

2014 Storm Drainage Improvement Project

3rd Street and Avenue D and Park Avenue South of 19th Street

City of Snohomish, Washington

City Council

Mayor:

Karen Guzak

Mayor Pro Tem:

Lynn Schillaty

Board Members:

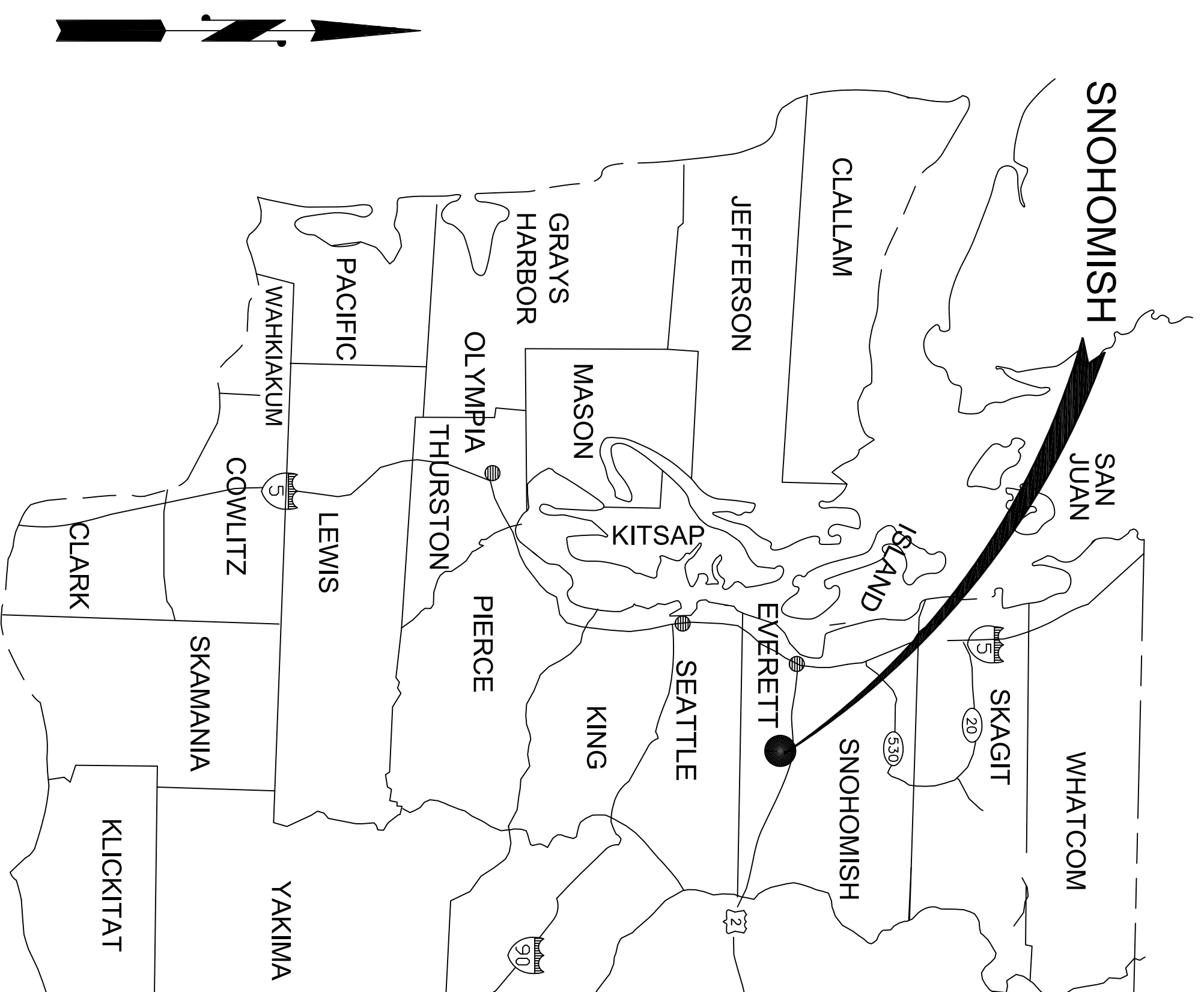
Derrick Burke
Tom Hamilton
Paul Kaftanski
Dean Randall
Michael Rohrscheib

City Manager:

Larry Bauman

Public Works Director: Steve Schuller, P.E.

Steve Schuller, P.E.



Vicinity Map

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Schedule No. 1	3rd Street and Avenue D
Schedule No. 2	Park Avenue South of 19th Street



GENERAL PROJECT NOTES

- ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE LATEST ENGINEERING STANDARDS AND SPECIFICATIONS OF THE CITY OF SNOHOMISH PUBLIC WORKS DEPARTMENT AND THE 2012 EDITION OF THE WSDOT/APWA STANDARDS AND SPECIFICATIONS AS APPROVED AND MODIFIED BY THE CITY OF SNOHOMISH. A SET OF APPROVED CONTRACT PLANS AND SPECIFICATIONS SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
- AN APPROVED TRAFFIC CONTROL PLAN IS REQUIRED TO BE SUBMITTED AT THE PRE-CONSTRUCTION MEETING. ANY MODIFICATIONS TO THE APPROVED TRAFFIC CONTROL PLAN SHALL BE RESUBMITTED AND APPROVED PRIOR TO IMPLEMENTATION.
- THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER OR DESIGNEE. FLUSHING OF STREETS SHALL NOT BE PERMITTED.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BUT NOT LIMITED TO SILT FENCE AND STORM DRAIN INLET PROTECTION. THE CONTRACTOR SHALL INSPECT THE CONDITION OF ALL EROSION AND SEDIMENT CONTROL MEASURES ON A DAILY BASIS AND MAINTAIN OR REPLACE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).
- TEMPORARY RESTORATION OF TRENCHES FOR OVERNIGHT USE SHALL BE ACCOMPLISHED BY USING COLD MIX ASPHALT. STEEL PLATES MAY BE USED OVERNIGHT TO COVER THE LAST SECTION OF TRENCH. STEEL PLATES MUST BE PINNED DOWN AND ASPHALT RAMPS/EDGES MUST BE PLACED AROUND THE PLATES. STEEL PLATES SHALL NOT BE USED ON STEEP GRADES OR WHERE STEEL PLATES PRESENT A ROADWAY HAZARD.

BEST MANAGEMENT PRACTICES (BMP'S)

BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT EROSION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

- PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE 2006 ECOLOGY STORMWATER MANUAL FOR WESTERN WASHINGTON AND THE CITY OF SNOHOMISH NPDES PHASE II STORMWATER PERMIT.
- ALL EROSION CONTROL PROCEDURES AT ALL THE CONTRACTORS WORK AND STAGING AREAS SHALL CONFORM TO PROJECT PERMITS, NPDES PERMIT, SWPPP, AND TEMPORARY EROSION AND SEDIMENTATION CONTROL (TESC) DETAILS.
- THE CONTRACTOR SHALL PREVENT THE SILTING OF STREAMS DURING CONSTRUCTION AND CONTROL WATER POLLUTION DURING THE LIFE OF THE CONTRACT THROUGH THE USE OF SEDIMENT TRAPS, STRAW BALES, FILTER FABRIC FENCES, PLASTIC FENCES, MULCHING, COVERING STORED PILES OF SOIL AND BACKFILL, AND OTHER TESC DEVICES OR METHODS.
- THE CONTRACTOR SHALL RETAIN AND PROTECT ALL NATURAL VEGETATION, PREVENT THE DISCHARGE OF POLLUTANTS INTO CRITICAL AREAS DURING EXCAVATION AND BACKFILL OR ANY OTHER CONSTRUCTION ACTIVITY.
- DETERMINE THE LOCATIONS OF AND INSTALL TESC SILT FENCES PER DETAIL, THIS SHEET AND CONSTRUCTION LIMIT FENCING PRIOR TO ANY SITE WORK.
- HAVE BACK-UP EQUIPMENT READILY AVAILABLE IN CASE EMERGENCY EROSION/POLLUTION SITUATIONS ARISE. THIS EQUIPMENT INCLUDES PUMPS, HOSES, AND BACKHOES. IN ADDITION, HAVE A STOCKPILE OF EXTRA ESC MATERIALS SUCH AS STRAW BALES, AND FILTER FENCE FOR EMERGENCY SITUATIONS.

LEGEND

- FND MON IN CASE, AS NOTED
- FND SURFACE MON, AS NOTED
- CATCH BASIN
- SANITARY SEWER MANHOLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- WATER VALVE
- POWER POLE
- GUY ANCHOR
- DECIDUOUS TREE
- SIGN
- OVERHEAD WIRES

BASIS OF BEARING
WASHINGTON STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD83. BASED UPON THE TO CITY OF SNOHOMISH DESIGNATION COS-16.

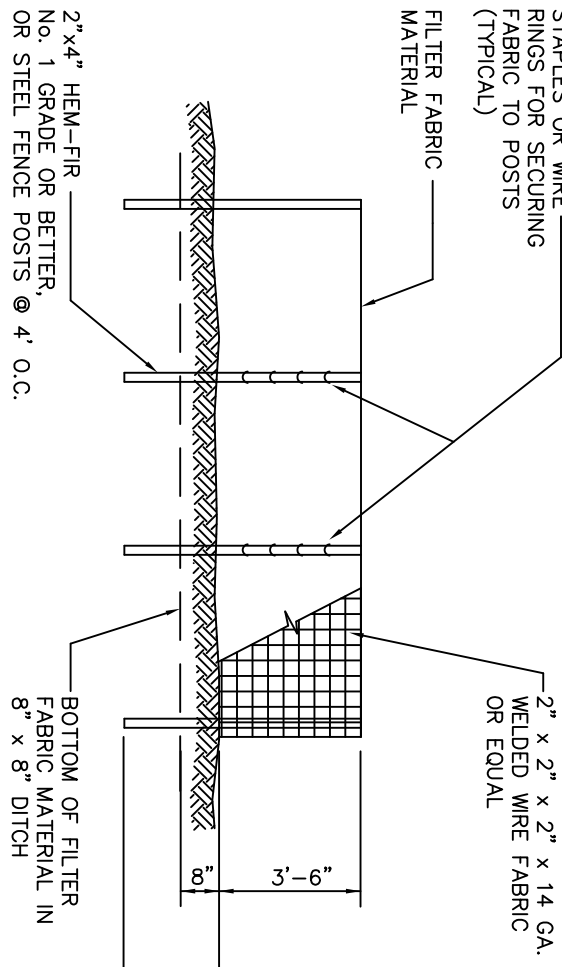
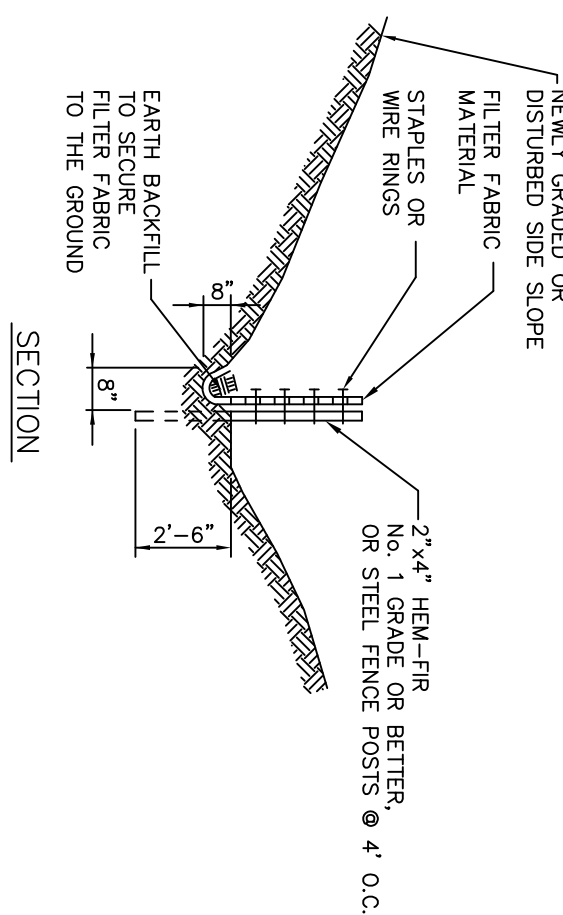
DATUM
NGVD 29 (CONVERSION TO NAVD 88 = +3.64)

PROJECT BENCHMARK
CITY OF SNOHOMISH GPS STA#16, DESIGNATION COS-16. BRASS DISK IN SOUTH BOUND LANE OF AVENUE A, ±22' SOUTH OF GATE AT BLACKMAN'S LAKE.
EL=143.10'

SITE BENCHMARK
TOP OF MONUMENT IN CASE LOCATED AT THE INTERSECTION OF 3RD ST AND AVENUE D.
EL=95.47'

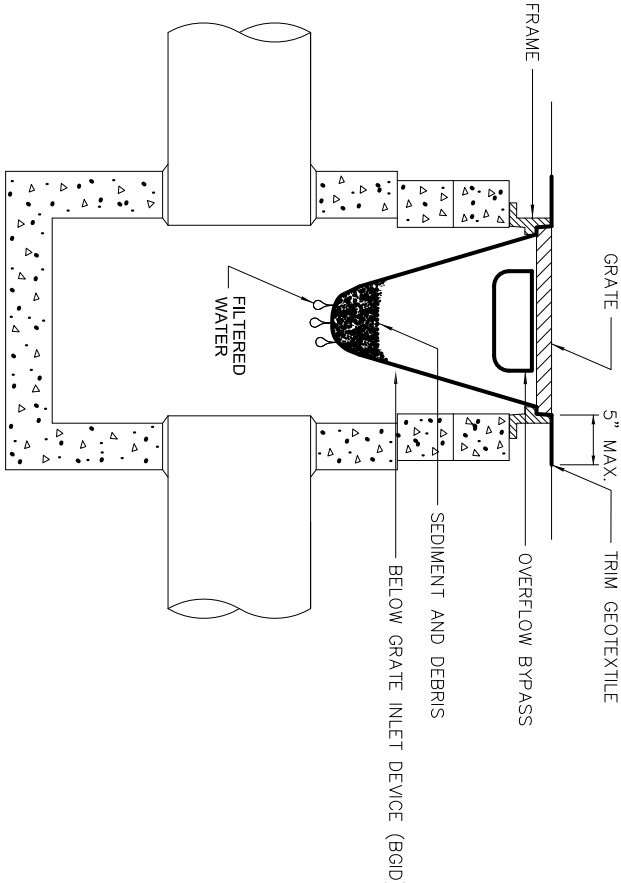
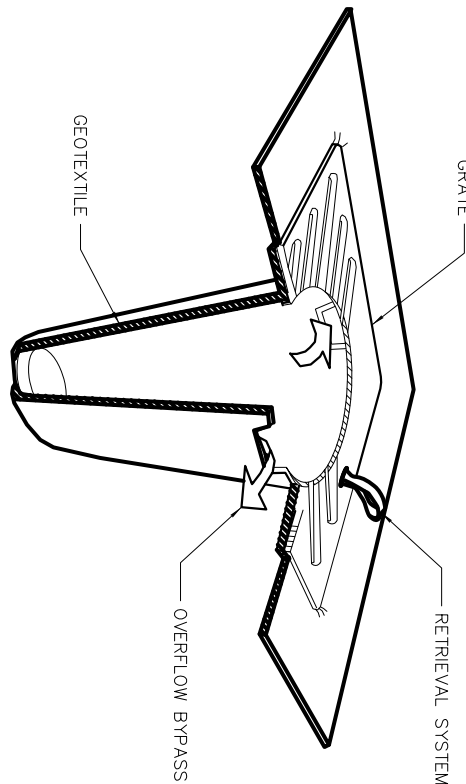
NOTES

- REPRESENTATION OF BOUNDARY LINES ARE GRAPHICALLY SHOWN FOR USE IN INTERPRETING THE TOPOGRAPHIC DATA. THIS REPRESENTATION IS BASED UPON INFORMATION PROVIDED BY THE CLIENT OR AS AVAILABLE FROM TAX ASSESSOR'S RECORDS AND SHOULD NOT BE RELIED UPON AS A BOUNDARY SURVEY.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN NOVEMBER 2013, AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
- UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON AS-BUILT FIELD LOCATION OF EXISTING STRUCTURES.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

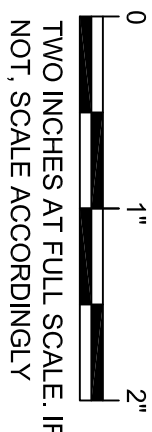


- NOTES:
- WHERE POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
 - TEMPORARY SILTATION CONTROL SHALL BE CONSTRUCTED BY PLACING FILTER FABRIC FENCES ACROSS SWALES UTILIZING FILTER SYSTEM PRIOR TO DISCHARGE.
 - PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).
 - MAINTAIN IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND SURFACE RESTORATION IS INITIATED. MAINTENANCE SHALL BE RETURNED TO ORIGINAL GROUND CONDITIONS UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE ENGINEER.

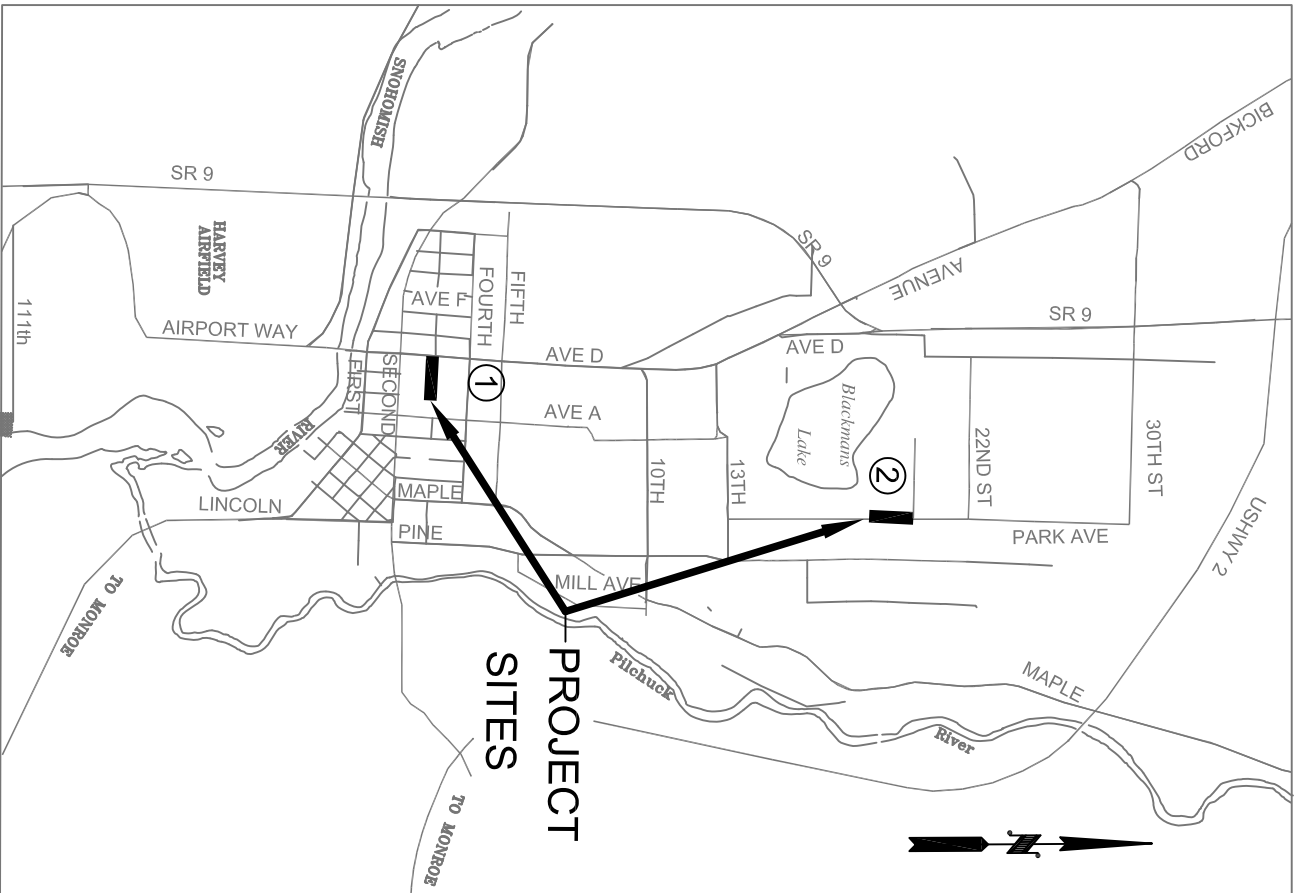
SILT FENCE
NOT TO SCALE



STORM DRAIN INLET PROTECTION
REFERENCE WSDOT STANDARD PLAN 140-20-00



- PROJECT LOCATION MAP
- 3RD STREET AND AVENUE D
 - PARK AVENUE SOUTH OF 19TH STREET



CALL OUT SYMBOL



<u>PROJECT CONTACTS</u>		
Max Sellin	Project Engineer	360-282-3196
Tim Cross	Public Works Inspector	425-328-0056
Derek Debaradi	Sewer and Storm Lead	425-328-6251
Joe Palmer	Water Distribution Lead	425-328-0068
Ann Ray	Cross Connection Specialist	425-328-0059
Fire District No. 4	EMS and Fire Services	360-568-2141
Snohomish Police	Police Department	360-568-0888

BURIED UTILITIES IN AREA CALL BEFORE YOU DIG
1-800-424-5555
EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE INFORMATION AND NO TYPE, LOCATION OR DEPTH.

No.	Date	Description	By	App.
1	05/2014	Plansheet	MMS	YM

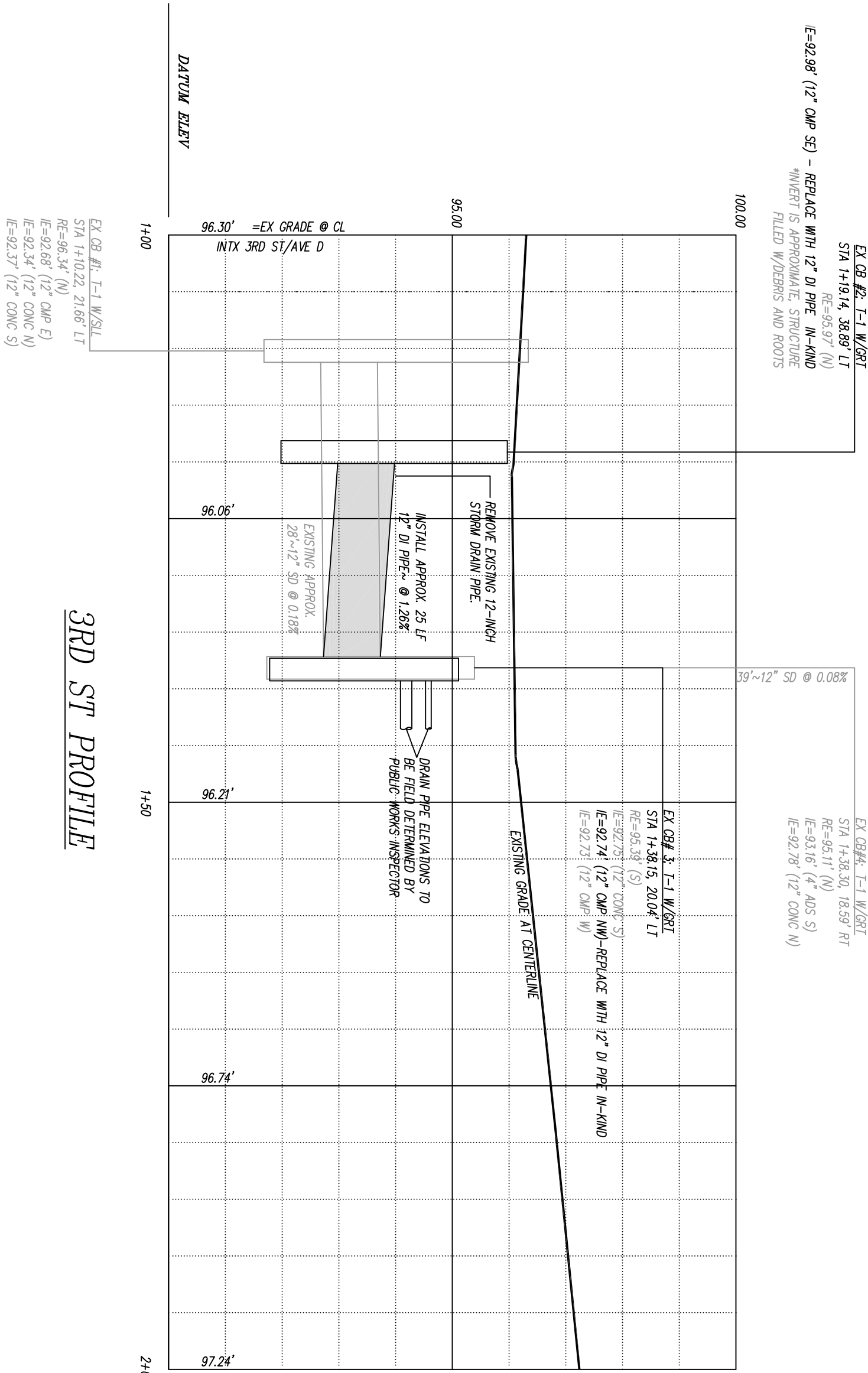
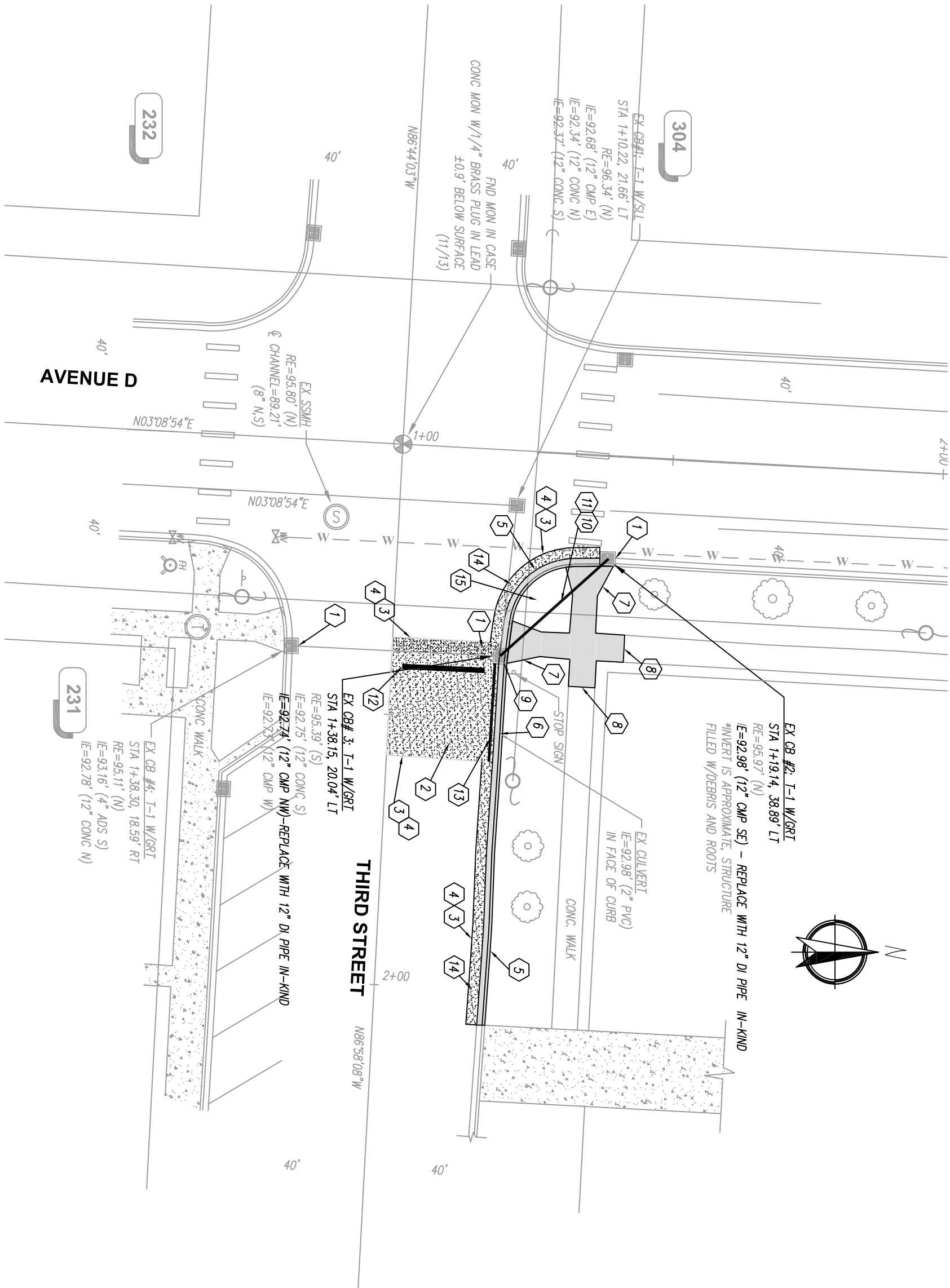


City of Snohomish
116 Union Avenue
Snohomish, WA 98290
360-568-3115

Scale = NTS This Sheet.			
Drawn By:	MMS	Date:	May 2014
Designed By:	MMS	Date:	May 2014
Checked By:	MMS	Date:	May 2014
Approved By:	YM	Date:	May 2014

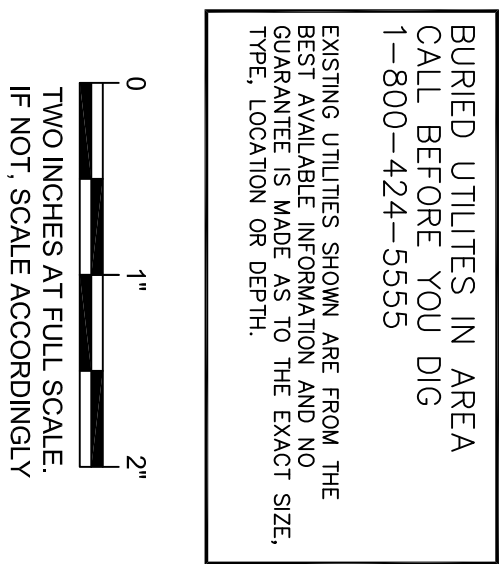
City of Snohomish		Drawing No.
2014 Storm Drainage Improvement Project		LN
Legend and Notes		Sheet No. 2 of 5

A Portion of the SW 1/4 of the NW 1/4 of Section 18,
Township 28 North, Range 6 East, W.M.



EX. 08 #1, I-1 W/8\"/>

3RD ST PROFILE



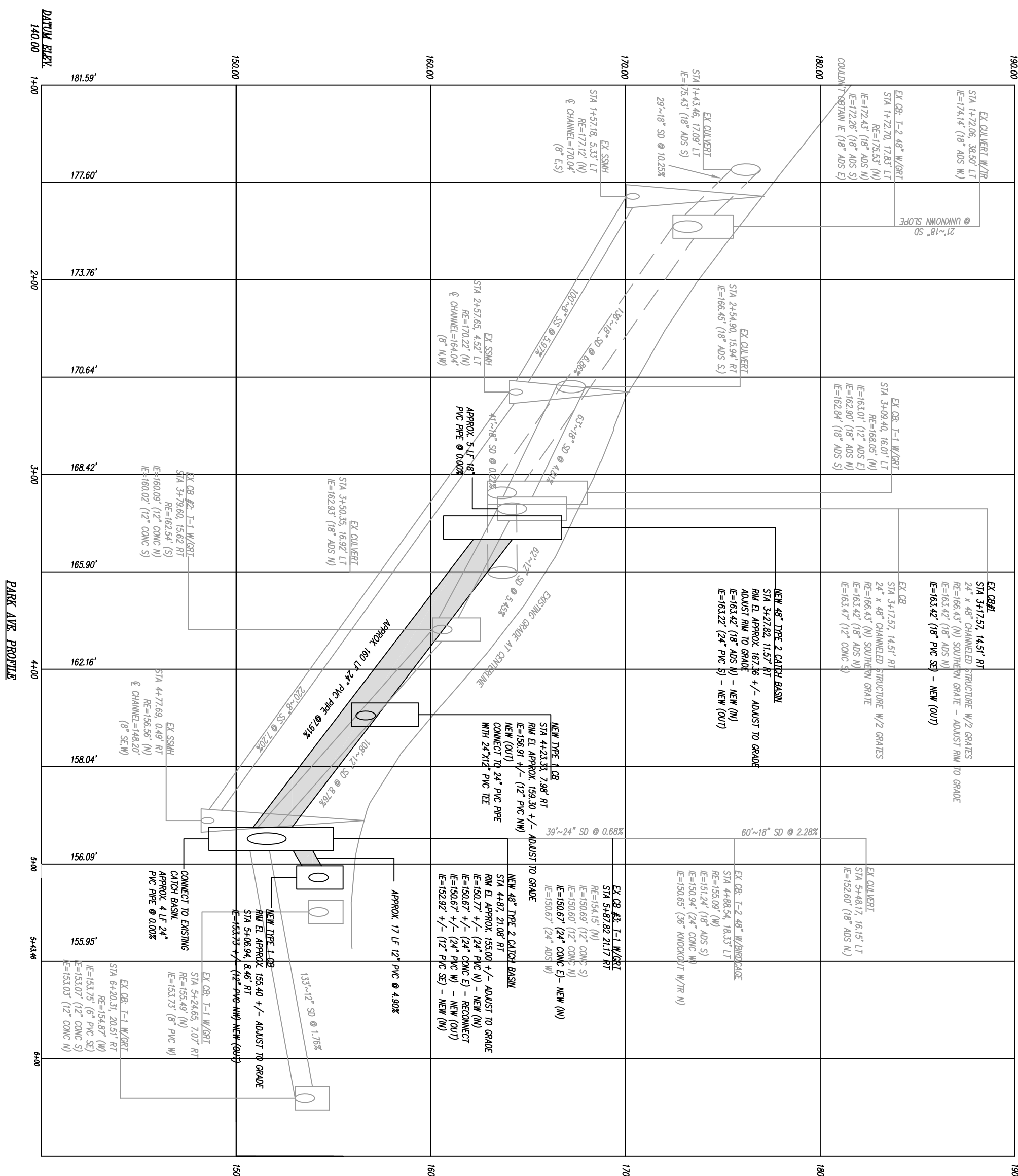
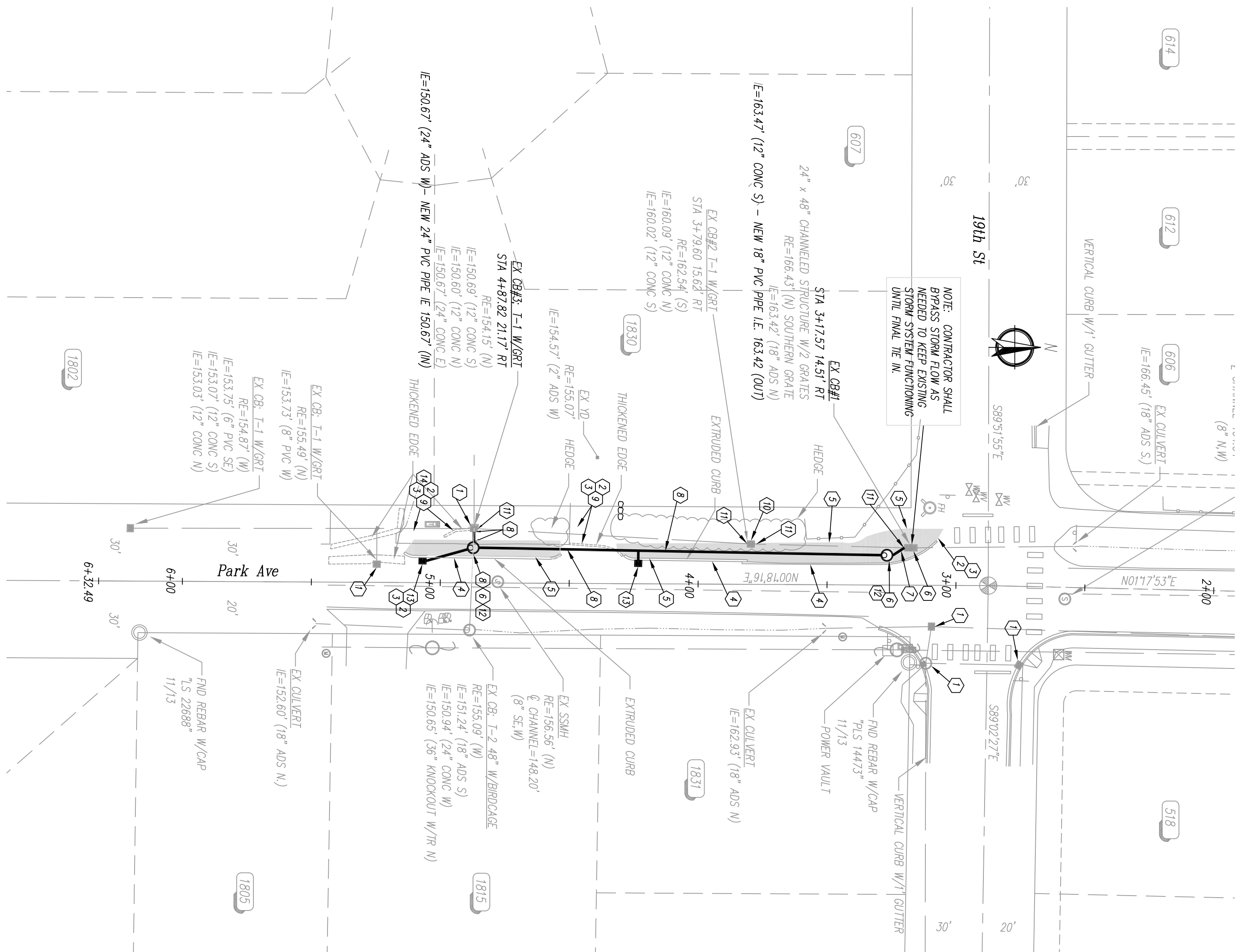
- GENERAL NOTES
- EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CORRECT LOCATIONS PRIOR TO CONSTRUCTION. THIS MAY BE DONE BY CALLING 1-800-424-5555 FOR THE UTILITIES PARTICIPATING IN ONE-CALL AND BY DIRECT CONTACT OF ALL OTHER AFFECTED UTILITY COMPANIES.
 - CONTRACTOR SHALL COORDINATE EXISTING UTILITY RELOCATIONS WITH ALL OTHER UTILITIES INCLUDING TEMPORARY SERVICES AND REMOVAL AND RELOCATION OF ALL EXISTING UTILITIES.
 - CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN CONFORMANCE WITH THE 2005 ECOLOGY STORMWATER MANUAL FOR WESTERN WASHINGTON. THE CITY OF SNOHOMISH ENGINEERING STANDARDS, INDUSTRY STANDARD BEST MANAGEMENT PRACTICES AND REQUIREMENTS INCLUDED IN THE PROJECT PLANS AND SPECIFICATIONS.
 - CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR REPAIR AND REPLACEMENT OF ANY SIGNS, UTILITIES OR INFRASTRUCTURE PUBLIC OR PRIVATE DAMAGED OR BROKEN DURING CONSTRUCTION.
 - ALL WORK, CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH THE CITY OF SNOHOMISH ENGINEERING STANDARDS AND WSDOT STANDARD SPECIFICATIONS CURRENT EDITION.
 - EXISTING ASPHALT SURFACE SHALL BE VACUUM SWEEP PRIOR TO PAVING. PAVING SURFACE SHALL BE FREE OF ALL VEGETATION, SEDIMENT AND DEBRIS PRIOR TO PAVING.
 - NEW STRUCTURE LOCATIONS MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
 - CONTRACTOR IS SOLELY RESPONSIBLE FOR REPAIR OF ANY CONCRETE CURB AND GUTTER, SIDEWALK OR PRIVATE PROPERTY DAMAGED DURING CONSTRUCTION. DAMAGED CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE REPLACED IN-KIND PRIOR TO PAVING.
 - ALL DEPTHS SHOWN ARE COMPACTED DEPTHS.
 - CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF ALL MONUMENTS INCLUDING BUT NOT LIMITED TO RESETTling MONUMENTS DISTURBED DURING CONSTRUCTION.

CONSTRUCTION NOTES

- INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN 1-4020-00. SEE SHEET 2. REMOVE/REINSTALL INSERT AS NEEDED FOR TO COMPLETE WORK.
- REMOVE FAILED ASPHALT IN THIS AREA. EXCAVATE AND REMOVE MAX. 6-INCHES EXISTING ROAD BASE AND HAUL TO CITY PIT. BACKFILL AND COMPACT BASE WITH 3/4\"/>
- ASPHALT SAW CUT.
- CONTRACTOR SHALL SEAL ASPHALT JOINT PER PROJECT SPECIFICATIONS.
- REMOVE AND REPLACE EXISTING CONCRETE CURB AND GUTTER PER CITY OF SNOHOMISH ENGINEERING STANDARDS AND STANDARD DETAIL #305a. SEE SHEET 5.
- RESET EXISTING 2-INCH PVC CURB DRAIN. EXTEND AND TIE IN TO EXISTING CATCH BASIN. PIPE ELEVATION TO BE FIELD DETERMINED BY THE PUBLIC WORKS INSPECTOR.
- REMOVE AND REPLACE EXISTING CONCRETE CURB RAMP WITH CURB RAMP TYPE A PER WSDOT STD. PLAN F-4015-02. SEE SHEET 5.
- REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK PER CITY OF SNOHOMISH ENGINEERING STANDARDS AND STANDARD DETAIL #306 TO LIMITS THAT ACHIEVE ADA COMPLIANCE. SEE SHEET 5.
- ADJUST CATCH BASIN CASTING TO NEW GRADE.
- REMOVE AND DISPOSE OF EXISTING STORM DRAIN PIPE.
- INSTALL APPROX. 25 LF NEW 12\"/>
- REPLACE STOP BAR IN-KIND PER CITY OF SNOHOMISH ENGINEERING DETAIL NO. 330. SEE SHEET 5.
- INSTALL APPROX. 20 LF 6-INCH WRAPPED PERFORATED PVC PIPE AND CONNECT TO EXISTING CATCH BASIN. BACKFILL PIPE ZONE WITH 8 INCH DRAIN ROCK. PIPE ELEVATION TO BE FIELD DETERMINED BY THE PUBLIC WORKS INSPECTOR.
- INSTALL APPROX. 2-FOOT WIDE, 3-INCH DEPTH ASPHALT PATCH.
- INSTALL SOD IN ALL DISTURBED LANDSCAPE AREAS.

No.	Date	Description	By	App.
1	05/20/14	Plansheet	MMS YM	
 City of Snohomish 116 Union Avenue Snohomish, WA 98290 360-568-3115				
Plan View Scale = 1:20 Profile Scale H=1:10 V=1:2			Drawing By: MMS Designed By: MMS Checked By: MMS Approved By: YM	
Date: May 2014 Date: May 2014 Date: May 2014 Date: May 2014			Date: May 2014 Date: May 2014 Date: May 2014 Date: May 2014	
Unless Otherwise Noted			Drawing No. C1	
City of Snohomish			Sheet No. 3 of 5	
2014 Storm Drainage Improvement Project			3rd Street and Avenue D	

A Portion of the NE 1/4 of the NW 1/4 of Section 7,
Township 28 North, Range 6 East, W.M.



BURIED UTILITIES IN AREA
CALL BEFORE YOU DIG
1-800-424-5555

0 1" 2"
TWO INCHES AT FULL SCALE. IF
NOT, SCALE ACCORDINGLY

- GENERAL NOTES**
1. EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CORRECT LOCATIONS PRIOR TO CONSTRUCTION. THIS MAY BE DONE BY CALLING 1-800-424-5555 FOR THE UTILITIES PARTICIPATING IN ONE-CALL AND BY DIRECT CONTACT OF ALL OTHER AFFECTED UTILITY COMPANIES.
 2. CONTRACTOR SHALL COORDINATE EXISTING UTILITY RELOCATIONS WITH ALL OTHER UTILITIES INCLUDING TEMPORARY SERVICES AND REMOVAL AND RELOCATION OF ALL EXISTING UTILITIES.
 3. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN CONFORMANCE WITH THE 2005 CITY OF SNOHOMISH MANUAL FOR WESTERN WASHINGTON, THE CITY OF SNOHOMISH ENGINEERING STANDARDS, INDUSTRY STANDARD BEST MANAGEMENT PRACTICES AND REQUIREMENTS INCLUDED IN THE PROJECT PLANS AND SPECIFICATIONS.
 4. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR REPAIR AND REPLACEMENT OF ANY UTILITIES OR INFRASTRUCTURE CONSTRUCTION.
 5. ALL WORK, CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH THE CITY OF SNOHOMISH ENGINEERING STANDARDS AND WSOT STANDARD SPECIFICATIONS CURRENT EDITION.
 6. EXISTING ASPHALT SURFACE SHALL BE VACUUM SWEEP PRIOR TO PAVING. PAVING SURFACE SHALL BE FREE OF ALL VEGETATION, SEDIMENT AND DEBRIS PRIOR TO PAVING.
 7. NEW STRUCTURE LOCATIONS MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
 8. CONTRACTOR IS SOLELY RESPONSIBLE FOR REPAIR OF ANY CONCRETE CURB AND GUTTER, SIDEWALK OR PRIVATE PROPERTY DAMAGED DURING CONSTRUCTION. DAMAGED CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE REPLACED IN-KIND PRIOR TO PAVING.
 9. ALL DEPTHS SHOWN ARE COMPACTED DEPTHS.
 10. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF ALL MONUMENTS INCLUDING, BUT NOT LIMITED TO, RESTING MONUMENTS DISTURBED DURING CONSTRUCTION.

CONSTRUCTION NOTES

1. INSTALL STORM DRAIN INLET PROTECTION PER WSDOT STANDARD PLAN 1-40.20-00. SEE SHEET 2. REMOVE/REINSTALL INSERT AS NEEDED FOR TO COMPLETE WORK.

- 2 ASPHALT SAW CUT.
- 3 CONTRACTOR SHALL SEAL ASPHALT JOINT PER PROJECT SPECIFICATIONS.
- 4 REMOVE AND REPLACE APPROX. 200 LF OF EXISTING CONCRETE EXTRUDED CURB PER CITY OF SNOHOMISH ENGINEERING STANDARDS, AND STANDARD DETAIL #305E. NEW CURB SHALL BE PAINTED WHITE. SEE SHEET 5.
- 5 REMOVE AND REPLACE EXISTING ASPHALT SIDEWALK IN-KIND PER PROJECT PLANS.
- 6 ADJUST CASTING TO NEW GRADE.
- 7 INSTALL APPROX. 5 LF 18" PVC PER CITY OF SNOHOMISH ENGINEERING STANDARDS AND STANDARD DETAILS #616 AND #617. SEE SHEET 5, CONNECT NEW STORM DRAIN PIPE TO NEW MANHOLE AND EXISTING CATCH BASIN PER CITY OF SNOHOMISH ENGINEERING STANDARDS.
- 8 INSTALL NEW 24" PVC STORM PIPE PER CITY OF SNOHOMISH ENGINEERING STANDARDS AND STANDARD DETAILS #616 AND #617. CONNECT NEW AND EXISTING STORM DRAIN PIPE TO NEW MANHOLE AND/OR EXISTING CATCH BASIN PER CITY OF SNOHOMISH ENGINEERING STANDARDS.
- 9 REMOVE AND RESTORE APPROX. 30 SY OF ASPHALT DRIVEWAY AND 25 LF THICKENED EDGE IN-KIND.
- 10 REMOVE AND DISPOSE OF EXISTING CATCH BASIN.
- 11 PLUG EXISTING STORM DRAIN PIPE AND ABANDON IN PLACE. GROUT CATCH BASIN AS NEEDED.
- 12 INSTALL NEW 48" TYPE 2 CATCH BASIN WITH FRAME AND GRATE PER MSDOT DETAIL B-10-20-01 SHEET 5.
- 13 INSTALL NEW TYPE 1 CATCH BASIN WITH FRAME AND GRATE PER PER CITY OF SNOHOMISH ENGINEERING STANDARDS AND STANDARD DETAIL 403 SHEET 5.
- 14 REMOVE EXISTING DEBRIS PILE AND RESTORE TO ORIGINAL GRADE.

No.	Date	Description	By:	App.
1	05/20/14	Plan Profile	MMS	YMA

SNOHOMISH CITY
City of Snohomish
116 Union Avenue
Snohomish, WA 98290
360-568-3115

Plan View Scale = 1:30
Profile Scale
H=1:30
V=1:5
Unless Otherwise Noted

Drawn By:	MMS	Date:	May 2013
Designed By:	MMS	Date:	May 2013
Checked By:	MMS	Date:	May 2013
Approved By:	YMA	Date:	May 2013

City of Snohomish
Park Avenue South of 19th Street

Drawing No.
C2

Sheet No.
4
of Total



CITY OF SNOHOMISH
City of Snohomish Public Works Department

**EXTRUDED CEMENT
CONCRETE CURB**

Project No. **3065**
 Date Issued **10/2/2018**
 Revision **1**

SECTION

NOTES:

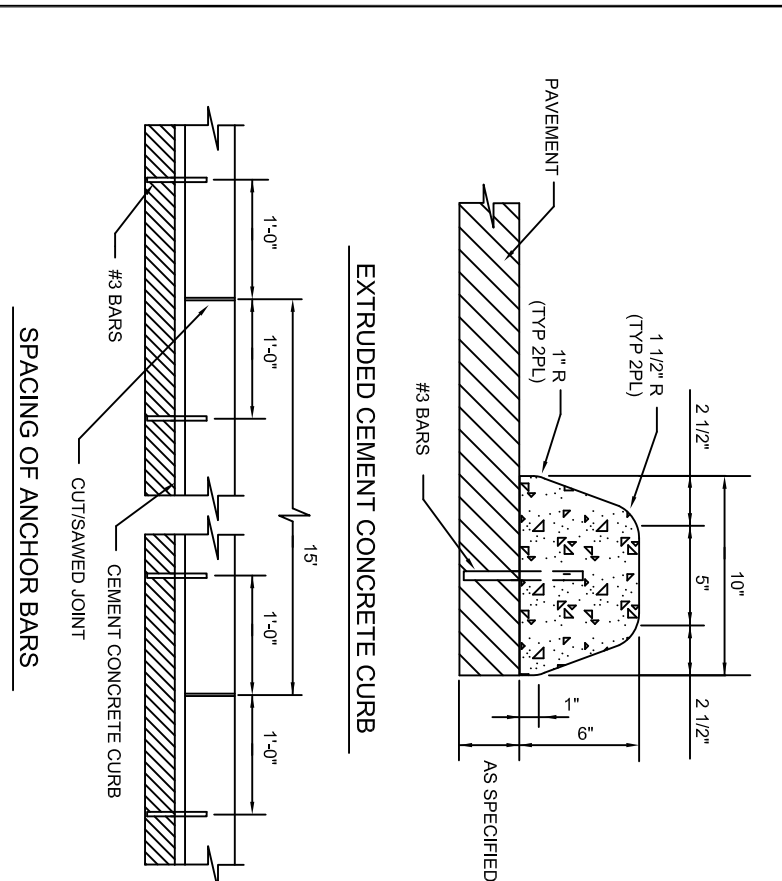
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS, 2018 EDITION, AND THE CITY OF SNOHOMISH STANDARD SPECIFICATIONS, 2018 EDITION.
2. THE CURB SHALL BE CONCRETE, 18" HIGH, 12" WIDE, AND 12" DEEP. THE CURB SHALL BE SET IN A 12" DEEP BED OF 3/4" GRAVEL.
3. THE CURB SHALL BE SET IN A 12" DEEP BED OF 3/4" GRAVEL. THE CURB SHALL BE SET IN A 12" DEEP BED OF 3/4" GRAVEL.
4. THE CURB SHALL BE SET IN A 12" DEEP BED OF 3/4" GRAVEL. THE CURB SHALL BE SET IN A 12" DEEP BED OF 3/4" GRAVEL.
5. THE CURB SHALL BE SET IN A 12" DEEP BED OF 3/4" GRAVEL. THE CURB SHALL BE SET IN A 12" DEEP BED OF 3/4" GRAVEL.



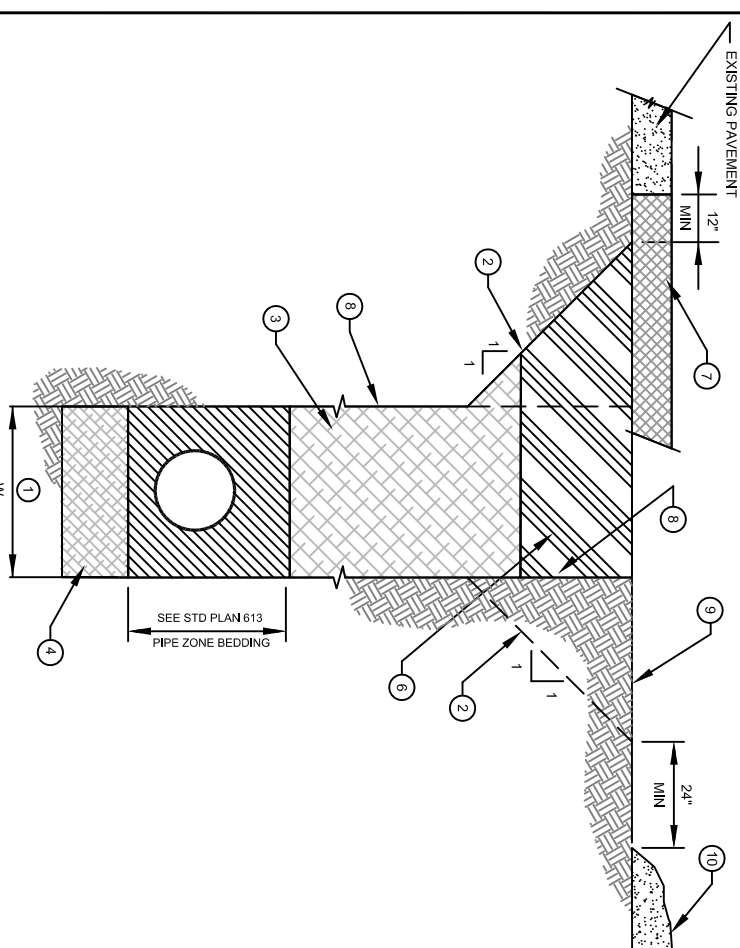
CITY OF SNOHOMISH
City of Snohomish Public Works Department

TYPICAL TRENCH COMPACTION

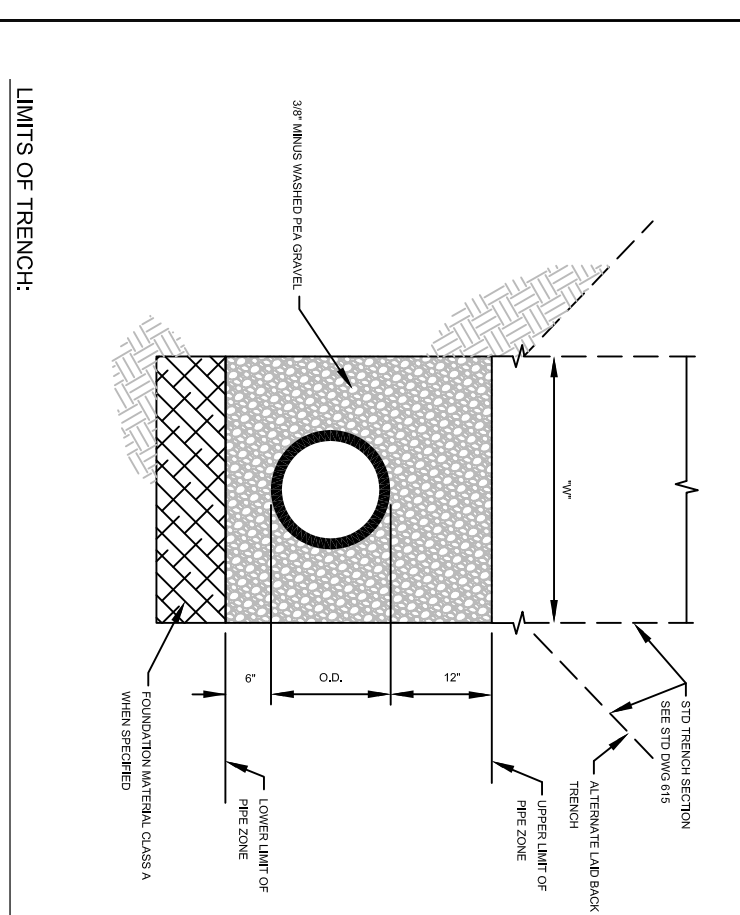
Approved by **617**
 Date Issued **10/2/2018**
 Revision **1**

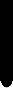


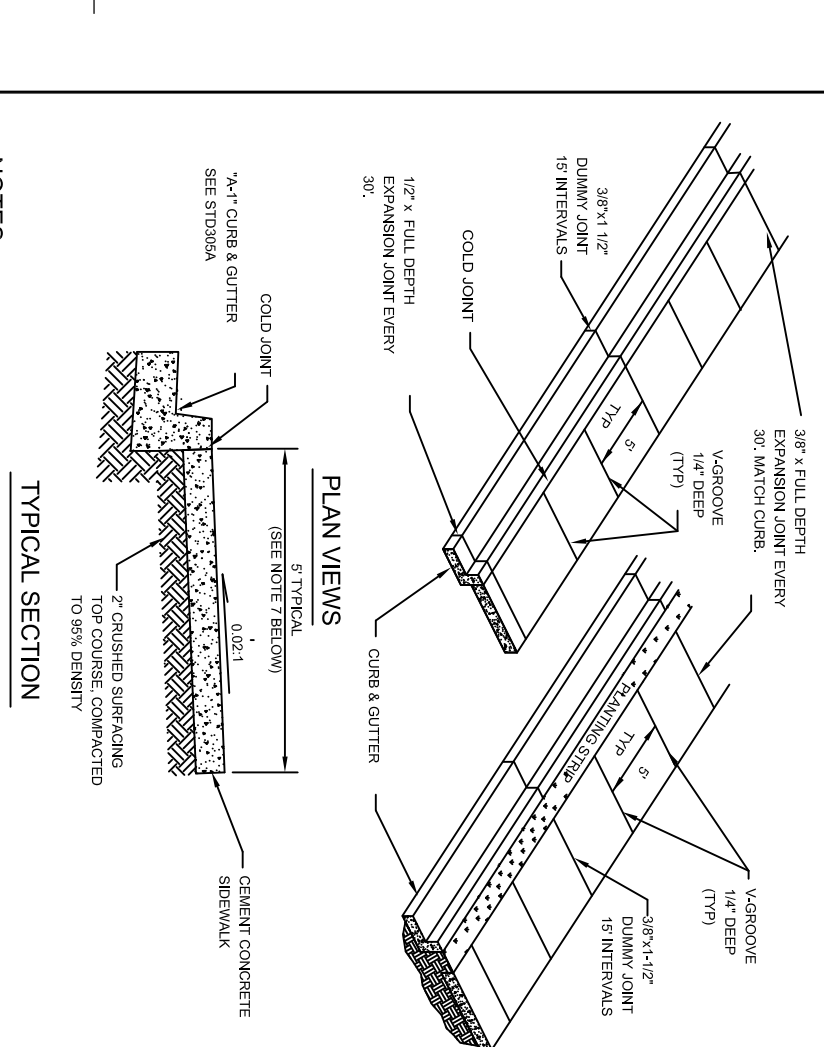
 SNOHOMISH PUBLIC WORKS DEPARTMENT	APPROVED BY SLS CJP	615
	DATE: 04/04/2010	NUMBER



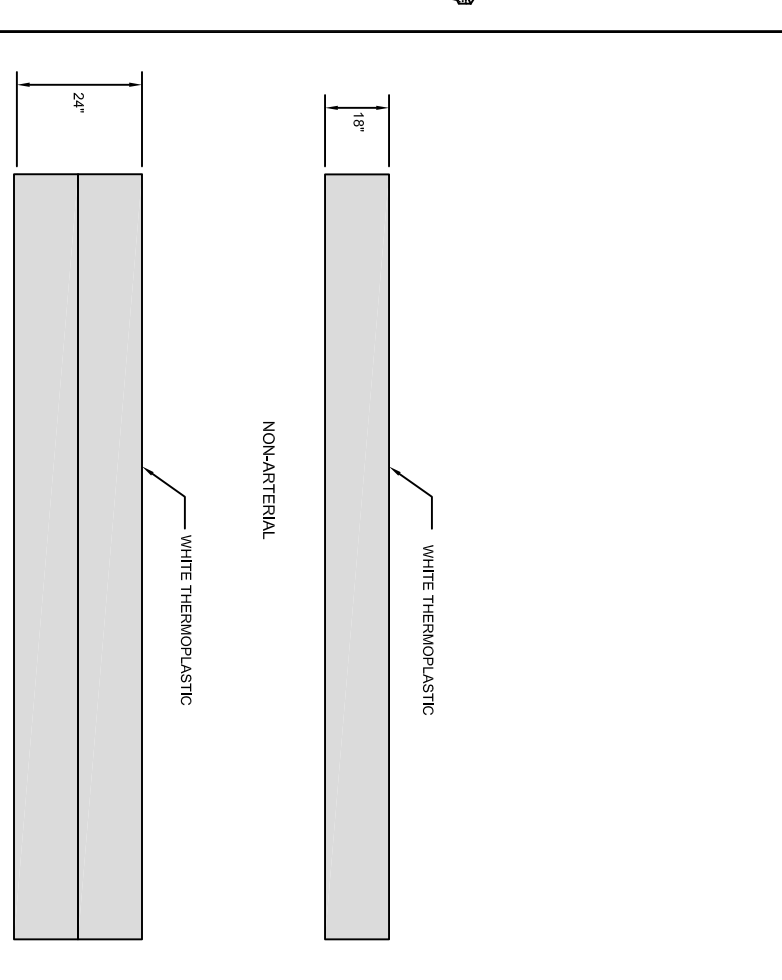
 SNOHOMISH PUBLIC WORKS DEPARTMENT	BEDDING FOR SEWER PIPE IN TRENCHES	Approved by SLS City Engineer Date: 04/04/2010
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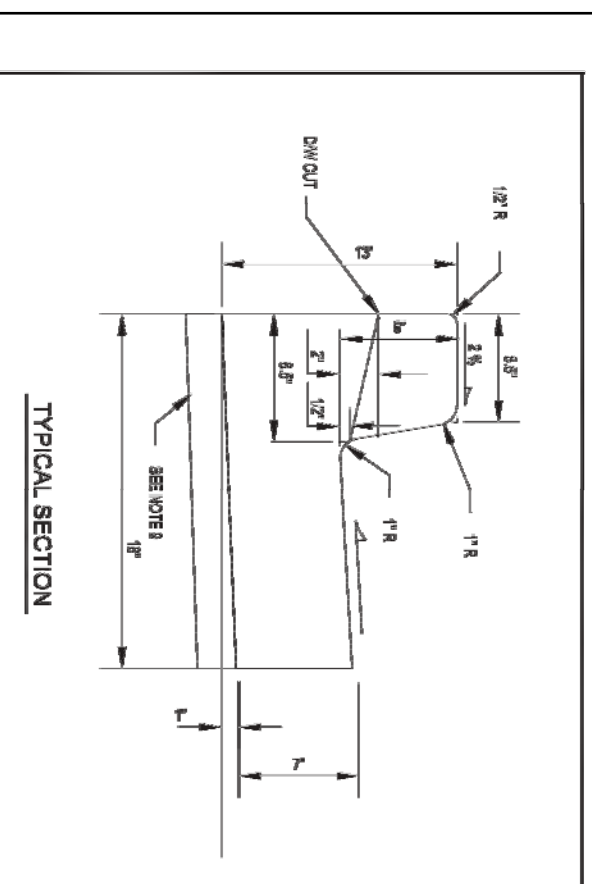
616	APPROVED BY: S.S. [Signature] 30
Number	Date: 04/04/2010
	Name:
SNOHOMISH WASHINGTON	City of Snohomish Public Works Department



6	STOP BARS	Approve By: <u> </u> City Engineer: <u> </u> Date: 06/26/2010	330
 SNOHOMISH WASHINGTON	City of Snohomish Public Works Department		
		Number	



 SNOHOMISH COUNTY	CURB AND GUTTER TYPE "A"	Issue May 20, 2014	M. 000000
	City of Snohomish Public Works Department		



DRAWN BY: LEA CYCROD

Technical drawing of a catch basin showing two types: Integral Base and Separate Base. The drawing includes dimensions for various components like the grate, riser, and base, and labels for materials like cast iron and steel.

CATCH BASIN BASE AND COVER

RECTANGULAR ADJUSTMENT SECTION OR CIRCULAR ADJUSTMENT SECTION

FLAT BASE TOP

GRATE TYPE B

GRATE TYPE A

GRATE TYPE C

GRATE TYPE D

GRATE TYPE E

GRATE TYPE F

GRATE TYPE G

GRATE TYPE H

GRATE TYPE I

GRATE TYPE J

GRATE TYPE K

GRATE TYPE L

NOTES

1. No steps are required when height is 4' or less.
2. The bottom of the present catch basin may be sloped to facilitate cleaning.
3. The catch basin frame and grate may be sloped to facilitate cleaning.
4. Horizontal catch basins shall have a wall thickness of 2.0" minimum to 2.2" maximum. Provide a 1/2" minimum gap between the knockout and the outside of the pipe. Allow for 1/2" minimum gap between the knockout and the outside of the pipe. Allow for 1/2" minimum gap between the knockout and the outside of the pipe. Allow for 1/2" minimum gap between the knockout and the outside of the pipe.

CATCH BASIN DIMENSIONS				
CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM HOISTOUT SIZE	MINIMUM HOISTOUTS
48"	4"	4"	48"	8"
54"	4"	4"	48"	8"
60"	4"	4"	48"	8"
72"	6"	6"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

PIPE ALLOWANCES				
CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM HOISTOUT SIZE	MINIMUM HOISTOUTS
48"	4"	4"	48"	8"
54"	4"	4"	48"	8"
60"	4"	4"	48"	8"
72"	6"	6"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

Standard Specification 8-01.12 (Standard Specification 8-01.12)

Standard Specification 8-01.12 (Standard Specification 8-01.12)

Standard Specification 8-01.12 (Standard Specification 8-01.12)

Logo of the City of Chicago, Department of Public Works, Engineering Division.

STANDARD PLAN B-10-20-01

CATCH BASIN TYPE 2

STANDARD PLAN B-10-20-01

CATCH BASIN TYPE 2

STANDARD PLAN B-10-20-01

CATCH BASIN TYPE 2

[illegible][illegible][illegible]

City of Snohomish
116 Union Avenue
Snohomish, WA 98290
360-568-3115

Scale = NTS	
Drawn By:	MMS Date: May 2014
Designed By:	MMS Date: May 2014
Checked By:	MMS Date: May 2014
Approved By:	YMI Date: May 2014

Scale = NTS

City of Snohomish 2014 Storm Drainage Improvement Project Detail Sheet	Drawing No.	DS
	Sheet No.	5
	of Total	5

City of Snohomish

2014 Storm Drainage Improvement Project

Detail Sheet

Drawing No.
DS
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5 / 5

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