

GRAPHIC SCALE: 1 INCH = 20 FEET

INTERSECTS BIKE LANE, SAWCUT SHALL BE PERPENDICULAR TO PATH OF TRAVEL. REPLACE DISTURBED BIKE LANE STRIPING ON WATER ST IN KIND. EXISTING BIKE LANE

7. EXISTING LIGHT POLE TO BE RELOCATED. NEW LIGHT POLE TO BE INSTALLED FOR

8. EXISTING DRIVEWAY APPROACH ON WATER ST TO BE REMOVED AND REPLACED WITH SIDEWALK, ROLLED CURB, AND GUTTER PER CITY STANDARDS FOR FIRE TRUCK

CHANNELIZERS ON WATER ST TO BE REMOVED.

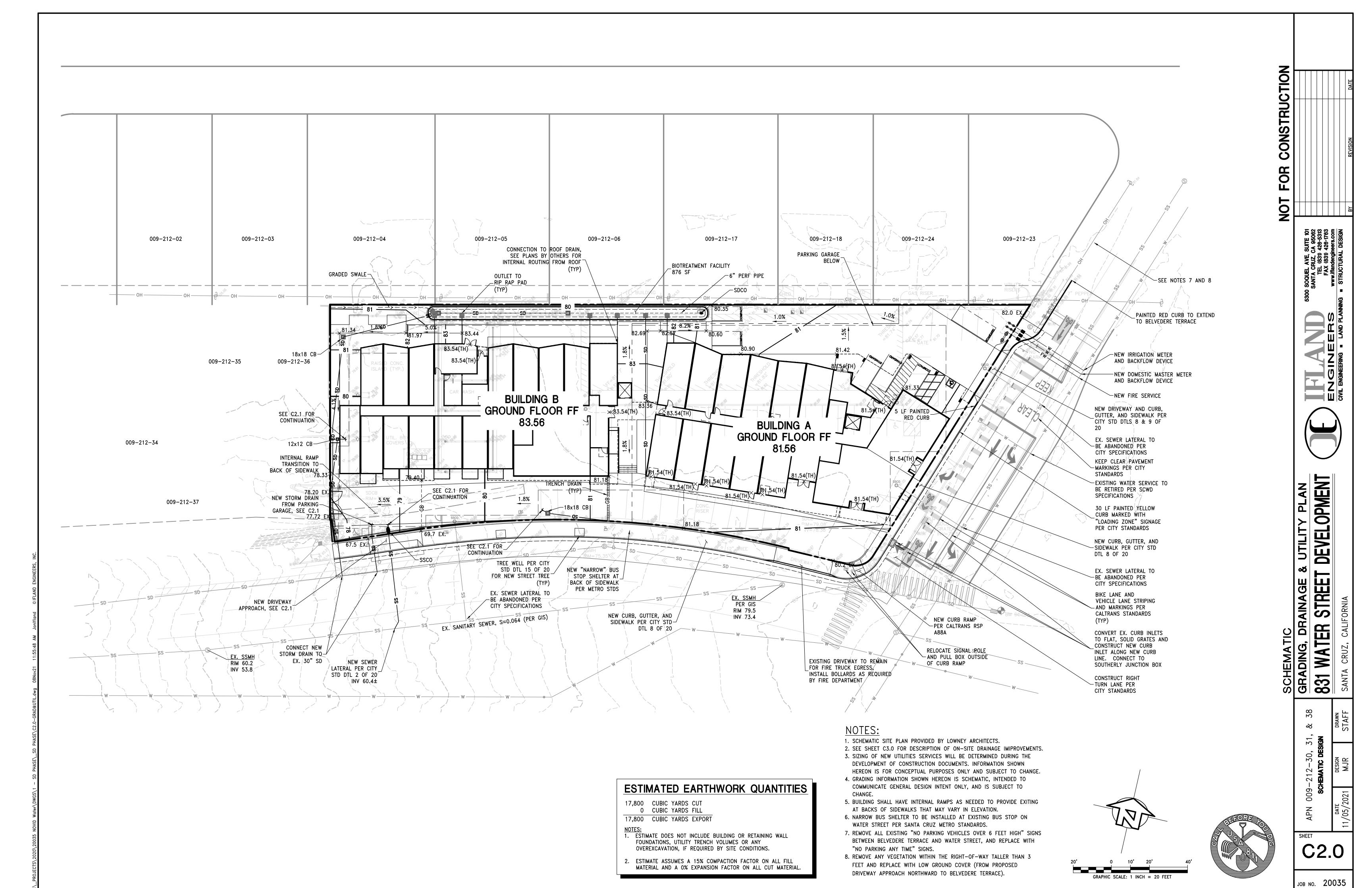
SIGNAL ON SOUTHBOUND BRANCIFORTE.

EGRESS.

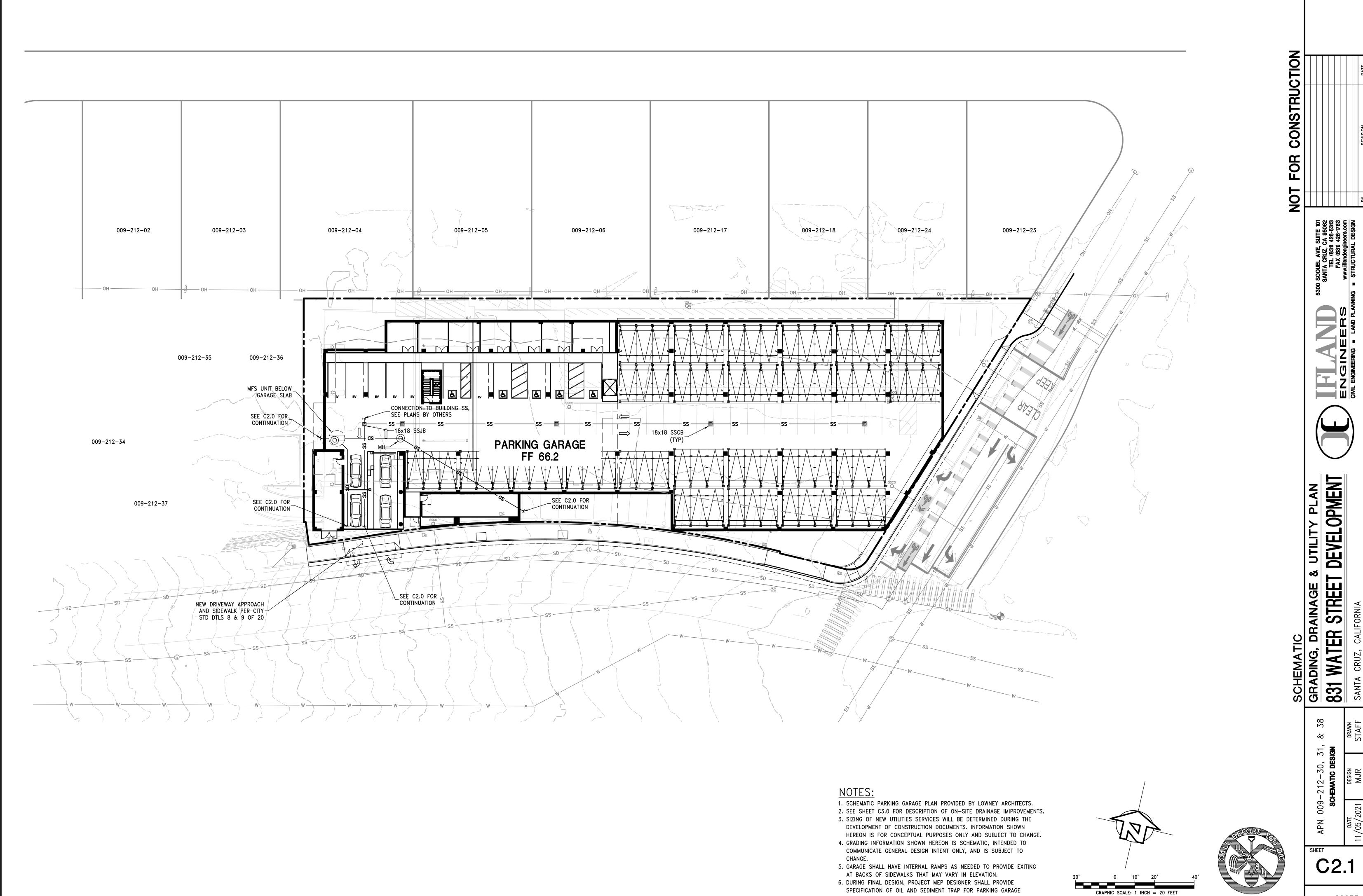
JOB NO. 20035

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COLLECTION SYSTEM ROUTED TO THE SANITARY SEWER.

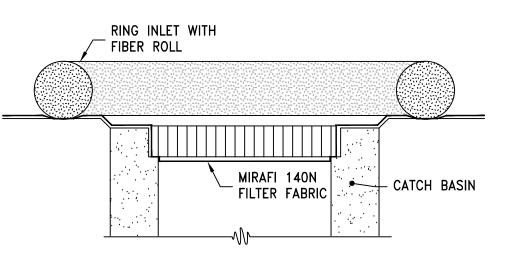
DEVELOPMENT

STREET

C2.1

JOB NO. 20035

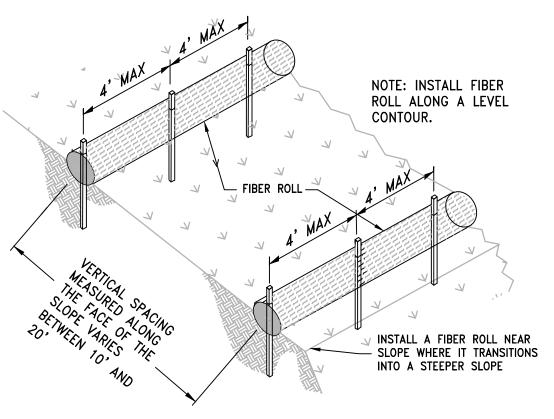
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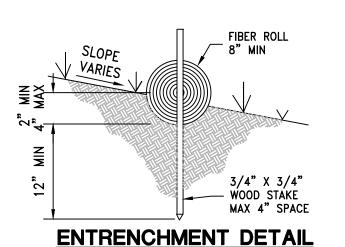
INSPECTION AND MAINTENANCE:

- 1. FILTER FABRIC BARRIERS SHALL BE INSPECTED WEEKLY AFTER EACH SIGNIFICANT STORM - 1 INCH RAINFALL (25.4 MM) IN 24 HOUR PERIOD. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- 2. SEDIMENT SHOULD BE REMOVED WHEN IT REACHES 3" MAXIMUM HEIGHT. AT THAT TIME INSPECT THE FILTER MATERIAL FOR TEARS AND CLEAN OR REPLACE AS
- 3. THE REMOVED SEDIMENT SHALL BE DISTRIBUTED EVENLY ACROSS AREAS ON-SITE, CONFORM WITH THE EXISTING GRADE AND BE REVEGETATED OR OTHERWISE STABILIZED PER EROSION CONTROL NOTES.

CATCH BASIN PROTECTION



TYPICAL INSTALLATION



FIBER ROLLS PART

SLOPE INSTALLATION TABLE	
SLOPE	MAX FIBER ROLL SPACING (FT)
4:1 (OR FLATTER)	20
4:1 TO 2:1	15

10

GREATER THAN 2:1

CONSTRUCTION SPECIFICATIONS

- 1. PREPARE SLOPE BEFORE THE FIBER ROLL PROCEDURE IS STARTED. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.
- 2. DIG SMALL TRENCHES ACROSS SLOPE ON CONTOUR, TO PLACE FIBER ROLLS IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE FIBER ROLL. WHEN THE SOIL IS LOOSE AND UNCOMPACTED. THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE FIBER ROLL 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE. IT IS CRITICAL THAT FIBER ROLLS ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.
- 3. START BUILDING TRENCHES AND INSTALL FIBER ROLLS FROM THE BOTTOM
- OF THE SLOPE AND WORK UP. 4. CONSTRUCT TRENCHES AT CONTOUR INTERVALS OF THREE TO EIGHT FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES.
- 5. LAY THE FIBER ROLL ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE FIBER ROLL. USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE FIBER ROLL AND INTO THE SOIL FOR THE WOODEN STAKES.
- 6. DRIVE THE STAKE THROUGH THE PREPARED HOLE INTO THE SOIL. LEAVE ONLY ONE OR TWO INCHES OF STAKE EXPOSED ABOVE FIBER ROLL. IF USING WILLOW STAKES REFER TO USDA SOIL CONSERVATION SERVICE TECHNICAL GUIDE, BIOENGINEERING, FOR GUIDELINES TO PREPARING LIVE WILLOW MATERIAL.
- 7. INSTALL STAKES AT LEAST EVERY FOUR FEET APART THROUGH FIBER ROLL. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSIVE OR VERY STEEP SLOPES.

INSTALLATION AND MAINTENANCE

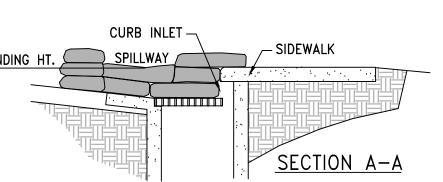
- 8. INSPECT THE FIBER ROLL AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE FIBER ROLLS ARE IN CONTACT WITH THE SOIL.
- 9. REPAIR ANY RILLS OR GULLIES PROMPTLY. 10. RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL THE SLOPE IS STABILIZED.

FIBER ROLLS PART 2

EROSION CONTROL NOTES

- 1. THE EROSION CONTROL PLANS IN THIS SET SHALL BE REVIEWED AND IMPLEMENTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK.
- 2. NO LAND CLEARING, GRADING OR EXCAVATION SHALL BE DONE BETWEEN OCTOBER 1ST AND APRIL 30TH. ANY DEVIATION FROM THIS CONDITION REQUIRES REVIEW AND APPROVAL OF A SEPARATE WINTER EROSION CONTROL PLAN BY ENVIRONMENTAL PLANNING PRIOR TO BEGINNING CONSTRUCTION. THE DEVELOPER SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING SITE EROSION CONTROL AT ALL TIMES.
- 3. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE PERMITTEE TO ENSURE THAT EROSION DOES NOT OCCUR FROM ANY ACTIVITY DURING OR AFTER PROJECT CONSTRUCTION. ADDITIONAL MEASURES, BEYOND THOSE SPECIFIED, MAY BE REQUIRED BY THE PLANNING DIRECTOR AS DEEMED NECESSARY TO CONTROL ACCELERATED EROSION.
- PRIOR TO ANY FORECAST RAIN AND ANYTIME BETWEEN OCTOBER 1ST AND APRIL 30TH, AT THE END OF EACH WORKDAY, AT THE END OF EACH WORKWEEK, THE DEVELOPER SHALL IMPLEMENT ALL TEMPORARY MEASURES NECESSARY TO PREVENT EROSION AND SILTATION, UNTIL THE PROJECT HAS BEEN FINALIZED. THESE MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, DIRECT SEEDING OF THE AFFECTED AREAS, STRAW MULCHING, AND/OR INSTALLATION OF STRAW BALES DAMS/SILT FENCES.
- DURING CONSTRUCTION, NO TURBID WATER SHALL BE PERMITTED TO LEAVE THE SITE. USE OF SILT AND GREASE TRAPS, FILTER BERMS, OR SILT FENCES SHALL BE USED TO PREVENT SUCH
- 6. ALL AREAS ON- AND OFF-SITE EXPOSED DURING CONSTRUCTION ACTIVITIES, IF NOT PERMANENTLY LANDSCAPED PER PLAN, SHALL BE PROTECTED BY MULCHING AND/OR SEEDING WITH ANNUAL WINTER BARLEY.
- 7. ALL EXCAVATED MATERIAL SHALL BE REMOVED TO AN APPROVED DISPOSAL SITE OR DISPOSED OF ON-SITE IN A MANNER THAT WILL NOT CAUSE EROSION.
- 8. ANY MATERIAL STOCKPILED, FOR LONGER THAN 14 DAYS, DURING CONSTRUCTION SHALL BE COVERED WITH PLASTIC.
- 9. UPON COMPLETION OF CONSTRUCTION, ALL REMAINING EXPOSED SOILS SHALL BE PERMANENTLY REVEGETATED PER LANDSCAPING PLAN. THE PROTECTION REQUIRED BY SECTION 16.19.140 SHALL BE INSTALLED PRIOR TO CALLING FOR FINAL APPROVAL OF THE PROJECT AND AT ALL TIMES BETWEEN OCTOBER 1ST AND APRIL 30TH. SUCH PROTECTION SHALL BE MAINTAINED FOR AT LEAST ONE WINTER UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 10. EXPOSED SOIL ON SLOPES GREATER THAN 20% SHALL BE SEEDED, COVERED WITH 2 INCHES OF STRAW, AND AN EROSION CONTROL BLANKET. THE EROSION CONTROL BLANKET SHALL BE STAKED IN PLACE.
- 11. IT IS THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ADDITIONAL MEASURES, NECESSARY TO CONTROL SITE EROSION AND PREVENT SEDIMENT TRANSPORT OFF-SITE ARE IMPLEMENTED.
- 12. ALL SPILLS AND/OR LEAKS SHALL BE IMMEDIATELY CLEANED UP AND MITIGATED PER THE SPILL RESPONSE REQUIREMENTS SPECIFIED IN THE SWPPP DOCUMENT AND THE CONTRACTORS O&M
- 13. CONTRACTOR SHALL OFF-HAUL DIRT IMMEDIATELY AFTER EXCAVATION, STOCKPILING OF DIRT NOT ALLOWED.

- BACK OF SIDEWALK BACK OF CURB-**GRAVEL BAGS TIGHTLY** STACKED CURB INLET



CURB INLET PROTECTION PART 1

CONSTRUCTION SPECIFICATIONS:

- PLACE THE BARRIERS ON GENTLY SLOPING STREETS WHERE WATER CAN POND. THE BARRIERS MUST ALLOW FOR OVERFLOW FROM A SEVERE STORM EVENT. SLOPE RUNOFF SHALL BE ALLOWED TO FLOW OVER BLOCKS AND GRAVEL AND NOT BE BYPASSED OVER THE CURB. A SPILLWAY SHALL BE CONSTRUCTED WITH THE SANDBAG
- STRUCTURES TO ALLOW OVERFLOW. 3. THE SANDBAG SHOULD BE OF WOVEN-TYPE GEOTEXTILE FABRIC.
- 4. THE SANDBAGS SHALL BE FILLED WITH 3/4 INCH (19 MM) DRAIN ROCK OR 1/4 INCH (6
- MM) PEA GRAVEL. 5. THE SANDBAGS SHALL BE PLACED IN A CURVED ROW FROM THE TOP OF CURB AT LEAST 3 FEET (0.9 M) INTO THE STREET. THE ROW SHOULD BE CURVED AT THE ENDS, POINTING UPHILL.
- 6. SEVERAL LAYERS OF BAGS SHOULD BE OVERLAPPED AND PACKED TIGHTLY.
- 7. LEAVE A ONE-SANDBAG GAP IN THE TOP ROW TO ACT AS A SPILLWAY.

FOR BLOCK AND GRAVEL TYPE BARRIERS:

- 8. PLACE TWO CONCRETE BLOCKS ON THEIR SIDES PERPENDICULAR TO THE CURB AT EITHER END OF THE INLET OPENING. THESE WILL SERVE AS SPACER BLOCKS.
- 9. PLACE CONCRETE BLOCKS ON THEIR SIDES ACROSS THE FRONT OF THE INLET AND ABUTTING THE SPACER BLOCKS. THE OPENINGS IN THE BLOCKS SHOULD FACE OUTWARD,
- 10. CUT A 2 BY 4 INCH (51 BY 102 MM) STUD THE LENGTH OF THE CURB INLET PLUS THE WIDTH OF THE TWO SPACER BLOCKS. PLACE THE STUD THROUGH THE OUTER HOLE OF EACH SPACER BLOCK TO HELP KEEP THE FRONT BLOCKS IN PLACE
- 11. PLACE WIRE MESH OVER THE OUTSIDE VERTICAL FACE (OPEN ENDS) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE BLOCKS.
- 12. USE CHICKEN WIRE, HARDWARE CLOTH WITH 1/2 INCH (13 MM) OPENINGS, OR FILTER FABRIC. REFER TO APPENDIX — GEOTEXTILES/GEOSYNTHETICS. 13. PLACE $\frac{3}{4}$ - $\frac{1}{3}$ INCH (19-34 MM) GRAVEL AGAINST THE WIRE TO THE TOP OF THE
- BARRIER.

INSPECTION AND MAINTENANCE:

NTS

- 14. INSPECT AND CLEAN BARRIER DURING AND AFTER EACH SIGNIFICANT STORM AND REMOVE SEDIMENT FROM BEHIND SANDBAG STRUCTURE AFTER EVERY STORM.
- 15. ANY SEDIMENT AND GRAVEL SHALL BE IMMEDIATELY REMOVED FROM THE TRAVELED WAY
- 16. THE REMOVED SEDIMENT SHALL BE PLACED WHERE IT CANNOT ENTER A STORM DRAIN, STREAM, OR BE TRANSPORTED OFF SITE.
- 17. IF THE GRAVEL BECOMES CLOGGED WITH SEDIMENT, IT MUST BE CAREFULLY REMOVED FROM THE INLET AND EITHER CLEARED OR REPLACED.

CURB INLET PROTECTION

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DEVELOPMENT DET. NOTES STREET

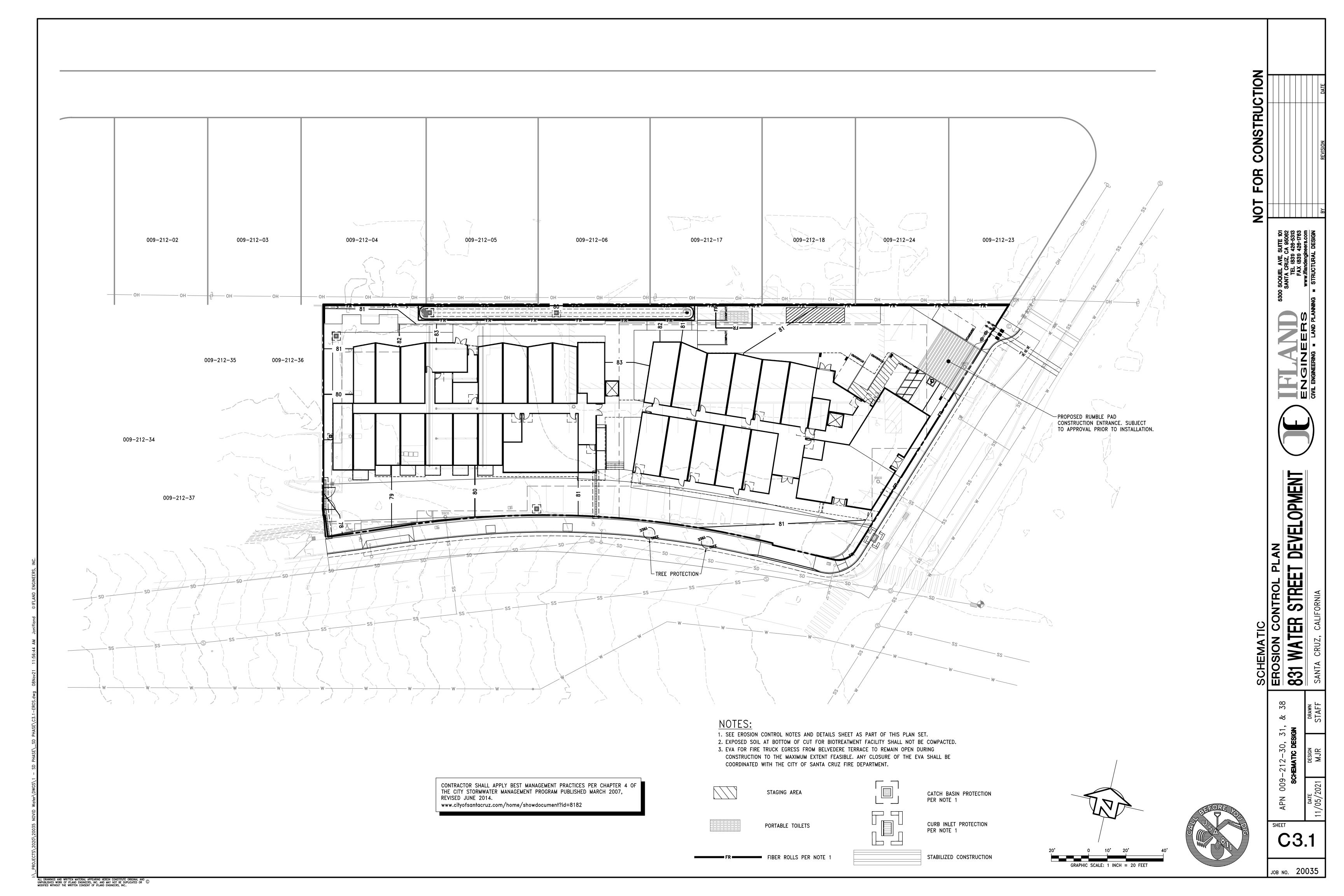
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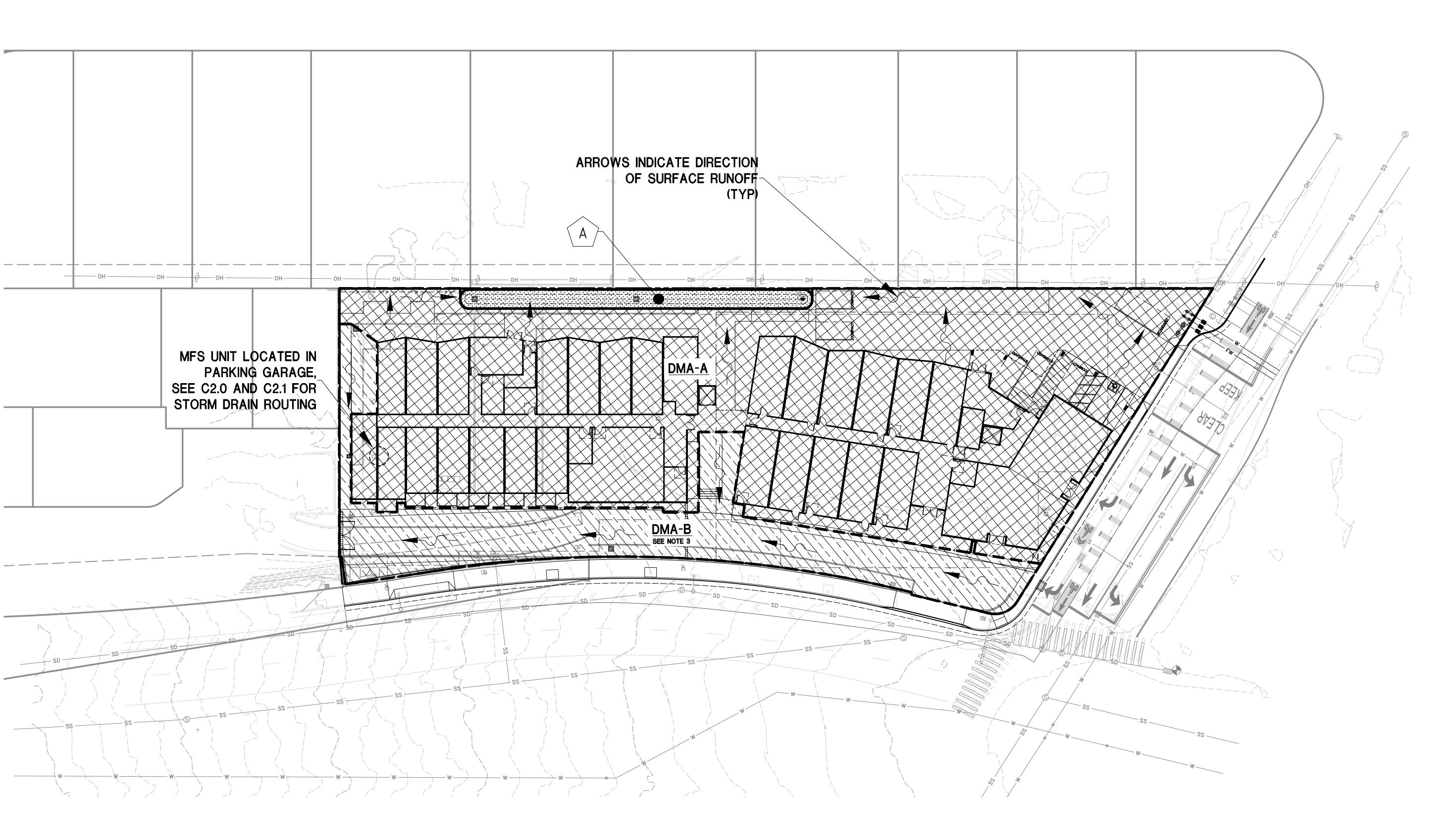
SCHEMA EROSION 831 WA \blacktriangleleft

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NOTES:

1. THE PROJECT HAS MORE THAN 22,500 SF OF NEW OR REPLACED IMPERVIOUS SURFACES AND THEREFORE QUALIFIES AS A TIER 4 PROJECT PER CHAPTER 6B OF THE CITY'S STORMWATER BMP MANUAL.

2. RUNOFF REDUCTION IS PROVIDED BY LIMITING SURFACE PARKING AND IMPERVIOUS SURFACES TO WITHIN THE BOUNDARIES OF

EXISTING IMPERVIOUS COVERAGE.

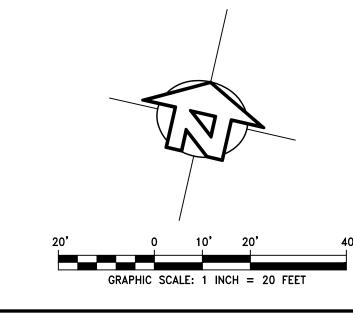
3. TREATMENT FOR ALL IMPERVIOUS SURFACES IN DMA-B WILL BE PROVIDED VIA A MECHANICAL FILTRATION UNIT LOCATED IN THE PARKING GARAGE PRIOR TO DISCHARGE TO THE PUBLIC STORM DRAIN IN WATER STREET.

4. THE SITE IS LOCATED WITHIN AN URBAN SUSTAINABILITY AREA (USA) AND THEREFORE QUALIFIES FOR CERTAIN REDUCTIONS AND EXEMPTIONS FROM ON-SITE RETENTION AND DETENTION REQUIREMENTS.

5. ON-SITE RETENTION REQUIREMENTS ARE LIMITED TO THE LEVEL OF EXISTING RETENTION PROVIDED AT THE EXISTING SITE, WHICH IS ZERO. THEREFORE, NO ON-SITE RETENTION UPON REDEVELOPMENT OF THE SITE IS REQUIRED PER "DEVELOPMENT REQUIREMENT SPECIAL CIRCUMSTANCES", SECTION I., OF THE CITY'S STORMWATER BMP MANUAL.

6. AS ALL RUNOFF FROM THE SITE WILL BE HARD-PIPED TO THE CONCRETE-LINED CHANNEL THAT IS BRANCIFORTE CREEK, WHICH DISCHARGES TO THE SAN LORENZO RIVER, THE PROJECT QUALIFIES FOR AN EXEMPTION FROM ON-SITE DETENTION PER "DEVELOPMENT REQUIREMENT SPECIAL CIRCUMSTANCES", SECTION II., OF THE CITY'S STORMWATER BMP MANUAL.

7. PARKING GARAGE INLETS WILL BE CONNECTED TO THE SANITARY SEWER SYSTEM.





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DEVELOPMENT

TREET

SCHEMAT STORMW/ 831 WAT

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DRAINAGE

AREA (SF)

30,613

IMPERVOUS

SURFACE (SF)

IMPERVIOUS

SURFACE

AC PVMT

TREATMENT CONTROL MEASURE SUMMARY TABLE

TREATMENT

AREA (SF)

1,171

TREATMENT

AREA (SF)

1,169

REQUIRED

FLOW CAPACITY

PROVIDED

FLOW CAPACITY

PROPOSED

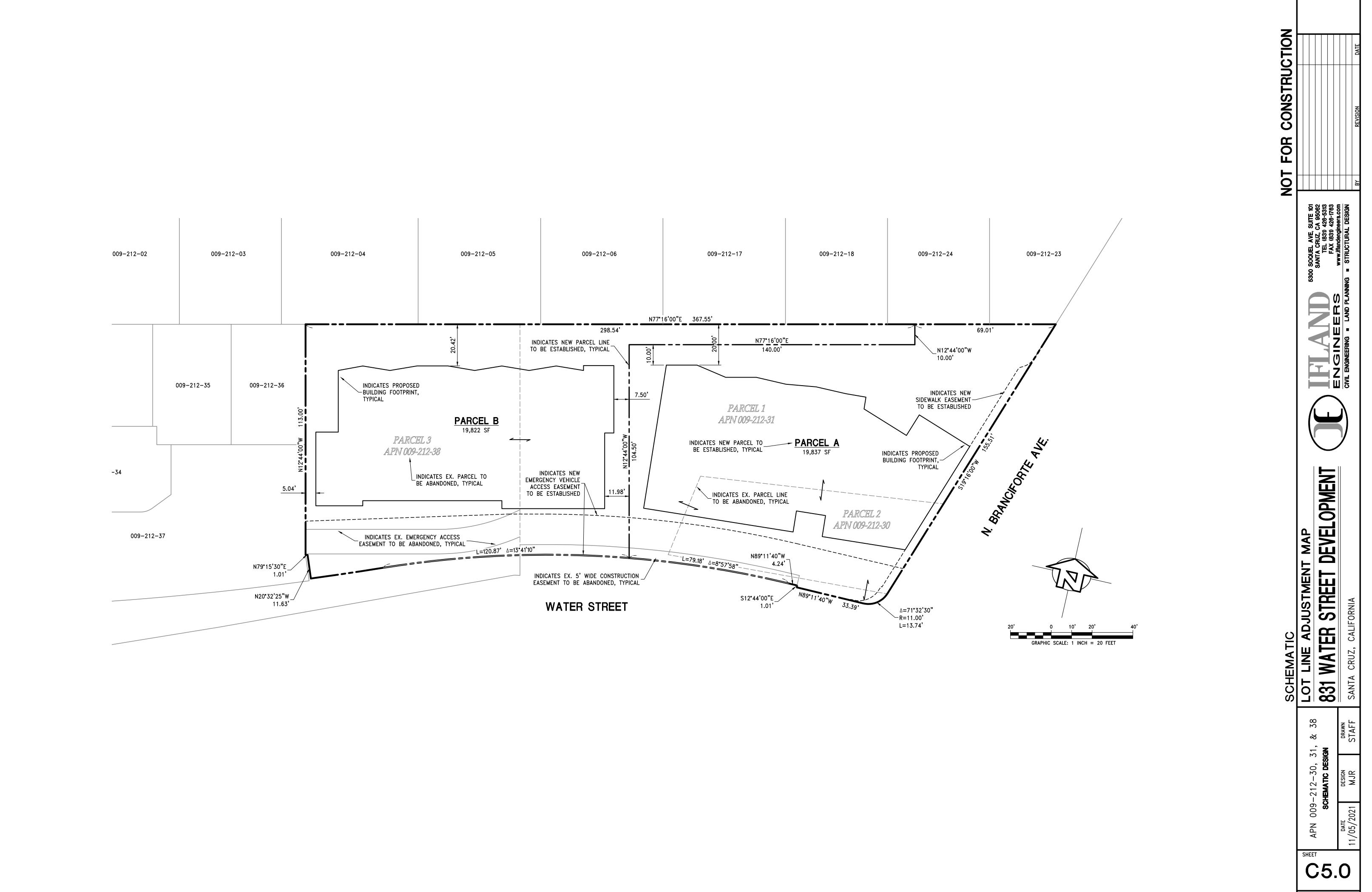
TREATMENT

CONTROL

SCM-A

BIOTREATMENT

MECH. FILTRATION UNIT



ЈОВ NO. 20035

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