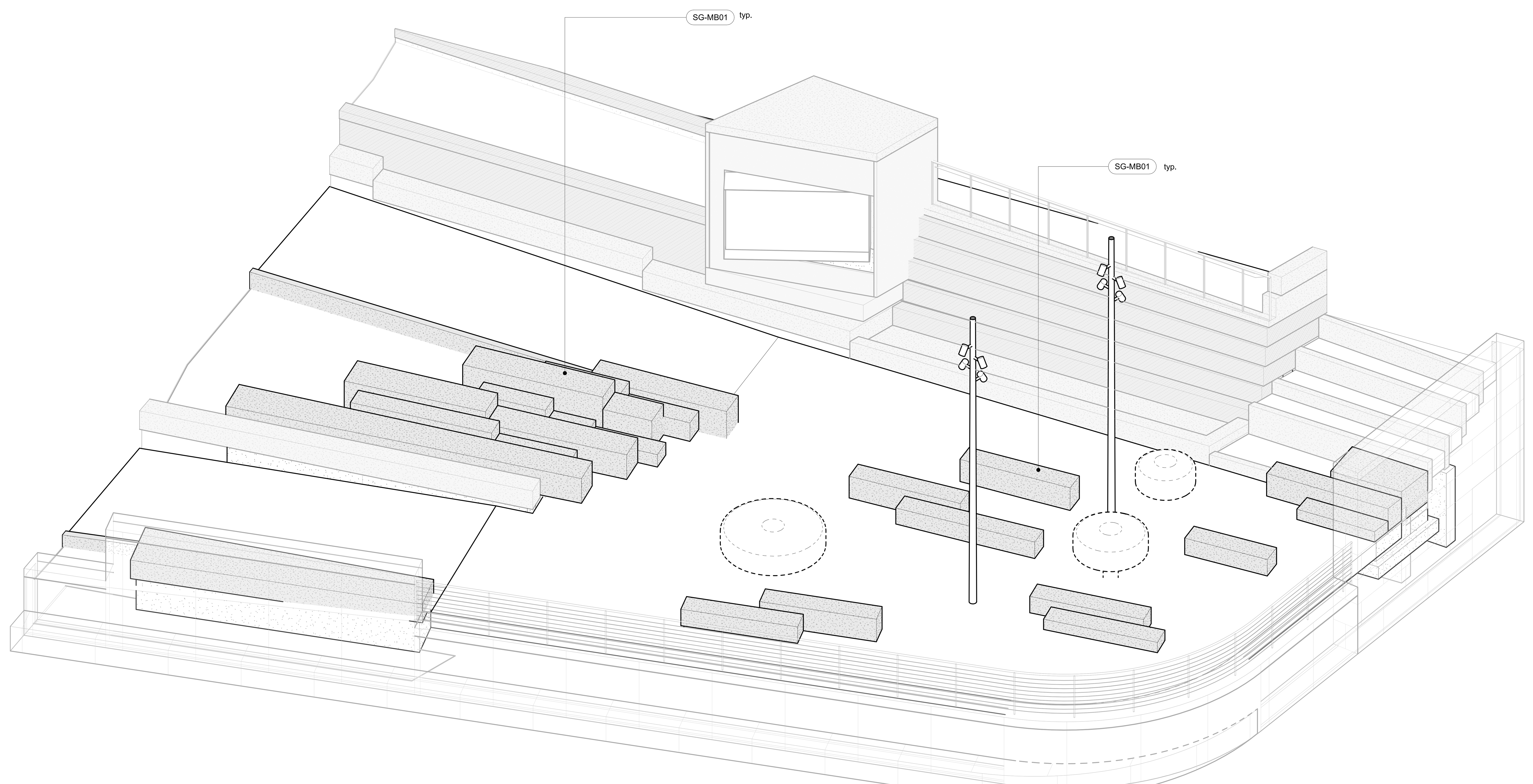
DRAWING NUMBER
A372



10 SECTION - LOWER LANDING SEATING
A510.1 1/4" = 1'-0"



1 ENLARGED PLAN - LOWER LANDING BLEACHER SEATING
A510.1 1/4" = 1'-0"



2 AXONOMETRIC - LOWER LANDING BLEACHER SEATING
A510.1

DRAWING NOTES

1. 3/8" JOINTS TYP. BETWEEN GRANITE, REFER DETAILS

MATERIAL LEGEND

SG-MB01 SOLID GRANITE ELEMENT; MESABI BLACK; FINISH: ANTIQUE

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

michael mcinturf architects
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

PRELIMINARY NOT FOR CONSTRUCTION

ISSUES		
1	10/01/2021	SCHEMATIC DESIGN
2	12/17/2021	BP#2 - PARK & GARAGE

LOT D (25) · LOT 24 · LOT 27 · LOT 23 · LOT 28 · NORTH

DRAWN BY: Author
ARCHITECT: MM
CHECKED BY: Checker

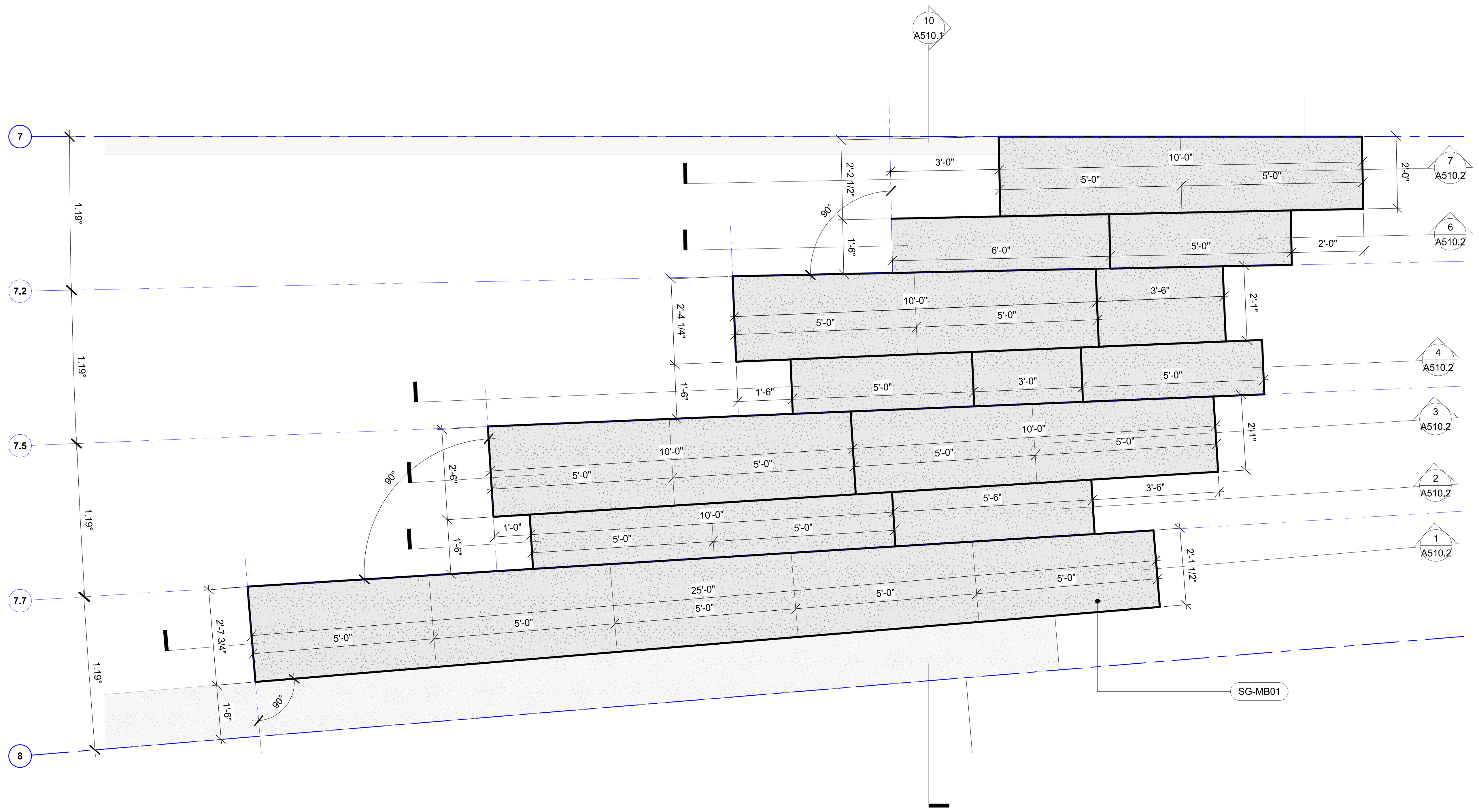
THE BANKS Public Partnership

LOT 28 GARAGE AND PARK

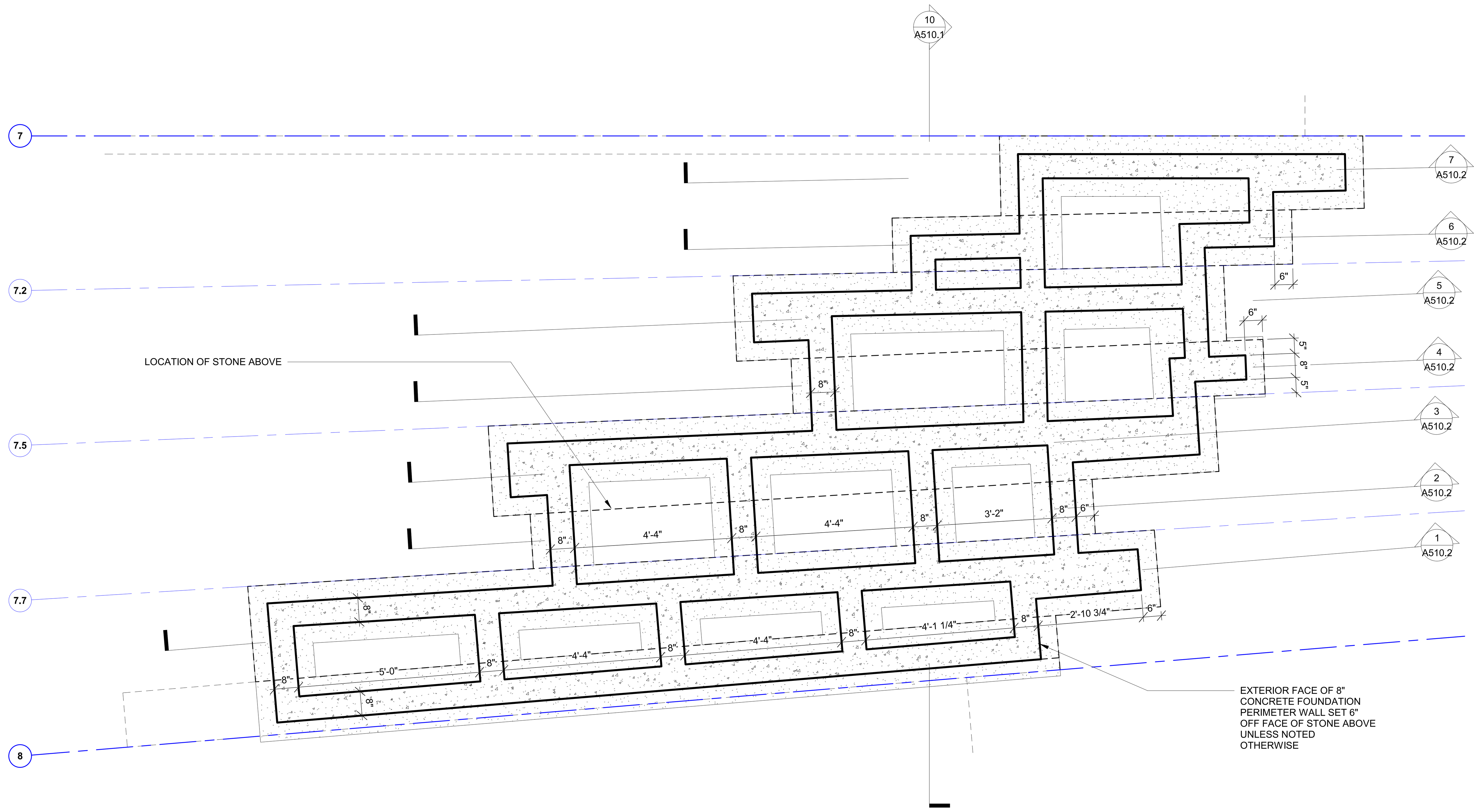
DRAWING TITLE: LOWER LANDING BLEACHER SEATING

JOB NUMBER: 98090.40 DATE: 12/17/2021

DRAWING NUMBER: A510.1



8 BLEACHER SEATING PLAN
A510.2 1/2" = 1'-0"

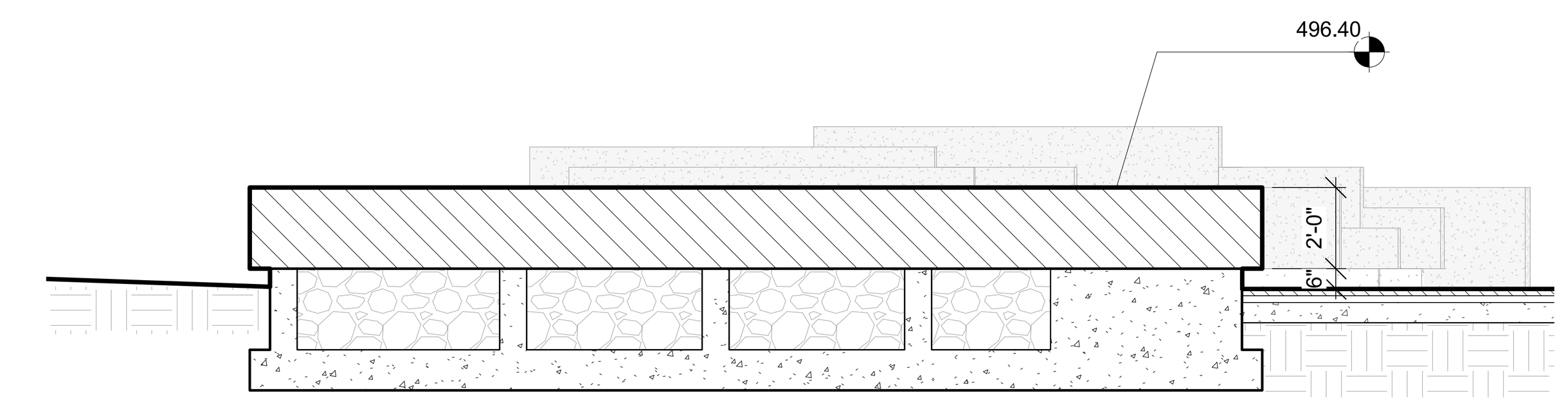


9 BLEACHER SEATING FOUNDATION PLAN
A510.2 1/2" = 1'-0"

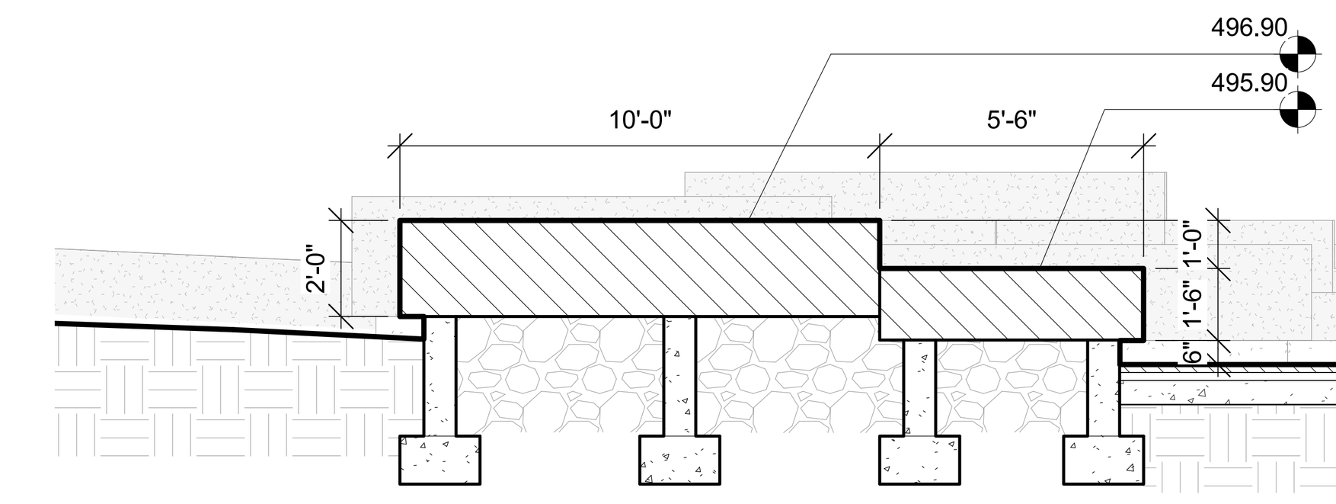
DRAWING NOTES

1. 3/8" JOINTS TYP. BETWEEN GRANITE, REFER DETAILS

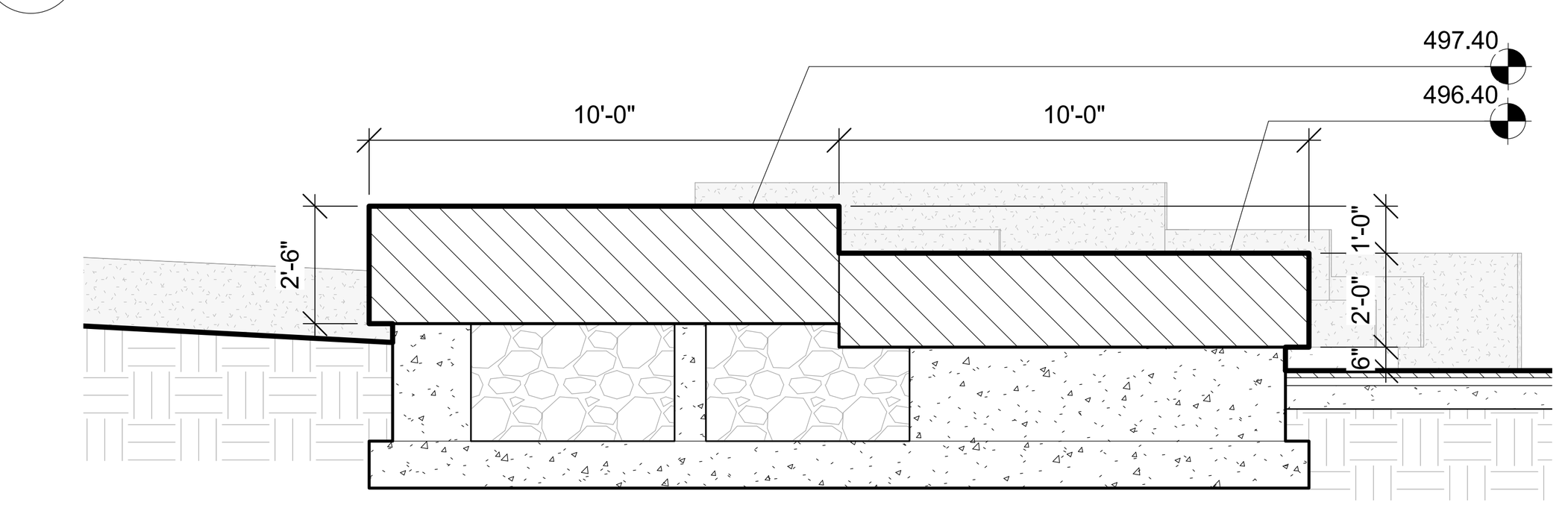
MATERIAL LEGEND



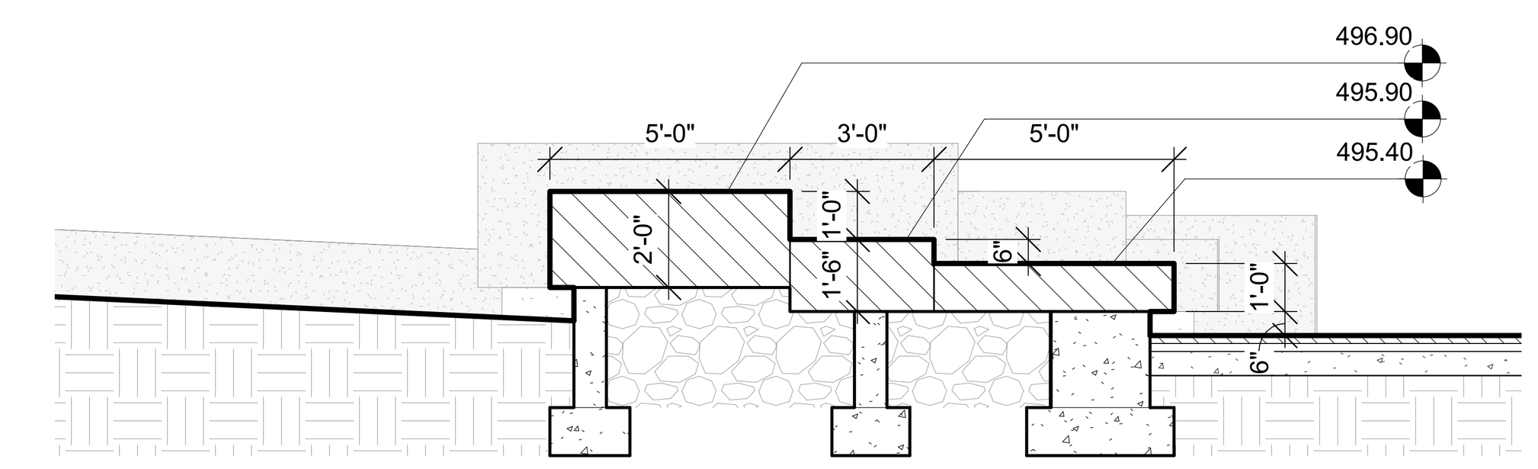
1 BLEACHER SECTION 1
A510.2 1/4" = 1'-0"



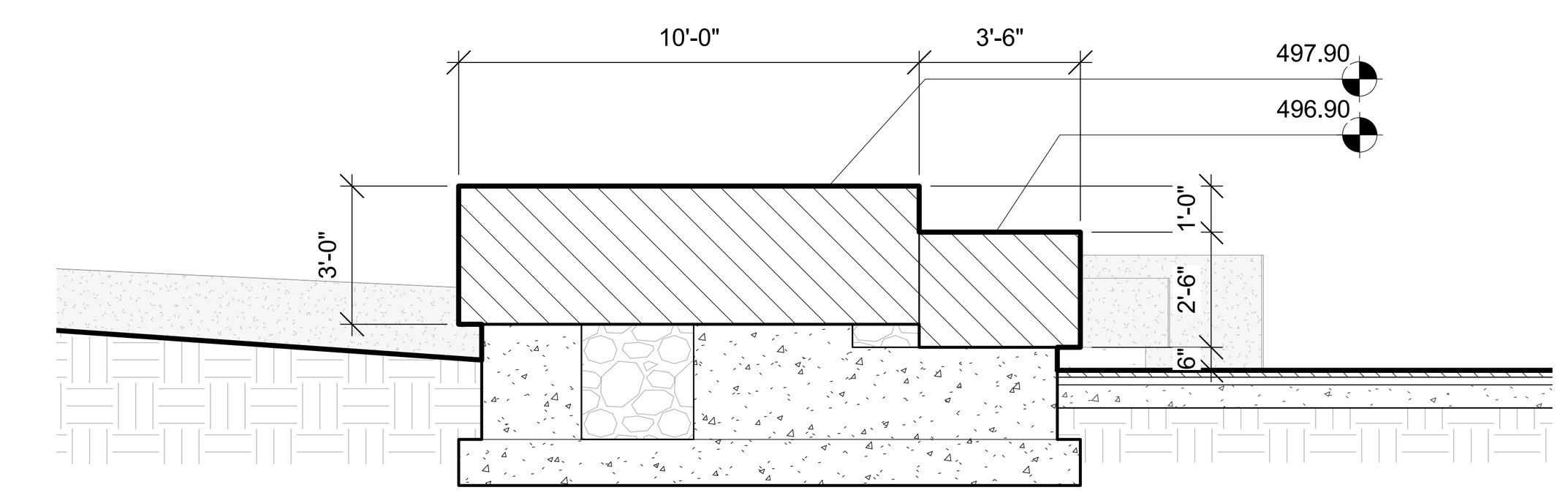
2 BLEACHER SECTION 2
A510.2 1/4" = 1'-0"



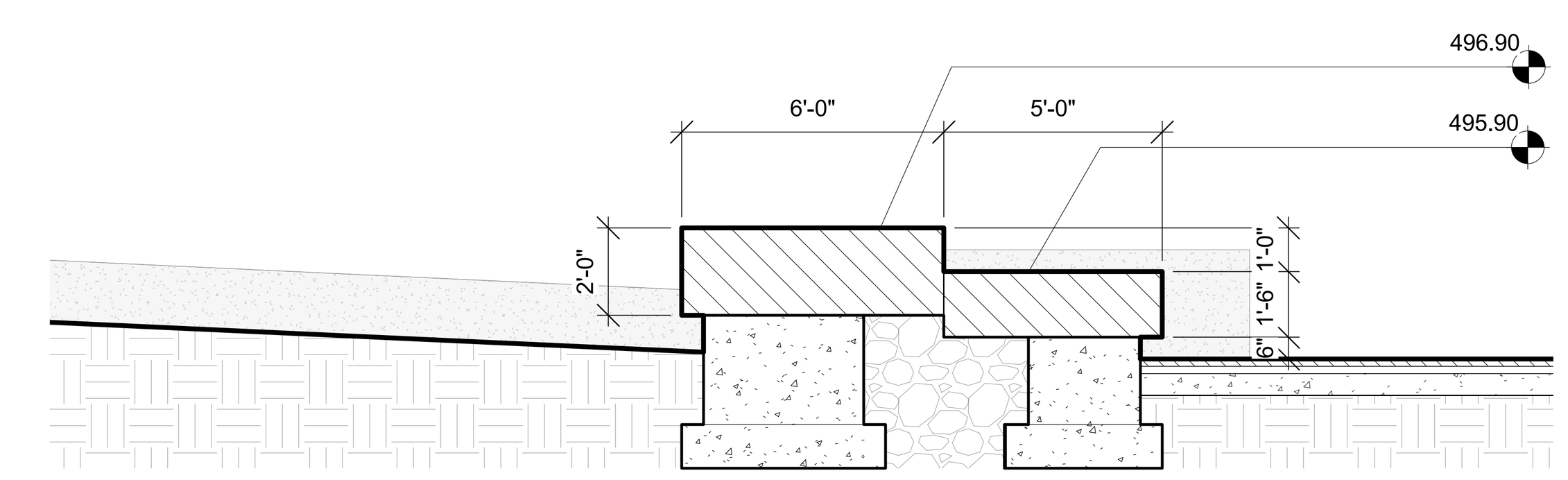
3 BLEACHER SECTION 3
A510.2 1/4" = 1'-0"



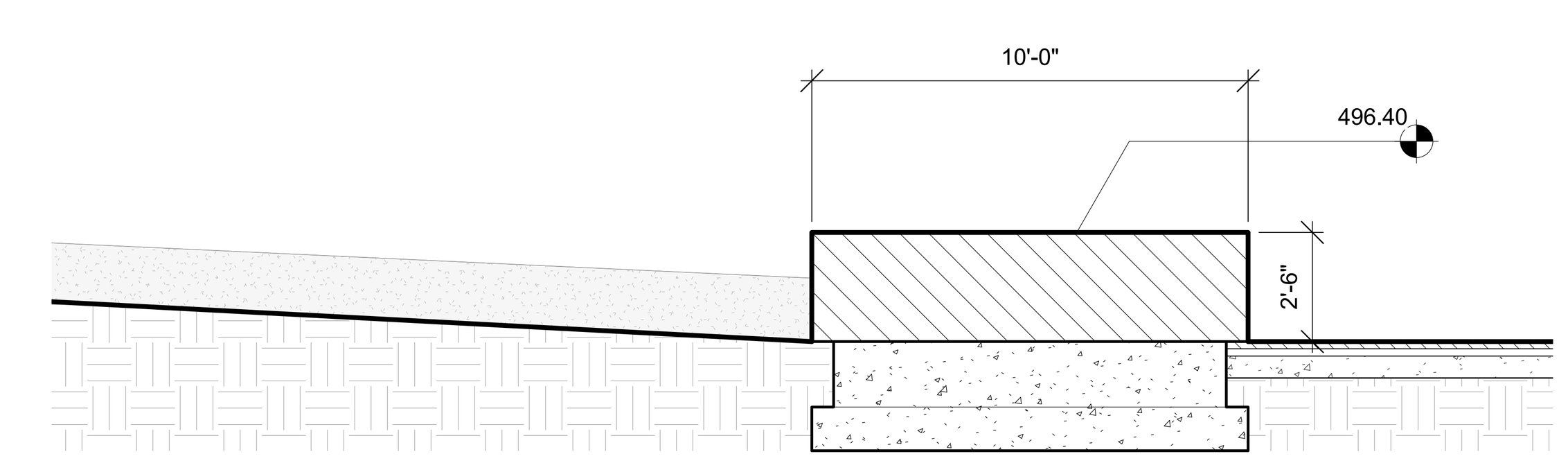
4 BLEACHER SECTION 4
A510.2 1/4" = 1'-0"



5 BLEACHER SECTION 5
A510.2 1/4" = 1'-0"



6 BLEACHER SECTION 6
A510.2 1/4" = 1'-0"



7 BLEACHER SECTION 7
A510.2 1/4" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

michael mcinturf architects
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

PRELIMINARY NOT FOR CONSTRUCTION

ISSUES

1	10/01/2021	SCHEMATIC DESIGN
2	12/17/2021	BP#2 - PARK & GARAGE

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28 | NORTH

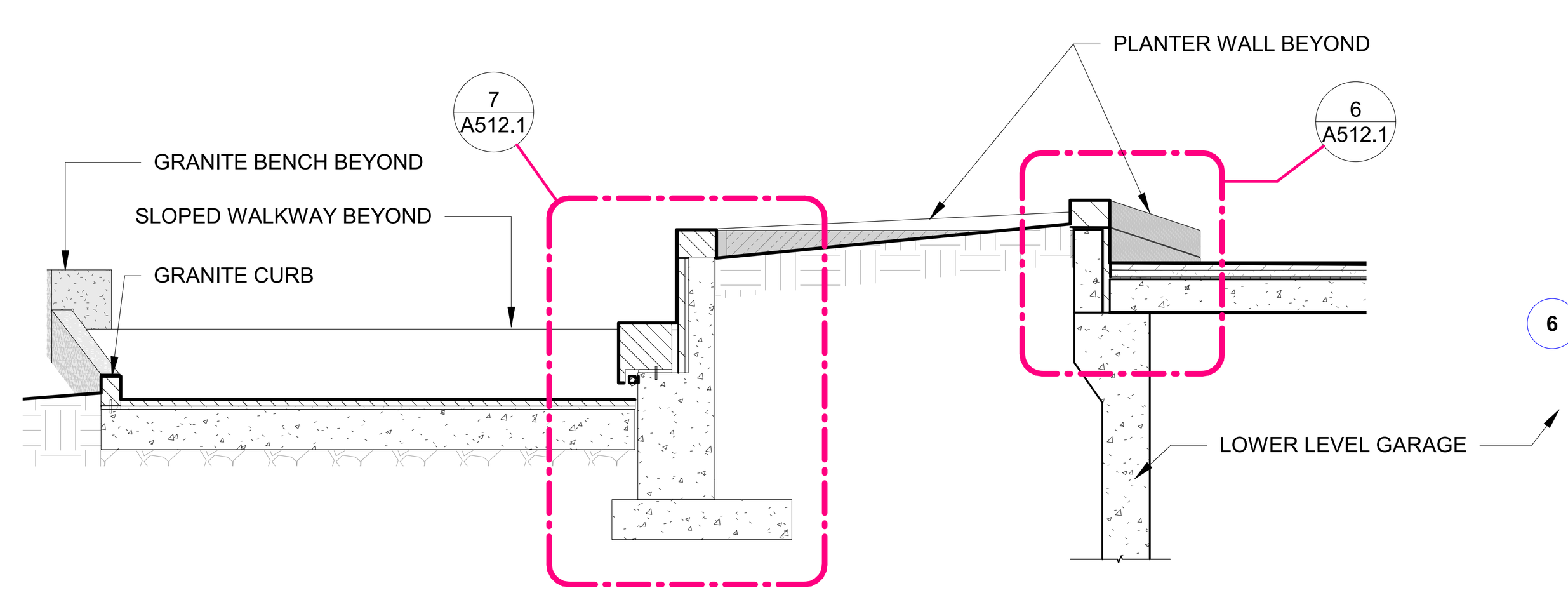
DRAWN BY: Author
ARCHITECT: MM
CHECKED BY: Checker

THE BANKS Public Partnership

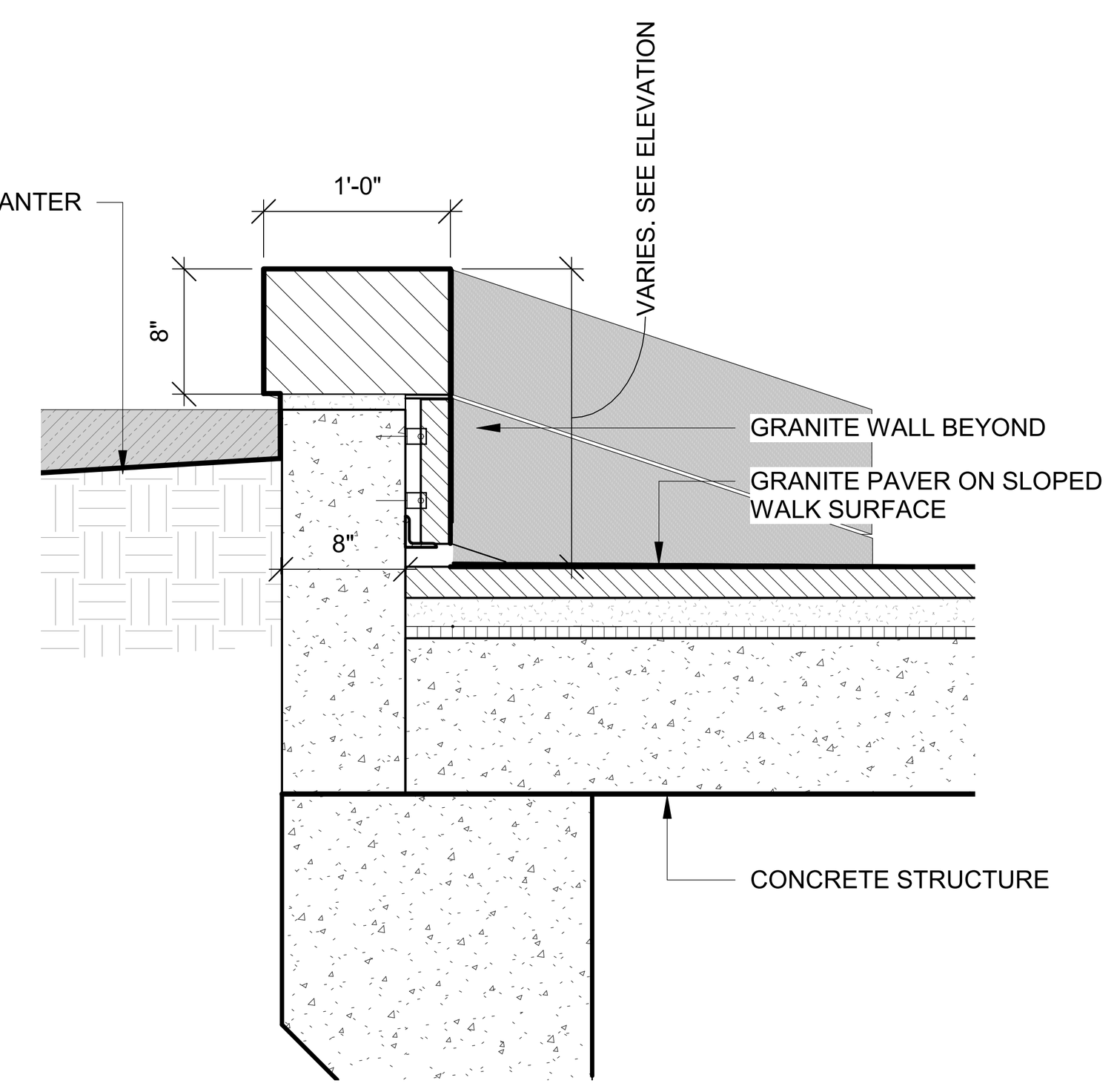
LOT 28 GARAGE AND PARK

DRAWING TITLE
LOWER LANDING BLEACHER SEATING

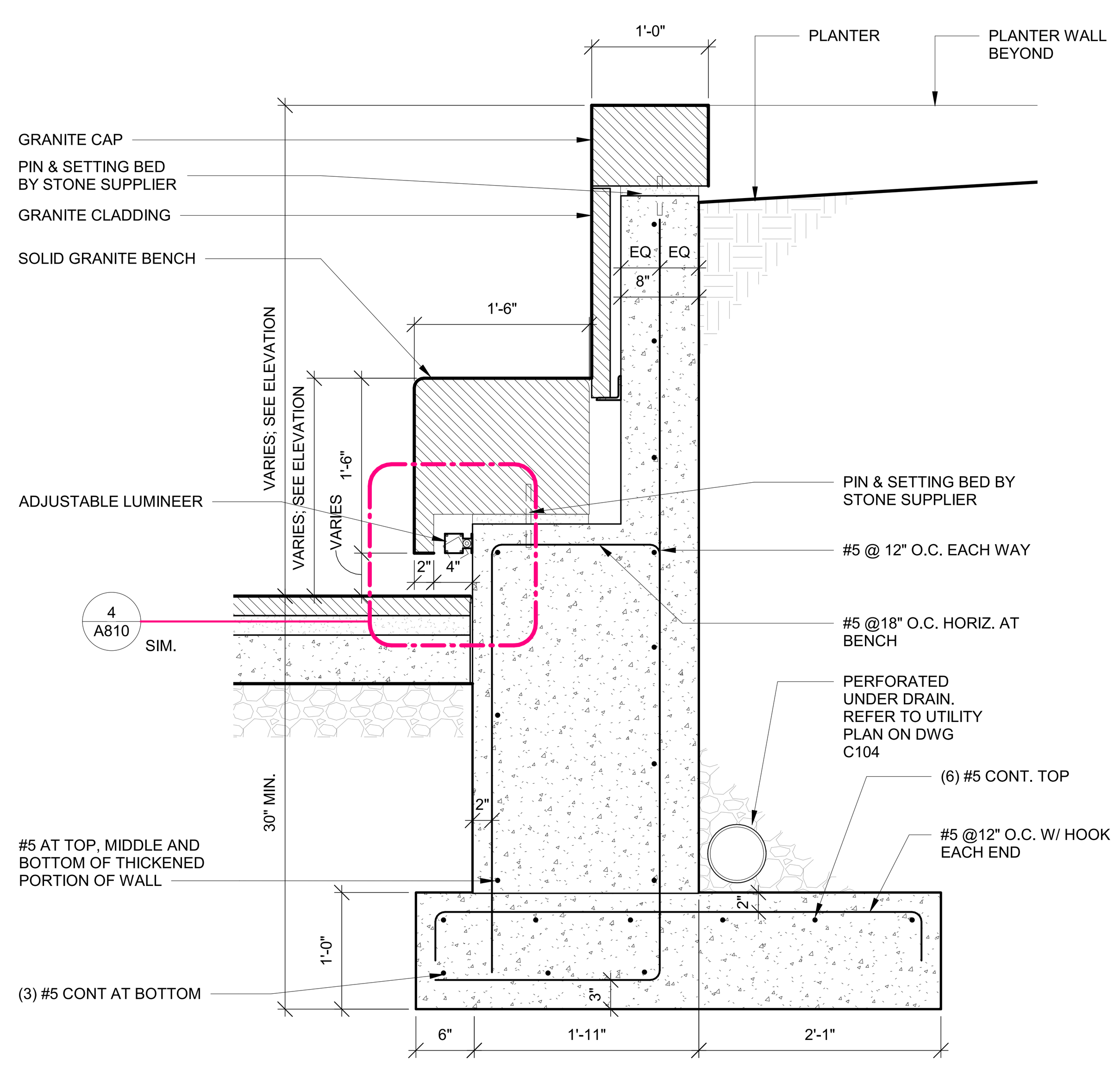
JOB NUMBER 98090.40 DATE 12/17/2021
DRAWING NUMBER
A510.2



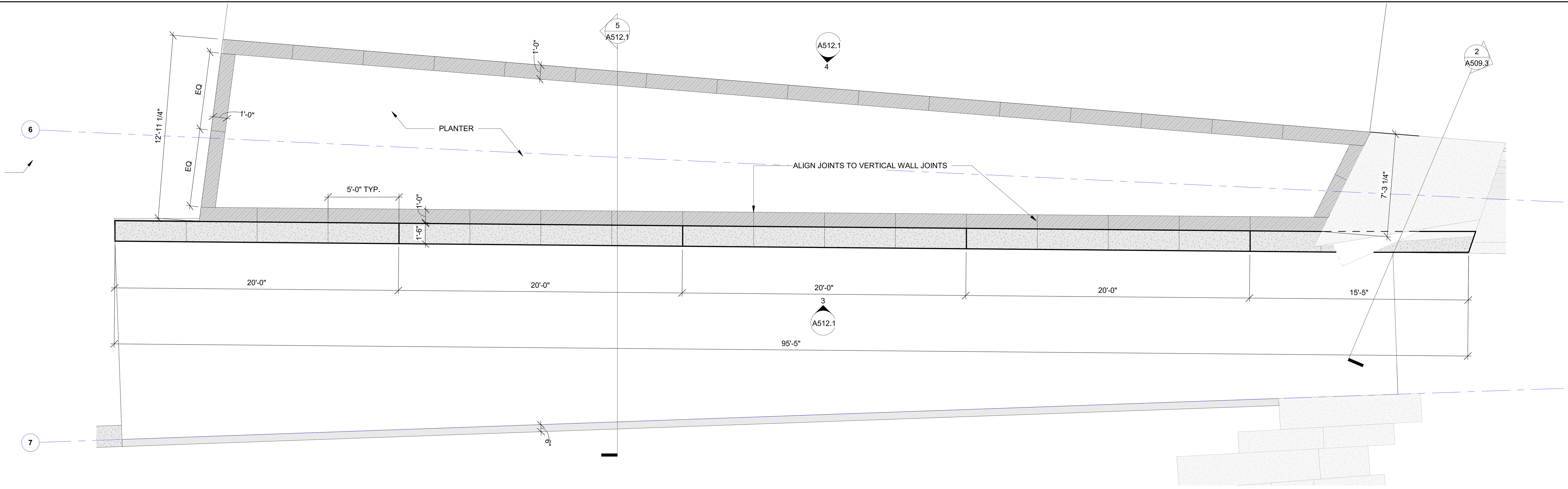
5 SECTION - STEPPED BENCH & PLANTER @ MIDDLE WALK
A512.1 1/4" = 1'-0"



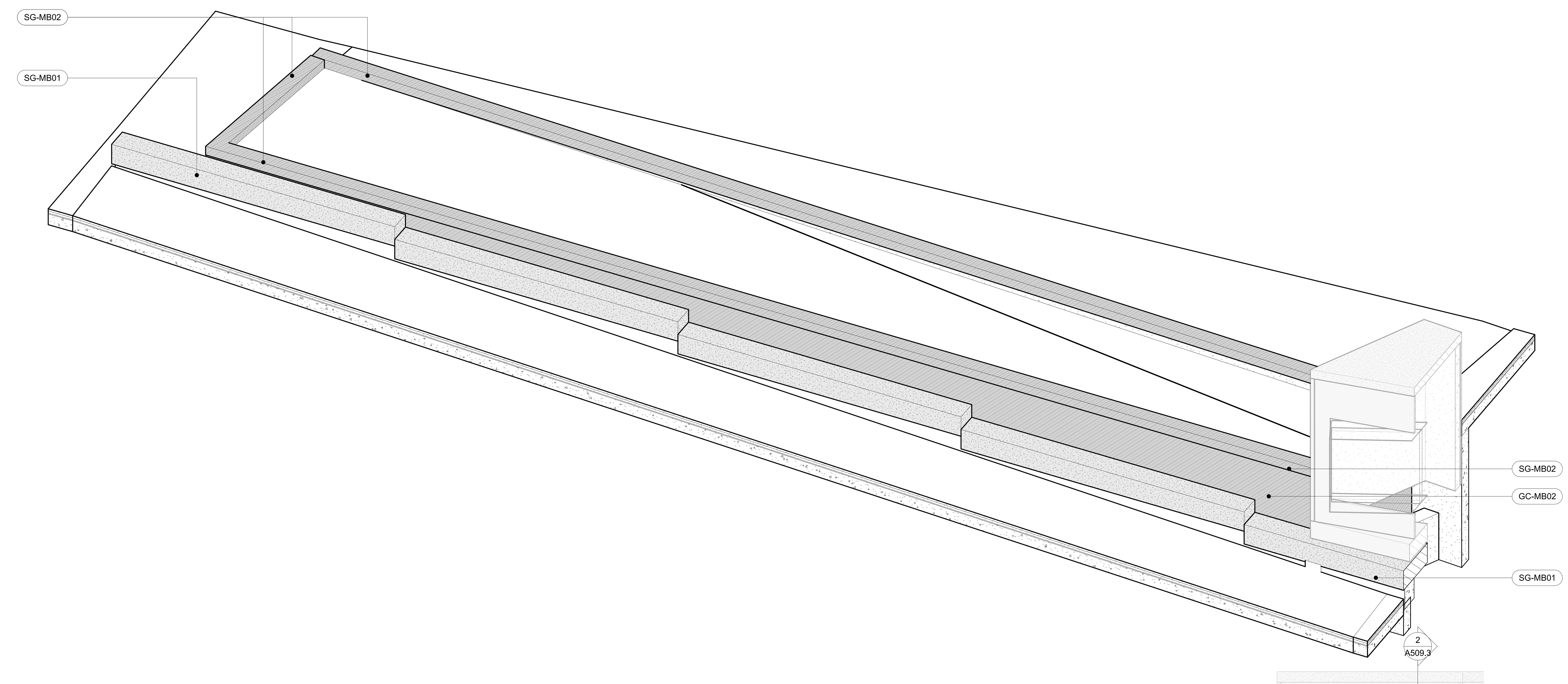
6 SECTION - STEPPED BENCH & PLANTER @ MIDDLE WALK
A512.1 1" = 1'-0"



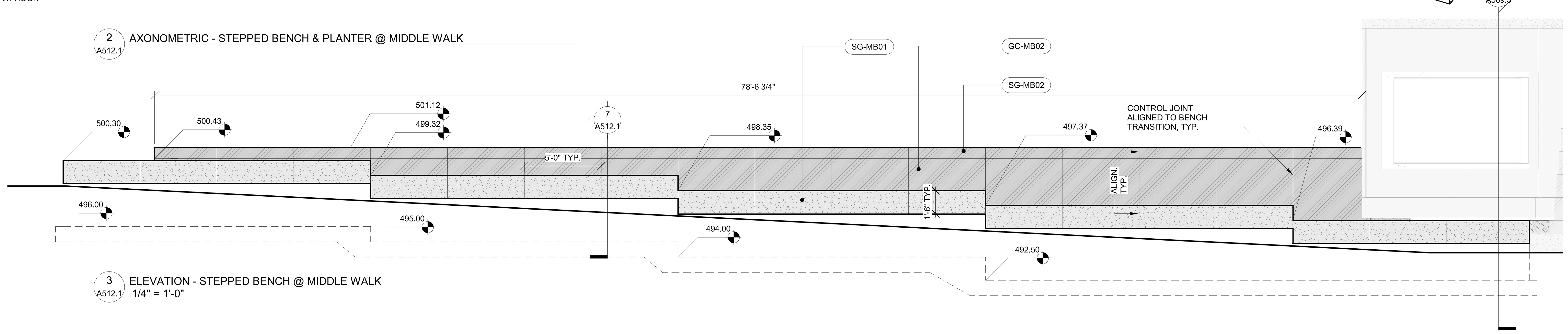
7 SECTION - STEPPED BENCH & PLANTER @ MIDDLE WALK
A512.1 1" = 1'-0"



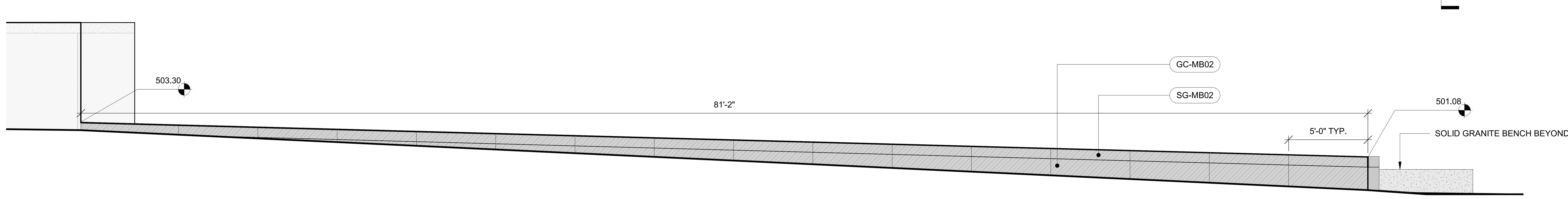
1 ENLARGED PLAN - STEPPED BENCH & PLANTER @ MIDDLE WALK
A512.1 1/4" = 1'-0"



2 AXONOMETRIC - STEPPED BENCH & PLANTER @ MIDDLE WALK
A512.1



3 ELEVATION - STEPPED BENCH @ MIDDLE WALK
A512.1 1/4" = 1'-0"



4 ELEVATION - PLANTER @ MIDDLE WALK
A512.1 1/4" = 1'-0"

DRAWING NOTES

1. 3/8" JOINTS TYP. BETWEEN GRANITE, REFER DETAILS

MATERIAL LEGEND

GC-MB02	GRANITE VENEER CLADDING; MESABI BLACK; FINISH: DIAMOND 300
SG-MB01	SOLID GRANITE ELEMENT; MESABI BLACK; FINISH: ANTIQUE
SG-MB02	SOLID GRANITE ELEMENT; MESABI BLACK; FINISH: DIAMOND 300

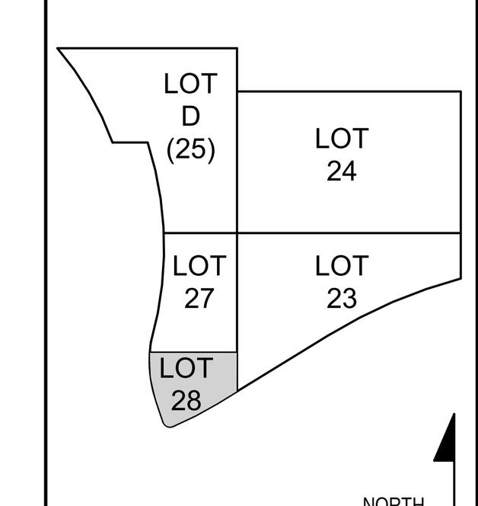
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

michael mcinturf architects
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

PRELIMINARY NOT FOR CONSTRUCTION

ISSUES		
1	10/01/2021	SCHEMATIC DESIGN
2	12/17/2021	BP#2 - PARK & GARAGE



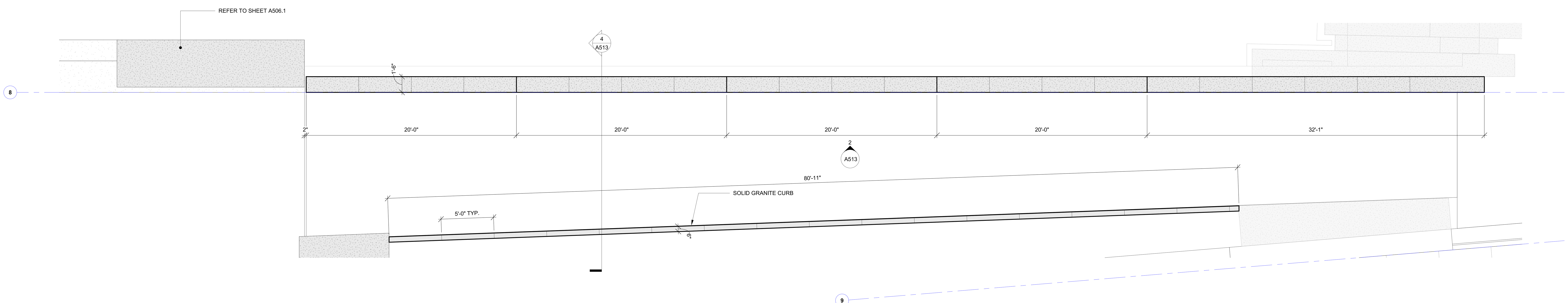
DRAWN BY: Author
ARCHITECT: MM
CHECKED BY: Checker

THE BANKS
Public Partnership

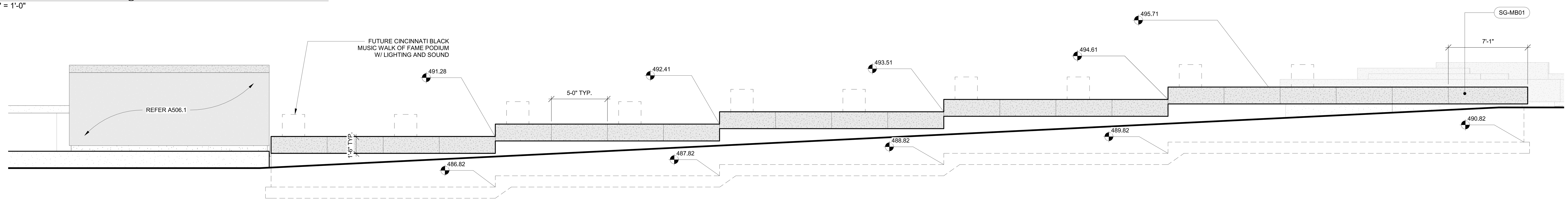
LOT 28 GARAGE AND PARK

DRAWING TITLE
STEPPED BENCH & PLANTER @ MIDDLE WALK

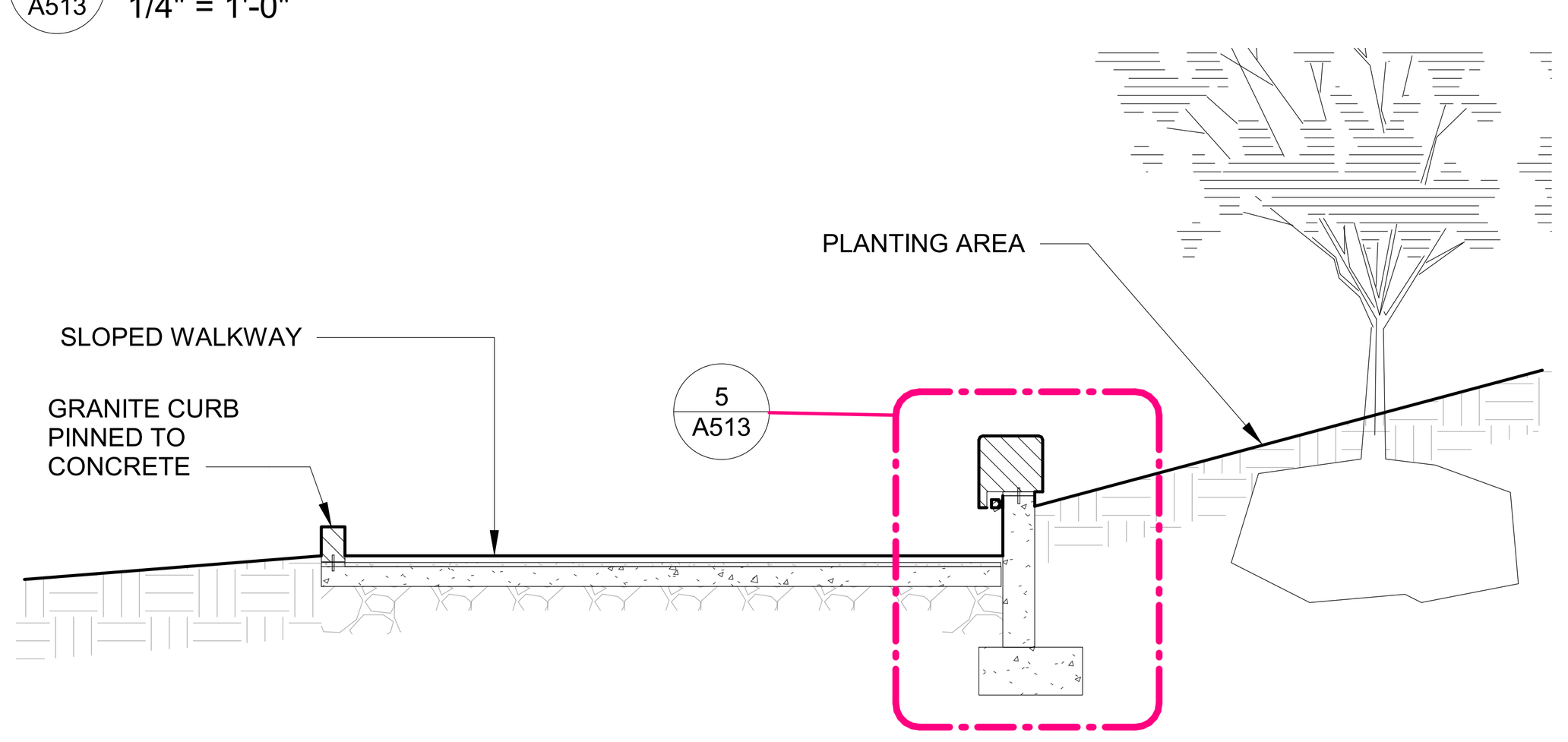
JOB NUMBER 98090.40
DATE 12/17/2021
DRAWING NUMBER
A512.1



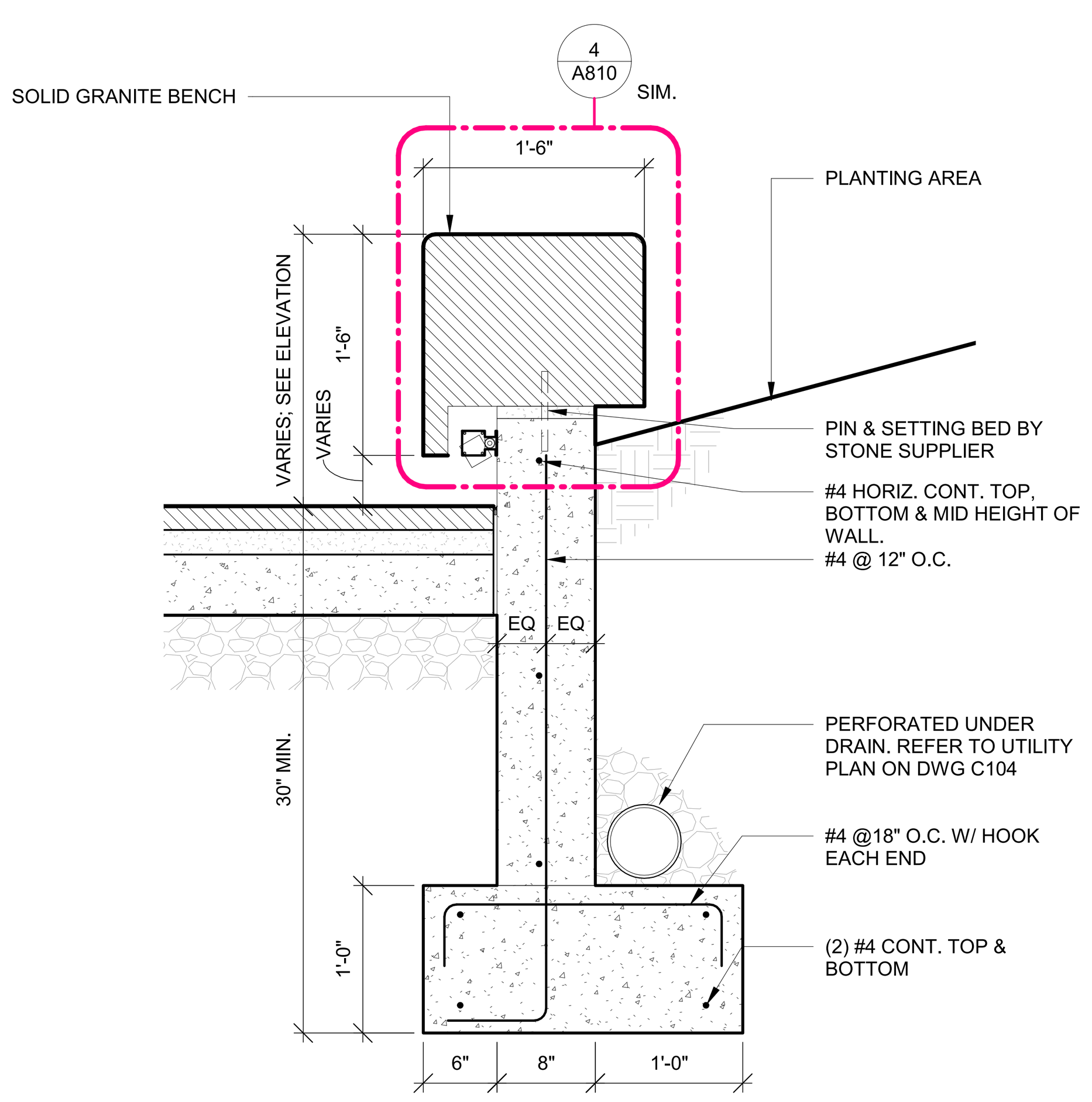
1 ENLARGED PLAN - STEPPED BENCH @ LOWER WALK
A513 1/4" = 1'-0"



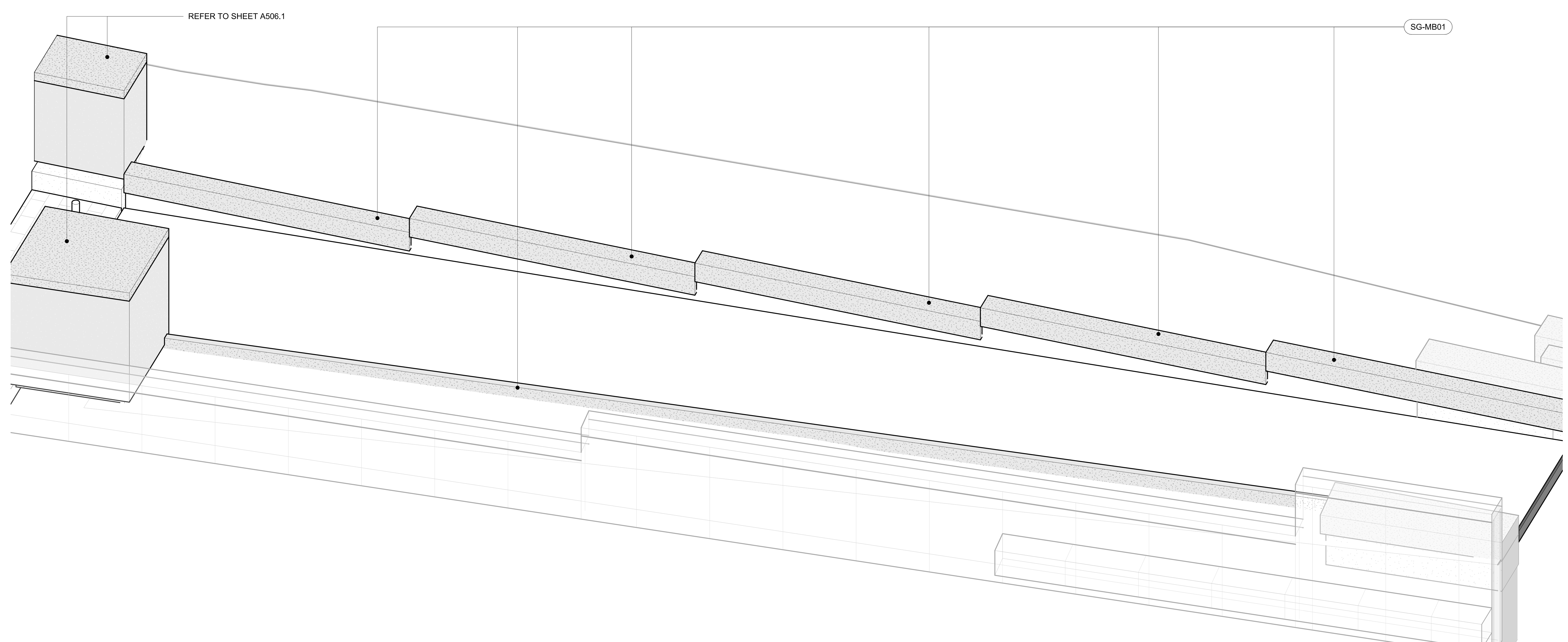
2 ELEVATION - STEPPED BENCH @ LOWER WALK
A513 1/4" = 1'-0"



4 SECTION - STEPPED BENCH @ LOWER WALK
A513 1/4" = 1'-0"



5 SECTION DETAIL - STEPPED BENCH @ LOWER WALK
A513 1" = 1'-0"



3 AXONOMETRIC - STEPPED BECH @ LOWER WALK
A513

DRAWING NOTES

1. 3/8" JOINTS TYP. BETWEEN GRANITE, REFER DETAILS

MATERIAL LEGEND

SG-MB01 SOLID GRANITE ELEMENT; MESABI BLACK; FINISH: ANTIQUE

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

MMA michael mcinturf architects
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

PRELIMINARY NOT FOR CONSTRUCTION

ISSUES		
1	10/01/2021	SCHEMATIC DESIGN
2	12/17/2021	BP#2 - PARK & GARAGE

LOT D (25) LOT 24 LOT 27 LOT 23 LOT 28 NORTH

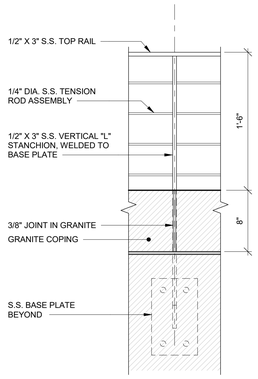
DRAWN BY: Author
ARCHITECT: MM
CHECKED BY: Checker

THE BANKS Public Partnership

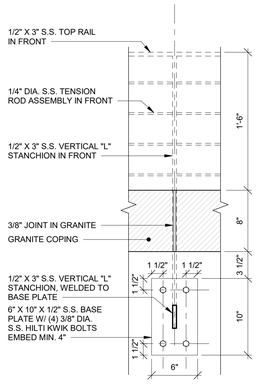
LOT 28 GARAGE AND PARK

DRAWING TITLE
STEPPED BENCH @ LOWER WALK

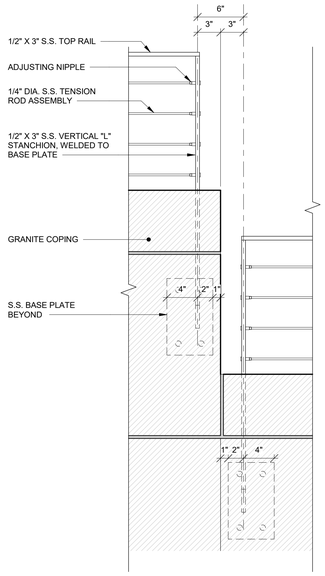
JOB NUMBER 98090.40 DATE 12/17/2021
DRAWING NUMBER A513



FRONT ELEVATION (STREET SIDE)

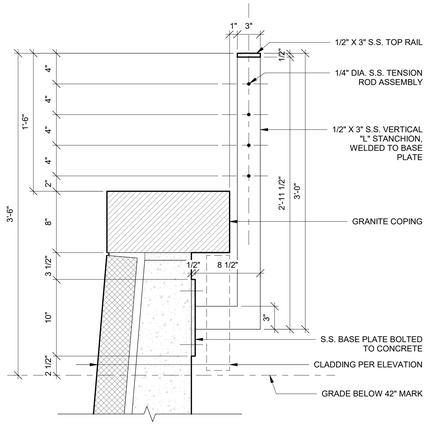


REAR ELEVATION (PARK SIDE)

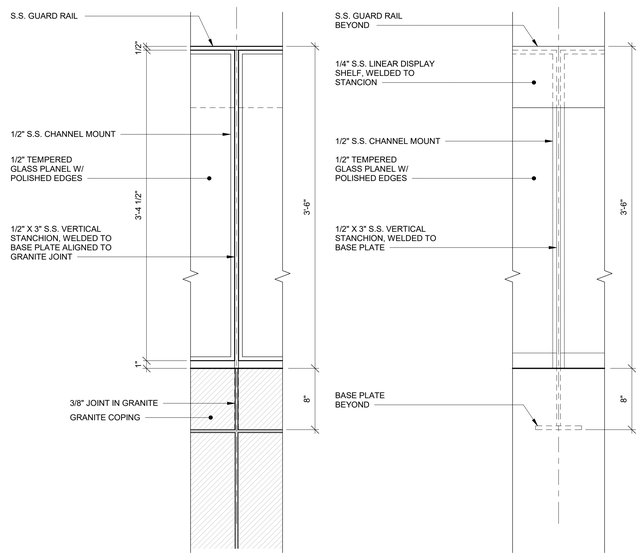


STEPPING TRANSITION (STREET SIDE)

1 A801 ELM ST. GUARD RAIL ELEVATIONS
1 1/2" = 1'-0"

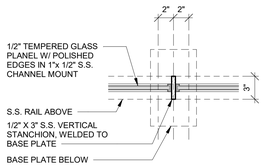


2 A801 ELM ST. GUARD RAIL SECTION
1 1/2" = 1'-0"

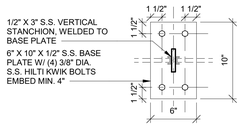


FRONT ELEVATION (STREET FACING)

REAR ELEVATION (UPPER PLAZA SIDE)

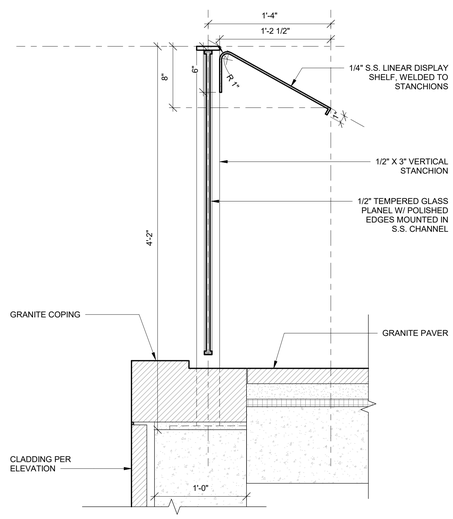


PLAN DETAIL



BASE PLATE DETAIL

4 A801 GLASS GUARD RAIL DETAILS
1 1/2" = 1'-0"



3 A801 GLASS RAIL TYP. DETAIL
1 1/2" = 1'-0"

HAMILTON COUNTY
RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

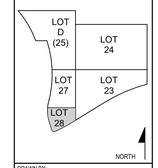
THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

MMA michael mcinturf ARCHITECTS
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

PRELIMINARY NOT FOR CONSTRUCTION

ISSUES

ISSUES		
1	10/01/2021	SCHEMATIC DESIGN
2	12/17/2021	BP-2 - PARK & GARAGE



DRAWN BY: JML, BR
ARCHITECT: MM
CHECKED BY: JML, MM

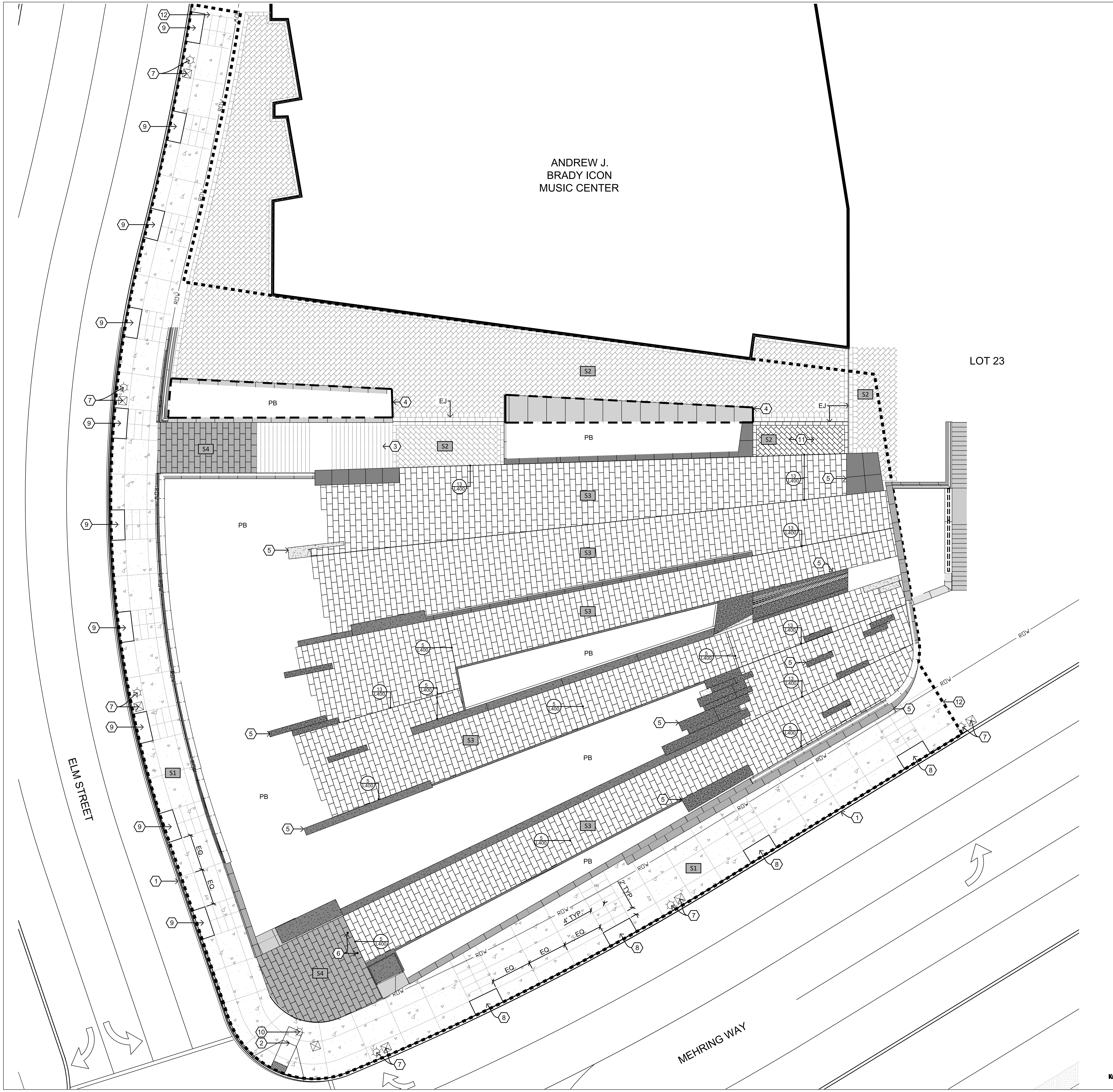
THE BANKS
Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE
GUARD RAIL DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

DRAWING NUMBER
A801



CONSTRUCTION NOTES:

1. EXISTING CURB TO REMAIN, PROTECT IN PLACE.
2. REFER TO CITY OF CINCINNATI STANDARD TYPE "Q" CURB RAMP & TRUNCATED DOMES ACC NO. 27256.
3. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR MONUMENTAL STAIR, HANDRAILS, AND LANDING DETAILS.
4. SALVAGE EXISTING GRANITE PAVERS FOR REUSE WITHIN PROJECT AREA. INFILL AND MODIFY EXISTING PAVER AREAS TO MEET PROPOSED CONDITIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR FOUNTAIN, CURB, SEATWALLS, AND RETAINING WALL DETAILS, TYP.
6. TWO EACH STAINLESS STEEL BOLLARDS REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
7. EXISTING LIGHT POLE AND ELECTRICAL PULL BOX. ADJUST AS NECESSARY TO MEET FINISHED GRADE.
8. 4'X8' OPEN TREE PIT ALONG MEHRING WAY, TYP. ALIGN WITH TREE PITS ACROSS STREET.
9. 4'X8' OPEN TREE PIT ALONG ELM STREET, TYP. ALIGN WITH PARK RADIAL GEOMETRY. REFER TO ARCHITECTURAL AND LANDSCAPE PLANS.
10. EXISTING TRAFFIC SIGNAL POLE TO REMAIN, TYP.
11. RELOCATE SALVAGED DEER ISLE GRANITE PAVERS, TYP.
12. ABUT EXISTING CONCRETE SIDEWALK AT NEW SAWCUT JOINT AND DOWEL INTO EXISTING SLAB PER DETAIL 11, SHEET L400. ALIGN SCORE JOINTS TO MATCH EXISTING SIDEWALK JOINTS.

HARDSCAPE NOTES:

1. FOUR (4) EA BLACK MUSICIAN HALL OF FAME DEDICATION PLAQUES TO BE INSTALLED BY THE CONTRACTOR WITHIN THE PROPOSED GRANITE FLATWORK. PLAQUES SUPPLIED BY OWNER. LOCATION TO BE DETERMINED.
2. ALL PAVING TO PAVING 1/8" JOINT, TYP.
3. ALL PAVING TO FACE OF WALL 1/2" JOINT, TYP.
4. FOR EXPANSION JOINT LOCATIONS AND DETAILS SEE ARCHITECTURAL DRAWINGS.
5. ALL ANGLES ARE TO BE CONSIDERED 90° UNLESS NOTED OTHERWISE.
6. AVOID SMALL SLIVERS OR TRIANGULAR GRANITE PAVER SEGMENTS, REFER TO DETAIL 10, SHEET L400. SNAP JOINT LINE TO TANGENT OF CURVE OR PROVIDE PERPENDICULAR OFFSET TO CREATE "HOME PLATE" LAYOUT. SEE PREVIOUS PHASES FOR CONSTRUCTED EXAMPLES. NO GRANITE PIECES SMALLER THAN 6".
7. JOINTS SHOULD BE ALIGNED WITH MAJOR VERTICAL ELEMENTS AND MATERIAL CHANGES.

LEGEND:

- - - - LIMITS OF WORK, TYP.
PB PLANT BED, REFER TO LANDSCAPE PLANS.
EJ EXPANSION JOINT, REFER TO ARCHITECTURAL PLANS. (12/L400)
S1 STANDARD CONCRETE SIDEWALK, TYP. (11/L400)
S2 PAVING PATTERN #1- DEER ISLE THERMAL GRANITE PAVER, TYP. RUNNING BOND PATTERN ON 45° ANGLE. SALVAGE EXISTING. (1/L400)
S3 PAVING PATTERN #2 - MESABI BLACK GRANITE PAVER, 18"X36" RUNNING BOND PATTERN SET PERPENDICULAR TO UPPER GRID LINE. (2/L400)
S4 PAVING PATTERN #3 - PRAIRIE BROWN GRANITE PAVER, 18"X36" RUNNING BOND PATTERN. (3/L400)
STAINLESS STEEL TRANSITION STRIP, TYP. (13/L400)

811 Know what's below. Call before you dig.

NOTE: UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

0 5 10 20

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

ISSUES/REVISIONS
1	11/08/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE

ISSUES/REVISIONS (CONT.)

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28
NORTH

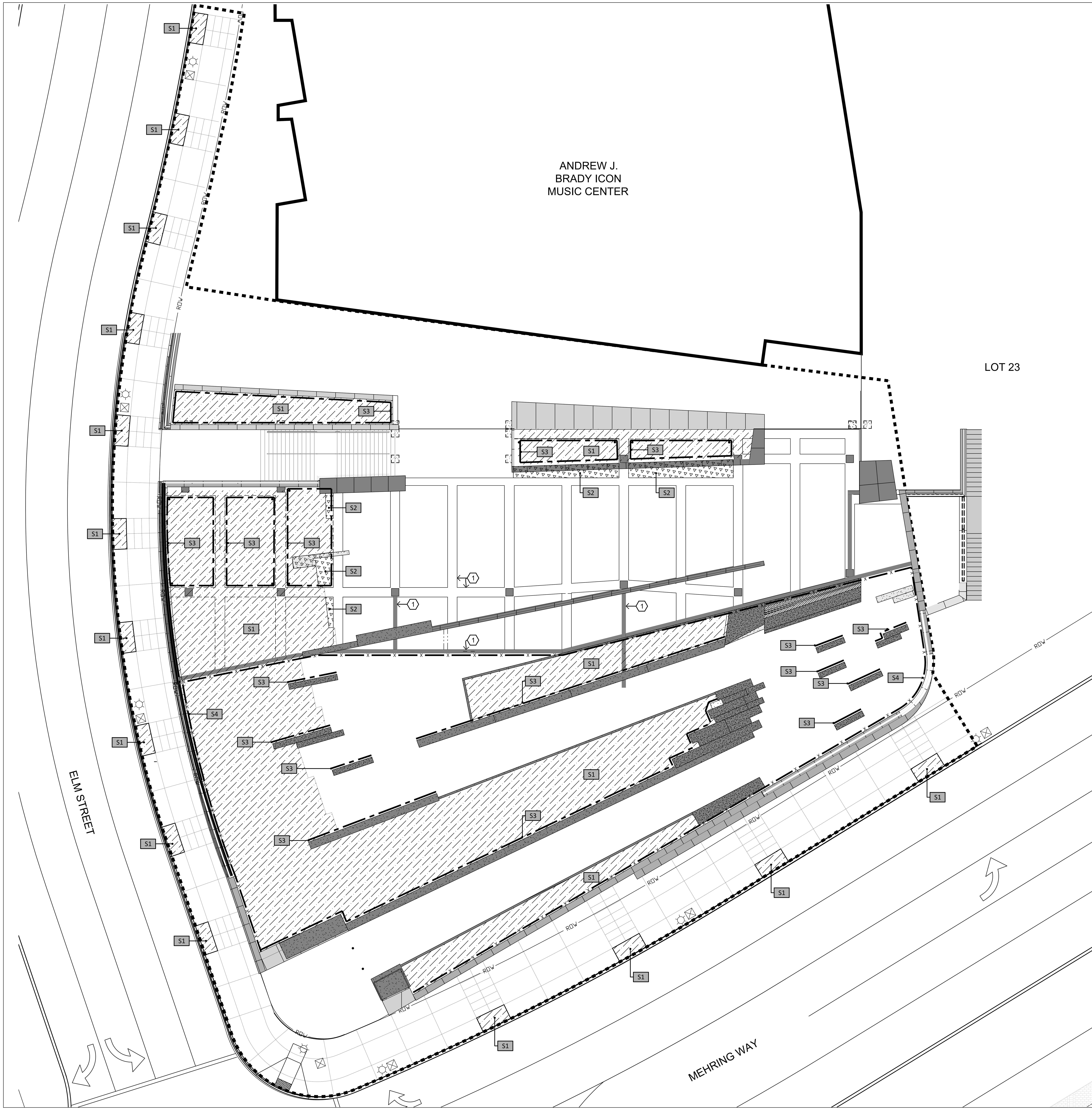
DRAWN BY:
ARCHITECT/ENGINEER:
CHECKED BY:

THE BANKS Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE
HARDSCAPE PLAN

JOB NUMBER 98090.40
DATE 12/17/2021
DRAWING NUMBER **L100**



CONSTRUCTION NOTES:

⟨1⟩ STRUCTURAL BEAMS AND / OR BASEMENT WALLS, TYP. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.

SOIL NOTES

1. PREPARE TRANSITION ZONE ABOVE SUBSOIL IN PLANTING AREAS ON GRADE AS DESCRIBED IN THE SPECIFICATIONS AND SHOWN IN THE DETAILS.
2. REFER TO THE ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLAN AND REQUIRED SOIL DEPTHS. COMPENSATE FOR SETTLING AND COMPACTION AS NECESSARY.

LEGEND

LIMITS OF WORK

SUB-SURFACE DECK DRAIN, REFER TO ARCHITECTURAL AND MEP PLANS FOR TIE-IN LOCATIONS.

SURFACE ITEMS

S1 PLANTING SOIL, TYP. SEE SPECIFICATION SECTION 329113 - PLANTING SOILS.

S2 STRUCTURAL SOIL, TYP. SEE SPECIFICATION SECTION 329113.23 - STRUCTURAL SOILS.

S3 4" UNDERDRAIN, TYP. REFER TO CIVIL & MEP PLANS FOR TIE-IN LOCATIONS.

S4 WALL FOUNDATION UNDERDRAIN, TYP. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR TIE-IN LOCATIONS.

14-15 / L400

Know what's below. Call before you dig.

NOTE :
UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

0 5 10 20

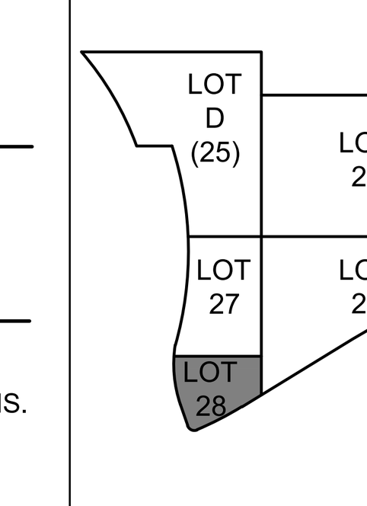
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr
West Chester, OH 45069
513.779.7851

ISSUES/REVISIONS (CONT.)

ISSUES/REVISIONS		
1	11/08/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE



DRAWN BY:

ARCHITECT/ENGINEER:

CHECKED BY:

THE BANKS
Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE

LANDSCAPE SOILS PLAN

JOB NUMBER	DATE
98090.40	12/17/2021

DRAWING NUMBER

L200

ANDREW J.
BRADY ICON
MUSIC CENTER

LOT 23

(4) GIN BIL

(19) ACE RUB

REFER TO SHEET L100 FOR HARDSCAPE DESIGN

MATCHLINE: SEE SHEET L301

MATCHLINE: SEE SHEET L302

(10) QUE IMB

ELM STREET

MEHRING WAY

RDW

PLANT SCHEDULE :

KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS TREES:					
ACE RUB	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	3" CAL.	B&B	SINGLE STEMMED SPECIMEN TREE, MATCHING SPREAD & HEIGHT. OWNER & LANDSCAPE ARCHITECT TO FIELD TAG TREES PRIOR TO DIGGING.
GIN BIL	GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD GINKGO	3" CAL.	B&B	SINGLE STEMMED SPECIMEN TREE, MATCHING SPREAD & HEIGHT. OWNER & LANDSCAPE ARCHITECT TO FIELD TAG TREES PRIOR TO DIGGING.
QUE IMB	QUERCUS IMBRICARIA	SHINGLE OAK	3" CAL.	B&B	SPECIMEN TREE, MATCHING SPREAD & HEIGHT. OWNER & LANDSCAPE ARCHITECT TO FIELD TAG TREES PRIOR TO DIGGING.

CONSTRUCTION NOTES:

1. STREET TREES ALONG MEHRING WAY ARE TO BE FURNISHED AND INSTALLED BY THE CITY OF CINCINNATI URBAN FORESTRY DEPARTMENT.
2. STRUCTURAL BEAMS AND / OR BASEMENT WALLS, TYP. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.

DESIGN INTENT:

1. LANDSCAPE DESIGN INTENT IS TO HAVE A SIMILAR AESTHETIC TO THAT OF SMALE RIVERFRONT PARK. THE TREES ARE PLACED ALONG A RADIAL ALIGNMENT, REFER TO ARCHITECTURAL PLANS. THE PERENNIALS AND SHRUBS ARE ARRANGED IN SMALL GROUPINGS AND CONTINUOUS ARCS TO CREATE AN ORGANIC AESTHETIC.

GENERAL NOTES:

1. SEE SHEET L303 FOR FULL PLANT SCHEDULE AND PLANT DETAILS.

PLANTING NOTES:

1. CONTRACTOR TO LAYOUT A SMALL PORTION OF THE LANDSCAPE PLAN FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
2. EACH CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES.
3. CONTRACTOR SHALL VERIFY ALL PLANTING CONDITIONS FOR OBSTRUCTIONS AND OVERHEAD ELECTRICAL POWER LINES PRIOR TO PLANTING. IF ADVERSE PLANTING CONDITIONS ARE OBSERVED, CONTACT THE OWNERS REPRESENTATIVE IMMEDIATELY.
4. SUBSURFACE IMPROVEMENTS SHALL BE OBSERVED. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) 48 HOURS PRIOR TO ANY EXCAVATION OR DIGGING TO ENSURE THE LOCATION OF UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT SUCH UNDERGROUND UTILITIES.
5. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NEWLY PLANTED TREES ARE PERFECTLY ALIGNED AND SET PLUMB WITH PROPER RELATIONSHIP TO THE SURROUNDING GRADE. CONFIRM FINISHED GRADE PRIOR TO PLANTING.
7. ALL PLANT MATERIAL SHALL BE OF THE SIZE AND TYPE SPECIFIED. IF SUBSTITUTIONS ARE APPROVED BY THE OWNER'S REPRESENTATIVE, THE SIZE AND GRADING STANDARDS SHALL CONFORM TO THOSE OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

LEGEND

LIMITS OF WORK, TYP.

PLANT MATERIAL

DECIDUOUS TREE, TYP. 6-8 L303

SHRUBS, TYP. 3 L303

PERENNIALS & ORNAMENTAL GRASSES, TYP. 1/2 L303

FUTURE TREES BY OTHERS, TYP.

Know what's below. Call before you dig.

NOTE:
UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

0 5 10 20

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

ISSUE/REVISIONS (CONT.)

ISSUE/REVISIONS

1	11/05/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28

NORTH

DRAWN BY:

ARCHITECT/ENGINEER:

CHECKED BY:

THE BANKS
Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE

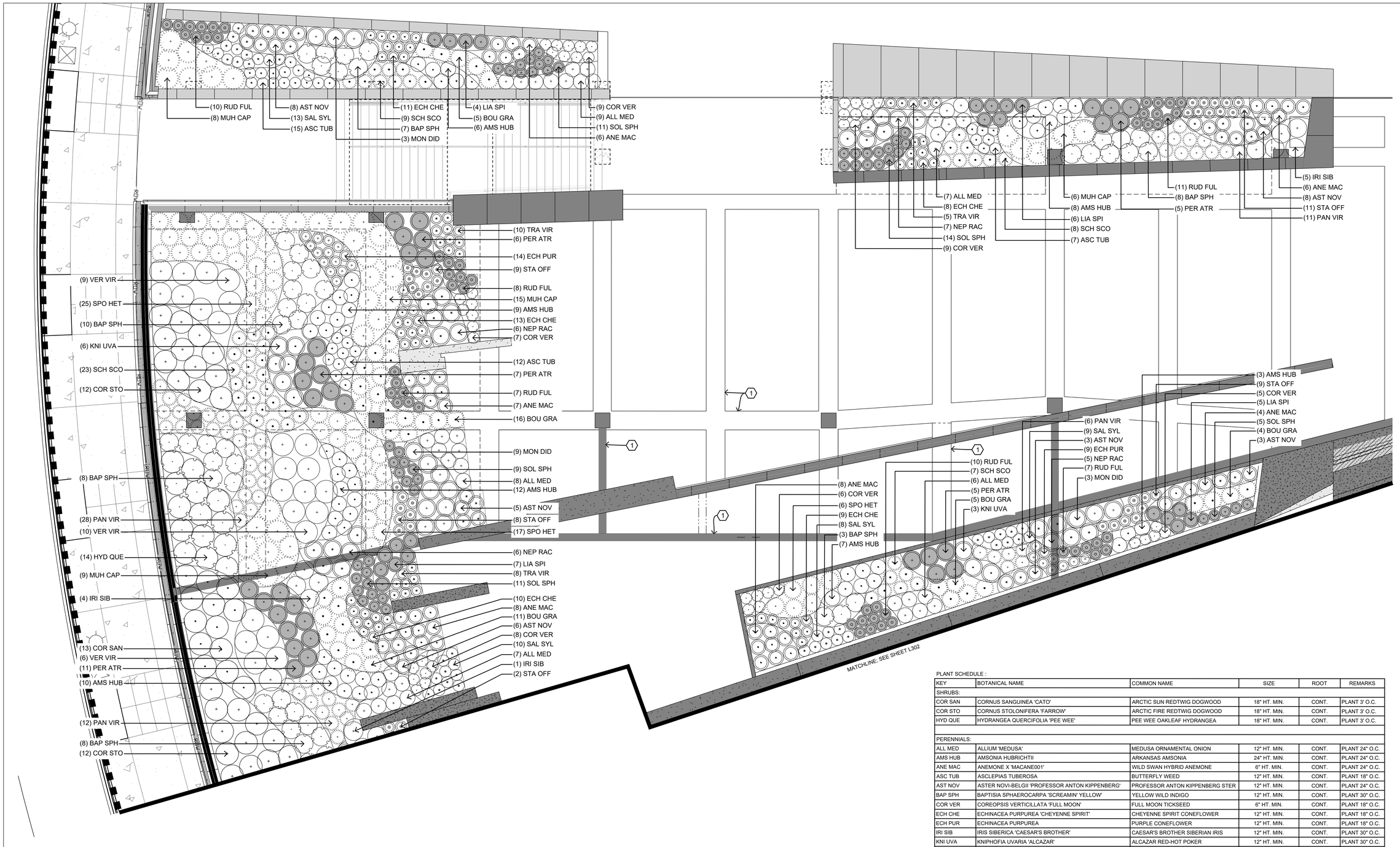
OVERALL LANDSCAPE PLAN

JOB NUMBER: 98090.40
DATE: 12/17/2021

DRAWING NUMBER

L300

H:\2019\190725.002_DWG_Sheets\190725LLND002.dwg, 12/17/2021 11:43:39 AM, _DWG To PDF.pc3



PLANT SCHEDULE :

KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
SHRUBS:					
COR SAN	CORNUS SANGUINEA 'CATO'	ARCTIC SUN REDTWIG DOGWOOD	18" HT. MIN.	CONT.	PLANT 3' O.C.
COR STO	CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE REDTWIG DOGWOOD	18" HT. MIN.	CONT.	PLANT 3' O.C.
HYD QUE	HYDRANGEA QUERCIFOLIA 'PEE WEE'	PEE WEE OAKLEAF HYDRANGEA	18" HT. MIN.	CONT.	PLANT 3' O.C.
PERENNIALS:					
ALL MED	ALLIUM 'MEDUSA'	MEDUSA ORNAMENTAL ONION	12" HT. MIN.	CONT.	PLANT 24" O.C.
AMS HUB	AMSONIA HUBRICHTII	ARKANSAS AMSONIA	24" HT. MIN.	CONT.	PLANT 24" O.C.
ANE MAC	ANEMONE X 'MACANE001'	WILD SWAN HYBRID ANEMONE	6" HT. MIN.	CONT.	PLANT 24" O.C.
ASC TUB	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	12" HT. MIN.	CONT.	PLANT 18" O.C.
AST NOV	ASTER NOVI-BELGII 'PROFESSOR ANTON KIPPENBERG'	PROFESSOR ANTON KIPPENBERG STER	12" HT. MIN.	CONT.	PLANT 24" O.C.
BAP SPH	BAPTISIA SPHAEROCARPA 'SCREAMIN' YELLOW'	YELLOW WILD INDIGO	12" HT. MIN.	CONT.	PLANT 30" O.C.
COR VER	COREOPSIS VERTICILLATA 'FULL MOON'	FULL MOON TICKSEED	6" HT. MIN.	CONT.	PLANT 18" O.C.
ECH CHE	ECHINACEA PURPUREA 'CHEYENNE SPIRIT'	CHEYENNE SPIRIT CONEFLOWER	12" HT. MIN.	CONT.	PLANT 18" O.C.
ECH PUR	ECHINACEA PURPUREA	PURPLE CONEFLOWER	12" HT. MIN.	CONT.	PLANT 18" O.C.
IRI SIB	IRIS SIBERICA 'CAESAR'S BROTHER'	CAESAR'S BROTHER SIBERIAN IRIS	12" HT. MIN.	CONT.	PLANT 30" O.C.
KNI UVA	KNIPHOFIA UVARIA 'ALCAZAR'	ALCAZAR RED-HOT POKER	12" HT. MIN.	CONT.	PLANT 30" O.C.
LIA SPI	LIATRIS SPICATA	BLAZING STAR	12" HT. MIN.	CONT.	PLANT 24" O.C.
MON DID	MONARDA DIDYMA 'PRAIRIE NIGHT'	BEE BALM	12" HT. MIN.	CONT.	PLANT 30" O.C.
NEP RAC	NEPETA RACEMOSA 'WALKER'S LOW'	WALKER'S LOW CATMINT	12" HT. MIN.	CONT.	PLANT 30" O.C.
PER ATR	PEROVSKIA ATRIPLICIFOLIA 'BLUE JEAN BABY'	DWARF RUSSIAN SAGE	24" HT. MIN.	CONT.	PLANT 30" O.C.
RUD FUL	RUDBECKIA FULGIDA	BLACK EYED SUSANS	12" HT. MIN.	CONT.	PLANT 18" O.C.
SAL SYL	SALVIA X SYLVESTRIS 'MAINACHT'	MAY NIGHT SAGE	12" HT. MIN.	CONT.	PLANT 18" O.C.
SOL SPH	SOLIDAGO SPHACELATA 'GOLDEN FLEECE'	GOLDEN FLEECE GOLDENROD	12" HT. MIN.	CONT.	PLANT18" O.C.
STA OFF	STACHYS OFFICINALIS 'HUMMELO'	HUMMELO BETONY	12" HT. MIN.	CONT.	PLANT 18" O.C.
TRA VIR	TRANDESCANTIA VIRGINIANA 'PURPLE DOME'	PURPLE DOME VIRGINIA SPIDERWORT	6" HT. MIN.	CONT.	PLANT 18" O.C.
VER VIR	VERONICASTRUM VIRGINICUM 'LAVENDELTURM'	LAVENDER TOWERS CULVER'S ROOT	24" HT. MIN.	CONT.	PLANT 36" O.C.
ORNAMENTAL GRASSES:					
BOU GRA	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION GRAMA GRASS	12" HT. MIN.	CONT.	PLANT 30" O.C.
MUH CAP	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	24" HT. MIN.	CONT.	PLANT 36" O.C.
PAN VIR	PANICUM VIRGATUM 'CHEYENNE SKY'	CHEYENNE SKY SWITCH GRASS	24" HT. MIN.	CONT.	PLANT 24" O.C.
SCH SCO	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM GRASS	12" HT. MIN.	CONT.	PLANT 24" O.C.
SPO HET	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	12" HT. MIN.	CONT.	PLANT 30" O.C.

GENERAL NOTES:
1. SEE SHEET L303 FOR FULL PLANT SCHEDULE AND PLANT DETAILS.

PLANTING NOTES:
1. CONTRACTOR TO LAYOUT A SMALL PORTION OF THE LANDSCAPE PLAN FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
2. EACH CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES.
3. CONTRACTOR SHALL VERIFY ALL PLANTING CONDITIONS FOR OBSTRUCTIONS AND OVERHEAD ELECTRICAL POWER LINES PRIOR TO PLANTING. IF ADVERSE PLANTING CONDITIONS ARE OBSERVED, CONTACT THE OWNERS REPRESENTATIVE IMMEDIATELY.
4. SUBSURFACE IMPROVEMENTS SHALL BE OBSERVED. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) 48 HOURS PRIOR TO ANY EXCAVATION OR DIGGING TO ENSURE THE LOCATION OF UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT SUCH UNDERGROUND UTILITIES.
5. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NEWLY PLANTED TREES ARE PERFECTLY ALIGNED AND SET PLUMB WITH PROPER RELATIONSHIP TO THE SURROUNDING GRADE. CONFIRM FINISHED GRADE PRIOR TO PLANTING.
7. ALL PLANT MATERIAL SHALL BE OF THE SIZE AND TYPE SPECIFIED. IF SUBSTITUTIONS ARE APPROVED BY THE OWNER'S REPRESENTATIVE, THE SIZE AND GRADING STANDARDS SHALL CONFORM TO THOSE OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

CONSTRUCTION NOTES:
1. STRUCTURAL BEAMS AND / OR BASEMENT WALLS, TYP. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.

LEGEND
- - - - LIMITS OF WORK, TYP.

PLANT MATERIAL
- DECIDUOUS TREE, TYP. — 6-8 / L303
- SHRUBS, TYP. — 3 / L303
- PERENNIALS & ORNAMENTAL GRASSES, TYP. — 1/2 / L303

811 Know what's below. Call before you dig.

NOTE :
UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

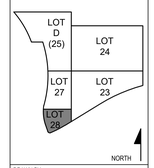
0 2.5 5 10

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

ISSUES/REVISIONS
1 11/05/2021 50% CONSTRUCTION DOCUMENTS
2 12/17/2021 BPAC + PARK & GARAGE



DRAWN BY:
ARCHITECT/ENGINEER:
CHECKED BY:

THE BANKS Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE
LANDSCAPE ENLARGEMENT PLAN

JOB NUMBER 98090.40
DATE 12/17/2021

DRAWING NUMBER
L301

PLANT SCHEDULE :

KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
SHRUBS:					
COR SAN	CORNUS SANGUINEA 'CATO'	ARCTIC SUN REDTWIG DOGWOOD	18" HT. MIN.	CONT.	PLANT 3' O.C.
COR STO	CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE REDTWIG DOGWOOD	18" HT. MIN.	CONT.	PLANT 3' O.C.
HYD QUE	HYDRANGEA QUERCIFOLIA 'PEE WEE'	PEE WEE OAKLEAF HYDRANGEA	18" HT. MIN.	CONT.	PLANT 3' O.C.
PERENNIALS:					
ALL MED	ALLIUM 'MEDUSA'	MEDUSA ORNAMENTAL ONION	12" HT. MIN.	CONT.	PLANT 24" O.C.
AMS HUB	AMSONIA HUBRICHTII	ARKANSAS AMSONIA	24" HT. MIN.	CONT.	PLANT 24" O.C.
ANE MAC	ANEMONE X 'MACANE001'	WILD SWAN HYBRID ANEMONE	6" HT. MIN.	CONT.	PLANT 24" O.C.
ASC TUB	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	12" HT. MIN.	CONT.	PLANT 18" O.C.
AST NOV	ASTER NOVI-BELGII 'PROFESSOR ANTON KIPPENBERG'	PROFESSOR ANTON KIPPENBERG STER	12" HT. MIN.	CONT.	PLANT 24" O.C.
BAP SPH	BAPTISIA SPHAEROCARPA 'SCREAMIN' YELLOW'	YELLOW WILD INDIGO	12" HT. MIN.	CONT.	PLANT 30" O.C.
COR VER	COREOPSIS VERTICILLATA 'FULL MOON'	FULL MOON TICKSEED	6" HT. MIN.	CONT.	PLANT 18" O.C.
ECH CHE	ECHINACEA PURPUREA 'CHEYENNE SPIRIT'	CHEYENNE SPIRIT CONEFLOWER	12" HT. MIN.	CONT.	PLANT 18" O.C.
ECH PUR	ECHINACEA PURPUREA	PURPLE CONEFLOWER	12" HT. MIN.	CONT.	PLANT 18" O.C.
IRI SIB	IRIS SIBERICA 'CAESAR'S BROTHER'	CAESAR'S BROTHER SIBERIAN IRIS	12" HT. MIN.	CONT.	PLANT 30" O.C.
KNI UVA	KNIPHOFIA UVARIA 'ALCAZAR'	ALCAZAR RED-HOT POKER	12" HT. MIN.	CONT.	PLANT 30" O.C.
LIA SPI	LIATRIS SPICATA	BLAZING STAR	12" HT. MIN.	CONT.	PLANT 24" O.C.
MON DID	MONARDA DIDYMA 'PRAIRIE NIGHT'	BEE BALM	12" HT. MIN.	CONT.	PLANT 30" O.C.
NEP RAC	NEPETA RACEMOSA 'WALKER'S LOW'	WALKER'S LOW CATMINT	12" HT. MIN.	CONT.	PLANT 30" O.C.
PER ATR	PEROVSKIA ATRIPLICIFOLIA 'BLUE JEAN BABY'	DWARF RUSSIAN SAGE	24" HT. MIN.	CONT.	PLANT 30" O.C.
RUD FUL	RUDBECKIA FULGIDA	BLACK EYED SUSANS	12" HT. MIN.	CONT.	PLANT 18" O.C.
SAL SYL	SALVIA X SYLVESTRIS 'MAINACHT'	MAY NIGHT SAGE	12" HT. MIN.	CONT.	PLANT 18" O.C.
SOL SPH	SOLIDAGO SPHACELATA 'GOLDEN FLEECE'	GOLDEN FLEECE GOLDENROD	12" HT. MIN.	CONT.	PLANT18" O.C.
STA OFF	STACHYS OFFICINALIS 'HUMMELO'	HUMMELO BETONY	12" HT. MIN.	CONT.	PLANT 18" O.C.
TRA VIR	TRANDESCANTIA VIRGINIANA 'PURPLE DOME'	PURPLE DOME VIRGINIA SPIDERWORT	6" HT. MIN.	CONT.	PLANT 18" O.C.
VER VIR	VERONICASTRUM VIRGINICUM 'LAVENDELTURM'	LAVENDER TOWERS CULVER'S ROOT	24" HT. MIN.	CONT.	PLANT 36" O.C.
ORNAMENTAL GRASSES:					
BOU GRA	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION GRAMA GRASS	12" HT. MIN.	CONT.	PLANT 30" O.C.
MUH CAP	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	24" HT. MIN.	CONT.	PLANT 36" O.C.
PAN VIR	PANICUM VIRGATUM 'CHEYENNE SKY'	CHEYENNE SKY SWITCH GRASS	24" HT. MIN.	CONT.	PLANT 24" O.C.
SCH SCO	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM GRASS	12" HT. MIN.	CONT.	PLANT 24" O.C.
SPO HET	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	12" HT. MIN.	CONT.	PLANT 30" O.C.

GENERAL NOTES:
1. SEE SHEET L303 FOR FULL PLANT SCHEDULE AND PLANT DETAILS.

PLANTING NOTES:
1. CONTRACTOR TO LAYOUT A SMALL PORTION OF THE LANDSCAPE PLAN FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
2. EACH CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES.
3. CONTRACTOR SHALL VERIFY ALL PLANTING CONDITIONS FOR OBSTRUCTIONS AND OVERHEAD ELECTRICAL POWER LINES PRIOR TO PLANTING. IF ADVERSE PLANTING CONDITIONS ARE OBSERVED, CONTACT THE OWNERS REPRESENTATIVE IMMEDIATELY.
4. SUBSURFACE IMPROVEMENTS SHALL BE OBSERVED. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) 48 HOURS PRIOR TO ANY EXCAVATION OR DIGGING TO ENSURE THE LOCATION OF UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT SUCH UNDERGROUND UTILITIES.
5. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NEWLY PLANTED TREES ARE PERFECTLY ALIGNED AND SET PLUMB WITH PROPER RELATIONSHIP TO THE SURROUNDING GRADE. CONFIRM FINISHED GRADE PRIOR TO PLANTING.
7. ALL PLANT MATERIAL SHALL BE OF THE SIZE AND TYPE SPECIFIED. IF SUBSTITUTIONS ARE APPROVED BY THE OWNER'S REPRESENTATIVE, THE SIZE AND GRADING STANDARDS SHALL CONFORM TO THOSE OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

LEGEND

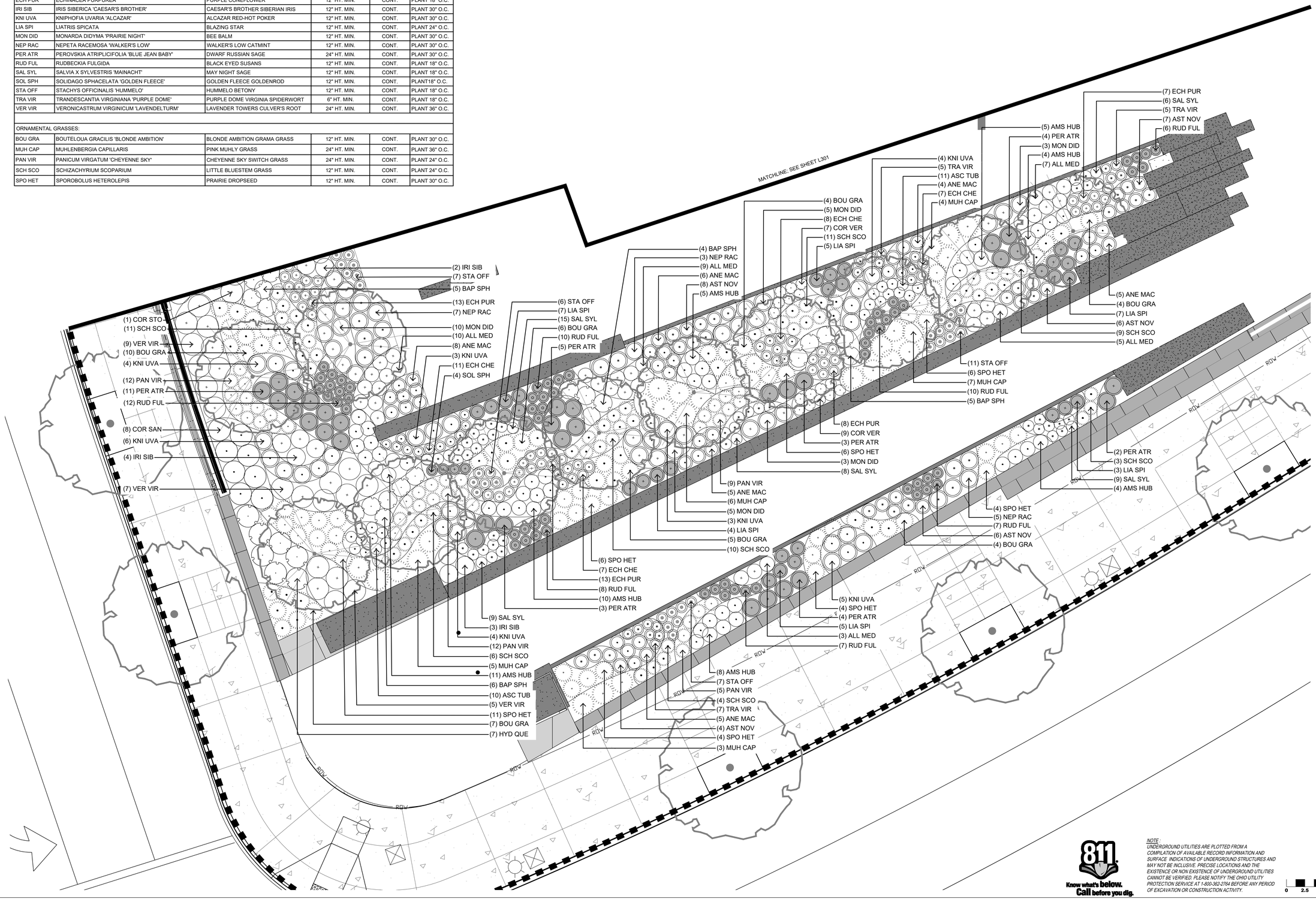
LIMITS OF WORK, TYP.

PLANT MATERIAL

DECIDUOUS TREE, TYP. (6-8 / L303)

SHRUBS, TYP. (3 / L303)

PERENNIALS & ORNAMENTAL GRASSES, TYP. (1/2 / L303)



NOTE :
UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

0 2.5 5 10

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

ISSUES/REVISIONS
1 1/28/2021 50% CONSTRUCTION DOCUMENTS
2 12/17/2021 BP#2 - PARK & GARAGE

ISSUES/REVISIONS (CONT.)

LOT D (25) LOT 24 LOT 27 LOT 23 LOT 28 NORTH

DRAWN BY:
ARCHITECT/ENGINEER:
CHECKED BY:

THE BANKS Public Partnership

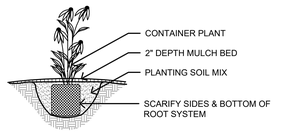
LOT 28 GARAGE AND PARK

DRAWING TITLE
LANDSCAPE ENLARGEMENT PLAN

JOB NUMBER 98090.40
DATE 12/17/2021

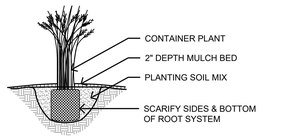
DRAWING NUMBER
L302

H:\2019\190725\002_DWGS_Sheets\190725LND002.dwg, 12/17/2021 11:44:26 AM, _DWG to PDF.pc3



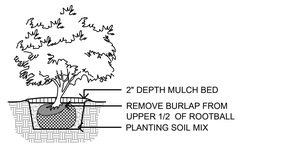
NOTES:
1. REFER TO SPECIFICATION SECTION 329300 - PLANTS AND 329113 - PLANTING SOILS FOR ADDITIONAL INFORMATION.
2. WHEN PLANTING ON GRADE, PLANTING SOIL DEPTH SHALL BE 12" MIN. BY A WIDTH OF THREE TIMES THE DIAMETER OF THE ROOTBALL/CONTAINER.
3. WHEN PLANTING ON STRUCTURE, REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR GRADING PLANS AND TREE PIT DEPTHS.

1 PERENNIAL PLANTING
SCALE: N.T.S.



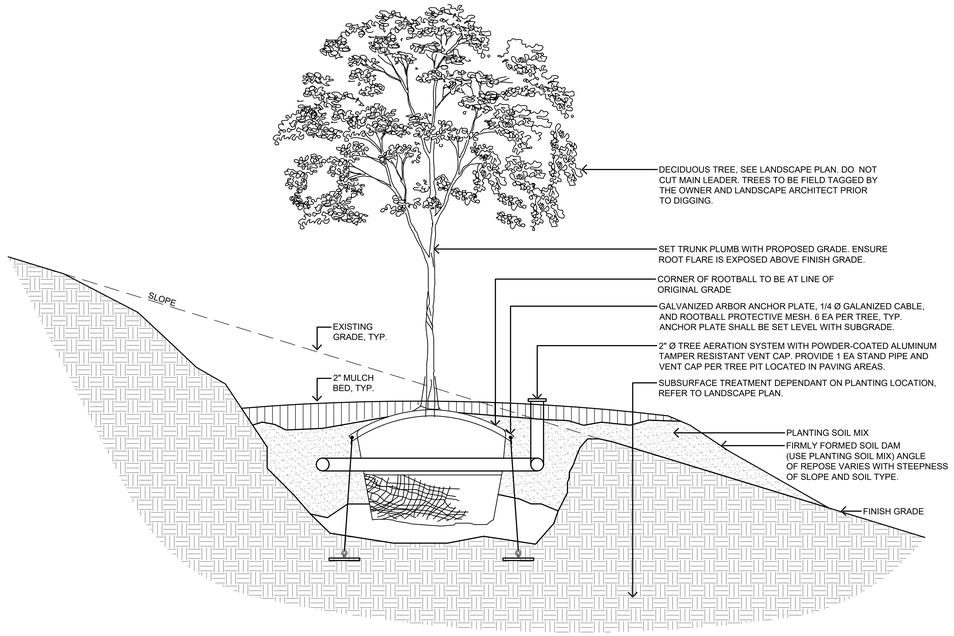
NOTES:
1. REFER TO SPECIFICATION SECTION 329300 - PLANTS AND 329113 - PLANTING SOILS FOR ADDITIONAL INFORMATION.
2. WHEN PLANTING ON GRADE, PLANTING SOIL DEPTH SHALL BE 12" MIN. BY A WIDTH OF THREE TIMES THE DIAMETER OF THE ROOTBALL/CONTAINER.
3. WHEN PLANTING ON STRUCTURE, REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR GRADING PLANS AND TREE PIT DEPTHS.

2 ORNAMENTAL GRASS PLANTING
SCALE: N.T.S.



NOTES:
1. REFER TO SPECIFICATION SECTION 329300 - PLANTS AND 329113 - PLANTING SOILS FOR ADDITIONAL INFORMATION.
2. WHEN PLANTING ON GRADE, PLANTING SOIL DEPTH SHALL BE 12" MIN. BY A WIDTH OF THREE TIMES THE DIAMETER OF THE ROOTBALL/CONTAINER.
3. WHEN PLANTING ON STRUCTURE, REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR GRADING PLANS AND TREE PIT DEPTHS.

3 SHRUB PLANTING
SCALE: N.T.S.



NOTES:
1. TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISHED GRADE.
2. REMOVE ALL LABELS, TAGS, OR OTHER FOREIGN MATERIALS FROM LIMBS.
3. THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES AND TO COMPENSATE FOR THE LOSS OF ROOTS DURING TRANSPLANTING. RETAIN NORMAL SHAPE OF TREE. OWNERS REPRESENTATIVE WILL DETERMINE AMOUNT OF PRUNING NECESSARY.
4. PIT DIAMETER AND DEPTHS SHALL VARY WITH THE TYPE AND SIZE OF THE PLANT, THE SOIL TYPE, AND OTHER SITE CONDITIONS.
5. FOR PLANTING INSTRUCTIONS SEE DECIDUOUS TREE PLANTING DETAIL, THIS SHEET.

8 TREE PLANTING ON A SLOPE
SCALE: N.T.S.

PLANT SCHEDULE :

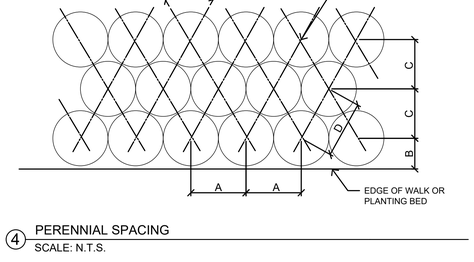
KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS TREES:					
ACE RUB	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	3" CAL.	B&B	SINGLE STEMMED SPECIMEN TREE, MATCHING SPREAD & HEIGHT. OWNER & LANDSCAPE ARCHITECT TO FIELD TAG TREES PRIOR TO DIGGING.
GIN BIL	GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD GINKGO	3" CAL.	B&B	SINGLE STEMMED SPECIMEN TREE, MATCHING SPREAD & HEIGHT. OWNER & LANDSCAPE ARCHITECT TO FIELD TAG TREES PRIOR TO DIGGING.
QUE IMB	QUERCUS IMBRICARIA	SHINGLE OAK	3" CAL.	B&B	SPECIMEN TREE, MATCHING SPREAD & HEIGHT. OWNER & LANDSCAPE ARCHITECT TO FIELD TAG TREES PRIOR TO DIGGING.
SHRUBS:					
COR SAN	CORNUS SANGUINEA 'CATO'	ARCTIC SUN REDTWIG DOGWOOD	18" HT. MIN.	CONT.	PLANT 3' O.C.
COR STO	CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE REDTWIG DOGWOOD	18" HT. MIN.	CONT.	PLANT 3' O.C.
HYD QUE	HYDRANGEA QUERCIFOLIA 'PEE WEE'	PEE WEE OAKLEAF HYDRANGEA	18" HT. MIN.	CONT.	PLANT 3' O.C.
PERENNIALS:					
ALL MED	ALLIUM 'MEDUSA'	MEDUSA ORNAMENTAL ONION	12" HT. MIN.	CONT.	PLANT 24" O.C.
AMS HUB	AMSONIA HUBRICHTII	ARKANSAS AMSONIA	24" HT. MIN.	CONT.	PLANT 24" O.C.
ANE MAC	ANEMONE X 'MACANE001'	WILD SWAN HYBRID ANEMONE	6" HT. MIN.	CONT.	PLANT 24" O.C.
ASC TUB	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	12" HT. MIN.	CONT.	PLANT 18" O.C.
AST NOV	ASTER NOVI-BELGII 'PROFESSOR ANTON KIPPENBERG'	PROFESSOR ANTON KIPPENBERG STER	12" HT. MIN.	CONT.	PLANT 24" O.C.
BAP SPH	BAPTISIA SPHAEROCARPA 'SCREAMIN' YELLOW'	YELLOW WILD INDIGO	12" HT. MIN.	CONT.	PLANT 30" O.C.
COR VER	COREOPSIS VERTICILLATA 'FULL MOON'	FULL MOON TICKSEED	6" HT. MIN.	CONT.	PLANT 18" O.C.
ECH CHE	ECHINACEA PURPUREA 'CHEYENNE SPIRIT'	CHEYENNE SPIRIT CONEFLOWER	12" HT. MIN.	CONT.	PLANT 18" O.C.
ECH PUR	ECHINACEA PURPUREA	PURPLE CONEFLOWER	12" HT. MIN.	CONT.	PLANT 18" O.C.
IRI SIB	IRIS SIBERICA 'CAESAR'S BROTHER'	CAESAR'S BROTHER SIBERIAN IRIS	12" HT. MIN.	CONT.	PLANT 30" O.C.
KNI UVA	KNIPHOFIA UVARIA 'ALCAZAR'	ALCAZAR RED-HOT POKER	12" HT. MIN.	CONT.	PLANT 30" O.C.
LIA SPI	LIATRIS SPICATA	BLAZING STAR	12" HT. MIN.	CONT.	PLANT 24" O.C.
MON DID	MONARDA DIDYMA 'PRAIRIE NIGHT'	BEE BALM	12" HT. MIN.	CONT.	PLANT 30" O.C.
NEP RAC	NEPETA RACEMOSA 'WALKER'S LOW'	WALKER'S LOW CATMINT	12" HT. MIN.	CONT.	PLANT 30" O.C.
PER ATR	PEROVSKIA ATRIPLICIFOLIA 'BLUE JEAN BABY'	DWARF RUSSIAN SAGE	24" HT. MIN.	CONT.	PLANT 30" O.C.
RUD FUL	RUDBECKIA FULGIDA	BLACK EYED SUSANS	12" HT. MIN.	CONT.	PLANT 18" O.C.
SAL SYL	SALVIA X SYLVESTRIS 'MAINACHT'	MAY NIGHT SAGE	12" HT. MIN.	CONT.	PLANT 18" O.C.
SOL SPH	SOLIDAGO SPHACELATA 'GOLDEN FLEECE'	GOLDEN FLEECE GOLDENROD	12" HT. MIN.	CONT.	PLANT18" O.C.
STA OFF	STACHYS OFFICINALIS 'HUMMELO'	HUMMELO BETONY	12" HT. MIN.	CONT.	PLANT 18" O.C.
TRA VIR	TRANDESCANTIA VIRGINIANA 'PURPLE DOME'	PURPLE DOME VIRGINIA SPIDERWORT	6" HT. MIN.	CONT.	PLANT 18" O.C.
VER VIR	VERONICASTRUM VIRGINICUM 'LAVENDELTURM'	LAVENDER TOWERS CULVER'S ROOT	24" HT. MIN.	CONT.	PLANT 36" O.C.
ORNAMENTAL GRASSES:					
BOU GRA	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION GRAMA GRASS	12" HT. MIN.	CONT.	PLANT 30" O.C.
MUH CAP	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	24" HT. MIN.	CONT.	PLANT 36" O.C.
PAN VIR	PANICUM VIRGATUM 'CHEYENNE SKY'	CHEYENNE SKY SWITCH GRASS	24" HT. MIN.	CONT.	PLANT 24" O.C.
SCH SCO	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM GRASS	12" HT. MIN.	CONT.	PLANT 24" O.C.
SPO HET	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	12" HT. MIN.	CONT.	PLANT 30" O.C.

BULB PLANT SCHEDULE :

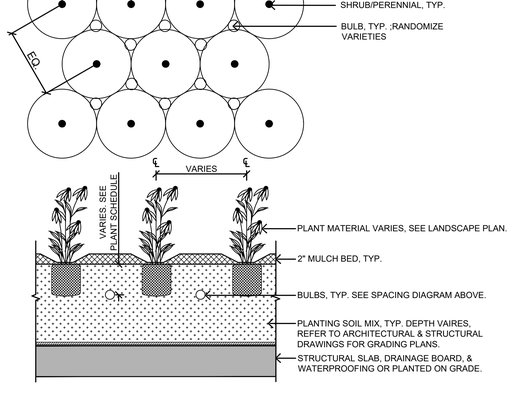
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
BULBS:						
630	ALL AMB	ALLIUM 'AMBASSADOR'	ORNAMENTAL ONION	6" BULB	BULB	PLANT 4-6" O.C. ONLY PLANT IN FALL
630	CRO CRO	CROCOSMIA CROCOSMIIFLORA 'GEORGE DAVIDSON'	MONTBRETIA	4" BULB	BULB	PLANT 4-6" O.C. ONLY PLANT IN FALL
420	CRO TOM	CROCUS TOMMASINIANUS	TOMMASINI'S LILAC CROCUS	2" BULB	BULB	PLANT 3-4" O.C. ONLY PLANT IN FALL
420	GAL NIV	GALANTHUS NIVALIS	SNOWDROPS	2" BULB	BULB	PLANT 3-4" O.C. ONLY PLANT IN FALL
420	TUL PUR	TULIPA 'PURISSIMA BLONDE'	WHITE FOSTERIANA TULIP	5" BULB	BULB	PLANT 4-6" O.C. ONLY PLANT IN FALL
NOTE: BULBS TO BE PLANTED IN ALL PLANT BEDS BETWEEN PERENNIALS AND SHRUBS WHERE POSSIBLE, EXCLUDING TREE PITS ALONG ELM STREET AND MEHRING WAY. BULB VARIETIES ARE TO BE DISTRIBUTED RANDOMLY.						

SPACING	A	B	C	D
12"	12"	6"	10"	12"
18"	18"	8"	15	18"
24"	24"	10"	20"	24"
30"	30"	15"	25"	30"
36"	36"	18"	31"	36"
48"	48"	21"	41"	48"

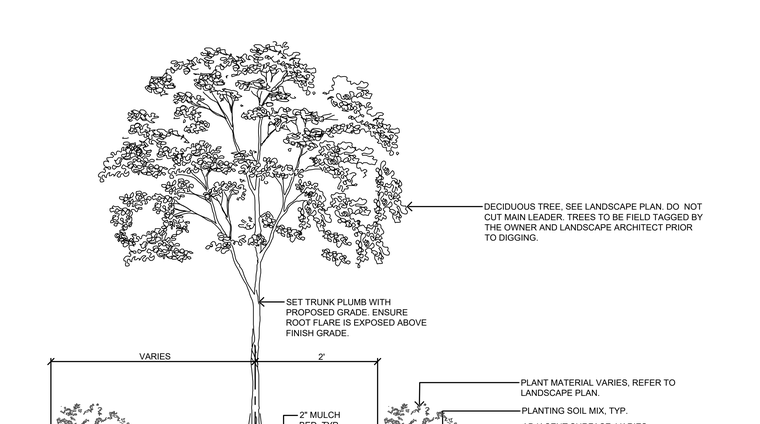
A = SPACING
B = SP/2
C = SP/1.2
D = SPACING



4 PERENNIAL SPACING
SCALE: N.T.S.

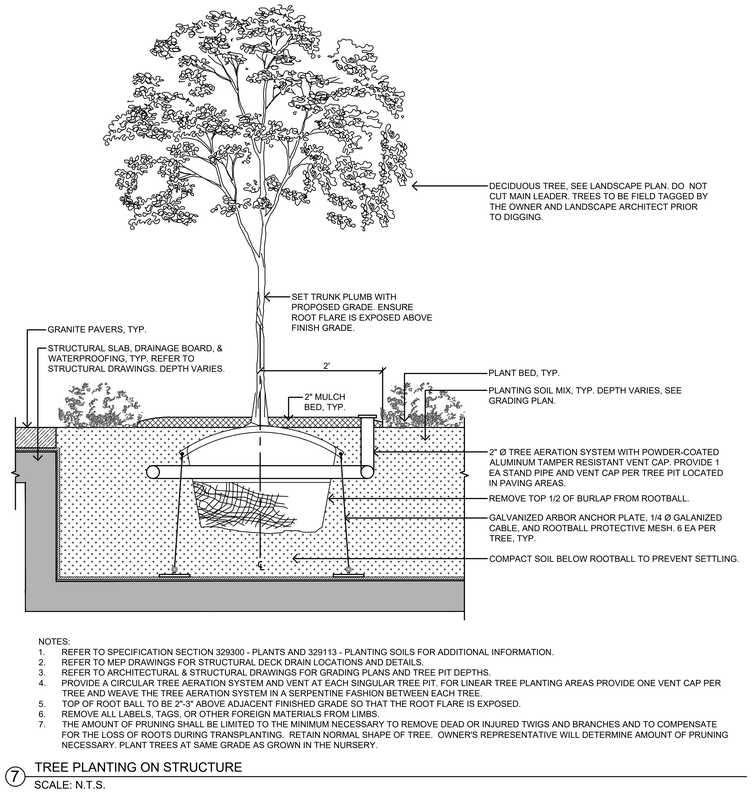


5 BULB SPACING
SCALE: N.T.S.



NOTES.
1. REFER TO SPECIFICATION SECTION 329300 - PLANTS AND 329113 - PLANTING SOILS FOR ADDITIONAL INFORMATION.
2. PLANTING SOIL DEPTH SHALL BE 30" MIN. BY A WIDTH OF THREE TIMES THE DIAMETER OF THE ROOTBALL.
3. PROVIDE A CIRCULAR TREE AERATION SYSTEM AND VENT AT EACH SINGULAR TREE PIT. FOR LINEAR TREE PLANTING AREAS PROVIDE ONE VENT CAP PER TREE AND WEAVE THE TREE AERATION SYSTEM IN A SERPENTINE FASHION BETWEEN EACH TREE.
4. TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISHED GRADE SO THAT THE ROOT FLARE IS EXPOSED.
5. REMOVE ALL LABELS, TAGS, OR OTHER FOREIGN MATERIALS FROM LIMBS.
6. THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES AND TO COMPENSATE FOR THE LOSS OF ROOTS DURING TRANSPLANTING. RETAIN NORMAL SHAPE OF TREE. OWNER'S REPRESENTATIVE WILL DETERMINE AMOUNT OF PRUNING NECESSARY. PLANT TREES AT SAME GRADE AS GROWN IN THE NURSERY.

6 TREE PLANTING ON GRADE
SCALE: N.T.S.



NOTES:
1. REFER TO SPECIFICATION SECTION 329300 - PLANTS AND 329113 - PLANTING SOILS FOR ADDITIONAL INFORMATION.
2. REFER TO MEP DRAWINGS FOR STRUCTURAL DECK DRAIN LOCATIONS AND DETAILS.
3. REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR GRADING PLANS AND TREE PIT DEPTHS.
4. PROVIDE A CIRCULAR TREE AERATION SYSTEM AND VENT AT EACH SINGULAR TREE PIT. FOR LINEAR TREE PLANTING AREAS PROVIDE ONE VENT CAP PER TREE AND WEAVE THE TREE AERATION SYSTEM IN A SERPENTINE FASHION BETWEEN EACH TREE.
5. TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISHED GRADE SO THAT THE ROOT FLARE IS EXPOSED.
6. REMOVE ALL LABELS, TAGS, OR OTHER FOREIGN MATERIALS FROM LIMBS.
7. THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES AND TO COMPENSATE FOR THE LOSS OF ROOTS DURING TRANSPLANTING. RETAIN NORMAL SHAPE OF TREE. OWNER'S REPRESENTATIVE WILL DETERMINE AMOUNT OF PRUNING NECESSARY. PLANT TREES AT SAME GRADE AS GROWN IN THE NURSERY.

7 TREE PLANTING ON STRUCTURE
SCALE: N.T.S.

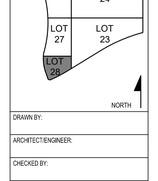
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

ISSUES/REVISIONS		
-	1	11/09/2021
-	2	12/17/2021

50% CONSTRUCTION DOCUMENTS
BPAC - PARK 4 GARAGE
ISSUES/REVISIONS (CONT.)



DRAWN BY:
ARCHITECT/ENGINEER:
CHECKED BY:

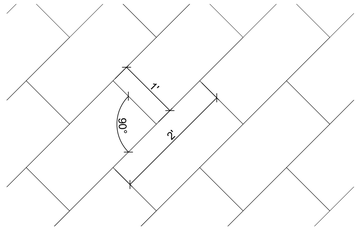
THE BANKS Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE
PLANTING DETAILS

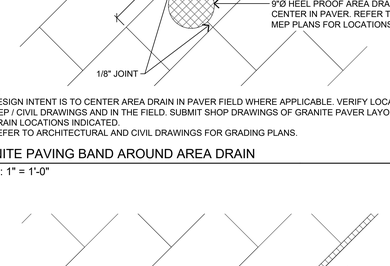
JOB NUMBER: 98090.40
DATE: 12/17/2021
DRAWING NUMBER: **L303**

H:\2019\190725\02_DWG_Sheets\190725LLND002.dwg, 12/17/2021 11:44:47 AM, _DWG To PDF.pc3



NOTES:
1. PAVER SIZE: 12"X24"X2". SALVAGE EXISTING PAVERS FROM AREAS LOCATED ON PLANS.
2. PAVER COLOR TO BE DEER ISLE, MATCH EXISTING.
3. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GRADING PLANS ON STRUCTURE.

1 PAVING PATTERN #1
SCALE: 1" = 1'-0"



NOTES:
1. PAVER SIZE: 18"X36"X2"
2. PAVER COLOR TO BE MESABI BLACK.
3. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

2 PAVING PATTERN #2
SCALE: 1" = 1'-0"

NOTES:
1. PAVER SIZE: 18"X36"X2".
2. PAVER COLOR TO BE PRAIRIE BROWN.
3. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

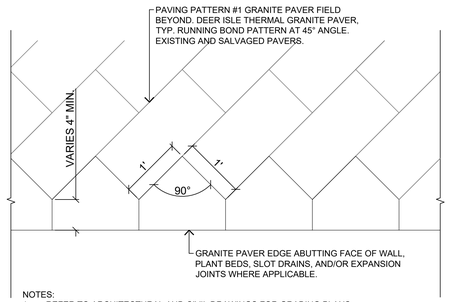
3 PAVING PATTERN #3
SCALE: 1" = 1'-0"

NOTES:
1. DESIGN INTENT IS TO CENTER AREA DRAIN IN PAVER FIELD WHERE APPLICABLE. VERIFY LOCATIONS ON MEP / CIVIL DRAWINGS AND IN THE FIELD. SUBMIT SHOP DRAWINGS OF GRANITE PAVER LAYOUT WITH DRAIN LOCATIONS INDICATED.
2. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

4 GRANITE PAVING BAND AROUND AREA DRAIN
SCALE: 1" = 1'-0"

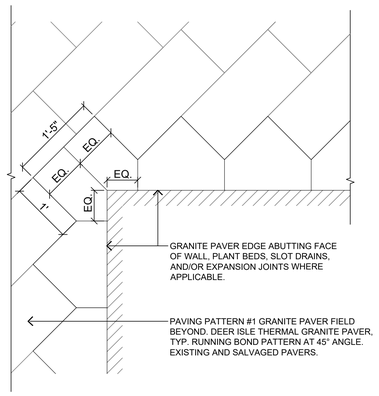
NOTES:
1. REFER TO ARCHITECTURAL AND CIVIL PLANS FOR SLOT DRAIN, CLEANOUT LOCATIONS, AND GRADING PLANS.

5 PAVER AT SLOT DRAIN CLEANOUT ACCESS
SCALE: 1" = 1'-0"



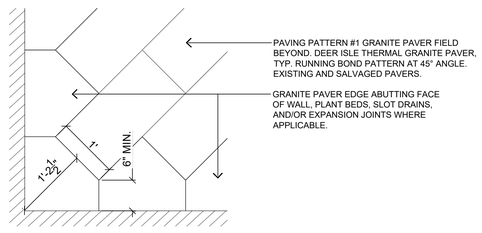
NOTES:
1. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

6 GRANITE PAVER EDGE CONDITION #1
SCALE: 1" = 1'-0"



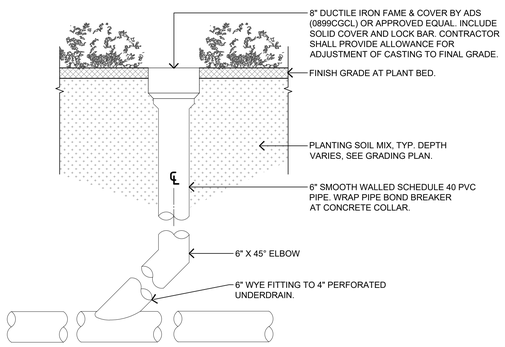
NOTES:
1. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

7 GRANITE PAVER EDGE CONDITION #2
SCALE: 1" = 1'-0"

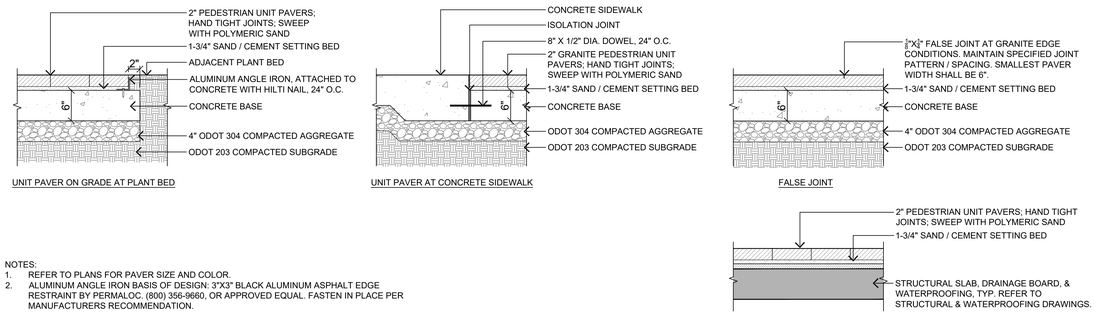


NOTES:
1. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

8 GRANITE PAVER EDGE CONDITION #3
SCALE: 1" = 1'-0"

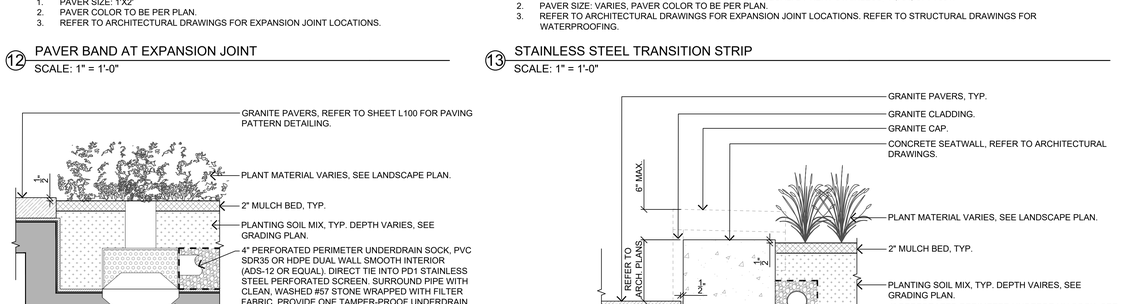


9 UNDERDRAIN CLEANOUT
SCALE: N.T.S.



NOTES:
1. REFER TO PLANS FOR PAVER SIZE AND COLOR.
2. ALUMINUM ANGLE IRON BASIS OF DESIGN: 3"X3" BLACK ALUMINUM ASPHALT EDGE RESTRAINT BY PERMALOC. (800) 356-9660, OR APPROVED EQUAL. FASTEN IN PLACE PER MANUFACTURERS RECOMMENDATION.

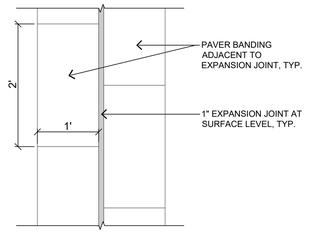
10 GRANITE PAVER SECTIONS
SCALE: 1" = 1'-0"



NOTES:

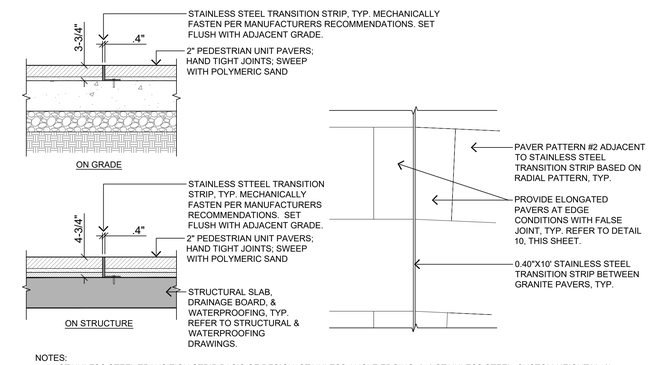
1. CONCRETE WALKS TO BE INSTALLED PER DETAIL AND DOTE STANDARD DRAWINGS WITH THE BELOW LISTED EXCEPTIONS.
2. INSTALL EXPANSION JOINTS AT 50' OC MAXIMUM AND WHERE SLAB ABUTS STRUCTURES. WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXISTING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT. EXPANSION JOINTS SHALL BE 1/2" WIDE BY DEPTH OF SLAB. SEAL ALL EXPANSION JOINTS.
3. INSTALL CONTROL JOINTS AT AS SHOWN ON PLAN, 12' OC MAXIMUM. CONTROL JOINTS SHALL BE 3/8" WIDE BY 1 1/2" DEEP AND SAWED.
4. WALK SHALL HAVE A MINIMUM CROSS SLOPE OF 1.00%, MAXIMUM CROSS SLOPE OF 2.00%.
5. WATER AND UTILITY BOXES IN THE WALK AREA SHALL BE ADJUSTED FLUSH WITH THE FINAL SURFACE.
6. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL DETAIL AT ALL BUILDING DOORS.
7. JOINTING SHOP DRAWING MUST BE SUBMITTED FOR APPROVAL.

11 CONCRETE SIDEWALK AND JOINTS
SCALE: N.T.S.



NOTES:
1. PAVER SIZE: 1'X2'
2. PAVER COLOR TO BE PER PLAN.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXPANSION JOINT LOCATIONS.

12 PAVER BAND AT EXPANSION JOINT
SCALE: 1" = 1'-0"



NOTES:
1. STAINLESS STEEL TRANSITION STRIP BASIS OF DESIGN: STAINLESS ANGLE EDGING, 316 STAINLESS STEEL, CUSTOM HEIGHT X 10' LENGTH X .4" THICKNESS, FLAT TOP; OR APPROVED EQUAL. BY KENT STAINLESS, 1 (781) 374-7391.
2. PAVER SIZE: VARIES. PAVER COLOR TO BE PER PLAN.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXPANSION JOINT LOCATIONS. REFER TO STRUCTURAL DRAWINGS FOR WATERPROOFING.

13 STAINLESS STEEL TRANSITION STRIP
SCALE: 1" = 1'-0"

NOTES:
1. REFER TO SPECIFICATION SECTION 329300 - PLANTS AND 329113 - PLANTING SOILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL AND MEP DRAWINGS FOR STRUCTURAL DECK DRAIN LOCATIONS AND DETAILS.
3. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

14 UNDERDRAIN & SUBSURFACE PLANTER DRAIN DETAIL (PD1)
SCALE: 1" = 1'-0"

NOTES:
1. REFER TO SPECIFICATION SECTION 329300 - PLANTS AND 329113 - PLANTING SOILS FOR ADDITIONAL INFORMATION.
2. REFER TO ARCHITECTURAL AND MEP DRAWINGS FOR STRUCTURAL DECK DRAIN LOCATIONS AND DETAILS.
3. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR GRADING PLANS.

15 CONCRETE PLANTER WALL
SCALE: 1" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

ISSUES/REVISIONS (JOINT)

ISSUES/REVISIONS
1	11/09/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	SPEC, PARK & GARAGE

DRAWN BY:
ARCHITECT/ENGINEER:
CHECKED BY:

THE BANKS Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE
DETAILS

JOB NUMBER: 98090.40
DATE: 12/17/2021

DRAWING NUMBER
L400

H:\2019\190725\002_DWG_Sheets\190725LDTL002.dwg, 12/17/2021 11:44:56 AM, _DWG To PDF.pc3

CONSTRUCTION NOTES:

1. IRRIGATION CONTROLLER AND BACKFLOW PREVENTER TO BE LOCATED IN HAMILTON COUNTY ELECTRICAL ROOM / MECHANICAL ROOM UNDER THE RACE STREET TURNAROUND. REFER TO MEP PLANS FOR EXACT LOCATIONS.
2. GENERAL LOCATIONS OF WATER SUPPLY LINE PENETRATING PARKING GARAGE BASEMENT WALL TO FEED IRRIGATION SYSTEM. REFER TO MEP PLANS.

IRRIGATION NOTES

1. BASIS OF DESIGN: ASSUME 1" WATER SERVICE WITH 70 PSI AT 23 GPM REQUIRED IMMEDIATELY AFTER THE METER/BACKFLOW ASSEMBLY.
2. MAINLINE STUB TO BE PROVIDED BY THE MEP CONTRACTOR. WATERPROOFING OF PENETRATIONS PER STRUCTURAL / WATERPROOFING PLANS.
3. IRRIGATION CONTRACTOR IS RESPONSIBLE TO VERIFY ACTUAL CONDITIONS BEFORE STARTING INSTALLATION. IF PRESSURE CONDITIONS CANNOT BE MET, FIELD ADJUSTMENT MAY BE NECESSARY, SUCH AS AN ADDITION OF A BOOSTER PUMP.
4. THIS IRRIGATION ZONE PLAN IS DIAGRAMMATIC AND ONLY SHOWS AREAS TO BE IRRIGATED. CONTRACTOR TO DESIGN SYSTEM TO ENSURE FULL IRRIGATION COVERAGE ON AREAS SHOWN TO BE IRRIGATED.
5. IRRIGATION CONTRACTOR TO COORDINATE WITH MEP THE SIZE OF THE TAP AND THE LOCATION OF THE POINT OF CONNECTION PRIOR TO CONSTRUCTION. SEE MEP DRAWINGS.
6. THE IRRIGATION SYSTEM SHALL BE INSTALLED USING ACCEPTED AND QUALITY INSTALLATION STANDARDS AS USED IN THE INDUSTRY.
7. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BE FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, STRUCTURES, AND UTILITIES AND MAKE THE NECESSARY ADJUSTMENTS TO ACCOMMODATE THE IRRIGATION SYSTEM. ANY OBSTRUCTIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY COSTS.
8. MAINLINE PIPING ON-GRADE SHALL BE BURIED A MINIMUM OF 12" OF COVER AND A MAXIMUM OF 18" OF COVER. LATERAL LINE PIPING A MINIMUM OF 12" COVER. ALL BACKFILL SURROUNDING THE PIPE SHALL BE SCREENED AND CLEANED OF MATERIAL NO LARGER THAN 1" IN SIZE.
9. IRRIGATION CONTRACTOR SHALL PROVIDE FIRST WINTERIZATION AND SPRING TURN ON IN BID.
10. FOR PLANTING PLANS AND DETAILS, REFER TO LANDSCAPE PLAN.
11. IRRIGATION CONTRACTOR TO COORDINATE ALL SLEEVES NECESSARY TO BE CONSTRUCTED PRIOR TO PARKING LOT AND SIDEWALK CONSTRUCTION.
12. THE GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE POWER TO THE IRRIGATION CONTROLLER, SET METER, ALL SLEEVES, TAP, BACKFLOW PREVENTION DEVICE AND TO GAIN ANY AND ALL PERMITTING. IRRIGATION CONTRACTOR TO COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR.
13. WATER FROM IRRIGATION SHALL NOT ENCROACH ON PAVEMENTS.
14. ALL AREAS PLANTED WITH SHRUBS, PERENNIALS, AND ORNAMENTAL GRASSES SHALL USE DRIP TUBING.

LEGEND

- LIMITS OF WORK, TYP.
- AREA TO BE IRRIGATED WITH SPRAY ZONES

811 Know what's below. Call before you dig.

NOTE:
UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

0 5 10 20

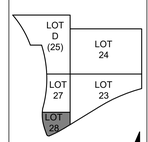
HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

THE KLEINGERS GROUP
CIVIL ENGINEERING
SURVEYING
LANDSCAPE ARCHITECTURE
www.kleingers.com
9219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

ISSUES/REVISIONS		
1	11/05/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BPR1 - PARK & GARAGE

ISSUES/REVISIONS (CONT.)		



DRAWN BY:

ARCHITECT/ENGINEER:

CHECKED BY:

THE BANKS
Public Partnership

LOT 28 GARAGE AND PARK

DRAWING TITLE

IRRIGATION ZONE PLAN

JOB NUMBER: 98090.40
DATE: 12/17/2021

DRAWING NUMBER

L500

H:\2019\190725\002_DWGs_Sheets\190725LIR002.dwg, 12/17/2021 11:45:03 AM, _DWG To PDF.pc3

GENERAL STRUCTURAL NOTES:

A. CODES AND SPECIFICATIONS

1. CINCINNATI, OHIO BUILDING CODE, 2017.
2. ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
3. ACI 301-16 STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE.
4. ANSI/AISC 303-16 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.
5. ANSI/AWS - STRUCTURAL WELDING CODE - STEEL D1.1.

B. FOUNDATIONS

1. THE FOUNDATION DESIGN IS BASED UPON THE RECOMMENDATIONS INCLUDED IN THE GEOTECHNICAL INVESTIGATION PREPARED BY TERRACON, DATED MARCH 10, 2015 AND SEPTEMBER 10, 2021.
2. FOUNDATION ELEVATIONS SHOWN ARE ESTIMATED AND ARE FOR BIDDING PURPOSES ONLY, AND MAY VARY TO SUIT SUBSURFACE SOIL CONDITIONS.
3. FOUNDATIONS DESIGNED FOR 18" DIAMETER, AUGERED, CAST-IN-PLACE CONCRETE PILES WITH MINIMUM 125 TON CAPACITY.
4. SPREAD FOOTINGS ARE DESIGNED FOR A MAXIMUM ALLOWABLE BEARING PRESSURE OF 2000 PSF WITHIN STRUCTURAL FILL. SOILS UNSUITABLE FOR SUPPORTING FOUNDATIONS SHALL BE REMOVED AS DIRECTED BY THE GEOTECHNICAL ENGINEER, AND BACKFILLED TO DESIGN BEARING ELEVATION WITH LEAN CONCRETE.
5. ALL BEARING SURFACES SHALL BE UNDISTURBED, LEVEL (WITHIN 1 IN 12), AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.
6. ALL FOOTINGS, CAPS AND GRADE BEAMS ARE TO BE POURED NEAT AGAINST EARTH BANKS (WITHOUT SIDE FORMS) UNLESS APPROVED OTHERWISE BY BOTH THE GEOTECHNICAL AND STRUCTURAL ENGINEERS. WHERE EARTH CUTS WILL NOT STAND, SIDES SHALL BE FORMED AND BACKFILLED WITH COMPACTED MATERIAL, SUBJECT TO ENGINEERS' APPROVAL.
7. SET COLUMN DOWELS WITH TEMPLATE PRIOR TO CONCRETING.

C. CONCRETE

1. CONCRETE STRENGTHS:
   a. 4500 PSI: FOOTINGS, PILE CAPS, AND GRADE BEAMS.
   b. 5000 PSI (AE): LOT 28 PODIUM ELEVATED SLAB WITH MEMBRANE PROTECTION, SLABS ON GRADE, WALLS, RAILS, EXTERIOR TOPPING SLABS, AND OTHER CONCRETE WITH EXTERIOR EXPOSURE.
   c. 5000 PSI (AE) COLUMNS AND SHEAR WALLS.
   d. 1500 PSI: BACKFILL CONCRETE.
2. PROVIDE 3/4" BEVELS AT CORNERS OF ALL COLUMNS, EDGES OF EXPOSED BEAMS AND SLABS, AND TOP EDGES AND CORNERS OF EXPOSED WALLS.
3. LENGTH OF SLAB POUR BETWEEN CONSTRUCTION JOINTS SHALL NOT EXCEED 120 FEET. MAXIMUM AREA OF SLAB POURS NOT TO EXCEED 14,000 SF.
4. JOINTS NOT INDICATED ON STRUCTURAL DRAWINGS ARE NOT PERMITTED UNLESS APPROVED BY STRUCTURAL ENGINEER. LOCATIONS OF ALL CONSTRUCTION JOINTS TO BE SUBMITTED TO STRUCTURAL ENGINEER FOR APPROVAL.
5. PERMANENT LOADS, SUCH AS MASONRY WALLS, SHALL NOT BE PLACED ON SUPPORTED SLABS UNTIL CONCRETE HAS REACHED SPECIFIED STRENGTH AND ALL SHORING HAS BEEN REMOVED.
6. PLACE NO OPENINGS, SLEEVES, INSERTS, ETC. IN CONCRETE WORK UNLESS CRITERIA INDICATED ON STRUCTURAL DRAWINGS IS MET, OR APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. METAL SLEEVES OR CONDUIT ARE NOT PERMITTED IN PODIUM LEVEL EXTERIOR.

D. REINFORCING STEEL

1. ALL REINFORCING: 60 KSI YIELD.
2. PROVIDE CLASS 'B' TENSION SPLICES UNLESS OTHERWISE NOTED.
3. CLEARANCES BETWEEN REINFORCING BARS AND CONCRETE SURFACES SHALL BE ACI MINIMUM UNLESS OTHERWISE NOTED. PROVIDE SPACERS ON OUTER LAYERS OF WALL REINFORCING TO MAINTAIN SPECIFIED COVER.
4. PROVIDE EPOXY COATED REINFORCING FOR ALL BARS FULLY OR PARTIALLY EMBEDDED IN SLABS AND BEAMS OF EXTERIOR SLAB WITHOUT MEMBRANE PROTECTION, ALL COLUMNS, AND OTHER BARS AS NOTED.
5. PROVIDE MATERIAL AND PLACEMENT OF ONE AND ONE HALF (1.5) TONS CONTINGENCY STEEL. SIZE OF BARS TO BE MIXED. HALF FOR FOUNDATION PACKAGE, AND HALF FOR PODIUM FRAMING PACKAGE, BARS ARE TO BE CUT, BENT AND PLACED AS DIRECTED BY THE ENGINEER. .

E. MECHANICAL LOADS SUPPORTED FROM STRUCTURE

1. LOADS ARE TO BE DISTRIBUTED TO THE STRUCTURE IN A MANNER THAT DOES NOT EXCEED THE LOAD ALLOWANCES NOTED UNDER DESIGN LOADS. ANCHORS ARE TO HAVE AN ULTIMATE SAFETY FACTOR OF AT LEAST 4.0.

F. COORDINATION

1. CONTRACTOR SHALL COMPLETE ALL WORK REQUIRED AND NECESSARY FOR THE PROJECT IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, DRAWINGS, AND REFERENCED STANDARDS. THE SPECIFICATIONS AND DRAWINGS COMPLEMENT EACH OTHER. THE CONTRACTOR SHALL THOROUGHLY REVIEW BOTH BEFORE PROCEEDING WITH ANY WORK.
2. UNLESS OTHERWISE NOTED, DETAILS, SECTIONS AND NOTES ON THE STRUCTURAL DRAWINGS ARE INTENDED TO APPLY TO SIMILAR SITUATIONS ELSEWHERE.
3. ALL FRAMING PLANS ARE TYPICALLY DRAWN AS REFLECTED PLANS SHOWING BEAMS, WALLS, AND COLUMNS ON THE UNDERSIDE OF THE LEVEL SHOWN.
4. ALL FRAMING MEMBERS PROVIDED FOR MECHANICAL TRADES, EQUIPMENT SUPPORT, ELEVATOR SUPPORT BEAMS, LINTELS, ROOF OPENINGS, ETC., ARE FOR BIDDING PURPOSES ONLY. SUBMIT MANUFACTURER'S DATA FOR THE ACTUAL PROPOSED EQUIPMENT TO STRUCTURAL ENGINEER FOR VERIFICATION OR REDESIGN OF SUPPORTS PRIOR TO PREPARING SHOP DRAWINGS.
5. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL DETAILS, DIMENSIONS, EMBEDDED ITEMS, SLEEVES, FLOOR PITCHES, DEPRESSIONS AND FILLS. OPENING SIZES AND LOCATIONS FOR PIPES, DUCTS, ETC., WHEN SHOWN, ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED WITH MECHANICAL, ELECTRICAL, PLUMBING AND OTHER COORDINATION DRAWINGS AS APPLICABLE.
6. SHOP DRAWINGS AND INSTALLATION DRAWINGS SHALL BE PREPARED AND SUBMITTED FOR REVIEW. SUBMITTALS PREPARED BY SUPPLIERS AND SUB CONTRACTORS SHALL BE REVIEWED BY THE TRADE CONTRACTOR AND GENERAL CONTRACTOR OR CONSTRUCTION MANAGER PRIOR TO SUBMITTING TO ARCHITECT/ENGINEER.
   a. FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS WHICH AFFECT FABRICATION AND SHOW ON SHOP DRAWINGS.
   b. AND SHOW EXACT SIZE AND LOCATION OF ALL FLOOR, WALL AND ROOF OPENINGS, SLAB EDGES, EMBEDDED ANCHORS AND OTHER ITEMS.
   c. AND LOCATE ALL MECHANICAL SLEEVES, EMBEDS, DRAINS, ETC. ON COORDINATION DRAWINGS. ITEMS NOT SUBMITTED FOR REVIEW TO THE STRUCTURAL ENGINEER ARE NOT PERMITTED IN OR THROUGH THE STRUCTURE.
   d. COMPLETE SHOP DRAWINGS WITH MANUFACTURERS' DATA, ETC. SHOW ALL CONNECTIONS AND DETAILS NECESSARY TO FULLY DESCRIBE AND PROPERLY INSTALL THE WORK.
   e. ENGINEER'S REVIEW SHALL BE FOR GENERAL ARRANGEMENT AND CONFORMANCE WITH THE STRUCTURAL INTENT ONLY.
7. THE SPECIFICATIONS AND STRUCTURAL DRAWINGS TYPICALLY REFER TO THE FINISHED STRUCTURE. UNLESS NOTED OTHERWISE, THEY DO NOT PRESCRIBE THE METHOD OF CONSTRUCTION.
8. BRACE ENTIRE STRUCTURE AND PORTIONS THEREOF AS REQUIRED TO MAINTAIN STABILITY UNTIL COMPLETE AND FUNCTIONING AS THE DESIGNED UNIT.
9. DO NOT BACKFILL FOUNDATION WALLS SPANNING BETWEEN BASEMENT SLABS AND STRUCTURAL FLOORS UNTIL SUPPORTING SLABS ARE IN PLACE.
10. BRACE WALLS WHICH ARE TIED TO SLAB ON GRADE FOR TOP LATERAL SUPPORT BEFORE BACKFILLING AND UNTIL SLAB ON GRADE HAS ATTAINED SPECIFIED STRENGTH.
    a. PIPE AND CONDUIT PENETRATIONS ARE TO BE SLEEVED WHEREVER POSSIBLE. CORE DRILLING OF BEAMS AND COLUMNS IS NOT PERMITTED. CORE DRILLING OF SLABS AND WALLS IS NOT PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
    b. WHERE BEAMS OF VARIOUS DEPTHS FRAME INTO A COLUMN, PROVIDE A CONSTRUCTION JOINT AT THE BOTTOM OF THE LOWEST BEAM.
    c. ALL CONDUITS IN GARAGE ARE TO BE SURFACE MOUNTED.
11. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.
12. THE ARCHITECT'S AND ENGINEER'S OBSERVATION AND REVIEW OF CONTRACTORS' PERFORMANCE DOES NOT INCLUDE REVIEW OF ADEQUACY OF CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

G. CONSTRUCTION

1. BRACE ENTIRE STRUCTURE AS REQUIRED TO MAINTAIN STABILITY UNTIL COMPLETE AND FUNCTIONING AS THE DESIGNED UNIT.
2. DO NOT BACKFILL FOUNDATION WALLS SPANNING BETWEEN BASEMENT SLABS AND STRUCTURAL FLOORS UNTIL SUPPORTING SLABS ARE IN PLACE.
3. BRACE WALLS WHICH ARE TIED TO SLAB ON GRADE FOR TOP LATERAL SUPPORT BEFORE BACKFILLING AND UNTIL SLAB ON GRADE HAS ATTAINED SPECIFIED STRENGTH.
4. WHERE BEAMS OF VARIOUS DEPTHS FRAME INTO A COLUMN, PROVIDE A CONSTRUCTION JOINT AT THE BOTTOM OF THE LOWEST BEAM.
5. VERIFY EXACT SIZE AND LOCATION OF ALL WALL, FLOOR, AND ROOF OPENINGS PRIOR TO SUBMISSION OF SHOP DRAWINGS. SHOW ALL OPENINGS ON SHOP DRAWINGS.
6. ALL CONDUITS IN GARAGE ARE TO BE SURFACE MOUNTED.

H. DESIGN LOADS

1. LIVE LOAD
   PODIUM LEVEL: 100 PSF.
2. SUPERIMPOSED DEAD LOADS
   CEILING AND MECHANICAL ALLOWANCE: 5 PSF
   SUPERIMPOSED DEAD LOAD: 80 PSF TYPICAL
   480 PSF AT PLANTER PIT
3. SNOW LOAD
   GROUND SNOW LOAD: P_g = 20 PSF
   FLAT ROOF SNOW LOAD: P_f = 20 PSF
   SNOW EXPOSURE FACTOR: C_e = 1.0
   SNOW LOAD IMPORTANCE FACTOR: I_S = 1.10
   THERMAL FACTOR: C_t = 1.2
4. WIND LOAD
   BASIC WIND SPEED (3-SECOND GUST): Vult = 120 MPH; Vasd = 93 MPH
   RISK CATEGORY: II
   WIND EXPOSURE: C
   INTERNAL PRESSURE COEFFICIENT: ENCLOSED BUILDING, GCpi = ± .18
5. EARTHQUAKE DESIGN DATA
   RISK CATEGORY: II
   SEISMIC IMPORTANCE FACTOR: I_E = 1.0
   MAPPED SPECTRAL RESPONSE ACCELERATION: S_S = 0.145
   MAPPED SPECTRAL RESPONSE ACCELERATION: S_1 = 0.078
   SPECTRAL RESPONSE COEFFICIENT: S_{DS} = 0.154
   SPECTRAL RESPONSE COEFFICIENT: S_{D1} = 0.125
   SITE CLASS: D
   SEISMIC DESIGN CATEGORY: B
   BASIC SEISMIC FORCE RESISTING SYSTEM: ORDINARY CONCRETE SHEAR WALL
   SEISMIC RESPONSE COEFFICIENT: C_S=0.0516
   DESIGN BASE SHEAR: 196 KIPS
   ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PER ASCE 7.
6. FLOOD DESIGN DATA
   ZONE AE PER FLOOD INSURANCE RATE MAP (FIRM) NUMBER 39061C0307D
   DESIGN FLOOD ELEVATION: 499.2' (DFE)
   ELEVATION OF LOWEST FLOOR: 500'
   FOR FULLY ENCLOSED AREA BELOW DFE, ENGINEERED OPENING IS DESIGNED TO PROVIDE EQUALIZATION OF HYDROSTATIC FLOOD FORCES PER ASCE 24, SECTION 2.6.2.2.

I. QUALITY ASSURANCE

1. THE OWNER SHALL EMPLOY QUALIFIED SPECIAL INSPECTORS TO PERFORM INSPECTIONS IN ACCORDANCE WITH OBC CHAPTER 17 AS A MINIMUM. THE ITEMS REQUIRING SPECIAL INSPECTION ON THIS PROJECT INCLUDE THE FOLLOWING:
   a. AUGER CAST PILING: ALL PILING WORK. SEE SPEC SECTION 316310.
   b. CONCRETE: ALL CONCRETE WORK. SEE SPEC SECTION 033000.
   c. REINFORCING: ALL REINFORCING WORK. SEE SPEC SECTION 033000.
2. SPECIAL INSPECTORS SHALL BE QUALIFIED BY TRAINING AND EXPERIENCE FOR THE REQUIRED INSPECTIONS AND MUST BE ACCEPTABLE TO THE BUILDING OFFICIAL. INSPECTORS SHALL THOROUGHLY REVIEW THE APPLICABLE PORTIONS OF THE DOCUMENTS.
3. THE STRUCTURAL ENGINEER WILL GENERALLY REVIEW THE PROGRESS OF THE WORK, BUT HIS REVIEW SHALL NOT BE CONSTRUED AS SPECIAL INSPECTION.

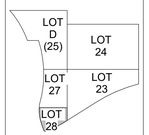
HAMILTON COUNTY
RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

ISSUES/REVISIONS		
1	11/05/2021	BP#1 - GARAGE FOUNDATIONS AND SITE PREPARATION
2	11/08/2021	95% CONSTRUCTION DOCUMENTS
3	11/12/2021	BP#1 PERMIT SET
4	12/17/2021	BP#2 - PARK & GARAGE



TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
J.Y.

THE BANKS
Public Partnership

DRAWING TITLE

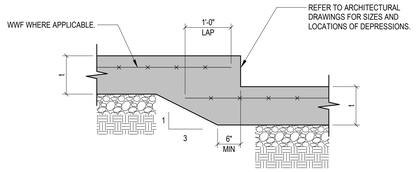
GENERAL NOTES AND TYPICAL DETAILS

JOB NUMBER 98090.40

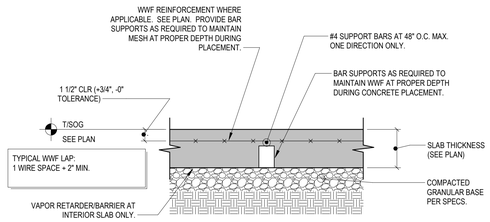
DATE 12/17/2021

DRAWING NUMBER

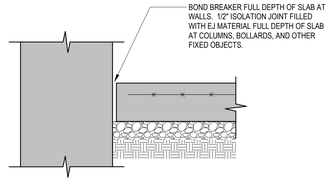
S001



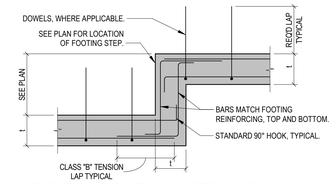
S.O.G. DEPRESSION



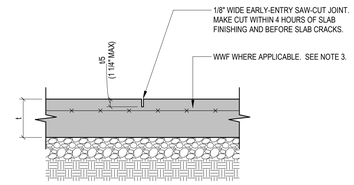
TYPICAL S.O.G.



ISOLATION JOINT AT WALLS AND COLUMNS

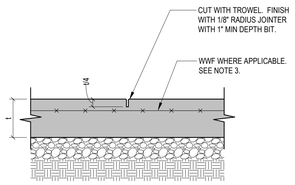


TYPICAL FOOTING STEP IN ROCK (8 KSF OR GREATER BEARING MATERIAL)



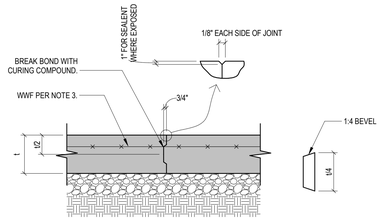
SAWED CONTROL JOINT

(APPLIES TO INTERIOR SLABS UNLESS NOTED OTHERWISE)



TOOLED CONTROL JOINT

(APPLIES TO EXTERIOR SLABS UNLESS NOTED OTHERWISE. ALTERNATIVELY USE SAW-CUT JOINT WITH PRIOR APPROVAL)

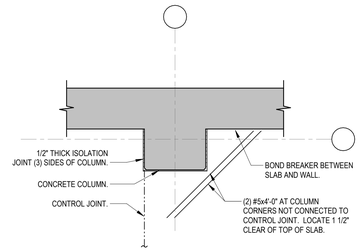


KEYED CONSTRUCTION JOINT

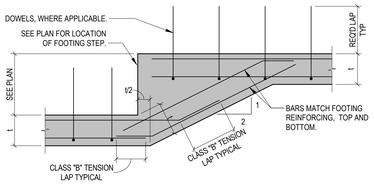
(APPLIES TO SLABS REINFORCED WITH WWF)

NOTES:
1. REFER TO ARCHITECTURAL DRAWINGS FOR JOINTS AT EXTERIOR PAVEMENTS.
2. PROVIDE CONTROL (OR CONSTRUCTION) JOINTS AT ALL COLUMN LINES. ADDITIONALLY PROVIDE CONTROL JOINTS AT MAXIMUM SPACING OF 15'-0" EACH WAY UNLESS OTHERWISE NOTED. ALIGN CONTROL JOINTS WITH RE-ENTRANT CORNERS WHEREVER POSSIBLE. CONTRACTOR SHALL SUBMIT A JOINTING PLAN TO ARCHITECT FOR REVIEW.
3. CUT OUT 4" LENGTH OF EVERY OTHER WIRE AT ALL LOCATIONS WHERE WWF CROSSES CONTROL JOINTS AND KEYED CONTSTRUCTION JOINTS.
4. WHERE APPLICABLE, CONTROL AND CONSTRUCTION JOINTS SHALL BE ALIGNED WITH TILE JOINTS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS.
5. REFER TO SPECIFICATIONS FOR GRANULAR BASE AND VAPOR RETARDER/BARRIER REQUIREMENTS.

SLAB ON GRADE DETAILS

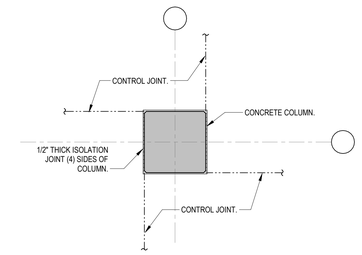


PERIMETER COLUMN



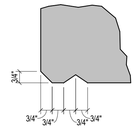
TYPICAL FOOTING STEP IN CLAY OR FILL

TYPICAL FOOTING STEPS



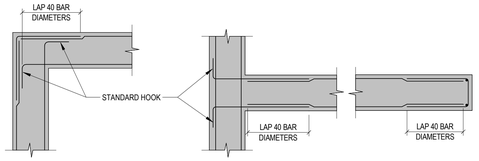
INTERIOR COLUMN

SLAB ON GRADE CONTROL JOINTS AT COLUMNS



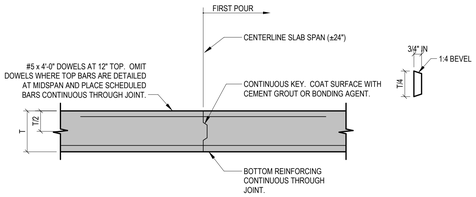
NOTE:
1. CHAMFER IS REQUIRED AT ALL FORMED CORNERS OF EXPOSED CONCRETE.
2. DRIP IS REQUIRED AT BOTTOM EDGES OF ALL SLABS AND BEAMS WHERE VERTICAL SURFACE IS EXPOSED TO RAIN AND AT OTHER LOCATIONS AS NOTED.

TYPICAL CHAMFER AND DRIP EDGE

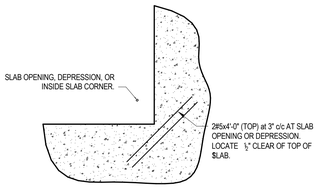


NOTES:
1. CORNER, HOOK, AND U-BARS MATCH HORZONTAL REINFORCEMENT IN SIZE AND SPACING.
2. FOR SINLGE LAYER WALLS USE SINGLE BARS AS SHOWN.

TYPICAL BARS AT WALL AND FOOTING CORNERS AND INTERSECTIONS

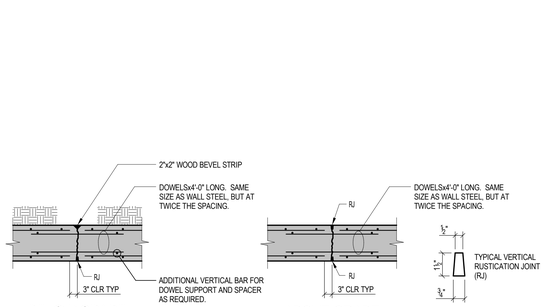


SLAB CONSTRUCTION JOINT



NOTE: DETAIL APPLIES AT BOTH ELEVATED SLABS AND SLABS ON GRADE U.N.O.

TYPICAL BARS AT SLAB CORNER



BEAM

BELOW GRADE

ABOVE GRADE

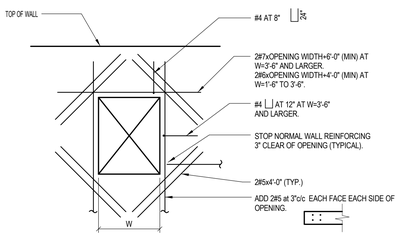
MAXIMUM ALLOWABLE LOADING WITHOUT SPECIAL APPROVAL		
MARK	PRESET INSERTS - EMBEDDED (MAXIMUM LOAD)	AFTERSET INSERTS - DRILLED OR SHOT (MAXIMUM LOAD)
(A)	300 POUNDS	200 POUNDS
(B)	2000 POUNDS	200 POUNDS
(C)	1500 POUNDS	150 POUNDS

NOTES:
1. INSERTS MUST NOT INTERFERE WITH REINFORCEMENT.
2. MANUFACTURER'S LOAD TABLES OR DESIGN INFORMATION MUST BE SUBMITTED TO INDICATE CAPACITY OF INSERT FOR THE SPECIFIC INSTALLATION.
3. REFER TO DESIGN LOADS IN GENERAL NOTES FOR MAXIMUM UNIFORM ALLOWABLE LOAD FOR CEILING AND MISCELLANEOUS MATERIALS.

TYPICAL HANGING LOADS

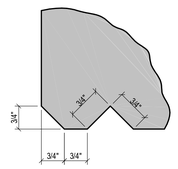
NOTES:
1. FORM TIES TO BE WITHIN 6" OF ANY JOINT.
2. UNLESS NOTED OTHERWISE, PROVIDE CONTROL JOINTS IN PERIMETER FOUNDATION WALLS AT MAXIMUM 30'-0" O.C.
3. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING REQUIREMENTS.
4. DETAIL CONTROL JOINTS ON SHOP DRAWINGS. 5. LOCATE CONSTRUCTION JOINTS AT CONTROL JOINTS.

TYPICAL VERTICAL WALL CONTROL JOINTS



NOTES:
1. SLEEVED OPENINGS 18" AND SMALLER REQUIRE NO ADDITIONAL REINFORCEMENT. PLACE DETAILED REINFORCEMENT (HORIZ. AND VERT.) EACH SIDE OF SLEEVE, 3" CLEAR.
2. FOR SINGLE LAYER WALLS USE SINGLE BARS AS SHOWN.
3. AT ROUND OPENINGS PLACE DIAGONAL BARS 3" CLEAR.
4. REINFORCE OPENINGS PER THIS DETAIL UNLESS OTHERWISE SHOWN.

WALL OPENING REINFORCEMENT



REQUIRED AT BOTTOM EDGES OF ALL EXPOSED SOFFITS AND BEAMS IN PARKING GARAGE AND AS NOTED.

TYPICAL CHAMFER AND DRIP EDGE

LINTEL SCHEDULE	
CLEAR SPAN	8" CMU
LESS THAN 4'-0"	2#4 BOTTOM
BETWEEN 4'-0" AND 6'-0"	2#5 BOTTOM
BETWEEN 6'-0" AND 8'-0"	2#6 BOTTOM
BETWEEN 8'-0" AND 10'-0"	2#7 BOTTOM
MORE THAN 10'-0"	CONSULT ENGINEER

LINTEL SCHEDULE NOTES :
1. LINTELS FOR 8" CMU ARE 8" CMU BOND BEAM WITH REINFORCEMENT AS INDICATED.
2. CENTERED LINTEL IS CLEAR SPAN PLUS 8" BEARING AT EACH END.

TYPICAL LINTEL SUPPORT

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1 11/05/2021	BPH1 - GARAGE FOUNDATIONS AND SITE PREPARATION
2 11/08/2021	PERMIT SUBMISSION DOCUMENTS
3 11/12/2021	BPH1 PERMIT SET
4 12/17/2021	BP#2 - PARK & GARAGE

TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
J.Y.

THE BANKS
Public Partnership

DRAWING TITLE
TYPICAL DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

DRAWING NUMBER
S002

LEVEL 1 FOUNDATION PLAN

1 / S101 — 3/32" = 1'-0"

NORTH

DRAWING NOTES

A. REFER TO S000 SERIES FOR GENERAL NOTES AND TYPICAL DETAILS.
B. REFER TO DRAWINGS S200 SERIES FOR FOUNDATION AND FRAMING DETAILS.
C. REFER TO DRAWINGS S301 FOR COLUMN AND PILE CAP DETAILS.
D. TOP OF SLAB VARIES FOR DRAINAGE. REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF SLAB ELEVATIONS.

PLAN NOTES:

1. EXISTING UNDERGROUND UTILITY LINES TO REMAIN. FIELD LOCATE. DO NOT DAMAGE.
2. TYPICAL SLAB ON GRADE CONTROL JOINT PATTERN.
3. EXISTING PARK WALL.
4. PROVIDE TEMPORARY RETENTION SYSTEM AS REQUIRED TO AVOID UNDERMINING EXISTING SIDEWALK ALONG MEHRING WAY AND ELM STREET.
5. 1'-0" THICK SHEAR WALL REINFORCED WITH 3# AT 12" EACH FACE, EACH WAY. PROVIDE MATCHING DOWELS AT BOTTOM, HOOK AT BOTTOM AND LAP 2'-0" WITH WALL VERTICALS. HOOK WALL HORIZONTALS INTO COLUMN. AT END WITHOUT COLUMN PROVIDE ADDITIONAL REINFORCEMENT PER PLAN DETAIL 5/S201.
6. BATTERED REINFORCED CONCRETE WALL. HEIGHT VARIES.
7. ROUGHEN THE CONTACT SURFACE. DRILL AND EPOXY #8"x5'-0" DOWELS 1'-0" INTO EXISTING PILE CAP. PLACE DOWELS IN TWO ROWS, WITH 1'-0" SPACING EACH WAY CENTERED AT GRADE BEAM.
8. PROTECT EXISTING SLAB ON GRADE EDGE AS NEEDED TO INSTALL COHESIVE SUB BASE.
9. REMOVE EXISTING SLAB ON GRADE TO INSTALL PILE CAP. PROVIDE TEMPORARY RETENTION SYSTEM TO AVOID UNDERMING EXISTING WALL AND COLUMNS/PILE CAP.
10. PILASTER. REFER TO PLAN DETAIL 9/S201 FOR INFO.
11. 1" EXPANSION JOINT AT WALL.
12. POUR WALL FOOTING INTEGRAL WITH PILE CAP OR PROVIDE DBR'S TO RECEIVE FOOTING STEEL WITH DBR'S.

FOUNDATION PLAN LEGEND:

INDICATES EXISTING FOUNDATIONS (PILE CAPS, ETC.) THAT ARE TO REMAIN.

5A / 487.00' / 410.00' — INDICATES NEW PILE CAP TYPE, TOP OF CAP ELEVATION, PILE TIP ELEVATION

SEE DRAWINGS S301 FOR PILE AND PILE CAP REINFORCING. ALL PILES REINFORCED WITH (1)#9 CENTER BAR UNLESS MODIFIED BELOW. LETTERS IN PARENTHESIS FOLLOWING CAP MARK MODIFY CAP OR PILE REINFORCING:

(A) ADD 4#7 (LENGTH = CAP THICKNESS +20") AND (20) #3 TIES AT 6" AT TOP, BALANCE AT 12" PROVIDE CENTRALIZERS AT TOP AND BOTTOM OF CAGE TO CENTER IN PILE.

(B) ADD 4#7 (LENGTH = CAP THICKNESS +20") AND (20) #3 TIES AT 6" AT TOP, BALANCE AT 12" PROVIDE CENTRALIZERS AT TOP AND BOTTOM OF CAGE TO CENTER IN PILE. CENTER BAR EXTENDS TO BOTTOM OF PILE. PROVIDE #11 CENTER BAR (1" DIAMETER, 150 KSI HIGH STRENGTH BAR AT CONTRACTOR OPTION. PROVIDE STANDARD HOOK OR DONUT TERMINATOR.

SLAB STEP

FOOTING STEP

WALL CONTROL JOINT

T/F=XXX'-XX" — INDICATES TOP OF FOOTING ELEVATION

EXISTING DRILLED PIER

LOT 28 GRADE BEAM SCHEDULE

MARK	SIZE	REINFORCING	STIRRUPS
GB1	48"x48"	SEE GRADE BEAM DIAGRAM ON S301	
GB2	48"x48"		
GB3	48"x48"		
GB4	48"x48"		
GB5	48"x48"	8#7 TOP	#5 (ST-4)
		8#11 BOTTOM	10 AT 12" LEFT END
		4#9 BOTTOM 2nd LAYER	10 AT 6" RIGHT END
		4#5 FACE, (2) EACH SIDE	BALANCE AT 16"
GB6	36"x36"	6#9 TOP	#5 (ST-4)
		6#11 BOTTOM	AT 12" C/C TYPICAL
		2#5 FACE, (1) EACH SIDE	AT 8" THROUGH SOUTH PILE CAP
GB7	48"x48"	6#11 + 2#9 TOP LEFT 6#7 TOP RIGHT	#5 (ST-4)
		6#7 BOTTOM	AT 16"C/C TYPICAL
		4#5 FACE, (2) EACH SIDE	AT 12" IN CANTILEVER
GB8	24"x24"	3#7 TOP AND BOTTOM	#4 (ST-3) AT 12"C/C

GRADE BEAM SCHEDULE NOTES:

1. LAP TOP AND FACE BARS AT MID SPAN, UNLESS NOTED OTHERWISE.
2. HOOK ALL BARS AT FAR EDGE OF PILE CAP EXCEPT 2ND LAYER BOTTOM BARS.
3. BEAM STIRRUP STARTS FROM CENTERLINE OF FIRST ROW OF PILES.

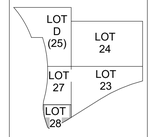
HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

	ISSUES/REVISIONS	ISSUES/REVISIONS (BPH1 - GARAGE FOUNDATIONS AND SITE PREPARATION)
1	11/05/2021	
2	11/08/2021	BPH1 CONSTRUCTION DOCUMENTS
3	11/12/2021	BPH1 PERMIT SET
4	12/2/2021	BPH1 ADDENDUM #2
5	12/17/2021	BPH2 - PARK & GARAGE.



TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
J.Y.

THE BANKS
Public Partnership

DRAWING TITLE
FOUNDATION PLAN

JOB NUMBER 98090.40
DATE 12/17/2021

DRAWING NUMBER
S101

1 PARK LEVEL FRAMING PLAN (503)

S102 — 3/32" = 1'-0"

NORTH

DRAWING NOTES

A. REFER TO S000 SERIES FOR GENERAL NOTES AND TYPICAL DETAILS.
B. REFER TO DRAWINGS S200 SERIES FOR FOUNDATION AND FRAMING DETAILS.
C. REFER TO DRAWINGS S301 FOR COLUMN AND PILE CAP DETAILS.
D. REFER TO DRAWINGS S400 SERIES FOR FRAMING DETAILS.
E. REFER TO DRAWINGS S500 SERIES FOR BEAM DIAGRAMS.
F. TOP OF SLAB VARIES FOR DRAINAGE. REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF SLAB ELEVATIONS.

PLAN NOTES:

1. 8" MIN THICK ONE WAY SLAB. BOTTOM OF SLAB LEVEL. SEE PLAN FOR SLAB SOFFIT ELEVATION. TOP OF SLAB SLOPES SEE ARCH FOR ELEVATION. SLAB REINFORCING PER PLAN.
2. 10" MIN THICK ONE WAY SLAB AT PLANTER AREA(SHADED). BOTTOM OF SLAB LEVEL, SEE PLAN FOR SLAB SOFFIT ELEVATION. TOP OF SLAB SLOPES, SEE ARCH FOR ELEVATION. SLAB REINFORCING PER PLAN.
3. 8" THICK ONE WAY SLAB AT RAMP, SLAB SLOPES PER ARCH. SLAB REINFORCING PER PLAN.
4. SET TOP OF WALL ADDITION TO EXISTING WALL 3 INCH BELOW SOFFIT OF CONCRETE BEAM. SEE SECTION 18/S402.
5. TOP SLAB STEP AT RAMP, COORDINATE WITH ARCH ON EXACT LOCATION.
6. RETAINING WALL, SEE S101 FOR INFO.
7. 1" EXPANSION JOINT IN WALL.
8. #4 TEMPERATURE BARS AT 12" O.C. IN 8" SLAB AND AT 10" O.C. IN 10" SLAB. ALTERNATE PLACEMENT AT TOP AND BOTTOM SLAB. HOOK AT DISCONTINUOUS EDGE.
9. SLAB SOFFIT STEP ALONG RAMP.
10. FAN LAYOUT SLAB BARS WITHIN 5'-0" WIDE WIDTH ALONG THE SKEWED EDGE ON SOUTH. MAINTAIN SCHEDULED REBAR SPACING AT MID SPAN.
11. REFER TO ARCH. FOR TOP OF SHEARWALL ELEVATION.
12. TRENCH DRAIN IN SLAB SEE DETAIL 19/S402 FOR INFO.
13. BEAM BOX OUT. REFER TO REINFORCEMENT AT BOX OUT ON S501.

FRAMING PLAN LEGEND:

- SLAB STEP
- S1 — SLAB SYSTEM, SEE SCHEDULE
- XXX.XX — TOP OF SLAB ELEVATION
- XXX.XX — TOP OF COLUMN ELEVATION
- A — COLUMN MARK, SEE SCHEDULE

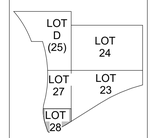
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS		
1	11/08/2021	50% CONSTRUCTION DOCUMENTS
2	12/17/2021	BP#2 - PARK & GARAGE

ISSUES/REVISIONS (CONTINUED)



TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

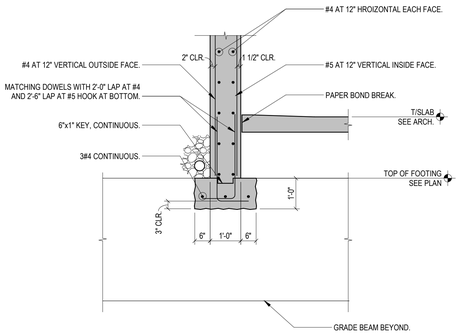
CHECKED BY
J.Y.

THE BANKS
Public Partnership

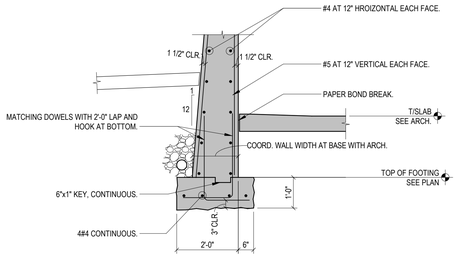
DRAWING TITLE
UPPER LEVEL (503) FRAMING PLAN

JOB NUMBER 98090.40
DATE 12/17/2021

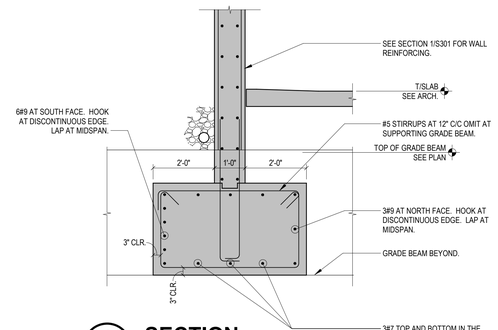
DRAWING NUMBER
S102



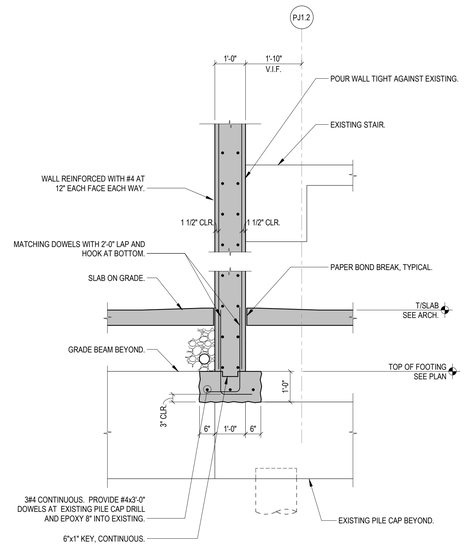
1 S201 **SECTION**
1/2" = 1'-0"



2 S201 **SECTION**
1/2" = 1'-0"

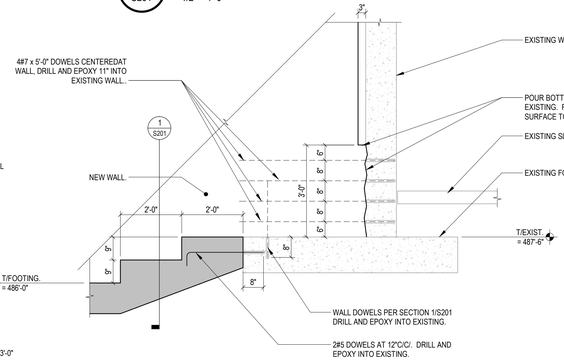


3 S201 **SECTION**
1/2" = 1'-0"

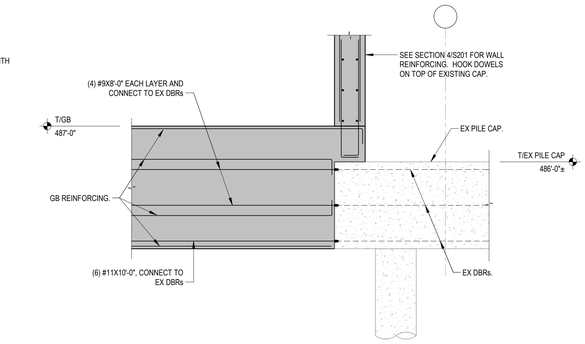


4 S201 **SECTION**
1/2" = 1'-0"

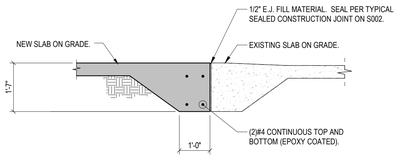
5 S201 **PLAN DETAIL**
1/2" = 1'-0"



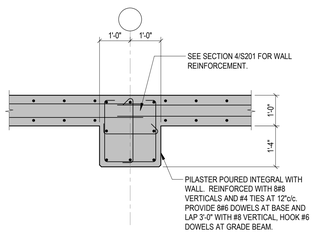
6 S201 **SECTION**
1/2" = 1'-0"



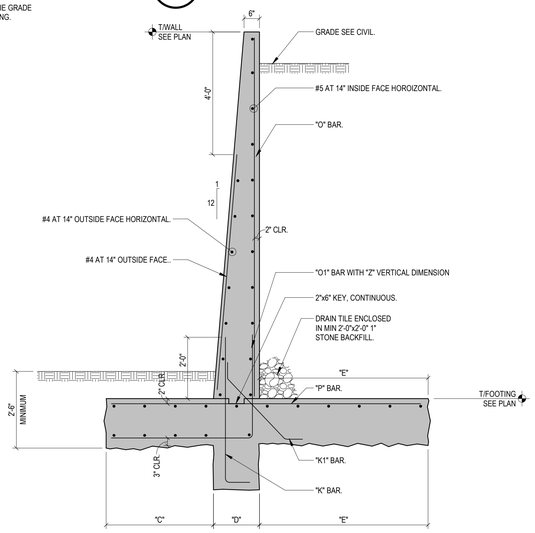
7 S201 **SECTION**
1/2" = 1'-0"



8 S201 **SECTION**
1/2" = 1'-0"



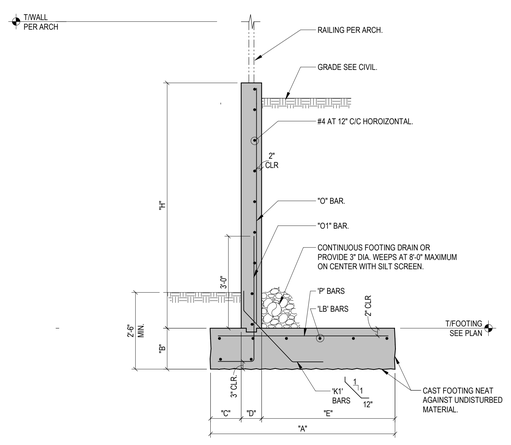
9 S201 **SECTION**
1/2" = 1'-0"



SECTION	DIMENSION							REINFORCEMENT						
	H	A	B	C	D	E	F	O	O1	P	K	K1	Lb	Z
TYPE 1	≤13'-0"	10'-6"	1'-6"	3'-6"	1'-6"	5'-6"	2'-0"	#5 AT 10"	#6 AT 10"	#5 AT 10"	#5 AT 12"	#4 AT 10"	10#5 TOP 5#5 BOT	6'-0"
TYPE 2	≤11'-0"	8'-6"	1'-6"	2'-0"	1'-6"	5'-0"	1'-0"	#4 AT 10"	#5 AT 10"	#5 AT 10"	#4 AT 12"	#4 AT 10"	8#5 TOP 4#5 BOT	4'-0"
TYPE 3	≤9'-0"	6'-6"	1'-0"	1'-6"	1'-0"	4'-0"	1'-0"	#5 AT 12"	#5 AT 12"	#5 AT 12"	#5 AT 16"	#4 AT 12"	6#5 TOP 3#5 BOT	3'-0"

BATTERED RETAINING WALL

10 S201 **SECTION**
1/2" = 1'-0"



SECTION	DIMENSION						REINFORCEMENT					
	H	A	B	C	D	E	O	O1	P	K1	LB	
TYPE 1	≤8'-0"	6'-0"	1'-0"	1'-0"	0'-8"	4'-4"	#4 AT 9"	#5 AT 9"	#5 AT 12"	#4 AT 16"	6#5 TOP 3#5 BOT	
TYPE 2	≤6'-0"	4'-8"	1'-0"	1'-0"	0'-8"	3'-0"	[1]	#4 AT 12"	#4 AT 12"	#4 AT 16"	5#5 TOP 2#5 BOT	

[1] OMIT "O" BAR, EXTEND "O1" TO 2" BELOW TOP OF WALL.

RETAINING WALL

11 S201 **SECTION**
1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS		ISSUES/REVISIONS (CONTINUED)
1	11/05/2021	BP#1 - GARAGE FOUNDATIONS AND SITE PREPARATION
2	11/08/2021	95% CONSTRUCTION DOCUMENTS
3	11/12/2021	BP#1 PERMIT SET
4	12/17/2021	BP#2 - PARK & GARAGE

TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

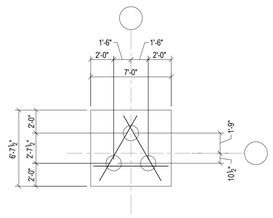
CHECKED BY
J.Y.

THE BANKS
Public Partnership

DRAWING TITLE
FOUNDATION DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

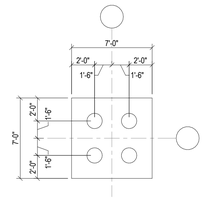
DRAWING NUMBER
S201



CAP THICKNESS: 34" AT TYP, 46" AT TYPE 3A
TOP REINFORCING: NONE.
BOTTOM REINFORCING: (12) #6 IN 3 DIRECTIONS.

3A S301 | 3 S301

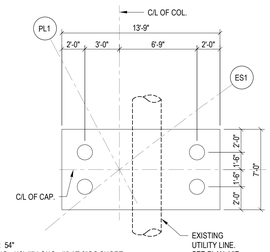
PILE CAP TYPE 3 AND TYP 3A
PLAN DETAIL
3/16" = 1'-0"



CAP THICKNESS: 38" AT TYP 4 AND 50" AT TYPE 4A
TOP REINFORCING: NONE
BOTTOM REINFORCING: (13) #7 EACH WAY.

4A S301 | 4 S301

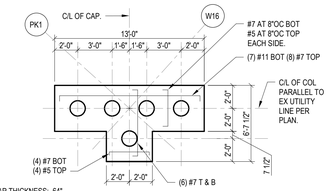
PILE CAP TYPE 4 AND TYPE 4A
PLAN DETAIL
3/16" = 1'-0"



CAP THICKNESS: 54"
TOP REINFORCING: (12) #7 LONG. #5 AT 8'OC SHORT
BOTTOM REINFORCING: (12) #9 LONG. #7 AT 8'OC SHORT

4B S301

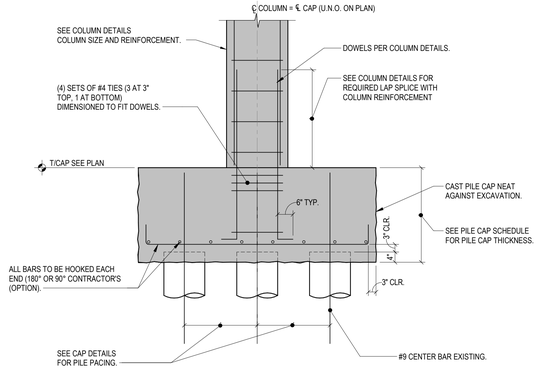
PILE CAP TYPE 4B
PLAN DETAIL
3/16" = 1'-0"



CAP THICKNESS: 64"
TOP REINFORCING: SEE DETAIL.
BOTTOM REINFORCING: SEE DETAIL.

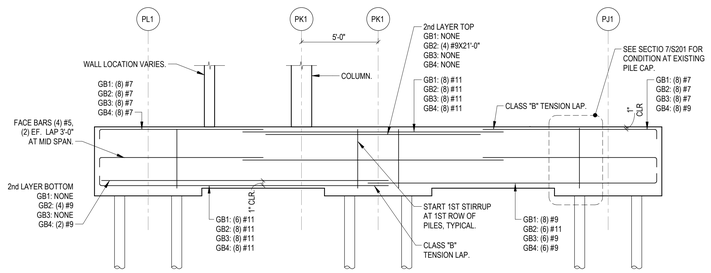
5A S301

PILE CAP TYPE 5A
PLAN DETAIL
3/16" = 1'-0"



A S301

TYPICAL PILE CAP
SECTION
1/2"=1'-0"



STIRRUPS:

GB1: #5, (4) AT 12" LE, (12) AT 4" RE, BAL AT 16"
GB2: #6, (10) AT 12" LE, (12) AT 4" RE, BAL AT 16"
GB3: #5, (12) AT 4" RE, BAL AT 16"
GB4: #5, (12) AT 4" RE, BAL AT 16"

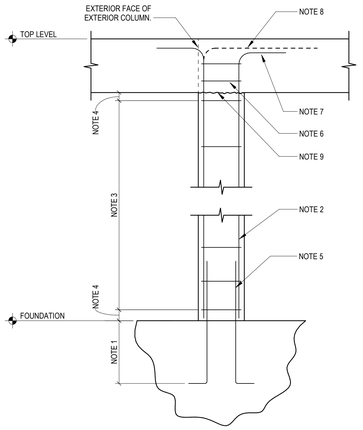
STIRRUPS:

GB1: #5, (6) AT 7" R.E. BAL AT 16"
GB2: #5 AT 16" FULL LENGTH
GB3: #5 AT 16" FULL LENGTH
GB4: #5 AT 16" FULL LENGTH

STIRRUPS TYPE:

GB1-GB4
GBD S301

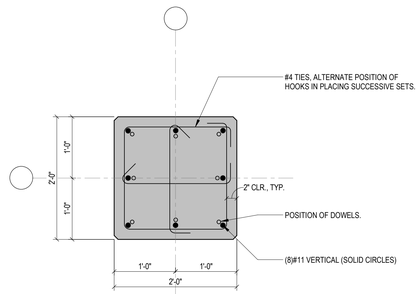
GRADE BEAM DIAGRAM
1/2" = 1'-0" N.T.S.



CONCRETE COLUMN DETAIL

CONCRETE COLUMN NOTES:

1. EXTEND DOWELS TO BOTTOM OF GRADE BEAM OR PILE CAP AND HOOK. SEE TYPICAL PILE CAP DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION.
2. 8#11 COLUMN VERTICAL BARS. SEE COLUMN PLAN DETAIL FOR LAYOUT INFO.
3. #4 TIES AT 10"O/C. SEE COLUMN PLAN DETAIL FOR LAYOUT INFO.
4. LOCATE FIRST TIE 3" +/- FROM CONSTRUCTION JOINT (TYPICAL).
5. #9 DOWELS TO LAP 5'-0" WITH COLUMN VERTICAL BARS. PROVIDE TEMPLATES TO HOLD DOWELS IN PROPER POSITION DURING CONCRETE PLACEMENT. REFER TO COLUMN PLAN DETAIL FOR LOCATIONS OF DOWELS WITHIN COLUMNS.
6. UNLESS OTHERWISE DETAILED. PROVIDE TIES AT NORMAL SPACING THROUGH BEAMS OR FLOOR SYSTEM, BUT NOT GREATER THAN 1/2 LEAST COLUMN DIMENSION, WITH A MINIMUM OF TWO (2) SETS OF TIES WITHIN BEAM OR SLAB DEPTH.
7. TOP OF COLUMN BARS TO BE 1" BELOW LOWEST LAYER OF BEAM OR SLAB STEEL, UNLESS OTHERWISE DETAILED. TERMINATE ALL COLUMN BARS WITH STANDARD 90 DEG HOOK, UNLESS OTHERWISE DETAILED.
8. HOOK OUTSIDE FACE BARS IN EXTERIOR COLUMN FACES 36 BAR DIAMETERS INTO BEAM OR SLAB (2-FACES AT CORNER COLUMNS, 1-FACE AT PERIMETER COLUMNS).
9. CONSTRUCTION JOINT. LOCATE NO MORE THAN 1/2" HIGHER THAN BOTTOM OF LOWEST BEAM OR SLAB SUPPORTED BY COLUMN.



NOTE: ALL COLUMN REINFORCING SHALL BE EPOXY COATED

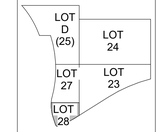
COLUMN PLAN DETAIL

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS		ISSUES/REVISIONS (CONTINUED)
1	11/05/2021	BP#1 - GARAGE FOUNDATIONS AND SITE PREPARATION
2	11/08/2021	95% CONSTRUCTION DOCUMENTS
3	11/12/2021	BP#1 PERMIT SET
4	12/17/2021	BP#2 - PARK & GARAGE



TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

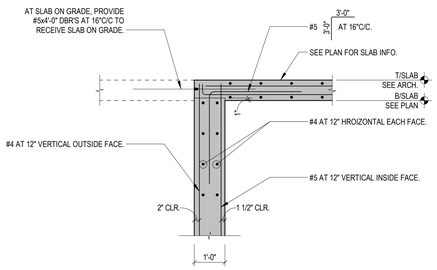
CHECKED BY
Checker

THE BANKS
Public Partnership

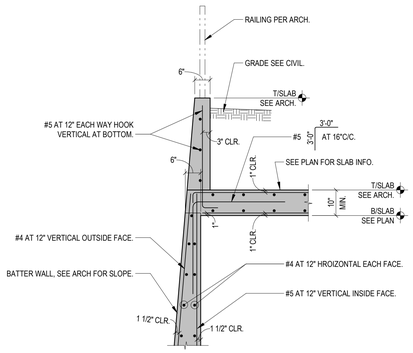
DRAWING TITLE
PILE CAP AND COLUMN DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

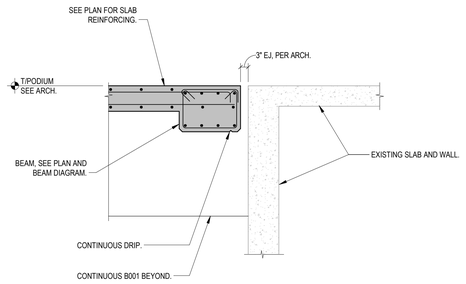
DRAWING NUMBER
S301



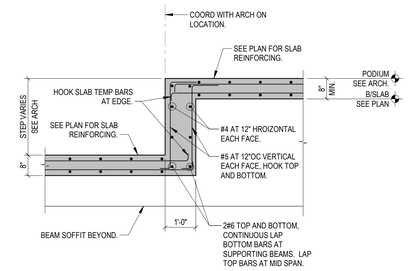
1 S401 **SECTION** 1/2" = 1'-0"



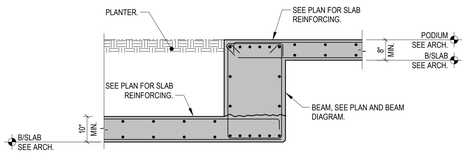
2 S401 **SECTION** 1/2" = 1'-0"



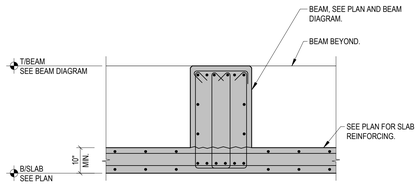
3 S401 **SECTION** 1/2" = 1'-0"



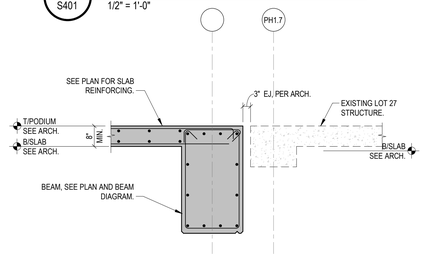
4 S401 **SECTION** 1/2" = 1'-0"



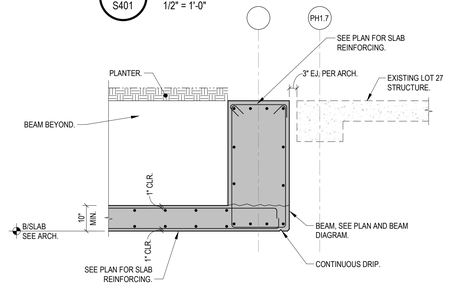
5 S401 **SECTION** 1/2" = 1'-0"



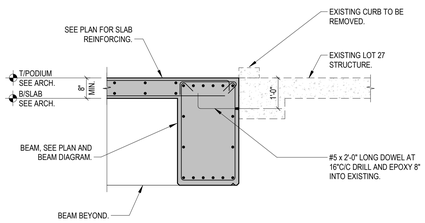
6 S401 **SECTION** 1/2" = 1'-0"



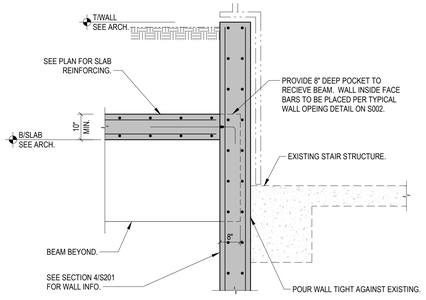
7 S401 **SECTION** 1/2" = 1'-0"



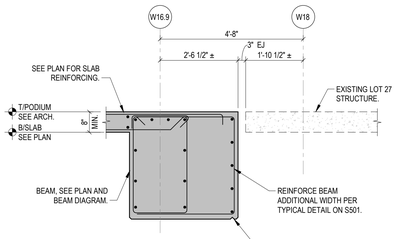
8 S401 **SECTION** 1/2" = 1'-0"



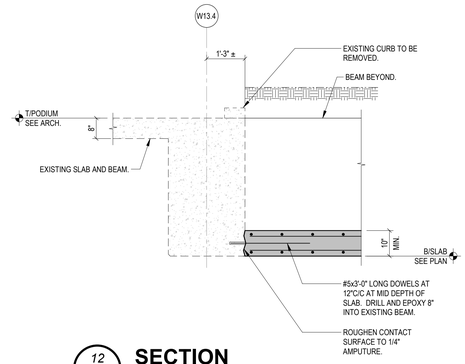
9 S401 **SECTION** 1/2" = 1'-0"



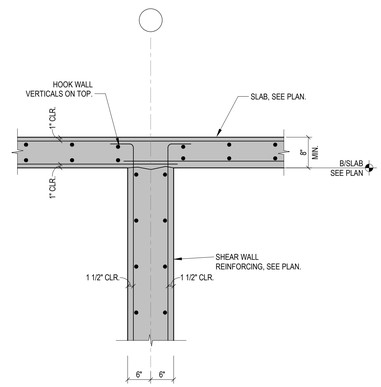
10 S401 **SECTION** 1/2" = 1'-0"



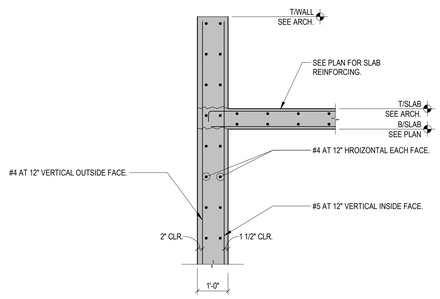
11 S401 **SECTION** 1/2" = 1'-0"



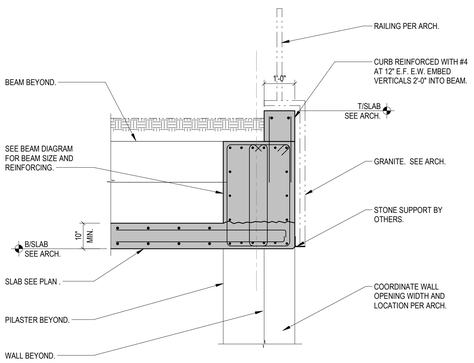
12 S401 **SECTION** 1/2" = 1'-0"



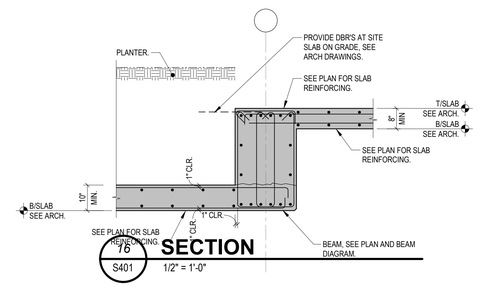
13 S401 **SECTION** 3/4" = 1'-0"



14 S401 **SECTION** 1/2" = 1'-0"



15 S401 **SECTION** 1/2" = 1'-0"



16 S401 **SECTION** 1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1 12/17/2021	(BP#2 - PARK & GARAGE

TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

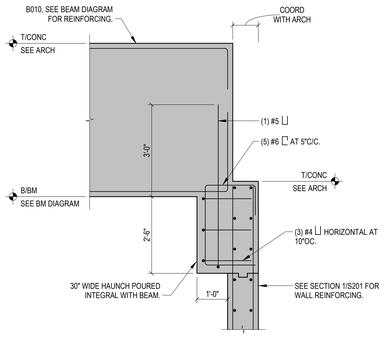
CHECKED BY
Checker

THE BANKS
Public Partnership

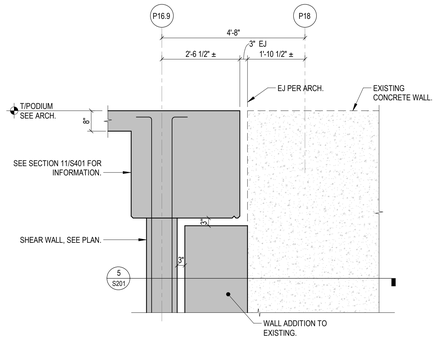
DRAWING TITLE
FRAMING DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

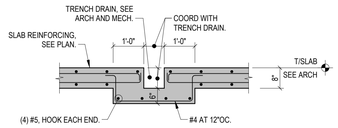
DRAWING NUMBER
S401



17 S402 **SECTION**
1/2" = 1'-0"



18 S402 **SECTION**
1/2" = 1'-0"



19 S402 **SECTION**
1/2" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

ISSUES/REVISIONS		ISSUES/REVISIONS (CONTINUED)
1	12/17/2021	BP#2 - PARK & GARAGE

TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

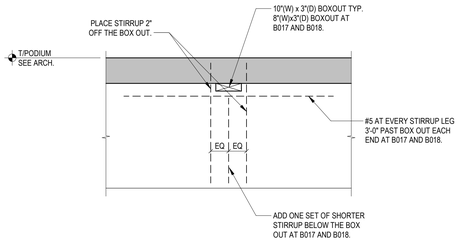
CHECKED BY
J.Y.

THE BANKS
Public Partnership

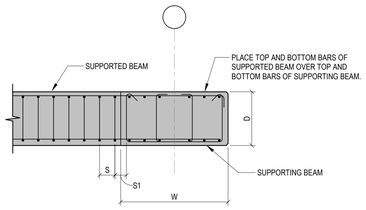
DRAWING TITLE
FRAMING DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

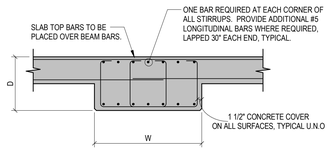
DRAWING NUMBER
S402



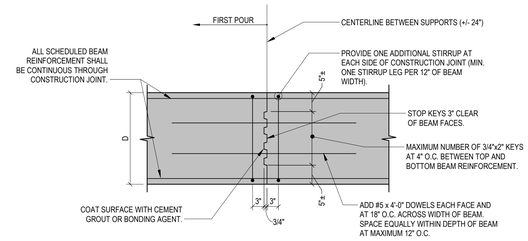
REINFORCEMENT AT BEAM BOX OUT



INTERSECTING BEAMS

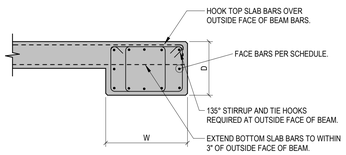


TYPICAL INTERIOR BEAM

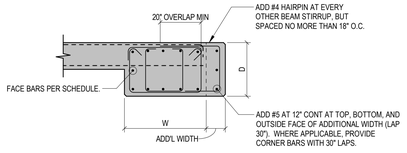


BEAM CONSTRUCTION JOINT

NOTES:
1. LOCATION OF SLAB AND BEAM CONSTRUCTION JOINTS SHALL BE SHOWN ON THE REINFORCING STEEL SHOP DRAWINGS.
2. LOCATIONS OF JOINTS TO BE APPROVED BY THE STRUCTURAL ENGINEER.



TYPICAL EXTERIOR



BEAMS WITH ADDITIONAL WIDTH

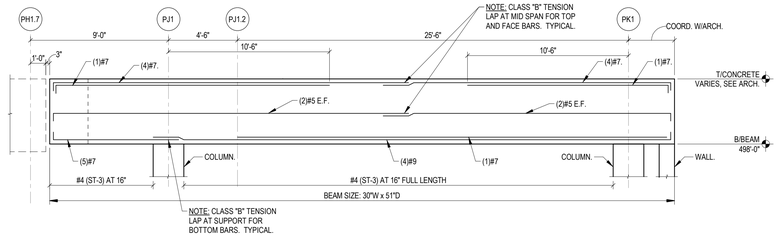
TYPICAL BEAM BAR PLACEMENT

NOTES:

1. TOP, BOTTOM AND FACE BARS SHALL BE EQUALLY SPACED ACROSS WIDTH AND DEPTH OF BEAM UNLESS NOTED OTHERWISE.
2. SPACE VERTICAL LEGS OF MULTIPLE LEG STIRRUPS EQUALLY ACROSS WIDTH OF BEAM UNLESS NOTED OTHERWISE.

STIRRUP TYPES	
ST-1	
ST-2	
ST-3	
ST-4	
ST-5	

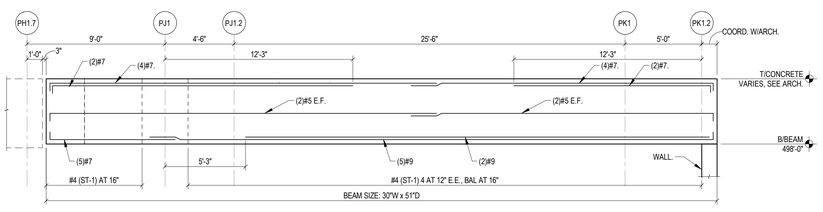
NOTE: BEAM SIZE NOTED ON BEAM DIAGRAM ARE FOR REBAR FABRICATION ONLY. BEAM TOP COVER VARIES, 1 1/2" MINIMUM.



GRID LINE W17

B001 / S501 BEAM DIAGRAM

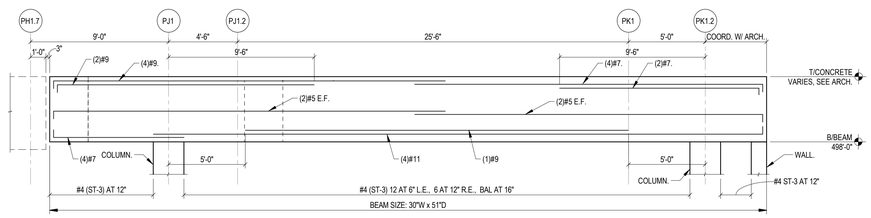
1/4" = 1'-0"



GRID LINE W16.5

B002 / S501 BEAM DIAGRAM

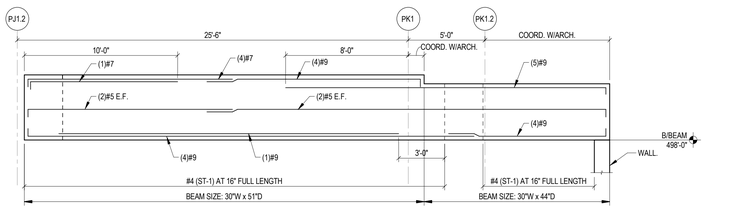
1/4" = 1'-0"



GRID LINE W16

B003 / S501 BEAM DIAGRAM

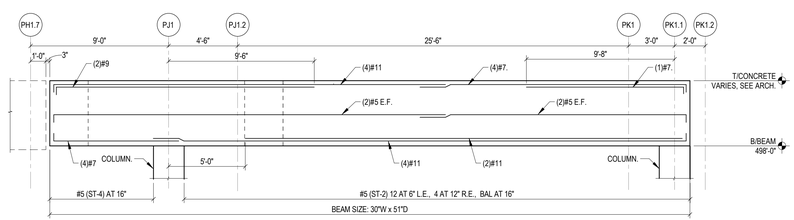
1/4" = 1'-0"



GRID LINE W15.5

B004 / S501 BEAM DIAGRAM

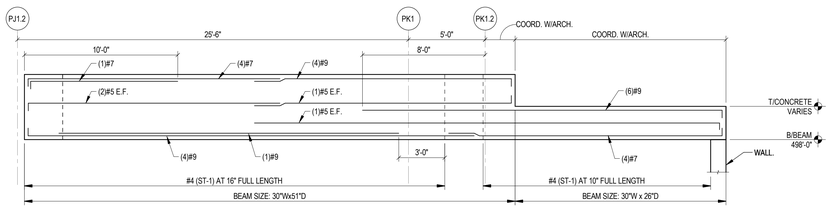
1/4" = 1'-0"



GRID LINE W15

B005 / S501 BEAM DIAGRAM

1/4" = 1'-0"



GRID LINE W14.5

B006 / S501 BEAM DIAGRAM

1/4" = 1'-0"

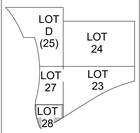
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS (CONTINUED)

#		
1	12/17/2021	BP#2 - PARK & GARAGE



TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

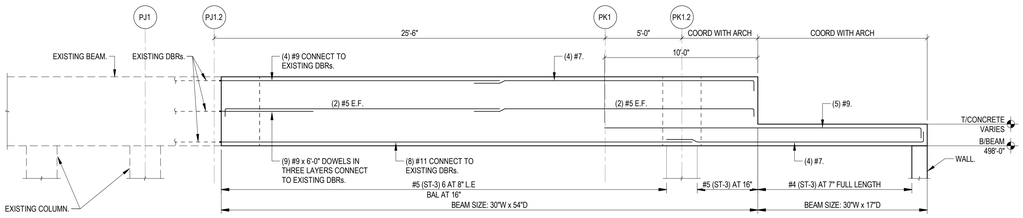
CHECKED BY
J.Y.

THE BANKS
Public Partnership

DRAWING TITLE
TYPICAL BEAM DETAILS AND BEAM DIAGRAMS

JOB NUMBER 98090.40
DATE 12/17/2021

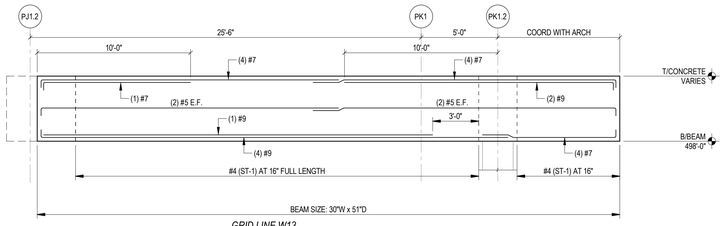
DRAWING NUMBER
S501



GRID LINE W13.4

B007 / S502 BEAM DIAGRAM

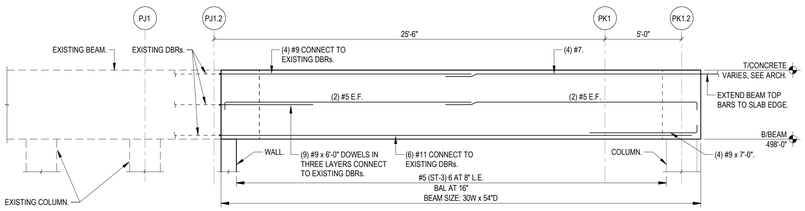
1/4" = 1'-0"



GRID LINE W13

B008 / S502 BEAM DIAGRAM

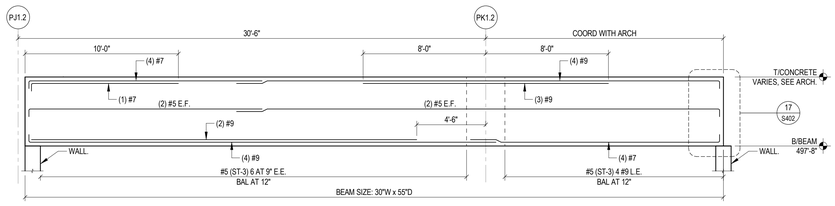
1/4" = 1'-0"



GRID LINE W12.4

B009 / S502 BEAM DIAGRAM

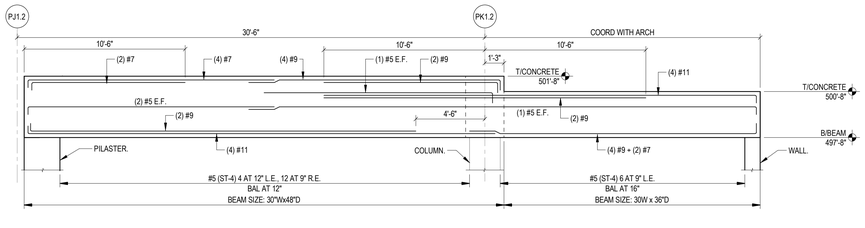
1/4" = 1'-0"



GRID LINE W12

B010 / S502 BEAM DIAGRAM

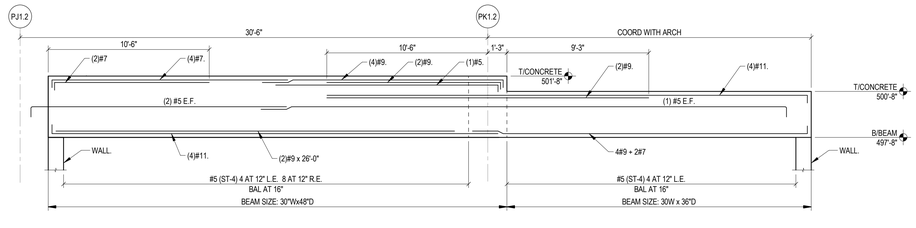
1/4" = 1'-0"



GRID LINE W11

B011 / S502 BEAM DIAGRAM

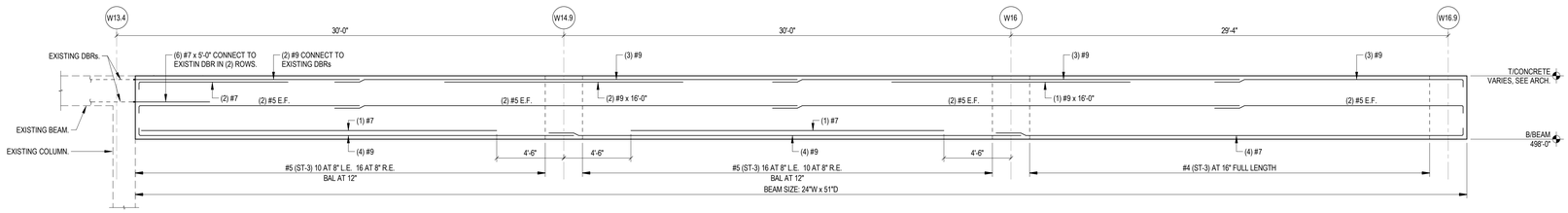
1/4" = 1'-0"



GRID LINE W11

B012 / S502 BEAM DIAGRAM

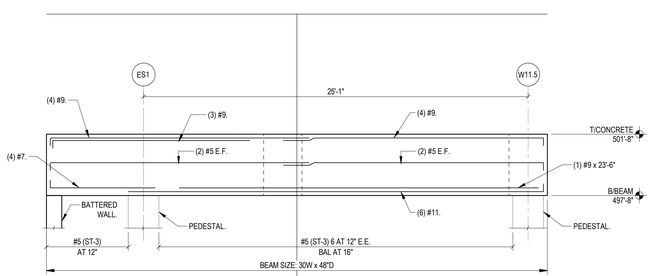
1/4" = 1'-0"



GRID LINE PJ1.2

B013 / S502 BEAM DIAGRAM

1/4" = 1'-0"



GRID LINE PJ1.2

B014 / S502 BEAM DIAGRAM

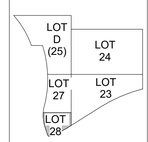
1/4" = 1'-0"

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS		ISSUES/REVISIONS (CONTINUED)
1	12/17/2021	BP#2 - PARK & GARAGE



TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

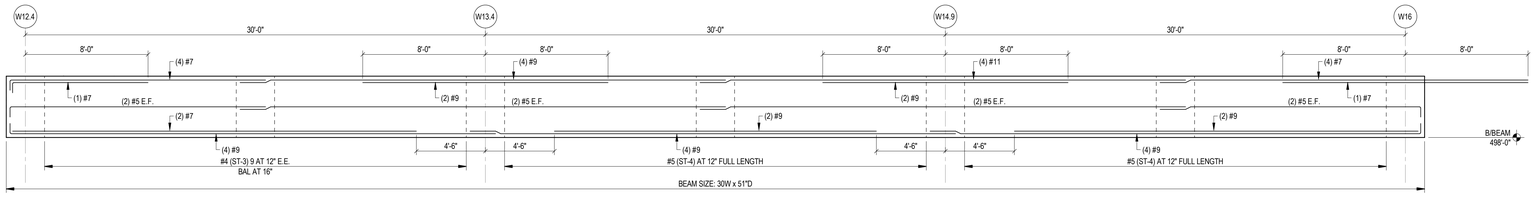
CHECKED BY
Checker

THE BANKS
Public Partnership

DRAWING TITLE
BEAM DIAGRAMS

JOB NUMBER 98090.40
DATE 12/17/2021

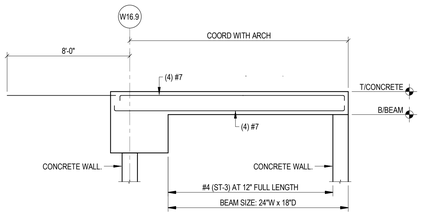
DRAWING NUMBER
S502



GRID LINE PJ1.2

B015 / S503 BEAM DIAGRAM

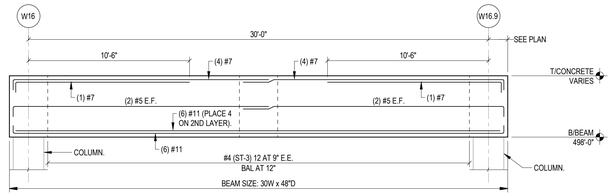
1/4" = 1'-0"



GRID LINE PK1.2

B016 / S503 BEAM DIAGRAM

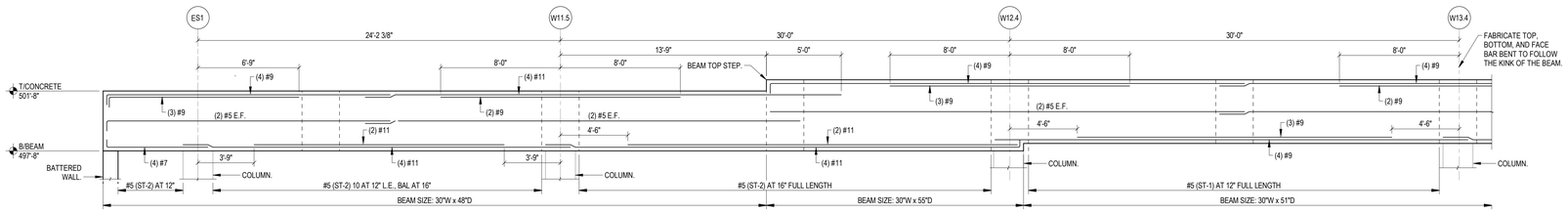
1/4" = 1'-0"

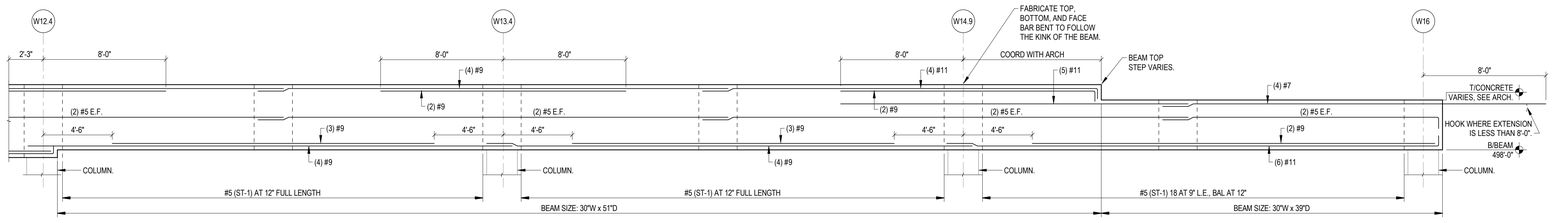


GRID LINE PJ1

B017 / S503 BEAM DIAGRAM

1/4" = 1'-0"





GRID LINE PK1.2

B018 / S503 BEAM DIAGRAM

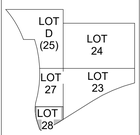
1/4" = 1'-0"

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited
100 East Eighth Street
Cincinnati, Ohio 45202

513.241.3222
THPLTD.com

ISSUES/REVISIONS	ISSUES/REVISIONS (CONTINUED)
1	
12/17/2021	(BP#2 - PARK & GARAGE



TECHNICIAN
P.A.B.

PROJECT MANAGER
M.S.M.

PRINCIPAL
J.M.J.

CHECKED BY
Checker

THE BANKS
Public Partnership

DRAWING TITLE
BEAM DIAGRAMS

JOB NUMBER 98090.40 DATE 12/17/2021

DRAWING NUMBER
S503

FIRE SUPPRESSION DESIGN NOTES

A DESIGN AND INSTALL AUTOMATIC DRY PIPE STANDPIPE/SPRINKLER SYSTEM THROUGHOUT ALL AREAS OF THE GARAGE AS INDICATED ON THE DRAWINGS AND AS OUTLINED IN THE SPECIFICATIONS. PIPE SLOPES SHALL BE PER NFPA 13.

B BASIS FOR DESIGN IS ORDINARY HAZARD OCCUPANCY, GROUP 1.

C MINIMUM AREA OF OPERATION FOR ORDINARY HAZARD SYSTEMS SHALL BE 1500 SQUARE FEET, 0.15 GPM/SQ. FT., 130 SQUARE FEET MAXIMUM PER SPRINKLER, 250 GPM HOSE STREAM ALLOWANCE. APPROPRIATE AREA ADJUSTMENTS FOR QUICK RESPONSE SPRINKLERS AND DRY PIPE SYSTEMS SHALL BE UTILIZED.

D EXERCISE SPECIAL CARE TO COORDINATE PIPING AND EQUIPMENT LOCATIONS WITH ALL OTHER TRADES.

E PIPING DOWNSTREAM OF FIRE PUMP TO BRANCH SERVING FIRST 2.5" FIRE DEPARTMENT VALVE SHALL BE INSTALLED AS SIZED.

F ALL OTHER PIPING SHOWN SHALL BE INSTALLED AS SIZED UNLESS HYDRAULIC CALCULATIONS INDICATE PIPING MAY BE SMALLER. FOR PIPING NOT SHOWN OR SIZED ON THE DRAWINGS, PIPE SIZING SHALL BE BASED ON FSC'S HYDRAULIC CALCULATIONS. MINIMUM SPRINKLER PIPING SHALL BE 1".

G SPRINKLERS SHALL BE ALL BRASS UPRIGHT PENDENT TYPE SPRINKLERS UNLESS OTHERWISE INDICATED. ALL SPRINKLERS LOCATED IN PODIUM LEVEL CEILINGS OF STAIRWAYS SHALL BE RECESSED TWO-PIECE ADJUSTABLE PENDENT QUICK RESPONSE TYPE.

H ALL HORIZONTAL PIPING SHALL BE SLOPED TO DRAIN. CARE SHALL BE TAKEN TO AVOID TRAPS, DIPS IN PIPE, AND OTHER PIPE CONFIGURATIONS WHICH HINDER SYSTEM DRAINAGE. MAINS AND BRANCH MAINS RUNNING EAST OR WEST SHALL BE INSTALLED AT LOWEST PART OF SLAB ABOVE.

I PRIOR TO INTRODUCING WATER TO SYSTEM, SAMPLES OF WATER SHALL BE TAKEN AND TESTED FOR MICROBIAL INFLUENCED CORROSION (MIC) ORGANISMS PER SPECIFICATION REQUIREMENTS.

J PERFORM A FLOW TEST AND OBTAIN APPROVAL FROM GOVERNING AUTHORITIES PRIOR TO STARTING WORK.

K PIPE SIZES AND HYDRAULIC CALCULATIONS SHALL PROVIDE FOR CONNECTION OF 2.5" HOSE VALVES AS SHOWN ON PLANS. DESIGN SHALL MEET REQUIRED 50 SECOND FLOW TEST FOR DRY PIPE SYSTEMS. HYDRAULIC CALCULATIONS SHALL UTILIZE FLOW CURVE OF SPECIFIED FIRE PUMP. MINIMUM SIZE OF COMBINED STANDPIPE/SPRINKLER SYSTEM PIPING SHALL BE 6" UNLESS HYDRAULIC CALCULATIONS INDICATE SMALLER PIPING MAY BE USED.

L SPRINKLERS SHALL BE PROVIDED IN ELEVATOR MACHINE ROOMS AND SHAFT TOPS PER SPECIFICATIONS.

M PROVIDE HEAT TRACE, INSULATION, AND PVC JACKET (SEE INSULATION SPECS) FOR FREEZE PROTECTION ON ALL EXPOSED PORTIONS OF WATER SERVICE PIPING LOCATED IN UNHEATED AREAS OF GARAGE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

N INDICATED DRAINAGE LOCATION ARE NOT EXHAUSTIVE. CONTRACTOR SHALL PROVIDE MEANS OF DRAINING ALL DRY PIPE SYSTEM PIPING.

GENERAL NOTES

A IN THE PARKING GARAGE AREAS, ALL BRANCH PIPING SHALL BE INSTALLED WITHIN 0'-6" TO 1'-0" BELOW STRUCTURE OR CONFLICTING EQUIPMENT/PIPING OF OTHER TRADES. ALL MAIN PIPING SHALL BE INSTALLED WITHIN 0'-9" TO 1'-6" BELOW STRUCTURE, COLUMNS, COLUMN DROPS, OR CONFLICTING EQUIPMENT. NO PIPING,FITTINGS, HANGERS, OR OTHER ASSOCIATED EQUIPMENT SHALL BE BELOW 8'-4" ABOVE FINISHED FLOOR ELEVATION UNLESS OTHERWISE INDICATED. SPOT ELEVATIONS ARE FOR INFORMATION ONLY. NO PIPING SHALL BE INSTALLED WITHOUT REVIEW AND APPROVAL OF LAYOUT BY ARCHITECT AND ENGINEER.

B ALL PIPING IS AT THE UNDERSIDE OF STRUCTURE IN EXPOSED STRUCTURE AREAS, UNLESS OTHERWISE NOTED.

C REFER TO SCHEDULES, DETAILS AND SCHEMATICS FOR PIPING, PIPE SIZES AND PIPELINE DEVICES NOT INDICATED ON THE FLOOR PLAN.

D UNLESS OTHERWISE NOTED, ABOVE GROUND PIPE ELEVATIONS ARE TO CENTER OF PIPE.

E FIRE SUPPRESSION PIPING NOT SHOWN ON DRAWINGS SHALL NOT PASS THROUGH SHEAR WALLS UNLESS LOCATION IS APPROVED BY STRUCTURAL ENGINEER PRIOR TO ANY PENETRATION WORK BY FSC. FOR PIPING PENETRATIONS THROUGH SHEARWALLS SHOWN ON DRAWINGS, SUBMIT SLEEVE DRAWING WITH EXACT LOCATION SHOWN FOR APPROVAL BY STRUCTURAL ENGINEER.

F HOUSEKEEPING PADS SHALL BE PROVIDED FOR AIR COMPRESSORS AND FIRE PUMPS. PADS SHALL BE INSTALLED PER SPECIFICATIONS.

LEGEND

PC	PLUMBING CONTRACTOR
FSC	FIRE SUPPRESSION CONTRACTOR
HC	HVAC CONTRACTOR
EC	ELECTRICAL CONTRACTOR
⊗	"CONNECT TO EXISTING" SYMBOL
(2)	"DETAIL NOTE" SYMBOL (FOR NOTES ON SAME DETAIL)
⟨3⟩	"NOTE" SYMBOL (FOR NOTES ON SAME SHEET)
CWS	COMBINATION FIRE SUPPRESSION AND DOMESTIC WATER SERVICE
F	FIRE SUPPRESSION PIPE
FR	FIRE RISER
DS	SPRINKLER PIPE (DRY)
—⋈—	SHUTOFF VALVE
—S⋈—	SUPERVISED VALVE
FDC	FIRE DEPARTMENT CONNECTION (STORZ)
FDV	FIRE DEPARTMENT VALVE (2.5" CINCINNATI STD.)
BFP	BACKFLOW PREVENTER

PLAN NOTES

1 DASHED LINE INDICATES LIMITS OF NEW DRY PIPE SPRINKLER SYSTEM. THE FIRE SUPPRESSION CONTRACTOR SHALL PROVIDE DRY PIPE SYSTEM EXTENDED FROM ADJACENT EXISTING SYSTEM AS INDICATED.

2 PROVIDE TIE-IN INTO EXISTING ZONE#6 DRY PIPE SYSTEM AND EXTEND INTO NEW SPACE AS INDICATED. EXISTING SQUARE FOOTAGE OF ZONE #6 IS 40,000. ADDITIONAL SQUARE FOOTAGE FOR THIS PROJECT IS 8700 FOR A GRAND TOTAL SQUARE FOOTAGE OF 48,700.

3 FIRE DEPARTMENT VALVE (FDV) LOCATED APPROXIMATLY 82' DUE NORTH OF THIS LOCATION. LINEAR FOOTAGE PER NFPA 13 ALLOWS THIS SPACE TO BE SERVED BY THIS FDV.

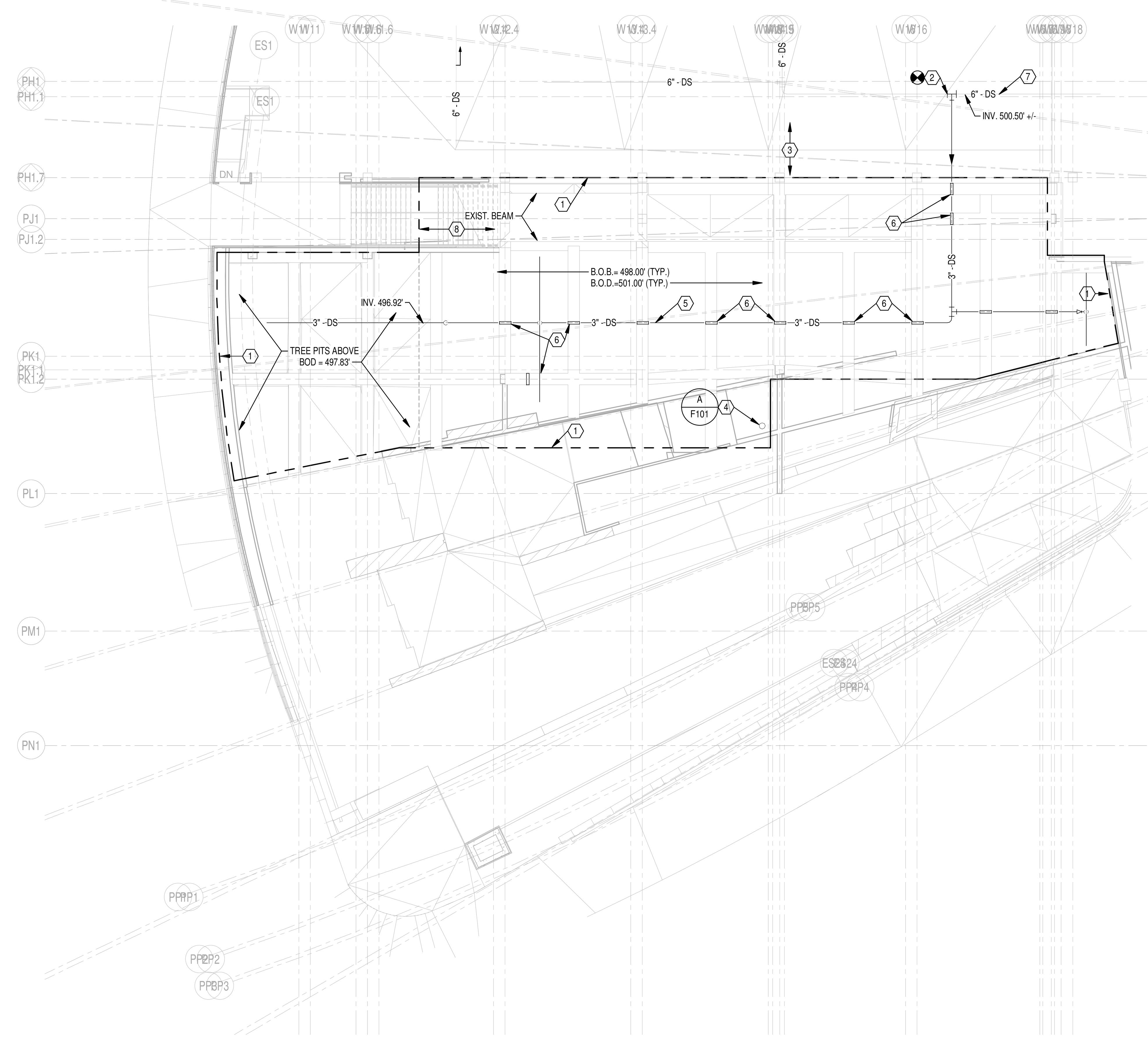
4 PROVIDE DRUM DRIP DEVICE TO SERVE NEW DRY PIPE SPRINKLERS WITHIN THIS AREA.

5 PROVIDE PIPING AT 500.50' +/-.

6 PROVIDE SLEEVE CAST IN PLACE IN BEAM FOR ALL SPRINKLER MAINS AND BRANCH PIPING. CENTERLINE ELEVATION APPROXIMATELY 499.83'. COORDINATE FINAL SLEEVE ELEVATION AND INSTALLATION REQUIREMENTS WITH DECKING CONTRACTOR. COORDNATE WITH ARCHITETCURLA AND STRUCTURE DRAWINGS.

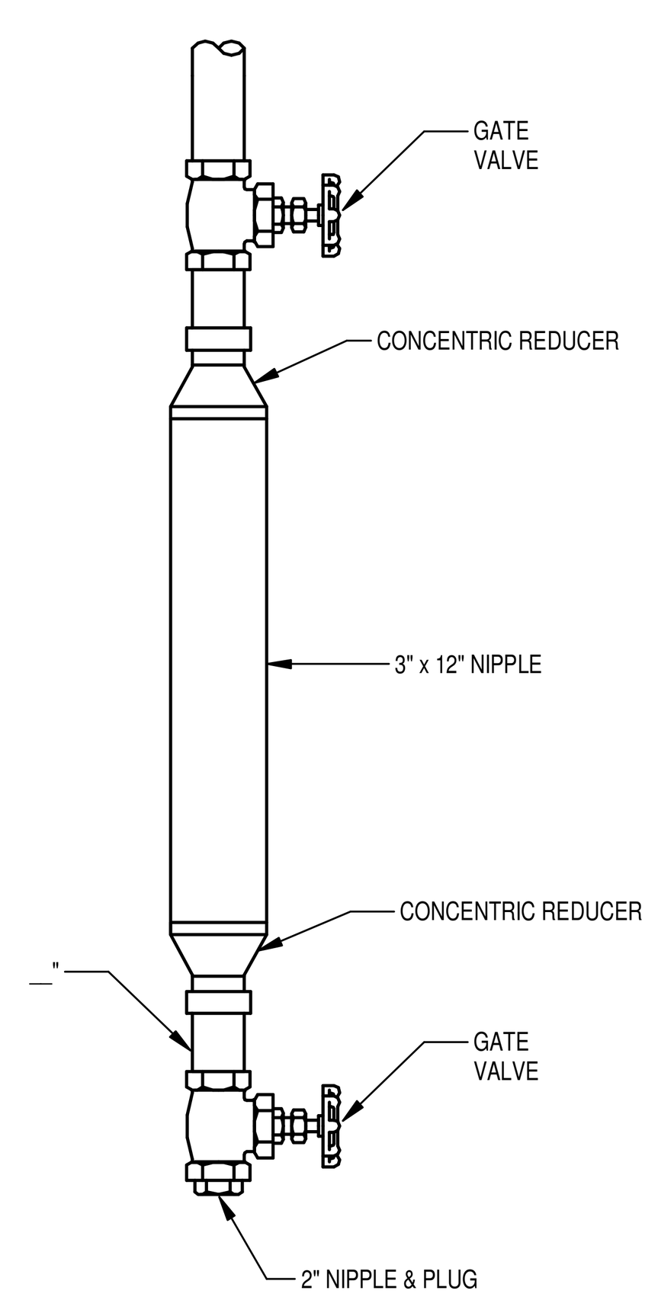
7 EXISTING DRY PIPE SPRINKLER PIPING ZONE #6 (TO REMAIN).

8 SPRINKLER COVERAGE SHALL BE PROVIDED BENEATH EXISTING STAIRS (FUTURE STORAGE RM).



1 LOWER LEVEL FS PLAN
SCALE: 1/16" = 1'-0"

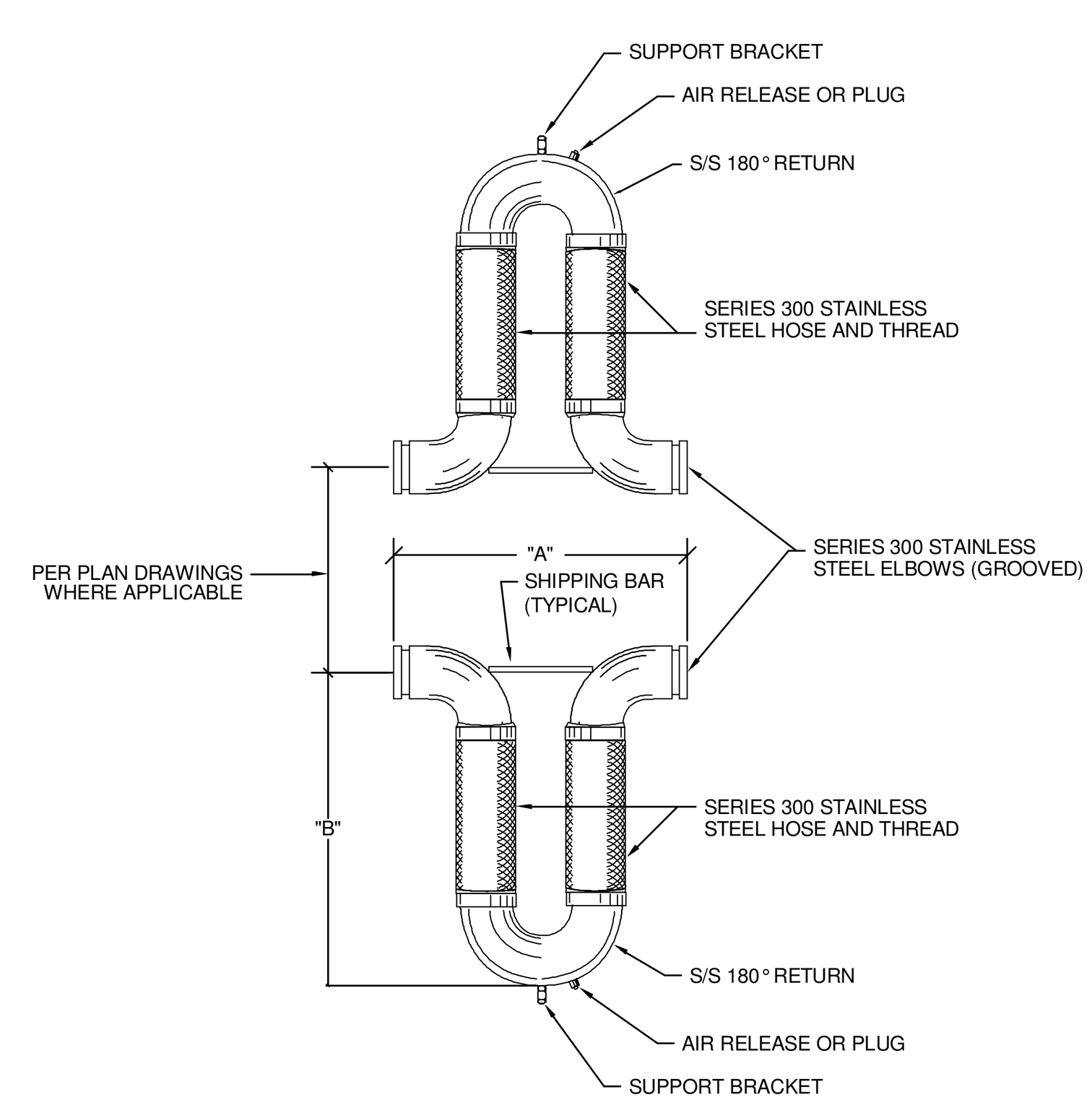
0 8 16 32 48

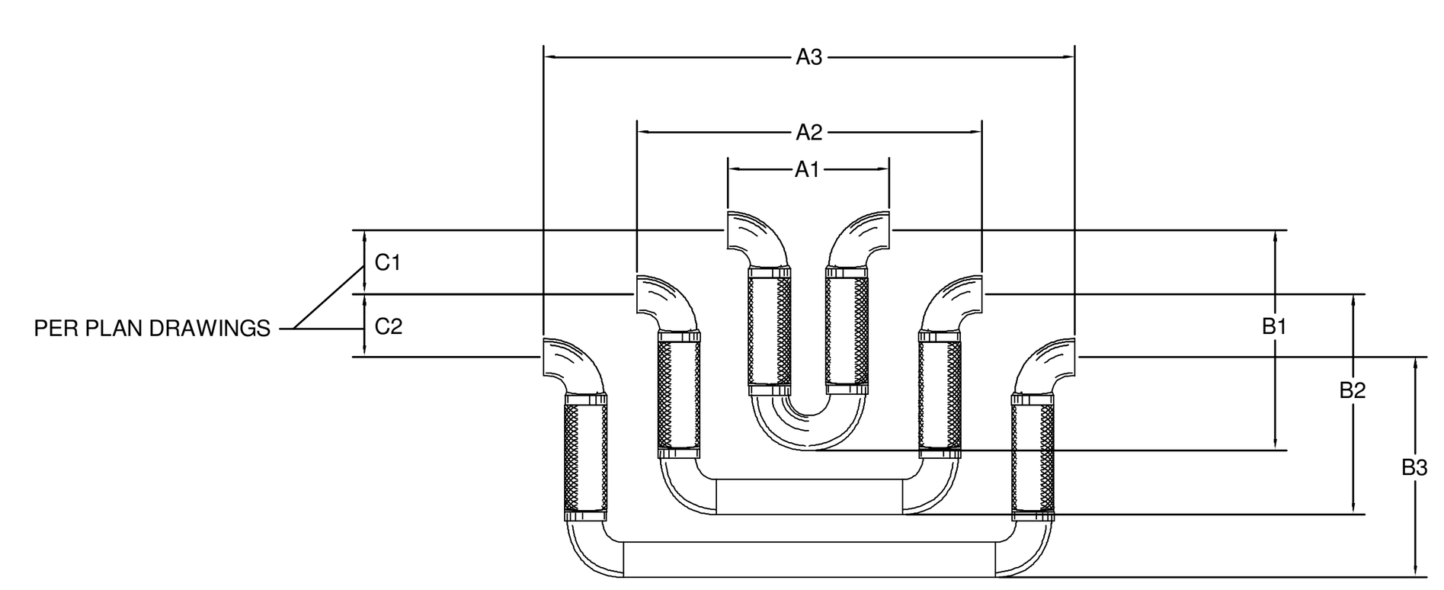


NOTES

1. PRE-MANUFACTURED DRUM DRIP ASSEMBLIES MAY BE USED IN LIEU OF INDIVIDUAL COMPONENTS.

A DRUM DRIP DRAIN ASSEMBLY
SCALE: NONE





NOTES:
1 MATERIALS PER PIPE SERVICE.

2 "A" AND "B" DIMENSIONS PROVIDED BY EXPANSION LOOP MANUFACTURER. PROVIDE DIMENSIONED DRAWINGS INDICATING A, B, & C DIMENSIONS WITH CORRESPONDING LOCATION ON PLAN DRAWINGS. LOCATION SHALL SHOW NEAREST COLUMN(S) WITH APPLICABLE GRID DESIGNATION.

DIMENSION DATA*

PIPE SIZE	"A"	"B"
2"	23"	30'
2.5"	25"	34"
3"	27"	37"
4"	31.5"	48"
6"	42"	55"
8"	56"	70"

* APPROXIMATE

B FS EXPANSION JOINTS
SCALE: NONE

PIPE SLEEVE SCHEDULE

PIPE SIZE	SLEEVE SIZE
0.75"	1.5"
1"	2"
2"	4"
3"	5"
4"	6"
6"	10"
8"	12"
10"	14"

SCHEDULE NOTES:
1 CONTRACTOR SHALL SUBMIT PIPE SLEEVE SHOP DRAWINGS FOR APPROVAL PRIOR TO DECK FORMING APPROVAL AND CONSTRUCTION.

WATER HYDRANT FLOW TEST DATA

FLOW TEST INFORMATION PERFORMED ON March of 2016 SHALL BE USED FOR BASIS OF BIDDING ONLY.

FSC SHALL PERFORM TEST AS REQUIRED IN SPECIFICATIONS AND NFPA 13.

STATIC PRESSURE: 73 PSI
RESIDUAL PRESSURE: 68 PSI
FLOW: 1330 @ 68 PSI

SHEET LIST FS

Sheet Number	Sheet Name
F101	LOWER LEVEL FS PLAN

HEAPY
P: 937-224-0861 www.heapy.com
PROJECT NO. 2021-07091

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

michael mcinturf ARCHITECTS
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

ISSUES
1 12/03/2021 PROGRESS SET

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28
NORTH

DRAWN BY: JRJ
ENGINEER: JRJ
CHECKED BY: DNM

THE BANKS Public Partnership
BP#2 - PARK & GARAGE

DRAWING TITLE
LOWER LEVEL FS PLAN

JOB NUMBER 98090.40
DATE 12/17/2021
DRAWING NUMBER F101

FITTINGS

	CHECK VALVE
	CONCENTRIC PIPE REDUCER
	UNION
CO	CLEANOUT TO GRADE OR FINISHED FLOOR

PIPING SYMBOLS

SINGLE LINE

	BOTTOM CONNECTION (45°)
	BOTTOM CONNECTION (90°)
	BRANCH TEE CONNECTION (NOTE: BULLHEAD TEE'S ARE NOT PERMITTED)
	DIRECTION OF PITCH
D	DROP
	ELBOW DOWN
	ELBOW UP
	EXISTING PIPE TO BE REMOVED
	EXISTING PIPE TO REMAIN
	FLOW DIRECTION DESIGNATION
	PIPE RISER
	PUMP
R	RISE
	TOP CONNECTION (45°)
	TOP CONNECTION (90°)

PLUMBING PIPING DESIGNATIONS

	EXISTING PIPE TO REMAIN
GD	GARAGE DRAINAGE PIPE
NPW	NON POTABLE WATER PIPE (HOSE BIBB)
IRR	NON POTABLE WATER PIPE - IRRIGATION
WD	NON POTABLE WATER PIPE - WASH DOWN
PD	PUMP DISCHARGE PIPE
SAN	SANITARY DRAINAGE PIPE
STM	STORM DRAINAGE PIPE
V	SANITARY SEWER VENT
WS	WATER SERVICE

GENERAL FLOOR PLAN NOTES

10" ELEV: 8' - 0" / 10" ELEV: 8' - 0"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO CENTERLINE OF PIPE, UNLESS NOTED OTHERWISE
TOE: 3' - 0" / BOE: 0' - 6"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO TOP OR BOTTOM OF EQUIPMENT, UNLESS NOTED OTHERWISE
2	RISER OR STACK NUMBER
B / P2	DETAIL: B = DETAIL DESIGNATION P2 = SHEET WHERE DETAIL IS LOCATED
1 / P2	SECTION: 1 = SECTION DESIGNATION P2 = SHEET WHERE DETAIL IS LOCATED
A1	EQUIPMENT, DEVICE, OR PLUMBING FIXTURE MARK. LETTER DESIGNATIONS REFER TO SCHEDULES.
	CONNECT TO EXISTING
3	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN UNLESS NOTED OTHERWISE.
3	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
A1	"UP TO" SYMBOL (ITEM ON FLOOR ABOVE)

ABBREVIATIONS

AFF - ABOVE FINISHED FLOOR
AFG - ABOVE FINISHED GRADE
ALT - ALTERNATE
APPROX - APPROXIMATE
ARCH - ARCHITECT OR ARCHITECTURAL
ASSY - ASSEMBLY

BLDG - BUILDING
BOB - BOTTOM OF BEAM
BOF - BOTTOM OF FOOTING
BOP - BOTTOM OF PIPE
BOT - BOTTOM
BTU - BRITISH THERMAL UNIT
BTUH - BRITISH THERMAL UNIT PER HOUR
BTWN - BETWEEN

CB - CATCH BASIN
CFCI - CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFM - CUBIC FEET PER MINUTE
CI - CAST IRON
CMU - CONCRETE MASONRY UNIT
CO - CLEAN OUT
CONN - CONNECT OR CONNECTION
CONTR - CONTRACTOR
CTR - CENTER
CU - COPPER
CW - COLD WATER
CWS - COMBINATION WATER SERVICE OR CONDENSER WATER SUPPLY

D - DEPTH OR DRAIN LINE
DD - DECK DRAIN
DET - DETAIL
DFU - DRAINAGE FIXTURE UNIT
DIA - DIAMETER
DIM - DIMENSION
DN - DOWN
DS - DOWN SPOUT OR SPRINKLER (DRY)
DWG - DRAWING

EA - EACH
EJ - EXPANSION JOINT
ELEV - ELEVATOR
EQ - EQUAL
EQUIP - EQUIPMENT
ETR - EXISTING TO REMAIN
EQS - EQUIPMENT SUPPLIER
EXP - EXPANSION
EXT - EXTERIOR
EX - EXISTING

FCO - FLOOR CLEANOUT
FD - FLOOR DRAIN
FF - FINISHED FLOOR ELEVATION
FLR - FLOOR
FM - FORCE MAIN
FPM - FEET PER MINUTE
FT - FEET
FTG - FOOTING

G - GAS OR NATURAL GAS
GA - GAUGE
GAL - GALLON
GALV - GALVANIZED
GD - GARAGE DRAINAGE
GPM - GALLONS PER MINUTE

HD - HUB DRAIN
HP - HORSEPOWER OR HIGH POINT

ID - INSIDE DIAMETER
INV - INVERT ELEVATION
IN - INCHES

L - LENGTH
LBS - POUNDS

MAX - MAXIMUM
MFR - MANUFACTURER
MH - MANHOLE
MIN - MINIMUM OR MINUTE
MISC - MISCELLANEOUS

NIC - NOT IN CONTRACT
NOM - NOMINAL
NPT - NATIONAL PIPE THREAD
NTS - NOT TO SCALE

OD - OUTSIDE DIAMETER OR OVERFLOW DRAIN
OFCI - OWNER FURNISHED CONTRACTOR INSTALLED
OFOI - OWNER FURNISHED OWNER INSTALLED

PC - PLUMBING CONTRACTOR (DIVISION 22)
PD - PUMP DISCHARGE OR PARAPET DRAIN
PLBG - PLUMBING
PRESS - PRESSURE
PSF - POUNDS PER SQUARE FOOT
PSI - POUNDS PER SQUARE INCH
PSIG - POUNDS PER SQUARE INCH GAUGE

RAD - RADIUS
RCP - REINFORCED CONCRETE PIPE
REQD - REQUIRED

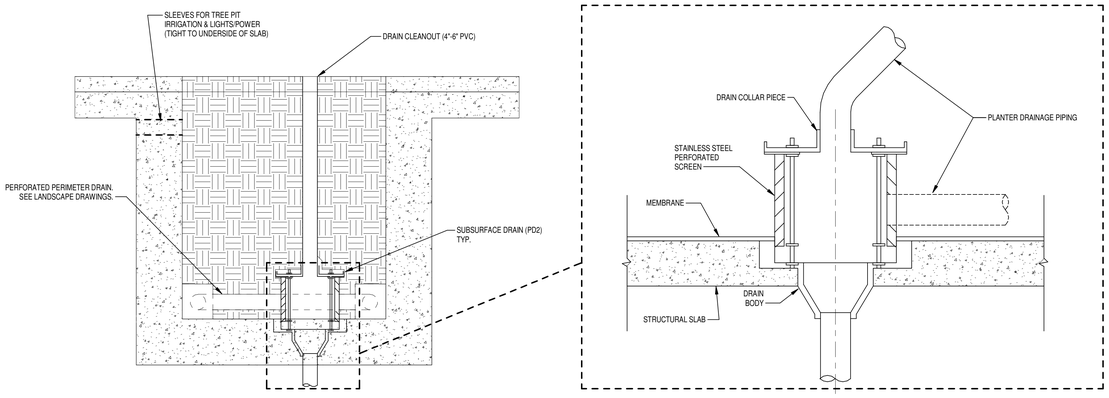
SAN - SANITARY OR SANITARY DRAIN
SCH - SCHEDULE
SHT - SHEET
SPEC - SPECIFICATIONS
SQ - SQUARE
SS - SANITARY STACK (SOIL OR WASTE) OR STAINLESS STEEL
STD - STANDARD
STM - STORM OR STORM DRAINAGE
STRUC - STRUCTURAL OR STRUCTURE
SUC - SITE UTILITY CONTRACTOR

TOB - TOP OF BEAM
TOF - TOP OF FOOTING
TOP - TOP OF PIPE
TOS - TOP OF SLAB OR TOP OF STEEL
TYP - TYPICAL

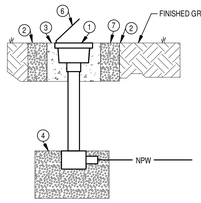
UNO - UNLESS NOTED OTHERWISE

V - VENT OR SANITARY SEWER VENT
VEL - VELOCITY
VOL - VOLUME
VS - VENT STACK
VR - VENT RISER

W/ - WITH
W/O - WITHOUT
W - WASTE
WS - WATER SERVICE



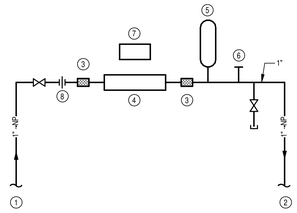
C TYPICAL DETAIL AT TREE PIT (PD2 DRAIN)
SCALE: NONE



NOTES

1. MURDOCK M-6150-LL 1.5" OUTLET, FLUSH STYLE YARD HYDRANT WITH LOCKING LID.
2. STEEL EDGING, 4" TALL BY 14 GA. SECURE INTO GROUND AROUND PERIMETER OF GRAVEL BASE.
3. CONCRETE BASE FLUSH WITH GRADE - 12'x12'x12".
4. GRAVEL DRAINAGE AROUND WEEPHOLES - MINIMUM 6 CU.FT.
5. WATER SUPPLY
6. COVER SHALL BE PERMENTLY MARKED - "NON-POTABLE".
7. GRAVEL DRAINAGE - 36" DIA. x 24" DEEP.

B NON-POTABLE WATER HYDRANT
SCALE: 1/8" = 1'-0"



DETAIL NOTES

1 PIPING FROM WATER TAP LOWER LEVEL CEILING.
2 TO IRRIGATION SYSTEM (SIZED PER DRAWINGS).
3 FLEXIBLE CONNECTOR.
4 INLINE BOOSTER PUMP.
5 EXPANSION TANK.
6 PRESSURE SENSOR.
7 PUMP CONTROLLER.
8 UNION.

A IRRIGATION BOOSTER PUMP DETAIL
SCALE: NONE

NOTE: ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.

ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

DRAIN SCHEDULE

MARK	TYPE	CATALOG NOS.	TYPE: FLOOR	TYPE: ROOF	TYPE: GARAGE DECK	TYPE: TRENCH	BODY: CAST IRON	BODY: BRONZE	BODY: ACID RESIS.	BODY: STAINLESS STEEL	BODY: COMPOSITE	OUTLET: SIZE	OUTLET: BOTTOM	OUTLET: SIDE	STRAINER/GRATE: SIZE	STRAINER/GRATE: ADJUSTABLE	STRAINER/GRATE: FLAT	STRAINER/GRATE: DOME	STRAINER/GRATE: RECESSED	STRAINER/GRATE: FUNNEL	STRAINER/GRATE: VANDAL RESISTANT	STRAINER/GRATE: STAINLESS STEEL	STRAINER/GRATE: LESS TOP GRATE	TOP FINISH: NICKEL BRONZE	TOP FINISH: CAST IRON	TOP FINISH: ACID RESIS.	TOP FINISH: STAINLESS STEEL	TOP FINISH: PLASTIC	ADDITIONAL FEATURES: ANCHOR FLANGE	ADDITIONAL FEATURES: FLSHG. CLAMP	ADDITIONAL FEATURES: DBL. DRAINAGE	ADDITIONAL FEATURES: SED. BUCKET	ADDITIONAL FEATURES: AUX. STRAINER	ADDITIONAL FEATURES: BEARING PAN	ADDITIONAL FEATURES: U'DECK CLAMP	ADDITIONAL FEATURES: 2" STANDPIPE	ADDITIONAL FEATURES: TRAP PRIMER CON.	ADDITIONAL FEATURES: BIRD SCREEN	SEE DRAIN SCHEDULE NOTES
PD1	PLAZA	Z415 SERIES			X		X					4"	X		9" RD	X	X				X						X			X	X								2
PD2	PLAZA	Z110 SERIES			X		X					6"	X		15" RD		X				X						X			X	X	X							2,3
GD1	GARAGE	Z525 SERIES			X		X					4"	X		9" RD	X	X				X				X					X	X	X							1,2

DRAIN SCHEDULE NOTES:
1 DRAINS IN AREAS SUBJECT TO FREEZING IN PARKING AREAS SHALL NOT BE PROVIDED WITH P-TRAPS.
2 CLOSELY COORDINATE INSTALLATION LOCATIONS OF DRAINS WITH CONSTRUCTION MANAGER. CONTRACTOR SHALL ALSO REFER TO ARCHITECTURAL SHEETS.
3 PROVIDE ADDITIONAL 8-10" TALL STAINLESS STEEL PERFORATED GRATING AROUND DRAIN DOME GRATING (ZURN SUFFIX "-PS"). COORDINATE FINAL SCREEN HEIGHT WITH CM PRIOR TO PURCHASE.

SHEET LIST PLUMBING

Sheet Number	Sheet Name
P001	LEGEND SCHEDULES & NOTES
P101	LOWER LEVEL PLUMBING PLAN
P101A	LOWER LEVEL PLUMBING PLAN (LOT 27)
P102	UPPER TERRACE LEVEL PLUMBING PLAN

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com

ISSUES

ISSUES

DRAWN BY: RRM
ENGINEER: RRM
CHECKED BY: EWL

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

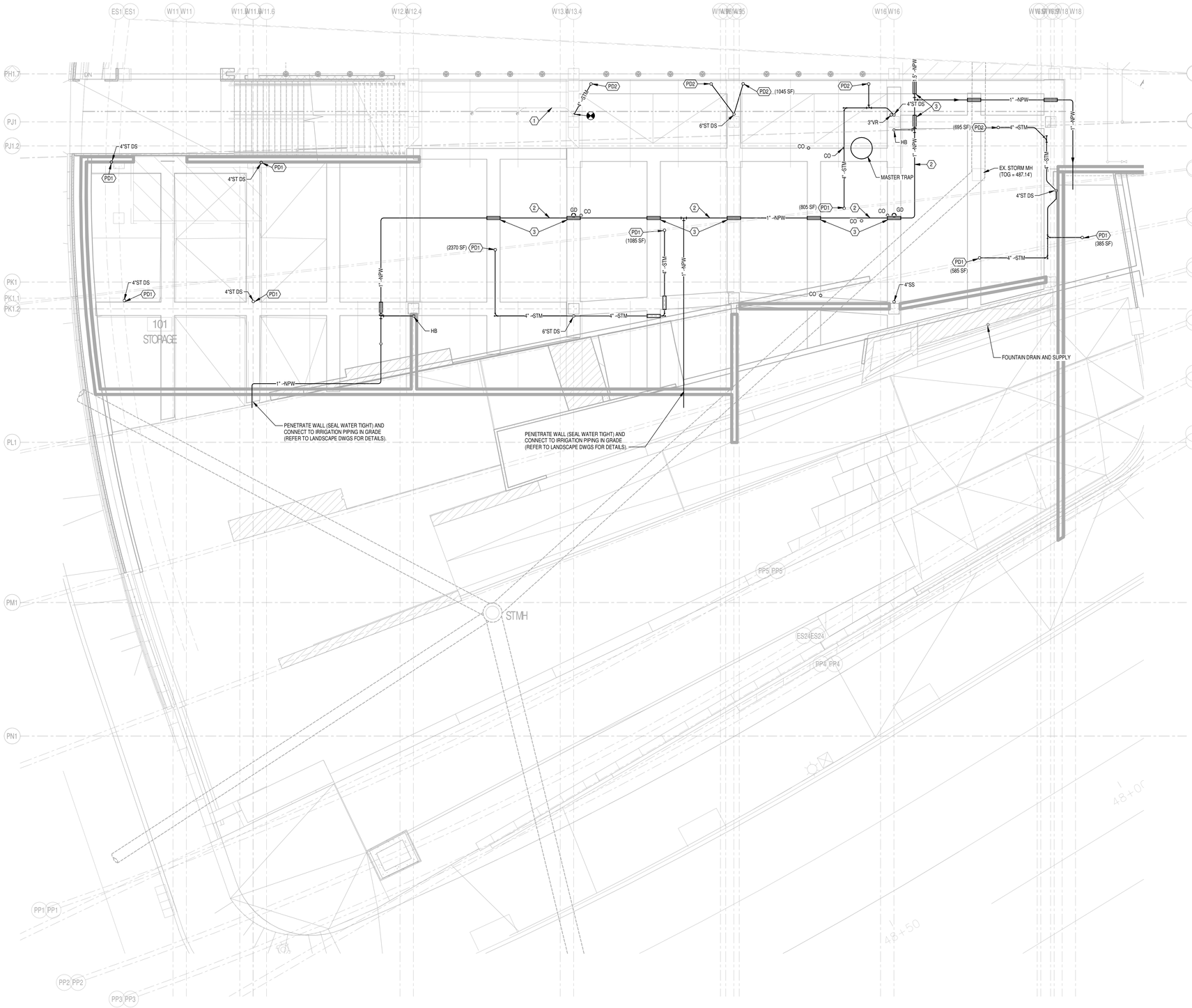
DRAWING TITLE
LEGEND SCHEDULES & NOTES

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER
P001

PLAN NOTES

1. EXISTING PIPING TO REMAIN.
2. INSTALL PIPING AT 500.50' +/-.
3. PROVIDE SLEEVE CAST IN PLACE IN BEAM FOR ALL NON-POTA LE PIPING. CENTERLINE ELEVATION APPROXIMATELY 500.50'. COORDINATE FINAL SLEEVE ELEVATION AND INSTALLATION REQUIREMENTS WITH DECKING CONTRACTOR. COORDINATE WITH ARCHITETCURLA AND STRUCTURE DRAWINGS.



1 LOWER LEVEL PLUMBING PLAN

SCALE: 1/8" = 1'-0"

0 8 16 32 48

C:\BIM\Model\2021-0709\1-MEP-Central_RRMcGinnis@heapy.com.rvt

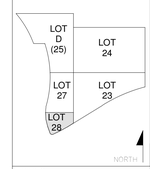
12/17/2021 1:36:36 PM

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-324-5777 www.heapy.com

ISSUES		
1	11/05/2021	BP#1 - GARAGE FOUNDATIONS AND SITE PREPERATION



DRAWN BY: KTG
ENGINEER: DJT
CHECKED BY: DNM

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

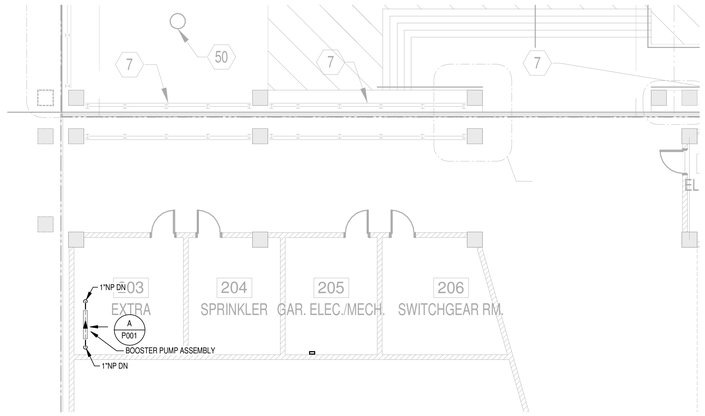
DRAWING TITLE
LOWER LEVEL PLUMBING PLAN

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER
P101

PLAN NOTES

1. EXISTING PIPING TO REMAIN.
2. PIPING LOCATED BELOW GARAGE FLOOR SLAB.
3. EXTEND PIPING 1'-0" AFF AND TEMPORALLY CAP.



3 PARK LEVEL PLUMBING PLAN (LOT 23)
SCALE: 1/8" = 1'-0"

1 LOWER LEVEL PLUMBING PLAN
SCALE: 1/16" = 1'-0"

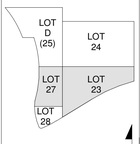
HAMILTON COUNTY
RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com

ISSUES

ISSUES



DRAWN BY: Author
ENGINEER: Designer
CHECKED BY: Checker

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

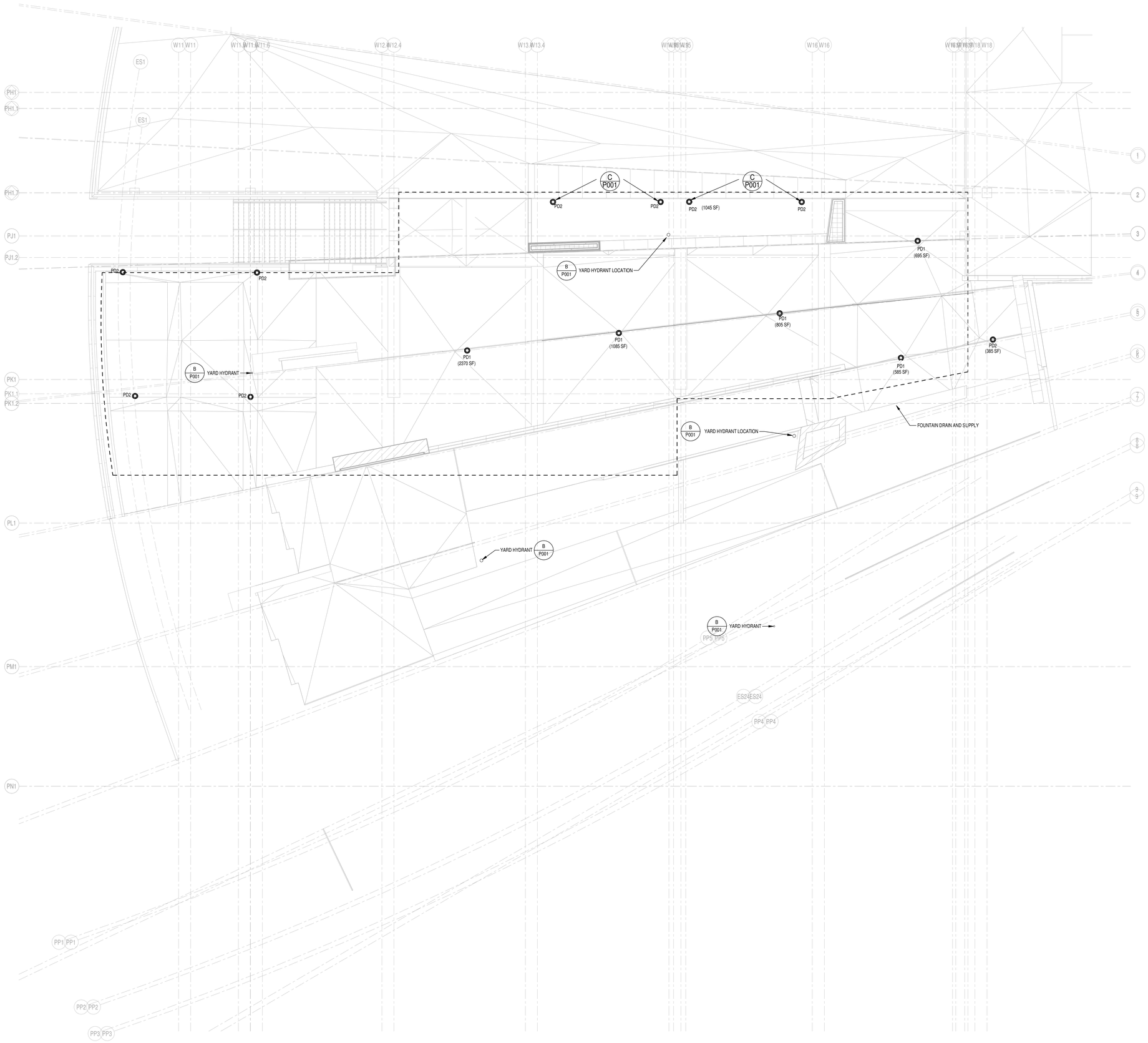
DRAWING TITLE
LOWER LEVEL PLUMBING PLAN (LOT 27)

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER P101A

PLAN NOTES

1. PLACE HOLDER



1 **UPPER TERRACE LEVEL - NEW WORK**
SCALE: 1/8" = 1'-0"

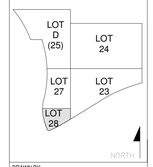
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com

ISSUES

ISSUES



DRAWN BY: Author
ENGINEER: Designer
CHECKED BY: Checker

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE
UPPER TERRACE LEVEL PLUMBING PLAN

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER
P102

DUCTWORK SYMBOLS

RECTANGULAR	ROUND / OVAL	
	CONICAL FITTING	ROUND BRANCH DUCTWORK
ACOUSTIC FITTING	ACOUSTIC FITTING	RECTANGULAR BRANCH DUCTWORK
		SQUARE TEE WITH TURNING VANES NOTE: ALL SQUARE ELBOWS IN RECTANGULAR AND ROUND / OVAL DUCTWORK SHALL BE PROVIDED WITH TURNING VANES. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.
		RADIUS'D TEE
		RADIUS'D BRANCH
		UNLESS NOTED OTHERWISE ON DRAWINGS, 15° MAX FOR DIVERGING, 30° MAX FOR CONVERGING TRANSITION
		EXISTING DUCTWORK TO REMAIN
		EXISTING DUCTWORK TO REMOVED
		RETURN AIR, RELIEF AIR, OR TRANSFER AIR DUCTWORK. (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES.
		SUPPLY AIR OR OUTDOOR AIR DUCTWORK. (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES.
		EXHAUST AIR DUCTWORK. (UP AND DOWN) RADIUSED OR SQUARE WITH TURNING VANES.
		RECTANGULAR AND ROUND / OVAL DUCTWORK RISE / DROP WITH 90° RADIUSED OR SQUARE ELBOWS AND TURNING VANES.
		RADIUS ELBOW
		90° SQUARE ELBOW (WITH TURNING VANES) NOTE: ALL SQUARE ELBOWS IN RECTANGULAR AND ROUND DUCTWORK SHALL BE PROVIDED WITH TURNING VANES.
		SQUARE THROAT / RADIUS HEEL FITTINGS NOT ACCEPTABLE
AD	AD	ACCESS DOOR OR PANEL
R	R	DUCTWORK RISE IN DIRECTION OF AIR FLOW
D	D	DUCTWORK DROP IN DIRECTION OF AIR FLOW
		FLEXIBLE DUCTWORK
		DUCTWORK WITH ACOUSTICAL LINER. LISTED DUCT SIZES ARE INSIDE CLEAR DIMENSIONS.
		FLEXIBLE CONNECTION
		DUCTWORK CONSTRUCTED OF SPECIAL MATERIAL AS NOTED
		DIRECTION OF PITCH
26x20		RECTANGULAR DUCTWORK DIMENSIONS (W x H)
26ø		ROUND DUCTWORK DIMENSIONS (DIA)
26x20 OV		OVAL DUCTWORK DIMENSIONS (W x H)

DUCTWORK DEVICE SYMBOLS

A3 10ø 300	AIR DEVICE. A3 = DESIGNATION (REFER TO FLOOR PLANS AND AIR DEVICE SCHEDULE FOR VARIOUS DESIGNATIONS). 10ø = NECK SIZE (IN INCHES). 300 = REQUIRED CFM. ALL AIR DEVICE DISCHARGE 4-WAY UNLESS NOTED WITH FLOW ARROWS. AIR DEVICE SHOWN IS 2-WAY SIDE THROW. METHOD OF IDENTIFICATION ALSO APPLIES TO OTHER CEILING MOUNTED AIR DEVICES.
SG1 20x12 300 BOG: 9'-0"	WALL OR DUCTWORK MOUNTED AIR DEVICE. SG1 = DESIGNATION (REFER TO AIR DEVICE SCHEDULE). 20x12 = DUCT CONNECTION SIZE (IN INCHES). 300 = REQUIRED CFM. 9'-0" = MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF GRILLE.
	MANUAL BALANCING VALVE DAMPER WITH LOCKING DEVICE
XXX	BDD = BACK DRAFT DAMPER CBD = COUNTER-BALANCED BACK DRAFT DAMPER
A-D	FIRE DAMPER A = TYPE (REFER TO FLOOR PLANS FOR VARIOUS TYPES) D OR S = DYNAMIC OR STATIC
XX	SD = SMOKE DAMPER FS = COMBINATION FIRE - SMOKE DAMPER MDD = MOTORIZED DAMPER AFMS = AIR FLOW MEASURING STATION
SD	DUCT MOUNTED SMOKE DETECTOR. COORDINATE LOCATION.
H	HUMIDITY SENSOR - DUCT MOUNTED
SP	STATIC PRESSURE SENSOR - DUCT MOUNTED
C	CARBON DIOXIDE SENSOR - DUCT MOUNTED
S	TEMPERATURE SENSOR - DUCT MOUNTED

VALVES AND FITTINGS

DOUBLE LINE	SINGLE LINE	
		CHECK VALVE
BALL VALVE BUTTERFLY VALVE GATE VALVE		SHUTOFF VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
		COMBINATION SHUTOFF AND BALANCING VALVE (REFER TO SPECIFICATIONS FOR REQUIRED TYPE BASED ON APPLICATIONS)
		CONCENTRIC PIPE REDUCER
	FOT FOB	ECCENTRIC PIPE REDUCER
	P	PRESSURE GAUGE
	T	TEMPERATURE GAUGE OR THERMOMETER
		UNION
		CLEANOUT
		STRAINER
		STRAINER WITH A BLOW DOWN VALVE AND HOSE CONNECTION
		DRAIN VALVE WITH HOSE END CONNECTION
		AUTOMATIC FLOW CONTROLLER WITH P/T PLUG IN AND OUT
		EXPANSION JOINT
		MANUAL AIR VENT
	A	AUTOMATIC AIR VENT
		PRESSURE REDUCING VALVE
	M	2 PORT AUTOMATIC CONTROL VALVE
	M	3 PORT AUTOMATIC CONTROL VALVE
	M	AUTOMATIC PRESSURE INDEPENDENT CONTROL VALVE
		QUICK OPENING MANUAL VALVE
		SAFETY RELIEF VALVE. FOR HYDRONIC SYSTEMS PIPE DISCHARGE AIR GAPPED TO FLOOR DRAIN UNLESS NOTED OTHERWISE. FOR STEAM SYSTEMS PIPE DISCHARGE TO OUTDOORS.
		VACUUM BREAKER
	N	NEEDLE VALVE
		PRESSURE AND TEMPERATURE TEST PLUG
	V	VACUUM GAUGE WITH STOP
		END CAP
		GLOBE VALVE
	VB	SHUTOFF VALVE AND BOX
		SHUTOFF VALVE ON RISER
	S	SOLENOID VALVE
	M	WATER METER
	F	FLOW METER
	BM	BI-METALIC STEAM TRAP AND DRIP ASSEMBLY
	TD	THERMODYNAMIC STEAM TRAP AND DRIP ASSEMBLY
	IB	INVERTED BUCKET STEAM TRAP AND DRIP ASSEMBLY
	FT	FLOAT AND THERMOSTATIC STEAM TRAP AND DRIP ASSEMBLY
	TS	THERMOSTATIC STEAM TRAP AND DRIP ASSEMBLY
		PRESSURE GAUGE WITH COCK AND SIPHON LOOP

MISC SYMBOLS

C	CARBON DIOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
CO	CARBON MONOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
CO NO2	COMBINATION CARBON MONOXIDE / NITROGEN DIOXIDE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
DP	DIFFERENTIAL PRESSURE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
H	HUMIDITY SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
S	TEMPERATURE SENSOR. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
S	TEMPERATURE SENSOR MOUNTED IN CEILING PLENUM.
SP	STATIC PRESSURE SENSOR.
T	SPACE TEMPERATURE SENSOR / THERMOSTAT. WHEN WALL MOUNTED, MOUNTING HEIGHT 46" TO MEET ADA REQUIREMENTS. WHEN MOUNTED NEXT TO WALL SWITCH COORDINATE WITH ARCHITECT.
	EMERGENCY SHUTOFF STATION. 46" MOUNTING HEIGHT UNLESS NOTED OTHERWISE.

GENERAL FLOOR PLAN NOTES

3	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN UNLESS NOTED OTHERWISE.
3	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
A1	EQUIPMENT, DEVICE, OR PLUMBING FIXTURE MARK. LETTER DESIGNATIONS REFER TO SCHEDULES.
H1 OR H1	EQUIPMENT REFERENCE. LETTER DESIGNATION VARIES. REFER TO SCHEDULES.
2	RISER OR STACK NUMBER
B / H2	DETAIL: B = DETAIL DESIGNATION H2 = SHEET WHERE DETAIL IS LOCATED
1 / H2	SECTION: 1 = SECTION DESIGNATION H2 = SHEET WHERE DETAIL IS LOCATED
A1	"UP TO" SYMBOL (ITEM ON FLOOR ABOVE)
TOE: 3' - 0" BOE: 0' - 6"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO TOP OR BOTTOM OF EQUIPMENT, UNLESS NOTED OTHERWISE
10" ELEV: 8' - 0" / 10" ELEV: 8' - 0"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO CENTERLINE OF PIPE, UNLESS NOTED OTHERWISE
20x20 TOD: 8' - 10" 20x20 BOD: 7' - 2"	APPROXIMATE DIMENSION ABOVE FINISHED FLOOR TO TOP OR BOTTOM OF DUCTWORK, UNLESS NOTED OTHERWISE
UC-X	DOOR UNDERCUT. X = HEIGHT OF UNDERCUT IN INCHES; 0.75 INCH UNDERCUT IF NO HEIGHT IS NOTED. COORDINATE WITH GC.
DL-1	DOOR LOUVER. 1 = SQUARE FEET OF LOUVER.
	CONNECT TO EXISTING

PIPING SYMBOLS

DOUBLE LINE	SINGLE LINE	
		BOTTOM CONNECTION (45°)
		BOTTOM CONNECTION (90°)
		BRANCH TEE CONNECTION (NOTE: BULLHEAD TEE'S ARE NOT PERMITTED)
		DIRECTION OF PITCH
D	D	DROP
		ELBOW DOWN
		ELBOW UP
		EXISTING PIPE TO BE REMOVED
		EXISTING PIPE TO REMAIN
		FLOW DIRECTION DESIGNATION
		PIPE RISER
		PUMP
R	R	RISE
		TOP CONNECTION (45°)
		TOP CONNECTION (90°)

HVAC PIPING DESIGNATIONS

CHS	CHILLED WATER SUPPLY PIPE
CHR	CHILLED WATER RETURN PIPE
CWS	CONDENSER WATER SUPPLY PIPE
CWR	CONDENSER WATER RETURN PIPE
CHGS	CHILLED WATER GLYCOL SOLUTION SUPPLY PIPE
CHGR	CHILLED WATER GLYCOL SOLUTION RETURN PIPE
D	DRAIN LINE. PITCH IN DIRECTION INDICATED
HWR	HEATING HOT WATER RETURN PIPE
HWS	HEATING HOT WATER SUPPLY PIPE
MU	WATER MAKE-UP PIPE
V	VENT PIPE
ET	EXPANSION TANK PIPE
HG	REFRIGERANT HOT GAS LINE
RL	REFRIGERANT LIQUID LINE
RS	REFRIGERANT SUCTION LINE
10	STEAM SUPPLY PIPE - NUMBER INDICATES P.S.I.G.
HPC	HIGH PRESSURE CONDENSATE RETURN PIPE
HPS	HIGH PRESSURE STEAM SUPPLY PIPE
LPC	LOW PRESSURE CONDENSATE RETURN PIPE
LPS	LOW PRESSURE STEAM SUPPLY PIPE
MPC	MEDIUM PRESSURE CONDENSATE RETURN PIPE
MPS	MEDIUM PRESSURE STEAM SUPPLY PIPE
PC	PUMPED CONDENSATE RETURN PIPE

ABBREVIATIONS

AC - AIR COMPRESSOR OR AIR CONDITIONER
ACCU - AIR COOLED CONDENSING UNIT
AD - ACCESS DOOR OR AREA DRAIN
ADJ - ADJUSTABLE
AFF - ABOVE FINISHED FLOOR
AFG - ABOVE FINISHED GRADE
AFMS - AIR FLOW MEASURING STATION
ALT - ALTERNATE
AP - ACCESS PANEL
APPROX - APPROXIMATE
ARCH - ARCHITECT OR ARCHITECTURAL
ASSY - ASSEMBLY
ATC - AUTOMATIC TEMPERATURE CONTROL

BDD - BACK DRAFT DAMPER
BFP - BACKFLOW PREVENTER
BLDG - BUILDING
BOB - BOTTOM OF BEAM
BOD - BOTTOM OF DUCT
BOE - BOTTOM OF EQUIPMENT
BOF - BOTTOM OF FOOTING
BOG - BOTTOM OF GRILLE
BOP - BOTTOM OF PIPE
BOT - BOTTOM
BTU - BRITISH THERMAL UNIT
BTUH - BRITISH THERMAL UNIT PER HOUR

CBD - COUNTER BALANCED BACKDRAFT DAMPER
CFCI - CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFM - CUBIC FEET PER MINUTE
CHS - CHILLED WATER SUPPLY
CHR - CHILLED WATER RETURN
CHGR - CHILLED WATER GLYCOL SOLUTION RETURN
CHGS - CHILLED WATER GLYCOL SOLUTION SUPPLY
CLG - CEILING
CMU - CONCRETE MASONRY UNIT
CO - CLEAN OUT
CO2 - CARBON DIOXIDE
CONN - CONNECT OR CONNECTION
CONTR - CONTRACTOR
CTR - CENTER
CU - COPPER
CW - COLD WATER
CWR - CONDENSER WATER RETURN
CWS - CONDENSER WATER SUPPLY

D - DRAIN LINE
DB - DRY BULB
DDC - DIRECT DIGITAL CONTROLS
DI - DEIONIZED WATER
DIA - DIAMETER
DIM - DIMENSION
DN - DOWN
DWG - DRAWING

EA - EACH OR EXHAUST AIR
EAT - ENTERING AIR TEMPERATURE
EC - ELECTRICAL CONTRACTOR (DIVISION 26)
EJ - EXPANSION JOINT
ELEC - ELECTRICAL
ELEV - ELEVATOR
EQUIP - EQUIPMENT
ET - EXPANSION TANK
ETR - EXISTING TO REMAIN
EQS - EQUIPMENT SUPPLIER
EWT - ENTERING WATER TEMPERATURE
EXH - EXHAUST
EXP - EXPANSION
EXT - EXTERIOR
EX - EXISTING

FD - FLOOR DRAIN
FF - FINISHED FLOOR ELEVATION
FLR - FLOOR
FOB - FLAT ON BOTTOM
FOF - FUEL OIL FLOW
FOG - FUEL OIL GAUGE
FOR - FUEL OIL RETURN
FOS - FUEL OIL SUPPLY
FOT - FLAT ON TOP
FPM - FEET PER MINUTE
FSC - FIRE SUPPRESSION CONTRACTOR (DIVISION 21)
FT - FEET
FTG - FOOTING

G - GAS OR NATURAL GAS
GA - GAUGE
GAL - GALLON
GALV - GALVANIZED
GC - GENERAL TRADES CONTRACTOR
GPM - GALLONS PER MINUTE

HB - HOSE BIBB
HC - HVAC CONTRACTOR (DIVISION 23)
HD - HUB DRAIN
HG - REFRIGERANT HOT GAS
HP - HORSEPOWER
HPC - HIGH PRESSURE CONDENSATE RETURN
HPS - HIGH PRESSURE STEAM SUPPLY
HR - HOUR
HT - HEAT TRACE
HTR - HEATER
HVAC - HEATING, VENTILATING, AND AIR CONDITIONING
HW - HOT WATER
HWR - HEATING HOT WATER RETURN
HWS - HEATING HOT WATER SUPPLY

ID - INSIDE DIAMETER
INV - INVERT ELEVATION
IN - INCHES

KEC - KITCHEN EQUIPMENT CONTRACTOR

L - LENGTH
LAT - LEAVING AIR TEMPERATURE
LAV - LAVATORY
LBS - POUNDS
LPC - LOW PRESSURE CONDENSATE RETURN
LPS - LOW PRESSURE STEAM SUPPLY
LWT - LEAVING WATER TEMPERATURE

MAX - MAXIMUM
MDD - MOTORIZED DAMPER
MEZZ - MEZZANINE
MFR - MANUFACTURER
MH - MANHOLE
MIN - MINIMUM OR MINUTE
MISC - MISCELLANEOUS
MTD - MOUNTED
MTG - MOUNTING
MPC - MEDIUM PRESSURE CONDENSATE RETURN
MPS - MEDIUM PRESSURE STEAM SUPPLY
MU - WATER MAKE-UP

N/C - NORMALLY CLOSED
NIC - NOT IN CONTRACT
N/O - NORMALLY OPEN
NOM - NOMINAL
NPT - NATIONAL PIPE THREAD
NTS - NOT TO SCALE

OA - OUTDOOR AIR
OBD - OPPOSED BLADE DAMPER
OD - OUTSIDE DIAMETER
OFCI - OWNER FURNISHED CONTRACTOR INSTALLED
OFOI - OWNER FURNISHED OWNER INSTALLED

P - PROPANE GAS
PC - PLUMBING CONTRACTOR (DIVISION 22) OR PUMPED CONDENSATE RETURN
PLBG - PLUMBING
PRESS - PRESSURE
PRV - PRESSURE REGULATING VALVE
PSF - POUNDS PER SQUARE FOOT
PSI - POUNDS PER SQUARE INCH
PSIG - POUNDS PER SQUARE INCH GAUGE

RA - RETURN AIR
RAD - RADIUS
RCP - REFLECTED CEILING PLAN
RD - ROOF DRAIN
REC - RECESSED
REQD - REQUIRED
RI - ROUGH IN
RL - REFRIGERANT LIQUID
ROS - REVERSE OSMOSIS WATER SUPPLY
ROR - REVERSE OSMOSIS WATER RETURN
RPM - REVOLUTIONS PER MINUTE
RS - REFRIGERANT SUCTION

S - SPRINKLER (WET)
SA - SUPPLY AIR
SAN - SANITARY OR SANITARY DRAIN
SCH - SCHEDULE
SCW - SOFT COLD WATER
SHT - SHEET
SPEC - SPECIFICATIONS
SQ - SQUARE
SR - SUPPLY RISER
SRV - SAFETY RELIEF VALVE
SS - STAINLESS STEEL
STD - STANDARD
STM - STORM OR STORM DRAINAGE
STRUC - STRUCTURAL OR STRUCTURE
SUC - SITE UTILITY CONTRACTOR

TEMP - TEMPERATURE
TOB - TOP OF BEAM
TOD - TOP OF DUCT
TOE - TOP OF EQUIPMENT
TOF - TOP OF FOOTING
TOJ - TOP OF JOIST
TOP - TOP OF PIPE
TOS - TOP OF SLAB OR TOP OF STEEL
TYP - TYPICAL

UNO - UNLESS NOTED OTHERWISE

V - VENT
VAC - VACUUM
VEL - VELOCITY
VIB - VALVE IN BOX
VOL - VOLUME
VTR - VENT THROUGH ROOF
VR - VENT RISER

W/ - WITH
W/O - WITHOUT
WB - WET BULB
WCO - WALL CLEANOUT

HEAPY SNAP CODE

HEAPY SNAP CODES (HSCs) (A.K.A. QR CODES), MADE AVAILABLE FOR INFORMATIONAL PURPOSES ONLY IN RELATION TO THIS PROJECT. REFER TO SCHEDULE.

NOTE: ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.

ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

SHEET LIST HVAC

Sheet Number	Sheet Name
H001	HVAC SYMBOLS, NOTES, LEGENDS
H101	LOWER LEVEL HVAC PLAN (LOT 28)
H301	CONTROL SCHEMATIC
H302	CONTROL SCHEMATIC

HEAPY
PROJECT NO. 2021-07091

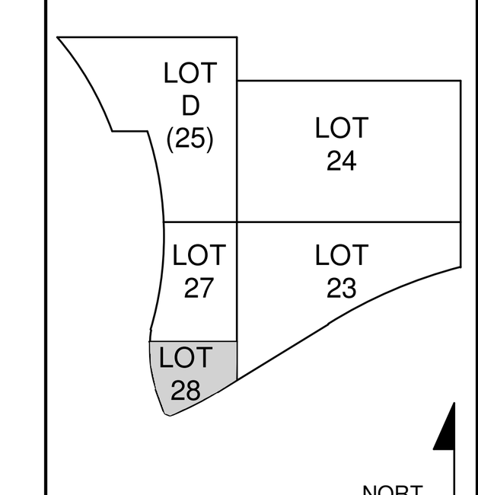
HAMILTON COUNTY STATE OF OHIO

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

michael mcinturf ARCHITECTS
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

ISSUES



DRAWN BY: LDD
ENGINEER: LDD
CHECKED BY: CSR

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE: HVAC SYMBOLS, NOTES, LEGENDS

JOB NUMBER: 98090.40 DATE: 12/17/2021

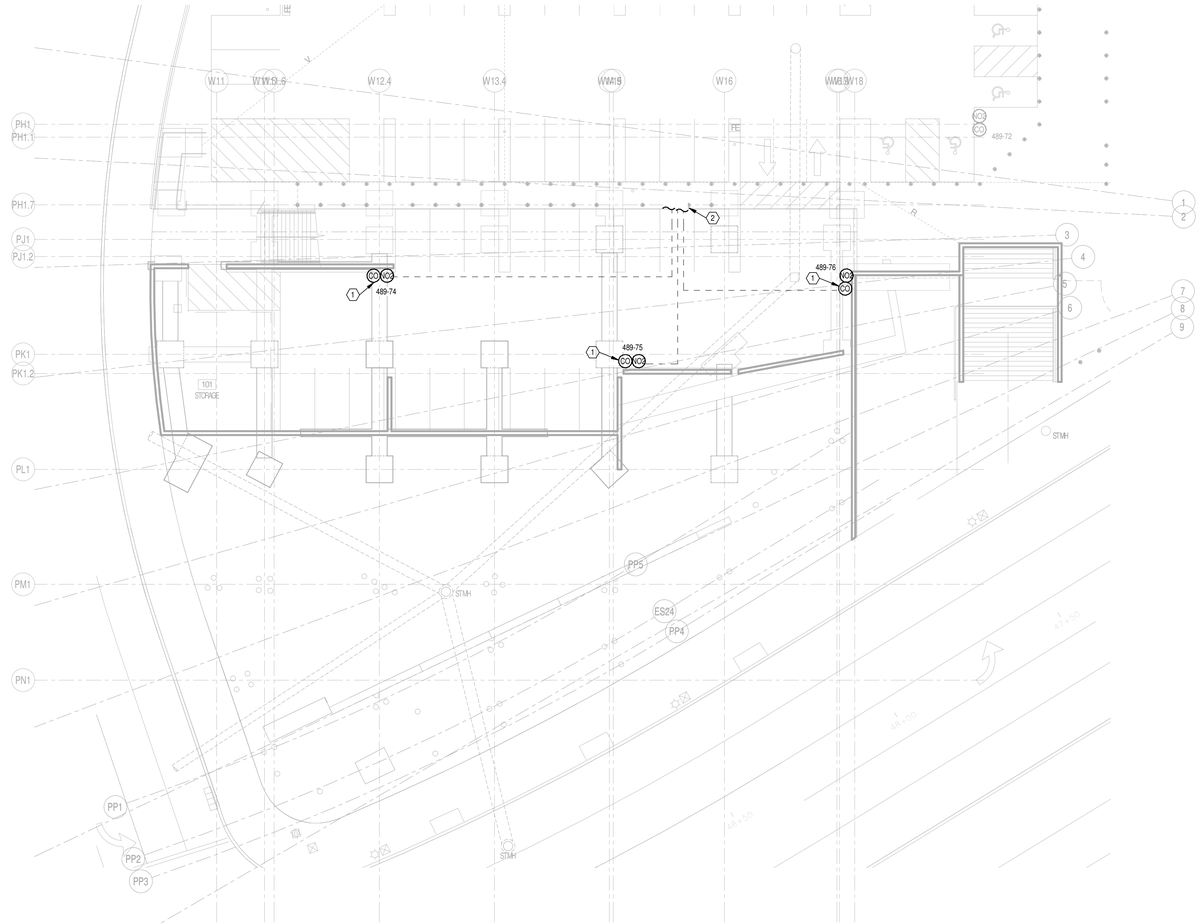
DRAWING NUMBER: H001

GENERAL NOTES

1. REFER TO ARCHITECTURAL SPECIFICATIONS FOR ALL PAINTING REQUIREMENTS.

NOTES

1. REFER TO DETAIL 1 ON SHEET H301 FOR CO/NO2 POINT INSTALLATION.
2. APPOXIMATELY 820' TO LOT 24 WATER METER ROOM.



1 **LOWER LEVEL HVAC PLAN (LOT 28)**
SCALE: 1/16" = 1'-0"

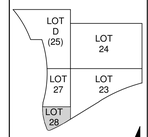
HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

MMA
michael mcinturf ARCHITECTS
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

ISSUES

ISSUES



DRAWN BY: LDD
ENGINEER: LDD
CHECKED BY: CSR

THE BANKS
Public Partnership

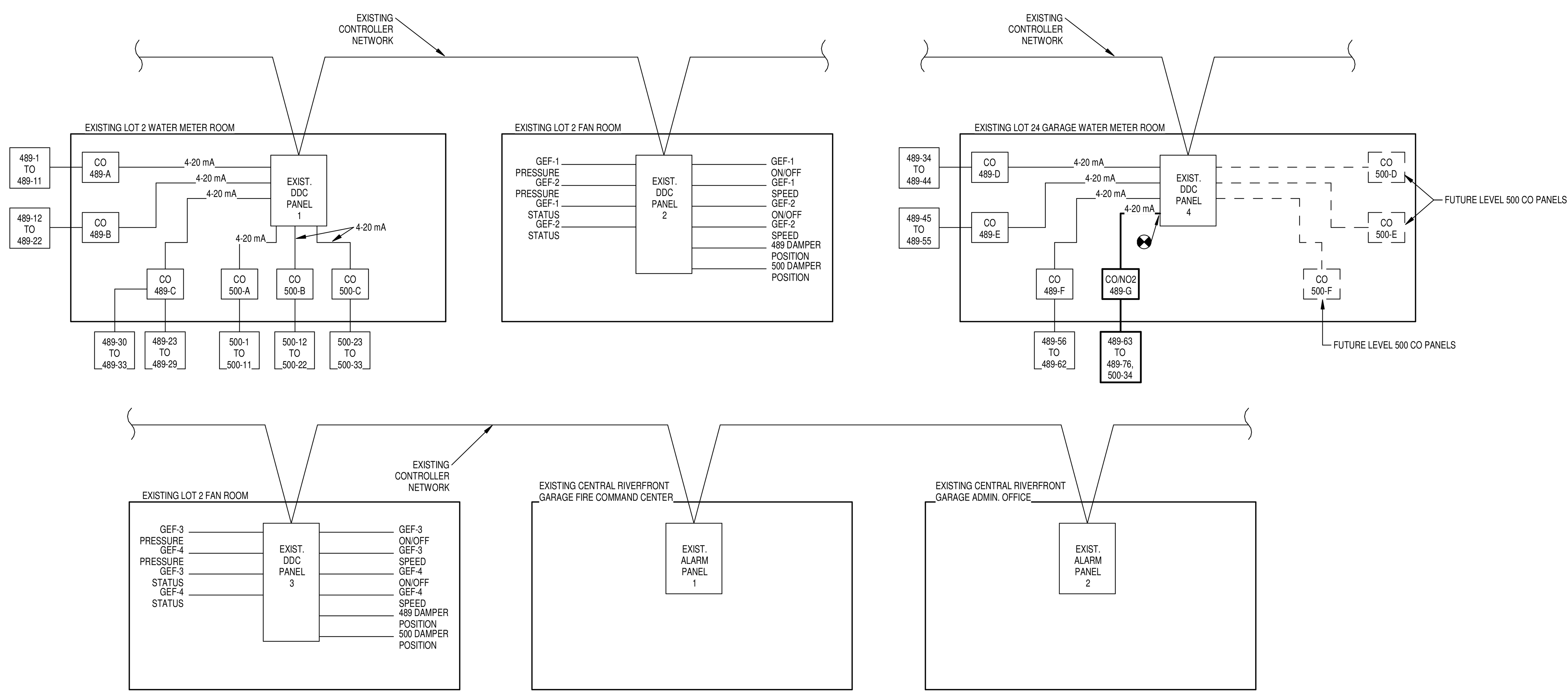
BP#2 - PARK & GARAGE

DRAWING TITLE
LOWER LEVEL HVAC PLAN (LOT 28)

JOB NUMBER 98090.40
DATE 12/17/2021

DRAWING NUMBER H101

HEAPY
PROJECT NO. 2021-07091



CO/NO2 FAN CONTROL ARCHITECTURE

SCALE: NONE

EXISTING SEQUENCE OF OPERATION

FAN AND DAMPER MODULATION

GEF-1,2.3 AND 4 MODE SHALL BE DETERMINED BY THE POSITION OF THE ON-OFF-AUTO SWITCHES ON THE CENTRAL RIVERFRONT GARAGE ALARM PANELS.
THE SWITCHES IN THE FIRE COMMAND CENTER SHALL OVERRIDE ALL OTHER CONTROL FUNCTIONS.

IN AUTOMATIC MODE, FANS GEF-1,2,3 AND 4 SHALL OPERATE CONTINUOUSLY. DDC SHALL VARY THE FAN SPEED FOR EACH FAN BETWEEN VFD MINIMUM AND FULL SPEED TO MAINTAIN NEGATIVE STATIC PRESSURE SETPOINT OF -1.5"WG (ADJUSTABLE) WITHIN THE EXHAUST AIRSHAFT BASED ON A STATIC PRESSURE SENSOR MOUNTED ON THE 489 AND 500 LEVELS FOR EACH SHAFT SHALL MODULATE BASED ON A SIGNAL FROM DDC. DDC SHALL SENSE CO/NO2 LEVELS THROUGH OUT THE GARAGE AND SHALL MODULATE THE DAMPERS FOR EACH LEVEL, IN UNISON. AS CO RISES ABOVE 35 PPM (ADJUSTABLE), THE DAMPER SHALL MODULATE OPEN FROM MINIMUM TO 100% OPEN AT 50 PPM (ADJUSTABLE) AND ABOVE. ADDITIONALLY, AS NO2 RISES ABOVE 2 PPM (ADJUSTABLE), THE DAMPER SHALL MODULATE OPEN FROM MINIMUM TO 100% OPEN AT 5 PPM (ADJUSTABLE) AND ABOVE.

IN OFF MODE, GEF-1,2,3 AND 4 SHALL STOP AND THE DAMPERS ON THE 489 AND 500 LEVELS SHALL BE COMMANDED FULLY CLOSED.

IN ON MODE, GEF-1,2,3 AND 4 SHALL BE COMMANDED TO FULL SPEED AND THE DAMPERS ON THE 489 AND 500 LEVELS SHALL BE COMMANDED 100% OPEN.

A TWO POSITION PRESSURE SWITCH WITH A SETPOINT OF -3"WG (ADJUSTABLE) WIRED TO THE VFD DIRECTLY SHALL SHUT DOWN THE ASSOCIATED FAN ON TRIP. THIS SWITCH SHALL REQUIRE MANUAL RESET; AN ALARM SHALL BE INDICATED AT THE FIRE DEPARTMENT CONTROL PANEL AND THE GARAGE ADMIN ALARM PANEL IF THE PRESSURE SAFETY IS TRIPPED.

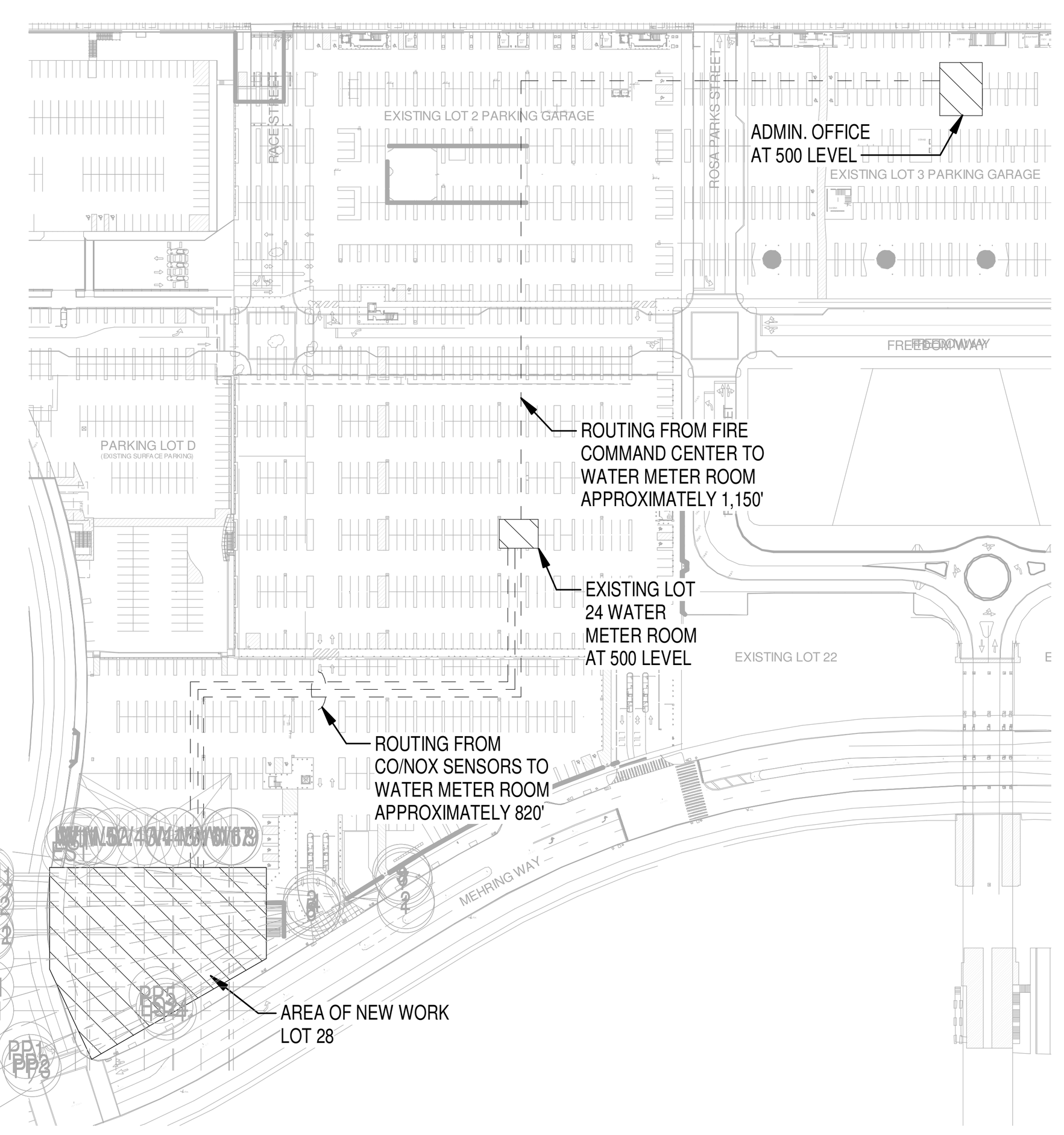
ALARM MODES

DDC SHALL INITIATE ALARMS VIA LIGHTS AND AUDIBLE HORN AT BOTH CENTRAL RIVERFRONT GARAGE ALARM PANELS. IF A CO/NO2 SENSOR PANEL HAS NO ALARM CONDITION, DDC SHALL TURN ON THE ASSOCIATED GREEN LIGHT FOR THAT ZONE. IF A CO SENSOR PANEL INDICATES ALARM IN ANY ZONE (ABOVE 50 PPM), OR NO2 INDICATES ALARM IN ANY ZONE (ABOVE 5 PPM), DDC SHALL INITIATE ALARMS VIA RED LIGHT AT BOTH CENTRAL RIVERFRONT GARAGE ALARM PANELS AND INITIATE THE HORN ON EACH CENTRAL RIVERFRONT GARAGE ALARM PANEL.

ONCE IN ALARM MODE, THE SILENCE BUTTON ON EITHER PANEL SHALL SILENCE BOTH HORNS FOR A PERIOD OF 1 HOUR. IF THE ALARM HAS NOT CLEARED IN THAT TIME, THE ALARM HORN SHALL BE RE-INITIATED. THE SILENCE FEATURE SHALL CONTINUE TO BE FUNCTIONAL.

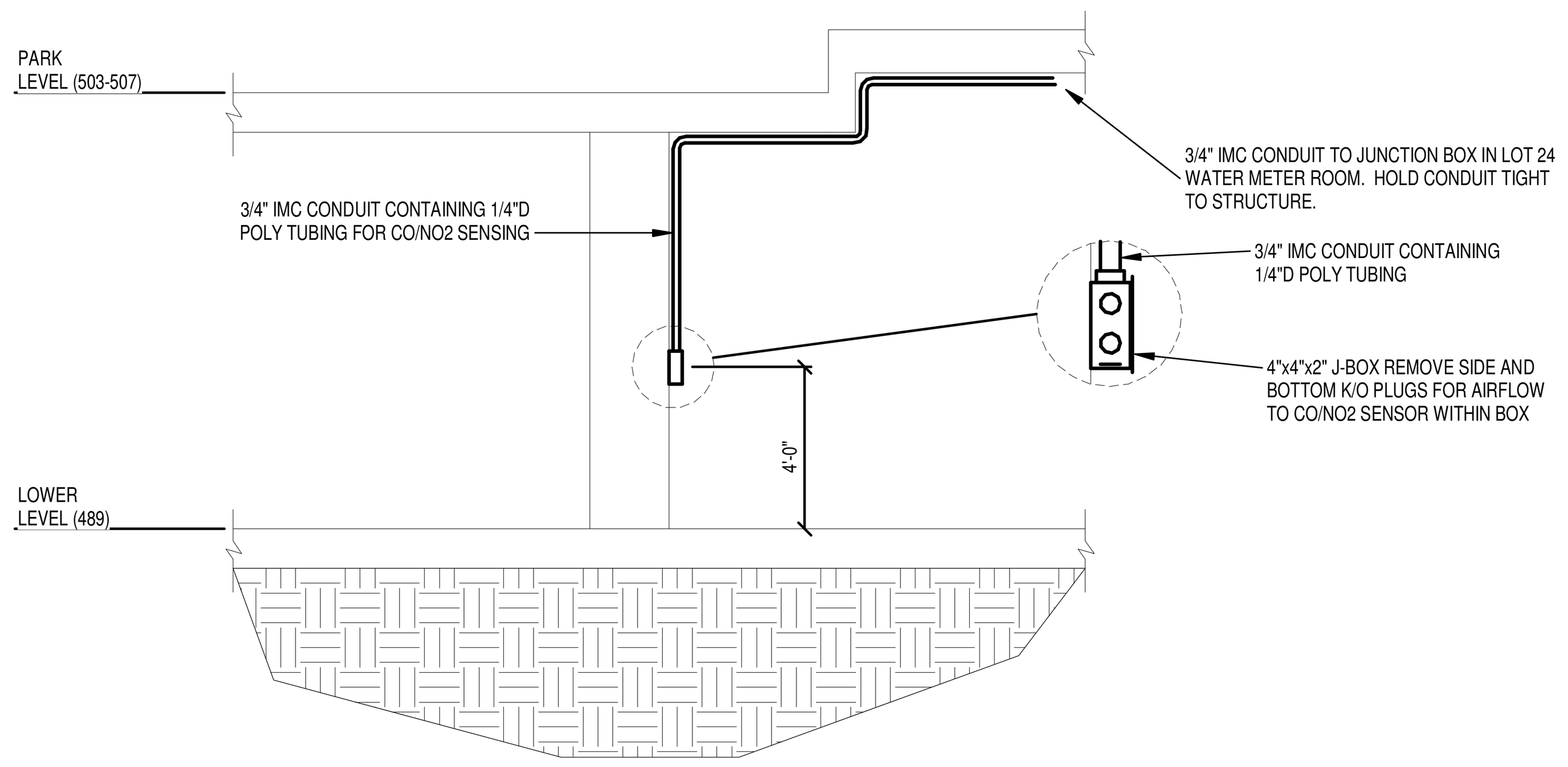
FAN STATUS

FOR EACH FAN (GEF-1,2,3 AND 4), IF THE VFD FOR THE FAN INDICATES TROUBLE, DDC SHALL INITIATE A RED LIGHT ON BOTH CENTRAL RIVERFRONT GARAGE ALARM PANELS FOR THAT FAN. OTHERWISE, THE GREEN LIGHT FOR THE ASSOCIATED FAN SHALL BE INITIATED.



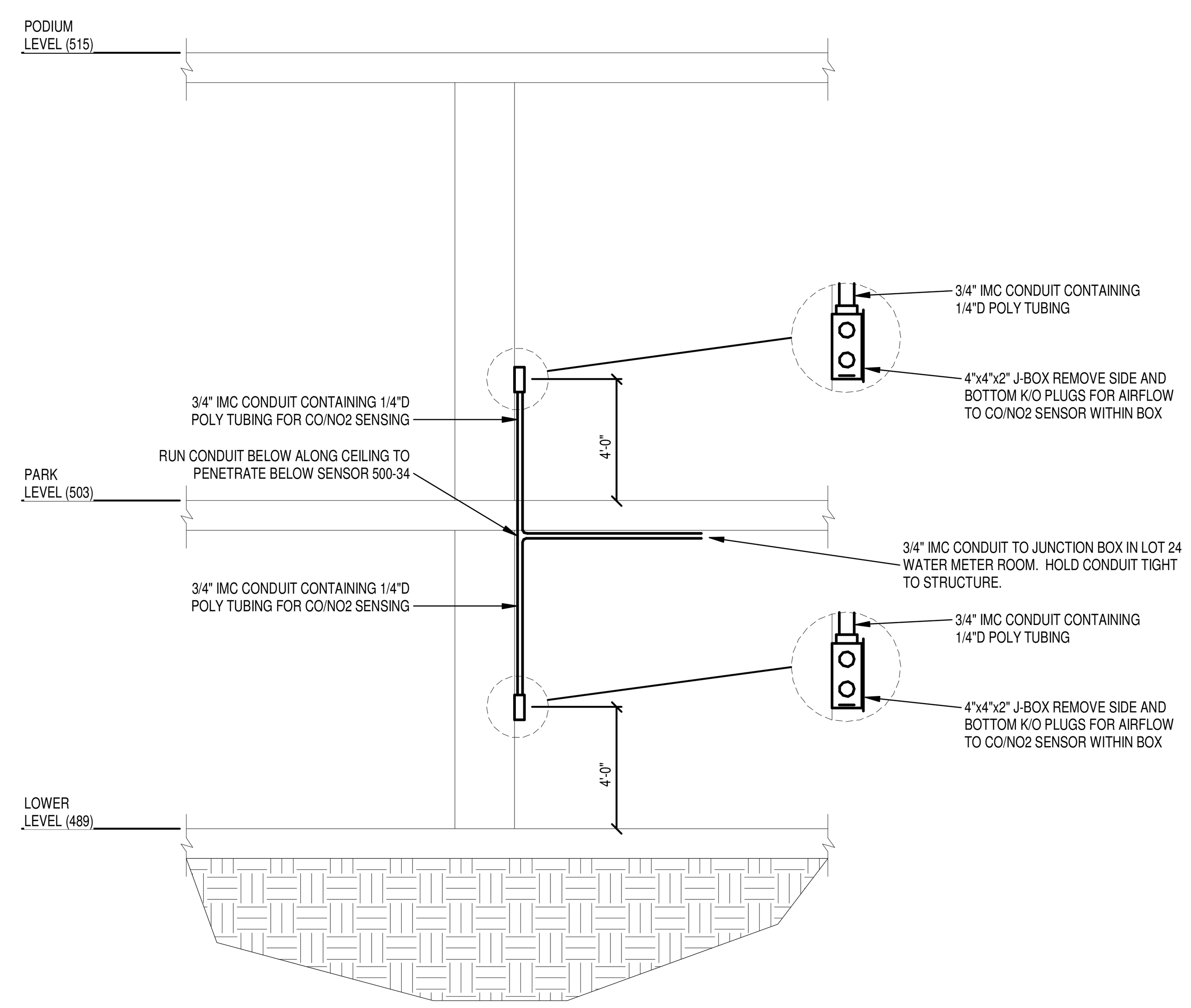
5 **MECHANICAL LOWER LEVEL OVERVIEW**

SCALE: 1" = 160'-0"



1 **CO/NO2 SENSING LOCATION**

SCALE: NONE

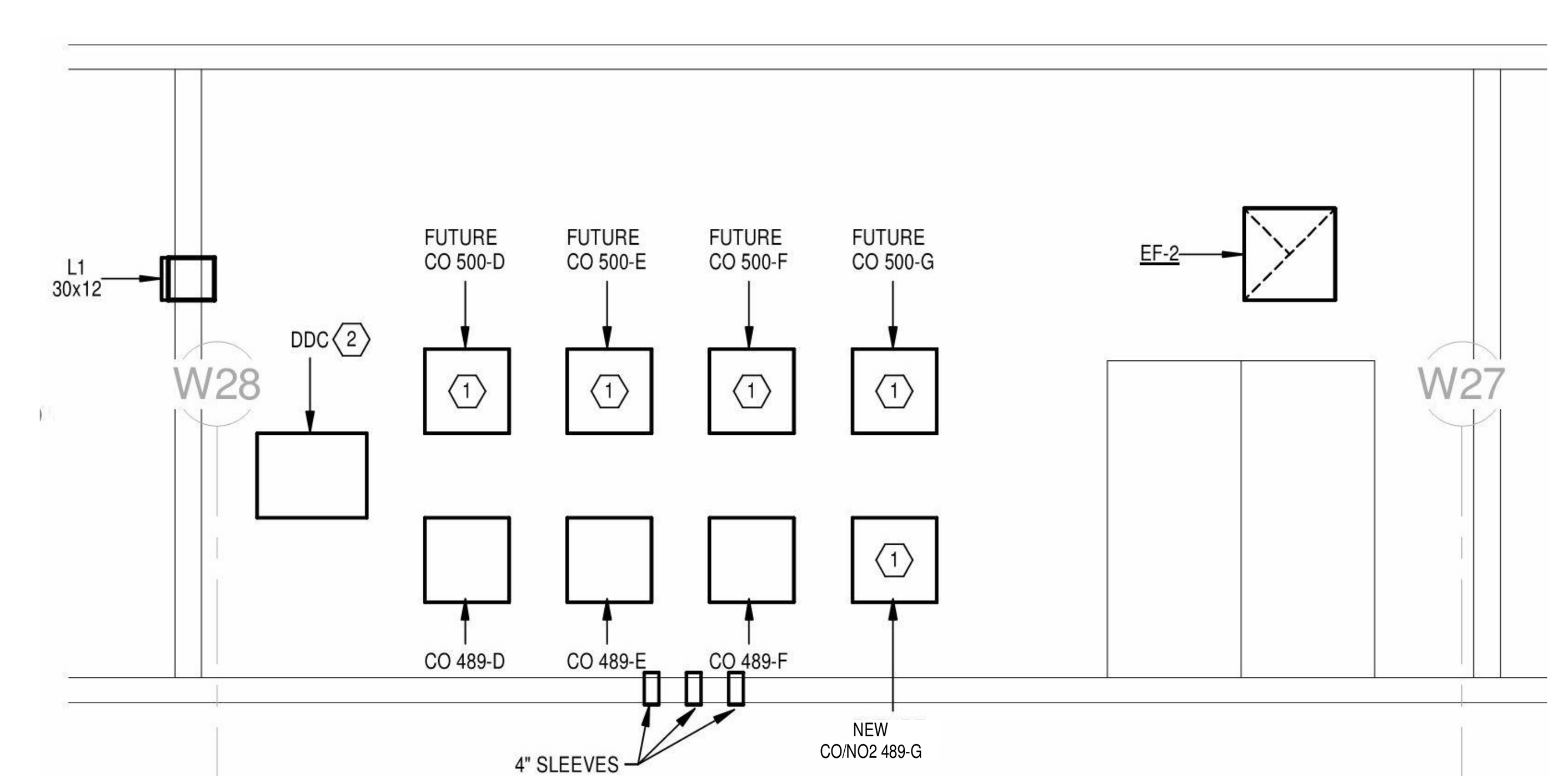


2 **CO/NO2 SENSING LOCATION**

SCALE: NONE

KEYED NOTES

1. MAINTAIN THIS CLEAR SPACE FOR INSTALLATION OF FUTURE CO PANELS. COORDINATE WITH OTHER TRADES.
2. EXISTING DDC CONTROLLER AND CO PANELS.



4 **LOT 24 WATER METER ROOM SECTION**

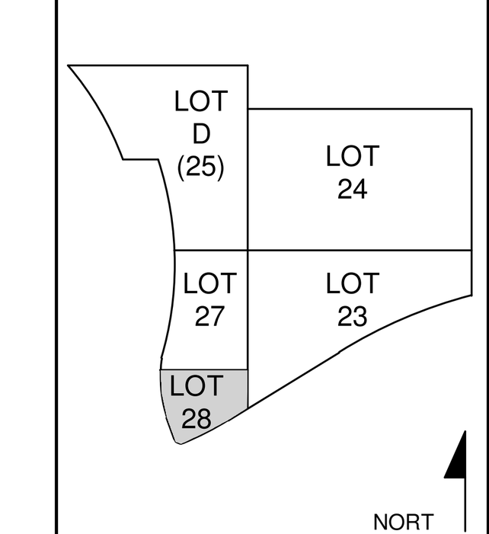
SCALE: NONE

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

michael schuster associates
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

ISSUES



DRAWN BY: JWF

ENGINEER: JWF

CHECKED BY: CSR

THE BANKS Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE

CONTROL SCHEMATIC

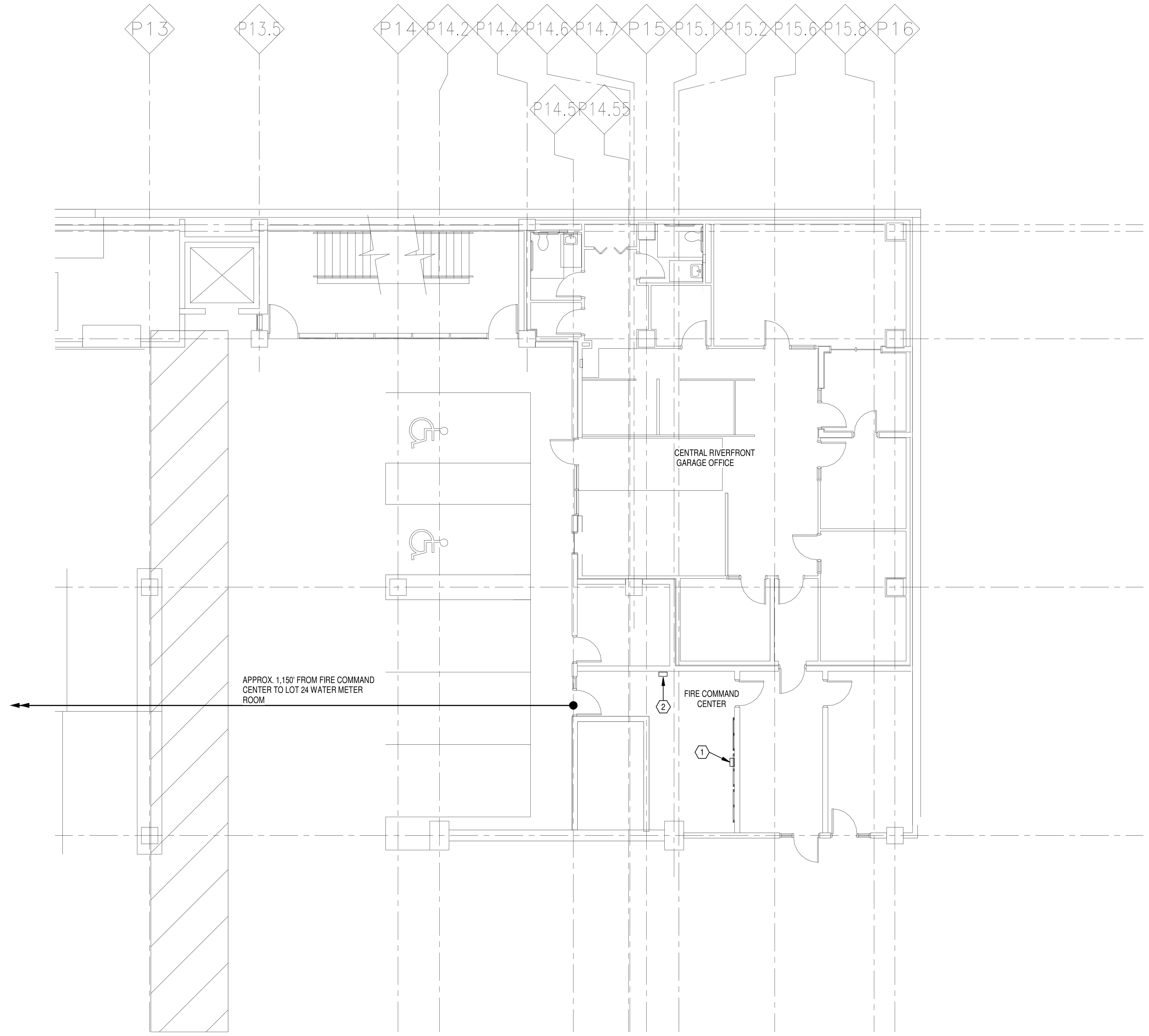
JOB NUMBER 98090.40 DATE 12/17/2021

DRAWING NUMBER

H301

HEAPY

PROJECT NO. 2021-07091

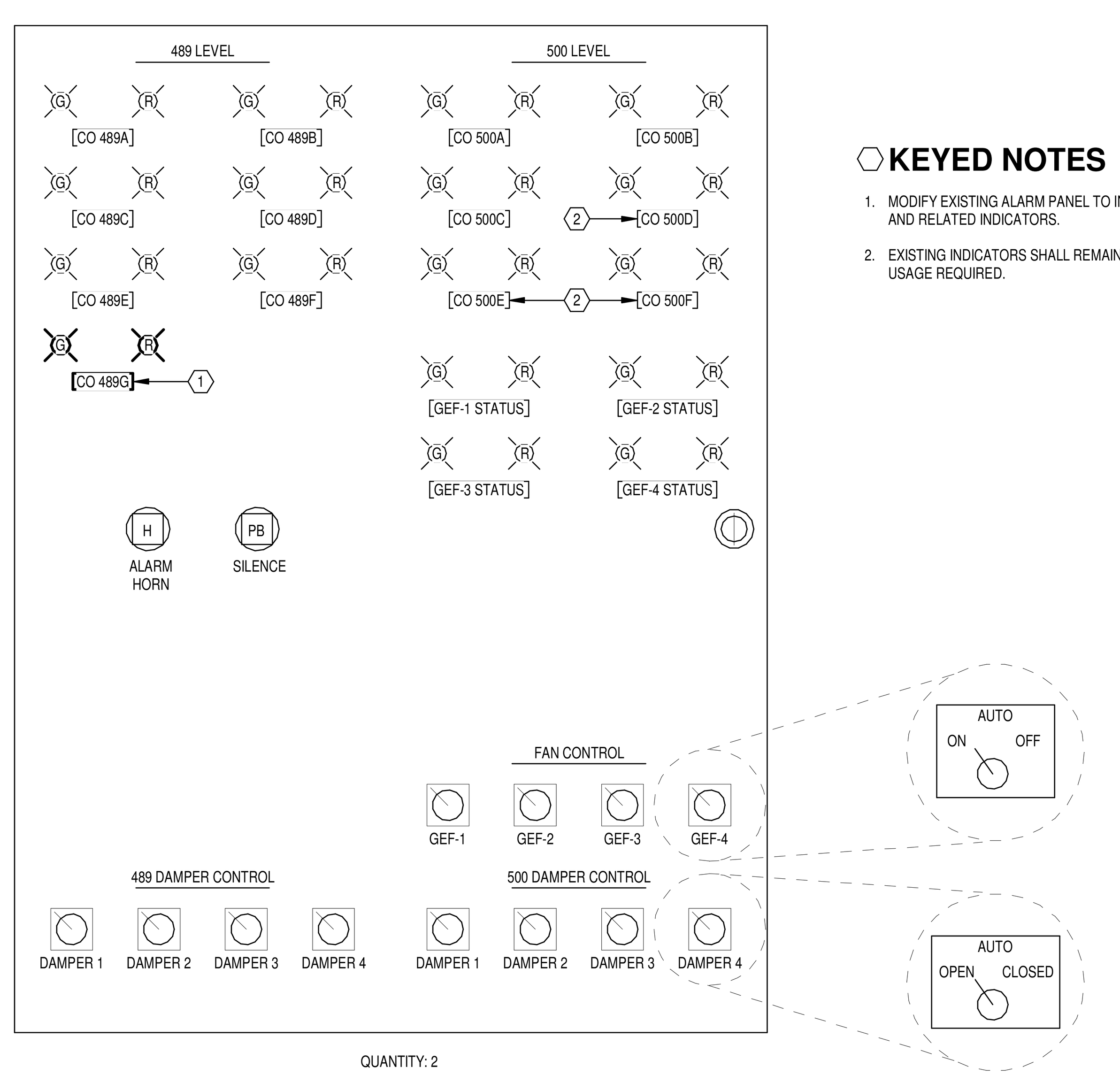


EXISTING CENTRAL RIVERFRONT GARAGE ADMIN OFFICE (UPPER LEVEL 500)

SCALE: 1/8" = 1'-0"

KEYED NOTES

1. EXISTING GARAGE ADMIN CO/NO2 MONITORING AND ALARM PANEL LOCATION TO REMAIN.
2. EXISTING FIRE DEPT. CO/NO2 MONITORING AND CONTROL PANEL LOCATION TO REMAIN.



QUANTITY: 2

EXISTING CENTRAL RIVERFRONT GARAGE ALARM PANEL LAYOUT

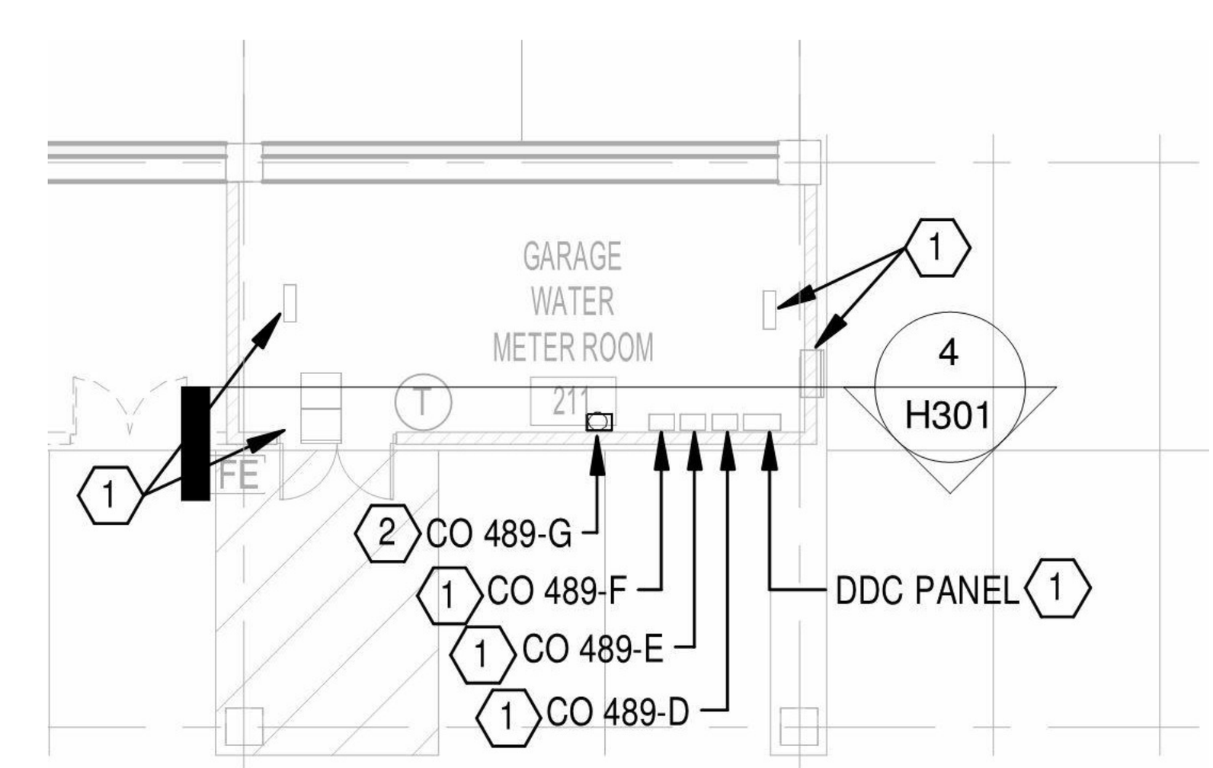
SCALE: NONE

KEYED NOTES

1. MODIFY EXISTING ALARM PANEL TO INCLUDE CO/NO2 PANEL 489G AND RELATED INDICATORS.
2. EXISTING INDICATORS SHALL REMAIN DECOMMISSIONED UNTIL USAGE REQUIRED.

KEYED NOTES

1. EXISTING MECHANICAL EQUIPMENT TO REMAIN.
2. NEW CARBON MONOXIDE/NITROGEN DIOXIDE MONITORING PANEL.



LOT 24 WATER METER ROOM PLAN

SCALE: NONE

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

MMA
1116 RACE ST
CINCINNATI, OH 45202
513.639.2351 TEL
513.639.2353 FAX
WWW.MCINTURF.COM

ISSUES

LOT D (25) | LOT 24 | LOT 27 | LOT 23 | LOT 28

NORTH

DRAWN BY:	LDD
ENGINEER:	LDD
CHECKED BY:	CSR

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE: CONTROL SCHEMATIC

JOB NUMBER	DATE
98090.40	12/17/2021

DRAWING NUMBER: H302

HEAPY
PROJECT NO. 2021-07091

ELECTRICAL SYMBOLS

φ^{3}_{S}	DASH SYMBOL INDICATES PARTICULAR OUTLET OR DEVICE TO BE REMOVED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED.
φ^{3}_{S}	EXISTING OUTLET OR DEVICE TO REMAIN. MAINTAIN EXISTING CIRCUITING.
φ	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE). WHEN SHOWN, RECEPTACLE TO HAVE "CONTROLLED" MARKINGS.
φ	20A-125V SINGLE RECEPTACLE, NEMA 5-20R (18" MH UNLESS NOTED OTHERWISE).
φ	SPECIAL PURPOSE RECEPTACLE. REFER TO NOTE ON PLAN.
φ	20A-125V DOUBLE DUPLEX RECEPTACLE. NEMA 5-20R, (18" MH UNLESS NOTED OTHERWISE) TWO GANG ASSEMBLY.
φ	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (46" MH UNLESS NOTED OTHERWISE).
φ^{GF}	20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE).
φ^{WP}	20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R (HORIZONTAL 18" MH UNLESS NOTED OTHERWISE) WITH TAYMAC #MM420G EXTRA DUTY GRAY COVER, VERTICAL MOUNT.
$\varphi^{WP/GF}$	20A-125V WEATHERPROOF DUPLEX RECEPTACLE, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH UNLESS NOTED OTHERWISE), WITH TAYMAC #MM420G EXTRA DUTY GRAY COVER, VERTICAL MOUNT.
φ^{IG}	20-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH ISOLATED GROUND (18" MH UNLESS NOTED OTHERWISE).
φ^{20A}	20A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-20R (18" MH UNLESS NOTED OTHERWISE).
φ^{30A}	30A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-30R (18" MH UNLESS NOTED OTHERWISE).
φ^{50A}	50A-125/250V-1PH-4W SINGLE RECEPTACLE, NEMA 14-50R (18" MH UNLESS NOTED OTHERWISE).
φ^{20A}	20A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-20R (18" MH UNLESS NOTED OTHERWISE).
φ^{30A}	30A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-30R (18" MH UNLESS NOTED OTHERWISE).
φ^{50A}	50A-250V-3PH-4W SINGLE RECEPTACLE, NEMA 15-50R (18" MH UNLESS NOTED OTHERWISE).
J	JUNCTION BOX.
$	SINGLE POLE SWITCH (46" MH UNLESS NOTED OTHERWISE).
2$	TWO POLE WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
P$	SWITCH WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).
K$	KEY OPERATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
L$	LOW-VOLTAGE MOMENTARY WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
DM$	LIGHTING DIMMER SWITCH (46" MH UNLESS NOTED OTHERWISE) 1000 WATTS UNLESS OTHERWISE INDICATED.
R$	SWITCH WITH RECEPTACLE (46" MH UNLESS NOTED OTHERWISE) STANDARD TWO-GANG ASSEMBLY OF SWITCH AND RECEPTACLE.
M$	FLUSH FRACTIONAL HORSEPOWER MOTOR STARTER WITH NEON PILOT LIGHT. ONE-GANG ASSEMBLY (46" MH UNLESS NOTED OTHERWISE).
H$	HP RATED WALL SWITCH (46" MH UNLESS NOTED OTHERWISE).
	ELECTRICAL PANEL OR SWITCHBOARD PER DRAWINGS.
P/B	PULL BOX.
J	DISCONNECT SWITCH.
	MOTOR STARTER.
J	COMBINATION MOTOR STARTER AND DISCONNECT SWITCH.
	ELECTRIC MOTOR.
UH	UNIT HEATER.
FC	FAN COIL.
AC	AIR CONDITIONER.
CU	CONDENSING UNIT.
BL	BLUE LIGHT PHONE AND LUMINAIRE, PROVIDE 120 VOLT CIRCUIT.
T	LINE VOLTAGE THERMOSTAT.
PC	PHOTOELECTRIC SENSOR.
LC	LIGHTING CONTACTOR.
OS	CEILING MOUNTED OCCUPANCY SENSOR.
OS	WALL MOUNTED OCCUPANCY SENSOR.
DS	CEILING MOUNTED DAYLIGHT SENSOR.
OP	OCCUPANCY SENSOR POWER PACK.

NOTE: ALL SYMBOLS AND ABBREVIATIONS ARE SUBJECT TO MODIFICATIONS ON OTHER DRAWINGS.

ALL SYMBOLS OR ABBREVIATIONS MIGHT NOT NECESSARILY BE USED ON THIS PROJECT.

FIRE ALARM SYMBOLS

FACP	FIRE ALARM CONTROL PANEL.
RAP	REMOTE ANNUNCIATOR PANEL.
NAC	NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL.
ASSD	AIR SAMPLING SMOKE DETECTOR BASE UNIT.
15 F	FIRE ALARM SPEAKER & SIGNAL LIGHT (80" AFF), # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
15 F	FIRE ALARM SIGNAL LIGHT (80" AFF), # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 15 CANDELA IN CORRIDORS AND 30 CANDELA FOR ALL OTHER LOCATIONS.
FK	FIRE ALARM MANUAL STATION (46" MH UNLESS NOTED OTHERWISE). SUBSCRIPT "K" INDICATES KEY OPERATED.
S	CEILING MOUNTED SMOKE DETECTOR.
H	CEILING MOUNTED HEAT DETECTOR.
S S/R	DUCT MOUNTED SMOKE DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN.
H S/R	DUCT MOUNTED HEAT DETECTOR. SUBSCRIPT "S" INDICATES SUPPLY. SUBSCRIPT "R" INDICATES RETURN.
C	ELECTRIC RELEASE DOOR CLOSER.
D	ELECTRO-MAGNETIC DOOR HOLDER.
FS	WATER FLOW SWITCH.
V	VALVE SUPERVISORY SWITCH.
W R	CEILING MOUNTED REMOTE TEST STATION AND ALARM INDICATOR LIGHT FOR DUCT DETECTOR. SUBSCRIPT "W" INDICATES WALL MOUNTED.
SD	SMOKE DAMPER.
FT	FIRE FIGHTER'S TELEPHONE (60" MH UNLESS NOTED OTHERWISE).
PS	PRESSURE SWITCH.
AM C/	ADDRESSABLE MODULE. SUBSCRIPT "I" INDICATES INPUT. SUBSCRIPT "C" INDICATES CONTROL.
PIV	POST INDICATOR VALVE.
K	KNOX BOX.

LUMINAIRE SYMBOLS

A a	LIGHTING FIXTURE. CAPITAL LETTER DENOTES FIXTURE TYPE, LOWER CASE LETTER DENOTES SWITCHING ARRANGEMENT.
	LIGHTING FIXTURE ON NIGHT LIGHT OR EMERGENCY CIRCUIT.
	EXIT LIGHTING FIXTURE, ARROWS AS INDICATED.

GENERAL FLOOR PLAN NOTES

B / E2	DETAIL: B = DETAIL DESIGNATION E2 = SHEET WHERE DETAIL IS LOCATED
1 / E2	SECTION: 1 = SECTION DESIGNATION E2 = SHEET WHERE SECTION IS LOCATED
T2 | 1	ELEVATION: 1 = ELEVATION DESIGNATION T2 = SHEET WHERE ELEVATION IS LOCATED
3	PLAN NOTE. APPLIES ONLY TO THE SHEET WHICH IT IS SHOWN.
3	DETAIL NOTE. APPLIES ONLY TO THE ASSOCIATED DETAIL.
3	LIGHTING CONTROL DETAIL NOTE. APPLIES TO THE LIGHTING CONTROL SEQUENCE OF OPTERATIONS SCHEDULE FOR ROOM CONTROL
	LADDER TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
	CABLE TRAY, 12" x 4" DEEP UNLESS NOTED OTHERWISE.
4"	WIRE & CONDUIT IN WALL OR ABOVE CEILING.
4"	WIRE & CONDUIT IN OR BELOW SLAB OR GRADE.
4"	CONDUIT TO BE REMOVED.
EX	EXISTING WIRE & CONDUIT TO REMAIN.
DAT	CONDUIT FOR DATA CIRCUITRY.
EM	WIRE & CONDUIT FOR EMERGENCY CIRCUITRY.
FA	WIRE & CONDUIT FOR FIRE ALARM CIRCUITRY.
I	WIRE & CONDUIT FOR INTERCOM SYSTEM CIRCUITRY.
NC	WIRE & CONDUIT FOR NURSE CALL CIRCUITRY.
NL	WIRE & CONDUIT FOR NIGHT LIGHT CIRCUITRY.
PHO	CONDUIT FOR PHONE CIRCUITRY.
S	WIRE & CONDUIT FOR SOUND SYSTEM CIRCUITRY.
SEC	WIRE & CONDUIT FOR SECURITY SYSTEM CIRCUITRY.
TV	WIRE & CONDUIT FOR TELEVISION SYSTEM CIRCUITRY.
W	WIRE RUN IN SURFACE WIREWAY.
CM	CABLE MANAGEMENT SYSTEM PATHWAY.
X - 1,2	EACH ARROWHEAD REPRESENTS ONE COMPLETE CIRCUIT; "X" DENOTES PANEL NAME; NUMBER(S) DENOTES CIRCUIT(S).

GENERAL NOTE

(APPLIES TO ALL SHEETS)

1. BRANCH CIRCUIT WIRE SIZING CHART (APPLIES TO PHASE, NEUTRAL AND GROUND CONDUCTORS) TO BE UTILIZED AS GUIDELINE FOR VOLTAGE DROP COMPENSATION. INCREASE CONDUIT SIZING PER WIRE SIZE.

   A) 20A - 120V CIRCUITS
   1) #12 WIRE - 75' LENGTH MAX.
   2) #10 WIRE - 125' LENGTH MAX.
   3) #8 WIRE - 190' LENGTH MAX.

   B) 20A - 277V CIRCUITS
   1) #12 WIRE - 172' LENGTH MAX.
   2) #10 WIRE - 288' LENGTH MAX.
   3) #8 WIRE - 443' LENGTH MAX.

ABBREVIATIONS

AAP - AREA ALARM PANEL - MEDICAL GAS
ACC - ACCESS
ADJ - ADJUSTABLE
AF - ARC FAULT CIRCUIT INTERRUPTER
AFCI - ARC FAULT CIRCUIT INTERRUPTER
AFF - ABOVE FINISHED FLOOR TO BOTTOM OF ITEM
AFG - ABOVE FINISHED GRADE TO BOTTOM OF ITEM
ALT - ALTERNATE
AP - ACCESS PANEL
APPROX - APPROXIMATE
ARCH - ARCHITECT OR ARCHITECTURAL
ASSY - ASSEMBLY
ATS - AUTOMATIC TRANSFER SWITCH

BLDG - BUILDING
BOE - BOTTOM OF EQUIPMENT
BOT - BOTTOM
BTWN - BETWEEN

CFCI - CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CKT - CIRCUIT
CLG - CEILING
CMU - CONCRETE MASONRY UNIT
CONN - CONNECT OR CONNECTION
CONTR - CONTRACTOR
CORR - CORRIDOR
CTR - CENTER

D - DEPTH
DET - DETAIL
DIA - DIAMETER
DIM - DIMENSION
DIV - DIVISION
DN - DOWN
DWG - DRAWING

EA - EACH
EC - ELECTRICAL CONTRACTOR (DIVISION 26)
EJ - EXPANSION JOINT
ELEC - ELECTRICAL
ELEV - ELEVATION OR ELEVATOR
EM - EMERGENCY
EQ - EQUAL
EQS - EQUIPMENT SUPPLIER
EQUIP - EQUIPMENT
ETR - EXISTING TO REMAIN
E - EXISTING
EXP - EXPANSION
EXT - EXTERIOR

FCE - FIRE CONTROL EQUIPMENT
FF - FINISHED FLOOR ELEVATION
FLR - FLOOR
FSC - FIRE SUPPRESSION CONTRACTOR (DIVISION 21)
FT - FEET
FTG - FOOTING

GC - GENERAL CONTRACTOR
GF - GROUND FAULT CIRCUIT INTERRUPTER
GFCI - GROUND FAULT CIRCUIT INTERRUPTER OR GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GFFT - GROUND FAULT FEED THRU

HC - HVAC CONTRACTOR (DIVISION 23)
HP - HORSE POWER OR HIGH POINT
HVAC - HEATING, VENTILATING, AND AIR CONDITIONING

ID - INSIDE DIAMETER
IN - INCHES

KEC - KITCHEN EQUIPMENT CONTRACTOR

L - LENGTH
LBS - POUNDS

MAP - MASTER ALARM PANEL (MEDICAL GAS)
MAX - MAXIMUM
MEZZ - MEZZANINE
MFR - MANUFACTURER
MH - MANHOLE OR MOUNTING HEIGHT TO CENTER LINE OF ITEM
MIN - MINIMUM OR MINUTE
MISC - MISCELLANEOUS
MTD - MOUNTED
MTG - MOUNTING

NIC - NOT IN CONTRACT
NOM - NOMINAL
NTS - NOT TO SCALE

OD - OUTSIDE DIAMETER
OFCI - OWNER FURNISHED CONTRACTOR INSTALLED
OFOI - OWNER FURNISHED OWNER INSTALLED

PC - PLUMBING CONTRACTOR (DIVISION 22)
PLBG - PLUMBING

RAD - RADIUS
REC - RECESSED
REQD - REQUIRED
RI - ROUGH-IN

S - SURFACE MOUNTED
SC - SECURITY CONTRACTOR
SCH - SCHEDULE
SHT - SHEET
SMS - SECURITY MANAGEMENT SYSTEM
SPEC - SPECIFICATIONS
SQ - SQUARE
SS - STAINLESS STEEL
STD - STANDARD
STRUC - STRUCTURAL OR STRUCTURE
SUC - SITE UTILITY CONTRACTOR

TC - TECHNOLOGY CONTRACTOR
TEMP - TEMPERATURE
TOE - TOP OF EQUIPMENT
TYP - TYPICAL

UNO - UNLESS NOTED OTHERWISE

VFD - VARIABLE FREQUENCY DRIVE
VOL - VOLUME

W/ - WITH
W/O - WITHOUT
WP - WEATHERPROOF

ZVC - ZONE VALVE CABINET

SHEET LIST LOT 28 ELECTRICAL

Sheet Number	Sheet Name
E001	LEGEND AND INDEX
E002	SCHEDULES
E003	PANELBOARDS
E004	SINGLE-LINE
E005	DETAILS
E201	LIGHTING PLANS LOT 28
E301	POWER PLANS LOT 28

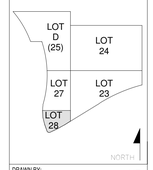
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0661 Fax 937-324-5777 www.heapy.com

STATE OF OHIO
DONALD E. ALLEN JR.
68729
REGISTERED
PROFESSIONAL ENGINEER
12-17-2021

ISSUES



DRAWN BY: JJT
ENGINEER: JJT
CHECKED BY: DA

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE
LEGEND AND INDEX

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER
E001

LIGHTING CONTROL SEQUENCE OF OPERATIONS

NOTES:
1. LIGHTS TO BE CONTROLLED THRU PHOTOCELL ON/OFF. LIGHTS WILL STAY ON FULL BRIGHTNESS FOR SAFETY AND SECURITY PURPOSE.
2. TURN "ON" AT DUSK. DIM TO 50% FROM 12AM TO 6AM. TURN "ON" FULL BRIGHTNESS AT 6AM. TURN "OFF" AT DAWN.

		OCCUPANCY SENSOR				TIME CLOCK					WALL SWITCH					DAYLIGHT SENSOR				INTEGRATION POINTS					
CONTROL NUMBER	TYPICAL SPACE NAME	VACANCY MODE (MANUAL ON)	OCCUPANCY MODE (AUTO ON)	SENSOR TIME OUT PERIOD (IN MINUTES)	HIGH / LOW OPERATION: OCCUPIED: 100% / VACANT: 30%	SCHEDULED ON AT	SCHEDULED OFF AT	OCCUPIED TIME START	UNOCCUPIED TIME START	• AFTER HOURS OVERRIDE SWITCH (2 HOURS)	ON / OFF ONLY	• DIMMER SWITCH	KEY SWITCH	SCENE SWITCH	GRAPHICAL WALL STATION	INDOOR - ON / OFF ONLY	INDOOR - DIMMING	LIGHT LEVEL MAINTAINED AT (IN FOOTCANDLES @ 2'-6" A.F.F.)	• EXTERIOR PHOTOCELL - ON / OFF	OCCUPANCY STATUS (BINARY INPUT - READ ONLY - OCCUPIED / UNOCCUPIED)	DIMMING OUTPUT LEVEL (ANALOG VALUE - READ / WRITE - 0-100%)	RELAY STATUS (BINARY VALUE - READ / WRITE - ON / OFF)	MEASURED LIGHT LEVEL (ANALOG INPUT - 0-212FC)	SEE NOTE	DETAIL NUMBER
1	EXTERIOR LIGHTING W/ DIMMING									•		•							•						

MOTORS, STARTERS, DISCONNECTS & CONTROLS

NOTES:
1. COORDINATE EQUIPMENT LOCATION WITH PC.

		MOTOR											STARTER										DISCONNECT MEANS												CONTROL			FEEDER				
		CHARACTERISTICS									LOCATION		TYPE						LOCATION				TYPE						LOCATION												
MARK	NAMEPLATE	HORSEPOWER (HP)	LOAD (kVA)	120V-1PH	208V-1PH	208V-3PH	240V-1PH	240V-3PH	277V-1PH	480V-1PH	• 480V-3PH	ROOM NUMBER	ROOM NAME	NEMA SIZE	MANUAL	MAGNETIC	• BUILT-IN MOTOR O.L	2-SPEED	VFD	SEE NOTE	• NEAR MOTOR	MOTOR CONT CENTER	EQUIP CONT PANEL	ROOM NUMBER	SEE NOTE	FURNISHED BY	DISC SWITCH	MANUAL STARTER	RECEPTACLE	FEEDER SW OR BREAKER	NEMA TYPE	DISC SIZE	FUSE SIZE	• NEAR MOTOR	MOTOR CONT CENTER	EQUIP CONT PANEL	PANEL BOARD	SEE NOTE	FURNISHED BY	INTERLOCK WITH MOTOR NO. BY E.C.	MANUAL AT STARTER	• INTEGRAL WITH EQUIPMENT	FURNISHED BY	SEE NOTE	NUMBER OF CONDUCTORS	WIRE SIZE	GROUND SIZE	CONDUIT SIZE	SEE NOTE
BP-1	BOOSTER PUMP 1	5 HP	6.32							•				0		•					•					PC	•				1	30		•					EC			•	PC		3	12	12	0.75"	

LUMINAIRES

MARK	LAMPS: QUANTITY FLUORESCENT	QUANTITY INCANDESCENT	QUANTITY H.I.D.	QUANTITY L.E.D.	WATTS / LAMP	VA / LINEAR FOOT	CATALOG NO.	DELIVERED LUMENS	COLOR	LOAD (VA)	FIXTURE VOLTAGE	MANUFACTURER	CATALOG NO.	DESCRIPTION	OTHER ACCEPTABLE MANUFACTURERS	DIFFUSING MEDIA	TRIM COLOR: WHITE	BLACK	ALUMINUM	BRONZE	STANDARD	SEE NOTE	MOUNTING: S-SURFACE R-RECESSED SM-STEM MTD WM-WALL MTD C-CHAIN MTD UC-UNDER CAB CS-CEIL SURFACE PM-POLE MOUNT	SIZE: DIAMETER	WIDTH	LENGTH	DEPTH	SEE NOTE
C1				LED	41		INCLUDED		5000K	41	277	KURTZON	SERIES "WL-A"	ALUMINUM HOUSING, WHITE POWDER COAT FINISH, FULLY GASKETED, UL LISTED, IP65 IP55 & HD85 RATED, 80 CRI, UNIVERSAL VOLTAGE DRIVER	KENALL,PARAMOUNT INDUSTRIES	LINEAR OPAL ACRYLIC	•						S		3.699"	49.375"	4.5"	1, 3
H1				LED	77		INCLUDED		5000K	58	277	MCGRAW-EDISON	SERIES "TT-A3-LED-E1-WQ-DOS-"	ONE PIECE CAST ALUMINUM HOUSING, POWDER COAT FINISH, LM-80, UL LISTED, IP66 & 3G VIBRATION RATED, -40 DEG TO 104 DEG TEMPRATURE RATING, DIMMING OCCUPANCY SENSOR, UNIVERSAL VOLTAGE DRIVER	LITHONIA, GARDCO, BEACON	ACYLIC LENS WITH WAVESTEAM OPTICS	•						S	18.375"			4.438"	1, 2, 3
H1A				LED	77		INCLUDED		5000K	58	277	MCGRAW-EDISON	SERIES "TT-A3-LED-E1-WQ-DOS-"	ONE PIECE CAST ALUMINUM HOUSING, POWDER COAT FINISH, LM-80, UL LISTED, IP66 & 3G VIBRATION RATED, -40 DEG TO 104 DEG TEMPRATURE RATING, DIMMING OCCUPANCY SENSOR, UNIVERSAL VOLTAGE DRIVER, PENDANT MOUNT	LITHONIA, GARDCO, BEACON	ACYLIC LENS WITH WAVESTEAM OPTICS	•						PENDANT	18.375"			4.438"	1, 2, 3
K1				1	40		INCLUDED		4000K	0	208	LIGMAN LIGHTING	ULEW-30021-T3-W40-XX-208V	LED WALL PACK	LITHONIA, COLUMBIA	TYPE 3 DIST.					•		WM		12"	17.125"	6"	
PL6				3	40		INCLUDED		4000K	120	277	FIXTURE: KIM LIGHTING; POLE: STRUCTURA	FIXTURE: ALT1-28L-40-4K7-3-UNV-XX-CC-CLR; POLE: REED-M-1-C-3-GALV-STD	CURVED POLE FLOOD LIGHT	BEGA, INSIGHT, HYDREL	ACRYLIC LENS					•		PM - 18' ROUND POLE		12"	17.125"	6"	
S1				1	0	9	INCLUDED		RGBW	0	277	INSIGHT LIGHTING	MER-MO-RGBWQ-1060-XX-XX"-DMXSY-CC	LINEAR WALL MOUNT LED	ARCHITECT APPROVED	10 X 60 DIST.					•		S		2"		1.852"	
S2				1	0	4	INCLUDED		RGBW	0	277	OSRAM TRAXON	PROPOINT KONTOUR RXX-B-X-0-0-44-0-1-3	LED COLOR CHANGING STRIP LIGHTING	ARCHITECT APPROVED	IP67 LENS					•		S		9"	312"	9"	
X2				LED	3		INCLUDED			3	277	BEGEHELLI PACO	SERIES "PX"	POLYCARBONATE HOUSING, UL LISTED, DAMP LOCATION LISTED, UNIVERSAL FACE PLATE DOUBLE SIDED WITH RED STENCIL LETTERS AND UNIVERSAL MOUNTING BRACKETS, MULTI-VOLTAGE	SURE LITE, CHLORIDE, LITHONIA, BARRON, COMPASS	WHITE HOUSING WITH RED STENCIL LETTERS, FACES AND DIRECTIONAL ARROWS PLAN	•						S (PER PLAN)		9"	13"	2.375"	1, 3
X4				LED	3		INCLUDED			3	277	BEGEHELLI PACO	SERIES "PX"	POLYCARBONATE HOUSING, UL LISTED, DAMP LOCATION LISTED, UNIVERSAL FACE PLATE SINGLE SIDED WITH RED STENCIL LETTERS AND UNIVERSAL MOUNTING BRACKETS, MULTI-VOLTAGE	SURE LITE, CHLORIDE, LITHONIA, BARRON, COMPASS	WHITE HOUSING WITH RED STENCIL LETTERS, FACES AND DIRECTIONAL ARROWS PLAN	•						S (PER PLAN)		9"	13"	2.375"	1, 3

LUMINAIRE SCHEDULE NOTES:

1. LUMINAIRE MOUNTING TO MATCH THAT OF LOT 27 GARAGE.
2. INTEGRAL OCCUPANCY SENSOR AT LUMINAIRE TO REDUCE LUMEN OUTPUT BY 50%.
3. LUMINAIRE TO MATCH THAT OF LOT 27.

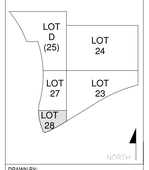
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-324-5777 www.heapy.com

STATE OF OHIO
DONALD B. ALLEN JR.
68729
REGISTERED
PROFESSIONAL ENGINEER
12-17-2021

ISSUES



DRAWN BY: JJT
ENGINEER: JJT
CHECKED BY: DA

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE: SCHEDULES

JOB NUMBER: 98090.40 12/17/2021

DRAWING NUMBER: E002

Panel: EL-23 EXISTING

Location: LOT 23 ELECTRICAL ROOM
Supply From: EL-24
Voltage: 480/277 Wye-3PH-4W
Mounting: Surface
Enclosure: Type 1
1 A
A.I.C. Rating: 10,000
Mains Type: MB
Mains Rating: 125 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EXITS LOT 23	20 A	1	34 VA	29 VA					1	20 A	EX LL LOT 23	2
3	EX POD LOT 23	20 A	1			112 VA	3054...			1	20 A	EX ENTRANCE	4
5	EX LL LOT 23	20 A	1					58 VA	348 VA	1	20 A	EX LL LOT 23	6
7	EX LL LOT 23	20 A	1	1042...	902 VA					1	20 A	EX LL LOT 23	8
9	EX LL LOT 23	20 A	1			984 VA	28 VA			1	20 A	EX Lighting	10
11	EX LOT 27 EXIT	20 A	1					52 VA	2058...	1	20 A	EX ENTRANCE AREA	12
13	EX LL LOT 27	20 A	1	662 VA	1102...					1	20 A	EX LL LOT 27	14
15	EX LL LOT 27	20 A	1			1312...	756 VA			1	20 A	EX ENTRANCE	16
17	EX LOT 27 STAIRS	20 A	1					150 VA					18
19	EX LOT 23 ELEC...	20 A	1	360 VA	0 VA					1	20 A	Spare	20
21							0 VA			1	20 A	Spare	22
23	Space	--	1					--	0 VA	1	20 A	Spare	24
25	Space	--	1	--	0 VA					1	20 A	Spare	26
27	Space	--	1			--	0 VA			1	20 A	Spare	28
29	Space	--	1					--	0 VA	1	20 A	Spare	30
	Total Load:			4.13 kVA		6.25 kVA		2.67 kVA					

Load Classification	Connected...	Demand Factor	Estimated...	Panel Totals	
Lighting	13042 VA	125.00%	16303 VA		
				Total Conn. Load:	13042 VA
				Total Est. Demand:	16303 VA
				Total Conn.:	16 A
				Total Est. Demand:	20 A

Notes: 1) "EX" IN PANEL SCHEDULE INDICATES AND EXISTING BREAKER AND BRANCH CIRCUIT SERVED.

TOTAL CONNECTED		ESTIMATED DEMAND
13.04 kVA		16.3 kVA (20 A)

Panel: R-23 EXISTING

Location: LOT 23 ELECTRICAL ROOM
Supply From: EP-24
Voltage: 120/208 Wye-3PH-4W
Mounting: Surface
Enclosure: Type 1
1 A
A.I.C. Rating:
Mains Type: MLO
Mains Rating: 100 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EX Resistive Heat	20 A	2	1450...	1450...					2	20 A	EX Resistive Heat	2
3	--	--	--			1450...	1450...			--	--	--	4
5	EX Resistive Heat	20 A	2					1450...	901 VA	3	20 A	EX DAC-3	6
7	--	--	--	1450...	901 VA					--	--	--	8
9	EX RECEPTACLE	20 A	1			45 VA	901 VA			--	--	--	10
11	EX FA	20 A	1					0 VA	45 VA	1	20 A	EX RECEPTACLE	12
13	EX HEAT TRACE...	20 A	1	180 VA	180 VA					1	20 A	EX ELEV SUMP	14
15	EX Receptacle	20 A	1			720 VA	180 VA			1	20 A	EX Receptacle	16
17	EX CAB LIGHTS	20 A	1					0 VA	408 VA	1	20 A	EX EF	18
19	PL6 RECEPT	20 A	1	1440...	180 VA					1	30 A	EX Power	20
21	PL6 RECEPT	20 A	1			1260...	180 VA			1	30 A	EX Power	22
23	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	24
25	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	26
27	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	28
29	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	30
	Total Load:			7.23 kVA		6.19 kVA		2.80 kVA					

Load Classification	Connected...	Demand Factor	Estimated...	Panel Totals	
Lighting	2790 VA	125.00%	3488 VA		
Motor	3110 VA	121.72%	3785 VA	**Total Conn. Load:**	16220 VA
Other	0 VA	0.00%	0 VA	**Total Est. Demand:**	17593 VA
Power	360 VA	100.00%	360 VA	**Total Conn.:**	45 A
Receptacle	1080 VA	100.00%	1080 VA	**Total Est. Demand:**	49 A
Resistive Heat	8880 VA	100.00%	8880 VA		

Notes: 1) "EX" IN PANEL SCHEDULE INDICATES AND EXISTING BREAKER AND BRANCH CIRCUIT SERVED.

TOTAL CONNECTED		ESTIMATED DEMAND
16.22 kVA		17.59 kVA (49 A)

Panel: L-23 EXISTING

Location: LOT 23 ELECTRICAL ROOM
Supply From: L24
Voltage: 480/277 Wye-3PH-4W
Mounting: Surface
Enclosure: Type 1
1 A
A.I.C. Rating: 10,000
Mains Type: MB
Mains Rating: 125 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EX LL LOT 23	20 A	1	232 VA	2628...					1	20 A	EX LL LOT 23	2
3	EX LL LOT 23	20 A	1			522 VA	50 VA			1	20 A	EX LL LOT 23	4
5	EX Lighting	20 A	1					84 VA	428 VA	1	20 A	EX STORAGE LOT 23	6
7	EX Lighting	20 A	1	84 VA	0 VA					1	20 A	Spare	8
9	EX LL LOT 27	20 A	1			638 VA	986 VA			1	20 A	EX LL LOT 27	10
11	EX UH3	20 A	3					1275...	1275...	3	20 A	EX UH2	12
13	--	--	--	1275...	1275...					--	--	--	14
15	--	--	--			1275...	1275...			--	--	--	16
17	EX UH1	20 A	3					2162...	2440...	1	20 A	Lighting	18
19	--	--	--	2162...	2448...					1	20 A	Lighting	20
21	--	--	--			2162...	1800...			1	20 A	Lighting	22
23	BP-1 NEW	20 A	3					2106...	0 VA	1	20 A	Spare	24
25	--	--	--	2106...	0 VA					1	20 A	Spare	26
27	--	--	--			2106...	0 VA			1	20 A	Spare	28
29	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	30
	Total Load:			12.21 kVA		10.81 kVA		9.77 kVA					

Load Classification	Connected...	Demand Factor	Estimated...	Panel Totals	
Lighting	12340 VA	125.00%	15425 VA		
Motor	20452 VA	107.93%	22073 VA	**Total Conn. Load:**	32792 VA
				Total Est. Demand:	37498 VA
				Total Conn.:	39 A
				Total Est. Demand:	45 A

Notes: 1) "EX" IN PANEL SCHEDULE INDICATES AND EXISTING BREAKER AND BRANCH CIRCUIT SERVED.

TOTAL CONNECTED		ESTIMATED DEMAND
32.79 kVA		37.5 kVA (45 A)

Panel: DP24 EXISTING

Location: LOT 24 ELECTRICAL ROOM
Supply From:
Voltage: 480/277 Wye-3PH-4W
Mounting: Surface
Enclosure: Type 1
1 A
A.I.C. Rating: 10,000
Mains Type: MB
Mains Rating: 200 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EX DPAP	20 A	3	1109...	1109...					3	20 A	EX DAC2	2
3	--	--	--			1109...	1109...			--	--	--	4
5	--	--	--					1109...	1109...	--	--	--	6
7	EX JP1	20 A	3	1386...	6651...					3	30 A	EX EUH-1	8
9	--	--	--			1386...	6651...			--	--	--	10
11	--	--	--					1386...	6651...	--	--	--	12
13	EX EUH-3	25 A	3	4988...	4988...					3	25 A	EX EUH-2	14
15	--	--	--			4988...	4988...			--	--	--	16
17	--	--	--					4988...	4988...	--	--	--	18
19	EX MOTOR	20 A	3	1109...	3570...					3	45 A	EX T10	20
21	--	--	--			1109...	3540...			--	--	--	22
23	--	--	--					1109...	1990...	--	--	--	24
25	EX Spare	20 A	3	0 VA	--					1	--	Space	26
27	--	--	--			0 VA	--			1	--	Space	28
29	--	--	--					0 VA	--	1	--	Space	30
31	EX Spare	20 A	1	0 VA	--					1	--	Space	32
33	EX Spare	20 A	3			0 VA	--			1	--	Space	34
35	--	--	--					0 VA	--	1	--	Space	36
37	--	--	--	0 VA	--					1	--	Space	38
39	EX Spare	20 A	1			0 VA	--			1	--	Space	40
41	EX Spare	20 A	1					0 VA	--	1	--	Space	42
	Total Load:			24.91 kVA		24.88 kVA		23.33 kVA					

Notes: 1) EXISTING PANELBOARD LOCATED AT LOT 24 SHOWN FOR REFERENCE ONLY.
2) "EX" IN PANEL SCHEDULE INDICATES AND EXISTING BREAKER AND BRANCH CIRCUIT SERVED.

TOTAL CONNECTED		ESTIMATED DEMAND
73.12 kVA		73.76 kVA (89 A)

Panel: RP23A EXISTING

Location: LOT 23 ELECTRICAL ROOM
Supply From: T10
Voltage: 120/208 Wye-3PH-4W
Mounting: Surface
Enclosure: Type 1
1 A
A.I.C. Rating: 10,000
Mains Type: MB
Mains Rating: 100 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EX Blue Light	20 A	1	180 VA	360 VA					1	20 A	EX Blue Light	2
3	EX Security	20 A	1			1000...	1000...			1	20 A	EX Security	4
5	EX Blue Light	20 A	1					180 VA	500 VA	1	20 A	EX Security	6
7	EX Blue Light	20 A	1	360 VA	1180...					1	20 A	EX Security	8
9	EX Power	20 A	1			180 VA	1000...			1	20 A	EX Security	10
11	Spare	20 A	1					0 VA	1310...	2	20 A	EX CU-1	12
13	EX Receptacle	20 A	1	180 VA	1310...					--	--	--	14
15	EX PAY STATION	20 A	1			180 VA	180 VA			1	20 A	EX ELEV L LOT 23	16
17	Space	--	1					--					18
19	Space	--	1	--									20
	Total Load:			3.57 kVA		3.54 kVA		1.99 kVA					

Load Classification	Connected...	Demand Factor	Estimated...	Panel Totals	
Motor	2621 VA	124.21%	3255 VA		
Power	5760 VA	100.00%	5760 VA	**Total Conn. Load:**	9101 VA
Receptacle	720 VA	100.00%	720 VA	**Total Est. Demand:**	9735 VA
				Total Conn.:	25 A
				Total Est. Demand:	27 A

Notes: 1) "EX" IN PANEL SCHEDULE INDICATES AND EXISTING BREAKER AND BRANCH CIRCUIT SERVED.

TOTAL CONNECTED		ESTIMATED DEMAND
9.1 kVA		9.74 kVA (27 A)

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

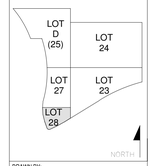
THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-324-5777 www.heapy.com

STATE OF OHIO
DONALD E. ALLEN, JR.
68729
REGISTERED
PROFESSIONAL ENGINEER
12-17-2021

ISSUES

ISSUES



DRAWN BY: JJT
ENGINEER: JJT
CHECKED BY: DA

THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE
PANELBOARDS

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER
E003

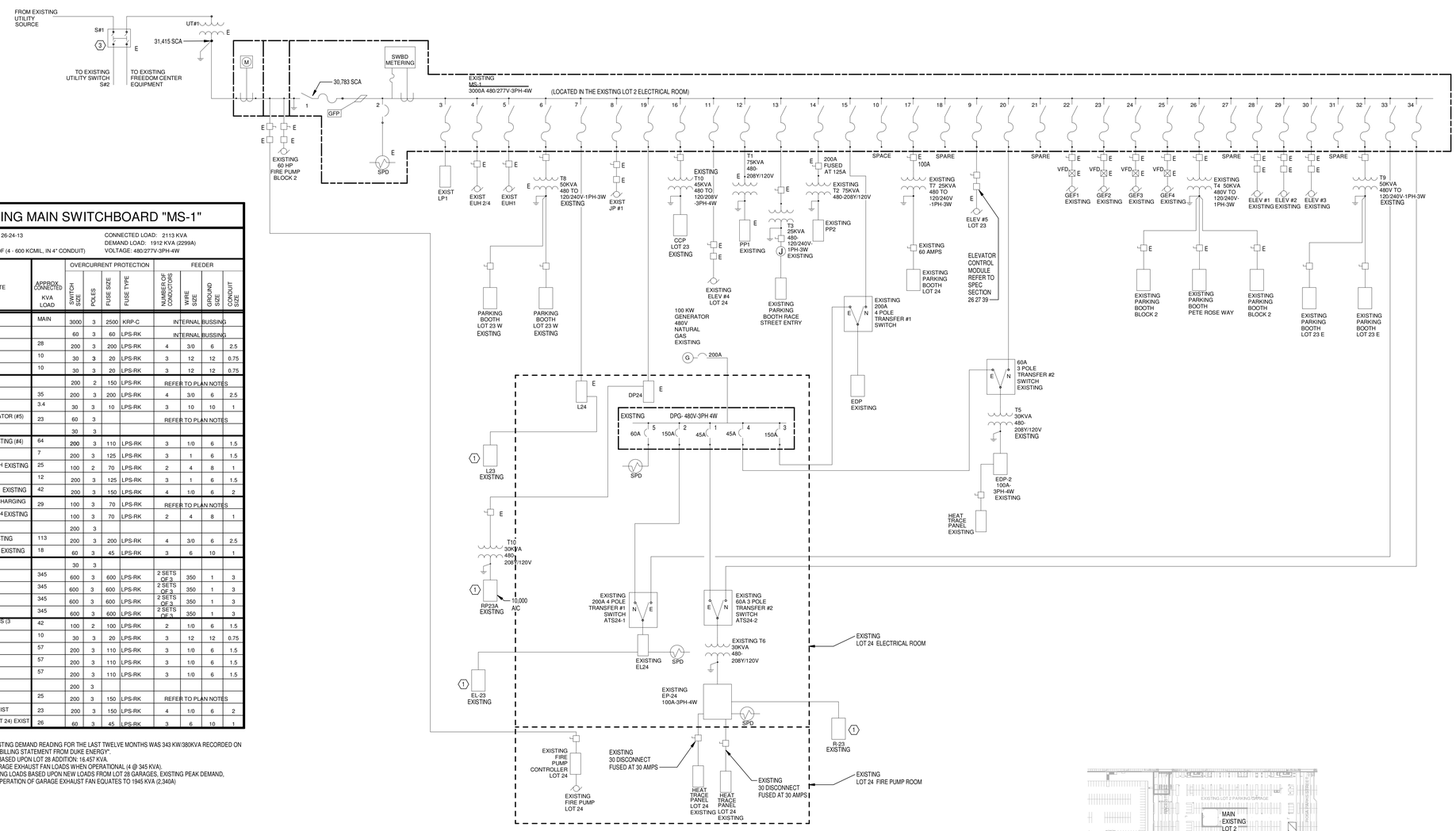
EXISTING MAIN SWITCHBOARD "MS-1"

SPEC. REFERENCE NO.: 26-24-13
MAIN BUSSING: 3000A
FEEDER SIZE: 6 SETS OF (4 - 600 KCMIL, IN 4" CONDUIT)

CONNECTED LOAD: 2113 KVA
DEMAND LOAD: 1912 KVA (2299A)
VOLTAGE: 480/277V-3PH-4W

SWITCH OR BKR NO	NAMEPLATE	APPROX CONNECTED KVA LOAD	OVERCURRENT PROTECTION: SWITCH SIZE	POLES	FUSE SIZE	FUSE TYPE	FEEDER: NUMBER OF CONDUCTORS	WIRE SIZE	GROUND SIZE	CONDUIT SIZE
1	MAIN EXISTING	MAIN	3000	3	2500	KRP-C	INTERNAL BUSSING			
2	SPD EXISTING		60	3	60	LPS-RK	INTERNAL BUSSING			
3	LP1 EXISTING	28	200	3	200	LPS-RK	4	3/0	6	2.5
4	EUH 2/4 EXISTING	10	30	3	20	LPS-RK	3	12	12	0.75
5	EUH1 EXISTING	10	30	3	20	LPS-RK	3	12	12	0.75
6	NEW T8/PARKING		200	2	150	LPS-RK	REFER TO PLAN NOTES			
7	L24 EXISTING	35	200	3	200	LPS-RK	4	3/0	6	2.5
8	JP#1 EXISTING	3.4	30	3	10	LPS-RK	3	10	10	1
9	NEW LOT 23 ELEVATOR (#5)	23	60	3			REFER TO PLAN NOTES			
10	SPARE EXISTING		30	3						
11	ELEV LOT 24 EXISTING (#4)	64	200	3	110	LPS-RK	3	1/0	6	1.5
12	T1/PP1 EXISTING	7	200	3	125	LPS-RK	3	1	6	1.5
13	T3/PARKING BOOTH EXISTING	25	100	2	70	LPS-RK	2	4	8	1
14	T2/PP2 EXISTING	12	200	3	125	LPS-RK	3	1	6	1.5
15	ATS (LIFE SAFETY) EXISTING	42	200	3	150	LPS-RK	4	1/0	6	2
16	NEW LOT 23 CAR CHARGING	29	100	3	70	LPS-RK	REFER TO PLAN NOTES			
17	T7/PARKING- LOT 24 EXISTING		100	3	70	LPS-RK	2	4	8	1
18	SPARE EXISTING		200	3						
19	DP24- LOT24 EXISTING	113	200	3	200	LPS-RK	4	3/0	6	2.5
20	ATS (STAND-BY) EXISTING	18	60	3	45	LPS-RK	3	6	10	1
21	SPARE EXISTING		30	3						
22	GEF1 EXISTING	345	600	3	600	LPS-RK	2 SETS OF 3	350	1	3
23	GEF2 EXISTING	345	600	3	600	LPS-RK	2 SETS OF 3	350	1	3
24	GEF3 EXISTING	345	600	3	600	LPS-RK	2 SETS OF 3	350	1	3
25	GEF4 EXISTING	345	600	3	600	LPS-RK	2 SETS OF 3	350	1	3
26	T4/PARKING BOOTHS (3 @ 14 kva) EXIST	42	100	2	100	LPS-RK	2	1/0	6	1.5
27	EUH3 EXISTING	10	30	3	20	LPS-RK	3	12	12	0.75
28	ELEV1 EXISTING	57	200	3	110	LPS-RK	3	1/0	6	1.5
29	ELEV2 EXISTING	57	200	3	110	LPS-RK	3	1/0	6	1.5
30	ELEV3 EXISTING	57	200	3	110	LPS-RK	3	1/0	6	1.5
31	EXISTING		200	3						
32	NEW T9/PARKING	25	200	3	150	LPS-RK	REFER TO PLAN NOTES			
33	ATS (LS LOT 24) EXIST	23	200	3	150	LPS-RK	4	1/0	6	2
34	ATS (STAND-BY LOT 24) EXIST	26	60	3	45	LPS-RK	3	6	10	1

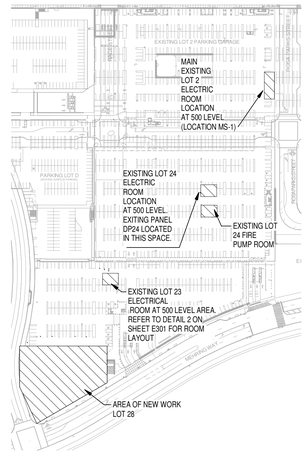
HIGHEST EXISTING DEMAND READING FOR THE LAST TWELVE MONTHS WAS 343 KW/380KVA RECORDED ON MACH 2019 " BILLING STATEMENT FROM DUKE ENERGY".
NEW LOADS BASED UPON LOT 28 ADDITION: 16.457 KVA.
EXISTING GARAGE EXHAUST FAN LOADS WHEN OPERATIONAL (4 @ 345 KVA).
TOTAL BUILDING LOADS BASED UPON NEW LOADS FROM LOT 28 GARAGES, EXISTING PEAK DEMAND, POTENTIAL OPERATION OF GARAGE EXHAUST FAN EQUATES TO 1945 KVA (2,340A)



1 EXISTING SINGLE-LINE
SCALE: NONE

NOTES:

1. REFER TO DETAIL 2 ON SHEET E301 FOR EXISTING PANEL PLACEMENT IN EXISTING LOT 23 ROOM.



3 ELECTRICAL LOWER LEVEL OVERVIEW
SCALE: 1" = 160'-0"

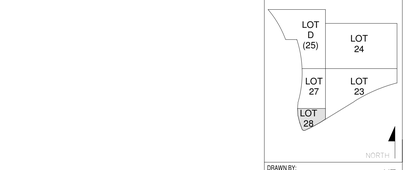
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-324-5777 www.heapy.com

STATE OF OHIO
DONALD E. ALLEN JR.
68729
REGISTERED
PROFESSIONAL ENGINEER
12-17-2021

ISSUES



DRAWN BY: JJT
ENGINEER: JJT
CHECKED BY: DA

THE BANKS
Public Partnership

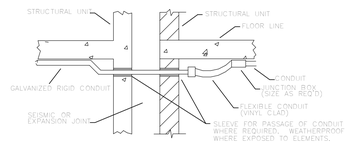
BP#2 - PARK & GARAGE

DRAWING TITLE: SINGLE-LINE

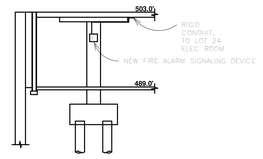
JOB NUMBER: 98090.40 12/17/2021

DRAWING NUMBER: E004

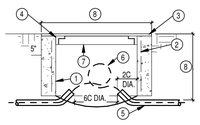
C:\BIM\Model\2021-07091-MEP-Central_JJThomas@Heapy.com.rvt
12/17/2021 10:52:49 AM



1 EXPANSION JOINT LOT 28
SCALE: NONE



3 TYPICAL GARAGE FIRE ALARM
SCALE: NONE



○ DETAIL NOTES

1 5" CONCRETE WALLS, FOUR SIDES.

2 1/2" DIA. REINFORCED STEEL-10"CC BOTH WAYS.

3 1/4" CHECKERED STEEL PLATE COVER.

4 2"X2"X1/4" L WELDED TO PLATE. TWO SIDES ONLY 1/4" CLEARANCE FIT.

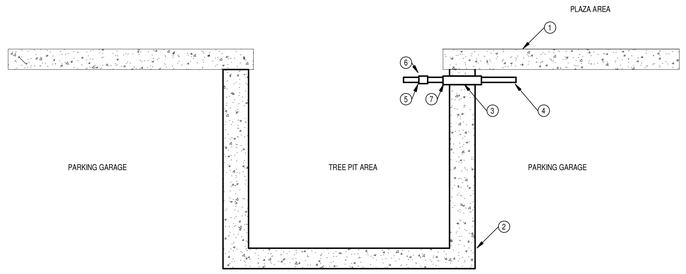
5 UNDERGROUND DUCT-TURN UP @ 45 DEG.

6 CONDUCTORS-LOOP/PULL OR SPLICE.

7 CROSSWISE FOR SUPPORT.

8 SIZE PULL BOX PER NEC.

4 GROUND PULLBOX
SCALE: NONE



○ DETAIL NOTES

1 CONCRETE STRUCTURAL SLAB

2 CONCRETE TREE PIT.

3 SLEEVE FOR CONDUIT LOCATED HIGH AT STRUCTURAL SLAB. REFER TO PLANS FOR SIZES AND QUANTITIES. IN AREAS OF MULTIPLE SLEEVES, THE SLEEVES SHALL BE PLACED NO CLOSER THAN 6" APART TO ALLOW FOR WATERPROOFING MATERIAL INSTALLATION.

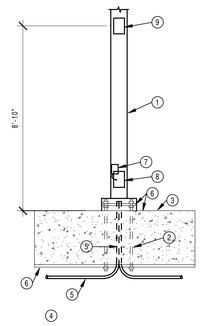
4 RIGID METAL CONDUIT, REFER TO PLANS AND SPECIFICATIONS FOR SIZES.

5 TRANSITION FROM RIGID METAL CONDUIT TO PVC CONDUITS IN TREE PIT AREAS.

6 THREADED COUPLING.

7 PROVIDE WATERTIGHT SEAL BETWEEN SLEEVE AND CONDUIT RACEWAY.

2 SLEEVE DETAIL FOR TREE PITS
SCALE: NONE



○ DETAIL NOTES

1 SEE FIXTURE SCHEDULE FOR POLE AND FIXTURE ASSEMBLY.

2 ANCHOR BOLTS BY E.C., WELD TO REBARS. REFER TO STRUCTURAL DRAWINGS FOR ANCHOR BOLTS INFORMATION.

3 CONCRETE SLAB.

4 EXISTING PARKING GARAGE

5 RIGID GALVANIZED STEEL CONDUIT.

6 EXISTING PARKING GARAGE CEILING. (TYPICAL)

7 LIGHTNING ARRESTOR. EXTEND TO THE BUILDING GROUNDING LOOP PROVIDED UNDER BID PACK #5 WITH #2/0 WIRE.

8 HANDHOLE.

9 PROVIDE WEATHERPROOF DUPLEX RECEPTACLE WITH TAYMAC OR EQUAL BY HUBBEL OR LEVITON COVERPLATE DIRECTLY ABOVE HANDHOLE FOR ALL LOCATIONS AS INDICATED ON PLAN. REFER TO LEGEND FOR ADDITIONAL REQUIREMENTS. PROVIDE BRANCH CIRCUITRY AS INDICATED ON PLANS.

GENERAL NOTE:
REFER TO POLE BASES WITH STRUCTURAL DRAWING SHEETS AND PROVIDE ACCORDINGLY. AVOID CUTTING PRETENSION STRANDS AND REBAR. THIS DETAIL IS FOR SCHEMATIC IN NATURE AND DOES NOT INCLUDE ALL PIECES AND ACCESSORIES FOR A COMPLETE SYSTEM. THIS SCHEMATIC IS MEANT TO SHOW INTENT AND SHALL NOT BE USED FOR A BOM. E.C. IS RESPONSIBLE TO COORDINATE AND PROVIDE ALL COMPONENTS TO MEET THE INTENT OF THIS SCHEMATIC AND FOR A COMPLETE AND OPERATIONAL INSTALLATION.

5 TYPE PL6 POLE BASE
SCALE: NONE

HAMILTON COUNTY
RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-324-5777 www.heapy.com

STATE OF OHIO
DONALD E. ALLEN, JR.
68729
REGISTERED
PROFESSIONAL ENGINEER
12-17-2021

ISSUES

ISSUES

DRAWN BY: JJT
ENGINEER: JJT
CHECKED BY: DA

THE BANKS
Public Partnership

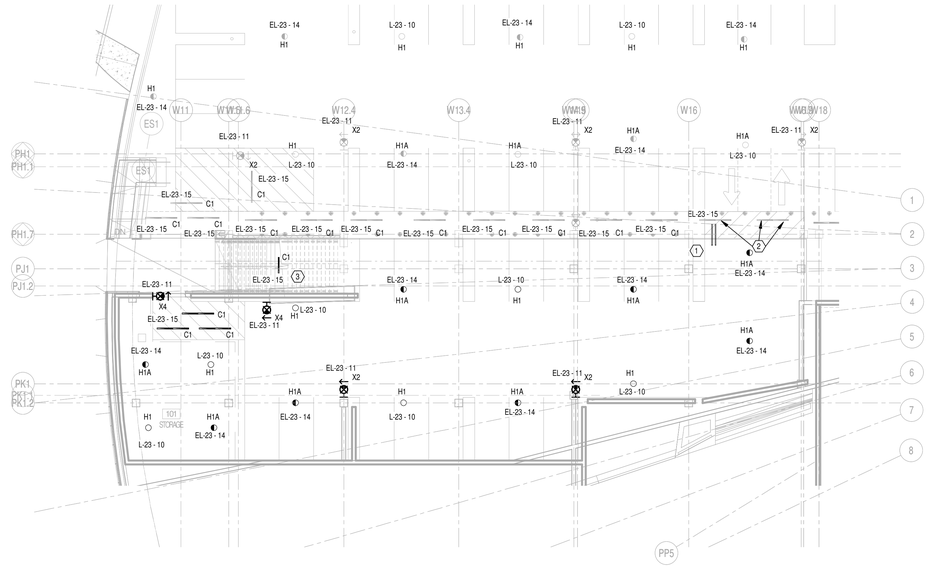
BP#2 - PARK & GARAGE

DRAWING TITLE
DETAILS

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER
E005

12/17/2021 10:52:53 AM C:\BIM\Model\2021-07091-MEP-Central_JJThomas@heapy.com.rvt



1 LOWER LEVEL LIGHTING PLAN (LOT 28 & PARTIAL LOT 27)

SCALE: 1/16" = 1'-0"

2 UPPER LEVEL LIGHTING PLAN (LOT 28 & PARTIAL LOT 27)

SCALE: 1/16" = 1'-0"

GENERAL NOTES:

A. ALL UNDERGROUND CONDUITS AND DUCTBANKS SHALL BE DIRECT BURIED PER DETAILS, ON SHEET E005 UNLESS INDICATED OTHERWISE. ALL CONDUITS BURIED UNDER DRIVEWAYS AND PARKING AREAS WHERE AUTOMOBILE TRAFFIC PASSES THROUGH AND ANY BENDS IN CONDUIT SHALL BE CONCRETE ENCASED. PROVIDE ALL CONDUITS WITH PULLWIRE; ALL CONDUITS SHALL BE 1.5" UNLESS INDICATED OTHERWISE. CONTRACTOR SHALL UTILIZE COMMON TRENCH(ES) WHERE EVER FEASIBLE.

B E.C. IS RESPONSIBLE FOR ALL CUTTING, PATCHING AND RESURFACING OF ANY/ALL HARD SURFACES DISTURBED TO FACILITATE THIS WORK. E.C. SHALL REFER TO CIVIL DRAWINGS SHEET FOR EXACT ROUTING OF ALL UNDERGROUND UTILITIES.

C THIS SITE WILL BE REGRADED AND RENOVATED UNDER THIS PROJECT; REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR AREA WHERE NEW WORK WILL OCCUR. E.C. SHALL REMOVE ALL ELECTRICAL DEVICES, LIGHT POLES, UNDERGROUND CONDUITS AND OTHER EQUIPMENT ASSOCIATED WITH DIV 26 TO ACCOMMODATE ALL NEW CONSTRUCTION ON SITE. ONLY EXISTING DEVICES SERVING EXISTING EQUIPMENT TO REMAIN AND DEVICES INDICATED AS EXISTING SHALL BE MAINTAINED.

D ALL STREET LIGHT POLES ON ELM ST AND OHIO RIVER SCENIC BYWAY SHALL REMAIN.

NOTES:

1. PROVIDE 3-1.5" SLEEVES FOR LIGHTING, FIRE ALARM AND POWER RACEWAYS, CLOSELY COORDINATE SLEEVE LENGTHS WITH ALL STRUCTURAL DRAWINGS.
2. EXISTING LUMINAIRE SHALL BE REMOVED AT DRIVE AISLE.
3. LOCATE "C1" FIXTURE BELOW LANDING AT STAIR FOR SECURITY LIGHTING.
4. MOUNT "S1" FIXTURES UNDERNEATH CONCRETE BENCH LIP, AND AIM AT DOWN AT PATHWAY. COORDINATE EXACT AIMING WITH ARCHITECT PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
5. COORDINATE EXACT AIMING OF "PL6" FIXTURE'S INDIVIDUAL LIGHTS WITH ARCHITECT PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY.
6. E.C. SHALL PROVIDE CONTROL WIRING FROM C-BOX LOCATION AT GRADE INTO PARKING GARAGE AND TO THE LUMEN TOUCH 2.0 CONTROLLER. MOUNT CONTROLLER IN EXISTING ELECTRICAL ROOM. RUN CONDUIT AND WIRING THROUGH EXISTING PARKING GARAGE OVER TO ELECTRICAL ROOM TO LUMENTOUCH 2.0 CONTROLLER. CONDUIT SHALL BE .75".
7. PROVIDE WEATHERPROOF BOX MOUNTED IN PLANTER BED. BOX SHALL HOUSE THE C-BOX CONTROLLER FOR COLOR CHANGING LIGHTS. EXTEND CONDUIT AND CONTROL WIRING TO FIXTURES AND TO LUMENTOUCH CONTROLLER FROM THIS LOCATION. (E.C. SHALL THE OPTION TO PROVIDE EXTERIOR RATED C-BOX IN LIEU OF WEATHERPROOF ENCLOSURE).
8. 24"X24" FLUSH GRADE PULL BOX ENCLOSURE WITH GREEN GASKET COVER WITH APPROPRIATE LOGO. PER DETAIL 4, SHEET E005. PULLBOX CONTAINS ALL EXTERIOR LIGHTING (AND RECEPTACLE) CONDUITS; EXTEND (2)-4" CONDUITS FROM THIS PULLBOX TO ELECTRIC ROOM TO SERVE EXTERIOR LIGHTING AND EXTERIOR RECEPTACLE CIRCUITS. PROVIDE DIVIDER PLATE INSIDE TO SEGREGATE THE LIGHTING AND RECEPTACLE CIRCUITS AND PROVIDE LABEL ON WIRING TO INDICATE BRANCH CIRCUITS. REFER TO NOTES ON THIS SHEET.
9. RUN 20A, 277V-1PH LIGHTING CIRCUIT WITH 2-#8, 1-#8 GRD., IN COMMON 1.5" CONDUIT WITH RECEPTACLE CIRCUIT TO EXTERIOR LIGHTING PULLBOX (NOTE 8, THIS SHEET. EXTEND FROM PULLBOX TO PANEL IN ELECTRICAL ROOM AS INDICATED. RUN LIGHTING BRANCH CIRCUITS THROUGH EXTERIOR LIGHTING CONTROLS PER DETAILS ON SHEET E005.
10. RUN 20A, 120V-1PH RECEPTACLE CIRCUIT WITH 2-#8, 1-#8 GRD., IN COMMON 1.5" CONDUIT WITH LIGHTING CIRCUIT TO PULLBOX (NOTE 8, THIS SHEET), EXTEND FROM PULLBOX AND TO PANEL IN PARKING GARAGE. RUN RECEPTACLE BRANCH CIRCUITS THROUGH EXTERIOR LIGHTING/RECEPTACLE CONTROL RELAY PER DETAIL ON SHEET E005.
11. FLUSH GRADE PULLBOX ENCLOSURE WITH GREEN GASKETED COVER WITH APPROPRIATE LOGO, PER DETAIL 4, ON SHEET E005.
12. CONDUIT MOUNTED IN DIRT.
13. CONDUIT MOUNTED UNDER STRICTURE IN PARKING GARAGE.
14. PROVIDE 1-.75" & 2-1.5" SLEEVES. COORDINATE EXACT LOCATION WITH STRUCTURAL/ARCHITECT PRIOR TO ROUGH IN AND PROVIDE ACCORDINGLY. REFER TO DETAIL 1, ON SHEET E005 FOR ADDITIONAL INFORMATION.
15. PROVIDE SLEEVES. COORDINATE EXACT LOCATION WITH STRUCTURAL/ARCHITECT AND CONSTRUCTION MANAGER PRIOR TO ROUGH IN AND PROVIDE ACCORDINGLY. REFER TO DETAIL 2 ON SHEET E005 FOR ADDITIONAL INFORMATION.
16. PROVIDE 1-.75" & 2-1.5" SLEEVES. COORDINATE EXACT LOCATION WITH STRUCTURE/ARCHITECT PRIOR TO ROUGH IN AND PROVIDE ACCORDINGLY.

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-324-5777 www.heapy.com

STATE OF OHIO
DONALD E. ALLEN JR.
68729
REGISTERED
PROFESSIONAL ENGINEER
12-17-2021

ISSUES

ISSUES

DRAWN BY: E201
ENGINEER: JJT
CHECKED BY: DA

THE BANKS
Public Partnership

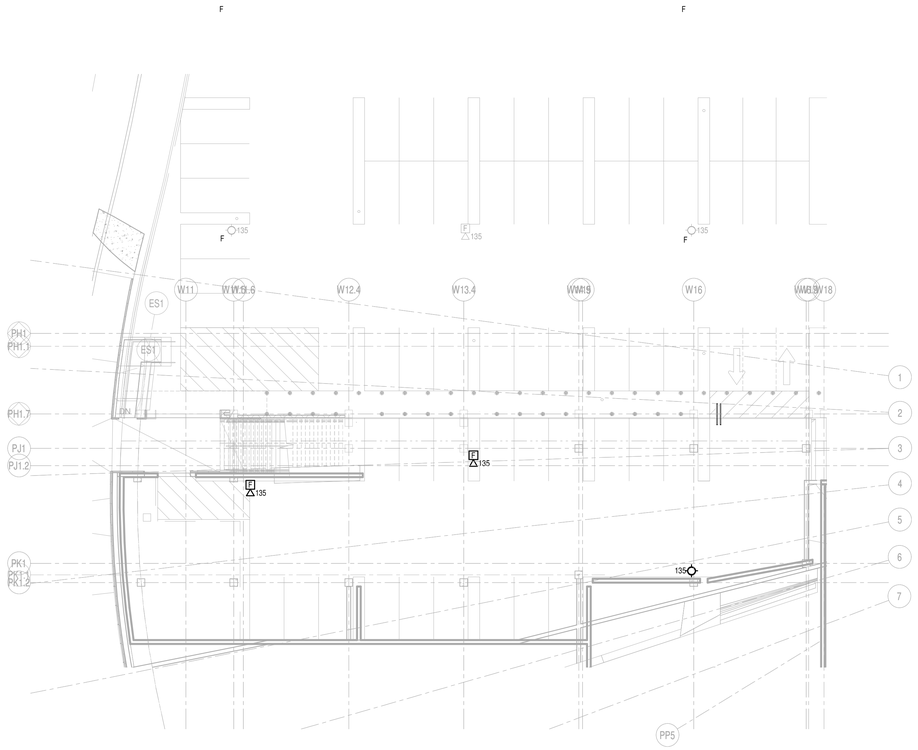
BP#2 - PARK & GARAGE

DRAWING TITLE
LIGHTING PLANS LOT 28

JOB NUMBER 98090.40 12/17/2021

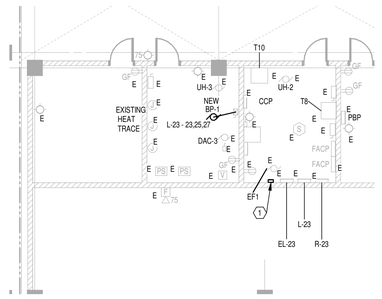
DRAWING NUMBER
E201

12/17/2021 10:53:04 AM C:\BIM\Model\2021-07091-MEP-Central_JJThomas@heapy.com.rvt



1 LOWER LEVEL POWER PLAN-(LOT 28 & PARTIAL LOT 27)

SCALE: 1/16" = 1'-0"



2 EXISTING (LOT 23) ELECTRIC ROOM ENLARGED

SCALE: 1/8" = 1'-0"

⬡ PLAN NOTES

1. PROVIDE NEW LUMENPULSE LUMEN TOUCH 2.0 (LT02) OR EQUAL. S1 AND S2 FIXTURES DMX TO BE DAISY CHAINED. PROVIDE DMX COMPATIBILITY WIRING FROM S1 AND S2 TO THE LT02. PROVIDE ALL THE COMPONENTS NECESSARY TO MAKE A COMPLETE AND OPERATIONAL SYSTEM AND INSTALLATION.

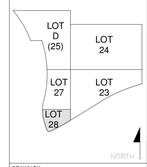
HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Consulting Engineers
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: (513) 241-3222
Fax: (513) 241-2981

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
Nationally Recognized Leader in Sustainability
1400 W Dorothy Lane, Dayton, OH 45409-1310
Ph 937-224-0861 Fax 937-224-5777 www.heapy.com

STATE OF OHIO
DONALD E. ALLEN JR.
68729
REGISTERED
PROFESSIONAL ENGINEER
12-17-2021

ISSUES



DRAWN BY: JJT
ENGINEER: JJT
CHECKED BY: DA

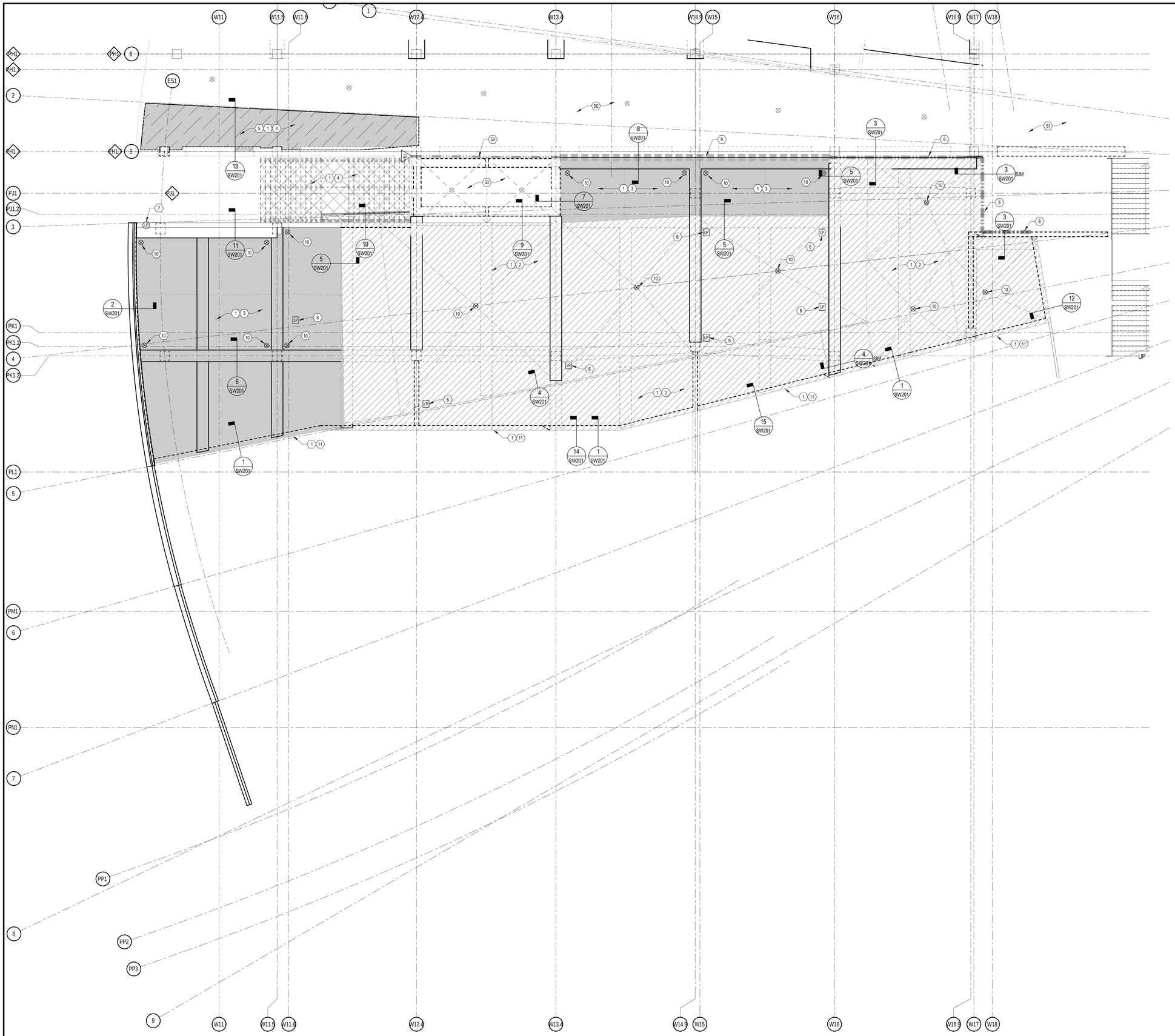
THE BANKS
Public Partnership

BP#2 - PARK & GARAGE

DRAWING TITLE
POWER PLANS LOT 28

JOB NUMBER 98090.40 12/17/2021

DRAWING NUMBER
E301



GENERAL NOTES:

A. REFER TO LANDSCAPE PLANS FOR PLANTINGS, SITE FURNISHINGS, AND JOINT/SCORING PATTERNS.

B. REFER TO PLUMBING PLANS FOR DRAIN LOCATIONS AND DETAILS. DRAINS SHOWN FOR REFERENCE ONLY.

C. REFER TO MEP PLANS FOR VERTICAL PENETRATION LOCATIONS AND DETAILS. BOLLARDS AND LIGHT POLES SHOWN FOR REFERENCE ONLY.

D. COORDINATE WITH ENGINEER AND WATERPROOFING MANUFACTURER'S PREPARATION TO CONFIRM VERTICAL AND HORIZONTAL PENETRATION PRIOR TO PERFORMING WORK. REFER TO SPECIFICATION SECTION 071400.

E. DURING ENTIRE COURSE OF THE PROJECT PROVIDE TEMPORARY PROJECTION OF INSTALLED WATERPROOFING SYSTEMS UNTIL OVERBURDEN IS INSTALLED. REFER TO SPECIFICATION SECTION 071400.

DRAWING NOTES:

1. REVIEW AND PREPARE CONCRETE FOR MEMBRANE APPLICATION. REFER TO DETAILS 4, AND 3 ON DRAWING SW301 AND SPECIFICATION SECTION 030100.
2. PROVIDE HOT-APPLIED REINFORCED WATERPROOFING MEMBRANE WITH PROTECTION SHEET AND DRAIN BOARD HORIZONTAL WITH FILTER FABRIC (U.N.O) AT THIS AREA. LAPS IN PROTECTION COURSE TO BE SEALED WITH HOT-APPLIED MEMBRANE. REFER TO DETAIL 4 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
3. PROVIDE HOT-APPLIED REINFORCED WATERPROOFING MEMBRANE WITH PROTECTION SHEET, ROOT BARRIER ON VERTICAL AND HORIZONTAL SURFACES. PROVIDE DRAIN BOARD WITH FILTER FABRIC ON HORIZONTAL SURFACES. LAPS IN PROTECTION COURSE TO BE SEALED WITH HOT-APPLIED MEMBRANE. REFER TO DETAIL 4 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
4. PROVIDE HOT-APPLIED REINFORCED WATERPROOFING MEMBRANE WITH PROTECTION SHEET (U.N.O) AT THIS AREA. LAPS IN PROTECTION COURSE TO BE SEALED WITH HOT-APPLIED MEMBRANE. REFER TO DETAIL 4 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
5. REMOVE EXISTING MEMBRANE PRIOR TO INSTALLIATION OF CONCRETE CURBS. REFER TO SPECIFICATION SECTION 071400.
6. TERMINATE WATERPROOFING SYSTEM ON LIGHT POLE BASE. REFER TO DETAIL 16 ON DRAWING SW302.
7. TERMINATE WATERPROOFING SYSTEM ON LIGHT POLE BASE. REFER TO DETAIL 15 ON DRAWING SW302.
8. PROVIDE EXPANSION JOINT TYPE 1. REFER TO DETAIL 17 ON DRAWING SW302 AND SPECIFICATION SECTIONS 071400 AND 079000.
9. PROVIDE EXPANSION JOINT TYPE 2. REFER TO DETAIL 18 ON DRAWING SW302 AND SPECIFICATION SECTIONS 071400 AND 079000.
10. NEW SUBSURFACE DRAIN SYSTEM. PROVIDE WATERPROOFING MEMBRANE AT DRAIN. REFER TO DETAIL 14 ON DRAWING SW302.
11. PROVIDE SELF ADHERED MEMBRANE WATER PROOFING ON THE FOUNDATION WALL AND FOOTING. REFER TO DETAILS 14 AND 15 ON DRAWING SW201 AND SPECIFICATION SECTION 071300.

50. EXISTING LOT 27. SUBSURFACE WATERPROOFING SYSTEM BY HENRY.
51. EXISTING LOT 23. SUBSURFACE WATERPROOFING HENRY 790-11 SYSTEM.
52 EXISTING SUBSURFACE EXPANSION JOINT.

LEGEND:

- EXISTING EXPANSION JOINT (52)
- AREA DRAIN (4)
- LP PROPOSED LIGHT POLE (5)
- LP PROPOSED LIGHT POLE (6)
- PROVIDE WATERPROOFING MEMBRANE SYSTEM (1)(2)
- PROVIDE WATERPROOFING MEMBRANE SYSTEM (1)(3) WITH ROOT BARRIER
- PROVIDE WATERPROOFING MEMBRANE SYSTEM (1)(4)
- PROVIDE WATERPROOFING MEMBRANE SYSTEM (5)(1)(3)
- PROVIDE EXPANSION JOINT TYPE 1 (8)
- PROVIDE EXPANSION JOINT TYPE 2 (9)

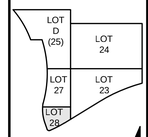
1 SW101 — **PARK LEVEL SUBSURFACE WATERPROOFING PLAN**
1/8" = 1'-0"

NORTH

HAMILTON COUNTY RIVERFRONT PARKING AND INFRASTRUCTURE IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

ISSUES
1 12/17/2021 BP#2 - PARK & GARAGE



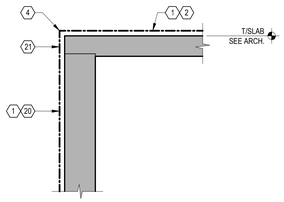
DRAWN BY: J.A.L.
ARCHITECT/ENGINEER: J.D.M.
CHECKED BY: J.D.M.

THE BANKS
Public Partnership

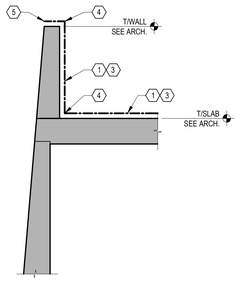
DRAWING TITLE
PARK LEVEL SUBSURFACE WATERPROOFING PLAN

JOB NUMBER 98090.40 DATE 12/17/2021

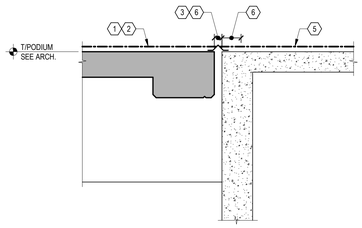
DRAWING NUMBER
SW101



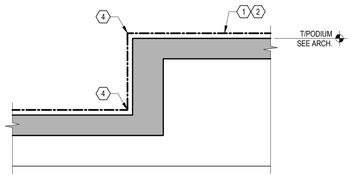
1 SW201 **SECTION**
1/2" = 1'-0"



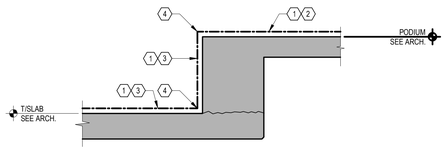
2 SW201 **SECTION**
1/2" = 1'-0"



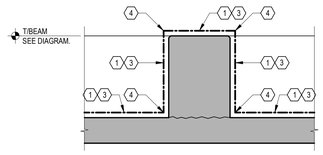
3 SW201 **SECTION**
1/2" = 1'-0"



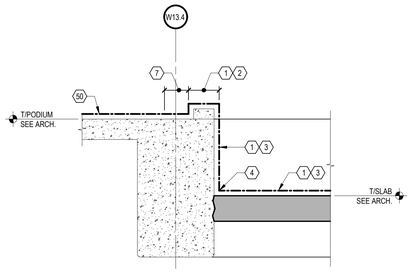
4 SW201 **SECTION**
1/2" = 1'-0"



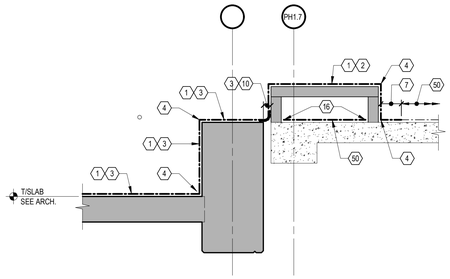
5 SW201 **SECTION**
1/2" = 1'-0"



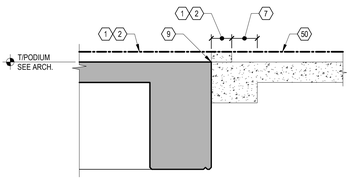
6 SW201 **SECTION**
1/2" = 1'-0"



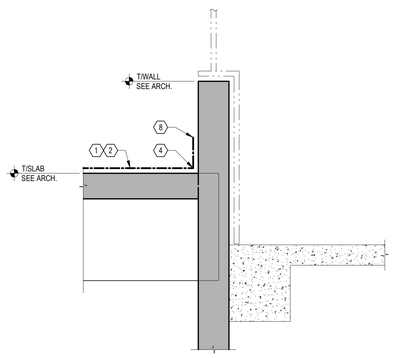
7 SW201 **SECTION**
1/2" = 1'-0"



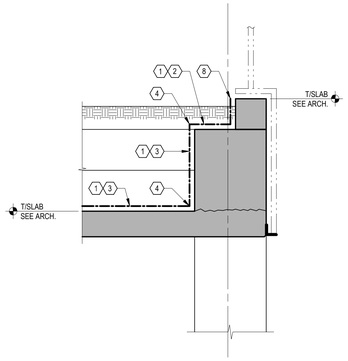
8 SW201 **SECTION**
1/2" = 1'-0"



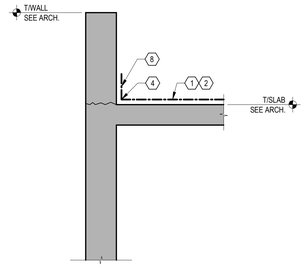
9 SW201 **SECTION**
1/2" = 1'-0"



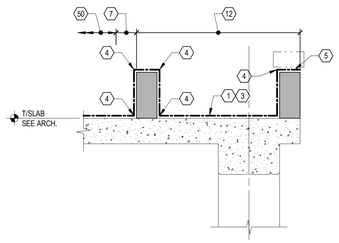
10 SW201 **SECTION**
1/2" = 1'-0"



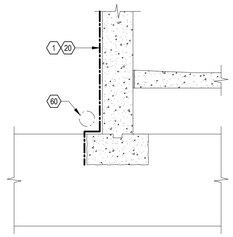
11 SW201 **SECTION**
1/2" = 1'-0"



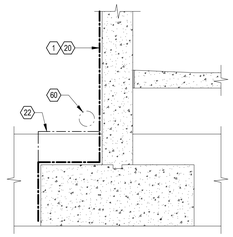
12 SW201 **SECTION**
1/2" = 1'-0"



13 SW201 **SECTION**
1/2" = 1'-0"



14 SW201 **SECTION**
1/2" = 1'-0"



15 SW201 **SECTION**
1/2" = 1'-0"

DRAWING NOTES:

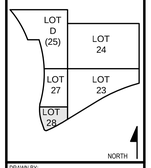
1. REVIEW AND PREPARE CONCRETE FOR MEMBRANE APPLICATION. REFER TO DETAILS 3, AND 4 ON DRAWING SW301 AND SPECIFICATION SECTION 030100.
2. PROVIDE HOT-APPLIED REINFORCED WATERPROOFING MEMBRANE WITH PROTECTION SHEET AND DRAIN BOARD HORIZONTAL WITH FILTER FABRIC (U.N.O) AT THIS AREA. LAPS IN PROTECTION COURSE TO BE SEALED WITH HOT-APPLIED MEMBRANE. REFER TO DETAIL 4 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
3. PROVIDE HOT-APPLIED REINFORCED WATERPROOFING MEMBRANE WITH PROTECTION SHEET, ROOT BARRIER ON VERTICAL AND HORIZONTAL SURFACES. PROVIDE DRAIN BOARD WITH FILTER FABRIC ON HORIZONTAL SURFACES. LAPS IN PROTECTION COURSE TO BE SEALED WITH HOT-APPLIED MEMBRANE. REFER TO DETAIL 4 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
4. PROVIDE MEMBRANE INSIDE/OUTSIDE CORNER DETAIL THIS AREA. REFER TO DETAILS 8, 9, AND 10 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
5. PROVIDE MEMBRANE TERMINIATION. REFER TO DETAIL 6 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
6. PROVIDE EXPANSION JOINT TYPE 1. REFER TO DETAIL 17 ON DRAWING SW302 AND SPECIFICATION SECTIONS 071400 AND 079000.
7. PROVIDE MEMBERANE TIE IN TO EXISTING SYSTEM. REFER TO DETAIL 7 ON DRAWING SW301 AND SPECIFICATION SECTION 071400.
8. EXTEND NEW MEMBRANE 12" FROM CONCRETE SLAB AND TERMINATE. REFER TO DETAIL 11 ON DRAWING SW301.
9. PROVIDE SEALANT JOINT AT COLD JOINT BETWEEN NEW AND EXIST STRUCTURES. REFER TO DETAIL 5 ON DRAWING SW301.
10. PROVIDE EXPANSION JOINT TYPE 2. REFER TO DETAIL 18 ON DRAWING SW302 AND SPECIFICATION SECTIONS 071400 AND 079000.
11. PRIOR TO INSTALLATION OF CONCRETE OVER BUILD STRUCTURE REMOVE EXISTING MEMBRANE AT NEW CONCRETE WALL BASE. REFER TO SPECIFICATION SECTION 071400.
12. PRIOR TO INSTALLATION OF CONCRETE PLANTER WALLS REMOVE EXISTING MEMBRANE AT NEW CONCRETE WALL BASES AND PLANTER AREA. REFER TO SPECIFICATION SECTION 071400.
20. PROVIDE SHEET MEMBRANE WATERPOOFING SYSTEM. REFER TO SPECIFICATION SECTION 071300.
21. AT TOP OF WALL BURN OFF 3" OF SHEET MEMBRANE WATERPROOFING FACER SHEET. LAP HOT APPLIED REINFORCED WATERPROOFING MEMBRANE WITH PROTECTION SHEET AND DRAIN BOARD OVER SHEET MEMBRANE. REFER TO SPECIFICATION SECTIONS 071300 AND 071400.
22. AT INTERSECTION OF GRADE BEAM EXTEND SHEET MEMBRANE WATERPROOFING UP AND OVER BEAM. REFER TO SPECIFICATION SECTION 071300.
50. EXISTING LOT 27. SUBSURFACE WATERPROOFING SYSTEM BY HENRY.
51. EXISTING LOT 23. SUBSURFACE WATERPROOFING HENRY 790-11 SYSTEM.
60. NEW FOOTING DRAIN. REFER TO CIVIL DRAWINGS.

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

ISSUES

ISSUES		
1	12/17/2021	BP#2 - PARK & GARAGE



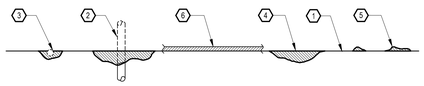
DRAWN BY: J.A.L.
ARCHITECT/ENGINEER:
CHECKED BY: J.D.M.

THE BANKS
Public Partnership

DRAWING TITLE
WATERPROOFING SECTIONS

JOB NUMBER 98090.40
DATE 12/17/2021

DRAWING NUMBER
SW201



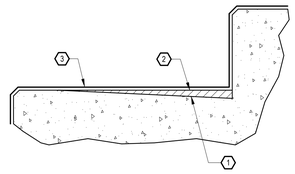
EXPOSED METAL SURFACE DEFECTS

1. EXISTING CONCRETE SLAB.
2. CUT OFF NON-FUNCTIONAL METALS 1" BELOW CONCRETE SURFACE. PREPARE CONCRETE AND PATCH WITH EPOXY AND SAND MIXTURE. NO FLAME CUTTING PERMITTED. REFER TO SPECIFICATION SECTION 030100.
3. EXPOSED SLAB REINFORCEMENT AND OR WIRE MESH. CUT AND REMOVE SUFFICIENT AMOUNT OF REINFORCEMENT TO PROVIDE 1/2" COVER AT CUT ENDS. PREPARE AND PATCH WITH EPOXY AND SAND MIXTURE. CONSULT WITH ENGINEER PRIOR TO CUTTING REINFORCEMENT.
4. REPAIR MINOR EXISTING SURFACE DEFECTS CAUSED BY AGGREGATE POP-OUTS, SURFACE SCALING, AND FREEZE-THAW DAMAGE IN A MANNER ACCEPTABLE TO THE ENGINEER AND MEMBRANE MANUFACTURER. REFER TO SPECIFICATION SECTION 030100.
5. GRIND SMOOTH OR OTHERWISE REMOVE EXISTING EXCESS CONCRETE AND/OR MATERIAL DEPOSITED (LEFT ON SLAB) FROM CONSTRUCTION ACTIVITIES. WHERE THE EXISTING SLAB CONCRETE IS MOUNDED OR OTHERWISE PROTRUDES MORE THAN 1/16" ABOVE THE DECK, GRIND IT SMOOTH, OR GRIND A TRANSITION SLOPE OF 1:4 (MAXIMUM) WITH BLENDING RADII AT PERIMETER OF LARGE AREAS.
6. NEW MEMBRANE SYSTEM. REFER TO SPECIFICATION SECTION 071400.

SUPPLEMENTAL SURFACE PREPARATION (HORIZONTAL AND VERTICAL)

1 SW301 DETAIL

NO SCALE

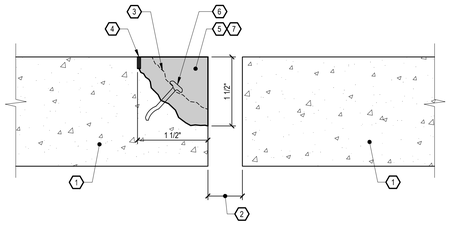


1. EXISTING PONDED AREA IN TREAD SURFACE.
2. AFTER SURFACE PREPARATION PER SPECIFICATION SECTION 030100, FILL PONDED AREA WITH MEMBRANE MANUFACTURER APPROVED MATERIALS. REFER TO SPECIFICATION SECTIONS 030100 AND 071400.
3. NEW MEMBRANE SYSTEM. REFER TO SPECIFICATION SECTION 071400.

PONDED CONCRETE TREAD LEVELING

2 SW301 DETAIL

NO SCALE

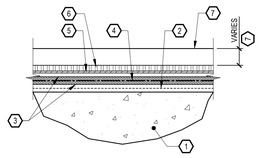


1. EXISTING CONCRETE STRUCTURE.
2. EXPANSION JOINT OPENING. PROVIDE FORMS TO MAINTAIN EXISTING DIMENSION.
3. EXISTING DELAMINATION PLANE.
4. PROVIDE 3/4" SAWCUT AROUND PERIMETER OF REPAIR AREA.
5. REMOVE ALL CONCRETE WITHIN SHADED AREA. REFER TO SPECIFICATION SECTION 030100.
6. PROVIDE 1/4" DIA. x 3" LONG PATCH ANCHORS 1'-0" O.C. REFER TO SPECIFICATION SECTION 030100.
7. PREPARE CAVITY SURFACES AND PROVIDE PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.

EXPANSION JOINT EDGE REPAIR

3 SW301 DETAIL

NO SCALE

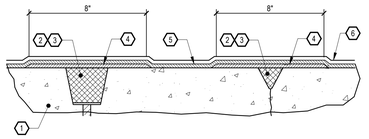


1. CONCRETE SLAB. SURVEY STRUCTURAL SLAB FOR DETERIORATED CONCRETE. REPAIR TO WATERPROOFING MANUFACTURER'S REQUIREMENTS. REFER TO DETAILS 1, 2, AND 3 ON THIS DRAWING.
2. PROVIDE SURFACE CONDITIONER. REFER TO SPECIFICATION SECTION 071400.
3. PROVIDE HOT FLUID APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
4. PROVIDE REINFORCING SHEET. FULLY ENCAPSULATE REINFORCING SHEET MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
5. PROVIDE PROTECTION SHEET OR ROOT BARRIER. REFER TO SPECIFICATION SECTION 071400.
6. PROVIDE DRAIN BOARD, U.N.O. REFER TO SPECIFICATION SECTION 071400.
7. TOPPING SLAB . REFER TO ARCHITECT DRAWING FOR MORE INFORMATION.

TYPICAL WATERPROOFING MEMBRANE SYSTEM

4 SW301 DETAIL

NO SCALE

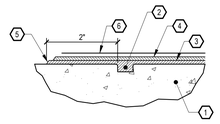


1. CONCRETE STRUCTURE.
2. PREPARE ALL SURFACES INTENDED FOR NEW SEALANT. REFER TO SPECIFICATION SECTION 079200.
3. PRIME SUBSTRATE AND PROVIDE NEW SEALANT. INSTALL SEALANT FLUSH WITH ADJOINING SURFACE BENEATH MEMBRANE. REFER TO SPECIFICATION SECTION 079200.
4. PROVIDE REINFORCEMENT FABRIC ENCAPSULATED IN NEW WATERPROOFING MEMBRANE MIN. 8" WIDE. REFER TO SPECIFICATION SECTION 071400 AND MANUFACTURE'S RECOMMENDATIONS.
5. PROVIDE CONTINUOUS HOT APPLIED MEMBRANE. REFER TO DETAIL 9 ON THIS DRAWING FOR COMPLETE SYSTEM. REFER TO SPECIFICATION SECTION 071400.
6. PROVIDE PROTECTION SHEET OVER WATERPROOFING MEMBRANE. INSTALL PROTECTION SHEET INTO HOT MEMBRANE. REFER TO SPECIFICATION SECTION 071400.

TYPICAL MEMBRANE OVER CJ's OR CRACKS (REFERENCE)

5 SW301 DETAIL

NO SCALE

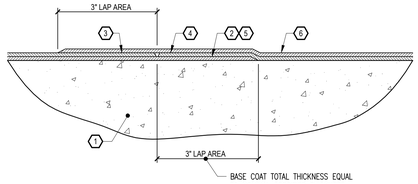


1. CONCRETE SLAB.
2. SAWCUT 1/4" WIDE x 1/8" DEEP.
3. PROVIDE MEMBRANE BASECOAT. ENSURE BASE COAT COMPLETELY FILLS SAWCUT. REFER TO SPECIFICATION SECTION 071400.
4. PROVIDE MEMBRANE TOP COAT. REFER TO SPECIFICATION SECTION 071400.
5. MASK STRAIGHT LINE FOR TERMINATION. PERIMETER SHALL BE PARALLEL TO ADJACENT WALLS AND/OR PERPENDICULAR TO ADJACENT WALLS AS REQUIRED TO OBTAIN CLEAN AND NEAT SYSTEM INSTALLATION.
6. PROVIDE NEW PROTECTION SHEET OR ROOT BARRIER DIRECTLY INTO TOP COAT WHILE STILL HOT. DO NOT LEAVE MEMBRANE EXPOSED TO U.V. FOR MORE THAN 24 HOURS.

TYPICAL HORIZONTAL MEMBRANE TERMINATION

6 SW301 DETAIL

NO SCALE

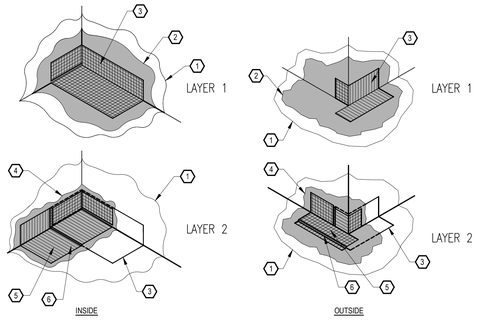


1. CONCRETE STRUCTURE. PREPARE AND PRIME PER MEMBRANE MANUFACTURER'S REQUIREMENTS.
2. WATERPROOFING MEMBRANE BASE COAT WITH INTEGRAL REINFORCEMENT FOR PHASE 1 INSTALLATION.
3. WATERPROOFING MEMBRANE TOP COAT FOR PHASE 1 INSTALLATION.
4. MEMBRANE BASE COAT WITH INTEGRAL REINFORCEMENT FOR PHASE 2 INSTALLATION.
5. WHERE NEW WATERPROOFING AREAS ARE TO TIE INTO ALREADY INSTALLED WATERPROOFING AREAS, PROCEED AS FOLLOWS:
   - -PREPARE EXISTING BASE COAT PER MANUFACTURER REQUIREMENTS.
   - -LAP NEW BASE COAT ONTO EXISTING BASE COAT AND PROCEED AS NOTED ABOVE.
6. WATERPROOFING TOP COAT FOR PHASE 2 INSTALLATION.

TYPICAL MEMBRANE TIE-IN

7 SW301 DETAIL

NO SCALE

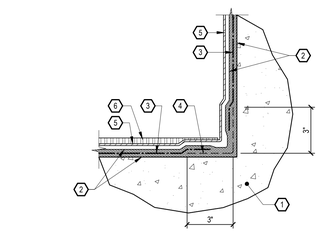


1. PRIMER PER MANUFACTURER'S RECOMMENDATIONS. REFER TO SPECIFICATION SECTION 071400.
2. FIRST COAT OF WATERPROOFING SYSTEM. REFER TO SPECIFICATION SECTION 071400 FOR THICKNESS.
3. REINFORCEMENT SHEET FIRST LAYER. REFER TO SPECIFICATION SECTION 071400.
4. SECOND COAT OF WATERPROOFING SYSTEM. REFER TO SPECIFICATION SECTION 071400.
5. REINFORCEMENT SHEET SECOND LAYER. REFER TO SPECIFICATION SECTION 071400.
6. APPLY A TOP COAT COMPLETELY COVERING ALL EXPOSED REINFORCING MATERIAL.

CORNER REINFORCING

8 SW301 DETAIL

NO SCALE

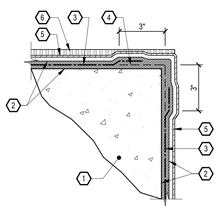


1. CONCRETE STRUCTURE. PREPARE SURFACE TO RECEIVE NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
2. PROVIDE NEW HOT APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
3. PROVIDE REINFORCING FABRIC ENCAPSULATED IN NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. OVERLAP FABRIC ONTO NEOPRENE FLASHING.
4. PROVIDE CONTINUOUS UNCURED NEOPRENE FLASHING ENCAPSULATED IN WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
5. PROVIDE PROTECTION SHEET OVER WATERPROOFING MEMBRANE. INSTALL PROTECTION SHEET INTO HOT MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
6. PROVIDE DRAIN BOARD. WRAP EXPOSED EDGES OF DRAIN BOARD CORE WITH FILTER FABRIC. REFER TO SPECIFICATION SECTION 071400.

TYPICAL MEMBRANE AT INSIDE CORNER

9 SW301 DETAIL

NO SCALE

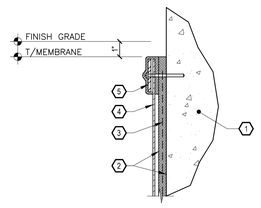


1. CONCRETE STRUCTURE. PREPARE SURFACE TO RECEIVE NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
2. PROVIDE NEW HOT APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
3. PROVIDE REINFORCING FABRIC ENCAPSULATED IN NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. OVERLAP FABRIC ONTO NEOPRENE FLASHING.
4. PROVIDE CONTINUOUS UNCURED NEOPRENE FLASHING ENCAPSULATED IN WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
5. PROVIDE PROTECTION SHEET OVER WATERPROOFING MEMBRANE. INSTALL PROTECTION SHEET INTO HOT MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
6. PROVIDE DRAIN BOARD. WRAP EXPOSED EDGES OF DRAIN BOARD CORE WITH FILTER FABRIC. REFER TO SPECIFICATION SECTION 071400.

TYPICAL MEMBRANE AT OUTSIDE CORNER

10 SW301 DETAIL

NO SCALE

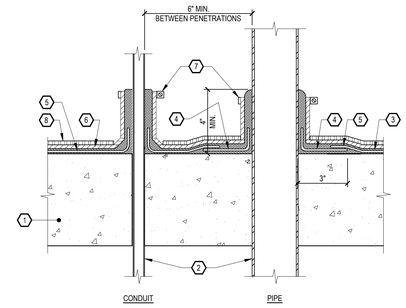


1. CONCRETE STRUCTURE. PREPARE SURFACE TO RECEIVE NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
2. PROVIDE NEW HOT APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
3. PROVIDE REINFORCING FABRIC ENCAPSULATED IN NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. OVERLAP FABRIC ONTO NEOPRENE REINFORCING SHEET.
4. PROVIDE PROTECTION SHEET OVER WATERPROOFING MEMBRANE. INSTALL PROTECTION SHEET INTO HOT MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
5. PROVIDE STAINLESS STEEL TERMINATION BAR ALONG TOP OF MEMBRANE. SECURE TO CONCRETE AT 12" O.C. ENCAPSULATE ALL EXPOSED ANCHOR HEADS WITH WATERPROOFING MEMBRANE FOR WATERTIGHT INSTALLATION. REFER TO SPECIFICATION SECTION 071400.

TYPICAL MEMBRANE TERMINATION ON VERTICAL SURFACE

11 SW301 DETAIL

NO SCALE



1. CONCRETE STRUCTURE. PREPARE SURFACE TO RECEIVE NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
2. EXISTING PIPE PENETRATION/VENT AND/OR CONDUIT. PREPARE SURFACE TO RECEIVE NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
3. PROVIDE NEW HOT APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. EXTEND MEMBRANE ONTO PIPE/VENT AND/OR CONDUIT.
4. PROVIDE UNCURED NEOPRENE FLASHING AROUND PENETRATION. FULLY ENCAPSULATE IN MEMBRANE MATERIAL. REFER TO SPECIFICATION SECTION 071400.
5. PROVIDE REINFORCING FABRIC ENCAPSULATED IN WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. OVERLAP FABRIC ONTO NEOPRENE FLASHING.
6. PROVIDE PROTECTION SHEET OVER WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
7. PROVIDE STAINLESS STEEL WORM DRIVE HOSE CLAMP.
8. PROVIDE DRAIN BOARD. WRAP EXPOSED EDGES OF DRAIN BOARD CORE WITH FILTER FABRIC. REFER TO SPECIFICATION SECTION 071400.

TYPICAL CAST-IN-PLACE PENETRATIONS (VERTICAL AND HORIZONTAL)

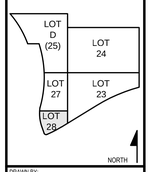
12 SW301 DETAIL

NO SCALE

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

ISSUES
1 12/17/2021 BP #2 – PARK & GARAGE



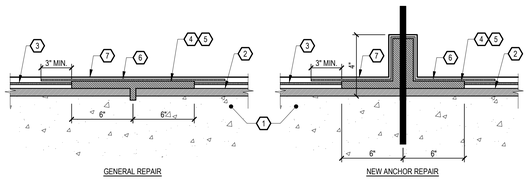
DRAWN BY: J.A.L.
ARCHITECT/ENGINEER: J.D.M.
CHECKED BY: J.D.M.

THE BANKS
Public Partnership

DRAWING TITLE
WATERPROOFING DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

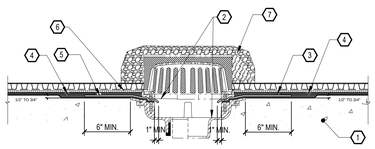
DRAWING NUMBER
SW301



1. CONCRETE SLAB.
2. DAMAGED MEMBRANE DURING CONSTRUCTION. FOR DAMAGE LARGER THAN 3" OR WHERE MEMBRANE MUST BE REMOVE FROM THE SUBSTRATE, CONSULT WITH THE ENGINEER AND THE MANUFACTURE.
3. EXISTING PROTECTION SHEET. REMOVE AND EXPOSED MIN. 12" AROUND DAMAGE AREA. REFER TO MANUFACTURE AND SPECIFICATION SECTION 071400.
4. NEW HOT FLUID APPLIED REINFORCED WATERPROOFING MEMBRANE. HEAT EXISTING MEMBRANE AND PROVIDE NEW HOT FLUID MEMBRANE. REFER TO MANUFACTURE AND SPECIFICATION SECTION 071400.
5. PROVIDE REINFORCING FABRIC ENCAPSULATED IN WATERPROOFING MEMBRANE TO COVER THE DAMAGE AREAS. REFER TO MANUFACTURE AND SPECIFICATION SECTION 071400 . EXTEND FABRIC 3" MIN. BEYOND THE DAMAGE AREA ON ALL DIRECTION.
6. PROVIDE NEW PROTECTION SHEET. EXTEND PROTECTION SHEET 3" MIN. BEYOND THE DAMAGE AREA ON ALL DIRECTION REFER TO MANUFACTURE AND SPECIFICATION SECTION 071400.
7. REINSTALL ROOT BARRIER / DRAINAGE BOARD WITH FILTER FABRIC ABOVE DAMAGED AREAS AT LOCATIONS AS SHOWN ON PLAN ONLY. REFER TO MANUFACTURE AND SPECIFICATION SECTION 071400 AND DETAIL 9/SW301.

TYPICAL REPAIR TO HOT APPLIED WATERPROOFING MEMBRANE

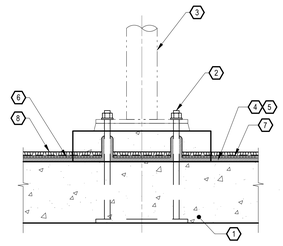
13 / SW302 **DETAIL**
NO SCALE



1. CONCRETE STRUCTURE.
2. PREPARE CONCRETE SURFACE. REFER TO PLUMBING DRAWINGS FOR DRAIN.
3. PROVIDE HOT APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. .TERMINATE MEMBRANE ON DRAIN CASTING.
4. PROVIDE REINFORCING SHEET FULLY ENCAPSULATE IN WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400
5. PROVIDE UNCURED NEOPRENE FLASHING ENCAPSULATED IN WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
6. PROVIDE NEW PROTECTION BOARD OR ROOT BARRIER, AND DRAINAGE BOARD WITH FILTER FABRIC PER PROJECT SPECIFICATION SECTION 071400.
7. TOP SOIL BY OTHERS. REFER TO ARCHITECTURAL DRAWINGS FOR DETAIL.

WATERPROOFING SYSTEM AT PD1 DRAIN

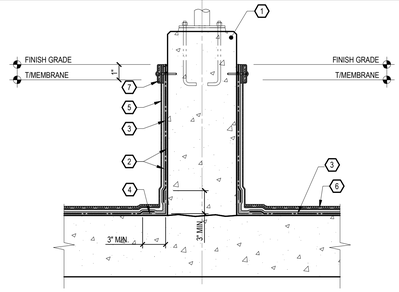
14 / SW302 **DETAIL**
NO SCALE



1. CONCRETE SLAB.
2. (4) 3/4" DIA BOLT, REFER TO STRUCTURAL DRAWINGS DOR MORE INFORMATION.
3. LIGHT POLE , REFER TO ELECTRIC DRAWING FOR MORE INFORMATION.
4. PROVIDE HOT FLUID APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
5. PROVIDE REINFORCING FABRIC ENCAPSULATED IN WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. OVERLAP FABRIC ONTO NEOPRENE FLASHING.
6. PROVIDE PROTECTION SHEET. REFER TO SPECIFICATION SECTION 071400.
7. PROVIDE ROOT BARRIER AT LOCATIONS AS SHOWN ON PLAN ONLY. REFER TO SPECIFICATION SECTION 071400.
8. PROVIDE DRAINAGE BOARD WITH FILTER FABRIC U.N.O. REFER TO SPECIFICATION SECTION 071400.

TYPICAL MEMBRANE AT LIGHT POLE TYPE PL-1

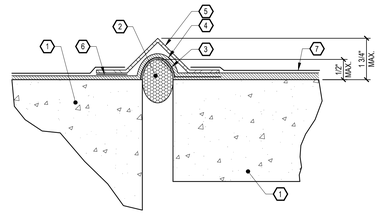
15 / SW302 **DETAIL**
NO SCALE



1. CONCRETE STRUCTURE FOR LIGHT POLE. PREPARE SURFACE TO RECEIVE NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
2. PROVIDE NEW HOT APPLIED REINFORCED WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
3. PROVIDE REINFORCING FABRIC ENCAPSULATED IN NEW WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400. OVERLAP FABRIC ONTO NEOPRENE REINFORCING SHEET.
4. PROVIDE CONTINUOUS UNCURED NEOPRENE FLASHING ENCAPSULATED IN WATERPROOFING MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
5. PROVIDE PROTECTION SHEET AND ROOT BARRIERS OVER WATERPROOFING MEMBRANE. INSTALL PROTECTION SHEET INTO HOT MEMBRANE. REFER TO SPECIFICATION SECTION 071400.
6. PROVIDE DRAIN BOARD. WRAP EXPOSED EDGES OF DRAIN BOARD CORE WITH FILTER FABRIC. REFER TO SPECIFICATION SECTION 071400.
7. PROVIDE STAINLESS STEEL TERMINATION BAR ALONG TOP OF MEMBRANE. SECURE TO CONCRETE AT 12" O.C WITH MINIMUM (2) ANCHORS PER SIDE. ENCAPSULATE ALL EXPOSED ANCHOR HEADS WITH WATERPROOFING MEMBRANE FOR WATERTIGHT INSTALLATION. REFER TO SPECIFICATION SECTION 071400.

TYPICAL MEMBRANE AT LIGHT POLE TYPE PL-2 & PL-3

16 / SW302 **DETAIL**
NO SCALE



1. CONCRETE STRUCTURE.
2. PROVIDE CLOSED CELL BACKER ROD. DIMENSION TO BE 1.5 x JOINT WIDTH.
3. PROVIDE PREFORMED REINFORCING STRIP. REFER TO SPECIFICATION SECTION 071400.
4. PROVIDE WATERPROOFING SYSTEM.
5. PROVIDE NEW 16 GA. STAINLESS STEEL PROTECTION COVER TO BE ATTACHED AT ONE SIDE ONLY AS SHOWN.
6. ADHERE NEW STAINLESS STEEL PROTECTION COVER TO PROTECTION SHEET WITH HOT ASPHALT SYSTEM PER MANUFACTURER'S RECOMMENDATIONS. INSTALL ADHESIVE ON THE HIGH SIDE OF THE JOINT.
7. PROVIDE PROTECTION SHEET. REFER TO SPECIFICATION SECTION 071400.

EXPANSION JOINT - TYPE "3"

17 / SW302 **DETAIL**
NO SCALE

1. CONCRETE STRUCTURE.
2. PROVIDE NEW CLOSED CELL BACKER ROD. DIMENSION TO BE 1.5 x JOINT WIDTH.
3. PROVIDE PREFORMED REINFORCING STRIP. REFER TO SPECIFICATION SECTION 071400.
4. PROVIDE NEW WATERPROOFING SYSTEM.
5. PROVIDE NEW 16 GA. STAINLESS STEEL PROTECTION COVER TO BE ATTACHED AT ONE SIDE ONLY AS SHOWN. SECURE WITH STAINLESS STEEL ANCHORS AT 12" O.C.
6. PROVIDE NEW PROTECTION SHEET. REFER TO SPECIFICATION SECTION 071400.
7. PROVIDE CONTINUOUS DRAINAGE BOARD WITH FILTER FABRIC U.N.O. REFER TO SPECIFICATION SECTION 071400.

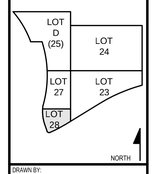
EXPANSION JOINT - TYPE "2"

18 / SW302 **DETAIL**
NO SCALE

HAMILTON COUNTY
RIVERFRONT PARKING
AND INFRASTRUCTURE
IMPROVEMENTS

THP Limited, Inc.
Cincinnati • Cleveland
100 East Eighth Street
Cincinnati, Ohio 45202
Phone: 513.241.3222
www.thpltd.com

ISSUES
1 12/17/2021 BP#2 – PARK & GARAGE



DRAWN BY: J.A.L.
ARCHITECT/ENGINEER: J.D.M.
CHECKED BY: J.D.M.

THE BANKS
Public Partnership

DRAWING TITLE
WATERPROOFING DETAILS

JOB NUMBER 98090.40
DATE 12/17/2021

DRAWING NUMBER
SW302