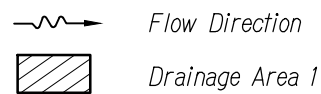


LEGEND:



MATCH LINE PAIWA ST @ STA. 46+00
For Continuation, See Exhibit 46

WAIKELE VMS DRAINAGE AREA MAP - 1
Scale: 1" = 40'

Scale: 1" = 40'

FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)



AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

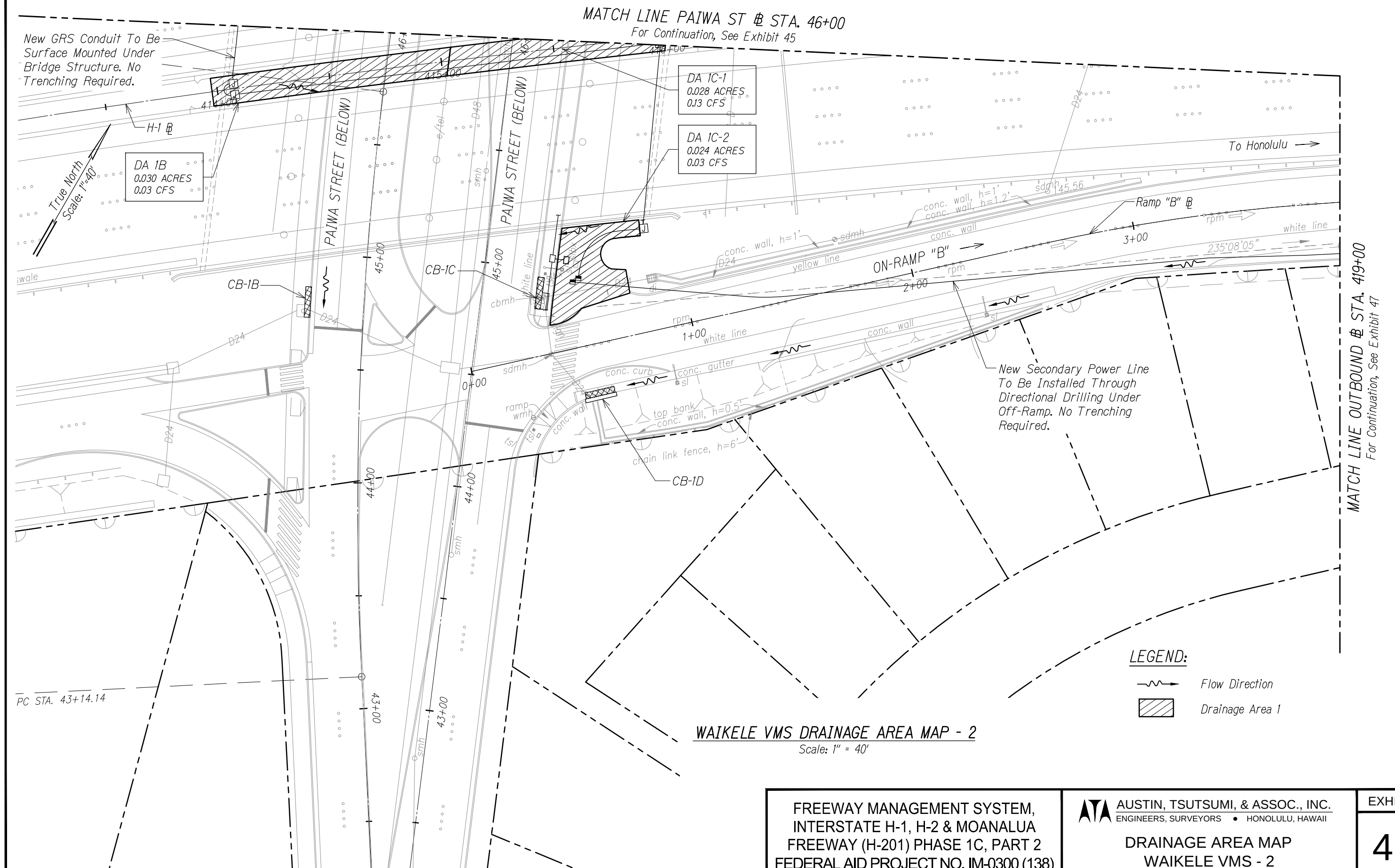
DRAINAGE AREA MAP WAIKELE VMS - 1

EXHIBIT

45

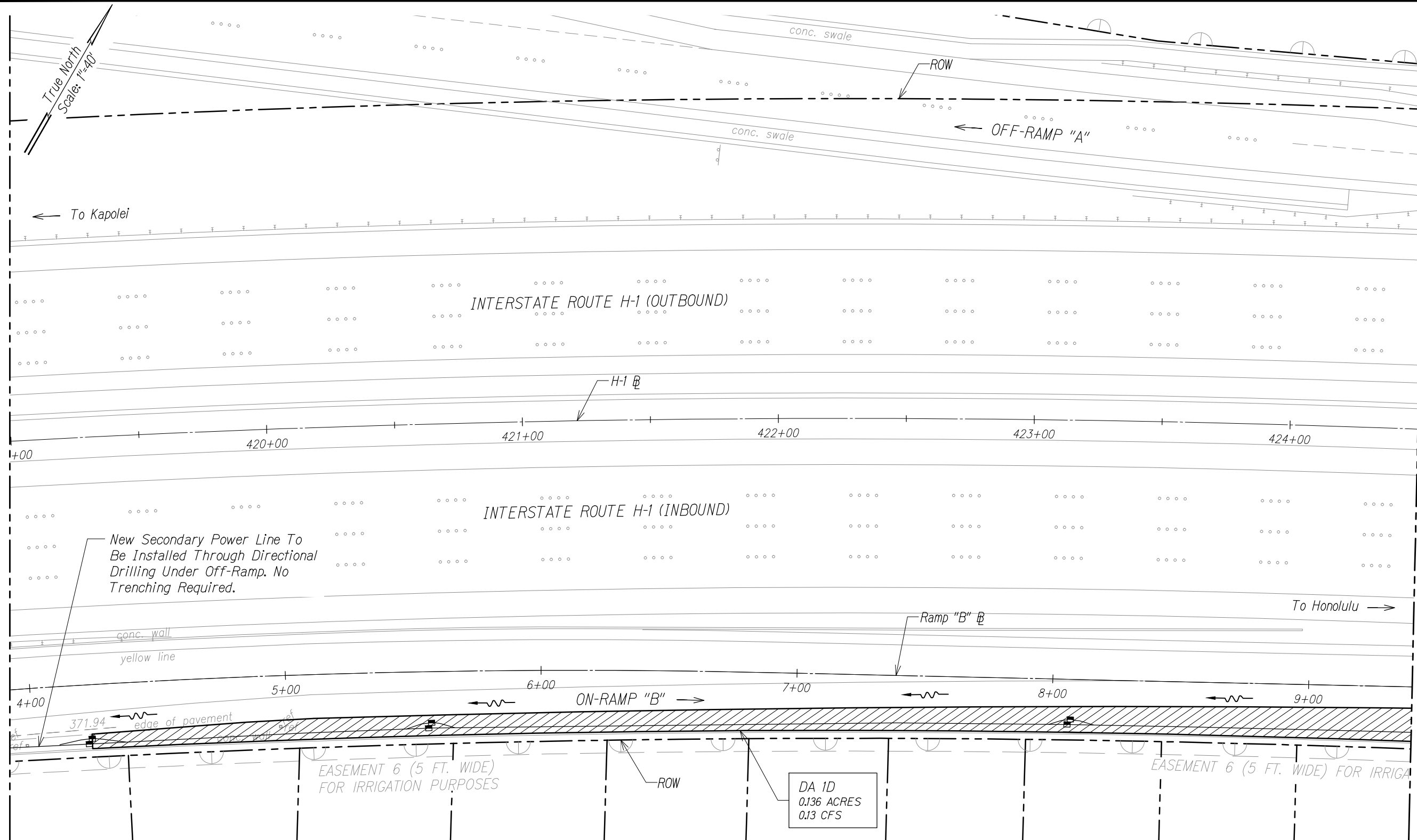
MATCH LINE OUTBOUND @ STA. 419+00
For Continuation, See Exhibit 47

FN: X:\96-46\96-46\27\NPDES\EXHIBITS\EX 46 - DRAINAGE AREA MAP - WAIKELE VMS 2.DWG



MATCH LINE OUTBOUND @ STA. 419+00
For Continuation, See Exhibit 46

MATCH LINE OUTBOUND @ STA. 424+50
For Continuation, See Exhibit 48

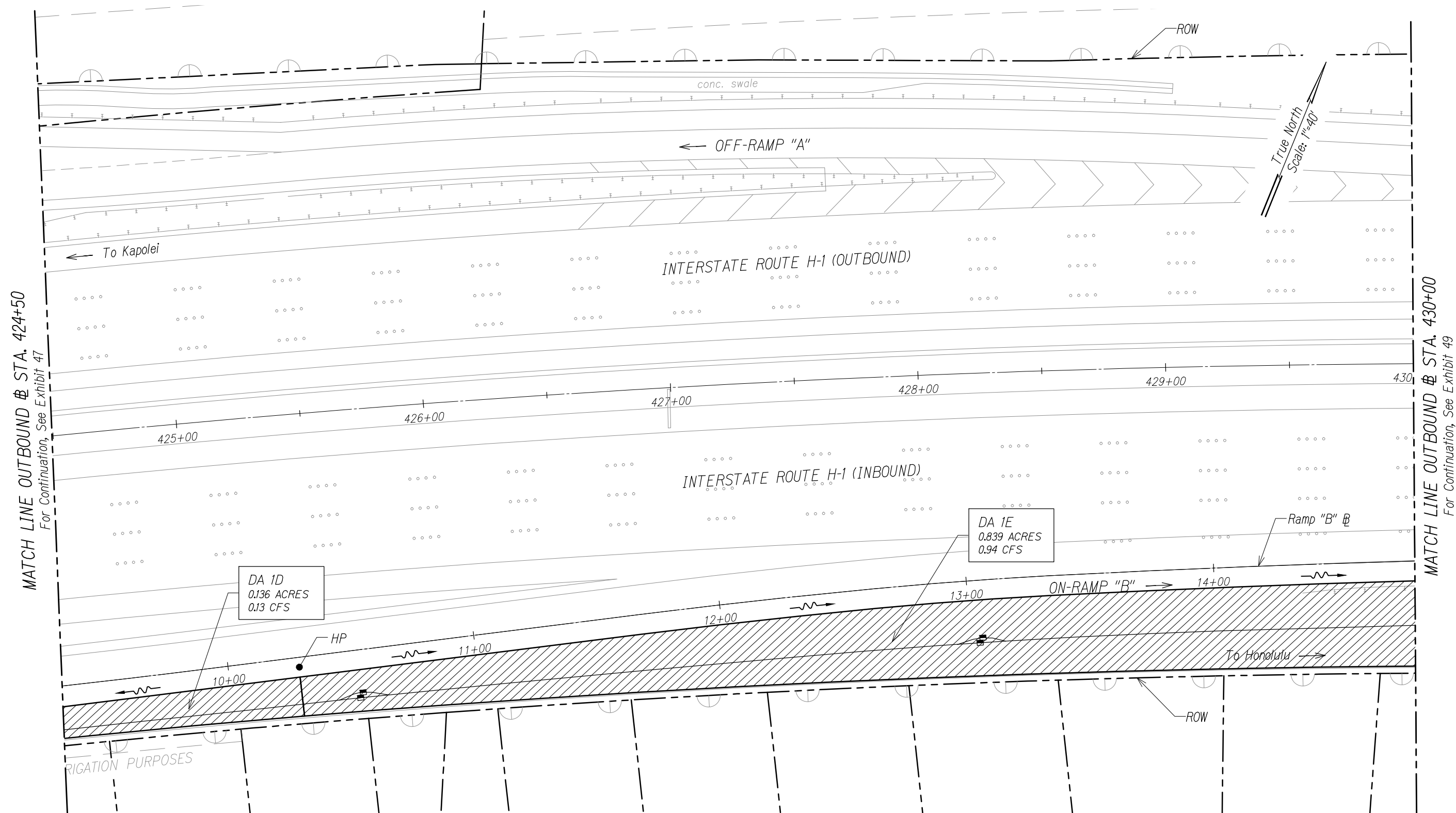


WAIKELE VMS DRAINAGE AREA MAP - 3
Scale: 1" = 40'

FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

AUSTIN, TSUTSUMI, & ASSOC., INC.
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DRAINAGE AREA MAP
WAIKELE VMS - 3

EXHIBIT
47



FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

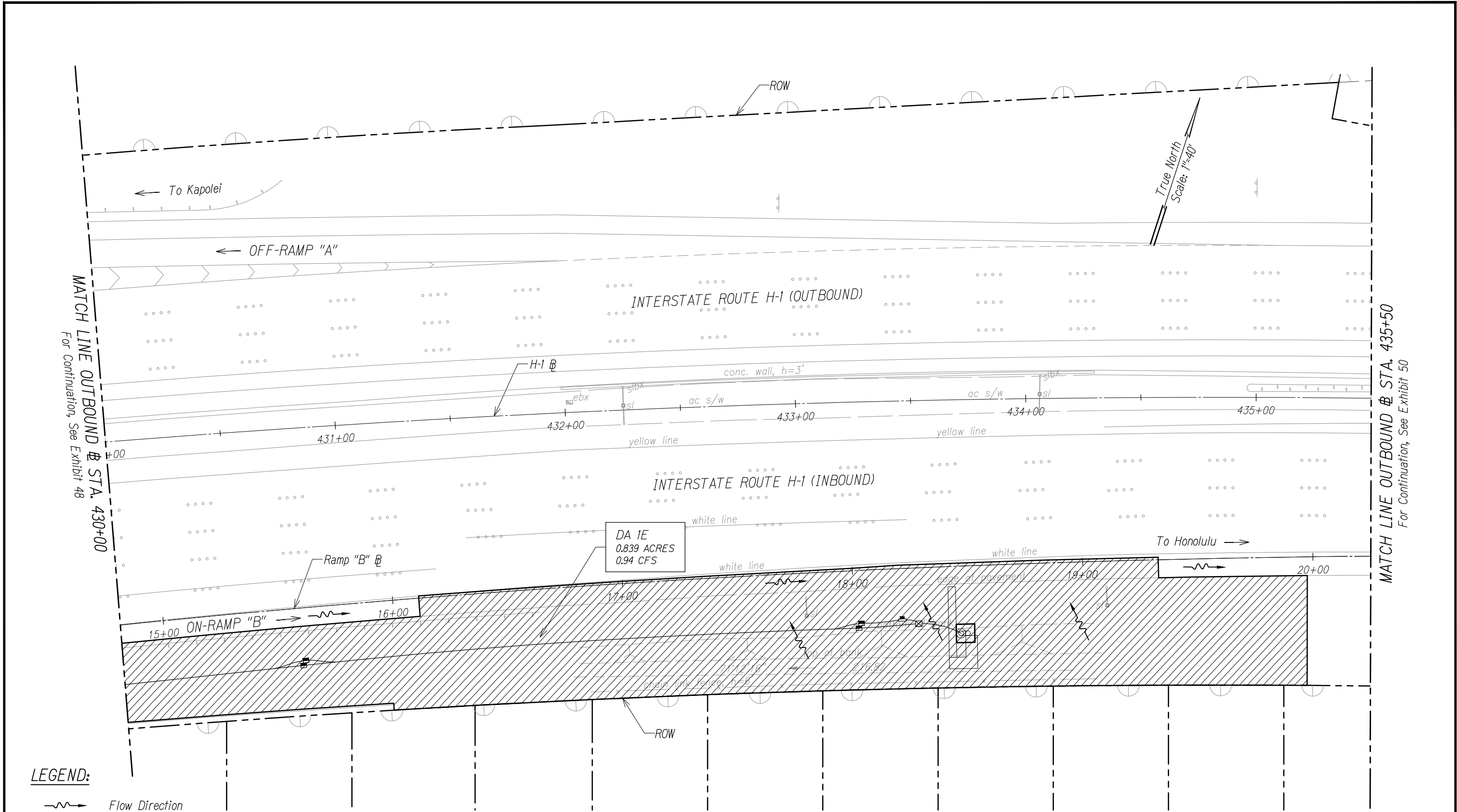
AUSTIN, TSUTSUMI, & ASSOC., INC.
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DRAINAGE AREA MAP
WAIKELE VMS - 4

EXHIBIT

48

FN: X:\96-46\96-46.27\NPDES\NPDES EXHIBITS\EX 49 - DRAINAGE AREA MAP - WAIKELE VMS 5.DWG



MATCH LINE OUTBOUND @ STA. 430+00
For Continuation, See Exhibit 48

MATCH LINE OUTBOUND @ STA. 435+50
For Continuation, See Exhibit 50

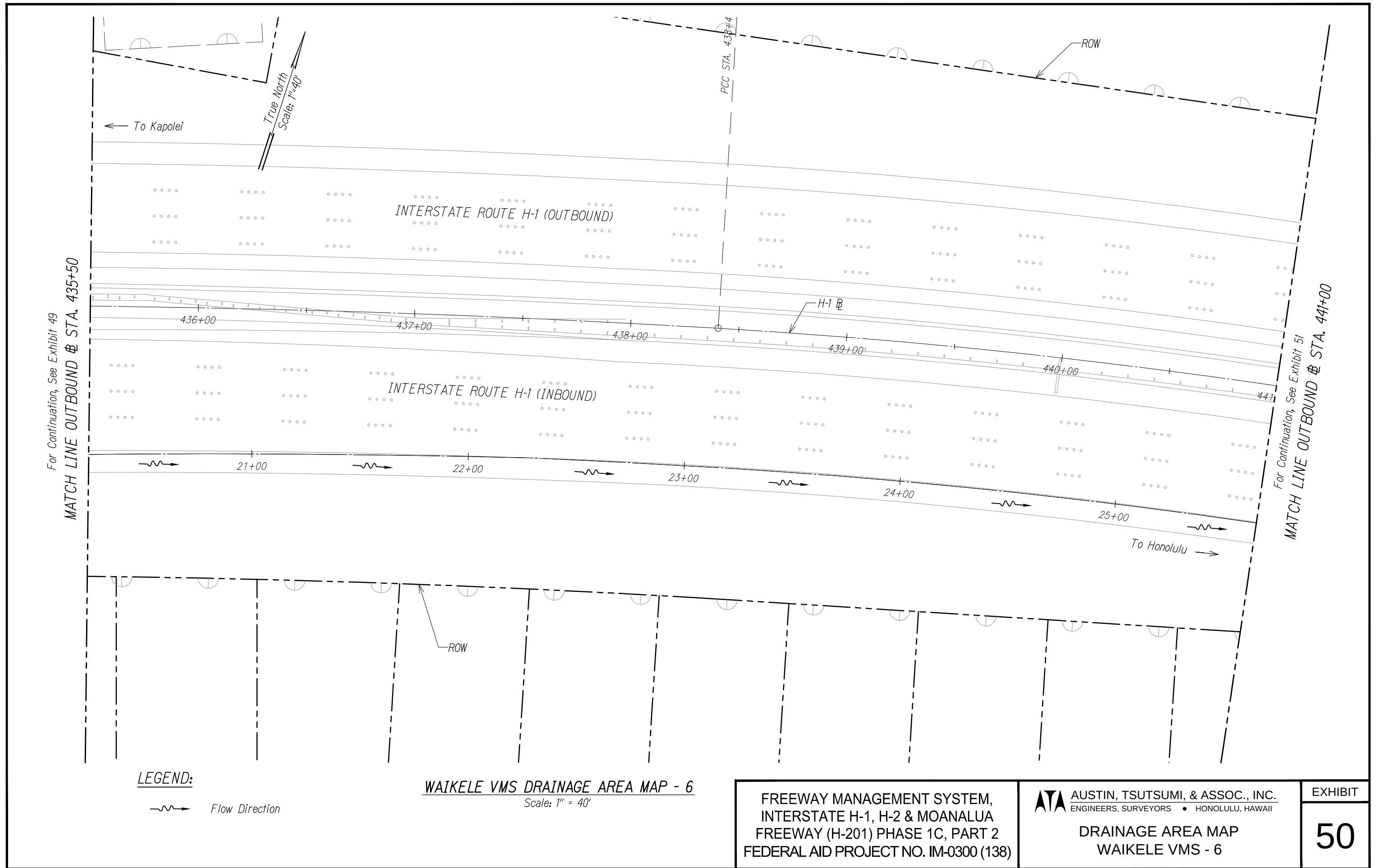
LEGEND:

- Flow Direction
- Drainage Area 1

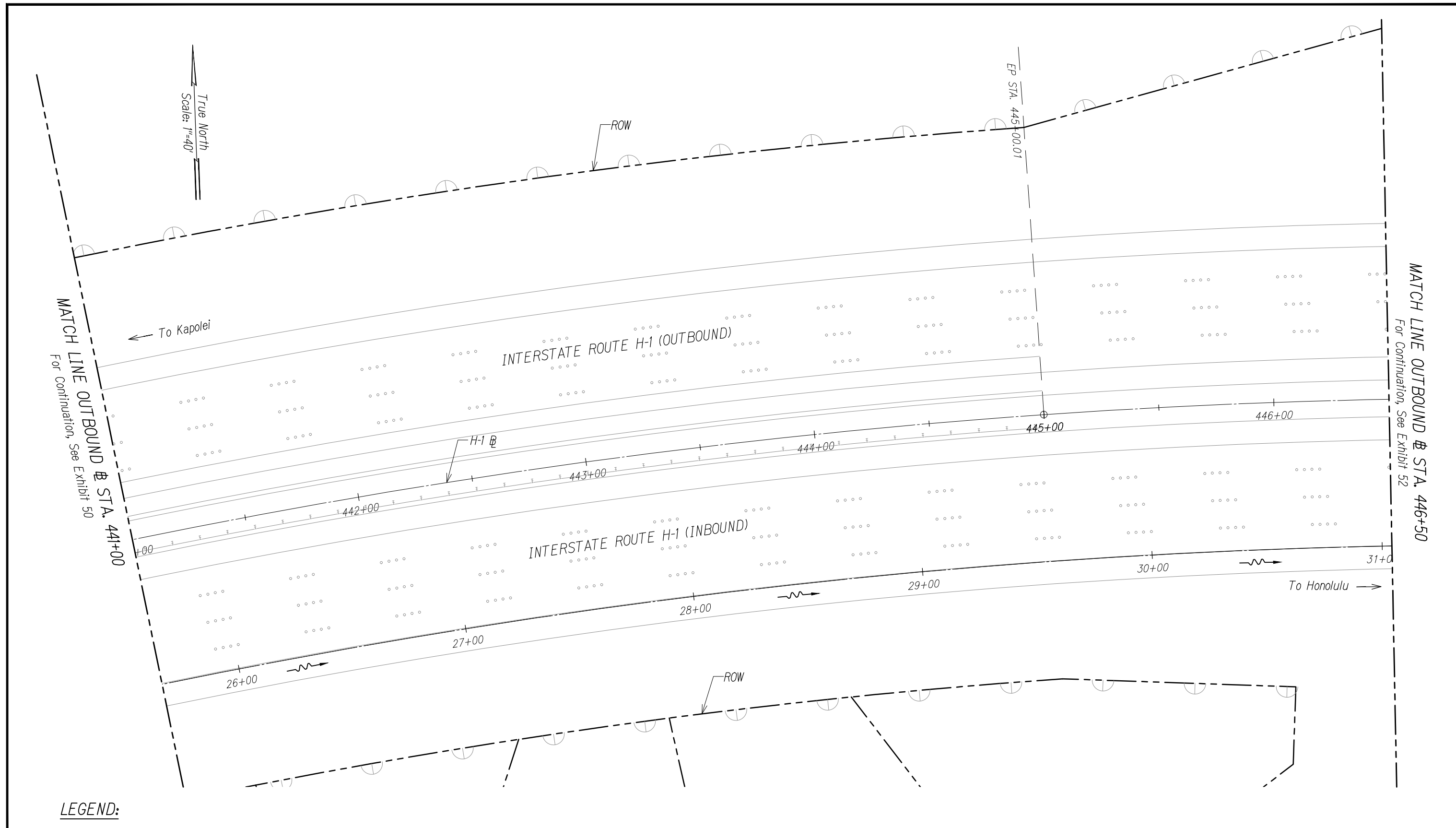
WAIKELE VMS DRAINAGE AREA MAP - 5
Scale: 1" = 40'

**FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)**

AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII
**DRAINAGE AREA MAP
WAIKELE VMS - 5**



FN: X:\96-46\96-46\27\NPDES\NPDES EXHIBITS\EX 51 - DRAINAGE AREA MAP - WAIKELE VMS 7.DWG



LEGEND:

—~—~—~ Flow Direction

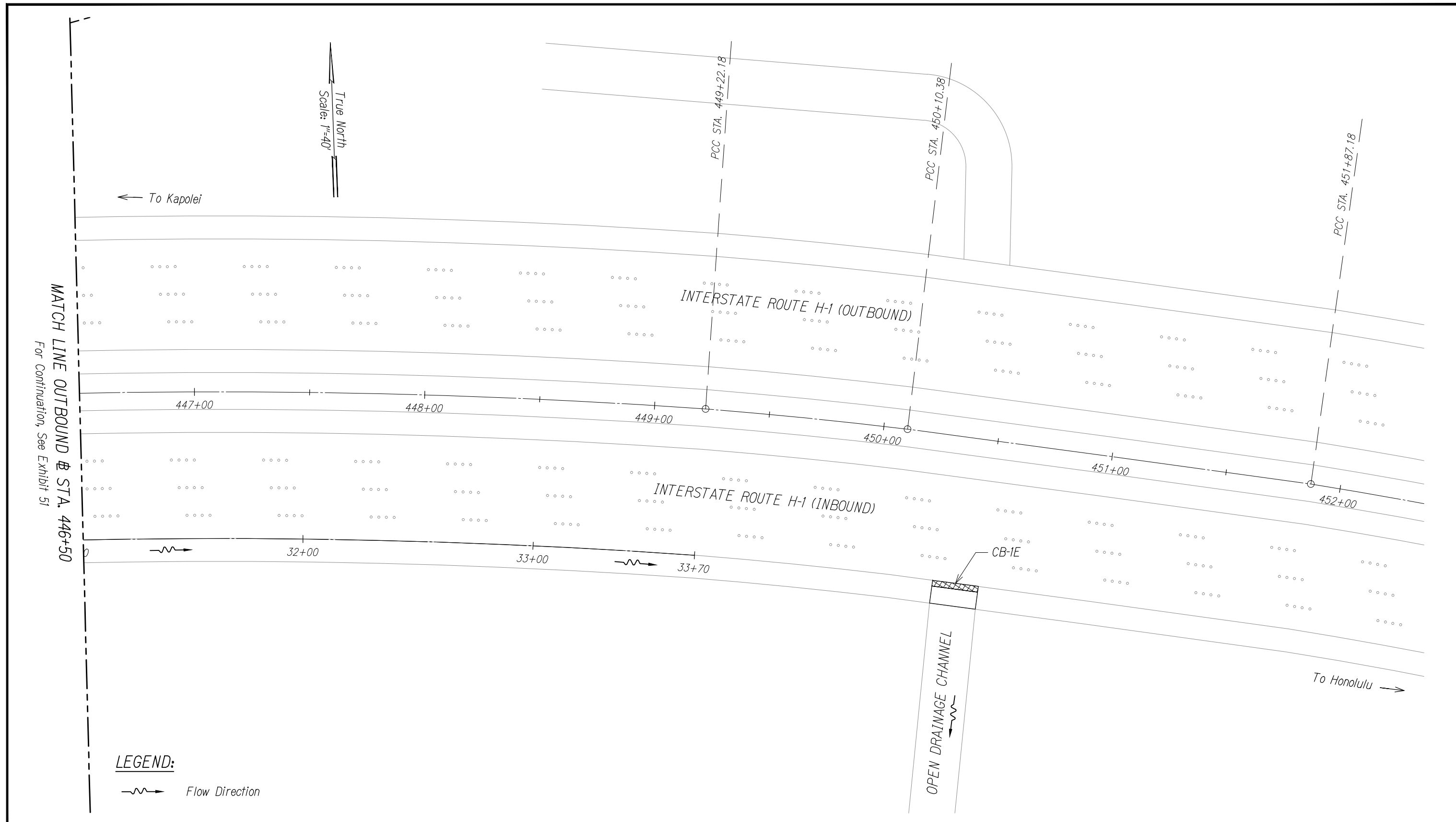
WAIKELE VMS DRAINAGE AREA MAP - 7
Scale: 1" = 40'

**FREeway MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)**

AUSTIN, TSUTSUMI, & ASSOC., INC.
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**DRAINAGE AREA MAP
WAIKELE VMS - 7**

EXHIBIT

51



WAIKELE VMS DRAINAGE AREA MAP - 8
Scale: 1" = 40'

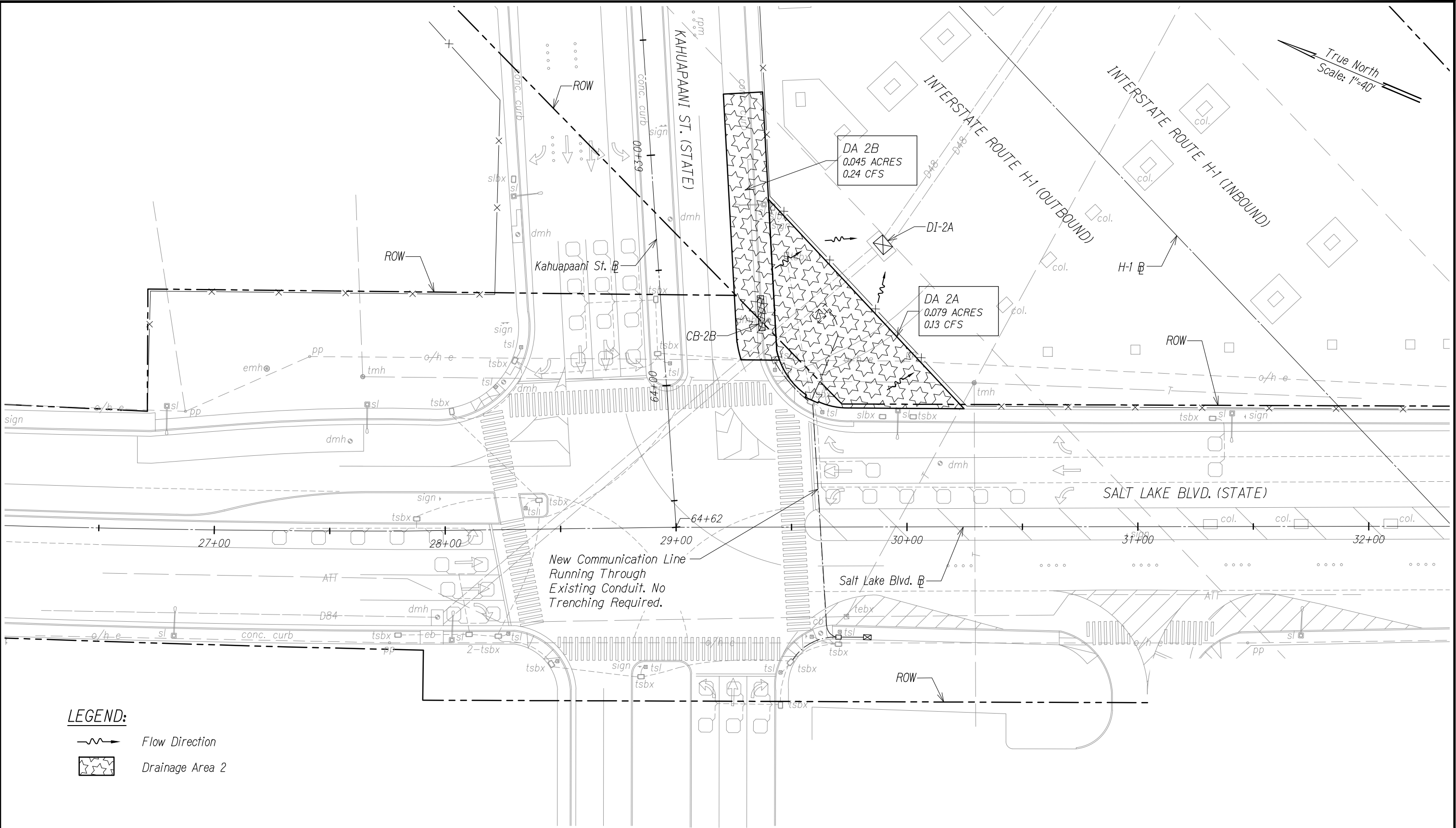
FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

ATA AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII
DRAINAGE AREA MAP
WAIKELE VMS - 8

EXHIBIT

52

FN: X:\96-46\96-46.27\NPDES\NPDES EXHIBITS\EX 53 - DRAINAGE AREA MAP - KAHUAPAANI.DWG



LEGEND:

Flow Direction

Drainage Area 2

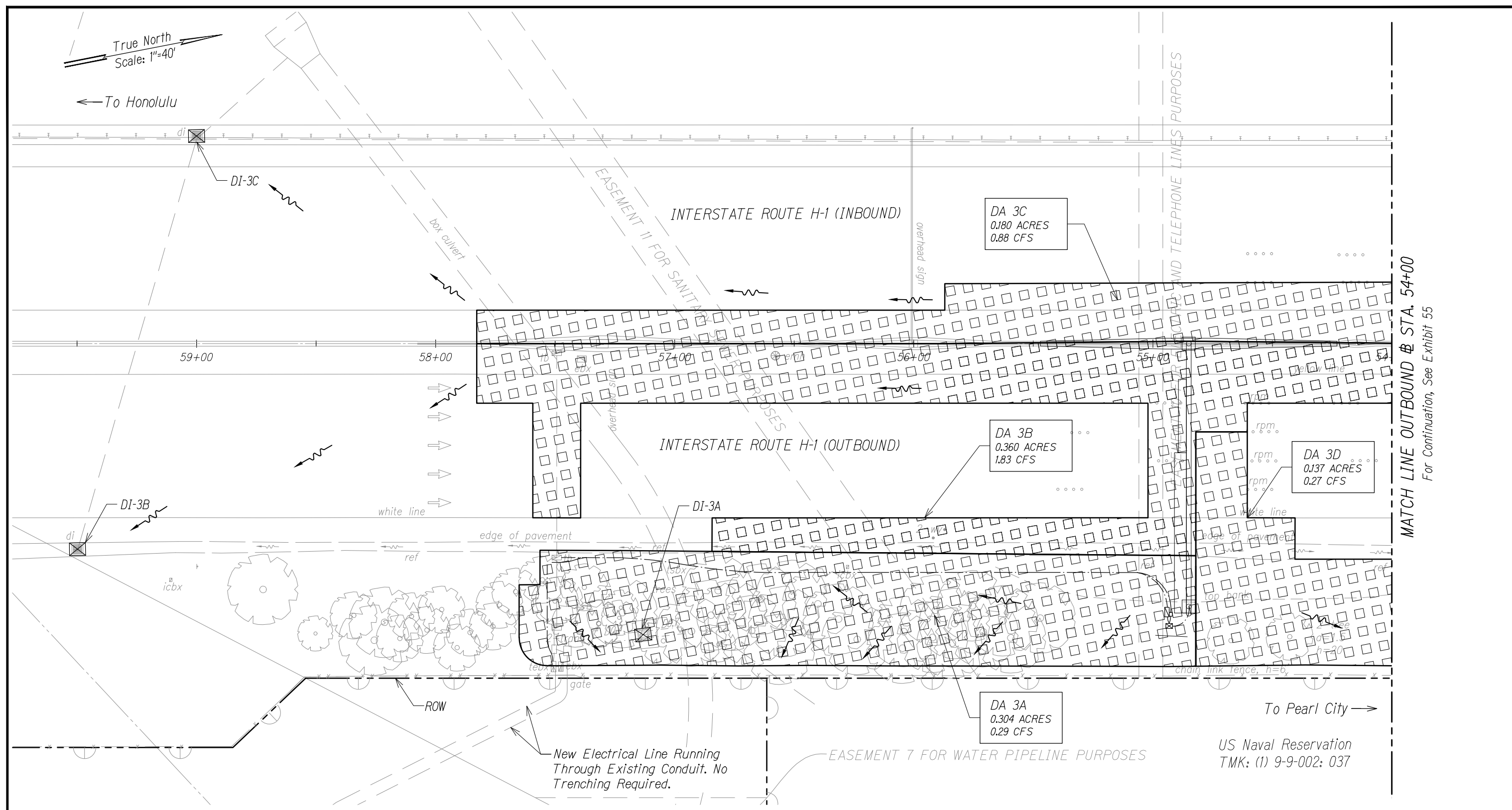
KAHUAPAANI CCTV DRAINAGE AREA MAP
Scale: 1" = 40'

**FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)**

AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

**DRAINAGE AREA MAP
KAHUAPAANI CCTV**

FN: X:\96-46\96-46.27\NPDES\EXHIBITS\EX 54 - DRAINAGE AREA MAP - RADFORD VMS 1.DWG



LEGEND:

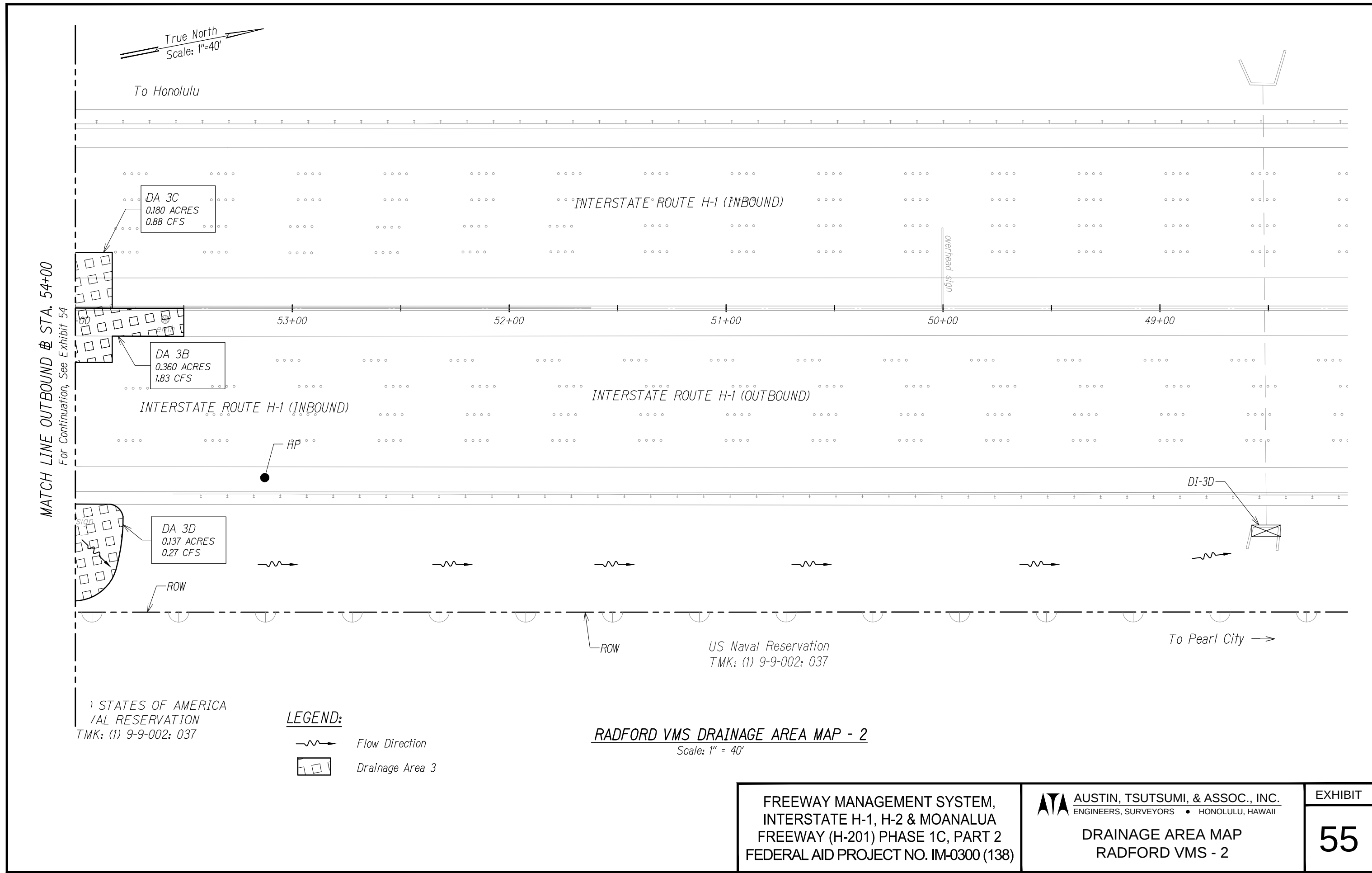
- Flow Direction
- Drainage Area 3

RADFORD VMS DRAINAGE AREA MAP - 1

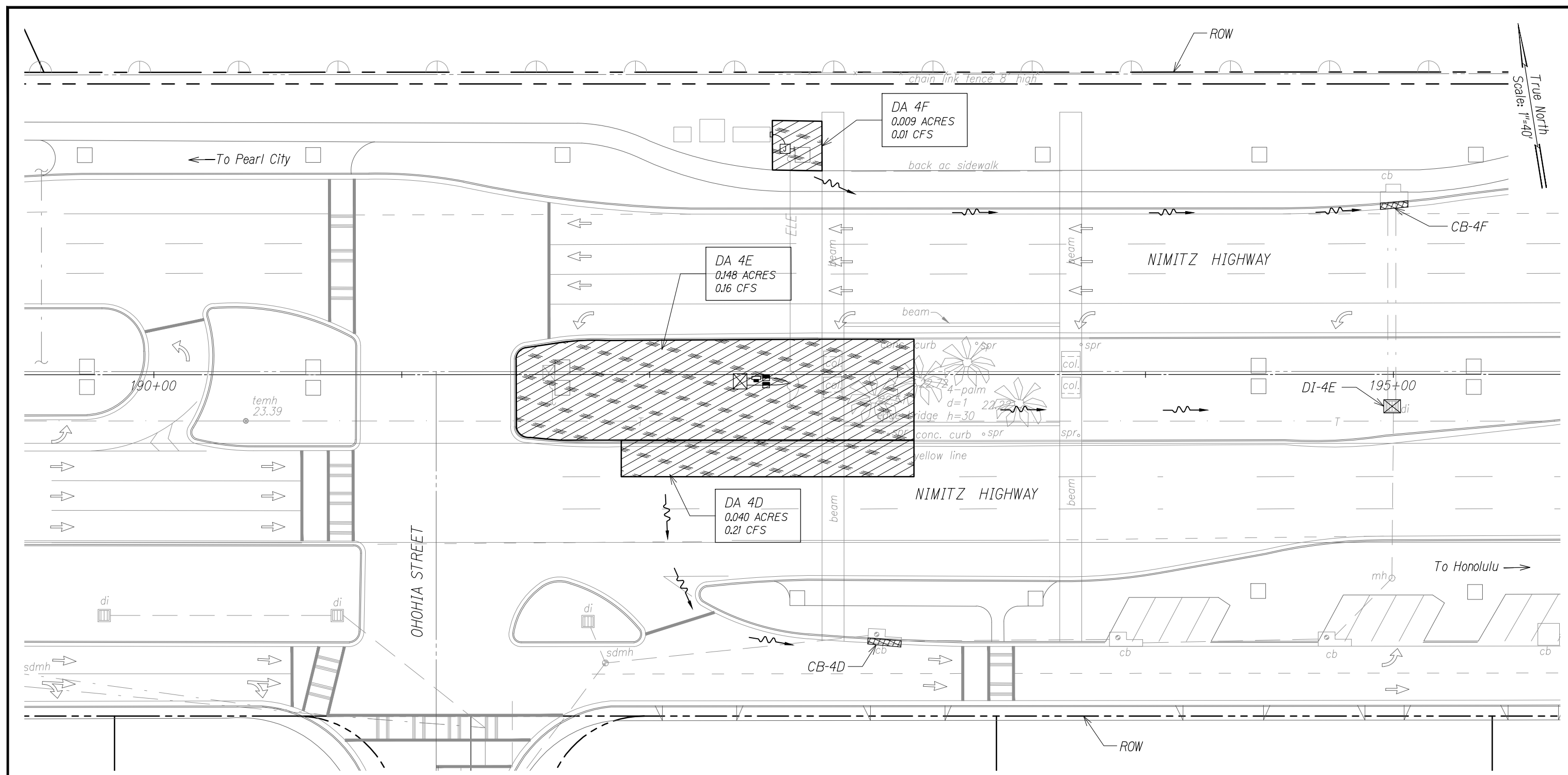
Scale: 1" = 40'

FREEWAY MANAGEMENT SYSTEM, INTERSTATE H-1, H-2 & MOANALUA FREEWAY (H-201) PHASE 1C, PART 2 FEDERAL AID PROJECT NO. IM-0300 (138)	AUSTIN, TSUTSUMI, & ASSOC., INC. ENGINEERS, SURVEYORS • HONOLULU, HAWAII	EXHIBIT
		54

FN: X:\96-46\96-46.27\NPDES EXHIBITS\EX 55 - DRAINAGE AREA MAP - RADFORD VMS 2.DWG



FN: X:\96-46\96-46.27\NPDES\EXHIBITS\EX 57 - DRAINAGE AREA MAP - AIRPORT CCTV 2.DWG



LEGEND:

- Flow Direction
- Drainage Area 4

AIRPORT CCTV DRAINAGE AREA MAP - 2
Scale: 1" = 40'

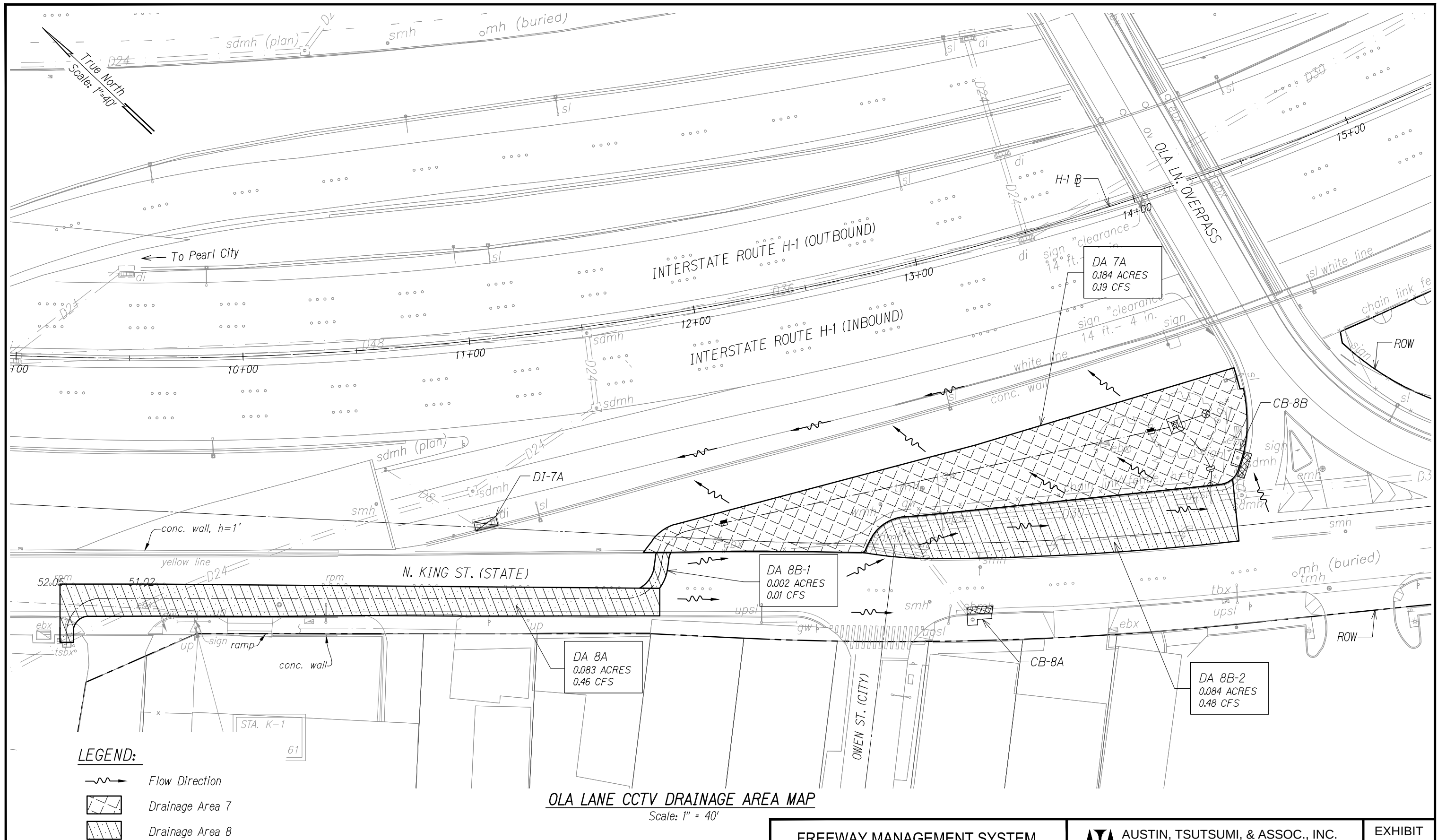
FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII
DRAINAGE AREA MAP
AIRPORT CCTV - 2

EXHIBIT

57

FN: X:\96-46\96-46.27\NPDES\EXHIBITS\EX 59 - DRAINAGE AREA MAP - OLA LANE CCTV.DWG



FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

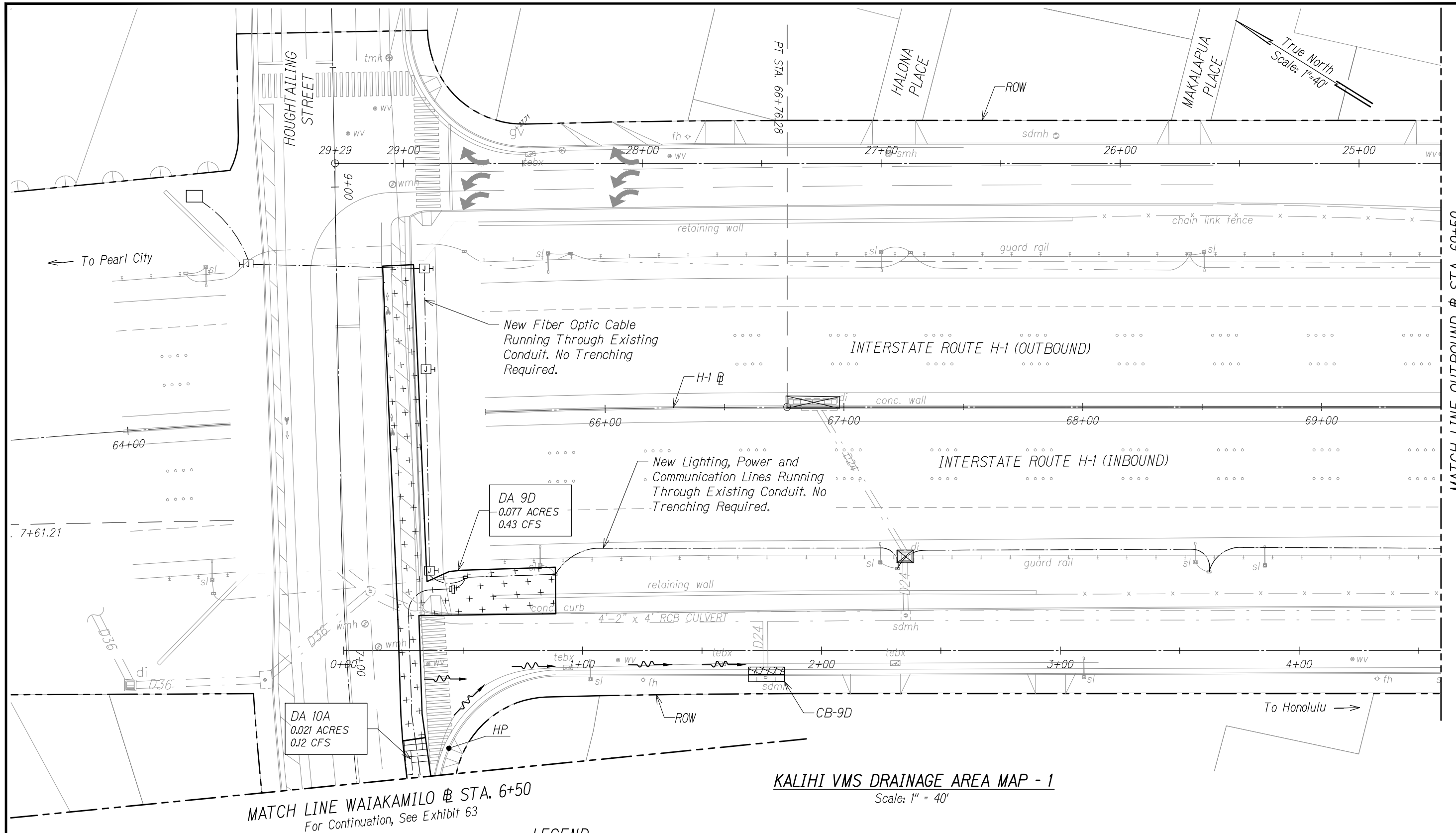
AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

DRAINAGE AREA MAP
OLA LANE CCTV

EXHIBIT

59

FN: X:\96-46\96-46.27\NPDES\EXHIBITS\EX 61 - DRAINAGE AREA MAP - KALIHI VMS 1.DWG



LEGEND:

- Flow Direction
- Drainage Area 9
- Drainage Area 10

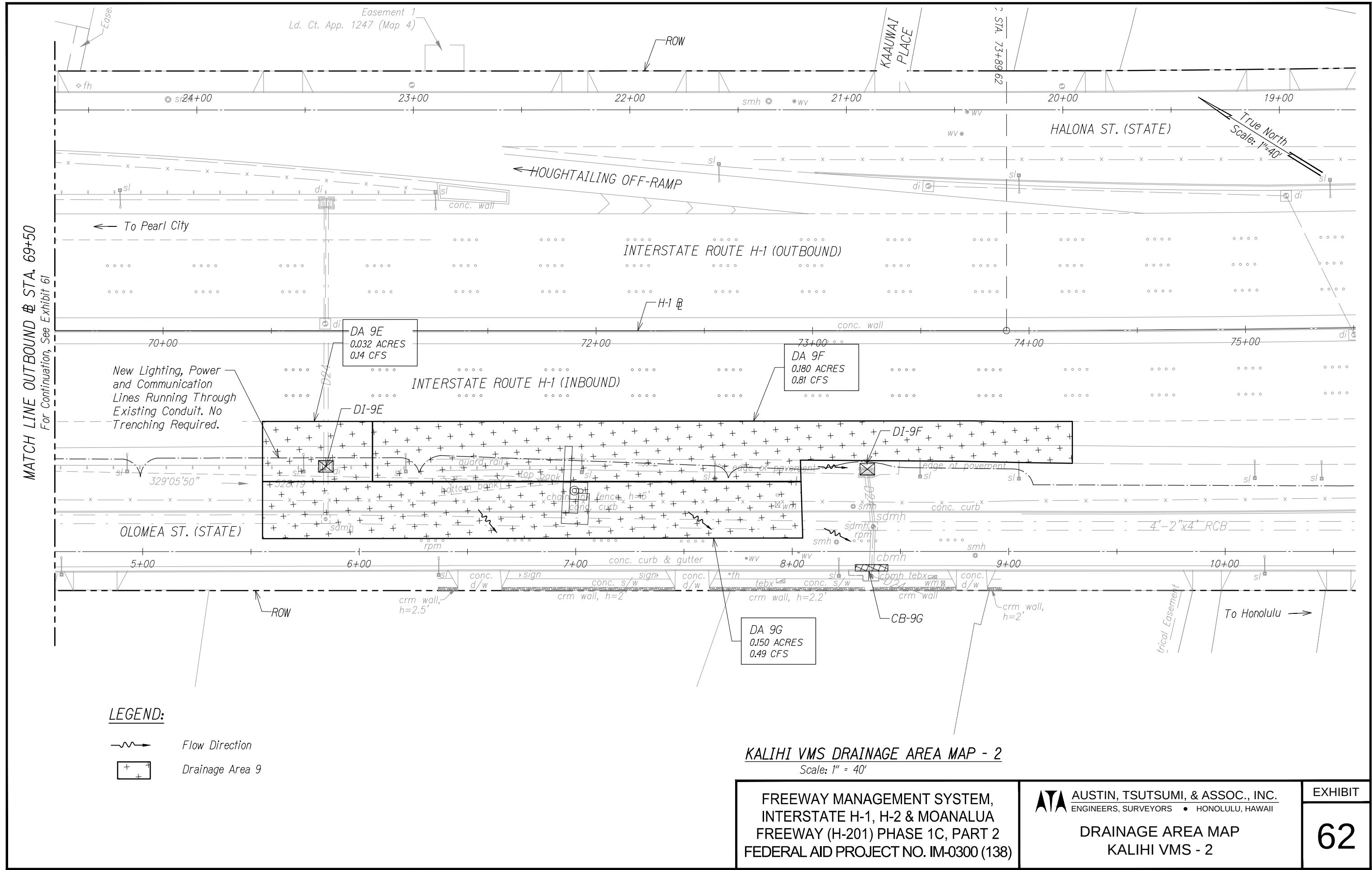
KALIHI VMS DRAINAGE AREA MAP - 1
Scale: 1" = 40'

**FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)**

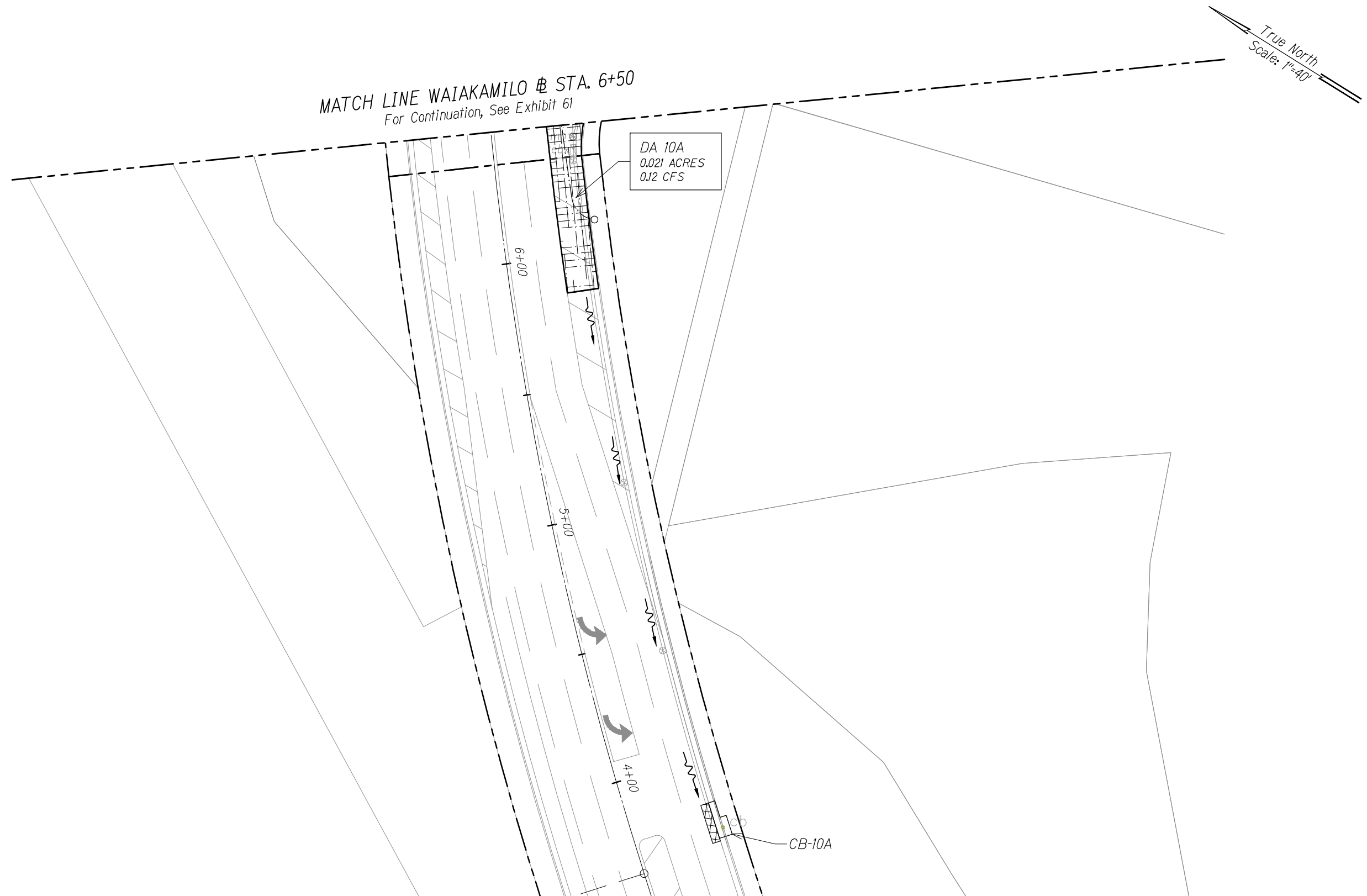
AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII
**DRAINAGE AREA MAP
KALIHI VMS - 1**

EXHIBIT

61



FN: X:\96-46\96-46.27\NPDES\NPDES EXHIBITS\EX 63 - DRAINAGE AREA MAP - KALIHI VMS 3.DWG



LEGEND:

- ~> Flow Direction
- ▢ Drainage Area 10

KALIHI VMS DRAINAGE AREA MAP - 3
Scale: 1" = 40'

FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

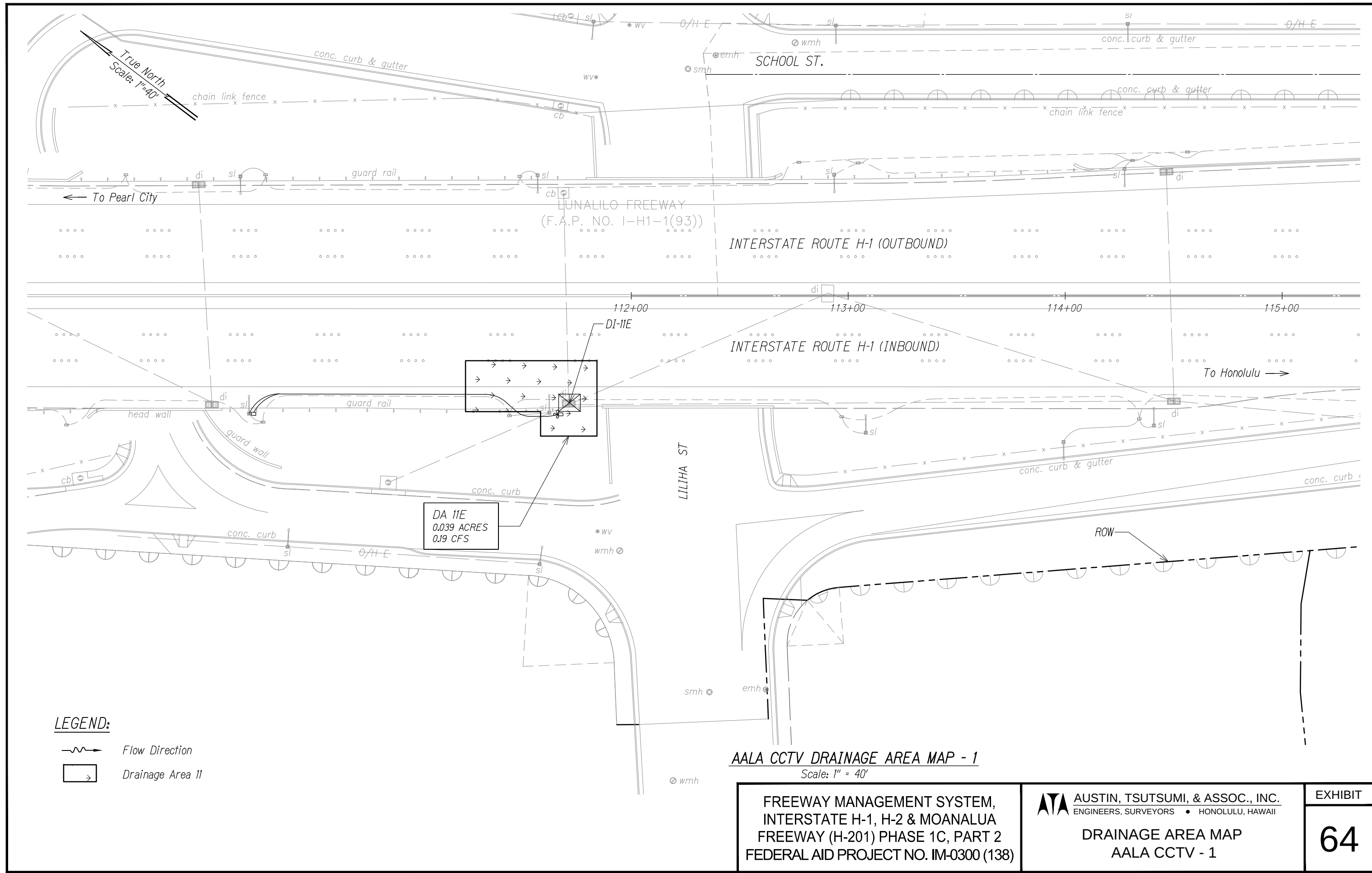
ATA AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

DRAINAGE AREA MAP
KALIHI VMS - 3

EXHIBIT

63

FN: X:\96-46\96-46.27\NPDES\NPDES EXHIBITS\EX 64 - DRAINAGE AREA MAP - AALA CCTV 1.DWG



LEGEND:

- Flow Direction
- Drainage Area 11

AALA CCTV DRAINAGE AREA MAP - 1

Scale: 1" = 40'

FREEMAN MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

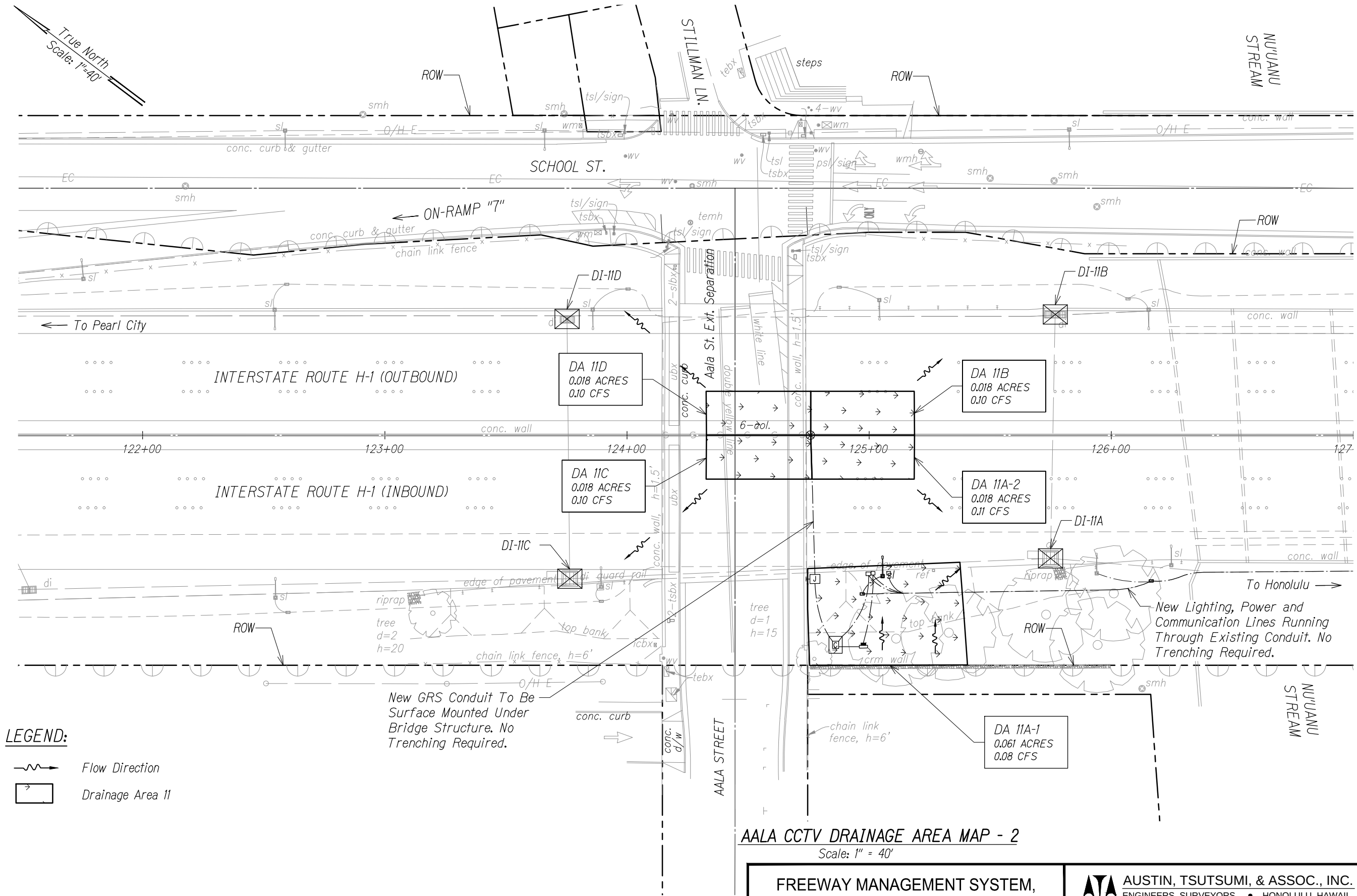
AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

DRAINAGE AREA MAP
AALA CCTV - 1

EXHIBIT

64

FN: X:\96-46\96-46.27\NPDES\EXHIBITS\EX 65 - DRAINAGE AREA MAP - AALA CCTV 2.DWG



AALA CCTV DRAINAGE AREA MAP - 2

FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

DRAINAGE AREA MAP
AALA CCTV - 2

EXHIBIT

65

Flow Direction

Drainage Area 12

FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

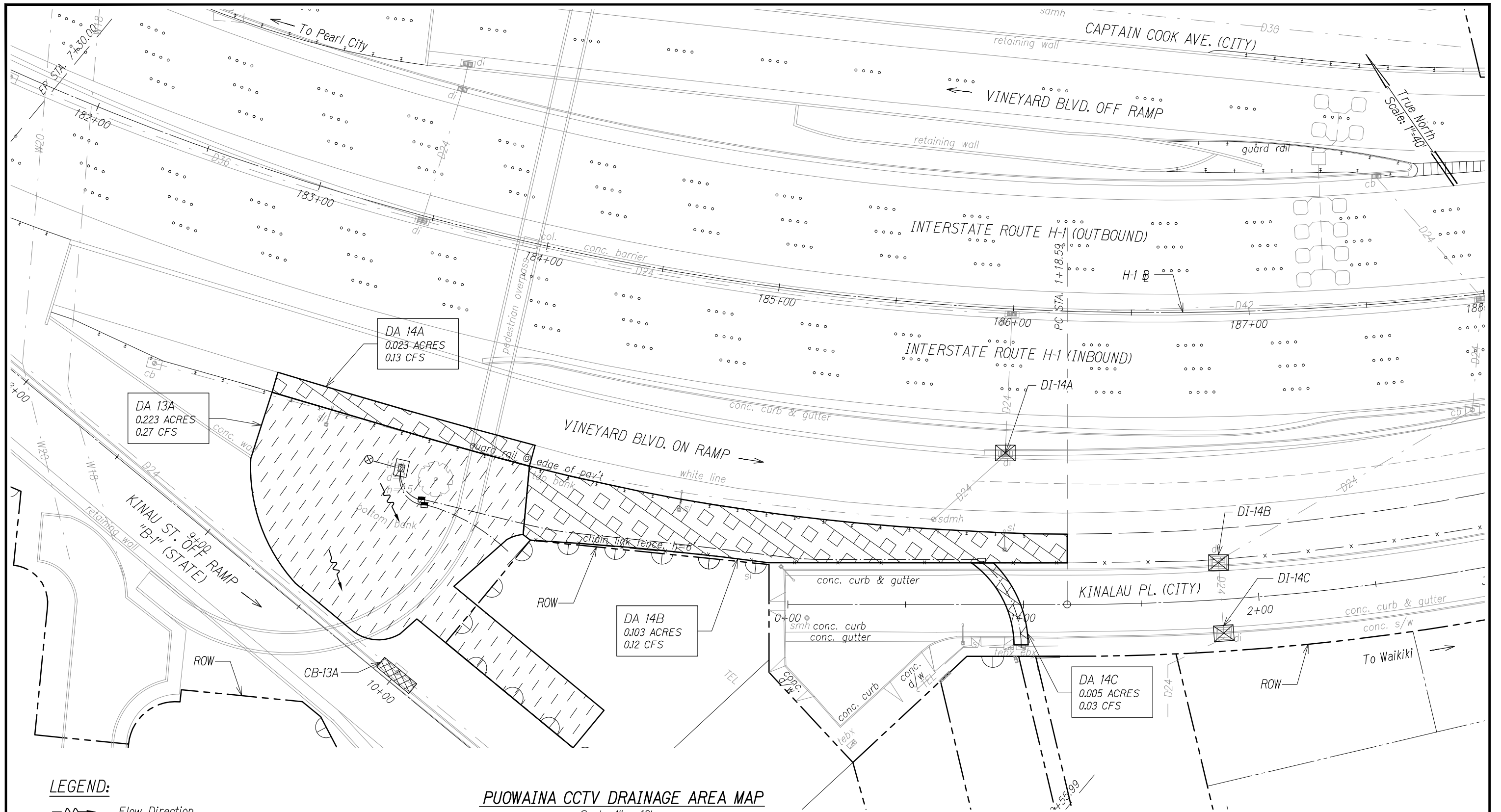
 **AUSTIN, TSUTSUMI, & ASSOC., INC.**
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

DRAINAGE AREA MAP
AALA CCTV - 3

EXHIBIT

66

FN: X:\96-46\96-46.27\NPDES EXHIBITS\EX 67 - DRAINAGE AREA MAP - PUOWAINA CCTV.DWG



LEGEND:

- Flow Direction
- Drainage Area 13
- Drainage Area 14

PUOWAINA CCTV DRAINAGE AREA MAP
Scale: 1" = 40'

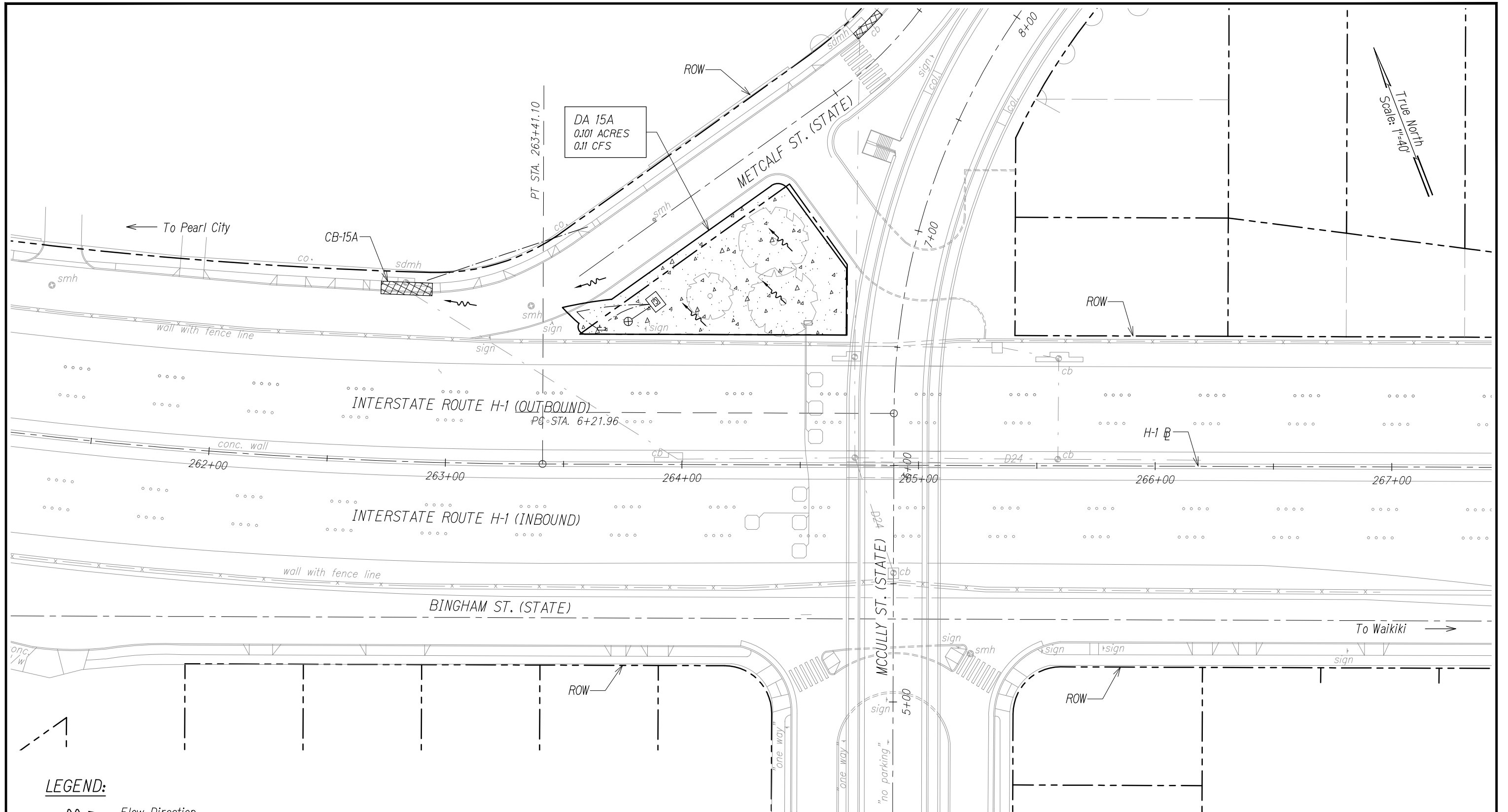
**FREeway MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)**

AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII
**DRAINAGE AREA MAP
PUOWAINA CCTV**

EXHIBIT

67

FN: X:\96-46\96-46.27\NPDES\NPDES EXHIBITS\EX 68 - DRAINAGE AREA MAP - MCCULLY CCTV.DWG



MCCULLY CCTV DRAINAGE AREA MAP
Scale: 1" = 40'

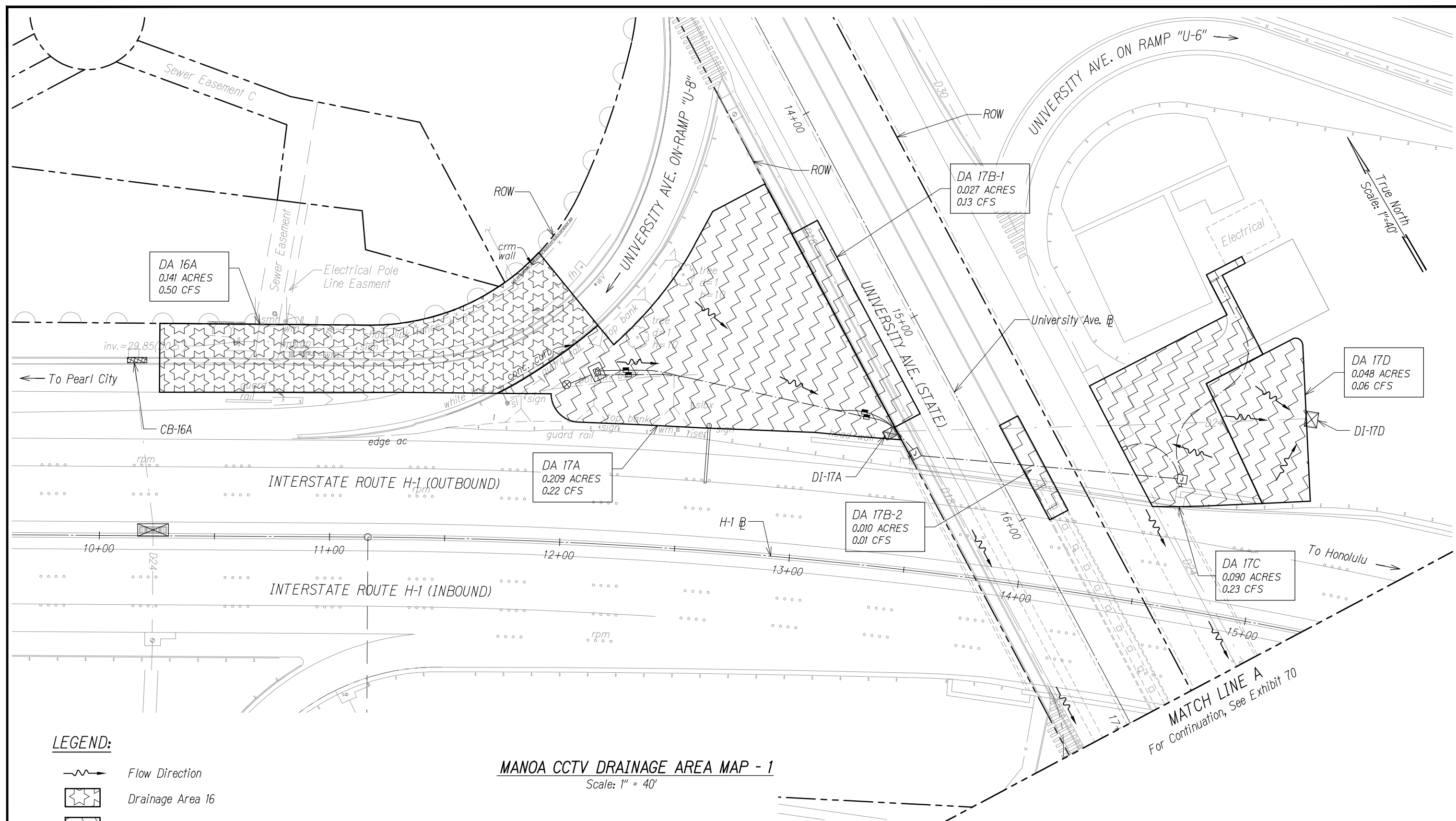
**FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)**

AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII
**DRAINAGE AREA MAP
MCCULLY CCTV**

EXHIBIT

68

FN: X:\96-46\96-46.27\NPDES\EXHIBITS\EX 69 - DRAINAGE AREA MAP - MANOA CCTV 1.DWG



LEGEND:

- Flow Direction
- Drainage Area 16
- Drainage Area 17

MANOA CCTV DRAINAGE AREA MAP - 1
Scale: 1" = 40'

FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

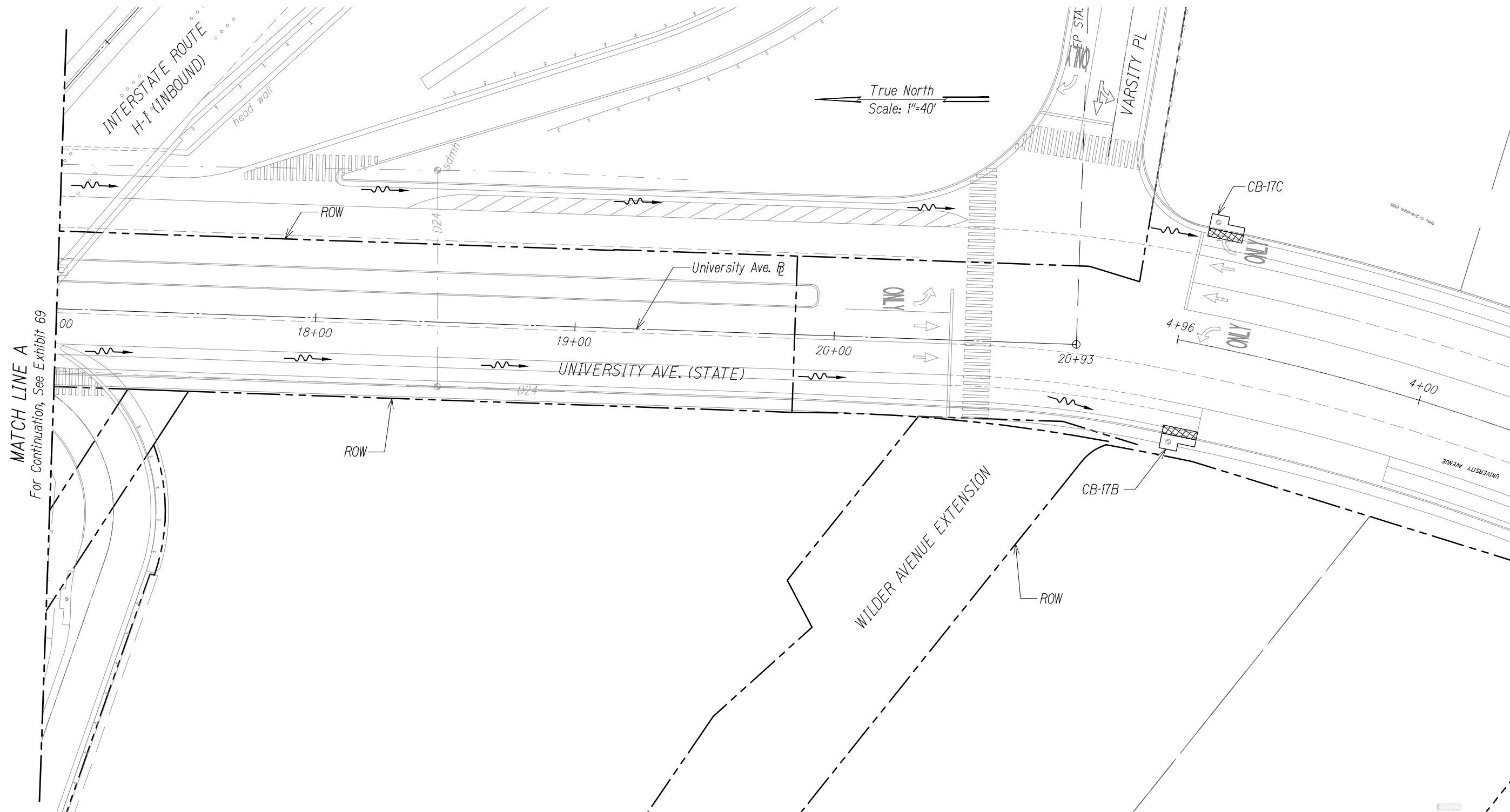
AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

DRAINAGE AREA MAP
MANOA CCTV - 1

EXHIBIT

69

FN: X:\96-46\96-46.27\NPDES\EXHIBITS\EX 70 - DRAINAGE AREA MAP - MANOA CCTV 2.DWG



MANOA CCTV DRAINAGE AREA MAP - 2
Scale: 1" = 40'

LEGEND:

~> Flow Direction

FREEWAY MANAGEMENT SYSTEM,
INTERSTATE H-1, H-2 & MOANALUA
FREEWAY (H-201) PHASE 1C, PART 2
FEDERAL AID PROJECT NO. IM-0300 (138)

AUSTIN, TSUTSUMI, & ASSOC., INC.
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

DRAINAGE AREA MAP
MANOA CCTV - 2

EXHIBIT

70