GRADING AND STORMWATER IMPROVEMENTS FOR SCRAP IT!

PREPARED FOR:

PARBERRY ENVIRONMENT SOLUTIONS, INC.

FERNDALE, WASHINGTON

PROJECT CONTACTS

CLIENT
PARBERRY ENVIRONMENT SOLUTIONS, INC.
1526 SLATER RD
FERNDALE, WA 98248
P: 360-734-1112
BRIAN PARBERRY

CIVIL ENGINEER
MAUL, FOSTER & ALONGI, INC.
6 CENTERPOINTE DR., STE#360
LAKE OSWEGO, OR 97035
P: 503-318-8862
CEM GOKCORA
CGOKCORA@MAULFOSTER.COM

SURVEYOR
WILSON ENGINEERING, LLC.
805 DUPONT STREET
BELLINGHAM, WA 98225
P: 360-773-6100
J. THOMAS BREWSTER

PROJECT SUMMARY

SITE ADDRESS:
1526 SLATER RD
FERNDALE, WA 98248
TOWNSHIP 39 NORTH ,RANGE 02 EAST,
SECTION 33

WHATCOM COUNTY PARCEL NO.
390233 179090 (LOT D)
390233 215103 (LOT 2)

LOT AREA:
10.209 AC. (LOT D)
3.846 AC. (LOT 2)

ZONING DESIGNATION: MANUFACTURING

PROJECT OVERVIEW: IN THE AREA WEST OF THE BUILDINGS AND TO THE EAST OF THE CLOSED ASH LANDFILL, THE PROJECT INCLUDES REGRADING, PAVEMENT REPLACEMENT, PAVEMENT REPAIR, A NEW GRAVITY FEED WASTE WATER LINE AND REROUTING OF WASTEWATER AND STORM WATER. THE PROJECT WILL ALLOW FOR BETTER UTILIZATION OF THE SITE, DECREASE IN WASTE WATER AND AN IMPROVEMENT IN STORM WATER QUALITY

PROJECT ELEMENTS: (1) REGRADING A PORTION OF THE SITE, (2) ASPHALT REPLACEMENT/REPAIR WITH NO CHANGE IN WATER HANDLING ON THESE PORTIONS OF THE SITE, (3) INSTALL A NEW GRAVITY FEED LINE TO CARRY THE SITE WASTEWATER TO THE CITY SANITARY SEWER, (4) INSTALL NEW FLOW MONITORING AND A SAMPLING SITE FOR THIS GRAVITY FEED LINE, (5) RE-ROUTING THE WATER FROM A SMALL PORTION OF THE WASTEWATER BASIN THAT CURRENTLY HAS PAVED SURFACING TO THE STORMWATER SYSTEM, (6) PAVING A SMALL PORTION OF WASTEWATER BASIN THAT CURRENTLY HAS COMPACTED DIRT/GRAVEL SURFACING AND ALSO RE-ROUTING THE WATER FROM THE NEW PAVED AREA TO THE STORM WATER SYSTEM AND (7) PAVING A PORTION OF THE STORM WATER BASIN THAT CURRENTLY HAS COMPACTED DIRT/GRAVEL SURFACING.

TOTAL AREA OF DISTURBANCE: THE TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 1.3 ACRES.

NEW IMPERVIOUS SURFACE CONTRIBUTING TO STORMWATER: LESS THAN 5,000 SQ.FT. NEW IMPERVIOUS AREA FOR STORMWATER COLLECTION (INCLUDING ELEMENTS 5, 6 AND 7 ABOVE)

VICINITY MAP

NOT TO SCALE

SHEET INDEX

LEGAL DESCRIPTIONS

A.F.N. 2130102981

LOT D, AS DELINEATED ON RECOMP LOT LINE ADJUSTMENT, ACCORDING TO THE PLAT THEREOF, RECORDED UNDER AUDITOR'S FILE NO. 2081101788, RECORDS OF WHATCOM COUNTY, WASHINGTON.

A.F.N. 2111200732

LOT 2, RECOMP LOT LINE ADJUSTMENT #2, ACCORDING TO THE MAP THEREOF, RECORDED MAY 13, 2011, UNDER AUDITOR'S FILE NO. 211100501368, RECORDS OF WHATCOM COUNTY, WASHINGTON.

CONTROL POINTS

Number	Northing	Easting	Elevation	Raw Desc
100	668274.7780	1223364.8684	46.68	RR SPIKE
101	668557.8970	1223421.8820	45.63	REBAR & PLASTIC CAP
102	668533.1684	1223052.4719	44.61	PK NAIL & WASHER
103	669122.8344	1223320.0132	42.32	BERN SPIKE
104	669022.5248	1223061.7124	49.24	PK NAIL & WASHER
105	669234.0217	1223145.0437	46.04	PK NAIL & WASHER
106	668863.1590	1222919.4804	44.59	REBAR & PLASTIC CAP
107	669207.2252	1222708.2183	34.14	BERN SPIKE
109	669526.7820	1223431.4990	48.04	PK NAIL & WASHER
111	669554.2351	1223286.8018	44.37	PK NAIL & WASHER
112	669481.2690	1223029.6544	51.24	PK NAIL & WASHER
113	669272.9934	1223355.2628	44.64	CONCRETE NAIL

BENCHMARKS

1. **BASIS OF COORDINATES:** COORDINATES ARE A GROUND-VALUE APPROXIMATION OF ***NAD83(2007) WASHINGTON STATE PLANE (NORTH ZONE) COORDINATES***, BASED UPON THE CONVERTED NAD83/91 VALUES FOR THE CITY OF FERNDALE'S 2001 HORIZONTAL AND VERTICAL CONTROL NETWORK. COORDINATION FOR GROUND-VALUE MENSURATION BASED UPON HOLDING THE FOLLOWING COORDINATES FOR ***CITY OF FERNDALE SURVEY MONUMENT #15***, A CASED MONUMENT ON THE NORTH SIDE OF THE I-5 FRONTAGE ROAD WEST OF THE INTERSTATE AND SOUTH OF SLATER ROAD, AS FOLLOWS:

   NORTHING = 667,222.58 USFT
   EASTING = 1,226,895.93 USFT

2. **BASIS OF BEARINGS:** HELD BEARING BETWEEN ABOVE MENTIONED ***CITY OF FERNDALE SURVEY MONUMENT #15*** (BOC) AND FOUND BRASS SURFACE DISC NORTH OF THE INTERSECTION OF FERNDALE ROAD AND SLATER , SAID MONUMENT BEING A NGS HARN POINT AND CITY OF FERNDALE CONTROL MONUMENT #14, PER THE AFOREMENTIONED 2001 CONTROL NETWORK. THE GPS-DERIVED INVERSE BEARING BETWEEN #15 AND #14 BEING ***N 83° 10' 54" W*** A DISTANCE OF ***11,099.70 FEET***. NAD83(2007) COORDINATES FOR #387 ARE AS FOLLOWS:

   NORTHING = 668,540.36 USFT
   EASTING = 1,215,874.74 USFT

3. **BASIS OF ELEVATIONS:** ELEVATIONS ARE NGVD29 VALUES BASED UPON HOLDING THE PUBLISHED ELEVATION OF ***89.31'*** AT THE CASED MONUMENT DESIGNATED ***CITY OF FERNDALE #15***, PER THE PUBLISHED DATA SHEET. ELEVATIONS AT THE WILSON SITE CONTROL POINTS WERE ESTABLISHED BY CLOSED NETWORKED RTK GPS TIES.

GENERAL NOTES

1. SURVEY PERFORMED BY WILSON ENGINEERING IN JULY, 2013 AND SEPTEMBER, 2014 USING A COMBINATION OF NETWORKED REAL-TIME KINEMATIC GPS AND CONVENTIONAL TECHNIQUES. SECTIONAL CONTROL WAS ESTABLISHED USING NETWORKED GPS SOLUTIONS FOR FOUND MONUMENTATION AND RECORD (PLAT) DATA WAS ROTATED TO CONFORM WITH CURRENT COORDINATION.
2. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES WITH THE PLANS. A MINIMUM OF TWO FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 (UTILITY NOTIFICATION CENTER) FOR LOCATION MARK-UP OF EXISTING UTILITIES.
3. ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF THE CITY OF FERNDALE AND THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" PREPARED BY WSDOT/APWA .
4. IN CASE OF A CONFLICT BETWEEN THE REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
5. ANY CHANGES TO THE DESIGN AND/OR CONSTRUCTION SHALL BE APPROVED BY THE OWNER OR ENGINEER.
6. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION NOT SPECIFICALLY SHOWN ON THE PLANS.
7. A COPY OF THESE APPROVED PLANS SHALL BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS AND PERMITS NECESSARY TO PERFORM THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
10. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION. NO MATERIAL IS TO BE DISCHARGED TO OR DEPOSITED IN STORMWATER SYSTEMS THAT MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS.
11. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL HAVE AN APPROVED PUBLIC RIGHT-OF-WAY WORK PERMIT PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN THE RIGHT-OF-WAY.
12. 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. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON THE ADJACENT PUBLIC STREETS.
13. ANY PUBLIC OR PRIVATE CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO CITY OF FERNDALE AND WHATCOM COUNTY STANDARDS AND PRACTICES. SEE NOTE 5.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ADJACENT UTILITIES WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WATER, SANITARY SEWER, STORMWATER, POWER, TELEPHONE, CABLE TV, GAS, IRRIGATION, AND STREET LIGHTING. THE CONTRACTOR SHALL NOTIFY RESIDENTS AND BUSINESSES 48 HOURS IN ADVANCE OF ANY WORK AFFECTING ACCESS OR SERVICE AND SHALL MINIMIZE INTERRUPTIONS TO DRIVEWAYS FOR RESIDENTS AND BUSINESSES ADJACENT TO THE PROJECT.
15. ALL LAWN AND VEGETATED AREAS DISTURBED WILL BE RESTORED TO ORIGINAL CONDITION. ANY DISTURBANCE OR DAMAGE TO OTHER PROPERTY ON ADJACENT PARCELS OR IN THE PUBLIC RIGHT OF WAY SHALL ALSO BE REPAIRED OR RESTORED TO ORIGINAL CONDITION.

ENGINEER'S CERTIFICATION
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN SCRAP IT (GRADING AND STORMWATER IMPROVEMENTS)HAVE BEEN INSPECTED BY MAUL FOSTER AND ALONGI, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.
(SEE TITLE BLOCK FOR SIGNED STAMP)

SURVEYOR'S CERTIFICATION
I CERTIFY THAT THE STRUCTURE LOCATIONS, ELEVATIONS, DEPTHS, AND ASBUILT COMMENTS REFLECTING PIPE MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 7/10/20

PAUL JONATHAN BARKER — STATE OF WASHINGTON — 20897 — REGISTERED PROFESSIONAL LAND SURVEYOR — 7/10/20

JUL 20 2020
BY
CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT

RECORD DRAWING

MAUL FOSTER ALONGI
1329 NORTH STATE STREET
BELLINGHAM, WA 98225
PHONE: 360-594-6270
www.maulfoster.com

CEM EMIR GOKCORA — STATE OF WASHINGTON — 54676 — REGISTERED PROFESSIONAL ENGINEER

07/08/2020

SCRAP-IT
PARBERRY ENVIRONMENT SOLUTIONS, INC.
FERNDALE, WASHINGTON

ISSUE	DATE	DESCRIPTION
G	06.22.20	AS BUILT DRAWINGS
F	11.17.17	REVISED PER CITY REVIEW COMMENTS
E	10.5.17	REVISED PERMIT SET
D	9.7.17	REVISED PERMIT SET
C	8.23.17	REVISED PERMIT SET RESPNS TO CITY CMNTS
B	3.10.17	PERMIT SET - ADDRES CITY COMMENTS
A	8.26.16	PERMIT SET

PROJECT: 0789.02.07
DESIGNED: C. GOKCORA
DRAWN: K. BOON
CHECKED: J. CLARY
SCALE
DRAWING NOT TO SCALE
SHEET TITLE
COVER SHEET
SHEET
C0.0

PLOTTED BY: Cem Gokcora FILENAME: G:\05_MFA Civil 3D\05_PROJECTS\0789.02 Scrap It\PLANS\AS-BUILT PLAN SET\Cover.dwg
PLOTTED ON: 2020-07-08 12:09 PM

GENERAL NOTES

EROSION AND SEDIMENT CONTROL

1. ALL GRADING AND EROSION CONTROL MATERIALS, WORKMANSHIP AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE 2005 EDITION OF THE "WESTERN WASHINGTON STORMWATER MANAGEMENT MANUAL" PREPARED BY WASHINGTON STATE DEPARTMENT OF ECOLOGY AND THE LATEST STANDARDS AND PRACTICES OF THE CITY OF FERNDALE. IN THE CASE OF A CONFLICT BETWEEN STANDARDS AND DETAILS THE MOST STRINGENT REQUIREMENT WILL PREVAIL.
2. THE CONTRACTOR SHALL MAINTAIN AN ON-SITE WRITTEN DAILY LOG OF EROSION CONTROL AND MAINTENANCE.
3. DURING THE PERIOD FROM OCTOBER 1ST TO APRIL 30TH, NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS. FROM MAY 1ST TO SEPTEMBER 30TH, NO SOILS SHALL REMAIN EXPOSED FOR MORE THAN SEVEN (7) DAYS.
4. THE CONSTRUCTION ENTRANCE MAY BE REDUCED TO LESS THAN 100' WITH APPROVAL OF THE EROSION CONTROL INSPECTOR.
5. INLET PROTECTION FABRIC SHALL BE INSTALLED UNDER GRATES FOR INLETS IN LANDSCAPED AREAS.
6. THE CONTRACTOR WILL PROVIDE APPROPRIATE PROACTIVE EROSION CONTROL DURING CONSTRUCTION TO PREVENT THE EROSION CONTROL SYSTEMS FROM FAILING DUE TO SILT. THE CONTRACTOR SHALL ENSURE THAT SEDIMENT DOES NOT IMPACT THE ADJACENT PROPERTIES OR THE SURROUNDING PUBLIC ROADS DURING CONSTRUCTION.
7. THE IMPLEMENTATION OF THESE EROSION AND SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND VEGETATION IS ESTABLISHED.
8. CARE SHOULD BE TAKEN TO NOT DISTURB MORE AREA THAN NEEDED FOR CONSTRUCTION REQUIREMENTS. ALL DISTURBED SOILS SURFACES ARE TO BE STABILIZED. STABILIZATION OF DISTURBED SOIL AREAS SHALL CONSIST OF: HYDROSEEDING OR HANDSEEDING, MULCHING, PLACING OF EROSION CONTROL BLANKETS OR PLASTIC IN LANDSCAPING SOIL AREAS. IT WILL ALSO CONSIST OF PAVING AND CONCRETE WORK IN DRIVING, PARKING, AND SIDEWALK AREAS. ALL SEEDED AREAS ARE TO BE FERTILIZED, WATERED, AND MAINTAINED TO ENHANCE THE IMMEDIATE REGROWTH OF VEGETATION.
9. MATERIAL STOCKPILES ARE TO BE PROTECTED FROM PRECIPITATION BY THE FOLLOWING MEANS:

   • TEMPORARY - COVER PILES WITH TARPS OR PLASTIC SHEETING WEIGHTED WITH TIRES, LUMBER, OR CONCRETE BLOCKS.

   • PERMANENT - COVER PILES WITH TARPS OR PLASTIC, OR RESEED. PERIMETER AREAS AROUND PILES ARE TO BE SURROUNDED WITH EROSION CONTROL FILTER FABRIC FENCES UNTIL SOILS SURFACE IS STABILIZED WITH RESEEDING.
10. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE CONTINUOUS FUNCTIONING. INSPECTION AND MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:

    • VERIFYING THAT ALL AREAS ARE GRADED SUCH THAT ALL RUNOFF IS DIRECTED TO A SEDIMENTATION TRAP FACILITY BEFORE BEING DISCHARGING TO SURFACE.

    • REMOVAL OF TRAPPED SILTS AT SILT BARRIERS, SILT TRAPS, OR POINTS OF ACCUMULATION.

    • ADDITIONAL PROTECTIVE MEASURES, AS REQUIRED, DUE TO JOB SITE CONDITIONS.

    • STABILIZED CONSTRUCTION ENTRANCES INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. MONITORING OF VEHICLES LEAVING THE SITE TO MINIMIZE TRANSMISSION OF LOOSE SOILS TO THE PUBLIC ROADWAYS.

    • IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE SURFACE IS TO BE CLEANED THOROUGHLY AT THE END OF EACH DAY.
11. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
12. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
13. THIS SEDIMENTATION AND EROSION CONTROL PLAN IS INTENDED TO BE UTILIZED AS A GUIDE TO CONTROL THE TRANSPORTATION OF LOOSE SOILS FROM THE PROPERTY THAT CAUSE WATER QUALITY AND NUISANCE PROBLEMS OUTSIDE OF THE CONSTRUCTION AREA.
14. DEPENDING ON THE CONTRACTOR'S CONSTRUCTION PRACTICES, SOME PORTIONS OF THE PROPOSED EROSION CONTROL PLAN MAY BE VARIED ACCORDING TO THE JOB SITE CONDITION. ALL CHANGES TO THE PLAN MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ADJUSTMENT.

SITE GRADING

15. ALL PORTIONS OF THE SITE WITHIN THE LIMITS OF THE WORK SHALL BE MOWED AND STRIPPED TO REMOVE ALL GRASS, ROOTS, ORGANIC SOIL, AND CONSTRUCTION FILL DEBRIS PRIOR TO THE BEGINNING OF ANY GRADING OPERATIONS. THE CONTRACTOR SHALL SALVAGE AND STOCKPILE ENOUGH SELECT TOPSOIL TO ACCOMMODATE LANDSCAPING NEEDS.
16. FOLLOWING STRIPPING AND GRUBBING, THE EXPOSED SOILS SHALL BE PROOF ROLLED TO REVEAL WEAK, ORGANIC, OR OTHER UNSUITABLE SOILS. UNSUITABLE SOILS SHALL BE EXCAVATED TO FIRM GROUND AND FILLED TO GRADE WITH SUITABLE NATIVE OR IMPORTED STRUCTURAL FILL.
17. EXPOSED SUBGRADE SOILS ON AREAS TO RECEIVE STRUCTURAL FILL SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES.
18. IF FILLS ARE NEEDED FOR STRUCTURAL SUPPORT, THEY SHALL BE INSTALLED IN NO MORE THAN 8-INCH LIFTS, AND SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY FOR FINE GRAINED NATIVE SOILS UNLESS OTHERWISE SPECIFIED ON THE PLAN. THE TOP LIFT OF FILL SHALL BE COMPACTED TO 92%. ALL OTHER SOILS SHALL BE COMPACTED TO NO LESS THAN 85%.
19. COMPACTION TESTING SHALL BE DONE IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR).
20. AT THE END OF THE GRADING OPERATION, THE STOCKPILED STRIPPINGS SHALL BE DISTRIBUTED ON THE LANDSCAPED AREAS IN A COMPACTED DEPTH NOT TO EXCEED 12".
21. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
22. ALL GRADING OPERATIONS AND DISTURBED SURFACE STABILIZATION SHALL BE IN ACCORDANCE WITH THE PROJECT EROSION CONTROL PLAN.

STORM SEWER CONSTRUCTION

23. ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS IN THE LATEST ADDITION OF THE "WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" BY THE AMERICAN PUBLIC WORKS ASSOCIATION AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE "STATE", "SECRETARY", OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "OWNER". ADDITIONALLY, ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS IN THE RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS IN THE MOST CURRENT EDITIONS OF THE WHATCOM COUNTY DESIGN STANDARDS.
24. PIPE LENGTHS SHOWN ON THE PLANS ARE TO THE CENTER OF THE STRUCTURE.
25. PRE-PAVING AS-BUILTS ARE REQUIRED FOR STORMWATER, WATER, AND SANITARY FACILITIES. PROVIDE AS-BUILT INFORMATION TO THE CONSTRUCTION INSPECTOR AND CONSTRUCTION ENGINEER FOR APPROVAL PRIOR TO ANY PAVING.
26. MATERIALS FOR STORM SEWER INLET LATERALS AND MAINS SHALL BE SMOOTH INTERIOR, PVC STORM SEWER PIPE, UNLESS OTHERWISE SPECIFIED ON PLANS.
27. STORM SEWER PIPE BEDDING AND BACKFILL SHALL MEET THE REQUIREMENTS OF WSDOT SECTIONS 7-08. PIPE BEDDING MATERIALS SHALL BE PER SECTION 9-03.12(3) AND PIPE BACKFILL MATERIALS SHALL BE PER SECTION 7-08.3(3) AS APPROVED BY THE INSPECTOR.
28. PERFORATED PIPE MATERIALS SHALL BE PERFORATED CORRUGATED POLYETHYLENE STORM SEWER PIPE.
29. CATCH BASINS SHALL BE TYPE 1 H-20 OR PROJECT APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED ON PLANS.
30. TRENCH EXCAVATION SHALL MEET THE REQUIREMENTS OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION SECTION 7-08.
31. STORM SEWER PIPE BEDDING AND BACKFILL SHALL MEET THE REQUIREMENTS OF SECTIONS 00405.12-14, AND SECTIONS 00405.45-46. PIPE BEDDING MATERIALS SHALL BE $\frac{3}{4}$" - 0 AGGREGATE BEDDING PER SECTION 00405.12 (AND PER CITY OF FERNDALE STANDARD DETAIL ST-17, AS SHOWN ON C4.2) AND PIPE BACKFILL MATERIALS SHALL BE CLASS A OR CLASS B PER SECTION 00405.14 AS APPROVED BY THE INSPECTOR. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM RELATIVE DENSITY PER ASTM D 698 (STANDARD PROCTOR). NATIVE BACKFILL MAY BE USED UPON APPROVAL FROM THE INSPECTOR. STORM SEWER PIPE SHALL BE INSTALLED IN THE RIGHT OF WAY IN ACCORDANCE TO THE "UTILITY TRENCH" CITY OF FERNDALE STANDARD DETAIL.
32. STORM SEWER INLETS, AS NOTED ON THE PLANS, SHALL BE FITTED WITH AN APPROVED TRAP.

APPROVED
JUL 20 2020
BY CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT

RECORD DRAWING

MAUL FOSTER ALONGI
1329 NORTH STATE STREET
BELLINGHAM, WA 98225
PHONE: 360-594-6270
www.maulfoster.com

06/23/2020

SCRAP-IT
PARBERRY ENVIRONMENT SOLUTIONS, INC.
FERNDALE, WASHINGTON

ISSUE	DATE	DESCRIPTION
G	12.10.19	AS-BUILT DRAWINGS
F	11.17.17	REVISED PER CITY REVIEW COMMENTS
E	10.5.17	REVISED PERMIT SET
D	9.7.17	REVISED PERMIT SET
C	8.25.17	REVISED PERMIT SET-RSPNS TO CITY CMMTS
B	3.10.17	PERMIT SET - ADDRSS CITY RVW CMMNTS
A	8.26.16	PERMIT SET

PROJECT: 0789.02.07
DESIGNED: C. GOKCORA
DRAWN: K. BOON
CHECKED: J. CLARY
SCALE

SHEET TITLE
CONSTRUCTION NOTES

SHEET
C1.0

PLOTTED ON: 2019-12-09 4:44 PM PLOTTED BY: Cem Gokcora FILENAME: G:\02_MFA Civil\SCW_PROJECTS\789.02\cosp II\PLANS\AS-BUILT PLANS\ES Construction Notes.dwg

NOTES:
1. PROJECT CONTROL POINT #100 IS LOCATED AT 3,684.5 FEET N73°24'23.09"E OF CITY OF FERNDALE SURVEY MONUMENT #15, A CASED MONUMENT ON THE NORTH SIDE OF THE I-5 FRONTAGE ROAD WEST OF THE INTERSTATE AND SOUTH OF SLATER ROAD.
2. ALL NEWLY ADDED CONVEYANCE ELEMENTS WILL BE AS-BUILT BY THE ENGINEER OF RECORD. THE APPROVED AS-BUILT EXHIBIT WILL BE ADDED TO THE SWMM FOR FINAL PROJECT APPROVAL.
3. PLAN SHEET APPROVAL IS FOR DESIGN AND CONCEPT ONLY. TIMING OF ACTUAL REROUTE OF CONVEYANCE WILL BE DETERMINED AFTER CITY RECEIVES WRITTEN APPROVAL FROM DOE PREVIOUSLY ASKED FOR.

LEGEND

- EXISTING GRADE MAJOR CONTOUR — 25
- EXISTING GRADE MINOR CONTOUR — 27
- EXISTING CATCH BASIN
- EXISTING SANITARY MANHOLE — S
- EXISTING STORM MANHOLE — D
- EXISTING STORM DRAIN PIPE — SD
- EXISTING SANITARY SEWER PIPE — SS
- EXISTING GRADE SLOPE — EX -X.X%
- EXISTING ASPHALT PAVEMENT
- PROPOSED GRADE BREAK
- PROPOSED GRADE MAJOR CONTOUR (FOR REFERENCE ONLY - CONTRACTOR TO FIELD FIT TO MEET GRADING REQUIREMENTS) — 25
- PROPOSED GRADE MINOR CONTOUR (FOR REFERENCE ONLYCONTRACTOR TO FIELD FIT TO MEET GRADING REQUIREMENTS) — 27
- PROPOSED SANITARY MANHOLE — S
- PROPOSED WASTEWATER PIPE — WW
- PROPOSED GRADE SLOPE MIN 1%- MAX 5% — -X.X%

SEE C2.1 FOR PROPOSED SURFACING, ASSOCIATED DISCHARGE CONVEYANCE SYSTEMS AND SURFACE AREAS

CONNECT TO EXTG. SSWR MH 9 (SEE DTL SHT C4.0)
(FERNDALE MH--W8)
EXIST. SSMH 9000, TYPE 2
RIM= 45.60
N. 8" INV=31.85
E. INV NOT ACCESSIBLE
S.E. 6" TOP OF PIPE=41.90
S. 2x4" TOP OF PIPES=42.15
SUMP= 31.85
12" IE 33.20" IN(SW)

EXTG. STRM CB 21

EXTG MH 3A
RIM= 43.46
EXTG 10" IE PVC 38.43 IN (NE)
EXTG 38.36' IN (SE)
EXTG 38.61' IN (SW)
EXTG 10" IE PVC 38.28' OUT (NW)
SUMP= 37.9

EXTG. STRM CB 9

EXTG. STRM MH 3-B
RIM: 44.15
EXTG. 10" IE 37.25 IN (E)
EXTG. 10" IE 37.00 IN (S)
EXTG. 10" IE 36.92 OUT (NW)

ABANDON SECTION OF EXTG STRM LINE IN CONFLICT W/ PROPOSED WW ALIGNMENT BY REMOVING A 5' SECTION AND PLUG ON BOTH CUT ENDS

APPROXIMATE LIMITS OF SAWCUT

EXTG. STRM CB 24

EXTG. STRM CB 28

SSWR MH A-2
STA 5+47.01
SEE PROFILE FOR DESIGN INFO
INSTALL GREYLINE
AVFM5.0 A-1-A-1-A1-1-B-1-A
METER DOWNSTREAM OF THE MH PER MANUFACTURER'S RECOMMENDATIONS
(SEE DETAIL ON THIS SHT)
CONTRACTOR TO PROVIDE A PORT FOR SAMPLE ASSEMBLY LINE

EXTG. STRM MH 17

EXTG. STRM CB 11

4X8 COALESCING SEPARATOR 2
(SEE DTL ON SHT C4.0)
RIM - 44.50
12" IE 37.45 IN (S)
12" IE 37.45 OUT (N)
USE VAULT RISERS TO GET TO THE DESIGN INVERTS

OLDCASTLE CST-1500
5'X10' 1,500 GAL
SETTLING VAULT
RIM - 44.50
12" IE 37.60 IN (S)
12" IE 37.60 OUT (N)
SUMP 33.60

56 LF 6" PVC SSWER @S=0.0268 FT/FT

EXTG SSWR MH-16
STA 6+37.92

EXTG. SS MH 14

EXTG CB-1
GRATE: 43.20
EXTG 6" IE 41.00 IN (SE)
PLUG EXTG 10" IE 40.62 OUT(W) AFTER ECOLOGY APPROVAL
10" IE 40.50 IN (SE)
10" IE 40.62 OUT (NE)- KEEP PLUGGED UNTIL ECOLOGY APPROVAL

CB-30
GRATE: AA20
6" IE 41.00 OUT (NW)
SUMP AO50

NEW RUN A-1
SEE DTL 1 OF SHT C-4.1 FOR TRENCH BACKFILL ASSOCIATED WITH EXTG SURFACING (I.E. AC OR NON-DEVELOPED AREA)

SSWR MH A-1
SAMPLING LOCATION
STA 1+64.85

SAMPLING SHED

WWMH 20
RIM: 43.46
10" IE 35.92 (APPROX.) IN (SE)
10" IE 35.92 (APPROX.) OUT (SW)

NEW RUN A-2

NEW RUN A-3

EG: 44.27

EXTG STRM CROSSING (SEE PROFILE)

NEW RUN D
81...97 LF 12" PVC SSWR
@ S= 0.01 FT/FT

RUN 4
78 LF 10" PVC STRM
@ S=0.0100 ± FT/FT
(OPTIONAL – TO BE INSTALLED AFTER WW IS ROUTED TO PUBLIC SEWER)

ABANDON LINE IN -PLACE PLUG BOTH PIPE ENDS , AFTER ECOLOGY APPROVAL

EXTG. 10" PVC IE 34.69'

NEW RUN B
39 LF 10" PVC SSWR
@ S= 0.0088 FT/FT

NEW RUN C

TO BE ABANDONED, UPON RUN C INSTALLATION

120 LF 6" DI SAN
@S=0.010 FT/FT

22.5° DI BEND
22.5° DI BEND
6" CO
DI TO PVC ROMAC COUPLING

22.5° DI BEND
6" CO
DI TO PVC ROMAC COUPLING

22.5° DI BEND

EG: 46.30

EXTG. WW MH-2
ABANDON AFTER ECOLOGY APPROVAL, ALL PIPE ENTRIES TO BE PLUGGED AND GROUTED

EXTG CB-3
PROPOSED FLOW CONTROL STR (SEE DTL ON SHT C4.1)
STA 8+98.29
GRATE: 43.17
PLUG EXTG 6" IE 39.77 OUT (NW) AFTER ECOLOGY APPROVAL
EXTG 8" IE 40.07 IN (S)
8" IE 39.77 OUT (N) W/ 2.6 IN ORIFICE PLATE
8" IE 39.77 OUT (SW) W/
8" STANDPIPE ATTACHED OVERFLOW
ELEVATION SET AT 41.05

EXTG DRAINAGE CHANNEL

130 LF 8" PVC STRM
@S=0.010 FT/FT

END OF PIPE CANNOT BE SEEN ON THIS PLAN DUE TO SCALING
8" IE 38.40 OUT

EXTG. WW MH-4
RIM: 46.85
10" IE 35.14' IN (E)
(TO BE INSTALLED AFTER WW IS ROUTED TO PUBLIC SEWER)
12" IE 33.17' IN (SE)
EXTG 10" IE 31.52' IN (S)
EXTG 10" IE 31.45' OUT (W)

ABANDON EXTG. CB

EXTG. WW MH-3
ABANDON AFTER ECOLOGY APPROVAL, ALL PIPE ENTRIES TO BE PLUGGED AND GROUTED

ABANDON EXTG. STRM CB 8

ABANDON EXTG. STRM CB

ABANDON EXTG. STRM CB 7

ABANDON EXTG. CB

APPROXIMATE LIMITS OF GRADING

APPROX. LANDFILL BOUNDARY PER DRAWINGS FOR THERMAL REDUCTION CO. INC. TEMPORARY ASH STORAGE FACILITY PREPARED BY HARPER OWES

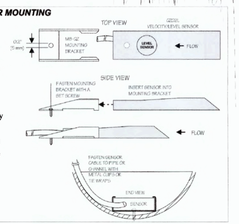
APPROXIMATE LIMITS OF GRADING

QZ02L VELOCITY-LEVEL SENSOR MOUNTING

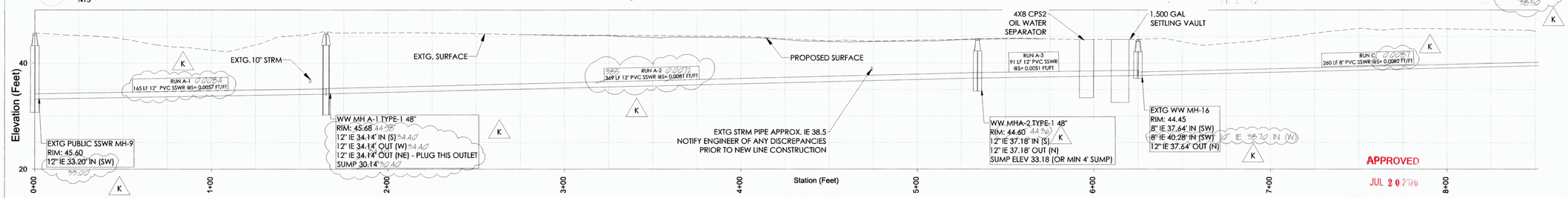
Mount the QZ02L sensor with the stainless steel bracket and hardware supplied. Ensure that the sensor is parallel to the water surface (check with a level). Mount with the tapered end of the sensor pointing upstream and the sensor cable pointing downstream.

Clip or tie wrap the sensor cable securely to the pipe or channel wall.

Note: The mounting bracket is designed to release the sensor if weeds or rags are caught by the sensor.



WASTE WATER FLOW METER
NTS



PROFILE VIEW OF SECTION PV - (1)
ORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 10'
VERTICAL EXAGGERATION: 3

APPROVED
JUL 20 2020
BY CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

RECORD DRAWING

MAUL FOSTER ALONGI
1329 NORTH STATE STREET
BELLINGHAM, WA 98225
PHONE: 360-594-6270
www.maulfoster.com

CEM EMTA GOKCORA
STATE OF WASHINGTON
54676
REGISTERED PROFESSIONAL ENGINEER
07/08/2020

SCRAP-IT
PARBERRY ENVIRONMENT SOLUTIONS
FERNDALE, WASHINGTON

ISSUE	DATE	DESCRIPTION
K	2.25.20	ACCEPTED COMMENTS
J	10.14.18	REVISED PER CITY REVIEW COMMENTS
H	11.13.17	REVISED PER CITY REVIEW COMMENTS
G	10.5.17	REVISED PERMIT SET
F	9.19.17	REVISED GRADING - REPLACEMENT SHEET
E	9.7.17	REVISED PERMIT SET
D	8.28.17	REVISED PERMIT SET -RSPNS TO CITY COMMTS
C	7.21.17	RESPONSE TO CITY REVIEW COMMENTS
B	4.3.17	PERMIT SET-ADDRESS CITY RVW COMMENTS
A	3.10.17	PERMIT SET-ADDRESS CITY RVW COMMENTS

PROJECT: 0789.02.01
DESIGNED: C. GOKCORA
DRAWN: K. BOON
CHECKED: J. CLARY

SCALE
0 30' 60'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
WASTEWATER REROUTING PLAN

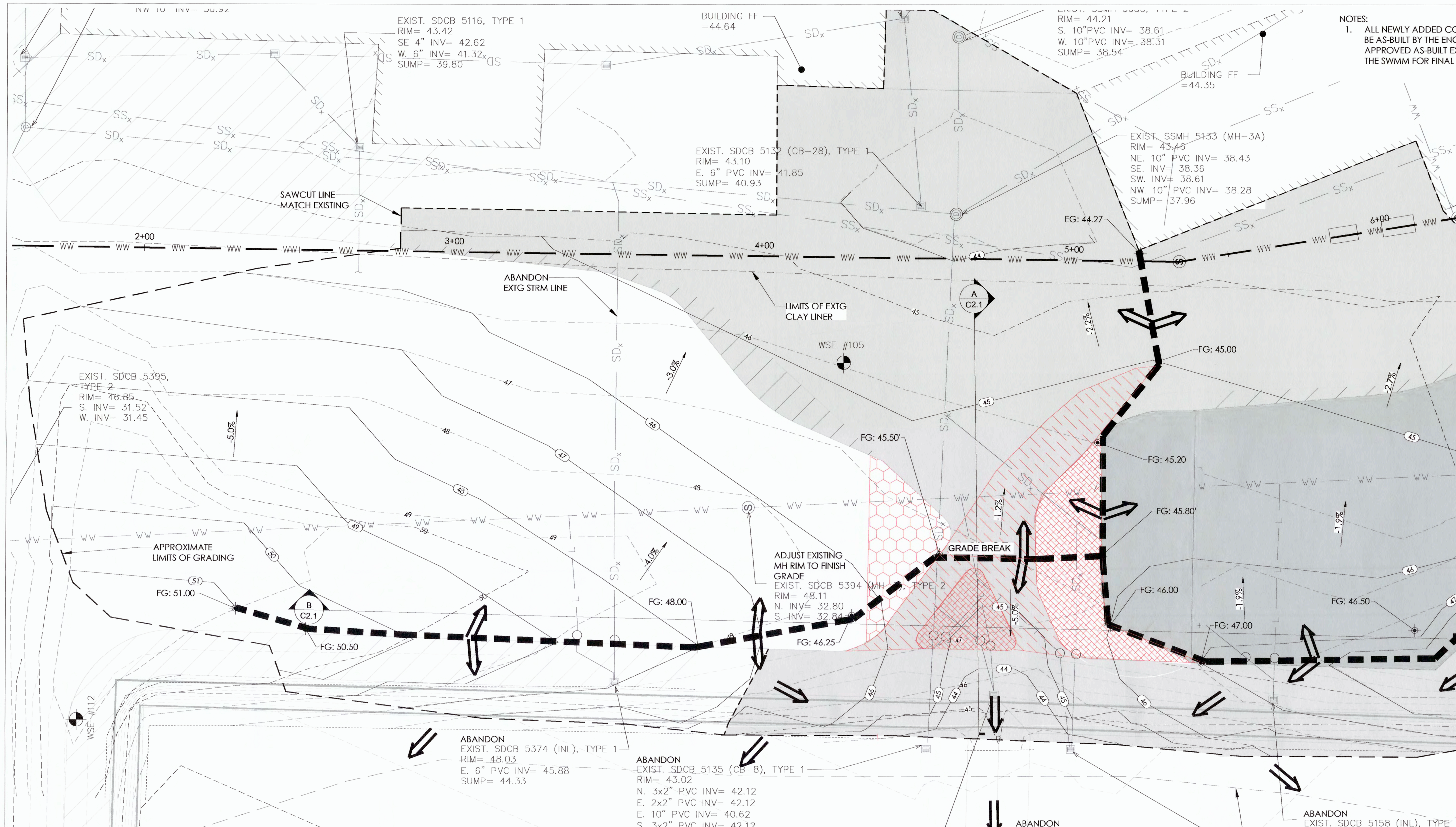
SHEET
C2.0

PLOTTED BY: Cem Gokcora FILENAME: G:\0_MFA Civil 3D\0_PROJECTS\0789.02 Scrap It\PLANS\v4.6\0417 PLAN SET-Grading and WW Routing Plan.dwg
PLOTTED ON: 2020-07-08 2:57 PM

NOTES:
1. ALL NEWLY ADDED CONVEYANCE ELEMENTS WILL BE AS-BUILT BY THE ENGINEER OF RECORD. THE APPROVED AS-BUILT EXHIBIT WILL BE ADDED TO THE SWMM FOR FINAL PROJECT APPROVAL.

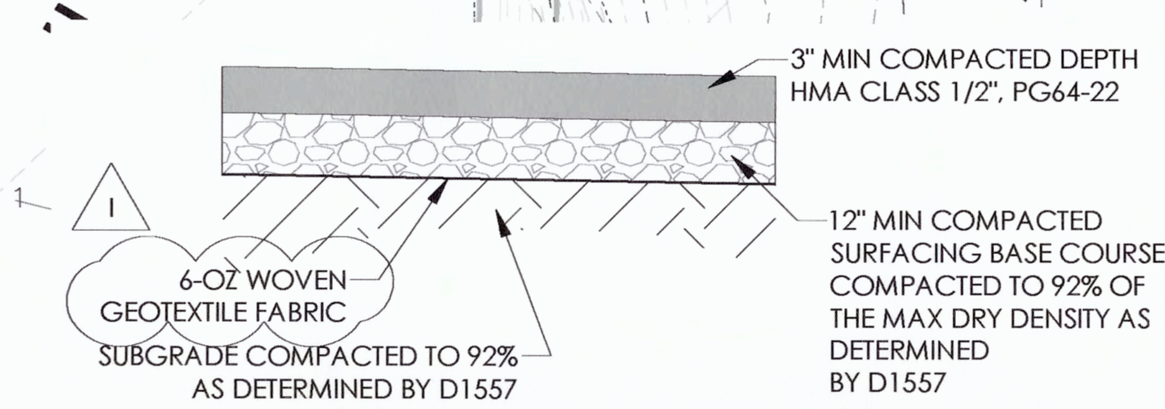
LEGEND

- EXISTING ASPHALT PAVEMENT
- PROPOSED ASPHALT REPAVEMENT (NO CHANGE IN BASIN)- 27,840 SQ.FT.
- PROPOSED NEW ASPHALT PAVEMENT (WW BASIN STAYING WW BASIN) - 13,500 SQ.FT.
- PROPOSED NEW ASPHALT PAVEMENT (PORTION OF WW BASIN CONVERTING TO STRM BASIN) - 1,860 SQ.FT.
- PROPOSED NEW ASPHALT PAVEMENT (PORTION OF STRM BASIN STAYING STRM BASIN) - 920 SQ.FT.
- PROPOSED ASPHALT REPAVEMENT (PORTION OF WW BASIN CONVERTING TO STRM BASIN) - 2,200 SQ.FT.

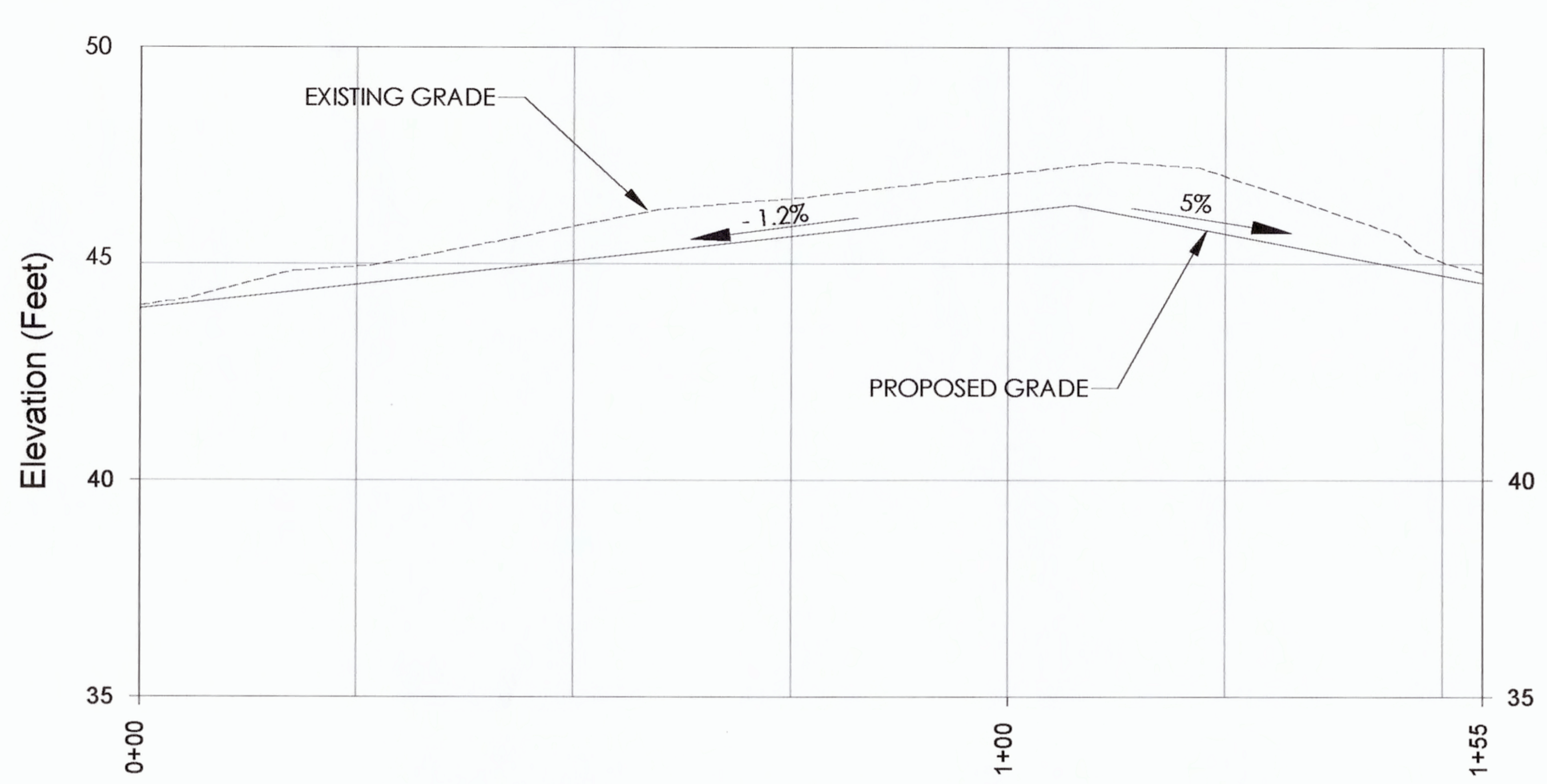


EXIST. SDCB 5116, TYPE 1
RIM= 43.42
SE 4" INV= 42.62
W. 6" INV= 41.32
SUMP= 39.80
BUILDING FF =44.64
BUILDING FF =44.35
EXIST. SDCB 5132 (CB-28), TYPE 1
RIM= 43.10
E. 6" PVC INV= 41.85
SUMP= 40.93
EXIST. SSMH 5133 (MH-3A)
RIM= 43.46
NE. 10" PVC INV= 38.43
SE. INV= 38.36
SW. INV= 38.61
NW. 10" PVC INV= 38.28
SUMP= 37.96
SAWCUT LINE MATCH EXISTING
ABANDON EXTG STRM LINE
LIMITS OF EXTG CLAY LINER
WSE #105
EXIST. SDCB 5395, TYPE 2
RIM= 46.85
S. INV= 31.52
W. INV= 31.45
APPROXIMATE LIMITS OF GRADING
FG: 51.00
FG: 50.50
FG: 48.00
FG: 45.50
FG: 45.00
FG: 45.20
FG: 45.80
FG: 46.00
FG: 46.25
FG: 47.00
FG: 46.50
FG: 46.30
FG: 49.08
FG: 44.27
GRADE BREAK
ADJUST EXISTING MH RIM TO FINISH GRADE
EXIST. SDCB 5394 (MH-?), TYPE 2
RIM= 48.11
N. INV= 32.80
S. INV= 32.84
EXIST. SDMH 8001 (MH-2), TYPE 2
RIM=45.67
N. 10" PVC
S. 10" PVC
FLOWLINE INV=34.57
ADJUST EXISTING MH RIM TO FINISH GRADE
2' SHOULDER FROM EDGE OF EXTG ROAD & SLOPE DOWN AT 4H:1V W/ AC
ABANDON EXIST. SDCB 5374 (INL), TYPE 1
RIM= 48.03
E. 6" PVC INV= 45.88
SUMP= 44.33
ABANDON EXIST. SDCB 5135 (CB-8), TYPE 1
RIM= 43.02
N. 3x2" PVC INV= 42.12
E. 2x2" PVC INV= 42.12
E. 10" PVC INV= 40.62
S. 3x2" PVC INV= 42.12
W. 2x2" PVC INV= 42.12
SUMP= 36.39
ABANDON EXIST. SDCB 5393 (INL), TYPE 1
RIM= 45.63
COULD NOT ACCESS
ABANDON EXIST. SDCB 5136 (CB-7), TYPE 1
RIM= 43.09
N. 3x2" PVC INV= 42.24
E. 2x2" PVC INV= 42.24
E. 10" PVC INV= 40.34
S. 3x2" PVC INV= 42.24
W. 2x2" PVC INV= 42.24
SUMP= 36.49
ABANDON EXIST. SDCB 5158 (INL), TYPE 1
RIM= 47.22
E. 6" PVC INV= 45.32
SUMP= 43.57
LIMITS OF CAPPED LANDFILL
WSE #104
WSE #112

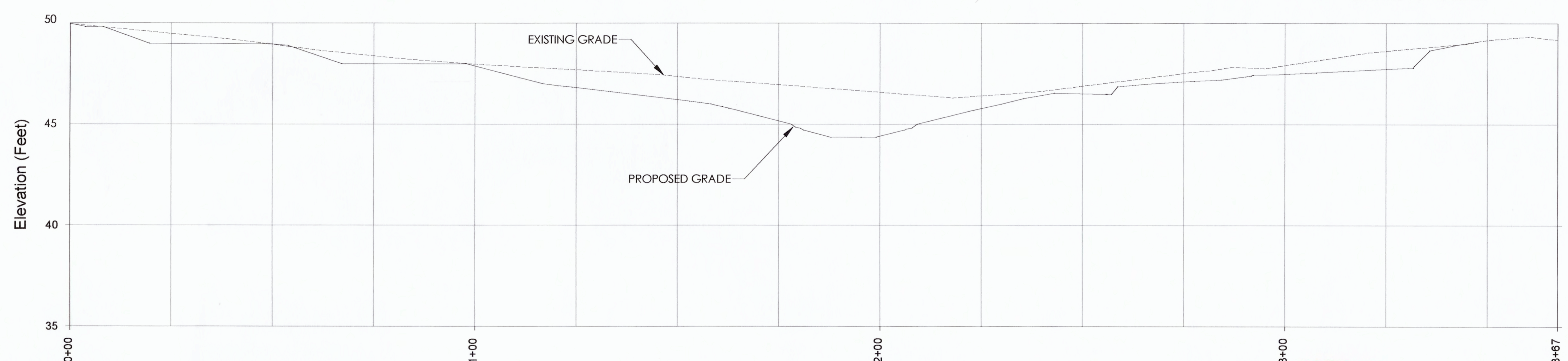
UNADJUSTED EARTHWORK QUANTITIES		
CUT (CY)	FILL (CY)	NET (CY)
1810	50	1760



PAVEMENT SURFACING DETAIL
DRAWING NOT TO SCALE



A A-A' CROSS SECTION
PROFILE VIEW OF SECTION A-A
HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 6'
VERTICAL EXAGGERATION: 5



B B-B' CROSS SECTION
PROFILE VIEW OF SECTION B-B'
HORIZONTAL SCALE: 1" = 30' VERTICAL SCALE: 1" = 6'
VERTICAL EXAGGERATION: 5

APPROVED
JUL 20 2020
BY
CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

RECORD DRAWING

MAUL FOSTER ALONGI
1329 NORTH STATE STREET
BELLINGHAM, WA 98225
PHONE: 360-594-6270
www.maulfoster.com

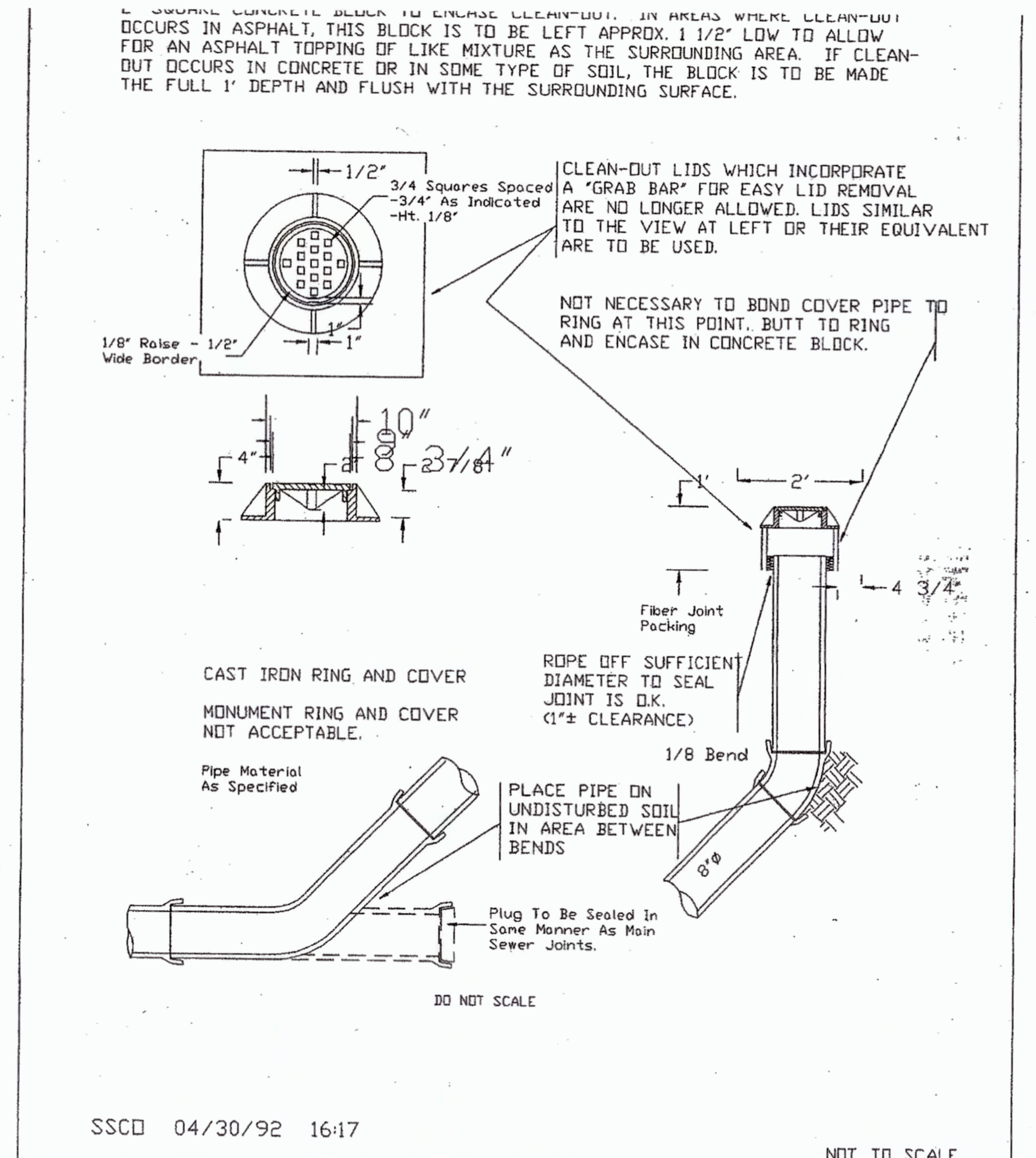
CEM EMIR GOKCORA, STATE OF WASHINGTON, 54676, REGISTERED PROFESSIONAL ENGINEER
06/23/2020

SCRAP-IT
PARBERRY ENVIRONMENT SOLUTIONS
FERNDALE, WASHINGTON

PROJECT: 0789.02.01
DESIGNED: C. GOKCORA
DRAWN: K. BOON
CHECKED: J. CLARY
SCALE 0 20' 40'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
GRADING AND STORM DRAINAGE PLAN

SHEET
C2.1



SSCO 04/30/92 16:17

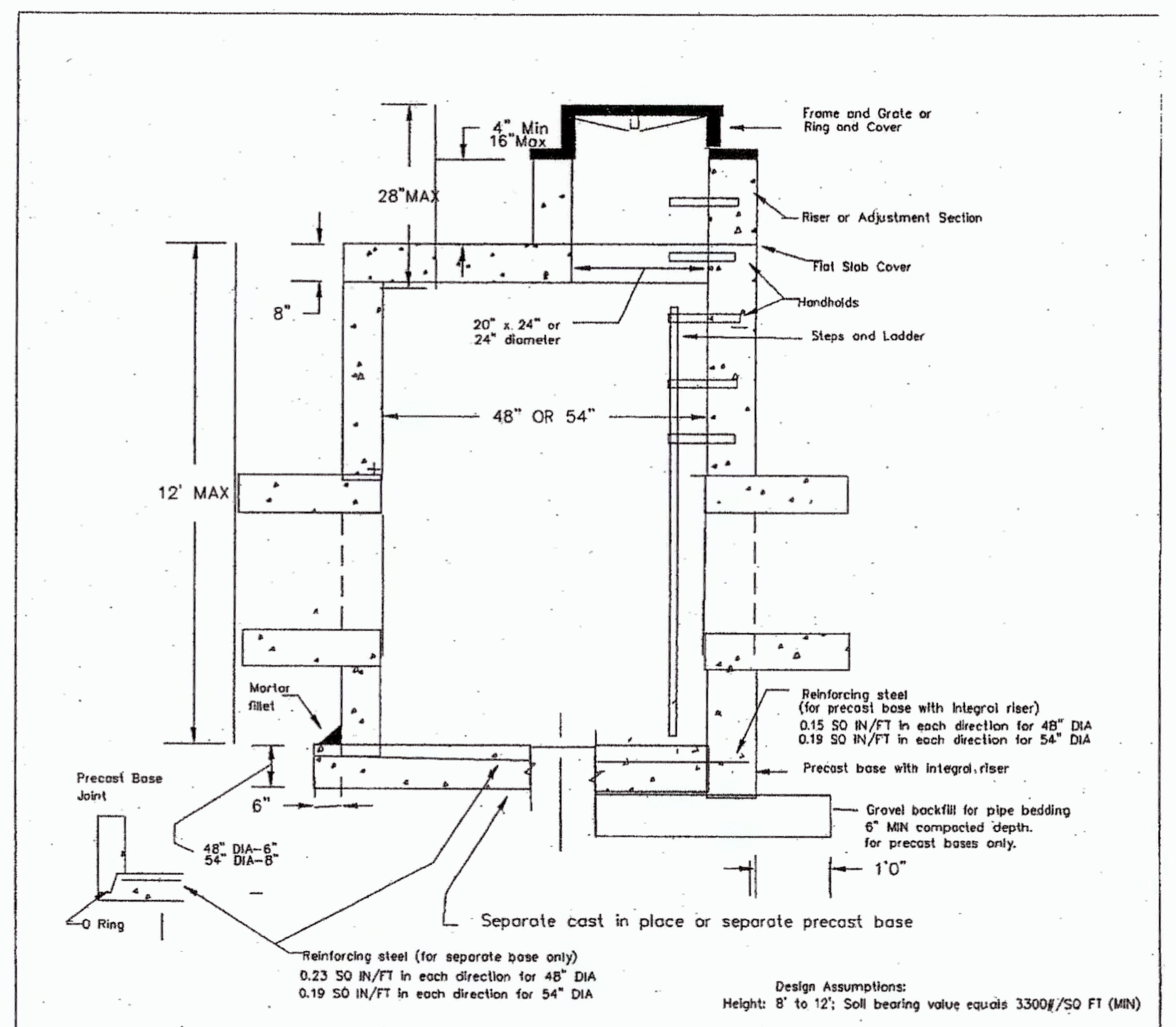
NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	8" CLEAN OUT	SS-5

JANUARY 1993

1 CLEANOUT

NTS



Notes

Catch basins to be constructed in accordance with ASTM C 478 (AASHTO M 199) C 890 unless otherwise shown on plans or noted in the standard specifications.

Handholds in riser or adjustment section shall have 3" minimum clearance. Steps in catch basin shall have 6" minimum clearance. No steps are required when height is 4' or less.

All reinforced cast in place concrete shall be Class A. Non-reinforced concrete in channel and shelf shall be Class C. All precast concrete shall obtain 4000 PSI @ 28 days.

Precast bases shall be furnished with cutout or knockouts. Knockouts shall have a wall thickness of 2" minimum. Knockout or cutout hole size is equal to pipe outer diameter plus catch basin wall thickness. Maximum hole size is 36" for 48" catch basin; 42" for 54" catch basin. Minimum distance between holes is 8".

Frame and grate or ring and cover shall be in accordance with standard specifications and meet the strength requirements of Federal Specification RR-F-621D. Mating surfaces shall be finished to assure a non-rocking fit.

All base reinforcing steel shall have a minimum yield strength of 60,000 PSI and be placed in the upper half of the base with 1" minimum clearance.

The bottom of the precast Catch Basin may be rounded.

Frame and grate may be installed with flange down or cast into riser.

NOT TO SCALE

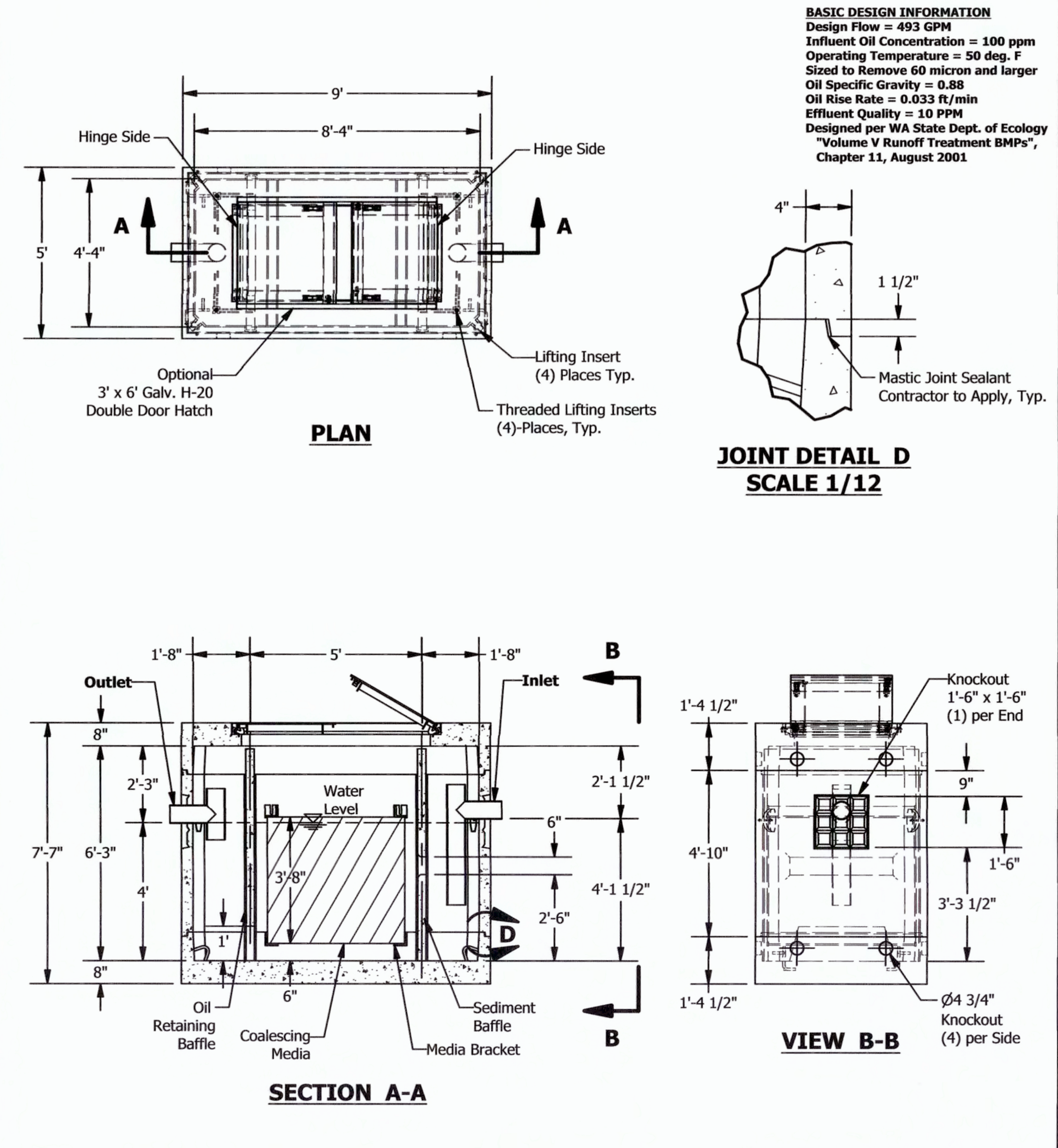
APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	TYPE 2 CATCH BASIN 48" & 54"	ST-2

2 TYPE 2 CATCH BASIN

NTS

BASIC DESIGN INFORMATION

Design Flow = 493 GPM
Influent Oil Concentration = 100 ppm
Operating Temperature = 50 deg. F
Sized to Remove 60 micron and larger
Oil Specific Gravity = 0.88
Oil Rise Rate = 0.033 ft/min
Effluent Quality = 10 PPM
Designed per WA State Dept. of Ecology "Volume V Runoff Treatment BMPs", Chapter 11, August 2001



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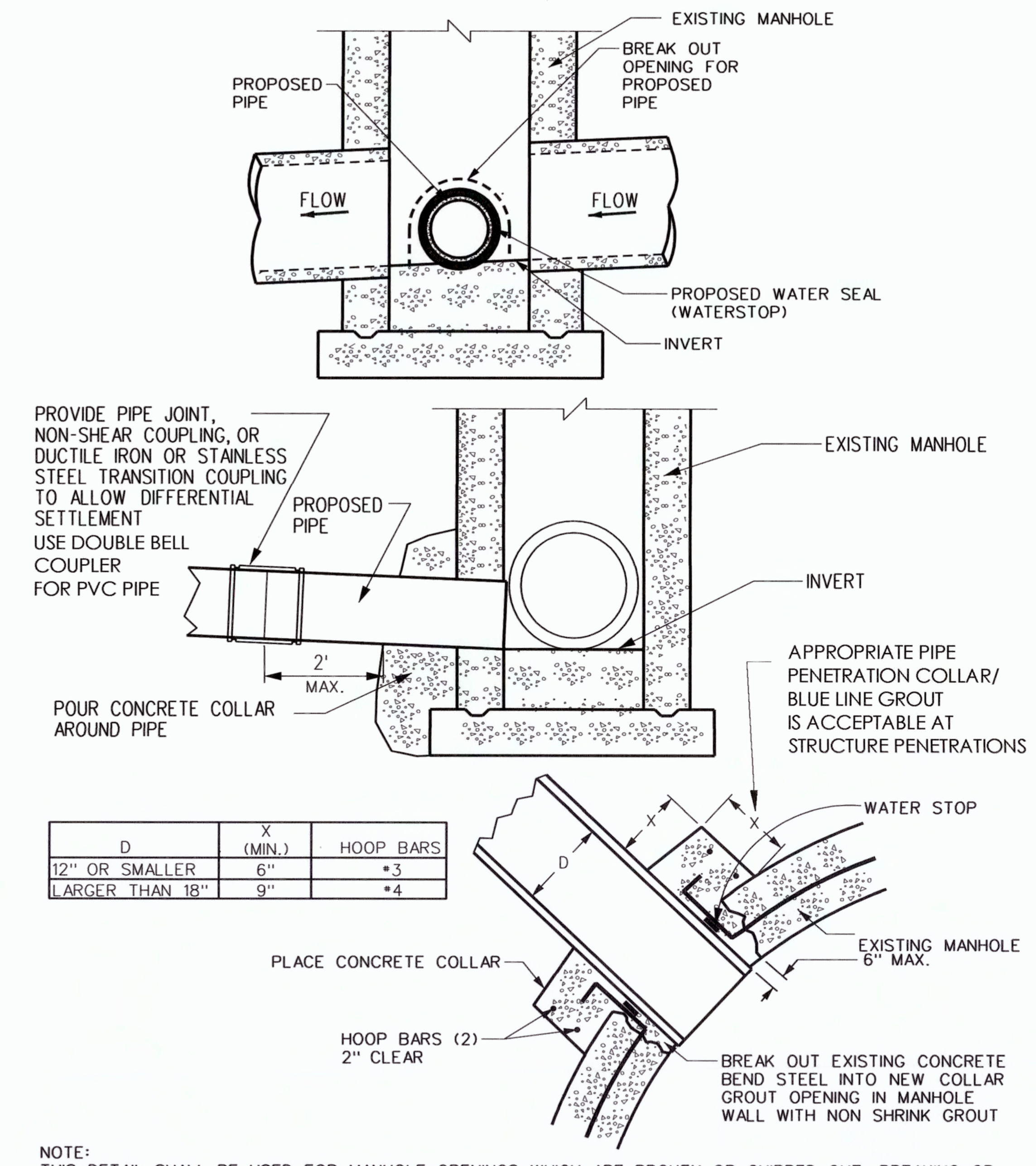
SPECIFICATIONS

1. Concrete: Fc=5,000 psi @ 28 days
2. Rebar: ASTM A-615 Grade 60
3. Design: ASTM C-857 "Minimum Structural Design Loading for Underground Precast Concrete Utility Structures"
4. Loads: AASHTO HS-20
5. Backfill with granular free draining material (sand or pea gravel) free of stones or cobbles greater than 4" dia.
6. All pipe to be supplied and installed by contractor.
7. Contractor to field install baffle.
8. Fill with clean water prior to start up.
9. Items shown are subject to change without notice.

4 4X8 COALESCING SEPERATOR 2

NTS



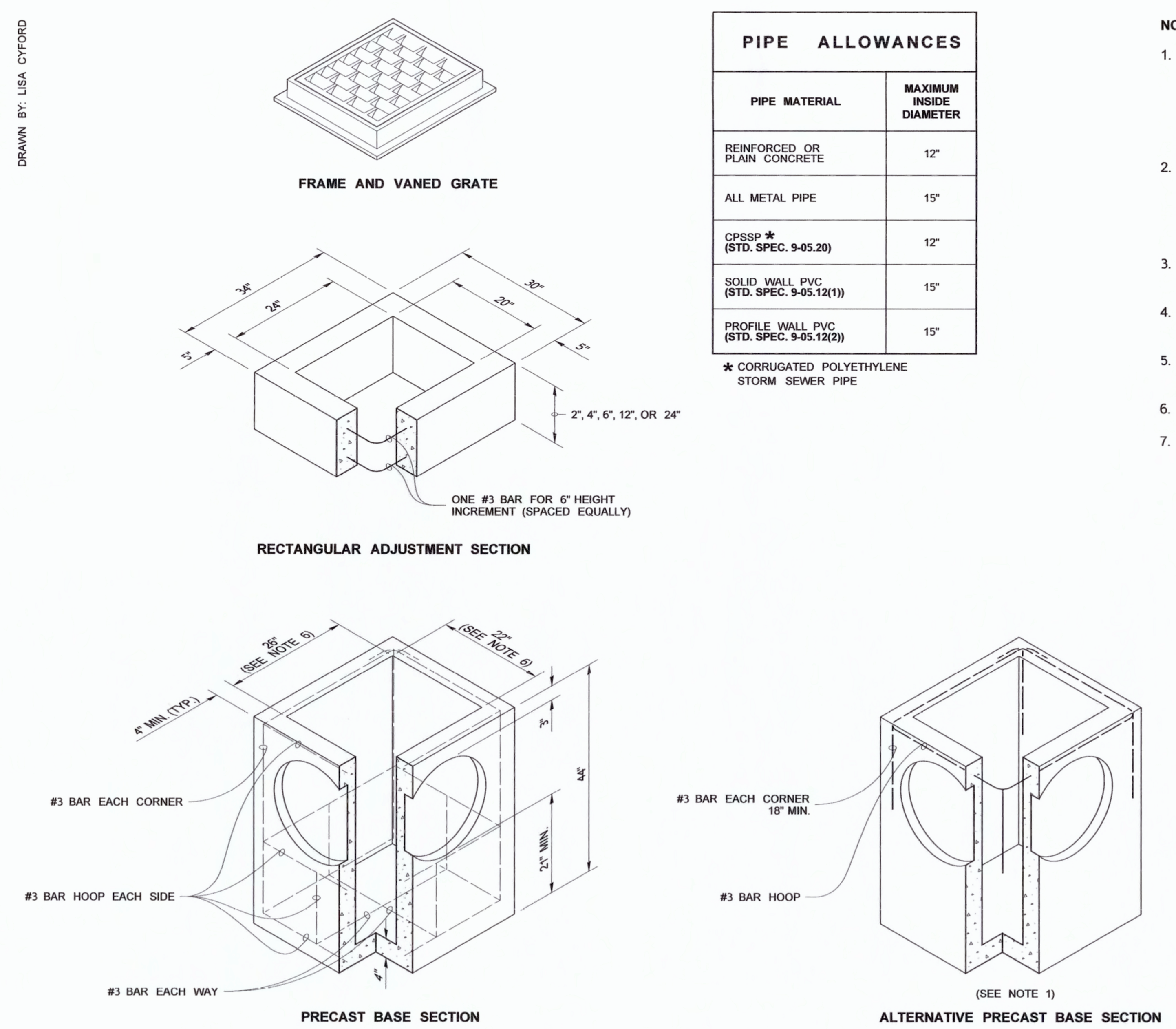
D	X (MIN.)	HOOP BARS
12" OR SMALLER	6"	#3
LARGER THAN 18"	9"	#4

NOTE:
THIS DETAIL SHALL BE USED FOR MANHOLE OPENINGS WHICH ARE BROKEN OR CHIPPED OUT. BREAKING OR CHIPPING NEW OPENING INTO AN EXISTING MANHOLE WILL BE ALLOWED ONLY WHEN SPECIFIED IN THE CONTRACT DOCUMENTS

6 EXISTING MANHOLE CONNECTION

NTS

DRAWN BY: LISA CYFORD



PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP ★ (STD. SPEC. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. 9-05.12(2))	15"

★ CORRUGATED POLYETHYLENE STORM SEWER PIPE

NOTES

1. As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the ALTERNATIVE PRECAST BASE SECTION. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20". Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum. Provide a 1.5" minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification 9-04.3.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5'.
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1:24 or steeper.
6. The opening shall be measured at the top of the Precast Base Section.
7. All pickup holes shall be grouted full after the basin has been placed.

CATCH BASIN TYPE 1

STANDARD PLAN B-5.20-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III 06-16-11

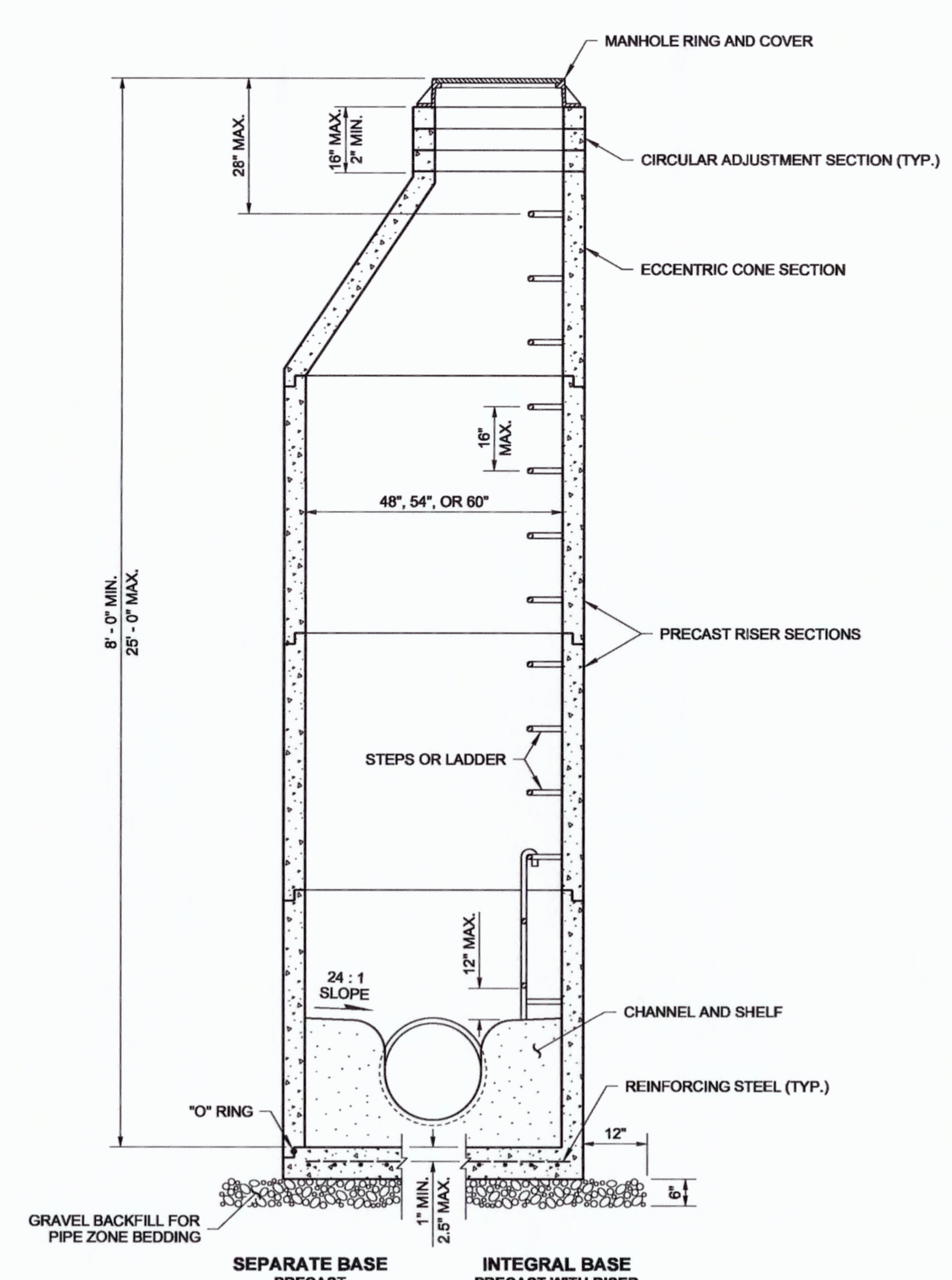
STATE DESIGN ENGINEER DATE

Washington State Department of Transportation

3 CATCH BASIN TYPE 1

NTS

DRAWN BY: LISA CYFORD



NOTES

1. Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum.
2. For pipe allowances, see Standard Plan B-10.20.

MANHOLE DIMENSION TABLE				
DIAM.	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"

MANHOLE TYPE 1

STANDARD PLAN B-15.20-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III 02-07-12

STATE DESIGN ENGINEER DATE

Washington State Department of Transportation

5 MANHOLE TYPE 1

NTS

APPROVED

JUL 2 0 2020

BY

CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

RECORD DRAWING

MAUL FOSTER ALONGI

1329 NORTH STATE STREET

BELLINGHAM, WA 98225

PHONE: 360-594-6270

www.maulfoster.com

CEM EMIR GOKCORA, STATE OF WASHINGTON, 54676, REGISTERED PROFESSIONAL ENGINEER

06/23/2020

SCRAP-IT

PARBERRY ENVIRONMENT SOLUTIONS, INC.

FERNDALE, WASHINGTON

ISSUE	DATE	DESCRIPTION
B	3.10.17	PERMIT SET - ADDRESS CITY REVIEW COMMENTS
C	6.2.2017	REVISED PERMIT SET-RESPND TO CITY CMNTS
D	8.25.17	REVISED PERMIT SET
E	9.7.17	REVISED PERMIT SET
F	10.5.17	REVISED PERMIT SET
G	11.17.17	REVISED PER CITY REVIEW COMMENTS
H	12.10.19	AS-BUILT DRAWINGS

PROJECT: 0789.02.07

DESIGNED: C. GOKCORA

DRAWN: L. CROSBY

CHECKED: J. CLARY

SCALE

DRAWING NOT TO SCALE

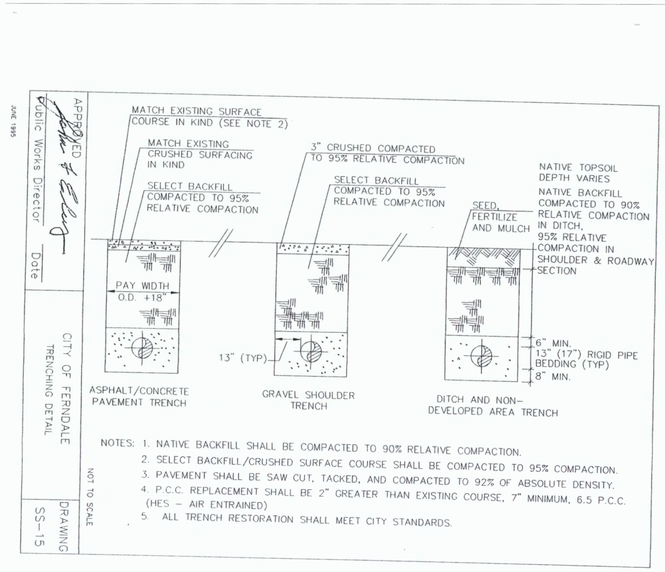
SHEET TITLE

DETAILS I

SHEET

C4.0

PLOTTED ON: 2020-03-04 | 3:54 PM PLOTTED BY: Cem Gokcora



1 TRENCHING DETAIL
NTS SOURCE: COF SS-15

THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS ARE TO BE USED IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION:

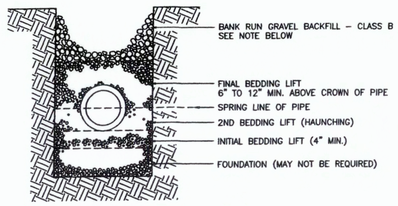
BEDDING FOR SEWERS, DRAINS AND CULVERTS FOR PVC PIPE–

BEDDING MATERIAL FOR PVC PIPE SHALL BE PEA GRAVEL CONFORMING THE FOLLOWING SPECIFICATIONS:

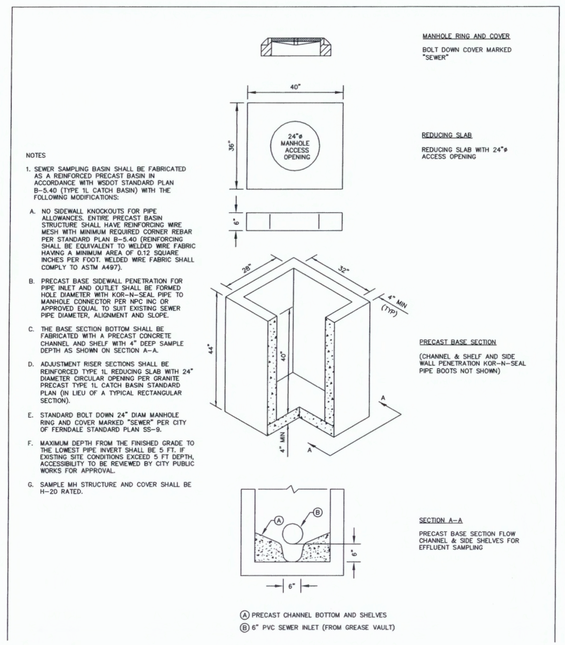
PEA GRAVEL – PEA GRAVEL BEDDING SHALL BE A CLEAN MIXTURE FREE FROM ORGANIC MATTER AND CONFORMING TO THE FOLLOWING GRADATION WHEN TESTED IN ACCORDANCE WITH ASTM D422:

U.S. STANDARD SIEVE SIZE	PERCENTAGE PASSING, BY WT.
3/4"	100
3/8"	95–100
#8	0–10
#200	0–3

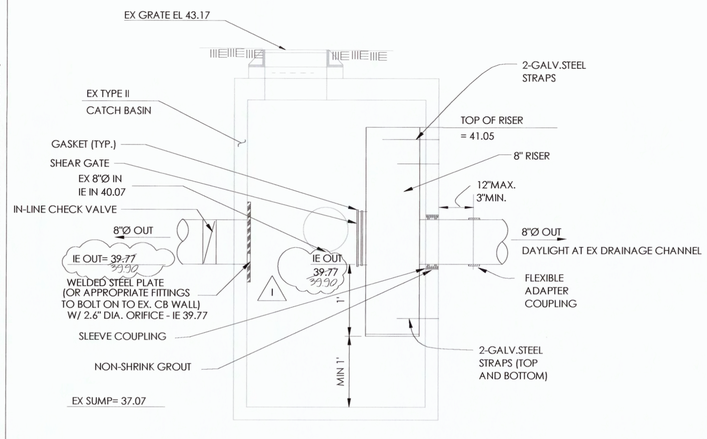
BACKFILL – WHENEVER A TRENCH IS EXCAVATED IN THE EXISTING OR PROPOSED ROADWAY, SIDEWALK OR OTHER AREAS WHERE SETTLEMENT WOULD BE DETRIMENTAL, THE ENTIRE TRENCH SHALL BE BACKFILLED WITH IMPORTED GRAVEL AND COMPACTED TO 95% OF MAXIMUM DENSITY.



2 BEDDING SPECIFICATIONS FOR PVC PIPE
NTS - COF ST-17



3 SEWER SAMPLING BASIN
NTS - COF SS-20



4 CB-3 FLOW CONTROL STRUCTURE
NTS -MFA

APPROVED
JUL 20 2020
BY CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

RECORD DRAWING

MAUL FOSTER ALONGI
1329 NORTH STATE STREET
BELLINGHAM, WA 98225
PHONE: 360-594-6270
www.maulfoster.com

06/23/2020

SCRAP-IT
PARBERRY ENVIRONMENT SOLUTIONS, INC.
FERNDALE, WASHINGTON

ISSUE	DATE	DESCRIPTION
I	12.10.19	AS-BUILT DRAWINGS
H	3.14.18	REVISED TO INCLUDE FLOW CONTROL DTL
G	11.17.17	REVISED PER CITY COMMENTS
F	10.5.17	REVISED PERMIT SET
E	9.7.17	REVISED PERMIT SET
D	8.25.17	REVISED PERMIT SET-RSPNS TO CITY CMNTS
C	6.6.2017	
B	3.10.17	PERMIT SET- ADDRESS CITY FLOW COMMENTS

PROJECT: 0789.02.07
DESIGNED: C. GOKCORA
DRAWN: L. CROSBY
CHECKED: J. CLARY
SCALE: DRAWING NOT TO SCALE
SHEET TITLE: DETAILS II
SHEET: C4.1

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