## **BEFORE THE HEARING EXAMINER**

#### IN AND FOR THE COUNTY OF SAN JUAN

In re: Appeals of a SEPA Determination of Nons issued for Permit No. P.	A Mitigated ignificance (MDNS) SJ000-17-003	Appeal No. PAPL000-17-0010 (U.W.)		
UNIVERSITY OF WASHINGTON, Appellant,		Appeal No. PAPL000-17-0012 (Sundberg, et al.)		
KIMBAL SUNDBERG, et al., Appellants,		DECLARATION OF SALLY HAWKINS		
SAN JUAN COUNTY,	Respondent,			
ORCA DREAMS LLC,	Respondent.			

I, SALLY HAWKINS, declare under penalty of perjury pursuant to the laws of the State of Washington that the following is true and correct:

#### **Background**:

I was engaged by Kim Sundberg and Debra Clausen to prepare exhibits for their subject SEPA appeal to be used in the hearing at that appeal. Specifically, they engaged me to take publicly available aerial photographs of the subject property displayed with spatially correlated publicly available data sets of significance to the issues before the hearing examiner, as well as spatially correlated data recently published for which I was provided coordinates. With this data as a map basis, I was asked to display the information provided in the permit application submission of May 26, 2017, with its spatial relationship to the subject property as shown in the application drawings. I was also asked to draft up a profile of the project, its accuracy based on these same permit application drawings and superimpose a wave profile based on published buoy information showing wave heights during summer months.

I use the skills required to prepare documents of this type and nature on a regular basis in my professional career and am qualified to do so based on my education, training, and experience.

# **Applicable Education:**

Architectural Drafting Tutorial; 1983-1984: Steve Koppke (Planning Director), U of Idaho.
Autocad Tools and Customization class: Mc Niel and Associates, Seattle. 1989
Autocad 3D production drawing: Skagit College, Wa. 2000.
GIS Certification; 2007-2009: Everett Community College; Department of Geography
Certification Program with internships under SJ Co. GIS department (2008) and Friends of the
San Juans (2009)

Python programming for ArcGIS workshop. Peer Group Workshop. 2011.

# Applicable experience:

*Hand Drafting*: KSM planning and survey: 1986-1988. Survey and engineering drawing; field data collection; translation and drafting of field notes; interpreting property lines, and easements drafted from written descriptions; drafting engineering details.

*Professional CAD Contractor*: AutoCad: Computerized drafting for Architectural permit, construction, and design drawing. 1988-2016. Contracts with private residential clients as a designer for permit and construction of residential projects; production draftsman for residential designers; and for one year was employed by a Friday Harbor Landscape company in their Cad department developing plans for cost estimates. My Cad drawing experience includes Plans, elevations, sections, interior elevations, cabinetry detail, tile layout and detail drawings, field data collection with survey equipment, measuring tapes, sight levels and other manual approaches- for computerized drafting of site plans, and project profiles.

*Professional GIS Contractor*: ESRI ArcDesktop mapping software: Working with digital spatially related data shown in correlation with table data for analysis. GPS field collection of data for x-y entry into GIS format. I typically work as a GIS analyst team associate for various agencies, groups, or individual professionals who need the assistance of managing spatial data.

# Methods:

# Drafted information on Aerial Photo Exhibits 42, 43, 44, 45, 46:

- Software: ArcMap version 10.3.
- Working in a digital mapping file and with hard copy of the permit application, I used a 1:40 scale, and adjustable triangle to interpret the line shown on the dimensioned dock Plan-I determined that the projected line was an extension of the existing property line, I traced the property line on the Assessor's map digitally, then moved it out to the property corner as shown on the Assessor's Parcel map.
- I then used a "copy parallel 10 ft to the left" command to create the setback line.
- I placed the pier head at the convergence of the 11' contour line and the property lineas shown in the permit information.
- With an adjustable triangle I determined the approximate angle of the dock's relationship to the extended property line location.

- Using tools provided in the mapping software, I was able to create a dimensionally accurate image of the dock, ramp, and floats as defined in the permit.
- The final adjustment of the angle of this image was made by rotating from the pier head to a point 41 ft. from the setback line.
- All dimensional data for the dock assemblage was taken from the permit drawings. My effort was to replicate them as shown in these drawings. Any dimension lines related to this assemblage were created by copying a line parallel from the image, and then having the software calculate its length. These length attributes were then displayed as "labels" using the length attribute field. Distance between rocks shown on the infrared orthophoto were created by visually drawing a line between one rock formation and another.
- Again, the dimensions displayed are a result of using the calculated length created by the software-as a label for the line. Since this was an approx. +1 ft. tide, distances between rocks would decrease at a 0.0' tide and minus tides.

# Drafted Information on Exhibit 47, Proposed Dock Profile and Floats Study with Significant wave height Profile:

- Software: Autocad version 2006.
- The drawings of dock, ramp and float plan, elevation, and detail are drawn with strict drafting conventions for orthographic projections; all based on the 5/26/17 dock permit application construction dimension information.
- The sea bottom profile is drafted strictly to the bathometry dimensions and notes shown in the Dive Survey by Bobby Wells; as included in the permit application package.
- The boat profile was traced directly from a dimensionally scaled raster image of the Whaler 350 which my client suggested as fitting the description of the boat size the applicant intended to moor at this dock. The draft (depth under water) shown for the floats was included in the permit information; and for the boat, was included in the user's manual information. I attach that image here for reference.
- The crest and trough of the storm waves shown were based on NOAA buoy data tables showing significant wave heights between May and October. The height was halved at the 0.0' (MLLW) water height to make evaluating impact of minus tides straight forward. Once this data was drafted, it was possible to use the software to create accurate dimensions of grounding of the boat during a summer storm at a zero tide.

# Data Relied Upon:

# Availability of Public Data:

All Data Listed is available through SJC GIS department. Additional availability listed with specific citation.

## Juvenile Chinook Presence Probability:

Beamer, E. and K. Fresh, April 2012, Juvenile Salmon and Forage Fish Presence and Abundance i n Shoreline Habitats of the San Juan Islands, 2008 -

2009: Map Applications for Selected Fish Species.

Link: <a href="http://skagitcoop.org/wp-content/uploads/Beamer\_Fresh\_2012\_Final1.pdf">http://skagitcoop.org/wp-content/uploads/Beamer\_Fresh\_2012\_Final1.pdf</a>

#### **Eelgrass:**

Friends of the San Juans. 2004. Eelgrass Mapping Project for San Juan County Washington. Fi nal Project Report to the Washington State Salmon Recovery Funding Board. In partnership with the University of Washington and

the Washington Department of Natural Resources. Friday Harbor, WA.

Availability:

Helen Berry, Habitat Program, Department of Natural Resources.

Friends of the San Juans.

#### Forage Fish Spawn Habitat:

Friends of the San Juans. 2004. Forage Fish Spawning Habitat Assessment and a Summary of Protection

and Restoration Priorities for San Juan County Washington. Final Project Report to the Washington State Salmon Recovery Funding Board. In partnership with the SJC Marine Resources Committee and the Washington Department of Fish and

Wildlife. Final Project Report. Friday Harbor, WA. Washington Department of Fish and Wildlife. 2012. Forage fish spawning habitat maps. Olympia WA.

Friends of the San Juans forage fish spawn habitat geodatabase. 2016. In partnership with the WA Department of Fish and Wildlife.

Availability:

Philip Dionne, Habitat Program, Department of Fish and Wildlife.

Friends of the San Juans

#### Kelp:

Friends of the San Juans. 2007. Bull kelp mapping project for San Juan County Washington. Final Project Report to the Washington State Salmon Recovery Funding Board. In partnership with the Washington Department of Natural Resources and the University of Washington. Final Project Report. Friday Harbor, WA. Availability:

Helen Berry, Habitat Program, Department of Natural Resources. Friends of the San Juans.

# Fish Use Shoreform and Fish Use Region:

PIAT II: SJC Salmon Recovery Prioritization

Whitman, T, MacLennan, A. Schlenger, P., Rot, B. and Hawkins, S. 2017.

Strategic salmon recovery planning for San Juan County Washington: the pulling it all together (PIAT)II project.

Prepared by Friends of the San Juans, Coastal Geologic Services and Confluence Environmental for the Lead Entity for Salmon Recovery, San Juan County Environmental Services. Friday Harbor, WA Availability: Byron Rot, Environmental Services, San Juan County. Friends of the San Juans

#### Assessor's Tax Parcel Map:

Taxmap\_join 9/9/16: Provided by SJC Assessor's office. Availability: San Juan County Assessor

# Land Contours:

SJC LiDar derived contour files. 2015 LiDar.

# Data used as foundation for Exhibit's Computerized Drafted Information:

#### **Eelgrass Biodiversity Surveys and Eelgrass Disease Surveys-2016:**

False Bay Seagrass Report: Transect x-y coordinates for beginning points, lengths of transects, spacing, and other locational data: provided by and reviewed with Olivia Graham; University of Washington Friday Harbor Labs Biodiversity Survey Associate.

#### **Project Site Delineations:**

Waterfront Construction Inc. (Project Designer) dock permit application submission as revised 5/26/2017.

x-y coordinates for warning buoy, projected orientation line, setback, locational data for pier head, dimensions, and construction details shown for dock, ramp, floats, depth of float tub waterline, and ocean bottom profile.

# Significant Wave Height Tables in Meters:

NOAA data for buoy 45088, available at: http://www.ndbc.noaa.gov/station\_page.php?station=46088

#### **Boat Representation:**

Whaler 350 Users' Manual in digital form. Scaled boat plan and profile used in Autocad for accurate tracing of images. Waterline determined from published draft dimension. See attached.

# **Digital Aerial Imagery Data:**

#### **Aerial Photos:**

Project Area and Greater False Bay True Color Orthophoto: SJC flight 2016.

Project Area Oblique: Dept. of Ecology

Available online at Washington State Coastal Atlas: Date on image used to determine actual tidal data shown in photo with NOAA verified tides table.

Project Area Infrared Orthophoto: Dept. of Natural Resources flight 2006.

Dept. of Transportation tables for time of flight used to determine actual tidal data shown in photo with NOAA verified tides table. https://tidesandcurrents.noaa.gov/waterlevels.html?id=9444090

Image Inserts: NOAA Chartlette: NOAA Navigational Chart # 18434 **Orca Whale:** "Orca Off False Bay" provided by San Juan Preservation Trust.

SIGNED AT FRIDAY HARBOR THIS <u>20<sup>th</sup></u> day of DECEMBER, 2017.

Sally L. Hawkins

Section 2 • General Information



# **Specifications & Dimensions**

(Specified measurements are approximations and are subject to variance.)

Overall Length	35' 6"	10.82	m	Maximum Engine Weight	2,100 lb	s. 953	kg
Bridge Clearance				Maximum Weight,	5,071 lbs	s 2300	kg
- with hardtop	8' 10"	2.70	m	(passengers, engine(s),	gear²)		
- with optional radar	9' 11"	3.02	m	Persons	14		
- top of anchor light	10' 9"	3.28	m	Maximum Horsepower	1050 HF	° 783	k₩
- w/optional upper contro	115' 0°	4.57	m	Minimum Horsepower	750 HP	559	kw
Beam	10'10"	3.30	m	Fuel Capacity:	400 gal.	1514.16	L
Draft, (boat only <sup>1</sup> )	24.5"	0.62	m	Water Capacity	45 gal.	170.34	L.
Weight (dry, no engine)	11,000 lbs.	4990	kg	Waste Capacity	7 gal.	26	L
Swamped Capacity	5,000 lbs	2268	kg				

<sup>1</sup> Optional equipment and loading of the boat will affect the draft measurements. Follow the recommendations regarding the maximum amount of weight your boat can safely carry.

<sup>3</sup> Exceeding this weight will affect the boat's performance. DO NOT Exceed the weight listed.

WHALER