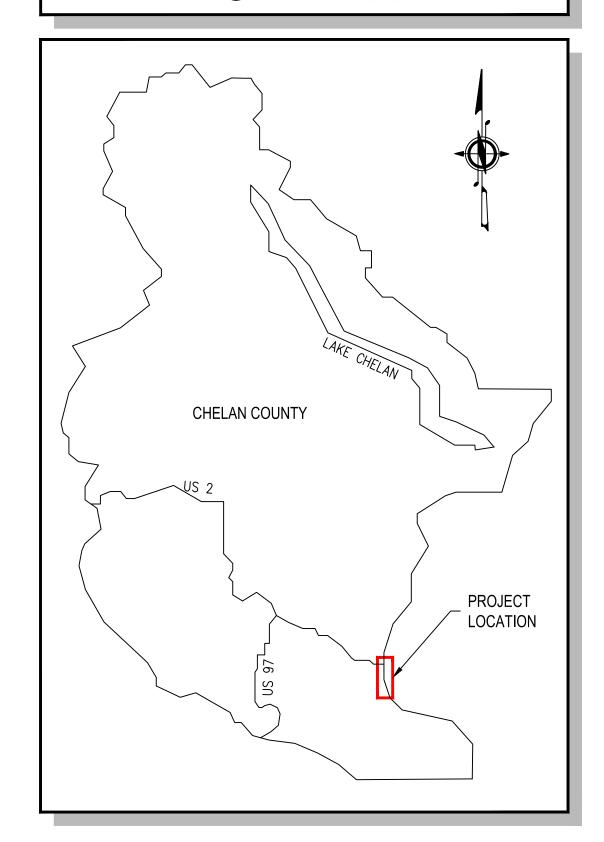
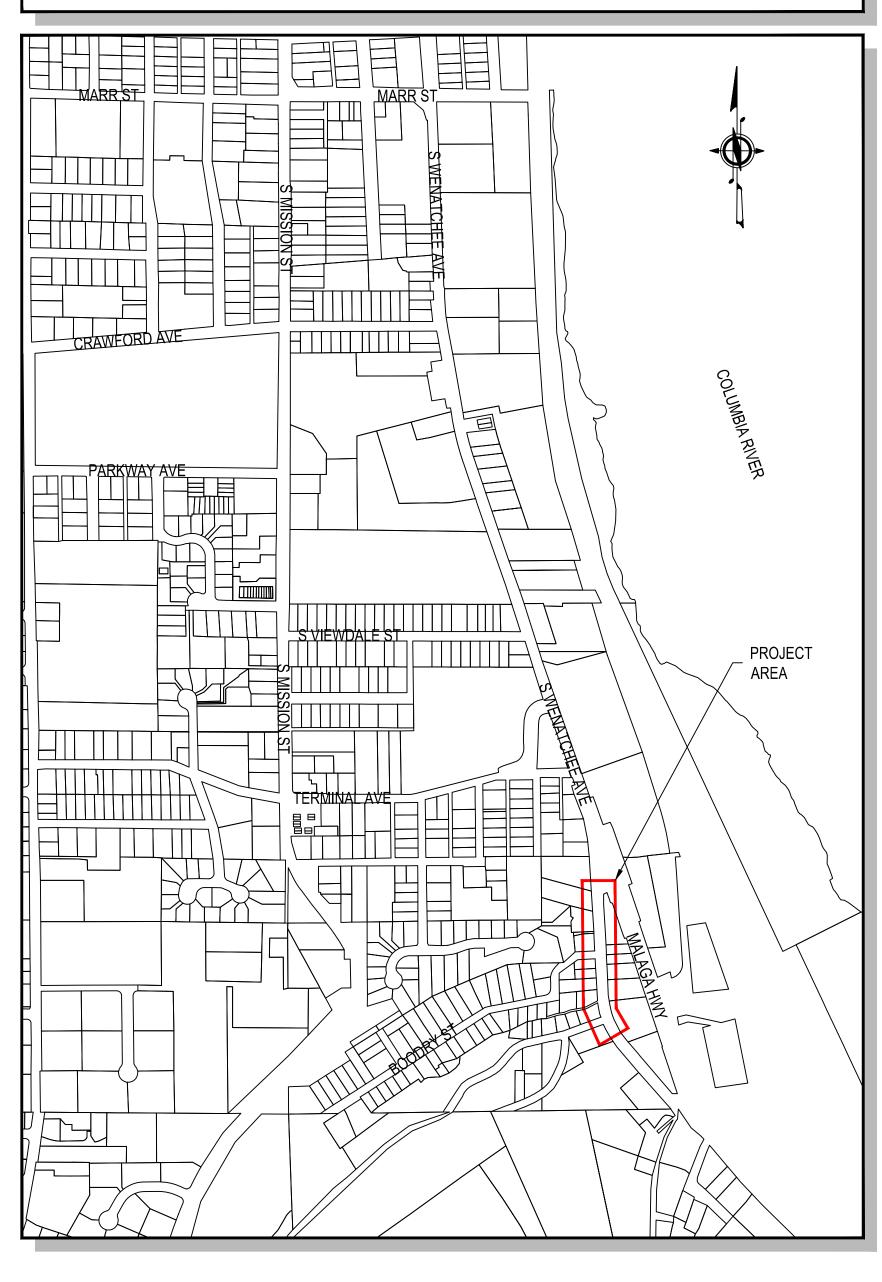


# CHELAN COUNTY PUBLIC WORKS SQUILCHUCK OUTFALL SD2008

#### **VICINITY MAP**



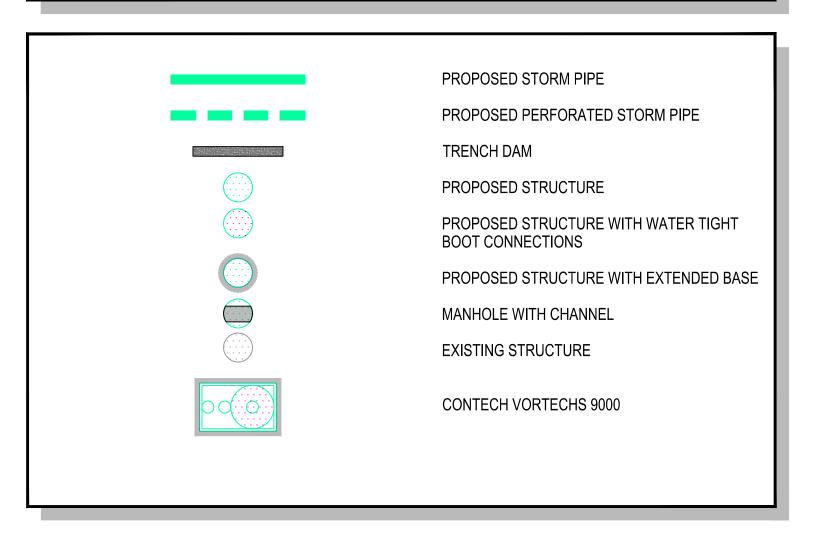
#### PROJECT LOCATION



#### **DRAWING INDEX**

Sheet Number	Sheet Title					
1	COVER					
2	SUMMARY OF QUANTITIES					
3	SITE, DEMOLITION, AND SURVEY CONTROL NORTH					
4	SITE, DEMOLITION, AND SURVEY CONTROL SOUTH					
5	PROPOSED SITE PLAN NORTH					
6	PROPOSED SITE PLAN SOUTH					
7	STORMWATER DETAILS					
8	VORTECHS 9000 DETAILS					
9	RESTORATION DETAILS					
10	TRAFFIC CONTROL PLAN					

#### PROPOSED LEGEND



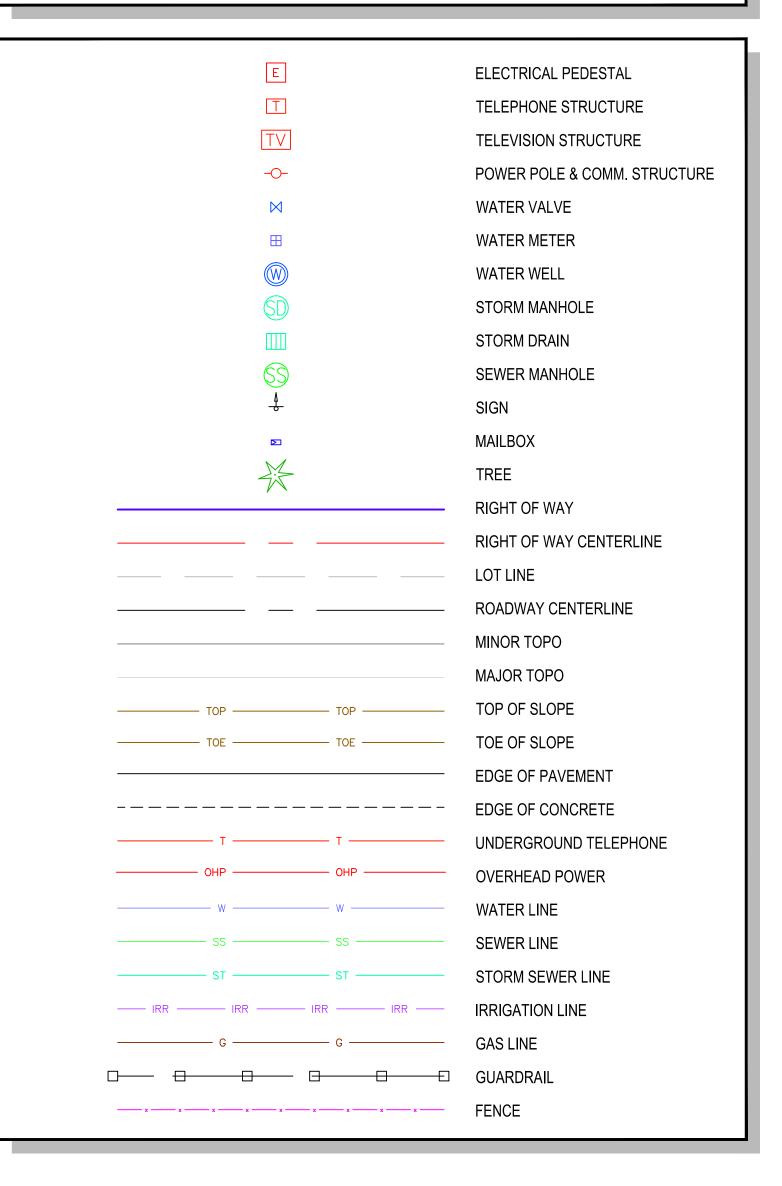
#### **GENERAL NOTES**

NO CONSTRUCTION RELATED ACTIVITY SHALL CONTRIBUTE TO THE DEGRADATION OF THE ENVIRONMENT, ALLOW MATERIAL TO ENTER SURFACE OR GROUND WATERS, OR ALLOW PARTICULATE EMISSIONS TO THE ATMOSPHERE, WHICH EXCEED STATE OR FEDERAL STANDARDS. ANY ACTIONS THAT POTENTIALLY ALLOW A DISCHARGE TO STATE WATERS MUST HAVE PRIOR APPROVAL OF THE WASHINGTON STATE DEPARTMENT OF ECOLOGY.

#### **CONTACT PERSONNEL**

CONTACT	AGENCY	PHONE (509)
ANGI WALIGORSKI (PROJECT MANAGER)	RH2 ENGINEERING	509-886-6765
MICHAEL VOTH (STAFF ENGINEER)	RH2 ENGINEERING	509-886-6789

#### **EXISTING LEGEND**



CALL 48 HOURS BEFORE YOU DIG ONE CALL 811

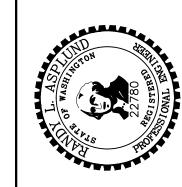
REPORT ALL SPILLS
DEPT. OF ECOLOGY 1-800-258-5990



## **SUMMARY OF QUANTITIES**

Item No.	Total Quantity	Unit	Description			
			PREPARATION			
1	1	L.S.	MOBILIZATION			
2	1	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS			
			STORM SEWER			
3	3	EACH	MANHOLE 72 IN. DIAM. TYPE 3			
4	1	EACH	FLOW SPLITTER CATCH BASIN 84 IN. DIAM. TYPE 2 W/ ANTIFL, LIP			
 5	1	EACH	MANHOLE 72 IN. DIAM. TYPE 3 W/ ANTIFL. LIP			
6	1	EACH	MANHOLE 84 IN, DIAM, TYPE 3			
7	1	EACH	MANHOLE 84 IN. DIAM. TYPE 3 W/ ANTIFL. LIP			
8	1	EACH	WEIR CATCH BASIN 72 IN. DIAM. TYPE 2			
9	1	EACH	WYE CATCH BASIN 84 IN, DIAM, TYPE 2			
10	1	EACH	VORTECHS 9000 TREATMENT SYSTEM			
11	1	EACH	INSERTION TEE 12 IN, DIAM.			
12	1	EACH	MANHOLE BOOT CONNECTION 12 IN. DIAM.			
13	4	EACH	MANHOLE BOOT CONNECTION 18 IN. DIAM.			
14	4	EACH	MANHOLE BOOT CONNECTION 36 IN. DIAM.			
15	1	EACH	MANHOLE BOOT CONNECTION 48 IN. DIAM.			
16	205	L.F.	PERFORATED CMP STORM SEWER PIPE 36 IN. DIAM			
17	75	L.F.	PERFORATED CMP STORM SEWER PIPE 48 IN. DIAM			
18	60	L.F.	CORRUGATED POLYETHYLENE STORM SEWER PIPE 12 IN. DIAM.			
19	60	L.F.	CORRUGATED POLYETHYLENE STORM SEWER PIPE 18 IN. DIAM.			
20	450	L.F.	CORRUGATED POLYETHYLENE STORM SEWER PIPE 36 IN. DIAM.			
21	180	L.F.	CORRUGATED POLYETHYLENE STORM SEWER PIPE 48 IN. DIAM.			
22	30	C.Y.	QUARRY SPALLS			
	30	0.1.	QUARTET OF ALLO			
			SURFACING			
23	830	TON	CRUSHED SURFACING BASE COURSE			
20	000	1011	CROSHED CORT ACING BACE COCKCE			
			HOT MIX ASPHALT			
24	340	TON	HMA CL.1/2 IN. PG 64-28			
	J-10	TON	11WA GE. 1/2 IIV. 1 G 04-20			
			EROSION CONTROL AND PLANTING			
25	12	DAY	ESC LEAD			
26	5,000	DOL	EROSION/WATER POLLUTION CONTROL			
27	1	EACH	INLET PROTECTION			
۷1	<u>'</u>	LAOIT	INCLI I NOTEOTION			
			TRAFFIC			
28	500	L.F.	PAINT LINE			
29	1	L.F.	PROJECT TEMPORARY TRAFFIC CONTROL			
23	1	L.S.	FROJECT TEMPORARY TRAFFIC CONTROL			
			OTHER ITEMS			
30	1	L.S.	DEWATERING			
31	1	L.S.	SHORING OR EXTRA EXCAVATION CLASS A			
32	1	L.S.	SHORING OR EXTRA EXCAVATION CLASS B			
33	5,000	EST	UNKNOWN UTILITY REPAIR			
34	5,000	EST	ROADSIDE CLEANUP			
35	1	L.S.	ROADWAY SURVEYING			
36	1	L.S.	SPCC PLAN			
JU	<u> </u>	L.S.	SI OO FLAIN			



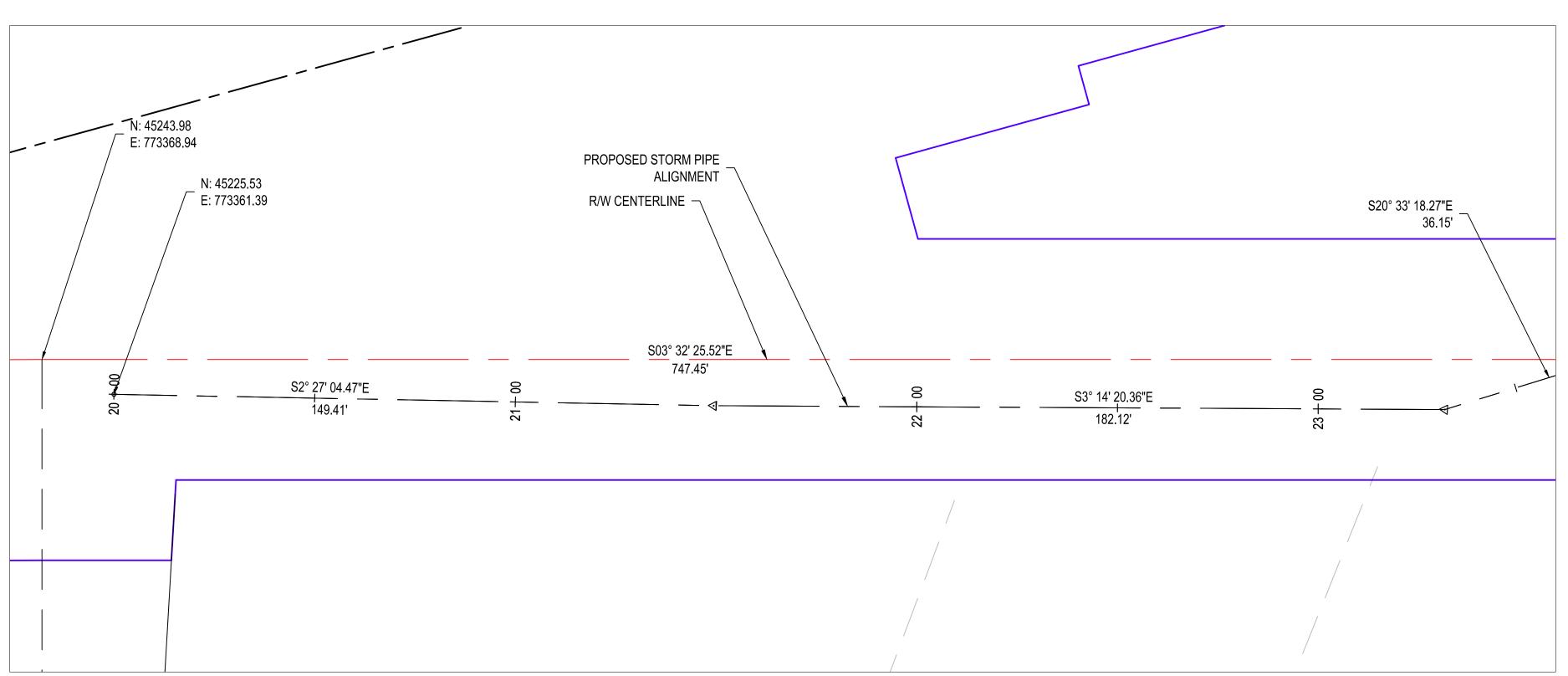




SUMMARY

~	4	ch			
JOB NO.: 213-132					
JOB NO.:					
CLIENT: CCD	FILENAME: SQUI-P-COV.DWG	REVISIONS			
SAVE DATE: Jan 12, 2015	чот <i>DATE:</i> Jan 12, 2015				
SAVE DA:	PLOT DA				$\mid$

## REMOVE AND STOCKPILE QUARRY SPALLS ALONG PROPOSED PIPE SAWCUT AND REMOVE ALIGNMENT (WIDTH AS NECESSARY) EXISTING CONCRETE AND -REMOVE EXISTING STORM PIPE TO THE SOUTH ASPHALT PAVEMENT S WENATCHEE AVE. REMOVE APPROX. 134 LF OF 36" CMP REMOVE EXISTING REMOVE EXISTING REMOVE APPROX. 140 LF OF 42"/CMP MANHOLE MANHOLE POND GRADING TO BE RETURNED TO EXISTING GEOMETRY PRIOR TO END OF PROJECT. RESTORE POND -SURFACE WITH GEOTEXTILE AND 12" OF QUARRY SPALLS. **DEMOLITION PLAN**



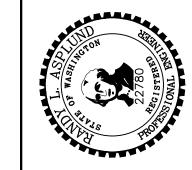
SURVEY CONTROL

1" = 20'

#### **DEMOLITION NOTES**

EXISTING 36", 42", AND 48" CMP AND STORM STRUCTURES THAT CONFLICT WITH THE PROPOSED SHALL BE REMOVED BY THE CONTRACTOR.







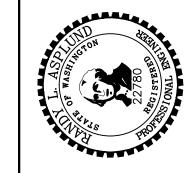
WORK DEMOLITION, AND SURVE CONTROL NORTH

## SOUTHERN EXTENT OF HIGH GROUNDWATER TO - BE DETERMINED BY FURTHER GEOTECHNICAL INVESTIGATIONS PRIOR TO CONSTRUCTION. REMOVE EXISTING STORM PIPE TO THE NORTH S WENATCHEE AVE. BOODRY ST. REMOVE EXISTING REMOVE APPROX. 150 LF OF 48" CMP MANHOLE BORING 1 - APPROX. 20.5' DEPTH SEE GEOLOGY REPORT REMOVE APPROX. 225 LF OF 42" CMP TEST PIT 1 - APPROX. 6.5' DEPTH TEST PIT 2 - APPROX. 8' DEPTH SEE GEOLOGY REPORT SEE GEOLOGY REPORT DEMOLITION PLAN 1" = 20' PROPOSED STORM PIPE ALIGNMENT R/W CENTERLINE -\_ S7° 08' 44.25"E \_ S0° 24' 52.99"E S03° 32' 25.52"E \_ 57.83' 747.45' 282.42' SURVEY CONTROL 1" = 20'

#### **DEMOLITION NOTES**

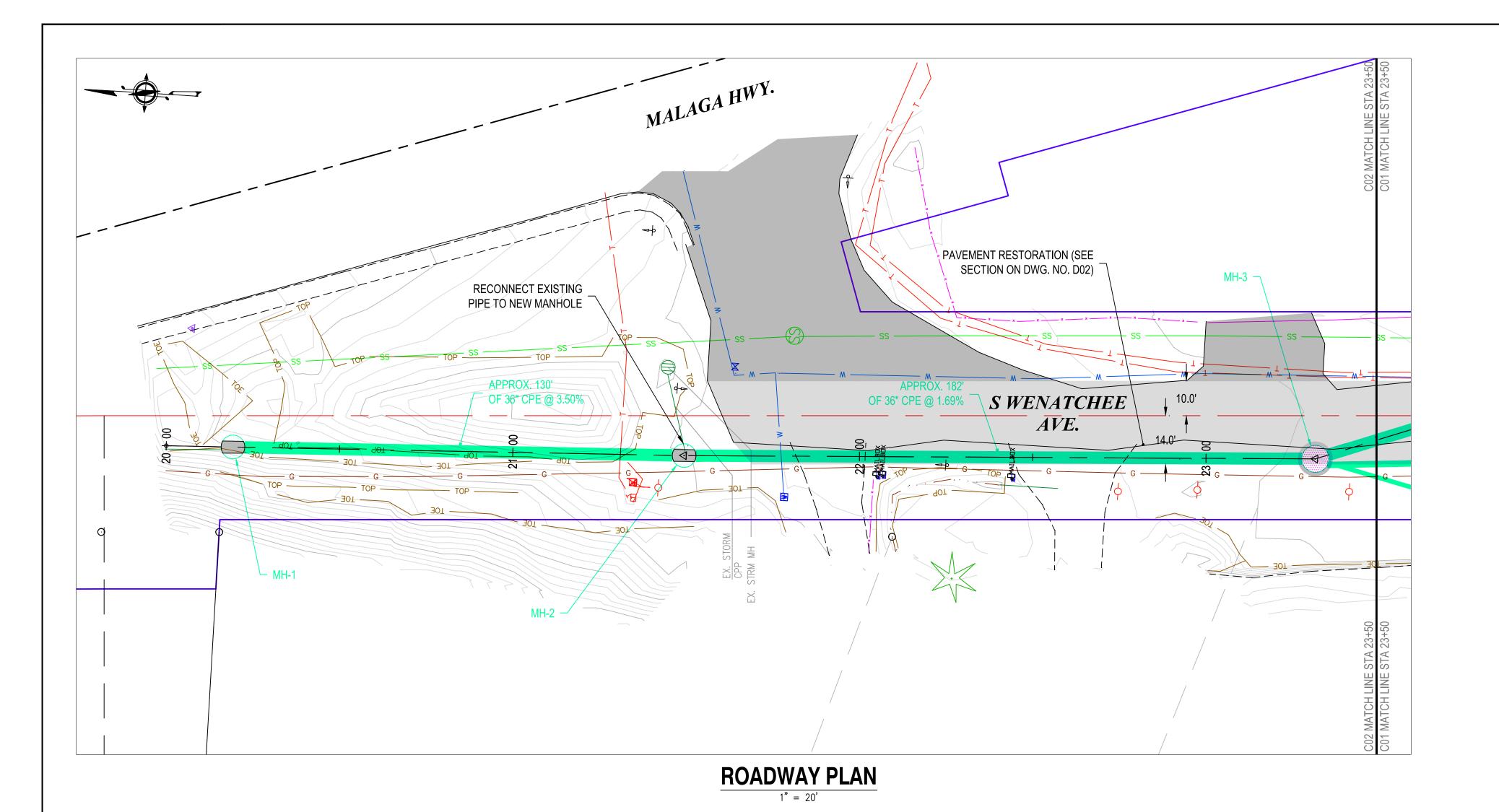
EXISTING 36", 42", AND 48" CMP AND STORM STRUCTURES THAT CONFLICT WITH THE PROPOSED SHALL BE REMOVED BY THE CONTRACTOR.

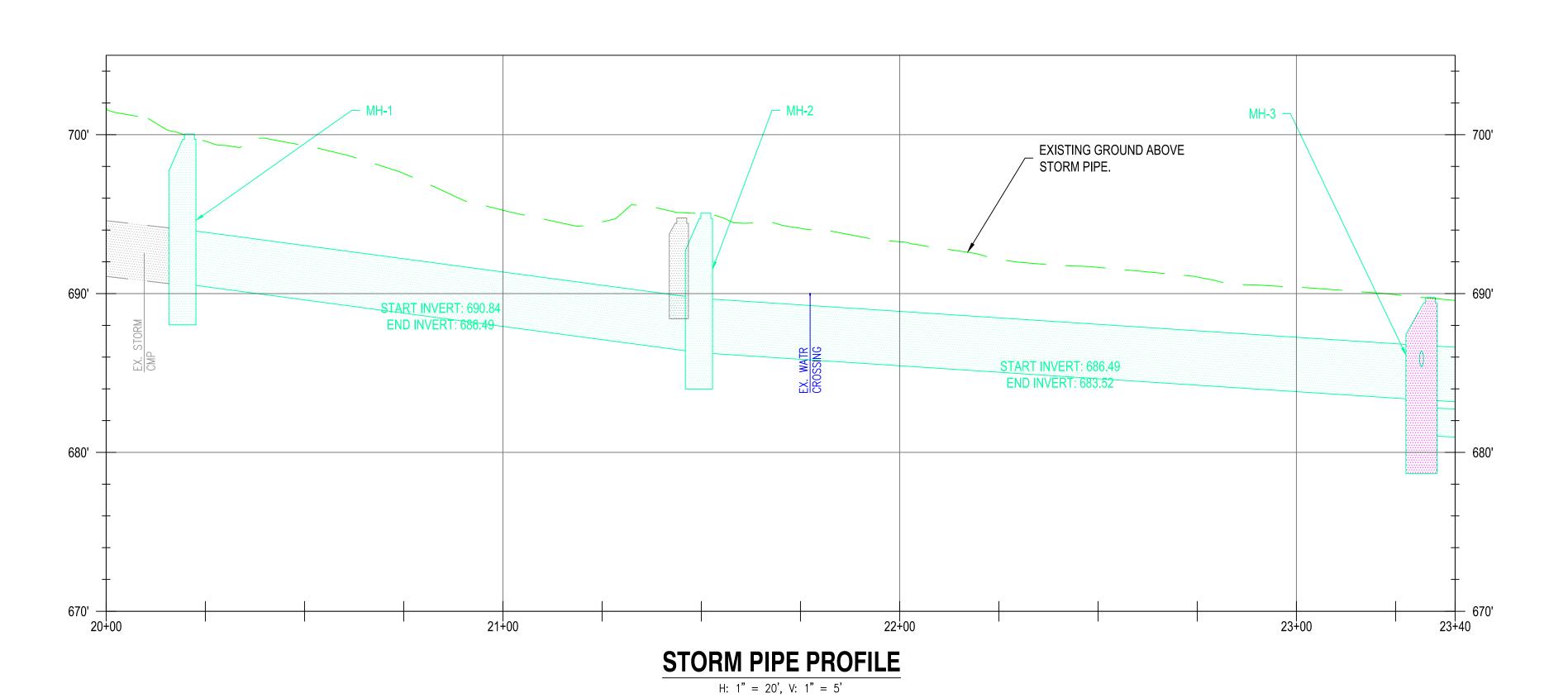






WORKS DEMOLITION, AND SURVE CONTROL SOUTH





#### **GENERAL NOTES**

- 1) EXISTING UTILITIES HAVE NOT BEEN POTHOLED TO IDENTIFY LOCATION, MATERIAL, SIZE, OR GEOMETRY.
- 2) ALL MANHOLES AND CATCH BASINS TO HAVE SOLID LIDS.

	STORM	STRUCTURE TABL	.E	
NAME	TYPE	STATION	RIM	PIPES IN
MH-1	MH 72" DIAM. TYPE 3	20+19.2, 0.0	ELEV. 700.04	I.E. 690.84, S I.E. 690.53, N
MH-2	MH 72" DIAM. TYPE 3	21+49.4, 0.0	ELEV. 695.06	I.E. 686.49, N I.E. 686.49, S I.E. 690.00, E
MH-3	FLOW SPLITTER CB 84" DIAM. TYPE 2 W/ ANTIFL. LIP (12'6" MIN DIAM. BASE)	23+31.5, 0.0	ELEV. 689.75	I.E. 683.52, N I.E. 681.17, S I.E. 683.52, S I.E. 685.38, S







RKS

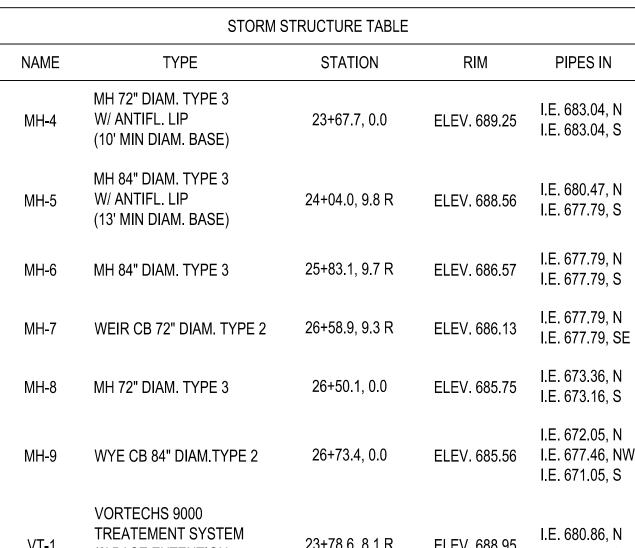
SQUILCHUCK

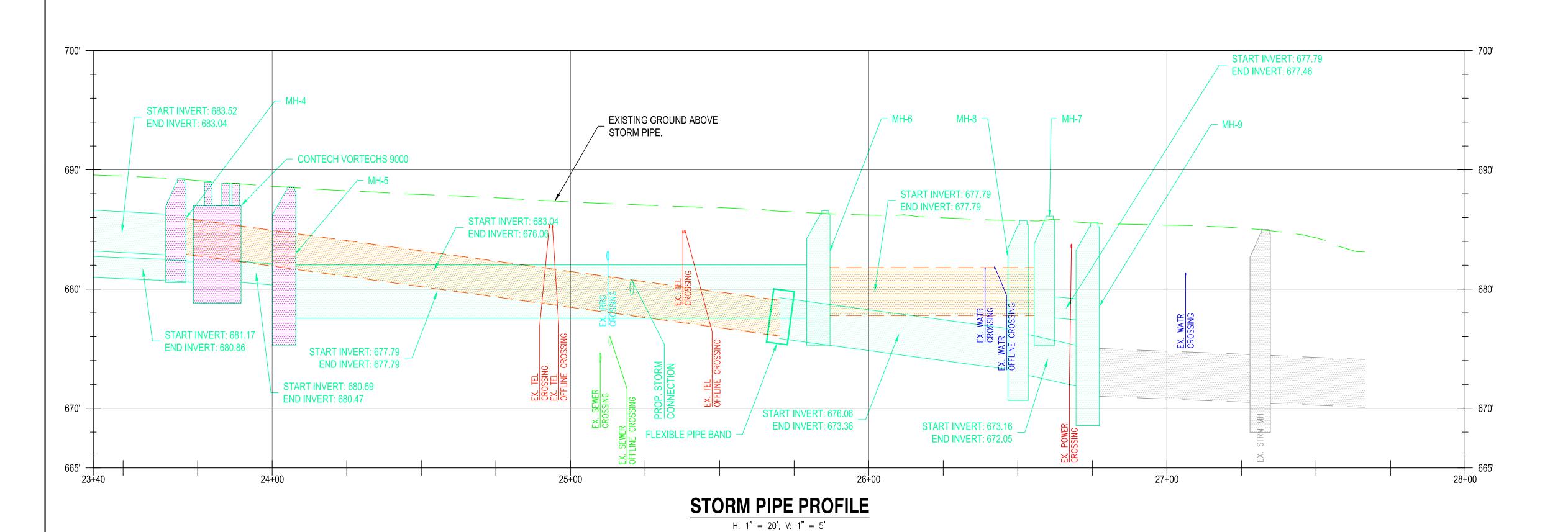
#### CONNECT WITH INSERTA APPROX. 36' - TEE PIPE FITTING OR OF 36" CPE @ 1.62% APPROVED EQUAL APPROX. 203' APPROX. 20' APPROX. 18' — OF PERFORATED OF 36" CPE @ 6.50% OF 12" CPE @ 0.68% 36" CMP @ 3.50% OF 36" CPE @ 3.50% S WENATCHEE AVE. 10.0' 10.0' BOODRYST. APPROX. 75' OF 48" PERFORATED CMP → @ 0.00% L TEST PIT 1 - BOREHOLE APPROX. 17' MH-7 — OF 18" CPE @ 3.07% APPROX. 30' OF 18" CPE @ 1.01% TEST PIT 2 APPROX. 41' APPROX. 175' TOF 18" CPE @ 1.92% FLEXIBLE PIPE BAND, OF 48" CPE @ 0.00% OF 12" CPE @ 0.50% INCIDENTAL TO PIPE

#### **GENERAL NOTES**

- EXISTING UTILITIES HAVE NOT BEEN POTHOLED TO IDENTIFY LOCATION, MATERIAL, SIZE, OR GEOMETRY.
- 2) ALL MANHOLES AND CATCH BASINS TO HAVE SOLID LIDS.

	STORM S	STRUCTURE TABLE		
NAME	TYPE	STATION	RIM	PIPES IN
MH-4	MH 72" DIAM. TYPE 3 W/ ANTIFL. LIP (10' MIN DIAM. BASE)	23+67.7, 0.0	ELEV. 689.25	I.E. 683.04, N I.E. 683.04, S
MH-5	MH 84" DIAM. TYPE 3 W/ ANTIFL. LIP (13' MIN DIAM. BASE)	24+04.0, 9.8 R	ELEV. 688.56	I.E. 680.47, N I.E. 677.79, S
MH-6	MH 84" DIAM. TYPE 3	25+83.1, 9.7 R	ELEV. 686.57	I.E. 677.79, N I.E. 677.79, S
MH-7	WEIR CB 72" DIAM. TYPE 2	26+58.9, 9.3 R	ELEV. 686.13	I.E. 677.79, N I.E. 677.79, SE
MH-8	MH 72" DIAM. TYPE 3	26+50.1, 0.0	ELEV. 685.75	I.E. 673.36, N I.E. 673.16, S
MH-9	WYE CB 84" DIAM.TYPE 2	26+73.4, 0.0	ELEV. 685.56	I.E. 672.05, N I.E. 677.46, NW I.E. 671.05, S
VT-1	VORTECHS 9000 TREATEMENT SYSTEM (2' BASE EXTENTION ALL SIDES)	23+78.6, 8.1 R	ELEV. 688.95	I.E. 680.86, N I.E. 680.69, S



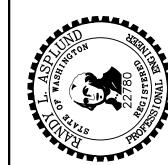


ROADWAY PLAN

1" = 20'

90% PLANS





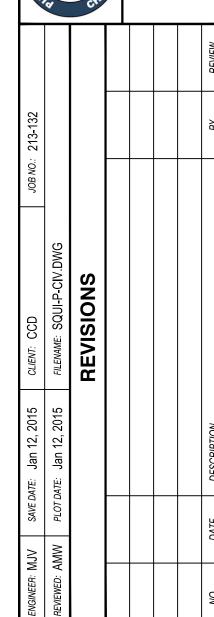


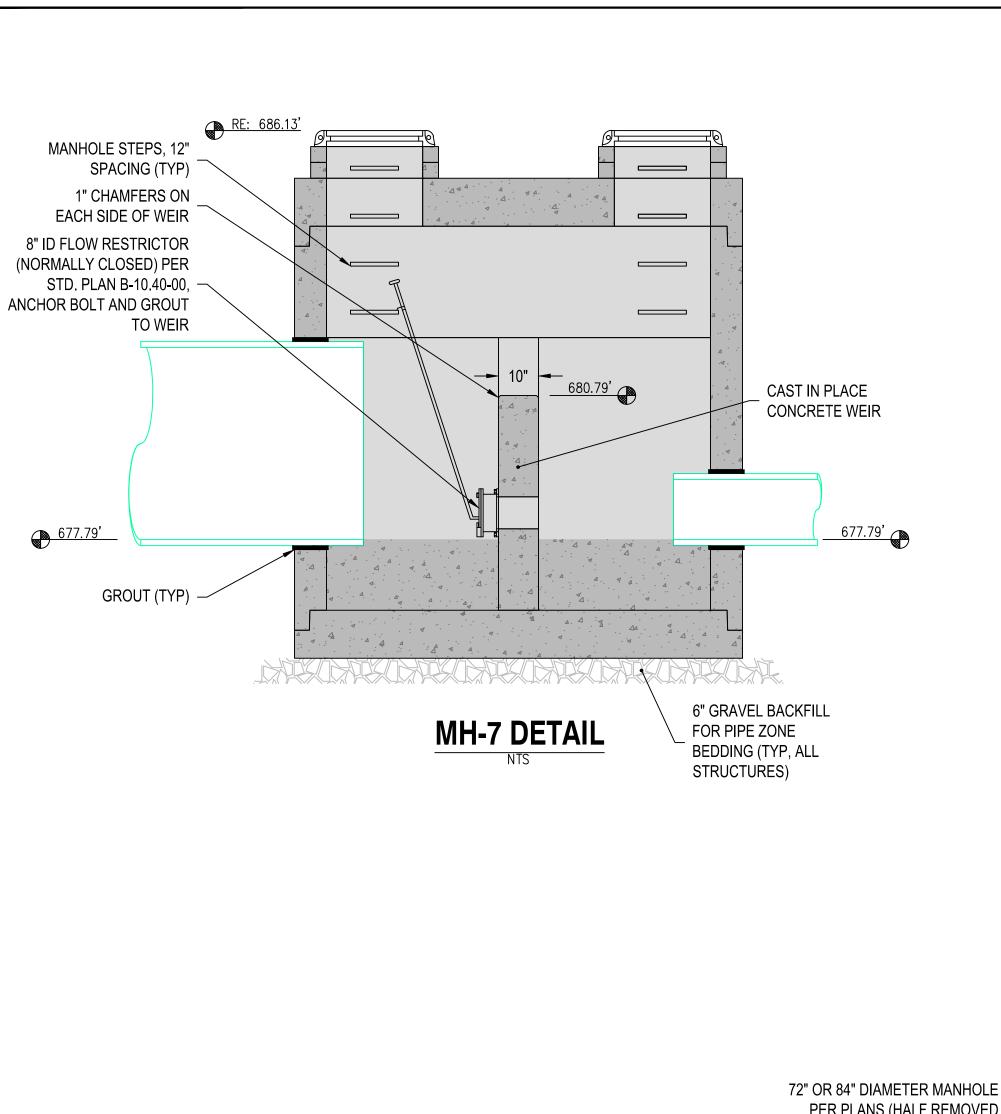


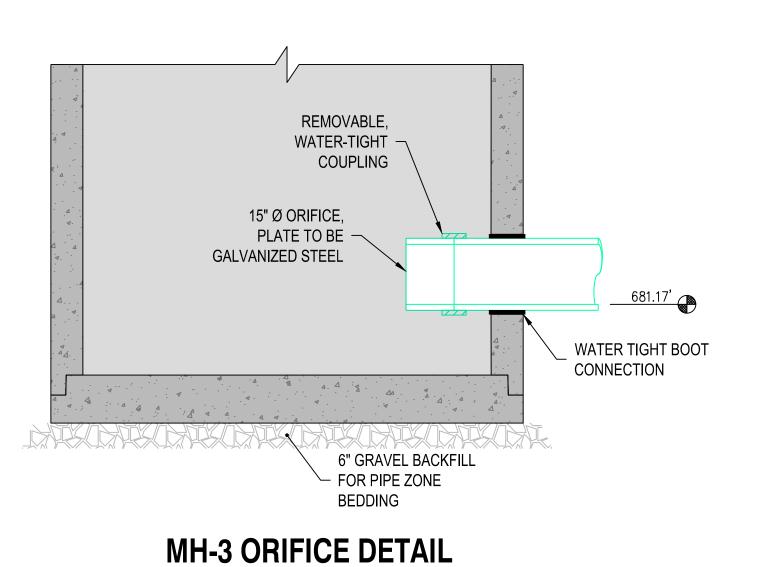
<u>~</u>

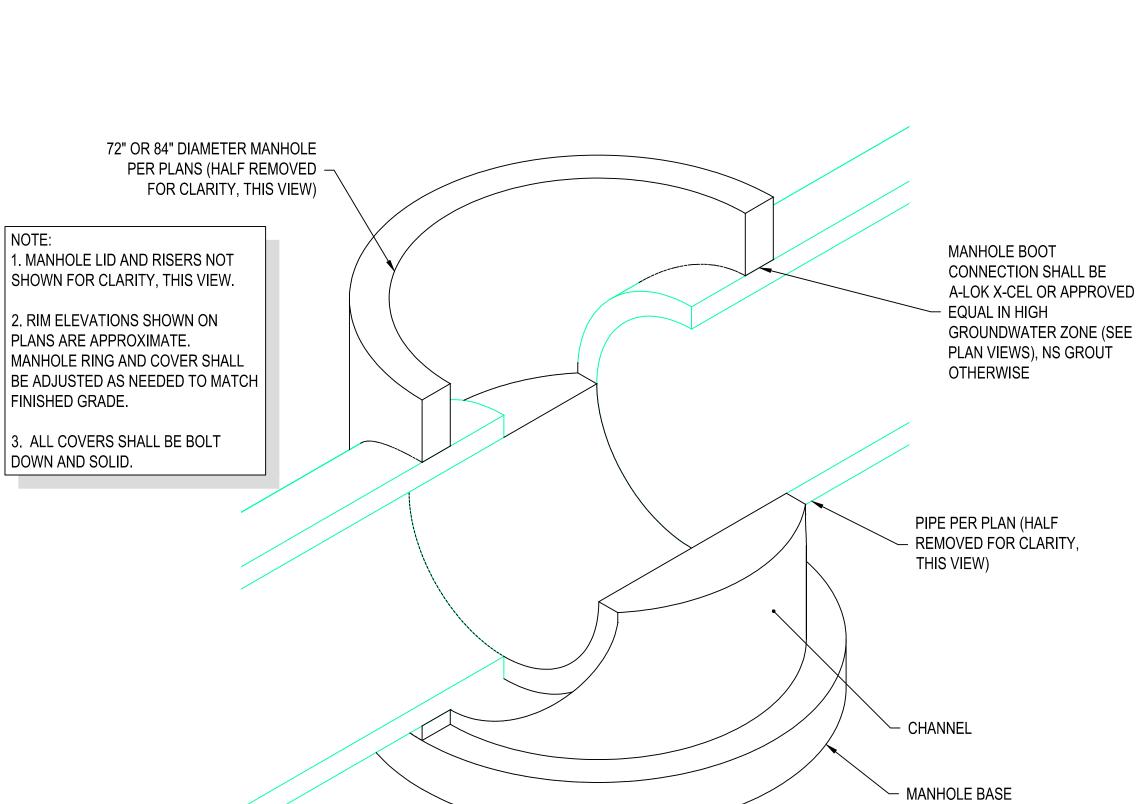
0

SOUTH PLAN SQUILCHUCK SQUILCHUCK PROPOSED





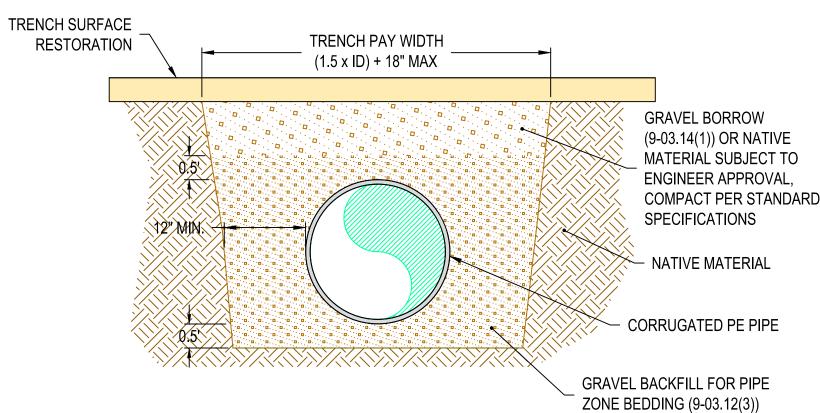




72" OR 84" THROUGH MANHOLE

**OBLIQUE** 

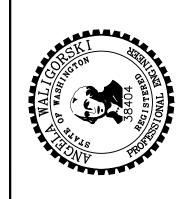
NOTE: THE CONTRACTOR SHALL PRESERVE AND PROTECT STORM SEWER PIPE AFTER INSTALLATION AND SHALL FOLLOW MANUFACTURER SPECIFICATIONS FOR MAINTAINING PIPE COVER DURING CONSTRUCTION.

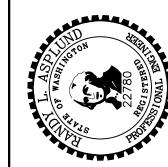


### PIPE TRENCH DETAIL **GENERAL INSTALLATION**

**GRAVEL BORROW** (9-03.14(1)) OR NATIVE IF APPROVED BY THE **ENGINEER** PERFORATED PIPE GRAVEL BACKFILL FOR DRYWELLS (9-03.12(5)) PLACE GEOTEXTILE FOR UNDERGROUND DRAINAGE ON TOP AND SIDES OF TRENCH 0.5'

> INFILTRATION PIPE DETAIL









RKS

0 PUBLIC SQUILCHUCK Ш

**DETAILS** 

STORMWATER

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN

BAR MEASURES 2"

90% PLANS

**CONTRACTOR TO GROUT** 

TO FINISHED GRADE

TOP AND SIDES

WEIR AND ORIFICE

**PLATES** 

**SEALED TO VAULT** 

**SECTION A-A** 

\_\_\_\_\_

#### **VORTECHS 9000 DESIGN NOTES**

VORTECHS 9000 RATED TREATMENT CAPACITY IS 5.0 CFS, OR PER LOCAL REGULATIONS. IF THE SITE CONDITIONS EXCEED RATED TREATMENT CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

SITE SPECIFIC

**DATA REQUIREMENTS** 

\* PER ENGINEER OF RECORD

MATERIAL

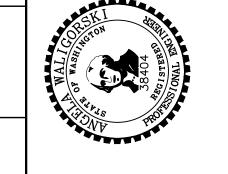
CPEP

CPEP

TBD

TBD

THE STANDARD INLET/OUTLET CONFIGURATION IS SHOWN. FOR OTHER CONFIGURATION OPTIONS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.contechES.com





VT-1

0.35

5.0

2-5

DIAMETER

18

688.85

TBD

TBD





 $\alpha$ 0

				ı
Jan 8, 2015	CLIENT: CCD	JOB NO.: 213-132	132	
Jan 12, 2015	FILENAME: SQUI-D-VT1.DWG			
	REVISIONS			

DETAIL VORTEC

SCALE: SHOWN DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

STRUCTURE ID WATER QUALITY FLOW RATE (CFS) PEAK FLOW RATE (CFS) RETURN PERIOD OF PEAK FLOW (YRS) PIPE DATA: I.E. **INLET PIPE 1** 680.86 **INLET PIPE 2 OUTLET PIPE** 680.69 **RIM ELEVATION** ANTI-FLOTATION BALLAST NOTES/SPECIAL REQUIREMENTS:

#### FRAME AND COVER (DIAMETER VARIES) N.T.S.

#### **GENERAL NOTES**

CONTRACTOR TO PROVIDE

GRADE RING/RISER

OUTLET

PIPE

- 1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- 2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- 3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.contechES.com
- 4. VORTECHS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- 5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- 6. INLET PIPE(S) MUST BE PERPEDICULAR TO THE VAULT AND AT THE CORNER TO INTRODUCE THE FLOW TANGENTIALLY TO THE SWIRL CHAMBER. DUAL INLETS NOT TO HAVE OPPOSING TANGENTIAL FLOW DIRECTIONS.
- 7. OUTLET PIPE(S) MUST BE DOWN STREAM OF THE FLOW CONTROL BAFFLE AND MAY BE LOCATED ON THE SIDE OR END OF THE VAULT. THE FLOW CONTROL WALL MAY BE TURNED TO ACCOMODATE OUTLET PIPE KNOCKOUTS ON THE SIDE OF THE VAULT.

#### **INSTALLATION NOTES**

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE VORTECHS STRUCTURE (LIFTING CLUTCHES PROVIDED).
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

## **C**INTECH **ENGINEERED SOLUTIONS LLC**

**EXTENDED** 

**ALL SIDES** 

BASE 2.0' ON -

E INLET PIPE -

PERMANENT

POOL ELEV.

**EXTENDED** 

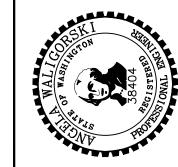
BASE

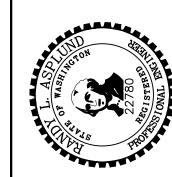
THIS PRODUCT MAY BE PROTECTED BY THE FOLLOWING U.S. PATENT: 5,759,415; RELATED FOREIGN PATENTS.

www.contechES.com

**90% PLANS** 

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069 800-338-1122 513-645-7000 513-645-7993 FAX

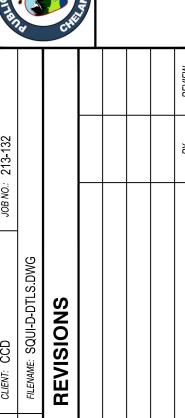






**DETAILS** 

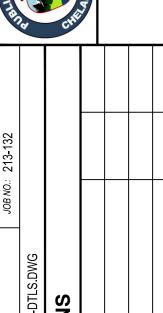
RESTORATION





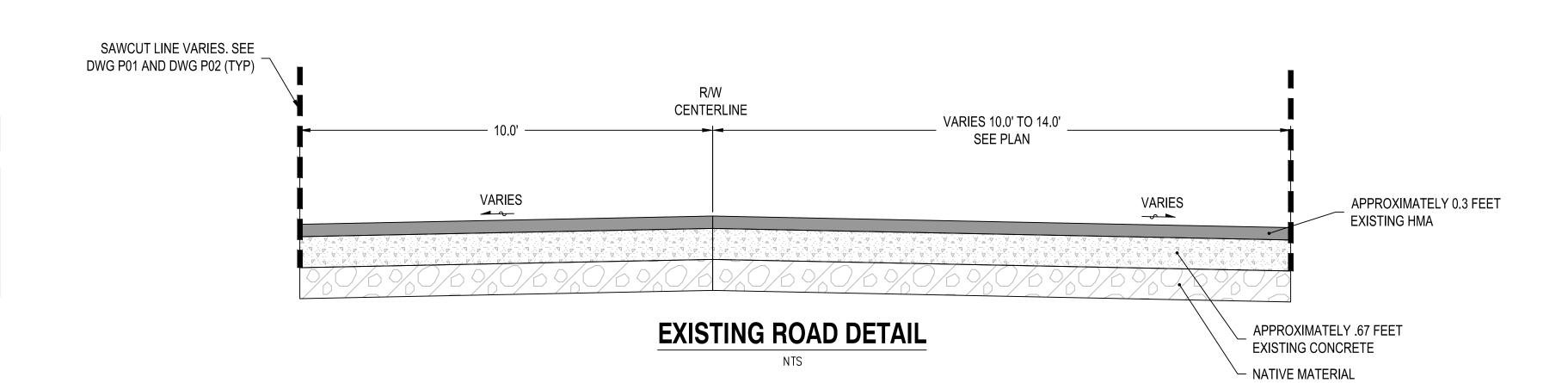


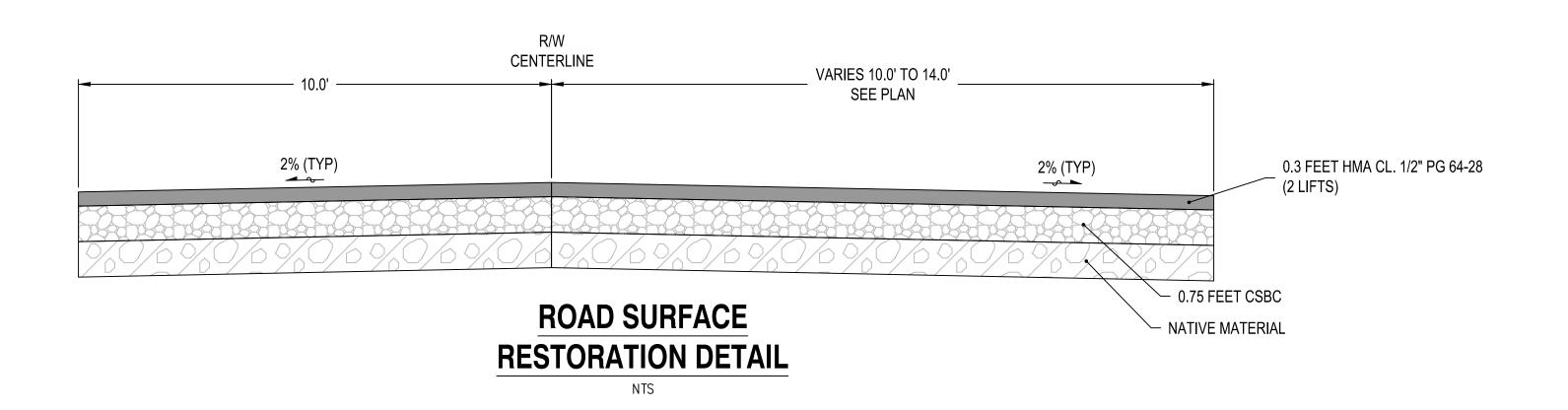
WORKS CHELAN COUNTY P

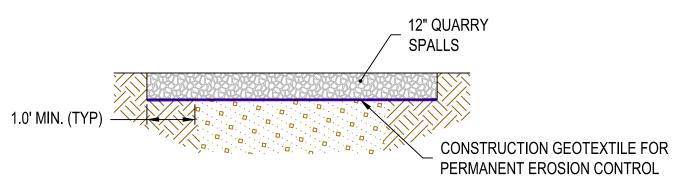


SCALE: SHOWN DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

90% PLANS







### TRENCH SURFACE RESTORATION IN EXISTING POND DETAIL

**NOTES** 

REMOVE EXISTING CONCRETE PANEL AND ASPHALT PER DWG PO1 AND DWG P02.

				BUFF	ER [	ATAC	<b>\</b>			
			L	ONGITUDIN	NAL BUFFER	R SPACE = I	3			
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (FEET)	155	200	250	305	360	425	495	570	645	_
			BUFFE	ER VEHICLE	ROLL AHE	AD DISTAN	CE = R			
MINIMUM HC	ABLE ATTENU OST VEHICLE CE WITH THE	WEIGHT 15,0				L BE IN	30	FEET MIN. TO	) 100 FEET I	MAX.
PROTECTIVE MAY BE A	VEHICLE: WORK VEHICL	LE STRATEGIO	CALLY LOCA	TED TO SHIE	LD THE WOR	K AREA.	NO S	SPECIFIED DIS	STANCE REQU	JIRED

1. ALL SIGNS ARE BLACK ON ORANGE.

RECOMMENDED.

DETAILS.

TEMPORARY SIGN LOCATION

CHANNELIZING DECIVES

PROTECTIVE VEHICLE

2. EXTENDING THE CHANNELIZING DEVICE TAPER ACROSS SHOULDER IS

3. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING

STATIONS. SEE THE STANDARD SPECIFICATIONS FOR ADDITIONAL

4. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.

SIGN S	SPACING = 2	X(1)
RURAL HIGHWAYS	60 / 65 MPH	800'
RURAL ROADS	45 / 55 MPH	500'
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350'
RURAL ROADS, URBAN ATERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' (2)
URBAN STREETS	25 MPH OR LESS	100' (2)
I. ALL SPACING MAY BE ADJUSTED 2. THIS SPACING MAY BE REDUCED		

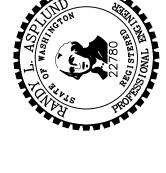
W20-7B (OPTIONAL IF 40 MPH OR LESS)

PREPARED

W20-7B









**SPACING (FEET)** 

10 TO 20

10 TO 20

10 TO 20

50 / 65

35 / 45

25 / 30

TANGENT

60

