

Fishermen's Terminal Net Sheds Code Compliance Improvements

June 5, 2012



Port
of Seattle

Where a sustainable world is headed.™

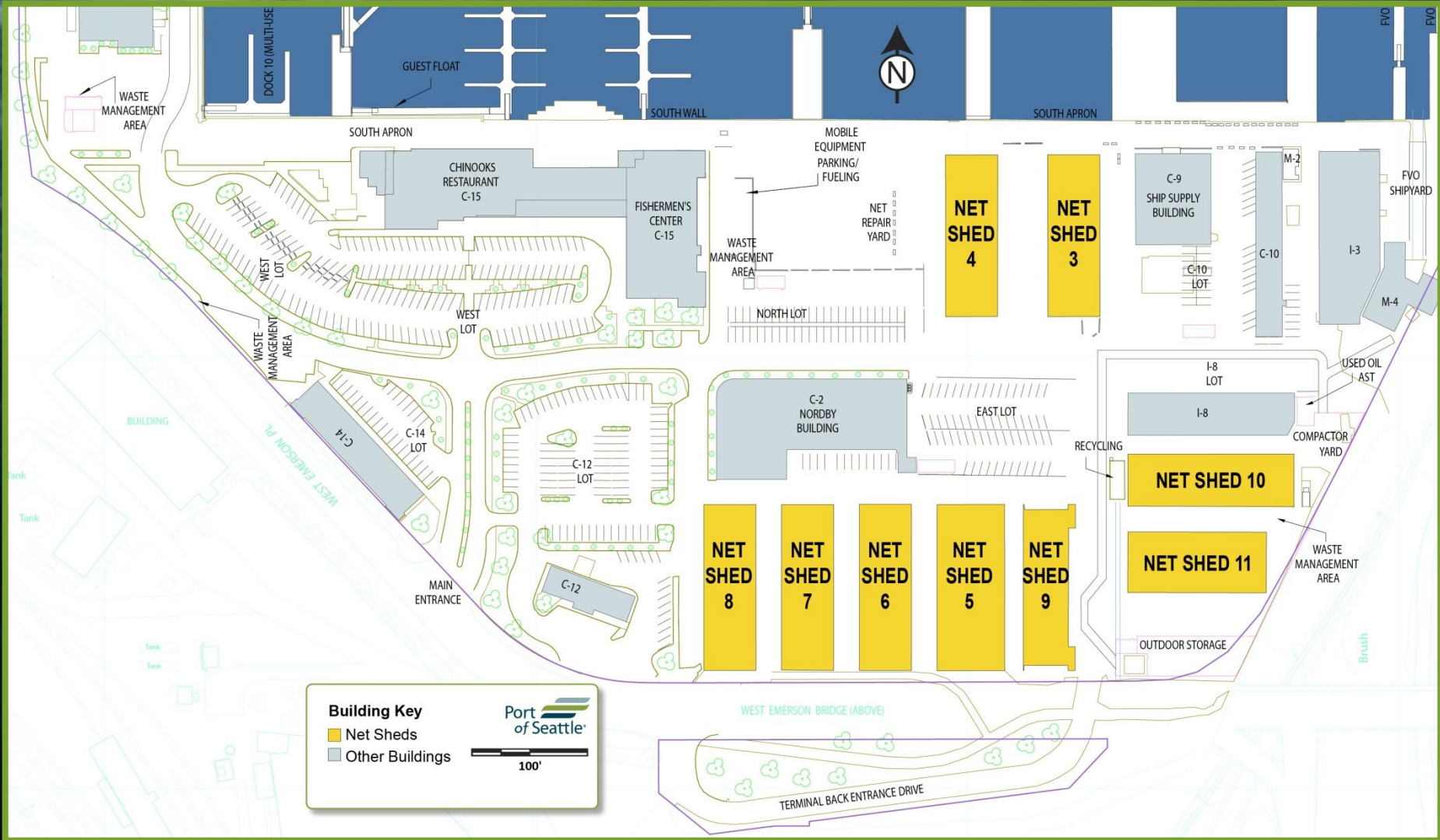
Net Repair Yard – May 2012



Overarching 25-Year Planning Process

- Initial steps: Asset Condition Assessment (2008), Customer Outreach (2009), Net Shed replacement analysis (2009)
- Fundamental planning assumption that net sheds are critical to FT fishing customers
- Studied several alternatives for providing net shed use (2009)
- Significant constraints bear on the net shed planning process:
 - Net sheds and open storage uses, while critical to the fleets, are low-revenue uses
 - Soils are poor for construction, raising new construction costs
- Development scenarios include demolition of two net sheds
 - Net sheds 3 & 4 *or* net sheds 7 & 8
 - These four net sheds will be phased at the end of the code compliance construction to allow for development decisions to be made.

Fishermen's Terminal Net Shed Locations





Sample of Existing FT Net Shed Lockers Interior

Net Shed Storage Commodity Material Examples

Group A Plastics

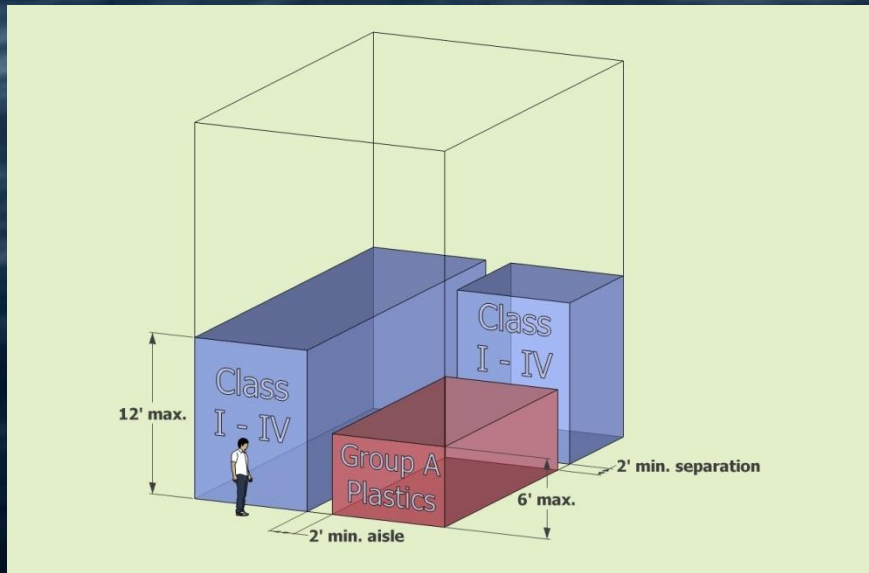
- Wax (candles, wax paper)
- ABS plastic (piping, electrical enclosures, protective headgear, and carrying cases)
- Foam rubber (cushioning and clothing/shoe inserts)
- Polystyrene plastic (styrofoam, plastic cutlery, and computer monitor cabinets)
- Polyethylene plastic (garbage bags, wraps, bottles, and electrical wire insulation)
- Polypropylene plastic (nets, bags and bottles)
- Polyurethane plastic (coatings, footwear, and equipment components)
- Polyvinyl chloride plastic (>15% plasticized) (electrical cable insulation)
- PET plastic (soft drink bottles)
- Rubber tires

Class I – IV

- Wood
- Cardboard
- Metal
- Natural fibers
- Nylon (clothing & netting)
- Polycarbonate plastic (compact discs and eyeglasses)
- Phenolic plastic (electrical insulators and automotive equipment components)
- Silicone (kitchenware, sealing membranes, and adhesives)
- Fluoroplastics (Teflon films and equipment components)
- Polyvinyl chloride (<15% plasticized) (piping)
- Melamine (utensils, bowls, & furniture laminate)

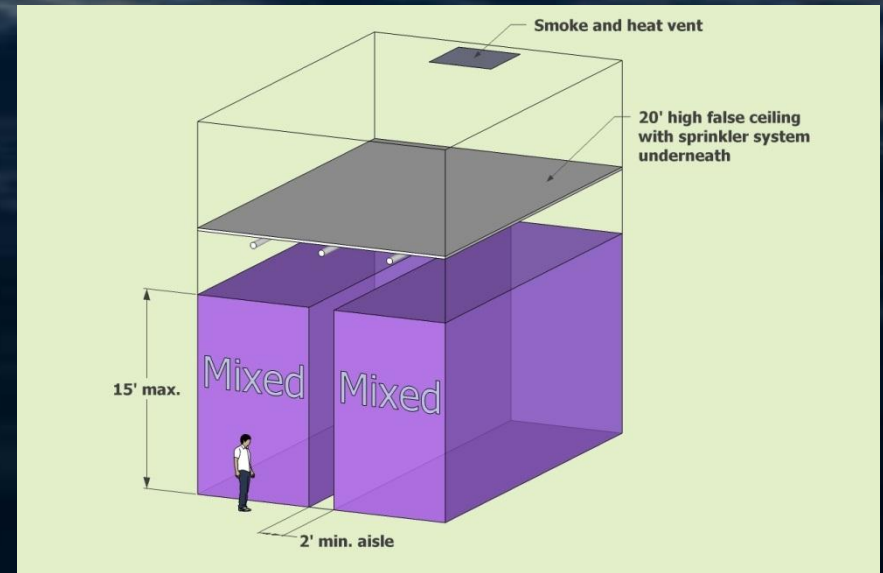
FT Net Sheds Code Compliance

- Net sheds vary in age, size, construction, and layout
- Fishermen's storage needs have changed over time
- Port has been working with tenants since 2006 on storage/usage policies
- Port cited by City of Seattle Fire Department in 2009 for fire & building code violations
- Port has since worked closely with SFD and DPD to address City's concerns
- Staff implemented a Pilot Storage Program and other improvements
- Port hired a fire protection consultant to interpret codes and determine code compliant storage options
- City concurred with four identified options and staff completed initial evaluation
- Net sheds must be improved to achieve code compliance
- Final project design to be approved by the City



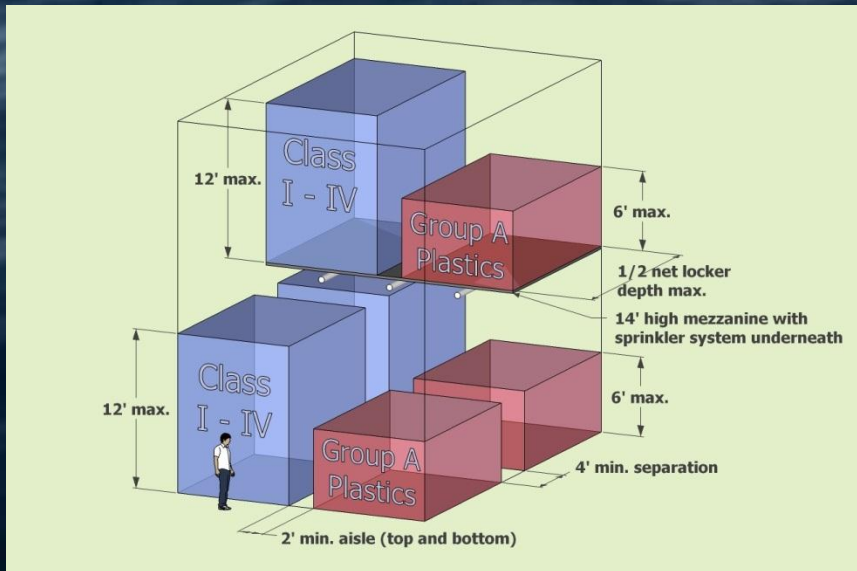
Option 1

Non-high-piled Storage – Single Level
Preliminary Est. Project Cost =
Approx. \$2,000,000



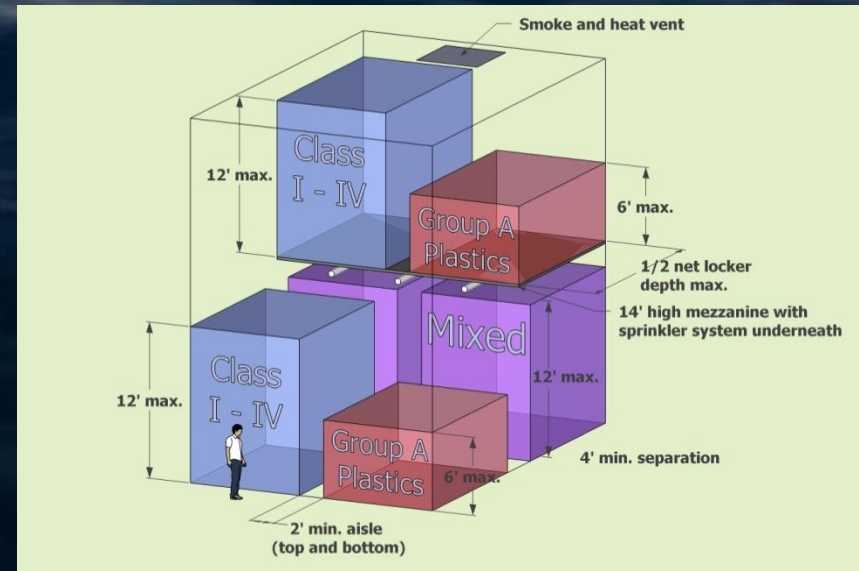
Option 3

High-piled Storage – Single Level
Preliminary Est. Project Cost =
Approx. \$6,000,000



Option 2

Non-high-piled Storage – Multi-level
Preliminary Est. Project Cost =
Approx. \$8,700,000



Option 4

High-piled Storage – Multi-level
Preliminary Est. Project Cost =
Approx. \$9,700,000

Example Net Locker Gross Storage Volumes

Typical gross storage volume within each Net Shed #10 locker:

Existing Gross Volume (CF)	Option 3 Gross Volume (CF)	Option 1 Gross Volume Range (CF)	Options 2 & 4 Gross Volume Range (CF)
12,600	8,100	3,240 – 6,480	4,560 – 7,320

- Gross volume ranges for Options 1, 2, & 4 reflect limits between 100% Group A Plastics (6' max storage height) and 100% other commodities (12' max storage height) being stored. Actual gross storage volume will fall somewhere between these limits.
- Note: Percentage of existing gross volume utilized by a typical tenant in Net Shed #10 is approximately 15%-30%.

Option 1

- Provides the lowest potential gross storage volume among four proposed options - approximately half the gross volume of Option 3.
- Gross storage volume provided likely to be inadequate for typical customer's needs when the majority of commodities being stored are Group A Plastics.
- Does not match existing storage conditions of high-piled mixed commodities
- Requires segregation of net shed contents between various plastics and other types of commodities and 2 feet minimum separation between them.
- Requires storage master plan within each net shed to ensure contents are separated per code between adjacent net lockers.
- Restricts storage heights i.e. plastics at 6 feet maximum; other commodities 12 feet maximum.
- Places Port in the role of enforcement agency to ensure contents are code compliant on perpetual basis. Estimated additional staff cost may be up to \$80,000 per year depending on the amount of staff time required.
- Requires lowest cost of building improvements among four storage options.
- Required improvements can be completed in a single net locker at a time.

Options 2 and 4

- Gross storage volume provided may be inadequate for typical customer's needs when the majority of commodities being stored are Group A Plastics.
- Requires highest cost of improvements among storage options.
- Does not match existing storage conditions of high-piled mixed commodities.
- Requires segregation of net shed contents between various plastics and other types of commodities and 2 feet minimum separation between them.
- Requires storage master plan within each net shed to ensure contents are separated per code between adjacent net lockers.
- Restricts storage heights i.e. plastics at 6 feet maximum; other commodities at 12 feet maximum.
- Places Port in the role of enforcement agency to ensure contents are segregated & code compliant on perpetual basis. Estimated additional staff cost may be up to \$80,000 per year depending on the amount of staff time required.
- Construction of required improvements will necessitate vacating multiple net lockers at a time within each net shed.
- Partially replaces existing tenant constructed lofts, where they exist, with code compliant 2nd level mezzanine structures

Option 3

- Provides greatest guaranteed amount of gross storage volume among four proposed options i.e. roughly twice the amount of Option 1 average volume.
- Does not require segregation and separation of net shed contents; most closely matches current use by fishermen considered to be high-piled, mixed commodities.
- Does not require storage master plan for each net shed.
- Allows for maximum storage height of 15 feet for all commodities.
- Port not required to be the enforcement agency to ensure contents are segregated & comply w/codes.
- Construction of required improvements will necessitate vacating multiple net lockers at a time within each net shed.

Port Risk Management Perspective

Option 1

- Port staff performing “compliance oversight” must be trained to identify and classify all the commodities.
- The Port must create policies, procedures and penalties applicable to tenants whose storage is out of compliance with the code requirements, including eviction.
- If the Port does not provide compliance oversight, the Port’s liability increases. The Port will be held to a higher degree of responsibility.
- If tenants don’t comply with the Port’s storage policies, regulations and procedures, and the Port doesn’t act, the Port creates its own liability by not enforcing its own policies.
- While existing overhead sprinklers will control the fire if storage is in compliance with code, overall fire damage will be greater in Option 1 because it is likely that fire, smoke and water damage will spread to areas beyond the net shed where the fire started.

Port Risk Management Perspective

Option 3

- Compliance oversight is not as much a burden for Port staff in Option 3. Training of Port staff is much simpler.
- The Port's policies, procedures and penalties for Option 3 will be simpler to understand and enforce, but the Port still must ensure that tenants comply with storage requirements to minimize liability. Eviction is still a possibility.
- The fire protection system in Option 3 will confine and reduce overall fire damage and limit smoke and water damage in areas beyond the specific net shed where the fire started.

Why Option 3 is being recommended:

- Provides greatest guaranteed amount of gross storage volume – on average, twice as much as Option 1 and one third more than Options 2 & 4 – due to mixed commodities advantage
- Most closely matches fishermen's current use (“high-piled” mixed commodities) of net lockers
- Allows greatest efficiency and flexibility in meeting customers’ storage needs
- No required segregation and separation of stored commodities
- No challenging requirements or perpetual cost for staff and customers to maintain and enforce the segregation and long-term code compliance.
- No need for overall building master planning i.e. individual locker configurations are independent of one another
- Least long-term code compliance liabilities and costs

Next project steps:

2012

- Complete logistics planning and construction phasing
- Perform net sheds improvements design & permitting

2013

- Complete net sheds improvements design & permitting
- Complete final construction cost estimate & bid documents
- Return to Commission for construction funding request
- Advertise for bids and start construction of improvements

2014 - 2015

- Complete improvements construction for seven to nine buildings per final FT 25-Year Plan