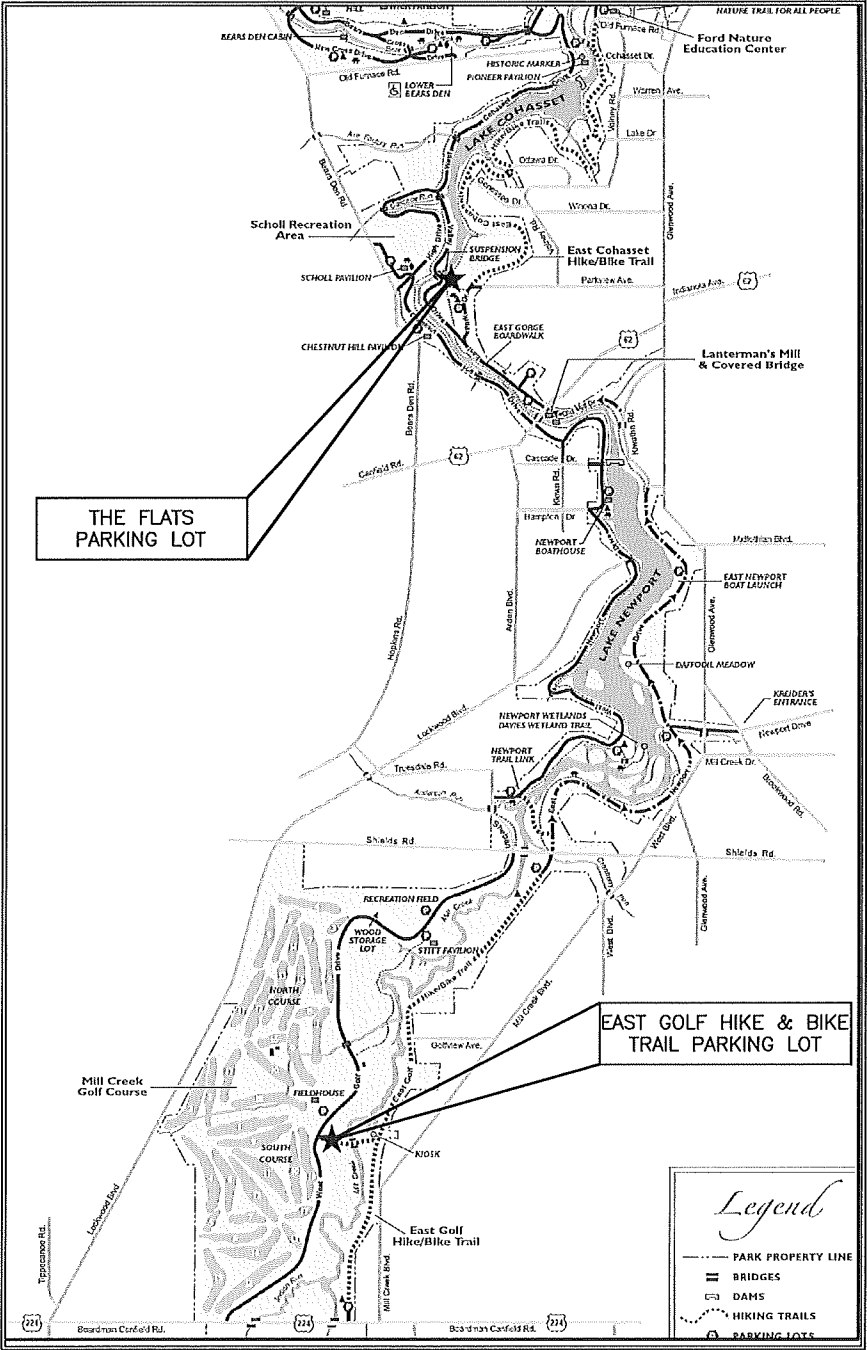


MILL CREEK METROPOLITAN PARK DISTRICT
MAHONING COUNTY, OHIO

2020 PARKING LOT IMPROVEMENTS

EAST GOLF HIKE & BIKE TRAIL PARKING LOT (WEST GOLF DRIVE) AND THE FLATS PARKING LOT



LOCATION MAP

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STANDARD DRAWINGS SUPPLEMENTAL SPECIFICATIONS	
BP 3.1 ASPHALT PAVING	7-18-14
BP 5.1 CONCRETE CURBS	7-19-13

2019 SPECIFICATIONS

ALL MATERIALS AND CONSTRUCTION OPERATIONS SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, THE PLANS, AND THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS), DATED JANUARY 1, 2019. IN CASE OF DISCREPANCY BETWEEN THE PARK DISTRICT PLANS AND SPECIFICATIONS AND THE ODOT CMS, THE PARK DISTRICT PLANS AND SPECIFICATIONS SHALL GOVERN.

SPECIAL NOTICE

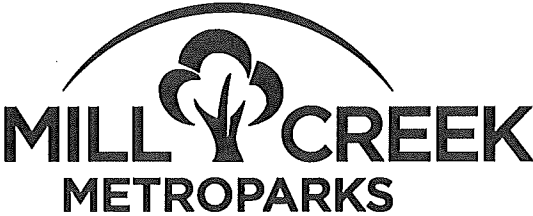
THE MILL CREEK METROPOLITAN PARK DISTRICT EXISTS TO PRESERVE OPEN SPACE AND NATURAL AREAS. CONSEQUENTLY, ANY WORK DONE IN THE PARK DISTRICT MUST BE DONE WITH THE PROTECTION OF THE ENVIRONMENT IN MIND. NO TREES, SHRUBS, PLANTS, WILDLIFE OR NATURAL FEATURES ARE TO BE DISTURBED DURING CONSTRUCTION WITHOUT THE PRIOR WRITTEN CONSENT OF THE EXECUTIVE DIRECTOR OF THE MILL CREEK METROPOLITAN PARK DISTRICT. ANY MATERIAL THAT FALLS INTO WATERWAYS IS TO BE REMOVED IMMEDIATELY. ALL HAZARDOUS MATERIALS SUCH AS FUELS, SOLVENTS, ETC., ARE TO BE HANDLED IN THE APPROVED MANNER SO AS NOT TO CAUSE POLLUTION OF THE ENVIRONMENT.

WORK REQUIRED

THE IMPROVEMENT OF TWO (2) PARKING LOTS IN MILL CREEK PARK (EAST GOLF HIKE & BIKE TRAIL PARKING LOT [WEST GOLF DRIVE] AND FLATS PARKING LOT). WORK INCLUDES EXCAVATION, EMBANKMENT, SUBGRADE COMPACTION, INSTALLATION OF AGGREGATE BASE, PAVEMENT PLANING, ASPHALT PAVEMENT REMOVAL, INSTALLATION OF NEW ASPHALT PAVEMENT, APPLICATION OF PAVEMENT MARKINGS; AND MISCELLANEOUS RELATED ITEMS OF WORK.

UNDERGROUND UTILITIES

TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY



GENERAL NOTES 1

MILL CREEK METROPARKS GENERAL NOTE

MILL CREEK METROPARKS EXISTS TO PRESERVE OPEN SPACE AND NATURAL AREAS. CONSEQUENTLY, WORK WITHIN THE METROPARKS MUST BE DONE WITH PROTECTION OF THE ENVIRONMENT IN MIND. NO TREES, SHRUBS, PLANTS, WILDLIFE OR NATURAL AREAS ARE TO BE DISTURBED DURING CONSTRUCTION WITHOUT THE PRIOR WRITTEN CONSENT OF THE EXECUTIVE DIRECTOR OF THE MILL CREEK METROPARKS. ANY MATERIALS THAT FALL INTO WATERWAYS SHALL BE REMOVED IMMEDIATELY. ALL HAZARDOUS MATERIALS SUCH AS FUELS, SOLVENTS, ETC. ARE TO BE HANDLED IN THE APPROVED MANNER SO AS NOT TO CAUSE POLLUTION OF THE ENVIRONMENT.

GENERAL NOTE ON EXISTING UTILITIES

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITY LINES THROUGHOUT THE WORK SITE. LOCATIONS PROVIDED ON DRAWINGS ARE APPROXIMATE LOCATIONS AND WILL REQUIRE FURTHER VERIFICATION. CONTACT OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 AT A MINIMUM OF 48 HOURS IN ADVANCE OF COMMENCING PROJECT.

LIMITS OF WORK

THE CONTRACTOR IS TO MINIMIZE DISTURBANCE OF AREAS OUTSIDE THE IMMEDIATE PROJECT AREA. ALL STRUCTURES, PAVEMENTS, TREES AND VEGETATION ARE TO BE PROTECTED AT ALL TIMES. CROSSING ANY EXISTING ASPHALT PAVEMENT SHOULD BE TAKEN WITH APPROPRIATE AND CAUTIOUS PLANNING AS TO NOT DAMAGE THE SURFACE. ANY AREAS DISTURBED THROUGHOUT AND ADJACENT TO THE PROJECT SITE ARE TO BE RESTORED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTORS SHALL PLAN ALL CONSTRUCTION OPERATIONS AND OPERATE EQUIPMENT TO COMPLY WITH THE ABOVE.

SCHEDULING OF WORK

THE CONTRACTOR SHALL BEGIN THE WORK AS EARLY AS POSSIBLE AFTER RECEIVING A NOTICE TO PROCEED. ONCE THE PROJECT HAS COMMENCED, THE CONTRACTOR SHALL COMPLETE THE WORK EXPEDITIOUSLY AND WITHOUT INTERRUPTION. DUE TO FACILITY RENTALS, PROGRAMMING, SPECIAL EVENTS AND/OR COMMITMENTS TO ORGANIZATIONS, WORK AT SPECIFIC LOCATIONS ON SPECIFIC DAYS MAY NOT BE POSSIBLE AND THEREFORE NOT PERMITTED. THEREFORE, ALL SCHEDULING BY THE CONTRACTOR SHALL BE COORDINATED AND APPROVED BY THE METROPARKS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS SET UP TO BE USED AS DIRECTED BY THE METROPARKS UNLESS AUTHORIZED BY THE METROPARKS. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE METROPARKS DISCRETION WILL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

ACCESS TO WORK SITE

ALL EQUIPMENT AND MATERIAL DELIVERIES AND GENERAL ACCESS TO THE PROJECT SITES SHALL BE COORDINATED WITH THE METROPARKS PRIOR TO THE BEGINNING OF WORK.

MILL CREEK METROPARKS ACCESS

ACCESS TO ALL MILL CREEK METROPARKS DRIVES AND FACILITIES SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT CONSTRUCTION ACTIVITIES USING APPROPRIATE MAINTENANCE OF TRAFFIC MEASURES, INCLUDING FLAGGERS, WHEN NECESSARY.

NO STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT WILL OCCUR WITHIN THE EXISTING BOUNDARIES OF MILL CREEK PARK EXCEPT WITHIN THE PARKING LOT PROJECT SITES AND ADDITIONAL APPROPRIATE AREAS AS APPROVED BY THE METROPARKS. NO STAGING OR STORAGE AREAS SHALL HINDER OR PROHIBIT ACCESS TO METROPARKS FACILITIES.

ITEM 202: ASPHALT PAVEMENT & BASE REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE REMOVAL AND DISPOSAL OFFSITE OF ALL EXISTING ASPHALT PAVEMENT AND BASE MATERIAL FROM DESIGNATED LOCATIONS, AS PER PLAN, AND AS DIRECTED BY THE METROPARKS PROJECT MANAGER. IN AREAS WHERE PARTIAL ASPHALT PAVEMENT REMOVAL IS DIRECTED, THE CONTRACTOR SHALL CAREFULLY SAWCUT A CLEAN JOINT AT THE REMOVAL LIMIT, IF IT DOES NOT OCCUR AT AN EXISTING JOINT.

ITEM 202: ASPHALT PAVEMENT REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE REMOVAL AND DISPOSAL OFFSITE OF ALL EXISTING ASPHALT PAVEMENT FROM DESIGNATED LOCATIONS, AS PER PLAN, AND AS DIRECTED BY THE METROPARKS PROJECT MANAGER. IN AREAS WHERE PARTIAL ASPHALT PAVEMENT REMOVAL IS DIRECTED, THE CONTRACTOR SHALL CAREFULLY SAWCUT A CLEAN JOINT AT THE REMOVAL LIMIT, IF IT DOES NOT OCCUR AT AN EXISTING JOINT.

REMOVE ALL ASPHALT PAVEMENT CONCRETE FROM THE SURFACE TO THE BOTTOM OF THE PAVEMENT COURSES AS SHOWN ON THE PLANS.

ITEM 202: CONCRETE CURB REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR CONCRETE CURB REMOVAL AT THE FLATS PARKING LOT. THE CONTRACTOR SHALL CAREFULLY SAWCUT ADJACENT ASPHALT AND REMOVE DESIGNATED CURBS WHILE PRESERVING ALL ADJACENT CURB, STRUCTURES, AND ADJACENT PAVEMENT.

ITEM 202: TIMBER BOLLARD REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR REMOVING EXISTING TIMBER BOLLARDS AND CONCRETE BASES AT THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT. HOLES LEFT AFTER EXTRACTION SHALL BE FILLED WITH SUITABLE SOIL MATERIAL (CMS 203.02R).

ITEM 202: FENCE REMOVED FOR REUSE OR STORAGE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR REMOVAL AND STOCKPILING OF EXISTING SPLIT RAIL FENCE AT THE FLATS PARKING LOT. THE REMOVED SPLIT RAIL FENCE SHALL BE CAREFULLY SET ASIDE AT A LOCATION DETERMINED BY THE METROPARKS PROJECT MANAGER. THE METROPARKS WILL RETRIEVE AND REMOVE THE STOCKPILE OFFSITE. HOLES LEFT AFTER EXTRACTION SHALL BE FILLED WITH SUITABLE MATERIAL (CMS 203.02R).

ITEM 202: GATE REMOVED FOR REUSE OR STORAGE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR REMOVING THE EXISTING GATES AND POSTS AT BOTH THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT AND THE FLATS PARKING LOT. THE REMOVED GATES AND POSTS SHALL BE CAREFULLY SET ASIDE AT A LOCATION DETERMINED BY THE METROPARKS PROJECT MANAGER. THE METROPARKS WILL RETRIEVE AND REMOVE THE GATES AND POSTS OFFSITE. HOLES LEFT AFTER EXTRACTION SHALL BE FILLED WITH SUITABLE MATERIAL (CMS 203.02R).

ITEM 202: PRECAST CONCRETE CURB REMOVED FOR REUSE OR STORAGE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE REMOVAL AND STOCKPILING OF EXISTING PRECAST CONCRETE CURB AND REMOVAL AND DISPOSAL OF REBAR ANCHORS FROM THE FLATS PARKING LOT.

ITEM 202: SIGNS & POSTS REMOVED FOR REUSE OR STORAGE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE REMOVAL AND STOCKPILING OF SIGNS AND EXISTING POSTS AT BOTH THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT AND THE FLATS PARKING LOT. THE REMOVED SIGNS AND POSTS SHALL BE CAREFULLY SET ASIDE AT A LOCATION DETERMINED BY THE METROPARKS PROJECT MANAGER. THE METROPARKS WILL RETRIEVE AND REMOVE THE SIGNS AND POSTS OFFSITE. HOLES LEFT AFTER EXTRACTION SHALL BE FILLED WITH SUITABLE MATERIAL (CMS 203.02R).

ITEM 203: EXCAVATION, AS PER PLAN

THIS ITEM SHALL INCLUDE EXCAVATION OF ASPHALT, AGGREGATE, AND/OR SOIL MATERIAL TO AN APPROPRIATE DEPTH AT LOCATIONS, AS DIRECTED AND AS PER PLAN. LOCATIONS ALONG WITH DESIRED GRADES AND ELEVATIONS ARE IDENTIFIED ON THE PLANS. ANY DAMAGE TO UNDERGROUND UTILITIES MUST BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE DISPOSAL OF EXCAVATED MATERIALS NOT SUITABLE FOR INCORPORATION INTO THE WORK.

ITEM 203: EMBANKMENT, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE EMBANKMENT OF SOIL AT THE FLATS PARKING LOT, AS PER PLAN, AND AS SHOWN ON THE PROPOSED DEVELOPMENT PLANS-SEE SHEET 11/14.

ITEM 203: BORROW, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF SOIL BORROW MATERIAL AT THE FLATS PARKING LOT. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR OBTAINING BORROW AND SHALL PAY ALL COSTS INVOLVED.

SUITABLE SOIL BORROW MATERIAL SHALL BE FURNISHED AND PLACED AS NEEDED AND AS DIRECTED AT SUBGRADE COMPACTION AREAS, SHOULDERS, EMBANKMENT AREAS AND OTHER GRADED AREAS.

USE ALL SUITABLE MATERIAL EXCAVATED FROM OTHER AREAS OF THE PROJECT BEFORE ORDERING BORROW. THE CONTRACTOR SHALL PROVIDE CERTIFIED VOLUME OR WEIGHT TICKETS WITH EACH DELIVERY. FOR CONVERSION PURPOSES, THE MATERIAL DENSITY FOR DELIVERED BORROW IS ASSUMED TO BE 100 LBS/CU.FT.

ITEM 304: AGGREGATE BASE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF AGGREGATE BASE MATERIAL THROUGHOUT THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT AND THE FLATS PARKING LOT.

AT THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT, THE AGGREGATE SHALL BE DISTRIBUTED FOR LEVELING, GRADING AND TO PREPARE THE INSTALLATION OF THE ASPHALT PAVEMENT COURSES. AGGREGATE SHALL ALSO BE INSTALLED TO MEET THE EXISTING GRADE AT DESIGNATED LOCATIONS AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN-SEE SHEET 7/14.

AT THE FLATS PARKING LOT, THE AGGREGATE BASE MATERIAL SHALL BE INSTALLED TO A MINIMUM UNIFORM DEPTH OF FOUR (4") INCHES AT DESIGNATED LOCATIONS AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN-SEE SHEET 11/14.

DATE: 02/2020

DRAWN BY: S. OLDHAM

REVIEW BY: DATE:

MILL CREEK METROPARKS
MILL CREEK PARK
YOUNGSTOWN / BOARDMAN TWP
MAHONING COUNTY, OH

2020 PARKING LOT IMPROVEMENTS
GENERAL NOTES

MILL CREEK
METROPARKS

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ITEM 703: NO.1 & NO.2 STONE BASE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION AND COMPACTION OF NO.1 & NO.2 STONE BASE MATERIAL TO A UNIFORM MINIMUM DEPTH OF EIGHT (8") INCHES AT THE FLATS PARKING LOT, AT DESIGNATED LOCATIONS AS SHOWN ON THE PROPOSED DEVELOPMENT PLANS--SEE SHEET 11/14. STONE MATERIAL TYPE AND QUALITY SHALL BE IN ACCORDANCE WITH ODOT ITEM 703.

ITEM 407: TACK COAT

THE TACK COAT APPLICATION RATE FOR EXISTING PAVEMENT SHALL BE 0.10 GALLONS PER SQUARE YARD. THE APPLICATION RATE FOR NEW PAVEMENT SHALL BE 0.05 GALLONS PER SQUARE YARD.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 407.03, 407.05, AND 407.06 OF THE 2010 CMS. THE DISTRIBUTOR USED FOR TACK COAT APPLICATION MUST BE CAPABLE OF ACCURATELY DISPENSING THE MATERIAL AT THE REQUIRED RATE IN A CONSISTENT AND UNIFORMLY DISTRIBUTED COATING THAT IS FREE OF THIN AREAS, STREAKS OR RIDGES. THE CONTRACTOR SHALL DEMONSTRATE HIS ABILITY TO PLACE THE TACK COAT IN THE MANNER SPECIFIED IN A TEST SECTION SELECTED BY THE METROPARKS, AND MUST MAKE ANY ADJUSTMENTS REQUIRED BEFORE PLACEMENT MAY BEGIN. ALL EXISTING SURFACES ARE TO BE CLEANED THOROUGHLY PRIOR TO APPLICATION OF TACK COAT.

THE CONTRACTOR SHALL MINIMIZE TRACKING ONTO ADJACENT PAVEMENT SURFACES.

ITEM 441: ASPHALT CONCRETE INTERMEDIATE LEVELING COURSE, TYPE 1

THE QUANTITY FOR THIS ITEM INCLUDES QUANTITIES TO BE USED FOR ALL PATCHING, LEVELING, AND GRADE ADJUSTMENT TO EXISTING AND PROPOSED ASPHALT PAVEMENT LOCATIONS AS PER PLAN AND AS DIRECTED BY THE METROPARKS. ALL PATCHING APPLICATION OF LOW AREAS SHALL BE FILLED WITH ASPHALT PRIOR TO BEGINNING THE APPLICATION OF THE UNIFORM ONE AND THREE--QUARTER (1.75") INCH ASPHALT COURSE (APPLICABLE AT ONLY THE FLATS PARKING LOT). THE CONTRACTOR SHALL MAKE ALL GRADE ADJUSTMENTS NECESSARY TO PROVIDE SMOOTH TRANSITIONS TO EXISTING PAVEMENT AREAS.

PAYMENT FOR THIS ITEM WILL BE MADE THE AT THE UNIT BID PRICE, AT THE ACCEPTED INSTALLED QUANTITY, AND SHALL BE FULL COMPENSATION FOR INCIDENTALS AND ALL OF THE ABOVE.

ITEM 441: ASPHALT CONCRETE PAVEMENT SURFACE COURSE, TYPE 1

THE QUANTITY FOR THIS ITEM INCLUDES QUANTITIES TO BE USED FOR UNIFORMLY APPLYING A ONE AND ONE--QUARTER (1.25") INCH ASPHALT PAVEMENT OVERLAY.

ALL JOINTS SHALL BE SEALED WITH AN ASPHALT CRACK FILLER, INCLUDING EDGE OF ASPHALT AT CONCRETE CURB. PAYMENT FOR THIS ITEM WILL BE MADE THE AT THE UNIT BID PRICE, AT THE ACCEPTED INSTALLED QUANTITY, AND SHALL BE FULL COMPENSATION FOR INCIDENTALS AND ALL OF THE ABOVE.

BUTT JOINTS

PROVIDE BUTT JOINTS AT LOCATIONS SHOWN ON PLANS. THE EDGES OF ALL JOINTS WHICH WILL REMAIN EXPOSED AFTER THE SURFACE COURSE HAS BEEN PLACED SHALL BE SAW CUT PRIOR TO PLANING/EXCAVATIONS AND SHALL BE SEALED WITH ASPHALT SEALER.

ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE JOINTS AS SHOWN IS CONSIDERED INCIDENTAL TO THE PAVEMENT REMOVAL AND ASPHALT CONCRETE PAVING WORK AND SHALL BE INCLUDED WITH THE VARIOUS ASPHALT ITEMS FOR PAYMENT.

LEAF & DEBRIS MAINTENANCE -- GENERAL

DURING THE PAVEMENT CLEANING, TACK COAT, PAVING AND PAVEMENT MARKING OPERATIONS, THE CONTRACTOR SHALL HAVE EQUIPMENT AND OPERATOR(S) ON SITE TO SWEEP, BLOW OR OTHERWISE REMOVE ALL DEBRIS FROM THE PARKING LOT SURFACE. EQUIPMENT SHALL BE OPERATED CONTINUOUSLY, IF NECESSARY, IMMEDIATELY AHEAD OF THE TACK COAT DISTRIBUTOR, ASPHALT PAVER, AND PAVEMENT MARKING STRIPER. UNDER EXTREME CONDITIONS, IT MAY BECOME NECESSARY TO LIMIT THE AREA OF TACK COAT THAT CAN BE PLACED AT ONE TIME.

ITEM 608: CONCRETE WALK, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL A CONCRETE PAVEMENT WALK AT THE FLATS PARKING LOT. ALL MATERIALS SHALL CONFORM TO ODOT ITEM NUMBER 608. CONCRETE SHALL BE CLASS C, 4000 PSI AND SHALL BE INSTALLED TO A THREE AND ONE--HALF (3.5") INCH DEPTH. THE FINISH GRADE OF THE CONCRETE WALK SHALL MATCH THE FINISH GRADE OF THE ADJACENT ASPHALT PARKING LOT AND SHALL MEET THE TOP OF CURB ALONG VALLEY DRIVE. THE CONCRETE WALK SHALL HAVE A CROSS SLOPE OF ONE PERCENT (1%). EXPANSION JOINTS SHALL BE PROVIDED EVERY (30') FEET MAXIMUM.

ITEM 609: CONCRETE CURB, TYPE 6

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL CONCRETE CURB AT THE FLATS PARKING LOT AT DESIGNATED LOCATIONS, AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN--SEE SHEET 11/14. THE CONCRETE CURB SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT ITEM 609. LAYOUT OF THE NEW SECTION OF CURB SHALL BE PROVIDED BY THE CONTRACTOR AND FINAL APPROVAL MUST BE GIVEN BY THE METROPARKS PROJECT MANAGER PRIOR TO DEMOLITION AND SETTING OF FORMS. GRADES FOR THE CURB MUST BE SET AT SIX (6") INCHES ABOVE THE FINAL GRADE OF THE PAVEMENT ALONG THE ENTRY DRIVE.

THE CURB ALONG VALLEY DRIVE WILL MEET THE EXISTING CURB AT A UNIFORM SLOPE.

EXISTING ASPHALT PAVEMENT SHALL BE SAWCUT TO A DISTANCE OF ONE (1') FOOT BEYOND ALL NEW CURBING AND THEN REMOVED, IF APPLICABLE. ALL VOIDS IN THE PAVEMENT AND BASE ALONG THE FACE OF CURB IS TO BE FILLED AND COMPACTED IN LIFTS WITH #304 AGGREGATE AND THREE (3") INCHES OF TYPE 2 ASPHALT CONCRETE TO MEET THE EXISTING.

ADD ALTERNATE -- ITEM SPECIAL: PRECAST CONCRETE CURB

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO FURNISH AND INSTALL SIX (6') FOOT LENGTH PRECAST CONCRETE CURBS (WHEEL STOPS). THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING PLANS/SPECIFICATIONS FOR METROPARKS REVIEW AND APPROVAL BEFORE ORDERING PRECAST CONCRETE CURB.

ITEM 611: 8" CONDUIT, TYPE B, 707.43, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL A SECTION OF EIGHT (8") DIAMETER CONDUIT, TYPE B, AT THE FLATS PARKING LOT, AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN -- SEE SHEET 11/14. THE CONTRACTOR SHALL TAKE ALL MEASUREMENTS AND ELEVATIONS NECESSARY TO COMPUTE THE PROPOSED FINAL FLOWLINE GRADE OF THE CONDUIT TO BE INSTALLED, AND SHALL SUBMIT CALCULATIONS AND CUT SHEETS TO THE METROPARKS FOR REVIEW AND APPROVAL. THE CONDUIT SHALL HAVE A MINIMUM OF (10") INCHES OF COVER.

ITEM 623: CONSTRUCTION LAYOUT STAKES

THE LOCATION AND GRADE FOR ALL PROPOSED CONSTRUCTION ITEMS SHALL BE STAKED ON THE SITE. PROPOSED CONSTRUCTION SHALL NOT PROCEED UNTIL LAYOUT AND GRADE STAKES HAVE BEEN APPROVED BY THE METROPARKS. THE METROPARKS RESERVES THE RIGHT TO ADJUST THE LOCATION AND/OR THE ELEVATION OF PROPOSED CONSTRUCTION ITEMS. PROPOSED GRADES SHALL BE STRICTLY ADHERED TO.

ITEM 642: PARKING LOT STALL MARKING, TYPE 1

PARKING LOT STALL MARKINGS SHALL BE IN CONFORMANCE WITH ALL PROVISIONS OF ITEM 642. STALL MARKING COLOR SHALL BE YELLOW FOR BOTH THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT AND THE FLATS PARKING LOT. ALL PARKING LOT STALL MARKINGS SHALL BE CONTINUOUS LINES, FOUR (4") INCHES IN WIDTH AND EIGHTEEN (18') FEET LONG UNLESS OTHERWISE SPECIFIED OR DIRECTED. CROSS--HATCHES SHALL BE CONTINUOUS, ANGLED AT 45', AND THREE (3) FOOT O.C. THE CONTRACTOR SHALL LAY OUT THE LOCATIONS OF ALL LINES TO ASSURE THEIR PROPER PLACEMENT. THE LAYOUT AND PRE--MARKING LINES SHALL BE APPROVED BY THE METROPARKS BEFORE MARKING OPERATIONS ARE STARTED.

ITEM 642: HANDICAP SYMBOL MARKING, TYPE 1

HANDICAP SYMBOL MARKINGS SHALL BE IN CONFORMANCE WITH ALL PROVISIONS OF ITEM 642. HANDICAP SYMBOL MARKING COLOR SHALL BE YELLOW, 42" HIGH. METROPARKS' HANDICAP SYMBOL MARKINGS DO NOT CONTAIN A BLUE BACKDROP. THE CONTRACTOR SHALL LAY OUT THE LOCATIONS OF ALL SYMBOLS (WITH TEMPLATES) TO ASSURE THEIR PROPER PLACEMENT. THE LAYOUT AND PRE--MARKING LINES SHALL BE APPROVED BY THE METROPARKS BEFORE MARKING OPERATIONS ARE STARTED.

ITEM 614: MAINTAINING TRAFFIC

FURNISH, ERECT AND MAINTAIN ALL NECESSARY SIGNS, CONES, BARRELS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, LATEST REVISION.

THE CONTRACTOR SHALL COORDINATE HIS SIGN AND BARRICADE PLACEMENT AND REMOVAL OPERATIONS WITH THE METROPARKS. ALL TRAFFIC CONTROL DEVICES SHALL ARRIVE AT THE SITE IN A CLEAN AND OPERABLE CONDITION, AND SHALL BE INSPECTED AT THE END OF EACH DAY AND MAINTAINED AS FOUND TO BE NECESSARY. SIGNS OR BARRICADES WITH LOOSE, BROKEN OR HAZARDOUS MOUNTING FRAMES OR SUPPORT STRUCTURES SHALL BE FIXED OR REPLACED.

TRAFFIC CONTROL DEVICES SHALL BE PLACED AT ALL ACCESS POINTS INCLUDING TRAILS. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE METROPARKS PRIOR TO THE BEGINNING OF CONSTRUCTION.

ITEM 651: STRIPPING & STOCKPILING TOPSOIL, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR AND EQUIPMENT NECESSARY TO STRIP AND STOCKPILE TOPSOIL, SUITABLE FOR REUSE, AT THE FLATS PARKING LOT AT LOCATIONS AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN --SEE SHEET 11/14-- AND AS DIRECTED BY THE METROPARKS PROJECT MANAGER.

ITEM 652: PLACING STOCKPILED TOPSOIL, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL LABOR AND EQUIPMENT NECESSARY TO PLACE STOCKPILED TOPSOIL AT THE FLATS PARKING LOT AT LOCATIONS AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN --SEE SHEET 11/14-- AND AS DIRECTED BY THE METROPARKS PROJECT MANAGER.

ALL AVAILABLE STOCKPILED TOPSOIL SHALL BE USED PRIOR TO USE OF BORROW MATERIAL IN NON--PAVEMENT AREAS AND/OR AT LOCATIONS AS DIRECTED BY THE METORPARKS PROJECT MANAGER.

ADD ALTERNATE -- ITEM 653: TOPSOIL FURNISHED AND PLACED, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF TOPSOIL AT BOTH THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT AND THE FLATS PARKING LOT AND AT LOCATIONS AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN--SEE SHEET 7/14 AND 11/14-- AND AS DIRECTED BY THE METROPARKS PROJECT MANAGER. APPROVAL OF TOPSOIL TYPE/QUALITY MUST BE GRANTED BY THE METROPARKS PROJECT MANAGER PRIOR TO INSTALLATION.

DATE: 02/2020

DATE:

DRAWN BY: S. OLIPHANT

REVIEWED BY:

MILL CREEK METROPARKS
MILL CREEK PARK
YOUNGSTOWN / BOARDMAN TWP
MAHONING COUNTY, OH

2020 PARKING LOT IMPROVEMENTS
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ADD ALTERNATE – ITEM 659: SEEDING AND MULCHING, AS PER PLAN

GRASS SEEDING AND MULCHING SHALL BE PERFORMED AS STATED IN THE ODOT CMS AND AS DESCRIBED BELOW.

THE AREAS TO BE SEEDED INCLUDE ALL SHOULDER AREAS WITH EXPOSED TOPSOIL, OR ARE OTHERWISE DESIGNATED FOR SEEDING BY THE METROPARKS PROJECT MANAGER.

SEED SHALL BE DELIVERED TO THE SITE IN BAGS WITH THE MANUFACTURER’S LABEL PRESENT. SEED SHALL BE EVENLY SOWN OVER THE PREPARED AREAS AT THE RATE OF 10 POUNDS PER 1000 SQUARE FEET. SEED SHALL BE 100% TURFTYPE PERENNIAL RYEGRASS CONSISTING OF A MINIMUM 3–WAY BLEND (FOR EXAMPLE, EAGLE BLEND). MULCHING MATERIAL SHALL BE SECOND CUTTING STRAW, FREE FROM SEED HEAD. HYDROSEEDING WILL NOT BE PERMITTED ON THIS PROJECT.

PAYMENT QUANTITIES FOR THIS ITEM WILL BE ESTABLISHED BY A MEASUREMENT OF ACCEPTED WIDTHS OF SEEDING ALONG LINEAR AREAS. ANY AREAS DISTURBED BY THE CONTRACTOR IN EXCESS OF NORMAL OR DESIGNATED CONSTRUCTION LIMITS SHALL BE SEEDED BY THE CONTRACTOR BUT WILL NOT BE INCLUDED IN PAYMENT QUANTITIES. THE TOTAL MEASURED AREA WILL BE CHECKED WITH THE ACTUAL QUANTITIES OF SEED USED TO DETERMINE COMPLIANCE WITH THE SPECIFIED SEEDING RATE.

ITEM 712.14: DETECTABLE WARNING DEVICE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL ONE (1) DETECTABLE WARNING DEVICES AT THE FLATS PARKING LOT. DETECTABLE WARNINGS TO BE USED SHALL BE FIBERGLASS COMPOSITE POLYMER, ADA SOLUTIONS, RED BRICK, #20109 (OR APPROVED EQUAL).

ADD ALTERNATE – ITEM SPECIAL: GATE WITH POST

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO FABRICATE AND INSTALL THE STEEL GATE, STATIONARY POSTS AND CONCRETE FOOTINGS; AND TO PAINT AND INSTALL REMOVABLE STEEL BOLLARDS AS SHOWN ON THE PLANS AT THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT.

STEEL SHALL BE FURNISHED AND FABRICATED IN GENERAL CONFORMANCE WITH CMS ITEM 513 LEVEL SF. ALL STEEL SHALL BE MADE IN THE UNITED STATES. SHOP DRAWINGS ARE REQUIRED AND SHALL BE FURNISHED AT LEAST 7 DAYS PRIOR TO THE START OF FABRICATION. THE COMPLETED GATE ASSEMBLY SHALL BE GIVEN A METALLIZED (ZINC) COATING AND A URETHANE FINISH COAT. THE FINISH COAT SHALL BE SILVER, AS SELECTED BY THE METROPARKS FROM COLOR SAMPLES SUPPLIED BY THE CONTRACTOR.

THE STEEL TOP RAIL WILL BE FURNISHED BY THE METROPARKS FROM VARIOUS LENGTHS OF SALVAGED HISTORIC BRIDGE RAILING. THE CONTRACTOR SHALL TRANSPORT THE TOP RAIL FROM THE METROPARKS SERVICE FACILITY AT 996 BEARS DEN ROAD TO HIS STEEL FABRICATOR. THE TOP RAIL SHALL BE CLEANED AND INCORPORATED INTO THE FINISHED RAILING AS SHOWN ON THE PLAN DETAILS. ANY WELDED SPLICES NEEDED SHALL BE GROUND FLUSH WITH THE SURROUNDING MATERIAL PRIOR TO PAINTING.

THE CONTRACTOR SHALL FURNISH BOLLARDS AND APPLY A FINISH COAT OF PAINT, MATCHING THE GATE COLOR, TO BOLLARD AREAS THAT WILL REMAIN EXPOSED AFTER INSTALLATION. CAREFULLY TRANSPORT AND INSTALL PAINTED BOLLARDS AT LOCATIONS SHOWN ON THE PLANS.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE LUMP SUM PRICE BID, AND SHALL BE FULL COMPENSATION FOR INCIDENTALS AND ALL OF THE ABOVE.

ITEM SPECIAL: 10” DIAMETER CEDAR BOLLARD

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR AND EQUIPMENT NECESSARY TO INSTALL CEDAR BOLLARDS AS SHOWN ON THE PLANS.

CEDAR BOLLARD LOGS WILL BE FURNISHED BY THE METROPARKS. THE CONTRACTOR SHALL TRANSPORT THE BOLLARDS FROM THE METROPARKS SERVICE FACILITY AT 996 BEARS DEN ROAD TO THE PROJECT SITE AND TRIM, SHAPE AND OTHERWISE PREPARE BOLLARDS FOR INSTALLATION AS SHOWN ON THE PLANS–SEE SHEETS 7/14 AND 11/14.

ITEM SPECIAL: 8X8 PRESSURE TREATED REMOVABLE BOLLARD

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO CONSTRUCT CONCRETE FOOTINGS AND INSTALL 8X8 PRESSURE TREATED REMOVABLE BOLLARDS AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN–SEE SHEET 11/14. THE 8X8 PRESSURE TREATED BOLLARD SHALL BE SOUTHERN YELLOW PINE, #2–SEE DETAIL SHEET 13/14 FOR INSTALLATION INFORMATION.

ADD ALTERNATE – ITEM SPECIAL: WOOD CHIP MULCH

THE CONTRACTOR SHALL PLACE A THREE INCH (3”) DEPTH OF WOOD CHIP MULCH AT THE FLATS PARKING LOT AT LOCATIONS AS SHOWN ON THE PROPOSED DEVELOPMENT PLAN – SEE SHEET 11/14.

WOOD CHIP MULCH MATERIAL WILL BE MADE AVAILABLE TO THE CONTRACTOR BY THE METROPARKS AT THE SERVICE FACILITY LOCATED AT 996 BEARS DEN ROAD. THE CONTRACTOR SHALL LOAD AND TRANSPORT THE MATERIAL TO THE PROJECT SITE FOR USE.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE UNIT PRICE BID, AND SHALL INCLUDE THE LOADING, TRANSPORTATION AND PLACEMENT OF WOOD CHIP MULCH MATERIAL.

ITEM SPECIAL: STUMP REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR AND EQUIPMENT NECESSARY FOR THE REMOVAL OF TREE STUMPS FROM BOTH THE EAST GOLF HIKE & BIKE TRAIL PARKING LOT AND THE FLATS PARKING LOT.

ITEM SPECIAL: RELOCATE STONES ONSITE, AS PER PLAN

THIS ITEM SHALL INCLUDE FURNISHING ALL LABOR AND EQUIPMENT NECESSARY FOR THE RELOCATING OF EXISTING STONES AT THE FLATS PARKING LOT. THE STONES SHALL BE MOVED AND RESET AT LOCATIONS AROUND THE FLATS PARKING LOT AS DIRECTED BY THE METROPARKS PROJECT MANAGER.

DATE: 06/2020

DRAWN BY: S. OLDSHAM

REVIEWED BY:

DATE:

MILL CREEK METROPARKS
MILL CREEK PARK
YOUNGSTOWN / BOARDMAN TWP
MAHONING COUNTY, OH

2020 PARKING LOT IMPROVEMENTS
GENERAL NOTES



4
14

GENERAL SUMMARY

SHEET NUMBER					LINE #	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
6	7	8	11	12						
1		2			1	201	3	EACH	STUMP REMOVED, AS PER PLAN	4
		91			2	202	91	LIN. FT.	CONCRETE CURB REMOVED, AS PER PLAN	2
		224			3	202	224	SQ. YD.	ASPHALT PAVEMENT & BASE REMOVED, AS PER PLAN	2
675		54			4	202	729	SQ. YD.	ASPHALT PAVEMENT REMOVED, AS PER PLAN	2
		216			5	202	216	LIN. FT.	FENCE REMOVED FOR REUSE OR STORAGE, AS PER PLAN	2
12					6	202	12	EACH	TIMBER BOLLARDS REMOVED, AS PER PLAN	2
1		1			7	202	2	EACH	GATE REMOVED FOR REUSE OR STORAGE, AS PER PLAN	2
		15			8	202	15	EACH	PRECAST CONCRETE CURB REMOVED FOR REUSE OR STORAGE, AS PER PLAN	2
1		2			9	202	3	EACH	SIGNS & POSTS REMOVED FOR REUSE OR STORAGE, AS PER PLAN	2
1		1			10	203	1	LUMP	EXCAVATION, AS PER PLAN	2
	1		1		11	203	1	LUMP	EMBANKMENT, AS PER PLAN	2
			164.5		12	203	164.5	CU. YD.	BORROW, AS PER PLAN	2
	6		614		13	204	620	SQ. YD.	SUBGRADE COMPACTION, AS PER PLAN	
23					14	254	23	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	
	89		69		15	304	158	CU. YD.	AGGREGATE BASE, AS PER PLAN	2
	106		117		16	407	223	GAL	TACK COAT	3
	77		61		17	441	138	CU. YD.	ASPHALT CONC. INTERMEDIATE LEVELING COURSE, TYPE 1 (448)	3
	64		40		18	441	104	CU. YD.	ASPHALT CONC. SURFACE COURSE, TYPE 1 (448), PG 64-22	3
			854		19	608	854	SQ. FT.	CONCRETE WALK, AS PER PLAN	3,13
			133		20	609	133	LIN. FT.	CONCRETE CURB, TYPE 6	3,13
			12		21	611	12	LIN. FT.	8" CONDUIT, TYPE B, 707.43, AS PER PLAN	3
	1026			459	22	642	1485	LIN. FT.	PARKING LOT STALL MARKING, TYPE 1	3
	4			2	23	642	6	EACH	HANDICAP SYMBOL MARKING, TYPE 1	3
		165			24	651	165	CU. YD.	STRIPPING & STOCKPILING TOPSOIL, AS PER PLAN	3
			51.5		25	652	51.5	CU. YD.	PLACING STOCKPILED TOPSOIL, AS PER PLAN	3
			137.5		26	703	137.5	CU. YD.	NO.1 AND NO.2 STONE BASE, AS PER PLAN	3
			1		27	712.14	1	EACH	DETECTABLE WARNING DEVICE, AS PER PLAN	4
			2		28	SPEC	2	EACH	8X8 PRESSURE TREATED REMOVABLE BOLLARD	4,13
		27			29	SPEC	27	EACH	RELOCATE STONES ONSITE, AS PER PLAN	4
					30	614	1	LUMP	MAINTENANCE OF TRAFFIC	3
					31	623	1	LUMP	CONSTRUCTION LAYOUT STAKES	3
					32	624	1	LUMP	MOBILIZATION	

**PLEASE NOTE: CONTINGENCY QUANTITIES SHALL NOT BE ORDERED OR USED WITHOUT PRIOR APPROVAL FROM THE METROPARKS.

ADD ALTERNATES

SHEET NUMBER					LINE #	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
6	7	8	11	12						
	48		22		A1	SPEC	70	EACH	*PRECAST CONCRETE CURB, AS PER PLAN	3,13
	20		30		A2	653	50	CU. YD.	*TOPSOIL FURNISHED AND PLACED	3
	155		366		A3	659	521	SQ. YD.	*SEEDING AND MULCHING, AS PER PLAN	4
			578		A4	SPEC	578	SQ. YD.	*WOOD CHIP MULCH	4
	1				A5	SPEC	1	LUMP	*GATE WITH POSTS	4,14
	8		4		A6	SPEC	12	EACH	*10" DIAMETER CEDAR BOLLARD	4,13

DRAWN BY: S. OLDSMAN
DATE: 02/2020
REVIEWED BY: DATE:

MILL CREEK METROPARKS
MILL CREEK PARK
YOUNGSTOWN / BOARDMAN TWP
MAHONING COUNTY, OH

2020 PARKING LOT IMPROVEMENTS
GENERAL SUMMARY

MILL CREEK METROPARKS

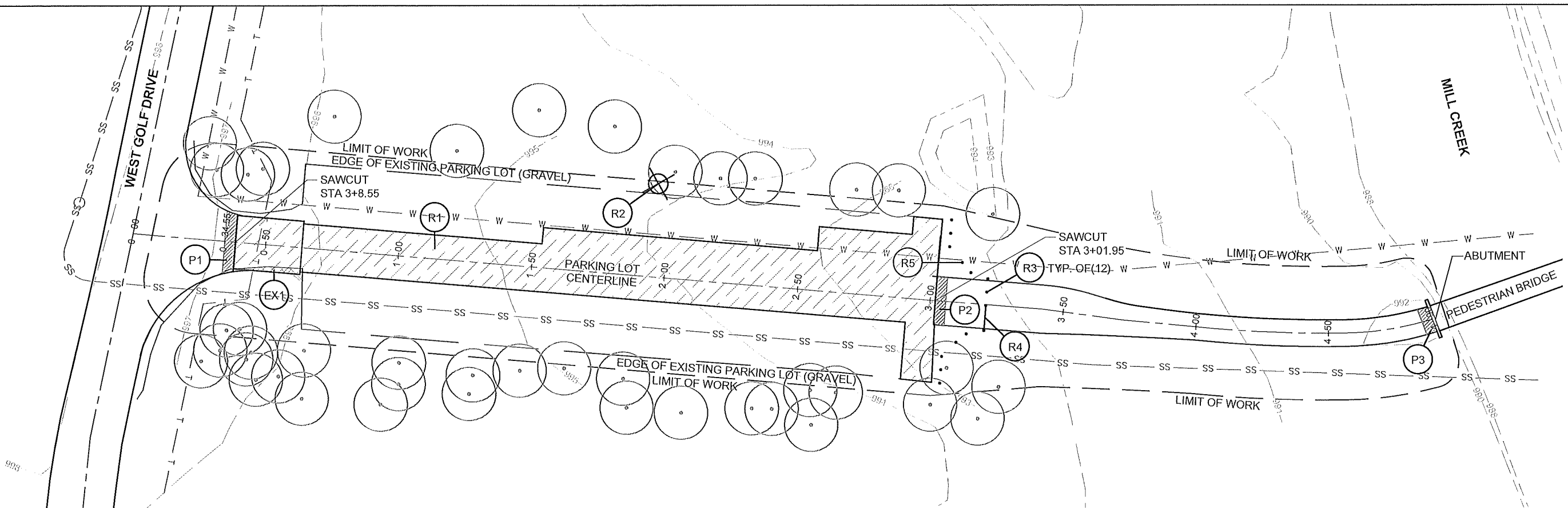
5
14

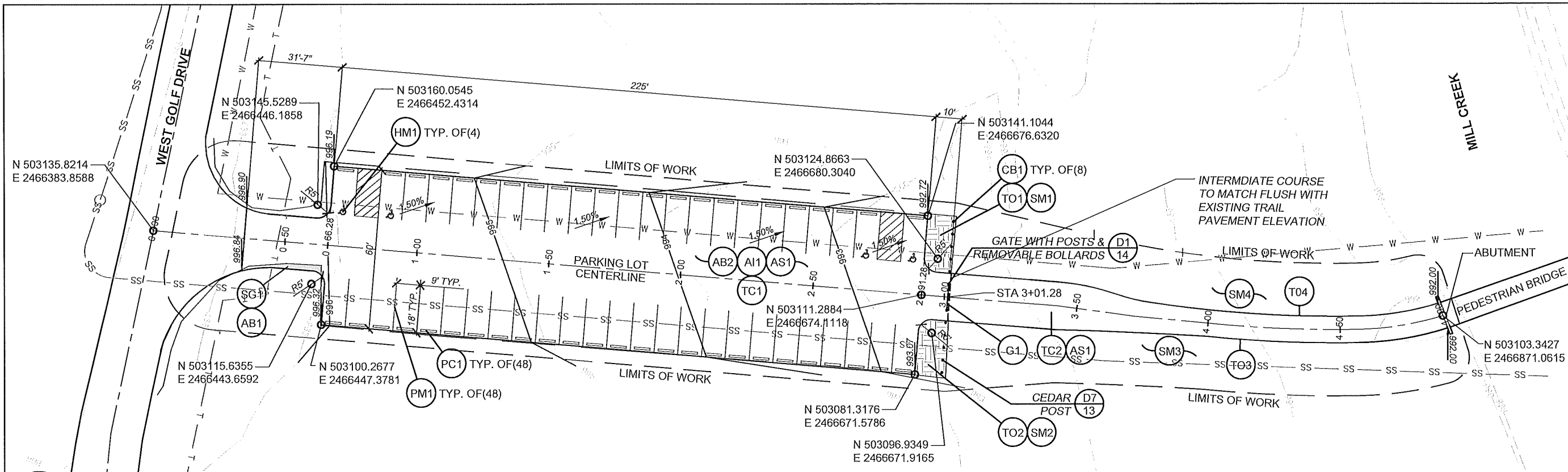
A1

EAST GOLF HIKE & BIKE TRAIL PARKING LOT (WEST GOLF DRIVE)
SCALE: 1" = 40'
1698 SQUARE YARDS

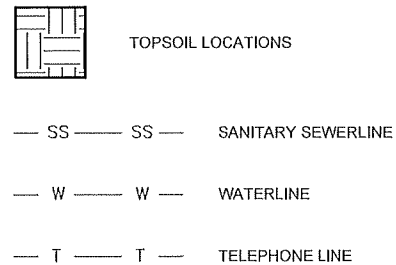
- EXCAVATION LOCATION
- PAVEMENT REMOVAL
- SANITARY SEWERLINE
- WATERLINE
- TELEPHONE LINE
- EXISTING TREES
- STUMP REMOVED

ESTIMATED QUANTITIES							
REFERENCE NUMBER	202	202	202	202	203	254	SPEC
	ASPHALT PAVEMENT REMOVED	TIMBER BOLLARDS REMOVED	GATE REMOVED FOR REUSE OR STORAGE	SIGNS & POSTS REMOVED FOR REUSE OR STORAGE	EXCAVATION AS PER PLAN	PAVEMENT PLANING AS PER PLAN	STUMP REMOVED
	SQ.YD.	EACH	EACH	EACH	CU.YD.	SQ.YD.	EACH
R1	713						
R2							1
R3		12					
R4			1				
R5				1			
P1						10	
P2						8	
P3						5	
EX1					2		
TOTALS	713	12	1	1	2	23	1

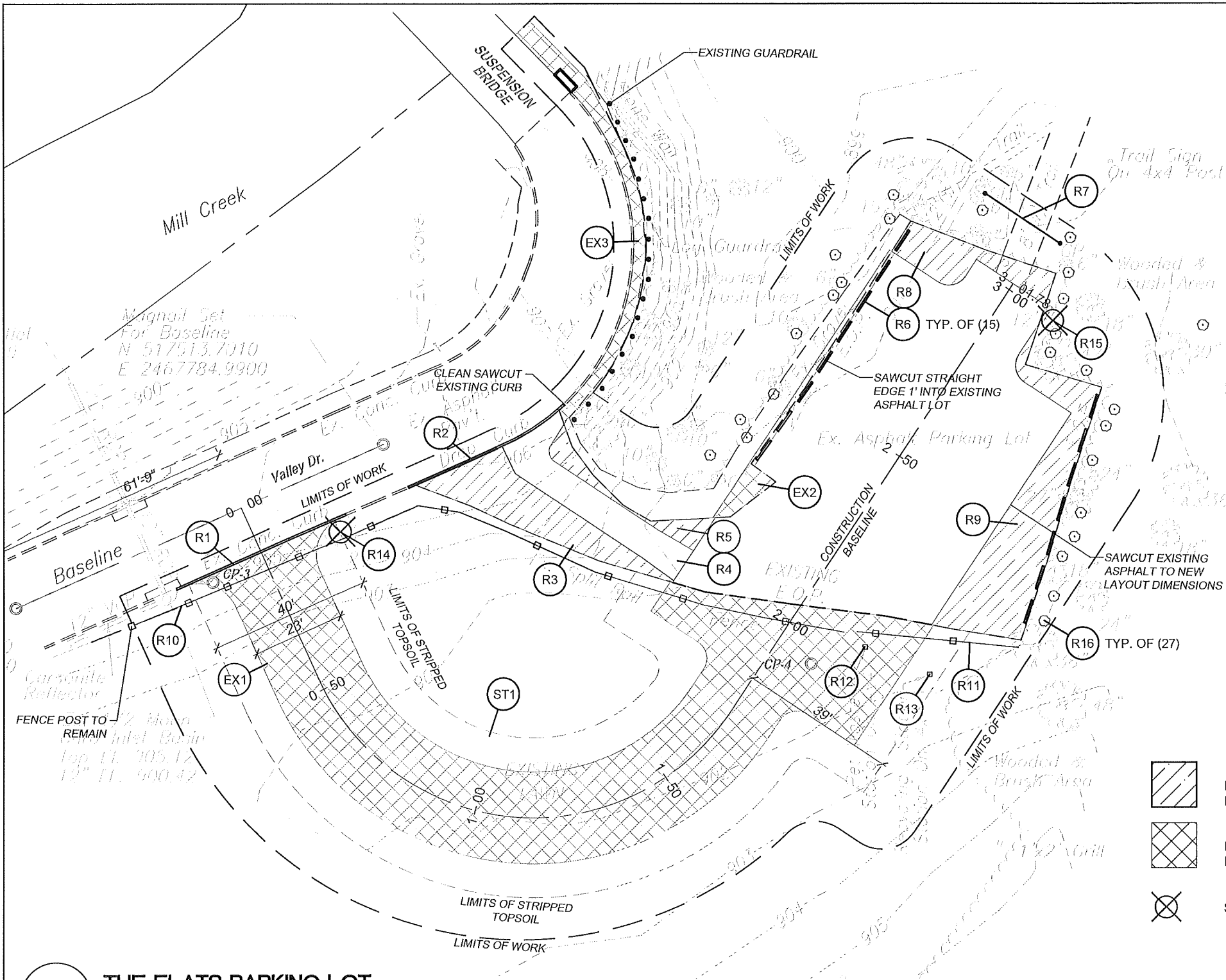




A1 EAST GOLF HIKE & BIKE TRAIL PARKING LOT (WEST GOLF DRIVE)
SCALE: 1" = 40'
44 STANDARD STALLS, 4 DISABLED STALLS
1698 SQUARE YARDS



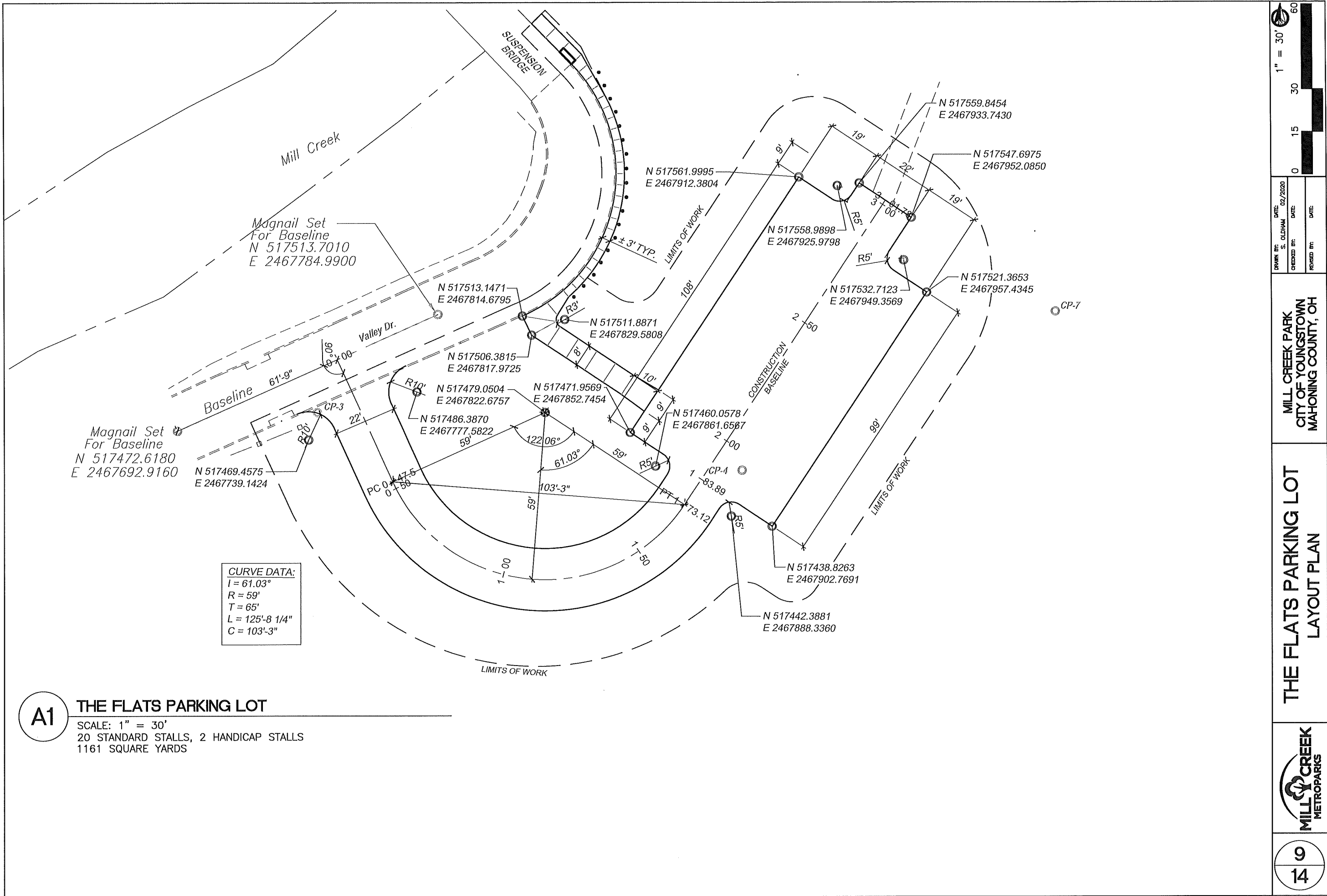
ESTIMATED QUANTITIES								ADD ALTERNATE				
REFERENCE NUMBER	204	304	407	441	441	642	642	SPEC	SPEC	653	659	SPEC
	SUBGRADE COMPACTION AS PER PLAN	AGGREGATE BASE AS PER PLAN	TACK COAT	ASPHALT CONC. INTERMEDIATE COURSE, TYPE 1	ASPHALT CONC. SURFACE COURSE TYPE 1	PARKING LOT STALL MARKING TYPE 1	HANDICAP SYMBOL MARKING	PRECAST CONCRETE CURB AS PER PLAN	10" DIAMETER CEDAR POST	TOPSOIL FURNISHED AND PLACED	SEEDING AND MULCHING AS PER PLAN	GATE WITH POSTS
	SQ.YD.	CU.YD.	GAL	CU.YD.	CU.YD.	LIN.FT.	EACH	EACH	EACH	CU.YD.	SQ.YD.	EACH
SG1	6											
AB1		1.5										
AB2		88										
TC1			79									
TC2			27									
AI1				77								
AS1					65							
PC1								48				
PM1						1,026						
HM1							4					
TO1										5		
TO2										5		
TO3										5		
TO4										5		
SM1											25	
SM2											26	
SM3											52	
SM4											52	
CB1									8			
G1												1
TOTALS	6	89.5	106	77	65	1,026	4	48	8	20	155	1



A1 THE FLATS PARKING LOT
SCALE: 1" = 30'
15 STANDARD STALLS

ESTIMATED QUANTITIES 1							
REFERENCE NUMBER	202	202	202	202	202	202	SPEC
	CONCRETE CURB REMOVED	ASPHALT PAVEMENT & BASE REMOVED	ASPHALT PAVEMENT REMOVED	FENCE REMOVED FOR REUSE OR STORAGE	GATE REMOVED FOR REUSE OR STORAGE	SIGNS & POSTS REMOVED FOR REUSE OR STOR.	PRECAST CONC. CURB REMOVED FOR REUSE OR STOR.
	LIN.FT.	SQ.YD.	SQ.YD.	LIN.FT.	EACH	EACH	EACH
R1	46						
R2	45						
R3		62					
R4		18	54				
R5							
R6							15
R7					1		
R8		35					
R9		109					
R10				175			
R11				41			
R12						1	
R13						1	
TOTALS	91	224	54	216	1	2	15

ESTIMATED QUANTITIES 2				
REFERENCE NUMBER	203	651	SPEC	SPEC
	EXCAVATION AS PER PLAN	STRIPPING & STOCKPILING TOPSOIL	STUMP REMOVED	RELOCATE STONES ONSITE AS PER PLAN
	CU.YD.	CU.YD.	EACH	EACH
R14			1	
R15			1	
R16				27
EX1	148			
EX2	7			
EX3	11			
ST1		165		
TOTALS	166	165	2	27



A1

THE FLATS PARKING LOT

SCALE: 1" = 30'
20 STANDARD STALLS, 2 HANDICAP STALLS
1161 SQUARE YARDS

1" = 30'

60

30

15

0

DATE: 02/2020

DATE:

DATE:

DRAWN BY: S. OLDSHAM

CHECKED BY:

REVIEWED BY:

MILL CREEK PARK

CITY OF YOUNGSTOWN

MAHONING COUNTY, OH

THE FLATS PARKING LOT

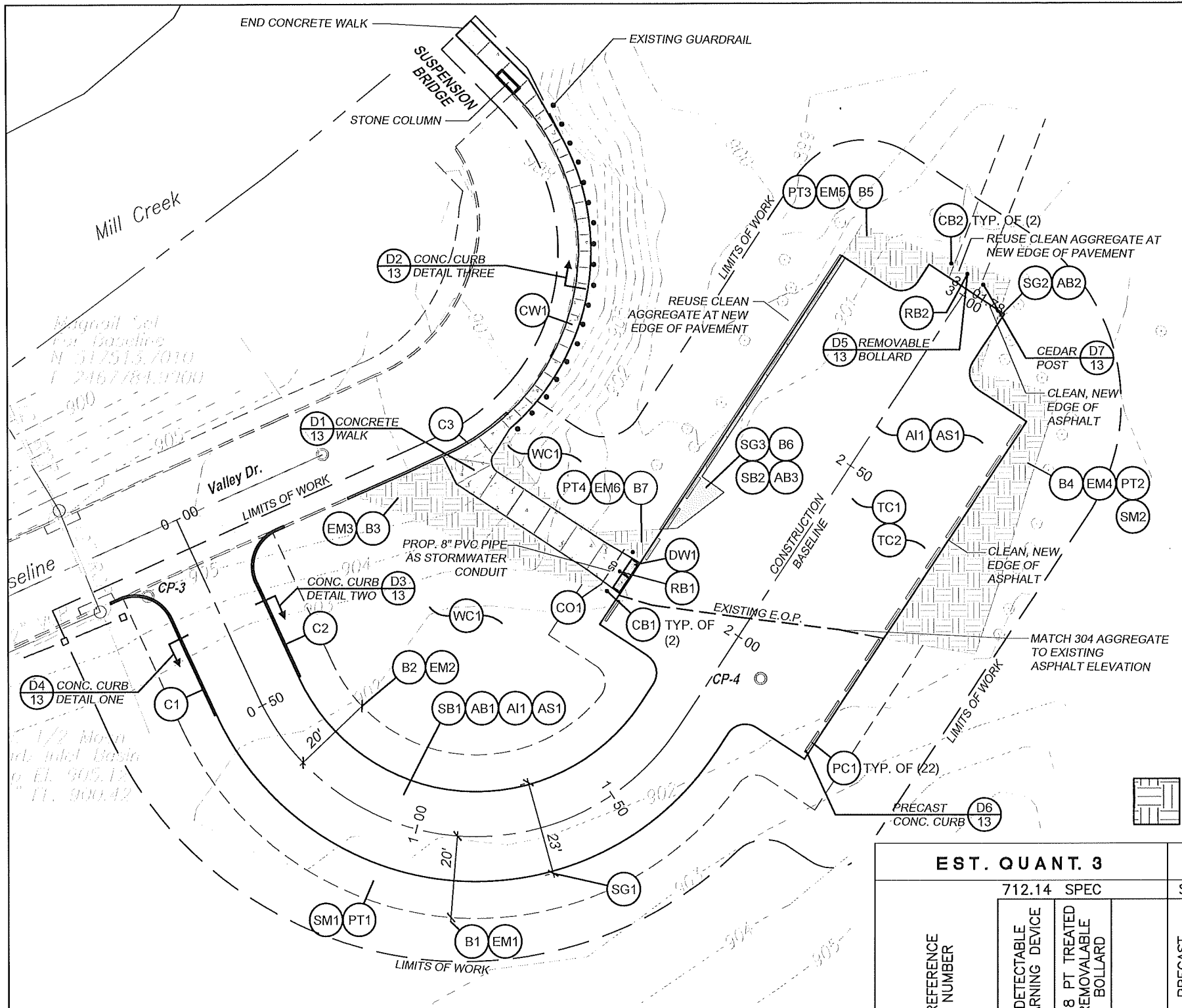
LAYOUT PLAN

MILL CREEK

METROPARKS

9

14

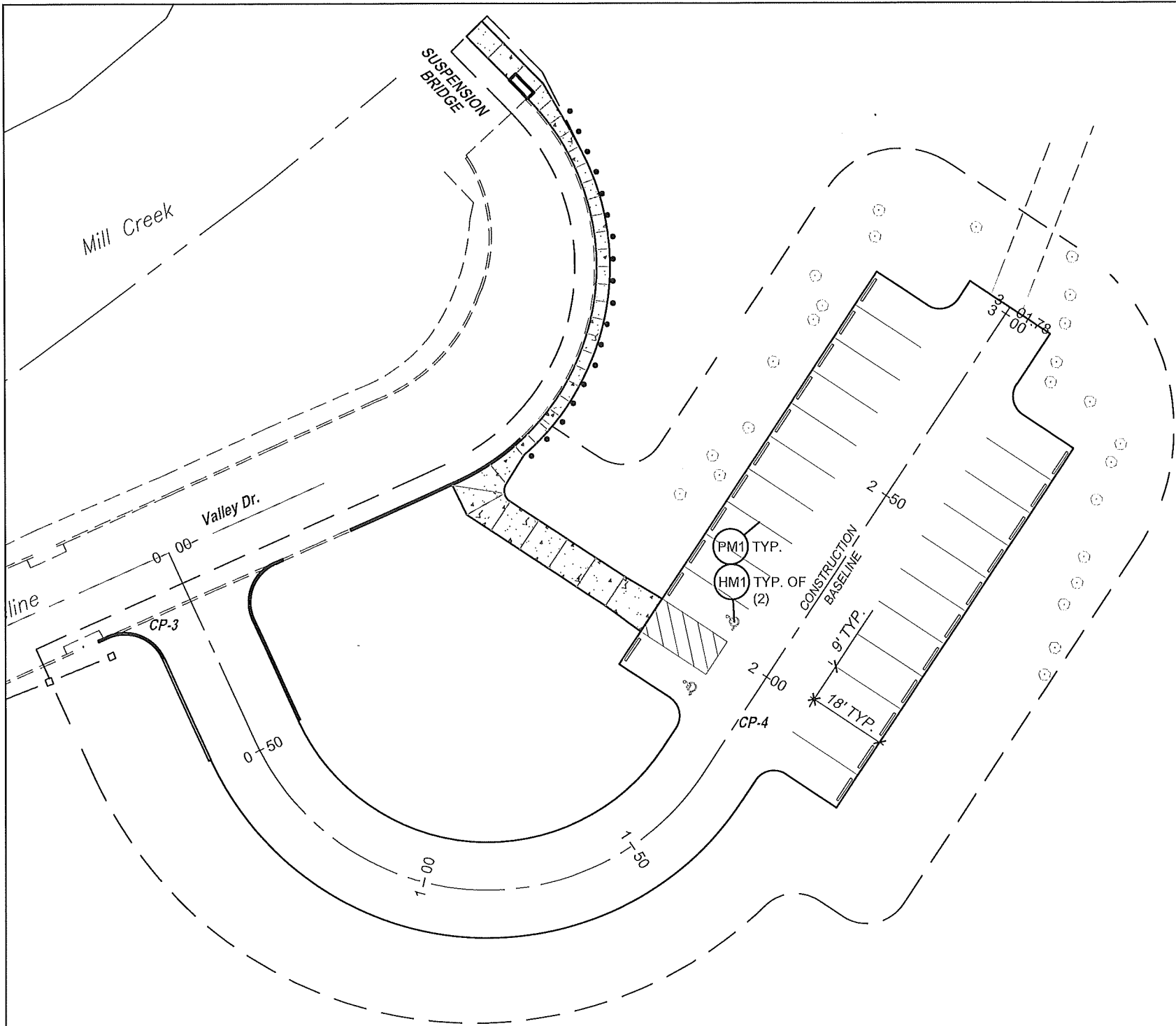


A1 THE FLATS PARKING LOT
SCALE: 1" = 30'
20 STANDARD STALLS, 2 DISABLED STALLS
1161 SQUARE YARDS

ESTIMATED QUANTITIES 1								
REFERENCE NUMBER	203	203	204	304	407	441	441	608
	BORROW AS PER PLAN	EMBANKMENT AS PER PLAN	SUBGRADE COMPACTION AS PER PLAN	AGGREGATE BASE AS PER PLAN	TACK COAT	ASPHALT CONC. INTERMEDIATE COURSE, TYPE 1	ASPHALT CONC. SURFACE COURSE TYPE 1	CONCRETE WALK AS PER PLAN
	CU.YD.	CU.YD.	SQ.YD.	CU.YD.	GAL	CU.YD.	CU.YD.	SQ.FT.
B1	60							
B2	60							
B3	12							
B4	21							
B5	7							
B6	3.5							
B7	1							
SG1			593					
SG2			1					
SG3			20					
AB1				66				
AB2				0.5				
AB3				2.5				
AI1						61		
AS1							40	
CW1								854
EM1		89						
EM2		80						
EM3		12						
EM4		21						
EM5		7						
EM6		3.5						
TC1					59			
TC2					58			
TOTALS	164.5	212.5	614	69	117	61	40	854

EST. QUANT. 3				ADD ALT.			
REFERENCE NUMBER	712.14	SPEC		SPEC	SPEC	SPEC	653 659
	DETECTABLE WARNING DEVICE	8X8 PT TREATED REMOVABLE BOLLARD		PRECAST CONCRETE CURB AS PER PLAN	10" DIAMETER CEDAR POST	WOOD CHIP MULCH	TOPSOIL FURNISHED AND PLACED
	EACH	EACH		EACH	EACH	SQ.YD.	CU.YD. SQ.YD.
CB1					2		
CB2					2		
RB1		1					
RB2		1					
WC1						578	
DW1	1						
SM1							257
SM2							109
PC1				22			
GENERAL						30	
TOTALS	1	2		22	4	578	30 366

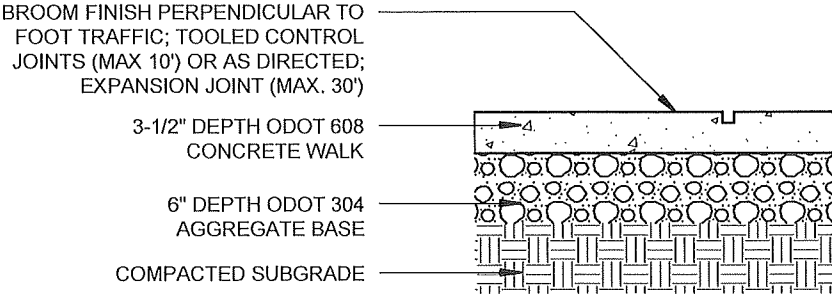
EST. QUANTITIES 2				
REFERENCE NUMBER	609	611	652	703
	CONCRETE CURB TYPE 6	8" CONDUIT 707.43 TYPE B	PLACING STOCKPILED TOPSOIL	NO.1 & NO.2 STONE BASE
	LIN.T.	LIN.FT.	CU.YD.	CU.YD.
C1	44			
C2	44			
C3	45			
CO1		12		
PT1			22	
PT2			19	
PT3			3	
PT4			1.5	
SB1				132
SB2				4.5
TOTALS	133	12	51.5	137.5



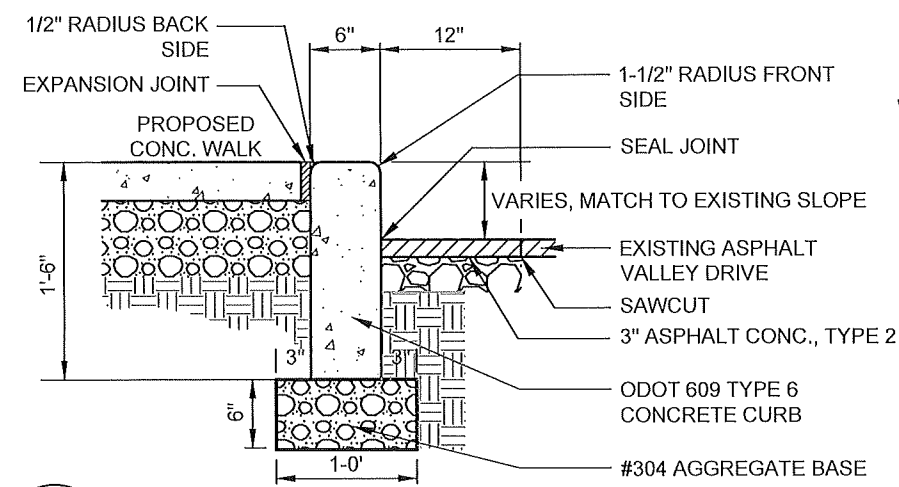
EST. QUANTITIES		
REFERENCE NUMBER	642	642
	PARKING LOT STALL MARKING TYPE 1	HANDICAP SYMBOL MARKING TYPE 1
	LIN.FT.	EACH
PM1	459	
HM1		2
TOTALS	459	2

PROJECT NOTES:
1. ALL PARKING LOT PAVEMENT MARKINGS SHALL BE YELLOW. PARKING LOT STALL MARKING LINES SHALL BE CONTINUOUS LINES, FOUR (4) INCHES IN WIDTH AND EIGHTEEN (18) FEET LONG UNLESS OTHERWISE SPECIFIED OR DIRECTED. CROSS-HATCHES SHALL BE CONTINUOUS, ANGLED AT 45°, AND THREE (3) FOOT o.c. DISABLED SYMBOLS SHALL BE FORTY-TWO (42) INCHES HIGH AND LOCATED IN THE CENTER OF THE STALL.

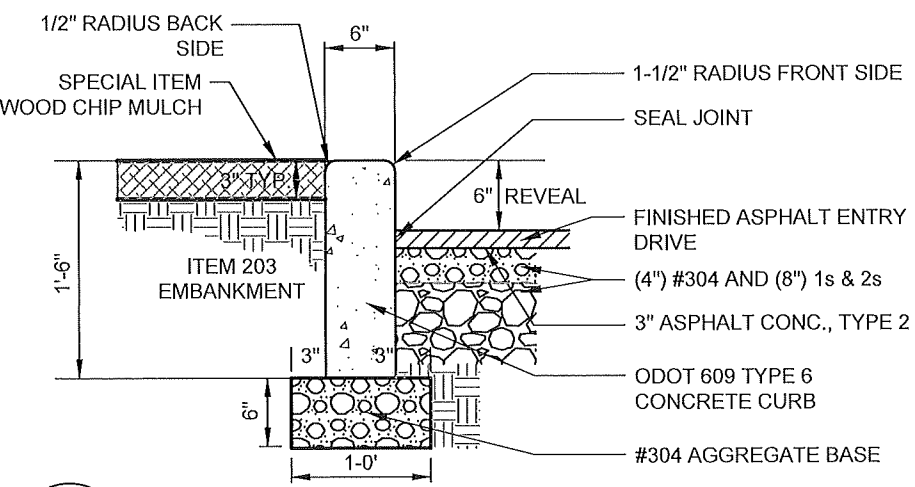
A1 THE FLATS PARKING LOT
SCALE: 1" = 30'
20 STANDARD STALLS, 2 DISABLED STALLS
1161 SQUARE YARDS



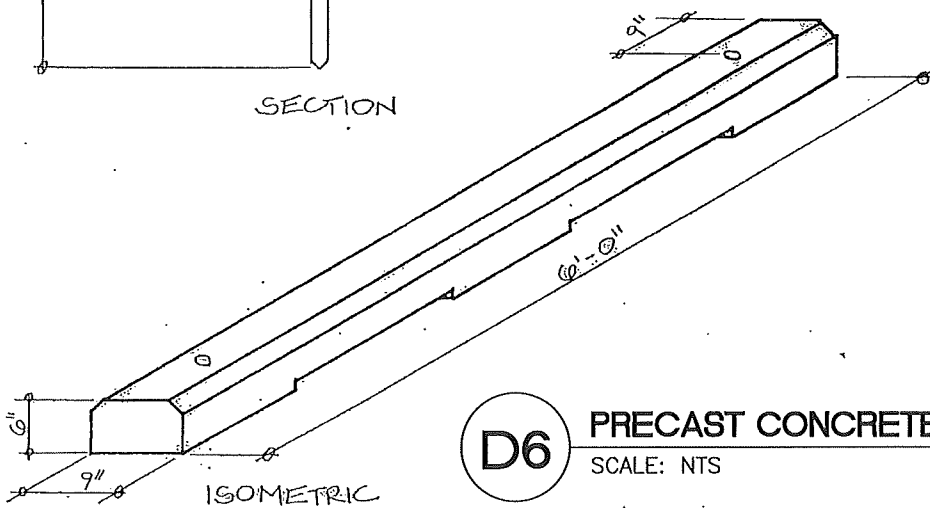
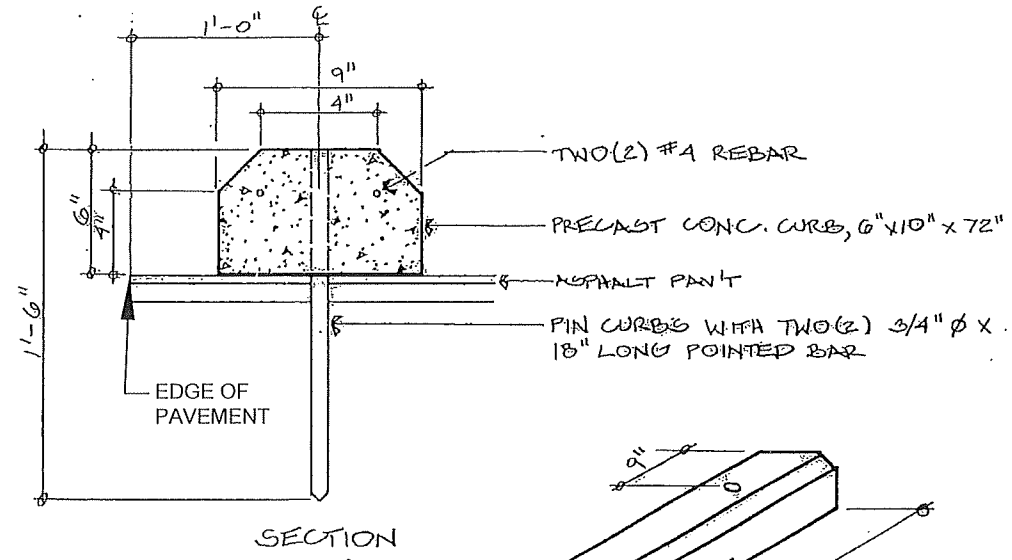
D1 CONCRETE WALK
SCALE: NTS



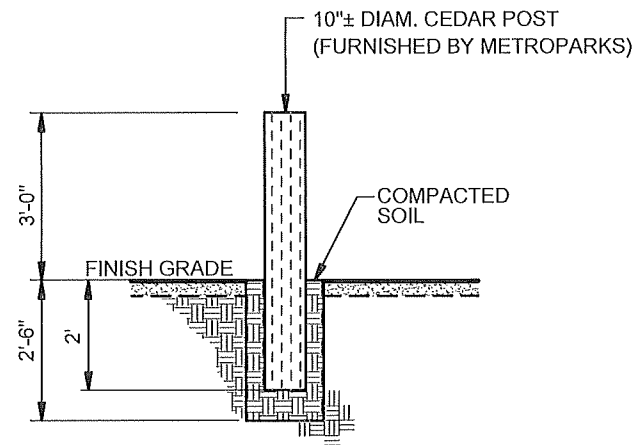
D2 CONCRETE CURB SECTION THREE
SCALE: NTS



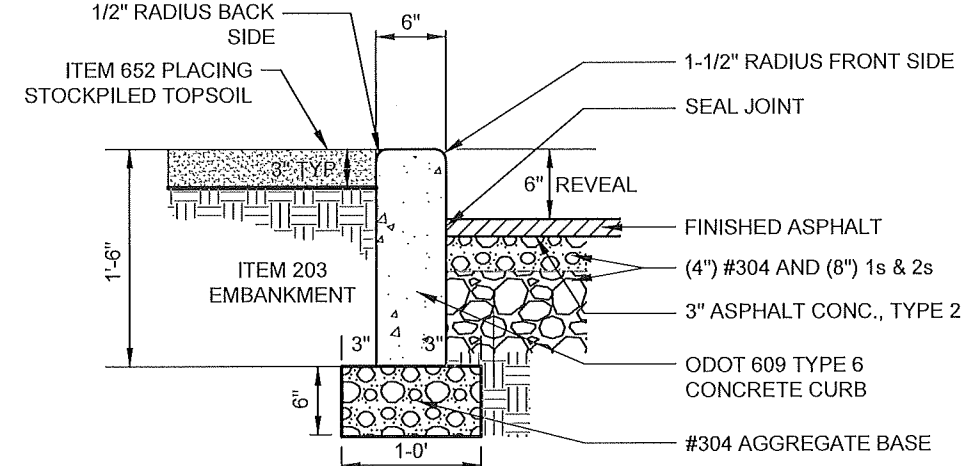
D3 CONCRETE CURB SECTION TWO
SCALE: NTS



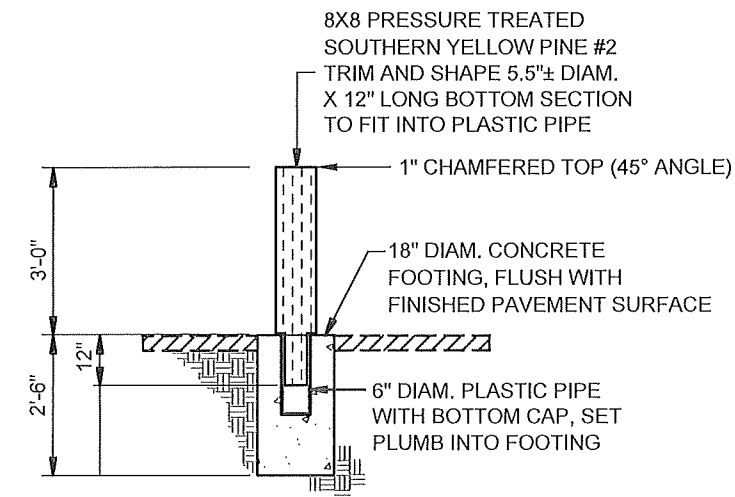
D6 PRECAST CONCRETE CURB
SCALE: NTS



D7 CEDAR POST
SCALE: NTS



D4 CONCRETE CURB SECTION ONE
SCALE: NTS



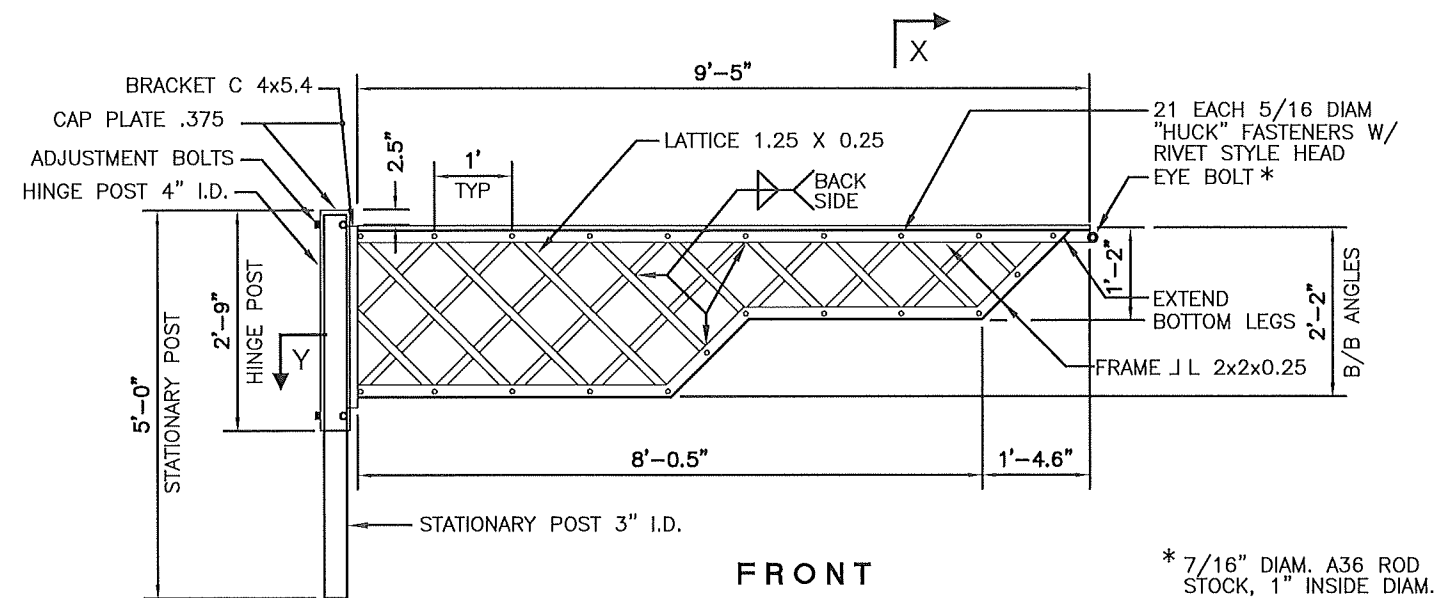
D5 REMOVABLE BOLLARD
SCALE: NTS

DATE: 02/2020	DATE:
CHECKED BY: S. OLIPHAN	DATE:
DESIGNED BY:	DATE:

2020 PARKING LOT IMPROVEMENTS
SITE DETAILS & SECTIONS



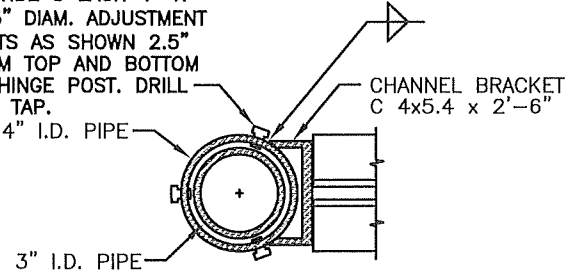
GATE WITH POST AND BOLLARDS



FABRICATION DETAILS

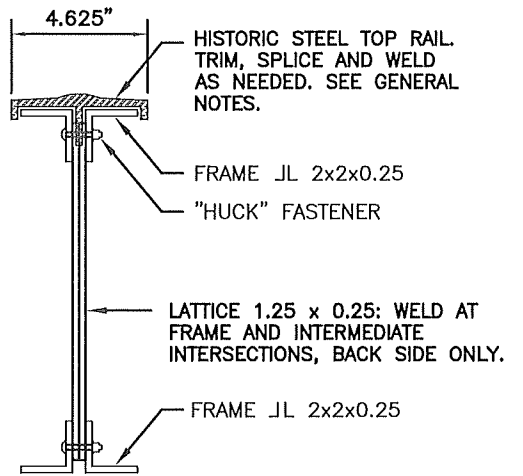
PROVIDE ONE GREASE FITTING IN POST CAP PLATE APPROXIMATELY 5/8" FROM OUTER EDGE

PROVIDE 3 EACH 1" X .375" DIAM. ADJUSTMENT BOLTS AS SHOWN 2.5" FROM TOP AND BOTTOM OF HINGE POST. DRILL AND TAP.



HINGE POST SECTION Y

N.T.S.

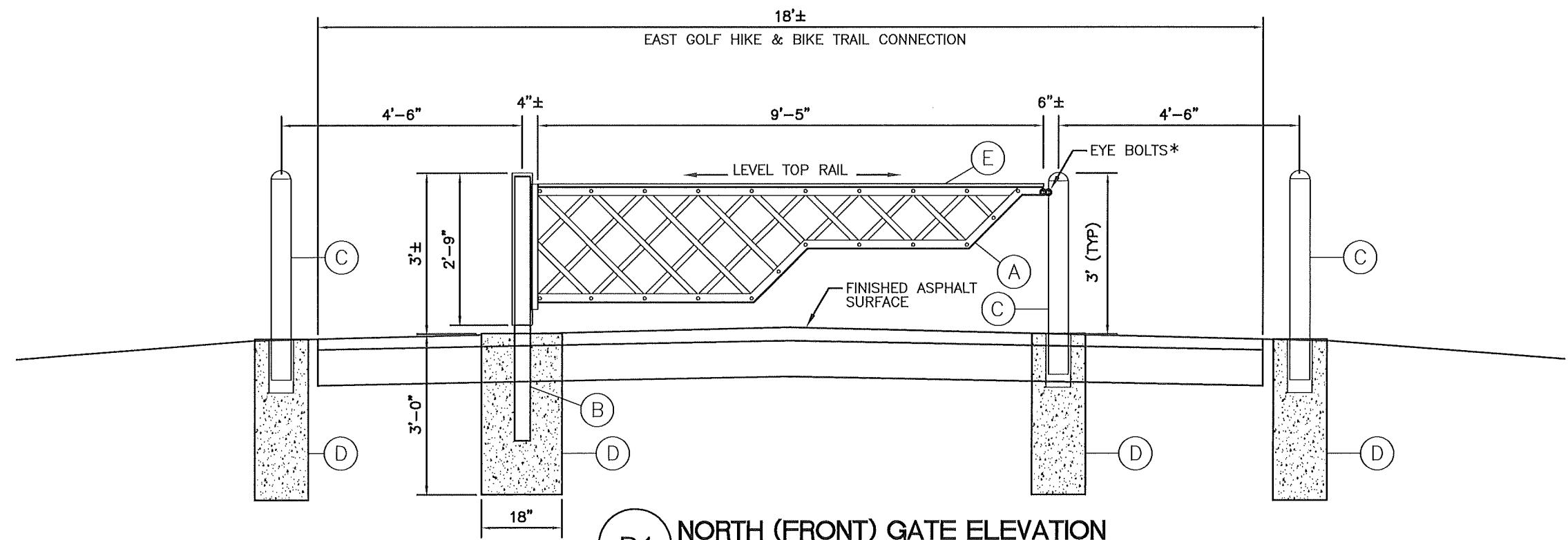


GATE SECTION X

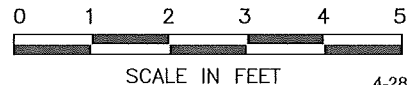
N.T.S.

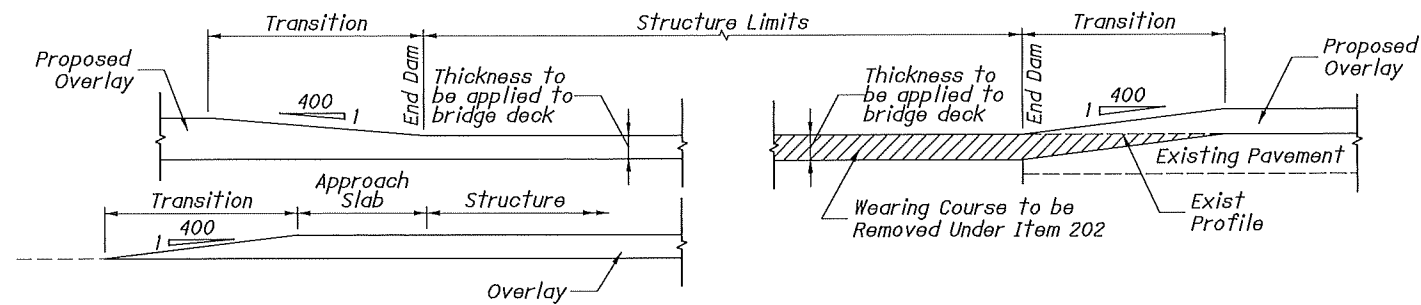
CODED NOTES

- (A) STEEL GATE WITH INTEGRAL HINGE POST: SEE GENERAL NOTES.
- (B) STATIONARY HINGE POST: FURNISH 3" I.D. GALVANIZED STEEL PIPE WITH OUTSIDE DIAMETER OF APPROXIMATELY 3.5 INCHES. INSTALL PLUMB INTO CONCRETE FOOTING. COAT WITH WHITE GREASE AT TOP AND AT LEVEL OF ADJUSTMENT BOLTS AT TOP AND BOTTOM AS DIRECTED.
- (C) 4.5" O.D. REMOVABLE STEEL BOLLARD WITH GROUND SLEEVE: INSTALL SLEEVE PLUMB INTO FOOTING FLUSH WITH THE TOP OF CONCRETE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. PAINT POST TO MATCH GATE AND MOUNT INTO SLEEVE.
- (D) CAST IN PLACE CONCRETE FOOTING: FOOTINGS SHALL BE 3 FEET DEEP X 12 INCHES IN DIAMETER EXCEPT AS SHOWN. CONCRETE SHALL BE ODOT CLASS QC1. FINISH CONCRETE FLUSH WITH SURROUNDING ASPHALT SURFACE.
- (E) SALVAGED TOP RAIL: THE METROPARKS WILL FURNISH SALVAGED STEEL TOP RAIL IN SUFFICIENT LENGTHS TO BE INSTALLED AS SHOWN. CUT, WELD, GRIND AND OTHERWISE FINISH AND PAINT THE RAIL AS NECESSARY AND AS DIRECTED. TRIM GATE TOP ANGLE LEGS AND TOP RAIL AS NEEDED TO COMPLETE THE ASSEMBLY.



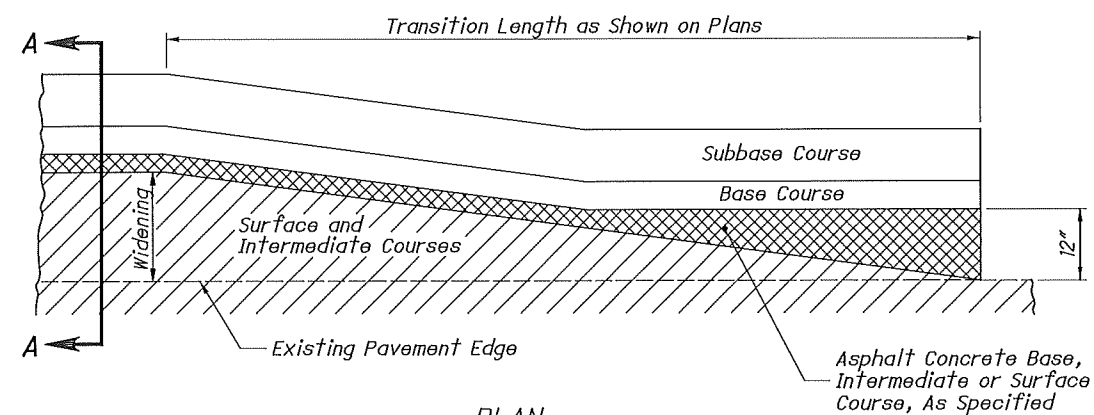
D1 NORTH (FRONT) GATE ELEVATION
SCALE: NTS





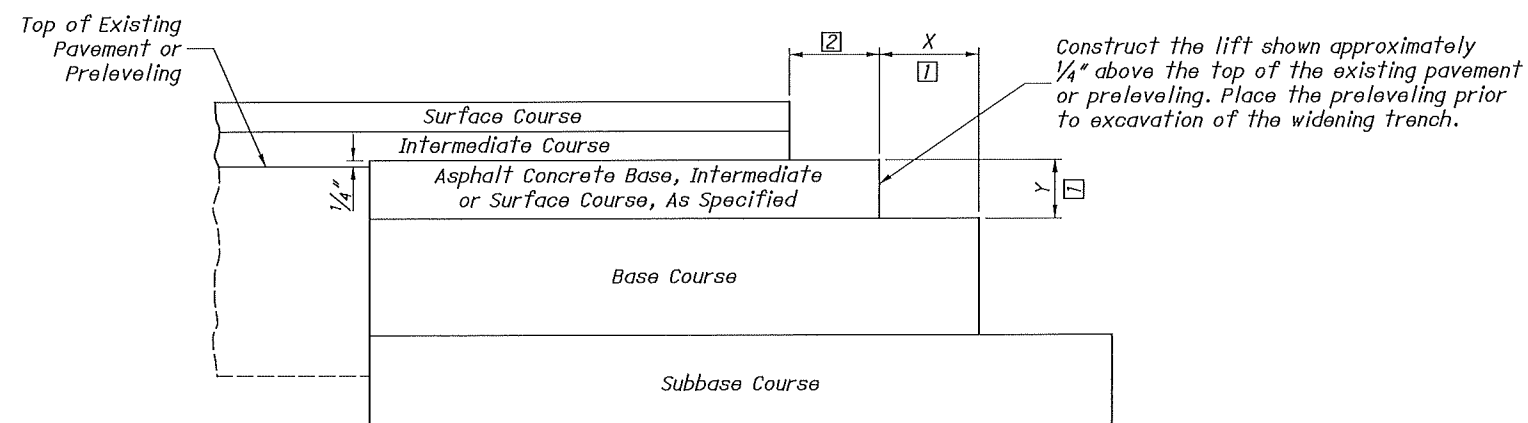
Details assume non-settled approach slabs. Smoothing of the profile for settlement is required per plan grades or as directed by the Engineer.

TRANSITIONING AT STRUCTURES



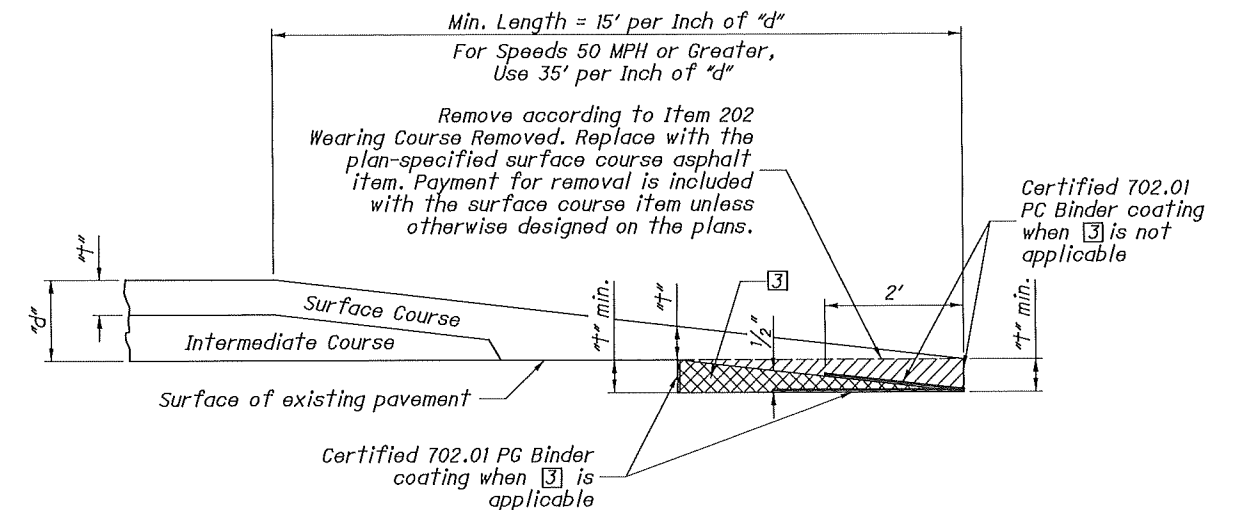
PLAN

MERGING EDGE OF PAVEMENT WIDENING WITH EDGE OF EXISTING PAVEMENT

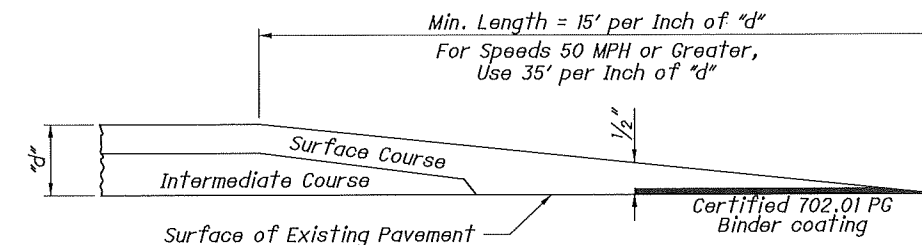


SECTION A-A

COURSE DETAIL FOR WIDENING



Butt Joint



Taper End

NOTE: Butt joint is required unless the taper end is specified in the plans or approved by the Engineer

BUTT JOINTS AND TAPER ENDS

Values for "t" and "d" are obtained from the plans.

LEGEND

- [1] The extended width (X) of a base or subbase lift shall be equal to the depth (Y) of the overlying lift or 6", whichever is greater, or as shown on the plans.
- [2] The extended width shall be equal to the combined thickness of the surface and intermediate courses, or 4", whichever is greater.
- [3] Permissible removal and replacement

THIS DRAWING REPLACES BP-3.1 DATED 10-18-2019.

SCD NUMBER

BP-3.1

STANDARD ROADWAY CONSTRUCTION DRAWING

ASPHALT PAVING

OFFICE OF
PAVEMENT
ENGINEERING

STD.
ENGINEER

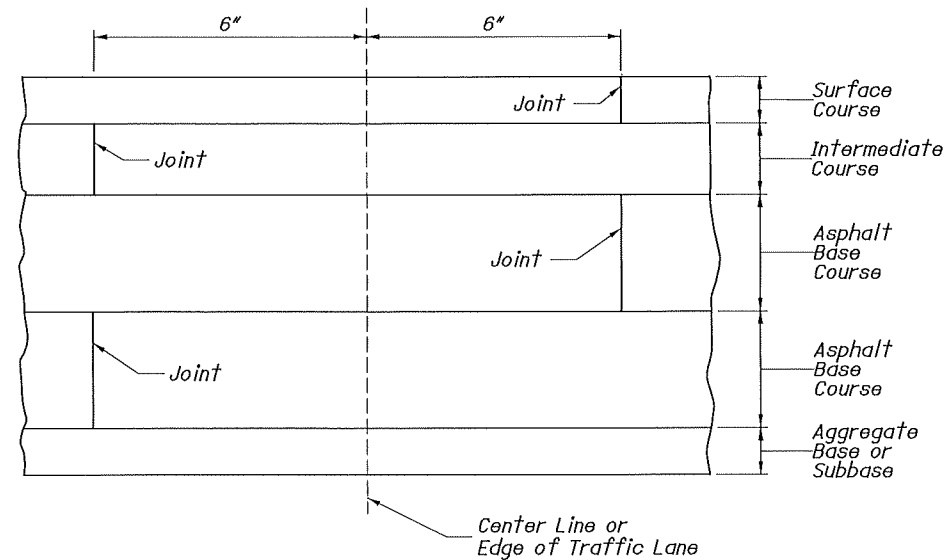
W. Feehan

STATE OF OHIO DEPARTMENT OF
TRANSPORTATION ADMINISTRATOR

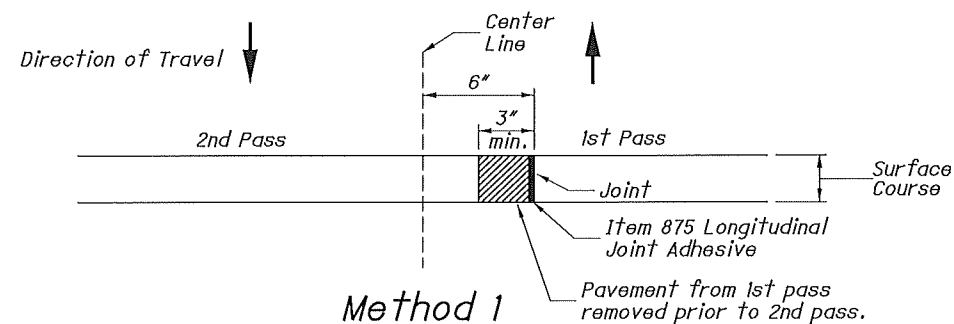
Craig E. Landefeld

REVISION DATE

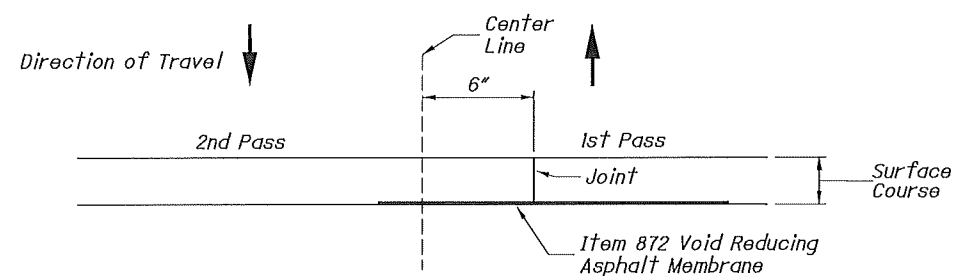
1-17-2020



LAPPING LONGITUDINAL JOINTS
(see notes)

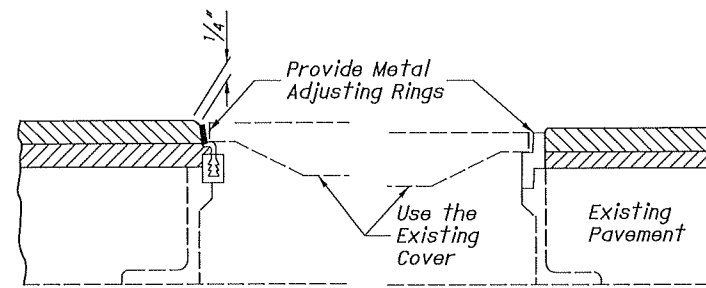


Method 1

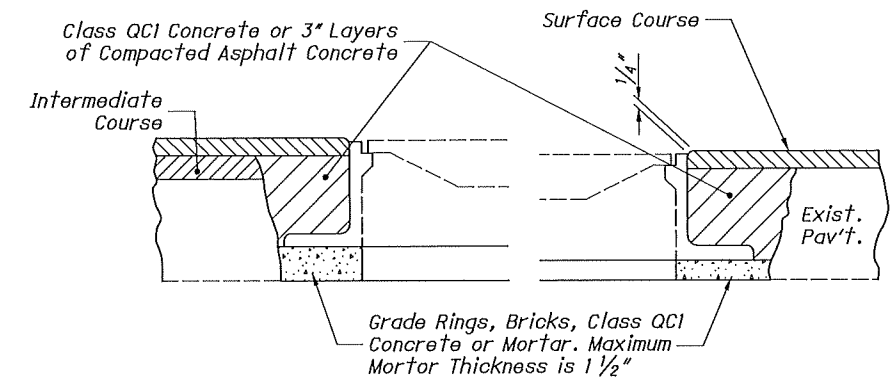


Method 2

LONGITUDINAL JOINT PREPARATION
(if specified)

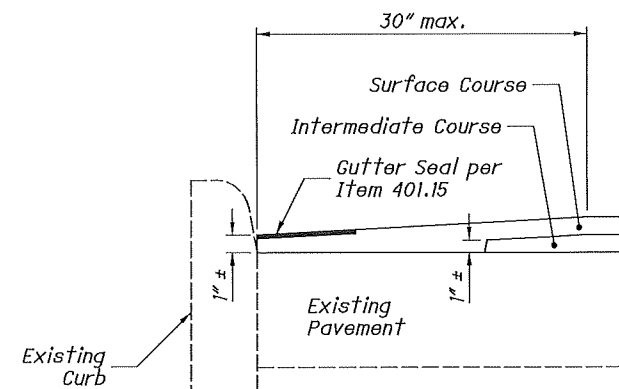


Using Metal Adjusting Rings



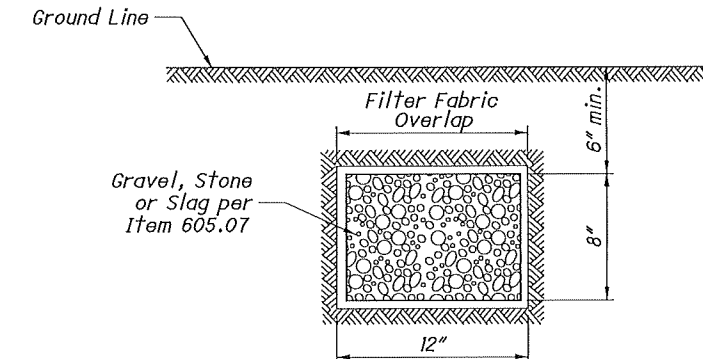
Using Concrete or Mortar

MANHOLES ADJUSTED TO GRADE



Special care shall be taken during construction to obtain maximum compaction of asphalt concrete in gutters.

GUTTER FINISH



Aggregate drains to be placed where and as directed by Engineer. Provide Filter Fabric when specified as a separate pay item.

AGGREGATE DRAIN

NOTES

GENERAL: Lap all longitudinal joints as shown regardless of the number of courses being placed. Do not construct a longitudinal joint directly above and in line with the longitudinal joint of previously placed material.

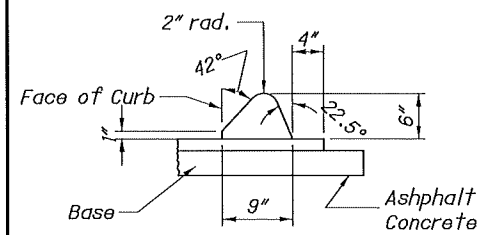
METAL ADJUSTING RINGS:

Metal adjusting rings shall:

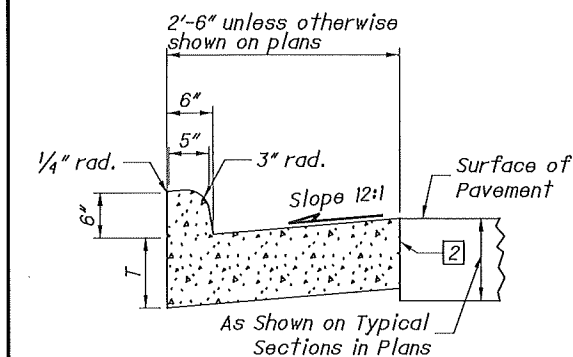
- Attach securely to the existing frame by welding or mechanical devices;
- Consist either of cast metal having an integral rim and seat, or be fabricated metal with a sturdy connection between the seat and rim; and
- Provide an even seat for the manhole cover.

In addition, the adjusting ring type shall be a design acceptable to the local governmental agency responsible for street and sewer maintenance. Any installation unacceptable to the Engineer shall be replaced by the Contractor at his expense.

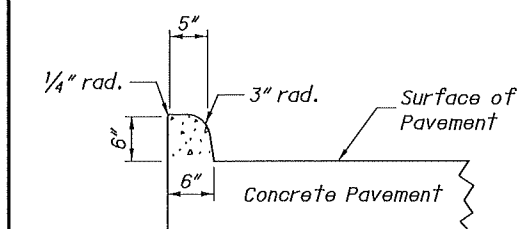
PAYMENT: The Department will pay for manholes adjusted to grade using Item 611 Manhole, Catch Basin, or Inlet Adjusted to Grade. The Department will pay for longitudinal joint preparation using Item 874 Longitudinal Joint Preparation.



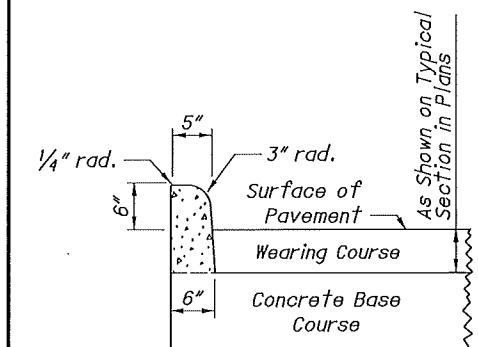
TYPE 1



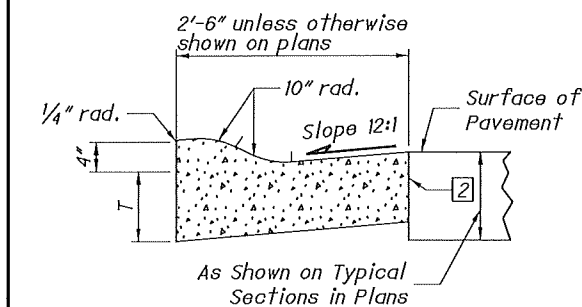
TYPE 2



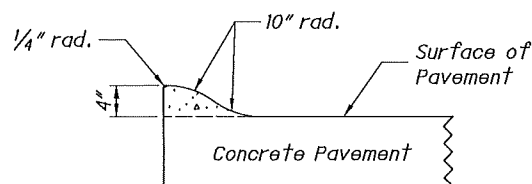
TYPE 2-A



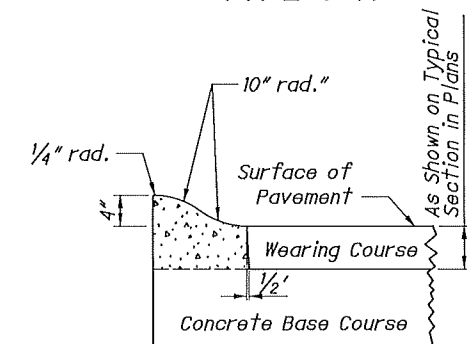
TYPE 2-B



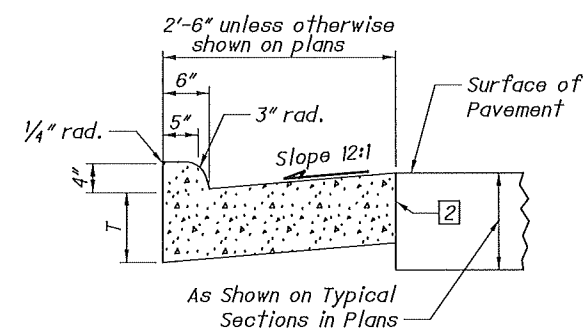
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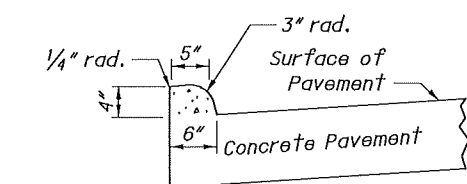
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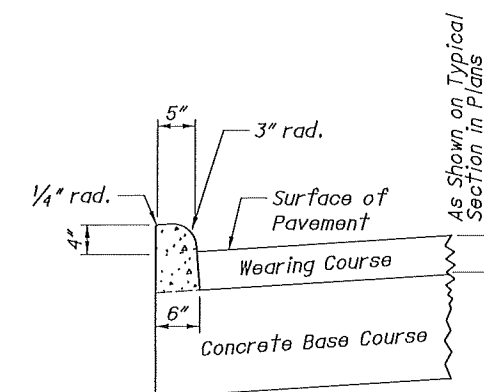
TYPE 3-B



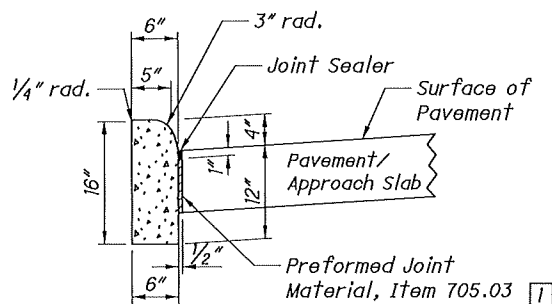
TYPE 4



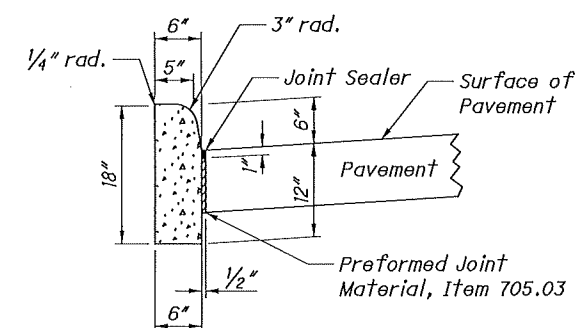
TYPE 4-A



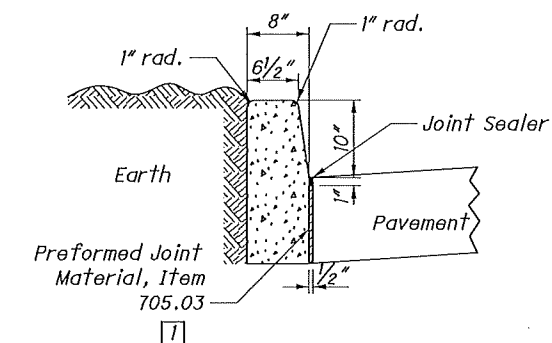
TYPE 4-B



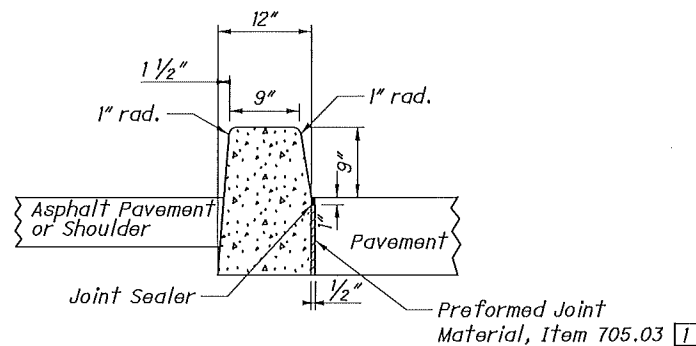
TYPE 4-C



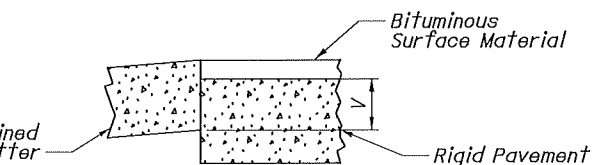
TYPE 6



TYPE 7



TYPE 8



TYPE 9

NOTES

GENERAL: This drawing shows alternate types of curb that may be used on various types of pavement. The typical section of the project shows the type to be used, also the thickness of the edge of the pavement or the edge of the curb and gutter section.

JOINTS: 1" expansion joints shall extend up to the top of the curb and shall be constructed in the curb and gutter section in such a manner that the joint seal will extend the full width of the gutter and into the curb face a sufficient distance to seal the joint to an elevation of at least 2" above the flow line of the gutter. Dowel bars shall be used in the curb and gutter section at expansion joints and to the surface of the pavement.

Transverse expansion joint material shall meet the requirements of Item 705.03.

GUTTER PLATE THICKNESS: Thickness of gutter plate "T" shall be 9" unless otherwise shown on the plans.

TOLERANCES: Dimensional tolerances are as follows:

Curbs: $\pm \frac{1}{32}$ " to $\pm \frac{1}{4}$ ".
Gutters: 0 to $\pm \frac{1}{2}$ ".

LEGEND

[1] Expansion joint material and joint sealer are not required for the portion of the curb that is adjacent to a flexible pavement type. Both materials are required, as detailed, for the full height of rigid pavement and concrete bases.

[2] Butt joints shall be provided between combined curb-and-gutter and new or existing rigid pavements, with tie bars or hook bolts provided at intervals of 5'. See SCD BP-2.1 for details of tie bars and hook bolts.

If the combined curb-and-gutter adjoins a new rigid base or an existing rigid base or pavement that is to be surfaced with asphalt concrete, a butt joint shall also be provided. However, tie bars or hook bolts shall be omitted when the vertical overlap ("V" in detail below) between the curb-and-gutter and rigid pavement is less than 7".

