FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-17	2022	ADD.7	35

WATER POLLUTION AND EROSION CONTROL NOTES (CONT.):

3. Onsite and Offsite Product Specific Plan

The following product specific practices shall be followed onsite:

a. Petroleum Based Products: Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.

b. Fertilizers: Apply fertilizers used only in the minimum amounts recommended by the manufacturer and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or stormwater. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.

c. Paints: Seal and store all containers when not required for use. Do not discharge excess paint to the drainage system, sanitary sewer system, or State waters. Dispose properly according to manufacturers' instructions and State and local regulations.

d. Concrete Trucks: Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.

4. Spill Control Plan

a. Post a spill prevention plan to include measures to prevent and clean up each spill.

b. The Contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area on a weatherproof bulletin board or other accessible location acceptable to the Engineer and in the office trailer onsite.

c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.

d. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.

e. Clean up all spills immediately after discovery.

f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the Contractor shall notify the Engineer as soon as the Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately. The Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRC if requested.

E. PERMIT REQUIREMENTS:

1. The calculated land disturbance area for this project based on the construction plans is 0.39 acres, including Contractor Staging and Storage areas. See Sheet No. EC4 of the construction plans for limits of area to be disturbed. If the total of the disturbed area and the Contractor Staging and Storage area is one acre or greater, the Contractor shall obtain the NPDES Construction Activities Permit using HDOT's latest SWPPP template. See Hawaii Administrative Rules Chapter 11-55, Appendix C for the definition of land disturbance. The Contractor shall be responsible for obtaining the required NPDES Construction Activities Permit and complying with the requirements of HAR 11-55 including, but not limited to:

a. Deadlines for initiating and completing initial stabilization

b. Increased inspection frequency and installation of rain gage if applicable

c. Deadlines to initiate and complete repairs to BMPs

d. Reporting requirements and corrective action reports

2. Comply with all applicable State and Federal Permit conditions. Permits may include, but not limited to the following:

a. NPDES Permit for Construction Activities

b. NPDES Permit for Construction Dewatering

c. NPDES Permit for Hydrotesting Waters

d. Water Quality Certification

e. Stream Channel Alteration Permit

f. Section 404 Army Corps of Engineer Permit

F. SITE-SPECIFIC BMP REQUIREMENTS:

Each BMP below is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual and appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at http://www.stormwaterhawaii.com/resources/contractors-and-consultants/ under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/ under Concrete Curing and Irrigation Water. The requirements for Water Pollution, Dust, and Erosion Control submittals are included in Section 209 of the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable Special Provisions. A list of pollutant sources and corresponding BMP used to mitigate the pollutants are included in Section 209 of the Special Provisions under Appendix A. Follow the requirements below: ⚠1

1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC-2).

2. Contain on-site runoff using Perimeter Sediment Controls

a. SC-1 Silt Fence

b. SC-5 Vegetated Filter Strips and Buffers

c. SC-8 Compost Filter Berm

d. SC-13 Sandbag Barrier

e. SC-14 Brush or Rock

3. Control offsite runoff from entering construction area

a. EC-8 Run-On Diversion

b. SC-6 Earth Dike

c. SC-7 Temporary Drains and Swales

4. Incorporate applicable Site Management BMP

a. SM-1 Employee Training

b. SM-2 Material Delivery and Storage

c. SM-3 Material Use

d. SM-4 Protection of Stockpiles

e. SM-6 Solid Waste Management

f. SM-7 Sanitary/Septic Waste Management

g. SM-9 Hazardous Waste Management

h. SM-10 Spill Prevention and Control

i. SM-11 Vehicle and Equipment Cleaning

j. SM-12 Vehicle and Equipment Maintenance

k. SM-13 Vehicle and Equipment Refueling

l. SM-14 Scheduling

m. SM-15 Location of Potential Sources of Sediment

n. SM-16 Preservation of Existing Vegetation

o. SM-18 Dust Control

5. Contain pollutants within the Construction Staging/Storage Area BMP with applicable Perimeter Sediment Controls and Site Management BMP. Include a Stabilized Construction Entrance/Exit (EC-2) for all areas which exit onto a paved street. Restrict vehicle access to these points.

6. Manage Concrete Waste including installing a Concrete Washout Area (SM-5) and properly disposing of Concrete Curing Water (California Stormwater BMP Handbook NS-12 Concrete Curing).

7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Provide storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.

8. Please note Exhibit A in the bid documents include the Project-Specific Construction Environmental Hazard Management Plan (C-EHMP). ⚠1

9. Alternate areas may be considered within HDOT property to sample, test and characterize excavated material subject to Engineer's acceptance. ⚠1

⚠1	12/21/21	Added notes F.8 and F.9.
	DATE	REVISION

ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

RUSSELL M. ARAKAKI
LICENSED PROFESSIONAL ENGINEER
No. 8297-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

PARK ENGINEERING, Inc. dba PARK ENGINEERING — APRIL 30, 2022 LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION AND EROSION CONTROL NOTES

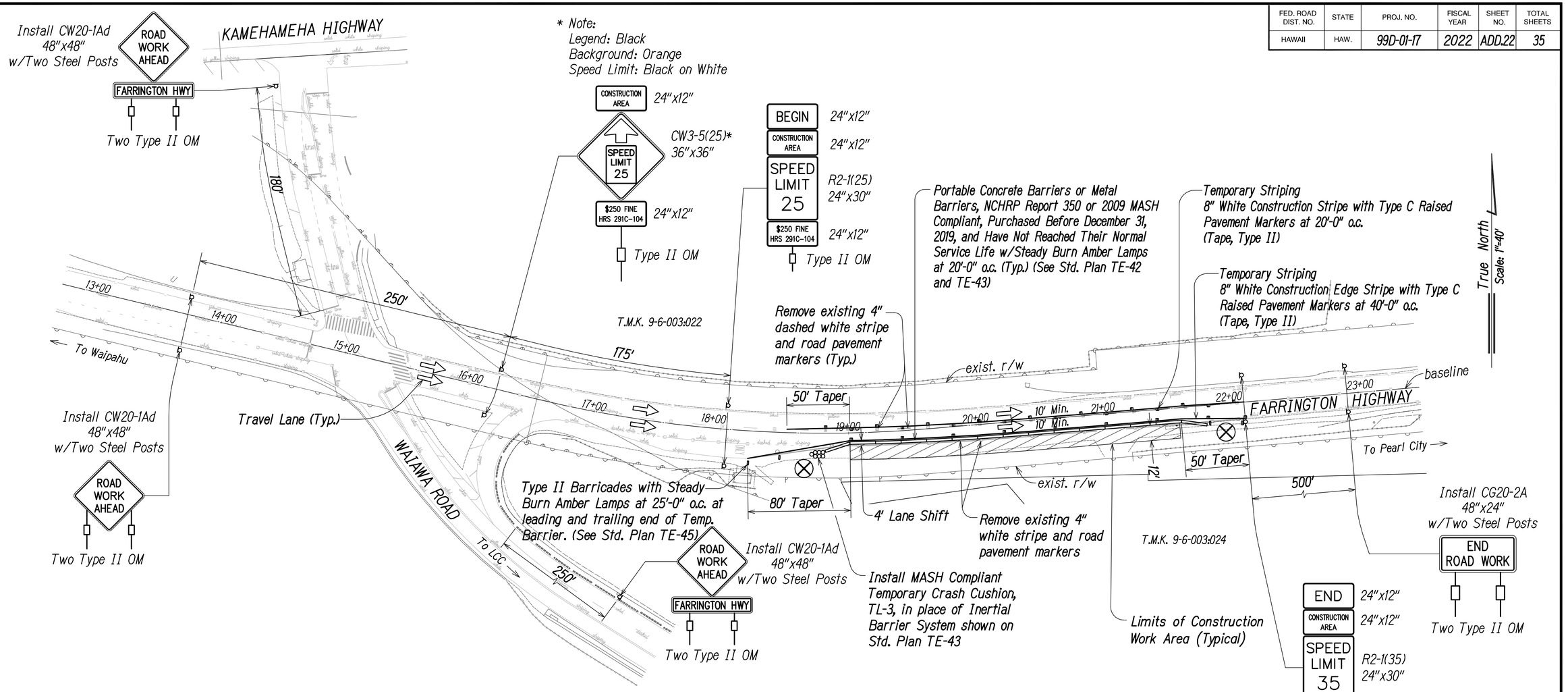
FARRINGTON HIGHWAY
Drainage Improvements
Vicinity of Leeward Community College
PROJECT NO. 99D-01-17

Scale: None Date: June 2021

SHEET No. EC2 OF EC4 SHEETS

ADD. 7

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-17	2022	ADD.22	35



Notes:

1. Contractor shall submit requests for detours and lane closures in accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 645.03(F) - Lane Closures and shall follow the minimum time frames required for implementation. Once the request has been approved by HDOT, the Contractor shall provide a written Weekly Lane Closure Request to the HDOT Construction Field Office at least 1-week ahead of all upcoming work.
2. Existing striping to be removed where in conflict with temporary work zone striping.
3. Traffic Control Plan - 1 is for A.C. pavement reconstruction on the right shoulder of Farrington Highway only. After right shoulder is paved for temporary travel lane, Contractor shall implement Traffic Control Plan - 2 for remaining work.

⚠1 TRAFFIC CONTROL PLAN - 1

Scale: 1" = 40'

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN

NOTE BOOK No.

⚠	DATE	REVISION
1	12/21/21	Revised Traffic Control Plan to include Work Zone Signs.

RUSSELL M. ARAKAKI
LICENSED PROFESSIONAL ENGINEER
No. 8297-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

PerEn, Inc. dba PARK ENGINEERING — APRIL 30, 2022 LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN - 1

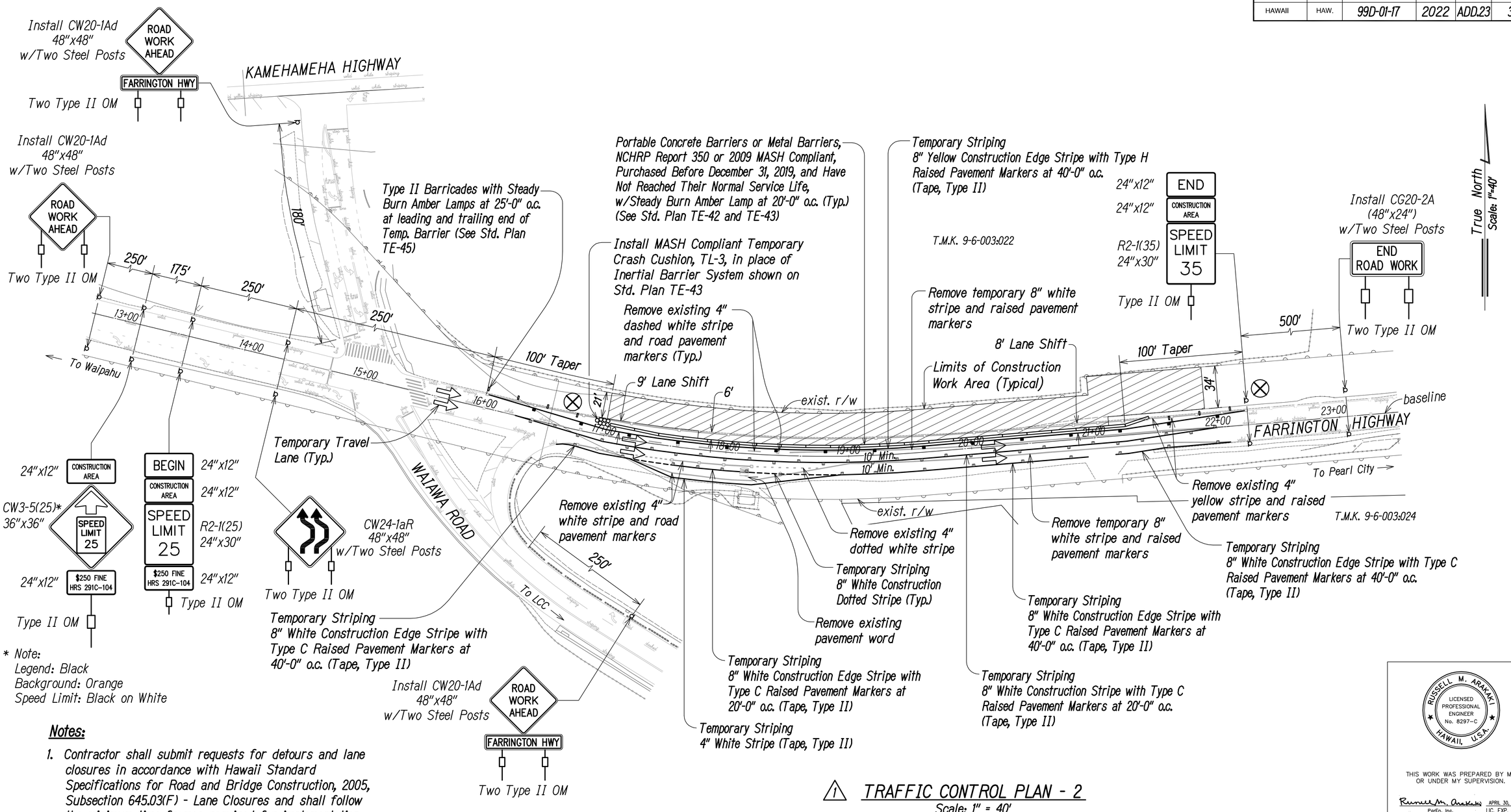
FARRINGTON HIGHWAY
Drainage Improvements
Vicinity of Leeward Community College
PROJECT NO. 99D-01-17

Scale: As Shown Date: June 2021

SHEET No. TCP1 OF TCP2 SHEETS

ADD. 22

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-17	2022	ADD.23	35



* Note:
Legend: Black
Background: Orange
Speed Limit: Black on White

Notes:

1. Contractor shall submit requests for detours and lane closures in accordance with Hawaii Standard Specifications for Road and Bridge Construction, 2005, Subsection 645.03(F) - Lane Closures and shall follow the minimum time frames required for implementation. Once the request has been approved by HDOT, the Contractor shall provide a written Weekly Lane Closure Request to the HDOT Construction Field Office at least 1-week ahead of all upcoming work.

2. Existing striping to be removed where in conflict with temporary work zone striping.

⚠1 TRAFFIC CONTROL PLAN - 2

Scale: 1" = 40'

⚠	DATE	REVISION
1	12/21/21	Revised Traffic Control Plan to include Work Zone Signs.

ORIGINAL PLAN | NOTE BOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

RUSSELL M. ARAKAKI LICENSED PROFESSIONAL ENGINEER No. 8297-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

PerEn, Inc. dba PARK ENGINEERING — APRIL 30, 2022 LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN - 2

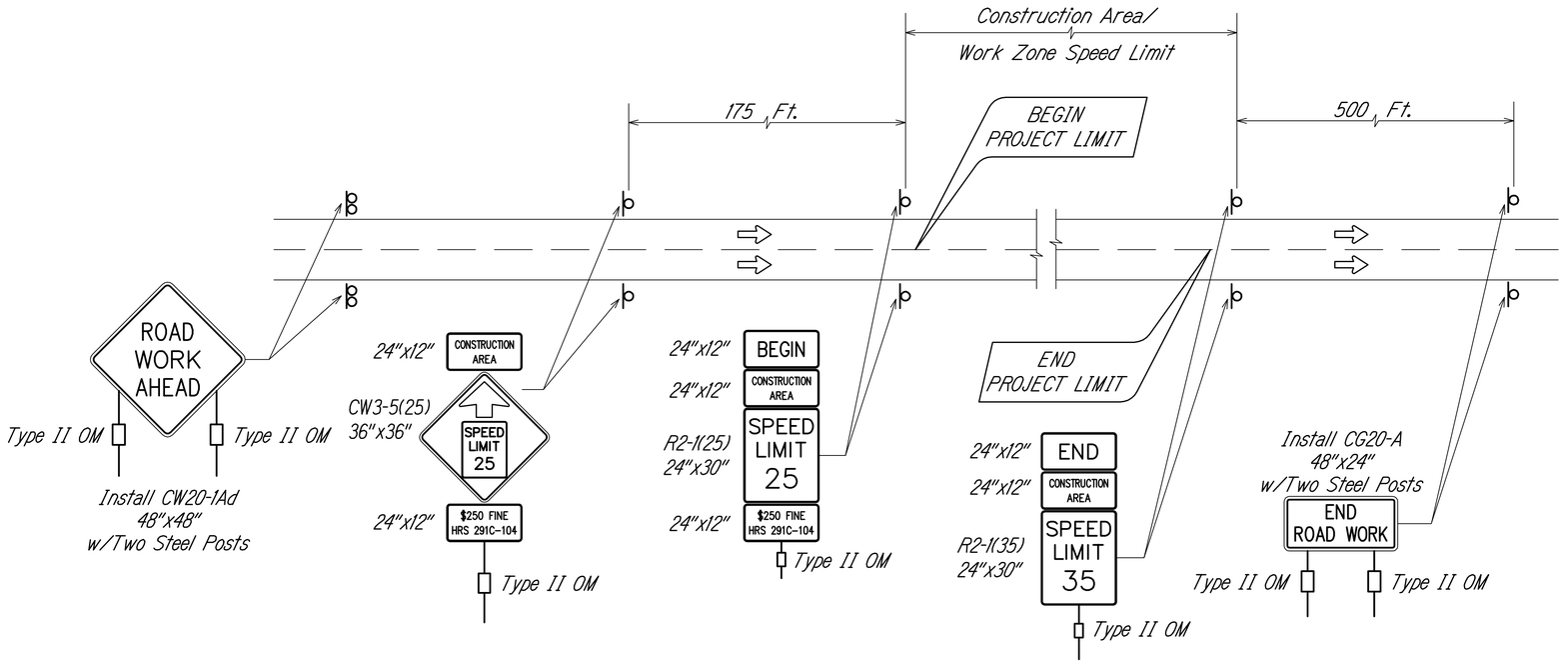
FARRINGTON HIGHWAY
Drainage Improvements
Vicinity of Leeward Community College
PROJECT NO. 99D-01-17

Scale: As Shown Date: June 2021

SHEET No. TCP2 OF TCP2 SHEETS

ADD. 23

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-17	2022	ADD.23 S-1	35



Work Zone Notes:

1. *This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Special Provisions.*

2. *All existing regulatory speed limit signs with posts within the work zone/ project limits shall be removed and replaced with work zone speed limit sign assemblies (R2-1(25) and CW3-5(25) with "CONSTRUCTION AREA" and "$250 FINE HRS 291C-104" Supplemental Signs).*

3. *Work zone sign assemblies shall be installed on both the approaching and trailing ends of each work zone as shown on this plan. The cost for and installation of each work zone sign assembly shall be considered incidental to Item No. 645.1000 - Traffic Control.*

4. *Each work zone warning sign shall have a minimum of two (2) Type II Object Markers (OM). Each work zone speed limit assembly shall have a minimum of one (1) Type II OM. The cost for installation of each Type II OM shall be considered incidental to Item No. 645.1000 - Traffic Control.*

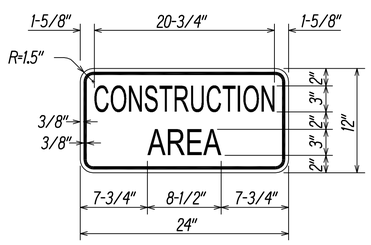
5. *Upon the completion of all physical work or as directed by the Engineer, all work zone warning signs and work zone speed limit assemblies shall be removed. All speed limit signs that were existing at the start of the project within the work zone/project limits and that are to remain shall be reinstalled with new post(s) at their original locations and configurations.*

6. *Placement of work zone signs shall not obstruct the path of pedestrians and bicyclists.*

7. *The removal and restoration of existing regulatory speed limit signs with new posts along with the installation, maintenance and removal of work zone speed limit sign assemblies shall be considered incidental to Item No. 645.1000 - Traffic Control.*

TYPICAL DETAIL FOR WORK ZONE SIGNS ON TWO LANE OR MULTILANE UNDIVIDED LOW SPEED HIGHWAY

NOT TO SCALE



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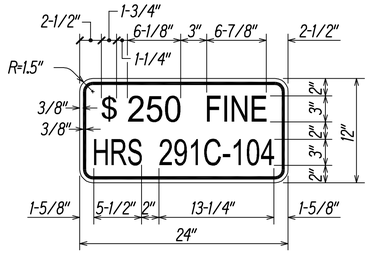

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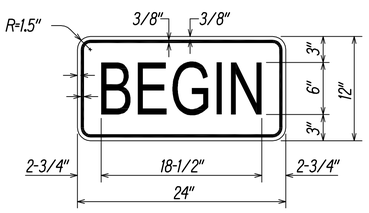

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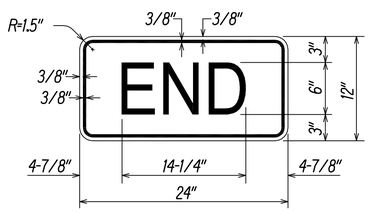

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Background: Orange

DATE	REVISION
12/21/21	Added new sheet to include Work Zone Signing Notes & Details.

ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DRAWN BY
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PorEn, Inc. dba PARK ENGINEERING
APRIL 30, 2022
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WORK ZONE SIGNING NOTES & DETAILS

FARRINGTON HIGHWAY
Drainage Improvements
Vicinity of Leeward Community College
PROJECT NO. 99D-01-17

Scale: As Shown Date: June 2021

SHEET No. TCP2A OF TCP2 SHEETS

ADD. 23 S-1