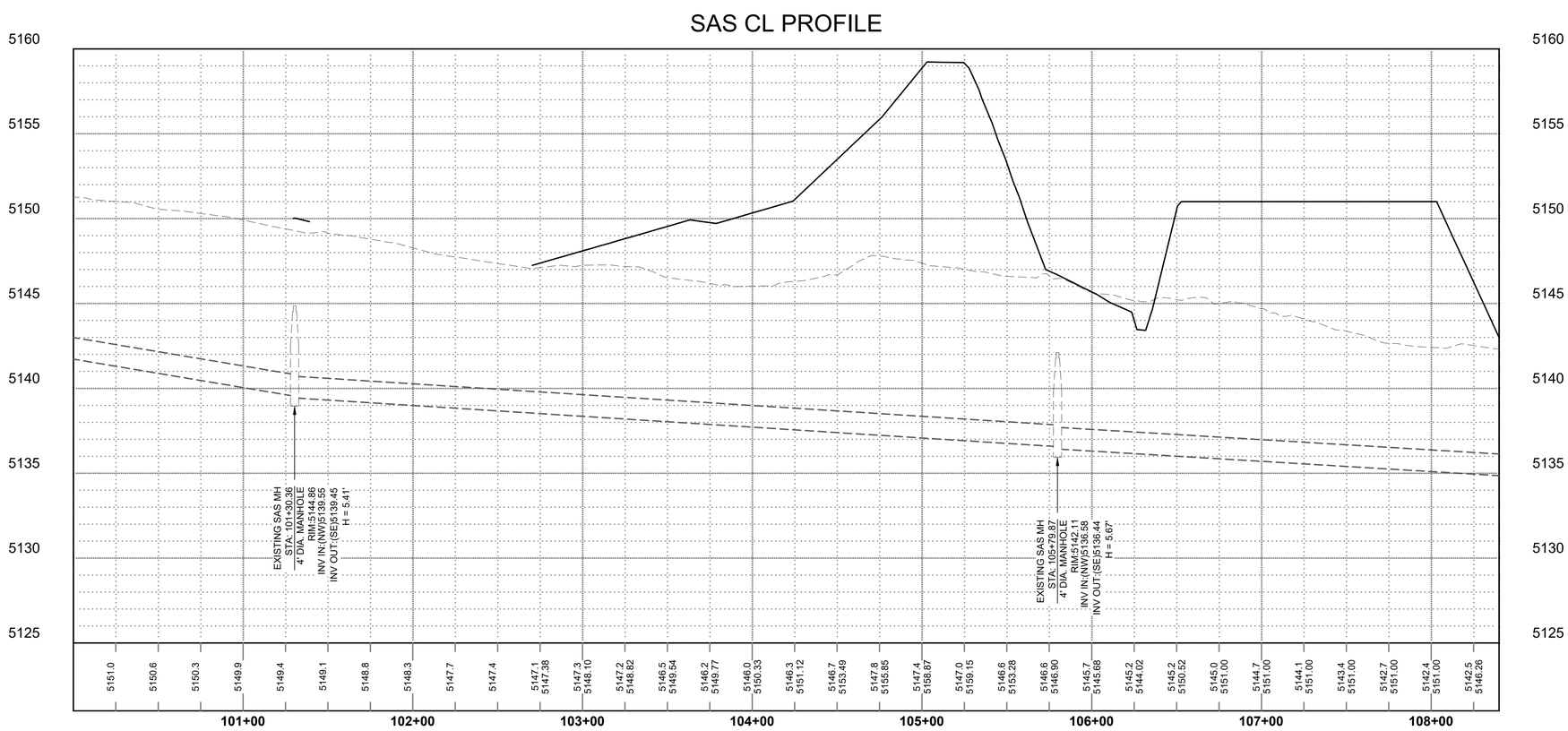
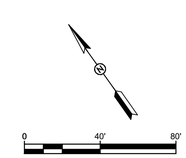
EXISTING SANITARY MAIN PLAN AND PROFILE
(FOR INFORMATION ONLY)





PATRICK L. STOVALL
NEW MEXICO
13930
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

LOMITAS NEGRAS
PHASE 2

CIVIL
EXISTING SANITARY MAIN PLAN AND PROFILE

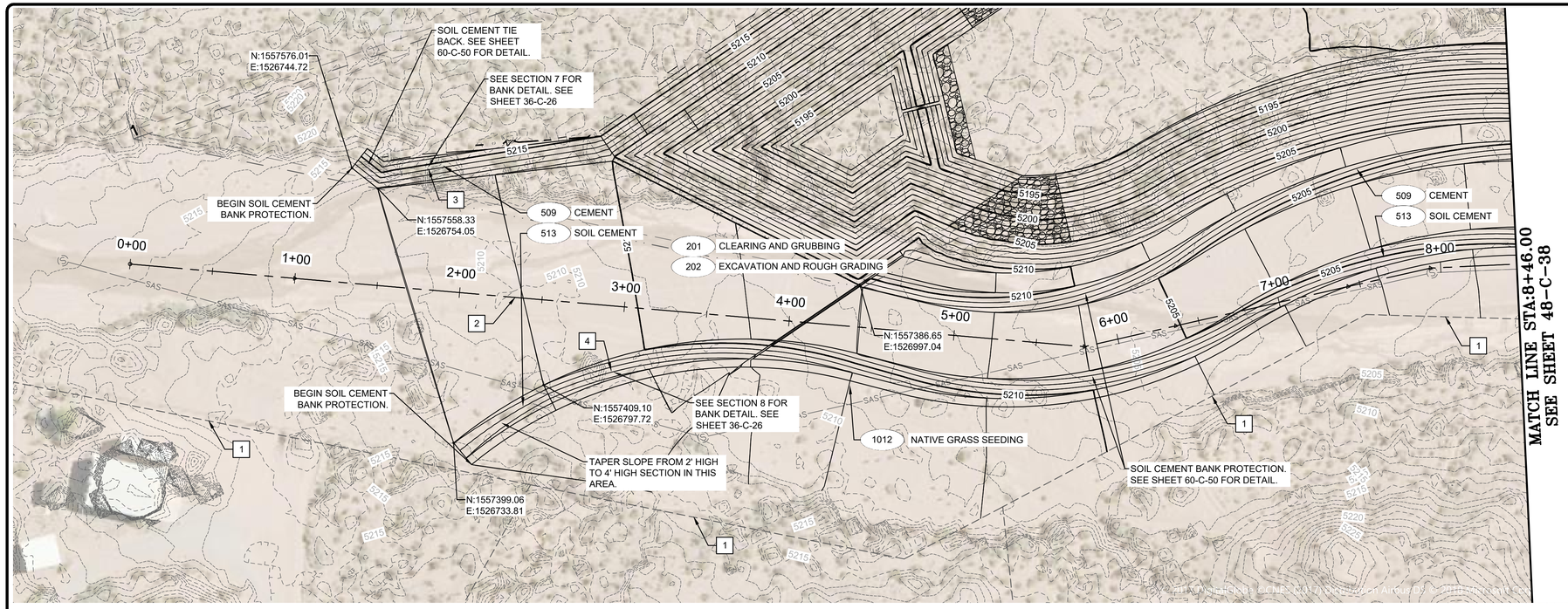
SMITH ENGINEERING

JOB NO: 115121-02

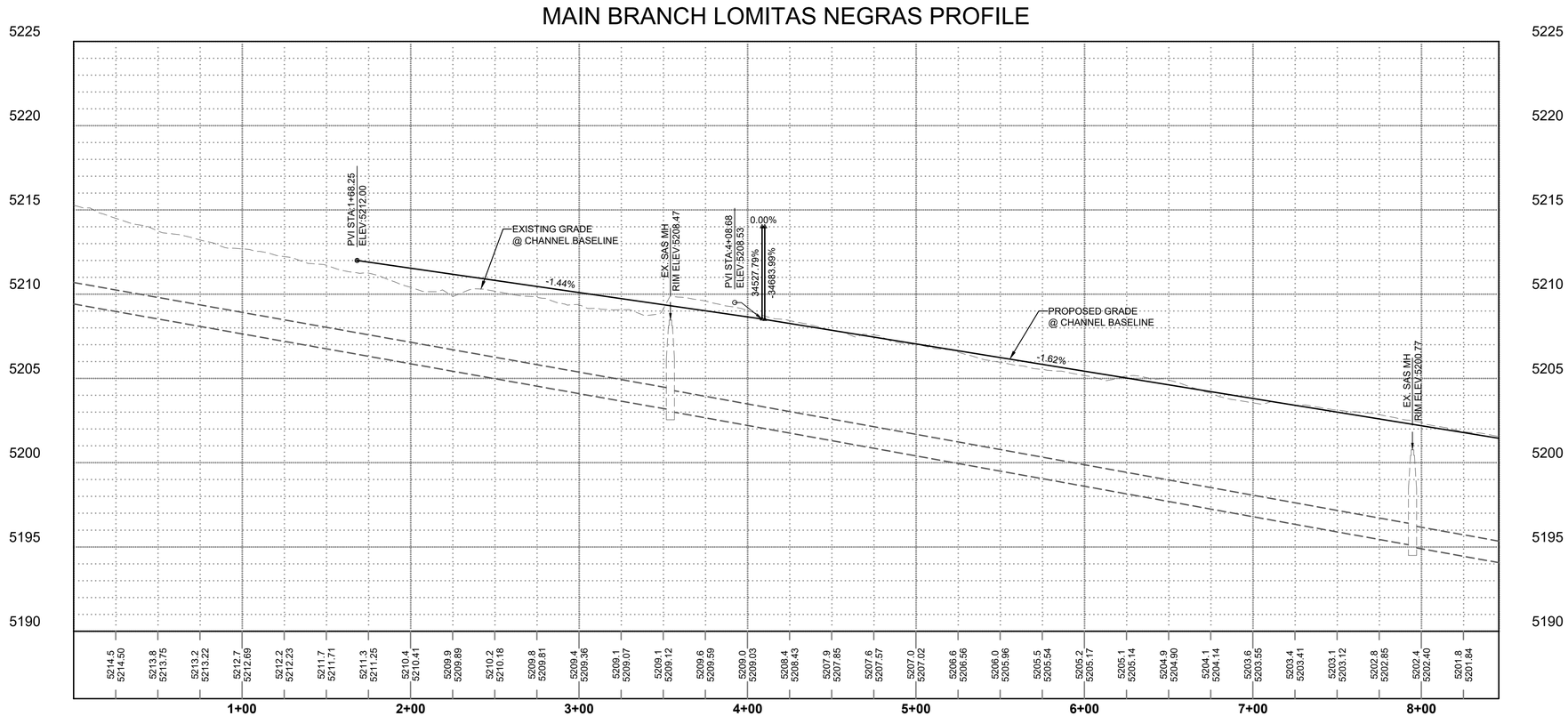
DATE: NOV. 14, 2018

SHEET NO: 46-C-36

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\46-C-36 EXISTING SANITARY MAIN PLAN AND PROFILE.dwg Nov 14, 2018 - 2:40pm Saved By: jamiev



MAIN BRANCH LOMITAS NEGRAS PROFILE



BUILD/PAY NOTES

201 CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201

202 EXCAVATION AND ROUGH GRADING: INCLUDES UNCLASSIFIED EXCAVATION, AND STOCKPILING MATERIAL TO BE USED AS SOIL CEMENT, HAUL AND DISPOSAL OF EXCESS MATERIAL TO SSCAFCA DESIGNATED SPOIL SITES. STD.. SPEC. SECT. 202

509 CEMENT: PORTLAND CEMENT FOR SOIL CEMENT. SUP. SPEC. SECT. 513

513 SOIL CEMENT: BUILD SOIL CEMENT STRUCTURES, TRANSITIONS, DIKES WITH ON-SITE SOILS AS AGGREGATE. EXCAVATION, SUBGRADE PREPARATION UNDER STRUCTURES TO WITHIN 0.1 FEET OF SPECIFIED ELEVATION AND BACKFILL AT STRUCTURES ARE INCIDENTAL. SUP. SPEC. SECT. 513

1012 NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R.O.W. AND CONSTRUCTION EASEMENTS.
2. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.
3. MAIN ARROYO NORTH BANK WEST OF LATERAL WEIR: SOIL CEMENT TRANSITION FROM SOIL CEMENT STEPS TO 1 FT THICK SLAB ABOVE BED, INCLUDING 5 STEPS BELOW BED PER TYPICAL SECTION ON SHEET 36-C-26 (SECTION 7).
4. MAIN ARROYO SOUTH BANK WEST OF FLOW DIVERSION WALL: SOIL CEMENT 1 FT THICK SLAB ABOVE BED, INCLUDING 5 STEPS BELOW BED PER TYPICAL SECTION ON SHEET 36-C-26 (SECTION 8).

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

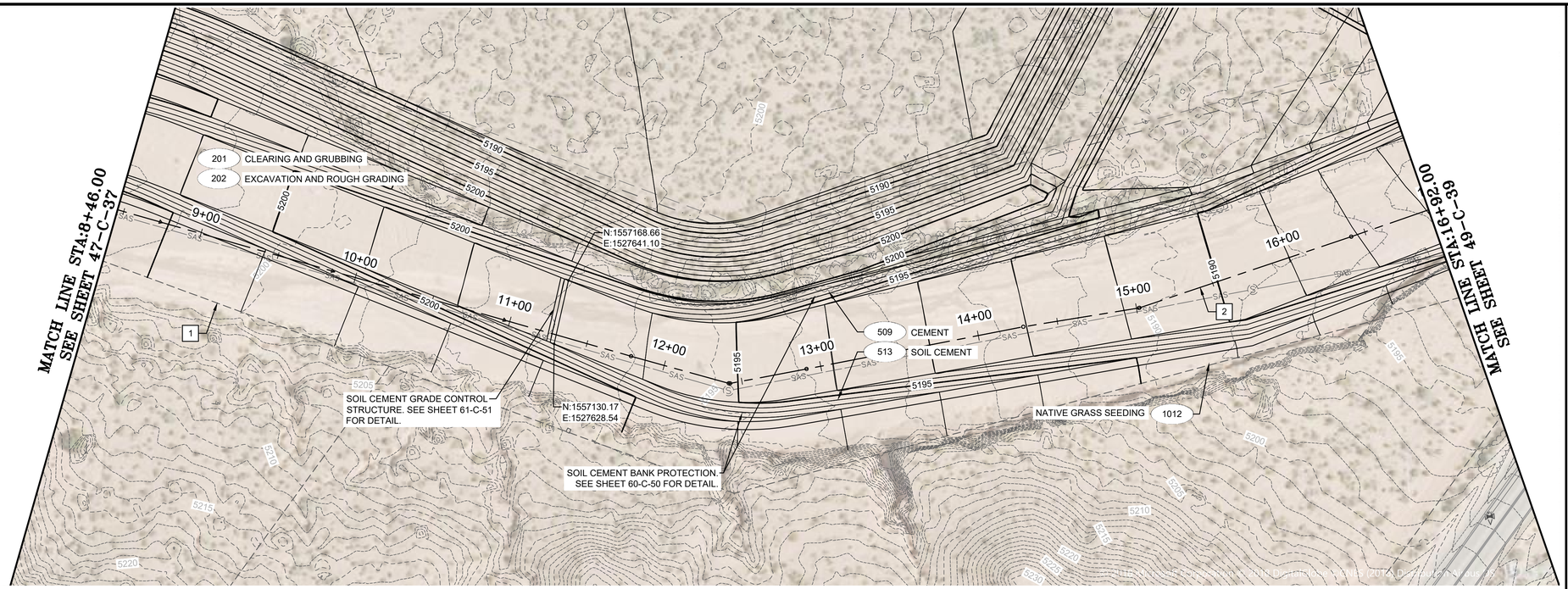
LOMITAS NEGRAS
PHASE 2

CIVIL
MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 1

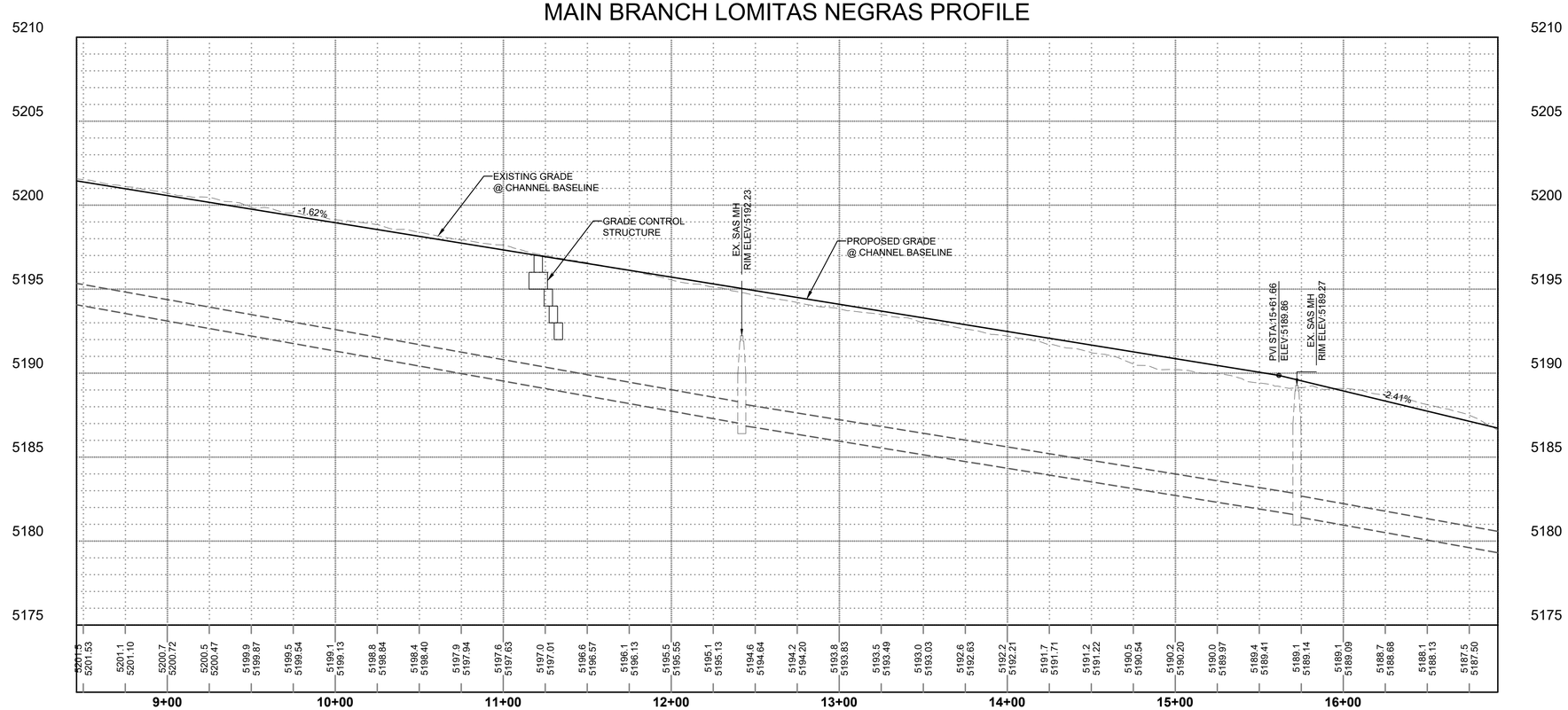
SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO.: 47-C-37

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\47-C-37 MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 1.dwg Nov 14, 2018 - 2:41pm Saved By: chrisa



MAIN BRANCH LOMITAS NEGRAS PROFILE



BUILD/PAY NOTES

201 CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201

202 EXCAVATION AND ROUGH GRADING: INCLUDES UNCLASSIFIED EXCAVATION, AND STOCKPILING MATERIAL TO BE USED AS SOIL CEMENT, HAUL AND DISPOSAL OF EXCESS MATERIAL TO SSCAFCA DESIGNATED SPOIL SITES. STD. SPEC. SECT. 202

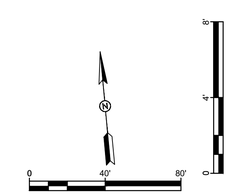
509 CEMENT: PORTLAND CEMENT FOR SOIL CEMENT. SUP. SPEC. SECT. 513

513 SOIL CEMENT: BUILD SOIL CEMENT STRUCTURES, TRANSITIONS, DIKES WITH ON-SITE SOILS AS AGGREGATE. EXCAVATION, SUBGRADE PREPARATION UNDER STRUCTURES TO WITHIN 0.1 FEET OF SPECIFIED ELEVATION AND BACKFILL AT STRUCTURES ARE INCIDENTAL. SUP. SPEC. SECT. 513

1012 NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R.O.W. AND CONSTRUCTION EASEMENTS.
2. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.



PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

LOMITAS NEGRAS
PHASE 2

CIVIL
MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 2

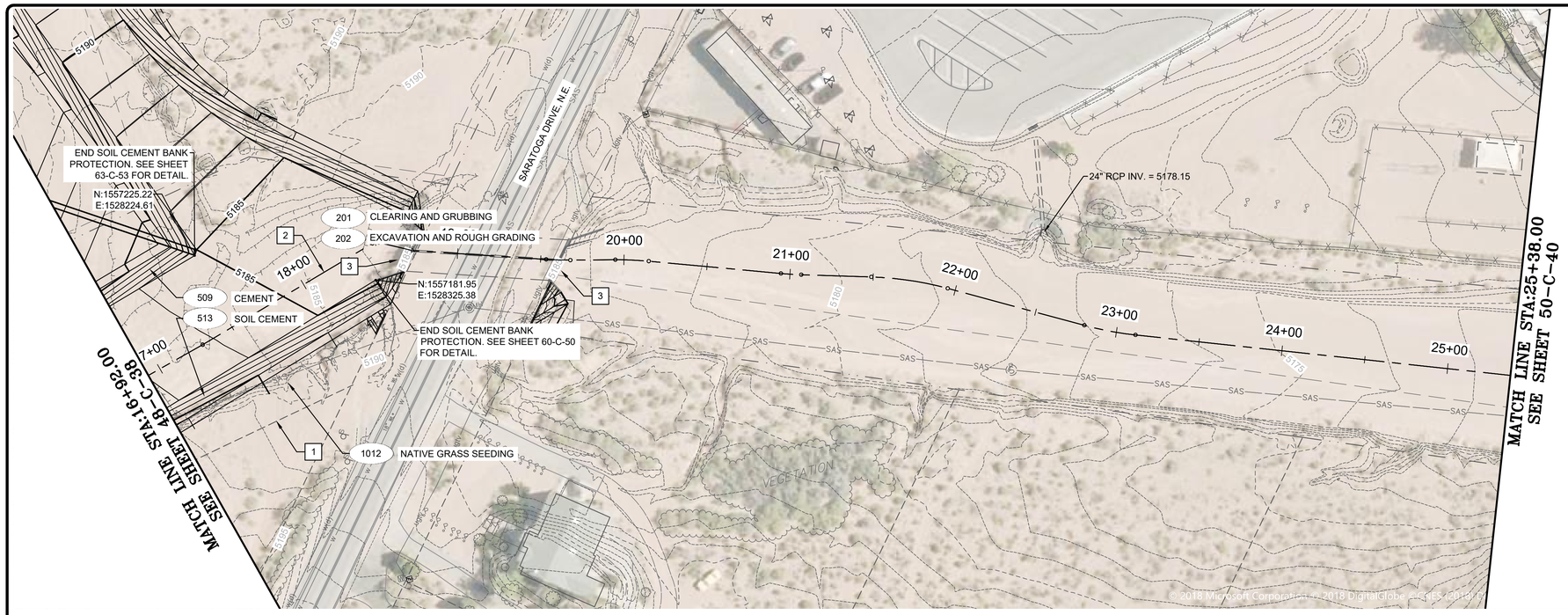
SMITH ENGINEERING

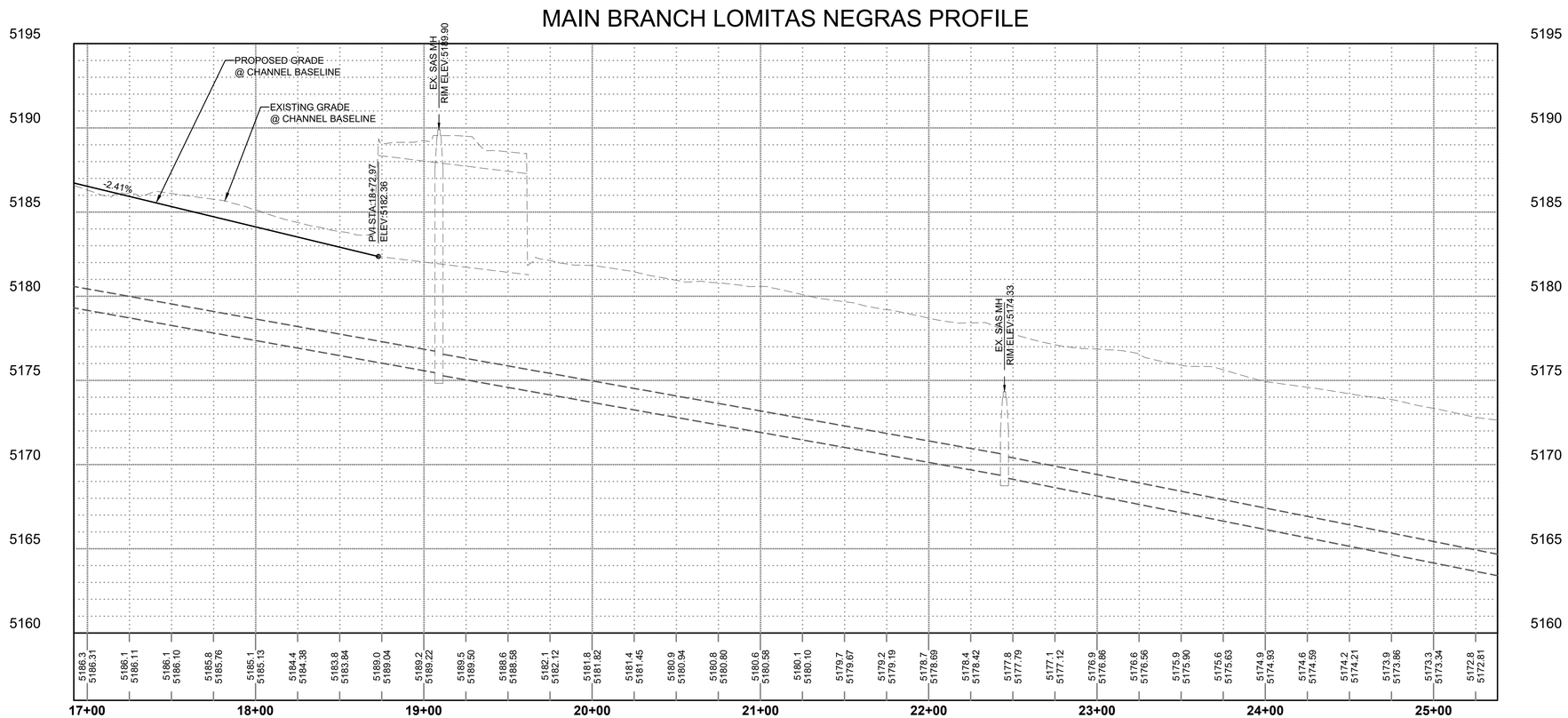
JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO. 48-C-38

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\48-C-38 MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 2.dwg Nov 14, 2018 - 2:41pm Saved By: jamiew





BUILD/PAY NOTES

201 CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201

202 EXCAVATION AND ROUGH GRADING: INCLUDES UNCLASSIFIED EXCAVATION, AND STOCKPILING MATERIAL TO BE USED AS SOIL CEMENT, HAUL AND DISPOSAL OF EXCESS MATERIAL TO SSCAFCA DESIGNATED SPOIL SITES. STD. SPEC. SECT. 202

509 CEMENT: PORTLAND CEMENT FOR SOIL CEMENT. SUP. SPEC. SECT. 513

513 SOIL CEMENT: BUILD SOIL CEMENT STRUCTURES, TRANSITIONS, DIKES WITH ON-SITE SOILS AS AGGREGATE. EXCAVATION, SUBGRADE PREPARATION UNDER STRUCTURES TO WITHIN 0.1 FEET OF SPECIFIED ELEVATION AND BACKFILL AT STRUCTURES ARE INCIDENTAL. SUP. SPEC. SECT. 513

1012 NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R.O.W. AND CONSTRUCTION EASEMENTS.
2. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.
3. REMOVE SEDIMENT FOR 3 FT HORIZONTAL INSIDE EXISTING BOX CULVERTS TO EXPOSE CONCRETE BOTTOM. (INCIDENTAL TO CHANNEL CONSTRUCTION.)

REGISTERED PROFESSIONAL ENGINEER
PATRICK L. STOVALL
NEW MEXICO
13830
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

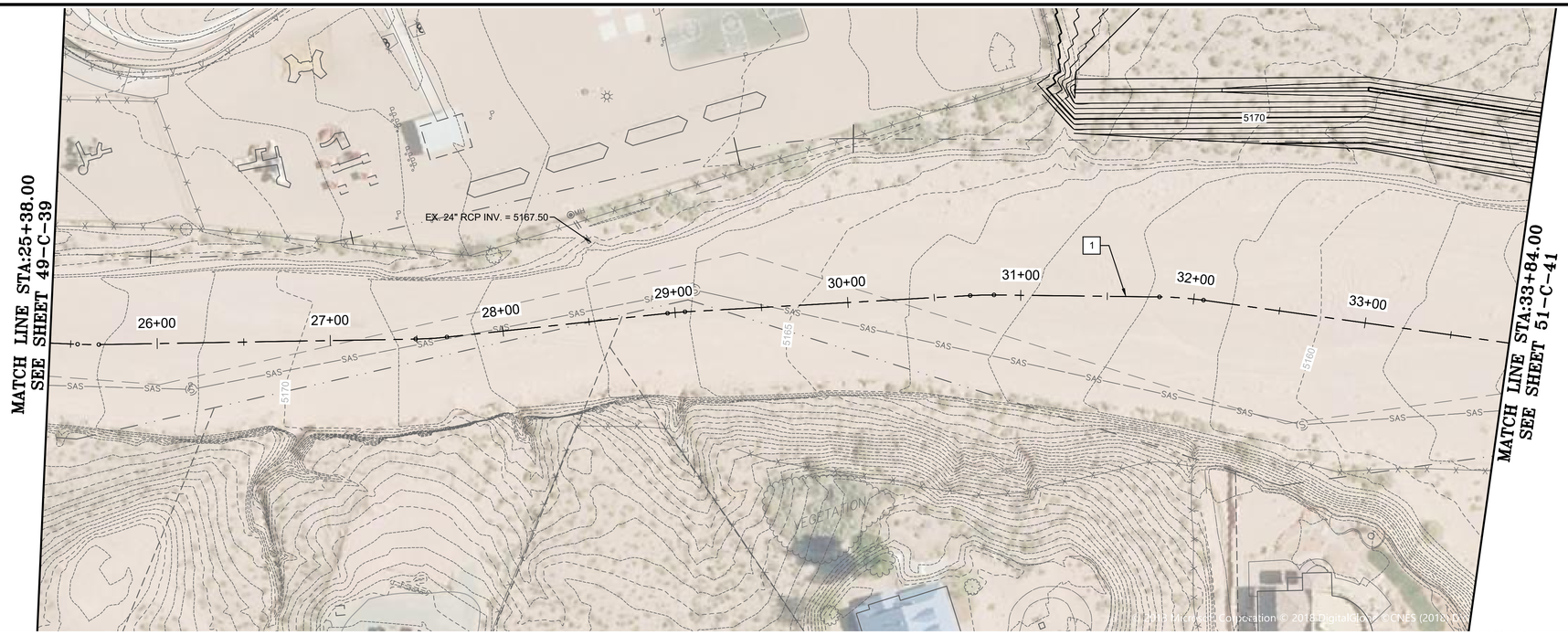
LOMITAS NEGRAS
PHASE 2

CIVIL
MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 3

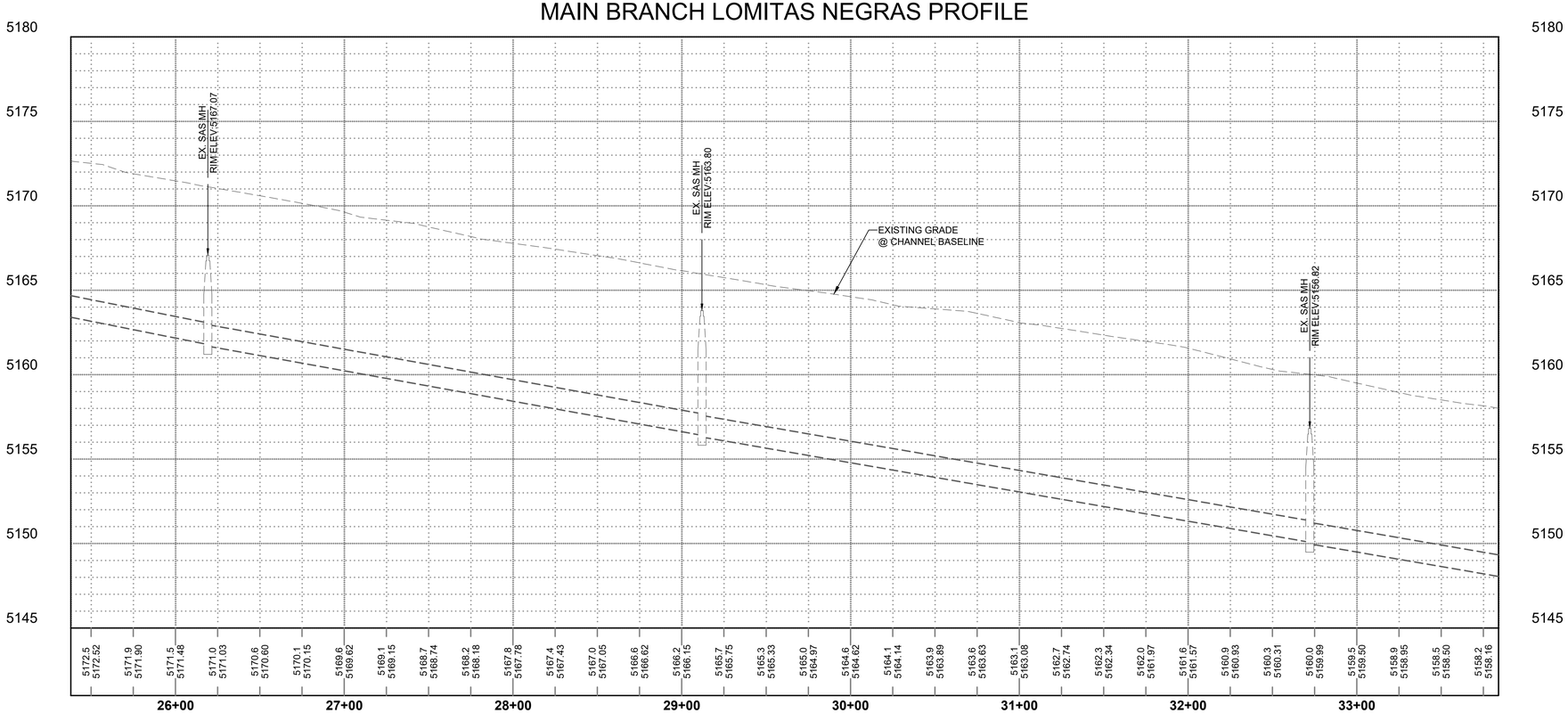
SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 49-C-39

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\49-C-39 MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 3.dwg Nov 14, 2018 - 2:42pm Saved By: cinnia

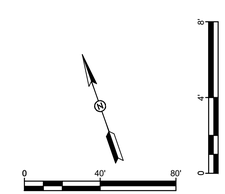


MAIN BRANCH LOMITAS NEGRAS PROFILE



CONSTRUCTION NOTES:

1. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.



PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

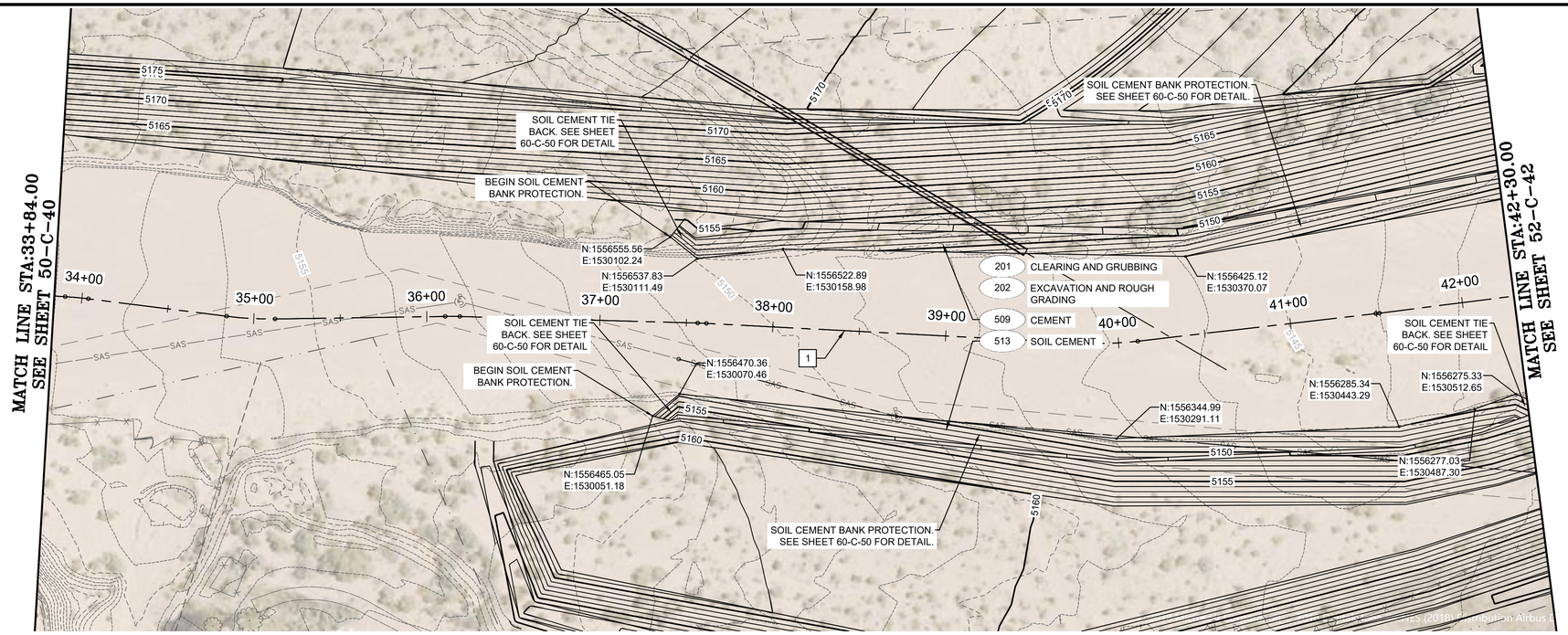
LOMITAS NEGRAS
PHASE 2

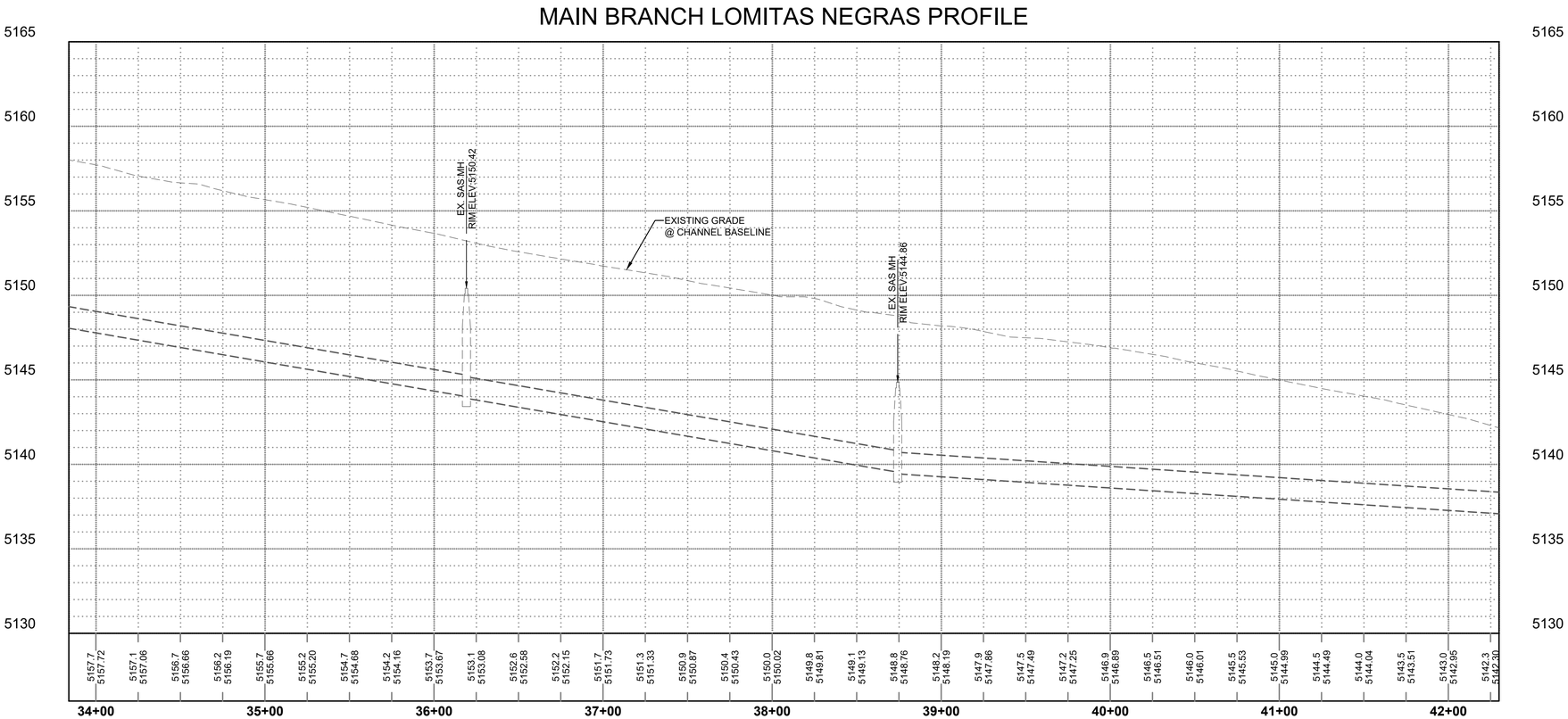
CIVIL
MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 4

SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 50-C-40

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\50-C-40 MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 4.dwg Nov 14, 2018 - 2:42pm Saved By: cinnia





BUILD/PAY NOTES

201 CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201

202 EXCAVATION AND ROUGH GRADING: INCLUDES UNCLASSIFIED EXCAVATION, AND STOCKPILING MATERIAL TO BE USED AS SOIL CEMENT, HAUL AND DISPOSAL OF EXCESS MATERIAL TO SSCAFCA DESIGNATED SPOIL SITES. STD. SPEC. SECT. 202

509 CEMENT: PORTLAND CEMENT FOR SOIL CEMENT. SUP. SPEC. SECT. 513

513 SOIL CEMENT: BUILD SOIL CEMENT STRUCTURES, TRANSITIONS, DIKES WITH ON-SITE SOILS AS AGGREGATE. EXCAVATION, SUBGRADE PREPARATION UNDER STRUCTURES TO WITHIN 0.1 FEET OF SPECIFIED ELEVATION AND BACKFILL AT STRUCTURES ARE INCIDENTAL. SUP. SPEC. SECT. 513

CONSTRUCTION NOTES:

1. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

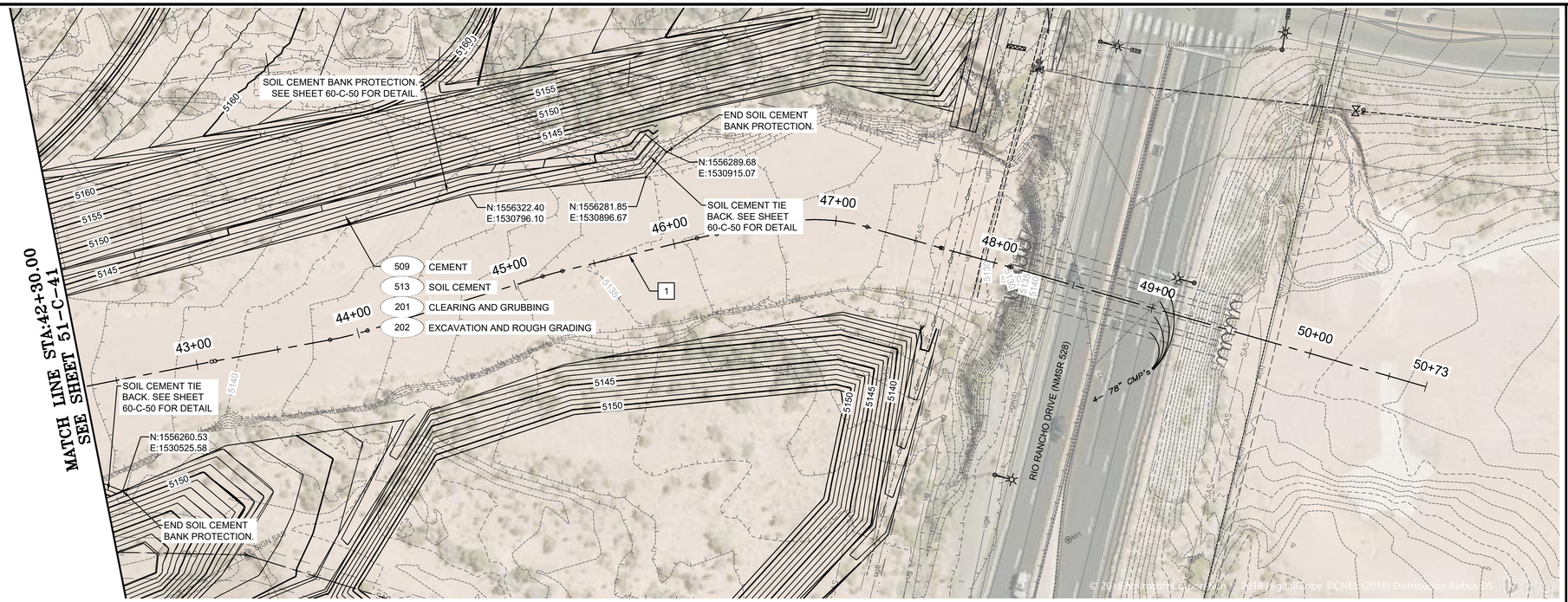
LOMITAS NEGRAS
PHASE 2

CIVIL
MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 5

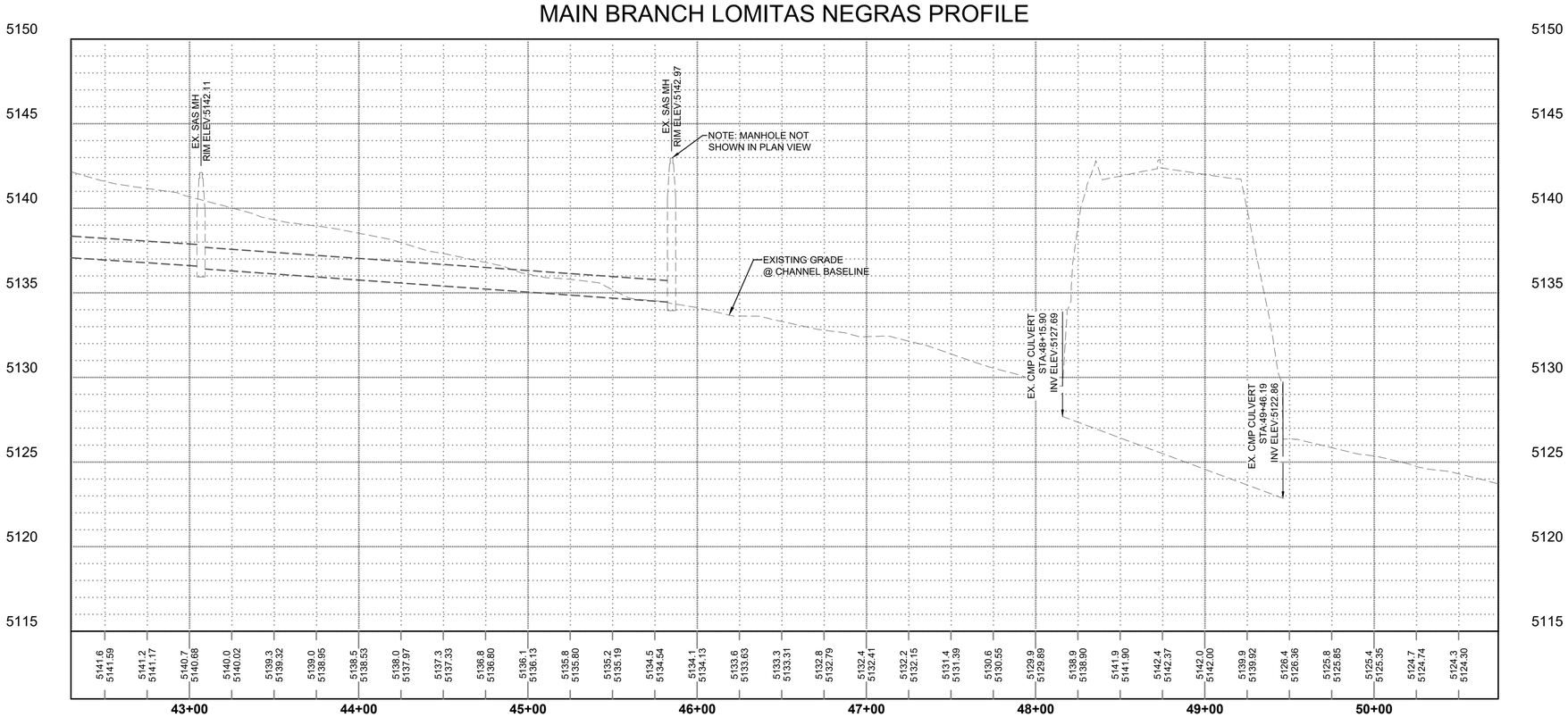
SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 51-C-41

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\51-C-41 MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 5.dwg Nov 14, 2018 - 2:43pm Saved By: chrisa



MAIN BRANCH LOMITAS NEGRAS PROFILE



BUILD/PAY NOTES

201 CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201

202 EXCAVATION AND ROUGH GRADING: INCLUDES UNCLASSIFIED EXCAVATION, AND STOCKPILING MATERIAL TO BE USED AS SOIL CEMENT, HAUL AND DISPOSAL OF EXCESS MATERIAL TO SSCAFCA DESIGNATED SPOIL SITES. STD. SPEC. SECT. 202

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CONSTRUCTION NOTES:

1. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

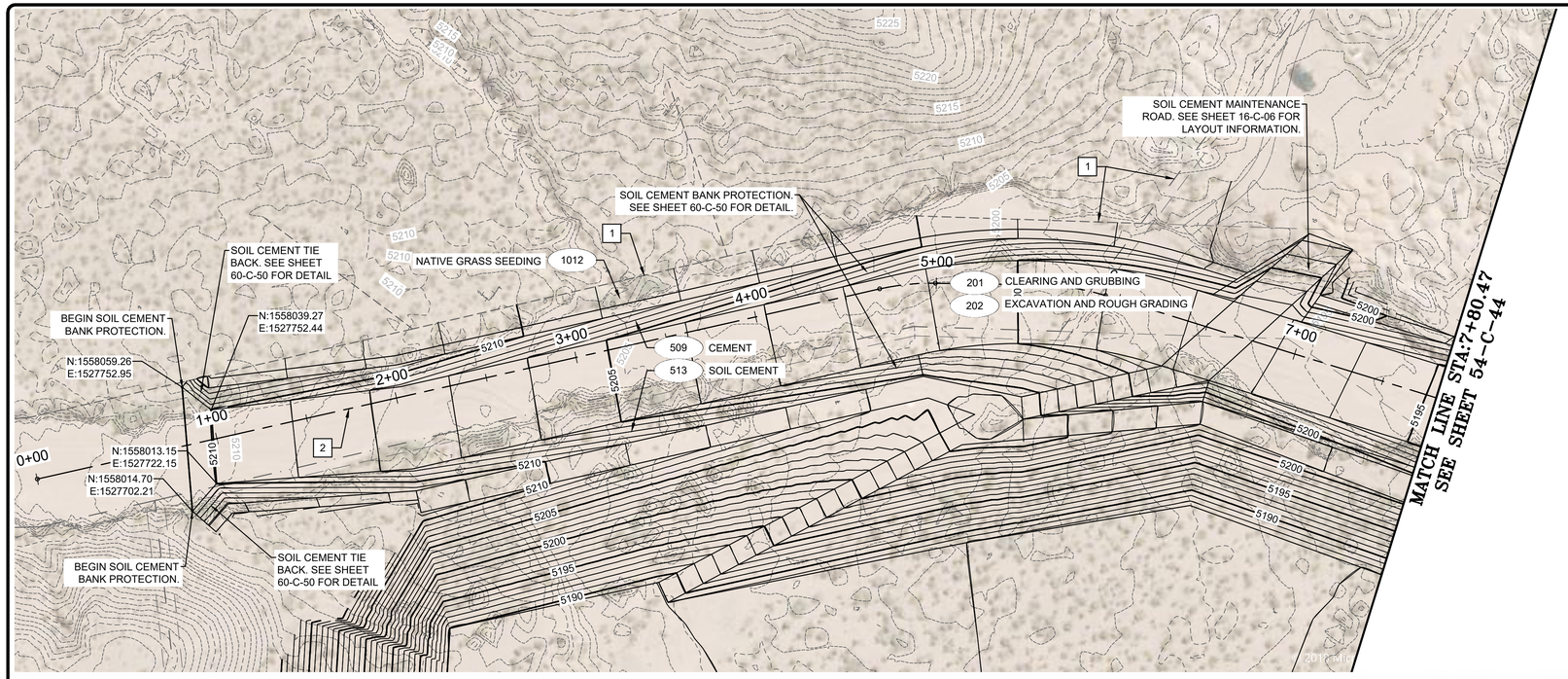
LOMITAS NEGRAS
PHASE 2

CIVIL
MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 6

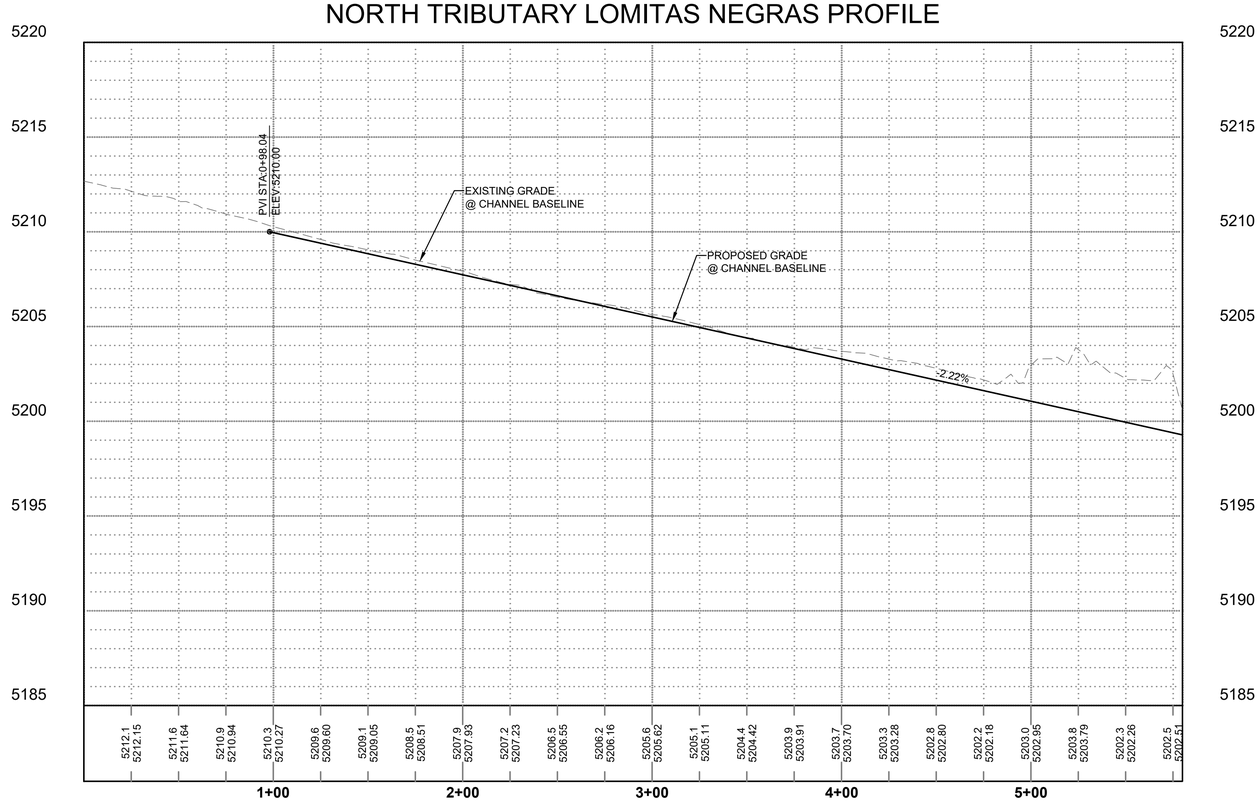
SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 52-C-42

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\52-C-42 MAIN BRANCH LOMITAS NEGRAS - PLAN AND PROFILE 6.dwg Nov 14, 2018 - 2:43pm Saved By: cinnia



NORTH TRIBUTARY LOMITAS NEGRAS PROFILE



BUILD/PAY NOTES

201	CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201
202	EXCAVATION AND ROUGH GRADING: INCLUDES UNCLASSIFIED EXCAVATION, AND STOCKPILING MATERIAL TO BE USED AS SOIL CEMENT, HAUL AND DISPOSAL OF EXCESS MATERIAL TO SSCAFCA DESIGNATED SPOIL SITES. STD. SPEC. SECT. 202
509	CEMENT: PORTLAND CEMENT FOR SOIL CEMENT. SUP. SPEC. SECT. 513
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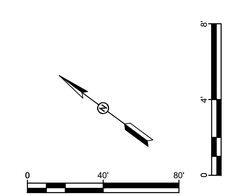
1012	NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R.O.W. AND CONSTRUCTION EASEMENTS.
2. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.



PATRICK L. STOVALL
NEW MEXICO
13830
LICENSED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

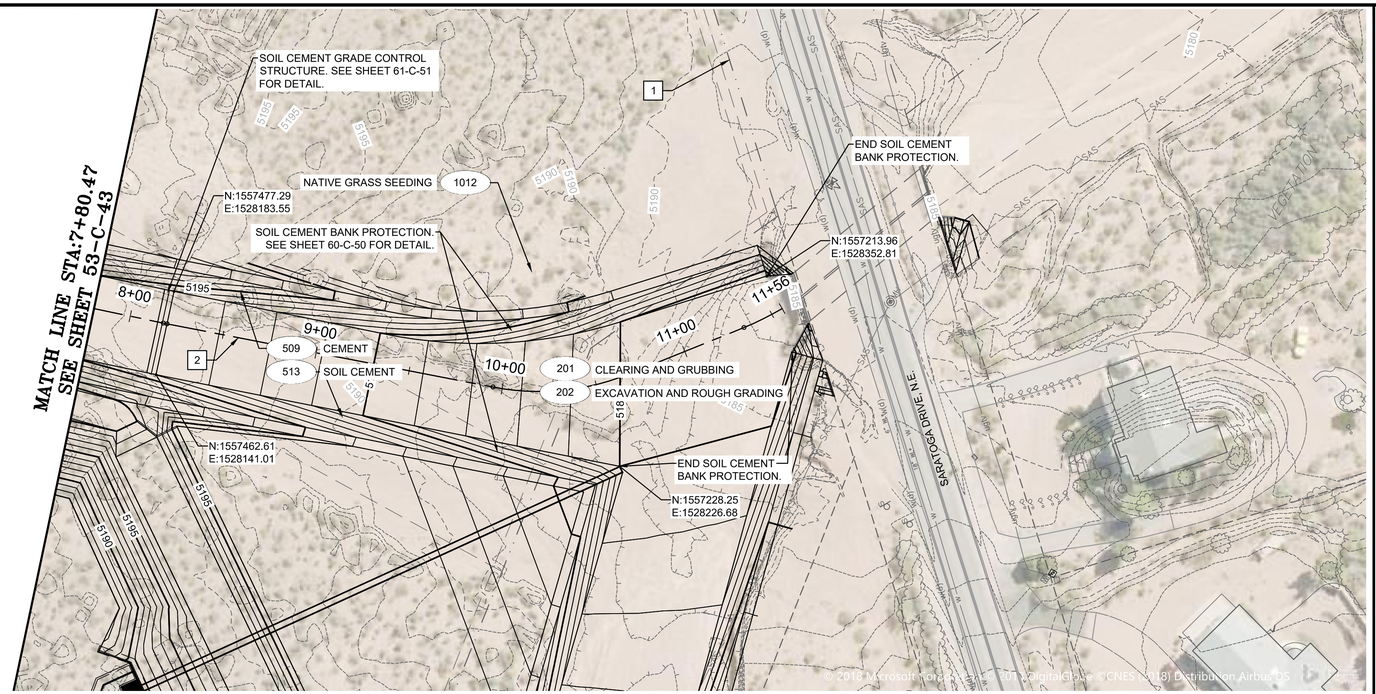
LOMITAS NEGRAS
PHASE 2

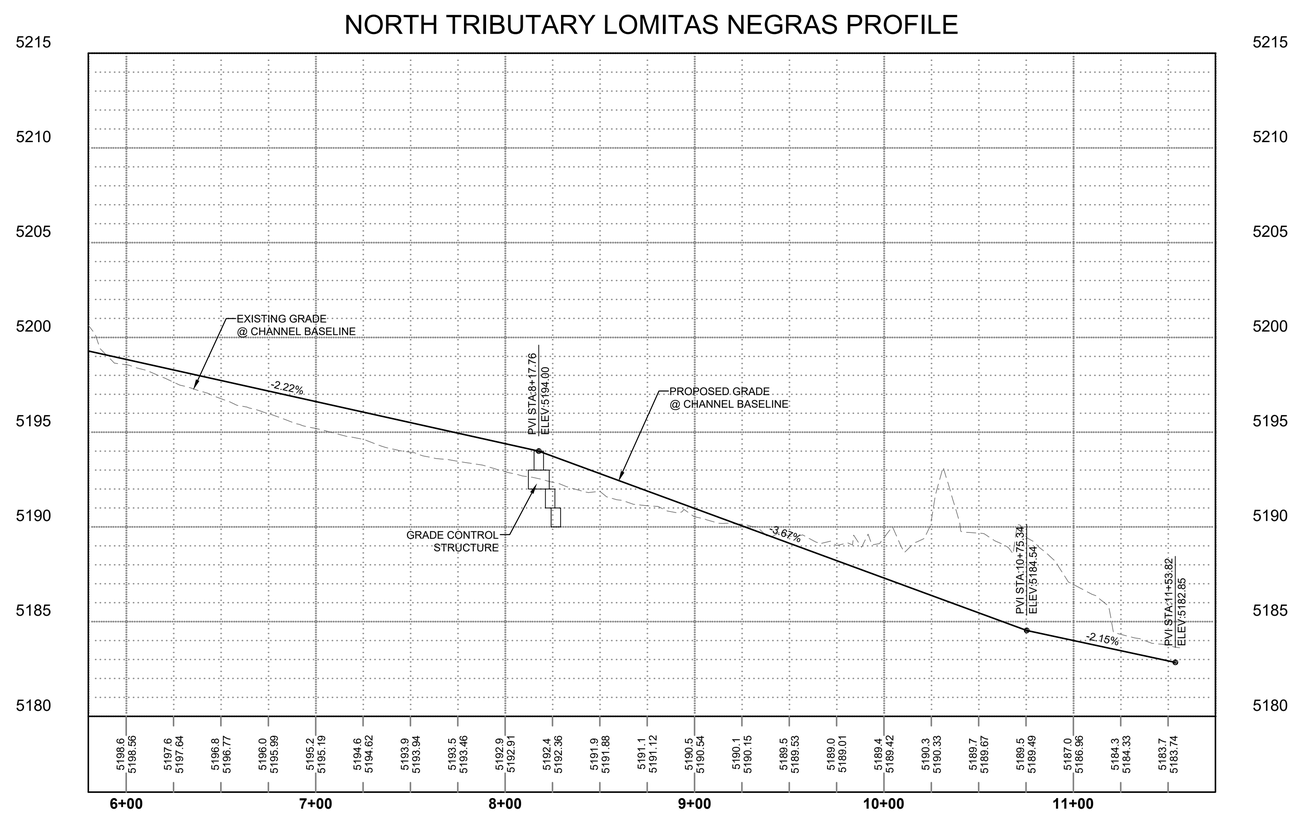
CIVIL
NORTH TRIBUTARY LOMITAS NEGRAS - PLAN AND PROFILE 1

SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 53-C-43

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\53-C-43 NORTH TRIBUTARY LOMITAS NEGRAS - PLAN AND PROFILE 1.dwg Nov 14, 2018 - 2:44pm Saved By: chrisa





BUILD/PAY NOTES

201 CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201

202 EXCAVATION AND ROUGH GRADING: INCLUDES UNCLASSIFIED EXCAVATION, AND STOCKPILING MATERIAL TO BE USED AS SOIL CEMENT, HAUL AND DISPOSAL OF EXCESS MATERIAL TO SSCAFCA DESIGNATED SPOIL SITES. STD. SPEC. SECT. 202

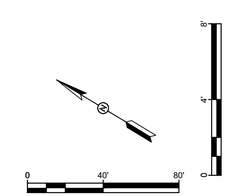
509 CEMENT: PORTLAND CEMENT FOR SOIL CEMENT. SUP. SPEC. SECT. 513

513 SOIL CEMENT: BUILD SOIL CEMENT STRUCTURES, TRANSITIONS, DIKES WITH ON-SITE SOILS AS AGGREGATE. EXCAVATION, SUBGRADE PREPARATION UNDER STRUCTURES TO WITHIN 0.1 FEET OF SPECIFIED ELEVATION AND BACKFILL AT STRUCTURES ARE INCIDENTAL. SUP. SPEC. SECT. 513

1012 NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R.O.W. AND CONSTRUCTION EASEMENTS.
2. BASELINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.



PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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Name
Location

LOMITAS NEGRAS
PHASE 2

CIVIL
NORTH TRIBUTARY LOMITAS NEGRAS - PLAN AND PROFILE 2

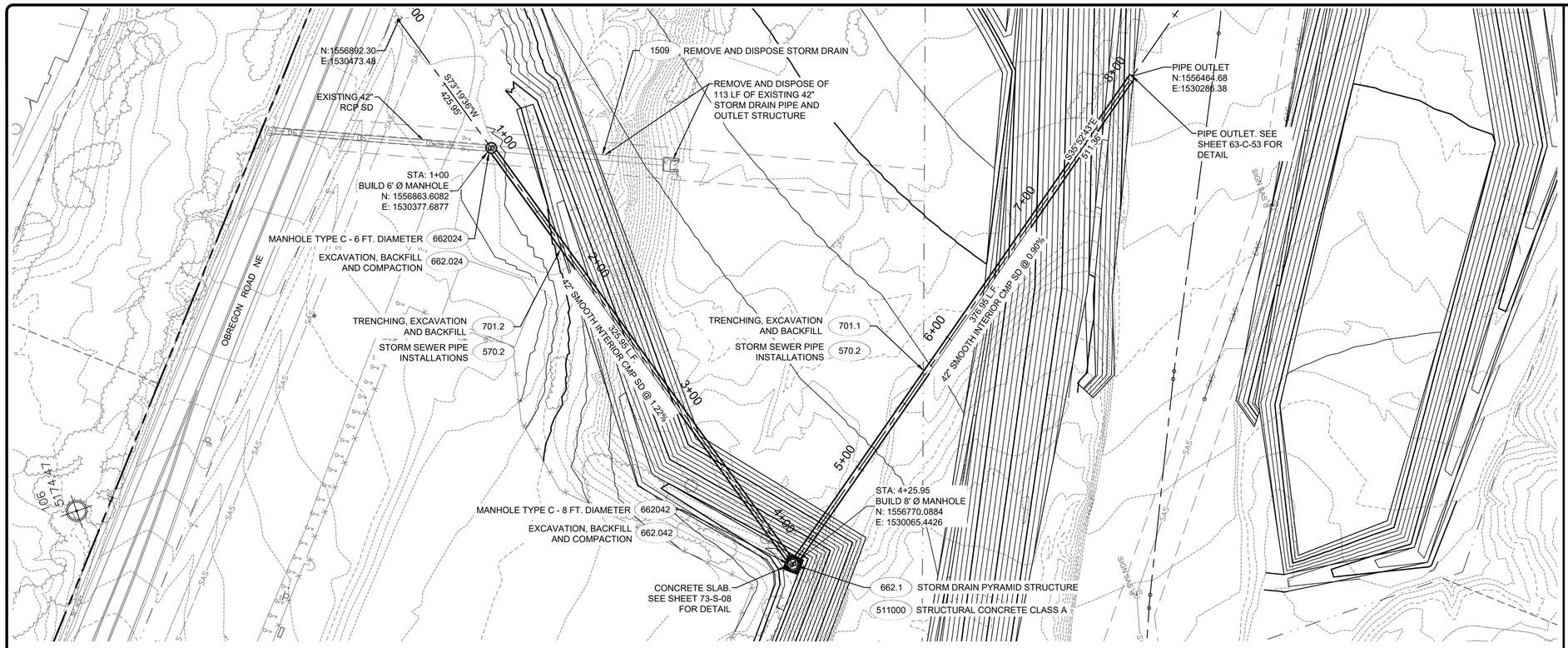
SMITH ENGINEERING

JOB NO: 115121-02

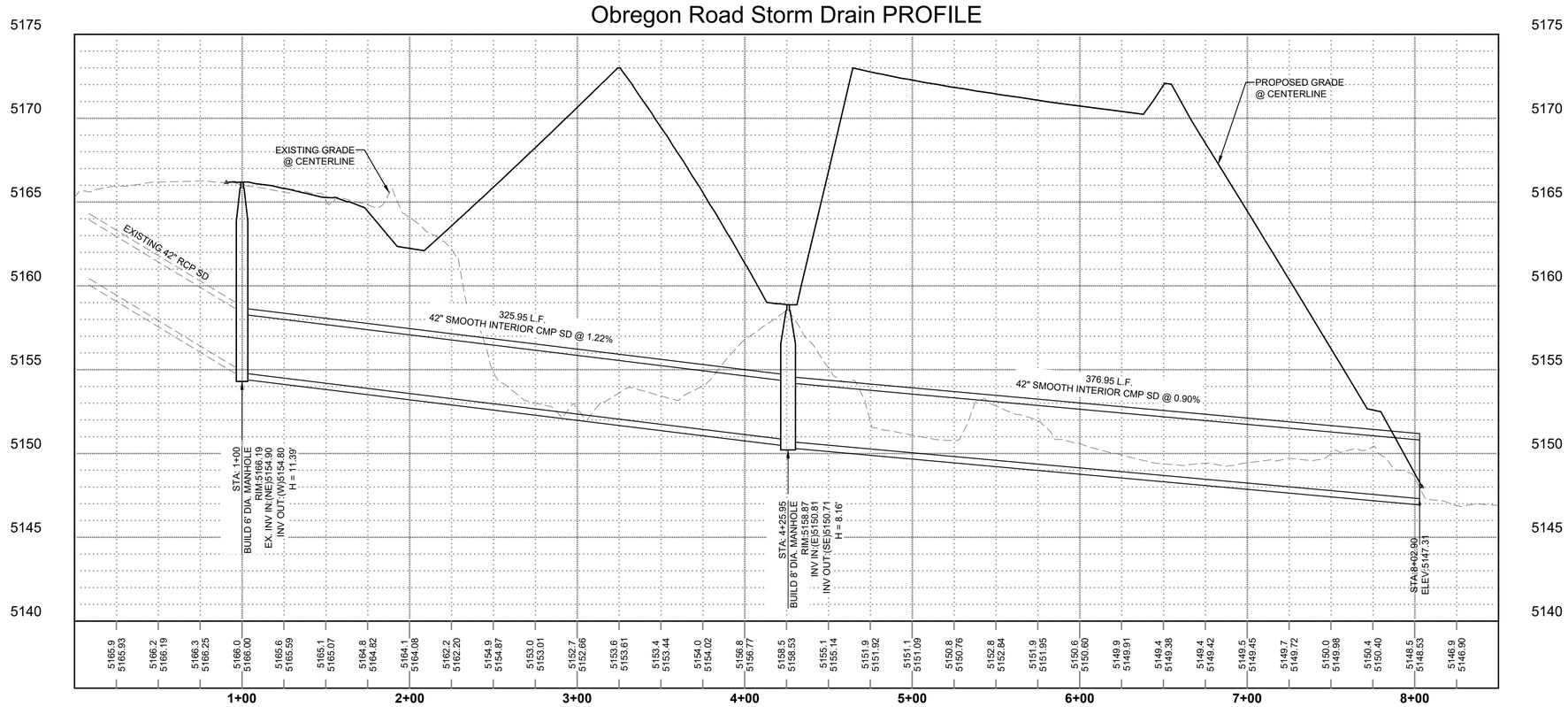
DATE: NOV. 14, 2018

SHEET NO: 54-C-44

Q:\SSC—PROJECTS\115121-02\CADD\PLANSET\54-C-44 NORTH TRIBUTARY LOMITAS NEGRAS - PLAN AND PROFILE 2.dwg Nov 14, 2018 - 2:44pm Saved By: jamiev



Obregon Road Storm Drain PROFILE



BUILD/PAY NOTES

511000	STRUCTURAL CONCRETE CLASS A: SUP. SPEC. SECT. 511.6
662024	MANHOLE TYPE C - 6 FT. DIAMETER: 10 FT TO 14 FT DEPTH, INCLUDES ALL MATERIALS, (CONTECH ULTRA FLOW OR APPROVED EQUAL). COMPLETE. NMDOT STD. SPEC. SECT. 662
662.024	EXCAVATION, BACKFILL AND COMPACTION FOR MANHOLE TYPE C - 6 FT. DIAMETER. 10 FT TO 14 FT DEEP. NMDOT STD. SPEC. SECT. 660
662042	MANHOLE TYPE C - 8 FT. DIAMETER: 6-FT TO 10 FT DEPTH, INCLUDES ALL MATERIALS, (CONTECH ULTRA FLOW OR APPROVED EQUAL). COMPLETE. NMDOT STD. SPEC. SECT. 662
662.042	EXCAVATION, BACKFILL AND COMPACTION FOR MANHOLE TYPE C - 8 FT. DIAMETER. 6 FT TO 14 FT DEEP. NMDOT STD. SPEC. SECT. 660
662.1	STORM DRAIN PYRAMID STRUCTURE: INSTALL STORMRAX PYRAMID STRUCTURE (OR APPROVED EQUAL). INCLUDES MATERIALS AND INSTALLATION. C.I.P. SUP. SPEC. SECT. 662.1
701.2	TRENCHING, EXCAVATION AND BACKFILL: INCLUDES TRENCHING, EXCAVATION AND BACKFILL FOR UNDERGROUND UTILITIES, STORM SEWER. STD. SPEC. SECT. 701
570.2	STORM SEWER PIPE INSTALLATIONS: INCLUDES STORM SEWER PIPE INSTALLATION AND PIPE TYPE CULVERTS. NMDOT STD. SPEC. SECT. 570 (REQUIRE MINIMUM 10.8 PSI JOINT PRESSURE FOR MINIMUM 10 MINUTES)
1509	REMOVE AND DISPOSE STORM DRAIN: REMOVE AND DISPOSE STORM DRAIN, OUTFALL CONCRETE STRUCTURE AND APPURTENANCES, INCLUDES HAUL AND DISPOSAL FEE. COMPLETE

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

Name
Location

NO.	REVISION DESCRIPTION	DATE	BY
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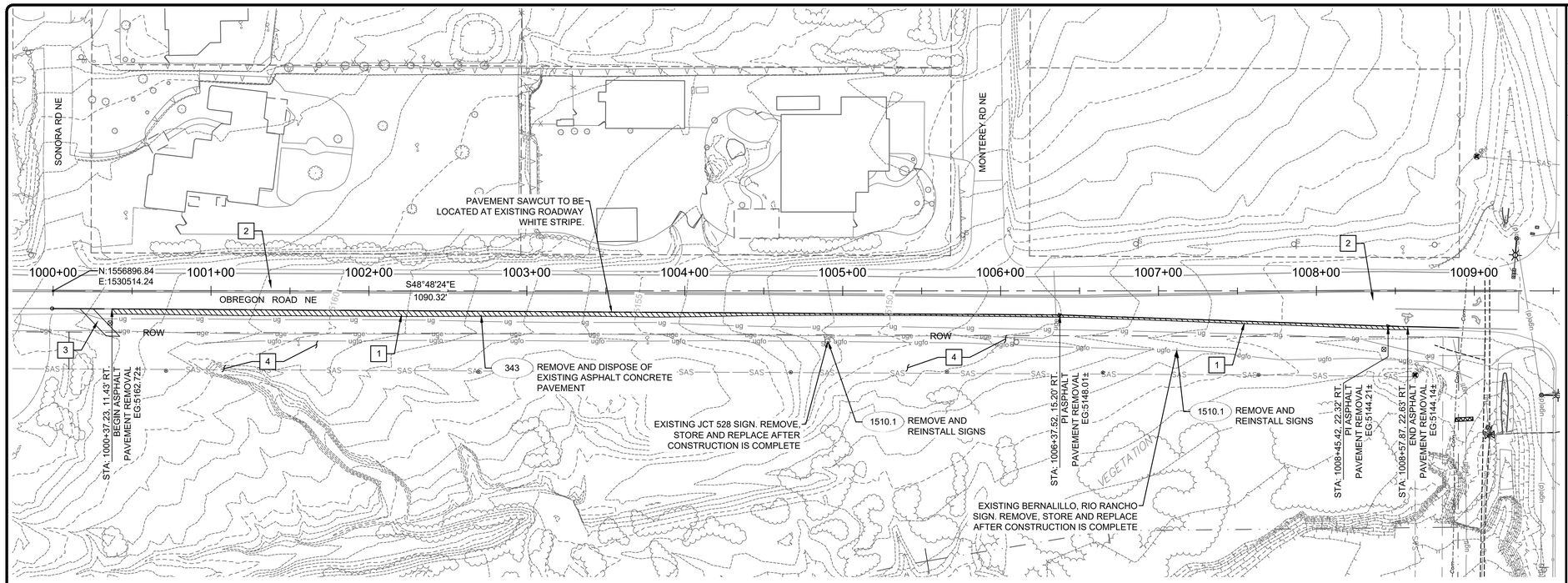
LOMITAS NEGRAS
PHASE 2

CIVIL
OBREGON ROAD STORM DRAIN - PLAN AND PROFILE

SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 55-C-45

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\55-C-45 OBREGON ROAD STORM DRAIN - PLAN AND PROFILE.dwg Nov 14, 2018 - 2:45pm Saved By: chrisa



BUILD/PAY NOTES

343 REMOVE AND DISPOSE OF EXISTING ASPHALT CONCRETE PAVEMENT: OBREGON ROAD EXISTING PAVEMENT, ASPHALT CONCRETE, SAWCUT, REMOVE AND DISPOSE, ANY THICKNESS, COMPLETE. STD. SPEC. SECT. 343

1510.1 REMOVE AND REINSTALL SIGNS: REMOVE AND REINSTALL TO NM 528 ROADWAY SIGNS ALONG OBREGON ROAD.

CONSTRUCTION NOTES:

1. SAWCUT NEAT LINE REMOVE AND DISPOSE EXISTING ASPHALT PAVEMENT.
2. TRAFFIC CONTROL: CONTRACTOR TO COORDINATE WITH THE CITY OF RIO RANCHO, DAVID SERRANO, P.E. (505) 891-5059 FOR ALL PERMITS AND OTHER ITEMS RELATED TO TRAFFIC CONTROL.
3. REMOVE EXISTING RIPRAP (24' LONG X 6' WIDE). STOCKPILE AND PLACE IN CHANNEL 3. INCIDENTAL TO CHANNEL 3 CONSTRUCTION (SHEET 42-C-32).
4. COORDINATE WITH APPLICABLE UTILITY COMPANIES TO RELOCATE ALL MARKERS. COORDINATE WITH NMDOT TO RELOCATE 2 HIGHWAY SIGNS.

0 40' 80'

PATRICK L. STOVALL
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11-14-2018

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NO.	REVISION DESCRIPTION	DATE	BY
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LOMITAS NEGRAS
PHASE 2

CIVIL
OBREGON ROAD - REMOVAL PLAN

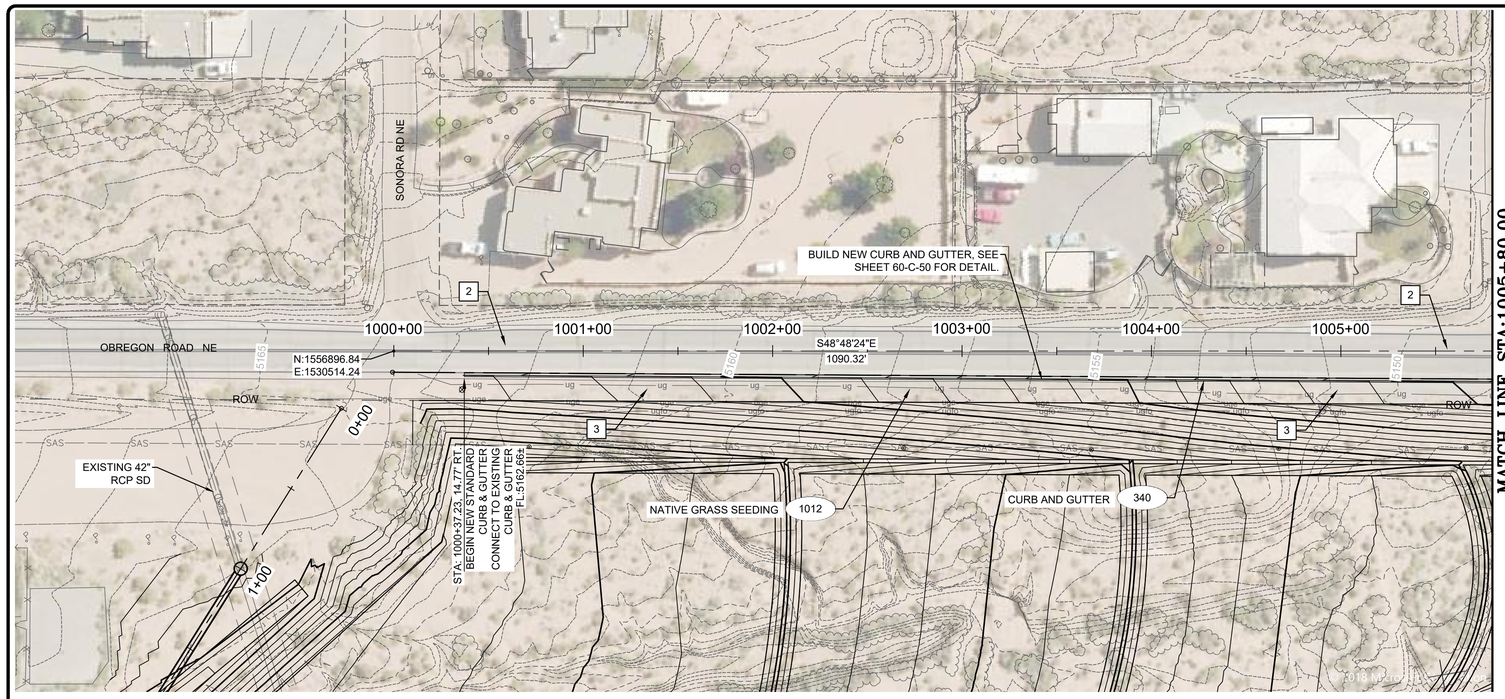
SMITH ENGINEERING

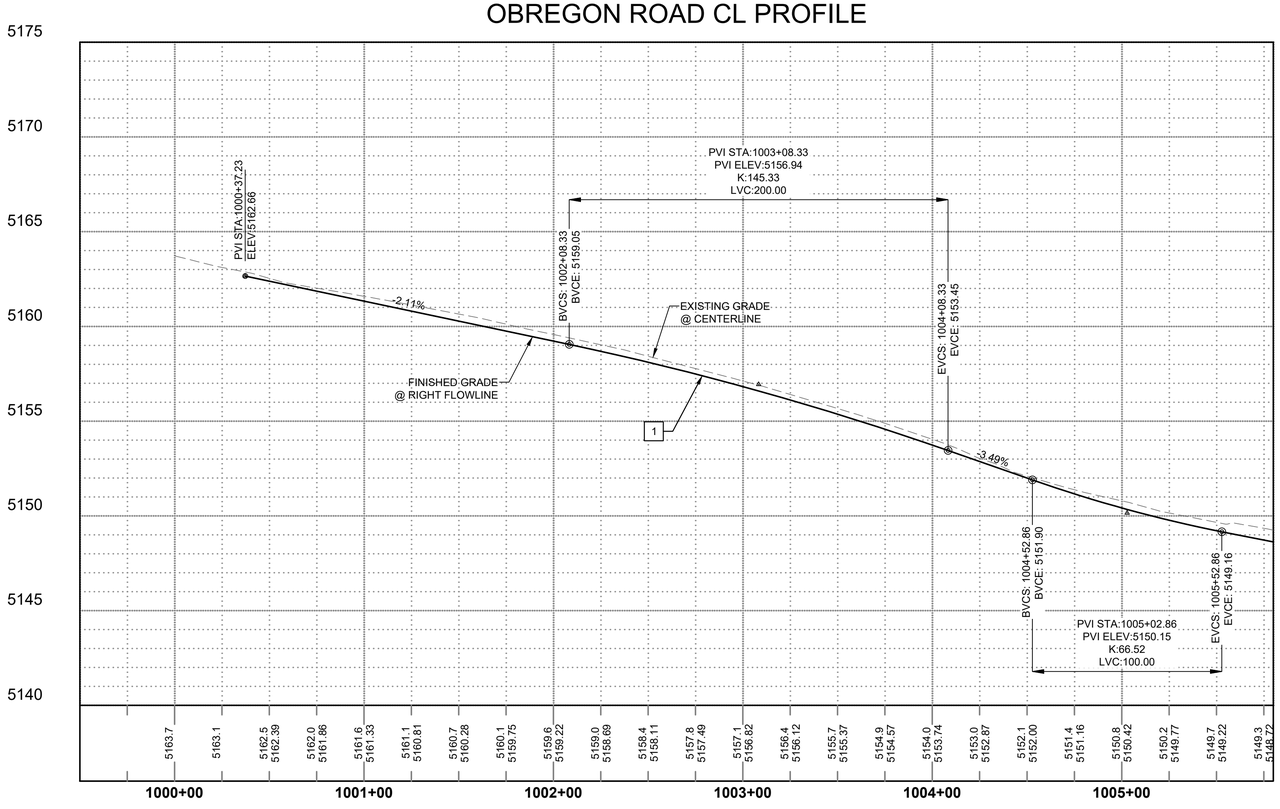
JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO: 56-C-46

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\56-C-46 OBREGON ROAD - REMOVAL PLAN.dwg Nov 14, 2018 - 2:45pm Saved By: chrisa





BUILD/PAY NOTES

#	
340	CURB AND GUTTER: STD. SPEC. 340
1012	NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. PROFILE SHOWN FOR GENERAL INFORMATION ONLY. BUILD CURB AND GUTTER TO MATCH EXISTING ASPHALT SAW CUT.
2. TRAFFIC CONTROL: CONTRACTOR TO COORDINATE WITH THE CITY OF RIO RANCHO, DAVID SERRANO, P.E. (505) 891-5059 FOR ALL PERMITS AND OTHER ITEMS RELATED TO TRAFFIC CONTROL.
3. CLEAR AND GRUB CONDUCTED WITH SPOIL PILE SITE PREP, NO PAYMENT HERE.

REGISTERED PROFESSIONAL ENGINEER
PATRICK L. STOVALL
NEW MEXICO
13830
Patrick L. Stovall
11-14-2018

Name
Location

NO.	REVISION DESCRIPTION	DATE	BY
5	####	####	####
4	####	####	####
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LOMITAS NEGRAS
PHASE 2

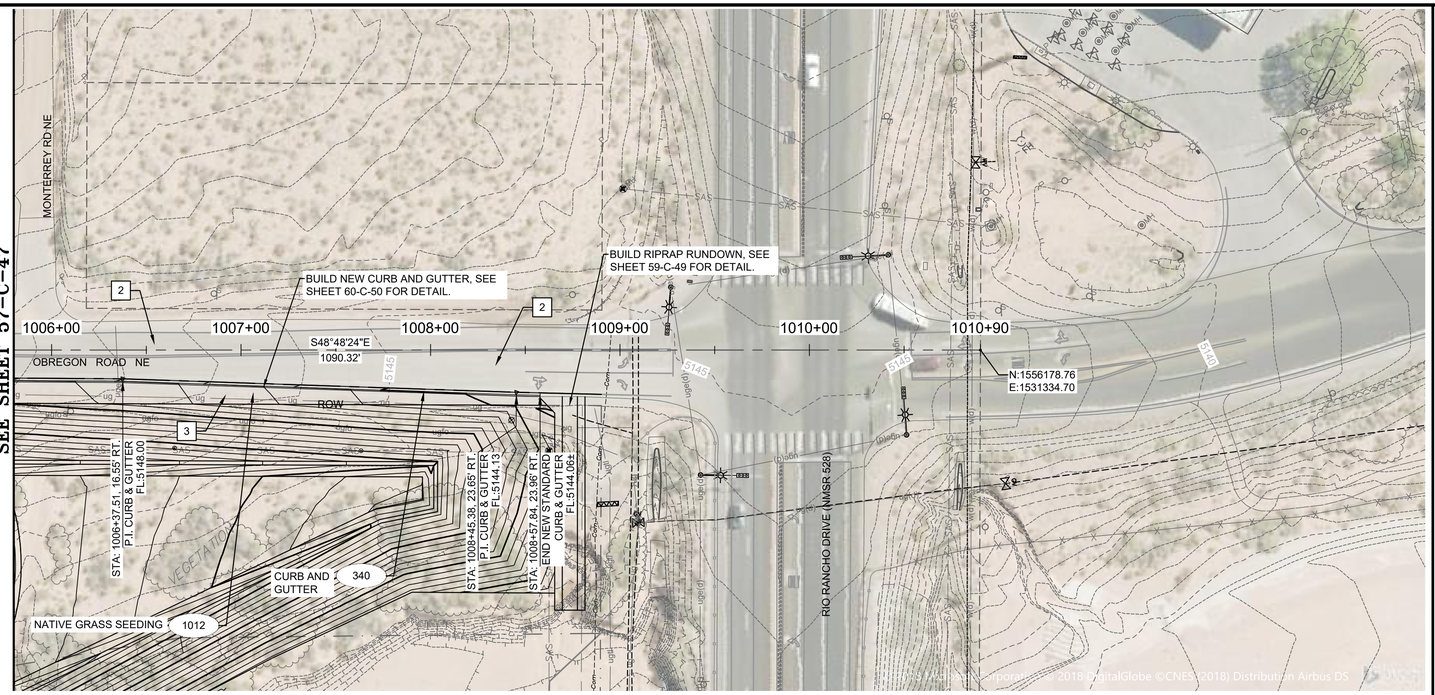
CIVIL
OBREGON ROAD - PLAN AND PROFILE 1

SMITH ENGINEERING

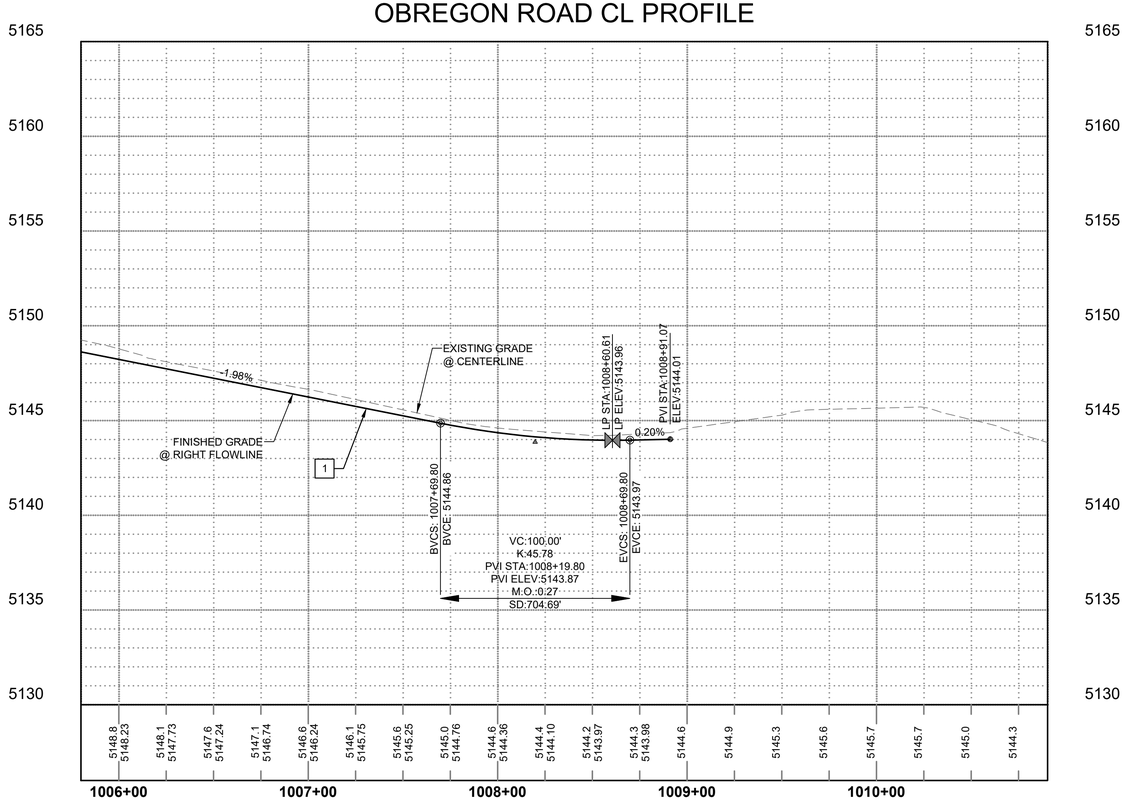
JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 57-C-47

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\57-C-47 OBREGON ROAD - PLAN AND PROFILE 1.dwg Nov 14, 2018 - 2:46pm Saved by: jamiev

MATCH LINE STA:1005+80.00
SEE SHEET 57-C-47



OBREGON ROAD CL PROFILE



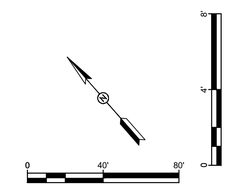
BUILD/PAY NOTES

340 CURB AND GUTTER: STD. SPEC. 340

1012 NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. PROFILE SHOWN FOR GENERAL INFORMATION ONLY. BUILD CURB AND GUTTER TO MATCH EXISTING ASPHALT SAW CUT.
2. TRAFFIC CONTROL: CONTRACTOR TO COORDINATE WITH THE CITY OF RIO RANCHO, DAVID SERRANO, P.E. (505) 891-5059 FOR ALL PERMITS AND OTHER ITEMS RELATED TO TRAFFIC CONTROL.
3. CLEAR AND GRUB CONDUCTED WITH SPOIL PILE SITE PREP, NO PAYMENT HERE.



PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

Name
Location

NO.	REVISION DESCRIPTION	DATE	BY
5	#####	#####	###
4	#####	#####	###
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LOMITAS NEGRAS
PHASE 2

CIVIL
OBREGON ROAD - PLAN AND PROFILE 2

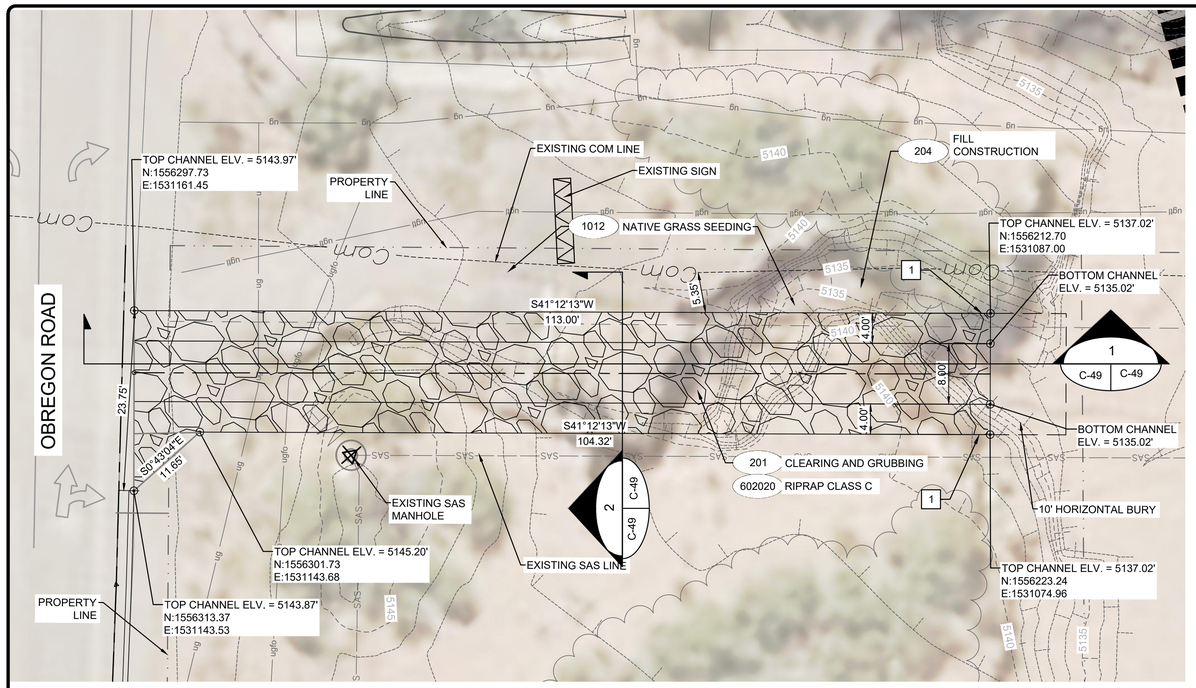
SMITH ENGINEERING

JOB NO:
115121-02

DATE:
NOV. 14, 2018

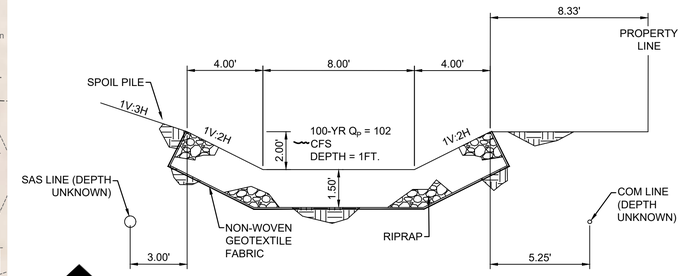
SHEET NO:
58-C-48

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\58-C-48 OBREGON ROAD - PLAN AND PROFILE 2.dwg Nov 14, 2018 - 2:46pm Saved By: chrisa



OBREGON RUNDOWN - PLAN VIEW

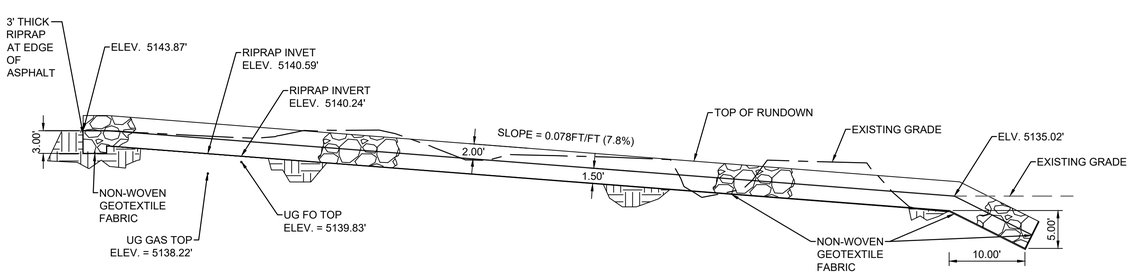
SCALE: 1" = 10'



2 C-49 C-49

SECTION - TYPICAL RUNDOWN SECTION

SCALE: 1" = 4'



1 C-49 C-49

OBREGON RUNDOWN - PROFILE VIEW

SCALE: 1" = 10'

BUILD/PAY NOTES

201 CLEARING AND GRUBBING: CONTRACTOR SHALL CLEAR AND GRUB ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 201

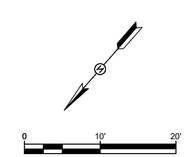
204 FILL CONSTRUCTION: STD. SPEC. SECT. 204

602020 RIPRAP CLASS C: INSTALL CLASS C RIPRAP, INCLUDES EXCAVATION, BACKFILL AND DISPOSAL OF MATERIAL REQUIRED FOR THE PLACEMENT OF THE AND EROSION PROTECTION, INCLUDES NON-WOVEN FILTER FABRIC, ALL MATERIALS, CIP. NMDOT STD. SPEC. SECTION 602.

1012 NATIVE GRASS SEEDING: SEED ALL ARROYO OVER BANK DISTURBED AREAS. STD. SPEC. SECT. 1012 AND SUP. SPEC. SECT. 1012

CONSTRUCTION NOTES:

1. FILL EXISTING GULLEY PRIOR TO RUNDOWN CONSTRUCTION. GRADE EXISTING GROUND TO TRANSITION TO TOP OF RUNDOWN ALL LOCATIONS.



PATRICK L. STOVALL
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13830
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Patrick L. Stovall
11-14-2018

Name
Location

NO.	REVISION DESCRIPTION	DATE	BY
5	#####	#####	###
4	#####	#####	###
3	#####	#####	###
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LOMITAS NEGRAS
PHASE 2

CIVIL
OBREGON ROAD - RUNDOWN

SMITH ENGINEERING

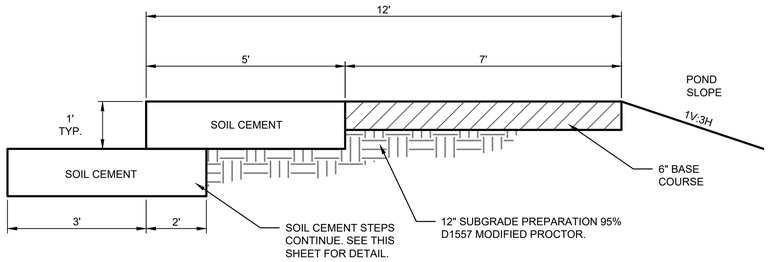
JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO: 59-C-49

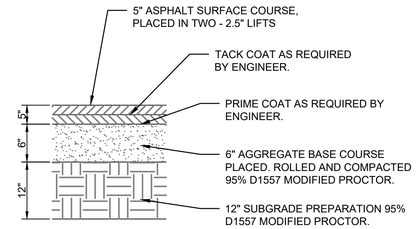
Q:\SEC—PROJECTS\115121-02\CADD\PLANSET\59-C-49 OBREGON ROAD - RUNDOWN.dwg Nov 14, 2018 - 2:47pm Saved By: jamesv

NOTE: BUILD 12' WIDE BASE COURSE ALONG SOIL CEMENT ACCESS ROAD TRANSITIONS AND TO POND BOTTOM. SEE SHEET 11-C-01



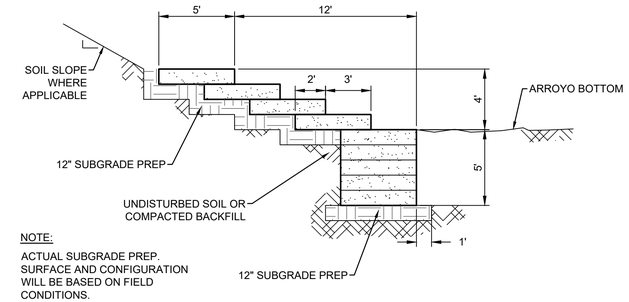
TYPICAL BASE COURSE ACCESS ROAD AT TOP OF POND EMBANKMENT

N.T.S



SARATOGA DRIVE ASPHALT PAVEMENT SECTION (CORR STD. PS-01)

SCALE: 3/4"=1'-0"

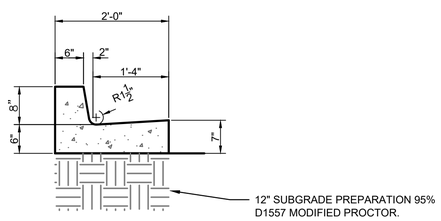


NOTE:

ACTUAL SUBGRADE PREP. SURFACE AND CONFIGURATION WILL BE BASED ON FIELD CONDITIONS.

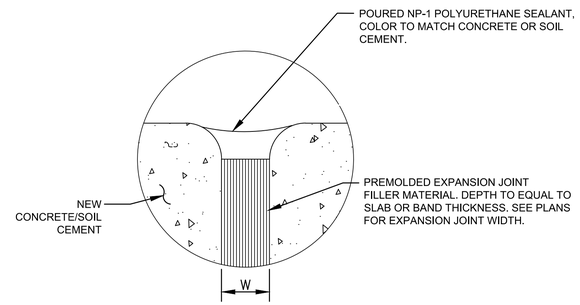
SOIL CEMENT TYPICAL SECTION - MAIN ARROYO (EAST OF FLOW DIVERSION WALL)

SCALE 1" = 5'



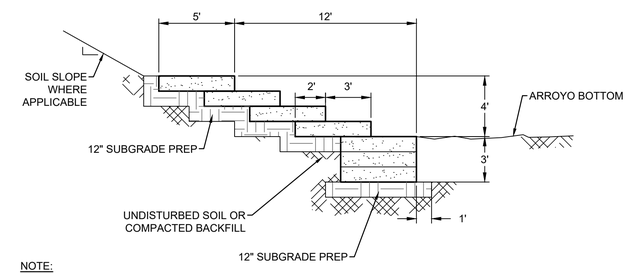
STANDARD CURB AND GUTTER (CORR STD. CG-01)

SCALE: 3/4"=1'-0"



EXPANSION JOINT (EJ)

N.T.S

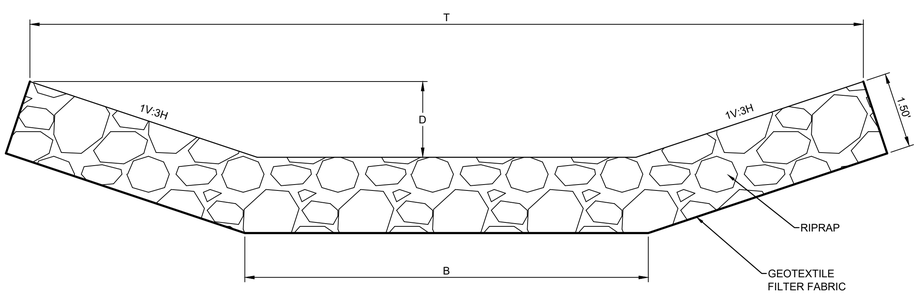


NOTE:

ACTUAL SUBGRADE PREP. SURFACE AND CONFIGURATION WILL BE BASED ON FIELD CONDITIONS.

SOIL CEMENT TYPICAL SECTION - NORTH TRIBUTARY ARROYO

SCALE 1" = 5'

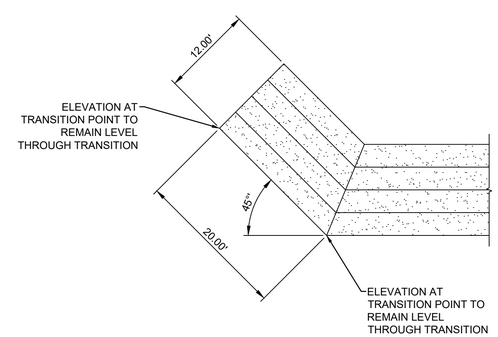


RIPRAP CHANNEL (NORTH AND SOUTH STOCKPILES)

SCALE: N.T.S

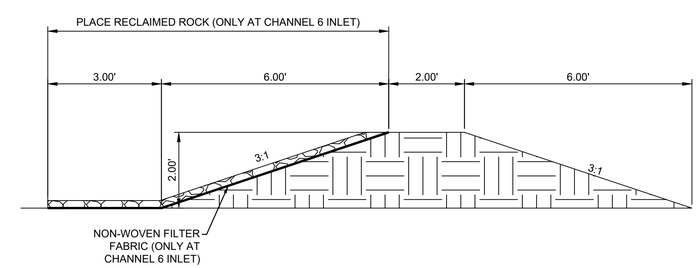
RIPRAP CHANNEL SCHEDULE

CHANNEL NAME	T	B	D	RUNDOWN LENGTH
	FT	FT	FT	FT
1	15.4	5.0	1.7	157
2	19.4	5.0	2.4	414
3	10.4	5.0	0.9	357
4	10.4	5.0	0.9	961
5	9.2	5.0	0.7	395
6	9.2	5.0	0.7	78



SOIL CEMENT TIE BACK

N.T.S



EARTH BERM DETAIL

SCALE: 1"=2'

PATRICK L. STOVALL
NEW MEXICO
13830
LICENSED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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LOMITAS NEGRAS PHASE 2

CIVIL SITE DETAILS

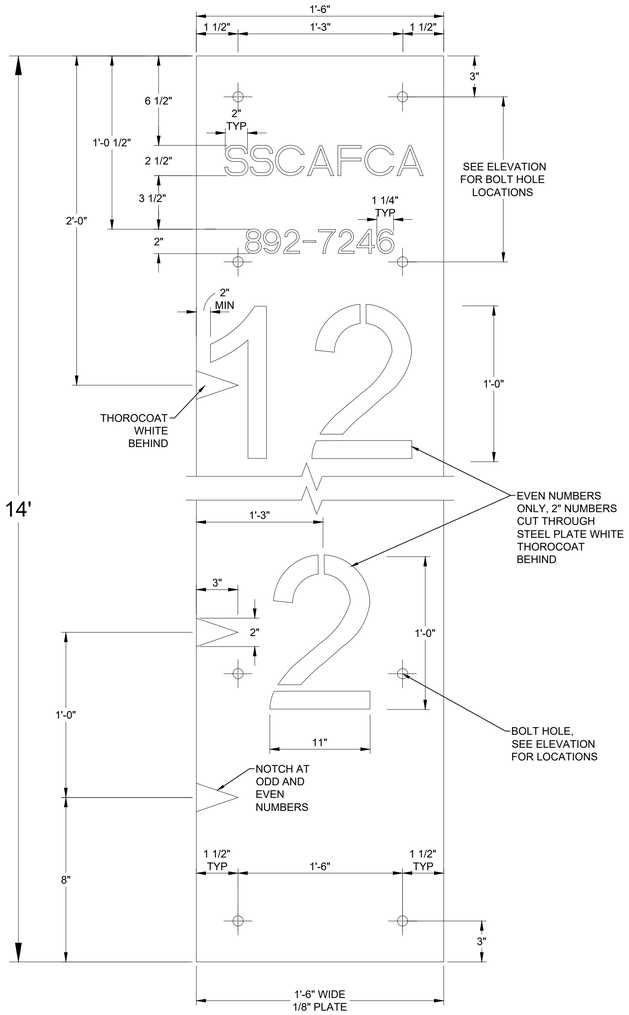
SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

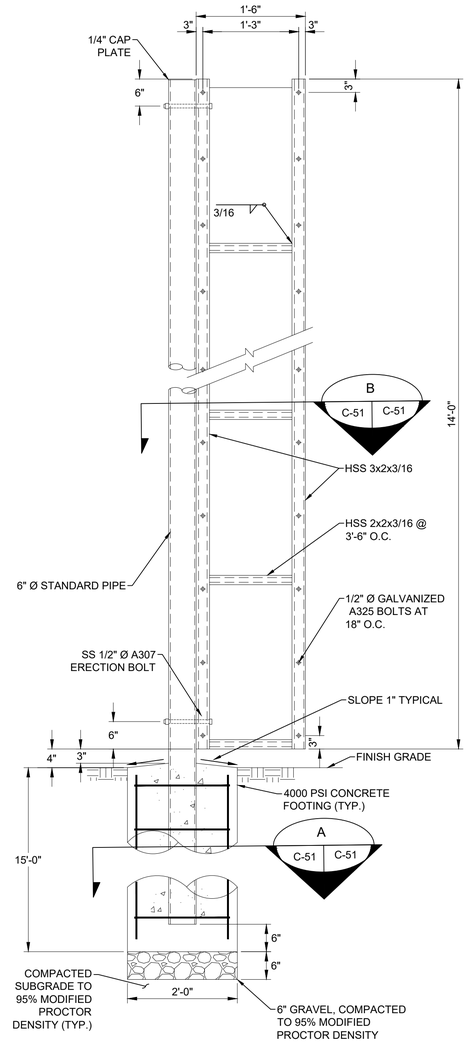
SHEET NO: 60-C-50

O:\SEC---PROJECTS\115121-02\CAD\DP\LANSET\60-C-50 SITE DETAILS.dwg Nov 14, 2018 - 2:47pm Saved By: jamiev



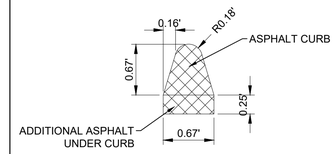
SEDIMENT STAGE MARKER DETAIL

N.T.S



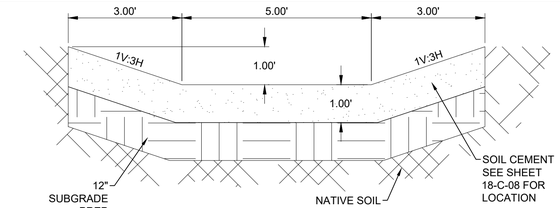
SEDIMENT STAGE MARKER ELEVATION

N.T.S



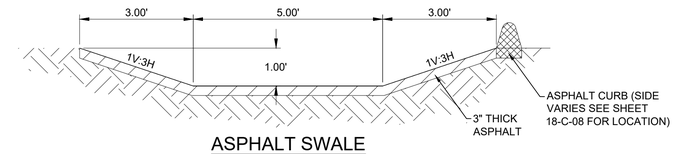
ASPHALT CURB

SCALE: 1"=1'



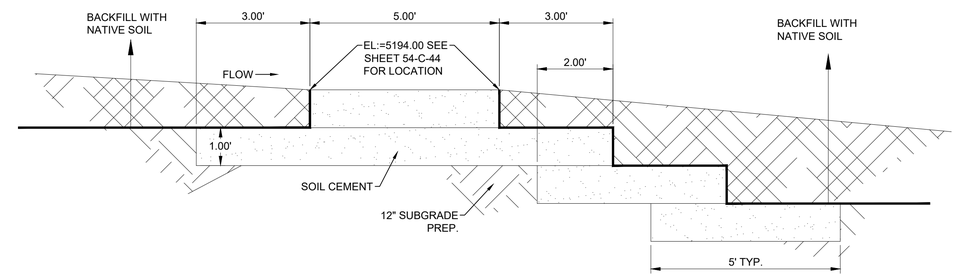
SOIL CEMENT RUNDOWN

SCALE: 1"=2'



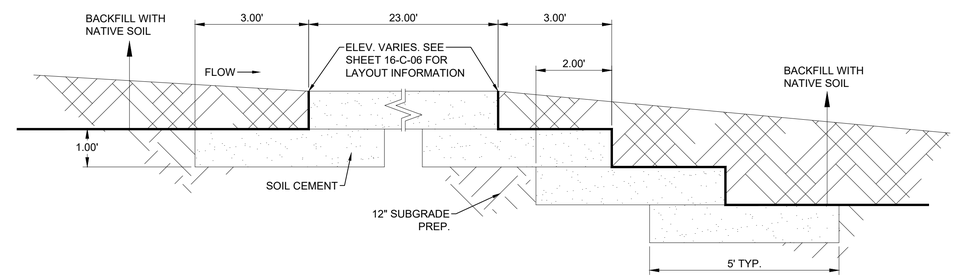
ASPHALT SWALE

SCALE: 1"=2'



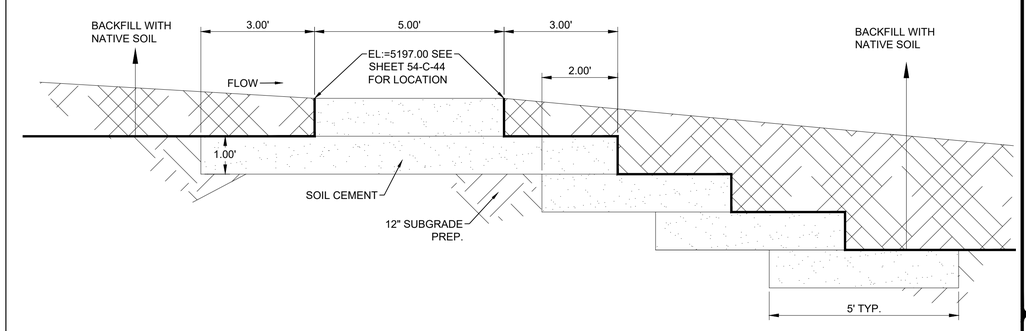
SOIL CEMENT GRADE CONTROL STRUCTURE PROFILE (NORTH TRIBUTARY)

SCALE: 1"=2'



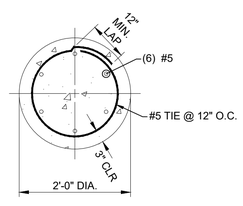
MAINTENANCE ROAD SOIL CEMENT GRADE CONTROL STRUCTURE PROFILE (NORTH TRIBUTARY)

SCALE: 1"=2'



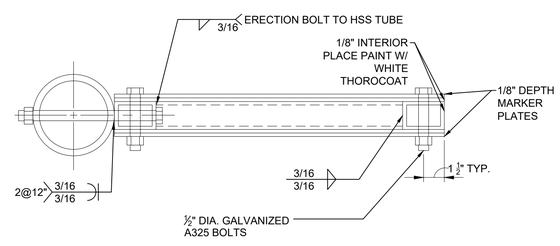
MAINTENANCE ROAD SOIL CEMENT GRADE CONTROL STRUCTURE PROFILE (MAIN ARROYO)

SCALE: 1"=2'



SECTION A

N.T.S



SECTION B

N.T.S

CHARLES W. STUBBS NEW MEXICO 11704 PROFESSIONAL ENGINEER
11-14-18

PATRICK L. STOVALL NEW MEXICO 13830 REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			

LOMITAS NEGRAS PHASE 2

CIVIL SITE DETAILS 2

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO: 61-C-51

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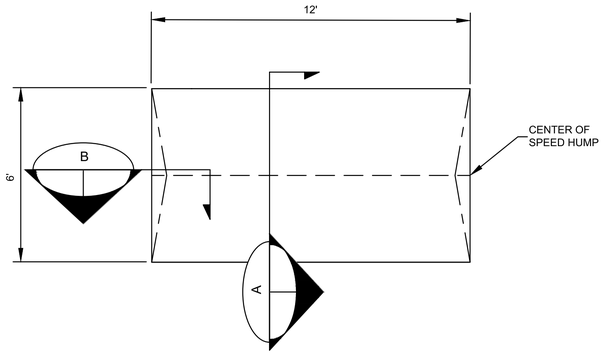
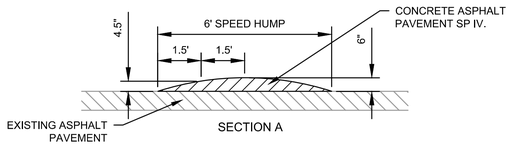
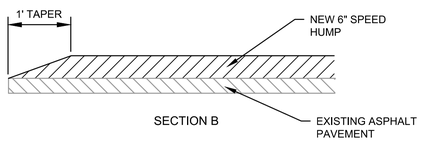


SPEED HUMP PLAN

SCALE: 1"=1'





SPEED HUMP DETAIL

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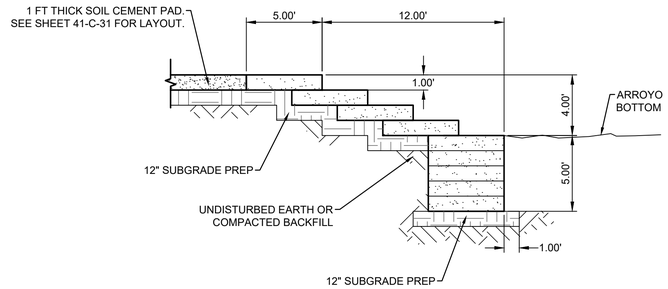

A | C-31 | C-52

SOIL CEMENT TYPICAL SECTION A - MAIN ARROYO

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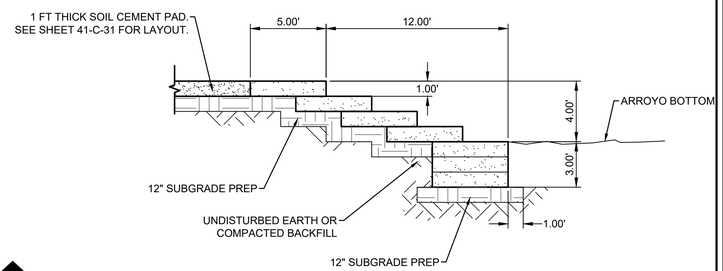
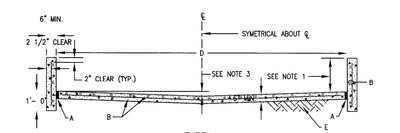


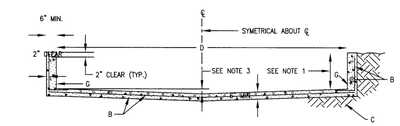
B | C-31 | C-52

SOIL CEMENT TYPICAL SECTION B - NORTH TRIBUTARY ARROYO

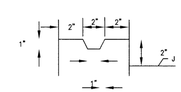
SCALE: 1"=5'



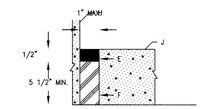
TYPE A



TYPE B



KEYWAY DETAIL



EXPANSION JOINT DETAIL

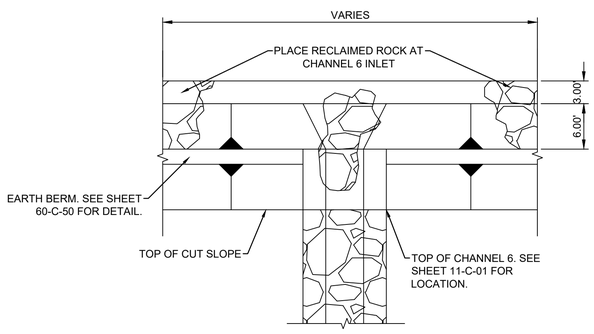
GENERAL NOTES:

1. CHANNEL DEPTHS EXCEEDING 2'– 0" WILL REQUIRE SEPERATE DESIGN FOR FLOOR AND WALLS.
2. TYPE B LINING WILL BE USED ONLY WHERE NO UTILITIES ARE LOCATED OR PROPOSED.
3. UP TO 16'– 0" WIDTH USE 4" INVERTED CROWN. 16'– 0" WIDTH AND OVER USE 6" INVERTED CROWN.
4. WARNING: THESE WALLS ARE NOT DESIGNED TO SUPPORT THE ADDITION OF GARDEN OR RETAINING TYPE OF WALLS. A SEPERATE DESIGN MUST BE SUBMITTED FOR THE ENGINEER'S APPROVAL IN SUCH INSTALLATIONS.
5. THE OUTSIDE OF DRAINAGE WALLS SHALL NOT EXTEND BEYOND EASEMENT LINES OR RIGHT–OF–WAY LINES.
6. UNLESS OTHERWISE DETAILED ON PLANS, ISOLATE UPSTREAM AND DOWNSTREAM ENDS OF LINING FROM OTHER STRUCTURES AND FACILITIES USING THE EXPANSION JOINT DETAIL, THIS SHEET.
7. 6" CONC. BLOCK WITH CORES FILLED WITH CONC. AND NO. 4 REBARS INSERTED INTO CORES AT 1'– 8" O.C., MAY BE SUBSTITUTED FOR FORMED CONC. WALLS.

CONSTRUCTION NOTES:

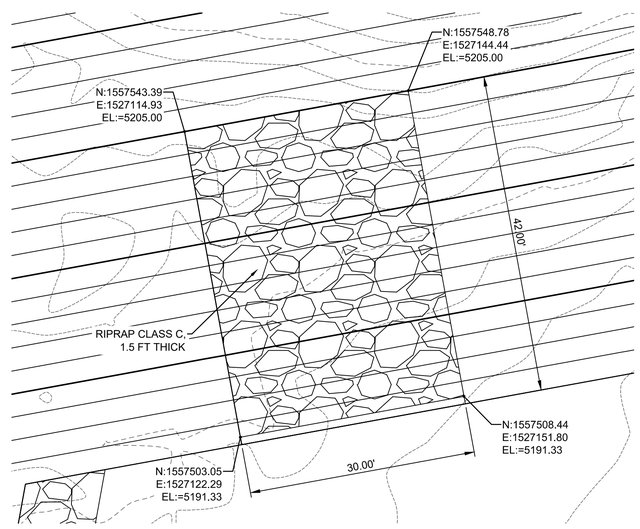
A. EXPANSION JOINT, SEE DETAIL BELOW.
B. NO. 4 REBARS AT 6" O.C. LONG. AND 12" O.C. TRANSVERSE.
C. 6" COMPACTED SOIL 95% PER ASTM D 1557.
D. WIDTH OF CHANNEL.
E. URETHANE PRIMER AND SEALANT.
F. POLYETHYLENE FOAM FILLER TO DEPTH OF SLAB.
G. KEYED CONSTRUCTION JOINT, SEE DETAIL BELOW.
H. WALL SURFACE.
J. CHANNEL SURFACE.

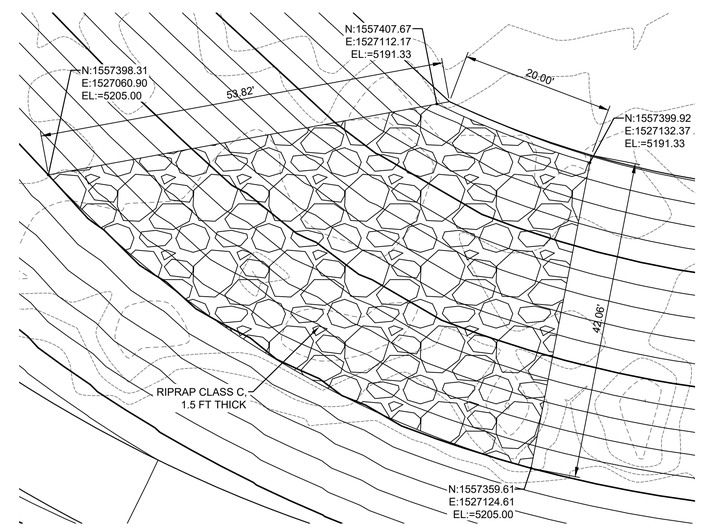
REVISIONS	NM APWA
	DRAINAGE TYPICAL LINING FOR DRAINAGE EASEMENTS DWG. 2260 FEB. 2005



WIRE ENCLOSED RIPRAP - STONE REUSE DETAIL

SCALE: 1"=10'





SARATOGA POND - RIPRAP PAD LAYOUT

SCALE: 1"=10'

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
Patrick L. Stovall
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
5			
4			
3			
2			
1			

LOMITAS NEGRAS
PHASE 2

CIVIL
SITE DETAILS 3

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO: 62-C-52

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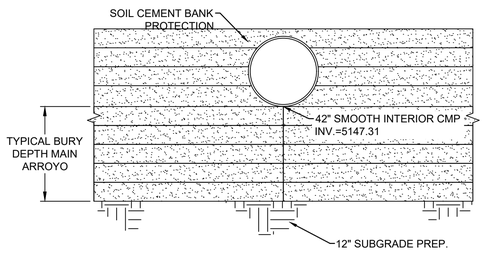
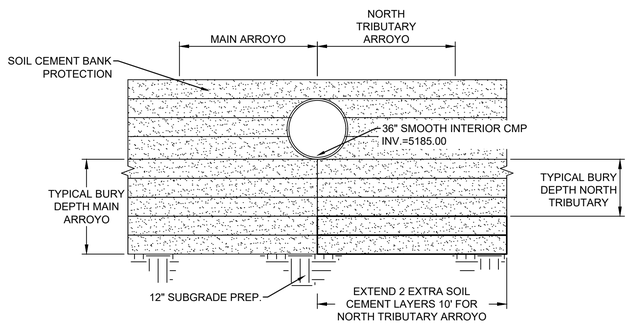


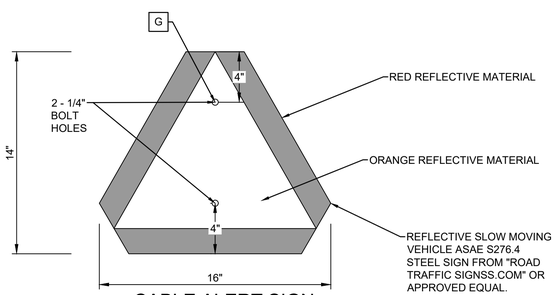
OBREGON STORM DRAIN PIPE OUTLET

SCALE: 1"=4'



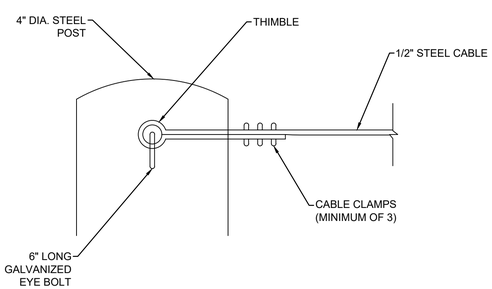
PRINCIPAL SPILLWAY PIPE OUTLET

SCALE: 1"=4'



CABLE ALERT SIGN

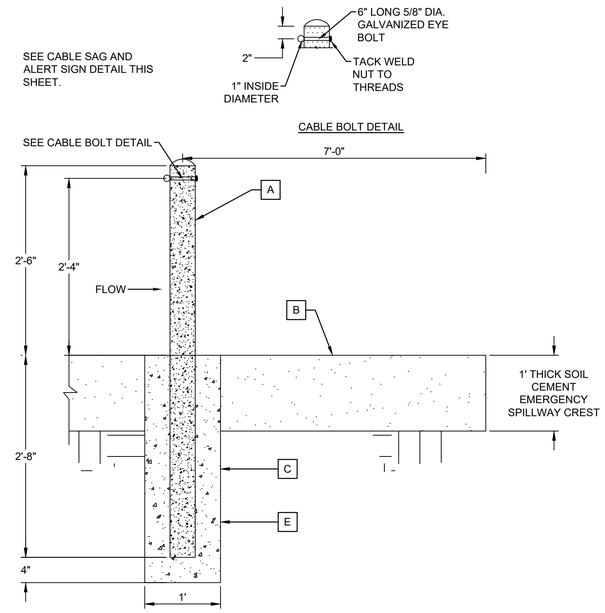
N.T.S.



NOTE: ONLY REQUIRED AT 2 END POSTS ON LATERAL WEIR AND 2 END POSTS ON EMERGENCY SPILLWAY.

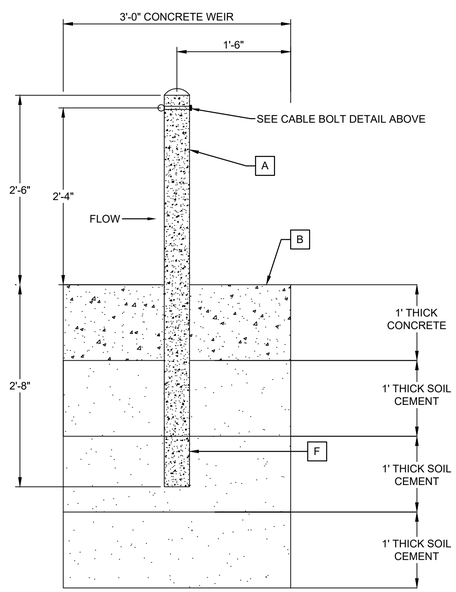
CABLE CLAMP DETAIL

N.T.S.



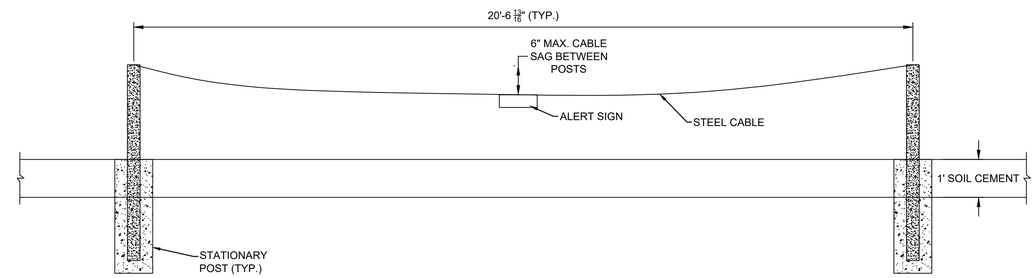
STATIONARY POST IN SOIL CEMENT

SCALE: N.T.S.



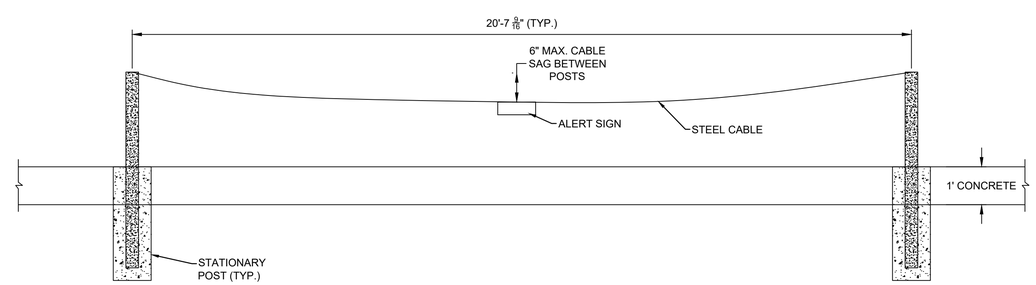
STATIONARY POST IN CONCRETE WEIR CAP

SCALE: 1"=1'



SOIL CEMENT CABLE SAG AND ALERT SIGN DETAIL

SCALE: N.T.S.



CONCRETE CABLE SAG AND ALERT SIGN DETAIL

SCALE: N.T.S.

GENERAL NOTES:

1. FOR SLEEVE, USE GATES NO. 37 W WATER HOSE, DISCHARGE HOSE OR EQUIVALENT. I.D. 6.625" O.D. 7.29", 6 PLY WITH BLACK NEOPRENE COVER.
2. WELDS ARE TO BE GROUND SMOOTH.
3. EXPOSED STEEL AND SLEEVE TO BE PAINTED WITH AN OIL BASE ALKYD PRIMER AND AN OIL BASE ALKYD ENAMEL TOP COAT. COLOR TO BE BRIGHT YELLOW.

CONSTRUCTION NOTES:

A. 4" NOMINAL DIA. SCHEDULE 40 GALV. STEEL PIPE, 5'- 2" TO BE FILLED W/CONC. PAINT PIPE BRIGHT YELLOW ABOVE FINISHED GRADE.

B. SOIL CEMENT OR CONCRETE.

C. CONC. COLLAR, 3000 PSI AT 28 DAYS, W/SMOOTH OR BROOM FINISH WHERE PAVEMENT IS ADJACENT.

D. NOT USED

E. 4" DIAMETER POST SHALL BE SET IN CONCRETE FOOTING. NO AUGER HOLES ARE ALLOWED THROUGH SOIL CEMENT.

F. 4" DIAMETER POST SHALL BE SET IN SOIL CEMENT. NO AUGER HOLES ARE ALLOWED THROUGH THE CONCRETE OR SOIL CEMENT.

G. BOLT SIGNS TO CABLE TACK WELD NUT TO THREADS.

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
1			
2			
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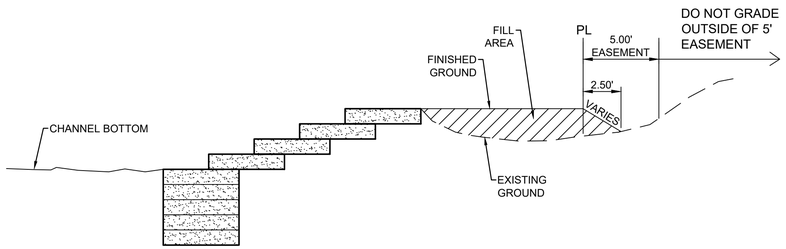
LOMITAS NEGRAS
PHASE 2

CIVIL
PIPE OUTLET AND STATIONARY POST DETAILS

SMITH ENGINEERING

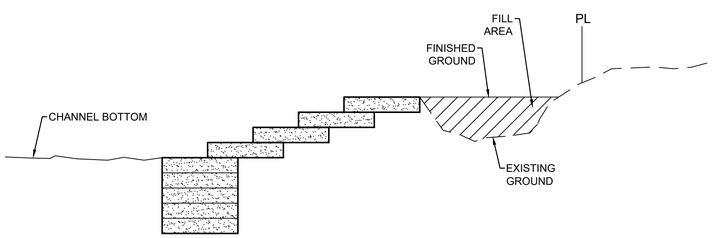
JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 63-C-53

Q:\SEC---PROJECTS\115121-02\CAD\PLANSET\63-C-53 PRINCIPAL SPILLWAY AND OUTLET DETAILS.dwg Nov 14, 2018 - 2:48pm Saved By: jamesv



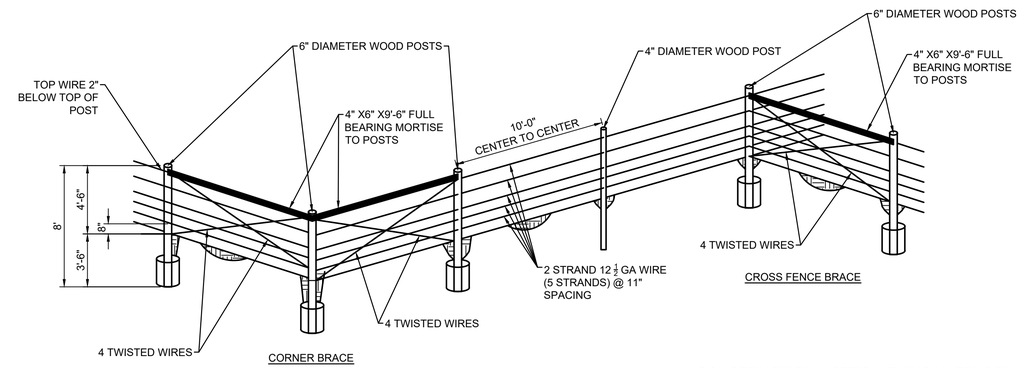
GRADING BEHIND SOIL CEMENT STRUCTURE - CASE 1

EXISTING GROUND BELOW STRUCTURE AT PROPERTY LINE



GRADING BEHIND SOIL CEMENT STRUCTURE - CASE 2

EXISTING GROUND ABOVE STRUCTURE AT PROPERTY LINE



CONSTRUCTION NOTES: (TYPICAL FENCE)

1. CORNER MORTISE BRACE INSTALLATION WILL BE REQUIRED AT ALL CHANGES IN DIRECTION. (BRACES ARE INCIDENTAL TO FENCE CONSTRUCTION)
2. ALL CORNER BRACE POSTS AND CROSS FENCE BRACE POSTS TO HAVE 3 FT DEEP, 18 INCH DIA., 3,000 PSI, CONCRETE FOOTING. (CONCRETE IS INCIDENTAL TO FENCE CONSTRUCTION)
3. ALL POSTS SHALL BE TREATED WOOD.

WOOD POST BARBLESS WIRE FENCE DETAIL - TYPICAL

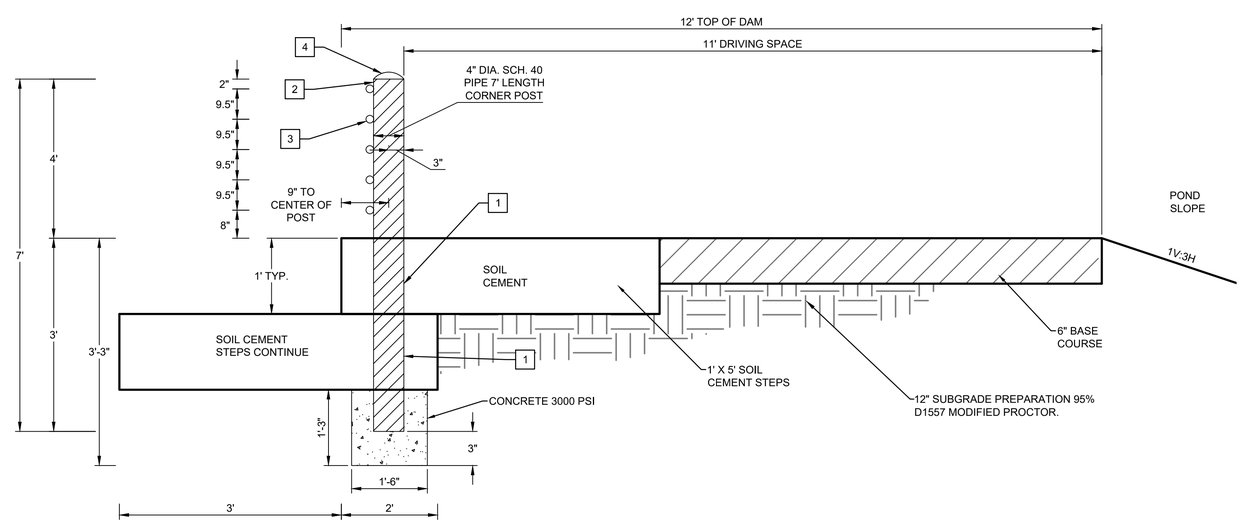
SCALE 1"=5'

CONSTRUCTION NOTES: (AT TOP OF EMBANKMENT)

1. 4 INCH DIAMETER CORNER POSTS SHALL BE SET IN CONCRETE PRIOR TO SOIL CEMENT INSTALLATION. NO AUGER HOLES ARE ALLOWED THROUGH SOIL CEMENT.
2. 4 INCH DIAMETER NON-CORNER POSTS SHALL ALSO BE CENTERED AT 9 INCHES FROM EDGE OF SOIL CEMENT. THESE POSTS DO NOT REQUIRE CONCRETE. NO AUGER HOLES ARE ALLOWED THROUGH SOIL CEMENT.
3. 1/2" INSIDE DIA., 1/4" THICK A36 STEEL RING WELDED TO STEEL POST.
4. 4 INCH ROUNDED WELDED CAP.

GENERAL NOTES:

1. ALL PIPE SHALL BE SCHEDULE 40 STEEL PIPE AND CONFORM WITH ASTM A53 GRADE B. THE TOP RAIL SHALL BE CONTINUOUS, ALL HORIZONTAL RAILS SHALL BE SADDLE CUT, WELDED ALL AROUND AND GROUND BEFORE PAINTING.
2. ALL RAILS, PIPES, PLATES AND TUBING TO BE COLOR COATED. COLOR COATING SHALL BE DUNN-EDWARDS SYN-LUSTRO RUST PREVENTION ALKYD SEMI-GLOSS ENAMEL 9 SERIES OR PITTSBURGH PAINT AND GLASS PITHANE ULTRA COATINGS OR APPROVED EQUAL. PRIOR TO COLOR COATING, RAIL IS TO BE PRIMED WITH 2 COATS OF PRIMER BY THE RESPECTIVE MANUFACTURER. COLOR OF FINAL COATING TO BE "SSCAFCA BLUE" PROVIDE COLOR SAMPLE TO OWNER FOR APPROVAL.
3. NEW MATERIAL SHALL BE USED THROUGHOUT.
4. ALL WELDING OR GAS CUTTING SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN WELDING SOCIETY D1.1-2000. ALL WELDING SHALL USE E70XX ELECTRODES.
5. CORNER MORTISE BRACE INSTALLATION WILL BE REQUIRED AT ALL CHANGES IN DIRECTION. (BRACES ARE INCIDENTAL TO FENCE CONSTRUCTION).
6. ALL CORNER BRACE POSTS AND CROSS FENCE BRACE POSTS TO HAVE 3 FT DEEP, 18 INCH DIA., 3,000 PSI, CONCRETE FOOTING. (CONCRETE IS INCIDENTAL TO FENCE CONSTRUCTION).



STEEL POST DETAIL AT TOP OF POND EMBANKMENT (5 STRAND BARBLESS WIRE FENCE

N.T.S

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
5			
4			
3			
2			
1			

LOMITAS NEGRAS
PHASE 2

CIVIL
FENCE DETAILS

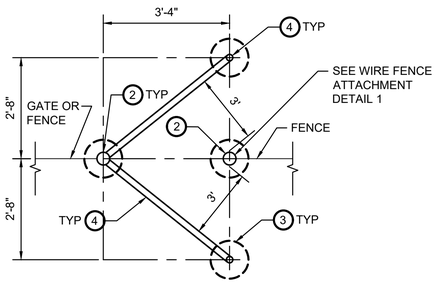
SMITH ENGINEERING

JOB NO: 115121-02

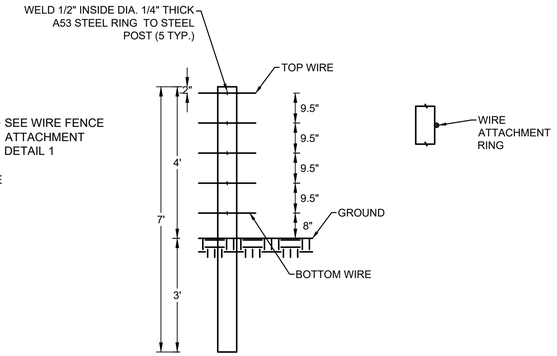
DATE: NOV. 14, 2018

SHEET NO: 64-C-54

O:\SEC—PROJECTS\115121-02\CADD\PLANSET\64-C-54 FENCE DETAILS.dwg Nov 14, 2018 - 2:49pm Saved By: chrisa



PEDESTRIAN ACCESS PLAN



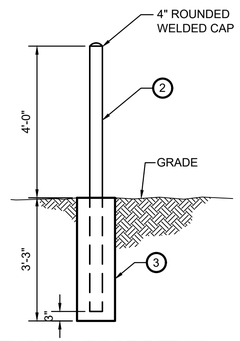
DETAIL 1

GENERAL NOTES

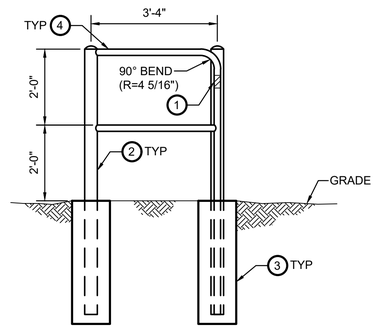
1. ALL PIPE SHALL BE SCHEDULE 40 STEEL PIPE AND CONFORM WITH ASTM A53 GRADE B. THE TOP RAIL SHALL BE CONTINUOUS, ALL HORIZONTAL RAILS SHALL BE SADDLE CUT, WELDED ALL AROUND AND GROUND BEFORE PAINTING.
2. ALL RAILS, PIPES, PLATES AND TUBING TO BE COLOR COATED. COLOR COATING SHALL BE DUNN-EDWARDS SYN-LUSTRO RUST PREVENTION ALKYD SEMI-GLOSS ENAMEL 9 SERIES OR PITTSBURG PAINT AND GLASS PITHANE ULTRA COATINGS OR APPROVED EQUAL. PRIOR TO COLOR COATING, RAIL IS TO BE PRIMED WITH 2 COATS OF PRIMER BY THE RESPECTIVE MANUFACTURER. COLOR OF FINAL COATING TO BE "SSCAFCA BLUE" PROVIDE COLOR SAMPLE TO OWNER FOR APPROVAL.
3. NEW MATERIAL SHALL BE USED THROUGHOUT.
4. ALL WELDING OR GAS CUTTING SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN WELDING SOCIETY D1.1-2000. ALL WELDING SHALL USE E70XX ELECTRODES.
5. GATE TO OPEN AWAY FROM STREET SIDE.

KEYED NOTES

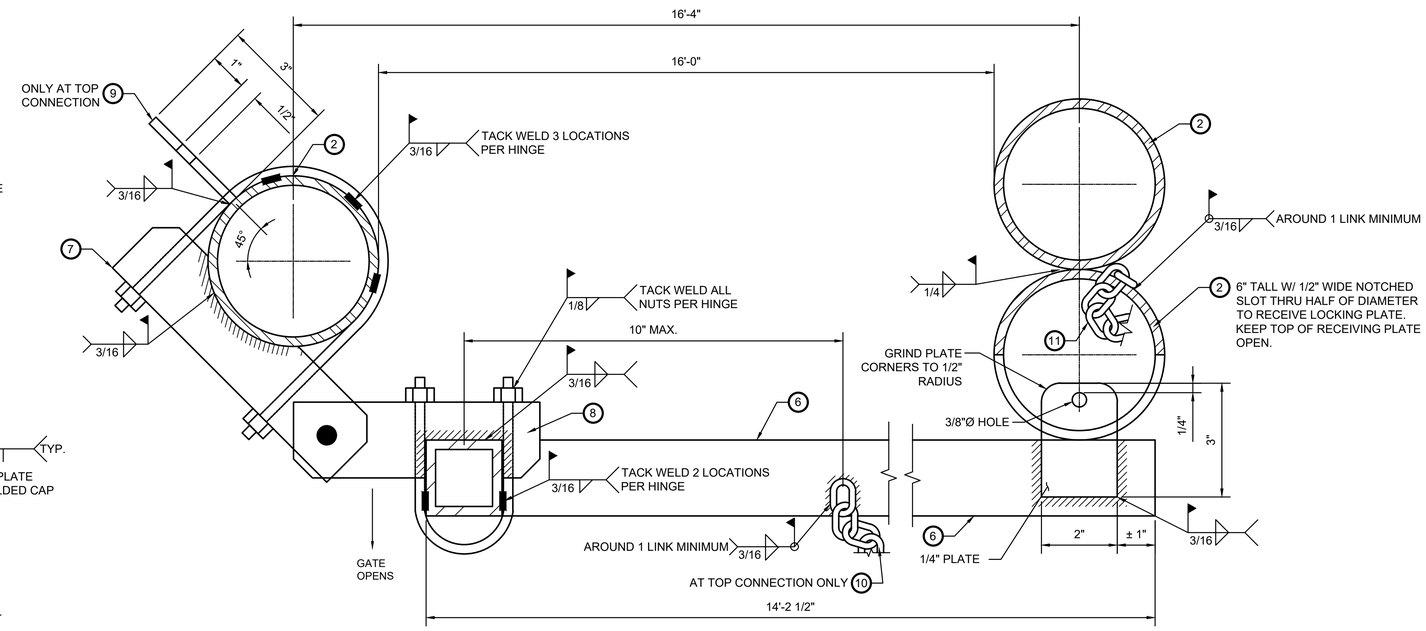
1. REFLECTIVE TAPE, AS APPROVED BY ENGINEER, LOCATE ALL AROUND PIPE AT LOCATIONS SHOWN.
2. 4" Ø SCH. 40 PIPE A53 GRADE B.
3. 12"Ø CONCRETE FOOTING.
4. 2" Ø SCH. 40 PIPE.
5. 5/8"Ø SOLID ROUND A-53 BAR.
6. HSS 2x2x1/8 TUBE FRAME
7. 180° - 4" x 1 7/8" INDUSTRIAL HINGE (#IHP4180) BY AMERICAN FENCE COMPANY OR APPROVED EQUAL. WELDED TO POST.
8. 180° - 2 7/8" x 1 1/7" INDUSTRIAL HINGE (#IHP27180) BY AMERICAN FENCE COMPANY OR APPROVED EQUAL. WELDED TO GATE FRAME.
9. PLATE 1/4" x 2" x3" CHAIN KEEPER W/ 1/2" WIDE x 1" DEEP NOTCH.
10. 3/8" x 24" LONG GALVANIZED CHAIN WELDED TO FRAME.
11. 1/4" x 12" LONG GALVANIZED CHAIN WELDED TO FRAME AND LOCK. LOCK SUPPLIED BY SSCAFCA.
12. 1' SPACE BETWEEN POSTS.
13. SEE DETAIL 1 FOR WIRE FENCE ATTACHMENT.



TYPICAL POST DETAIL

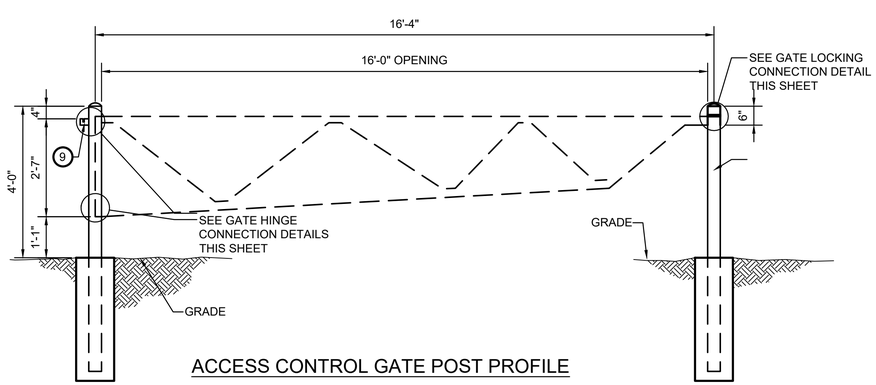


PEDESTRIAN ACCESS PROFILE



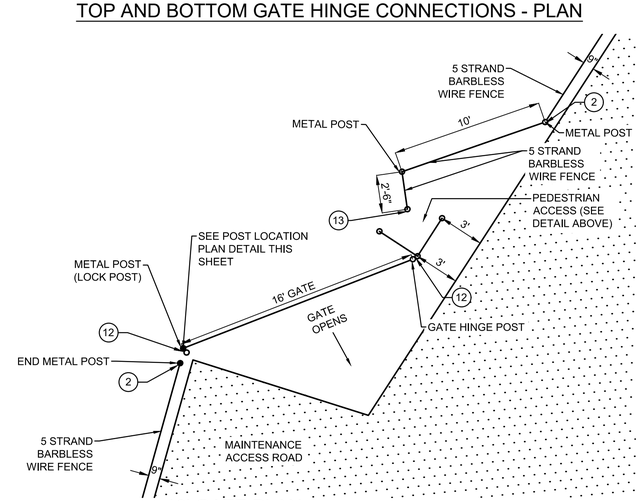
TOP AND BOTTOM GATE HINGE CONNECTIONS - PLAN

GATE LOCKING CONNECTION - PLAN



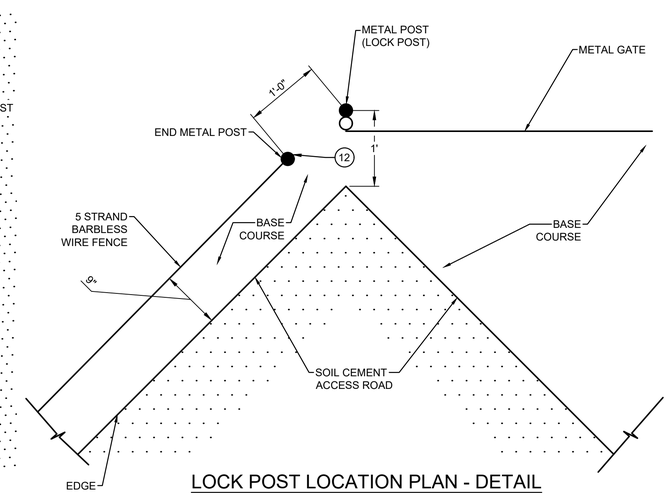
ACCESS CONTROL GATE PROFILE

ACCESS CONTROL GATE POST PROFILE



16' GATE PLAN

SCALE 1" = 5'



LOCK POST LOCATION PLAN - DETAIL

SCALE 1" = 1'

PATRICK L. STOVALL
NEW MEXICO
13830
LICENSED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			

LOMITAS NEGRAS
PHASE 2

CIVIL
GATE DETAILS

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO: 65-C-55

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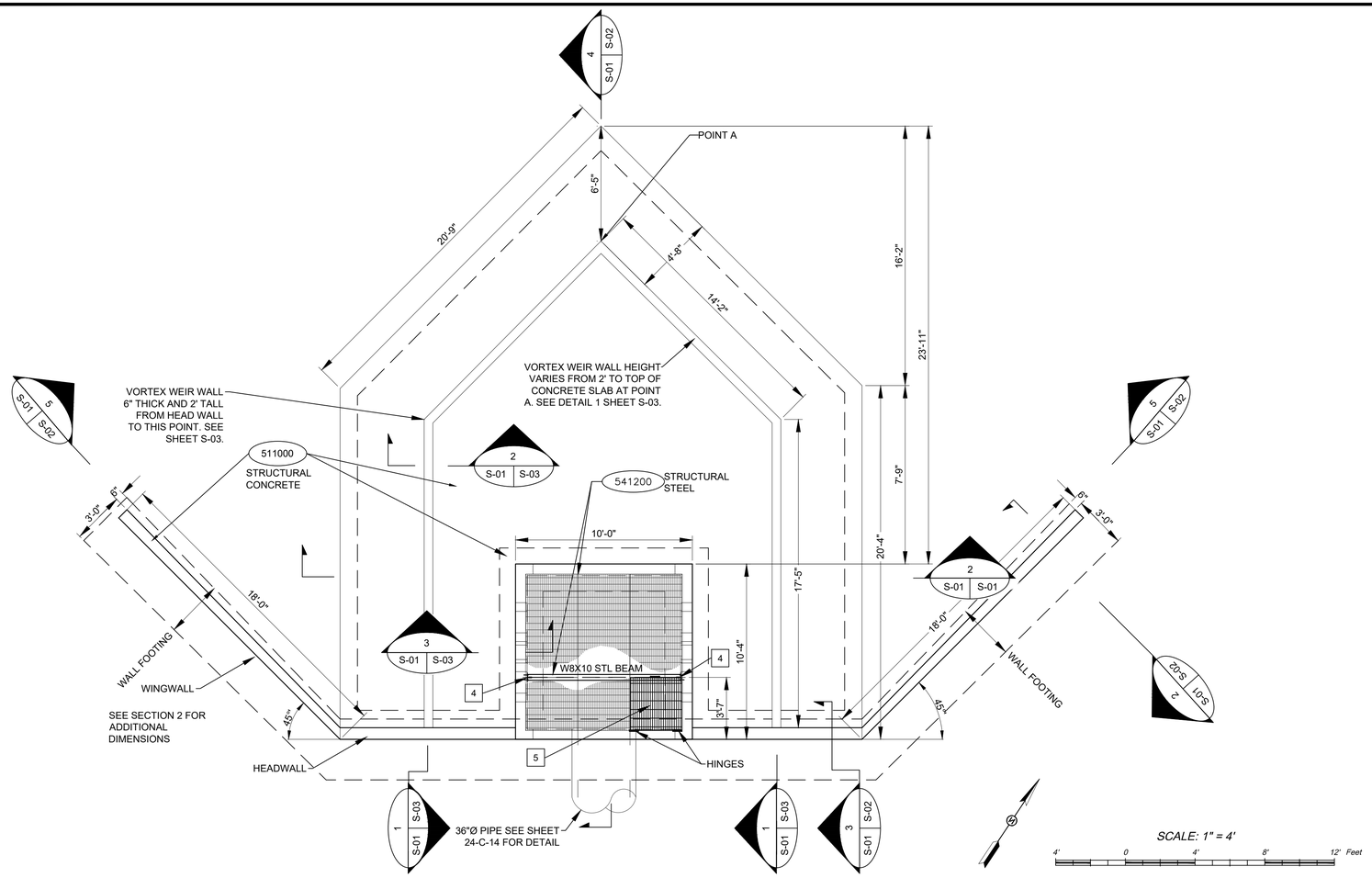
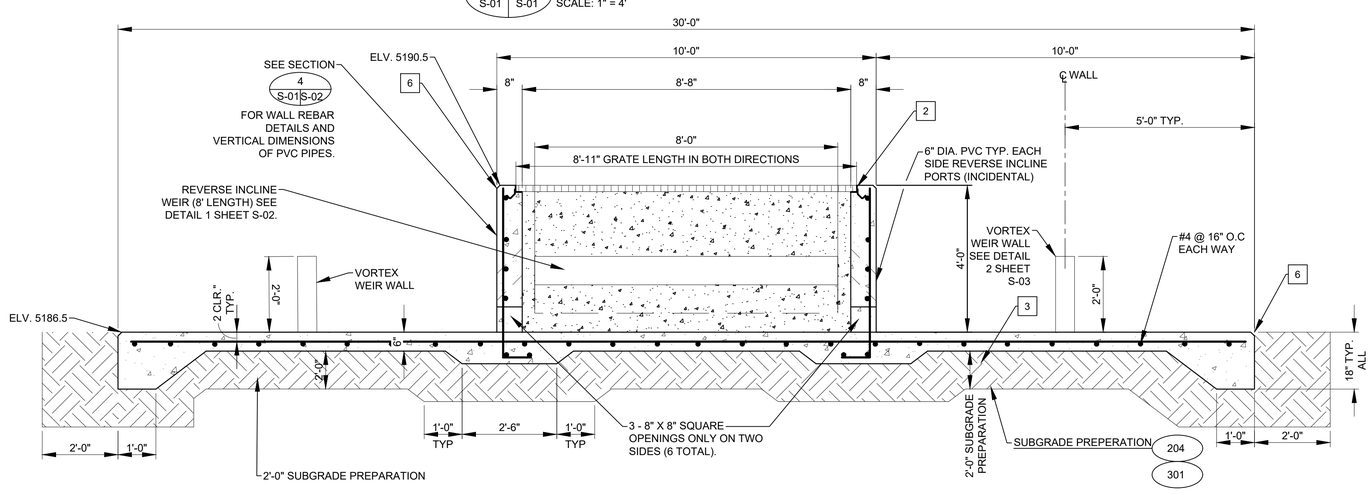


PRINCIPAL SPILLWAY PLAN

1 | S-01 | S-01 — SCALE: 1" = 4'



PRINCIPAL SPILLWAY SECTION

2 | S-01 | S-01 — SCALE: 1" = 2'

BUILD/PAY NOTE:

204	CONSTRUCTION: STD. SPEC. SECT. 204.
301	SUBGRADE PREPARATION: STD. SPEC. SECT. 301.
511000	STRUCTURAL CONCRETE CLASS A: SUP. SPEC. SECT. 511.6
541200	STRUCTURAL STEEL FOR MISCELLANEOUS STRUCTURES: GRATE AND STEEL SUPPORT BEAM. SEE DESIGN DATA "D" THIS SHEET. NMDOT. STD. SPEC. SECT. 541. HINGES AND LOCK/LOCK PLATE ARE INCIDENTAL TO GRATE.

☐ CONSTRUCTION NOTES

1. NOT USED.
2. CAST A CONTINUOUS GALV. ANGLE 2"x2"x1/4" GRATING SUPPORT INTO EDGE OF CONCRETE WALLS WITH #3 ANCHORS EMBED 3" MIN. AT 24" O.C.
3. COMPACTED SUB-GRADE - 95% MODIFIED PROCTOR. PER ASTM D1557
4. INSTALL A GALV. W8x10 GRATING SUPPORT BEAM CONNECTED TO CONCRETE WALLS AT EACH END PER DETAIL 5 ON SHEET S-03.
5. INSTALL ACCESS HATCH IN GRATING PER DETAIL 4 ON SHEET S-03.
6. ALL EXPOSED EDGES ON CAST-IN-PLACE CONCRETE STRUCTURES SHALL HAVE A 1-IN CHAMFER UNLESS OTHERWISE NOTED ON PLANS.

DESIGN DATA

A. CAST-IN-PLACE CONCRETE: F'C = 4000 PSI

B. REINFORCING STEEL: ASTM A615 GRADE 60

C. MOISTURE AND DENSITY CONTROL: ASTM D-1557 ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS OF 8" MAXIMUM AND COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY. THE MOISTURE CONTENT SHALL BE OPTIMUM TO ±2 PERCENT.

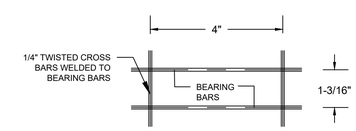
D. SPECIFICATIONS FOR PRINCIPAL SPILLWAY:
RECTANGULAR BAR GRATING

PREFABRICATED RECTANGULAR BAR PANELS:
MATERIAL: HOT DIPPED GALVANIZED STEEL
WELDED BEARING BARS AND 1/4 INCH SQUARE TWISTED CROSS BARS.

BEARING BAR SIZE: 1 - 3/4 INCH HEIGHT, 3/16 INCH WIDTH.
BAR SPACING: 1 - 3/16 INCH CENTER TO CENTER WITH 4 INCHES BETWEEN 1/4 INCH SQUARE TWISTED CROSS BARS.

NO. OF PANELS: 3
LENGTH OF EACH PANEL: 8 FEET AND 11 INCHES (a)
WIDTH OF EACH PANEL: 35 - 13/16 INCHES (a)
WEIGHT: 12.5 LBS./SQ. FT. (a)
TOTAL WEIGHT: 8'-11" X 8'-11" (12.5 LBS./SQ FT) = 994 LBS (a)

(a) CONTRACTOR TO VERIFY PANEL LENGTHS, WIDTHS AND 3' X 3' ACCESS GRATE WITH MANUFACTURER.



CHARLES W. STUBBS
NEW MEXICO
11704
PROFESSIONAL ENGINEER
11-14-18

NO.	REVISION DESCRIPTION	DATE	BY
5	####	####	####
4	####	####	####
3	####	####	####
2	####	####	####
1	####	####	####

Name
Location

LOMITAS NEGRAS PHASE 2

STRUCTURAL PRINCIPAL SPILLWAY

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO: 66-S-01

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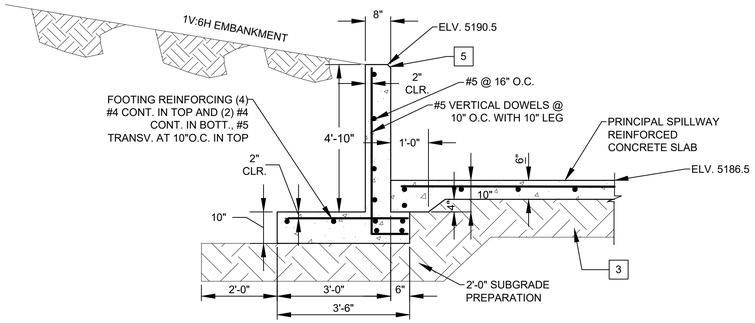
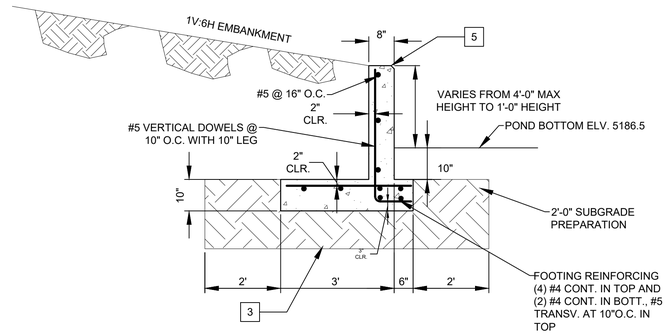


3 | S-01 S-02

HEADWALL DETAIL SECTION

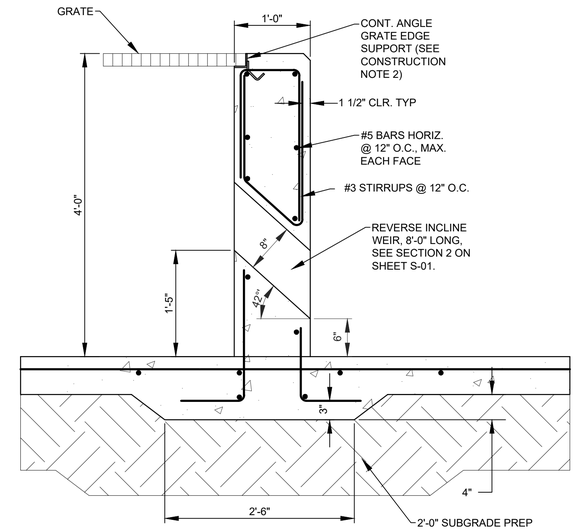
SCALE: 1" = 2'



2 | S-01 S-02

WINGWALL DETAIL

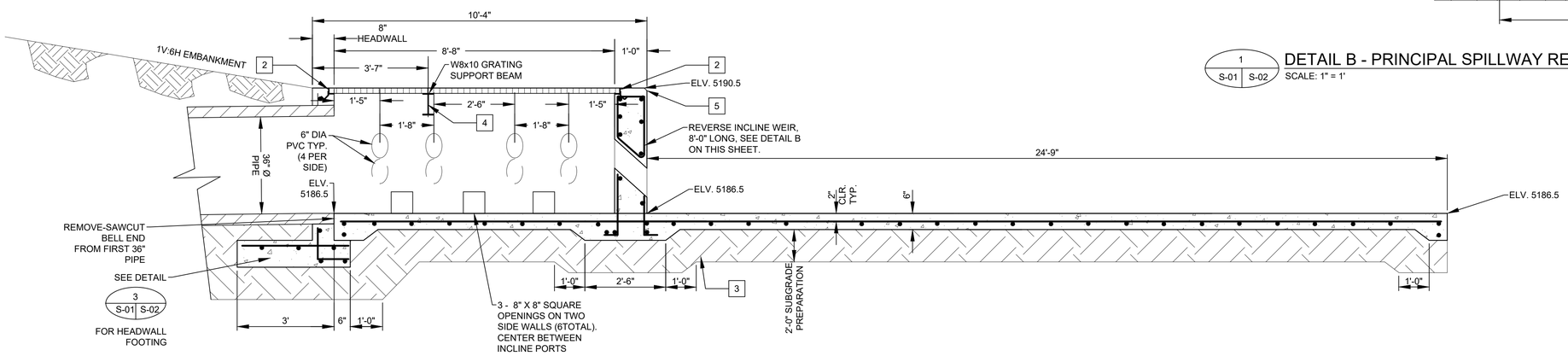
SCALE: 1" = 2'



1 | S-01 S-02

DETAIL B - PRINCIPAL SPILLWAY REVERSE INCLINE WEIR DETAIL SECTION

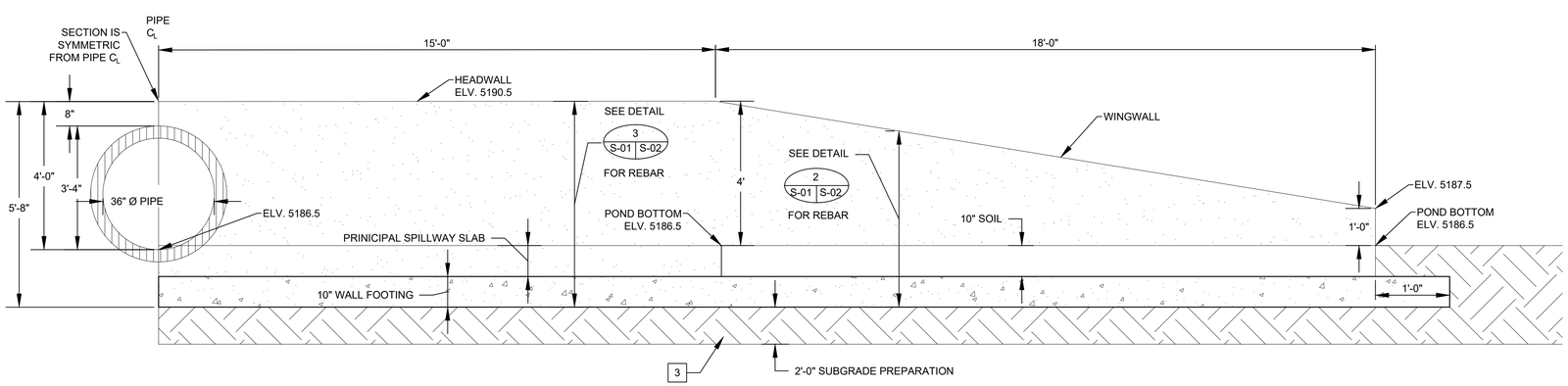
SCALE: 1" = 1'



4 | S-01 S-02

PRINCIPAL SPILLWAY DETAIL SECTION

SCALE: 1" = 2'



5 | S-01 S-02

PRINCIPAL SPILLWAY HEADWALL/WINGWALL PROFILE SECTION

SCALE: 1" = 2'

☐ CONSTRUCTION NOTES

1. NOT USED.
2. CAST A CONTINUOUS GALVANIZED ANGLE 2"x2"x1/4" GRATING SUPPORT INTO EDGE OF CONCRETE WALLS WITH #3 ANCHORS EMBED 3" MIN. AT 24"O.C.
3. COMPACTED SUB-GRADE - 95% MODIFIED PROCTOR. PER ASTMD1557
4. INSTALL A GALVANIZED W8x10 GRATING SUPPORT BEAM CONNECTED TO CONCRETE WALLS AT EACH END PER DETAIL 9 ON SHEET S-03.
5. ALL EXPOSED EDGES ON CAST-IN-PLACE CONCRETE STRUCTURES SHALL HAVE A 1-IN CHAMFER UNLESS OTHERWISE NOTED ON PLANS.

DESIGN DATA

A. CAST-IN-PLACE CONCRETE:	F'C = 4000 PSI
B. REINFORCING STEEL:	ASTM A615 GRADE 60
C. MOISTURE AND DENSITY CONTROL:	ASTM D-1557 ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS OF 8" MAXIMUM AND COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY. THE MOISTURE CONTENT SHALL BE OPTIMUM TO ±2 PERCENT.

CHARLES W. STUBBS NEW MEXICO 11704 PROFESSIONAL ENGINEER
11-14-18

Name
Location

NO.	DATE	REVISION DESCRIPTION	BY
5	#####	#####	###
4	#####	#####	###
3	#####	#####	###
2	#####	#####	###
1	#####	#####	###

LOMITAS NEGRAS
PHASE 2

STRUCTURAL
PRINCIPAL SPILLWAY DETAILS

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO.: 67-S-02

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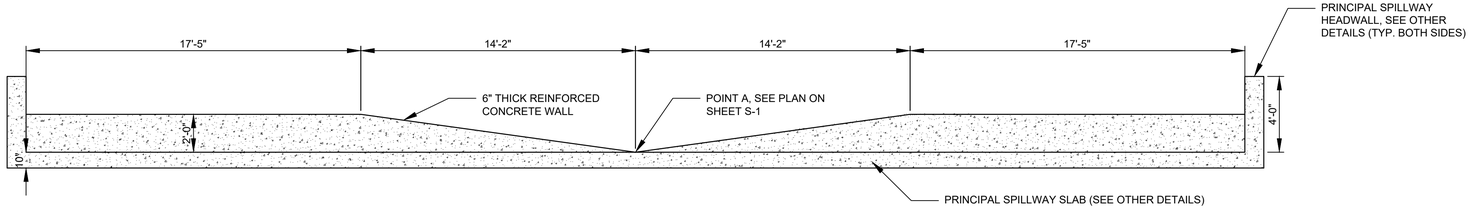
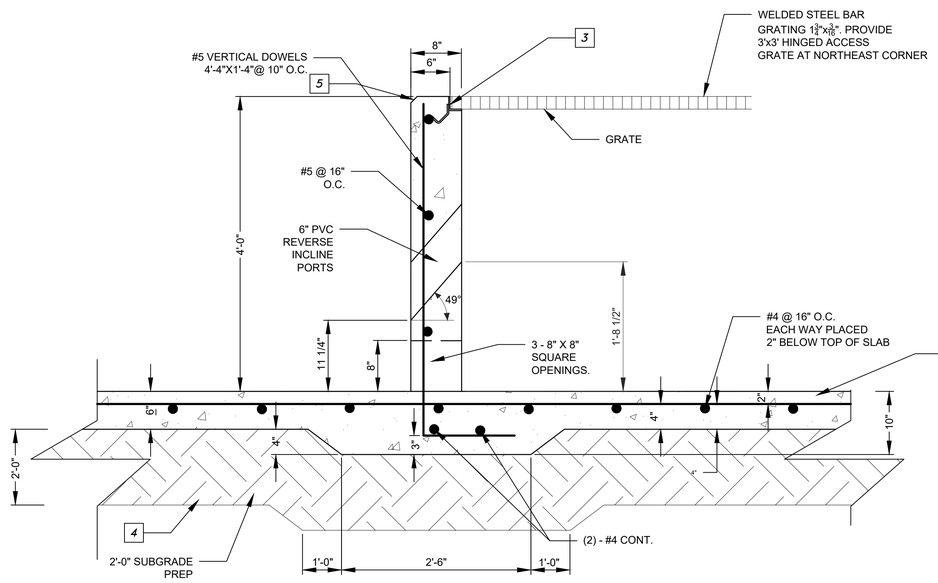


1 / S-01 S-03 VORTEX WEIR WALL PROFILE
SCALE: 1" = 4'

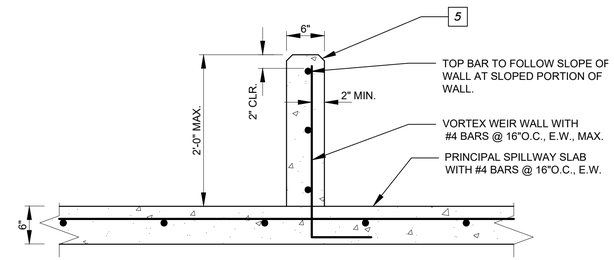
SCALE: 1" = 4'
4' 0 4' 8' 12' Feet

☐ CONSTRUCTION NOTES

1. SPILLWAYS SHALL BE CONSTRUCTED OF 6" THICK CONCRETE WITH #5 BARS AT 15" O.C.
2. NOT USED.
3. CAST A CONTINUOUS GALVANIZED ANGLE 2"x2"x1/4" GRATING SUPPORT INTO EDGE OF CONCRETE WALLS WITH #3 ANCHORS EMBED 3" MIN. AT 24"O.C.
4. COMPACTED SUB-GRADE - 95% MODIFIED PROCTOR. PER ASTMD1557
5. ALL EXPOSED EDGES ON CAST-IN-PLACE CONCRETE STRUCTURES SHALL HAVE A 1-IN CHAMFER UNLESS OTHERWISE NOTED ON PLANS.



3 / S-01 S-03 PRINCIPAL SPILLWAY DETAIL SECTION
SCALE: 1" = 1'



2 / S-01 S-03 VORTEX WEIR WALL SECTION
SCALE: 1" = 1'

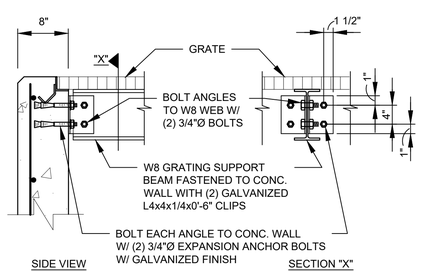
0 1' 2'

DESIGN DATA

A. CAST-IN-PLACE CONCRETE: F'C = 4000 PSI

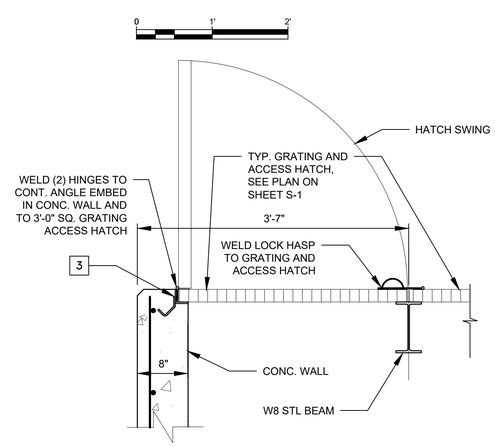
B. REINFORCING STEEL: ASTM A615 GRADE 60

C. MOISTURE AND DENSITY CONTROL: ASTM D-1557 ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS OF 8" MAXIMUM AND COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY. THE MOISTURE CONTENT SHALL BE OPTIMUM TO ±2 PERCENT.



5 / S-01 S-03 W8 STEEL BEAM GRATING SUPPORT DETAILS
SCALE: 1" = 1'

0 1' 2'



4 / S-01 S-03 ACCESS HATCH DETAILS
SCALE: 1" = 1'

0 1' 2'

CHARLES W. STUBBS
NEW MEXICO
11704
PROFESSIONAL ENGINEER
11-14-18

NO.	REVISION DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			

LOMITAS NEGRAS PHASE 2

STRUCTURAL VORTEX WEIR PROFILE

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO.: 68-S-03

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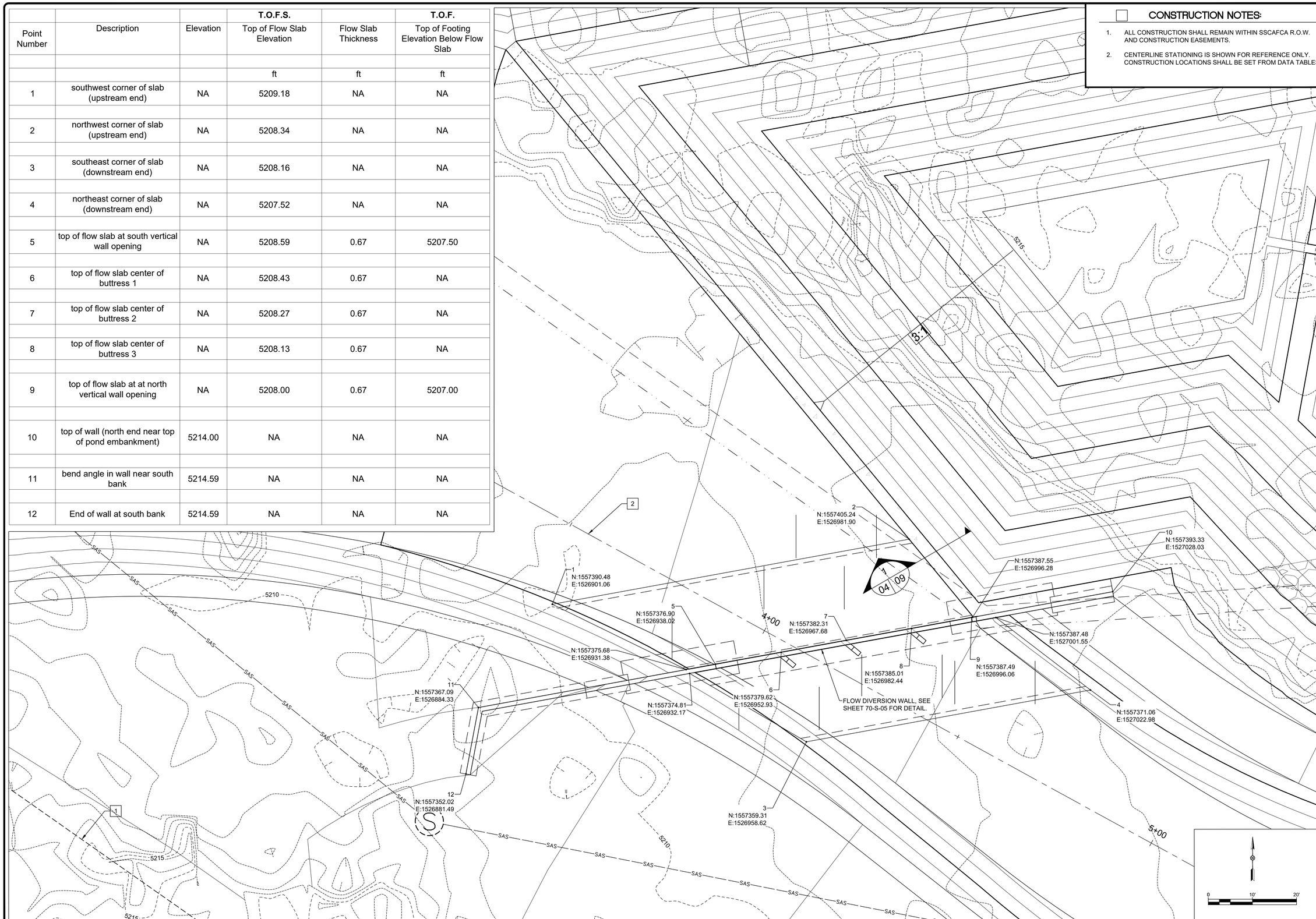
Point Number	Description	Elevation	T.O.F.S. Top of Flow Slab Elevation	Flow Slab Thickness	T.O.F. Top of Footing Elevation Below Flow Slab
			ft	ft	ft
1	southwest corner of slab (upstream end)	NA	5209.18	NA	NA
2	northwest corner of slab (upstream end)	NA	5208.34	NA	NA
3	southeast corner of slab (downstream end)	NA	5208.16	NA	NA
4	northeast corner of slab (downstream end)	NA	5207.52	NA	NA
5	top of flow slab at south vertical wall opening	NA	5208.59	0.67	5207.50
6	top of flow slab center of buttress 1	NA	5208.43	0.67	NA
7	top of flow slab center of buttress 2	NA	5208.27	0.67	NA
8	top of flow slab center of buttress 3	NA	5208.13	0.67	NA
9	top of flow slab at at north vertical wall opening	NA	5208.00	0.67	5207.00
10	top of wall (north end near top of pond embankment)	5214.00	NA	NA	NA
11	bend angle in wall near south bank	5214.59	NA	NA	NA
12	End of wall at south bank	5214.59	NA	NA	NA



CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL REMAIN WITHIN SSCAFCA R.O.W. AND CONSTRUCTION EASEMENTS.
2. CENTERLINE STATIONING IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION LOCATIONS SHALL BE SET FROM DATA TABLES.

CHARLES W. STUBBS NEW MEXICO 11704 PROFESSIONAL ENGINEER
11-14-18

NO.	REVISION DESCRIPTION	DATE	BY
1			
2			
3			
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LOMITAS NEGRAS
PHASE 2

CIVIL
FLOW DIVERSION WALL PLAN

SMITH ENGINEERING

JOB NO: 115121-02

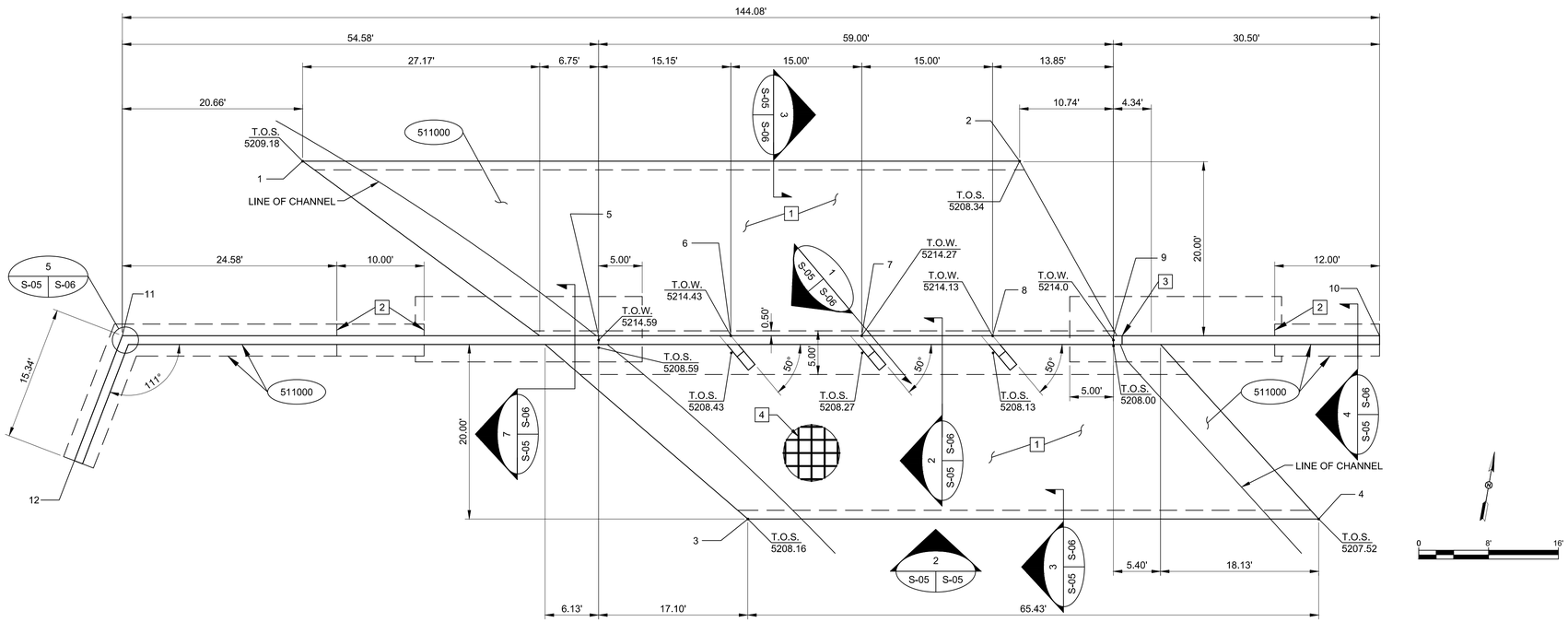
DATE: NOV. 14, 2018

SHEET NO. 69-S-04

Q:\SEC-PROJECTS\115121-02\CAD\PLANSET\69-S-04 FLOW DIVERSION WALL PLAN.dwg Nov 14, 2018 - 2:49pm Saved By: jamesv

BUILD/PAY NOTE:

204	CONSTRUCTION: STD. SPEC. SECT. 204.
301	SUBGRADE PREPARATION: STD. SPEC. SECT. 301.
511000	STRUCTURAL CONCRETE CLASS A: SUP. SPEC. SECT. 511.6
541200	STRUCTURAL STEEL FOR MISCELLANEOUS STRUCTURES: GRATE AND STEEL SUPPORT BEAM. SEE DESIGN DATA "D" THIS SHEET. NMDOT. STD. SPEC. SECT. 541. HINGES AND LOCK/LOCK PLATE ARE INCIDENTAL TO GRATE.



1 S-05 S-05 FLOW DIVERSION WALL PLAN
SCALE: 1"=8'

CONSTRUCTION NOTES

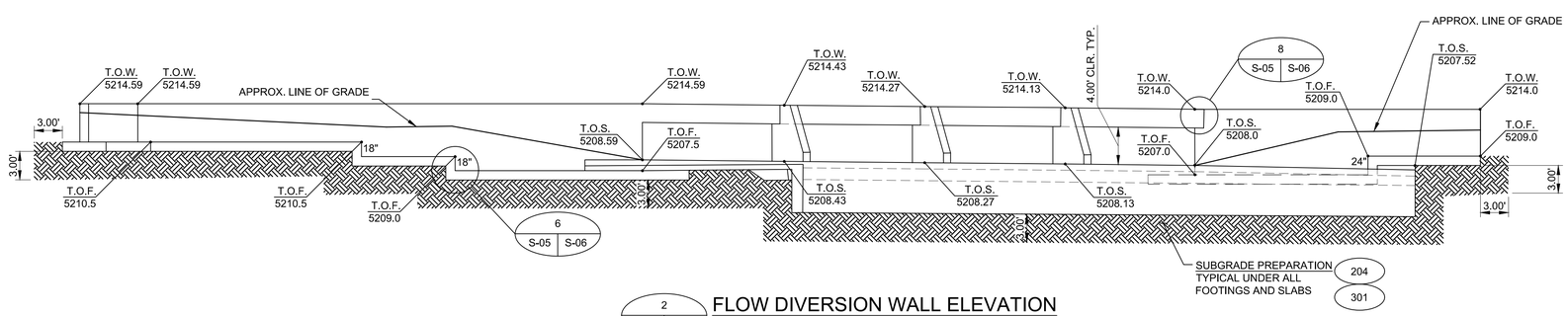
1. 8" CONCRETE SLAB ON GRADE. SEE DETAIL 3/S-06 FOR REINFORCING.
2. FOOTING STEP, TYPICAL. SEE DETAIL 6/S-06.
3. EXPANSION JOINT. SEE DETAIL 8/S-06.
4. SLAB REINFORCING IS PARALLEL AND PERPENDICULAR TO WALL.

DESIGN DATA

A. CAST-IN-PLACE CONCRETE:	Fc = 4000 PSI
B. REINFORCING STEEL:	ASTM A615 GRADE 60
C. MOISTURE AND DENSITY CONTROL:	ASTM D-1557 ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS OF 8" MAXIMUM AND COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY. THE MOISTURE CONTENT SHALL BE OPTIMUM TO ±2 PERCENT.

LEGEND

1 - INDICATES POINT NUMBER, SEE SHEET S-04 FOR DESCRIPTION.



2 S-05 S-05 FLOW DIVERSION WALL ELEVATION
SCALE: 1"=8'

CHARLES W. STUBBS NEW MEXICO 11704 PROFESSIONAL ENGINEER
11-14-18

NO.	REVISION DESCRIPTION	DATE	BY
5	#####	#####	###
4	#####	#####	###
3	#####	#####	###
2	#####	#####	###
1	#####	#####	###

Name
Location

LOMITAS NEGRAS
PHASE 2

STRUCTURAL
FLOW DIVERSION WALL

SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 70-S-05

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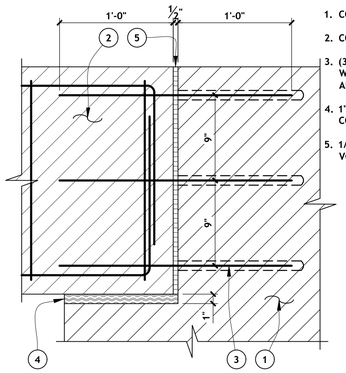
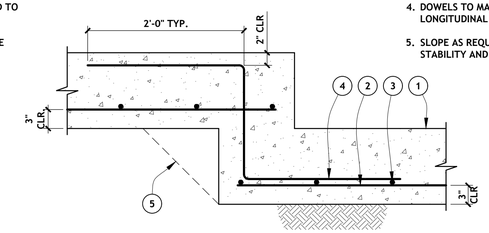


1. CONCRETE WALL, SEE PLANS.
2. CONCRETE BEAM, SEE PLANS.
3. (3) 1"Ø SMOOTH DOWELS EACH FACE OF WALL. GREASE DOWEL ON WALL SIDE AND ALLOW FOR 1" OF MOVEMENT.
4. 1"x12"x12" NEOPRENE PAD ADHERED TO CONCRETE WALL.
5. 1/2" COMPRESSIBLE FILLER IN ENTIRE VOID.

8 | S-05 | S-06

BEAM EXPANSION JOINT AT WALL

115121-02D16



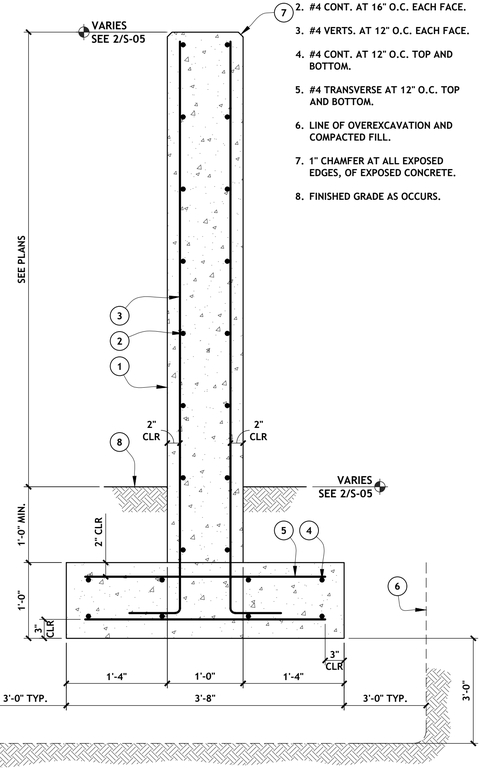
1. CONT. CONCRETE FOOTING, SEE PLANS.
2. LONGITUDINAL REINF'G, SEE PLANS AND DETAILS FOR SIZE AND SPACING.
3. TRANSVERSE REINF'G, SEE PLANS AND DETAILS FOR SIZE AND SPACING.
4. DOWELS TO MATCH AND LAP LONGITUDINAL REINF'G.
5. SLOPE AS REQUIRED FOR EARTH STABILITY AND FILL WITH CONCRETE.

NOTE:
CONCRETE WALL NOT SHOWN FOR CLARITY.

6 | S-05 | S-06

STEP IN FOOTING

115121-02D15

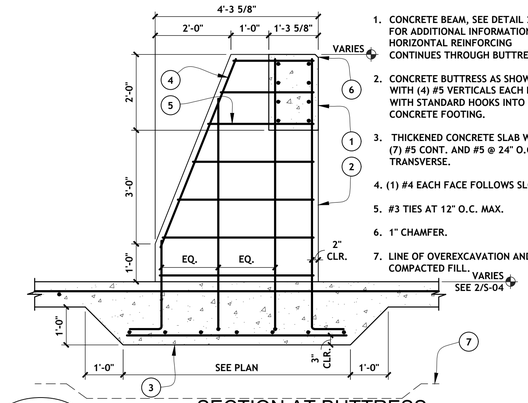


1. 12" CONCRETE WALL, SEE PLANS.
2. #4 CONT. AT 16" O.C. EACH FACE.
3. #4 VERTS. AT 12" O.C. EACH FACE.
4. #4 CONT. AT 12" O.C. TOP AND BOTTOM.
5. #4 TRANSVERSE AT 12" O.C. TOP AND BOTTOM.
6. LINE OF OVEREXCAVATION AND COMPACTED FILL.
7. 1" CHAMFER AT ALL EXPOSED EDGES, OF EXPOSED CONCRETE.
8. FINISHED GRADE AS OCCURS.

4 | S-05 | S-06

FLOW DIVERSION WALL SECTION

115121-02D13

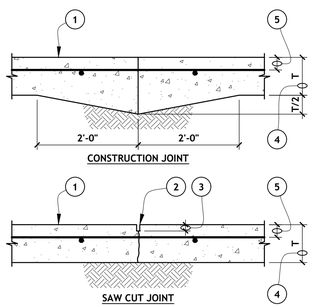


1. CONCRETE BEAM, SEE DETAIL 2/S-05 FOR ADDITIONAL INFORMATION. HORIZONTAL REINFORCING CONTINUES THROUGH BUTTRESS.
2. CONCRETE BUTTRESS AS SHOWN WITH (4) #5 VERTICALS EACH FACE WITH STANDARD HOOKS INTO CONCRETE FOOTING.
3. THICKENED CONCRETE SLAB WITH (7) #5 CONT. AND #5 @ 24" O.C. TRANSVERSE.
4. (1) #4 EACH FACE FOLLOWS SLOPE.
5. #3 TIES AT 12" O.C. MAX.
6. 1" CHAMFER.
7. LINE OF OVEREXCAVATION AND COMPACTED FILL.

1 | S-05 | S-06

SECTION AT BUTTRESS

115121-02D10



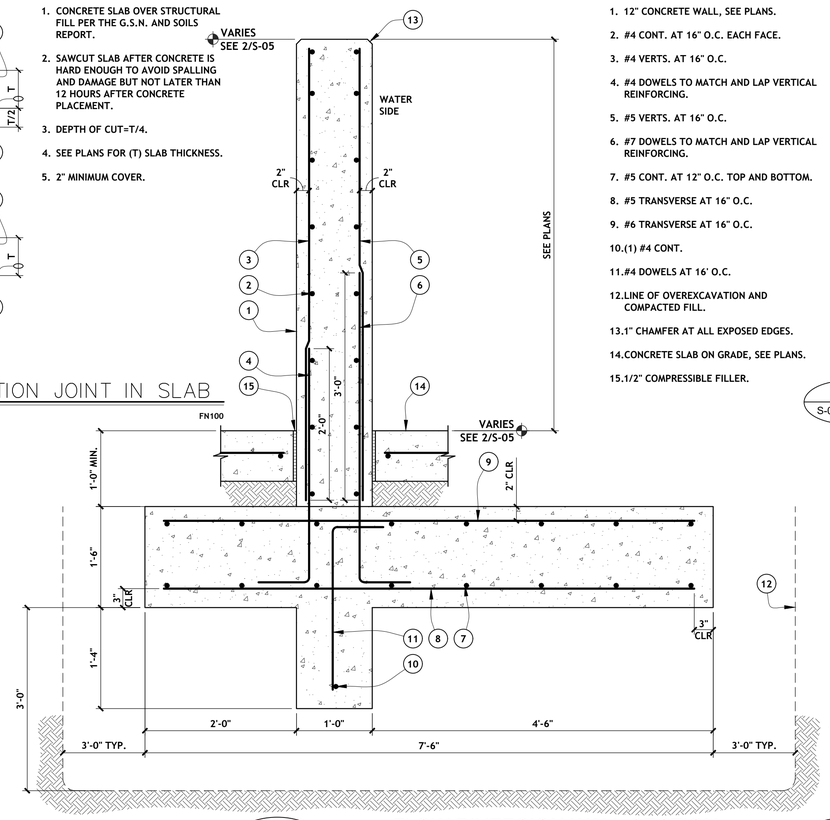
1. CONCRETE SLAB OVER STRUCTURAL FILL PER THE G.S.N. AND SOILS REPORT.
2. SAWCUT SLAB AFTER CONCRETE IS HARD ENOUGH TO AVOID SPALLING AND DAMAGE BUT NOT LATER THAN 12 HOURS AFTER CONCRETE PLACEMENT.
3. DEPTH OF CUT=T/4.
4. SEE PLANS FOR (T) SLAB THICKNESS.
5. 2" MINIMUM COVER.

NOTE:
JOINTS TO BE NO MORE THAN 20'-0" O.C. (10'-0" O.C. WHEN LEFT EXPOSED). ASPECT RATIO OF PANEL LENGTH TO PANEL WIDTH NOT TO EXCEED 1.5.

9 | S-05 | S-06

TYPICAL CONTRACTION JOINT IN SLAB

FN100

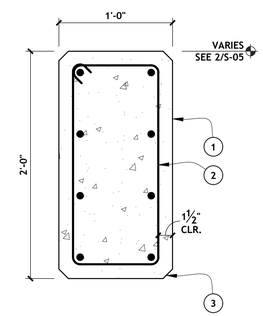


1. 12" CONCRETE WALL, SEE PLANS.
2. #4 CONT. AT 16" O.C. EACH FACE.
3. #4 VERTS. AT 16" O.C.
4. #4 DOWELS TO MATCH AND LAP VERTICAL REINFORCING.
5. #5 VERTS. AT 16" O.C.
6. #7 DOWELS TO MATCH AND LAP VERTICAL REINFORCING.
7. #5 CONT. AT 12" O.C. TOP AND BOTTOM.
8. #5 TRANSVERSE AT 16" O.C.
9. #6 TRANSVERSE AT 16" O.C.
10. (1) #4 CONT.
11. #4 DOWELS AT 16' O.C.
12. LINE OF OVEREXCAVATION AND COMPACTED FILL.
13. 1" CHAMFER AT ALL EXPOSED EDGES.
14. CONCRETE SLAB ON GRADE, SEE PLANS.
15. 1/2" COMPRESSIBLE FILLER.

7 | S-05 | S-06

FLOW DIVERSION WALL SECTION

115121-02D13

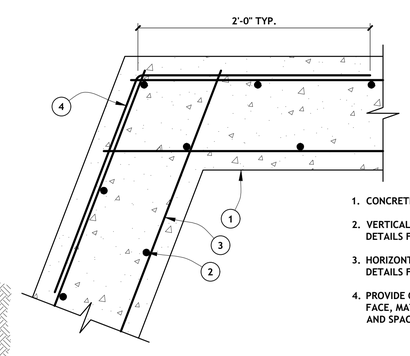


1. CONCRETE BEAM AS SHOWN WITH (4) #6 CONT. EACH FACE.
2. #3 TIES AT 12" O.C.
3. 1" CHAMFER TYPICAL ALL CORNERS.

2 | S-05 | S-06

SECTION AT CONCRETE BEAM

115121-02D11

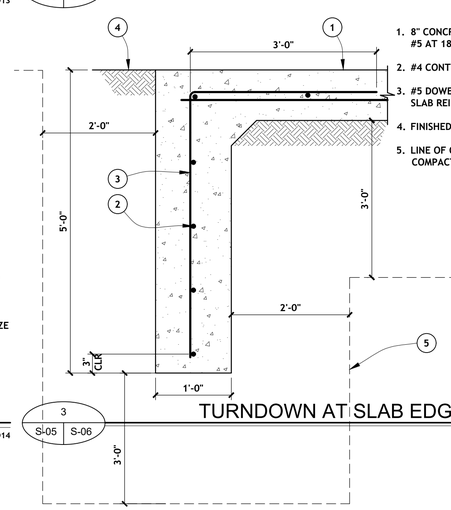


1. CONCRETE WALL, SEE PLANS.
2. VERTICAL REINF'G, SEE PLANS AND DETAILS FOR SIZE AND SPACING.
3. HORIZONTAL REINF'G, SEE PLANS AND DETAILS FOR SIZE AND SPACING.
4. PROVIDE CORNER BARS AT OUTSIDE FACE, MATCH HORIZONTAL REINF'G SIZE AND SPACING.

5 | S-05 | S-06

CONCRETE WALL CORNER

115121-02D14



1. 8" CONCRETE SLAB ON GRADE WITH #5 AT 18" O.C. EACH WAY.
2. #4 CONT. AT 12" O.C.
3. #5 DOWELS TO MATCH AND LAP SLAB REINFORCING.
4. FINISHED GRADE AS OCCURS.
5. LINE OF OVEREXCAVATION AND COMPACTED FILL.

3 | S-05 | S-06

TURNDOWN AT SLAB EDGE

115121-02D12

CHARLES W. STUBBS
NEW MEXICO
11704
PROFESSIONAL ENGINEER
11-14-18

NO.	REVISION DESCRIPTION	DATE	BY
5			
4			
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1			

LOMITAS NEGRAS
PHASE 2

STRUCTURAL
FLOW DIVERSION WALL DETAILS

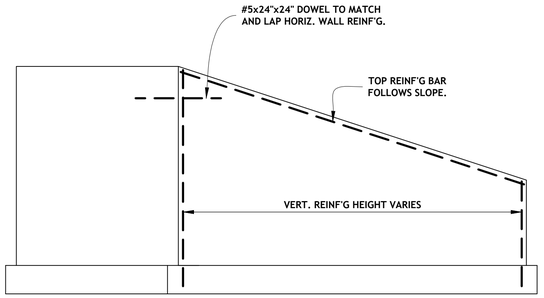
SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

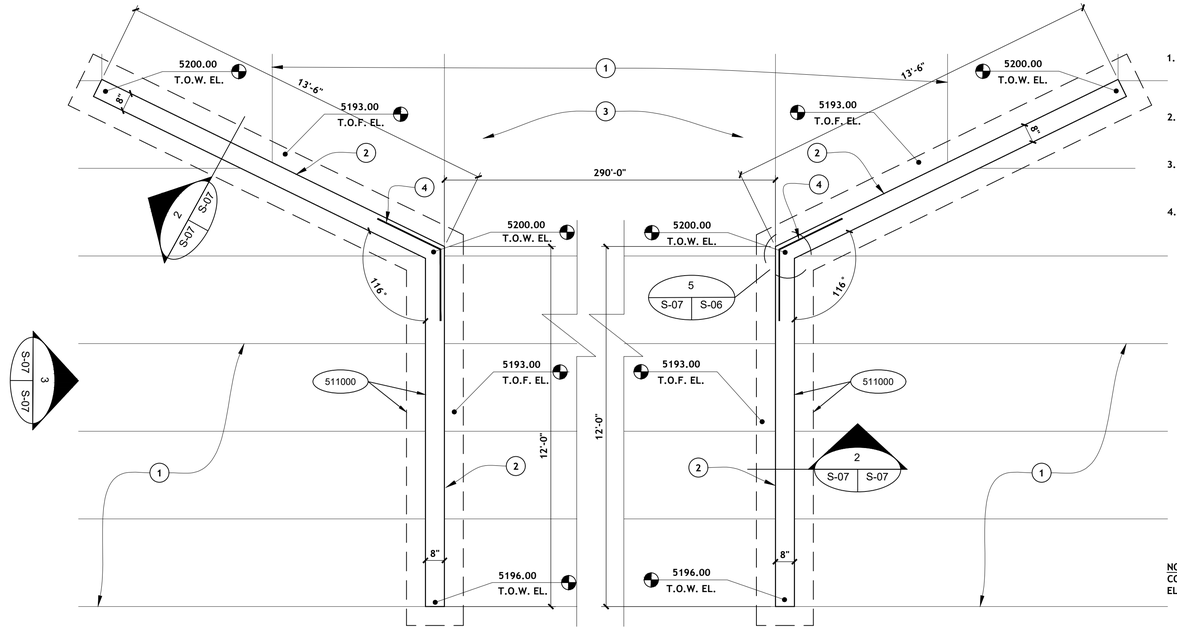
SHEET NO: 71-S-06

Q:\SEC—PROJECTS\115121-02\CADD\PLANSET\71-S-06 FLOW DIVERSION WALL DETAILS.dwg Nov 14, 2018 - 2:49pm Saved By: jamiev



3 / S-07 S-07 EMERGENCY SPILLWAY END WALL ELEVATION VIEW

SCALE: 3/8"=1'-0"



1. SEE CIVIL DRAWING 11-C-01, SARATOGA POND SITE LAYOUT AND GRADING PLAN FOR GRADING CONTOURS AROUND EMERGENCY SPILLWAY.
2. 8" CONCRETE WALLS AT EACH END OF EMERGENCY SPILLWAY WITH 2'-0" WIDE, 12" DEEP CONCRETE FOOTINGS.
3. BACK FILL AGAINST WALLS WITH SOIL CEMENT WHERE INDICATED ON CIVIL DRAWINGS.
4. #5X24"X24" DOWEL TO MATCH AND LAP HORIZONTAL WALL REINFORCEMENT.

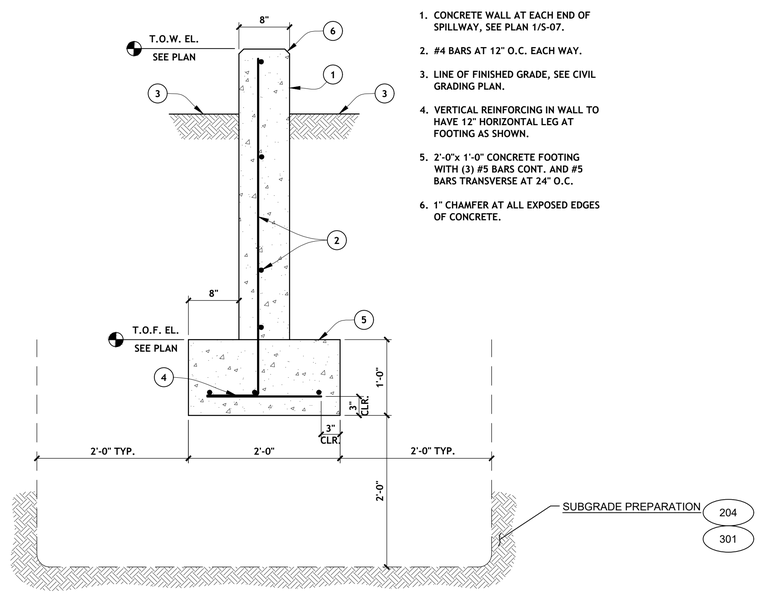
NOTE:
COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH CIVIL DRAWINGS

1 / S-07 S-07 EMERGENCY SPILLWAY END WALL PLAN VIEW

SCALE: 3/8"=1'-0"

115121-02_S-06-1

0 1' 2' 4'



1. CONCRETE WALL AT EACH END OF SPILLWAY, SEE PLAN 1/S-07.
2. #4 BARS AT 12" O.C. EACH WAY.
3. LINE OF FINISHED GRADE, SEE CIVIL GRADING PLAN.
4. VERTICAL REINFORCING IN WALL TO HAVE 12" HORIZONTAL LEG AT FOOTING AS SHOWN.
5. 2'-0"x 1'-0" CONCRETE FOOTING WITH (3) #5 BARS CONT. AND #5 BARS TRANSVERSE AT 24" O.C.
6. 1" CHAMFER AT ALL EXPOSED EDGES OF CONCRETE.

2 / S-07 S-07 EMERGENCY SPILLWAY WALL SECTION

SCALE: 1"= 1'-0"

115121-02_S-06-2

0 1' 2'

BUILD/PAY NOTE:

204	EXCAVATION, FILL, COMPACTION CONSTRUCTION: STD. SPEC. SECT. 204.
301	SUBGRADE PREPARATION: STD. SPEC. SECT. 301.
511000	STRUCTURAL CONCRETE CLASS A: SPEC. SECT. 511.6

DESIGN DATA

A. CAST-IN-PLACE CONCRETE:	Fc = 4000 PSI
B. REINFORCING STEEL:	ASTM A615 GRADE 60
C. MOISTURE AND DENSITY CONTROL:	ASTM D-1557 ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS OF 8" MAXIMUM AND COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY. THE MOISTURE CONTENT SHALL BE OPTIMUM TO ±2 PERCENT.

CHARLES W. STUBBS NEW MEXICO 11704 PROFESSIONAL ENGINEER
11-14-18

Name
Location

NO.	REVISION DESCRIPTION	DATE	BY
5	####	####	####
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3	####	####	####
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1	####	####	####

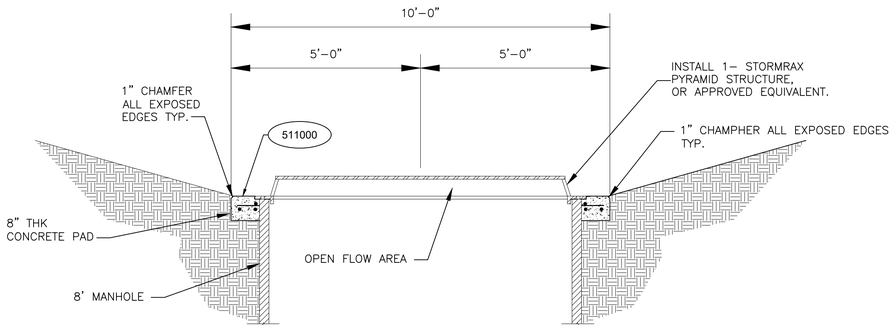
LOMITAS NEGRAS
PHASE 2

STRUCTURAL
EMERGENCY SPILLWAY WALL DETAILS

SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO. 72-S-07

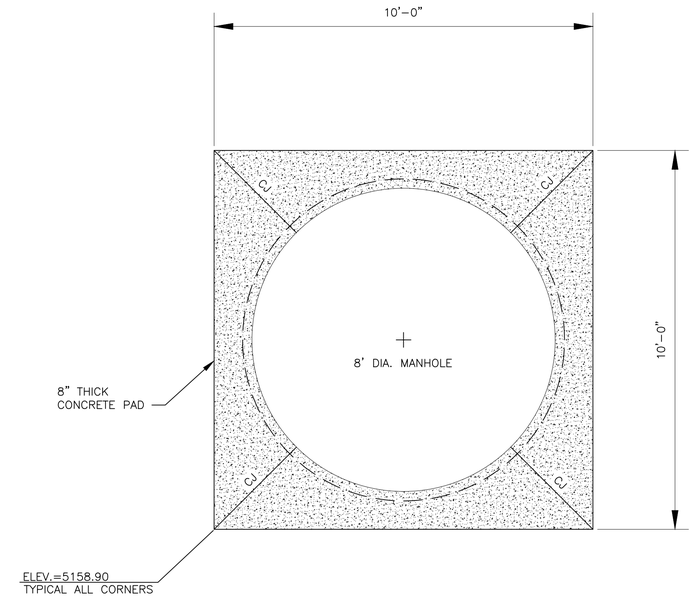
Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\72-S-07 EMERGENCY SPILLWAY WALL DETAILS.dwg Nov 14, 2018 - 2:50pm Saved By: jamiev



3 S-08 S-08 **SECTION**
SCALE: 1/2"=1'-0"

NOTE: SEE SHEET 55-C-45 FOR SITE GRADING AND MANHOLE LOCATION.

0 1' 2' 4'



1 S-08 S-08 **CONCRETE SLAB DETAIL**
SCALE: 1/2"=1'-0"

NOTE: SEE SHEET 9/S-06 FOR CONTRACTION JOINT DETAIL.

0 1' 2' 4'

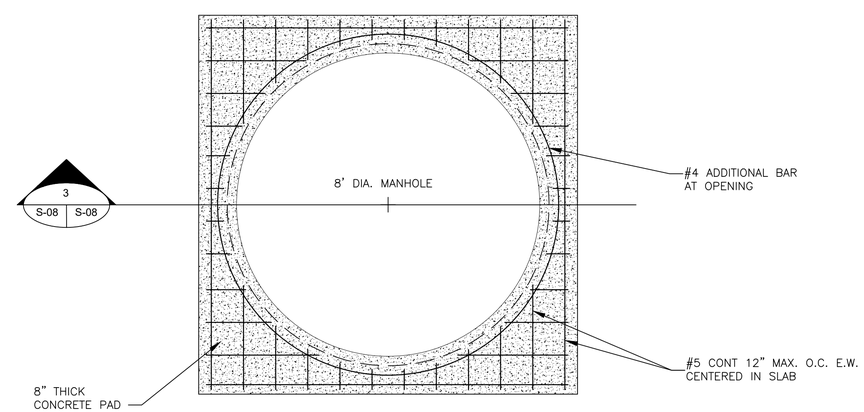
BUILD/PAY NOTE:

511000 STRUCTURAL CONCRETE CLASS A: PAYMENT DOES NOT INCLUDE REBAR. SUP. SPEC. SECT. 511.6.

DESIGN DATA

A. CAST-IN-PLACE CONCRETE: Fc = 4000 PSI

B. REINFORCING STEEL: ASTM A615 GRADE 60



2 S-08 S-08 **REINFORCEMENT LAY OUT PLAN**
SCALE: 1/2"=1'-0"

0 1' 2' 4'

CHARLES W. STUBBS
NEW MEXICO
11704
PROFESSIONAL ENGINEER
11-14-18

NO.	REVISION DESCRIPTION	DATE	BY
1			
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LOMITAS NEGRAS
PHASE 2

STRUCTURAL
OBREGON STORM DRAIN CONCRETE SLAB DETAILS

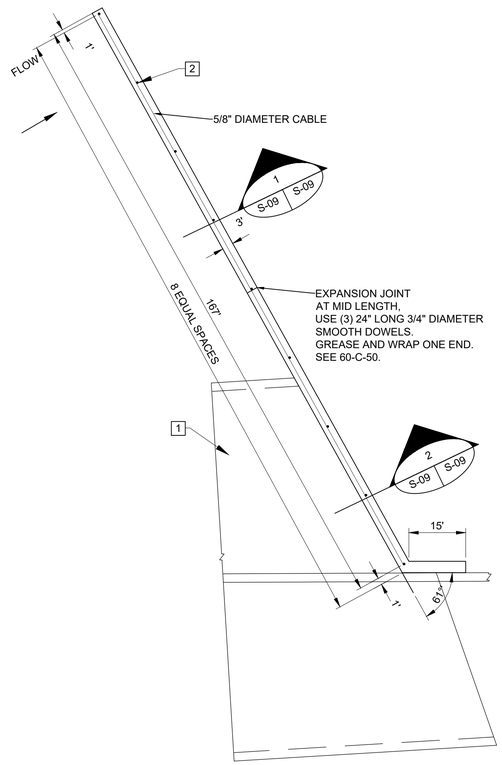
SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

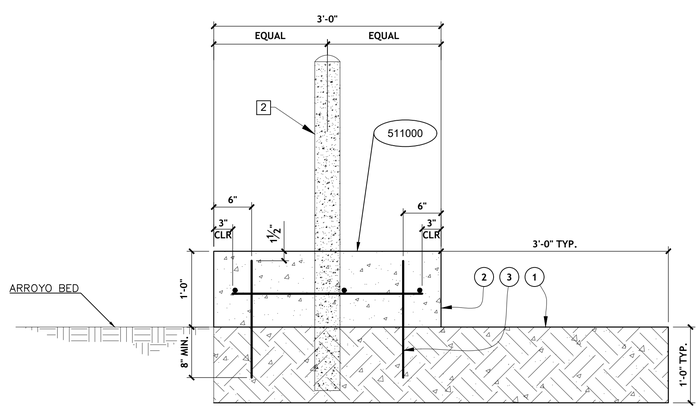
SHEET NO: 73-S-08

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\73-S-08 OBREGON STORM DRAIN CONCRETE SLAB DETAILS.dwg Nov 14, 2018 - 2:50pm Saved By: jamesv



CONCRETE WEIR PLAN

SCALE: 1" = 20'



1. SOIL CEMENT WEIR WALL.
2. CONCRETE WEIR CAP WITH (3) #5 CONT. AT MID-DEPTH AND #4 TRANSVERSE AT 24" O.C.A
3. #4 DOWELS AT 24" O.C. EACH WAY.

1 S-09 S-09

WEIR CAP

115121-02D18

BUILD/PAY NOTE:

511000 STRUCTURAL CONCRETE CLASS A: PAYMENT DOES NOT INCLUDE REBAR. SUP. SPEC. SECT. 511.6.

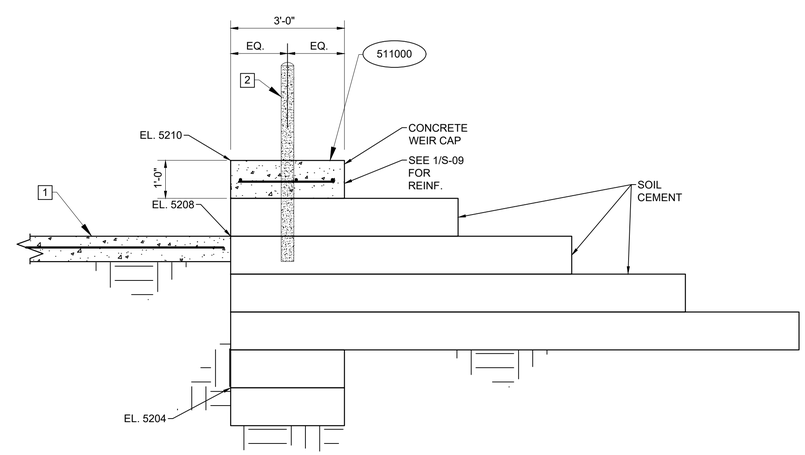
☐ CONSTRUCTION NOTES

1. 8" CONCRETE SLAB ON GRADE. SEE DETAIL 3/S-05 FOR REINFORCING.
2. STATIONARY POST, SEE SHEET 63-C-53 FOR CONSTRUCTION.

DESIGN DATA

A. CAST-IN-PLACE CONCRETE: Fc = 4000 PSI

B. REINFORCING STEEL: ASTM A615 GRADE 60



2 S-09 S-09

FLOW DIVERSION SLAB - LATERAL WEIR ENERGY DISSIPATOR PROFILE

SCALE: 1" = 2'

CHARLES W. STUBBS
NEW MEXICO
11704
PROFESSIONAL ENGINEER
11-14-18

NO.	REVISION DESCRIPTION	DATE	BY
5	#####	#####	###
4	#####	#####	###
3	#####	#####	###
2	#####	#####	###
1	#####	#####	###

Name
Location

LOMITAS NEGRAS
PHASE 2

STRUCTURAL
WEIR LAYOUT

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO. 74-S-09

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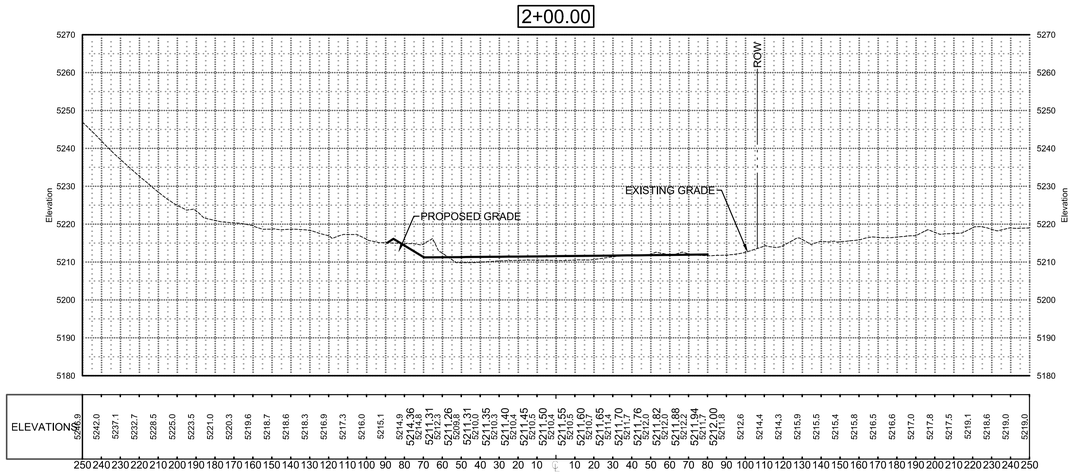

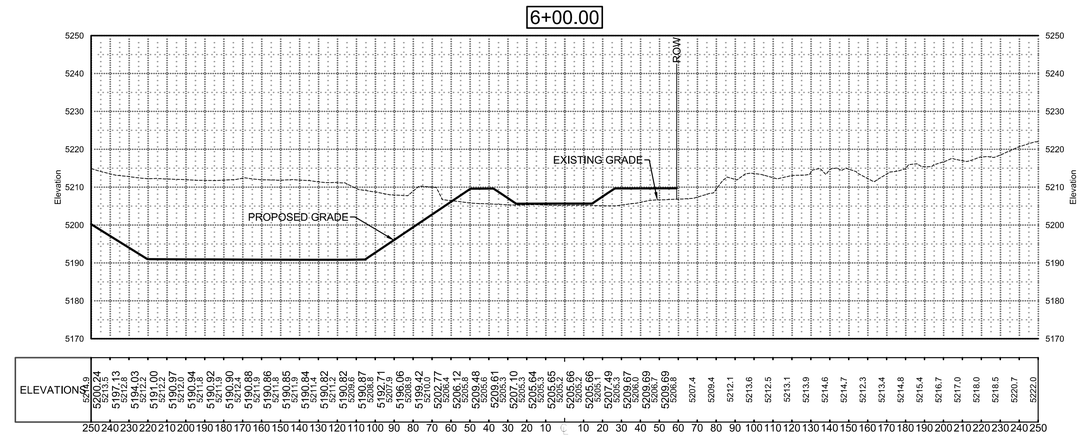

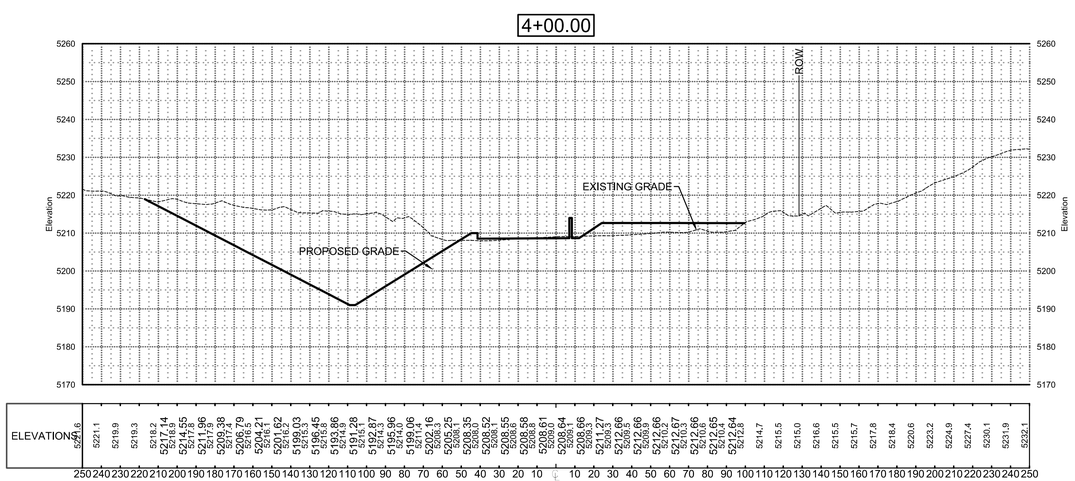

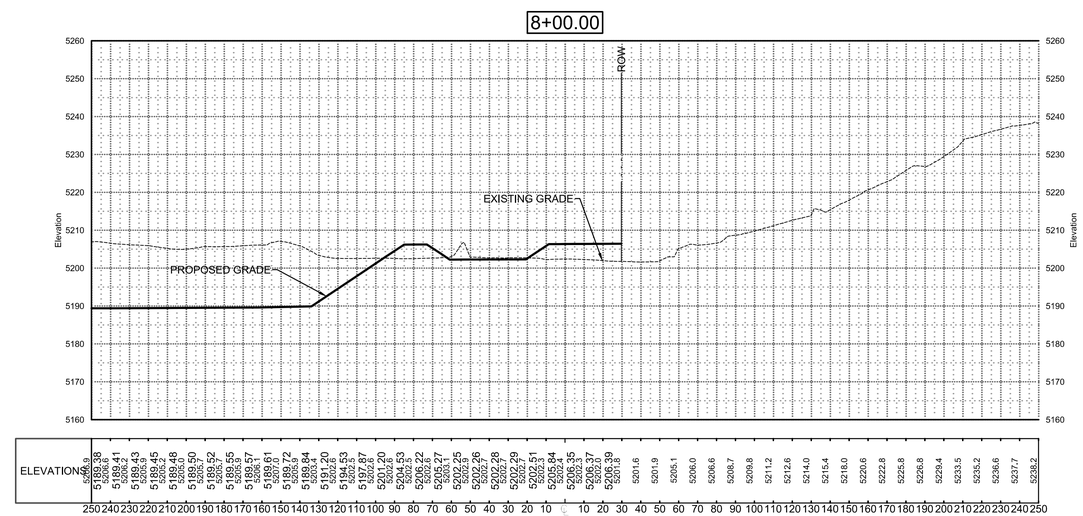

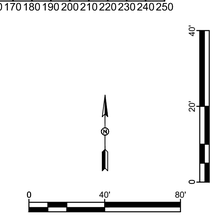

MAIN BRANCH LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
5			
4			
3			
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1			

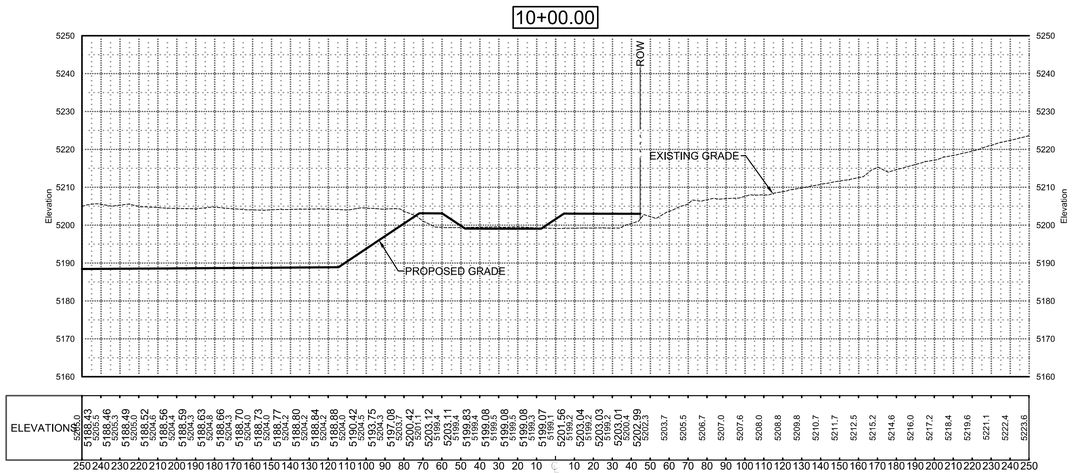
LOMITAS NEGRAS
PHASE 2

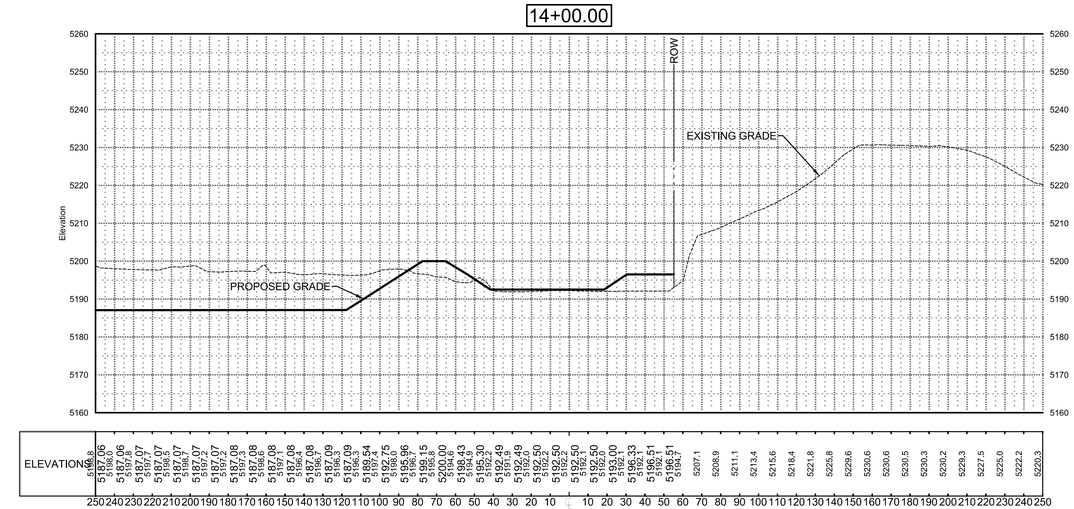
CIVIL
SECTION VIEW 1 LOMITAS NEGRAS MAIN ARROYO

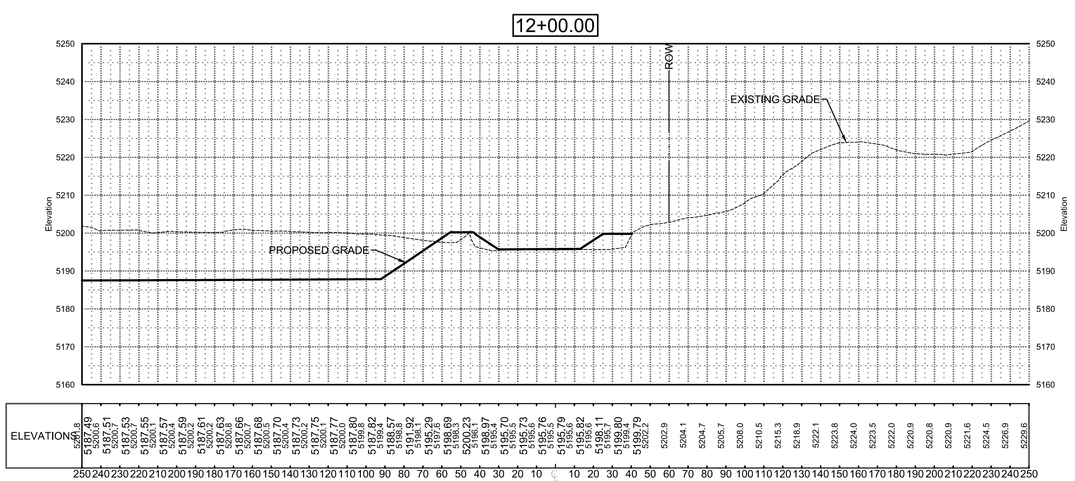
SMITH ENGINEERING

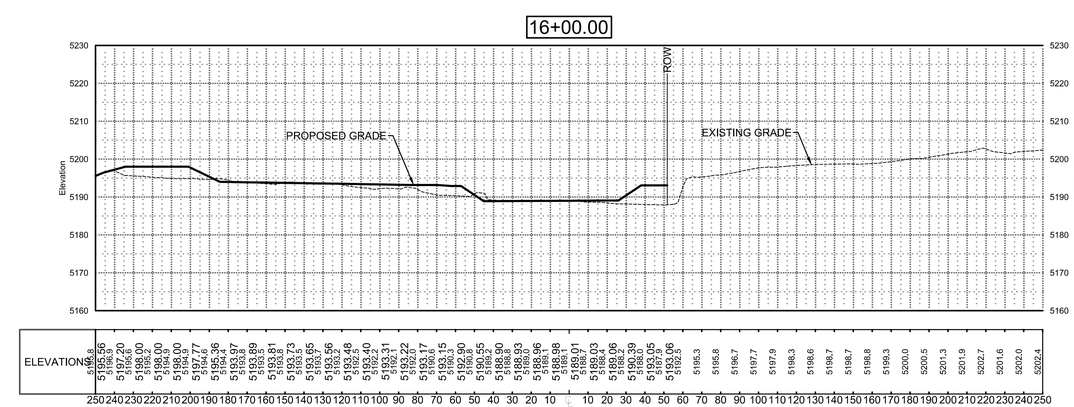
JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 75-C-01

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\75-C-01 SECTION VIEW 1 LOMITAS NEGRAS MAIN ARROYO.dwg Nov 14, 2018 - 2:50pm Saved By: jamiev

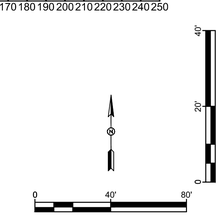








MAIN BRANCH LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)



PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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LOMITAS NEGRAS
PHASE 2

CIVIL
SECTION VIEW 2 LOMITAS NEGRAS MAIN ARROYO

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO: 76-C-02

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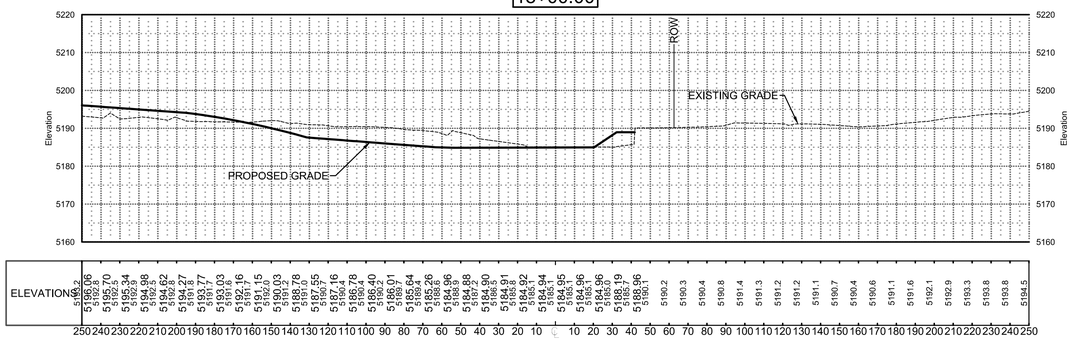

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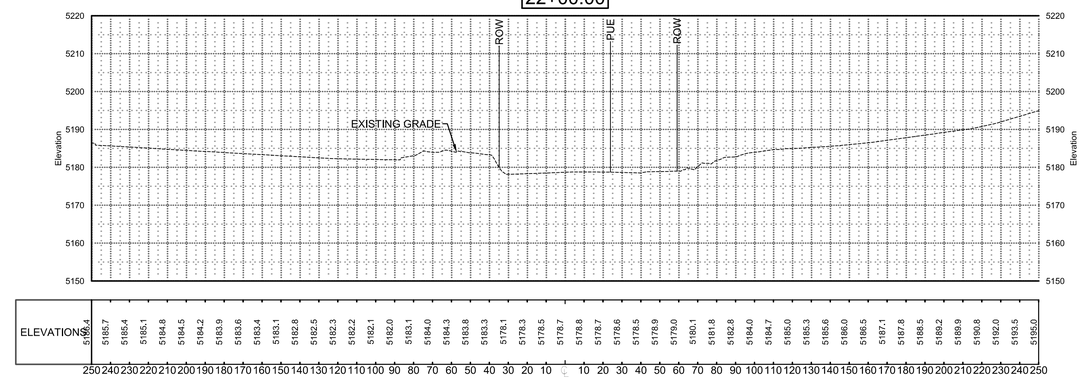

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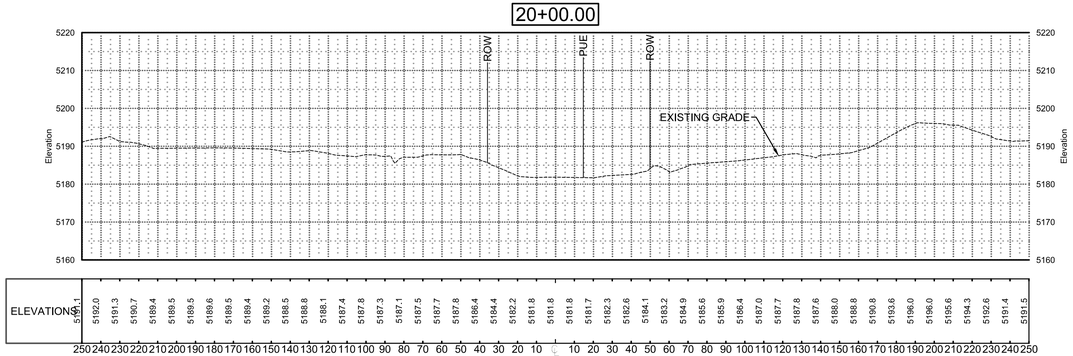

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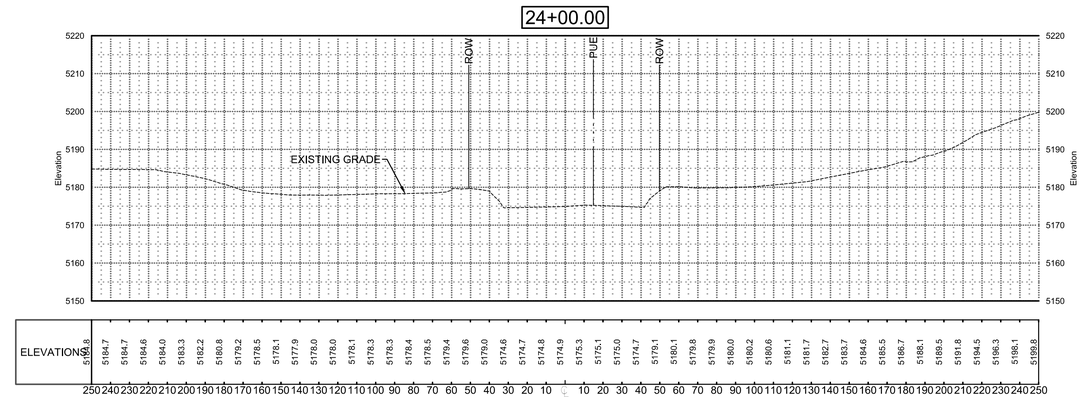
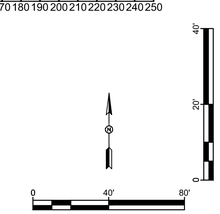




MAIN BRANCH LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)

PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
5			
4			
3			
2			
1			

LOMITAS NEGRAS
PHASE 2

CIVIL
SECTION VIEW 3 LOMITAS NEGRAS MAIN ARROYO

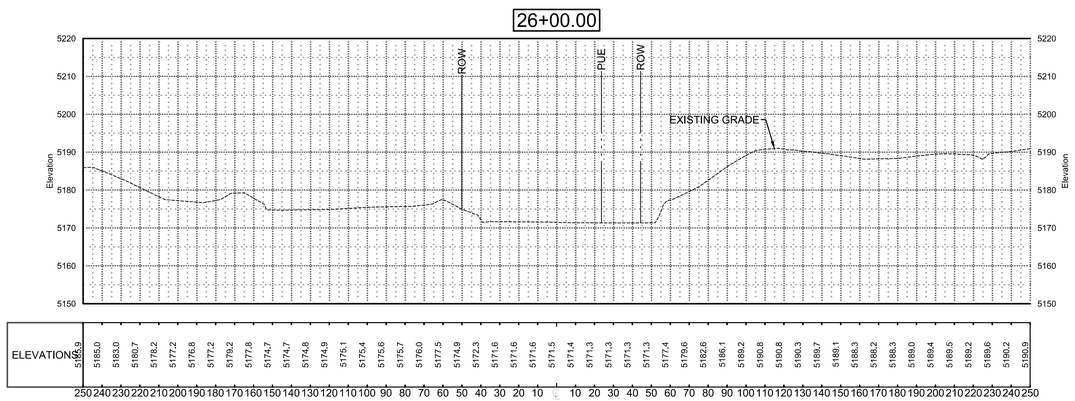
SMITH ENGINEERING

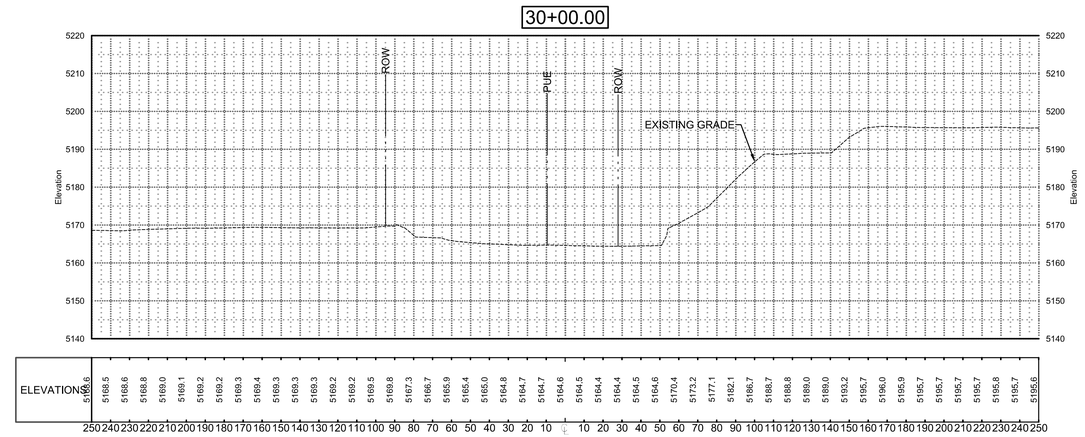
JOB NO: 115121-02

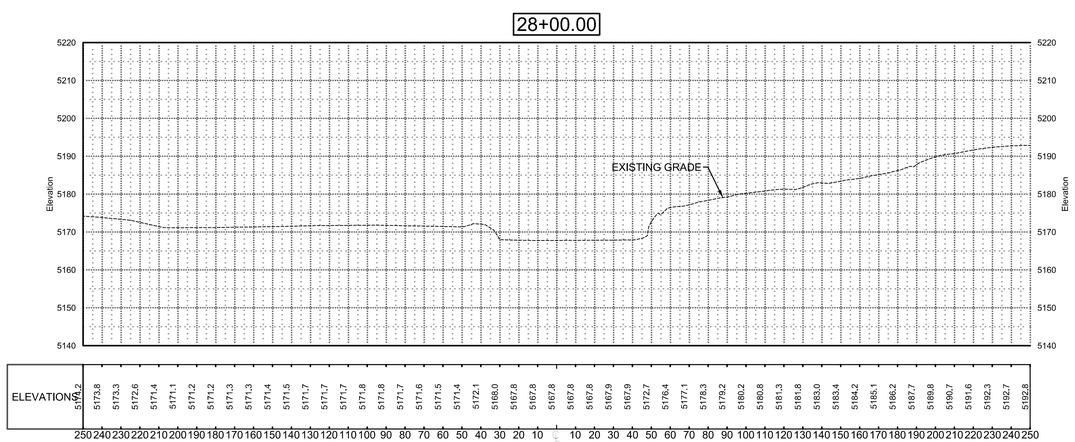
DATE: NOV. 14, 2018

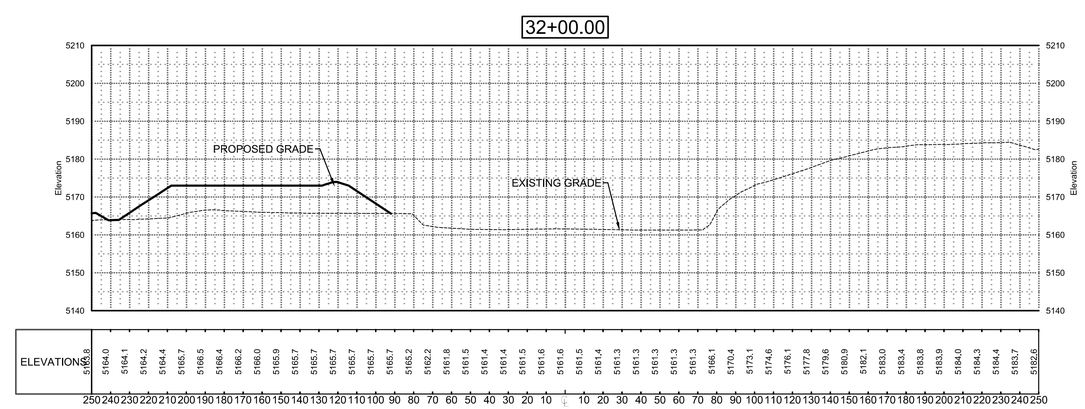
SHEET NO: 77-C-03

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\77-C-03 SECTION VIEW 3 LOMITAS NEGRAS MAIN ARROYO.dwg Nov 14, 2018 - 2:51pm Saved By: jamiev

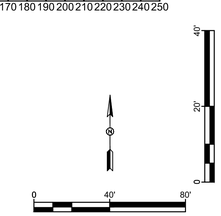








MAIN BRANCH LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)



PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

NO.	REVISION DESCRIPTION	DATE	BY
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LOMITAS NEGRAS
PHASE 2

CIVIL
SECTION VIEW 4 LOMITAS NEGRAS MAIN ARROYO

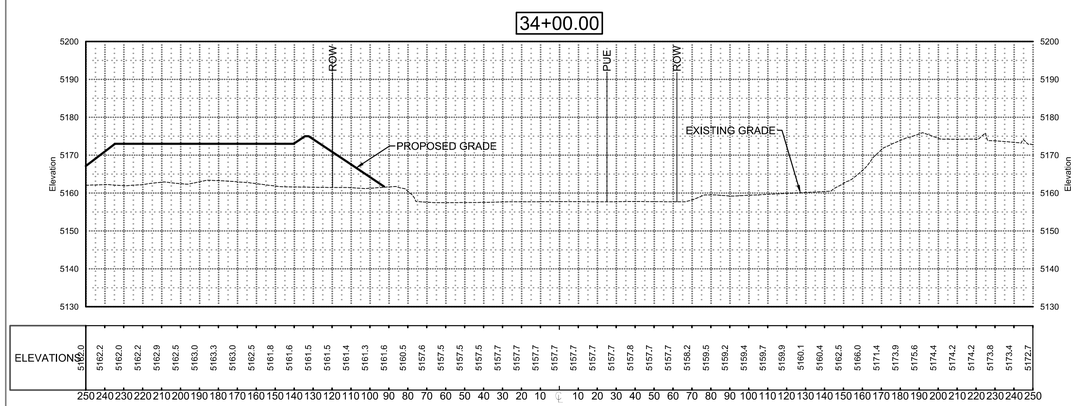
SMITH ENGINEERING

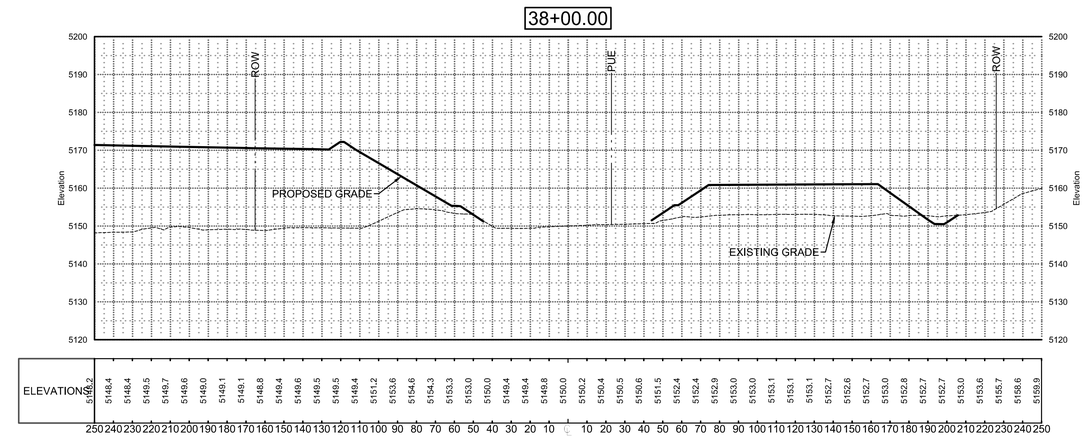
JOB NO: 115121-02

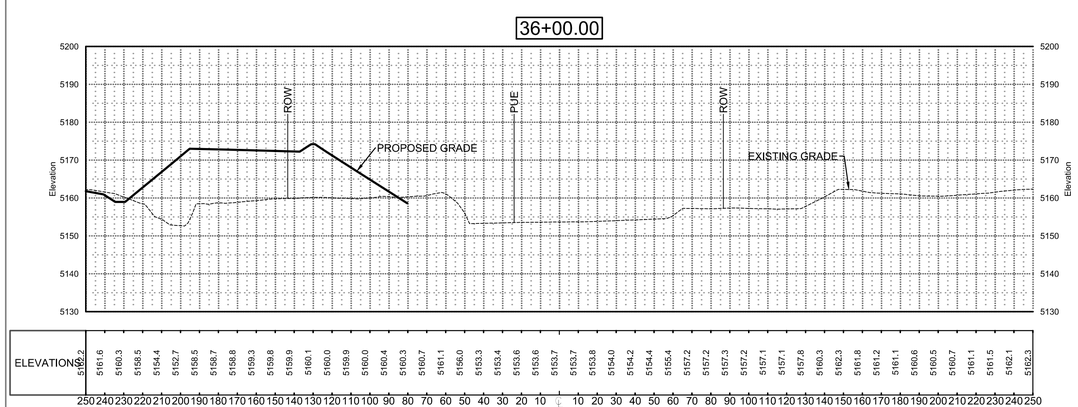
DATE: NOV. 14, 2018

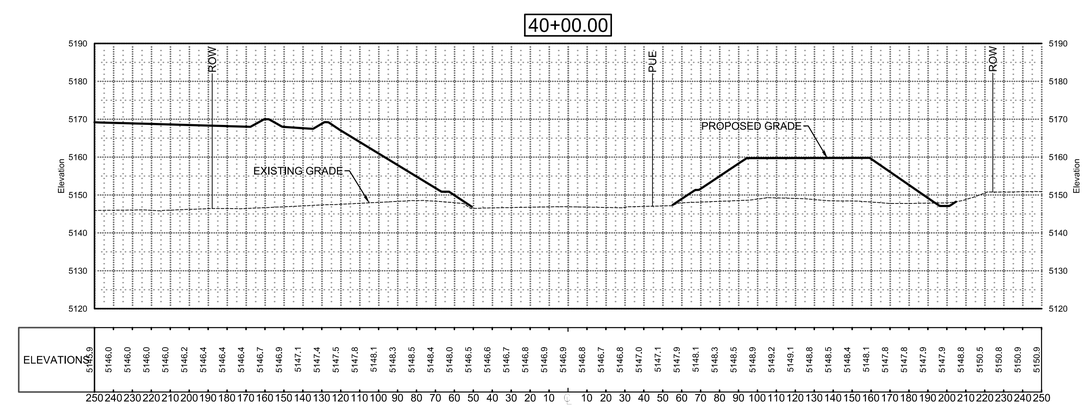
SHEET NO: 78-C-04

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\78-C-04 SECTION VIEW 4 LOMITAS NEGRAS MAIN ARROYO.dwg Nov 14, 2018 - 2:51pm Saved By: jamiev









MAIN BRANCH LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)

PATRICK L. STOVALL
NEW MEXICO
13830
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11-14-2018

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LOMITAS NEGRAS
PHASE 2

CIVIL
SECTION VIEW 5 LOMITAS NEGRAS MAIN ARROYO

SMITH ENGINEERING

JOB NO.
115121-02

DATE:
NOV. 14, 2018

SHEET NO.
79-C-05

Q:\SEC—PROJECTS\115121-02\CADD\PLANSET\79-C-05 SECTION VIEW 5 LOMITAS NEGRAS MAIN ARROYO.dwg Nov 14, 2018 - 2:51pm Saved By: jamiev

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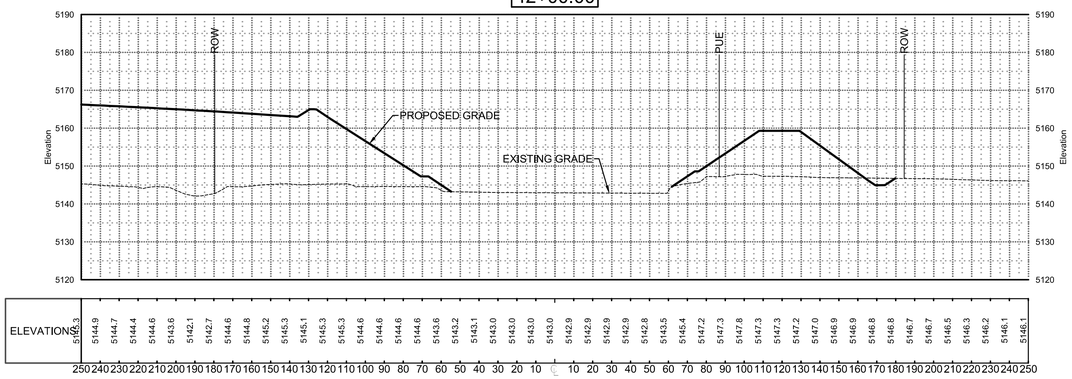

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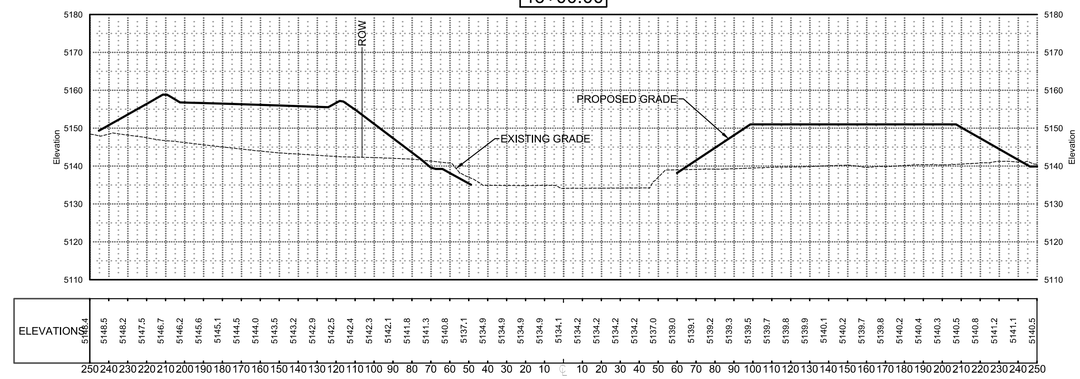

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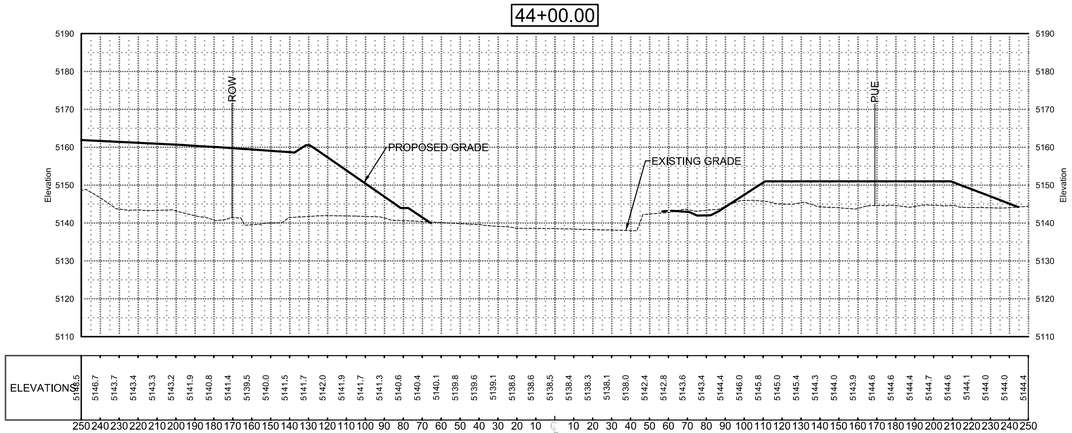
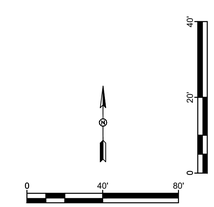


MAIN BRANCH LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)



PATRICK L. STOVALL
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11-14-2018

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LOMITAS NEGRAS
PHASE 2

CIVIL
SECTION VIEW 6 LOMITAS NEGRAS MAIN ARROYO

SMITH ENGINEERING

JOB NO: 115121-02

DATE: NOV. 14, 2018

SHEET NO. 80-C-06

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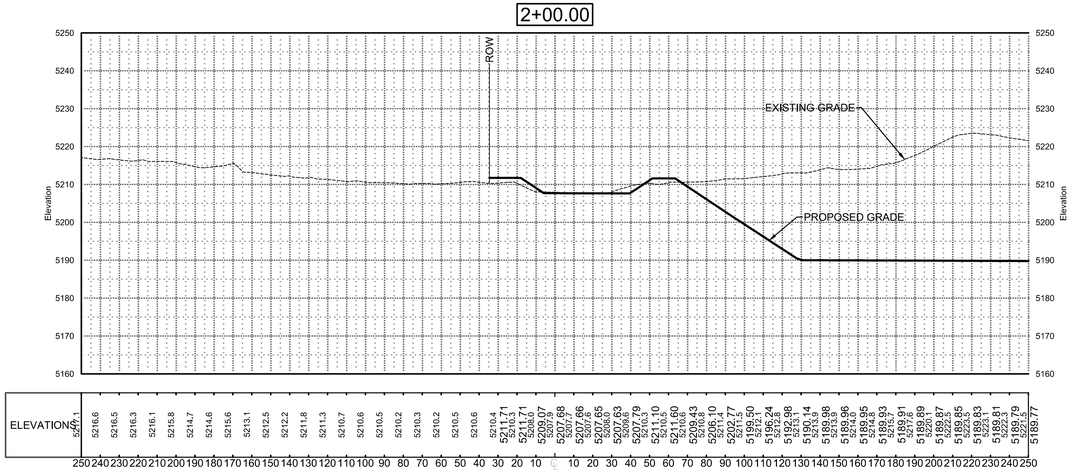
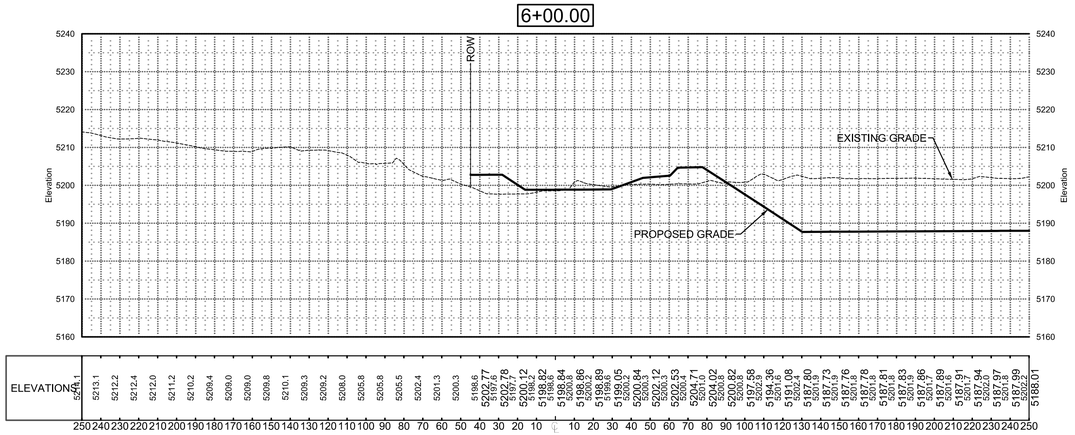
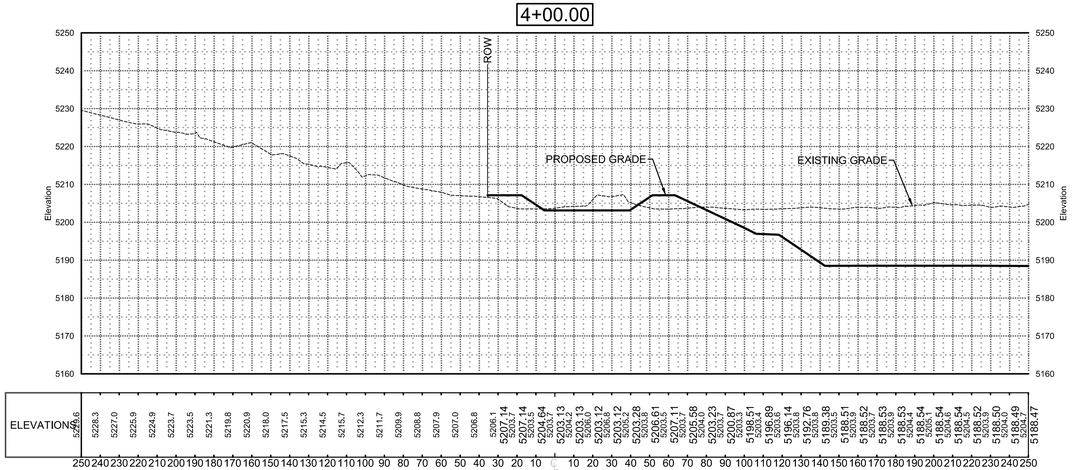
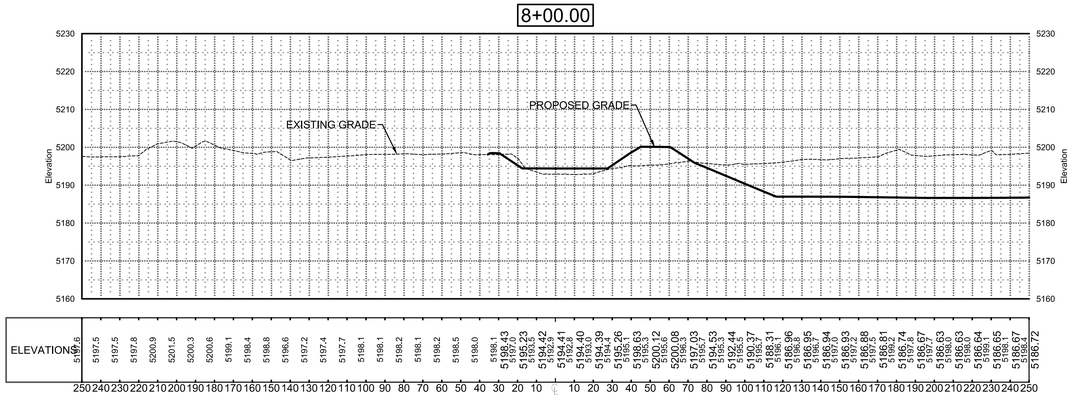
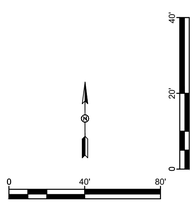








NORTH TRIBUTARY LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)



PATRICK L. STOVALL
NEW MEXICO
13930
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11-14-2018

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LOMITAS NEGRAS
PHASE 2

CIVIL
SECTION VIEW 1 LOMITAS NEGRAS NORTH TRIBUTARY ARROYO

SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 81-C-07

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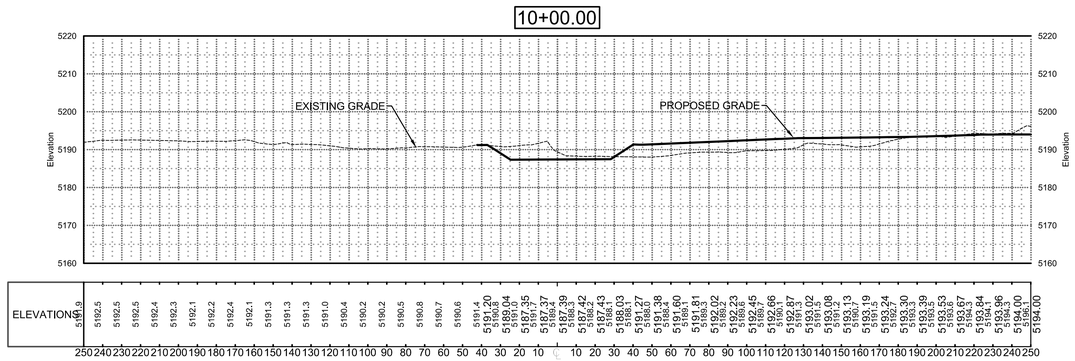
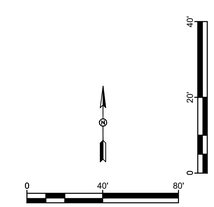


NORTH TRIBUTARY LOMITAS NEGRAS ARROYO
(FOR INFORMATION ONLY)



PATRICK L. STOVALL
NEW MEXICO
13830
REGISTERED PROFESSIONAL ENGINEER
11-14-2018

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LOMITAS NEGRAS
PHASE 2

CIVIL
SECTION VIEW 2 LOMITAS NEGRAS NORTH TRIBUTARY
ARROYO

SMITH ENGINEERING

JOB NO: 115121-02
DATE: NOV. 14, 2018
SHEET NO: 82-C-08

Q:\SEC---PROJECTS\115121-02\CADD\PLANSET\82-C-08 SECTION VIEW 2 LOMITAS NEGRAS NORTH TRIBUTARY ARROYO.dwg Nov 14, 2018 - 2:32pm Saved By: jamsw