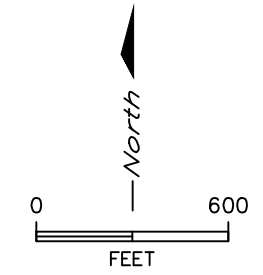
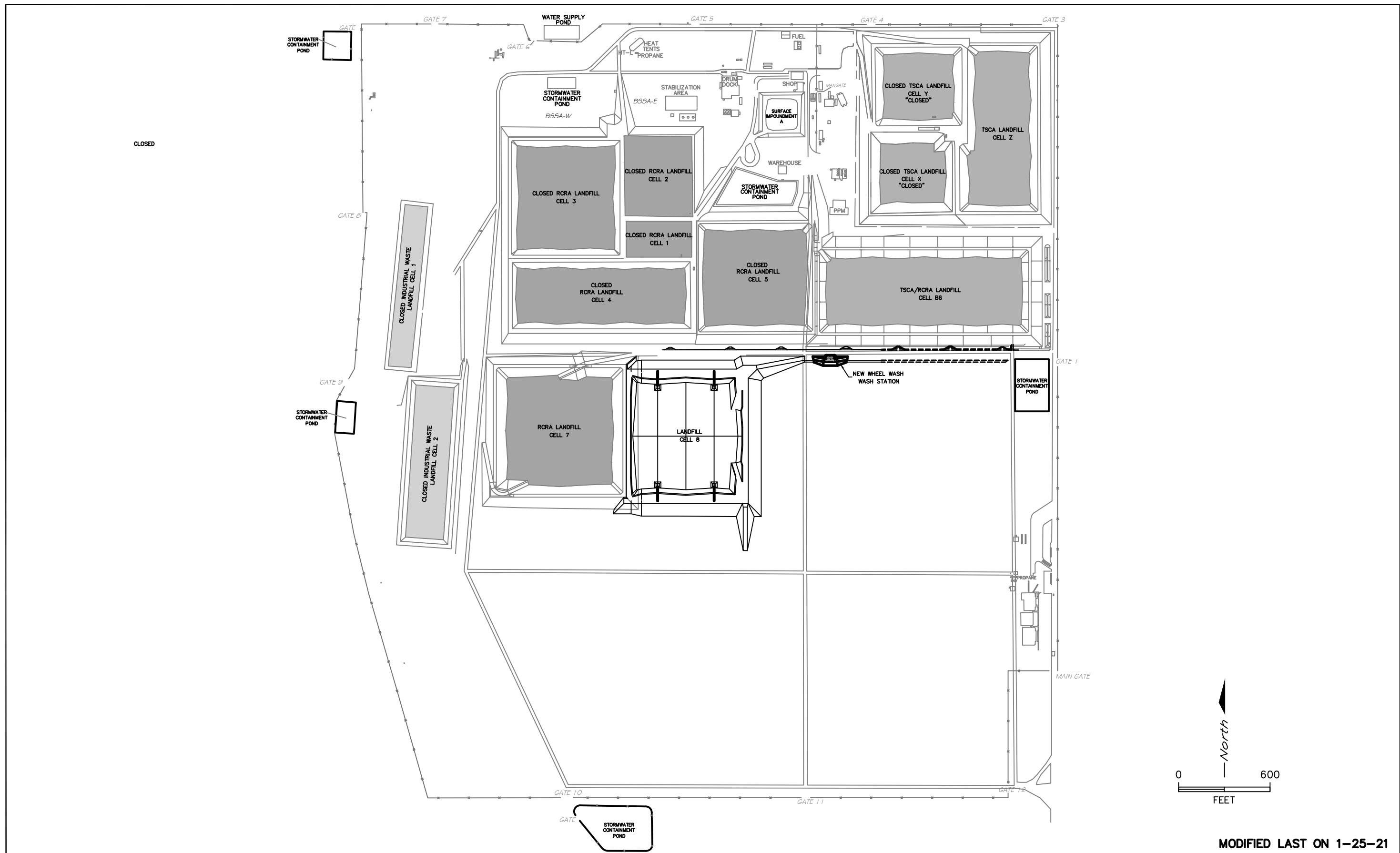


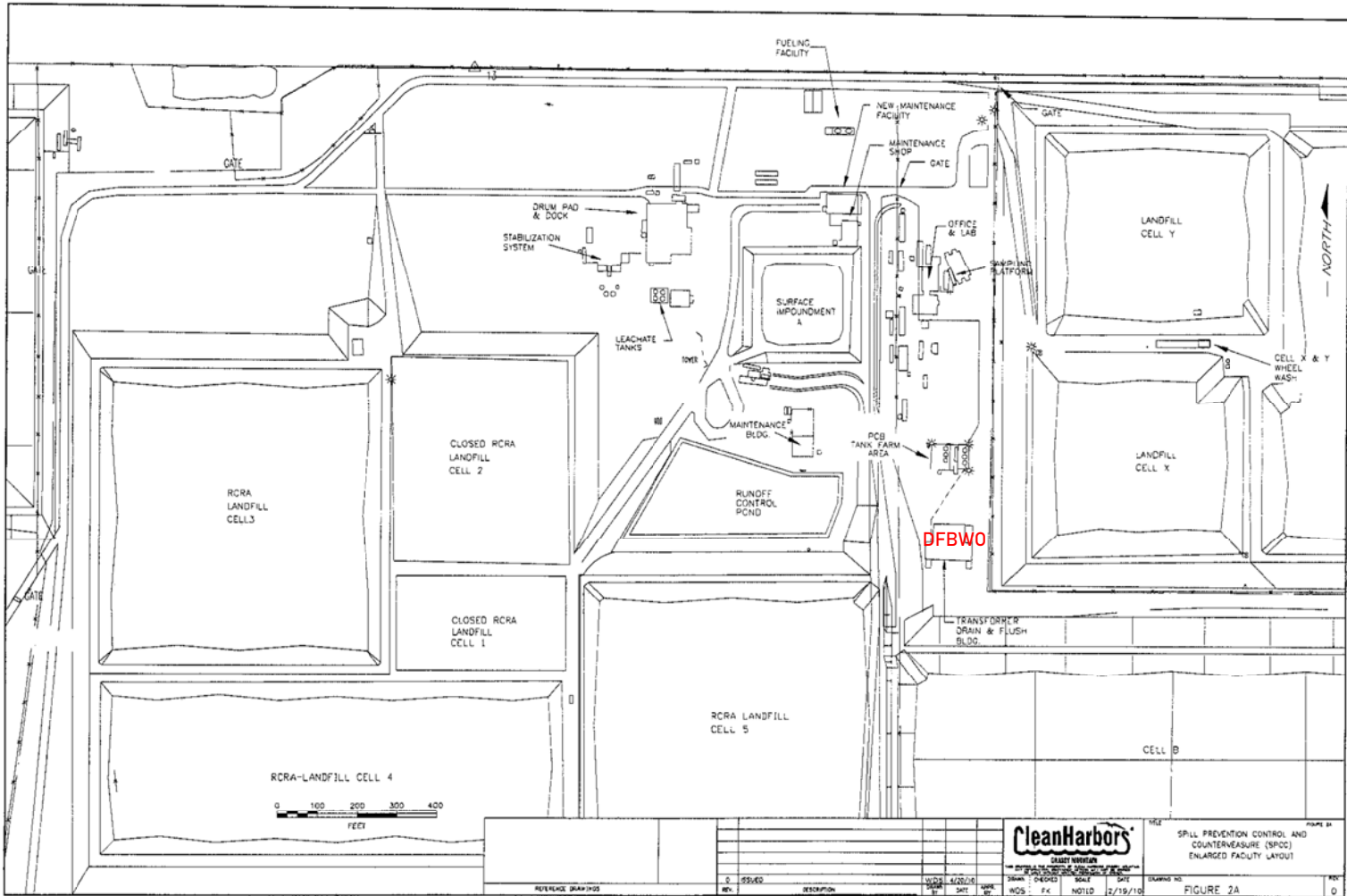
ATTACHMENT III-1

CONTAINER MANAGEMENT BUILDING AND DRAIN
AND FLUSH BUILDING WAREHOUSE ONE
STORAGE AREA DRAWINGS



MODIFIED LAST ON 1-25-21

REFERENCE DRAWINGS		REV.		DESCRIPTION		DATE		DRAWN BY		CHECKED		SCALE		DATE		APPR BY		TITLE		DRAWING NO.		REV.	
																			CLEAN HARBORS GRASSY MOUNTAIN, LLC ATTACHMENT II-1 FACILITY PLAN VIEW		963225-08A		C
																			CleanHarbors				

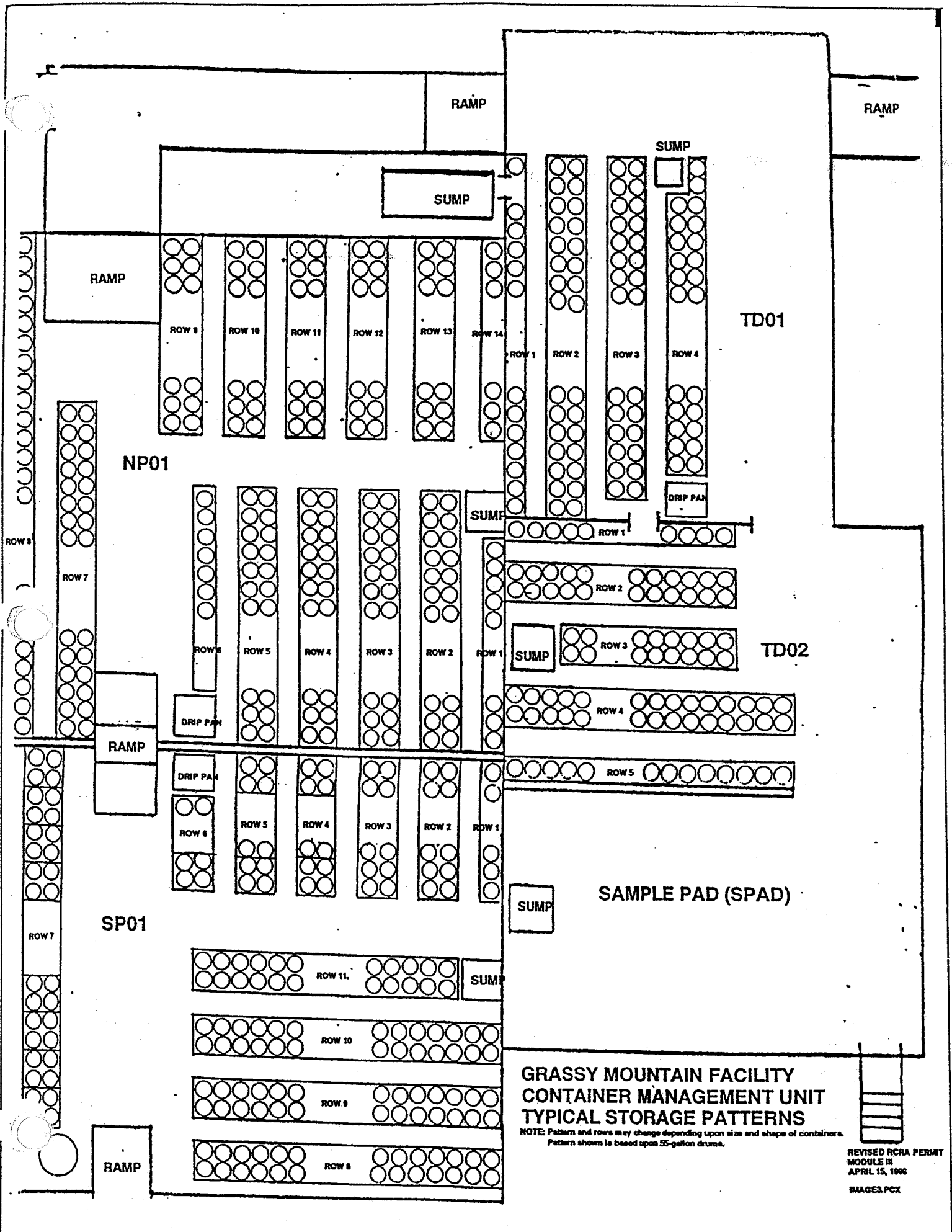


CleanHarbors
CRADY REMEDIATION

PLANS BY
 SPILL PREVENTION CONTROL AND
 COUNTERMEASURE (SPCC)
 ENLARGED FACILITY LAYOUT

NO.	DATE	DESCRIPTION	BY	CHECKED	DATE	SCALE	SHEET NO.	TOTAL SHEETS
1	02/19/10	NOTED	FX	WOS	FX	NOTED	2/19/10	0

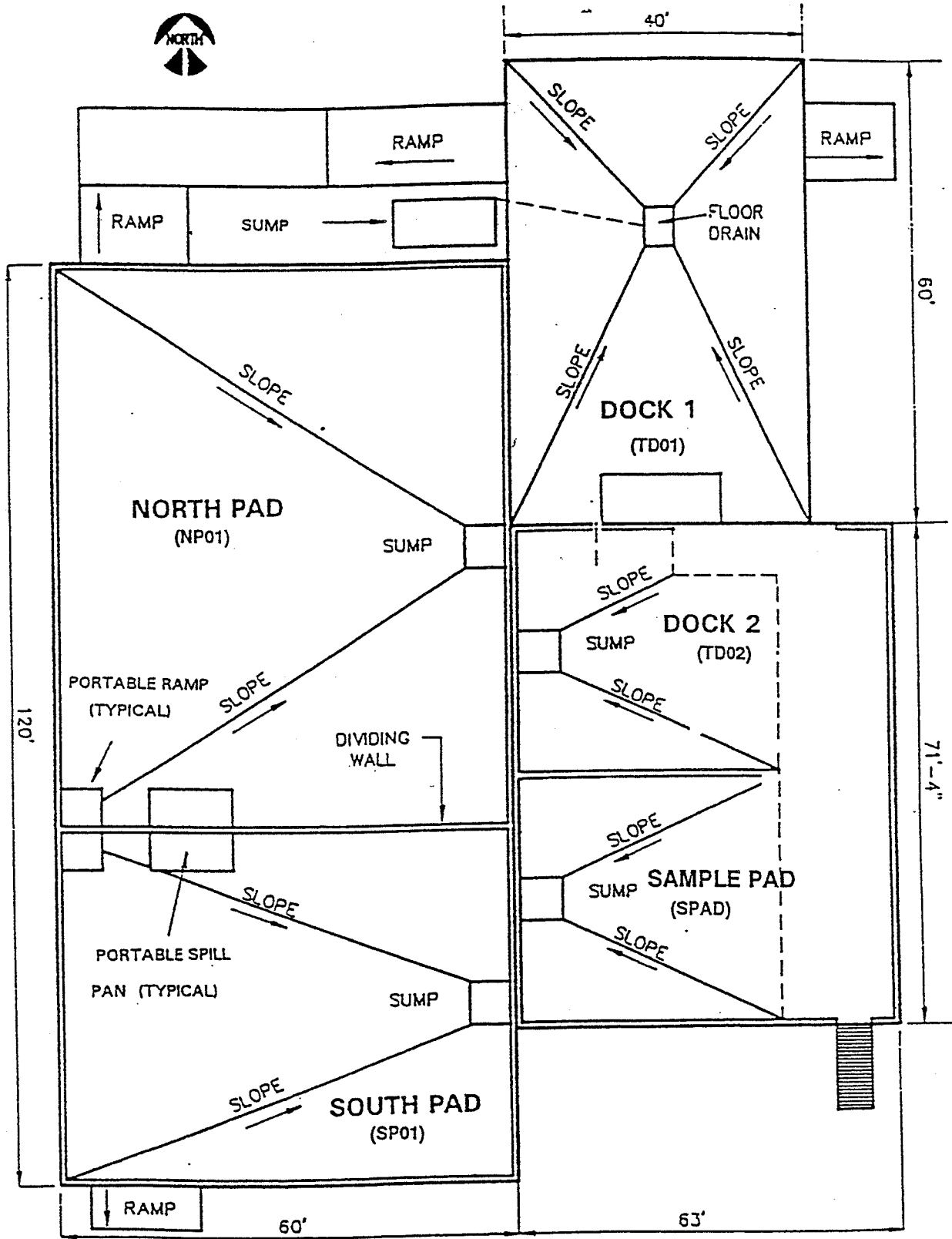
FIGURE 2A



**GRASSY MOUNTAIN FACILITY
CONTAINER MANAGEMENT UNIT
TYPICAL STORAGE PATTERNS**

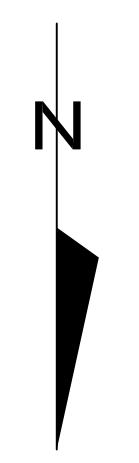
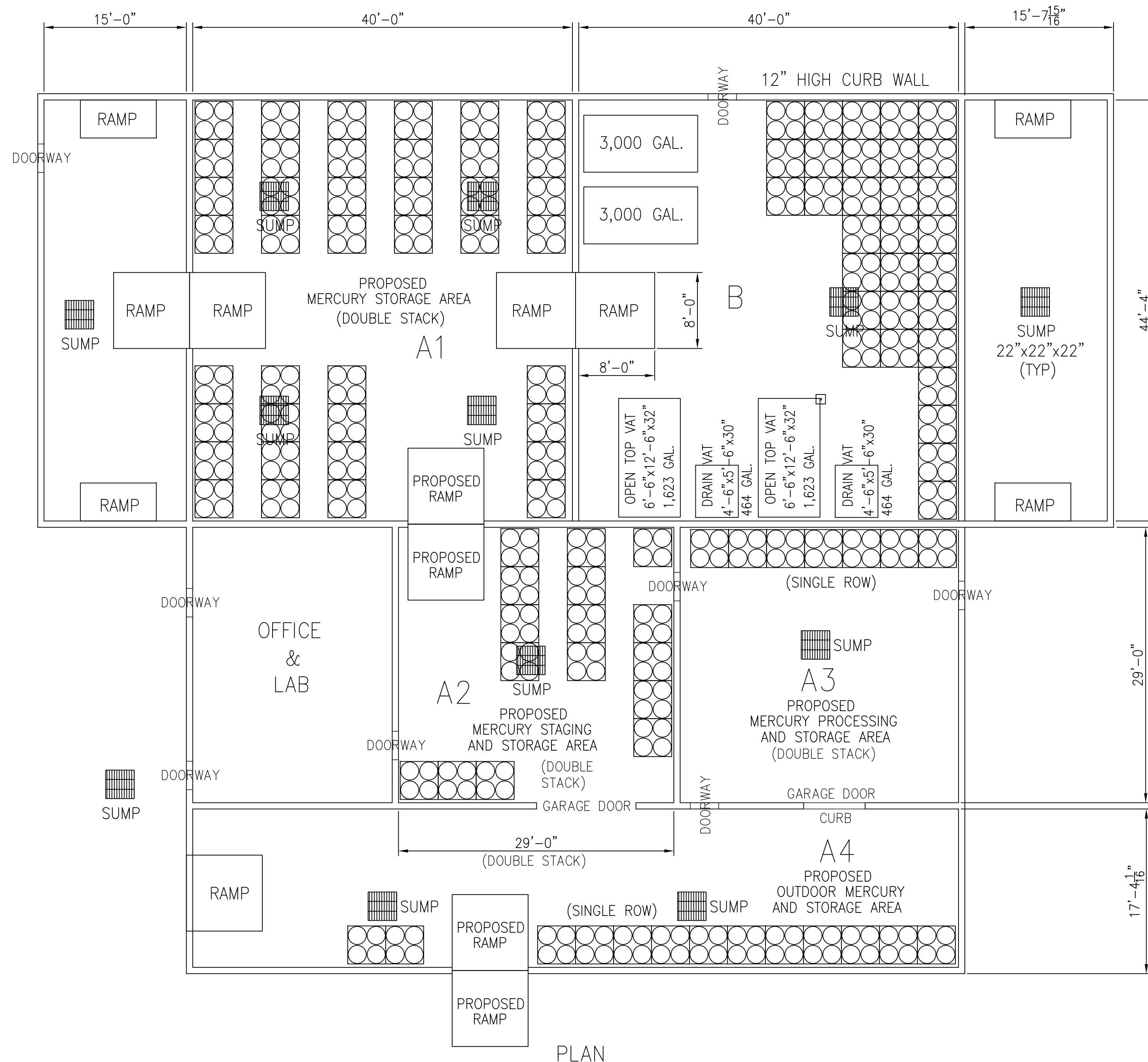
NOTE: Pattern and rows may change depending upon size and shape of containers.
Pattern shown is based upon 55-gallon drums.

REVISED RCRA PERMIT
MODULE III
APRIL 15, 1996
IMAGE.PCX

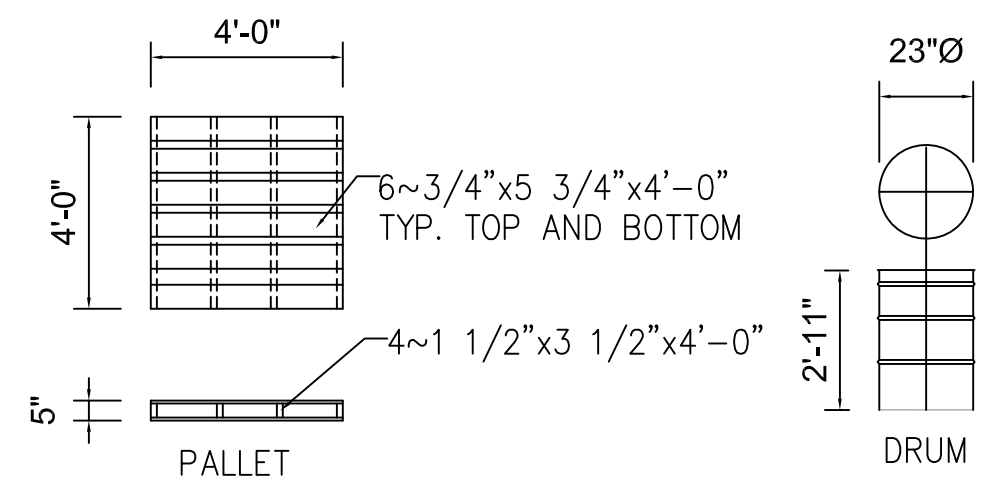


GRASSY MOUNTAIN FACILITY
 CONTAINER MANAGEMENT UNIT
 SECONDARY CONTAINMENT AREAS

REVISED RCRA PERMIT
 MODULE III
 APRIL 15, 1996
 IMAGE2.PCX

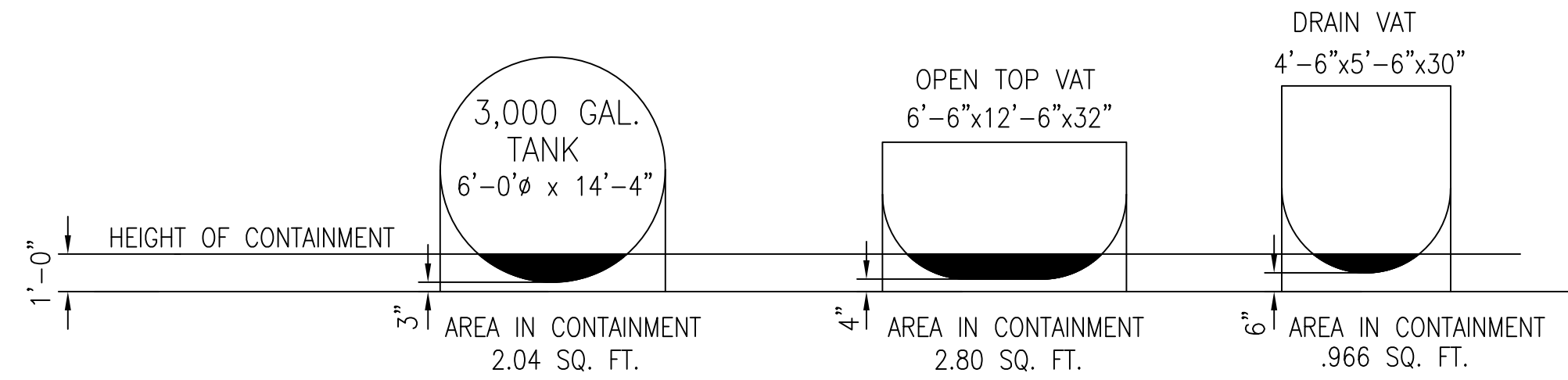


PLAN



PALLET VOLUME CALCULATIONS:
 (6 EA. 3/4"x5 3/4"x4') = 0.72 CU. FT.
 (6 EA. 3/4"x5 3/4"x4') = 0.72 CU. FT.
 (4 EA. 1 1/2"x3 1/2"x4') = 0.58 CU. FT.
 TOTAL VOLUME 2 CUBIC FEET

HEIGHT OF PALLET = 0.42 FT.
 SCALE: 1/4" = 1'-0"



TANK & VAT DISPLACEMENT
 SCALE: 1/4" = 1'-0"

A. REQUIRED CONTAINMENT AREA A1
 320 DRUMS x 55 GAL. EA. = 17,600 GAL.
 17,600 GAL. x .25 = 4,400 GAL.

B. AVAILABLE CONTAINMENT CAPACITY
 40'x44'x1' = 1,760 CU. FT.
 $\frac{x7.481}{2}$
 FLOOR CAPACITY = 13,165 GAL.
 SUMP CAPACITY = 2'x2'x2'x4 = 32 CU. FT.
 $\frac{x7.481}{2}$
 239 GAL.
 TOTAL CAPACITY = 13,404 GAL.

DEDUCT FOR RAMPS
 $\frac{8'x8'x1'}{2} \times 3 = 96$ CU. FT. x 7.48 = 718 GAL. (1)

DEDUCT VOLUME OCCUPIED BY DRUMS/PALLETS
 MAXIMUM CAPACITY = 320 DRUMS
 STACK 2 HIGH = 160 DRUMS
 4 DRUMS / PALLET = 40 PALLETS
 2 CU. FT. / PALLET x 40 = 80 CU. FT.
 $\frac{x7.481}{598.4}$
 598.4 GAL. (2)

HEIGHT OF DRUMS IN CONTAINMENT
 12" - 5" = 7" OF DRUM VOLUME
 23" Ø DRUM = 1.799 GAL./IN. x 7" = 12.6 GAL./DRUM
 12.6 GAL./DRUM x 160 = 2,013 GAL. (3)

TOTAL DEDUCT FOR RAMPS + DRUMS + PALLETS IN CONTAINMENT
 (i.e., (1) + (2) + (3))
 718 + 599 + 2,013 GAL. = 3,330 GAL.

TOTAL AVAILABLE CONTAINMENT CAPACITY
 13,165 GAL. - 3,330 GAL. = 9,835 GAL.

AVAILABLE CAPACITY (9,835) > REQUIRED CAPACITY (4,400) O.K.

A. REQUIRED CONTAINMENT AREA A3
 56 DRUMS x 55 GAL. EA. = 3,080 GAL.
 3,080 GAL. x .25 = 770 GAL.

B. AVAILABLE CONTAINMENT CAPACITY
 29'x29'x1' = 841 CU. FT.
 $\frac{x7.481}{2}$
 FLOOR CAPACITY = 6,291 GAL.
 SUMP CAPACITY = 2'x2'x2'x1 = 8 CU. FT.
 $\frac{x7.481}{60}$
 60 GAL.
 TOTAL CAPACITY = 6,351 GAL.

DEDUCT VOLUME OCCUPIED BY DRUMS/PALLETS
 MAXIMUM CAPACITY = 56 DRUMS
 STACK 2 HIGH = 28 DRUMS (BOTTOM ROWS)
 4 DRUMS / PALLET = 7 PALLETS
 2 CU. FT. / PALLET x 7 = 14 CU. FT.
 $\frac{x7.481}{105}$
 105 GAL. (2)

HEIGHT OF DRUMS IN CONTAINMENT
 12" - 5" = 7" OF DRUM VOLUME
 23" Ø DRUM = 1.799 GAL./IN. x 7" = 12.6 GAL./DRUM
 12.6 GAL./DRUM x 28 = 353 GAL. (3)

TOTAL DEDUCT FOR DRUMS + PALLETS IN CONTAINMENT
 (i.e., (2) + (3))
 105 + 353 GAL. = 458 GAL.

TOTAL AVAILABLE CONTAINMENT CAPACITY
 6,351 GAL. - 458 GAL. = 5,893 GAL.

AVAILABLE CAPACITY (5,893) > REQUIRED CAPACITY (770) O.K.

A. REQUIRED CONTAINMENT AREA A2 + A4 (CONTIGUOUS)
 232 DRUMS x 55 GAL. EA. = 12,760 GAL.
 12,760 GAL. x .25 = 3,190 GAL.

B. AVAILABLE CONTAINMENT CAPACITY
 29'x29'x1' + 17.38 x 80 x 1 = 2,231.4 CU. FT.
 $\frac{x7.481}{2}$
 FLOOR CAPACITY = 16,691 GAL.
 SUMP CAPACITY = 2'x2'x2'x3 = 24 CU. FT.
 $\frac{x7.481}{180}$
 180 GAL.
 TOTAL CAPACITY = 16,871 GAL.

DEDUCT FOR RAMPS
 $\frac{8'x8'x1'}{2} \times 3 = 96$ CU. FT. x 7.48 = 718 GAL. (1)

DEDUCT VOLUME OCCUPIED BY DRUMS/PALLETS
 MAXIMUM CAPACITY = 232 DRUMS
 STACK 2 HIGH = 116 DRUMS
 4 DRUMS / PALLET = 29 PALLETS
 2 CU. FT. / PALLET x 29 = 58 CU. FT.
 $\frac{x7.481}{434}$
 434 GAL. (2)

HEIGHT OF DRUMS IN CONTAINMENT
 12" - 5" = 7" OF DRUM VOLUME
 23" Ø DRUM = 1.799 GAL./IN. x 7" = 12.6 GAL./DRUM
 12.6 GAL./DRUM x 116 = 1,462 GAL. (3)

TOTAL DEDUCT FOR RAMPS + DRUMS + PALLETS IN CONTAINMENT
 (i.e., (1) + (2) + (3))
 718 + 434 + 1,462 GAL. = 2,614 GAL.

TOTAL AVAILABLE CONTAINMENT CAPACITY AREA
 16,871 GAL. - 2,614 GAL. = 14,257 GAL.

AVAILABLE CAPACITY (14,257) > REQUIRED CAPACITY (3,190) O.K.

REQUIRED CONTAINMENT AREA B
 TANKS, VATS & DRUMS IN AREA
 194 DRUMS x 55 GAL. EA. = 10,670 GAL.

TANKS & VATS
 6,000 GAL. + 4,174 GAL. = 10,174 GAL.
 10,670 GAL. + 10,174 GAL. = 20,884 GAL.
 20,884 GAL. x .25 = 5,211 GAL.

AVAILABLE CONTAINMENT AREA B
 40'x44'x1' = 1,760 CU. FT.
 $\frac{x7.481}{2}$
 13,167 GAL.

SUMPS
 2'x2'x2' = 8 CU. FT.
 $\frac{x7.481}{60}$
 60 GAL.

TOTAL
 13,167 GAL. + 60 GAL. = 13,227 GAL.

DEDUCT RAMPS
 $\frac{8'x8'x1'}{2} = 32$ CU. FT.
 $\frac{x7.481}{239}$
 239 GAL.

DEDUCT DRUMS & PALLETS
 MAX. CAP. 192 DRUMS
 96 DRUMS ON FLOOR AREA
 4 DRUMS / PALLET = 24 PALLETS
 2 CU. FT. / PALLET x 24 = 48 CU. FT.
 $\frac{x7.481}{359}$
 359 GAL.

DEDUCT HEIGHT OF DRUM IN CONTAINMENT
 12" - 5" = 7"
 23" Ø DRUM = 1.799 GAL./IN. x 7" = 12.6 GAL./DRUM
 12.6 x 96 = 1,210 GAL.

TOTAL DEDUCT FOR DRUMS & PALLETS IN CONTAINMENT
 359 GAL. + 1,210 GAL. = 1,569 GAL.

DEDUCT TANKS & VATS

DEDUCT FOR TANKS IN CONTAINMENT
 2.04 SQ. FT. x 14'-4" = 29.24 CU. FT. x 2 = 58.48 CU. FT.
 $\frac{x7.481}{437}$
 437 GAL.

DEDUCT FOR VATS IN CONTAINMENT
 2.8 SQ. FT. x 12'-6" x 2 = 70 CU. FT.
 $\frac{x7.481}{524}$
 524 GAL.
 .966 SQ. FT. x 5'-6" x 2 = 10.6 CU. FT.
 $\frac{x7.481}{79}$
 79 GAL.

TOTAL DEDUCT FOR AREA
 239 + 1,569 + 437 + 524 + 79 = 2,848 GAL.

TOTAL AVAILABLE CONTAINMENT AREA B
 13,227 GAL. - 2,848 GAL. = 10,379 GAL.

REFERENCE DRAWINGS		REV.		DESCRIPTION		DRAWN		CHECKED		SCALE		DATE		DRAWING NO.		REV.	
2	ROTATE NORTH ARROW 180 DEGREES	KMC	8/20/21	JT													
1	PROPOSED MERCURY PROCESSING, STAGING & STORAGE	KMC	9/21/20	FRK													
0	ISSUED	WDS	4/20/10														
GRASSY MOUNTAIN THIS DRAWING IS THE PROPERTY OF CLEAN HARBORS ANY INFORMATION CONTAINED HEREIN MAY NOT BE COPIED OR USED WITHOUT WRITTEN PERMISSION OF OWNER.																	
TITLE DRAIN & FLUSH BUILDING WAREHOUSE ONE														FIGURE 4A			
DRAWING NO. FIGURE 4A														REV. 2			