



GENERAL SITE NOTES:

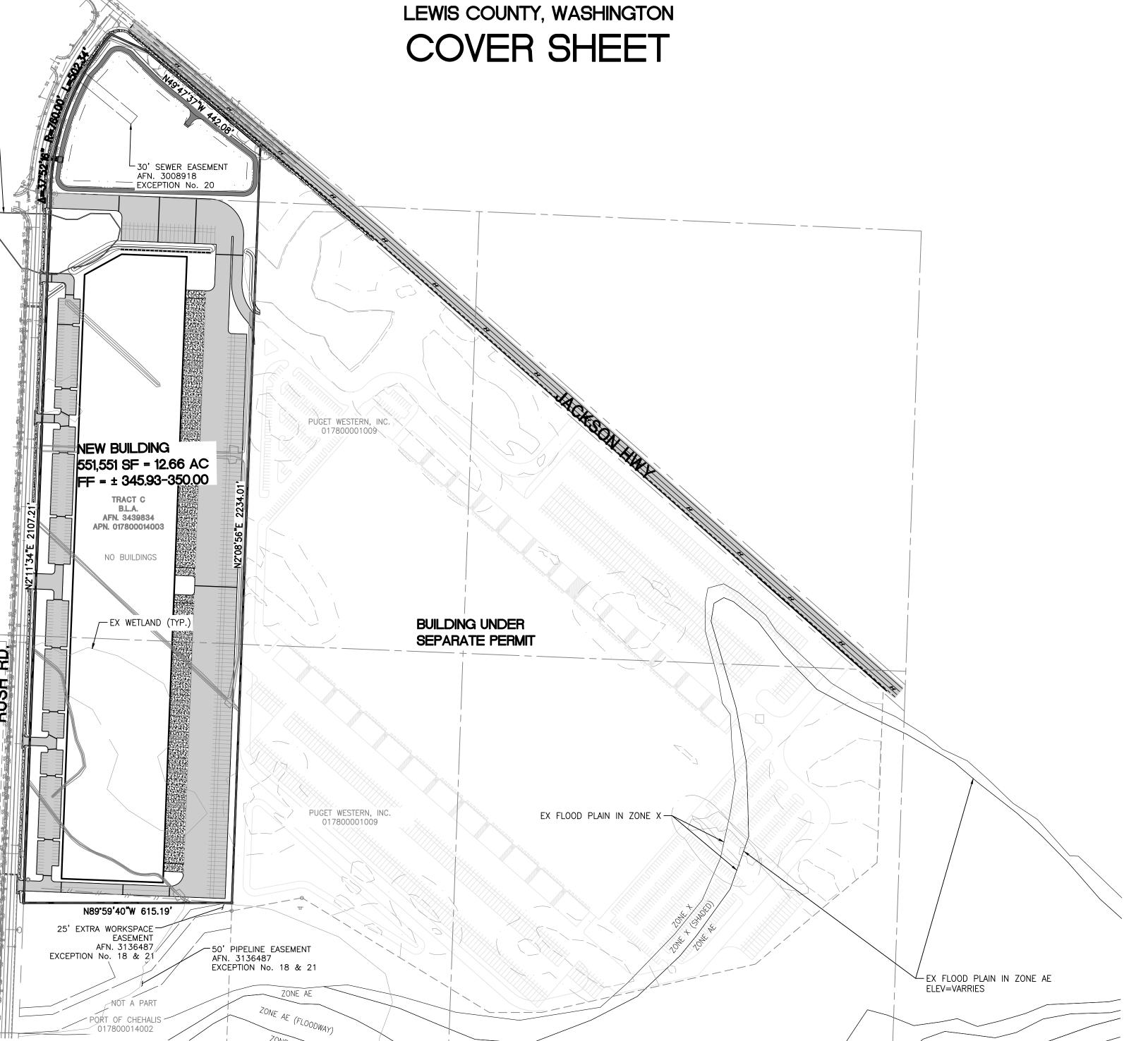
- THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE GOVERNING AGENCY STANDARDS AT THE JOB SITE DURING THE RELATED CONSTRUCTION OPERATIONS.
- 2. CONTRACTOR SHALL ASSURE THAT ALL NECESSARY PERMITS HAVE BEEN OBTAINED PRIOR TO
- OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE OR SHOWN ON RECORD DRAWING PROVIDED BY OTHERS ARE SHOWN HEREON. EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE SUBJECT TO A DEGREE OF UNKNOWN VARIATION. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS BARGHAUSEN CONSULTING ENGINEERS, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS OR RECORDS OF OTHERS. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR
- 4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE APPROPRIATE UTILITIES INVOLVED PRIOR TO CONSTRUCTION.
- 6. INSPECTION OF SITE WORK WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE GOVERNING JURISDICTION. INSPECTION OF PRIVATE FACILITIES WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL CONSTRUCTION.
- 7. PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY THE CONTRACTOR SHALL CONTACT THE AGENCY AND/OR UTILITY INSPECTION PERSONNEL AND ARRANGE ANY REQUIRED PRE-CONSTRUCTION MEETING(S). CONTRACTOR SHALL PROVIDE ONE WEEK MINIMUM ADVANCE NOTIFICATION TO OWNER, FIELD ENGINEER AND ENGINEER OF PRE-CONSTRUCTION MEETINGS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR WORKER AND SITE SAFETY AND SHALL COMPLY WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS. SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR, ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED.
- 10. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ALL ADJACENT PUBLIC AND PRIVATE PROPERTIES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITY SERVICES THAT ARE TO REMAIN OPERATIONAL WITHIN THE CONSTRUCTION AREA WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
- 11. TWO (2) COPIES OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. ONE (1) SET WITH RECORDS OF AS-BUILT INFORMATION SHALL BE SUBMITTED TO BARGHAUSEN CONSULTING ENGINEERS, INC. AT COMPLETION OF PROJECT.
- 12. CONTRACTOR SHALL OBTAIN SERVICES OF A LICENSED LAND SURVEYOR TO STAKE HORIZONTAL CONTROL FOR ALL NEW IMPROVEMENTS. STAKING CONTROL SHALL BE TAKEN FROM ELECTRONIC PLAN FILES PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, INC.
- 13. CONTRACTOR SHALL REQUEST FROM BARGHAUSEN CONSULTING ENGINEERS, INC., PRIOR TO ANY CONSTRUCTION STAKING OR CONSTRUCTION WORK. A FORMAL CONSTRUCTION RELEASE PLAN SET OR SPECIFIC RELEASE IN WRITING. THE APPROVED AGENCY PERMIT DRAWINGS WILL NOT BE CONSIDERED CONSTRUCTION RELEASE PLANS BY BARGHAUSEN CONSULTING ENGINEERS, INC. UNLESS BARGHAUSEN CONSULTING ENGINEERS, INC. HAS GIVEN A FORMAL WRITTEN RELEASE OR

ISSUED A CONSTRUCTION RELEASE PLAN SET.

	LEGEND:
SURVEY MONUMENT	PROPOSED TYPE II CATCH BASIN
EX. POWER VAULT	PROPOSED TYPE I CATCH BASIN
EX. LUMINAIRE (LUM.)	PROPOSED STORM DRAIN FLOW ARROW
EX. LOT LIGHT	PROPOSED STORM DRAINAGE LINE
EX. POWER POLE	PROPOSED TRENCH DRAIN
EX. JUNCTION BOX	PROPOSED SANITARY SEWER LINE -
	PROPOSED SANITARY SEWER CLEANOUT
EX. CATCH BASIN (CB)	PROPOSED SANITARY SEWER MANHOLE -
EX. CATCH BASIN (CB) TYPE 2	PROPOSED WATERMAIN
EX. SANITARY SEWER MANHOLE (SSMH)	PROPOSED FIRE HYDRANT ← → →
EX. GAS METER	PROPOSED WATER VALVE
EX. GAS VALVE	PROPOSED CONCRETE BLOCKING
EX. WATER VALVE (WV)	PROPOSED 90° BEND
EX. FIRE HYDRANT (FH)	PROPOSED SPOT ELEVATIONS 23.20
MAIL BOX	,
EX. WATER METER	
EX. WATER LINE - w - w - w -	PROPOSED CONTOURS98
EX. SANITARY SEWER LINE	EXISTING CONTOURS — — — 100 — — 98 — — — 98
EX. STORM DRAINAGE LINE	PROPOSED BUILDING LINE
EX. POWER UNDERGROUNDP(UG)	THE GOLD DELIDING LINE
	PROPOSED PAVEMENT
EX. METAL FENCE***	
EX. WOOD FENCE ——//——	PROPOSED CONCRETE
	<u>L∵</u>

CHEHALIS INDUSTRIAL PARK

PORTIONS OF THE N.W. 1/4 AND THE S.W. 1/4 OF SEC. 11, TWN. 13 N., RG. 2 W., W.M.



UTILITY CONFLICT NOTE:

CAUTION:

APPROX. LOCATION -

OF EX. CULTURAL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH

HORIZONTAL CONTROL NOTE:

CONTRACTOR SHALL HAVE ALL PROPERTY LINES, CURB, SIDEWALK, STRUCTURES, CONCRETE PADS AND ANY OTHER ABOVE GROUND PERMANENT STRUCTURE DEPICTED ON THESE PLANS STAKED FOR CONSTRUCTION BY A LICENSED SURVEYOR. LICENSED SURVEYOR SHALL STAKE ALL ITEMS USING COORDINATE GEOMETRY (RECTIFIED TO SITE CONTROL) CONTAINED IN CAD DRAWING FILES PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, INC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RETRIEVE LATEST CAD FILES FROM BARGHAUSEN CONSULTING ENGINEERS INC., REFLECTING ANY ISSUED PLAN REVISIONS. BARGHAUSEN CONSULTING ENGINEERS SHALL IMMEDIATELY BE NOTIFIED OF ANY DISCREPANCIES

PRIOR TO THE START OF CONSTRUCTION.

MONUMENT DEMOLITION NOTE:

CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING PERMITS FROM ANY JURISDICTIONS HAVING AUTHORITY FOR REMOVING AND REPLACING ALL SURVEY MONUMENTATION THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITY. UPON COMPLETION OF CONSTRUCTION, ALL MONUMENTS DISPLACED, REMOVED, OR DESTROYED SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR, AT THE COST AND AT THE DIRECTION OF THE CONTRACTOR, PURSUANT TO THESE REGULATIONS. THE APPROPRIATE FORMS FOR REPLACEMENT OF SAID MONUMENTATION SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

LOT COVERAGE SUMMARY

SURFACE NAME	AREA (SF)	AREA (AC)	
ASPHALT	412,926	9.48	
CONC	99,691	2.29	
BLDG	551,551	12.66	
POND	146,496	3.36	
LANDSCAPE	273,086	6.27	
TOTAL SITE AREA	1,483,749	34.06	

ZONE AE (FLOODWAY)

ZONE AE

ESTIMATED EARTHWORK QUANTITIES

22,008 CY 153,925 CY

CONTRACTOR SHALL REFER TO THE REPORT OF GEOTECHNICAL INVESTIGATION DATED MAY 3RD, 2022 FOR THIS SITE PREPARED BY TERRA ASSOCIATES INC. FOR GRADING RECOMMENDATIONS. EARTHWORK QUANTITIES ARE FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE USED FOR BIDDING PURPOSES. CONTRACTOR SHALL PERFORM AN INDEPENDENT ANALYSIS FOR THE PURPOSES OF PREPARING THEIR

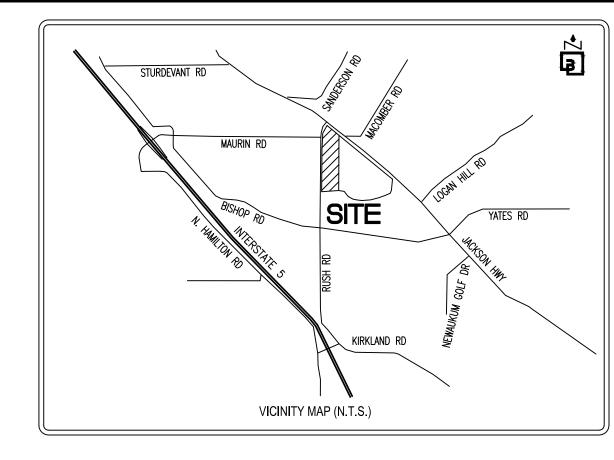
GEOTECHNICAL REPORT NOTES:

1. THE FOLLOWING GEOTECHNICAL REPORTS FOR THE SITE SHALL BE CONSIDERED PART OF THESE CONSTRUCTION DOCUMENTS:

GEOTECHNICAL ENGINEERING REPORT SOILS REPORTS: TERRA PROJECT NO. T-8643-1 DATE: MAY 03, 2022 TERRA ASSOCIATES, INC.

12220 113TH AVE NE, KIRKLAND, WA 98034 PHONE (425) 821-7777

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PROVISIONS OF THE SOILS REPORT FOR THE SITE BE OBSERVED AND COMPLIED WITH DURING ALL PHASES OF THE SITE PREPARATION, GRADING OPERATIONS, FOUNDATION, SLAB, AND PAVING CONSTRUCTION.
- ANY PROVISIONS OF THE SOILS REPORT WHICH CONFLICT WITH INFORMATION SHOWN ELSEWHERE ON THESE DRAWINGS, OR WHICH REQUIRE FURTHER CLARIFICATION, SHALL BE BROUGHT TO THE ATTENTION PH: (425) 251-6222 OF THE ARCHITECT/ENGINEER FOR DETERMINATION.
- 4. A REPRESENTATIVE OF THE SOILS ENGINEER SHALL BE AVAILABLE TO OBSERVE AND APPROVE THE EARTHWORK OPERATIONS AND TO VERIFY FIELD CONDITIONS AS WORK PROCEEDS. THE SOILS ENGINEER SHALL SUBMIT FIELD REPORTS CERTIFYING THAT THE METHODS AND MATERIALS OF THE EARTHWORK OPERATIONS WERE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS INVESTIGATION AND THAT THE WORK WAS PERFORMED TO HIS/HER SATISFACTION.
- 5. THE SOILS ENGINEER SHOULD BE NOTIFIED AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY SITE CLEARING OR GRADING.



CIVIL SHEET INDEX

C1 OF 9 COVER SHEET

J. J. J	
C2 OF 9	PRELIMINARY GRADING AND DRAINA

C3 OF 9 PRELIMINARY GRADING AND DRAINAGE C4 OF 9 PRELIMINARY GRADING AND DRAINAGE

C5 OF 9 SECTION DETAILS

9 PRELIMINARY WATER AND SANITARY SEWER PLAN

C7 OF 9 CONSTRUCTION NOTES AND DETAILS 9 CONSTRUCTION NOTES AND DETAILS 9 CONSTRUCTION NOTES AND DETAILS OF 1 ALTA-NSPS LAND TITLE SURVEY

BASIS OF BEARINGS NAD83/91 (WSDOT)

BASIS OF BEARINGS FOR THIS SURVEY IN NAD 83/91 PER WSDOT. WSDOT CONTROL POINT NO. CHE-05 WAS HELD FOR POSITION AND A LINE BETWEEN SAID POINT NO. CHE-05 AND CHE-03 WAS HELD FOR ROTATION, BEING SOUTH 48°39'23" EAST.

THIS IS A FIELD TRAVERSE SURVEY. A "TRIMBLE S6 VISION" ROBOTIC TOTAL STATION, AND A TOPCON GR-5 WERE USED TO MEASURE THE ANGULAR AND DISTANCE RELATIONSHIPS BETWEEN THE CONTROLLING MONUMENTATION AS SHOWN. CLOSURE RATIOS OF THE TRAVERSE MET OR EXCEEDED THOSE SPECIFIED IN WAC 332-130-090. ALL INSTRUMENTS AND EQUIPMENT HAVE BEEN MAINTAINED IN ADJUSTMENT ACCORDING TO MANUFACTURERS' SPECIFICATIONS.

THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING IN DECEMBER 2016 AND JANUARY 2017, AND VERIFIED IN MARCH OF 2022. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN DECEMBER OF 2016.

TAX PARCEL NUMBER:

APN: 017800014003

1,483,749± S.F. (34.06± AC.)

O RUSH ROAD, CHEHALIS WA 98532

NO ZONING REPORT PROVIDED.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) INFORMATION: FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 5301021782C PANEL 1782 OF 2500, DATED JULY 17, 2006, FIRM MAP NO. 5301021781C PANEL 1781 OF 2500, DATED JULY 17, 2006, FIRM MAP NO. 5301021368C PANEL 1368 OF 2500, DATED JULY 17. 2006 AND FIRM MAP NO. 5301020242C PANEL 242 OF 2500, DATED JULY 17, 2006. THE SUBJECT PROPERTY IS IN ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

DEVELOPER CRG REAL ESTATE SOLUTIONS 35 E. WACKER DRIVE

CHICAGO, ILLIMOIS 60601 PH: (312) 658-0747 CONTACT: ALP HACIOSMANOGLU EMAIL: ALPH@REALCRG.COM

ENGINEER/SURVEYOR BARGHAUSEN CONSULTING

ENGINEERS, INC. 18215 72ND AVE S KENT WA, 98032 PH: (425) 251-6222 CONTACT: DAN BALMELLI, P.E. EMAIL: DBALMELLI@BARGHAUSEN.COM

BARGHAUSEN CONSULTING ENGINEERS, INC.

18215 72ND AVE S KENT WA, 98032 CONTÀCT: JEFF VARLEY EMAIL: JVARLEY@BARGHAUSEN.COM

GEOTECHNICAL

TERRA ASSOCIATES, INC. 12220 113TH AVE NE. KIRKLAND, WA 98034 PHONE (425) 821-7777 CONTACT: CÁROLYN S. DECKER, P.E. EMAIL: CDECKER@TERRA-ASSOCIATES.COM

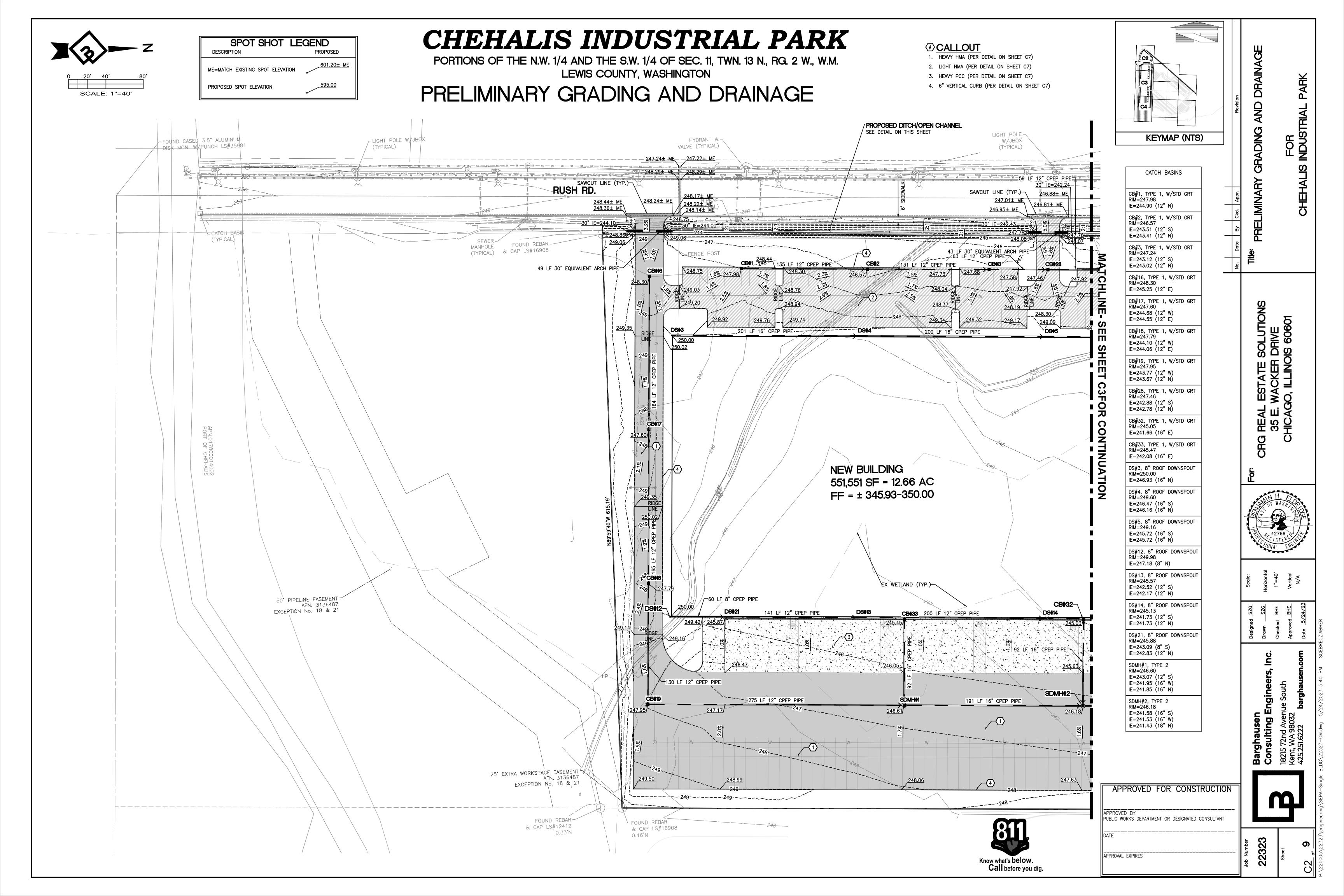
WETLAND CONSULTANT

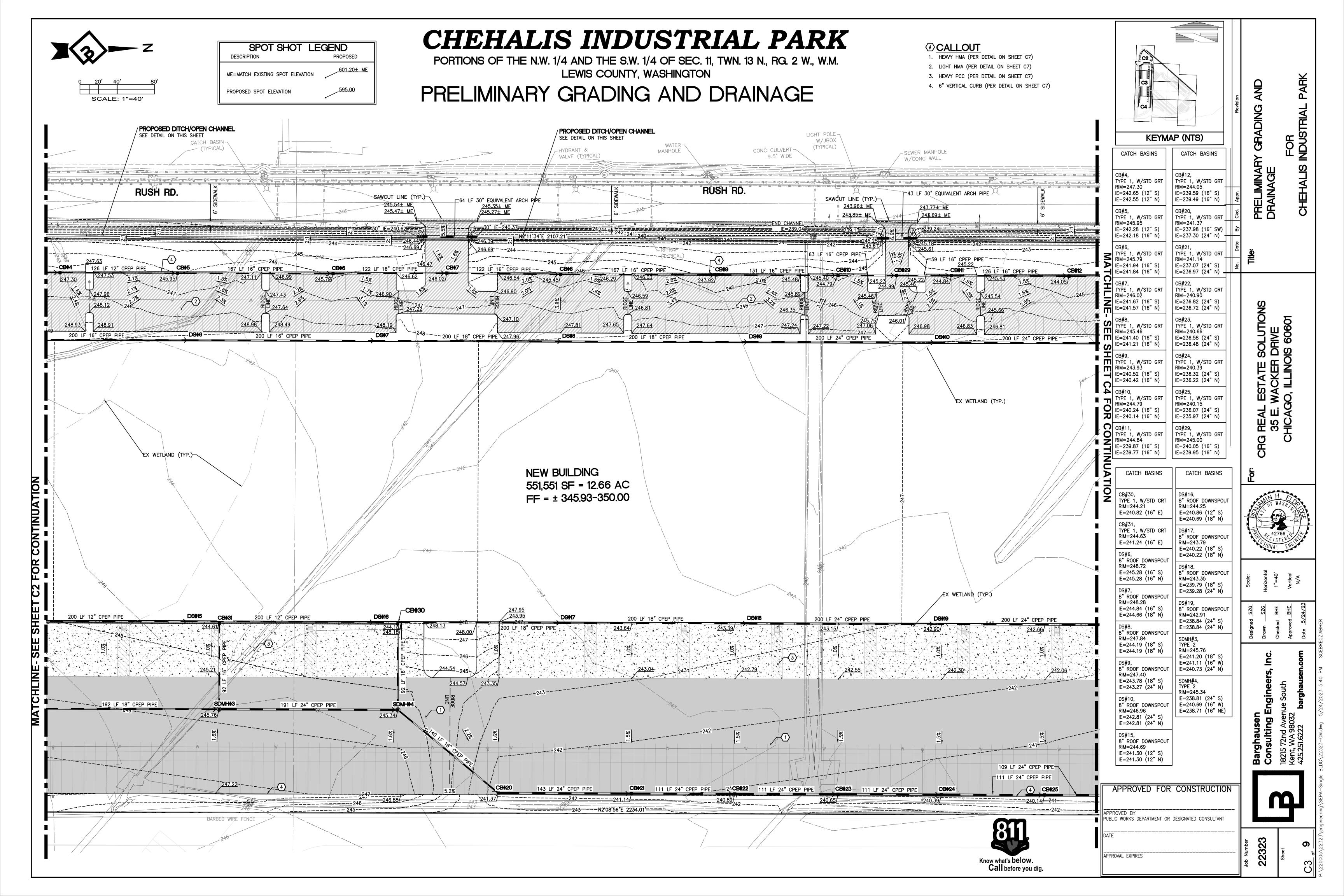
SOUNDVIEW CONSULTANTS 2907 HARBORVIEW DRIVE, SUITE D GIG HARBOR, WA 98335 PH: (253)-514-8952 CONTACT: RACHEAL VILLA EMAIL: RACHEAL@SOUNDVIEWCONSULTANTS.COM

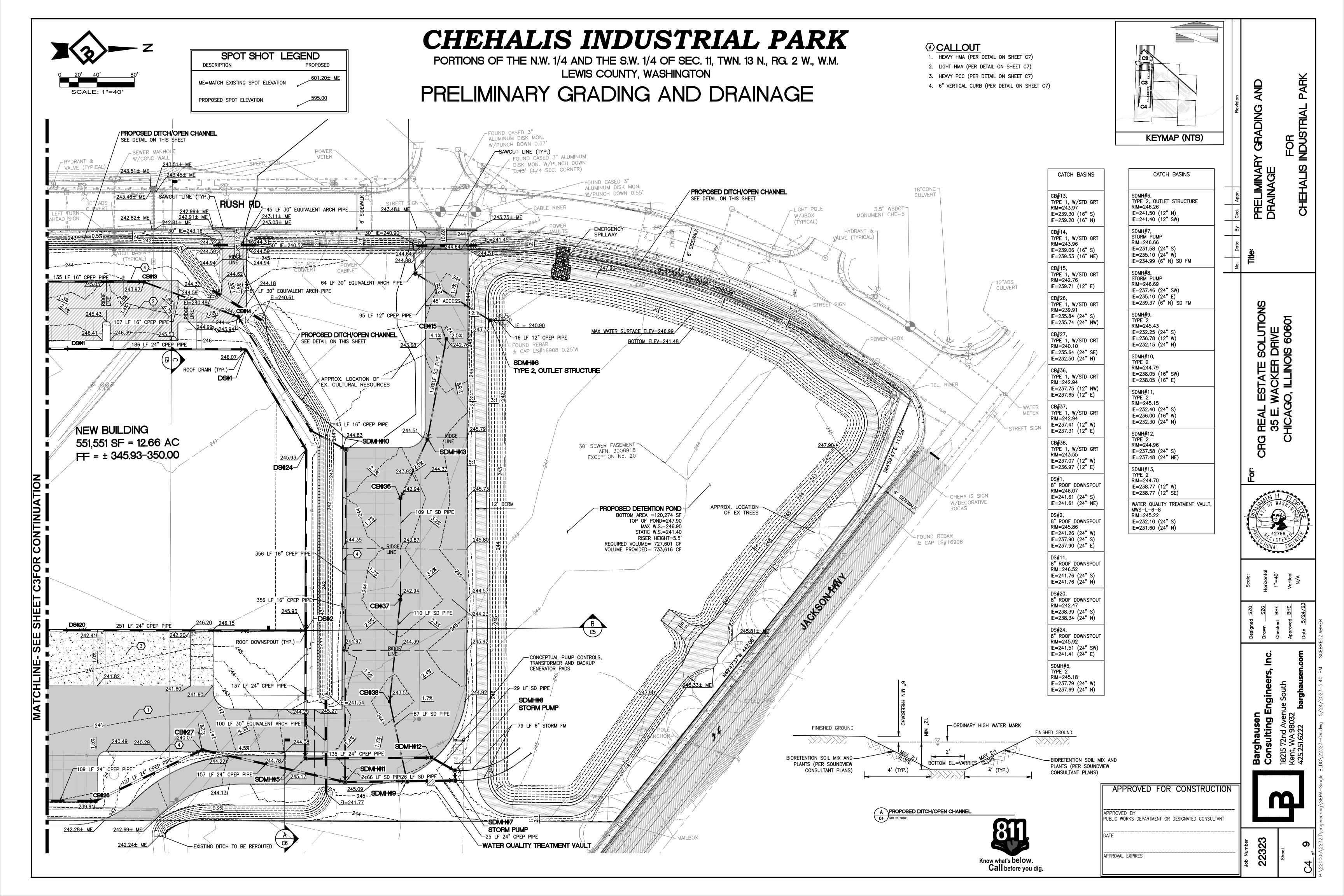
APPROVED FOR CONSTRUCTION

PUBLIC WORKS DEPARTMENT OR DESIGNATED CONSULTANT APPROVAL EXPIRES

띪铭

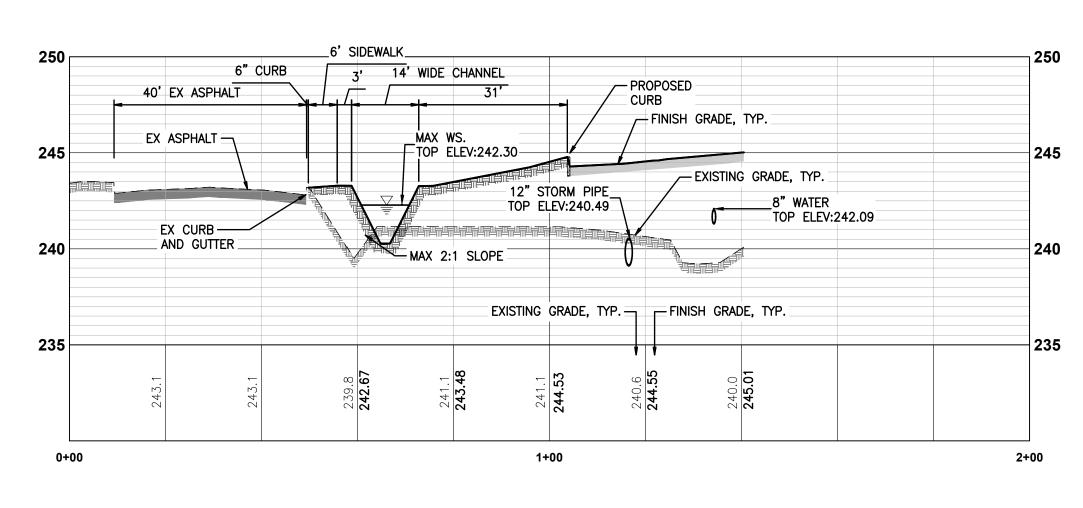




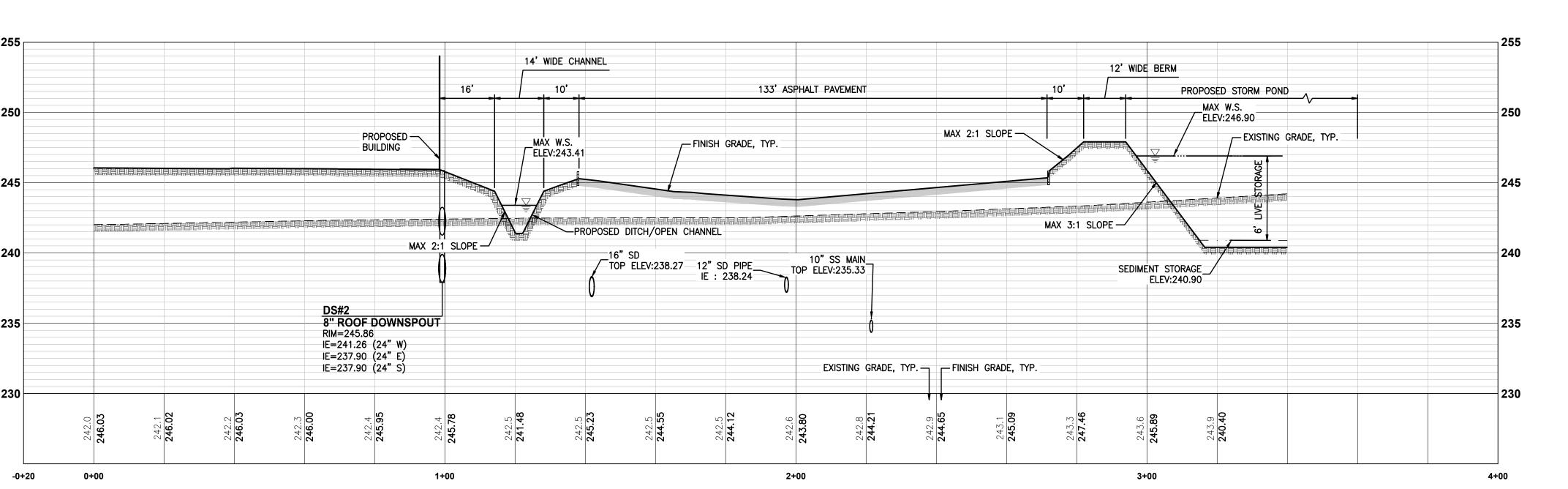


PORTIONS OF THE N.W. 1/4 AND THE S.W. 1/4 OF SEC. 11, TWN. 13 N., RG. 2 W., W.M. LEWIS COUNTY, WASHINGTON

SECTION DETAILS



PROPOSED DITCH/OPEN CHANNEL SECTION



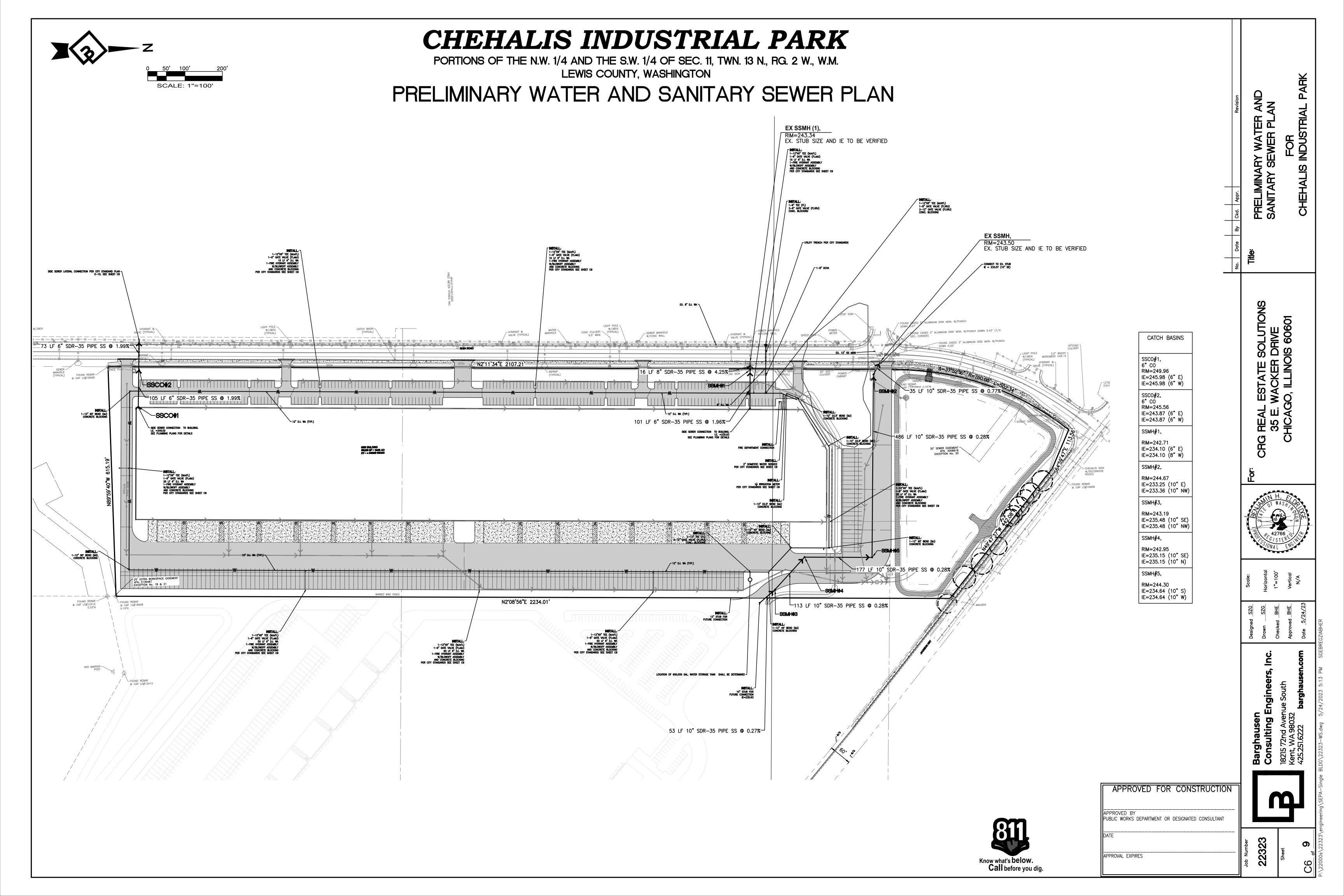
PROPOSED DITCH/OPEN CHANNEL SECTION SCALE: H: 1"=20', V: 1"=5'



22323

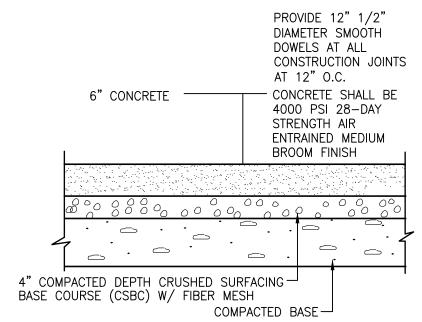
APPROVED FOR CONSTRUCTION APPROVED BY
PUBLIC WORKS DEPARTMENT OR DESIGNATED CONSULTANT

APPROVAL EXPIRES



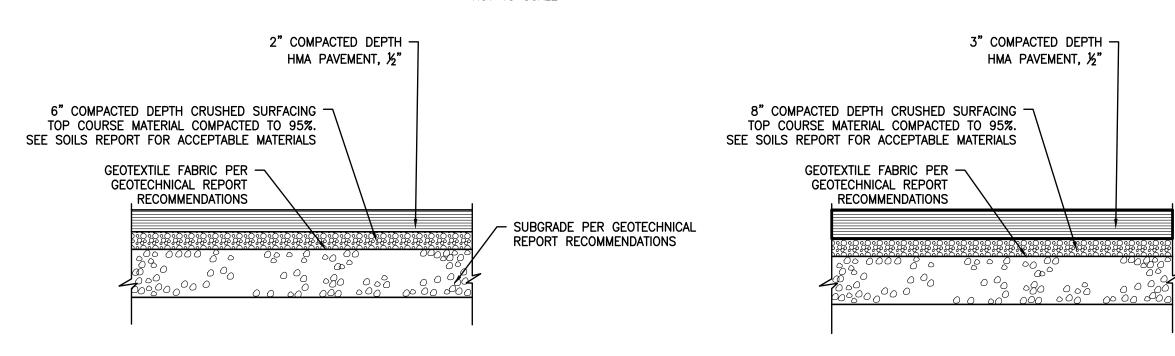
PORTIONS OF THE N.W. 1/4 AND THE S.W. 1/4 OF SEC. 11, TWN. 13 N., RG. 2 W., W.M. LEWIS COUNTY, WASHINGTON

CONSTRUCTION NOTES AND DETAILS



HEAVY DUTY PORTLAND CEMENT CONCRETE PAVEMENT

NOT TO SCALE



LIGHT-DUTY ASPHALT PAVING SECTION

C13 ALTERNATE: 4" FULL DEPTH HMA

NEW PAVEMENT

7 3/4" _

VERTICAL CURB DETAIL

NOTE: SEE GRADING PLANS-

FOR FINISH PAVEMENT GRADE

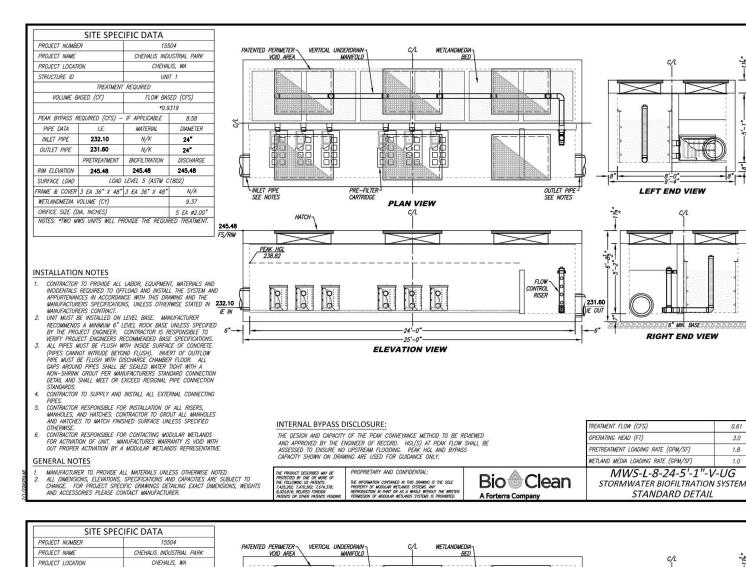
EXPANSION JOINT AT 20' INTERVALS

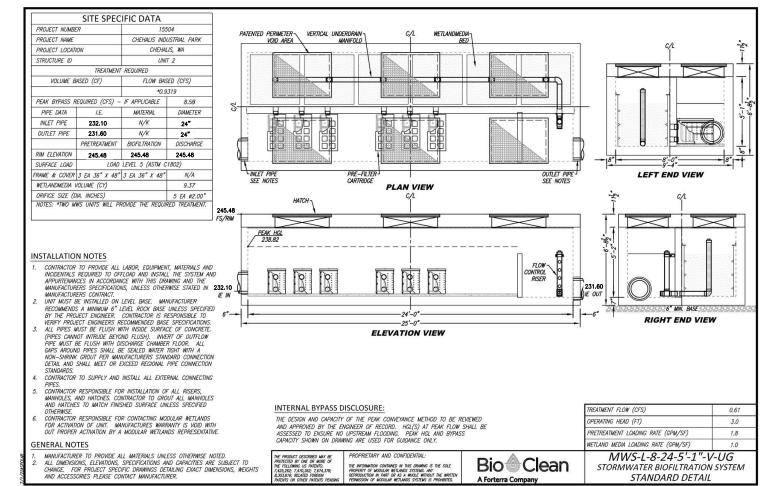
DETAIL IS FOR REFERENCE ONLY, GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT PREPARED BY TERRA ASSOCIATES, INC. DATED MAY 03, 2022 FOR PAVEMENT, AGGREGATE, OVER-EXCAVATION, AND SUBGRADE

HEAVY-DUTY ASPHALT PAVING SECTION

C13/ALTERNATE: 5.5" FULL DEPTH HMA

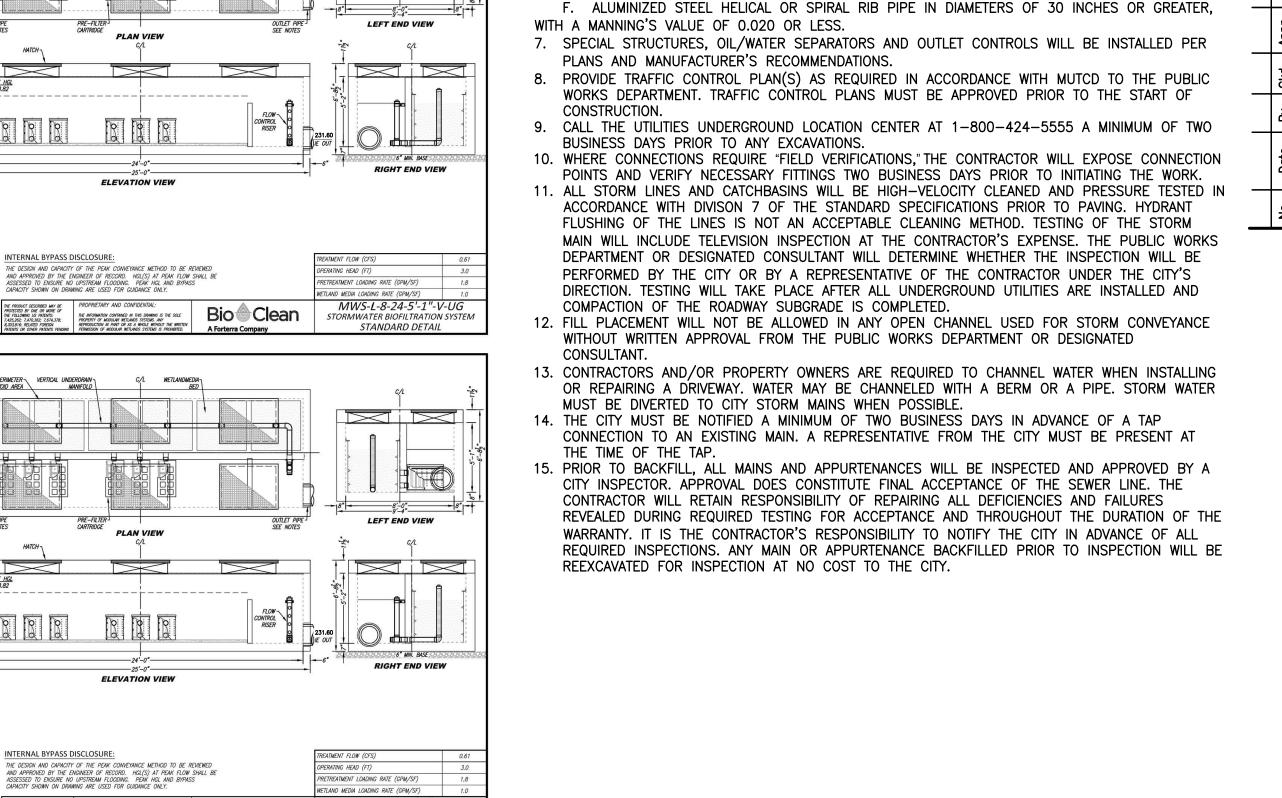
DETAIL IS FOR REFERENCE ONLY, GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT PREPARED BY TERRA ASSOCIATES. INC. DATED MAY 03, 2022 FOR PAVEMENT, AGGREGATE. OVER-EXCAVATION, AND SUBGRADE REQUIREMENTS.

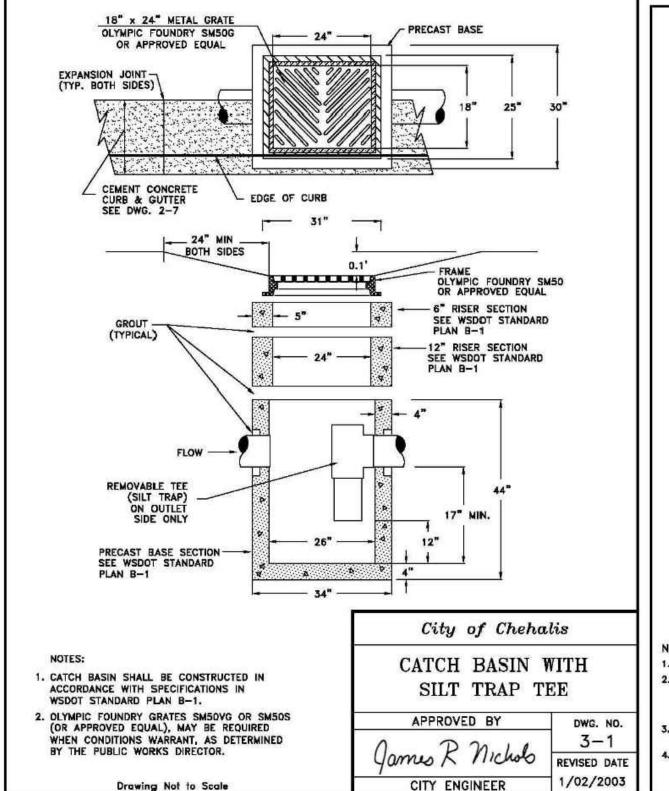


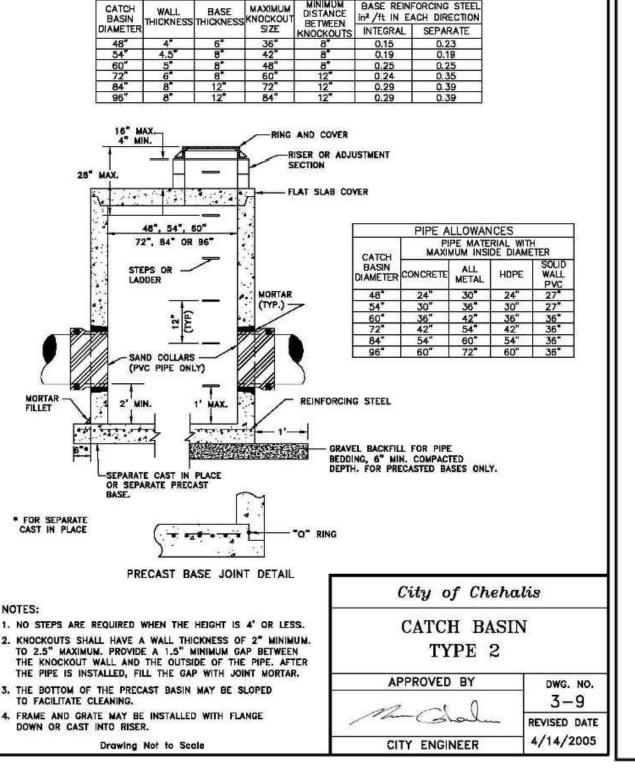


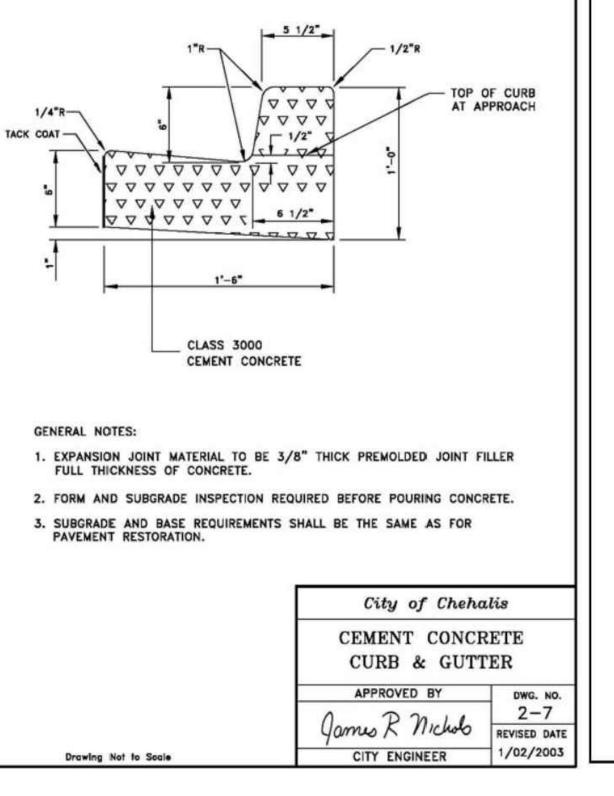
STORM DRAIN GENERAL NOTES:

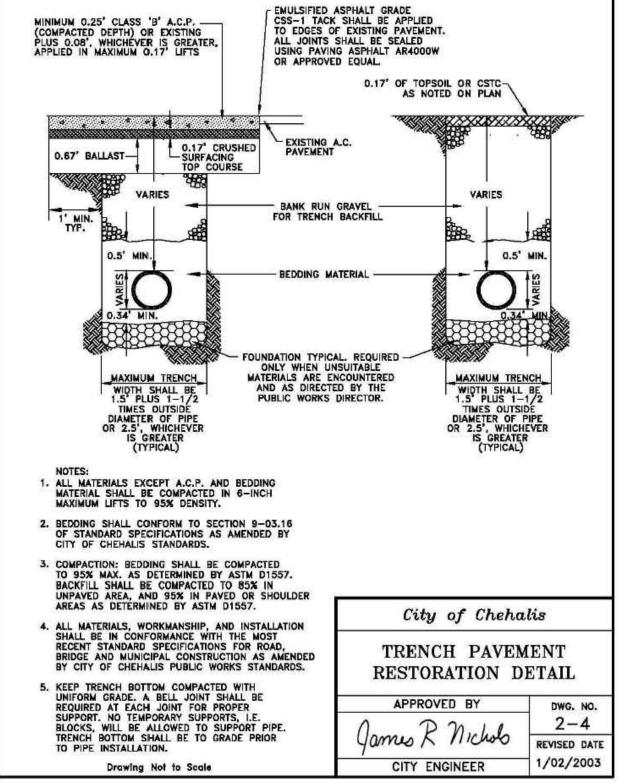
- 1. ALL WORKMANSHIP AND MATERIALS WILL BE IN ACCORDANCE WITH THE CITY OF CHEHALIS DEVELOPMENT ENGINEERING STANDARDS AND THE MOST RECENT COPY OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION
- 2. TEMPORARY EROSION/WATER POLLUTION MEASURES WILL BE REQUIRED IN ACCORDANCE WITH THE
- STORM WATER MANAGEMENT PLAN AND SECTION 1-07.15 OF THE STANDARD SPECIFICATIONS. COMPLY WITH ALL OTHER PERMITS AND REQUIREMENTS OF THE CITY OF CHEHALIS AND/OR
- OTHER GOVERNING AUTHORITIES OR AGENCIES. 4. A PRECONSTRUCTION MEETING WILL BE HELD WITH THE PUBLIC WORKS DEPARTMENT AND THE
- ENGINEERING DIVISION PRIOR TO THE START OF CONSTRUCTION. ALL STORM MAINS AND RETENTION/DETENTION AREAS WILL BE STAKED FOR GRADE AND
- ALIGNMENT BY AN ENGINEERING OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK.
- STORM DRAINPIPE WILL MEET THE FOLLOWING REQUIREMENTS: A. PLAIN CONCRETE PIPE CONFORMING TO THE REQUIREMENTS OF AASHTO M 86, CLASS 2. REINFORCED CONCRETE PIPE CONFORMING TO THE REQUIREMENTS OF AASHTO M 170.
- PVC PIPE CONFORMING TO ASTM D3034 SDR 35 OR ASTM F794 OR ASTM F679 TYPE 1 WITH JOINTS AND GASKETS CONFORMING TO ASTM D3212 AND ASTM F477.
- D. DUCTILE IRON PIPE CONFORMING TO THE REQUIREMENTS OF AWWA C151, THICKNESS CLASS
- E. HIGH-DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE CONFORMING TO AASHTO M 252 TYPES OR AASHTO M 294 TYPE S, WITH A GASKETED BELL AND SPIGOT JOINTS.

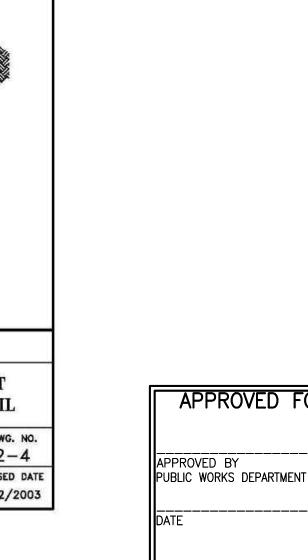












Al	PPROVED FOR CONSTRUCTION
	VED BY WORKS DEPARTMENT OR DESIGNATED CONSULTANT
DATE	
APPROV	AL EXPIRES

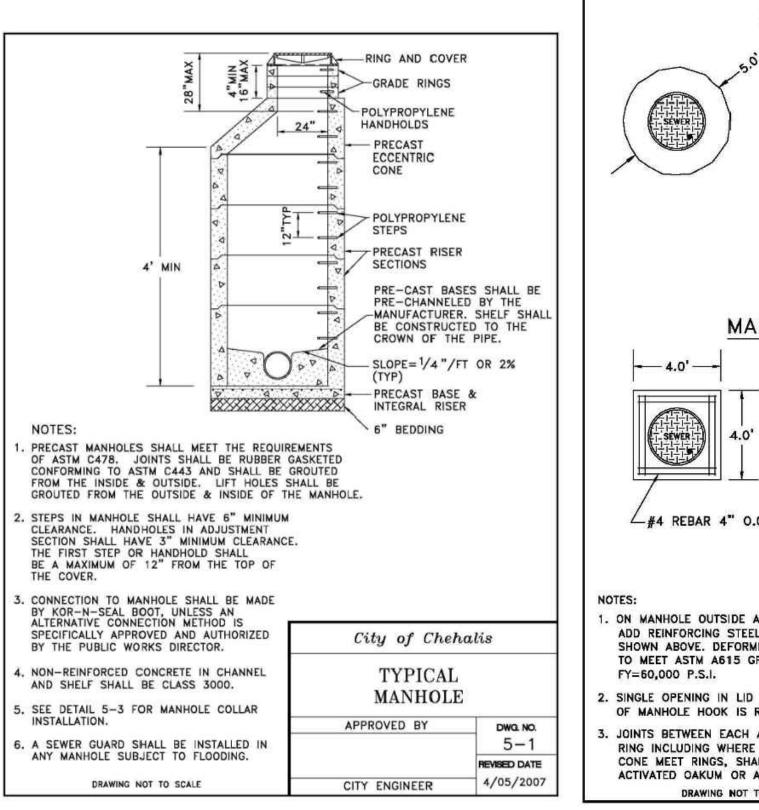
SOLUTIONS
DRIVE
DIS 60601

Barghausen Consulting

22323

PORTIONS OF THE N.W. 1/4 AND THE S.W. 1/4 OF SEC. 11, TWN. 13 N., RG. 2 W., W.M. LEWIS COUNTY, WASHINGTON

CONSTRUCTION NOTES AND DETAILS



INSTALL THREADED CAP OR PLUG

INSTALL THREADED CAP OR PLUG

CLEANOUT DIAGRAM

FOR NEW SERVICES

1. ALL JOINT CONNECTIONS SHALL BE

THE PUBLIC WORKS DIRECTOR.

2. SANITARY TEES MAY BE USED FOR DEPTHS

LESS THAN 3', UPON APPROVAL OF

DRAWING NOT TO SCALE

RUBBER GASKETED.

45° PVC ELBOW -

FLEXIBLE COUPLERS

CLEANOUT DIAGRAM FOR RETROFITTING EXISTING SERVICES

PVC WYE (RUBBER GASKET JOINTS)

City of Chehalis

SIDE SEWER

CLEANOUT

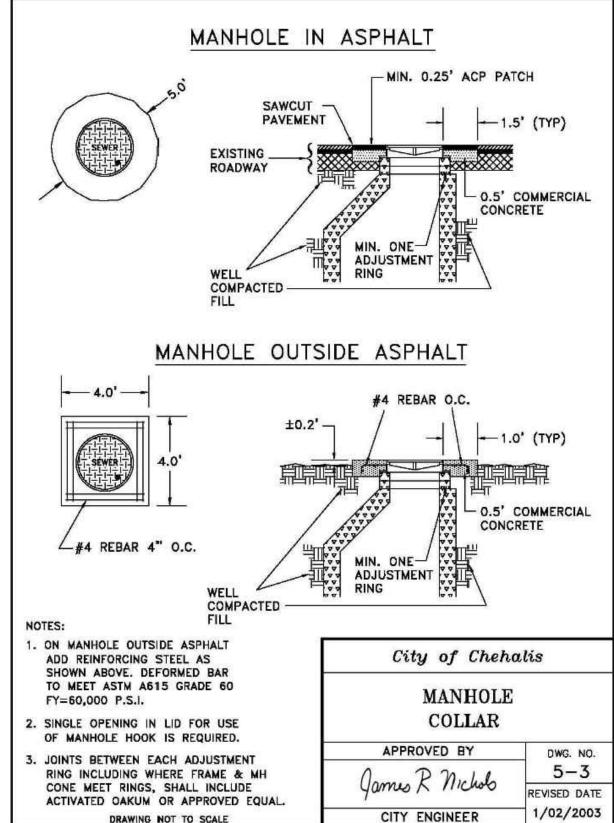
DWG, NO.

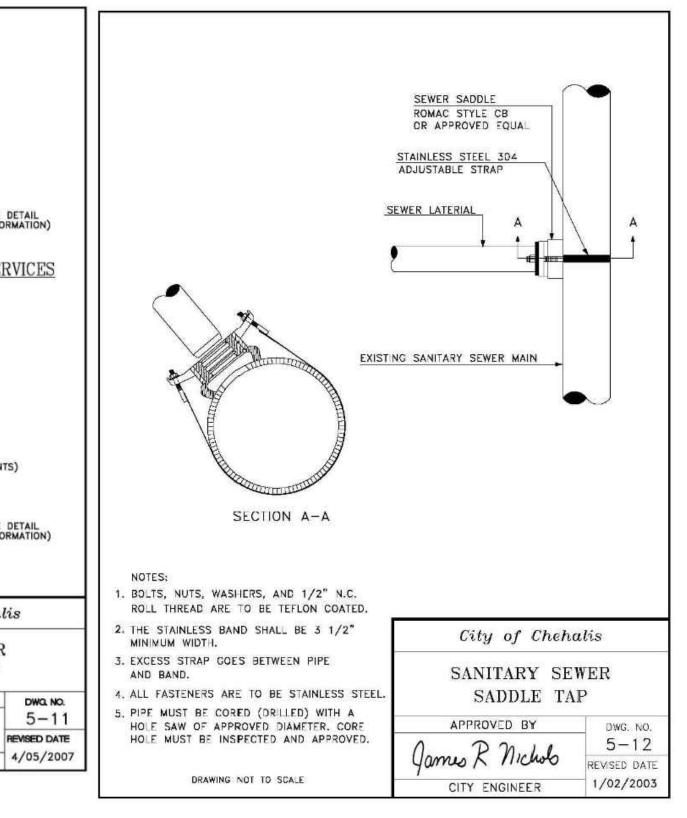
5 - 11

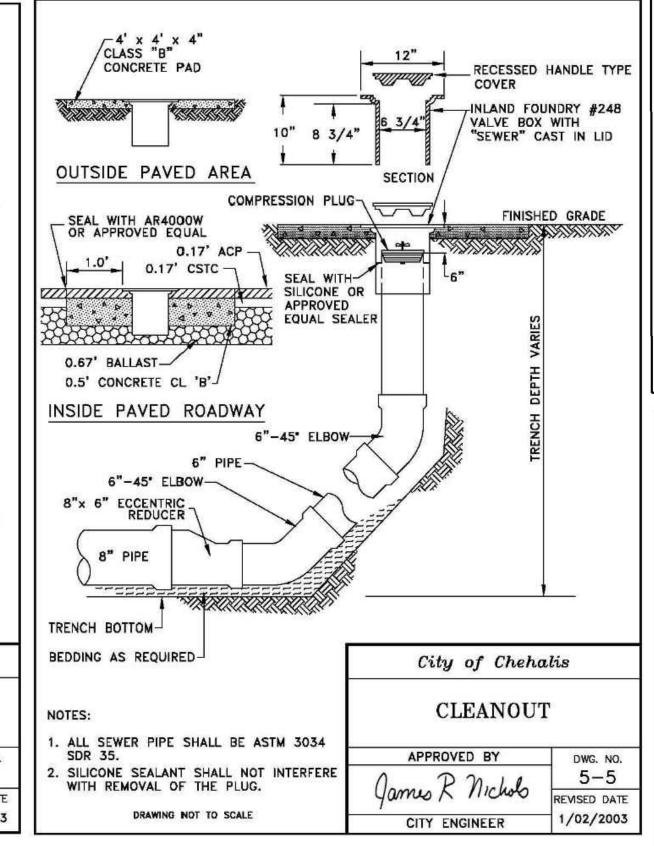
APPROVED BY

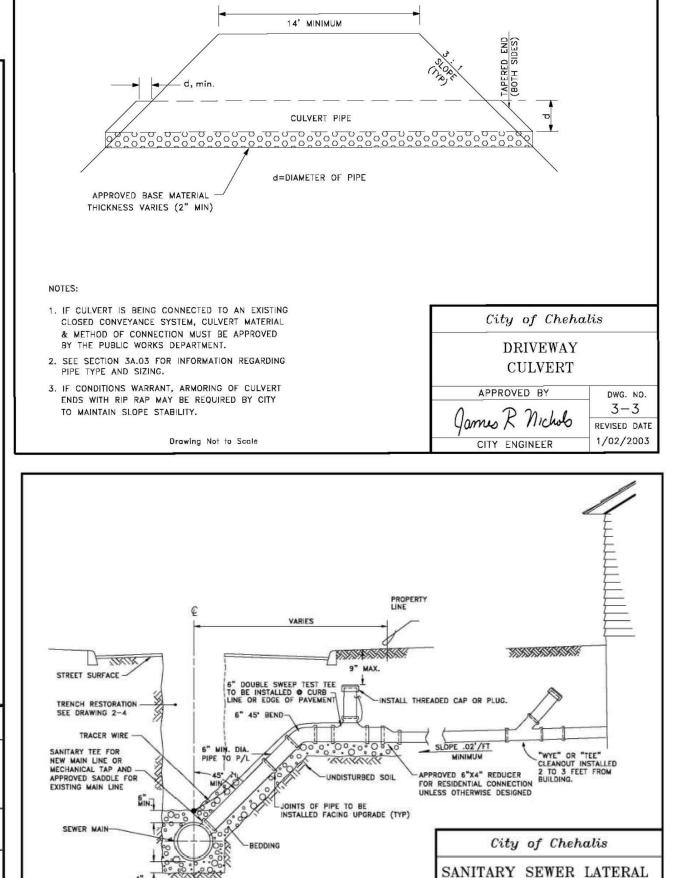
CITY ENGINEER

PVC PIPE (AS REQD.)









SERVICE CONNECTION

5-10

REVISED DATE 4/05/2007

APPROVED BY

CITY ENGINEER

WATER MAIN GENERAL NOTES:

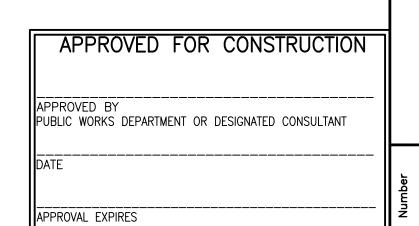
- 1. ALL WORKMANSHIP AND MATERIAL WILL BE IN ACCORDANCE WITH CITY OF CHEHALIS STANDARDS AND THE MOST RECENT COPY OF THE WSDOT/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS AND ANSI/NSF STANDARD 60 OR 61.
- 2. A PRECONSTRUCTION MEETING WILL BE HELD WITH THE PUBLIC WORKS DEPARTMENT AND THE ENGINEERING DIVISION PRIOR TO THE START OF CONSTRUCTION.

1. SIDE SEWER PIPE TO BE PVC ASTM D3034.

2. ALL JOINTS & CONNECTIONS TO BE RUBBER

GASKETED TYPE CONFORMING TO ASTM D3212 3. BEDDING AND GRADE SHALL BE ESTABLISHED

- 3. ALL WATER MAINS WILL BE DUCTILE IRON CEMENT MORTAR LINED THICKNESS CLASS 52.
- 4. GATE VALVES WILL BE RESILIENT WEDGE, NRS (NONRISING STEM) WITH O-RING SEALS. VALVE ENDS WILL BE MECHANICAL JOINT OR ANSI FLANGES. VALVES WILL CONFORM TO AWWA 509-80. VALVES WILL BE MUELLER, M&H, KENNEDY, CLOW R/W OR AMERICAN FLOW CONTROL SERIES 2500. EXISTING VALVES AND ALL VALVES INSTALLED DIRECTLY TO AND CONNECTED TO A PORTION OF THE ACTIVE WATER SYSTEM ARE TO BE OPERATED BY CITY EMPLOYEES ONLY.
- 5. FIRE HYDRANTS WILL BE MUELLER CENTURION A-423, M&H RELIANT STYLE 129, CLOW MEDALLION, OR KENNEDY GUARDIAN K81D, WATEROUS PACER MODEL WB-67-250 OR AVK 2780. HYDRANTS WILL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE INTERNATIONAL FIRE CODE. HYDRANTS WILL BE BAGGED AND THE CONNECTING GATE VALVES LEFT CLOSED UNTIL THE SYSTEM HAS BEEN APPROVED. HYDRANTS MUST BE PAINTED WITH SUNBURST YELLOW HIGH-GRADE ENAMEL AFTER INSTALLATION.
- 6. ALL LINES WILL BE CHLORINATED AND TESTED IN CONFORMANCE WITH THE ABOVE— REFERENCED SPECIFICATIONS (SEE NOTE 1).
- 7. ALL PIPES AND SERVICES WILL BE INSTALLED WITH CONTINUOUS TRACER TAPE PLACED 12 TO 18 INCHES UNDER THE PROPOSED FINISHED SUBGRADE. THE MARKER WILL BE OF PLASTIC, NONBIODEGRADABLE, METAL CORE, OR BACKING MARKED "WATER" THAT CAN BE DETECTED BY A STANDARD METAL DETECTOR. TAPE WILL BE TERRA TAPE "D" OR APPROVED EQUAL. IN ADDITION TO TRACER TAPE, TONING WIRE WILL BE INSTALLED OVER ALL PIPE AND SERVICES. TONING WIRE WILL BE UL LISTED, TYPE UF, 14-GAUGE SOLID COATED COPPER WIRE, TAPED TO THE TOP OF THE PIPE TO PREVENT MOVEMENT DURING BACKFILLING AND LAID LOOSE ENOUGH TO PREVENT STRETCHING AND DAMAGE BEFORE BEING BROUGHT UP AND TIED OFF AT THE VALVE OPERATING NUT OR VALVE BOX. IF THE OPERATING NUT IS NOT EASILY ACCESSIBLE FROM THE GROUND SURFACE, THE COPPER WIRE WILL BE TIED OFF AT THE VALVE BOX IN SUCH A WAY THAT THE WIRE IS EASILY ACCESSIBLE FROM THE GROUND SURFACE. TWO FEET OF SLACK WILL BE PROVIDED TO ALLOW FOR CONNECTION TO THE LOCATOR. A ONE-POUND MAGNESIUM ANODE WILL BE BURIED WITH THE PIPE EVERY 1,000 LINEAR FEET MAXIMUM FOR CATHODIC PROTECTION OF THE TONING WIRE. TONING WIRE SPLICES AND CONNECTIONS TO ANODES WILL JOIN WIRES BOTH MECHANICALLY AND ELECTRICALLY AND WILL EMPLOY EPOXY RESIN OR HEAT-SHRINK TAPE INSULATION. TONING WIRE WILL BE TESTED PRIOR TO ACCEPTANCE OF THE PIPE SYSTEM. A WRITTEN NOTICE FROM THE CONTRACTOR TO THE CITY MUST BE RECEIVED TWO BUSINESS DAYS PRIOR TO WHEN TESTING IS REQUIRED.
- 8. THE CONTRACTOR WILL PROVIDE TRAFFIC CONTROL PLAN(S) AS REQUIRED IN ACCORDANCE WITH MUTCD.
- 9. ALL WATER MAINS WILL BE STAKED FOR GRADES AND ALIGNMENT BY AN ENGINEERING OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK. STAKING WILL BE MAINTAINED THROUGHOUT
- 10. ALL SERVICE LINE AND WATER VALVE LOCATIONS WILL BE MARKED ON THE FACE OF THE ADJACENT CURB WITH A "W" OR "WV" EMBOSSED ONE-FOURTH INCH INTO THE CONCRETE.
- 11. ALL WATER SYSTEM CONNECTIONS SERVING BUILDINGS OR PROPERTIES WITH DOMESTIC POTABLE WATER, FIRE SPRINKLER OR IRRIGATION SYSTEMS WILL COMPLY WITH THE MINIMUM BACKFLOW PREVENTION REQUIREMENTS ESTABLISHED BY THE DEPARTMENT OF HEALTH (DOH) AND THE CITY OF CHEHALIS CROSS-CONNECTION CONTROL PROGRAM.
- 12. CALL UTILITIES UNDERGROUND LOCATION CENTER AT 1-800-424-5555 A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY EXCAVATIONS.
- 13. THE CITY WILL BE NOTIFIED FIVE BUSINESS DAYS PRIOR TO SCHEDULING A WATER SYSTEM SHUTDOWN. THE CITY'S WATER DIVISION WILL PERFORM ALL WATER SYSTEM SHUTDOWNS. WHEN CONNECTIONS REQUIRE "FIELD VERIFICATION," CONNECTION POINTS WILL BE EXPOSED BY THE CONTRACTOR AND FITTINGS VERIFIED BY THE CITY TWO BUSINESS DAYS PRIOR TO THE DISTRIBUTION OF SHUTDOWN NOTICES. CUSTOMERS INVOLVED WITH OR AFFECTED BY WATER SERVICE



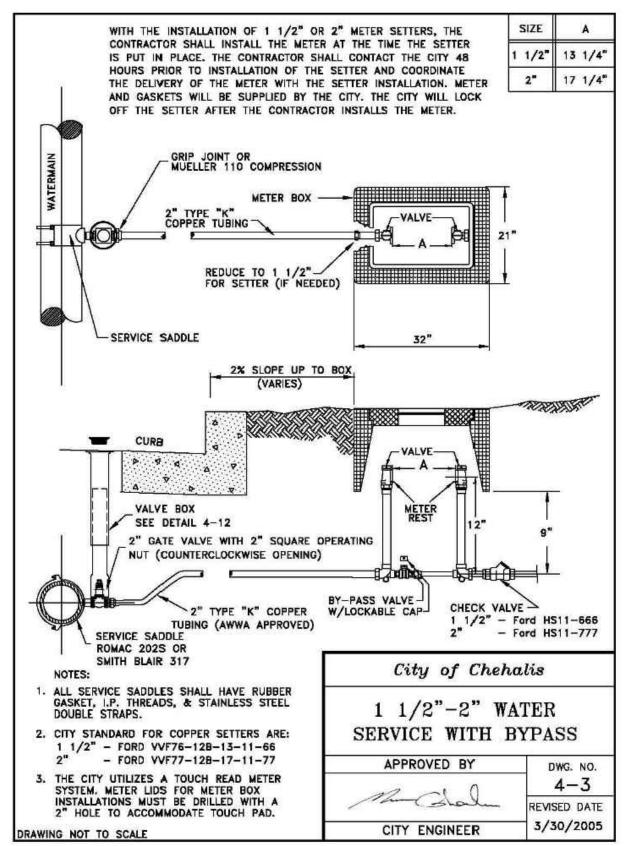
CONSTRUCTION NOTES
DETAILS

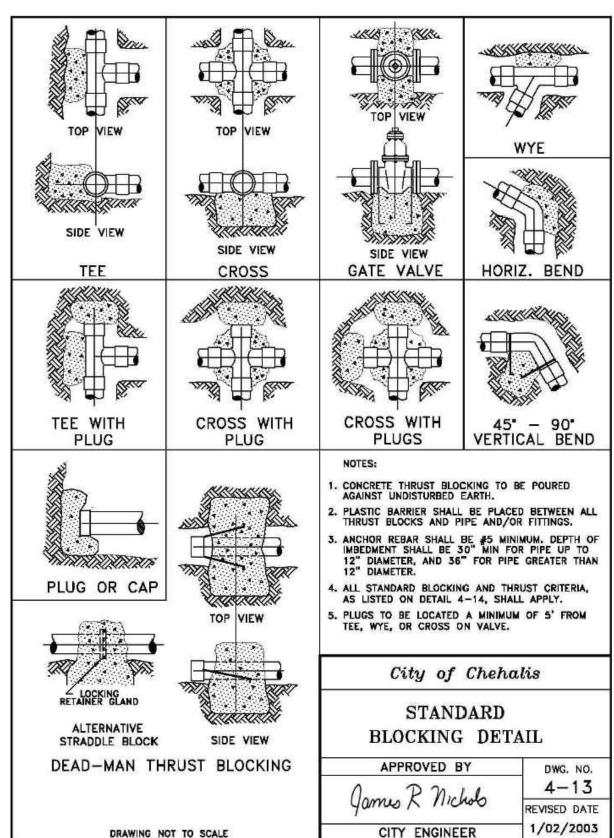
SOLUTIONS
DRIVE
DIS 60601

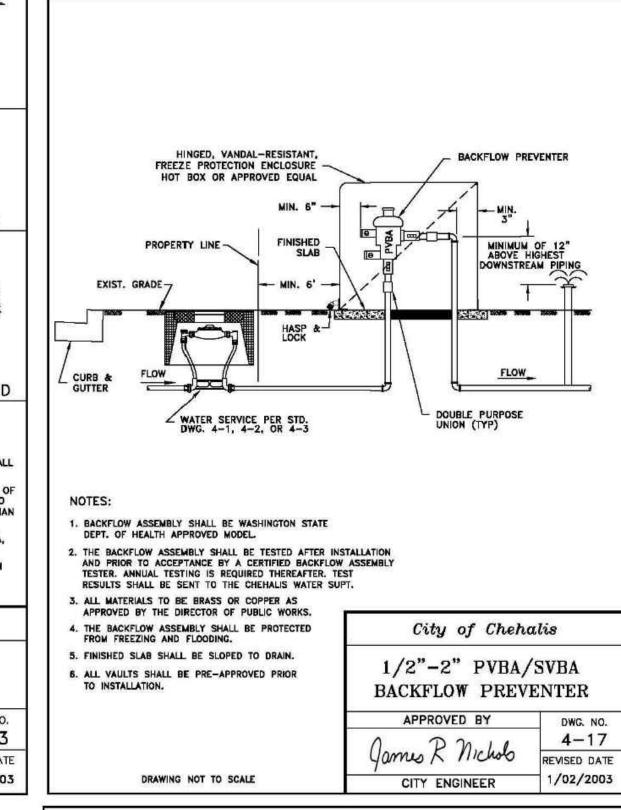
23

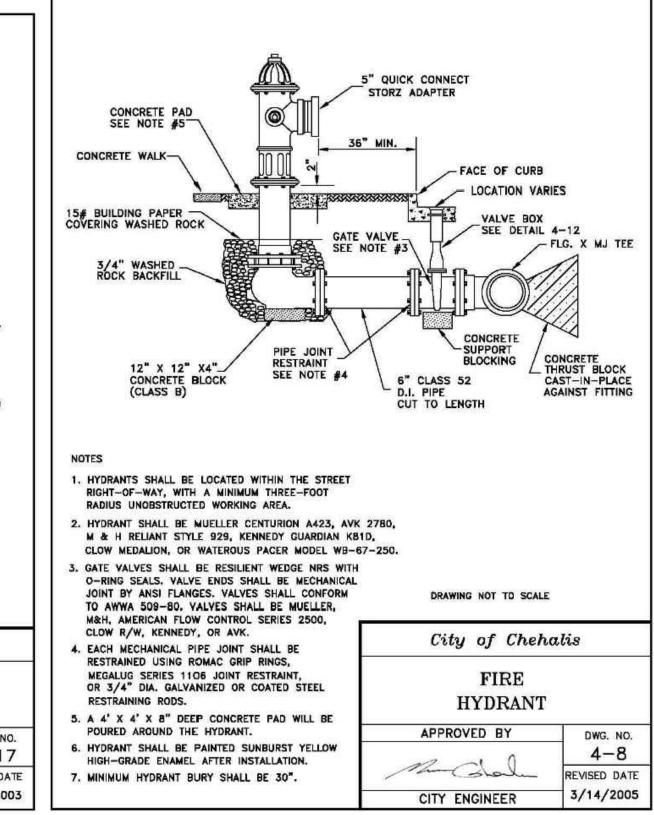
PORTIONS OF THE N.W. 1/4 AND THE S.W. 1/4 OF SEC. 11, TWN. 13 N., RG. 2 W., W.M. LEWIS COUNTY, WASHINGTON

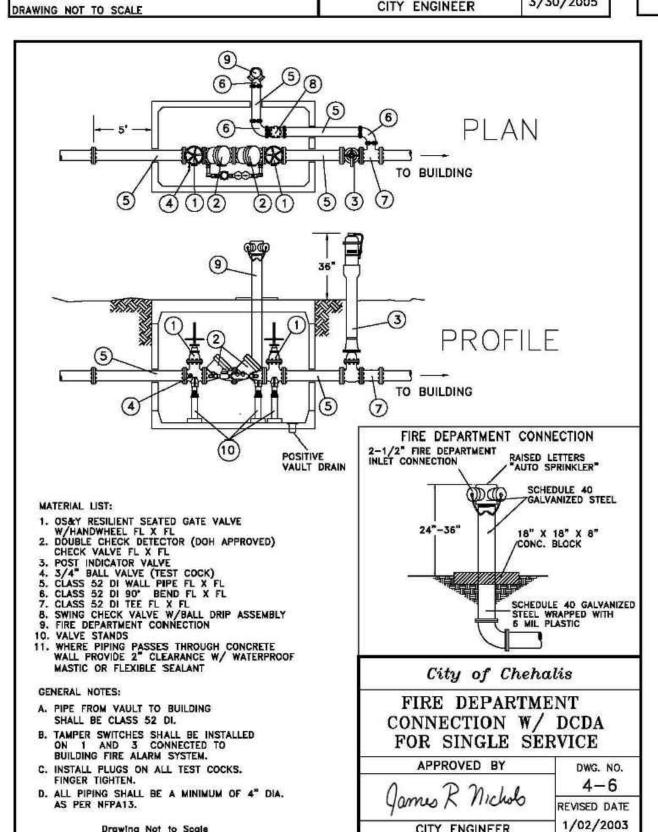
CONSTRUCTION NOTES AND DETAILS





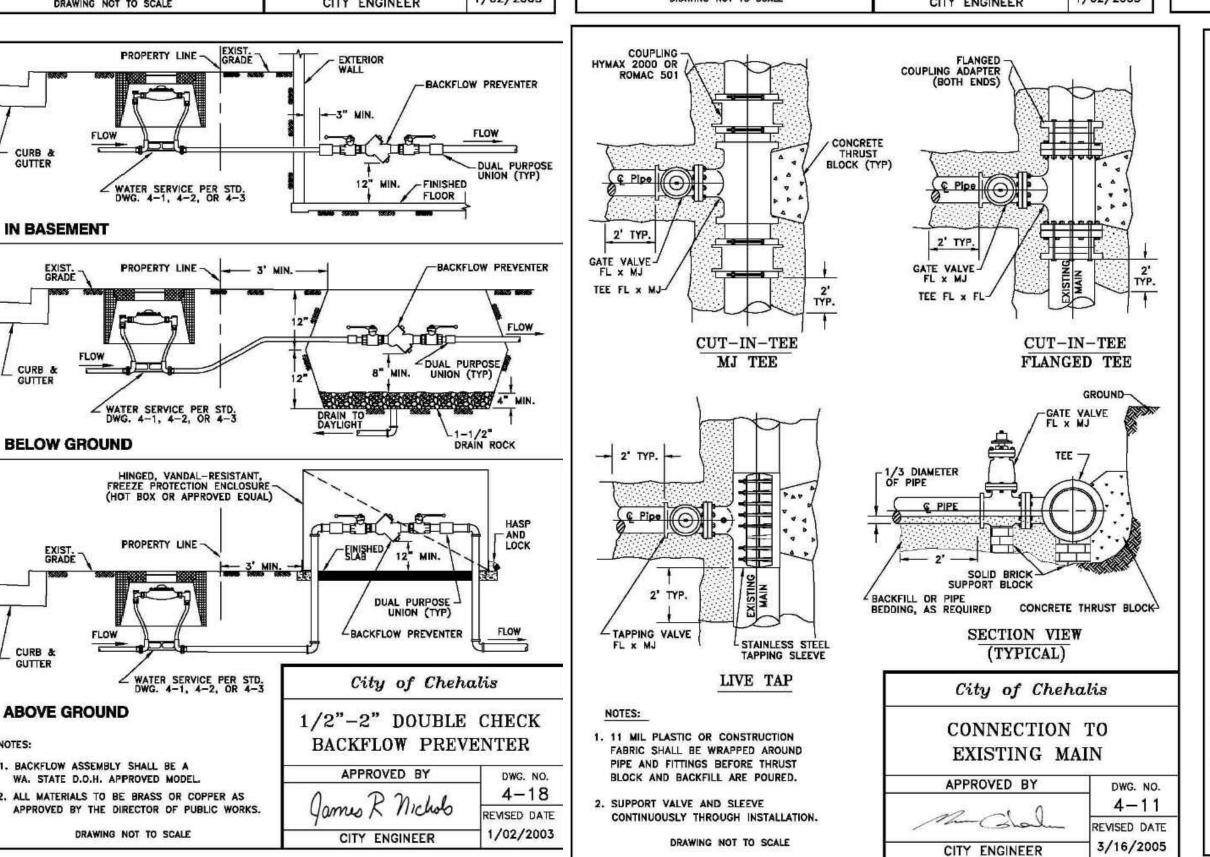


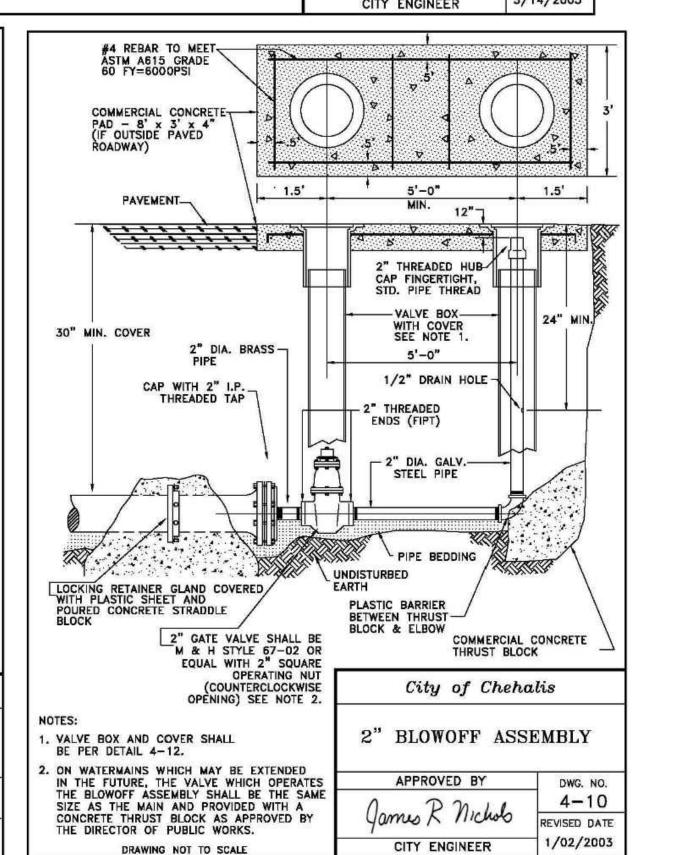


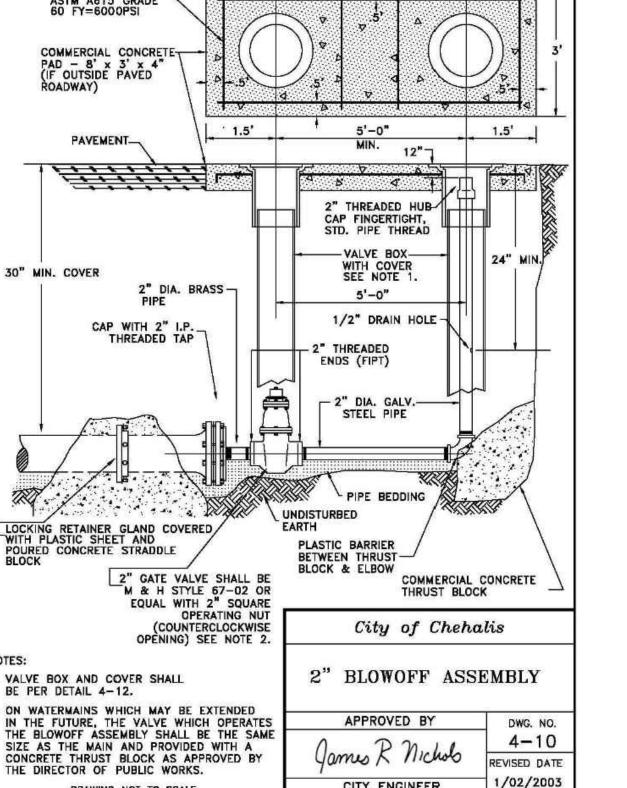


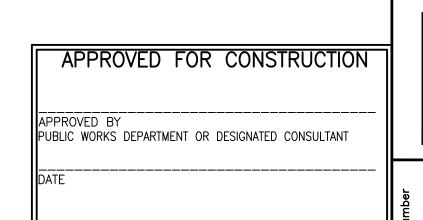
CITY ENGINEER

Drawing Not to Scale









APPROVAL EXPIRES

Barghausen Consulting F

223

CONSTRUCTION NOTES
DETAILS

SOLUTIONS

I DRIVE

DIS 60601