



CI APRON İNŞAAT



CI APRON İNŞAAT

HAKKIMIZDA

TÜRKİYE’NİN YANI SIRA ORTA DOĞU VE KUZAY AFRİKA’DA BİRÇOK HAVAALANI VE ÜSTYAPI PROJELERİNDE YER ALAN CI APRON İNŞAAT OLARAK KALİTELİ BETON KAPLAMA PROJELERİ, HAVALİMANI APRON VE PİST, BETON KAPLAMALARI, HER TÜRLÜ YAĞMUR SUYU, DRENAJ, İÇME SUYU HATLARI GİBİ ALTYAPI İŞLERİ, BETON KAPLAMALI KANAL YAPIM İŞLERİ, YÜZEY SERTLEŞTİRİCİLİ BETON KAPLAMALARI, KALIPLI BORDÜR BETON SİSTEMLERİ, FİNİŞERLİ BETONLAR, VİBRATÖRLÜ BETONLAR, HELİKOPTER PERDAHLI BETON ALANLARINDA PROFESYONEL KADROSU VE YÖNETİM EKİBİ İLE SİZ DEĞERLİ MÜŞTERİLERİMİZE KALİTELİ HİZMET SUNMAKTAYIZ.

YURT İÇİ VE YURT DIŞI PROJELERİNDE PROFESYONELLİKTEN VE KALİTEDEN ÖDÜN VERMEYEN YAPISI İLE CI APRON İNŞAAT, KALİTE MERKEZLİ ÇÖZÜM ORTAĞINIZDIR.



CI APRON İNŞAAT

MAKİNA EKİPMAN LİSTESİ

- 2015 MODEL WIRTGEN SP500 SLIPFORM FINISHER
- 2010 MODEL HEM 12 - 72 RIDING FORM FINISHER
 - 2010 MODEL VOLVO ASPAHLT FINISHER
 - 2010 MODEL HIDROMEK EXCAVATOR
 - 2010 MODEL BOMAG CYLINDIR
 - 2010 MODEL DUMPER TURKCS
 - WATER TANKER
 - COMPRESORS



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HEM RIDING FORM



CI APRON İNŞAAT



WIRTGEN SP500



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DEVAM EDEN PROJELERİMİZ

- ADANA ÇUKUROVA BÖLGESEL HAVALİMANI
1.300.000 M2
- MALATYA 7. ANA JET ÜSSÜ HAVALİMANI
330.000M2
- KONYA KAYACIK LOJİSTİK MERKEZİ
480.000 M2



CI APRON İNŞAAT



KONYA KAYACIK LOJİSTİK MERKEZİ



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MALATYA 7. ANA JET ÜSSÜ KOMUTANLIĞI



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ADANA ÇUKUROVA BÖLGESEL HAVALİMANI



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ANAHTAR TESLİM ÜST YAPI PROJELERİ

- RAMADI - IRAQ ONCOLOGY HOSPITAL
- HILLA - IRAQ ONCOLOGY HOSPITAL
- BASRAH - IRAQ ONCOLOGY
HOSPITAL
- SÜLEYMANİYE - IRAQ HOSPITAL
- İZMİR ADATEPE APARTMENTS
COMPLEX



CI APRON İNŞAAT



RAMADI ONCOLOGY HOSPITAL



CI APRON ÎNŞAAT



RAMADI ONCOLOGY HOSPITAL



CI APRON ÎNŞAAT



RAMADI ONCOLOGY HOSPITAL



CI APRON İNŞAAT



RAMADI ONCOLOGY HOSPITAL



CI APRON İNŞAAT



RAMADI ONCOLOGY HOSPITAL



CI APRON İNŞAAT



BASRAH ONCOLOGY HOSPITAL



CI APRON İNŞAAT



BASRAH ONCOLOGY HOSPITAL



CI APRON İNŞAAT



HILLA ONCOLOGY HOSPITAL



CI APRON İNŞAAT



HILLA ONCOLOGY HOSPITAL



CI APRON İNŞAAT



HILLA ONCOLOGY HOSPITAL



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BİTEN YURT DIŞI PROJELERİ

- TUNUSIA HAVALİMANI
- DAMASCUS HAVALİMANI
- AŞGABAT HAVALİMANI
- RİYADH HAVALİMANI
- TBİLİSİ HAVALİMANI
- CİDDE HAVALİMANI



CI APRON İNŞAAT



TUNUSIA HAVALİMANI



CI APRON İNŞAAT



DAMASCUS HAVALİMANI



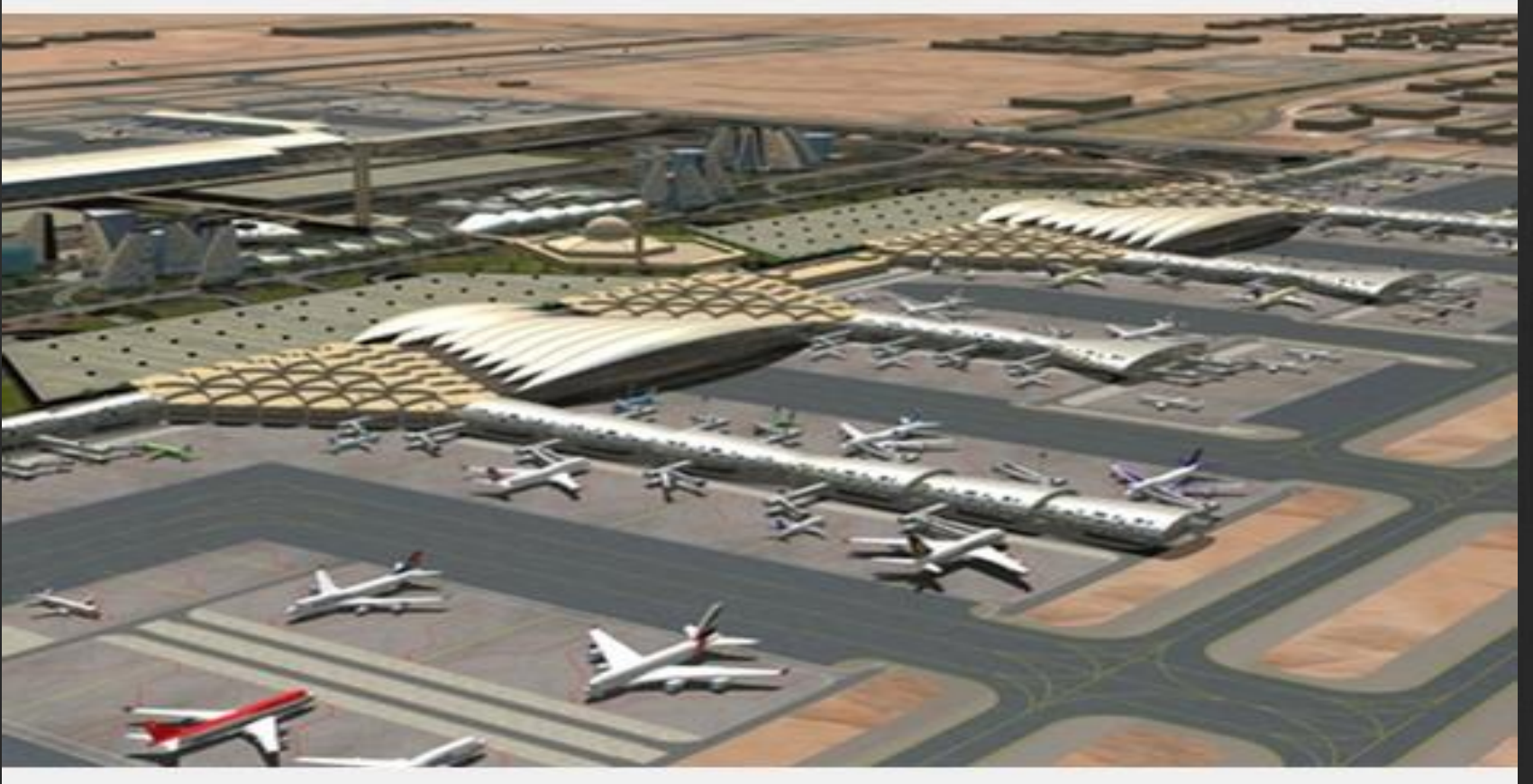
CI APRON İNŞAAT



AŞGABAT HAVALİMANI



CI APRON İNŞAAT



RİYADH HAVALİMANI



CI APRON İNŞAAT



TBİLİSİ HAVALİMANI



CI APRON İNŞAAT

BİTEN TÜRKİYE PROJELERİMİZ

•IĞDIR HAVALİMANI
225.000 M2

•BİNGÖL HAVALİMANI
247.000 M2

•KÜTAHYA BÖLGESEL HAVALİMANI
300.000 M2

•DİYARBAKIR HAVALİMANI
133.000 M2

•MARDİN KIZILTEPE HAVALİMANI
250.000 M2



CI APRON İNŞAAT

BİTEN TÜRKİYE PROJELERİMİZ

• İSPARTA KARA HAVACILIK OKULU
580.000 M2

• İZMİR ADNAN MENDERES
HAVALİMANI

50.000 M2

• KONYA HAVALİMANI
50.000 M2

• İSTANBUL SABİHA GÖKÇEN
HAVALİMANI
180.000 M2

• ANTALYA HAVALİMANI
45.000 M2



CI APRON İNŞAAT



IĞDIR HAVALİMANI



CI APRON İNŞAAT



BİNGÖL HAVALİMANI



CI APRON İNŞAAT



KÜTAHYA BÖLGESEL HAVALİMANI



CI APRON İNŞAAT



DİYARBAKIR HAVALİMANI



CI APRON İNŞAAT



MARDİN HAVALİMANI



CI APRON İNŞAAT



ISPARTA KARA HAVACILIK OKULU



CI APRON İNŞAAT



İZMİR ADNAN MENDERDES HAVALİMANI



CI APRON İNŞAAT



KONYA HAVALİMANI



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İSTANBUL SABIHA GÖKÇEN HAVALİMANI



CI APRON İNŞAAT

İŞ BİTİRMELER



CI APRON İNŞAAT

COMPLETION CERTIFICATE
(Sub-Contractor – Work Completion)

Date : 02.07.2013

1. Work holder Administration ^(a)	: General Directorate Of State Airports Authority Of Turkey (DHİMİ)
2. Client ^(b)	: TAV TEPE AKFEN YATIRIM İNŞAAT ve İŞLETME A.Ş.
3. Name of core business and tender registration number if any	: AIRPORT CONSTRUCTION
4. Work place	: İZMİR / TURKEY
5. Subcontractor name/surname or trade name	: DİZAYN PİST BETON YOL İNŞAATI SAN.TİC.LTD.ŞTİ.
6. ID number/Tax Identification Number	: 301 054 9838
7. Work carried out by the subcontractor ^(c)	: Apron Excavation, Backfilling & Construction
8. Applied construction technique ^(d)	:
9. Main work contract date	: 30 November 2012
10. Initial contract price of the main work ^(e)	: 1.081.335,47 (Turkish Lira)
11. Total contract value of the main work ^(f)	:
12. Date of contract between the subcontractor and the contractor ^(g)	: 7 January 2013
13. Value of the contract made between the subcontractor and contractor ^(h)	: 1.081.335,47 (Turkish Lira)
14. Partial/ Qualified acceptance of the work carried out by the subcontractor ⁽ⁱ⁾	:
15. Temporary Acceptance of the main work	: Not completed yet
16. Total amount of document ^(j)	:

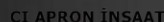
SIGNATURE

TAV TEPE AKFEN
YATIRIM İNŞAAT ve İŞLETME A.Ş.
Atatürk Havalimanı G11 Hızır Terminali
Yerleşim: İZMİR
Büyükdere Caddesi No: 332 336 1921

EXPLANATIONS

- (a) Name of the administration conducting the Work Contract shall be written.
(b) Name, surname or trade name of the work contractor shall be written.
(c) Description of work of the contract made between Subcontractor and Contractor shall be written.
(d) Regarding the specific characteristics of the building/construction; in terms of materials characteristics such as brick or stone masonry, reinforced concrete, steel, wood, precast concrete and similar shall be written; also, prefabricated construction, tooling, body construction technique and other similar matters showing the procedure for construction as well as matters showing the physical site of the construction such as construction area, audience capacity, closed/indoor exhibition area and number of floors shall be written.
(e) All changes of prices and VAT excluded, if any discounts made from the tender, the contract price/value shall be written.
(f) Total amount of the contract shall be written, including statutory increases from first contract (except for changes in prices and VAT excluded, and if any discounts of the tender are made).
(g) Date of Contract made between the subcontractor and the Main Work contractor.
(h) Price of Contract made between the subcontractor and the Main Work contractor.
(i) In case of partial acceptance of work done by the subcontractor, the acceptance date shall be written.
(j) The smaller amount of the charges paid by the administration to the contractor as per the contract price specified in item (13) and the work carried out by the subcontractor described in item (7) shall be written.

Standart Form — KİK027.0/Y
Completion Certificate (subcontractor work completion)



Date : 03.07.2013

1. Work holder Administration ^(a)	: ZAFER Havalimanı Yatırım A.Ş.
2. Client ^(b)	: İC İçtaş İnşaat A.Ş.
3. Name of core business and tender registration number if any	: Construction Contracting Company
4. Work place	: Kütahya-TÜRKİYE
5. Subcontractor name/surname or trade name	: Düzayn Pist Beton Yol İnşaatı San.Tic.Ltd.Şti.
6. ID number/Tax Identification Number	: -
7. Work carried out by the subcontractor ^(x)	: Concrete Pavement Works
8. Applied construction technique ^(d)	: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications , Directorate of Railways, Ports and Airports Specifications No:9-R, No:6-R and No: 4-B; TS. 5926 EN 14188 2
9. Main work contract date	: 06.07.2011
10. Initial contract price of the main work ^(a)	: 50.000.000€
11. Total contract value of the main work ^(b)	: 50.000.000€
12. Date of contract between the subcontractor and the contractor ^(e)	: 28.03.2012
13. Value of the contract made between the subcontractor and contractor ^(b)	: 3.564.300TL
14. Partial/ Qualified acceptance of the work carried out by the subcontractor ^(g)	: 10.11.2012
15. Temporary Acceptance of the main work	: 20.11.2012
16. Total amount of document ^(b)	: 3.564.300TL

SIGNATURE
Behalf of Project Manager
İCİTAS inşaat
BY ACTING PROJECT MANAGER VE TOCAPIYI A.Ş.
Project Manager Mr. Tolga ÖZGÜDÜĞÜ / 0532 360 00 00
TOL - 0532 360 00 00 / TOL - 0532 360 00 00

EXPLANATIONS

- (a) Name of the administrator conducting the Work Contract shall be written.
- (b) Name, surname or trade name of the work contractor shall be written.
- (c) Description of work of the contract made between Subcontractor and Contractor shall be written.
- (d) Regarding the specific characteristics of the building construction in terms of materials/characteristics such as brick or stone masonry, reinforced concrete, steel, wood, prestressed concrete and similar, shall be written. Also, pre-fabricated construction, tooling, body construction technique and other similar matters showing the procedure for construction as well as matters showing the physical size of the construction such as construction area, audience capacity, closed/indoor exhibition area and number of floors shall be written.
- (e) All changes of prices and VAT excluded, if any discounts made from the tender, the contract price/value shall be written.
- (f) Total amount of the contract shall be written, including statutory increases from first contract (except for changes in prices and VAT excluded, and if any discounts of the tender are made).
- (g) Date of Contract made between the subcontractor and the Main Work contractor.
- (h) Price of Contract made between the subcontractor and the Main Work contractor.
- (i) In case of partial acceptance of work done by the subcontractor, the acceptance date shall be written.
- (j) The smaller amount of the charges paid by the administration to the contractor as per the contract price specified in item(13) and the work carried out by the subcontractor described in item(7) shall be written.



CI APRON İNŞAAT

COMPLETION CERTIFICATE

(Sub-Contractor – Work Completion)

Date : 05. July.2013

1. Work holder Administration ^(a)	: MSB, İnş. Emlak ve Nato Gv. Yat. D. Bşk. İđi
2. Client ^(b)	: Baytur İnş. Taah. A.Ş. & Koçoglu İnş. San. Tarım ve Hayvancılık Tic. A.Ş. Ortak Girişim, Abidin Daver Sok.
3. Name of core business and tender registration number if any	: İsparta Kara Havacılık Okul Komutanlığı İskan Tesisleri İnşaatı 21.01.2011.....2010/55/1935
4. Work place	: Runway, Taxiway and Aprons
5. Subcontractor name/surname or trade name	: Dizayn Pist Beton Yol İnşaatı San. ve Tic. Ltd. Şti. Mehmet Akif Ersoy Cad. No:92/1 Şirinyer/Buca İzmir/Turkey Tel:00902324870774 Fax:00902324261358
6. ID number/Tax Identification Number	: Şirinyer V.D. No: 3014391468
7. Work carried out by the subcontractor ^(c)	: Excavation, Sub-basic, Basic, PMT, Weak Concrete, Concrete quality
8. Applied construction technique ^(d)	: Airport construction of infrastructure and superstructure construction
9. Main work contract date	: 13.07.2011
10. Initial contract price of the main work ^(e)	: 142.500.000,- TL.
11. Total contract value of the main work ^(f)	: 149.743.762,50 TL.
12. Date of contract between the subcontractor and the contractor ^(g)	: 13.11.2012
13. Value of the contract made between the subcontractor and contractor ^(h)	: 6.000.000,- TL.
14. Partial/ Qualified acceptance of the work carried out by the subcontractor ⁽ⁱ⁾	: 30.06.2013 %70
15. Temporary Acceptance of the main work	:
16. Total amount of document ^(j)	: 7.500.000,- TL.

SIGNATURE

İSTİMLİK İNŞAAT İŞLERİ VE İNŞAAT İŞLERİ
İNŞAAT İŞLERİ VE İNŞAAT İŞLERİ
İNŞAAT İŞLERİ VE İNŞAAT İŞLERİ
İNŞAAT İŞLERİ VE İNŞAAT İŞLERİ
İNŞAAT İŞLERİ VE İNŞAAT İŞLERİ

Atilla DEGERLİYURT
İnşaat Mühendisi
Şantiye Şefi

EXPLANATIONS

- (a) Name of the administration conducting the Work Contract shall be written.
(b) Name, surname or trade name of the work contractor shall be written.
(c) Description of work of the contract made between Subcontractor and Contractor shall be written.
(d) Regarding the specific characteristics of the building/construction; in terms of materials characteristics such as brick or stone masonry, reinforced concrete, steel, wood, prestressed concrete and similar shall be written; also, as well as matters showing the physical size of the construction such as construction area, audience capacity, closed/indoor exhibition area and number of floors shall be written.
(e) All changes of prices and VAT excluded, if any discounts made from the tender, the contract price/value shall be written.
(f) Total amount of the contract shall be written, including statutory increases from first contract (except for changes in prices and VAT excluded, and if any discounts of the tender are made).
(g) Date of Contract made between the subcontractor and the Main Work contractor.
(h) Price of Contract made between the subcontractor and the Main Work contractor.
(i) In case of partial acceptance of work done by the subcontractor, the acceptance date shall be written.
(j) The smaller amount of the charges paid by the administration to the contractor as per the contract price specified in item(15) and the work carried out by the subcontractor described in item (7) shall be written.

Standart Form — KİK027.0/Y
Completion Certificate (subcontractor work completion)



CI APRON İNŞAAT



BAŞAK İNŞAAT

COMPLETION CERTIFICATE
(Sub-Contractor – Work Completion)

Date : 10.07.2013

1. Work holder Administration ^(a)	: GENERAL DIRECTORATE OF STATE AIRPORTS AUTHORITY OF TURKEY
2. Client ^(b)	: BAŞAK TUR.İNS.OTO.SAN.TİC.LTD.ŞTİ. ANKARA/TURKEY
3. Name of core business and tender registration number if any	: İGDIR AIRPORT
4. Work place	: İGDIR / TURKEY
5. Subcontractor name/surname or trade name	: DİZAYN PİST BETON YOL İNŞAATI SAN.TİC.LTD.ŞTİ.
6. ID number/Tax Identification Number	: ŞİRİNYER V.D 301 054 9838
7. Work carried out by the subcontractor ^(c)	: AIRPORT CONSTRUCTION OF SUPERSTRUCTURE AND INFRASTRUCTURE
8. Applied construction technique ^(d)	: WEAK CONCRETE, CONCRETE QUALITY,excavation sub-basic and basic
9. Main work contract date	: 09.12.2010
10. Initial contract price of the main work ^(e)	: 20.856.628,85 TURKISH LIRA
11. Total contract value of the main work ^(f)	: 22.940.236,44 TURKISH LIRA
12. Date of contract between the subcontractor and the contractor ^(g)	: 05.04.2012
13. Value of the contract made between the subcontractor and contractor ^(h)	: 209.000,00 TURKISH LIRA
14. Partial/ Qualified acceptance of the work carried out by the subcontractor ⁽ⁱ⁾	: 06.07.2012
15. Temporary Acceptance of the main work	: The project has been completed
16. Total amount of document ^(j)	: 209.000,00 TURKISH LIRA

SIGNATURE

BAŞAK TURİZM İNŞAAT
OTO, SAN. VE TİC. LTD. ŞTİ.
Etiler Mah. 105. Sokak Kat: 2
No: 20/4 Çankaya 06550 Ankara
Tlf: 0312 441 59 73 Faks: 0312 441 81 36
E-Mail: info@basakinsaat.com.tr

EXPLANATIONS

- (a) Name of the administration conducting the Work Contract shall be written.
(b) Name, surname or trade name of the work contractor shall be written.
(c) Description of work of the contract made between Subcontractor and Contractor shall be written.
(d) Regarding the specific characteristics of the building/construction, in terms of materials characteristics such as brick or stone masonry, reinforced concrete, steel, wood, prestressed concrete and similar shall be written; also prefabricated construction, roofing, body construction technique and other similar matters showing the procedure for construction, as well as matters showing the physical size of the construction such as construction area, audience capacity, closed indoor exhibition area and number of floors shall be written.
(e) All changes of prices and VAT excluded; if any discounts made from the tender, the contract price/value shall be written.
(f) Total amount of the contract shall be written, including statutory increases from first contract (except for changes in prices and VAT excluded; and if any discounts of the tender are made).
(g) Date of Contract made between the subcontractor and the Main Work contractor.
(h) Price of Contract made between the subcontractor and the Main Work contractor.
(i) In case of partial acceptance of work done by the subcontractor, the acceptance date shall be written.
(j) The smaller amount of the charges paid by the administration to the contractor as per the contract price specified in item (13) and the work carried out by the subcontractor described in item (7) shall be written.



CI APRON İNŞAAT

COMPLETION CERTIFICATE
(Sub-Contractor – Work Completion)

Date :

1. Work holder Administration ^(a)	: GENERAL DIRECTORATE OF STATE AIRPORTS AUTHORITY OF TURKEY
2. Client ^(b)	: EMT İNŞ.TURİZM.TİC.A.Ş ANKARA-TURKEY
3. Name of core business and tender registration number if any	: BİNGÖL AIRPORT
4. Work place	: BİNGÖL / TURKEY
5. Subcontractor name/surname or trade name	: DİZAYN PİST BETON YOL İNŞAATI SAN.TİC.LTD.ŞTİ.
6. ID number/Tax Identification Number	: ŞİRİNYER V.D 301 054 9838
7. Work carried out by the subcontractor ^(c)	: AIRPORT CONSTRUCTION OF SUPERSTRUCTURE AND INFRASTRUCTURE
8. Applied construction technique ^(d)	: WEAK CONCRETE, CONCRETE QUALITY,excavation sub-basic and basic
9. Main work contract date	: 29.01.2010
10. Initial contract price of the main work ^(e)	: 11.444.786,18TL
11. Total contract value of the main work ^(f)	: 13.732.808,03TL
12. Date of contract between the subcontractor and the contractor ^(g)	: 16.05.2012
13. Value of the contract made between the subcontractor and contractor ^(h)	: 977.927,30 TL
14. Partial/ Qualified acceptance of the work carried out by the subcontractor ⁽ⁱ⁾	: 15.10.2012
15. Temporary Acceptance of the main work	: The project has been completed
16. Total amount of document ^(j)	: 977.927,30TL

SIGNATURE


 İNŞAAT TURİZM ve Ticaret A.Ş.
 4.Öğretmen Yolu - 06100 Çankaya / Ankara
 Tic. Sic. No: 272990 / Mers: 0817007187000000
 Tel: 0312 252 51 50 / Faks: 0312 252 51 51

EXPLANATIONS

- (a) Name of the administration conducting the Work Contract shall be written.
 (b) Name, surname or trade name of the work contractor shall be written.
 (c) Description of work of the contract made between Subcontractor and Contractor shall be written.
 (d) Regarding the specific characteristics of the building/construction; in terms of materials characteristics such as brick or stone masonry, reinforced concrete, steel, wood, prestressed concrete and similar shall be written; also, prefabricated construction, tooling, body construction technique and other similar matters showing the procedure for construction, as well as matters showing the physical size of the construction such as construction area, audience capacity, closed indoor exhibition area and number of floors shall be written.
 (e) All changes of prices and VAT excluded, if any discounts made from the tender, the contract price-value shall be written.
 (f) Total amount of the contract shall be written, including statutory increases from first contract (except for changes in prices and VAT excluded, and if any discounts of the tender are made).
 (g) Date of Contract made between the subcontractor and the Main Work contractor.
 (h) Price of Contract made between the subcontractor and the Main Work contractor.
 (i) In case of partial acceptance of work done by the subcontractor, the acceptance date shall be written.
 (j) The smaller amount of the charges paid by the administration to the contractor as per the contract price specified in item(13) and the work carried out by the subcontractor described in item (7) shall be written.



CI APRON İNŞAAT



**ZAFER BÖLGESEL HAVALİMANI
PİST, APRON ve TAKSİYOLU
KALİTELİ KAPLAMALARININ
LCN/PCN ve PÜRÜZLÜLÜK
RAPORU**



ARAŞTIRMA DAİRESİ BAŞKANLIĞI

6886 / 2012



CI APRON İNŞAAT



T.C.
ULAŞTIRMA DENİZCİLİK VE HABERLEŞME BAKANLIĞI
Altyapı Yatırımları Genel Müdürlüğü

Sayı : B 11.0. DLH. 0. 19. 00. 06 /210-01 /18450
Konu : Zafer Havalimanı PAT Sahaları LCN/PCN
ve Pürüzlülük Raporu.

19/11/2012

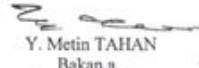
IC İÇTAŞ ZAFER HAVALIMANI YATIRIM ve İŞLETME A.Ş.
Konur Sokak No: 58/204 Kızılay/ANKARA

İlgi : a) IC İÇTAŞ Zafer Havalimanı Yat. ve İşletme A.Ş. nin 17.09.2012 tarih ve 587 sayılı yazısı.
b) DHMİ Genel Müdürlüğünün 21.09.2012 tarih ve 68524 sayılı yazısı.

İlgi yazılarda Yap-İşlet-Devret Modeli ile ihale edilen ve IC İÇTAŞ Zafer Havalimanı Yatırım ve İşletme A.Ş. taahhüdündeki "Zafer Bölgesel Havaalanı İnşaatı" işi bünyesinde yapımı tamamlanan PAT sahaları kaplamaları LCN/PCN ve pürüzlülük testlerinin yapılması talep edilmiştir.

Konu ile ilgili gerekli arazi çalışmaları 16-21.10.2012 tarihleri arasında Genel Müdürlüğümüz Araştırma Dairesi Başkanlığı teknik personeli tarafından yapılmış olup, hazırlanan rapor yazı ekinde gönderilmektedir.

Bilgilerinizi rica ederim.


Y. Metin TAHAN
Bakan a.
Genel Müdür V.

EKİ: 1 Takım Rapor (4 sayfa ve eki 4sayfa pafta)

DAĞITIMLI:

Bilgi:

- DHMİ Genel Müdürlüğü Etiler/ ANKARA
- IC İÇTAŞ Zafer Havalimanı Yatırım ve İşletme A.Ş.
- Konur Sokak No:58/204 Kızılay /ANKARA



CI APRON İNŞAAT

T.C.
ULAŞTIRMA, DENİZCİLİK ve HABERLEŞME BAKANLIĞI
Altyapı Yatırımları Genel Müdürlüğü

Araştırma Dairesi Başkanlığı
Nükleer Ölçme ve Araştırma Şb.Md.

Rapor No : 5886
Rapor Tarihi : 12.12.2012



ZAFER BÖLGESEL HAVALİMANI
PİST, APRON ve TAKSİYOLU KALİTELİ KAPLAMALARININ
LCN/PCN ve PÜRÜZLÜLÜK RAPORU

1. KONU :

Bu rapor; DHM Genel Müdürlüğünün 21.09.2012 tarih ve B.11.2.DHM.0.80.02.00-755-68524 sayılı yazısı ve IC İÇTAŞ Zafer Havalimanı Yat. ve İşletme A.Ş. nin 17.09.2012 tarih ve 587 sayılı yazısı gereği Yap-İşlet-Devret Modeli ile ihale edilen IC İÇTAŞ Zafer Havalimanı Yatırım ve İşletme A.Ş. taahhüdündeki "Zafer Bölgesel Havaalanı İnşaatı" işi bünyesinde yapımı tamamlanan PAT sahaları kaliteli kaplamaları üzerinde 16-21/10/2012 tarihleri arasında gerçekleştirilen LCN/PCN ve Pürüzlülük testlerinin değerlendirilmesine ilişkindir.

2. TESTLER:

2.1. LCN TESTLERİ:

Zafer Bölgesel Havalimanının 3000x45m pisti, 150x240m apron ve 24x362,5m boyutlarındaki taksiyolu kaliteli beton kaplamalarının yapımında ulaşılan performansların tespiti için gerçekleştirilen LCN testlerinde, yüklenici firma tarafından sağlanan kum yüklü bir treyler test yükü olarak kullanılmıştır.

Test yükünden alınabilen en çok 132.2763 lb' lik yük transferleri ile deney tarihinde 28 günlük dayanımlarını tamamlamış kaliteli beton kaplamalarında, konumları ek sayfada gösterilen toplam 22 ayrı istasyonda LCN testleri gerçekleştirilmiştir. LCN testlerinde; $\sigma=12$ inç'lik test plakası üzerinden kaplamaya aktarılan yüklere karşılık gelen defleksiyonlar ve $\sigma=18$ inç'lik standart plakaya göre dönüşümler tablo halinde aşağıya çıkarılarak, elde edilen veriler üzerinde emniyetli yük değerlendirmeleri yapılmıştır.

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LCN TABLOSU

TEST No	ŞERİT (Hm)	KONUM	Ø=12 inç TRANSFER YÜKÜ (lb)	Ø=12 inç Plaka Max veya KIRILMA YÜKÜ (lb)	Max. Def x0,001 (inç)	STANDART Ø=18 inç Plaka YÜKÜ (lb)	DİZELİM YÜK (lb)	EMNİYETLİ YÜK (lb)
1	00+54 sağ 1	APRON	132.276	110.230	25	136.685	123.017	82.011
2	02+10 sol 2	APRON	132.276	110.230	24	136.685	123.017	82.011
3	03+57 sağ 2	APRON	132.276	110.230	26	136.685	123.017	82.011
4	05+13 sol 1	APRON	132.276	121.253	20	150.354	135.318	90.212
5	06+66 sağ 3	APRON	132.276	121.253	20	150.354	135.318	90.212
6	08+10 sol 3	TAX. Yolu	132.276	110.230	27	136.685	123.017	82.011
7	09+57 sağ 2	PIST	132.276	110.230	26	136.685	123.017	82.011
8	11+13 sol 1	PIST	132.276	110.230	24	136.685	123.017	82.011
9	12+60 sağ 1	PIST	132.276	121.253	19	150.354	135.318	90.212
10	14+40 sol 3	PIST	132.276	110.230	30	136.685	123.017	82.011
11	16+20 sağ 2	PIST	132.276	121.253	19	150.354	135.318	90.212
12	18+00 sol 1	PIST	132.276	121.253	21	150.354	135.318	90.212
13	20+10 sol 2	PIST	132.276	121.253	22	150.354	135.318	90.212
14	22+20 sağ 2	PIST	132.276	110.230	28	136.685	123.017	82.011
15	22+50	PIST	132.276	110.230	31	136.685	123.017	82.011
16	Ek Paftada	PIST	132.276	110.230	29	136.685	123.017	82.011
17	Ek Paftada	PIST	132.276	121.253	17	150.354	135.318	90.212
18	Ek Paftada	PIST	132.276	121.253	19	150.354	135.318	90.212
19	Ek Paftada	PIST	132.276	110.230	32	136.685	123.017	82.011
20	Ek Paftada	PIST	132.276	121.253	20	150.354	135.318	90.212
21	Ek Paftada	PIST	132.276	121.253	19	150.354	135.318	90.212
22	Ek Paftada	PIST	132.276	121.253	18	150.354	135.318	90.212

Ortalama Emniyetli Yük : X_{22} : 86.112
Yarım Standart Sapma : $\sqrt{(n-1)}$: 4.197
Tek Teker Yük Eşdeğeri : ESWL : 81.915
Yük Sınıflandırma Sayısı : LCN : 115
Yük Sınıflandırma Grubu : LCG : I

2. 2. HI-LO PÜRÜZLÜLÜK TESTLERİ:

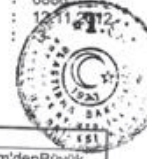
Zafer Bölgesel Havalimanının 3000x45m pist ve 150x240m boyutlarındaki apron kaliteli kaplama betonlarının yüzey profili üzerindeki lokalize pürüzlerin, "9-R Kaliteli Beton Kaplama Teknik Sarfamesi" tanımlarına uygun olarak tespiti için (3) metrelik mekanik master "SOILTEST CT-610 HI-LO Dedector" kullanılmıştır. Tespit edilen lokalize pürüzler, şeritlere göre sayısal olarak aşağıya çıkarılarak konumları ek sayfalarda gösterilmiştir. (Taksiyolu kaplamalarının gövdesi deney tarihinde tamamlanmamıştır)

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PIST HI-LO TABLOSU (3x7,5m) (ek pafta)

ŞERİT NO	TUMSEK		ÇUKUR	
	3-6 mm Arası (+)	6mm'denBüyük (⊕)	3-6 mm Arası (-)	6mm'denBüyük (⊖)
Sol 3	10	2	30	2
Sol 2	15	0	18	1
Sol 1	12	1	29	1
Sağ 1	14	2	24	2
Sağ 2	16	0	31	2
Sağ 3	28	1	20	2
TOPLAM	95	6	152	10

DÖNÜŞ APRONLARI (3x7,5m) (ek pafta)

ŞERİT NO	TUMSEK		ÇUKUR	
	3-6 mm Arası (+)	6mm'denBüyük (⊕)	3-6 mm Arası (-)	6mm'denBüyük (⊖)
1	3	0	4	0
2	0	0	1	0
3	2	0	1	0
4	1	0	1	0
5	3	0	1	0
6	1	0	0	0
TOPLAM	10	0	8	0

APRON HI-LO TABLOSU (3x7,5m) (ek pafta)

ŞERİT NO	TUMSEK		ÇUKUR	
	3-6 mm Arası (+)	6 mm'denBüyük (⊕)	3-6 mm Arası (-)	6 mm'denBüyük (⊖)
1	1	0	2	0
2	2	0	2	0
3	0	0	0	1
4	1	0	2	0
5	1	1	3	0
6	1	1	5	0
7	3	0	4	0
8	4	0	1	0
9	2	0	0	1
10	1	0	0	0
11	1	0	1	0
12	0	0	1	0
13	1	0	1	0
14	0	0	2	0
15	0	0	0	0
16	0	0	1	0
17	2	0	0	0
18	0	0	1	0
19	1	0	0	0
20	0	0	1	0
21	1	0	0	0
TOPLAM	22	2	27	2

6/12/2012



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2.3. RI (Roughness Index):

Zafer Bölgesel Havalimanının 3000x45m boyutlarındaki pist kaliteli beton kaplamaları Pürüzlülük İndeksleri (RI); DLH "9-R Kaliteli Beton Kaplama Teknik Şartnamesi" öngörülerine uygun olarak "SOILTEST CT-444 Electronics Roughness Indicator" kullanılarak tespit edilmiştir. Altı şerit olarak oluşturulan pist kaliteli beton kaplamaları üzerinde her şeritte en az 4 ölçüm yapılarak elde edilen verilerin değerlendirilmesi sonucunda ortalama indeksler tablo halinde aşağıya çıkartılmıştır.

ŞERİT NO	PÜRÜZLÜLÜK İNDEKSİ (RI) (inç/mil)	
	00+60 / 16+69	13+31 / 29+40
	Hm (1 mil)	Hm (1 mil)
Sol 3 (7,5m)	146	150
Sol 2 (7,5m)	143	149
Sol 1 ((7,5m)	149	148
Sağ 1 (7,5m)	148	144
Sağ 2 (7,5m)	145	149
Sağ 3 (7,5m)	144	147
DLH 9-R Nolu Kaliteli Beton Kaplama Şartnamesi Limiti: RI, Maksimum 150 inç/mil		

3. SONUÇ :

Yap-İşlet-Devret Modeli ile ihale edilen IC İÇTAŞ Zafer Havalimanı Yatırım ve İşletme A.Ş. taahhüdündeki "Zafer Bölgesel Havaalanı İnşaatı" işi bünyesinde yapımı tamamlanan pist, apron ve taksiyolu kaliteli beton kaplamaları üzerinde gerçekleştirilen testlerden alınan verilerin değerlendirilmesi sonucunda;

- Tespit edilen ve konuları ek sayfada gösterilen lokalize HI-LO pürüzler, sayısal olarak tablolarda verilmiştir.
- Pist Yüzeysel Pürüzlülük İndekslerinin şartlere göre; RI=143-150 inç/mil arasındaki değerleriyle "9-R Kaliteli Beton Kaplama Teknik Şartnamesi" ni sağladığı tespit edilmiştir.
- Zafer Havalimanının Pist, Apron ve taksiyolu kaliteli kaplamalarının eşdeğer performanslarda ve LCN 115 değerinde olduğu, tespit edilerek aşağıdaki değerlendirme yapılmıştır.

Zafer Havalimanı PAT Sahaları için;

PCN 110/ R / D / W / T

DLH İnşaatı Genel Müdürlüğü Araştırma Dairesi Başkanlığı'nın 6/05/2006 sayılı "Kütahya-Afyon-Uşak Bölgesel Havaalanı Zemin Etüt ve Malzeme Olanakları raporu" ile 01.04.2007 tarih ve 2007/3 sayılı "Kütahya-Afyon-Uşak Havaalanı Kaplama Kaliteliğin Raporu" verilerine göre, Zeminin "k" reaksiyon modülü" değeri 18,97 MN/m² olarak tespit edilmiş ve Zemin Sınıfı (D) olarak hesaplanmıştır.

İsmail ÜSTEK
Kimyager

İsmail ÖZTÜRK
Nük.Ölç.ve Arş.Şb.Md. Y.

