

Meeting Date:

June 9, 2025

Location:

200 Laurel Lake Drive

Parcel Numbers

3203045

Request:

Major Site Plan to construct 7 duplex villa buildings

Applicant:

Jeffrey Jardine,
Riverstone Survey

Property Owner:

Laurel Lake Retirement
Community LLC

Zoning:

D3- Outer Village
Residential Neighborhood

Case Manager:

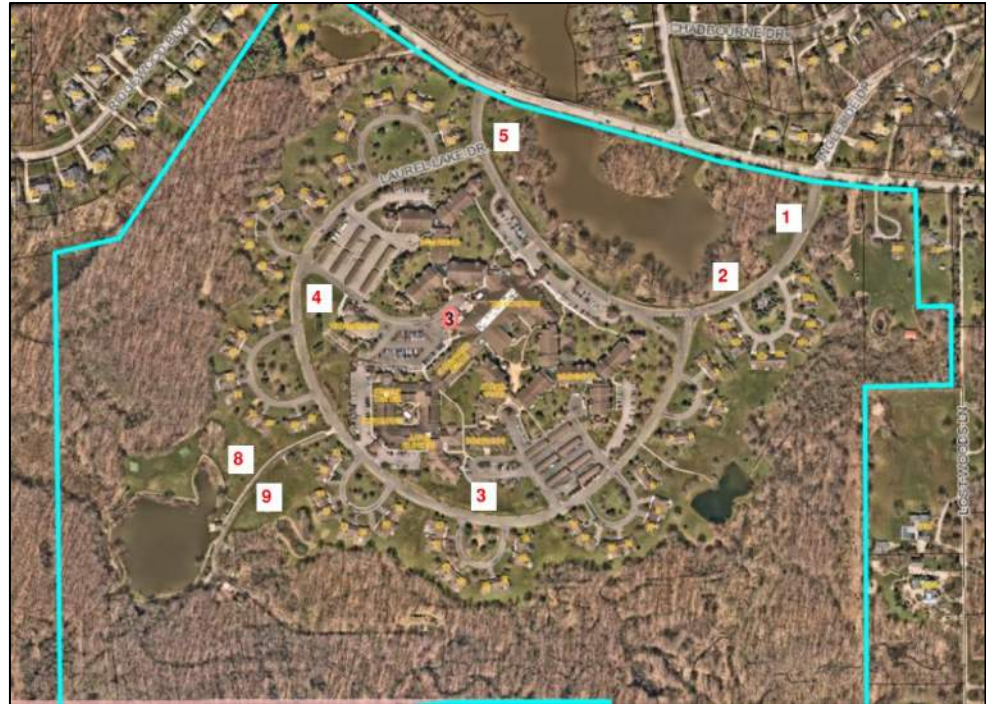
Nick Sugar, City Planner

Staff Recommendation

Refer to page 13

Contents

- Applicant response letter, 5.12.25
- Civil Plans, 5.12.25
- Landscaping Plan, May 2025
- Lighting Plan, 6.5.25
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- Cost Estimates
- Wetland Delineation /Pond Letter, 3.13.25
- Stormwater Report, 6.10.24
- Traffic Analysis, 12.12.24



City of Hudson GIS

Project Background:

Laurel Lake received Conditional Use and Major Site Plan approval at the October 14, 2024 Planning Commission meeting to construct 7 duplex villa buildings. The decision was subject to the condition that the three buildings along the front pond be removed from the proposal. The full decision is attached for reference.

The applicant subsequently appealed the Planning Commission's Decision to the Board of Zoning and Building Appeals, requesting the conditional use request for the three buildings along the pond be approved. Per Section 1212.01(c), *Any party-in-interest aggrieved by any final action, decision, or order by the Planning Commission may appeal to the City Council, except that appeals from PC action on an application for conditional use shall be to the Board of Zoning and Building Appeal.*

The applicant did not appeal the Planning Commission's Decision related to the site plan which per Section 1212 would have needed to be submitted to City Council for consideration.

The BZBA reviewed the Conditional Use appeal at the January 16, 2025 meeting and made the following determination: *The Board of Zoning Appeals in applying the evidence and law hereby reverses the final decision made by the Planning Commission to deny buildings #1, #2, and #5 on November 6, 2024, and affirms the Planning Commission's decision to approve buildings #3, #4, #6 and #7. The Board of Zoning*

- Asst. City Engineer review dated June 3, 2025
- Previous PC Decision
- BZBA Decision
- Supplemental Docs

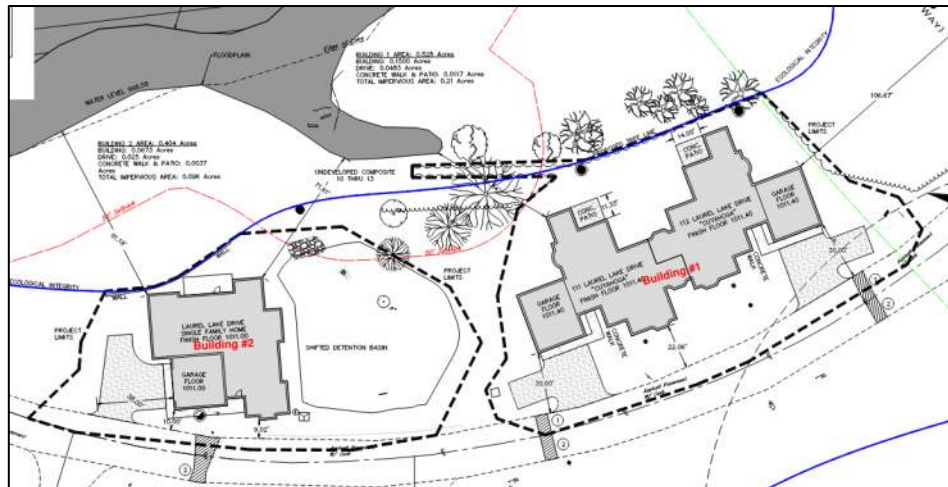
and Building Appeals adopts the attached findings of fact which are incorporated herein. The full decision is attached for reference.

With the Conditional Use approval authorized by the BZBA, the applicant is now requesting site plan approval for the 3 duplex villa buildings previously denied. To help aid the Planning Commission's review, this staff report has organized the findings of both boards and noted updates to the application.

Notable Design Changes

Staff notes the site plan request for these three buildings is not a resubmit of the previous request as following design changes have been proposed in response to the October 14, 2024 Planning Commission discussion:

1. Buildings #1 and #2 have been repositioned. Building #2 has been redesigned to a duplex with side loaded garages and is located further from the access drive. The proposed stormwater pond has been reconfigured.



Oct 14, 2024 PC Submittal

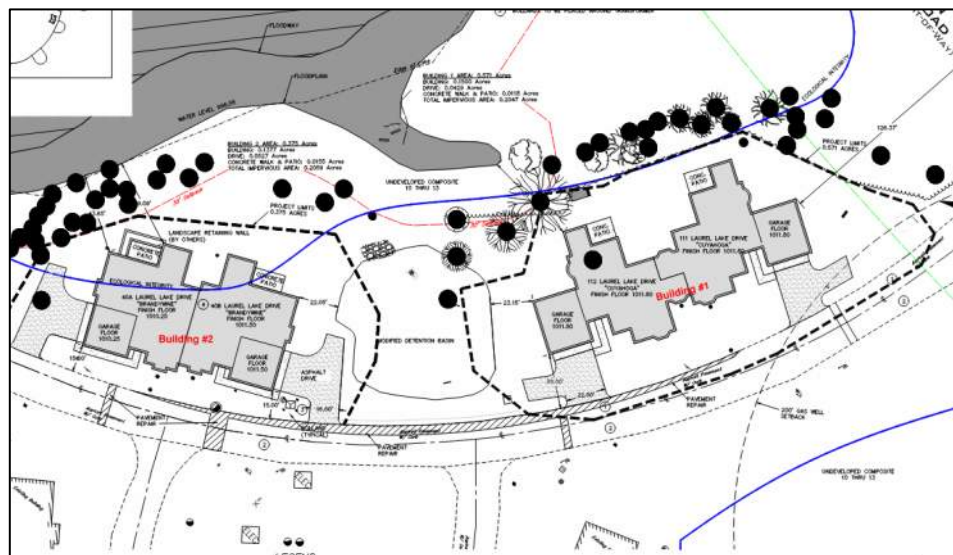


Fig. 1 - June 9, 2025 PC Submittal

- The applicant is no longer requesting to realign the access drive. The building has been slightly redesigned allowing the existing drive to remain in place.

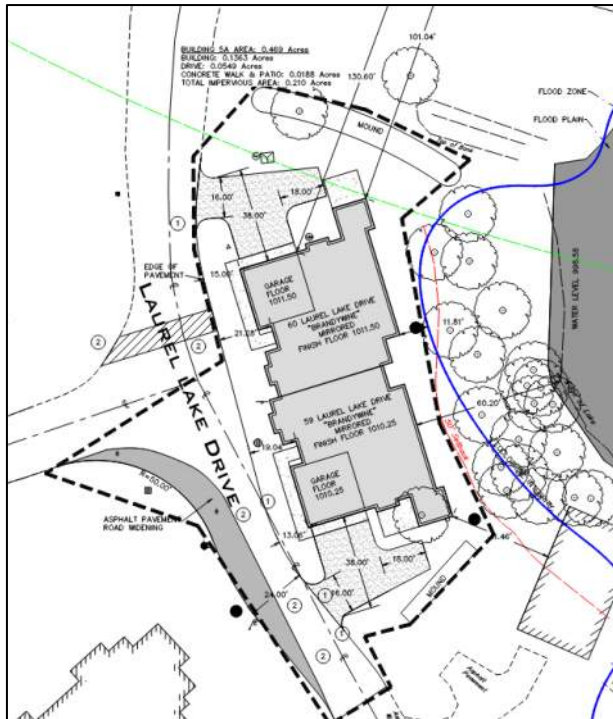


Fig. 2. Oct 14, 2024 PC Submittal

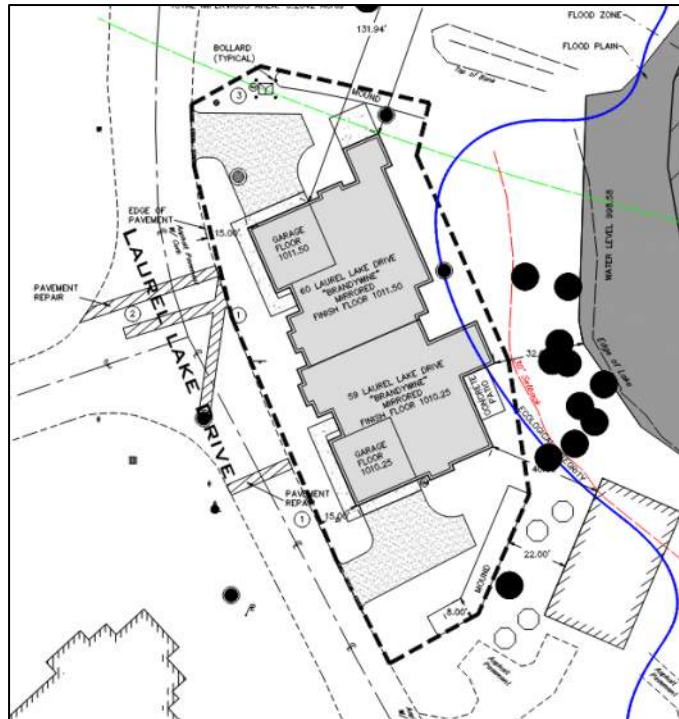


Fig. 3 June 9, 2025 PC Submittal

Review of Findings from PC Decision of October 2024

PC Finding #1: Buildings #2 and #5 are in violation of Section 1206.02(b)(5) relating to traffic circulation patterns based on the proposed building separation from the drive.

Code Section Referenced: 1206.02(b)(5): *On-site and off-site traffic circulation patterns related to the use shall not adversely impact adjacent uses or result in hazardous conditions for pedestrians or vehicles in or adjacent to the site.*

BZBA Finding: *Since this provision contains no objective standards for its application, determining whether this provision has been met is a matter of discretion. The traffic in question traverses the property along the semicircular private drive having two exits onto Boston Mills Road near opposite ends of the property. Appellant submitted a traffic pattern study report showing that the average number of cars entering the property using the private drive is about one per minute, and the average number of cars leaving the property is also about one per minute. The report states that “the number of trips that are generated are quite low, which is to be expected from a retirement community.” Since the Commission has approved the addition of four buildings without objections to the additional traffic they might cause, there seems to be no standard being applied to decide that three more buildings will nevertheless create hazardous conditions. Thus, the finding of a violation here has no evidentiary support, and a contrary conclusion is supported by the evidence.*

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Nevertheless, the Commission asserts that two of the units, Buildings #2 and #5, interfere with traffic circulation patterns “based on the proposed building separation from the drive.” The nature of this objection is unclear because the Commission’s decision does not recite any particular danger based upon proximity of the unit to the drive. To the contrary, the site plan shows that each of these units will have a side-facing garage and a turn-around apron allowing the resident to enter the drive frontwards. Since this is a matter of discretion, and no evidence is recited as the basis for the Commission’s finding of a violation, the Board concludes that the decision is arbitrary and without evidentiary support. There is no violation of § 1206.02(b)(5).

Updates to Application:

The applicant submitted an updated trip generation study to the Board of Zoning Appeals, dated December 12, 2024. The full study is attached for reference. The Study provides additional sight distance analysis for the proposed buildings. Overall, the study makes the following findings:

- The number of anticipated vehicle trips would be low per the following chart (See Figure 4).
- The proposed driveways and resulting sight distances would meet the most recent edition of the *Federal Manual of Traffic Control Devices 11th Edition, December 2023*.

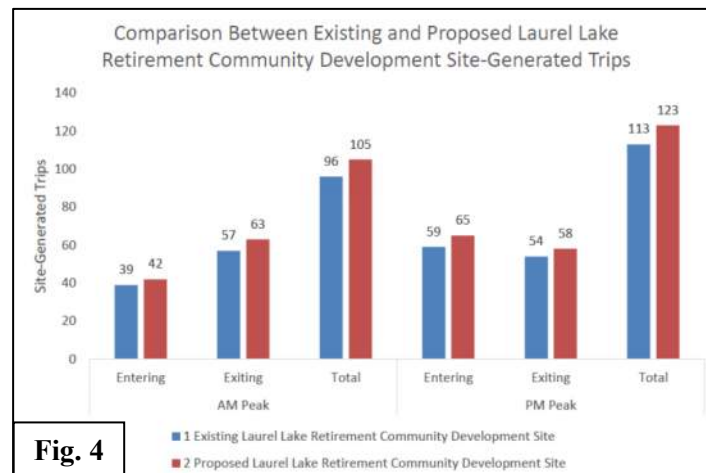


Fig. 4

PC Finding #2: Buildings #1 and #2 are in violation of Sections 1207.03(c) and 1207.03(f) relating to disturbance within a stream or wetland setback as disturbance would occur within the required fifty (50) foot setback of the jurisdictional pond.

Code Sections Referenced:

- 1207.03(c): *Prohibited Activities:* No person shall engage in any activity that will disturb, remove, fill, drain, dredge, clear, destroy, or alter any area, including vegetation, within stream corridors, wetlands, and their setbacks, except as may be expressly allowed in this Code.
- 1207.03(f): *Preservation of Vegetation:* All existing vegetation within the stream corridor or wetland setback area shall be preserved, and where necessary to provide adequate screening or to repair damaged riparian areas, supplemented with additional native planting and landscaping approved by the City Community Development Staff.

BZBA Finding: The Commission states that these buildings are in violation “relating to disturbance within a stream or wetland setback as disturbance would occur within the required fifty (50) foot setback of the jurisdictional pond.” This conclusion is in error because there is no stream or wetland near these

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Buildings, and, therefore, no 50-foot setback is required. It appears that the Commission, and perhaps the staff also, has misconstrued the nearby south end of Lake Forest as being wetlands, but it is not. Wetlands are defined in 40 CFR § 230.41(a)(1) as follows:

(1) Wetlands consist of areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

There is no nearby stream either. The curious phrase “jurisdictional pond” seems to have no legal effect on the placement of these two buildings either. The record shows that the staff and the Appellant struggled to deal with a non-existent 50-foot setback, including pushing the three units closer to the road to get away from Lake Forest, a non-requirement. There is no violation of § 1207.03(c) and (f).

Updates to Application:

Updates to Application: The applicant has submitted a letter with the current Planning Commission submittal. The letter was written by Carrie Ricker, Project manager and profession wetland specialist, of Verdantas (formerly CT Consultants), the environmental science and engineering firm that has completed the environmental documentation for the site . The letter states: *Verdantas, LLC (formerly CT Consultants, Inc.) prepared the Wetland Delineation Report for the Laurel Lake, Hudson, Ohio property in August 2022. We have been requested to provide clarification around Pond-1 jurisdiction and the type of surface water feature this is considered. Pond-1 as labeled on the attached Water Resource Map for Laurel Lake (see Figure 5)., is considered a tributary impoundment under (a)(3) of the Waters of the United States (WOTUS) Regulatory Ruling. Pond-1 does not contain wetland vegetation and is not considered a wetland by definition. This feature is an open water impoundment that extends upstream as a part of Lake Forest on the north side of Boston Mills Road. This feature is an impoundment of an unnamed tributary to*

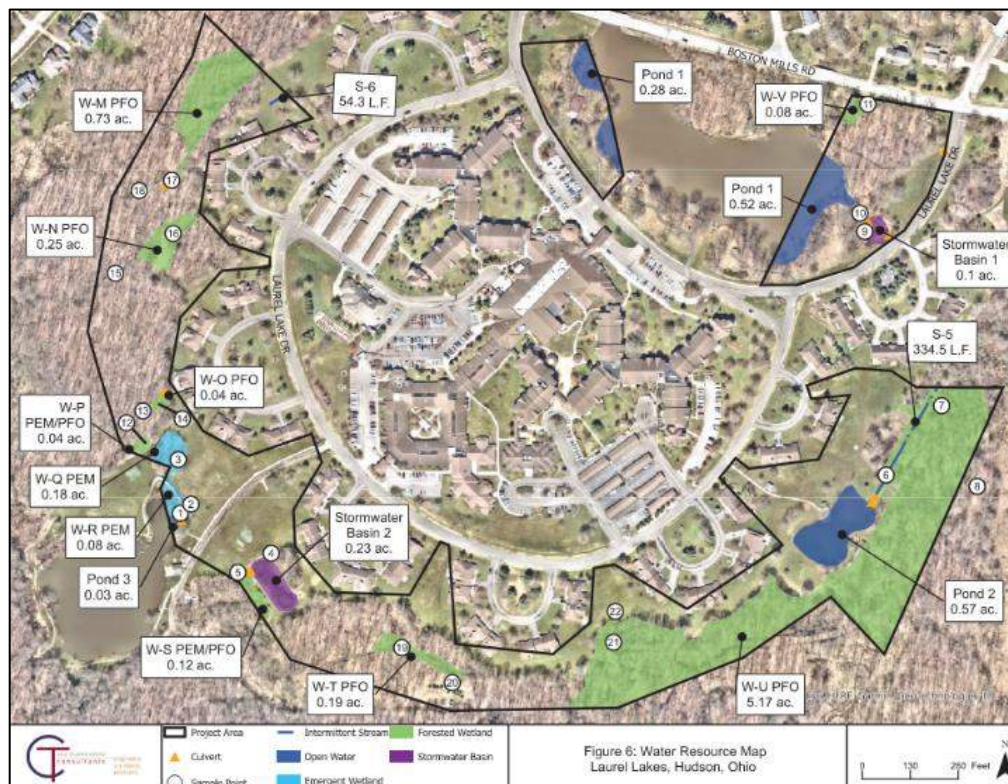


Fig. 5

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Brandywine Creek, that drains to the Cuyahoga River and ultimately into Lake Erie. I hope the preceding information provides the necessary clarification.

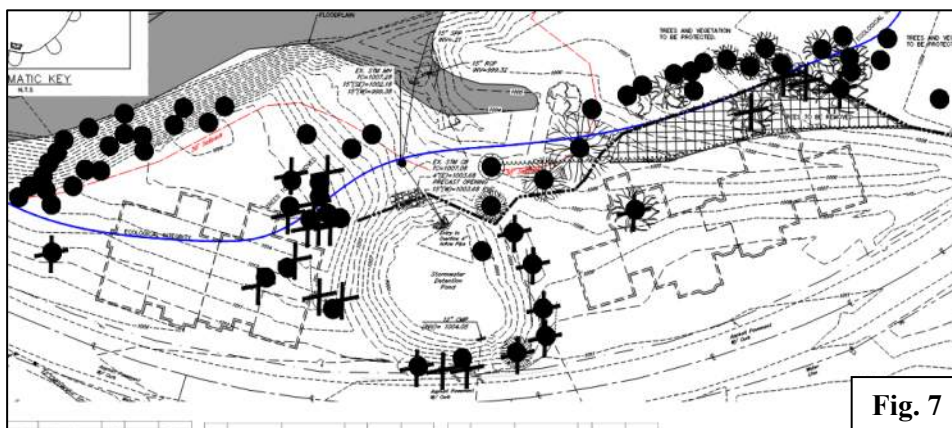
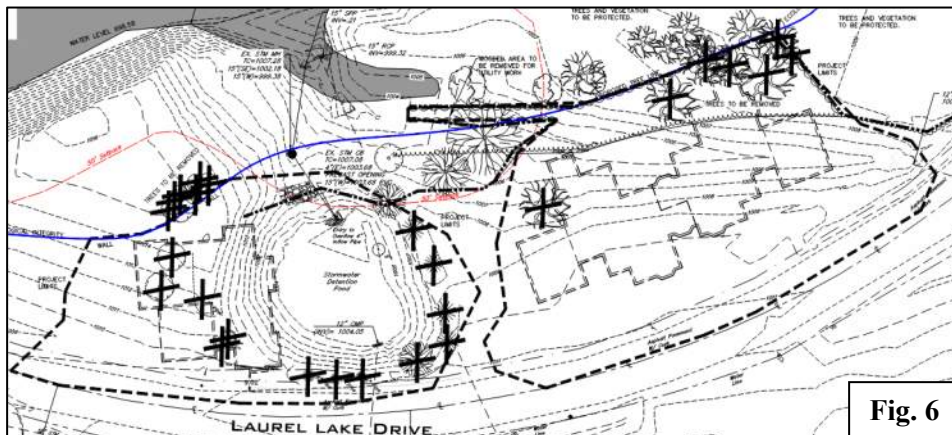
PC Finding #3: Buildings #1 and #2 are in violation of Section 1207.02(b)(2) relating to tree preservation as significant mature trees would be removed.

Code Section Referenced: 1207.02(b)(2): Within the limits of disturbance: *Whenever practicable, significant trees and existing vegetation within the limits of disturbance should be preserved.*

BZBA Response: *This section provides as follows: Whenever practicable, significant trees and existing vegetation within the limits of disturbance of disturbance should be preserved.*

Notably, this provision does not prohibit the removal of trees. Further, the introductory phrase, “Wherever practicable,” signals that this provision is a matter of discretion. Yet the Commission’s ratio decidendi assumes that removing mature trees is prohibited. What if it is not practicable to preserve the trees? According to the plain meaning of this statutory language, in that case it is not necessary to preserve the trees. But there is another option that was not addressed by the Commission. A mature tree of at least nine inches diameter at breast height can be removed upon cash payment of \$200 to a conservation escrow account, pursuant to § 1207.02(c)(2). Furthermore, the four units that were approved by the Commission’s decision require the removal of 19 trees. The statute contains no bright line for how many trees are too many. Thus, without more, the approval of removing 19 trees but disapproving removal of 25 trees appears arbitrary. No reason is given for approving 19 trees but not 25 trees. There is no violation §1207.02(b)(2).

Updates to Application: Staff notes minimal changes to the proposed number of trees removed for buildings #1 and #2



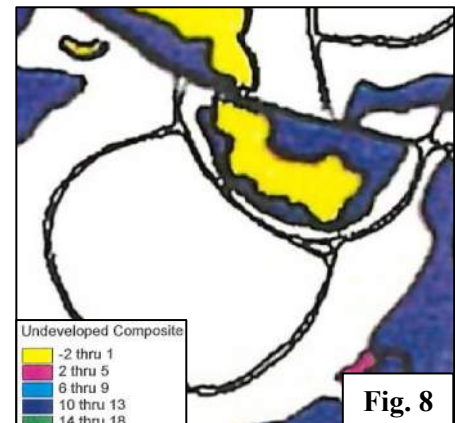
PC Finding #4: Buildings #1 and #2 are in violation of Section 1207.02(b)(3) relating to priority areas of existing trees and vegetation as disturbance would occur within a sensitive natural area.

Code Section Referenced: 1207.02(b)(3): *Priority areas of retention: Priority areas for retention of existing trees and vegetation shall include, but not be limited to riparian areas, wetlands, wildlife habitat, aquifer or wellhead protection areas, areas falling within the two highest quality ecological integrity classifications for any of the individual metrics or composite as set forth in Appendix B to this Code, and other sensitive natural areas. Streets, buildings, and lot layouts shall be designed to minimize disturbance to all trees nine inches DBH or larger.*

BZBA Response: *The only portion of this provision that the Commission recites for its finding of a violation is that the Buildings would occur “within a sensitive natural area.” The term “sensitive natural area” is not defined in the LDC. Again, this provision is not a prohibition on tree removal, but is a directive to minimize disturbance of large trees at least nine inches in diameter at breast height. The Commission made no findings as to the size of any trees designated for removal. The option to pay cash for removing large trees was not addressed either. The term “sensitive natural area” is a very general, imprecise term, subject to discretionary interpretation. There is no bright-line standard for determining the presence of a sensitive natural area. While this provision could be argued as impermissibly vague, it is more fitting at this juncture to determine that there is no evidence to support a conclusion that the area around Buildings #1 and #2 is a “sensitive natural area.” The Appellant is not required to prove affirmatively that this area is not a sensitive natural area; it was up to the Commission to show that it is, in order to support its finding. The Appellant need not prove a negative.*

There is no violation of § 1207.02(b)(3).

Update to Application: Staff notes minimal change to the site plan relative to this requirement; however, the applicant’s determination on the classification of the pond vs. wetland would relate to this analysis. Staff notes; while the pond shore area itself is classified under the lowest Index of Ecological Integrity Composite, the surround area falls under the two highest (see Figure 8). The applicant has labeled this area on the submitted site plans.



PC Finding #5: Building #2 is in violation of Section 1419(6.6) of the City of Hudson Engineering Standards as it would not provide the required thirty (30) foot detention pond easement outside the entire perimeter of the pond.

Code Section Referenced: 1419(6.6): *Detention/Retention Pond Easement: A detention/retention pond easement conveys the right to construct and maintain a pond and its appurtenances (i.e., outlet structure, etc) which is used for the detention/retention of storm water runoff and includes the right of ingress and egress. The detention/retention pond easement shall be a minimum width of 30 feet outside the entire perimeter of the pond or as approved by the City.*

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BZBA Response: *The City stated in its January 16 response to the Appellant’s statement in this Appeal that it would accept a 10-foot easement for this purpose, and it should be incorporated into the drawings. This will meet the statutory language “or as approved by the City.” There is no violation of § 1419(6.6).*

Updates to Application: Staff notes the Engineering Department has accepted a 10-foot easement and noted the revised layout gives adequate access to the detention pond.

PC Finding #6: Buildings #1, #2, and #5 would compromise existing community amenities including the pavilion and East Loop Trail.

BZBA Response: *The Commission asserts that these buildings “would compromise existing community amenities including the pavilion and East Loop Trail.” First, testimony was presented that “East Loop Trail” was a path created by an individual resident for walking through the site, and he kept it clear of overgrowth for a while. Other residents used this trail for exercise on occasion. In at least the past year the creator has become insufficiently mobile to maintain the trail, and it has become clogged with overgrowth and unused. The evidence shows insufficient reason to block a project because of this moribund trail.*

As to the pavilion, the Commission’s recitation of this amenity is baffling. The pavilion along the edge of Lake Forest is not being moved, and these units will not be interposed between the pavilion and the remainder of the residential units. Building #5 will be closer to the pavilion than the rest, but there is no requirement that a large area around the pavilion be preserved. Indeed, there is nothing in the LDC that requires the owner of the property to preserve the pavilion at all. Owners of multi-family developments are not required to fashion or to preserve amenities that are not called out in the rental contracts. Property owners are entitled to develop their properties as they wish, subject only to the requirements of the LDC, and there is no provision protecting these amenities in the LDC. There is no violation here because there is no code provision to violate.

Updates to Application: Staff notes minimal change to the impact on community amenities. Staff notes a mound would be constructed between the pavilion and Building #5 for enhanced screening.

District Standards (Section 1205)	
☒ Maximum Net Density 1205.06(d)(1)	Staff notes the Land Development Code references to residential net density requirements are not applicable to the proposed Institutional Residential use classification. The Institutional Residential use is a separate classification category than residential uses. Net density requirements are applicable to residential uses as listed in Section 1205.06 (d)(1), (single-family detached and duplexes, single family attached, and townhomes).
☒ Building Setback 1205.06(d)(5)	1. Minimum front yard setback: 100 ft (Boston Mills Road is considered an Arterial Street). <u>Staff Comment:</u> Acceptable 2. Minimum side yard setback: 30 ft <u>Staff Comment:</u> Acceptable 3. Minimum rear yard setback: 50 ft <u>Staff Comment:</u> Acceptable

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- ☒ **Maximum Building Height**
1205.06(d)(7) The maximum building height is 40 ft.
Staff Comment: Staff notes the buildings would have an average height of approximately 24 ft, which is typical of residential buildings.
- ☒ **Distance Between Buildings**
1205.06(d)(8) Structures shall be separated from each other a minimum of twenty feet at their closest points.
Staff Comment: The proposed buildings would meet this requirement.
- ☐ **Building Siting and Orientation**
1205.06(d0)(9) Building siting and orientation standards shall apply to buildings located with a front yard depth of less than 130 feet.

Staff Comment: The property is comprised of one parcel and Laurel Lake Drive is a private drive; therefore, building #1 and building #5 would be subject to these standards in relation to Boston Mills Road. Staff notes building #1 would be in conflict with the requirement that doors of attached garages shall not face the street.
- ☐ **Floodplain Overlay Zone**
1205.14 The City has special flood hazard areas that are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base. Additionally, structures that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss. In order to minimize the threat of such damages and to achieve the purposes hereinafter set forth, these regulations are adopted.

Staff Comment: The proposed drive turnaround serving buildings #8 and #9 would be located within a designated floodplain. Staff notes minor fill and grading associated with the proposed work. The applicant shall submit a separate floodplain application for review by the City's Floodplain Administrator.

Site Plan Standards (Section 1207)

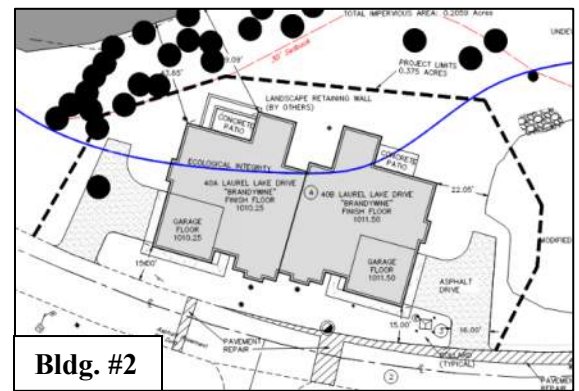
- ☒ **Maximum Impervious Surface Coverage**
Section 1207.01 The maximum impervious surface coverage is 60%
Staff Comment: The proposed development would increase the impervious area by .75 acres and increase the total impervious coverage from 16.3% to 16.9%.
- ☐ **Tree and Vegetation Protection**
1207.02 Priority areas for retention of existing trees and vegetation shall include, but not be limited to riparian areas, wetlands, wildlife habitat, aquifer or wellhead protection areas, areas falling within the two highest quality ecological integrity classifications for any of the individual metrics or composite as set forth in Appendix B to this Code, and other sensitive natural areas. Streets, buildings, and lot layouts shall be designed to minimize disturbance to all trees nine inches DBH or larger.

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Staff Comment: Staff notes minor changes to the proposed clearing plan have been proposed with the redesign. Buildings #2 and #5 would encroach into the ecological integrity priority retention area; however, neither building proposed encroachment with the previous submittal. Staff recommends the following:

Building #2: The revisions to Building #2 as a duplex would further encroach into the Index of Ecological Integrity priority retention area than the previous plan. Staff recommends Building #2 be revised back to a single unit with the limits of disturbance established outside of the ecological index retention area.

Building #5: Revise the design so the building footprint is located outside of the ecological retention area.



☒ **Wetland/Stream
Corridor Protection
1207.03**

All buildings would be located outside of applicable wetland setbacks. The applicant has submitted documentation from a professional wetland specialist clarifying that the front pond is not classified as a wetland.

☐ **Landscaping/Buffering
1207.04**

A minimum bufferyard width of 50 ft is required along arterial streets (Boston Mills Road). Four small trees and two large and medium trees are required every 100 ft.

Staff Comment: Revise the submitted Landscape Plan to verify this requirement is met along buildings #1, #2, and #5.

☒ **Open Space
1207.05**

Open space requirements are not applicable to institutional land uses.

☒ **Stormwater
Management**

A stormwater management report has been submitted with the application. Generally, stormwater would be managed by existing, onsite drainage. Existing facilities would be upgraded to account for the proposed units. The report has been reviewed and accepted by the Engineering Department with minor comments to be addressed for a final zoning certificate review.

☒ **Wellhead Protection
1207.08**

The boundaries of all wellhead protection areas in the City of Hudson are shown on a map entitled "City of Hudson, Ohio, Wellhead Protection Areas Map." the

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following uses and activities shall be prohibited within the designated five-year time-of-travel wellhead protection areas:

- (1) All agricultural, commercial, retail, or industrial uses;
- (2) All institutional/civic/public uses, including solid waste disposal facilities, but not including passive recreational or natural open space systems, including trails;
- (3) All golf course uses (public or private);
- (4) Individual on-lot sewage systems, including septic systems, dry wells, and package plants;
- (5) Other prohibited activities:
 - A. Use of regulated or unregulated hazardous materials, in an amount defined by the Ohio Environmental Protection Agency as constituting a medium to high pollution risk for wellhead protection purposes;
 - B. Use of above or below ground storage tanks (flammable, toxics, petroleum products, and other chemicals); and
 - C. Any other uses or activities listed by the Ohio Environmental Protection Agency, as part of the agency's Ohio Wellhead Protection Program, that fall within Category I, "Medium to High Pollution Risk," or Category II, "Medium Pollution List."

Staff Comment: The proposed development is located within the designated five-year time-of-travel wellhead protection area; however, Laurel Lake is an established use dating back to the early 1990s.

☒ **Parking
1207.12**

Staff notes the land use category for *continuing care retirement facility* is not described within the minimum parking space chart in Section 1207.12(f)(1); however, the Institute of Transportation Engineer's Parking Generation Manual may also be used in determining minimum parking requirements. The manual further classifies these types of facilities and lists a classification for *attached senior adult housing* recommends a minimum of 1.4 spaces per dwelling unit. Staff notes the proposed villas would comply with this requirement.

☐ **Exterior Lighting
1207.14**

Exterior lighting shall meet the following requirements:

- With the exception of lighting for public streets, all other lighting used to illuminate buildings, parking lots, walkways, or the landscape, shall be evaluated during the site plan review process.
- Glare shall be controlled at all times through proper equipment selection, careful aiming, and limits on brightness as per IESNA recommendations
- In Zone Districts 1, 2, 3, 4, and 10, light fixtures shall be mounted on concrete or painted metal poles no higher than sixteen feet.

Staff comment: Staff notes the additional light pole proposed to serve buildings #8 and #9 would have a height of 30 ft and should be reduced to the maximum height of 16 ft.

☒ **Special Development
Standards
1207.19**

Staff notes multiple oil and gas wells are located on the property; however, the proposed villas would be located outside of the applicable setbacks.

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City Departments:

- ☒ **Engineering** Assistant City Engineer David Rapp has submitted the attached review letter dated June 3, 2025
- ☒ **Fire Department** Fire Marshal Shawn Kasson has reviewed the proposal with no comments.
- ☒ **Hudson Public Power** Assistant Public Works Superintendent Dave Griffith has reviewed the proposal and stated HPP will coordinate with the designers/engineers to serve the site.

Required PC Action

The PC shall consider the development application, the staff report, and then take final action. PC shall approve, approve with conditions, or deny the application based on its compliance with the appropriate review standards. All decisions of the Commission shall be based on findings of fact related to the relevant standards of the Code.

Recommendation

Staff recommends the Planning Commission review the submitted application, staff comments, and testimony from the applicant and public prior to formal action on the request. Staff recommends the Planning Commission consider the following items as part of any determination on the request.

1. Building #1
 - a. The garage doors face the street and are in conflict with the orientation standards of Section 1205.06(d0(9).
2. Building #2
 - a. Limits of disturbance encroaches into the Index of Ecological Integrity priority retention area Section 1207.02(b)(3)
3. Building #5
 - a. Limits of disturbance encroaches into the Index of Ecological Integrity priority retention area Section 1207.02(b)(3).
4. Buildings #8 and #9:
 - a. A separate floodplain application is required for review by the City's Floodplain Administrator per Section 1205.14.
 - b. Proposed light pole exceeds the maximum height of 16 ft per Section (e)(1).
5. Landscaping Plan is required to be revised to verify the minimum bufferyard width of 50 ft is met, requiring four small trees and two large and medium trees every 100 ft. Section 1207.04(k)(1)(A).
6. The comments of Assistant City Engineer David Rapp shall be addressed per the review letter dated June 3, 2025.
7. Design of the buildings would require review from the Architectural and Historic Board of Review



ENGINEERING • 1140 Terex Road • Hudson, Ohio 44236 • (330) 342-1770

Date: June 03, 2025

To: Nick Sugar, City Planner

CC: Bradley Kosco, P.E., P.S. City Engineer

From: David Rapp, P.E., P.S. Assistant City Engineer

Re: Laurel Lake – Addition of Units – Modified 3-17-25
Conditional Use Request
Viewpoint #25-229

The City of Hudson Engineering Department has reviewed the plans submitted and the comments are below. Note: The City of Hudson Engineering Standards (Engineering Standards) and Land Development Code (LDC) are available online at the City of Hudson Website www.hudson.oh.us under the Engineering Dept. and Community Development Department respectively. The standards are also available in print for a fee. Please contact our office (330-342-1776) if you would like a cost for the printed version.

The City of Hudson Engineering Department has the following comments:

Items of concern:

1. Building 5 (Units 59 and 60) opposite the intersection of the driveways
 - a. This building location will require the following:
 - i. Realignment of the storm sewer piping, storm calculations are required to confirm adding 4 bends and reducing the pipe slope will not change the capacity of the storm system.
 - b. The new location has been modified with a 15' setback and no relocation of pavement and is acceptable.
 - c. Units 59 and 60 do have sideload garages.
2. Building 2
 - a. This unit has been restored to 2 units.
 - b. The building has 15' setbacks on both sides with sideload garages and is acceptable.
 - c. The new units location has been shifted to avoid impact of the existing detention pond. The new building has access around the pond for maintenance.
3. Building 1 (Units 111 and 112) have minimal changes.
 - a. The location of the building requires piping in of an existing ditch, shown on the plans. The pipe has adequate size and slope.
 - b. Units 111 and 112 shall direct stormwater into the existing pond when practical.

4. The plan shall follow Chapter 1419 of the City of Hudson Engineering Standards for Infrastructure Construction for all Stormwater Management. Updated calculations will be needed to determine volume and direction of flow at each unit location.
5. Revised calculations for the pond alteration shall be submitted and approved prior to breaking ground.
6. A 10' access to the detention pond exists around the pond and is acceptable.

Please contact me with any questions.

Sincerely,



David Rapp, P.E., P.S.
Assistant City Engineer
1140 Terex Road, Hudson, OH 44236
Ph: 330-342-1776



City of Hudson, Ohio

CD Meeting Agenda - Final Planning Commission

Sarah Norman, Chair
Angela Smith, Vice Chair
Fred Innamorato
Chelsea McCoy
David Nystrom
Jessie Obert
Matt Romano

Monday, June 9, 2025

7:30 PM

Town Hall
27 East Main Street

I. Call To Order

II. Roll Call

III. Swearing In

IV. Approval of Minutes

A. [PC 5-12-25](#) Minutes of Previous Planning Commission Meeting: May 12, 2025

Attachments: [PC Meeting Minutes May12, 2025](#)

V. Public Discussion

VI. Correspondence

VII. Old Business (including continuation of public hearings)

- A. [PC 2025-231](#) A Conditional Use and Major Site Plan request of an artificial turf field and restroom building for Christ Community Chapel.
[Contd](#)

Attachments: [Staff Report](#)
[Applicant Responses](#)
[Site Plans](#)
[Elevations/Floor Plan](#)
[Interior Landscaping Plan](#)
[Turf information](#)
[Wetland Delineation Report](#)
[Trip Generation Analysis](#)
[Stormwater Management Report](#)
[SWPPP](#)
[Engineering Review](#)
[Supplemental Documents](#)
[Previous Public Comments](#)

VIII. New Business (including public hearings)

- A. [PC 2025-229](#) A Major Site Plan request for Laurel Lake Retirement Community. The request would construct seven villa duplex buildings.

Attachments: [Staff Report](#)
[Submittal letter](#)
[Civil Plans](#)
[Landscaping Plan](#)
[Lighting Plan](#)
[Elevations - Floor Plan](#)
[Cost Estimates](#)
[Stormwater Management Report](#)
[Trip Generation Report](#)
[Wetland Delineation](#)
[Engineering Review](#)
[Supplemental Documents](#)
[PC Decision 2024](#)
[BZBA Decision - Conditional Use Appeal](#)

- B.** [PC 2025-507](#) A Conditional Use and Major Site Plan request for an addition for Hudson High School serving as an orchestra room.

Attachments: [Staff Report](#)
[Conditional Use Letter](#)
[Site Plans](#)
[Elevation and Floorplan](#)
[Stormwater report](#)
[Traffic Letter](#)
[Engineering Review](#)
[Site Photos](#)
[Supplemental Documents](#)

- C.** [PC 2025-561](#) A Text Amendment request to amend certain administrative appeal processes within the city.

Attachments: [Staff Report](#)
[Proposed Amendment](#)
[Ordinance No. 25-85](#)

IX. Other Business

- A.** [PC Public Hearing Update](#) Update for Order and Rules of Public Hearings

Attachments: [Staff Memo](#)
[Ordinance 25-21](#)

X. Staff Update

XI. Adjournment

Public Hearings by the Commission will be undertaken for each case in the following order:

- 1. Project Introduction and report by Staff*
- 2. Application presentation*
- 3. Questions of Applicant and Staff by the Commission*
- 4. Hearing of Public Testimony by the Commission*
- 5. Closing of Public Comment Hearing by the Commission*
- 6. Follow-up/additional questions by the Commission, Staff, and Applicant*
- 7. Final Applicant Comments*
- 8. Discussion by the Commission*
- 9. Action by the Commission*

* * *

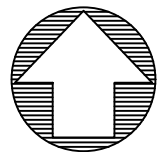
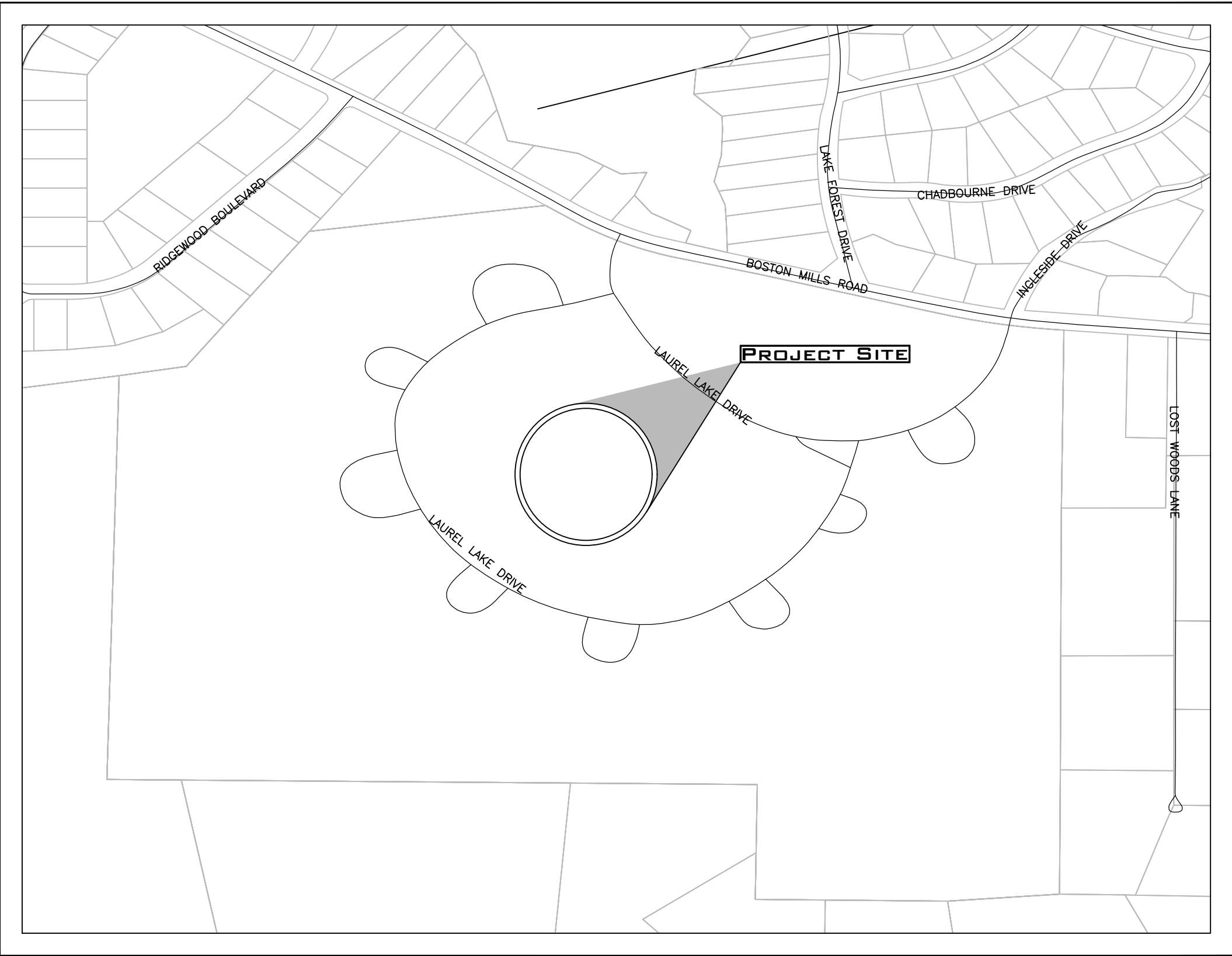
The mission of the Hudson City Government is to serve, promote and support, in a fiscally responsible manner, an outstanding community that values quality of life, a well-balanced tax base, historic preservation, with a vision to the future, and professionalism in volunteer and public service.

IMPROVEMENT PLANS FOR LAUREL LAKE VILLA ADDITIONAL BUIDINGS 1-5, 8,9

THE CITY OF HUDSON, COUNTY OF
SUMMIT AND STATE OF OHIO

INDEX TO DRAWINGS

TITLE PAGE	C1.01
EXISTING CONDITIONS	C2.01
SCHEMATIC PLAN	C2.02
BUILDINGS 1&2	C3.01,C3.01A-C2.04
BUILDING 3	C4.01-C4.04
BUILDING 4	C5.01-C5.04
BUILDING 5	C6.01-C6.04
BUILDINGS 8&9	C7.01-C7.06
NOTES & DETAILS (PAVEMENT SECTIONS)	C8.01
SWPPP	C9.01



VICINITY MAP
SCALE: 1" = 400'

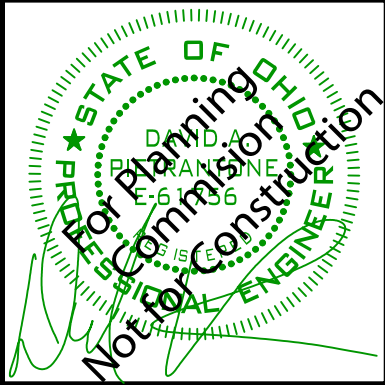

DAVID PIETRANTONE P.E. #61756



5/12/25
DATE

PREPARED FOR:

LAUREL LAKE
200 LAUREL LAKE DRIVE
HUDSON, OHIO 44236



RIVERSTONE
LAND SURVEYING · ENGINEERING · DESIGN
3800 LAKEVIEW AVENUE · SUITE 100
CLEVELAND, OHIO 44114
PHONE: (216) 491-9640
WWW.RIVERSTONEENGINEERING.COM

2023-186

PLAN REVISIONS:
5/12/2025
TREE INVENTORY

PAGE REVISIONS:
10/11/2024
FIRE COMMENTS

ISSUED FOR:
PC APPLICATION
3/17/25
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

TITLE PAGE



C1.01



GENERAL NOTES:
TOTAL AREA 141.9 ACRES
TOTAL IMPERVIOUS AREA: 23.18 ACRES
IMPERVIOUS COVERAGE: 16.3%

PARCEL NUMBER 3203045
LAUREL LAKE RETIREMENT COMMUNITY INC.
ZONED: OUTER VILLAGE
RESIDENTIAL NEIGHBORHOOD



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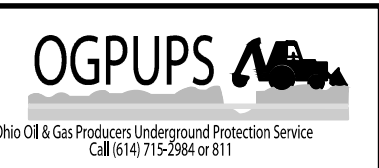
2023-186

PLAN REVISIONS:
5/12/2025
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3/17/25
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LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE
EXISTING CONDITIONS



C2.00

LEGEND

M = Monument Box Found	Spot Elevation Tag
O = Iron Pin or Pipe Found	Hydrant
• = 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS5747	Water Service Valve
+ = P.K. Nail	Water Valve
⊙ = Gas Meter	Water Meter
△ = Gas Valve	Reducer
⊕ = Utility Pole	Storm Manhole
⊖ = Light Pole	Sanitary Manhole
⊗ = Guy Anchor & Line	Curb Inlet
⊙ = Telephone Box	Catch Basin
⊙ = Electric Box	Property Line
⊙ = Cable Box	Centerline
⊙ = Bollard	
⊙ = Cleanout / Test Tee	

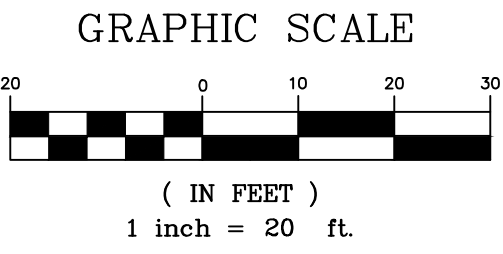
Ex. Parcel line
Original Sublot Line
Original Lot Line
Centerline
Property Line
Right-of-way Line
Easement Line
Railroad Tracks

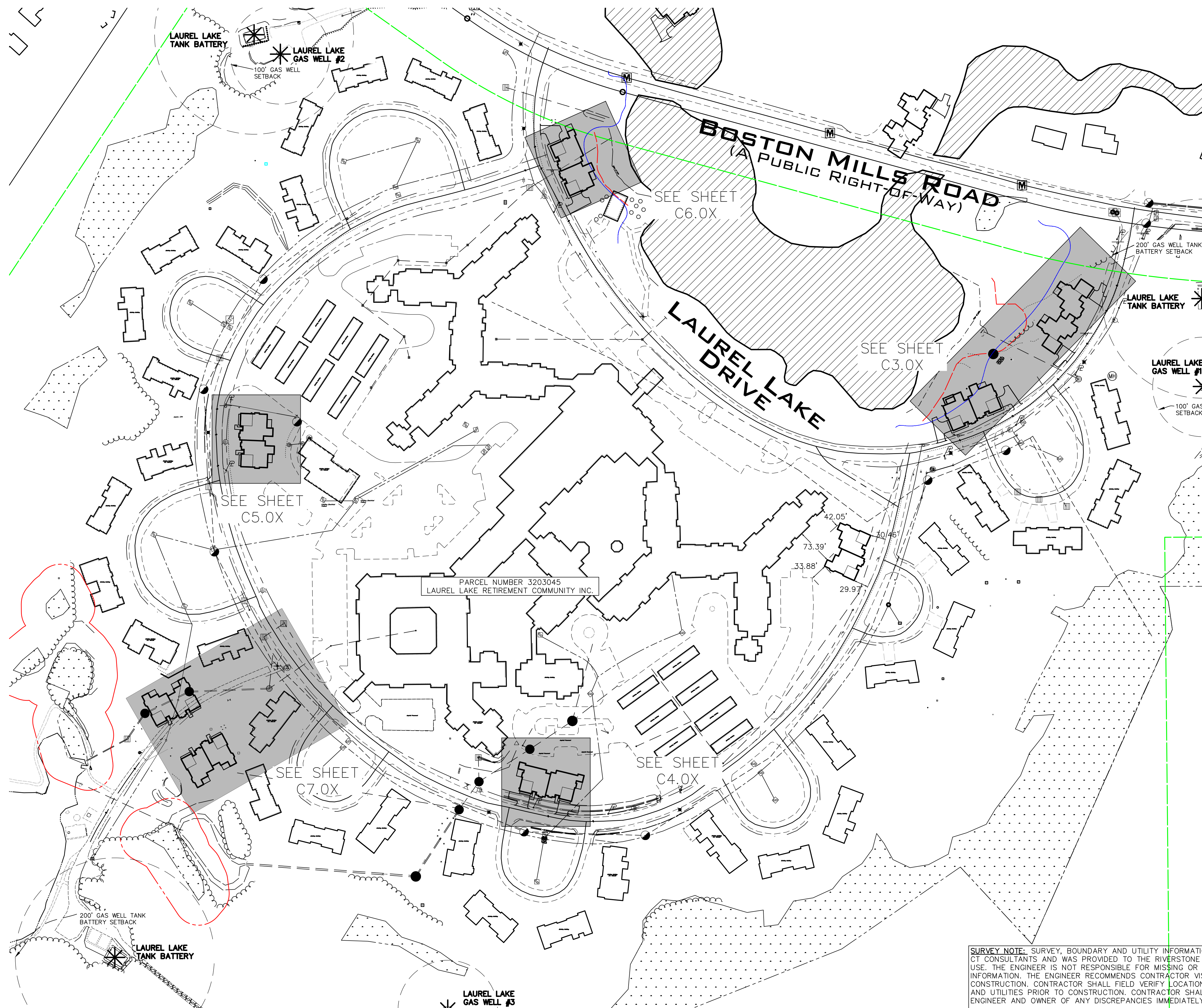
Electric Line
Gas Line
Sanitary/Combination Sewer
Storm Sewer
Waterline
Fence Line (Wooden)
Fence Line (Chain-Link)
Guardrail

Existing PROPOSED

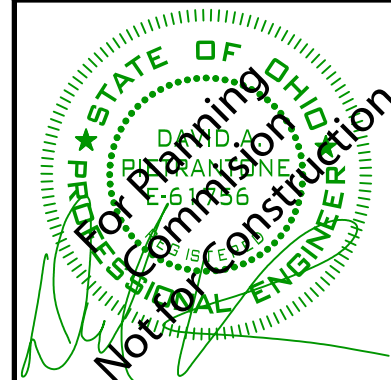
Ac.	Acres	L.C.A.	Limited Common Area
Adj.	Adjacent	L.F.	Lineal Feet
A.F.N.	Auditor's File Number	M.E.	Match Existing
Asp.	Asphalt	Meas./M.	Measured
B.F.	Basement Floor	MH	Manhole
BW	Bottom of Wall	Obs.	Observed
Calc./C.	Calculated	Pa.	Page
CB	Catch Basin	P.P.N.	Permanent Parcel Number
C.C.M.R.	Cuyahoga County Map Records	Prop	Proposed
C.L.F.	Chain-link Fence	Rec./R.	Record
C.O.	Clean Out	R/W	Right-of-way
Comb.	Combination	San.	Sanitary
Conc.	Concrete	S.F.	Square Feet
Conn.	Connection	S/L	Sublot
D.H.	Drill Hole	Stm.	Storm
D.I.W.M.	Ductile Iron Water Main	T.B.M.	Temporary Bench Mark
Elec	Electric	To Be Removed	
Elev	Elevation	T/C	Top of Curb
Encr.	Encroaches	Tele	Telephone
Ex.	Existing	T.F.	Top Of Footer
F.F.	Finished Floor	T.T.	Test Tee
GUT	Gutter	TW	Top of Wall
Inv	Invert	Typ.	Typical
		Vol.	Volume
		Wat	Water

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION COMPLETED BY CT CONSULTANTS AND WAS PROVIDED TO THE RIVERSTONE COMPANY FOR USE. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER OF ANY DISCREPANCIES IMMEDIATELY UPON DISCOVERY.





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TOTAL IMPERVIOUS AREA: 23.93 ACRES
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LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE
SCHEMATIC PLAN



OGPUPS
Ohio Oil & Gas Producers Underground Protection Service
CMB 01/17/2004 or 011

C2.01

LEGEND

= Monument Box Found	= Spot Elevation Tag
= Iron Pin or Pipe Found	= Hydrant
= 5/8" Iron Pin Set and Capped Riverstone Company Dudley P56747	= Water Service Valve
= P.K. Nail	= Water Valve
= Gas Meter	= Water Meter
= Gas Valve	= Reducer
= Utility Pole	= Storm Manhole
= Light Pole	= Sanitary Manhole
= Guy Anchor & Line	= Curb Inlet
= Telephone Box	= Catch Basin
= Electric Box	= Property Line
= Cable Box	= Centerline
= Bollard	
= Cleanout / Test Tee	

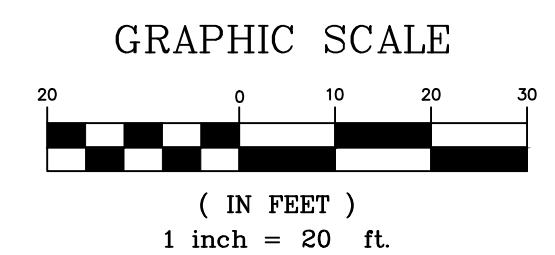
Ex. Parcel line
Original Sublot Line
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Gas Line
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Storm Sewer
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Existing	PROPOSED

Ac.	Acres	L.C.A.	Limited Common Area
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CB	Catch Basin	P.P.N.	Permanent Parcel
C.C.M.R.	Cuyahoga County Map	Number	Number
C.L.F.	Chain-link Fence	Prop	Proposed
Clr.	Clears	Rec./R.	Record
C.O.	Clean Out	R/W	Right-of-way
Comb.	Combination	San.	Sanitary
Conc.	Concrete	S.F.	Square Feet
Conn.	Connection	S/L	Sublot
D.H.	Drill Hole	Strm.	Storm
D.I.W.M.	Ductile Iron Water	T.B.M.	Temporary Bench Mark
Main	Main	To Be Removed	To Be Removed
T/C	Top of Curb	T/C	Top of Curb
Tele	Telephone	Tele	Telephone
Elev	Elevation	T.F.	Top Of Footer
Encr.	Encroaches	T.T.	Test Tee
Ex.	Existing	TW	Top of Wall
F.F.	Finished Floor	Typ.	Typical
GUT	Gutter	Vol.	Volume
Invt	Invert	Wat	Water

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= Monument Box Found = Iron Pin or Pipe Found = 5/8" Iron Pin Set and Capped Rivestone Company Dudley #56747 = P.K. Nail = Gas Meter = Gas Valve = Utility Pole = Light Pole = Guy Anchor & Line = Telephone Box = Electric Box = Cable Box = Round Curb Inlet = Bollard	= Spot Elevation Tag = Hydrant = Water Service Valve = Water Valve = Water Meter = Reducer = Storm Manhole = Sanitary Manhole = Curb Inlet = Catch Basin = Round Curb Inlet = Cleanout/Test Tee	Ex. Parcel line Original Sublot Line Original Lot Line Centerline Property Line Right-of-way Line Easement Line Railroad Tracks Electric Line Gas Line Sanitary/Combination Sewer Storm Sewer Waterline Fence Line (Wooden) Fence Line (Chain-Link) Guardrail	= Acres = Adjacent = Asphalt = Basement Floor = Calculated = Catch Basin = Cuyahoga County = Map Records = Centerline = Chain-link Fence = Clears = Concrete = Connection = Drill Hole = Ductile Iron Water Main = Electric = Encroaches = Existing = Finished Floor	L.C.A. Limited Common Area Meas./M. Measured MH Manhole Obs. Observed Pg. Page P.P.N. Permanent Parcel Number P.L. Property Line Rec./R. Record R/W Right-of-way S.F. Sanitary Sq. Feet Square Feet S/L Sublot Stm. Storm T.B.M. Temporary Bench Mark TBR To Be Removed Tele. Telephone Top Footer Vol. Volume Water
---	--	--	--	--

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SITE DEMOLITION LEGEND:



—SEE SHEET C3.01A FOR TREE IDENTIFICATION

GENERAL SITE DEMOLITION NOTES:

CONTRACTOR SHALL COMPLETELY CLEAR SITE WITH
REGARDS TO PROJECT LIMITS. REMOVAL SHALL
INCLUDE BUT NOT LIMITED TO ALL PAVEMENTS,
SIDEWALKS, CURBS, POLES, SIGNS, UTILITIES, FENCES,
TREES, LANDSCAPING AND ALL APPURTENANCES.

CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL PERMITS NECESSARY FOR SITE DEMOLITION AND SHALL BE RESPONSIBLE FOR ALL FEES.

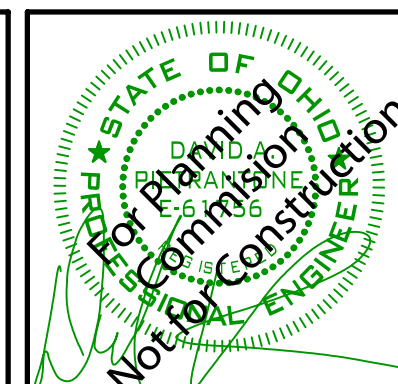
CONTRACTOR SHALL CALL THE OHIO UTILITIES PROTECTION SERVICE (OUPS) A MINIMUM OF 48 HOURS BEFORE ANY DEMOLITION WORK.

CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY DEMOLITION OR RELOCATION WORK WITH THE APPROPRIATE UTILITIES PRIOR TO DEMOLITION.

TREES AND VEGETATION
TO BE PROTECTED.

TREES AND VEGETATION
TO BE PROTECTED.

**BOSTON
MILLS ROAD
PUBLIC RIGHTS**



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3800 LAKESIDE AVENUE - SUITE 100
CLEVELAND - OHIO - 44114
PHONE: (216) 491-2000 FAX: (216) 491-9641
WWW.RIVERSTONESURVEY.COM

2023-186

PLAN REVISIONS:
5/12/2025
TREE INVENTORY

PAGE REVISIONS:

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PC APPLICATION
3/17/25
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

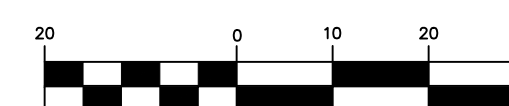
SITE DEMOLITION PLAN - BUILDING 1 & 2

Ohio Utilities Protection Service
Call 811
before you dig

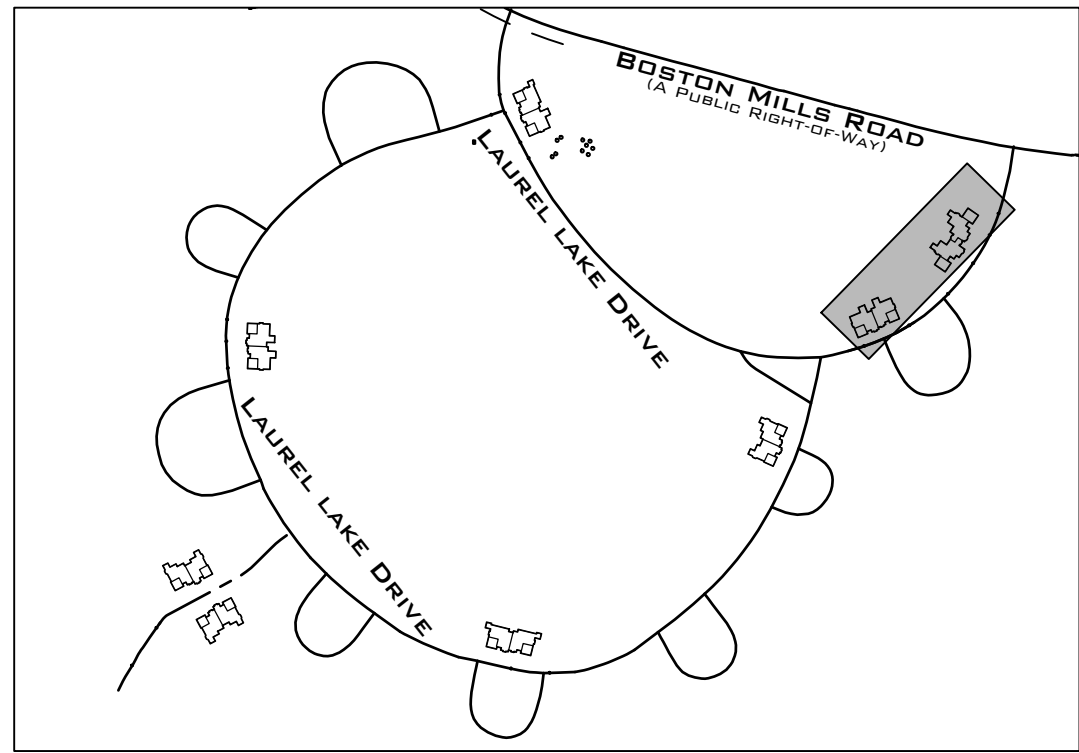
OGPUPS 

C3.0

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

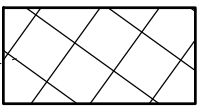


SCHMATIC KEY
N.T.S

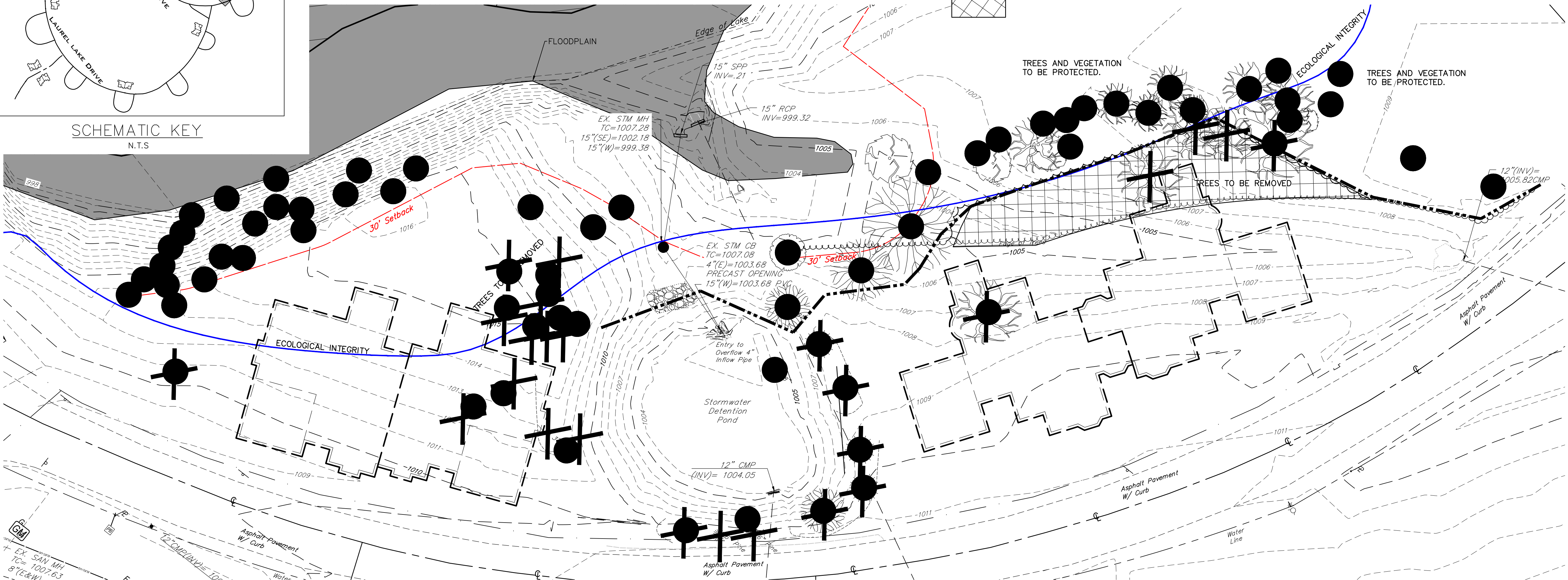
SITE DEMOLITION LEGEND:



TREE TO BE REMOVED



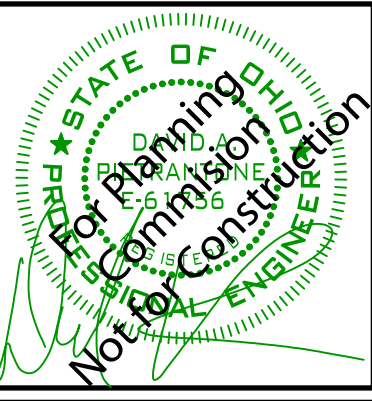
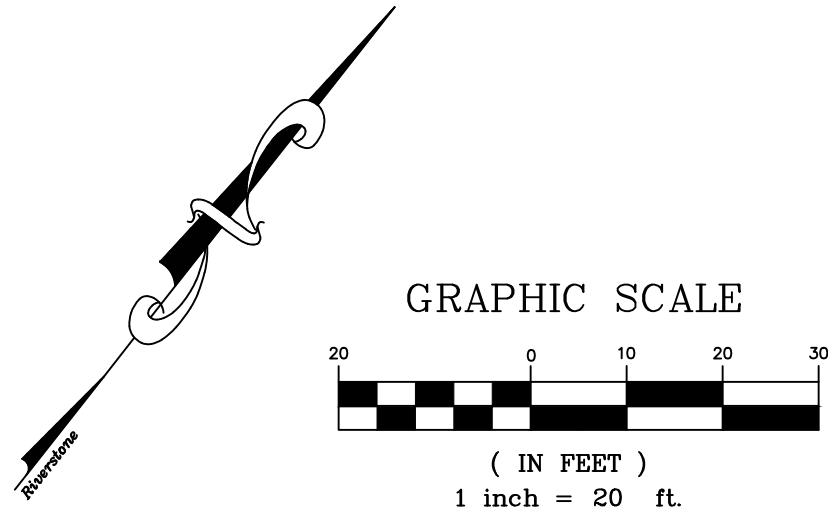
WOODED AREA TO BE REMOVED.



1	red maple	<i>Acer rubrum</i>	6		Good
2	black cherry	<i>Prunus serotina</i>	13	2	Fair
3	silver maple	<i>Acer saccharinum</i>	14		Fair
4	black cherry	<i>Prunus serotina</i>	10		Fair
5	black cherry	<i>Prunus serotina</i>	10		Fair
6	Nonway maple	<i>Acer platanoides</i>	11		Fair
7	black cherry	<i>Prunus serotina</i>	16		Fair
8	red maple	<i>Acer rubrum</i>	11		Fair
9	red maple	<i>Acer rubrum</i>	10		Fair
10	red maple	<i>Acer rubrum</i>	14		Fair
11	bird cherry	<i>Prunus avium</i>	7		Fair
12	red maple	<i>Acer rubrum</i>	12		Fair
13	sugar maple	<i>Acer saccharum</i>	18		Fair
14	red maple	<i>Acer rubrum</i>	18		Fair
15	red maple	<i>Acer rubrum</i>	13		Fair
16	northern red oak	<i>Quercus rubra</i>	11		Poor
17	red maple	<i>Acer rubrum</i>	16,17	2	Fair
18	red maple	<i>Acer rubrum</i>	7,7.6,5	4	Fair
19	bird cherry	<i>Prunus avium</i>	7		Fair
20	red maple	<i>Acer rubrum</i>	8		Fair
21	American elm	<i>Ulmus americana</i>	7		Fair
22	red maple	<i>Acer rubrum</i>	14		Fair
23	red maple	<i>Acer rubrum</i>	11,15,9	3	Fair
24	bigtooth aspen	<i>Populus grandidentata</i>	13		Fair
25	bigtooth aspen	<i>Populus grandidentata</i>	10		Fair
26	sugar maple	<i>Acer saccharum</i>	20		Fair
27	white fir	<i>Abies concolor</i>	7		Good
28	red maple	<i>Acer rubrum</i>	24		Poor
29	bigtooth aspen	<i>Populus grandidentata</i>	11		Fair
30	bird cherry	<i>Prunus avium</i>	10		Fair
31	bigtooth aspen	<i>Populus grandidentata</i>	8		Fair
32	American beech	<i>Fagus grandifolia</i>	11		Fair
33	American beech	<i>Fagus grandifolia</i>	11		Fair

34	American beech	<i>Fagus grandifolia</i>	11		Fair
35	bigtooth aspen	<i>Populus grandidentata</i>	11		Fair
36	bigtooth aspen	<i>Populus grandidentata</i>	7		Fair
37	American basswood	<i>Tilia americana</i>	12		Fair
38	bigtooth aspen	<i>Populus grandidentata</i>	6		Fair
39	American beech	<i>Fagus grandifolia</i>	16		Fair
40	bitternut hickory	<i>Carya cordiformis</i>	13		Fair
41	northern red oak	<i>Quercus rubra</i>	21		Fair
42	bald cypress	<i>Taxodium distichum</i>	7		Good
43	northern red oak	<i>Quercus rubra</i>	11		Good
44	northern red oak	<i>Quercus rubra</i>	21		Fair
45	black cherry	<i>Prunus serotina</i>	17		Fair
46	northern red oak	<i>Quercus rubra</i>	18		Good
47	northern red oak	<i>Quercus rubra</i>	14		Fair
48	northern red oak	<i>Quercus rubra</i>	23		Fair
49	northern red oak	<i>Quercus rubra</i>	10		Good
50	northern red oak	<i>Quercus rubra</i>	15		Fair
51	northern red oak	<i>Quercus rubra</i>	15		Fair
52	northern red oak	<i>Quercus rubra</i>	24		Good
53	northern red oak	<i>Quercus rubra</i>	40		Fair
54	American basswood	<i>Tilia americana</i>	8,15,8	3	Fair
55	northern red oak	<i>Quercus rubra</i>	20		Fair
56	white oak	<i>Quercus alba</i>	18		Good
57	American basswood	<i>Tilia americana</i>	12,11,10	3	Poor
58	northern red oak	<i>Quercus rubra</i>	25		Fair
59	northern red oak	<i>Quercus rubra</i>	33		Good
60	northern red oak	<i>Quercus rubra</i>	21		Fair
61	northern red oak	<i>Quercus rubra</i>	21		Good
62	American beech	<i>Fagus grandifolia</i>	11		Fair
63	American beech	<i>Fagus grandifolia</i>	16		Fair
64	American basswood	<i>Tilia americana</i>	13		Fair
65	black cherry	<i>Prunus serotina</i>	18		Fair
66	flowering crabapple	<i>Malus sylvestris</i>	9		Fair

67	sweetgum	<i>Liquidambar styraciflua</i>	20		Good
68	red maple	<i>Acer rubrum</i>	14		Fair
69	white fir	<i>Abies concolor</i>	7		Good
70	white oak	<i>Quercus alba</i>	11		Fair
71	white oak	<i>Quercus alba</i>	16		Fair
72	white oak	<i>Quercus alba</i>	11		Fair
73	white oak	<i>Quercus alba</i>	16		Fair
74	white oak	<i>Quercus alba</i>	13		Fair
75	white oak	<i>Quercus alba</i>	16		Fair
76	white oak	<i>Quercus alba</i>	27		Fair
77	white oak	<i>Quercus alba</i>	20		Fair
78	white oak	<i>Quercus alba</i>	18		Fair
79	white oak	<i>Quercus alba</i>	17		Fair
80	white oak	<i>Quercus alba</i>	11		Fair
81	white oak	<i>Quercus alba</i>	11		Fair
82	white oak	<i>Quercus alba</i>	19		Fair
83	white oak	<i>Quercus alba</i>	12		Fair
84	white oak	<i>Quercus alba</i>	11		Fair
85	white oak	<i>Quercus alba</i>	15		Fair
86	white oak	<i>Quercus alba</i>	15		Fair
87	white oak	<i>Quercus alba</i>	18		Fair
88	white oak	<i>Quercus alba</i>	23		Good
89	white oak	<i>Quercus alba</i>	12		Fair
90	white oak	<i>Quercus alba</i>	16		Fair
91	white oak	<i>Quercus alba</i>	10		Fair
92	white oak	<i>Quercus alba</i>	6,23	2	Fair
93	white oak	<i>Quercus alba</i>	13		Fair
94	black cherry	<i>Prunus serotina</i>	8,12	2	Fair
95	northern red oak	<i>Quercus rubra</i>	15		Fair



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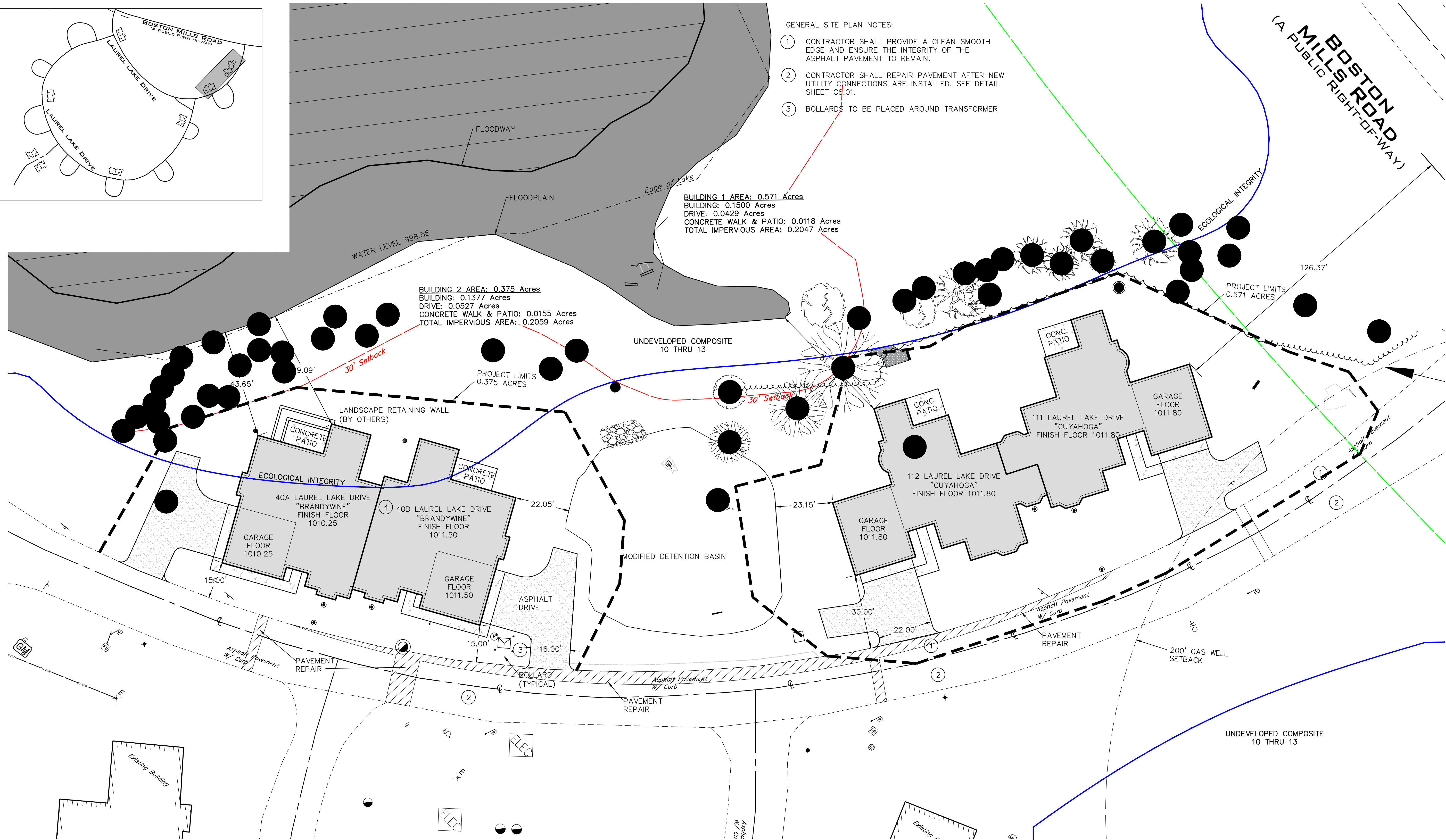
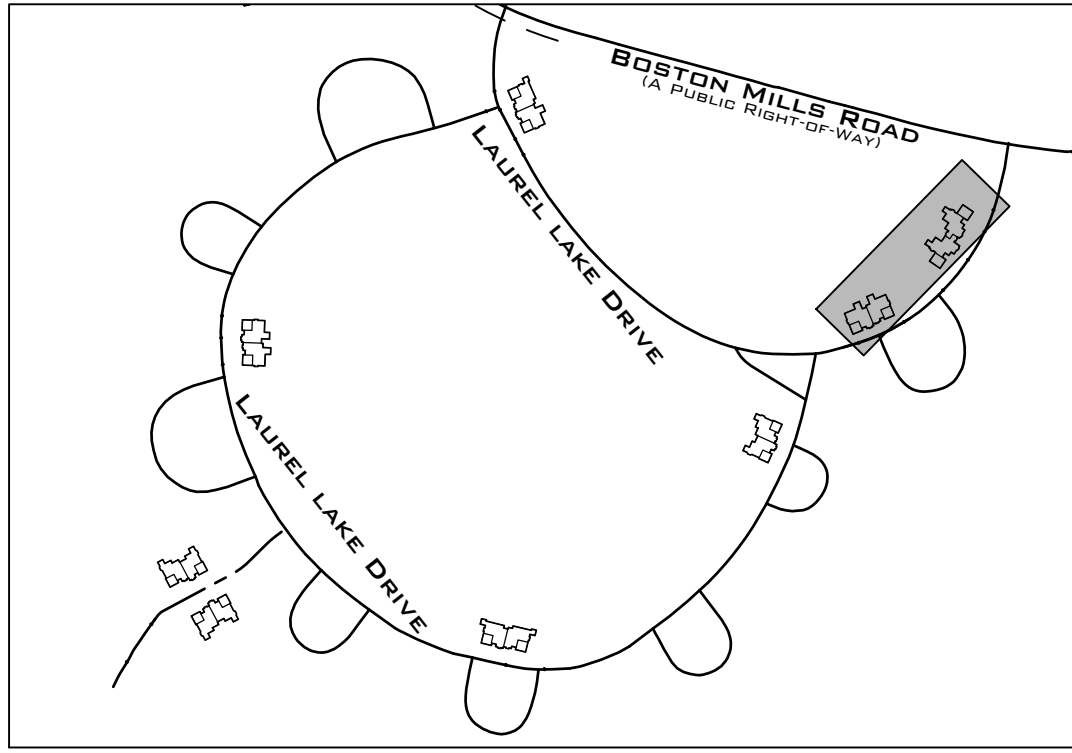
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

SITE DEMOLITION PLAN TREE - BUILDING 1 & 2

Ohio Utilities Protection Service
Call 811
before you dig

OGPUPS
Ohio Oil & Gas Producers Underground Protection Service
Call 811 (715-5861 or 811)

C3.01A



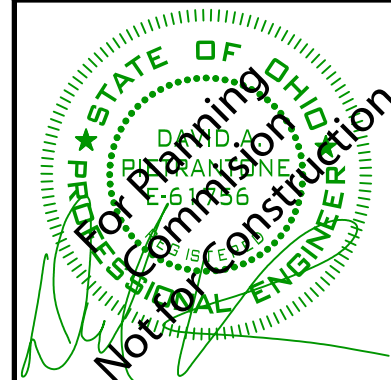
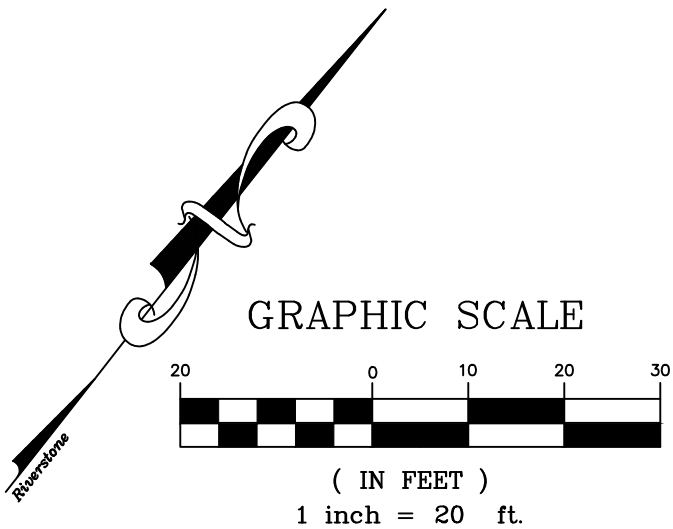
- GENERAL SITE PLAN NOTES:
- 1 CONTRACTOR SHALL PROVIDE A CLEAN SMOOTH EDGE AND ENSURE THE INTEGRITY OF THE ASPHALT PAVEMENT TO REMAIN.
 - 2 CONTRACTOR SHALL REPAIR PAVEMENT AFTER NEW UTILITY CONNECTIONS ARE INSTALLED. SEE DETAIL SHEET C6.01.
 - 3 BOLLARDS TO BE PLACED AROUND TRANSFORMER

BUILDING 1 AREA: 0.571 Acres
BUILDING: 0.1500 Acres
DRIVE: 0.0429 Acres
CONCRETE WALK & PATIO: 0.0118 Acres
TOTAL IMPERVIOUS AREA: 0.2047 Acres

BUILDING 2 AREA: 0.375 Acres
BUILDING: 0.1377 Acres
DRIVE: 0.0527 Acres
CONCRETE WALK & PATIO: 0.0155 Acres
TOTAL IMPERVIOUS AREA: 0.2059 Acres

LEGEND

- Monument Box Found - Iron Pin or Pipe Found 5/8" Iron Pin Set and Capped - P.K. Nail - Gas Meter - Gas Valve - Utility Pole - Light Pole - Guy Anchor & Line - Telephone Box - Electric Box - Cable Box - Bollard	- Spot Elevation Tag - Hydrant - Water Service Valve - Water Valve - Water Meter - Reducer - Storm Manhole - Sanitary Manhole - Catch Basin - Round Curb Inlet - Cleanout/Test Tee	- Ex. Parcel line - Original Sublot Line - Original Lot Line - Centerline - Property Line - Right-of-way Line - Easement Line - Railroad Tracks - Electric Line - Gas Line - Sanitary/Combination Sewer - Storm Sewer - Waterline - Fence Line (Wooden) - Fence Line (Chain-Link) - Guardrail	- Ac. Acres - Adj. Adjacent - Asp. Asphalt - B.F. Basement Floor - Calc./C. Calculated - CB Catch Basin - C.C.M.R. Cuyahoga County Map Records - C.L.F. Chain-link Fence - Clr. Clears - Conc. Concrete - Conn. Connection - D.H. Drill Hole - D.I.W.M. Ductile Iron Water Main - Elec. Electric - Encr. Encroaches - Ex. Existing - F.F. Finished Floor	- L.C.A. Limited Common Area - Meas./M. Measured - MH Manhole - Obs. Observed - Pg. Page - P.P.N. Permanent Parcel Number P. Property Line - Rec./R. Record - R/W Right-of-way - San. Sanitary - S.F. Square Feet - S/L Sublot - Storm Storm - T.B.M. Temporary Bench Mark - TBR To Be Removed - Tele. Telephone - T.F. Top Footer - Vol. Volume - Wat. Water	- FLOODPLAIN - FLOODWAY
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RIVERSTONE
LAND SURVEYING - ENGINEERING - DESIGN
3800 LAKEVIEW AVENUE, SUITE 100
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PHONE: (216) 991-9640
WWW.RIVERSTONEENGINEERING.COM

2023-186

PLAN REVISIONS:
5/12/2025
TREE INVENTORY

PAGE REVISIONS:

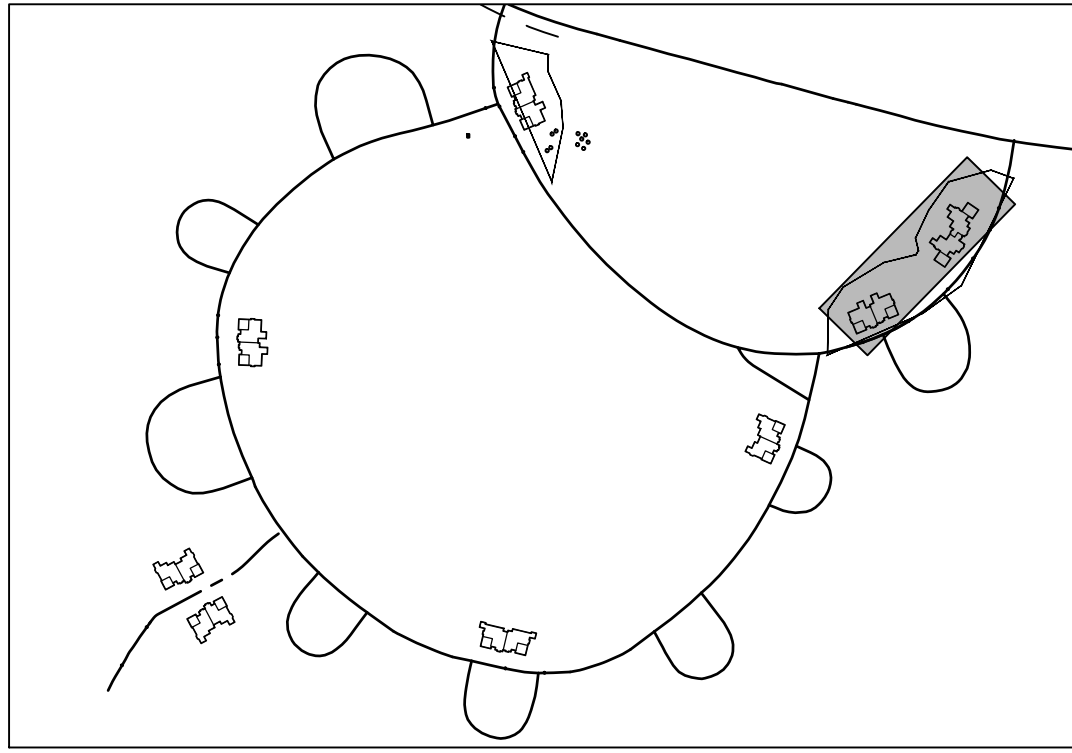
ISSUED FOR:
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LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

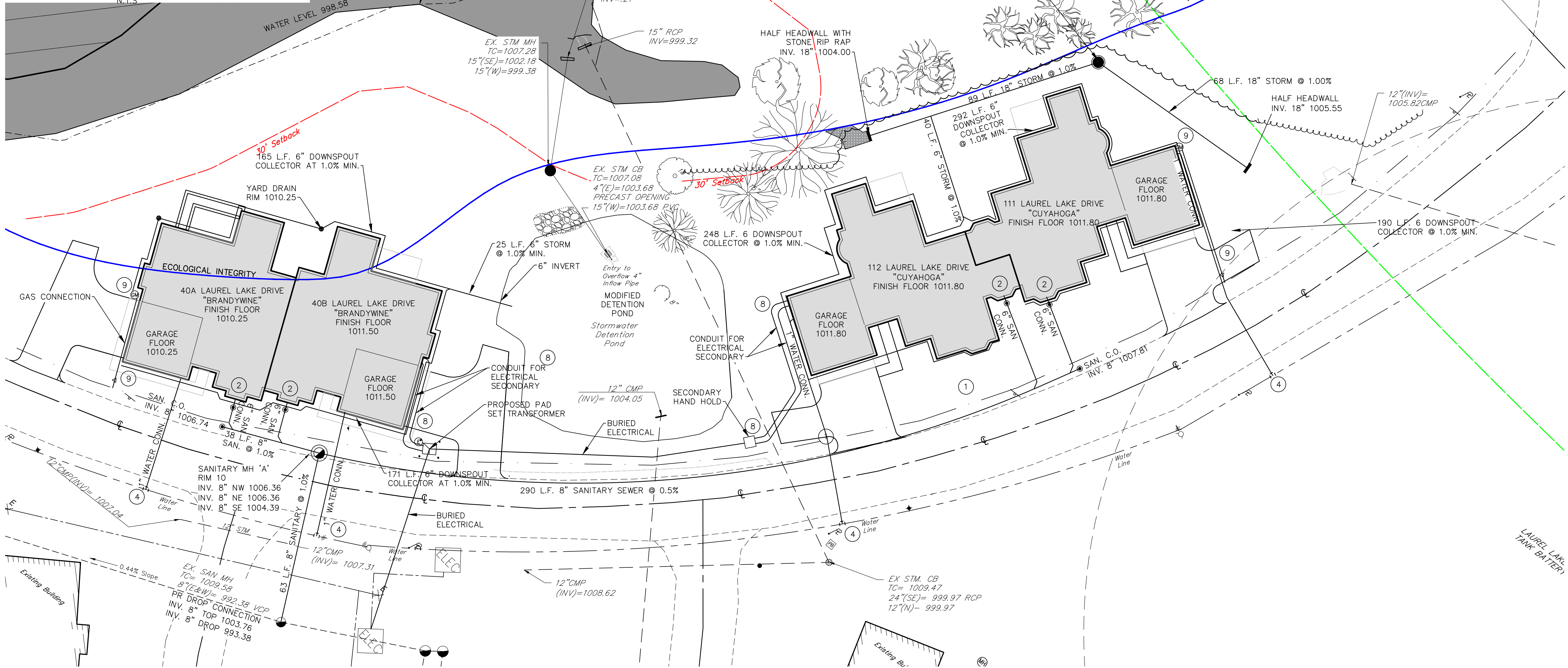
SITE PLAN - BUILDING 1 & 2



C3.02



SCHEMATIC KEY



UTILITY PLAN NOTES:

- CONTRACTOR SHALL DEFLECT 6" PVC SDR 35 SANITARY SEWER AS NEEDED WITHIN MANUFACTURER'S RECOMMENDATION TO OBTAIN A 400' RADIUS.
- 6" SANITARY CONNECTION AT 1.0% MIN. SLOPE
- INTERNAL SANITARY DROP CONNECTION. SEE DETAIL SHEET C6.02 FOR INFORMATION.
- 1" WATER CONNECTION TO BUILDING. 1" SADDLE CONNECTION TO MAIN. SEE SHEET C6.03 FOR DETAIL.
- SIGN TO BE REMOVED FOR SEWER INSTALLATION AND REINSTALLED AFTER SEWER INSTALLATION.
- 3'x3'x8" NUMBER 1 AND NUMBER 2 STONE RIPRAP.
- 8" DOWNSPOUT COLLECTOR AT 0.5% MINIMUM. CONTRACTOR SHALL COORDINATE DOWNSPOUT LOCATIONS WITH ARCHITECTURAL AND MEP PLANS.
- PROPOSED ELECTRICAL SERVICE. SEE SHEET ME1.01 FOR DETAILS.
- PROPOSED GAS SERVICE. SEE SHEET ME1.01 FOR DETAILS.



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TREE INVENTORY

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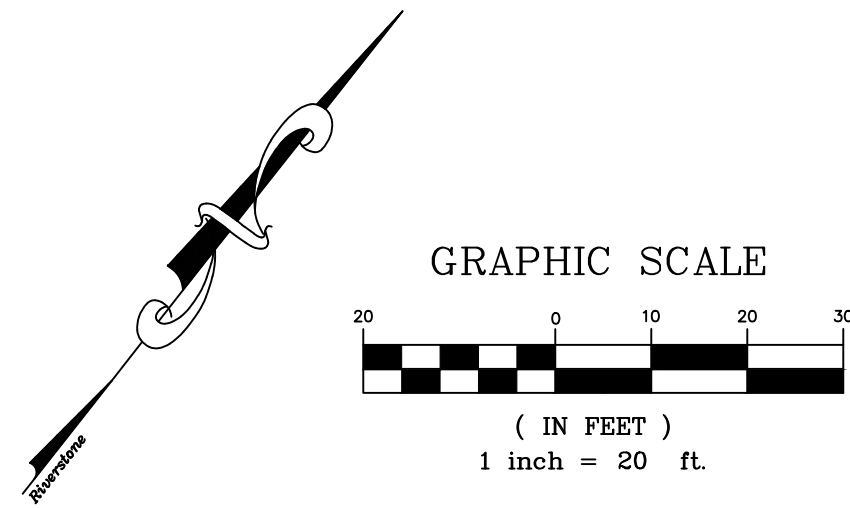
ISSUED FOR:
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3/17/25
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

UTILITY PLAN - BUILDING 1 & 2

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION COMPLETED BY CT CONSULTANTS AND WAS PROVIDED TO THE RIVERSTONE COMPANY FOR USE. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER OF ANY DISCREPANCIES IMMEDIATELY UPON DISCOVERY.

- Monument Box Found - Iron Pin or Pipe Found 5/8" Iron Pin Set and Capped - P.K. Nail - Gas Meter - Gas Valve - Utility Pole - Light Pole - Guy Anchor & Line - Telephone Box - Electric Box - Cable Box - Bollard	- Spot Elevation Tag - Hydrant - Water Service Valve - Water Valve - Water Meter - Reducer - Storm Manhole - Sanitary Manhole - Curb Inlet - Catch Basin - Round Curb Inlet - Cleanout/Test Tee	- Ex. Parcel line - Original Sublot Line - Original Lot Line - Centerline - Property Line - Right-of-way Line - Easement Line - Railroad Tracks - Electric Line - Gas Line - Sanitary/Combination Sewer - Storm Sewer - Waterline - Fence Line (Wooden) - Fence Line (Chain-Link) - Guardrail	- Ac. Acres - Adj. Adjacent - Asp. Asphalt - B.F. Basement Floor - Calc./C. Calculated - CB Catch Basin - C.C.M.R. Cuyahoga County Map Records - C.L.F. Chain-Link Fence - Clr. Clears - Conn. Connection - Conc. Concrete - D.H. Drill Hole - D.I.W.M. Ductile Iron Water Main - Elec. Electric - Encl. Encroaches - Ex. Existing - F.F. Finished Floor	- L.C.A. Limited Common Area - Meas./M. Measured - MH Manhole - Obs. Observed - Pg. Page - P.P.N. Permanent Parcel Number - Prop. Property Line - Rec./R. Record - R/W Right-of-way - San. Sanitary - S.F. Square Feet - S/L Sublot - Stm. Storm - T.B.M. Temporary Bench Mark - TBR To Be Removed - Tele. Telephone - T.F. Top Footer - Vol. Volume - Wat. Water
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Ohio Utilities Protection Service
Call 811
before you dig

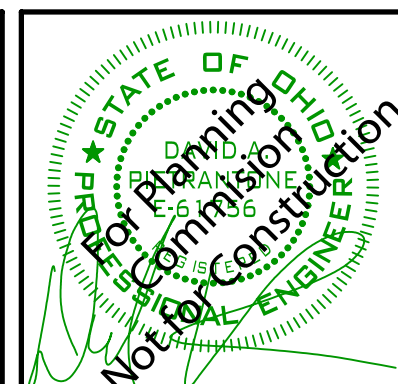
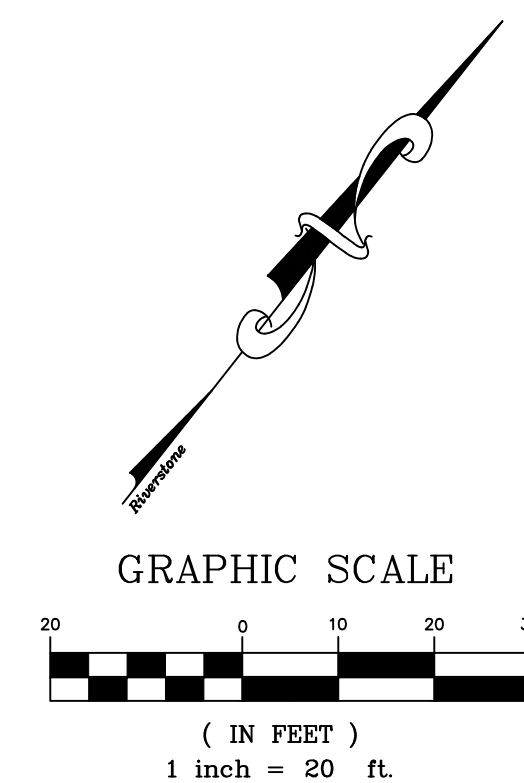
OGPUPS
Ohio Oil & Gas Producers Underground Protection Service
CMB 01/17/2008 or 811

C3.03



 = Monument Box Found  = Iron Pin or Pipe Found  = 5/8" Iron Pin Set and Capped  = Dashed Riverstone Company Dupley P56747	 = Spot Elevation Tag  = Hydrant  = Water Service Valve  = Water Valve  = Water Meter  = Reducer	 = Storm Manhole  = Sanitary Manhole  = Curb Inlet  = Catch Basin  = Round Curb Inlet  = Cleanout/Test Tee	Ex. Parcel line Original Sublot Line Original Lot Line Centerline Property Line Right-of-way Line Easement Line Railroad Tracks Electric Line Gas Line Sanitary/Combination Sewer Storm Sewer Waterline Fence Line (Wooden) Fence Line (Chain-Link) Guardrail	 = Acres  = Adjacent  = Asphalt  = Basement Floor  = Calculated  = Catch Basin  = Cuyahoga County  = Map Records  = Centerline  = Chain-link Fence  = Clears  = Concrete  = Connection  = Drill Hole  = Ductile Iron Water Main  = Electric  = Encroaches  = Existing  = Finished Floor	 = Limited Common Area  = Measured  = Manhole  = Observed  = Page  = Permanent Parcel Number  = Property Line  = Record  = Right-of-way  = Sanitary  = Square Feet  = Sublot  = Storm  = Temporary Bench Mark  = To Be Removed  = Telephone  = Top Footer  = Volume  = Water
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2023-186

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5/12/2025
TREE INVENTORY

PAGE REVISIONS:

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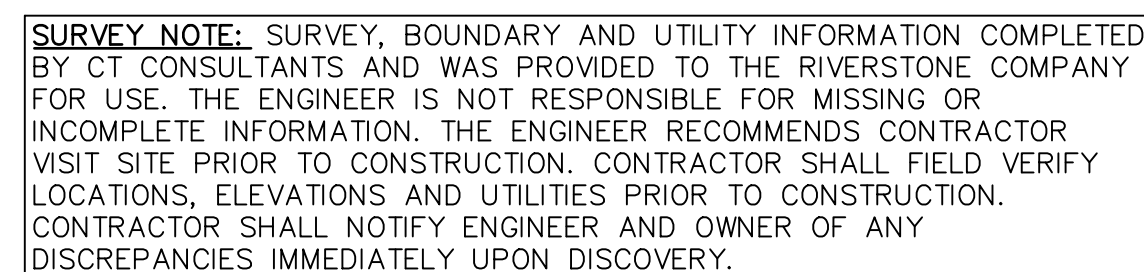
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

GRADING PLAN - BUILDING 1 & 2

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before you dig

OGPUPS 
Ohio Oil & Gas Producers Underground Protection Service
Call (614) 715-1984 or 811

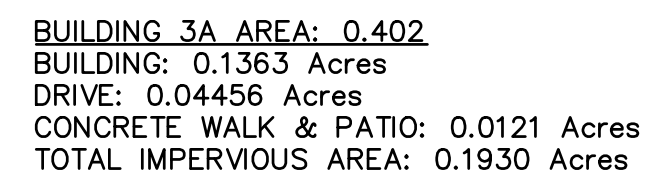
C3.04



① CONTRACTOR TO REMOVE DITCH. SEE UTILITY AND GRADING PLANS.

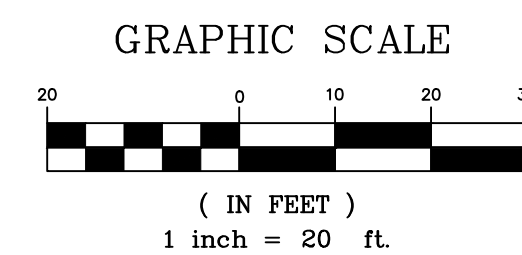
1 inch = 20 ft





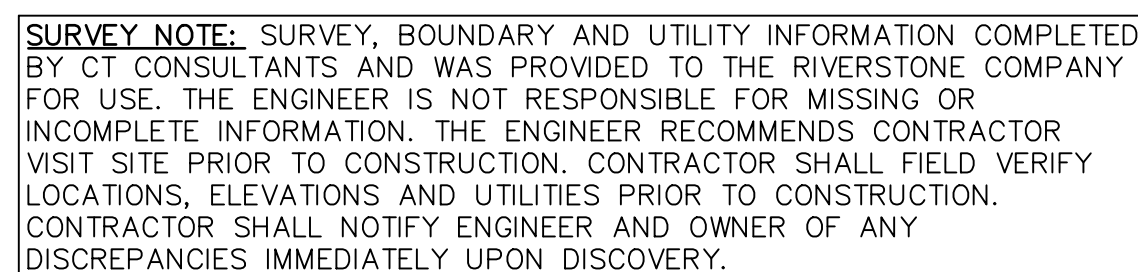
LEGEND

Ac.	Acres	L.C.A.	Limited Common Area
Adj.	Adjacent	L.F.	Lineal Feet
A.F.N.	Auditor's File Number	M.E.	Match Existing
Asp.	Asphalt	Meas./M.	Measured
B.F.	Basement Floor	Mon.	Monthly
BW	Bottom of Wall	Obs.	Observed
Calc./C.	Calculated	P.B.	Page
CB	Catch Basin	P.N.	Permanent Parcel
C.C.M.R.	Cuyahoga County Map	Number	Number
	Records	Prop	Proposed
C.L.F.	Chain-link Fence	R/C/R.	Right of Carry
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	S.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conc.	Concrete	S/L	Sublot
Conc.	Connection	Stm.	Storm
Drill Hsg.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
	Main	T/C	Top of Curb
Elec	Electric	Tele	Telephone
Elev	Elevation	T.F.	Top of Footing
Encr.	Encroaches	T.T.	Test Tee
Ex.	Existing	TW	Top of Wall
F.F.	Finished Floor	Typ.	Typical
GUT	Gutter	Vol.	Volume
Inv	Invert	Wat	Water

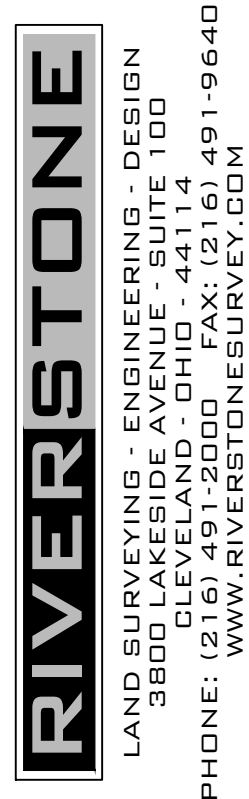


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- ① 6" SANITARY CONNECTION AT 2.0% SLOPE
- ② 1" WATER CONNECTION TO BUILDING. 1" SADDLE CONNECTION TO MAIN. SEE SHEET C6.03 FOR DETAILS.
- ③ 6" DOWNSPOUT COLLECTOR AT 1.0% MINIMUM. CONTRACTOR SHALL COORDINATE DOWNSPOUT LOCATIONS WITH ARCHITECTURAL AND MEP PLANS.
- ④ PRIOR TO CONSTRUCTION CONTRACTOR SHALL LOCATE AND EXPOSE THE EXISTING STORM SEWER. CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE LOCATION AND DEPTH OF THE EXISTING STORM SEWER TO VERIFY PIPE SLOPES AND PROPOSED INVERTS.
- ⑤ PROPOSED ELECTRICAL SERVICE. SEE MEP PLANS SHEET ME1.01 FOR DETAILS.
- ⑥ PROPOSED GAS SERVICE. SEE MEP PLANS SHEET ME1.01 FOR DETAILS.



PLAN REVISIONS:
5/12/2025
TREE INVENTORY

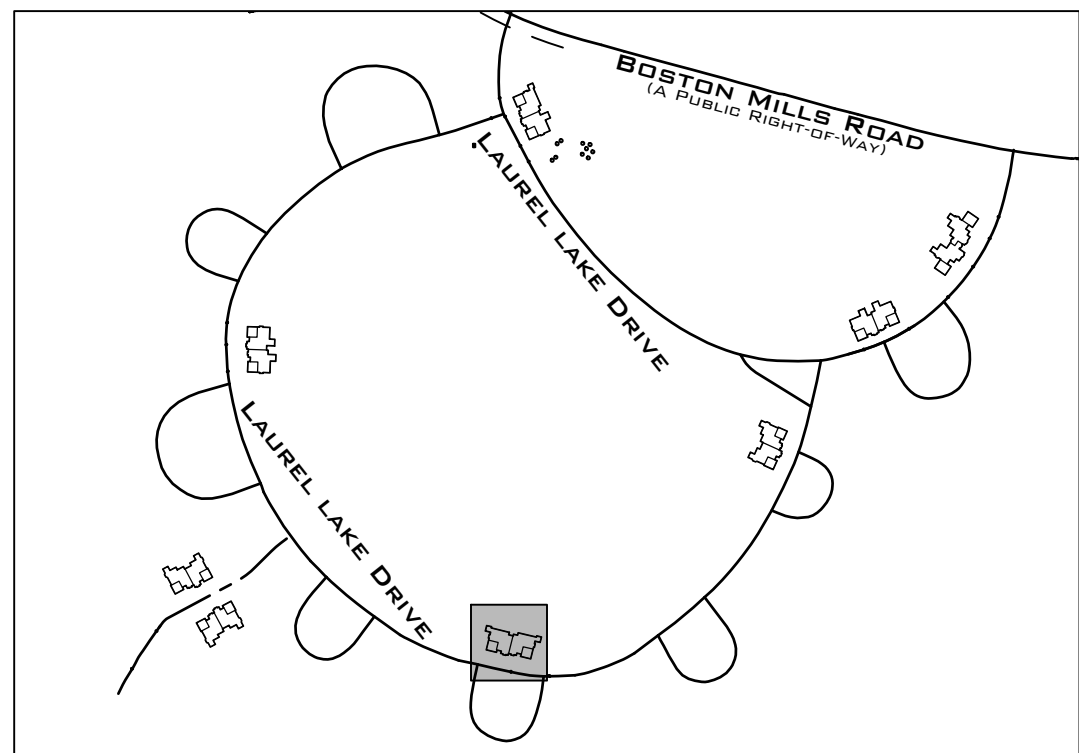
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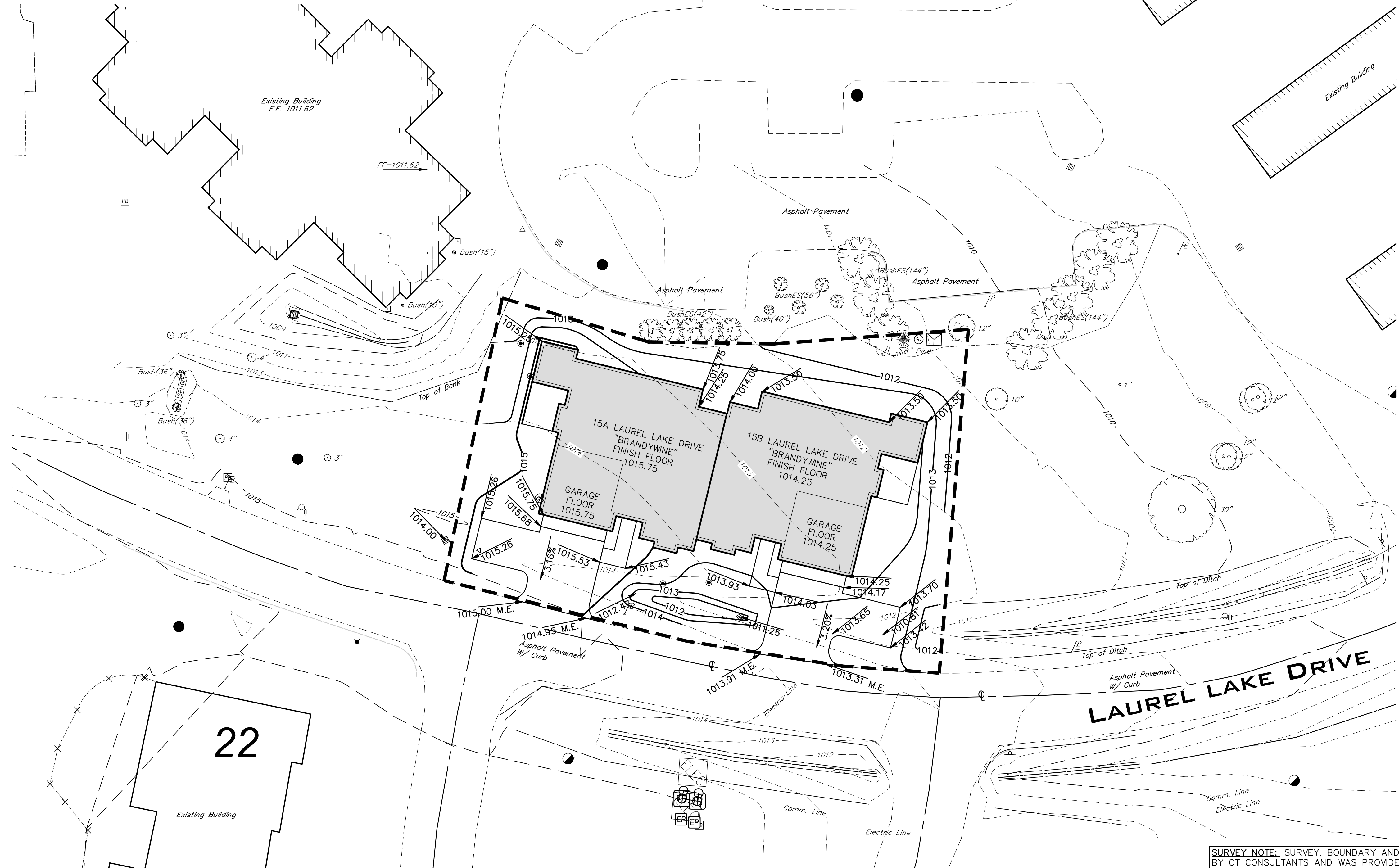
UTILITY PLAN - BUILDING 3



C4.03



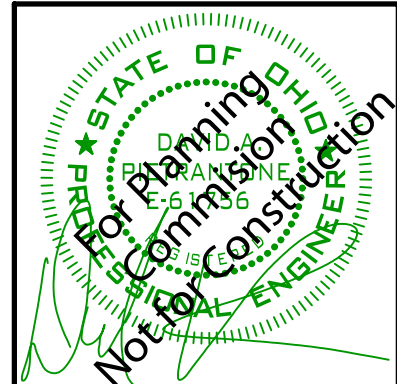
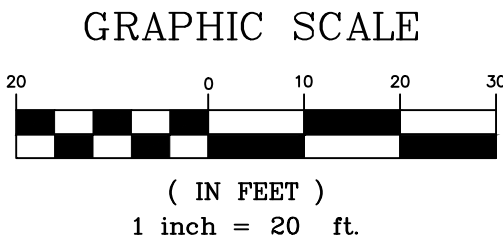
SCHEMATIC KEY
N.T.S.



LEGEND

M	= Monument Box Found	PROPOSED	Spot Elevation Tag
○	= Iron Pin or Pipe Found	⊗	= Hydrant
●	= 5/8" Iron Pin Set and Capped		= Water Service Valve
	Riverstone Company Dudley P56747		= Water Valve
+	= P.C. Wall	⊙	= Water Meter
⊕	= Gas Meter	⊖	= Reducer
△	= Gas Valve	⦿	= Storm Manhole
⊙	= Utility Pole	⦿	= Sanitary Manhole
⊙	= Light Pole	⦿	= Catch Inlet
⊙	= Guy Anchor & Line	⦿	= Cutch Basin
⊙	= Telephone Box	⦿	= Property Line
⊙	= Electric Box	⦿	= Centerline
⊙	= Cable Box		
⊙	= Bollard		
⊙	= Cleanout / Test Tee		
Ex. Parcel Line			
Original Sublot Line			
Original Lot Line			
Centerline			
Property Line			
Right-of-way Line			
Easement Line			
Railroad Tracks			
Electric Line			
Gas Line			
Sanitary/Combination Sewer			
Storm Sewer			
Waterline			
Fence Line (Wooden)			
Fence Line (Chain-Link)			
Guardrail			
Acres	L.C.A.	Limited Common Area	
Adj.	L.F.	Linear Feet	
A.F.N.	M.E.	Match Existing	
Asp.	M.E.S./M.	Measured	
B.F.	M.H.	Manhole	
BW	Obs.	Observed	
Calc./C.	P.P.N.	Permanent Parcel	
CB	Prop	Proposed	
C.C.M.R	Rec./R.	Record	
	R/W	Right-of-way	
C.L.F.	S.M.	Sanitary	
Clr.	S.F.	Square Feet	
C.O.	S/L	Sublot	
Comb.	Sq	Square	
Conn.	Stm.	Storm	
Conn.	T.B.M.	Temporary Bench Mark	
D.H.	TBR	To Be Removed	
D.I.W.M.	T/C	Top of Curb	
	T/E	Telephone	
Elec	T.F.	Top Of Footer	
Encr.	T.T.	Test Tee	
Exc.	Top of Wall		
Ext.	Typical		
Fin.	Volume		
GUT	Vol.		
Invert	Wat	Water	

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2023-186

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TREE INVENTORY

PAGE REVISIONS:

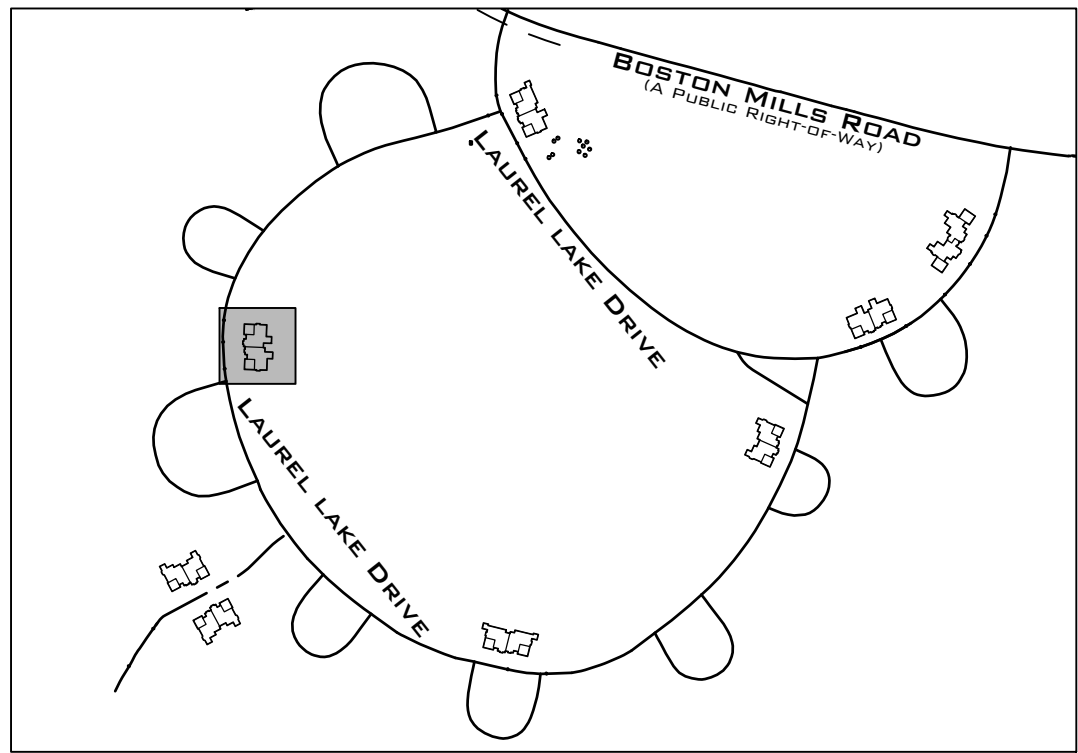
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200 LAUREL LAKE DRIVE

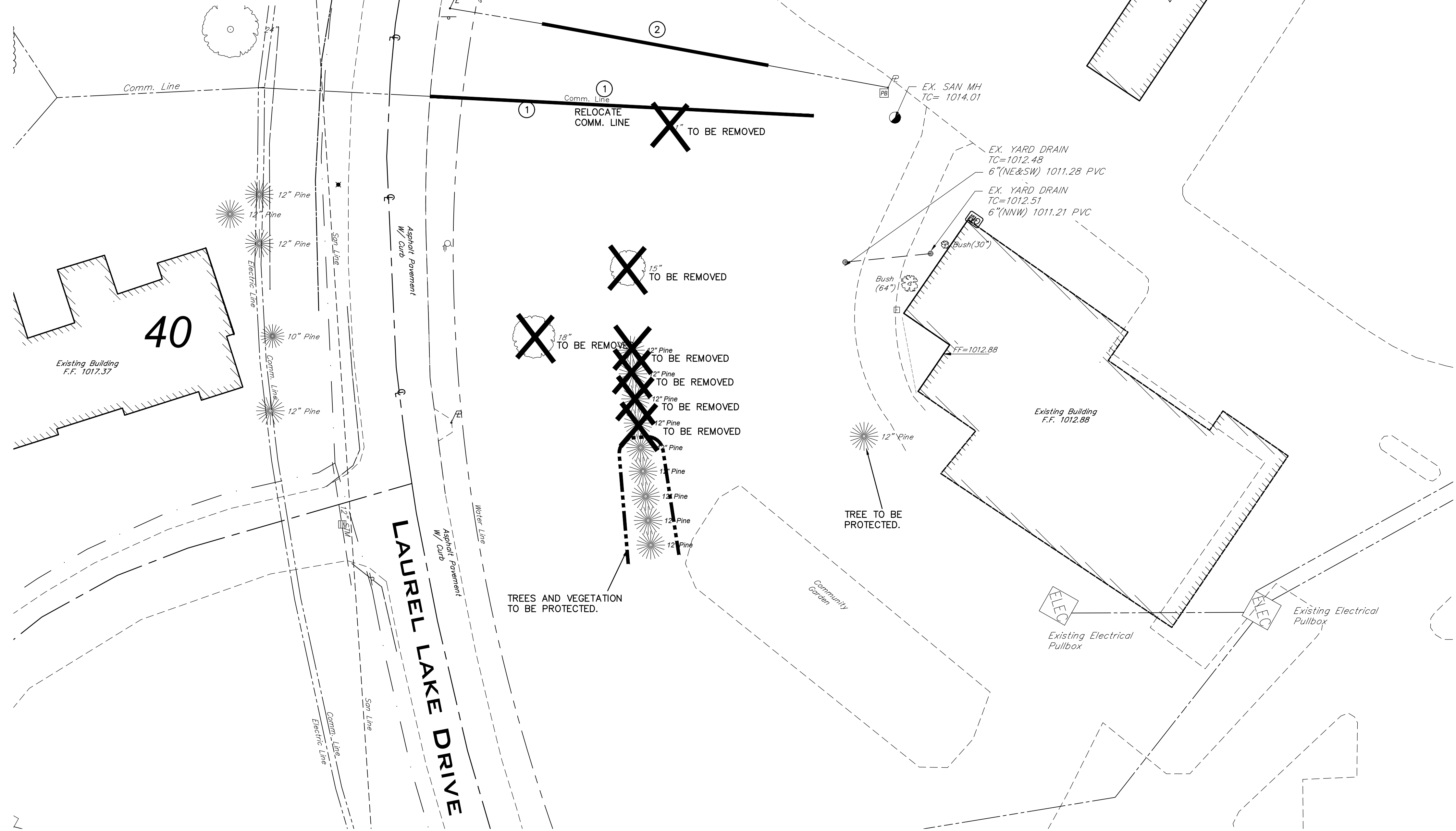
GRADING PLAN - BUILDING 3



C4.04



SCHMATIC KEY
N.T.S



GENERAL SITE DEMOLITION NOTES:

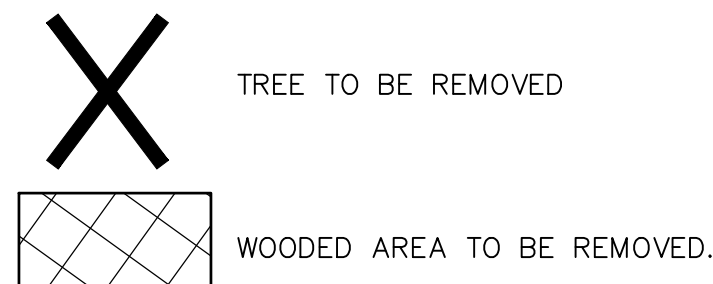
CONTRACTOR SHALL COMPLETELY CLEAR SITE WITH REGARDS TO PROJECT LIMITS. REMOVAL SHALL INCLUDE BUT NOT LIMITED TO ALL PAVEMENTS, SIDEWALKS, CURBS, POLES, SIGNS, UTILITIES, FENCES, TREES, LANDSCAPING AND ALL APPURTENANCES.

CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL PERMITS NECESSARY FOR SITE DEMOLITION AND SHALL BE RESPONSIBLE FOR ALL FEES.

CONTRACTOR SHALL CALL THE OHIO UTILITIES PROTECTION SERVICE (OUPS) A MINIMUM OF 48 HOURS BEFORE ANY DEMOLITION WORK.

CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY DEMOLITION OR RELOCATION WORK WITH THE APPROPRIATE UTILITIES PRIOR TO DEMOLITION.

SITE DEMOLITION LEGEND:



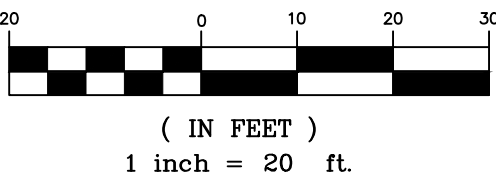
SITE DEMOLITION PLAN KEYNOTES:

- ① CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANIES TO RELOCATE COMM. LINE.
- ② EXISTING ELECTRIC LINE TO BE RELOCATED. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTION.

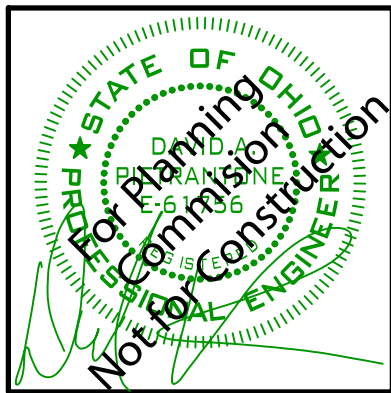
LEGEND

	= Monument Box Found		= Spot Elevation Tag
	= Iron Pin or Pipe Found		= Hydrant
	= 5/8" Iron Pin Set and Capped Riverstone Company Dudley P56747		= Water Service Valve
	= P.K. Nail		= Water Valve
	= Gas Meter		= Water Meter
	= Gas Valve		= Reducer
	= Utility Pole		= Storm Manhole
	= Light Pole		= Sanitary Manhole
	= Guy Anchor & Line		= Curb Inlet
	= Telephone Box		= Catch Basin
	= Electric Box		= Property Line
	= Cable Box		= Centerline
	= Bollard		
	= Cleanout / Test Tee		
	= Ex. Parcel line		
	= Original Sublot Line		
	= Original Lot Line		
	= Centerline		
	= Property Line		
	= Right-of-way Line		
	= Easement Line		
	= Railroad Tracks		
	= Electric Line		
	= Gas Line		
	= Sanitary/Combination Sewer		
	= Storm Sewer		
	= Waterline		
	= Fence Line (Wooden)		
	= Fence Line (Chain-Link)		
	= Guardrail		
	= Acres		= Limited Common Area
	= Adjacent		= Lineal Feet
	= Auditor's File Number		= Match Existing
	= Asphalt		= Measured
	= Basement Floor		= Manhole
	= Bottom of Wall		= Observed
	= Calculated		= Page
	= Catch Basin		= Permanent Parcel
	= Cuyahoga County Map		= Number
	= Chain-link Fence		= Proposed
	= Clears		= Record
	= Clean Out		= Right-of-way
	= Combination		= Sanitary
	= Concrete		= Square Feet
	= Connection		= Sublot
	= Drill Hole		= Storm
	= Ductile Iron Water		= Temporary Bench Mark
	= Electric		= To Be Removed
	= Elevation		= Top of Curb
	= Encroaches		= Telephone
	= Existing		= Top Of Footer
	= Finished Floor		= Test Tee
	= Gutter		= Top of Wall
	= Invert		= Typical
			= Volume
			= Water

GRAPHIC SCALE



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2023-186

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5/12/2025
TREE INVENTORY

PAGE REVISIONS:

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PC APPLICATION

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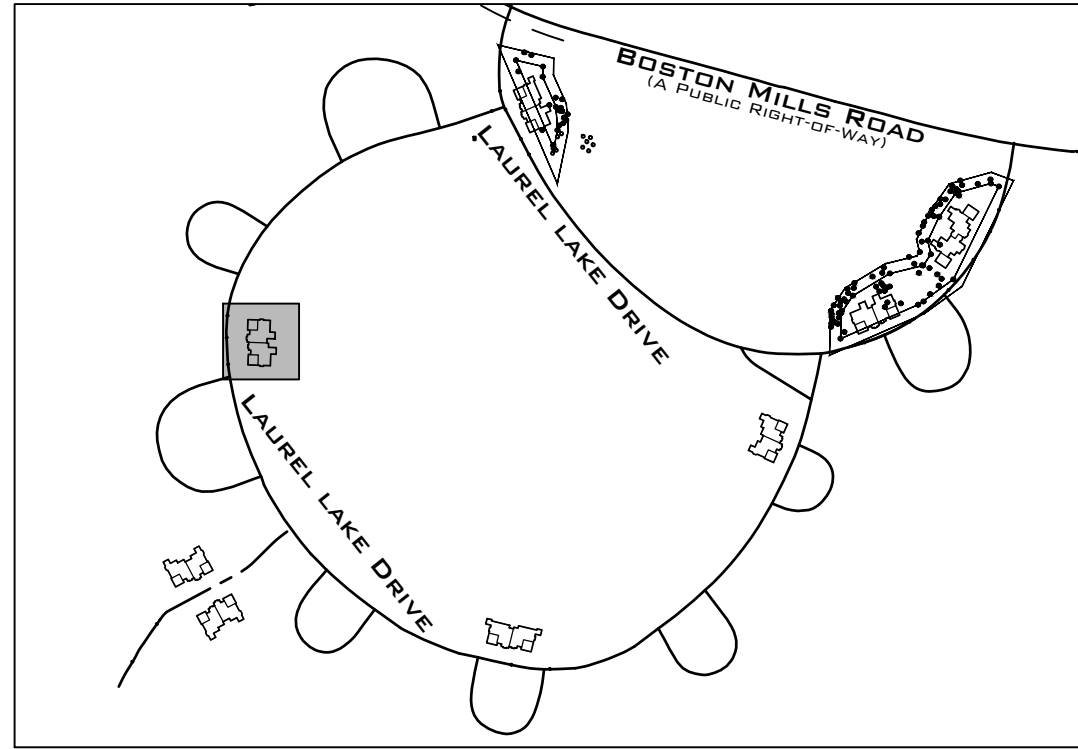
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

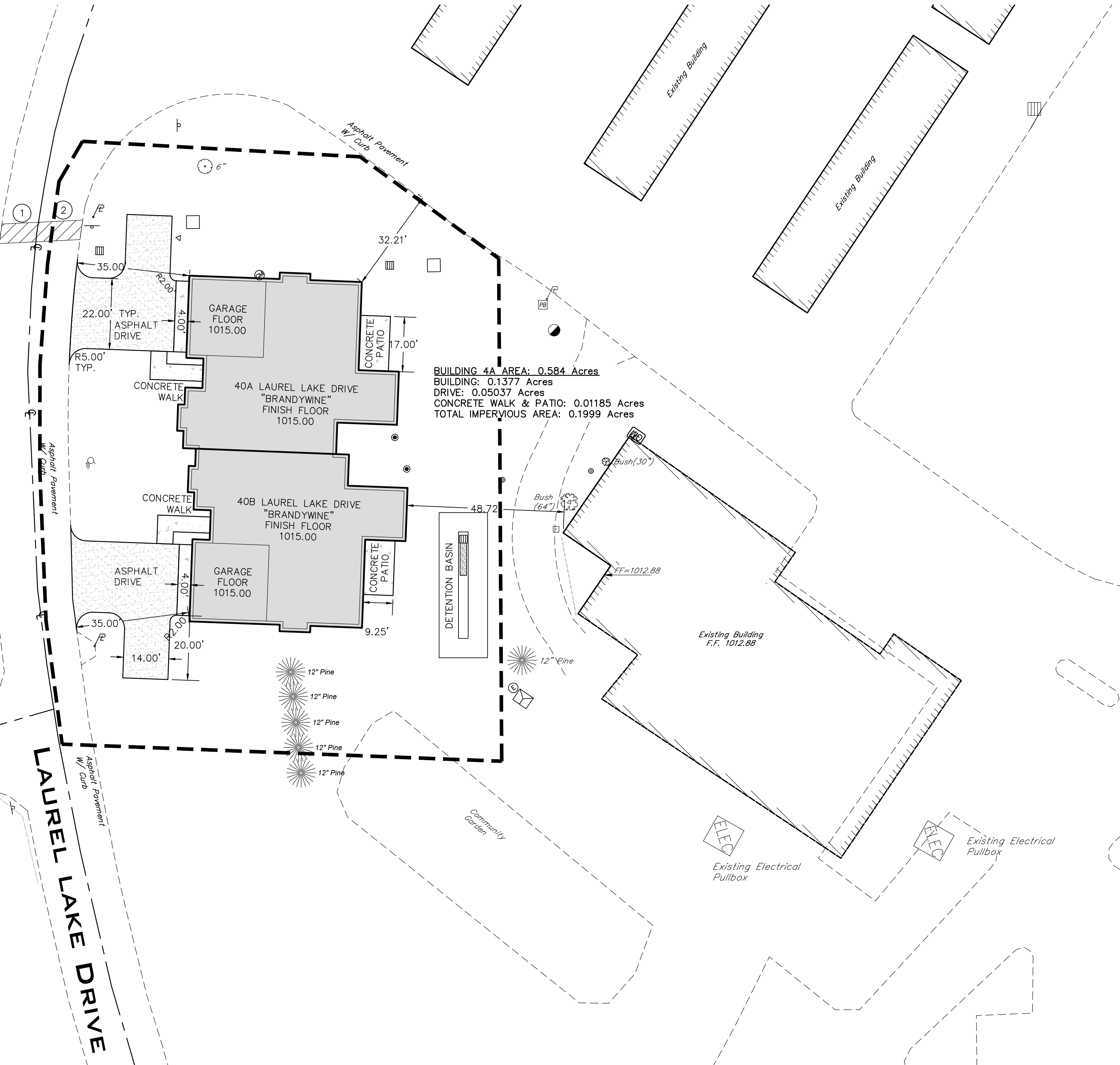
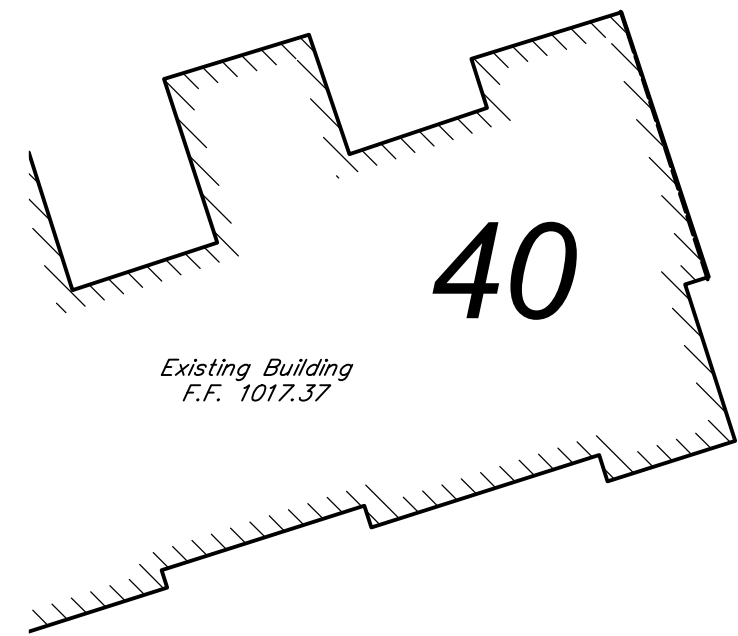
SITE DEMOLITION PLAN - BUILDING 4



C5.01



SCHEMATIC KEY
N.T.S.



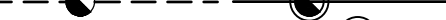
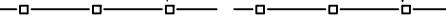
BUILDING 4A AREA: 0.584 Acres
BUILDING: 0.1377 Acres
DRIVE: 0.05037 Acres
CONCRETE WALK & PATIO: 0.01185 Acres
TOTAL IMPERVIOUS AREA: 0.1999 Acres

- GENERAL SITE PLAN NOTES:
- 1 CONTRACTOR SHALL PROVIDE A CLEAN SMOOTH EDGE AND ENSURE THE INTEGRITY OF THE ASPHALT PAVEMENT TO REMAIN.
 - 2 CONTRACTOR SHALL REPAIR PAVEMENT AFTER NEW UTILITY CONNECTIONS ARE INSTALLED. SEE DETAIL SHEET C6.01.

LEGEND

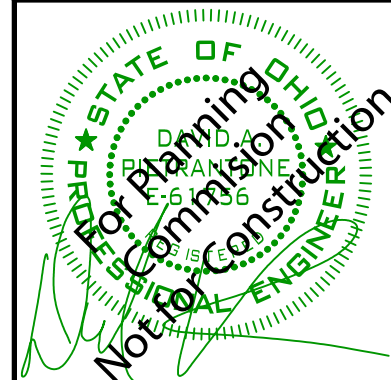
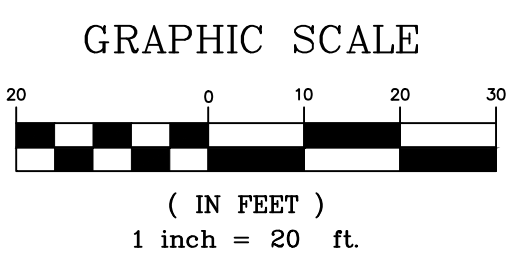
	= Monument Box Found		= Spot Elevation Tag
	= Iron Pin or Pipe Found		= Hydrant
	= 5/8" Iron Pin Set and Capped Riverstone Company Dudley P56747		= Water Service Valve
	= P.K. Nail		= Water Valve
	= Gas Meter		= Water Meter
	= Gas Valve		= Reducer
	= Utility Pole		= Storm Manhole
	= Light Pole		= Sanitary Manhole
	= Guy Anchor & Line		= Curb Inlet
	= Telephone Box		= Catch Basin
	= Electric Box		= Property Line
	= Cable Box		= Centerline
	= Bollard		
	= Cleanout / Test Tee		

Ex. Parcel Line	
Original Sublot Line	
Original Lot Line	
Centerline	
Property Line	
Right-of-way Line	
Easement Line	
Railroad Tracks	

Electric Line		Existing	PROPOSED
Gas Line			
Sanitary/Combination Sewer			
Storm Sewer			
Waterline			
Fence Line (Wooden)			
Fence Line (Chain-Link)			
Guardrail			

Ac.	Acres	L.C.A.	Limited County Area
Adj.	Adjacent	L.F.	Lineal Feet
A.F.N.	Asphalt's File Number	M.E.	Match Existing
Asp.	Asphalt	Meas./M.	Measured
B.F.	Basement Floor	Mn	Manhole
B.W.	Bottom of Wall	Obs.	Observed
Calc./C.	Calculated	Pg.	Page
CB	Catch Basin	P.P.N.	Permanent Bench Mark
C.C.M.R.	Cuyahoga County Map	Number	Number
C.L.F.	Records	Prop	Proposed
Clr.	Chain-link Fence	Rec./R.	Record
C.O.	Cleats	R/W	Right-of-way
C.C.	Clean Out	San.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conc.	Concrete	Sublot	Sublot
Conn.	Connection	Stm.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
		T/C	Top of Curb
		Tele	Telephone
Elec	Electric	T.F.	Top of Footer
Elev	Elevation	T.I.	Test Tee
Encr.	Encroaches	T.W.	Top of Wall
Ex.	Existing	Typ	Typical
F.F.	Finished Floor	Vol.	Volume
GUT	Gutter	Wat	Water
Inv	Invert		

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION COMPLETED BY CT CONSULTANTS AND WAS PROVIDED TO THE RIVERSTONE COMPANY FOR USE. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER OF ANY DISCREPANCIES IMMEDIATELY UPON DISCOVERY.



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2023-186

PLAN REVISIONS:
5/12/2025
TREE INVENTORY

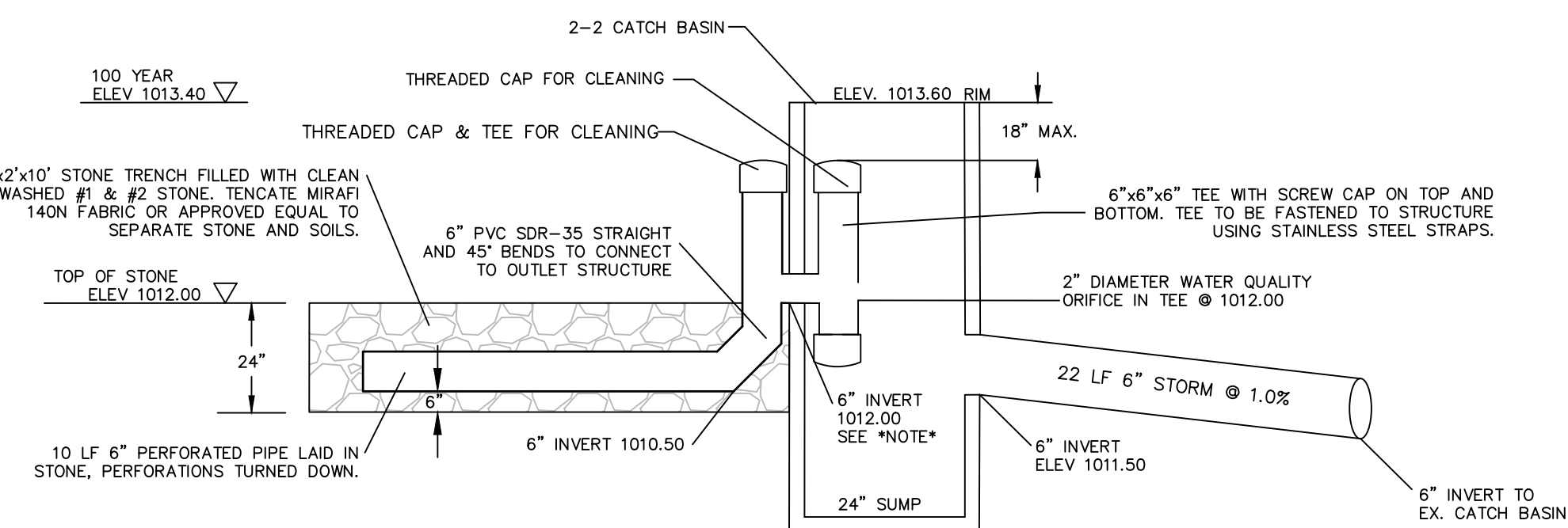
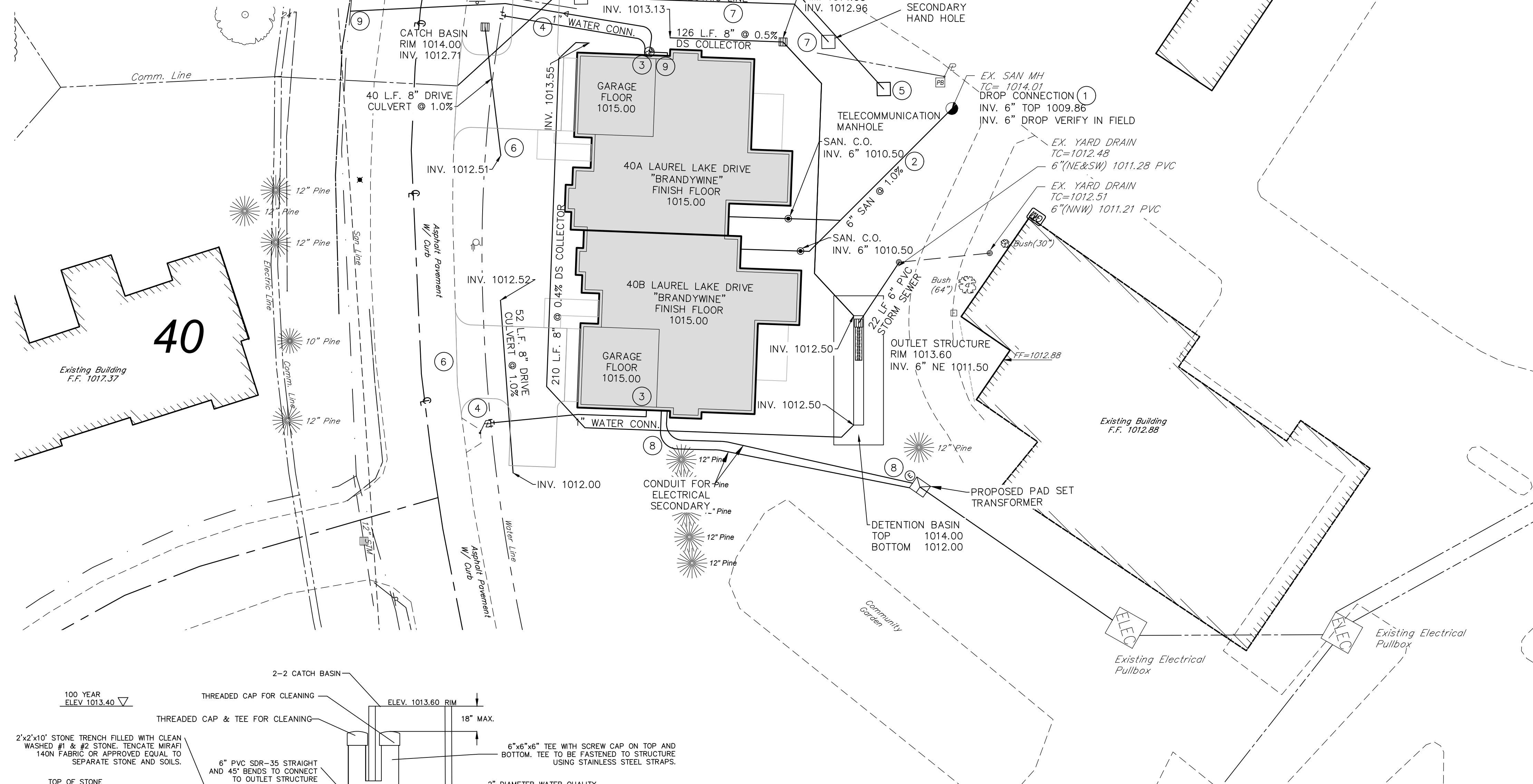
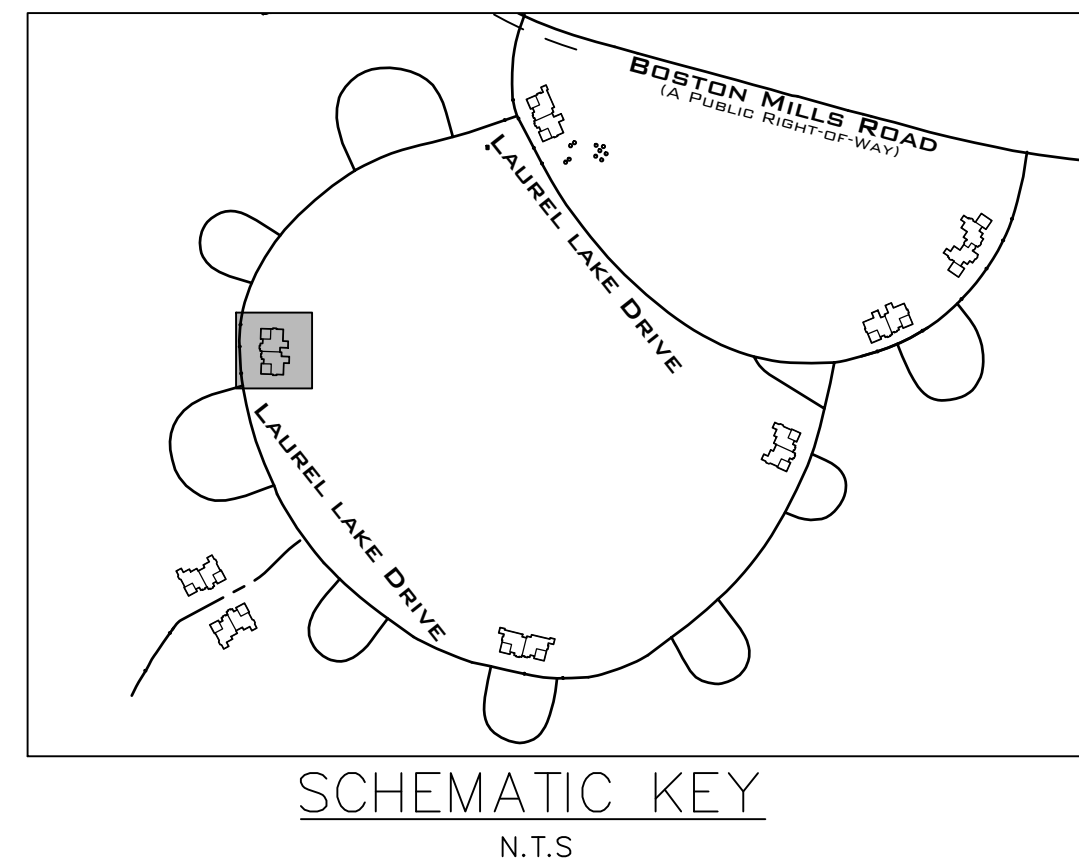
PAGE REVISIONS:

ISSUED FOR:
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LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE
SITE PLAN - BUILDING 4



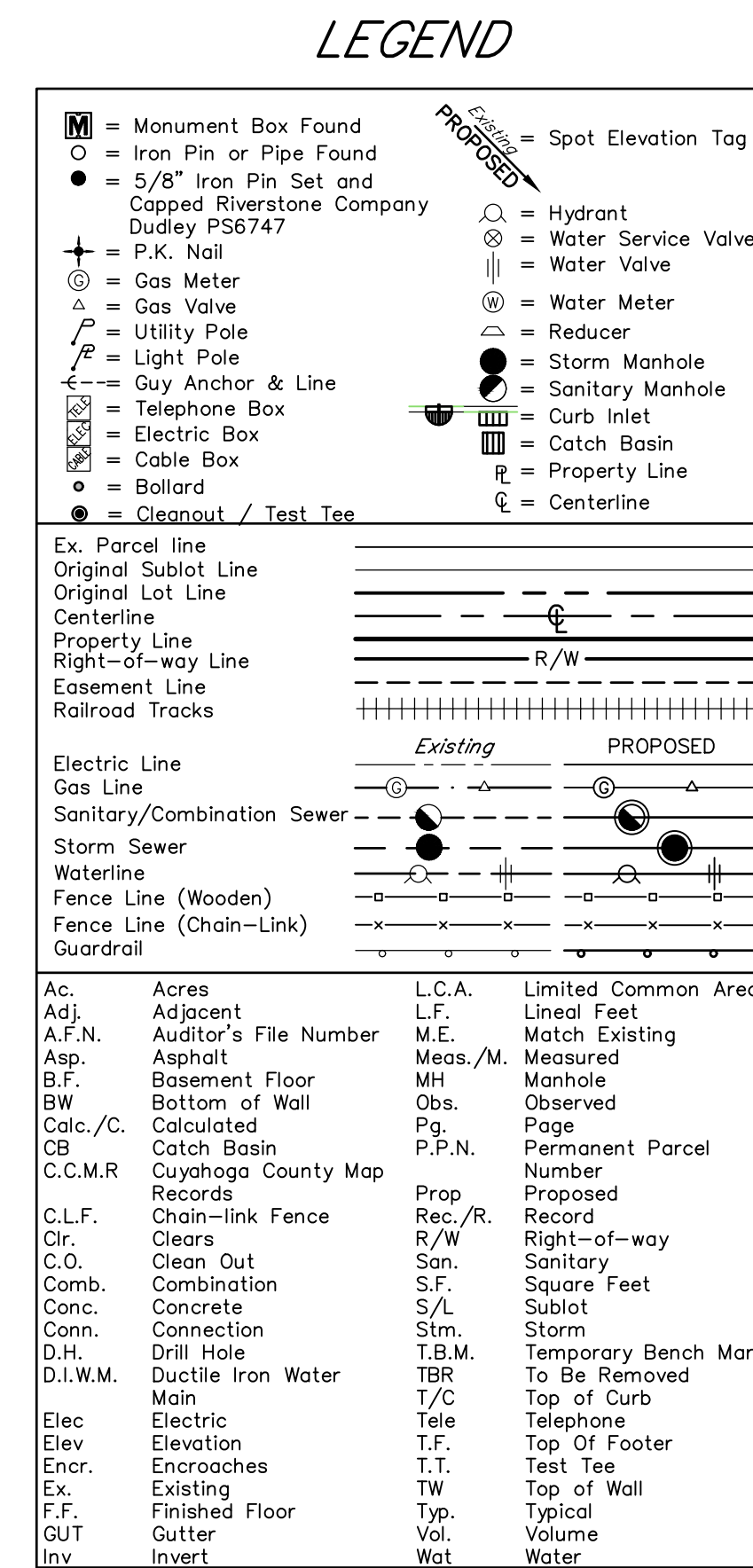
C5.02



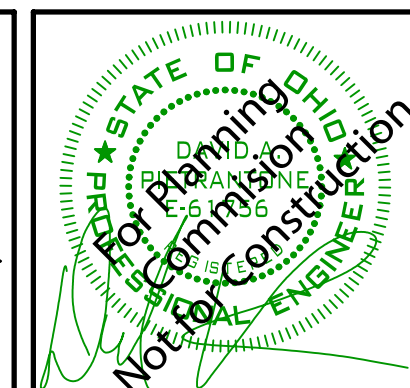
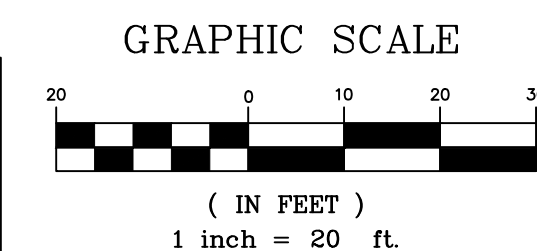
2-2 OUTLET STRUCTURE
N.T.S.

UTILITY PLAN NOTES:

- ① 6" SANITARY CONNECTION WITH INTERNAL DROP CONNECTION. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING SEWER INVERT ELEVATION AND NOTIFY ENGINEER FOR DROP CONNECTION INVERT.
- ② 6" SANITARY CONNECTION AT 1.0% SLOPE
- ③ 1" WATER CONNECTION. SEE DETAIL SHEET C6.03.
- ④ 1" SADDLE CONNECTION TO MAIN. SEE DETAIL SHEET C6.03.
- ⑤ COMMUNICATION LINE IS TO BE RELOCATED AROUND PROPOSED BUILDING. CONTRACTOR IS TO COORDINATE WITH LOCAL UTILITY COMPANIES.
- ⑥ 8" PVC DRIVE CULVERT. SEE SHEET C6.02 FOR DETAILS.
- ⑦ RELOCATED ELECTRICAL CONDUIT. CONTRACTOR SHALL COORDINATE WITH FIRST ENERGY PRIOR TO CONSTRUCTION.
- ⑧ PROPOSED ELECTRICAL SERVICE. SEE MEP PLANS SHEET ME1.03 FOR DETAILS.
- ⑨ PROPOSED GAS SERVICE. SEE MEP PLANS SHEET ME1.03 FOR DETAILS.



SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION COMPLETED BY C.T. CONSULTANTS, INC. WAS PROVIDED TO THE RIVERSTONE COMPANY. CONTRACTOR AND/OR USER OF THIS ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER OF ANY DISCREPANCIES IMMEDIATELY UPON DISCOVERY.



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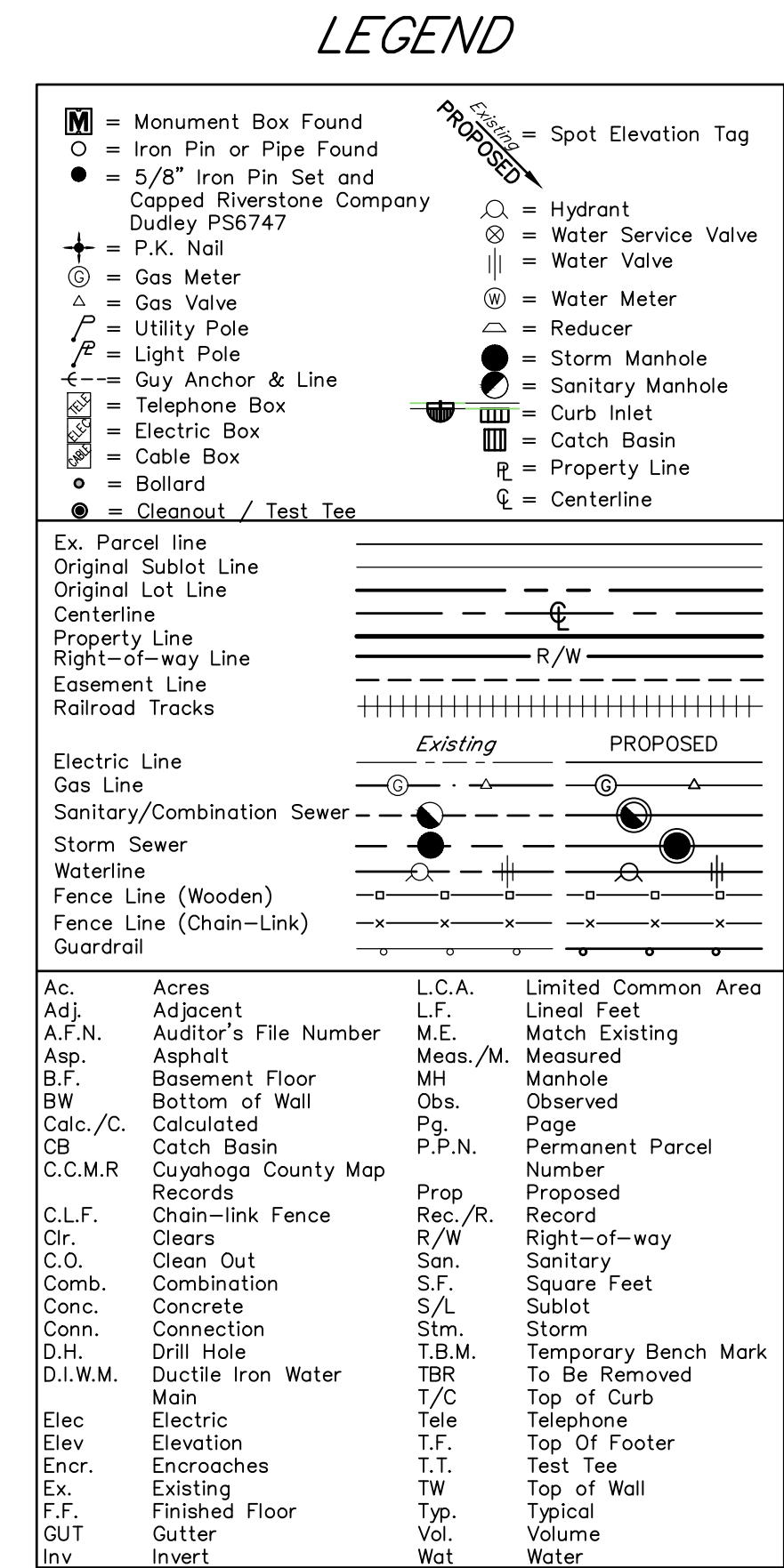
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

UTILITY PLAN - BUILDING 4

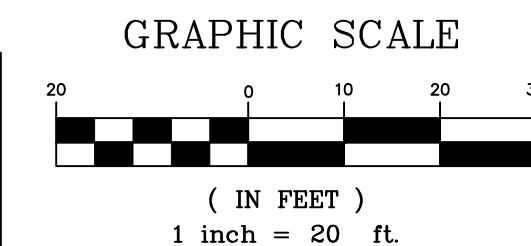
Ohio Utilities Protection Service
Call 811
before you dig

OGPUPS 
Ohio Oil & Gas Producers Underground Protection Service
Call (614) 715-7884 or 811

C5.03



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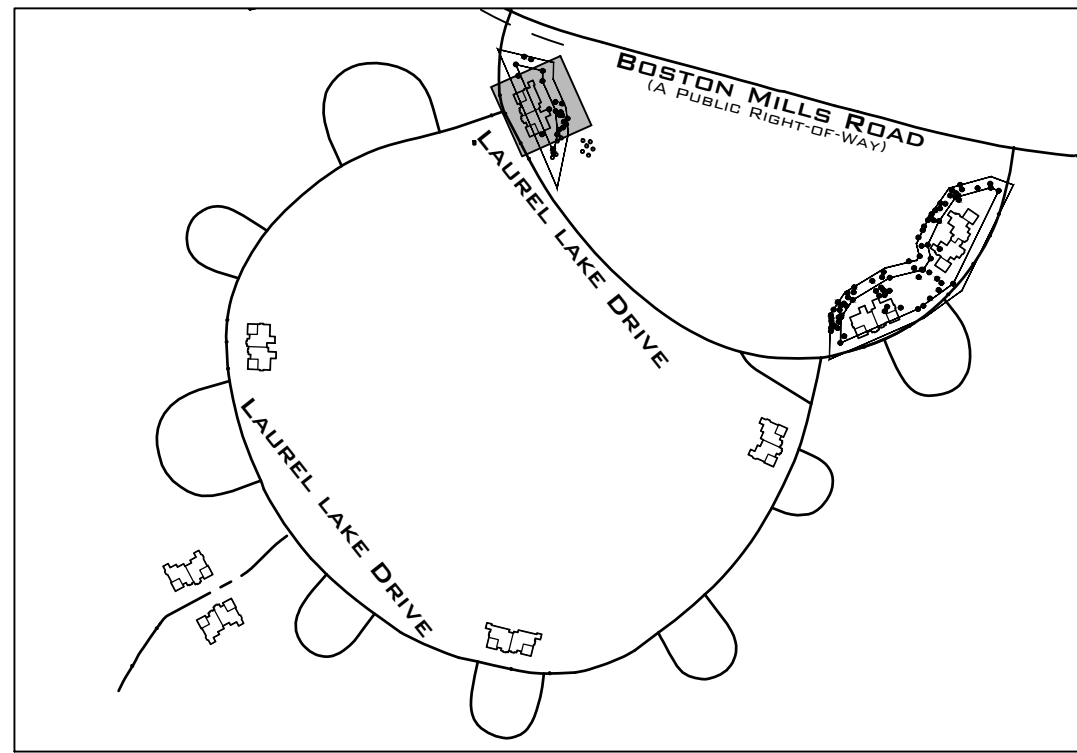
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

GRADING PLAN - BUILDING 4



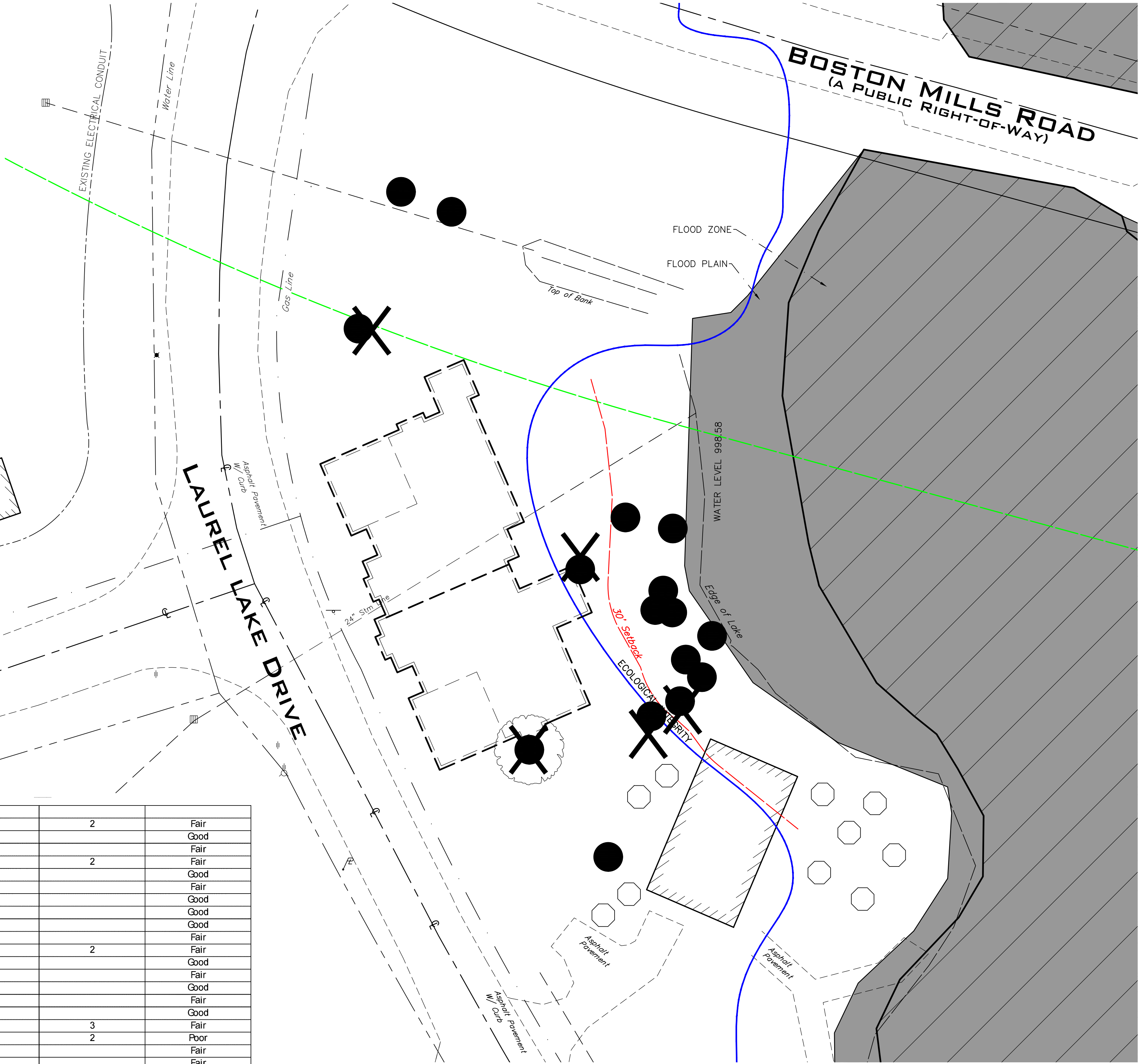
OGPUPS 
Ohio Oil & Gas Producers Underground Protection Service
Call (614) 715-2984 or 811

C5.04



SCHMATIC KEY
N.T.S.

1	red maple	<i>Acer rubrum</i>	13.12	2	Fair
2	hickory species	<i>Carya sp.</i>	19.8		Good
3	hickory species	<i>Carya sp.</i>	14		Fair
4	hickory species	<i>Carya sp.</i>	15.6	2	Fair
5	bald cypress	<i>Taxodium distichum</i>	7		Good
6	hickory species	<i>Carya sp.</i>	10		Fair
7	northern red oak	<i>Quercus rubra</i>	9		Good
8	bald cypress	<i>Taxodium distichum</i>	9		Good
9	bald cypress	<i>Taxodium distichum</i>	9		Good
10	bald cypress	<i>Taxodium distichum</i>	7		Fair
11	black willow	<i>Salix nigra</i>	14.5	2	Fair
12	bald cypress	<i>Taxodium distichum</i>	9		Good
13	northern red oak	<i>Quercus rubra</i>	10		Fair
14	white oak	<i>Quercus alba</i>	20		Good
15	sugar maple	<i>Acer saccharum</i>	15		Fair
16	white oak	<i>Quercus alba</i>	24		Good
17	American basswood	<i>Tilia americana</i>	8.7,6	3	Fair
18	black cherry	<i>Prunus serotina</i>	11.11	2	Poor
19	northern red oak	<i>Quercus rubra</i>	7		Fair
20	American elm	<i>Ulmus americana</i>	10		Fair
21	northern red oak	<i>Quercus rubra</i>	15		Poor
22	American elm	<i>Ulmus americana</i>	6		Fair
23	American elm	<i>Ulmus americana</i>	15		Fair
24	red maple	<i>Acer rubrum</i>	6,9,8,7	4	Fair
25	black cherry	<i>Prunus serotina</i>	12		Poor
26	silver maple	<i>Acer saccharinum</i>	18		Fair
27	American elm	<i>Ulmus americana</i>	6		Fair
28	American basswood	<i>Tilia americana</i>	12		Fair
29	red maple	<i>Acer rubrum</i>	9		Fair
30	black cherry	<i>Prunus serotina</i>	10		Fair



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GENERAL SITE DEMOLITION NOTES:

CONTRACTOR SHALL COMPLETELY CLEAR SITE WITH REGARDS TO PROJECT LIMITS. REMOVAL SHALL INCLUDE BUT NOT LIMITED TO ALL PAVEMENTS, SIDEWALKS, CURBS, POLES, SIGNS, UTILITIES, FENCES, TREES, LANDSCAPING AND ALL APPURTENANCES.

CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL PERMITS NECESSARY FOR SITE DEMOLITION AND SHALL BE RESPONSIBLE FOR ALL FEES.

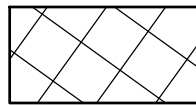
CONTRACTOR SHALL CALL THE OHIO UTILITIES PROTECTION SERVICE (OUPS) A MINIMUM OF 48 HOURS BEFORE ANY DEMOLITION WORK.

CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY DEMOLITION OR RELOCATION WORK WITH THE APPROPRIATE UTILITIES PRIOR TO DEMOLITION

SITE DEMOLITION LEGEND:



TREE TO BE REMOVED



WOODED AREA TO BE REMOVED.

SITE DEMOLITION PLAN KEYNOTES:

- ① EXISTING 24" STORM SEWER TO BE RELOCATED.

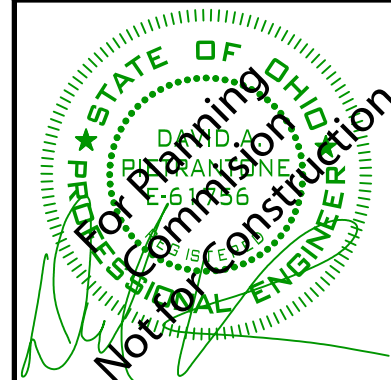
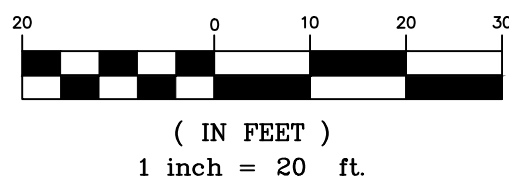
LEGEND

- Legend symbols and definitions:
- Monument Box Found
 - Iron Pin or Pipe Found
 - 5/8" Iron Pin Set and Capped Riverstone Company Dudley P56747
 - P.K. Nail
 - Gas Meter
 - Gas Valve
 - Utility Pole
 - Light Pole
 - Guy Anchor & Line
 - Telephone Box
 - Electric Box
 - Cable Box
 - Bollard
 - Cleanout / Test Tee
 - Spot Elevation Tag
 - Hydrant
 - Water Service Valve
 - Water Valve
 - Water Meter
 - Reducer
 - Storm Manhole
 - Sanitary Manhole
 - Curb Inlet
 - Catch Basin
 - Property Line
 - Centerline

- Legend symbols and definitions (continued):
- Ex. Parcel line
 - Original Sublot Line
 - Original Lot Line
 - Centerline
 - Property Line
 - Right-of-way Line
 - Easement Line
 - Railroad Tracks
 - Electric Line
 - Gas Line
 - Sanitary/Combination Sewer
 - Storm Sewer
 - Waterline
 - Fence Line (Wooden)
 - Fence Line (Chain-Link)
 - Guardrail

- Legend symbols and definitions (continued):
- Ac. Acres
 - Adj. Adjacent
 - A.F.N. Auditor's File Number
 Asp. Asphalt | B.F. Basement Floor | B.W. Bottom of Wall | Calc./C. Calculated | CB Catch Basin | C.C.M.R. Cuyahoga County Map | C.L.F. Chain-link Fence | Clr. Clears | C.O. Clean Out | Comb. Combination | Conc. Concrete | Conn. Connection | D.H. Drill Hole | D.I.W.M. Ductile Iron Water Main | Elev. Elevation | Encr. Encroaches | Ex. Existing | F.F. Finished Floor | GUT Gutter | Inv. Invert | L.C.A. Limited Common Area | L.F. Lineal Feet | M.E. Match Existing | Meas./M. Measured | M.H. Manhole | Obs. Observed | Pg. Page | P.P.N. Permanent Parcel Number | Prop. Proposed | Rec./R. Record | R/W Right-of-way | San. Sanitary | S.F. Square Feet | S/L Sublot | Stm. Storm | T.B.M. Temporary Bench Mark | TBR To Be Removed | T/C Top of Curb | Tele. Telephone | T.F. Top Of Footer | T.T. Test Tee | TW Top of Wall | Typ. Typical | Vol. Volume | Wat. Water |

GRAPHIC SCALE



RIVERSTONE
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2023-186

PLAN REVISIONS:

5/12/2025
TREE INVENTORY

PAGE REVISIONS:

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200 LAUREL LAKE DRIVE

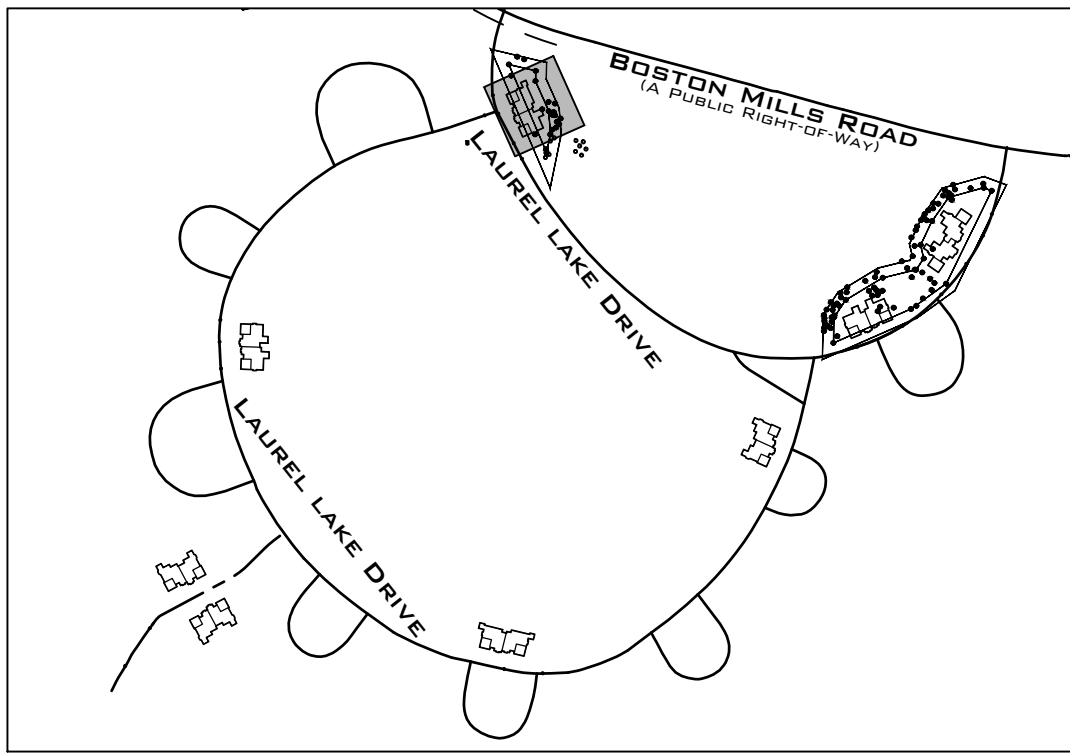
SITE DEMOLITION PLAN - BUILDING 5



OGPUPS

Ohio Oil & Gas Producers Underground Protection Service
Call 811 or 775-5566 or 811

C6.01



SCHEMATIC KEY
N.T.S.

58

BUILDING 5A AREA: 0.3556 Acres
BUILDING: 0.1370 Acres
DRIVE: 0.0521 Acres
CONCRETE WALK & PATIO: 0.0151 Acres
TOTAL IMPERVIOUS AREA: 0.2042 Acres

BOLLARD
(TYPICAL)

LAUREL LAKE DRIVE

GARAGE FLOOR 1011.50
60 LAUREL LAKE DRIVE
"BRANDYWINE"
MIRRORED
FINISH FLOOR 1011.50

59 LAUREL LAKE DRIVE
"BRANDYWINE"
MIRRORED
FINISH FLOOR 1010.25
GARAGE FLOOR 1010.25

PAVEMENT REPAIR

FLOOD ZONE
FLOOD PLAIN

WATER LEVEL 998.58

100' setback
ECOLOGICAL SENSITIVITY

UNDEVELOPED COMPOSITE
10 THRU 13

FLOODPLAIN

FLOODWAY

GENERAL SITE PLAN NOTES:

- CONTRACTOR SHALL PROVIDE A CLEAN SMOOTH EDGE AND ENSURE THE INTEGRITY OF THE ASPHALT PAVEMENT TO REMAIN.
- CONTRACTOR SHALL REPAIR PAVEMENT AFTER NEW UTILITY CONNECTIONS ARE INSTALLED. SEE DETAIL SHEET C6.01.
- BOLLARDS TO BE PLACED AROUND TRANSFORMER

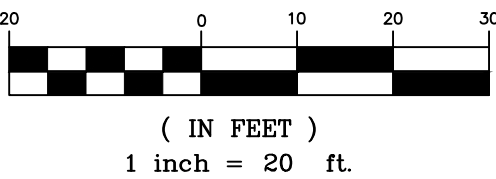
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 - M.E. Match Existing
 - Meas./M. Measured
 - MH Manhole
 - Obs. Observed
 - Pg. Page
 - P.P.N. Permanent Parcel
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 - San. Sanitary
 - S.F. Square Feet
 - S/L Sublot
 - Stm. Storm
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 - T/C Top of Curb
 - Tele. Telephone
 - T.F. Top Of Footer
 - T.T. Test Tee
 - TW Top of Wall
 - Typ. Typical
 - Vol. Volume
 - Wat. Water

GRAPHIC SCALE



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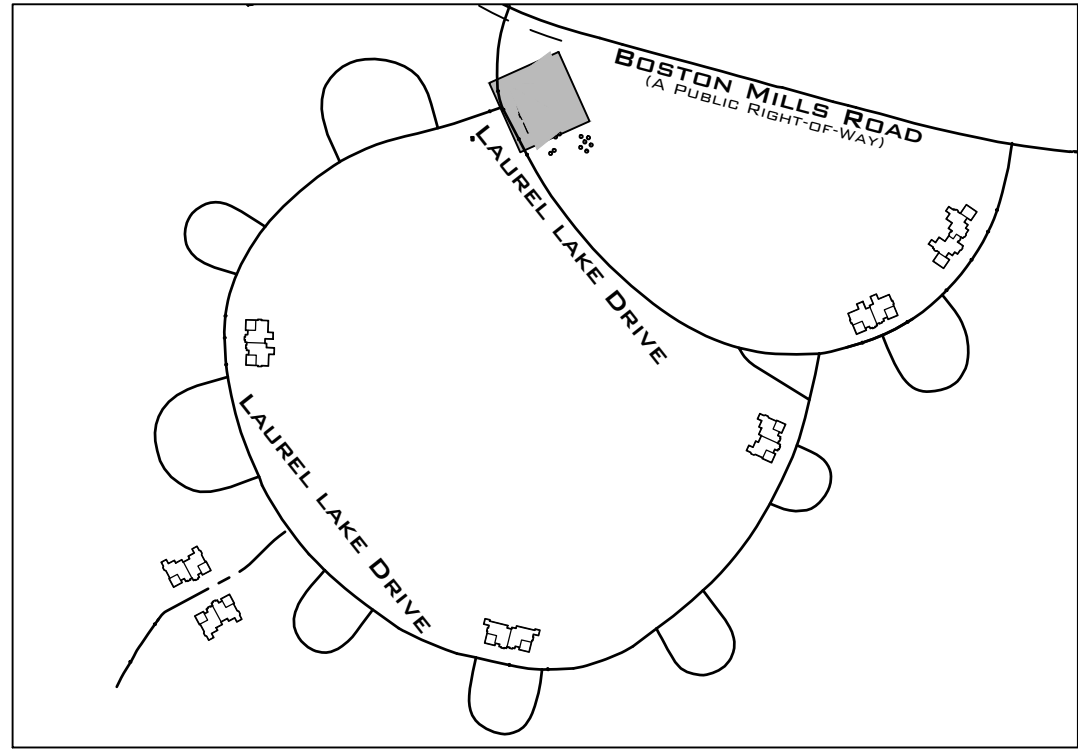
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200 LAUREL LAKE DRIVE

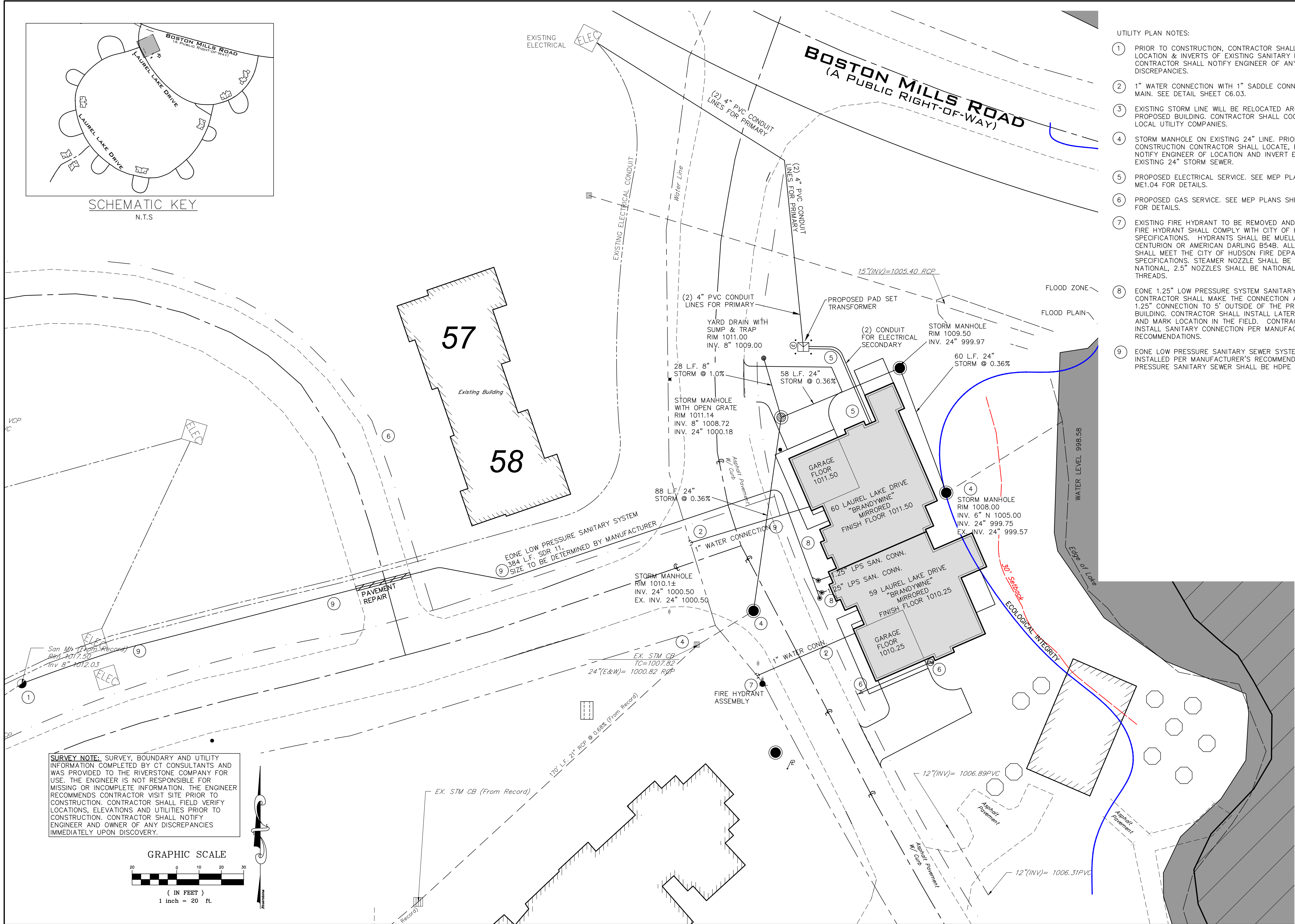
SITE PLAN - BUILDING 5



C6.02

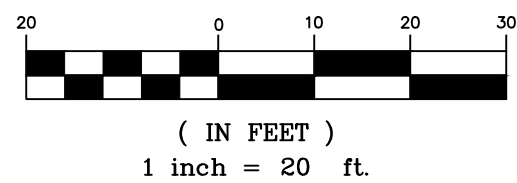


SCHEMATIC KEY
N.T.S.



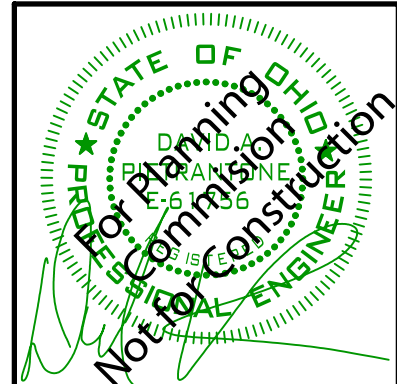
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GRAPHIC SCALE



UTILITY PLAN NOTES:

- 1 PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY LOCATION & INVERTS OF EXISTING SANITARY MANHOLE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 2 1" WATER CONNECTION WITH 1" SADDLE CONNECTION TO MAIN. SEE DETAIL SHEET C6.03.
- 3 EXISTING STORM LINE WILL BE RELOCATED AROUND THE PROPOSED BUILDING. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES.
- 4 STORM MANHOLE ON EXISTING 24" LINE. PRIOR TO CONSTRUCTION CONTRACTOR SHALL LOCATE, EXPOSE AND NOTIFY ENGINEER OF LOCATION AND INVERT ELEVATION OF EXISTING 24" STORM SEWER.
- 5 PROPOSED ELECTRICAL SERVICE. SEE MEP PLANS SHEET ME1.04 FOR DETAILS.
- 6 PROPOSED GAS SERVICE. SEE MEP PLANS SHEET ME1.04 FOR DETAILS.
- 7 EXISTING FIRE HYDRANT TO BE REMOVED AND REPLACED. FIRE HYDRANT SHALL COMPLY WITH CITY OF HUDSON SPECIFICATIONS. HYDRANTS SHALL BE MUELLER A423 CENTURION OR AMERICAN DARLING B54B. ALL THREADS SHALL MEET THE CITY OF HUDSON FIRE DEPARTMENT SPECIFICATIONS. STEAMER NOZZLE SHALL BE MACK NATIONAL, 2.5" NOZZLES SHALL BE NATIONAL STANDARD THREADS.
- 8 EONE 1.25" LOW PRESSURE SYSTEM SANITARY CONNECTION. CONTRACTOR SHALL MAKE THE CONNECTION AND EXTEND 1.25" CONNECTION TO 5' OUTSIDE OF THE PROPOSED BUILDING. CONTRACTOR SHALL INSTALL LATERAL ASSEMBLY AND MARK LOCATION IN THE FIELD. CONTRACTOR SHALL INSTALL SANITARY CONNECTION PER MANUFACTURER RECOMMENDATIONS.
- 9 EONE LOW PRESSURE SANITARY SEWER SYSTEM TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. LOW PRESSURE SANITARY SEWER SHALL BE HDPE SDR 11.



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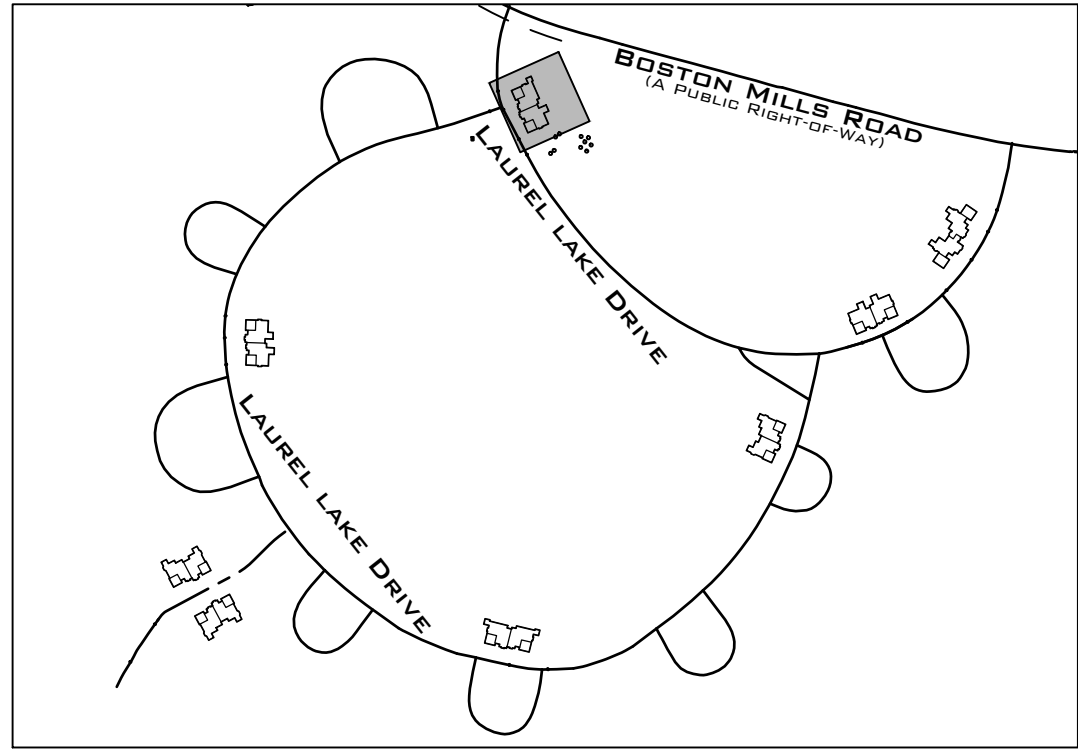
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

UTILITY PLAN - BUILDING 5

Ohio Utilities Protection Service
Call 811
before you dig

OGPUPS
Ohio Oil & Gas Producers Underground Protection Service
C6.03(1/17/2004 or 811)

C6.03



SCHEMATIC KEY
N.T.S.



LEGEND

= Monument Box Found	= Spot Elevation Tag
= Iron Pin or Pipe Found	= Hydrant
= Capped Riverstone Company Dudley P56747	= Water Service Valve
= P.K. Nail	= Water Valve
= Gas Meter	= Water Meter
= Gas Valve	= Reducer
= Utility Pole	= Storm Manhole
= Light Pole	= Sanitary Manhole
= Guy Anchor & Line	= Curb Inlet
= Telephone Box	= Catch Basin
= Electric Box	= Property Line
= Cable Box	= Centerline
= Bollard	
= Cleanout / Test Tee	

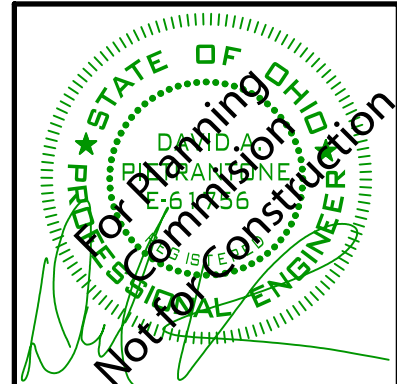
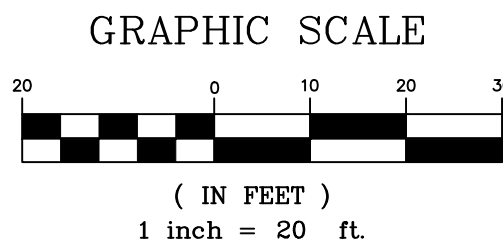
Ex. Parcel line
Original Sublot Line
Original Lot Line
Centerline
Property Line
Right-of-way Line
Easement Line
Railroad Tracks

Electric Line
Gas Line
Sanitary/Combination Sewer
Storm Sewer
Waterline
Fence Line (Wooden)
Fence Line (Chain-Link)
Guardrail

Ac. Acres
Adj. Adjacent
A.F.N. Auditor's File Number
Asp. Asphalt
B.F. Basement Floor
B.W. Bottom of Wall
Calc./C. Calculated
CB Catch Basin
C.C.M.R. Cuyahoga County Map
C.L.F. Chain-link Fence
Clr. Clears
C.O. Clean Out
Comb. Combination
Conc. Concrete
Conn. Connection
D.H. Drill Hole
D.I.W.M. Ductile Iron Water Main
Elec. Electric
Elev. Elevation
Encr. Encroaches
Ex. Existing
F.F. Finished Floor
GUT Gutter
Inv. Invert

L.C.A. Limited Common Area
L.F. Lineal Feet
M.E. Match Existing
Meas./M. Measured
MH Manhole
Obs. Observed
Pg. Page
P.P.N. Permanent Parcel Number
C.C.M.R. Cuyahoga County Map
Prop. Proposed
Rec./R. Record
R/W Right-of-way
San. Sanitary
S.F. Square Feet
S/L Sublot
Stm. Storm
T.B.M. Temporary Bench Mark
TBR To Be Removed
T/C Top of Curb
Tele. Telephone
T.F. Top Of Footer
T.T. Test Tee
TW Top of Wall
Typ. Typical
Vol. Volume
Wat. Water

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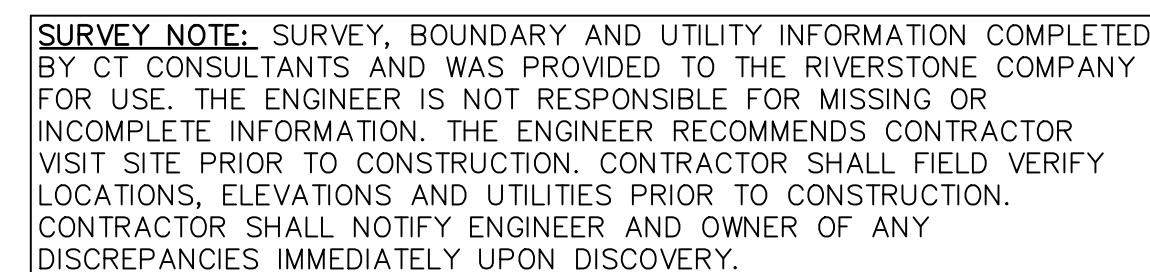
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LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

GRADING PLAN - BUILDING 5



C6.04



CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY DEMOLITION WORK WITH APPROPRIATE UTILITIES PRIOR TO DEMOLITION. ALL UTILITY CONNECTIONS SHALL BE REMOVED ACCORDING TO UTILITY COMPANY REQUIREMENTS.

PAVEMENT TO BE REMOVED.

(7) GAS LINE TO BE RELOCATED. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES

(IN FEET)
1 inch = 20 ft

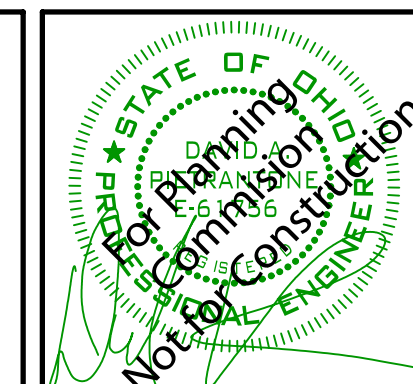




N.T.S

GENERAL SITE PLAN NOTES:

- ① RETAINING WALL TO BE DESIGNED BY OTHERS. SEE GRADING PLAN SHEET C7.07 FOR ELEVATIONS
- ② FIRE LANE. CURB TO BE PAINTED RED.
- ③ FIRE LANE SIGN. "FIRE LANE NO PARKING"
- ④ BOLLARDS TO BE PLACED AROUND TRANSFORMER.



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LAUREL LAKE VILLA
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SITE PLAN - BUILDING 8&9

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Ohio Oil & Gas Producers Underground Protection Service

C7.02



LEGEND

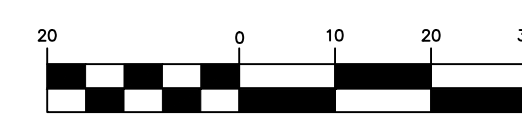
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	= Iron Pin or Pipe Found		= Hydrant
	= 5/8" Iron or Steel		= Water Service Valve
	= Capped Rivetstone Company Dudley P56747		= Water Valve
	= P.K. Nail		= Water Meter
	= Gas Meter		= Reducer
	= Gas Valve		= Storm Manhole
	= Utility Pole		= Sanitary Manhole
	= Light Pole		= Curb Inlet
	= Guy Anchor & Line		= Catch Basin
	= Telephone Box		= Property Line
	= Electric Box		= Centerline
	= Cable Box		
	= Ballard		

Legend

	Existing	PROPOSED
Electric Line	—●—	—●—
Gas Line	—○—	—○—
Sanitary/Combination Sewer	—●—	—●—
Storm Sewer	—○—	—○—
Waterline	—○—	—○—
Fence Line (Wooden)	—○—	—○—
Fence Line (Chain-Link)	—○—	—○—
Guardrail	—○—	—○—

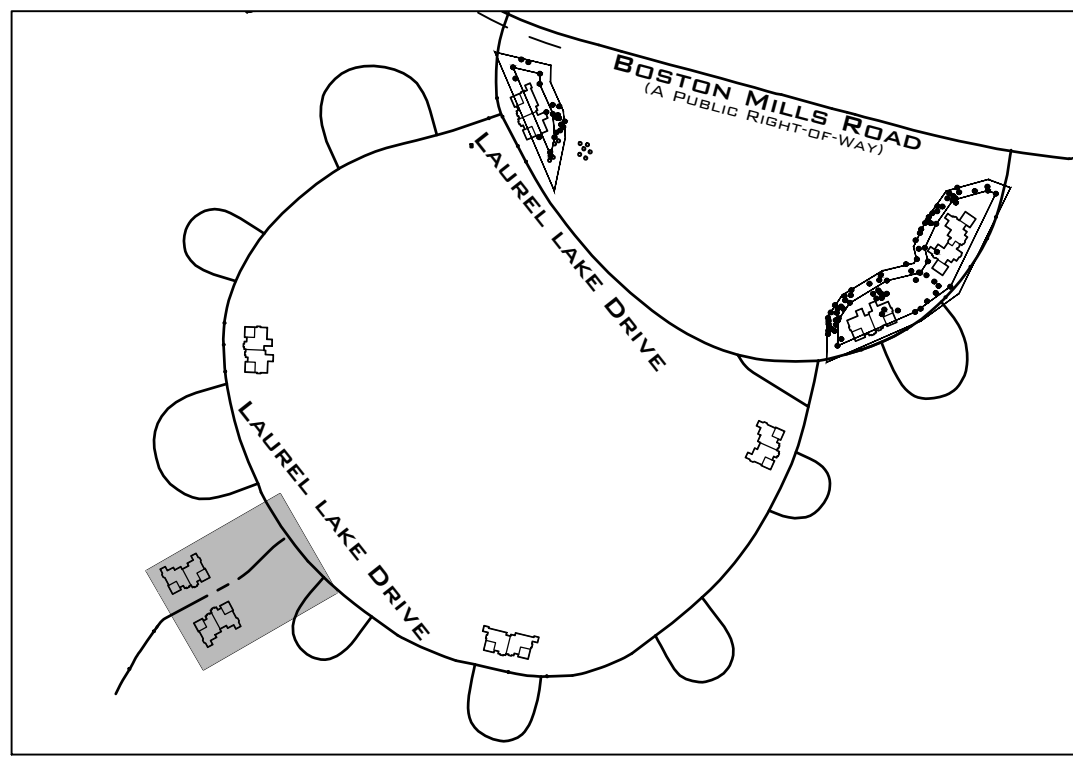
Ac.	Across	L.C.A.	Limited Common Area
Adj.	Adjustment	L.F.	Linear Feet
A.F.N.	Auditor's File Number	M.E.	Match Existing
Asp.	Asphalt	M/H.	Measured
B.F.	Basement Floor	M/H.	Manhole
B.W.	Bottom of Wall	Obs.	Observed
Calc./C.	Calculated	Pg.	Page
CB	Catch Basin	P.P.N.	Permanent Parcel
C.C.M.R	Cuyahoga County Map		Number
		Prop	Proposed
C.L.F.	Chain-link Fence	Rec./R.	Record
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	S.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conc.	Concrete	S/L	Sublot
Conn.	Connection	Stm.	Storm
D.H.	Drip Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	To Be	To Be Removed
	Main	T/C	Top of Curb
Elec	Electric	Tele	Telephone
Elev.	Elevation	T.F.	Top of Footer
Encr.	Encroaches	Test	Test
Ex.	Existing	TW	Top of Wall
F.F.	Finished Floor	Typ.	Typical
GUT	Gutter	Vol.	Volume
IV	INVERT	Wat	Water

GRAPHIC SCALE

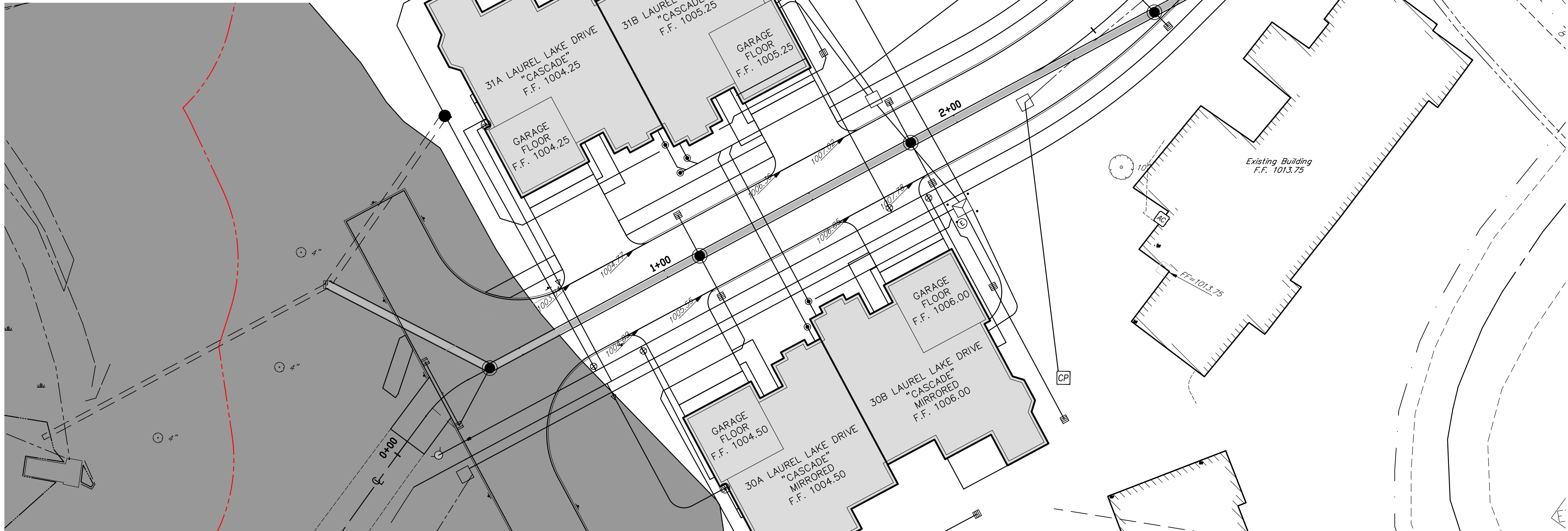


(IN FEET)
1 inch = 20 ft

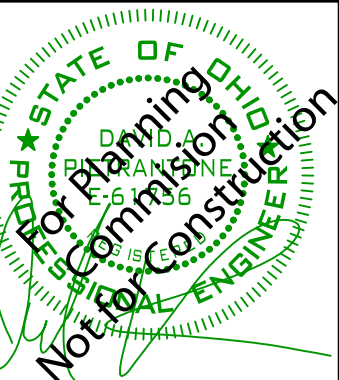
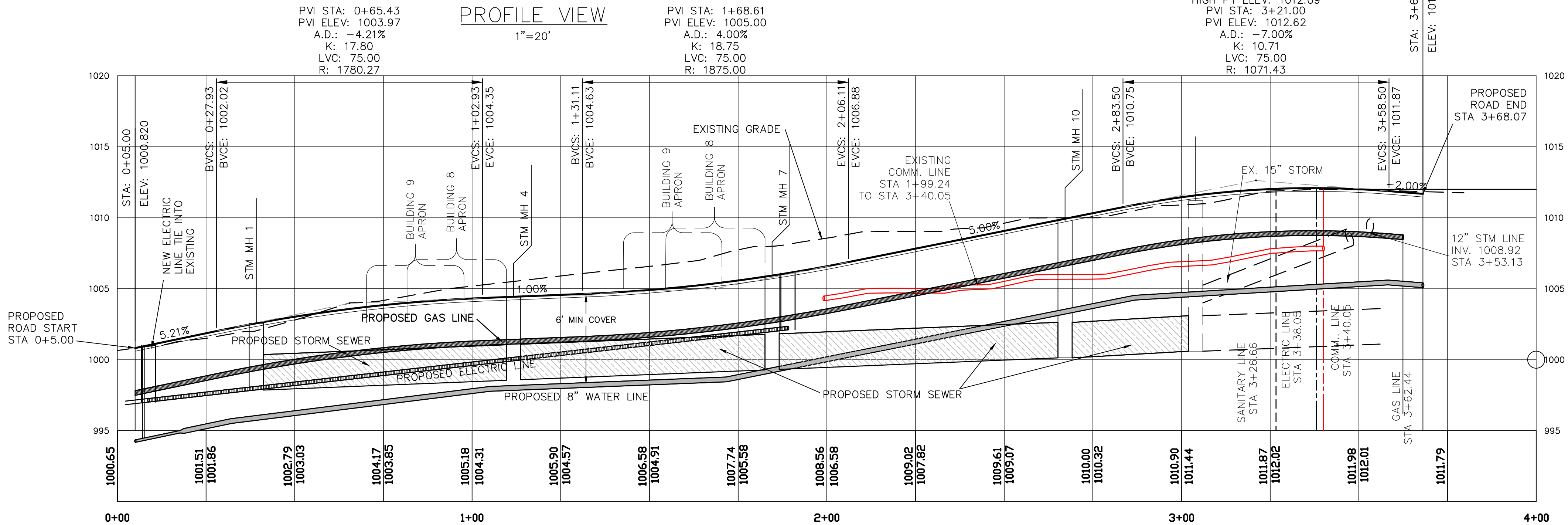
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SCHEMATIC KEY
N.T.S.



STM MH 1 RIM 1002.08 INV 30° NW 997.74 INV 30° NE 997.74 INV 12° N 997.74 INV 12° S 997.74	STM MH 7 RIM 1005.92 INV 30° NW 999.30 INV 30° NE 999.30 INV 12° N 1000.56 INV 12° S 1000.54
STM CB 2 RIM 1001.40 INV 12° S 997.87	STM CB 8 RIM 1004.70 INV 12° S 1000.70
STM CB 3 RIM 1001.36 INV 12° N 997.88	STM CB 9 RIM 1004.70 INV 12° N 1000.70
STM MH 4 RIM 1004.43 INV 30° NW 998.57 INV 30° NE 998.57 INV 12° N 1000.01 INV 12° S 1000.01	STM MH 10 RIM 1009.76 INV 30° NW 1000.15 INV 30° NE 1000.15 INV 12° N 1004.49 INV 12° S 1004.58
STM CB 5 RIM 1004.15 INV 12° S 1000.15	STM CB 11 RIM 1008.71 INV 12° S 1004.71
STM CB 6 RIM 1004.15 INV 12° N 1000.15	STM CB 12 RIM 1008.64 INV 12° N 1004.64



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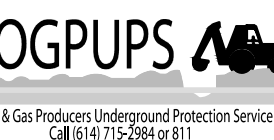
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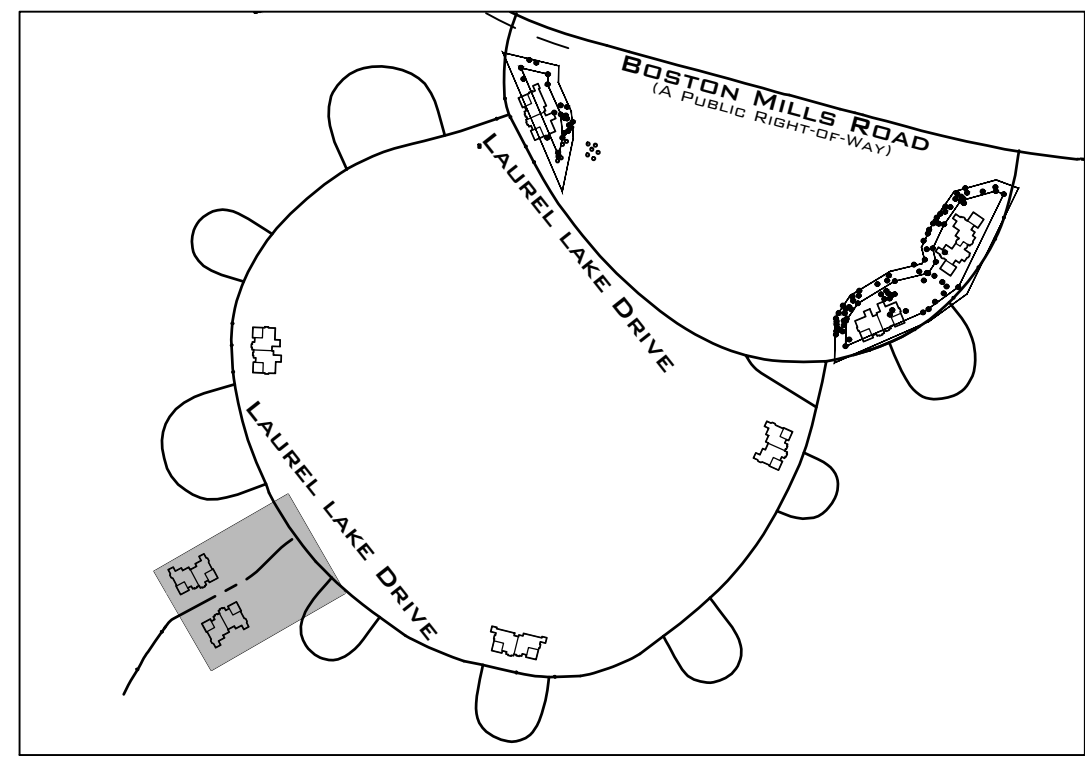
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200 LAUREL LAKE DRIVE

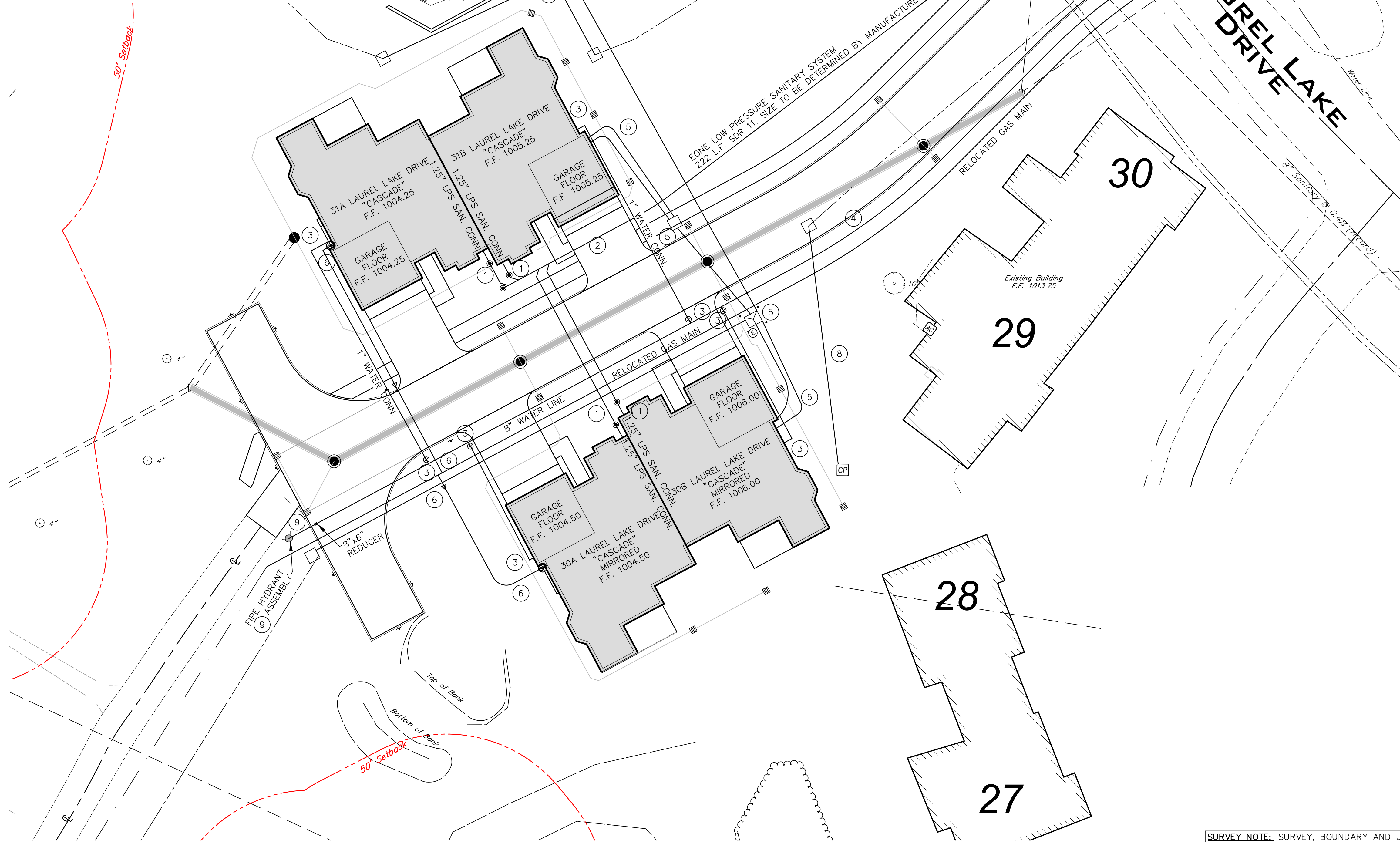
PLAN & PROFILE VIEW - BUILDING 8&9



C7.03



SCHEMATIC KEY
N.T.S.



UTILITY PLAN NOTES:

1. EONE 1.25" LOW PRESSURE SYSTEM SANITARY CONNECTION. CONTRACTOR SHALL MAKE THE CONNECTION AND EXTEND 1.25" CONNECTION TO 5' OUTSIDE OF THE PROPOSED BUILDING. CONTRACTOR SHALL INSTALL LATERAL ASSEMBLY AND MARK LOCATION IN THE FIELD. CONTRACTOR SHALL INSTALL SANITARY CONNECTION PER MANUFACTURER RECOMMENDATIONS.
2. EONE LOW PRESSURE SANITARY SEWER SYSTEM TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. LOW PRESSURE SANITARY SEWER SHALL BE HDPE SDR 11.
3. 1" WATER CONNECTION TO BUILDING. 1" SADDLE CONNECTION TO MAIN.
4. CONTRACTOR SHALL DEFLECT 8" WATERLINE AS NEEDED WITHIN MANUFACTURER'S RECOMMENDATION TO OBTAIN A 216' RADIUS.
5. PROPOSED ELECTRICAL SERVICE. SEE MEP PLANS SHEET ME1.05 FOR DETAILS.
6. PROPOSED GAS SERVICE. SEE MEP PLANS SHEET ME1.05 FOR DETAILS.
7. RELOCATED ELECTRICAL CONDUIT. CONTRACTOR SHALL COORDINATE WITH HUDSON PUBLIC POWER PRIOR TO CONSTRUCTION.
8. RELOCATED TELECOMMUNICATIONS CONDUIT. CONTRACTOR SHALL COORDINATE WITH TELECOMMUNICATIONS PROVIDER PRIOR TO CONSTRUCTION.
9. PROPOSED FIRE HYDRANTS SHALL COMPLY WITH CITY OF HUDSON SPECIFICATIONS. HYDRANTS SHALL BE MUELLER A423 CENTURION OR AMERICAN DARLING B54B. ALL THREADS SHALL MEET THE CITY OF HUDSON FIRE DEPARTMENT SPECIFICATIONS. STEAMER NOZZLE SHALL BE MACK NATIONAL. 2.5" NOZZLES SHALL BE NATIONAL STANDARD THREADS.

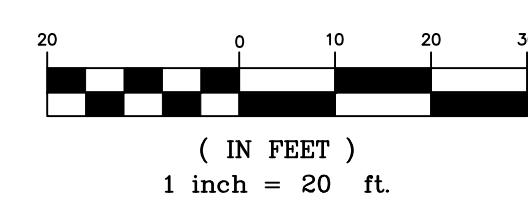
LEGEND

	= Monument Box Found		= Spot Elevation Tag
	= 5/8" Iron Pin Set and Capped Riverstone Company Dudley P56747		= Hydrant
	= P.K. Nail		= Water Service Valve
	= Gas Meter		= Water Valve
	= Gas Valve		= Water Meter
	= Utility Pole		= Reducer
	= Light Pole		= Storm Manhole
	= Guy Anchor & Line		= Sanitary Manhole
	= Telephone Box		= Curb Inlet
	= Electric Box		= Catch Basin
	= Cable Box		= Property Line
	= Bollard		= Centerline
	= Cleanout / Test Tee		

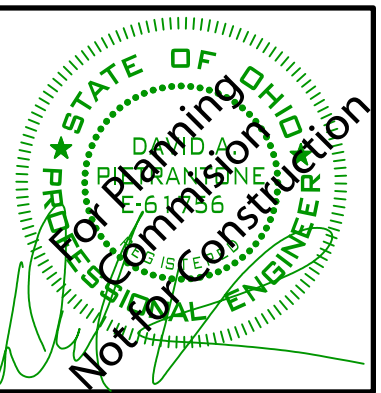
Ex. Parcel line	Original Sublot Line	Original Lot Line	Centerline	Property Line	Right-of-way Line	Easement Line	Railroad Tracks
Electric Line	Gas Line	Sanitary/Combination Sewer	Storm Sewer	Waterline	Fence Line (Wooden)	Fence Line (Chain-Link)	Guardrail
Existing	PROPOSED	Existing	PROPOSED	Existing	PROPOSED	Existing	PROPOSED

Ac.	Acres	L.C.A.	Limited Common Area
Adj.	Adjacent	L.F.	Lineal Feet
A.F.N.	Auditor's File Number	M.E.	Match Existing
Asp.	Asphalt	Meas./M.	Measured
B.F.	Basement Floor	MH	Manhole
B.W.	Bottom of Wall	Obs.	Observed
Calc./C.	Calculated	Pg.	Page
CB	Catch Basin	P.P.N.	Permanent Parcel
C.C.M.R.	Cuyahoga County Map	Number	Number
C.L.F.	Chain-link Fence	Prop	Proposed
Clr.	Clears	Rec./R.	Record
C.O.	Clean Out	R/W	Right-of-way
Comb.	Combination	San.	Sanitary
Conc.	Concrete	S.F.	Square Feet
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D.H.	Drill Hole	Stm.	Storm
D.I.W.M.	Ductile Iron Water	T.B.M.	Temporary Bench Mark
Elec	Electric	To Be Removed	To Be Removed
Elev	Elevation	T/C	Top of Curb
Encr.	Encroaches	Tele	Telephone
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F.F.	Finished Floor	T.I.	Test Tee
GUT	Gutter	TW	Top of Wall
Invt	Invert	Typ.	Typical
		Vol.	Volume
		Wat	Water

GRAPHIC SCALE



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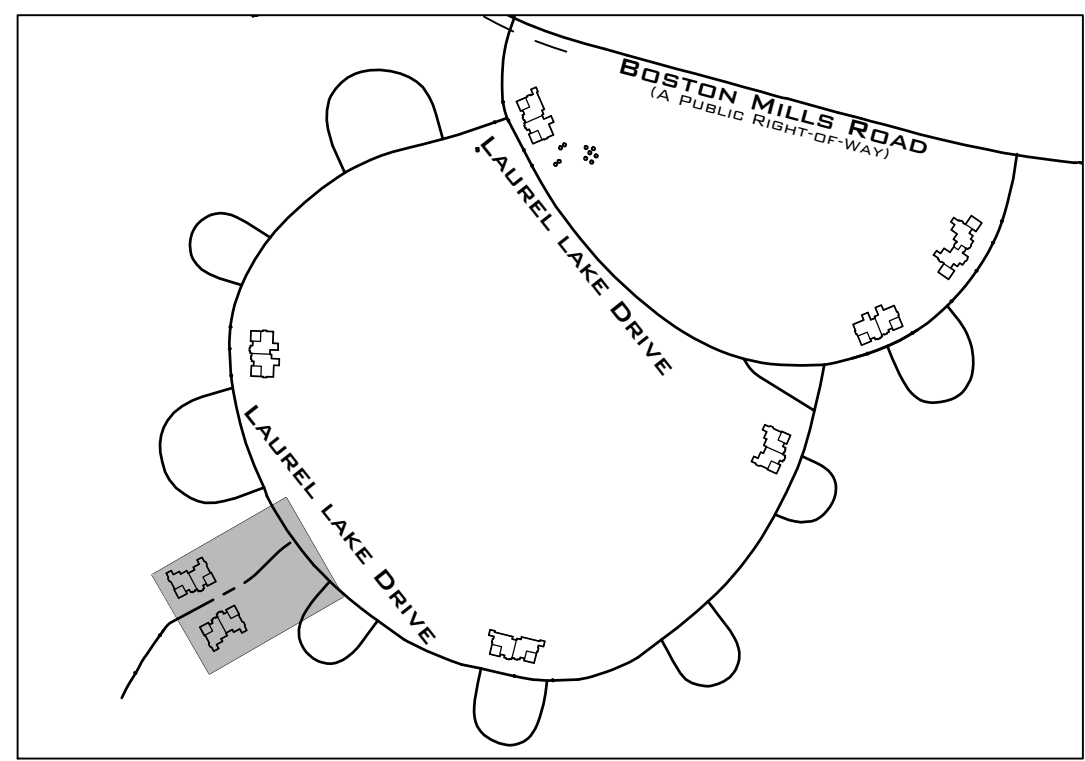
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

UTILITY PLAN - BUILDING B&9

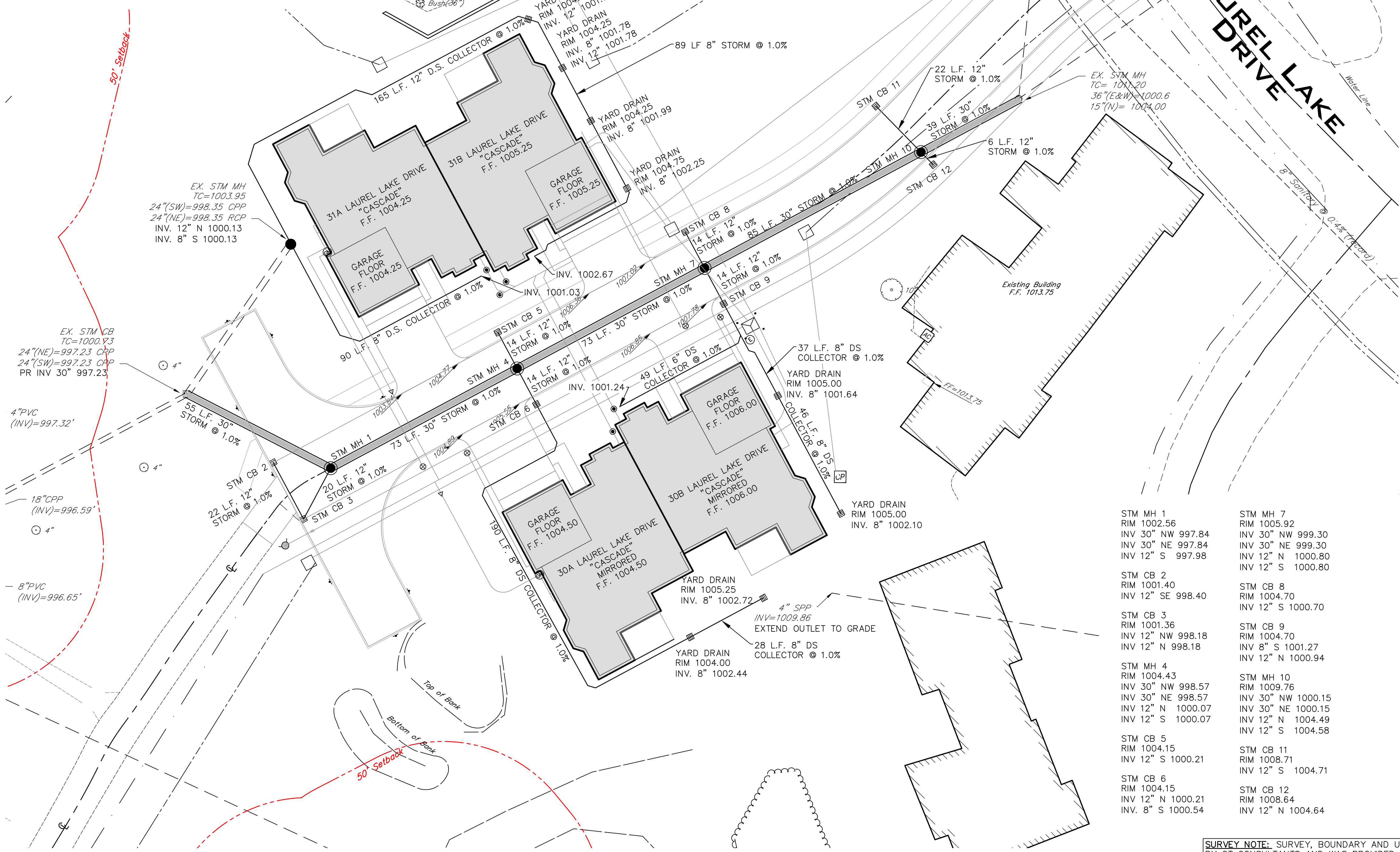
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Call 811
before you dig

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Ohio Oil & Gas Producers Underground Protection Service
CMB 01/01/17-2026 or 01/

C7.04



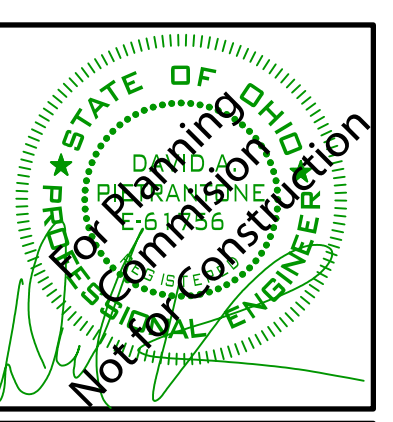
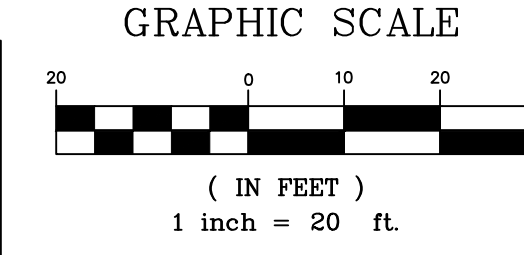
SCHEMATIC KEY
N.T.S.



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LEGEND	PROPOSED
Monument Box Found ○ = Iron Pin or Pipe Found ● = 5/8\" Iron Pin Set and Capped + = P.K. Nail ⊙ = Gas Meter Δ = Gas Valve / = Utility Pole ⊥ = Light Pole ⊥ = Telephone Box ⊥ = Electric Box ⊥ = Cable Box ● = Bollard ● = Cleanout / Test Tee	Spot Elevation Tag ○ = Hydrant ○ = Water Service Valve ○ = Water Valve ○ = Water Meter ○ = Reducer ○ = Storm Manhole ○ = Sanitary Manhole ○ = Curb Inlet ○ = Catch Basin ○ = Property Line ○ = Centerline
Ex. Parcel Line Original Sublot Line Original Lot Line Centerline Property Line Right-of-way Line Easement Line Railroad Tracks	Existing PROPOSED R/W
Electric Line Gas Line Sanitary/Combination Sewer Storm Sewer Waterline Fence Line (Wooden) Fence Line (Chain-Link) Guardrail	Existing PROPOSED
Ac. Acres Adj. Adjacent A.F.N. Auditor's File Number Asp. Asphalt B.F. Basement Floor B.W. Bottom of Wall Calc./C. Calculated CB Catch Basin C.C.M.R. Cuyahoga County Map C.L.F. Chain-link Fence Clr. Clears C.O. Clean Out Comb. Combination Conc. Concrete Conn. Connection D.H. Drill Hole D.I.W.M. Ductile Iron Water Main Elev Elevation Encr. Encroaches Ex. Existing GUT Gutter Inv Invert	L.C.A. Limited Common Area L.F. Lineal Feet M.E. Match Existing Meas./M. Measured MH Manhole Obs. Observed Pg. Page P.P.N. Permanent Parcel Number Prop Proposed Rec./R. Record R/W Right-of-way San. Sanitary S.F. Square Feet S/L Sublot Stm. Storm T.B.M. Temporary Bench Mark To Be Removed T/C Top of Curb Tele Telephone T.F. Top Of Footer T.T. Test Tee T.W. Top of Wall Typ. Typical Vol. Volume Wat Water

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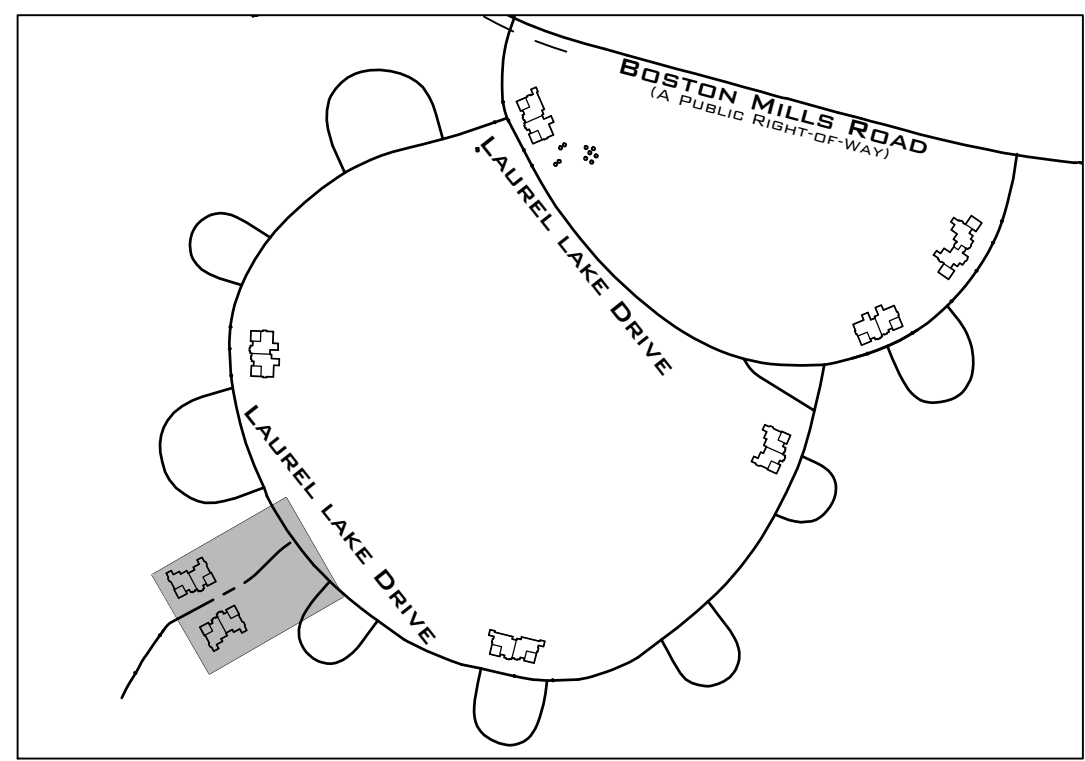
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200 LAUREL LAKE DRIVE
STORMWATER PLAN - BUILDING B&G



OGPUPS
Ohio Gas & Electric Protection Service
Call 811 before you dig

C7.05



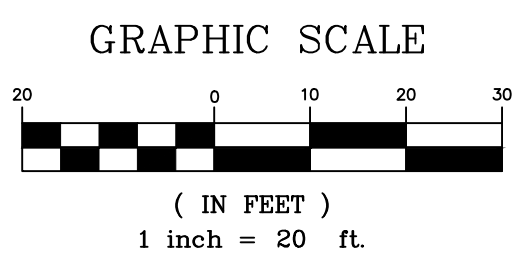
SCHEMATIC KEY
N.T.S.



BUILDING 8 & 9 AREA: 1.214 Acres
ROAD AND SIDEWALK: 0.2655 Acres
BUILDING: 0.2456 Acres
DRIVE: 0.05511 Acres
CONCRETE WALK & PATIO: 0.02357 Acres
TOTAL IMPERVIOUS AREA: 0.58978 Acres

LEGEND	
	= Monument Box Found
	= Iron Pin or Pipe Found
	= 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747
	= P.K. Nail
	= Gas Meter
	= Gas Valve
	= Utility Pole
	= Light Pole
	= Guy Anchor & Line
	= Telephone Box
	= Electric Box
	= Cable Box
	= Ballard
	= Cleanout / Test Tee
	= Spot Elevation Tag
	= Hydrant
	= Water Service Valve
	= Water Valve
	= Water Meter
	= Reducer
	= Storm Manhole
	= Sanitary Manhole
	= Curb Inlet
	= Catch Basin
	= Property Line
	= Centerline
Ex. Parcel Line	
Original Sublot Line	
Original Lot Line	
Centerline	
Property Line	
Right-of-way Line	
Easement Line	
Railroad Tracks	
Electric Line	
Gas Line	
Sanitary/Combination Sewer	
Storm Sewer	
Waterline	
Fence Line (Wooden)	
Fence Line (Chain-Link)	
Guardrail	
Ac. Adj. A.F.N. Asp. B.F. BW. Calc./C. CB. C.C.M.R. C.L.F. C.L.R. C.O. Comb. Conc. Conn. D.H. D.I.W.M. Elec. Elev. Encr. Ex. F.F. GUT Inv.	
L.C.A. L.F. L.F. M.E. Meas./M. MH. Obs. Pg. P.P.N. Number Prop. Rec./R. R/W. Right-of-way San. S.F. Square Feet S/L. Sublot Stm. T.B.M. Temporary Bench Mark To Be Removed T/C Top of Curb Tele. Telephone T.F. Top of Footer T.T. Test Tee TW Top of Wall Typ. Typical Vol. Volume Wat. Water	

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION COMPLETED BY CT CONSULTANTS AND WAS PROVIDED TO THE RIVERSTONE COMPANY FOR USE. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER OF ANY DISCREPANCIES IMMEDIATELY UPON DISCOVERY.



RIVERSTONE
LAND SURVEYING - ENGINEERING - DESIGN
3800 LAKESIDE AVENUE, SUITE 100
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2023-186

PLAN REVISIONS:
5/12/2025
TREE INVENTORY

PAGE REVISIONS:

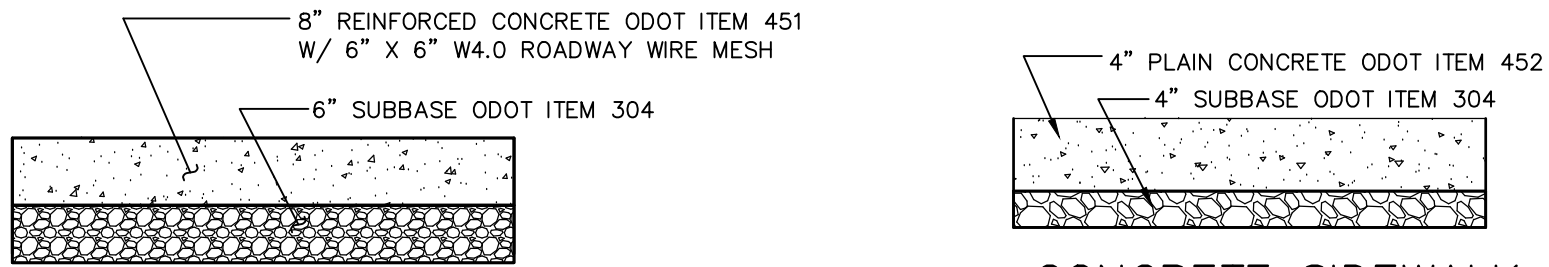
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LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

GRADING PLAN - BUILDING 8&9

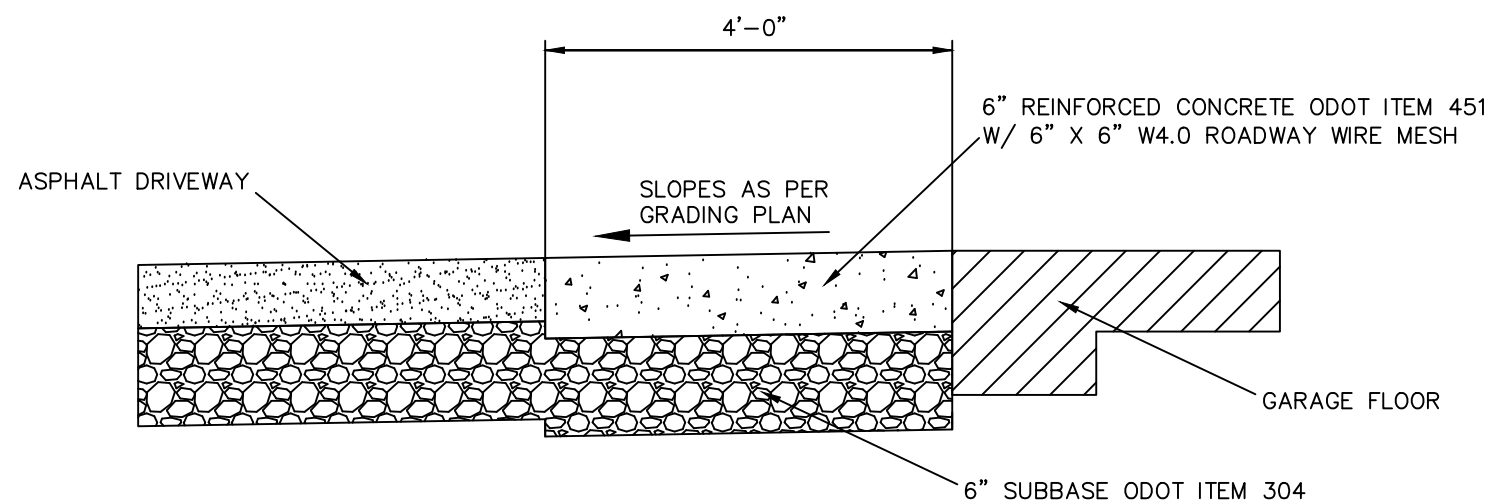
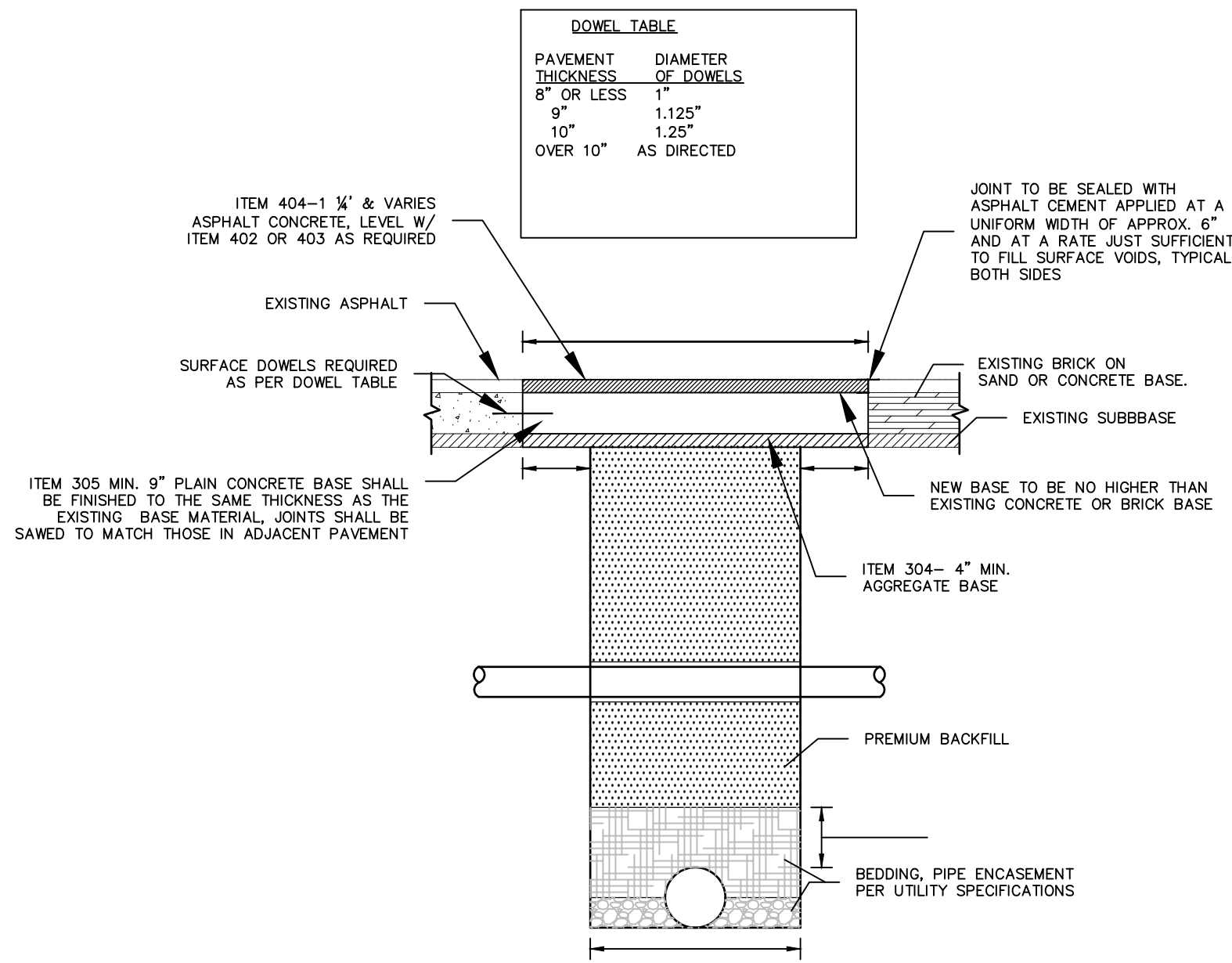


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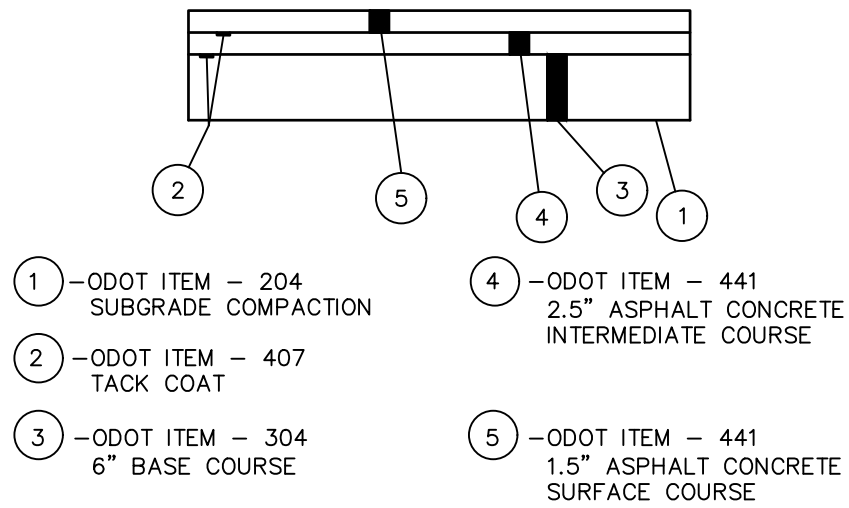


- | | | |
|---|--|---|
| ① ODOT ITEM - 204
SUBGRADE COMPACTION | ④ ODOT ITEM 304
8" AGGREGATE BASE | ⑦ ODOT ITEM - 609
FLUSH CONCRETE CURB |
| ② ODOT ITEM - 605
6" PERFERATED PVC
UNDERDRAIN 707.41 | ⑤ ODOT ITEM - 402
3 1/2" ASPHALT
INTERMEDIATE COURSE | ⑧ ODOT ITEM - 659
SEEDING AND MULCHING ITEM 653
3" TOPSOIL FURNISHED AND PLACED |
| ③ ODOT ITEM 407
TACK COAT | ⑥ ODOT ITEM - 404
1 1/2" ASPHALT
SURFACE COURSE | |
| ④ ODOT ITEM 304
8" AGGREGATE BASE | | |

TYPICAL ASPHALT SECTION
WITH FLUSH CONCRETE CURB
N.T.S.



CONCRETE APRON AT GARAGE
N.T.S.



TYPICAL ASPHALT
DRIVEWAY SECTION
N.T.S.

PROOF ROLL

A MINIMUM OF TWO (2) PROOF ROLLINGS WILL BE REQUIRED AS DIRECTED BY THE ENGINEER BEFORE PAVING. THE FIRST PROOF ROLLING SHALL BE PERFORMED AFTER THE INSTALLATION OF ALL UNDERGROUND IMPROVEMENTS AND ROUGH GRADING HAS BEEN COMPLETED. AFTER FINE GRADING, JUST PRIOR TO PAVING, THE SUBGRADE SHALL BE PROOF ROLLED AGAIN. A PROOF ROLLING SHALL CONSIST OF TRAVELING THE ENTIRE AREA OF THE PREPARED SUBGRADE WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PROVIDED BY THE CONTRACTOR. MOISTURE CONTENT ADJUSTMENT METHODS USED AT THE TIME OF PROOF ROLLING SHALL CONFORM TO SECTION 203.11 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. WHERE THIS OPERATION SHOWS THE SUBGRADE TO BE UNSTABLE OR TO HAVE NON-UNIFORM STABILITY, THE CONTRACTOR SHALL CORRECT THE UNSTABLE AREAS AS DIRECTED BY THE ENGINEER. THE MINIMUM EQUIPMENT SHALL CONSIST OF A SINGLE UNIT, TANDEM AXLE DUMP TRUCK CAPABLE OF BEING LOADED TO 30,000 POUND AXLE LOAD, 60,000 POUND GVW. TIRE PRESSURE SHALL BE MAINTAINED AT 90 PSI OR AS SPECIFIED UNDER SECTION 203.14 OF ODOT SPECIFICATIONS. ANY AREA PERMITTING TIRES TO LEAVE A GROOVE OF ONE (1) INCH OR MORE SHALL BE UNACCEPTABLE FOR PAVING. ANY AREA PERMITTING THE TEST VEHICLE TIRES TO LEAVE A GROOVE OF ZERO (0) TO ONE-HALF (1/2) INCH DEEP SHALL BE ACCEPTABLE. ANY AREA PERMITTING THE TEST VEHICLE TIRES TO LEAVE A GROOVE OF ONE-HALF (1/2) INCH TO ONE (1) INCH DEEP SHALL BE AT THE ENGINEER'S DISCRETION.

GENERAL NOTES

- A PRE-CONSTRUCTION CONFERENCE SCHEDULED BY THE CONTRACTOR SHALL BE HELD PRIOR TO START OF ANY WORK. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE CITY ENGINEER PRIOR TO BEGINNING WORK TO ARRANGE FOR INSPECTION.
- ANY AND ALL CHANGES IN PLAN QUANTITIES OR MATERIALS SHALL BE APPROVED IN WRITING BY THE DEVELOPER PRIOR TO INCORPORATION IN THE WORK.
- EARTHWORK QUANTITIES:
 - ALL STUMPS, TREES AND OTHER CONSTRUCTION DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF-SITE.
 - THE CONTRACTOR SHALL PLACE AND COMPACT ALL SUITABLE FILL MATERIAL EXCAVATED DURING HIS CONSTRUCTION OPERATIONS WITHIN THE FILL AREAS DESIGNATED ON THE GRADING PLAN AND/OR AS DIRECTED BY THE DEVELOPER AND/OR HAULED OFF-SITE AT THE DEVELOPER'S DISCRETION.
 - NO DISPOSAL SITE WITHIN THE PROJECT LIMITS SHALL BE UTILIZED.
- SEEDING AND MULCHING: SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY SEEDING AND MULCHING IMMEDIATELY UPON COMPLETION OF EXCAVATION OR FILL AND FINISHED GRADING IN ACCORDANCE WITH ITEM 659 OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.
- ALL TRENCHES IN PAVED AREAS SHALL BE BACKFILLED WITH GRANULAR MATERIALS FROM THE TOP OF THE TRENCH BEDDING. BACKFILL TO BE MECHANICALLY COMPACTED. SLAG NOT ALLOWED.
- ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SYSTEM PROHIBITED.
- PRIOR TO CONNECTION CONSTRUCTION, CONTRACTOR TO VERIFY LOCATIONS, SIZE AND DEPTH OF EXISTING SEWER & WATER TIE-INS.
- THE UTILITY OWNERSHIPS ARE AS FOLLOWS:

OHIO UTILITIES PROTECTION SERVICE
106 WEST RYEN - ROOM 427
YOUNGSTOWN, OHIO 44051
PH: (800) 362-2764

DOMINION ENERGY
320 SPRINGSIDE DRIVE, SUITE 320
AKRON, OHIO 44333
PH: (877) 542-2630

CITY OF HUDSON DEPARTMENT
OF PUBLIC WORKS
1769 GEORGETOWN ROAD
HUDSON, OHIO 44236
PH: (330) 342-1750

SUMMIT COUNTY DEPARTMENT
OF SANITARY SEWER SERVICES
1180 S MAIN STREET SUITE 201
AKRON, OHIO 44301
PH: (330) 926-2400

SUMMIT PETROLEUM INC.
9345 RAVENNA ROAD
TWINSBURG, OHIO 44087
PH: (330) 487-5494

CENTURYLINK
4000 CHESTER AVENUE
CLEVELAND, OHIO 44102
PH: (216) 906-6284

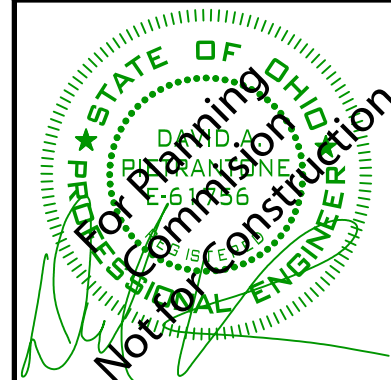
MCI (VERIZON)
120 RAVINE STREET
AKRON, OHIO 44303
PH: (330) 329-5495

THE LOCATION OF UNDERGROUND UTILITIES ARE PLOTTED ACCORDING TO THE INFORMATION FURNISHED BY THE UTILITIES CONCERNED AND THE ENGINEER DOES NOT GUARANTEE THE ACCURACY THEREOF.

- ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL COMPLY WITH U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT, THE STANDARD SPECIFICATIONS OF THE CITY OF HUDSON AND THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS LATEST EDITION, EXCEPT WHERE SPECIFICALLY SPECIFIED IN THESE PLANS.
- IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ALL MATERIAL TESTING AND ALL PERMITS REQUIRED FOR THIS PROJECT.
- THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY FACILITIES ARE SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF THE FIELD SURVEY IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS AND UTILITY PROTECTION SERVICE LISTED ABOVE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE AND AS OUTLINED IN PROJECT SPECIFICATIONS.
- ALL WORK CONTEMPLATED SHALL BE GOVERNED BY THE RULES, REGULATIONS AND SPECIFICATIONS OF THE CITY OF HUDSON AND AT ALL TIMES BE SUBJECT TO THEIR DIRECT SUPERVISION AND INSPECTION.
- ALL SANITARY SEWER CONNECTIONS SHALL BE 6" DIAMETER V.C.P. C-700 E.S. w/PREMIUM JOINTS (OR THERMOPLASTIC AS SPECIFIED) @ 1.0% MIN. (INCLUDING TEST TEE LOCATED AT R/W - SEE DETAIL).
- ALL EXISTING CONNECTIONS SHALL BE TESTED WITH DYE AND CAMERA BEFORE TYING IN FOR USE WITH PROPOSED LOTS.
- COLOR DVD VIDEO OF THE SANITARY AND STORM SEWERS (8" AND GREATER) SHALL BE GIVEN TO THE CITY OF HUDSON DIVISION OF WATER POLLUTION CONTROL.
- COST OF REMOVAL, FILLING, ABANDONING AND DISPOSAL OF EXISTING SEWERS & CONNECTIONS TO BE INCLUDED IN PRICES BID UNDER OTHER ITEMS (OF SPECIFICATIONS) AND NO ADDITIONAL COMPENSATION WILL BE MADE.
- TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION BY THE CONTRACTOR.
- ALL SANITARY AND STORM MAIN LINE SEWERS & HOUSE CONNECTIONS SHALL HAVE PREMIUM JOINTS.
- FLEXIBLE GASKETS SHALL BE PROVIDED AT ALL SANITARY AND STORM MANHOLES.
- FOR CURB INLET MANHOLE, BRICK MAY BE USED TO FIT CASTING.

ENVIRON. IMPACT NOTES

- IF, DURING THE COURSE OF CONSTRUCTION, EVIDENCE OF ANY DEPOSIT OF HISTORICAL AND/OR ARCHAEOLOGICAL INTEREST IS FOUND, CEASE OPERATIONS AFFECTING THE FIND AND NOTIFY THE OHIO HISTORIC PRESERVATION OFFICE AT (614) 297-3470. NO FURTHER DISTURBANCE OF THE DEPOSITS SHALL OCCUR UNTIL THE CONTRACTOR HAS BEEN NOTIFIED BY THE OWNER THAT HE OR SHE MAY PROCEED. THE OWNER WILL ISSUE THE NOTICE TO PROCEED ONLY AFTER THE STATE OHIO OFFICIAL HAS SURVEYED THE FIND AND MADE SUCH A DETERMINATION.
- ACCESS FOR EMERGENCY VEHICLES MUST BE PROVIDED AT ALL TIMES.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING LOCAL ACCESS TO ALL RESIDENCES AND BUSINESSES, AND TO PROVIDE WHATEVER TEMPORARY MATERIALS ARE NECESSARY TO PROVIDE A SAFE, ADEQUATE DRIVE SURFACE.
- NO MANHOLE OR SEWER EXCAVATION WILL BE LEFT OPEN AWAITING CONNECTION OR REMOVAL AT A LATER DATE BY THE CONTRACTOR'S FORCES, OR OTHERS, BUT SHALL BE TEMPORARILY BACKFILLED AND RESURFACED, IF APPLICABLE, WITH A TEMPORARY PAVEMENT PASSABLE TO TRAFFIC.
- NO MORE THAN 200 TO 300 FEET OF SEWER TRENCH SHALL REMAIN OPEN AT ONE TIME. MATERIALS EXCAVATED DURING TRENCHING SHALL BE PILED ON THE UPHILL SIDE OF THE TRENCH.
- STOCKPILED TOPSOIL AND FILL MATERIALS SHALL BE PROTECTED WITH EROSION CONTROL BARRIERS OR TEMPORARY SEEDING. EXCESS SOIL THAT IS STOCKPILED MUST BE EITHER REMOVED OR REGRADED WITHIN 15 DAYS OF THE COMPLETION OF CONSTRUCTION.
- IF TREE REMOVAL IS NECESSARY, TREES SHALL BE FELLED IN A MANNER THAT AVOIDS DAMAGE TO ADJACENT REMAINING TREES. WHERE ROOT DAMAGE CANNOT BE AVOIDED, PRUNING AND PAINTING AS APPROPRIATE TO COMPENSATE FOR DAMAGE WILL BE DONE BY AN AUTHORIZED ARBORIST.



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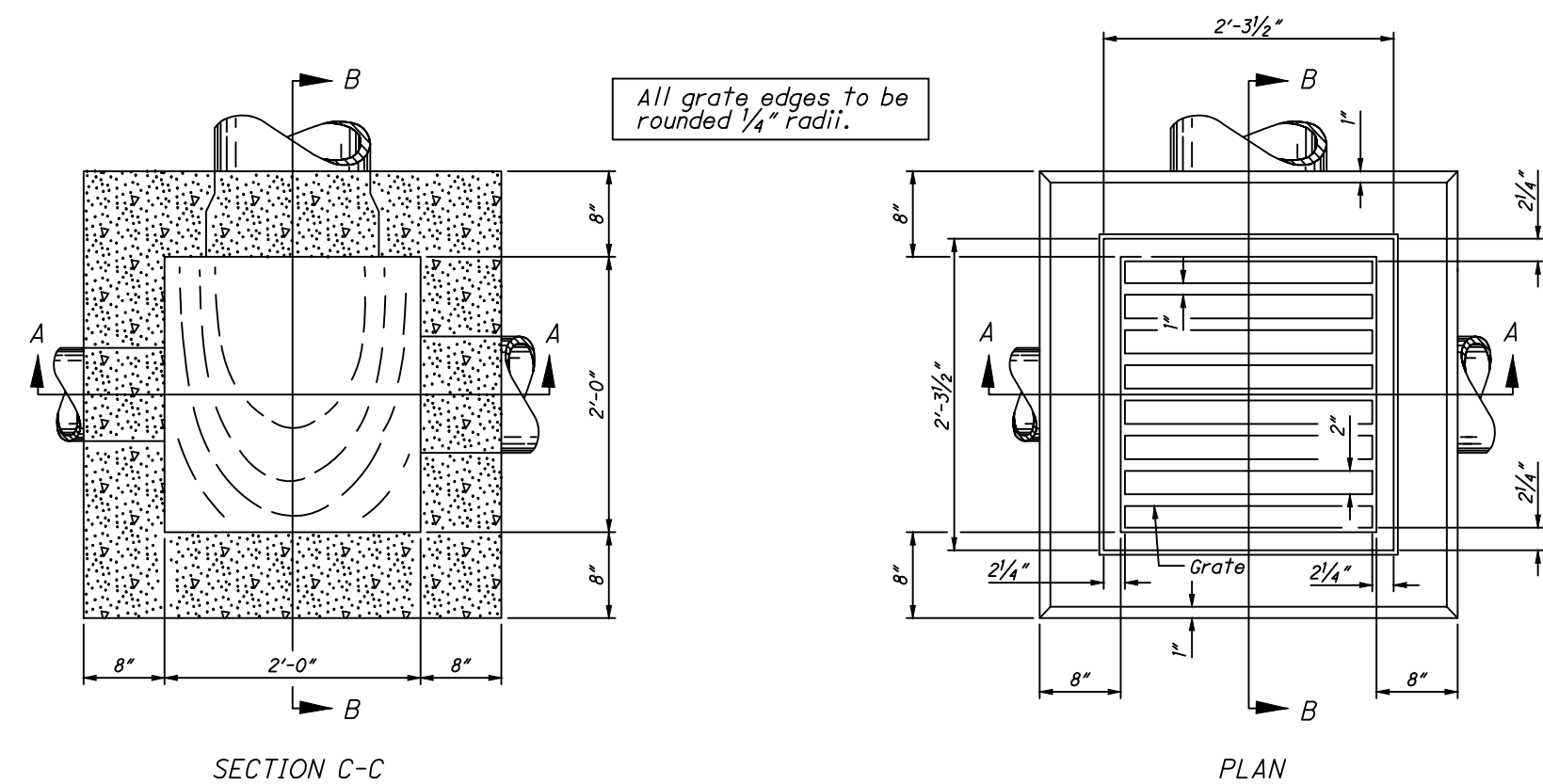
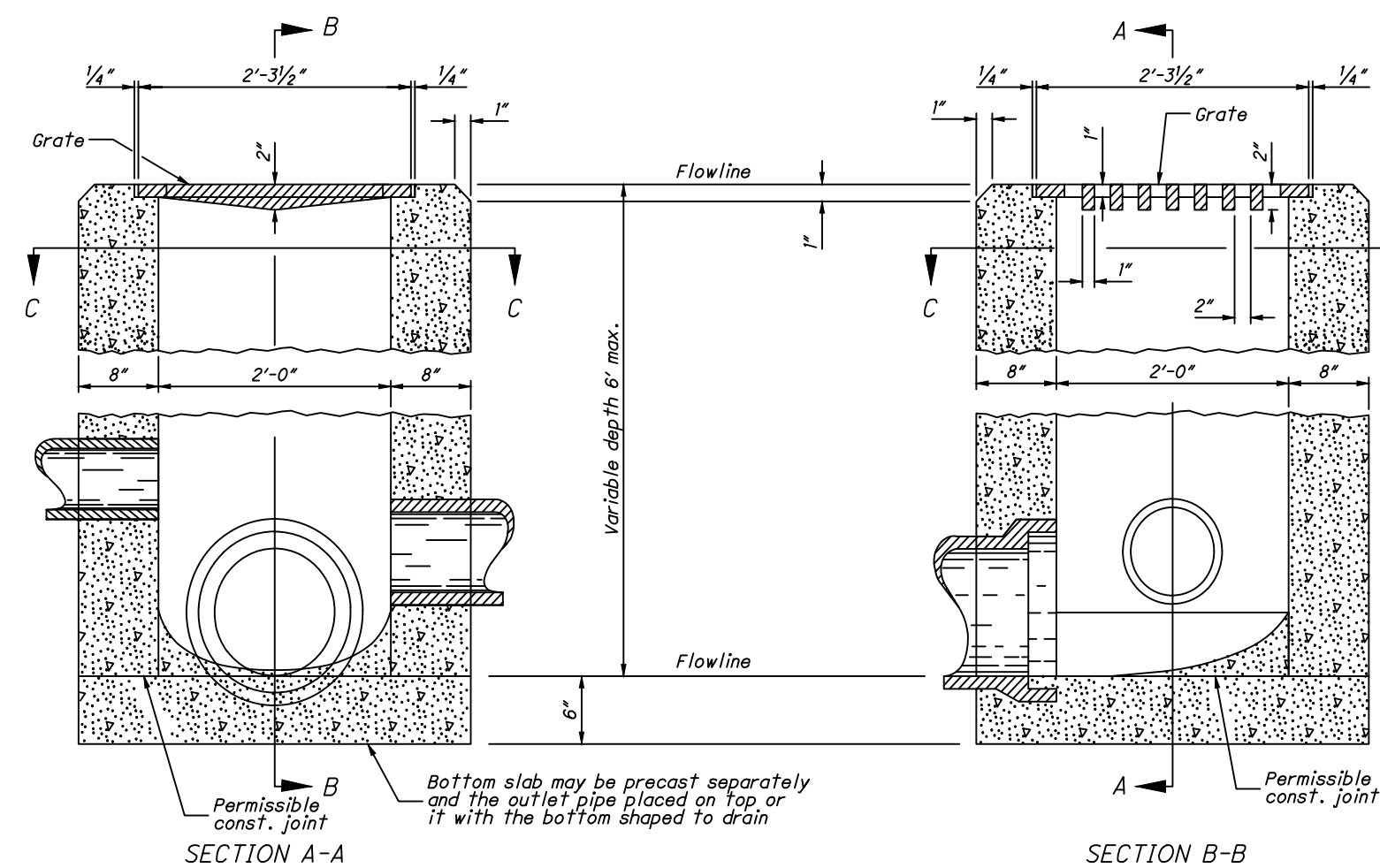
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

NOTES & DETAILS

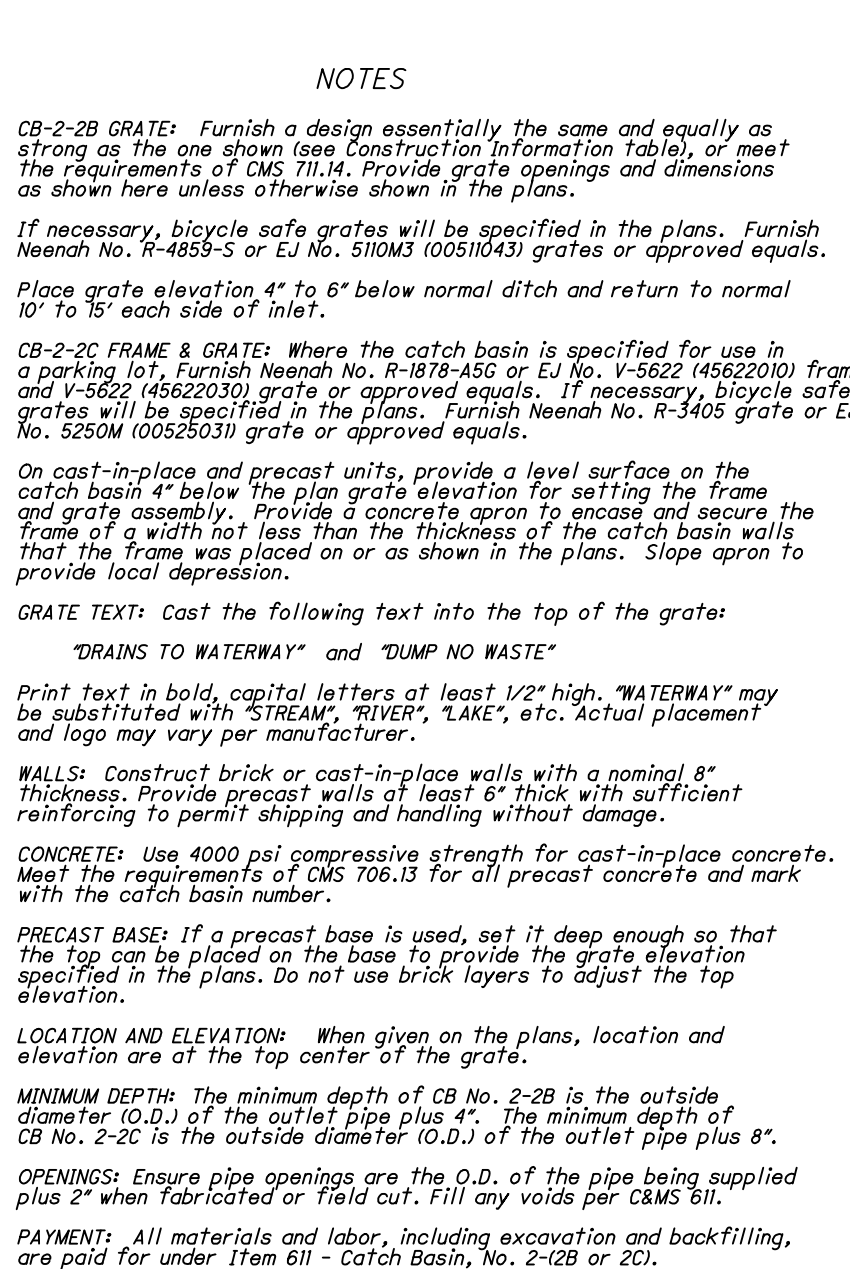
Ohio Utilities Protection Service
Call 811
before you dig

OGPUPS
Ohio Oil & Gas Producers Underground Protection Service
Call 811 or 1-755-5861 or 811

C8.01

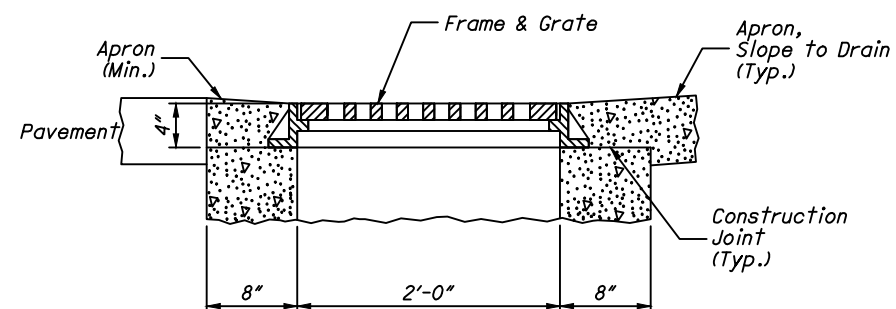


CATCH BASIN No. 2-2B

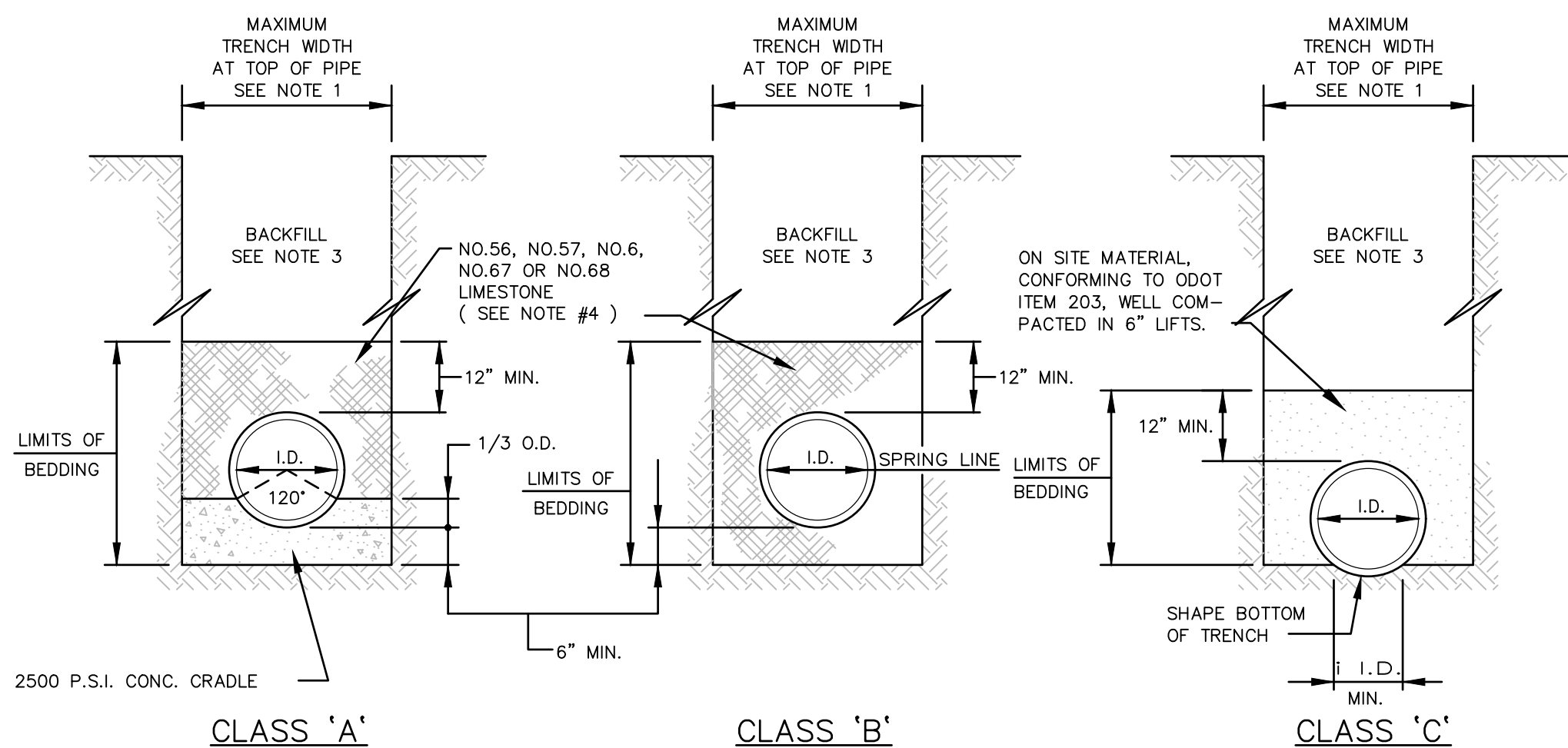
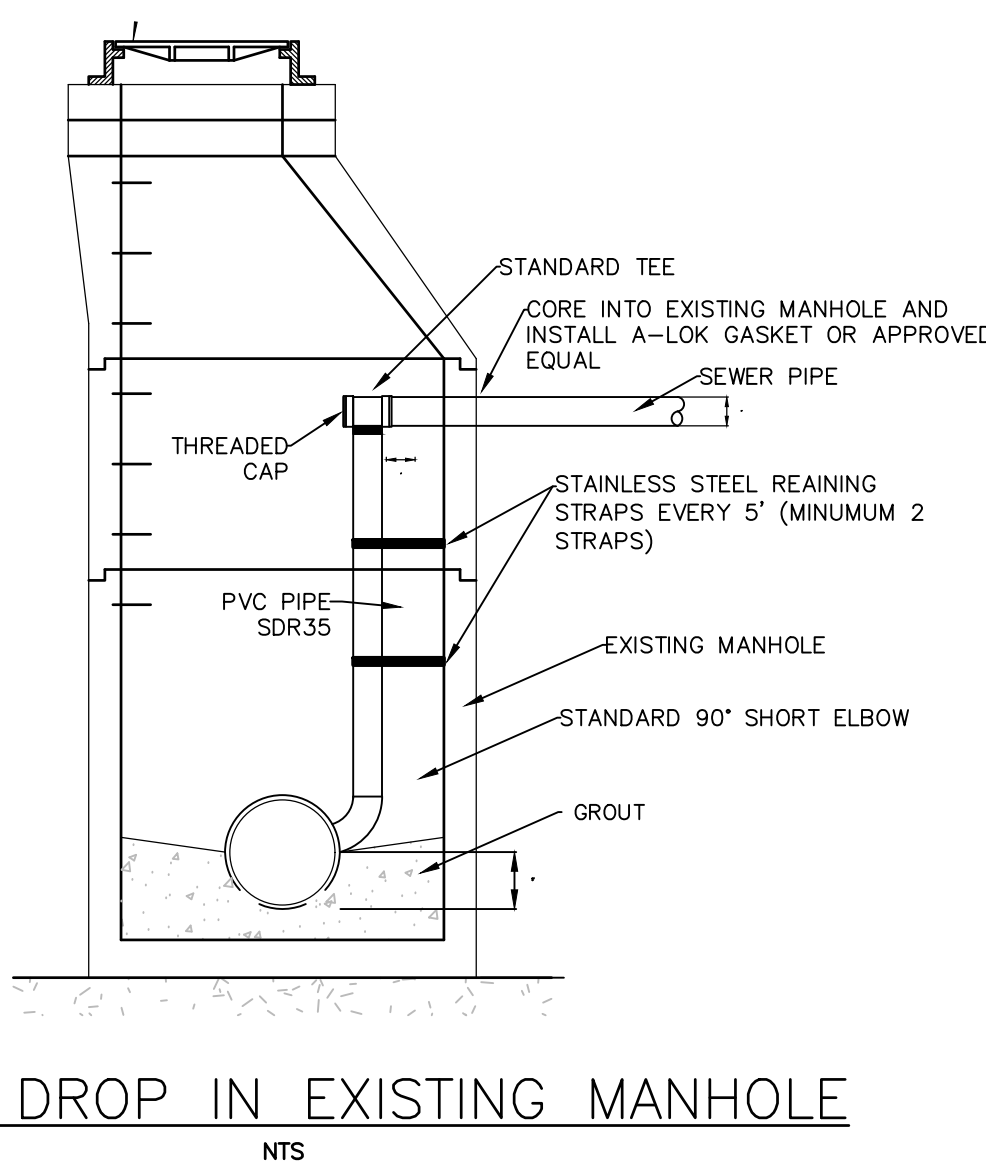
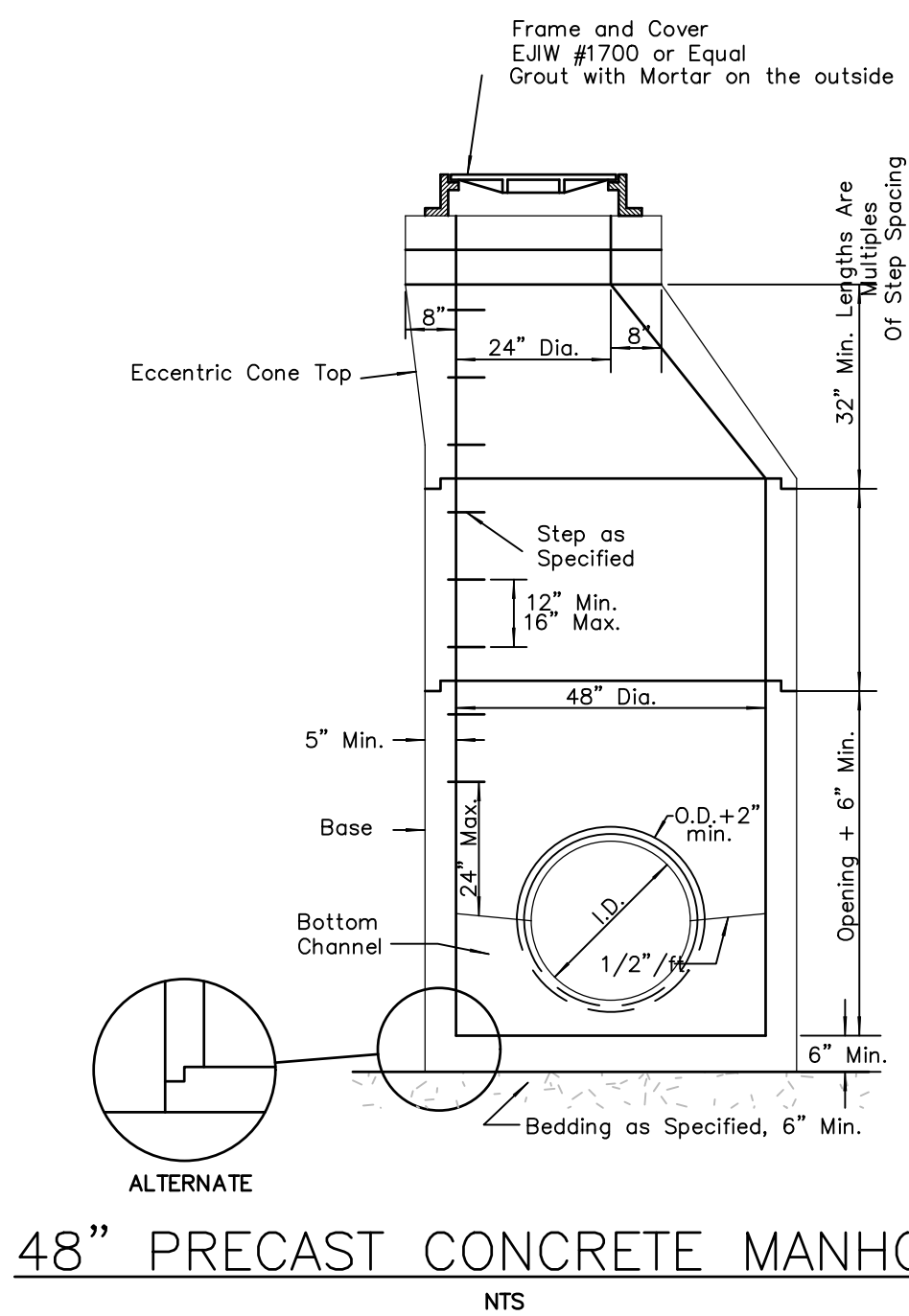


CONSTRUCTION INFORMATION	
Minimum weight of grate, 120 lbs.	

CATCH BASIN	OUTLET PIPE SIZE
2-2B, 2-2C	12" to 21"

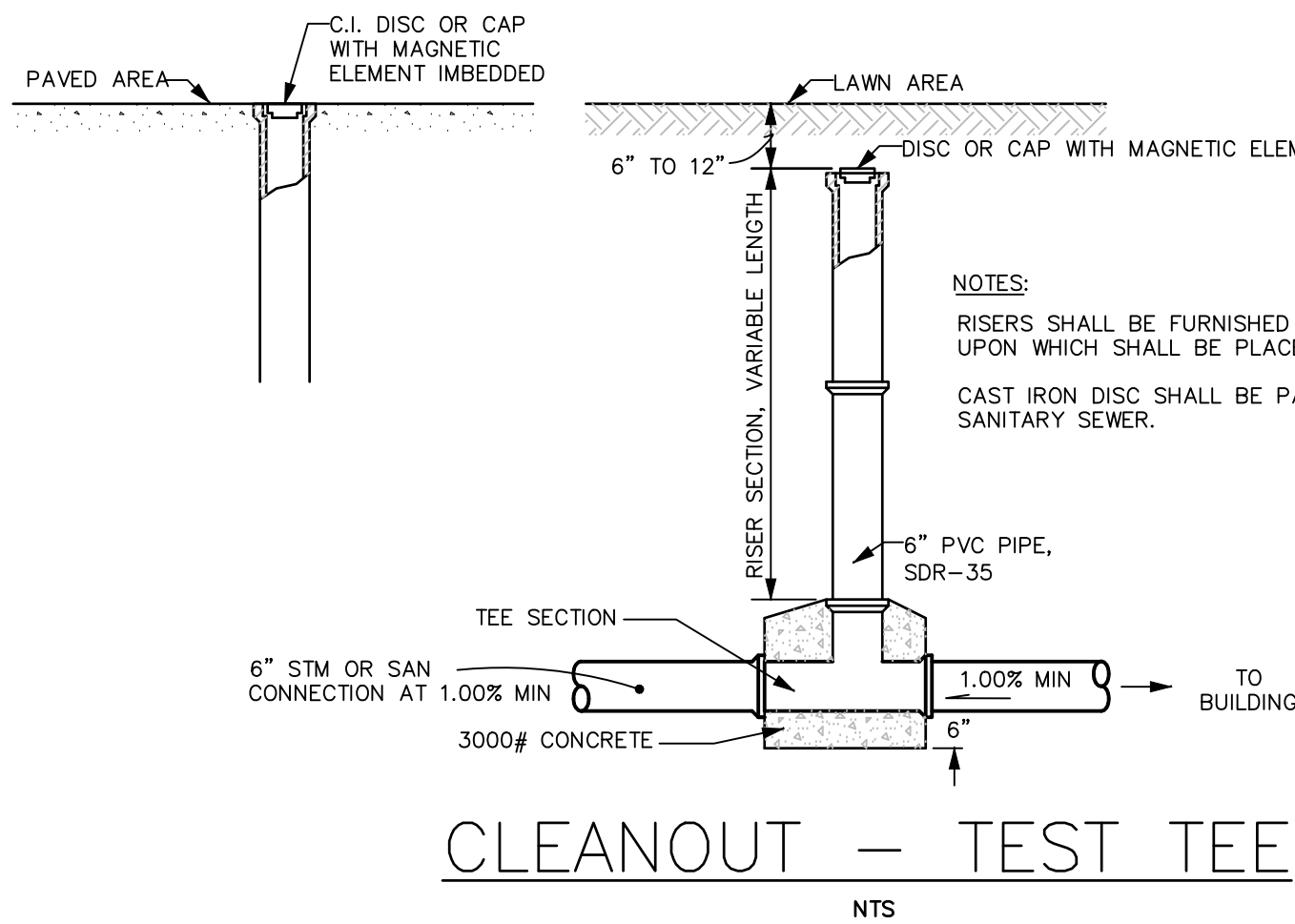


CATCH BASIN No. 2-2C



- NOTES:
1. MAXIMUM TRENCH AT TOP OF PIPE SHALL BE O.D.+24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D.; O.D.+30" FOR PIPE LARGER THAN 24" I.D. TO 54" I.D.; AND O.D.+48" FOR PIPE SIZES 60" AND OVER.
 2. ALL TRENCH EXCAVATION SHALL CONFORM TO THE RULES AND REGULATIONS OF THE OHIO STATE INDUSTRIAL COMMISSION (OSIC) AND THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).
 3. ALL BACKFILL MATERIAL USED UNDER ANY PAVEMENTS SHALL BE PREMIUM BACKFILL PLACED FROM THE INITIAL ONE FOOT OVER THE TOP OF UTILITIES, TO PREVENT FLOTATION AND ENTRY OF FLOWABLE FILL INTO ANY OTHER AREAS, TO THE SUBGRADE. ALL OTHER AREAS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND SHALL BE TAMPED WITH MACHINE MOUNTED TAMPING EQUIPMENT. NO FLOODING, JETTING OR PUDDLING OF BACKFILL WILL BE PERMITTED. BACKFILL SHALL BE COMPACTED TO 100% OF MAXIMUM LABORATORY DRY DENSITY PER ASTM D 698.
 4. ALL BEDDING SHALL BE CLASS 'B' EXCEPT AS STATED IN NOTE 6 OR OTHERWISE NOTED ON THE PLANS. BEDDING LIMITS FOR R.C.P. AND D.I.P. SHALL BE TO THE PIPE SPRINGLINE.
 5. SLAG BEDDING SHALL NOT BE USED.
 6. BEDDING FOR DUCTILE IRON PIPE USED FOR WATERLINE OR FORCE MAIN SHALL BE CLASS 'C' EXCEPT WHEN INSTALLED IN ROCK AND UNDER PAVEMENT OR STRUCTURES, IN WHICH CASE, BEDDING SHALL BE CLASS 'B' OR AS NOTED ON THE PLANS.
 7. INSTALL A MAGNETIC DETECTOR TAPE 12" ABOVE THE CENTERLINE OF NON-METALLIC WATERLINES OR SANITARY FORCE MAINS.

TRENCH & BEDDING DETAILS



- ## NOTES FOR STORM SEWERS
- 1.) THE FOLLOWING PIPES ARE APPROVED FOR THIS PROJECT:
 - A) 15" & UNDER - PVC SDR 35 PER ASTM D3034 (GASKETED)
 - B) 15" & UNDER - POLYPROPYLENE MEETING ASTM F2764 (ONLY OUTSIDE ROADWAY AND ABOVE ROADWAY'S ANGLE OF REPOSE)
 - C) 16" & GREATER - CONCRETE MEETING ASTM C76 CLASS IV
 - 2.) ALL DOWNSPOUT COLLECTORS SHALL USE PUSH ON JOINTS.
 - 3.) ALL DRIVE CULVERT WITH LESS THAN 2' OF COVER ABOVE THE TOP OF THE CULVERT SHALL BE EITHER CONCRETE PIPE MEETING ASTM C76, OR CONCRETE ENCASED PVC SDR 35 OR POLYPROPYLENE PIPE. DRIVE CULVERTS WITH GREATER THAN 2' OF COVER SHALL BE PIPE MATERIAL AS SPECIFIED FOR SEWERS AND PIPES.
 - 3.) PIPE REQUIRES #57 LIMESTONE BACKFILL 12" OVER TOP OF PIPE
 - 4.) CONTRACTOR SHALL INCLUDE COST OF GRANULAR BACKFILL MATERIAL UNDER ALL EXISTING AND PROPOSED PAVEMENTS IN BIDS.
 - 5.) PRIOR TO THE ACCEPTANCE OF THE COMPLETED SEWER LINE, A MANDREL OF NOT LESS THAN NINETY-FIVE PERCENT (95% OF THE AVERAGE CALCULATED REFERENCE INTERNAL DIAMETER OF THE PIPE SHALL BE PULLED BY HAND FREELY THROUGH EACH SECTION OF SEWER PIPE NOT LESS THAN THIRTY (30) DAYS AFTER INSTALLATION AND FINAL BACKFILL.

- ## NOTES FOR SANITARY SEWERS
- 1.) THE FOLLOWING PIPES ARE APPROVED FOR THIS PROJECT:
 - A) V.C.P., C-700 ES w/ PREM. JTS. (ASTM C425) (GASKETED)
 - B) PVC SDR 35 (SEWER DEPTH LESS THAN 13') w/ ASTM D3212 JOINTS (GASKETED)
 - C) PVC SDR 26 (SEWER DEPTH 13' OR MORE) w/ ASTM D3212 JOINTS (GASKETED)
 - D) PVC SCHEDULE 40 (WITH APPROVAL BY ENGINEER)
 - 2.) ALL PIPES USED FOR THIS PROJECT MUST BE FROM MANUFACTURERS APPROVED BY THE SUMMIT COUNTY DEPARTMENT OF SANITARY SEWER SERVICES (DOSSS).
 - 3.) ALL 6" SANITARY LATERAL CONNECTIONS SHALL BE AT A MINIMUM SLOPE OF 1.0%
 - 4.) PIPE REQUIRES #57 LIMESTONE BACKFILL 12" OVER TOP OF PIPE.
 - 4.) CONTRACTOR SHALL INCLUDE COST OF GRANULAR BACKFILL MATERIAL UNDER ALL EXISTING AND PROPOSED PAVEMENTS IN BIDS.
 - 6.) ALL SANITARY SEWER TO BE C.P. AIR TESTED PER ASTM C-828-80
 - 7.) ALL SANITARY SEWER SYSTEMS MUST PASS AN EXFILTRATION AND AN INFILTRATION TEST AFTER CONSTRUCTION HAS BEEN COMPLETED. THE MAXIMUM RATE OF INFILTRATION SHALL BE 100 GALLONS PER INCH DIAMETER OF SEWER PER MILE, PER DAY, FOR V.C.P. AND 50 GALLONS FOR PVC.
 - 8.) PRIOR TO THE ACCEPTANCE OF THE COMPLETED SEWER LINE, A MANDREL OF NOT LESS THAN NINETY-FIVE PERCENT (95%) OF THE AVERAGE CALCULATED REFERENCE INTERNAL DIAMETER OF THE PIPE SHALL BE PULLED BY HAND FREELY THROUGH EACH SECTION OF SEWER PIPE NOT LESS THAN THIRTY (30) DAYS AFTER INSTALLATION AND FINAL BACKFILL.



RIVERSTONE

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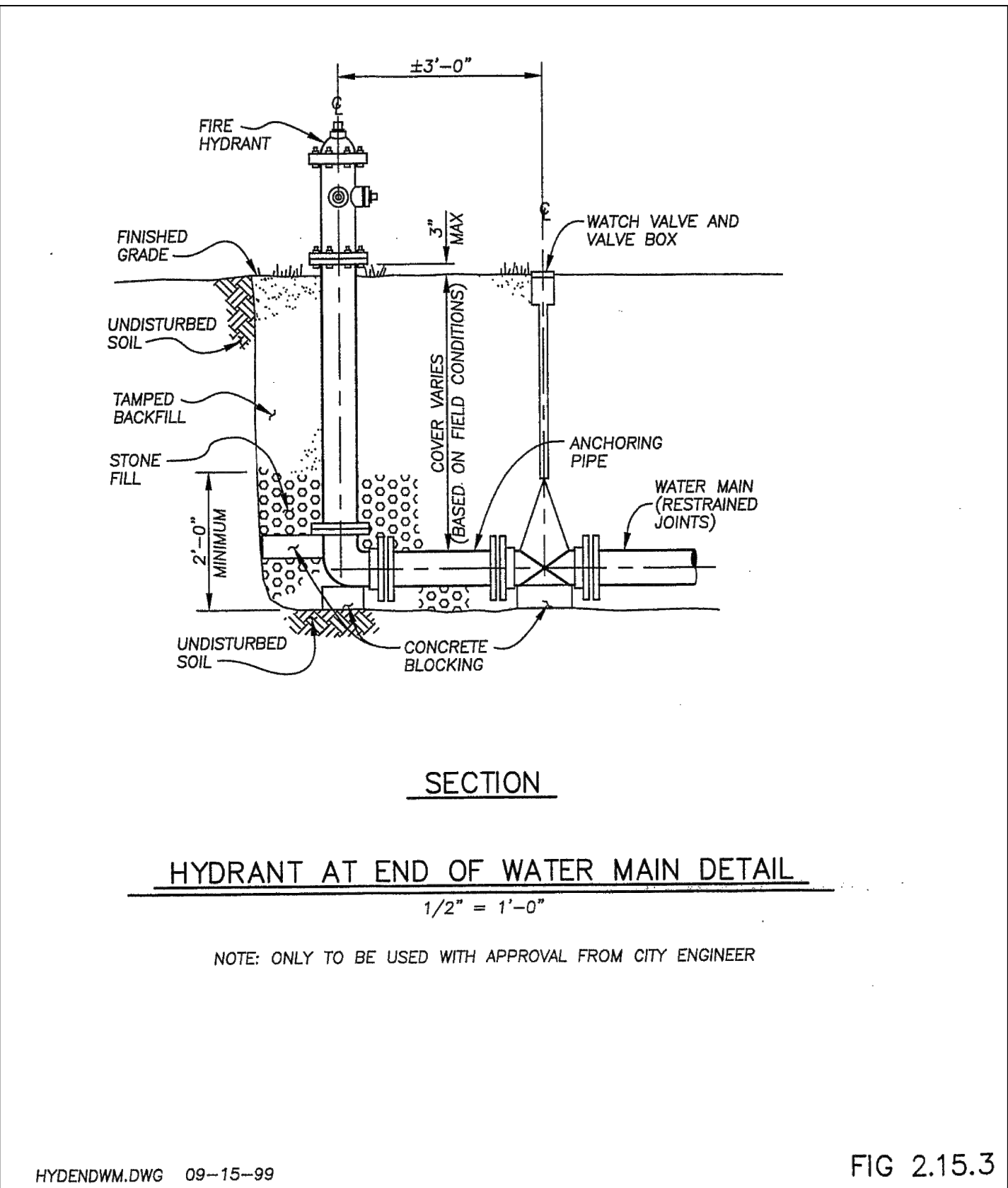
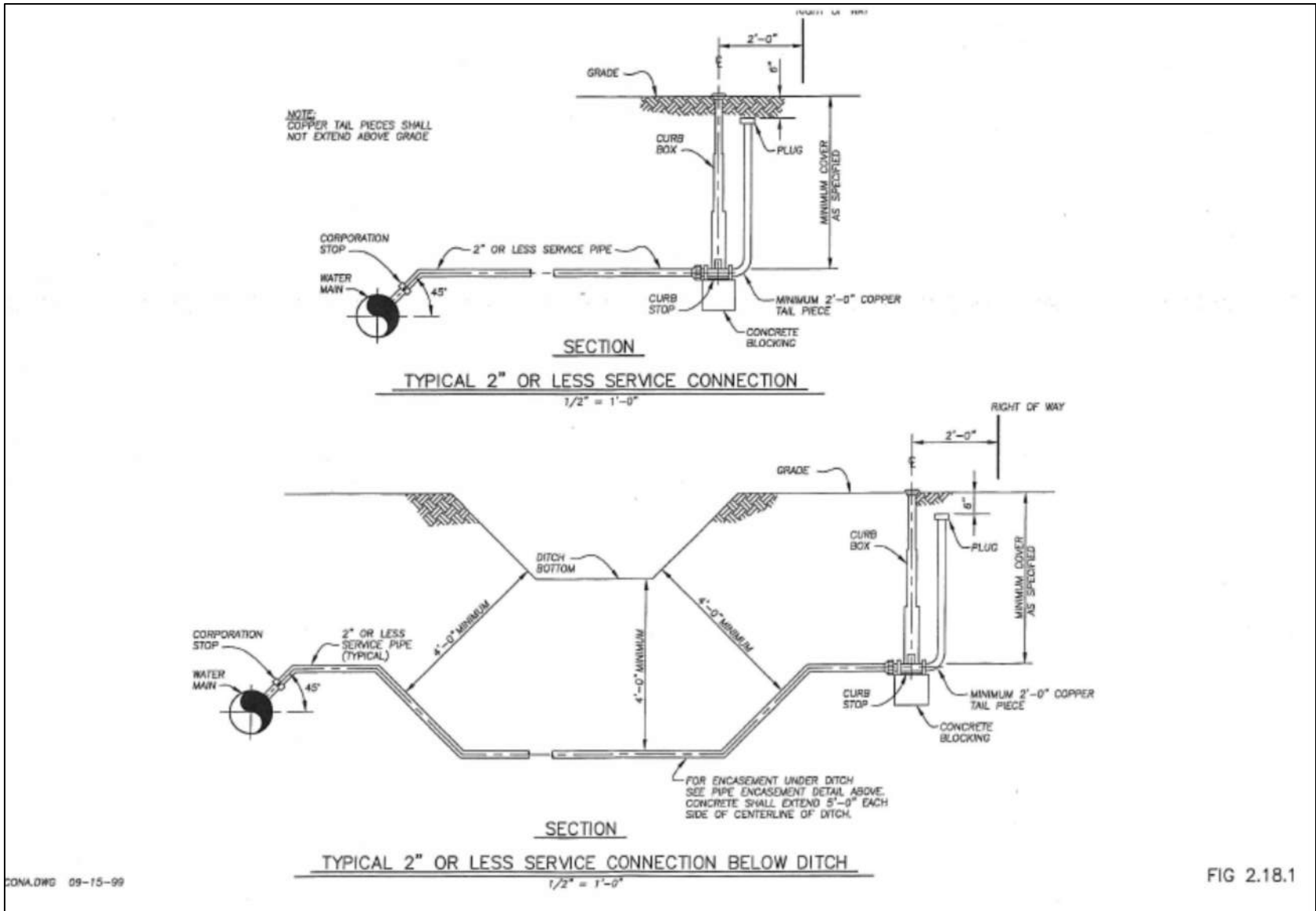
LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

NOTES & DETAILS



C8.02

- CITY OF HUDSON WATER SERVICE AREA
NOTE: THESE WATER WORK NOTES APPLY TO AREAS OF HUDSON THAT ARE TO BE SERVED WITH CITY OF HUDSON WATER.
1. ALL WATER MAINS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HUDSON "ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION", LATEST EDITION.
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY AND ALL AREAS ALONG THE ROUTE OF THE WATER MAIN. THIS WILL INCLUDE LAWNS, DRIVES, DITCHES, CULVERTS, LANDSCAPING, ETC, AND ANY OTHER AREAS DISTURBED DURING THE CONSTRUCTION PROCESS.
 3. ALL TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF HUDSON "ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION" AND BE COORDINATED WITH THE CITY OF HUDSON. AWWA C-600 PRESSURE TESTING AND C-651 DISINFECTION BY CHLORINATION OF THE WATER MAIN WILL BE REQUIRED.
 4. ALL PROPOSED TRENCHES LOCATED UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE FILLED WITH LOW STRENGTH MORTAR. THE METHOD OF BACKFILLING AS DIRECTED BY THE ENGINEER, SHALL CONFORM TO ODOT 613 TYPE 1. SLAG OR FLY ASH IS NOT PERMITTED IN MIX. PAVEMENT INCLUDES, BUT IS NOT LIMITED TO, ROADWAY SURFACES, SIDEWALKS, BIKE WAYS, DRIVEWAYS, SHOULDERS, ETC. THE LIMITS OF THE LOW STRENGTH MORTAR SHALL INCLUDE 45° ANGLE OF REPOSE FROM ALL EDGES OF PAVEMENT.
 5. FIELD STAKING AND RECORD DRAWINGS SHALL BE PROVIDED TO THE CITY BY THE CONTRACTOR, AS SUPERVISED AND STAMPED BY A LICENSED PROFESSIONAL SURVEYOR. RECORD DRAWINGS (AS-BUILTS) IN BOTH REPRODUCIBLE AND DIGITAL FORMAT COMPATIBLE WITH THE CITY OF HUDSON STANDARDS TO BE SUBMITTED TO AND APPROVED BY THE CITY OF HUDSON PRIOR TO UTILITY SERVICE CONNECTIONS BEING MADE.
 6. A 4' MINIMUM HORIZONTAL CLEARANCE AND A 12" MINIMUM VERTICAL CLEARANCE SHALL BE MAINTAINED FROM THE EDGE OF THE WATER MAIN PIPE TO THE EDGE OF THE STORM SEWER PIPE.
 7. A 10' MINIMUM HORIZONTAL CLEARANCE AND AN 18" MINIMUM VERTICAL CLEARANCE SHALL BE MAINTAINED FROM THE EDGE OF THE WATER MAIN PIPE TO THE EDGE OF ALL SANITARY SEWERS AND/OR FORCE MAIN PIPE.
 8. ALL VALVES, FITTINGS, BENDS, TEES, ETC. SHALL HAVE MEGALUG JOINT RESTRAINTS BY EBBA IRON, INC.
 9. ALL WATER MAINS WITHIN LOW STRENGTH MORTAR BACKFILL SHALL BE WRAPPED IN POLYETHYLENE AS PER AWWA C-105. OTHER AREAS TO BE WRAPPED IN POLYETHYLENE SHALL BE AS SHOWN ON THE DRAWINGS, AS DETERMINED FROM DIPRA REPORT OR AS REQUIRED BY THE CITY.
 10. WHERE WATER MAINS CROSS SEWER TRENCHES, THE TRENCH IS TO BE BACKFILLED WITH ODOT 304 CRUSHED LIMESTONE.
 11. TAPPING SLEEVES SHALL BE ROMAC TYPE, WRAP AROUND STAINLESS STEEL WITH # 316 STAINLESS STEEL BOLTS AND NUTS.
 12. MANUFACTURER'S AFFIDAVIT: THE MANUFACTURER SHALL FURNISH AN AFFIDAVIT INDICATING THAT ALL PIPE, FITTINGS, VALVES, FIRE HYDRANTS, AND APPURTENANCES HAVE BEEN MANUFACTURED AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE REFERENCED STANDARDS. A COPY OF EACH AFFIDAVIT, INDICATING THE PROJECT ON WHICH THE MATERIAL IS TO BE USED SHALL BE FORWARDED TO THE CITY OF HUDSON PRIOR TO THE PRECONSTRUCTION MEETING BEING SCHEDULED.
 13. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS. THE CITY MAY GRANT SPECIAL PERMISSION FOR BUILDINGS FOUR STORIES AND HIGHER WITH A FIRE SUPPRESSION SYSTEM.
 14. PROPOSED FACILITIES SHALL BE DESIGNED TO MAINTAIN A MINIMUM OF 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
 15. ALL WATER MAINS GREATER THAN 12 INCH DIAMETER SHALL BE LAID TO GRADE WITH HIGH POINTS AND LOW POINTS HAVING ADEQUATE BLOW-OFFS VIA USE OF HYDRANTS.
 16. FOR ALL NON-RESIDENTIAL WATER SERVICE, A BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED PER CITY OF HUDSON AND OEPA STANDARDS AND REQUIREMENTS. FOR RESIDENTIAL WATER SERVICE A BACKFLOW PREVENTION DEVICE MAY BE REQUIRED FOR SWIMMING POOLS, IRRIGATION SYSTEMS, ETC. CONTACT THE CITY SERVICE/WATER DISTRIBUTION DEPARTMENT FOR THE REQUIREMENTS AND STANDARDS FOR BACKFLOW PREVENTION, THERMAL EXPANSION CONTROL, ETC.
 17. ALL WATER METER SETTINGS MUST BE APPROVED BY THE CITY OF HUDSON. METERS SHALL BE MAGNETIC DRIVE, WITH A SCANCODE REMOTE READ, MUST READ IN CUBIC FEET, SET WITH VALVES BEFORE AND AFTER THE METER. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO PROVIDE AND RUN A REMOTE WATER METER WIRE FROM THE PROPOSED WATER METER LOCATION TO THE VICINITY OF THE PROPOSED ELECTRIC METER LOCATION. CONTACT THE CITY SERVICE/WATER DISTRIBUTION DEPARTMENT FOR THE COMPLETE STANDARDS AND REQUIREMENTS FOR WATER METERS, PRESSURE REGULATORS, ETC.
 18. FOR NEW WATER MAIN CONSTRUCTION THE DRAWINGS SHALL HAVE BEEN REVIEWED BY THE OHIO EPA AND WRITTEN APPROVAL RECEIVED PRIOR TO THE START OF CONSTRUCTION.
 19. ALL WATER SHUT DOWNS SHALL BE PLANNED FOR MONDAY THROUGH WEDNESDAY ONLY.



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TREE INVENTORY

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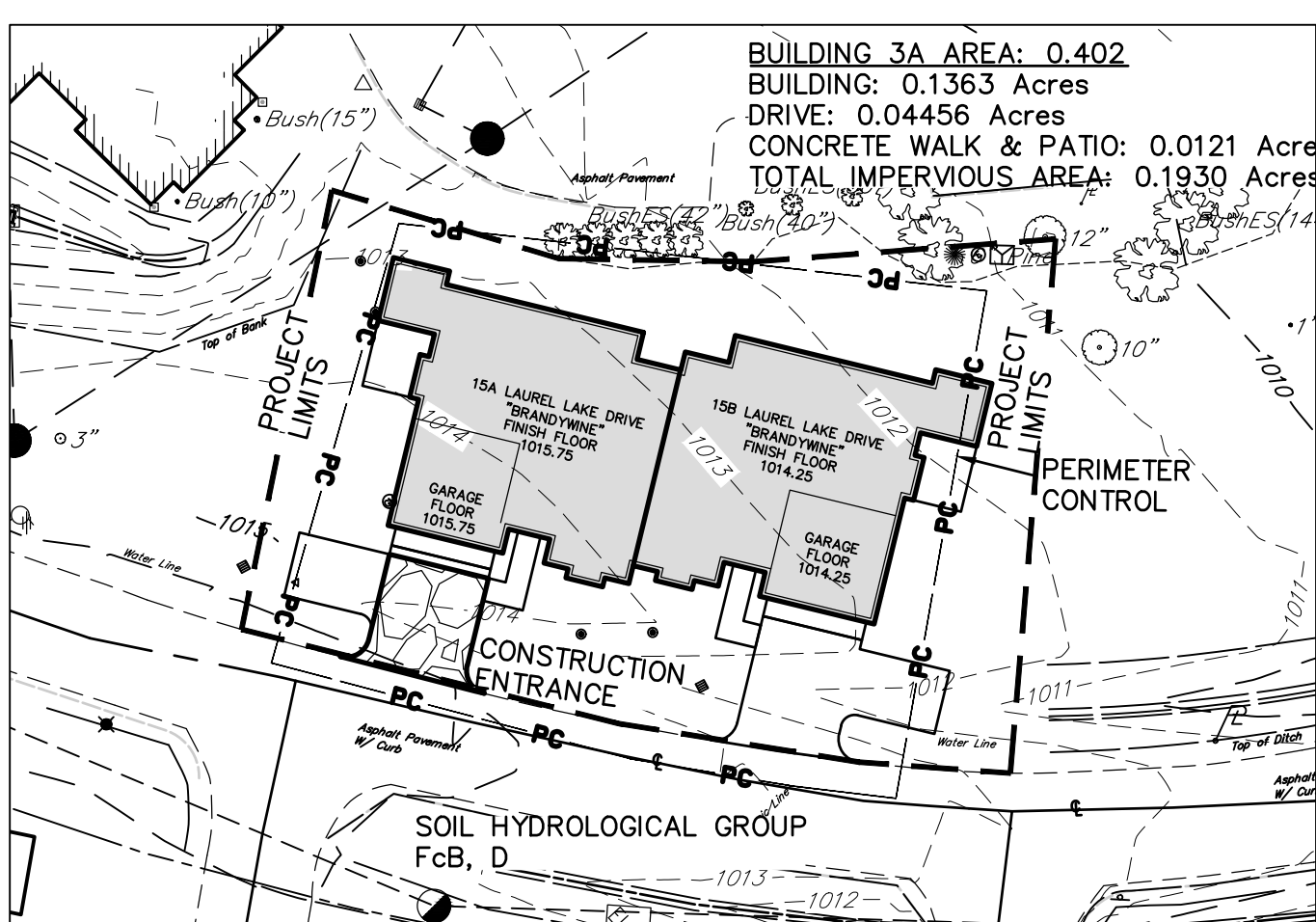
PC APPLICATION
3/17/25
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LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

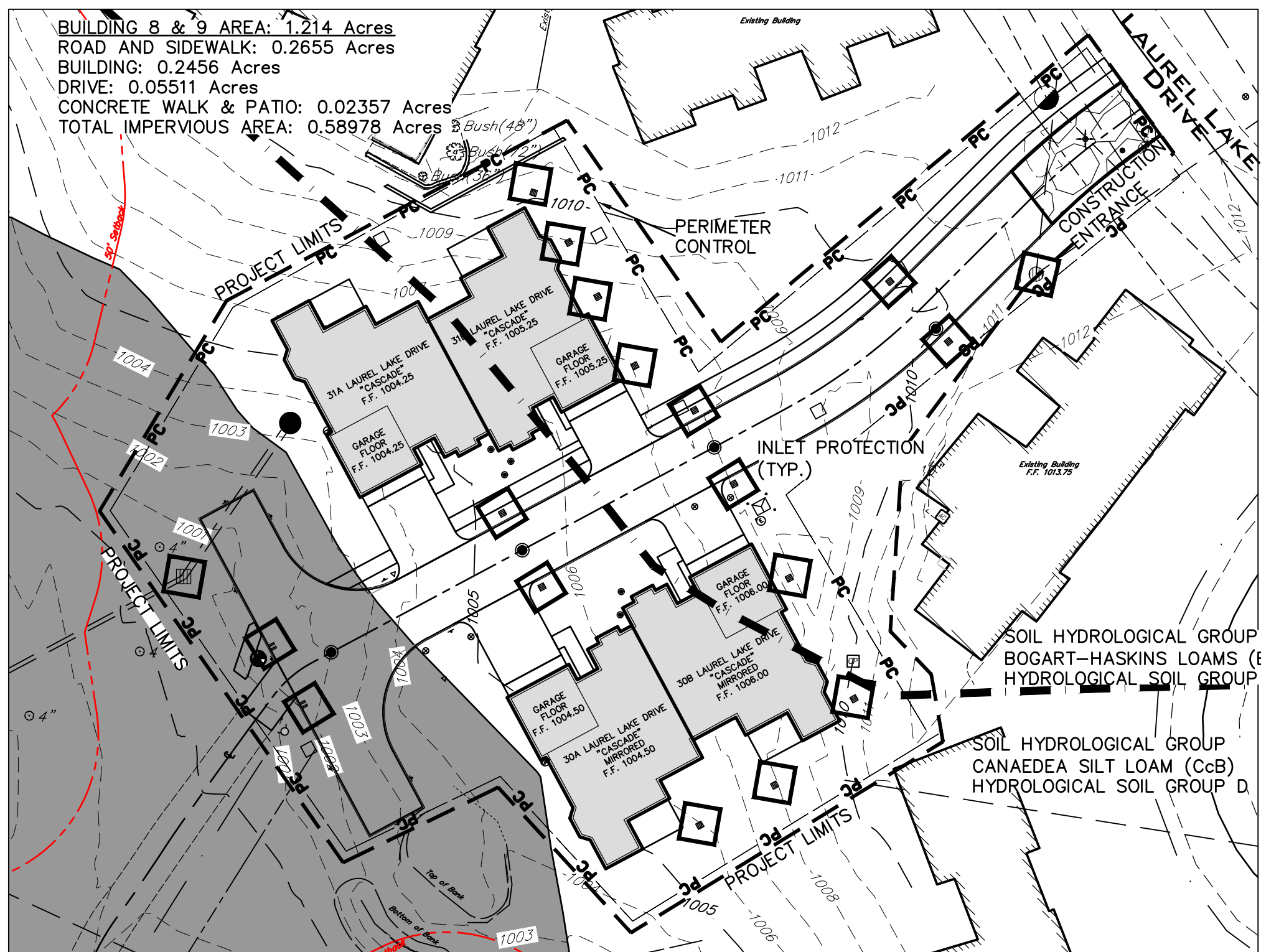
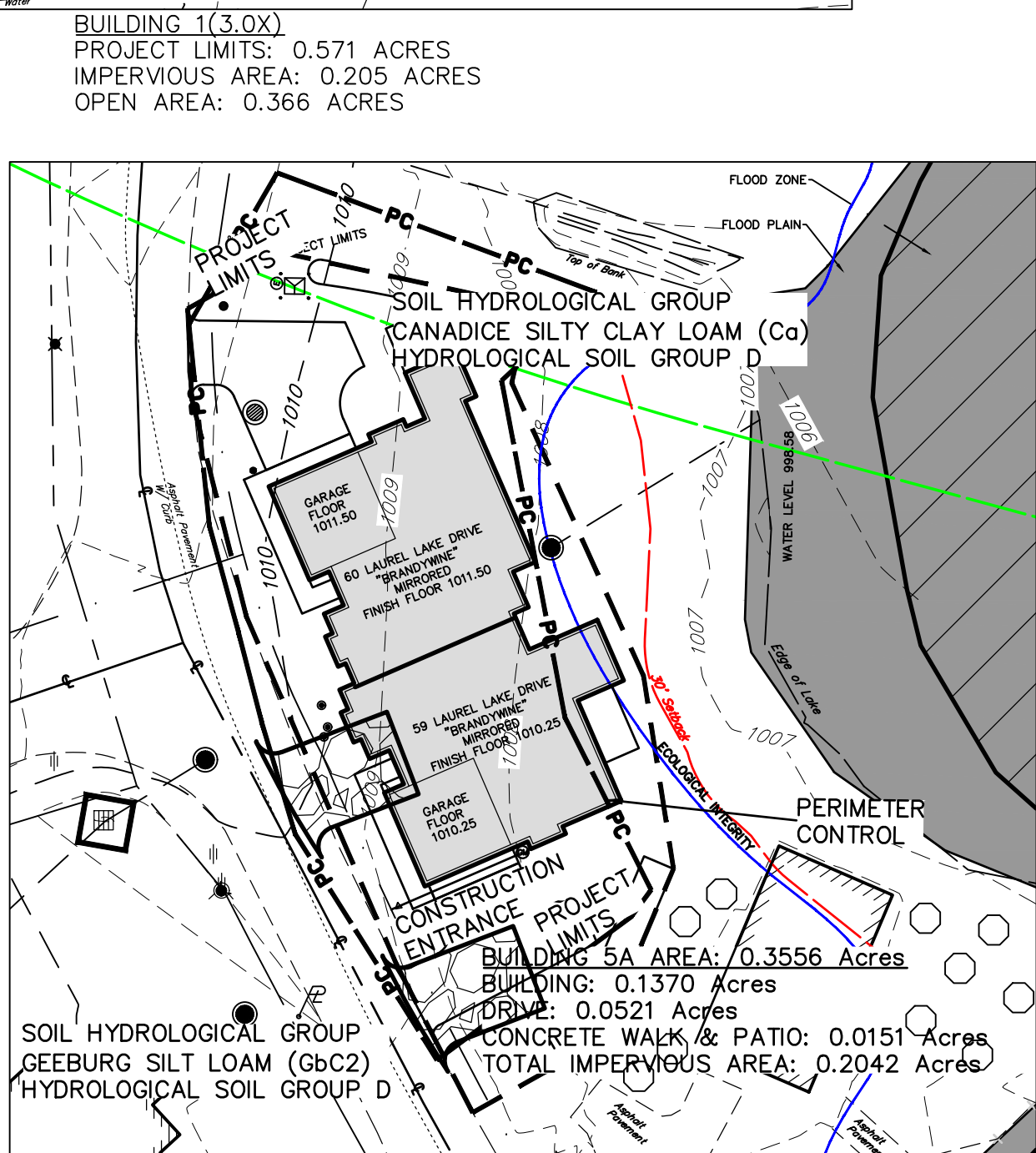
NOTES & DETAILS



C8.04



1. INSTALL TEMPORARY STONE CONSTRUCTION ENTRANCE.
2. INSTALL PERIMETER CONTROL.
3. CLEAR AND GRUB WITHIN CONSTRUCTION LIMITS.
4. STRIP TOPSOIL.
5. MASS GRADE AND APPLY SOIL STABILIZATION AS REQUIRED.
6. INSTALL UTILITIES.
7. INSTALL INLET PROTECTION ON NEW CATCH BASINS.
8. INSTALL BUILDING FOUNDATION.
9. PAVE
10. AFTER PROPER AUTHORIZATION HAS BEEN OBTAINED BY THE GOVERNING AGENCY,
REMOVE EROSION AND/OR SEDIMENT BMP'S.



☐ INLET PROTECTION



(IN FEET)

$$1 \text{ inch} = 40 \text{ ft.}$$


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3/17/25

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C9.01

SILT FENCE

DESCRIPTION:

SILT FENCE IS A SEDIMENT-TRAPPING PRACTICE UTILIZING A GEOTEXTILE FENCE, TOPOGRAPHY AND VEGETATION TO CAUSE SEDIMENT DEPOSITION. SILT FENCE REDUCES RUNOFFS ABILITY TO TRANSPORT SEDIMENT BY PONDING RUNOFF AND DISSIPATING SMALL RILLS OF CONCENTRATED FLOW INTO UNIFORM SHEET FLOW.

CONDITIONS WHERE PRACTICE APPLIES:

SILT FENCE IS USED WHERE RUNOFF OCCURS AS SHEET FLOW OR WHERE FLOW THROUGH SMALL RILLS CAN BE CONVERTED TO SHEET FLOW. SILT FENCE CANNOT EFFECTIVELY TREAT FLOWS IN GULLIES, DITCHES OR CHANNELS. FOR MORE SEVERE CONDITIONS SEE SPECIFICATIONS FOR TEMPORARY DIVERSIONS, SEDIMENT TRAPS AND SEDIMENT BASINS.

PLANNING CONSIDERATIONS:

SILT FENCE VS TEMPORARY DIVERSIONS AND SETTLING PONDS – TO TREAT SHEET FLOW RUNOFF, SILT FENCE IS USED OR DIVERSIONS ARE CONSTRUCTED TO DIRECT RUNOFF TO A SEDIMENT POND. SILT FENCE IS MOST APPLICABLE FOR RELATIVELY SMALL AREAS WITH FLAT TOPOGRAPHY. SILT FENCE ALSO REQUIRES LESS SPACE AND CAUSES LESS DISTURBANCE. A SYSTEM OF DIVERSIONS AND SETTLING PONDS, ON THE OTHER HAND, HAS GREATER INTEGRITY. COMPARED TO SILT FENCE, THEY CAN HANDLE MUCH GREATER FLOWS AND ARE MORE DURABLE AND EASIER TO CONSTRUCT CORRECTLY. AS A RESULT, EARTH DIVERSIONS AND SETTLING PONDS GENERALLY ARE RECOMMENDED OVER SILT FENCE.

DESIGN CRITERIA:

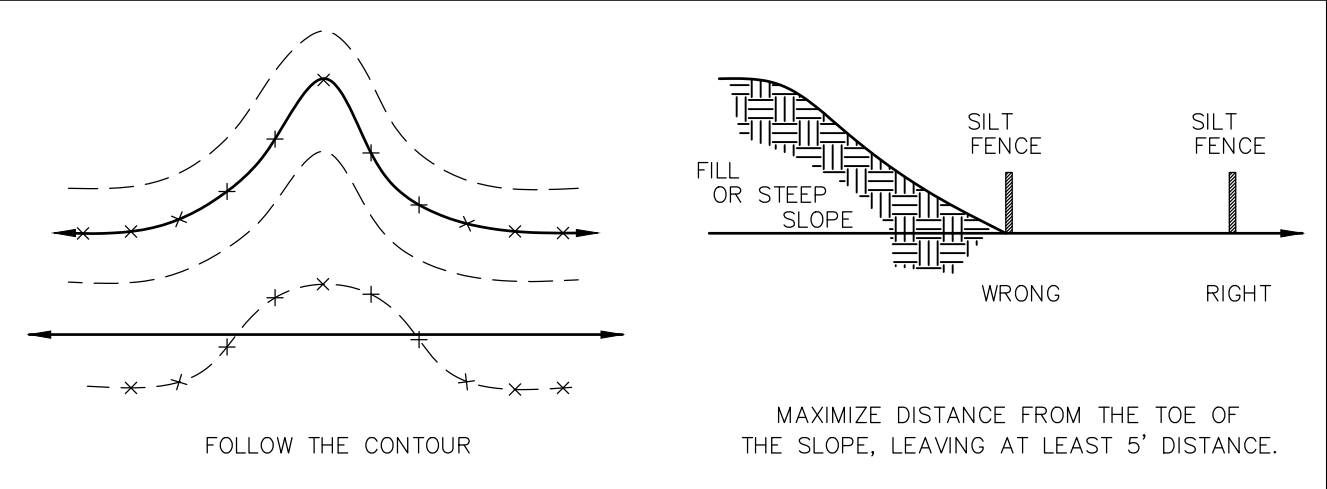
SILT FENCE AS A SEDIMENT CONTROL PRACTICE CONSISTS NOT ONLY OF THE FENCE ITSELF BUT, JUST AS IMPORTANTLY, IT ENTAILS TOPOGRAPHY. THIS IS A CRITICAL CONSIDERATION BECAUSE THE SEDIMENT REMOVAL PROCESS RELIES ON DEPOSITION NOT FILTERING, AS OFTEN ASSUMED. SILT FENCE WORKS BY DISPERSING FLOW, PONDING RUNOFF AND RELEASING DIFFUSE FLOW. HOWEVER, IF SILT FENCE IS USED WITHOUT REGARD TO A SITE'S TOPOGRAPHY, IT WILL TYPICALLY CONCENTRATE RUNOFF, INCREASING ITS ABILITY TO TRANSPORT SEDIMENT RATHER THAN CAUSING DEPOSITION.

LEVEL CONTOUR – FOR SILT FENCE TO ENHANCE DEPOSITION, IT MUST BE PLACED ON THE LEVEL CONTOUR OF THE LAND SO THAT FLOWS ARE DISSIPATED INTO UNIFORM SHEET FLOW, WHICH HAS LITTLE ENERGY FOR TRANSPORTING SEDIMENT. SILT FENCE SHOULD NEVER CONCENTRATE RUNOFF, WHICH WILL RESULT IF IT IS PLACED UP AND DOWN SLOPES RATHER THAN ON THE LEVEL CONTOUR.

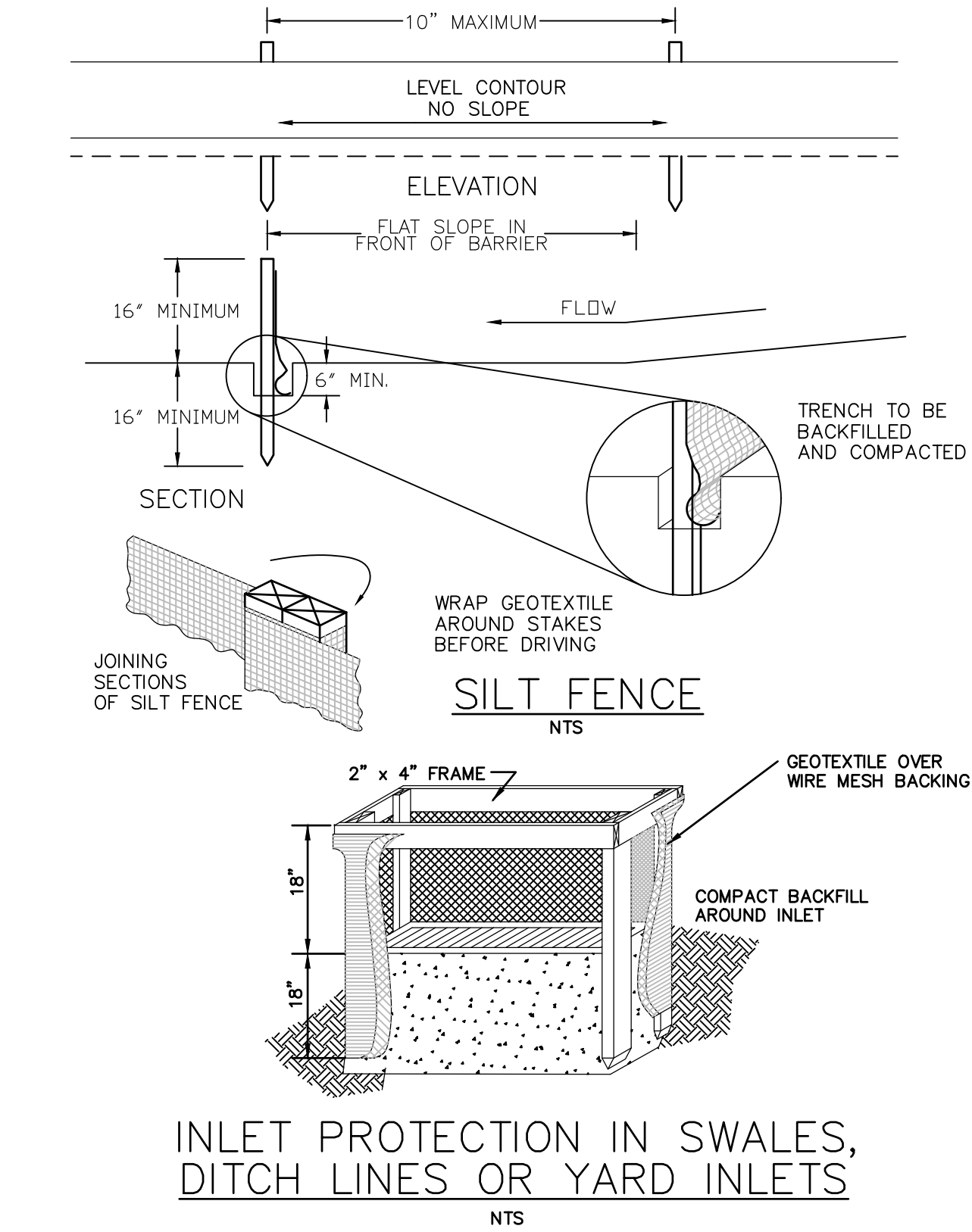
FLAT SLOPES – SILT FENCE MUST ALSO BE USE ON THE FLATTEST AREAS AVAILABLE. BECAUSE OF THE GREAT IMPORTANCE SLOPE HAS ON WATER'S ABILITY TO TRANSPORT SEDIMENT, SILT FENCE SHOULD NEVER BE PLACED DIRECTLY AT THE TOE OF A SLOPE IF IT IS AT ALL POSSIBLE TO PLACE IT SEVERAL FEET AWAY. SILT FENCE GENERALLY SHOULD BE PLACED ON THE FLATTEST AREA AVAILABLE TO INCREASE THE SHALLOW PONDING OF RUNOFF AND MAXIMIZE SPACE AVAILABLE FOR DEPOSITED SEDIMENT.

FLOW AROUND ENDS – TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END MUST BE CONSTRUCTED UP-SLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.

VEGETATION – DENSE VEGETATION ALSO HAS THE EFFECT OF DISSIPATING FLOW ENERGIES AND CAUSING SEDIMENT DEPOSITION. SEDIMENT-TRAPPING EFFICIENCY WILL BE ENHANCED WHERE A DENSE STAND OF VEGETATION OCCURS FOR SEVERAL FEET BOTH BEHIND AND IN FRONT OF A SILT FENCE.



FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	Astm D 1682
MULLEN BURST STRENGTH	190 PSI MINIMUM	Astm D 3786
SLURRY FLOW RATE	0.3 GAL./MIN./SQ. FT. MAXIMUM	
EQUIVALENT OPENING SIZE	40-80	US STD. SLEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	Astm-G-26



SPECIFICATIONS FOR SILT FENCE:

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UP-SLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UP-SLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UP-SLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN. ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 IN. OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
9. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE – SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

CRITERIA FOR SILT FENCE MATERIALS:

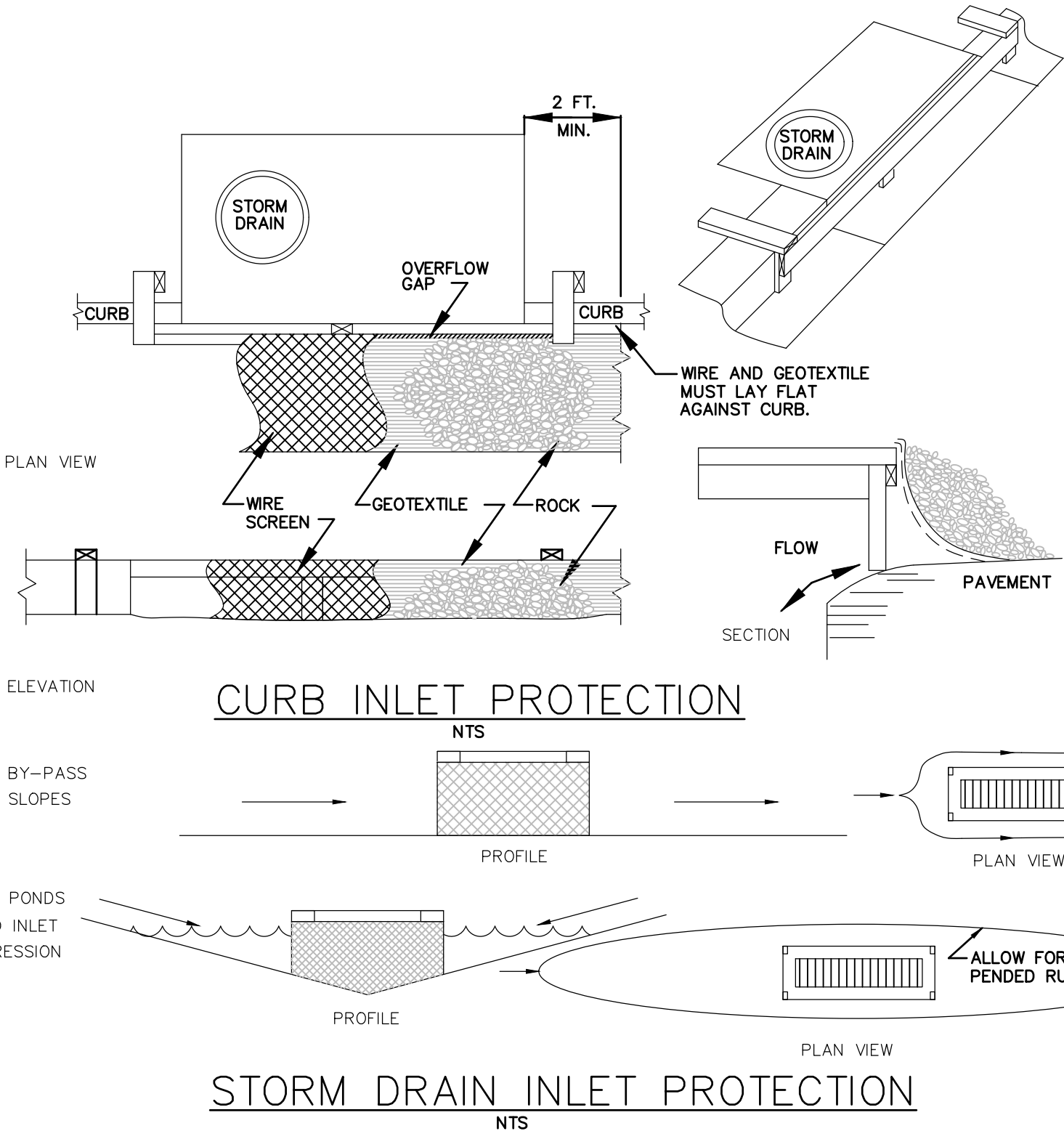
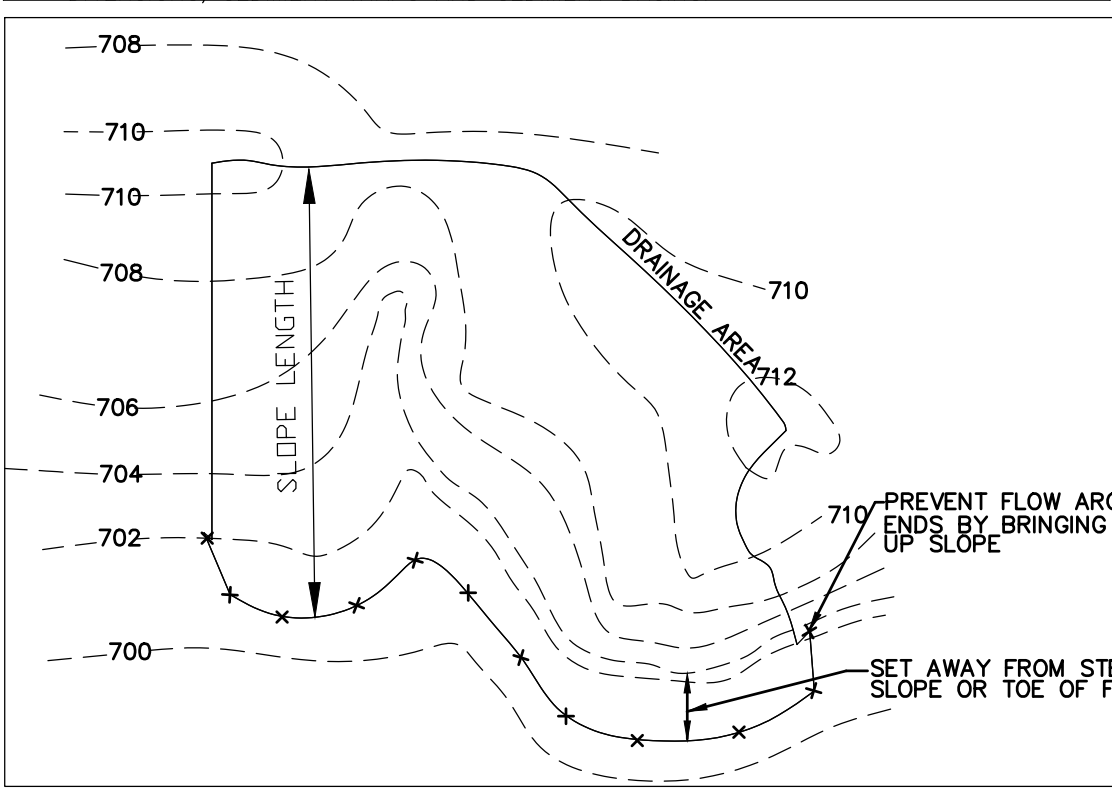
1. FENCE POSTS – THE LENGTH SHALL BE A MINIMUM OF 32 IN. LONG. WOOD POSTS WILL BE 2-BY-2 IN. HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
2. SILT FENCE FABRIC (SEE CHART BELOW):
 1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UP-SLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
 2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH OF AT LEAST 18 IN.
 3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-BY-4 IN. CONSTRUCTION-GRADE LUMBER. THE 2-BY-4 IN. POSTS SHALL BE DRIVEN 1 FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-BY-4 IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 IN. BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
 4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
 5. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 IN. BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
 6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 IN. LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
 7. A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 IN. HIGHER THAN THE TOP OF THE FRAME.

DRAINAGE AREA:

1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UP-SLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOME OPERATIONAL.
2. THE WOODEN FRAME IS TO BE CONSTRUCTED OF 2-BY-4 IN. CONSTRUCTION-GRADE LUMBER. THE END SPACERS SHALL BE A MINIMUM OF 1 FT. BEYOND BOTH ENDS OF THE THROAT OPENING. THE ANCHORS SHALL BE NAILED 2-BY-4 IN. STAKES DRIVEN ON THE OPPOSITE SIDE OF THE CURB.
3. THE WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC AND STONE. IT SHALL BE A CONTINUOUS PIECE WITH A MINIMUM WIDTH OF 30 IN. AND 4 FT. LONGER THAN THE THROAT LENGTH OF THE INLET, 2 FT. ON EACH SIDE.
4. GEOTEXTILE CLOTH SHALL HAVE AN EQUIVALENT OPENING SIZE (EOS) OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE AT LEAST THE SAME SIZE AS THE WIRE MESH.
5. THE WIRE MESH AND GEOTEXTILE CLOTH SHALL BE FORMED TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDE OF THE INLET AND SECURELY FASTENED TO THE 2-BY-4 IN. FRAME.
6. TWO-INCH STONE SHALL BE PLACED OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE CLOTH.

DISPERSING FLOW – PROPER APPLICATIONS OF SILT FENCE WILL ALLOW ALL THE INTERCEPTED RUNOFF TO PASS AS DIFFUSED FLOW THROUGH THE GEOTEXTILE. RUNOFF SHOULD NEVER OVERTOP SILT FENCE, FLOW AROUND THE ENDS, OR IN ANY OTHER WAY FLOW AS CONCENTRATED FLOW FROM THE PRACTICE. IF THIS DOES OCCUR, MAINTENANCE ALTERNATIVE SILT FENCE LAYOUT, OR OTHER PRACTICES ARE NEEDED.

SILT FENCE MAXIMUM DRAINAGE AREA BASED ON SLOPE AND SLOPE LENGTH		
SLOPE		SLOPE LENGTH (FT.)
0% – 2%	FLATTER THAN 50:1	250
2% – 10%	50:1 – 10:1	125
10% – 20%	10:1 – 5:1	100
20% – 33%	5:1 – 3:1	75
33% – 50%	3:1 – 2:1	50
> 50%	> 2:1	25



STORM DRAIN INLET PROTECTION

DESCRIPTION:

STORM DRAIN INLET PROTECTION CONSISTS OF A GEOTEXTILE BARRIER SUPPORTED AROUND OR ACROSS A STORM DRAIN INLET. IT IS USED TO PREVENT SEDIMENT-LADED WATER FROM ENTERING A STORM DRAIN SYSTEM. IT REDUCES THE RATE AT WHICH SEDIMENT-LADEN WATER MAY ENTER AN INLET THEREBY CAUSING PONDING AND SETTLING OF SEDIMENT.

CONDITIONS WHERE PRACTICE APPLIES AND PLANNING CONSIDERATIONS:

THIS PRACTICE IS NOT GENERALLY RECOMMENDED AS A PRIMARY MEANS OF SEDIMENT CONTROL. IT SHOULD ONLY BE USED IF IT IS NOT POSSIBLE TO TEMPORARILY DIVERT THE STORM DRAIN OUTFALL INTO A SEDIMENT TRAP OR SEDIMENT BASIN OR IF IT IS TO BE USED ONLY FOR A SHORT PERIOD OF TIME DURING THE CONSTRUCTION PROCESS.

INLET PROTECTION IN EFFECT BLOCKS STORM DRAIN INLETS. THE RESULT FROM BLOCKING STORM DRAIN INLETS WILL HAVE ON THE SITE'S DRAINAGE MUST BE CONSIDERED. LONG SLOPING STREETS OR DITCHES DESIGNED WITH SEVERAL INLETS ALONG THEIR LENGTH MAY HAVE A SIGNIFICANT AMOUNT OF SURFACE FLOW ACCUMULATE IF INLET PROTECTION IS USED. IN LOW AREAS, A POND WILL FORM AROUND INLETS. PONDING IS NECESSARY FOR REMOVING SEDIMENT FROM RUNOFF AND SHOULD BE ENCOURAGED IN CONJUNCTION WITH INLET PROTECTION.

SPECIFICATIONS FOR CURB INLET PROTECTION:

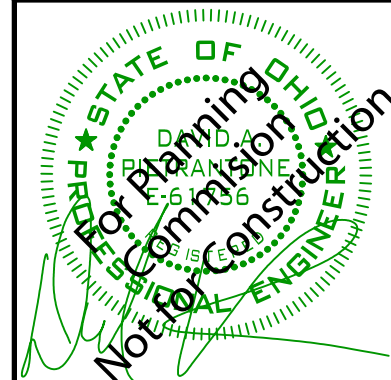
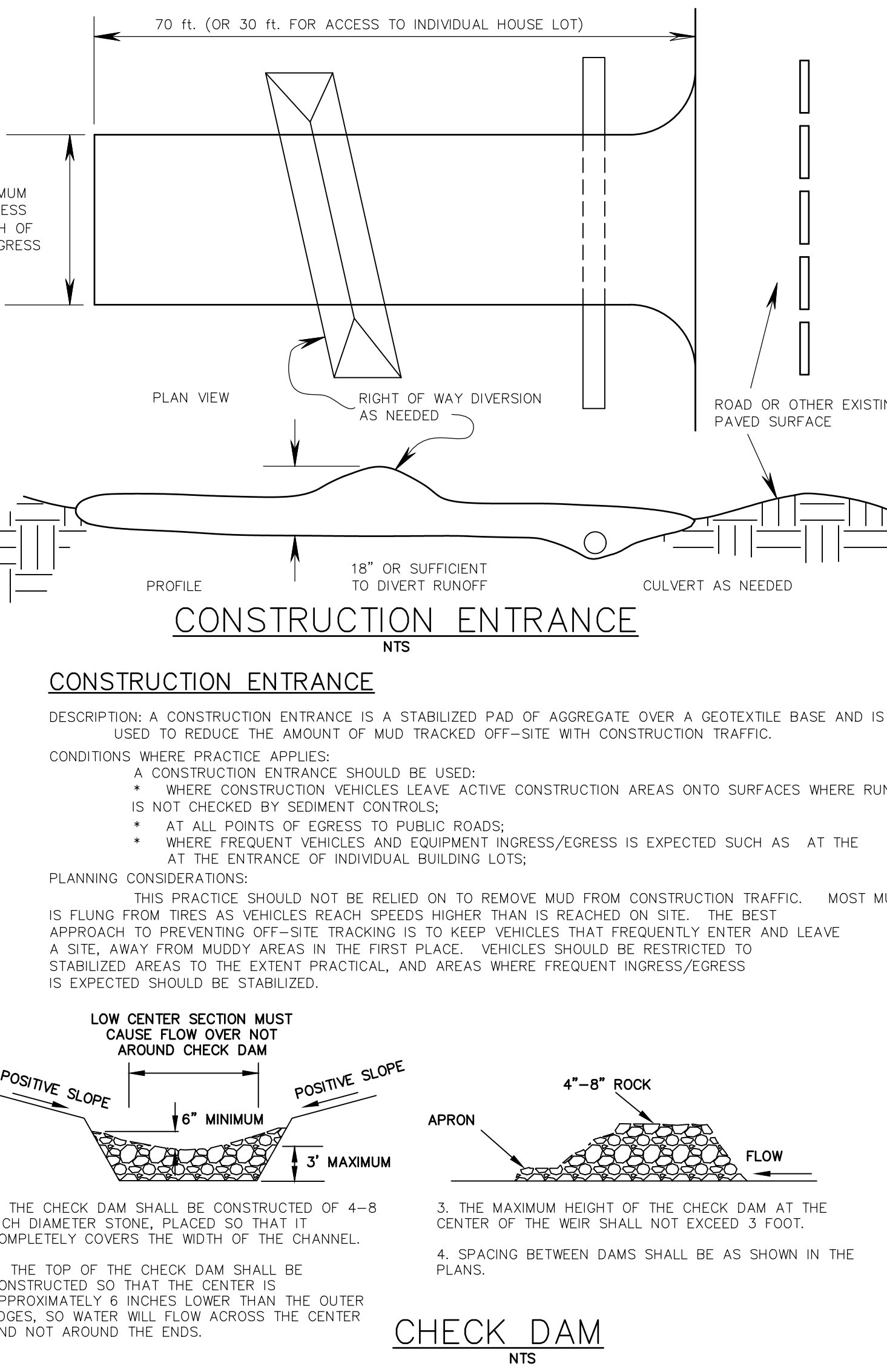
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE WOODEN FRAME IS TO BE CONSTRUCTED OF 2-BY-4-IN. CONSTRUCTION-GRADE LUMBER. THE END SPACERS SHALL BE A MINIMUM OF 1 FT. BEYOND BOTH ENDS OF THE THROAT OPENING. THE ANCHORS SHALL BE NAILED TO 2-BY-4-IN. STAKES DRIVEN ON THE OPPOSITE SIDE OF THE CURB.
3. THE WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC AND STONE. IT SHALL BE A CONTINUOUS PIECE WITH A MINIMUM WIDTH OF 30 IN. AND 4 FT. LONGER THAN THE THROAT LENGTH OF THE INLET, 2 FT. ON EACH SIDE.
4. GEOTEXTILE CLOTH SHALL HAVE AN EQUIVALENT OPENING SIZE (EOS) OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE AT LEAST THE SAME SIZE AS THE WIRE MESH.
5. THE WIRE MESH AND GEOTEXTILE CLOTH SHALL BE FORMED TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET AND SECURELY FASTENED TO THE 2-BY-4-IN. FRAME.
6. TWO-INCH STONE SHALL BE PLACED OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE CLOTH.

EROSION NOTES

1. SEDIMENT PONDS/TRAPS AND PERIMETER CONTROLS SHALL BE IMPLEMENTED AS A FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE STABILIZED.
2. DISTURBED AREAS WITHIN 50 FEET OF A STREAM, WHICH WILL REMAIN UNWORKED FOR A PERIOD OF 14 DAYS OR MORE, SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPROPRIATE MEANS WITHIN 2 DAYS.
3. DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR A PERIOD OF 14 DAYS OR MORE SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPROPRIATE MEANS WITHIN 7 DAYS.
4. EROSION CONTROL BLANKETS WITH MATTING WILL BE USED ON DITCHES GREATER THAN 1.5% AND ALL OTHER SLOPES GREATER THAN 6% GRADE.
5. DISTURBED AREAS THAT WILL BE IDLE OVER WINTER SHALL BE STABILIZED PRIOR TO NOVEMBER 1.
6. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.
7. OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON THE PLAN.
8. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (2006 or NEWEST EDITION).
9. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS. A TEMPORARY COVERING OF STRAW MULCH OVER BARE GROUND THROUGHOUT THE DURATION OF THE PROJECT IS EFFECTIVE MEANS OF MINIMIZING EROSION. A STOCKPILE OF STRAW BALES SHOULD BE ON HAND.
10. REGULAR INSPECTION AND MAINTENANCE WILL BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES. PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY 7 DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.5 INCHES OF RAIN IN A 24-HOUR PERIOD. PROVIDE NAME OF INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION AND CORRECTIVE MEASURES TAKEN.

SPECIFICATIONS FOR CONSTRUCTION ENTRANCE:

1. STONE SIZE--TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH--THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FT. (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30-FT. MINIMUM LENGTH APPLIES).
3. THICKNESS--THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK.
4. WIDTH--THE ENTRANCE SHALL BE AT LEAST 10 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCURS.
5. BEDDING--A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.
6. CULVERT--A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
7. WATER BAR--A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
8. MAINTENANCE--TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
9. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.



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3/17/25
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE
SWPPP



C9.02

AREA REQUIRING TEMPORARY STABILIZATION		TIME FRAME FOR SEEDING	
ANY DISTURBED AREA WITHIN 50' OF A STREAM AND NOT AT FINAL GRADE		WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR 14 DAYS OR MORE	
DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN 1 YEAR AND NOT WITHIN 50' OF A STREAM		WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA	
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER		PRIOR TO THE ONSET OF WINTER	
TEMPORARY SEEDING MIXTURE			
SEEDING DATES	SPECIES	LB./1,000 sq.ft.	per Acre
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	PERENNIAL RYEGRASS	1	40 LB
AUGUST 15 TO NOVEMBER 1	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	RYE	3	2 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	WHEAT	1	2 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
AUGUST 15 TO NOVEMBER 1	PERENNIAL RYEGRASS	1	40 LB
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
NOVEMBER 1 TO SPRING SEEDING USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING			

AREA REQUIRING PERMANENT STABILIZATION		TIME FRAME FOR SEEDING	
ANY AREAS THAT WILL LIE DORMANT FOR 1 YEAR OR MORE		WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE	
ANY AREAS WITHIN 50' OF A STREAM AND AT FINAL GRADE		WITHIN TWO DAYS OF REACHING FINAL GRADE	
ANY OTHER AREAS AT FINAL GRADE		WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA	
PERMANENT SEEDING MIXTURE			
SEEDING DATES	SPECIES	LB./1,000 sq.ft.	per Acre
MARCH 15 TO OCTOBER 1	TALL FESCUE	1	40-50 LBS
	TURF-TYPE (DWARF FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	PERENNIAL RYEGRASS	1	40 LB
AUGUST 15 TO NOVEMBER 1	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	RYE	3	2 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
	WHEAT	1	2 BUSHEL
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
NOVEMBER 1 TO SPRING SEEDING	PERENNIAL RYEGRASS	1	40 LB
	TALL FESCUE	1	40 LB
	ANNUAL RYEGRASS	1	40 LB
NOVEMBER 1 TO SPRING SEEDING USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING			

SWPPP AMENDMENT LOG			
PROJECT NAME: _____		PAGE _____ OF _____	
SWPPP CONTACT: _____			
AMENDMENT NO.	DESCRIPTION OF AMENDMENT	DATE OF AMENDMENT	AMENDMENT PREPARED BY (NAME & TITLE)

COPY AS NECESSARY

GRADING & STABILIZATION LOG				
PROJECT NAME: _____		SWPPP CONTACT: _____		
DATE GRADING ACTIVITY STARTED	DESCRIPTION OF GRADING ACTIVITY	DATE GRADING ACTIVITY CEASED	DATE STABILIZATION MEASURES	DESCRIPTION OF STABILIZATION MEASURES AND LOCATION

COPY AS NECESSARY

DUST CONTROL:

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

CONDITIONS WHERE PRACTICE APPLIES AND PLANNING CONSIDERATIONS: IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY TO OCCUR IF PREVENTATIVE MEASURES ARE NOT TAKEN.

DESIGN CRITERIA: A NUMBER OF MEASURES CAN BE UTILIZED TO LIMIT DUST EITHER DURING OR BETWEEN CONSTRUCTION STAGES OR ONCE CONSTRUCTION IS COMPLETE. GENERALLY THE SAME METHODS THAT ARE USED TO LIMIT EROSION BY LIMITING EXPOSURE OF SOILS TO RAINFALL CAN BE USED TO LIMIT DUST INCLUDING: STABILIZING EXPOSED SOILS WITH MULCH, VEGETATION OR PERMANENT COVER. ADDITIONAL METHODS PARTICULAR TO DUST CONTROL INCLUDING MANAGING VEHICLES AND CONSTRUCTION TRAFFIC, ROAD TREATMENT AND TREATMENT OF EXPOSED SOIL WITH CHEMICAL STABILIZERS.

USED OIL SHALL NOT BE USED AS A DUST SUPPRESSANT. DUST CONTROLS MAY INCLUDE THE USE OF WATER TRUCKS TO WET DISTURBED AREAS, TAPPING STOCKPILES, TEMPORARY STABILIZATION OF DISTURBED AREAS, AND REGULATION OF THE SPEED OF VEHICLES ON THE SITE.

SPECIFICATIONS FOR DUST CONTROL:

1. VEGETATIVE COVER AND/MULCH – APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS.
2. WATERING – SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION.
3. SPRAY-ON ADHESIVES – APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.
4. STONE – GRADED ROADWAYS AND OTHER SUITABLE AREAS WILL BE STABILIZED USING CRUSHED STONE OR COARSE GRAVEL AS SOON AS PRACTICABLE AFTER REACHING AN INTERIM OR FINAL GRADE. CRUSHED STONE OR COARSE GRAVEL CAN BE USED AS A PERMANENT COVER TO PROVIDE CONTROL OF SOIL EMISSIONS.
5. BARRIERS – EXISTING WINDBREAK VEGETATION SHALL BE MARKED AND PRESERVED. SNOW FENCING OR OTHER SUITABLE BARRIER MAY BE PLACED PERPENDICULAR TO PREVAILING AIR CURRENTS AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT TO CONTROL AIR CURRENTS AND BLOWING SOIL.
6. OPERATION AND MAINTENANCE – WHEN TEMPORARY DUST CONTROL MEASURES ARE USED; REPETITIVE TREATMENT SHOULD BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.
7. STREET CLEANING – PAVED AREAS THAT HAVE ACCUMULATED SEDIMENT FROM CONSTRUCTION SHOULD BE CLEANED DAILY, OR AS NEEDED, UTILIZING A STREET SWEEPER OR BUCKET-TYPE END LOADER OR SCRAPER.

ADDITIONAL CONSTRUCTION SITE POLLUTION CONTROLS
OHIO RAINWATER AND LAND DEVELOPMENT MANUAL (2006)

1. CONSTRUCTION PERSONNEL, INCLUDING SUBCONTRACTORS WHO MAY USE OR HANDLE HAZARDOUS OR TOXIC MATERIALS, SHALL BE MADE AWARE OF THE FOLLOWING GENERAL GUIDELINES REGARDING DISPOSAL AND HANDLING OF HAZARDOUS AND CONSTRUCTION WASTES:
 - PREVENT SPILLS
 - USE PRODUCTS UP
 - FOLLOW LABEL DIRECTIONS FOR DISPOSAL
 - REMOVE LIDS FROM EMPTY BOTTLES AND CAN WHEN DISPOSING IN TRASH
 - RECYCLE WASTES WHENEVER POSSIBLE
 - DON'T POUR INTO WATERWAYS, STORM DRAINS OR ONTO THE GROUND
 - DON'T POUR DOWN THE SINK, FLOOR DRAIN OR SEPTIC TANKS
 - DON'T BURY CHEMICALS OR CONTAINERS
 - DON'T BURN CHEMICALS OR CONTAINERS
 - DON'T MIX CHEMICALS TOGETHER
2. CONTAINERS SHALL BE PROVIDED FOR THE PROPER COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS USED ON SITE. CONTAINERS SHALL BE COVERED AND NOT LEAKING. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL. CONSTRUCTION DEMOLITION AND DEBRIS (CD&D) WASTE MUST BE DISPOSED OF AT AN OHIO EPA APPROVED CD&D LANDFILL AS REQUIRED BY OHIO REVISED CODE (OHC) 3714.
3. NO CONSTRUCTION RELATED WASTE MATERIAL ARE TO BE BURIED ON-SITE. BY EXCEPTION, CLEAN FILL (BRICKS, HARDENED CONCRETE SOIL) MAY BE UTILIZED IN A WAY WHICH DOES NOT ENCROACH UPON NATURAL WETLANDS, STREAMS OR FLOOD PLAINS OR RESULT IN THE CONTAMINATION OF WATER OF THE STATE.
4. HANDLING CONSTRUCTION CHEMICALS. MIXING, PUMPING, TRANSFERRING OR OTHER HANDLING OF CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH OR STORM DRAIN.
5. EQUIPMENT FUELING AND MAINTENANCE. OIL CHANGING, ETC., SHALL BE PERFORMED AWAY FROM WATERCOURSES, DITCHES OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. THESE AREA MUST BE INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A 0.5 INCH OR GREATER RAINFALL EVENT TO ENSURE THERE ARE NO EXPOSED MATERIAL WHICH WOULD CONTAMINATE STORM WATER. SITE OPERATORS MUST BE AWARE THAT SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) REQUIREMENTS MAY APPLY. AN SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVE GROUND TANK OF 600 GALLONS OR MORE, ACCUMULATIVE ABOVE GROUND STORAGE OF 1,330 GALLONS OR MORE OR 42,000 GALLONS OF UNDERGROUND STORAGE. CONTAMINATED SOILS MUST BE DISPOSED OF IN ACCORDANCE WITH ITEM 8.
6. CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAM, DITCHES, STORM DRAINS OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED.
7. SPILL REPORTING REQUIREMENTS. SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST OR KITTY LITTER AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILL SHALL BE REPORTED TO OHIO EPA (1-800-282-9378). SPILL OF 25 GALLONS OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO OHIO EPA, THE LOCAL FIRE DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MIN. OF THE DISCOVERY OF THE RELEASE. ALL SPILLS WHICH CONTACT WATERS OF THE STATE MUST BE REPORTED TO OHIO EPA.
8. CONTAMINATED SOILS. IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEADED OR RELEASED ONTO THE SOIL, THE SOIL SHALL BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LANDFILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY. (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). NOTE THAT STORM WATER RUN OFF ASSOCIATED WITH CONTAMINATED SOILS ARE NOT AUTHORIZED UNDER OHIO EPA'S GENERAL STORM WATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
9. OPEN BURNING. NO MATERIALS CONTAINING RUBBER, GREASE, ASPHALT OR PETROLEUM PRODUCTS; SUCH AS TIRES, AUTO PARTS, PLASTICS OR PLASTIC COATED WIRE MAY BE BURNED (OAC 3745-19). OPEN BURNING IS NOT ALLOWED IN RESTRICTED AREAS, WHICH ARE DEFINED AS:
 - 1) WITHIN CORPORATION LIMITS;
 - 2) WITHIN 1,000 FEET OUTSIDE A MUNICIPAL CORPORATION HAVE A POPULATION OF 1,000 TO 10,000;
 - 3) A ONE MILE ZONE OUTSIDE OF A CORPORATION OF 10,000 OR MORE.OUTSIDE RESTRICTED AREAS, NO OPEN BURNING IS ALLOWED WITHIN A 1,000 FEET OF AN INHABITED BUILDING ON ANOTHER PROPERTY. OPEN BURNING IS PERMISSIBLE IN A RESTRICTED AREA FOR: HEATING TAR, WELDING, SMUDGE POTS AND SIMILAR OCCUPATIONAL NEEDS, AND HEATING FOR WARMTH OR OUTDOOR BARBECUES. OUTSIDE OF RESTRICTED AREAS, OPEN BURNING IS PERMISSIBLE FOR LANDSCAPE OR LAND-CLEARING WASTES (PLANT MATERIAL, WITH PRIOR WRITTEN PERMISSION FROM OHIO EPA), AND AGRICULTURAL WASTES, EXCLUDING BUILDINGS.
10. DUST CONTROL OR DUST SUPPRESSANTS SHALL BE USED TO PREVENT NUISANCE CONDITIONS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND IN A MANNER, WHICH PREVENT A DISCHARGE TO WATERS OF THE STATE. SUFFICIENT DISTANCE MUST BE PROVIDED BETWEEN APPLICATIONS AND NEARBY BRIDGES, CATCH BASINS, AND OTHER WATERWAYS. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN RAIN IS IMMINENT AS NOTED IN THE SHORT TERM FORECAST. USED OIL MAY NOT BE APPLIED FOR DUST CONTROL.
11. OTHER AIR PERMITTING REQUIREMENTS: CERTAIN ACTIVITIES ASSOCIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS INCLUDING BUT NOT LIMITED TO: MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC. THESE ACTIVITIES WILL REQUIRE SPECIFIC OHIO EPA AIR PERMITS FOR INSTALLATION AND OPERATION. OPERATORS MUST SEEK AUTHORIZATION FROM THE CORRESPONDING DISTRICT OF OHIO EPA. FOR DEMOLITION OF ALL COMMERCIAL SITES, A NOTIFICATION FOR RESTORATION AND DEMOLITION MUST BE SUBMITTED TO OHIO EPA TO DETERMINE IF ASBESTOS CORRECTIVE ACTIONS ARE REQUIRED.
12. PROCESS WASTE WATER/LEACHATE MANAGEMENT. OHIO EPA'S CONSTRUCTION GENERAL PERMIT ONLY ALLOWS THE DISCHARGE OF STORM WATER AND DOES NOT INCLUDE OTHER WASTE STREAMS/DISCHARGES SUCH AS VEHICLE AND/OR EQUIPMENT WASHING, ON-SITE SEPTIC LEACHATE, CONCRETE WASH-OUTS, WHICH ARE CONSIDERED PROCESS WASTEWATERS. ALL PROCESS WASTEWATERS MUST BE COLLECTED AND PROPERLY DISPOSED AT AN APPROVED DISPOSAL FACILITY. IN THE EVENT, LEACHATE OR SEPTAGE IS DISCHARGED; IT MUST BE ISOLATED FOR COLLECTION AND PROPER DISPOSAL AND CORRECTIVE ACTIONS TAKEN TO ELIMINATE THE SOURCE OF WASTE WATER.
13. A PERMIT TO INSTALL (PTI) IS REQUIRED PRIOR TO THE CONSTRUCTION OF ALL CENTRALIZED SANITARY SYSTEMS, INCLUDING SEWER EXTENSIONS, AND SEWERAGE SYSTEMS (EXCEPT THOSE SERVICE ONE, TWO AND THREE FAMILY DWELLINGS) AND POTABLE WATER LINES. PLANS MUST BE SUBMITTED AND APPROVED BY OHIO EPA. ISSUANCE OF AN OHIO EPA CONSTRUCTION GENERAL STORM WATER PERMIT DOES NOT AUTHORIZE THE INSTALLATION OF ANY SEWERAGE SYSTEM WHERE OHIO EPA HAS NOT APPROVED A PTI.
14. POTENTIALLY TURBID WATER MUST PASS THROUGH A FILTER BAG, SUMP PIT, OR OTHER SEDIMENT REMOVAL DEVICE PRIOR TO BEING DISCHARGED OFF-SITE.

PRE-CONSTRUCTION SWPPP MEETING

PRIOR TO CONSTRUCTION THE PERMITTEE SHALL INFORM ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH THE IMPLEMENTATION OF THE SWPPP AND OF THE TERMS AND CONDITIONS OF THE OHIO EPA CONSTRUCTION GENERAL PERMIT. THE PERMITTEE SHALL MAINTAIN A WRITTEN DOCUMENT CONTAINING SIGNATURES AS PROOF OF ACKNOWLEDGMENT OF THE CONDITIONS AND RESPONSIBILITIES OF THE SWPPP.

INSPECTION DURING CONSTRUCTION

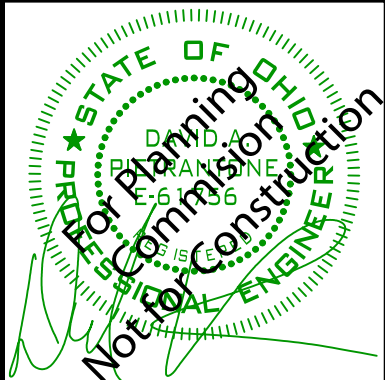
REGULAR INSPECTION AND MAINTENANCE IS TO BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES DURING CONSTRUCTION. PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD AND FOR 3 YEARS AFTER TERMINATION OF CONSTRUCTION ACTIVITIES. INSPECTIONS BY QUALIFIED INSPECTION PERSONNEL MUST BE MADE A MINIMUM OF ONCE EVERY 7 DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THEN 0.5 INCHES OF RAIN IN A 24-HOUR PERIOD. IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE IS REQUIRED, IT MUST BE REPAIRED WITHIN 3 DAYS OF THE INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED WITHIN 10 DAYS OF INSPECTION. INSPECTION REPORT SHALL PROVIDE NAME OF INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION, CORRECTIVE MEASURES TAKEN TO COMPLY WITH THE REQUIREMENTS IN "RAINWATER & LAND DEVELOPMENT" (2006) AND SIGNED BY THE QUALIFIED INSPECTOR. MISSING BMPs REQUIRED BY THE SWPPP ARE REQUIRED TO BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION. IF DURING INSPECTIONS IT IS DETERMINED THAT A BMP IS NOT EFFECTIVE AND THAT ANOTHER BMP IS NEEDED TO PROVIDE ADEQUATE CONTROL ON SITE, THE SWPPP SHALL BE AMENDED AND THE BMP SHALL BE INSTALLED WITHIN 10 DAYS FROM THE DATE OF INSPECTION.

IF SITE IS DORMANT FOR A LONG PERIOD AND IS STABILIZED A WAIVER REQUEST MAY BE SUBMITTED TO THE OHIO EPA TO REDUCE SITE INSPECTIONS TO A MONTHLY BASIS.

POST CONSTRUCTION

UPON COMPLETION OF SITE STABILIZATION, A NOTICE OF TERMINATION SHALL BE FILED WITH THE OHIO EPA. THE RESPONSIBLE PARTY SHALL COMPIL ALL INSPECTIONS, SIGN CERTIFICATION ON THE TITLE SHEET AND KEEP RECORDS FOR A MINIMUM OF 3 YEARS AFTER THE NOTICE OF TERMINATION WAS FILED.

POST CONSTRUCTION INSPECTION AND MAINTENANCE OF POST CONSTRUCTION BMPs SHALL BE THE RESPONSIBILITY OF THE DEVELOPMENT OWNER. INSPECTION SHALL BE DONE BY A CONTRACTOR SUITED FOR SUCH INSPECTIONS AND FUNDED BY THE DEVELOPMENT OWNER. CONTRACTOR SHALL REPORT FINDINGS DIRECTLY TO THE DEVELOPMENT OWNER.



RIVERSTONE
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2023-186

PLAN REVISIONS:
5/12/2025
TREE INVENTORY

PAGE REVISIONS:

ISSUED FOR:
PC APPLICATION
3/17/25
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

SWPPP



C9.03

12 GAUGE CORROSION-RESISTANT RIGID STEEL FRAME

OPTIONAL: REAR CURB FLAP TO PROTECT CURB OPENING

ULTIMATE BYPASS AREA

WOVEN GEOTEXTILE FILTER BAG:
200 GPM/SQFT FLOW RATE
82% FILTRATION EFFICIENCY PER ASTM D 7351

Installation Instructions:

1. Remove grate from the drainage structure
2. Clean stone and dirt from ledge (lip) of drainage structure
3. Drop the FLEXSTORM inlet filter through the clear opening such that the hangers rest firmly on the lip of the structure.
4. Replace the grate and confirm it is not elevated more than 1/8", the thickness of the steel hangers.

ADS FLEXSTORM CATCH-IT LITE ASTM D8057

Product Features

-Rigid frame and removable geosynthetic bag
-Sized to meet treatment flow rate.
-Bag maintains shape to be extracted when completely filled with sediment
-Rigid frame capable of supporting full load of sediment without deforming.
-Does not interfere or elevate grate by more than 1/8"
-Bypass flow exceeds design flow of drainage location
-Filter bag achieves +80% gross removal efficiency per ASTM D7351.

MEETS ASTM D8057 STANDARDS

FLEXSTORM FX FABRIC SPECS

WOVEN GEOTEXTILE FILTER BAG PROPERTIES (MINIMUM AVERAGE ROLL VALUES)			
PROPERTY	TEST METHOD	ENGLISH	METRIC
MECHANICAL			
TENSILE STRENGTH	ASTM D4632	350 X 225 LBS	1557 X 1001 N
ELONGATION	ASTM D4632	20% X 15%	20% X 15%
CSR PUNCTURE	ASTM D6241	1000 LBS	4448 N
TRAPEZOIDAL TEAR	ASTM D4533	110 X 75 LBS	483 X 334 N
ENDURANCE			
UV RESISTANCE	ASTM D4355	90%	90%
% RETAINED AT 500 HRS			
HYDROLOGIC			
APPARENT OPENING SIZE (AOS)	ASTM D4751	20 US STD. SIEVE	850 MM
PERCENT OPEN AREA (POA)	OW-0221S MOD	17%	17%
PERMITTIVITY	ASTM D4491	1.5 SEC ⁻¹	1.5 SEC ⁻¹
WATER FLOW RATE	ASTM D4491	200GAL/MIN/FT ²	8145 L/MIN/M ²

Concrete Washout Areas

Installation:

1. Concrete wash water shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance and washout pits shall be situated a minimum of fifty (50) feet from them.
2. Field tile or other subsurface drainage structures within 10 ft. of the sump shall be cut and plugged.
3. Ensure a stable path is provided for concrete trucks to reach the washout area.
4. A highly visible sign that reads "Concrete Washout Area" shall be erected adjacent to the washout pit.
5. Surface runoff generated from upslope areas shall be diverted away from below-grade washout pits so as not to flow into them.
6. A single centralized washout area may be utilized for multiple sublots.

Maintenance:

7. The washout pit must be inspected frequently to ensure the liner is intact.
8. Once 75% of the original volume of the washout pit is filled or is the liner is torn, the material must be removed and properly disposed of once it is completely hardened. Once the hardened concrete is removed, the liner must be replaced (if torn). A new pit must be constructed if the original structure is no longer suitable.

Maintenance:

9. Once the washout pit is no longer needed, ensure all washout material has been completely hardened, then remove and properly dispose of all materials. If straw bales were used, they can be spread as much.
10. Prefabricated containers specifically designed for concrete washout collection may be used subject to prior approval by the Community Engineer. Follow the manufacturer's suggestions for installation, maintenance and removal procedures.

Sizing of Concrete Washout Pits

Below-grade (3-ft depth)			Above-grade (2-ft depth)		
# of concrete trucks expected to be washed out on site*	Width (ft)	Length (ft)	# of concrete trucks expected to be washed out on site*	Width (ft)	Length (ft)
2-3	3	3	2	3	3
4-5	4	4	3-4	4	4
6-7	5	5	5-6	5	5
8-10	6	6	7-8	6	6
11-14	7	7	9-11	7	7
			12-15	8	8

*For small projects using a maximum of only one truckload of concrete or utilizing on-site mixing, rinsing of equipment may take place on the lot without a pit, provided it can be done on a maximum of fifty (50) feet away from any water conveyances

BLOWN/PLACED FILTER MEDIA

2" X 2" X 36" WOODEN STAKES PLACED 10' O.C.

FILTREXX SOXX (12" TYPICAL)

12" MIN

AREA TO BE PROTECTED

SECTION NTS

2" X 2" X 36" WOODEN STAKES PLACED 10' O.C.

AREA TO BE PROTECTED

FILTREXX SOXX (12" TYPICAL)

WATER FLOW

WORK AREA

PLAN NTS

NOTES:

1. ALL MATERIALS TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA: FILL TO MEET APPLICATION REQUIREMENTS
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

FILTREXX SEDIMENT CONTROL NTS

Above-Grade Concrete Washout Pit

X-Section

N.T.S.

Storage Area

Stakes or staples to anchor plastic liner to bale

Double-lined w/10 mil plastic sheeting (free of holes, tears, seams)

Plastic liner tucked under straw bales

Existing ground

Wood or metal stakes (2 per bale) to anchor straw bales

Width (variable)

Length (variable)

Minimum of 2 stakes or staples for each straw bale (to anchor plastic liner)

Below-Grade Concrete Washout Pit

X-Section

N.T.S.

Storage Area

Plastic liner secured w/ stakes, staples or sandbags

Max. 3' Depth

Single-lined w/10 mil plastic sheeting (free of holes, tears, seams)

Existing ground

Stakes, staples, or sandbags placed evenly on all four sides

2' min. overhang of plastic sheeting

Width (variable)

Length (variable)

DANDY CURB™

CURB OPENING WITHOUT GRATE

OVERFLOW GAP

AGGREGATE POUCH

MANHOLE

CURB FILTER

DETAIL OF CURB INLET SEDIMENT CONTROL

PROJECT: WITH CURB FILTER

CITY/STATE: DATE: DR. BY: DR. NO:

DANDY CURB SACK™

STORM GRATE

CURB OPENING

LIFT STRAPS

CURB FILTER

OPTIONAL OUTFLOW PORTS

REINFORCED CORNERS

MANAGEABLE 2 FOOT CONTAINMENT AREA

BUMPING STRAPS

DETAIL OF INLET SEDIMENT CONTROL DEVICE WITH CURB FILTER

PROJECT: DATE: DR. BY: DR. NO:

DANDY SACK™

STORM SEWER GRATE

REINFORCED CORNERS

MANAGEABLE 2 FOOT CONTAINMENT AREA

LIFT STRAPS

OPTIONAL OUTFLOW PORTS

BUMPING STRAPS

STORM INLET

DETAIL OF INLET SEDIMENT CONTROL DEVICE

PROJECT: DATE: DR. BY: DR. NO:

DANDY CURB™ SPECIFICATIONS

NOTE: THE DANDY CURB™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFLAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbf)	1.62 (365) X 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4633	kN (lbf)	0.42 (95)
Mullen Burst Strength	ASTM D 3786	MPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbf)	0.51 (115) X 0.33 (75)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m ² (gpm/ft ²)	5907 (145)
Permittivity	ASTM D 4491	Sec	2

*Note: All Dandy Curbs™ can be ordered with our optional oil absorbents

DANDY CURB SACK™ SPECIFICATIONS

NOTE: THE DANDY CURB SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFLAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbf)	1.78 (400) X 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 X 15
Puncture Strength	ASTM D 4633	kN (lbf)	0.67 (150)
Mullen Burst Strength	ASTM D 3786	MPa (psi)	3508 (500)
Trapezoid Tear Strength	ASTM D 4533	kN (lbf)	0.67 (150) X 0.73 (165)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m ² (gpm/ft ²)	2852 (70)
Permittivity	ASTM D 4491	Sec	0.90

*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows

DANDY SACK™ SPECIFICATIONS

NOTE: THE DANDY SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFLAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbf)	1.78 (400) X 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 X 15
Puncture Strength	ASTM D 4633	kN (lbf)	0.67 (150)
Mullen Burst Strength	ASTM D 3786	MPa (psi)	3508 (500)
Trapezoid Tear Strength	ASTM D 4533	kN (lbf)	0.67 (150) X 0.73 (165)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m ² (gpm/ft ²)	2852 (70)
Permittivity	ASTM D 4491	Sec	0.90

*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows

RIVERSTONE

LAND SURVEYING - ENGINEERING - DESIGN
3800 LAKESIDE AVENUE, SUITE 100
CLEVELAND, OHIO 44114
PHONE: (216) 491-9640
WWW.RIVERSTONESURVEY.COM

2023-186

PLAN REVISIONS:
5/12/2025
TREE INVENTORY

PAGE REVISIONS:

ISSUED FOR:
PC APPLICATION
3/17/25
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA
200 LAUREL LAKE DRIVE

SWPPP

C9.04

**Mannik
Smith
GROUP**
TECHNICAL SKILL.
CREATIVE SPIRIT.
www.MannikSmithGroup.com

Date: 3/13/2025

LATIN	COMMON	INSTL. SIZE	QTY	UNIT	UNIT COST	EXTENSION
TREES						
Acer palmatum 'Katsura'	Japanese Maple	2" CAL. BB	18	EA	\$300.00	\$ 5,400.00
Acer rubrum 'October Glory'	October Glory Red Maple	2" CAL. BB	4	EA	\$179.00	\$ 716.00
Pinus strobus	Eastern White Pine	6' HT. BB	6	EA	\$169.00	\$ 1,014.00
Picea abies	Norway Spruce	6' HT. BB	11	EA	\$239.00	\$ 2,629.00
SHRUBS						
Aesculus parviflora	Bottlebrush Buckeye	5 GAL.	3	EA	\$60.00	\$ 180.00
Buxus microphylla var. koreana	Korean Littleleaf Boxwood	5 GAL.	77	EA	\$35.00	\$ 2,695.00
Chamaecyparis pisifera 'Golden Mops'	Gold Mops False Cypress	3 GAL.	11	EA	\$20.00	\$ 220.00
Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	3 GAL.	11	EA	\$20.00	\$ 220.00
Pinus mugo 'Pumilio'	Dwarf Mugo Pine	3 GAL.	6	EA	\$20.00	\$ 120.00
Rosa 'Radsunny'	Sunny Knockout Rose	3 GAL.	8	EA	\$21.00	\$ 168.00
Rhododendron 'Encore'	Encore Rhododendron	5 GAL.	9	EA	\$32.00	\$ 288.00
Syringa patula 'Miss Kim'	Miss Kim Dwarf Lilac	3 GAL.	30	EA	\$20.00	\$ 600.00
Thuja occidentalis 'Emerald Green'	Emerald Green Arborvitae	5' HT. BB	60	EA	\$79.00	\$ 4,740.00
Viburnum dentatum 'Chicago Lustre'	Chicago Lustre Arrowwood Virburnum	7 GAL.	3	EA	\$40.00	\$ 120.00
Weigela florida 'Bokraspiwi'	Spilled Wine Weigela	3 GAL.	43	EA	\$22.50	\$ 967.50
MISC						
River Rock - 4" to 6" layer			64	CY	\$150.00	\$ 9,600.00
					SUBTOTAL	\$ 29,677.50
					+ 10% CONTINGENCY	
						\$ 32,645.25

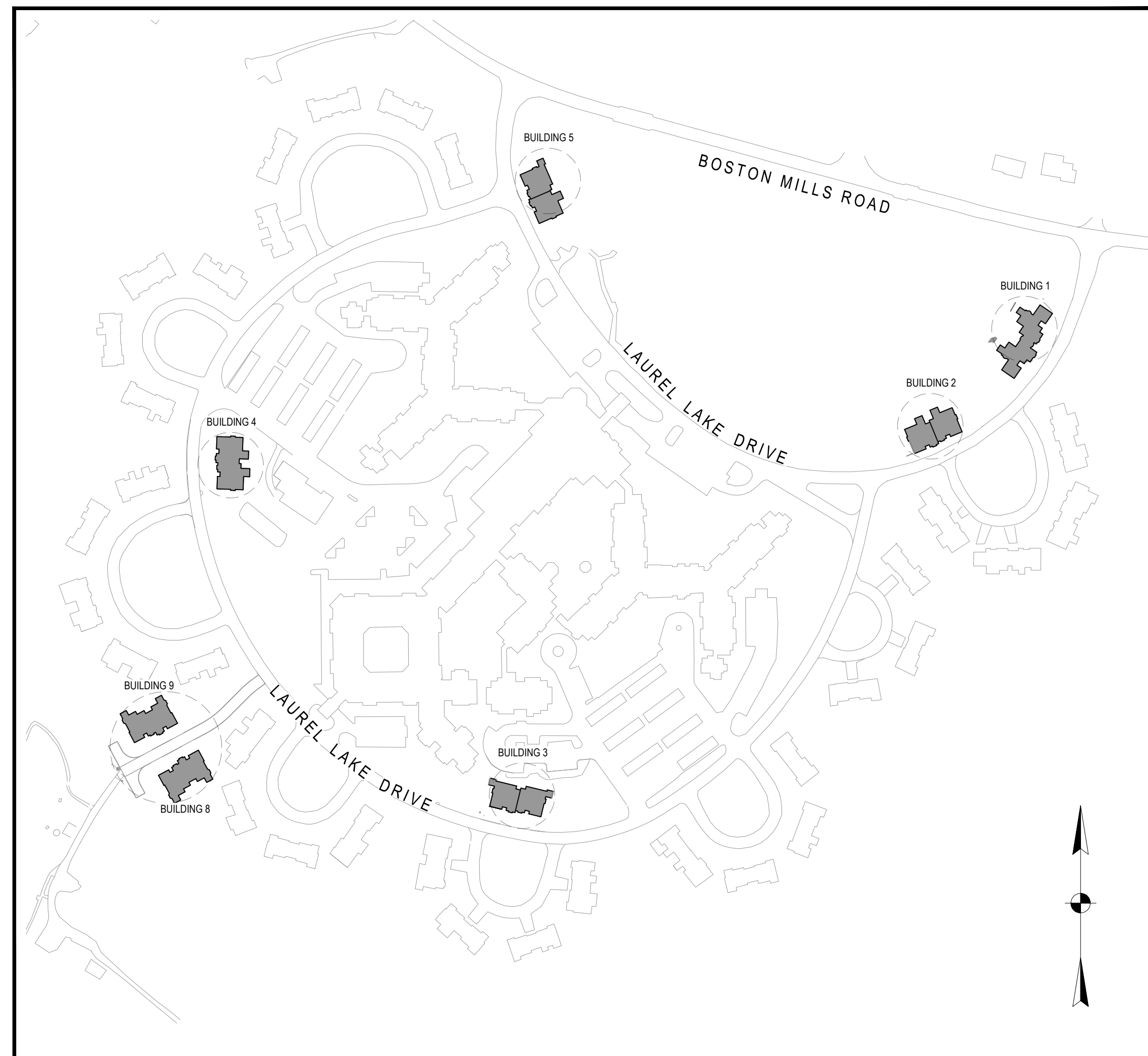
SITE IMPROVEMENT PLANS FOR

LAUREL LAKE VILLAS

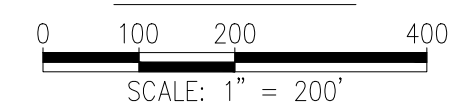
200 LAUREL LAKE DRIVE
HUDSON, OHIO 44236



VICINITY MAP
NOT TO SCALE



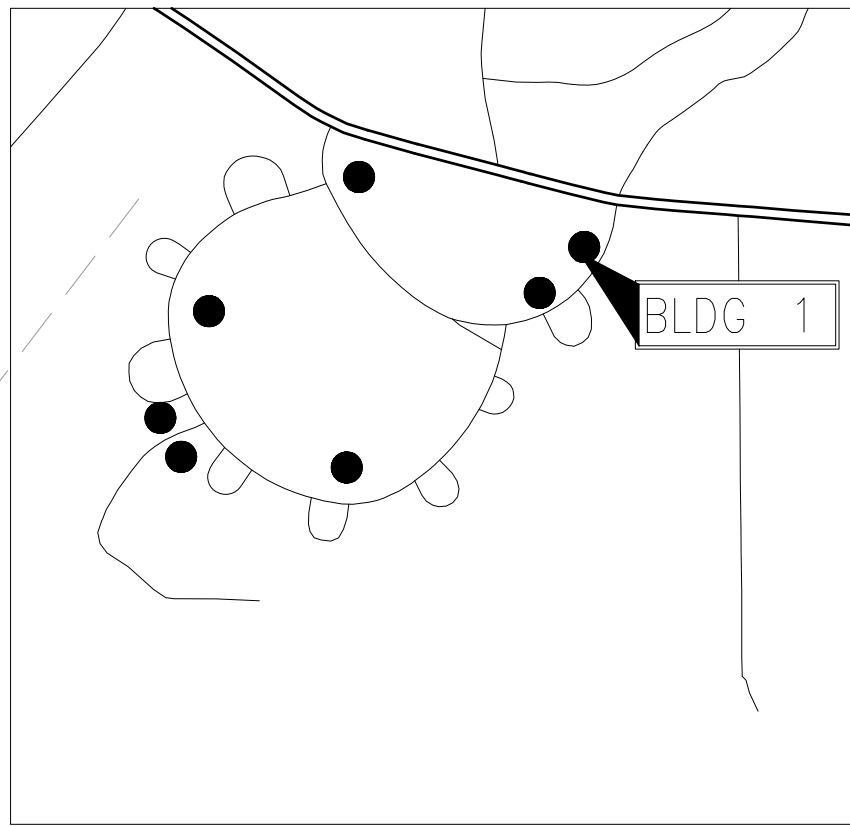
INDEX MAP



INDEX OF SHEETS

COVER SHEET	L100
BUILDING 1 LANDSCAPE	L101
BUILDING 2 LANDSCAPE	L102
BUILDING 3 LANDSCAPE	L103
BUILDING 4 LANDSCAPE	L104
BUILDING 5 LANDSCAPE	L105
BUILDING 8 LANDSCAPE	L106
BUILDING 9 LANDSCAPE	L107
LANDSCAPE NOTES AND DETAILS	L200

	DATE	BY	REVISION DESCRIPTION	PROJECT DATE: 6/7/2024
				PROJECT NO.: 2400545
				L100



CONTEXT MAP

NOT TO SCALE

1160 DUBLIN ROAD		NO.	DATE	BY	DESCRIPTION
SUITE 100					
COLUMBUS, OH 43215					
TEL: 614-441-4222					
FAX: 688-4887340					
PROJECT DATE: JUNE 2024					
PROJECT NO: 2405545					
DRAWN BY: DUS					
CHECKED BY: NAF					



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CREATIVE SPIRIT.**

PREPARED FOR:

LAUREL LAKE

200 LAUREL LAKE DRIVE
HUDSON, OHIO 44236

LANDSCAPE PLAN FOR

LAUREL LAKE VILLAS

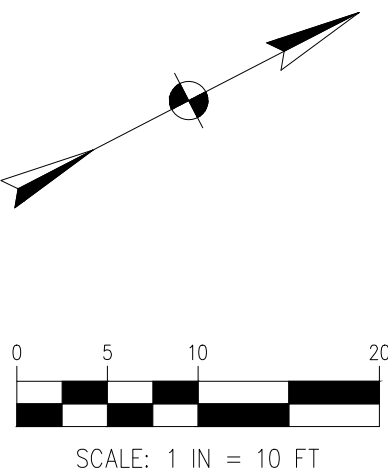
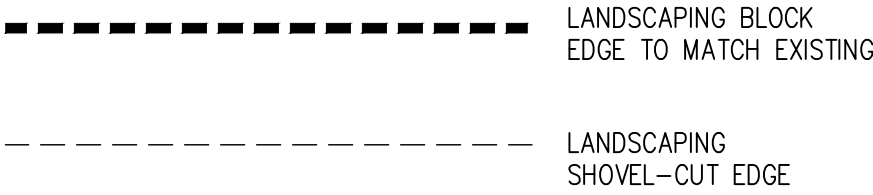
200 LAUREL LAKE DRIVE HUDSON, OHIO 44236

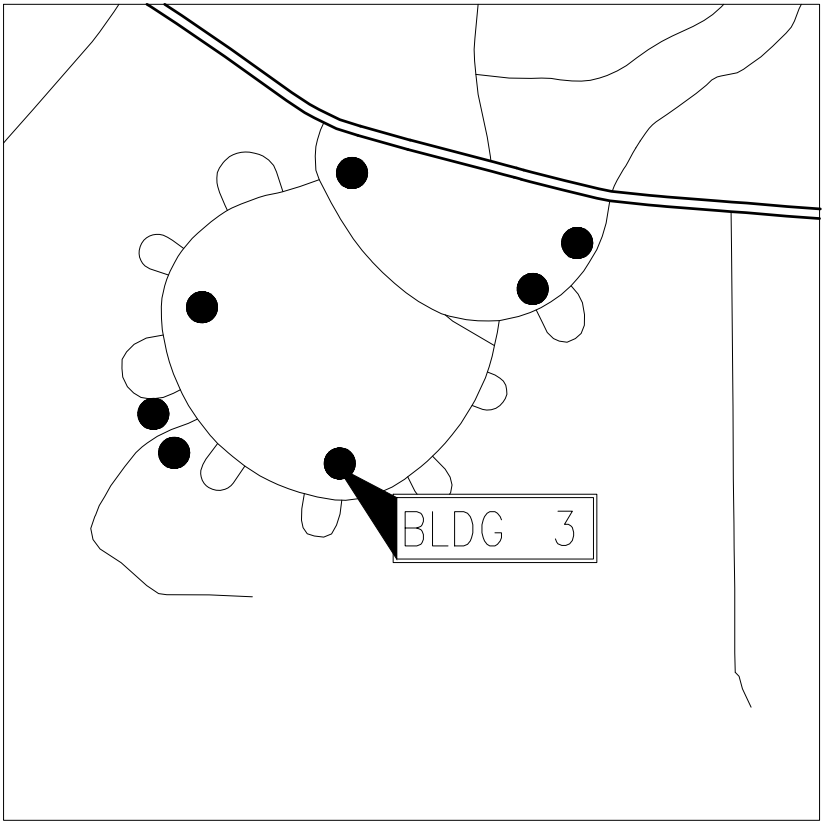
BUILDING 1 LANDSCAPE PLAN	L101
--	-------------

BUILDING 1 LANDSCAPE PLANT LIST

ABRV.	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	TYPE	REMARKS
TREES						
AC PA	2	ACER PALMATUM 'KATSURA'	KATSURA JAPANESE MAPLE	1 1/2" CAL	B&B	ORNAMENTAL TREE
SHRUBS						
SY MK	6	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
JU VI	11	JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL JUNIPER	30" HEIGHT MIN.	B&B	EVERGREEN SHRUB
BX GG	21	BUXUS MICROPHYLLA VAR. KOREANA	KOREAN LITTLELEAF BOXWOOD	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
WE FL	8	WEIGELA FLORIDA 'BOKRASPIW'	SPILLED MINE WEIGELA	30" HEIGHT MIN.	CONT.	ORNAMENTAL SHRUB

LEGEND





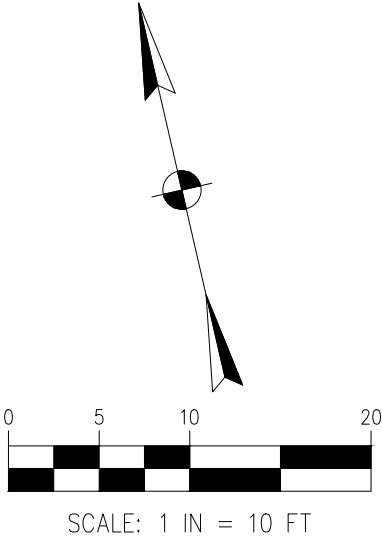
CONTEXT MAP

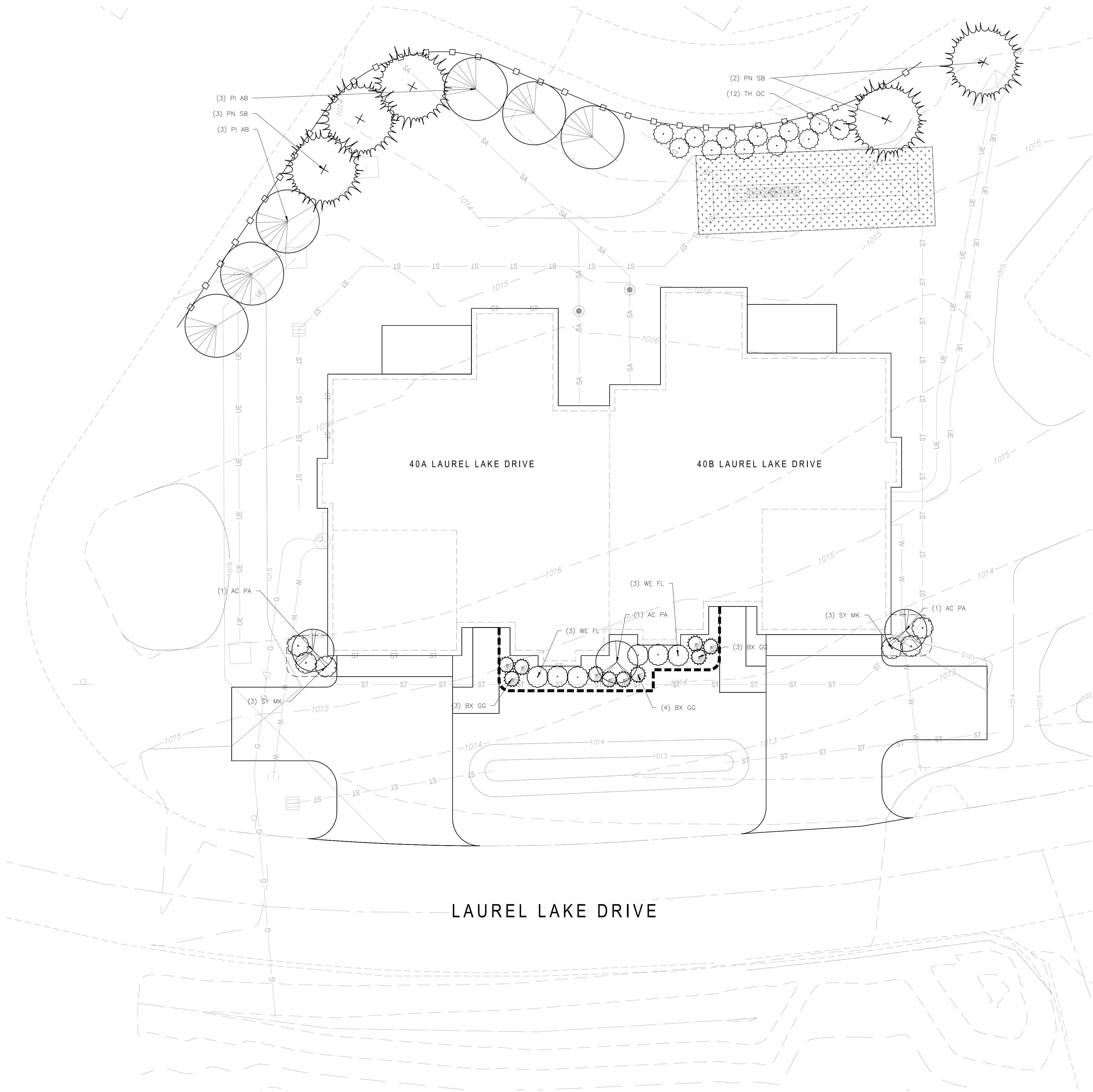
BUILDING 3 LANDSCAPE PLANT LIST

ABRV.	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	TYPE	REMARKS
TREES						
AC PA	3	ACER PALMATUM 'KATSURA'	KATSURA JAPANESE MAPLE	1 1/2" CAL	B&B	ORNAMENTAL TREE
PI AB	3	PICEA ABIES	NORWAY SPRUCE	6" HEIGHT MIN.	B&B	EVERGREEN TREE
SHRUBS						
TH OC	13	THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
SY MK	6	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
BX GG	10	BUXUS MICROPHYLLA VAR. KOREANA	KOREAN LITTLELEAF BOXWOOD	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
VI DE	3	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE VIBURNUM	36" HEIGHT MIN.	CONT.	DECIDUOUS SHRUB
CH PI	8	CHAMAECYPARIS PISIFERA 'GOLDEN MOP'	GOLDEN MOP FALSE CYPRESS	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
WE FL	6	WEIGELA FLORIDA 'BOKRASPIWI'	SPILLED WINE WEIGELA	30" HEIGHT MIN.	CONT.	DECIDUOUS SHRUB
AE PV	3	AESCULUS PARVIFLORA	BOTTLEBRUSH BUCKEYE	5 GALLON	CONT.	DECIDUOUS SHRUB
RH EN	5	RHODODENDRON 'ENCORE'	ENCORE AZALEA	24" HEIGHT MIN.	CONT.	DECIDUOUS SHRUB
PI MU	6	PINUS MUGO 'PUMILIO'	DWARF MUGO PINE	36" HEIGHT MIN.	B&B	EVERGREEN SHRUB

LEGEND

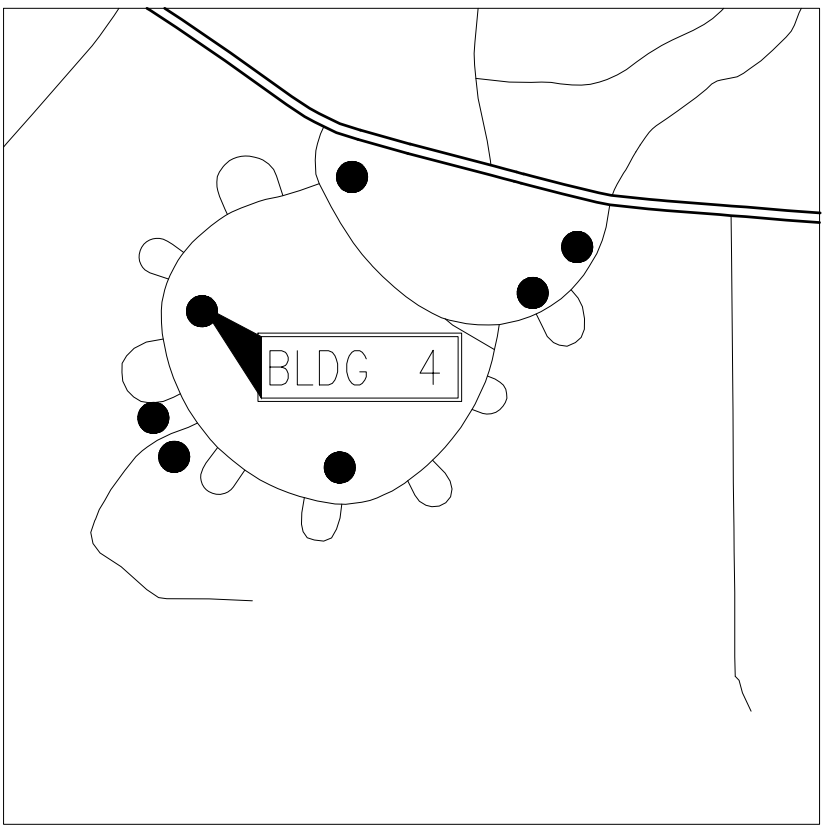
- LANDSCAPING BLOCK
EDGE TO MATCH EXISTING
- LANDSCAPING
SHOVEL-CUT EDGE

[illegible]



LEGEND

- LANDSCAPING BLOCK
EDGE TO MATCH EXISTING
- LANDSCAPING
SHOVEL-CUT EDGE
- 8' WHITE VINYL FENCING
- NO MOW MIX



CONTEXT MAP
NOT TO SCALE

BUILDING 4 LANDSCAPE PLANT LIST

ABRV.	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	TYPE	REMARKS
TREES						
AC PA	3	ACER PALMATUM 'KATSURA'	KATSURA JAPANESE MAPLE	1 1/2" CAL	B&B	ORNAMENTAL TREE
PI AB	6	PICEA ABIES	NORWAY SPRUCE	6' HEIGHT MIN.	B&B	EVERGREEN TREE
PN SB	5	PINUS STROBUS	EASTERN WHITE PINE	6' HEIGHT MIN.	B&B	EVERGREEN TREE
SY MK	6	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
SHRUBS						
TH OC	12	THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
BX GG	10	BUXUS MICROPHYLLA VAR. KOREANA	KOREAN LITTLELEAF BOXWOOD	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
WE FL	6	WEIGELA FLORIDA 'BOKRASPIW'	SPILLED WINE WEIGELA	30" HEIGHT MIN.	CONT.	ORNAMENTAL SHRUB

NO MOW SEED MIX

ECONOMY PRAIRIE (VENDOR: STANTEK OR SIMILAR)

BOTANICAL NAME	COMMON NAME	PLS QZ/ACRE
PERMANENT GRASSES		
ANDROPOGON GERARDII	BIG BLUESTEM	12.00
BOUTELOUA CURTIPENDULA	SIDE-OATS GRAMA	16.00
CAREX SPP.	PRAIRIE SEDGE SPECIES	3.00
ELYMUS CANADENSIS	CANADA WILD RYE	24.00
PANICUM VIRGATUM	SWITCH GRASS	2.50
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	32.00
SORGHASTRUM NUTANS	INDIAN GRASS	12.00
TOTAL		101.50

TEMPORARY COVER

BOTANICAL NAME	COMMON NAME	PLS QZ/ACRE
AVENA SATIVA	COMMON OAT	512.00
TOTAL		512.00

FORBS

BOTANICAL NAME	COMMON NAME	PLS QZ/ACRE
ASCLEPIAS SYRIACA	COMMON MILKWEED	3.00
ASCLEPIAS TUBEROSA	BUTTERFLY WEED	1.00
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	10.00
COREOPSIS LANCEOLATA	SAND COREOPSIS	6.00
ECHINACEA PURPUREA	BROAD-LEAVED PURPLE CONEFLOWER	8.00
HELIOPSIS HELIANTHOIDES	FALSE SUNFLOWER	0.50
MONARDA FISTULOSA	WILD BERGAMOT	0.50
PENSTEMON DIGITALIS	FOXGLOVE BEARD TONGUE	2.00
RATIBIDA PINNATA	YELLOW CONEFLOWER	4.00
RUDBECKIA HIRTA	BLACK-EYED SUSAN	8.00
SOLIDAGO SPECIOSA	SHOWY GOLDENROD	0.50
SYMPHYOTRICHUM LAEVE	SMOOTH BLUE ASTER	1.00
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50
TOTAL		45.00

DESCRIPTION

NO.

DATE

BY

1160 DUBLIN ROAD
SUITE 100
COLUMBUS, OH 43215
TEL: 614.441.4222
FAX: 888.488.7240

PROJECT DATE: JUNE 2024

PROJECT NO: 240545

DRAWN BY: DDS

CHECKED BY: NAF

TECHNICAL SKILL.
CREATIVE SPIRIT.

Mannik Smith Group
www.MannikSmithGroup.com

PREPARED FOR:

LAUREL LAKE

200 LAUREL LAKE DRIVE
HUDSON, OHIO 44236

LANDSCAPE PLAN FOR

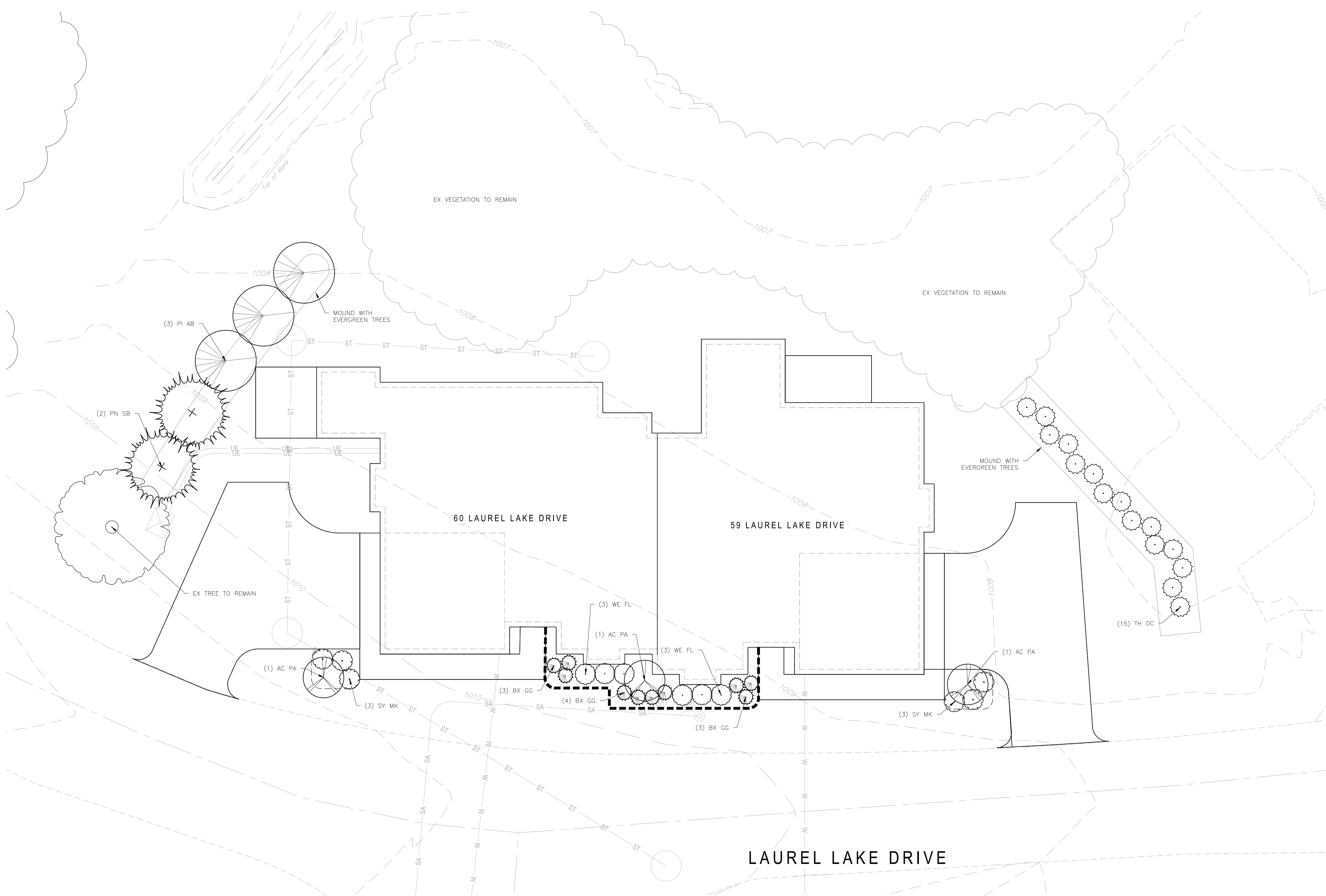
LAUREL LAKE VILLAS

200 LAUREL LAKE DRIVE HUDSON, OHIO 44236

BUILDING 4
LANDSCAPE PLAN

L104

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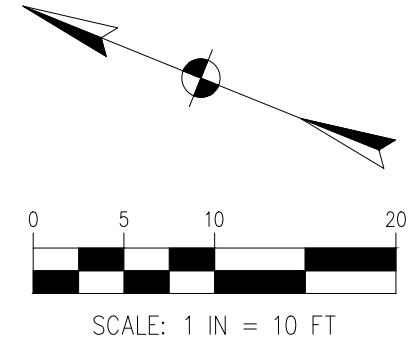
CONTEXT MAP
NOT TO SCALE

BUILDING 5 LANDSCAPE PLANT LIST

ABRV.	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	TYPE	REMARKS
TREES						
AC PA	2	ACER PALMATUM 'KATSURA'	KATSURA JAPANESE MAPLE	1 1/2" CAL	B&B	ORNAMENTAL TREE
PI AB	3	PICEA ABIES	NORWAY SPRUCE	6" HEIGHT MIN.	B&B	EVERGREEN TREE
PN SB	2	PINUS STROBUS	EASTERN WHITE PINE	6" HEIGHT MIN.	B&B	EVERGREEN TREE
SHRUBS						
TH OC	15	THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
BX GG	10	BUXUS MICROPHYLLA VAR. KOREANA	KOREAN LITTLELEAF BOXWOOD	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
WE FL	6	WEIGELA FLORIDA 'BOKRASPIW'	SPILED WINE WEIGELA	30" HEIGHT MIN.	CONT.	ORNAMENTAL SHRUB
SY MK	6	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	30" HEIGHT MIN.	CONT.	ORNAMENTAL SHRUB

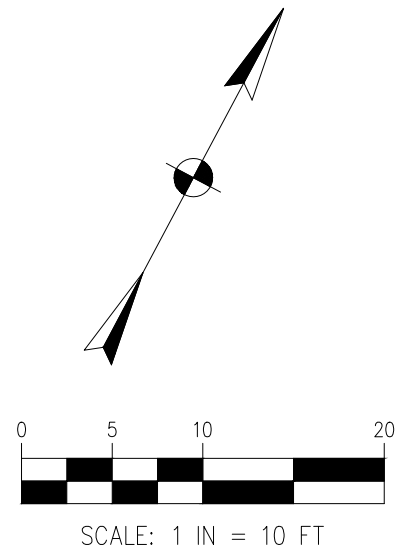
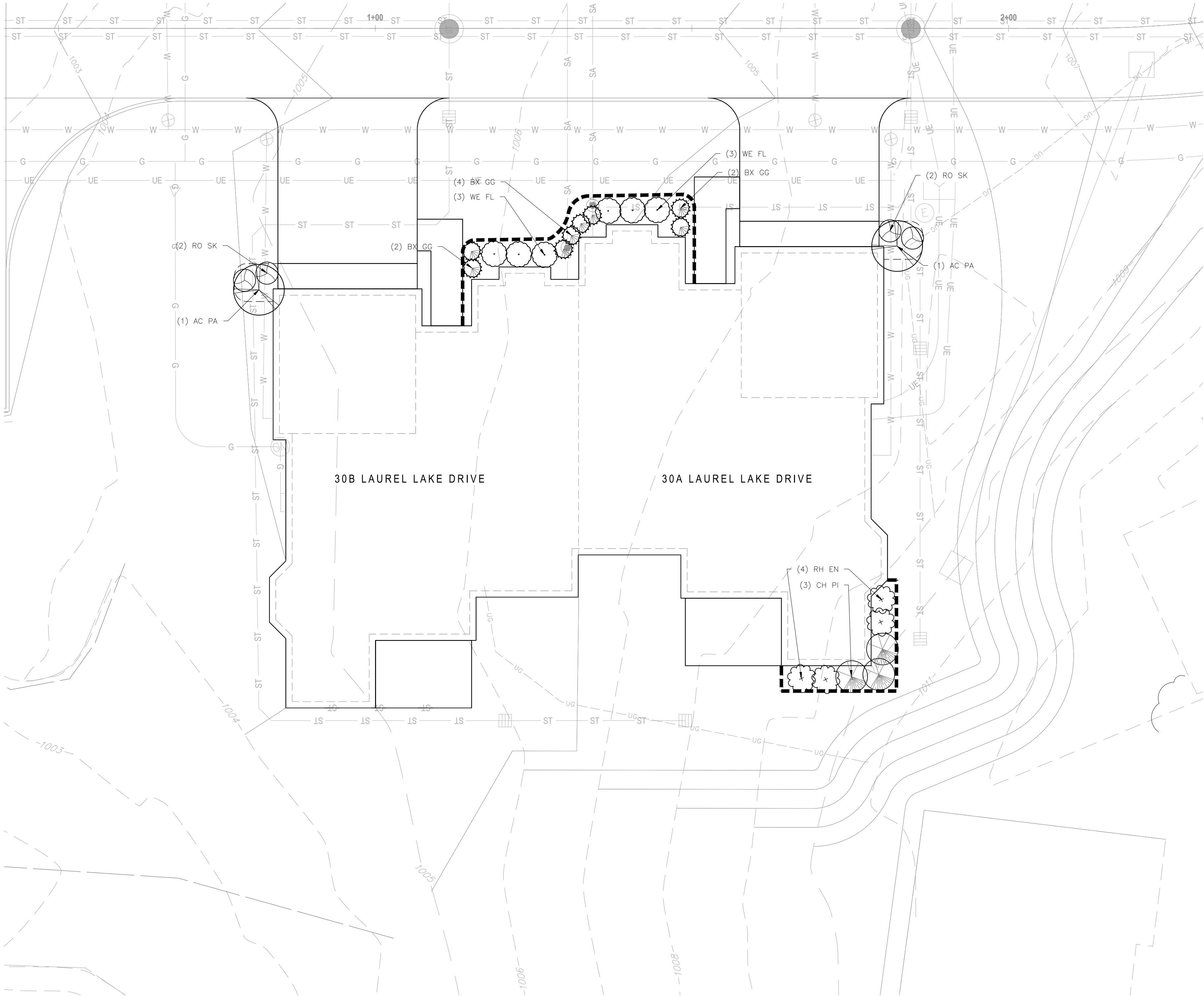
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EDGE TO MATCH EXISTING
- LANDSCAPING
SHOVEL-CUT EDGE



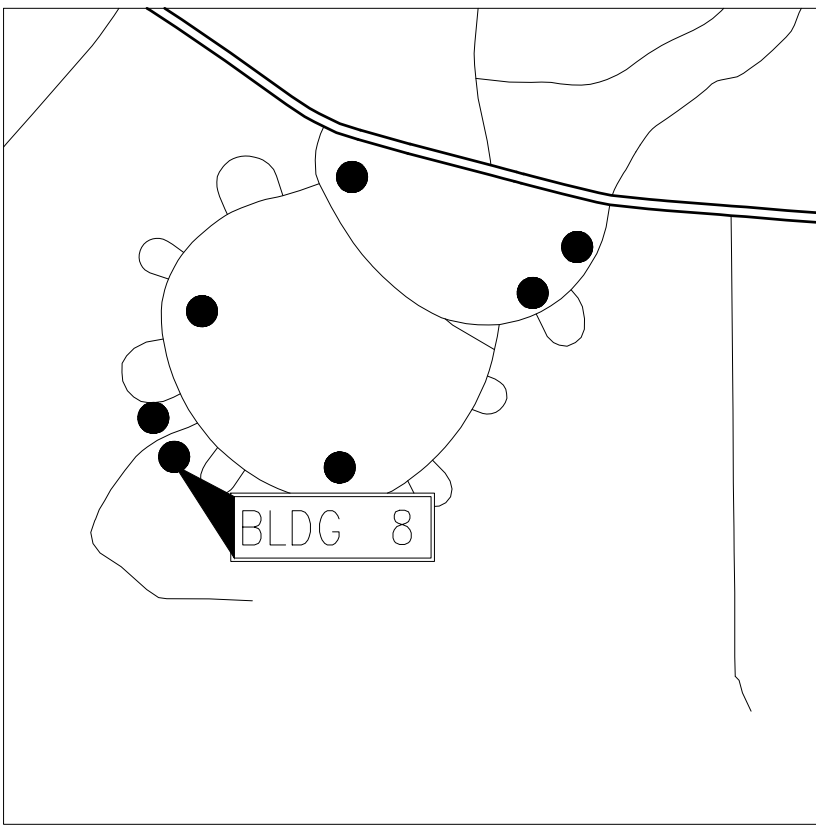
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1160 DUBLIN ROAD SUITE 100 COLUMBUS, OH 43215 TEL: 614.441.4222 FAX: 888.488.7440									
PROJECT NO. 240545 JUNE 2024 DRAWN BY: DDS CHECKED BY: NAF									
TECHNICAL SKILL: CREATIVE SPIRIT.									
 www.MannikSmithGroup.com									
PREPARED FOR:				LAUREL LAKE 200 LAUREL LAKE DRIVE HUDSON, OHIO 44236					
LANDSCAPE PLAN FOR				LAUREL LAKE VILLAS 200 LAUREL LAKE DRIVE HUDSON, OHIO 44236					
BUILDING 5 LANDSCAPE PLAN				L105					

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LEGEND

- LANDSCAPING BLOCK
EDGE TO MATCH EXISTING
- LANDSCAPING
SHOVEL-CUT EDGE



CONTEXT MAP
NOT TO SCALE

BUILDING 8 LANDSCAPE PLANT LIST

ABRV.	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	TYPE	REMARKS
TREES						
AC PA	2	ACER PALMATUM 'KATSURA'	KATSURA JAPANESE MAPLE	1 1/2" CAL	B&B	ORNAMENTAL TREE
SHRUBS						
RO SK	4	ROSA 'RADSUNNY'	SUNNY KNOCK OUT ROSE	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
BX GG	8	BUXUS MICROPHYLLA VAR. KOREANA	KOREAN LITTLELEAF BOXWOOD	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
WE FL	6	WEIGELA FLORIDA 'BOKRASPIW'	SPILLED WINE WEIGELA	30" HEIGHT MIN.	CONT.	ORNAMENTAL SHRUB
CH PI	3	CHAMAECYPARIS PISIFERA 'GOLD MOPS'	EMERALD GREEN ARBORVITAE	6" HEIGHT MIN.	B&B	EVERGREEN SHRUB
RH EN	4	RHODODENDRON 'ENCORE'	ENCORE AZALEA	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB

LANDSCAPE PLAN FOR

LAUREL LAKE VILLAS

BUILDING 8
LANDSCAPE PLAN

L106

PREPARED FOR:

LAUREL LAKE

200 LAUREL LAKE DRIVE
HUDSON, OHIO 44236

1160 DUBLIN ROAD
SUITE 100
COLUMBUS, OH 43215
TEL: 614.441.4222
FAX: 614.441.4240

PROJECT DATE: JUNE 2024
PROJECT NO.: 240545
DRAWN BY: DDS
CHECKED BY: NAF

TECHNICAL SKILL.
CREATIVE SPIRIT.

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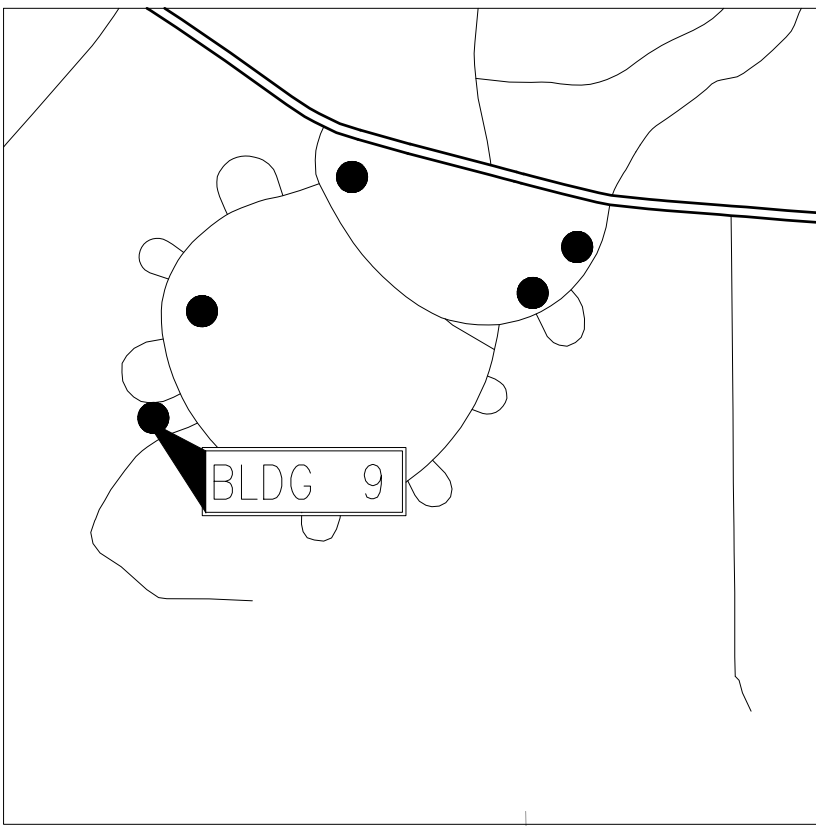
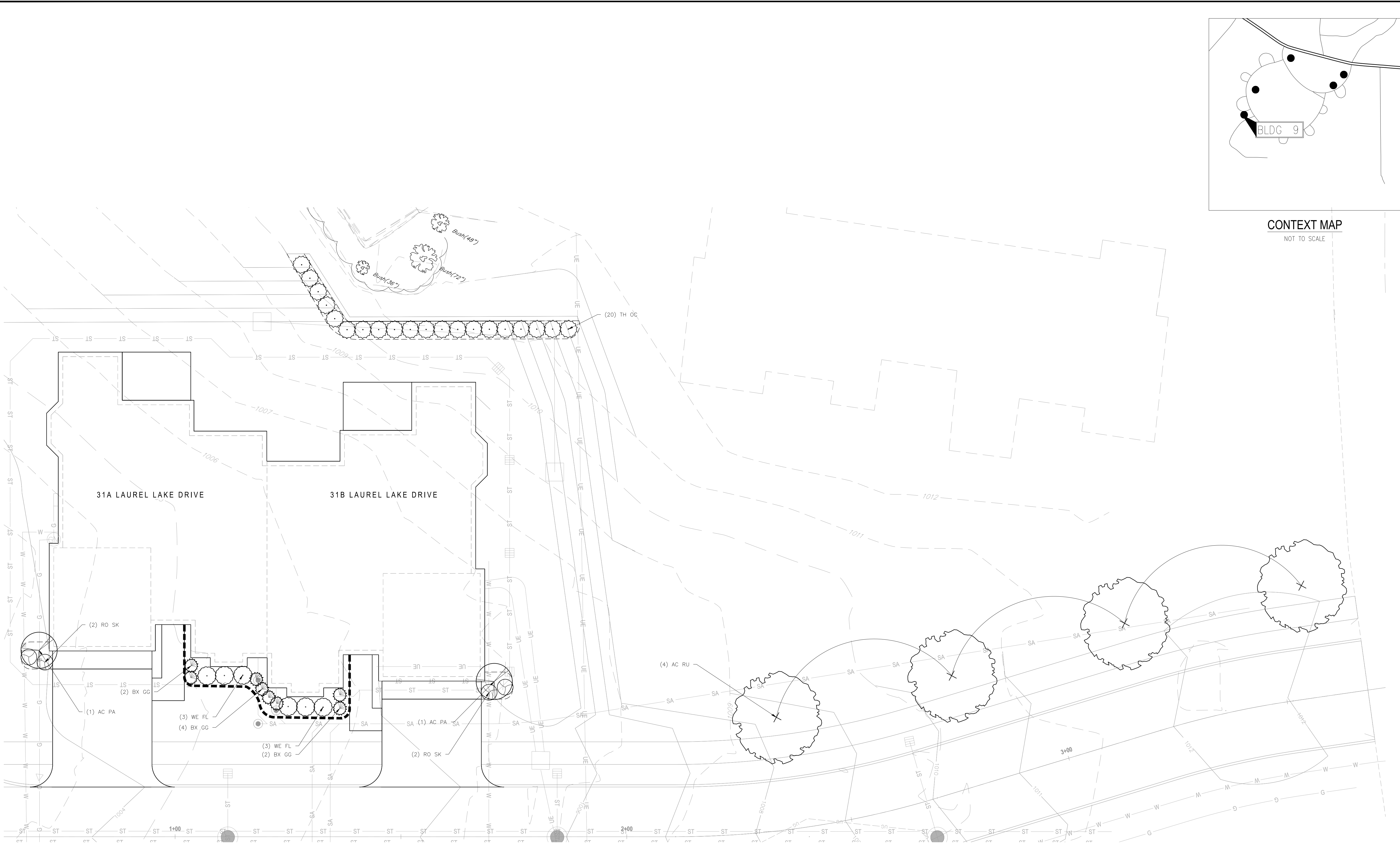
DESCRIPTION

BY

DATE

NO.

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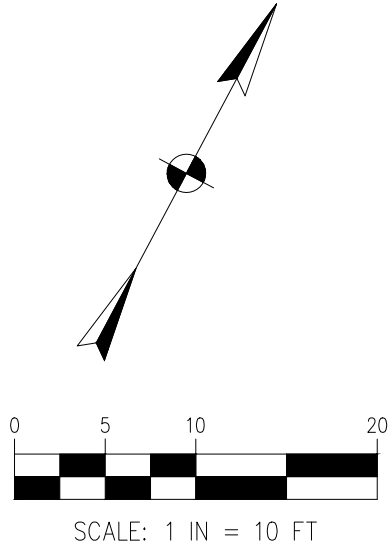
CONTEXT MAP
NOT TO SCALE

LEGEND

- LANDSCAPING BLOCK
EDGE TO MATCH EXISTING
- LANDSCAPING
SHOVEL-CUT EDGE

BUILDING 9 LANDSCAPE PLANT LIST

ABRV.	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	TYPE	REMARKS
TREES						
AC PA	2	ACER PALMATUM 'KATSURA'	KATSURA JAPANESE MAPLE	1 1/2" CAL	B&B	ORNAMENTAL TREE
AC RU	4	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2" CAL	B&B	DECIDUOUS TREE
SHRUBS						
RO SK	4	ROSA 'RADSUNNY'	SUNNY KNOCK OUT ROSE	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
BX GG	8	BUXUS MICROPHYLLA VAR. KOREANA	KOREAN LITTLELEAF BOXWOOD	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
WE FL	6	WEIGELA FLORIDA 'BOKRASPIW'	SPILLED WINE WEIGELA	30" HEIGHT MIN.	CONT.	ORNAMENTAL SHRUB
TH OC	20	THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB



LANDSCAPE PLAN FOR

LAUREL LAKE VILLAS

200 LAUREL LAKE DRIVE HUDSON, OHIO 44236

PREPARED FOR:

LAUREL LAKE

200 LAUREL LAKE DRIVE
HUDSON, OHIO 44236

BUILDING 9

LANDSCAPE PLAN

L107

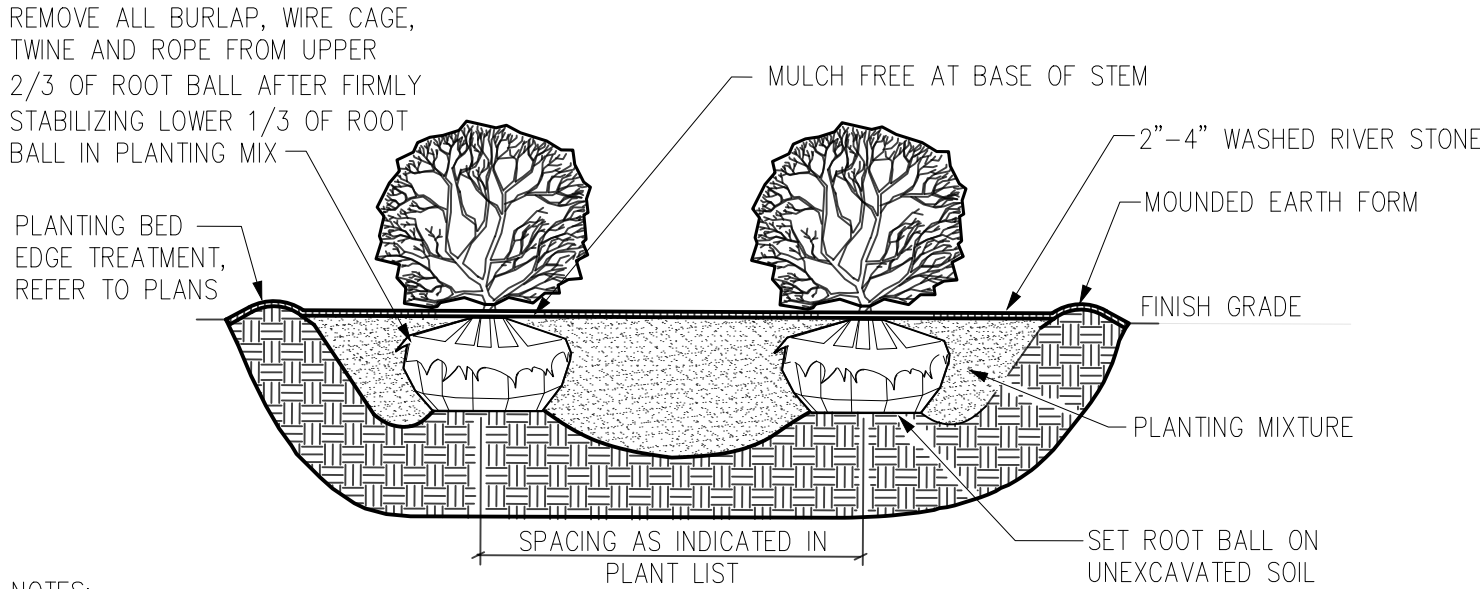
1160 DUBLIN ROAD
SUITE 100
COLUMBUS, OH 43215
TEL: 614.441.4222
FAX: 888.888.7440

PROJECT DATE: JUNE 2024
PROJECT NO.: 240545
DRAWN BY: DDS
CHECKED BY: NAF

NO. DATE BY DESCRIPTION

TECHNICAL SKILL:
CREATIVE SPIRIT.


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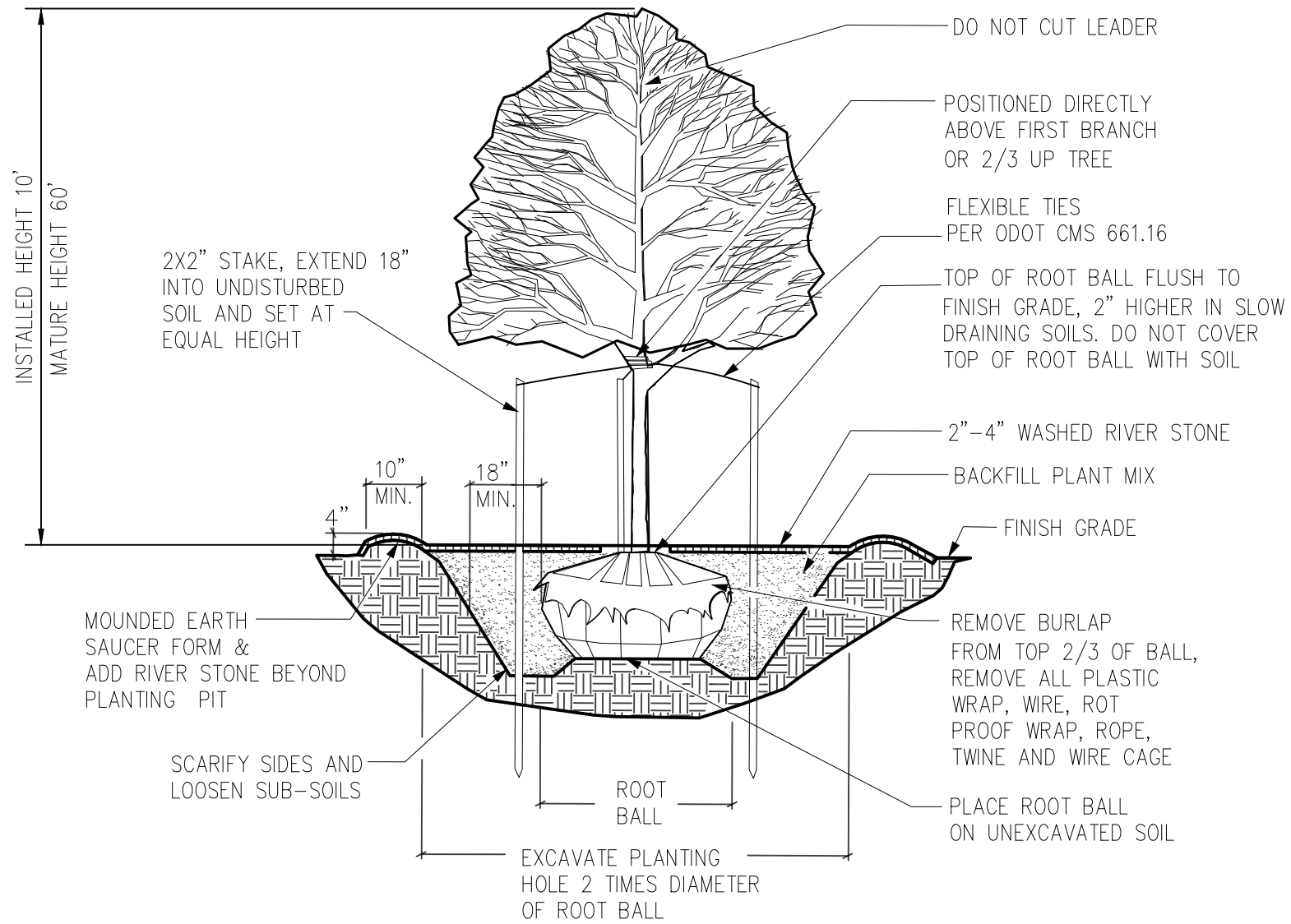
NOTES:

ALL SHRUBS PLANTED IN ROWS OR MASSES SHALL BE MATCHED IN SIZE AND FORM.

SHRUBS SHALL BEAR SAME RELATION TO FINISH GRADE AS THEY BORE TO EXISTING GRADE IN THE PREVIOUSLY PLANTED CONDITION.

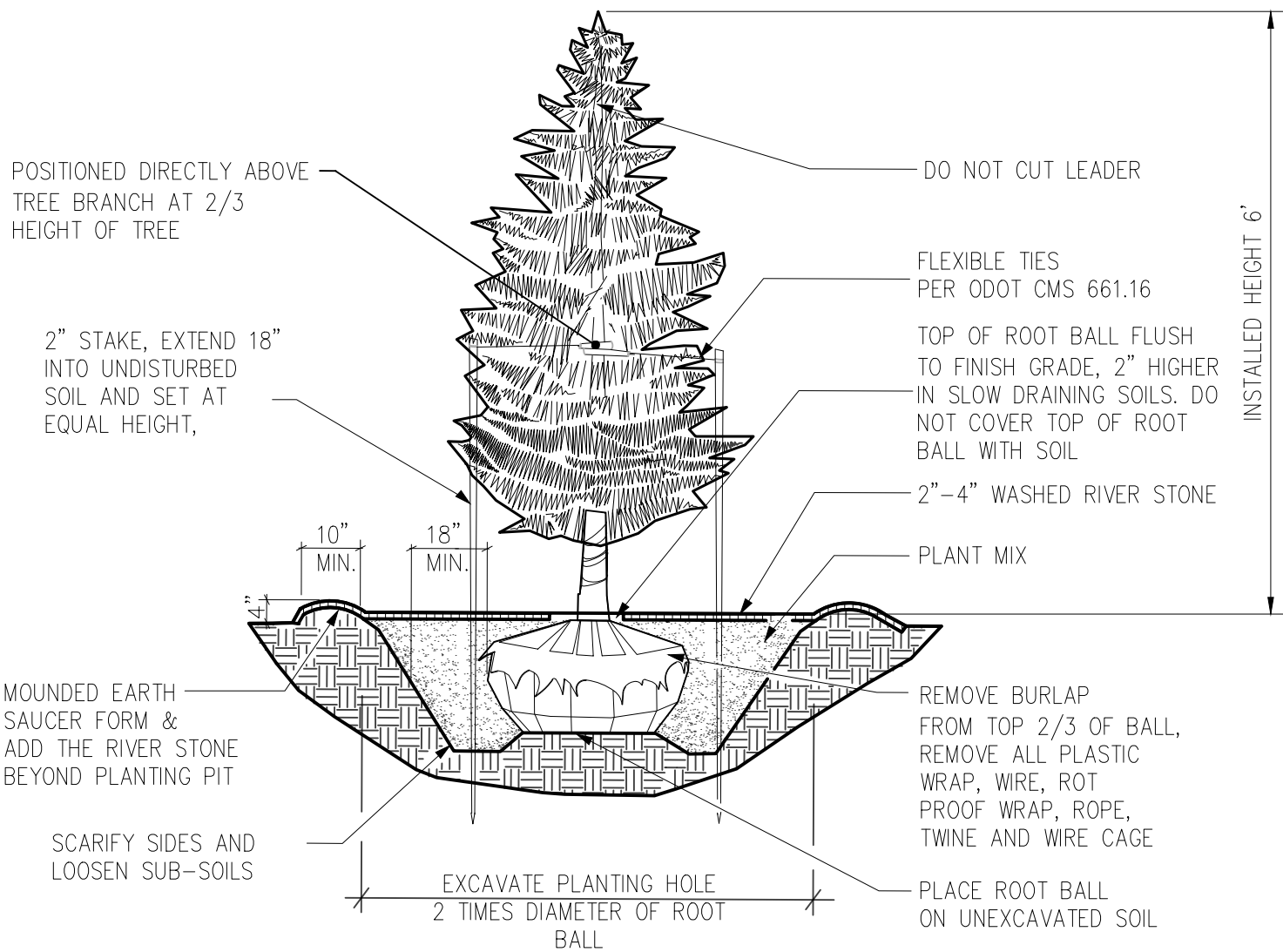
MASS SHRUB PLANTING DETAIL (B&B OR CONTAINER)

NO SCALE



DECIDUOUS TREE PLANTING DETAIL

NO SCALE



EVERGREEN TREE PLANTING DETAIL

NO SCALE

OVERALL LANDSCAPE PLANT LIST

ABRV.	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	TYPE	REMARKS
TREES						
AC RU	4	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2" CAL	B&B	DECIDUOUS TREE
AC PA	18	ACER PALMATUM 'KATSURA'	KATSURA JAPANESE MAPLE	1 1/2" CAL	B&B	ORNAMENTAL TREE
PI AB	11	PICEA ABIES	NORWAY SPRUCE	6' HEIGHT MIN.	B&B	EVERGREEN TREE
PI SB	6	PINUS STROBUS	EASTERN WHITE PINE	6' HEIGHT MIN.	B&B	EVERGREEN TREE
SHRUBS						
RO SK	8	ROSA 'RADSUNNY'	SUNNY KNOCK OUT ROSE	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
SY MK	30	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
WE FL	43	WEIGELA FLORIDA 'BOKRASPIW'	SPILLED WINE WEIGELA	30" HEIGHT MIN.	B&B	ORNAMENTAL SHRUB
JU VI	11	JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL JUNIPER	30" HEIGHT MIN.	B&B	EVERGREEN SHRUB
BX GG	77	BUXUS MICROPHYLLA VAR. KOREANA	KOREAN LITTLELEAF BOXWOOD	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
PI MU	6	PINUS MUGO 'PUMILIO'	DWARF MUGO PINE	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB
AE PV	3	AESCULUS PARVIFLORA	BOTTLEBRUSH BUCKEYE	36" HEIGHT MIN.	CONT.	DECIDUOUS SHRUB
RH EN	9	RHODODENDRON 'ENCORE'	ENCORE AZALEA	24" HEIGHT MIN.	CONT.	DECIDUOUS SHRUB
VI DE	3	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE VIBURNUM	36" HEIGHT MIN.	CONT.	DECIDUOUS SHRUB
CH PI	11	CHAMAECYPARIS PISIFERA 'GOLDEN MOP'	GOLDEN MOP FALCE CYPRESS	36" HEIGHT MIN.	CONT.	DECIDUOUS SHRUB
TH OC	60	THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	36" HEIGHT MIN.	CONT.	EVERGREEN SHRUB

LANDSCAPE PLAN NOTES

- THE CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY ON ALL PLANTS AND VEGETATION PROPOSED ON THE LANDSCAPING PLAN. ANY TREES, SHRUBS, GROUND COVER OR OTHER VEGETATION PLANTED AS PART OF THIS PROJECT THAT DO NOT SURVIVE ONE YEAR FROM PLANTING SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL PERTINENT UTILITY COMPANIES THREE WORKING DAYS IN ADVANCE OF ANY DIGGING. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF ANY UTILITIES.
- REFER TO THE LANDSCAPE PLAN FOR ADDITIONAL NOTES. LANDSCAPE IMPROVEMENTS SHALL CONFORM TO THE LATEST EDITION OF ODOT CONSTRUCTION SPECIFICATIONS.
- ALL PLANTING MATERIALS: SHALL BE PLANTED PER ODOT SPECIFICATIONS. EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE BROKEN, LOW HANGING AND OTHER UNDESIRABLE GROWTH TO ENSURE HEALTHY AND SYMMETRICAL NEW GROWTH.
- PLANTING BEDS, ONE MONTH BEFORE CULTIVATION AND AFTER DAYTIME TEMPERATURES HAVE WARMED TO 60° CONSISTENTLY, TREAT ALL PLANTING BEDS THAT ARE TO BE DEVELOPED IN AREAS OF EXISTING TURF WITH PRE-EMERGENT AND POST-EMERGENT TYPE HERBICIDES. USE A STATE-LICENSED PESTICIDE APPLICATOR TO APPLY THE HERBICIDE. REPEAT HERBICIDE APPLICATION TWO WEEKS LATER AND UNTIL ALL HERBACEOUS MATERIALS HAVE BEEN KILLED. BEFORE PLANTING, TOP DRESS ALL PLANTING BEDS WITH A MINIMUM OF 6 INCHES OF BACKFILL MIX, THEN CULTIVATE PLANTING AREA TO A DEPTH OF 6 INCHES USING A PLOW, DISC, OR ROTO-TILLER.
- BACKFILL MIX. FOR ALL PLANTINGS, USE BACKFILL MIX CONSISTING OF THE FOLLOWING:
A. ONE PART EXCAVATED SOIL.
B. ONE PART TOPSOIL.
C. ONE PART EPA RATED CLASS IV COMPOST.
D. A SLOW RELEASE COMMERCIAL FERTILIZER (0-20-20 OR EQUAL) ADDED AT A RATE OF 5 POUNDS PER CUBIC YARD TO THE BACKFILL MIX.
E. IF SOIL AREAS ARE OF HIGH PH (GREATER THAN 6.5), APPLY 1.25 POUNDS OF ELEMENTAL SULFUR PER CUBIC YARD OF BACKFILL MIX.
NOTE: CONTRACTOR SHALL SUPPLY A DETAILED SOIL ANALYSIS PRIOR TO ALL PLANT BED PREPARATION. ANALYSIS SHALL INDICATE SOIL PH, TEXTURE, MAJOR NUTRIENTS, SALTS, ETC. SOIL ANALYSIS SHALL BE FROM A REPUTABLE, INDEPENDENT LAB. SOIL AMENDMENTS SHALL BE INCORPORATED INTO BACKFILL/PLANT MIX AS RECOMMENDED BY THE INDEPENDENT LAB.
- WASHED RIVER STONE MULCH. SMOOTH AND SHAPE THE BACKFILL MIX TO FORM A SHALLOW BASIN SLIGHTLY LARGER THAN THE PLANTING HOLE. ADD STONE TO ALL PLANTING AREAS WITH A LAYER OF 2"-4" WASHED RIVER STONE. PLANTS GROUPED IN MASSES SHALL HAVE THE ENTIRE CONTIGUOUS PLANTING BED OR ISLAND MULCHED WITH THE WASHED RIVER STONE. SMOOTH THE ENTIRE AREA OF THE PLANTING BEDS. AFTER ADDING THE STONE AND BEFORE WATERING, ADD A SLOW RELEASE COMMERCIAL FERTILIZER (12-12-12 OR EQUAL), IN GRANULAR FORM, TO THE TOP OF THE STONE AT A RATE OF 5 POUNDS PER 1000 SQUARE FEET. DO NOT ALLOW FERTILIZER TO CONTACT THE STEMS, BRANCHES, ROOTS OR LEAVES.
- PERIOD OF ESTABLISHMENT. BEFORE FINAL INSPECTION, PLACE ALL PLANTS, SEED ALL LAWNS, AND CARE FOR THEM FOR A PERIOD OF ESTABLISHMENT. THE PERIOD OF ESTABLISHMENT BEGINS IMMEDIATELY UPON COMPLETION OF THE PLANTING OPERATIONS AND CONTINUES UNTIL OCTOBER 1. THE MINIMUM PERIOD OF ESTABLISHMENT IS ONE GROWING SEASON, JUNE 1 THROUGH OCTOBER 1. DURING THE PERIOD OF ESTABLISHMENT, FOLLOW STANDARD HORTICULTURAL PRACTICES TO ENSURE THE VIGOR AND GROWTH OF THE TRANSPLANTED MATERIAL. WATER, REMULCH, RESTAKE, GUY, AND CULTIVATE AS NECESSARY. PERFORM AT LEAST TWO WEEDING AND MOWING PROGRAMS (AROUND TREES, GUY STAKES, SHRUBS, AND BED EDGES) OF SUCH INTENSITY AS TO COMPLETELY RID THE PLANTED AND MULCHED AREAS OF WEEDS AND GRASSES. BEGIN THE FIRST PROGRAM ON OR ABOUT JUNE 15 AND THE SECOND APPROXIMATELY 8 WEEKS LATER. ON OR ABOUT AUGUST 15, THE ENGINEER WILL INSPECT THE PLANTING AND SUPPLY THE CONTRACTOR WITH A LIST OF MISSING AND DEAD PLANTS AND THOSE THAT HAVE DIED BACK BEYOND NORMAL PRUNING LINES. REPLANTS REQUIRED ACCORDING TO THE SPECIFICATIONS OF THE ORIGINAL MATERIAL. REPLACEMENT PLANTS ARE SUBJECT TO A NEW PERIOD OF ESTABLISHMENT. IMMEDIATELY REPLACE PLANTS PLANTED INITIALLY IN THE FALL THAT HAVE DIED BEFORE THE SPRING PLANTING SEASON. CARE FOR THE REPLACEMENT PLANTS DURING THE NEW ESTABLISHMENT PERIOD.
- RESTORATION OF DISTURBED AREAS FOR NEW LAWN:
ALL DISTURBED AREAS NOT COVERED BY BUILDING, PAVEMENT OR LANDSCAPE PLANTING BEDS SHALL BE PREPARED FOR GRASS SEED AND SEEDED. LOOSEN RUTS AND WORK THE SOIL AREAS TO A MINIMUM OF 6" DEEP PRIOR TO FINE GRADING AND SEEDING WORK. AREAS TO RECEIVE GRASS SEED SHALL HAVE A MIN. 4" TOPSOIL PLACED, SEEDED AND A STRAW/MULCH BLANKET COVER PLACED OVER THE SEEDED AREAS PER ODOT SPECIFICATIONS. FERTILIZE WITH ONE POUND OF ACTUAL NITROGEN PER 1000 SQUARE FEET WITH A SLOW RELEASE COMMERCIAL STARTER FERTILIZER (LESCO 18-24-12 OR EQUAL).
- LANDSCAPE TREES, SHRUBS AND PERENNIAL WATERING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, DELIVERING, APPLYING, MEASURING AND SCHEDULING A SUFFICIENT AMOUNT OF WATER NECESSARY TO KEEP EACH PLANT IN A HEALTHY GROWING CONDITION THROUGHOUT THE PERIOD OF ESTABLISHMENT. THE CONTRACTOR SHALL APPLY 1" OF WATER PER WEEK TO ALL NEW PLANTS. THE CONTRACTOR SHALL INSTALL & MAINTAIN SUPPLEMENTAL DRIP WATERING TREE BAGS (SUCH AS 20 GALLON TREE GATOR WATER BAG) TO PROVIDE ADEQUATE, SLOW RELEASE OF WATER. WATER BAGS SHALL BE REMOVED AT THE END OF THE SECOND GROWING SEASON.
- TURF GROUND COVER (SODDING, SEEDING AND SEED MULCHING):
ALL SEEDING INSTALLATION SHALL CONFORM TO ODOT SPECIFICATIONS AND NOTE 9 ABOVE. SEED AT 6 LBS/1000 SF WITH THE FOLLOWING SEED MIXTURE:
TITAN TALL-TYPE TURF FESCUE 70%
SR 4100 PERENNIAL RYEGRASS 20%
MERIT KENTUCKY BLUEGRASS 10%

LANDSCAPE PLAN FOR	LAUREL LAKE VILLAS	200 LAUREL LAKE DRIVE HUDSON, OHIO 44236	LANDSCAPE NOTES AND DETAILS	L200
PREPARED FOR:	LAUREL LAKE	200 LAUREL LAKE DRIVE HUDSON, OHIO 44236		
TECHNICAL SKILL- CREATIVE SPIRIT.				
				
1160 DUBLIN ROAD SUITE 100 COLUMBUS, OH 43215 TEL: 614.441.4222 FAX: 888.488.7440				
PROJECT DATE: JUNE 2024 PROJECT NO: 240546 DRAWN BY: DDS CHECKED BY: NAF				

rmk565 2/17/88

406004

GENERAL WARRANTY DEED

MEDIPLEX RETIREMENT VILLAGE OF HUDSON, INC., AN OHIO CORPORATION, (the "Grantor"), with a principal office in Cleveland, Ohio, for valuable consideration paid, grants, with general warranty covenants to LAUREL LAKE RETIREMENT COMMUNITY, INC., an Ohio Not-for-Profit Corporation, (the "Grantee"), whose tax mailing address is 10 West Streetsboro Street, Hudson, Ohio, the real property described on Exhibit A attached hereto and made a part hereof be the same, more or less, but subject to all legal highways.

To have and to hold the above granted and bargained real property, with the appurtenances thereunto belonging, unto the Grantee, its successors and assigns, forever, and the Grantor does for itself and its successors and assigns, covenant with the Grantee, its successors and assigns, that at and until the ensealing of these presents, it is well seized of the above described real property, as a good and indefeasible estate in fee simple, and has good right to bargain and sell the same in the manner and form as written above, and that the same are free and clear from all encumbrances whatsoever except ^{Subject to} easements, conditions, restrictions, reservations and encumbrances of record, including but not limited to (i) the platted right-of-way recorded in Cabinet A, Slide 63 of Summit County Records, (ii) the platted right-of-way found in the plat of the Lake Forest Subdivision as recorded in Volume 38, Page 49 of Summit County Records, (iii) the restrictions, covenants and conditions contained in the warranty deed from Charles V. Wellman, et al., to Chester E. Thomas and Maria A. Thomas, dated August 24, 1945 being recorded in Volume 2211, Page 105, Summit County Records, (iv) the restrictions, covenants and conditions contained in an instrument recorded in Volume 487, Page 191 of Summit County Records, (v) a pole line easement from the S.H. Klienman Realty Company of Ohio to Ohio Edison Company, dated August 23, 1938, recorded in Volume 1766, Page 692 of Summit County Records, and

Surety Title Agency, Inc.
ORDER NO. 7559.
ESCROW NO. 87-611

024116

TRANSFERRED IN COMPLIANCE WITH	
EXEMPT SEC. 319.202 REV CODE	
Consideration	FEE
TIM DAVIS	BY <u>[Signature]</u>
County Auditor	Deputy Auditor

7592-509

(viii) taxes and assessments, both general and special, not currently due and payable.

Excepting and reserving unto the Grantor, its successors and assigns (A) all oil, gas and minerals located beneath the surface of the above described real property, together with the right to extract said oil, gas and minerals and the right of ingress, across and through, and egress from the above described real property, by pedestrian or vehicular means, and the right of reasonable occupation and possession of the surface of said real property as may be necessary for or incidental to the extraction of such oil, gas and minerals, and (B) an easement or easements, as the case may be, and in a manner as Grantor deems to be reasonably appropriate, on, under, across and over the real property described on Exhibit A (the "Servient Parcel"), including but not limited to an easement over the area described in Exhibit B attached hereto and made a part hereof and further shown on the map attached hereto as Exhibit C, for and to be used in the initial and ongoing development of a certain parcel of real property described in Exhibit D attached hereto and made a part hereof (the "Benefited Parcel"), which is adjacent to the Servient Parcel, for the purpose of, but not limited to, (x) the installation, maintenance, repair and replacement of above and underground utilities such as but not limited to gas, electric, sanitary and storm sewers and communications lines and/or cables, (y) obtaining pedestrian, vehicular or utility access to and from Boston Mills Road, (z) and providing surface and subsurface drainage; provided, however, that the Grantor shall consult with the Grantee regarding the location of the easement(s) described in subsection (B), and such easement(s) shall not unreasonably interfere with the use or marketing of the Servient Parcel by the Grantee, nor impair the Grantee's ability to operate the facility located thereon as a "hospital facility" as defined in Chapter 140 of the Ohio Revised Code, as amended from time to time;

and that the Grantor will warrant and defend the above described real property, with the appurtenances thereunto belonging to the Grantee its successors and assigns forever, against all lawful claims and demands whatsoever except as stated above.

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and corporate seal by Patrick B. Styer its Treasurer and Joseph N. Casese its Vice President this 22nd day of February, 1988.

SIGNED AND ACKNOWLEDGED
IN THE PRESENCE OF:

MEDIPLEX RETIREMENT VILLAGE OF
HUDSON, INC.

Robert D. Gesto

BY: [Signature]

Donald W. Higgins

ITS: Treasurer

AND BY: [Signature]

ITS: Vice President

IN THE STATE OF Massachusetts)
NORFOLK COUNTY) SS:

Before me, a Notary Public in and for said county and state, personally appeared the above named Mediplex Retirement Village of Hudson, Inc., by Patrick B. Styer, its Treasurer and by Joseph N. Casese, its Vice President who acknowledged that they did sign the foregoing instrument and that the same is the free act and deed of said corporation, and the free act and deed of each of them personally and as such officers.

In testimony whereof, I have hereunto set my hand and official seal, at Wellesley, MA, this 22nd day of February, 1988.

[Signature]
NOTARY PUBLIC
MY COMMISSION EXPIRES
SEPTEMBER 30, 1988

This instrument was prepared by:

ARTER & HADDEN
1100 Huntington Building
Cleveland, Ohio 44115

7592-511

LEGAL DESCRIPTIONMEDIPLEX RETIREMENT VILLAGE OF HUDSON INC.

Situated in the Village of Hudson, County of Summit, State of Ohio, and known as being part of Lake Laurel Estate as shown by the plat recorded in Plat Cabinet A, Slide 63 of the Summit County Records and also being part of Original Hudson Township Lot Nos. 43, 52 & 53, bounded and described as follows:

Beginning on the southwesterly line of Boston Mills Rd. (County Highway No.32) (60 ft. wide) at the most northerly corner of land conveyed to Mediplex Retirement Village of Hudson, Inc. by deed recorded in Volume 6981, Page 777 of Summit County Records. Said corner being witnessed by an iron pin found south $82^{\circ} 34' 56''$ West, 0.19 ft. therefrom;

Thence south $50^{\circ} 12' 00''$ east, along the southwesterly line of Boston Mills Rd., 108.70 ft. to an iron pin set at a point of curvature;

Thence southeasterly along the southwesterly line of Boston Mills Rd., on an arc of a circle deflecting to the left, 352.19 ft. to an iron pin set at a point of tangency. Said arc having a radius of 984.93 ft. and a chord that bears south $60^{\circ} 26' 38''$ east, a distance of 350.31 ft.;

Thence south $70^{\circ} 41' 15''$ east, along the southwesterly line of Boston Mills Rd., 834.01 ft. to a iron pin set at a point of curvature;

Thence southeasterly along the southwesterly line of Boston Mills Rd., along an arc of a circle deflecting to the left 352.82 ft. to a point of tangency. Said arc having a radius of 1939.86 ft. and a chord that bears south $75^{\circ} 53' 53''$ east a distance of 352.33 ft.;

Thence south $81^{\circ} 06' 30''$ east, along the southwesterly line of Boston Mills Rd., 26.61 ft. to an iron pin found at the northeast corner of land conveyed to Mediplex Retirement Village of Hudson, Inc., as aforesaid;

Thence south $3^{\circ} 44' 44''$ west, along the east line of land so conveyed to Mediplex Retirement Village of Hudson, Inc., 2276.69 ft. to the southeast corner thereof. Said corner being witnessed by a stone marked with a drill hole found south $3^{\circ} 44' 44''$ west, 0.17 ft. therefrom;

Thence north $86^{\circ} 28' 41''$ west along a south line of land so conveyed to Mediplex Village of Hudson Inc., 917.51 ft. to a stone marked with a drill hole found at a southwest corner thereof;

Thence north $3^{\circ} 42' 40''$ east along a west line of land so conveyed, 363.59 ft. to an iron pipe found at a corner thereof;

Thence north $86^{\circ} 19' 35''$ west along a south line of land so conveyed, 1933.72 ft. to an iron pipe found at a southwest corner thereof;

Thence north $3^{\circ} 43' 57''$ east along a west line of land so conveyed, 1712.10 ft. to an iron pin found at the southwest corner of a 4.5900 acre parcel of land shown on the plat of survey for property split and reconsolidation for Mediplex Retirement Village of Hudson, Inc., as recorded in Plat Cabinet C, Slide 723 of Summit County Records;

-1-

44-11, 12, & 16

TIM DAVIS
COUNTY AUDITOR

FEB 23 1988

TRANSFERRED

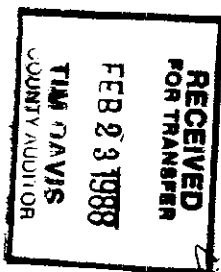


EXHIBIT A
Page 1 of 2

Thence north $83^{\circ} 10' 29''$ east along the southerly line of said 4.5900 acre parcel, 253.02 ft. to an iron pin found;

Thence north $37^{\circ} 55' 36''$ east along the southeasterly line of said 4.5900 acre parcel, 648.64 ft. to the north line of land so conveyed to Mediplex Retirement Village of Hudson, Inc., at the most southerly corner of land conveyed to Joseph P. Ditchman, Jr., by deed recorded in Volume 6451, Page 737 of Summit County Records;

Thence north $82^{\circ} 34' 56''$ east, along the north line of land so conveyed to Mediplex Retirement Village of Hudson, Inc., 671.66 ft. to the place of beginning, containing 146.6997 acres of land, more or less, according to a survey prepared by Carl L. Craddock, Registered Surveyor No. 5762, for and on behalf of Bock & Clark, under Project No. 87260, dated February 10, 1988 and subject to all legal highways.

The bearing used in this description are referred to an assumed meridian and are used to denote angles only.

Braun - Prenosil Associates, Inc.

547 East Washington Street Chagrin Falls, Ohio 44022 Tel. 247-8670

D.A. Braun, P.E., P.S.

J. Prenosil, P.S.

December 24, 1987

LEGAL DESCRIPTION FOR MEDIPLEX OF 30 FOOT WIDE SANITARY SEWER EASEMENT

Situated in the Village of Hudson, County of Summit and State of Ohio, and known as being part of Original Hudson Township Lot 52 and bounded and described as follows:

Beginning in the most Westerly corner of land described in deed to Joseph P. Ditchman, Jr. recorded in Volume 6451. Page 737 of Summit County Deed Records, said place of beginning being distant South $78^{\circ} 51' 05''$ West 671.47 feet, measured along the Southerly line of land so described in deed to Joseph P. Ditchman, Jr., from the Southwesterly line of Boston Mills Road (60 feet wide), said place of beginning also being the most Easterly corner of 4.5900 Acres of land described in deed to Mediplex Retirement Village of Hudson, Inc., recorded in Volume , Page of Summit County Deed Records;

Thence South $34^{\circ} 11' 45''$ West, along the Southeasterly line of land so described in deed to Mediplex Retirement Village of Hudson, Inc., a distance of 4.78 feet to the principal place of beginning of the easement hereintended to be described:

Thence South $45^{\circ} 59' 14''$ East a distance of 592.60 feet;

Thence South $44^{\circ} 00' 46''$ West a distance of 30.00 feet;

Thence North $45^{\circ} 59' 14''$ West a distance of 587.40 feet to the Southeasterly line of land described in deed to Mediplex Retirement Village of Hudson, Inc., as aforesaid;

Thence North $34^{\circ} 11' 45''$ East, along the Southeasterly line of land so described in deed to Mediplex Retirement Village of Hudson, Inc., a distance of 30.44 feet to the principal place of beginning.



Engineers...Surveyors

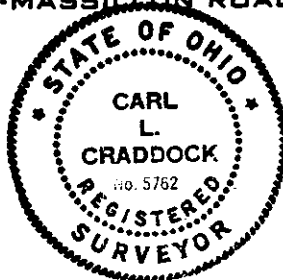


Exhibit B

BOCK & CLARK

537 NO. CLEVELAND-MASSILLON ROAD AKRON, OHIO 44313

Consulting Engineers
 Land Surveying
 Development Planning
 Topographic Surveys
 Oil & Gas Well Mapping
 Location Services



Akron: (216) 666-7578
 Cleveland: (216) 589-4947
 Canton: (216) 452-2226
 Ohio Wats: 800-362-8996

Description for
 Mediplex Retirement Village of Hudson, Inc.

Project No. 87260
 December 18, 1987

Situated in the Village of Hudson, County of Summit and State of Ohio; And Known as being part of Lake Laurel Estate as shown by the plat recorded in Plat Cabinet A, Slide 63, of the Summit County Records and also being part of Original Hudson Township Lot No. 52, bounded and described as follows:

Beginning on the northerly line of said Lake Laurel Estate, at the most southerly corner of land conveyed to Joseph P. Ditchman, Jr. by deed recorded in Volume 6451, Page 737 of the Summit County Records. Said corner being South 78° 51' 05" West 671.47 feet, as measured along said northerly line of Lake Laurel Estate, from an iron pin at the most northerly corner thereof on the southwesterly line of Boston Mills Road, County Highway No. 32 (60 feet wide);

Thence South 34° 11' 45" West, along the southwestly prolongation of the northwesterly line of land so conveyed to Joseph P. Ditchman, Jr., 648.65 feet to an iron pin set at the point of intersection of said southwestly prolongation and the northeasterly prolongation of the most southerly line of land conveyed to Mediplex Retirement Village of Hudson, Inc. by deed recorded in Volume 6981, Page 779 of the Summit County Records;

Thence South 79° 26' 39" West along said northeasterly prolongation 253.00 feet to an iron pin set on the west line of said Lake Laurel Estate at a southeast corner of land so conveyed to Mediplex Retirement Village of Hudson, Inc.

Thence North 00° 00' 02" West along said west line of Lake Laurel Estate 462.00 feet to a stone marked with a drill hole found at the northwest corner of said Lake Laurel Estate;

EXHIBIT D

Page 1 of 3

OHIO • FLORIDA • KENTUCKY • PENNSYLVANIA

Thence North 78° 51' 05" East along said northerly line of Lake Laurel Estate 625.07 feet to the place of beginning and containing 4.5900 Acres of Land, more or less, according to a survey prepared by Carl L. Craddock, Registered Surveyor No. 5762, for and in behalf of Bock & Clark under Project No. 87260 dated December 21, 1987, and subject to all legal highways.

The bearings used in this description are referred to an assumed meridian and are used to denote angels only.

Carl L. Craddock

Carl L. Craddock
Registered Surveyor No. 5762

7592- 517

(5)

LEGAL DESCRIPTION

PARCEL NO.2:

Situated in the Village of Hudson, County of Summit, State of Ohio, and known as being a part of Original Lots #52 & #62, formerly in Hudson Township and further bounded and described as follows:

Beginning at an iron pin found at the southwest corner of Original Lot #62 of Hudson Township;

Thence north $00^{\circ}21'35''$ west 990.65 ft. to an iron pin found on the southerly right of way line of Boston Mills Rd. (C.H. 32, 60 ft. r/w);

Thence south $57^{\circ}52'51''$ east 1755.77 ft. along the southerly right of way of Boston Mills Rd. to the P.C. of a curve;

Thence along the arc of a curve to the right 182.68 ft. to an iron pin found, said curve is also the southerly right of way line of Boston Mills Rd. and has a radius of 5699.58 ft. a central angle of $01^{\circ}50'11''$, a chord of 182.67 ft. and a chord bearing of south $56^{\circ}57'48''$ east;

Thence south $34^{\circ}10'24''$ west 489.78 ft. to an iron pin found;

Thence south $78^{\circ}51'05''$ west 625.26 ft. to a marked stone found at the northwest corner of the Lake Forest Subdivision as recorded in Plat Book 38, Pages 49 thru 63;

Thence south $00^{\circ}00'31''$ east 462.00 ft. along the east line of said Lake Forest Subdivision to a tee post set in a marsh area;

Thence south $79^{\circ}24'58''$ west 517.44 ft. to a point, and passing over an iron pin found north $79^{\circ}24'58''$ east 4.05 ft. from this point;

Thence north $00^{\circ}17'33''$ west 1125.17 ft. to an iron pin found at the northeast corner of the Pettitt Bros. Farm Allotment (Plat Book 19, Page 76 & 77);

Thence north $89^{\circ}53'22''$ west 231.09 ft. to the iron pin found at the place of beginning, containing 39.2079 acres of land more or less, but subject to all legal highways or easements of record.

As surveyed by James N. Connor, Registered Surveyor #4570 in March, 1984.

EXHIBIT D

Page 3 of 3

012 - 0021

COUNTY OF SUMMIT
VOL 592 PG 509-519
RECEIVED FOR RECORD

88 FEB 23 AM 11:04

RECORDED FEB 24 1988
RALPH JAMES - RECORDER
CO. OF SUMMIT OHIO

406004

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2.2388 RE
MAY 1988
BY THE MAY 1988

7592-519

*Medley
Recreation Village
of Hudson, Ohio.
+
Lured Lake
Recreation
Community etc.*

28.00

May 12, 2025

Mr. Nick Sugar, AICP, City Planner
City of Hudson, Community Development
1140 Terex Road,
Hudson, Ohio 44236

Re: Laurel Lake Development Plan, 200 Laurel Lake Drive – Site Plan Approval

Mr. Sugar

Laurel Lake Retirement Community is asking for Site Plan approval for the proposed construction of 7 duplex units in the existing Laurel Lake Retirement Community in the City of Hudson. Applications to the planning commission require a checklist of required materials.

Core Submittal Requirements

1. Application has been completed online and submitted.
2. The name of the project is included on the plans and application. Project is for the Laurel Lake Retirement Community.
3. The name and address of the current owner is included on the title page for the set of plans.
4. All existing easements, restrictions and setbacks are shown on the plans.
5. The plans were prepared by the Riverstone Company and their information is included on the title block of the plans.
6. Names and Addresses of adjoining property owner's within 500' of the site have been provided to the city.
7. A vicinity map is included on the title page of the set of plans.
8. Improvement plans have been submitted.
9. Locations, dimensions of the proposed improvements are included in the plans.
10. Plans include the construction of 7 duplex units on the existing campus, no additional land is being designated for open space.
11. The proposed parcel is over 140 acres and the location of the 7 duplex site are well within the proposed property. The units closest to Boston Mills Road are shown with dimensions to the R/W.
12. Tree and vegetation and landscape plans have been included in the submittal.
13. Boston Mills Road is shown on the plans.
14. existing detention basin near building 2.
15. Existing utility Infrastructure is shown on the plans.
16. Proposed connections and extensions to the utilities are shown on the plans.
17. Existing gas wells are shown on the plans as well as their associated setbacks.
The construction of the 7 duplex units are outside of the setback areas.
18. Existing topography is shown for each of the construction sites.
19. Zoning is listed on sheet C2.00.



20. Provide a checklist of materials submitted and compliance with the Land Development Code.
21. A traffic study has been performed and has been submitted. Based on the report the construction of the 7 duplexes will not impact the traffic.
22. Construction will begin on units as soon as plans and building permits are obtained.
23. Duplexes to be used as residential senior living. The improvement plans lists the overall impervious area coverage for pre and post development. The overall site plans and schematic plans show the developed area of the property and the existing buildings on site. The private drive Laural Lane navigates through the site, there are no sidewalks outside of the main parking lot in front of the building.
24. Items submitted to the city are in PDF and JPG format.
25. A SWPPP for each lot is included in the improvement plans.
26. Overtime, parcels have been added to the original parcel, there is no deed associated with the entire parcel.
27. Written Authorization has been submitted.
28. Wetland Delineations as well as additional letters noting the status of the lake in front have been submitted.
29. There are no easements or deed restrictions on the parcel. Gas well and the setbacks are shown on the plans.
30. Subject parcel has been staked.
31. Approvals will be provided once obtained. Submittals to outside agencies will not occur until plan is approved by the Planning Commission.

Site Plan Review

32. Improvements plans have been submitted at and scale of no less than 1"=100' and paper size less than 30"x42"
33. Legal Description of the property is provided.
34. Building locations and clearing limits are shown on the plans.
35. The property is one large parcel, smaller lots will not be created as part of the project.
36. Site plans for the proposed duplexes are provided and include the area of each site.
37. Existing topography, and environmental features are included on the plans.
38. Existing gas well and tanks are shown on the plans. Construction will occur outside of the required setback.
39. There are no proposed signs.
40. A statement about the filing of the NOI is included in the submittal. A NOI will be filed as part of the SWPPP review process.
41. There are no disturbance to the wetlands on site, therefore no permits are required from the US Army Corp of Engineers or the Ohio EPA.
42. Improvement plans have been submitted.



43. Sheet C2.00 and C2.01 break down the lot coverage.
44. Where buildings are proposed near existing buildings dimensions are provided.
45. 11x17 plans will be submitted if required prior to the meeting.
46. Proposed transformers are shown on the plans. No screening is proposed.
47. Finish Floor elevations are provided for each duplex.
48. Additional information will be provided as requested by the city.

Tree and Vegetation Plan

7. A survey of the trees within the project limits was completed by Davey Tree and shown on the improvement plans.
8. A survey of the trees within the clearing limits and within 25' of the clearing limits was completed by Davey Tree and shown on the improvement plans.
9. A cost estimate for the landscape plan has been submitted.

Landscaping / Bufferyard Plan

1. Landscape plan shows the north arrow.
2. The name of the owner is listed on the plans.
3. Plans are dated
4. Landscape plans use the improvement plans as the background which shows the existing and proposed improvements.
5. Trees to be removed are shown on the site improvement plans.
6. Landscape plans use the improvement plans as the background which shows the existing and proposed improvements.
7. Contour lines are shown on the improvement plans
8. Elevations and drainage patterns are shown on the improvement plans.
9. Duplex units are not near property lines and therefore property lines are not shown.
10. Limits of disturbance are shown on the improvement plans.
11. A table of vegetation is provided on the plans.
12. Landscape details are included on the plans.
13. A cost estimate has been submitted.
14. Surfaces that are not mulched will be grass.
15. Landscape areas are depicted on the plans.
16. A table of vegetation is provided .
17. Landscape details are included on the plans.
18. Proposed duplexes are shown on the plans.
19. Limits of tree protection are shown on the Improvement Plans.
20. No roof top mechanical equipment is used.
21. Proposed Transformers are shown on the plans.



Exterior Lighting Plan/Landscaping / Bufferyard Plan

1. Exterior lighting plan is provided for the new roadway. There are no building mounted light packs, just light poles. Existing lighting on site is to remain.
2. Footcandles are shown on ES1.1
3. Details for the fixture are on sheet ES1.1 Poles are to match the existing light poles.
4. Glare control devices are not needed.
5. Light poles and fixture are on sheet ES1.1.
6. Light pole height is shown on sheet ES1.1.
7. New light poles are located towards the center of the property and is not effecting adjacent properties.

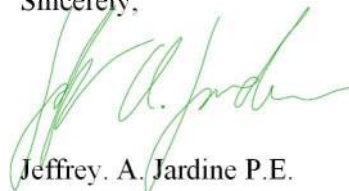
Notice of Intent – Summit Soil and Water Conservation District – SWPPP Review

Prior to construction the improvement plans will be submitted to Summit Soil and Water Conservation district for review and approval of the Storm Water Pollution Prevention Plan (SWPPP). Plan will be submitted after Planning Commission Approval.

The proposed development of Laurel Lake will disturb more than 1 acre of land, and therefore prior to earth disturbing activities the owner will need to file a Notice of Intent (NOI) with the Ohio Environmental Protection Agency (Ohio EPA). The improvement plan includes a similar note on sheet C9.01. The Riverstone Company will work with Laurel Lake to ensure the NOI is submitted to the Ohio EPA, prior to construction.

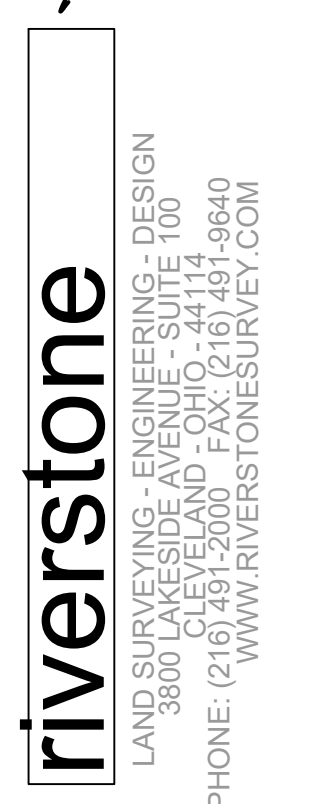
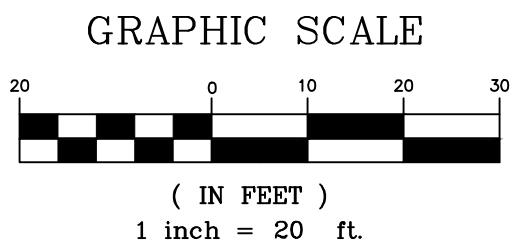
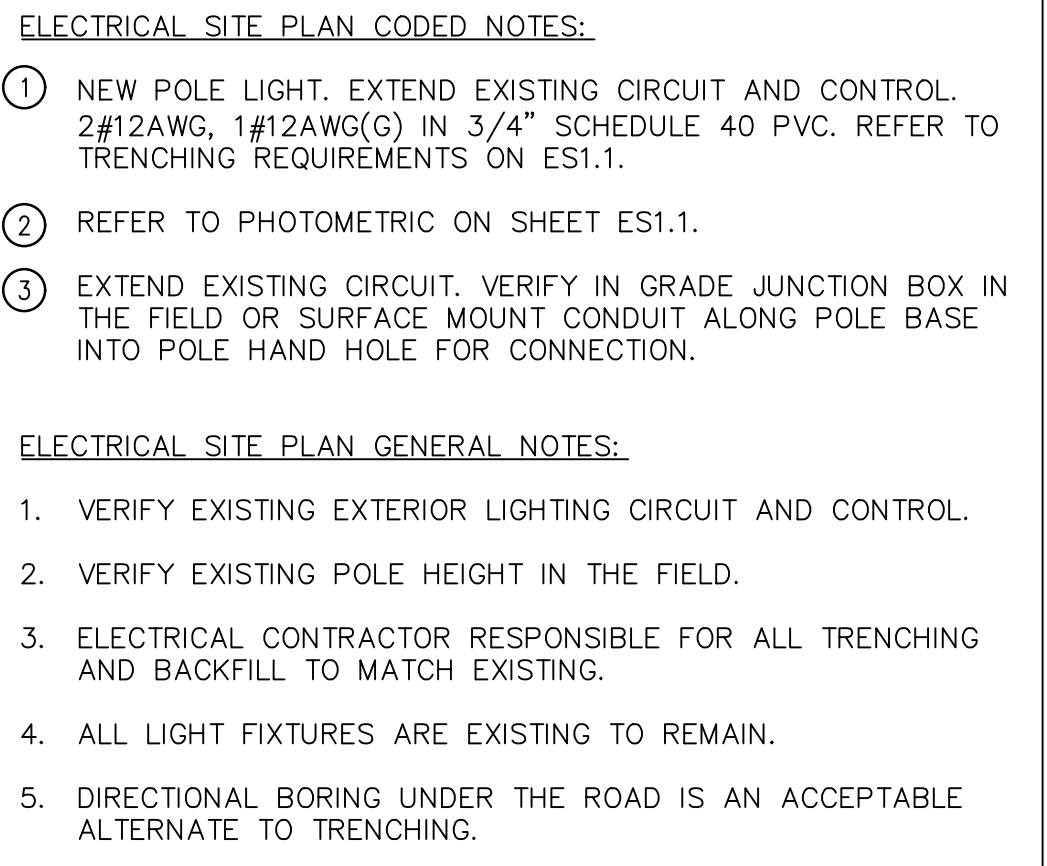
Should you have any questions pertaining to this letter or any submittals please contact our office at your earliest convenience.

Sincerely,



Jeffrey A. Jardine P.E.





DAI23133
Plan Revisions:
Page Revisions:

Issued For:
6-5-2024
-

Laurel Lake Villa
200 Laurel Lake Drive

ELECTRICAL SITE LIGHTING PLAN

Ohio Utilities Protection Service

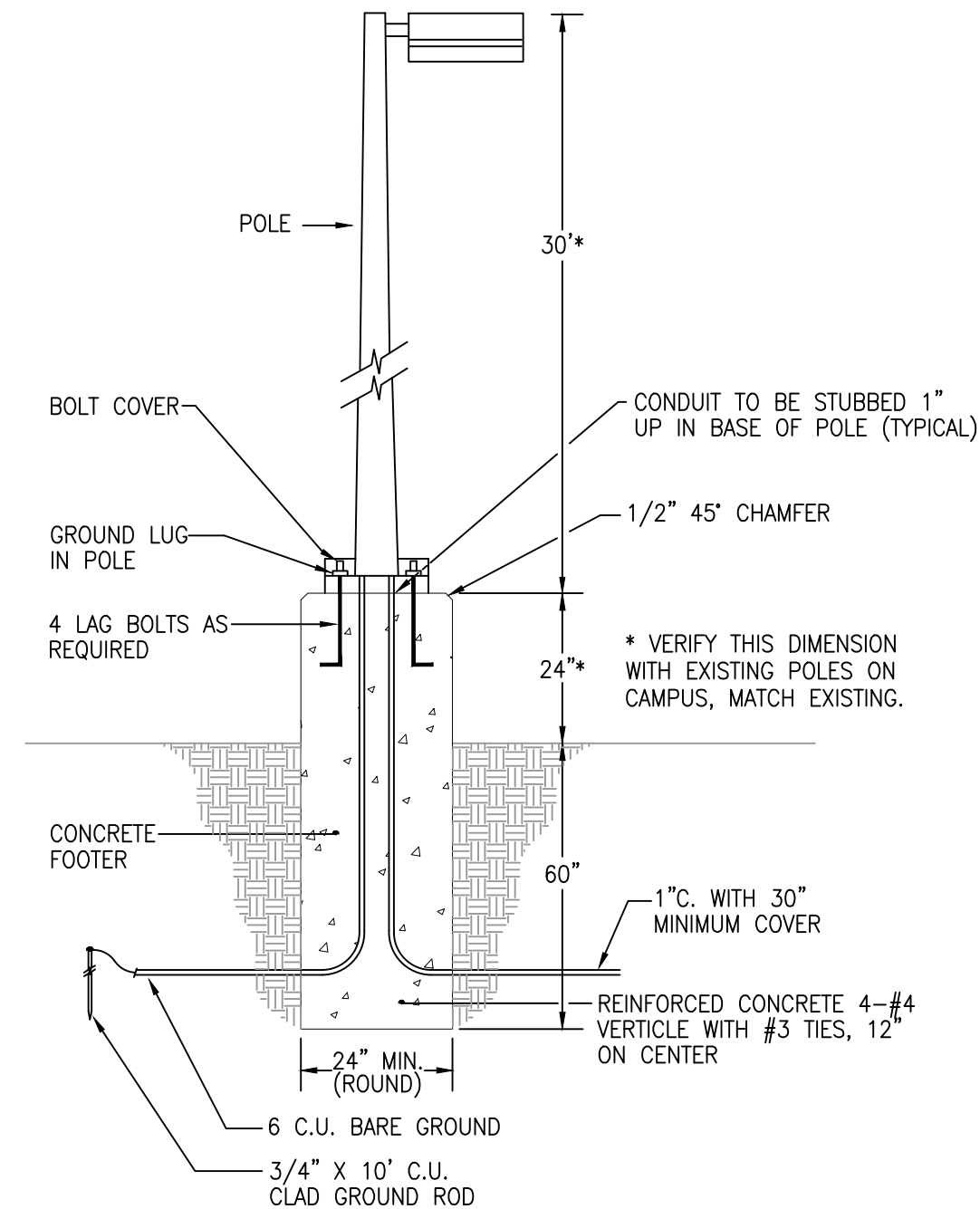
Call 811

before you dig

OGPUPS

Ohio Oil & Gas Producers' Underground Protection Service
Call (614) 715-2864 or 811

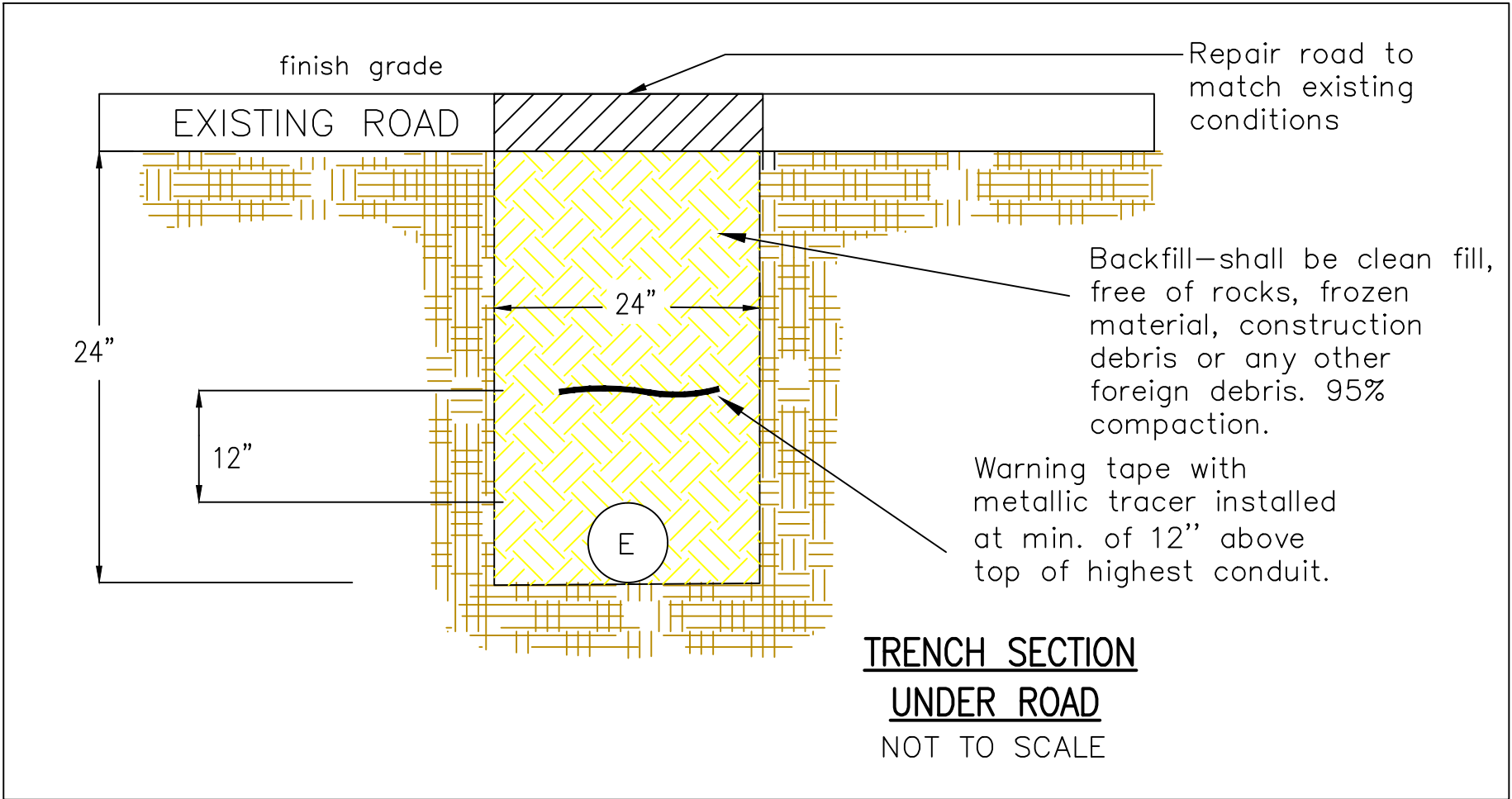
ES1.0



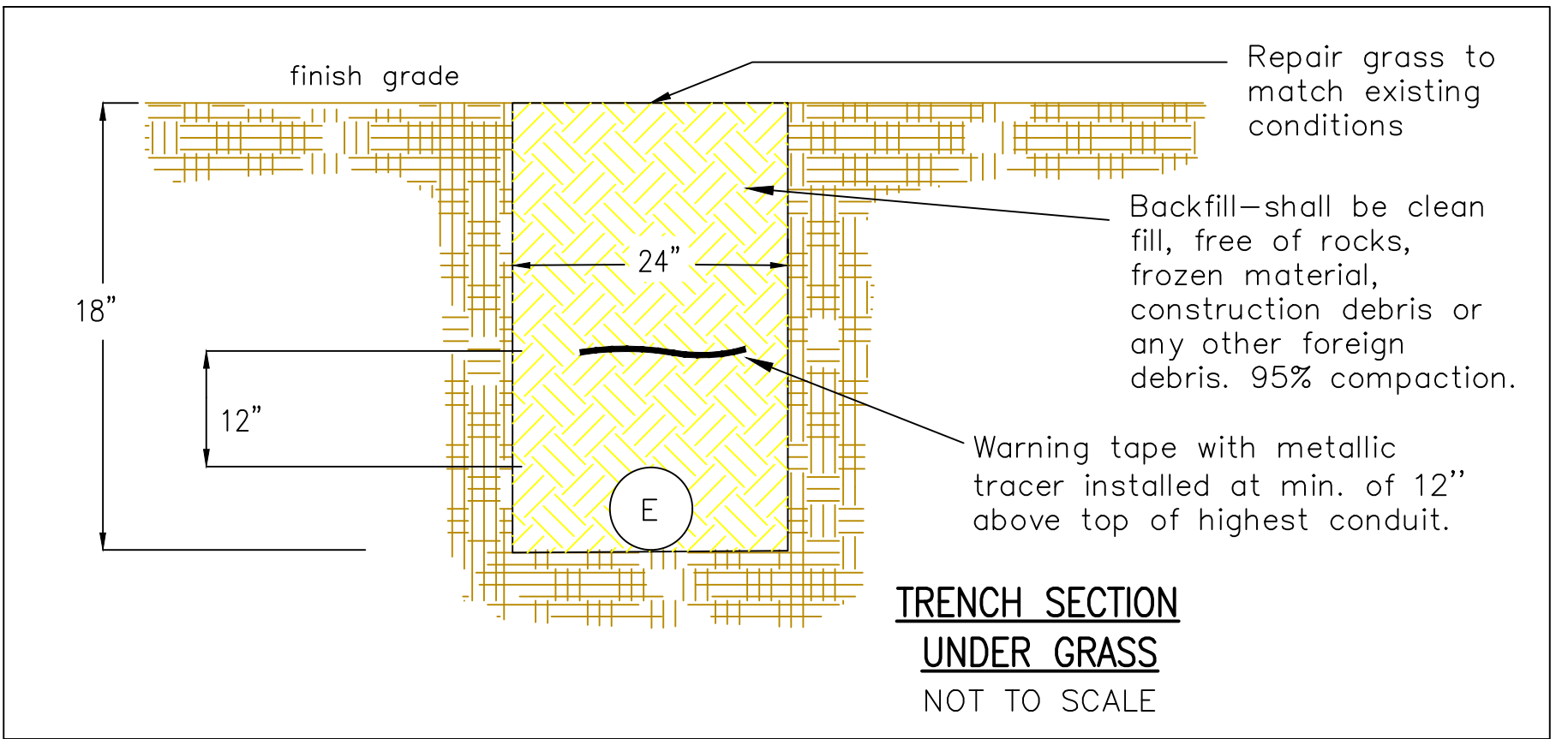
SITE LIGHT POLE MOUNTING DETAIL
NO SCALE

LIGHTING FIXTURE SCHEDULE					
TYPE	LUMINAIRE		DESCRIPTION	MOUNTING	CATALOG NO.
	LAMP	WATTAGE			
A	LED	97W	ONE-PIECE, DIE-CAST ALUMINUM HOUSING, SOLID-STATE LED PANEL, TYPE II DISTRIBUTION, BRONZE FINISH, HOUSE SIDE SHIELD.	30' POLE, VERIFY HEIGHT IN FIELD TO MATCH EXISTING POLES ON CAMPUS. MATCH POLE FINISH TO FIXTURE, MATCH POLE SHAPE TO EXISTING POLES ON CAMPUS.	COOPER LDRV-SL2-E04-E-BZ-HSS + POLE

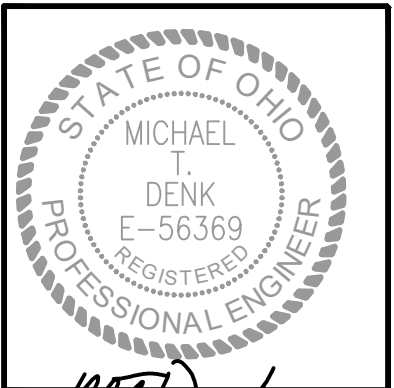
NOTE: NEW POEL AND EXTURE SHALL MATCH THE EXISTING BASE, POLE AND FIXTURES ON SITE.



TRENCH SECTION
UNDER ROAD
NOT TO SCALE



TRENCH SECTION
UNDER GRASS
NOT TO SCALE



riverstone
LAND SURVEYING - ENGINEERING - DESIGN
3800 LAKESIDE AVENUE - SUITE 100
COLUMBUS, OH 43207
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DAI23133

Plan Revisions:

Page Revisions:

Issued For:
6-5-2024

Laurel Lake Villa
200 Laurel Lake Drive
ELECTRICAL SITE LIGHTING - PHOTOMETRIC,
SCHEDULE AND DETAILS



ES1.1



GENERAL NOTES:

1. UTILIZATION OF THE ABBREVIATIONS "E.C.," "MECHANICAL CONTRACTOR," AND "G.C." WITHIN THE CONTEXT OF THESE DOCUMENTS SHALL EXPLICITLY REPRESENT "ELECTRICAL CONTRACTOR," "MECHANICAL CONTRACTOR," AND "GENERAL CONTRACTOR" RESPECTIVELY.
2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE VARIOUS EQUIPMENT PLACEMENTS, ROUGH-INS, BUILDING PENETRATIONS, AND SYSTEM RUNS WITH THE G.C. AND ALL OTHER TRADES, AND RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION AND PURCHASE/SHIPMENT OF MATERIALS.
3. THE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF ALL LIGHT FIXTURES AND CEILING MOUNTED DEVICES WITH THE ARCHITECTURAL CEILING PLAN, SECTIONS, ELEVATIONS, AND DETAILS. THE ELECTRICAL CONTRACTOR SHALL ALSO COORDINATE LOCATION OF RECEPTACLES, DATA OUTLETS, AND ALL OTHER WALL MOUNTED DEVICES WITH THE ARCHITECTURAL WALL FINISHES AND ELEVATIONS
4. THE ELECTRICAL CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR IN THE DRAWINGS, OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.
5. ALL BRANCH CIRCUITS AND FEEDERS SHALL CONTAIN INSULATED GROUNDING CONDUCTOR IN ACCORDANCE WITH SPECIFICATION SECTION 16400.
6. WIRE SIZES SHALL BE BASED ON THE 60°C. AMPACITIES FOR WIRE SIZES #14 THROUGH #1AWG, AND 75°C. AMPACITIES FOR WIRE SIZES #1/0 AWG AND LARGER.
7. ALL CONDUCTORS SHALL BE COPPER. ALUMINUM WIRING IS AN ACCEPTABLE ALTERNATE FOR FEEDERS 100 AMPERES OR LARGER.
8. ALL 15- AND 20-AMPERE, 120-VOLT NONLOCKING TYPE RECEPTACLES IN THE AREAS SPECIFIED IN NEC 406.12(1) THROUGH (7) SHALL BE LISTED TAMPER RESISTANT.
9. UTILIZATION OF THE PHRASE "PROVIDED BY" WITHIN THE CONTEXT OF THESE DOCUMENTS SHALL EXPLICITLY REPRESENT "FURNISHED AND INSTALLED BY".
10. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR ALL BRANCH CIRCUITS.
11. 120V.-20A. HOMERUNS SHALL BE #12AWG UNDER 100', #10AWG 100'-200' #8AWG 200'-300', UNLESS OTHERWISE NOTED.

ELECTRICAL SPECIFICATIONS

Architect as necessary to verify performance requirements. Submit data to the Architect.

SECTION 16010

PART 1 - GENERAL

1.01 GENERAL

A. The provisions of the Instructions to Bidders, General Conditions, Supplementary Conditions, Alternates, Addenda, and Division 1 are a part of this Specification. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. Contractors and Sub-contractors shall examine same as well as other Divisions of the Specifications which affect work under this Division.

B. Material or labor which is not indicated on the Drawings or Specifications, but which is obviously necessary to complete the work (and is usually included in similar work), shall be provided. Drawings and Specifications are to be considered as supplementing each other. Work specified but not indicated, or indicated but not specified, shall be provided as though mentioned in both Specifications and Drawings.

C. These Specifications establish quality standards of materials and equipment to be provided. Specific items are identified by Manufacturer, Trade Name or Catalog Designation. The Contractor shall submit his base bid price based upon specified equipment described herein and as detailed on drawings and associated contract documents

D. Definitions

1. "Contractor" as used within the Electrical Specifications shall refer to the Electrical Contractor.

2. "Equal" or "Equivalent" shall be understood to mean of the same quantity, size, number, value, degree, intensity and the items are similar in all respects. The Engineer will make the final decision of acceptance of these items.

3. "Contract Documents" shall be understood to encompass drawings and specifications for architecture, structural, civil, mechanical, electrical and all other pertinent disciplines.

4. "Provide" shall be interpreted to mean the Contractor shall furnish all labor, materials, equipment and supplies including tests and inspections necessary to install, connect, apply, erect, construct, and place in operating condition.

5. "Furnish" shall be interpreted to mean the Contractor shall supply and deliver to the job site specified material, equipment, and supplies.

6. "Install" shall be interpreted to mean assembling, placing, erecting, wiring and to make fully operational.

E. The Contractor shall furnish all materials and do all work in accordance with these specifications, and any supplementary documents provided by the Architect. The work shall include everything shown on the drawings and/or required by the specifications as interpreted by the Architect, regardless of where such information is indicated (Architectural, HVAC, Plumbing, Fire Protection, etc.). All work and materials furnished and installed shall be new and of the best quality and workmanship. The Contractor shall cooperate with the Architect so that no error or discrepancy in the Contract Documents shall cause defective materials to be used or poor workmanship to be performed.

F. Visit the site of the work and become familiar with conditions affecting the installation. The contractor shall ascertain the location of existing structures, utilities, equipment, etc. that may affect contract work and advise the engineer no later than five (5) working days prior to bid due date. Submission of a proposal shall presuppose knowledge of such conditions and no additional compensation shall be allowed where extra labor or materials are required because of ignorance of these conditions.

G. The contractor shall advise the architect and/or engineer of any code violations occurring in the Contract Documents prior to award of contract. In case of conflict between the Contract Documents and the requirements of any Code or Authorities having jurisdiction, the most stringent requirements of the aforementioned shall govern.

1.02 WORK INCLUDES

A. Include all labor, material, equipment, services, permits and certificates of inspection necessary for the proper completion of all electrical work. Items omitted, but necessary to make the electrical system complete and workable, shall be understood to form part of the work.

B. It is the purpose of the Electrical Drawings to indicate the approximate location of all equipment, outlets, etc. Ascertain exact locations and arrange work accordingly. The right is reserved to effect reasonable changes in the location of outlets up to the time of roughing-in with out additional cost to the Owner. Changes in location of equipment necessitated by interference with the work of other trades shall be made only with the consent of the Architect's or Owner's representative and at no additional cost.

C. Work shall include, but not be limited to, the following general systems and equipment:

Feeders and panel boards
Lighting and controls

D. All materials and workmanship shall comply with all applicable Codes, Specifications, Local and State Ordinances, Industry Standards, and Utility Company regulations and latest editions. In case of difference between Building Codes, State Laws, Local Ordinances, and the Contract Documents, the Contractor shall promptly notify the Architect in writing of any such difference.

E. The Electrical Design is based on the National Electrical Code. Work shall be installed in accordance with the provisions of the code as interpreted by the local board having jurisdiction, as well as any further modifications or regulations of local or state authorities. The Contractor shall include in his bid the cost of providing materials and equipment necessary to satisfy local or regional codes.

F. Provisions of the latest revisions to the Federal Occupational Safety and Health Act (OSHA) shall be satisfied.

G. Secure and pay for all permits and inspections required electrical work. Turn over all certificates of approval, by governing agencies, to the Architect for transmittal to Owner before payment is made for the work.

H. Give the proper authorities notices as required by law relative to the work in his charge. Comply with the regulations regarding temporary enclosures, obstructions or excavations and pay all legal fees involved.

I. The Electrical Contractor shall provide temporary electrical services adequate in size and characteristics, for use by all trades on site during project construction.

1.03 TESTS & DEMONSTRATION OF SYSTEMS

A. After installation but prior to energization, perform tests for grounds, short circuits and proper function. Faults in the installation shall be corrected.

B. Insulation resistance tests shall be made on the electrical system with not less than 1000V D.C. for 30 seconds using an approved megohmmeter (Biddle Megger or equal). Also, complete resistance/continuity tests on the grounding system.

C. The Contractor shall torque down all accessible bolts and perform rotation tests for all distribution and utilization equipment.

D. At each test site, the Contractor shall provide any test control power necessary to perform these tests.

E. Conduct such tests and adjustments of the equipment as required by the

Architect as necessary to verify performance requirements. Submit data to the Architect.

F. Before final payment, demonstrate to the Owner's satisfaction the proper operation of each of the systems comprising this Contract.

G. Instruct the Owner's maintenance personnel in the operation and maintenance of all electrical equipment and controls.

1.04 CLEANING AND FINISHING

A. After all tests have been completed, clean all equipment leaving everything in working order at the completion of this work.

B. All debris created by the execution of this work shall be removed

1.06 COORDINATION WITH OTHER TRADES

A. The Contract Drawings are diagrammatic only intending to show general runs and locations of conduit, equipment, terminals and specialties and not necessarily showing all required offsets, details and accessories and equipment to be connected. Take all field measurements necessary and assume responsibility for their accuracy. All work shall be accurately laid out with other Trades to avoid conflicts and to obtain a neat and workmanlike installation that will afford maximum accessibility for operation, maintenance and headroom.

B. Keep fully informed of the progress of the general construction. Install work that is to be concealed within the building construction in sufficient time to secure proper location without delay to the work of other trades. All conduit and outlet boxes concealed in masonry construction shall be installed during wall construction. Attend electrical work during the progress of building-in to prevent misalignments and damages to the electrical work.

C. The Contractor shall be responsible for coordinating with other trades (mechanical, plumbing, etc.), and shall verify any equipment and device voltage, phase and ampacity specifications. They shall furnish and install all necessary wiring, protective devices, etc., as recommended by the manufacturer and as required for the correct and proper operation of the installed equipment.

D. Examine the work of other trades when their work comes in contact with or is covered by this work. Do not attach to, cover up, or finish against any defective work, or install work in a manner which will prevent proper installation of the work of other trades.

E. Locate all electrical equipment, devices, equipment, etc. in the field in conjunction with drawings and building engineer. Coordinate routing of all feeders, conduit runs, pullboxes, etc. to avoid conflicts with existing ductwork, plumbing, and structural components.

1.07 GUARANTEE AND WORKMANSHIP

A. All materials and workmanship provided under the contract shall carry the standard warranty against all defects in material and workmanship. Any fault due to defective or improper material, equipment, workmanship or design which may develop shall be made good, forthwith, by and at the expense of the Contractor for the work under his Contract, including all other damage done to areas, materials and other systems resulting from this failure.

B. Manufacturers shall provide their standard guarantees for work under the Electrical Trades. However, such guarantees shall be in addition to and not in lieu of all other liabilities that the manufacturer and the Contractor may have by law or by other provisions of the Contract Documents

C. Workmanship shall be in accordance with the best practices of the trade. Journeymen electricians under the supervision of a competent foreman shall install electrical work

1.08 SUBMITTALS

A. Submit drawings and wiring diagrams in accordance with Division I on all items of equipment provided for review by the Engineer. These shall include, but not be limited to, the following:

Lighting and controls

B. The submittals will be reviewed only for general compliance and not for dimensions, quantities, etc. The submittals that are returned shall be used for procurement. The responsibility of correct procurement remains solely with the Contractor. The submittal review shall not relieve the Contractor of responsibility for errors or omissions and deviations from the contract requirements.

C. The Contractor shall insure submittals bear the Contractors' dated approval stamp and indicate all options. If the submittal shows variations from the requirements of the contract documents, for any reason, the Contractor shall make specific mention of such variation in his letter of transmittal. The Contractor shall note in red on the submittal any change in design or dimension on the item submitted including changes made by the manufacturer that may differ from catalog information.

D. Acceptance or rejection of the proposed substitutions shall be subject to approval by the Architect and Engineer. If requested, the Contractor shall submit (at their cost) inspection samples of both the specified and the proposed substitute items for review by the Engineer.

E. Contractor further agrees that if deviations, discrepancies, or conflicts between shop drawing submittals and the contract documents in the form of design drawings and specifications are discovered either prior to or after shop drawing submittals are processed by the Engineer, the design drawings and specifications shall control and shall be followed.

1.09 RECORD DRAWINGS

A. Each Contractor or Sub-contractor for Electrical work shall keep one complete set of the contract working drawings on the job site on which he shall record any deviations or changes from such contract drawings made during construction.

B. These Drawings shall be kept clean and undamaged, and shall not be used for any purpose other than recording deviations from working drawings and exact locations of concealed work.

1.10 OPERATING, MAINTENANCE AND SERVICE MANUALS

A. The Contractor shall thoroughly instruct the representative of the Owner, to the complete satisfaction of the Architect, in the proper operation of all systems and equipment provided by him. The Contractor shall make arrangements, via the Architect, as to whom the instructions are to be given in the operation of the basic and auxiliary systems and the period of time in which they are to be given. The Architect shall be completely satisfied that the representative of the Owner has been thoroughly and completely instructed in the proper operation of all systems and equipment before final payment is made. If the Architect determines that complete and thorough instructions have not been given by the Contractor to the Owner's representative, then the Contractor shall be directed by the Architect to provide whatever instructions are necessary until the intent of this paragraph of the specification has been complied with.

B. Deliver to the Owner all keys, special tools and appurtenances for proper operation and maintenance of the equipment. Provide complete bound set of operating and maintenance instructions for all electrical equipment and controls.

PART 2 - PRODUCTS

2.01 EQUIPMENT AND MATERIALS

A. Equipment and materials used on this job shall be new, U.L. labeled, and O.S.H.A. approved.

B. Equipment and materials shall be protected and be the responsibility of this Contractor until formally accepted by the Owner.

C. Material and equipment which for which examination service is provided shall bear the Underwriter's Label.

D. Materials and equipment provided under this Contract shall be new and of the

quality herein specified. Each class of materials shall be of the same type and make throughout the building.

E. All manufacturers of electrical equipment shall demonstrate to the satisfaction of the Contractor and Engineer that their equipment will function properly under the conditions of use as indicated on the drawings and as specified herein. Dimensions, weights, operating characteristics and all other related appurtenances should be verified before submittal of shop drawings.

PART 3 - EXECUTION

3.01 EQUIPMENT CONNECTIONS

A. Serve and connect equipment being installed during the construction period, but provide facilities only for serving equipment that will be moved in, set and connected later by the Owner. Provide cords and caps where required and fuse/stron fuses in switches later for future equipment connections.

3.02 SERVICE SHUTDOWNS

A. Prior to any isolation of systems, shutdowns or demolition the Contractor shall provide necessary investigation and notify the Facilities Engineering/Maintenance personnel of work to be performed so as to avoid any detrimental shutdown of systems to adjacent spaces.

B. Maintain existing electrical systems in service until the new systems are complete and ready for service. Disable the systems only to make switchovers and connections. Any service shutdowns that may be required shall be scheduled with and approved by the Owner. All shutdowns shall be scheduled with and approved by the Owner. A minimum of a one-week notice shall be given prior to any service shutdown. No additional compensation shall be allowed for these shutdown periods even though overtime work may be required.

END OF SECTION

SECTION 16050 - BASIC MATERIALS AND METHODS

PART 1 - GENERAL

1.01 GENERAL

A. Work Includes

Conduits
Wire and Cable
Wiring Devices
Supporting Devices

B. Related Work Specified Elsewhere

Section 16010 - General Electrical Provisions
Section 16050 - Grounding and Bonding

C. Products

1. Material and equipment built into the work for which examination service is provided shall bear the Underwriter's Label.
2. Materials and equipment provided under this Contract shall be new and of the quality herein specified. Each class of materials shall be of the same type and make throughout the building.

PART 2 - PRODUCTS AND EXECUTION

2.01 CONDUITS

A. Materials

1. Conduit shall be rigid galvanized or intermediate grade in exterior masonry walls; masonry walls below grade; concrete floors, walls or slabs; damp or wet locations; or exposed below 8 feet above finished floor. Use P.V.C. in ground applications. All other interior conduits may be EMT or MC as approved by the NEC.
2. Rigid conduit fittings shall be threaded fittings. Rigid conduit couplings and hubs to have no less than five (5) threads of conduit engaged and screwed up tight.
3. Exterior underground conduit shall be P.V.C. schedule 40, and must be encased in 6" of concrete under drives or roadways. The transition to rigid conduit must be made before the conduit enters the building.

B. Execution

1. Conduits shall be continuous and be secured to all boxes in a manner that each system shall be electrically continuous from point of service to all outlets. Terminals of all conduits shall be provided with locknuts and bushings. Plug ends of each conduit with an approved cap or disc to prevent the entrance of foreign materials during construction.
2. All conduit terminating in sheet steel enclosures shall have double locknuts and a bushing. Locknuts shall be a type which will "bite" into the metal of the box. All bushings shall be of the insulating type.
3. Homeruns to panels shall be 3/4" minimum.
4. Exterior underground conduits shall be 30" below grade, minimum.
5. A separate ground must be run in all P.V.C. conduit. Conduit size shall be increased to accept ground when required. Vertical transitions shall be made with rigid steel elts.

2.02 WIRE AND CABLE

A. Materials

1. Wire and cable for lighting feeders shall be 600 volt type THHN/THWN or XHHW copper. Aluminum wiring is an acceptable alternate for feeders 100 amperes or larger.
2. Wire and cable for power and lighting branch circuits shall be TW/UF copper for #8 and smaller and THHN or XHHW copper for #8 and larger. Wire sizes shall be based on the 60°C ampacities for wire sizes #14 through #1AWG, and 75°C ampacities for wire sizes #1/0 AWG and larger.
3. Minimum wire size for power and lighting circuits shall be #12. Wire sizes #12 and smaller shall be solid. Wire sizes #10 and larger shall be stranded.
4. Where size is not indicated, Conductor size #12 minimum shall be used for circuits less than 120 feet and size #10 minimum shall be used for circuits greater than 120 feet.
5. Joints in #10 and smaller wire shall be made with Minnesota Mining and Manufacturing Co. insulated "Scotch Locks", Ideal Co. "Wing-Nut", T & B Co. "Piggy" connectors, or with mechanically crimped sleeves as manufactured by T & B Co., or Ideal Co., or Ideal Co. Connector sleeves shall be insulated with pressure sensitive electrical tape equal to Minnesota Mining and Manufacturing Co. Scotch No. 33 "plus" or Raychem Corp. heat shrinkable tape.
6. Joints in #8 and larger shall be made with pressure type mechanical connectors and insulated with electrical tape to 150% of the insulating value of the conductor insulation.
7. Color code wire and cable for circuits as called for in the National Electric Code.
8. All mechanical wire & cable terminations shall be torque-tightened with torque wrench or torque screwdriver to manufacturer's recommended torque values.

2.03 WIRING DEVICES

A. Materials

1. Local light switches shall be back and side wired, 20 ampere, 120/277 volts, AC Specification Grade. The following manufacturers indicated are acceptable: Hubbell, Legrand, Leviton, Bryant.
2. All switch and convenience outlet plates shall be smooth finish, thermoplastic material such as nylon to suit outlets provided. To insure uniform color, plates and devices shall be of one manufacturer. In unfinished areas, use cadmium plated round corner steel cover plates.
3. All 15- and 20-ampere, 120-volt nonlocking type receptacles in the areas specified in NEC 406.12(1) through (7) shall be listed tamper resistant.
4. Ground fault circuit interrupter (G.F.C.I.) receptacles, where required by local code, shall be Hubbell #AFGF15TR.
5. Weatherproof receptacles shall be Hubbell #HBL5262WR duplex outlet with Hubbell #HBL5221 polycarbonate gray plate, box mount.
- B. Execution
1. Provide receptacles and switches as indicated. Colors of device and plates shall be selected by the Architect. Verify before installation.

2.05 SUPPORTING DEVICES

A. All hardware, supports, hangers, angle iron, channels, rods, clamps necessary to install electrical equipment and lighting fixtures shall be supplied to suit conditions and application. The use of perforated straps will not be permitted.

B. Supporting devices shall be galvanized or aluminum material.

2.07 EXCAVATION, CONCRETE AND BACKFILL

A. Provide all excavation, concrete and backfill required for electrical work exclusively. All concrete work shall be in accordance with the requirements of The State of Ohio.

2.08 PADS, FOUNDATIONS AND ENCLOSURES

A. Provide pads, foundations, and enclosures required for electrical equipment. All floor mounted or exterior equipment is to be on 4" concrete pads unless otherwise indicated.

B. Exterior concrete shall be thourasoeaded.

C. Pads for Utility Company transformers: follow Utility Company requirements.

END OF SECTION

SECTION 16400 - SERVICE AND DISTRIBUTION

PART 1 - GENERAL

1.01 GENERAL

A. Work Includes:

Grounding
Branch Circuit Panelboards

B. Related Work Specified Elsewhere

Section 16010 - General Electrical Provisions
Section 16050 - Basic Electrical Materials and Methods
Section 16400 - Power Distribution Equipment

1.02 GROUNDING

- A. Ground all conduits, cabinets, motors, panels and other exposed non-current carrying metal parts of electrical equipment in accordance with all provisions of the National Electric Code and local codes.
- B. Ground all conduits by means of grounding bushings on terminations at panelboards with an installed #12 conductor to grounding bus
- C. Grounding of the electrical system shall be by means of an insulated grounding conductor installed with circuit conductors in all conduits. Grounding conductors shall be sized in accordance with N.E.C. 250.95 and shall run from grounding bus of serving panel to ground bus of served panel, grounding screw of receptacles, lighting fixture housings, light switch outlet boxes or metal enclosures of served equipment.
- D. Conductors for grounding system shall be soft or medium hard drawn, stranded, bare copper except where otherwise noted.
4. All conductors #8AWG and smaller shall be insulated

PART 3 - EXECUTION

3.01 GROUNDING

- A. All connections of ground conductors to bus bars, structural members, pipes, or fences and splices of ground conductors shall be made by exothermic welds except where otherwise noted. All connections to bar lugs shall be exothermic weld or compression type. Bolted type connection of ground conductors may only be made where terminal lugs or blocks have been furnished and installed in equipment by the manufacturer.
- B. The resistance to ground for the entire grounding system shall not exceed 25 ohms under normal dry conditions.
- C. Tests of grounding resistance shall not be made within 24 hours after a rainfall. If after testing the system, it is found that the resistance to absolute earth exceeds 15 ohms, the Contractor shall install the necessary number of ground rods to reduce the resistance to less than 15 ohms. These tests shall be conducted in the presence of the local Electrical Inspector. The test results shall be submitted to the Owner/Engineer.

END OF SECTION

SECTION 16500 - LIGHTING

PART 1 - GENERAL

1.01 GENERAL

A. Work Includes

Exterior Lighting

PART 2 - PRODUCTS AND EXECUTION

2.01 EXECUTION

- A. Light fixtures (luminaires) shall be as specified on the lighting fixture schedule as indicated on the drawings. Where fixture types are indicated as a manufacturer's series, the contractor shall provide the correct trim, mounting hardware, lengths, etc., to complete the installation as indicated on the electrical/architectural drawings.
- B. All fixtures shall be securely supported with approved hangers. Fixtures shall be supported from structural ceiling or structural supports, not suspended ceiling supports, independent of ceiling material. Fixtures shall be secured per IBC, state and local seismic requirements. Surface mounted fixtures must have additional ceiling support as acceptable by the Architect.

END OF SECTION



riverstone

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Laurel Lake Villa
200 Laurel Lake Drive

ELECTRICAL SITE LIGHTING
SPECIFICATIONS



ES1.2