

## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

The following drawings are examples of common projects applied for under the Joint Permit Application. Since each project is unique, these drawings should be used as guides and are not intended to include all information necessary for every project scenario. Site plans, cross sections, and profiles are required showing existing and proposed conditions as follows:

**Overall Project Site Plan:** Many projects involve multiple activities requiring detailed information that cannot be captured in one drawing or illustration. As such, an overall project site plan should be submitted that shows the entire property and the location of all proposed activities. Separate plan view drawings should also be submitted for individual activities referenced in the application. The individual plan view drawing(s) should include all the required dimensions (length, width, area, cubic yardage, etc., as appropriate) for each activity, property lines, and all regulated features (wetlands, inland lakes and streams, Great Lakes, etc.). Include Soil Erosion and Sedimentation Control measures, as appropriate.

**Cross Sectional and Profile Drawings** of all proposed impact areas with dimensions.

The following items are required on all site plans, cross sections, and profiles, as applicable:

1. Scale and/or Dimensions, Compass North, and Property Lines.
2. All wetlands on the property and their delineated boundaries associated with proposed impacts. This includes wetlands that may not be regulated.
  - Wetland delineations determine where the regulated line between upland and regulated wetland lie. This is determined by a wetland professional through consideration of existing vegetation, hydrology, and soils. See [How Are Wetlands Identified](#). EGLE makes the final determinations on wetland regulatory status.
3. Any rivers, lakes, or ponds on the property and Ordinary High Water Mark (OHWM) elevation associated with the proposed impact locations. The OHWM is unique to each individual waterbody and is defined differently in inland lakes, streams, and each Great Lake. An OHWM can be determined by either land survey information or through simple vertical measurements taken in reference to a benchmark such as an observed water level or base of tree, etc. The following information indicates how to determine the OHWM in different situations:
  - [PART 325](#): The OHWM for each Great Lake is an elevation set by Part 325 and is referenced upon the baseline datum set called International Great Lakes Datum 1985 (IGLD 85). See the [EGLE Great Lakes OHWM website](#) for information on Part 325 OHWM elevations. In addition, the US Army Corps of Engineers (USACE) has jurisdiction over these areas and also has OHWM elevations; see [USACE website](#) for more accurate daily information on Great Lakes Water Level Data. When looking up daily data, use the Daily Lakewide Average Water Levels tables to select the closest date elevation. If you are using the IGLD 85 datum as the OHWM reference, this is the elevation you enter on the Joint Permit Application for Great Lakes Observed Water Elevation. You may also use a relative reference that is based on measurements in relation to a benchmark or point location identified in the field (such as a water level or base of a tree). The OHWM elevation can be converted based on this onsite observed data. See example drawings.

## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

- Part 301: OHWM for inland lakes is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels. This line is identified in the field based on observed physical characteristics and may be reported by referencing either land survey elevation information or a relative benchmark such as observed water level or the base of a tree. A surveyed elevation is typically referenced to the National Geodetic Vertical Datum (NGVD 29 or NAVD 88). If the actual land elevation is not known (i.e., no land survey is done), then use a relative reference elevation such as 0 for an observed water level or a static benchmark. The OHWM elevation to report on the JPA will be the vertical distance from that benchmark to the physical line observed in the field. If using a water level as the benchmark, report the date of observation. The OHWM is used for calculating impacts from the proposed activities so the actual surveyed elevation itself is not necessary in many cases. The necessary information is where the OHWM lies vertically and horizontally in relation to the existing and proposed features on site (e.g., water levels, bottom of stream, dock dimensions, etc.). See EGLE's [YouTube Series](#) for OHWM video tutorials, and the sample OHWM drawings below for more information. Some inland lakes have a legally established OHWM elevation (Legal Lake Level). For information, see EGLE's [YouTube video](#) describing Legal Lake Levels. Contact your County Drain Commissioner for established Legal Lake Levels in your area.
- 4. Any floodplain 100-year boundaries identified on the property with dimensions in reference to proposed impacts. See [Floodplain Management Program](#).
- 5. Each impact location should be called out on plans with a label that corresponds to reported impacts on the JPA. Identify fill and excavation dimensions and areas (in Square Feet or Acres) with associated volumes (in cubic yards) and locations of structures or other impact areas (including temporary impacts) associated with the proposed project.
- 6. Distance to other structures and lot lines associated with the project as appropriate.
- 7. Topographic contour lines from licensed surveyor or engineer when applicable; this is typically for larger developments or more complex projects.

List of sample drawings:

[Beach Sanding](#)

[Boardwalk](#)

[Boat Hoist](#)

[Boat Ramp](#)

[Boat Well](#)

[Bridges](#)

[Critical Dune Area](#)

[Cross Sectional Area of a](#)

[Stream](#)

[Culverts](#)

[Dams](#)

[Docks](#)

[Dredging](#)

[Driveway](#)

[Floodplains – Cut and Fill](#)

[Floodplains – Demarcation](#)

[Groin](#)

[High Risk Erosion Area](#)

[Intake](#)

[Marina](#)

[Mooring Buoy](#)

[Ordinary High Water Mark](#)

[Outlet](#)

[Pond Construction](#)

[Shore Protection -](#)

[Measurements](#)

[Shore Protection – Seawall](#)

[Shore Protection – Great Lakes](#)

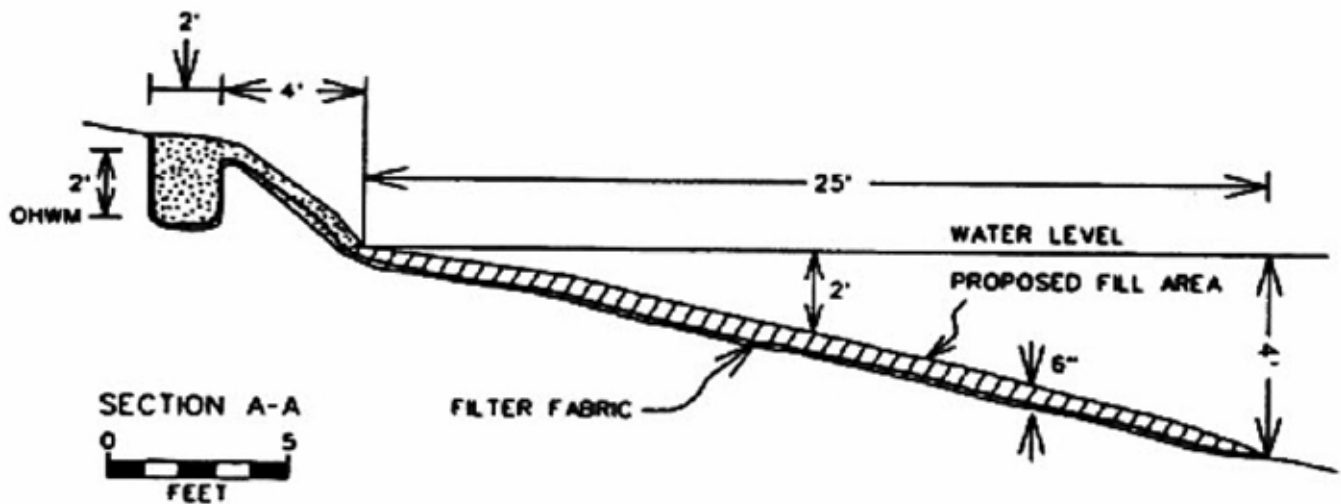
[Temporary Crossing – Logging  
road](#)

[Utility Boring](#)

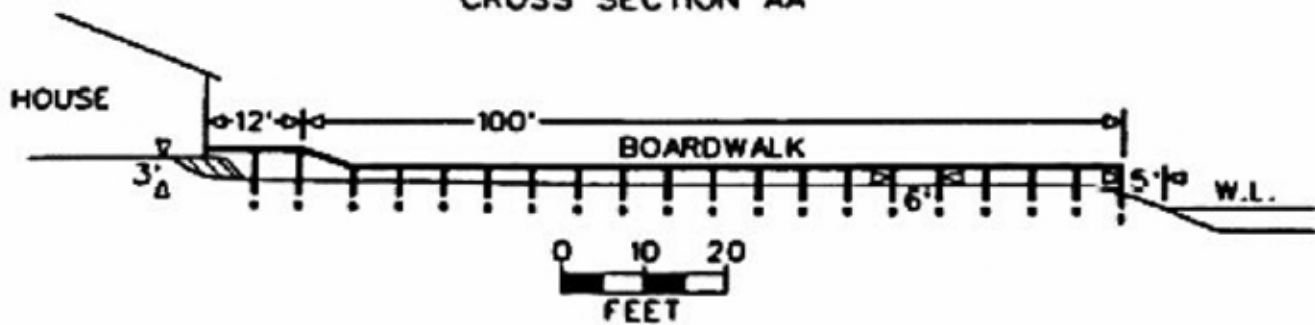
[Utility Trenching](#)

[Wetland Fill](#)

## Plan View



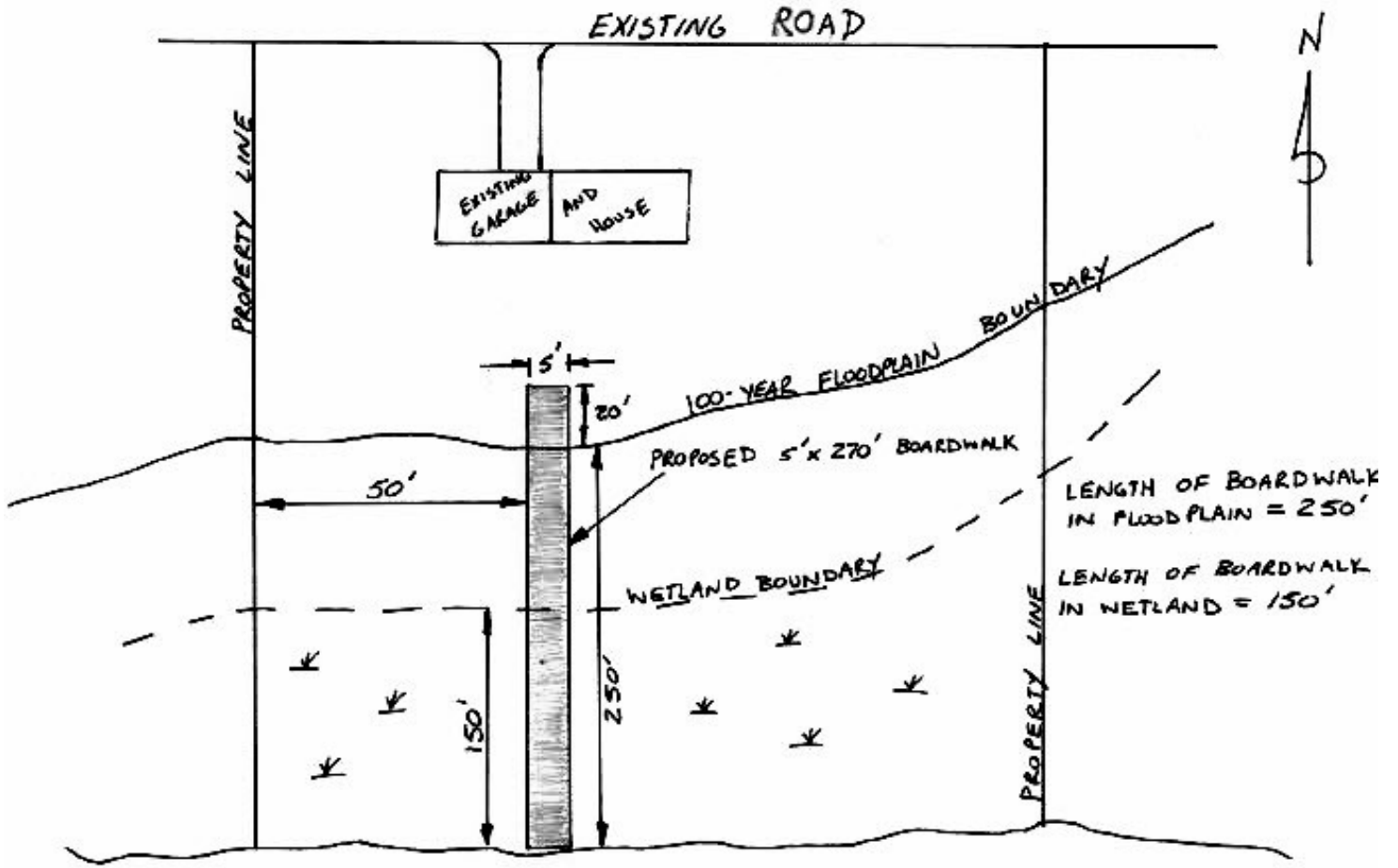
LAKE CHARLEVOIX



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

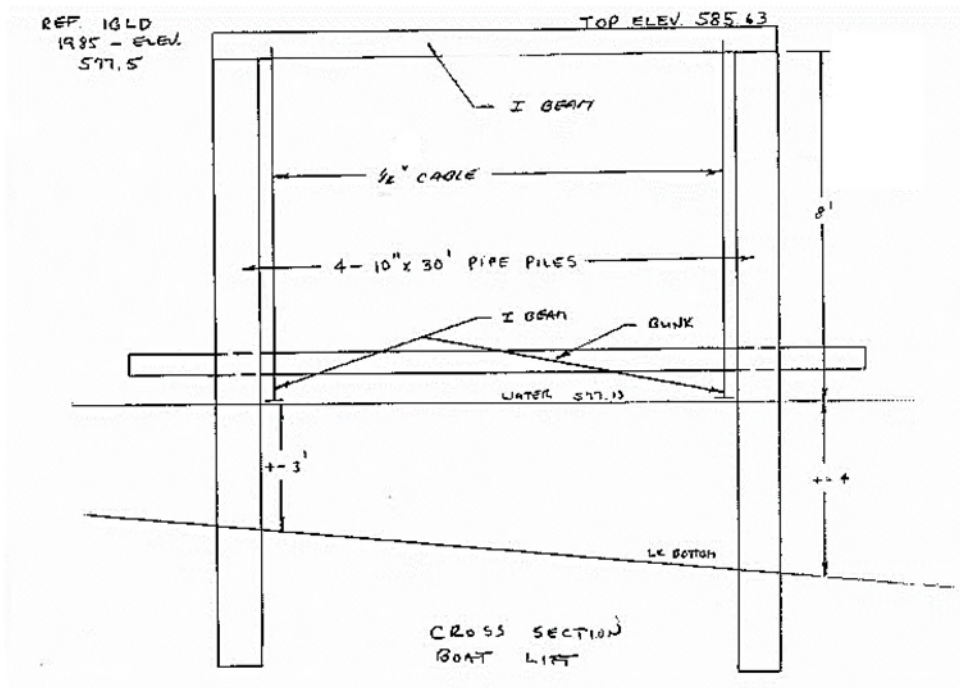
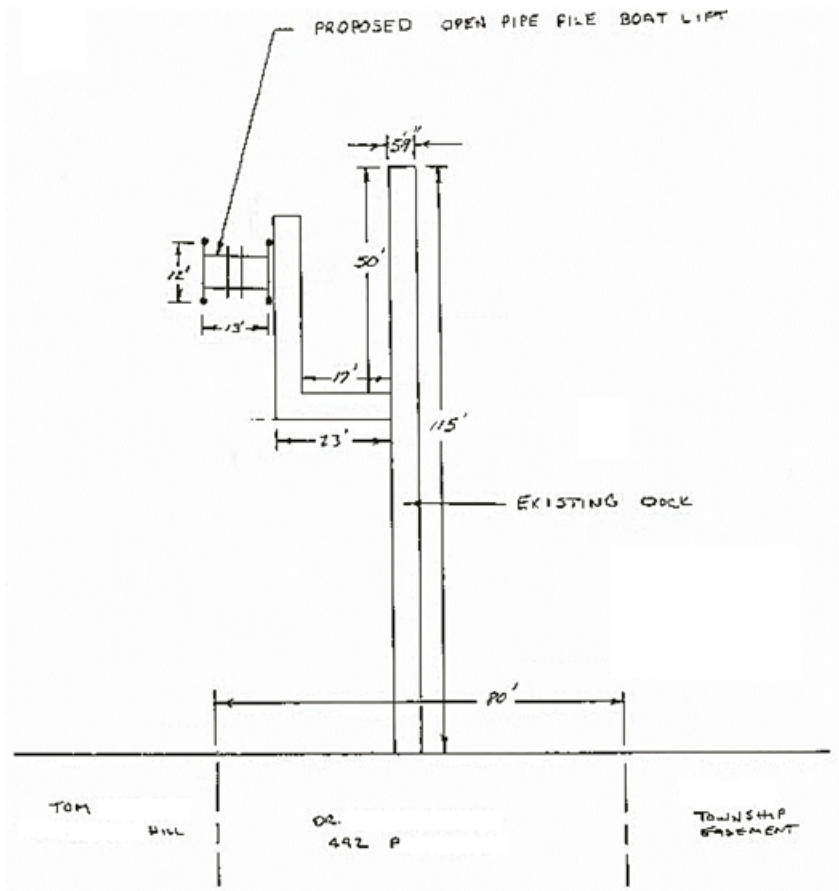
BOARDWALK

Crossing wetlands and floodplains



# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

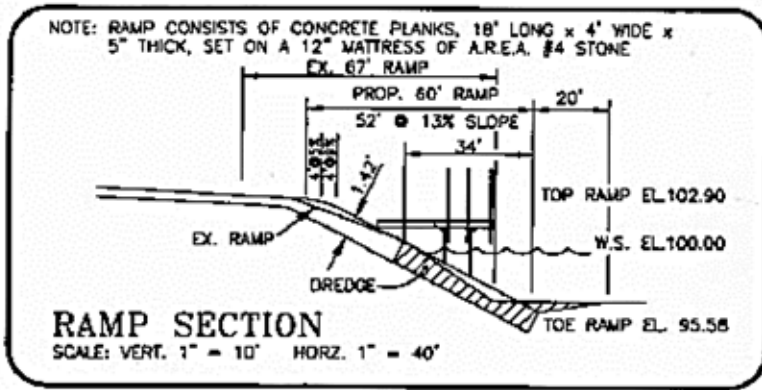
## BOAT HOIST/LIFT



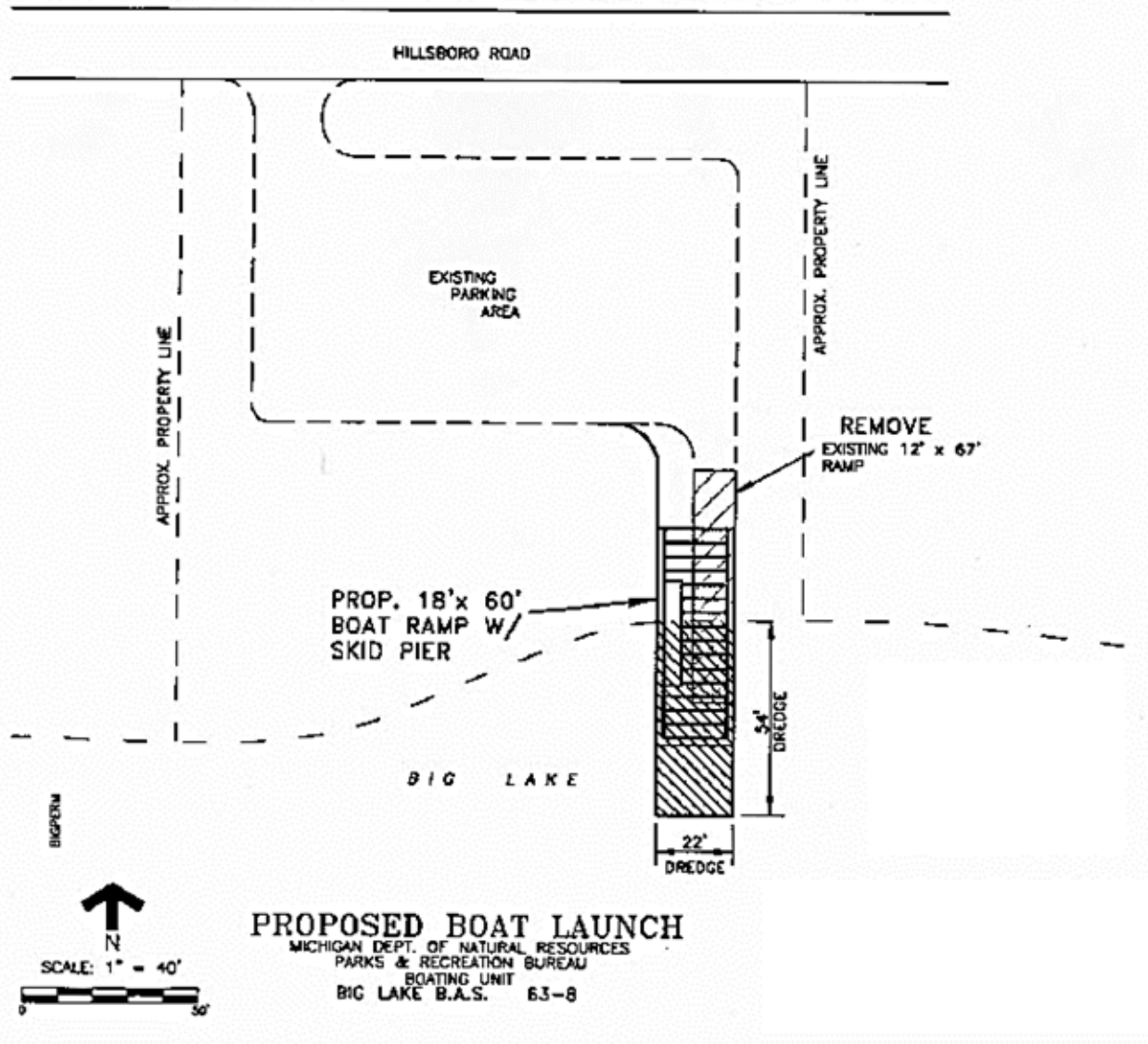
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

# BOAT RAMP

## Replacement



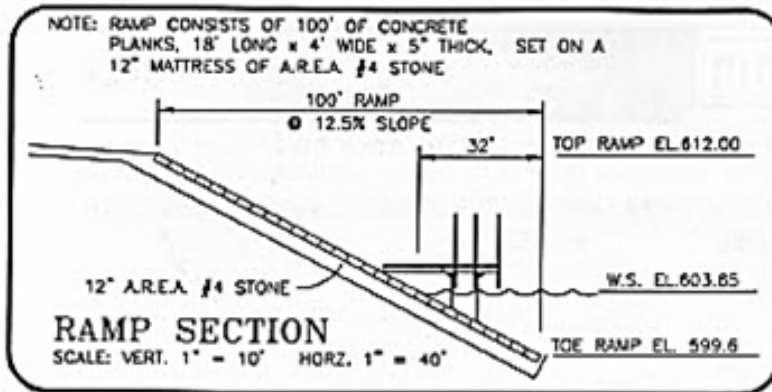
EST. 40 CY DREDGING—ALL DREDGED MATERIAL TO BE PLACED AT PONTIAC LAKE RECREATION AREA.  
GEOTEXTILE BARRIER REQUIRED IF WORK IS NOT COMPLETED IN THE DRY.



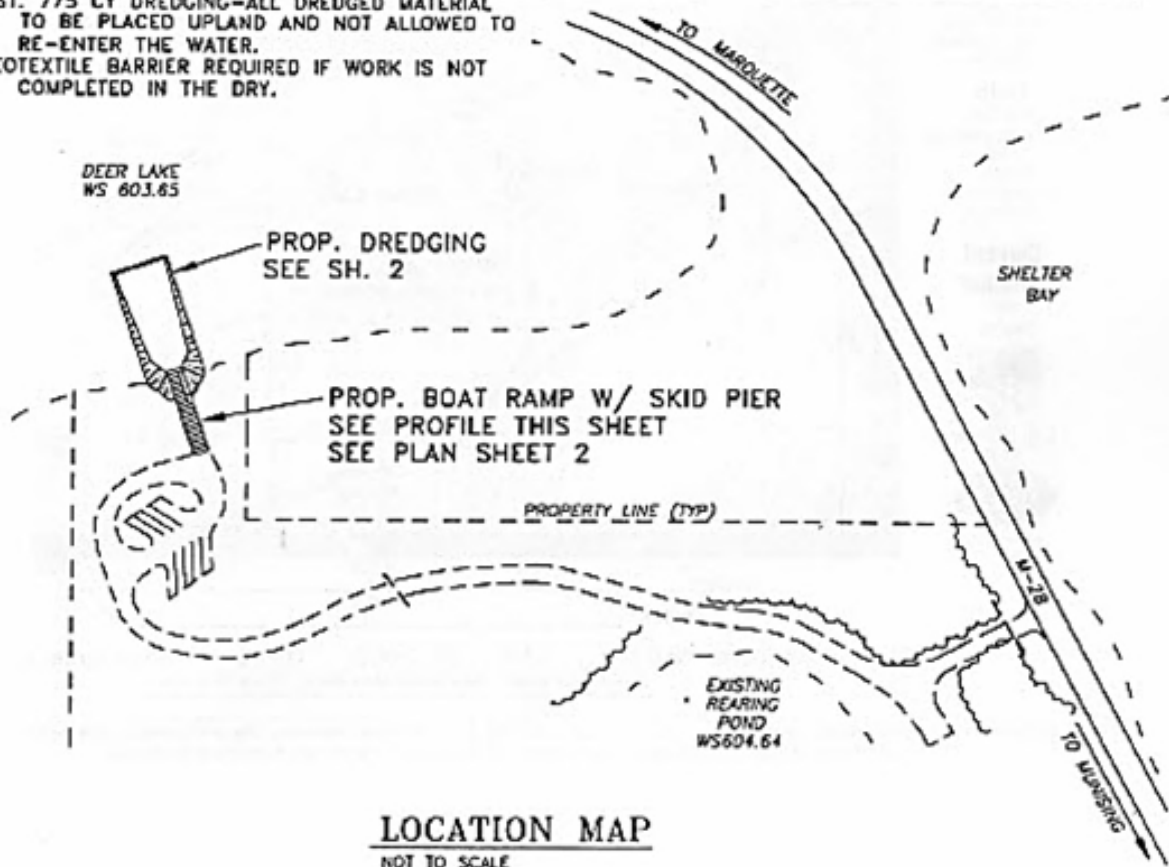
# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## BOAT RAMP

New



EST. 775 CY DREDGING—ALL DREDGED MATERIAL TO BE PLACED UPLAND AND NOT ALLOWED TO RE-ENTER THE WATER.  
GEOTEXTILE BARRIER REQUIRED IF WORK IS NOT COMPLETED IN THE DRY.

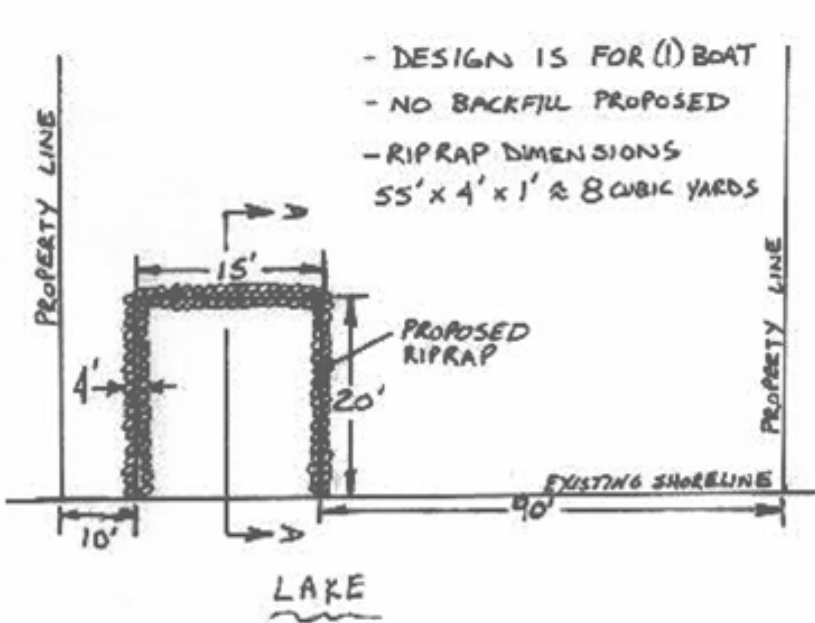




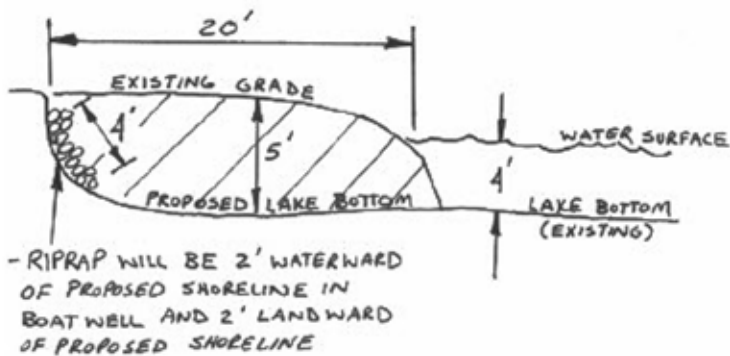
# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## BOAT WELL

New

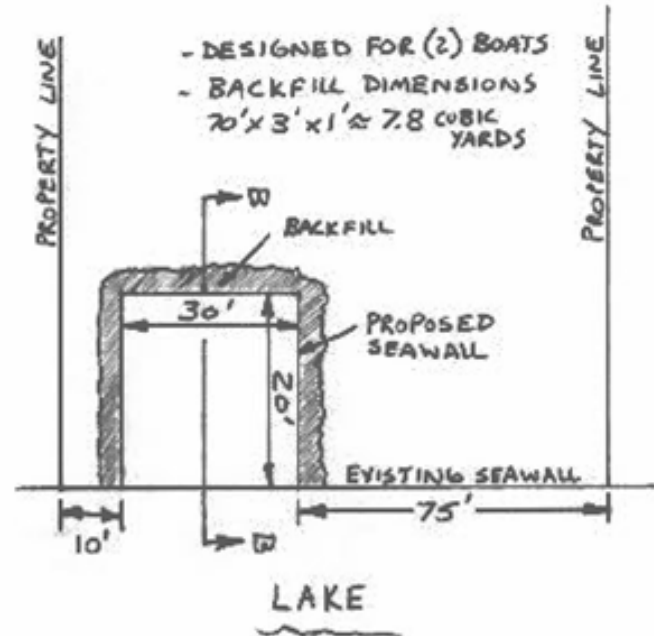


SECTION A-A

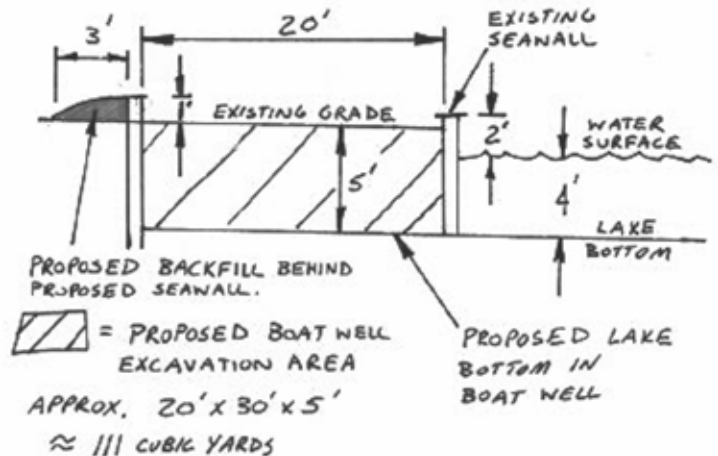


= PROPOSED BOAT WELL EXCAVATION AREA

APPROX. 20' x 15' x 5'  
≈ 55 CUBIC YARDS



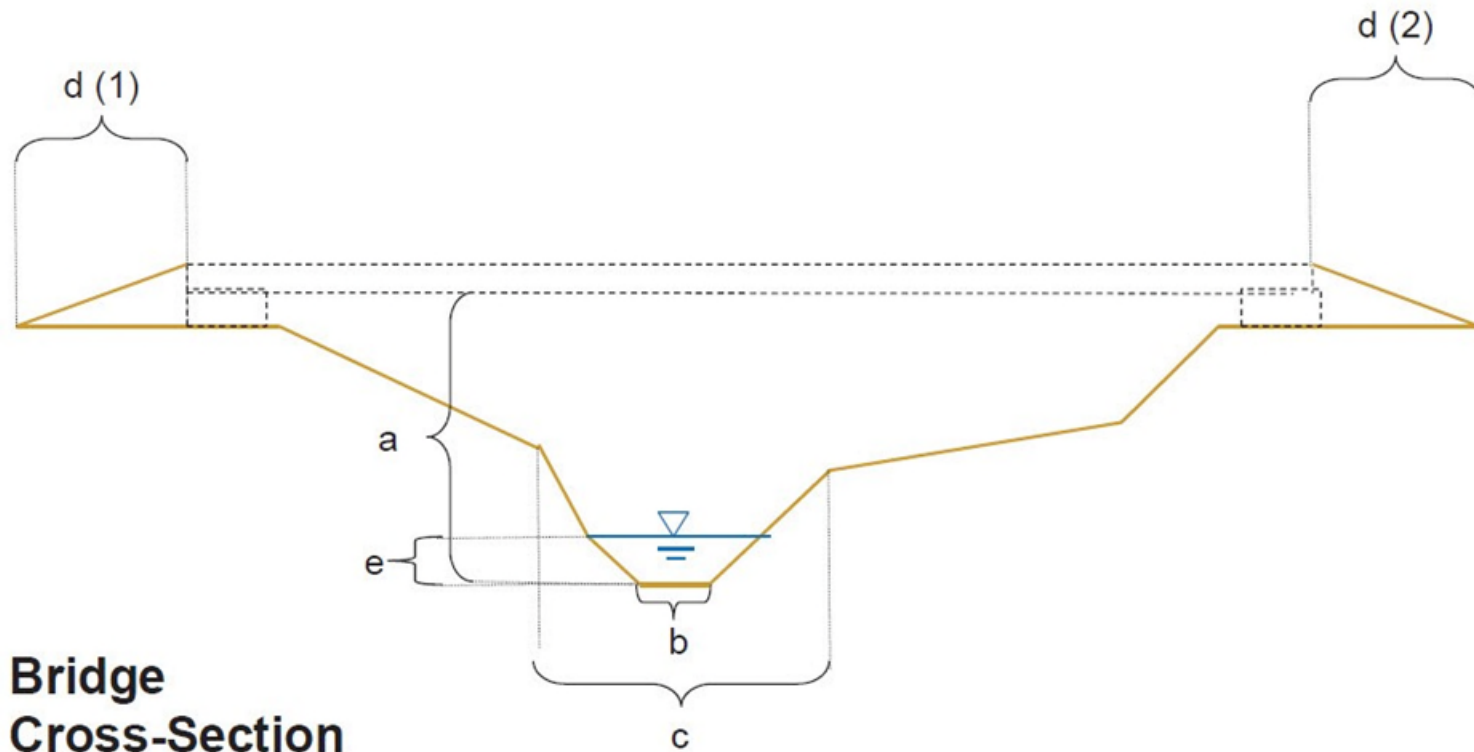
SECTION B-B



## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

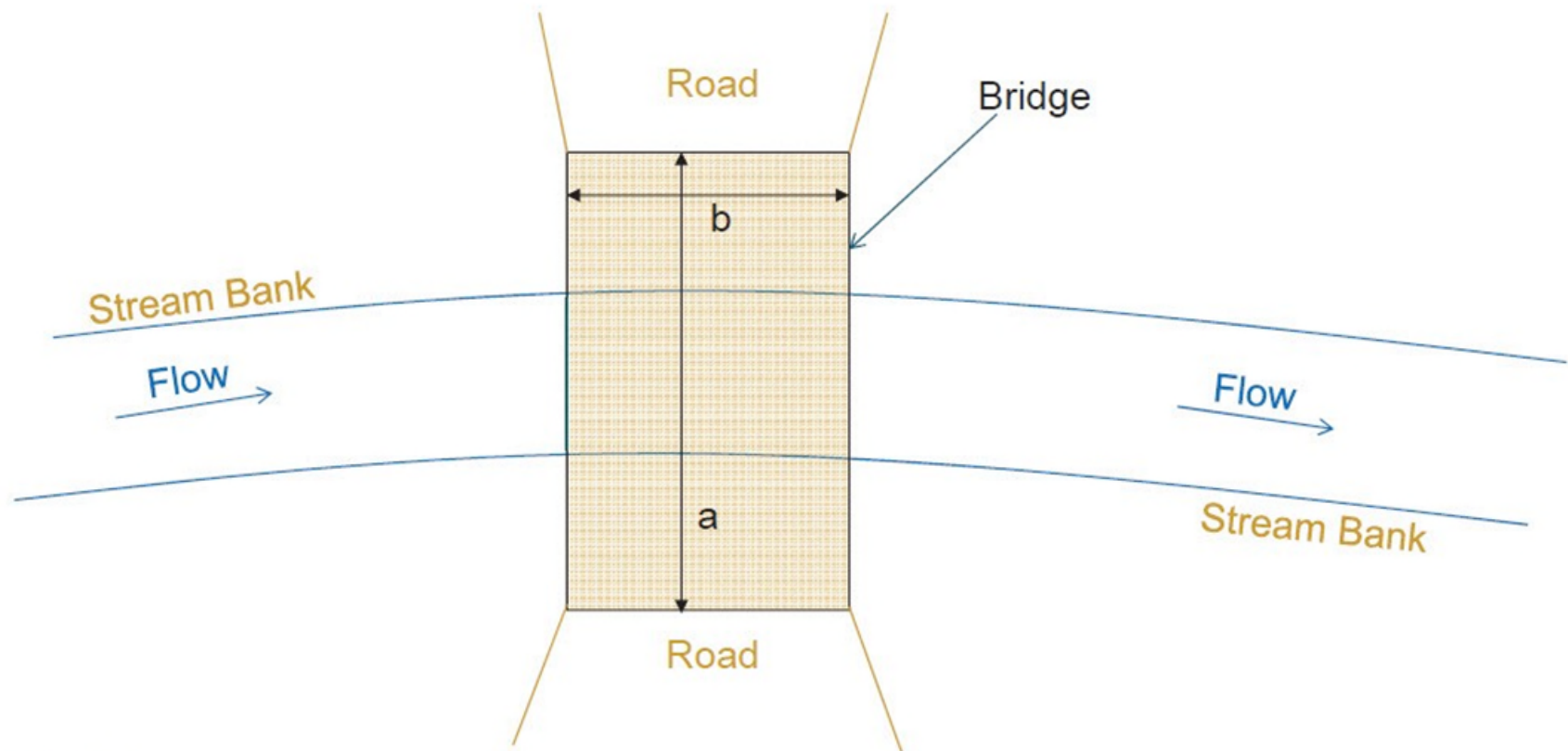
### BRIDGES

- a. \_\_\_\_\_ Bridge rise from stream bottom to bottom beam  
b. \_\_\_\_\_ Width of Stream Bottom  
c. \_\_\_\_\_ Width between stream banks (Bankfull Width)  
d. (1) \_\_\_\_\_ (2) \_\_\_\_\_ Length of fill from edge of bridge to existing ground surf.  
e. \_\_\_\_\_ Depth of water and Date \_\_\_\_\_



## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

- a. \_\_\_\_\_ Bridge span  
b. \_\_\_\_\_ Bridge width

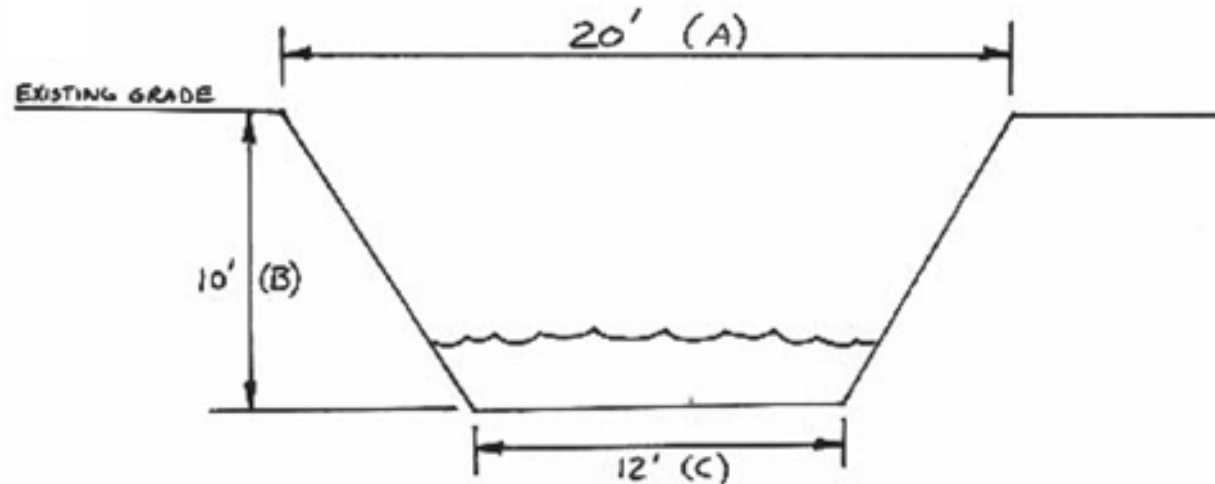


**Bridge  
Plan View**

## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

### CHANNEL CROSS SECTIONAL AREA

- PRIMARY CHANNEL WIDTH FROM TOP OF BANK TO TOP OF BANK = 20'
- BANK HEIGHT = 10'
- BOTTOM OF CHANNEL WIDTH = 12'



$$\text{CROSS SECTIONAL AREA} = \left( \frac{A+C}{2} \right) \times B$$

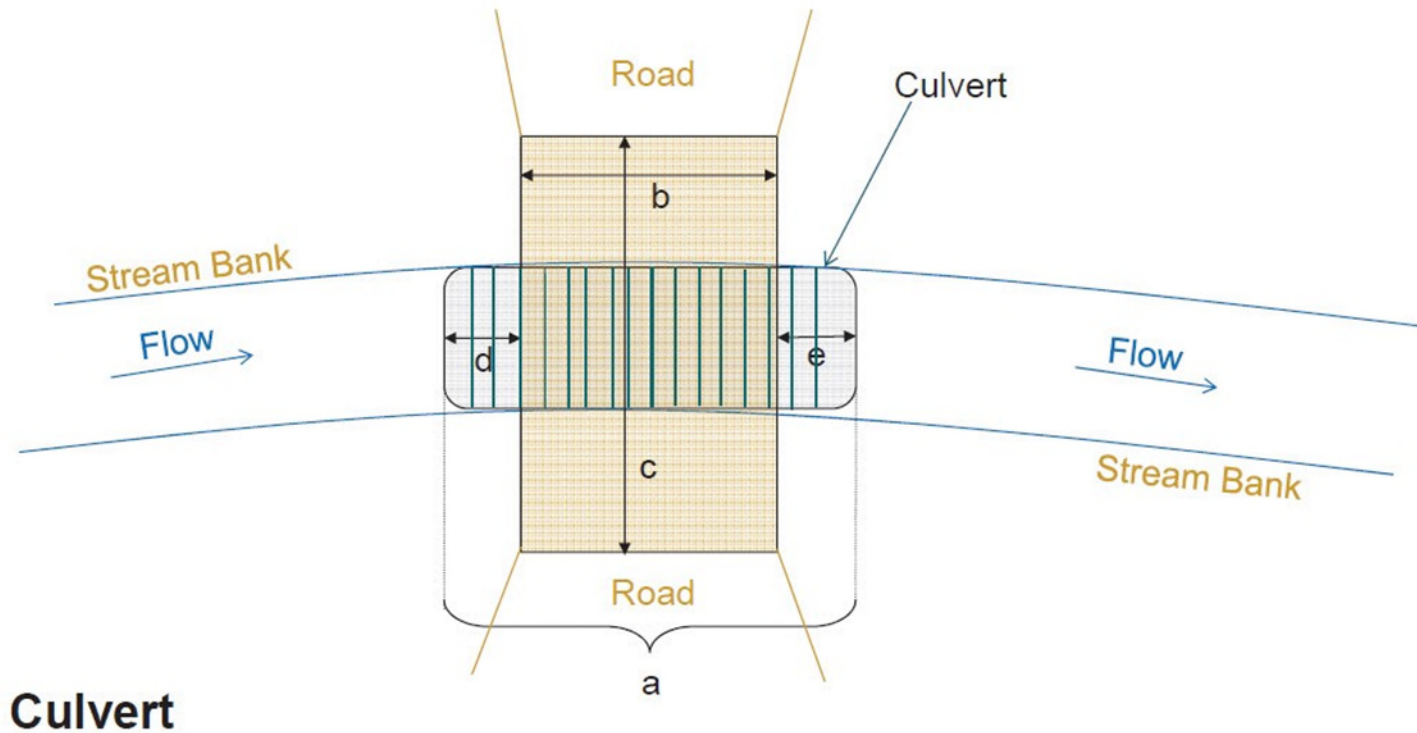
$$\text{CROSS SECTIONAL AREA} = \left( \frac{20' + 12'}{2} \right) \times 10' = 160 \text{ SQUARE FEET}$$

# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## CULVERTS

### Plan View

- a. \_\_\_\_\_ Length of culvert
- b. \_\_\_\_\_ Width of fill (distance parallel to stream)
- c. \_\_\_\_\_ Length of fill (distance perpendicular to stream)
- d. \_\_\_\_\_ Distance between edge of fill and end of culvert
- e. \_\_\_\_\_ Distance between edge of fill and other end of culvert

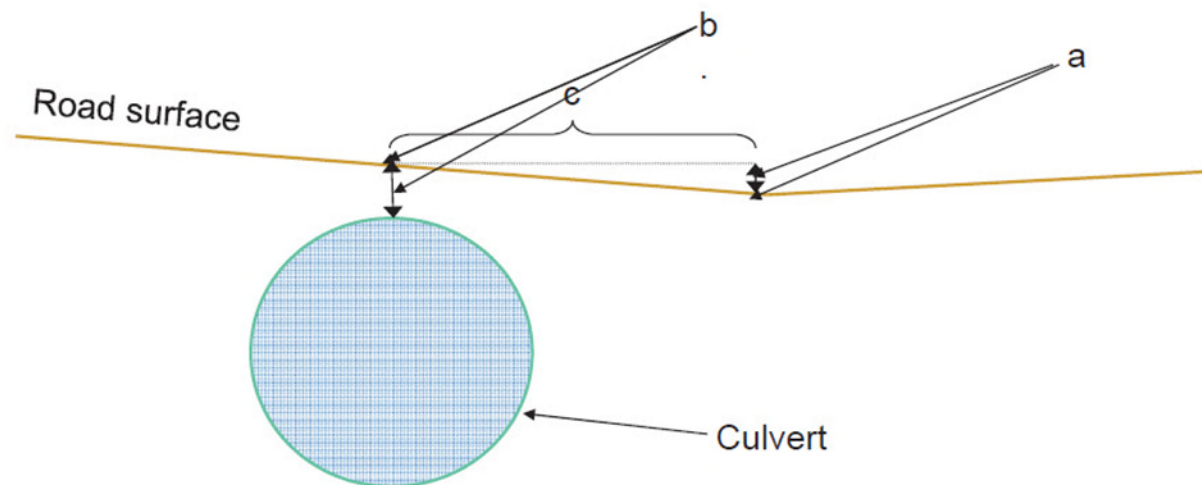


## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

### CULVERTS

#### Distance from Low Point in Road

- a. \_\_\_\_\_ Elevation at low point in road –OR- difference in height from road surface at that location, and above culvert
- b. \_\_\_\_\_ Elevation at road grade –OR- height
- c. \_\_\_\_\_ Distance from low point in road to center of crossing

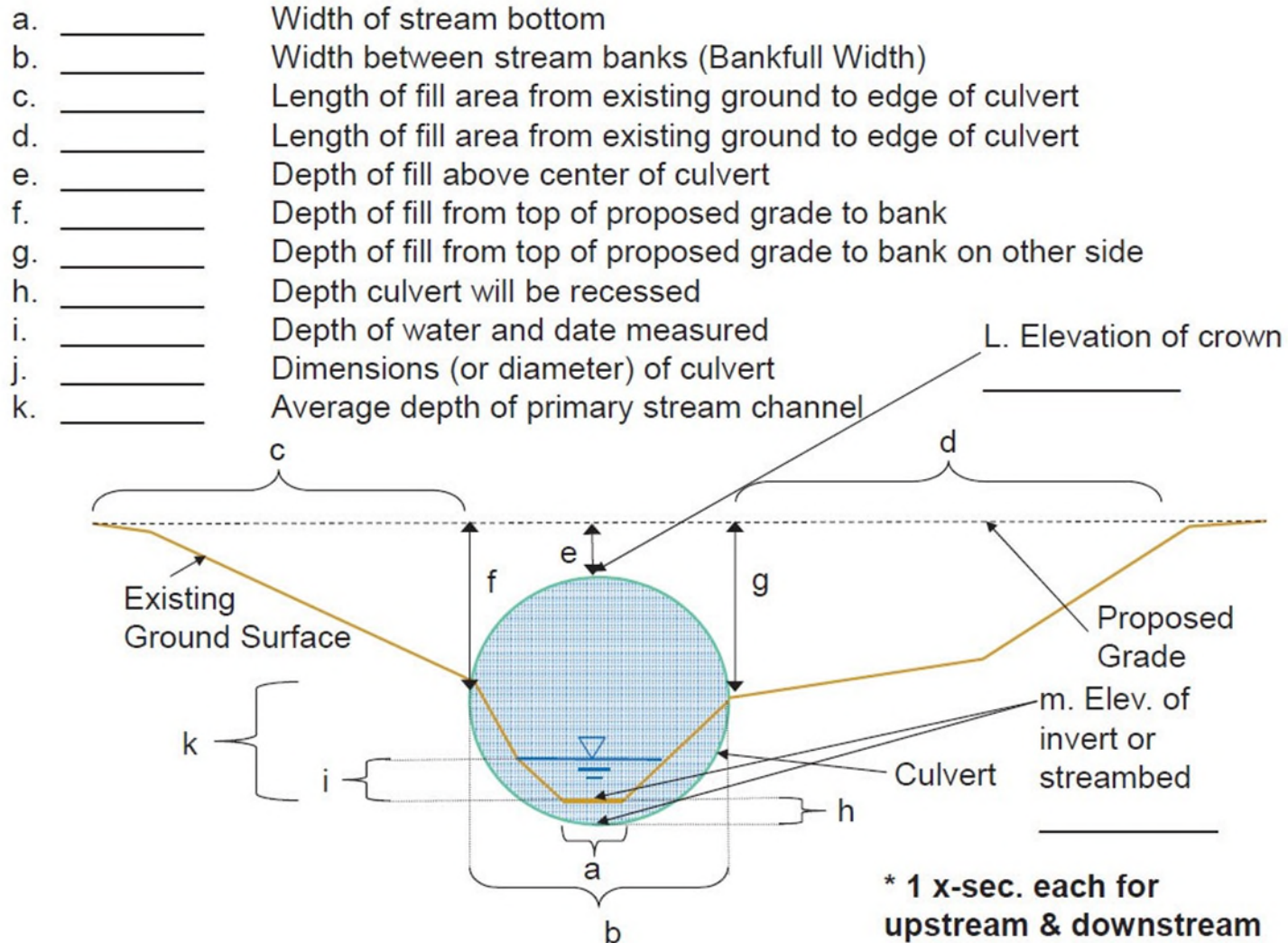


**ROAD**  
**(Cross-Section) View**

## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

### CULVERTS

#### Cross Section

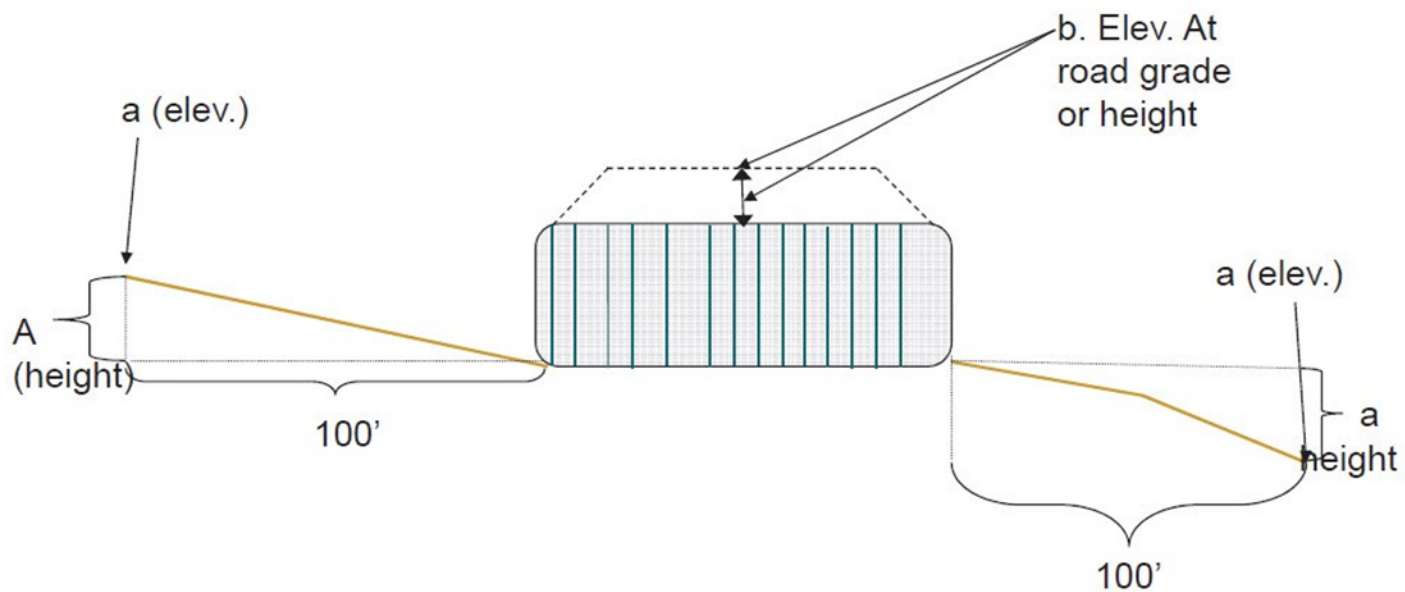




## JOINT PERMIT APPLICATION SAMPLE DRAWINGS

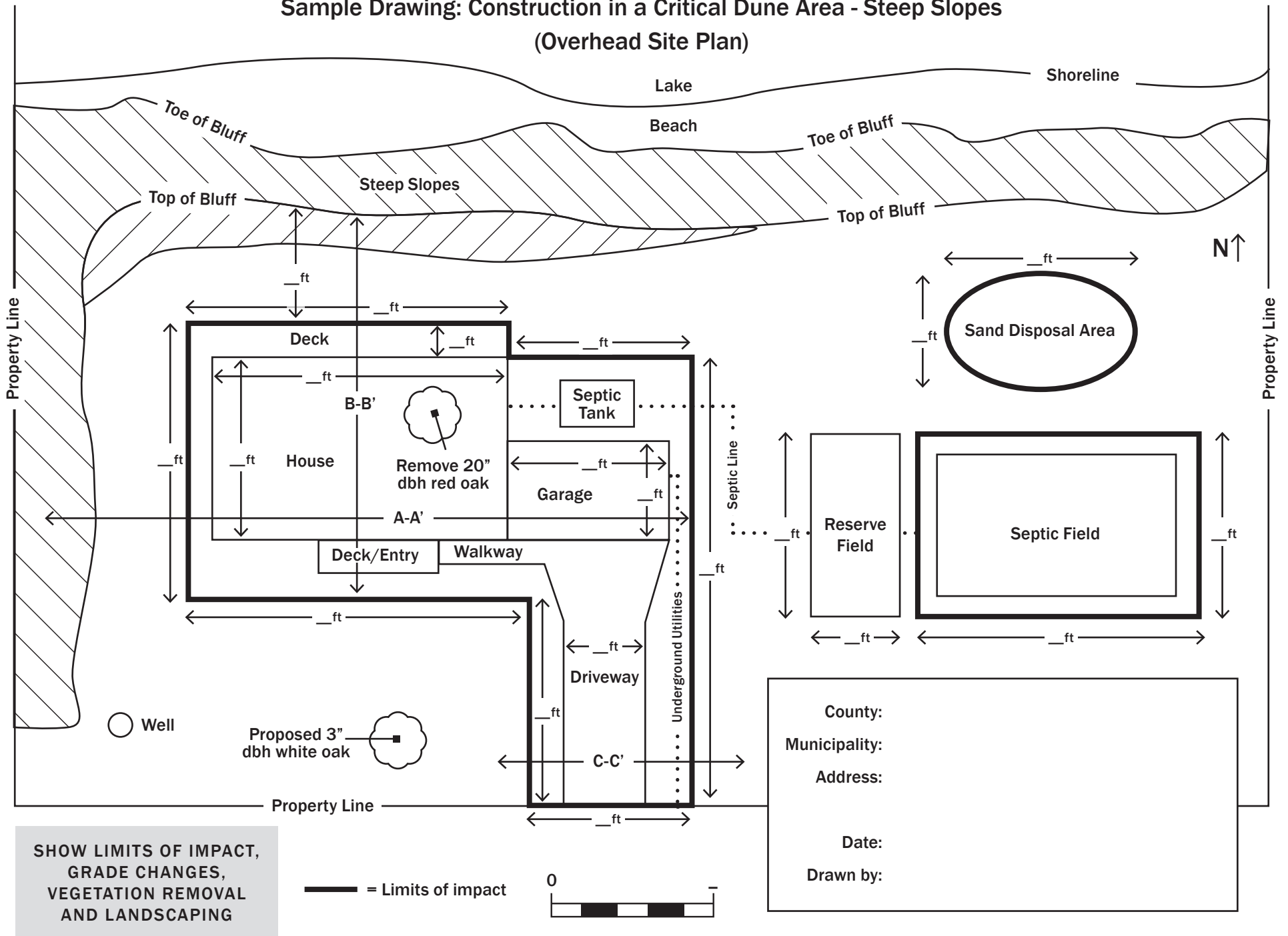
### CULVERTS

- a. \_\_\_\_\_ Invert (Elev.) of stream 100' from structure **-OR-** height difference between culvert inlet/outlet and 100' from it
- b. \_\_\_\_\_ Elevation at road grade **-OR-** road height above structure

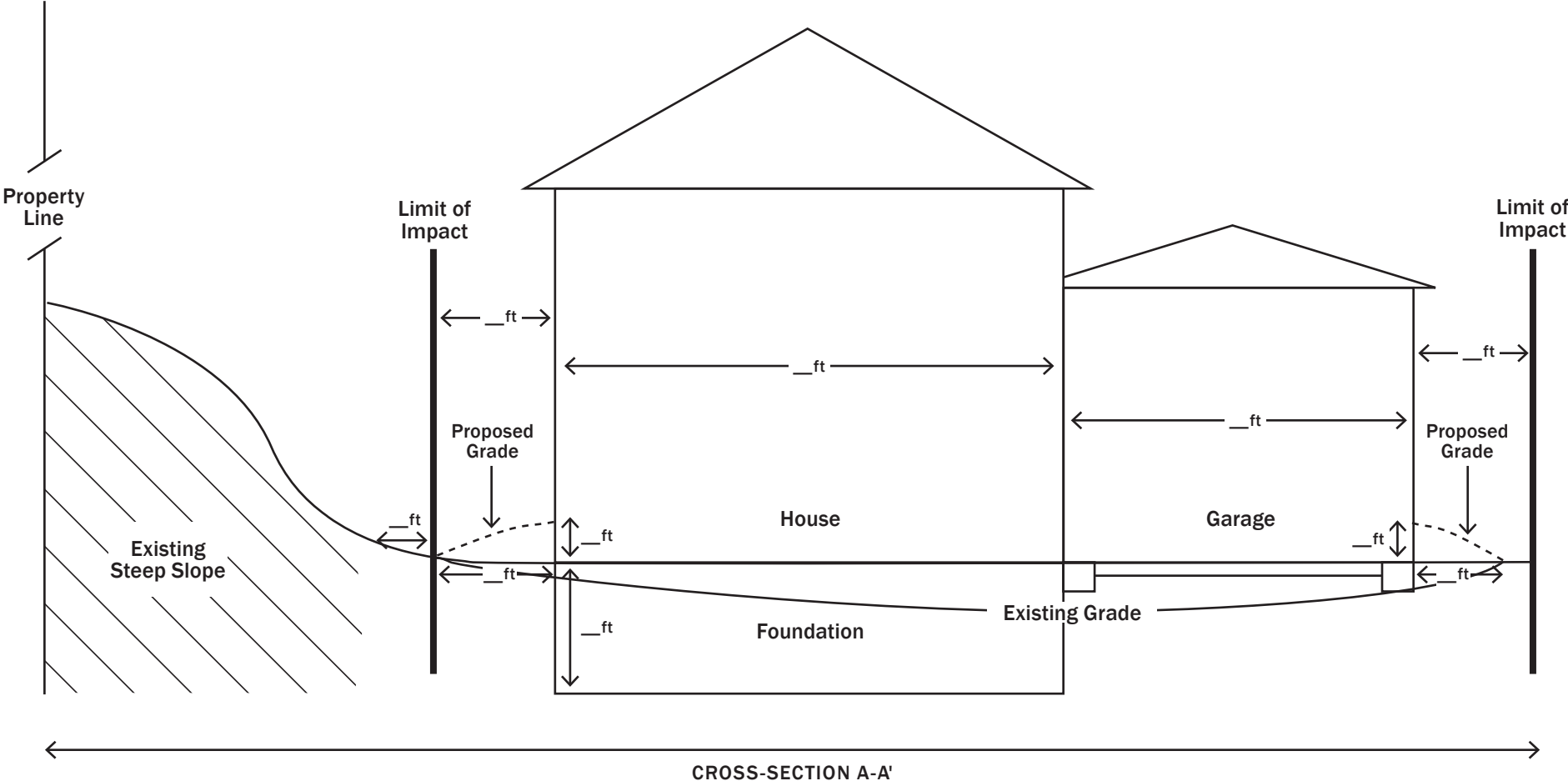




# Sample Drawing: Construction in a Critical Dune Area - Steep Slopes (Overhead Site Plan)



Sample Drawing: Construction in a Critical Dune Area - Steep Slopes  
(Cross-section A-A')

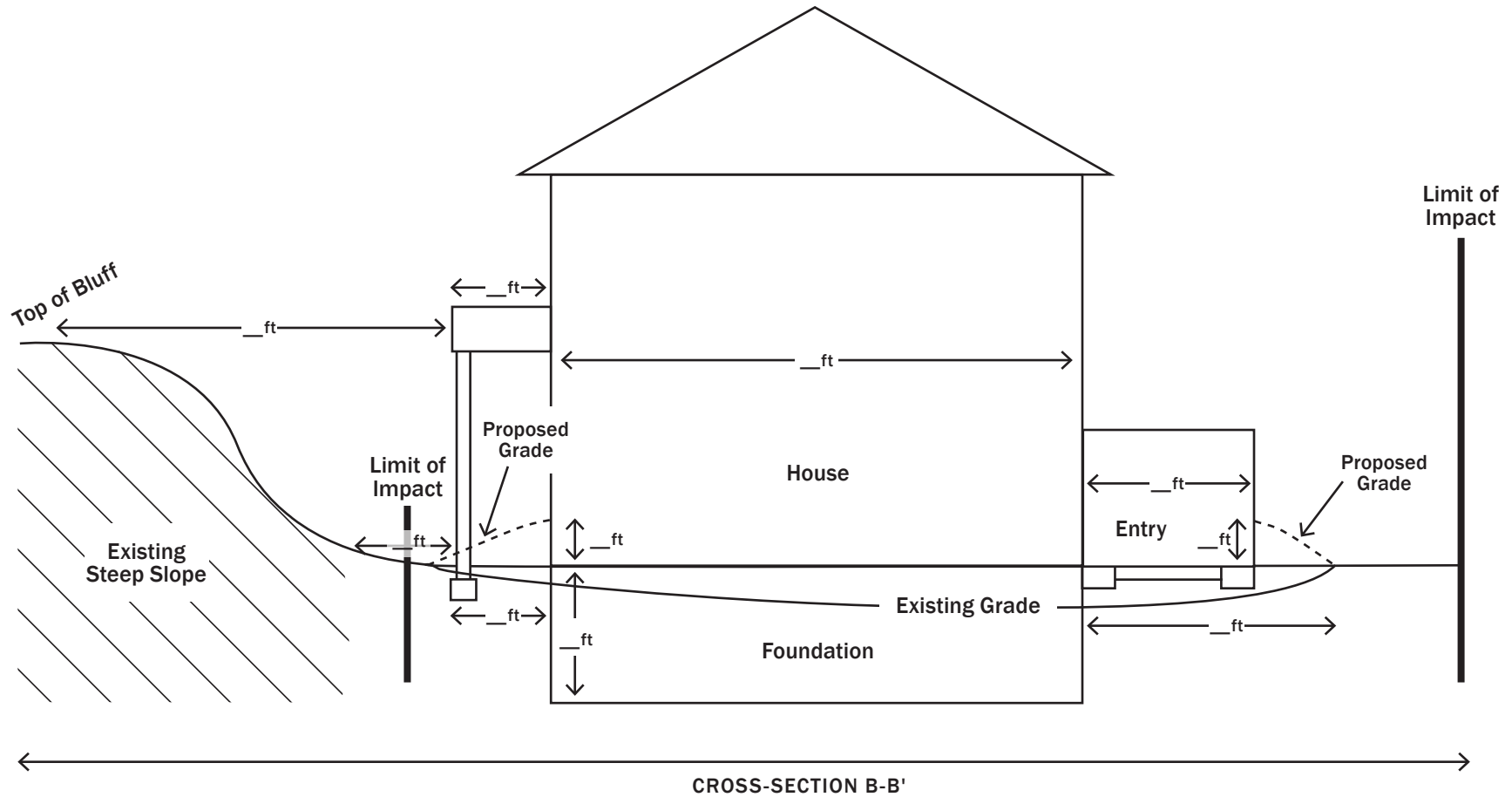


SHOW DIMENSIONS,  
GRADE CHANGES, AND  
DEPTH OF EXCAVATION



County:  
Municipality:  
Address:  
  
Date:  
Drawn by:

# Sample Drawing: Construction in a Critical Dune Area - Steep Slopes (Cross-section B-B')

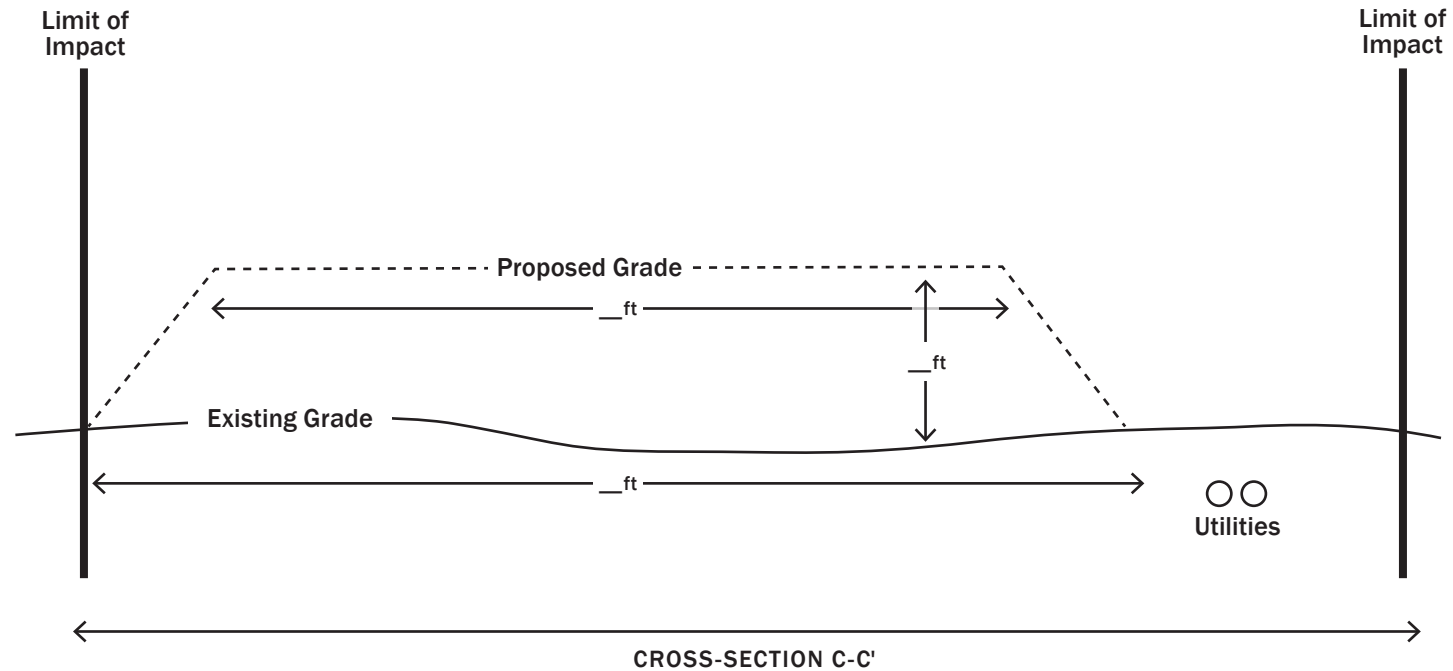


SHOW DIMENSIONS,  
GRADE CHANGES, AND  
DEPTH OF EXCAVATION



County:  
Municipality:  
Address:  
  
Date:  
Drawn by:

# Sample Drawing: Construction in a Critical Dune Area - Driveway (Cross-section C-C')



SHOW DIMENSIONS,  
GRADE CHANGES, AND  
DEPTH OF EXCAVATION



County:

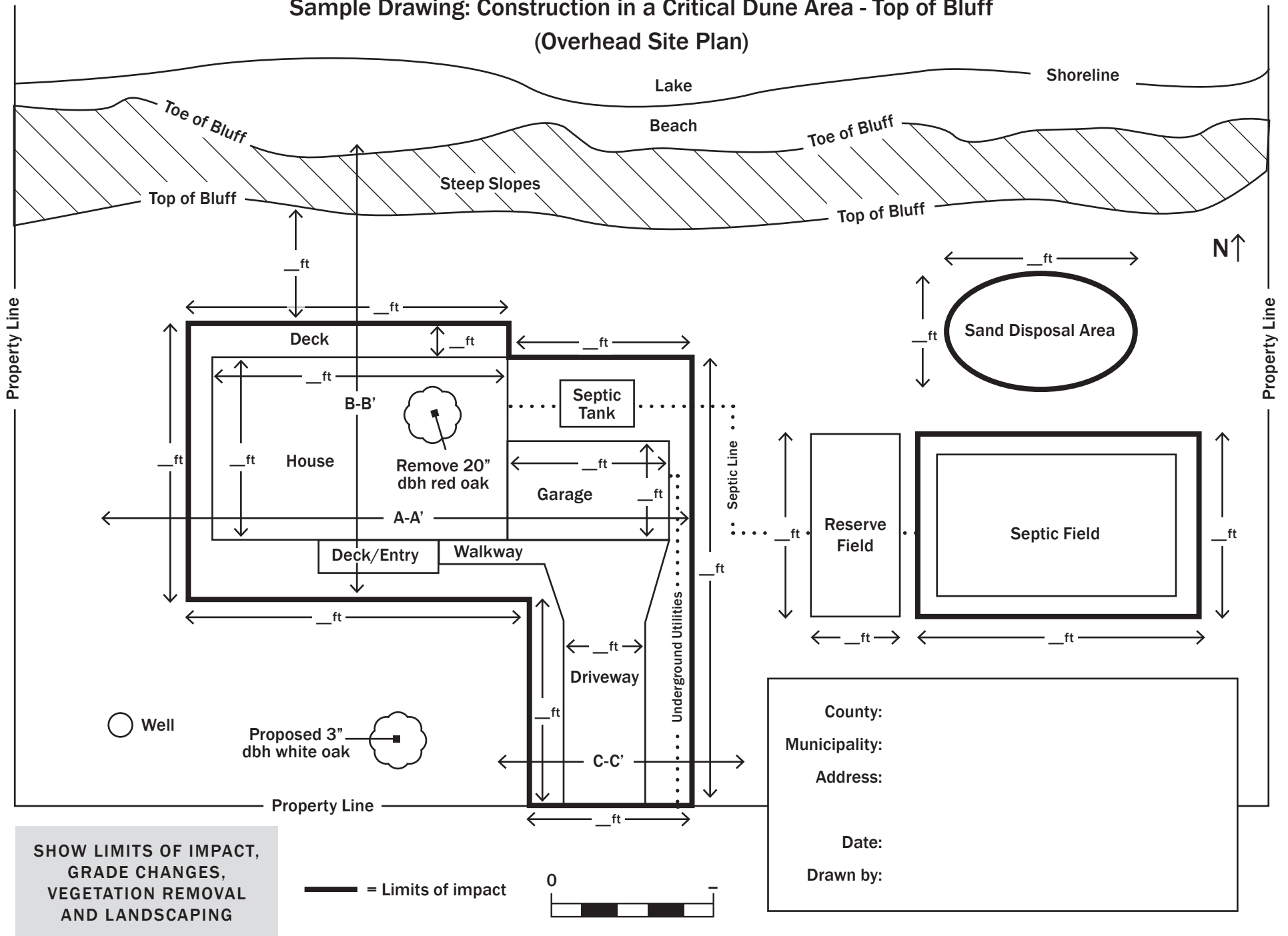
Municipality:

Address:

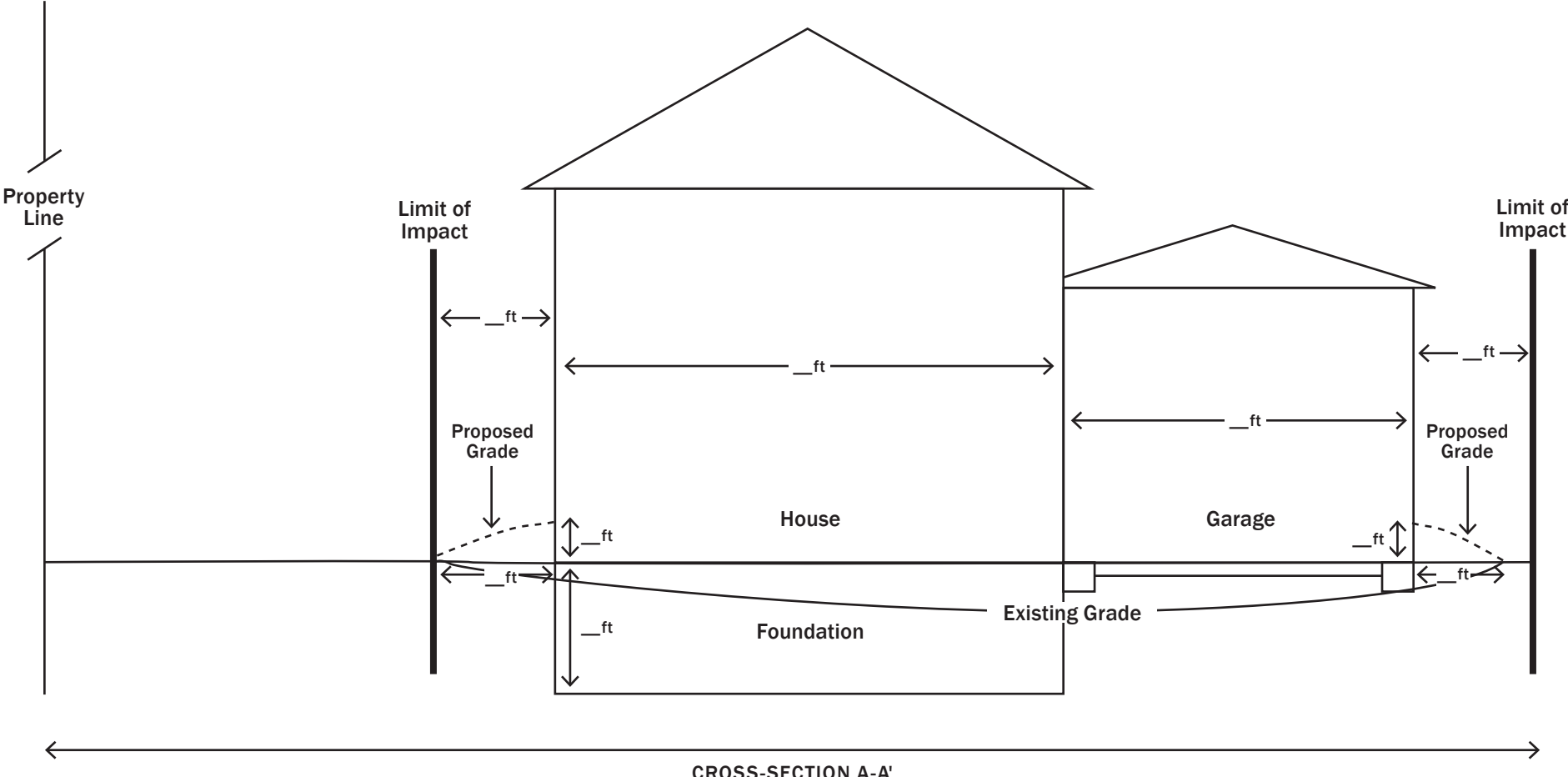
Date:

Drawn by:

# Sample Drawing: Construction in a Critical Dune Area - Top of Bluff (Overhead Site Plan)



Sample Drawing: Construction in a Critical Dune Area - Top of Bluff  
(Cross-section A-A')

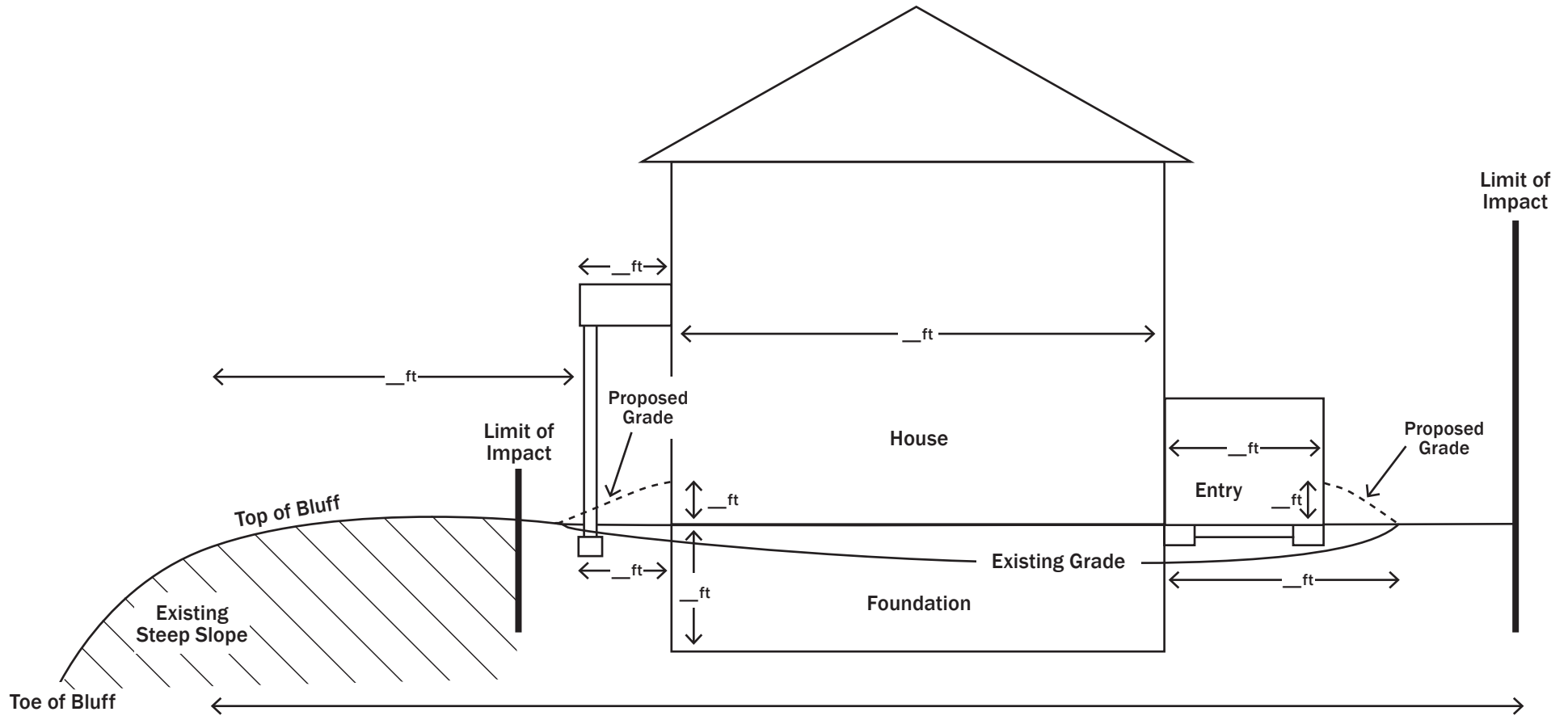


SHOW DIMENSIONS,  
GRADE CHANGES, AND  
DEPTH OF EXCAVATION



County:  
Municipality:  
Address:  
  
Date:  
Drawn by:

# Sample Drawing: Construction in a Critical Dune Area - Top of Bluff (Cross-section B-B')



CROSS-SECTION B-B'

SHOW DIMENSIONS,  
GRADE CHANGES, AND  
DEPTH OF EXCAVATION



County:

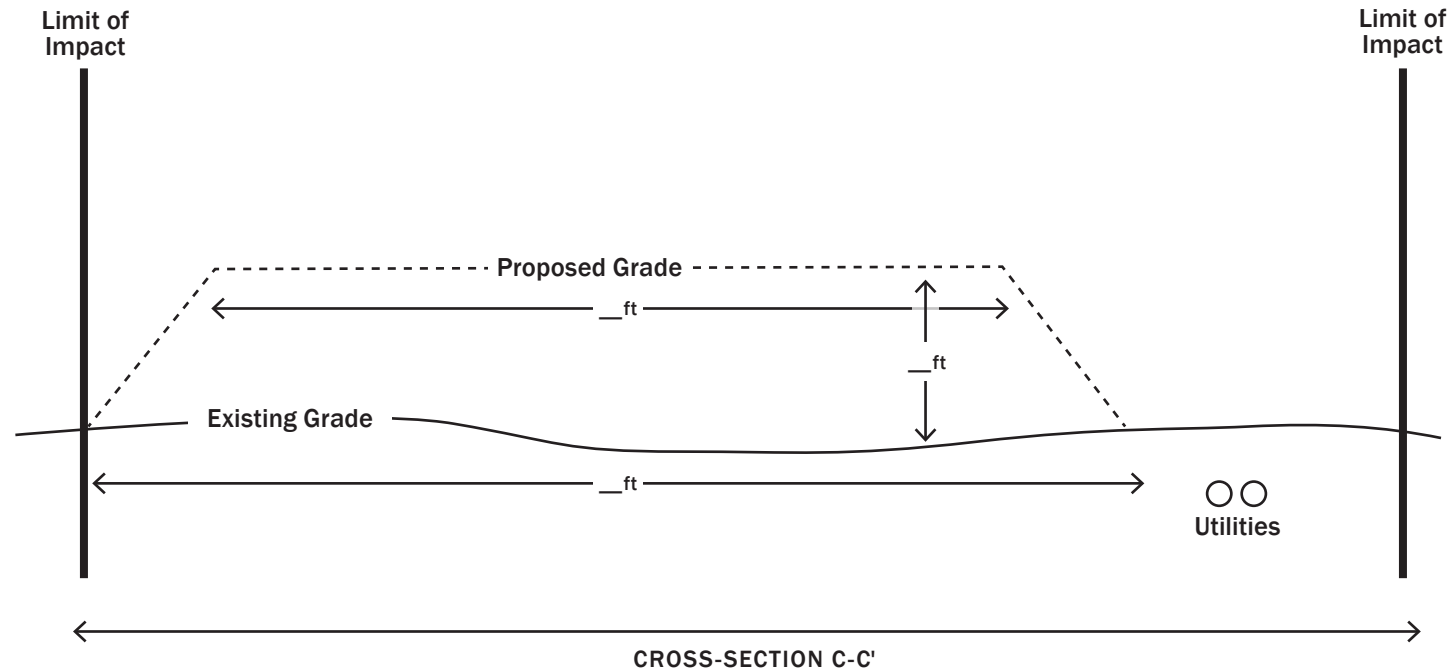
Municipality:

Address:

Date:

Drawn by:

# Sample Drawing: Construction in a Critical Dune Area - Driveway (Cross-section C-C')



SHOW DIMENSIONS,  
GRADE CHANGES, AND  
DEPTH OF EXCAVATION



County:

Municipality:

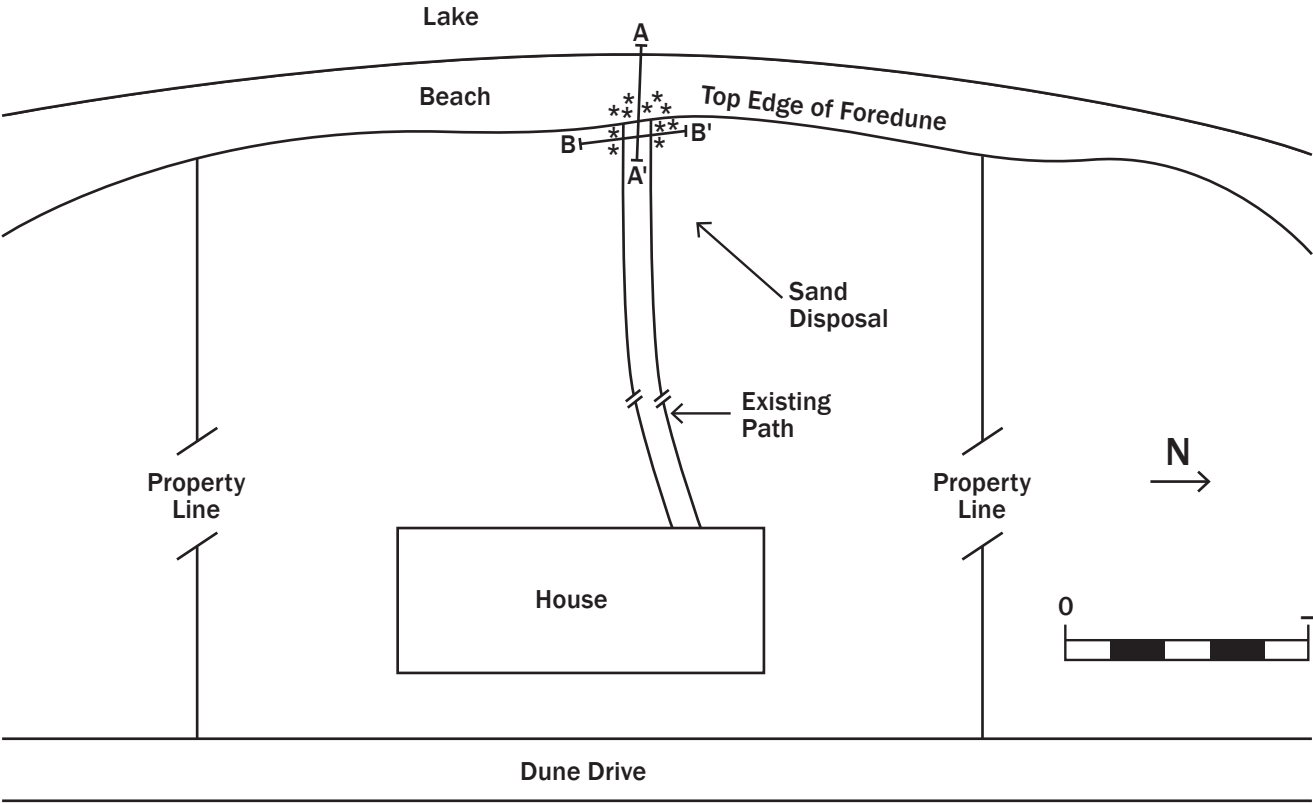
Address:

Date:

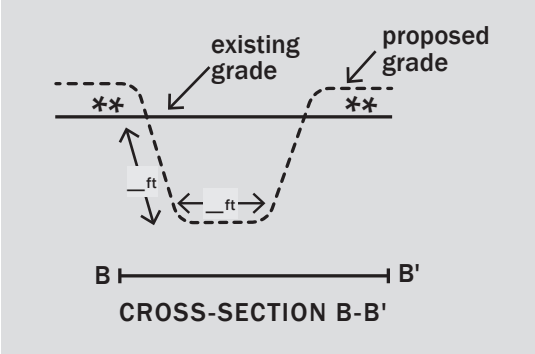
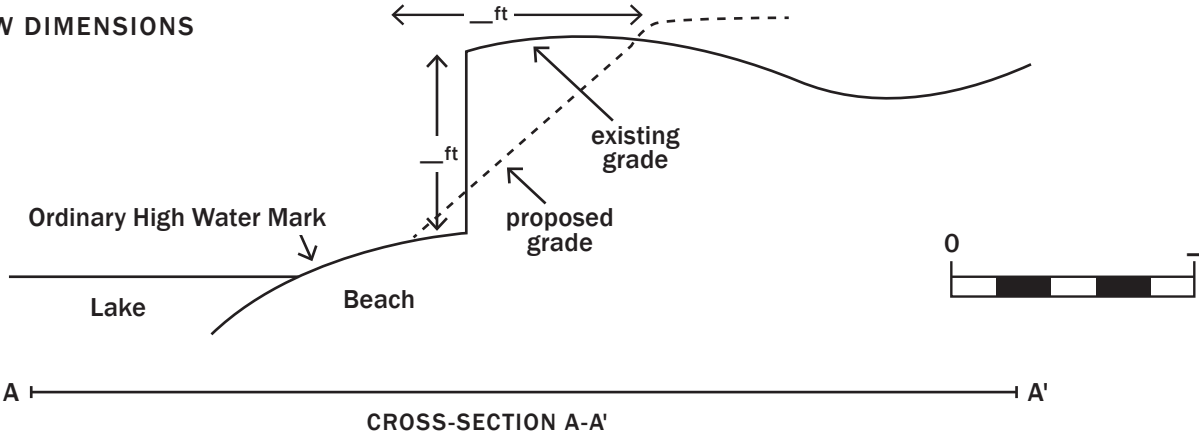
Drawn by:



# Sample Drawing: Path Maintenance Near the Water's Edge in a Critical Dune Area



## SHOW DIMENSIONS

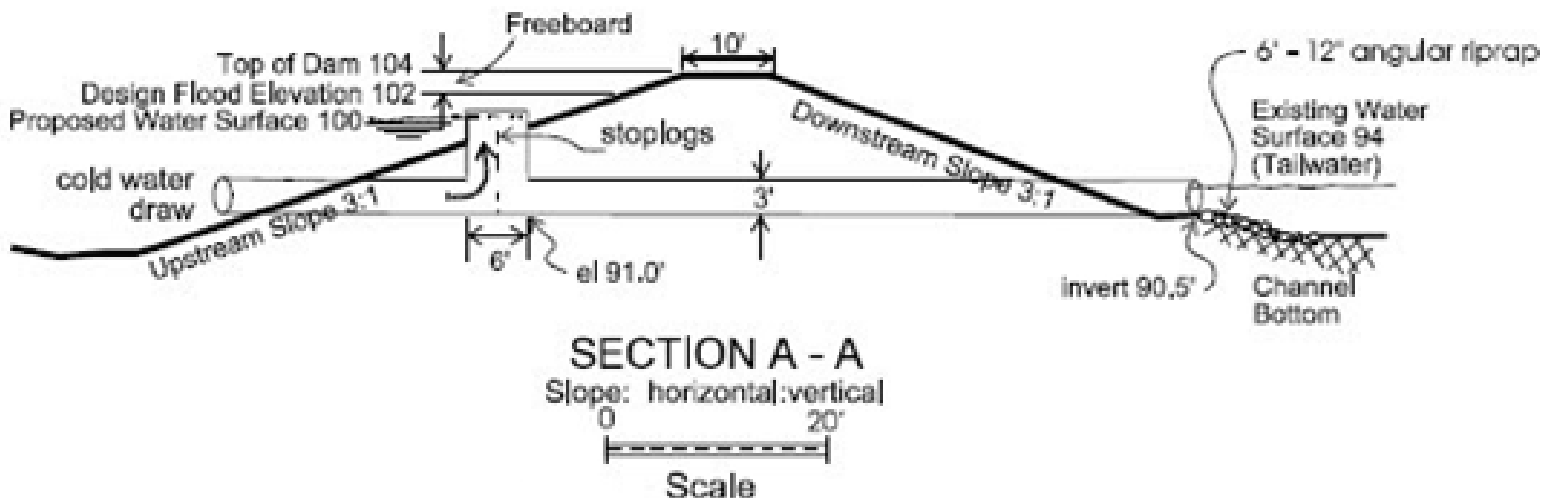
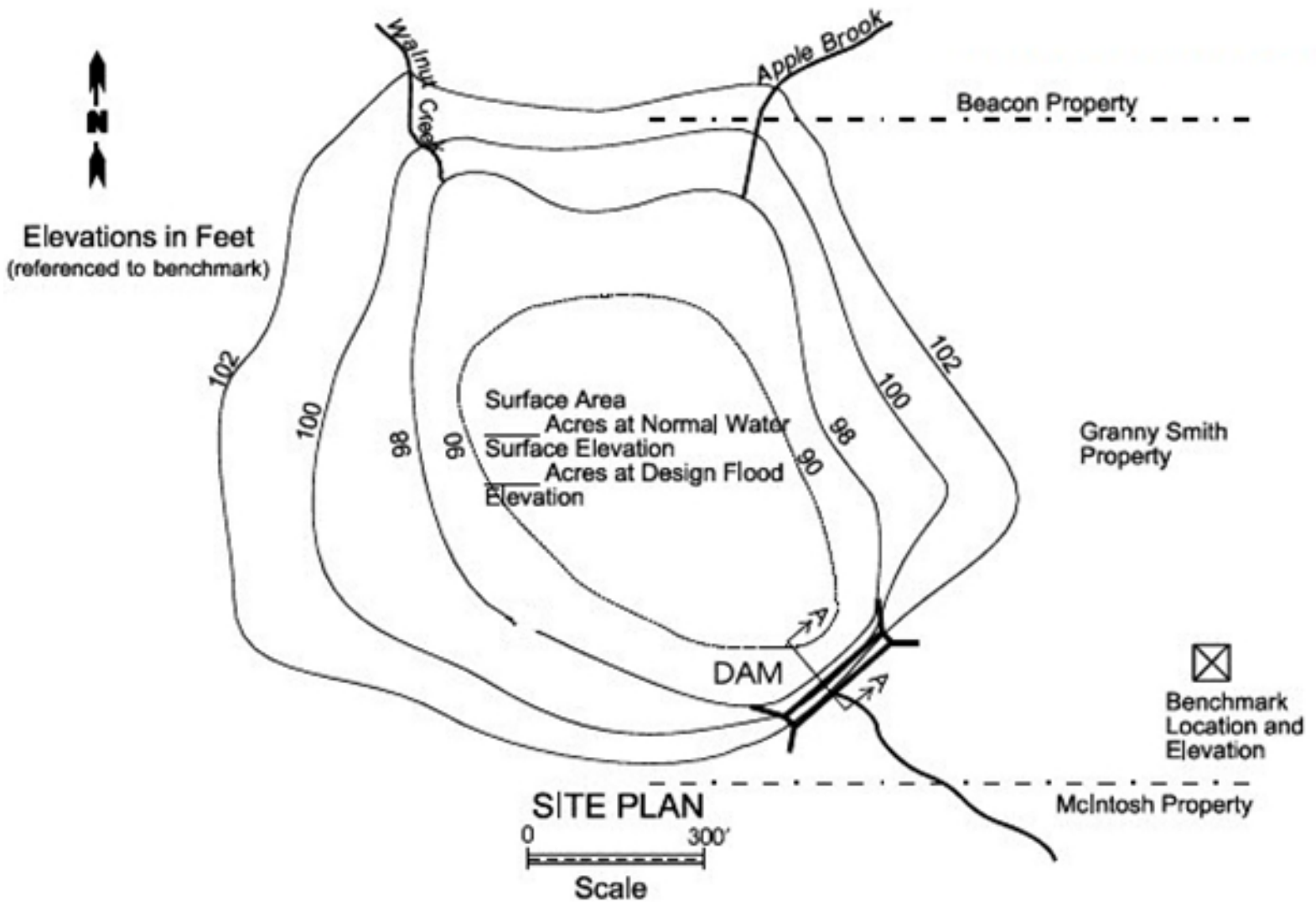


\*\* Sand Disposal  
Sand will be spread out to less than 12 inches thick adjacent to the cut in an area 10 feet wide or less. Sand will not be placed in the water.

County:
Municipality:
Address:
Date:
Drawn by:

# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## DAM

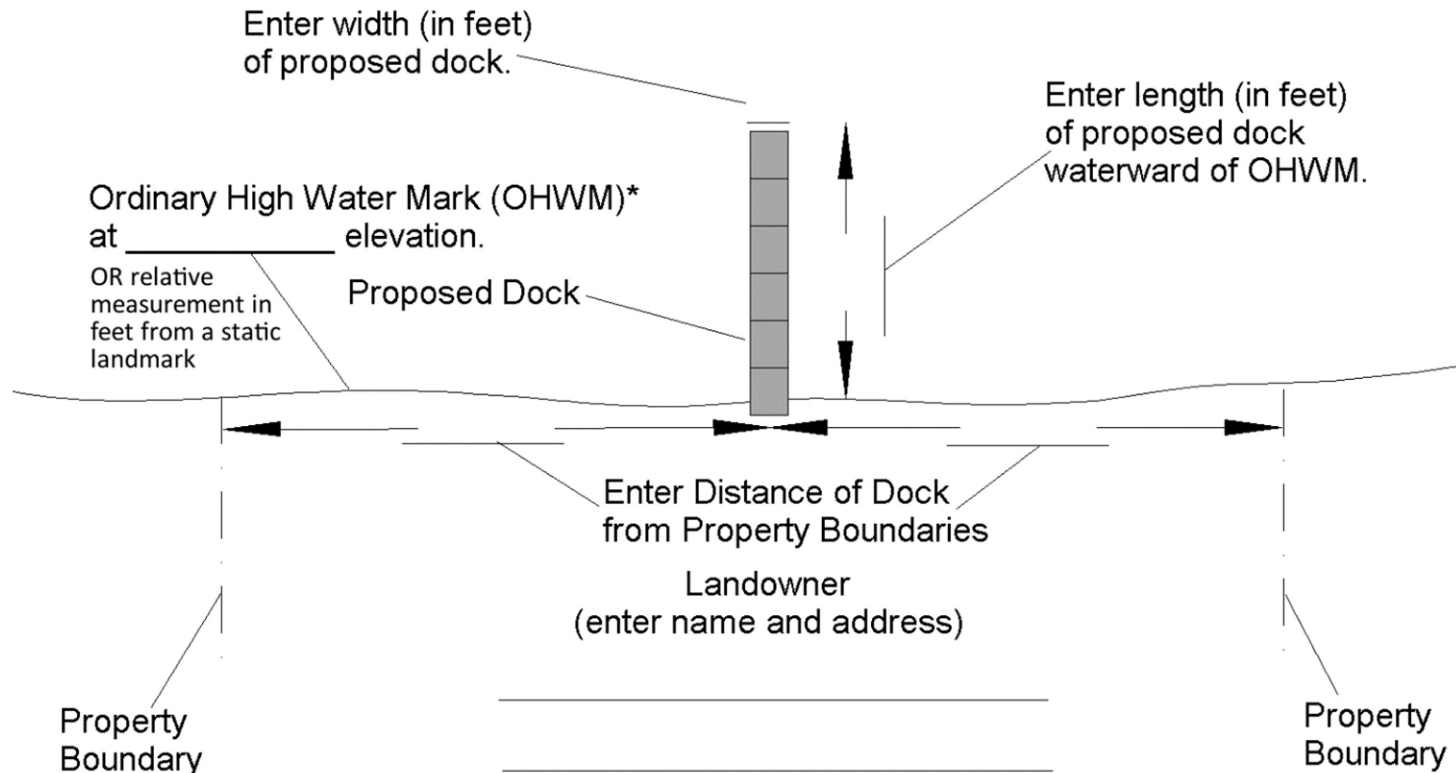


# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## DOCK

### Plan

## LAKE



Add additional drawing information, including:

- North arrow
- Edge of Water if different from OHWM\*
- Note any existing docks (on or off site) including dimensions and distances from proposed dock.
- Note buildings or other structures, including distances from proposed dock.

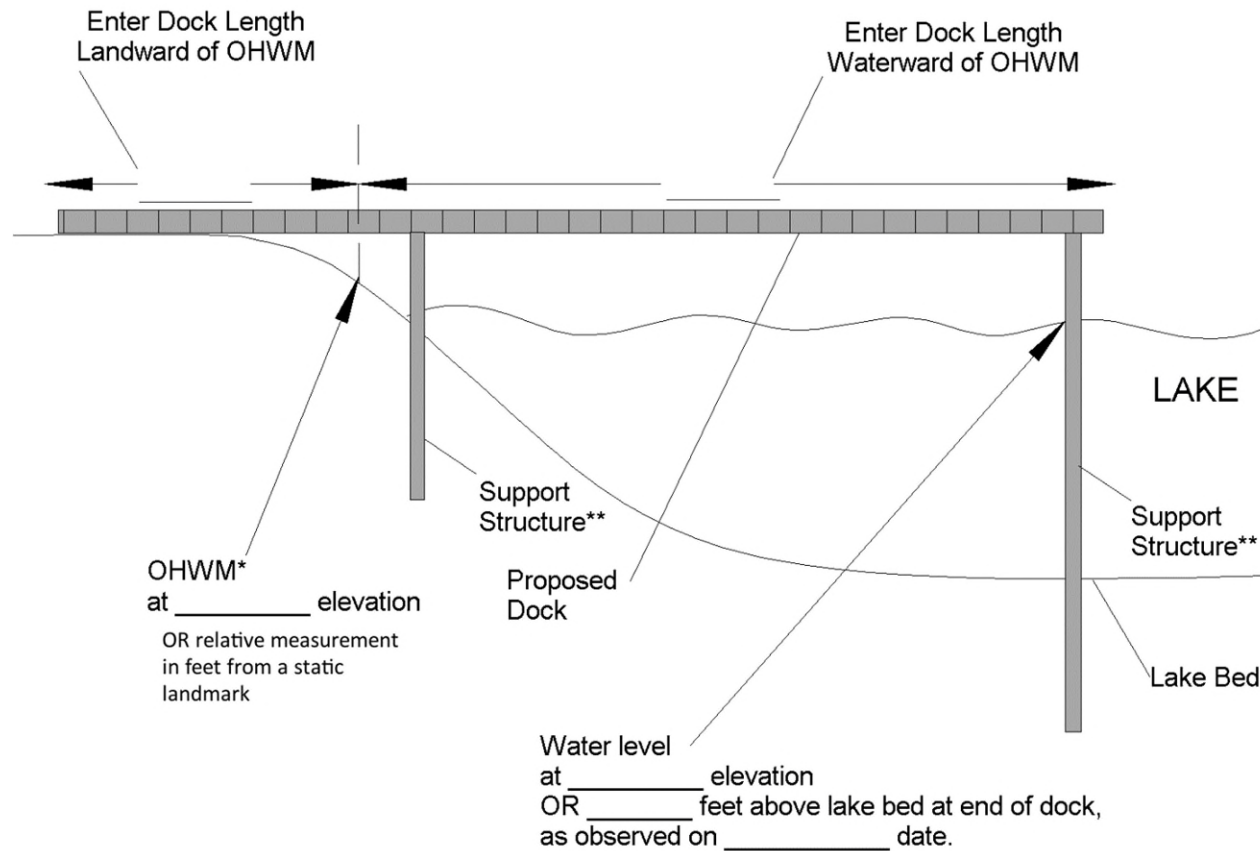
\*Ordinary High Water Mark (OHWM)

- For Great Lakes (Part 325) is an elevation set by the act, and are referenced upon the baseline datum set called International Great Lakes Datum 1955)
- See LINK for further information on Great Lakes OHWM
- For Inland Lakes (Part 301) is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels. This may be measured by surveyed elevation or by using a relative elevation such as 0. Some lakes have a legally established OHWM elevation.

# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## DOCK

### Cross Section



Add additional drawing information, including:

- Different types and or numbers of support structures
- If fill is involved, show area, type, and volume.

**\*Ordinary High Water Mark (OHWM)**

- For Great Lakes (Part 325) is an elevation set by the act, and are referenced upon the baseline datum set called International Great Lakes Datum 1955)  
See LINK for further information on Great Lakes OHWM
- For Inland Lakes (Part 301) is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels. This may be measured by surveyed elevation or by using a relative elevation such as 0.  
Some lakes have a legally established OHWM elevation.

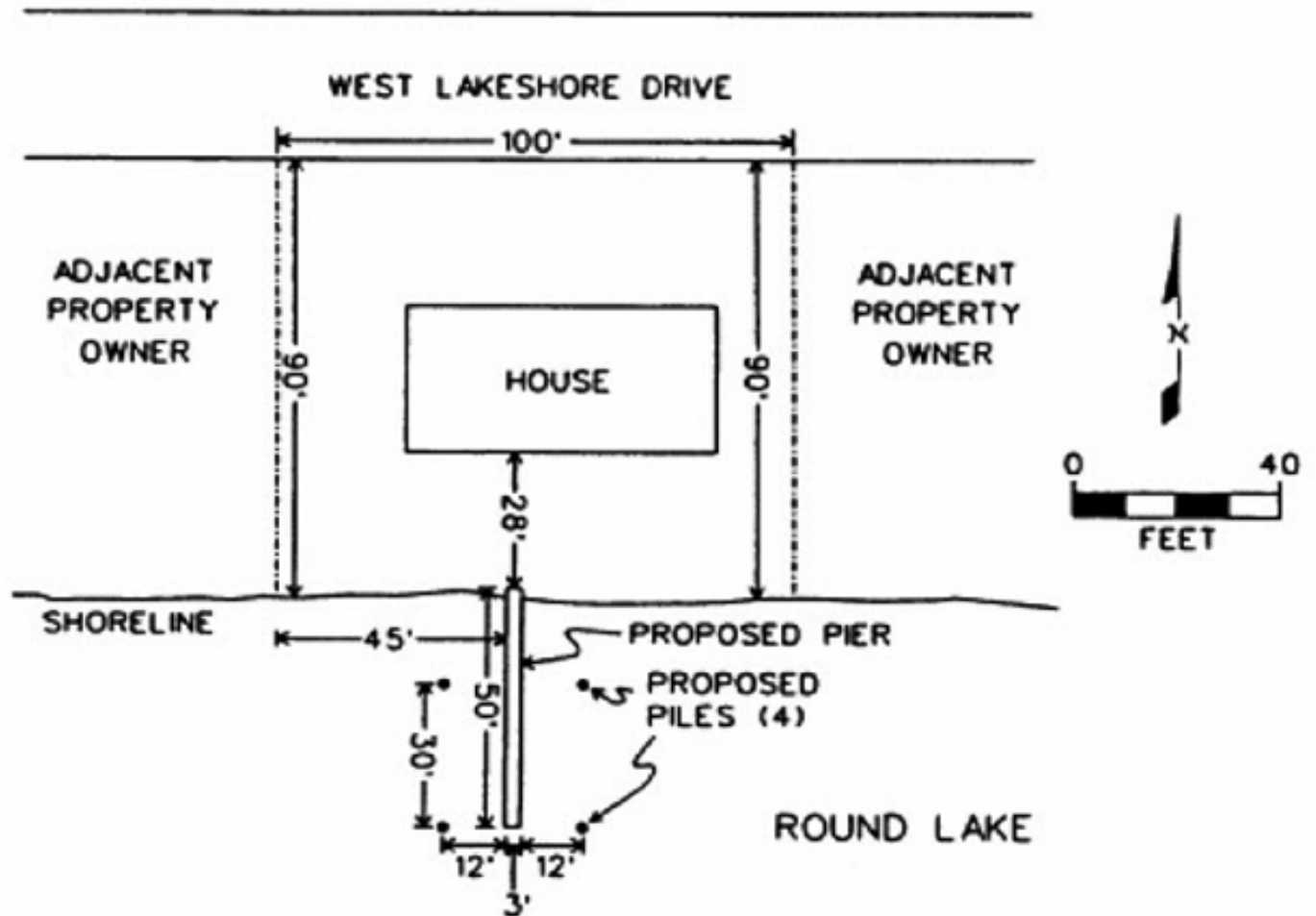
**\*\*Support structure examples are open pile, filled, crib, floating, cantilevered, spring piles, or piling clusters**

- On the plan above, draw in the correct representation of the proposed support structures.

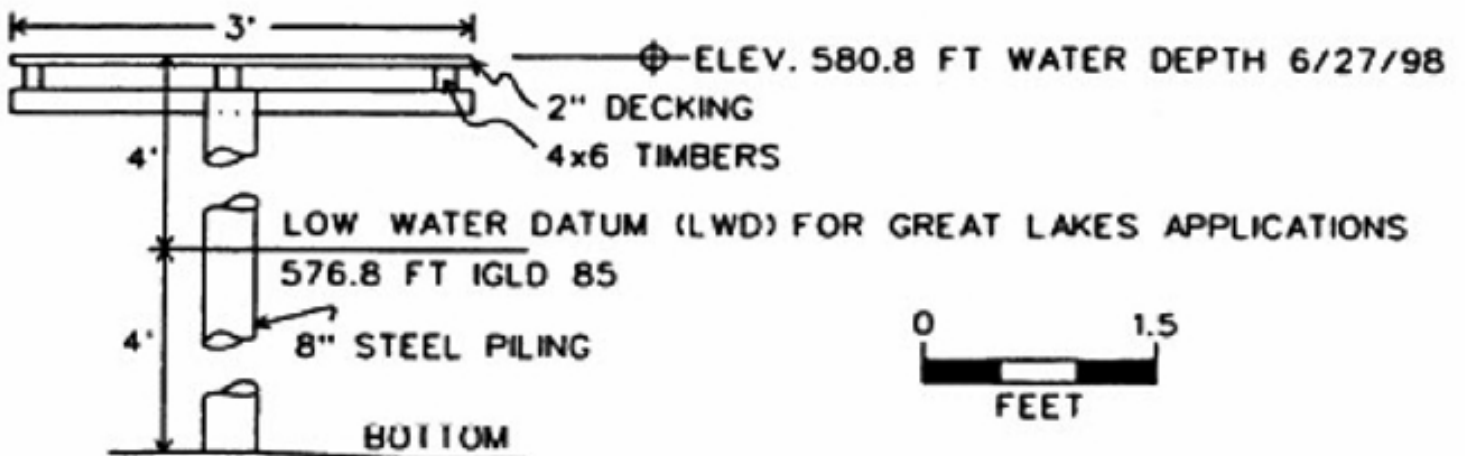
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DOCK

Piles/Pier



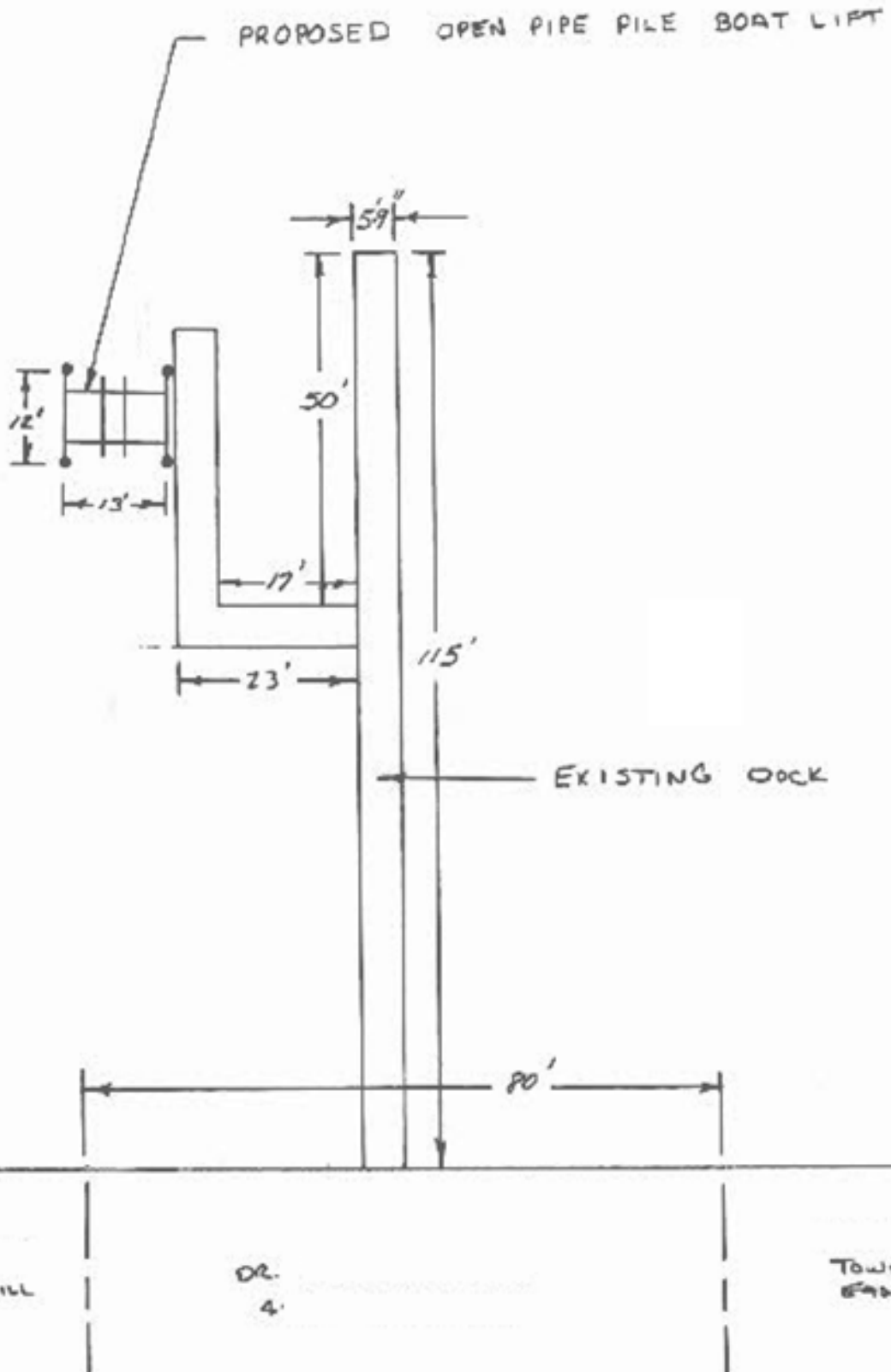
END VIEW



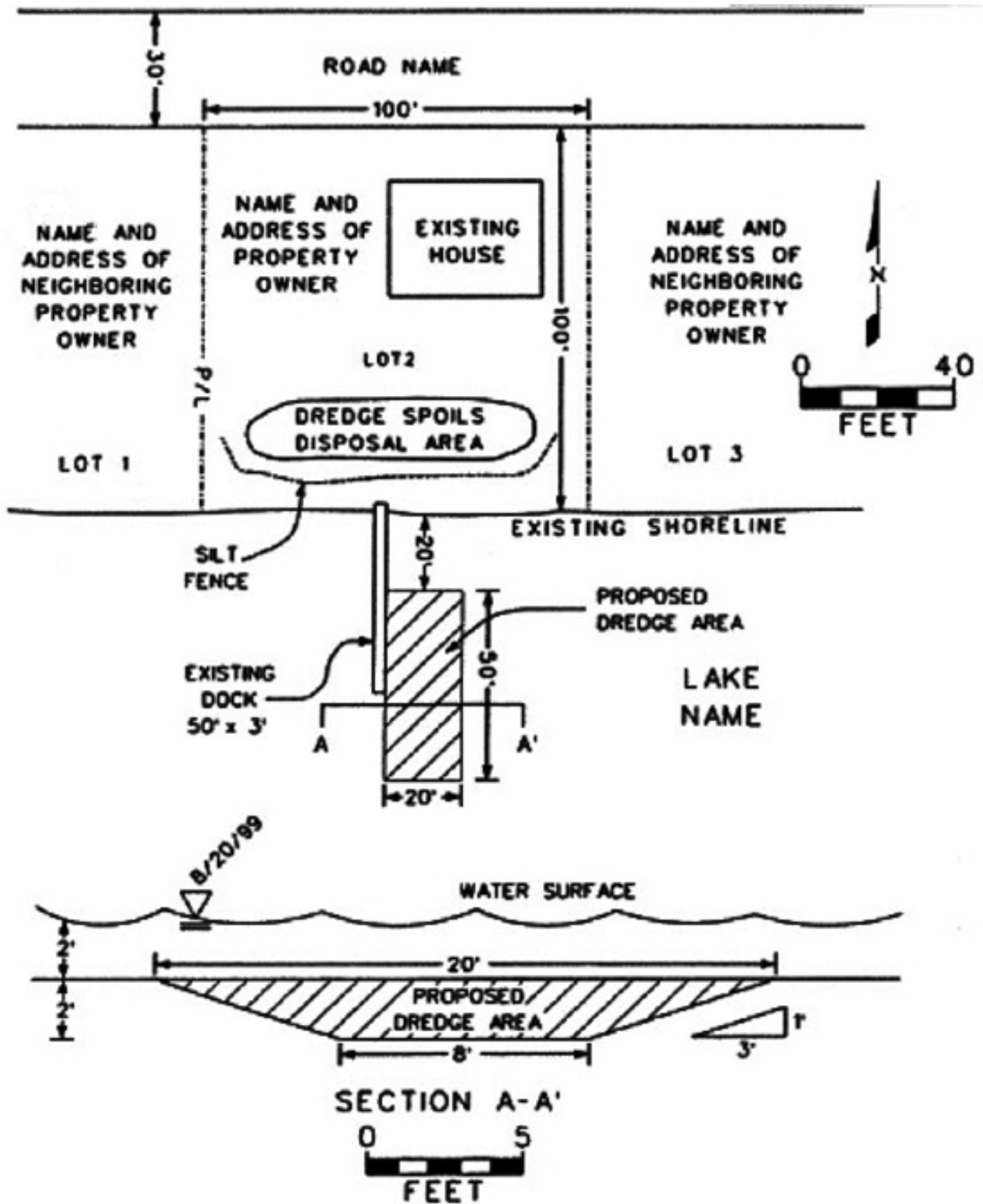
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DOCK

"H-shape"

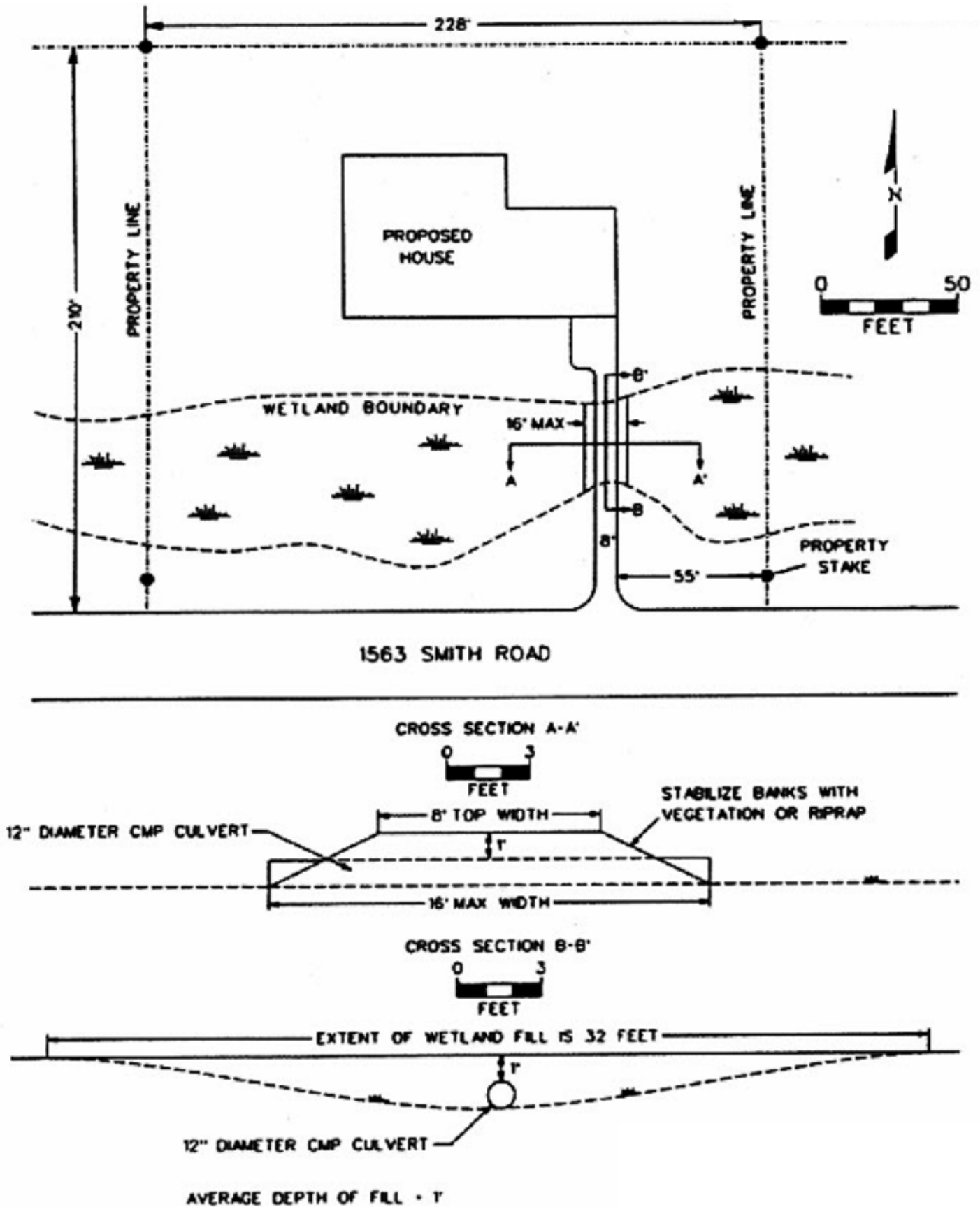


## DREDGING



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DRIVEWAY

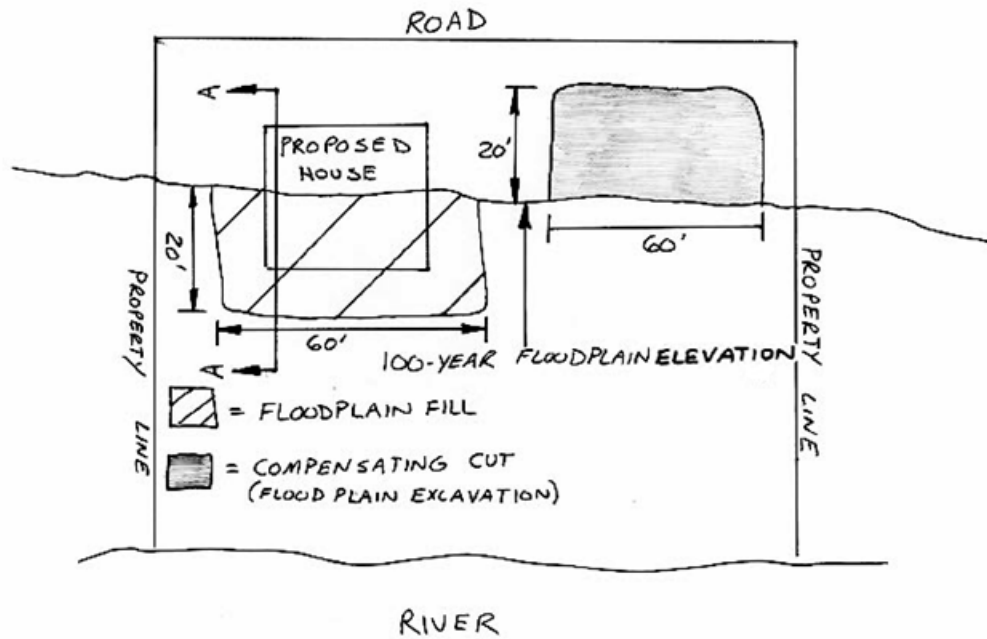




# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## FLOODPLAIN CUT AND FILL

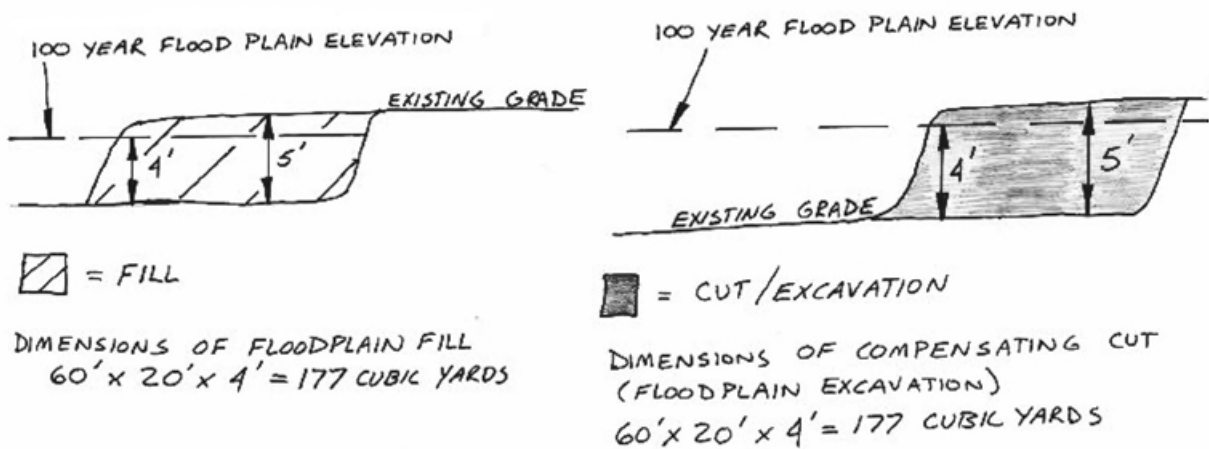
### Plan View



## FLOODPLAIN CUT AND FILL

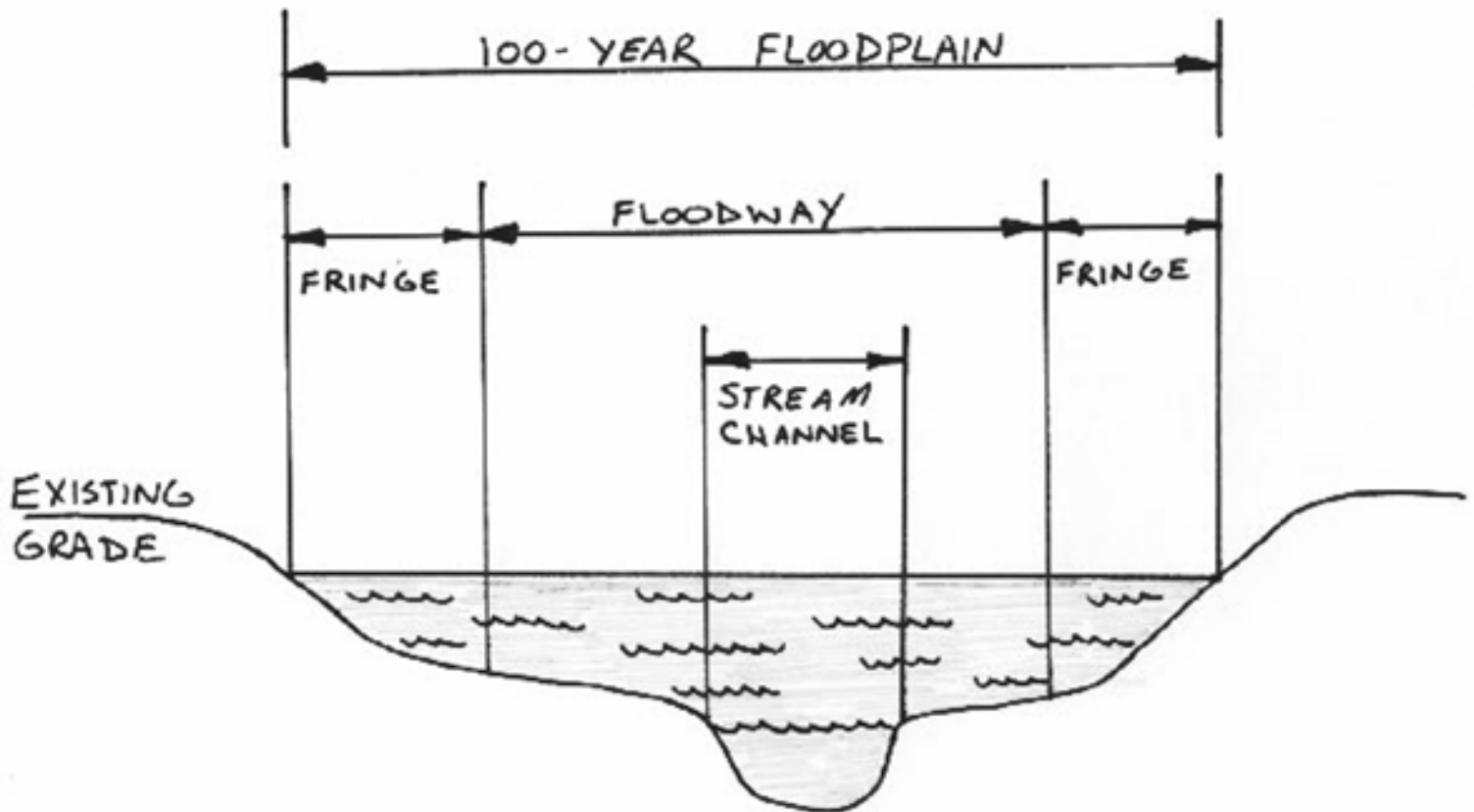
### Cross Section

#### SECTION A-A

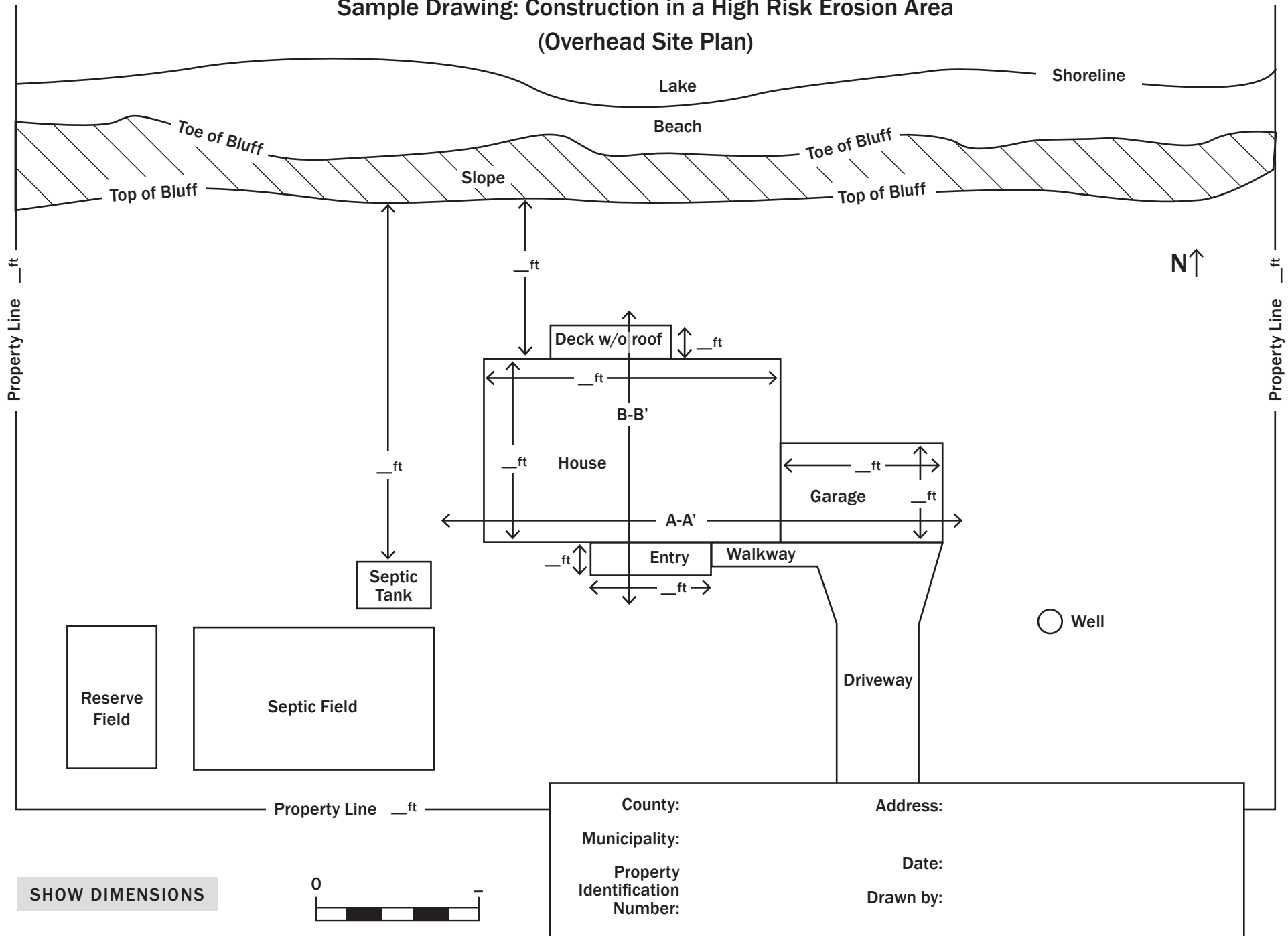


JOINT PERMIT APPLICATION SAMPLE DRAWINGS

FLOODPLAIN DEMARCATION



# Sample Drawing: Construction in a High Risk Erosion Area (Overhead Site Plan)

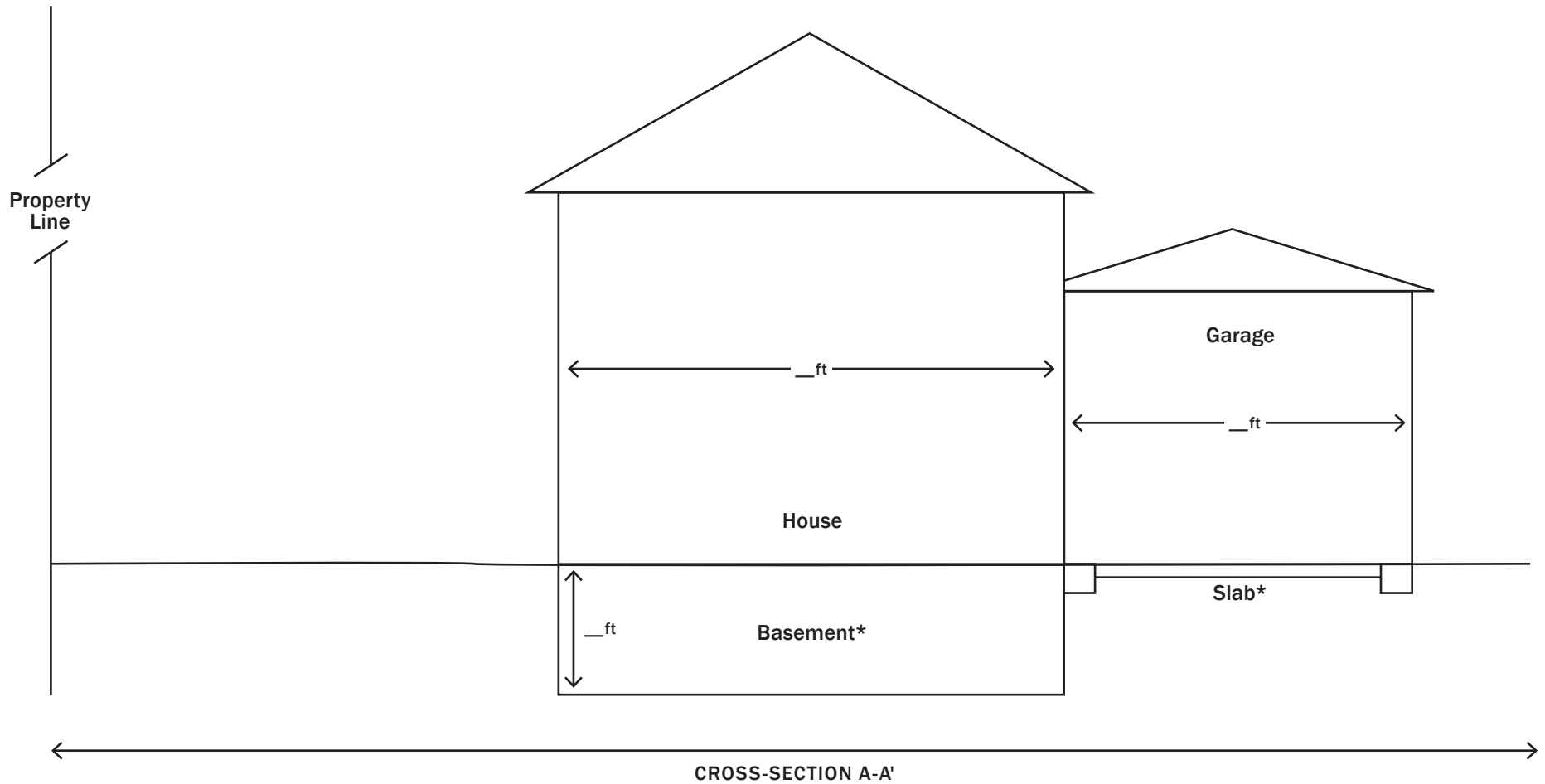


SHOW DIMENSIONS



County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

# Sample Drawing: Construction in a High Risk Erosion Area (Cross-section A-A')



SHOW DIMENSIONS

\*LABEL FOUNDATIONS:  
BASEMENT, CRAWLSPACE,  
PILINGS, SLAB



County:

Address:

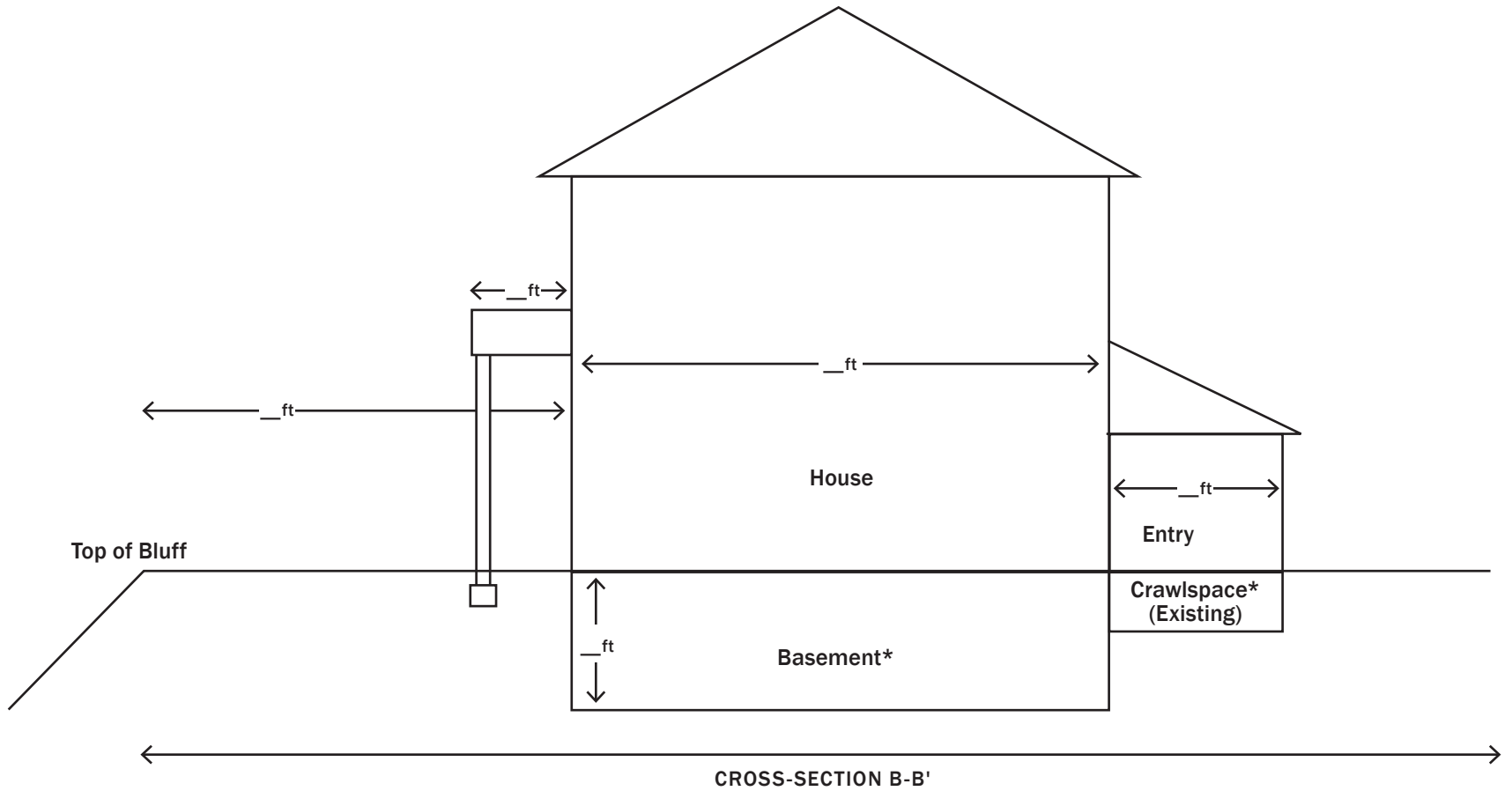
Municipality:

Date:

Property  
Identification  
Number:

Drawn by:

# Sample Drawing: Construction in a High Risk Erosion Area (Cross-section B-B')



SHOW DIMENSIONS

\*LABEL FOUNDATIONS:  
BASEMENT, CRAWLSPACE,  
PILINGS, SLAB



County:

Address:

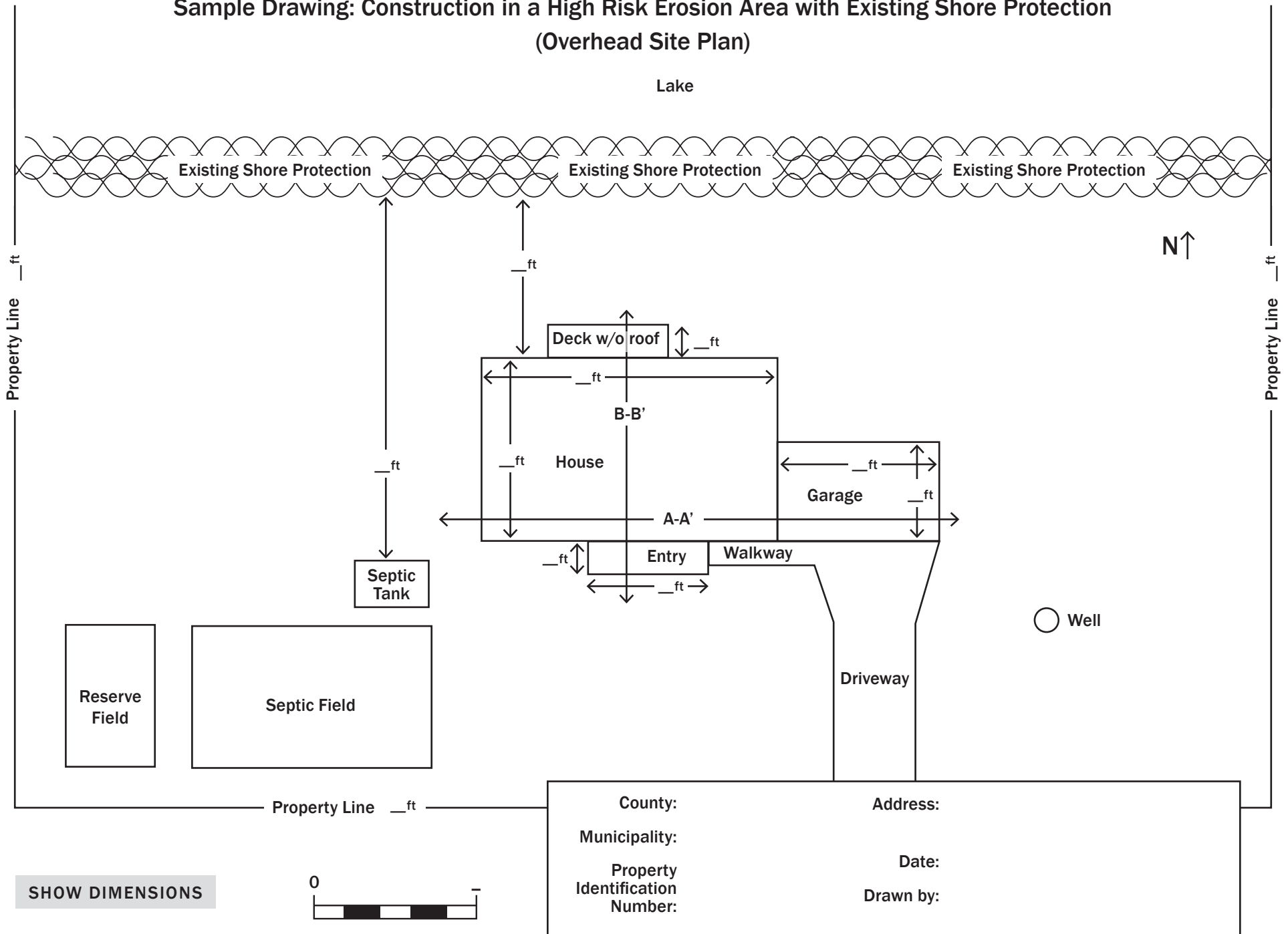
Municipality:

Property  
Identification  
Number:

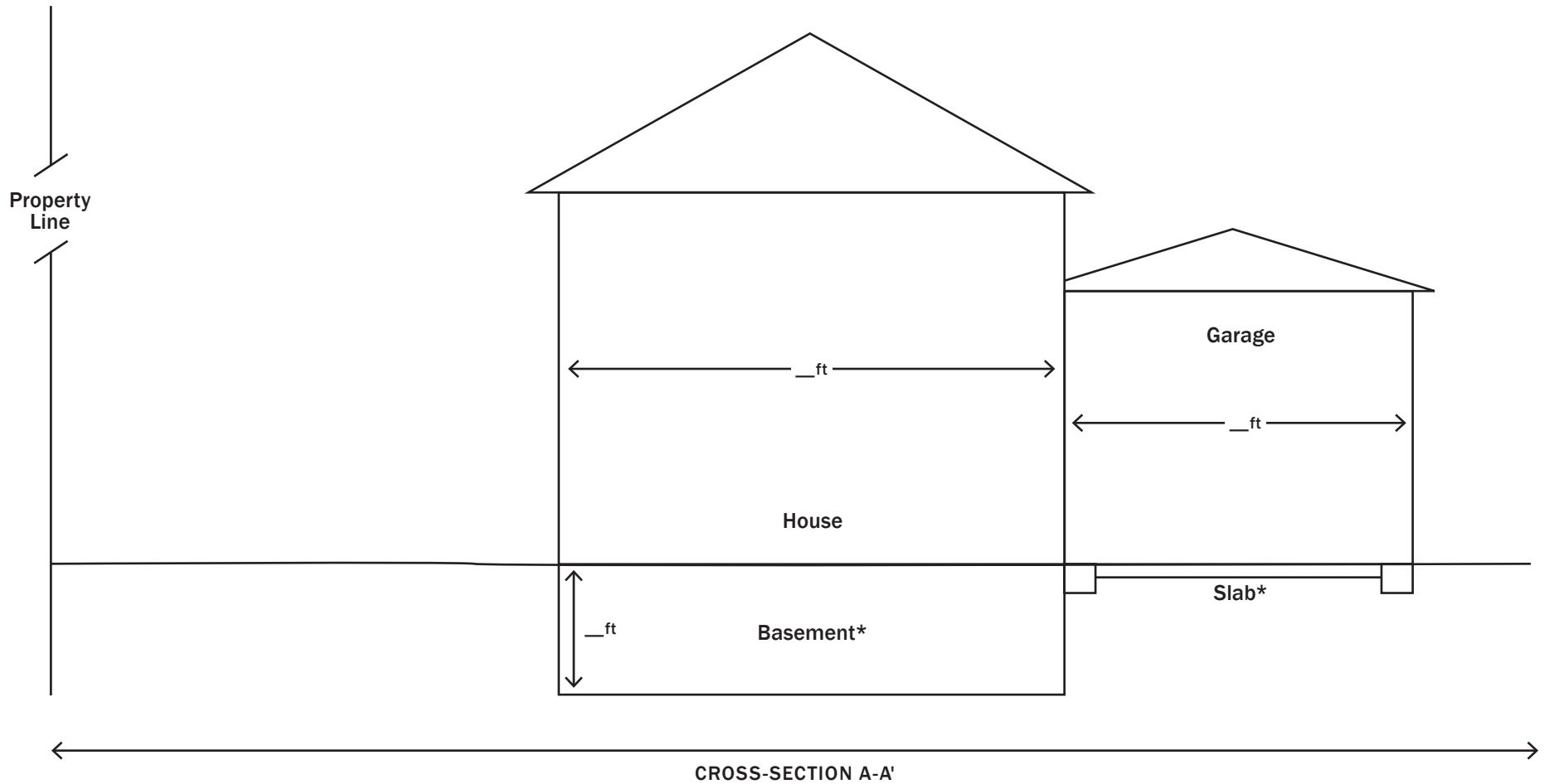
Date:

Drawn by:

# Sample Drawing: Construction in a High Risk Erosion Area with Existing Shore Protection (Overhead Site Plan)



# Sample Drawing: Construction in a High Risk Erosion Area with Existing Shore Protection (Cross-section A-A')

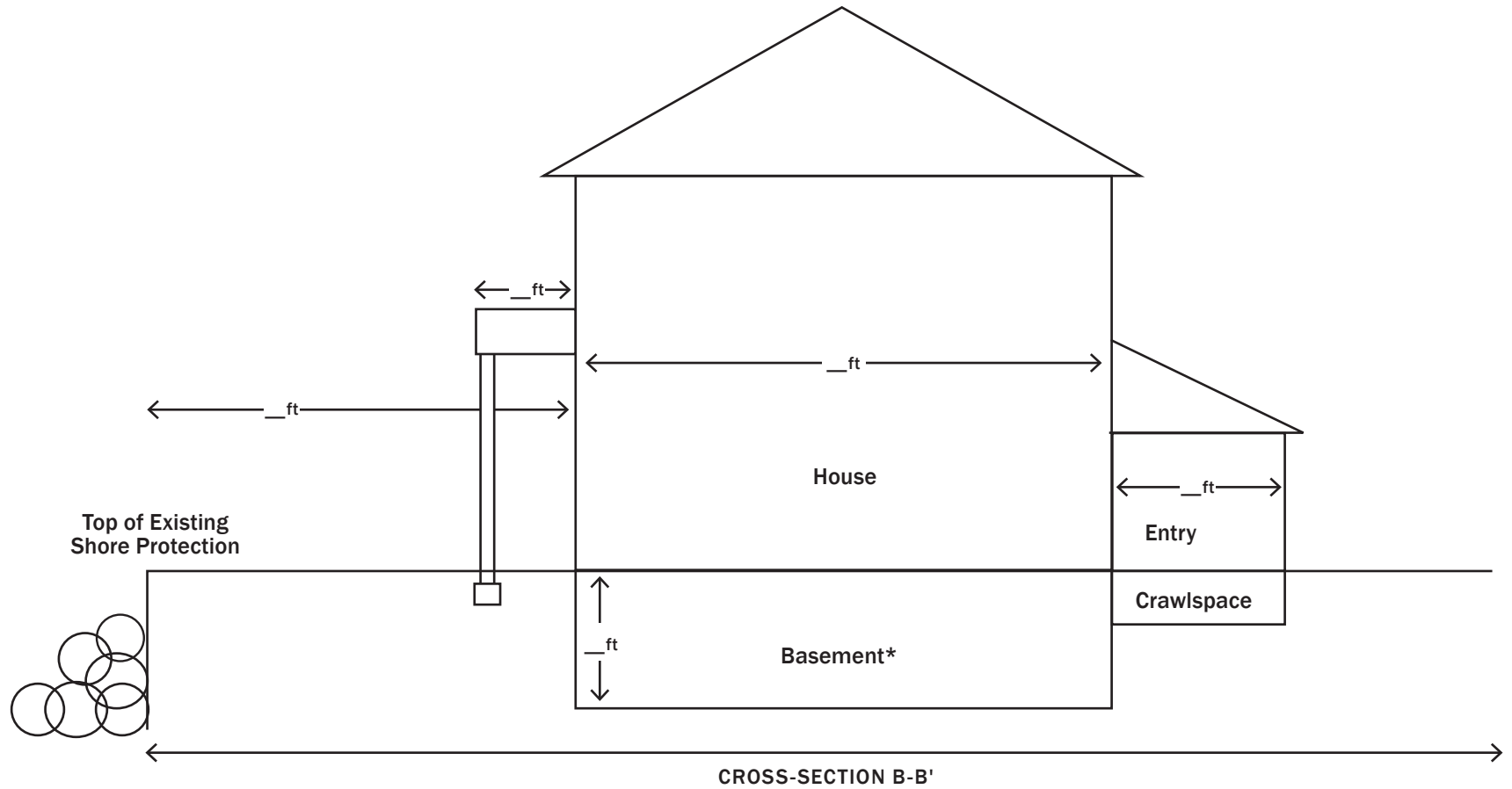


SHOW DIMENSIONS  
\*LABEL FOUNDATIONS:  
BASEMENT, CRAWLSPACE,  
PILINGS, SLAB



County:	Address:
Municipality:	Date:
Property Identification Number:	Drawn by:

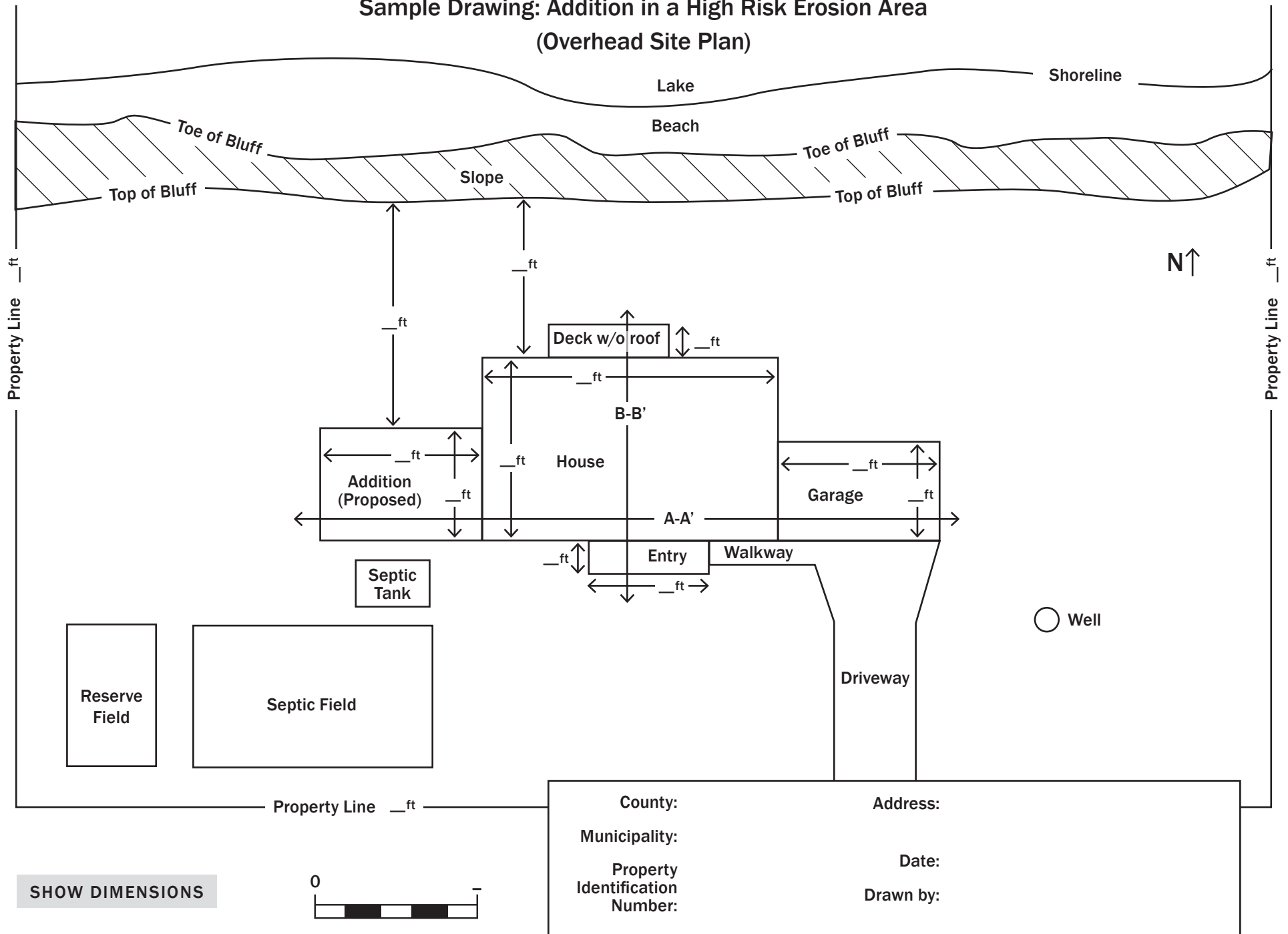
# Sample Drawing: Construction in a High Risk Erosion Area with Existing Shore Protection (Cross-section B-B')



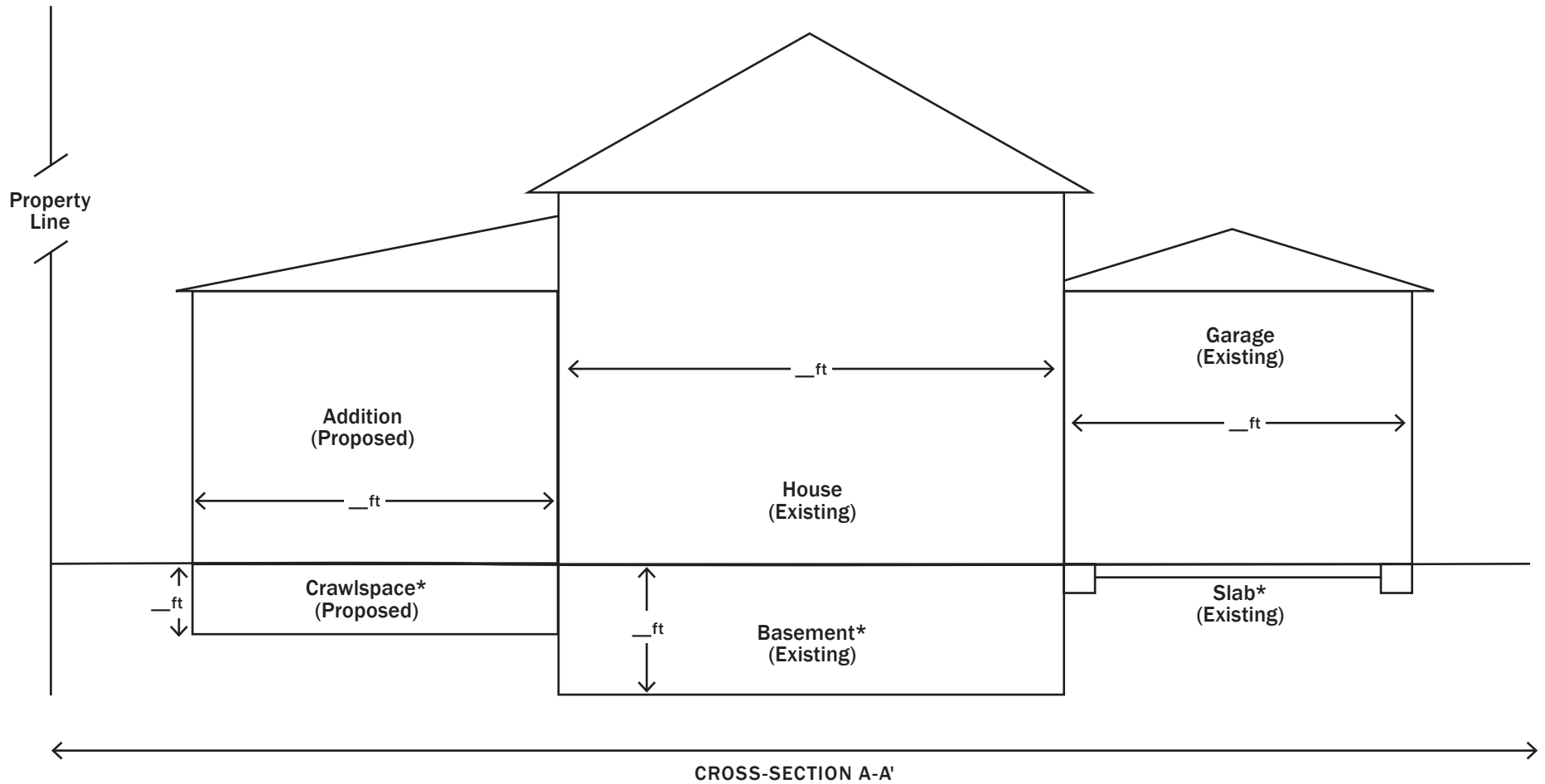
County:	Address:
Municipality:	Date:
Property Identification Number:	Drawn by:



# Sample Drawing: Addition in a High Risk Erosion Area (Overhead Site Plan)



# Sample Drawing: Addition in a High Risk Erosion Area (Cross-section A-A')



**SHOW DIMENSIONS**

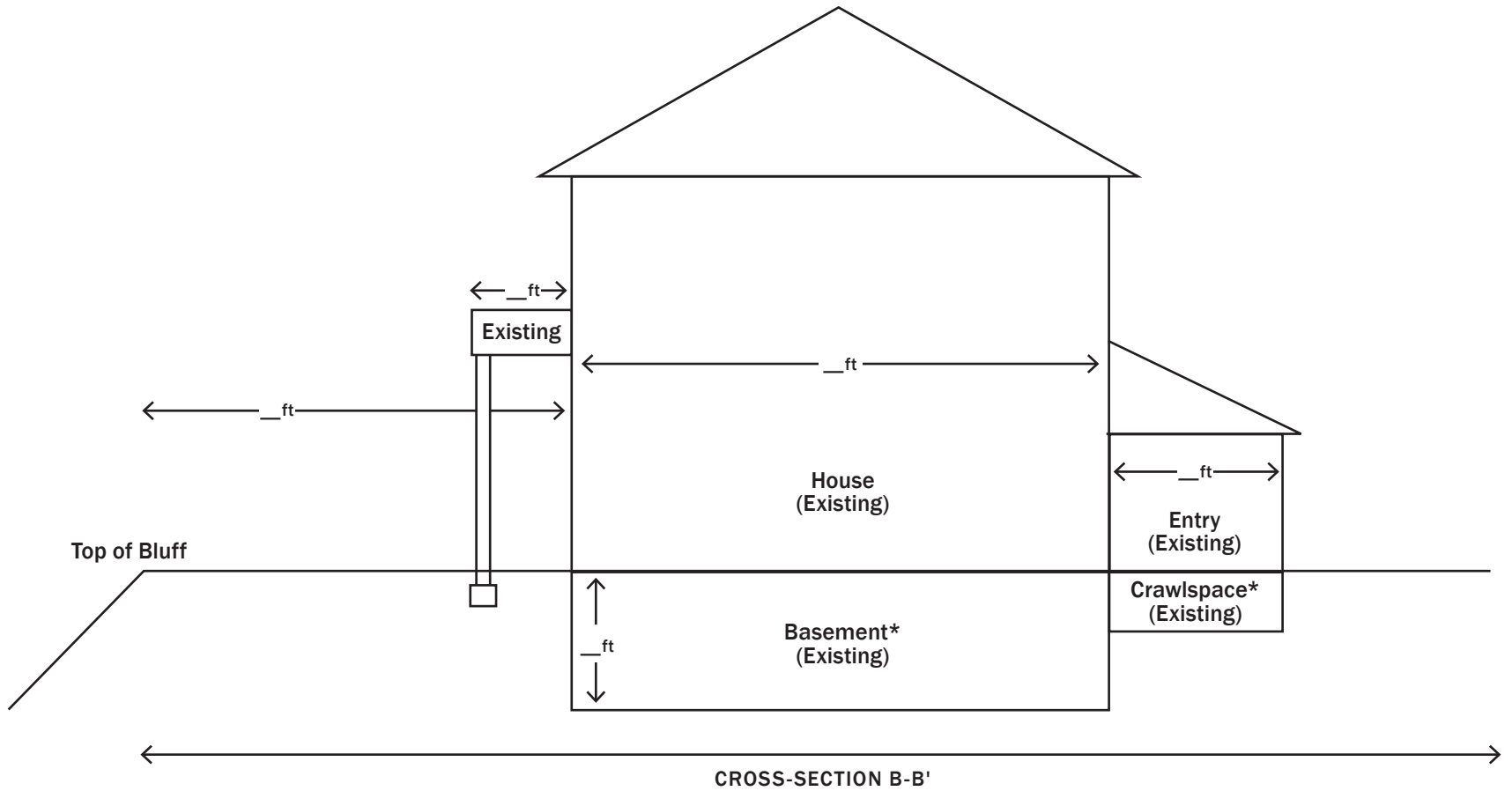
**\*LABEL FOUNDATIONS:**  
BASEMENT, CRAWLSPACE,  
PILINGS, SLAB

**LABEL STRUCTURES,**  
EXISTING OR PROPOSED



County:	Address:
Municipality:	Date:
Property Identification Number:	Drawn by:

# Sample Drawing: Addition in a High Risk Erosion Area (Cross-section B-B')



## SHOW DIMENSIONS

\*LABEL FOUNDATIONS:  
BASEMENT, CRAWLSPACE,  
PILINGS, SLAB

LABEL STRUCTURES,  
EXISTING OR PROPOSED



County:

Address:

Municipality:

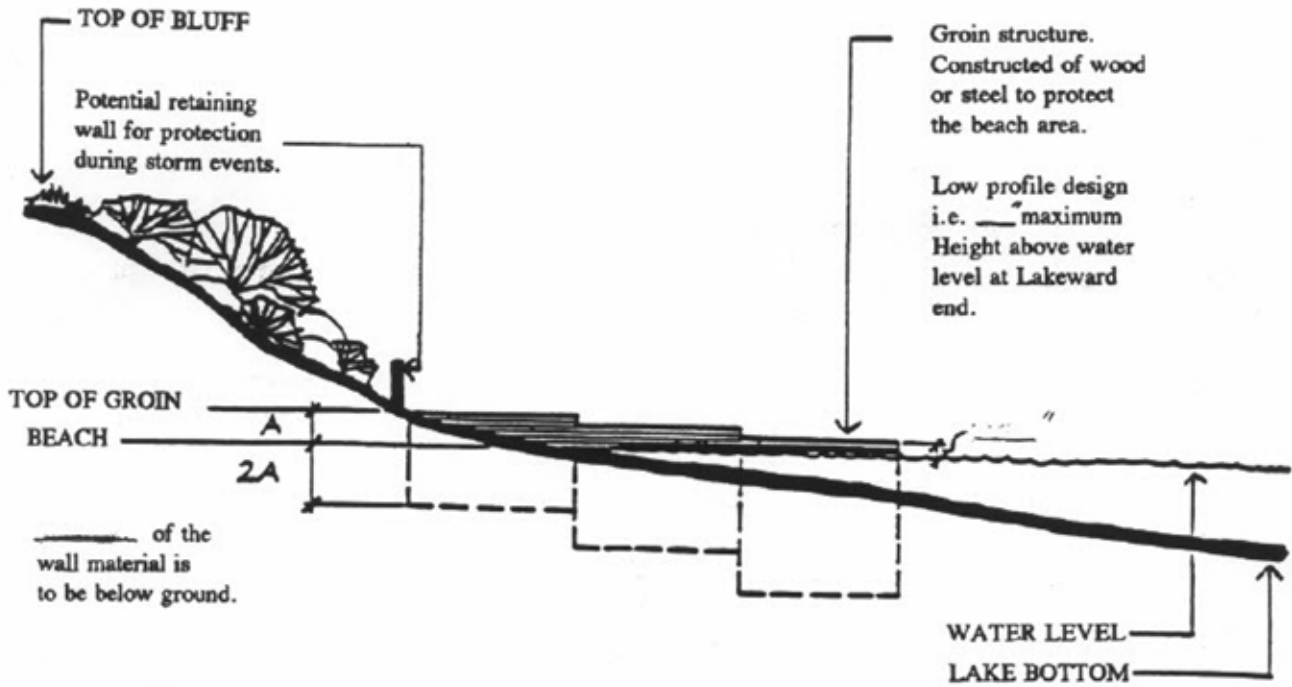
Date:

Property  
Identification  
Number:

Drawn by:

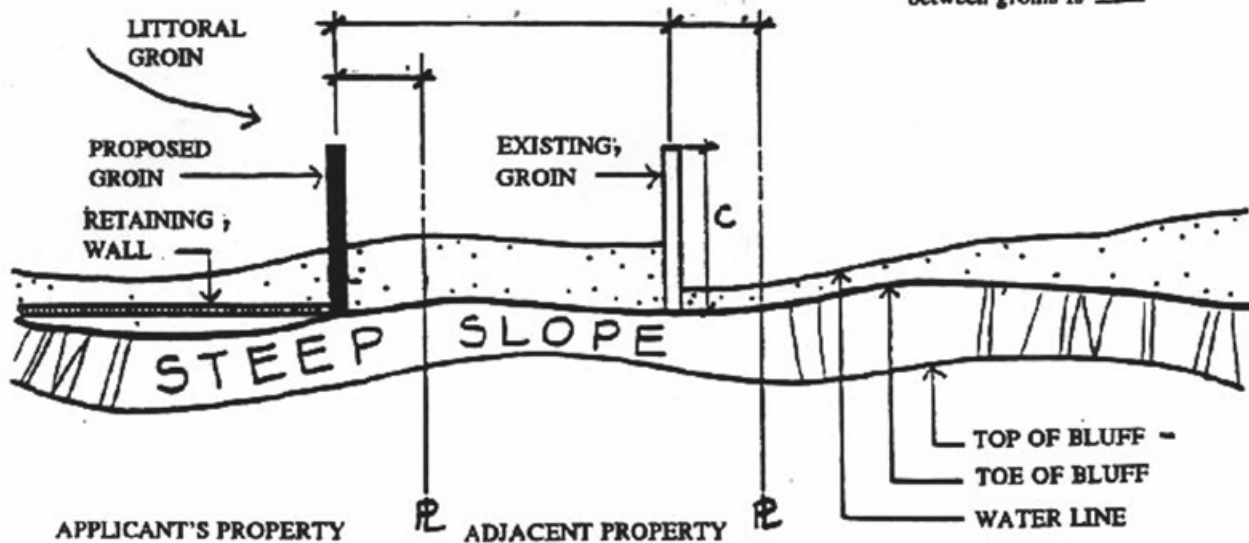
# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## GROIN



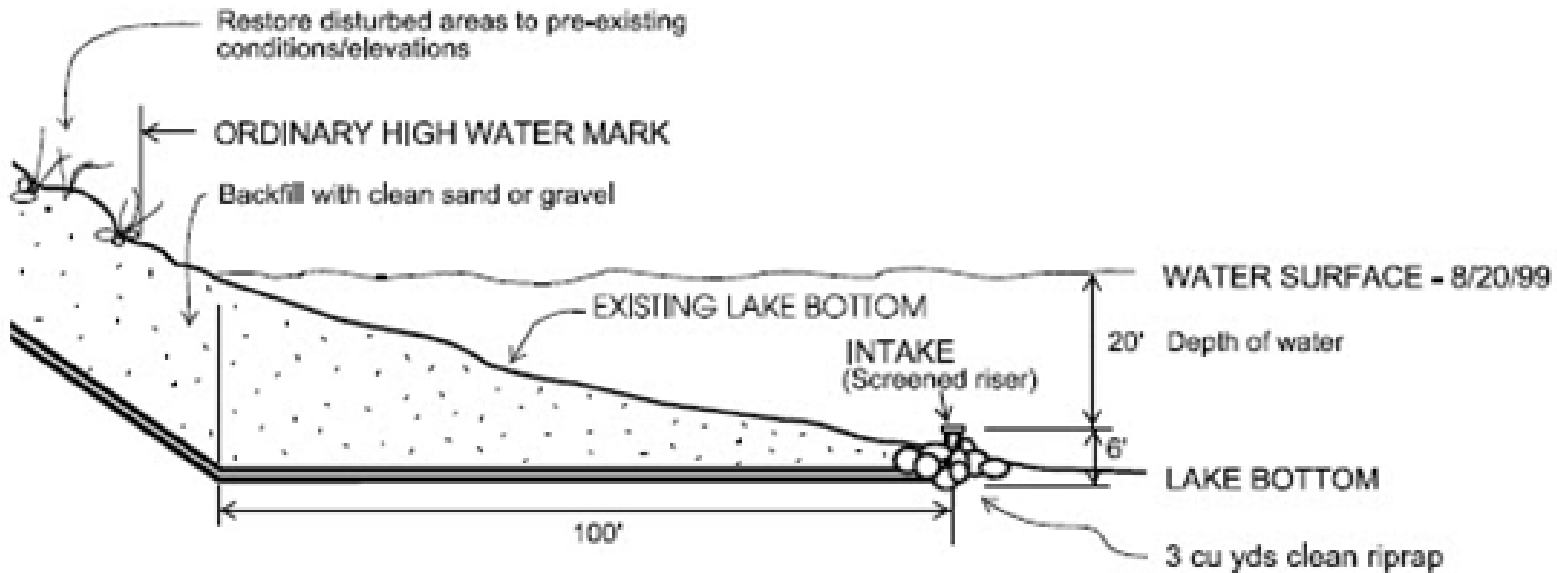
A proposed groin may be no longer than other groins in the vicinity (C). Unless authorized by adjacent landowners, minimum distances between groins and property lines (R) are \_\_\_\_\_.

Minimum distance between groins is \_\_\_\_\_

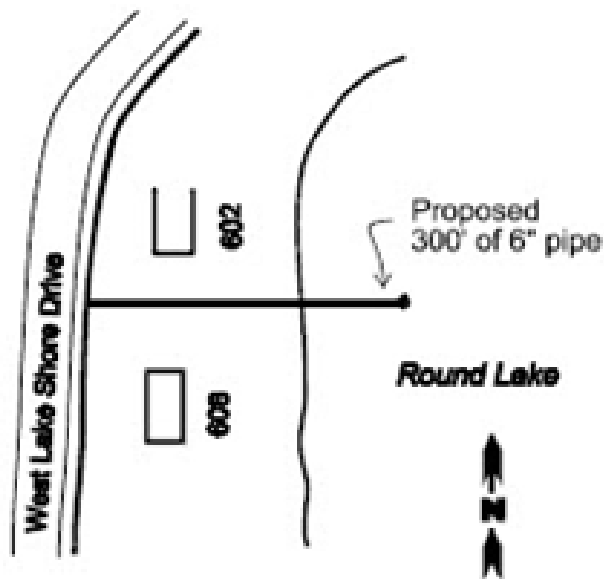


JOINT PERMIT APPLICATION SAMPLE DRAWINGS

INTAKE PIPE



PROFILE DRAWING

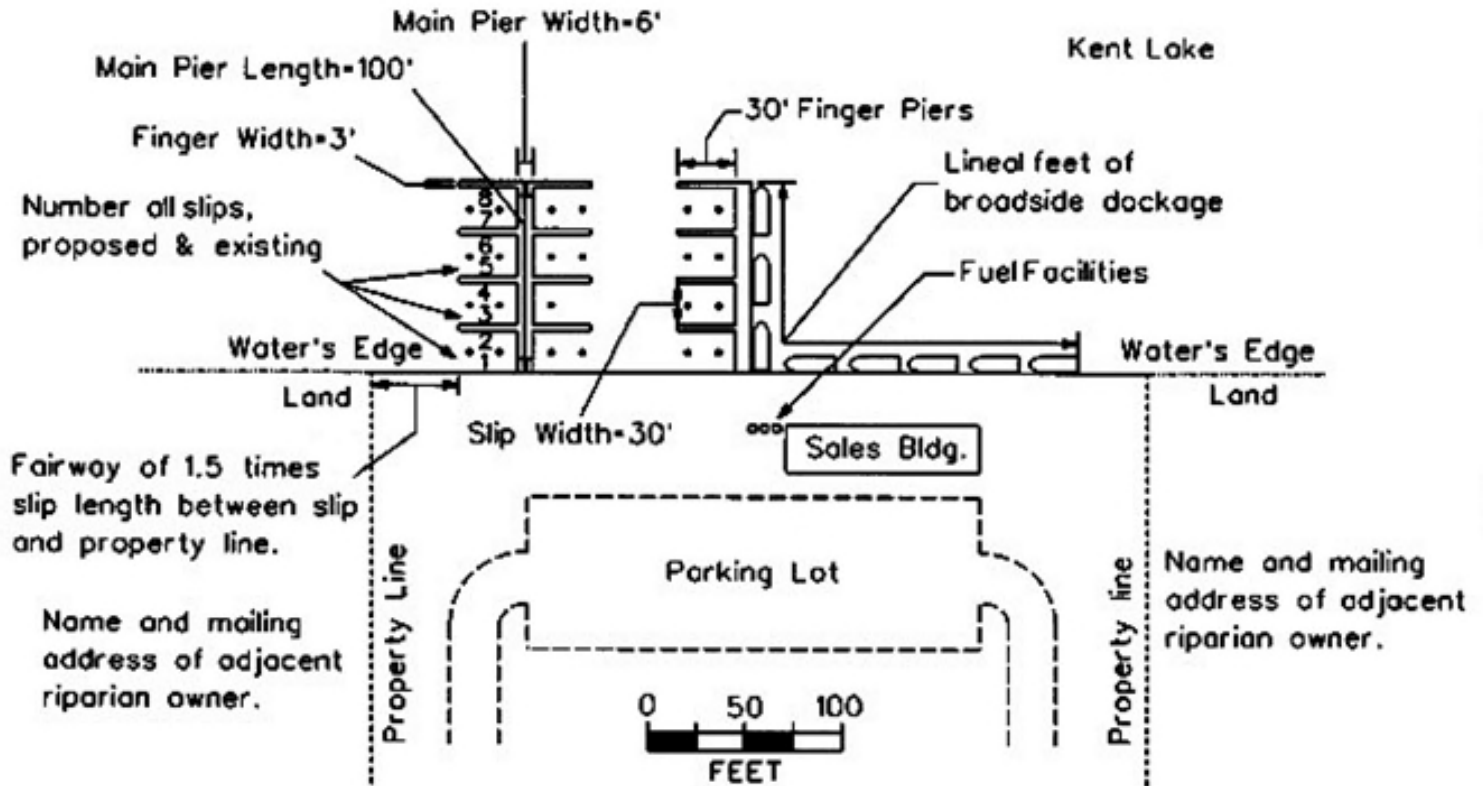


PLAN DRAWING

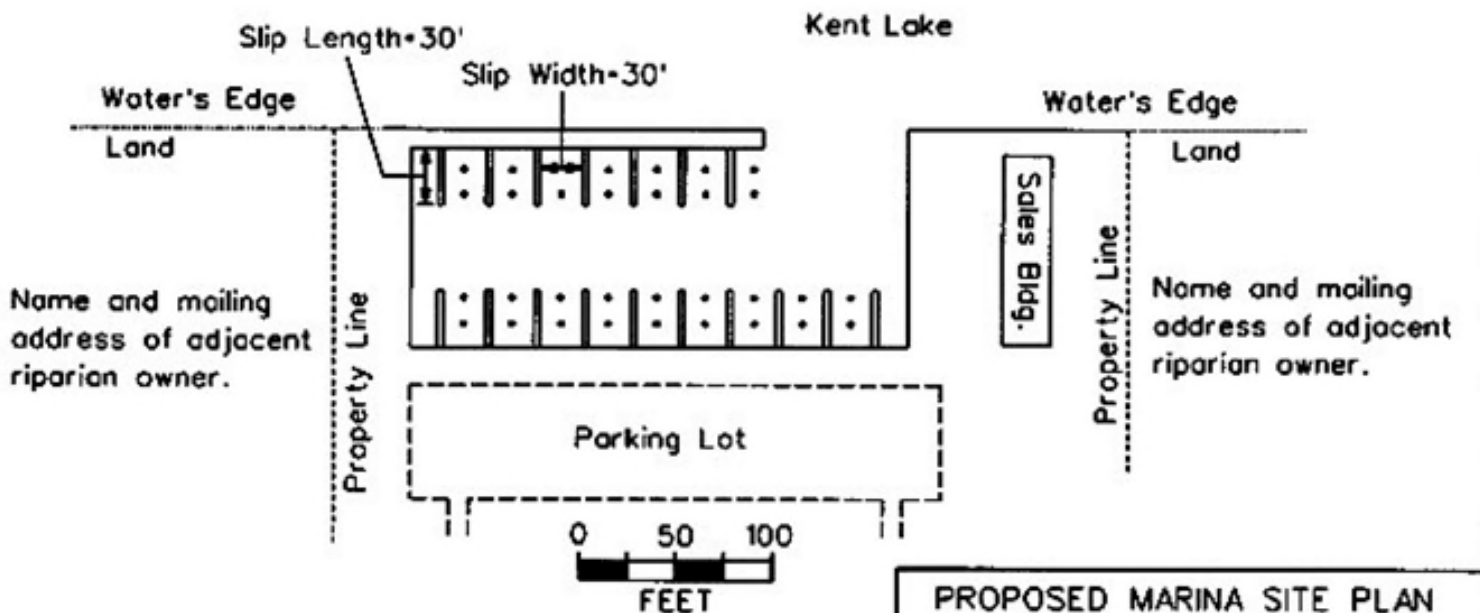
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

MARINA

MARINA SITE PLAN #1



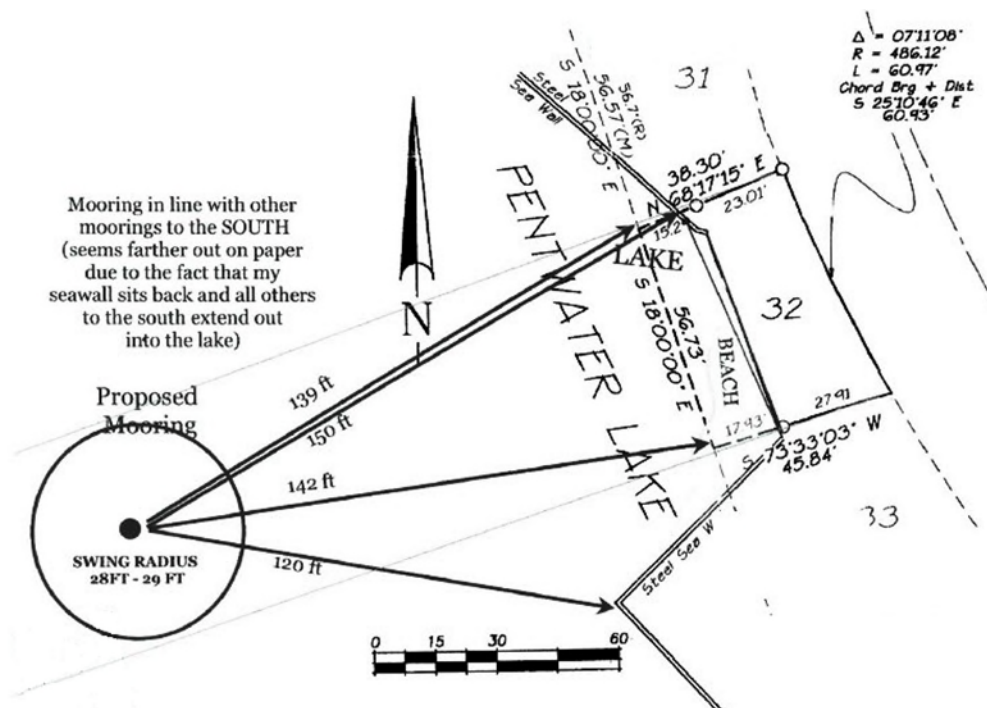
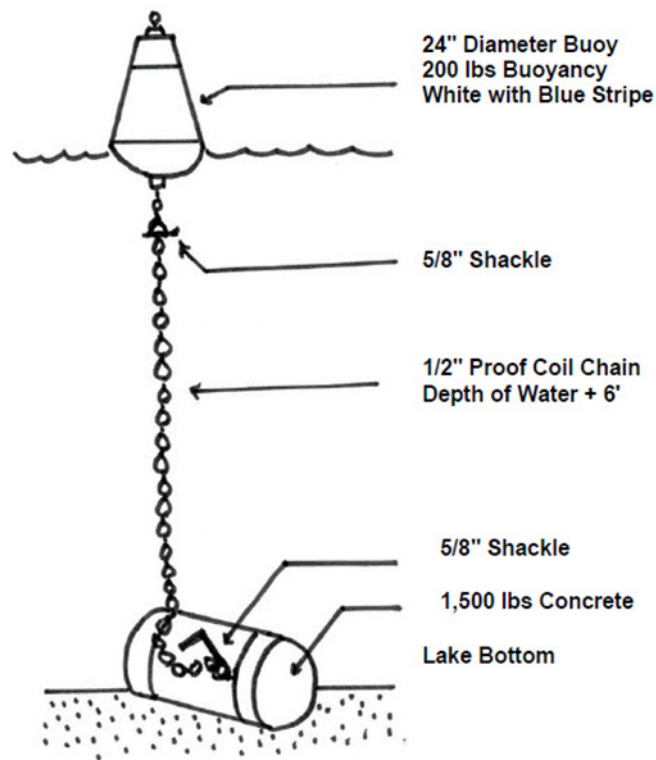
MARINA SITE PLAN #2



PROPOSED MARINA SITE PLAN

# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

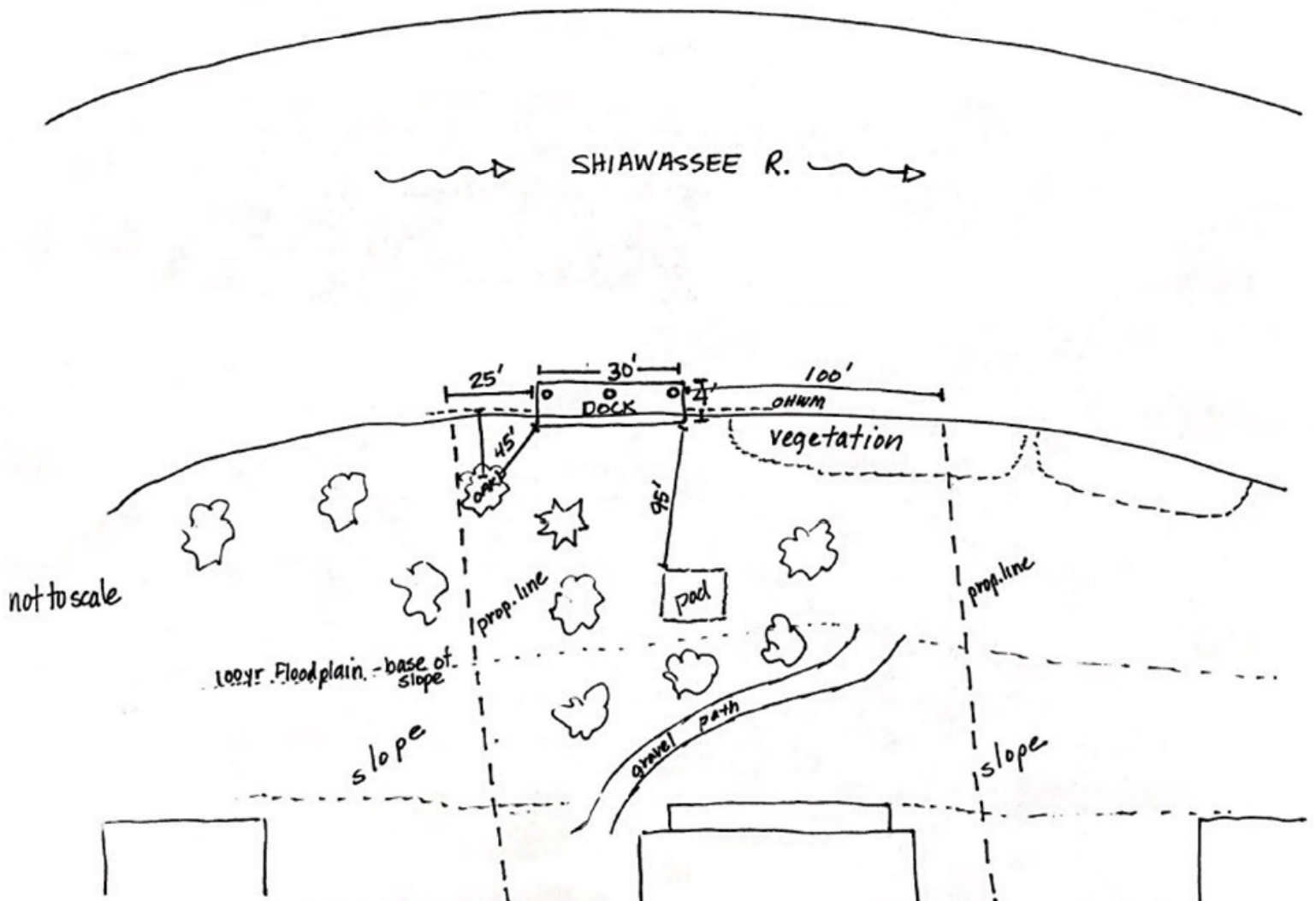
## MOORING BUOYS



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

ORDINARY HIGH WATER MARK

Plan View

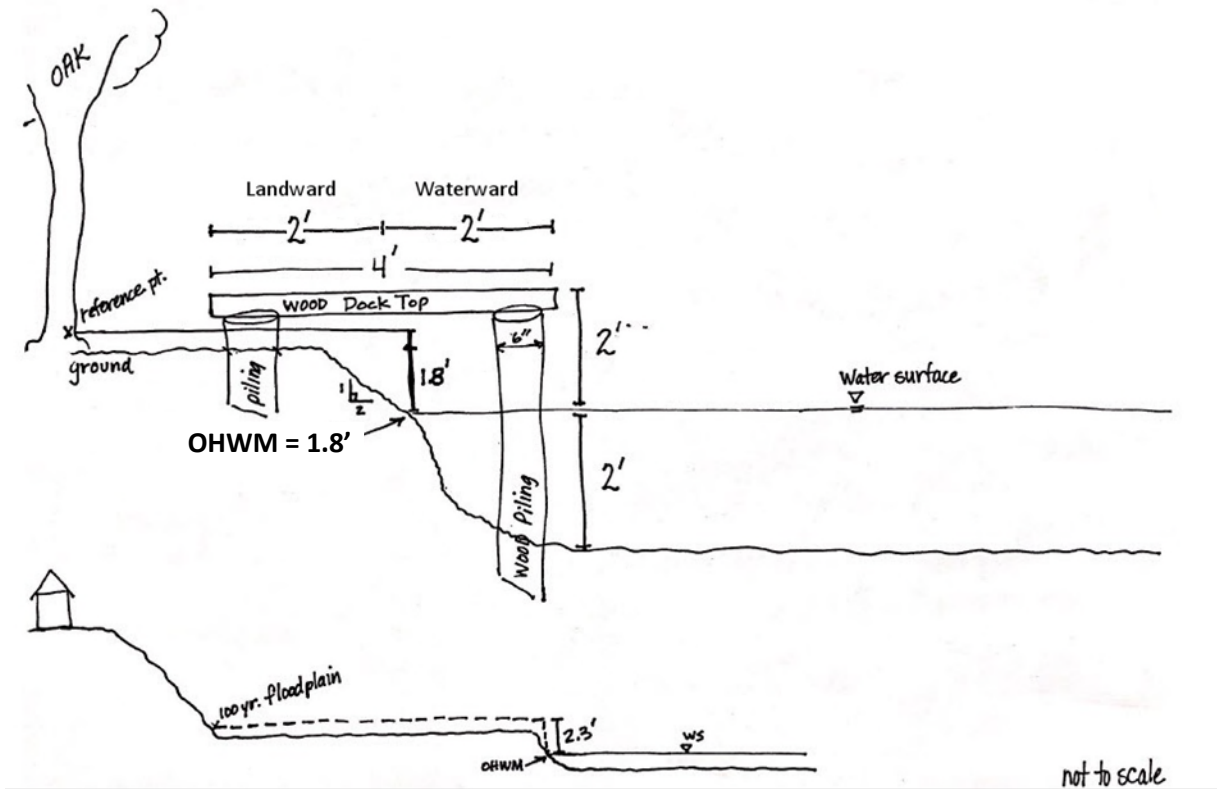




JOINT PERMIT APPLICATION SAMPLE DRAWINGS

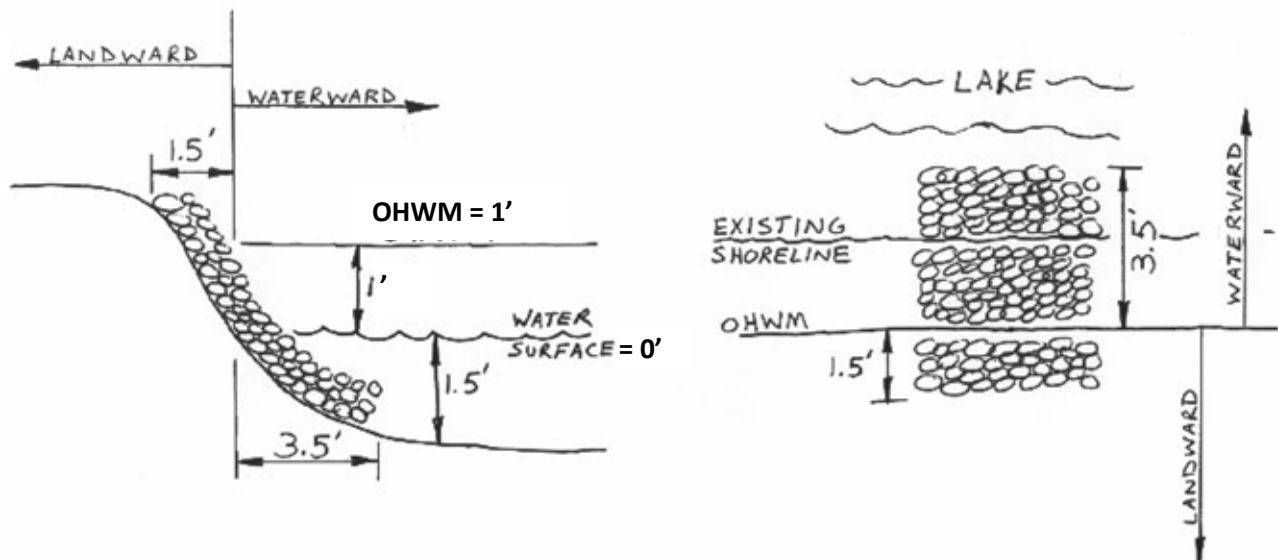
ORDINARY HIGH WATER MARK

Measured Relative to a Benchmark



ORDINARY HIGH WATER MARK

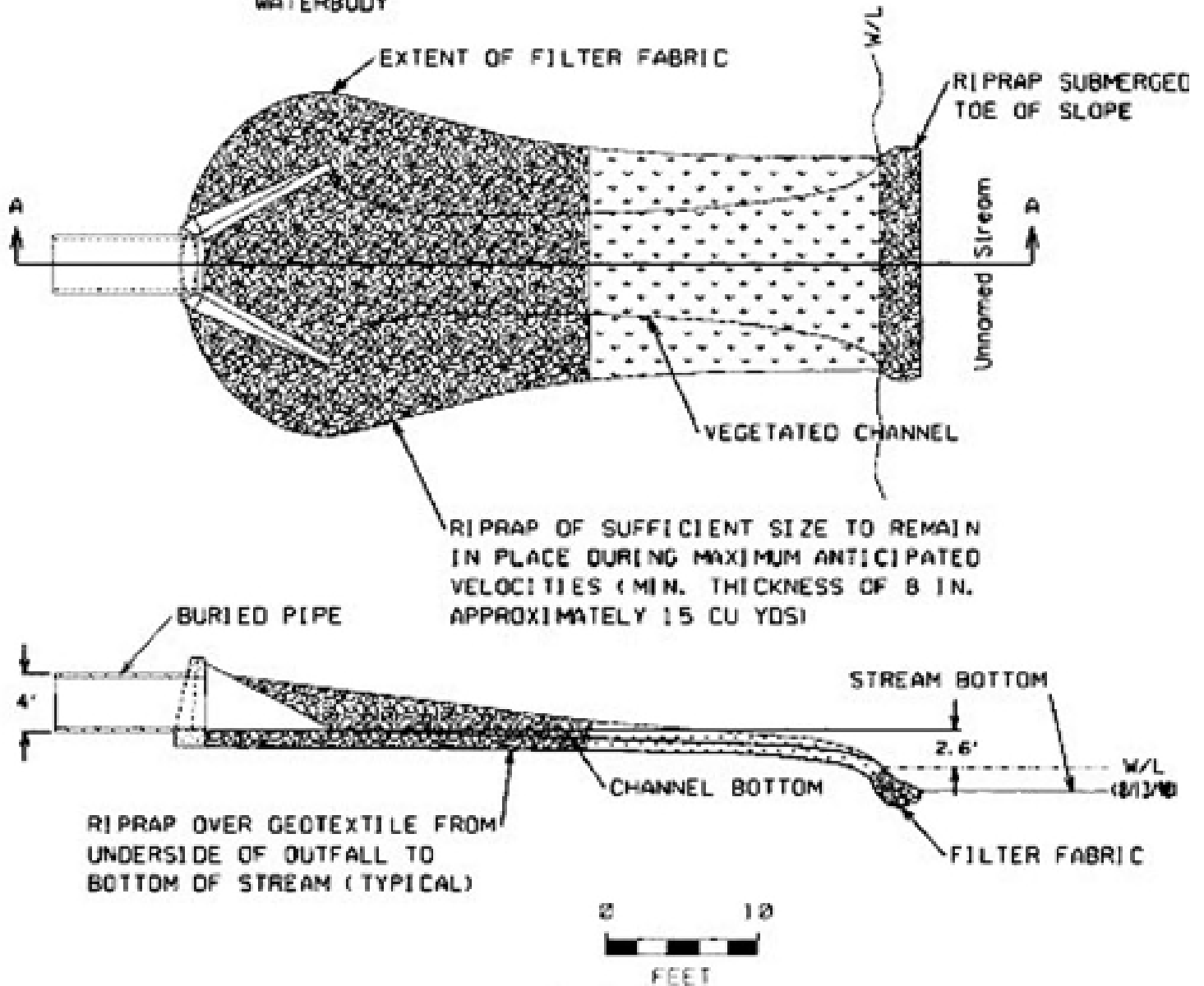
Measured Relative to Standing Water



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

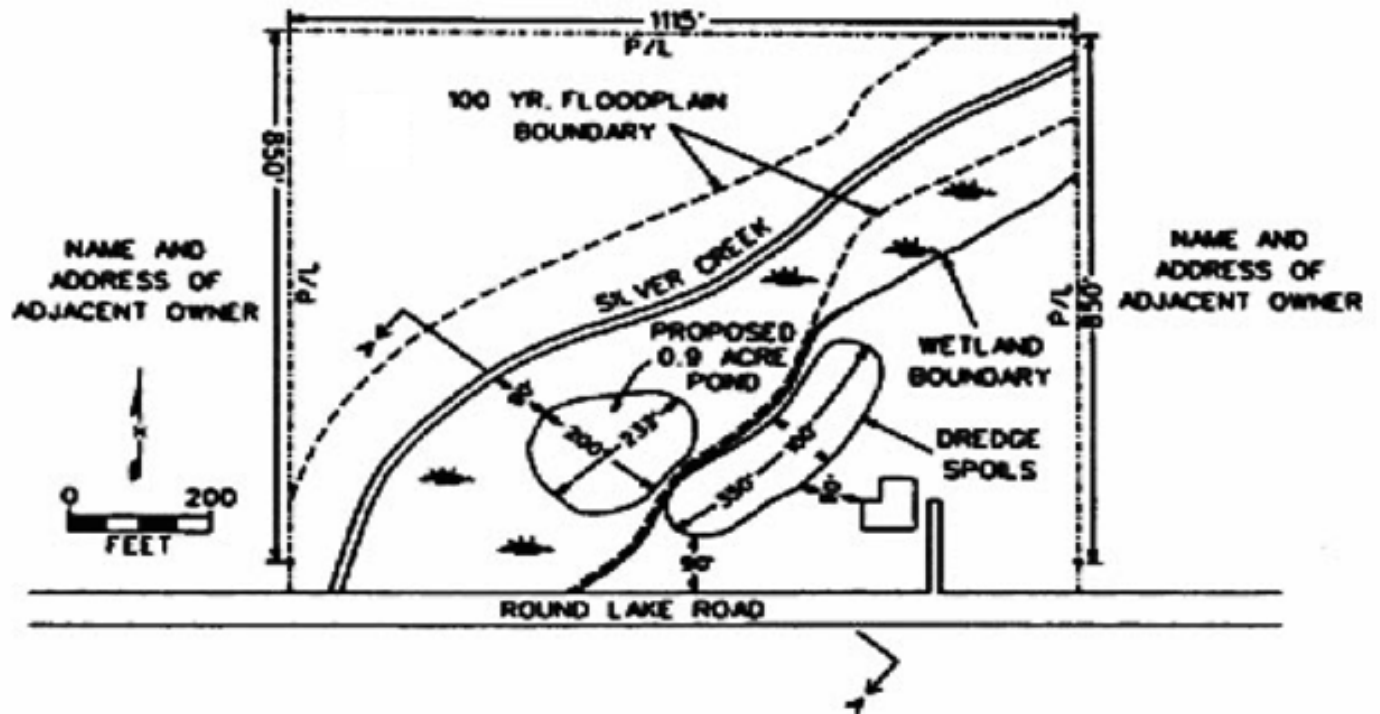
OUTLET

WHERE POSSIBLE THE OUTLET SHOULD BE SET BACK AWAY FROM THE BANK ALLOWING THE STORMWATER TO PASS THROUGH A VEGETATED CHANNEL BEFORE ENTERING THE WATERBODY

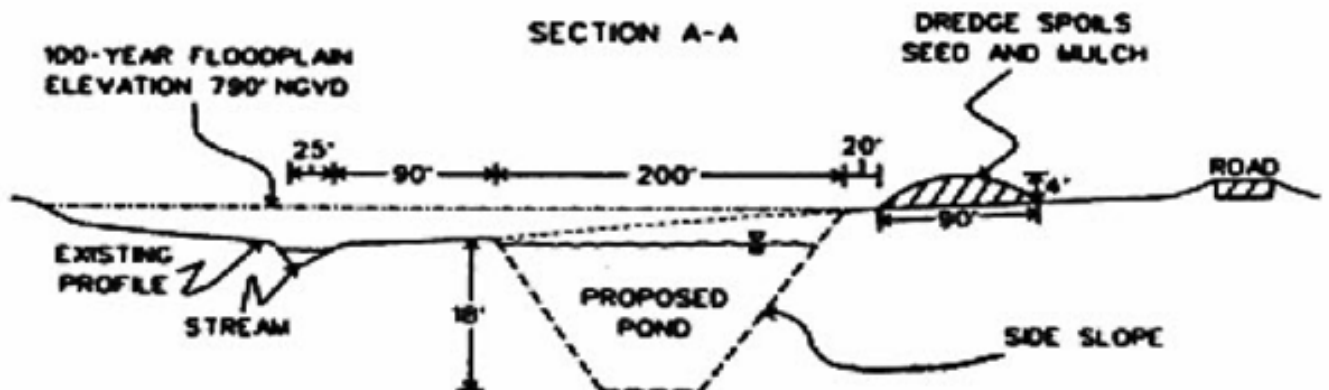


JOINT PERMIT APPLICATION SAMPLE DRAWINGS

POND CONSTRUCTION

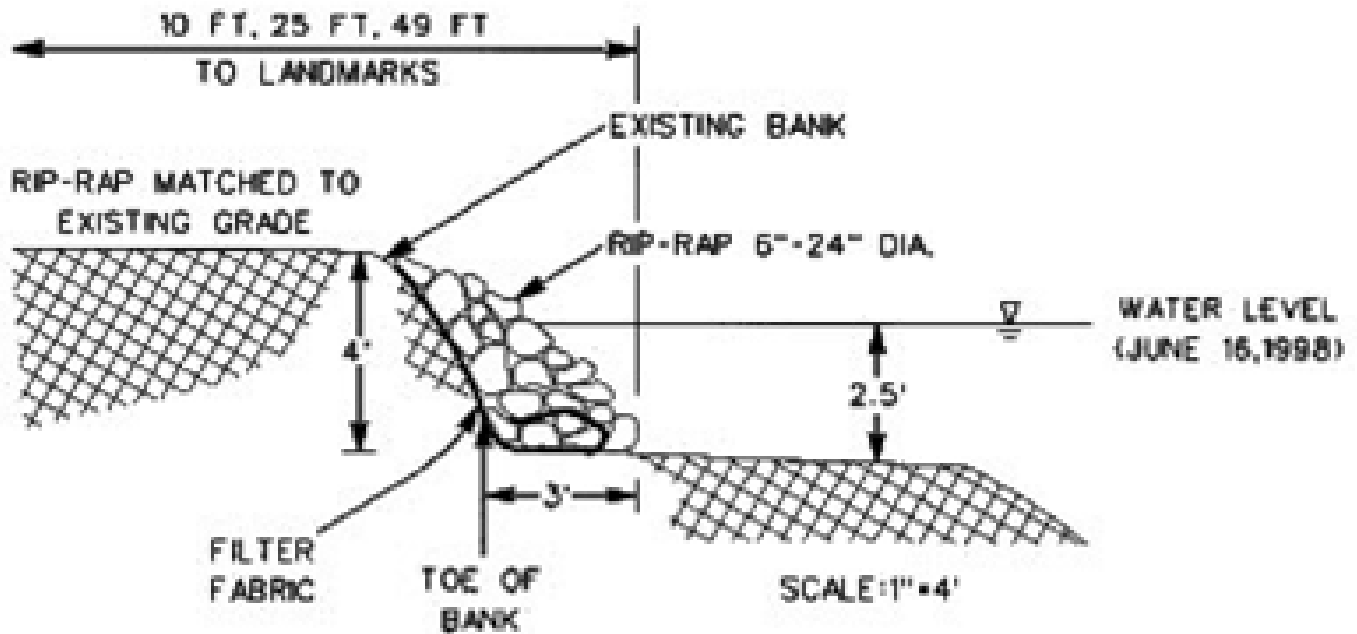
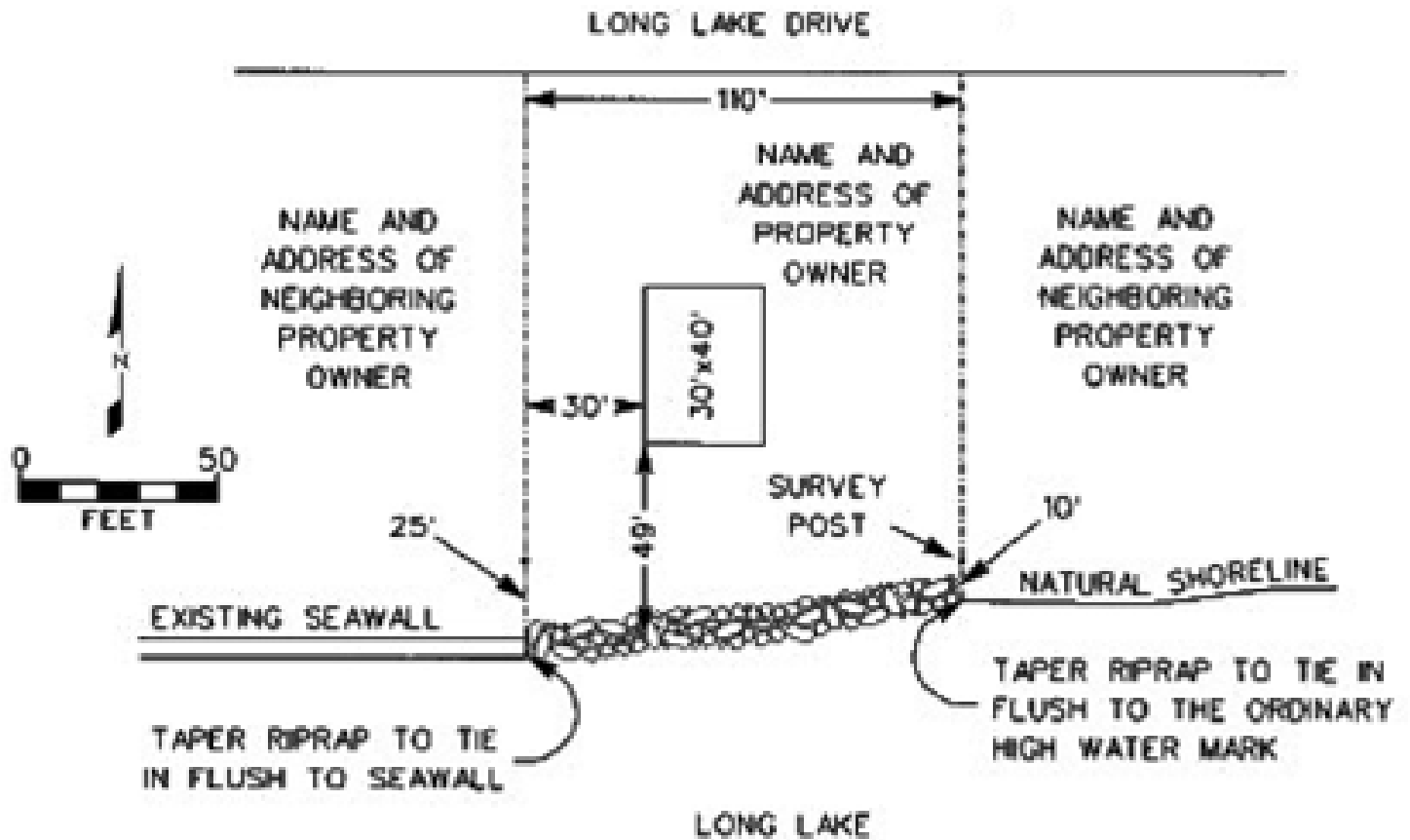


APPROXIMATELY 5000 CU. YD. WILL BE EXCAVATED  
AND THE DREDGE SPOILS WILL BE PLACED ON-SITE  
ABOVE THE 100 YR. FLOODPLAIN ELEVATION AND  
UPLAND OF REGULATED WETLANDS.

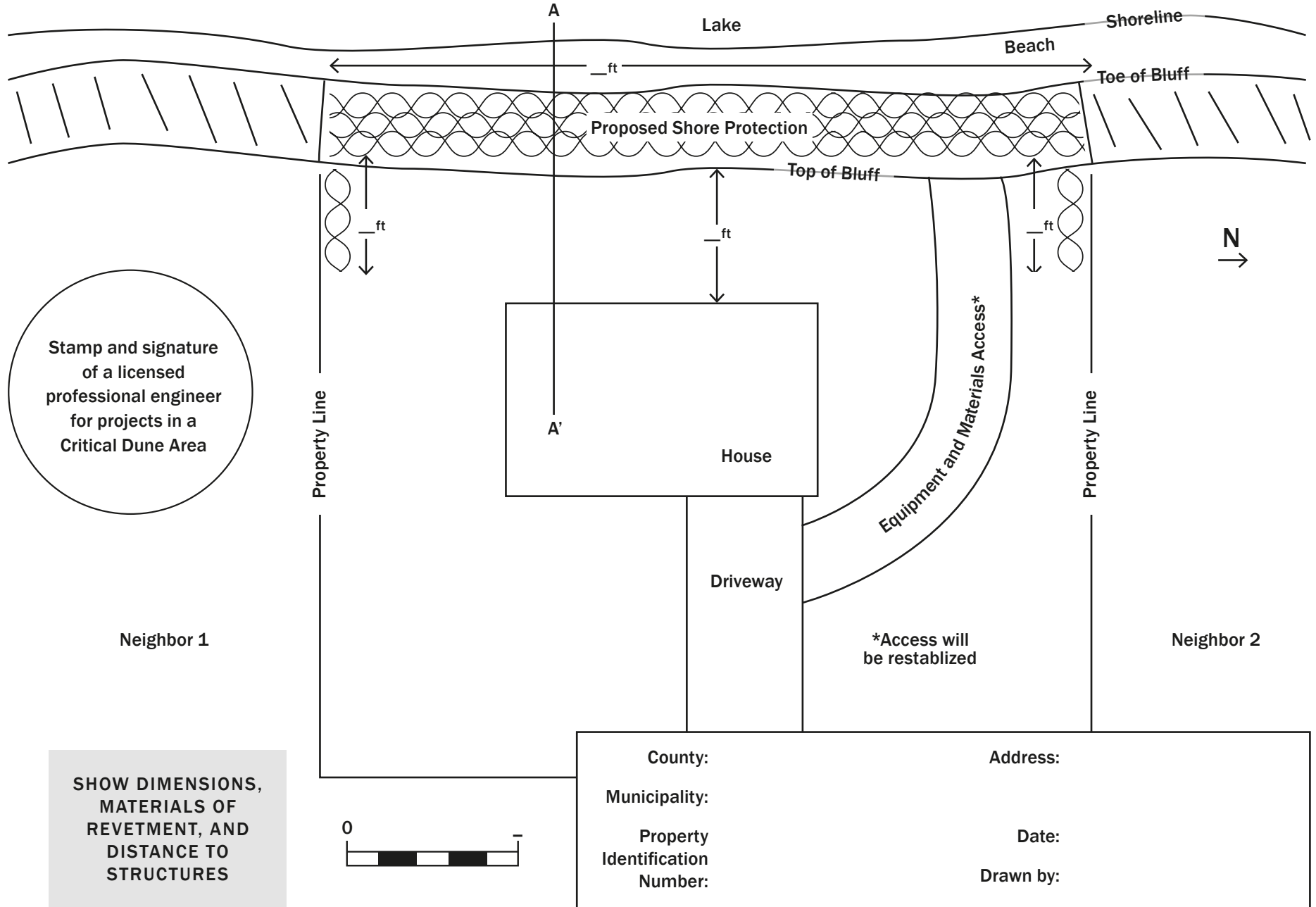


JOINT PERMIT APPLICATION SAMPLE DRAWINGS

RIPRAP



# Sample Drawing: Great Lakes Shore Protection During High Water (Overhead Site Plan)



# Sample Drawing: Great Lakes Shore Protection During High Water (Cross-section A-A')

Stamp and signature  
of a licensed  
professional engineer  
for projects in a  
Critical Dune Area

	Below EGLE Ordinary High Water Mark Elev. 580.5*	Below USACE Ordinary High Water Mark Elev. 581.5	Above EGLE Ordinary High Water Mark Elev. 580.5*
Armor stone fill	— C.Y.	— C.Y.	— C.Y.
Excavated sand to be spread over armor stone revetment	— C.Y.	— C.Y.	— C.Y.
Excavation volume	— C.Y.	— C.Y.	— C.Y.

Lake Michigan water levels

581.7 (IGLD85) 10/01/2019

USACE 581.5 (IGLD85)

EGLE 580.5 (IGLD85)

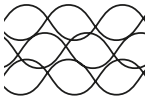
Lake

Top of revetment  
Elevation \_ft

Revetment structure  
(with dimensions and materials)

← \_ft →

House



= Rock riprap, \_\_\_\_\_ diameter

SHOW DIMENSIONS,  
MATERIALS OF  
REVETMENT, AND  
DISTANCE TO  
STRUCTURES



County:

Address:

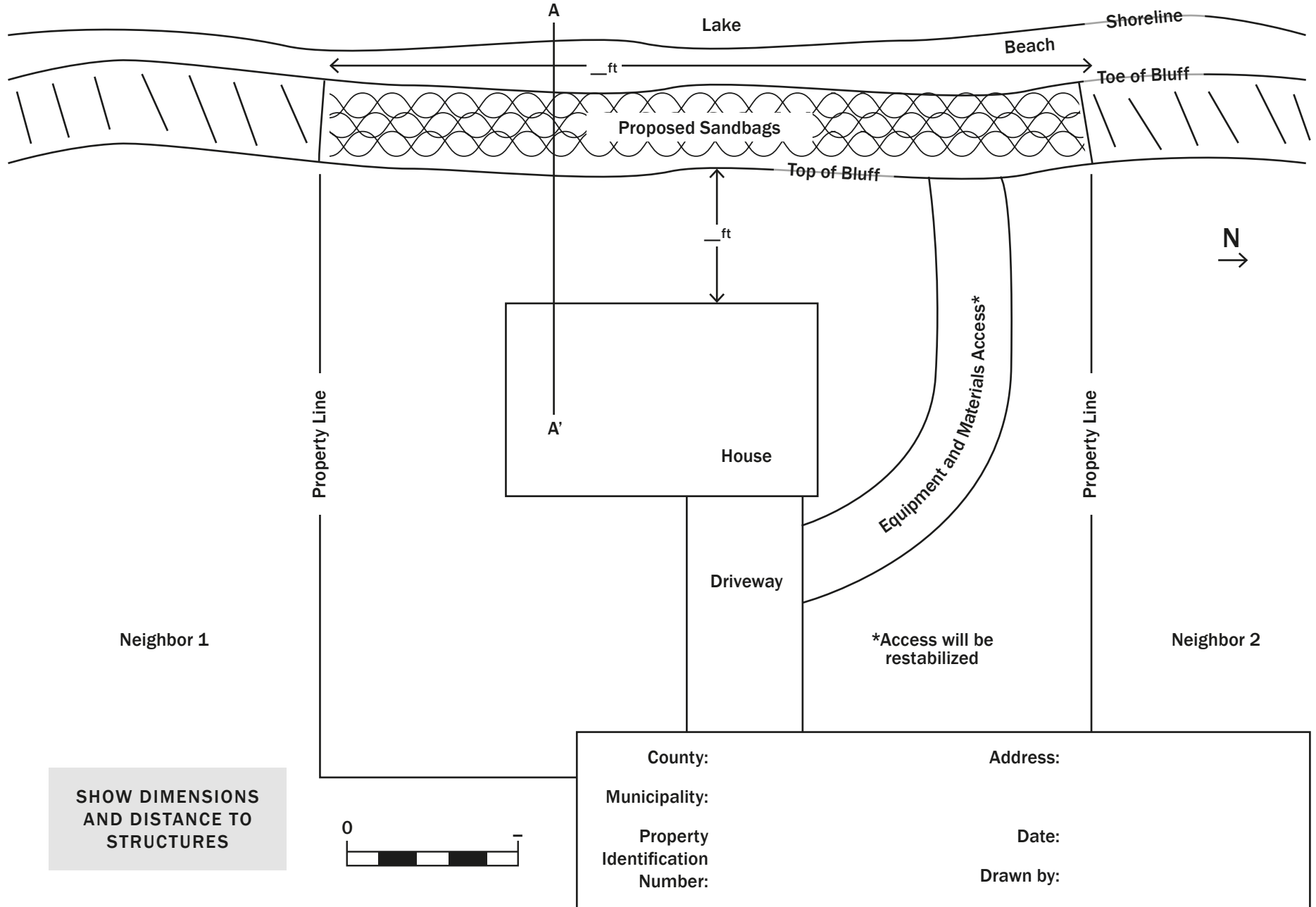
Municipality:

Property  
Identification  
Number:

Date:

Drawn by:

# Sample Drawing: Sandbags for Temporary Great Lakes Shore Protection During High Water (Overhead Site Plan)



# Sample Drawing: Sandbags for Temporary Great Lakes Shore Protection During High Water (Cross-section A-A')

	Below EGLE Ordinary High Water Mark Elev. 580.5*	Below USACE Ordinary High Water Mark Elev. 581.5	Above EGLE Ordinary High Water Mark Elev. 580.5*
Sandbag fill	__ C.Y.	__ C.Y.	__ C.Y.

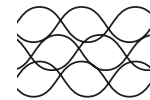
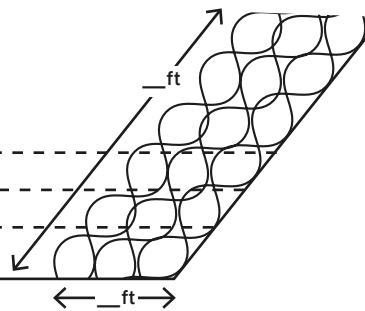
Lake Michigan water levels

581.7 (IGLD85) 10/01/2019

USACE 581.5 (IGLD85)

EGLE 580.5 (IGLD85)

Lake



= Sandbags, \_\_ ft x \_\_ ft x \_\_ ft, dimensions

SHOW DIMENSIONS  
AND DISTANCE TO  
STRUCTURES



County:

Address:

Municipality:

Property  
Identification  
Number:

Date:

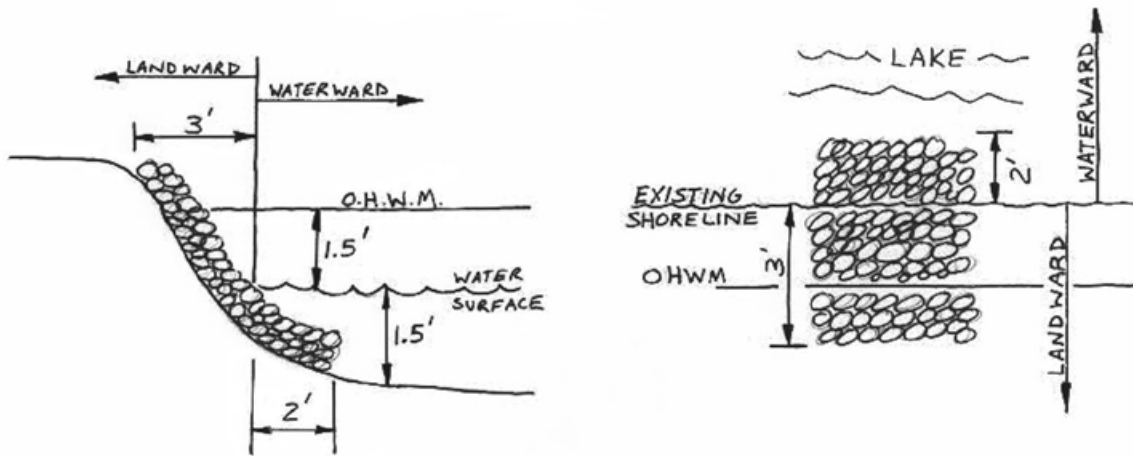
Drawn by:



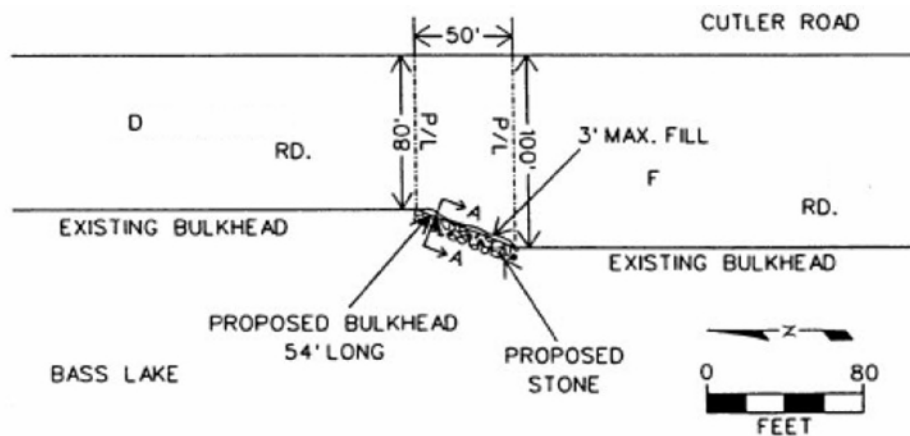
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

SHORE PROTECTION – MEASUREMENTS

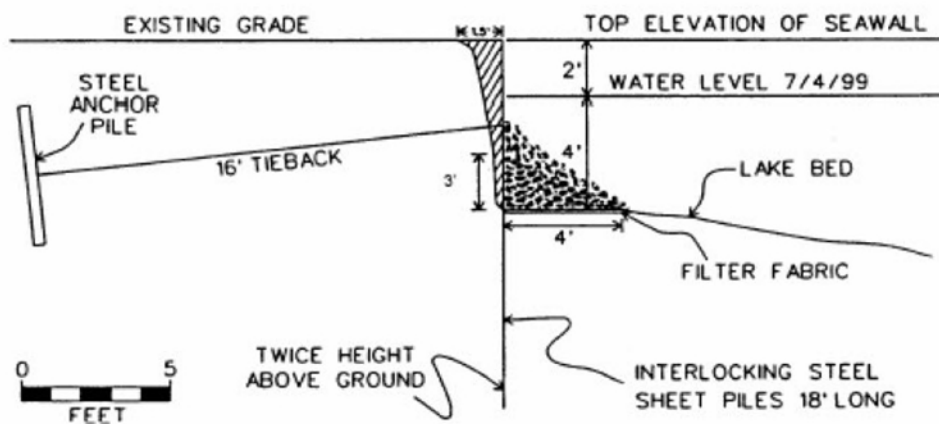
Landward – Waterward



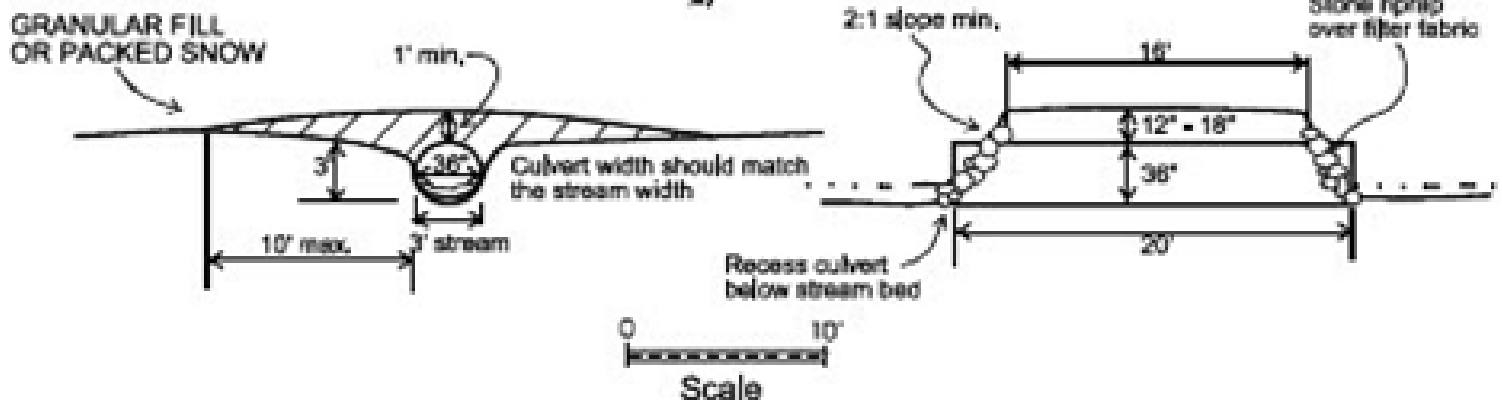
SHORE PROTECTION - SEAWALLS



SECTION A-A



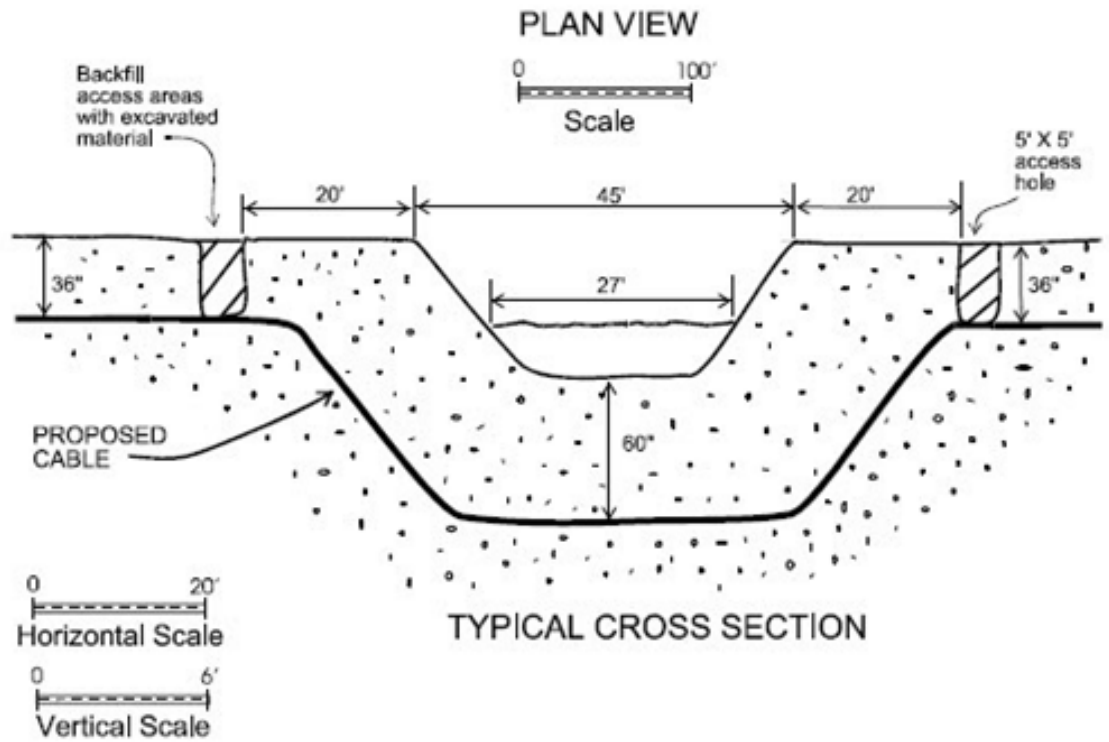
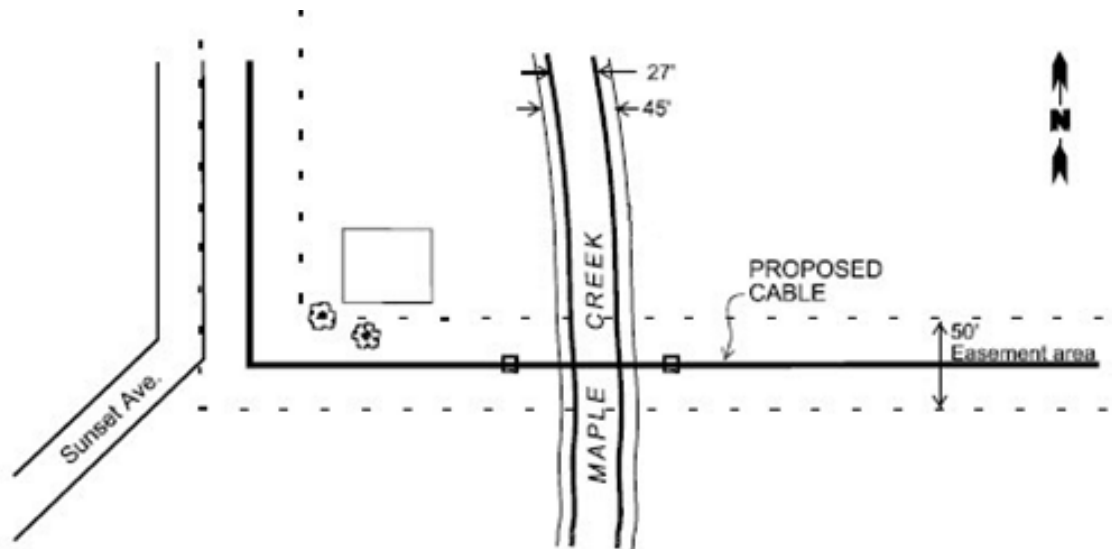
## Logging



# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## UTILITIES

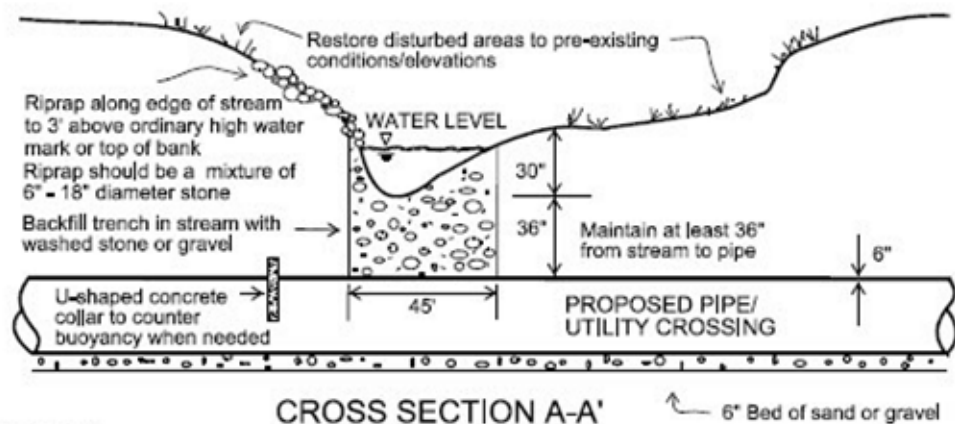
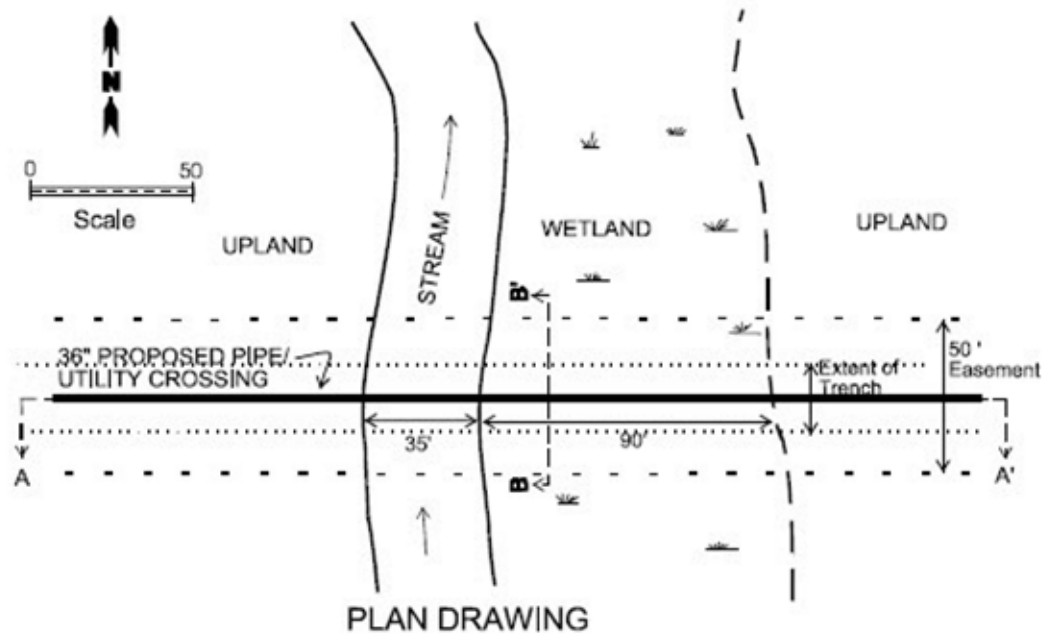
### Boring



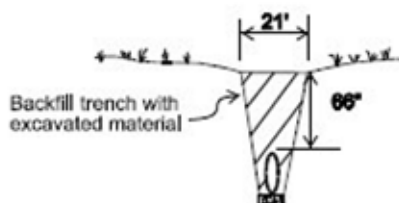
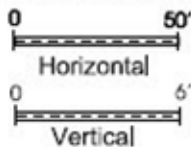
# JOINT PERMIT APPLICATION SAMPLE DRAWINGS

## UTILITIES

### Trenching



Cross Section Scale



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

WETLAND FILL

