

December 11, 2017

Mr. Benny Kim AIA
Benny Kim and Lydia Design
7415 Lake Ballinger Way
Edmonds, WA 98026

Re: 8114 W Mercer Way, Mercer Island, WA (Lot 3B) – Field Verification to Verify the Water Source at the Beginning of Drainage Pipe System at East End of Lake View Lane Draining to Lot 3B North and South Property Lines as Shown on the Mercer Island Watercourse Map.

To Whom It May Concern:

City of Mercer Island is requesting additional field verification documentations demonstrating that the pipe system does not convey naturally occurring surface runoff at the upstream of the pipe drainage system. This letter is to supplement the document prepared by C2MY Engineers, LLC dated November 27, 2017 for the verification of Source of Water.

A field visit was conducted on December 5, 2017 at 1 pm. The weather was sunny and 50° F. The beginning of the drainage pipe system is located at the catch basin at Lake View Lane in front of the single-family house number 7939 (Lot 4 of Dacres Short Plat). The catch basin collects pavement runoff from Lake View Lane and drains easterly approximately 108 l.f. through an 8" CMP to a Type 2 catch basin located at the hammer head turn around, a dead-end street. There is a 4" PVC in concrete sleeve connected to the catch basin running in northeast direction to the single-family house number 7942 (Lot 1 of Dacres Short Plat). This 4" PVC pipe collects the rockery wall footing drain at the north side of Lake View Lane/property line of Lot 1. There is no open channel, swale, ditch or any other pipe entering the catch basin. Please refer to photos 1 to 4.

The watercourse route as indicated on Mercer Island Water Course Map does not exist. The route is covered by driveway with concrete retaining wall of single-family house number 7934, west of Lot 1 and yard block retaining wall of Lot 1 Please refer to photos 6 - 8 for upstream view of catch basin.

Based on these field information, it is in our professional opinion that the upstream of the mapped piped water course does not consist of any natural channel with a bed, banks or sides to the upstream of the drainage system.

If you have any comments or questions, please do not hesitate to contact us.

Sincerely,

C2MY Engineers, LLC.



Choomeng Chin, P.E.
Principal



Attachments:
Existing catch basin photos
Upstream CB view photos



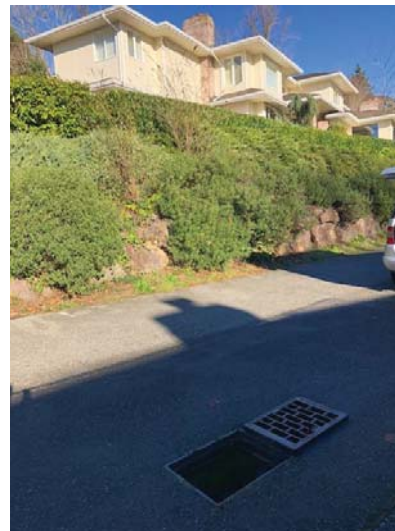
1 - Upstream Existing CB



3 - Existing CB 4" PVC Inlet Rockery Wall Drain



2 - Existing CB 8" CMP Outlet



4 - Existing CB - 4" PVC Inlet Rockery Wall Drain Direction



5 - Existing CB Upstream, Looking Direct North



6 - Existing CB Downstream, Looking East.



7 - View of Upstream per Watercourse Map North Direction (House No. 7934)



8 - View of Upstream per Watercourse Map North Direction (Closeup)



C2MY Engineers, LLC

Civil Engineering & Land Development Consultant
PO Box 52883, Bellevue, WA 98015~Tel 206.451.7856

November 27, 2017

Mr. Benny Kim AIA
Benny Kim and Lydia Design
7415 Lake Ballinger Way
Edmonds, WA 98026

Re: 8122 W Mercer Way, Mercer Island, WA (Lot 3B) – Source of Water Verification at the North and South Property Lines as Shown on the Mercer Island Watercourse Map.

To Whom It May Concern:

The Mercer Island Watercourse Map indicates a mapped piped water course located on the west and south property of the subject property. City of Mercer Island is requesting documentations demonstrating that the pipe system does not convey naturally occurring surface or ground water.

The location of the watercourse consists of manmade pipes from 8" to 12" \emptyset CMP for drainage and 6" \emptyset PVC and DI pipes for side sewer services. The manmade pipes were created as part of the drainage system with detention when the site was subdivided per the Dacres Short Plat (SP No. M.I.-85-12-19 (J-3), Road and Utility Plan dated November 1985 and approved by City of Mercer Island dated April 1, 1987, see the Road and Utility Plan attached.

Based on the approved plan, the manmade pipes were installed to serve Lots 1, 2, 3, 4 and roadway drainage as well as Lot 4A above this subject property Lot 3B. The Road and Utility Plan clearly indicated the drainage service stubs to each of the 4 lots and lot 4A with 4" \emptyset PVC lot drains and catch basins for the roadway drainage. The drainage system flows along the west property line and then turns to south property line of Lot 3B within the recorded 10' wide utility easement. It then enters into the 104 l.f., 72" \emptyset detention tank located under the access driveway at the south side of Lot 3A. The detention tank discharges into a 12" \emptyset CMP between Lot 1 and 2, south of Lots 3B and 3A.

Based on the as-built record drainage design and the other information available as discussed, it is in our professional opinion that the water source from the mapped water course does not receive naturally occurring surface or ground water. Furthermore, naturally occurring surface and ground water do not require detention before discharging.

If you have any comments or questions, please do not hesitate to contact us.

Sincerely,

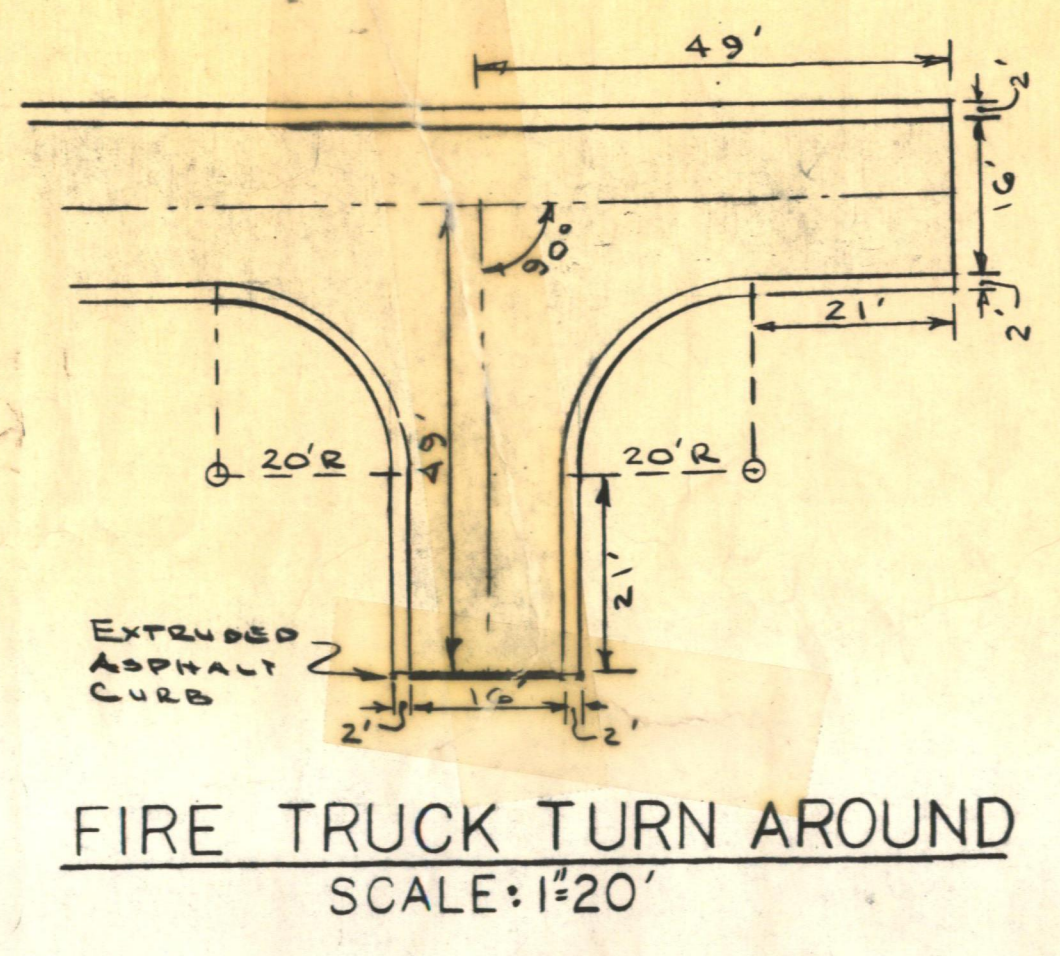
C2MY Engineers, LLC.



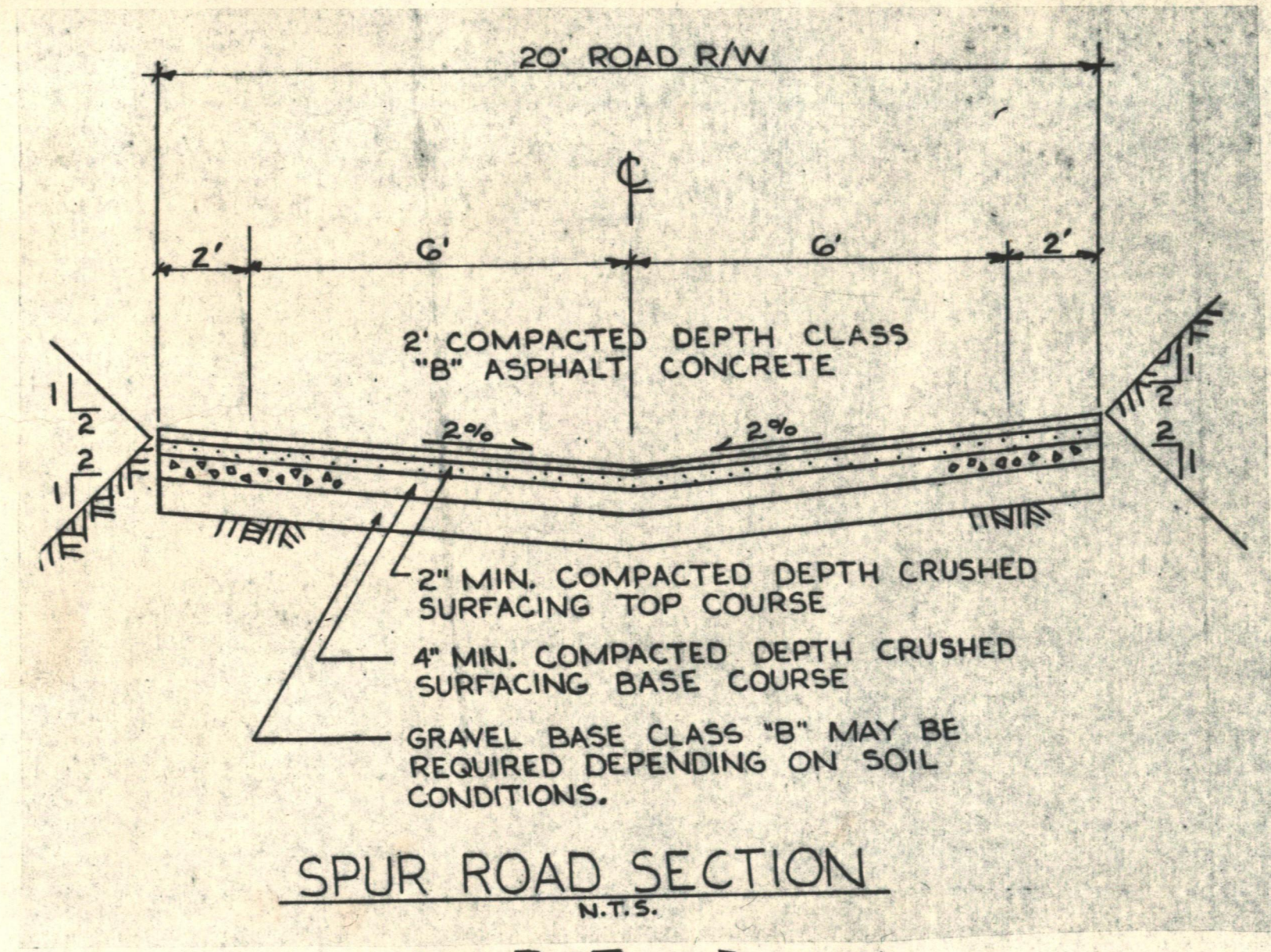
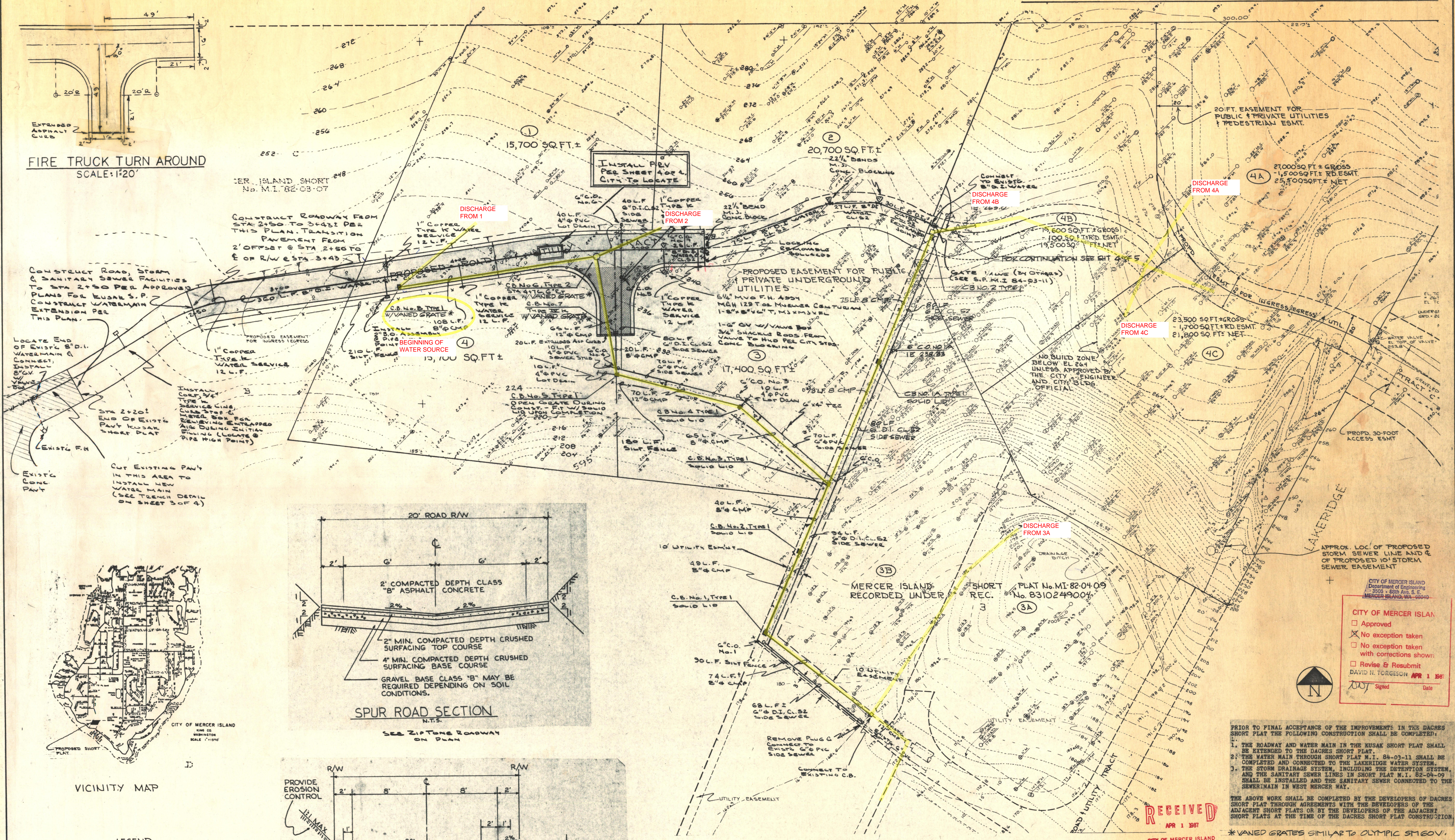
Choomeng Chin, P.E.
Principal



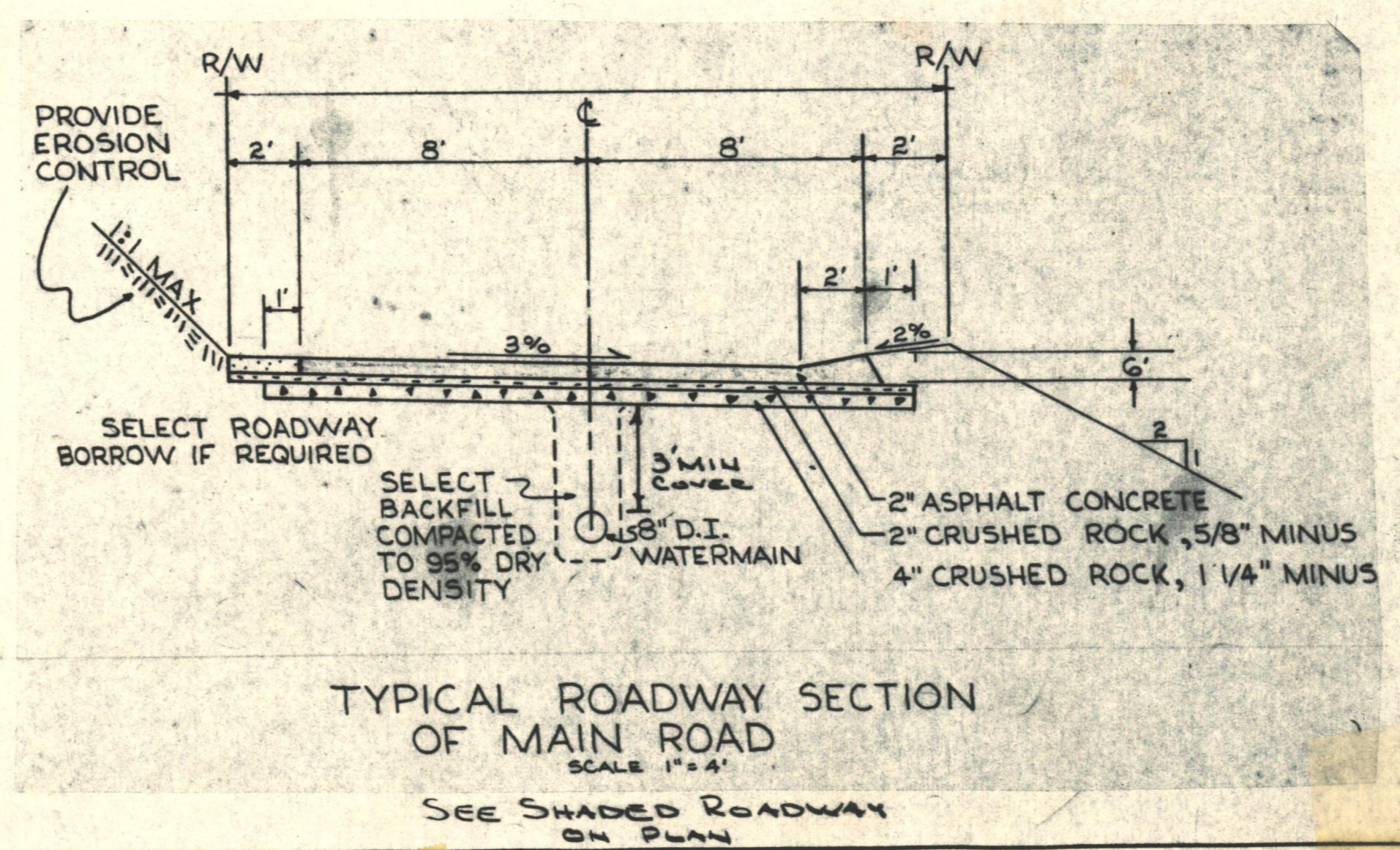
Attachments:
Dacres Short Plat – Road and Utility Plans
Dacres Recorded Plat
Detention System Information.



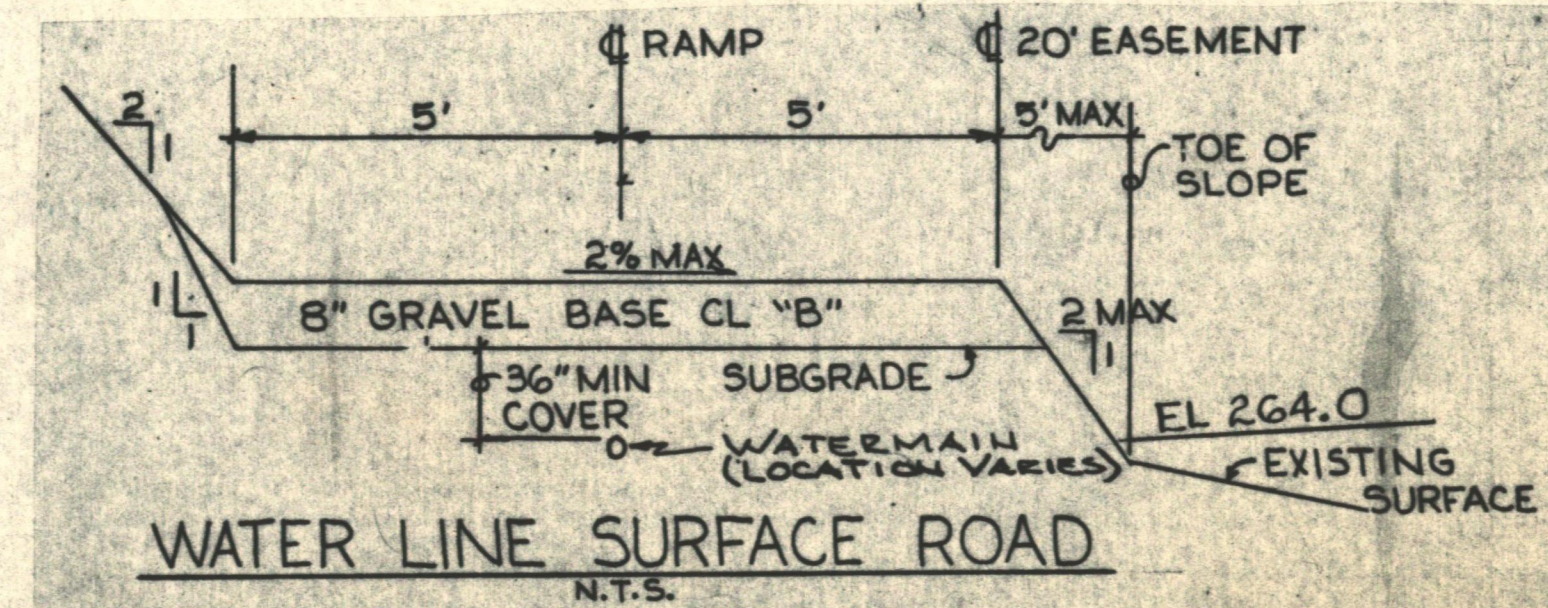
FIRE TRUCK TURN AROUND
SCALE: 1/20'



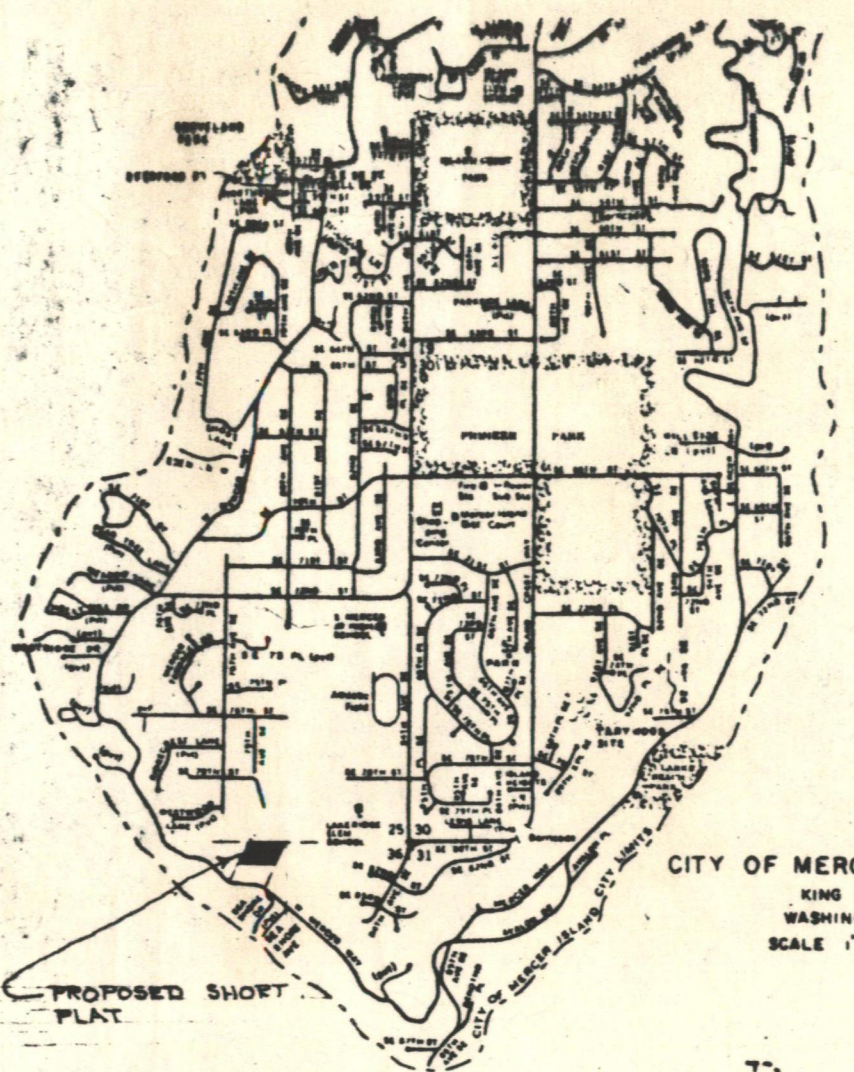
SPUR ROAD SECTION
N.T.S.
SEE ZIP TONE ROADWAY ON PLAN



TYPICAL ROADWAY SECTION OF MAIN ROAD
SCALE: 1/4"
SEE SHADED ROADWAY ON PLAN



WATER LINE SURFACE ROAD
N.T.S.



VICINITY MAP

- LEGEND
- ADDER
 - DOGWOOD
 - M.C.
 - WILL
 - ALDER
 - DOGWOOD
 - MAPLE CLUMP
 - WILLOW

- CITY OF MERCER ISLAND
- Approved
 - No exception taken
 - No exception taken with corrections shown
 - Revise & Resubmit
- DAVID H. TORGESEN APR 1 1987
DTJ Signed Date

- PRIOR TO FINAL ACCEPTANCE OF THE IMPROVEMENTS IN THE DACRES SHORT PLAT THE FOLLOWING CONSTRUCTION SHALL BE COMPLETED:
- THE ROADWAY AND WATER MAIN IN THE KUSKAS SHORT PLAT SHALL BE EXTENDED TO THE DACRES SHORT PLAT.
 - THE WATER MAIN THROUGH SHORT PLAT M.I. 84-03-11 SHALL BE COMPLETED AND CONNECTED TO THE LAKEBRIDGE WATER SYSTEM.
 - THE STORM DRAINAGE SYSTEM, INCLUDING THE DETENTION SYSTEM, AND THE SANITARY SEWER LINES IN SHORT PLAT M.I. 82-04-09 SHALL BE INSTALLED AND THE SANITARY SEWER CONNECTED TO THE SEWER MAIN IN WEST MERCER WAY.

THE ABOVE WORK SHALL BE COMPLETED BY THE DEVELOPERS OF DACRES SHORT PLAT THROUGH AGREEMENTS WITH THE DEVELOPERS OF THE ADJACENT SHORT PLATS OR BY THE DEVELOPERS OF THE ADJACENT SHORT PLATS AT THE TIME OF THE DACRES SHORT PLAT CONSTRUCTION.

NOTE:
THE CONTRACTOR SHALL COORDINATE WITH THE SURVEYOR AND ENGINEER BEFORE CONSTRUCTION OF THE DETENTION STRUCTURE.

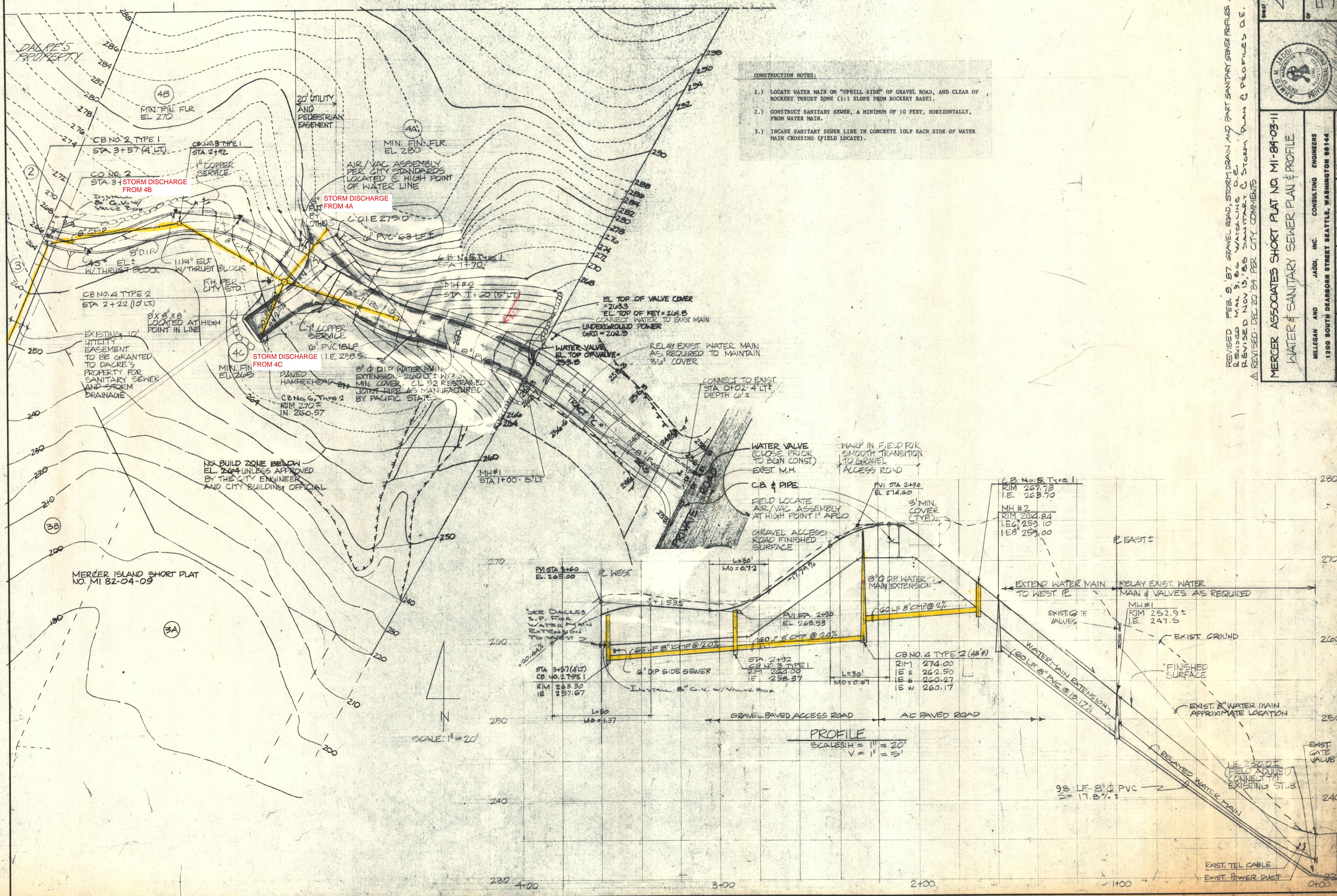
RECEIVED
APR 1 1987
CITY OF MERCER ISLAND
ENGINEERING DEPARTMENT

REVISED FEB. 9, 1987 ADDED STORM DRAIN AND SIDE SEWER LINE CONNECTION. A.J.
REVISED MAR. 9, 1986 STORM CONC. SP. 81-04-09 D.E.
REVISED JAN. 15, 1986 PER CIV. REVIEW D.E.

**DACRES SHORT PLAT
ROAD & UTILITY PLAN**

DATE: NOV. 1985	SCALE: 1/20'
OWNER: JEAN DACRES 318 1ST AVE. SE. SUITE 210 SEASIDE, WA 98104	ENGR: DEL ERICSSON 15010 S.E. 46TH BELLEVUE, WA TEL: 747-8825

Engineering Dept. File Copy



- CONSTRUCTION NOTES:**
- 1.) LOCATE WATER MAIN ON "UPHILL SIDE" OF GRAVEL ROAD, AND CLEAR OF ROCKERY THRUST ZONE (1:1 SLOPE FROM ROCKERY BASE).
 - 2.) CONSTRUCT SANITARY SEWER, A MINIMUM OF 10 FEET, HORIZONTALLY, FROM WATER MAIN.
 - 3.) INCASE SANITARY SEWER LINE IN CONCRETE 10LF EACH SIDE OF WATER MAIN CROSSING (FIELD LOCATE).

SHEET 4 OF 5

MILLIGAN AND JADDI, INC. CONSULTING ENGINEERS
 1200 SOUTH DEARBORN STREET SEATTLE, WASHINGTON 98144
 PROJECT: 80-03
 DATE: 10/15/84
 CHECKED: JR
 DRAWN: JR

REVISED FEB. 9, '87 GRAVEL ROAD, STORM DRAIN AND PART SANITARY SEWER PROFILES. A.J.
 REVISED MAR. 9, '86 WATERLINE D.E.
 REVISED NOV. 13, '85 SANITARY & STORM PLAN & PROFILES D.E.
 A REVISED - DEC. 20, '84 PER CITY COMMENTS

MERCER ASSOCIATES SHORT PLAT NO. MI-84-03-II
WATER & SANITARY SEWER PLAN & PROFILE

DACRE'S PROPERTY

4B
MIN. FIN. FLR
EL 270

4A
MIN. FIN. FLR
EL 280

4C
MIN. FIN. EL 265

MH#1
STA 1+00-8' LT

MH#2
STA 1+60 (5' LT)

CB No. 5, Type 1
RIM 267.73
I.E. 263.70
MH#2
RIM 260.84
I.E.G. 259.10
I.E.B. 259.00

MERCER ISLAND SHORT PLAT
NO. MI 82-04-09

3A

SCALE: 1" = 20'

PROFILE
 SCALES: H = 1" = 20'
 V = 1" = 5'

NO BUILD ZONE BELOW
EL. 264 UNLESS APPROVED
BY THE CITY ENGINEER
AND CITY BUILDING OFFICIAL

EXISTING 10' UTILITY
EASEMENT TO BE GRANTED
TO DACRE'S PROPERTY FOR
SANITARY SEWER AND STORM
DRAINAGE

AIR/VAC ASSEMBLY
PER CITY STANDARDS
LOCATED @ HIGH POINT
OF WATER LINE

EL TOP OF VALVE COVER = 263.3
EL TOP OF KEY = 261.8
CONNECT WATER TO EXIST MAIN
UNDERGROUND POWER
GRD = 262.9

RELAY EXIST WATER MAIN
AS REQUIRED TO MAINTAIN
3/8" COVER

CONNECT TO EXIST
STA 0+02.4' LT
DEPTH 6" ±

WATER VALVE
(CLOSE PRIOR
TO BGN CONST)
EXIST M.H.

WARP IN FIELD FOR
SMOOTH TRANSITION
TO GRAVEL
ACCESS ROAD

CB & PIPE

FIELD LOCATE
AIR/VAC ASSEMBLY
AT HIGH POINT 1" APLO

GRAVEL ACCESS
ROAD FINISHED
SURFACE

PVI STA 2+30
EL 274.60

3" MIN.
COVER
(TYR)

EXTEND WATER MAIN
TO WEST P

RELAY EXIST WATER
MAIN & VALVES AS REQUIRED

EXIST GATE
VALVES

MH#1
RIM 252.9 ±
I.E. 247.5

EXIST GROUND

FINISHED
SURFACE

EXIST 8" WATER MAIN
APPROXIMATE LOCATION

EXIST. TEL CABLE

EXIST. POWER DUCT

EXIST. GATE
VALVE

1E 230.0 ±
(FIELD ADJUST)
CONNECT TO
EXISTING STA B

98 LF 8" Ø PVC
S = 17.8% ±

WATER MAIN EXTENSION
(60LF 8" PVC @ 19.17%)

8" Ø DP WATER MAIN
EXTENSION

60LF 8" CMP @ 2%

CB NO. 4 TYPE 2 (48")
RIM 274.00
I.E. 262.50
I.E.S. 260.47
I.E.W. 260.17

PVI STA 2+90
EL 263.93

150 LF 8" CMP @ 2%

STA 2+92
CB NO. 3 TYPE 1
RIM 264.00
I.E. 258.97

65LF 8" CMP @ 2%

4" DIP SIDE SEWER

INSTALL 8" C.V. w/ VALVE BOX

SEE DACRE'S
S.P. FOR
WATER MAIN
EXTENSION
TO WEST P

20' DIA

STA 3+57 (4' LT)
CB NO. 2 TYPE 1
RIM 263.30
I.E. 257.67

L=50
M0=1.37

L=30
M0=0.72

L=30
M0=0.67

L=50
M0=1.37

L=30
M0=0.72

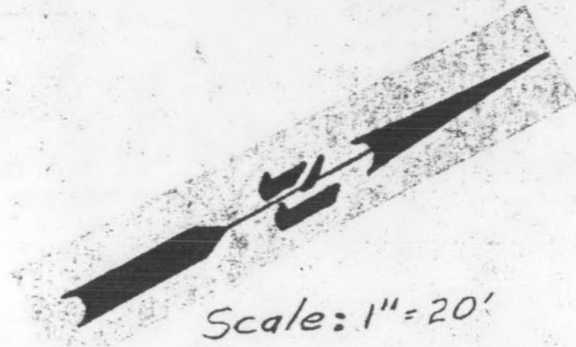
L=30
M0=0.67

L=50
M0=1.37

L=30
M0=0.72

L=30
M0=0.67

2



UTILITY EASEMENT

HAMMERHEAD TURN AROUND

INLET #1
STA. 0+37.4

SAN. M.H. #2
STA. 2+08.60LT.

MAIN RESTRAINED J. BY

EM #1

ORIFICE
CR#1 TYPE 1
STA. 1158.50

179 LF - 8" ϕ D.I.P.

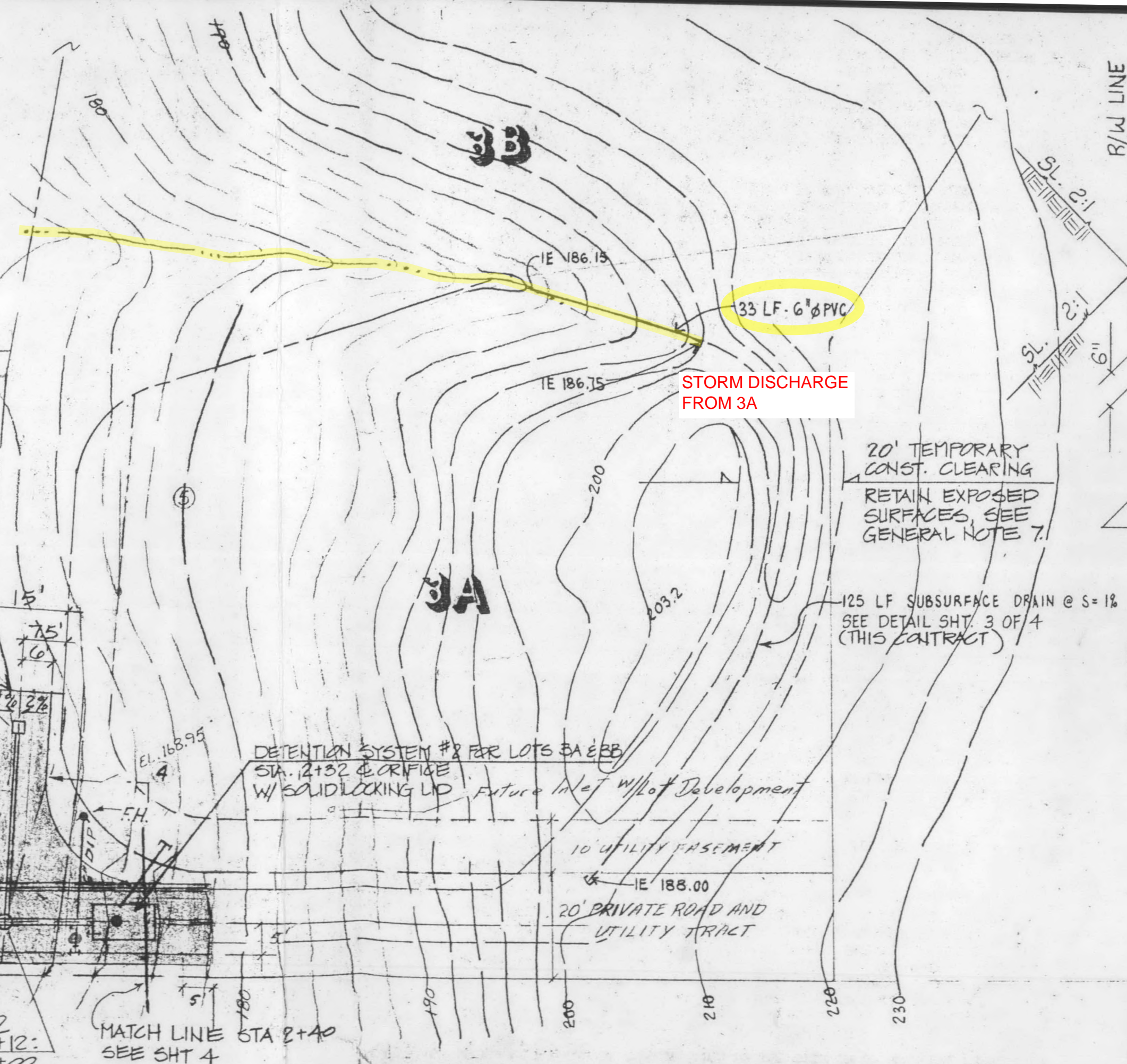


8" ϕ D.I.P. WATER MAIN EXTENSION.
290 L.F. w/30" MIN. COVER.
CL. 52 RESTRAINED JOINT
PIPE AS MANUF. BY PACIFIC STATES.

ROAD

C.B. #2
2+12:
0+00

MATCH LINE STA 2+40
SEE SHT 4



STORM DISCHARGE FROM 3A

33 LF - 6" ϕ PVC

20' TEMPORARY CONST. CLEARING
RETAIN EXPOSED SURFACES, SEE GENERAL NOTE 7.

125 LF SUBSURFACE DRAIN @ S=1%
SEE DETAIL SHT. 3 OF 4
(THIS CONTRACT)

DETENTION SYSTEM #8 FOR LOTS 3A & 3B
STA. 2+32 ORIFICE
W/ SOLID LOCKING LID Future Inlet w/lot Development

10' UTILITY EASEMENT

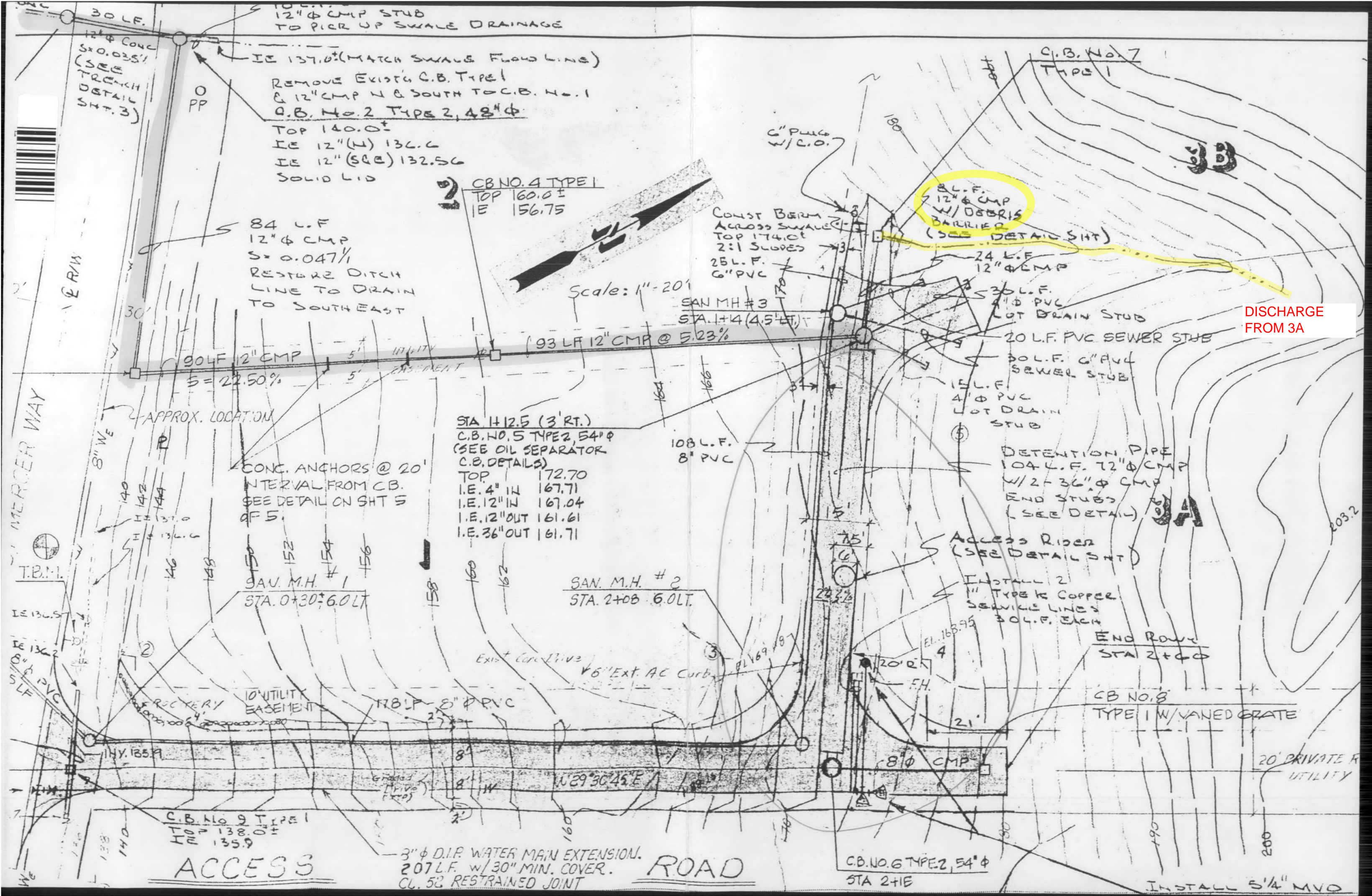
20' PRIVATE ROAD AND UTILITY TRACT

N
1
2

R/W LINE



PT. FIN. FLR



30 L.F.
 12" ϕ CMP STUB
 TO PICK UP SWALE DRAINAGE
 IE 137.0' (MATCH SWALE FLOW LINE)
 REMOVE EXIST'G C.B. TYPE 1
 & 12" CMP N & SOUTH TO C.B. No. 1
 C.B. No. 2 TYPE 2, 48" ϕ
 TOP 140.0'
 IE 12" (IN) 136.6
 IE 12" (S&B) 132.56
 SOLID LID

2 C.B. NO. 4 TYPE 1
 TOP 160.0'
 IE 156.75

84 L.F.
 12" ϕ CMP
 S = 0.047%
 RESTORE DITCH
 LINE TO DRAIN
 TO SOUTHEAST

CONST BERM
 ACROSS SWALE
 TOP 174.0'
 2:1 SLOPES
 25 L.F.
 6" PVC

24 L.F.
 12" ϕ CMP
 W/ OBORIS
 BARRIER
 (SEE DETAIL SHT)

Scale: 1" = 20'

SAN M.H. #3
 STA. 1+4 (4.5' LT.)

20 L.F. PVC SEWER STUB
 30 L.F. 4" ϕ PVC
 SEWER STUB
 15 L.F. 4" ϕ PVC
 LOT DRAIN
 STUB

DISCHARGE
 FROM 3A

90 L.F. 12" CMP
 S = 22.50%

93 L.F. 12" CMP @ 5.23%

STA. 1+12.5 (3' RT.)
 C.B. NO. 5 TYPE 2, 54" ϕ
 (SEE OIL SEPARATOR
 C.B. DETAILS)
 TOP 172.70
 I.E. 4" IN 167.71
 I.E. 12" IN 167.04
 I.E. 12" OUT 161.61
 I.E. 36" OUT 161.71

108 L.F.
 8" PVC

DETENTION PIPE
 104 L.F. 12" ϕ CMP
 W/ 2-36" ϕ CMP
 END STUBS
 (SEE DETAIL)

MERCER WAY

APPROX. LOCATION

CONC. ANCHORS @ 20'
 INTERVAL FROM CB.
 SEE DETAIL ON SHT 5
 Q.F. 5'

SAN. M.H. #1
 STA. 0+30 6.0 LT.

SAN. M.H. #2
 STA. 2+08 6.0 LT.

Access Riser
 (SEE DETAIL SHT)

INSTALL 2
 1" TYPE K COPPER
 SERVICE LINES
 30 L.F. EACH

END ROW
 STA. 2+00

C.B. NO. 8
 TYPE 1 W/ VANED GRATE

20' PRIVATE R
 UTILITY

T.B.M.

IE 136.5

IE 136.2

IE 135.9

IE 135.7

IE 135.4

IE 135.1

IE 134.8

IE 134.5

IE 134.2

IE 133.9

C.B. NO. 9 TYPE 1
 TOP 138.0'
 IE 135.9

ACCESS

3" ϕ D.I.P. WATER MAIN EXTENSION.
 207 L.F. W/ 30" MIN. COVER.
 CL. 52 RESTRAINED JOINT

ROAD

C.B. NO. 6 TYPE 2, 54" ϕ
 STA. 2+1E

INSTALL 5 1/4" MVD



Site Map

Location: 8114 West Mercer Way
Date of Photo: Oct 16, 2012
Page 1 of 14



Legend

- Watercourse
 - 1-Potential Fish Use
 - 2-Perennial
 - 3-Seasonal
- Parcels
- Docks
- Address
- Major Roads
- Street Centerline
- Lake Washington
- Parks

March 2017 (Preliminary)

- Red: Band_1
- Green: Band_2
- Blue: Band_3

1: 1,090



Disclaimer: These maps were developed by the City of Mercer Island and are intended to be a general purpose digital reference tool. These maps are not an accepted legal instrument for describing, establishing, recording or maintaining descriptions for property concerns or boundaries. The City makes no representation or warranty with respect to the accuracy or currency of these data sets, especially in regard to labeling of surveyed dimensions, or agreement with official sources such as records of survey, or mapped locations of features.

Notes