Housing Authority of Skagit County (HASC) Family Housing Project
Activity in a 100-Year Floodplain and Wetland Scoping Document

Skagit County, under a United States Department of Housing and Urban Development (HUD) 24 CFR part 58 review associated with the Project Based Rental Assistance program, has determined that the HASC Family Housing Project is located in the 100-year floodplain, and has type F stream and a small isolated Class III wetland present on the southeast portion of the proposed action site. Skagit County will be identifying and evaluating practicable alternatives to locating the action in the floodplain, or potentially impacting the floodplain, stream or wetland as a result of the proposed action, as required by Executive Orders 11988 and 11990, and in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management and Protection of Wetlands. The following document summarizes the initial scoping investigation and preliminary findings.

Project Information

Project Name: HASC Family Housing

Grant Recipient: Housing Authority of Skagit County

Responsible Entity: Skagit County

Certifying Officer Name and Title: Shelley J. Kjos, Housing Resource Coordinator
Skagit County Public Health

Direct Comments to: Shelley J. Kjos, Housing Resource Coordinator
Skagit County Public Health

Preparer/Consultant: Peggy Williamson, Fulcrum Environmental Consulting, Inc.

Description of the Proposed Action

The Housing Authority of Skagit County (HASC) proposes to develop approximately 50 affordable family housing units at 4100 East College Way in Mount Vernon, Washington adjacent to the existing Mount Baker Meadows 20-unit farmworker complex operated by HASC. The project will redevelop two former greenhouse/nursery parcels consisting of approximately 4.58 acres located within the boundaries of City of Mount Vernon into a family housing complex. The proposed action will require two to five feet of fill be imported to approximately 3.4 acres of the site that will be disturbed by redevelopment to raise the foundation and building floor elevations above the 100-year base flood elevation. The proposed action will not directly impact the Type F stream, or the small isolated and common Class III wetland located in the southeast portion of the site. A Managed Ecosystem Alternative approach has been designed that will reduce the standard stream and wetland buffers, implement on-site buffer restoration and enhancement measures, and pay into the City's Critical Areas Management Fund.

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Yakima, Washington 98901
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The site is currently zoned R-4, Multifamily Residential. Properties to the west consist of multifamily residence. Properties to the north, east, and south consist of single-family residence. See attached conceptual *Site Plan* for the *HASC Family Housing*, dated August 4, 2020 and authored by Environmental Works.

Proposed Action Purpose and Need

Mount Vernon has a severe housing crisis with very low vacancy rates and few options for low income households. The HASC Family Housing project purpose is to provide stable, affordable housing to farmworkers and extremely low-income people with disabilities and that additionally gives residents a sense of connection to the larger community and can be constructed within the project budget.

Project Location Relative to Floodplains, Streams and Wetlands

According to the attached *Flood Insurance Rate Map Panel Number 530158 0001 B, effective January 3, 1985* the proposed action site is in the 100-year floodplain and is designated with Flood Zone A7. To raise the elevation of the new building foundation floors, the proposed action intends to import approximately two to five feet of fill to the approximate 3.4 acres of the site that will be disturbed during development. The *Technical Memorandum – Conceptual Hydraulic Modeling for 4100 E College Way, Mt. Vernon, WA Housing Authority of Skagit County,* dated September 26, 2019 determined that there was no difference (greater than 0.01 ft) between the Base Flood Elevation (BFE) and the proposed action.

According to the National Wetlands Inventory Map surface waters and wetlands were identified on the proposed action site, and on adjacent parcels. See attached Figure 1. The *Preliminary Jurisdictional Determination – Summersun Greenhouse,* dated April 2018 and authored by Cardno identified College Way Creek, a Type F stream, and an unnamed Class III wetland, located on the southeastern portion of the proposed action site. Additionally, a second Type F stream (Trumpeter Creek) is located north of the site, and a Class II wetland is located to the northeast. The *Steam & Wetland Study with Managed Ecosystem Alternative & Conceptual Enhancements Plan,* dated August 14, 2020 and authored by Bachman Environmental, LLC stated that direct impact to the critical areas (stream and wetland) would be avoided altogether and that the City of Mount Vernon's Managed Ecosystem Alternative approach has been designed that will reduce the standard buffers, implement on-site buffer restoration and enhancement measures, and pay into the City's Critical Areas Management Fund. See attached *Site Plan Buffer Buy Down* for the *HASC Family Housing Project*, dated August 4, 2020, and authored by Environmental Works and *Critical Areas & Conceptual Enhancement Plan*, dated August 14, 2020 and authored by Bachman Environmental, LLC.

Under the proposed action, as a portion of site preparation grading work an approximate total of 116,000 square feet (sf) of impervious existing surface will be removed. The *Conceptual Stormwater Report for Housing Authority of Skagit County Family Housing,* (CSW Report) report dated August 11, 2020 and authored by Harmsen identified two existing drainage basins for the site: one that flows to the northeast Class II wetland and one that flows north to Trumpeter Creek (Type F stream). Except for two catch basins located in the southern driveway that appear to discharge into a grassy area above College Way Creek, the

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exiting site impervious surfaces have no method of stormwater discharge treatment but rather sheet flow to the offsite northeast Class II wetland, or north to Trumpeter Creek.

The proposed action will result in a total of 74,478 sf of new impervious surfaces being installed (buildings, sidewalks, vehicle access and parking), a reduction of approximately 35% of total impervious surfaces over current site conditions. The conceptual stormwater discharge as designed maintains stormwater flow from the two drainage basins. Stormwater sourced from the buildings, lawn, and interior sidewalk areas (non-pollution generating) will be routed through spreader bars to the northeast Class II wetland. Vehicle access and parking areas (PGIS) stormwater discharge will be routed to a detention pond on the north portion of the site that incorporates engineered wetland treatment and controlled flow discharge to Trumpeter Creek via a rock spreader pad. See attached *Conceptual Storm and Grading Plan* for the *HASC Family Housing* project, dated August 14, 2020 and authored by Harmesen.

Practicable Alternatives Being Considered

The HASC considered the following alternatives in selecting the proposed action. The HASC project selection criteria are as follows:

1. The site is within the boundaries of the City of Mount Vernon.
2. The site is currently zoned for residential use or could be rezoned for residential use.
3. Is large enough for an approximate 50-unit affordable housing complex.
4. Is connected to other HASC housing such that a sense of community can be achieved between the residences.
5. The project can be completed within the $15.5 million budgeted total project costs.

No Action Alternate: Under the no action alternative the 50-unit affordable housing complex would not be constructed. Although no new construction would occur in the 100-year floodplain and impact to the stream and wetlands would not occur, no new stable affordable housing would be created for farmworkers and extremely low-income people with disabilities that also gives residents a sense of connection to the larger community. The no action alternate does not meet the selection criteria.

Proposed Action Alternate: Under the proposed action alternative the 50-unit affordable housing complex would be constructed at the 4100 East College Way site, additional affordable housing stock would be created within the boundary of the City of Mount Vernon for alleviating the very low vacancy rates. Approximately two to five feet of fill at a cost of approximately $530,000 would be imported to approximately 3.4 acres of the site to raise the buildings foundation floor elevations above the base flood elevation. The estimated cost of site fill combined with other site grading and foundation work was within the budgetary estimate for project construction. The stream and wetland buffers would be established consistent with the City of Mount Vernon criteria and would be restored and enhanced. The proposed site is located adjacent to an existing HASC housing complex and has been designed for residents of both developments to access common features such as children's play areas and community buildings. The site meets all the selection criteria.

Construct Elevated Building Foundations (not included in the EA as it does not meet the selection criteria): Under this action the building floor elevations would be constructed approximately four to five feet above

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the surrounding ground elevation using taller foundations or piers so that the floor elevations will be above base flood level. The elevated floor elevations would require the addition of access stairs and landings at the front and back entrances for the approximate 38 units designated farmworker units. Lifts, ramps, or elevators that meet the Americans with Disabilities Act would need to be constructed for the 12 units designated for people with disabilities. Additionally, all mechanical building systems and utilities would need to be flood-proofed to prevent damage during a flood event. The estimated cost to construct elevated buildings, including steps and landings; lifts, ramps, or elevators; and to flood proof all the building mechanical systems and utilities is approximately $2 million dollars. In combination with other site grading and foundation work cost exceeded the budgetary estimate by approximately $1 million dollars. This alternate did not meet the selection criteria because the project could not be completed within the project budget of $15.5 million dollars.

Construct Affordable Housing at Freeway Drive and Kincade (not included in the EA as it does not meet the selection criteria): HASC had considered potentially constructing affordable housing for farmworkers and extremely low-income people with disabilities at the former Alf Christianson Seed Company site located at in the vicinity of Freeway Drive and Kincade in Mount Vernon. The site does not have a stream or wetland but during the preliminary scoping phase the site was determined to be in the 100-year floodplain and had environmental contamination, traffic concerns, vandalism, freeway and railroad concerns, and would require rezoning for residential housing which the City of Mount Vernon did not support. This alternate did not meet the selection criteria because it is not currently zoned for residential use and the City of Mount Vernon was not supportive of a rezoning to residential use.

Construct Affordable Housing on Vacant Land in the 2700 Block of East College Way (not included in the EA as it does not meet the selection criteria): HASC had also considered potentially constructing affordable housing for farmworkers and extremely low-income people with disabilities at a strip of vacant land located south and adjacent to East College Way in the general vicinity of the 2700 block (no site address assigned). During the preliminary scoping phase, it was determined that the site is not located within the 100-year floodplain but would be predominately delineated as wetlands without sufficient remaining land mass to construct a 50-unit affordable housing complex. This alternate did not meet the selection criteria because an approximate 50-unit housing complex could not be constructed without direct impact to the wetlands.

Potential Direct or Indirect Impacts to the Floodplain, Stream or Wetlands Being Considered

Direct impact to the floodplain includes converting about 3.4 acres of the 100-year floodplain to an area outside the floodplain. This impact is permanent. The *Skagit River Basing Skagit River Flood Risk Management Feasibility Study Final Report – Hydrology Technical Documentation,* dated August 2013 and authorized by the US Army Corps of Engineers identified the proposed action site as being within the Lower Skagit River drainage basin, an area of approximately 368 square miles, and more specifically the Nookachamps sub-drainage basin of 71.6 square miles. The Nookachamps sub-drainage basin is differentiated into the east and west forks. The proposed action site is located along the western margin of the Nookachamps west fork drainage which is characterized by low gradient stream and peak flows significantly attenuated by floodplain storage and by routing through several lakes. As the site is not within the main flow path of the Skagit River, it is not expected to affect conveyance in the river, nor is the size of the site significant enough to substantially decrease the flooded volume within the Nookachamps west

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fork floodplain. The conceptual hydraulic analysis determined that there was no difference (greater than 0.01 ft) between the Base Flood Elevation (BFE) and the proposed action. Although there may be other impacts to the west fork of the Nookachamps sub-drainage basin in the future, it is not likely that the proposed action would be the indirect cause of those impact, particularly to the east where a large portion of the land is owned by the Skagit Public Land Trust and is occupied by the portion of Trumpeter Creek that was restored to a meandering stream around 2017.

There are no direct impacts to the Type F stream and Class III wetland in the southeast portion of the site, the Type F stream to the north, or Class II wetland northeast of the proposed action site. The proposed action has designed a Managed Ecosystem Alternative approach that will reduce the standard buffers in compliance with the City of Mount Vernon's criteria; implement on-site buffer restoration and enhancement measures; and pay into the City's Critical Areas Management Fund. Additionally, following the proposed action the stormwater originating from the 116,000 square feet of impervious surface of the former greenhouse/nursery and entering the Type F stream and Class II wetland untreated, will have stormwater from pollution generating impervious surfaces routed through a detention pond and engineered wetland before discharging to the Type F stream north of the site, and non-polluted stormwater from building roofs, interior sidewalks and lawn areas directed for dispersive flow to the Class II wetlands to the northeast. The indirect impact to the stream and wetlands will be an improvement in quality and diversity of buffer plantings, and decreased pollutants entering the streams and wetlands through stormwater discharge.

Potential Adverse Impact Mitigation to Floodplain, Stream or Wetlands Being Considered

The proposed action design has minimized the impacts to the floodplain by reducing the fill required on the 4.58-acre site to an approximately 3.4 acres footprint. The area of fill represents approximately 0.005 square mile of the 71.6 square miles of the Nookachamps drainage sub-basin, or approximately 0.007% of the drainage area. Additionally, the conceptual hydraulic analysis has shown that the proposed action will not result in a significant change to the base flood elevation and is not in the main flow path of the Skagit River.

The proposed action design has minimized the impact to the Type F stream and Class III wetland located on the southeast portion by defining buffers consistent, eradicating invasive species within the buffers, increasing native vegetation diversity, directing stormwater from potential pollution generating impervious surfaces (PGIS) through a detention pond and engineered wetland for treatment, and maintaining the onsite stormwater drainage basin volume discharges to the Type F stream to the north and Class II wetland to the northeast.

Re-Evaluation of Proposed Action

The proposed action remains practicable based on raising the elevation of 3.4 acres of the 4.58 acre site so that the newly constructed housing units will be above the base flood elevation and thereby reducing the exposure risk to the housing unit occupants and the operator of the housing complex. The proposed action will not results in a change of base flood elevation in the area, current stormwater discharge composition will be improved by the reduction of potential pollutants and the volumes to the two Type F streams, onsite Class III and offsite Class II wetlands will be maintained.

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UNIT COUNT

10- 1 BED
21- 2 BED (INCL. MANAGER UNIT)
20- 3 BED
51 TOTAL

PARKING COUNT

10- 1 BED X 1.5 PER UNIT = 15
41- 2/3 BED X 2 PER UNIT = 82
TOTAL REQ'D SPACES = 97
+ ADEQUATE GUEST PARKING
97 SPACES * 20% = 20 GUEST
97 REQ'D + 20 GUEST = 117 TOTAL

117 PARKING SPACES PROVIDED
6 ACCESSIBLE SPACES
29 COMPACT SPACES (25%)

1 / A1.1 Site Plan
Scale: 1" = 20'-0"

environmental WORKS
Community Design Center

402 15th Avenue East
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HASC Family Housing

4100 EAST COLLEGE WAY
MOUNT VERNON, WA 98273

Site Plan

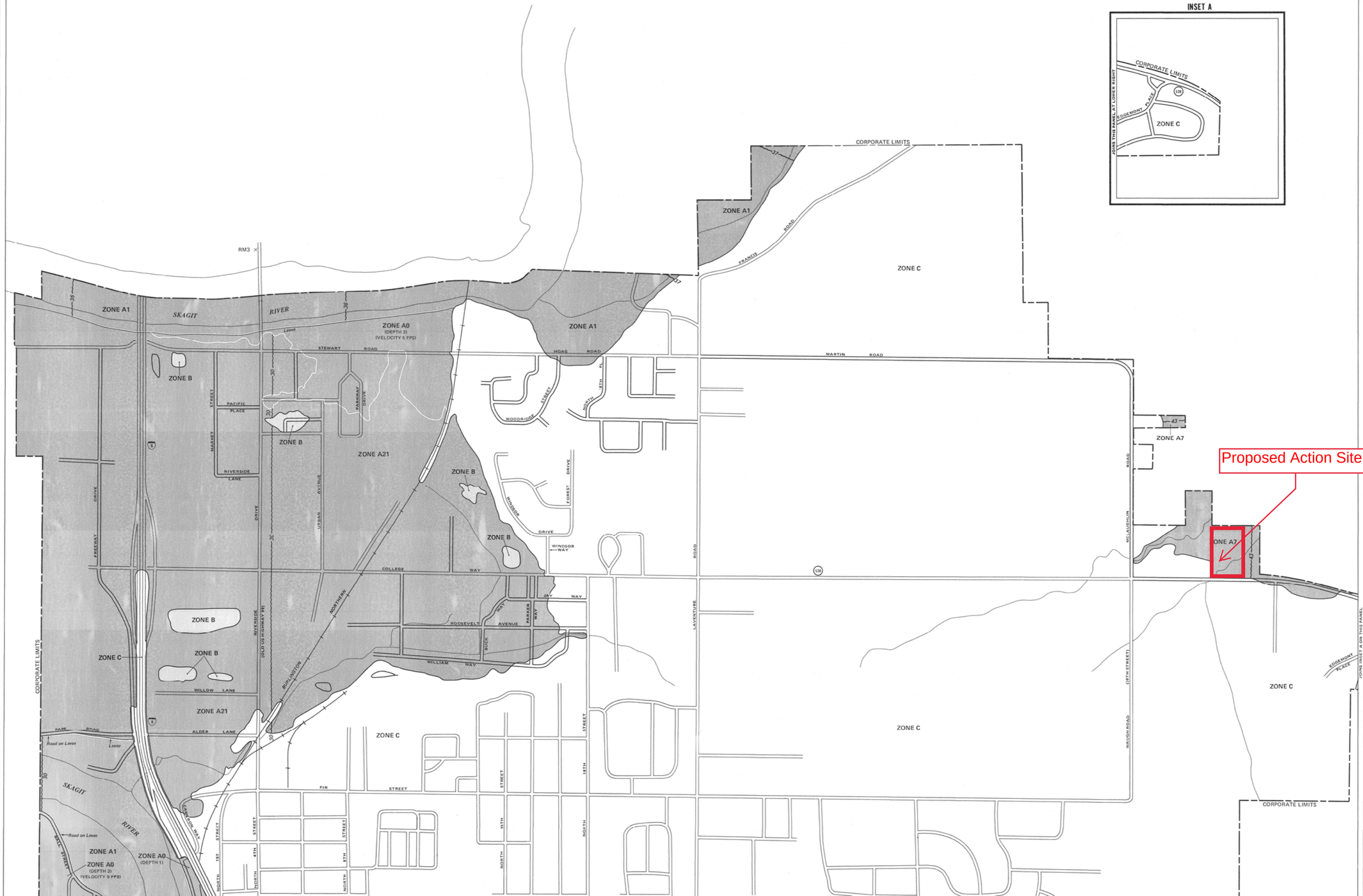
Date
4 August 2020
Progress Set
Revisions

Drawn by:
AKD, MBK
Checked by (P.M.):
Checked by (Q.C.):

Project No.
18-015A

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT, NGVD)	DESCRIPTION OF LOCATION
RM3	48.66	Chiseled square on top of 6-inch concrete retaining wall at the northwest corner of streamflow measuring station at the mouth and downstream end of the Riverside Drive (Old Highway 99) bridge over the Skagit River. Established by U.S. Army Corps of Engineers.



INSET A

FLOOD INSURANCE RATE MAP LEGEND

100-Year Flood Boundary	
Zone Designations	ZONE B / ZONE A1 / ZONE A5
100-Year Flood Boundary	
500-Year Flood Boundary	ZONE B
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7×
Zone D Boundary	
River Mile	•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
MAY 17, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:
MAY 7, 1976

FLOOD INSURANCE RATE MAP EFFECTIVE:
JANUARY 3, 1985

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE
500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

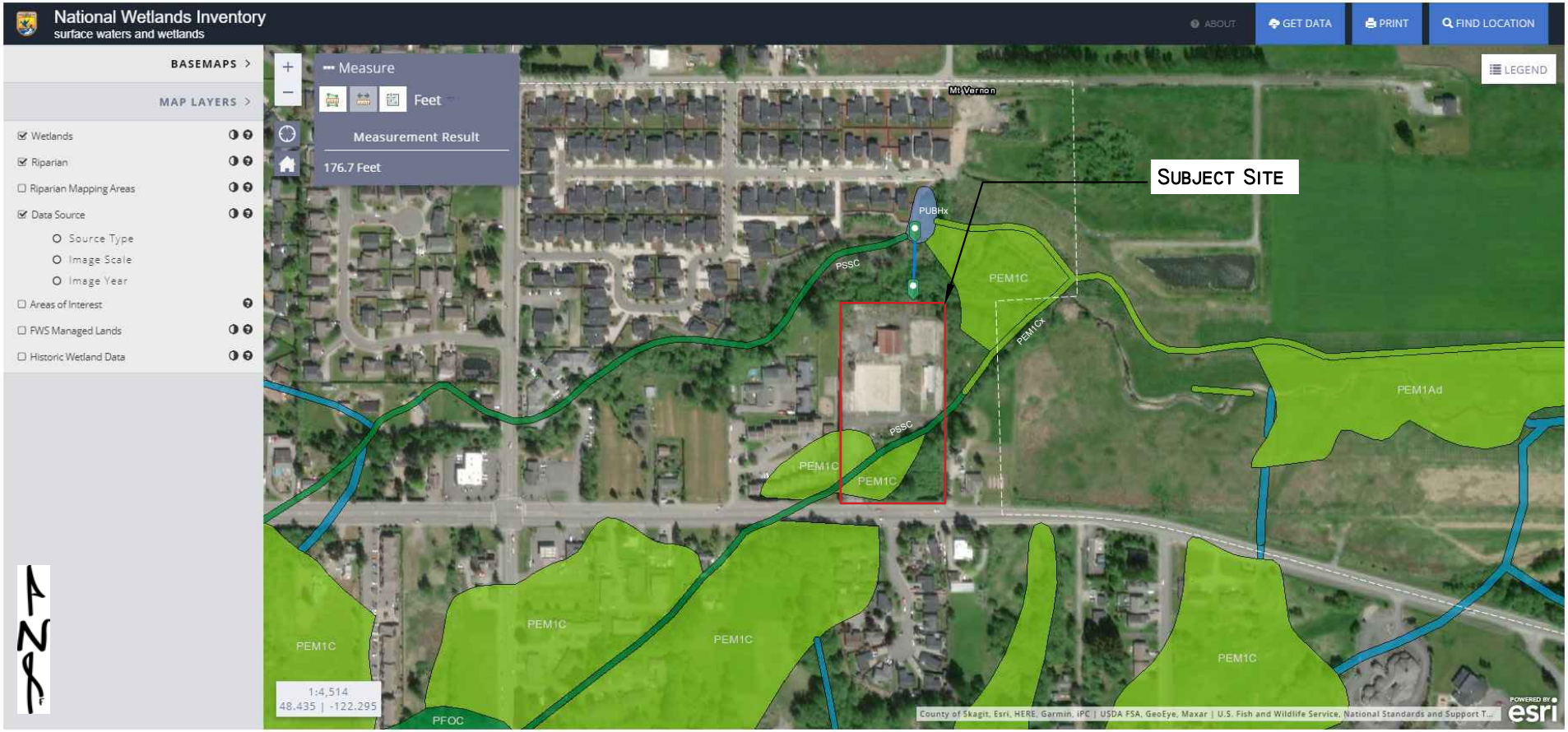
FIRM
FLOOD INSURANCE RATE MAP

CITY OF
MOUNT VERNON,
WASHINGTON
SKAGIT COUNTY

PANEL 1 OF 4
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
530158 0001 B

EFFECTIVE DATE:
JANUARY 3, 1985



Legend:

Onsite NWI Surface Waters and Wetlands:

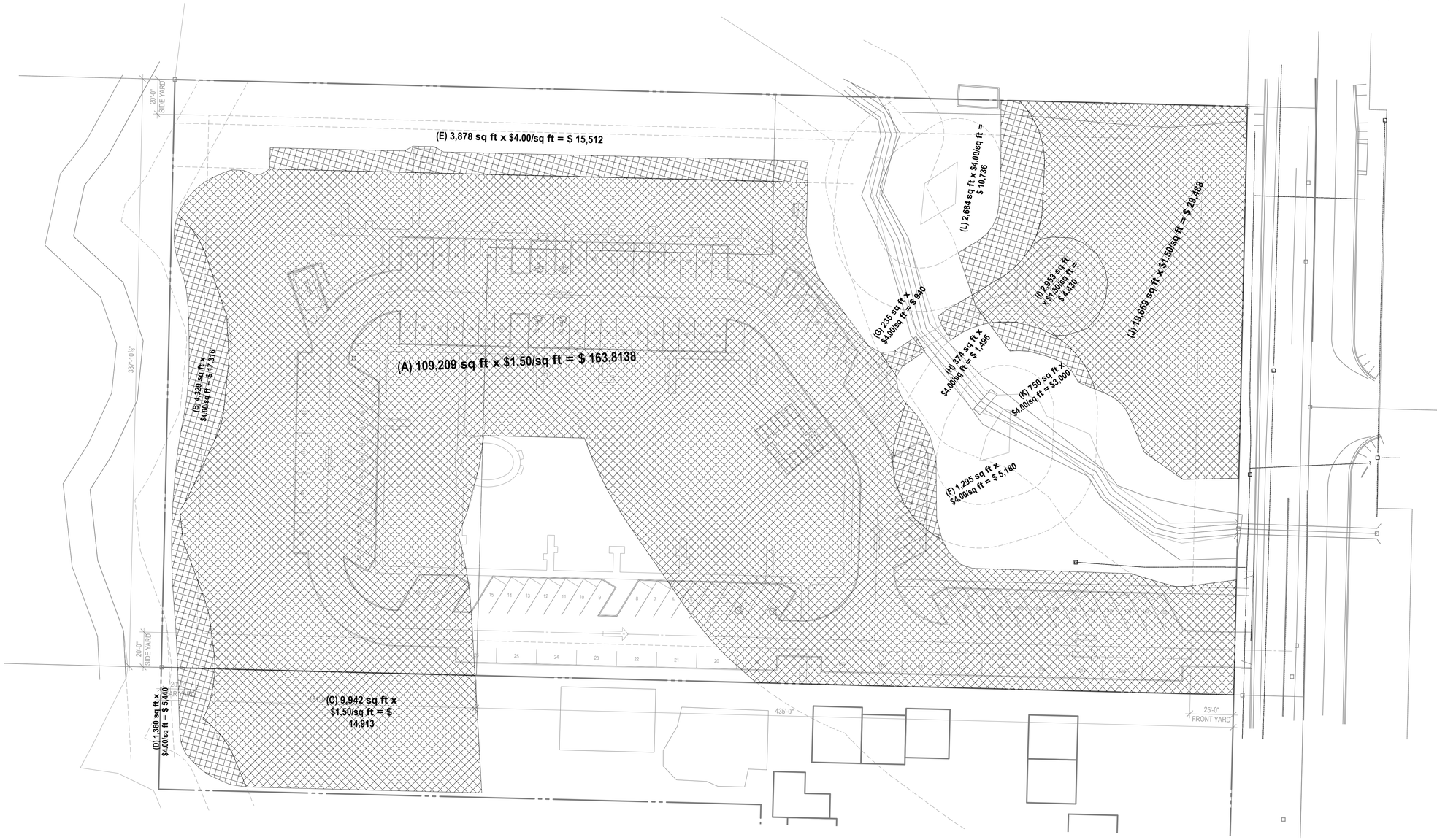
PEM1C - Palustrine System (P), Emergent Class (EM), Persistent Subclass (1), Seasonally Flooded Water Regime (C)
PSSC - Palustrine System (P), Scrub-Shrub Class (SS), Seasonally Flooded Water Regime (C)

Offsite NWI Surface Waters and Wetlands:

PSSC - Palustrine System (P), Scrub-Shrub Class (SS), Seasonally Flooded Water Regime (C)
PUBHx - Palustrine System (P), Unconsolidated Bottom Class (UB), Permanently Flooded Water Regime (H), Excavated Channel (x)
PEM1C - Palustrine System (P), Emergent Class (EM), Persistent Subclass (1), Seasonally Flooded Water Regime (C)
PEM1Cx - Palustrine System (P), Emergent Class (EM), Persistent Subclass (1), Seasonally Flooded Water Regime (C), Excavated Channel (x)

Buffer Buy Down Areas

	Description	Area	Rate	Cost	Running Total
A	Main site	109,209 sq ft	$1.50 /sq ft	$163,814	
B	Pond to north	4,329 sq ft	$4.00 /sq ft	$17,316	
C	Pond to west	9,942 sq ft	$1.50 /sq ft	$14,913	
D	Pond NW corner	1,360 sq ft	$4.00 /sq ft	$5,440	
E	East of Bldgs D & E	3,878 sq ft	$4.00 /sq ft	$15,512	
F	South of Bldg F	1,295 sq ft	$4.00 /sq ft	$5,180	**$222,175**
G	Path to bridge	235 sq ft	$4.00 /sq ft	$940	
H	Path S of bridge	374 sq ft	$4.00 /sq ft	$1,496	
I	Walk & lawn at SE	2,953 sq ft	$1.50 /sq ft	$4,430	**$229,040**
J	Main area at SE	19,659 sq ft	$1.50 /sq ft	$29,489	**$258,529**
K	Wetland buffer W of lawn	750 sq ft	$4.00 /sq ft	$3,000	
L	Wetland buffer E of lawn	2,684 sq ft	$4.00 /sq ft	$10,736	**$272,265**



1 / A1.1A Site Plan - Buffer Buy-Down Areas
Scale: 1" = 30'-0"

environmental WORKS
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HASC Family Housing

4100 EAST COLLEGE WAY
MOUNT VERNON, WA 98273

Site Plan

Buffer Buy Down

Date
4 August 2020
Progress Set

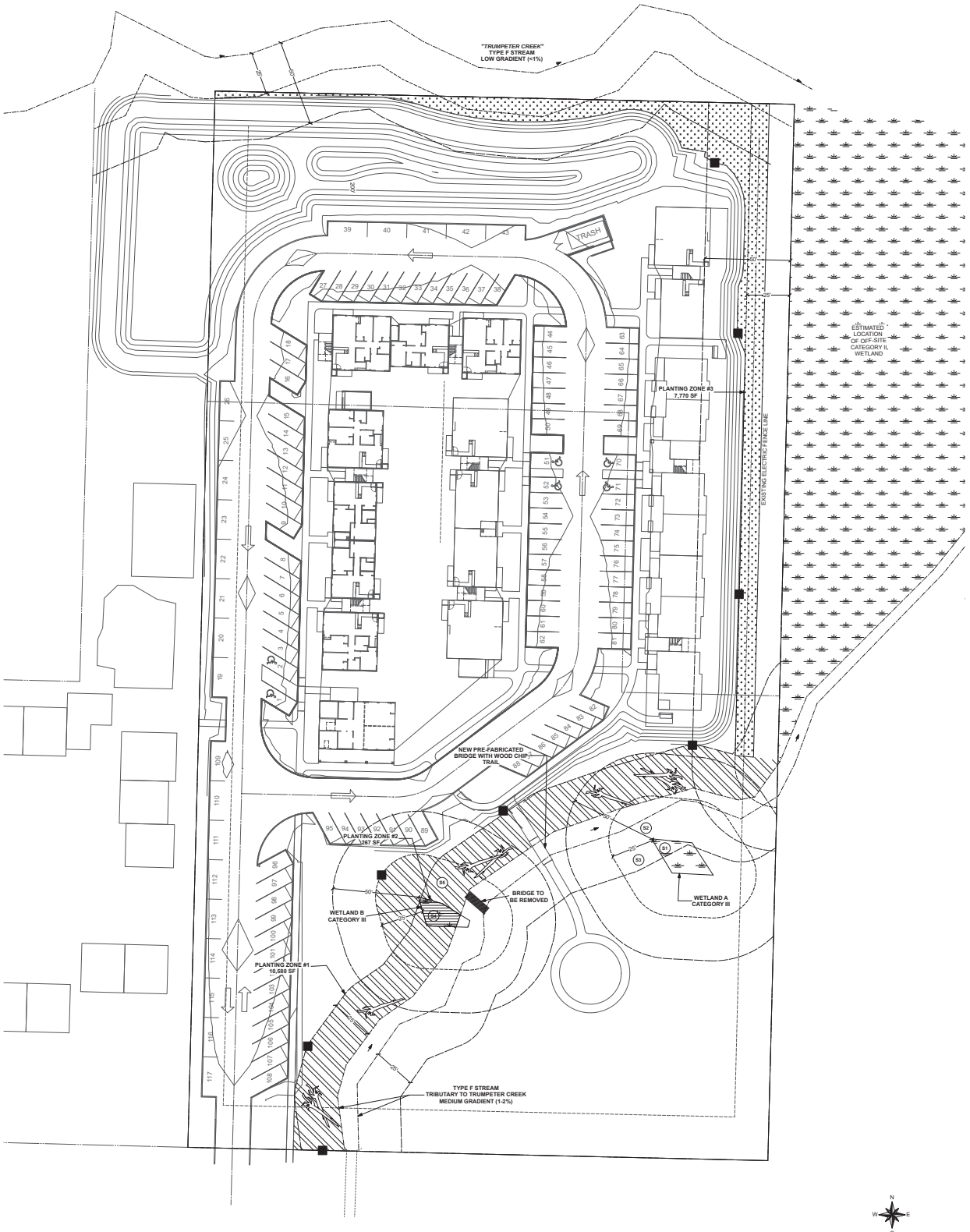
Revisions
08 July 2020- Design Updates

Drawn by:
AKD, MBK

Checked by (P.M.):

Checked by (Q.C.):

Project No.
18-015A

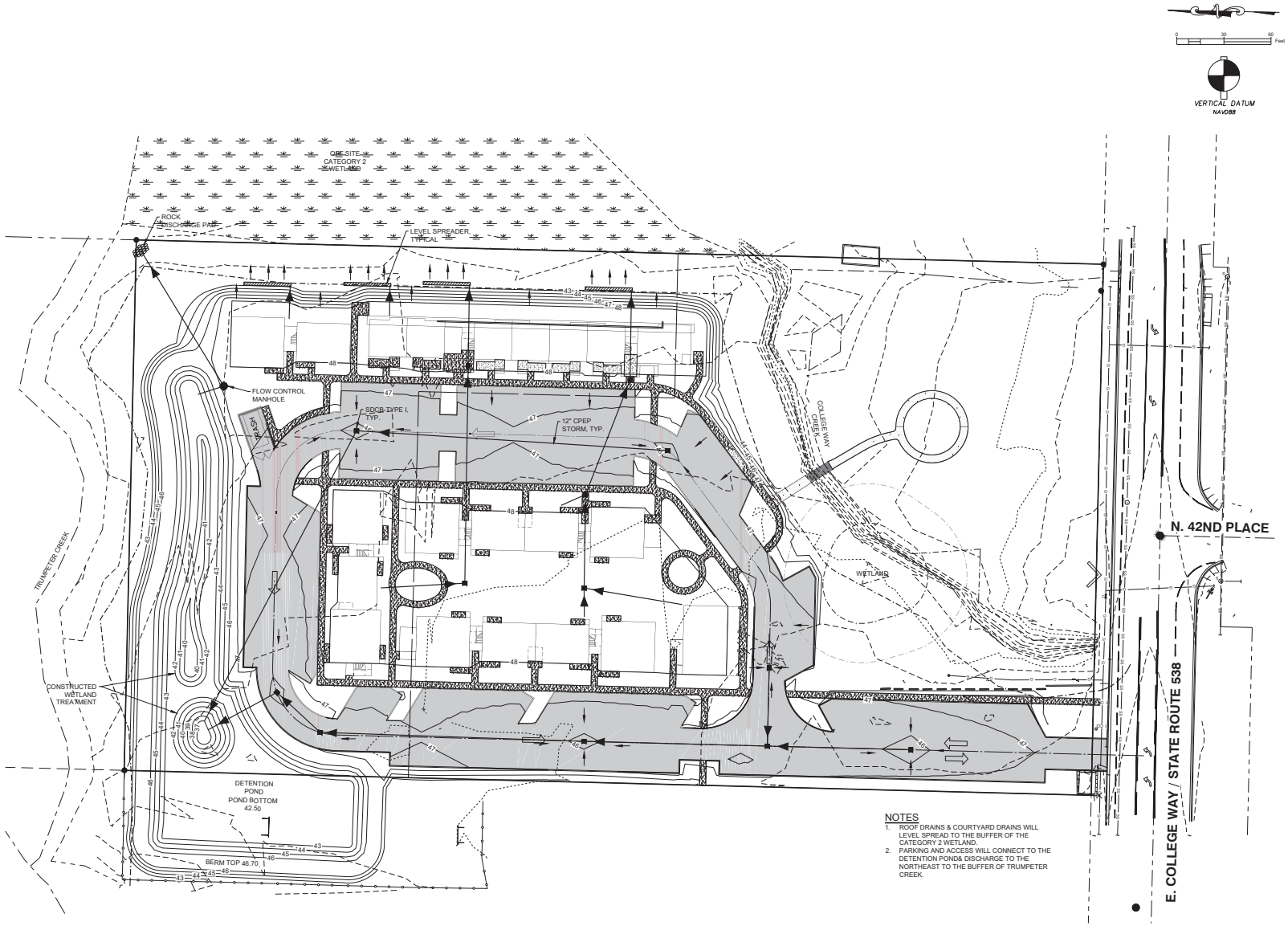


LEGEND

- PLANTING ZONE # 1 (10,580 SF)
- PLANTING ZONE # 2 (267 SF)
- PLANTING ZONE # 3 (7,770 SF)
- WETLAND
- MAXIMUM MANAGED BUFFER
- MINIMUM MANAGED BUFFER
- LARGE PIECES OF WOOD
- CRITICAL AREA SIGN
- WETLAND DETERMINATION SAMPLE SITES 1 - 5 (S1 S5)

APPLICANT: Housing Authority of Skagit County Attn: Melanie Corey 1650 Port Drive Burlington, WA 98233	SHEET TITLE: **CRITICAL AREAS & CONCEPTUAL ENHANCEMENT PLAN**	**SHEET: 1 OF 1** **SCALE: 1" = 20'**
	SITE LOCATION: 4100 East College Way Mount Vernon, WA 98273 Parcels P24832, P113507, & P24844 a portion Section 15, Township 34N, Range 04E, W.M.	**DATE: AUGUST 14, 2020** **BY: A. BACHMAN** **PH: (206) 963-2909**

SECTION 15, TOWNSHIP 34 NORTH, RANGE 4 EAST, W.M.



NOTES

1. ROOF DRAINS & COURTYARD DRAINS WILL LEVEL SPREAD TO THE BUFFER OF THE CATEGORY 2 WETLAND.
2. PARKING AND ACCESS WILL CONNECT TO THE DETENTION POND& DISCHARGE TO THE NORTHEAST TO THE BUFFER OF TRUMPETER CREEK.

811 Know what's below. Call before you dig.

P:\WORK\PROJECTS\2019\19-221 ENVIR WORKS\CE\DWG\SHEETS\CC3.0 CONCEPTUAL STORM.DWG 8/14/2020

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HASC Family Housing

4100 EAST COLLEGE WAY
MOUNT VERNON, WA 98273

CONCEPTUAL STORM AND GRADING PLAN

Date
14 August, 2020
Site Plan Submittal
Revisions

Drawn by:
PC/DH
Checked by (P.M.):
NM
Checked by (Q.C.):
NM
Project No.
18-015A

CC3.0