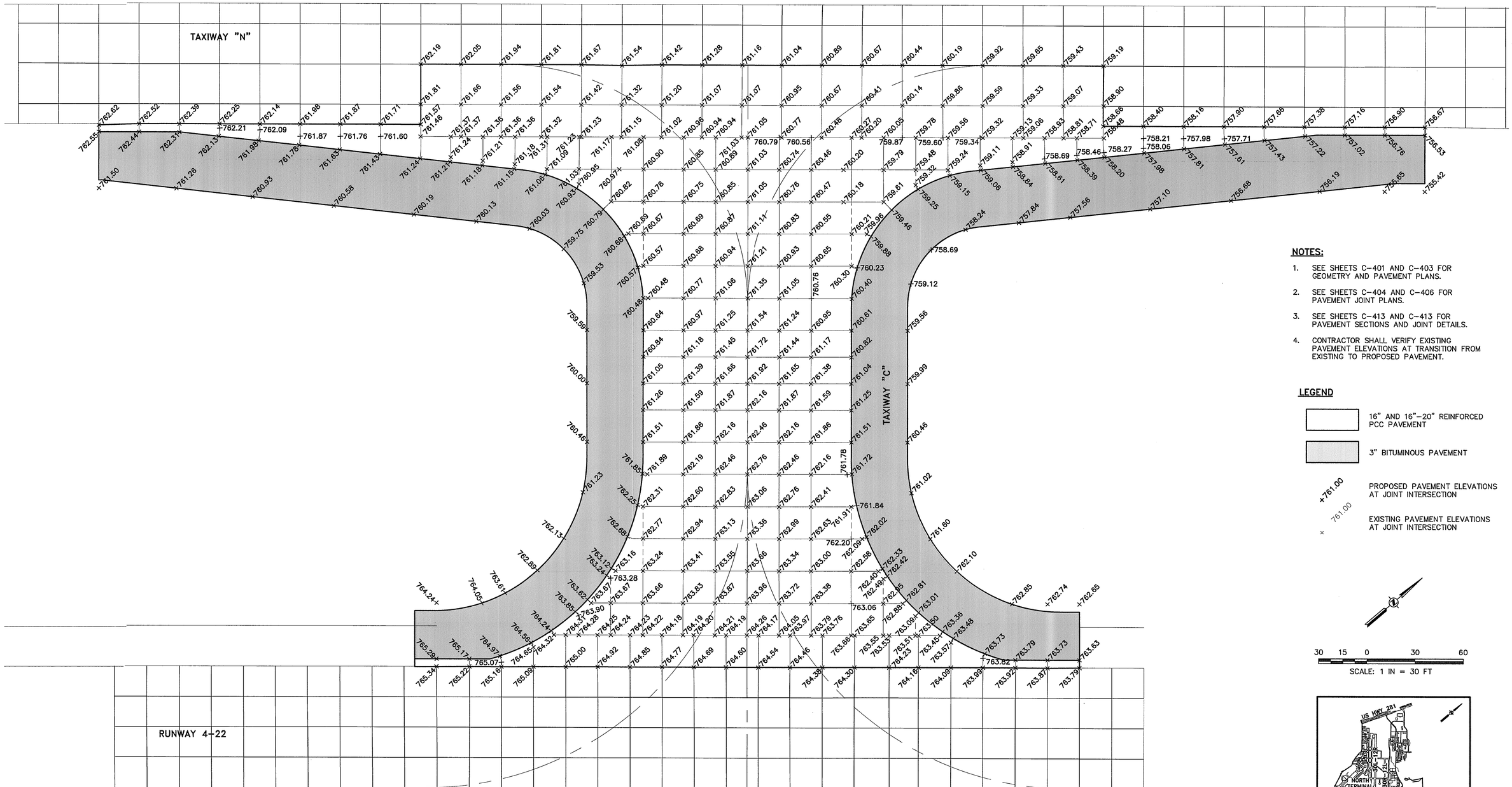


NOTES:

1. SEE SHEETS C-401 AND C-403 FOR GEOMETRY AND PAVEMENT PLANS.
2. SEE SHEETS C-404 AND C-406 FOR PAVEMENT JOINT PLANS.
3. SEE SHEETS C-413 AND C-413 FOR PAVEMENT SECTIONS AND JOINT DETAILS.
4. CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT TRANSITION FROM EXISTING TO PROPOSED PAVEMENT.

LEGEND

16" AND 16"-20" REINFORCED PCC PAVEMENT

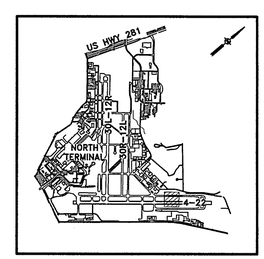
3" BITUMINOUS PAVEMENT

+761.00 PROPOSED PAVEMENT ELEVATIONS AT JOINT INTERSECTION

× 761.00 EXISTING PAVEMENT ELEVATIONS AT JOINT INTERSECTION

30 15 0 30 60

SCALE: 1 IN = 30 FT



KEY MAP

N.T.S.

No.	Revision	By	App.	Date
	ISSUE FOR BID			01-25-13

ISSUE FOR BID

SAN ANTONIO AIRPORT SYSTEM

AECOM
TEXAS REGISTERED ENGINEERING FIRM F-3580
5757 Woodway Drive
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Fax: 713.267.3278

STATE OF TEXAS
GUO-PIN FUAN
81466
REGISTERED PROFESSIONAL ENGINEER
12/6/12

Designed By: GPF
Drawn By: CRJ/FE/GWS
Checked By: TKD
Date: 12/03/2012
Scale: AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

PAVEMENT ELEVATIONS 1

Project No. 33-00160 | C.I.P. No. 0000 | A.I.P. No. 0000 | Sheet C-407

LAST MODIFIED: Dec 06, 2012 - 12:48pm BY USER: escobedof
DWG. LOCATION: V:\60039438_SAT\400-Technical\424-Sheets\RWY-321_Exten-PH4 - REBID\
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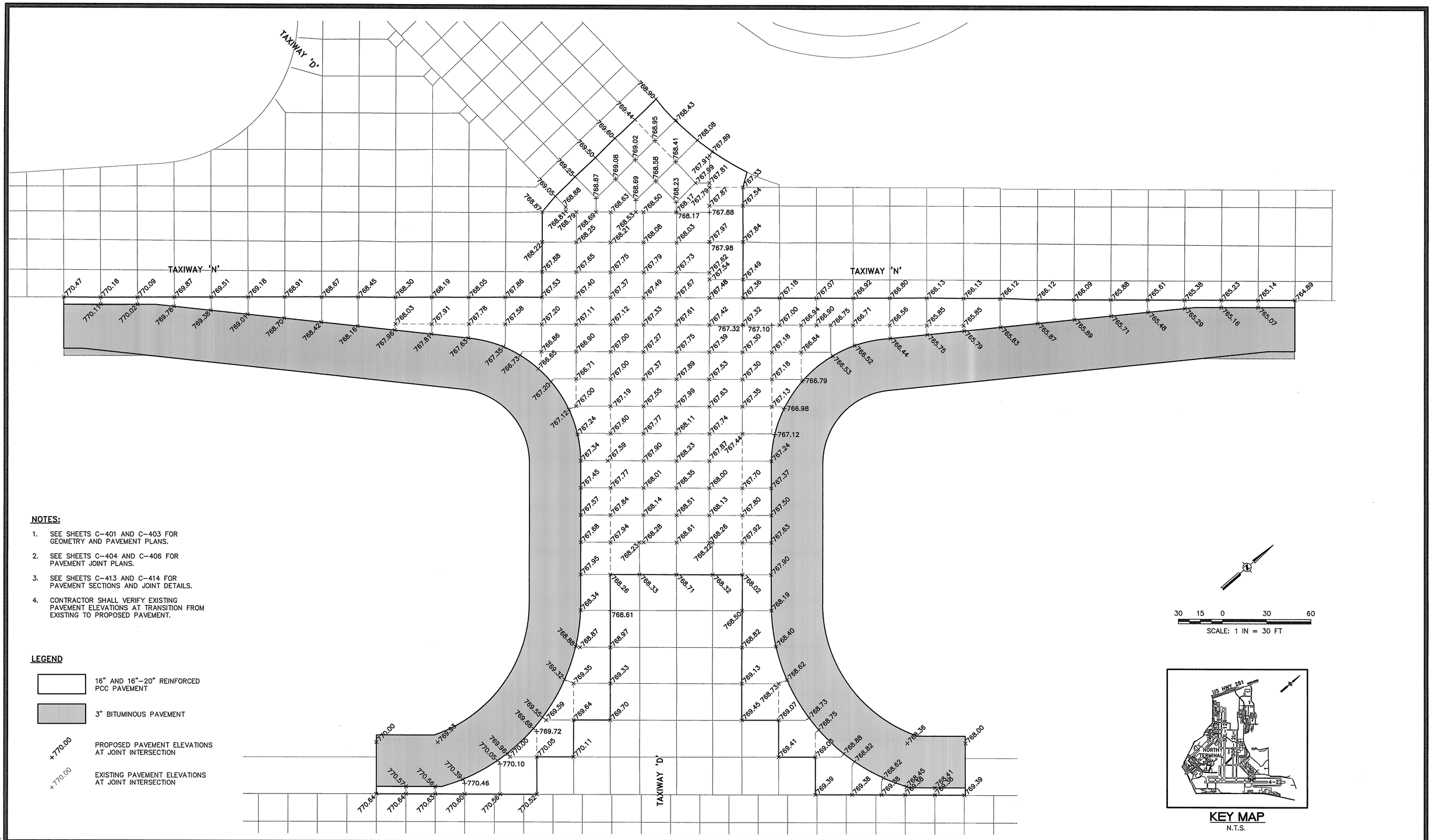

NOTES:

1. SEE SHEETS C-401 AND C-403 FOR GEOMETRY AND PAVEMENT PLANS.
2. SEE SHEETS C-404 AND C-406 FOR PAVEMENT JOINT PLANS.
3. SEE SHEETS C-413 AND C-414 FOR PAVEMENT SECTIONS AND JOINT DETAILS.
4. CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT TRANSITION FROM EXISTING TO PROPOSED PAVEMENT.

LEGEND

- 16" AND 16"-20" REINFORCED PCC PAVEMENT
- 3" BITUMINOUS PAVEMENT
- +770.00 PROPOSED PAVEMENT ELEVATIONS AT JOINT INTERSECTION
- +770.00 EXISTING PAVEMENT ELEVATIONS AT JOINT INTERSECTION

KEY MAP
N.T.S.

No.	Revision	By	App.	Date
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ISSUE FOR BID

SAN ANTONIO AIRPORT SYSTEM

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Checked By:	TKD
Date:	12/03/2012
Scale:	AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

PAVEMENT ELEVATIONS 2

Project No.	33-00160	C.I.P. No.	0000	Sheet	C-408
		A.I.P. No.	0000		

LAST MODIFIED: Dec 06, 2012 - 12:49pm BY USER: escobedof
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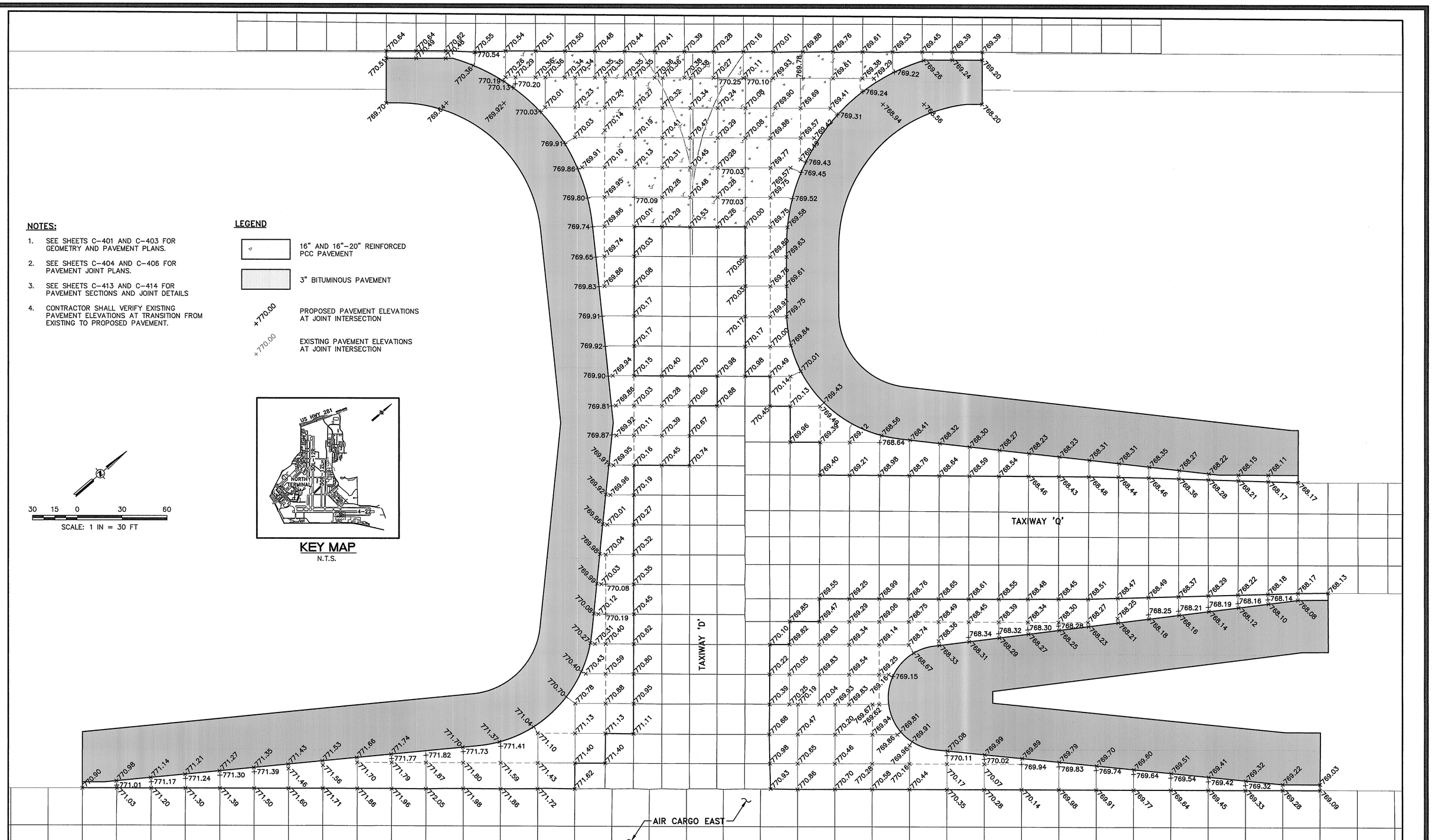

NOTES:

1. SEE SHEETS C-401 AND C-403 FOR GEOMETRY AND PAVEMENT PLANS.
2. SEE SHEETS C-404 AND C-406 FOR PAVEMENT JOINT PLANS.
3. SEE SHEETS C-413 AND C-414 FOR PAVEMENT SECTIONS AND JOINT DETAILS
4. CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT TRANSITION FROM EXISTING TO PROPOSED PAVEMENT.

LEGEND

16" AND 16"-20" REINFORCED PCC PAVEMENT

3" BITUMINOUS PAVEMENT

+770.00 PROPOSED PAVEMENT ELEVATIONS AT JOINT INTERSECTION

+770.00 EXISTING PAVEMENT ELEVATIONS AT JOINT INTERSECTION

30 15 0 30 60

SCALE: 1 IN = 30 FT

KEY MAP

N.T.S.

No.	Revision	By	App.	Date
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12/6/12

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Checked By: TKD
Date: 12/03/2012
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SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

PAVEMENT ELEVATIONS 3

Project No. 33-00160 | C.I.P. No. 0000 | A.I.P. No. 0000 | Sheet C-409

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DWG. LOCATION: V:\60039638_SAT\400-Technical\424-Sheets\RWY-321_Exten-PH4 - REBID\
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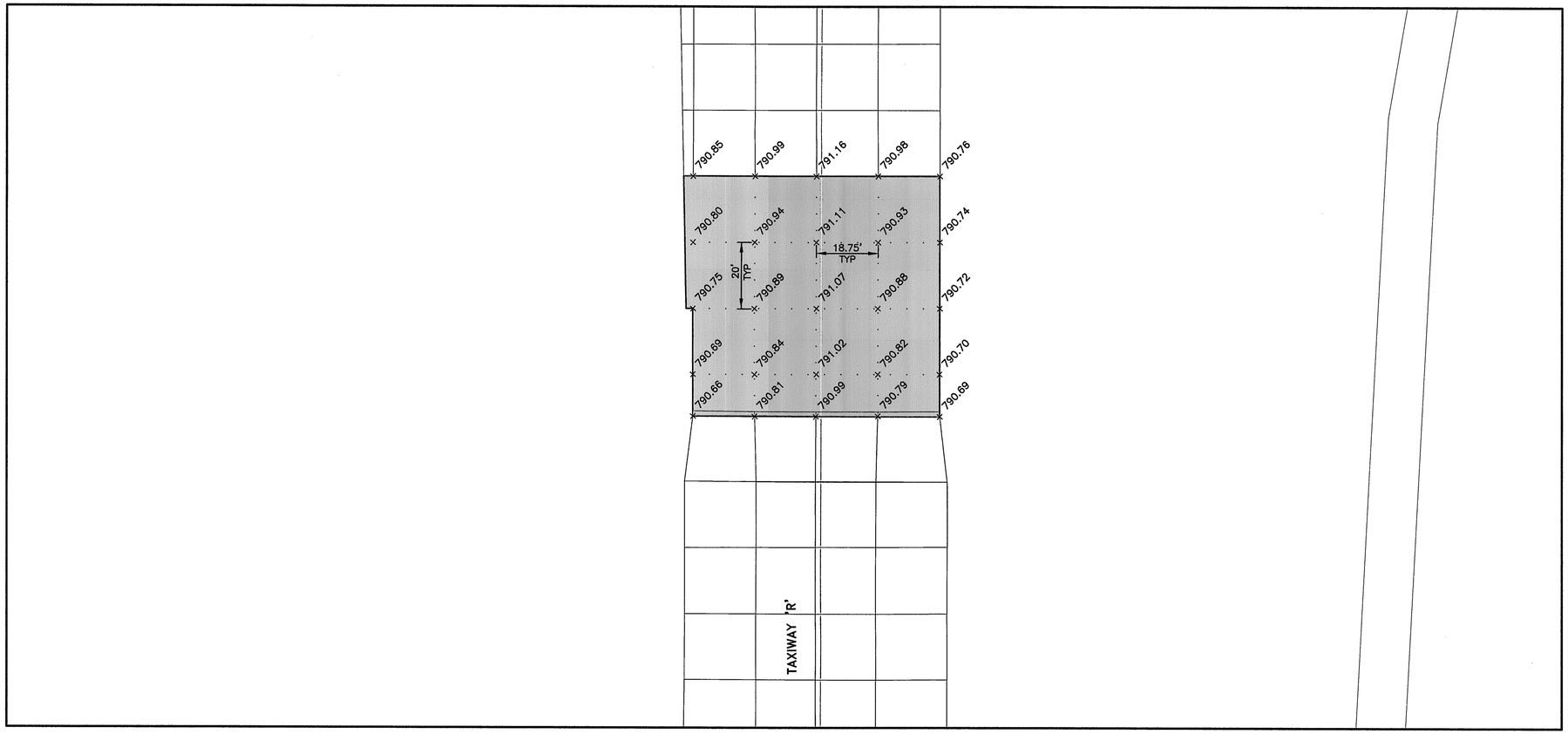
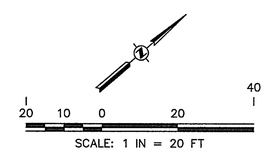
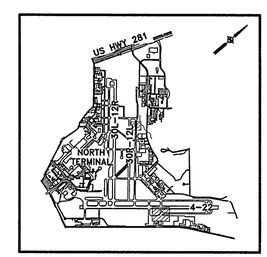


TAXIWAY 'R' RECONSTRUCTION

SCALE: 1" = 20'





KEY MAP

N.T.S.

NOTES:

1. SEE SHEETS C-401 AND C-403 FOR GEOMETRY AND PAVEMENT PLANS.
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LEGEND

- 16" AND 16"-20" REINFORCED PCC PAVEMENT
- 3" BITUMINOUS PAVEMENT
- +770.00 — PROPOSED PAVEMENT ELEVATIONS AT JOINT INTERSECTION
- +770.00 — EXISTING PAVEMENT ELEVATIONS AT JOINT INTERSECTION

No.	Revision	By	App.	Date
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STATE OF TEXAS — GUO-PIN FUAN — 81466 — REGISTERED PROFESSIONAL ENGINEER — 12/6/12

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Drawn By: CRJ/FE/GWS
Checked By: TKD
Date: 12/03/2012
Scale: AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

PAVEMENT ELEVATIONS 4

Project No. 33-00160 | C.I.P. No. 0000 | A.I.P. No. 0000 | Sheet C-410

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DWG. LOCATION: V:\60039638_SAT\400-Technical\424-Sheets\RWY-321_Exten-PH4 - REBID\
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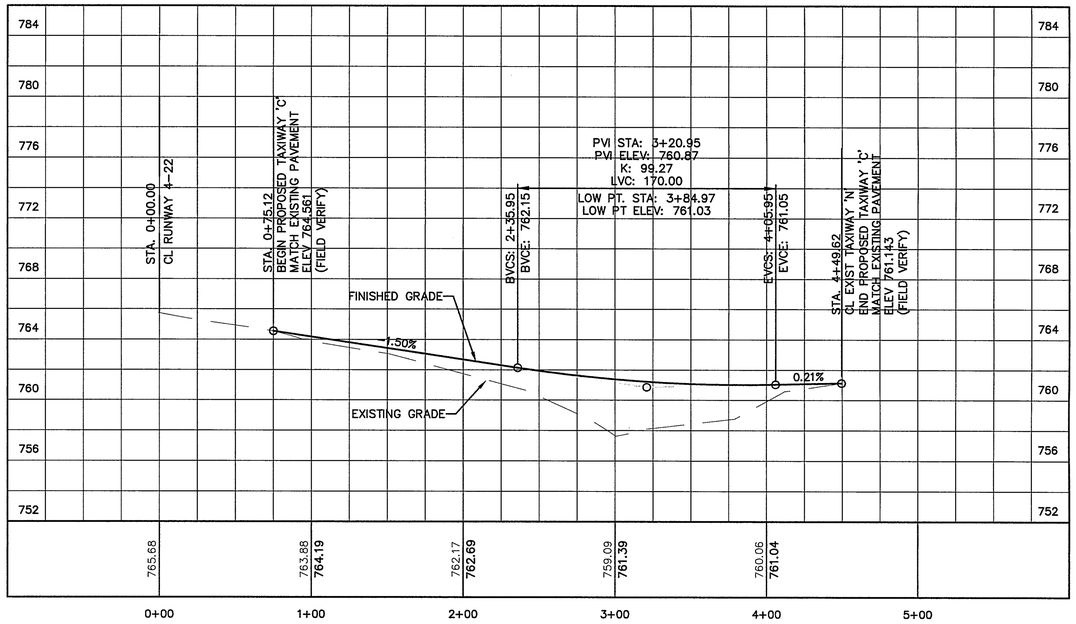
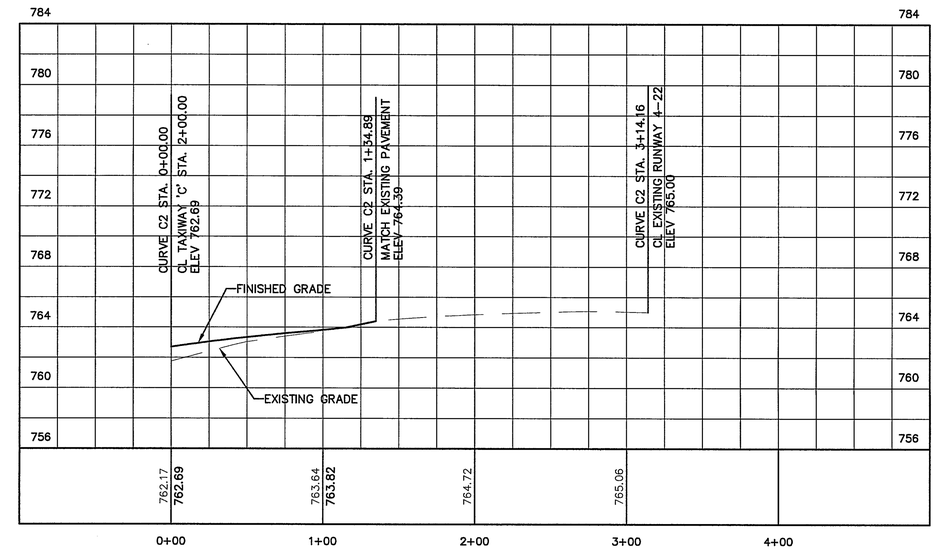


TAXIWAY 'C' PROFILE
1"=50' H 1"=5' V



CURVE C2 PROFILE
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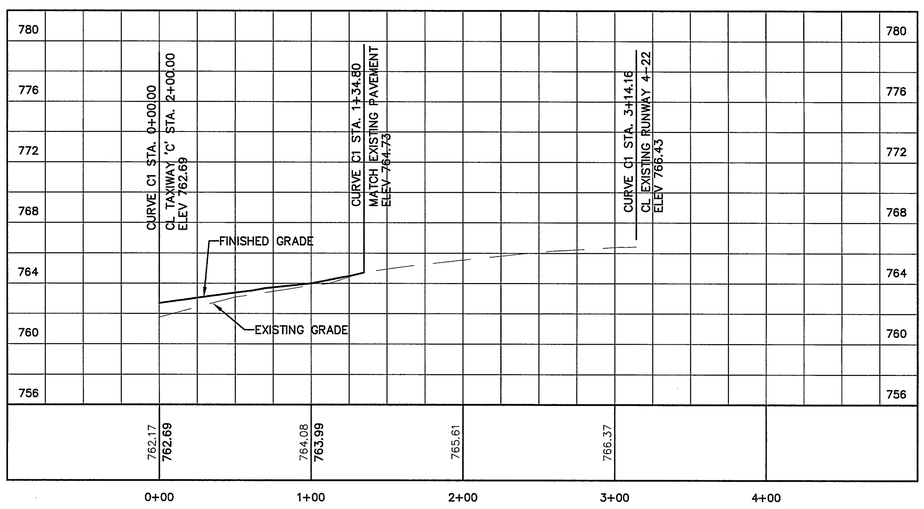

CURVE C1 PROFILE
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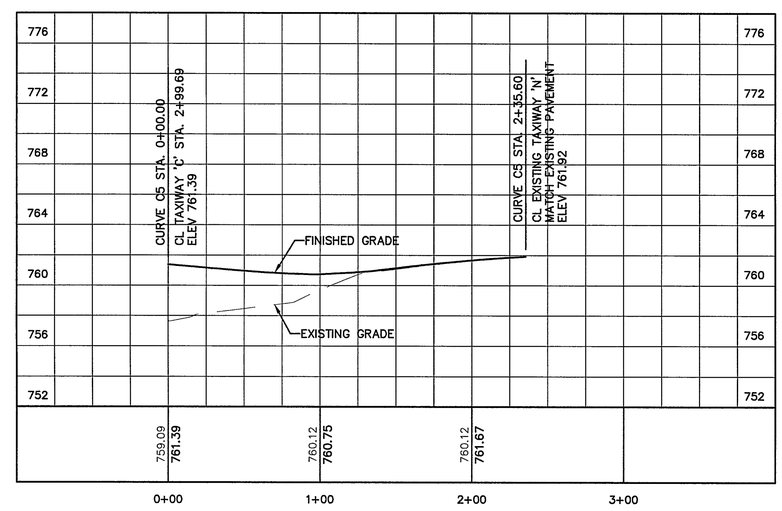

CURVE C5 PROFILE
1"=50' H 1"=5' V

No.	Revision	By	App.	Date
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SAN ANTONIO AIRPORT SYSTEM

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STATE OF TEXAS
GUO-PIN FUAN
81466
REGISTERED PROFESSIONAL ENGINEER
2/6/12

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Drawn By:	CRJ/FE/GWS
Checked By:	TKD
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Scale:	AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

TAXIWAY PROFILES 1

Project No.	33-00160	C.I.P. No.	0000	Sheet	C-411
		A.I.P. No.	0000		

LAST MODIFIED: Dec 06, 2012 – 12:50pm BY USER: escobedof
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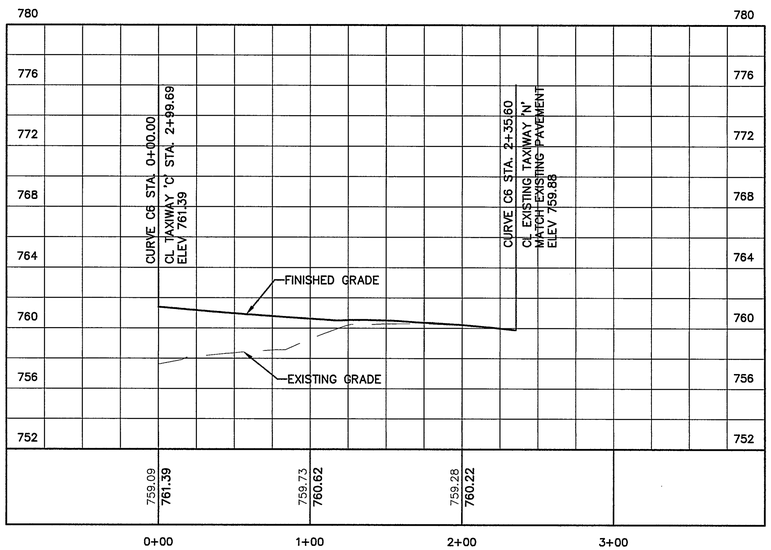
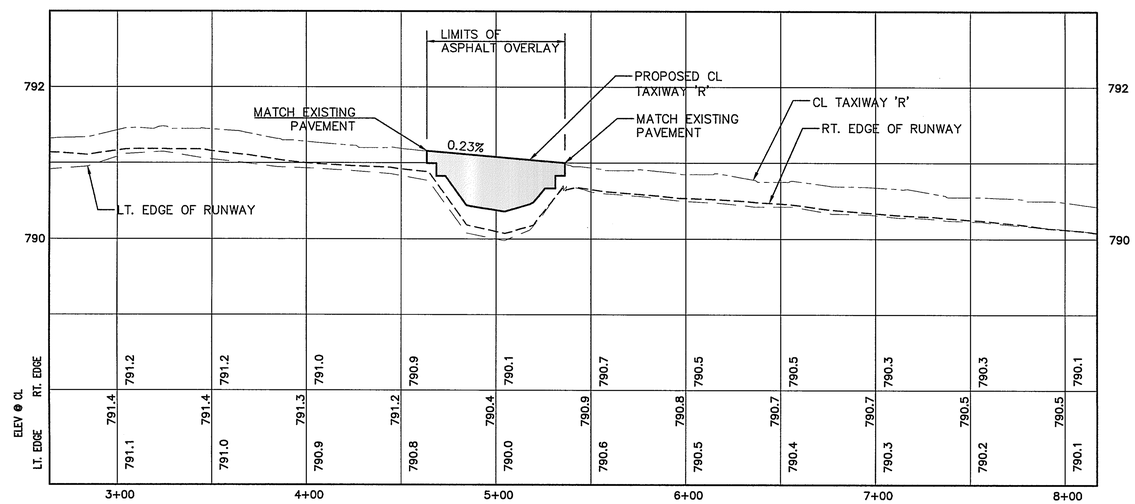
DWG. NAME: SAT-RW321-C-411.dwg



CURVE C6 PROFILE
1"=50' H 1"=5' V



TAXIWAY 'R' PROFILE
1"=40' H 1"=1' V

No.	Revision	By	App.	Date
	ISSUE FOR BID			01-25-13

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SAN ANTONIO AIRPORT SYSTEM

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Checked By: TKD
Date: 12/03/2012
Scale: AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

TAXWAY PROFILES 2

Project No. 33-00160 | C.I.P. No. 0000 | A.I.P. No. 0000 | Sheet C-412

LAST MODIFIED: Dec 06, 2012 - 12:50pm BY USER: escobedof
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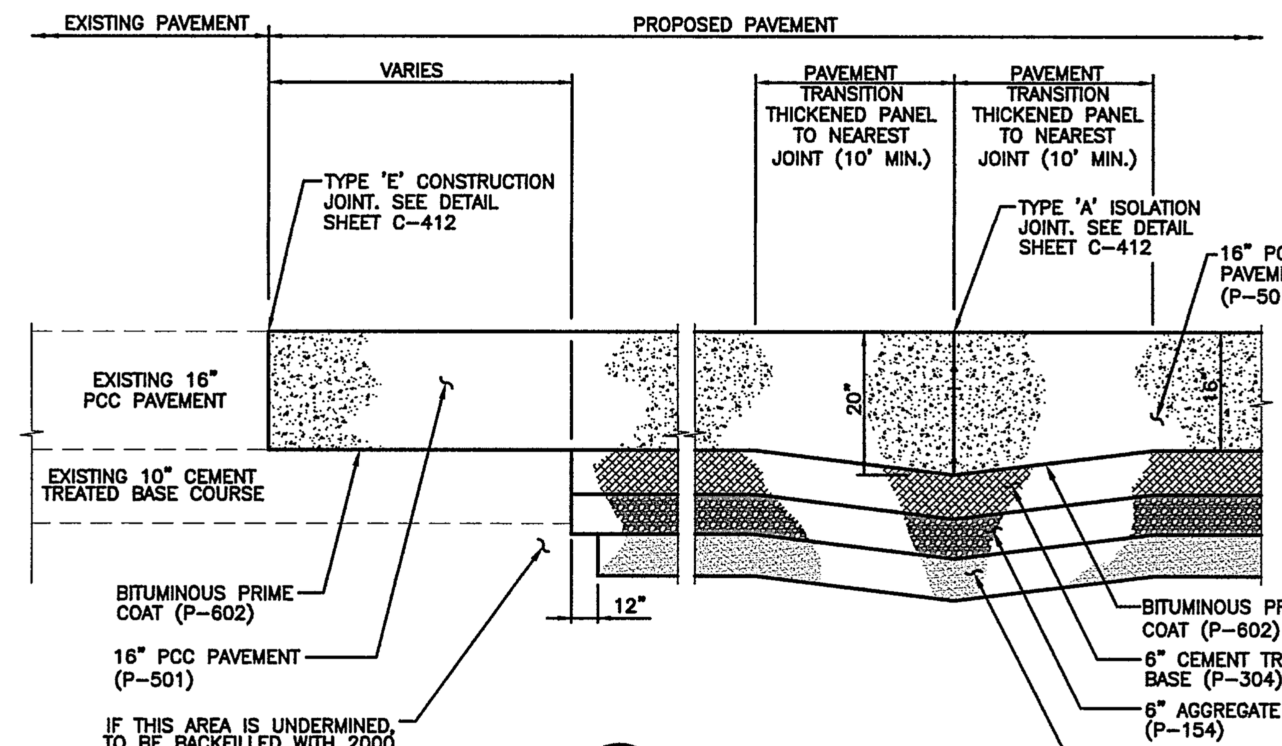

A SECTION
C-401 NTS
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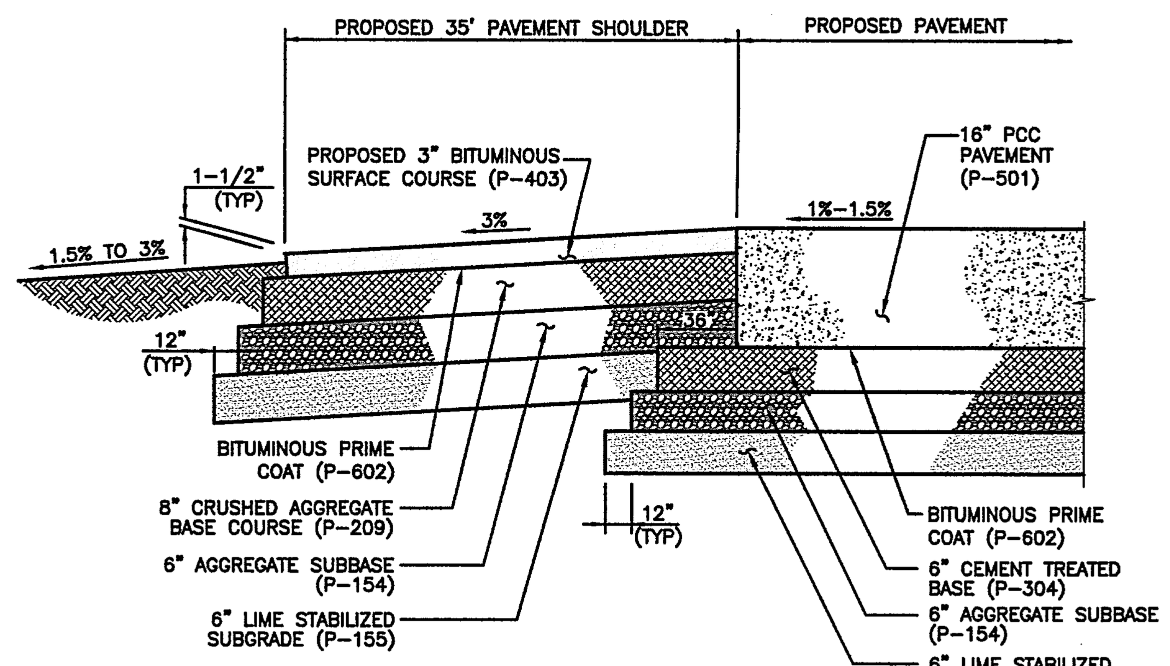

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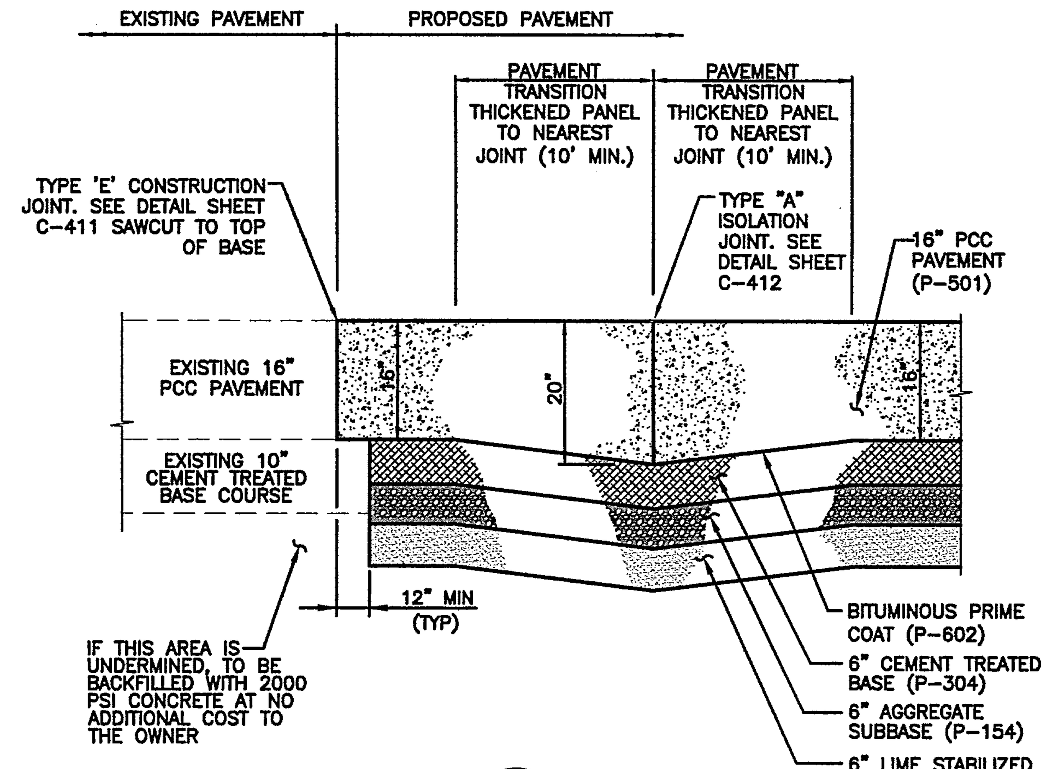
C-401 NTS



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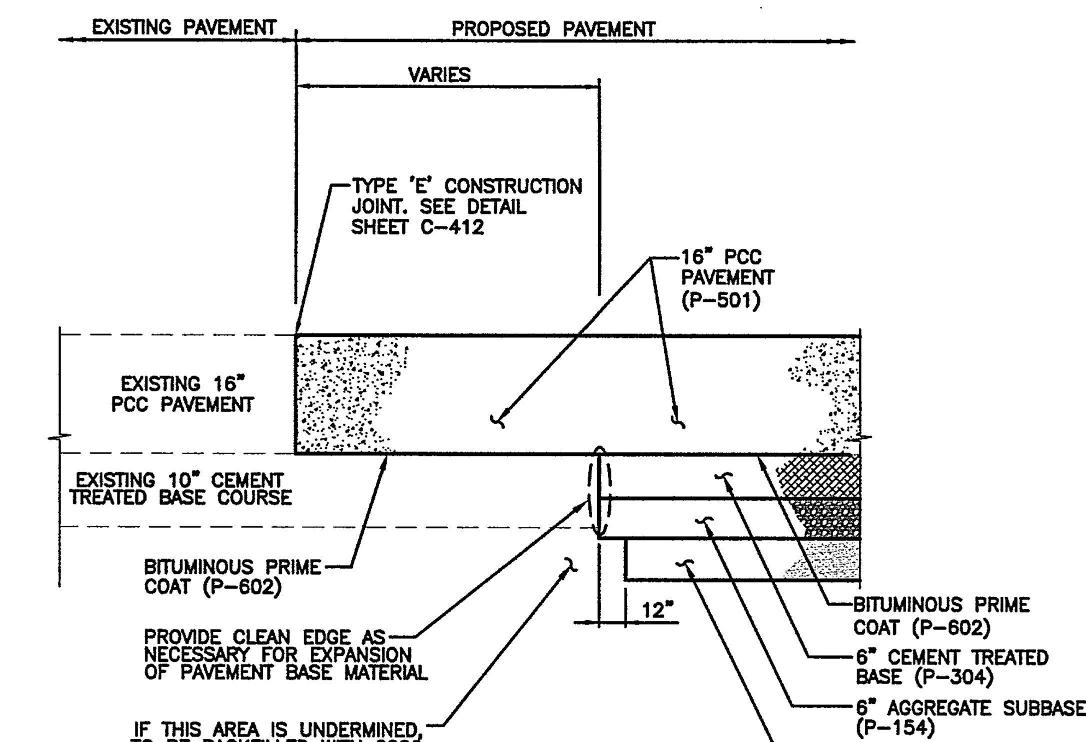
C-401 NTS



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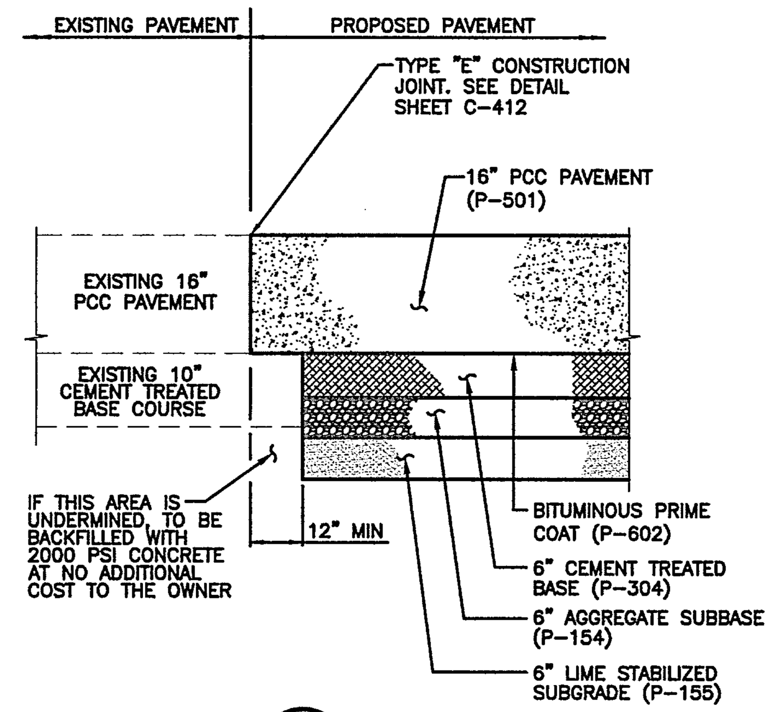
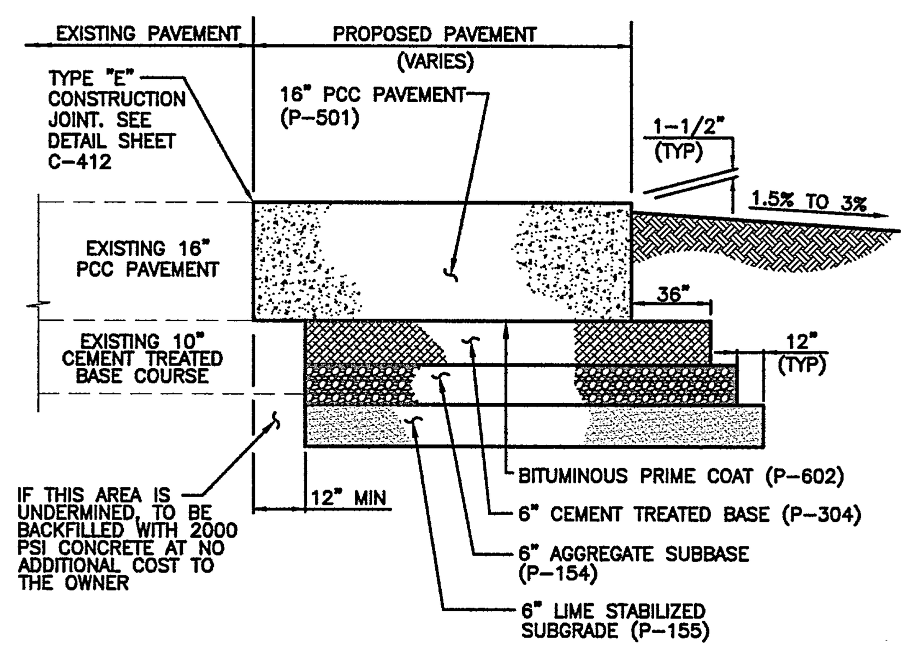
C-401 NTS



E SECTION
C-401 NTS
C-402



F SECTION
C-401 NTS
C-402
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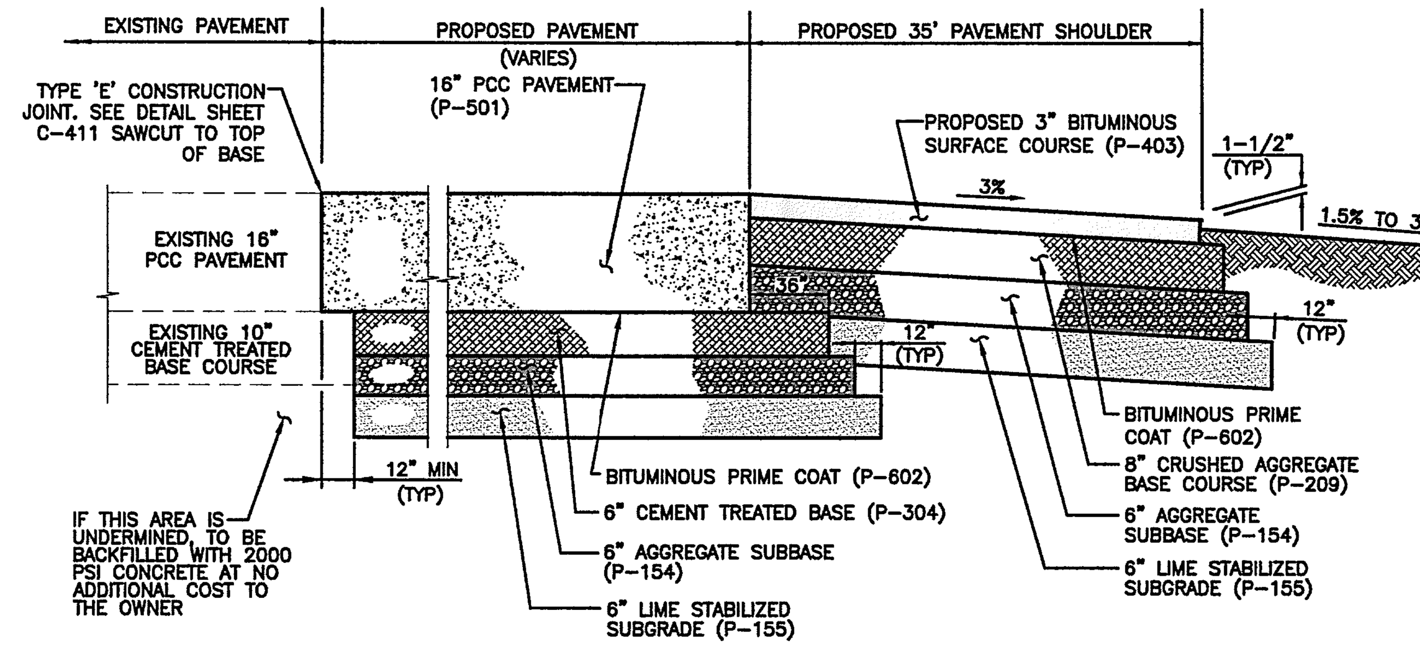

G SECTION
C-401 NTS
C-402
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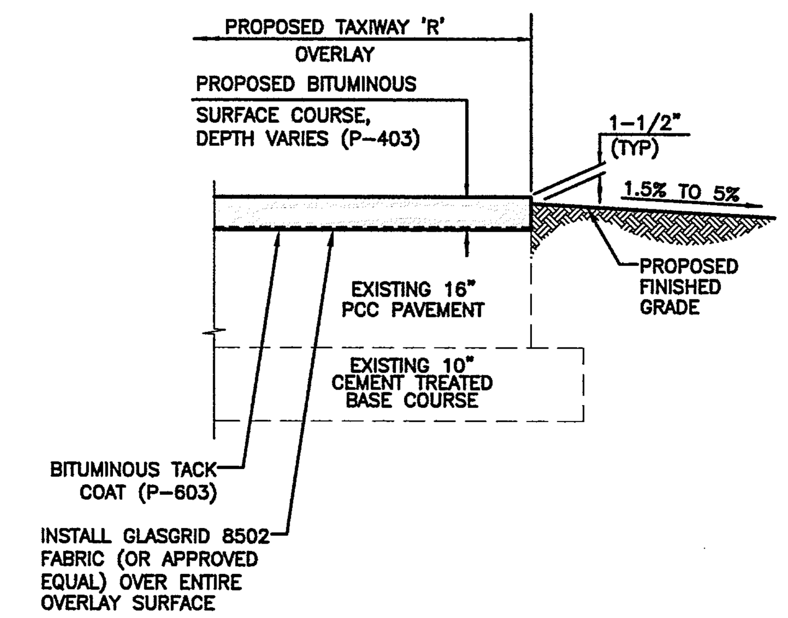

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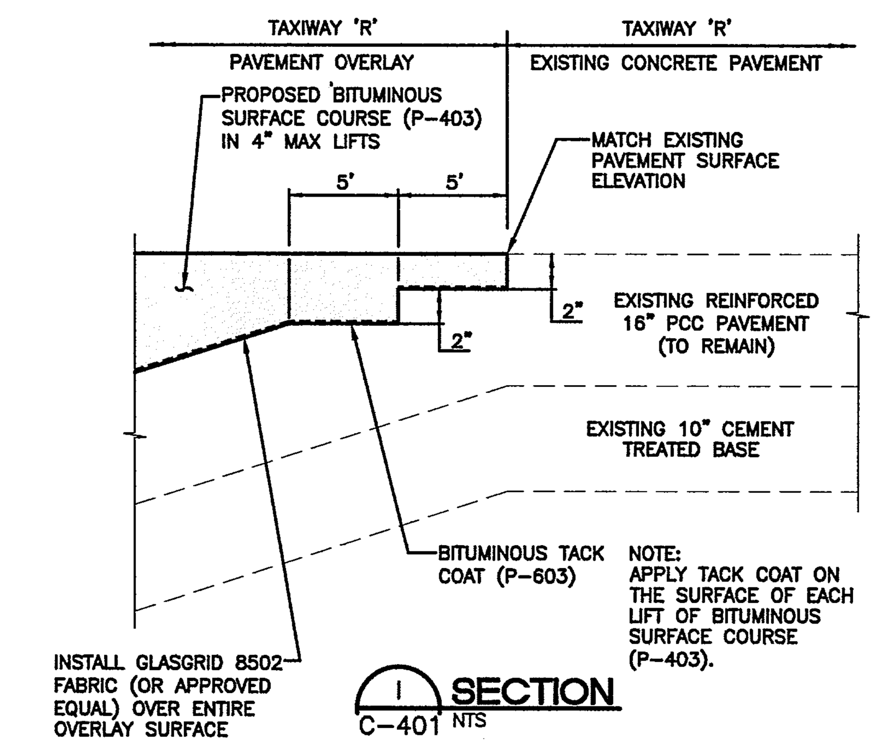
C-401 NTS



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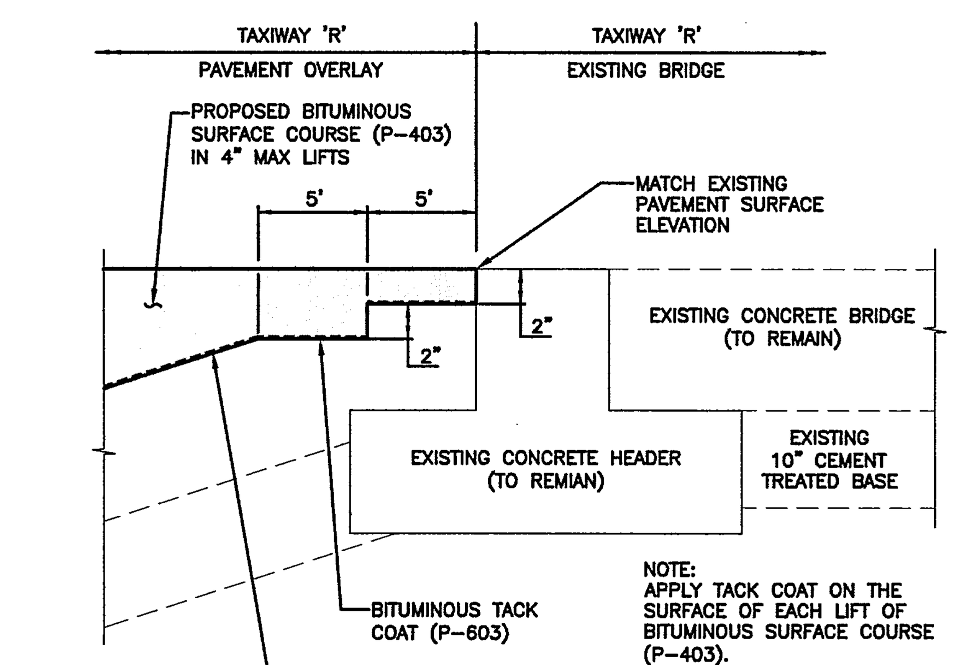
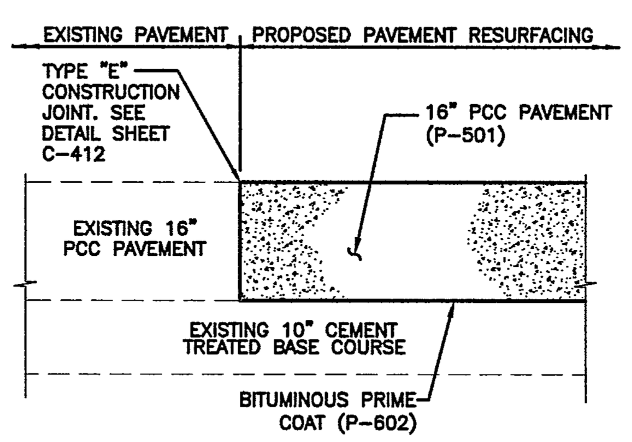


J SECTION
C-401 NTS



K SECTION
C-402 NTS
C-401
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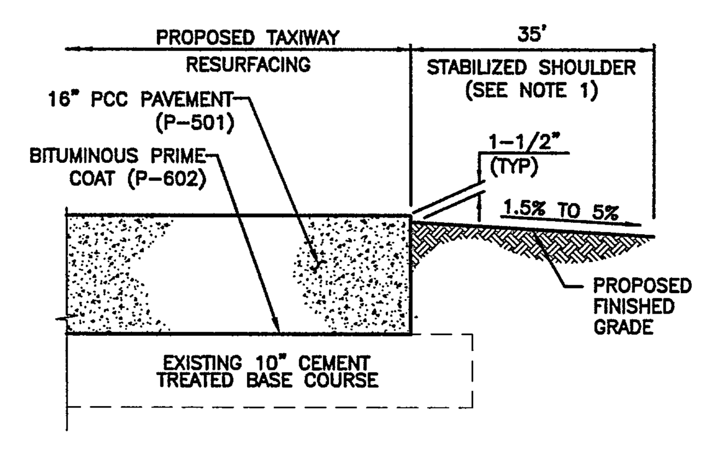
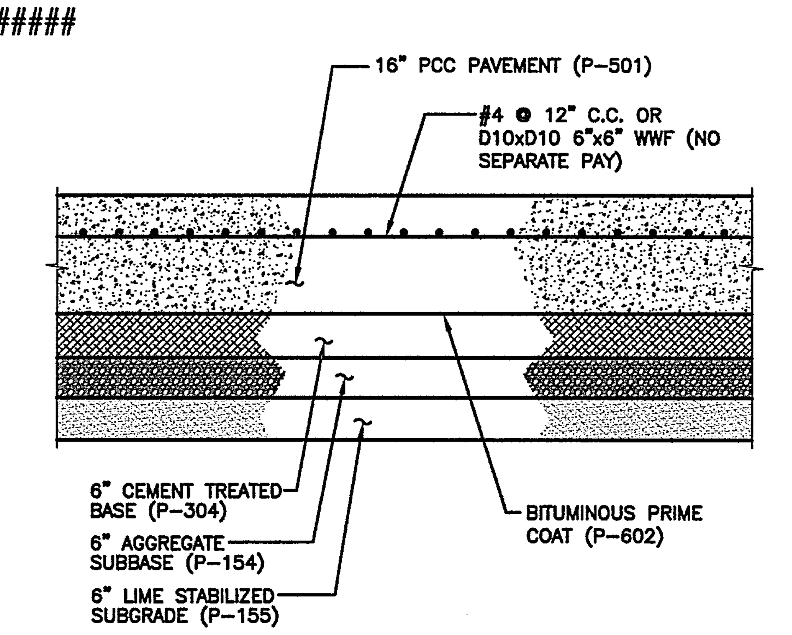
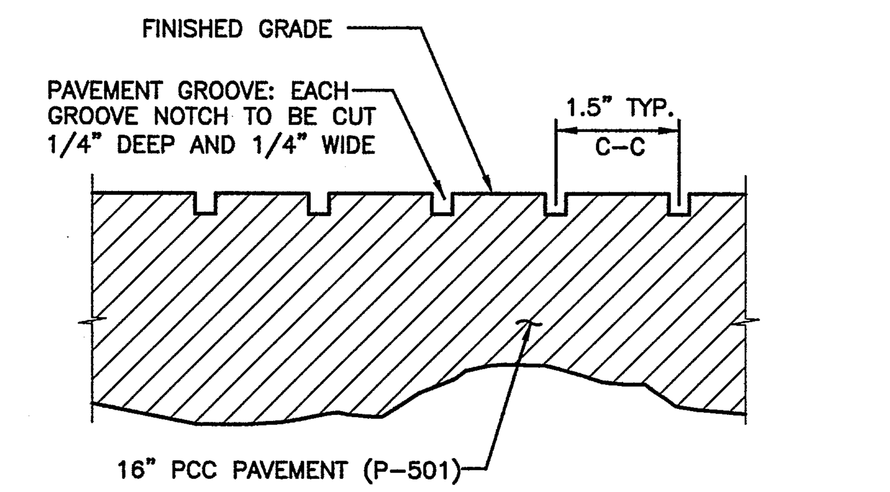


L SECTION
C-402 NTS



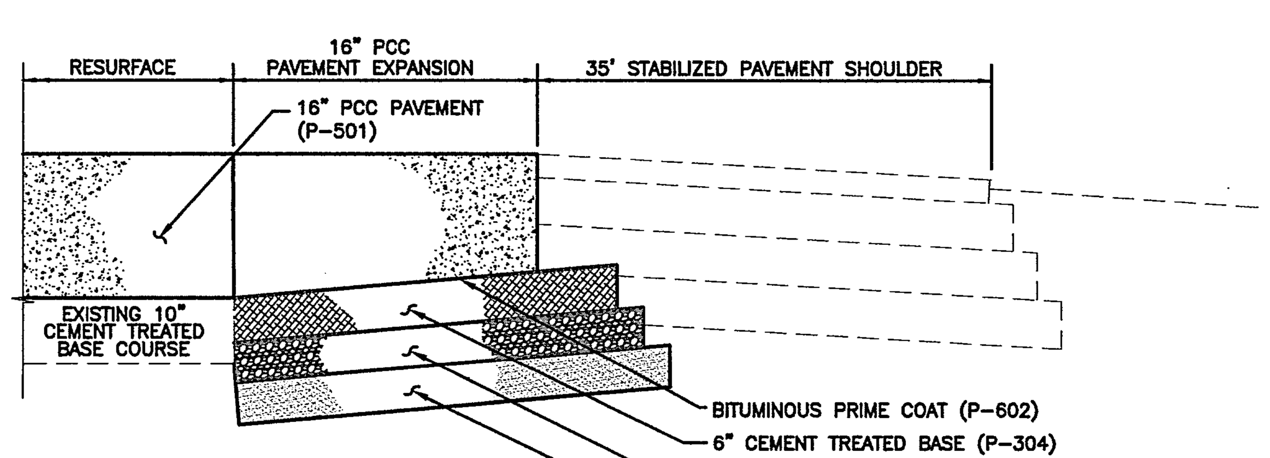
TYPICAL PROPOSED FULL STREGNTH REINFORCED 16" PCC PAVEMENT SECTION
NTS



TYPICAL SAWED GROOVE PATTERN
NTS

GROOVING NOTES:

1. SAW-CUT GROOVING OPERATIONS AND METHODS TO COMPLY WITH ITEM P-621.
2. ALL GROOVING OPERATIONS TO BE PERFORMED DURING OFF-PEAK NIGHTTIME HOURS, BETWEEN 10:00 PM. AND 6:00 AM.
3. ALL GROOVING OPERATIONS SHALL BE PERFORMED AFTER THE SPECIFIED 14 DAY CURING PERIOD FOR THE BITUMINOUS PAVEMENT, PRIOR TO FINAL PAVEMENT STRIPING.
4. CONTRACTOR SHALL GROOVE A TEST SECTION TO DEMONSTRATE THAT HIS EQUIPMENT WILL PROVIDE THE REQUESTED CONFIGURATION WITHIN THE PRESCRIBED TOLERANCES.
5. CONTINUOUS CLEAN-UP THROUGHOUT THE GROOVING OPERATION WILL BE REQUIRED OF THE CONTRACTOR. FAILURE TO REMOVE THE MATERIAL MAY CREATE CONDITIONS THAT WILL BE HAZARDOUS TO AIRCRAFT.
6. GROOVES SHALL BE SAWED NO CLOSER THAN 6-INCHES AND NO MORE THAN 18-INCHES FROM THE IN-PAVEMENT LIGHT FIXTURES.
7. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY LIGHTING, INLETS, OR OTHER AIRPORT EQUIPMENT DAMAGED BY THE GROOVING OPERATIONS, AT NO COST TO THE OWNER.



M SECTION
C-402 NTS
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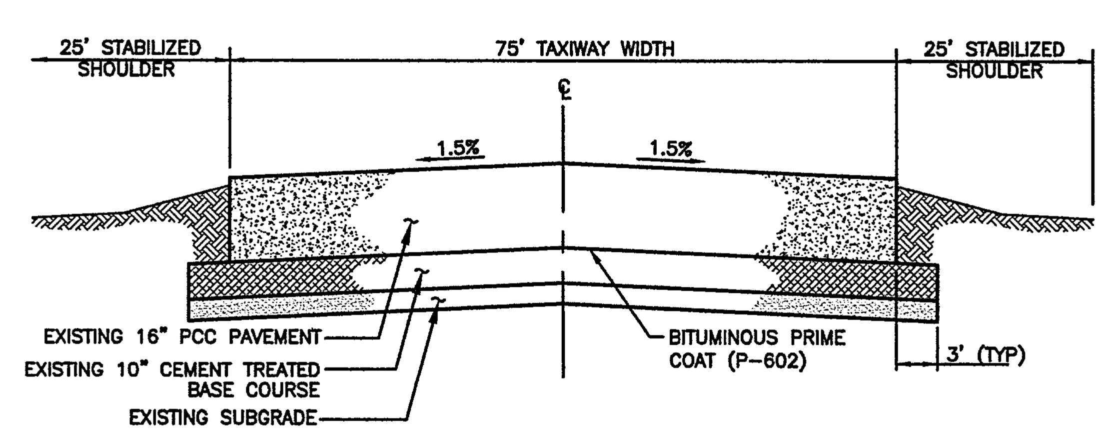
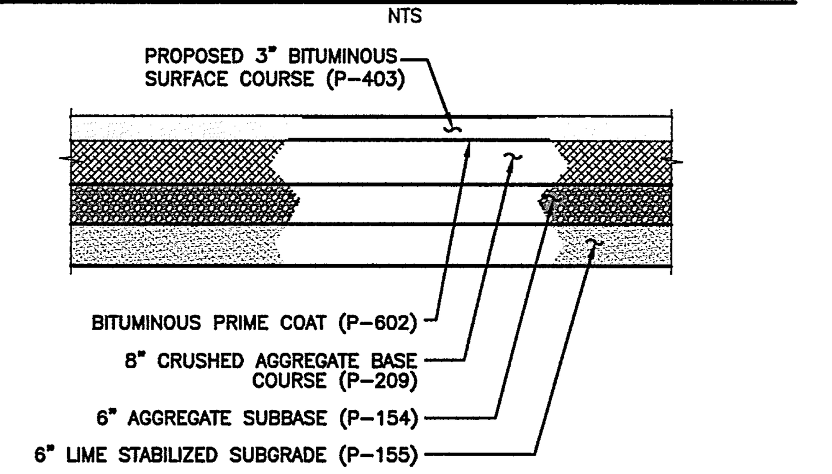


TYPICAL EXISTING TAXIWAY SECTION
NTS



TYPICAL PROPOSED SHOULDER 3" BITUMINOUS SHOULDER PAVEMENT SECTION
NTS

NOTE: ALL PROPOSED AIRFIELD PCC PAVEMENT IS TO BE REINFORCED.

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Designed By: GPF
Drawn By: CRJ/FE/GWS
Checked By: TKD
Date: 12/03/2012
Scale: AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

PAVEMENT SECTIONS

Project No. 33-00160
C.I.P. No. 0000
A.I.P. No. 0000
Sheet C-413

LAST MODIFIED: Dec 06, 2012 - 12:51pm BY USER: escobedof
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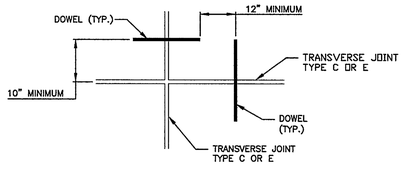
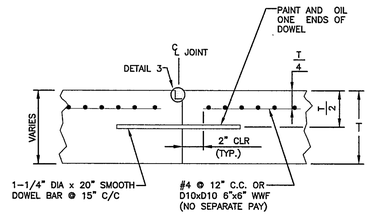


TYPICAL DOWEL POSITIONING

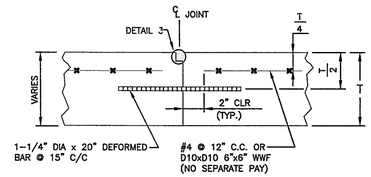
NOT TO SCALE



1. WHERE ONE SIDE OF THE JOINT IS AN EXISTING PCC PAVEMENT, DOWEL IS TO BE EPOXIED INTO EXISTING PAVEMENT.

TYPE E – DOWELED CONSTRUCTION JOINT

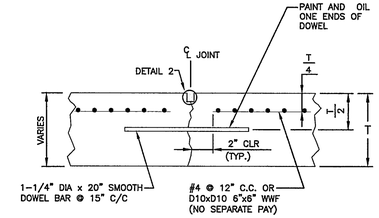
NOT TO SCALE



1. WHERE ONE SIDE OF THE JOINT IS AN EXISTING PCC PAVEMENT, DOWEL IS TO BE EPOXIED INTO EXISTING PAVEMENT.

TYPE E1 – TIED CONSTRUCTION JOINT

NOT TO SCALE

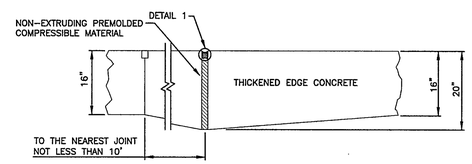


TYPE C – DOWELED CONTRACTION JOINT

NOT TO SCALE

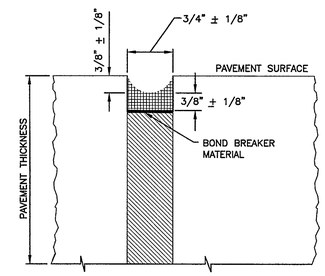
DOWEL AND JOINT NOTES:

1. DRILLING METHOD FOR DOWELS SHALL BE CAPABLE OF MAINTAINING DRILL HOLES PARALLEL TO THE CONCRETE SURFACE AND NORMAL TO THE JOINT LINE WITHIN 1/4"± AT THE END OF THE DOWEL BAR. DRILL HOLES SHALL BE ACCURATELY LAID OUT SO THAT THE MAXIMUM DEVIATION DOES NOT EXCEED 1". DRILL HOLE DIAMETER TO BE OF SUFFICIENT SIZE TO ACCEPT THE TYPE AND SIZE DOWEL REQUIRED.
2. AFTER THE DRILLING IS COMPLETE AND PRIOR TO THE INSTALLATION OF THE DOWELS, THE HOLES SHALL BE THOROUGHLY CLEANED TO REMOVE DRILLING DUST, CONCRETE CHIPS AND ANY MATERIAL DETRIMENTAL TO DEVELOPING BOND.
3. BONDING MATERIAL SHALL BE APPLIED UNIFORMLY TO THE ENTIRE CIRCUMFERENCE OF THE DOWEL HOLE SURFACE, AND SUFFICIENT MATERIAL PLACED IN THE HOLE SO THAT A SLIGHT AMOUNT WILL BE FORCED FROM AROUND THE ENTIRE CIRCUMFERENCE WHEN THE DOWEL IS INSERTED AND TAPPED TO THE CORRECT POSITION. SMALL WEDGES MAY BE USED TO SUPPORT THE DOWEL IN CORRECT ALIGNMENT UNTIL THE MATERIAL HARDENS. EXCESS BONDING MATERIAL TO BE REMOVED WITH TROWEL.
4. THE TOLERANCE FOR DOWEL ALIGNMENT IN EITHER THE HORIZONTAL OR VERTICAL PLANE IS 1/4 INCH PER FOOT.

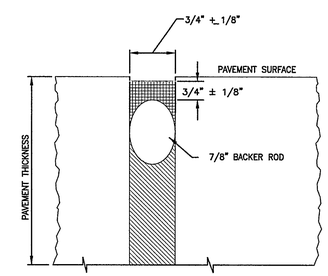


TYPE A–THICKENED EDGE

NOT TO SCALE



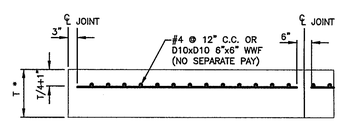
TYPE 1



TYPE 2

ISOLATION JOINTS, DETAIL 1

NOT TO SCALE



T = TOTAL PCC PAVEMENT COURSE THICKNESS

* THICKNESS VARIES ADJACENT TO TYPE 'B' JOINTS

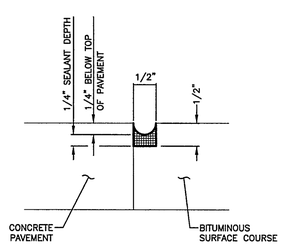
REINFORCED CONCRETE PAVEMENT

NOT TO SCALE

LEGEND:

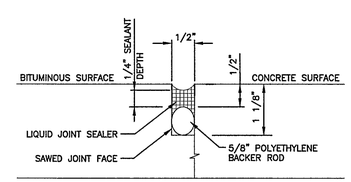
- SEALANT (P-605)
- BACKER ROD (CLOSED-CELL RESILIENT FOAM OR SPONGE RUBBER)
- BOND BREAKER MATERIAL
- NON-EXTRUDING PREMOLDED COMPRESSIBLE FILLER

T = TOTAL PCC PAVEMENT COURSE THICKNESS



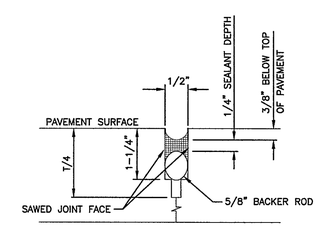
DETAIL 4
BITUMINOUS JOINT PAVEMENT

NOT TO SCALE

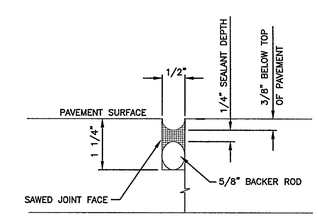


DETAIL 5
BITUMINOUS JOINT PAVEMENT

NOT TO SCALE



DETAIL 2
CONTRACTION JOINTS TYPE C



DETAIL 3
CONSTRUCTION JOINTS TYPES E & E1

DETAILS OF JOINTS IN RIGID PAVEMENT

NOT TO SCALE

No.	Revision	By	App.	Date
	ISSUE FOR BID			01-25-13

ISSUE FOR BID

SAN ANTONIO AIRPORT SYSTEM

AECOM
TEXAS REGISTERED ENGINEERING FIRM F-3580
5757 Woodway Drive
Suite 101 West
Houston, Texas 77057
Tel: 713.267.3200
Fax: 713.267.3278

STATE OF TEXAS — GUO-PIN FUAN — 81466 — REGISTERED PROFESSIONAL ENGINEER — 06/12/12

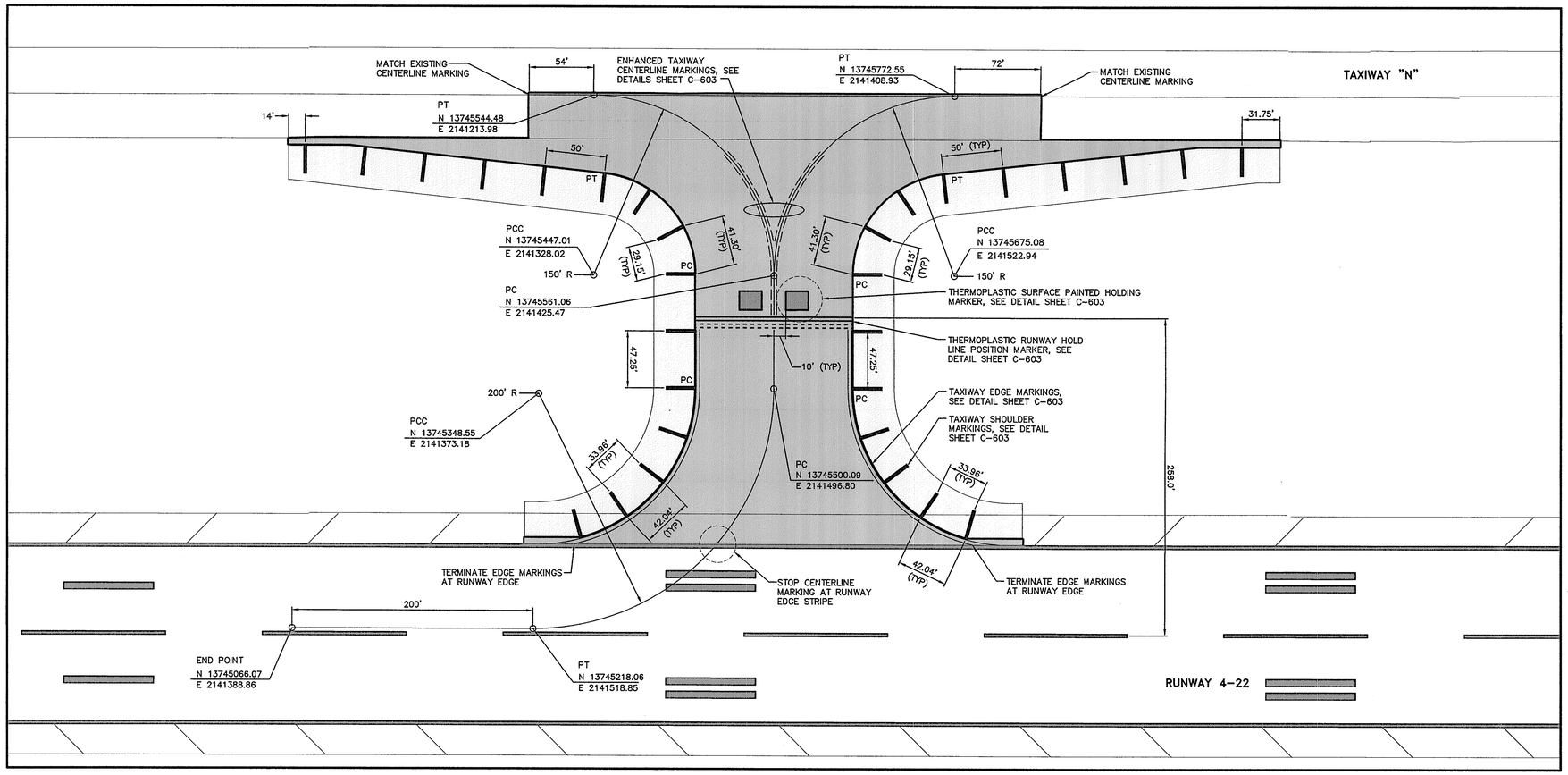
Designed By: GPF
Drawn By: CRJ/FE/GWS
Checked By: TKD
Date: 12/03/2012
Scale: AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

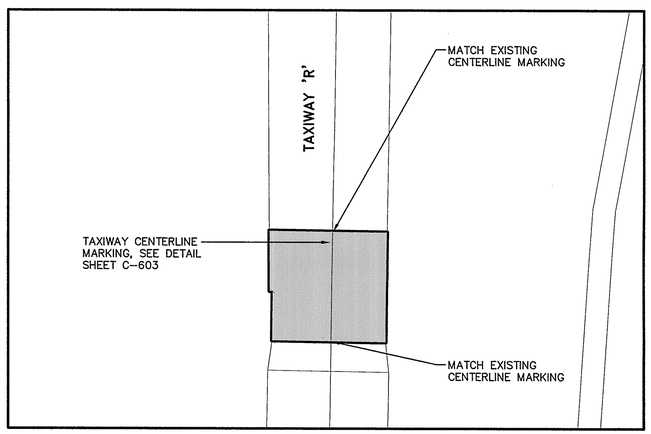
JOINT DETAILS

Project No. 33-00160 | C.I.P. No. 0000 | A.I.P. No. 0000 | Sheet C-414

LAST MODIFIED: Dec 06, 2012 – 12:51pm BY USER: eschdorf
DWG. LOCATION: V:\60039638_SAT\400-Technical\24-Sheets\RWY-321_Exten-PH4 – REBID\
DWG. NAME: SAT-RWY321-C-414.dwg



TAXIWAY 'C' CONSTRUCTION



TAXIWAY 'R' RECONSTRUCTION

NOTES:

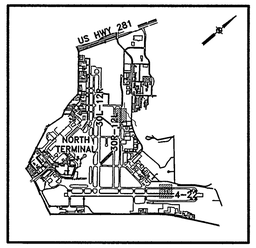
1. ALL MARKINGS AND MARKING APPLICATIONS SHALL BE IN ACCORDANCE WITH AC 150/5370-10F, ITEM P-620 AND AC 150/5340-1K.
2. ALL RUNWAY MARKINGS ARE TO BE WHITE AND ALL TAXIWAY MARKINGS ARE TO BE YELLOW. REFLECTIVE PAINT TO BE USED FOR ALL RUNWAY AND TAXIWAY MARKINGS. ALL MARKINGS ON CONCRETE PAVEMENT SHALL BE OUTLINED IN BLACK.
3. TIE ALL PROPOSED TAXIWAY CENTERLINE MARKINGS TO EXISTING TAXIWAY CENTERLINE MARKINGS.
4. TIE ALL PROPOSED TAXIWAY EDGE MARKINGS TO EXISTING TAXIWAY EDGE MARKINGS.
5. SEE SHEETS C-603 FOR PAVEMENT MARKING DETAILS,
6. ALL MARKINGS FOR EDGE AND CENTERLINES ARE TO BE PLACED IN ACCORDANCE WITH THE GEOMETRIC EDGE OR CENTERLINE OF PAVEMENTS AS INDICATED IN THE GEOMETRY PLANS, SHEETS C-401, AND C-404.
7. SOME MARKINGS IN THIS SHEET ARE EXAGGERATED AND NOT TO SCALE OR NOT FULLY SHOWN FOR CLARITY.
8.. TAXIWAY EDGE MARKINGS ARE TO BE PLACED ONLY FROM THE ENHANCED RUNWAY HOLD LINE MARKINGS TO THE EXISTING RUNWAY EDGE MARKINGS.
9. TYPICAL DIMENSIONS SHOWN FOR TAXIWAY SHOULDER MARKINGS AT TAXIWAY FILLETS ARE ARE SPECIFIC FOR THAT TAXIWAY FILLET ONLY.

LEGEND

LIMITS OF PAVEMENT IMPROVEMENTS

50 25 0 50

SCALE: 1 IN = 50 FT



KEY MAP

N.T.S.

No.	Revision	By	App.	Date
	ISSUE FOR BID			01-25-13

ISSUE FOR BID

SAN ANTONIO AIRPORT SYSTEM

AECOM
TEXAS REGISTERED ENGINEERING FIRM F-3580
5757 Woodway Drive
Suite 101 West
Houston, Texas 77057
Tel: 713.267.3200
Fax: 713.267.3278

STATE OF TEXAS — GUO-PIN FUAN — 81466 — REGISTERED PROFESSIONAL ENGINEER — 12/6/12

Designed By:	GPF
Drawn By:	CRJ/FE/GWS
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Scale:	AS SHOWN

SAN ANTONIO INTERNATIONAL AIRPORT
RUNWAY 3-21 EXTENSION - NEW EXIT TAXIWAY, TAXIWAY REPAIRS, AND PERIMETER RD RECONSTRUCTION - RE-BID

PAVEMENT MARKING PLAN 1

Project No. 33-00160 | C.I.P. No. 0000 | A.I.P. No. 0000 | Sheet C-601

LAST MODIFIED: Dec 06, 2012 - 1:19pm BY USER: escobedo/
DWG. LOCATION: V:\60039838_SAT\600-Technical\424-Sheets\RWY-321_Exten-PH4 - REBID\
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