



12.05.2023 RDLA 22063S

## LAUREL LAKE VILLAS | HUDSON, OH | BRANDYWINE

The drawings, specifications, ideas, design and arrangements represented thereby are and shall remain the property of the architect. No part of shall be copied, disclosed to others or used in conjunction with any work or project other than the specific project for which they have been prepared and developed without the written consent of the architect. Visual contact with these drawings or specifications shall constitute conclusive evidence of acceptance of these restrictions. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job site, and this office must be notified of any variations from the dimensions and conditions shown by these drawings.



**RDL**  
ARCHITECTS





12.05.2023 RDLA 22063S

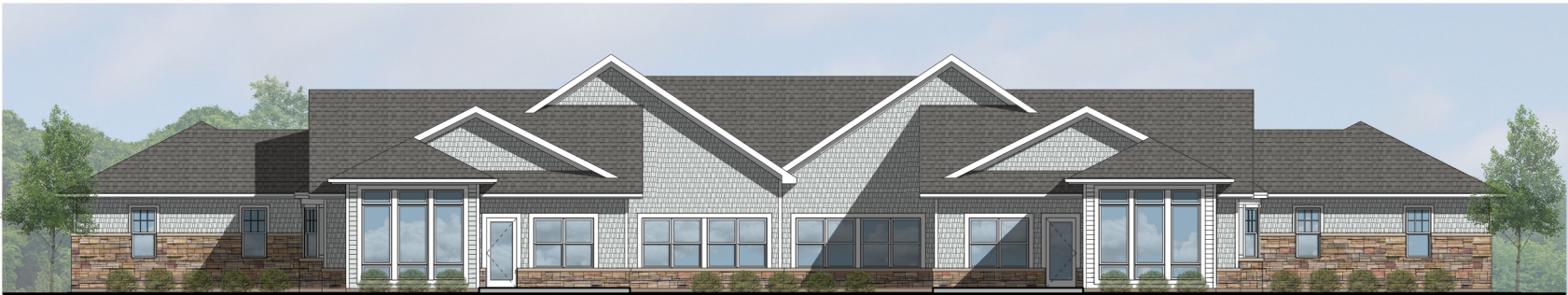
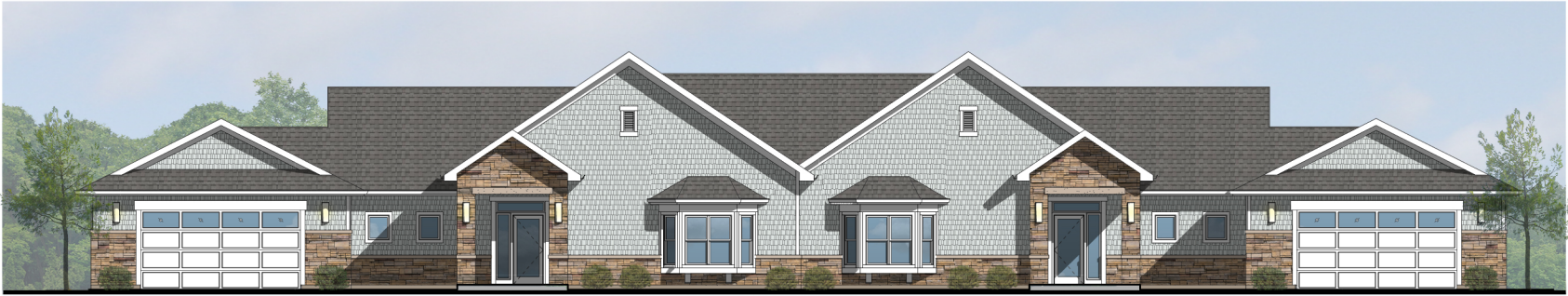
## LAUREL LAKE VILLAS | HUDSON, OH | CASCADE

The drawings, specifications, ideas, design and arrangements represented thereby are and shall remain the property of the architect. No part of shall be copied, disclosed to others or used in conjunction with any work or project other than the specific project for which they have been prepared and developed without the written consent of the architect. Visual contact with these drawings or specifications shall constitute conclusive evidence of acceptance of these restrictions. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job site, and this office must be notified of any variations from the dimensions and conditions shown by these drawings.



**RDL**  
ARCHITECTS





12.05.2023 RDLA 22063S

## LAUREL LAKE VILLAS | HUDSON, OH | PORTAGE

The drawings, specifications, ideas, design and arrangements represented thereby are and shall remain the property of the architect. No part of shall be copied, disclosed to others or used in conjunction with any work or project other than the specific project for which they have been prepared and developed without the written consent of the architect. Visual contact with these drawings or specifications shall constitute conclusive evidence of acceptance of these restrictions. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job site, and this office must be notified of any variations from the dimensions and conditions shown by these drawings.



**RDL**  
ARCHITECTS





12.05.2023 RDLA 22063S

## LAUREL LAKE VILLAS | HUDSON, OH | CUYAHOGA

The drawings, specifications, ideas, design and arrangements represented thereby are and shall remain the property of the architect. No part of shall be copied, disclosed to others or used in conjunction with any work or project other than the specific project for which they have been prepared and developed without the written consent of the architect. Visual contact with these drawings or specifications shall constitute conclusive evidence of acceptance of these restrictions. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job site, and this office must be notified of any variations from the dimensions and conditions shown by these drawings.



**RDL**  
ARCHITECTS

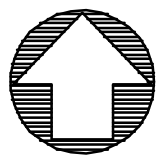
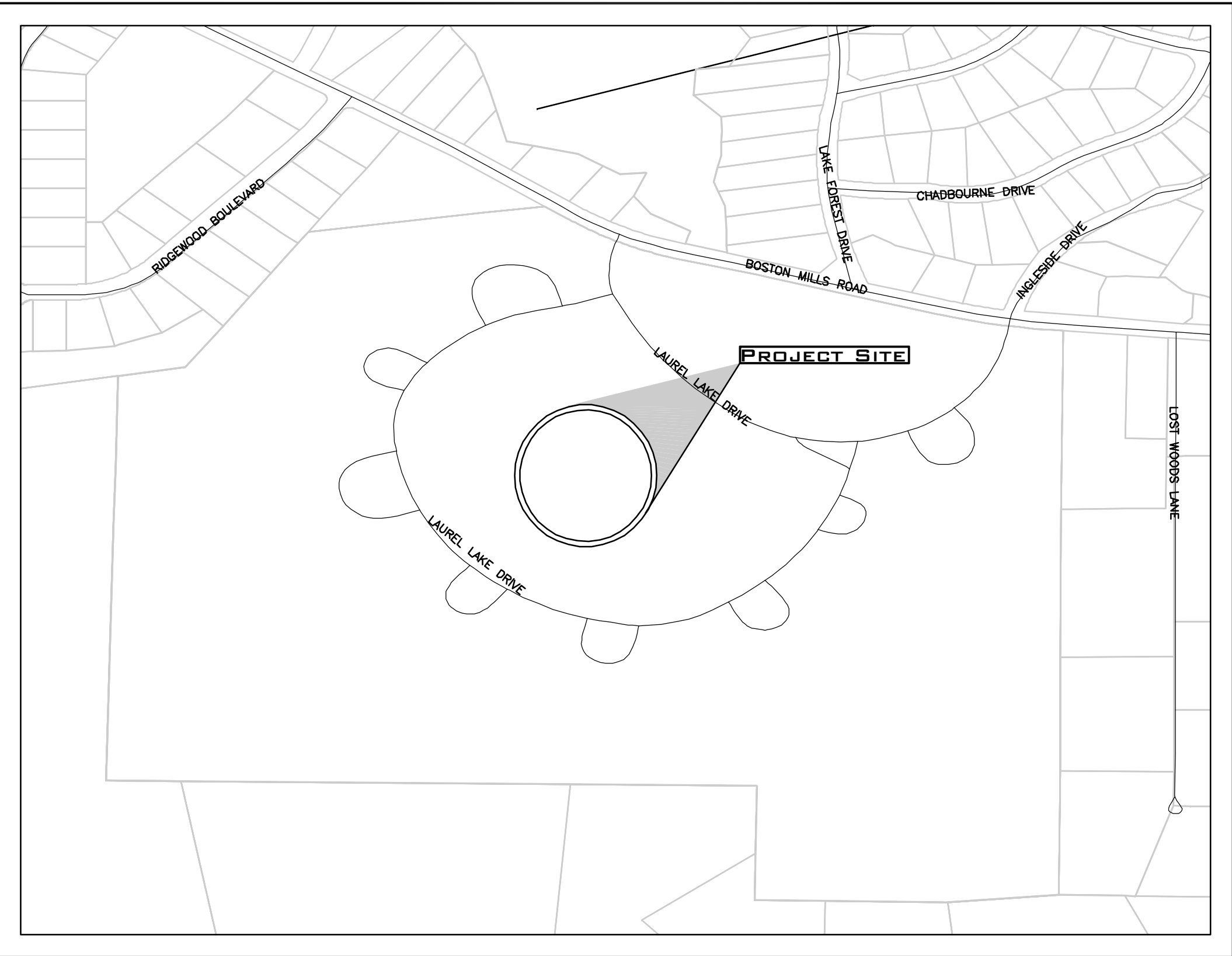


# IMPROVEMENT PLANS FOR LAUREL LAKE VILLA ADDITIONAL BUIDINGS 1-5, 8,9

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-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	C8.01-C8.03
SWPPP	C9.01-C9.04
ME NOTES & DETAILS	ME0.01-ME0.02
ME PLAN - OVERALL	ME1.00
ME SITE PLAN - INDIVIDUAL SITES	ME1.01-ME1.05



VICINITY MAP  
SCALE: 1" = 400'

  
DAVID PIETRANTONE P.E. #61756



12/26/2023  
DATE

### PREPARED FOR:

LAUREL LAKE  
200 LAUREL LAKE DRIVE  
HUDSON, OHIO 44236



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND - OHIO - 44114  
PHONE: (216) 233-1600 FAX: (216) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

### PLAN REVISIONS:


### PAGE REVISIONS:


ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

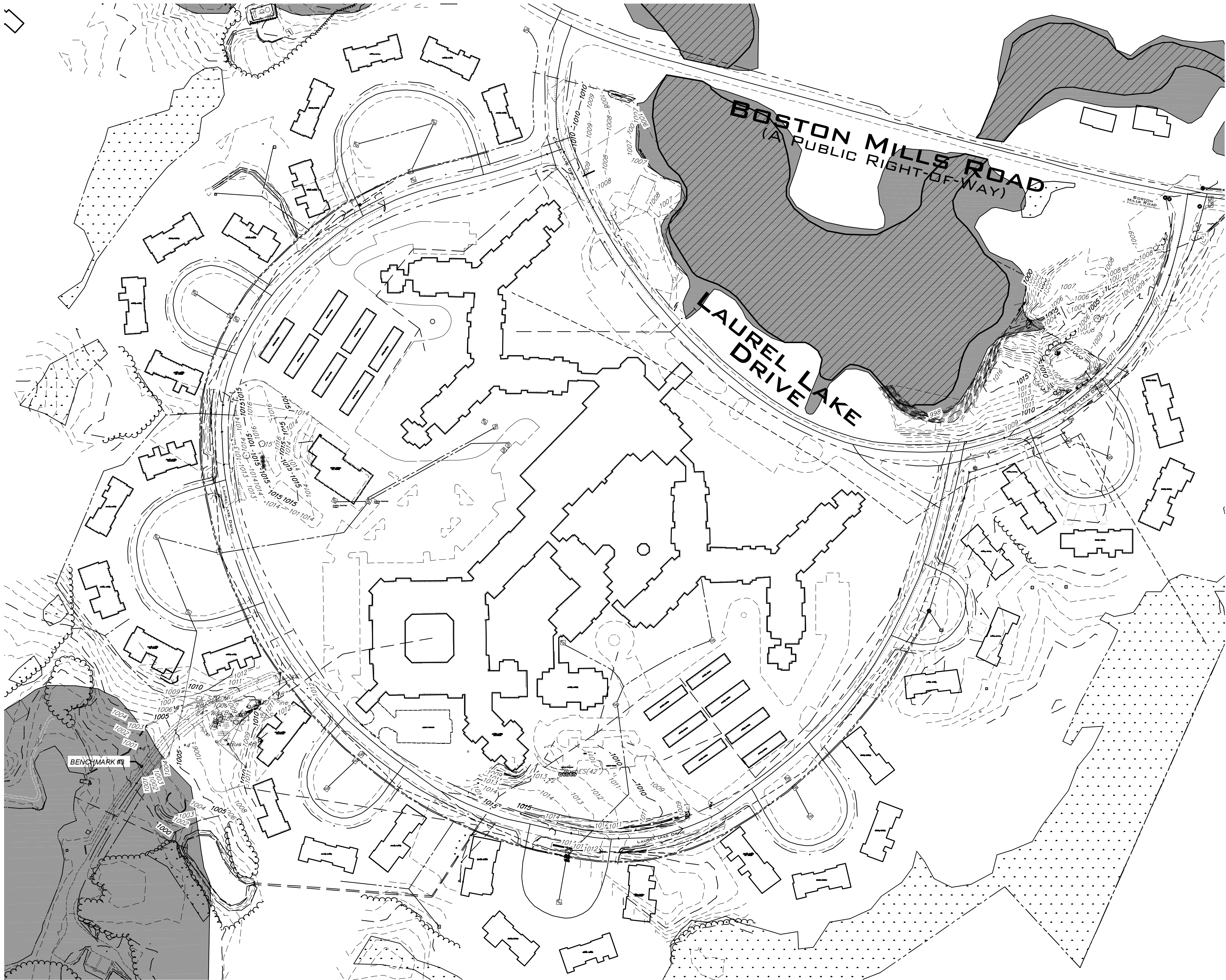
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

TITLE PAGE



C1.01





LEGEND

	Monument Box Found		Spot Elevation Tag
	Iron Pin or Pipe Found		Hydrant
	5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747		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		Proposed	
Original Sublot Line			
Original Lot Line			
Centerline			
Property Line			
Right-of-way Line			
Easement Line			
Railroad Tracks			

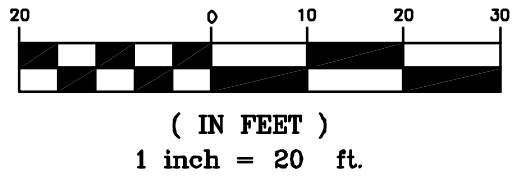
  

Electric Line		Existing		Proposed	
Gas Line					
Sanitary/Combination Sewer					
Storm Sewer					
Waterline					
Fence Line (Wooden)					
Fence Line (Chain-Link)					
Guardrail					

Ac.	Acres	L.C.A.	Limited 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	M.H.	Manhole
BW	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
Records	Records	Prop	Proposed
C.L.F.	Chain-link Fence	Rec./R.	Record
Cir.	Clears	R/W	Right-of-way
C.O.	Clean Out	San.	Sanitary
Comb.	Combination	S/L	Square Feet
Conc.	Concrete	S/L	Sublot
Conn.	Connection	Sim.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
Main	Main	T/C	Top of Curb
Elec	Electric	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
Inv.	Invert	Wat	Water

GRAPHIC SCALE



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

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
**12/26/2023**  
**NOT FOR CONSTRUCTION**

**LAUREL LAKE VILLA**  
**200 LAUREL LAKE DRIVE**

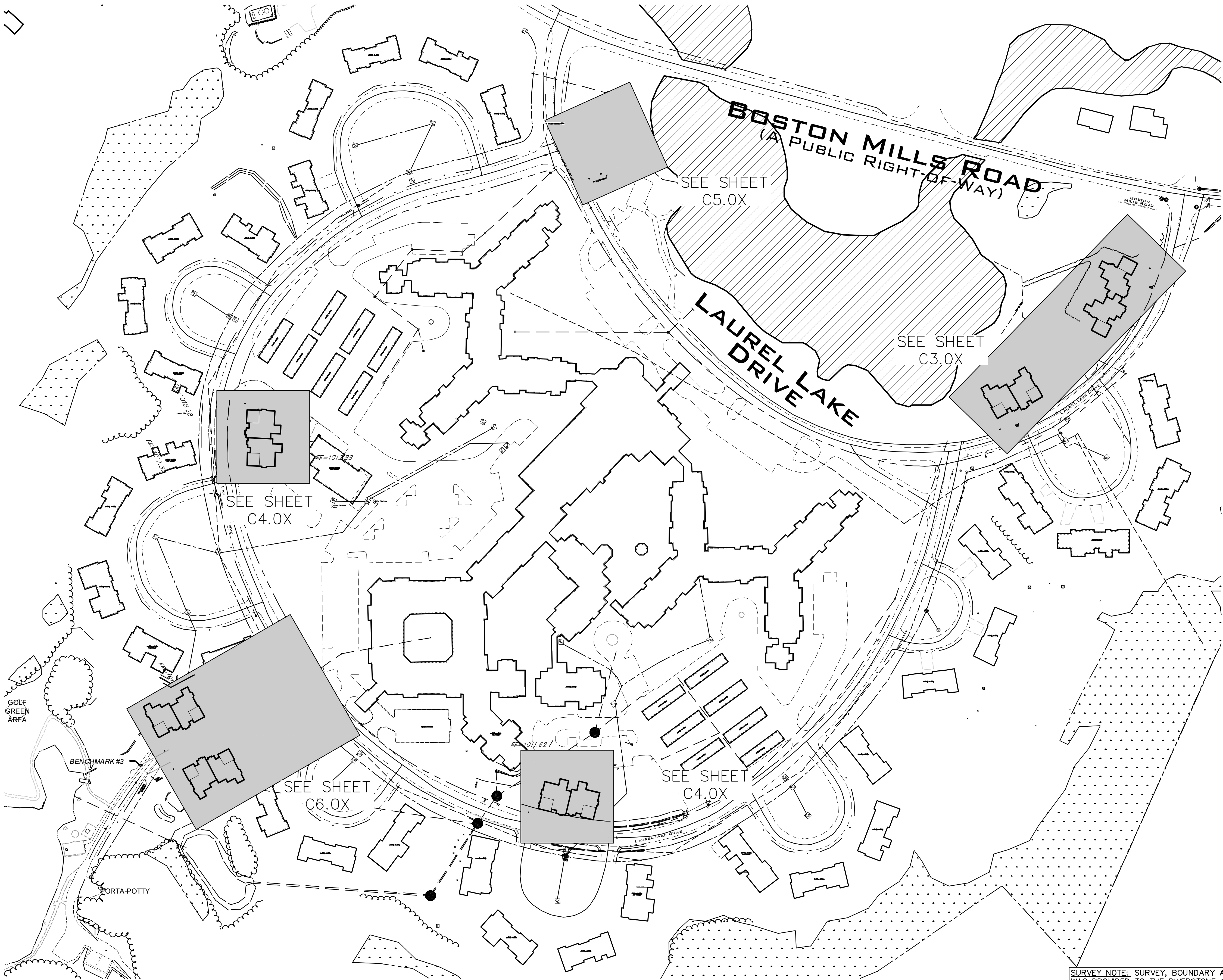
EXISTING CONDITIONS



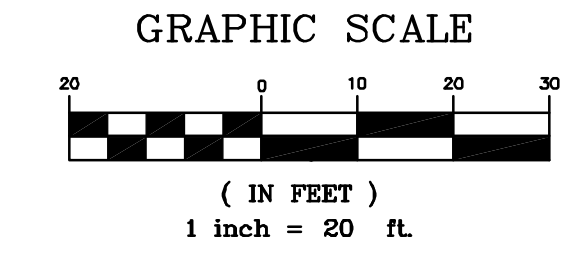
**OGPUPS**  
Ohio Oil & Gas Production Underground Protection Service  
Call 814-775-2884 or 811

**C2.00**

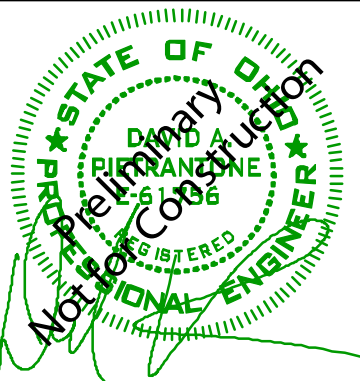




SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR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



LEGEND			
	= Monument Box Found		= Spot Elevation Tag
	= Iron Pin or Pipe Found		= Hydrant
	= 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747		= 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
	= Ballard		
	= 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	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	Pa.	Page
CB	Catch Basin	P.P.N.	Permanent Parcel Number
C.C.M.R.	Cuyahoga County Map	Prop	Proposed
C.L.F.	Chain-Link Fence	Rec./R.	Record
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	San.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conc.	Concrete	S/L	Sublot
Conn.	Connection	Strm.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
Ele	Electric	T/C	Top of Curb
Elev	Elevation	Tele	Telephone
Encr.	Encroaches	T.F.	Top Of Footer
Ex.	Existing	T.T.	Test Tee
F.F.	Finished Floor	TW	Top of Wall
GUT	Gutter	Typ.	Typical
Inv	Invert	Vol.	Volume
		Wat	Water



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE, SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE  
SCHEMATIC PLAN



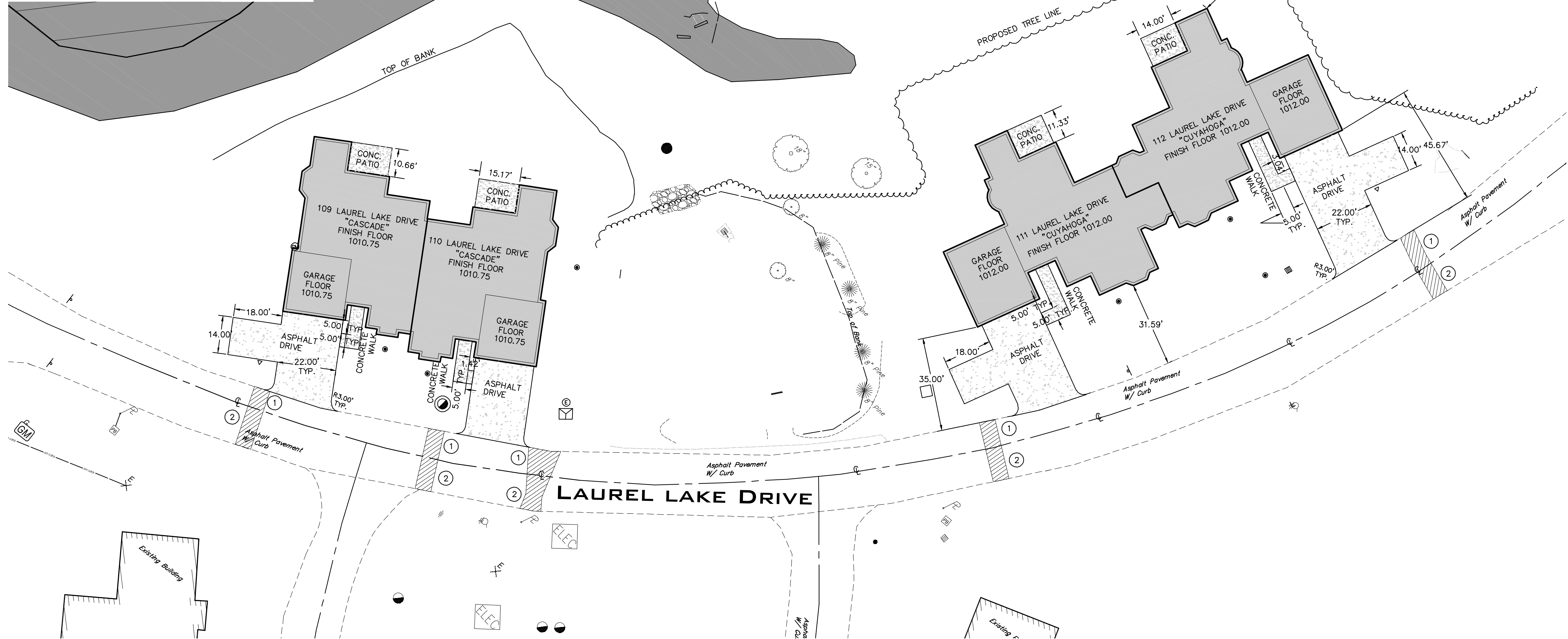
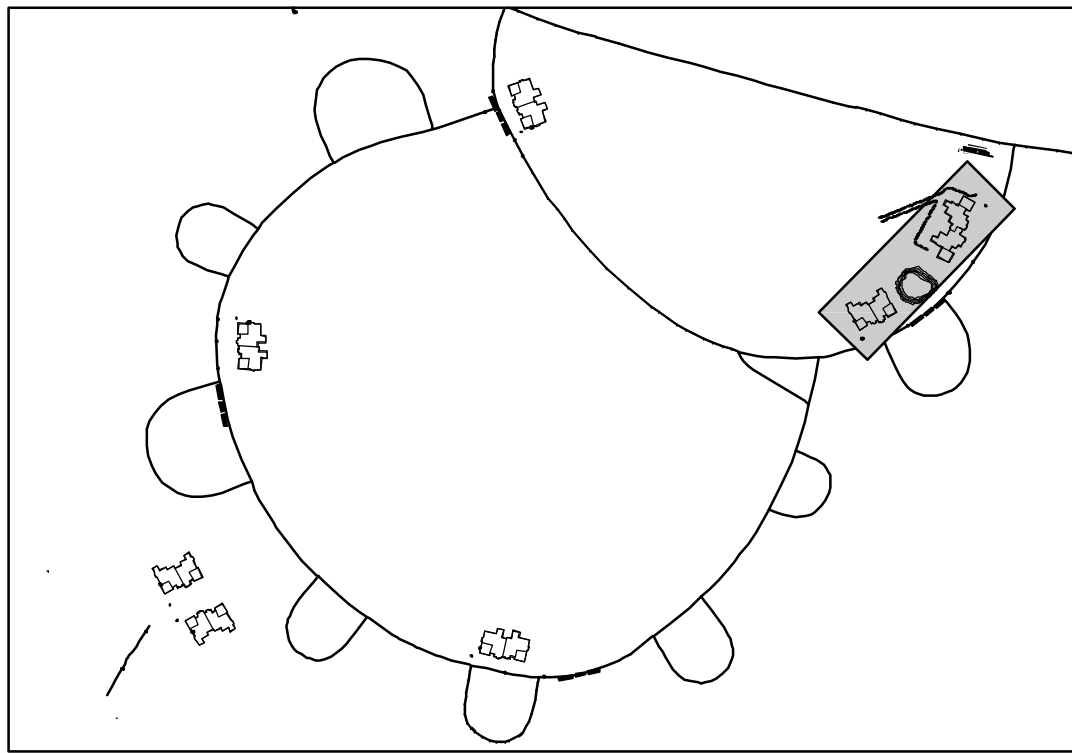
OGPUPS  
Ohio Oil & Gas Producers' Underground Protection Service  
Call (844) 775-2864 or 811

C2.01

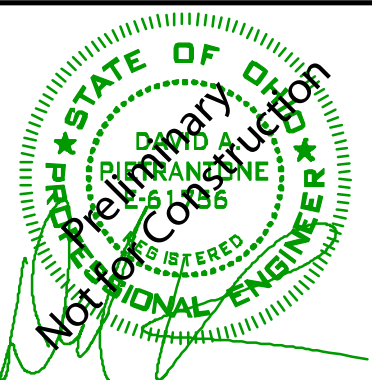








- GENERAL SITE PLAN NOTES:
- 1 CONTRACTOR SHALL PROVIDE A CLEAN SMOOTH EDGE AND ENSURE THE INTEGRITY OF THE ASPHALT PAVEMENT TO REMAIN.
  - 2 CONTRACTOR SHALL REPAIR PAVEMENT AFTER NEW UTILITY CONNECTIONS ARE INSTALLED. SEE DETAIL SHEET C6.01.



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND - OHIO - 44114  
PHONE: (216) 491-1600  
WWW.RIVERSTONEDESIGN.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

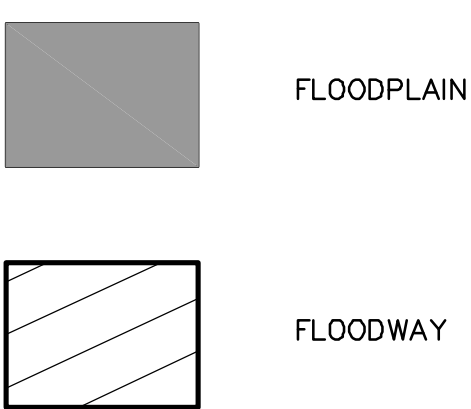
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

SITE PLAN - BUILDING 1&2

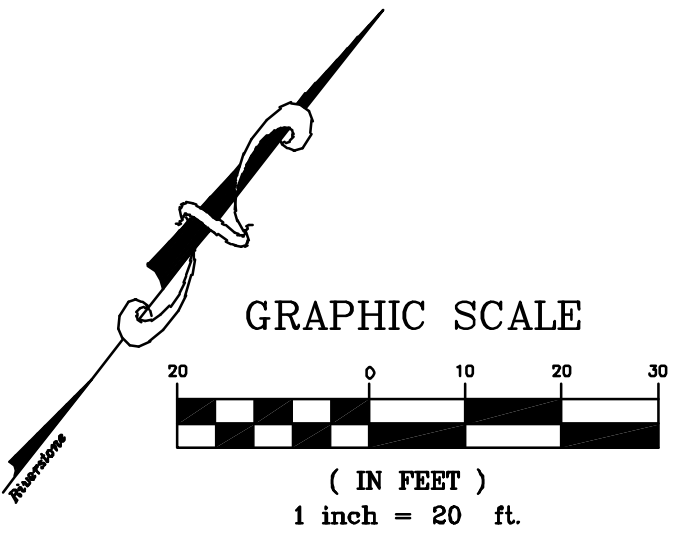
- |                                    |                       |
|------------------------------------|-----------------------|
| = Monument Box Found               | = Spot Elevation Tag  |
| = Iron Pin or Pipe Found           | = Hydrant             |
| = 5/8" Iron Pin Set and Capped     | = Water Service Valve |
| = Riverstone Company Dudley PS6747 | = 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                    | = Round Curb Inlet    |
| = Electric Box                     | = Cleanout/Test Tee   |
| = Cable Box                        |                       |
| = Ballard                          |                       |

- 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
- = Proposed
- = Right-of-way
- = Sanitary
- = Storm
- = Water
- = Electric
- = Gas
- = Sanitary/Combination Sewer
- = Storm Sewer
- = Waterline
- = Fence Line (Wooden)
- = Fence Line (Chain-Link)
- = Guardrail

- |          |                             |          |                         |
|----------|-----------------------------|----------|-------------------------|
| Ac.      | Acres                       | L.C.A.   | Limited Common Area     |
| Adj.     | Adjacent                    | Meas./M. | Measured                |
| Asp.     | Asphalt                     | MH       | Manhole                 |
| B.F.     | Basement Floor              | Obs.     | Observed                |
| Calc./C. | Calculated                  | Pg.      | Page                    |
| CB       | Catch Basin                 | P.P.N.   | Permanent Parcel Number |
| C.C.M.R. | Cuyahoga County Map Records | R        | Record                  |
| C.L.F.   | Chain-link Fence            | R/W      | Right-of-way            |
| Clr.     | Clears                      | 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                    | TBR      | To Be Removed           |
| Encr.    | Encroaches                  | Tele     | Telephone               |
| Ex.      | Existing                    | T.F.     | Top Footer              |
| F.F.     | Finished Floor              | Vol.     | Volume                  |
|          |                             | Wat      | Water                   |



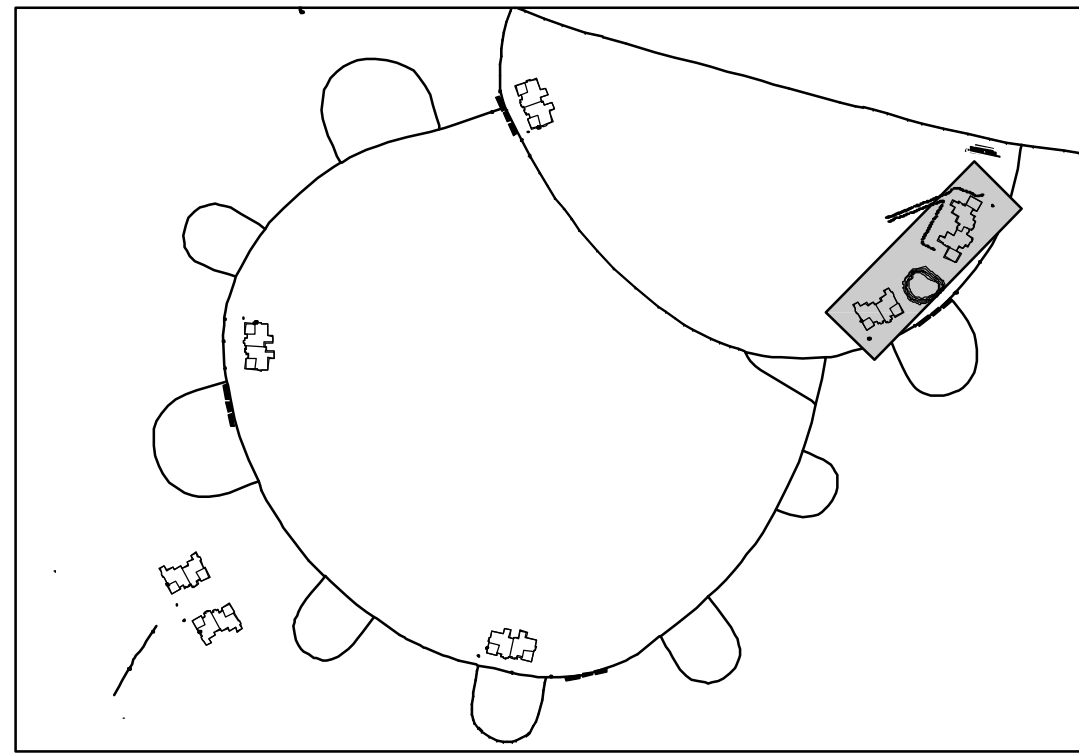
SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR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



OGPUPS  
Ohio Oil & Gas Produces Underground Protection Service  
Call 814-755-2884 or 811

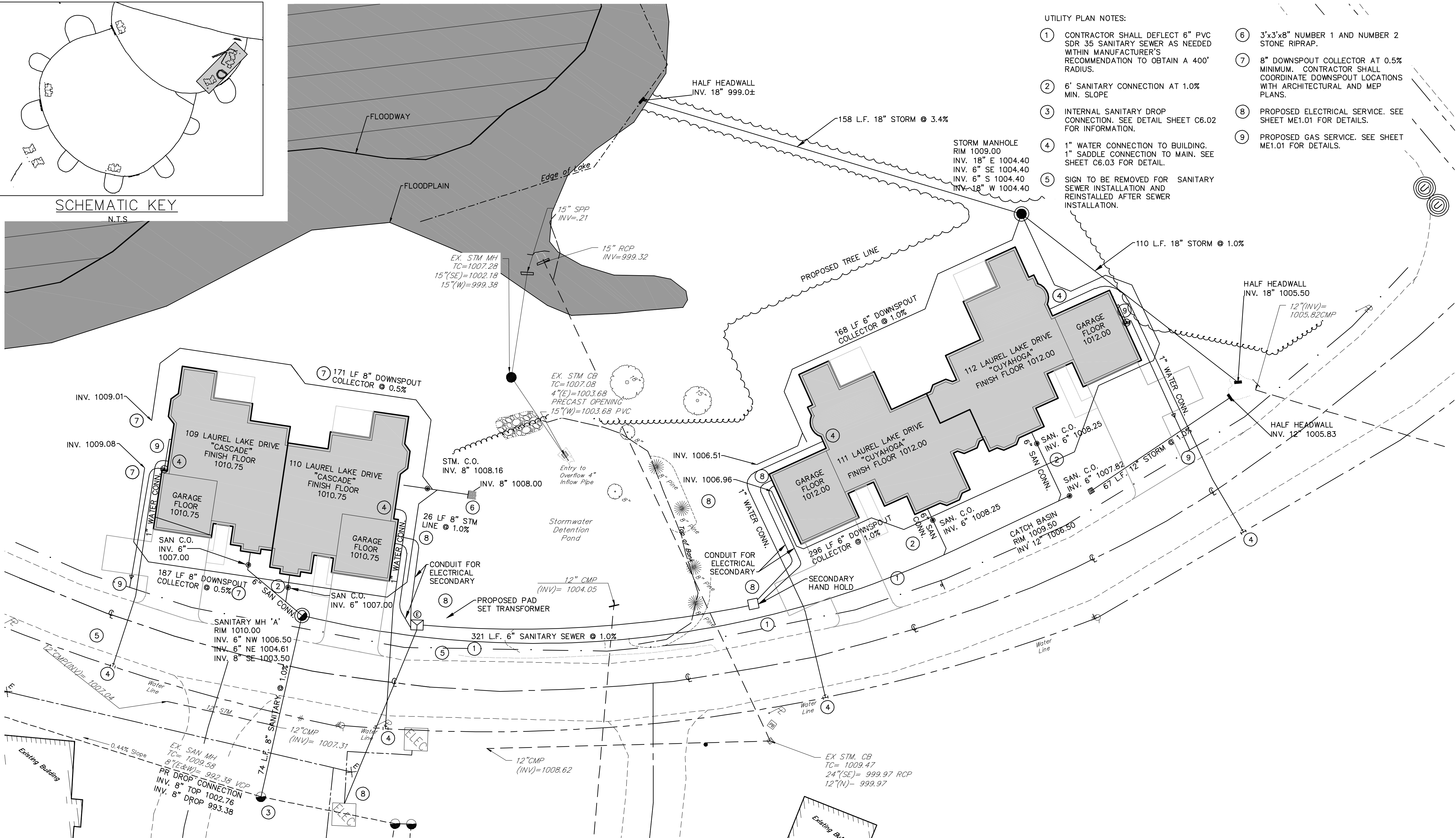
C3.02





SCHEMATIC KEY

N.T.S.



LEGEND

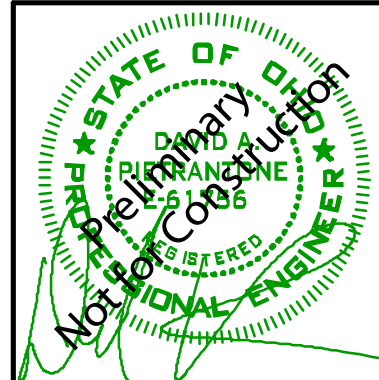
	Monument Box Found		Spot Elevation Tag
	Iron Pin or Pipe Found		Hydrant
	5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747		Water Service Valve
	P.U. Nail		Water Valve
	Gas Meter		Water Meter
	Gas Valve		Reducer
	Utility Pole		Storm Manhole
	Light Pole		Sanitary Manhole
	Guy Anchor & Line		Curb Inlet
	Telephone Box		Catch Basin
	Electric Box		Round Curb Inlet
	Cable Box		Cleanout/Test Tee
	Bollard		

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	L.C.A.	Limited Common Area
Adj.	Adjacent	Meas./M.	Measured
Asp.	Asphalt	MH	Manhole
B.F.	Basement Floor	Obs.	Observed
Calc./C.	Calculated	Page	Page
CB	Catch Basin	P.P.N.	Permanent Parcel Number
C.G.M.R.	Cuyahoga County	Property	Property
Map Records	Map Records	Rec./R.	Record
Centerline	Centerline	R/W	Right-of-way
C.L.F.	Chain-link Fence	S/L	Sanitary
Clear.	Clears	Sq.Ft.	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 Main	TBR	To Be Removed
Elec.	Electric	Tele	Telephone
Encr.	Encroaches	T.F.	Top Footer
Ex.	Existing	Vol.	Volume
F.F.	Finished Floor	Wat	Water

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 SANITARY 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.



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

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

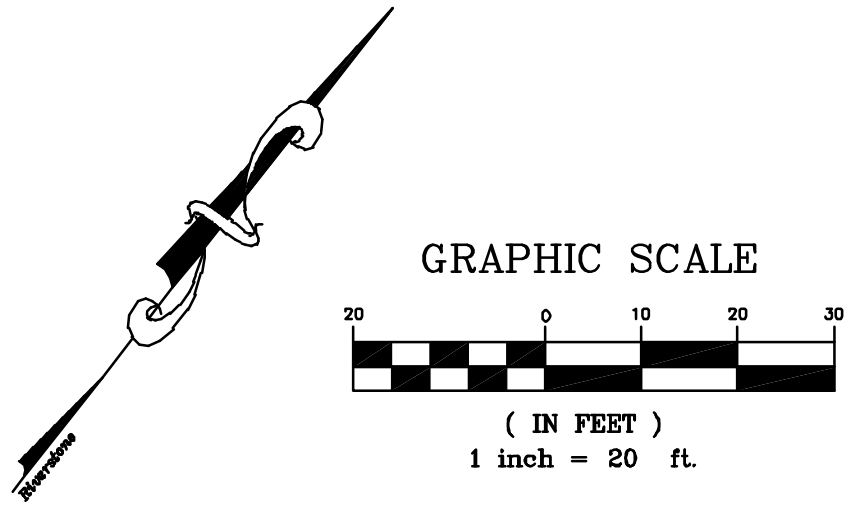
UTILITY PLAN - BUILDING 1&2



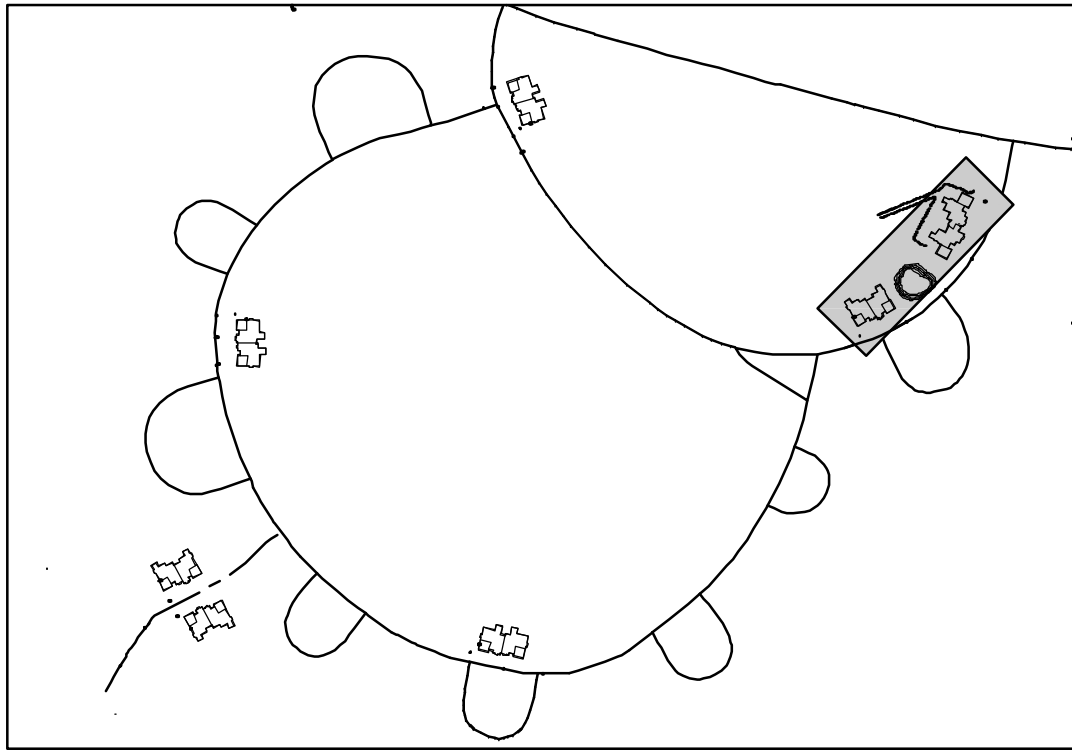
**OGUPS**  
Ohio Oil & Gas Producer Underground Protection Service  
Call 814-775-2884 or 811

**C3.03**

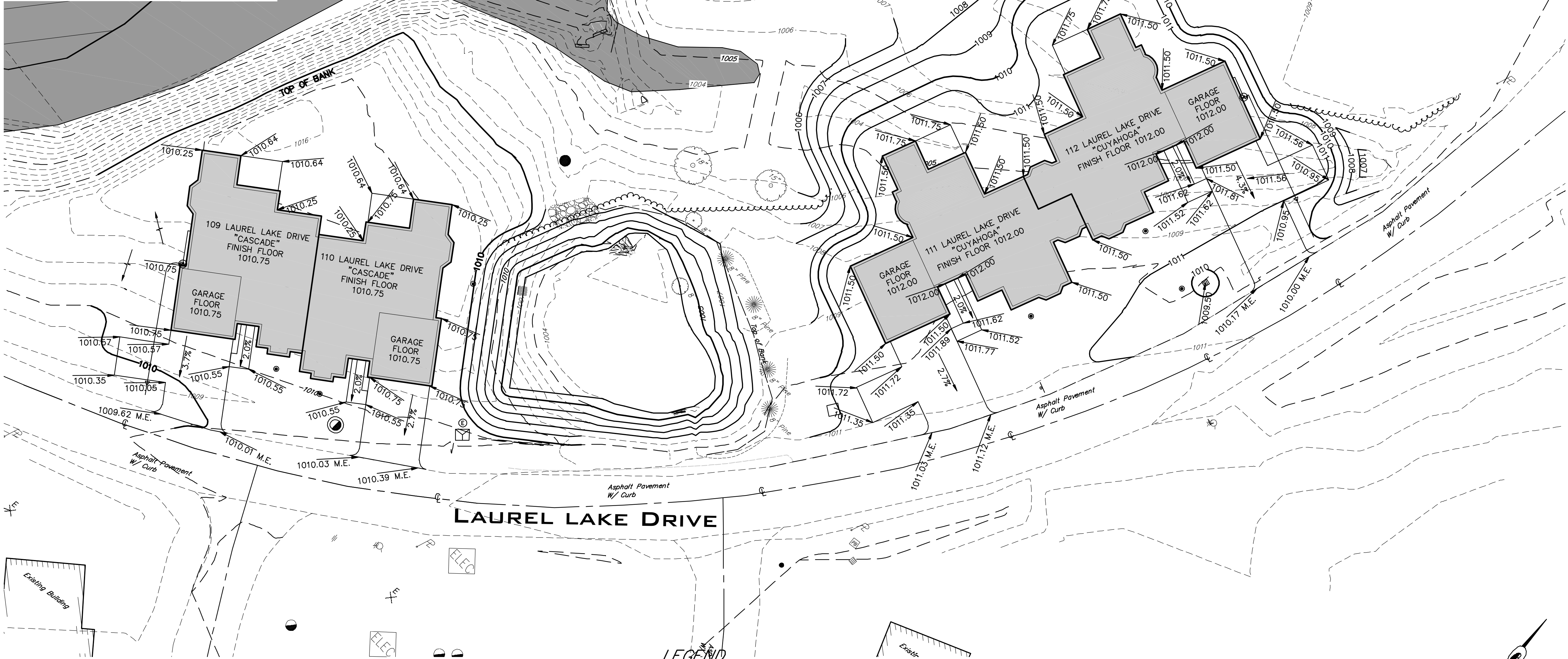
SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR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







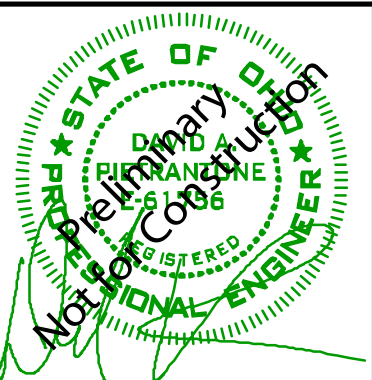
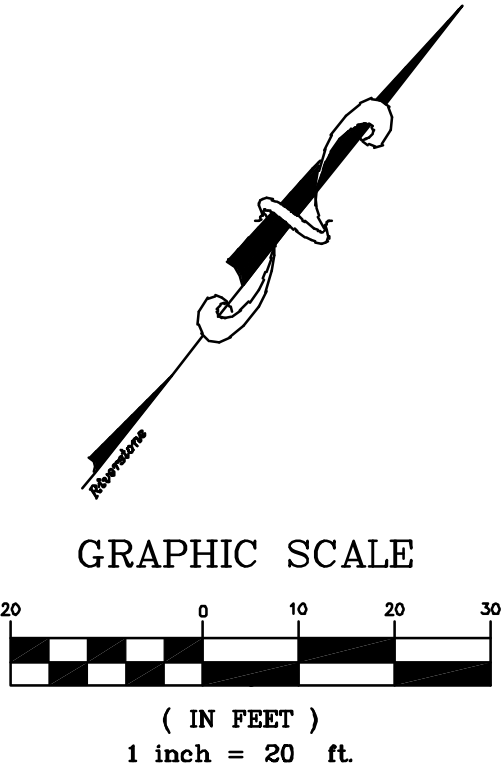
SCHEMATIC KEY  
N.T.S.



LEGEND

<b>Legend</b>	<b>Legend</b>	<b>Legend</b>
<ul style="list-style-type: none"><li>Monument Box Found</li><li>Iron Pin or Pipe Found</li><li>5/8" Iron Pin Set and Capped</li><li>P.K. Nail</li><li>Gas Meter</li><li>Gas Valve</li><li>Utility Pole</li><li>Light Pole</li><li>Guy Anchor &amp; Line</li><li>Telephone Box</li><li>Electric Box</li><li>Cable Box</li><li>Bollard</li></ul>	<ul style="list-style-type: none"><li>Spot Elevation Tag</li><li>Hydrant</li><li>Water Service Valve</li><li>Water Valve</li><li>Water Meter</li><li>Reducer</li><li>Storm Manhole</li><li>Sanitary Manhole</li><li>Curb Inlet</li><li>Catch Basin</li><li>Round Curb Inlet</li><li>Cleanout/Test Tee</li></ul>	<ul style="list-style-type: none"><li>Ex. Parcel Line</li><li>Original Sublot Line</li><li>Original Lot Line</li><li>Centerline</li><li>Property Line</li><li>Right-of-way Line</li><li>Easement Line</li><li>Railroad Tracks</li><li>Electric Line</li><li>Gas Line</li><li>Sanitary/Combination Sewer</li><li>Storm Sewer</li><li>Waterline</li><li>Fence Line (Wooden)</li><li>Fence Line (Chain-Link)</li><li>Guardrail</li></ul>
<ul style="list-style-type: none"><li>Ac. Acres</li><li>Adj. Adjacent</li><li>Asp. Asphalt</li><li>B.F. Basement Floor</li><li>Calc./C. Calculated</li><li>CB Catch Basin</li><li>C.C.M.R. Cuyahoga County Map Records</li><li>Centerline</li><li>Chain-Link Fence</li><li>Clr. Clears</li><li>Conc. Concrete</li><li>Conn. Connection</li><li>D.H. Drill Hole</li><li>D.I.W.M. Ductile Iron Water Main</li><li>Elec. Electric</li><li>Encr. Encroaches</li><li>Ex. Existing</li><li>F.F. Finished Floor</li></ul>	<ul style="list-style-type: none"><li>L.C.A. Limited Common Area</li><li>Meas./M. Measured</li><li>MH Manhole</li><li>Obs. Observed</li><li>Pg. Page</li><li>P.P.N. Permanent Parcel Number</li><li>Property Line</li><li>Rec./R. Record</li><li>R/W Right-of-way</li><li>San. Sanitary</li><li>S.F. Square Feet</li><li>S/L Sublot</li><li>Stm. Storm</li><li>T.B.M. Temporary Bench Mark</li><li>TBR To Be Removed</li><li>Tele. Telephone</li><li>T.F. Top Footer</li><li>Vol. Volume</li><li>Wat. Water</li></ul>	

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND, OHIO 44114  
PHONE: (216) 491-9640  
WWW.RIVERSTONEDESIGN.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

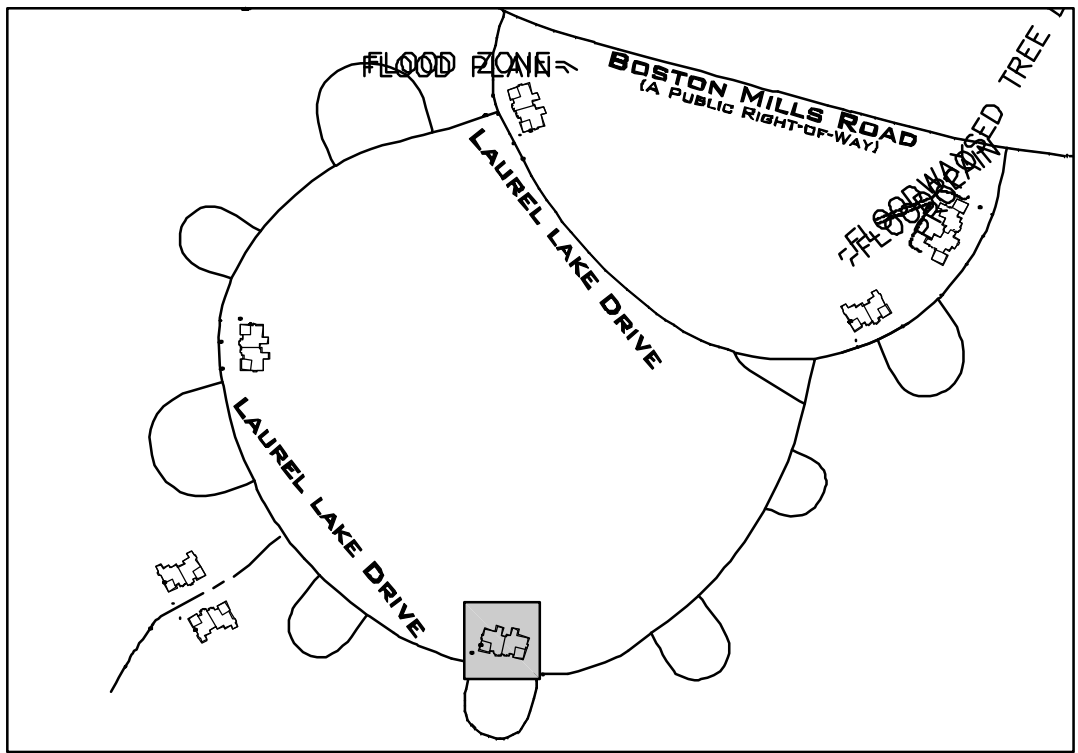
GRADING PLAN - BUILDING 1 & 2



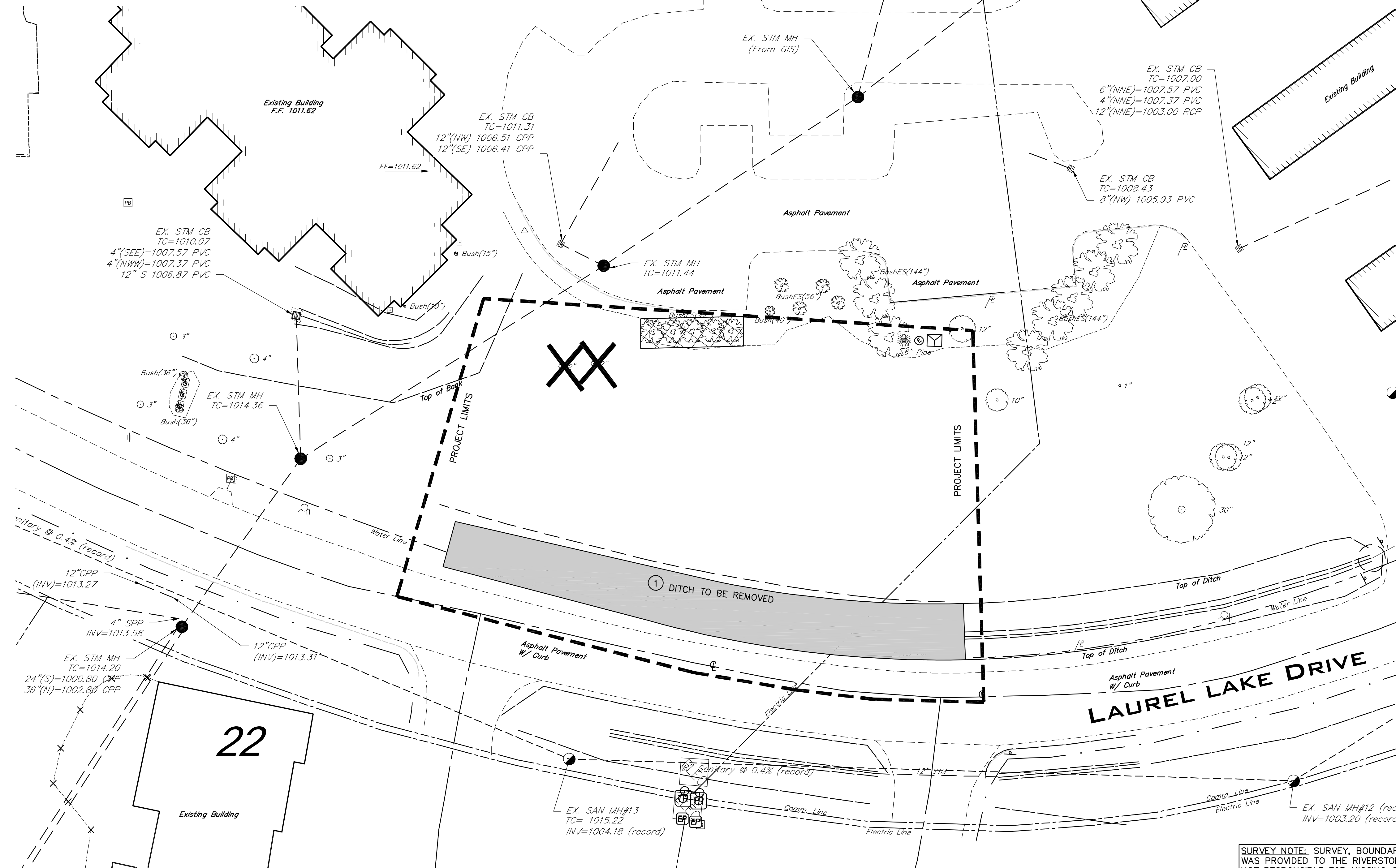
OGPUPS  
Ohio Oil & Gas Producer Underground Protection Service  
Call 800/715-2864 or 611

C3.04





SCHEMATIC KEY  
N.T.S.



GENERAL SITE DEMOLITION NOTES:

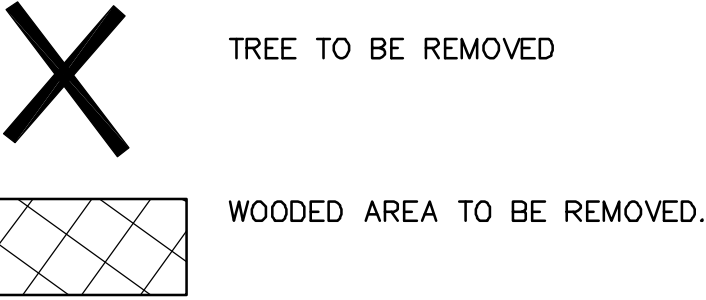
CONTRACTOR SHALL COMPLETELY CLEAR SITE WITH REGARDS TO PROJECT LIMITS. REMOVAL SHALL INCLUDE BUT NOT LIMITED TO ALL PAVEMENTS, SIDEWALKS, CURBS, POLES, SIGNS, UTILITIES, FENCES, TREES, LANDSCAPING AND ALL APPURTENANCES.

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 REMOVE DITCH. SEE UTILITY AND GRADING PLANS.

LEGEND

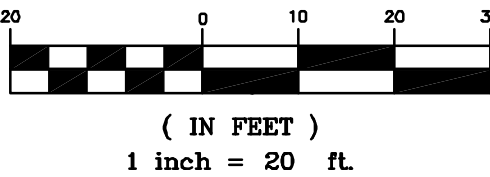
<b>M</b> = Monument Box Found	<b>Spot</b> = Spot Elevation Tag
<b>O</b> = Iron Pin or Pipe Found	<b>PROPOSED</b> = Proposed
<b>●</b> = 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747	<b>Hydrant</b> = Hydrant
<b>+</b> = P.K. Nail	<b>Water Service Valve</b> = Water Service Valve
<b>⊙</b> = Gas Meter	<b>Water Valve</b> = Water Valve
<b>△</b> = Gas Valve	<b>Water Meter</b> = Water Meter
<b>⊘</b> = Utility Pole	<b>Reducer</b> = Reducer
<b>⊙</b> = Light Pole	<b>Storm Manhole</b> = Storm Manhole
<b>⊙</b> = Guy Anchor & Line	<b>Sanitary Manhole</b> = Sanitary Manhole
<b>⊙</b> = Telephone Box	<b>Curb Inlet</b> = Curb Inlet
<b>⊙</b> = Electric Box	<b>Catch Basin</b> = Catch Basin
<b>⊙</b> = Cable Box	<b>Property Line</b> = Property Line
<b>⊙</b> = Ballard	<b>Centerline</b> = Centerline
<b>⊙</b> = Cleanout / Test Tee	

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

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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.

GRAPHIC SCALE



**RIVERSTONE**  
LAND SURVEYING · ENGINEERING · DESIGN  
3800 LAKESIDE AVENUE · SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

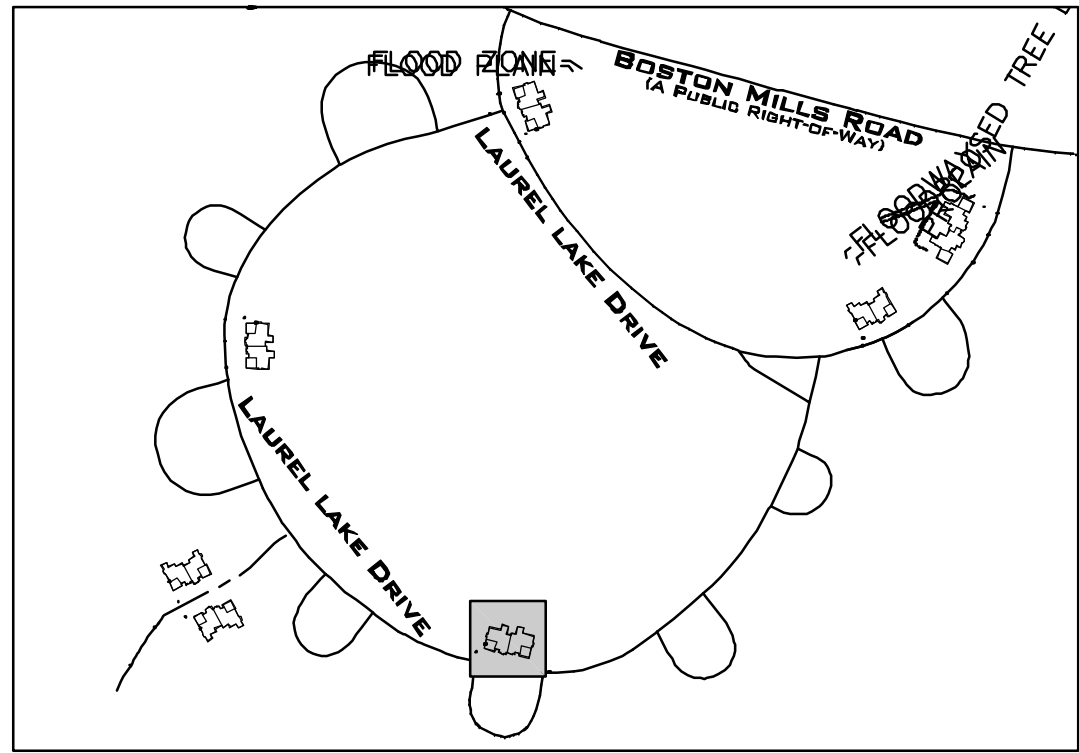
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE  
SITE DEMOLITION PLAN - BUILDING 3



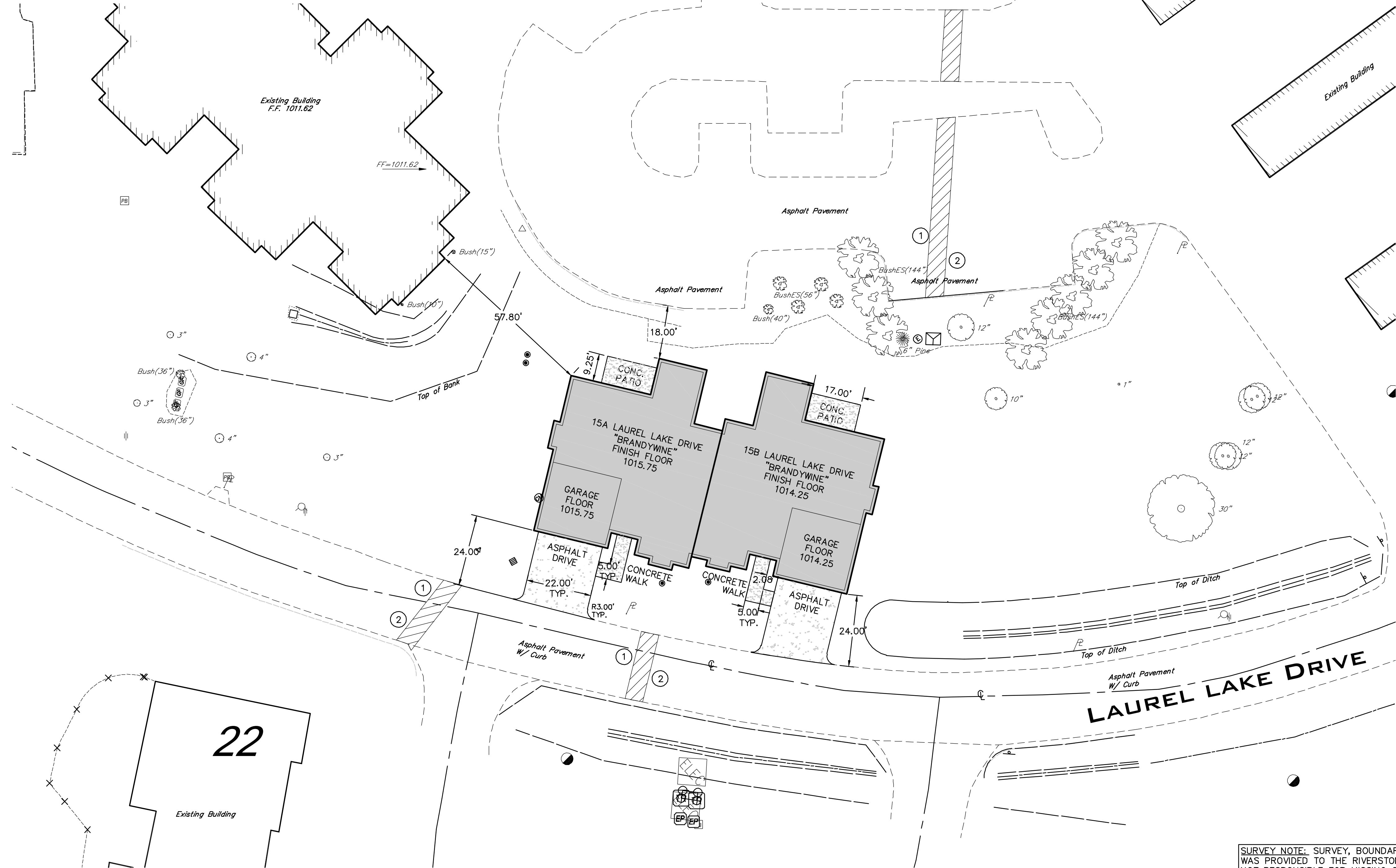
OGPUPS  
Ohio Oil & Gas Producer's Underground Protection Service  
Call (844) 715-2866 ext 811

C4.01





SCHEMATIC KEY  
N.T.S.



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.

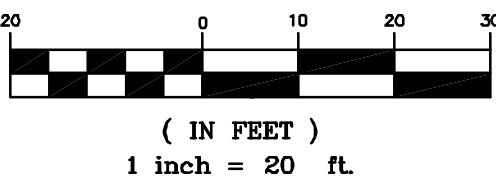
LEGEND

<b>M</b> = Monument Box Found	<b>Spot Elevation Tag</b>
<b>O</b> = Iron Pin or Pipe Found	<b>Hydrant</b>
<b>●</b> = 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747	<b>Water Service Valve</b>
<b>+</b> = P.K. Nail	<b>Water Valve</b>
<b>⊙</b> = Gas Meter	<b>Water Meter</b>
<b>△</b> = Gas Valve	<b>Reducer</b>
<b>P</b> = Utility Pole	<b>Storm Manhole</b>
<b>⊥</b> = Light Pole	<b>Sanitary Manhole</b>
<b>⊥</b> = Guy Anchor & Line	<b>Curb Inlet</b>
<b>⊥</b> = Telephone Box	<b>Catch Basin</b>
<b>⊥</b> = Electric Box	<b>Property Line</b>
<b>⊥</b> = Cable Box	<b>Centerline</b>
<b>●</b> = Ballard	
<b>●</b> = Cleanout / Test Tee	

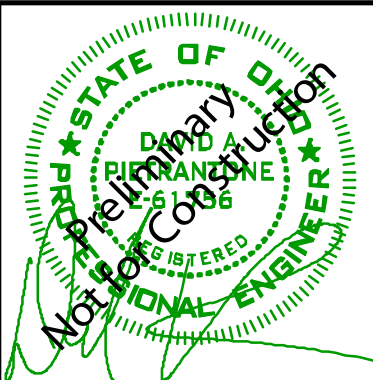
Ex. Parcel Line	Original Sublot Line	Centerline	Property Line	Right-of-way Line	Easement Line	Railroad Tracks
Electric Line	Gas Line	Sanitary/Combination Sewer	Storm Sewer	Waterline	Fence Line (Wooden)	Fence Line (Chain-Link)
Guardrail						

Ac.	Acres	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
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	San.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conc.	Concrete	S/L	Sublot
Conn.	Connection	Strm.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
Elec	Main	T/C	Top of Curb
Elev	Electric	Tele	Telephone
Encr.	Encroaches	T.F.	Top Of Footer
Ex.	Existing	T.T.	Test Tee
T.F.	Finished Floor	TW	Top of Wall
GUT	Gutter	Typ.	Typical
Inv	Invert	Vol.	Volume
		Wat	Water

GRAPHIC SCALE



SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

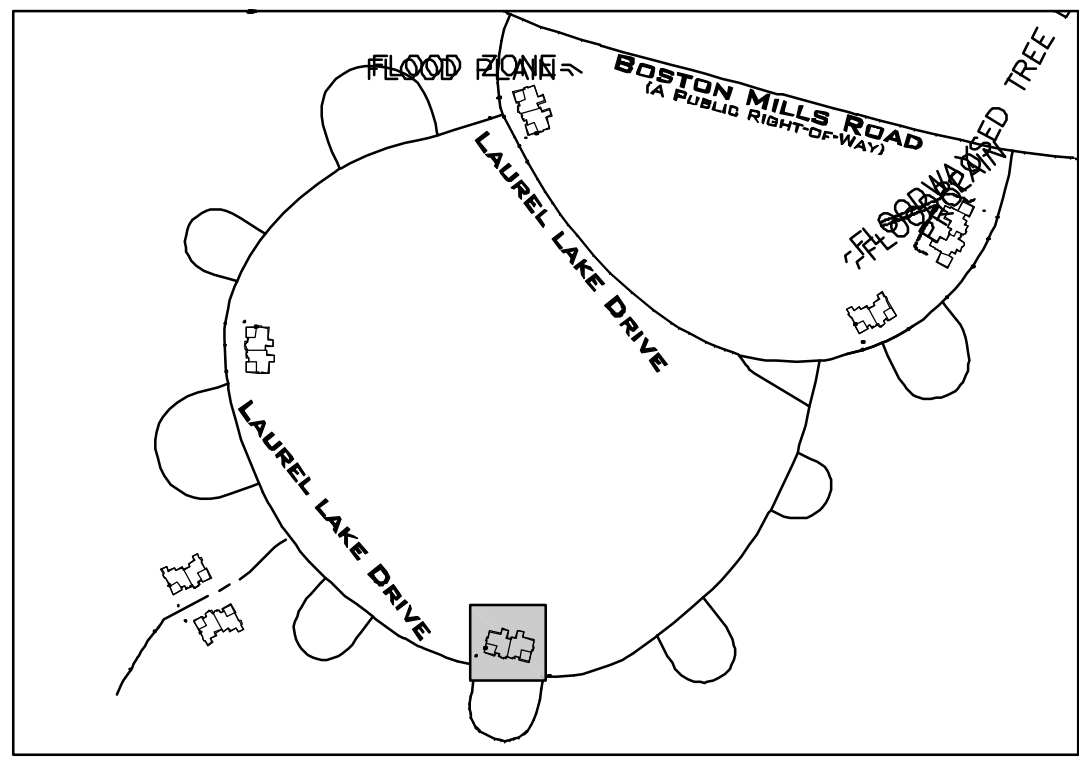
SITE PLAN - BUILDING 3



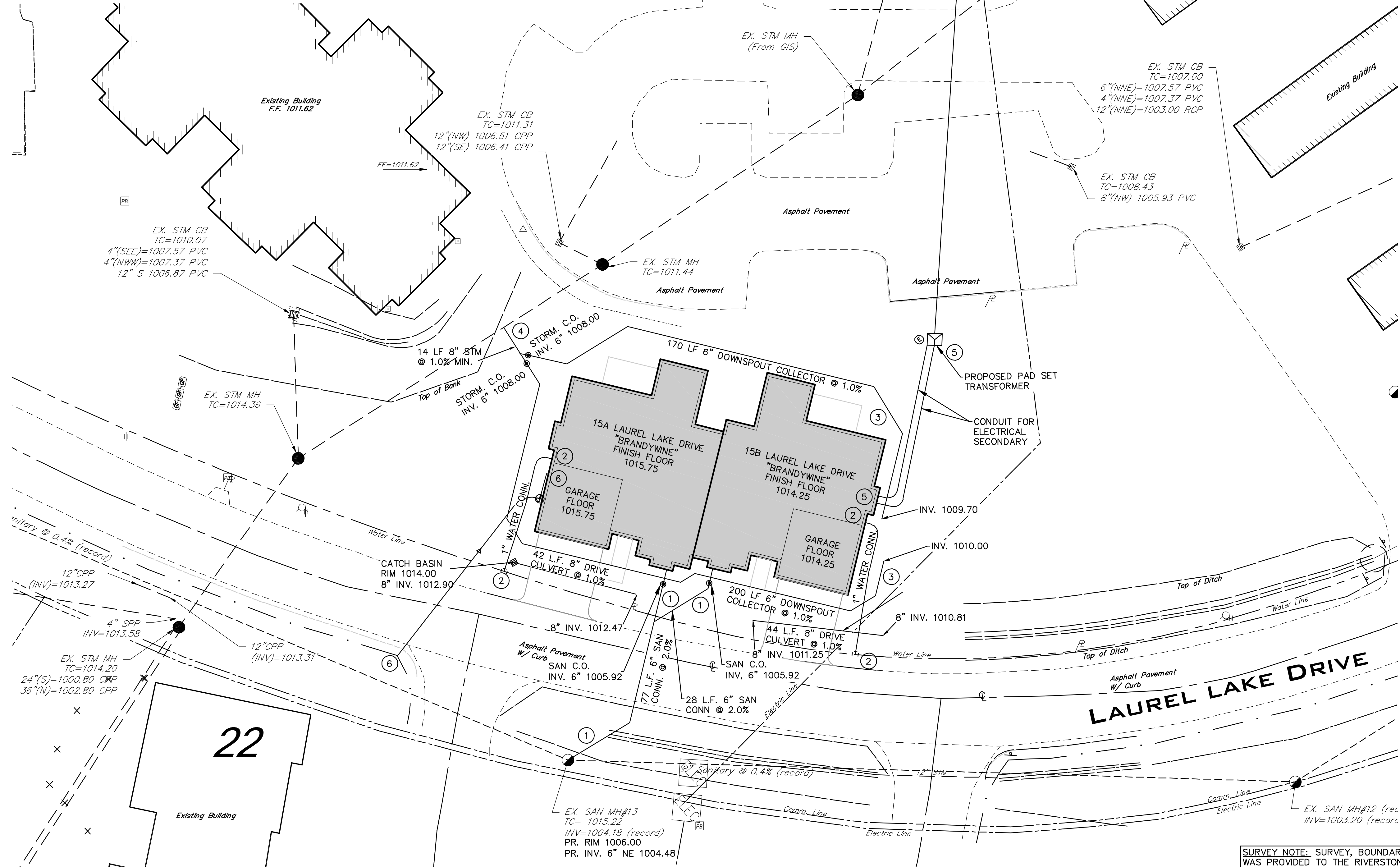
**OGPUPS**  
Ohio Oil & Gas Producers' Underground Protection Service  
Call (844) 775-2864 or 811

**C4.02**





SCHEMATIC KEY  
N.T.S.

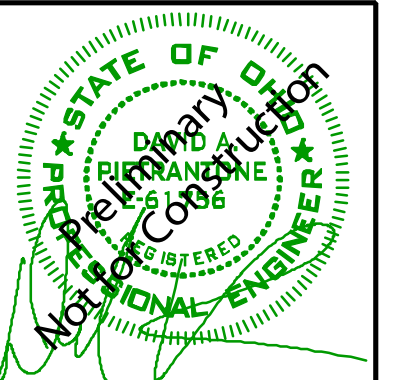
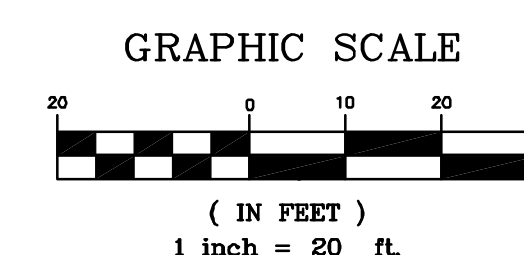


- UTILITY PLAN NOTES:
- 6" SANITARY CONNECTION AT 2.0% SLOPE
  - 1" WATER CONNECTION TO BUILDING. 1" SADDLE CONNECTION TO MAIN. SEE SHEET C6.03 FOR DETAILS.
  - 6" DOWNSPOUT COLLECTOR AT 1.0% MINIMUM. CONTRACTOR SHALL COORDINATE DOWNSPOUT LOCATIONS WITH ARCHITECTURAL AND MEP PLANS.
  - PRIOR TO CONSTRUCTION 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.
  - PROPOSED ELECTRICAL SERVICE. SEE MEP PLANS SHEET ME1.01 FOR DETAILS.
  - PROPOSED GAS SERVICE. SEE MEP PLANS SHEET ME1.01 FOR DETAILS.

LEGEND

<ul style="list-style-type: none"><li>Monument Box Found</li><li>Iron Pin or Pipe Found</li><li>5/8" Iron Pin Set and capped Riverstone Company Dudley PS6747</li><li>P.K. Nail</li><li>Gas Meter</li><li>Gas Valve</li><li>Utility Pole</li><li>Light Pole</li><li>Guy Anchor &amp; Line</li><li>Telephone Box</li><li>Electric Box</li><li>Cable Box</li><li>Ballard</li><li>Cleanout / Test Tee</li></ul>	<ul style="list-style-type: none"><li>Spot Elevation Tag</li><li>Hydrant</li><li>Water Service Valve</li><li>Water Valve</li><li>Water Meter</li><li>Reducer</li><li>Storm Manhole</li><li>Sanitary Manhole</li><li>Curb Inlet</li><li>Catch Basin</li><li>Property Line</li><li>Centerline</li></ul>
<ul style="list-style-type: none"><li>Ex. Parcel Line</li><li>Original Sublot Line</li><li>Original Lot Line</li><li>Centerline</li><li>Property Line</li><li>Right-of-way Line</li><li>Easement Line</li><li>Railroad Tracks</li></ul>	<ul style="list-style-type: none"><li>Existing</li><li>PROPOSED</li></ul>
<ul style="list-style-type: none"><li>Electric Line</li><li>Gas Line</li><li>Sanitary/Combination Sewer</li><li>Storm Sewer</li><li>Waterline</li><li>Fence Line (Wooden)</li><li>Fence Line (Chain-Link)</li><li>Guardrail</li></ul>	<ul style="list-style-type: none"><li>Existing</li><li>PROPOSED</li></ul>
<ul style="list-style-type: none"><li>Ac. Acres</li><li>Adj. Adjacent</li><li>A.F.N. Auditor's File Number</li><li>Asp. Asphalt</li><li>B.F. Basement Floor</li><li>BW Bottom of Wall</li><li>Calc./C. Calculated</li><li>CB Catch Basin</li><li>C.C.M.R. Cuyahoga County Map Records</li><li>C.L.F. Chain-link Fence</li><li>Clr. Clears</li><li>C.O. Clean Out</li><li>Comb. Combination</li><li>Conc. Concrete</li><li>Conn. Connection</li><li>D.H. Drill Hole</li><li>D.I.W.M. Ductile Iron Water Main</li><li>Elec. Electric</li><li>Elev. Elevation</li><li>Encr. Encroaches</li><li>Ex. Existing</li><li>F.F. Finished Floor</li><li>GUT Gutter</li><li>Inv. Invert</li></ul>	<ul style="list-style-type: none"><li>L.C.A. Limited Common Area</li><li>L.F. Lineal Feet</li><li>M.E. Match Existing</li><li>M.E. Meas./M. Measured</li><li>M.H. Manhole</li><li>Obs. Observed</li><li>Pa. Page</li><li>P.P.N. Permanent Parcel Number</li><li>Prop. Proposed</li><li>Rec./R. Record</li><li>R/W Right-of-way</li><li>San. Sanitary</li><li>S.F. Square Feet</li><li>S/L Sublot</li><li>Strm. Storm</li><li>T.B.M. Temporary Bench Mark</li><li>TBR To Be Removed</li><li>T/C Top of Curb</li><li>Tele. Telephone</li><li>T.F. Top Of Footer</li><li>T.T. Test Tee</li><li>TW Top of Wall</li><li>Typ. Typical</li><li>Vol. Volume</li><li>Wat. Water</li></ul>

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

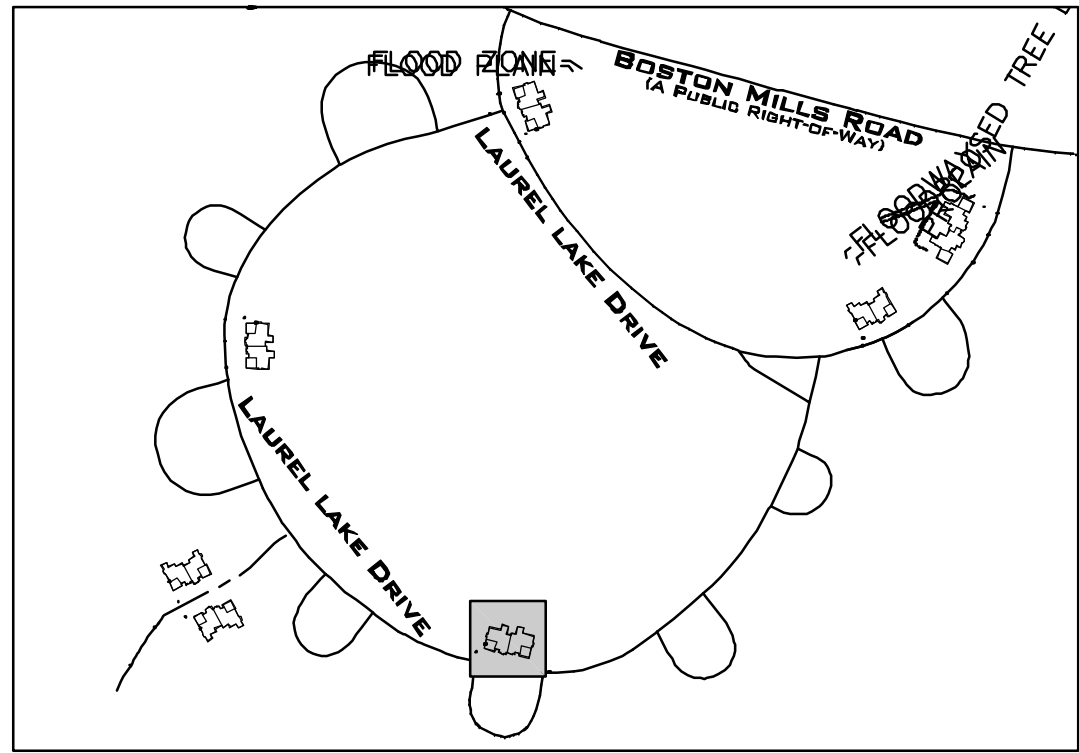
UTILITY PLAN - BUILDING 3



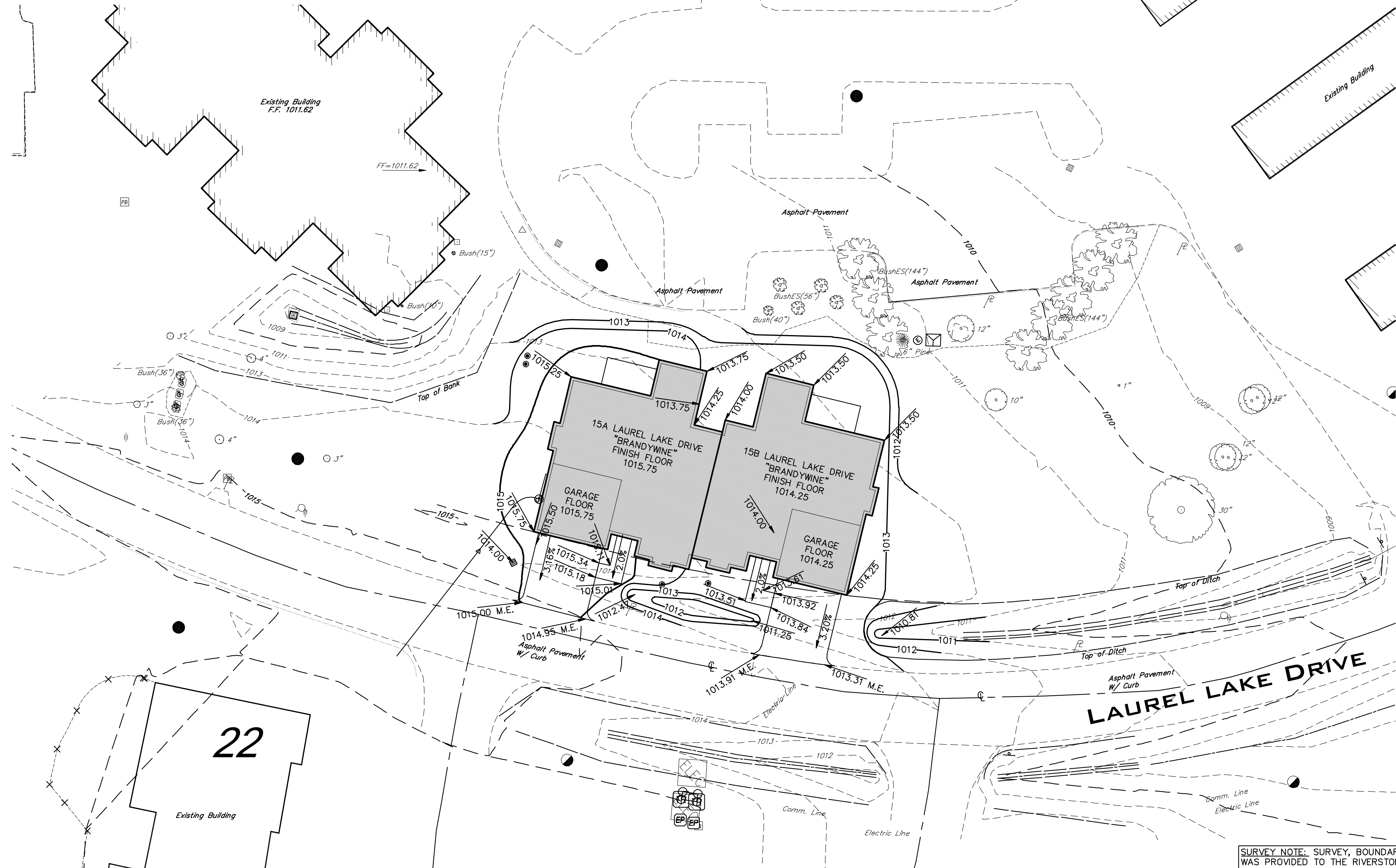
OGUPS  
Ohio Oil & Gas Producers Underground Protection Service  
Call (844) 715-2864 or 811

C4.03





SCHEMATIC KEY  
N.T.S.



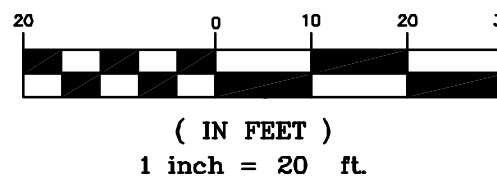
LEGEND

- Legend:**
- Monument Box Found** (M)
  - Iron Pin or Pipe Found** (O)
  - 5/8" Iron Pin Set and Capped** (Riverstone Company Dudley PS6747)
  - P.K. Nail** (+)
  - Gas Meter** (G)
  - Gas Valve** (V)
  - Utility Pole** (P)
  - Guy Anchor & Line** (A)
  - Telephone Box** (T)
  - Electric Box** (E)
  - Cable Box** (C)
  - Ballard** (B)
  - Cleanout / Test Tee** (CT)
  - Spot Elevation Tag** (Spot)
  - Hydrant** (H)
  - Water Service Valve** (WSV)
  - Water Valve** (WV)
  - Water Meter** (WM)
  - Reducer** (R)
  - Storm Manhole** (SM)
  - Sanitary Manhole** (S)
  - Curb Inlet** (CI)
  - Catch Basin** (CB)
  - Property Line** (P)
  - Centerline** (CL)

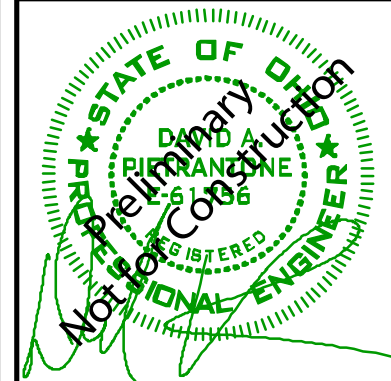
- Ex. Parcel Line**  
**Original Sublot Line**  
**Original Lot Line**  
**Centerline**  
**Property Line**  
**Right-of-way Line**  
**Easement Line**  
**Railroad Tracks**
- Electric Line**  
**Gas Line**  
**Sanitary/Combination Sewer**  
**Storm Sewer**  
**Waterline**  
**Fence Line (Wooden)** 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

- Ac.** Acres  
**Adj.** Adjacent  
**A.F.N.** Auditor's File Number  
**Asp.** Asphalt  
**B.F.** Basement Floor  
**BW** Bottom of Wall  
**Calc./C.** Calculated  
**CB** Catch Basin  
**C.C.M.R.** Cuyahoga County Map Records  
**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  
**T.F.** Typical  
**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  
**Pa.** 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  
**Strm.** 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



**SURVEY NOTE:** SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
**12/26/2023**  
**NOT FOR CONSTRUCTION**

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

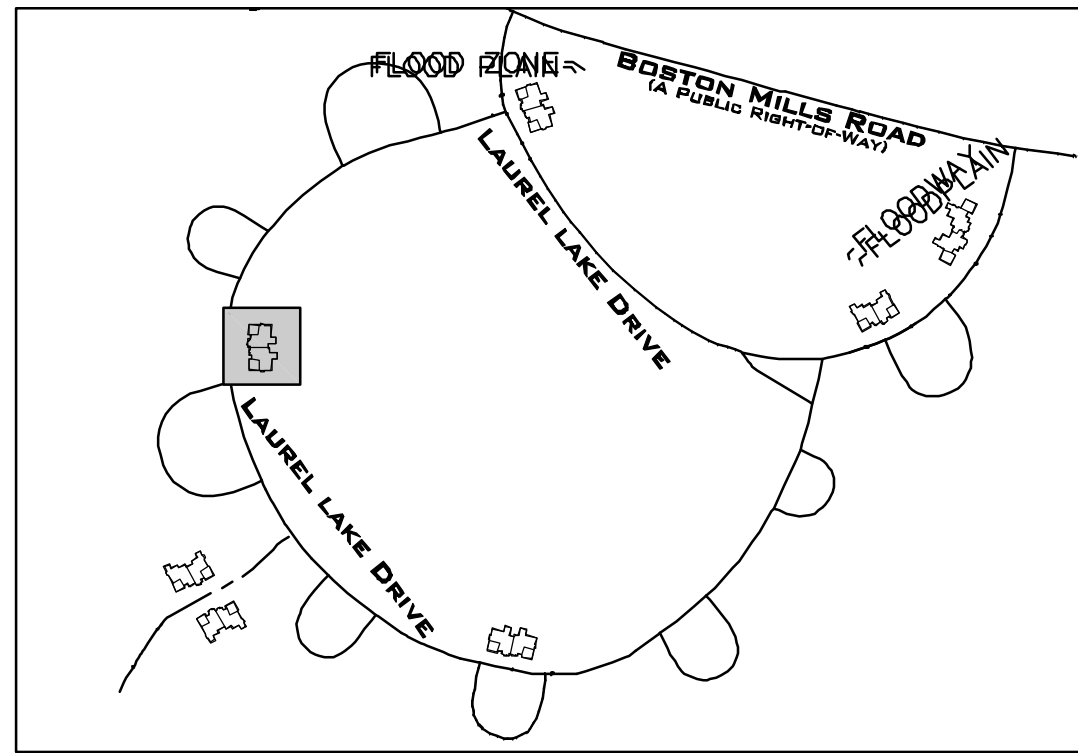
GRADING PLAN - BUILDING 3



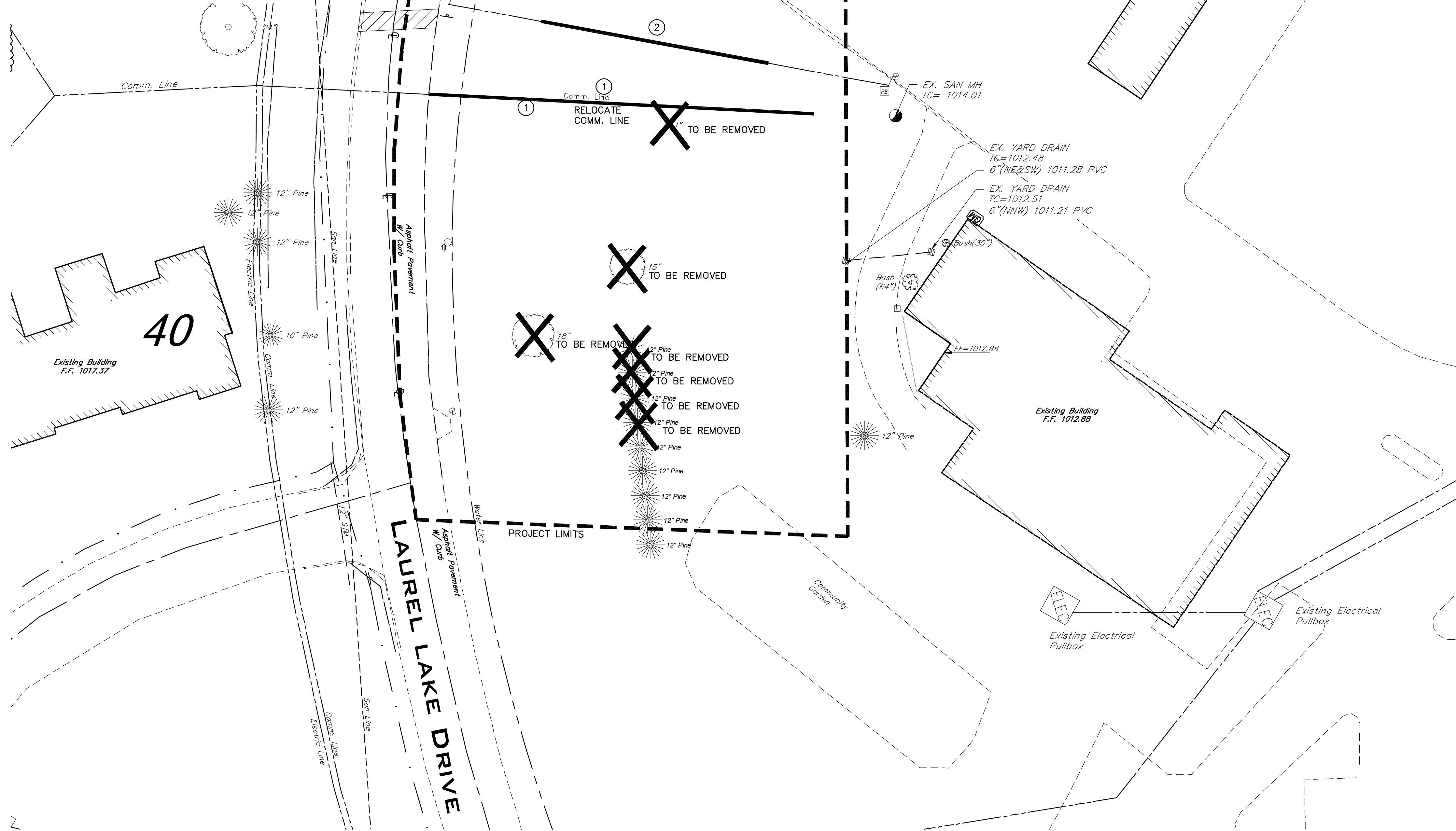
**OGPUPS**  
Ohio Oil & Gas Producers Underground Protection Service  
Call (844) 775-2866 or 811

**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:

- TREE TO BE REMOVED
- WOODED AREA TO BE REMOVED.

SITE DEMOLITION PLAN KEYNOTES:

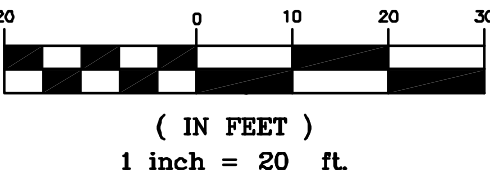
- CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANIES TO RELOCATE COMM. LINE.
- EXISTING ELECTRIC LINE TO BE RELOCATED. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTION.

LEGEND

= Monument Box Found	= Spot Elevation Tag
= Iron Pin or Pipe Found	= Hydrant
= 5/8" Iron Pin Set and Capped Riverstone Company Budley PS6747	= 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
= Ballard	= Cleanout / Test Tee
= Ex. Parcel line	
= Original Sublot 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	= Right-of-way
= Clean Out	= Sanitary
= Combination	= Square Feet
= Concrete	= Sublot
= Connection	= Storm
= Drill Hole	= Temporary Bench Mark
= Ductile Iron Water	= To Be Removed
= Electric	= Top of Curb
= Elevation	= Telephone
= Encroaches	= Top Of Footer
= Existing	= Test Tee
= Typical	= Top of Wall
= Gutter	= Volume
= Invert	= Water

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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.

GRAPHIC SCALE



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONEDESIGN.COM

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

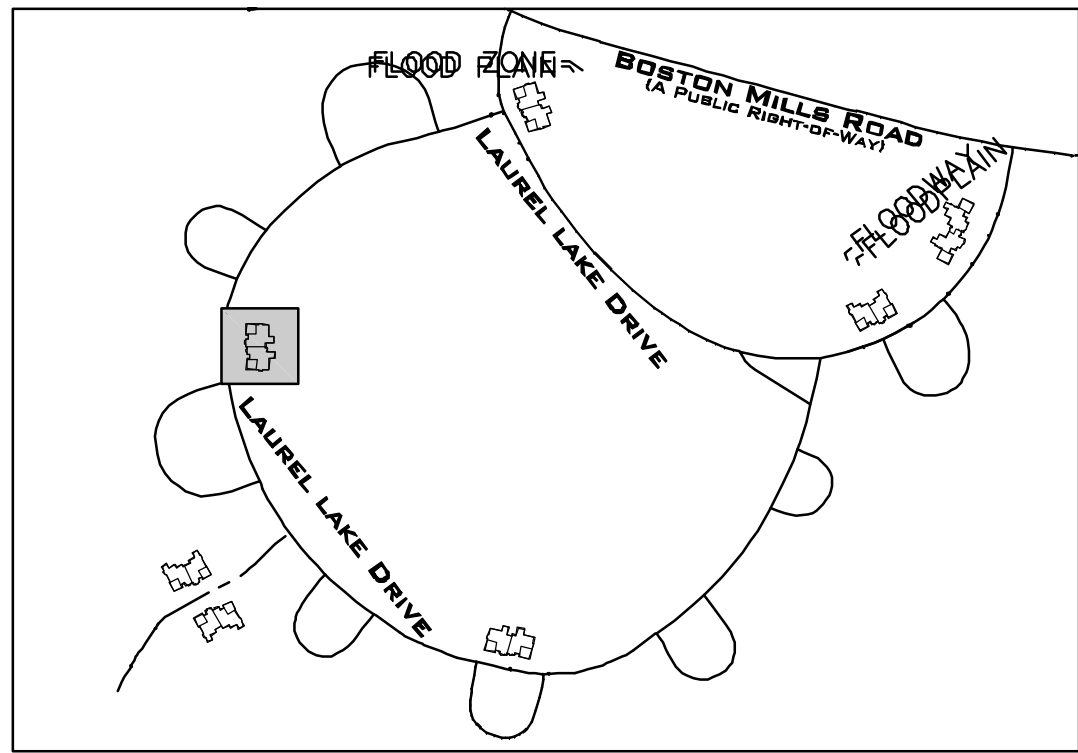
SITE DEMOLITION PLAN - BUILDING 4



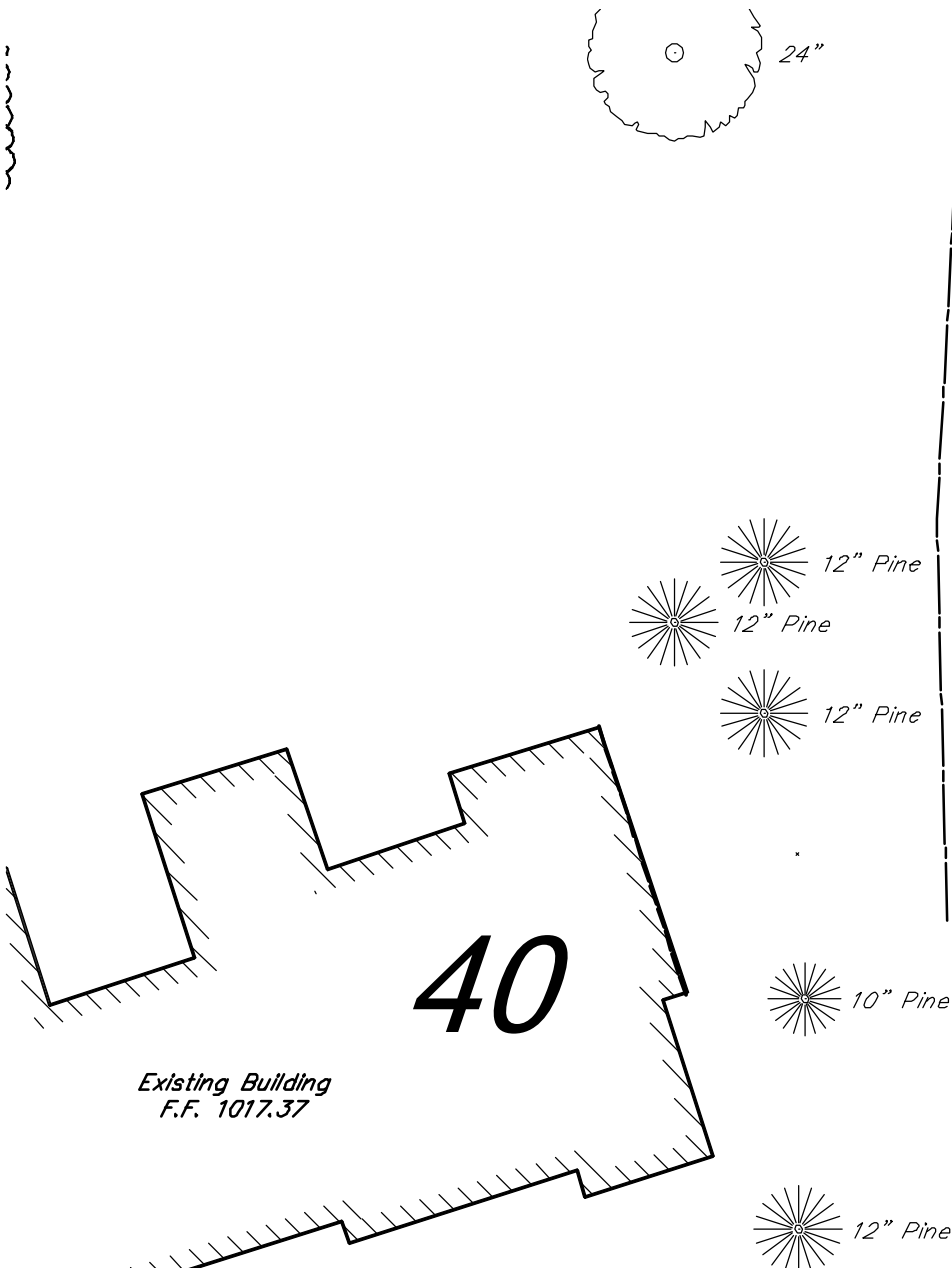
**OGPUPS**  
Ohio Oil & Gas Producer's Underground Protection Service  
Call (844) 715-2864 or 811

**C5.01**





SCHEMATIC KEY  
N.T.S.



LAUREL LAKE DRIVE

GENERAL SITE PLAN NOTES:

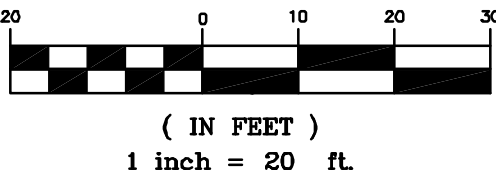
- CONTRACTOR SHALL PROVIDE A CLEAN SMOOTH EDGE AND ENSURE THE INTEGRITY OF THE ASPHALT PAVEMENT TO REMAIN.
- CONTRACTOR SHALL REPAIR PAVEMENT AFTER NEW UTILITY CONNECTIONS ARE INSTALLED. SEE DETAIL SHEET C6.01.

LEGEND

<b>M</b> = Monument Box Found	<b>PROPOSED</b> = Spot Elevation Tag
<b>O</b> = Iron Pin or Pipe Found	<b>PROPOSED</b> = Hydrant
<b>●</b> = 5/8" Iron Pin Set and Capped Riverstone Company Budley PS6747	<b>PROPOSED</b> = Water Service Valve
<b>+</b> = P.K. Nail	<b>PROPOSED</b> = Water Valve
<b>⊕</b> = Gas Meter	<b>PROPOSED</b> = Water Meter
<b>Δ</b> = Gas Valve	<b>PROPOSED</b> = Reducer
<b>⊙</b> = Utility Pole	<b>PROPOSED</b> = Storm Manhole
<b>⊙</b> = Light Pole	<b>PROPOSED</b> = Sanitary Manhole
<b>⊙</b> = Guy Anchor & Line	<b>PROPOSED</b> = Curb Inlet
<b>⊙</b> = Telephone Box	<b>PROPOSED</b> = Catch Basin
<b>⊙</b> = Electric Box	<b>PROPOSED</b> = Property Line
<b>⊙</b> = Cable Box	<b>PROPOSED</b> = Centerline
<b>⊙</b> = Ballard	
<b>⊙</b> = 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
BW	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
Elec	Main
Elev	Electric
Encr.	Encroaches
Ex.	Existing
T.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
Pa.	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
Strm.	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

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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.

GRAPHIC SCALE



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
**12/26/2023**  
**NOT FOR CONSTRUCTION**

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

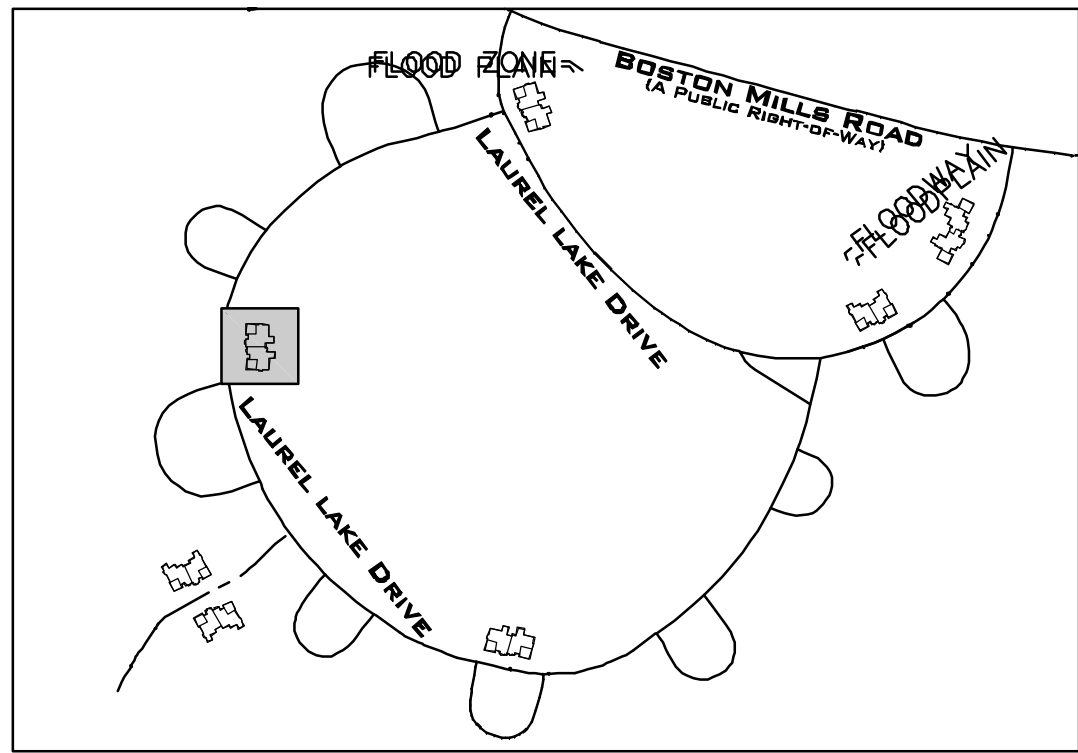
SITE PLAN - BUILDING 4



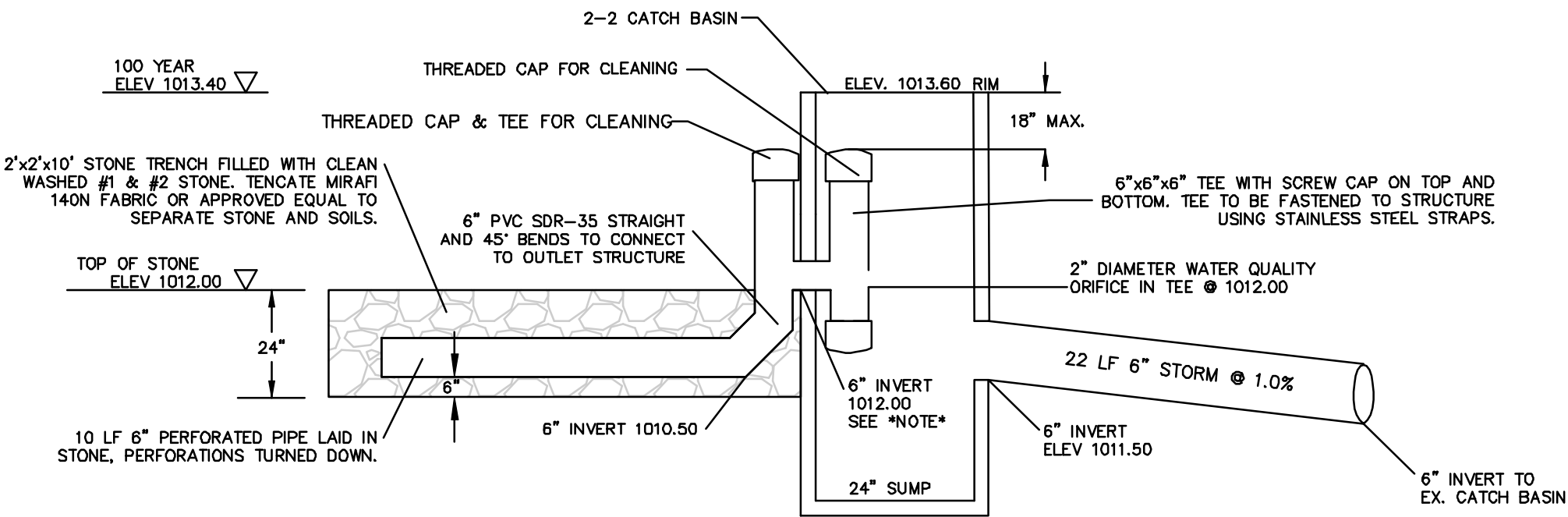
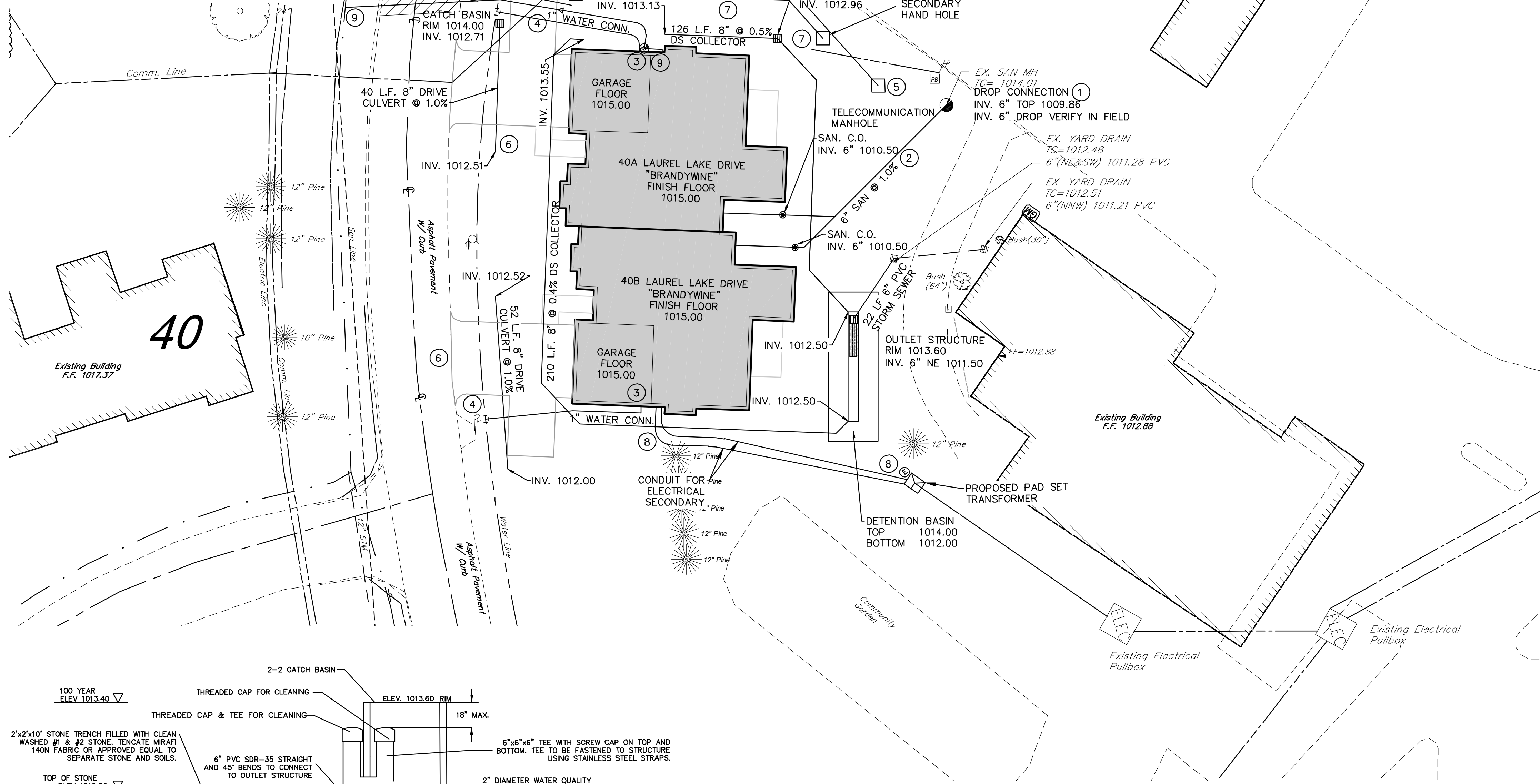
**OGPUPS**  
Ohio Oil & Gas Producer Underground Protection Service  
Call (844) 715-2864 or 811

**C5.02**





SCHEMATIC KEY  
N.T.S.



2-2 OUTLET STRUCTURE  
N.T.S.

UTILITY PLAN NOTES:

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

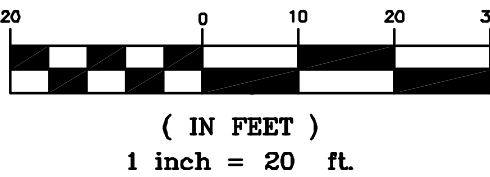
LEGEND

<b>M</b> = Monument Box Found	<b>Spot</b> = Spot Elevation Tag
<b>O</b> = Iron Pin or Pipe Found	<b>PROPOSED</b> = Proposed
<b>5/8"</b> = 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747	<b>Hydrant</b> = Hydrant
<b>+ P.K.</b> = P.K. Nail	<b>Water Service Valve</b> = Water Service Valve
<b>Gas Meter</b> = Gas Meter	<b>Water Valve</b> = Water Valve
<b>Gas Valve</b> = Gas Valve	<b>Water Meter</b> = Water Meter
<b>Utility Pole</b> = Utility Pole	<b>Reducer</b> = Reducer
<b>Light Pole</b> = Light Pole	<b>Storm Manhole</b> = Storm Manhole
<b>Guy Anchor &amp; Line</b> = Guy Anchor & Line	<b>Sanitary Manhole</b> = Sanitary Manhole
<b>Telephone Box</b> = Telephone Box	<b>Curb Inlet</b> = Curb Inlet
<b>Electric Box</b> = Electric Box	<b>Catch Basin</b> = Catch Basin
<b>Cable Box</b> = Cable Box	<b>Property Line</b> = Property Line
<b>Ballard</b> = Ballard	<b>Centerline</b> = Centerline
<b>Cleanout / Test Tee</b> = Cleanout / Test Tee	

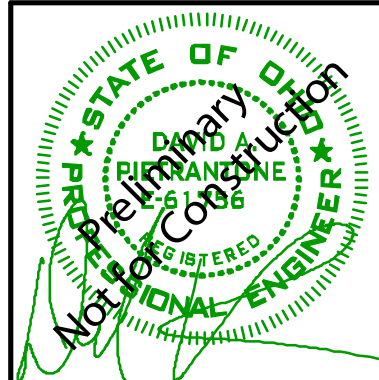
Ex. Parcel Line	Original Sublot Line	Centerline	Property Line	Right-of-way Line	Easement Line	Railroad Tracks
Electric Line	Gas Line	Sanitary/Combination Sewer	Storm Sewer	Waterline	Fence Line (Wooden)	Fence Line (Chain-Link)
Guardrail						

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

GRAPHIC SCALE



SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE.SURVEY.COM

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

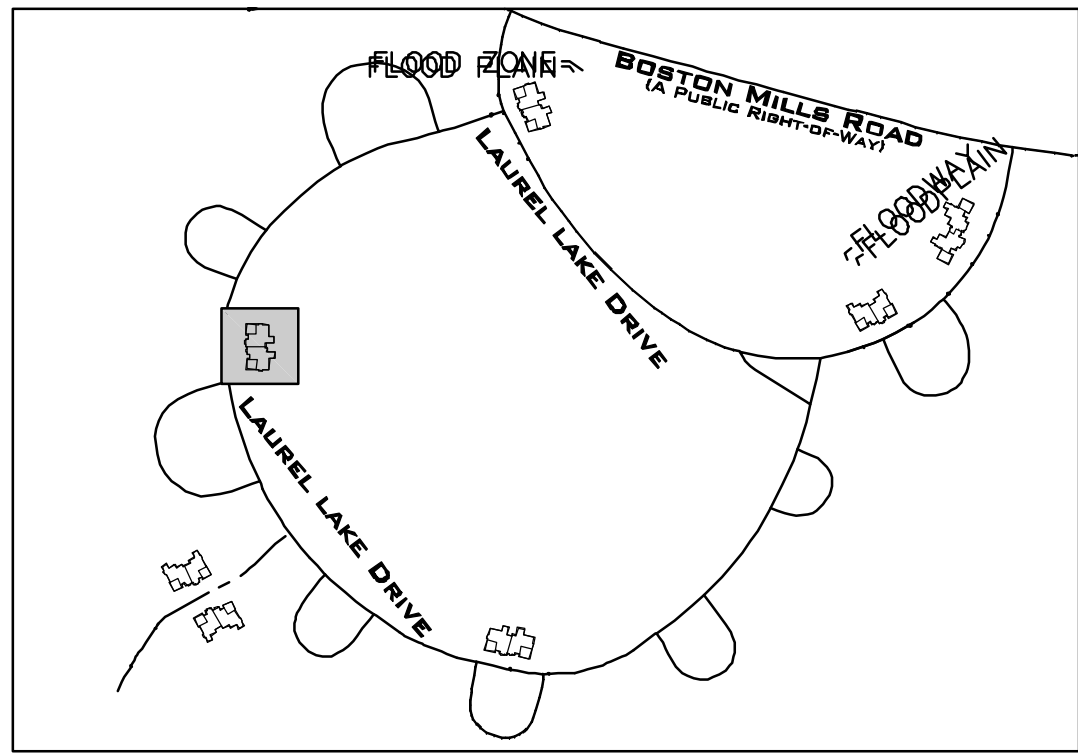
UTILITY PLAN - BUILDING 4



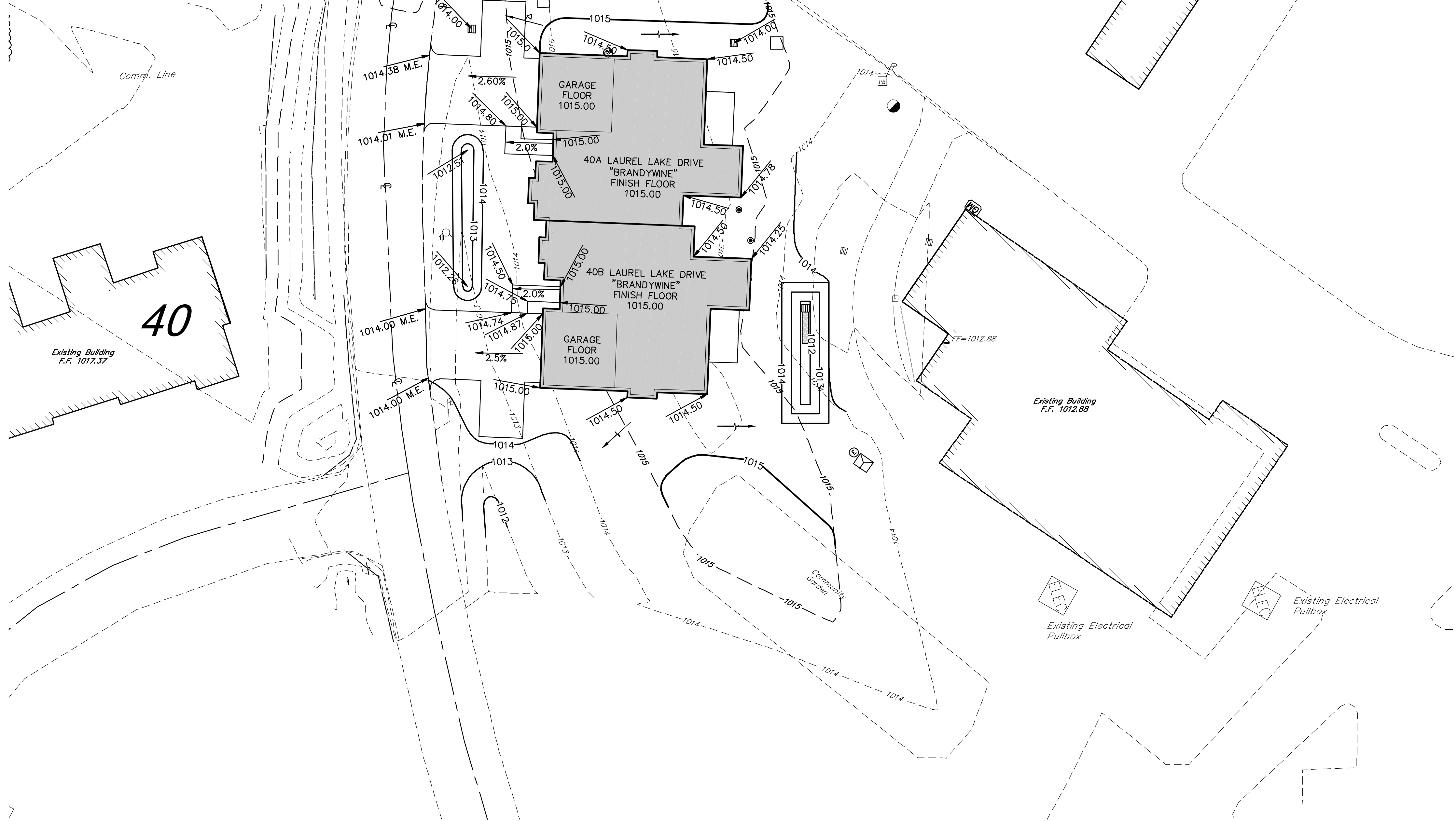
OGPUPS  
Ohio Oil & Gas Producer Underground Protection Service  
Call (844) 775-2864 or 811

C5.03





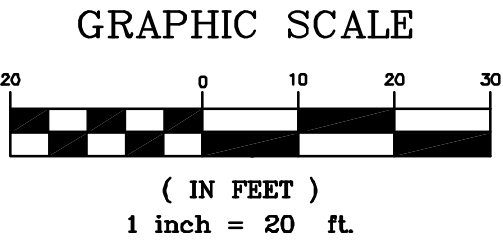
SCHEMATIC KEY  
N.T.S.



LEGEND

	= Monument Box Found		= Spot Elevation Tag
	= Iron Pin or Pipe Found		= Hydrant
	= 5/8" Iron Pin Set and Capped Riverstone Company Budley PS6747		= 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
	= Ballard		
	= Cleanout / Test Tee		
	= Ex. Parcel line		
	= Original Sublot 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 Number
	= Cuyahoga County Map Records		= Proposed
	= Chain-link Fence		= Record
	= Clears		= Right-of-way
	= Clean Out		= Sanitary
	= Combination		= Square Feet
	= Concrete		= Sublot
	= Connection		= Storm
	= Drill Hole		= Temporary Bench Mark
	= Ductile Iron Water		= To Be Removed
	= Electric		= Top of Curb
	= Elevation		= Telephone
	= Encroaches		= Top Of Footer
	= Existing		= Test Tee
	= Typical		= Top of Wall
	= Gutter		= Volume
	= Invert		= Water

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

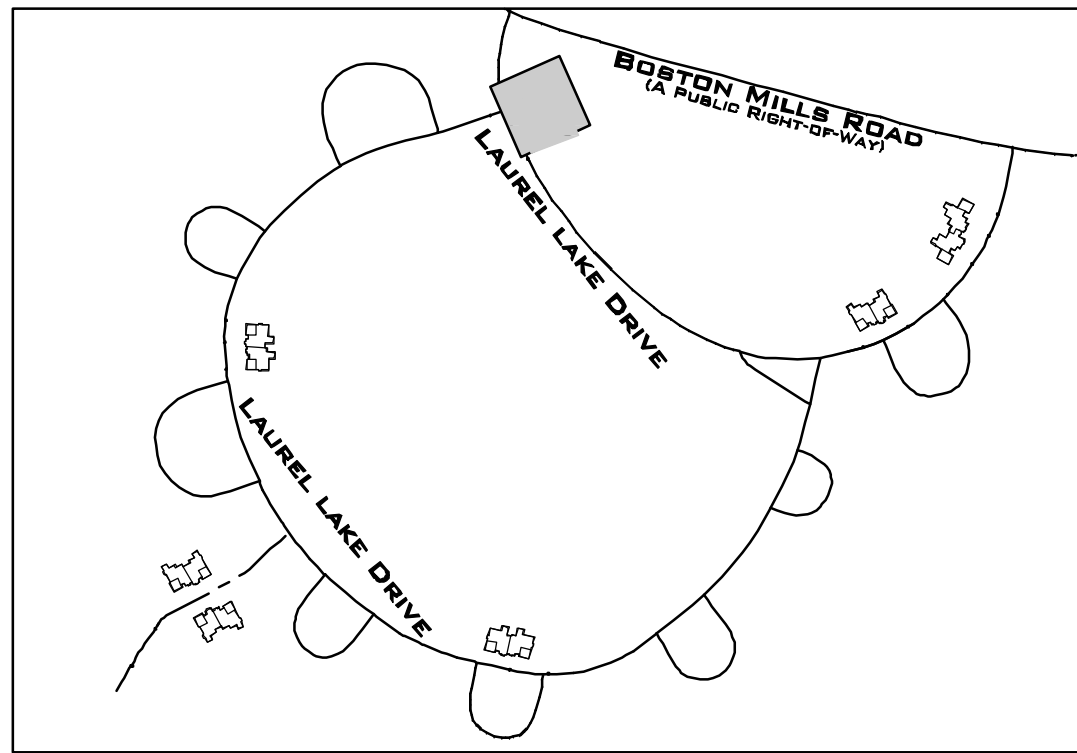
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

GRADING PLAN - BUILDING 4



C5.04





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:

- TREE TO BE REMOVED
- WOODED AREA TO BE REMOVED.

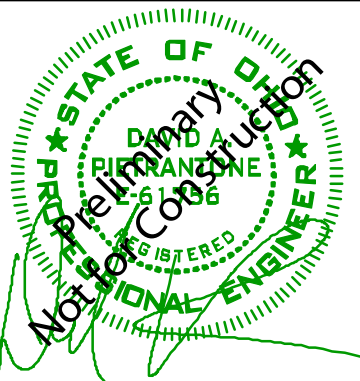
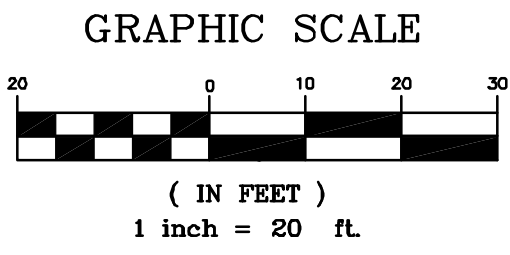
SITE DEMOLITION PLAN KEYNOTES:

- 1 EXISTING 24" STORM SEWER TO BE RELOCATED.

LEGEND

<b>M</b> = Monument Box Found	<b>Spot</b> = Spot Elevation Tag
<b>O</b> = Iron Pin or Pipe Found	<b>PROPOSED</b> = Proposed
<b>●</b> = 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747	<b>Hydrant</b> = Hydrant
<b>+</b> = P.K. Nail	<b>Water Service Valve</b> = Water Service Valve
<b>⊕</b> = Gas Meter	<b>Water Valve</b> = Water Valve
<b>Δ</b> = Gas Valve	<b>Water Meter</b> = Water Meter
<b>⊗</b> = Utility Pole	<b>Reducer</b> = Reducer
<b>⊙</b> = Light Pole	<b>Storm Manhole</b> = Storm Manhole
<b>⊕</b> = Guy Anchor & Line	<b>Sanitary Manhole</b> = Sanitary Manhole
<b>⊗</b> = Telephone Box	<b>Curb Inlet</b> = Curb Inlet
<b>⊕</b> = Electric Box	<b>Catch Basin</b> = Catch Basin
<b>⊗</b> = Cable Box	<b>Property Line</b> = Property Line
<b>●</b> = Ballard	<b>Centerline</b> = Centerline
<b>⊙</b> = Cleanout / Test Tee	
<b>Ex. Parcel line</b>	
<b>Original Sublot Line</b>	
<b>Original Lot Line</b>	
<b>Centerline</b>	
<b>Property Line</b>	
<b>Right-of-way Line</b>	
<b>Easement Line</b>	
<b>Railroad Tracks</b>	
<b>Electric Line</b>	
<b>Gas Line</b>	
<b>Sanitary/Combination Sewer</b>	
<b>Storm Sewer</b>	
<b>Waterline</b>	
<b>Fence Line (Wooden)</b>	
<b>Fence Line (Chain-Link)</b>	
<b>Guardrail</b>	
<b>Ac.</b> = Acres	<b>L.C.A.</b> = Limited Common Area
<b>Adj.</b> = Adjacent	<b>L.F.</b> = Lineal Feet
<b>A.F.N.</b> = Auditor's File Number	<b>M.E.</b> = Match Existing
<b>Asp.</b> = Asphalt	<b>Meas./M.</b> = Measured
<b>B.F.</b> = Basement Floor	<b>MH</b> = Manhole
<b>B.W.</b> = Bottom of Wall	<b>Obs.</b> = Observed
<b>Calc./C.</b> = Calculated	<b>Pg.</b> = Page
<b>CB</b> = Catch Basin	<b>P.P.N.</b> = Permanent Parcel
<b>C.C.M.R.</b> = Cuyahoga County Map	<b>Number</b> = Number
<b>C.L.F.</b> = Chain-Link Fence	<b>Prop</b> = Proposed
<b>Clr.</b> = Clears	<b>Rec./R.</b> = Record
<b>C.O.</b> = Clean Out	<b>R/W</b> = Right-of-way
<b>Comb.</b> = Combination	<b>San.</b> = Sanitary
<b>Conc.</b> = Concrete	<b>S.F.</b> = Square Feet
<b>Conn.</b> = Connection	<b>S/L</b> = Sublot
<b>D.H.</b> = Drill Hole	<b>Strm.</b> = Storm
<b>D.I.W.M.</b> = Ductile Iron Water	<b>T.B.M.</b> = Temporary Bench Mark
<b>Main</b> = Main	<b>To Be Removed</b> = To Be Removed
<b>Tele</b> = Telephone	<b>T/C</b> = Top of Curb
<b>Elev</b> = Elevation	<b>Tele</b> = Telephone
<b>Encr.</b> = Encroaches	<b>T.F.</b> = Top Of Footer
<b>Ex.</b> = Existing	<b>T.I.</b> = Test Tee
<b>T.F.</b> = Typical	<b>TW</b> = Top of Wall
<b>GUT</b> = Gutter	<b>Vol.</b> = Volume
<b>Inv</b> = Invert	<b>Wat</b> = Water

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND · OHIO · 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

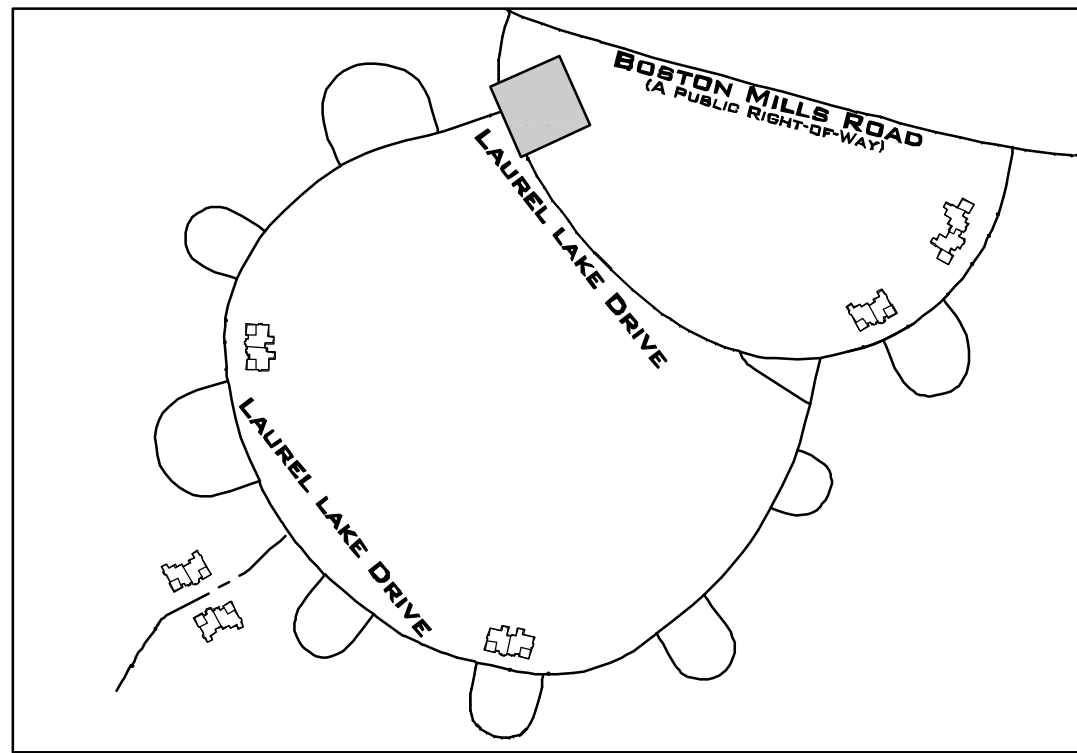
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

SITE DEMOLITION PLAN - BUILDING 5



C6.01

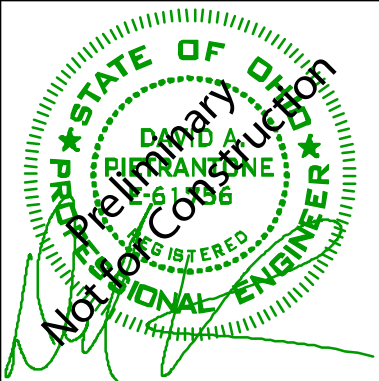




SCHEMATIC KEY  
N.T.S



- 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.



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND - OHIO - 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

PLAN REVISIONS:
PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE  
SITE PLAN - BUILDING 5

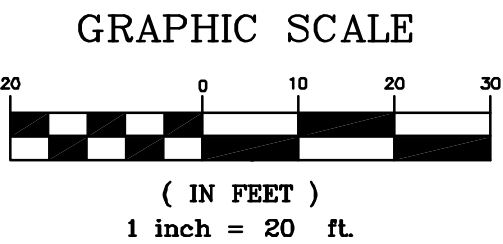
LEGEND

	= Monument Box Found		= Spot Elevation Tag
	= Iron Pin or Pipe Found		= Hydrant
	= 5/8" Iron Pin Set and capped Riverstone Company Dudley PS6747		= 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
	= Ballard		
	= 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	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	Pg.	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 Right-of-way
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	San.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conn.	Connection	Sublot	Sublot
Conn.	Connection	Strm.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
Encr.	Encroaches	T/C	Top of Curb
Ex.	Existing	Tele	Telephone
Elev	Elevation	T.F.	Top of Footer
Encr.	Encroaches	T.T.	Test Tee
Ex.	Existing	TW	Top of Wall
T.F.	Typical	Vol.	Volume
GUT	Gutter	Wat	Water
Inv	Invert		

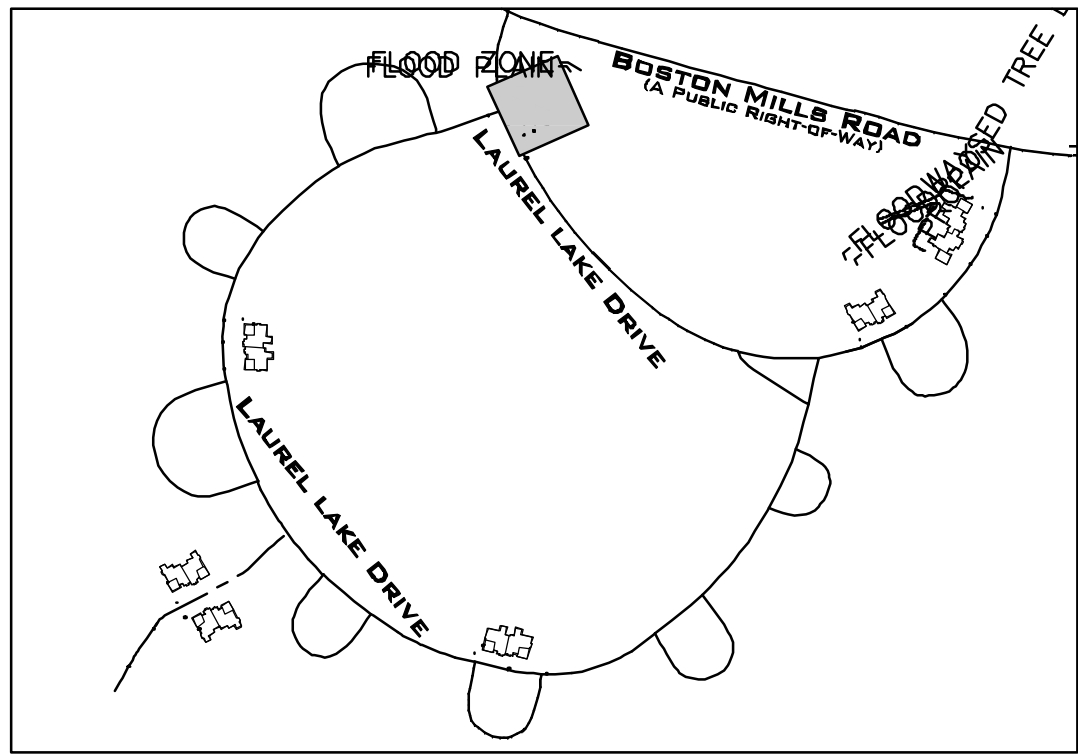


SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR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

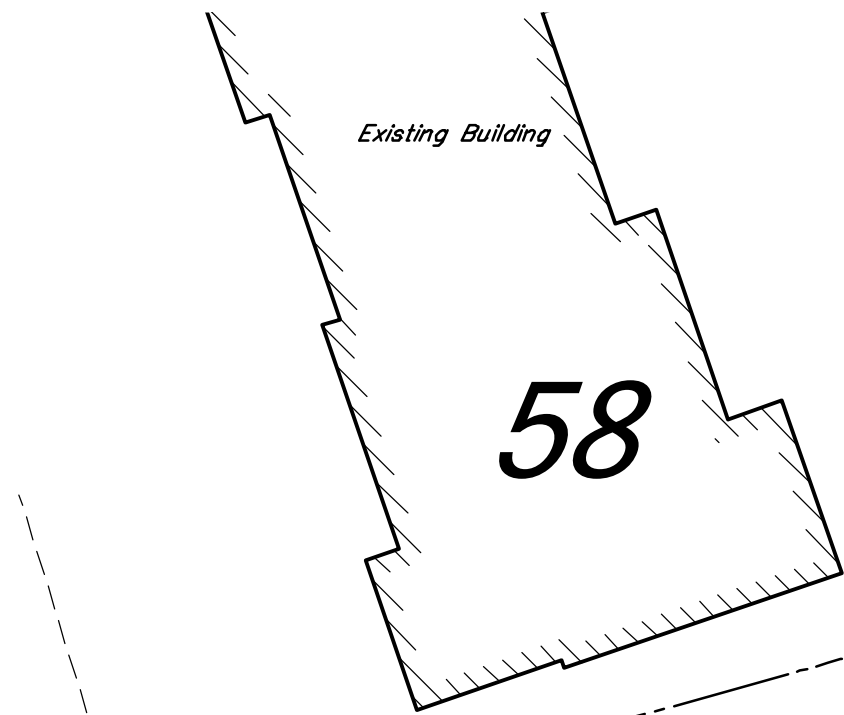








SCHEMATIC KEY  
N.T.S.



LEGEND

M

= Monument Box Found

O

= 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

PROPOSED

= Spot Elevation Tag

⊕

= Hydrant

⊗

= Water Service Valve

⊕

= Water Valve

⊙

= Water Meter

⊗

= Reducer

⊕

= Storm Manhole

⊗

= Sanitary Manhole

⊕

= Curb Inlet

⊗

= Catch Basin

R

= Property Line

C

= 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

Existing

PROPOSED

Ac.

Acres

A.F.N.

Auditor's File Number

Asp.

Asphalt

B.F.

Basement Floor

BW

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

Encr.

Encroaches

Ex.

Existing

Elev

Elevation

Encr.

Encroaches

Ex.

Existing

T.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

Pa.

Page

P.P.N.

Permanent Parcel Number

Prop

Proposed

Rec./R.

Record

R/W

Right-of-way

San.

Sanitary

S.F.

Square Feet

Sublot

Sublot

Strm.

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

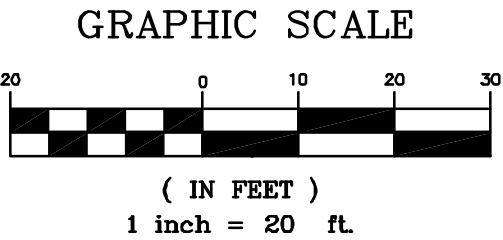
Vol.

Volume

Wat

Water

SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND · OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONEENGINEERING.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

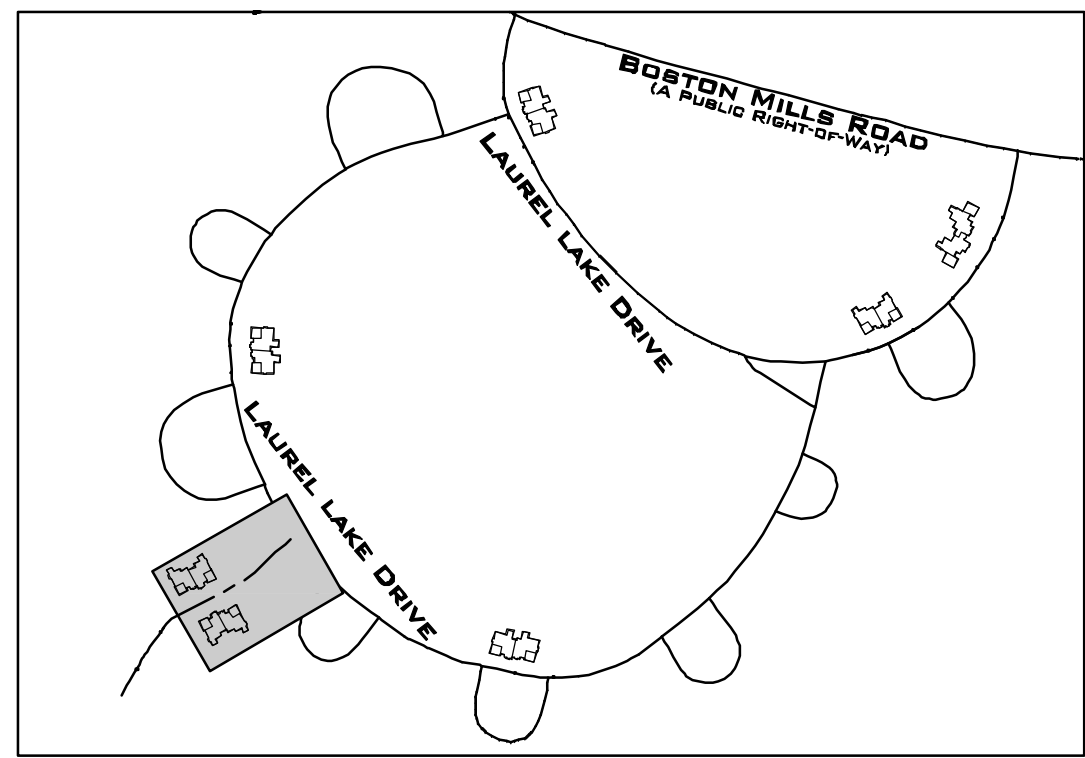
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE  
GRADING PLAN - BUILDING 5



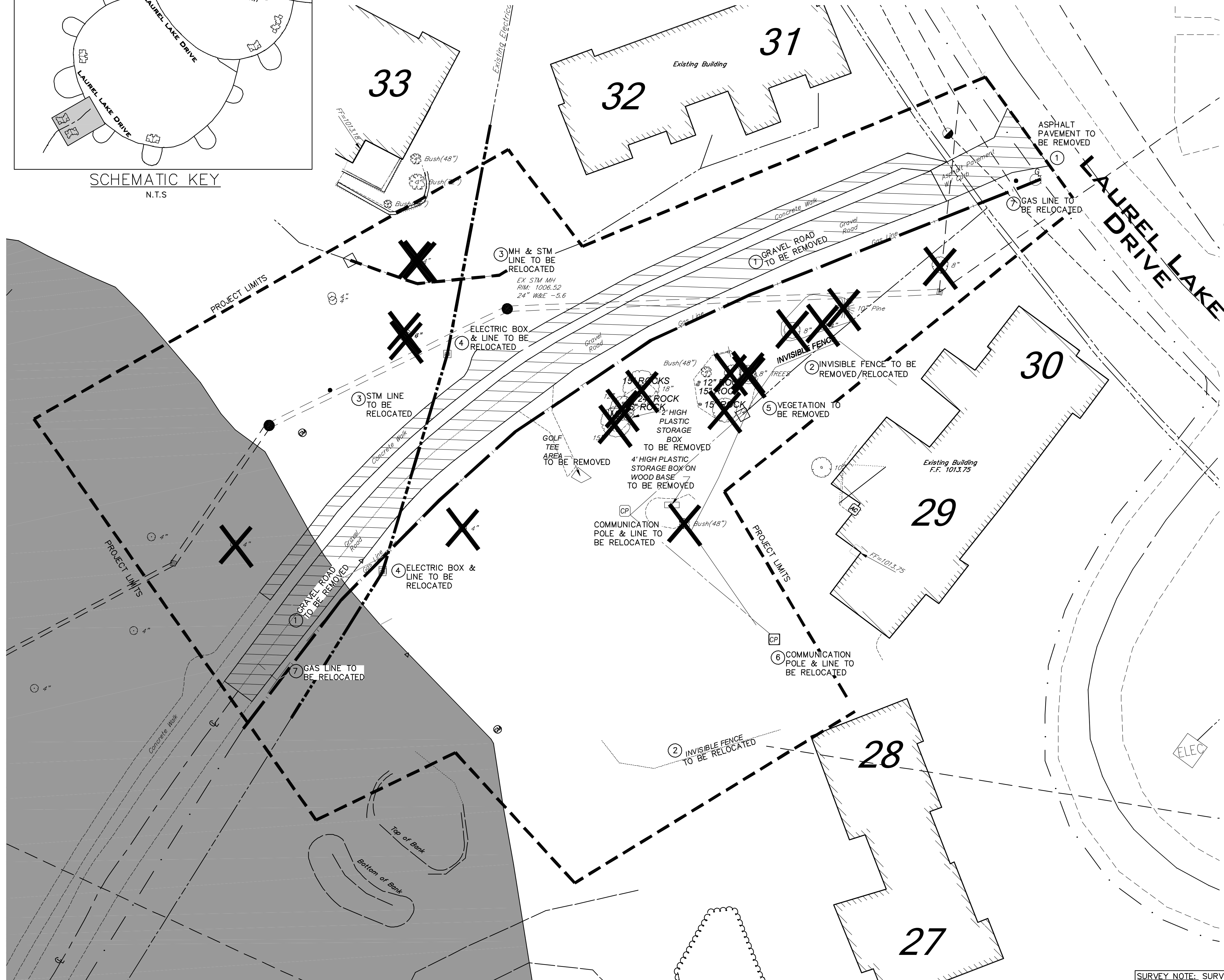
OGPUPS  
Ohio Oil & Gas Producers Underground Protection Service  
Call (844) 775-2864 or 811

C6.04





SCHMATIC KEY  
N.T.S



GENERAL SITE DEMOLITION NOTES:

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

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 WORK WITH THE APPROPRIATE UTILITIES PRIOR TO DEMOLITION. ALL UTILITY CONNECTIONS SHALL BE REMOVED ACCORDING TO UTILITY COMPANY REQUIREMENTS.

SITE DEMOLITION LEGEND:

TREE TO BE REMOVED

PAVEMENT TO BE REMOVED.

SITE DEMOLITION PLAN KEYNOTES:

- ASPHALT PAVEMENT TO BE REMOVED. CONTRACTOR SHALL SAWCUT AND REMOVE ASPHALT PAVEMENT. CONTRACTOR SHALL PROVIDE A CLEAN SMOOTH EDGE OF PAVEMENT AND ENSURE THE INTEGRITY OF THE PAVEMENT TO REMAIN.
- CONTRACTOR TO REMOVE INVISIBLE FENCE.
- DURING DEMOLITION, THE CONTRACTOR SHALL LOCATE, EXPOSE, MARK, AND INSPECT EXISTING STORM LINES AND MANHOLES. CONTRACTOR WILL NOTIFY ENGINEER OF LOCATION, CONDITION, AND INVERT ELEVATIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO COORDINATE RELOCATION WITH UTILITY COMPANIES PRIOR TO CONSTRUCTION.
- EXISTING ELECTRIC BOX AND ELECTRIC LINES TO BE RELOCATED. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTION.
- VEGETATION AREA TO BE CLEARED INCLUDING TREES, SHRUBS, BUSHES, AND ROCKS.
- COMMUNICATION POLES & LINES TO BE RELOCATED. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES.
- GAS LINE TO BE RELOCATED. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES.

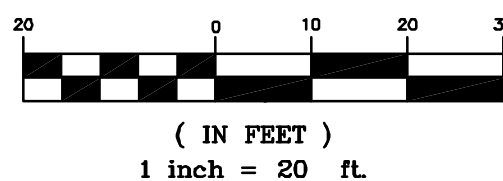
LEGEND

	Monument Box Found		Spot Elevation Tag
	Iron Pin or Pipe Found		Hydrant
	5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747		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
	Ballard		
	Cleanout / Test Tee		

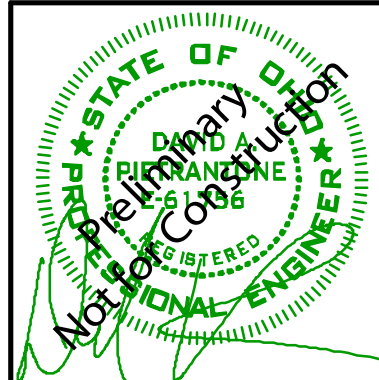
	Ex. Parcel Line		Proposed Gas Line
	Original Sublot Line		Proposed Sanitary/Combination Sewer
	Centerline		Proposed Storm Sewer
	Property Line		Proposed Waterline
	Right-of-way Line		Proposed Fence Line (Wooden)
	Easement Line		Proposed Fence Line (Chain-Link)
	Railroad Tracks		Proposed Guardrail

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 Number
C.C.M.R.	Cuyahoga County Map	Prop	Proposed
C.L.F.	Chain-Link Fence	Rec./R.	Record Right-of-way
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	San.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conc.	Concrete	S/L	Sublot
Conn.	Connection	Strm.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
Elec	Electric	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

GRAPHIC SCALE



SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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 LAKEVIEW AVENUE - SUITE 100  
CLEVELAND - OHIO - 44114  
PHONE: (216) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

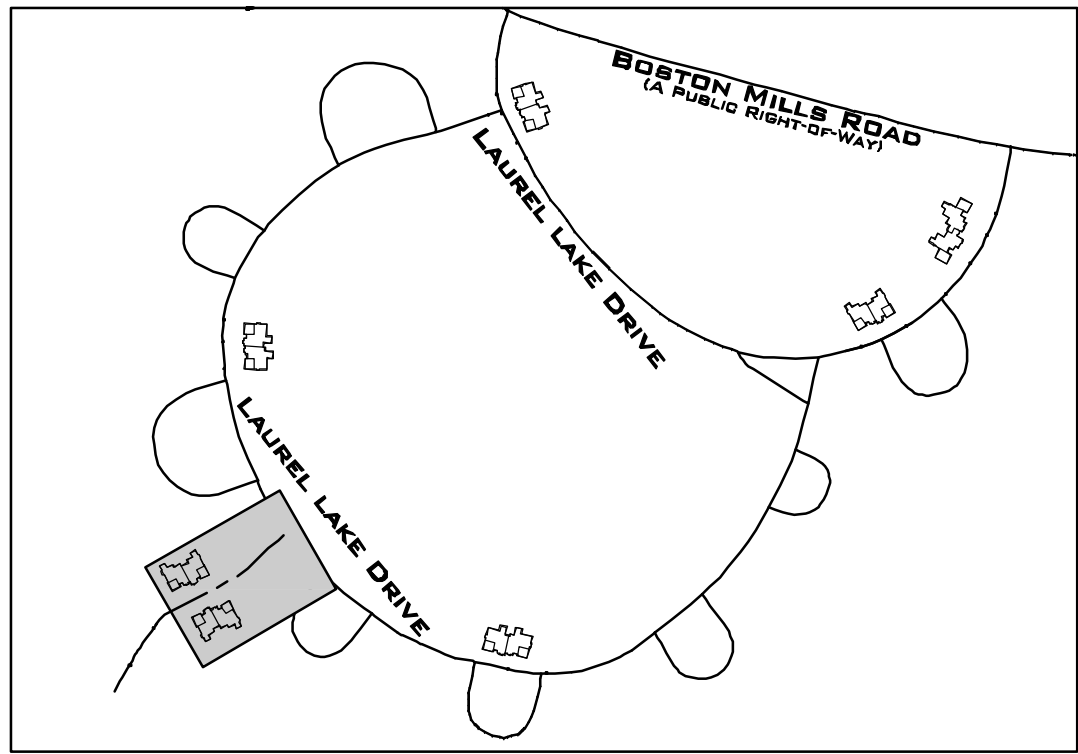
SITE DEMOLITION PLAN - BUILDING B&9



**OGPUPS**  
Ohio Oil & Gas Producer Underground Protection Service  
Call (814) 775-2866 ext 811

**C7.01**





SCHEMATIC KEY  
N.T.S



GENERAL SITE PLAN NOTES:  
① RETAINING WALL TO BE DESIGNED BY OTHERS. SEE GRADING PLAN SHEET C7.07 FOR ELEVATIONS



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE, SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

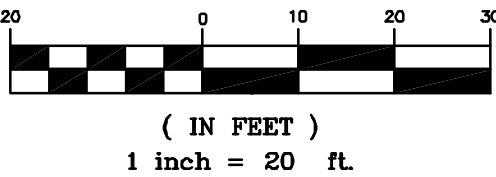
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

SITE PLAN - BUILDING B&9

LEGEND

	= Monument Box Found		= Spot Elevation Tag
	= Iron Pin or Pipe Found		= Hydrant
	= 5/8" Iron Pin Set and Capped		= Water Service Valve
	= Riverstone Company Dudley PS6747		= 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		
	= 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	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	Pg.	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
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	San.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conn.	Concrete	S/L	Sublot
Conn.	Connection	Strm.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water Main	TBR	To Be Removed
Elec	Electric	T/C	Top of Curb
Elev	Elevation	Tele	Telephone
Encr.	Encroaches	T.F.	Top Of Footer
Ex.	Existing	T.T.	Test Tee
F.F.	Finished Floor	TW	Top of Wall
GUT	Gutter	Typ.	Typical
Inv	Invert	Vol.	Volume
		Wat	Water

GRAPHIC SCALE

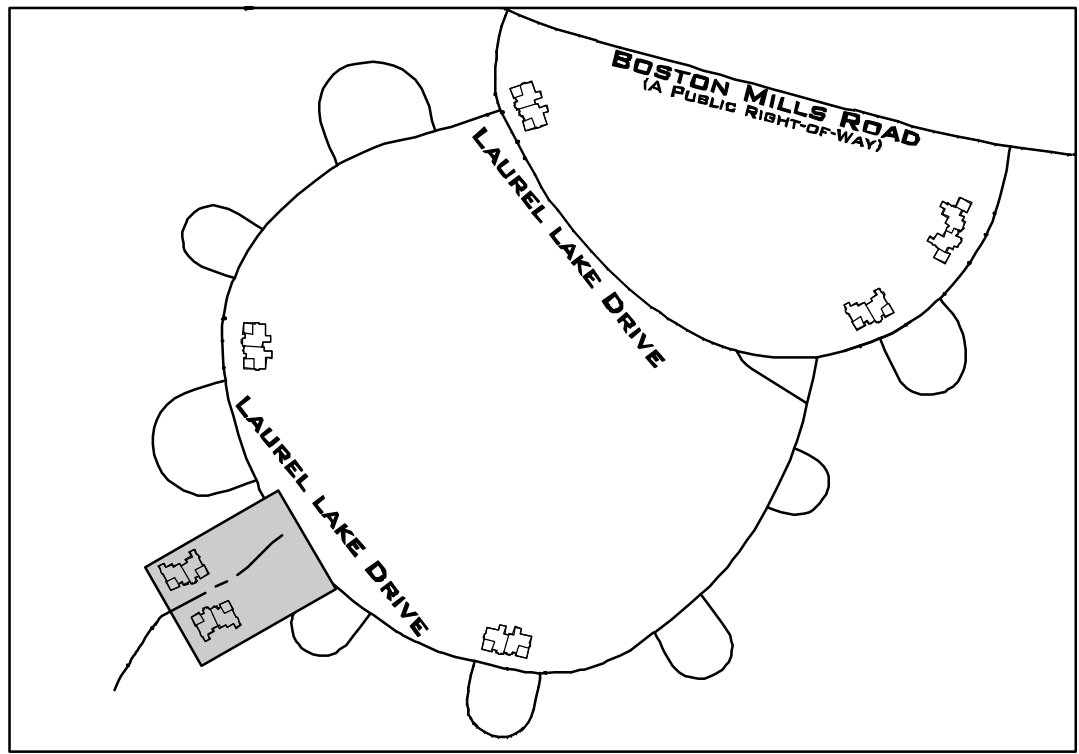


SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR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

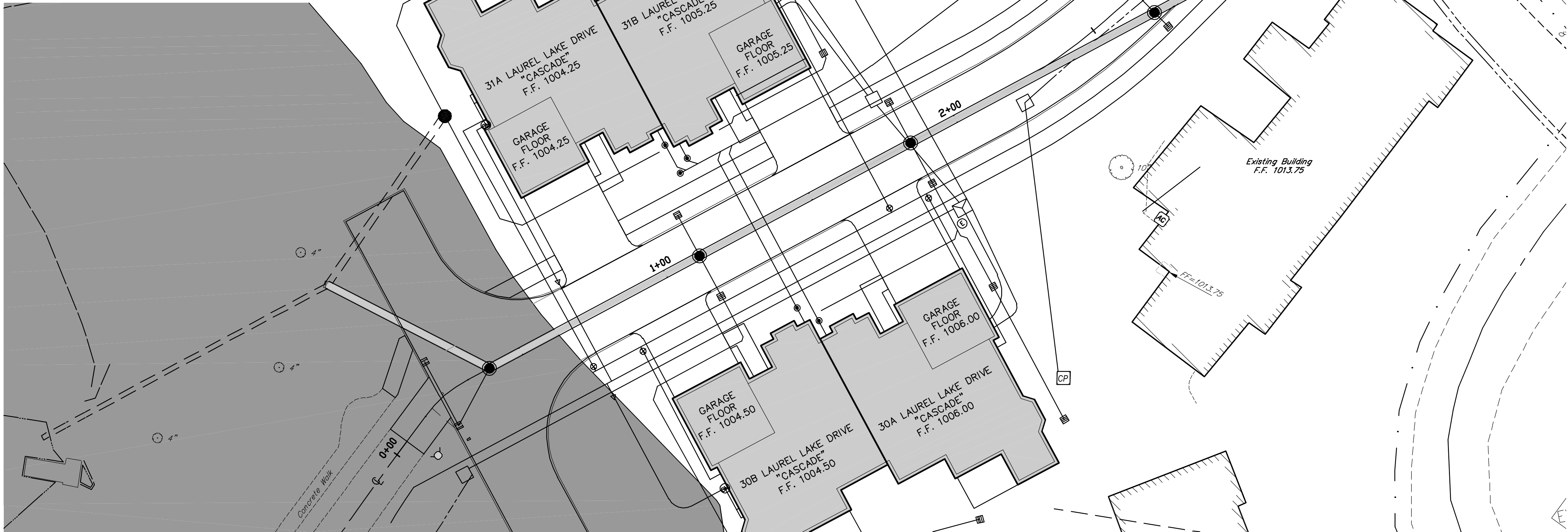


C7.02



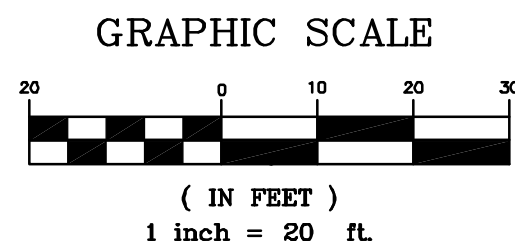
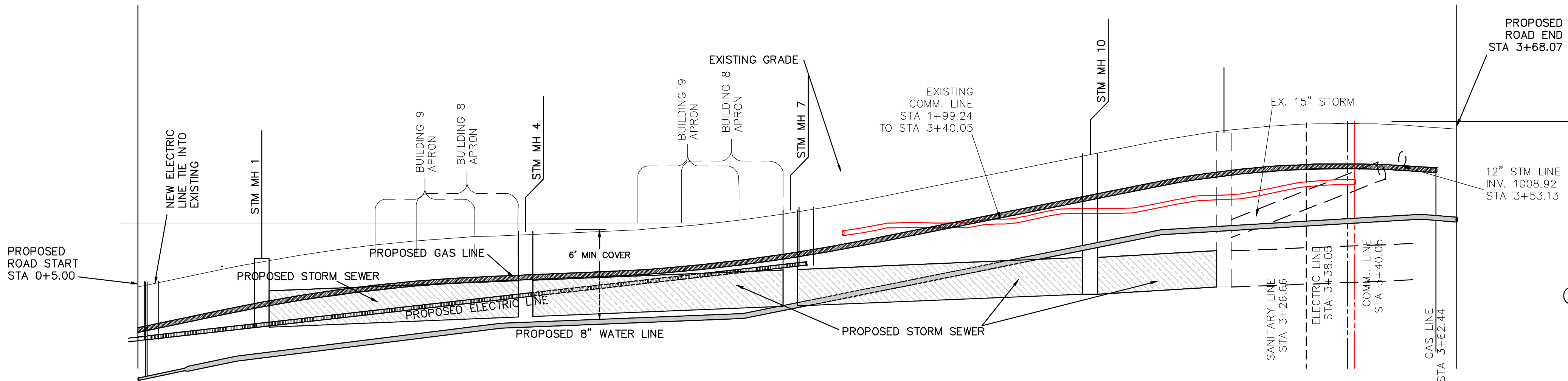


SCHEMATIC KEY  
N.T.S.



PROFILE VIEW  
1"=20'

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



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONEDESIGN.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

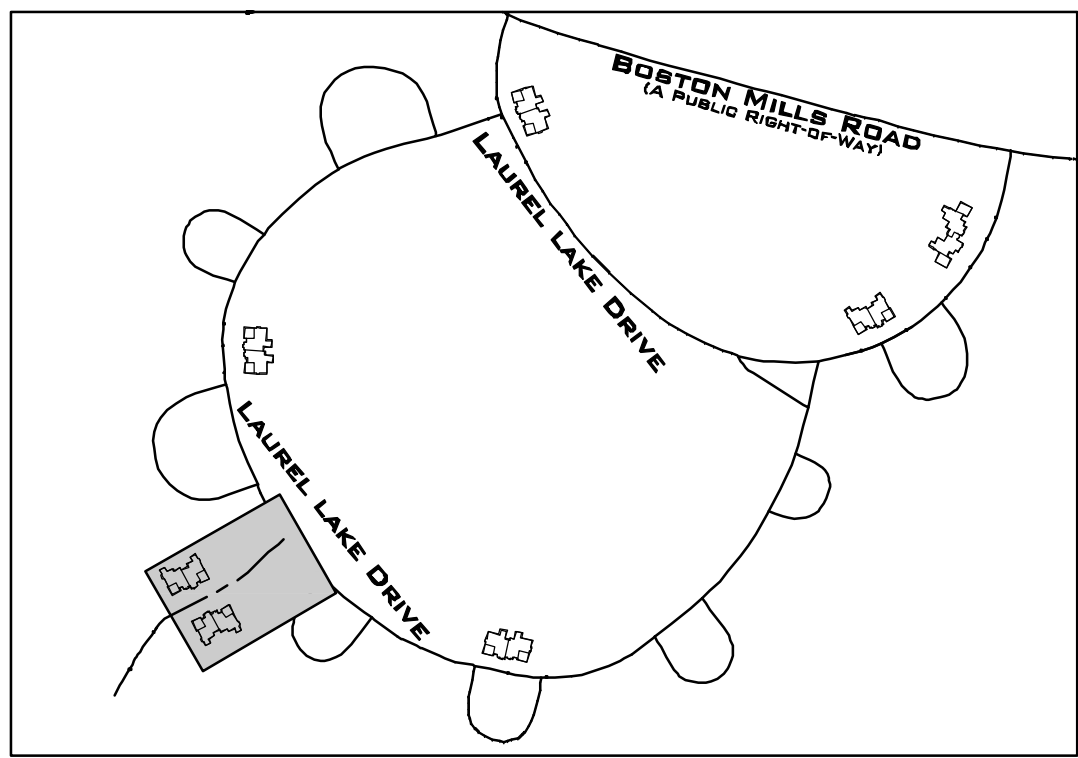
PLAN & PROFILE VIEW - BUILDING B&9



**OGPUPS**  
Ohio Oil & Gas Producers' Underground Protection Service  
Call (844) 715-2864 or 811

C7.03

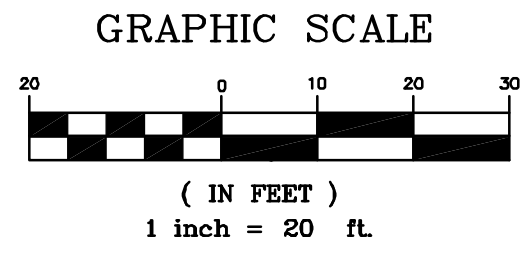




SCHEMATIC KEY  
N.T.S.



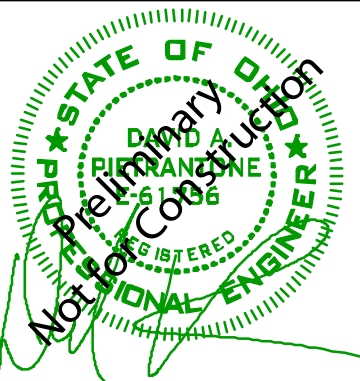
SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. THE ENGINEER IS NOT RESPONSIBLE FOR MISSING OR INCOMPLETE INFORMATION. THE ENGINEER RECOMMENDS CONTRACTOR VISIT SITE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS AND UTILITIES PRIOR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



- 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 TELECOMMUNICATIONS CONDUIT. CONTRACTOR SHALL COORDINATE WITH TELECOMMUNICATIONS PROVIDER PRIOR TO CONSTRUCTION.
  - 8 RELOCATED ELECTRICAL CONDUIT. CONTRACTOR SHALL COORDINATE WITH HUDSON PUBLIC POWER PRIOR TO CONSTRUCTION.

LEGEND

= Monument Box Found	= Spot Elevation Tag
= Iron Pin or Pipe Found	= Hydrant



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE, SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONEDESIGN.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
**FOR BID**  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

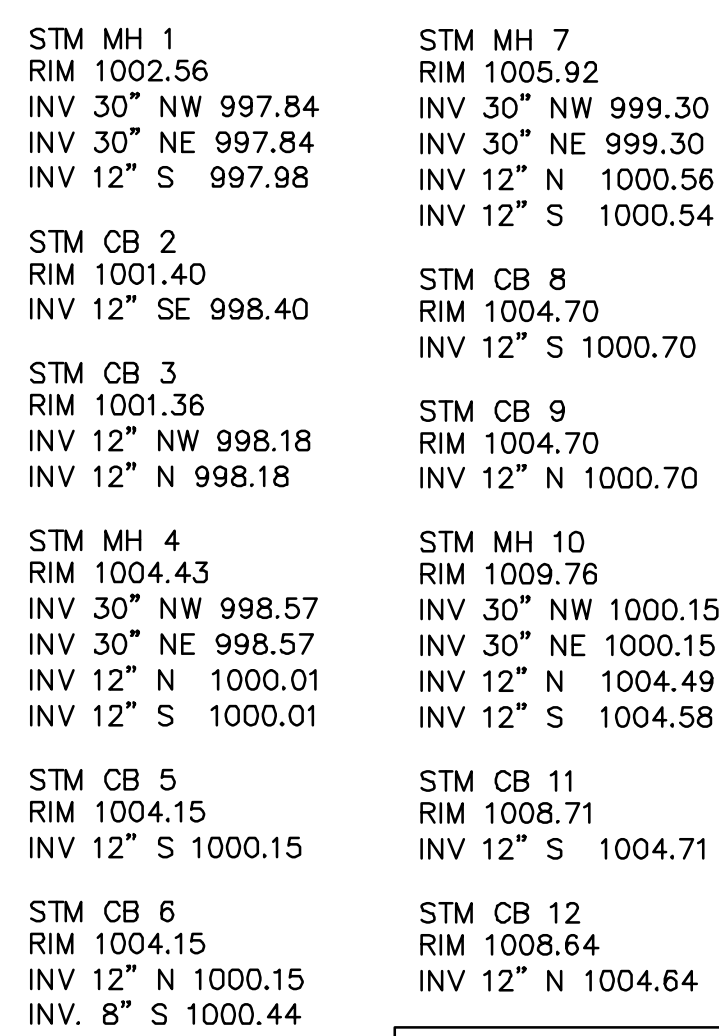
UTILITY PLAN - BUILDING B&G



OGPUPS  
Ohio Oil & Gas Producer Underground Protection Service  
Call (614) 715-2866 ext 811

C7.04





**Legend:**

- = Monument Box Found
- = Iron Pin or Pipe Found
- 
- = Capped Riserstone Company Dudley RS747
- = 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

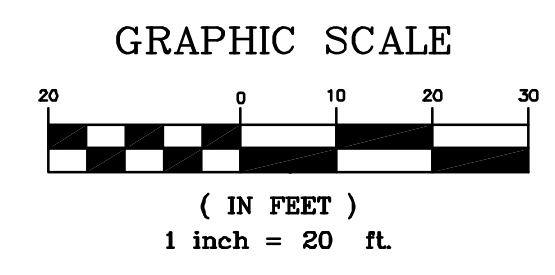
**Proposed**

**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.** Lined Common Area  
**Adj.** Adjacent      **L.F.** Lined Feet  
**A.F.N.** Auditor's File Number      **M.E.** Match Existing  
**Asp.** Asphalt      **Meas./M.** Measured  
**B.F.** Basement Floor      **MnH** Manhole  
**BW** 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      **Prop** Proposed  
**C.L.F.** Chain-link Fence      **Rec./R.** Recorded  
**Clr.** Clears      **R/W** Right-of-way  
**C.O.** Clean Out      **San.** Sanitary  
**Comb.** Combination      **S.F.** Square Feet  
**Conc.** Concrete      **S/L** Sublot  
**Conn.** Connection      **Strm.** Stream  
**D.H.** Drill Hole      **T.B.M.** Temporary Bench Mark  
**D.I.W.M.** Ductile Iron Water      **TBR** To Be Removed  
**Mail** Mail      **Top of Curb** Top of Curb  
**Elec** Electric      **Tele** Telephone  
**Elev** Elevation      **T.F.** Top of Footer  
**Encr.** Encroaches      **T.T.** Test Tee  
**Ext.** Existing      **TW** Top of Wall  
**F.N.F.** Finished Floor      **Typ** Typical  
**GUT** Gutter      **Vol** Volume  
**Inv** Invert      **Wat** Water



**SURVEY NOTE:** SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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.



2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

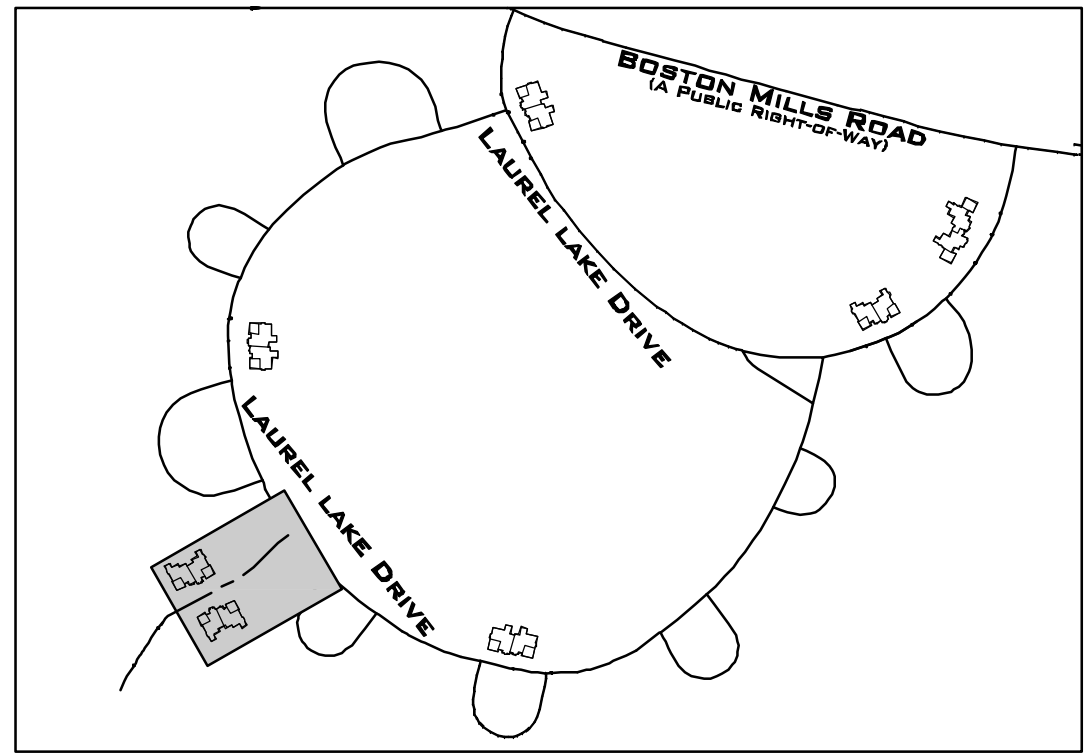
LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

STORMWATER PLAN - BUILDING 8&9

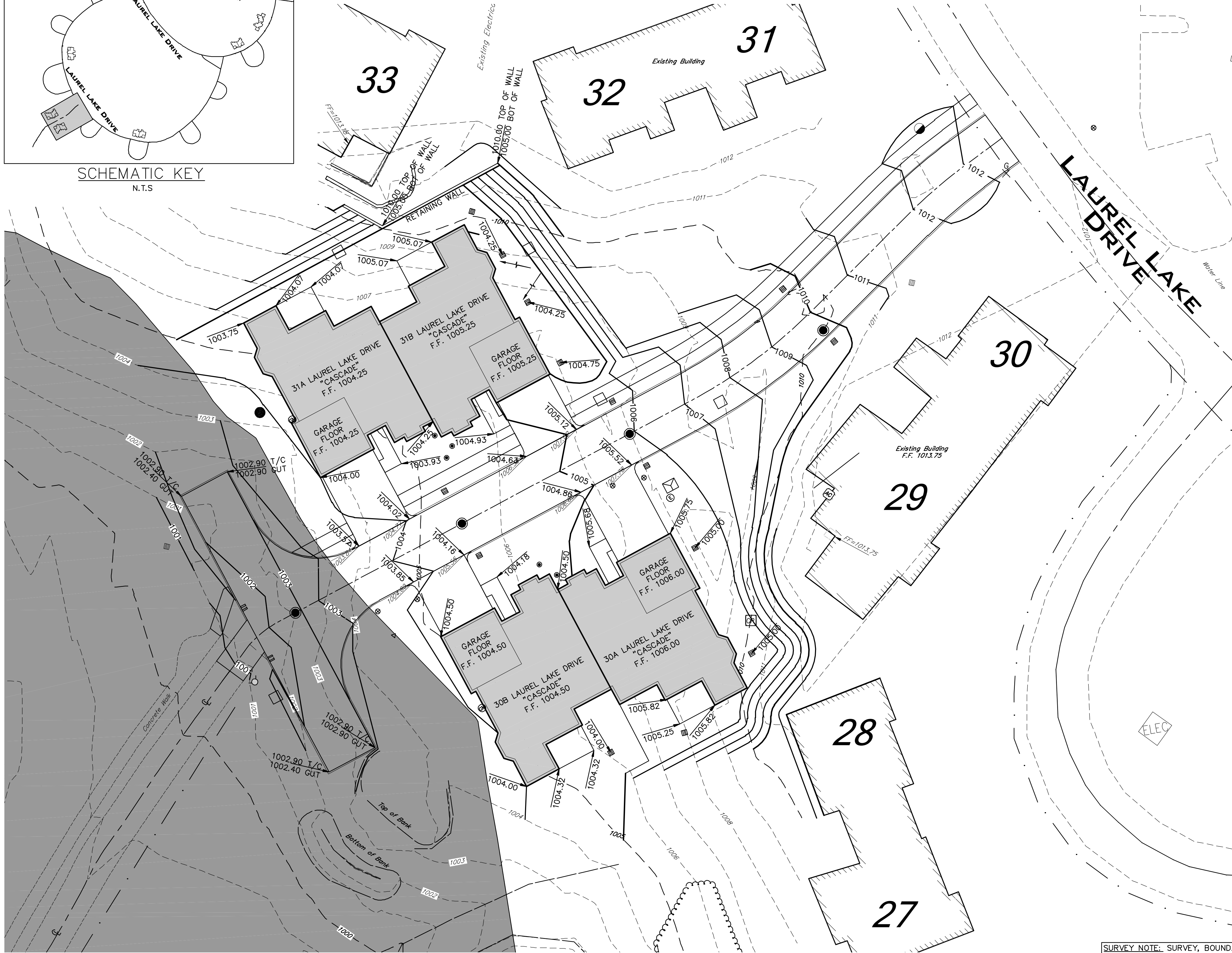


# C7.05





SCHEMATIC KEY  
N.T.S.



LEGEND

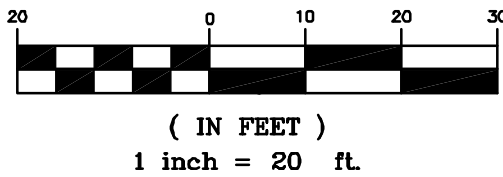
<b>M</b> = Monument Box Found	<b>Spot Elevation Tag</b>
<b>O</b> = Iron Pin or Pipe Found	<b>Hydrant</b>
<b>5/8"</b> = 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747	<b>Water Service Valve</b>
<b>P.K.</b> = P.K. Nail	<b>Water Valve</b>
<b>G</b> = Gas Meter	<b>Water Meter</b>
<b>U</b> = Gas Valve	<b>Reducer</b>
<b>U</b> = Utility Pole	<b>Storm Manhole</b>
<b>G</b> = Guy Anchor & Line	<b>Sanitary Manhole</b>
<b>T</b> = Telephone Box	<b>Curb Inlet</b>
<b>E</b> = Electric Box	<b>Catch Basin</b>
<b>C</b> = Cable Box	<b>Property Line</b>
<b>B</b> = Ballard	<b>Centerline</b>
<b>C</b> = Cleanout / Test Tee	

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

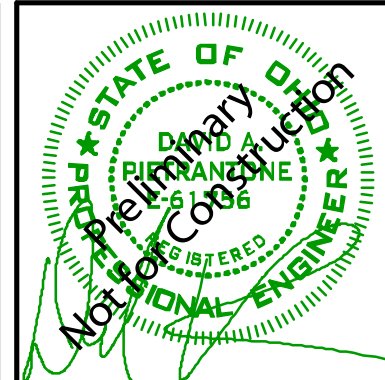
Electric Line	Gas Line
Sanitary/Combination Sewer	Storm Sewer
Waterline	Fence Line (Wooden)
Fence Line (Chain-Link)	Guardrail

Ac.	Acres	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	Pg.	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
Clr.	Clears	R/W	Right-of-way
C.O.	Clean Out	San.	Sanitary
Comb.	Combination	S.F.	Square Feet
Conc.	Concrete	S/L	Sublot
Conn.	Connection	Strm.	Storm
D.H.	Drill Hole	T.B.M.	Temporary Bench Mark
D.I.W.M.	Ductile Iron Water	TBR	To Be Removed
Elec	Main	T/C	Top of Curb
Ele	Electric	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
Inv	Invert	Wat	Water

GRAPHIC SCALE



SURVEY NOTE: SURVEY, BOUNDARY AND UTILITY INFORMATION WAS PROVIDED TO THE RIVERSTONE COMPANY. 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  
CLEVELAND - OHIO - 44114  
PHONE: (440) 491-9640  
WWW.RIVERSTONEENGINEERING.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

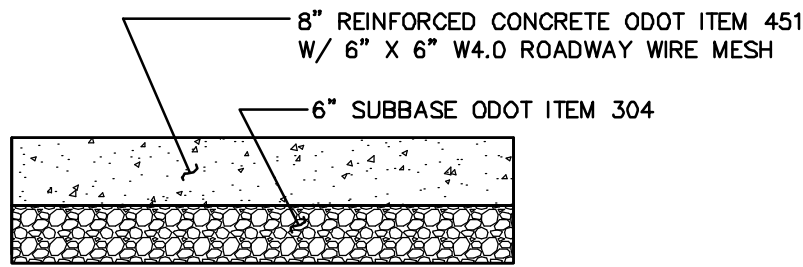
GRADING PLAN - BUILDING B&9



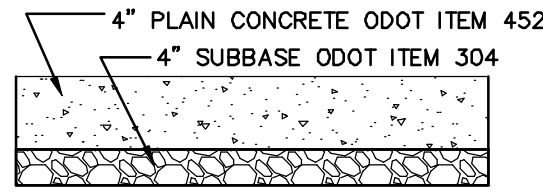
OGPUPS  
Ohio Oil & Gas Producer Underground Protection Service  
Call (844) 775-2864 or 811

C7.06

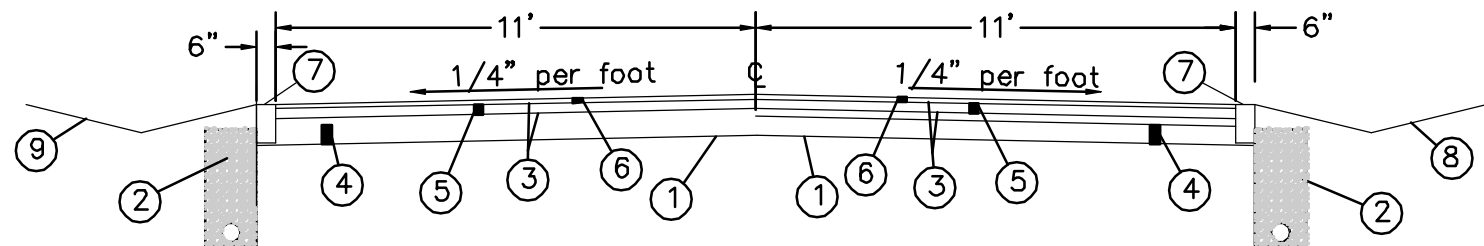




8" REINFORCED CONCRETE  
DRIVE AND APRON  
N.T.S.

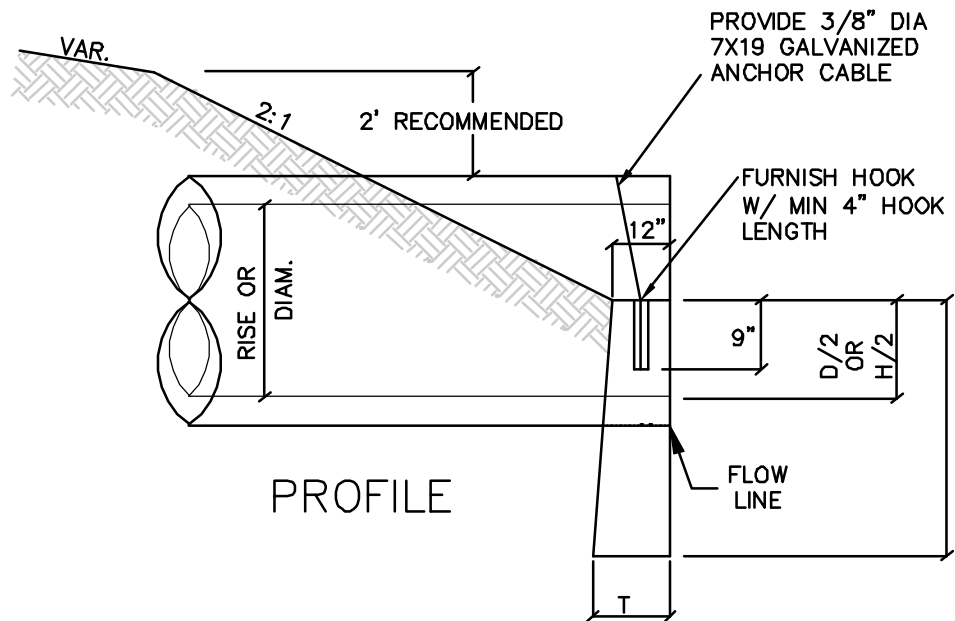
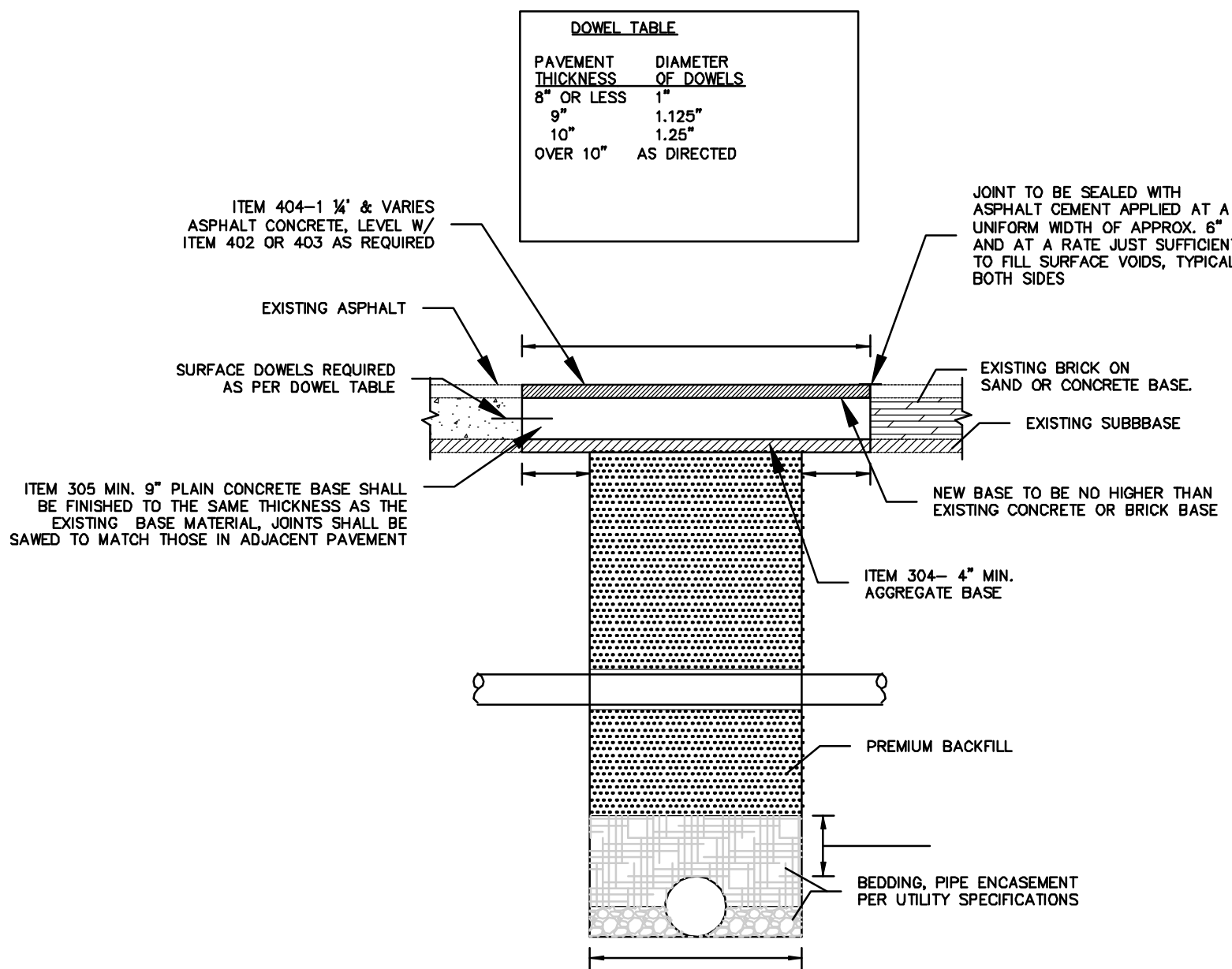


CONCRETE SIDEWALK  
REPLACEMENT/NEW  
N.T.S.



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

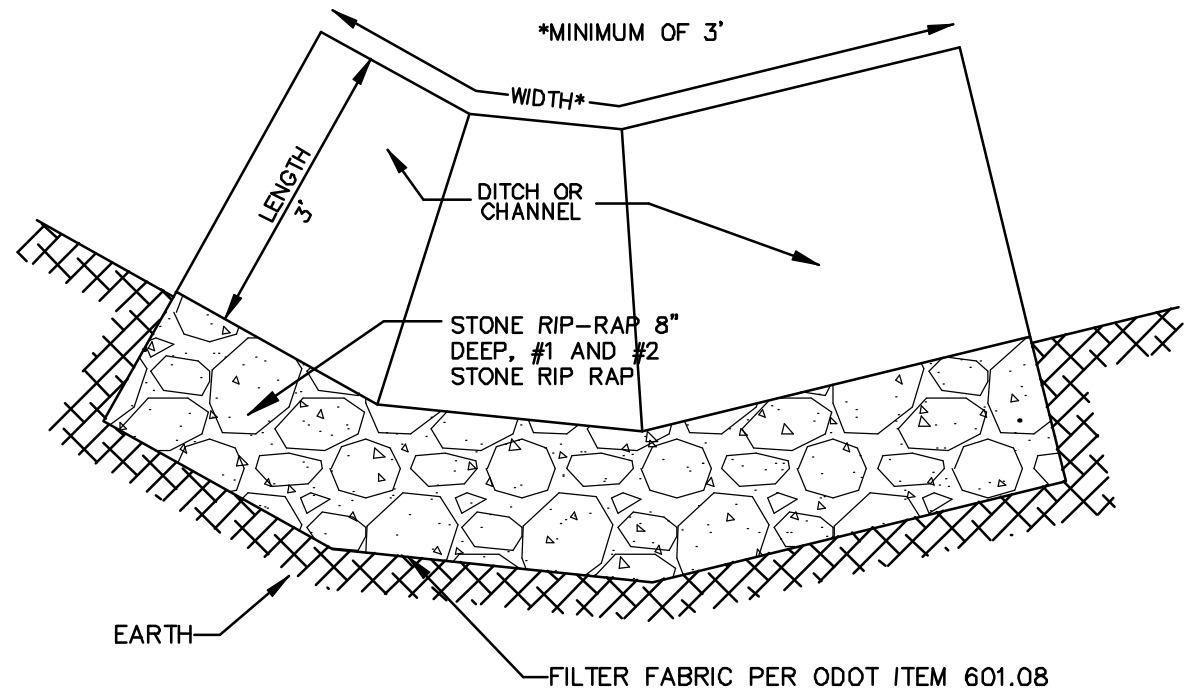
TYPICAL ASPHALT SECTION  
WITH FLUSH CONCRETE CURB  
N.T.S.



PROFILE

HEADWALL FOR CORRUGATED METAL & PLASTIC PIPE					
CIRCULAR					
D	W	H	T	CONC.	C.Y.
12"	2'-0"	3'-0"	12"	.21	
15"	2'-6"	3'-2"	12"	.27	
18"	3'-0"	3'-3"	12"	.33	
21"	3'-6"	3'-4"	12"	.39	
24"	4'-0"	3'-6"	12"	.46	

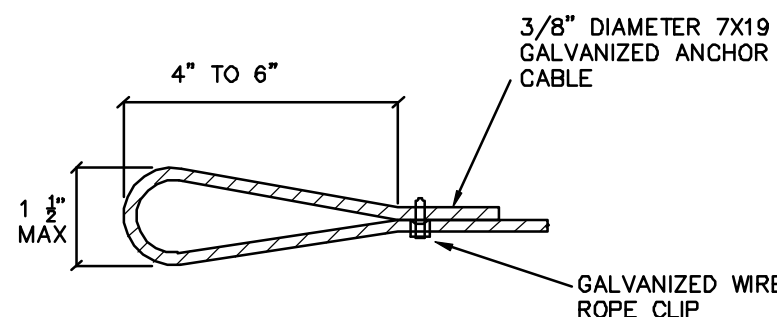
CAST IN PLACE HALF HEADWALL DETAIL  
N.T.S.



OUTLET PIPE RIP RAP DETAIL

## 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.



ANCHOR CABLE DETAIL

## GENERAL NOTES

- 1.) 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.
- 2.) ANY AND ALL CHANGES IN PLAN QUANTITIES OR MATERIALS SHALL BE APPROVED IN WRITING BY THE DEVELOPER PRIOR TO INCORPORATION IN THE WORK.
- 3.) EARTHWORK QUANTITIES:
  - A) ALL STUMPS, TREES AND OTHER CONSTRUCTION DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR OFF-SITE.
  - B) 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.
  - C) NO DISPOSAL SITE WITHIN THE PROJECT LIMITS SHALL BE UTILIZED.
- 4.) 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.
- 5.) 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.
- 6.) ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SYSTEM PROHIBITED.
- 7.) PRIOR TO CONNECTION CONSTRUCTION, CONTRACTOR TO VERIFY LOCATIONS, SIZE AND DEPTH OF EXISTING SEWER & WATER TIE-INS.
- 8.) 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

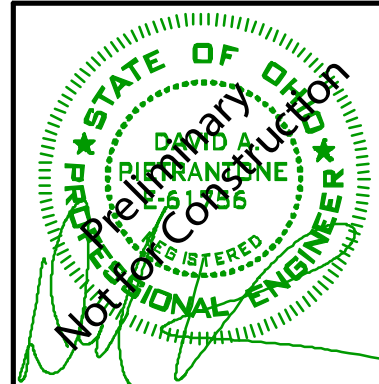
MCI (VERIZON)  
120 RAVINE STREET  
AKRON, OHIO 44303  
PH: (330) 329-5495

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.

- 9.) 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.
- 10.) IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL.
- 11.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ALL MATERIAL TESTING AND ALL PERMITS REQUIRED FOR THIS PROJECT.
- 12.) 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.
- 13.) 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.
- 14.) 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).
- 15.) ALL EXISTING CONNECTIONS SHALL BE TESTED WITH DYE AND CAMERA BEFORE TYING IN FOR USE WITH PROPOSED LOTS.
- 16.) 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.
- 17.) 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.
- 18.) TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION BY THE CONTRACTOR.
- 19.) ALL SANITARY AND STORM MAIN LINE SEWERS & HOUSE CONNECTIONS SHALL HAVE PREMIUM JOINTS.
- 20.) FLEXIBLE GASKETS SHALL BE PROVIDED AT ALL SANITARY AND STORM MANHOLES.
- 21.) FOR CURB INLET MANHOLE, BRICK MAY BE USED TO FIT CASTING.

## ENVIRON. IMPACT NOTES

- 1.) 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.
- 2.) ACCESS FOR EMERGENCY VEHICLES MUST BE PROVIDED AT ALL TIMES.
- 3.) 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.
- 4.) 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.
- 5.) 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.
- 6.) 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.
- 7.) 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.



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND - OHIO - 44114  
PHONE: (216) 616-4911 FAX: (216) 616-4911  
WWW.RIVERSTONESURVEY.COM

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

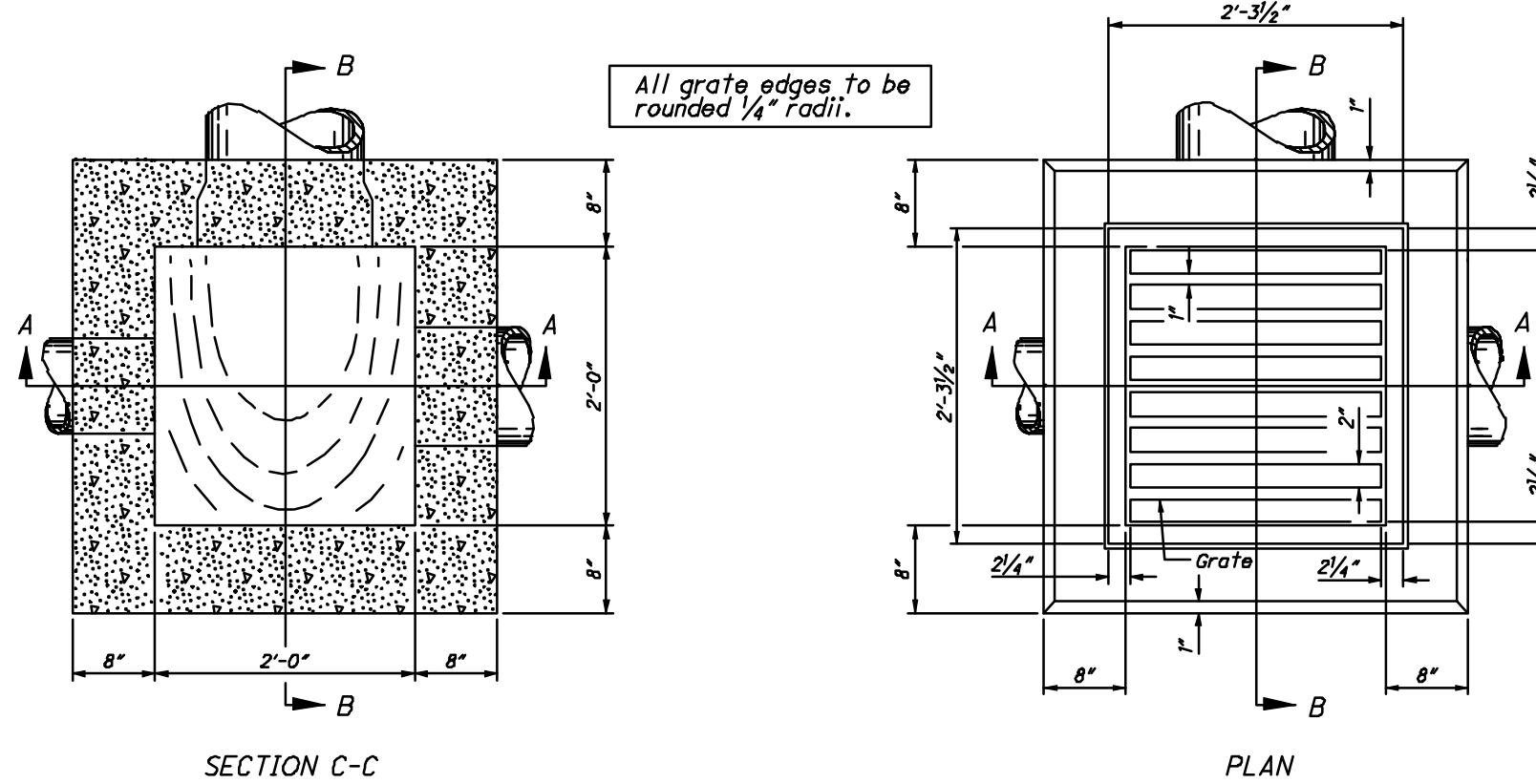
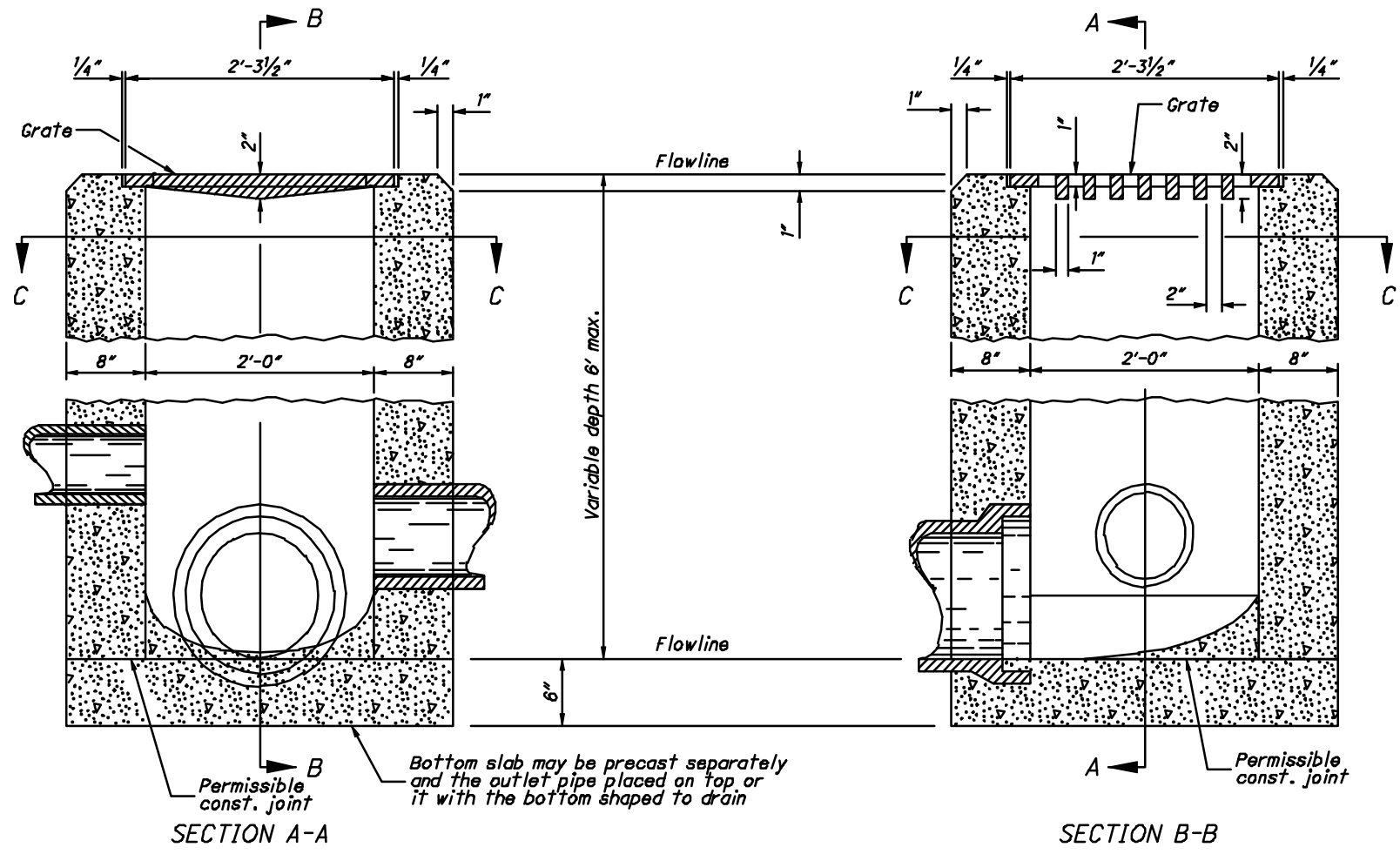
NOTES & DETAILS



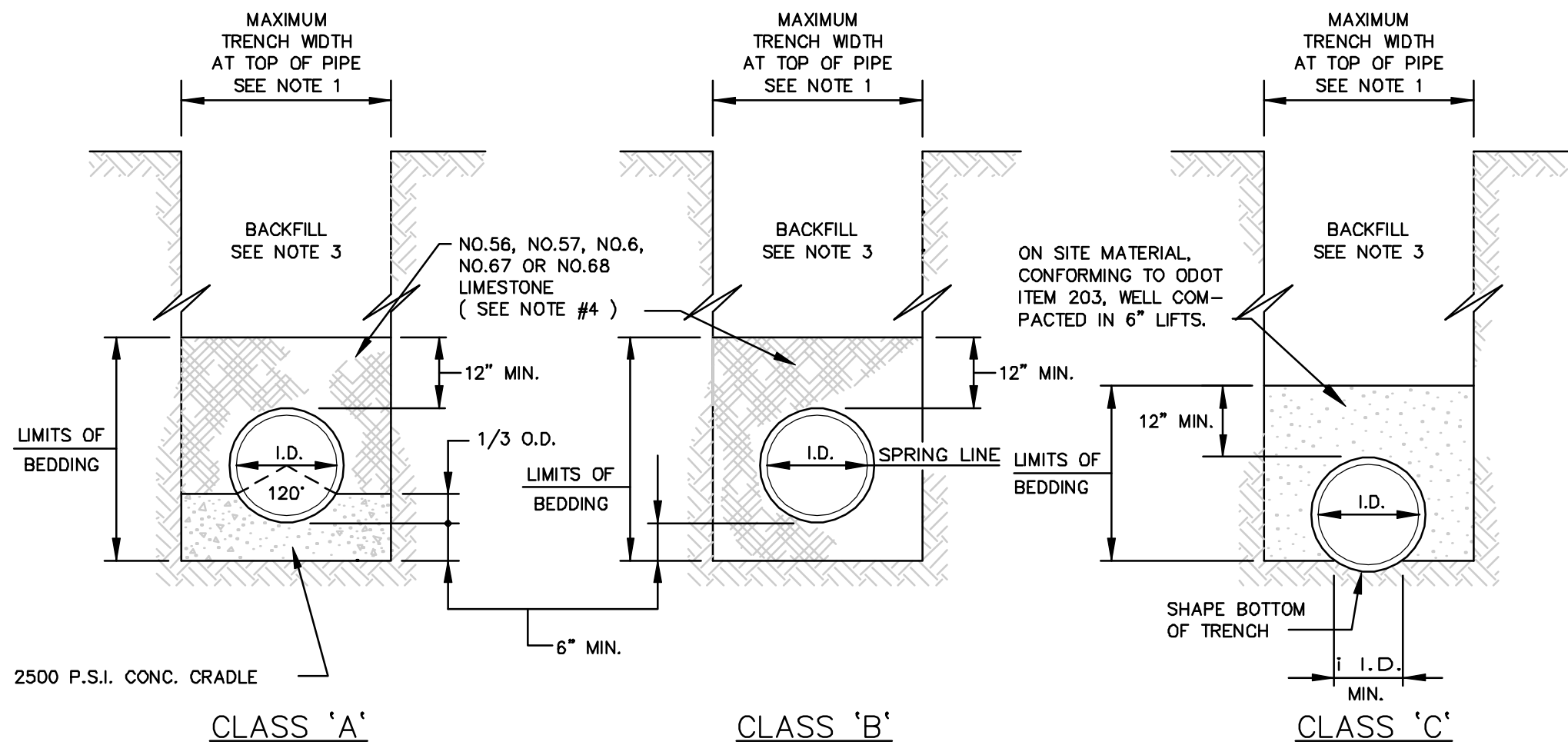
**OGPUPS**  
Ohio Oil & Gas Produces Underground Protection Service  
Call 614.715.2884 or 811

**C8.01**





CATCH BASIN No. 2-2B



NOTES:

1. MAXIMUM TRENCH AT TOP OF PIPE SHALL BE O.D.+24\"
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 FLOUTATION 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\"

TRENCH & BEDDING DETAILS

NTS

NOTES

CB-2-2B GRATE: Furnish a design essentially the same and equally as strong as the one shown (see Construction Information Table), or meet the requirements of CMS 711.14. Provide grate openings and dimensions as shown here unless otherwise shown in the plans.

If necessary, bicycle safe grates will be specified in the plans. Furnish Neenah No. R-4859-S or EJ No. 510M3 10051043 grates or approved equals.

Place grate elevation 4\"

CB-2-2C FRAME & GRATE: Where the catch basin is specified for use in a parking lot, Furnish Neenah No. R-478-456 or EJ No. V-5622 146622010 frame and V-5622 146622030 grate or approved equals. If necessary, bicycle safe grates will be specified in the plans. Furnish Neenah No. R-3405 grate or EJ No. 5260M 100526030 grate or approved equals.

On cast-in-place and precast units, provide a level surface on the catch basin 4\"

GRATE TEXT: Cast the following text into the top of the grate: "DRAINS TO WATERWAY" and "DUMP NO WASTE"

Print text in bold, capital letters of least 1/2\"

WALLS: Construct brick or cast-in-place walls with a nominal 8\"

CONCRETE: Use 4000 psi compressive strength for cast-in-place concrete. Meet the requirements of CMS 706.13 for all precast concrete and mark with the catch basin number.

PRECAST BASE: If a precast base is used, set it deep enough so that the top can be placed on the base to provide the grate elevation specified in the plans. Do not use brick layers to adjust the top elevation.

LOCATION AND ELEVATION: When given on the plans, location and elevation are of the top center of the grate.

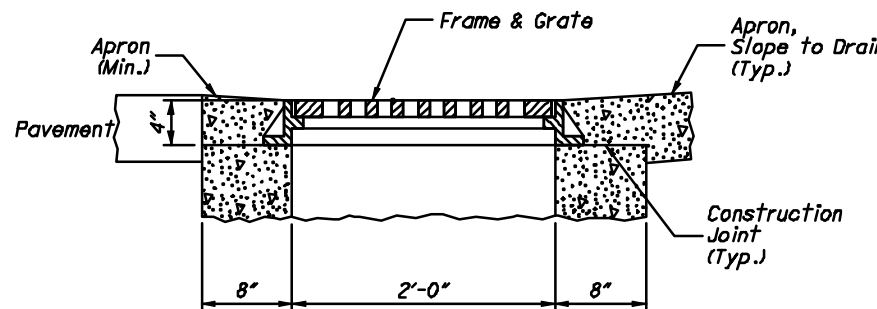
MINIMUM DEPTH: The minimum depth of CB No. 2-2B is the outside diameter (O.D.) of the outlet pipe plus 4\"

OPENINGS: Ensure pipe openings are the O.D. of the pipe being supplied plus 2\"

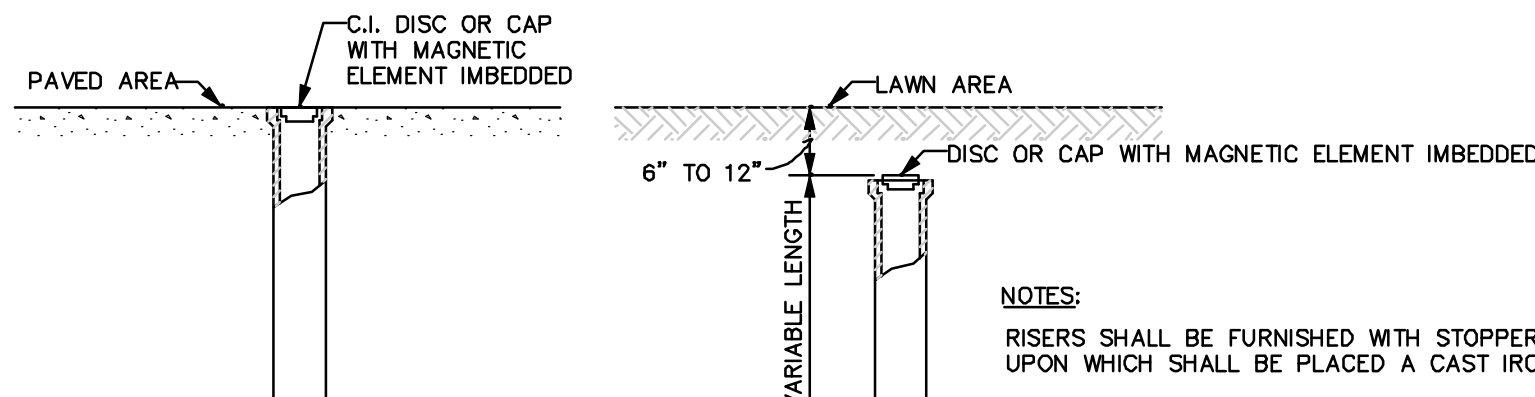
PAYMENTS: All materials and labor, including excavation and backfilling, are paid for under Item 611 - Catch Basin, No. 2-12B or 2C1.

CONSTRUCTION INFORMATION	
Minimum weight of grate, 120 lbs.	

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

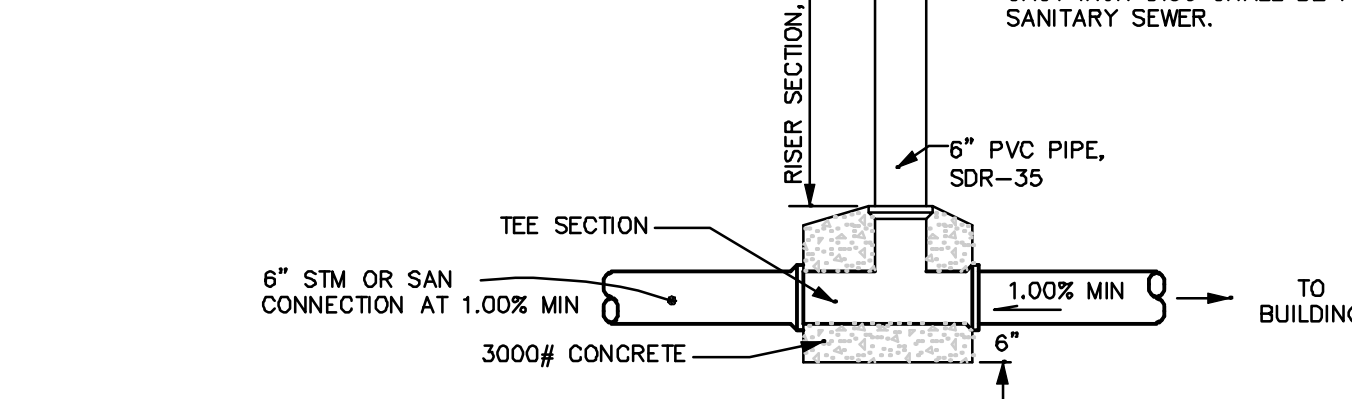


CATCH BASIN No. 2-2C



INTERNAL DROP IN EXISTING MANHOLE

NTS



CLEANOUT - TEST TEE

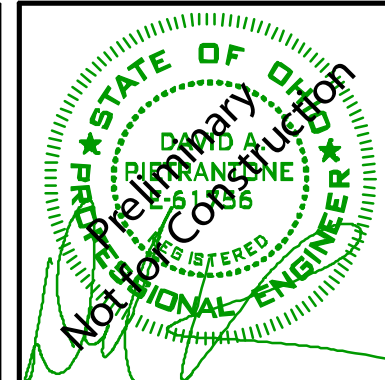
NTS

NOTES FOR STORM SEWERS

1. THE FOLLOWING PIPES ARE APPROVED FOR THIS PROJECT:
  - A) 15\"
  - B) 15\"
  - C) 16\"
2. ALL DOWNSPOUT COLLECTORS SHALL USE PUSH ON JOINTS.
3. ALL DRIVE CULVERT WITH LESS THAN 2\"
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\"
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**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE, SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (216) 491-9640  
WWW.RIVERSTONEENGINEERING.COM

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

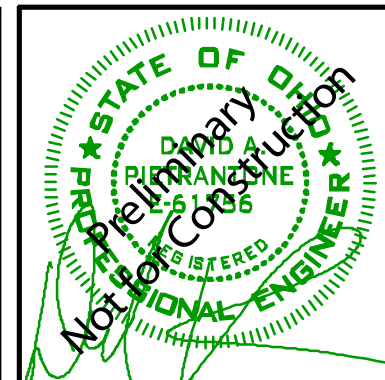
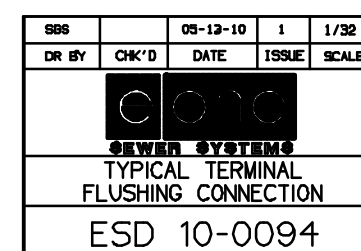
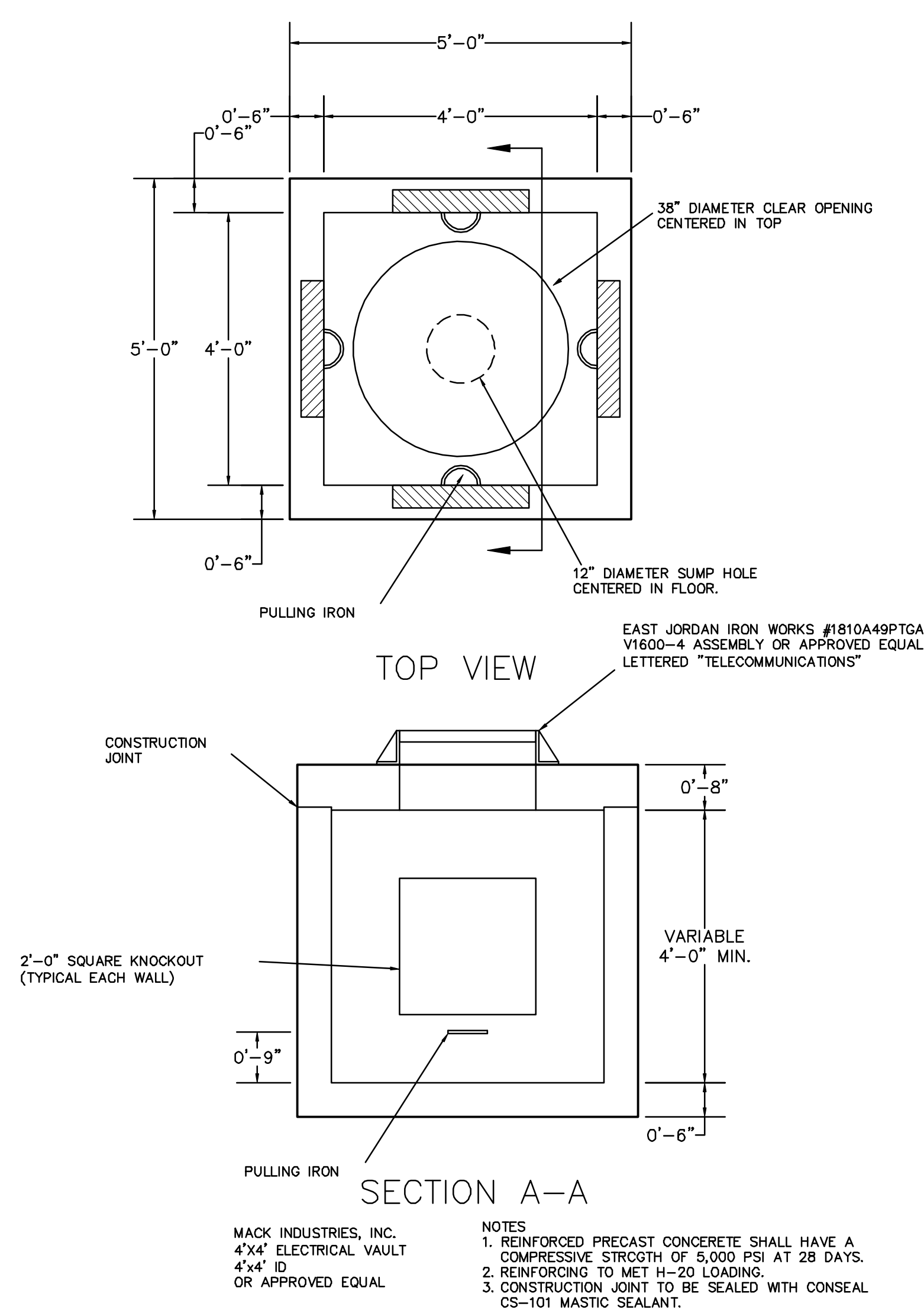
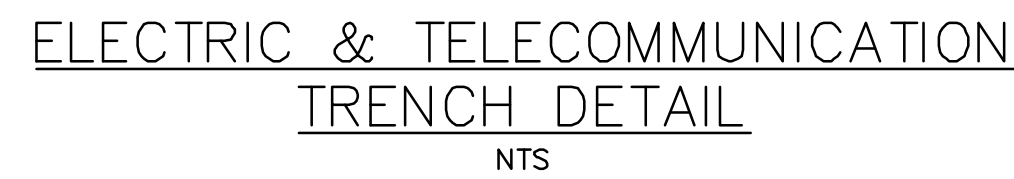
NOTES & DETAILS



**OGPUPS**  
Ohio Oil & Gas Produces Underground Protection Service  
Call 814.715.2884 or 811

**C8.02**





**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND - OHIO - 44114  
PHONE: (216) 491-2000 FAX: (216) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

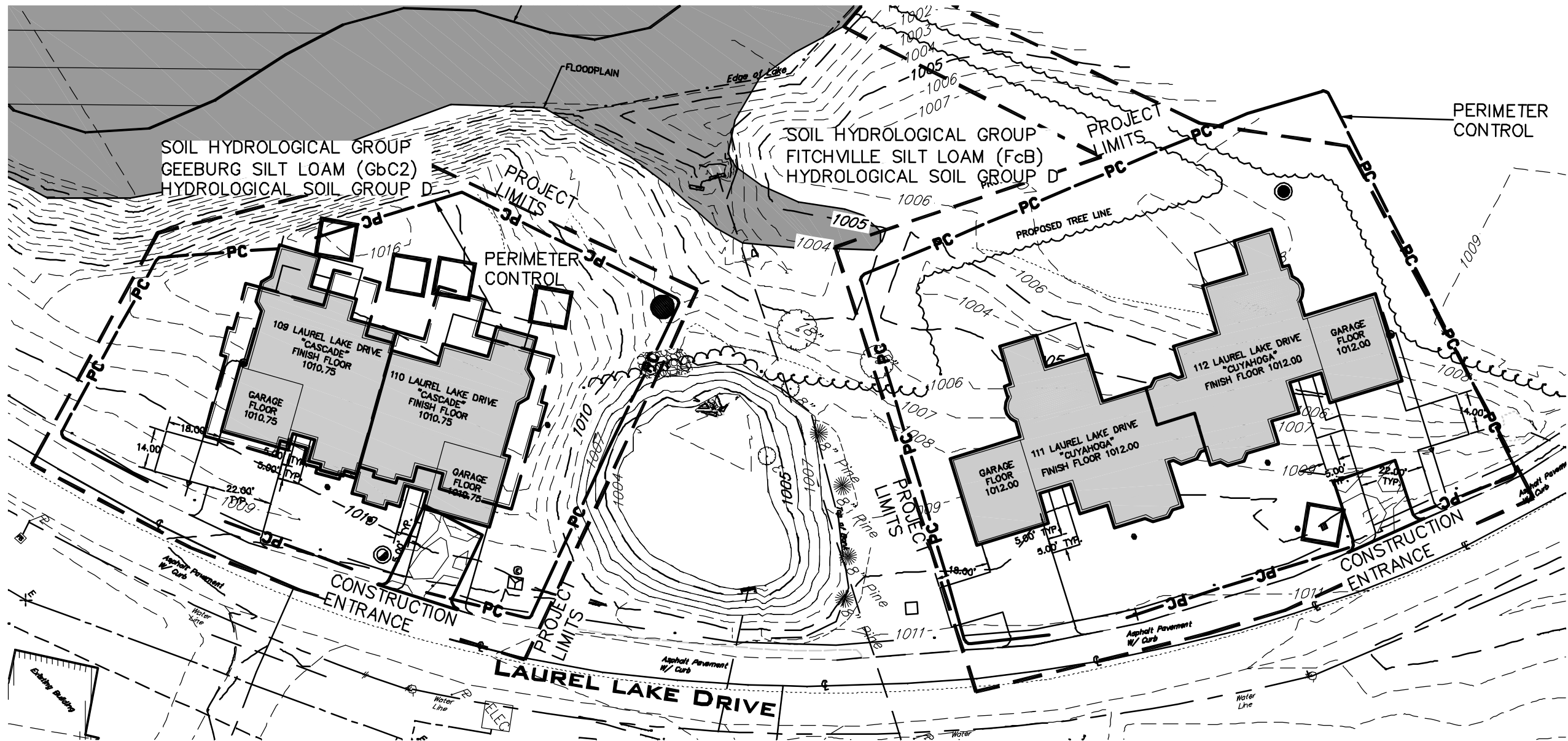
NOTES &amp; DETAILS



**OGPUPS**   
Ohio Oil & Gas Producers Underground Protection Section  
Call (614) 715-2584 or 811

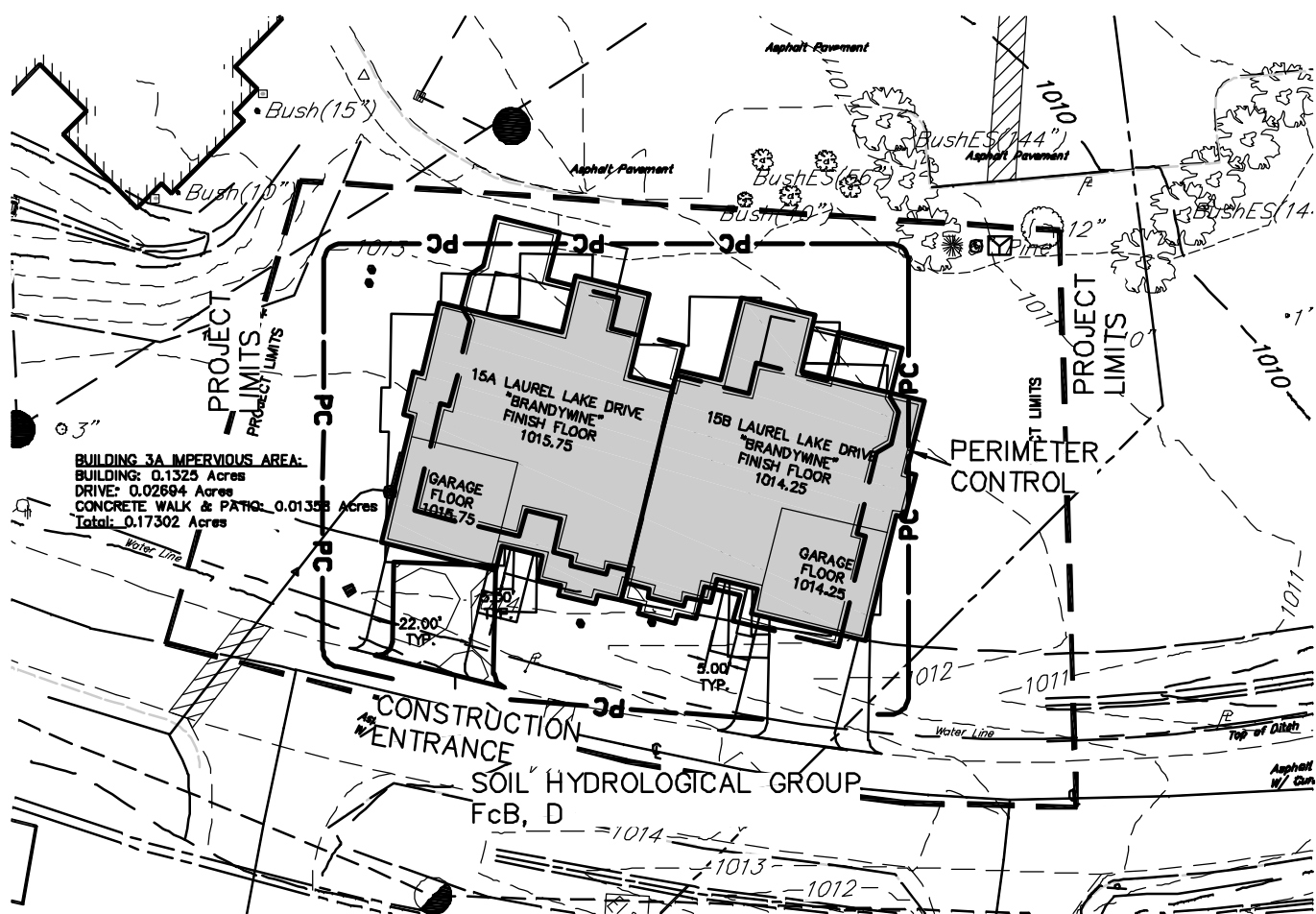
# C8.03



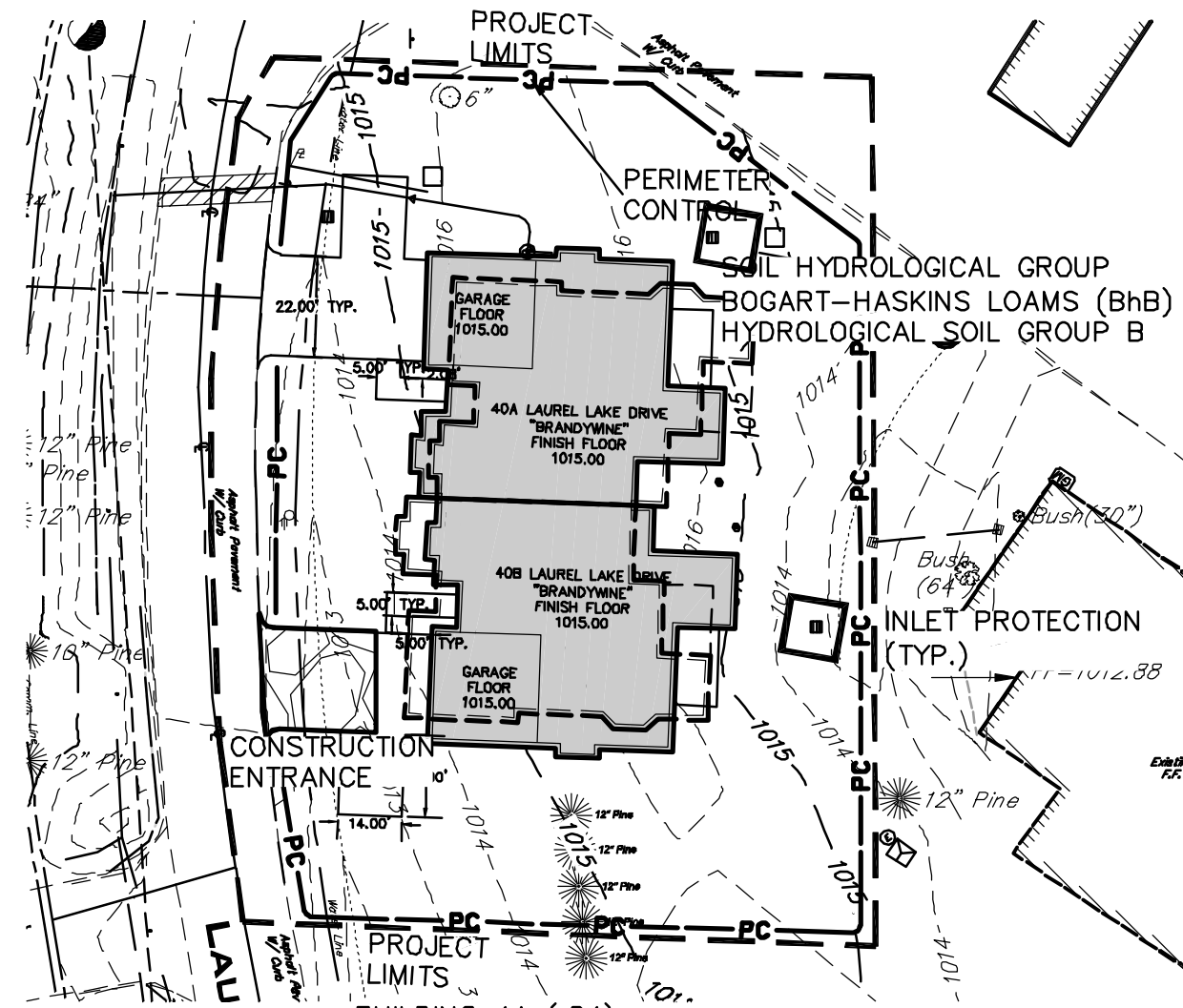


BUILDING 2(.02)  
PROJECT LIMITS: 0.591 ACRES  
IMPERVIOUS AREA: 0.183 ACRES

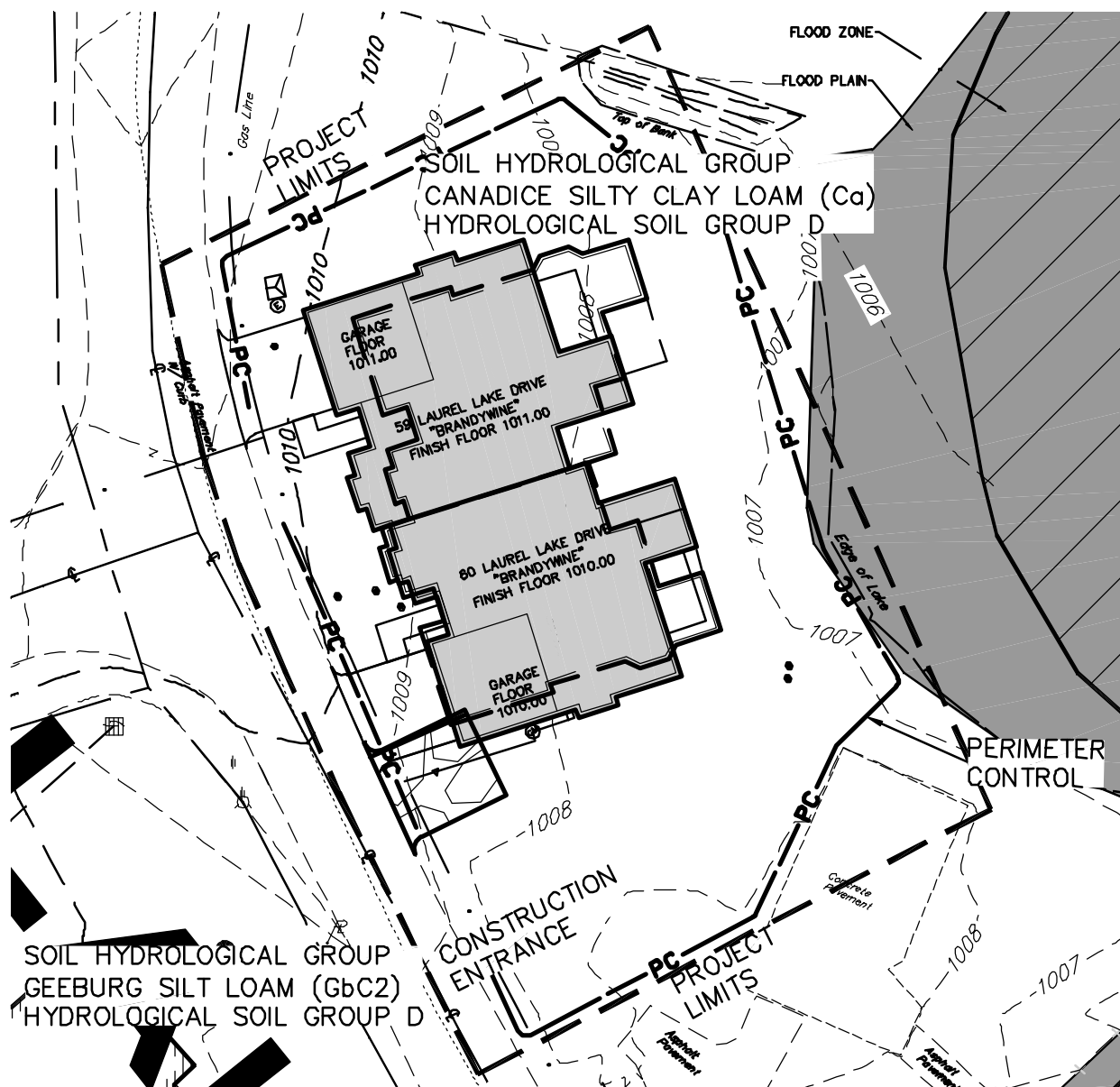
BUILDING 1(.02)  
PROJECT LIMITS: 0.701 ACRES  
IMPERVIOUS AREA: 0.216 ACRES



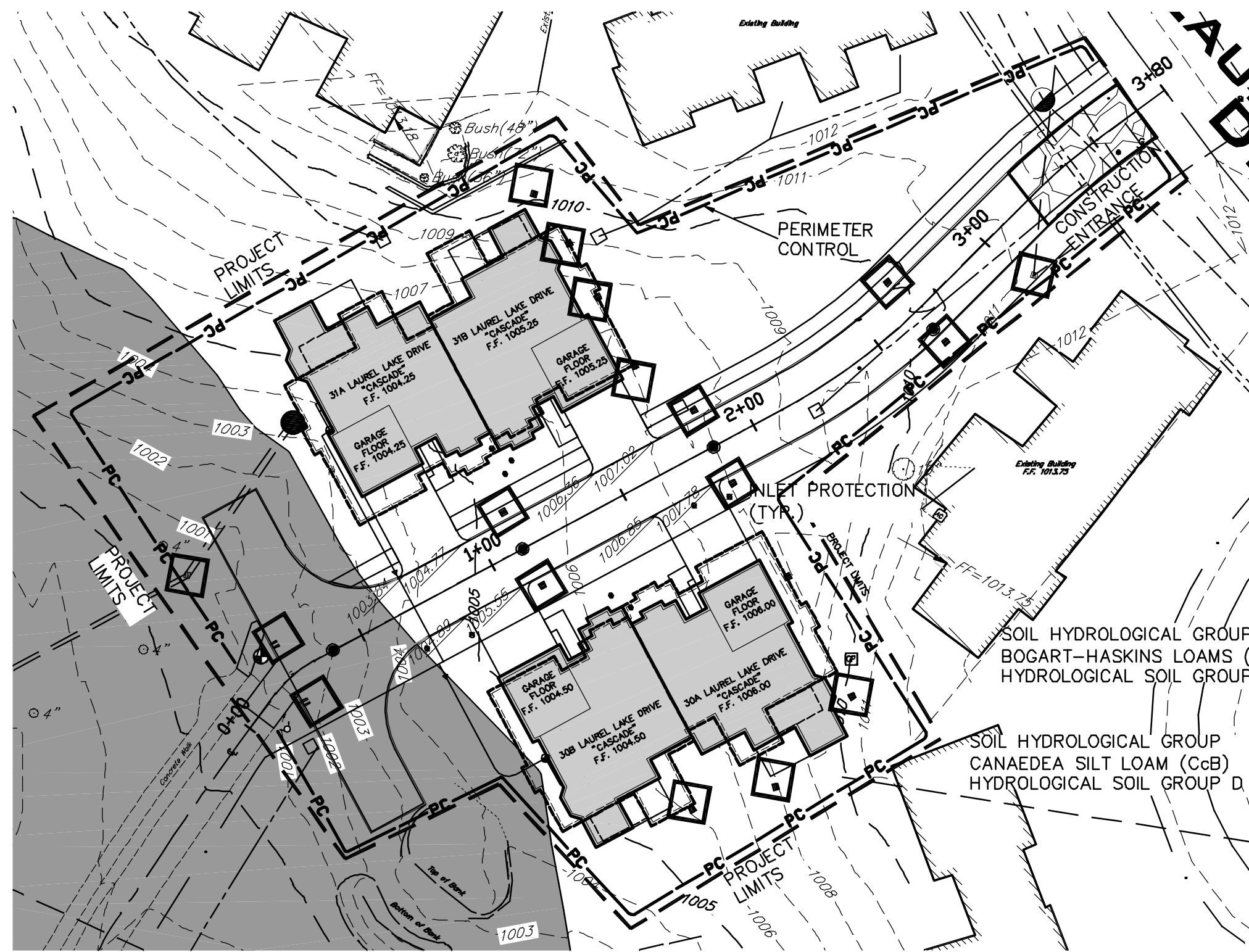
BUILDING 3A (.03)  
PROJECT LIMITS: 0.537 ACRES  
IMPERVIOUS AREA: 0.173 ACRES



BUILDING 4A (.04)  
PROJECT LIMITS: 0.617 ACRES  
IMPERVIOUS AREA: 0.194 ACRES



BUILDING 5 (.05)  
PROJECT LIMITS: 0.611 ACRES  
IMPERVIOUS AREA: 0.188 ACRES



BUILDING 8 & 9(.06)  
PROJECT LIMITS: 1.35 ACRES  
ROAD AREA: 0.266 ACRES  
BUILDING AREA: 0.3162 ACRES

**SITE DATA:** THE PROJECT IS LOCATED ON LAUREL LAKE DRIVE IN THE CITY OF HUDSON. THE ENTIRE AREA OF THE SITE IS APPROXIMATELY 141.9 ACRES. THE PROJECT LIMITS IS APPROXIMATELY 4.37 ACRES. EXISTING STORM WATER ON SITE IS COLLECTED INTO DRAINAGE SYSTEM BEFORE BEING DEPOSITED INTO A DETENTION BASIN OR DIRECTLY INTO ONE OF TWO LAKES ON SITE. DETENTION BASINS ON SITE DEPOSIT INTO LAKES. THE LARGER OF THE TWO LAKES—LAUREL LAKE FLOWS INTO PINE LAKE OFF SITE.

PRE CONSTRUCTION WEIGHTED C VALUE (PROJECT LIMITS)			
Surface	c	Area	CxArea
Woods (Fair)	0.41	0.18	0.0738
Impervious	0.96	0.36	0.1344
Open (Fair)	0.57	3.31	2.01
Total		3.85	2.218

Weighted C =  $2.218 / 3.85 = 0.576$

**PRE CONSTRUCTION % IMPERVIOUSNESS**  
 $0.36 / 3.85 = 9.3\%$

**SOILS:** THE NATIONAL RESOURCE CONSERVATION SERVICE WEB SOIL SURVEY OF SUMMIT COUNTY IDENTIFIES THE SOILS ON SITE AS SUCH:

BUILDING 1 – GEEBURG SILT LOAM (GbC2), HSG D  
BUILDING 2 – FITCHVILLE SILT LOAM (FcB), HSG D  
BUILDING 3A – FITCHVILLE SILT LOAM (FcB), HSG D  
BUILDING 4A – BOGART-HASKINS LOAMS (BhB), HSG B  
BUILDING 5 – CANADICE SILTY CLAY LOAM (Ca), HSG D  
BUILDING 8 – CANAEDea SILT LOAM (CcB), HSG D  
BUILDING 8 – BOGART-HASKINS LOAMS (BhB), HSG B  
BUILDING 9 – CANAEDea SILT LOAM (CcB), HSG D  
BUILDING 9 – BOGART-HASKINS LOAMS (BhB), HSG B

**CONSTRUCTION ACTIVITY:** CONSTRUCTION ACTIVITY WILL INCLUDE THE CLEARING AND GRUBBING OF THE PROJECT LIMITS SITE AND THE CONSTRUCTION OF PROPOSED BUILDINGS. CONSTRUCTION WILL ALSO INCLUDE THE INSTALLATION OF NEW UTILITY CONNECTIONS AND STORM SEWER SYSTEM THAT DEPOSITS STORM SEWER WATER INTO LAUREL LAKE. EACH BUILDING WILL EITHER DEPOSIT DIRECTLY INTO THE LAKE, DEPOSIT INTO THE LOCAL SYSTEM WHICH EVENTUALLY DEPOSITS INTO THE LAKE, OR DEPOSIT INTO A LOCAL DETENTION SYSTEM WHICH WILL DEPOSIT INTO THE LAKE.

**POST CONSTRUCTION SITE AREAS**  
TOTAL SITE: 141.9 ACRES  
PROPOSED IMPERVIOUS: APPROXIMATELY 24 ACRES.

POST CONSTRUCTION WEIGHTED C VALUE			
Surface	C	Area	CxArea
Bldg	0.90	0.80	0.72
Pavt	0.90	0.31	0.279
Open (Fair)	0.57	2.74	1.56
Total		3.85	2.56

Weighted C =  $2.56 / 3.85 = 0.66$

**POST CONSTRUCTION % IMPERVIOUSNESS**  
 $1.11 / 3.85 = 0.288 = 28.8\%$

**FUTURE STORM WATER:**

FUTURE STORM WATER WILL BE COLLECTED IN STORM SEWERS ON SITE. BUILDINGS 1,2 AND 5A WILL BE DISCHARGED DIRECTLY TO LAKE FOREST. LAKE FOREST HAS A DRAINAGE AREA OF APPROXIMATELY 3,200 ACRES. THE TOTAL IMPERVIOUS AREA DRAINING TO THE LAKE IS LESS THAN 5% OF THE TOTAL DRAINAGE AREA, THEREFORE WATER QUALITY DOES NOT NEED TO BE INCLUDED. BUILDING 4A DRAINS TO A SMALL DETENTION BASIN TO REDUCE THE PEAK FLOW FROM THE UNIT BEFORE BEING DISCHARGED INTO A STORM SEWER ON SITE. THIS ALSO DRAINS TO LAKE FOREST. BUILDING 3A, 8 AND 9 DRAIN TO THE LAUREL LAKE BEHIND THE DEVELOPMENT. LAUREL LAKE HAS A DRAINAGE AREA OF APPROXIMATELY 46 ACRES. THE INCREASE IN IMPERVIOUS AREA DRAINING TO THE LAKE IS LESS THAN 5% OF THE TOTAL DRAINAGE AREA AND THEREFORE WATER QUALITY IS NOT REQUIRED.

**NOTICE OF INTENT (NOI) & NOTICE OF TERMINATION (NOT):**  
PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, A NOTICE OF INTENT (NOI) SHALL BE FILED WITH THE OHIO EPA. CONSTRUCTION ACTIVITIES WILL COMPLY IN WITH CITY OF HUDSON CODIFIED ORDINANCE AND OEPA CONSTRUCTION GENERAL PERMIT #OHCO00005. ONCE CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED THE DEVELOPER SHALL SUBMIT A NOTICE OF TERMINATION (NOT) WITH THE OHIO EPA.

**NOI PERMIT #** \_\_\_\_\_

**CONSTRUCTION:**  
START: WINTER 2023 – COMPLETION: SPRING 2024

**SWPPP CHANGES & AMENDMENTS:** ALL CHANGES AND AMENDMENTS TO THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE APPROVED BY DAVID A. PIETRANTONE P.E., THE RIVERSTONE COMPANY.

THE RIVERSTONE COMPANY  
3800 LAKESIDE AVENUE, SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (216) 491-2000

**PREPARED FOR & OWNER:**  
LAUREL LAKE RETIREMENT COMMUNITY  
ANDREW LOVANO  
PH: 330-655-1402

GENERAL SWPPP NOTES:

TOTAL LOT AREA = 141.9 ACRES  
DISTURBED AREA = 4.37 ACRES

LOCATION OF WASTE STORAGE AND DISPOSAL SHOWN ON THE PLANS SHALL BE VERIFIED BY CONTRACTOR. LOCATION MAY BE CHANGED AND THE SWPPP AMENDED.

A COPY OF THE SWPPP AND ALL ADDENDUM TO THE SWPPP SHALL BE KEPT ON SITE AT ALL TIMES.

ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED AS PER PLAN. ALL PRACTICES MUST BE MAINTAINED AND FUNCTIONAL DURING CONSTRUCTION ACTIVITIES.

EROSION CONTROL BLANKETS WITH MATTING SHALL BE USED ON SLOPES GREATER THAN 6%.

EXCESS SEDIMENT SHALL BE REMOVED FROM THE TEMPORARY SEDIMENT BASIN WHEN THE SEDIMENT OCCUPIES 40% OF THE SEDIMENT STORAGE ZONE.

ONCE THE SITE HAS BEEN STABILIZED AND PROPER AUTHORIZATION HAS BEEN OBTAINED, CONSTRUCTION BMPs MAY BE REMOVED.

**CONSTRUCTION SCHEDULE**

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.

SWPPP LEGEND

PC PERIMETER CONTROL; SILT FENCE OR COMPOST FILLED FILTER SOCK

CONSTRUCTION LIMITS

SOIL TYPE

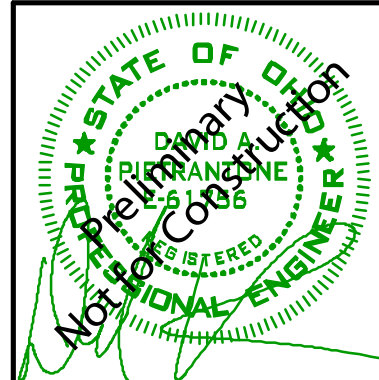
CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

INLET PROTECTION

GRAPHIC SCALE

40 0 20 40 60  
( IN FEET )  
1 inch = 40 ft.



**RIVERSTONE**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE, SUITE 100  
CLEVELAND, OHIO 44114  
PHONE: (216) 491-2000  
WWW.RIVERSTONE-SURVEY.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

9/7/2023  
PRE APPLICATION MEETING

ISSUED FOR:

FOR BID

12/26/2023

NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

SWPPP

Ohio Utilities Protection Service  
**Call 800**  
before you dig

OGPUPS  
Ohio Oil & Gas Produces Underground Protection Service  
Call 814-775-2884 or 811

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 RUNOFF'S 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:

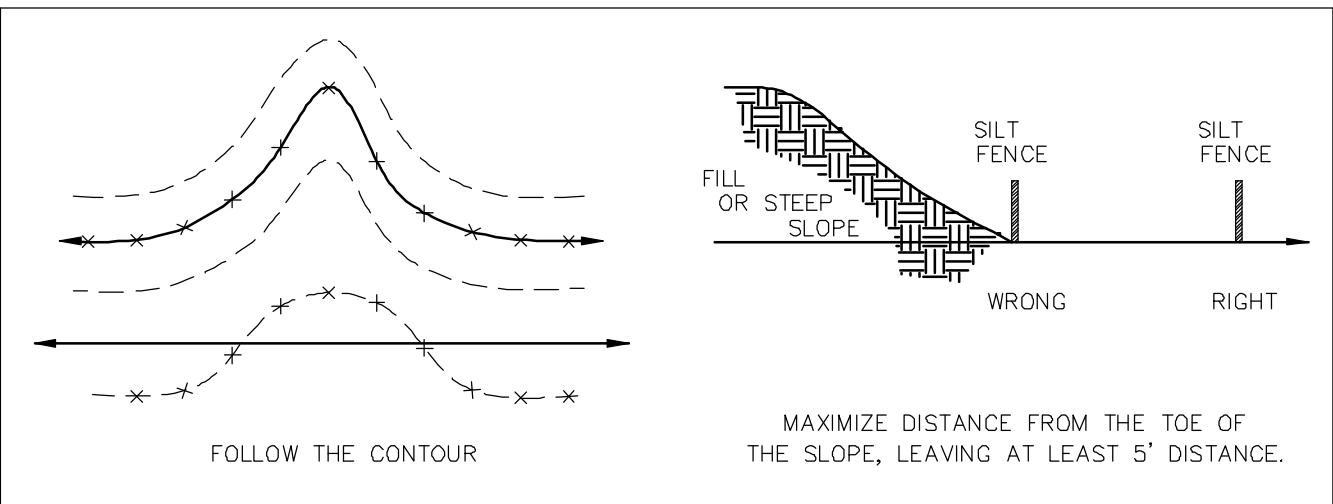
SILT FENCE AS A SEDIMENT CONTROL PRACTICE CONSISTS NOT ONLY OF THE FENCE ITSELF BUT, JUST AS IMPORTANTLY, IT ENTAILS TOPOGRAPHY. THIS IS A CRITICAL CONSIDERATION BECAUSE THE SEDIMENT REMOVAL PROCESS RELIES ON DEPOSITION NOT FILTERING, AS OFTEN ASSUMED. SILT FENCE WORKS BY DISPERSING FLOW, PONDING RUNOFF 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.

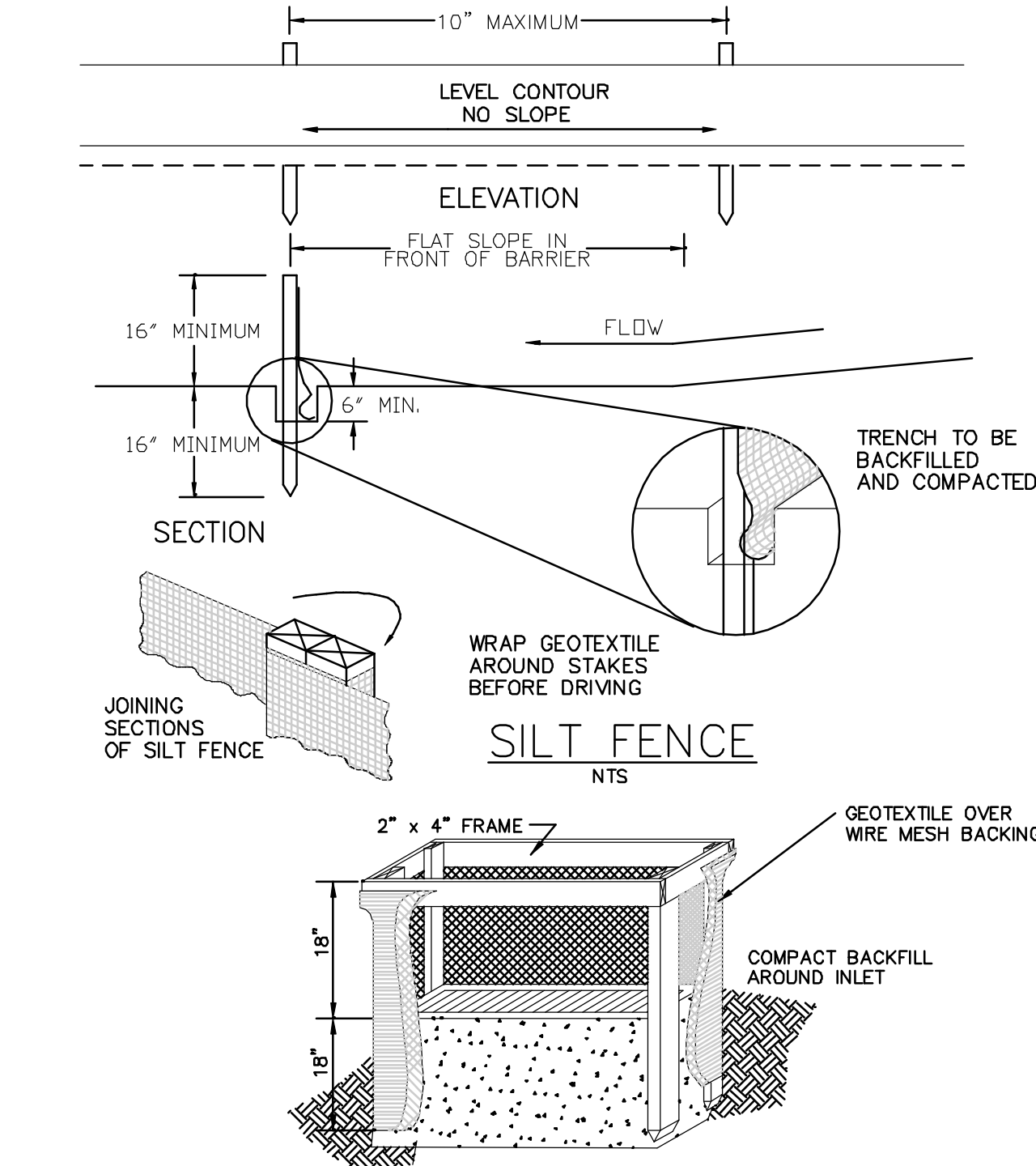
FLAT SLOPES – SILT FENCE MUST ALSO BE USE ON THE FLATTEST AREAS AVAILABLE. BECAUSE OF THE GREAT IMPORTANCE SLOPE HAS ON WATER'S ABILITY TO TRANSPORT SEDIMENT, SILT FENCE SHOULD NEVER BE PLACED DIRECTLY AT THE TOE OF A SLOPE IF IT IS AT ALL POSSIBLE TO PLACE IT SEVERAL FEET AWAY. SILT FENCE GENERALLY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



INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS

NTS

SPECIFICATIONS FOR SILT FENCE:

- SILT FENCE SHALL BE CONSTRUCTED BEFORE UP-SLOPE LAND DISTURBANCE BEGINS.
- 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.
- 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.
- WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
- 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.
- THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN. ABOVE THE ORIGINAL GROUND SURFACE.
- 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.
- 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.
- SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
- 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:

- 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.
- SILT FENCE FABRIC (SEE CHART BELOW):
  - INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UP-SLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
  - THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 IN.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.

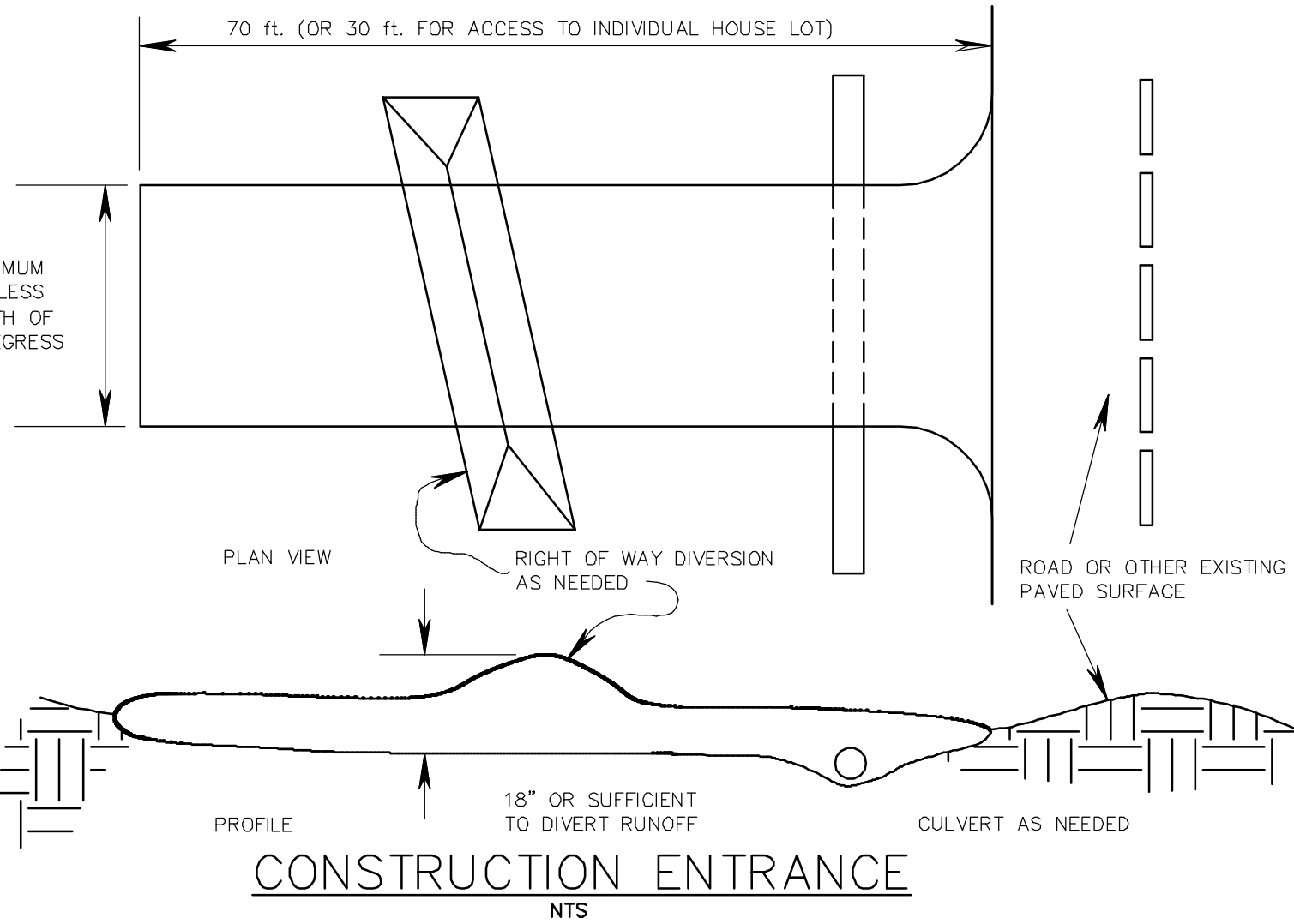
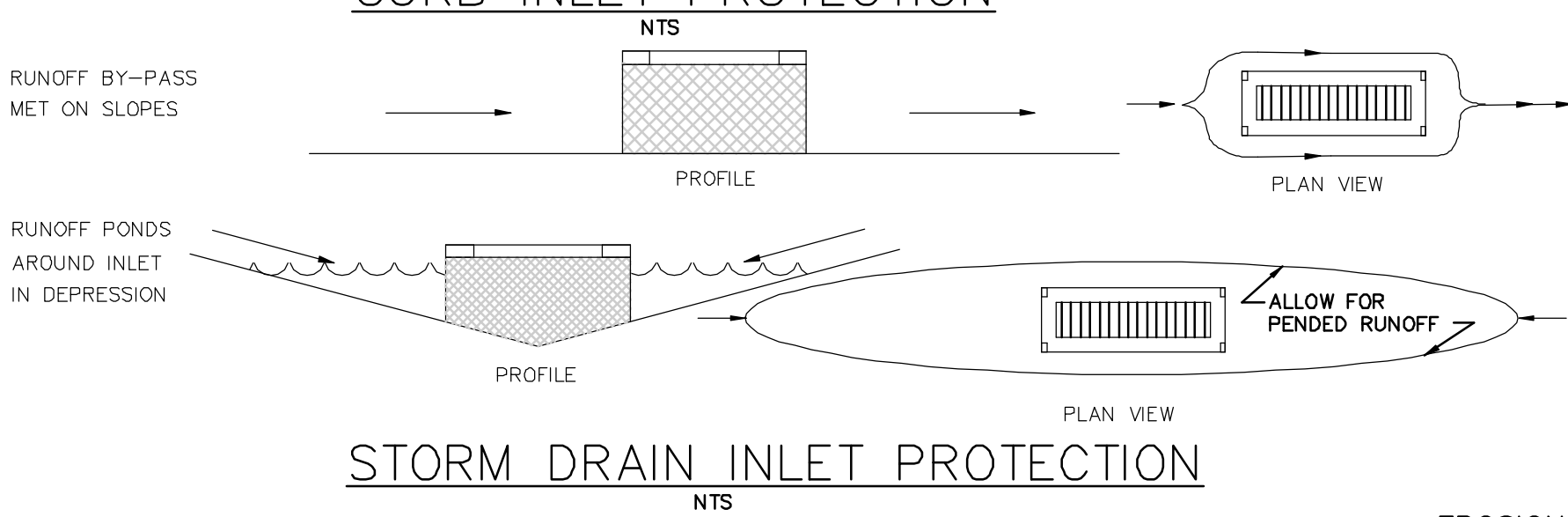
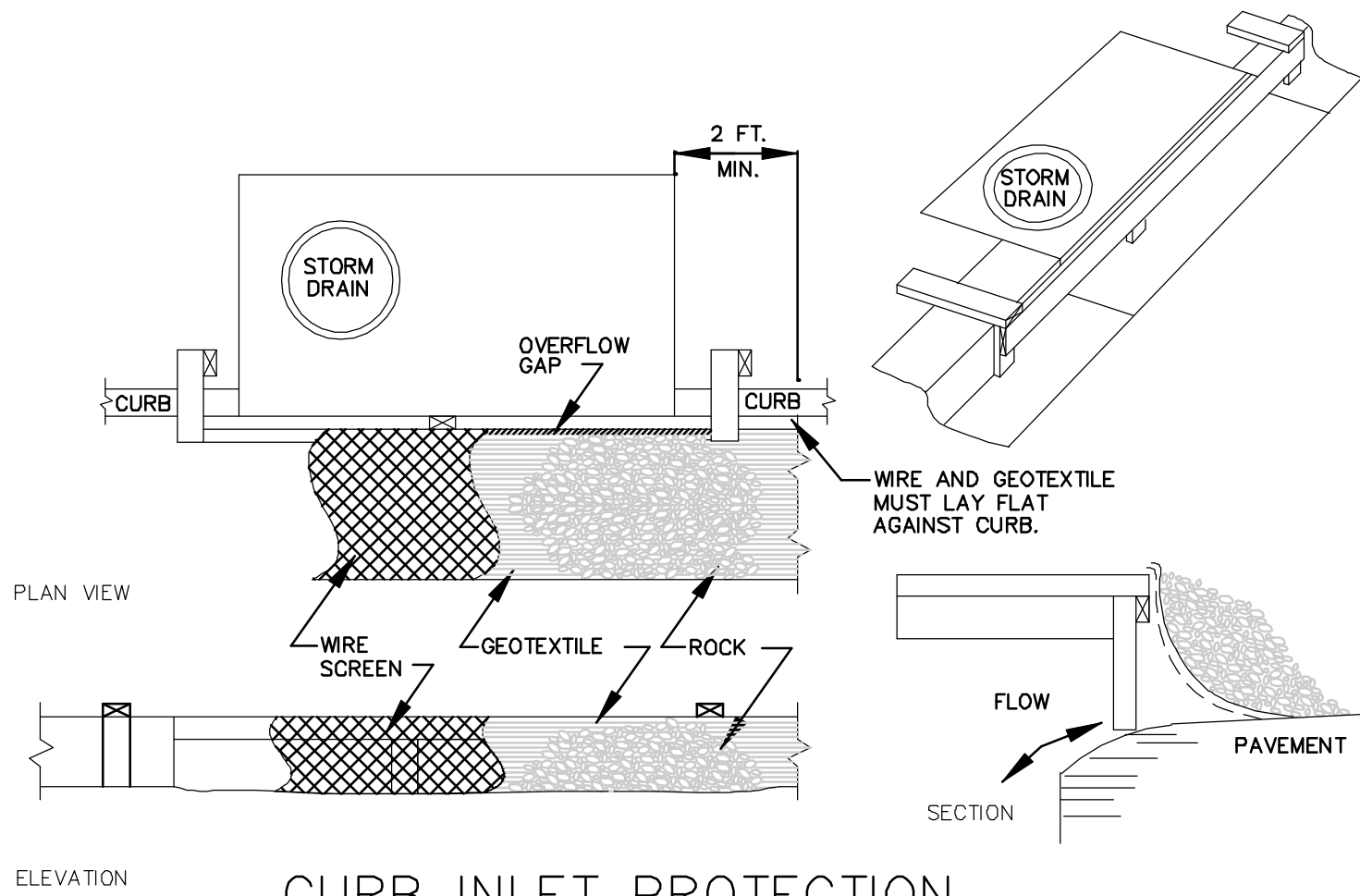
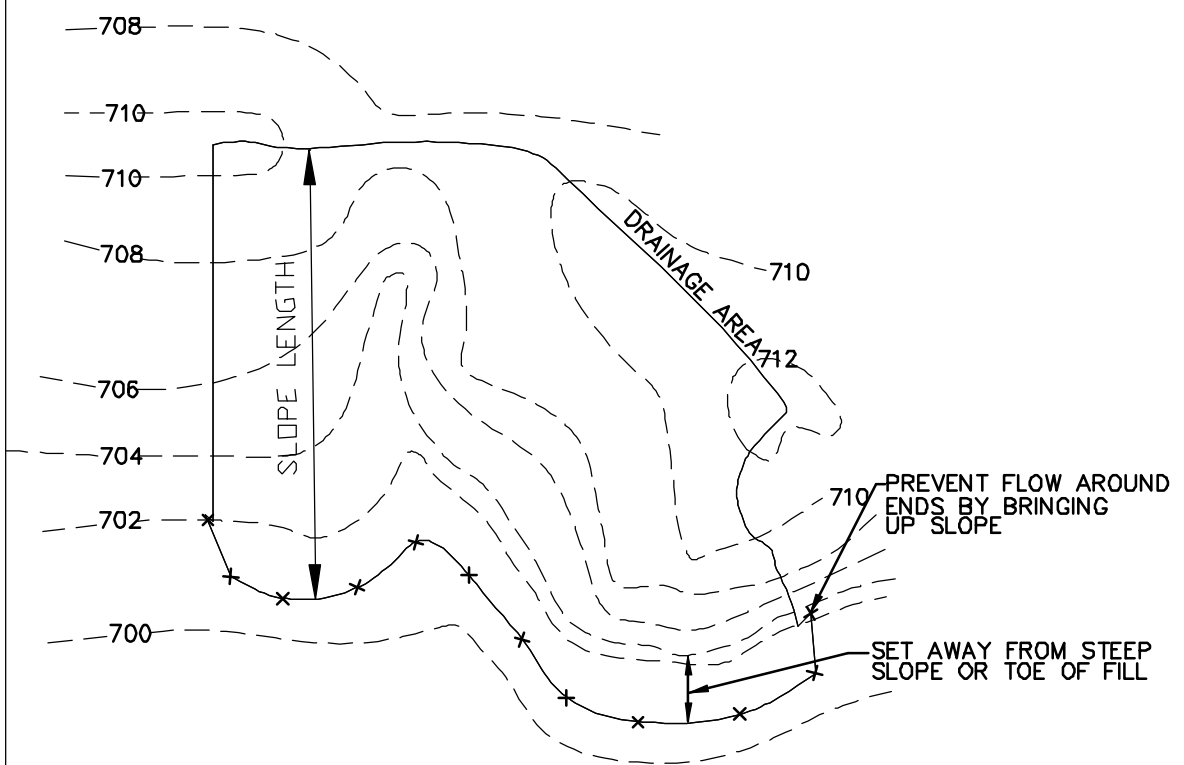
DRAINAGE AREA:

- INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UP-SLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOME OPERATIONAL.
- 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.
- 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.
- 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.
- 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.
- 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

NOTE: FOR LARGER DRAINAGE AREAS, SEE STANDARDS FOR TEMPORARY DIVERSIONS, SEDIMENT TRAPS AND SEDIMENT BASINS.



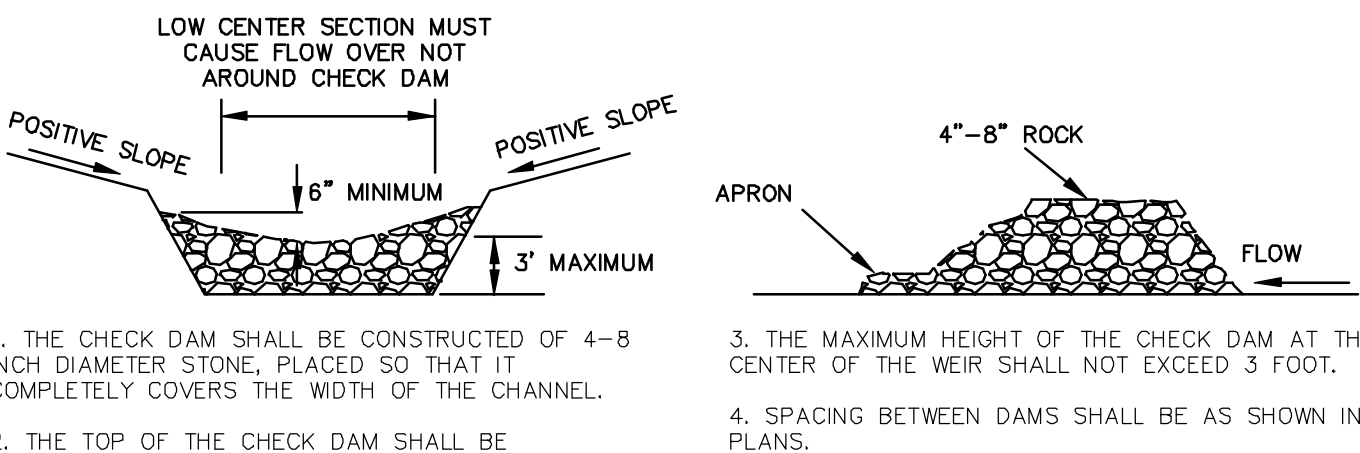
CONSTRUCTION ENTRANCE

DESCRIPTION: A CONSTRUCTION ENTRANCE IS A STABILIZED PAD OF AGGREGATE OVER A GEOTEXTILE BASE AND IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC.

- CONDITIONS WHERE PRACTICE APPLIES:
- A CONSTRUCTION ENTRANCE SHOULD BE USED:
    - WHERE CONSTRUCTION VEHICLES LEAVE ACTIVE CONSTRUCTION AREAS ONTO SURFACES WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS;
    - AT ALL POINTS OF EGRESS TO PUBLIC ROADS;
    - WHERE FREQUENT VEHICLES AND EQUIPMENT INGRESS/EGRESS IS EXPECTED SUCH AS AT THE ENTRANCE OF INDIVIDUAL BUILDING LOTS;

PLANNING CONSIDERATIONS:

THIS PRACTICE SHOULD NOT BE RELIED ON TO REMOVE MUD FROM CONSTRUCTION TRAFFIC. MOST MUD IS FLUNG FROM TIRES AS VEHICLES REACH SPEEDS HIGHER THAN IS REACHED ON SITE. THE BEST APPROACH TO PREVENTING OFF-SITE TRACKING IS TO KEEP VEHICLES THAT FREQUENTLY ENTER AND LEAVE A SITE, AWAY FROM MUDDY AREAS IN THE FIRST PLACE. VEHICLES SHOULD BE RESTRICTED TO STABILIZED AREAS TO THE EXTENT PRACTICAL, AND AREAS WHERE FREQUENT INGRESS/EGRESS IS EXPECTED SHOULD BE STABILIZED.



- THE CHECK DAM SHALL BE CONSTRUCTED OF 4-8 INCH DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL.
- THE TOP OF THE CHECK DAM SHALL BE CONSTRUCTED SO THAT THE CENTER IS APPROXIMATELY 6 INCHES LOWER THAN THE OUTER EDGES, SO WATER WILL FLOW ACROSS THE CENTER AND NOT AROUND THE ENDS.
- THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER OF THE WEIR SHALL NOT EXCEED 3 FOOT.
- SPACING BETWEEN DAMS SHALL BE AS SHOWN IN THE PLANS.

CHECK DAM

NTS

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:

- INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
- 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.
- 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.
- 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.
- 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.
- 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

- 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.
- 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.
- 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.
- EROSION CONTROL BLANKETS WITH MATTING WILL BE USED ON DITCHES GREATER THAN 1.5% AND ALL OTHER SLOPES GREATER THAN 6% GRADE.
- DISTURBED AREAS THAT WILL BE IDLE OVER WINTER SHALL BE STABILIZED PRIOR TO NOVEMBER 1.
- NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.
- OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON THE PLAN.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (2006 or NEWEST EDITION).
- 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.
- 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:

- STONE SIZE--TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
- 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).
- THICKNESS--THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK.
- WIDTH--THE ENTRANCE SHALL BE AT LEAST 10 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCURS.
- 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.
- 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.
- 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.
- 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.
- 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.



**RIVERSTONE**

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

2023-186

PLAN REVISIONS:


PAGE REVISIONS:


ISSUED FOR:

For Bid  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

SWPPP



C9.02







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

Meets ASTM D8057 standards  
FLEXSTORM FX FABRIC SPECS

PROPERTY	TEST METHOD	ENGLISH	METRIC
<b>MECHANICAL</b>			
TENSILE STRENGTH	ASTM D4632	350 X 225 LBS	1557 X 1001 N
ELONGATION	ASTM D4632	20% X 15%	20% X 15%
COR PUNCTURE	ASTM D6241	1000 LBS	4448 N
TRAPEZOIDAL TEAR	ASTM D4533	110 X 75 LBS	483 X 334 N
<b>DURANCE</b>			
UV RESISTANCE	ASTM D4355	90%	90%
% RETAINED AT 500 HRS			
<b>HYDROLOGIC</b>			
APPARENT OPENING SIZE (AOS)	ASTM D4751	20 US STD. SIEVE	.850 MM
PERCENT OPEN AREA (POA)	SW-02215 MOD	17%	17%
PERMITIVITY	ASTM D4491	1.5 SEC <sup>-1</sup>	1.5 SEC <sup>-1</sup>
WATER FLOW RATE	ASTM D4491	200GAL/MIN/FT <sup>2</sup>	8145 L/MIN/M <sup>2</sup>

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.

ADS FLEXSTORM CATCH-T  
LITE ASTM D8057

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.

Diagram of ADS FLEXSTORM CATCH-T LITE ASTM D8057 showing installation and components.

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.

Removal:

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 mulch.

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

Above-Grade Concrete Washout Pit

Straw Bale

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

X-Section N.T.S.

Storage Area

Stakes or staples to anchor plastic liner to bale

Plastic liner tucked under straw bales

Existing ground

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

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

Plan View N.T.S.

Storage Area

Existing ground

Width (variable)

Length (variable)

Below-Grade Concrete Washout Pit

X-Section N.T.S.

Storage Area

Max. 3' Depth

Existing ground

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

Plastic liner secured w/ stakes, staples or sandbags

Plan View N.T.S.

Storage Area

Existing ground

2' min. overhang of plastic sheeting

Width (variable)

Length (variable)

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

BLOWN/PLACED FILTER MEDIA

WORK AREA

12" MIN.

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

FILTREXX SOXX (12" TYPICAL)

AREA TO BE PROTECTED

SECTION N.T.S.

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

AREA TO BE PROTECTED

FILTREXX SOXX (12" TYPICAL)

WATER FLOW

WORK AREA

PLAN N.T.S.

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

N.T.S.

DANDY CURB

CURB OPENING WITHOUT GRATE

OVERFLOW GAP

AGGREGATE POUCH

MANHOLE

CURB FILTER

DETAIL OF CURB INLET SEDIMENT CONTROL DEVICE

WITH CURB FILTER

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 0.88 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4632	kPa (psi)	6.49 (95)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3297 (450)
Trapezoidal 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 Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m <sup>2</sup> (gal/min/ft <sup>2</sup> )	5807 (145)
Permeability	ASTM D 4491	sec	2.1

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

DANDY CURB SACK

STORM GRATE

CURB OPENING

LIFT STRAPS

REINFORCED CORNERS

MANAGEABLE 2 FOOT CONTAINMENT AREA

CURB FILTER

OPTIONAL OVERFLOW PORTS

DUMPING STRAPS

DETAIL OF INLET SEDIMENT CONTROL DEVICE

WITH CURB FILTER

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

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)	1.76 (400) X 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 X 15
Puncture Strength	ASTM D 4632	kPa (psi)	6.49 (95)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3297 (450)
Trapezoidal Tear Strength	ASTM D 4533	kN (lbf)	0.67 (150) X 0.75 (165)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m <sup>2</sup> (gal/min/ft <sup>2</sup> )	2852 (70)
Permeability	ASTM D 4491	sec	3.00

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

DANDY SACK

STORM SEWER GRATE

REINFORCED CORNERS

MANAGEABLE 2 FOOT CONTAINMENT AREA

LIFT STRAPS

OPTIONAL OVERFLOW PORTS

DUMPING STRAPS

STORM INLET

DETAIL OF INLET SEDIMENT CONTROL DEVICE

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

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)	1.76 (400) X 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 X 15
Puncture Strength	ASTM D 4632	kPa (psi)	6.49 (95)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3297 (450)
Trapezoidal 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 Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m <sup>2</sup> (gal/min/ft <sup>2</sup> )	5807 (145)
Permeability	ASTM D 4491	sec	2.1

\*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) 641-1641  
WWW.RIVERSTONEENGINEERING.COM

2023-186

PLAN REVISIONS:

PAGE REVISIONS:

ISSUED FOR:  
FOR BID  
12/26/2023  
NOT FOR CONSTRUCTION

LAUREL LAKE VILLA  
200 LAUREL LAKE DRIVE

SWPPP

OGPUPS

Ohio Oil & Gas Produces Underground Protection Service  
Call 814 715-2884 or 811

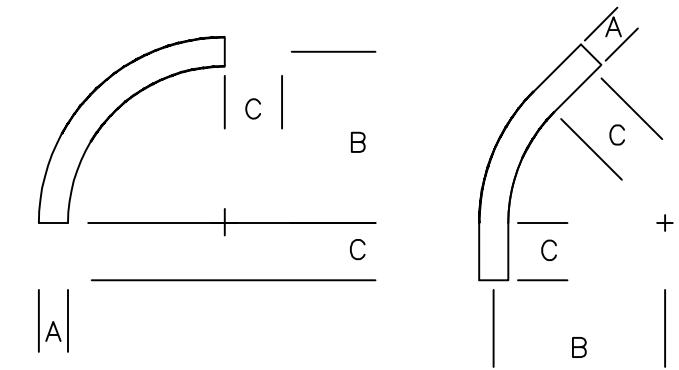
C9.04

N:\2023 JDBS\2023-186\DWG\2023-186 T&D.dwg, 12/26/2023 10:52:01 AM



LEGEND

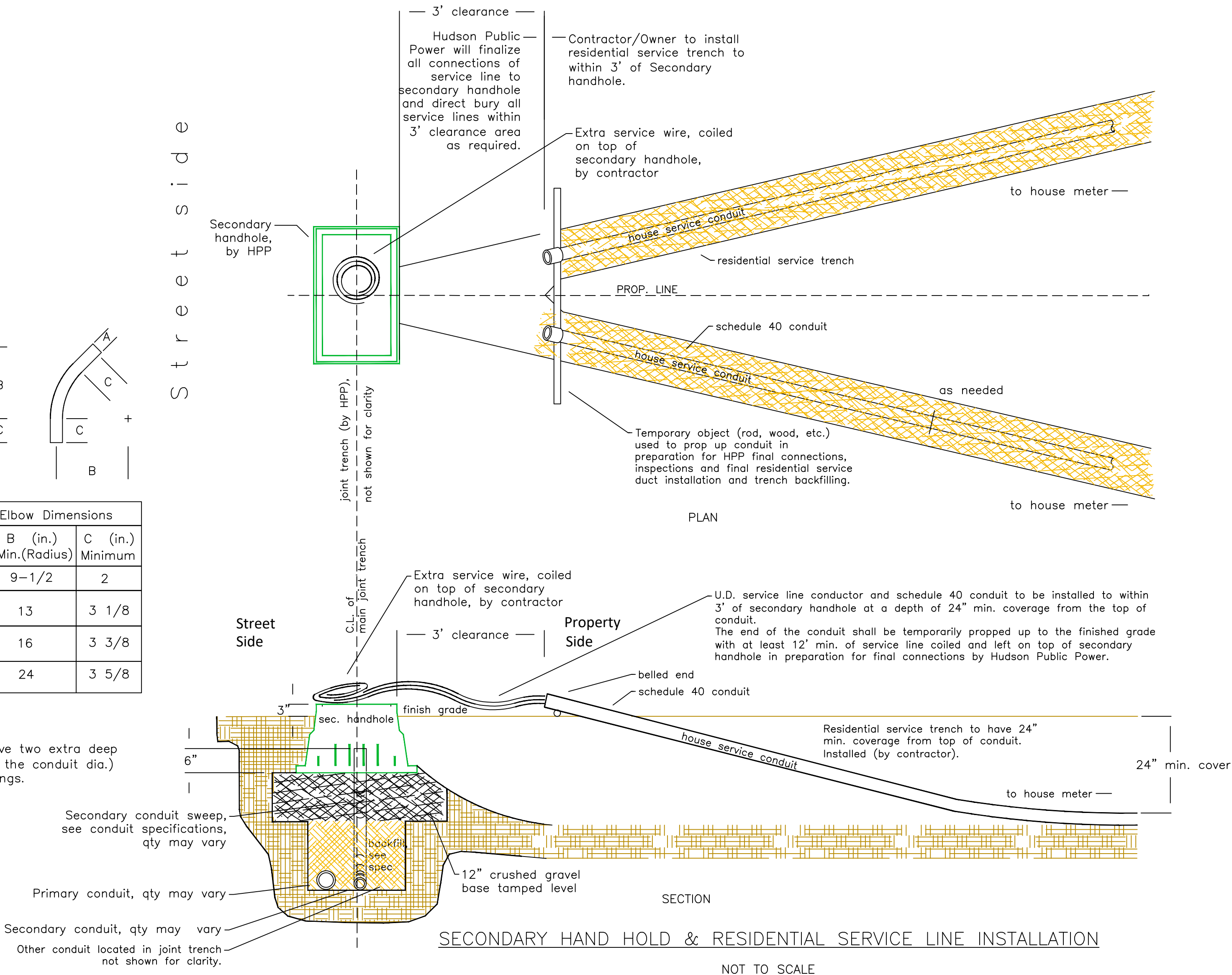
<ul style="list-style-type: none"><li>Monument Box Found</li><li>Iron Pin or Pipe Found</li><li>5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747</li><li>P.K. Nail</li><li>Gas Meter</li><li>Gas Valve</li><li>Utility Pole</li><li>Light Pole</li><li>Guy Anchor &amp; Line</li><li>Telephone Box</li><li>Electric Box</li><li>Cable Box</li><li>Ballard</li></ul>	<ul style="list-style-type: none"><li>Spot Elevation Tag</li><li>Hydrant</li><li>Water Service Valve</li><li>Water Valve</li><li>Water Meter</li><li>Reducer</li><li>Storm Manhole</li><li>Sanitary Manhole</li><li>Curb Inlet</li><li>Catch Basin</li><li>Round Curb Inlet</li><li>Cleanout/Test Tee</li></ul>	<ul style="list-style-type: none"><li>Ex. Parcel line</li><li>Original Sublot Line</li><li>Original Lot Line</li><li>Centerline</li><li>Property Line</li><li>Right-of-way Line</li><li>Easement Line</li><li>Railroad Tracks</li><li>Electric Line</li><li>Gas Line</li><li>Sanitary/Combination Sewer</li><li>Storm Sewer</li><li>Waterline</li><li>Fence Line (Wooden)</li><li>Fence Line (Chain-Link)</li><li>Guardrail</li></ul>	<ul style="list-style-type: none"><li>Ac. Acres</li><li>Adj. Adjacent</li><li>Asp. Asphalt</li><li>B.F. Basement Floor</li><li>Calc./C. Calculated</li><li>Pg. Page</li><li>CB Catch Basin</li><li>C.C.M.R. Cuyahoga County Map Records</li><li>Centerline</li><li>C.L.F. Chain-link Fence</li><li>Clr. Clears</li><li>Conn. Concrete</li><li>Conc. Connection</li><li>D.H. Drill Hole</li><li>D.I.W.M. Ductile Iron Water Main</li><li>Elec. Electric</li><li>Encl. Encroaches</li><li>Ex. Existing</li><li>F.F. Finished Floor</li></ul>	<ul style="list-style-type: none"><li>L.C.A. Limited Common Area</li><li>Meas./M. Measured</li><li>MH Manhole</li><li>Obs. Observed</li><li>Pg. Page</li><li>P.P.N. Permanent Parcel Number</li><li>Rec./R. Record</li><li>Rec./R. Record</li><li>R/W Right-of-way</li><li>San. Sanitary</li><li>S.F. Square Feet</li><li>S/L Sublot</li><li>Stm. Storm</li><li>T.B.M. Temporary Bench Mark</li><li>TBR To Be Removed</li><li>Tele. Telephone</li><li>T.F. Top Footer</li><li>Vol. Volume</li><li>Wat. Water</li></ul>
--	---	---	--	--



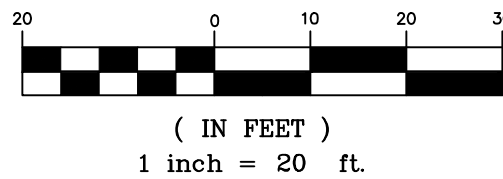
Standard Radius Elbow Dimensions			
Trade Size (in.)	A (in.)	B (in.) Min.(Radius)	C (in.) Minimum
2	2.375	9-1/2	2
3	3.500	13	3 1/8
4	4.500	16	3 3/8
5	5.563	24	3 5/8

ELBOW/SWEEPS

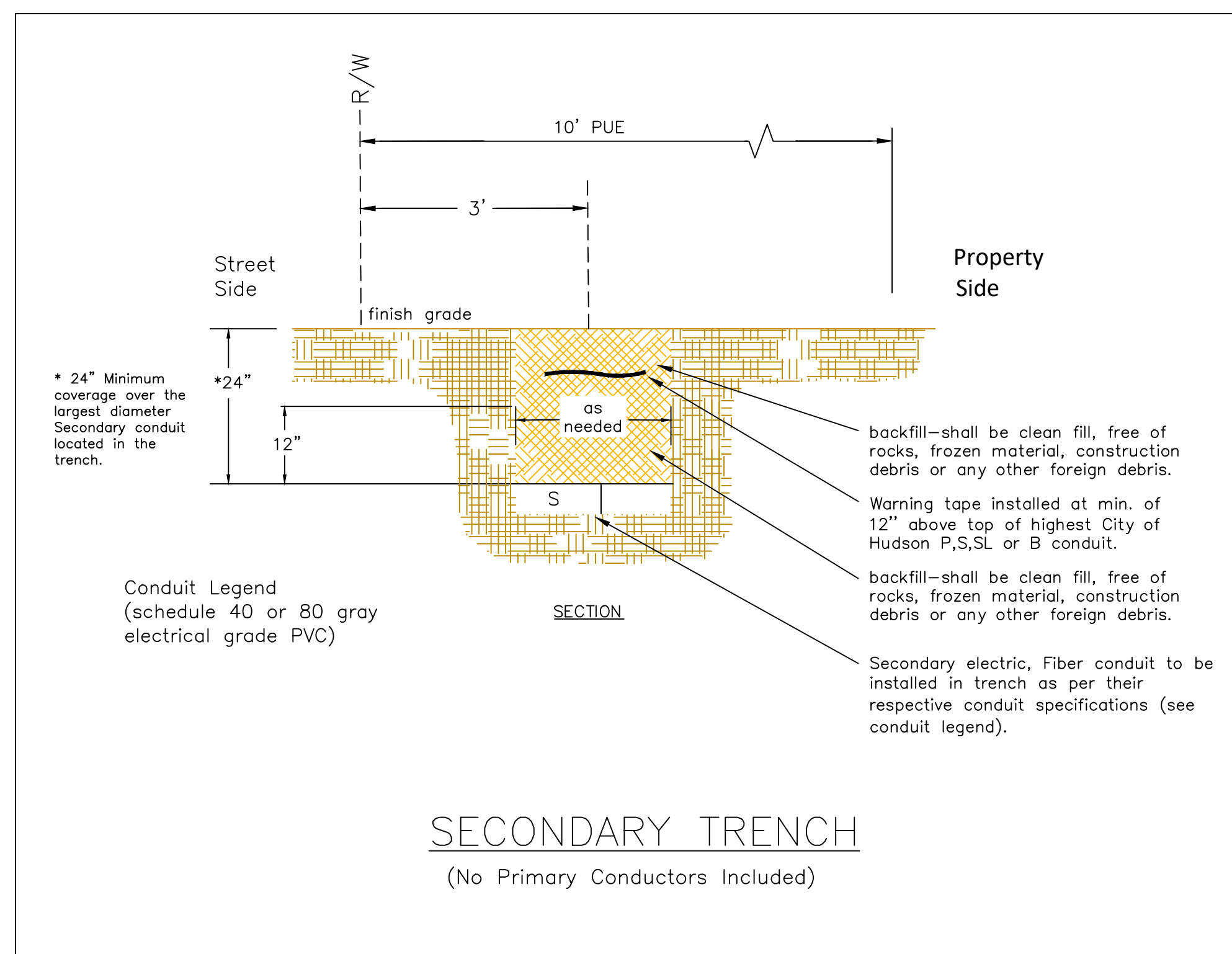
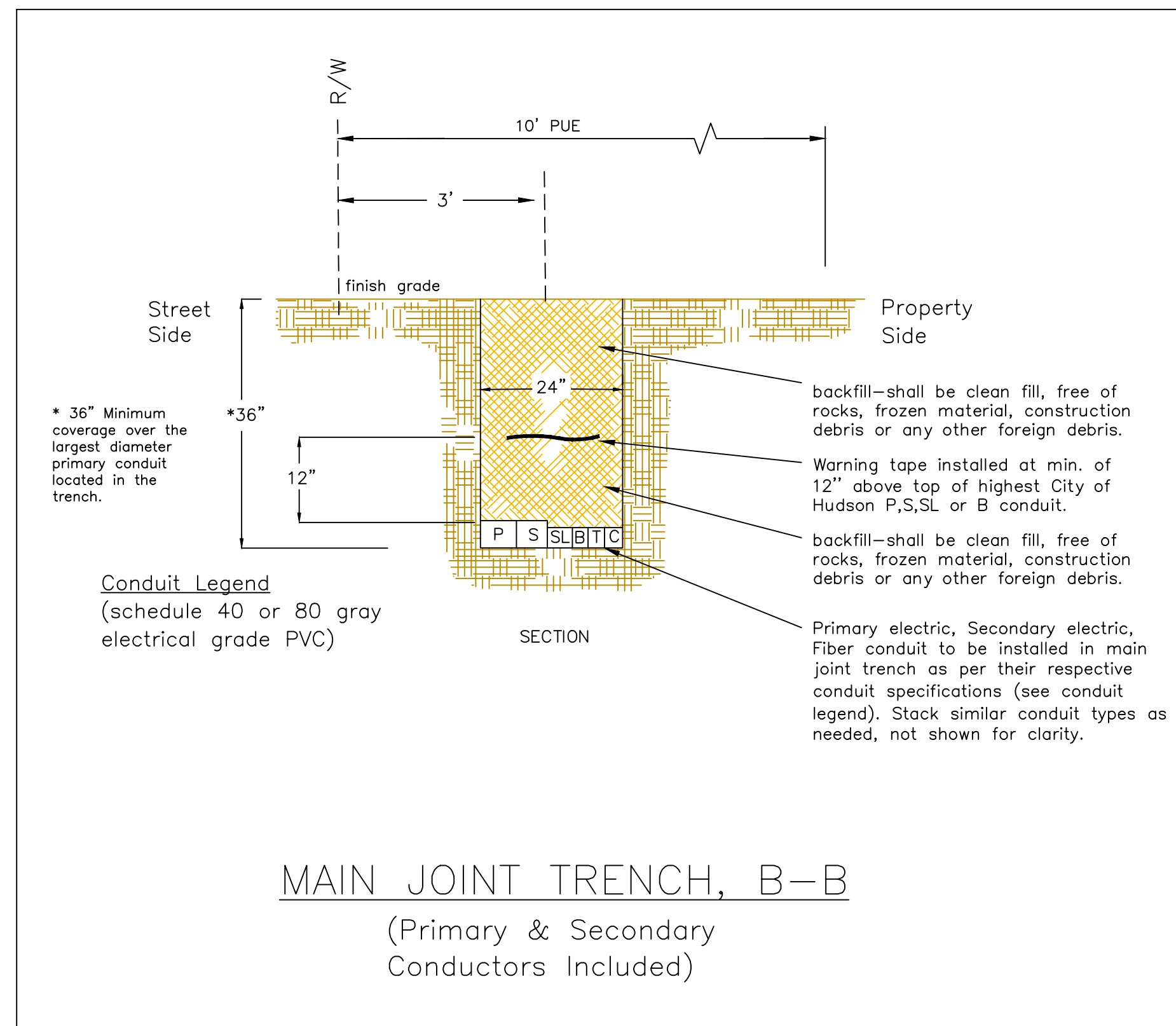
Each Sweep must have two extra deep (socket depth equals the conduit dia.) fabricated PVC couplings.



GRAPHIC SCALE



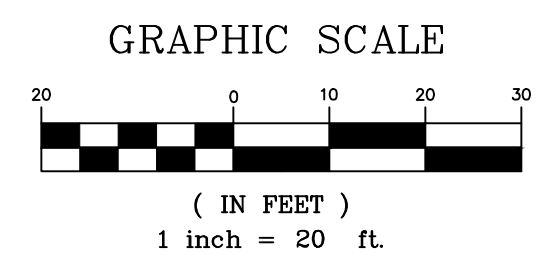
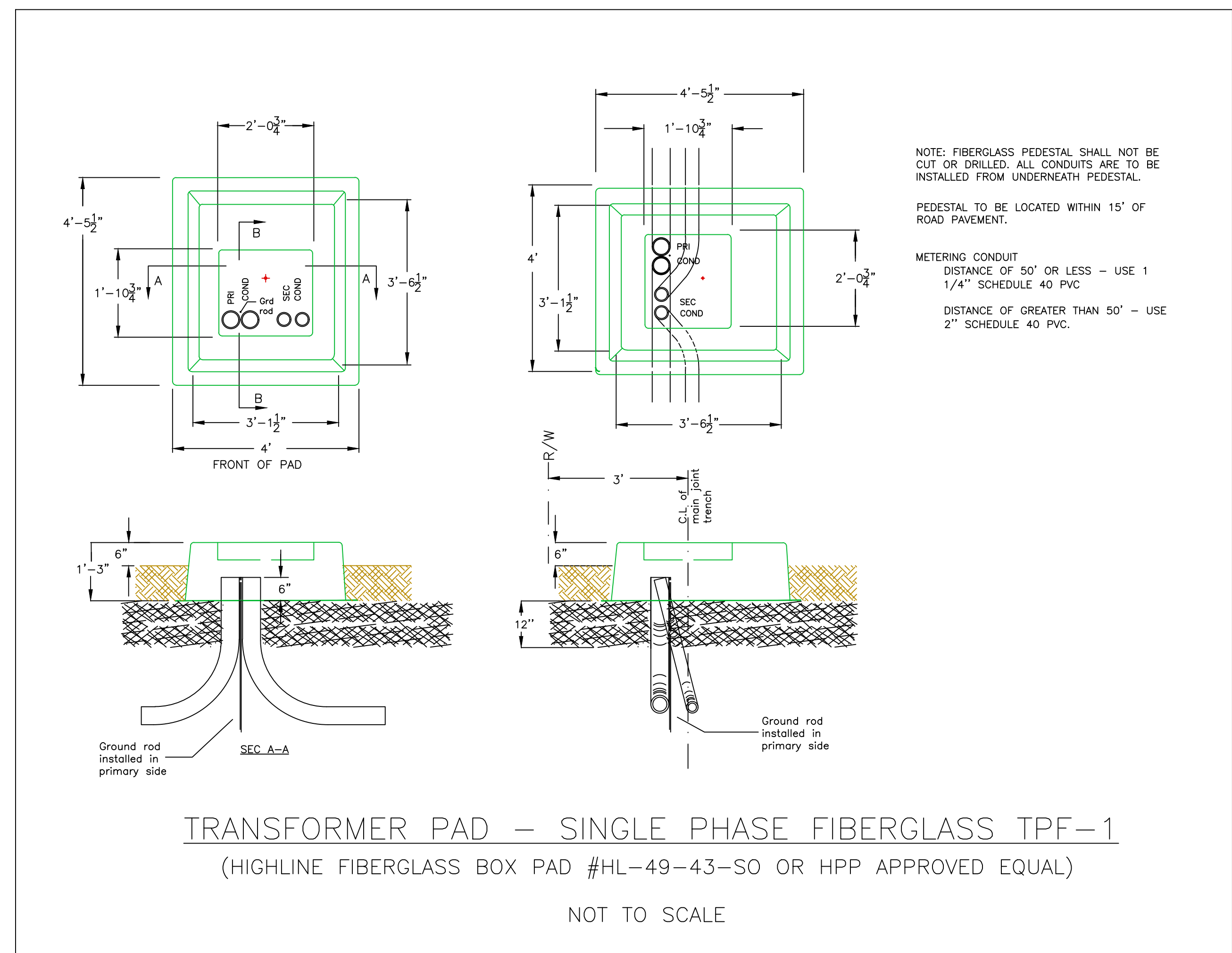




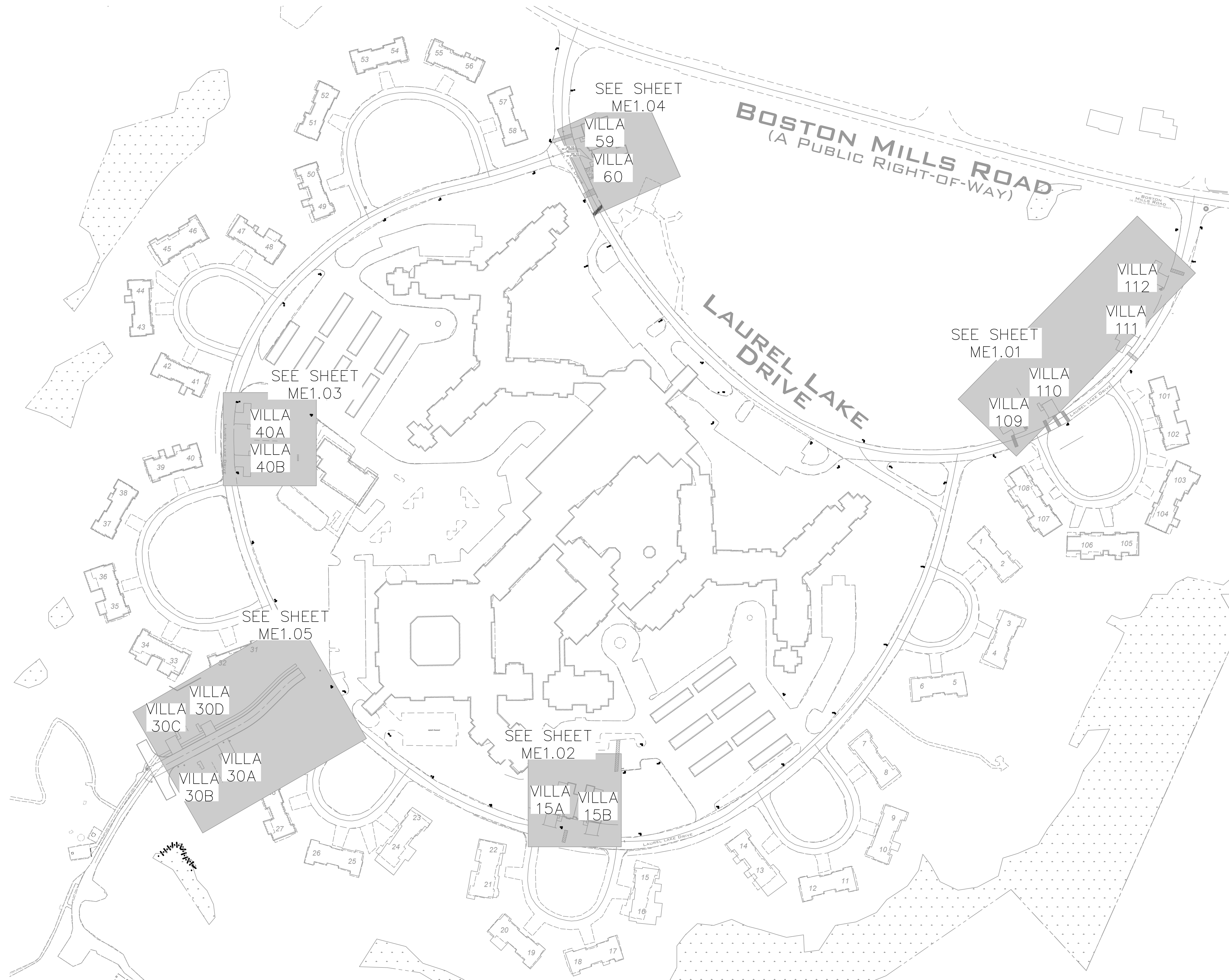
## LEGEND

<p><b>M</b> = Monument Box Found</p> <p>● = Iron Pin or Pipe Found</p> <p>● = 5/8" Iron Pin Set and Capped Riverstone Company Dudley PS6747</p> <p>+ = P.I.K. Nail</p> <p>⊕ = Gas Meter</p> <p>⊕ = Gas Valve</p> <p>⚡ = Utility Pole</p> <p>⚡ = Light Pole</p> <p>⚡ = Guy Anchor &amp; Line</p> <p>⊕ = Telephone Box</p> <p>⊕ = Electric Box</p> <p>⊕ = Cable Box</p> <p>○ = Bollard</p>	<p><b>Existing</b> <b>PROPOSED</b></p> <p>⊕ = Spot Elevation Tag</p> <p>⊕ = Hydrant</p> <p>⊕ = Water Service Valve</p> <p>⊕ = Water Valve</p> <p>⊕ = Water Meter</p> <p>⊕ = Reducer</p> <p>⊕ = Storm Manhole</p> <p>⊕ = Sanitary Manhole</p> <p>⊕ = Curb Inlet</p> <p>⊕ = Catch Basin</p> <p>⊕ = Round Curb Inlet</p> <p>⊕ = Cleanout/Test Tee</p>	<p>Ex. Parcel line</p> <p>Original Sublot Line</p> <p>Original Lot Line</p> <p>Centerline</p> <p>Property Line</p> <p>Right-of-way Line</p> <p>Easement Line</p> <p>Railroad Tracks</p> <p>Gas Line</p> <p>Sanitary/Combination Sewer</p> <p>Storm Sewer</p> <p>Waterline</p> <p>Fence Line (Wooden)</p> <p>Fence Line (Chain-Link)</p> <p>Guardrail</p>
--	--	--

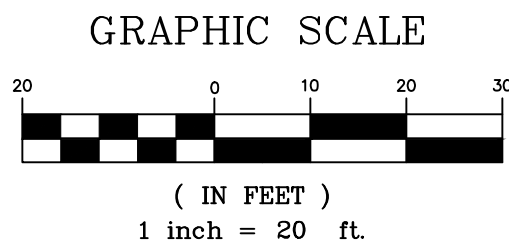
<p>Ac. Adj. Asphalt</p> <p>B.F. Basement Floor</p> <p>Calb./C. Calculated</p> <p>CB/C. Catch Basin</p> <p>C.C.M.R. Cuyahoga County Map Records</p> <p>C.L.F. Centerline</p> <p>Ch. Chain-link Fence</p> <p>Cl. Clears</p> <p>Conc. Concrete</p> <p>Conn. Connection</p> <p>D.H. Drill Hole</p> <p>D.I.W.M. Ductile Iron Water Main</p> <p>Elec. Electric</p> <p>Encr. Enclaves</p> <p>Ex. Existing</p> <p>F.F. Finished Floor</p>	<p>L.C.A. Limited Common Area</p> <p>Mess./M. Measured</p> <p>MH. Manhole</p> <p>Obs. Observed</p> <p>Pg. Page</p> <p>P.P.N. Permanent Parcel Number</p> <p>R. Right of Line</p> <p>Rec./R. Record</p> <p>R/W Right-of-way</p> <p>San. Sanitary</p> <p>S.F. Square Feet</p> <p>S/S Sublot</p> <p>Strm. Storm</p> <p>T.B.M. Temporary Bench Mark</p> <p>TBR To Be Removed</p> <p>Tele. Telephone</p> <p>T.F. Top Footer</p> <p>Vol. Volume</p> <p>Water Water</p>
---	--







SITE UTILITY CONTACTS  
**ELECTRIC** — Hudson Public Power  
David P. Griffith 330-342-1721.  
**GAS** — Dominion Energy  
Don — Field Technician 330-351-0884  
**SITE NETWORK/FIBER**  
LakeTec Communications—Roger Fling  
Dale Dawson 1-800-589-4604  
Justin Gallagher, Gary Bowers  
**PHONE** — Spectrum Enterprise  
Michael Harrah 234-788-3989(o) 330-962-2151(cell)  
**IT** — ALL THINGS TECHNOLOGY  
Sperre Technologies — Brian Cannon 216-851-8600  
**LAUREL LAKE**  
Eric Redd  
  
Andrew Lovano



PROGRESS  
NOT FOR  
CONSTRUCTION

**riverston**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
COLUMBIANA, OHIO 43081  
PHONE: (216) 491-2000 FAX: (216) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

Plan Revisions:

Page Revisions:

Issued For:

NOT FOR CONSTRUCTION

Laurel Lake Villa  
200 Laurel Lake Drive

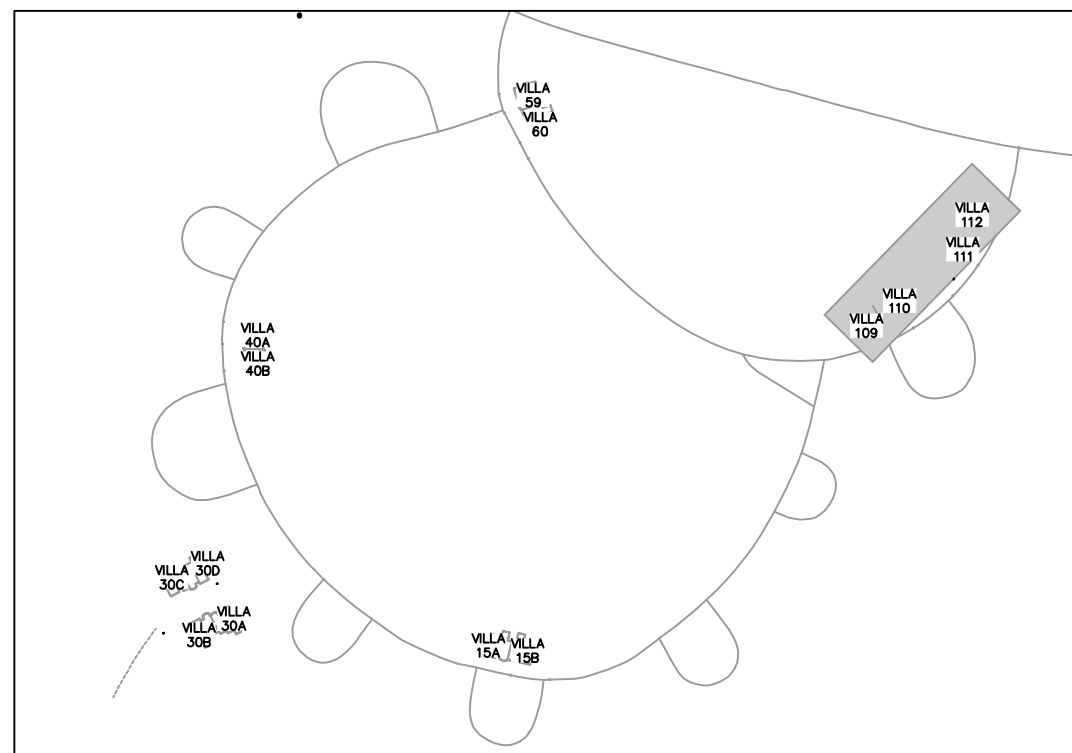
MECHANICAL/ ELECTRICAL PLAN - OVERALL

Ohio Utility Protection Service  
**Call 811**  
before you dig

**OGPUPS**  
Ohio Oil & Gas Programs Underground Protection Service  
Call 811 or 752-2666 or 811

ME1.00





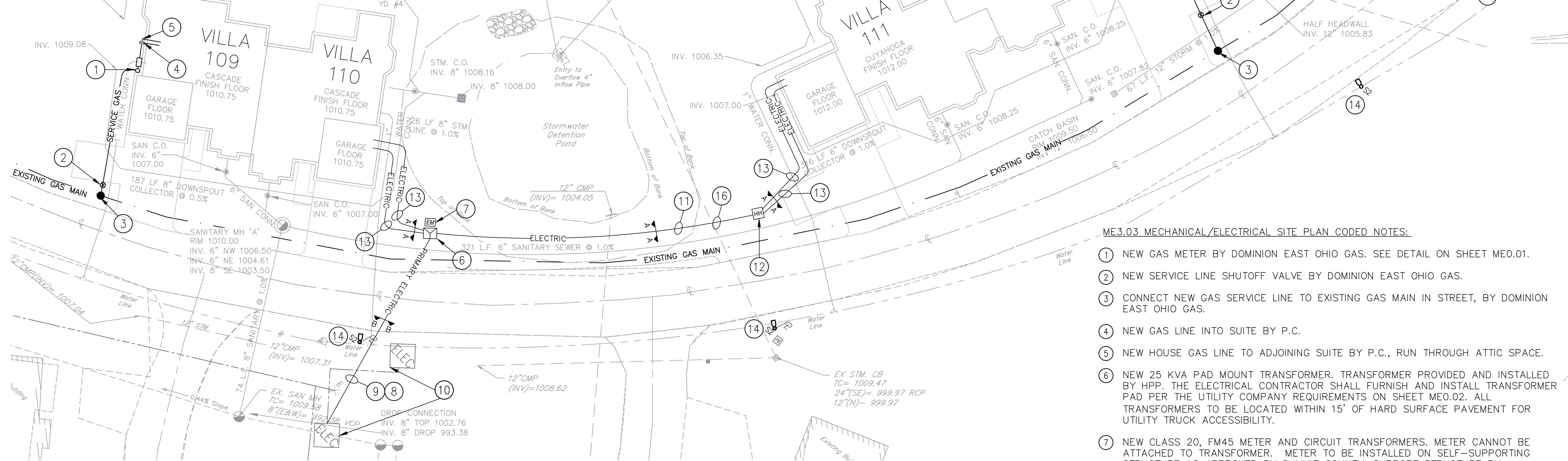
SCHEMATIC KEY  
N.T.S.

DRAIN #1  
010.00  
008.79

DRAIN #2  
010.00  
008.49

DRAIN #3  
010.00  
008.42

DRAIN #4  
010.00  
008.37 INV. 1009.01



MECHANICAL/ELECTRICAL SITE PLAN GENERAL NOTES:

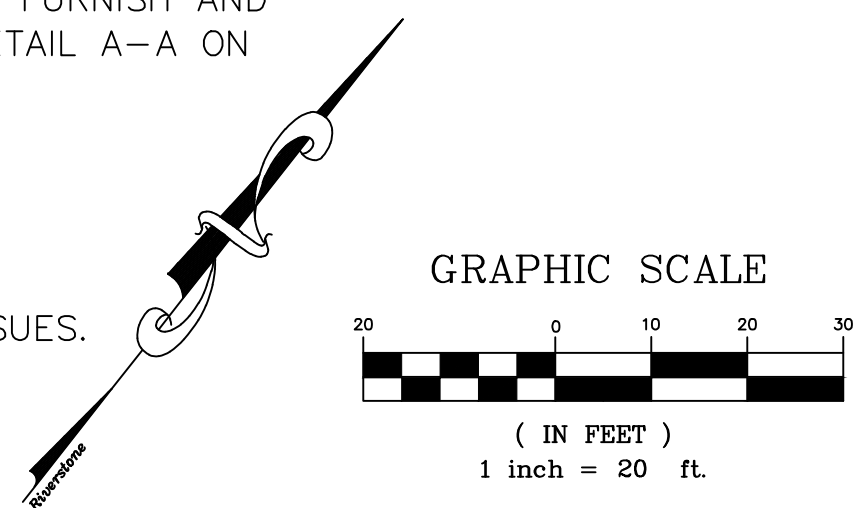
1. FIBER, CABLE TV, AND TELEPHONE BY LAKETEC COMMUNICATIONS.

- 8 #2 AL. CONDUCTOR, 2-4" SCHEDULE 40 PVC CONDUIT EXACT ROUTING AS PER HUDSON PUBLIC POWER.
- 9 SEE MAIN JOINT TRENCH DETAIL, B-B, ON SHEET ME0.02.
- 10 EXISTING PAD MOUNT TRANSFORMER, APPROXIMATE LOCATION. CONFIRM WITH HUDSON PUBLIC POWER EXACT TRANSFORMER CONNECTION.
- 11 1-3" SCHEDULE 40 PVC CONDUIT, #4/0 TPX CONDUCTOR. SEE TRENCH DETAIL, A-A, ON SHEET ME0.02.
- 12 ONE (1) SECONDARY HAND HOLE. SEE TRENCH DETAIL B-B ON SHEET ME0.02, AND HAND HOLE DETAIL ON SHEET ME0.01.

- 13 SERVICE LINE TO EACH BUILDING - ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL (1) 3" DIAMETER CONDUIT FOR EACH UNIT. SEE TRENCH DETAIL A-A ON SHEET ME0.02.
- 14 EXISTING STREET LIGHT TO REMAIN.
- 15 NOT USED.
- 16 DISTANCE FROM STREET MAY VARY DUE TO TOPOGRAPHY/SLOPE ISSUES.

ME3.03 MECHANICAL/ELECTRICAL SITE PLAN CODED NOTES:

- 1 NEW GAS METER BY DOMINION EAST OHIO GAS. SEE DETAIL ON SHEET ME0.01.
- 2 NEW SERVICE LINE SHUTOFF VALVE BY DOMINION EAST OHIO GAS.
- 3 CONNECT NEW GAS SERVICE LINE TO EXISTING GAS MAIN IN STREET, BY DOMINION EAST OHIO GAS.
- 4 NEW GAS LINE INTO SUITE BY P.C.
- 5 NEW HOUSE GAS LINE TO ADJOINING SUITE BY P.C., RUN THROUGH ATTIC SPACE.
- 6 NEW 25 KVA PAD MOUNT TRANSFORMER. TRANSFORMER PROVIDED AND INSTALLED BY HPP. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PAD PER THE UTILITY COMPANY REQUIREMENTS ON SHEET ME0.02. ALL TRANSFORMERS TO BE LOCATED WITHIN 15' OF HARD SURFACE PAVEMENT FOR UTILITY TRUCK ACCESSIBILITY.
- 7 NEW CLASS 20, FM45 METER AND CIRCUIT TRANSFORMERS. METER CANNOT BE ATTACHED TO TRANSFORMER. METER TO BE INSTALLED ON SELF-SUPPORTING STRUCTURE AS APPROVED BY SUMMIT COUNTY. SUPPORT STRUCTURE BY CONTRACTOR. SOCKET AND METER BY HUDSON PUBLIC POWER. SUPPORTING STRUCTURE BY CONTRACTOR. METER SOCKET AND METER BY HUDSON PUBLIC POWER.



PROGRESS  
NOT FOR  
CONSTRUCTION

**riverstone**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
COLUMBUS, OHIO 43260-1474  
PHONE: (216) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

Plan Revisions:

Page Revisions:

Issued For:

NOT FOR CONSTRUCTION

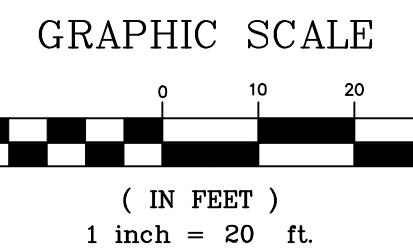
Laurel Lake Villa  
200 Laurel Lake Drive  
MECHANICAL/ ELECTRICAL PLAN - VILLAS  
109, 110, 111 & 112

Call 811  
before you dig

OGPUPS  
Ohio Oil & Gas Programs Underground Protection Service  
Call 811 or 1-800-4-A-PIPE

ME1.01





1. FIBER, CABLE TV, AND TELEPHONE BY LAKETEC COMMUNICATIONS.

- ① NEW GAS METER BY DOMINION EAST OHIO GAS. SEE DETAIL ON ME0.01.
- ② SERVICE LINE SHUTOFF VALVE FOR INCOMING GAS LINE.
- ③ CONNECT NEW GAS TO EXISTING GAS MAIN IN STREET, BY DOMINION EAST OHIO.
- ④ NEW GAS LINE INTO SUITE BY P.C.
- ⑤ NEW HOUSE GAS LINE TO ADJOINING SUITE BY P.C., RUN THROUGH ATTIC SPACE.
- ⑥ EXISTING SWITCH CABINET #50 TO REMAIN.
- ⑦ EXISTING PRIMARY UNDERGROUND TO REMAIN.
- ⑧ NEW #2 AL. CONDUCTOR, 2-4" SCHEDULE 40 PVC CONDUIT. EXACT ROUTE AS PER HUDSON PUBLIC POWER. SEE MAIN JOINT TRENCH DETAIL, B-B, ON SHEET ME0.02.
- ⑨ NEW 25 KVA PAD MOUNT TRANSFORMER. TRANSFORMER PROVIDED AND INSTALLED BY HPP. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PAD PER THE UTILITY COMPANY REQUIREMENTS ON SHEET ME0.02. ALL TRANSFORMERS TO BE LOCATED WITHIN 15' OF HARD SURFACED PAVEMENT FOR UTILITY ACCESSIBILITY.
- ⑩ NEW CLASS 20, FM45 METER. METER CANNOT BE ATTACHED TO TRANSFORMER. METER TO BE INSTALLED ON SELF-SUPPORTING STRUCTURE AS APPROVED BY SUMMIT COUNTY. SUPPORTING STRUCTURE BY CONTRACTOR. METER SOCKET AND METER BY HUDSON PUBLIC POWER.
- ⑪ SERVICE LINES TO EACH BUILDING - ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL  
(1) 3" DIAMETER CONDUIT FOR EACH UNIT. SEE TRENCH DETAIL, A-A, ON SHEET ME0.02.
- ⑫ EXISTING STREET LIGHT TO REMAIN.
- ⑬ FIBER, CABLE TV AND TELEPHONE BY LAKETEC COMMUNICATIONS.

**riverston**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
CLEVELAND - OHIO - 44114  
PHONE: (216) 491-2000 FAX: (216) 491-9640  
WWW.RIVERSTONESURVEY.COM

Plan Revisions:

Issued For:

**NOT FOR CONSTRUCTION**

Laurel Lake villa  
200 Laurel Lake Drive

VILLA 15A &amp; 15B

Call 811 before you dig

**DGPUPS**   
Oil & Gas Produces Underground Protection Service  
Call (614) 715-2004 or 811

ME1.02



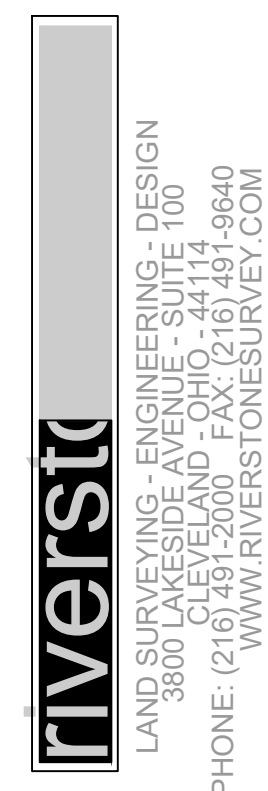


1. FIBER, CABLE TV, AND TELEPHONE BY LAKETEC COMMUNICATIONS.

- ① NEW GAS METER BY DOMINION EAST OHIO GAS. SEE DETAIL ON SHEET ME0.01.
- ② NEW SERVICE LINE SHUTOFF VALVE BY DOMINION EAST OHIO GAS.
- ③ CONNECT NEW GAS SERVICE LINE TO EXISTING GAS MAIN IN STREET, BY DOMINION EAST OHIO GAS.
- ④ NEW GAS LINE INTO SUITE BY P.C.
- ⑤ NEW HOUSE GAS LINE TO ADJOINING SUITE BY P.C., RUN THROUGH ATTIC SPACE.
- ⑥ NEW CLASS 20, FM45 METER. METER CANNOT BE ATTACHED TO TRANSFORMER. METER TO BE INSTALLED ON SELF-SUPPORTING STRUCTURE AS APPROVED BY SUMMIT COUNTY. SUPPORTING STRUCTURE BY CONTRACTOR. METER SOCKET AND METER PROVIDED BY HUDSON PUBLIC POWER.

- 
- The site plan illustrates the proposed and existing utility infrastructure for Villa 40A and Villa 40B. Key features include:
- Buildings:** Villa 40A and Villa 40B, both with a Brandywine Finish Floor at 1015.00. Villa 40A includes a Garage Floor at 1015.00.
  - Utilities:**
    - Gas:** Existing gas main and service gas lines with numbered callouts (1, 2, 3, 4, 5, 11, 13).
    - Electric:** Existing and proposed electric lines, including a new electric hand hole and a relocated site lighting electric line.
    - Storm Sewer:** A 22 LF 6" PVC storm sewer line and a 210 LF 8" DS collector.
    - Sanitary Sewer:** 6" sanitary sewer lines with various inverts and slopes.
  - Manholes and Catch Basins:** Various numbered manholes (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13) and catch basins (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13).
  - Other Features:** Existing buildings, asphalt pavement, and a community garden.

( IN FEET )  
1 inch = 20 ft.



2023-186



**NOT FOR CONSTRUCTION**

Laurel Lake Villa  
200 Laurel Lake Drive

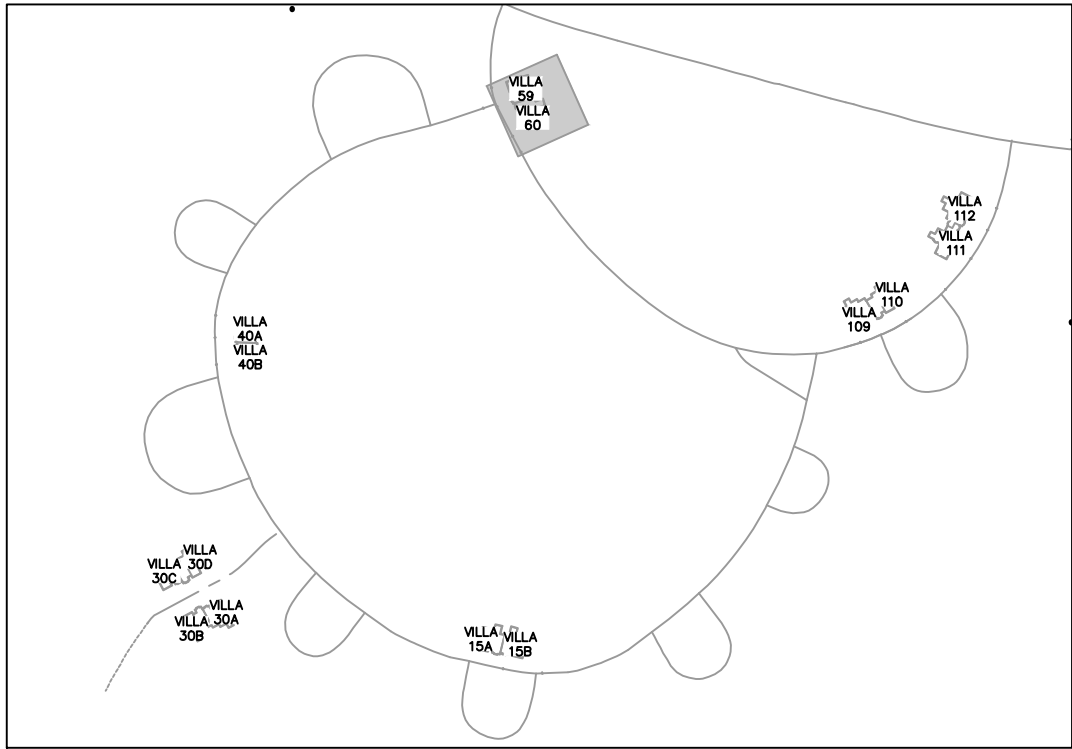
MECHANICAL/ ELECTRICAL PLAN - BUILDING 4

Ohio Utilities Protection Service  
**Call 811**  
before you dig

**OGPUPS**   
Ohio Oil & Gas Produces Underground Protection:  
Call (614) 713-2884 or 811

ME1.03





SCHEMATIC KEY  
N.T.S.



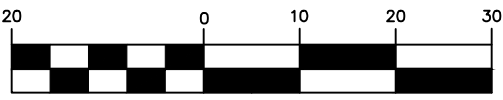
MECHANICAL/ELECTRICAL SITE PLAN GENERAL NOTES:

1. FIBER, CABLE TV, AND TELEPHONE BY LAKETEC COMMUNICATIONS.

ME 6.03 MECHANICAL/ELECTRICAL SITE PLAN CODED NOTES:

- ① NEW GAS METER BY DOMINION EAST OHIO GAS. SEE DETAIL ON SHEET ME0.01.
- ② NEW SERVICE LINE SHUTOFF VALVE BY DOMINION EAST OHIO GAS.
- ③ CONNECT NEW GAS SERVICE LINE TO EXISTING GAS MAIN IN STREET, BY DOMINION EAST OHIO GAS.
- ④ NEW GAS LINE INTO SUITE BY P.C.
- ⑤ NEW HOUSE GAS LINE TO ADJOINING SUITE BY P.C., RUN THROUGH ATTIC SPACE.
- ⑥ 210' APPROXIMATE DISTANCE FROM EXISTING SWITCH CABINET #10 TO PROPOSED PAD MOUNT TRANSFORMER. SEE MAIN JOINT TRENCH DETAIL, B-B, ON SHEET ME0.02.
- ⑦ NEW 25 KVA PAD MOUNT TRANSFORMER. TRANSFORMER PROVIDED AND INSTALLED BY HPP. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PAD PER THE UTILITY COMPANY REQUIREMENTS ON SHEET ME0.02. TRANSFORMER TO BE LOCATED WITHIN 15' OF HARD SURFACE PAVEMENT FOR UTILITY TRACK ACCESSIBILITY.
- ⑧ NEW CLASS 20, FM45 METER AND CIRCUIT TRANSFORMERS. METER CANNOT BE ATTACHED TO TRANSFORMER. METER TO BE INSTALLED ON SELF-SUPPORTING STRUCTURE AS APPROVED BY SUMMIT COUNTY. STRUCTURE BY CONTRACTOR. METER SOCKET AND METER BY HUDSON PUBLIC POWER.
- ⑨ #2 AL CONDUCTOR 2-4" SCHEDULE 40 PVC CONDUIT.
- ⑩ SERVICE LINES TO EACH BUILDING - ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL (1) 3" DIAMETER CONDUIT FOR EACH UNIT. SEE TRENCH DETAIL, A-A, ON SHEET ME0.02.
- ⑪ EXISTING STREET LIGHT TO REMAIN.

GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.

PROGRESS  
NOT FOR  
CONSTRUCTION

**riverston**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
COLUMBUS, OHIO 43260-1474  
PHONE: (216) 491-1200 FAX: (216) 491-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

Plan Revisions:


Page Revisions:


Issued For:

NOT FOR CONSTRUCTION

Laurel Lake Villa  
200 Laurel Lake Drive

MECHANICAL/ ELECTRICAL PLAN - BUILDING 5

Ohio Utility Protection Service  
**Call 811**  
before you dig

**OGPUPS**  
Ohio Oil & Gas Programs Underground Protection Service  
Call 811 or 715-266-6111

ME1.04



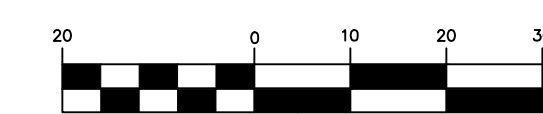


1. FIBER, CABLE TV, AND TELEPHONE BY LAKETEC COMMUNICATIONS.

ME 7.03 MECHANICAL/ELECTRICAL SITE PLAN CODED  
NOTES:

- ① NEW GAS METER BY DOMINION EAST OHIO GAS. SEE DETAIL ON SHEET ME0.01.
- ② NEW SERVICE LINE SHUTOFF VALVE BY DOMINION EAST OHIO GAS.
- ③ CONNECT NEW GAS SERVICE LINE TO EXISTING GAS MAIN IN STREET, BY DOMINION EAST OHIO GAS.
- ④ NEW GAS LINE INTO SUITE BY P.C.
- ⑤ NEW HOUSE GAS LINE TO ADJOINING SUITE BY P.C., RUN THROUGH ATTIC SPACE.
- ⑥ TO EXISTING PAD MOUNT TRANSFORMER LOCATED AT VILLA 33. PROPOSED 300' (APPROXIMATE) #2 AL. PRIMARY CONDUCTOR TO BE INSTALLED FROM TRANSFORMER AT VILLA 33 TO PROPOSED PAD MOUNT TRANSFORMER AT NEW BUILDING 8.
- ⑦ NEW 300' (APPROXIMATE) 4" DIAMETER PVC (SCHEDULE 40) CONDUITS, TWO (2) TOTAL, (300'X2).
- ⑧ EXISTING SECONDARY DUCT TO BE ABANDONED FROM EXISTING TRANSFORMER TO SECONDARY HAND HOLE INTERCEPTION.
- ⑨ NEW 25 KVA PAD MOUNT TRANSFORMER. TRANSFORMER PROVIDED AND INSTALLED BY HPP. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL TRANSFORMER PAD PER THE UTILITY COMPANY REQUIREMENTS. ALL TRANSFORMERS TO BE LOCATED WITHIN 15' OF HARD SURFACED PAVEMENT FOR UTILITY TRUCK ACCESSIBILITY.
- ⑩ NEW CLASS 20, FM45 METER AND CIRCUIT TRANSFORMERS. METER CANNOT BE ATTACHED TO TRANSFORMER. METER TO BE INSTALLED ON SELF-SUPPORTING STRUCTURE AS APPROVED BY SUMMIT COUNTY. SUPPORTING STRUCTURE BY CONTRACTOR. METER AND METER SOCKET PROVIDED BY HUDSON PUBLIC POWER.
- ⑪ NEW SECONDARY HAND HOLE AT POINT WHERE EXISTING SECONDARY CONDUIT AND PROPOSED INTERCEPTION POINT. HAND HOLE PROVIDED BY HPP, AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- ⑫ EXISTING SECONDARY CONDUIT TO REMAIN TO EXISTING LAKESIDE METER.
- ⑬ NEW 200' (APPROXIMATE) 3" DIAMETER SCHEDULE 40 PVC CONDUIT AND SECONDARY CONDUCTOR FROM PROPOSED TRANSFORMER TO EXISTING SECONDARY CONDUIT INTERCEPTION POINT.
- ⑭ SERVICE LINES TO EACH BUILDING – ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL (1) 3" DIAMETER CONDUIT FOR EACH UNIT.
- ⑮ NEW STREET LIGHT, MATCH EXISTING. CONFIRM LOCATION WITH ARCHITECT.
- ⑯ FIBER, CABLE TV AND TELEPHONE BY LAKETEC COMMUNICATIONS.
- ⑰ RELOCATE GAS MAIN.
- ⑱ NEW SECONDARY HAND HOLE. SEE HPP DETAILS ON SHEET ME0.01.
- ⑲ NEW 4/0 SECONDARY TRIPLEX IN 1-3" SCHEDULE 40 PVC CONDUIT.
- ⑳ EXISTING SECONDARY DUCT TO BE ABANDON FROM EXISTING TRANSFORMER TO SECONDARY HAND HOLE INTERCEPTION.

GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.

PROGRESS  
NOT FOR  
CONSTRUCTION

**riverston**  
LAND SURVEYING - ENGINEERING - DESIGN  
3800 LAKESIDE AVENUE - SUITE 100  
FARMINGTON, CT 06031  
PHONE: (216) 461-1947  
FAX: (216) 461-9640  
WWW.RIVERSTONESURVEY.COM

2023-186

#### Plan Revisions:

Page Revisions:

Issued For:

**NOT FOR CONSTRUCTION**

Laurel Lake Villa  
200 Laurel Lake Drive

Ohio Utilities Protection Service  
**Call 811**  
before you dig

**OGPUPS**   
Ohio Oil & Gas Producers Underground Protection Service  
Call 614 215-2884 or 811

ME1.05



# LAUREL LAKE VILLAS

HUDSON, OHIO

SCHEMATIC DESIGN PACKAGE: DECEMBER 5TH, 2023

## PROJECT TEAM

**OWNER:**

**LAUREL LAKE RETIREMENT COMMUNITY**  
MAILING ADDRESS: 200 LAUREL LAKE DRIVE  
HUDSON, OHIO 44236  
CONTACT: ERIC REDD  
DIRECTOR OF ENVIRONMENTAL SERVICES  
PHONE: 330 - 655 - 1412  
E-MAIL: EREDD@LAURELLAKE.ORG

**CIVIL ENGINEER:**

**RIVERSTONE**  
MAILING ADDRESS: 3800 LAKESIDE AVENUE, SUITE 100  
CLEVELAND, OHIO 44114  
CONTACT: JEFF JARDINE, PROJECT ENGINEER  
E-MAIL: JJARDINE@RIVERSTONESURVEY.COM

**ARCHITECT:**

**RDL ARCHITECTS**  
MAILING ADDRESS: 16102 CHAGRIN BLVD, STE 200  
SHAKER HTS, OH 44120  
CONTACT: EILEEN NACHT  
TITLE: SENIOR LIVING DIRECTOR  
PHONE: 216-752-4300  
E-MAIL: EILEEN@RDLARCHITECTS.COM

**INTERIOR DESIGN:**

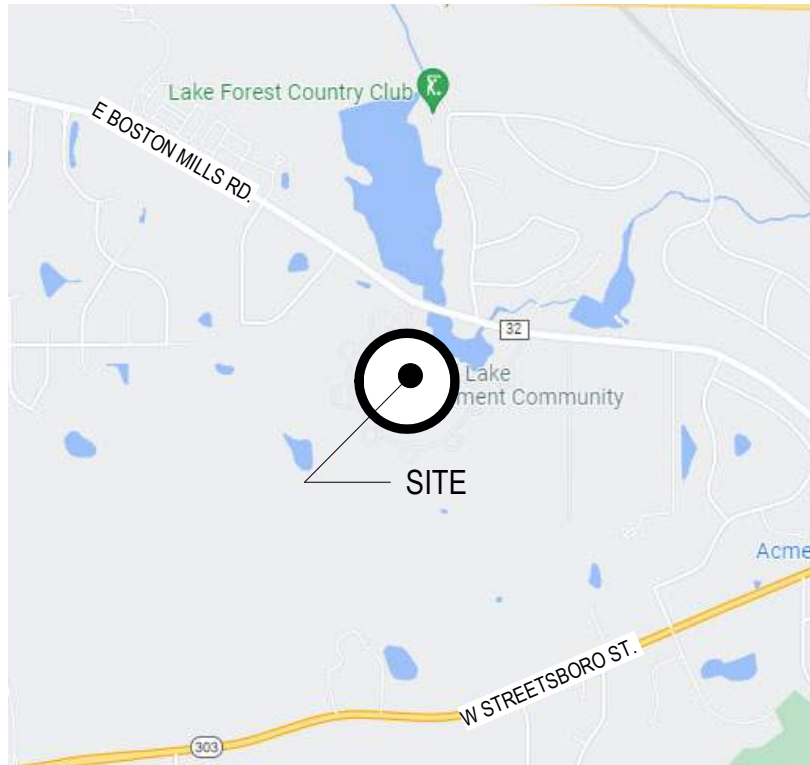
**RDL ARCHITECTS**  
MAILING ADDRESS: 16102 CHAGRIN BLVD, STE 200  
SHAKER HTS, OH 44120  
CONTACT: KATALIN SIGNS  
TITLE: INTERIOR DESIGN DIRECTOR  
PHONE: 216-752-4300  
E-MAIL: KATALIN@RDLARCHITECTS.COM



## DRAWING INDEX

TITLE SHEET  
SITE PLAN  
SITE UTILITY PLAN  
'BRANDYWINE' FLOOR PLAN  
'BRANDYWINE' EXTERIOR ELEVATIONS  
'BRANDYWINE' 3D VIEWS  
'CASCADE' EXTERIOR ELEVATIONS  
'CASCADE' FLOOR PLAN  
'CASCADE' 3D VIEWS  
'PORTAGE' FLOOR PLANS  
'PORTAGE' EXTERIOR ELEVATIONS  
'PORTAGE' 3D VIEWS  
'CUYAHOGA' FLOOR PLANS  
'CUYAHOGA' EXTERIOR ELEVATIONS

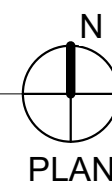
## LOCATION MAP







1 BRANDYWINE - 1ST FLOOR PLAN  
1/4" = 1'-0"  
GROSS SQ. FT. - 2350  
GARAGE SQ. FT. - 649







1 FRONT ELEVATION  
3/16" = 1'-0"



3 RIGHT ELEVATION  
3/16" = 1'-0"

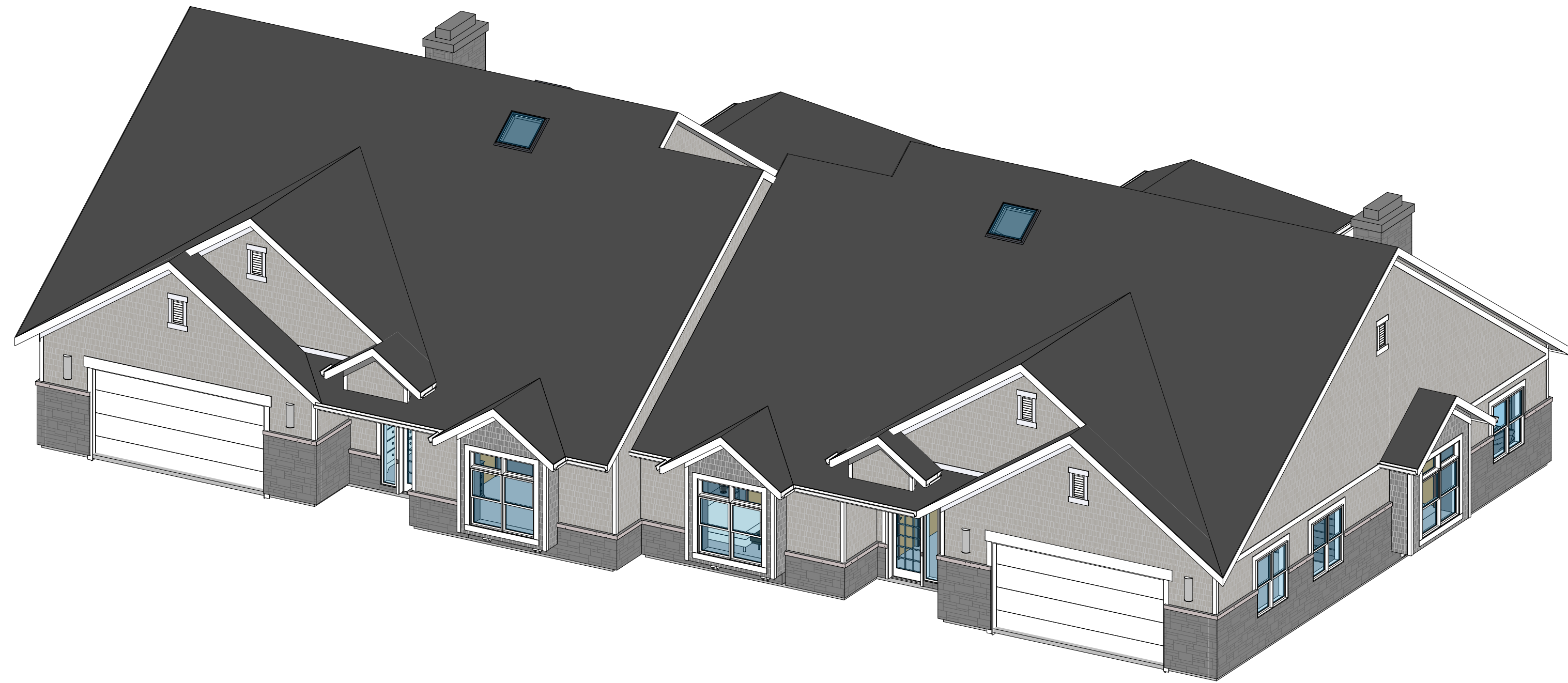


2 LEFT ELEVATION  
3/16" = 1'-0"

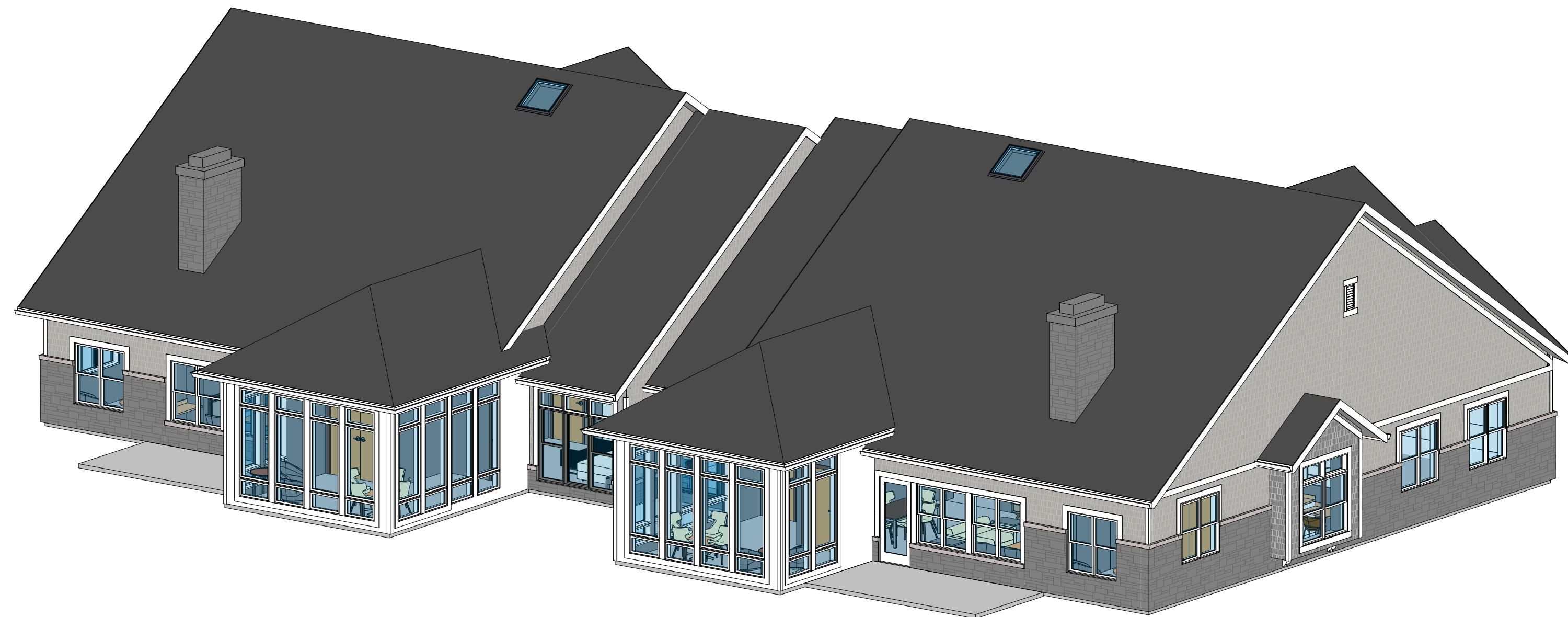


4 REAR ELEVATION  
3/16" = 1'-0"



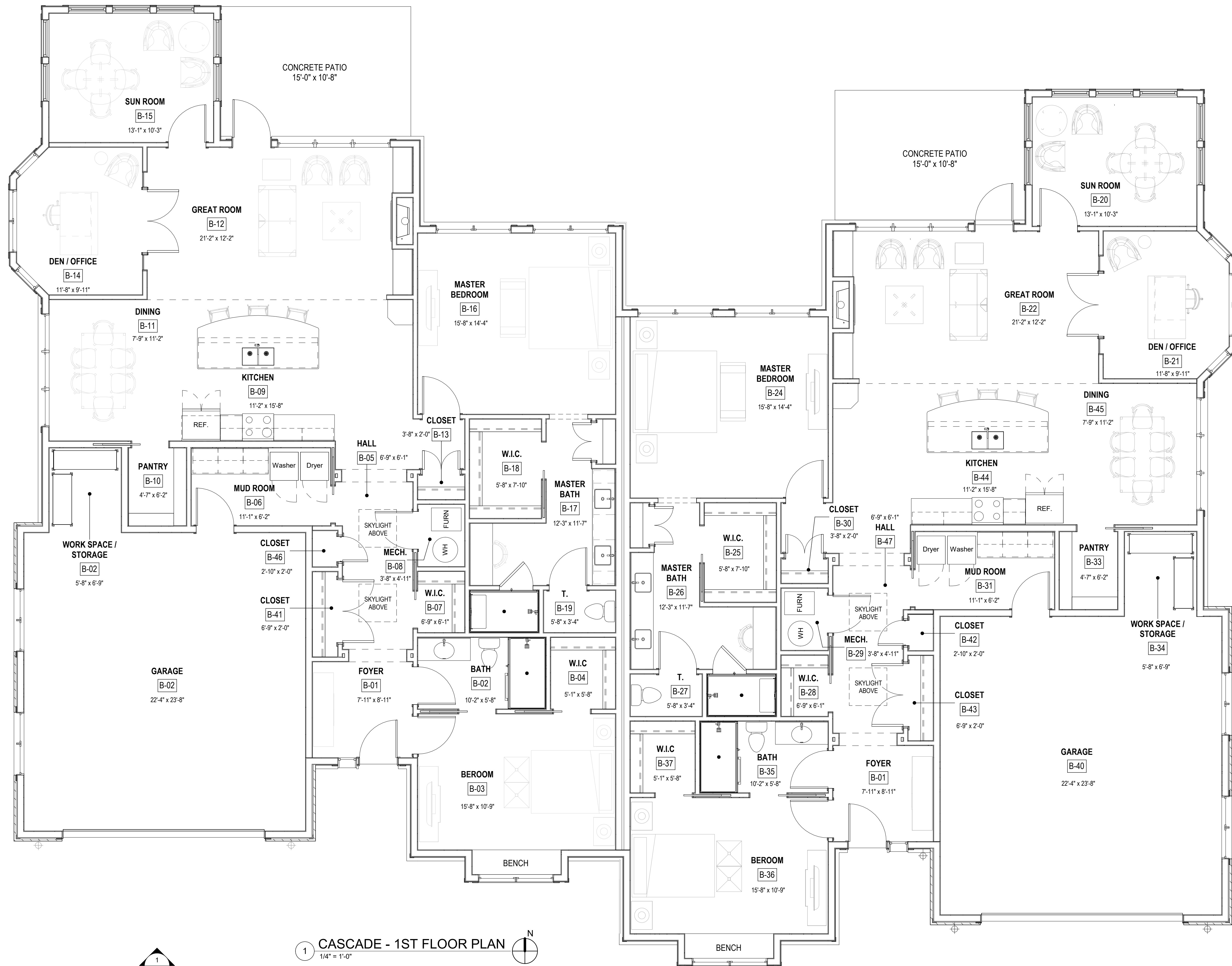


1 3D SKETCH VIEW - FRONT



2 3D SKETCH VIEW - REAR





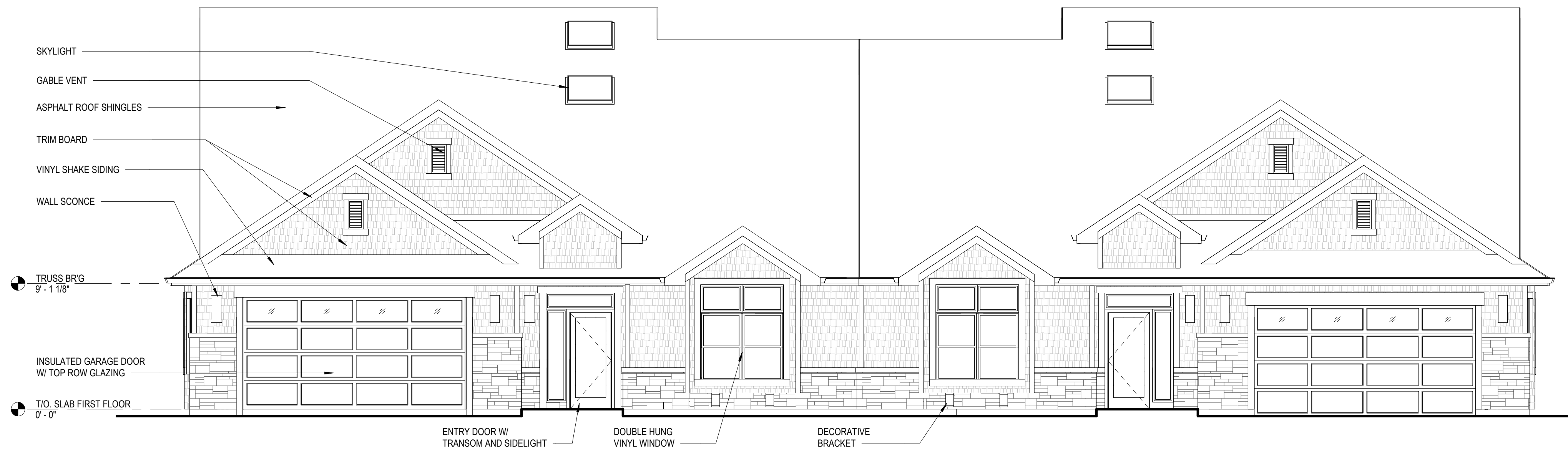
1  
A2.01

1  
CASCADE - 1ST FLOOR PLAN  
1/4" = 1'-0"

GROSS SQ. FT. - 2071  
GARAGE SQ. FT. - 604

N  
PLAN





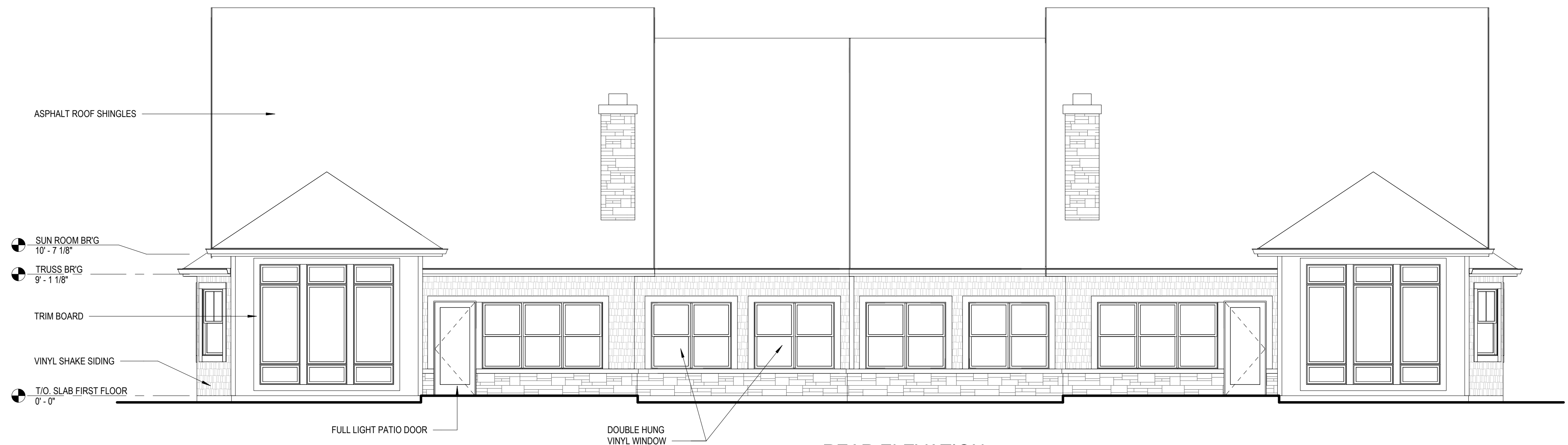
1 FRONT ELEVATION  
3/16" = 1'-0"



2 LEFT ELEVATION  
3/16" = 1'-0"

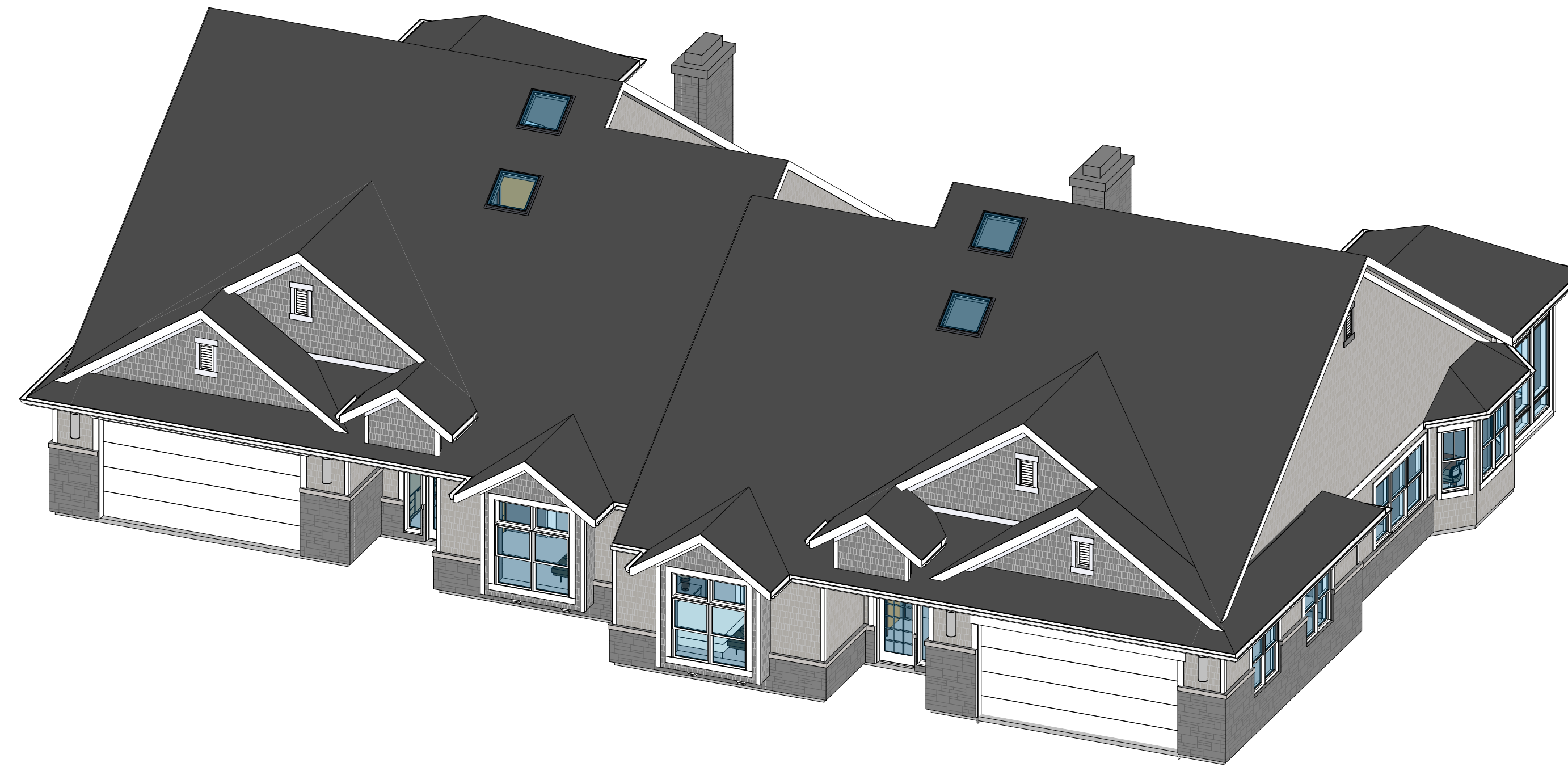


3 RIGHT ELEVATION  
3/16" = 1'-0"

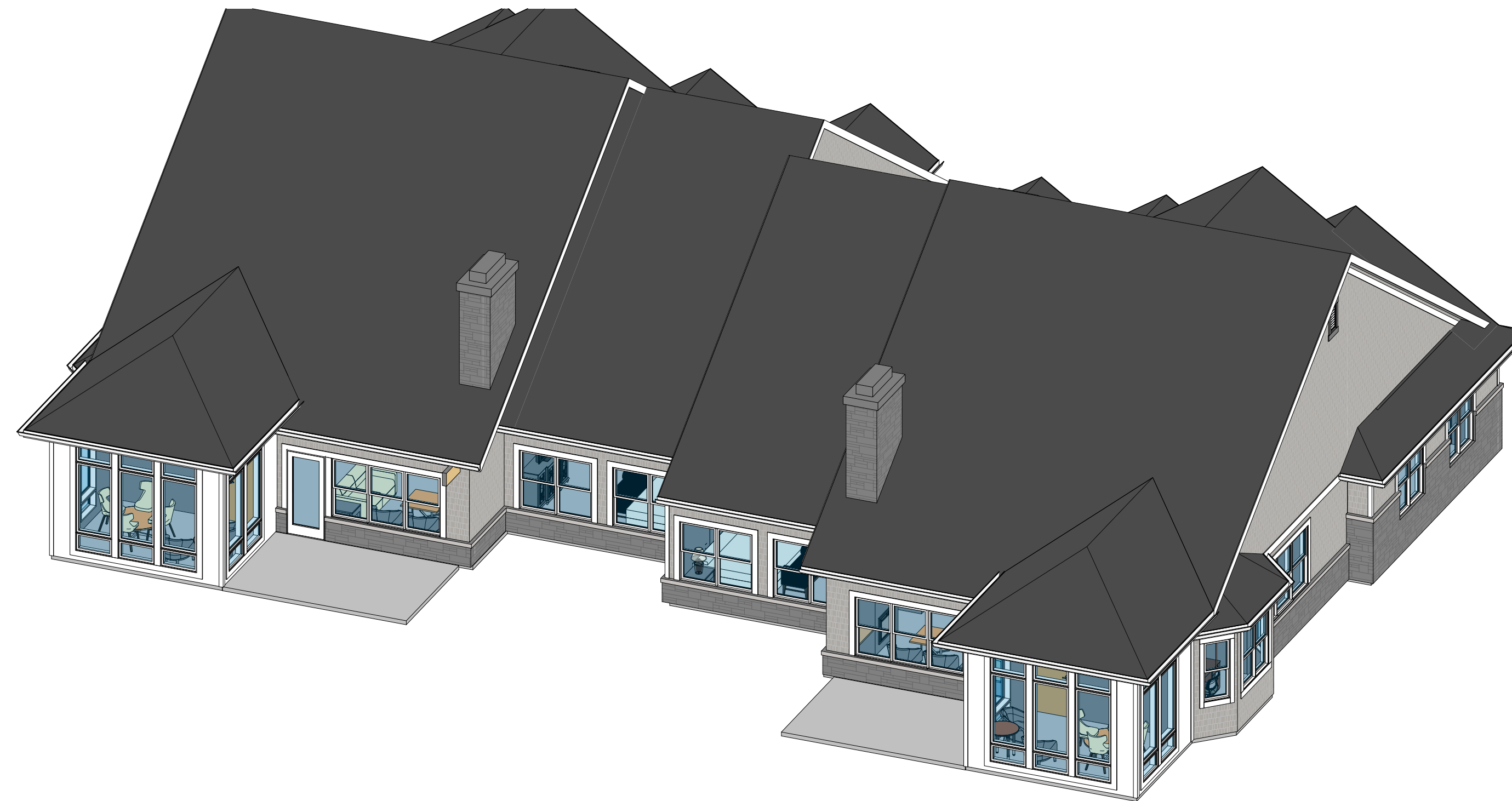


4 REAR ELEVATION  
3/16" = 1'-0"



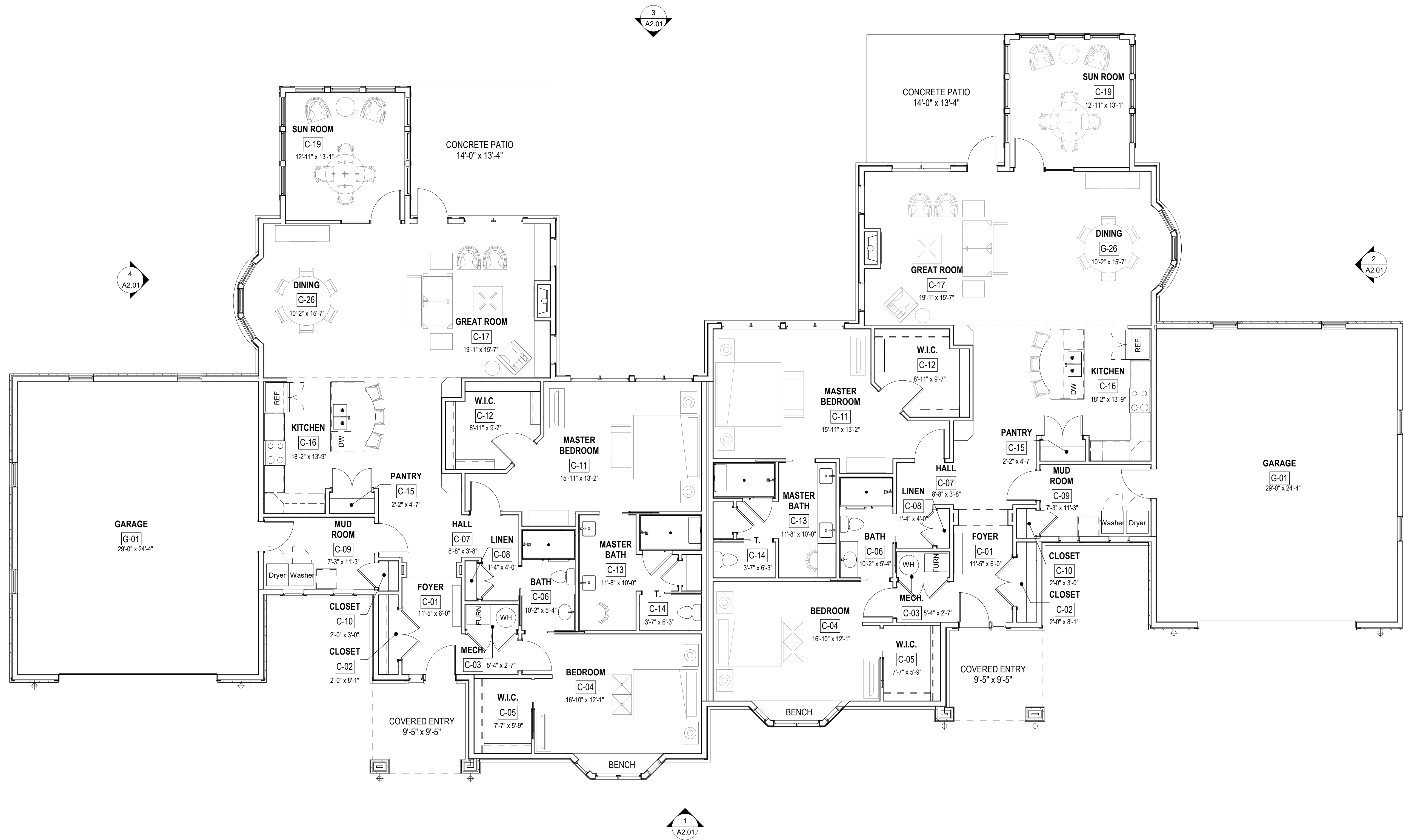


1 3D SKETCH VIEW - FRONT



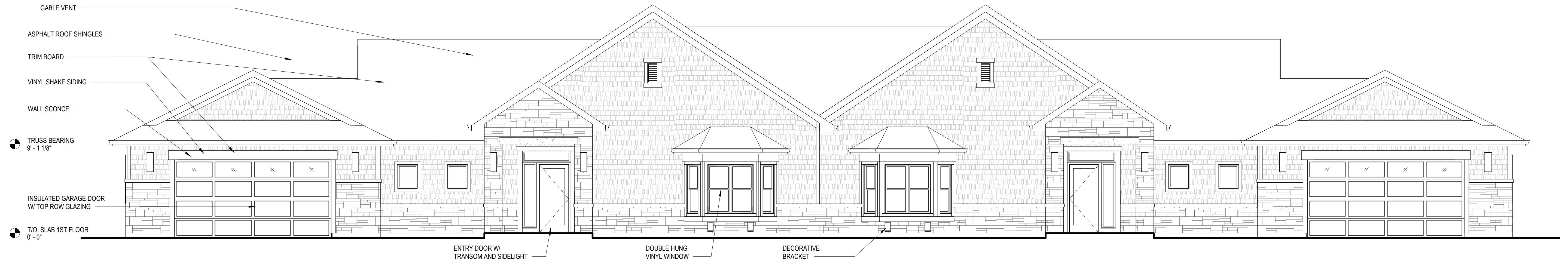
2 3D SKETCH VIEW - REAR





1 PORTAGE - 1ST FLOOR PLAN  
 3/16" = 1'-0"  
 GROSS SQ. FT. - 2185  
 GARAGE SQ. FT. - 775





1 FRONT ELEVATION  
3/16" = 1'-0"



4 LEFT ELEVATION  
3/16" = 1'-0"

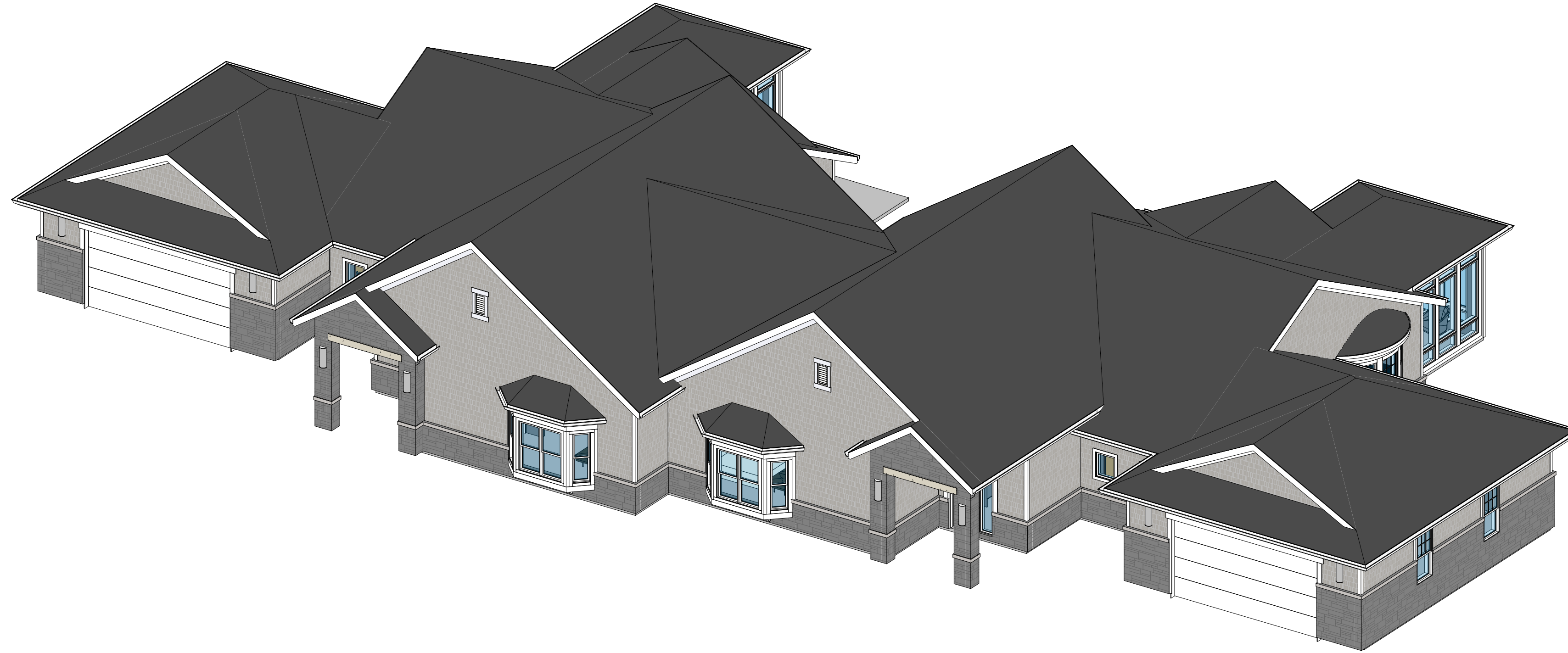


2 RIGHT ELEVATION  
3/16" = 1'-0"

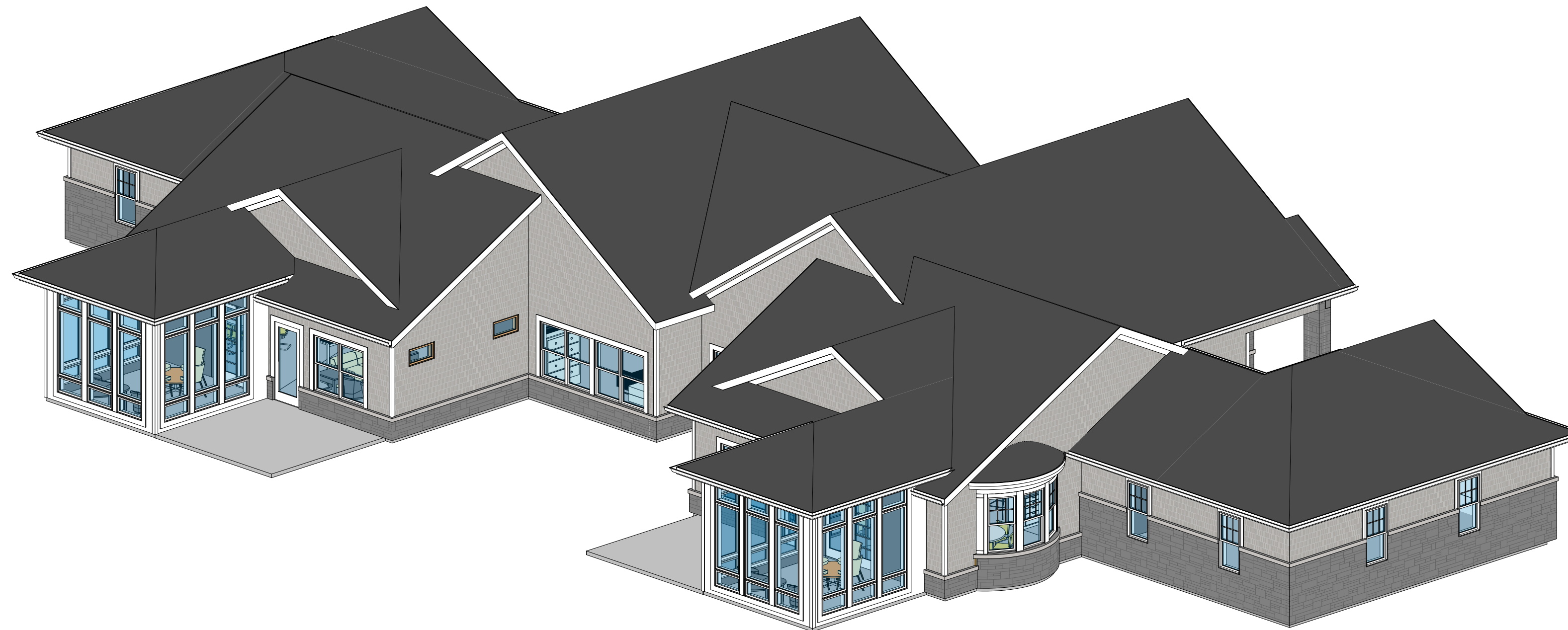


3 REAR ELEVATION  
3/16" = 1'-0"





2 3D SKETCH VIEW - FRONT

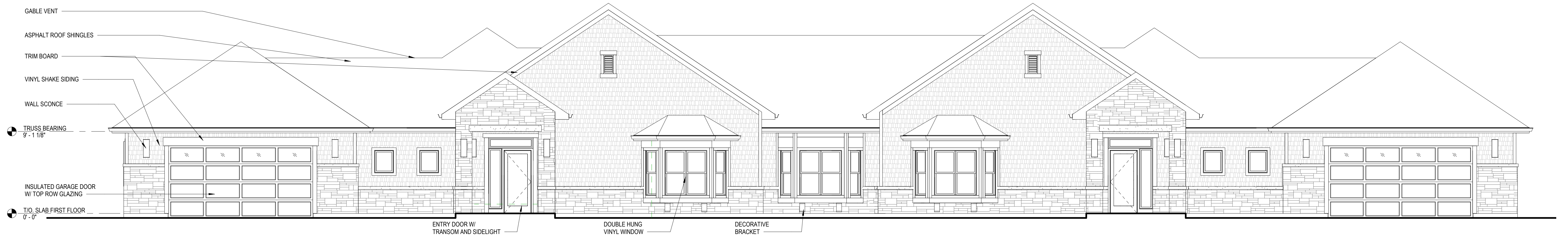


1 3D SKETCH VIEW - REAR





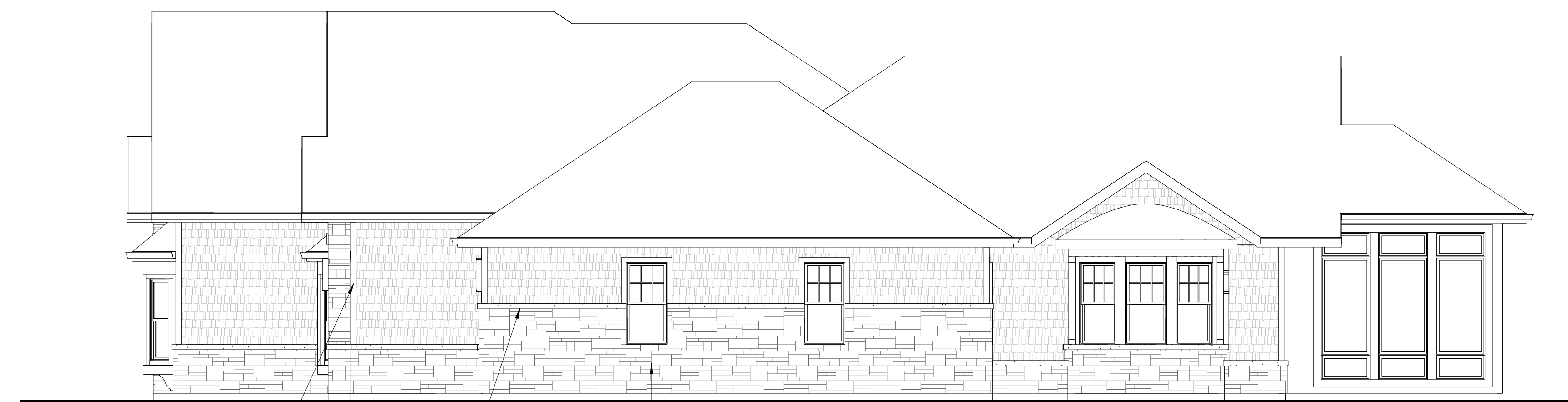




1 FRONT ELEVATION  
3/16" = 1'-0"



4 LEFT ELEVATION  
3/16" = 1'-0"

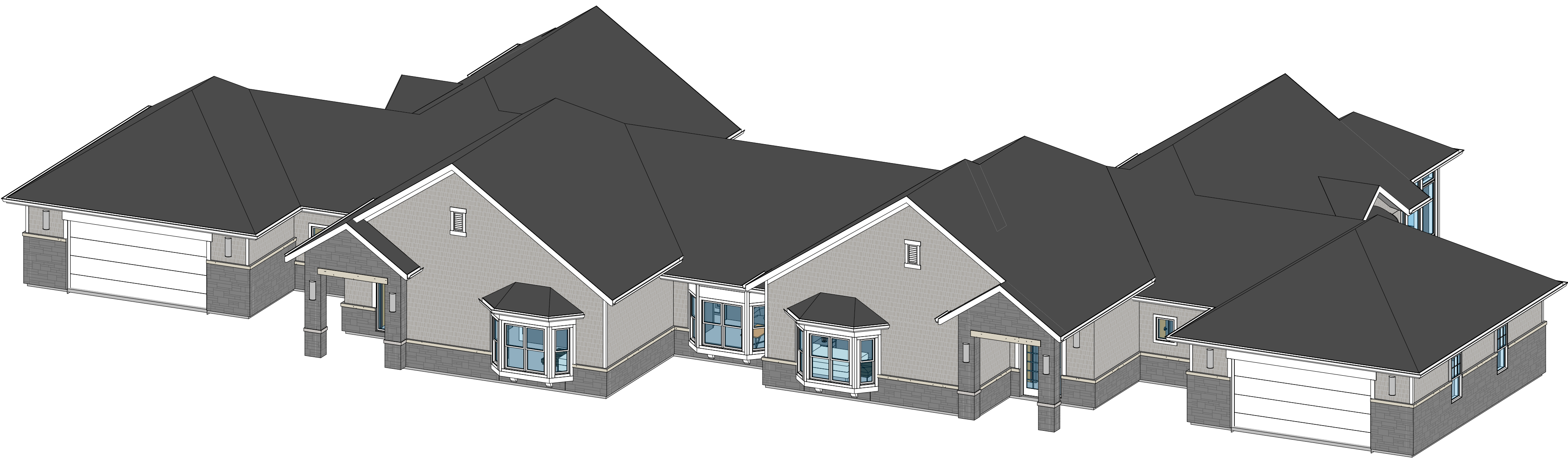


2 RIGHT ELEVATION  
3/16" = 1'-0"

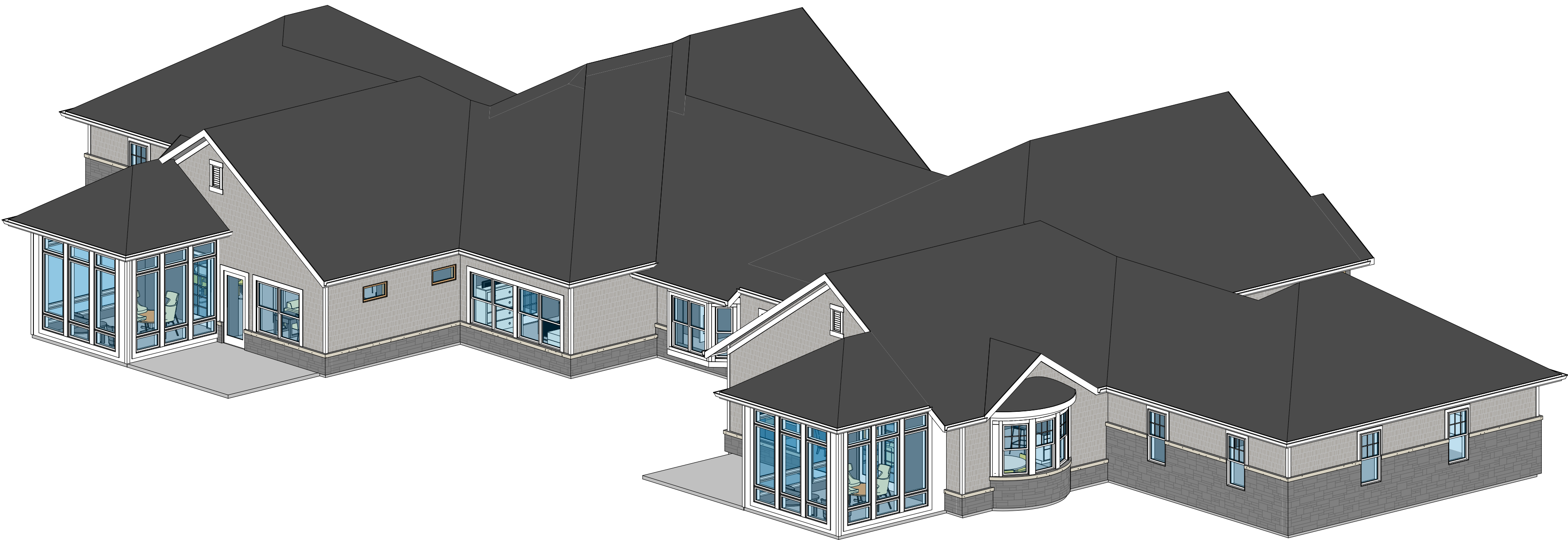


3 REAR ELEVATION  
3/16" = 1'-0"





1 3D SKETCH VIEW - FRONT



11 3D SKETCH VIEW - REAR