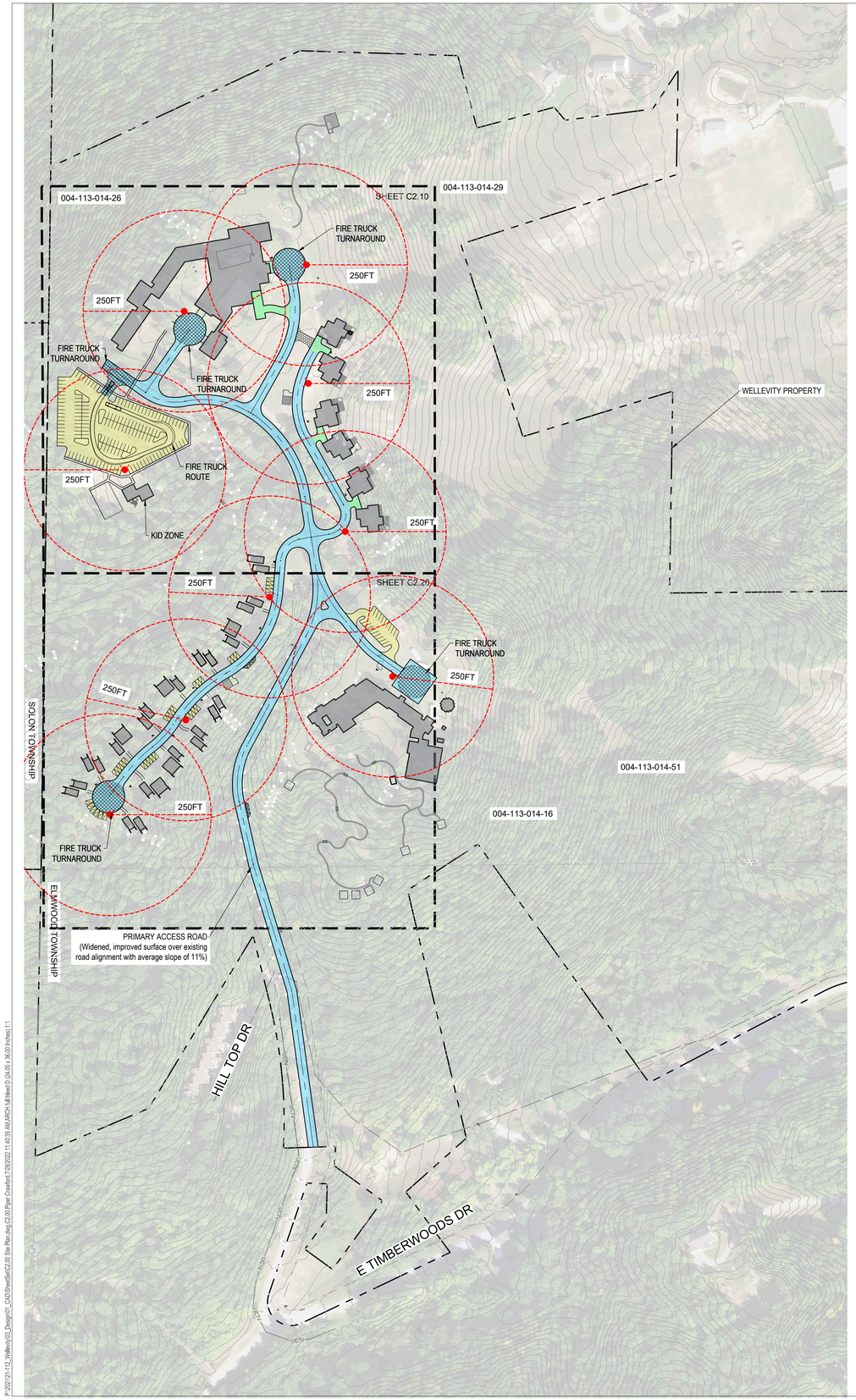


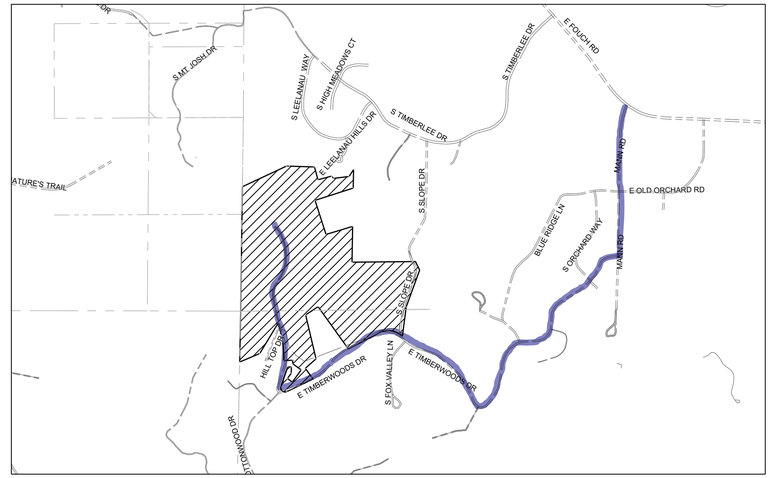
LEGEND

- 24' WIDE 2-WAY PAVED PRIMARY ACCESS DRIVE
- 18-20' WIDE 2-WAY PAVED SECONDARY ACCESS DRIVE
- PARKING
- FIRE TRUCK TURNAROUNDS PER ELMWOOD TOWNSHIP ROAD STANDARDS
- FIRE HYDRANT

Requirement	Distance
Width	Minimum 20ft
Vertical Clearance	Minimum 13ft-6in
Grade	Not to exceed 1ft drop in 20ft
Distance of access road to exterior door	Maximum 50ft
Distance of access road to any portion of the facility or any portion of an exterior wall of the first story of the building	Maximum 450ft

*All buildings to be sprinklered thus all distances will use the approved automatic sprinkler system option.

FIRE ACCESS ROAD REQUIREMENTS



PUBLIC ACCESS PATH

SCALE: 1"=1000'

Building	Area (sf)	Construction Type	Fire Flow Demand per NFPA 1 Fire Code			
			Maximum Capacity (gpm)	Reductions	Resulting Capacity (gpm)	Pressure
Hillside Homes	~8000	Type III	2000 gpm for 2 hour	(1) Provided an approved automatic sprinkler system [Reduction in req'd fire flow of 75%]. Resulting fire flow shall not be less than 1000 gpm.	1000 gpm for 2 hours	20 psi
Tree Houses	~1300	Type III	1500 gpm for 2 hour	(1) Provided an approved automatic sprinkler system [Reduction in req'd fire flow of 75%]. Resulting fire flow shall not be less than 1000 gpm.	1000 gpm for 2 hours	20 psi
Health and Wellness	~52600	Type III	4750 gpm for 4 hours	(1) Provided an approved automatic sprinkler system [Reduction in req'd fire flow of 75%]. Resulting fire flow shall not be less than 1000 gpm.	1187.5 gpm for 4 hours	20 psi
Lodge	~88600	Type III	6250 gpm for 4 hours	(1) Provided an approved automatic sprinkler system [Reduction in req'd fire flow of 75%]. Resulting fire flow shall not be less than 1000 gpm.	1562.5 gpm for 4 hours	20 psi

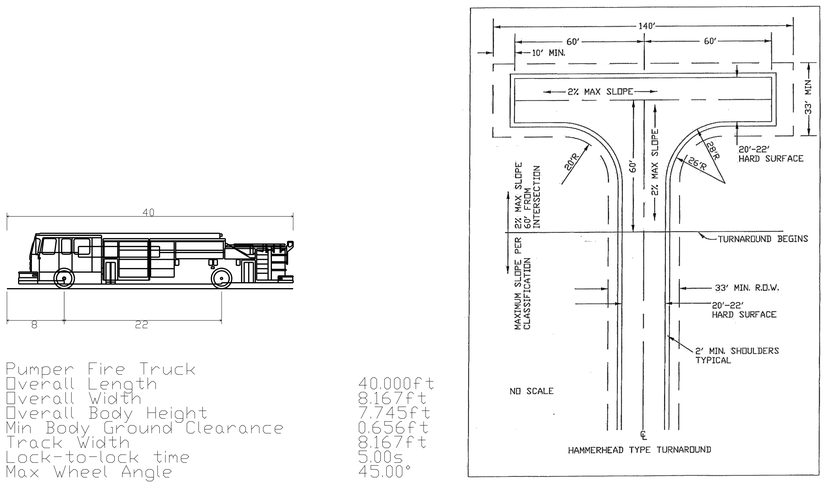
(1) NFPA 1 Section 18.4.5.3.2

FIRE FLOW DEMAND CALCULATIONS

Distance to Building	Maximum Capacity	Pressure	Minimum Hydrants Needed per Building
≤ 250ft	1500 gpm	20 psi	1.04
>250ft and ≤ 500ft	1000 gpm	21 psi	1.56
> 500ft and ≤ 1000ft	750 gpm	22 psi	2.08

(1) Maximum distance to a fire hydrant from the closest point on the building shall not exceed 400ft.
(2) The maximum distance between fire hydrants shall not exceed 500ft.
(3) Fire hydrants shall be located not more than 12 ft from access road.
(4) Minimum hydrants required was calculated using the greatest resulting fire flow demand.

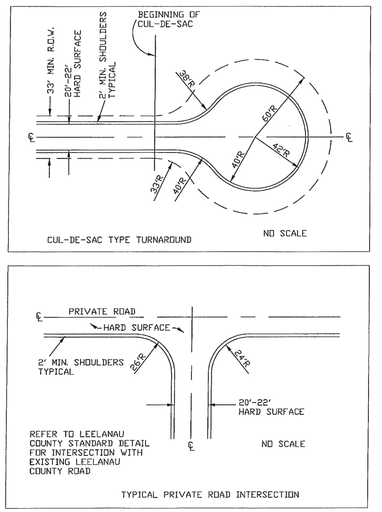
MINIMUM FIRE HYDRANT CALCULATION



Pumper Fire Truck	
Overall Length	40.000ft
Overall Width	8.167ft
Overall Body Height	7.745ft
Min Body Ground Clearance	0.656ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Max Wheel Angle	45.00°

PUMPER FIRE TRUCK TEMPLATE

NTS



ELMWOOD TOWNSHIP DETAILS

NTS

0 75' 150' 300'

North

NOT FOR CONSTRUCTION

SHERWOOD DESIGN ENGINEERS
2548 Mission Street
San Francisco, CA 94110
www.sherwoodengineers.com

SCALE: ----
0 1"
Note: If this graphic scale does not equal 1", this sheet has been modified from its original size.

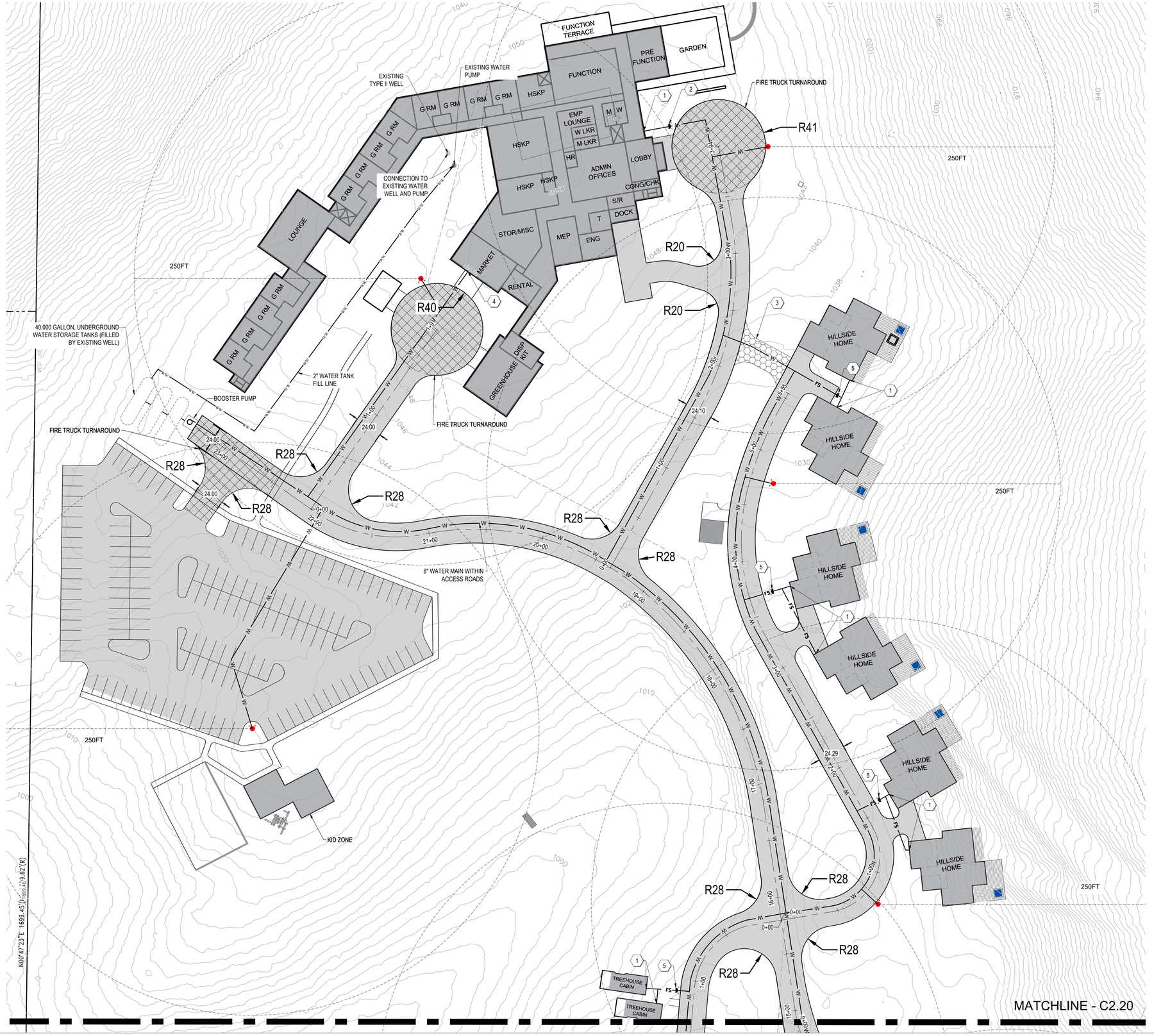
NO	DATE	REVISION

PROJECT NO. 21-112
DATE JULY 15, 2022
DRAWN PC
DESIGNED PC
CHECKED MH

Wellevity
Pre-Application

SITE FIRE PROTECTION PLAN - OVERALL

DRAWING NO.
C2.00



LEGEND

- FIRE HYDRANT
- W — WATER PIPE
- WW — WATER TANK FILL LINE
- FIRE TRUCK TURNAROUNDS PER ELMWOOD TOWNSHIP ROAD STANDARDS

KEYNOTES

1. FIRE SPRINKLER POINT OF CONNECTION
2. BACKFLOW DEVICE WITH ATTACHED FIRE DEPARTMENT CONNECTION
3. REINFORCED TURF BLOCK (H-20 LOADABLE)
4. DOMESTIC WATER POINT OF CONNECTION
5. SHARED FIRE DEPARTMENT CONNECTION
6. GRAVEL TURNOUT

SHERWOOD DESIGN ENGINEERS
2548 Mission Street
San Francisco, CA 94110
www.sherwoodengineers.com

SCALE: 0 1"

Note: If this graphic scale does not equal 1", this sheet has been modified from its original size.

NO	DATE	REVISION

PROJECT NO.	21-112
DATE	JULY 15, 2022
DRAWN	PC
DESIGNED	PC
CHECKED	MH

NOT FOR CONSTRUCTION

Wellevity
Pre-Application

SITE FIRE PROTECTION PLAN - DETAILED

DRAWING NO.
C2.10

MATCHLINE - C2.10

LEGEND

- FIRE HYDRANT
- W — WATER PIPE
- WW — WATER TANK FILL LINE
- FIRE TRUCK TURNAROUNDS PER ELMWOOD TOWNSHIP ROAD STANDARDS

KEYNOTES

1. FIRE SPRINKLER POINT OF CONNECTION
2. BACKFLOW DEVICE WITH ATTACHED FIRE DEPARTMENT CONNECTION
3. REINFORCED TURF BLOCK (H-20 LOADABLE)
4. DOMESTIC WATER POINT OF CONNECTION
5. SHARED FIRE DEPARTMENT CONNECTION
6. GRAVEL TURNOUT

TREEHOUSE CABIN

250FT

R38

R40

FIRE TRUCK TURNAROUND

HYDRO

MALE CHANGING

FEMALE CHANGING

TREATMENTS

RETAIL

ARRIVAL

CAFE

WELLNESS CENTER

LIBRARY

LEARNING LAB

TECH LOUNGE

MEDITATION DOME

FITNESS CENTER

INDOOR POOL

MOVEMENT STUDIO

COVERED, OPEN-AIR PAVILLIONS, TYP.

S56°45'05"W 209.20'

PRIMARY ACCESS ROAD
(Widened, improved surface over existing road alignment with average slope of 11%)

ELMWOOD TOWNSHIP

24.00

13-00

14-00

11-00

10-00

9-00

8-00

7-00

6-00

5-00

4-00

3-00

2-00

7-00

23.69

46.00

26.00

9.00

North

0 20' 40' 80'

NOT FOR CONSTRUCTION

SHERWOOD DESIGN ENGINEERS
2548 Mission Street
San Francisco, CA 94110
www.sherwoodengineers.com

SCALE:
0 1"
Note: If this graphic scale does not equal 1", this sheet has been modified from its original size.

NO	DATE	REVISION

PROJECT NO. 21-112

DATE	JULY 15, 2022
DRAWN	PC
DESIGNED	PC
CHECKED	MH

Wellevity
Pre-Application

SITE FIRE PROTECTION PLAN - DETAILED

DRAWING NO.
C2.20

refined entry road PROFILE
H: 1" = 80'
V: 1" = 40'

ISSUES:

DATE:	DESCRIPTION:
1	12/07/2022 EXHIBIT

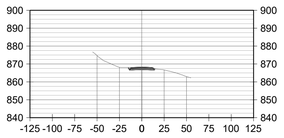
WELLEVITY

ENTRY DRIVE GRADING - 1:1 CUT SLOPES AND GATE

environmentarchitects

PLAN AND PROFILE

C-1



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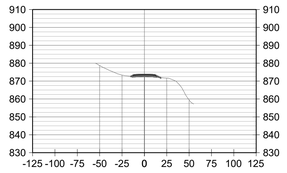

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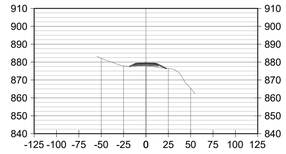

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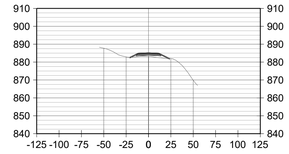

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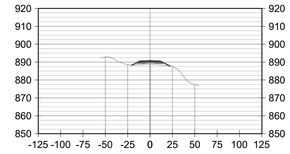

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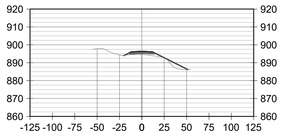

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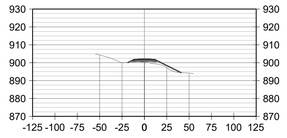

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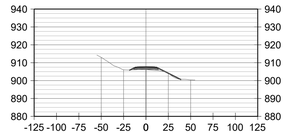

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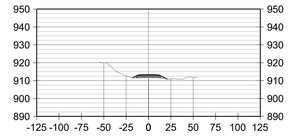

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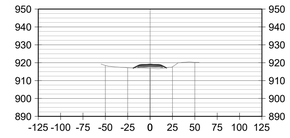

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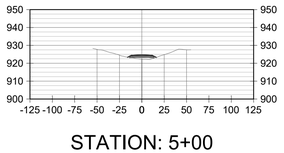

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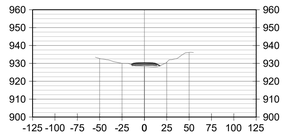

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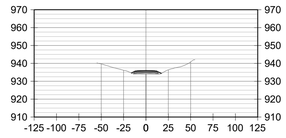

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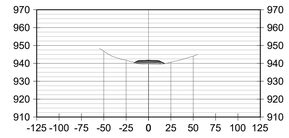

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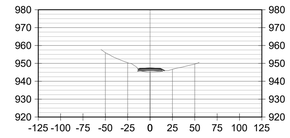

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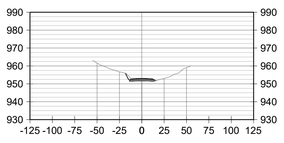

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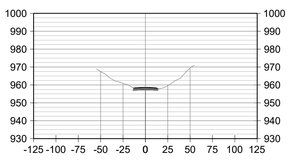

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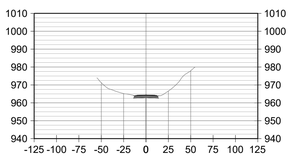

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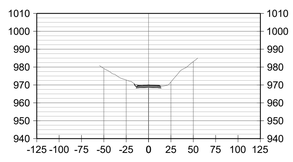

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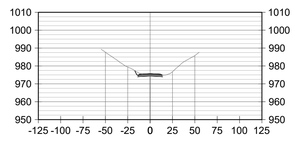

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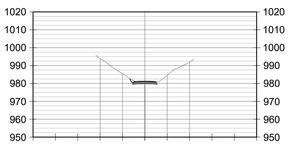

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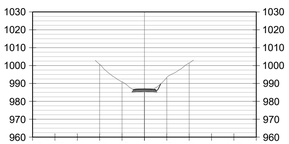

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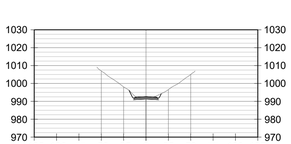

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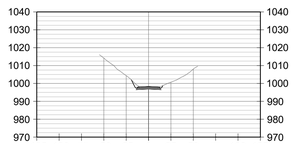

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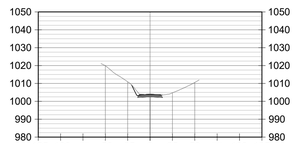

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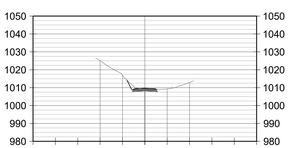

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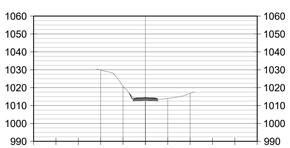

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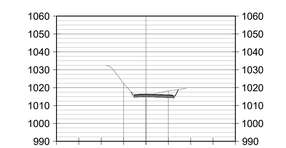

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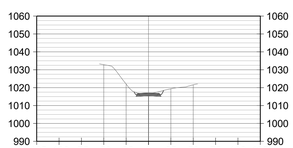

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VER: 1"=40'

ISSUES:

DATE:	DESCRIPTION:
1 12/07/2022	EXHIBIT

CUT SLOPES AND GATE

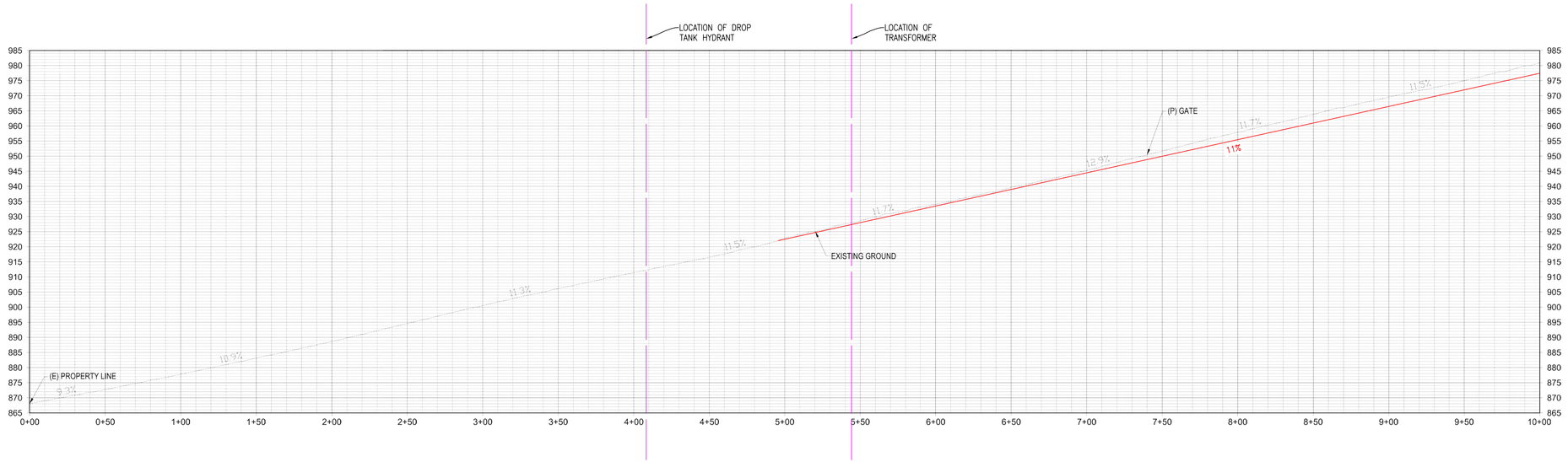
ENTRY DRIVE GRADING - 1:1

WELLEVITY

environmentarchitects

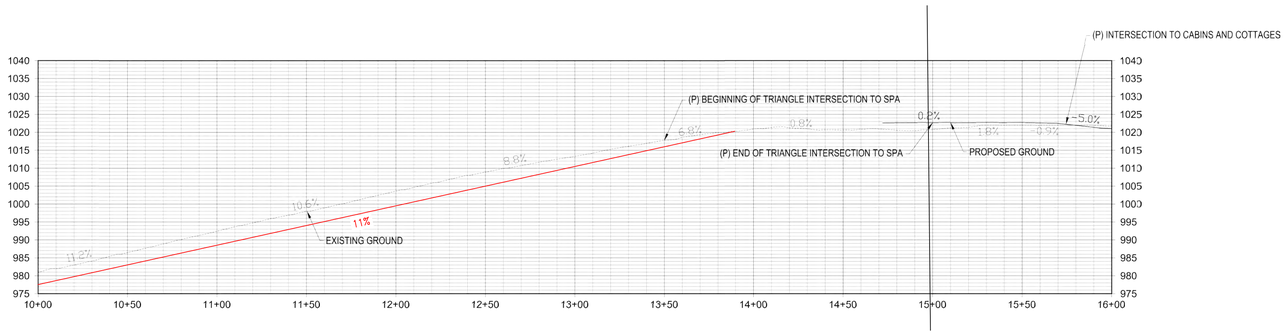
SECTIONS 0+00 TO 13+50

C-2



0+00 TO 10+00 PROFILE

HORIZ: 1"=40'
VERT:1"=20'



10+00 TO 20+00 PROFILE

HORIZ: 1"=40'
VERT:1"=20'

ISSUES:

DATE:	DESCRIPTION:
8/19/22	SUP
9/30/22	SUP REVISION 1

NOT FOR CONSTRUCTION

WELLEVILLE PROPERTY
SPECIAL USE PERMIT APPLICATION

environmentarchitects
cell 231 946 1234
fax 231 421 5772
10261 e cherry bend road
traverse city mi 49684
env-arch.com

S COTTONWOOD DR PROFILE

C-1

C-