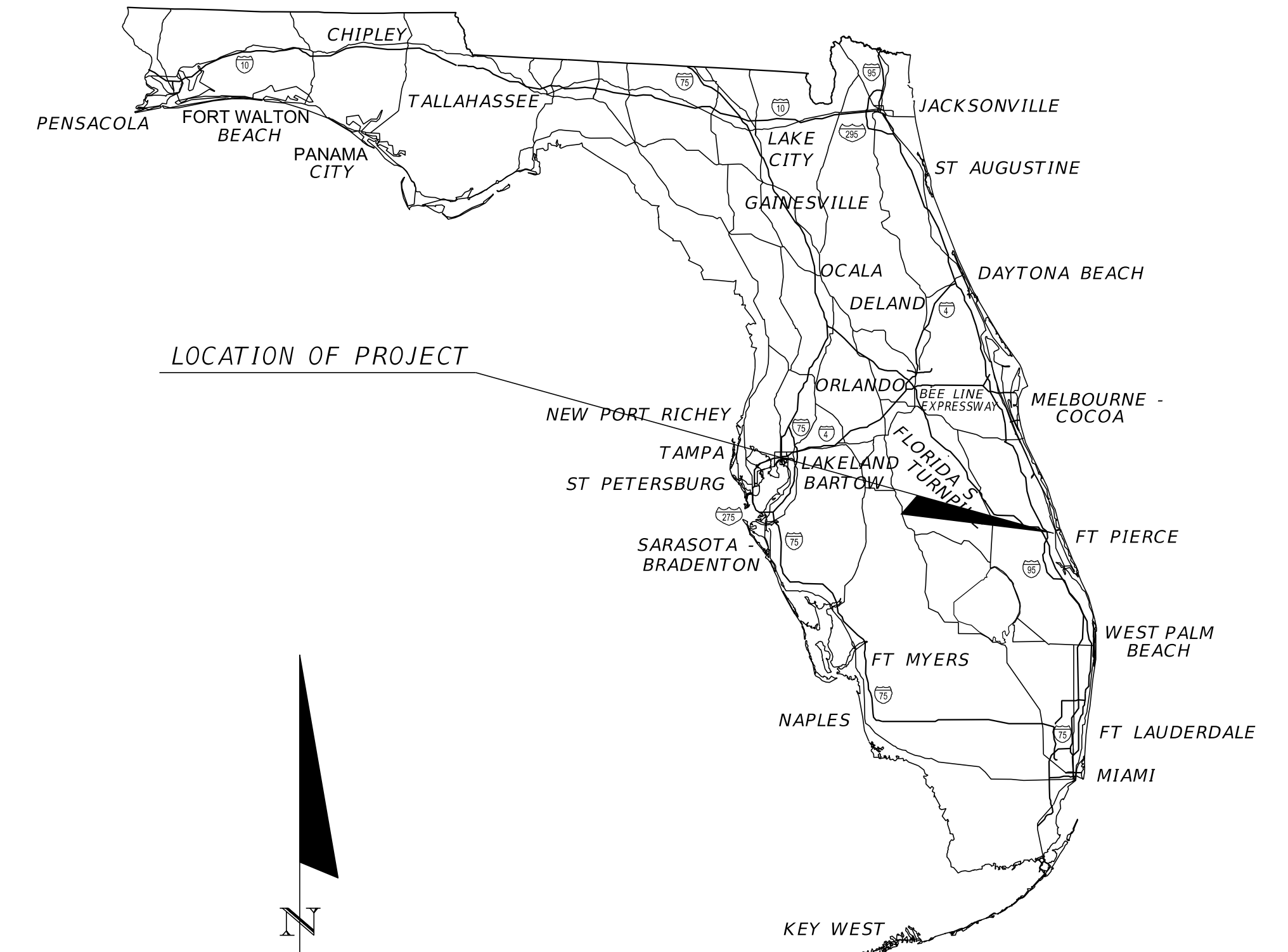


CONTRACT PLANS

INDIAN HILLS RECREATION AREA

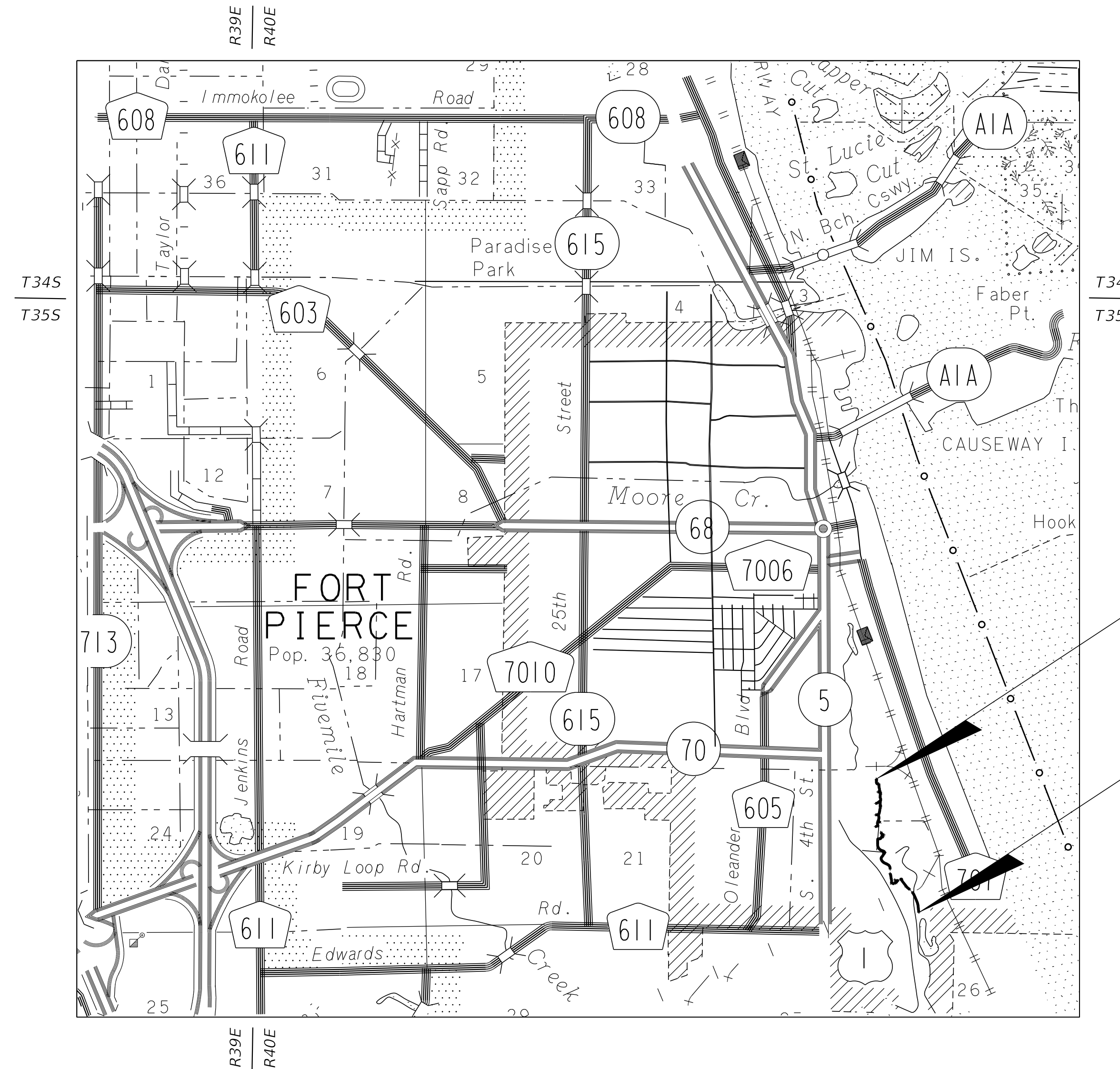
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MULTI-USE TRAIL IMPROVEMENTS



INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SUMMARY OF PAY ITEMS
3	PAVING, GRADING, & DRAINAGE GENERAL NOTES
4 - 11	PAVING, GRADING, AND DRAINAGE PLAN SHEETS
12	MISCELLANEOUS DETAILS



END IMPROVEMENT

BEGIN IMPROVEMENT

ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:

KIMLEY-HORN AND ASSOCIATES, INC.
BRIAN GOOD, P.E.
445 24th STREET, SUITE 200
VERO BEACH, FLORIDA 32960

PLANS PREPARED BY:

Kimley»Horn

445 24th STREET, SUITE 200
VERO BEACH, FL 32960
TEL (772) 794-4100
PROJECT NUMBER: 047922016
CERTIFICATE OF AUTHORIZATION: 00000696

ROADWAY PLANS
ENGINEER OF RECORD: BRIAN GOOD, P.E.

P.E. NO.: 56939

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

**100% PLANS
SEPTEMBER 2018**

**PREPARED FOR:
CITY OF FORT PIERCE**

SHEET
NO.

1

SUMMARY OF PAY ITEMS

PAY ITEM NO.	DESCRIPTION	UNIT	PROJECT QUANTITY
SITE DEVELOPMENT			
101-1	MOBILIZATION	LS	1
104-2A	PREVENTION, CONTROL & ABATEMENT OF EROSION AND WATER POLLUTION	LS	1
108-1	CONSTRUCTION LAYOUT/RECORD DRAWINGS	LS	1
110-1-1	SELECT CLEARING & GRUBBING	LS	1
120-1A	EXCAVATION & EMBANKMENT	LS	1
160-4	TYPE B STABILIZATION (LBR 40 MIN.)	SY	6,300
480-11	STRAIGHT BACK BENCH (6") (RELOCATE)	EA	2
480-51	BIKE RACK (RELOCATE)	EA	1
480-61	TRASH RECEPTACLE (RELOCATE)	EA	1
519-78	BOLLARD (REMOVABLE)	EA	3
522-2	CONCRETE SIDEWALK (6" THICK) (BROOM FINISH)	SY	6,600
550-10-111	2-RAIL SPLIT RAIL FENCE (4') (MODIFY)	LF	20
700-1-11	SINGLE POST SIGN (F&I) LESS THAN 12SF)	AS	2
570-1-2	PERFORMANCE SOD (BAHIA)	SY	11,100
580-1-3	MULCH (3" THICK) (PINE STRAW)	CY	250

PAY ITEM FOOTNOTES

- 120-1A COST TO INCLUDE ALL EXCAVATION AND EMBANKMENT, INCLUDING FINAL GRADING, NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
- 519-78 COST TO INCLUDE ALL MATERIAL AND LABOR ASSOCIATED WITH PIPE BOLLARD DETAIL.
- 522-2 COST TO INCLUDE, BUT NOT LIMITED TO, EXCAVATION, CONCRETE AND STEEL ASSOCIATED WITH THICKENED EDGE.
- 570-1-2 COST TO INCLUDE FERTILIZER, MOWING, WATERING AND ALL INCIDENTAL ITEMS NECESSARY.
- 700-1-11 SINGLE POST SIGN AND SUPPLEMENTAL PLAQUE SHALL BE FLOURESCENT YELLOW-GREEN BACKGROUND COLOR.

BID ALTERNATE

PAY ITEM NO.	DESCRIPTION	UNIT	PROJECT QUANTITY
SITE DEVELOPMENT (BID ALTERNATE)			
522-2A	CONCRETE SIDEWALK ROCK SALT FINISH	SY	6,350

BID ALTERNATE PAY ITEM FOOTNOTES

- 522-2A COST TO INCLUDE LABOR AND MATERIALS TO CONSTRUCT A ROCK SALT FINISH TO CONCRETE SIDEWALK SURFACES. PATTERN DENSITY SHALL BE APPROXIMATELY 6 LBS PER 100 SQUARE-FEET. CONTRACTOR SHALL CONSTRUCT 4'x4' TEST PATTERN AND OBTAIN ENGINEER APPROVAL PRIOR TO FINISH CONSTRUCTION.

PROJECT AND OWNER
INDIAN HILLS RECREATION AREA
 MULTI-USE TRAIL IMPROVEMENTS
 FORT PIERCE, FLORIDA
 CONSULTANTS
Kimley»Horn
 BRIAN A. GOOD, P.E.
 P.E. LICENSE NUMBER: 56939
 445 24th STREET, SUITE 200
 VERO BEACH, FL 32960
 (772) 794-4100
 CERT. OF AUTH. #: 00000696
 KHA PROJ. #: 047922008

SEAL

PROJECT NO. 922008.1
 DESIGNED BY BAG
 DRAWN BY MCF
 CHECKED BY EJK
 DATE 09-18-18

ISSUED FOR:

KEY MAP

DRAWING SCALE

DRAWING TITLE
SUMMARY OF PAY ITEMS

DRAWING NUMBER

CES-1

SHEET 2 OF 12

K:\VREL_Roadway_Vreathorte_Gardens_Project\Cadd\KHA_Sun_Trail\ACCESS\LD\ldgn Default 9/18/2018 10:20:07 AM

PAVING AND DRAINAGE

GENERAL:

IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION AND "ROADWAY AND TRAFFIC DESIGN STANDARDS", LATEST EDITION, BE USED WHERE APPLICABLE FOR VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND "ROADWAY AND TRAFFIC DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT.

IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE "STANDARD SPECIFICATIONS" ALSO.

ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.

GENERAL NOTES:

1. THE CONTRACTOR SHALL GIVE THE ENGINEER 24 HOURS NOTICE PRIOR TO REQUESTING REQUIRED CONSTRUCTION OBSERVATIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

2. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF PROJECT ACCEPTANCE, DURING WHICH TIME ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING ABOVE-GROUND, UNDERGROUND, AND ON THE SURFACE STRUCTURES AND UTILITIES AGAINST THE CONSTRUCTION OPERATION THAT MAY CAUSE DAMAGE TO SAID FACILITY.

4. THE LOCATIONS AND SIZES OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND SIZE OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

5. THE CONTRACTOR SHALL GIVE ADEQUATE NOTIFICATION TO ALL AFFECTED UTILITY OWNERS FOR REMOVAL, RELOCATION AND ALTERATION OF THEIR EXISTING FACILITIES.

6. TRAFFIC CONTROL ON ALL CITY, COUNTY AND STATE HIGHWAY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN A CONFLICT BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS IS DISCOVERED DURING THE COURSE OF CONSTRUCTION.

8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BIDDING THE WORK AND TO PERFORM SUCH TESTS, STUDIES AND SURVEYS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO ACTUAL SURFACE AND SUBSURFACE CONDITIONS EXISTING AT THE SITE. ACTUAL CONDITIONS THAT DIFFER FROM THOSE SHOWN ON DRAWINGS SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT.

9. ALL ELEVATIONS REFER TO N.G.V.D. 1929 DATUM, UNLESS OTHERWISE NOTED.

10. ANY CHANGES DUE TO FIELD CONDITIONS OR ANY OTHER DEVIATIONS FROM THE APPROVED DRAWINGS MUST BE APPROVED BY THE ENGINEER AND THE GOVERNING AUTHORITY HAVING JURISDICTION PRIOR TO BEING CONSTRUCTED.

11. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS HAVING FACILITIES IN THE AREA WITHIN AND ADJACENT TO THE PROPOSED CONSTRUCTION AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO BEGINNING CONSTRUCTION.

12. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES:
-ONE (1) SET OF "APPROVED" CONSTRUCTION DRAWINGS,
-ONE (1) COPY OF THE APPLICABLE UTILITY COMPANY'S "MINIMUM DESIGN AND CONSTRUCTION STANDARDS",
-ONE (1) COPY OF ALL CONTRACT DOCUMENTS AND,
-ONE (1) COPY OF ALL APPLICABLE LOCAL, STATE AND FEDERAL PERMITS REQUIRED FOR CONSTRUCTION.

13. THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN AT THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT ALL SCHEDULED CONSTRUCTION OBSERVATION MEETINGS.

CLEARING AND GRUBBING:

ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR LYING WITHIN 12" BELOW FINISHED GRADE OR SUBGRADE SHALL BE COMPLETELY REMOVED FOR THE FULL WIDTH OF ALL ROAD RIGHT-OF-WAYS, ROAD EASEMENTS, SWALES, UTILITY EASEMENTS AND DRAINAGE EASEMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.

EXCAVATION:

THE CONTRACTOR SHALL PERFORM ALL EXCAVATION NECESSARY TO ACCOMPLISH THE CONSTRUCTION INDICATED ON THE DRAWINGS. EXCAVATION SHALL BE UNCLASSIFIED REGARDLESS OF MATERIAL ENCOUNTERED. ALL EXCAVATED MATERIAL NOT REQUIRED FOR FILL OR EMBANKMENT, SHALL BE DEPOSITED OFF-SITE, REFER TO PROJECT SPECIFICATIONS, AS DIRECTED BY THE OWNER, OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL DO ALL SHORING NECESSARY TO PERFORM AND PROTECT THE EXCAVATION, AND AS NECESSARY FOR THE SAFETY OF THE WORKERS AND ANY EXISTING FACILITIES IN ACCORDANCE WITH THE STATE OF FLORIDA "TRENCH SAFETY ACT". WHEREVER EXCAVATIONS ARE MADE BELOW THE GRADES INDICATED ON THE DRAWINGS, CLEAN FIRM MATERIAL APPROVED BY THE ENGINEER SHALL BE USED TO RESTORE THE AREA TO THE PROPER GRADE, AND SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS.

EMBANKMENT:

A. THIS WORK SHALL CONSIST OF FURNISHING AND PLACING THE MATERIALS REQUIRED FOR FILL OR EMBANKMENT FOR THE CONSTRUCTION AS SHOWN ON THE DRAWINGS. THE MATERIAL USED FOR EMBANKMENT SHALL BE CLEAN UNIFORM FREE DRAINING GRANULAR SOIL CONSISTING OF SAND, GRAVEL, OR A MIXTURE THEREOF, AND/OR OTHER SUITABLE MATERIAL APPROVED BY THE ENGINEER. IF THE MATERIALS ARE OF A VARIABLE QUALITY, THE CONTRACTOR SHALL PLAN HIS OPERATIONS SO THAT THE UPPER TWO FEET OF THE EMBANKMENT IS CONSTRUCTED OF SELECTED MATERIALS AS APPROVED AND DIRECTED BY THE ENGINEER.

B. PRIOR TO PLACING ANY EMBANKMENT, THE SURFACE TO RECEIVE THE EMBANKMENT, SHALL BE PLOWED OR SCARIFIED. FILL OR EMBANKMENT SHALL BE PLACED IN SUCCESSIVE UNIFORM LAYERS TWELVE INCHES (12"), MEASURED LOOSE, OR AS APPROVED BY THE ENGINEER. EACH LAYER WILL THEN BE COMPACTED BY AN APPROVED METHOD IN ACCORDANCE WITH THE REQUIREMENTS FOR COMPACTION INCLUDED IN THESE SPECIFICATIONS.

BACKFILL:

ALL BACKFILL MATERIAL SHALL BE CLEAN, UNIFORM, FREE DRAINING SOIL AND FREE OF LUMBER, TRASH OR OTHER DEBRIS, AND SHALL BE THOROUGHLY COMPACTED IN LAYERS NOT TO EXCEED TWELVE INCHES (12"), AND BROUGHT TO AN ELEVATION ABOVE THE FINISHED GRADE, SUFFICIENT TO ALLOW FOR SETTLEMENT. PRIOR TO PLACING BACKFILL, THE AREAS AROUND STRUCTURES UPON WHICH THE BACKFILL IS TO BE PLACED, SHALL BE CLEANED OF ALL TRASH AND DEBRIS OF ANY NATURE. SHEETING AND BRACING ALLOWED TO BE LEFT IN PLACE SHALL BE CUT OFF A MINIMUM OF 2.5 FEET BELOW FINISHED GRADE. COMPACTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS INCLUDED IN THESE SPECIFICATIONS. COMPACTION FOR EACH LIFT SHALL BE EQUAL TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

GRADING:

THE CONTRACTOR SHALL PERFORM ALL NECESSARY GRADING TO ACHIEVE THE FINISHED GRADING AS PER THE DRAWINGS. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THESE SPECIFICATIONS.

COMPACTION:

ALL AREAS TO BE COMPACTED SHALL BE MOISTENED AND COMPACTED BY TAMPING OR USE OF VIBRATORY ROLLERS, VIBRATORY PLATE COMPACTORS OR ANY OTHER METHOD APPROVED BY THE ENGINEER IN ORDER TO OBTAIN THE REQUIRED DENSITY. WHERE USE OF VIBRATORY EQUIPMENT MAY AFFECT ADJACENT STRUCTURES, COMPACTION SHALL BE PERFORMED USING OTHER EQUIPMENT THAT WILL SATISFY THE DENSITY REQUIREMENTS WITHOUT DAMAGING EXISTING STRUCTURES. THE CONTRACTOR SHALL INSPECT ALL COMPACTED AREAS PRIOR TO FURTHER CONSTRUCTION OPERATIONS, TO ENSURE THAT SATISFACTORY COMPACTION HAS BEEN OBTAINED. ALL EMBANKMENT, INCLUDING BACKFILL AND EMBANKMENT ADJACENT TO STRUCTURES, SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 100 PERCENT (100%) OF THE MAXIMUM DENSITY, AS DETERMINED BY AASHTO T-99.

THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO COMPACTION IN AREAS AROUND STRUCTURES AND OTHER FEATURES WHERE ACCESS BY SELF PROPELLED VIBRATORY COMPACTORS MAY BE DIFFICULT.

STABILIZED SUBGRADE:

STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO THE LIMEROCK BEARING RATIO AS PER THE DRAWINGS FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS FOR TYPE C STABILIZATION. THE STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO A LIMEROCK BEARING RATIO (LBR) OF NOT LESS THAN 40 AND SHALL BE COMPACTED TO NOT LESS THAN 98% THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T- 180.

COMPACTED SUBGRADE:

COMPACTED SUBGRADE SHALL BE CONSTRUCTED TO THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS. ALL COMPACTED SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 98% THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

TESTING:

THE OWNER SHALL PROVIDE THE SPECS AND SCOPE OF SERVICES FOR AN APPROVED INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS ON SUBGRADE, BASE AND SURFACE COURSE MATERIALS. THE ENGINEER SHALL BE PRESENT FOR ALL TESTING. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST TWENTY-FOUR (24) HOURS NOTICE PRIOR TO ANY SCHEDULED TESTING. TEST RESULTS MUST BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL CERTIFICATION OR ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS.

THE SCHEDULE FOR TESTING OF PARKING LOT CONSTRUCTION SHALL BE AS FOLLOWS:

A. SUBGRADE:

1. SAMPLES OF SUBGRADE MATERIAL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SQUARE FEET, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS. LIMEROCK BEARING RATIO (LBR) TESTS SHALL BE PERFORMED ON A COMPOSITE OF SAMPLES OF SUBGRADE MATERIALS, CONSISTING OF MATERIAL FROM FOUR (4) CONSECUTIVE SAMPLES, SUCH THAT ONE (1) LBR TEST IS PERFORMED AT INTERVALS OF NOT MORE THAN 20,000 SQUARE FEET.

2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SQUARE FEET OR CLOSER AS MIGHT BE NECESSARY.

CONCRETE SIDEWALK:

CONCRETE SIDEWALK SHALL BE FIBER REINFORCED (1LB/CY) AND BE CONSTRUCTED TO THE DEPTH AND LIMITS SHOWN ON THE DRAWINGS IN ACCORDANCE WITH SECTION 522 OF THE "STANDARD SPECIFICATIONS", UNLESS OTHERWISE SPECIFIED OR INDICATED. ALL CONCRETE FOR SIDEWALK CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF AT 28 DAYS OF 3000 PSI.

JOINTING:

GENERAL

JOINTS SHALL BE SAWED AFTER THE CONCRETE HAS HARDENED AND SHALL BE TO A DEPTH OF 1/4 THE THICKNESS OF PAVEMENT. FORMED JOINTS ARE NOT PERMITTED AND WILL SERVE AS COURSE FOR REMOVAL AND REPLACEMENT AT NO COST TO THE OWNER. SAWING OF JOINTS SHALL BEGIN AS SOON AS THE PAVEMENT HAS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT EXCESSIVE RAVELING AND BEFORE UNCONTROLLED CRACKING OCCURS.

CONSTRUCTION JOINTS

ALL LONGITUDINAL JOINTS MAY BE CONSTRUCTION JOINTS AT THE CONTRACTOR'S OPTION. TRANSVERSE CONSTRUCTION JOINTS SHALL BE INSTALLED WHENEVER THE PLACING OF CONCRETE IS SUSPENDED A SUFFICIENT LENGTH OF TIME THAT THE CONCRETE MAY BEGIN TO HARDEN.

DISTURBED AREAS:

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED AS SPECIFIED BELOW:

SODDING:

WITHIN THE LIMITS DELINEATED ON THE DRAWINGS, THE CONTRACTOR SHALL, AFTER FINAL GRADING AND CLEANUP, ESTABLISH A STAND OF GRASS BY FURNISHING AND PLACING SOD IN ACCORDANCE WITH SECTION 575 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL WATER THE SODDED AREA TO MAINTAIN MOISTURE LEVELS FOR OPTIMUM GROWTH TO ASSURE A HEALTHY STAND OF GRASS. SOD SHALL BE BAHIA GRASS SOD UNLESS OTHERWISE SPECIFIED.

RECORD DRAWINGS:

THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON THE PROJECT SITE AT ALL TIMES WHICH SHALL BE ANNOTATED BY THE CONTRACTOR DEPICTING ANY CHANGES MADE IN THE FIELD WHICH DIFFER FROM THE APPROVED CONSTRUCTION DRAWINGS. UPON COMPLETION OF CONSTRUCTION, BUT PRIOR TO FINAL INSPECTION AND CERTIFICATION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A REPRODUCIBLE MYLAR COPY AND AT LEAST THREE (3) BLUE LINE OR BLACK LINE COPIES OF THE RECORD DRAWINGS. THE RECORD DRAWINGS SHALL BE AT THE SAME SCALE AS THE APPROVED CONSTRUCTION DRAWINGS AND SHALL ACCURATELY DEPICT THE HORIZONTAL AND VERTICAL LOCATION OF ALL FACILITIES.

THE RECORD DRAWINGS SHALL BE PREPARED AND CERTIFIED BY A SURVEYOR AND MAPPER LICENSED BY THE STATE OF FLORIDA.

PROJECT AND OWNER

INDIAN HILLS RECREATION AREA

MULTI-USE TRAIL IMPROVEMENTS

FORT PIERCE, FLORIDA

CONSULTANTS

Kimley Horn

BRIAN A. GOOD, P.E.
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CERT. OF AUTH. #: 00000696
KHA PROJ. #: 047922008

SEAL

PROJECT NO. 922008.1

DESIGNED BY BAG

DRAWN BY MCF

CHECKED BY EJK

DATE 09-18-18

ISSUED FOR:

KEY MAP

DRAWING TITLE

PAVING GRADING AND DRAINAGE GENERAL NOTES

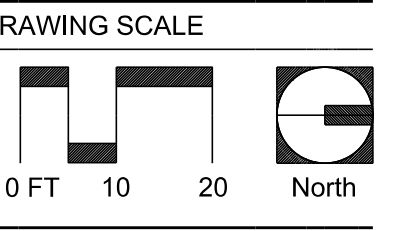
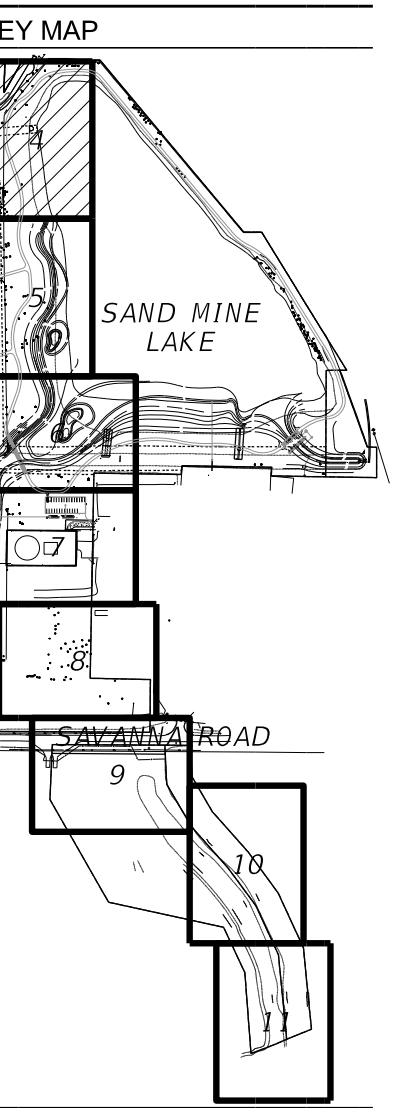
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PGDN-1

SEAL

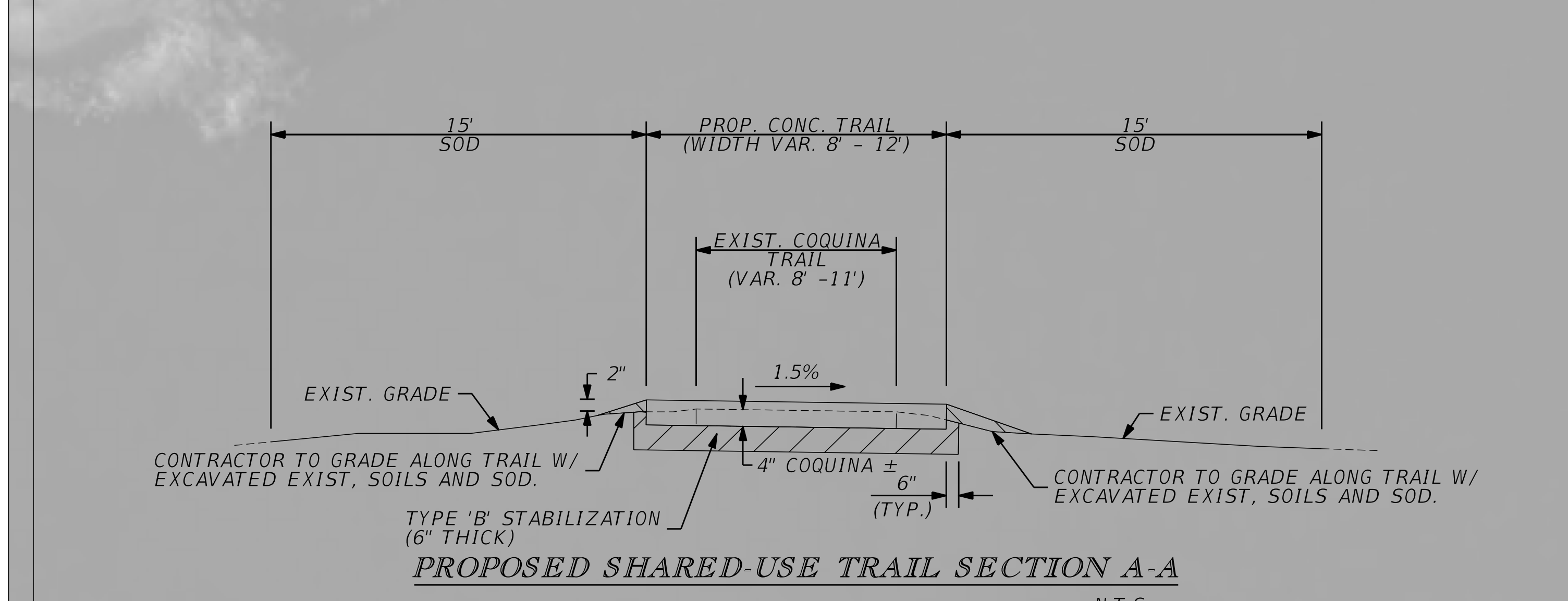
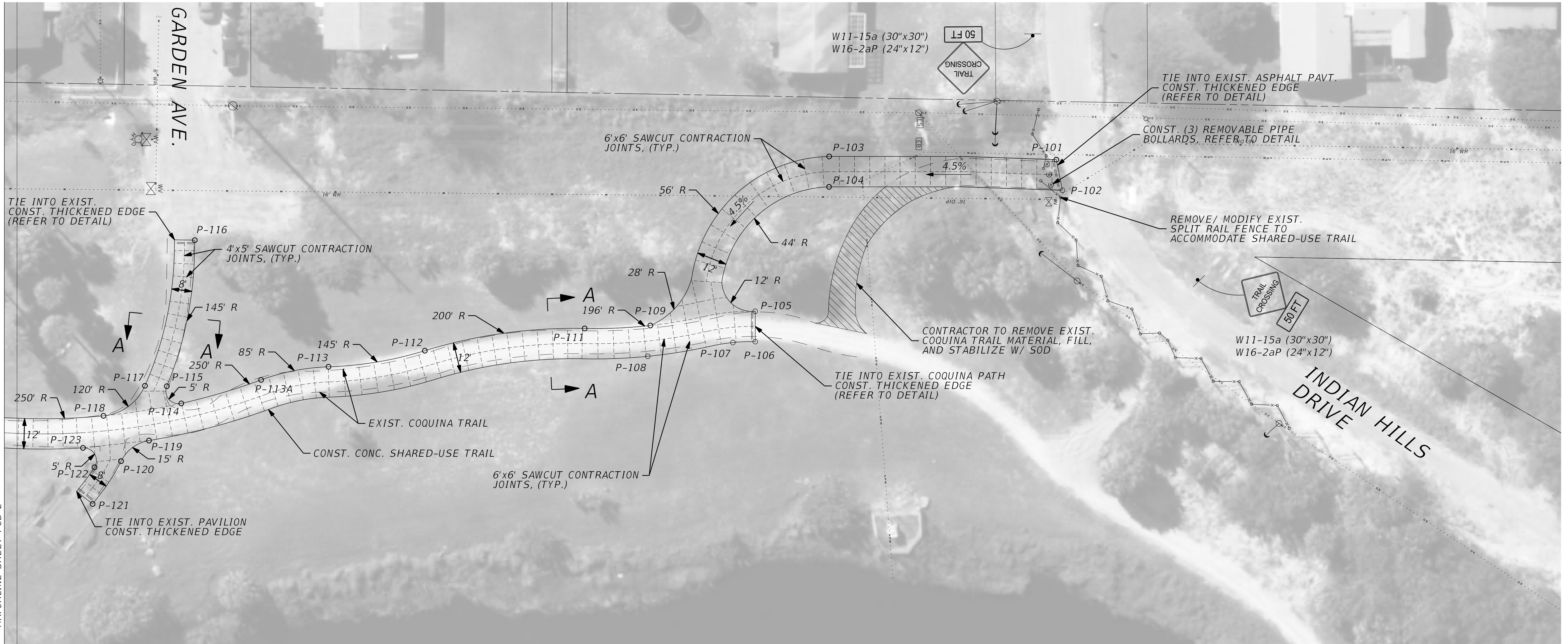
PROJECT NO.	922008.1
DESIGNED BY	BAG
DRAWN BY	MCF
CHECKED BY	EJK
DATE	09-18-18
ISSUED FOR:	

POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P101	1124097.3984	876570.5438	23.25	23.42
P102	1124099.8126	876582.6337	23.60	23.60
P103	1124007.6700	876569.2803	20.50	19.41
P104	1124007.6012	876581.2850	20.40	19.23
P105	1123978.4510	876630.4436	15.42	15.42
P106	1123978.4510	876642.4459	15.00	15.24
P107	1123969.6184	876642.7943	14.93	15.09
P108	1123935.9940	846648.2388	14.99	15.51
P109	1123937.0025	876636.0651	15.53	15.69
P111	1123911.0485	876637.2293	15.35	15.51
P112	1123847.9057	876646.0351	15.58	15.74
P113	1123809.8517	876652.3797	15.75	15.91
P113A	1123783.2315	876657.5541	15.59	15.75
P114	1123751.6958	876666.8410	15.50	15.66
P115	1123745.9803	876660.0536	15.71	15.87
P116	1123757.0265	876602.3514	18.02	18.02
P117	1123737.3507	876659.8965	15.90	15.75
P118	1123720.9630	876671.7474	15.42	15.58
P119	1123738.9565	876681.5167	15.34	15.48
P120	1123727.9197	876689.6608	15.38	15.54
P121	1123716.6665	876706.5525	16.19	16.19
P122	1123717.4042	876692.0744	15.37	15.42
P123	1123712.8713	876684.4175	15.08	15.40



DRAWING TITLE
PAVING, GRADING AND DRAINAGE PLAN

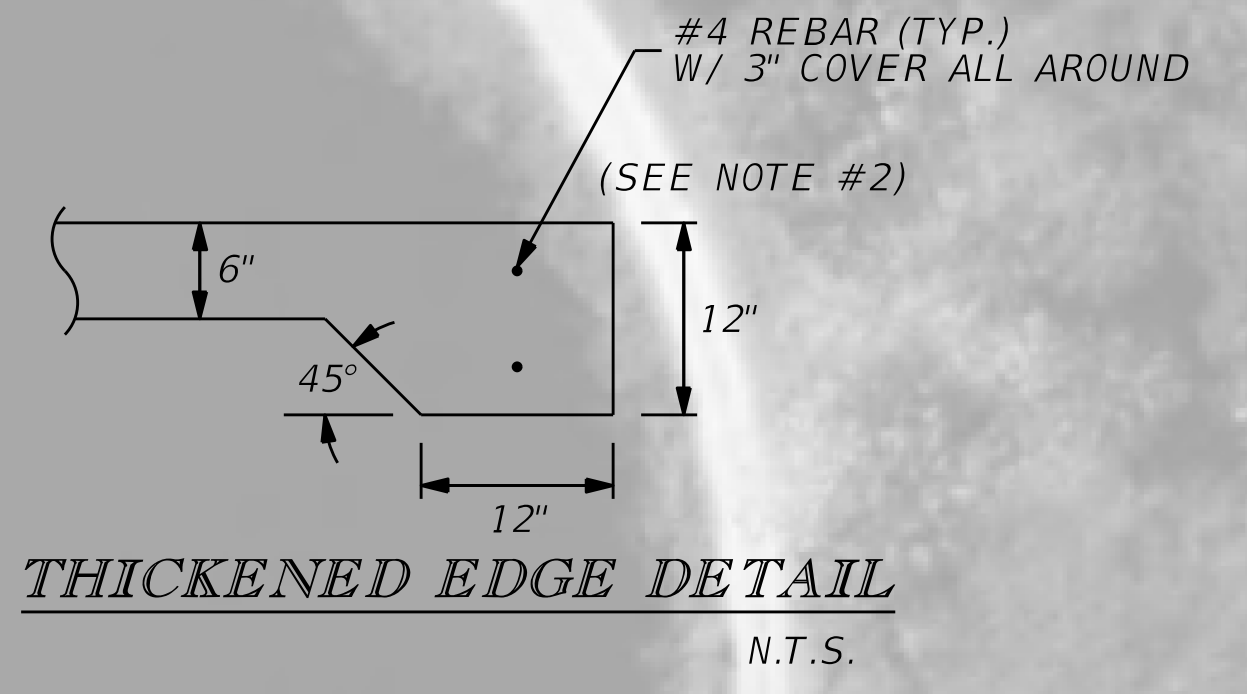
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PGD-1



- NOTE**
- CONTRACTOR TO EXCAVATE AND STOCK PILE EXISTING COQUINA TRAIL MATERIAL.
 - CONTRACTOR TO EXCAVATE 3" DEEP EXISTING SOILS AND STOCKPILE.
 - CONTRACTOR TO MIX REMAINING SUBGRADE WITH EXCAVATED COQUINA TRAIL MATERIAL AND COMPACT.
 - CONTRACTOR TO CONSTRUCT 6" CONC. TRAIL.

HORIZONTAL CONTROL POINTS

POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P101	1124097.3984	876570.5438	23.25	23.42
P102	1124099.8126	876582.6337	23.60	23.60
P103	1124007.6700	876569.2803	20.50	19.41
P104	1124007.6012	876581.2850	20.40	19.23
P105	1123978.4510	876630.4436	15.42	15.42
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P109	1123937.0025	876636.0651	15.53	15.69
P111	1123911.0485	876637.2293	15.35	15.51
P112	1123847.9057	876646.0351	15.58	15.74
P113	1123809.8517	876652.3797	15.75	15.91
P113A	1123783.2315	876657.5541	15.59	15.75
P114	1123751.6958	876666.8410	15.50	15.66
P115	1123745.9803	876660.0536	15.71	15.87
P116	1123757.0265	876602.3514	18.02	18.02
P117	1123737.3507	876659.8965	15.90	15.75
P118	1123720.9630	876671.7474	15.42	15.58
P119	1123738.9565	876681.5167	15.34	15.48
P120	1123727.9197	876689.6608	15.38	15.54
P121	1123716.6665	876706.5525	16.19	16.19
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P123	1123712.8713	876684.4175	15.08	15.40

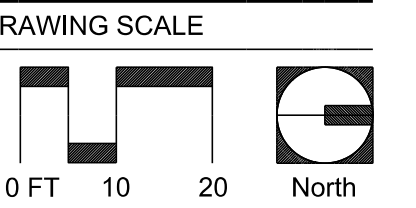
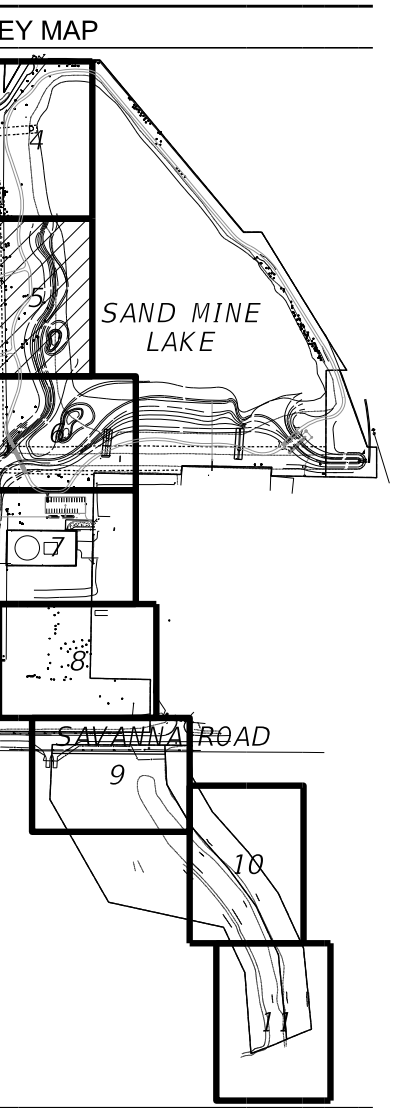


- NOTE**
- CONST. 1/2" EXPANSION JOINT WHEN SHARED-USE TRAIL IS CONST. ADJACENT TO EXIST. CONC. SLAB OR TIMBER BULKHEAD RETAINING WALL.
 - BEVEL CONCRETE EDGE AT 1:1 WHEN CONSTRUCTED ABOVE EXISTING ADJACENT SURFACE.

K:\VREL_Roadway\Weatherharte Gardens\Project\Cadd\KHA_Sun_Trail\PLAN\LD01.dgn
 Mike Forman
 9/18/2018
 10:20:42 AM
 MATCHLINE SHEET PGD-2

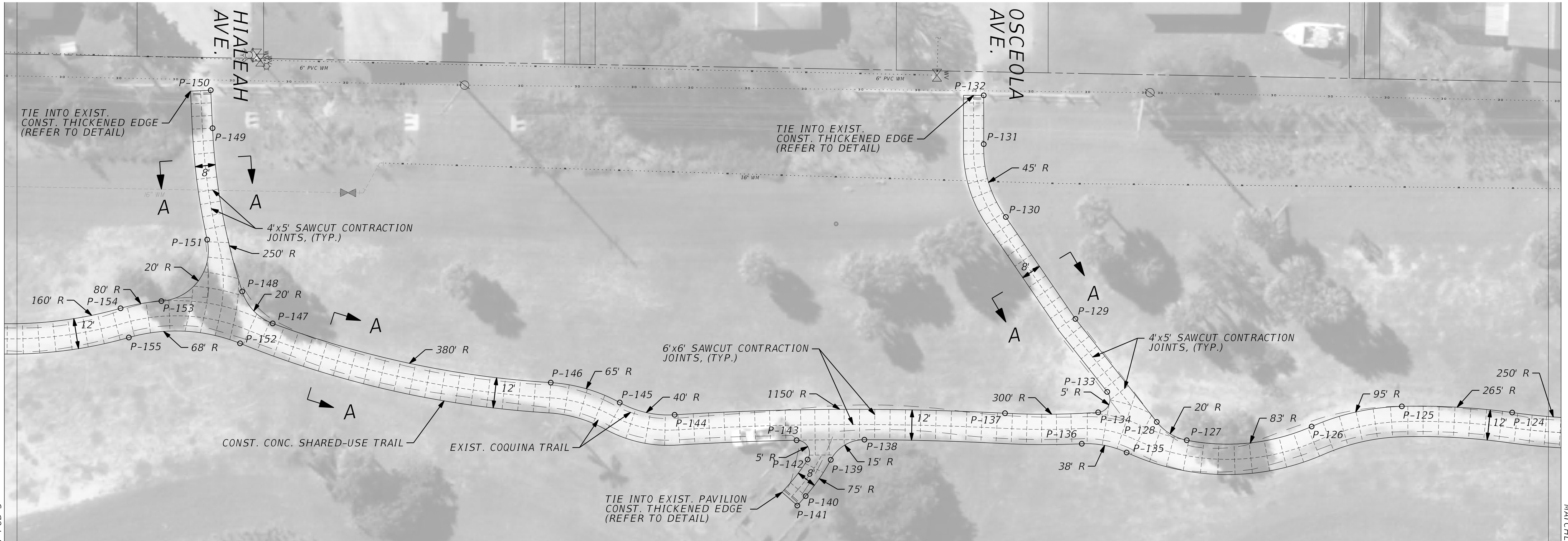
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PROJECT NO. 922008.1
 DESIGNED BY BAG
 DRAWN BY MCF
 CHECKED BY EJK
 DATE 09-18-18
 ISSUED FOR:

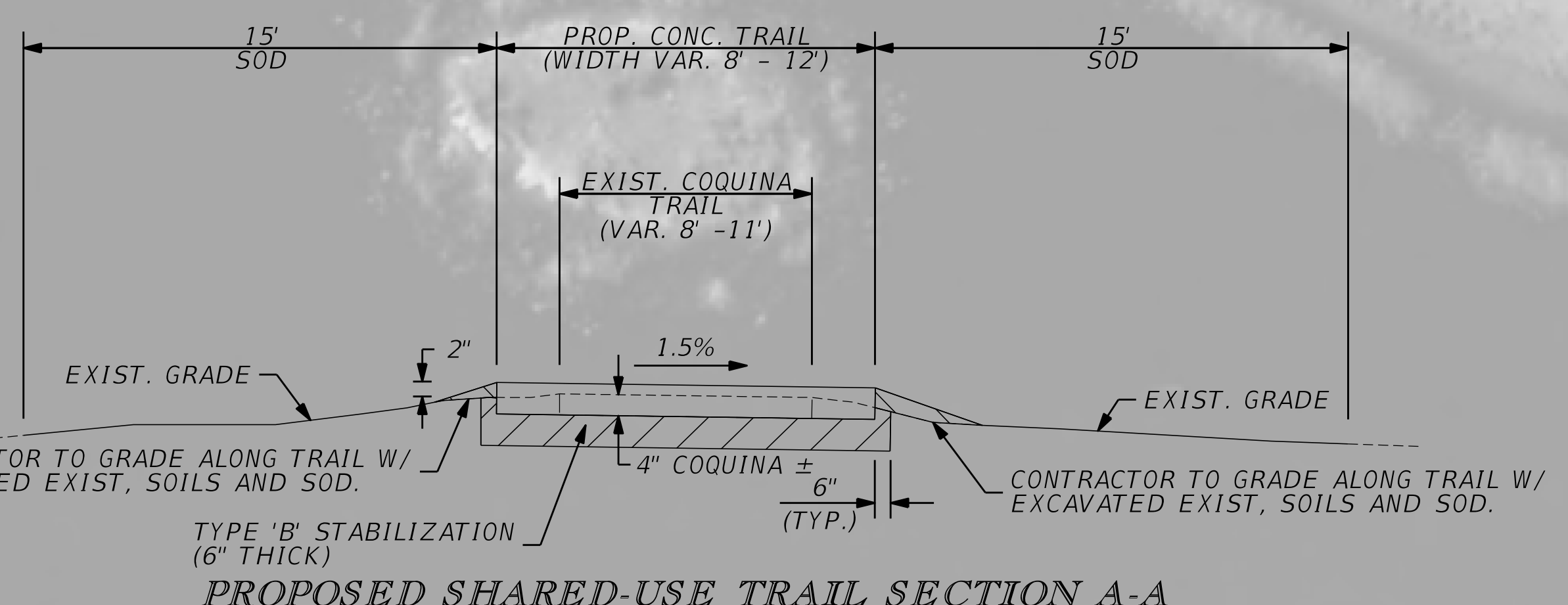


DRAWING TITLE
PAVING, GRADING AND DRAINAGE PLAN

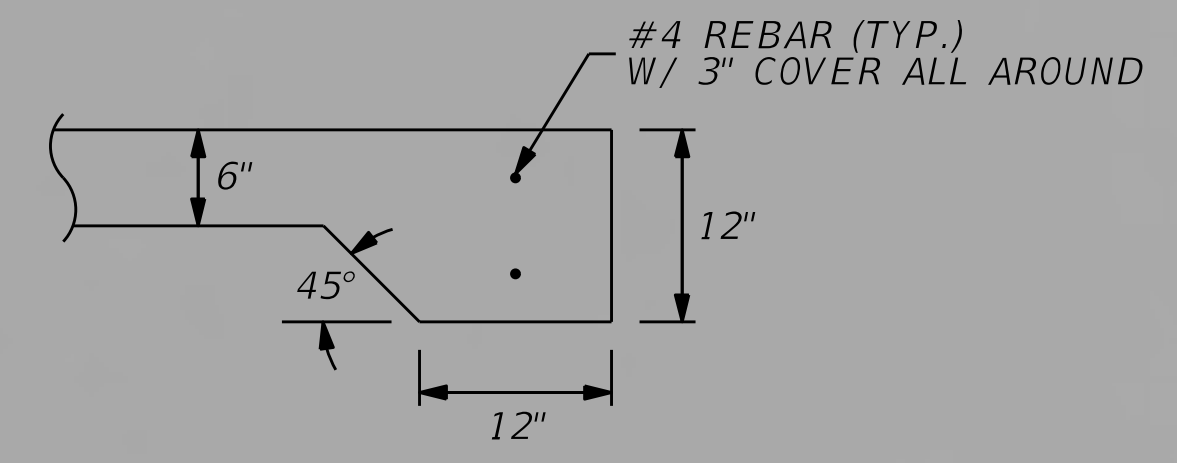
DRAWING NUMBER
PGD-2



HORIZONTAL CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P124	1123662.4956	876670.5075	15.40	15.56
P125	1123618.8893	876668.0659	15.32	15.48
P126	1123583.2708	876676.0255	15.02	15.18
P127	1123533.9238	876681.4477	14.55	14.71
P128	1123522.0864	876674.2158	14.57	14.73
P129	1123489.9371	876633.4882	15.09	15.25
P130	1123462.4552	876593.2214	15.52	15.68
P131	1123453.7245	876564.4334	15.78	15.94
P132	1123453.7245	876545.1524	15.89	15.89
P133	1123502.5167	876662.3361	14.66	14.82
P134	1123498.9459	876670.4215	14.56	14.61
P135	1123510.1602	876686.2761	14.29	14.45
P136	1123492.4512	876682.8254	14.24	14.43
P137	1123462.1251	876670.7679	14.63	14.79
P138	1123406.5797	876681.2212	14.30	14.46
P139	1123393.2785	876689.1814	14.27	14.43
P140	1123383.3802	876703.5010	14.33	14.49
P141	1123380.0791	876707.2562	14.43	14.43
P142	1123384.1393	876689.0534	14.28	14.31
P143	1123379.7798	876681.4372	14.99	14.34
P144	1123331.5922	876671.3922	14.05	14.21
P145	1123309.9104	876666.5474	13.97	14.13
P146	1123282.6668	876658.6740	14.17	14.33
P147	1123172.7980	876635.2827	14.69	14.85
P148	1123160.7690	876622.6758	15.09	15.25
P149	1123149.0477	876558.1172	14.82	14.98
P150	1123148.3276	876543.1264	14.76	14.76
P151	1123146.9216	876602.1717	15.29	15.45
P152	1123159.9161	876643.1565	14.44	14.67
P153	1123128.8346	876626.4650	14.98	15.14
P154	1123112.7073	876629.3058	15.12	15.28
P155	1123115.9876	876640.8488	14.85	15.10



- NOTE**
- CONTRACTOR TO EXCAVATE AND STOCK PILE EXISTING COQUINA TRAIL MATERIAL.
 - CONTRACTOR TO EXCAVATE 3" DEEP EXISTING SOILS AND STOCKPILE.
 - CONTRACTOR TO MIX REMAINING SUBGRADE WITH EXCAVATED COQUINA TRAIL MATERIAL AND COMPACT.
 - CONTRACTOR TO CONSTRUCT 6" CONC. TRAIL.

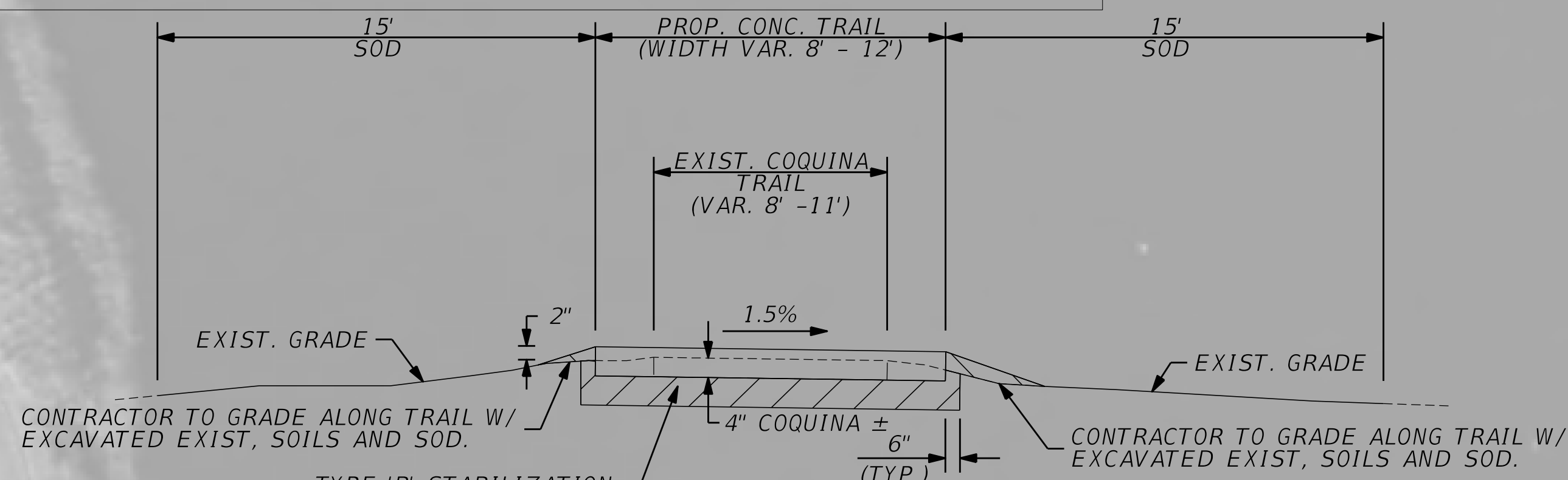


THICKENED EDGE DETAIL
 N.T.S.

NOTE

- CONST. 1/2" EXPANSION JOINT WHEN SHARED-USE TRAIL IS CONST. ADJACENT TO EXIST. CONC. SLAB OR TIMBER BULKHEAD RETAINING WALL.

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 MATCHLINE SHEET PGD-3
 MATCHLINE SHEET PGD-1

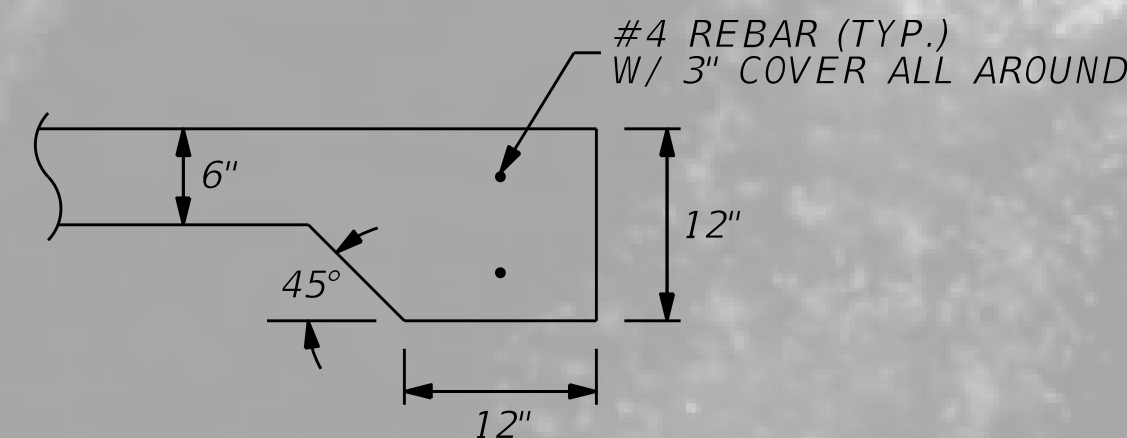


PROPOSED SHARED-USE TRAIL SECTION A-A

N.T.S.

NOTE

1. CONTRACTOR TO EXCAVATE AND STOCK PILE EXISTING COQUINA TRAIL MATERIAL.
2. CONTRACTOR TO EXCAVATE 3" DEEP EXISTING SOILS AND STOCKPILE.
3. CONTRACTOR TO MIX REMAINING SUBGRADE WITH EXCAVATED COQUINA TRAIL MATERIAL AND COMPACT.
4. CONTRACTOR TO CONSTRUCT 6" CONC. TRAIL.



THICKENED EDGE DETAIL

N.T.S.

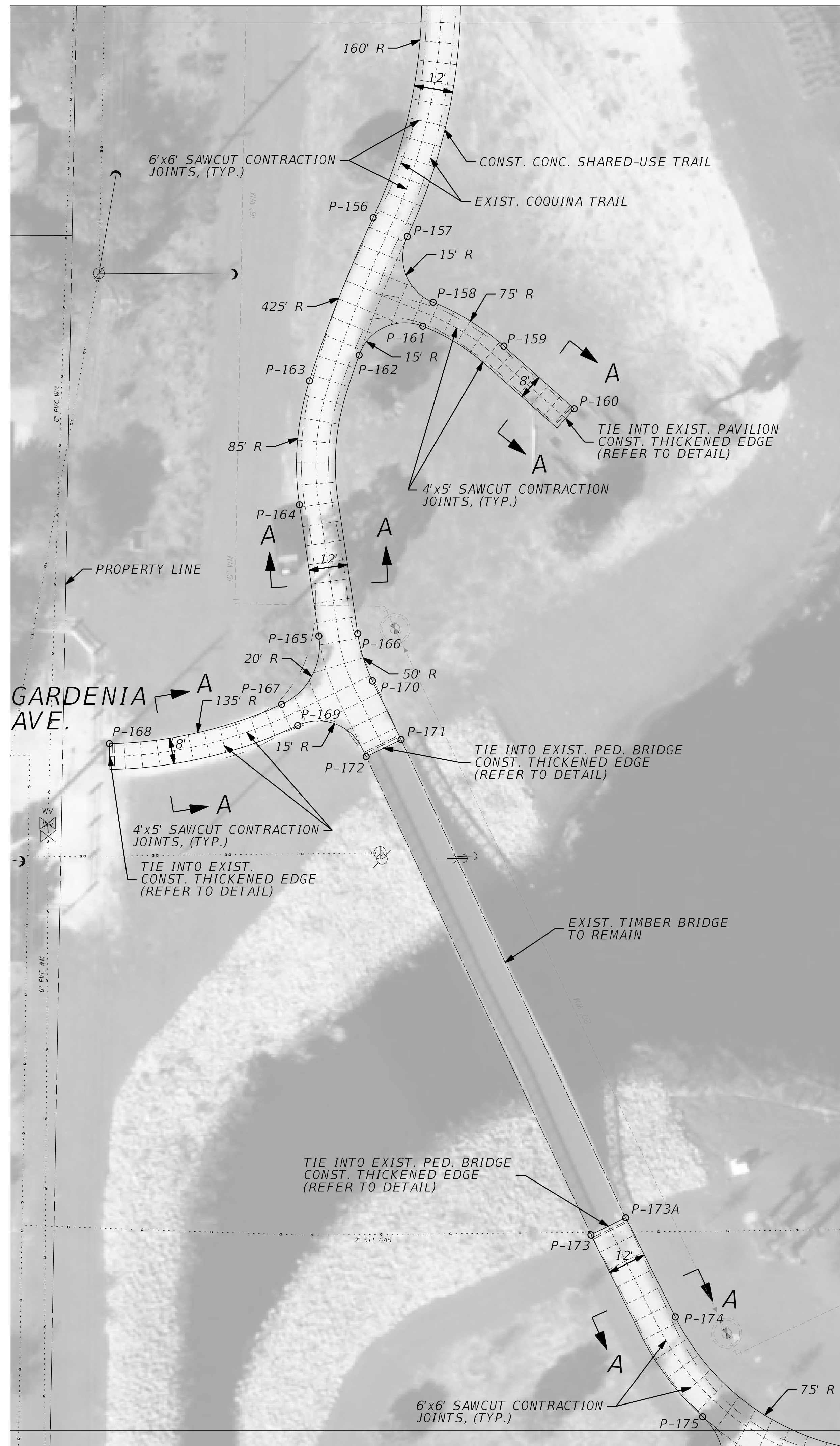
NOTE

1. CONST. 1/2" EXPANSION JOINT WHEN SHARED-USE TRAIL IS CONST. ADJACENT TO EXIST. CONCR. SLAB OR TIMBER BULKHEAD RETAINING WALL.

NOTE

1. CONTRACTOR TO PROTECT EXIST. TIMBER BRIDGE. IF CONTRACTOR ELECTS TO MOVE EQUIPMENT, MATERIAL, ETC. ACROSS EXIST. BRIDGE CONTRACTOR SHALL UTILIZE TEMPORARY PLYWOOD DECK PLATES.

HORIZONTAL CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P156	1123001.3838	876620.4248	15.56	15.72
P157	1122995.5666	876630.9508	15.55	15.54
P158	1122975.2477	876638.9214	15.46	15.62
P159	1122961.6943	876660.7985	15.20	15.36
P160	1122942.3843	876682.5035	16.31	16.31
P161	1122967.8937	876635.7658	15.63	15.50
P162	1122958.9395	876616.0598	15.85	16.11
P163	1122950.9929	876600.7400	16.13	16.29
P164	1122912.7136	876597.6384	16.02	16.18
P165	1122872.1948	876603.6392	15.94	16.10
P166	1122872.9469	876615.6587	15.83	15.92
P167	1122851.0593	876592.1350	16.25	16.41
P168	1122838.9737	876538.9502	16.41	16.41
P169	1122844.5483	876597.1142	16.12	16.29
P170	1122858.3382	876620.1870	15.76	16.13
P171	1122840.1940	876629.0300	16.45	16.45
P172	1122834.9354	876618.2576	16.51	16.51
P173	1122687.2369	876687.6816	16.34	16.34
P173A	1122692.5510	876698.3430	16.31	16.31
P174	1122661.8947	876713.7212	16.76	16.92
P175	1122631.1077	876722.1793	17.60	17.76

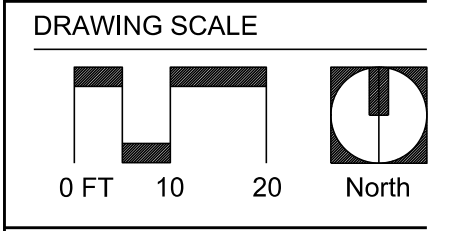
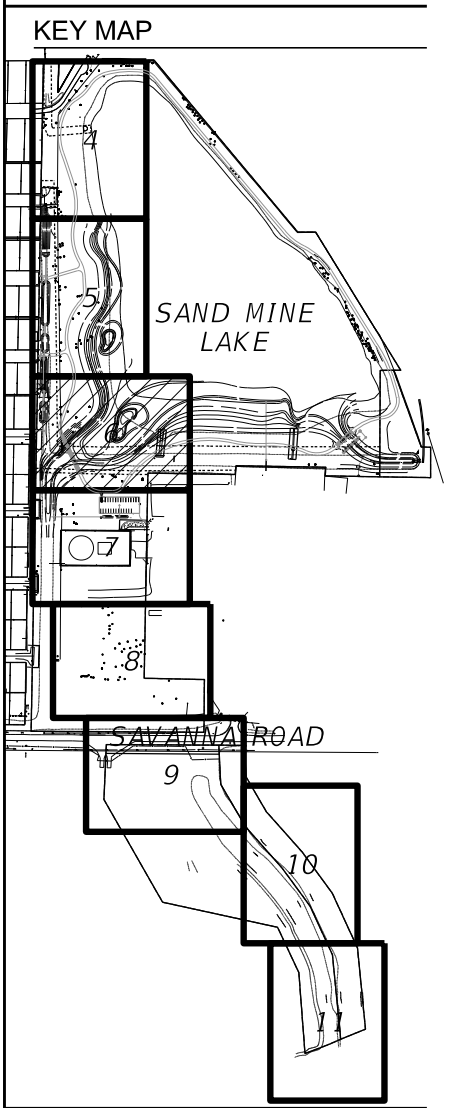


PROJECT AND OWNER
INDIAN HILLS RECREATION AREA
 MULTI-USE TRAIL IMPROVEMENTS
 FORT PIERCE, FLORIDA
 CONSULTANTS
Kimley-Horn
 BRIAN A. GOOD, P.E.
 P.E. LICENSE NUMBER: 56939
 445 24th STREET, SUITE 200
 VERO BEACH, FL 32960
 (772) 794-4100
 CERT. OF AUTH. # 00000696
 KHA PROJ. # 047922008

SEAL

PROJECT NO. 922008.1
 DESIGNED BY BAG
 DRAWN BY MCF
 CHECKED BY EJK
 DATE 09-18-18
 ISSUED FOR:

POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P156	1123001.3838	876620.4248	15.56	15.72
P157	1122995.5666	876630.9508	15.55	15.54
P158	1122975.2477	876638.9214	15.46	15.62
P159	1122961.6943	876660.7985	15.20	15.36
P160	1122942.3843	876682.5035	16.31	16.31
P161	1122967.8937	876635.7658	15.63	15.50
P162	1122958.9395	876616.0598	15.85	16.11
P163	1122950.9929	876600.7400	16.13	16.29
P164	1122912.7136	876597.6384	16.02	16.18
P165	1122872.1948	876603.6392	15.94	16.10
P166	1122872.9469	876615.6587	15.83	15.92
P167	1122851.0593	876592.1350	16.25	16.41
P168	1122838.9737	876538.9502	16.41	16.41
P169	1122844.5483	876597.1142	16.12	16.29
P170	1122858.3382	876620.1870	15.76	16.13
P171	1122840.1940	876629.0300	16.45	16.45
P172	1122834.9354	876618.2576	16.51	16.51
P173	1122687.2369	876687.6816	16.34	16.34
P173A	1122692.5510	876698.3430	16.31	16.31
P174	1122661.8947	876713.7212	16.76	16.92
P175	1122631.1077	876722.1793	17.60	17.76



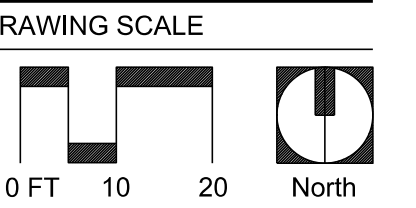
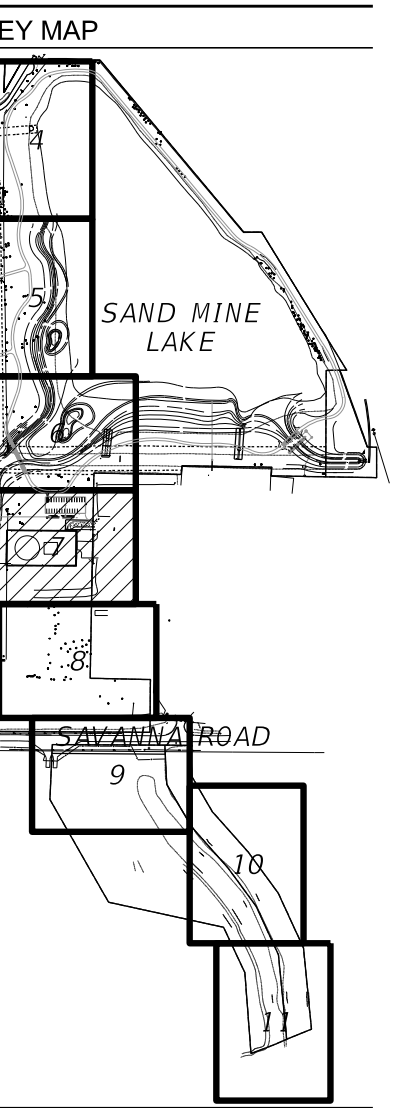
DRAWING TITLE
PAVING, GRADING AND DRAINAGE PLAN

DRAWING NUMBER
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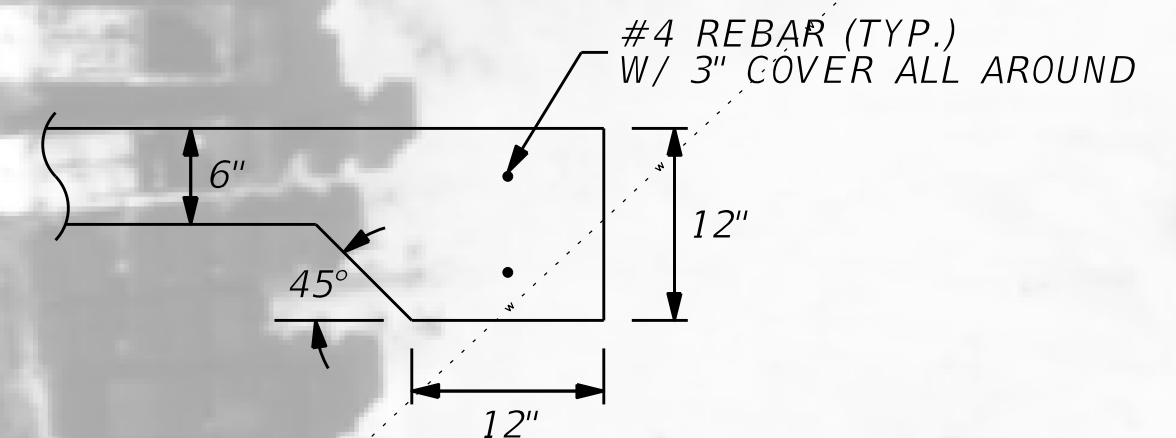
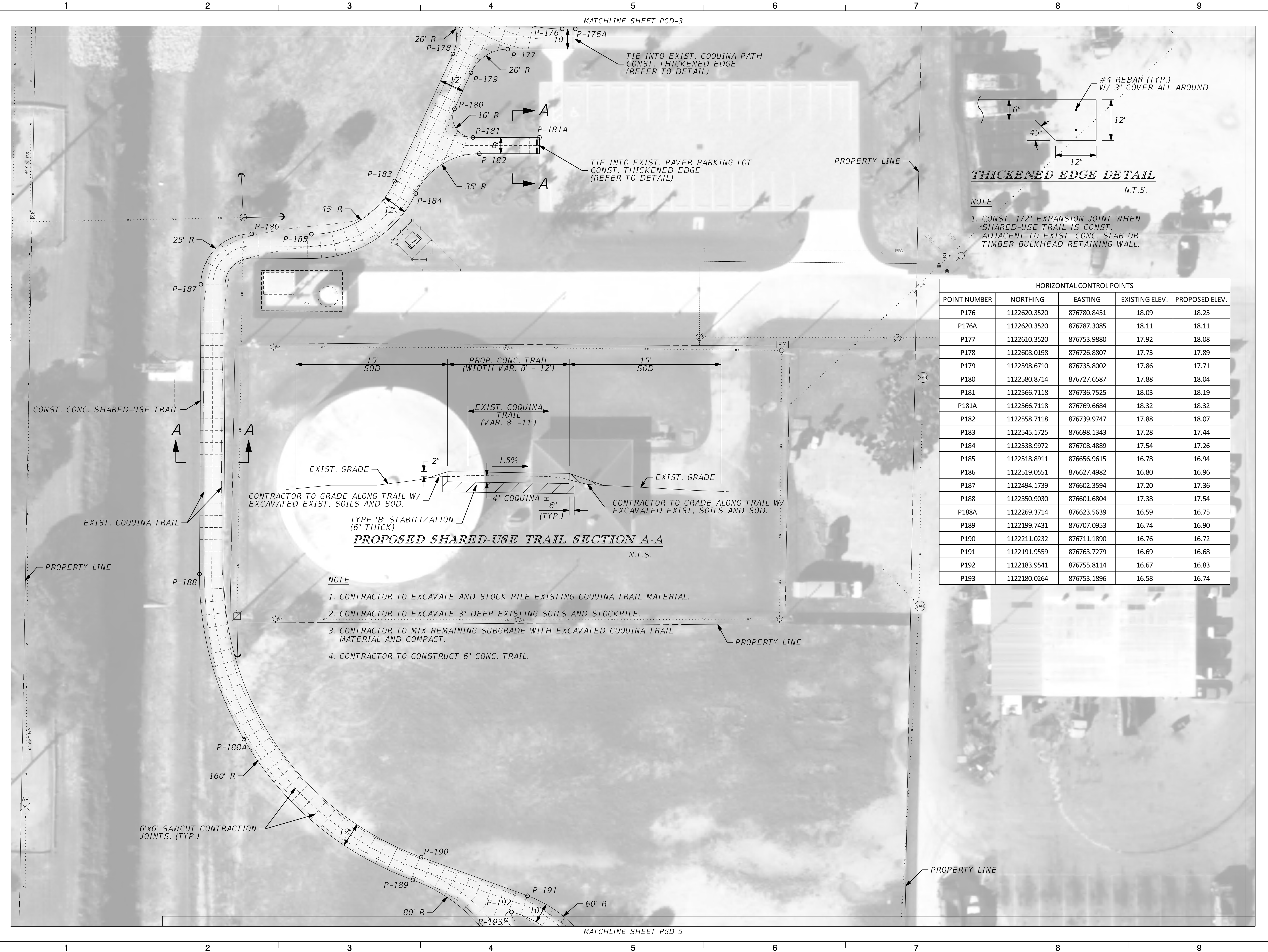
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PROJECT NO. 922008.1
 DESIGNED BY BAG
 DRAWN BY MCF
 CHECKED BY EJK
 DATE 09-18-18
 ISSUED FOR:



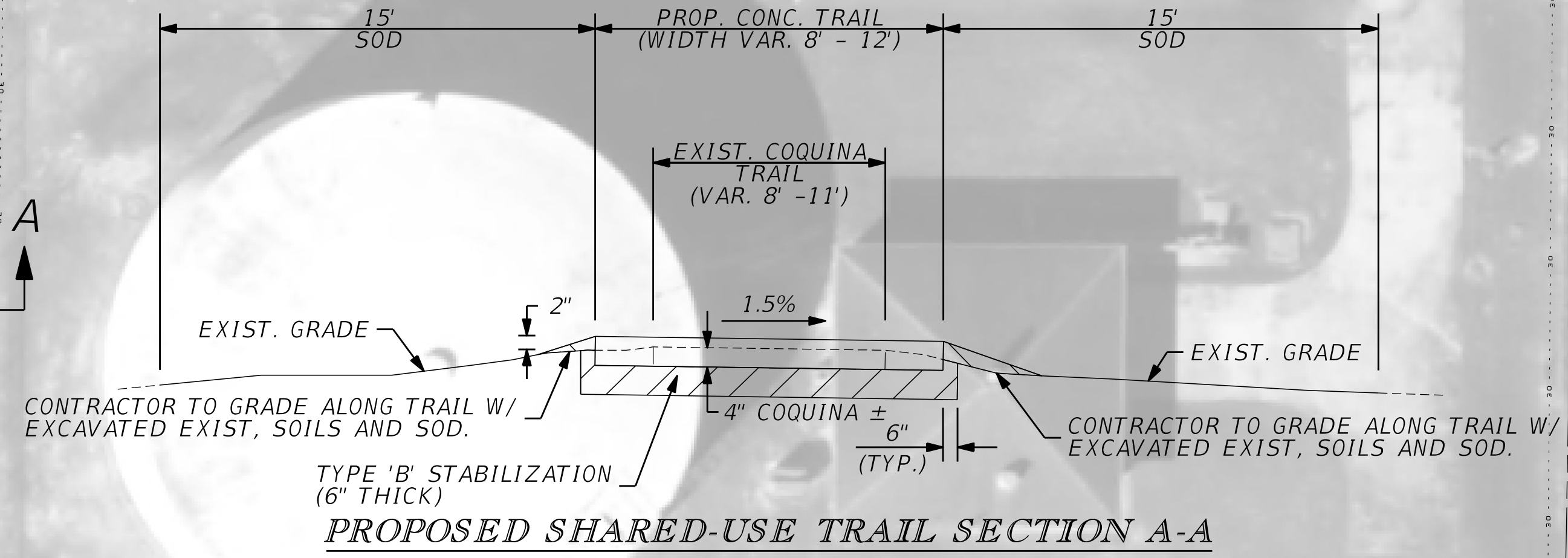
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PAVING, GRADING AND DRAINAGE PLAN

DRAWING NUMBER
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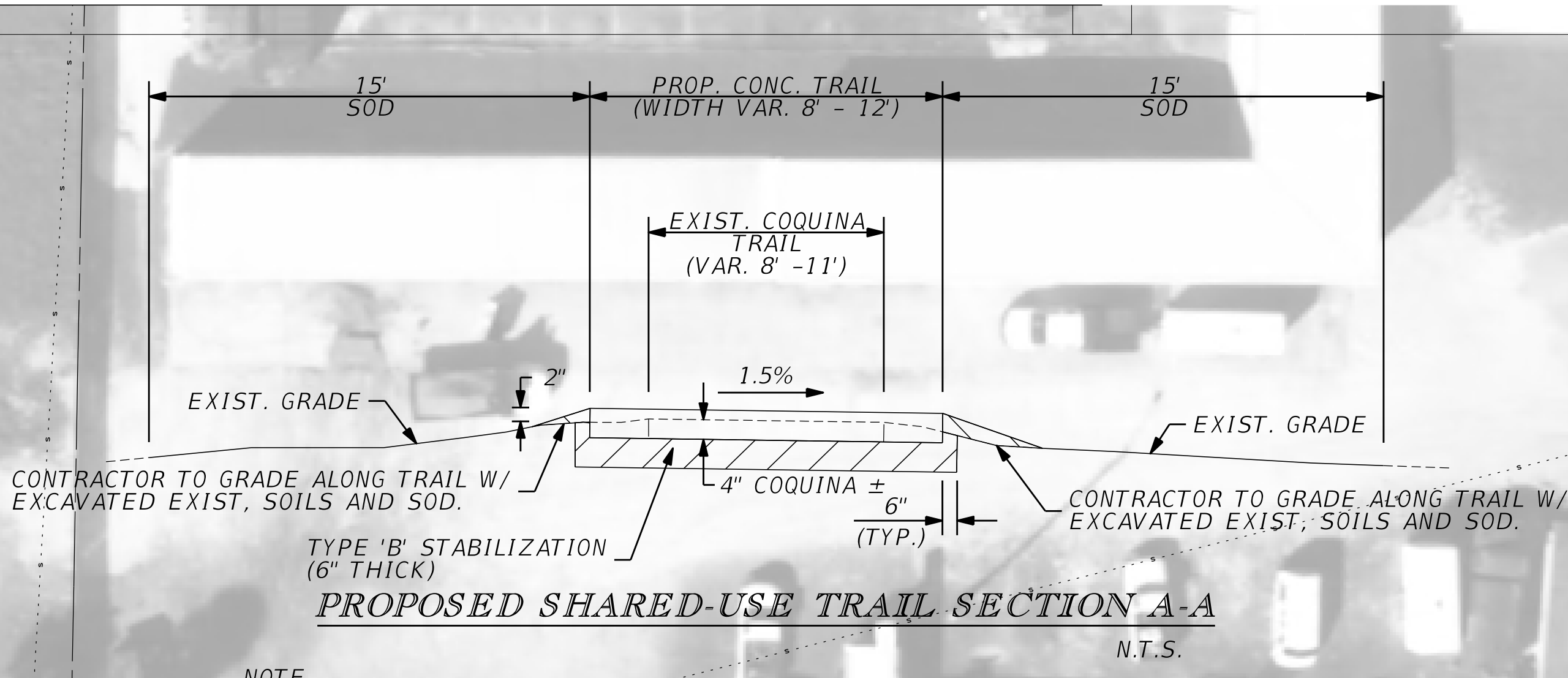
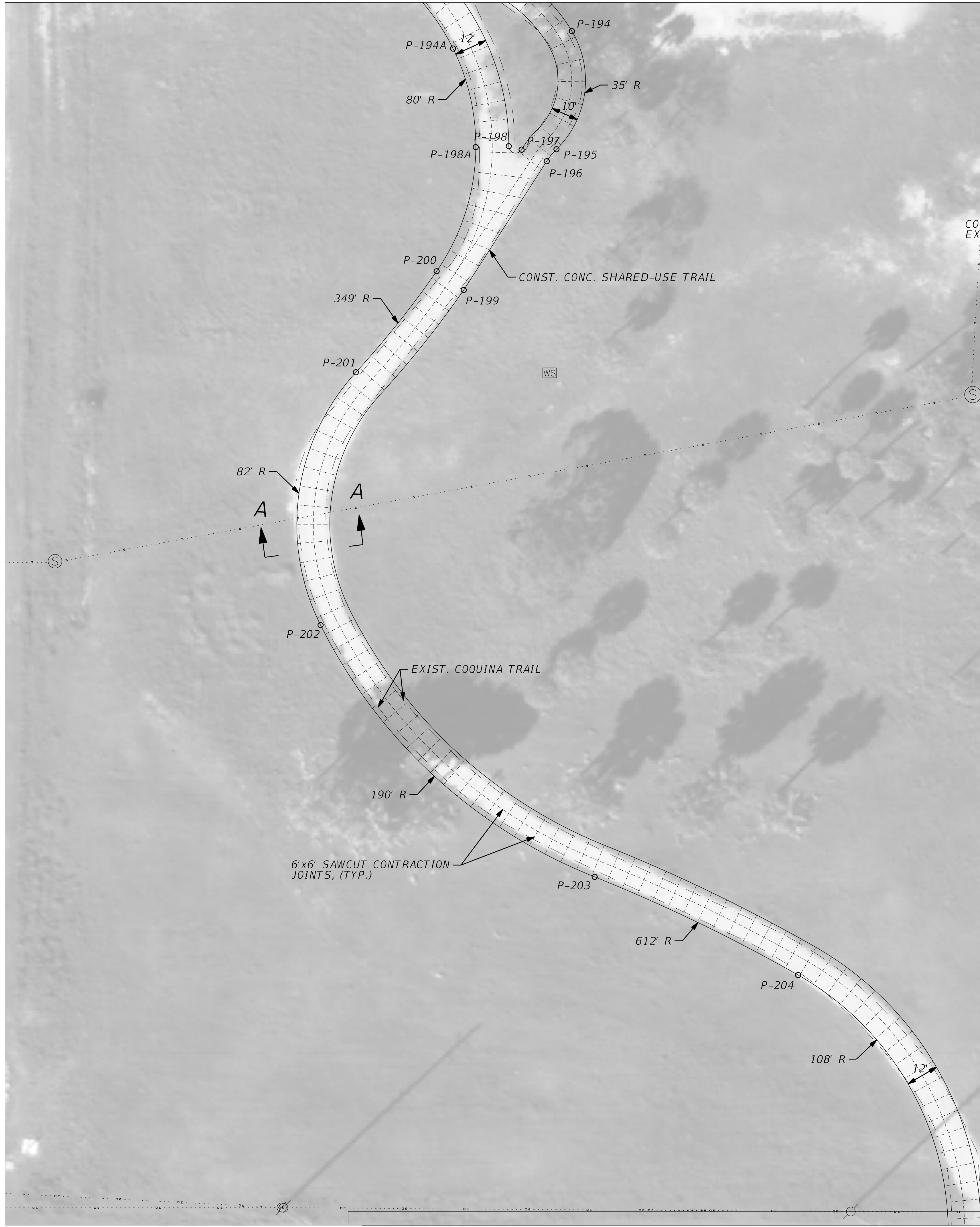
NOTE
 1. CONST. 1/2" EXPANSION JOINT WHEN SHARED-USE TRAIL IS CONST. ADJACENT TO EXIST. CONC. SLAB OR TIMBER BULKHEAD RETAINING WALL.

HORIZONTAL CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P176	1122620.3520	876780.8451	18.09	18.25
P176A	1122620.3520	876787.3085	18.11	18.11
P177	1122610.3520	876753.9880	17.92	18.08
P178	1122608.0198	876726.8807	17.73	17.89
P179	1122598.6710	876735.8002	17.86	17.71
P180	1122580.8714	876727.6587	17.88	18.04
P181	1122566.7118	876736.7525	18.03	18.19
P181A	1122566.7118	876769.6684	18.32	18.32
P182	1122558.7118	876739.9747	17.88	18.07
P183	1122545.1725	876698.1343	17.28	17.44
P184	1122538.9972	876708.4889	17.54	17.26
P185	1122518.8911	876656.9615	16.78	16.94
P186	1122519.0551	876627.4982	16.80	16.96
P187	1122494.1739	876602.3594	17.20	17.36
P188	1122350.9030	876601.6804	17.38	17.54
P188A	1122269.3714	876623.5639	16.59	16.75
P189	1122199.7431	876707.0953	16.74	16.90
P190	1122211.0232	876711.1890	16.76	16.72
P191	1122191.9559	876763.7279	16.69	16.68
P192	1122183.9541	876755.8114	16.67	16.83
P193	1122180.0264	876753.1896	16.58	16.74



NOTE
 1. CONTRACTOR TO EXCAVATE AND STOCK PILE EXISTING COQUINA TRAIL MATERIAL.
 2. CONTRACTOR TO EXCAVATE 3" DEEP EXISTING SOILS AND STOCKPILE.
 3. CONTRACTOR TO MIX REMAINING SUBGRADE WITH EXCAVATED COQUINA TRAIL MATERIAL AND COMPACT.
 4. CONTRACTOR TO CONSTRUCT 6" CONC. TRAIL.

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 Mike Forman
 9/18/2018
 10:22:04 AM
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- NOTE**
1. CONTRACTOR TO EXCAVATE AND STOCK PILE EXISTING COQUINA TRAIL MATERIAL.
 2. CONTRACTOR TO EXCAVATE 3" DEEP EXISTING SOILS AND STOCKPILE.
 3. CONTRACTOR TO MIX REMAINING SUBGRADE WITH EXCAVATED COQUINA TRAIL MATERIAL AND COMPACT.
 4. CONTRACTOR TO CONSTRUCT 6" CONC. TRAIL.

HORIZONTAL CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P194	1122166.3334	876794.7636	16.61	16.77
P194A	1122159.9941	876751.5195	16.83	16.99
P195	1122123.3322	876789.1658	16.62	16.89
P196	1122118.9855	876785.6144	16.59	16.75
P197	1122123.1845	876776.4585	16.88	17.04
P198	1122124.4543	876771.8035	16.88	16.63
P198A	1122124.1222	876759.8025	16.65	16.81
P199	1122072.1101	876755.4003	16.52	16.69
P200	1122078.9490	876745.5398	16.71	16.87
P201	1122042.1820	876716.1791	16.12	16.28
P202	1121950.1465	876703.3134	15.29	15.45
P203	1121858.5430	876803.0642	16.79	16.95
P204	1121822.8267	876877.0799	17.49	17.65

PROJECT AND OWNER
INDIAN HILLS RECREATION AREA
 MULTI-USE TRAIL IMPROVEMENTS
 FORT PIERCE, FLORIDA
 CONSULTANTS
Kimley»Horn
 BRIAN A. GOOD, P.E.
 P.E. LICENSE NUMBER: 56939
 445 24th STREET, SUITE 200
 VERO BEACH, FL 32960
 (772) 794-4100
 CERT. OF AUTH. # 00000696
 KHA PROJ. # 047922008

SEAL

PROJECT NO. 922008.1
 DESIGNED BY BAG
 DRAWN BY MCF
 CHECKED BY EJK
 DATE 09-18-18
 ISSUED FOR:

KEY MAP

DRAWING SCALE
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DRAWING TITLE
PAVING, GRADING AND DRAINAGE PLAN

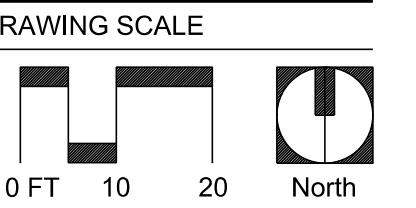
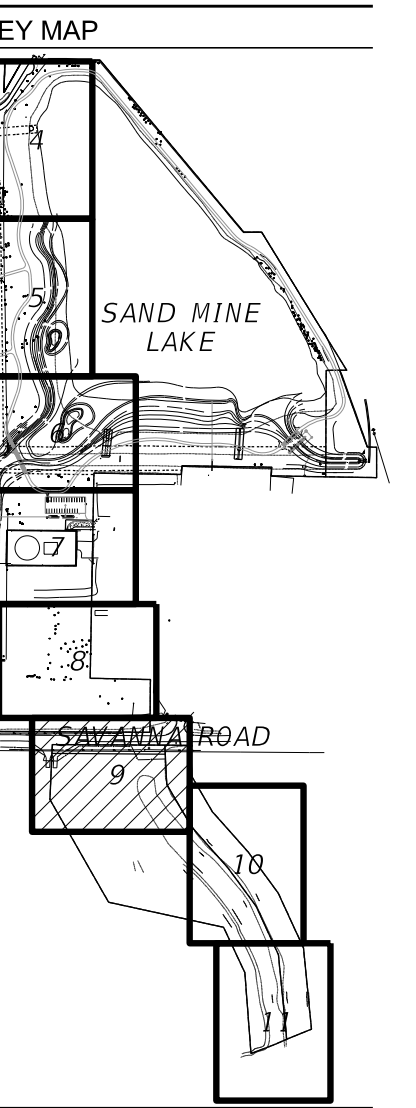
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SHEET 8 OF 12

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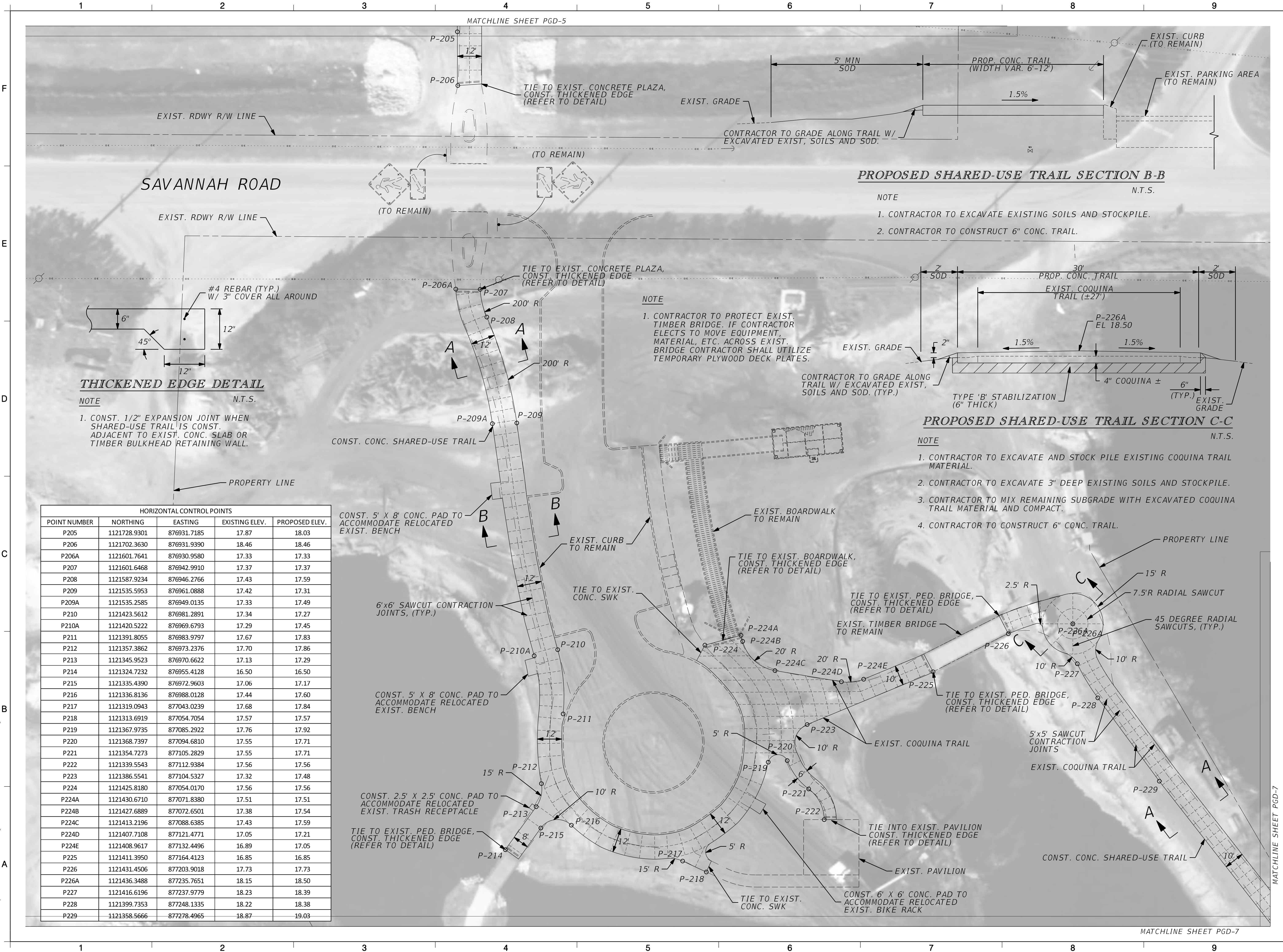
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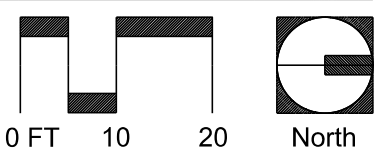
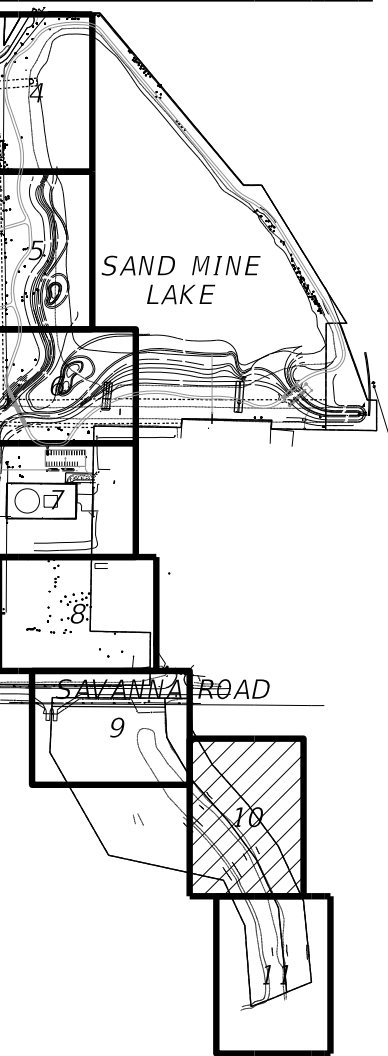
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 DRAWN BY MCF
 CHECKED BY EJK
 DATE 09-18-18
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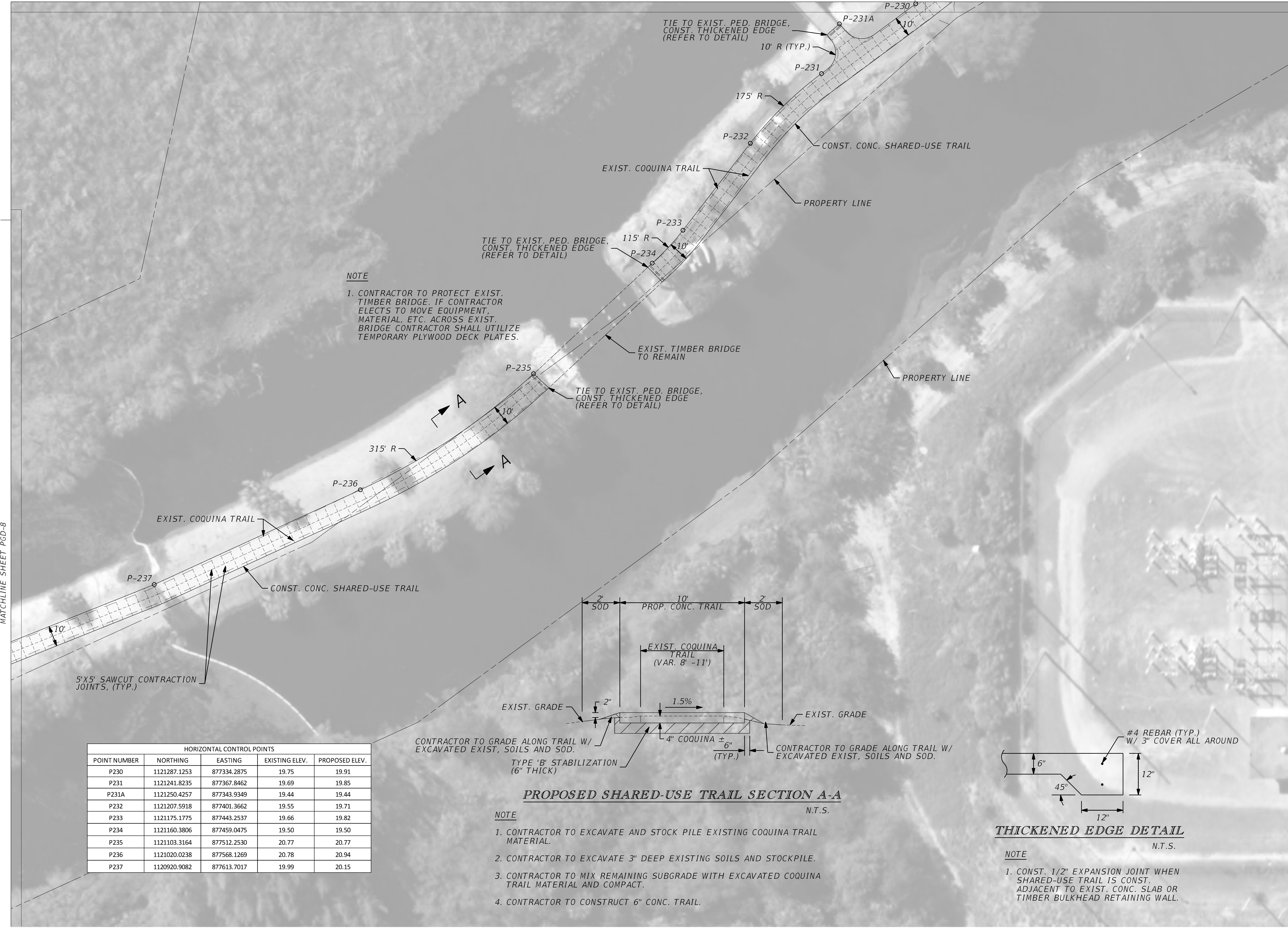
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PAVING, GRADING AND DRAINAGE PLAN

DRAWING NUMBER
PGD-6



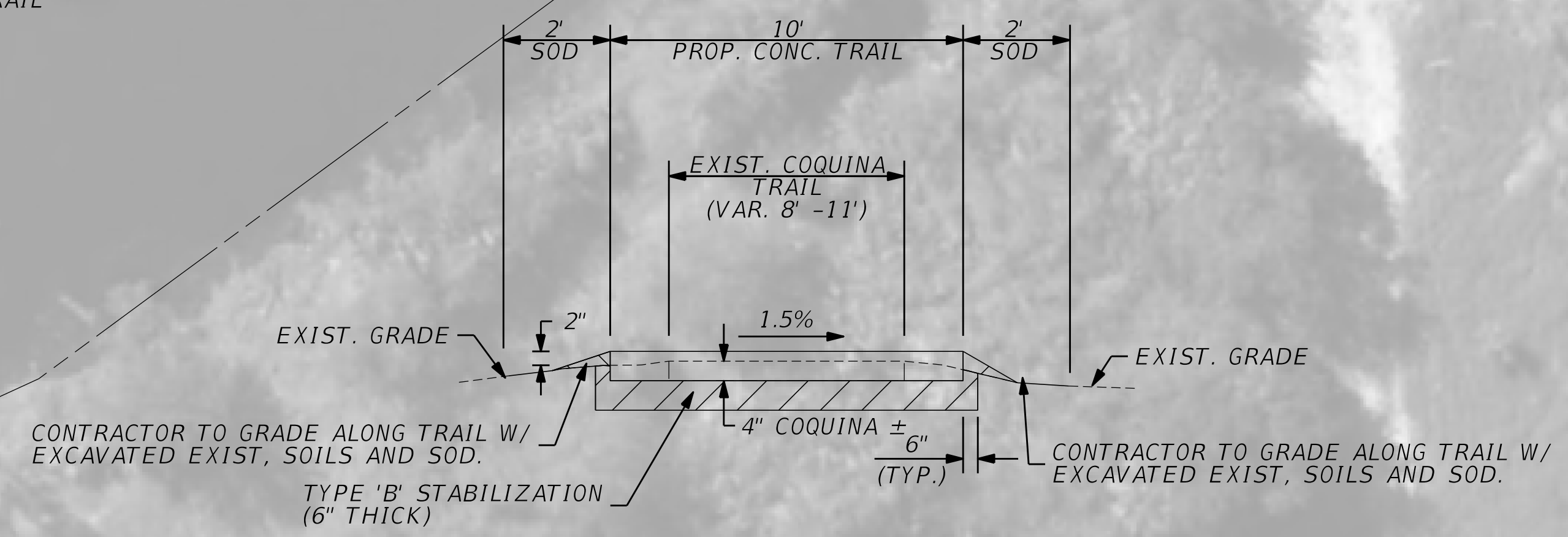


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9/18/2018 10:24:10 AM



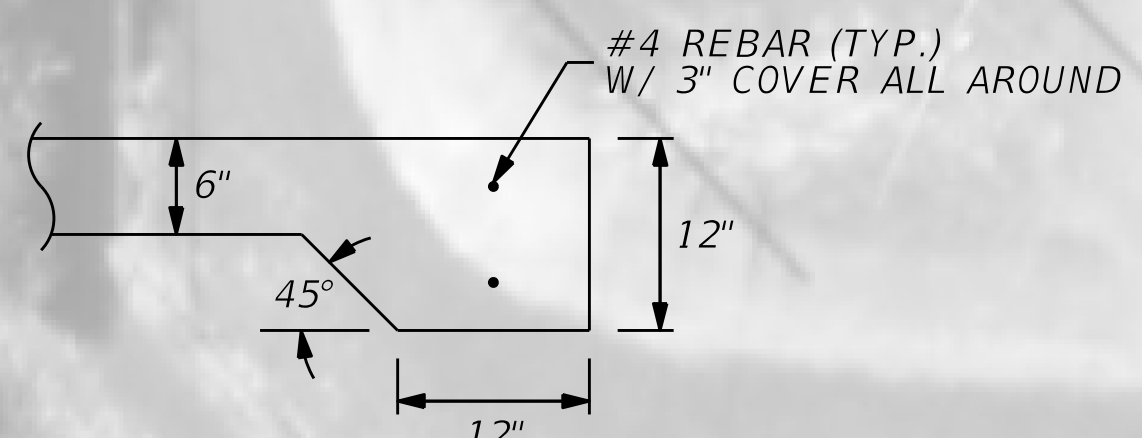
NOTE
1. CONTRACTOR TO PROTECT EXIST. TIMBER BRIDGE. IF CONTRACTOR ELECTS TO MOVE EQUIPMENT, MATERIAL, ETC. ACROSS EXIST. BRIDGE CONTRACTOR SHALL UTILIZE TEMPORARY PLYWOOD DECK PLATES.

HORIZONTAL CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P230	1121287.1253	877334.2875	19.75	19.91
P231	1121241.8235	877367.8462	19.69	19.85
P231A	1121250.4257	877343.9349	19.44	19.44
P232	1121207.5918	877401.3662	19.55	19.71
P233	1121175.1775	877443.2537	19.66	19.82
P234	1121160.3806	877459.0475	19.50	19.50
P235	1121103.3164	877512.2530	20.77	20.77
P236	1121020.0238	877568.1269	20.78	20.94
P237	1120920.9082	877613.7017	19.99	20.15



PROPOSED SHARED-USE TRAIL SECTION A-A

- NOTE**
1. CONTRACTOR TO EXCAVATE AND STOCK PILE EXISTING COQUINA TRAIL MATERIAL.
 2. CONTRACTOR TO EXCAVATE 3" DEEP EXISTING SOILS AND STOCKPILE.
 3. CONTRACTOR TO MIX REMAINING SUBGRADE WITH EXCAVATED COQUINA TRAIL MATERIAL AND COMPACT.
 4. CONTRACTOR TO CONSTRUCT 6" CONC. TRAIL.

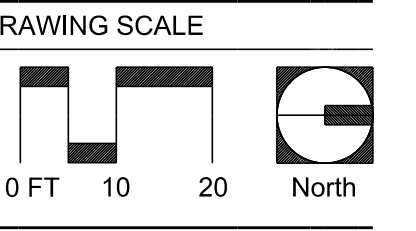
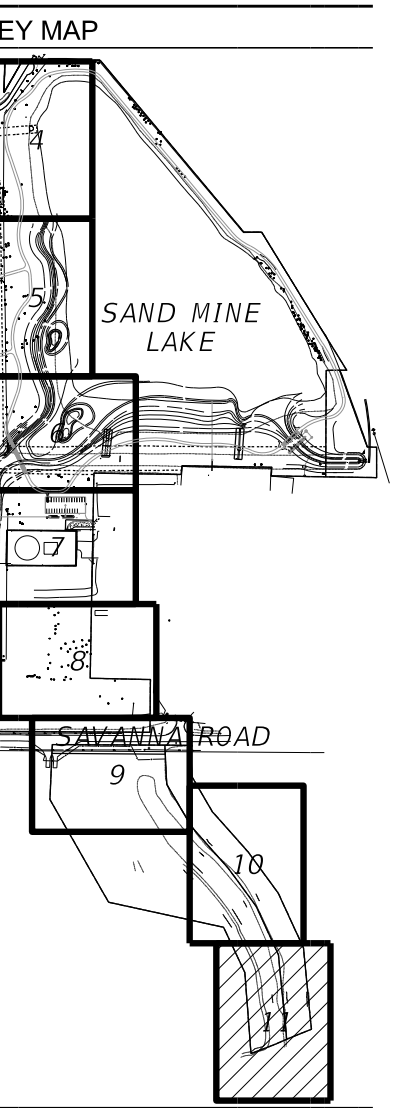


THICKENED EDGE DETAIL

- NOTE**
1. CONST. 1/2" EXPANSION JOINT WHEN SHARED-USE TRAIL IS CONST. ADJACENT TO EXIST. CONC. SLAB OR TIMBER BULKHEAD RETAINING WALL.

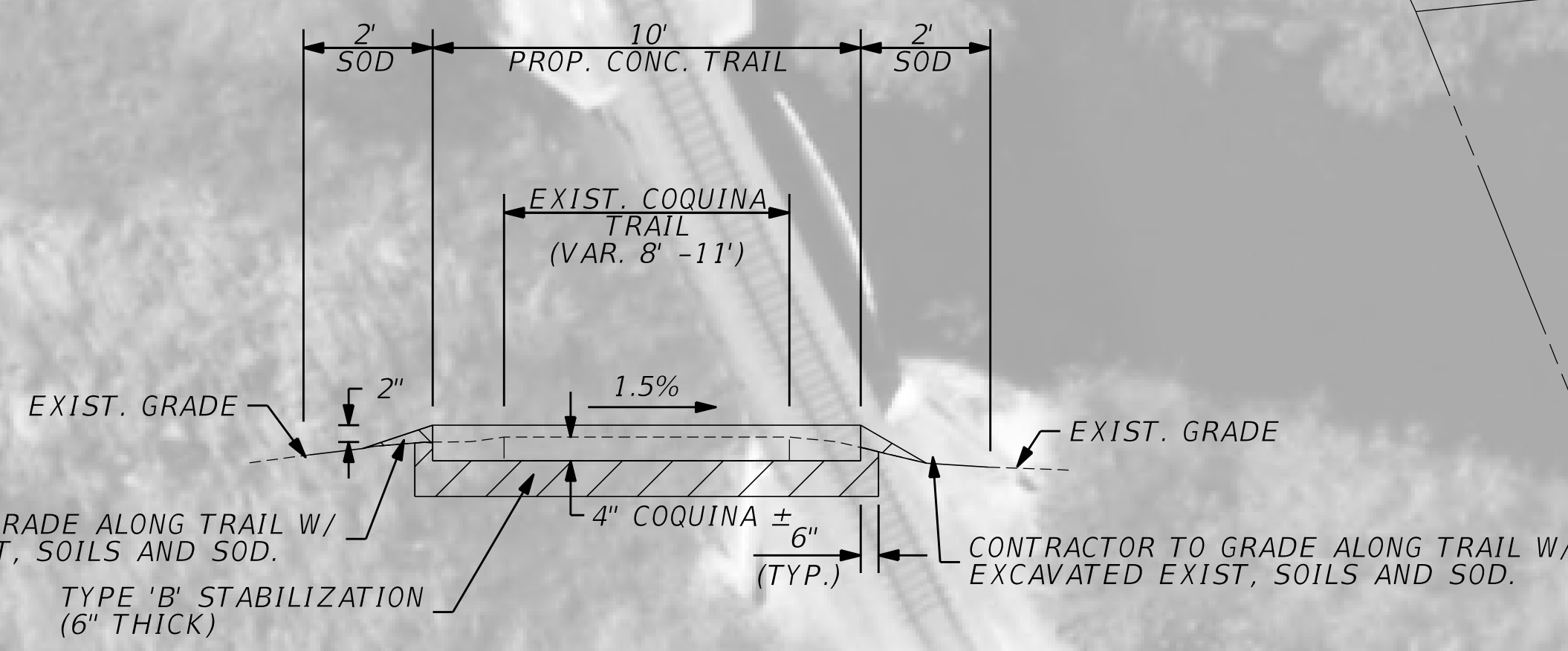
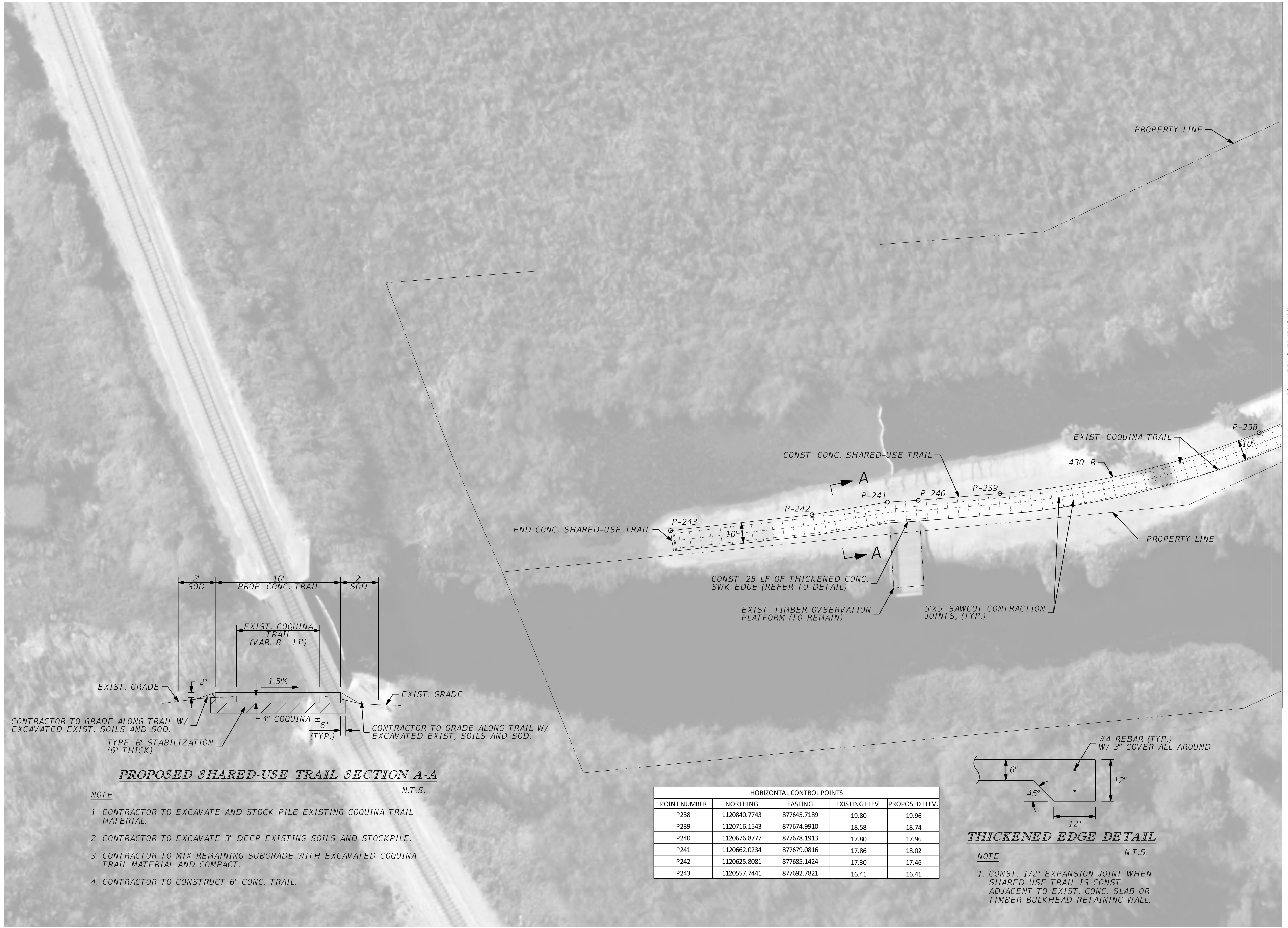
SEAL

PROJECT NO.	922008.1
DESIGNED BY	BAG
DRAWN BY	MCF
CHECKED BY	EJK
DATE	09-18-18
ISSUED FOR:	



DRAWING TITLE
PAVING, GRADING AND DRAINAGE PLAN

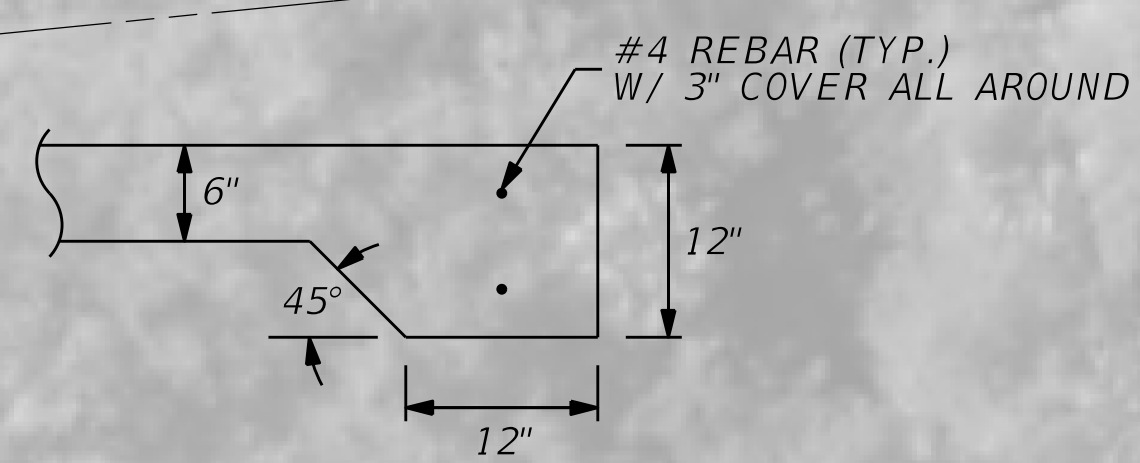
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PGD-8



PROPOSED SHARED-USE TRAIL SECTION A-A
 N.T.S.

- NOTE**
- CONTRACTOR TO EXCAVATE AND STOCK PILE EXISTING COQUINA TRAIL MATERIAL.
 - CONTRACTOR TO EXCAVATE 3" DEEP EXISTING SOILS AND STOCKPILE.
 - CONTRACTOR TO MIX REMAINING SUBGRADE WITH EXCAVATED COQUINA TRAIL MATERIAL AND COMPACT.
 - CONTRACTOR TO CONSTRUCT 6" CONC. TRAIL.

HORIZONTAL CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	EXISTING ELEV.	PROPOSED ELEV.
P238	1120840.7743	877645.7189	19.80	19.96
P239	1120716.1543	877674.9910	18.58	18.74
P240	1120676.8777	877678.1913	17.80	17.96
P241	1120662.0234	877679.0816	17.86	18.02
P242	1120625.8081	877685.1424	17.30	17.46
P243	1120557.7441	877692.7821	16.41	16.41



THICKENED EDGE DETAIL
 N.T.S.

- NOTE**
- CONST. 1/2" EXPANSION JOINT WHEN SHARED-USE TRAIL IS CONST. ADJACENT TO EXIST. CONC. SLAB OR TIMBER BULKHEAD RETAINING WALL.

10/24/17 AM
 9/18/2018
 Mike Forman
 Default
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