



**CITY OF HUBER HEIGHTS
STATE OF OHIO**

City Council Work Session

February 22, 2022

6:00 P.M.

City Hall – Council Chambers – 6131 Taylorsville Road

1. **Call Meeting To Order/Roll Call**
2. **Approval of Minutes**
 - A. February 8, 2022
3. **Work Session Topics Of Discussion**
 - A. City Manager Report/Water Infrastructure Update
 - B. ZC 22-05 Huber Heights Library - 6243 Brandt Pike - Basic and Detailed Development Plans
 - C. Space Needs Assessment - LWC
 - D. Brandt Pike Revitalization Project
 - E. Mowing/Maintenance - Specified City Properties - Award Contract
 - F. East Water Main and Sanitary Sewer Extension Projects - Acquisition of Right Of Way

G. Water Distribution Integrity Study - Award Contract

H. Water and Sewer Rate Adjustments

I. Massage Therapy Establishments

J. Municipal Services Request Letter - Carriage Trails - Phase II - Annexation

K. Annexations - Moratorium

L. Huber Heights Community Center Renovations

4. **Adjournment**

AI-8217

Topics of Discussion B.

Council Work Session

Meeting Date: 02/22/2022

ZC 22-05 - Huber Heights Library - 6243 Brandt Pike - Basic and Detailed Development Plans

Submitted By: Jamie Frey

Department: City Manager

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 02/22/2022

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

ZC 22-05 Huber Heights Library - 6243 Brandt Pike - Basic and Detailed Development Plans

Purpose and Background

LWC Incorporated is requesting approval of a Basic and Detailed Development Plan for 4.0 acres of property located at 6243 Brandt Pike for construction of a new library (ZC 22-05). This development is in furtherance with the City's partnership with Dayton Metro Library.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Drawings

Renderings

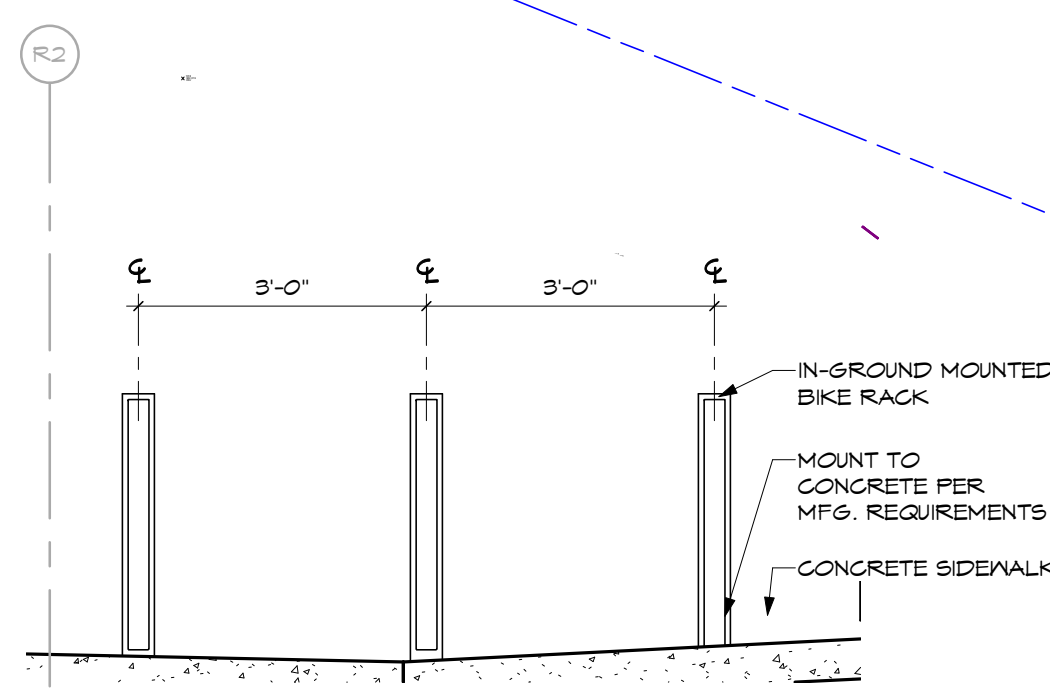
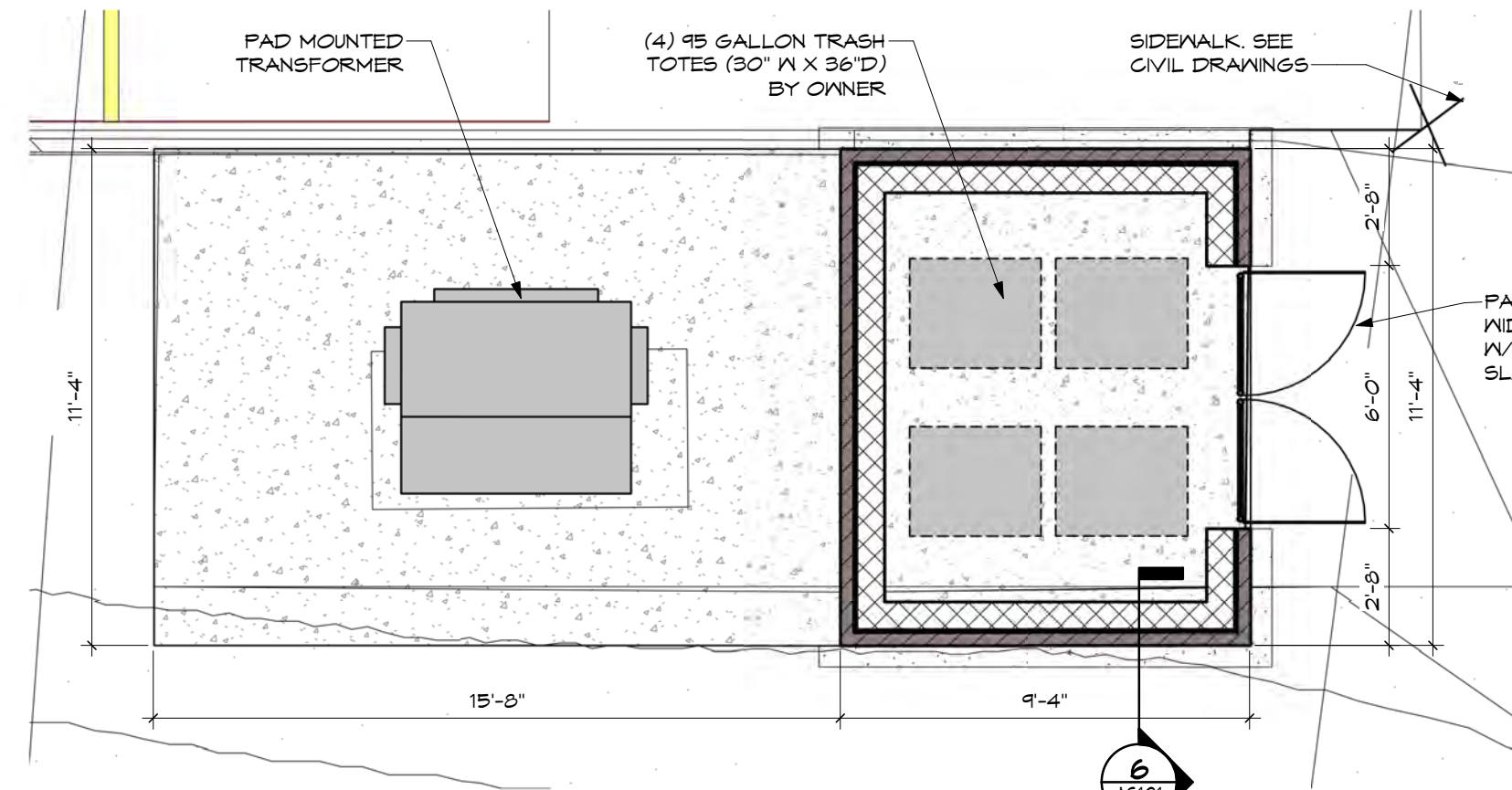
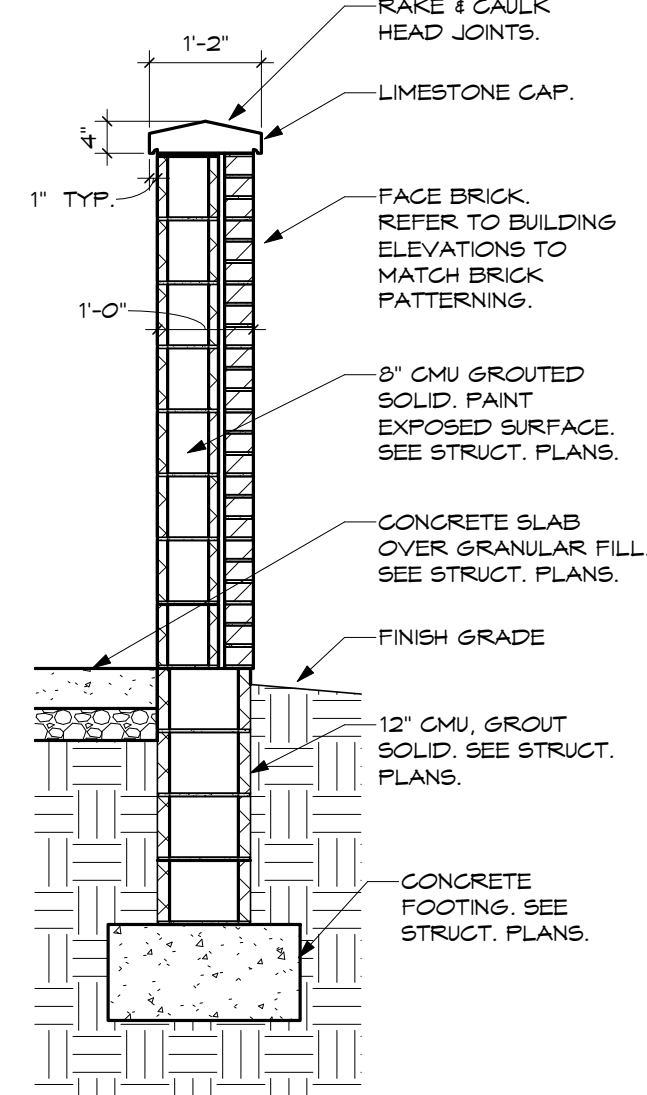
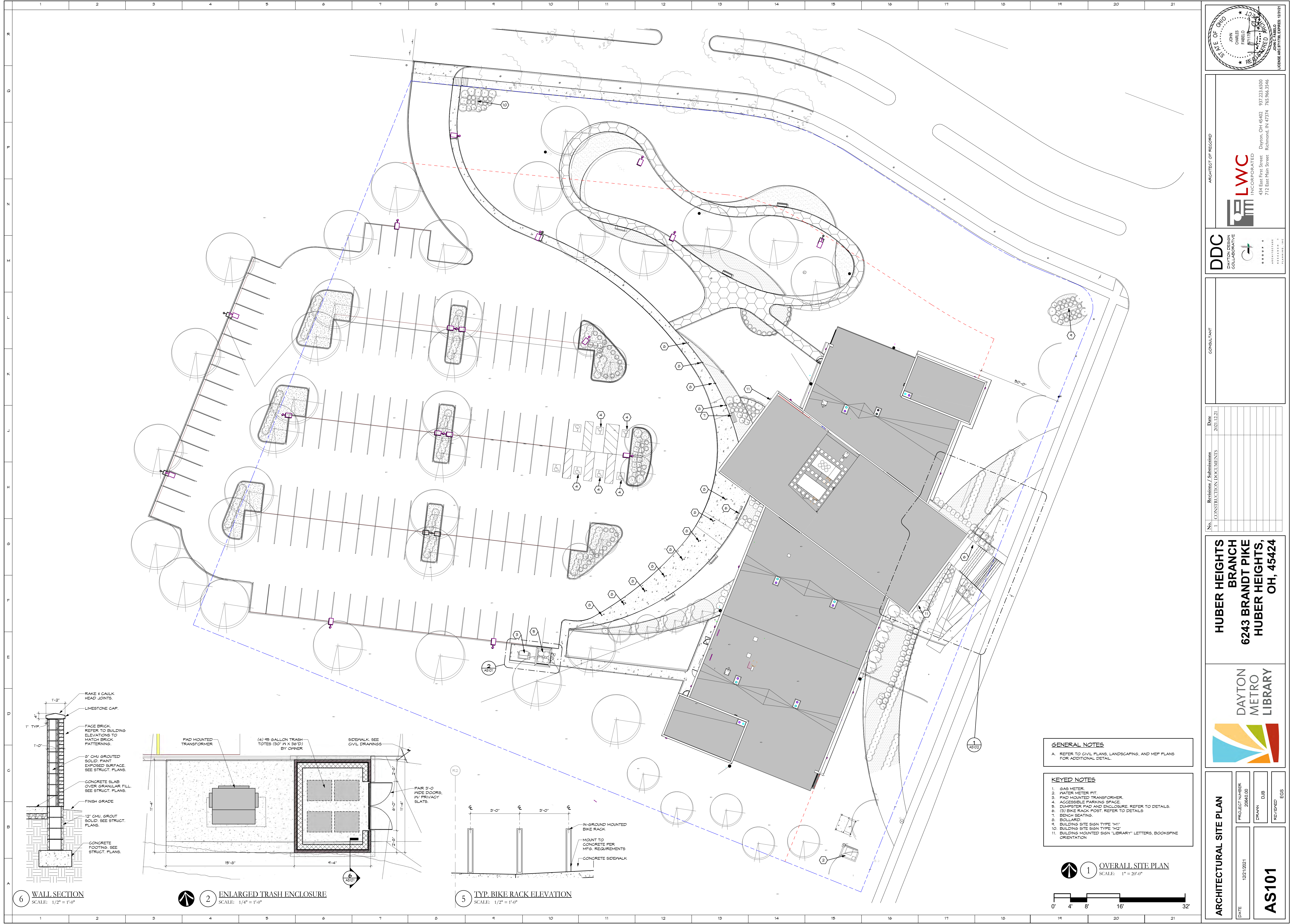
Lighting Report

Fire Assessment

Staff Report

Decision Record

Ordinance



- GENERAL NOTES**
- A. REFER TO CIVIL PLANS, LANDSCAPING, AND MEP PLANS FOR ADDITIONAL DETAIL.
- KEYED NOTES**
1. GAS METER
 2. WATER METER PIT
 3. PAD MOUNTED TRANSFORMER
 4. ACCESSIBLE PARKING SPACE
 5. DUMPSTER PAD AND ENCLOSURE, REFER TO DETAILS
 6. (3) BIKE RACK POST, REFER TO DETAILS
 7. BENCH SEATING
 8. BOLLARD
 9. BUILDING SITE SIGN TYPE "M1"
 10. BUILDING SITE SIGN TYPE "M2"
 11. BUILDING MOUNTED SIGN "LIBRARY" LETTERS, BOOKSPINE ORIENTATION

1 OVERALL SITE PLAN
SCALE: 1" = 20'-0"

0' 4' 8' 16' 32'

ARCHITECT OF RECORD

LWC
INCORPORATED
434 East First Street
712 East Main Street
Dayton, OH 45402 937.333.6500
Richmond, IN 47374 765.966.3546

ARCHITECT

DAYTON DESIGN COLLABORATIVE

ARCHITECT

CONSULTANT

No.	Revisions / Submittals	Date
1	CONSTRUCTION DOCUMENTS	2021.12.21

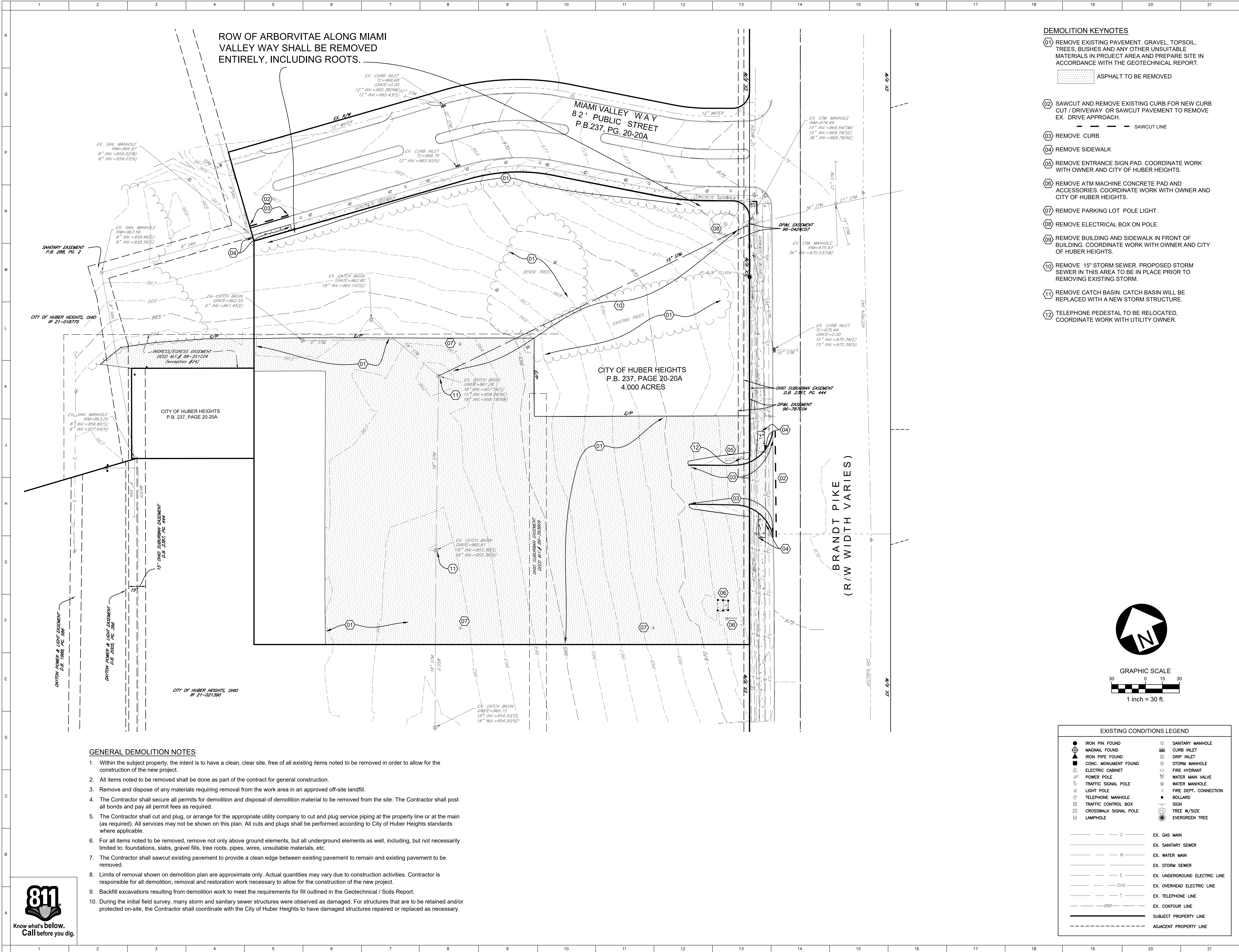
HUBER HEIGHTS BRANCH
6243 BRANDT PIKE
HUBER HEIGHTS, OH, 45424

DAYTON METRO LIBRARY

ARCHITECTURAL SITE PLAN

PROJECT NUMBER 20040.00
DATE 12/21/2021
DRAWN DUB
CHECKED EGS

AS101



ROW OF ARBORVITAE ALONG MIAMI VALLEY WAY SHALL BE REMOVED ENTIRELY, INCLUDING ROOTS.

MIAMI VALLEY WAY
82' PUBLIC STREET
P.B. 237, PG. 20-20A

CITY OF HUBER HEIGHTS
P.B. 237, PAGE 20-20A
4.000 ACRES

BRANDT PIKE
(R/W WIDTH VARIES)

- DEMOLITION KEYNOTES**
- 01 REMOVE EXISTING PAVEMENT, GRAVEL, TOPSOIL, TREES, BUSHES AND ANY OTHER UNSUITABLE MATERIALS IN PROJECT AREA AND PREPARE SITE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
 - 02 SAWCUT AND REMOVE EXISTING CURB FOR NEW CURB CUT / DRIVEWAY OR SAWCUT PAVEMENT TO REMOVE EX. DRIVE APPROACH.
 - 03 REMOVE CURB
 - 04 REMOVE SIDEWALK
 - 05 REMOVE ENTRANCE SIGN PAD. COORDINATE WORK WITH OWNER AND CITY OF HUBER HEIGHTS.
 - 06 REMOVE ATM MACHINE CONCRETE PAD AND ACCESSORIES. COORDINATE WORK WITH OWNER AND CITY OF HUBER HEIGHTS.
 - 07 REMOVE PARKING LOT POLE LIGHT.
 - 08 REMOVE ELECTRICAL BOX ON POLE.
 - 09 REMOVE BUILDING AND SIDEWALK IN FRONT OF BUILDING. COORDINATE WORK WITH OWNER AND CITY OF HUBER HEIGHTS.
 - 10 REMOVE 15" STORM SEWER. PROPOSED STORM SEWER IN THIS AREA TO BE IN PLACE PRIOR TO REMOVING EXISTING STORM.
 - 11 REMOVE CATCH BASIN. CATCH BASIN WILL BE REPLACED WITH A NEW STORM STRUCTURE.
 - 12 TELEPHONE PEDESTAL TO BE RELOCATED. COORDINATE WORK WITH UTILITY OWNER.

ARCHITECT OF RECORD

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Berkshires, IN 47374 765.866.3546

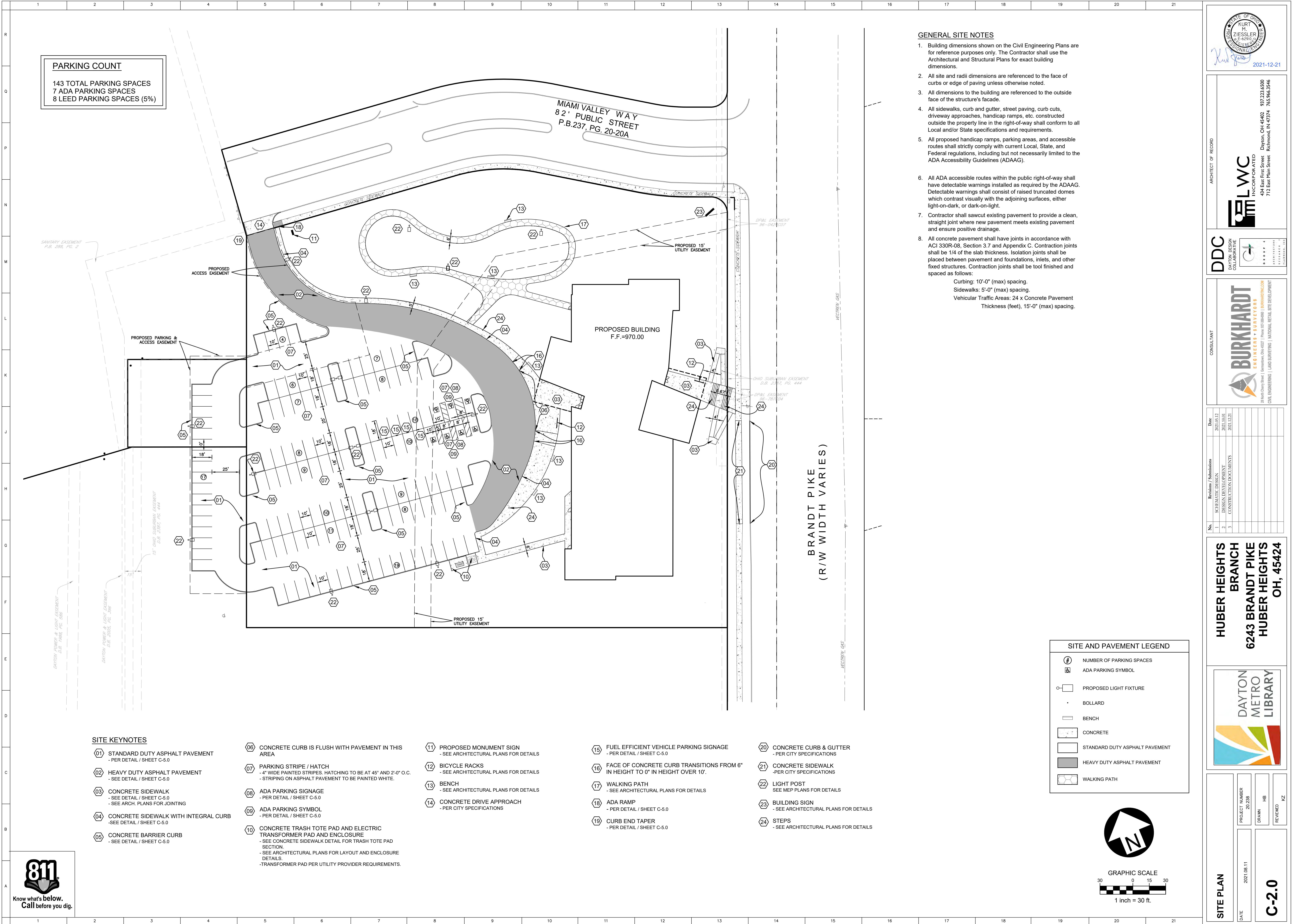
DDC DAYTON DESIGN COLLABORATIVE

BURKHARDT ENGINEERING & SURVEYING
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937.233.6500
www.burkhardt-engineering.com
CIVIL ENGINEERING | LAND SURVEYING | NATIONAL RETAIL SITE DEVELOPMENT

No.	Revision / Submittal	Date
1	SCHEMATIC DESIGN	2021.05.12
2	DESIGN DEVELOPMENT	2021.10.01
3	CONSTRUCTION DOCUMENTS	2021.12.21

HUBER HEIGHTS BRANCH
6243 BRANDT PIKE
HUBER HEIGHTS OH, 45424

DATE 2021.08.11
PROJECT NUMBER 2028
DRAWN HB
REVIEWED KZ
DEMOLITION PLAN
C-1.0



PARKING COUNT

143 TOTAL PARKING SPACES
7 ADA PARKING SPACES
8 LEED PARKING SPACES (5%)

GENERAL SITE NOTES

1. Building dimensions shown on the Civil Engineering Plans are for reference purposes only. The Contractor shall use the Architectural and Structural Plans for exact building dimensions.
2. All site and radii dimensions are referenced to the face of curbs or edge of paving unless otherwise noted.
3. All dimensions to the building are referenced to the outside face of the structure's facade.
4. All sidewalks, curb and gutter, street paving, curb cuts, driveway approaches, handicap ramps, etc. constructed outside the property line in the right-of-way shall conform to all Local and/or State specifications and requirements.
5. All proposed handicap ramps, parking areas, and accessible routes shall strictly comply with current Local, State, and Federal regulations, including but not necessarily limited to the ADA Accessibility Guidelines (ADAAG).
6. All ADA accessible routes within the public right-of-way shall have detectable warnings installed as required by the ADAAG. Detectable warnings shall consist of raised truncated domes which contrast visually with the adjoining surfaces, either light-on-dark, or dark-on-light.
7. Contractor shall sawcut existing pavement to provide a clean, straight joint where new pavement meets existing pavement and ensure positive drainage.
8. All concrete pavement shall have joints in accordance with ACI 330R-08, Section 3.7 and Appendix C. Contraction joints shall be 1/4 of the slab thickness. Isolation joints shall be placed between pavement and foundations, inlets, and other fixed structures. Contraction joints shall be tool finished and spaced as follows:
 - Curbing: 10'-0" (max) spacing.
 - Sidewalks: 5'-0" (max) spacing.
 - Vehicular Traffic Areas: 24 x Concrete Pavement Thickness (feet), 15'-0" (max) spacing.



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www.burkhardt-engineers.com

No.	Revisions / Submissions	Date
1	SCHEMATIC DESIGN	2021.05.12
2	DESIGN DEVELOPMENT	2021.10.01
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HUBER HEIGHTS
BRANCH
6243 BRANDT PIKE
HUBER HEIGHTS
OH, 45424



SITE PLAN

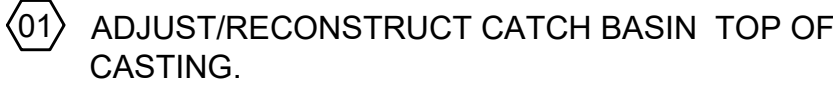
DATE: 2021.08.11

PROJECT NUMBER: 20208

DRAWN: HB


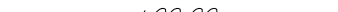
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C-2.0

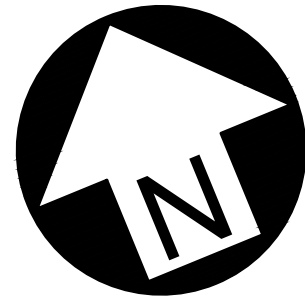


BRANDT PIKE
(R/W WIDTH VARIES)

REFERENCE ATC GEOTECHNICAL
REPORT DATED JANUARY 15, 2021
FOR RECOMMENDED EARTHWORK
PROCEDURES AND SITE
PREPARATION.

GRADING LEGEND	
INV	INVERT
P	TOP--OF--PAVEMENT
TC	TOP--OF--CURB
TG	GRATE/RIM ELEVATION
W	TOP--OF--SIDEWALK
	DIRECTION OF FLOW
+00.00	PROP. SPOT ELEVATION (ADD 900)
+00.00	EXIST. SPOT ELEVATION (ADD 900)
 969	PROP. CONTOUR

SPOT ELEVATIONS IN PAVEMENT AREAS ARE FOR TOP
OF PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED



GRAPHIC SCALE

1 inch = 30 ft.

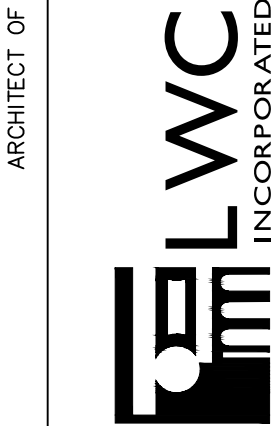
GENERAL GRADING, EARTHWORK & DRAINAGE NOTES

1. All spot elevations indicated in pavement areas are at bottom face of curb and/or finished pavement grade unless noted otherwise. All spot elevations indicated in grass or landscape areas are finished grade unless noted otherwise.
2. The Contractor shall be responsible for the removal and disposal of all vegetation and organic materials from the site that results from clearing & grubbing activities.
3. The Contractor shall be responsible for stripping and removal of all excess topsoil from the site. All topsoil that cannot be used on site shall be removed from the site at the Contractor's expense. The Contractor may dispose of excess topsoil by burying topsoil in landscape areas only at the direction of the Owner or the Owner's Representative.
4. The Contractor will be responsible for all safety requirements and for the protection of all existing and proposed utilities or structures during earthwork procedures.
5. The Contractor shall be responsible for the import of structural fill materials if suitable material is not available on site. The location and testing of suitable material shall be the Contractor's responsibility. The Contractor shall be responsible for the export and disposal of all excess or unsuitable materials.
6. The Contractor shall provide construction dewatering as necessary to complete construction as outlined in plans.
7. The Contractor shall exercise extreme care in establishing all grades and slopes in pavement areas, ramps and sidewalks in the vicinity of handicap parking and access areas and shall comply with Federal, State, and Local Codes.
8. In areas where sheet drainage flows from grass or landscape areas onto paved areas, the finished grade in grass or landscape areas shall be 1/2 inch above the top of curb or above the pavement in areas without curb. In areas where sheet drainage flows from pavement to grass or landscape areas, the finished grade in grass or landscape areas shall be 1/2 inch below the pavement.
9. The Contractor shall provide positive drainage in all areas and away from all buildings.
10. All pavement shall be laid on a straight, even, and uniform grade with a minimum of 1:100 (1.0%) slope toward the collection points unless otherwise specified on plans. Cut or fill slopes in unpaved areas shall not exceed 3:1 (33.3%) maximum grade unless otherwise noted on plans.

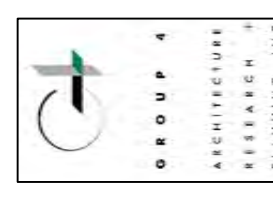
11. ADA accessible areas shall not exceed the following slopes:
 - Ramps - 1:12 (8.3%) max.
 - Routes - 1:20 (5.0%) max.
 - Parking - 1:50 (2.0%) max.
 - Cross Slopes - 1:50 (2.0%) max.
12. The Contractor shall adjust topsoil/slates/grates of all existing and proposed cleanouts, manholes, inlets, valves, etc. to match final grade.
13. Following grading of subsoil to subgrade elevations, the Contractor shall provide 4" of topsoil (minimum) in all disturbed areas which are not to be paved. Final grades should be smoothly finished to surrounding areas and ensure positive drainage. Stockpiled topsoil shall be screened prior to respreading and should be free of subsoil, debris, and stones.
14. The Contractor shall be responsible for determining exact quantities of cut and/or fill for estimating and construction and should alert the Engineer of any excessive cut and/or fill, especially if additional cut and/or fill will be required due to poor existing soil conditions discovered during earthwork operations.
15. Refer to the Architectural and Structural Plans for information regarding any perimeter foundation drains.
16. The Contractor shall obtain a copy of the Geotechnical / Soils Report and become thoroughly familiar with site and subgrade information and fully implement recommendations given therein.
17. Proposed spot elevations are provided in a truncated form to save space, add 900' to each spot elevation to convert the elevation to NAVD88 datum.
18. Refer to the Landscape Plans for finish material specifications (topsoil, seed, sod, mulch, etc.) in all landscape and open space areas.



ARCHITECT OF RECORD



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HUBER HEIGHTS
BRANCH
6243 BRANDT PIKE
HUBER HEIGHTS
OH, 45424



GRADING PLAN

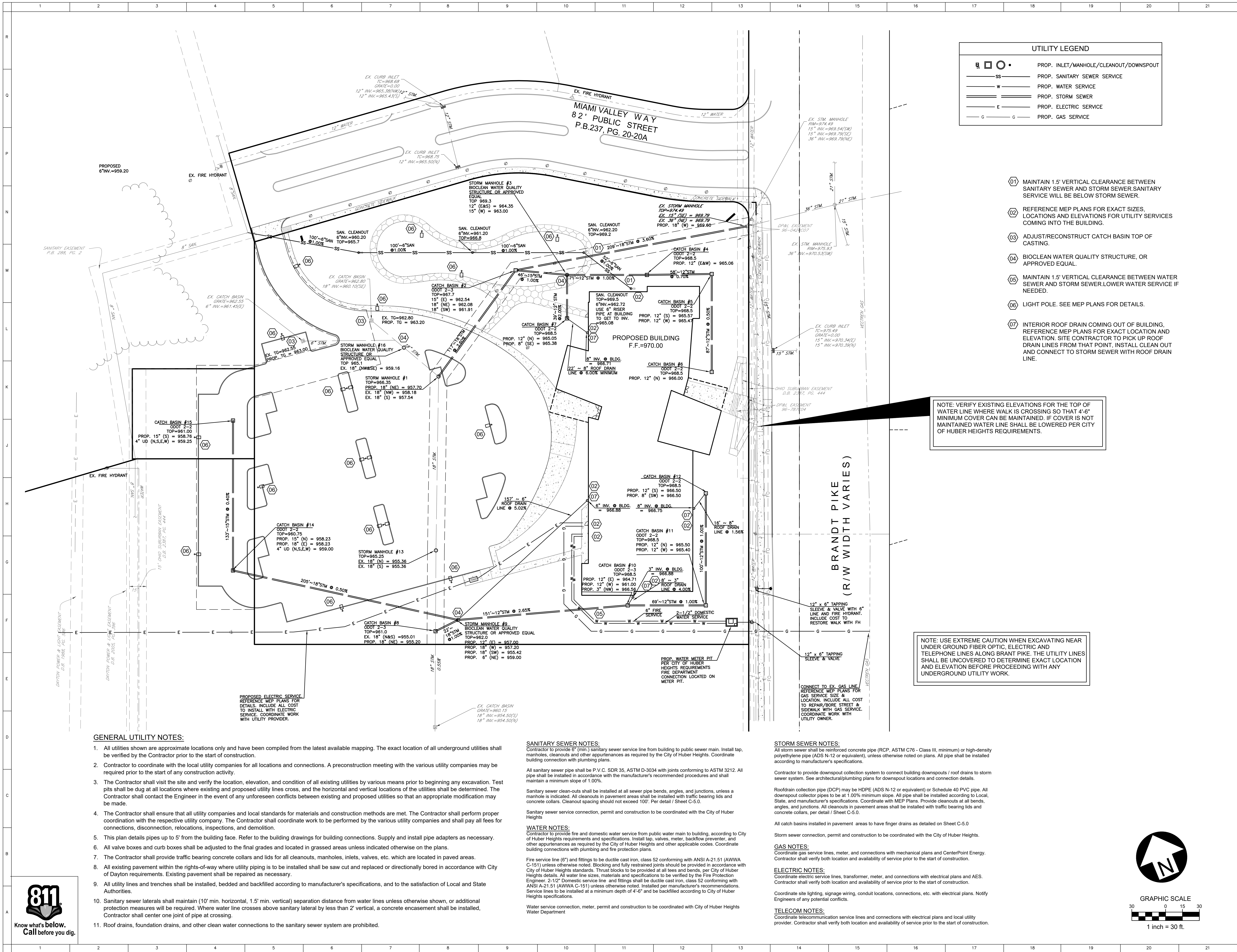
PROJECT NUMBER
20 228

DRAWN

REVIEWED

REVIEWED

C-3.0



UTILITY LEGEND	
	PROP. INLET/MANHOLE/CLEANOUT/DOWNSPOUT
	PROP. SANITARY SEWER SERVICE
	PROP. WATER SERVICE
	PROP. STORM SEWER
	PROP. ELECTRIC SERVICE
	PROP. GAS SERVICE

- 01 MAINTAIN 1.5' VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND STORM SEWER. SANITARY SERVICE WILL BE BELOW STORM SEWER.
- 02 REFERENCE MEP PLANS FOR EXACT SIZES, LOCATIONS AND ELEVATIONS FOR UTILITY SERVICES COMING INTO THE BUILDING.
- 03 ADJUST/RECONSTRUCT CATCH BASIN TOP OF CASTING.
- 04 BIOCLEAN WATER QUALITY STRUCTURE, OR APPROVED EQUAL.
- 05 MAINTAIN 1.5' VERTICAL CLEARANCE BETWEEN WATER SEWER AND STORM SEWER. LOWER WATER SERVICE IF NEEDED.
- 06 LIGHT POLE. SEE MEP PLANS FOR DETAILS.
- 07 INTERIOR ROOF DRAIN COMING OUT OF BUILDING. REFERENCE MEP PLANS FOR EXACT LOCATION AND ELEVATION. SITE CONTRACTOR TO PICK UP ROOF DRAIN LINES FROM THAT POINT. INSTALL CLEAN OUT AND CONNECT TO STORM SEWER WITH ROOF DRAIN LINE.

NOTE: VERIFY EXISTING ELEVATIONS FOR THE TOP OF WATER LINE WHERE WALK IS CROSSING SO THAT 4'-6" MINIMUM COVER CAN BE MAINTAINED. IF COVER IS NOT MAINTAINED WATER LINE SHALL BE LOWERED PER CITY OF HUBER HEIGHTS REQUIREMENTS.

NOTE: USE EXTREME CAUTION WHEN EXCAVATING NEAR UNDER GROUND FIBER OPTIC, ELECTRIC AND TELEPHONE LINES ALONG BRANDT PIKE. THE UTILITY LINES SHALL BE UNCOVERED TO DETERMINE EXACT LOCATION AND ELEVATION BEFORE PROCEEDING WITH ANY UNDERGROUND UTILITY WORK.

2021-12-21

ARCHITECT OF RECORD

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CONSULTANT

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CIVIL ENGINEERING | LAND SURVEYING | LANDSCAPE ARCHITECTURE | NATIONAL RETAIL SITE DEVELOPMENT

No.	Revision / Submittal	Date
1	SCHEMATIC DESIGN	2021.05.12
2	DESIGN DEVELOPMENT	2021.10.01
3	CONSTRUCTION DOCUMENTS	2021.12.21

HUBER HEIGHTS BRANCH

6243 BRANDT PIKE

HUBER HEIGHTS

OH, 45424

DAYTON METRO LIBRARY

UTILITY PLAN

DATE: 2021.08.11

PROJECT NUMBER: 20228

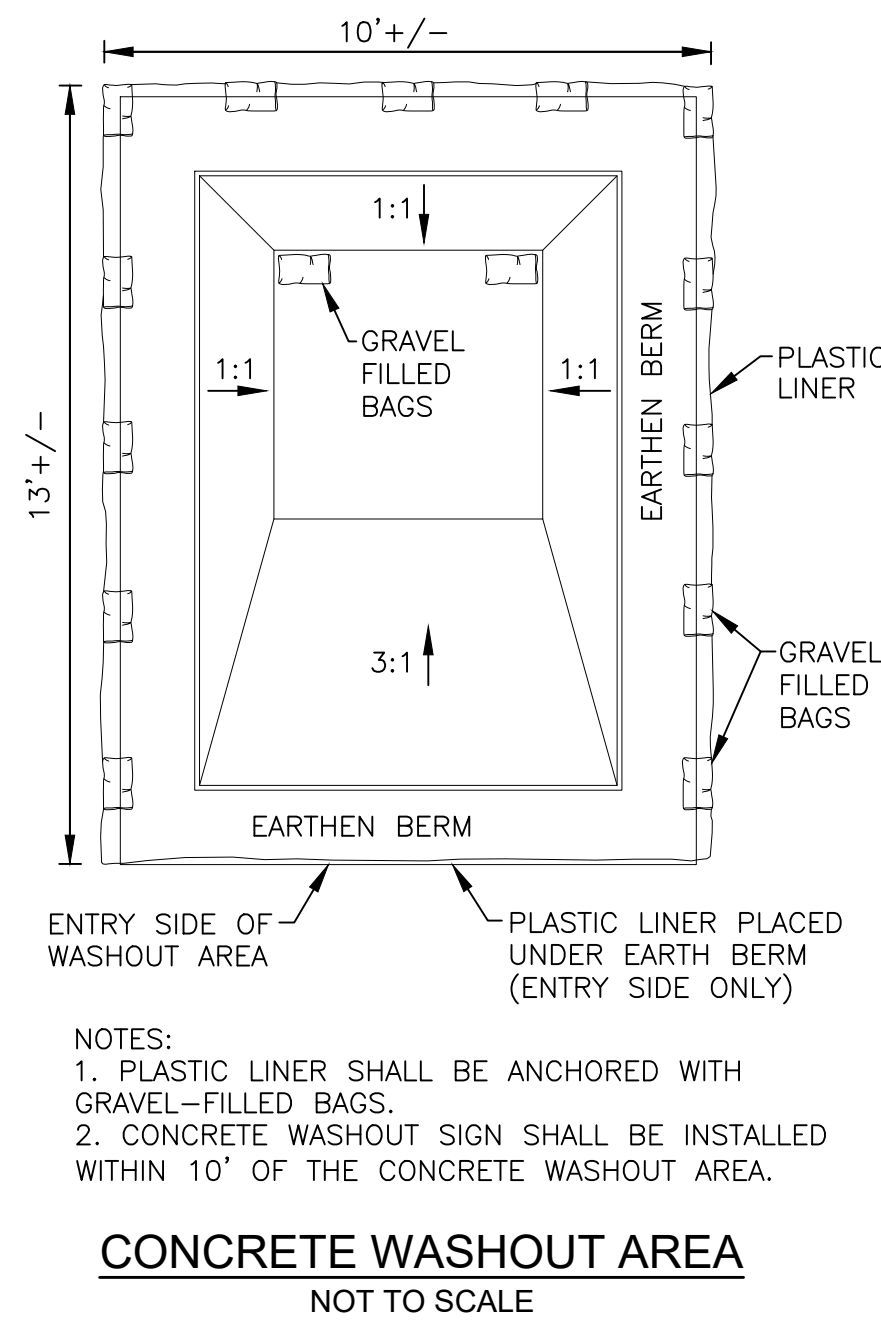
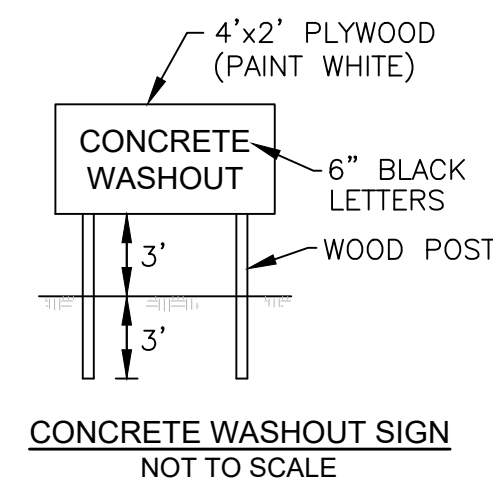
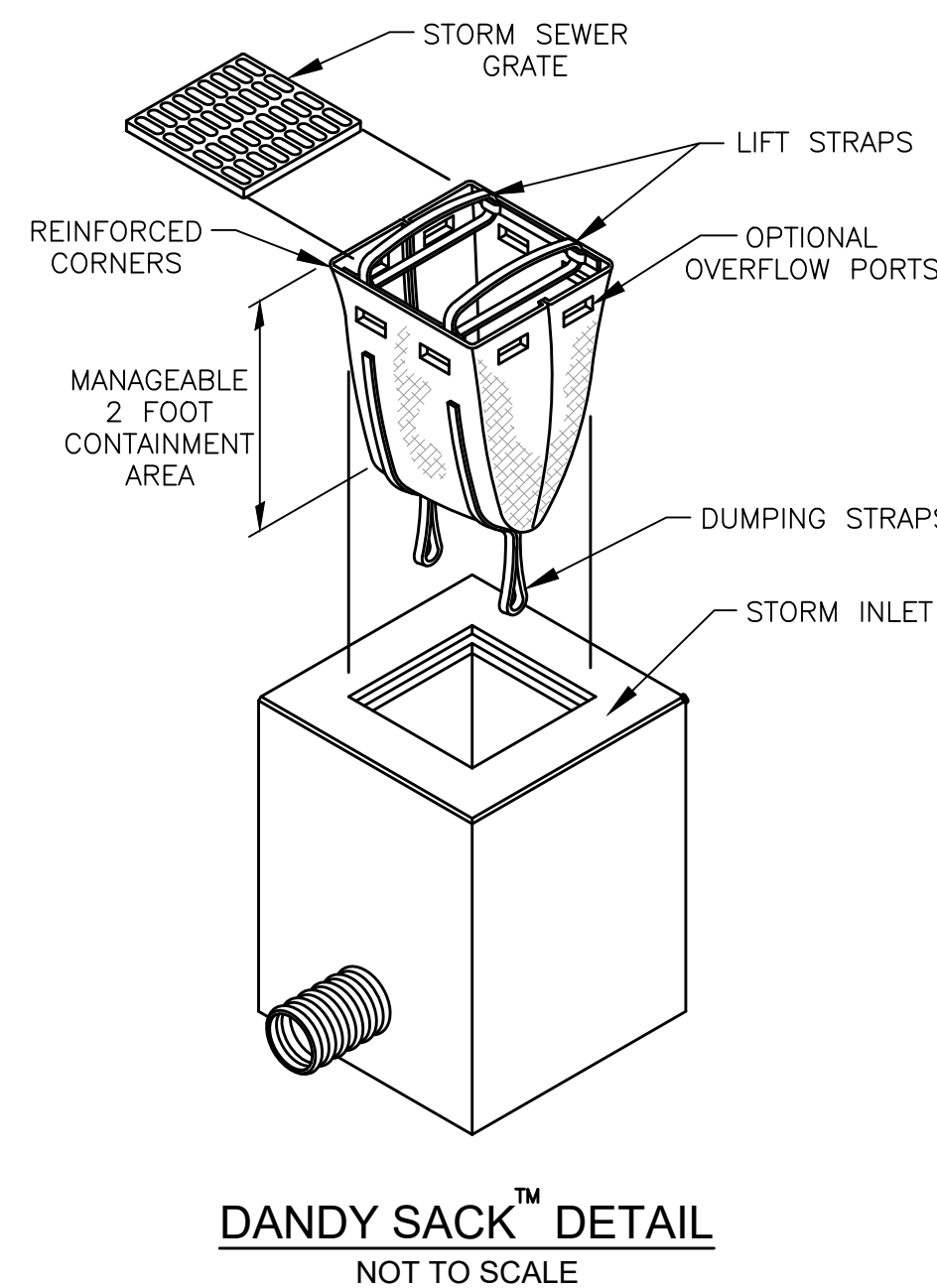
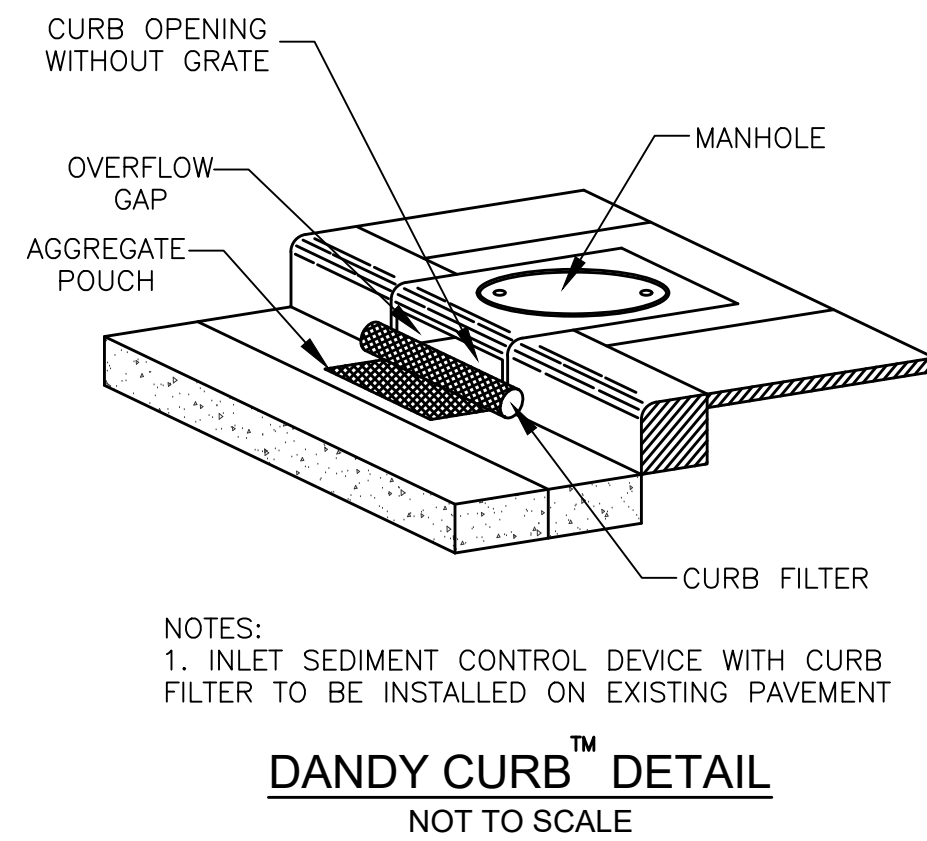
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REVIEWED: JZ

C-4.0



1. All erosion and sediment control practices must conform to the standards and specifications set forth by the Local, State, and Federal Authorities.
2. Construction activities shall be scheduled such that a minimum area of the site is disturbed at a time. Construction operation shall be scheduled and performed so that preventative soil erosion control measures are in place prior to excavation in critical areas and temporary stabilization measures are in place immediately following backfilling operations. Contractor shall reduce effects of storm water by using and/or maintaining grassed swales, infiltration structures, or water diversions.
3. Special precautions will be taken in the use of construction equipment to prevent situations that promote erosion.
4. Cleanup will be done in a manner to ensure that erosion control measures are not disturbed.
5. The soil erosion controls and sediment basin are to be inspected once a week and within 24 hours of a 0.25 inch or greater rain event. A written log of these inspections and improvements to controls shall be kept on site. The logs shall include the date of inspection, name of the inspector, weather conditions, actions taken to correct any problems and the date corrective actions were taken.
6. Temporary soil stabilization shall occur within 7 days after rough grading if the area will remain idle longer than 14 days. Any disturbed area that is not going to be worked for 365 days or more must be seeded and mulched within 7 days of most recent disturbance.
7. Trenches for underground utility lines and pipes shall be temporarily stabilized within 7 days if they are to remain inactive for 7 days. Trench dewatering devices shall discharge in a manner that filters soil-laden water before discharging it to a receiving drainage ditch or creek. If seeding, mulching or other erosion and sediment control measures were previously installed, these protective measures shall be reinstalled. Pipelines with joints that allow a maximum length of pipe to be placed in the trench with the pipe joint assembled/made in the trench require an open pipeline trench that is only slightly longer than the length of pipe being installed. The total length of excavated trench between an end one shall not be greater than the total length of pipeline/utility that can be placed in the trench and backfilled in one working day. No more than 50 linear feet of open trench should exist when pipeline/utility line installation ceases at the end of the work day.
8. Soil stockpiles shall be stabilized or protected to prevent soil loss.
9. All disturbed areas shall be permanently stabilized within 7 days of final grading. Further, soil erosion control measures shall be maintained until permanent stabilization is complete, at which time temporary measures will be removed. Permanent vegetation is a ground cover dense enough to cover 80% of the soil surface and mature enough to survive winter weather conditions.
10. The Contractor shall establish a permanent on-site benchmark prior to clearing, grubbing and/or demolition.
11. Haul Routes - The Contractor shall be responsible for the cleanup of any mud, dirt, or debris deposited on haul roads as a result of these operations. Soil shall be removed from roads and paved surfaces at the end of each day in such a manner that does not create off-site sedimentation in order to ensure safety and abate off-site soil loss. Collected sediments shall be placed in a stable location on site or taken off-site to a stable location. Contractor shall use State Routes (and shortest distance non-state routes) for project haul route.
12. No solid or liquid waste shall be discharged into storm water runoff.
13. Disposal of solid, sanitary and toxic waste - Solid, sanitary and toxic waste must be disposed of in a proper manner in accordance with local, state and federal regulations. It is prohibited to burn, bury or pour out onto ground or into storm sewer any solvents, paint, stains, gasoline, diesel fuel, used motor oil, hydraulic fluid, antifreeze, cement curing compounds and other such toxic or hazardous waste.
14. Wash out of cement trucks should occur in the designated area where the washing can collect and be disposed of properly when it hardens.
15. If a concrete washout area, and/or a stockpile area are needed, a delineated area for each must be provided and maintained to the extent that the area is located in an alternate location than that shown on the plans if necessary due to construction operations and other field considerations.
16. No fuel storage is permitted on-site.
17. All areas shall be cleared of construction sediment upon completion of construction.
18. The General Contractor shall be responsible for submitting a Notice of Intent (NOI) and Notice of Termination (NOT) as required by the Ohio EPA. Contact Burkhardt Engineering prior to construction to coordinate submittal requirements with the Ohio EPA.
19. The General Contractor is responsible for ensuring that all soil erosion and sediment control practices comply with the Ohio EPA and follow the best practices set forth in the ODNR Rainwater and Land Development Manual.





ARCHITECT OF RECORD

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DDC
DAYTON DESIGN
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GROUP



BURKHARDT
ENGINEERS & SURVEYORS

228 North Cherry Street | Germantown, Ohio 43037 | 614.837.3880-6091 | BURKHARDTINC.COM

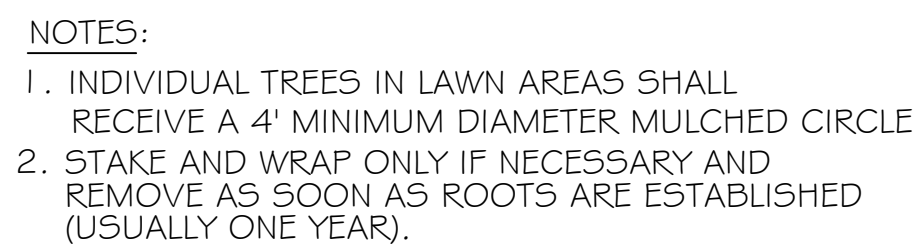
ENGINEERING • LAND SURVEYING • NATIONAL RETAIL SITE FISCAL OBTAINMENT

No.	Revisions / Submissions	Date
1	SCHEMATIC DESIGN	2021.05.12
2	DESIGN DEVELOPMENT	2021.10.01
3	CONSTRUCTION DOCUMENTS	2021.12.21

HUBER HEIGHTS
BRANCH
6243 BRANDT PIKE
HUBER HEIGHTS



DATE	2021.08.11	PROJECT NUMBER	20.238
		DRAWN	HB



3" HARDWOOD MULCH LAYER. KEEP CLEAR WITHIN A FEW INCHES OF TRUNK

SOIL DAM WATERING BASIN

BACKFILL: PLANTING SOIL MIX PER SPECIFICATIONS

REMOVE TOP 1/3 OF BURLAP (MORE IF POSSIBLE WITHOUT DAMAGING ROOTBALL) OR ENTIRE CONTAINER

PLANT MOUND-COMPACTED BACKFILL

UNDISTURBED SOIL

6" MIN.

1.5'

6" MIN.

ROOTBALL DEPTH

ROOTBALL DIAMETER

2X ROOTBALL DIA. (MIN.)

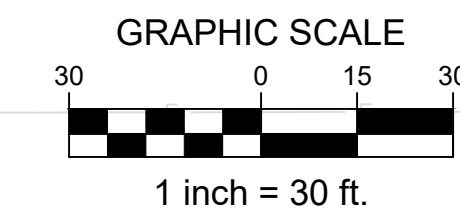


OHIO
Utilities Protection
SERVICE

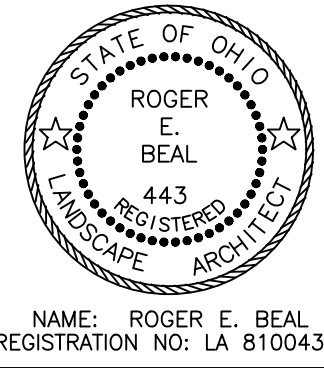
811 or
1-800-362-2764

Call Before You Dig

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO ONE CALL AT 811 OR 1-800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVED IN THIS PROJECT AND ARE



BRANDT PIKE
(R/W WIDTH VARIES)



NAME: ROGER E. BEAL
REGISTRATION NO: LA 810043


LWC
INCORPORATED

434 East First Street
710 East Main Street
Richmond, IN 47374 765 966 3546

Durham, OH 45402 937 223 6500

ARCHITECT OF RECORD

DDC
DAYTON DESIGN
COLLABORATIVE


GROUP 4
ARCHITECTURE

CONSULTANT

LANDSCAPE ARCHITECT:

YELLOW SPRINGS DESIGN
PO Box 472, 205 PARK MEADOWS DR,
YELLOW SPRINGS, OHIO 45387
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yellowspringdesign@earthlink.net
LICENSED IN: OH, KY, PA, IL, MI,
NJ, VA, TX, OK, AZ, CO, NM & UT

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**HUBER HEIGHTS
BRANCH
6243 BRANDT PIKE
HUBER HEIGHTS**



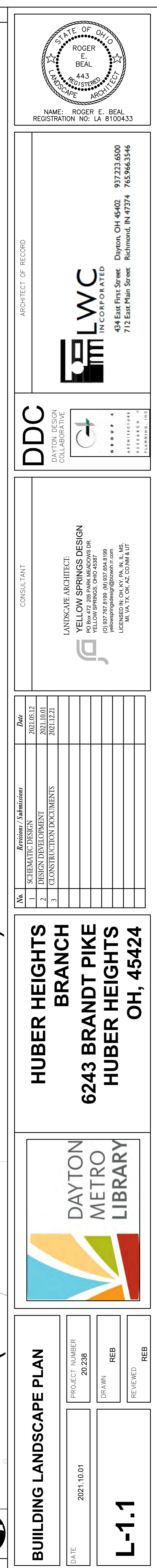
SITE LANDSCAPE PLAN

PROJECT NUMBER

REB

REB

1-10





PROJECT NO. 2021-07022

GAS CONNECTED LOAD

- 2.5" WATER SERVICE. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
- 6" FIRE SERVICE. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
3. GAS METER/REGULATOR SETTING AND PIPING UP TO SETTING BY GAS COMPANY. CONNECT TO OUTLET OF METER AND PROVIDE ALL PIPING DOWNSTREAM OF METER. TOTAL CONNECTED LOAD IS 1600 CUBIC FEET. OUTLET PRESSURE TO BE 7" W.C. COORDINATE ALL PIPING WITH GAS COMPANY. COORDINATE EXACT LOCATION WITH ADJACENT WATER METER PIT.
4. CONNECT TO SANITARY PIPING BY CIVIL AT POINT 5' - OUTSIDE BUILDING. PROVIDE TEST-HYD AND CLEANOUT AT POINT OF CONNECTION TO GAS PIPING. LOCATE LEAK DETECTION AND TEST POINTS IN UNOCCUPIED LANDSCAPING MEDIUM MOW LAWN. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
5. CONNECT TO STORM PIPES PROVIDED BY CIVIL AT POINT 5' - OUTSIDE OF BUILDING. PROVIDE TEST-HYD AND CLEANOUT AT POINT OF CONNECTION TO GAS PIPING. LOCATE LEAK DETECTION AND TEST POINTS IN UNOCCUPIED LANDSCAPING MEDIUM MOW LAWN. REFER TO CIVIL DRAWINGS FOR CONTINUATION.



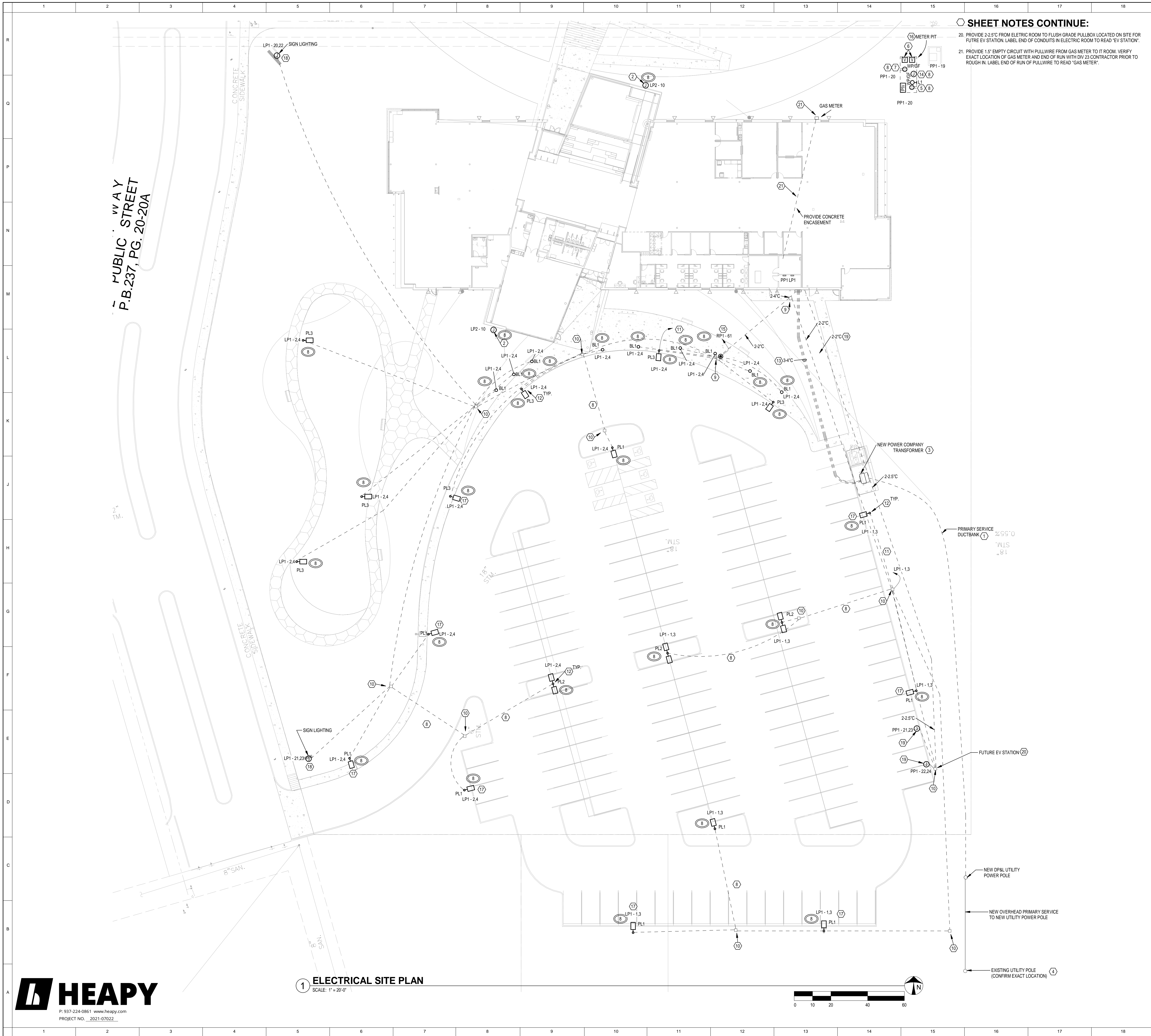
No.	Revisions / Submissions	Date
1	SCHEMATIC DESIGN	2021.05.12
2	DESIGN DEVELOPMENT	2021.10.01
3	CONSTRUCTION DOCUMENTS	2021.12.21

**HUBER HEIGHTS
BRANCH
BRANDT PIKE
HUBER HEIGHTS,
OH, 45424**



PLUMBING SITE PLAN	
DATE	12/21/21
PROJECT NUMBER	2021-07022.00
DRAWN	Author
REVIEWED	..

P003



SHEET NOTES CONTINUE:

20. PROVIDE 2-2.5" FROM ELETRIC ROOM TO FLUSH GRADE PULLBOX LOCATED ON SITE FOR FUTRE EV STATION. LABEL END OF CONDUITS IN ELECTRIC ROOM TO READ "EV STATION".
21. PROVIDE 1.5" EMPTY CIRCUIT WITH PULLWIRE FROM GAS METER TO IT ROOM. VERIFY EXACT LOCATION OF GAS METER AND END OF RUN WITH DIV 23 CONTRACTOR PRIOR TO ROUGH IN. LABEL END OF RUN OF PULLWIRE TO READ "GAS METER".

SHEET NOTES:

1. NEW UNDERGROUND PRIMARY ELECTRIC DUCTBANK CONSISTING OF (3)-4" DUCTS PER DETAIL 5, SHEET E004. DUCTS SHALL BE ENCASED IN 3000LB CONCRETE. DUCTBANK PROVIDED BY E.C. ALL PRIMARY CONDUCTORS PROVIDED BY POWER CO. COORDINATE EXACT LOCATION/ROUTE OF DUCTBANK AND SERVICE ENTRANCE REQUIREMENTS WITH POWER CO. PRIOR TO THIS WORK, AND PROVIDE ACCORDINGLY.
2. PROVIDE ASSOCIATED DECORATIVE BACKBOX AND WIRING FOR EXTERIOR SIGN. BACKBOX SHALL BE SMALL ENOUGH TO BE INCONSPICUOUS ON THE BUILDING, AND LARGE ENOUGH TO ACCOMMODATE TRANSFORMER AND ASSOCIATED CONDUIT AND CIRCUIT. LOW VOLTAGE WIRING TO EACH INDIVIDUAL LETTER TO EXTERIOR SIGN. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECT/SIGNAGE CONTRACTOR PRIOR TO ROUGH IN AND PROVIDE ACCORDINGLY. RUN CIRCUIT THROUGH LIGHTING CONTROL PANEL. REFER TO SHEET E003. EXTERIOR SIGN IS BY SIGNAGE CONTRACTOR AND SHALL BE CONNECTED BY E.C. G.C. SHALL PAINT COVERPLATE OF BACK BOX TO MATCH EXTERIOR WALL.
3. APPROXIMATE LOCATION OF PAD MOUNTED TRANSFORMER. E.C. SHALL PROVIDE TRANSFORMER PAD PER DETAIL 2, SHEET E005 AND PER POWER CO. STANDARD DRAWINGS. VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. POWER CO. SHALL INSTALL TRANSFORMER AND PERFORM FINAL TERMINATIONS. POWER CO. SHALL EXTEND PRIMARY ELECTRIC FEEDER FROM UTILITY POLE TO LOCATION OF TRANSFORMER AND CONNECT TO PRIMARY. E.C. SHALL EXTEND SECONDARY ELECTRIC SERVICE FROM TRANSFORMER TO MAIN SERVICE DISCONNECT SWITCH LOCATED IN THE BUILDING. REFER TO SINGLE-LINE DIAGRAM.
4. EXISTING U LIGHTING POLE
5. VERIFY EXACT MOUNTING LOCATION OF WORK LIGHT. COORDINATE SWITCH AND RECEPTACLE LOCATION WITH P.C. PRIOR TO INSTALLATION AND PROVIDE ACCORDINGLY.
6. E.C. SHALL PROVIDE (2)-1" WITH FIRE ALARM WIRING FROM FIRE ALARM DEVICES MOUNTED IN WATER METER PIT INTO BUILDING AND TO MAIN FIRE ALARM PANEL FOR MONITORING FIRE ALARM DEVICES. WIRE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
7. PROVIDE WEATHERPROOF RECEPTACLE WITH 120V-1PH BRANCH CIRCUIT WITH (2)-#8 GRD. IN 1" TO SERVE NEW SUMP PUMP. RUN CIRCUIT TO PANEL INDICATED.
8. ALL CONDUITS INSTALLED UNDER DRIVEWAYS AND PARKING AREAS WHERE AUTOMOBILE TRAFFIC PASSES THROUGH SHALL BE CONCRETE ENCASED.
9. 36"x36" FLUSH GRADE PULLBOX ENCLOSURE WITH GREEN GASKET COVER WITH APPROPRIATE LOGO, PER DETAIL 4, SHEET E004. 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.
10. FLUSH GRADE PULLBOX ENCLOSURE WITH GREEN GASKETED COVER WITH APPROPRIATE LOGO, PER DETAIL 3, SHEET E004.
11. RUN 20A, 208V-1PH LIGHTING CIRCUIT WITH 2-#8, 1#8 GRD. IN COMMON 1.5" CONDUIT WITH RECEPTACLE CIRCUIT TO EXTERIOR LIGHTING PULLBOX (NOTE 9, THIS SHEET). EXTEND FROM PULLBOX TO PANEL IN MAIN ELECTRIC ROOM AS INDICATED. RUN LIGHTING BRANCH CIRCUITS THROUGH EXTERIOR LIGHTING CONTROLS PER DETAILS ON SHEET E003.
12. G.C. IS RESPONSIBLE TO PROVIDE FINISHED WALKWAY (BRICK, PAVERS ETC.) UP TO POLE BASE.
13. PROVIDE (3)-4" CONDUIT FROM THIS LOCATION TO LOCATION OF NEW TRANSFORMER/TRANSFORMER PAD. COORDINATE EXACT LOCATION AND ROUTE WITH DP&L PRIOR TO ROUGH IN AND PROVIDE ACCORDINGLY.
14. E.C. SHALL PROVIDE 20A, 120V HEAT TRACE CIRCUIT WITH 2-#8, 1#8 GRD. IN 1" FROM POWER PANEL PP1 LOCATED IN MAIN ELECTRIC ROOM. PROVIDE GROUND FAULT BREAKER IN PANEL TO SERVE THIS CIRCUIT.
15. RUN 20A, 120V RECEPTACLE CIRCUIT WITH 2-#8, 1#8 GRD. IN COMMON 1.5" CONDUIT WITH LIGHTING CIRCUIT TO EXTERIOR LIGHTING PULLBOX (NOTE 9, THIS SHEET). EXTEND FROM PULLBOX AND TO PANEL IN BUILDING. RUN RECEPTACLE BRANCH CIRCUITS THROUGH EXTERIOR LIGHTING/RECEPTACLE CONTROL RELAY PER DETAIL ON SHEET E004.
16. COORDINATE EXACT LOCATION OF WATER METER PIT WITH P.C.
17. PROVIDE HOUSE SIDE SHIELD.
18. PROVIDE ASSOCIATED BACK BOX AND WIRING FOR EXTERIOR SIGN. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECT SIGN PRIOR TO ROUGH IN AND PROVIDE ACCORDINGLY. RUN CIRCUIT THROUGH LIGHTING CONTROL PANEL. REFER TO SHEET E003.
19. PROVIDE (2)-2" C AND CABLING FOR FUTURE CAR CHARGING STATION POWER AND DATA. BASIS OF DESIGN: LEVITON EV-GREEN 4000 POWER-SHARING CHARGER. E.C. SHALL PROVIDE A 208V-1PH, 40A BRANCH CIRCUIT UTILIZING A NON-GFCI BREAKER IN PANEL PP1. CONDUIT SHALL BE ROUTED BACK TO NECESSARY ELECTRICAL AND I.T. ROOMS IN MAIN BUILDING.

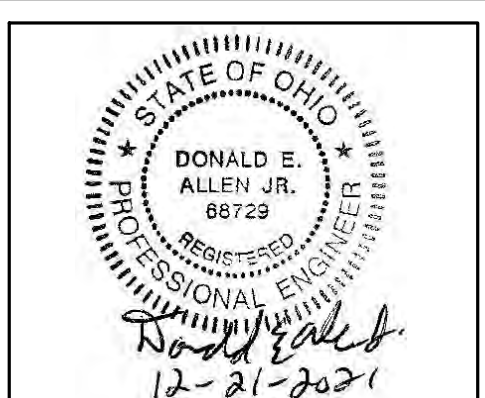
GENERAL NOTES:

- ALL UNDERGROUND CONDUITS AND DUCTBANKS SHALL BE DIRECT BURIED PER DETAILS ON SHEET E-005 UNLESS INDICATED OTHERWISE. ALL PRIMARY AND SECONDARY CONDUITS AND DUCTBANKS SHALL HAVE LONG SWEEPING BENDS. 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. CONTRACTORS SHALL UTILIZE COMMON TRENCHES) WHERE EVER FEASIBLE.
- E.C. IS RESPONSIBLE FOR ALL CUTTING, PATCHING, AND RESURFACING OF ANYWALL HARD SURFACES DISTURBED TO FACILITATE THIS WORK.
- E.C. SHALL REFER TO CIVIL DRAWINGS SHEET FOR EXACT ROUTING OF ALL UNDERGROUND UTILITIES.
- THE SITE WILL BE REGRADED AND RENOVATED UNDER THIS PROJECT. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR AREAS WHERE NEW WORK WILL OCCUR. E.C. SHALL REMOVE ALL ELECTRICAL DEVICES, LIGHT POLES, UNDERGROUND CONDUITS AND OTHER EQUIPMENT ASSOCIATED WITH DIVISION 26 TO ACCOMMODATE ALL NEW CONSTRUCTION ON SITE. ONLY EXISTING DEVICES SERVING EXISTING EQUIPMENT TO REMAIN AND DEVICES INDICATED AS EXISTING SHALL BE MAINTAINED.
- E.C. SHALL PROVIDE EXTERIOR MOUNTED WEATHERPROOF FIRE AUDIO/VISUAL DEVICE ON THE OUTSIDE OF THE BUILDING AS DIRECTED BY LOCAL FIRE DEPARTMENT. REFER TO SPEC SECTION 28 31 00.
- COORDINATE INCOMING ELECTRICAL SERVICE ROUTING WITH AES PRIOR TO ROUGH-IN AND PROVIDE ACCORDINGLY. CONTACT JULIE SULLIVAN @ JULIE.SULLIVAN@AES.COM FOR MORE INFORMATION.

CALL 811

**MINIMUM 2 WORK
DAYS BEFORE YOU DIG**

UTILITIES PROTECTION SERVICE



ARCHITECT OF RECORD

LWC
INCORPORATED
434 East First Street Dayton, OH 45402 937.223.6500
712 East Main Street Richmond, IN 47374 765.966.3546

DDC
DAYTON DESIGN
COLLABORATIVE

CONSULTANT	
No.	Revisions / Submissions
1.	SCHEMATIC DESIGN 2021.05.12
2.	DESIGN DEVELOPMENT 2021.10.01
3.	CONSTRUCTION DOCUMENTS 2021.12.21

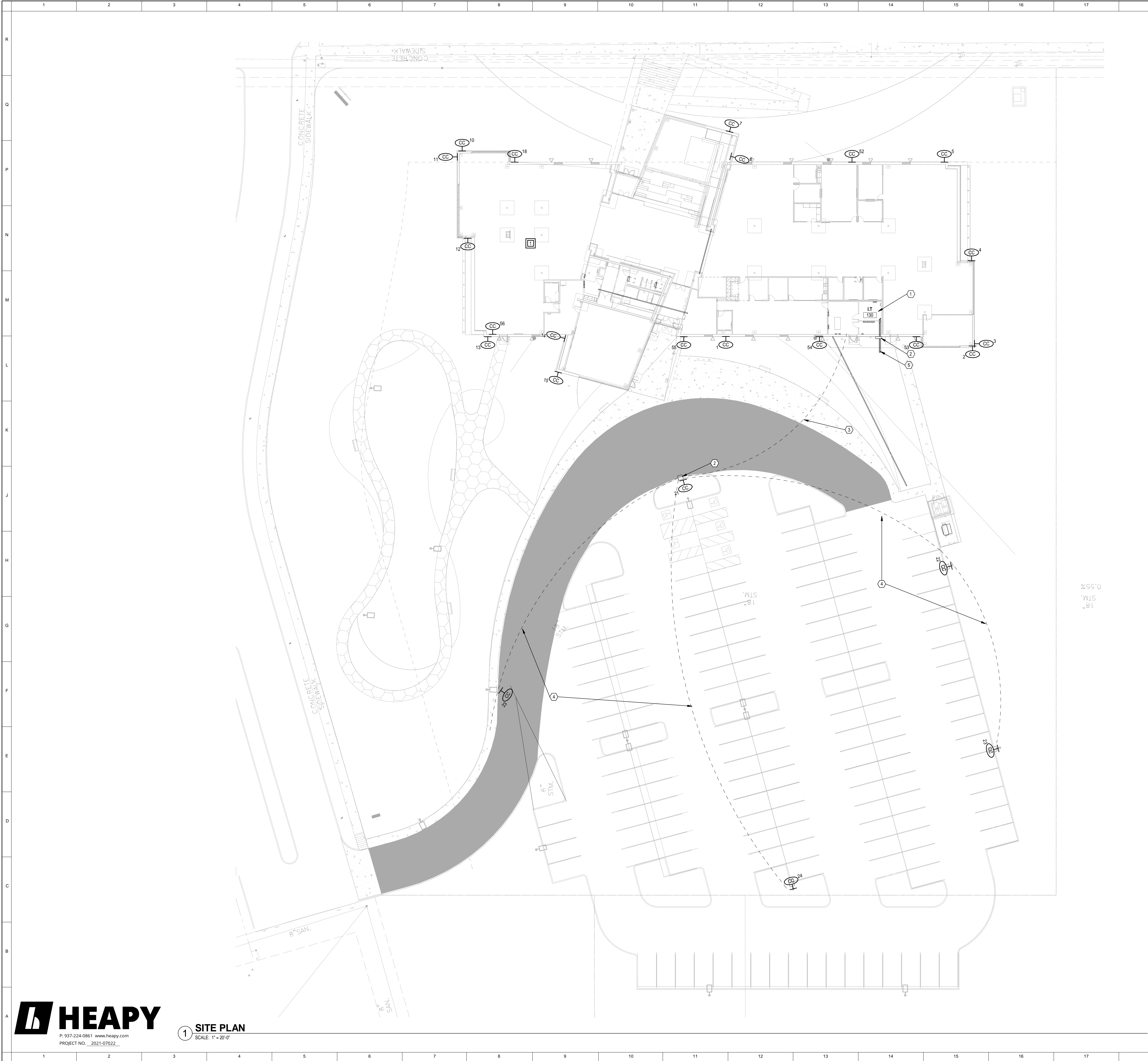
**HUBER HEIGHTS
BRANCH
BRANDT PIKE
HUBER HEIGHTS,
OH, 45424**



ELECTRICAL SITE PLAN

DATE	12/21/21
PROJECT NUMBER	2021-07022-00
DRAWN	MPH
REVIEWED	DEA

E007

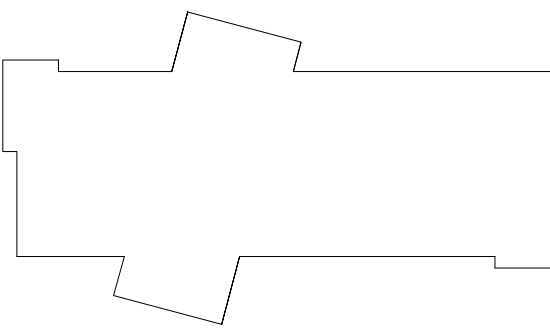


SHEET NOTES:

1. LOCATION OF IT ROOM 130.
2. HANDHOLE.
3. 2" CONDUIT FOR ROUTING OF CABLING TO THE LIGHT POLES.
4. 1.5" CONDUIT FOR ROUTING OF CABLING TO THE LIGHT POLES.
5. (2) 4" CONDUITS TO THE STREET. COORDINATE LOCATION OF CONDUITS BASED ON THE SELECTION OF THE SERVICE PROVIDER BY THE OWNER.

GENERAL NOTES:

KEY PLAN:



ARCHITECT OF RECORD

LWC
INCORPORATED
434 East First Street Dayton, OH 45402 937.223.6500
712 East Main Street Richmond, IN 47374 765.966.3546

DDC

DAYTON DESIGN COLLABORATIVE

CONSULTANT	

No.	Revisions / Submissions	Date
1	SCHEMATIC DESIGN	2021.05.12
2	DESIGN DEVELOPMENT	2021.10.01
3	CONSTRUCTION DOCUMENTS	2021.12.21

DAYTON METRO LIBRARY

HUBER HEIGHTS BRANCH
BRANDT PIKE
HUBER HEIGHTS, OH, 45424

TECHNOLOGY SITE PLAN

DATE 12/21/21

PROJECT NUMBER 2021-07022-00

DRAWN JHH

REVIEWED RSG

T002

HUBER HEIGHTS



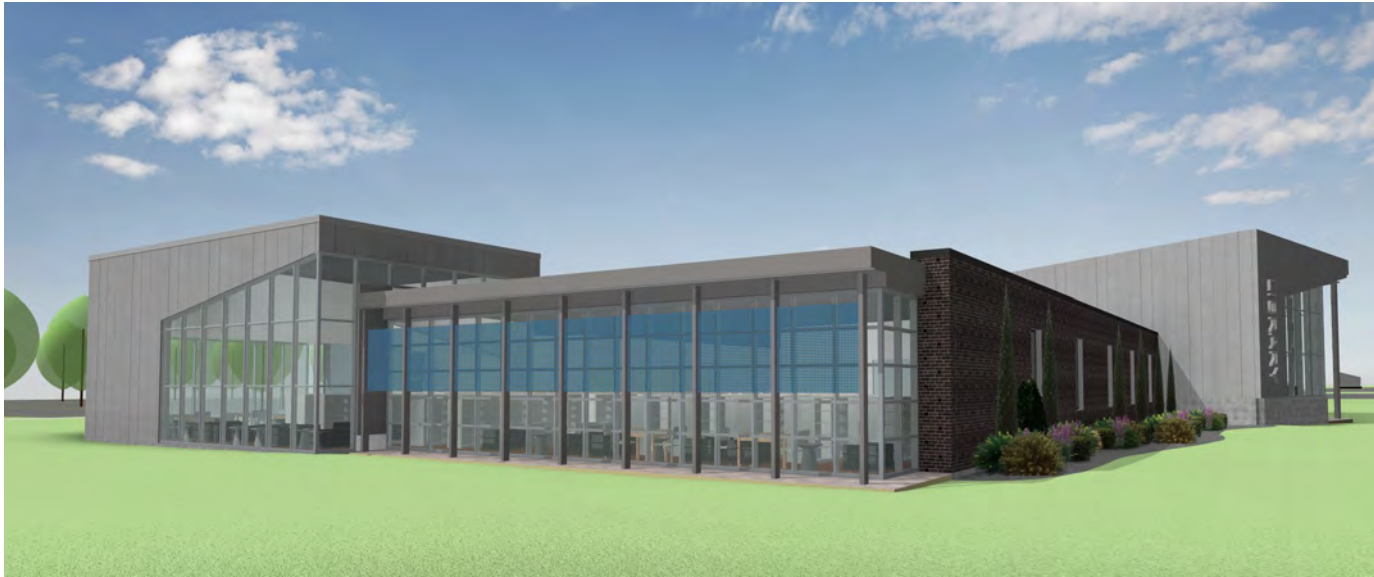
West Elevation - Main Entrance

HUBER HEIGHTS



West Elevation - Northwest Corner

HUBER HEIGHTS



South Elevation



East Elevation - North Corner



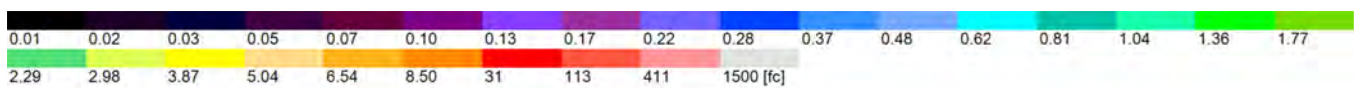
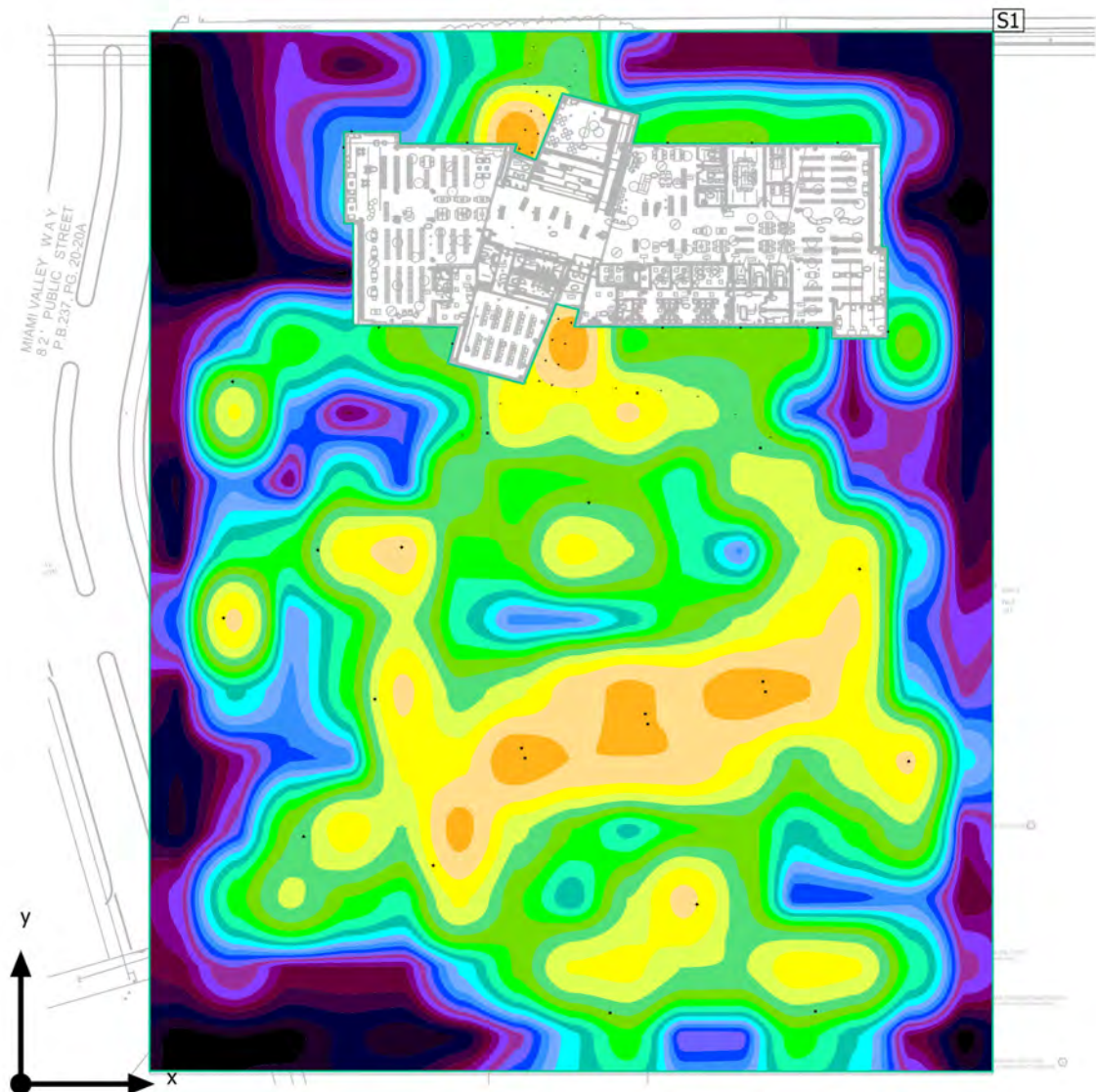
Luminaire list

Φ_{total} 449611 lm	P_{total} 3478.2 W	Luminous efficacy 129.3 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
12	HUBBELL OUTDOOR LIGHTING	TRP1- 12L30- 4K7-3	GeoPak Size 1	28.1 W	2836 lm	100.9 lm/W
15	Industrial Lighting Products Inc	SAS-18L-U- 40-T3	Skyline Small, 18,000 Lumens, 4000K, Type 3 Optic	132.6 W	20379 lm	153.7 lm/W
7	Industrial Lighting Products Inc	SAS-9L-U- 40-T3	Skyline Small, 9,000 Lumens, 4000K, Type 3 Optic	66.3 W	10189 lm	153.7 lm/W
17	LIGMAN	LH-10603- W40	Mini Lightsoft 2 bollard LED	14.3 W	347 lm	24.2 lm/W
16	WILLIAMS INDOOR	4DR-TL- L30-840- DIM-UNV- LW-OF- WH- WETCC	Black formed aluminum housing, white reflector, clear patterned glass lens enclosure	27.8 W	2042 lm	73.4 lm/W

Site 1

Calculation objects





Site 1

Calculation objects

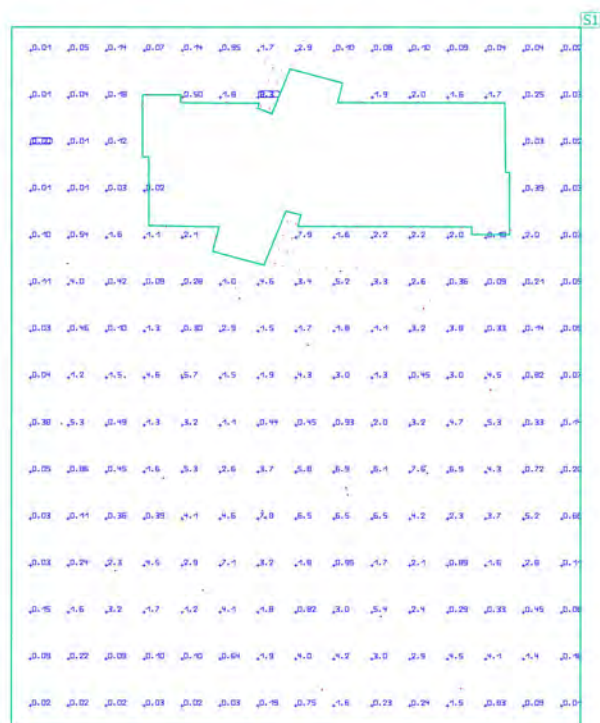
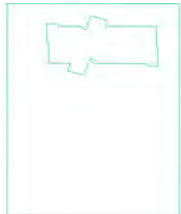
Calculation surfaces

Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Calculation surface 1 Perpendicular illuminance Height: 0.000 ft	1.76 fc	0.005 fc	8.32 fc	0.003	0.001	S1

Utilisation profile: DIALux presetting, Standard (outdoor transportation area)

Site 1

Calculation surface 1



Properties	\bar{E}	E_{min}	E_{max}	g_1	g_2	Index
Calculation surface 1	1.76 fc	0.005 fc	8.32 fc	0.003	0.001	S1
Perpendicular illuminance						
Height: 0.000 ft						

Utilisation profile: DIALux presetting, Standard (outdoor transportation area)



Huber Heights Fire Division

Inspections require two business days advance notice! (OAC)1301:7-7-09(A)(5)

Occupancy Name:	Huber Heights Branch Dayton Metro Library		
Occupancy Address:	6243 Brandt Pike		
Type of Permit:	HHP&D Site Plan		
Additional Permits:	Choose an item.		
Additional Permits:	Choose an item.		
MCBR BLD:	Not Yet Assigned	HH P&D:	
MCBR MEC:		HHFD Plan:	22-014
MCBR ELE:		HHFD Box:	16
REVIEWER:	Susong	DATE:	1/20/2022

Fire Department Comments:

The Huber Heights City Code Part 15 Refers to Fire Code Requirements and has adopted by reference OFC and IFC Appendices

- **Approval of site is subject to compliance with the following. Additional requirements for structure may arise during permitting process:**

Requirements: (Site Plan)

- The turn radius at the corner of the island on the north side of parking lot needs to be increased/decreased for Huber Heights Fire apparatus to make turn (adjacent to four parking spaces). Ohio Fire Code D103.3 and 503.2.4.
- If building will be equipped with a fire sprinkler system at least one fire hydrant will be required within 75 feet of the Fire Department Connection for the sprinkler system. (Huber Heights Codified Ordinance 1521.01). A new hydrant is shown on Brandt Pike near the new water meter pit. Due to the location and traffic on Brandt Pike we recommend the fire department connection and fire hydrant be moved to the parking lot side of structure.
- A permit shall be obtained for construction from Montgomery County Building Regulations.

Please reference contact information below for questions or concerns with this document.

Plans reviewed by the Huber Heights Fire Division are reviewed with the intent they comply in **ALL** respects to this code, as prescribed in **SECTION (D) 104.1 of the 2017 Ohio Fire Code**. Any omissions or errors on the plans or in this review do not relieve the applicant of complying with **ALL** applicable requirements of this code. These plans have been reviewed for compliance with the Ohio Fire Code adopted by this jurisdiction. There may be other regulations applicable under local, state, or federal statutes and codes, which this department has no authority to enforce and therefore have not been evaluated as part of this plan review.

Memorandum

Staff Report for Meeting of January 25, 2022

To: Huber Heights City Planning Commission

From: Aaron K. Sorrell, Interim City Planner
Community Planning Insights

Date: January 19, 2022

Subject: ZC 22-05 Huber Heights Branch Library Combined Basic & Detailed
Development Plan

Application dated January 14, 2022

APPLICANT/OWNER:	LWC, Inc. – Applicant Dayton Metro Library - Owner
DEVELOPMENT NAME:	Huber Heights Branch Library
ADDRESS/LOCATION:	6243 Brandt Pike
ZONING/ACREAGE:	PM - Planned Mixed Use District / 4.0 Acres
EXISTING LAND USE:	Vacant land
ZONING ADJACENT LAND:	PM
REQUEST:	The applicant requests approval of a Combined Basic & Detailed Development Plan in a PM Planned Mixed Use District for a new 26,617 SF branch library
ORIGINAL APPROVAL:	
APPLICABLE HHCC:	Chapter 1171, 1179
CORRESPONDENCE:	In Favor – In Opposition –

Overview:

The City of Huber Heights and the Dayton Metro Library (DML) have been working together for quite some time to develop a new branch library at this targeted redevelopment area. This branch is one of the last to be constructed as part of the DML's ambitious system-wide library expansion/replacement program that started with a voter-approved \$187 million bond issue in 2012.

STAFF ANALYSIS:

The applicant has submitted approval for a combined Basic and Detailed Development Plan for a 26,617SF library on a site currently zoned PM. At its highest point, the building is approximately 34 feet tall. The exterior facade is a mixture of 40% standing seam metal panel, 35% storefront and curtain wall, 22% brick, 2% ACM panel. Access to the site will be from Miami Valley Way, which eliminates a curb cut on Brandt Pike and provides a safer means of ingress and egress.

As the cover letter indicates, minor site development concessions are included in this proposal including a minor encroachment into the building setback and provision for seventeen off-site parking. The building setback encroachment brings the pedestrian entrance closer to the sidewalk and breaks up the front building wall facade, which is nearly 270 feet long. Planning staff is very supportive of this minor encroachment and design element.

The proposal contains 143 parking spaces including seven (7) ADA and eight (8) LEED (fuel-efficient cars) spaces. The parking spaces meet city standards. The 17 off-site parking spaces are located on adjacent land owned by the City and integrated into the site. These parking spaces will be indistinguishable to library patrons. The parking lot lights are full cut-off, with flat lenses on poles with a height up to 20 feet. The photometric calculations supplied by the applicant indicate little to no off-site light trespass.

1171.09 Detailed development plan.

The detailed development plan shall conform substantially to the basic development plan. If desired by the developer, it may be submitted in stages with each stage reflecting a portion of the approved basic plan which is proposed to be recorded and developed; provided however, that such portion conforms to all requirements of this chapter and other applicable ordinances. The requirement procedure for approval of a detailed development plan shall be:

- (a) The detailed plan and supporting data shall be filed with the City. The Planning Commission shall determine that such plan is in conformity with these regulations and in agreement with the approved basic plan.*
- (b) After review of the detailed plan and supporting data, the Commission shall approve or disapprove the plan submitted by the developer. Disapproval*

of the detailed plan shall be based on its failure to comply with the basic development plan and current applicable codes, standards and regulations.

(Ord. 89-O-339, Passed 2-6-89)

1171.091 Planning commission/council review.

It is the purpose of the Planning Development regulations to encourage property owners to develop their land in efficient and effective ways. It is the intent of these regulations to encourage land uses which may not always meet traditional zoning rules. Inherent in these Planned Development regulations is an opportunity for property owners to develop their sites without requiring strict compliance with all zoning regulations where the overall plan is deemed to be in the best interest of the City. During review of a Basic or Detailed Development Plan by the Planning Commission or City Council, all requirements within Part 11, Title 7 of the Code are to be used as guidelines and may be varied as part of the Basic or Detailed Development Plan if it is determined that such deviation will not materially adversely affect neighboring properties or the community as a whole, any such variation of these requirements does not change the overall plan and character of the proposed development, and the variance does not have the effect of nullifying the intent and purpose of these regulations or the Zoning Ordinance. In granting variances or modifications, the Commission or Council may require such conditions as shall, in its judgement, secure substantially the objective of the standards or requirements so varied or modified.

(Case 427; Ord. 2002-O-1367, Passed 9-9-02)

Development Standards Analysis:

1179.06 Development standards.

Except when specifically modified herein, the provisions of the Planning and Zoning Code shall govern. The following development standards apply to a PM development:

(a) Minimum Land Area Requirement. A minimum of 20 acres shall be required.

The area zoned PM is approximately 40 acres.

(b) Covenants. The developer of a PM development shall be required to submit a set of covenants or deed restrictions with the Basic Development Plan application that will outline, at a minimum, development standards and guidelines established in this chapter and any other requirements the developer and/or Planning Commission deems necessary. The Planning Commission may require additional or amended covenants as it deems necessary to ensure compliance with the Planning and Zoning Code and the Planned Mixed Use District.

N/A

(c) Required Mix of Land Uses. A developer shall be required to provide a mix of land uses in a PM Development. At a minimum, at least two of the following uses are required in a PM Development: residential, commercial, office, institutional, and/or industrial.

The area contains a mixture of institutional and retail uses.

(d) Site Planning.

(1) The combination of different uses, whether as part of one building or as part of the overall development, shall be designed and developed so as not to create a nuisance by excessive noise, light, vibration, odor or any other annoyances for any uses within the development or neighboring properties.

This site is located along a well-traveled thoroughfare, surrounded by institutional and retail uses. All lighting fixtures are full cut-off and should produce little to no light trespass to adjacent properties. The parking is located to the rear of the building and site access is moved from Brandt Pike to Miami Valley Way.

(2) A PM development is to be designed so that buildings and structures are clustered and open space areas are preserved and maintained. Special care shall be given to protect preexisting natural features including, but not limited to, woodlands, ravines, streams, lakes, ponds, and/or flood plains. Impervious surface coverage, including, but not limited to, buildings, parking area, and accessways, shall not exceed 75 percent of the total development area. Therefore, 25 percent of the development area shall be reserved for green space.

This is an urban redevelopment site with little to no existing natural features. The proposed development will reduce the amount of impervious surface from 2.72 acres to 2.32 acres, a reduction of 17%. Approximately 56.5% of the site is will be developed, and 43.5% is undeveloped or green space.

(3) The number of ingress and egress points onto the public streets shall be limited in order to reduce the number of traffic conflict points. Adequate and properly arranged facilities for internal pedestrian and traffic circulations shall be provided. The street and thoroughfare network shall be designed to minimize truck traffic through residential areas of the development.

This development will have one vehicular access from Miami Valley Way and will eliminate site access and a curb cut on Brandt Pike. The parking lot is well designed with sidewalks at the end of the four main parking isles. A separate pedestrian entrance is available along Brandt Pike for those patrons who may walk or utilize the RTA.

(4) Parking systems shall be designed so as to discourage single large unbroken paved lots for off-street parking and shall encourage smaller defined parking areas within the total parking system. Underground parking facilities are encouraged.

The parking lot is broken up by landscaped islands throughout the parking area. The zoning code requires 122 parking spaces and the applicant is proposing 143 spaces (133 spaces are unrestricted). The parking meets city standards.

(5) The development shall be designed to tie all the uses into one overall community and encourage walking, biking, running, and alternative modes of transportation. Developers are encouraged to incorporate bus stops, bikeways, walkways, and crosswalks into an overall thematic scheme for pedestrian traffic. Sidewalks shall be required except, in the case of a golf course or specific open space development, the Planning Commission may determine them to be unnecessary.

The proposal provides for a dedicated, well-landscaped pedestrian entrance along Brandt Pike. The building overhang provides protection for pedestrians during times of inclement weather. The site is on the RTA bus line and there is a stop in front of the building. Additionally, the development will have bike racks at the front and rear entrances.

(6) Any signs as proposed within this district, shall comply with Chapter 1189 "Signs". Additionally, a developer of a PM development shall develop and submit with the Detailed Development Plan application, a comprehensive set of graphic design criteria for signage in the development. This set of graphic design criteria for signage shall be approved by the Planning Commission and shall apply to all signage requests within the development. The criteria shall include, at a minimum, the sizes permitted (if different from Chapter 1189), colors permitted, materials permitted, typefaces permitted, type size permitted, and permitted illumination. Compliance with the on-site comprehensive graphics shall be verified by the Zoning Administrator during the sign permit review process.

A sign package was not submitted with the application and the elevation drawings only indicate one wall sign that is approximately 35 square feet. Staff recommends limiting the size of any single wall sign to a maximum of seventy-five (75) square feet, with a combined maximum 150 square feet for all wall signs, per the standard City Code,

(7) Minimum lot area, frontage and setback requirements may be varied to allow greater flexibility in design. However, the following shall be used as a guideline for development:

A. With multiple buildings on a single property, entirely residential buildings shall be at least 15 feet from another entirely residential building and at least 50 feet from nonresidential or mixed-use buildings.

B. With multiple buildings on a single property, nonresidential buildings or mixed use buildings shall be at least 20 feet or one-half the height of the taller building apart, whichever is greater from another nonresidential or mixed use building.

C. All nonresidential buildings or mixed-use buildings shall be set back at least 50 feet or the height of the structure, whichever is greater, from any residential property or residential building, whichever is closer, and from the public right-of-way. This setback applies to multiple buildings on a single property, to development within a PM development, and where it abuts to adjacent property.

As the cover letter indicates, minor site development concessions are included in this proposal including a minor encroachment into the building setback. Approximately 16% of the building frontage encroaches into the setback area. The building setback encroachment brings the pedestrian entrance closer to the sidewalk and breaks up the front building wall facade, which is nearly 270 feet long.

Planning staff is very supportive of this minor encroachment and design element.

(8) No maximum height restriction shall apply, except that the proposed development meets all Federal Aviation Administration (FAA), Dayton International Airport or Wright Patterson Air Force Base height or abatement requirements.

At its highest point, the building is approximately 34 feet tall.

(9) Common parking areas and accessways shall be lighted adequately with light fixtures that shall be designed to reflect light away from adjoining properties. Special attention will be given to protect entirely residential structures from light emitted from nonresidential land uses.

The photometric plan indicates little to no light trespass to the adjacent properties. All light fixtures are full cut-off with flat lenses.

(10) Nonresidential uses shall have trash containers and/or receptacles (including recycling containers) placed to the rear of all structures and shall be screened or enclosed on four sides with opening doors for the purpose of trash removal. The placement of trash containers and/or receptacles in multi-family residential developments shall be as inconspicuous as possible. The use of a wooden or vinyl fence structure, earth mound, or wall with an opaqueness of 100 percent and a height of 12 inches above the top of the largest container is required.

The site plan indicates the trash receptacle will be fully enclosed.

(11) The architecture of nonresidential structures is encouraged to be unique yet similar in certain sections of the PM.

The architecture of the proposed branch library is attractive, contemporary design that is consistent with the DML brand throughout Montgomery County. The exterior facade is

a mixture of 40% standing seam metal panel, 35% storefront and curtain wall, 22% brick, 2% ACM panel.

(12) The distribution systems for utilities are required to be underground.

All utilities will be placed underground.

(13) The use of privately owned open space and public dedicated park land is encouraged as part of a PM development. Privately owned open space shall be maintained by the developer or by a duly authorized owner's association.

N/A

(14) The use of chain link fencing is prohibited. Additionally, on an entirely residential property, no fencing shall be permitted in the front yard and, in the case of a corner lot, no fencing shall be permitted in the side yard with frontage to a public right-of-way. The covenants submitted by the developer shall establish the height requirements for fencing in the development. Fencing in a development shall be uniform in height in related use areas. On an entirely residential property, fence height shall not exceed six feet.

No on-site fencing is proposed

(15) With the submission of a Basic Development Plan application, the applicant is required to submit a phasing plan that details when certain sections of the development will commence construction and when the sections will be complete.

The applicant is proposing to develop the site in one phase.

1179.07 Landscaping.

To protect and promote a harmonious development that ensures a functional and logical arrangement of mixed uses, the effective and efficient use of landscaping and buffering is required. Therefore, a PM development shall include the following landscaping and buffering:

(a) Development Landscaping. Within the PM development that is proposed, entirely residential buildings shall be screened from nonresidential and mixed use buildings with a 20 foot wide buffer strip that includes a six foot high earth mound, wooden or vinyl fence, wall, landscaping and/or mixture thereof that shall maintain an opaqueness of at least 80 percent year around. Parking areas, accessways, or any impervious surfaces are prohibited within this buffer strip. If planted materials are used, the screen must achieve the required height, width, and opaqueness within two years of planting. The use of pre-existing trees, natural features or amenities as part of this buffer is encouraged. The Planning Commission may approve some other arrangement of buffering if it determines that such an arrangement meets the intent of this requirement.

(b) Perimeter Landscaping. In a section of a PM development that contains nonresidential, mixed use, or multi-family buildings that abut a neighboring property with a single-family residential zoning designation or in a PM development section that contains an entirely residential section that abuts a neighboring property with a commercial, office, or multi-family zoning designation, the perimeter of the section of the PM development shall be screened with a 25 foot wide buffer strip that includes a six foot high earth mound, wooden or vinyl fence, wall, landscaping and/or mixture thereof that shall maintain an opaqueness of at least 80 percent year-round. Parking areas, accessways or an impervious surface are prohibited within this buffer strip. If planted materials are used, the screen must achieve the required height, width, and opaqueness within two years of planting. The use of pre-existing trees, natural features or amenities as part of this buffer is encouraged. The Planning Commission may approve some other arrangement of buffering if it determines that such an arrangement meets the intent of this requirement.

There are no residential uses adjacent to the subject site. The existing street trees along Miami Valley Way will be preserved. The landscaping plan meets city code.

(c) Parking Lot Landscaping. All parking lots are required to have interior landscaped areas as outlined in Chapter 1185, "Parking and Loading".

The proposal meets this requirement.

(d) Street Tree Requirement. All frontage property within a PM development that abuts public rights-of-way and is developed with nonresidential, mixed use, and/or multi-family buildings is required to have one street tree per 40 feet of frontage planted just outside of the street right-of-way. Unless determined to be inappropriate by the City Engineer, street trees shall be planted at least four feet from the edge of the sidewalk on private property. All frontage property within a PM development along a major collector or better as defined by the Huber Heights Thoroughfare Plan, no matter what use, shall meet this requirement. The type of tree and size shall be proposed by the developer at the Detailed Development Plan application stage and approved by the Planning Commission. A list of appropriate trees with required caliper is available in the City Engineer's Office.

The existing street trees along Miami Valley Way meet this requirement and will be retained. There are currently no street trees along Brandt Pike. As an alternative to Brandt Pike street trees, the applicant is proposing two street trees at the corners of the Brandt Pike frontage and a significantly landscaped planning bed that accents the front entrance, main stairway and ADA ramps. The front landscaped area spans approximately 67% of the front footage. Staff supports this landscaped alternative.

STAFF RECOMMENDATION

Staff recommends approval of the combined Basic and Detailed Development Plan to construct a new Huber Heights Library Branch. Staff recommends the following conditions for approval:

- 1) The applicant shall submit a sign package consistent with Section 1189 of the Huber Heights Planning and Zoning Code when seeking a zoning permit;
- 2) The applicant will comply with all stormwater requirements, per the City Engineer;
- 3) The applicant will comply will all Fire Code requirements, per the Huber Heights Fire Department;
- 4) The applicant will submit a revised site and landscaping plan reflecting all conditions of the Planning Commission decision, if any, prior to review by City Council.

Planning Commission Action

Planning Commission may take the following actions with a motion:

- 1) Approve the Combined Basic and Detailed Development Plan;
- 2) Deny the Combined Basic and Detailed Development Plan (the Commission should state the specific reasons for denial); or
- 3) Table the application.



Planning Commission Decision Record

WHEREAS, on January 14, 2022, the applicant, LWC, Inc., requested approval of a Combined Basic and Detailed Development Plan in a PM (Planned Mixed Use) District for a new 26,617 SF branch Library for property located at 6243 Brandt Pike (Zoning Case 22-05); and

WHEREAS, on January 25, 2022, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby approved the request.

moved to approve the application submitted by the applicant, LWC, Inc, requesting approval of a Combined Basic and Detailed Development Plan in a PM (Planned Mixed Use) District for the property located at 6243 Brandt Pike (Zoning Case 22-05), with the following conditions:

1. The applicant shall submit a sign package consistent with Section 1189 of the Huber heights Planning and Zoning Code when seeking a zoning permit.
2. The applicant will comply with all stormwater requirements, per the City Engineer.
3. The applicant will comply with all Fire code requirements, per the Huber Heights Fire Department.
4. The applicant will submit a revised site and landscaping plan reflecting all conditions of the Planning Commission decision, if any, prior to review by City Council.
5. In accordance with Section 1182..06 Prior to the issuance of a zoning permit, the applicant shall submit a performance bond, cash bond, or letter of credit to insure the installation of landscaping as approved. The

bond or letter of credit shall be in an amount equal to the applicant's estimate of the cost of installation as approved by the Planning Department and shall remain in effect until such time as the landscaping has been completed as determined by the Planning Department.

Seconded by _____. Roll call showed: YEAS: _____. NAYS: _____.
Motion to approve carried _____.

Terry Walton, Chair
Planning Commission

Date

CITY OF HUBER HEIGHTS
STATE OF OHIO

ORDINANCE NO. 2022-O-

TO APPROVE A BASIC AND DETAILED DEVELOPMENT PLAN FOR THE PROPERTY LOCATED AT 6243 BRANDT PIKE AND ACCEPTING THE RECOMMENDATION OF THE PLANNING COMMISSION (ZONING CASE 22-05).

WHEREAS, the citizens of Huber Heights require the efficient and orderly planning of land uses within the City; and

WHEREAS, the City Planning Commission has reviewed Zoning Case 22-05 and on January 25, 2022, recommended approval by a vote of 5-0 of the Basic and Detailed Development Plan; and

WHEREAS, the City Council has considered the issue.

NOW, THEREFORE, BE IT ORDAINED by the City Council of Huber Heights, Ohio that:

Section 1. The application requesting approval of a Basic and Detailed Development Plan (Zoning Case 22-05) is hereby approved in accordance with the Planning Commission's recommendation and the following conditions:

1. The applicant shall submit a sign package consistent with Section 1189 of the Huber Heights Planning and Zoning Code when seeking a zoning permit.
2. The applicant will comply with all stormwater requirements per the City Engineer.
3. The applicant will comply with all Fire Code requirements per the Huber Heights Fire Division.
4. The applicant will submit a revised site and landscaping plan reflecting all conditions of the Planning Commission decision, if any, prior to review by City Council.
5. In accordance with Section 1182.06, prior to the issuance of a zoning permit, the applicant shall submit a performance bond, cash bond, or letter of credit to insure the installation of landscaping as approved. The bond or letter of credit shall be in an amount equal to the applicant's estimate of the cost of installation as approved by the Planning Department and shall remain in effect until such time as the landscaping has been completed as determined by the Planning Department.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Ordinance shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the ____ day of _____, 2022;
____ Yeas; ____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-8204

Topics of Discussion C.

Council Work Session

Meeting Date: 02/22/2022

Space Needs Assessment - LWC

Submitted By: Bryan Chodkowski

Department: Economic Development

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 02/22/2022

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Space Needs Assessment - LWC

Purpose and Background

Pursuant to City Council's previous discussions, certain City buildings or facilities no longer function effectively or efficiently for City Staff and citizens. To assist Council in deciding the future configurations and locations of certain City operations, it is recommended that Council authorize this space needs assessment.

Fiscal Impact

Source of Funds: General Fund

Cost: \$30,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

The proposal associated with this legislation has a cost of \$27,500. Staff included additional funds in the event that alternative concept drawing or floor plans were requested by the City following presentation of deliverables from the proposal.

Attachments

Resolution

Exhibit A

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2022-R-

AUTHORIZING THE CITY MANAGER TO ENGAGE LWC INCORPORATED TO PROVIDE A SPACE NEEDS ASSESSMENT FOR CERTAIN CITY OPERATIONS.

WHEREAS, the City of Huber Heights (“City”) owns numerous buildings and facilities from which it operates and provides services; and

WHEREAS, several of these buildings and facilities have reached their operational capacity or no longer functions effectively and efficiently; and

WHEREAS, the City desires to understand the best methods to address the conditions of capacity, efficiency, and effectiveness to plan for future building and facility improvements.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Manager is hereby authorized and directed to execute an agreement with LWC Incorporated for the purposes of conducting a space needs assessment as proposed in Exhibit A as attached hereto. Said agreement shall be approved as to form and content by the Law Director prior to its execution by the City Manager.

Section 2. This legislation is adopted in accordance with Section 171.03(1) and Section 171.12(a)4 of the City Code of Huber Heights, Ohio.

Section 3. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 4. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2022;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

EXHIBIT A



February 8, 2022

Bryan Chodkowski
Interim City Manager
City of Huber Heights
6131 Taylorsville Road
Huber Heights, Ohio 45424

Dear Bryan:

I am following-up to the city's request to provide a fee proposal for an assessment study to site two future buildings at Southpointe Crossing, the former Marion Meadows Shopping Center.

Our scope will include the following items:

- interviews with staff and council members to determine goals and priorities
- evaluate current and future space needs of City Administration
- evaluation current and future space needs of Tax and Water divisions
- evaluate current and future space needs of the Senior Center

Deliverables will include:

- program with recommended tenants and square footages
- site studies for building locations
- square footage and footprint of buildings
- site plan rendering with buildings and associated parking
- axonometric site rendering with building elevations
- preliminary cost estimate and schedule

Our fee to complete the scope and deliverables described above is \$27,500 and can be completed within 60 days from a notice to proceed from the city.

Please call, (513) 617-0550, if you have any questions or need additional information. LWC looks forward to continuing our partnership with the city.

Sincerely,

A handwritten signature in dark ink, appearing to read "John Fabelo", written over a horizontal line.

John Fabelo, AIA
Partner

accepted on behalf of City of Huber Heights

AI-8213

Topics of Discussion D.

Council Work Session

Meeting Date: 02/22/2022

Brandt Pike Revitalization Project

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 09/21/2021 and 10/05/2021 and 10/19/2021 and 11/01/2021 and 11/16/2021 and 12/07/2021 and 01/04/2022 and 01/18/2022 and 02/08/2022 and 02/22/2022

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Brandt Pike Revitalization Project

Purpose and Background

This item is to continue discussion on the Brandt Pike Revitalization Project. The link to the Brandt Pike Target Revitalization Plan from May, 2017 is as follows: https://www.hhoh.org/DocumentCenter/View/2667/Brandt_Pike_Target_Revitalization_Plan_FINAL_DRAFT_2017_0512

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

No file(s) attached.

AI-8216

Topics of Discussion E.

Council Work Session

Meeting Date: 02/22/2022

Mowing/Maintenance/Revitalization - Specified City Properties - Award Contract

Submitted By: Linda Garrett

Department: Public Works

Division: Public Works

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 02/22/2022

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Mowing/Maintenance - Specified City Properties - Award Contract

Purpose and Background

The Public Works Division requests the authorization to award a contract for the mowing and maintenance of specified City properties.

Fiscal Impact

Source of Funds: Public Works Division Budget

Cost: \$260,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Resolution

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2022-R-

AUTHORIZING THE CITY MANAGER TO AWARD A CONTRACT FOR SERVICES RELATED TO THE MOWING AND MAINTENANCE OF SPECIFIED CITY PROPERTIES.

WHEREAS, throughout the course of a four-year period, the City of Huber Heights will require the mowing and maintenance of specified City properties; and

WHEREAS, the City Council under Resolution No. 2021-R-7057 authorized the solicitation of bids for the mowing and maintenance of specified City properties on November 8, 2021; and

WHEREAS, bids for the mowing and maintenance of specified City properties were received by the City on February 11, 2022; and

WHEREAS, the costs for such services are estimated to exceed \$25,000.00.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Manager is hereby authorized to award a contract for services related to the mowing and maintenance of specific properties in the City of Huber Heights to Greentech Lawn and Irrigation, 2985 Fenner Road, Troy, Ohio 45373 for a four-year period for 2022-2025 in an amount not to exceed \$230,000.00 annually, subject to the availability of funds.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2022;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-8186

Topics of Discussion F.

Council Work Session

Meeting Date: 02/22/2022

East Water Main and Sanitary Sewer Extension Projects - Acquisition of Right Of Way

Submitted By: Hanane Eisentraut

Department: Engineering

Division: Engineering

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 02/22/2022

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

East Water Main and Sanitary Sewer Extension Projects - Acquisition of Right Of Way

Purpose and Background

This legislation will authorize the City Manager to acquire easements and rights of way needed for the East Water and Sewer Extension Projects at a total cost not to exceed \$150,000.

Federal funds as part of the American Rescue Plan Act (ARPA) and the Sewer Capital Fund will be utilized to pay for these improvements.

Fiscal Impact

Source of Funds: American Rescue Plan Act Funds/Sewer Capital Fund

Cost: \$150,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Resolution

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2022-R-

AUTHORIZING THE CITY MANAGER TO ACQUIRE NEEDED RIGHT OF WAY, DRAINAGE, SLOPE, AND TEMPORARY EASEMENTS FOR THE EAST WATER MAIN AND EAST SANITARY SEWER EXTENSION PROJECTS.

WHEREAS, it is necessary to acquire certain sections of right of way as part of the East Water Main and East Sanitary Sewer Extension Projects; and

WHEREAS, there are adequate funds available for these acquisitions.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Manager is hereby authorized to acquire needed easements and right of way parcels for the East Water Main and East Sanitary Sewer Extension Projects at a total cost not to exceed \$150,000.00.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2022;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-8211

Topics of Discussion G.

Council Work Session

Meeting Date: 02/22/2022

Water Distribution Integrity Study - Award Contract

Submitted By: Hanane Eisentraut

Department: Engineering

Division: Engineering

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 02/22/2022

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Water Distribution Integrity Study - Award Contract

Purpose and Background

City Staff solicited expressions of interest and proposals from various qualified engineering firms to provide a Water Distribution System Integrity Study. City Staff analyzed these responses and selected Burgess & Niple as the most qualified firm for this study at a cost not to exceed \$85,000. The purpose of this study is to address the rising water main break rate, identify the causes, prioritize the right water mains to rehabilitate and replace, and determine the appropriate investment level to control the break rate and mitigate the risks. The Water Fund will be utilized for this study.

Fiscal Impact

Source of Funds: Water Fund

Cost: \$85,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Proposal Results

Burgess & Niple Water Integrity Study Proposal



CITY OF HUBER HEIGHTS
WATER DISTRIBUTION SYSTEM INTEGRITY STUDY
PROPOSALS RESULT
BID DATE: FEBRUARY 8, 2022

CONSULTANT'S NAME	PROPOSAL AMOUNT
Burgess & Niple	\$64,600.00
Strand	\$78,000.00

PROPOSAL

Water Distribution System Integrity Study

Huber Heights, Ohio

February 8, 2022

BURGESS & NIPLE
Engineers ■ Architects ■ Planners



Hanane Eisentraut
Assistant City Engineer
City of Huber Heights
6131 Taylorsville Rd
Huber Heights, OH 45424

Re: Water Distribution System Integrity Study

Dear Mr. Eisentraut,

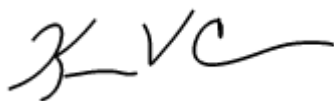
February 8, 2022

In 2001, the American Water Works Association published “Reinvesting in Drinking Water Infrastructure: Dawn of the Replacement Era” with a key finding that most of our nation’s water mains would come of age by 2030. Is this the cause of the recent rise in Huber Heights’ watermain break rate? Is it the result of changing pressure zones, or the change in finished water quality? Or perhaps all three factors are contributing to the spike. Untangling the interaction of these factors requires complex tools and experienced engineers to utilize them and properly interpret outputs. Our team brings the City everything they need to make the right determinations and ultimately develop a plan that will manage breaks and avoid costs.

 We Have the Right Experience	 We Know Your Water System	 We Have the Right Tools
Our team develops practical and proven watermain replacement plans for water utilities across the U.S. as far away as Anchorage, Alaska (where pipes are buried 10+ feet) and Ohio communities similar in size to Huber Heights. We know what data is needed to make accurate predictions and will limit the gathering of additional information to only what is necessary.	B&N knows the City’s water system based on a long history of working for you. Kevin Campanella and Mark Uprite developed the City’s hydraulic model, the 2018 asset management plan and the 2021 Risk and Resilience Assessment and Emergency Response Plan update.	We use the most advanced software platform designed specifically for predicting watermain breaks and developing watermain risk management plans. Developed over a decade, our sophisticated algorithms provide the analytics needed to answer the City’s questions with confidence and impressive accuracy.

Based on our team’s knowledge of your system, experience, and tools, we will develop a strategy and plans to cost-effectively address the risks of watermain breaks and provide reliable capacity to water customers.

Respectfully Submitted,



Kevin Campanella, PE
Project Manager
p. 614.459.2050 x1401
e. kevin.campanella@burgessniple.com



Robbie Cameruca, PE
Principal-in-Charge
p. 614.459.2050 x1402
e. robbie.cameruca@burgessniple.com

CONTENTS

Sections

Section 1	
Business Organization.....	1
Section 2	
Technical Approach and Scope of Work.....	3
Section 3	
Related Technical Experience.....	16
Section 4	
Project Staffing and Organization	
Organizational Chart.....	23
Resumes.....	24
Section 5	
Timely Completion of the Project.....	30
Section 6	
Additional Information.....	31
Section 7	
Cost.....	32

BUSINESS ORGANIZATION

B&N: Water Distribution Leader for more than a Century

Founded in 1912 in Columbus, Ohio, B&N is a nationally recognized engineering, planning and architecture firm. We emphasize practical design to generate ideas that save our clients millions of dollars in capital improvement, operation and maintenance costs.

B&N excels in delivering solutions to maintain and improve our clients' water distribution systems. During the last decade, we have completed nearly 700 water distribution-related projects totaling \$32.5 million in fees and \$290 million in construction. Our staff is well versed in the inspection, evaluation, design and construction of water distribution pipelines. Our water system modeling work has ranged from spreadsheet calculations of small or partial water systems to a fully calibrated WaterCAD model. We have the diversified talent to tackle any distribution system project.

Our water distribution services include:

- Water Mains
- Booster/Pumping Stations
- Storage Reservoirs and Tanks
- Nondestructive Testing/Sampling
- Water Modeling (Hydraulic/Water Quality)
- Flushing Program
- Leak Identification
- Corrosion Protection
- Services During Construction
- O&M Assistance
- Funding Assistance
- Regulatory Assistance

Offices to Perform Services


Columbus

5085 Reed Rd
Columbus, OH 43220
614.459.2050

Cincinnati

525 Vine St., Ste 1300
Cincinnati, OH 45202
513.579.0042




 The Columbus
and Cincinnati offices
of B&N are located **an**
hour from the City.

Principal-in-Charge



Robbie Cameruca, PE

p. 614.459.2050 x1402

e. robbie.cameruca@burgessniple.com

Your Principal-in-Charge for this project will be Robbie Cameruca, PE. Robbie is an owner of B&N and the Director of Utility Infrastructure. She has over 30 years of experience in electrical engineering and project management.

SUBCONSULTANT

infraPLAN

infraPLAN is a New York-based engineering firm specialized in planning watermain replacements using advanced analytical approaches. Services provided include:

- Data review and clean up using spatial, statistical approaches and machine learning
- Thorough statistical analysis and comprehensive suite of results dashboards
- Watermain failure forecasting using advanced statistical models including machine learning
- Development of watermain aging curves, estimations of remaining useful life
- Calculation of business risk exposure due to breaks
- Definition of non-risk based criteria scores (fire flow, hydraulic capacity, water quality)
- Definition of project prioritization scores
- Simulation of rehabilitation and replacement plans, balancing yearly length and cost of rehabilitation with resulting break rate, business risk exposure, and cost

infraPLAN was created by Annie Vanrenterghem, Ph.D., in 2008 to provide utilities with advanced analytical models she had developed during 11-years at Tandon School of Engineering of New York University, where she was a Research Associate professor and principal investigator of research projects funded by the NSF and USEPA. infraPLAN has helped utilities with system lengths up to 6,000 miles. Pioneers of analytically advanced forecasting models and planning approaches, we deliver data-driven solutions. infraPLAN developed and uses the user-friendly infraSOFT platform that greatly facilitates planning. **infraPLAN is WBE-certified nationally through WBENC.**

TECHNICAL APPROACH AND SCOPE OF WORK

Overview

For a typical water distribution system, the technical approach to address a rising watermain break rate due to pipe deterioration involves a complex study of watermain attributes and break data throughout the system. The complexity of the approach for Huber Heights becomes more challenging because of recent changes in the distribution system that can have an impact on watermain break rate (i.e. changes to pressure zones and changes to the water treatment process and finished water quality). Determining the extent that each of these factors is impacting the break rate will require the right approach.



B&N has the right approach to address these challenges.

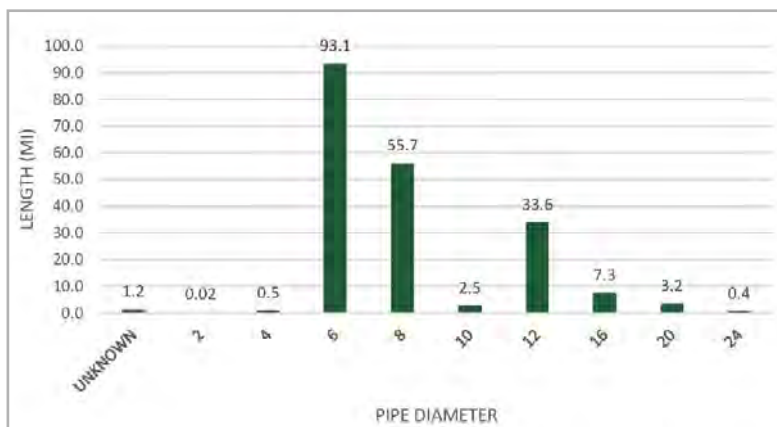
Our project team supports water utilities around the U.S. with similar approaches and has tools that are designed specifically to answer the questions posed in this RFP.

We developed one of the most complex software platforms dedicated to the sole purpose of identifying the causes of a rising watermain break rate, prioritizing the right watermains to rehabilitate and replace, and determining the appropriate investment level to control the break rate and mitigate risks. **This platform has been implemented and validated for over 1 million pipes with demonstrated results that are better than the industry's most commonly employed methodologies.** In some cases, predicting 75-percent of future breaks within a 5-year period has occurred, an unprecedented level of accuracy. Our approach leverages this tool to answer all the questions in the RFP regarding watermain break causes, impacts, and solutions, and to staff this project with technical experts most experienced at interpreting the results and providing you with the most practical path forward.



Insight into Huber Heights Water System

To determine the adequacy of distribution system capacity to support future growth (Task 9), we offer staff with experience modeling your system who can perform the evaluation cost-effectively. B&N is the developer and maintainer of the Huber Heights water distribution system model in WaterGEMS, an industry-leading hydraulic modeling software. We have used the model to support growth and planning of the system.



This graphic, taken from the 2018 Huber Heights Water Asset Management Plan prepared by B&N, shows the length of pipes (in miles) in the Huber Heights water system by diameter, one key parameter in predicting future breaks.

Our hydraulic modeling team includes Mark Upite, PE, who is extremely knowledgeable of the Huber Heights water distribution system based on his experience working for you both modeling the system and through his participation in developing the Huber Heights asset management plan.

There are many other approaches to this project that may appear attractive for their simplicity. In the words of Henry Louis Mencken, “Every complex problem has a solution which is simple, direct, plausible—and wrong.” Our approach has been developed over a decade by those that understand the complexities of watermain break prediction. This approach will help the City avoid significant costs in both the short- and long-term by reducing the cumulative impacts of watermain breaks to the utility and community. Every watermain replacement project is costly, and by identifying the right watermains to rehabilitate and replace at the right time, B&N will determine the best value for your investments.

Scope of Work

Task 1. Kick-off Meeting

The kick-off meeting for this project will be held either in-person or virtually to maximize participation. We will introduce project personnel from the City and B&N team. The Huber Heights project manager will review the City's goals and define success for the project. B&N will review the proposed scope and schedule and provide examples of the deliverables that will be provided, noting discussion of any desired adjustments to meet the City's success factors. We will also be prepared to review a request for information (RFI) to include watermain shapefiles, the City's watermain break database, formatting of shapefile data, and information relevant to updating the City's water distribution hydraulic model. Examples of discussion will include the possibility of the City / Suez supplementing the existing watermain break database with additional historical data. B&N will also review the process to be used for transferring large volumes of data between the City and B&N securely.

Task 2. Data Review

Producing accurate, high-quality results you can trust is our goal. One of our approach's many strengths is our investment in the high-quality data input needed to produce high-quality results. The process begins by uploading the City's GIS shapefiles containing asset IDs, install dates, diameter, length, and other pertinent data (e.g., soil type) for Huber Heights' 200 miles of watermain into infraSOFT. The software has unique, built-in quality control features that immediately analyze the data for comprehensiveness and quality. Issues are displayed in an interactive dashboard. Pre-built quality control measures flag different issues such as:

- **Watermain/Asset IDs:** Missing and duplicate asset IDs; assets without IDs
- **Install Dates:** Missing, anomalous or incoherent install dates (for example, install dates after the dates of abandonment for abandoned watermain).
- **Diameter:** Missing and anomalous diameters (e.g. zero, negative, or triple-digit values).
- **Length:** Exceedingly short or long watermain.

Issues can also be defined by the user based on utility-specific concerns. An example of the infraSOFT dashboard taken from another B&N project is displayed in on this page – that dashboard quantifies the number of issues related to all the factors mentioned above. An example of a user-defined issue is framed in green for Ductile Iron (DI, or D in the table) watermain with a year of installation (YOI) before 1970 – this community started installing DI pipe in 1970, so DI pipes with install dates before that represent a data quality issue. As shown near the bottom of graphic, the user can see that 93.45% of the watermain do not have any issue (framed in blue) and can be used in the analysis.

From input file		156,814	94.02 %		
		initial	current	initial	current
+ New filter	<input type="checkbox"/> Pipes excluded from project	0	0	0.00%	0.00%
	Pipes included in project	156,821	156,814	100.00%	100.00%
+ New Issue	<input type="checkbox"/> Pipes with issues	10,281	10,268	6.56%	6.55%
	No Pipe ID	5,834	5,833	3.72%	3.72%
	I YOI > 1974	3,715	3,715	2.37%	2.37%
	D YOI < 1970	880	880	0.56%	0.56%
	No DOI	375	375	0.24%	0.24%
	Bad DIAM	38	38	0.02%	0.02%
	DUPL Pipe ID, same Life Status	24	24	0.02%	0.02%
	No MAT	0	0	0.00%	0.00%
	No DOA	0	0	0.00%	0.00%
	DOI > DOA	0	0	0.00%	0.00%
	DUPL Pipe	14	0	0.01%	0.00%
	Bad Length	0	0	0.00%	0.00%
	Pipes without issues	146,540	146,546	93.45%	93.45%
	Pipes included in project without issues	146,540	146,546	93.45%	93.45%

Watermain break data will be also be addressed in the same manner as watermain attribute data. That data will be uploaded into infraSOFT. infraSOFT automatically performs a quality check on break data and displays the results in the break section of the software's interactive dashboard. Built-in quality control measures (issues) include:

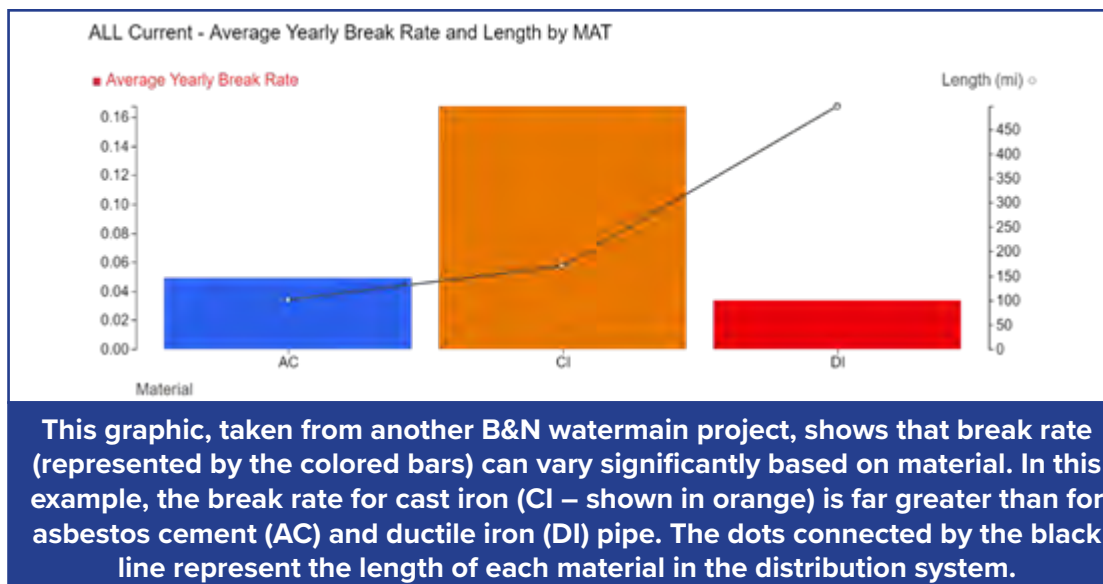
- Breaks with no date
- Multiple breaks with the same break ID
- Duplicate entry of breaks
- Date of break is after abandonment date
- Date of break is before pipe install date
- No watermain ID associated with the break
- Watermain ID associated with the break is not in the watermain database
- No break ID

This dashboard for watermain attributes and break data will help our team determine what data to utilize for the watermain break prediction analysis and where additional data may be needed.

Task 3. Review Data Gaps

Identifying data issues early in the project is essential because the accuracy of prediction of future breaks depends on comprehensive, high-quality data. Virtually no system has every piece of data that is desired. Our experience supported by our analytical tools help us determine when enough data is available for us to produce high quality predictions without further investment in closing data gaps.

The GIS data B&N analyzed when developing the City's water asset management plan in 2018 revealed that 97.3% of pipes have install dates, 99.7% have populated diameters, and 99.8% have a material. Based on this comprehensiveness, we do not expect any effort by City staff will be needed to obtain additional asset attribute data unless data is readily available. Accurate predictions of future watermain breaks will not be hindered based on comprehensiveness of data, provided data quality is high. The infraSOFT dashboard discussed above in Task 2 will alert us if quality issues are of concern, and we will discuss alternatives to address those issues with the City prior to embarking on Task 4 – Data Gap Closure .



The City's existing GIS break database has approximately 10 years of history, and the City has indicated that an additional 10-years of break data could be obtained from historical records and incorporated into the GIS system. Adding high-quality input data leads to more accurate and dependable results, so one approach is to have the City add that additional 10-years of data for analysis. If, however, that process would be burdensome or the City does not have a high degree of confidence in that data, a second approach is to perform a preliminary analysis of the first 10-years of break data to determine if high-quality predictions of future breaks can be produced.

Very importantly, our approach incorporates abandoned watermain and their breaks, provided the data is available. Including abandoned pipe data in the model calibration enhances predictive results, and this type of data is often overlooked by less-experienced planners. Imagine predicting human longevity with only data on the living population versus including additional actuarial data – clearly, additional data enhances that prediction. The same is true for watermain. We analyze abandoned watermain data the same way as active watermain data, identifying data gaps, reviewing them with the City, and determining the value of any gap closure activities, provided the City has historical data for abandoned watermain and the associated break history.

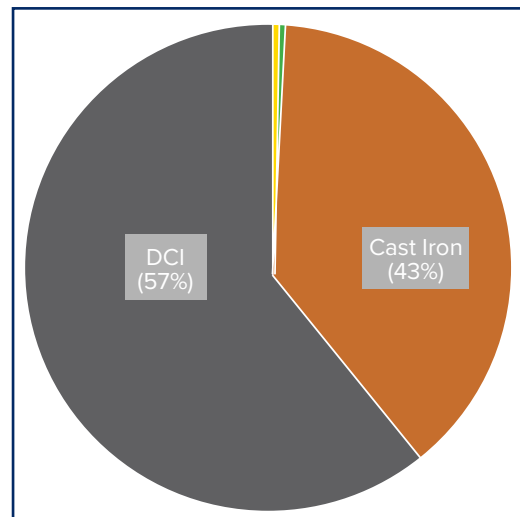


Other interactive features of the platform allow us to define filters, used to exclude some watermain and breaks from the predictive analysis. For example, because service laterals are not included in the R&R program, service connections could be excluded using a filter that removes pipes with small diameters. The software also filters out “non-natural” breaks (e.g. contractor strikes) as these breaks are not indicators of physical degradation and should not be included in failure forecasting. **These filters allow for efficient removal of inapplicable data from the analysis and enhance the accuracy of results.**

Task 4. Data Gap Closure

Resolving input data issues is fundamental to producing high-quality physical failure predictions that drive much of the watermain rehabilitation and replacement (R&R) CIP. Our approach does this transparently. Our team and the infraSOFT platform provide multiple ways of addressing gaps and improving data quality:

1. With a spatial approach by viewing a watermain in infraSOFT’s embedded map interface to determine if missing attributes can be populated based on surrounding watermain attributes
2. With a statistical approach that allows correcting one issue on many watermain at a time, such as changing the material of a watermain based on the year of installation or eliminating duplicate watermain (same ID, diameter, length, install date)
3. Using infraSOFT’s machine learning capacity; missing data is interpolated using logic and the knowledge “learned” from populated data from the entire the City dataset.



This pie chart, taken from the 2018 Water Asset Management Plan, show that nearly 100% of the Huber Heights water distribution system is comprised of ductile iron and cast iron pipes.

The software functionality to close gaps and the level of attention to data input quality are distinguishing features of our approach that result in better predictions and a more targeted CIP.

If there are data gaps populated to a low degree of confidence or if there are critical data gaps remaining after using the bullet list of methods above, B&N will consult with the City to determine if further investigation is justified (i.e. utilizing the City’s construction management data or other source data). While watermain with issues are to be excluded from the calibration of the model, accurate break predictions can still be made without a fully populated dataset.

Changing asset attribute data in infraSOFT does not automatically update GIS, a concern with some utilities that want to preserve the integrity of their source data. Original and updated data is preserved in infraSOFT, and the full change history is cataloged (who edited what and when). The

details of the change history allow the City to determine what proportion of the updated data in infraSOFT should be updated in GIS records following appropriate approval processes. InfraSOFT has an interactive feature that allows an authorized utility user to approve GIS changes in the platform.

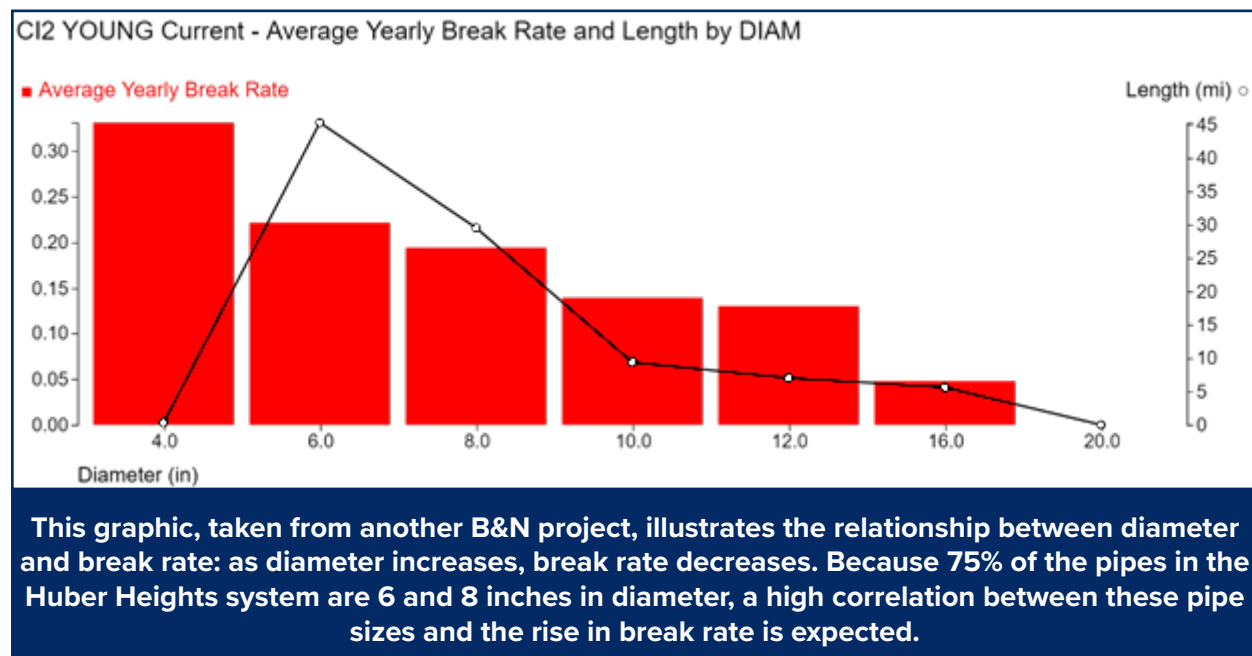
Watermain Break Risk Determination



Tasks 5 and 6. Break Data Analysis and Failure Forecasting

Our watermain break prediction tool, infraSOFT, uses watermain attribute data, break data, and any other input data (e.g., soil type, pressure data) to compute the likelihood of failure (LoF) for every watermain in the analysis. The LoF for every pipe is projected for every year in the planning horizon, understanding that LoF will increase as each pipe ages. We use that data not only to make pipe-by-pipe investment decisions, but also can project performance of the entire distribution system in each year in the planning horizon and beyond so the utility sees how the break rate progresses (i.e., aging curves as seen in Figure 2). We can project the break rate for many scenarios, including the “do nothing” alternative where system-wide break rate, overall number of breaks, and system-wide risk exposure are projected assuming no replacement. We then project those same parameters using different investment scenarios, allowing us to calculate a benefit to cost ratio, where the benefits are measured in terms of reduced impacts of breaks.

The platform uses two analytical approaches to forecast future condition and generate LoF and aging curves: (a) an advanced statistical regression model, LEYP (Linear Extended Yule Process) and (b) machine learning. These advanced statistical methods are superior to more rudimentary scoring systems that involve assigning 1-5 scores to a series of “likelihood parameters” like age, size, and material and assigning subjective weights to each of those factors. Advanced analytical approaches automatically assign weights based on analytics, removing subjectivity. These methods have been shown to make predictions far more accurate.



Calibrating survival models of this nature is complex, and our experience with calibrations will help yield the best results. The validation approach is just as important. As an example of our validation: if a utility has 20 years of break data, the model is calibrated using the first 17 years. Predictions are made using the calibrated model for the following 3 years, and model predictions are compared with actual breaks. Our experience has shown well calibrated LEYP models (something that

DID YOU KNOW?

LEYP modeling incorporates the Weibull model that takes time into account; the Proportional Hazard Model (PHM) that accounts for physical watermain characteristics and environmental risk factors (material, diameter, soil, etc.) and Yule, which takes past breaks into account (crucial because the more a watermain has broken in the past, the more likely it is to break in the future).

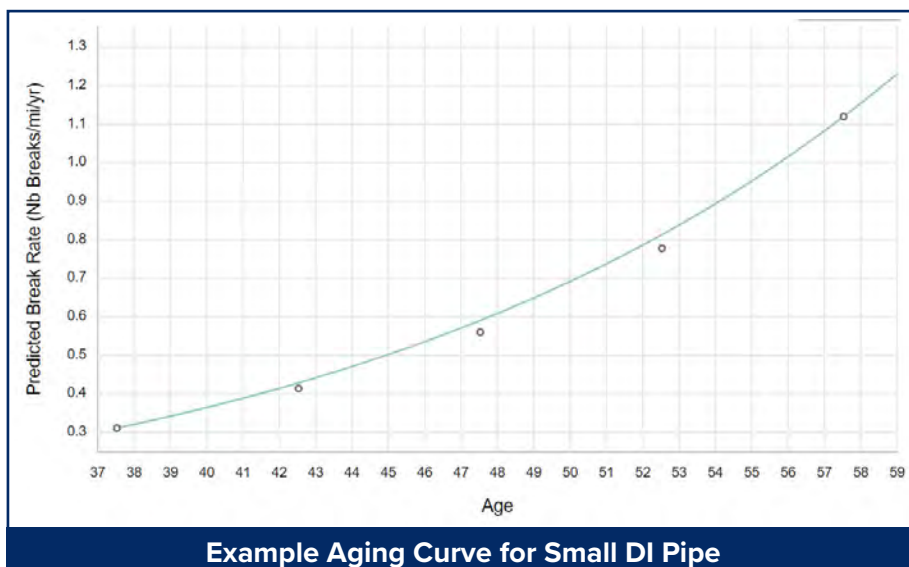
requires experience) and machine learning models yield similar validation for the highest priority watermain. Machine learning tends to perform better for the next priority tiers, and as such machine learning will be our default calibration method.

Evaluating the Impacts of Corrosive Soils. The calibrated model predicts the impacts of expected deterioration of pipes due to corrosion, accounting for the influence of age, size, material, and soil properties. For soil properties, our approach will be to review existing data (e.g. USGS soil maps) to determine which pipes are in aggressive / corrosive soils and which are not. infraPLAN can then compare the performance of pipes in corrosive soils versus those that are not by examining their respective break rates. This analysis is conducted on a material-by-material basis, understanding that corrosive soils may have different impacts on pipes based on materials. Almost the entire existing Huber Heights distribution system was constructed beginning in 1956 and is therefore almost entirely cast iron and ductile iron pipe. Higher break rates are

expected for iron pipes in corrosive soils. We do not recommend soil borings to determine soil characteristics until the desktop calibration and verification are complete. We will discuss the results of the desktop investigation described above with the City before determining if borings are needed, and if so, we will use the model to limit the number of borings needed by doing area-by-area analysis .

Evaluating the impacts of changes in pressure zones.

The water distribution system consists of 4 pressure districts: Northwest, Huber East, Fishburg Road/Aaron Lane, and Huber West . These pressures zones were established in the year 2019 with the commissioning of the US 40, Emeraldgate, and Wildcat pump stations. These booster stations increase pressure to an industrial zone and may contribute to an increase in the break rate for that zone.



While it remains to be seen whether the change in zones has impacted break rates, the approach to making that determination is greatly simplified by our analytics software, infraSOFT. Aging curves (graphs that show how the break rate changes over time as pipe age), will be created for each zone using data from before the change in pressure zones was implemented. These aging curves will be used to estimate what the break rate in each of the zones should have been in recent years if the pressure zone changes had not taken place. That data will be compared to actual break rate in each zone after the zone changes to measure impacts of the changes.

Evaluating the impacts of changes in the water treatment process and finished water quality.

This approach to this evaluation is similar to the approach for pressure zones. Because finished water quality may impact break rate in the entire system, a prediction for the system-wide break

rate for the entire distribution system is made using data prior to changes in the treatment process which occurred in 2020. Those predictions are compared to actual system-wide break rate to determine if there was an increase in breaks compared to what was expected.

Changes in pressure zones and the water treatment process were both made recently, and decoupling their impacts is important. Our approach to that challenge is to perform the water quality impact analysis first. If areas not impacted by the pressure zone changes show a rise in break rate, they are likely to be attributed to finished water quality. Breaks that can be attributed to the change in finished water quality should be removed from the analysis of pressure zones so that the impact of pressure zones is not overestimated.

Evaluating Changes in watermain construction techniques. Our approach to evaluating the impacts of changes in watermain construction technique (i.e. a change in the type of backfill used beginning in roughly 1980), is also simplified considerably using infraSOFT. Aging curves will be developed for two cohorts of pipes, one cohort of pipes installed prior to backfill changes and one for pipes installed after backfill changes. The curves for each will be compared to determine if either is experiencing a higher deterioration rate.

Whether evaluating changes in finished water quality, pressure zones, or backfill, infraSOFT simplifies what are otherwise highly complex analyses that cannot be completed accurately with simplified approaches. B&N and infraPLAN used the software to help the Anchorage Water and Wastewater Utility determine if the November 2018 magnitude-7.0 earthquake that rocked the greater Anchorage area had a lasting impact on watermain break rate.



Task 7. Consequence of Failure Estimation

B&N has been at the forefront of watermain break consequence of failure (CoF) work for a decade. We were one of the most significant contributors to the Water Research Foundation's Project #4451 (<https://www.waterrf.org/research/projects/managing-infrastructure-risk-consequence-failure-buried-assets>), in which the full triple-bottom-line costs of watermain breaks were assessed and monetized. Our work showed indirect social costs (e.g. property damage, outages, traffic) can be up to 5 times higher than direct financial costs to the utility. Our approach embeds that research to determine the full monetized CoF of breaks to the City and its customers, which significantly supports appropriate investment decision making, discussed in future tasks.

We understand from our participation in the WRF study and similar project work that breaks on small watermain generally have minimal impacts, with financial consequences representing half to two-thirds of the overall impacts. For larger watermain breaks, costs vary widely and the sum of social costs (surface damage, property damage and traffic) is half to two-thirds of overall costs. We have researched the monetary impacts to hospitals, restaurants, grocers, hotels, schools and non-wet businesses (e.g., clothing stores, bike shops) when water service is interrupted by a break itself or the subsequent repair work, and will use this knowledge to support the assignment of CoF to every watermain in the system.

Our approach to evaluating CoF incorporates both (a) proximity factors using GIS and (b) hydraulic consequences (interruption in service) using data from the distribution hydraulic model. If a watermain is in close proximity to a major road, railroad, waterbody, or other structure, the potential for property damage rises along with the cost of the repair.

Depending on data available from the City's hydraulic model, B&N develops highly sophisticated calculations of the hydraulic impacts of pipe breaks. We recently completed a project for Fort Wayne where a break was simulated in the hydraulic model on every watermain in the system; the resulting hydraulic impacts such as pressure drops and customers without water were determined. A hydraulic CoF score was assigned to every watermain using this technique. This hydraulic criticality work will be conducted if the model supports this analysis, which is conducted in WaterGEMS, provided that the model is fully populated with distribution system isolation valves. Otherwise, B&N will associate critical customer and large users to watermain using GIS functionality to develop hydraulic consequence scores .

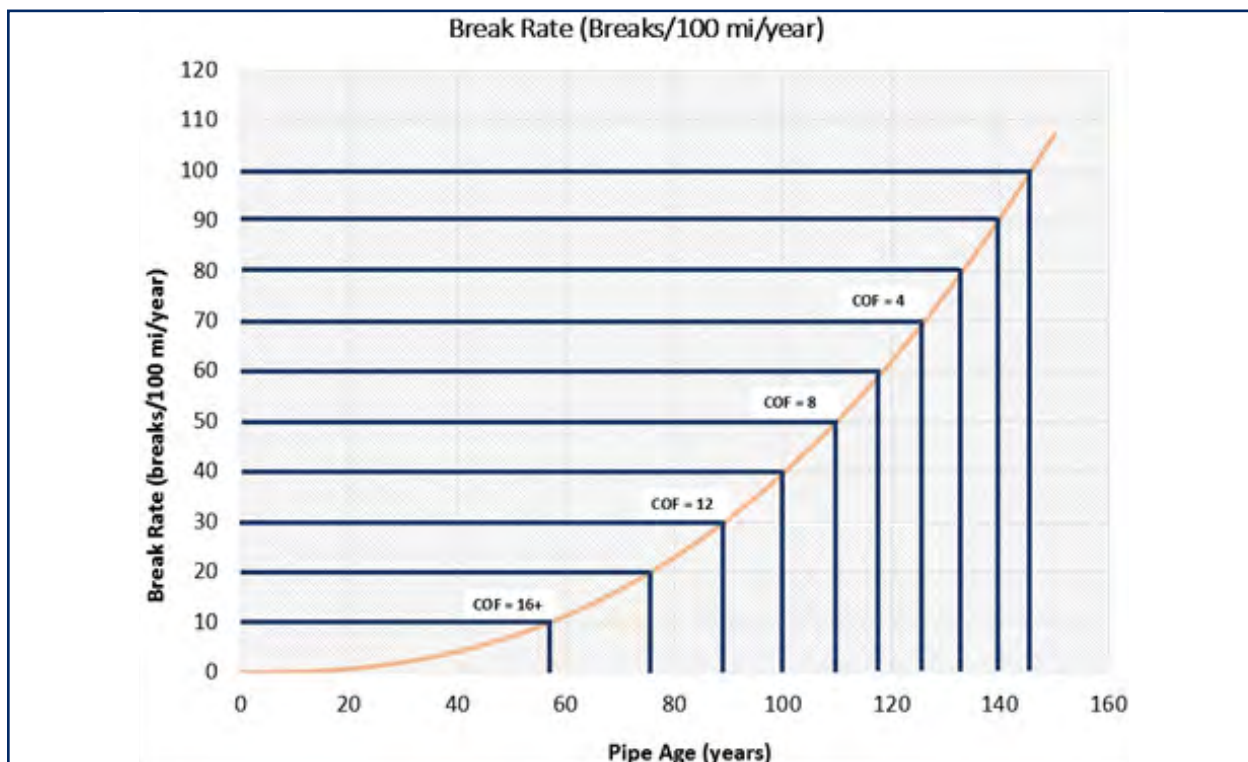
The following table, developed for a project B&N conducted for the City of Fort Wayne, IN, summarizes the factors that contribute to watermain criticality (consequence of failure) and how they can be rated. An advantage to our approach is that in place of the 1 to 5 scoring shown in the table, each level of consequence is associated with dollar value that represents both financial impacts as well as impacts to customers and the community.

Criteria	1	2	3	4	5
Pipe diameter (inches)	< 8	8 - 10	12 - 16	18 - 24	> 24
Adjacency to Body of Water	N/A	N/A	Within 20 ft.	Intersecting	N/A
Adjacency to Railroads	N/A	Within 5 ft.	Intersecting	N/A	N/A
Adjacency to Roads	Collector	Arterial	Highway	N/A	N/A
Critical Customers	< 100 residential	100 - 500 residential	School OR > 500 residential	2 schools OR 1 assisted living/nursing home/prison	Hospitals/dialysis centers OR 3+ schools OR 1 assisted living/nursing home/prison PLUS any other critical customer
Critical Consumption (Monthly average in CCF)	< 1,000	1,000 - 3,999	4,000 - 7,499	7,500 - 10,000	> 10,000
Unbalanced Model					Yes

Task 8 Identify Risks

Determining the risk of watermain involves multiplying LoF times CoF. Because our predictive model produces an annual probability of failure (the LoF component) and our CoF approach produces a monetized value, our risk values are determined in USD per year, an extraordinary advantage over the 1-5 scoring used in other approaches. This monetized risk-cost allows for direct benefit-to-cost ratios (BCR) to be calculated so the City can determine when investments will produce an acceptable BCR. This information will be valuable in determine appropriate investment levels over time to manage the break rate.

Identification of risks on a pipe-by-pipe basis is crucial because the replacement of watermain should be made based on risk. For example, if a watermain has a high break rate, the City may choose not to replace it if the consequence of failure is very low. Conversely, even if a pipe has a lower break rate, replacement may be a good investment if the consequence of failure of that pipe is very high. Our approach to risk quantification has been applied for over a decade with great success in constructing watermain replacement plans that have significantly reduced break rates.



This illustration, taken from B&N's work with the City of Westerville, OH, shows the relationship between likelihood and consequence of failure (i.e. risk) and how it was used to determine when pipes should be replaced. The aging curve for a given pipe is represented by the gold line. For high consequence pipes, a lower break rate is considered acceptable, meaning it would be replaced at a younger age to a comparable pipe with a low consequence of failure.

Address Distribution Capacity Risks

Task 9. Identify Capacity Issues

Once calibrated, the model will be used to determine if there are locations in the distribution system that may experience shortfalls by the end of the planning horizon (25 years). Based on assumptions of growth provided by the City, those locations will be identified with a description of the impacted areas.

NOTE: The task labeled **Task 9a** is necessary for this project, but it will be completed under a separate project with Suez. The task labeled as **Task 9b** is optional and will be determined after any capacity issues are identified.

Task 9a. Update and Calibrate the Hydraulic Model (To be Performed Under a Separate Project)

Review Existing Information. B&N has maintained and utilized the Huber Heights hydraulic model using Bentley WaterGEMS® software to support the City with various planning efforts in the past. Our approach is to leverage that experience to update the model efficiently to produce the best results.

It has been several years since the hydraulic model has been updated, and additional data will need to be reviewed to update the model configuration. We will review the following data provided by the city to perform the update: recent water production and consumption records, pump curves and pump operating records for booster stations and the Rip Rap Road treatment plant, and historic tank level records. Ground contour data, factory pump curves and tank operating levels obtained from SCADA data will also be utilized to build the model capable of accurately assessing capacity and predicting flows and pressures.

B&N will also meet with the City to confirm our understanding of updates to the physical configuration of the pipe network. A variety of other updates will improve the model accuracy and functionality.

Steady-State Calibration. Given the potential investments that may be considered to address future growth in the City, it is important that the hydraulic model used to inform those investments is as accurate as possible through proper calibration. B&N will use watermain asset data and operational data to calibrate the model. The model will first be calibrated to run at steady-state (SS) simulation. SS calibration will utilize hydrant flow test data along with SCADA data for tank levels and pump status at the time of the hydrant tests.

Calibration is an iterative process. Because pipes deteriorate over time, their roughness can increase, changing system hydraulics. Calibration involves incrementally adjusting roughness coefficients to achieve the best match with actual hydraulics. Pump efficiency also degrades, and the model can be adjusted to reflect this, though the pumps in the Huber Heights booster stations are relatively new. In addition, unexpectedly closed valves can often be found, and unknown pipe sizes can be estimated.

The goals of calibration will be to model pressures to within 4-psi of actual conditions at maximum flow and to model tank level fluctuations to within 5 feet or less. The quality and comprehensiveness of data obtained from the City will determine the potential accuracy of the calibration. We will work with the City to limit their effort in gathering data will gathering enough data to produce accurate evaluations of the system.

Extended Period Simulation (EPS) Calibration. EPS calibration tends to incrementally enhance the accuracy of the model. Based on our knowledge of Huber Heights distribution system operations, we recommend consideration of EPS calibration. EPS will be beneficial in determining if water age is a concern in the future as the City grows.

All of the data used in the SS simulation would be used in the EPS calibration with additional data needed to describe how demands, pumps, valves, and tank levels change over a specific time range, commonly 24 hours. Operational controls and set points would be used to control the operation of pumps, valves, and pipes in the model to simulate actual system operational changes over time.

Task 9b. Model Future Projects (If Authorized)

The calibrated model will be used to model system performance under a variety of future scenarios. For future flows, demands will be forecasted for an agreed-upon planning horizon (25 years). Average day demand (ADD), maximum day demand (MDD), and peak hour demand (PHD) factors will be calculated using historic flow data and these factors, coupled with growth estimates provided by the City, will support the modeling of future conditions.

Known or expected expansions of the system to support development will be modeled to determine what additional infrastructure may be needed. The model can be used to determine which areas would be better for growth than others based on predicted hydraulic performance.

Where hydraulic issues exist, the model will be used to simulate high-level options to resolve them through the planning horizon. Issues could include areas of low pressure, inadequate fire flow, undersized mains, closed valves, poor tank turnover, and high water-age. If operational solutions are possible, they will be explored to avoid costs. For example, increasing pumping and system pressures operationally (rather than adding pumps or raising the elevation of storage) may allow additional flow to be pushed to extremes of the system, where pressure and flow tend to be lowest. Decreasing pressure near tanks may allow for higher tank turnover rates and decreasing water age, as opposed to potentially adding jockey pumps to circulate tanks.

Summary of Task 9b Results. If the City approves the scope involving investigation of potential solutions, recommendations to support development will also be presented. Recommendations will be prioritized, and planning-level cost estimates for recommendations will be provided.

Recommendations

Task 10. Operational Changes

Determining whether operational change to the system are appropriate to manage the rising break rate will involve considerable discussion with the City regarding the service levels it wants to provide its customers. For example, the additional pressure provided by the City's three recently constructed booster stations improve service levels and may potentially alleviate fire flow issues related to future development in the industrial areas of the City, but they are not necessary to maintain service. It may be possible to change the operation of the booster stations to balance the need to provide a higher level of service with the desire to reduce break rates, if break rates in the industrial zone are problematic. Similarly, tweaks to finished water quality may be possible to address the rising break rate, but this must be balanced with the desire to continue to produce excellent water quality. Our approach will be to meet with the City and determine their desired service levels, then evaluate potential operational changes to estimate the benefits of reducing the break rate.

Task 11. Project Prioritization and Sizing

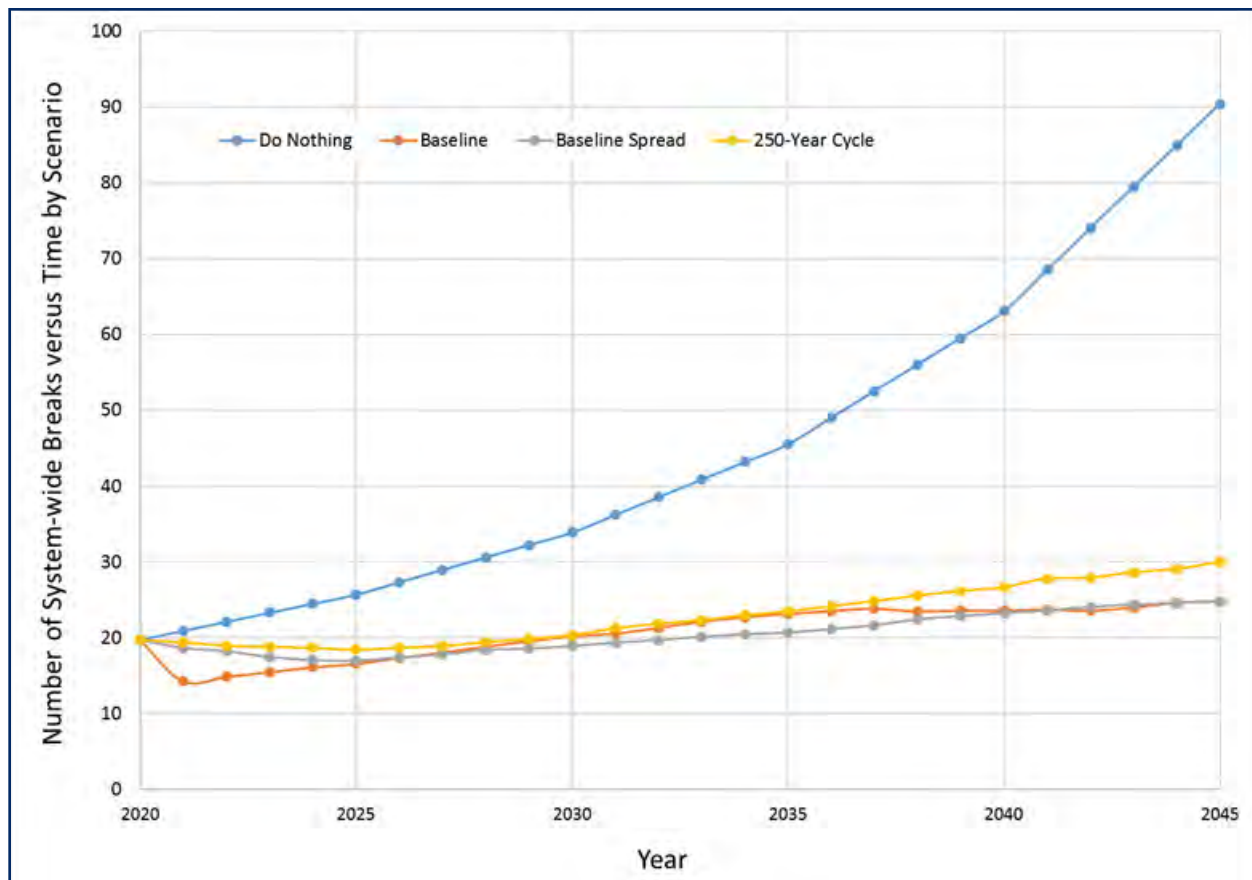
Projects will be prioritized based on their benefit-to-cost ratio. For a watermain rehabilitation or replacement (R&R), the benefit is the reduction in risk, and the cost is based on the estimate of costs to perform the R&R. Cost estimating for replacements are based on the City's construction cost database, supplemented if necessary, with our team's local knowledge. If the City is aware of any upcoming street resurfacing or reconstruction projects, additional benefits of timing pipe R&R with those projects can be assigned to pipe projects.

Our approach is to assign a BCR for every pipe in the system and rank replacements. Understanding constraints and/or preferences for project sizes will help support the bundling of replacements into projects of acceptable size / investment.

Watermain Rehabilitation versus Replacement. Both rehabilitation (i.e. pipe lining) and replacement are viable methods to reduce pipe risk. In our experience, replacement is generally the most cost-effective risk reduction method for all but the most difficult pipe to access, when lining may offer a better price point. Lining involves its own set of complicating risk factors during installation. For the purposes of this analysis, our approach assumed replacement over lining, but our subject matter expert, Tim Antos, will perform an evaluation of both methods for the City based on recent supply chain issues, accessibility and applicability per individual watermain for both methods and shall include that analysis for consideration. Ultimately, these methods will need to be evaluated on a project-by-project basis over the course of the entire CIP and may change year to year.

Task 12. Replacement Planning Analysis

infraSOFT allows us to determine the benefits of R&R projects well beyond the 25-year planning horizon referenced in the RFP. Our approach is to evaluate multiple funding levels and the associated impacts on system-wide break rate, number of breaks, and risk. The graphic below, taken from our work with another community, illustrates how the number of annual system-wide breaks would be impacted by various funding levels. We will explore funding levels based on monetary constraints, as well as evaluate what funding levels would be needed to achieve a desired level of risk or break rate.



Task 13. Draft and Final Reports, Presentations and Data

B&N prepares draft and final documents to address all items requested in the RFP as part of its standard project deliverables for watermain evaluation projects. Many of the illustrations in this proposal come from reports we prepared for other water systems, and these illustrations greatly enhance understanding of the information presented. Presentation of the results to the City will assemble many of these charts, graphs, and tables into a PowerPoint that can be used not only for the project team but subsequent communication to City Council and the public.

Task 14. Project Management

Our project manager (PM) leads all communications and tracks the progress of each task against budgeted costs and schedule. Our project management software updates cost daily, and time charged weekly. Our PM monitors progress weekly to see that our team meets expectations and takes immediate corrective actions if needed. The City will be informed along the way. Monthly progress reports will be submitted with our invoices.

RELATED TECHNICAL EXPERIENCE

Westerville Water Main Replacement Plan

CITY OF WESTERVILLE

Westerville, Ohio

RELEVANT FEATURES

- ➔ Watermain Replacement Planning
- ➔ Risk Assessment

Using utility-specific GIS and watermain break data, B&N used state-of-the-art predictive software to estimate the failure probability of every watermain in the water distribution system. B&N worked with the City to compile 15 years of historical break data from work orders and associated breaks with pipes in GIS. B&N also performed extensive quality checks on pipe and break data to ensure output would be as accurate as possible. Pipes were divided into cohorts based on material, diameter, and installation data, and the performance of pipes in each cohort was modeled to develop predictions of performance for each pipe.

Additionally, pipe attribute data and spatial information in GIS was used to estimate the consequence of watermain failures based on proximity to roads, structures, waterbodies, and critical customers.

Probability and consequence data were used to determine which pipes posed the greatest risks, and these pipes were prioritized for proactive replacement. B&N used cost estimates for replacements and modeled three different investment scenarios and their associated impacts on breaks and risks. Recommendations for investment and a 5-year CIP were provided.

PROJECT DATA

Key Staff: Kevin Campanella - Project Manager
I Kris Popovich - GIS

Contract Amount: \$37,980

Reference: Kevin Weaver | 614.901.6746 |
kevin.weaver@westerville.org

Schedule: December 2018 - April 2020

Springboro Water Master Plan

CITY OF SPRINGBORO

Springboro, Ohio

RELEVANT FEATURES

- ➔ Utility and Capital Planning
- ➔ Asset Management
- ➔ Distribution System Modeling

B&N developed a new water distribution system model using WaterGEMS modeling software, including steady state and extended period calibration and simulations. Future growth was incorporated into the model, and the system was evaluated for capacity, fire-flow, pressure, and water age. B&N also performed the water system Risk and Resilience Assessment and assessed the condition of all critical facilities. For all aspects of the project, B&N developed a 20-year CIP, reviewed and approved by the City.

PROJECT DATA

Key Staff: Kevin Campanella - Project Manager

Contract Amount: \$75,000

Reference: Elmer Dudas | 937.748.4365

Schedule: January 2021 - February 2022

Westerville Hydraulic Model

CITY OF WESTERVILLE

Westerville, Ohio

RELEVANT FEATURES

- WaterGEMS Hydraulic Modeling
- Distribution System Evaluation

B&N developed a new hydraulic model for the City of Westerville to replace the existing model that was developed in 2001. The City's current GIS database was used to build the new model in WaterGEMS® modeling software, which consists of 205 miles of pipeline, two pressure zones, three storage tanks, one booster station, and four high-service pumps. The new model was used to evaluate the hydraulic performance of the system, including a water age and fire flow evaluation. In addition to the model update, B&N has utilized the current model to assist the City with the hydraulic evaluation of proposed water main improvements on an as-needed basis.

PROJECT DATA

Key Staff: Kevin Campanella - Project Manager
Kris Popovich - GIS Designer

Contract Amount: \$29,100

Reference: Kevin Weaver | 614.901.6746 |
kevin.weaver@westerville.org

Schedule: December 2017 - July 2019

Asset Management

ANCHORAGE WATER & WASTEWATER
UTILITY (AWWU)

Anchorage, Alaska



RELEVANT FEATURES

- Asset Management
- Capital Planning
- Watermain Replacement Planning

Since 2015, B&N has served AWWU through an asset management (AM) term contract. In addition to 15 other asset management task orders, the B&N team (which includes a partner in this proposal, infraPLAN) has assisted extensively with AWWU's watermain replacement planning program, evaluating asset inventory and break data from GIS, identifying cohorts of similarly performing pipes, determining the correlation between pipe age, size, material, and surrounding soils on break rate, and developing break performance predictions at the pipe level using a state-of-the-art software platform developed by infraPLAN. We also assisted AWWU in determining the impacts of the 2018 magnitude-7.0 earthquake on the water distribution system break rate. **B&N, with infraPLAN, has been AWWU's "go-to" team for watermain replacement planning services for 6 years.**

PROJECT DATA

Key Staff: Kevin Campanella - Project Manager
Kris Popovich - GIS Designer

Contract Amount: \$600,000

Reference: Jacques Annandale | 907.786.5611 |
Jacques.Annandale@awwu.biz

Schedule: April 2019 - Present

Risk and Resilience Assessment and Emergency Preparedness Plan Update

CITY OF HUBER HEIGHTS

Huber Heights, Ohio



RELEVANT FEATURES

- ➔ Risk and Resilience Assessment
- ➔ Critical Infrastructure
- ➔ Public Water Systems

B&N performed a risk and resilience assessment (RRA) for the City of Huber Heights to identify potential vulnerabilities to their public water system in early 2021. Critical facilities, including source water wells, the Rip Rap Road treatment facility, three booster stations and four elevated storage tanks, were inspected to determine the presence of physical security countermeasures. Cybersecurity was also assessed. Recommendations for were made for potential capital, operational, and IT-based security improvements. In addition, contingency plan improvements were recommended for any significant risks that could not be addressed cost-effectively. Under contract with Suez, B&N developed an updated Contingency / Emergency Preparedness Plan (ERP) update with specific incident action checklists that meet not only federal AWIA 2018 requirements but also Ohio Administrative Code requirements for contingency plans. B&N and partner Launch! Consulting facilitated a collaborative session between Huber Heights and Suez water staff, other city staff that would be involved in emergency response, and the county emergency management agency to modify emergency action plans to reflect a unified response to emergencies.

PROJECT DATA

Key Staff: Kevin Campanella - Project Manager
I Mark Upite - Project Engineer

Contract Amount: \$48,000

Reference: Russ Bergman, Huber Heights City Engineer | 937.237.5816 | rbergman@hhoh.org

Schedule: January 2021 - January 2022

Asset Management Plan Development

CITY OF HUBER HEIGHTS

Huber Heights, Ohio



RELEVANT FEATURES

- ➔ Asset Management
- ➔ Public Water Systems
- ➔ Water System Improvements

B&N assisted the Huber Heights water utility with preparation of an asset management plan (AMP) to address Ohio EPA legislation requiring all public water systems to prepare written AMPs by October 1, 2018. This involved an extensive document review process and interviews with Huber Heights and Suez staff in many disciplines to document existing AM processes. B&N uses a hybrid of the WRF® SAM-GAP tool and international benchmarking frameworks to rate AM practices and identify opportunities to improve. B&N also led the City through a “drivers exercise” to determine top priorities to align and prioritize AM opportunities. The AMP contained a series of improvement opportunities and was completed in time to comply with regulatory deadlines.

PROJECT DATA

Key Staff: Kevin Campanella - Project Manager
I Mark Upite - Project Engineer

Contract Amount: \$22,000

Reference: Russ Bergman, Huber Heights City Engineer | 937.237.5816 | rbergman@hhoh.org

Schedule: March 2018 - October 2018

Water System Model

CITY OF HUBER HEIGHTS

Huber Heights, Ohio



RELEVANT FEATURES

- ➔ Water Distribution System Modeling
- ➔ Water Systems

The City of Huber Heights is served by over 182 miles of water mains. In 2006, the City expanded its Rip Rap Road Water Treatment Plant (RRRWTP) from 1.4 to 7.0-MGD. With this expansion, the City shifted primary production to RRRWTP; however, the nearly fivefold increase in pumping rates from RRRWTP significantly increased system pressures in the high service main and adjacent branches to unacceptable levels. This, coupled with other system needs, prompted the City to authorize the development of a distribution system model.

B&N created a steady-state model representation of the existing distribution system using WaterCAD software. Three water demand scenarios (average day, peak day, peak hour) were created and used as a baseline comparison to the actual operation of the distribution system.

B&N is the firm the City hires to update the City's distribution system model when the need arises.

PROJECT DATA

Key Staff: Mark Upite - Project Engineer

Contract Amount: \$40,800

Reference: Russ Bergman, PE | 937.237.5816 | rbergman@hhoh.org

Schedule: 2007

Akron Steel Transmission Force Main Corrosion Study

AKRON WATER SUPPLY BUREAU

Kent, Ohio



RELEVANT FEATURES

- ➔ Non-Destructive Testing
- ➔ Soils Analysis
- ➔ Extreme Values Analysis
- ➔ Direct Examination
- ➔ Corrosion Study

The purpose of this study was to assess the condition of existing 24-inch, 36-inch, and 48-inch steel potable water forcemain for the City of Akron. The forcemains were excavated in select locations and non-destructive testing procedures were conducted to measure the thickness of remaining pipe and depth of pitting due to corrosion. Soils analysis, DC and AC readings, stray current analysis, and extreme values analysis were performed at each location to determine contributing factors to corrosion of the pipe. Mapping was created with recommended repair items, and corresponding construction estimates.

PROJECT DATA

Key Staff: Tim Antos - Project Manager

Contract Amount: \$499,600

Reference: William Marchand, PE | 330.375.2796

Schedule: April 2021 - February 2022

Pikewood Manor 30" Water Transmission Main Rehabilitation Design

CITY OF ELYRIA

Elyria, Ohio



RELEVANT FEATURES

- ➔ Watermain Replacement
- ➔ Soils Analysis
- ➔ Trenchless Rehab Slip-Lining

When a 30-inch steel transmission main installed in 1937 began to fail, the City of Elyria turned to B&N for assistance with the rehabilitation of the 2,100-foot line. The location of the water main would make addressing the issue difficult, expensive, and inconvenient to residents if the repair was performed using traditional open-cut replacement methods.

B&N worked with the City's Engineering Department to select a trenchless method to renew the failing main. Slip-lining with HDPE pipe was evaluated, along with cured-in-place rehabilitation options. It was determined that slip-lining with 24-inch Fusible C-905® pipe was the best rehabilitation solution. The entire process of fusing the new 24-inch pipe and pulling it back into the 30-inch host pipe took approximately 3 weeks.

Installation transitioned to conventional construction using bell-and-spigot PVC pipe just beyond the developed areas of the project site. The open-cut and slip-line sections were connected using standard mechanical joint fittings.

PROJECT DATA

Key Staff: Tim Antos - Project Manager

Contract Amount: \$220,701

Reference: Dave Rothgery | 440.346.9699

Schedule: November 2013 - October 2015

Sugarcreek WTP and Wellfield Improvements

CANTON WATER DEPARTMENT

Canton, Ohio



RELEVANT FEATURES

- ➔ New 20" - 30" Raw Watermains
- ➔ Rehab 20"-36" Raw Watermains
- ➔ Cleaning/CCTV/Condition Assessment
- ➔ Rehabilitation Options Feasibility

B&N assisted the City to complete a Capital Improvement Plan and Design for their 22.1-MGD Sugar Creek WTP and wellfield. The design includes rehabilitation of the existing 10 wells and existing PCCP 20-inch to 36-inch raw water main and design of a new redundant 20-inch to 30-inch raw water main. For the rehabilitation of the existing main, the following options were explored: cementitious re-lining; Cured-In-Place-Pipe (CIPP) lining with either mechanical or chemical bond; Spray-In-Place-Pipe (SIPP) with either polyurea or polyurethane; cleaning, CCTV and condition assessment.

PROJECT DATA

Key Staff: Tim Antos - Project Manager

Contract Amount: \$30,000,000 (est.)

Reference: Brent Burrier, PE | 330.438.6569

Schedule: June 2022 - December 2022 (est.)

Water Research Foundation Project #4451

CITY OF COLUMBUS

Columbus, Ohio

RELEVANT FEATURES

- ➔ Watermain Break Analysis
- ➔ Watermain Replacement
- ➔ Utility Infrastructure

As a subconsultant of Abt Associates, Inc., B&N investigated the triple bottom line impacts of watermain breaks throughout the City of Columbus to determine overall impacts, including traffic, water disruptions on businesses and residents, overall financial costs to the utility and public safety departments, property damage and environmental impacts. Impacts were characterized and market externalities (i.e. non-monetary factors) were monetized based on literature research and experience working Columbus DPU planners and customers. Developed processes for utilities to predict watermain break impacts to make datadriven watermain replacement decisions.

PROJECT DATA

Key Staff: Kevin Campanella - Contributing Investigator

Contract Amount: \$10,000

Reference: Frank Blaha | 303.347.6244 | fblaha@waterrf.org

Schedule: 2015

Hydraulic Consequences of Watermain Failures

CITY OF FORT WAYNE

Fort Wayne, Indiana

RELEVANT FEATURES

- ➔ Water Distribution System Modeling
- ➔ Watermain Break Analysis
- ➔ Utility Infrastructure

B&N developed and applied a methodology to identify the criticality of every watermain and valve in the distribution system based on asset attributes and water consumption data. For pipe and valve criticality, the process involved the model “breaking” each pipe and valve in the system iteratively and running the hydraulic model with the broken asset isolated. The model is run with the isolation in place, and results include a list of impacted customers. Areas that had demand or pressure reductions were also reported. This process iterated until the failure impacts are determined for every asset.

B&N monetized the impacts of lost service and low pressure based on research B&N conducted, which documents the overall costs of watermain breaks, including direct costs to utilities, impacts on traffic, property damage, the cost of lost water service to different customer types. These values were used to develop a criticality score for every asset.

PROJECT DATA

Key Staff: Kevin Campanella - Project Manager
| Kris Popovich - GIS

Contract Amount: \$40,000

Reference: Ben Groeneweg | 260.427.1365 | ben.groeneweg@cityoffortwayne.org

Schedule: November 2016 - January 2021

Watermain Replacement Plan

AQUARION WATER COMPANY

Bridgeport, Connecticut

infraPLAN



RELEVANT FEATURES

- **infraSOFT Platform**
- **Watermain Failure Forecasting**

Watermain asset attribute data and watermain break data clean up; watermain failure forecasting; development of pipe ageing curves and remaining useful life estimates; long-term watermain rehabilitation plan; project completed using the infraSOFT platform for 3,190 miles of pipe.

PROJECT DATA

Key Staff: Annie Vanrenterghem Raven

Contract Amount: \$65,000

Reference: Daniel R. Lawrence, P.E., Director of Engineering and Planning | 203.362.3055 | 203.223.0607 | dlawrence@aquarionwater.com

Schedule: 2019

Watermain Replacement Plan

LIBERTY UTILITIES

Los Angeles, California

infraPLAN



RELEVANT FEATURES

- **Watermain Failure Analysis**
- **Long Term Watermain Rehabilitation**

Watermain failure analysis; development of ageing curves and service lives for each pipe; and long-term watermain rehabilitation plan for two water systems: Apple Valley Rancho, (510 miles of watermain) and Park Water (257 miles of watermain).

PROJECT DATA

Key Staff: Annie Vanrenterghem Raven

Contract Amount: \$130,000

Reference: Rick Dalton, Senior Director, Engineering | 562.805.2013 | 310.710.1618 | Rick.Dalton@libertyutilities.com

Schedule: May 2020

Asset Management

ANCHORAGE WATER & WASTEWATER UTILITY (AWWU)

Anchorage, Alaska

infraPLAN



RELEVANT FEATURES

- **infraSOFT Platform**
- **Watermain Failure Analysis**

As a subconsultant to Burgess & Niple, infraPLAN performed data quality checks and clean-up; failure analysis; development of aging curves and remaining useful life estimates; and training for multiple iterations of the watermain replacement plan in 2015, 2017 and 2019 for 900 miles of watermain.

PROJECT DATA

Key Staff: Annie Vanrenterghem Raven

Contract Amount: \$250,000 (total contract value for three task orders)

Reference: Edward Sorenson | 907.564.2724 | edward.sorenson@awwu.biz

Schedule: 2015, 2017, 2019

PROJECT STAFFING AND ORGANIZATION



Understanding watermain performance and investigating the causes of watermain breaks is a differentiating strength of our team.

Our project manager, **Kevin Campanella**, was a leader in establishing the Columbus Department of Public Utilities (DPU) watermain replacement planning program as DPU's AM program director from 2008-2015.

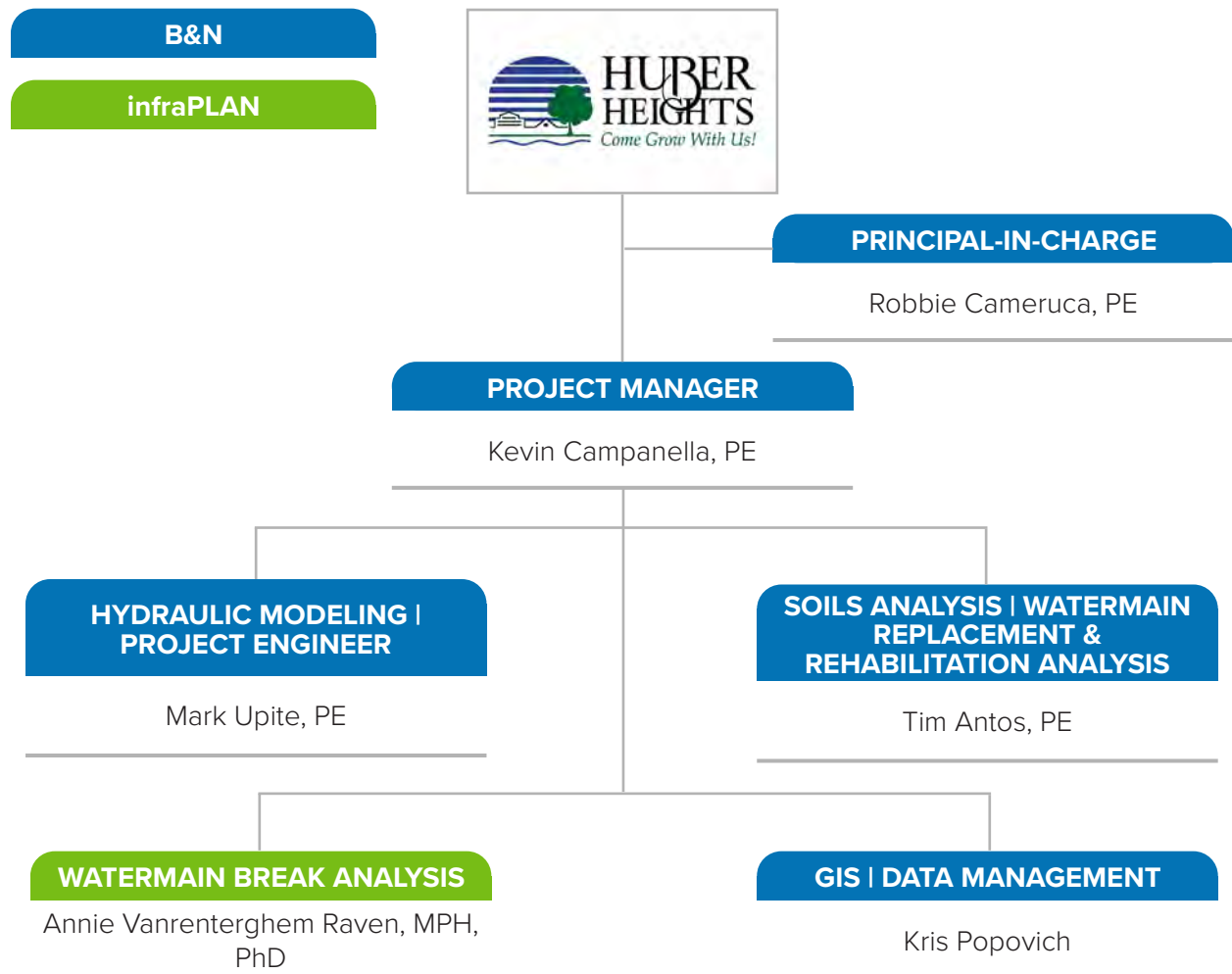
The same contractor that provided the approach and platform supporting Kevin at DPU is B&N's teaming partner for this project, infraPLAN, led by **Dr. Annie Vanrenterghem**. Since 2015 when Kevin joined B&N, he and Dr. Annie have been providing innovative project approaches with well-thought out deliverables based on your utilities goals.

Mark Upite provides not only outstanding water distribution system modeling experience to evaluate the capacity of your system, but also has worked with Huber Heights on modeling and asset management projects.

B&N's **Tim Antos** has helped communities throughout Ohio with evaluating pipe rehabilitation and replacement (R&R) options. As our expert in both physical condition assessment of pipes and exploration of the pros and cons of alternative solutions like pipe lining and replacements, Tim will play a vital role in helping us construct the recommendations for managing the distribution system break rate.

We pride ourselves on teaming with you and welcome the Huber Heights / Suez staff to work with us: brainstorming, listening and thinking together to take advantage of collective experience to solve issues and serve the City.

Organizational Chart



Resumes

Kevin Campanella, PE

Project Manager

Availability: 35%



BURGESS & NIPLE

Years with Current Firm: **6**

Total Years of Experience: **28**

Education: **BS, Civil Engineering – Cornell University | ME, Cornell University**

Background

Mr. Campanella joined Burgess & Niple in 2015 as the firm's Utility Planning Leader. For 7 years prior, he was an Assistant Director and leader of the comprehensive Asset Management (AM) Program for the City of Columbus, Department of Public Utilities. He has 23 years of experience supporting utilities with planning functions throughout their organizations, including strategic planning, capital plan prioritization and capital project evaluations, R&R planning, maintenance and reliability program advancement, and business support systems enhancements. He chairs the AWWA AM Committee's "Progress in Asset Management Survey" subcommittee, is incoming Chair of the Ohio AWWA AM Committee, and is active on the New England Water Environment Association's AM Committee.

Kevin leads B&N watermain replacement planning projects, including projects in Anchorage, AK and in Ohio for communities similar in size to Huber Heights (e.g. Westerville, OH). Kevin has also led distribution system master plans for similar Ohio water systems (Springboro, OH).

Relevant Experience

- **City of Springboro - Water Master Plan:** Project Manager
- **AWWU - Asset Management:** Project Manager
- **City of Columbus - The Consequence of Failure for Buried Assets, Water Research Foundation Project #4451:** Contributing Investigator
- **City of Westerville - Watermain Replacement Plan:** Project Manager
- **City of Fort Wayne - Hydraulic Consequences of Watermain Failures:** Project Manager
- **MSDGC - Asset Management System Implementation:** Utility Planning Leader

Current Commitments

- **AWWU:** On-call Asset Management Services
- **Aqua Texas:** Development of Emergency Preparedness Plans
- **Parkersburg Utility Board:** Emergency Response Plan Development
- **City of Columbus:** Wastewater Solids Portfolio Disposal Model Update
- **City of Chillicothe:** Asset Management Plan

Robbie Cameruca, PE
Principal-in-Charge
 Availability: 20%



BURGESS & NIPLE

Years with Current Firm: **36**
 Total Years of Experience: **36**
 Education: **BS, Electrical Engineering – The Ohio State University**

Background

Driving teams to deliver top-quality projects.

Robbie has many years of electrical engineering and project management experience. She is a skilled leader who excels at moving projects to successful completion while advocating for client needs. Robbie's project portfolio includes water and wastewater treatment plants, collection and distribution systems, green infrastructure and roadway and highway lighting design. She currently directs a team of engineers to deliver top-quality projects with a focus on efficiency and cost-effective solutions.

Robbie is the Director of the Utility Infrastructure Division of B&N. As an owner of the firm, she will oversee all of your projects and approve contractual decisions on the firm's behalf. She will ensure that the project has sufficient resources for on-time and on-budget completion.

Relevant Experience

- **City of Springboro - WTP Water Softening Alternatives Analysis:** PIC
- **AWWU - Asset Management Plan:** PIC
- **City of Huber Heights - RRA and ERP Update:** PIC
- **City of Springboro - Water Master Plan:** PIC

Current Commitments

- **Utilities Division Management**
- **Board of Directors Service**
- **Electrical and Controls Project QA/QC**
- **Business Development and Proposal Management**

Mark Upite, PE
Hydraulic Modeling | Project Engineer
 Availability: 25%



BURGESS & NIPLE

Years with Current Firm: **15**
 Total Years of Experience: **15**
 Education: **BS, Civil Engineering – The Ohio State University**

Background

Designing and modeling top-quality utility infrastructure.

Mark's experience in water and wastewater includes evaluating existing facilities; developing preliminary engineering reports; and detailed design and plan production for force mains, gravity sewers, waterlines, pump stations, and water/wastewater treatment plants. He has constructed, calibrated, and evaluated numerous water distribution system models and has developed master plans and CIPs for several water utilities. He has completed designs for 64 pump station projects since 2005.

Mark has expertise in hydraulic modeling and pump system evaluations, including diagnosing operational problems of existing pumping systems. His water distribution system modeling experience includes preparation of detailed water distribution studies using extensive modeling with WaterCAD and Water GEMS computer software.

Relevant Experience

- **City of Huber Heights - Water System Model:** Sanitary Engineer
- **Western Water Company - Water Model Water Systems:** Project Engineer
- **City of Huber Heights - System Model Update and Fire Flow Evaluation:** Project Engineer
- **City of Florence - Water Model Water Systems:** Project Engineer
- **City of Huber Heights - North Pressure Zone Model:** Project Engineer
- **City of Wyoming - Wyoming, Ohio Water Model:** Project Engineer
- **Village of Indian Hill - Water Model Water Systems:** Project Manager

Current Commitments

- **City of Lebanon:** Glosser Road Pump Station and EQ Improvements
- **Warren County:** Fosters Lift Station and Gravity Sewers Improvements

Tim Antos, PE
Soils Analysis | Watermain
Replacement and Rehabilitation
Analysis

Availability: 20%



BURGESS & NIPLE

Years with Current Firm: **21**

Total Years of Experience: **21**

Education: **BS, Civil Engineering – Cleveland State University | MS, Civil Engineering – Cleveland State University**

Background

Delivering thorough, detailed analyses that produce results.

Tim's background includes the evaluation and rehabilitation of underground water and sanitary utilities. He specializes in trenchless technologies for pipelines, including cleaning and inspection and non-destructive testing for condition assessment. Tim serves as a technical advisor for projects involving small- and large-diameter water mains and sanitary force mains.

He has been involved in the detailed design of the expansion, upgrade and rehabilitation of water distribution systems, and utility assets such as water lines, transmission mains, pump stations, and elevated water storage tanks. His career experience has had an emphasis on such trenchless technologies as horizontal directional drilling (HDD), cured-in-place pipe (CIPP) lining, slip-lining, and pipe bursting.

Tim is a member of the OAWWA Distribution Committee.

Relevant Experience

- **City of Elyria - Non-Destructive PCCP Watermain Testing:** Project Engineer
- **City of Elyria - Pikewood Manor 30" Water Transmission Main Slip-Lining Rehabilitation Design:** Project Manager
- **City of Akron - Steel Transmission Main Condition Study:** Project Manager
- **Trumbull County - Blueprint Waterline Improvements:** Project Manager
- **City of Canton - Market Avenue North Waterline Replacement:** Project Manager
- **City of Canton - Harvard Avenue Waterline Replacement:** Project Manager
- **City of Aurora - SR 43 Force Main Replacement:** Project Manager

Current Commitments

- **Trumbull County:** Meadowbrook Sewer Improvements
- **City of Niles:** Bellvue Storm Sewer Improvements
- **City of Niles:** Detention Pump Stations Condition Assessments
- **City of Solon:** Miles Road Waterline Replacement

Kris Popovich
 GIS | Data Management
 Availability: 15%



BURGESS & NIPLE

Years with Current Firm: **17**
 Total Years of Experience: **20**
 Education: **BS, Geography – The Ohio State University**

Background

Leading the way in GIS, data analysis and mapping expertise.

Kris joined B&N in 2003 as a cartographer / designer, with specialization in Cartography and GIS. He has 10 years of experience with water/ wastewater planning projects. Recently for a water master plan project for the Anchorage Water and Wastewater Utility in Anchorage, AK, Kris used Survey123, an extension of ArcGIS, to build a cloud-based tool allows B&N's condition assessment tool to be installed on mobile devices for more efficient field data acquisition. He designed dropdown menus that eliminated data entry errors and increased data collection and processing efficiency. Kris has assisted with asset characterization for AM plans based on review of asset register data in GIS and CADD.

Relevant Experience

- **AWWU - Asset Management Plan:** Built a cloud-based tool allowing for B&N's condition assessment data collection
- **City of Westerville - Westerville Hydraulic Model:** GIS Designer and support with condition assessment tools
- **City of Westerville - Water Main Replacement Plan:** GIS assessment tools
- **City of Fort Wayne - Hydraulic Consequences of Watermain Failure:** GIS assessment tools

Current Commitments

- **Aqua Texas:** Development of Emergency Preparedness Plans

Annie Vanrenterghem Raven, MPH,
PhD

Watermain Break Analysis

Availability: 25%



infraPLAN

Years with Current Firm: **14**

Total Years of Experience: **25**

Education: **Mathématiques Supérieures and Mathématiques Spéciales – Lycée Faidherbe, Lille, France | MS, Civil Engineering – Ecole Spéciale des Travaux Publics, Paris, France | MPH – Columbia University | PhD, Civil Engineering – New York University Tandon School of Engineering,**

Background

Curating comprehensive asset management plans.

For the last 24 years, Dr. Vanrenterghem's research and consulting work has focused on water and waste water infrastructure, addressing the optimal planning of short- and long-term rehabilitation projects. She is now the Managing Director of infraPLAN, a firm she created in 2008 that develops analytical models translated in functional software, and provides consulting and training. The goal is to help utilities create comprehensive and advanced analytical asset management programs, and, ultimately, identify and justify their long-term investments, and short-term projects selection. More specifically, infraPLAN models and software focus on:

- Data clean up
- Pipes and breaks statistical analyses
- Physical degradation and failure forecasting
- Aging curve and service life development
- Inspection prioritization plan
- Hydraulic criticality
- Long-term rehabilitation plan
- Multi Criteria Decision Support Systems (MCDSS) for short-term prioritization of rehabilitation projects

infraPLAN has developed a web-based platform, infraSOFT, that greatly facilitates the cleanup and statistical analysis of pipe and break data, and the calibration of failure forecasting models

Relevant Experience

- **Liberty Utilities:** Watermain Replacement Plan - including watermain failure analysis and long-term watermain rehabilitation for 767 miles of pipe
- **Aquarion Water Company:** Watermain Replacement Plan - including watermain attribute data and watermain break data for 3,190 miles of pipe
- **AWWU:** Asset Management - including 3 task orders to develop an updated watermain replacement plan and investigation into the impact of the 2018 earthquake on watermain break rates for 900 miles of pipe

Current Commitments

- **Washington Suburban Sanitary Commission:** Watermain Replacement Planning
- **American Water Company:** Watermain Replacement Planning
- **Carollo, Inc.:** Watermain Replacement Planning Support

TIMELY COMPLETION OF THE PROJECT

As stated in the RFP, all work on this project must be completed prior by September 1, 2022. A schedule to complete the work is shown below, with an anticipated kick-off meeting in the first week of March. After selection and contract approval, we will prepare a data request. To complete the work on schedule, the City must provide the data needed for the analysis in a timely manner, and data quality must be sufficient to support analysis. Our expectation is that the City will deliver all data by the second week in March, with the exception of watermain break data prior to 2012 (that data should be transmitted no later than April 1) and hydrant test data for the hydraulic model update (also expected by early April). For tasks related to the watermain rehabilitation and replacement study, key milestones include: closing data gaps by early April and the ability to leverage the hydraulic model by mid-June to support hydraulic consequence of watermain failures. For Task 9, we expect to have the model calibrated by mid-to-late June under a separate project in time to evaluate capacity by July. The calibrated model will be needed for the Task 7 as noted above.

City of Huber Heights Water Master Plan Update		2022																											
		March				April				May				June				July				August							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Kick-off Meeting																												
2	Data Review																												
3	Review Data Gaps																												
4	Data Gap Closure																												
5	Break Data Analysis																												
6	Failure Forecasting																												
7	Consequence of Failure Estimation																												
8	Identify Risks																												
9a	Update and Calibrate the Model (separate project)																												
9	Identify Capacity Issues																												
9b	Model Future Projects (if authorized)																												
10	Operational Changes																												
11	Project Prioritization and Sizing																												
12	Replacement Planning Analysis																												
13	Draft and Final Reports, Presentations, and Data																												
14	Project Management																												

ADDITIONAL INFORMATION



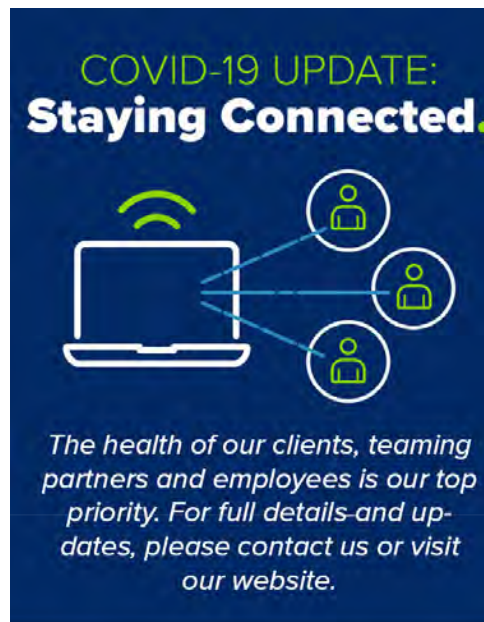
Quality Assurance/Quality Control

Quality is measured by your satisfaction with our ability to meet project goals, including the thoroughness of our work and schedule compliance. A complete check of calculations is made at key progress milestones eliminating errors, and the tools that we employ have pre-built QA/QC features that have been employed on similar projects prior to this one. An independent review team reviews all deliverables before submittal so they meet your goals.

COVID-19 Provisions

It is B&N's priority to protect the health of our clients, teaming partners, and employees while continuing to provide high-quality services. Our staff is encouraged to work both in-person and remotely depending on what is best for everyone. While we are optimistic that our workdays will return to "normal" soon, we realize there have been lasting changes, many of which benefit our clients. Flexibility and adaptability are key. At all times, we comply with Ohio's COVID-19 checklist and local policies for facial coverings and social distancing as well as suggested contract tracing guidance. Measures we have taken to ensure connectivity of service will remain in place and include:

- **Connectivity.** Our existing "virtual office" allows all employees to work from any device or location, including their homes. This means that our staff will continue to seamlessly use technology with social distancing and remote work standards in place.
- **Collaboration.** We will leverage our conferencing platforms to conduct meetings and keep this project on track. We have various software for meetings and other collaboration efforts to provide an experience that is like in-person meetings, optimizing the results and discussion. These packages have no charge to the City.
- **Project Delivery Schedules.** Our project managers will communicate frequently with our clients to ensure deadlines are met. With Work-from-Home becoming routine, project schedules have proceeded as if all were normal.
- **Communication.** Our communication strategies remain unchanged; our platform has simply become virtual instead of in-person to ensure all parties safety. When necessary to meet in-person, our staff is following the established City and state social distancing and mask protocols.



COST

The lump sum cost for the work proposed by B&N is shown below, based on the following assumptions:

- The quality of watermain attribute data, watermain break data, and USGS soils data is high and the data does not require extensive clean-up.
- The City will provide 10 years of watermain break data and, if practical, an additional 10 years of comprehensive break data believed by the City to be available in historical records.
- The City will provide comprehensive, updated data for appropriate assets and asset attributes including GIS and other data for watermain, isolation valves, tanks, pumps, and pressure zones in the distribution system.
- An updated and calibrated model, developed under a separate project with Suez, will be available for use for this project by mid-June.
- The City will provide growth assumptions to allow for hydraulic modeling of future system demands.

PROJECT COMPONENT	LUMP SUM FEE
Distribution System Study, Replacement Planning, and Identification of Capacity Issues (Tasks 1 - 14, excluding tasks 9a and 9b described below)	\$64,600

Tasks to update and calibrate the hydraulic model will be performed under a separate project. Modeling future alternatives to address any capacity issues found in the distribution system during the update of the hydraulic model (Task 9b) assumes the following:

- If Task 9b is authorized, B&N will develop and model concept-level alternatives to address issues related to distribution system hydraulics, including issues related to: capacity, water age, pressure and fire-flow. Concept-level cost estimates will accompany these alternatives.

PROJECT COMPONENT	LUMP SUM FEE
Task 9a. Update and Calibrate Model	N/A (separate project)
Task 9b. Model Future Projects (If Authorized)	TBD*

* The fee for Task 9b will depend on whether hydraulic deficiencies are predicted by the end of the planning horizon (25 years). We estimated \$10,000 for the investigation of two concept-level alternatives to address hydraulic deficiencies. This fee estimate would be adjusted if necessary after identification of capacity issues.



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AI-8210

Topics of Discussion H.

Council Work Session

Meeting Date: 02/22/2022

Water and Sewer Rate Adjustments

Submitted By: Jim Bell

Department: Finance

Division: Accounting

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 02/22/2022

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Water and Sewer Rate Adjustments

Purpose and Background

The final 2022 City Budget presentation and discussion included an option to increase water rates by 5% with a corresponding decrease in sewer rates by 7.5%. This plan would generate an estimated \$300,000 in additional water revenue annually.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Ordinance

CITY OF HUBER HEIGHTS
STATE OF OHIO

ORDINANCE NO. 2022-O-

DECREASING THE SEWER RATES IN SECTION 934.03 OF THE CODIFIED ORDINANCES OF HUBER HEIGHTS AND INCREASING THE WATER RATES IN SECTION 934.02 OF THE CODIFIED ORDINANCES OF HUBER HEIGHTS.

WHEREAS, Section 934.02 of the Codified Ordinances of the City of Huber Heights sets forth the water distribution rates for all municipal water customers; and

WHEREAS, Section 934.03 of the Codified Ordinances of the City of Huber Heights sets forth the sanitary sewer rates for water customers; and

WHEREAS, Council has determined it is necessary to increase the water distribution rates across the board effective in April 2022 by five percent (5%) and to decrease the sanitary sewer rates across the board effective in April 2022 by seven and one half (7½%) percent.

NOW, THEREFORE, BE IT ORDAINED by the City Council of Huber Heights, Ohio that:

Section 1. Effective with the first billing in April 2022, Section 934.02(a), (b) and (c) of Chapter 934 Rates and Fees for Water Distribution and Sanitary Sewer Services, of Title Three, Public Utilities, of Part Nine Streets and Public Services, of the Codified Ordinances of the City of Huber Heights is hereby amended to read as follows:

934.02 WATER DISTRIBUTION RATES.

(a) Except as provided elsewhere in this section, water rates for all customers, including customers that reside within the City limits that are in the Huber East Water District System shall be as follows.

- (1) The billing period shall be monthly and include estimated or actual readings.
- (2) The water rates to be charged shall be based on the volume of water consumption and the size of the water meter(s) servicing a property as follows:

Effective through the last billing in December 2018	Effective through the last billing in December 2018
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$1.7794
Over 1500 cubic feet	1.5045

Effective with the first billing in January 2019:	Effective with the first billing in January 2019:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$2.0463
Over 1500 cubic feet	1.7302

Effective with the first billing in January 2020:	Effective with the first billing in January 2020:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$2.3532
Over 1500 cubic feet	1.9897

Effective with the first billing in April 2021:	Effective with the first billing in April 2021:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$2.3817
Over 1500 cubic feet	2.0138

Effective with the first billing in April 2022:	Effective with the first billing in April 2022:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$2.5008
Over 1500 cubic feet	2.1145

(3) Monthly service charges for water distribution services shall be based on the size of the largest meter servicing a property as follows:

Effective through the last billing in December 2018	Effective through the last billing in December 2018	Effective through the last billing in December 2018
Meter Size	Residential User Service Charge	Commercial User Service Charge
5/8"	\$10.28	\$10.28
1"	25.40	25.40
1 1/2"	50.63	54.02
2"	80.86	86.27
3"	151.44	161.56
4"	255.82	272.95

Effective with the first billing in January 2019:	Effective with the first billing in January 2019:	Effective with the first billing in January 2019:
Meter Size	Residential User Service Charge	Commercial User Service Charge
5/8"	\$11.82	\$11.82
1"	29.21	29.21
1 1/2"	58.22	62.12
2"	92.99	99.21
3"	174.16	185.79
4"	294.19	313.89

Effective with the first billing in January 2020:	Effective with the first billing in January 2020:	Effective with the first billing in January 2020:
Meter Size	Residential User Service Charge	Commercial User Service Charge
5/8"	\$13.59	\$13.59
1"	33.59	33.59
1 1/2"	66.95	71.44
2"	106.94	114.09
3"	200.28	213.66
4"	338.32	360.97

Effective with the first	Effective with the first	Effective with the first
---------------------------------	---------------------------------	---------------------------------

billing in April 2021:	billing in April 2021:	billing in April 2021:
Meter Size	Residential User Service Charge	Commercial User Service Charge
5/8"	\$13.75	\$13.75
1"	33.99	33.99
1 1/2"	67.76	72.30
2"	108.23	115.47
3"	202.70	216.25
4"	342.41	365.34

Effective with the first billing in April 2022:	Effective with the first billing in April 2022:	Effective with the first billing in April 2022:
Meter Size	Residential User Service Charge	Commercial User Service Charge
5/8"	\$14.44	\$14.44
1"	35.69	35.69
1 1/2"	71.15	75.92
2"	113.64	121.24
3"	212.84	227.06
4"	359.53	383.61

Monthly service charges for water distribution for meter sizes not enumerated above shall be determined by the City Engineer in proportion to the rates for meter sizes listed above. The Citizens Water and Sewer Advisory Board shall hear appeals concerning service charge determinations by the City Engineer and provide a recommendation of final action to the City Council. The City Council shall make the final decision regarding any appeal concerning service charge determinations by the City Engineer.

- (b) Except as otherwise provided in this section, Huber East Water District customers located outside of the City limits shall pay rates according to the following schedule:
- (1) Monthly service charge based on meter size.

Effective through the last billing in December 2018:	Effective through the last billing in December 2018:
Meter Size	Service Charge
5/8"	\$ 15.21
1"	36.53
1 1/2"	72.05
2"	114.67
3"	214.13

Effective with the first billing in January 2019:	Effective with the first billing in January 2019:
Meter Size	Service Charge
5/8"	\$17.49
1"	42.01
1 1/2"	82.86
2"	131.87
3"	246.25

Effective with the first billing in January 2020:	Effective with the first billing in January 2020:
Meter Size	Service Charge
5/8"	\$20.11
1"	48.31

1 1/2"	95.29
2"	151.65
3"	283.19

Effective with the first billing in April 2021:	Effective with the first billing in April 2021:
Meter Size	Service Charge
5/8"	\$20.35
1"	48.89
1 1/2"	96.44
2"	153.48
3"	286.62

Effective with the first billing in April 2022:	Effective with the first billing in April, 2022:
Meter Size	Service Charge
5/8"	\$21.37
1"	51.33
1 1/2"	101.26
2"	161.15
3"	300.95

(2) Volume charge based on the volume of consumption per cubic feet.

Effective through the last billing in December 2018	Effective through the last billing in December 2018
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$4.1233
Over 1500 cubic feet	3.5601

Effective with the first billing in January 2019:	Effective with the first billing in January 2019:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$4.7418
Over 1500 cubic feet	4.0941

Effective with the first billing in January 2020:	Effective with the first billing in January 2020:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$5.4531
Over 1500 cubic feet	4.7082

Effective with the first billing in April 2021:	Effective with the first billing in April, 2021:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$5.5191
Over 1500 cubic feet	4.7652
Effective with the first billing in April 2022:	Effective with the first billing in April 2022:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$5.7951
Over 1500 cubic feet	5.0035

(c) Water Rates for Commercial/Industrial Customers not Within the City Limits.

(1) Commercial/Industrial Water District customers located outside of the City limits shall pay rates according to the following schedule:

A. Monthly service charge based on meter size.

Effective through the last billing in December 2018:	Effective through the last billing in December 2018:
Meter Size	Service Charge
5/8"	\$ 18.26
1"	43.84
1 1/2"	92.26
2"	146.82
3"	274.17

Effective with the first billing in January 2019:	Effective with the first billing in January 2019:
Meter Size	Service Charge
5/8"	\$21.00
1"	50.42
1 1/2"	106.10
2"	168.84
3"	315.30

Effective with the first billing in January 2020:	Effective with the first billing in January 2020:
Meter Size	Service Charge
5/8"	\$24.15
1"	57.98
1 1/2"	122.02
2"	194.17
3"	362.60

Effective with the first billing in April 2021:	Effective with the first billing in April 2021:
Meter Size	Service Charge
5/8"	\$24.44
1"	58.68
1 1/2"	123.50
2"	196.52
3"	366.99

Effective with the first billing in April 2022:	Effective with the first billing in April 2022:
Meter Size	Service Charge
5/8"	\$25.66
1"	61.61
1 1/2"	129.68
2"	206.35
3"	385.34

B. Volume charge based on the volume of consumption per cubic feet.

Effective through the last billing in December 2018:	Effective through the last billing in December 2018:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$4.9479
Over 1500 cubic feet	4.2842

Effective with the first billing in January 2019:	Effective with the first billing in January 2019:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$5.6901
Over 1500 cubic feet	4.9268

Effective with the first billing in January 2020:	Effective with the first billing in January 2020:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$6.5436
Over 1500 cubic feet	5.6658

Effective with the first billing in April 2021:	Effective with the first billing in April 2021:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$6.6228
Over 1500 cubic feet	5.7344

Effective with the first billing in April 2022:	Effective with the first billing in April 2022:
Consumption Volume	Rate Per 100 Cubic Feet
0 to 1500 cubic feet	\$6.9539
Over 1500 cubic feet	6.0211

- (d) Customer Equivalents. When the City agrees to provide service to apartment buildings, condominiums, townhouses, mobile home parks and office buildings to which water is furnished through a single meter, for the purpose of distribution to several customers, such billings shall be determined on the following bases:
- (1) The amounts of each such billing shall be determined on the basis of the "customer equivalents" provided by the meter employed. Such customer equivalents shall be determined by comparing the size of the meter in cross section area with the cross-section area of the five-eighths inches meter, which is the size of meter most typically installed on a service line which serves a single-family dwelling or single professional or business office. Such relationship is as follows:

Meter Size	Customer Equivalent
5/8"	1 Customer Equivalent
1"	2.5 Customer Equivalent
1 1/2"	5 Customer Equivalent
2"	8 Customer Equivalent
3"	15 Customer Equivalent
4"	40 Customer Equivalent

- (2) To determine the amount of any billing for water service pursuant to such special arrangement:
- A. The total consumption through the meter during the billing period will be divided by the customer equivalent for the meter included:

B. The applicable usage rates contained in this chapter will then be applied to the quotient to determine the charge per customer equivalent; and

C. Such charge per equivalent will then be multiplied by the customer equivalent for that meter, the product of such multiplication plus the customer charge producing the total bill as to that meter for that billing period.

Section 2. Nothing herein shall affect the annual cost of living increase based on the Consumer Price Index pursuant to Ordinance No. 2018-O-2343.

Section 3. Effective with the first billing in April 2022, Section 934.02(a) and (b) of Chapter 934 Rates and Fees for Water Distribution and Sanitary Sewer Services, of Title Three, Public Utilities, of Part Nine Streets and Public Services, of the Codified Ordinances of the City of Huber Heights is hereby amended to read as follows:

934.03 – Sanitary sewer rates.

(a) Except as provided elsewhere in this section, sanitary sewer rates for all customers shall be as provided below.

(1) The billing period for sanitary sewer rates shall be monthly.

(2) The sanitary sewer rates to be charged shall be based on the volume of water consumption measured by meters servicing customers of the system, and the size of the water meter(s) servicing a property as follows:

Consumption Volume	Rate per 100 Cubic Foot
Per Cubic Foot	\$1.4202

(3) Consumption charges shall be used to pay for wastewater treatment service charges billed to the City.

(4) Residential customers with sanitary sewer service and no water service, and therefore no water meter shall be billed at a rate of \$15.66 per month plus the monthly service charge which, for these customers, shall be at the rate of the five-eighths inches meter.

(5) Monthly service charges for sanitary sewer services shall be based on the size of the largest meter servicing a property as follows:

Meter Size	Residential User Service Charge	Commercial User Service Charge
5/8"	\$8.84	\$8.84
1"	22.10	22.10
1 1/2"	44.21	46.08
2"	70.73	73.75
3"	132.61	138.28
4"	173.00	178.67

Monthly service charges for water distribution for meter sizes not enumerated above shall be determined by the City Engineer in proportion to the rates for meter sizes listed above. The Citizens Water and Sewer Advisory Board shall hear appeals concerning service charge determinations by the City Engineer and provide a recommendation of final action to the City Council. The City Council shall make the final decision regarding any appeal concerning service charge determinations by the City Engineer.

(b) Rates for the Miami Villa Sewerage District. For any lot, parcel of land, building or premises situated within the Miami Villa plat limits of the City, having any connection with the City sanitary sewer system or otherwise discharging wastewater, either directly or indirectly, into the City sanitary sewer system, a monthly charge or rental shall be based upon the number of bedrooms or occupants of the facility, or by other means acceptable to the City Manager.

(1) The rates for residential users shall be as follows:

Number of Bedrooms	Number of Residents	Monthly Billing
--------------------	---------------------	-----------------

1-3	1-3	\$16.45
4	4	21.94
5+	5+	27.42

(2) The rates for commercial users shall be as follows:

- A. Restaurants, bars, etc.\$1.57 per seat
- B. Churches and public assembly hall\$0.08 per seat
- C. Manufacturing plant\$1.57 per employee

(3) Vacant property in the Miami Villa Sewerage District shall be billed at one-half the rate stated above for occupied property, provided notification of the vacancy is given to the City.

Section 4. Section 934.03(c) shall remain in full force and effect

Section 5. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 6. This Ordinance shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____ 2022;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-8215

Topics of Discussion I.

Council Work Session

Meeting Date: 02/22/2022

Massage Therapy Establishments

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 02/22/2022

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Massage Therapy Establishments

Purpose and Background

This agenda item is to discuss proposed amendments to Chapter 738 - Massage Therapy Establishments of the Huber Heights Codified Ordinances. The City Council enacted Ordinance No. 2018-O-2350 on October 22, 2018 providing that all massage establishments in the City must be operated by a State licensed massage therapist. Since that time, it has been determined that massage practitioners certified for Ayurveda massage should also be able to operate a massage establishment and perform massages in the City. This proposed ordinance has been reviewed by the Police Chief and the Law Director.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Ordinance

CITY OF HUBER HEIGHTS
STATE OF OHIO

ORDINANCE NO. 2022-O-

AMENDING CHAPTER 738 – MASSAGE THERAPY ESTABLISHMENTS, SECTIONS 738.01, 738.02, AND 738.03 OF THE HUBER HEIGHTS CODIFIED ORDINANCES TO PERMIT CERTAIN CERTIFIED MASSAGE PRACTITIONERS.

WHEREAS, City Council enacted Ordinance No. 2018-O-2350 on October 22, 2018 providing that all massage establishments in the City must be operated by a State licensed massage therapist; and

WHEREAS, since that time, it has been determined that massage practitioners certified for Ayurveda massage should also be able to operate a massage establishment and perform massages in the City.

NOW, THEREFORE, BE IT ORDAINED by the City Council of Huber Heights, Ohio that:

Section 1. Chapter 738 – Massage Therapy Establishments, Section 738.01 – Definitions is hereby amended as follows:

738.01 - Definitions.

For purposes of this chapter the following definitions shall apply:

Applicant means a person who has applied for a permit to operate a Massage Therapy Establishment in the City of Huber Heights.

Licensed massage therapist means a person who is licensed under Ohio R.C. Chapter 4731 to practice Massage Therapy in the State of Ohio.

Certified massage practitioner means a person who has received a certification for Ayurveda massage from a regional, state or nationally recognized certification body.

Massage service means any method of exerting pressure on, stroking, kneading, rubbing, tapping, pounding, vibrating, or stimulating the external soft tissue of the body with the hands, or with the aid of any mechanical or electrical apparatus or appliance in exchange for anything of value. Massage Services shall also include the treatment of disorders of the human body by the manipulation of soft tissue through the systematic external application of massage techniques including touch, stroking, friction, vibration, percussion, kneading, stretching, compression, and joint movements within the normal physiologic range of motion; and adjunctive thereto, the external application of water, heat, cold, topical preparations, and mechanical devices in exchange for anything of value.

Massage therapy establishment means a fixed place of business where Massage Services are provided in exchange for anything of value.

Section 2. Chapter 738 – Massage Therapy Establishments, Section 738.02 – Permit Required; Prohibited Conduct; Exemptions is hereby amended as follows:

738.02 - Permit required; prohibited conduct; exemptions.

(a) After the effective date of this chapter all Licensed Massage Therapists, Certified Massage Practitioners and Massage Therapy Establishments operating in the City of Huber Heights shall obtain a permit pursuant to this chapter to operate.

(b) It shall be unlawful for any person to offer or perform Massage Services in the City of Huber Heights unless that person is a Licensed Massage Therapist with the State of Ohio, or a Certified Massage Practitioner. This provision applies to all Massage Services

including but not limited to those performed at a Day Spa as defined under Section 1123.31 of the Huber Heights Zoning Code.

(c) It shall be unlawful for any person to operate a Massage Therapy Establishment in the City of Huber Heights unless both of the following applies:

(1) The owner or manager is a Licensed Massage Therapist in the State of Ohio, or a Certified Massage Practitioner;

(2) Massage Services provided in the Massage Therapy Establishment are performed exclusively by a Licensed Massage Therapist in the State of Ohio, or a Certified Massage Practitioner.

(d) It shall be unlawful to employ a person to perform Massage Services in a Massage Therapy Establishment in the City of Huber Heights unless that person is a Licensed Massage Therapist in the State of Ohio, or Certified Massage Practitioner.

(e) It shall be unlawful for a person to operate a Massage Therapy Establishment in the City of Huber Heights without obtaining a Certificate of Zoning Compliance to operate a Massage Therapy Establishment from the City of Huber Heights.

(f) Prohibited Conduct. No person that is ~~if~~ providing Massage Services in the City of Huber Heights shall knowingly do any of the following at, upon or within a Massage Therapy Establishment or elsewhere:

(1) Place his or her hand upon, touch with any part of his or her body, fondle in any manner, or massage the sexual or genital area of any other person;

(2) Perform, offer, or agree to perform any act which would require the touching of the sexual or genital area of any other person;

(3) Touch, offer or agree to touch the sexual or genital area of any other person with any mechanical or electrical apparatus or appliance;

(4) Wear unclean clothing, no clothing, transparent clothing, or clothing that otherwise reveals the sexual or genital areas of the masseur or masseuse;

(5) Uncover or allow the sexual or genital area of any other person to be uncovered while providing a massage;

(6) Perform, offer or agree to perform a massage with or without compensation to any individual less than 18 years of age without the full consent and permission of a parent or guardian.

(g) Exceptions. The permit requirement provisions of this chapter shall not apply to the following:

(1) Hospitals, medical facilities and public health centers (all as defined in Ohio R.C. 3701.01);

(2) A person licensed or registered by the State of Ohio Medical Board (other than a Massage Therapist) while performing his/her licensed or registered profession;

(3) A licensed cosmetologist, registered barber, registered barber apprentice, in which massages are administered only to the scalp, the face, the neck or the shoulder;

(4) A licensed chiropractor, licensed podiatrist, licensed nurse, or any other licensed health professional while performing his/her licensed or registered profession;

- (5) A trainer for any amateur, semiprofessional or professional athlete or athletic team or school athletic program;
- (6) A person working under the direct supervision of individuals or establishments mentioned in this subsection (g) while performing his/her licensed or registered profession;
- (7) A person undertaking the required course work to become a licensed massage therapist while working under the direct supervision of a licensed massage therapist;
- (8) As used in this subsection (g) "licensed" means licensed, certified, or registered to practice in the State of Ohio.

Section 3. Chapter 738 – Massage Therapy Establishments, Section 738.03 – Permit Application Process is hereby amended as follows:

738.03 - Permit application process.

(a) Permit for Massage Therapy Establishments. The Chief of Police, or his or her designee is responsible for granting, denying, revoking, and renewing Massage Therapy Establishment permits. A person who wishes to provide Massage Services in the City of Huber Heights must submit a current valid Certificate of Zoning Compliance to the City of Huber Heights Chief of Police or his/her designee and an Application for the Massage Therapy Establishment. The Application for Massage Therapy Establishment shall be accompanied by the following information:

- (1) Full legal name and current residential address of the applicant(s);
- (2) The address of the proposed Massage Therapy Establishment;
- (3) The names of any persons who will perform Massage Therapy at the Massage Therapy Establishment and copies of all licenses/certifications of those persons;
- (4) A list of other services to be offered at the Massage Therapy Establishment;
- (5) The website of the Massage Therapy Establishment, if applicable;
- (6) All felony and misdemeanor convictions, of the applicant excluding those for traffic offenses;
- (7) A copy of the license provided by the State Medical Board of Ohio for the owner and/or manager and each person who will practice Massage Therapy at the Massage Therapy Establishment(if applicable);
- (8) A printed form, signed the owner of the parcel of real property which is the proposed location of the Massage Therapy Establishment, whereby each such owner certifies that he/she/it understands and acknowledges that a Massage Therapy Establishment will be located on said parcel of real property; and
- (9) Any other information requested at the time of application.

(b) Each individual that performs Massage Services in the City shall be required to obtain a permit from the Chief of Police or his/her designee. Such permits are nontransferable. Before any individual may be issued a permit, he or she shall submit on a form to be provided by the City the following information:

- (1) The individual's name and a personal or business address where mail may be delivered.
- (2) The address where Massage Services will be performed.

(3) A copy of the license provided by the State Medical Board of Ohio or certification for Ayurveda massage practice.

(4) For renewals, a statement that the applicant has not violated and provision of this chapter.

(c) A permit granted pursuant to this section shall be subject to annual renewal by the Chief of Police upon the written permit application of the individual and a finding by the Chief of Police that the individual has not committed any act during the existence of the previous permit period which would be grounds to deny the initial permit application.

(d) Applications shall be submitted and approved before a Massage Therapy Establishment can be operated and Massage Services offered.

(e) Establishments and individuals performing Massage Services that were in operation prior to the effective date of this section must submit an application not later than 90 days after the effective date of this section.

(f) Once an application is submitted, the applicant shall receive a response in writing no later than 30 days after the date of submission.

(g) In the event that an application is denied, the applicant may submit a new application.

Section 4. All other provisions of Chapter 738 not expressly amended herein shall remain in full force and effect.

Section 5. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 6. This Ordinance shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2022;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

_____	_____
Clerk of Council	Mayor

_____	_____
Date	Date

AI-8205

Topics of Discussion J.

Council Work Session

Meeting Date: 02/22/2022

Municipal Services Request Letter - Carriage Trails - Phase II - Annexation

Submitted By: Bryan Chodkowski

Department: Economic Development

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 02/22/2022

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Municipal Services Request Letter - Carriage Trails - Phase II - Annexation

Purpose and Background

DEC, on behalf of the various landowners listed within the legislative recitals, is requesting the City adopt the proposed legislation. The proposed legislation is associated with provisions of the Ohio Revised Code and the adoption of such is a requirement should Council desire that the pending annexation matter advance upon its filing with Miami County.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Resolution

Exhibit A

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2022-R-

ADOPTING A STATEMENT INDICATING THE SERVICES THE CITY OF HUBER HEIGHTS, OHIO WILL BE PROVIDED TO THE TERRITORY PROPOSED TO BE ANNEXED TO THE CITY OF HUBER HEIGHTS PURSUANT TO A PETITION FILED WITH THE BOARD OF COMMISSIONERS OF MIAMI COUNTY BY LANDOWNERS (AS DEFINED BELOW) AND AS PROVIDED BY OHIO REVISED CODE SECTION 709.023.

WHEREAS, Gary L. Lavy, Successor Trustee (Parcel No. A01-012200), Gessaman Family Farm, LLC (Parcel Nos. A01-012300 and A01-044400), Raymond E. and Kriss T. Haren (Parcel No. A01-015000,) and the Estate of Charles O. Stafford AKA Charles Stafford (Parcel No. A01-016400), (collectively referred to as the “Landowners”), have filed with the Board of Commissions of Miami County, a petition to annex to the City of Huber Heights approximately 260.369 +/- acres of land as shown in the legal descriptions and map attached and incorporated as Exhibit A (the “Proposed Property”); and

WHEREAS, the Landowners’ property is contiguous to the City of Huber Heights Corporation limits as shown in Exhibit A; and

WHEREAS, pursuant to Ohio Revised Code Section 709.023, in a special annexation procedure where land is not excluded from the township, the municipal corporation to which annexation is proposed shall adopt a resolution stating what services the municipal corporation will provide to the land petitioned to be annexed.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Montgomery and Miami Counties, Ohio that:

Section 1. The City of Huber Heights states that within a reasonable amount of time anticipated to be approximately thirty (30) days after completion of the annexation of the Proposed Property to the City of Huber Heights, it will provide to the newly annexed territory the following services: police and fire protection; paramedic and ambulance services; professional engineering staff; park and recreation programming; maintenance of any and all public streets and alleyways falling within the jurisdiction and control of the City and keeping the same open, in repair, and free from nuisance; street lighting in accordance with any Citywide plan/policy for streetlights; planning and development services; fire inspections; and any and all other services provided at the discretion of the City of Huber Heights, which may be in addition to those services listed herein.

Section 2. If the Proposed Property is subject to zoning regulations adopted under either Chapter 303 or Chapter 519 of the Ohio Revised Code and once annexed becomes subject to City of Huber Heights zoning which permits uses in the annexed territory that the City determines are clearly incompatible with uses under current county or township zoning in the adjacent land remaining in the township, the City of Huber Heights shall require, in the zoning ordinance permitting the incompatible use, the owner of the annexed territory to provide a buffer separating the use of the annexed territory and the adjacent land remaining within the township.

Section 3. If a street or highway will be divided or segmented by the boundary line between the township and the municipal corporation as to create a road maintenance problem, the City of Huber Heights agrees to and will assume the maintenance of that street or highway or to otherwise correct the problem.

Section 4. The Clerk of Council is hereby directed to file a certified copy of this legislation with the Board of County Commissioners for Miami County, Ohio within twenty (20) days following the date that the petition was filed with the County.

Section 5. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in

such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 6. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the ____ day of _____, 2022.
____ Yeas; ____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

CERTIFICATE

The undersigned, Clerk of Council of the City of Huber Heights, Ohio, hereby certifies that the foregoing is a true and correct copy of Resolution No. 2022-R-_____ adopted by the Council of the City of Huber Heights, on _____, 2022.

Clerk of Council

DESCRIPTION OF 260.369 ACRES
BETHEL TOWNSHIP, MIAMI COUNTY, OHIO

Situated in the State of Ohio, County of Miami, Township of Bethel, being parts of Sections 13, 19 and 20, Township 2, Range 9, Miami Rivers Survey, being all that property described in a deed to Raymond E. & Kriss T. Haren, of record in Deed Book 616, Page 414, all of that property as described in a deed to Gary L. Lavy, Trustee, of record in Document No. 2019OR-07903 (Tract I only), all of that property as described in a deed to Gessaman Family Farm LLC, of record in Deed Book 722, Page 610 and all of that property as described in a deed to Estate of Charles O. Stafford AKA Charles Stafford Michael D. Stafford, Executor, of record in Deed Book 481, Page 662, all references herein being to the records of the Recorder's Office, Miami County, Ohio, and being more particularly described as follows:

Beginning at the common corner to Sections 13, 14, 19 and 20, said point being occupied by a utility pole and also being the southwesterly corner of that 20.933 acre tract as described in a deed to Jeannine F. Friend, of record in Deed Book 650, Page 134;

Thence South $84^{\circ}05'03''$ East, along the southerly line of said 20.933 acre tract, a distance of 809.57 feet to a 5/8" rebar found at a angle point in said southerly line at the northwesterly corner of said Stafford tract;

Thence South $84^{\circ}03'21''$ East, continuing along said southerly line and the southerly line of that 15.417 acre tract as described in a deed to Jeannine F. Friend (LE) and Diana Jones (RM), of record in Deed Book 576, Pages, 109, 111 and 113, and the southerly line of that 35.873 acre tract as described in a deed to Carol J. Marchelletta, of record in Document No. 2020OR-12550, a distance of 1,596.36 feet to a 5/8" rebar found at the northwesterly corner of that 1.637 acre tract as described in a deed to J. James Merz, Peggy J. Clendening and William J. Merz, Co-trustees, of record in Document No. 2018OR-08112;

Thence South $05^{\circ}01'23''$ West, along the westerly line of said 1.637 acre tract, a distance of 271.00 feet to an iron pin set at the southwesterly corner of said 1.637 acre tract;

Thence South $84^{\circ}03'18''$ East, along the southerly of said 1.637 acre tract, a distance of 263.13 feet to a 5/8" rebar found at the southwesterly corner of that 2.750 acre tract as described in a deed to J. James Merz, Peggy J. Clendening and William J. Merz, Co-trustees, of record in Document No. 2018OR-08112;

Thence South $84^{\circ}30'13''$ East, along the southerly line of said 2.750 acre tract, a distance of 334.94 feet to a mag nail found in the centerline of Mann Road (60.00 feet in width) at the southeasterly corner of said 2.750 acre tract;

Thence South $44^{\circ}29'47''$ West, along said centerline, a distance of 307.30 feet to a mag nail set at the northeasterly corner of that 1.388 acre tract as described in a deed to Eric Douglas Anderson, of record in Document No. 2020OR-13719;

Thence North $84^{\circ}06'13''$ West, along the northerly line of said 1.388 acre tract, a distance of 441.73 feet to a 5/8" rebar found at the northwesterly corner of said 1.388 acre tract;

Thence South $05^{\circ}53'47''$ West, along the westerly line of said 1.388 acre tract, a distance of 160.00 feet to a 5/8" rebar found at the southwesterly corner of said 1.388 acre tract in the northerly line of that 14.510 acre tract as described in a deed to Michael Seale and Eugenia Seale, of record in Document No. 2021OR-03790;

Thence North $84^{\circ}06'13''$ West, along said northerly line, a distance of 1554.77 feet to a 1" pinch top pin found at the northwesterly corner of said 14.51 acre tract;

Page 2 = 260.369 acres

Thence South $05^{\circ}00'47''$ West, along the westerly line of said 14.510 acre tract and the westerly line of that 2.811 acre tract as described in a deed to William L. Thayer and Bobbie J. Cantrell of record in Document No. 2016OR-14842, a distance of 671.16 feet to a 5/8" rebar found at the southwesterly corner of said 2.811 acre tract;

Thence South $84^{\circ}12'59''$ East, along the southerly line of said 2.811 acre tract, the southerly line of that 3.675 acre tract as described in a deed to William L. Thayer and Bobbie J. Cantrell of record in Document No. 2016OR-14842 and the southerly line of that 1.100 acre tract as described in a deed to Isaac B. Coppock and Michele M. Coppock of record in Deed Book 711, Page 289, a distance of 867.83 feet to a mag nail found in the centerline of Heffner Road (30 foot right of way) at the northwesterly corner of that 10.140 acre tract as described in a deed to Kerry J. Pahal, of record in Document No. 2015OR-05509;

Thence South $04^{\circ}52'03''$ West, along the westerly line of said 10.140 acre tract, a distance of 1339.34 feet to a 5/8" rebar found at the southwesterly corner of said 10.140 acre tract and in the northerly line of that 13.3764 acre tract as described in a deed to Carriage Points LTD., of record in Document No. 2021OR-04394;

Thence North $84^{\circ}20'09''$ West, along said northerly line, a distance of 1680.77 feet to a 1" pipe found at the northwesterly corner of said 13.3764 acre tract and the southeasterly corner of "Carriage Trails Section 7, Phase III", a subdivision of record in Plat Book 26, Pages 8-8A;

Thence North $05^{\circ}13'29''$ East, along the easterly line of said Carriage Trails Section 7, Phase III and the easterly perimeter of Inlot 352 (remainder) as shown and delineated upon the plat "Carriage Trails" a subdivision of record in Plat Book 22, Page 25, a distance of 732.60 feet to an iron pin found with plastic cap inscribed "M-E Companies";

Thence North $84^{\circ}54'54''$ West, along the northerly perimeter of said Inlot 352, a distance of 2,678.46 feet to an iron pin found with plastic cap inscribed "M-E Companies" in the easterly line of "Carriage Trails Section 9, Phase III", a subdivision of record in Plat Book 26, Pages 20-20A;

Thence North $05^{\circ}06'04''$ East, along the easterly line of said "Carriage Trails Section 9, Phase III", and the easterly line of "Carriage Trails Section 9, Phase IV", a subdivision of record in Plat Book 26, Pages 67-67B, a distance of 614.38 feet to an iron pin found with plastic cap inscribed "M-E Companies" at the northeasterly corner of said "Carriage Trails Section 9, Phase IV";

Thence North $84^{\circ}34'07''$ West, along the northerly line of said "Carriage Trails Section 9, Phase IV", a distance of 456.76 feet to an 1" pipe found at the southeasterly corner of that 12.982 acre tract as described in a deed to Nicholas P. Holmes Sr. and Rita T. Holmes, of record in Deed Book 675, Page 30;

Thence North $04^{\circ}58'53''$ East, along the easterly line of said 12.982 acre tract, a distance of 1337.64 feet to an iron pin set at the northeasterly corner of said 12.982 acre tract and in the southerly line of that 1.857 acre tract as described in a deed to Nicholas P. Holmes Sr. and Rita T. Holmes, of record in Deed Book 675, Page 30;

Thence South $84^{\circ}50'32''$ East, along the southerly line of said 1.857 acre tract and the southerly line of that 2.011 acre tract as described in a deed to Joyce A. Clifford, of record in Document No. 2015OR-13536, a distance of 333.63 feet to a 2" pipe found at the southeasterly corner of said 2.011 acre tract;

Page 3 - 260.369 acres

Thence North $04^{\circ}55'31''$ East, along the easterly line of said 2.011 acre tract, passing a 5/8" rebar found in the southerly right of way line of U.S. Route 40 (80.00 feet in width) at a distance of 304.99 feet, a total distance of 345.96 feet to a mag nail set in the centerline of U.S. Route 40;

Thence North $82^{\circ}26'45''$ East, along said centerline, a distance of 237.40 feet to a mag nail set at an angle point in said centerline;

Thence North $82^{\circ}23'02''$ East, continuing along said centerline, a distance of 8.50 feet to a mag nail set at the northwesterly corner of that 16.764 acre tract as described in a deed to Kenneth L. Hosler and Gene L. Hosler, of record in Document No. 2020OR-07836;

Thence South $04^{\circ}26'06''$ West, along the westerly line of said 16.764 acre tract, passing a 1" pipe found in the southerly right of way line of U.S. Route 40 at a distance of 40.89 feet, a total distance of 400.57 feet to a 1" pinch top pin found at the southwest corner of said 16.764 acre tract;

Thence South $85^{\circ}01'11''$ East, along the southerly line of said 16.764 acre tract and the southerly line of that 3.236 acre tract as described in a deed to Holly A. Williams and Anthony D. Williams of record in Document No. 2017OR-07099, Document No. 2017OR-07100 and Document No. 2021OR-13707, a distance of 1,523.43 feet to a 1" pinch top pin found at the southeasterly corner of said 3.236 acre tract;

Thence North $05^{\circ}07'34''$ East, along the easterly line of said 3.236 acre tract, passing a 5/8" rebar in the southerly right of way line of U.S. Route 40 at a distance of 701.25 feet a total distance of 742.26 feet to a mag nail set in the centerline of U.S. Route 40;

Thence North $82^{\circ}23'02''$ East, along said centerline, a distance of 1,065.69 feet to a mag nail set at the northwesterly corner of that aforementioned 20.933 acre tract and in the common line to Sections 14 and 20;

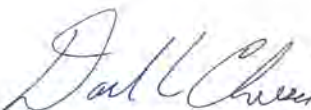
Thence South $05^{\circ}34'32''$ West, along said common line, the westerly line of said 20.933 acre tract and the westerly line of that 0.717 acre tract as described in a deed to Wilbur E. Friend and Jeannine F. Friend, of record in Deed Book 327, Page 183, a distance of 979.31 feet to the place of beginning and containing 260.369 acres of land of which 134.161 acres lies in Section 19, 22.526 acres lies in Section 20 and 103.682 acres lies in Section 13.

Bearings herein are based on the Ohio State Plane Coordinate System, North Zone, NAD 83.

Iron pins set consist of a 5/8-inch rebar, 30 inches long with an orange plastic cap stamped "IBI Group, S-6872/S-7740".

This description was prepared by IBI Group Survey, Columbus, Ohio, and is based on an actual field survey of the premises performed in May and November 2021.



By 
David L. Chiesa Date 12/21/21
Registered Surveyor No. 7740

AI-8212

Topics of Discussion K.

Council Work Session

Meeting Date: 02/22/2022

Annexations - Moratorium

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 02/22/2022

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Annexations - Moratorium

Purpose and Background

Councilmembers Richard Shaw, Glenn Otto, and Anita Kitchen requested this agenda item for a discussion on a moratorium on annexations in the City.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Information

Draft Ordinance

From: [Shaw, Richard](#)
To: [Gerald McDonald](#); [Rodgers, Anthony](#)
Subject: Huber Heights Moratorium on Annexation
Date: Tuesday, February 15, 2022 10:37:50 AM
Attachments: [Annexation Moratorium Ordinance.pdf](#)

Good Morning,

Attached is a draft Ordinance for your review regarding a Moratorium on Annexation in Huber Heights.

Below is a brief list of communities that have presented legislation for a Moratorium on Annexation:

- Ashville, Ohio

[AMA Signed \(ashvilleohio.gov\)](#)

- City of Columbus

[City of Columbus - File #: 2837-2015 \(legistar.com\)](#)

- South Bloomfield

[Village of South Bloomfield Ordinances for 2006 \(southbloomfieldoh.com\)](#)

- City of Wheeling

[Wheeling City Council Tables Danfield Drive Annexation Petition | News, Sports, Jobs - The Intelligencer](#)

- Waukee, Iowa

[2021-11-01-H02 Annexation Moratorium Agreement_West Des Moines_PH \(waukee.org\)](#)

Other Interesting Research Items:

- Centerville Supreme Court Ruling

[pdf_viewer.aspx \(ohio.gov\)](#)

- OML Article

[Ohio Supreme Court Clarifies the Requirements for Certain Expedited Annexations - Frost Brown Todd | Full-Service Law Firm](#)

- Bethel Township Online Petition

[Petition · Ask elected officials to cease all annexation of Bethel Township land. · Change.org](#)

Sections of the ORC regarding Annexation

- Section 701.07 Cooperative economic development agreements

- Section 3311.06 Territory of district to be contiguous; exceptions; annexation of territory
- Section 1545.15 Annexation procedure
- Section 709.04 Accepting or rejecting annexation by ordinance or resolution
- Section 715.79 Annexation, merger, or consolidation proceedings barred
- Section 709.02 Petition for annexation by owners of contiguous real estate
- Section 709.33 Effective date of annexation
- Section 709.023 Special annexation procedure where land is not excluded from township
- Section 709.192 Annexation agreements
- Section 709.024 Special annexation procedure for purpose of undertaking significant economic development project
- Section 709.07 Appeal from resolution granting or denying petition

If you have any further questions, please reach out.

Thank you,

Richard E. Shaw Jr

Huber Heights City Council Ward 1

Vice Chair NLC Community and Economic Development

Drive Electric Dayton EV Ambassador

NLC Service Line Warranty Program Advisor

Cell: 937-829-1209

Email = rshaw@hhoh.org

CITY OF HUBER HEIGHTS STATE
OF OHIO

ORDINANCE NO. 2022-O-

AN ORDINANCE TO AUTHORIZE AND APPROVE ENTERING INTO AN ANNEXATION MORATORIUM AGREEMENT BY AND BETWEEN BETHEL TOWNSHIP, AND THE CITY OF HUBER HEIGHTS THE AND DECLARING AN EMERGENCY.

WHEREAS, Bethel Township (hereinafter "TOWNSHIP"), and City of Huber Heights (hereinafter "CITY") wish to cooperate in a manner prescribed by the Ohio Revised Code Section 709.192 in facilitating economic development opportunities and reserved for such purposes by entering into an Annexation Moratorium Agreement (hereinafter "AMA") pertains; and.

WHEREAS, TOWNSHIP, AND CITY wish to cooperate in improving and advancing the welfare of the citizens within the territories to which the AMA Agreement pertains, including but not limited to making water and sewer services more widely available within such territory and promoting economic development and uniform planning standards; and.

WHEREAS, TOWNSHIP, AND CITY wish to cooperate in facilitating responsible development within the territory of CITY while also preserving the geographic integrity of TOWNSHIP, the extent consistent with the wishes of TOWNSHIP'S landowners; and.

WEREAS, the parties hereto wish to extend full and good faith cooperation to each other in accomplishing the foregoing objectives, as described in the AMA Agreement, which the parties hereto recognize will benefit all of their respective residents and businesses and will operate to preserve and protect the public health, safety and welfare of the citizens of TOWNSHIP, AND CITY;

NOW, THEREFORE, BE IT ORDAINED by the City Council of Huber Heights, Ohio that:

Section 1. Pursuant to the authority expressly granted in Ohio Revised Code Section 709.192; and 1545.15; and Section 3.01 of the Charter of the City of Huber Heights; and Article XVIII of the Ohio Constitution, an Annexation Moratorium shall be in place for two calendar years.

Section 2. Notwithstanding Section 1 above, the TOWNSHIP, and CITY will schedule a public joint meeting, within thirty days, to start the public discussions of a Final Agreement.

Section 3. Clerk of Council is hereby directed on behalf of Council to schedule the requested meeting.

Section 4. City Staff is hereby directed to cease any and all actions regarding Annexation as expressly set forth in this Ordinance.

Section 4. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 5. This Ordinance shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2022; _____
Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-8214

Topics of Discussion L.

Council Work Session

Meeting Date: 02/22/2022

Huber Heights Community Center Renovations

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 02/22/2022

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Huber Heights Community Center Renovations

Purpose and Background

Councilmembers Nancy Byrge and Kathleen Baker requested this agenda item to discuss renovations to the Huber Heights Community Center, including parking lot expansion, signage, and kitchen upgrades.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

No file(s) attached.
