

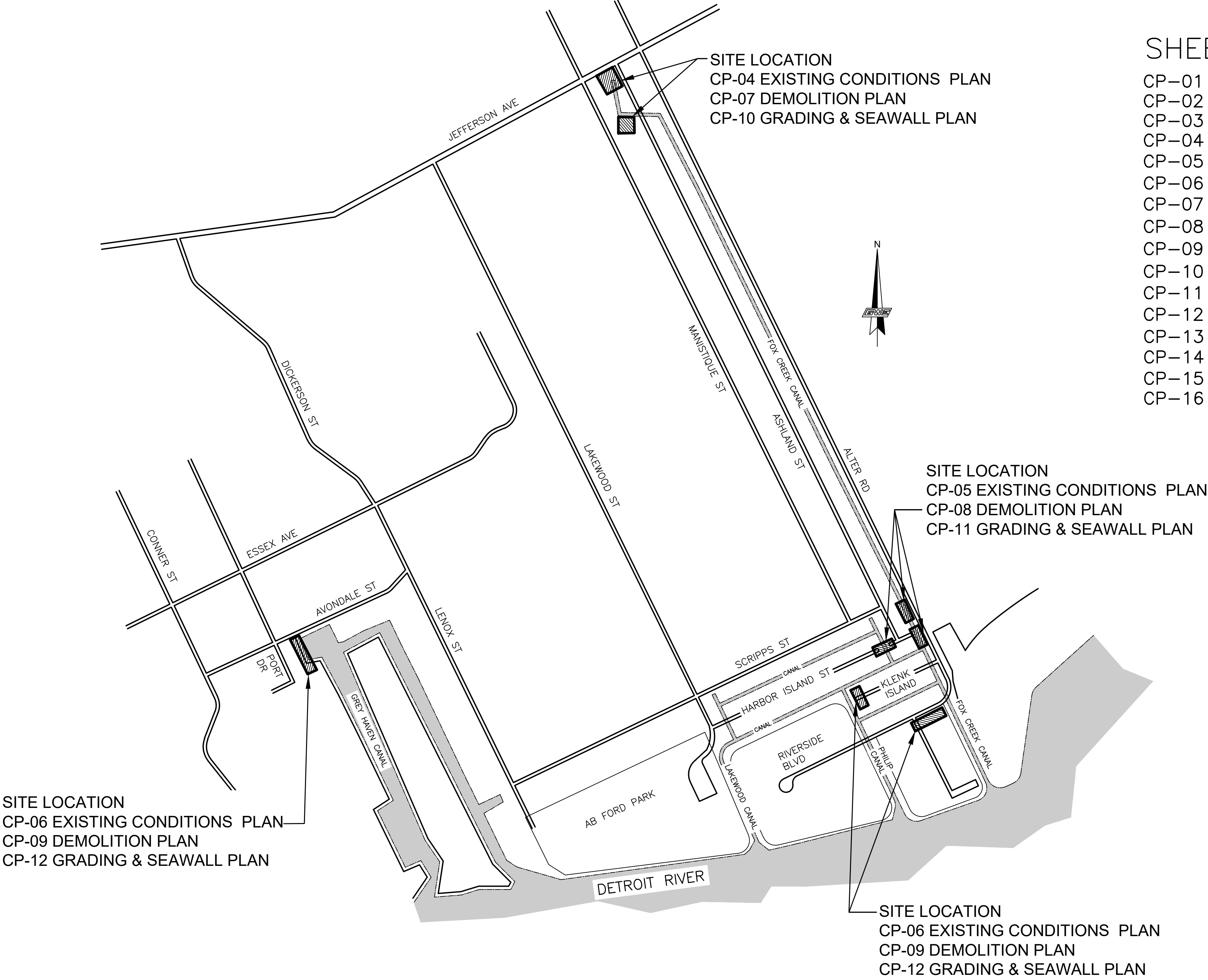
DETROIT LOWER EAST SIDE FLOOD MITIGATION PROJECT

CITY OF DETROIT WAYNE COUNTY, MICHIGAN

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LOCATION MAP
NOT TO SCALE

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DATE:	ISSUE:
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COVER SHEET	
DETROIT LOWER EAST SIDE FLOOD MITIGATION PROJECT	
CITY OF DETROIT WAYNE COUNTY MICHIGAN	
Date:	06.13.23
Scale:	NONE
Sheet:	CP-01
Project:	20370.00D

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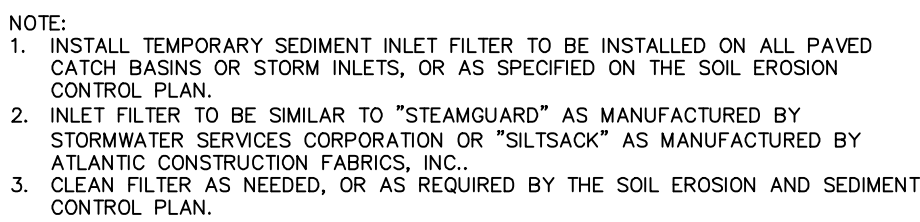
1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STANDARDS, SPECIFICATIONS AND GENERAL CONDITIONS OF THE CITY OF DETROIT, AND ANY OTHER AGENCIES HAVING JURISDICTION.
2. UTILITY INFORMATION SHOWN ON THESE PLANS WAS OBTAINED FROM UTILITY OWNERS AND THEREFORE MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL VERIFY AND OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT HAVE AN IMPACT ON THIS PROJECT, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY PUBLIC OR PRIVATE UTILITIES WHETHER THEY ARE SHOWN OR NOT ON THE PLANS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AT PROPOSED CONNECTIONS AND/OR CROSSINGS, AND TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES TO THESE PLANS.
4. 72 HOURS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG AT (800) 482-7171 FOR THE LOCATION OF UNDERGROUND GAS AND CABLE FACILITIES, AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.
5. ALL PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR. ALL PERMIT FEES, BONDS, AND INSURANCE REQUIRED BY THE ISSUING AGENCIES SHALL BE PROVIDED BY THE CONTRACTOR, AND MUST BE KEPT CURRENT. THE CONTRACTOR IS RESPONSIBLE FOR ALL OTHER FEES, INSPECTION COSTS, ETC., AND SHALL ADHERE TO ALL REQUIREMENTS SET FORTH IN SAID PERMITS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL WORK AREAS TO ENSURE THE SAFETY OF ALL OCCUPANTS, VISITORS, PEDESTRIANS, WORKERS, ETC. THE CONTRACTOR SHALL REPAIR AND MAINTAIN ALL CONSTRUCTION FENCING AS NECESSARY.
7. THE CONTRACTOR SHALL PROVIDE FOR CONTROLLED ACCESS TO THE SITE FOR USE BY THE VARIOUS WORK FORCES, EMERGENCY VEHICLES, OCCUPANTS, VISITORS, ETC. THROUGHOUT CONSTRUCTION. THIS ACCESS MUST PROVIDE FOR THE REMOVAL OF MUD FROM VEHICLES TIRES. ROADWAYS AND DRIVEWAYS SHALL BE MAINTAINED OPEN FOR EMERGENCY VEHICLES AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE RESIDENTS AND BUSINESSES WHOSE DRIVEWAYS ARE AFFECTED BY THEIR SCHEDULE 24 HOURS IN ADVANCE. CONTRACTOR SHALL SCHEDULE CONSTRUCTION AT NON-PEAK USE HOURS AND SHALL MINIMIZE DRIVEWAY CLOSURE BY EXPEDITING CONSTRUCTION.
8. THE CONTRACTOR SHALL PROVIDE NECESSARY SIGNS, BARRICADES, AND LIGHTS TO PROTECT THE TRAFFIC AND THE WORK AS DIRECTED BY THE PLANS OR BY THE AGENCY WITH JURISDICTION. ALL TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
9. THE CONTRACTOR IS REQUIRED TO CONFINED CONSTRUCTION ACTIVITIES TO THE LIMITS OF THE SITE AS SHOWN ON THE CONSTRUCTION PLANS. ANY DAMAGE OR DISRUPTION TO ADJACENT SITES IS THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT IMMEDIATELY. NO OFF-SITE WORK SHALL BE PERFORMED OUTSIDE OF PUBLIC RIGHTS-OF-WAY OR DEDICATED EASEMENTS WITHOUT PRIOR WRITTEN APPROVAL OF THE PROPERTY OWNER.
10. GREAT CARE SHALL BE TAKEN TO AVOID DAMAGE TO VEGETATION OUTSIDE THE CLEARING AND GRUBBING LIMITS. NO DRIVING OR PARKING OF VEHICLES AND/OR STORAGE OF MATERIALS AND SUPPLIES SHALL BE PERMITTED OUTSIDE THE LIMITS OF CONSTRUCTION.
11. ALL ELEVATIONS ON THESE PLANS ARE ON THE NAVD 88 DATUM.
12. THE PROTECTION OF EXISTING TREES, AS REQUIRED, SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY.
13. ALL CONSTRUCTION SHALL HAVE INSPECTION PROVIDED BY THE CITY OF DETROIT. THE CONTRACTOR SHALL CONTACT THE CITY OF DETROIT 48 HOURS BEFORE THE START OF CONSTRUCTION.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL, AND SHALL PROVIDE ALL NECESSARY MATERIAL AND EQUIPMENT TO KEEP DUST IN CHECK AT ALL TIMES. THE CONTRACTOR SHALL RESPOND IMMEDIATELY TO ANY AND ALL COMPLAINTS. DUST CONTROL SHALL BE INCIDENTAL TO THE PROJECT.
15. DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER SPRINKLER HEADS, PIPING, LIGHTING AND BURIED ELECTRICAL CABLE, MAILBOXES, FENCES, SIGNS, ETC., THAT MAY OR MAY NOT BE INDICATED ON THESE PLANS. THE CONTRACTOR SHALL REPLACE AND/OR RESTORE ALL COMPONENTS OF SUCH SYSTEMS. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, MINIMUM STANDARD REQUIREMENTS, OR AS SPECIFIED HEREIN; WHICHEVER IS MORE STRINGENT.
16. ROADWAY, DRIVEWAY, AND PARKING AREA FINAL RESTORATION SHALL BE PERFORMED WITH SURFACE AND BASE MATERIALS MATCHING EITHER THE EXISTING MATERIALS IN QUALITY AND THICKNESS, PER MINIMUM REQUIREMENTS, OR PER THE FOLLOWING, WHICHEVER IS MORE STRINGENT:
 - A. ASPHALT ROADWAYS - 4" ASPHALT MDOT 1100T-20 AA
 - B. ASPHALT DRIVEWAYS - 3" ASPHALT MDOT 1100T-36 A
 - C. GRAVEL ROAD AND DRIVEWAYS - 8" MDOT 22A GRAVEL
 - D. CONCRETE ROADS - 8" 3500 PSI CONCRETE
 - E. CONCRETE DRIVEWAYS - 6" 3500 PSI CONCRETE
17. ALL LOT MARKERS AND MONUMENT POINTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
18. FINAL CLEANUP AND RESTORATION SHALL CONSIST OF FINE GRADING OF CONSTRUCTION AREAS, REMOVAL OF CONSTRUCTION SIGNS, ETC. TOPSOIL SHALL BE SPREAD OVER ALL DISTURBED AREAS, FOLLOWED BY SEED, FERTILIZER AND EROSION MAT OR STRAW MULCH, OR AS FURTHER REQUIRED BY THE LANDSCAPING PLANS AND SPECIFICATIONS. ALL REQUIRED RESTORATION ITEMS NOT SPECIFICALLY IDENTIFIED AS A PAY ITEM SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
19. THE UTILITY POLES SHOWN ON THESE DRAWINGS ARE INTENDED TO SHOW ONLY THE LOCATION OF EXISTING POLES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE QUANTITY AND DIRECTION OF OVERHEAD LINES. THE COST FOR SUPPORTING AND RELOCATING POLES SHALL BE INCIDENTAL TO THE PROJECT.
20. THE MEANS AND METHODS OF CONTROLLING GROUNDWATER AND DEWATERING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL COST ASSOCIATED WITH DEWATERING SHALL BE INCIDENTAL TO THE CONTRACT.

1. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. WITH THE EXCEPTION OF AN AMOUNT OF EXCAVATED MATERIALS SUFFICIENT FOR BACKFILLING AND CONSTRUCTION OF FILLS AS CALLED FOR ON THE PLANS AND AS INDICATED BELOW, ALL BROKEN CONCRETE, STONE AND EXCESS EXCAVATED MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN THEIR OWN DISPOSAL GROUND, AND WILL RECEIVE NO ADDITIONAL COMPENSATION FOR DISPOSING OF ANY OF THE EXCESS MATERIALS. MATERIALS ACCEPTABLE TO THE ENGINEER MAY BE DISPOSED OF ON-SITE AT THE CONTRACTORS EXPENSE IN A MANNER APPROVED IN ADVANCE BY THE ENGINEER.
3. THE EDGE OF EXISTING PAVEMENT SHALL BE CLEANED OF EARTH AND OTHER FOREIGN MATERIAL BEFORE ADJACENT POURS ARE PLACED.
4. ALL BULKHEAD AND/OR SEWER PIPE REMOVAL NECESSITATED BY THE REMOVAL OF DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE STRUCTURE REMOVAL.
5. STREET SIGNS IN THE WAY OF CONSTRUCTION WILL BE REMOVED AND RESET IMMEDIATELY IN A TEMPORARY LOCATION, AS APPROVED BY ENGINEER.
6. THE CONTRACTOR SHALL PROTECT ALL EXISTING SIGNS AND POSTS SCHEDULED TO REMAIN, AS DIRECTED BY THE ENGINEER.
7. ALL UNDERGROUND UTILITIES NOT INDICATED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PRIVATE PROPERTY (INCLUDING BUILDINGS AND FOUNDATIONS) THROUGHOUT CONSTRUCTION AND SHALL MAINTAIN SAFE PEDESTRIAN ACCESS AT ALL TIMES.
9. THE REMOVAL OF PAVEMENT, CURBS AND WALKS SHALL INCLUDE ALL REQUIRED SAWCUTTING. CURB REMOVAL IS INCIDENTAL TO PAVEMENT REMOVAL.



1. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. REFER TO ARCHITECTURAL PLANS TO COORDINATE ALL:
 - A. WATER SUPPLY, METERING, SPRINKLER AND FDC PIPING, DESIGN AND COORDINATION
 - B. BUILDING SEWER, BUILDING DRAIN DESIGN AND CONNECTIONS TO CLEAN OUTS AND ROOF CONNECTORS
 - C. GAS, ELECTRIC AND COMMUNICATION SERVICES, AND LIGHTING DETAILS
 - D. ALL BUILDING ACCESS WALKS AND ENTRY DETAILS, INCLUDING SUPPORTED SLABS
 - E. ALL WORK TO CONSTRUCT THE BUILDING AND ALL ITEMS CONNECTED TO IT
3. ALL TRENCHES WITHIN A ONE ON ONE SLOPE OF PAVEMENT SHALL BE BACKFILLED WITH SAND (MOOT CLASS II MINIMUM) AND MECHANICALLY COMPACTED IN NOT MORE THAN 9" LAYER TO 95% MAXIMUM DRY DENSITY PER MODIFIED PROCTER COMPACTION TEST ASTM D-1557. COMPACTED SAND BACKFILL SHALL ALSO BE PROVIDED FOR ALL SEWER TRENCHES LOCATED UNDER, OR WITHIN, THREE FEET OF PAVEMENT.
4. THE COST OF ALL TREE, STUMP, FOUNDATION AND/OR STRUCTURE REMOVAL AND DISPOSAL NOT INCLUDED IN THE PROPOSAL SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE PRICE BID FOR WATERMAIN, SANITARY SEWER, STORM SEWER, AND PAVING WORK.
5. A MINIMUM VERTICAL CLEARANCE OF 18 INCHES IS REQUIRED AT UTILITY CROSSINGS (MEASURED FROM THE OUTSIDE OF PIPE TO THE OUTSIDE OF PIPE). POSITIVE PROVISIONS SHALL BE MADE TO ENSURE THAT ALL UTILITY TRENCHES ARE FREE DRAINING DURING ALL PHASES OF CONSTRUCTION.
6. THE REQUIRED BEDDING FOR SEWER PIPE SHALL CONSIST OF A MAXIMUM 3/4 INCH DIAMETER CRUSHED STONE.
7. THE MINIMUM SLOPE FOR A BUILDING LEAD IS 1%. LEADS SHALL ONLY BE CONNECTED TO THE MAIN LINE WITH WYES.
8. ALL STORM SEWER PIPE SHALL BE CONSTRUCTED WITH RUBBER GASKET (PREMIUM) JOINTS.
9. THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF ALL UTILITY LINES AND STRUCTURES, AS OUTLINED ON THE DEMOLITION PLAN, WITH THE INSTALLATION OF UTILITY IMPROVEMENTS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING GRADE MODIFICATIONS INDICATED ON THE FINISHED LANDSCAPE PLAN, AND COORDINATE THE ACTUAL FINISH GRADE OF FIRE HYDRANTS, GATE VALVE CASTINGS, MANHOLES, YARD DRAINS, CLEAN OUTS AND OTHER UTILITY STRUCTURES. ENSURE THAT ALL FINISH GRADING IS PERFORMED IN A MANNER THAT ACCOMPLISHES THE PROJECT DESIGN OBJECTIVES AND PROVIDES FOR POSITIVE DRAINAGE OF ALL AREAS. ANY SUBSTANTIAL GRADE CHANGES WHICH MAY CAUSE FUNCTIONAL PROBLEMS SHALL BE REPORTED PROMPTLY TO THE ENGINEER WHO SHALL EVALUATE THE CONDITIONS AND PROVIDED CORRECTIONAL RECOMMENDATIONS TO THE OWNER FOR FINAL DETERMINATION.
11. CONTRACTOR SHALL BE REQUIRED TO COORDINATE THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, SPRINKLERS ETC., IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO PLACING THE PAVEMENT MATERIALS. ENSURE THAT ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED AND THAT THE TRENCHES ARE PROPERLY BACKFILLED AND COMPACTED.
12. THE CONTRACTOR SHALL REMOVE UTILITIES, WHICH HAVE BEEN ABANDONED IN PLACE, AS REQUIRED TO COMPLETE INSTALLATION OF NEW UTILITIES. WHENEVER ABANDONED UTILITIES ARE CUT, CONTRACTOR SHALL COMPLETELY CAP BOTH ENDS TO PREVENT THE INFILTRATION OF SOILS.
13. NO CONNECTION MAY BE MADE TO ANY EXISTING WATER MAIN UNTIL THE NEW MAIN HAS PASSED ALL PRESSURE AND BACTERIOLOGICAL TESTING.
14. ROADWAY, DRIVEWAY AND PARKING AREA CROSSINGS SHALL BE TEMPORARILY CONDITIONED IMMEDIATELY AFTER CROSSING BY PLACING 8" OF MOOT 22A GRAVEL OR SLAG AGGREGATE, AND SHALL BE MAINTAINED IN GOOD, DUST FREE CONDITION UNTIL PAVEMENT RESTORATION IS TEMPORARY.

1. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. THE PAVING CONTRACTOR SHALL BE REQUIRED TO COORDINATE THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, SPRINKLERS, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO PLACING THE PAVEMENT MATERIALS. ENSURE THAT ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED AND THAT THE TRENCHES ARE PROPERLY BACKFILLED AND COMPACTED.
3. BUTT JOINTS SHALL BE PLACED AT ALL LOCATIONS WHERE AN EXISTING ASPHALT PAVEMENT SURFACE IS BEING DISTURBED BY REMOVALS AND/OR THE INSTALLATION OF NEW ASPHALT PAVEMENT.
4. ALL PAVEMENT AREAS SHOULD BE CLEARED AND GRUBBED BY REMOVING SURFACE VEGETATION, TOPSOIL, DEBRIS AND OTHER DELETERIOUS MATERIALS.
5. THE PLACEMENT OF THE FINAL ASPHALT LIFT SHALL BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED, OR AS PROVIDED BY THE OWNER. A BOND COAT OF SS-1H EMULSION SHALL BE APPLIED (AT A RATE OF 0.10 GALLONS/S.Y.D.) BETWEEN THE LEVELING AND WEARING COURSE WHEN 48 HOURS HAVE ELAPSED BETWEEN PLACEMENTS.
6. THE FINAL SUB-GRADE SHALL BE THOROUGHLY PROOF-ROLLED UNDER THE OBSERVATION OF THE SOILS ENGINEER.
7. PROPOSED AGGREGATE BASE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND THE PAVEMENT EDGE/BACK OF CURB.
8. ALL TRENCHES WITHIN A ONE ON ONE SLOPE OF PAVEMENT SHALL BE BACKFILLED WITH SAND (MOOT CLASS II MINIMUM) AND MECHANICALLY COMPACTED IN NOT MORE THAN 9" LAYER TO 95% MAXIMUM DRY DENSITY PER MODIFIED PROCTER COMPACTION TEST ASTM D-1557.
9. NO FROZEN MATERIAL SHALL BE PERMITTED AS BACKFILL UNDER ANY ROADWAY, DRIVEWAY OR PARKING AREA.
10. PRIOR TO THE START OF ANY FILLING, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ALL OTHER UNACCEPTABLE SOIL FROM THE FILL AREAS, AND PROPERLY BACKFILL WITH ACCEPTABLE SOIL.
11. BARRIER FREE SIGNAGE SHALL BE PLACED IN FRONT OF EVERY DESIGNATED BARRIER FREE STALL. THE CONTRACTOR SHALL COORDINATE STANDARD AND VAN ACCESSIBILITY SIGNAGE AS INDICATED ON THE PLANS.
12. ALL BARRIER FREE RAMPS TO BE A.D.A. COMPLIANT.
13. GENERAL GRADING REQUIREMENTS ARE AS FOLLOWS:
 - A. FINISH GRADE AT EXISTING BUILDING SHALL MATCH BRICK LEDGES, DOORWAYS OR BASEMENT WINDOWS
 - B. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING ($\pm 2\%$)
 - C. SIDEWALK CROSS SLOPE $\pm 2\%$ UNLESS OTHERWISE NOTED (EXCLUDING RAMPS)
 - D. PAVEMENT SLOPES (1.0% MINIMUM, 4.0% MAXIMUM) UNIFORMLY BETWEEN FINISH GRADE ON PLANS
 - E. LAWN AREAS $\pm 1\%$ MINIMUM TO 25% (BERMS) MAXIMUM
14. ALL PROPOSED GRADES ARE AT THE GUTTER UNLESS OTHERWISE NOTED. SEE DETAILS FOR FACE OF CURB, TOP OF CURB AND ASPHALT ADJUSTMENTS.
15. REFER TO ARCHITECTURAL PLANS TO COORDINATE ALL:
 - A. WATER SUPPLY, METERING, SPRINKLER AND FDC PIPING, DESIGN AND COORDINATION
 - B. BUILDING SEWER, BUILDING DRAIN DESIGN AND CONNECTIONS TO CLEAN OUTS AND ROOF CONNECTORS
 - C. GAS, ELECTRIC AND COMMUNICATION SERVICES AND LIGHTING DETAILS AND COORDINATION.
 - D. ALL BUILDING ACCESS WALKS AND ENTRY DETAILS, INCLUDING SCHEDULED SLABS
 - E. ALL WORK TO CONSTRUCT THE BUILDING AND ALL ITEMS CONNECTED TO IT
16. PRIOR TO THE PLACEMENT OF ANY BASE ASPHALT OR LEVELING COURSE, THE CURBS SHALL BE PARTIALLY BACKFILLED AND THE SUB-GRADE SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF THE SOILS ENGINEER.
17. ALL SIDEWALKS AND PATHWAYS IN ANY PUBLIC R.O.W. SHALL BE INSPECTED BY THE AGENCY WITH JURISDICTION.



NOT TO SCALE

1. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. ALL EROSION AND SEDIMENTATION CONTROL, WORK SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT, WAYNE COUNTY, AND IN WATERWAYS. (WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, PONDS AND WETLANDS) ON ANY OFF-SITE AREAS OR IN WATERWAYS. (WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, PONDS AND WETLANDS) ON ANY OFF-SITE AREAS OR IN WATERWAYS.
3. THE CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS DIRECTED ON THESE PLANS AND WHENEVER OTHERWISE REQUIRED BY THE WORK, THE CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER CHANGES HAVE BEEN ACCOMPLISHED.
4. SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENTATION CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF DIRT OUT OF THE WORK AREA.
5. THE CONTRACTOR SHALL PRESERVE NATURAL VEGETATION AS MUCH AS POSSIBLE.
6. PROTECT ALL EXISTING TREES, INCLUDING THEIR BRANCHES AND ROOTS, FROM DAMAGE DUE TO THIS WORK UNLESS SPECIFICALLY IDENTIFIED FOR REMOVAL.
7. VEGETATION STABILIZATION OF ALL DISTURBED AREAS SHALL BE ESTABLISHED WITHIN 15 DAYS OF COMPLETION OF FINAL GRADING.
8. THE CONTRACTOR SHALL SWEEP THE EXISTING STREETS SURROUNDING THE PROJECT SITE ONCE A WEEK, OR AS DIRECTED BY THE ENGINEER OR INSPECTOR. STREET SCRAPING SHALL BE PERFORMED IN CONJUNCTION WITH THIS SWEEPING ON AN AS NEEDED BASIS.
9. THE SEDIMENT CONTROL FENCING INDICATED ON THIS PLAN IS NOT INTENDED TO SHOW THE EXACT LOCATION OF THE FENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE REQUIRED TO CONTROL SEDIMENT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL APPLICABLE NPDES REGULATIONS, INCLUDING: INSPECTION, RESTORATION, AND RECORD KEEPING REQUIREMENTS.
11. THE CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL SOIL EROSION CONTROLS AS INDICATED BY THESE PLANS.
12. CONSTRUCTION ACTIVITIES (INCLUDING INSTALLATION OF PIPE AND ASSOCIATED VALVES, STRUCTURES, BACK FILLING, SURFACE RESTORATION, AND REMOVAL OF EXCESS EXCAVATED MATERIAL) SHALL BE ACCOMPLISHED IN ONE CONTINUOUS OPERATION.
13. PAYMENT AND/OR VEGETATION SHALL NOT BE STRIPPED FROM AN AREA UNLESS CONSTRUCTION ACTIVITIES ARE TO COMMENCE IN THAT AREA WITHIN THE NEXT THREE DAYS.
14. IF FOR ANY PERIOD PERMANENT STABILIZATION CAN NOT BE PROVIDED WITHIN 15 DAYS OF THE COMPLETION OF PIPE LAYING OPERATIONS, TEMPORARY STABILIZATION SHALL BE PROVIDED AT ALL DISTURBED AREAS. TEMPORARY STABILIZATION SHALL FURTHERMORE BE PROVIDED DURING THE NON-GROWING SEASON (OCTOBER 1 THROUGH APRIL 20) FOR ALL AREAS TO BE SEED.
15. TEMPORARY STABILIZATION SHALL CONSIST OF EITHER SMALL GRAIN STRAW OR GRASS HAY SPREAD AT THE RATE OF 1.5 TO 2.0 TONS PER ACRE, OR MULCH BLANKETS, WHICH SHALL BE ANCHORED IN PLACE TO PREVENT DISPLACEMENT FROM WIND AND RAIN. TEMPORARY STABILIZATION SHALL BE REPAIRED AS OFTEN AS NECESSARY, AS DETERMINED BY THE AGENCY WITH JURISDICTION.
16. ALL DETERIORATING SHALL BE ACCOMPLISHED IN A MANNER THAT WILL NOT CONTRIBUTE TO DEPOSITION OF SEDIMENT IN ROAD DITCHES OR OPEN WATER.
17. THIS PROJECT SHALL BE CONSTRUCTED IN COMPLIANCE WITH PART 91 OF ACT 451 OF 1994, AS AMENDED.
18. SEDIMENT CONTROL FENCING SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND SEVERAL TIMES DURING PROLONGED STORM EVENTS. IF THE FENCE IS SAGGING, OR SOIL HAS REACHED ONE HALF OF THE HEIGHT OF THE FABRIC, THE SOIL BEHIND THE FABRIC SHALL BE REMOVED AND DISPOSED OF IN A STABLE AREA OF THE SITE. IF WATER IS SEEPING UNDER THE FENCE, OR THE FABRIC IS DECOMPOSED OR OTHERWISE INEFFECTIVE, THE FENCE SHALL BE REMOVED AND PROPERLY REINSTALLED AS INDICATED ON THESE PLANS.
19. MUD MAT ENTRANCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH STORM RAINFALL. THE SURROUNDING ROADS SHALL ALSO BE INSPECTED AT THIS TIME FOR EVIDENCE THAT MUD IS BEING TRACKED OFF OF THE SITE. MAINTENANCE SHALL INCLUDE THE INSTALLATION OF ADDITIONAL LAYERS OF STONE WHEN THE ORIGINAL STONE BECOMES COVERED WITH MUD. ALL SEDIMENT DROPPED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY BY SWEEPING AND SCRAPING (AS MAY BE REQUIRED BY THE ENGINEER).
20. SEDIMENT INLET FILTERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND SEVERAL TIMES DURING PROLONGED STORM EVENTS. THE FILTERS SHALL BE CLEANED PERIODICALLY THROUGHOUT CONSTRUCTION TO AVOID CLOGGING. FILTERS THAT CANNOT BE MAINTAINED BY CLEANING SHALL BE COMPLETELY REPLACED.

1. INSTALL MUD MATS, SILT FENCE AND INLET FILTERS AT ALL EXISTING LOCATIONS AS SHOWN AND AS REQUIRED TO ACHIEVE ON-SITE CONTAINMENT.
2. CLEAR AND ROUGH GRADE THE PROJECT "WORK AREA" AS NEEDED.
3. INSTALL PROPOSED SEAWALL IMPROVEMENTS PER PLANS AND DETAILS FINAL GRADE WORK AREA AS SHOWN ON PLANS.
4. CLEAR ALL ACCUMULATED SILT AND REMOVE ALL EROSION CONTROL DEVICES.
5. INSTALL LANDSCAPING MATERIALS AS INDICATED PER PLANS & RE-SEED, FERTILIZE AND MULCH ALL DISTURBED AREAS.

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF LOCAL ORDINANCES.
2. ALL AREAS NOT BUILT, LANDSCAPED, OR PAVED UPON SHALL RECEIVE SEASONED DOUBLE SHREDDED HARDWOOD BARK MULCH.
3. DURING INSTALLATION AND CONSTRUCTION, THE CONTRACTOR MUST PROVIDE A WATERING METHOD FOR ALL PLANT MATERIAL UNTIL IT HAS BECOME ESTABLISHED.
4. TWO (2) YEAR GUARANTEE PERIOD BEGINS AT FINAL ACCEPTANCE OF LANDSCAPE MATERIAL BY THE CITY'S REPRESENTATIVE, A LANDSCAPE ARCHITECT, AND PRIOR TO THE AUTHORIZATION OF THE OCCUPANCY PERMIT.
5. A MINIMUM OF ONE CULTIVATION IN EACH MONTH OF JUNE, JULY, AND AUGUST SHALL BE PERFORMED WITHIN THE 2-YEAR WARRANTY PERIOD.
6. THE DEVELOPMENT OF THIS SITE WILL NOT RESULT IN ANY INCREASE IN DUST, ODOR, SMOKE, FUMES, NOISE, LIGHTS, OR OTHER OBJECTIONABLE FEATURES.
7. GRASS SEED SHALL BE CERTIFIED TURF GRASS SEED COMPLYING WITH A.S.P.A SPECIFICATIONS, AND FREE OF WEED SEEDS AND UNDESIRABLE NATIVE GRASSES. SEEDS AREAS SHALL NOT BE PERMITTED TO DRY OUT, AND LAWN AREAS SHALL BE FERTILIZED AND WATERED AS REQUIRED DURING THE FIRST GROWING SEASON TO MAINTAIN A DENSE AND VIGOROUS TROPICAL LAWN. AREAS SCHEDULED FOR LAWN SEED SHALL RECEIVE A MINIMUM OF 3" OF SCREEN TOPSOIL AT 3" DEPTH UNLESS OTHERWISE NOTED ON PLANS.
 - 30% PERENNIAL RYEGRASS
 - 20% PARK KENTUCKY BLUEGRASS
 - 45% CREEPING RED FESCUE
 - 5% ANNUAL RYEGRASS
8. 1 LB / 1000 SF SEEDING RATE
9. IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO PROVIDE WATER AS REQUIRED TO ENSURE DELIVERY OF PROPER AND ADEQUATE WATER SUPPLY TO ALL PLANT MATERIAL TO ENSURE THE ESTABLISHMENT OF HEALTHY PLANT MATERIAL FOR THEIR FIRST YEAR OF GROWTH. FOLLOWING THE LANDSCAPE CONTRACTOR'S TWO-YEAR IRRIGATION REQUIREMENT PERIOD, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH SUGGESTED IRRIGATION MAINTENANCE SCHEDULE FOR THEIR USE.



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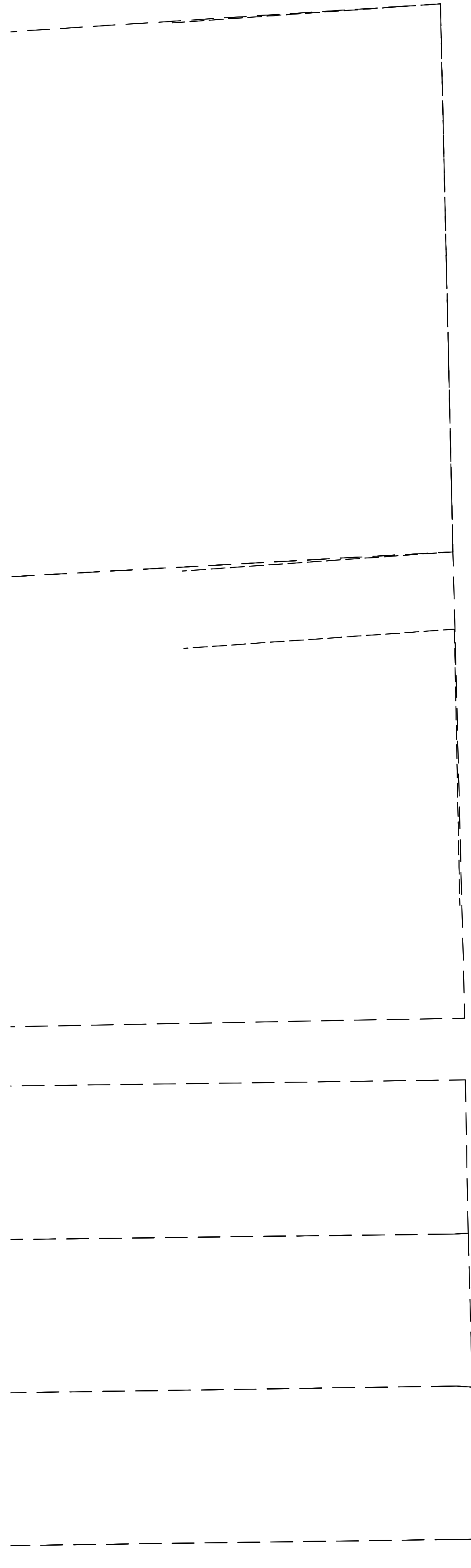
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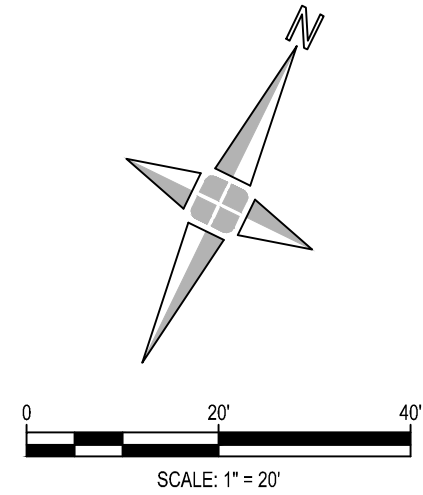
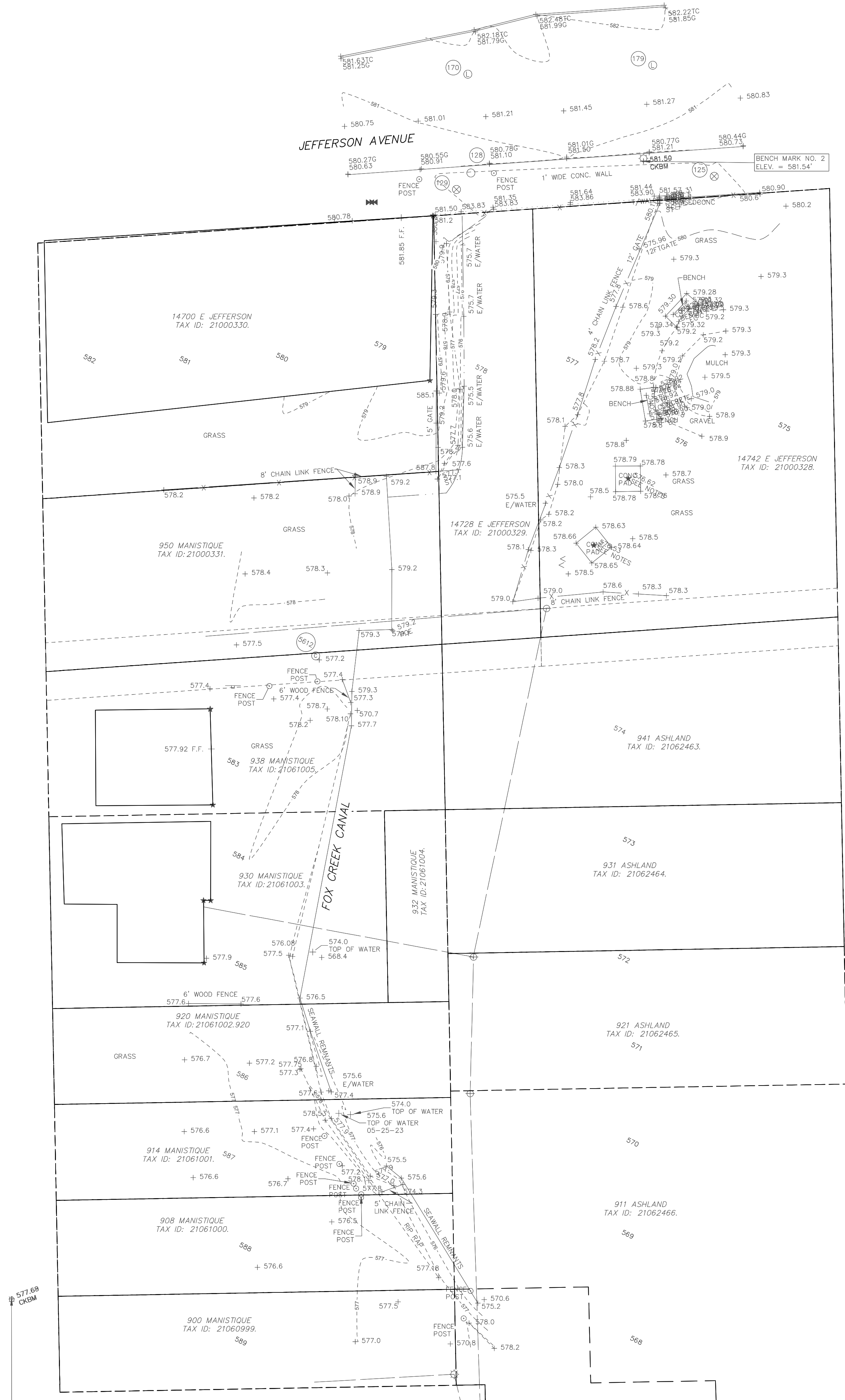
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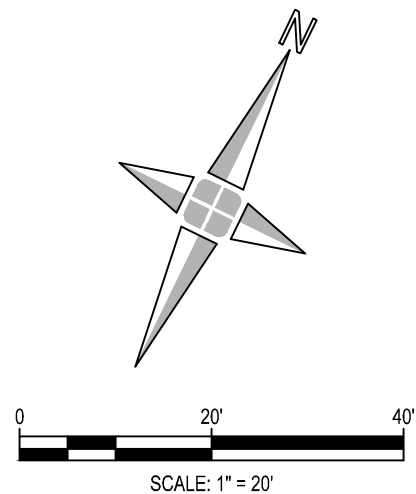
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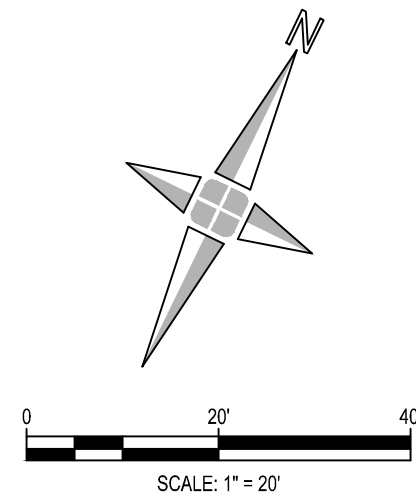
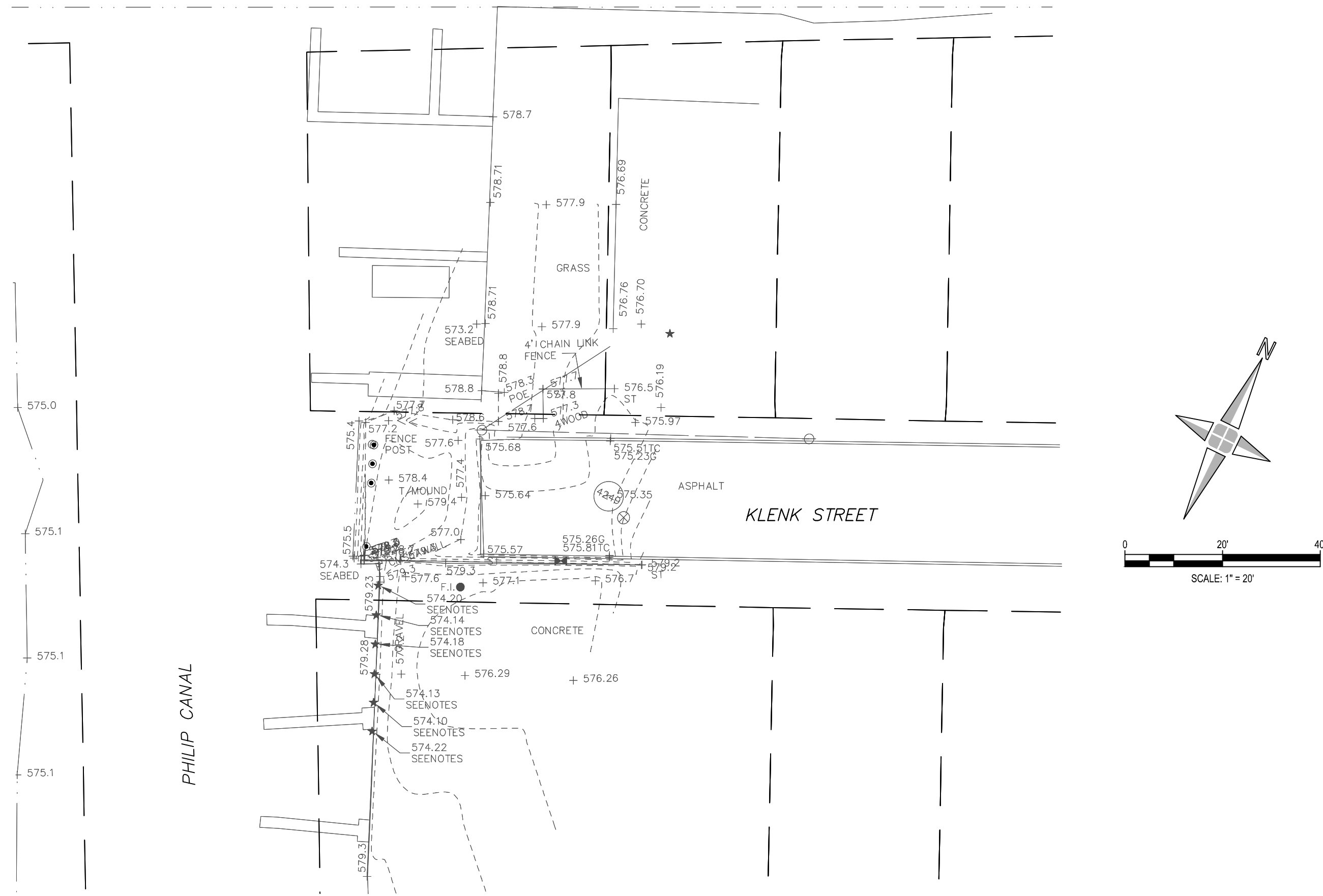
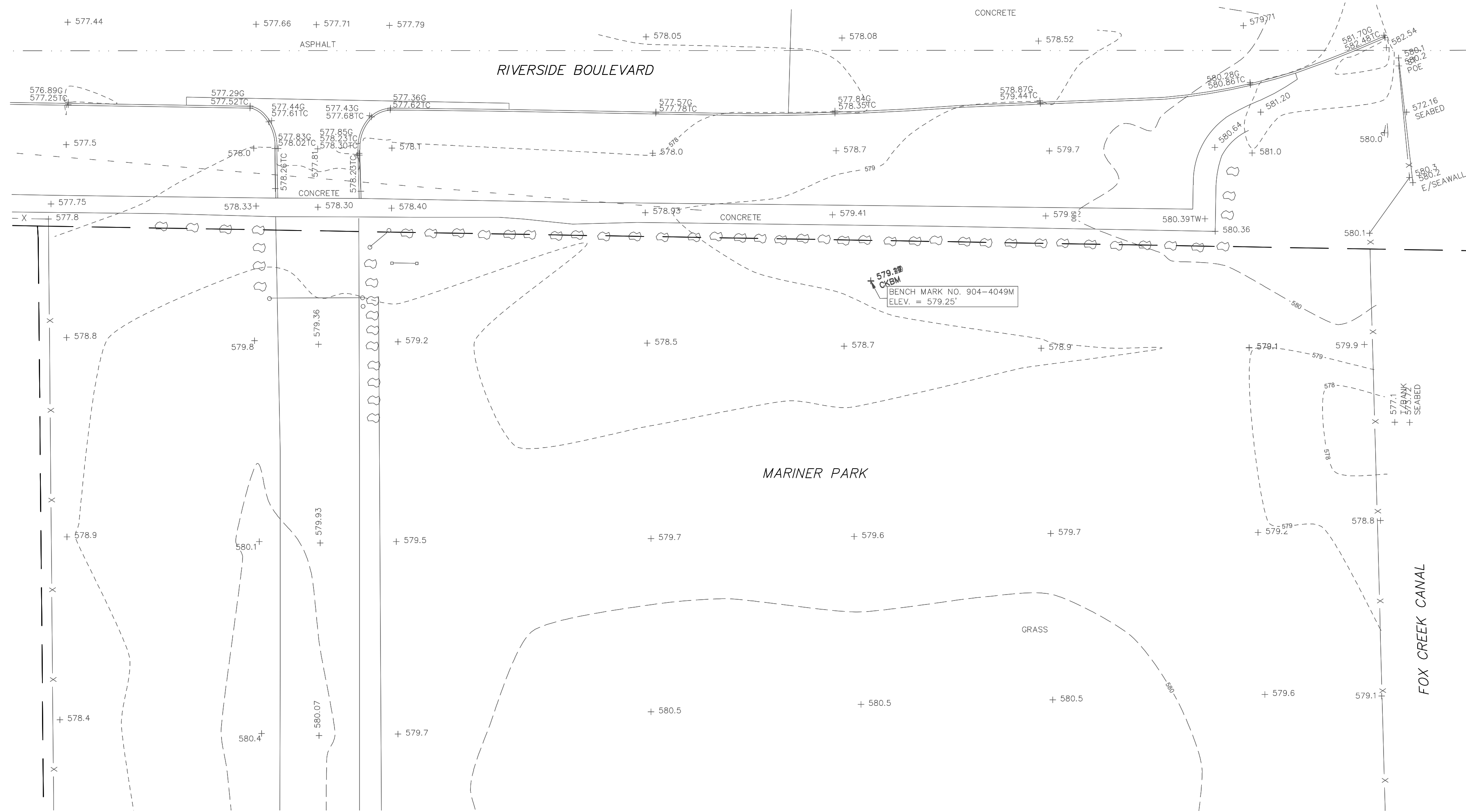
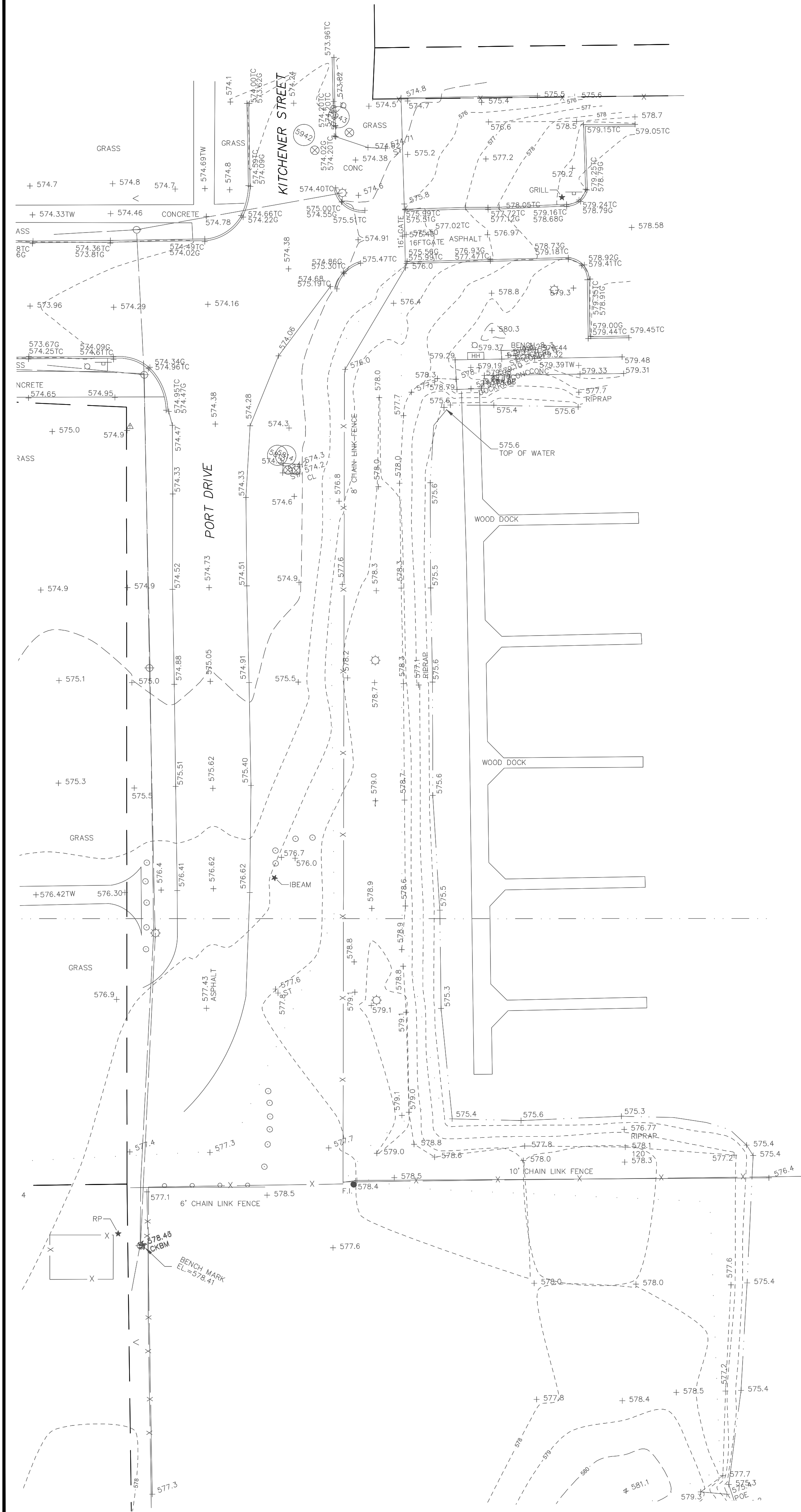
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EXISTING CONDITIONS PLAN

DETROIT LOWER EAST SIDE
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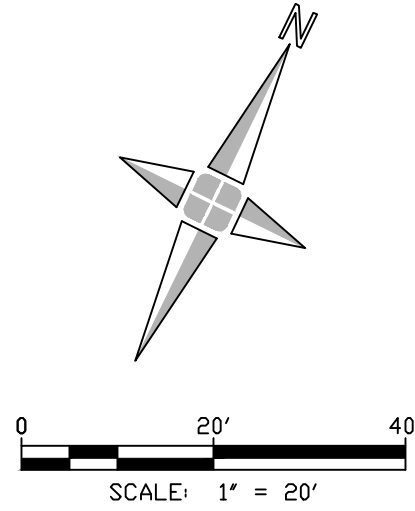
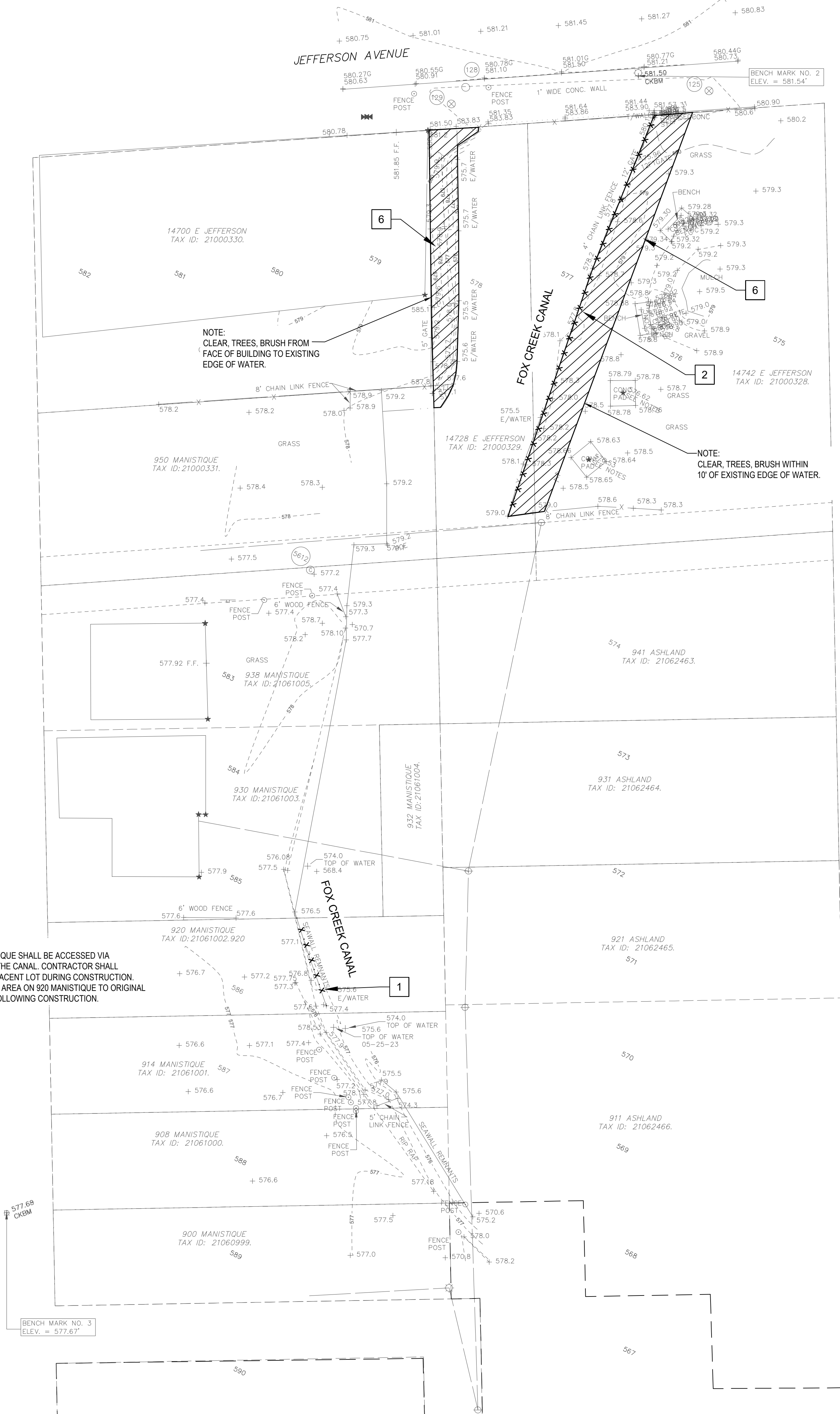
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NOTE:
CONTRACTOR SHALL ACCESS WORK ON WEST SIDE OF CANAL FROM THE CANAL ONLY UNLESS WRITTEN PERMISSION IS OBTAINED FROM ADJACENT PROPERTY OWNERS. WORK ON EAST SIDE OF CANAL MAY BE STAGED FROM WITHIN EXISTING PARK. CONTRACTOR SHALL PROTECT ALL IMPROVEMENTS AND RESTORE GRADE TO ORIGINAL CONDITION OR BETTER FOLLOWING COMPLETION OF WORK. COORDINATE WITH GLWA AS REQUIRED FOR THEIR PROPOSED WORK WITHIN THE PARK.

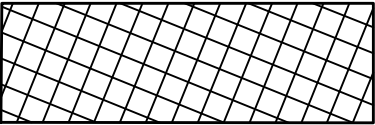
QUANTITIES THIS SHEET DEMOLITION PLAN - KEYNOTES

- 1 EXISTING SEA WALL, TO BE REMOVED - 29 FT
- 2 EXISTING FENCE, TO BE REMOVED - 133 FT
- 3 EXISTING FENCE POST, TO BE REMOVED
- 4 SAWCUT AND REMOVE EXISTING PAVEMENT
- 5 EXIST. BOULDERS REMOVE, SALVAGE AND REINSTALL
- 6 CLEARING, TREES, BRUSH AS NEEDED FOR CONSTRUCTION PER PLAN - 0.05 AC.
- 7 RELOCATE EXISTING PICNIC TABLE

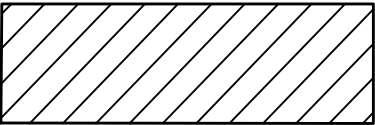
DEMOLITION LEGEND

REMOVE EXISTING SEA WALL / FENCE / FENCE POST · · · · ·

PAVEMENT REMOVAL



CLEARING, TREES, BRUSH



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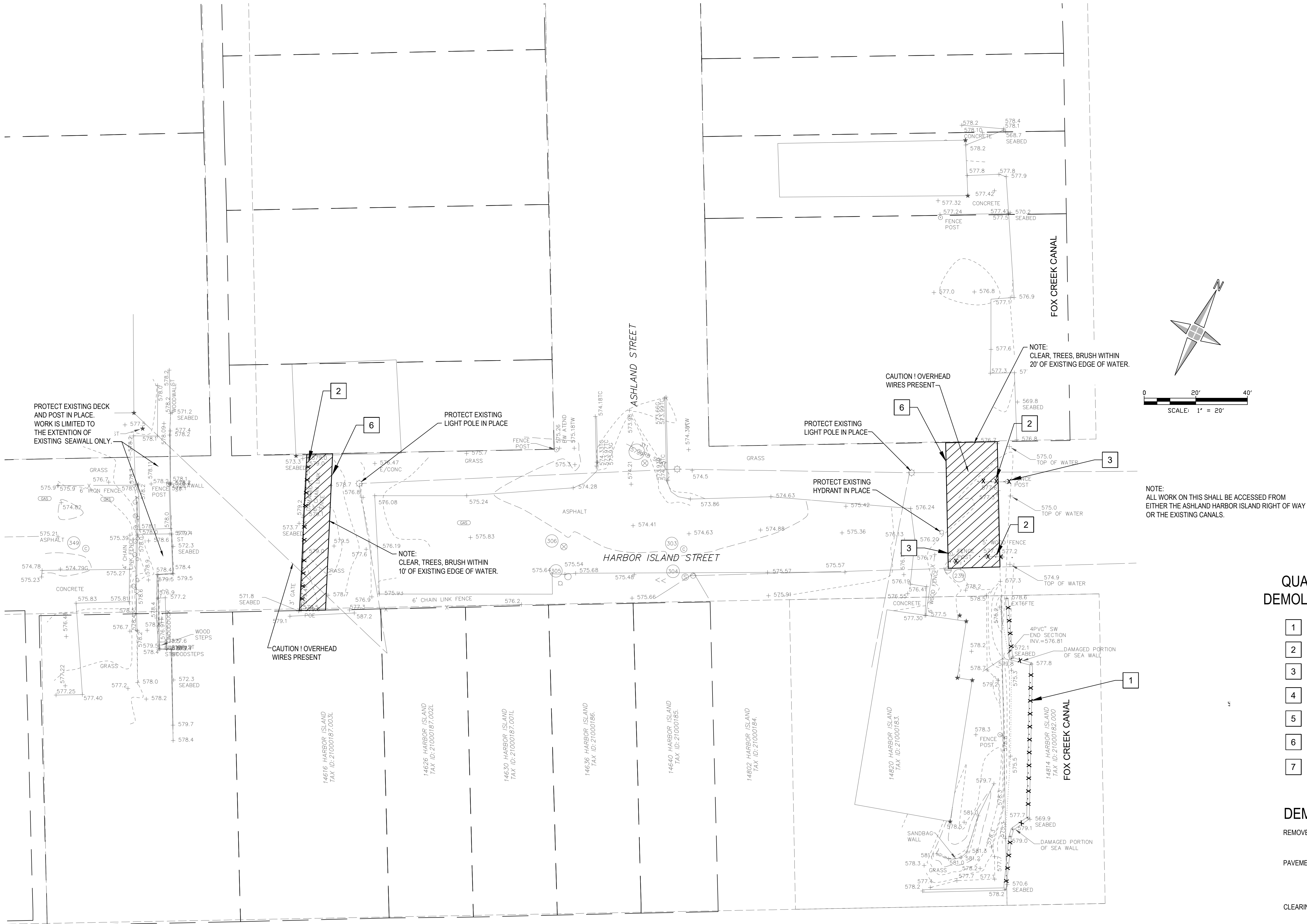
DEMOLITION & SOIL EROSION PLAN

DETROIT LOWER EAST SIDE
FLOOD MITIGATION PROJECT

CITY OF DETROIT
WAYNE COUNTY
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QUANTITIES THIS SHEET
DEMOLITION PLAN - KEYNOTES

- 1 EXISTING SEA WALL, TO BE REMOVED - 122 FT
- 2 EXISTING FENCE, TO BE REMOVED - 90 FT
- 3 EXISTING FENCE POST, TO BE REMOVED - 2 EA
- 4 SAWCUT AND REMOVE EXISTING PAVEMENT
- 5 EXIST. BOULDERS REMOVE, SALVAGE AND REINSTALL
- 6 CLEARING, TREES, BRUSH AS NEEDED FOR CONSTRUCTION PER PLAN - 0.04 AC.
- 7 RELOCATE EXISTING PICNIC TABLE

DEMOLITION LEGEND

REMOVE EXISTING SEA WALL / FENCE / FENCE POST · · · · ·

PAVEMENT REMOVAL

CLEARING, TREES, BRUSH

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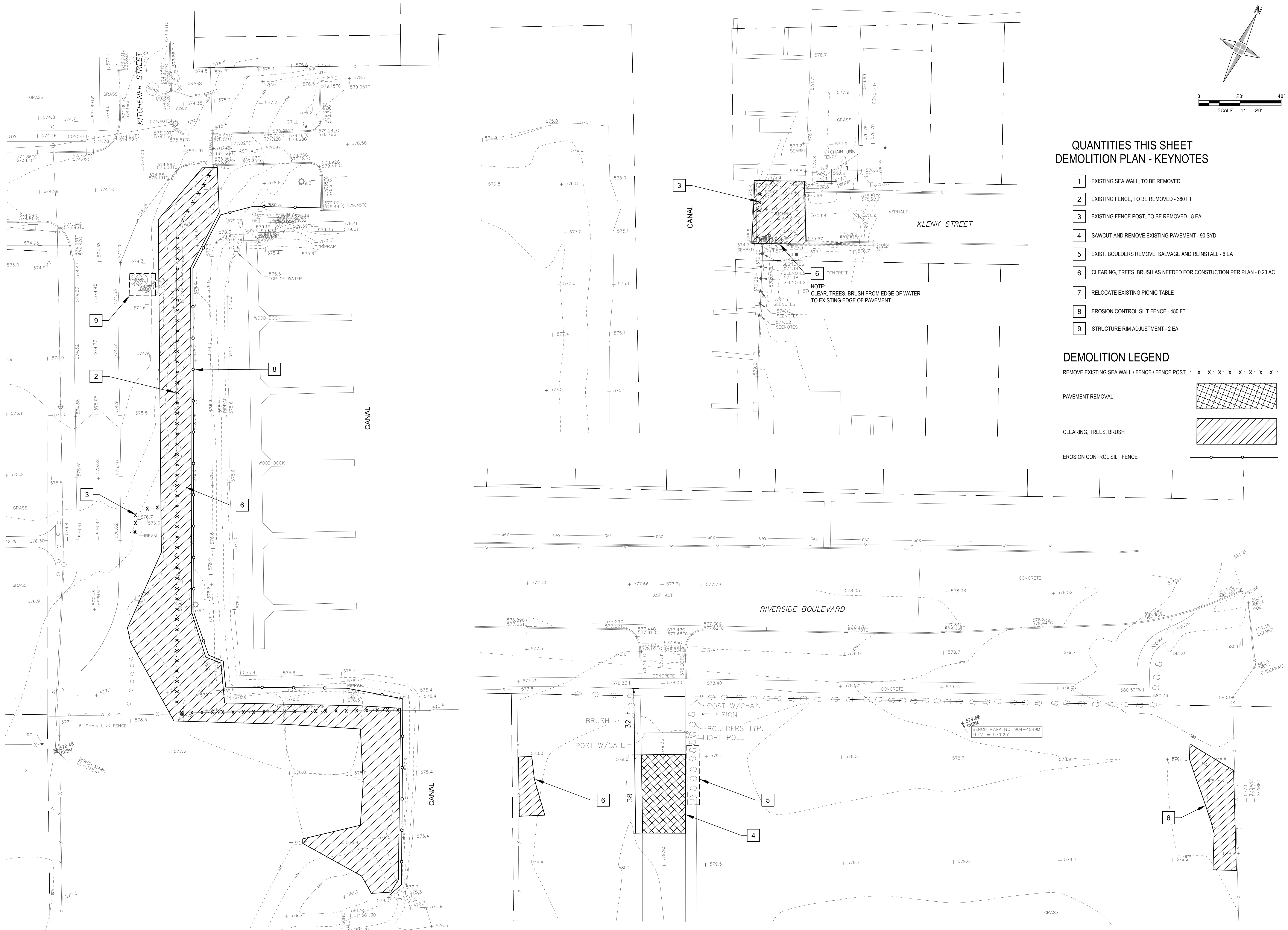
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DEMOLITION & SOIL EROSION PLAN

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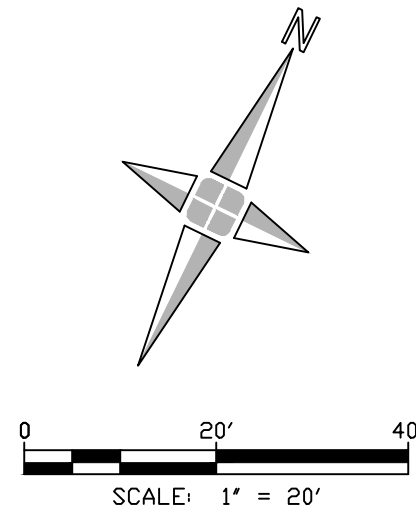
GRADING & SEA WALL PLAN

DETROIT LOWER EAST SIDE
FLOOD MITIGATION PROJECT

CITY OF DETROIT
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QUANTITIES THIS SHEET IMPROVEMENT - KEYNOTES

- 1 PROVIDE AND INSTALL NEW SEAWALL - 227 FT
- 2 PROVIDE AND INSTALL NEW SEAWALL EXTENSION

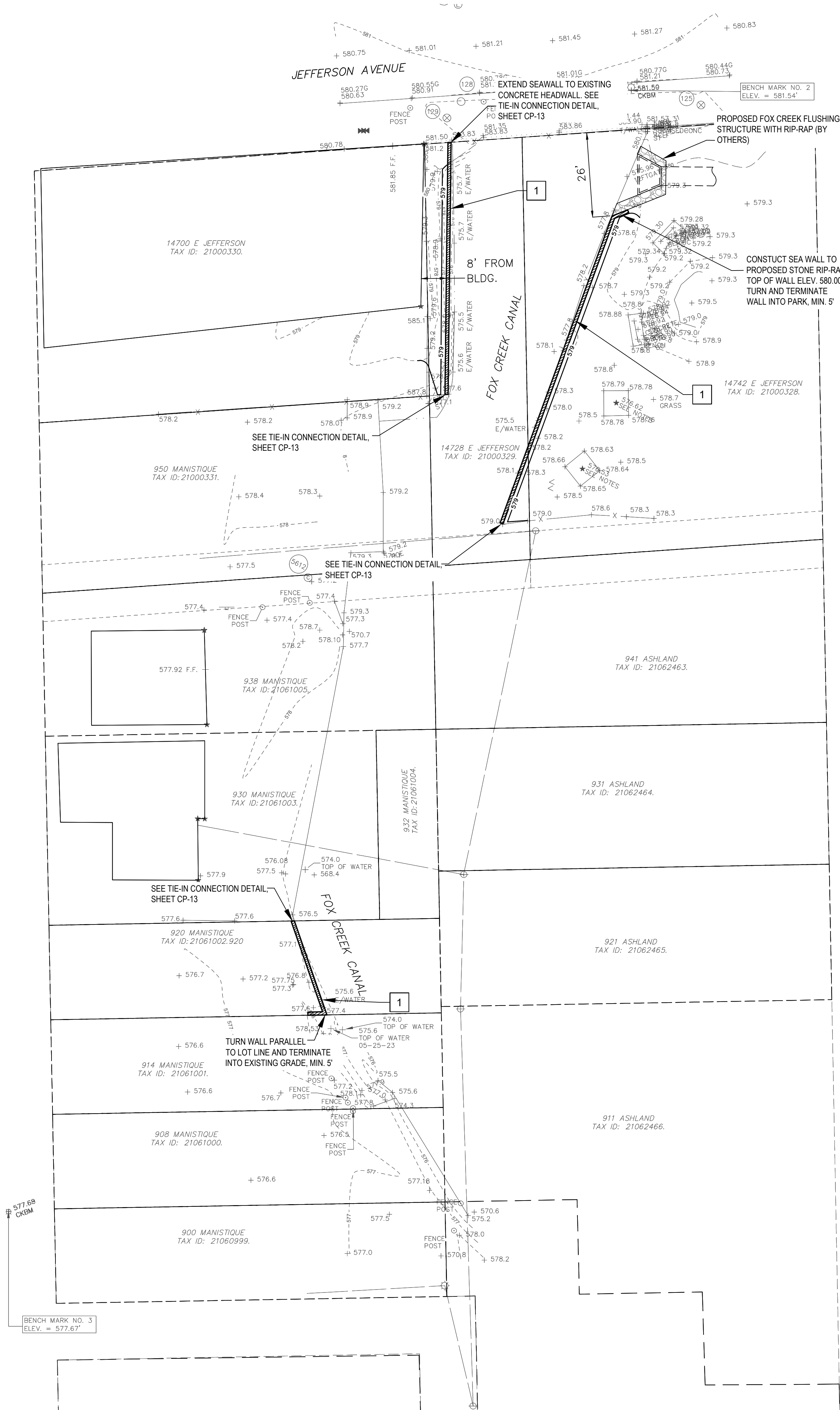
RESTORATION - LUMP SUM

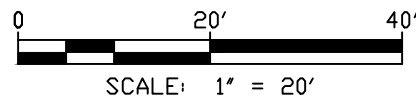
LEGEND

SEE SHEET CP-13 FOR ALL SEAWALL DETAILS

- NEW SEAWALL, TOP OF WALL
ELEVATION = 580.00'
- NEW CONCRETE BARRIER WALL ON TOP
OF EXISTING WALL, ELEVATION = 580.00'

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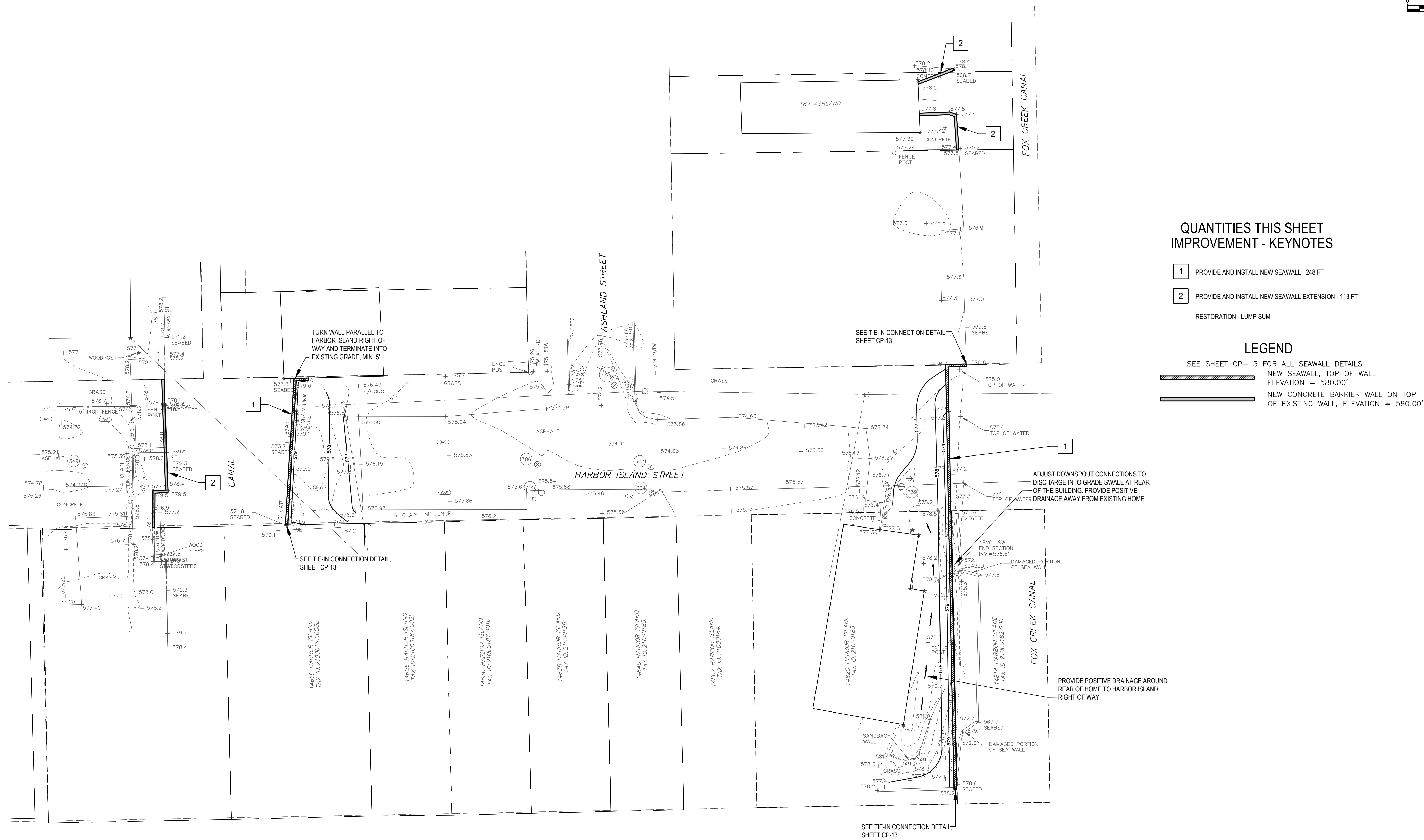
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Project:	20370.00

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- 1 PROVIDE AND INSTALL NEW SEAWALL - 248 FT
- 2 PROVIDE AND INSTALL NEW SEAWALL EXTENSION - 113 FT

SEE SHEET CP-13 FOR ALL SEAWALL DETAILS

NEW SEAWALL, TOP OF WALL
ELEVATION = 580.00'

NEW CONCRETE BARRIER WALL ON TOP
OF EXISTING WALL, ELEVATION = 580.00

RESTORATION - LUMP SUM

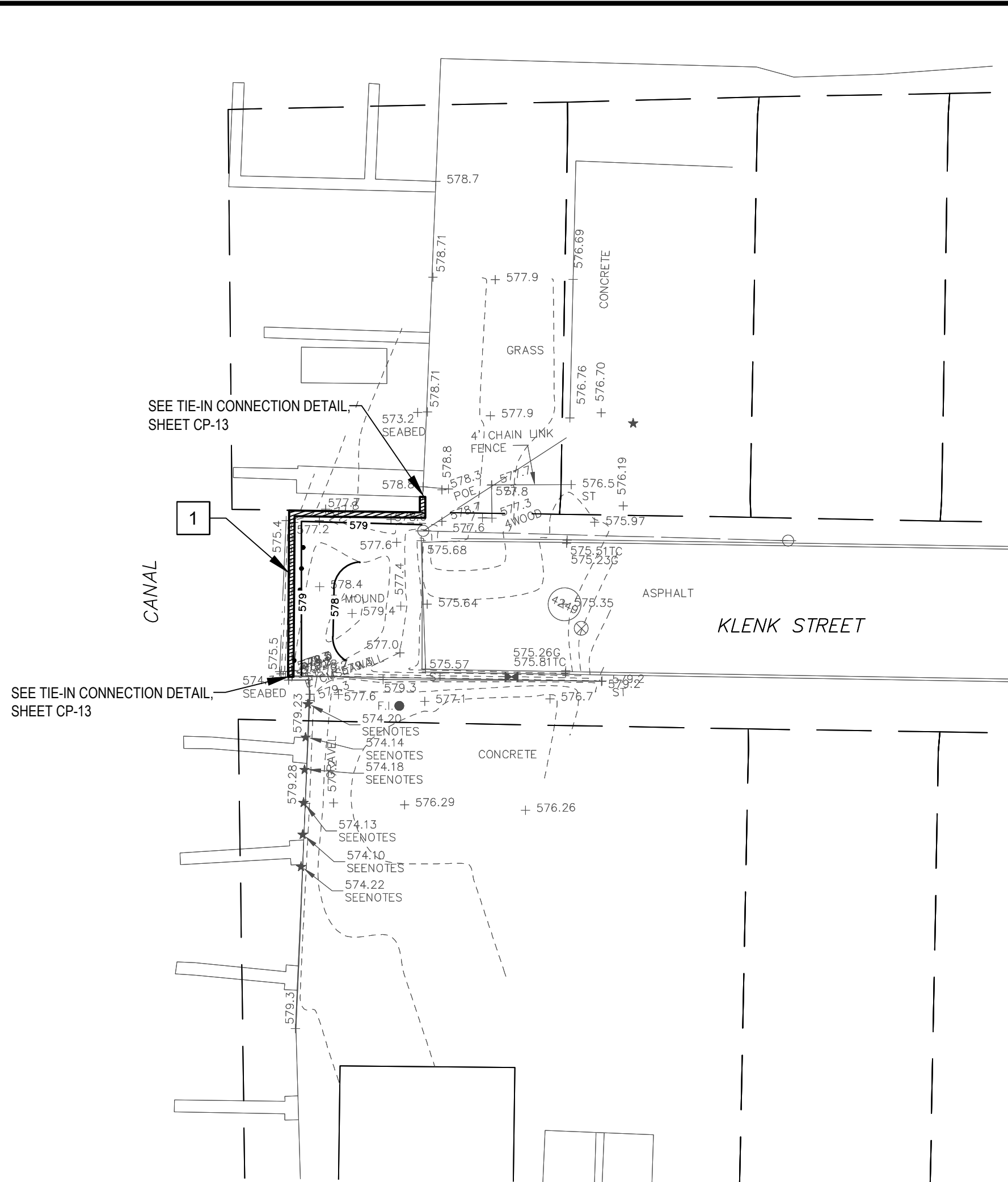
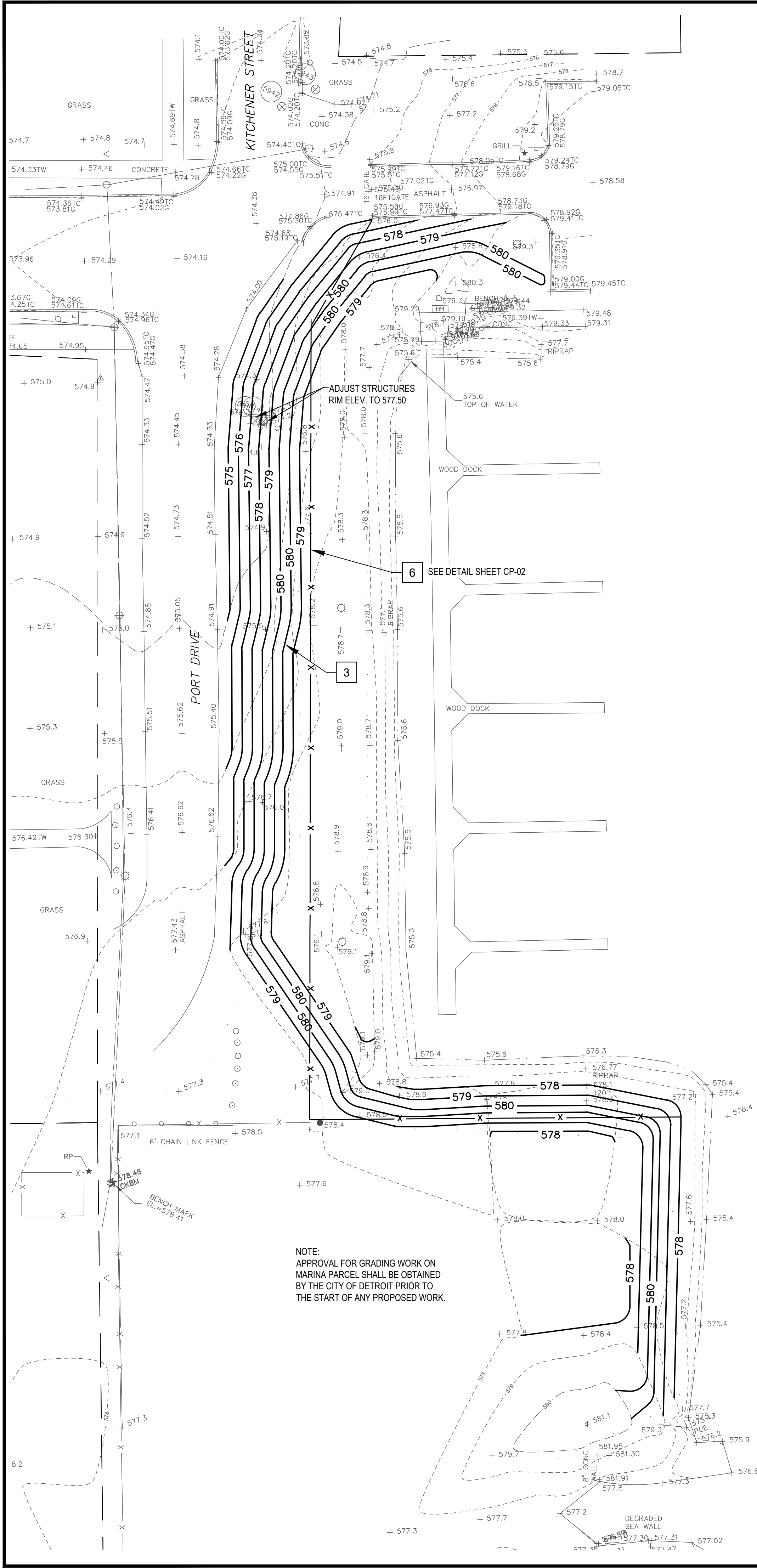
ADJUST DOWNSPOUT CONNECTIONS TO
DISCHARGE INTO GRADE SWALE AT REAR
OF THE BUILDING. PROVIDE POSITIVE
DRAINAGE AWAY FROM EXISTING HOME.

PROVIDE POSITIVE DRAINAGE AROUND
REAR OF HOME TO HARBOR ISLAND
- RIGHT OF WAY

SEE TIE-IN CONNECTION DETAIL-
SHEET CP-13

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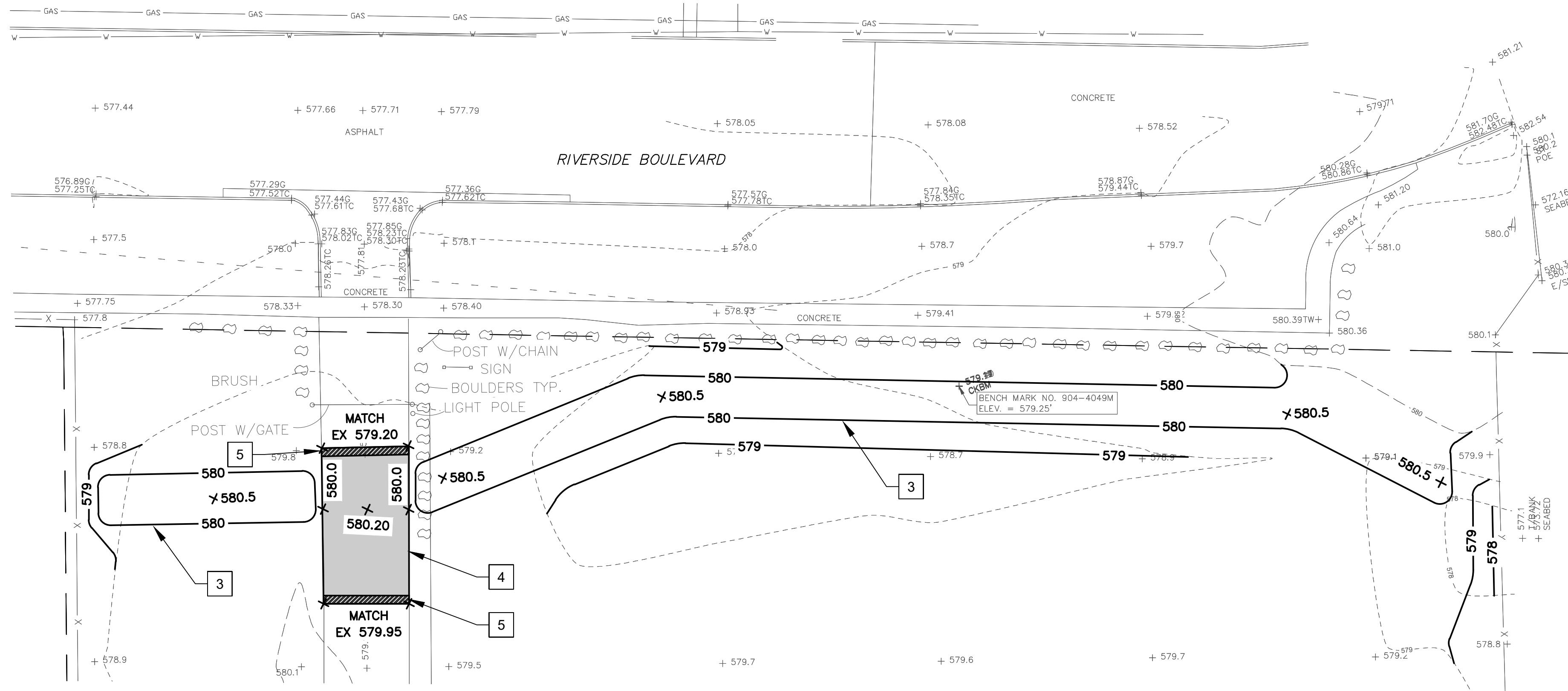
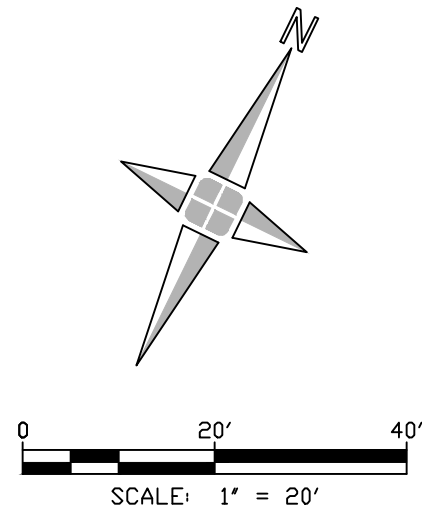
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QUANTITIES THIS SHEET IMPROVEMENT - KEYNOTES

- 1 PROVIDE AND INSTALL NEW SEAWALL - 58 FT
- 2 PROVIDE AND INSTALL NEW SEAWALL EXTENSION
- 3 PROVIDE AND INSTALL APPROVED MATERIAL EARTH BERM - LUMP SUM
- 4 PROVIDE AND INSTALL HMA PAVEMENT / AGGREGATE BASE - 94 SYD
- 5 PROVIDE AND INSTALL 2 FT BUTT - JOINT - 40 FT
- 6 8 FT TALL CHAIN LINK FENCE - 380 FT

LEGEND
SEE SHEET CP-13 FOR ALL SEAWALL DETAILS
NEW SEAWALL, TOP OF WALL
ELEVATION = 580.00'
NEW CONCRETE BARRIER WALL ON TOP
OF EXISTING WALL, ELEVATION = 580.00'



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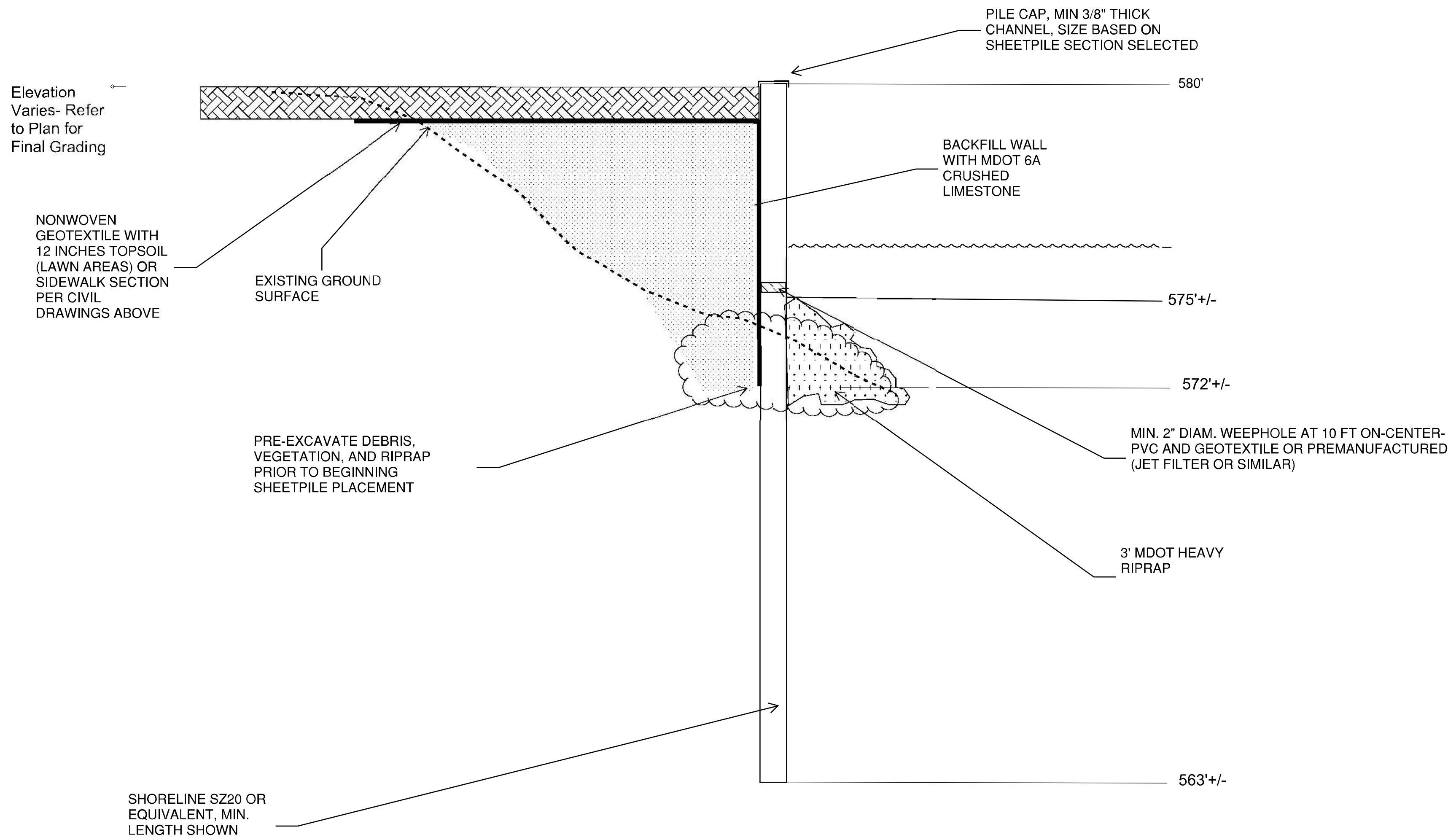
GRADING & SEA WALL PLAN

DETROIT LOWER EAST SIDE
FLOOD MITIGATION PROJECT

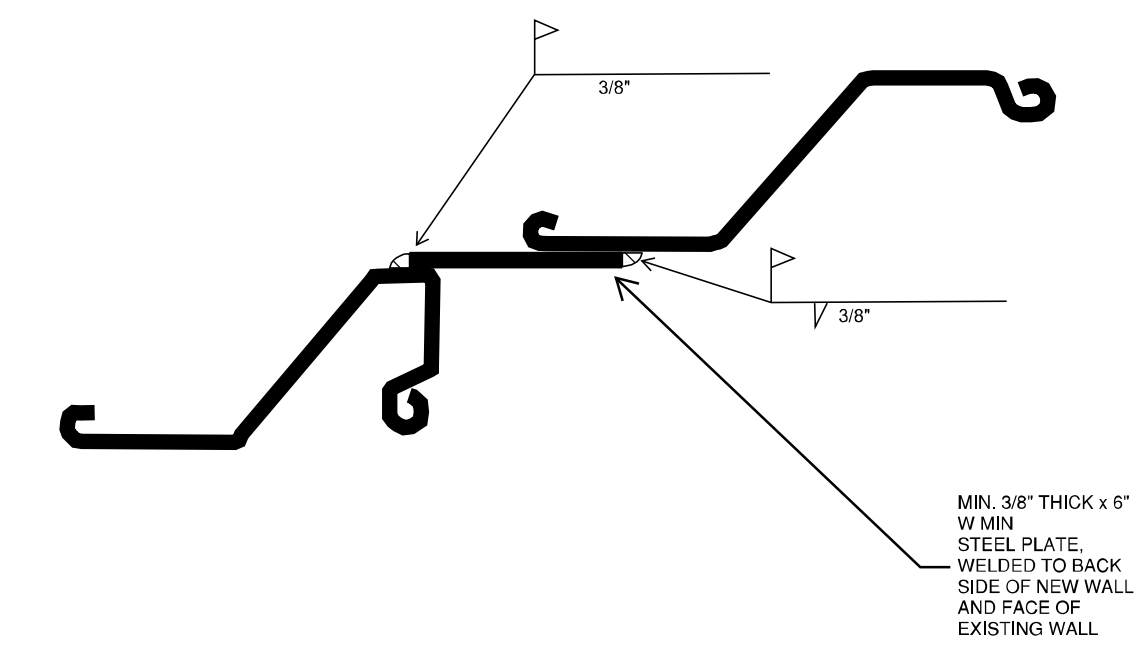
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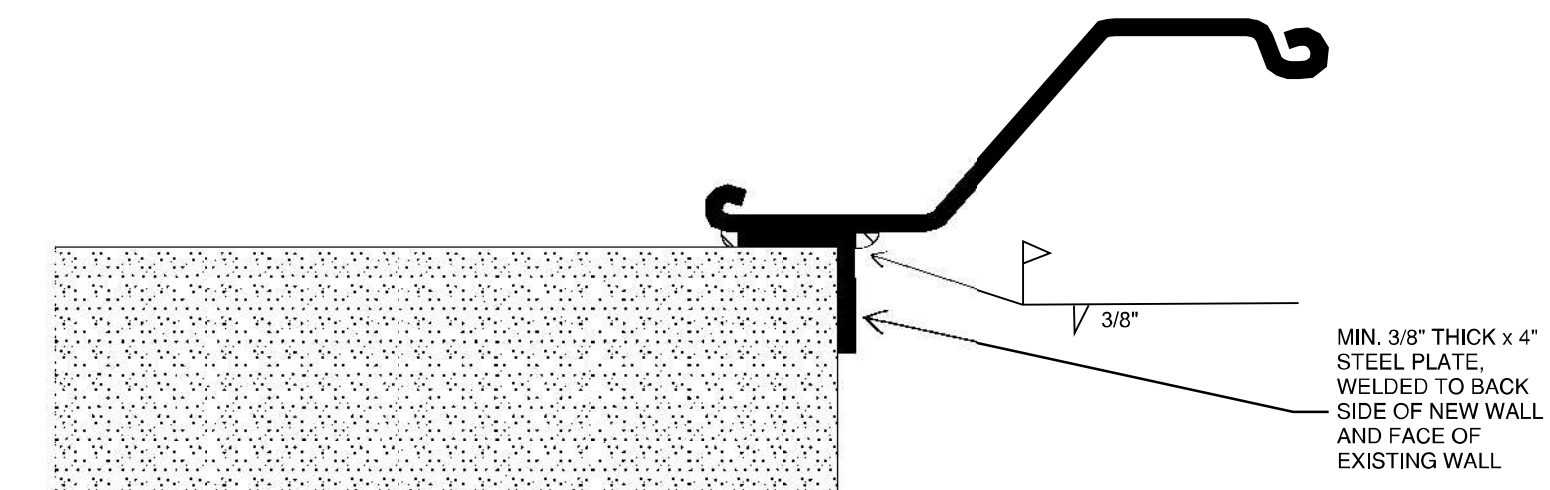
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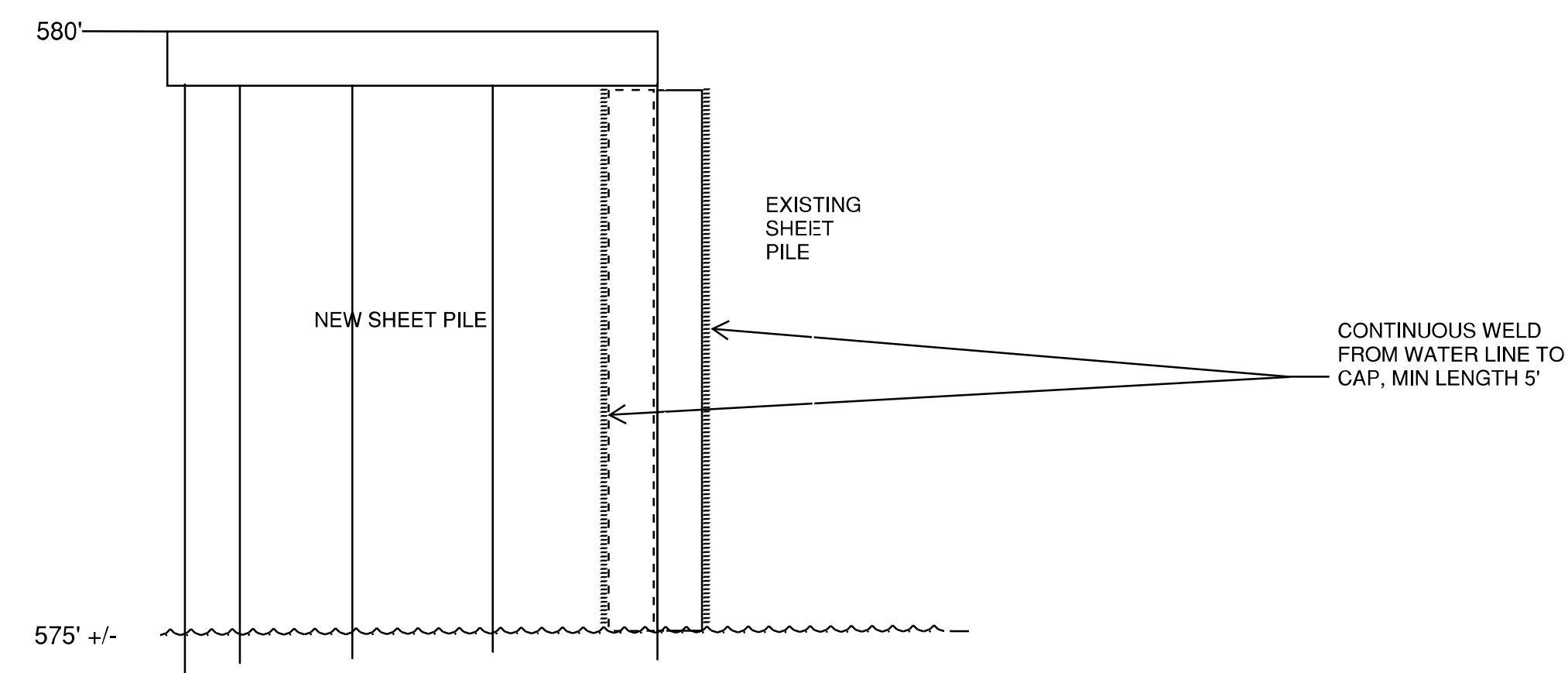
NEW SEAWALL SECTION - TOP OF WALL ELEVATION 580.00'



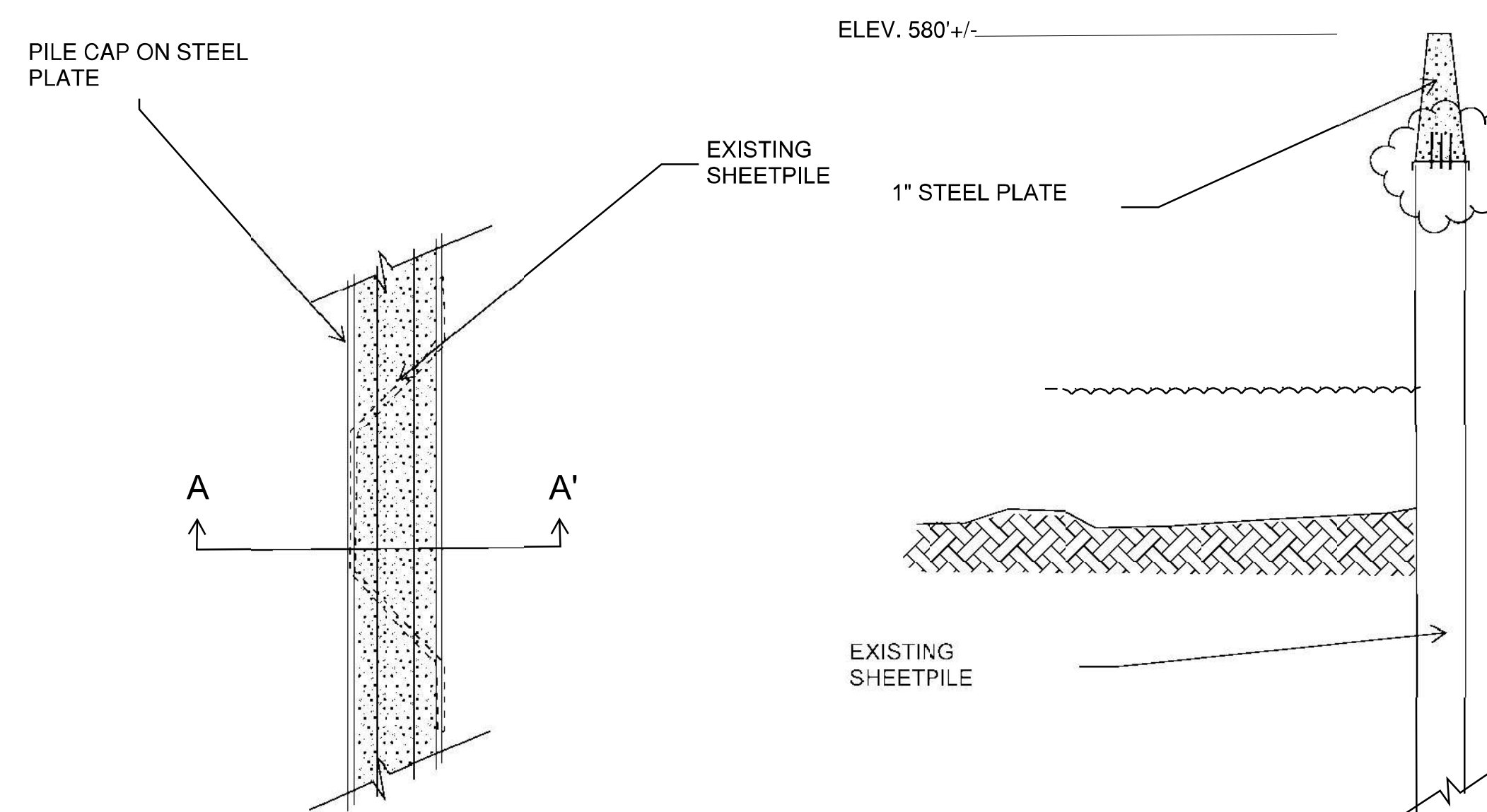
PLAN VIEW - BASIS OF DESIGN - TIE-IN TO EXISTING STEEL SEAWALL



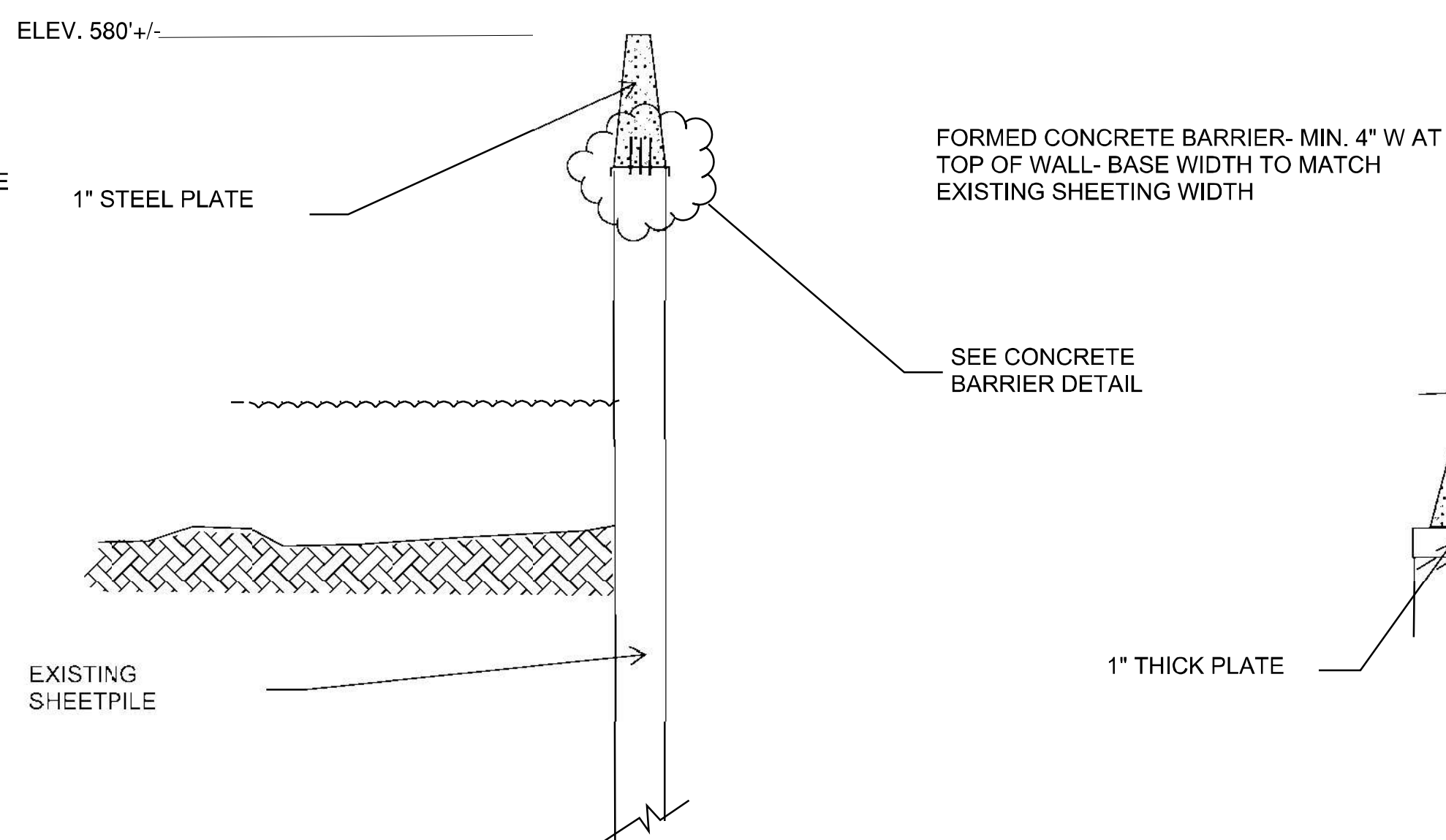
PLAN VIEW - BASIS OF DESIGN - TIE-IN TO EXISTING CONCRETE SEAWALL



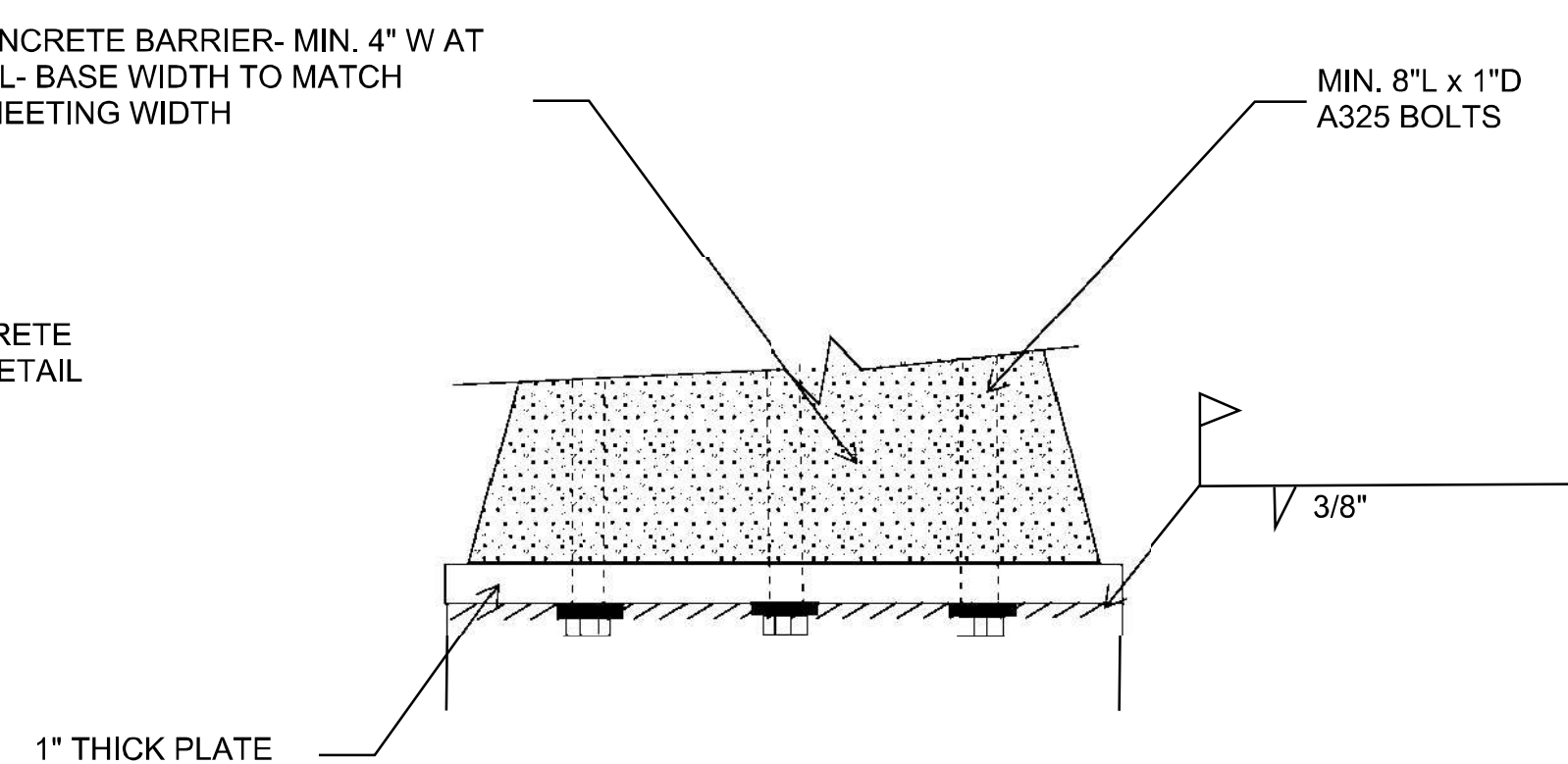
ELEVATION - BASIS OF DESIGN - TIE-IN TO EXISTING SEAWALL (STEEL WALL SHOWN)



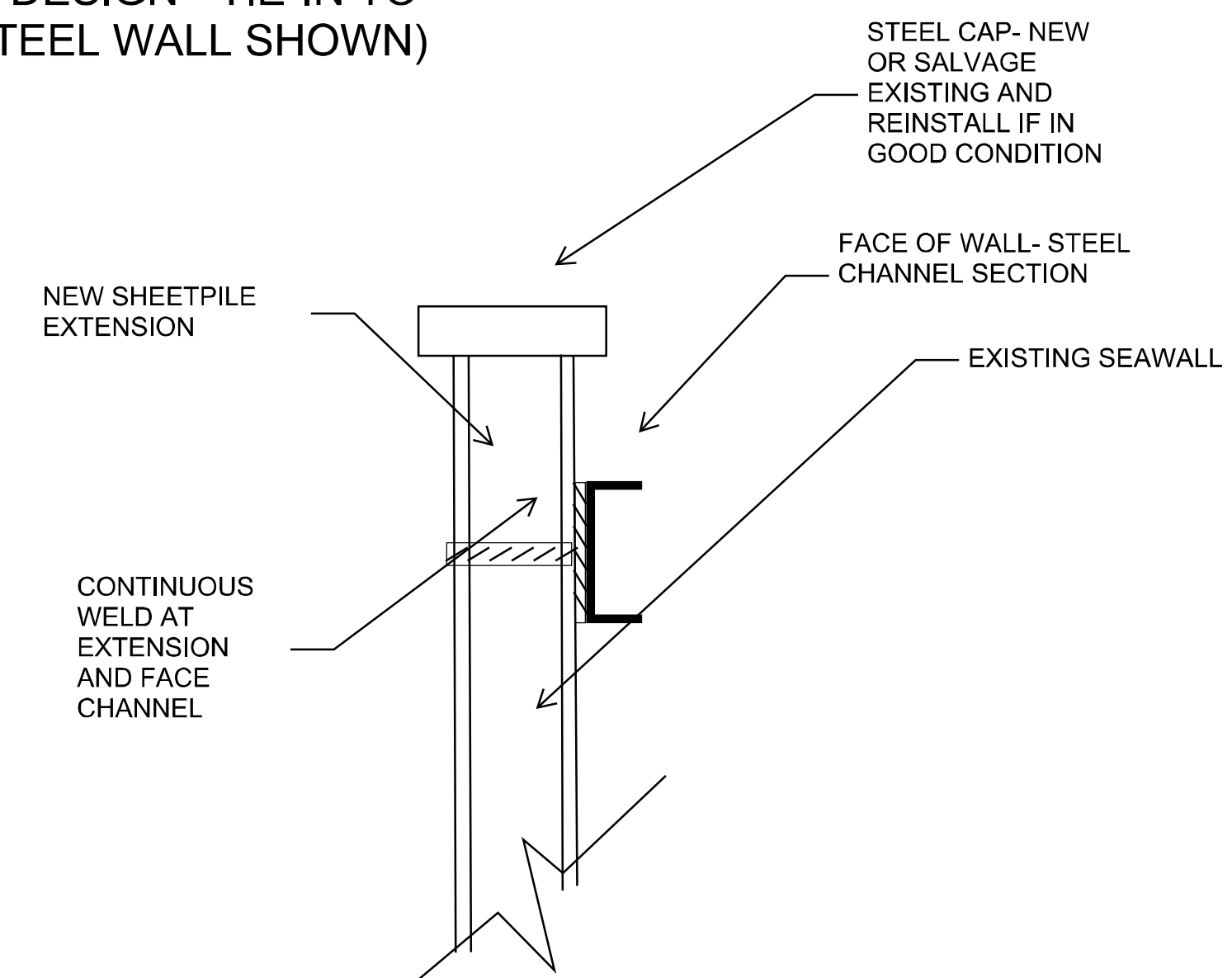
PLAN VIEW- CONCRETE BARRIER WALL



SECTION A-A' CONCRETE BARRIER WALL



CONCRETE BARRIER DETAIL



STEEL BARRIER DETAIL - BASIS OF DESIGN



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Orientation
Scale
NONE

Project
CITY OF DETROIT FLOOD
MITIGATION - LOWER EAST SIDE

Project Location
DETROIT, MICHIGAN

Sheet Name
SHEETPILE DETAILS

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Revisions			
REV	ISSUED FOR	DATE	BY
1	OWNER REVIEW	07/21/23	LMJ
2	REVISION 1	08/18/23	LMJ
3	REVISION 2	09/12/23	LMJ
4	FOR BIDS	09/21/23	
5			
6			
7			

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07/21/23

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Designer:
L. JOHNSON

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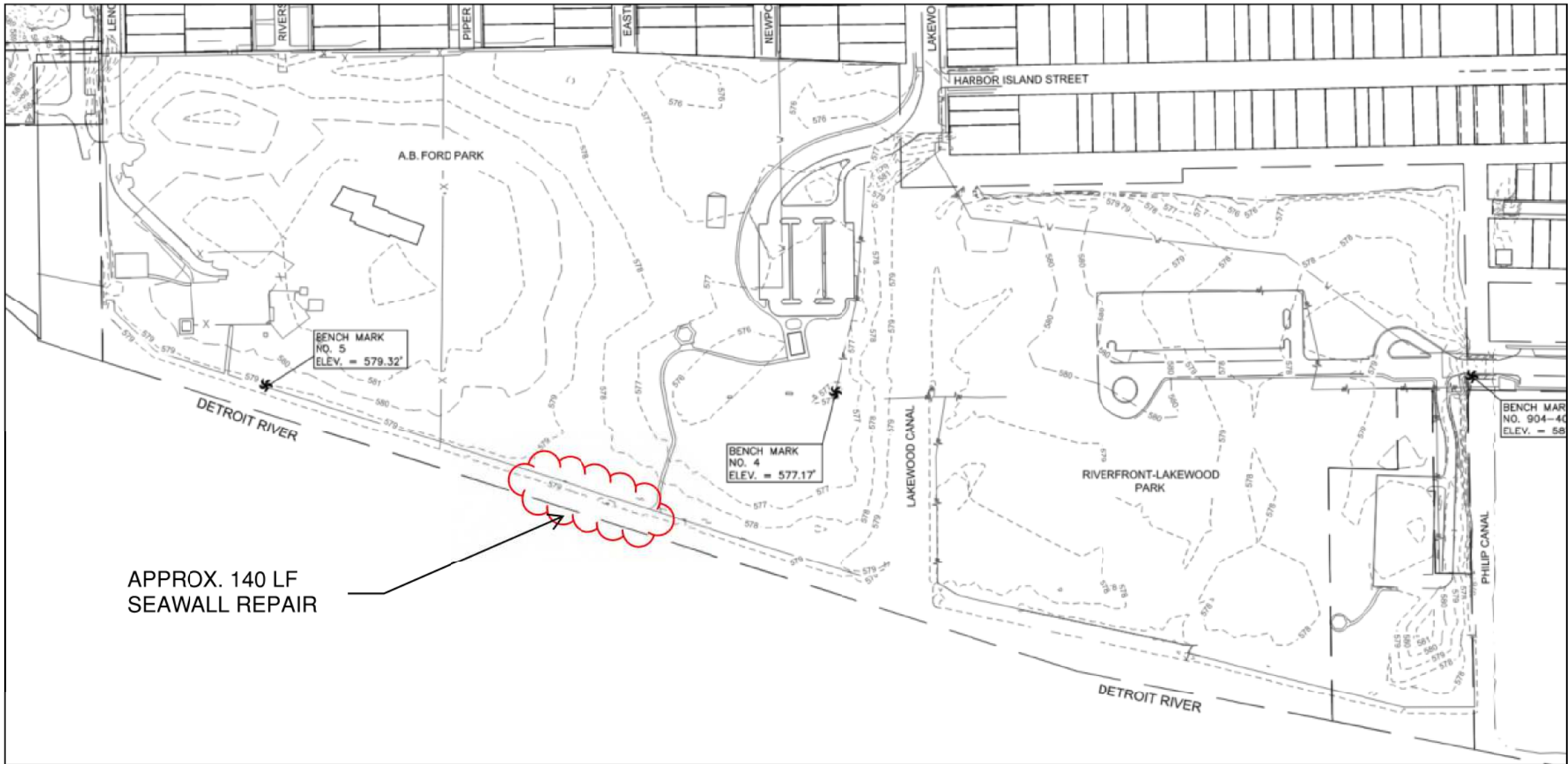


FIGURE 1: SEAWALLS AT ALFRED BRUSH FORD PARK

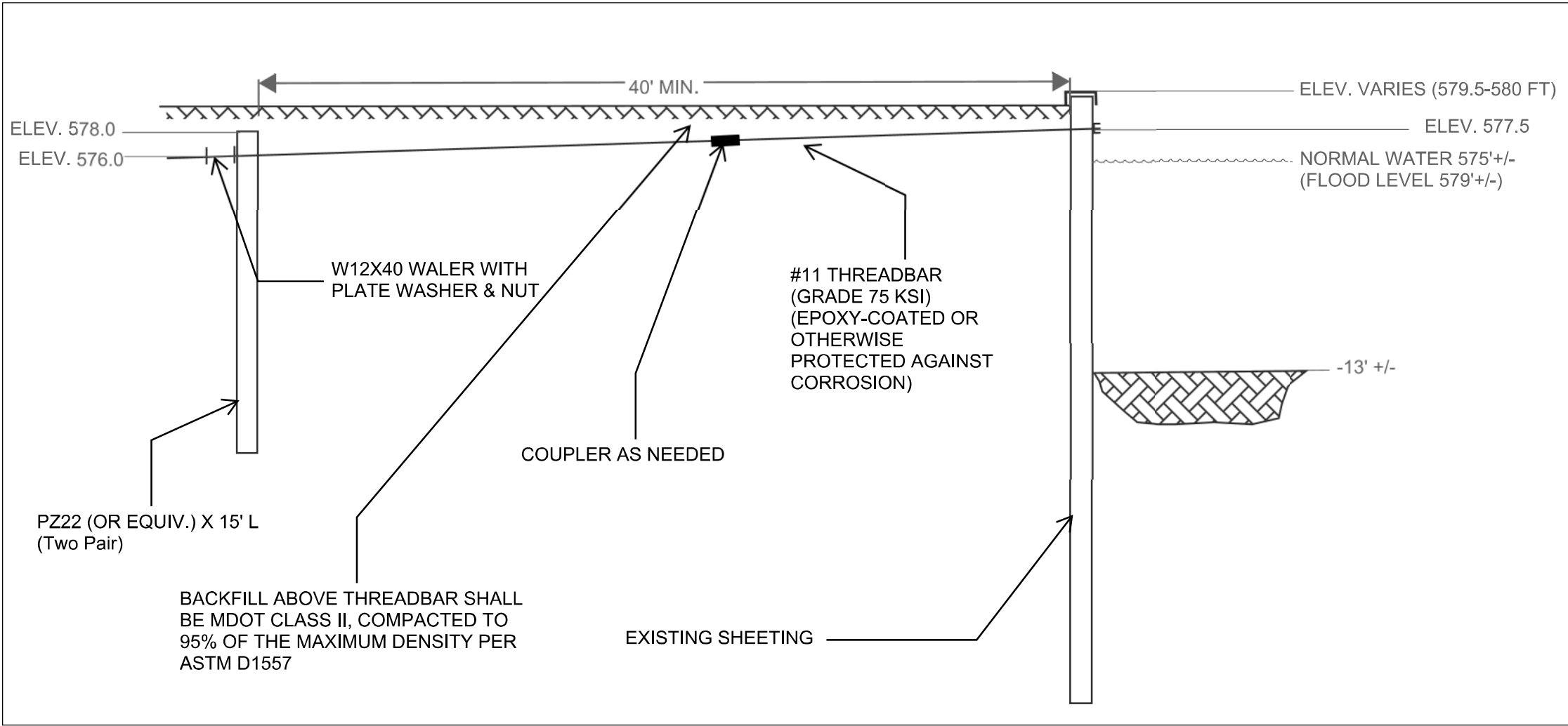


FIGURE 2: CROSS SECTION - SEAWALL REPAIR
NO SCALE

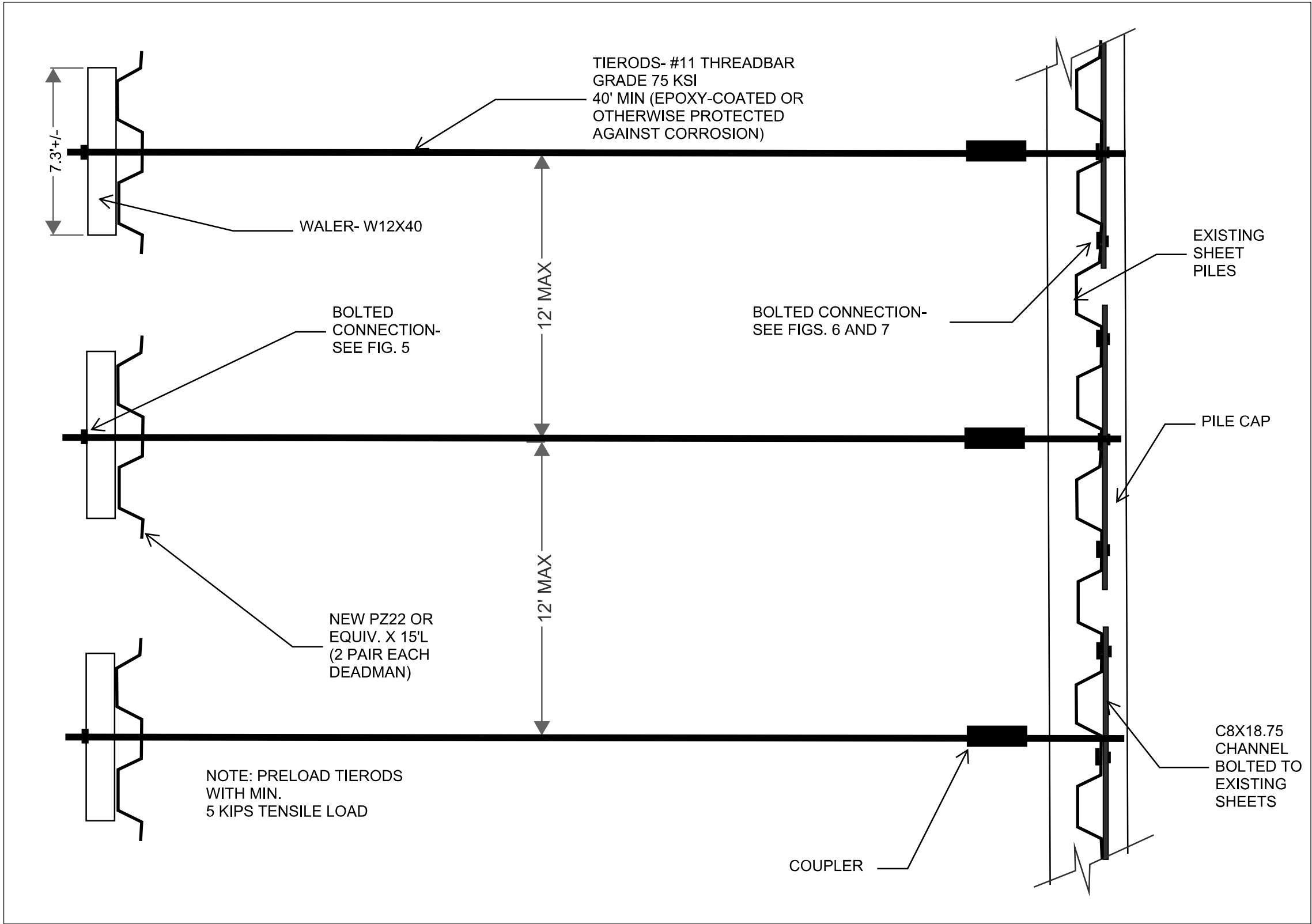


FIGURE 3: PLAN - SEAWALL REPAIR
NO SCALE



PHOTO 1: SEPARATION AT PILE CAP JOIN



PHOTO 2: LOOKING WEST ALONG SEAWALL



PHOTO 3: SIDEWALK SUBSIDENCE AND OUTWARD ROTATION OF SEAWALL



PHOTO 4: TERMINAL END OF EASTERNMOST TIEBACK- ANGLE MAY BE A TURNBUCKLE, BUT NO ROD WAS OBSERVED BEYOND 15' OFF BACK FACE OF SEAWALL, ROD ABOUT 5 FEET BELOW TOP OF SEAWALL.

BASED ON OBSERVATIONS, SEAWALL APPEARS TO BE P222 SHEET PILING. REPAIR DESIGN IS BASED ON DESIGN PLANS PREPARED BY SME FOR OTHER PORTIONS OF THE SEAWALL ALONG THE CITY OF DETROIT RIVERWALK AND A PREVIOUS REPAIR AT ALFRED BRUSH FORD PARK.

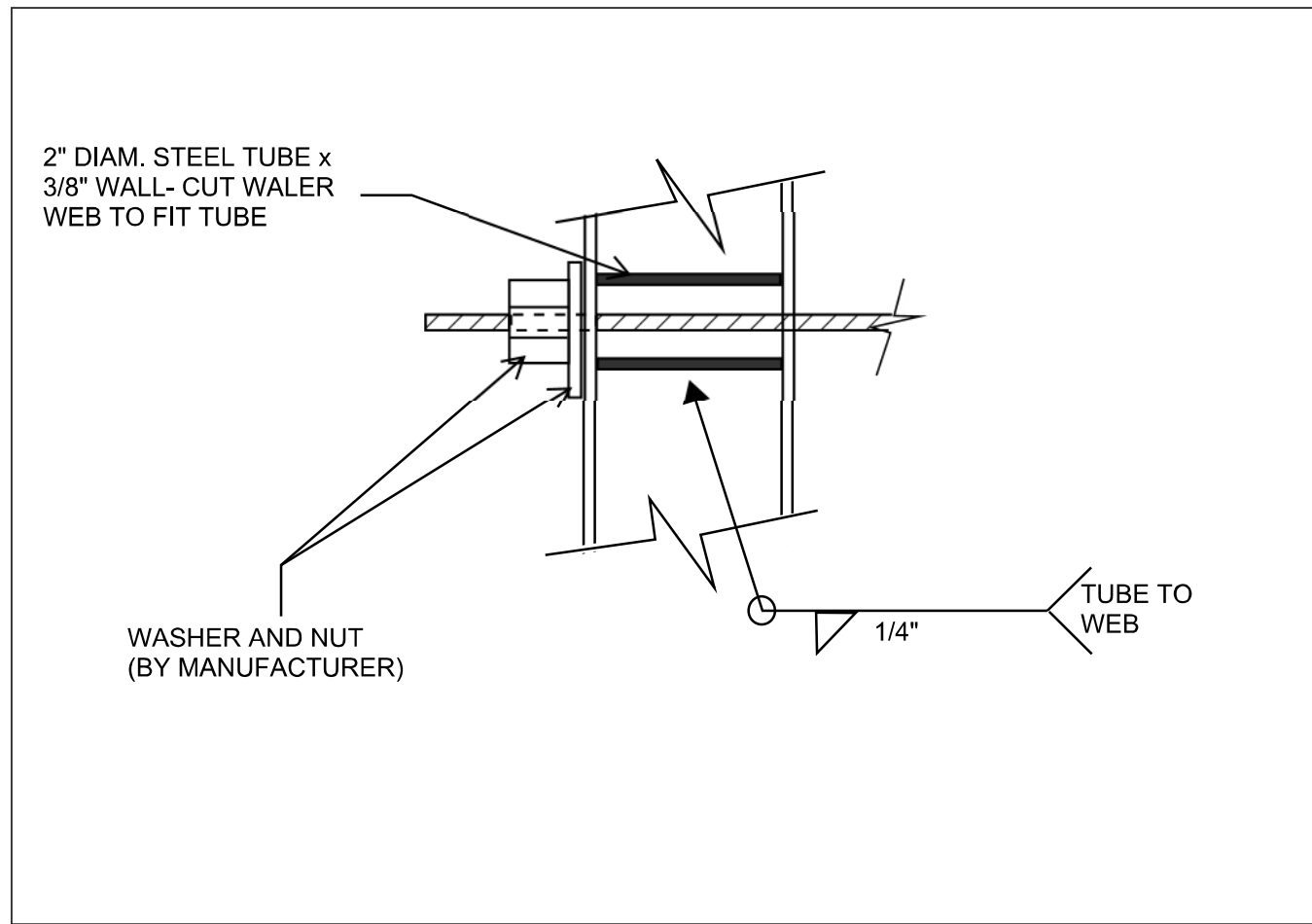
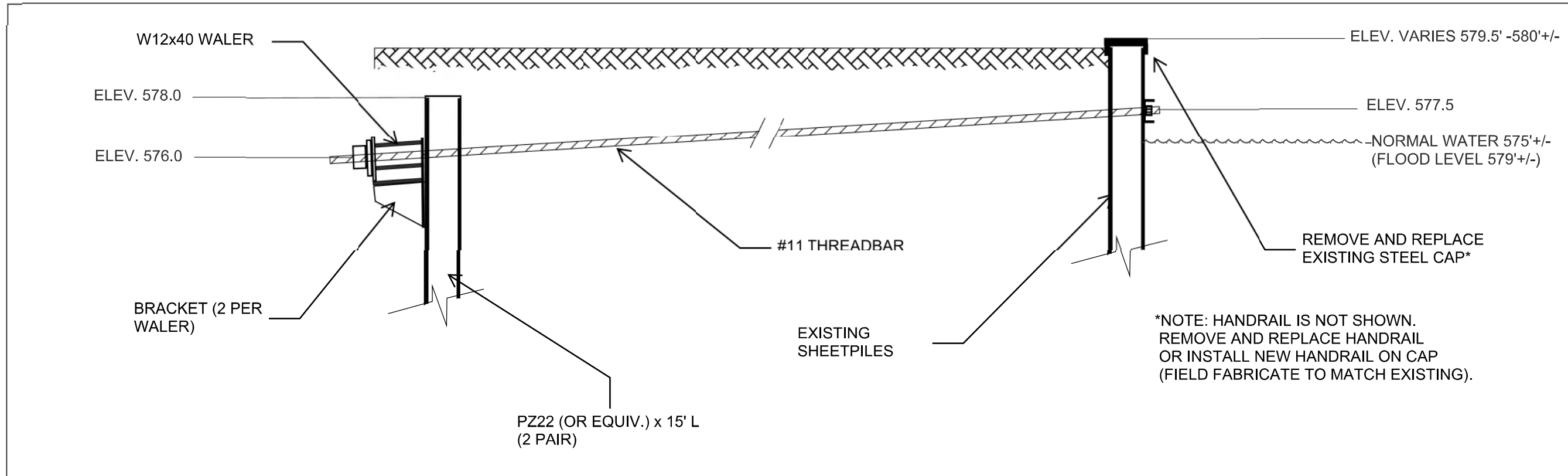


FIGURE 5: PLAN - WALER/TIE CONNECTION
NO SCALE

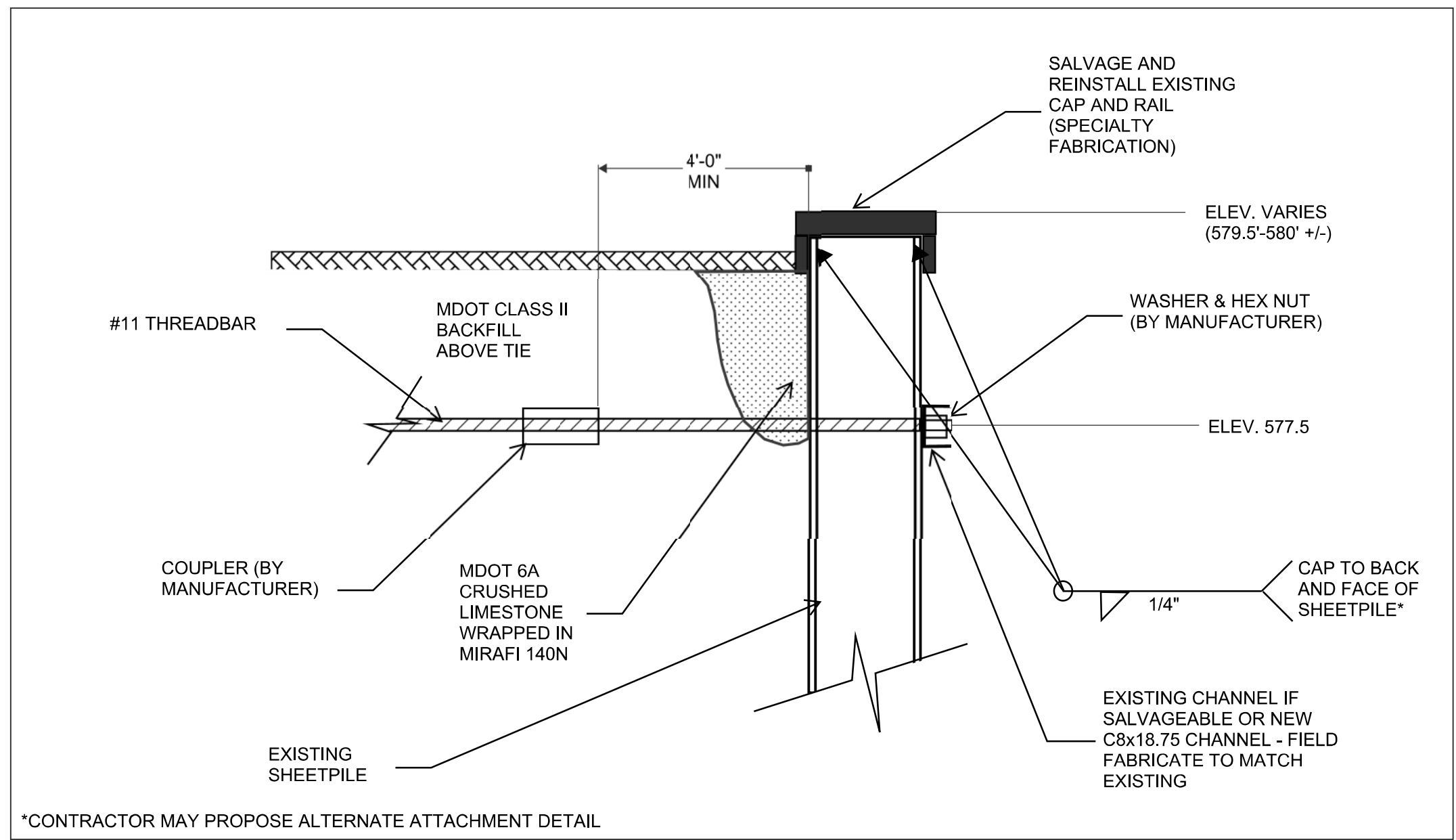


FIGURE 6: SECTION - SHEETPILE/TIE CONNECTION
NO SCALE



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Orientation
Scale
NONE

Project
CITY OF DETROIT FLOOD MEASURES

Project Location
DETROIT, MICHIGAN

Sheet Name
SHEETPILE DETAILS- AB FORD PARK

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2	FOR BIDS	08/21/23	

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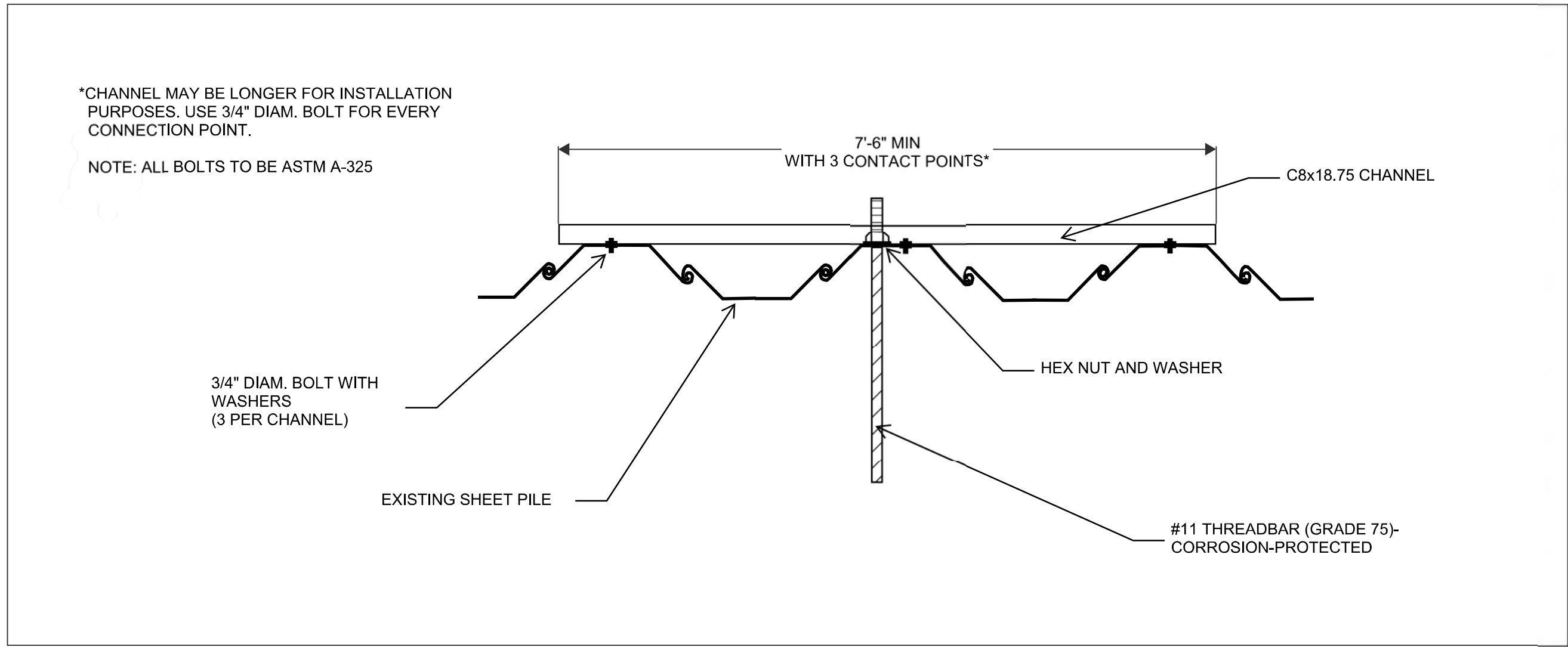


FIGURE 7: PLAN - SHEETPILE/TIE CONNECTION

NO SCALE



PHOTO 1: DETERIORATED ASPHALT, GRADE SLOPES TOWARD WALL



PHOTO 2: TREES BEHIND NORTH SEAWALL



PHOTO 3: DETERIORATED WALER



PHOTO 4: TREES HAVE RESULTED IN DAMAGE TO WALL



PHOTO 5: TREES BEHIND WALLS HAVE DAMAGED WALLS



PHOTO 6: BROKEN TIES & EROSION BEHIND WALLS

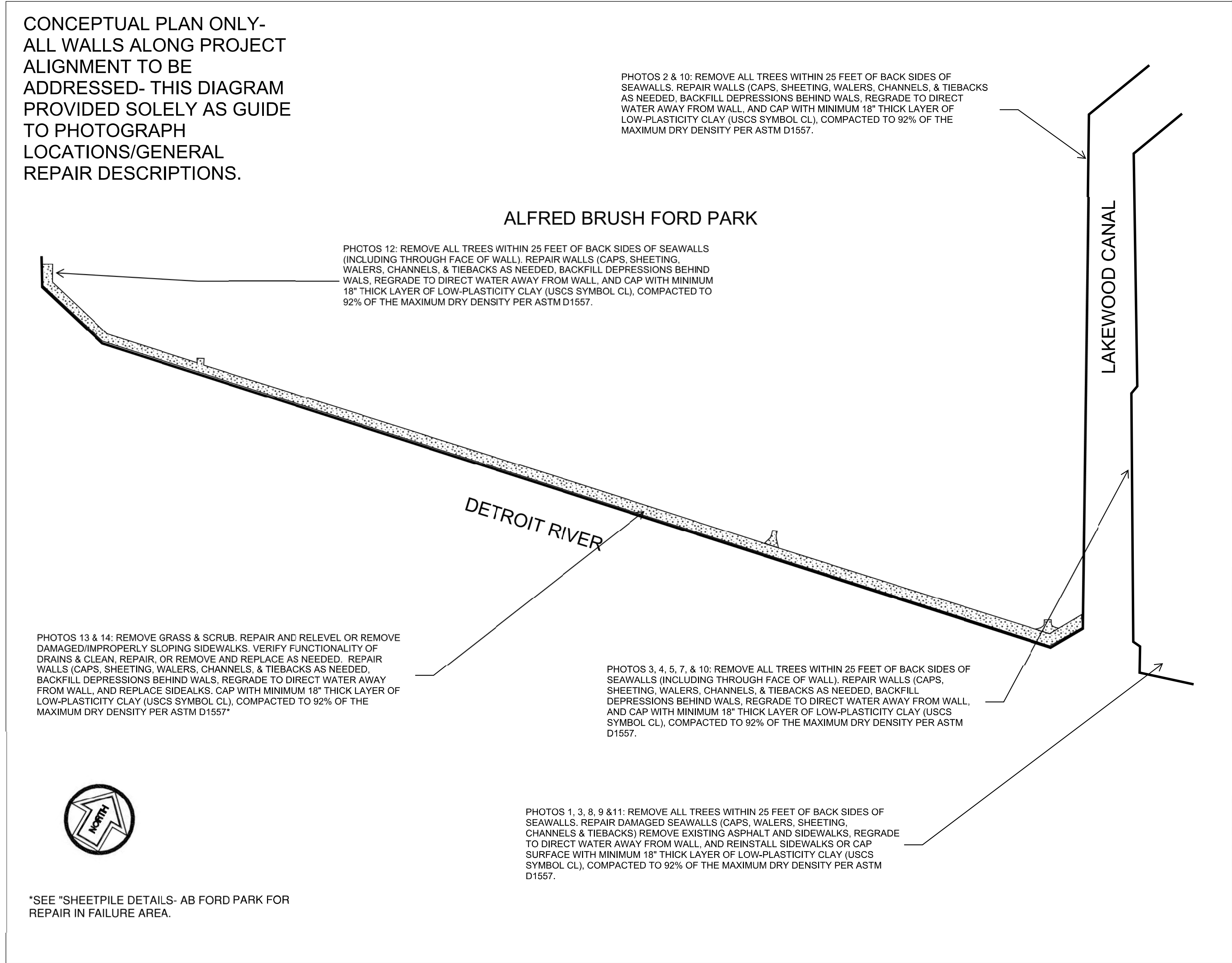


FIGURE 8: ALFRED BRUSH FORD PARK WALL MAINTENANCE

NO SCALE



PHOTO 7: SCRUB AND ROOTS GROWING THROUGH WALLS, TIES EXPOSED



PHOTO 9: DETERIORATED ASPHALT, GRADE SLOPES TOWARD WALL



PHOTO 11: DETERIORATED ASPHALT, GRADE SLOPES TOWARD WALL, DAMAGED CAP



PHOTO 13: "SAGS" IN SIDEWALKS, SIDEWALKS SLOPE TOWARD WALLS, SIDEWALKS NOT MAINTAINED

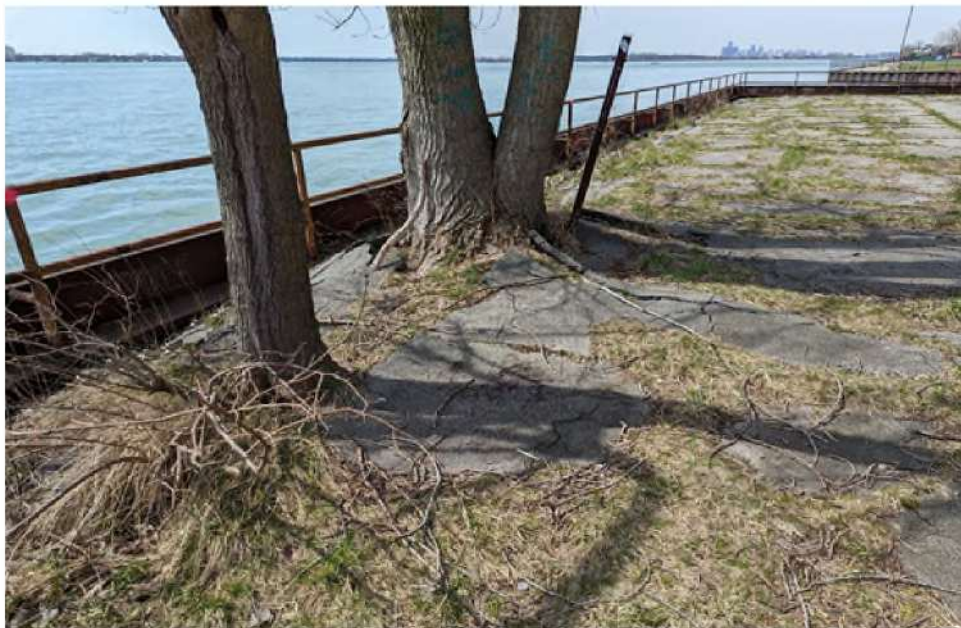


PHOTO 8: LARGE TREES CLOSE TO WALLS, DETERIORATED ASPHALT, GRADE SLOPES TOWARD WALL



PHOTO 10: TREES BEHIND WALLS ARE DAMAGING WALLS



PHOTO 12: TREES & EROSION BEHIND WALL



PHOTO 14: SIDEWALKS HAVE NOT BEEN MAINTAINED. NOTE SETTLEMENT, UNEVEN SLABS, SCRUB IN JOINTS



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Orientation

Scale

NONE

Project

CITY OF DETROIT FLOOD MEASURES

Project Location

DETROIT, MICHIGAN

Sheet Name

SHEETPILE DETAILS- AB FORD PARK AND GENERAL WALL MAINTENANCE

Engineer's Seal

Revisions

REV	ISSUED FOR	DATE	BY
OWNER REVIEW		07/21/23	LMU
FOR BIDS		09/21/23	

Date

07/21/23

SME Project No.

091506.00

Project Manager:

L. JOHNSON

Designer:

L. JOHNSON

CADD:

Checked By:

THB

Sheet No.

CP-16

DRAWING NOTE: SCALE SHOWN IS MEANT FOR 24" X 36" AND WILL SCALE PROPORTIONALLY IF PRINTED ON ANY OTHER SIZE MEDIA.
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